

INDUSTRIAL

CO

UPL

ING

S

SME

■上海晟江机械设备有限公司

CE
SME INDUSTRIAL CO.,LTD
www.smecoupling.com



COMANY OVERVIEW

SME is an industrial supplier for hose couplings, flange joints and assorted types of industrial-grade pipe fittings and valves. The Company features the unique geographic advantage in one of the largest and the most congregated centers for non-ferrous metal productions in Wenzhou Zhejiang Province of China. SME is therefore able to make the full use of every penny invested in producing world-class qualities (of quick-disconnect hose couplings of majority). We are proud to be one among those who are dedicated to improving the fluid connections in all industrial pipeline systems.

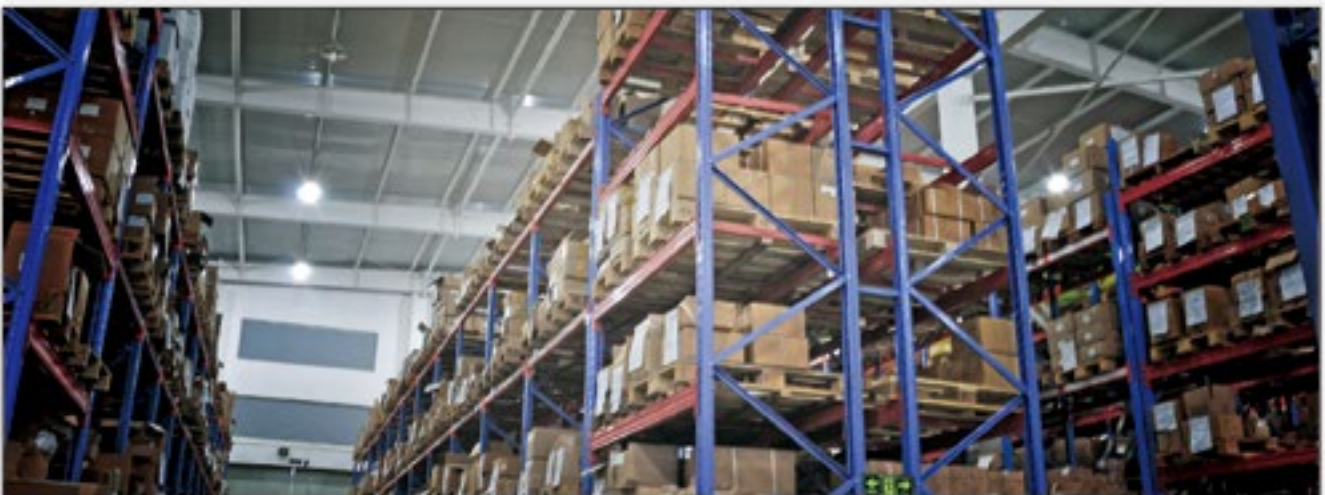
SME is short for "Sheng jiang" Mechanism and Equipment company, taking "jiang" from Ou-jiang river across Wenzhou city. It was the family business established and followed from massive production of mechanical equipments in complying with universal standards home and abroad.

SME came to its name and was founded by Mr. Lee Sunlong since mid 2004.

China production can be associated with "mass produced", "cheap" and "poor safety standards" more than anything else. Learning to divert the concept of being cheap to better management on cost and risk controlling, we are making a different way of living. Our team incorporates skilled members who excel at OEM on solid products or computer model and master craftsman who know by heart the metal forming and producing processes. SME is devoted to approaching the market with low-cost, feature-rich products.

In terms of shipping for domestic business, we intend to provide 24-hour delivery. The running flow of 60-80% of our complete product program (esp. quick-disconnect couplings and flanges) are being formed on 6 floors of racks, 1,000+ pallets on and over in inventory in a spacing of over 2,000 square meter large.

We are keeping track of historical shipping data for timing storage of particular items and because of that we are capable of pre-storing interested products prior to customers' requests. Pre-stock is an additional service from SME. Stock in types of core materials, half products or end products are retained based on one or combined long-time, esp. a quarter or an annual requirement from international consumers.



OUR CULTURE

To understand the manufacturing orientation of Wenzhou, Wenzhou inherits the superiorities of traditional industries, renovates and upgrades it with high and new technology and spurring on industrial modernization with information technology. Wenzhou has formed a complete industrial production system covering machinery, electricity, chemicals, ship-building, electrical power, building materials, light industrial products and textiles, foodstuffs, tanning, plastics, warehouse, superior steel and arts and crafts.

Wenzhou boasts many featured products, including shoes, apparel, electrical equipment, lighters, optical glasses, auto parts, valves, stainless steel, stationery, locks, synthetic leather, toys and playgrounds, packaging machinery, packaging bags, plastic machinery, sanitary ware, printing services and promotional gifts etc. Their production bases are laid out in Lucheng District (鹿城), Ouhai District (瓯海), Longwan District (龙湾), Rui'an City (瑞安), Yueqing City (乐清), Cangnan County (苍南), Pingyang County (平阳) and Yongjia County (永嘉), which are all county-level administrations under Wenzhou.

Lucheng District, Ouhai District and Longwan District serve as main urban areas of Wenzhou. In Lucheng and Ouhai, there are numerous manufacturers for shoes, optical glasses, lighters and apparel. In the Industrial Zone of China Shoes Capital, you will be amazed at so many shoes factories there. Also, these two districts have the majority of Wenzhou's suppliers for apparel, optical glasses and lighters, though the industry of lighters is undergoing a tough time these years.

Longwan District, where Wenzhou Airport is located, has many different industries, including stainless steel, valves for sanitary use, sanitary ware, stationery, synthetic leather and locks, some of which you can also find in Ouhai District.

Yueqing City is most famous for its electrical equipment. If you go to Liushi, a township under Yueqing City, you will see advertisements of electricals everywhere. Yueqing is also the birth place of many famous electrical brands in China, like CHINT, CNC and PEOPLE etc.

Rui'an City is in the south of Wenzhou, where there are many factories for auto parts and packaging machinery. A township called Tangxia gathers most suppliers for auto parts. Also, it is called a production base for cloth and injection shoes.

Yongjia County is famous for its Nanxi River, a hot tourist spot in Wenzhou. Well, the county also gives birth to many competitive industries, including valves in its Oubei Town, playgrounds in its Qiaoxia Town and buckles, buttons and zippers for shoes and apparel in its Qiaotou Town.

Pingyang County and Cangnan County are the most southern parts of Wenzhou, where you can find a lot of factories for promotional gifts, packaging bags, labels and plastic machinery which are used to produce plastic bags, and printing services.





SME PRODUCTIONS

Our products are made of 3 basic metal materials of aluminum+T6, brass, stainless steel and 2 chemical resistant materials of reinforced polypropylene, nylon and fiberglass combinations. To be fitted for specific considerations about working pressure, temperature, assembling method and medium we are capable of producing custom material grades upon customers' requirement.

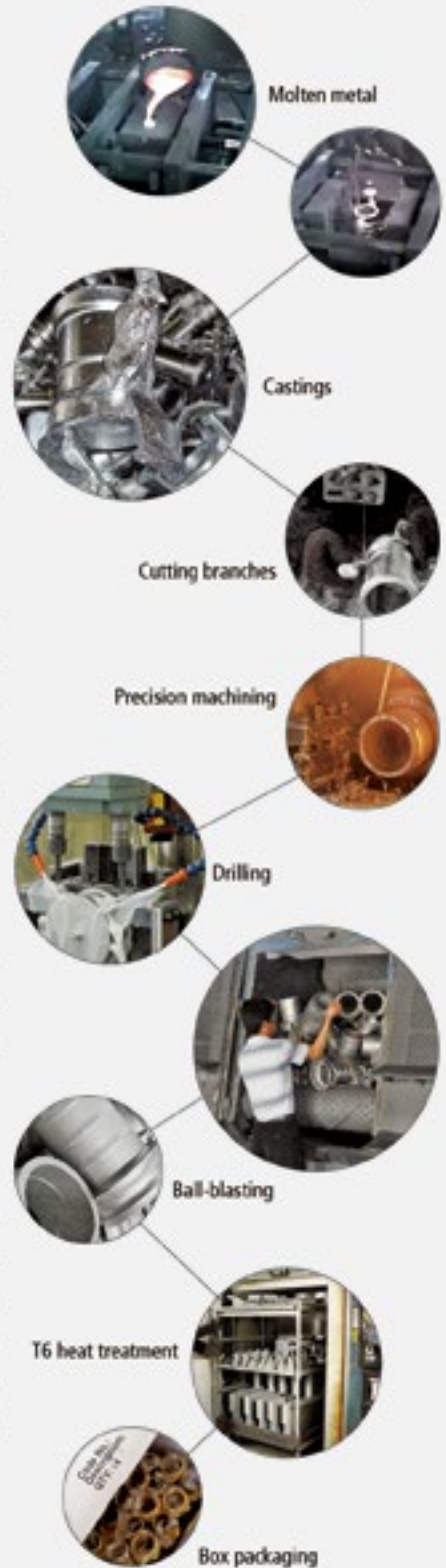
ALUMINUM PRODUCTS

Aluminum products are produced in volume by gravity casting. This method uses the force of gravity to fill a permanent mold with molten material without application of any external pressure. It will ensure that there will be less bubble vacancy formed during this process as compared to press casting method like die casting. Gravity casting has advantages of cost effective and good quality.

Aluminum couplings are made from alloy base of aluminum grade #A356 and #A380. After treatment like T6 heat treating that involves the use of heating to extreme temperatures for hardening purpose is carried out 100% on each coupling. Heat treating is generally more economical and more controllable.

To begin the process, a cast iron mold capable of producing tens of thousands of castings must be made in at least two sections to permit removal of castings.

In the casting cycle, the die caster clamps the two die halves tightly together. Molten metal is poured into the die cavity where it solidifies quickly. The die halves are drawn apart and the casting is ejected. Die casting dies can be simple or complex, having moveable slides, cores, or other sections depending on the complexity of the casting.



STAINLESS STEEL PRODUCTS

Our stainless steel products are made by investment castings. It is a process that derives its name from the fact that the pattern is invested with a refractory material. Compared to other casting processes such as die casting or sand casting, it is an expensive process. However the components that can be produced can incorporate intricate contours, and in most cases the components are cast near net shape, so requiring little or no rework once cast.

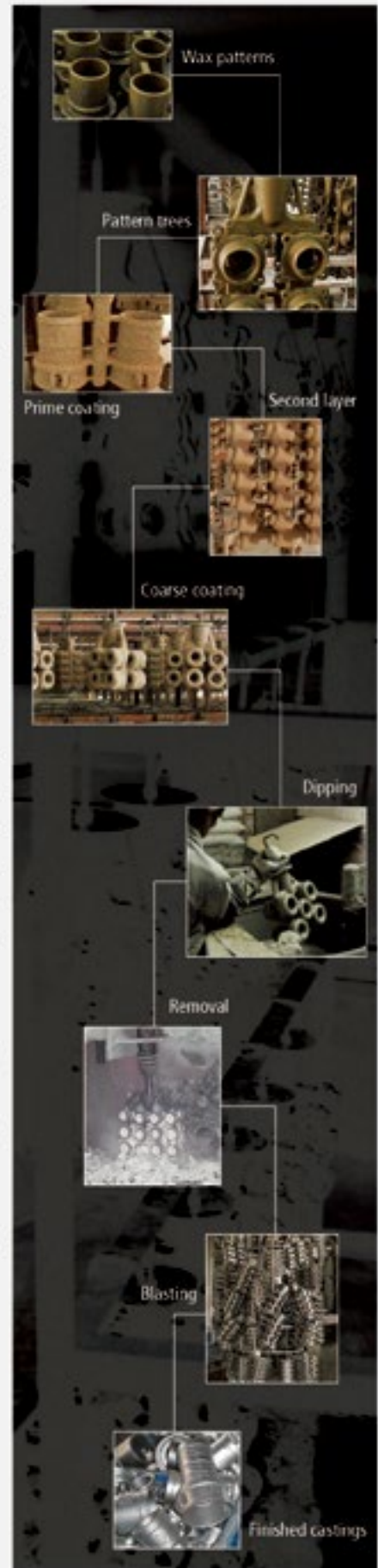
Investment casting features pattern trees and the repetition of layer-ing process. Pattern trees or clusters are mounted after wax patterns are set, cooled and carefully checked following the coating repetition.

Investment is produced by three repeating steps: coating, stuccoing and hardening. The first step involves dipping the cluster into a slurry of fine refractory material and then letting any excess drain off. So a uniform surface (prime coating) is produced. This fine material is used first to give a smooth surface finish and reproduce fine details. In the second step, the cluster is stuccoed with a coarse ceramic particle by dipping it into a fluidized bed, placing it by applying by hand or in a rainfall sander. Finally the coating is allowed to harden. These steps are repeated till the investment thickness is achieved which is usually 5 to 15 mm.

The investment is allowed to completely dry, which can take 16 to 48 hours. It is then turned upside-down and placed in a furnace or autoclave to melt out the wax. The mold is subjected to a burnout, which heats the mold between 870 °C and 1095 °C to remove any moisture and residual wax, and to sinter the mold. Before investment mold is placed cup-upwards into a tub filled with sand. The metal is thereafter gravity poured. In final procedures the shell is hammered to release the casting which will be cleaned up to remove signs of the casting process by grinding.

Our stainless steel products are made from standard materials AISI #316 or casting grade CF8M, #304 / CF8 and available on request with similar German reference #1.4408, #1.4401, #1.4301 or custom Hastalloy and Monel. Material correctness is closely checked and restored in database, based on which material certificate can be retrieved upon request.

As stainless steel is usually chosen for chemical aggressive applications, strict controlling methods like heat-numbered tracing system and penetrating checks are usually organized.





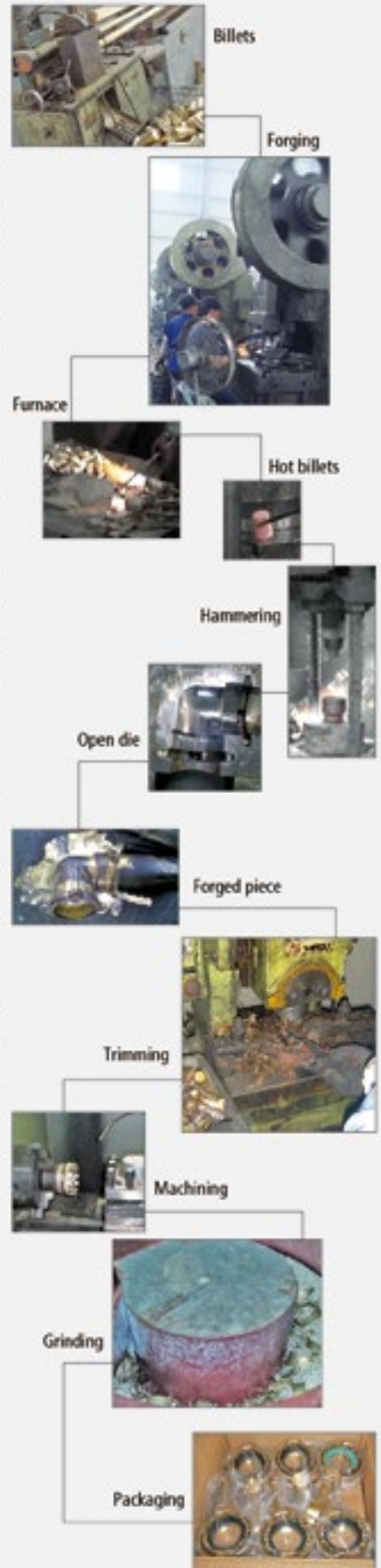
BRASS PRODUCTS

Forging is the shaping of metal using localized compressive forces. It can produce a piece that is stronger than an equivalent cast or machined part. As the metal is shaped during the forging process, its internal grain deforms to follow the general shape of the part. As a result, the grain is continuous throughout the part, giving rise to a piece with improved strength characteristics.

Production forging involves significant capital expenditure for machinery, tooling, facilities and personnel. In the process of hot drop forging, a high temperature furnace is required to heat the billets before it is pressed and deformed under the massive weight of over thousands of kilonewton (hundreds of tons) by large forging hammers.

Forged pieces taking the general shape are trimmed before the second step of machining. In most cases the semi-finished pieces need to get deburred as in grinding pools following final checks and packaging.

Our brass alloy products are made by above mentioned drop forging method using 100t ~ 1.000t electric friction screw press machines. Certified copper alloy to China code #57-3 or similar German reference #CW614N and #CW617N are monitored throughout the whole production.



POLYPROPYLENE PRODUCTS


Our polypropylene products are made of 25–30% acid resistant glass fiber (GF) added black polypropylene (PP) formula through injection molding process. Enhanced strength and durability has approved by tests in accordance with ISO specifications as follows.

Test Report No. 1003-000001-001

Test Report

2008.3.16.1

No.	Test Items	Unit	Test Results	Standard
1	Material hardness	HR	100	ISO 6893-1:2007
2	Flexural force strength	MPa	75.9	ISO 178:2003
3	Flexural strength	MPa	100	ISO 178:2003
4	Compressive strength	MPa	51.9	ISO 604:2003
5	Impact (notch) strength	KJ/m ²	0.24	ISO 180:2003
6	Tensile strength	MPa	44.4	ISO 527-1:2000
7	100% elongation	%	100	ISO 527-1:2000



Test Report No. 1003-000002-001

Test Report

2008.3.16.1



These are the original copies of the test reports. If you require a copy, please refer to the official website.



GF compound



NYLON PRODUCTS

Nylon products are made of 25–30% acid resistant glass fiber added yellowish nylon formula through injection molding process. It is with excellent resistance for abrasion and aggressive chemicals.

Nylon is found even stronger than PP bodies according to our internal testing. Additional pull testing and torque tests are made in respect to simulating the actual over-rated force in use.



Forming



Drilling



Cooling





PACKING AND PACKAGES

We use fumigation-free packing materials for shipping the complete program of our products. Every piece is protected safe and tight with foam and plastic bags with thread and surface protective covers. We set our standard packing quantity for cartons, boxes as well as pallets. Clear markings in big white-and-black characters are made on front, side and top facades of each pallet carefully foam protected and supported by four solid top-to-bottom cylinders on all corners.

Multiple packing materials and case-by-case quantity packages are provided against scratching and cutting in surfaces from vibration during transport.

- EUR marked pallets
- Plastic bags = protecting whole bodies of products
- Plastic thread covers and web sleeves = protecting outside / male threads
- Grease paper = protecting anti-rust oil on esp. non-plating steel made products
- Foams = protecting esp. non-plating steel made products from high moisture environment like during sea shipment

Clear markings outside pallets contain basic information in our standard supplies as follows.

- Customer's purchase reference and order number
- Package content relative
- Our item description in English, other sayings in other languages possible on request
- Our item description of products' size, quantity
- Green-light label in case thus package passes final spot check on request



CONTROLS AND INSPECTIONS

Proven quality safeguards the life of both the users and the whole supplying vitality. We are therefore in continuous pursuit of developing strict, stable and reliable controls over both production methods and inspection processes.

A - Controls and inspections on source of materials

Material ingots are sourced from quality vendors with proven stability and continuous supply capacity. When custom material or special alloy is required we are organizing a different yet quick-reacted line of production so as not to affect the normal working routines on daily basis. It is on the other hand of utmost importance that we can thereafter establish tracing systems from material to processing for specialties especially of cases like high-value-yet-low-volume custom made. Definite heat numbers or batch numbers are engraved permanently at visible positions on bodies.

- Metal materials are proven in every process since when we check the correctness of the resources. The information is kept in database that can be restored in case of request.

- Final products are double confirmed using spectrum analyzer before inventory. We are using a handheld Olympus Innov-X Alloys and Metals Analyzer that identifies alloy grades of esp. stainless steel and copper alloys in seconds. With its in-built material database the result is automatically made and instantly read so that we are able to approve the quality beyond eyes right before shipping.

B - Controls and inspections on dimensions prior to, in the middle and after productions

Most of our products are dimensionally specified in relevant standards published by industry authorities like BS, DIN, ASTM, etc. We are following them strictly in order to make sure of the interchangeable of every coupling with worldwide manufacturers who are producing according to norm.

- Computerized models from CAD 2D / 3D drawings are developed to help perfect the molding structure. We pay highest respect to mold makers who are dedicated to sculpturing the optimal base for different forms of productions so that productiveness is enhanced while production cost can be saved.

- We stamp our names in confirming all drawings of dimension and technical details.

- Standard calibers, self developed gauges and tools are used in crucial processes case by case. Curve tools are custom-made for cam and groove adapters' curve; for safety clamp rib distance as in right image; and for TW fittings' crown closeness and so on.





- Compression tests are applied on sealing materials complying with Shore A with and without simulating working on two couplings.

C - Controls and inspections on physical and mechanical intensities

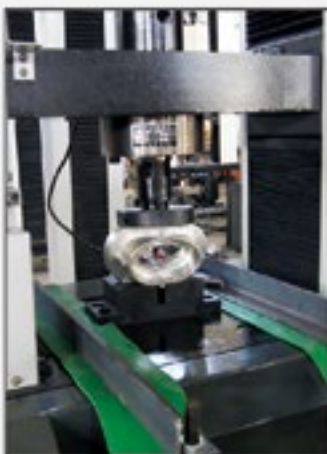
To design one coupling we are supposed to make sure that the bodies are physically strong enough for the desired purpose. The values to our satisfaction will be recorded and constantly verified during the process of mass productions that followed. Inspections to prove that feature are repeatedly performed in delivery checks again.



Breaking and blast tests are usually applied for the purpose of discovering the physical limitation of body intensities. Taking tests of impact tests, press tests, pulling tests, expanding and torque testing, we are able to pinpoint crucial points for the desired mechanical parameters.

- Impact tests using facilities like Chinese heading are developed to check specific positions or weak points with reference to both standards and experience.

- Press tests using hydraulic compressing machines to distort, for instance, aluminum ferrule clamping to prove its excellent ductility when no cracking line is observed. See details of tests for Storz couplings on page #, for safety clamps on page #, crimping ferrules on #, TW couplings on page# .



- Pulling tests for eg. tensile strength of a safety cable to discover the maximum power it can withstand from sudden and continuous force; or for eg. claw resistance of a fire fighting Storz coupling.

- In pulling test for a reinforced polypropylene cam and groove female coupler, we pull apart the two handles till one is torn broken. The collapsing pressure is leveled up when a stronger formula of compound is developed.

- In torque tests we turn an over-sized tapered outside thread into a female till its molding line or weakest thread position collapses. That is a simulation of the use of applying too much force when threading two couplings together.

Enduring testing like hydrostatic pressure tests is less aggressive than blasting tests. The result is made by observing air bubbles in case of leakage in bodies or at sealing positions.



Hydrostatic testing under water is always carried out on each coupling prior to the machining process. It is made to discover any fiber thin leakage or sand holes in poor castings and forges.

D - Third party inspection is always an option and available upon request

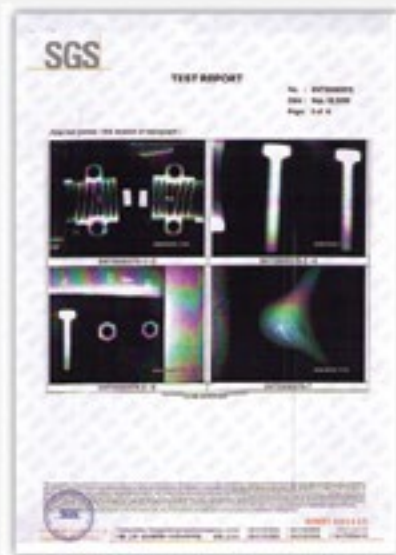
We are ready to discuss every possibility to help customers be relieved of our supplies, as well as to acquire the necessary certificates for sales and marketing purposes by means of cooperating with third-party institutes like TÜV, BV, ITS, SGS or appointed specialized organizations.

Following a sample of one X-ray penetration testing on our investment casting steam couplings performed by SGS Shanghai.

When the new Polypropylene compound was developed for reinforced performance, we went to a third-party laboratory's resort for a satisfactory test results.

REACH & RoHS compliance assessment was once made in 2011 in purpose of confirming SVHC (Substances of Very High Concern) contained was below limitation in any exported materials.

SME has acquired ISO 9001 management approval and has renewed it very recently.





晟江家族 Teamplayer



晟江缘起温州阀门厂，温州是工业石化核电天然气等中国重工领域的——顶级流量。在工业制造中，阀门是一个必不可少的通断和控制一体的连接件，从标准到技术研发温州都集聚了世界级的科研和生产能力，妥妥的阀门之乡、宝藏之都。

SME is originated from the valve manufacturing industry in Wenzhou city. That is one of the most congregated metallurgical processing areas in China especially for valve industries serving the industrial petrochemical, nuclear power, natural gas, etc.



而这正是得力于温州阀门厂的一脉传承，在这个产业链密集的制造氛围中，孕育出一大批对流体技术和金属加工熟悉甚至痴迷的工匠们。

In the line of succession to metallurgy, we see ourselves teamed up with a whole bunch of craftsmen who are obsessed with fluid technology and metal processing.



2004年，李孙龙先生在上海沪闵路7388号创立上海晟江。晟江人，志在铸就工业流体行业第一品牌的梦想从这里出发。

The name came to existence in 2004 when our founder Mr. Li Sunlong set foot at 7338 Humin Road in Shanghai, the location where SME places its goal to be amongst the leadership of industrial fluid connectivity.

晟江基地 Facilities

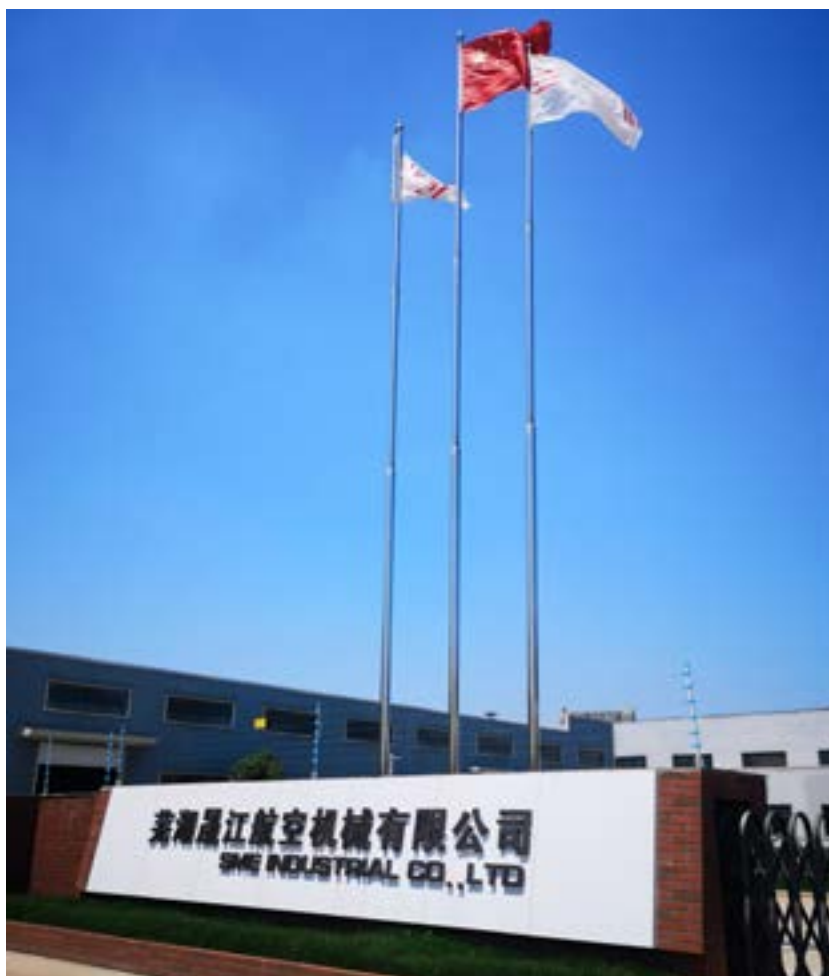


在晟江，我们对全球连接件的行业设计标准、工况用途、人员使用习惯，拥有长达15年的思考与实践。我们尊重标准，将标准与规范融入到从研发设计、生产加工以及品控管理中去，为稳定输出晟江品质而不懈努力。

In SME we have the tradition to pay respect for standards since the foundation over 15 years ago. We take them seriously and direct ourselves with them in practice. The standards are the soul to working management, product designs and process control. Never have we managed to cope with the products both home and abroad without the fine care to the industry standards.

晟江经过长年的积累，顺利地由贸易型供应商转型成为工业连接与控制装置的一站式供应服务商。

SME has successfully transformed from a trade-oriented supplier to a one-stop service provider of industrial connection and control devices after years of development.



晟江在芜湖航空高新开发区搭建起了晟江芜湖产研基地、依托上海金山石化物流仓储中心，辐射全国乃至全球；晟江的商务总部位于世界之窗的上海陆家嘴，立足于中国制造，服务于全球工业用户。

SME has established a supply trinity of engineering, production and inventory, first two set up in a high-tech aviation zone in Anhui province, the last held up close to Shanghai port where petro-giants like Bayer, BASF and Sinopec resides. That is by all means the perfect location to have us stand shoulder by shoulder with the industry demands.

晟江创新 Innovation



专利·虹吸破坏阀

Patent of siphon breaker solenoid valve

晟江从阀门设计与制造中汲取养分，怀着对行业敏锐的嗅觉，与对高效流体解决技术执着的追求，率先探索并创造出最适合自己的新型阀门产品。

SME is dealing with the flexible and hard piping connectors, valves be still part of it. The potential solution to a niche market inspired us which led to the innovation of a patented idea of vacuum breaker solenoid valves.



晟江创始人李孙龙先生，从 2002 年开始研发的虹吸破坏阀系列，填补行业空白，自研电磁装置迅速达到了世界级应用标准，一经问世很快便成为水利泵站首选泵机保护安全设备之一，一举拿到国内外多个泵站建设和改造项目订单，例如曾在 2010 年中国技术进出口总公司中标乌兹别克斯坦项目中，跻身国际舞台。

Innovated by Mr. Li Sunlong, SME presented siphon breaker valve package since 2002. It is a solenoid safety equipment for water conservancy pumping stations. It functions to save the valuable pump from the deadly backflow without any personal attention or specific timely operation as they did before that. It is something crucial to any pump station without doubt.

This valves are being actuated over the majority of high-end pump stations in China mainland. In 2010, SME wins as the supplier of this solenoid breaker valve for a renovation project in Uzbekistan followed up with more orders from abroad.

不仅如此，在晟江，我们对新技术和新工艺有着不懈的追求。面对复杂的管道工况与流体连接需求，晟江机械自主研制出了，多项适用高端应用场景——例如航空、半导体、钻井矿采、船舶海洋、医疗医药、冷链运输、核电核能和盾构机等配套连接产品。

Not only that, SME see itself running in the highway to achieve safer and more efficient ways of connection, dealing with a number of industries and applications like the aviation, semiconductor, drilling, mining, on-and-off shore, food processing, pharmaceuticals, cold chain transportation, nuclear energy and more to come.



石化零滴漏干式快速接头模拟实验

Simulation of a dropping test on the no-spillage dry-break coupling for petrochemistry.

晟江创新产品均通过了行业检测与实况模拟实验，方可上市。我们的自主设计获得实用新型专利数十项；诸多产品还通过了国际行业认证，如美国卫生级 3-A 许可、澳洲建筑水印阀认可、国际 3C 认证以及专用设备防爆等级认证等。

Standards come along with the approval and certificates. We consolidate each step with valid type test approval and certificates to the sustaining management and quality processing in the guidance of institutes like American 3-A for sanitation, Australian Watermark in building practice, ATEX as well as 3C, ISO and REACH regulations.

晟江仓储 Inventory



晟江从多年的客户服务经验中，逐渐意识到建立一套半成品和成品库存系统，有助于解决用户的实际需求。我们的库存系统自 2008 年落地执行，到了 2010 年库存达到了 2000 个的托盘位，相当于 100 个集装箱的库存量。

From the beginning we understand the competition lies in efficiency and readiness in our territory. Therefore SME produces, SME stocks. We use the strategy to stock both finished and semi items. Our capacity grows since 2010 and has an amount of ready inventory of over 2,000 pallets, or say the volume of 100 containers.



随着公司库存策略的执行，很大程度上缩短了平均交货时间，丰富的库存品类，使客户体验再次提升，以客户为中心的核心价值观再次被验证。开启了公司新模式的发展之路。

Relatively small, yet good enough to help shorten the average delivery time back then. The strategy was totally welcomed and forges the success and the way to go.

晟江研发 Engineering



每一次决策无不需巨大的勇气，而每个晟江人深知，寻求创新，创造平台的使命，远远不止如此，对每个环节的极致追求，都是晟江人永恒的目标。成长中的晟江于 2011 年实现了管理全面信息化，晟江专属的 ERP 管理系统，帮助用户需求快速响应，流程便捷化提高了生产效能，电子商务也因此衍生起航。

SME is missioned with efficient fluid connectivity, same story to the management. We are programmed with the ERP system, 100% self-originated digital connection. That gives it possible for rapid response to user needs and results in SME e-commerce service in China mainland since 2011.



不仅是专利虹吸阀从晟江芜湖生产基地下线，还有更多精密连接件与快接产品从芜湖基地被设计和制造出来。晟江芜湖的生产能力不断放大，我们开始向航空、半导体、核电核能等高要求行业，为用户进行定制化生产。

To make the engineered down to products. SME production site in Anhui province is now engaged with that for couplings, solenoid valves, and for more like the supply for aviation, semiconductors, nuclear power energy.

晟江的生产基地正在进行物联智能化改进，我们正视用户的每一个新需求，快速收集用户反馈，快速响应用户需求。

SME production is working on an intelligent improvement per IoT (Internet of Things) aiming for swift response and effective feedback collection and alternation.



稳定 · 品质与精神

Sustainable, in quality and enthusiasm

在晟江我们深知——品质才是生命。字如千金，我们严苛自律。从企业管理、生产流程设计、监管以及物料流转、包装运输等各个环节，我们不遗余力，将稳定持续、可控可发展的高品质路线贯彻到底。

See survival from quality persistence. We are delivering that from management, process design, supervision, circulation of materials, packaging and transportation.

**晟江服务
Services**



除了提供好的产品，我们还为用户提供增值服务，公司从原来只提供产品，向提供具有高复杂性、多样性需求的成套组合件发展。晟江在金山石化的基地，就近为上海石化园区内的用户提供更快捷、更贴身与定制化的服务，如阀门维护、软管总成装配和检测试验等。

SME is standing right beside the definite users, like Sinopec, BASF, Bayer, BP.. in a petro-zone at the southern sea mouth of Shanghai.



晟江的业务范围从研发生产，国内外销售，电子商务，拓展到了进口软管配套、代理国际一线的流体产品。晟江的每一个脚印都是实实在在的历史印记，见证着每一次的成长。成长的路上绝不会一帆风顺，机遇与挑战的背后是晟江人对梦想和信念的坚守。

Over time the scope of business is expanded to fields like imported hoses, online retail and domestic business, involving fields such as house construction, engineering projects, tunnel development, and solar energy.



一站式·管家式综合体

Consolidation, more than couplings with SME.

晟江从领导到员工，几十年如一日的坚守在自己的岗位上，如今的晟江工业，已经是交货速度快，定制化程度高，信息化高覆盖的工业流体控制企业。

晟江肩负着流体输送更安全快捷的使命，立志成为用户信赖的工业流体控制解决方案的提供者。我们终极愿景成为有生命力的幸福企业。

Each one of us in SME must know what he or she is doing as the position demands, giving it possible for the company to adapt and even lead the development of fluid control in its quick, safe and effecient ways.

SME is missioned to become the trusted provider of industrial fluid control solutions, setting the goal in becoming a blissful teamplayer for both internally and externally.



晟江营业执照 Business License



营业执照

Business License

No. 29000000202005140375



Business License

(Duplicate)

Unified Social Credit Code: 31310114759579740U

Name:	Shanghai Shengjiang Mechanism & Equipment Co., Ltd.
Type:	Company limited by shares (non-listed)
Location:	No. 222 Shanfeng Road, Jinshan District, Shanghai
Legal Representative:	Li Sunlong
Registered Capital:	Ten Million and Eighty-eight Yuan Only
Foundation Date:	March 3, 2004
Operation Period:	From March 3, 2004 to March 2, 2034
Operation Scope:	General items: production of mechanical parts, fluid equipment, electromechanical equipment, electrical equipment, instrumentation, rubber and plastic products, metal materials, Wujinxiadian, fire fighting equipment, heat preservation equipment, pneumatic hydraulic equipment, solar equipment, pumps, valves, hardware tools, Labor protection products sales, engaged in technology development, technical consultation, technical services, mechanical equipment installation and maintenance, pipeline installation engineering in the field of mechanical equipment technology. (Except for items subject to approval according to law, carry out business activities independently with business license according to law)

Registry Organ: Jinshan Bureau of Administrative Examination and Approval (seal)

May 14, 2020

Please perform the obligation of publicizing annual report from January 1st to June 30th each year.

Enterprise credit information publicity system website: www.gsxt.gov.cn
Supervised by the State Administration for Industry & Commerce of the People's Republic of China

ISO14001:2015 环境
管理体系认证
ISO14001:2015
Environmental Management
System



**ISO9001:2015 质量
管理体系认证**
**ISO9001:2015 Quality
Management System**

管理体系认证证书
MANAGEMENT SYSTEM CERTIFICATE



质量管理体系认证证书

证书号: 30222Q01581R0S

兹证明:

上海晟江机械设备有限公司

统一社会信用代码: 91310114759579740U

注册地址: 上海市金山区山丰路222号 邮编: 201508
办公地址: 上海市金山区山丰路222号2楼 邮编: 201508
生产地址: 上海市金山区山丰路222号2楼 邮编: 201508

质量管理体系符合:

GB/T 19001-2016/ISO9001:2015

证书覆盖业务范围:

机械金属零件的生产和销售 (法规强制要求范围除外)

证书有效期: 自2022年02月16日至2025年02月15日。



本证书在国家规定的行政许可、资质、强制性产品认证有效期内并正常接受年度审核的情况下保持有效。
本证书信息可在国家认证认可监督管理委员会官方网站 www.cnca.gov.cn 上查询。



北京中汇恒泰认证有限公司
北京市大兴区天华大街5号院13号楼5层513 总机:010-53606385

管理体系认证证书
MANAGEMENT SYSTEM CERTIFICATE



Quality Management System Certificate

Certificate No.:30222Q01581R0S

Hereby Certify:

SME INDUSTRIAL CO.,LTD

Unified Social Credit Code: 91310114759579740U

Registered address:No. 222, Shanfeng Road, Jinshan District, Shanghai post code:201508
Office address:No. 222, Shanfeng Road, Jinshan District, Shanghai post code:201508
Production address:No. 222, Shanfeng Road, Jinshan District, Shanghai post code:201508

QMS conforms to:

GB/T 19001-2016/ISO9001:2015

Scope of Certificate:

Production and sale of mechanical metal parts (except where required by law)

Issue Date:Feb.16, 2022; Valid Until:Feb.15, 2025.



This certificate in the state regulations administrative licence, Qualification, Mandatory product certification received within the validity period and the normal annual review of the case effectively.
To verify that this certificate is current please refer to CNCA website at <http://www.cnca.gov.cn>.



Beijing Zhonghui Hengtai Certification Co., Ltd.
Room 513,5F,13b Building, No.5, Tianhua Street, Daxing District, Beijing Tel:010-53606385

ISO45001:2018 职业健康安全管理体系
ISO45001:2018 Occupational Health and Safety Management System

管理体系认证证书
MANAGEMENT SYSTEM CERTIFICATE



职业健康安全管理体系认证证书

证书号: 30222S01108R0S

兹证明:

上海晟江机械设备有限公司

统一社会信用代码: 91310114759579740U

注册地址: 上海市金山区山丰路222号 邮编: 201508
 办公地址: 上海市金山区山丰路222号2幢 邮编: 201508
 生产地址: 上海市金山区山丰路222号2幢 邮编: 201508

职业健康安全管理体系符合:

GB/T 45001-2020/ISO45001:2018

证书覆盖业务范围:

机械金属零件的生产和销售 (法规强制要求范围除外) 及其场所所涉及的职业健康安全管理活动

证书有效期: 自2022年02月16日至2025年02月15日。



本证书在国家规定的行政许可、资质、强制性产品认证有效期内并正常接受年度审核的情况下保持有效。
本证书信息可在国家认证认可监督管理委员会官方网站 www.cnca.gov.cn 上查询。



北京中汇恒泰认证有限公司
北京市大兴区天华大街5号院13号楼5层513 总机: 010-53606385

管理体系认证证书
MANAGEMENT SYSTEM CERTIFICATE



Occupational health and safety Management System Certificate

Certificate No.:30222S01108R0S

Hereby Certify:

SME INDUSTRIAL CO.,LTD

Unified Social Credit Code: 91310114759579740U

Registered address:No. 222, Shanfeng Road, Jinshan District, Shanghai post code:201508
 Office address:No. 222, Shanfeng Road, Jinshan District, Shanghai post code:201508
 Production address:No. 222, Shanfeng Road, Jinshan District, Shanghai post code:201508

OHSMS conforms to:

GB/T 45001-2020/ISO45001:2018

Scope of Certificate:

The production and sale of mechanical metal parts (except for those required by laws and regulations) and the occupational health and safety management activities involved in their places

Issue Date:Feb.16, 2022; Valid Until:Feb.15, 2025.



This certificate in the state regulations administrative licence, Qualification, Mandatory product certification received within the validity period and the normal annual review of the case effectively.
To verify that this certificate is current please refer to CNCA website at <http://www.cnca.gov.cn>.



Beijing Zhonghui Hengtai Certification Co., Ltd.
Room 513,5F,13th Building, No.3, Yantou Street, Daxing District, Beijing Tel:010-53606385

安全生产合格证

Safety Production Certificate



设备维修安装企业能力等级证

Enterprise Capability Level Certificate for Equipment Maintenance and Installation



澳洲水印认证
 AS2419.2 一级消防阀
 产品认证
 ABCB Construction
 WaterMark Certificate

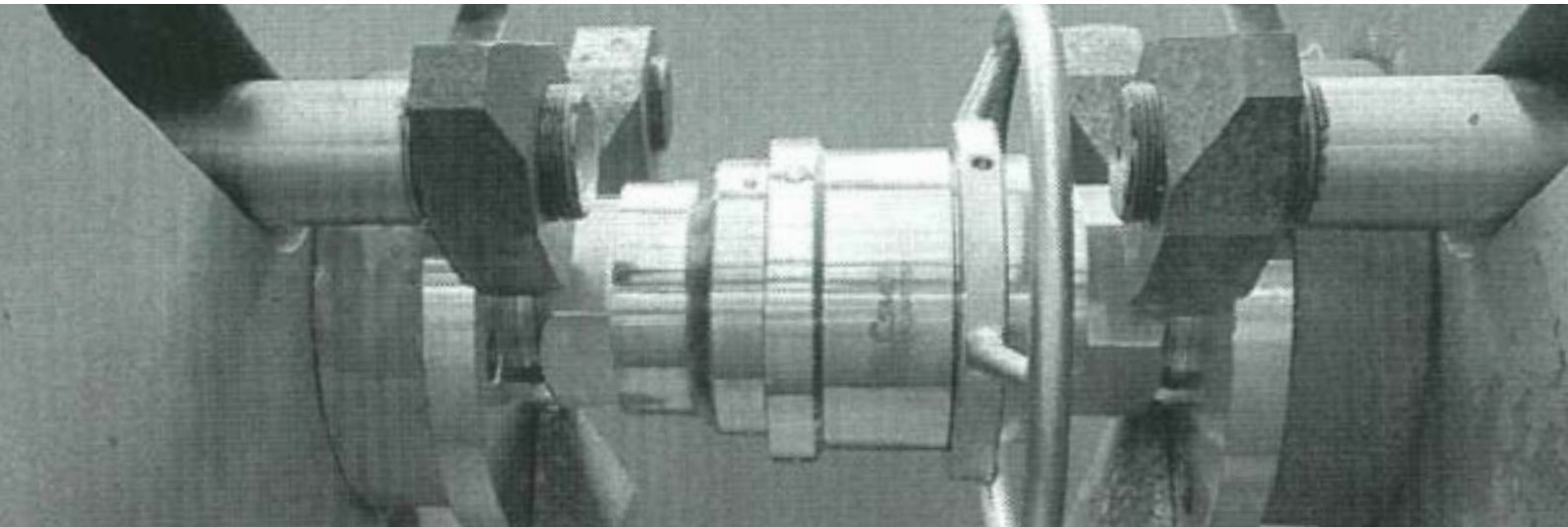


澳洲水印认证

AS2419.3 一级消防阀 产品认证

ABCB Construction WaterMark Certificate





石化干式接头防爆等级认证

Type Tests and Certifications for Dry Break Couplings



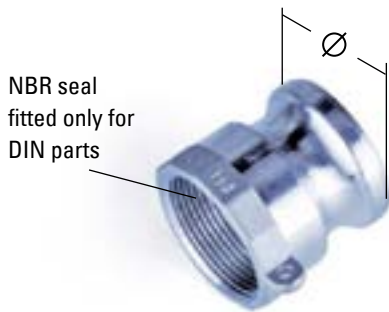
晟江工业出品的干式接头对于壳体强度、防爆等级都做了严格测试与认证。试验根据 GB/T 13927-2008 《工业阀门 压力试验》相关规范，对晟江 DMG 芒果干式接头进行了型式试验：壳体强度、密封保压性能、高低压密封性能等均达到设计要求，符合国家实用规范。晟江 DMG 芒果干式接头同样获得欧标 2014/34/EU ATEX 防爆等级认证许可，获得 Ex II 2G Ex H IIC T5 Gb 认证标示。





Aluminum CG-A male adapter by inside thread AA59326, EN14420-7

We apply gravity casting followed by T6 hardening for aluminum production, ECO pieces by die casting. No sealing is fitted for AA, NBR seal for DIN parts.



SIZE Ø	THRD (INCH)	AA BSPP	ECO BSPP	DIN NBR
A050	1/2	061050.1	061050.2	-
A075	3/4	061051.6	061051.2	061051.18
A100	1	061052.6	061052.2	061052.18
A125	1¼	061053.6	061053.2	061053.18
A150	1½	061054.6	061054.2	061054.18
A200	2	061055.6	061055.2	061055.18
A250	2½	061056.6	061056.2	061056.18
A300	3	061057.6	061057.2	061057.18
A400	4	061058.6	061058.2	061058.18
A500	5	061059.6	061059.2	-
A600	6	061060.6	061060.2	-
A800	8	061061.1	061061.2	-

Brass CG-A male adapter by inside thread AA59326, EN14420-7

We forge brass camlock from 1/2" to 3", rest by casting. No thread seal is used for AA, PUR for DIN.



SIZE Ø	THRD (INCH)	AA BSPP	DIN PUR
A050	1/2	061250	061250.18
A075	3/4	061251	061251.18
A100	1	061252	061252.18
A125	1¼	061253	061253.18
A150	1½	061254	061254.18
A200	2	061255	061255.18
A250	2½	061256	061256.18
A300	3	061257	061257.18
A400	4	061258	061258.18
A500	5	061259	-
A600	6	061260	-
A800	8	061261	-

316 CG-A male adapter by inside thread AA59326, EN14420-7



We cast stainless steel parts with lost-wax investment technique. Thread seal is not applicable for AA, PTFE seal available in DIN parts.

SIZE Ø	THRD (INCH)	AA BSPP	DIN PTFE
A050	1/2	061150.1	-
A075	3/4	061151.1	061151.18
A100	1	061152.1	061152.18
A125	1¼	061153.4	061153.18
A150	1½	061154.4	061154.18
A200	2	061155.4	061155.18
A250	2½	061156.4	061156.18
A300	3	061157.4	061157.18
A400	4	061158.4	061158.18
A500	5	061159.1	-
A600	6	061160.1	-
A800	8	061061.1	-

Plastic CG-A male adapter by inside thread AA59326



We use polypropylene and nylon with glassfiber in the process of injection molding for the production, no gasket fitted. They are resistant to chemicals.

SIZE Ø	THRD (INCH)	PP BSPP	NYL BSPP
A050	1/2	061350.0	-
A075	1/2	061350	061450
A075	3/4	061351	061451
A100	1	061352	061452
A125	1¼	061353	061453
A150	1½	061354	061454
A200	2	061355	061455
A250	2½	061356	061456
A300	3	061357	061457
A400	4	061358	061458
A500	5	061359	061459
A600	6	-	-
A800	8	-	-

Aluminum CG-E male adapter by hose shank AA59326



We apply gravity casting plus T6 treatment for the aluminum parts, ECO pieces by die casting. Serration type can be customized.

SIZE Ø	(INCH)	AA	ECO
		SERR	SERR
E050	1/2	065050.1	065050.2
E075	3/4	065051.6	065051.2
E100	1	065052.6	065052.2
E125	1¼	065053.6	065053.2
E150	1½	065054.6	065054.2
E200	2	065055.6	065055.2
E250	2½	065056.6	065056.2
E300	3	065057.6	065057.2
E400	4	065058.6	065058.2
E500	5	065059.6	065059.2
E600	6	065060.6	-
E800	8	065061.1	-

Brass CG-E male adapter by hose shank AA59326, EN14420-7

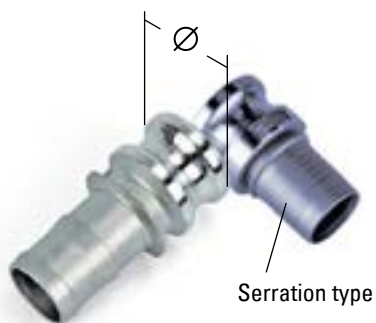


We forge them up to 3" and cast the other sizes. For DIN version smooth hose shank with collar is designed as in compliance with EN 14420-2.

SIZE Ø	(INCH)	AA	DIN
		SERR	SMOOTH
E050	1/2	065250	065250.18
E075	3/4	065251	065251.18
E100	1	065252	065252.18
E125	1¼	065253	065253.18
E150	1½	065254	065254.18
E200	2	065255	065255.18
E250	2½	065256	065256.18
E300	3	065257	065257.18
E400	4	065258	065258.18
E500	5	065259	065259.18
E600	6	065260	065260.18
E800	8	-	065261.18



316 CG-E male adapter by hose shank AA59326, EN14420-7



We cast all stainless steel camlock by lost-wax process, serrations worked in CNC. Both smooth and serrated types are designed per EN 14420 series.

SIZE Ø	(INCH)	AA	DIN	DIN
		SERR	SMOOTH	SERR
E050	1/2	065150.1	065150.18	065150.19
E075	3/4	065151.1	065151.18	065151.19
E100	1	065152.1	065152.18	065152.19
E125	1¼	065153.4	065153.18	065153.19
E150	1½	065154.4	065154.18	065154.19
E200	2	065155.4	065155.18	065155.19
E250	2½	065156.1	065156.18	065156.19
E300	3	065157.4	065157.18	065157.19
E400	4	065158.4	065158.18	065158.19
E500	5	065159.1	-	-
E600	6	065160.1	-	-
E800	8	065161.1	-	-

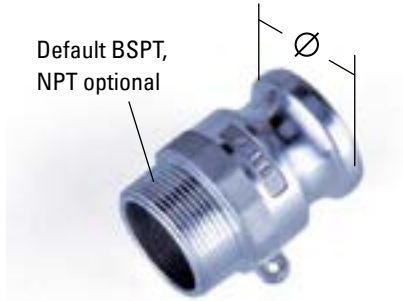
Plastic CG-E male adapter by hose shank AA59326



We apply injection molding technique for glassfiber rich polypropylene and nylon camlock with glassfiber blend.

SIZE Ø	(INCH)	PP	NYL
		SERR	SERR
E050	1/2	065350.0	-
E075	1/2	065350	065450
E075	3/4	065351	065451
E100	1	065352	065452
E125	1¼	065353	065453
E150	1½	065354	065454
E200	2	065355	065455
E250	2½	065356	065456
E300	3	065357	065457
E400	4	065358	065458
E500	5	065359	065459
E600	6	065360	-
E800	8	-	-

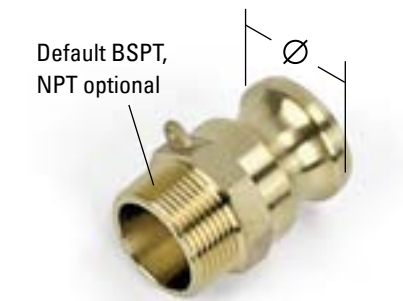
Aluminum CG-F male adapter by outside thread AA59326



We apply gravity casting plus T6 treatment for the aluminum parts, ECO version by die casting. Tapered thread is made, NPT optional.

SIZE Ø	THRD (INCH)	AA BSPT	AA NPT	ECO BSPT
F050	1/2	066050.1	066050.12	066050.2
F075	3/4	066051.6	066051.12	066051.2
F100	1	066052.6	066052.12	066052.2
F125	1¼	066053.6	066053.12	066053.2
F150	1½	066054.6	066054.12	066054.2
F200	2	066055.6	066055.12	066055.2
F250	2½	066056.6	066056.12	066056.2
F300	3	066057.6	066057.12	066057.2
F400	4	066058.6	066058.12	066058.2
F500	5	066059.6	066059.12	066059.2
F600	6	066060.6	066060.12	066060.2
F800	8	066061.1	-	066061.2

Brass CG-F male adapter by outside thread AA59326



We forge brass camlock from 1/2" to 3", rest by casting. NPT is an option over default BSPT type of thread.

SIZE Ø	THRD (INCH)	AA BSPT	AA NPT
F050	1/2	066250	-
F075	3/4	066251	066251.12
F100	1	066252	066252.12
F125	1¼	066253	066253.12
F150	1½	066254	066254.12
F200	2	066255	066255.12
F250	2½	066256	066256.12
F300	3	066257	066257.12
F400	4	066258	066258.12
F500	5	066259	-
F600	6	066260	-
F800	8	-	-

316 CG-F male adapter by outside thread AA59326



We cast stainless steel parts with lost-wax investment technique. Thread is made BSPT by default, NPT optional.

SIZE Ø	THRD (INCH)	AA BSPT	AA NPT
F050	1/2	066150.1	066150.12
F075	3/4	066151.1	066151.12
F100	1	066152.1	066152.12
F125	1¼	066153.4	066153.12
F150	1½	066154.4	066154.12
F200	2	066155.4	066155.12
F250	2½	066156.4	066156.12
F300	3	066157.1	066157.12
F400	4	066158.1	066158.12
F500	5	066159.1	066159.12
F600	6	066160.1	066160.12
F800	8	066061.1	-

Plastic CG-F male adapter by outside thread AA59326



We produce camlock in polypropylene and nylon, and glassfiber blend by injection molding process. NPT is workable. They are resistant to chemicals.

SIZE Ø	THRD (INCH)	PP BSPT	PP NPT	NYL BSPT
F050	1/2	066350.0	-	-
F075	1/2	066350	066350.12	066450
F075	3/4	066351	066351.12	066451
F100	1	066352	066352.12	066452
F125	1¼	066353	066353.12	066453
F150	1½	066354	066354.12	066454
F200	2	066355	066355.12	066455
F250	2½	066356	066356.12	066456
F300	3	066357	066357.12	066457
F400	4	066358	066358.12	066458
F500	5	066359	066359.12	066459
F600	6	066360	066360.12	066460
F800	8	-	-	-

Aluminum CG-DP dust plug AA59326



We apply gravity casting plus T6 treatment for the aluminum parts, ECO range done by die casting. Chains can be attached.

SIZE Ø	(INCH)	AA NO CHAIN	AA CS CHAIN	ECO NO CHAIN
DP050	1/2	068050.1	-	068050.2
DP075	3/4	068051.6	068051.61	068051.2
DP100	1	068052.6	068052.61	068052.2
DP125	1¼	068053.6	068053.61	068053.2
DP150	1½	068054.6	068054.61	068054.2
DP200	2	068055.6	068055.61	068055.2
DP250	2½	068056.6	068056.61	068056.2
DP300	3	068057.6	068057.61	068057.2
DP400	4	068058.6	068058.61	068058.2
DP500	5	068059.6	068059.61	068059.2
DP600	6	068060.6	068060.61	068060.2
DP800	8	068068.1	-	068068.2

Brass CG-DP dust plug AA59326



We forge brass camlock from 1/2" to 3", rest by casting. Chain attachment is available.

SIZE Ø	(INCH)	AA NO CHAIN	AA SS CHAIN
DP050	1/2	068250	068250.11
DP075	3/4	068251	068251.11
DP100	1	068252	068252.11
DP125	1¼	068253	068253.11
DP150	1½	068254	068254.11
DP200	2	068255	068255.11
DP250	2½	068256	068256.11
DP300	3	068257	068257.11
DP400	4	068258	068258.11
DP500	5	068259	068259.11
DP600	6	068260	068260.11
DP800	8	-	-

316 CG-DP dust plug AA59326



We cast stainless steel parts with lost-wax investment technique. Chain attachment is possible.

SIZE Ø	(INCH)	AA NO CHAIN	AA SS CHAIN
DP050	1/2	068150.1	068150.11
DP075	3/4	068151.1	068151.11
DP100	1	068152.1	068152.11
DP125	1¼	068153.1	068153.11
DP150	1½	068154.1	068154.11
DP200	2	068155.1	068155.11
DP250	2½	068156.1	068156.11
DP300	3	068157.1	068157.11
DP400	4	068158.1	068158.11
DP500	5	068159.1	068159.11
DP600	6	068160.1	068160.11
DP800	8	068161.1	-

Plastic CG-DP dust plug AA59326



We produce camlock in glassfiber mixed polypropylene and nylon by injection molding and optional attached with chains.

SIZE Ø	(INCH)	PP NO CHAIN	NYL NO CHAIN
DP050	1/2	068350	068450
DP075	3/4	068351	068451
DP100	1	068352	068452
DP125	1¼	068353	068453
DP150	1½	068354	068454
DP200	2	068355	068455
DP250	2½	068356	068456
DP300	3	068357	068457
DP400	4	068358	068458
DP500	5	068359	068459
DP600	6	068360	068460
DP800	8	-	-

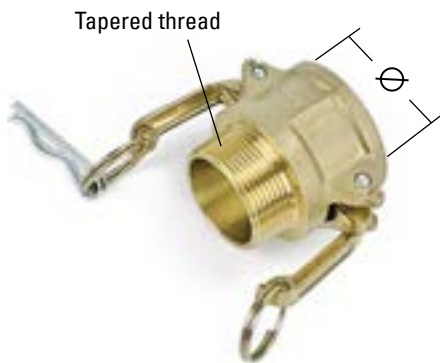
Aluminum CG-B female coupler by outside thread AA59326



We apply gravity casting plus T6 treatment for all sizes, ECO parts by die casting, in combination with forged arms and NBR gasket. Tapered thread is designed.

SIZE Ø	THRD (INCH)	AA	AA	ECO
		SS ARM BSPT	BR ARM NPT	SS ARM BSPT
B050	1/2	062050.3	062050.12	062050.2
B075	3/4	062051.6	062051.12	062051.2
B100	1	062052.6	062052.12	062052.2
B125	1¼	062053.6	062053.12	062053.2
B150	1½	062054.6	062054.12	062054.2
B200	2	062055.6	062055.12	062055.2
B250	2½	062056.6	062056.12	062056.2
B300	3	062057.6	062057.12	062057.2
B400	4	062058.6	062058.12	062058.2
B500	5	062059.6	062059.12	062059.2
B600	6	062060.6	062060.12	062060.2
B800	8	-	-	062061.2

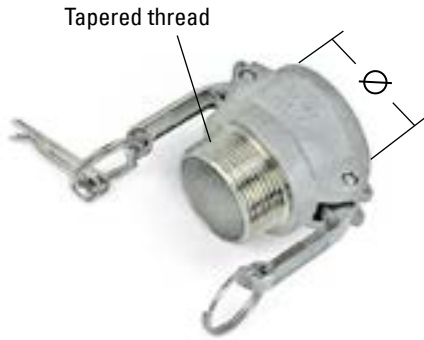
Brass CG-B female coupler by outside thread AA59326



We forge brass camlock from 1/2" to 3", rest by casting, in combination with forged arms and NBR gasket.

SIZE Ø	THRD (INCH)	AA	AA	AA
		BR ARM BSPT	BR ARM NPT	SS ARM BSPT
B050	1/2	062250	062250.12	062250.3
B075	3/4	062251	062251.12	062251.3
B100	1	062252	062252.12	062252.3
B125	1¼	062253	062253.12	062253.3
B150	1½	062254	062254.12	062254.3
B200	2	062255	062255.12	062255.3
B250	2½	062256	062256.12	062256.3
B300	3	062257	062257.12	062257.3
B400	4	062258	062258.12	062258.3
B500	5	062259	062259.12	062259.3
B600	6	062260	062260.12	062259.3
B800	8	-	-	-

316 CG-B female coupler by outside thread AA59326



We cast stainless steel parts with lost-wax investment fashion, fitted with NBR gasket. Arms are fitted with stainless steel pins and clips. Tapered thread is made.

SIZE Ø	THRD (INCH)	AA SS ARM BSPT	AA SS ARM NPT
B050	1/2	062150.1	062150.12
B075	3/4	062151.1	062151.12
B100	1	062152.1	062152.12
B125	1¼	062153.1	062153.12
B150	1½	062154.1	062154.12
B200	2	062155.1	062155.12
B250	2½	062156.1	062156.12
B300	3	062157.1	062157.12
B400	4	062158.1	062158.12
B500	5	062159.1	062159.12
B600	6	062160.1	062160.12
B800	8	-	-

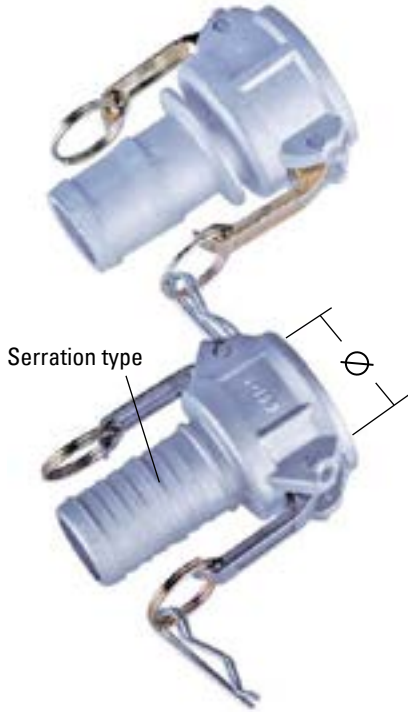
Plastic CG-B female coupler by outside thread AA59326



We produce camlock in glassfiber rich polypropylene and nylon by injection molding process, fitted with EPDM gasket. Tapered thread is worked.

SIZE Ø	THRD (INCH)	PP SS ARM BSPT	PP SS ARM NPT	NYL SS ARM BSPT
B050	1/2	-	-	-
B075	1/2	062350.1	-	062450
B075	3/4	062351.1	062351.12	062451
B100	1	062352.1	062352.12	062452
B125	1¼	062353.1	062353.12	062453
B150	1½	062354.1	062354.12	062454
B200	2	062355.1	062355.12	062455
B250	2½	062356.1	062356.12	062456
B300	3	062357.1	062357.12	062457
B400	4	062358.1	062358.12	062458
B500	5	-	062359.12	062459
B600	6	-	062160.12	062160
B800	8	-	-	-

Aluminum CG-C female coupler by hose shank AA59326



We apply gravity casting plus T6 treatment for all sizes, ECO parts by die casting, in combination with forged arms and NBR gasket. Serrated hose shank is designed.

SIZE Ø	(INCH)	AA	AA	ECO
		SS ARM	BR ARM	SS ARM
		SERR	SERR	SERR
C050	1/2	063050.3	063050.1	063050.2
C075	3/4	063051.6	063051.1	063051.2
C100	1	063052.6	063052.1	063052.2
C125	1¼	063053.6	063053.1	063053.2
C150	1½	063054.6	063054.1	063054.2
C200	2	063055.6	063055.1	063055.2
C250	2½	063056.6	063056.1	063056.2
C300	3	063057.6	063057.1	063057.2
C400	4	063058.6	063058.1	063058.2
C500	5	063059.6	063059.1	063059.2
C600	6	063060.6	063060.1	063060.2
C800	8	063061.3	063061.1	063061.2
C1000	10	-	063062.1	-
C1200	12	-	063063	-

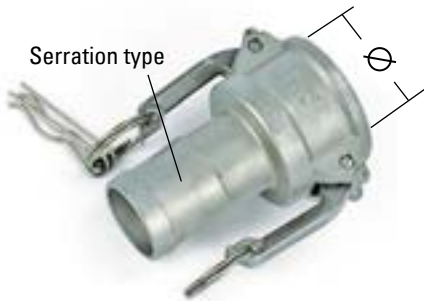
Brass CG-C female coupler by hose shank AA59326, EN14420-7



We forge brass camlock from 1/2" to 3", rest by casting. NBR gasket and forged arms are attached. Serration is made for AA, smooth and collar for DIN.

SIZE Ø	(INCH)	AA	DIN	DIN
		BR ARM	BR ARM	BR ARM
		SERR	SMOOTH	SERR
C050	1/2	063250	063250.18	063250.181
C075	3/4	063251	063251.18	063251.181
C100	1	063252	063252.18	063252.181
C125	1¼	063253	063253.18	063253.181
C150	1½	063254	063254.18	063254.181
C200	2	063255	063255.18	063255.181
C250	2½	063256	063256.18	063256.181
C300	3	063257	063257.18	063257.181
C400	4	063258	063258.18	063258.181
C500	5	063259	063259.18	063259.181
C600	6	063260	063260.18	063260.181
C800	8	-	063261.18	-

316 CG-C female coupler by hose shank AA59326, EN14420-7



We cast stainless steel parts with lost-wax investment fashion, fitted with NBR gasket. Arms are fitted with stainless steel pins and clips. Serration is done for AA, smooth and collar for DIN.

SIZE Ø	(INCH)	AA	DIN	DIN
		SS ARM SERR	SS ARM SMOOTH	SS ARM SERR
C050	1/2	063150.1	063150.18	063150.19
C075	3/4	063151.1	063151.18	063151.19
C100	1	063152.1	063152.18	063152.19
C125	1¼	063153.1	063153.18	063153.19
C150	1½	063154.1	063154.18	063154.19
C200	2	063155.1	063155.18	063155.19
C250	2½	063156.1	063156.18	063156.19
C300	3	063157.1	063157.18	063157.19
C400	4	063158.1	063158.18	063158.19
C500	5	063159.1	063159.18	063159.19
C600	6	063160.1	-	-
C800	8	063161.1	-	-

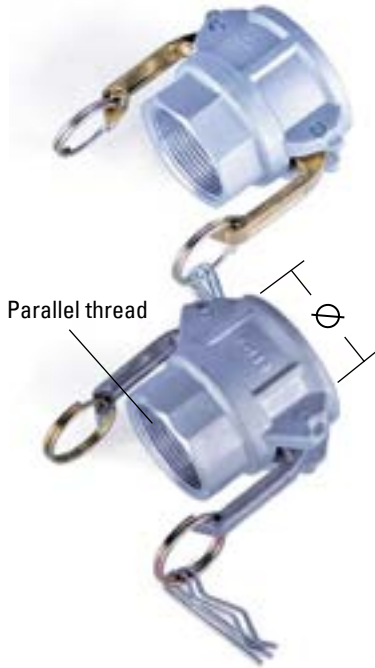
Plastic CG-C female coupler by hose shank AA59326



We produce camlock in polypropylene and nylon with glassfiber reinforcement by injection molding. EPDM gasket is fitted.

SIZE Ø	(INCH)	PP	NYL
		SS ARM SERR	SS ARM SERR
C050	1/2	-	-
C050	3/4	063350.1	063450
C075	3/4	063351.1	063451
C100	1	063352.1	063452
C125	1¼	063353.1	063453
C150	1½	063354.1	063454
C200	2	063355.1	063455
C250	2½	063356.1	063456
C300	3	063357.1	063457
C400	4	063358.1	063458
C500	5	063359.1	063459
C600	6	063360	063460
C800	8	-	-

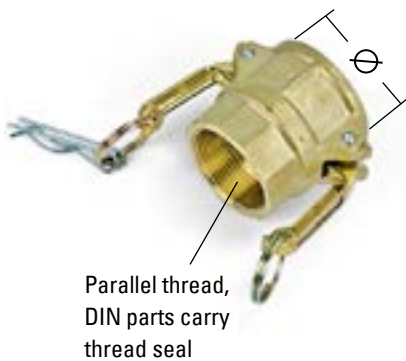
Aluminum CG-D female coupler by inside thread AA59326, EN14420-7



We use gravity casting plus T6 treatment for all sizes, ECO parts by die casting in combination with forged arms. NBR gasket is fitted, plus an NBR thread seal for DIN parts. Parallel inside thread is designed to mate tapered counterparts.

SIZE Ø	THRD (INCH)	AA	ECO	DIN
		SS ARM BSPP	SS ARM BSPP	SS ARM NBR/NBR
D050	1/2	064050.3	064050.2	-
D075	3/4	064051.6	064051.2	064051.18
D100	1	064052.6	064052.2	064052.18
D125	1¼	064053.6	064053.2	064053.18
D150	1½	064054.6	064054.2	064054.18
D200	2	064055.6	064055.2	064055.18
D250	2½	064056.6	064056.2	064056.18
D300	3	064057.6	064057.2	064057.18
D400	4	064058.6	064058.2	064058.18
D500	5	064059.6	064059.2	-
D600	6	064060.6	064060.2	-
D800	8	064061.3	064061.2	-

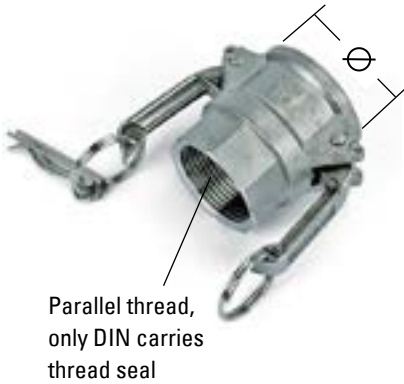
Brass CG-D female coupler by inside thread AA59326, EN14420-7



We forge brass camlock from 1/2" to 3", rest by casting. NBR gasket and forged arms are attached. DIN part applies NBR, EPDM, PTFE and PUR sealing packages.

SIZE Ø	THRD (INCH)	AA	DIN	DIN
		BR ARM BSPP	BR ARM EPDM/PTFE	SS ARM NBR/PUR
D050	1/2	064250	064250.19	064250.18
D075	3/4	064251	064251.19	064251.18
D100	1	064252	064252.19	064252.18
D125	1¼	064253	064253.19	064253.18
D150	1½	064254	064254.19	064254.18
D200	2	064255	064255.19	064255.18
D250	2½	064256	064256.19	064256.18
D300	3	064257	064257.19	064257.18
D400	4	064258	-	064258.18
D500	5	064259	-	-
D600	6	064260	-	-
D800	8	-	-	-

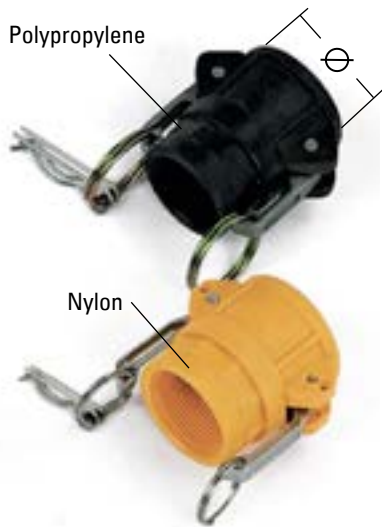
316 CG-D female coupler by inside thread AA59326, EN14420-7



We cast stainless steel parts with lost-wax investment process. NBR gasket and forged arms are fitted. DIN part is joined with additional CSM and PTFE seals.

SIZE Ø	THRD (INDH)	AA SS ARM BSPT	DIN SS ARM NBR/PTFE	DIN SS ARM DSM/PTFE
D050	1/2	064150.1	-	-
D075	3/4	064151.1	064151.18	064151.17
D100	1	064152.1	064152.18	064152.17
D125	1¼	064153.1	064153.18	064153.17
D150	1½	064154.1	064154.18	064154.17
D200	2	064155.1	064155.18	064155.17
D250	2½	064156.1	064156.18	064156.17
D300	3	064157.1	064157.18	064157.17
D400	4	064158.1	064158.18	064158.17
D500	5	064159.1	-	-
D600	6	064160.1	-	-
D800	8	064161.1	-	-

Plastic CG-D female coupler by inside thread AA59326



We offer cam and groove in polypropylene and nylon with reinforcing glassfiber, made by injection molding. EPDM gasket is fitted. BSPP inside thread is done to mate tapered counterparts without additional thread seal.

SIZE Ø	THRD (INDH)	PP SS ARM BSPP	NYL SS ARM BSPP
D050	1/2	-	-
D075	1/2	064350.1	063450
D075	3/4	064351.1	063451
D100	1	064352.1	063452
D125	1¼	064353.1	063453
D150	1½	064354.1	063454
D200	2	064355.1	063455
D250	2½	064356.1	063456
D300	3	064357.1	063457
D400	4	064358.1	063458
D500	5	-	-
D600	6	-	-
D800	8	-	-

Aluminum CG-DC dust cap AA59326

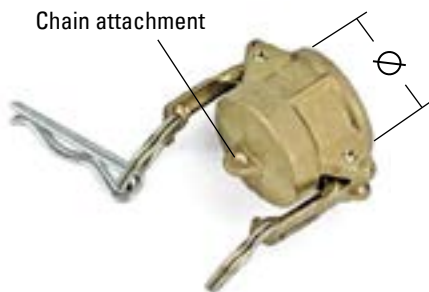


We use gravity casting plus T6 treatment for all sizes, ECO parts by die casting in combination with forged arms and NBR gasket, optional with chains.

SIZE Ø	(INCH)	AA	AA	ECO
		SS ARM NO CHAIN	SS ARM CS CHAIN	SS ARM NO CHAIN
DC050	1/2	067050.3	-	067050.2
DC075	3/4	067051.6	067051.61	067051.2
DC100	1	067052.6	067052.61	067052.2
DC125	1¼	067053.6	067053.61	067053.2
DC150	1½	067054.6	067054.61	067054.2
DC200	2	067055.6	067055.61	067055.2
DC250	2½	067056.6	067056.61	067056.2
DC300	3	067057.6	067057.61	067057.2
DC400	4	067058.6	067058.61	067058.2
DC500	5	067059.6	067059.61	067059.2
DC600	6	067060.6	067060.61	067060.2
DC800	8	067061.3	-	067061.2

SIZE Ø	(INCH)	AA
		SS ARM 90° NO CHAIN
DC200	2	067545
DC300	3	067547
DC400	4	067548

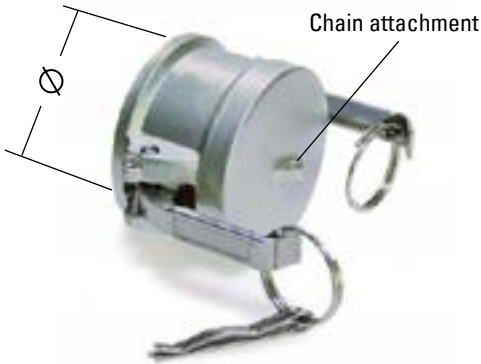
Brass CG-DC dust cap AA59326



We forge brass camlock from 1/2" to 3", rest by casting. NBR gasket and forged arms are attached. Chain attachment is available.

SIZE Ø	(INCH)	AA	AA	AA
		BR ARM NO CHAIN	BR ARM SS CHAIN	SS ARM NO CHAIN
DC050	1/2	067250	067250.11	067250.3
DC075	3/4	067251	067251.11	067251.3
DC100	1	067252	067252.11	067252.3
DC125	1¼	067253	067253.11	067253.3
DC150	1½	067254	067254.11	067254.3
DC200	2	067255	067255.11	067255.3
DC250	2½	067256	067256.11	067256.3
DC300	3	067257	067257.11	067257.3
DC400	4	067258	067258.11	067258.3
DC500	5	067259	067259.11	067259.3
DC600	6	067260	067259.11	067260.11
DC800	8	-	-	-

316 CG-DC dust cap AA59326



We cast stainless steel parts with lost-wax investment process. NBR gasket and forged arms are fitted. Optional with chain attachment.

SIZE Ø	(INCH)	AA	AA
		SS ARM NO CHAIN	SS ARM SS CHAIN
DC050	1/2	067150.1	067150.11
DC075	3/4	067151.1	067151.11
DC100	1	067152.1	067152.11
DC125	1¼	067153.1	067153.11
DC150	1½	067154.1	067154.11
DC200	2	067155.1	067155.11
DC250	2½	067156.1	067156.11
DC300	3	067157.1	067157.11
DC400	4	067158.1	067158.11
DC500	5	067159.1	067159.11
DC600	6	067160.1	067160.11
DC800	8	067161.1	-

Plastic CG-DC dust cap AA59326



We offer cam and groove in polypropylene and nylon with reinforcing glassfiber, made by injection molding. EPDM gasket is fitted, possible with chains.

SIZE Ø	(INCH)	PP	NYL
		SS ARM NO CHAIN	SS ARM NO CHAIN
DC050	1/2	067350	067450
DC075	3/4	067351.1	067451
DC100	1	067352.1	067452
DC125	1¼	067353.1	067453
DC150	1½	067354.1	067454
DC200	2	067355.1	067455
DC250	2½	067356.1	067456
DC300	3	067357.1	067457
DC400	4	067358.1	067458
DC500	5	067359.1	067459
DC600	6	067360	067460
DC800	8	-	-

Bronze CG AA59326, EN14420-7



Bronze parts type A, C, D and E of AA and DIN standard are popular. We use material British/LG2, fitted with NBR gasket. Customize specs is possible.

SIZE Ø	AA59326				EN14420-7		
	(INCH)	A BSPP	C SERR	D BSPP	E SERR	CC SMOOTH	EC SMOOTH
050	1/2	-	-	-	-	-	-
075	3/4	061211	063211	064211	065211	063211.18	065211.18
100	1	061212	063212	064212	065212	063212.18	065212.18
125	1¼	061213	063213	064213	065213	063213.18	065213.18
150	1½	061214	063214	064214	065214	063214.18	065214.18
200	2	061215	063215	064215	065215	063215.18	065215.18
250	2½	061216	063216	064216	065216	063216.18	065216.18
300	3	061217	063217	064217	065217	063217.18	065217.18
400	4	061218	063218	064218	065218	063218.18	065218.18
500	5	061219	063219	064219	065219	063219.18	065219.18
600	6	-	-	-	-	-	-
800	8	-	-	-	-	-	-

Anodizing aluminum CG AA59326



Anodizing surface is commonly requested where abrasion resistance is demanded. We have experience with aluminum parts.

SIZE Ø	AA59326					
	(INCH)	DC NO CHAIN	DP NO CHAIN	A BSPP	D BSPP	F BSPT
050	1/2	067050.13	068051.23	061050.23	064050.15	066050.122
075	3/4	067051.13	068051.23	061051.23	064051.15	066051.122
100	1	067052.13	068052.23	061052.23	064052.15	066052.122
125	1¼	067053.13	068053.23	061053.23	064053.15	066053.122
150	1½	067054.13	068054.23	061054.23	064054.15	066054.122
200	2	067055.13	068055.23	061055.23	064055.15	066055.122
250	2½	067056.13	068056.23	061056.23	064056.15	066056.122
300	3	067057.13	068057.23	061057.23	064057.15	066057.122
400	4	067058.13	068058.23	061058.23	064058.15	066058.122
500	5	067059.13	068059.23	061059.23	064059.15	066059.122
600	6	067060.13	068060.23	061060.23	064060.15	066060.122
800	8	-	-	-	-	-

316 CG heavy-duty for snow-blasting, PN 60



We produce heavy-duty camlock, couplers 316 with FPM gasket and adapters both hose shanked and threaded. Tough construction is self compliant rigid up to PN 60.

SIZE Ø	(INCH)	A BSPP	C SERR	D BSPP	E SERR
050	1/2	-	-	-	-
075	3/4	061100	-	061120	-
100	1	061101	061111	061121	061131
125	1¼	-	061112	061122	061132
150	1½	061103	061113	061123	061133
200	2	061104	061114	061124	061134
250	2½	061105	061115	061125	061135
300	3	-	-	-	-
400	4	-	-	-	-
500	5	-	-	-	-
600	6	-	-	-	-
800	8	-	-	-	-

316 CG coupler with locking security



We can apply standard coupler parts with arms with auto security, AA and DIN. That makes no change to the connection with cam adapters.

SIZE Ø	(INCH)	B BSPT	C RIBBED	D BSPP	DC NO CHAIN
050	1/2	-	-	-	-
075	3/4	064810	064820	064830	064840
100	1	064811	064821	064831	064841
125	1¼	064812	064822	064832	064842
150	1½	064813	064823	064833	064843
200	2	064814	064824	064834	064844
250	2½	064815	064825	064835	064845
300	3	064816	064826	064836	064846
400	4	064817	064827	064837	064847
500	5	-	-	-	-
600	6	-	-	-	-
800	8	-	-	-	-

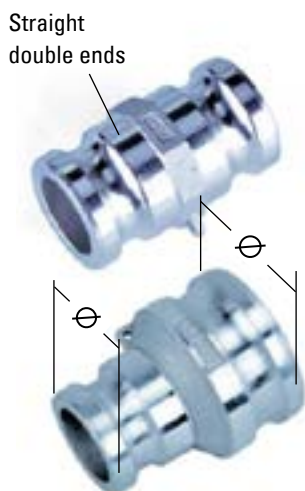
Aluminum reductions CG, AA59326



We design reduction types for all couplers and adapters, made of aluminum and T6 followed. Blinds are not applicable.

SIZE Ø × THRD/TAIL	AR BSPP	BR BSPT	CR SERR	DR BSPP	ER SERR	FR BSPT
150 × 1"	-	062604	-	064604	065604	-
150 × 3"	-	-	-	-	-	066603
200 × 1½"	061605	062605	063605	064605	065605	066605
200 × 3"	061606	-	-	-	065606	066606
300 × 1½"	061607.1	-	-	-	-	-
300 × 2"	061607	062607	063607	064607	065607	066607
300 × 2½"	-	-	-	-	-	066608
300 × 4"	061609	062609	063609	-	065609	066609
400 × 2"	-	-	-	-	065610	-
400 × 3"	061611	062611	063611	064611	065611	066611
400 × 6"	061613	-	-	-	-	066613
600 × 4"	061615	-	-	-	-	-

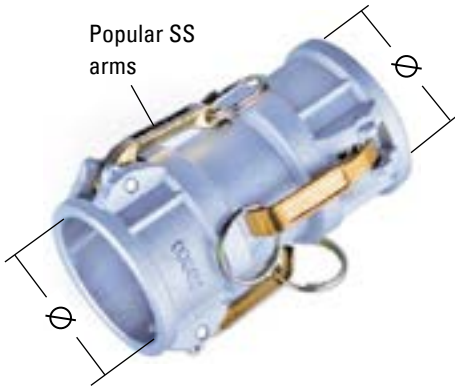
Aluminum CG-SA spool adapter AA59326



We produce one-piece camlock spool adapters. Connection is AA compliant.

SIZE Ø	(INCH)	ALU	316
SA100	1	061003	061023
SA125	1¼	061004	061024
SA150 × 100	1½ × 1	061005.2	061025.1
SA150	1½	061005	061025
SA150 × 200	1½ × 2	061005.1	061025.2
SA200	2	061006	061026
SA200 × 300	2 × 3	061006.1	061026.1
SA300	3	061008	061028
SA300 × 400	3 × 4	061008.1	061028.1
SA400 × 150	4 × 1½	061009.1	-
SA400 × 200	4 × 2	061009.2	-
SA400	4	061009	061029
SA400 × 600	4 × 6	061009.3	-
SA600	6	061010	-

Aluminum CG-DD double coupler AA59326



We design no-split piece camlock double couplers for AA compliant connections, with NBR gasket fitted on both ends.

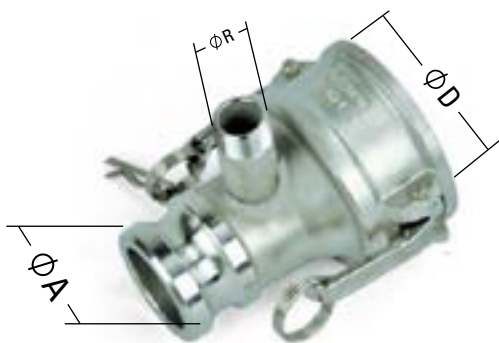
SIZE Ø	(INCH)	ALU SS ARM	ALU BR ARM
DD150	1½	064005.3	064005
DD200	2	064006.3	064006
DD300 × 200	3 × 2	-	064008.1
DD300	3	064008.3	064008
DD300 × 400	3 × 4	-	064008.2
DD400 × 150	4 × 1½	-	064009.1
DD400	4	064009.3	064009

Aluminum CG-DA coupling adapter AA59326



We produce adapters for female and male camlock connection AA compliant. NBR gasket is fitted in coupler end.

SIZE Ø	(INCH)	ALU BR ARM	316 SS ARM
D150 × A100	1½ × 1	062002	062022
D150 × A200	1½ × 2	062003	062023
D200 × A150	2 × 1½	062004	062024
D200 × A300	2 × 3	062005	062025
D200 × A400	2 × 4	062006	062026
D300 × A150	3 × 1½	062008	062028
D300 × A200	3 × 2	062009	062029
D300 × A400	3 × 4	062010	062030
D400 × A150	4 × 1½	062012	062032
D400 × A200	4 × 2	062013	062033
D400 × A300	4 × 3	062014	062034
D400 × A600	4 × 6	062015	062035
D600 × A400	6 × 4	062018	062038



SIZE Ø	(INCH)	304
D300 × A200 × R 3/4"	3 × 2 × ¾	064157.24
D300 × A200 × R 1/2"	3 × 2 × ½	064157.25

CAMLOCK COUPLER

SIGHT GLASS

visually possible

www.smecoupling.com



316 CG visual coupler with sight glass AA59326

We provide female couplers with sight glass making it visually possible. The body is made of st. steel, in-lined compartment to fit in a glass window.



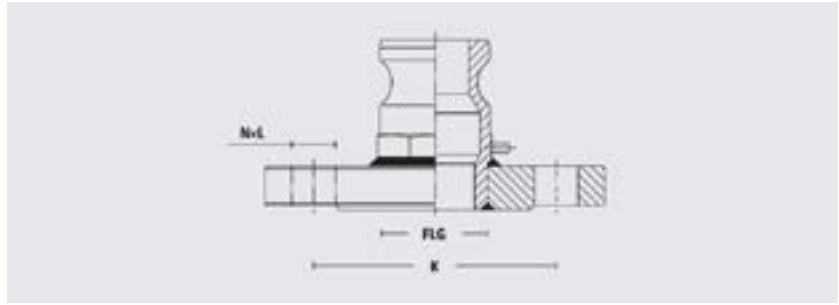
Standard	Cam and groove armed coupler AA59326
Size	DN 50 by 2 inch threading
Body Material	AISI 316 fitted with st. steel arm accessories
Spare Parts	PMMA glass, or optional borosilicate
Thread	BSPF female thread w/thread sealing, to go with male BSPT or other tapered types
Working Pressure	PN 16-25
Gasket	Black NBR gasket for connection, plus NBR thread seal
Suitable Media	Dry bulk transferring
Marking	SME D200 SS316 **** SERIAL

SIZE Ø	THRD (INCH)	316 SS ARM NBR/NBR
100	1	-
150	1½	-
200	2	064145
250	2½	-
300	3	-
400	4	-

316 CG male adapter AA59326 by round DIN flange



We weld the AA standard male adapter with a DIN EN 1092-1 flange piece, serving as a flanged quick-disconnect fitting. ASTM flange joint is optional.

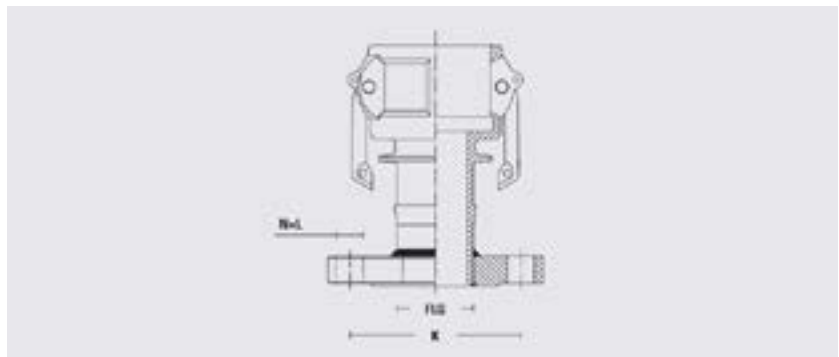


SIZE Ø	(INCH)	Ø K	NUM × L	316
100	1"	85	4 × 14	061852.1
125	1¼"	100	4 × 18	061853.1
150	1½"	110	4 × 18	061854.1
200	2"	125	4 × 18	061855.1
250	2½"	145	8 × 18	061856.1
300	3"	160	8 × 18	061857.1
400	4"	180	8 × 18	061858.1
500	5"	210	8 × 18	061859.1
600	6"	240	8 × 22	061860.1

316 CG female coupler AA59326 by round DIN flange



We weld the AA standard female coupler with a DIN EN 1092-1 flange piece, fitted with S/S arms and NBR gasket. ASTM flange joint is optional.

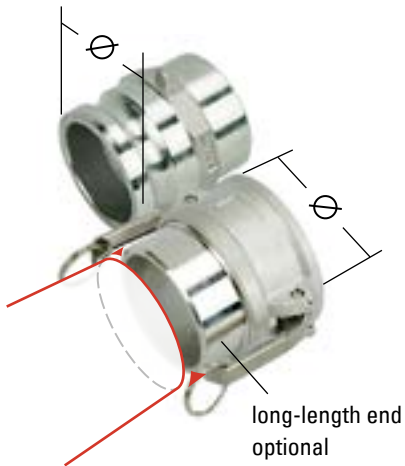


SIZE Ø	(INCH)	Ø K	NUM × L	316
100	1"	85	4 × 14	063852.1
125	1¼"	100	4 × 18	063853.1
150	1½"	110	4 × 18	063854.1
200	2"	125	4 × 18	063855.1
250	2½"	145	8 × 18	063856.1
300	3"	160	8 × 18	063857.1
400	4"	180	8 × 18	063858.1
500	5"	210	8 × 18	063859.1
600	6"	240	8 × 22	063860.1



316 CG BW welding adapters and couplers

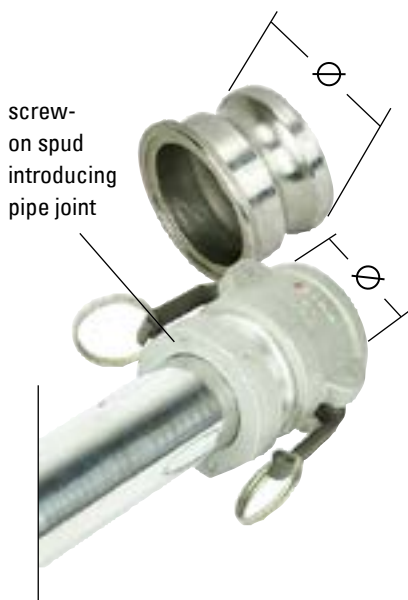
We produce cam adapters and couplers by BW welding ends, made in stainless steel. Special alloy, eg. hastelloy is possible.



SIZE Ø	(INCH)	ADAPTER	COUPLER
050	1/2	066150.11	062150.11
075	3/4	066151.11	062151.11
100	1	066152.11	062152.11
125	1¼	066153.11	062153.11
150	1½	066154.11	062154.11
200	2	066155.11	062155.11
250	2½	066156.11	062156.11
300	3	066157.11	062157.11
400	4	066158.11	062158.11
500	5	066159.11	062159.11
600	6	066160.11	062160.11
800	8	-	-

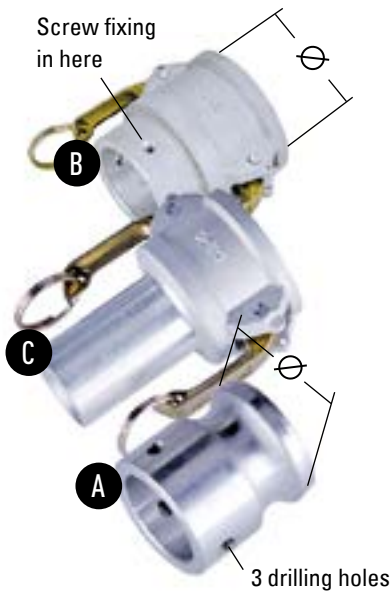
316 CG SW welding adapters, coupler spud sets

We can offer AA standard camlock by socket welding adapters, couplers with spud addition.



SIZE Ø	(INCH)	ADAPTER	COUPLER
050	1/2	-	-
075	3/4	-	-
100	1	-	-
125	1¼	-	-
150	1½	-	-
200	2	061155.31	064155.31
250	2½	061156.31	064156.31
300	3	-	-
400	4	-	-
500	5	-	-
600	6	-	-
800	8	-	-

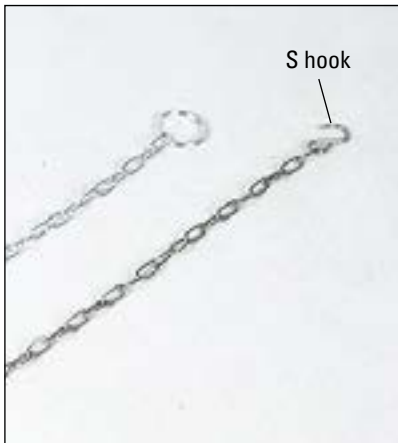
Aluminum CG blasting with drilling holes



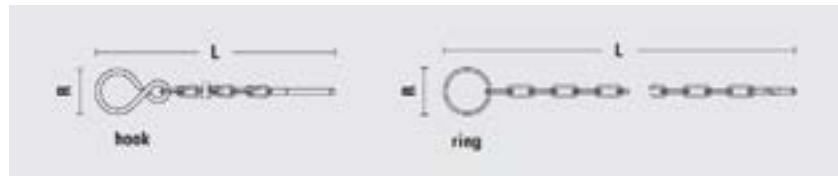
We design (a) coupler, (b) smooth shanked coupler and (c) mating adapter with reference to sandblasting couplings, adding 3 drilling holes in body.

SIZE Ø	(INCH)	A NO GASKET	B BR ARM NBR	C BR ARM NBR
050	1/2	-	-	-
075	3/4	-	-	-
100	1	-	-	-
125	1¼	-	-	-
150	1½	061054S	064054S	063054S
200	2	061055S	064055S	063055S
250	2½	061056S	064056S	063056S
300	3	061057S	064057S	063057S
400	4	-	-	-
500	5	-	-	-
600	6	-	-	-
800	8	-	-	-

Spare part chains with pull-ring or hook



We supply steel, st. steel and poly or plastic chains with pull rings or hooks on the end. Customized requirement is possible.



L (MM)	ØR (MM)	STEEL RING	STEEL HOOK	SS RING	SS HOOK	POLY HOOK
230	26	-	-	-	-	069324
330	26	-	-	-	069323	-
330	32	069321	-	069322	-	-
460	26	-	069325	-	069325.1	-

Spare part CG arm package, AA and DIN applicable



We can offer camlock arm sets as spare part. Each includes 2 standard arms, 2 pull rings and 2 security clips, locking arms optional.



RANGE	(INCH)	BR ARM	SS ARM
CG-B,C,D,DC		CS RING, CLIP	SS RING, CLIP
050, 075	1/2, 3/4	069111.9	069121.9
100	1	069112.9	069122.9
125, 150, 200, 250	1¼, 1½, 2, 2½	069113.9	069123.9
300, 400, 500	3, 4, 5	069114.9	069124.9
600	6	069115.9	069125.9
800	8	069116.9	069126.9

Arm is done by forging process, giving it sufficient strength least possible getting cracked or bent.

Forged pieces



RANGE	(INCH)	BR ARM	SS ARM
050, 075	1/2, 3/4	069111	069121
100	1	069112	069122
125, 150, 200, 250	1¼, 1½, 2, 2½	069113	069123
300, 400, 500	3, 4, 5	069114	069124
600	6	069115	069125
800	8	069116	069126

2 to 3 circles



RANGE	(INCH)	CS RING	SS RING
050, 075, 100, 125, 150, 200, 250	1/2, 3/4, 1, 1¼, 1½, 2, 2½	069421.1	069421.2
300, 400, 500, 600, 800	3, 4, 5, 6, 8	069422.1	069422.2

Fitted for Camlock connection



RANGE	(INCH)	CS CLIP	SS CLIP
050, 075, 100	1/2, 3/4, 1	069521	069521.1
125, 150, 200, 250, 300, 400, 500, 600, 800	1¼, 1½, 2, 2½, 3, 4, 5, 6, 8	069522	069522.1

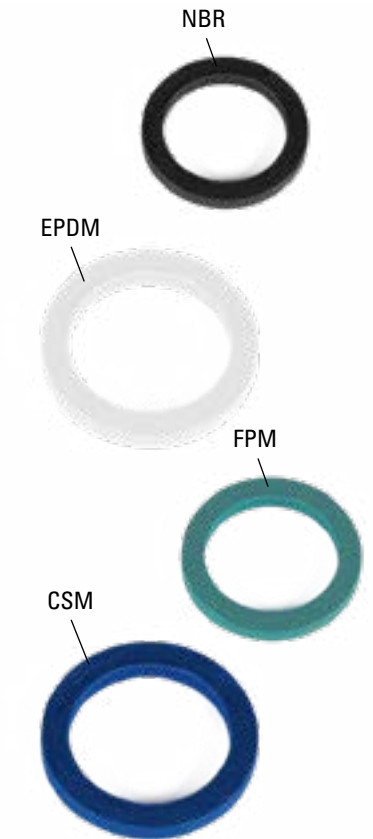
Spare part CG pin



We can provide pins as a replacement part to SME camlock couplers.

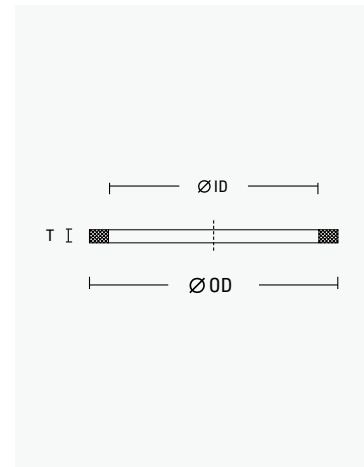
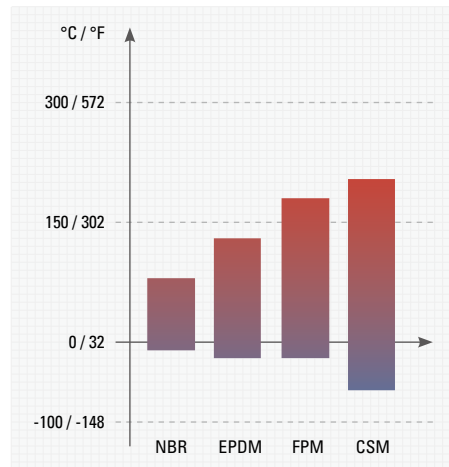
RANGE	(INCH)	CS CLIP	SS CLIP
050, 075	1/2, 3/4	069621.1	069621.2
100	1"	069622.1	069622.2
125, 150, 200, 250	1¼, 1½, 2, 2½	069623.1	069623.2
300, 400, 450	3, 4, 5	069624.1	069624.2
600, 800	6, 8	069625.1	069625.2

Spare part CG flat gasket, NBR EPDM FPM CSM



We develop flat gasket specifically for camlock connection made from materials NBR, EPDM, FPM and CSM. Hardness in Shore A is indicated.

GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
EPDM	70 ± 5	-20 / 130	-4 / 266	ethylene propylene
FPM	70 ± 5	-20 / 180	-4 / 356	fluorocarbon
CSM	70 ± 5	-60 / 204	-76 / 399	chlorosulfonated polyethylene



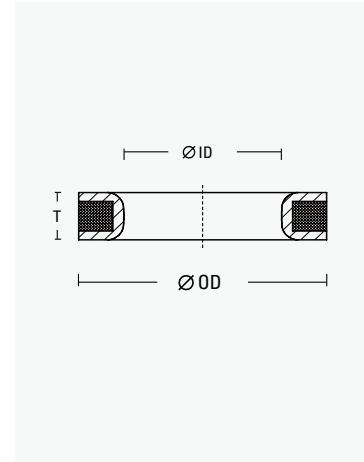
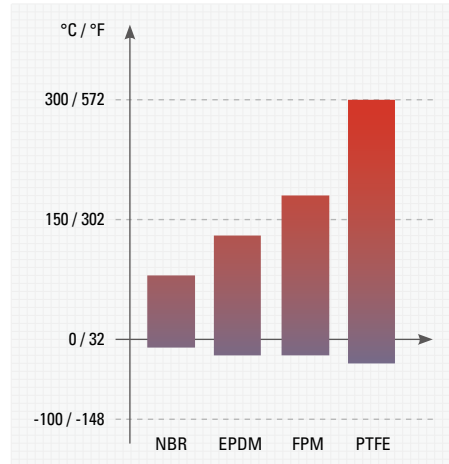
SIZE (INCH)	Ø ID (MM)	Ø OD (MM)	T (MM)	NBR	EPDM	FPM	CSM
				BLACK	WHITE	GREEN	BLUE
050 (1/2)	13.2	26	3.5	069080.10	069080.22	069080.31	069080.4
075 (3/4)	22	35	5.5	069081.1	069081.23	069081.3	069081.4
100 (1)	27	40	6.4	069082.1	069082.23	069082.3	069082.4
125 (1¼)	35	50	6.4	069083.1	069083.23	069083.3	069083.4
150 (1½)	41	56	6.4	069084.1	069084.23	069084.3	069084.4
200 (2)	51	67	6.4	069085.1	069085.23	069085.3	069085.4
250 (2½)	60	80	6.4	069086.1	069086.23	069086.3	069086.4
300 (3)	76	95	6.4	069087.1	069087.23	069087.3	069087.4
400 (4)	102	124	6.4	069088.1	069088.23	069088.3	069088.4
500 (5)	125	151	6.4	069089.1	069089.23	069089.3	069089.4
600 (6)	152	180	6.4	069090.1	069090.23	069090.3	069090.4
800 (8)	205	236	8.8	069091.1	069091.23	-	-

Spare part CG PTFE enveloped gasket

We develop open enveloped gasket with heat-and-chemical-resistant PTFE cover and elastic materials in the core. Different compound is possible.



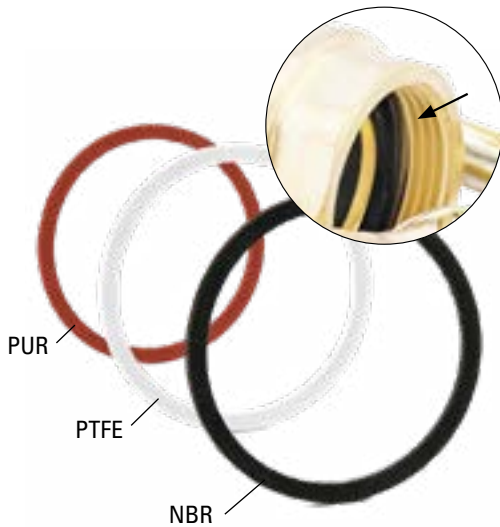
GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
EPDM	70 ± 5	-20 / 130	-4 / 266	ethylene propylene
FPM	70 ± 5	-20 / 180	-4 / 356	fluorocarbon
PTFE	90 ± 5	-30 / 300	-22 / 572	poly tetrafluorethylene



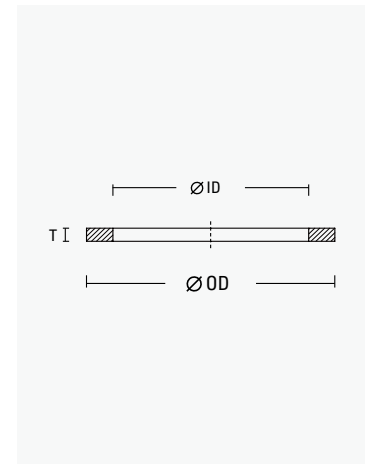
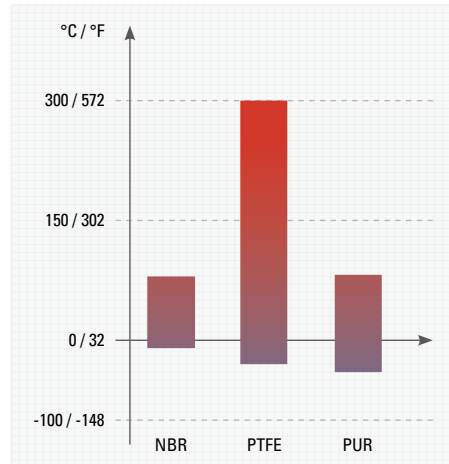
SIZE (INCH)	Ø ID (MM)	Ø OD (MM)	T (MM)	PTFE/NBR BLACK	PTFE/EPDM BLACK	PTFE/FPM GREEN
050 (1/2)	15.0	26.5	3.5	069060.1	069060.2	069060.3
075 (3/4)	19.5	34.9	5.5	069061.1	069061.2	069061.3
100 (1)	25.0	39.7	6.4	069062.1	069062.2	069062.3
125 (1¼)	32.5	49.2	6.4	069063.1	069063.2	069063.3
150 (1½)	39.3	55.6	6.4	069064.1	069064.2	069064.3
200 (2)	48.8	66.6	6.4	069065.1	069065.2	069065.3
250 (2½)	58.3	79.4	6.4	069066.1	069066.2	069066.3
300 (3)	74.2	94.5	6.4	069067.1	069067.2	069067.3
400 (4)	99.6	123.8	6.4	069068.1	069068.2	069068.3
500 (5)	-	-	-	-	-	-
600 (6)	-	-	-	-	-	-
800 (8)	-	-	-	-	-	-

Parallel thread seal, fitted in CG A and D EN14420-7

We fit in thread seal in DIN typed camlock type A and D, securing sealing function with an outside threaded counterpart.



GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
PTFE	90 ± 5	-30 / 300	-22 / 572	poly tetrafluorethylene
PUR	70 ± 5	-40 / 82	-40 / 180	polyurethane



SIZE (INCH)	Ø ID (MM)	Ø OD (MM)	T (MM)	NBR BLACK	PTFE WHITE	PUR BROWN
050 (1/2)	13	20.2	1.5	022121.3	022121.2	022121.1
075 (3/4)	19	26.2	1.5	022122.3	022122.2	022122.1
100 (1)	24	33.2	2.0	022123.3	022123.2	022123.1
125 (1¼)	33	42.2	2.0	022124.3	022124.2	022124.1
150 (1½)	39	48.2	2.0	022125.3	022125.2	022125.1
200 (2)	49	60.2	2.0	022126.3	022126.2	022126.1
250 (2½)	63	76.2	2.5	022127.3	022127.2	022127.1
300 (3)	77	88.3	3.0	022128.3	022128.2	022128.1
400 (4)	100	114.3	3.0	022129.3	022129.2	022129.1
500 (5)	-	-	-	-	-	-
600 (6)	-	-	-	-	-	-
800 (8)	-	-	-	-	-	-



Aluminum & 316 Guillemin hose coupler NFE29-572



We design shanked Guillemin couplers, aluminum by gravity casting, stainless steel by investment casting, fitted with NBR gasket.

DN (MM)	(INCH)	Ø (MM)	ALU NBR	316 NBR
15	1/2	20	-	031019
20	3/4	25	031010	031020
25	1	30	031011	031021
32	1¼	35	031012	031022
40	1½	40.5	-	031023
40	1½	45	031013	031023.1
50	2	51	031114	031024
50	2	55	031014	031024.1
65	2½	63	031115	031025
65	2½	70	031015	031025.1
80	3	76	031116	031026.1
80	3	80	031116.81	031026.2
80	3	90	031016	031026.3
100	4	101.5	-	031027
100	4	105	031018	-
100	4	110	031017	031028
125	5	125	031118	-
150	6	152	031119	-

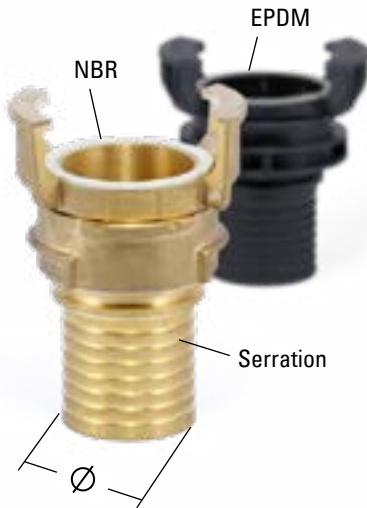
Aluminum & 316 Guillemin hose coupler EN14420-8



We produce hose couplers with DIN collar per EN14420-8, for direct assembly with DIN safety clamps, working with crimp ferrules as well.

DN (MM)	(INCH)	Ø (MM)	ALU NBR	316 NBR
20	3/4	19.5	031110.18	031020.18
25	1	25.5	031111.18	031021.18
32	1¼	32.5	031112.18	031022.18
40	1½	38.5	031113.18	031023.18
50	2	50.5	031114.18	031024.18
65	2½	63.5	031115.18	031025.18
80	3	75.5	031116.18	031026.18
100	4	101.5	031117.18	031027.18

Brass & PP Guillemín hose coupler NFE29-572



We offer Guillemín couplings in forged brass, also polypropylene and glassfiber blend for better chemical resistance, optional with NBR or EPDM gasket.

DN (MM)	(INCH)	Ø (MM)	BR NBR	PP EPDM
20	3/4	25	031061	-
25	1	30	031062	-
32	1¼	35	031063	-
40	1½	25.5	031064.41	-
40	1½	30.5	031064.31	-
40	1½	35.5	031064.21	-
40	1½	40.5	031064.1	-
40	1½	45	031064	-
50	2	51	031065.1	031084
50	2	55	031065	031084.1
65	2½	65	031066.1	-
65	2½	70	031066	-
80	3	76	031067.1	031086
80	3	90	031067.3	031086.1
100	4	100	031068.3	-
100	4	102	031068.2	031087.1
100	4	105	031068.1	-
100	4	110	031068	031087
125	5	-	-	-
150	6	-	-	-

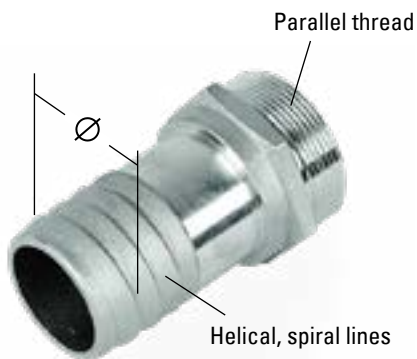
Brass Guillemín hose coupler EN14420-8



We offer Guillemín brass parts also with DIN collar per EN14420-8, for direct assembly with DIN safety clamps, working with crimp ferrules as well.

DN (MM)	(INCH)	Ø (MM)	BR NBR
20	3/4	19.5	031061.18
25	1	25.5	031062.18
32	1¼	32.5	031063.18
40	1½	38.5	031064.18
50	2	50.5	031065.18
65	2½	63.5	031066.18
80	3	75.5	031067.18
100	4	101.5	031068.18

Aluminum & 316 Guillemin composite hose coupling



We design hose couplers with helical shank, going in line with composite hose wires, possible to be specified. NBR gasket is fitted.

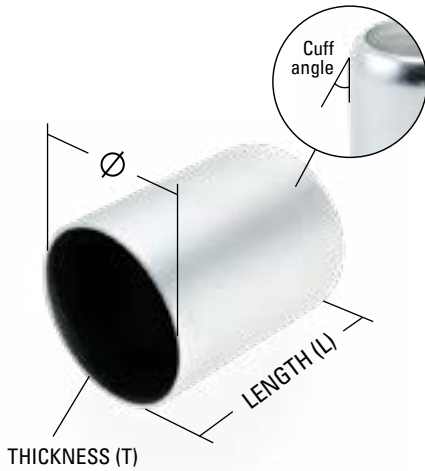
DN (MM)	(INCH)	Ø (MM) ¹	ALU NBR	316 NBR
20	3/4	23.3	-	031220
25	1	28	-	031221
32	1¼	35	-	031222
40	1½	43 / 43.5	031213	031223
50	2	53 / 53.6	031214	031224
65	2½	67 / 67.5	031215	031225
80	3	83	031216	031226
100	4	106 / 105.5	031217	031227

DN (MM)	(INCH)	Ø (MM)	ALU NBR	316 NBR
20	3/4	-	-	-
25	1	-	-	-
32	1¼	-	-	-
40	1½	-	-	-
50	2	53	031214.1	-
65	2½	-	-	-
80	3	83	031216.11	031226.11
100	4	-	-	-

DN (MM)	THRD (INCH)	Ø (MM) ¹	ALU BSPP	316 BSPP
20	3/4	22.3	-	031320
25	1	28	-	031321
32	1¼	35.5	-	031322
40	1½	43.5 / 43	031373	031323
50	2	53.4 / 53	031374	031324
65	2½	67.0 / 67.5	031375	031325
80	3	82.5 / 83	031376	031326
100	4	105	031377	031327

¹ Due to non-working surfaces, outside dia. on hose ends could differ slightly between aluminum and stainless steel parts.

Aluminum crimping ferrule



Some of suitable aluminum ferrules for composite assemblies are listed here, optional SS304. Cuff degrees, lengths, thickness and diameters can be specified.

DN (MM)	Ø (INCH)	Ø (MM)	L (MM)	T (MM)	CUFF (DEG.)	ALU
20	3/4	35	37	1.0	90	043050
25	1	40	42	1.5	15	043051
32	1¼	50	45	1.5	20	043057
40	1½	57	52	1.5	15	043052
50	2	67	45	1.5	90	043053
65	2½	83	73	2.0	15	043054
80	3	98.5	75	2.2	15	043055
100	4	122.5	87	2.0	15	043056

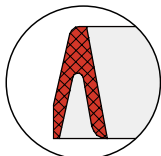
NBR & FPM expansion gasket composite hose crimper

We provide expansion gaskets in combination with helical hose couplings and crimping ferrules. Materials can be specified.

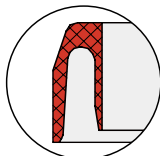
GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
FPM	70 ± 5	-20 / 180	-4 / 356	fluorocarbon



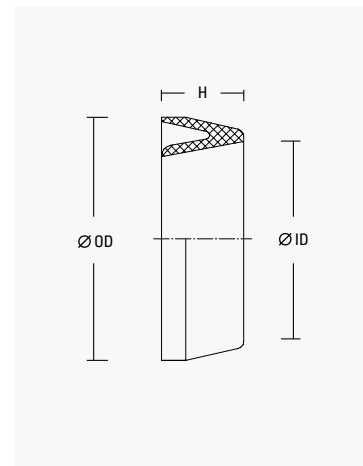
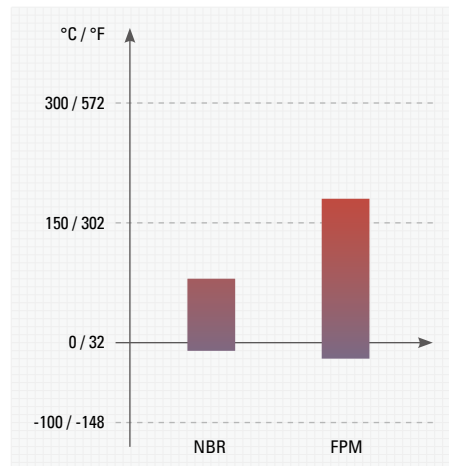
Edge shape varies from V and U shapes.



Type V



Type U



DN (MM)	Ø ID (INCH)	Ø ID (MM)	Ø OD (MM)	H (MM)	TYPE	NBR BLACK	FPM BLACK
20	3/4	-	-	-	-	-	-
25	1	25	40.5	17	U	039100	039100.1
32	1¼	32	48	20	U	039101	039101.1
40	1½	40	56	20	U	039102	039102.1
50	2	44	65	22	V	039104	039104.1
65	2½	64	84	24	V	039105	039105.1
80	3	73	98	25	V	039106	039106.1
100	4	95	122	30	V	039107	039107.1

Aluminum & 316 Guillemin by inside thread NFE29-572



We design Guillemin couplers with parallel inside thread in cast aluminum and SS316, those with lock ring fitted with NBR connection gasket.

DN (MM)	THRD (INCH)	ALU NBR	316 NBR
15	1/2	-	033021
20	3/4	033052	033022
25	1	033053	033023
32	1¼	033054	033024
40	1½	033055	033025
50	2	033056	033026
65	2½	033057	033027
80	3	033058	033028
100	4	033059	033029
125	5	033051.2	-
150	6	033050	-

Aluminum & 316 Guillemin thread adapter w/o lock-ring



We produce also light Guillemin threaded coupler without lock-ring in aluminum and stainless steel. Gasket is not necessary as working with one that carries.

DN (MM)	THRD (INCH)	ALU BSPP	316 BSPP
15	1/2	-	035021
20	3/4	035052	035022
25	1	035053	035023
32	1¼	035054	035024
40	1½	035055	035025
50	2	035056	035026
65	2½	035057	035027
80	3	035058	035028
100	4	035059	035029

Aluminum & 316 Guillemin jawless adapter



We design free of jaw or claw piece mating with Guillemin couplings. NBR gasket is fitted.

DN (MM)	THRD (INCH)	ALU BSPP	316 BSPP
25	1	-	-
50	2	-	-
80	3	033058.1	-
100	4	-	-



Brass & PP Guillemín by inside thread NFE29-572



We provide Guillemín threaded adapter in forged brass, also polypropylene and glass-fiber blend for better chemical resistance, optional with NBR or EPDM gasket.

DN (MM)	THRD (INCH)	BR NBR	PP EPDM
15	1/2	-	033021
20	3/4	033061	033022
25	1	033062	033023
32	1¼	033063	033024
40	1½	033064	033025
50	2	033065	033026
65	2½	033066	033027
80	3	033067	033028
100	4	033068	033029

Brass Guillemín without lock-ring



We produce light Guillemín threaded coupler without lock-ring in forging brass. No gasket is necessary as working with one that carries.

DN (MM)	THRD (INCH)	BR NBR	PP EPDM
15	1/2	-	-
20	3/4	035061	-
25	1	035062	-
32	1¼	035063	-
40	1½	035064	-
50	2	035065	-
65	2½	035066	-
80	3	035067	-
100	4	035068	-

Aluminum & 316 Guillemín by outside thread NFE29-572



We offer Guillemín also by parallel outside thread in cast aluminum and SS316, those with lock ring fitted with NBR connection gasket.

DN (MM)	THRD (INCH)	ALU NBR	316 NBR
15	1/2	-	032021
20	3/4	032052	032022
25	1	032053	032023
32	1¼	032054	032024
40	1½	032055	032025
50	2	032056	032026
65	2½	032057	032027
80	3	032058	032028
100	4	032059	032029
125	5	032051.2	-
150	6	033050	032031

Aluminum & 316 Guillemín thread adapter w/o lock-ring



We produce also light Guillemín threaded coupler without lock-ring in aluminum and stainless steel. Gasket is not necessary as working with one that carries.

DN (MM)	THRD (INCH)	ALU NBR	316 NBR
15	1/2	-	-
20	3/4	036052	036022
25	1	036053	036023
32	1¼	036054	036024
40	1½	036055	036025
50	2	036056	036026
65	2½	036057	036027
80	3	036058	036028
100	4	036059	036029
125	5	-	-
150	6	036050	-

Aluminum & 316 Guillemín jawless adapter

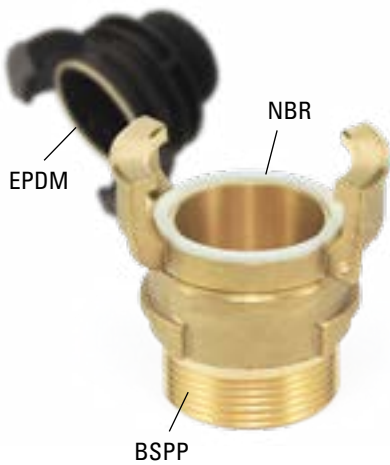


We design free of jaw or claw piece mating with Guillemín couplings. NBR gasket is fitted.

DN (MM)	THRD (INCH)	ALU BSPP	316 BSPP
25	1	-	-
50	2	-	-
80	3	032058.1	032028.6
100	4	-	-



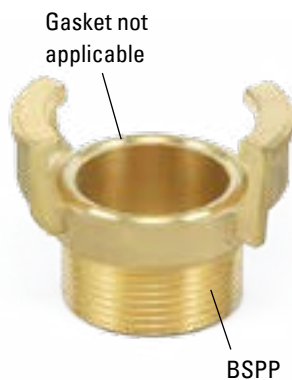
Brass & PP Guillemín by outside thread NFE29-572



We provide Guillemín threaded adapter in forged brass, also polypropylene and glass-fiber blend for better chemical resistance, optional with NBR or EPDM gasket.

DN (MM)	THRD (INCH)	BR NBR	PP EPDM
15	1/2	-	033021
20	3/4	032061	033022
25	1	032062	033023
32	1¼	032063	033024
40	1½	032064	033025
50	2	032065	033026
65	2½	032066	033027
80	3	032067	033028
100	4	032068	033029

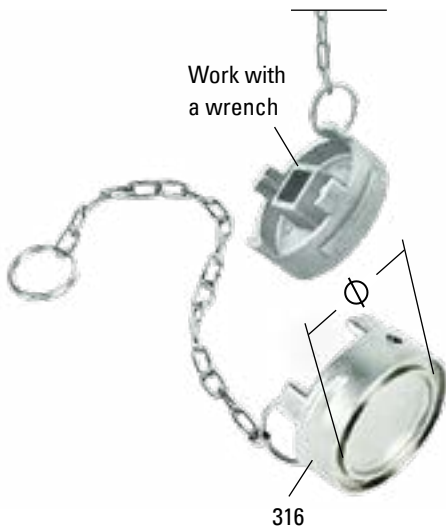
Brass Guillemín without lock-ring



We produce light Guillemín threaded coupler without lock-ring in forging brass. No gasket is necessary as working with one that carries.

DN (MM)	THRD (INCH)	BR NBR	PP EPDM
15	1/2	-	-
20	3/4	033061	-
25	1	033062	-
32	1¼	033063	-
40	1½	033064	-
50	2	033065	-
65	2½	033066	-
80	3	033067	-
100	4	033068	-

Aluminum & 316 Guillemin blind end, locking plug



We also produce plugs with turning lock-ring, made in casting aluminum and stainless steel, fitted with NBR and steel chain.

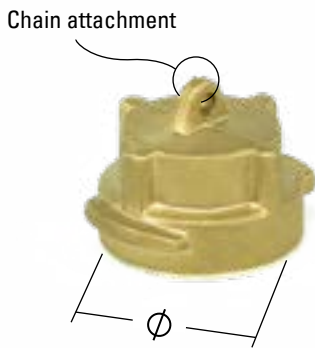
DN Φ	ALU	316
(MM)	NBR	NBR
(INCH)	CS CHAIN	SS CHAIN
15	-	034021
20	034052.1	034022
25	034053.1	034023
32	034054.1	034024
40	034055	034025
50	034056	034026
65	034057	034027
80	034058	034028
100	034059	034029
125	034051	-
150	034050	034031

DN Φ	ALU	316
(MM)	NBR	NBR
(INCH)	CS CHAIN	SS CHAIN
32	034154	-
40	034155	-
50	034156	034126
65	034157	-
80	034158	034128
100	034159	-

DN Φ	ALU	316
(MM)	NBR	NBR
(INCH)	CS CHAIN	SS CHAIN
15	-	034080
20	-	034081
25	-	034082
32	-	034083
40	034094.2	034084
50	034095	034085
65	034096	034086
80	034097.2	034087
100	034098.4	034088

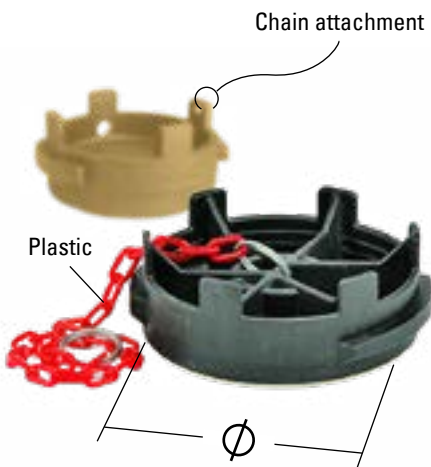


Brass & PP Guillemín blind end, locking plug



We also produce plugs with turning lock-ring, made in forged brass also polypropylene with glassfiber blend, NBR gasket and chain fitted.

DN Ø		BR	PP
(MM)	(INCH)	NBR CS CHAIN	NBR SS CHAIN
20	3/4	034061	-
25	1	034062	-
32	1¼	034063	-
40	1½	034064	-
50	2	034065	-
65	2½	034066	-
80	3	034067	-
100	4	034068	-



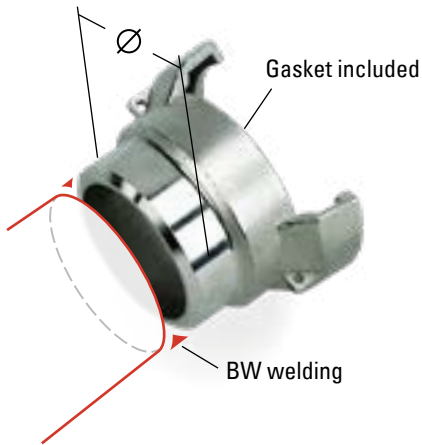
DN Ø		BR	PP
(MM)	(INCH)	NBR CS CHAIN	NBR POLY CHAIN
20	3/4	034061	-
25	1	034062	-
32	1¼	034063	-
40	1½	034064	034285
50	2	034065	034286
65	2½	034066	-
80	3	034067	034288
100	4	034068	034289

316 Guillemin coupler for welding connection, BW



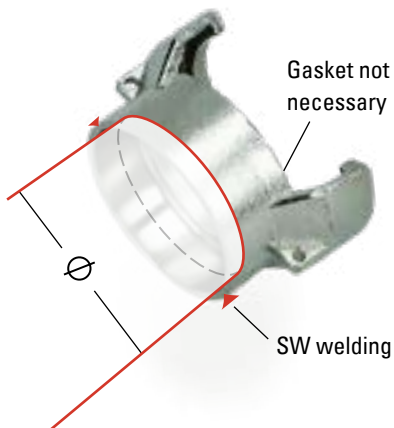
We produce stainless steel Guillemin coupler with blunt end for BW welding connection, gasket applied.

DN Ø (MM)	(INCH)	316 NBR
15	1/2	032021.1
20	3/4	032022.1
25	1	032023.1
32	1¼	032024.1
40	1½	032025.1
50	2	032026.1
65	2½	032027.1
80	3	032028.1
100	4	032029.1
125	5	-
150	6	032031.1



DN Ø (MM)	(INCH)	316 NBR
20	3/4	-
25	1	-
32	1¼	036024.1
40	1½	036025.1
50	2	036026.1
65	2½	036027.1

316 Guillemin coupler for welding connection, SW



We produce stainless steel Guillemin coupler with socket end for SW insertion, gasket not necessary.

DN Ø (MM)	(INCH)	316 NBR
20	3/4	035022.1
25	1	035023.1
32	1¼	-
40	1½	035025.1
50	2	035026.1
65	2½	035027.1



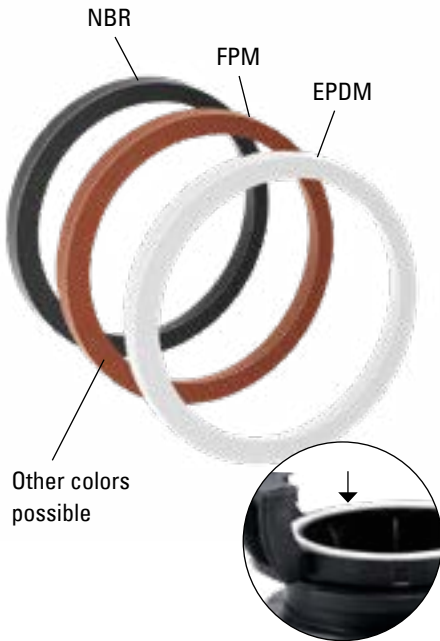
Aluminum, 316 & PP spool reducer of Guillemain



We produce spool adapters of Guillemain made in aluminum plus T6 treatment and investment casting 316. Gaskets on both ends are applied.

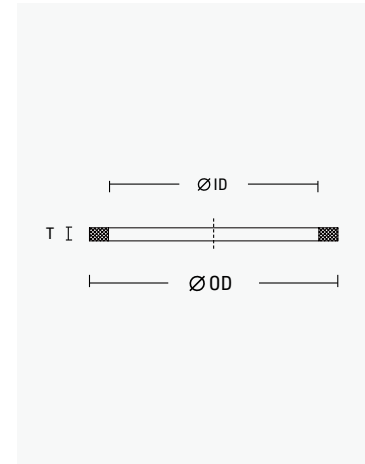
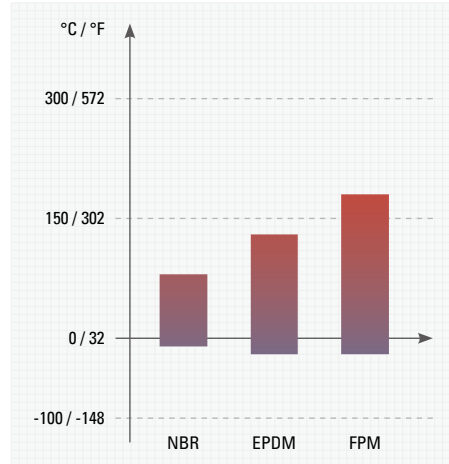
DN Ø (MM)	(INCH)	ALU NBR	316 NBR	PP EPDM
40 × 20	1½ × ¾	031305	031334	-
40 × 25	1½ × 1	031306	031335	-
40 × 32	1½ × 1¼	031307	031336	-
50 × 25	2 × 1	031308	031337	-
50 × 32	2 × 1¼	031309	031338	-
50 × 40	2 × 1½	031310	031339	-
65 × 25	2½ × 1	031302	-	-
65 × 32	2½ × 1¼	-	031340	-
65 × 40	2½ × 1½	031311	031341	-
65 × 50	2½ × 2	031312	031342	-
80 × 40	3 × 1½	031313	031343	-
80 × 50	3 × 2	031314	031344	031384
80 × 65	3 × 2½	031315	031345	-
100 × 40	4 × 1¼	031316	031346	-
100 × 50	4 × 2	031317	031347	-
100 × 65	4 × 2½	031318	031348	-
100 × 80	4 × 3	031319	031349	031386
125 × 100	5 × 4	031301	-	-
150 × 100	6 × 5	031300	-	-

Spare part NBR, FPM, EPDM Guillemin gasket



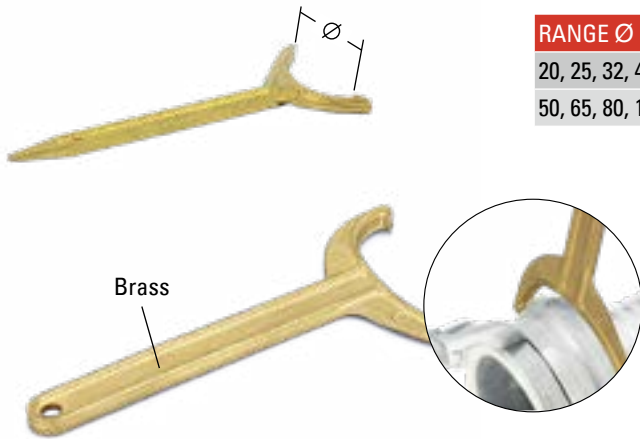
We fit Guillemin with connection gaskets, mainly in NBR and FPM for aluminum and 316 parts, EPDM in Poly couplers.

GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
EPDM	70 ± 5	-20 / 130	-4 / 266	ethylene propylene
FPM	70 ± 5	-20 / 180	-4 / 356	fluorocarbon



SIZE (INCH)	Ø ID (MM)	Ø OD (MM)	T (MM)	NBR BLACK	EPDM WHITE	FPM RED
15 (1/2)	17	22	3.5	039001.2	039001.1	039001.4
20 (3/4)	23	28	3.5	039002.2	039002.1	039002.4
25 (1)	27.3	34.3	4	039003.2	039003.1	039003.4
32 (1¼)	32	38	4.5	039004.2	039004.1	039004.4
40 (1½)	43	51	5	039005.2	039005.1	039005.4
50 (2)	54	64	5	039006.2	039006.1	039006.4
65 (2½)	69	79	6	039007.2	039007.1	039007.4
80 (3)	85	96	6	039008.2	039008.1	039008.4
100 (4)	103.5	117.5	7	039009.2	039009.1	039009.4

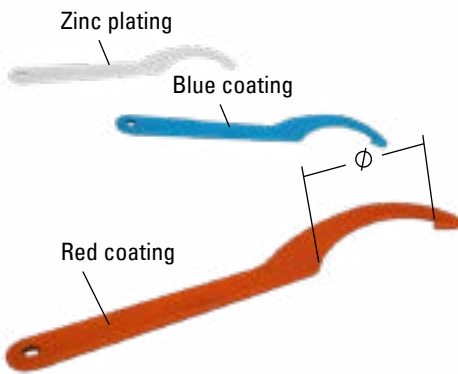
Brass Guillemin hook wrench



We forge brass hook wrenches (spanners) for the Guillemin connection. It works on those with lock-ring, two applied for sufficient torque.

RANGE Ø	(INCH)	BR
20, 25, 32, 40, 50, 65	3/4, 1, 1¼, 1½, 2, 2½	084144
50, 65, 80, 100	2, 2½, 3, 4	084142

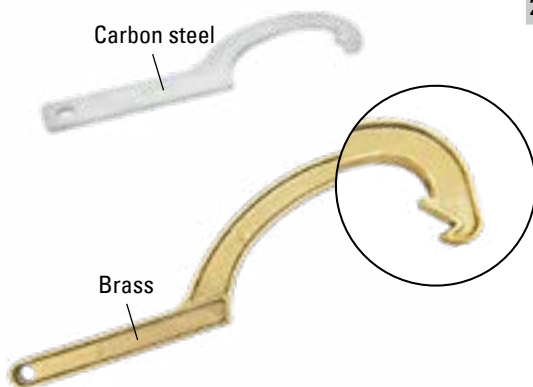
Steel Guillemin hook wrench



We produce also the hook wrenches in carbon steel, coated and plated working for anti-rust purpose.

RANGE Ø	(INCH)	RED	BLUE	PLATING
50, 65, 80, 100	2, 2½, 3, 4	084108	084108.1	084108.2

Brass & steel Guillemin dual hooked wrench



We offer a specific wrench that can be adapted for the full Guillemin range. The trick is done with two hooks on the head.

RANGE Ø	(INCH)	BR	CS
20, 25, 32, 40, 50, 65, 80, 100	3/4, 1, 1¼, 1½, 2, 2½, 3, 4	084143	084109



Brass & 316 internal BSPP hose couplings EN14420-5

We design DIN typed hose couplings by BSPP internal thread, made of forged brass and 316, sealing is achieved with a thread seal.



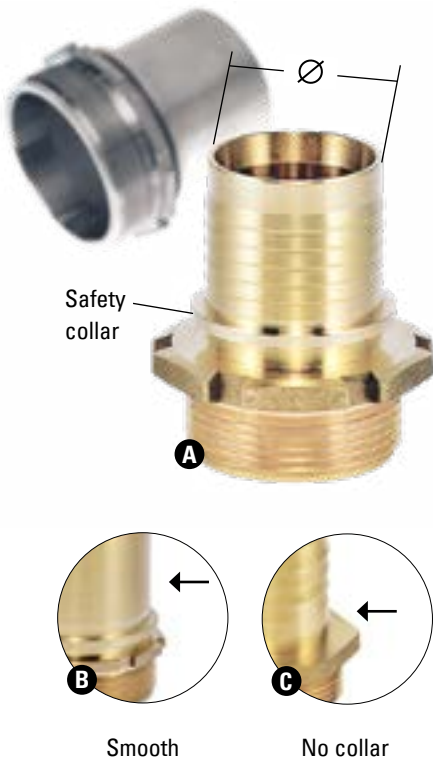
DN (MM)	THRD (INCH)	Ø (MM) ¹	TYPE	BR PUR	316 PTFE
15	1/2	14 / 13.4	A B C	022111.2	022181
20	3/4	20 / 19.4	A B C	022112.2	022182
25	1	26 / 25.4	A B C	022113.2	022183
32	1¼	33 / 32.4	A B C	022114.2	022184
40	1½	39 / 38.4	A B C	022115.2	022185
50	2	51 / 50.4	A B C	022116.2	022186
65	2½	64	A B C	022117.2	022187
80	3	76.1 / 76	A B C	022118.2	022188
100	4	101.6	A B C	022119.2	022189

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR PUR	316 PTFE
15	1/2	13.4	A B C	022011	022021
20	3/4	19.4	A B C	022012	022022
25	1	25.4	A B C	022013	022023
32	1¼	32.4	A B C	022014	022024
40	1½	38.4	A B C	022015	022025
50	2	50.4	A B C	022016	022026
65	2½	63.4	A B C	022017	022027
80	3	75.4	A B C	022018	022028
100	4	100.3	A B C	022019	022029

DN (MM)	THRD (INCH)	Ø (MM) ¹	TYPE	BR PUR	316 PTFE
15	1/2	14 / 13.4	A B C	022111	022041
20	3/4	20 / 19.4	A B C	022112	022042
25	1	26 / 25.4	A B C	022113	022043
32	1¼	33 / 32.4	A B C	022114	022044
40	1½	39 / 38.4	A B C	022115	022045
50	2	51 / 50.4	A B C	022116	022046
65	2½	64	A B C	022117	022047
80	3	76.1 / 76	A B C	022118	022048
100	4	101.6	A B C	022119	022049

¹ Due to non-working surfaces, outside dia. on hose ends could differ slightly between aluminum and stainless steel parts.

Brass & 316 external BSPP hose couplings EN14420-5



We produce DIN typed hose couplings by BSPP external thread, made of forged brass and 316.

DN (MM)	THRD (INCH)	Ø (MM) ¹	TYPE	BR BSPP	316 BSPP
15	1/2	14 / 13.4	A B C	021111.2	021121.21
20	3/4	20 / 19.4	A B C	021112.2	021122.21
25	1	26 / 25.4	A B C	021113.2	021123.21
32	1¼	33 / 32.4	A B C	021114.2	021124.21
40	1½	39 / 38.4	A B C	021115.2	021125.21
50	2	51 / 50.4	A B C	021116.2	021126.21
65	2½	64 / 63.4	A B C	021117.2	021127.21
80	3	76.1 / 75.4	A B C	021118.2	021128.21
100	4	101.6 / 100.3	A B C	021119.2	021129.21

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR BSPP	316 BSPP
15	1/2	13.4	A B C	021011	021021
20	3/4	19.4	A B C	021012	021022
25	1	25.4	A B C	021013	021023
32	1¼	32.4	A B C	021014	021024
40	1½	38.4	A B C	021015	021025
50	2	50.4	A B C	021016.9	021026
65	2½	63.4	A B C	021017.1	021027
80	3	75.4	A B C	021018	021028
100	4	100.3	A B C	021019	021029

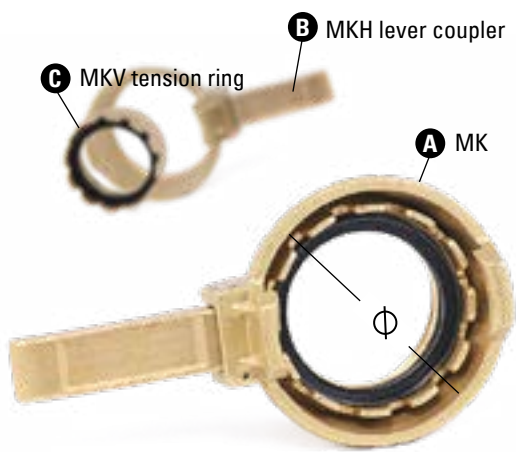
DN (MM)	THRD (INCH)	Ø (MM) ¹	TYPE	BR BSPP	316 BSPP
15	1/2	14 / 13.4	A B C	021111	021121
20	3/4	20 / 19.4	A B C	021112	021122
25	1	26 / 25.4	A B C	021113	021123
32	1¼	33 / 32.4	A B C	021114	021124
40	1½	39 / 38.4	A B C	021115	021125
50	2	51 / 50.4	A B C	021116	021126
65	2½	64	A B C	021117	021127
80	3	76.1 / 76	A B C	021118	021128
100	4	101.6	A B C	021119	021129.1

¹ Due to non-working surfaces, outside dia. on hose ends could differ slightly between aluminum and stainless steel parts.



Brass & 316 MK BSPP lever coupler EN14420-6

We design MK lever coupler and tension ring by BSPP internal thread, made of forged brass and casted 316, sealing is achieved with gaskets on both ends.



DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR NBR/NBR	316 CSM/PTFE
50	G2 × 11	70.5	A B C	011011	011021
80	G3 × 11	102	A B C	011012	011022
100	G4 × 11	128	A B C	011013	011023

DN (INCH)	Ø (MM)	TYPE	BR ¹	316 ¹
50	2	A B C	011011.2	011021.2
80	3	A B C	011012.2	011022.2
100	4	-	-	-

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR NBR/NBR	316 CSM/PTFE
50	G2 × 11	70.5	A B C	011011.17	011021.1
80	G3 × 11	102	A B C	011012.17	011022.1
100	G4 × 11	-	A B C	-	-

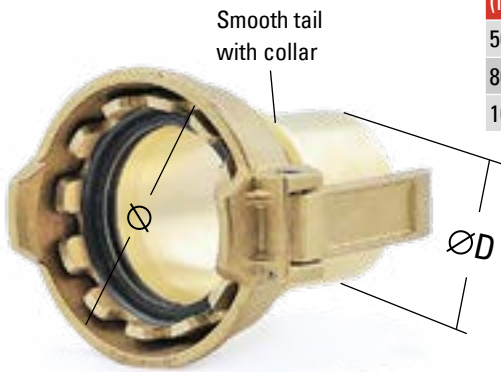


DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR NBR/NBR	316 CSM/PTFE
50	G2 × 11	70.5	D E	-	011021.5
80	G3 × 11	102	D E	-	011022.5
100	G4 × 11	128	D E	-	011023.5

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR NBR/NBR	316 CSM/PTFE
50	G2 × 11	70.5	D E	-	-
80	G3 × 11	102	D E	-	011102
100	G4 × 11	128	D E	-	011103

¹ We offer MK DN 100 only assembled, not applicable with MKV and MKH separately.

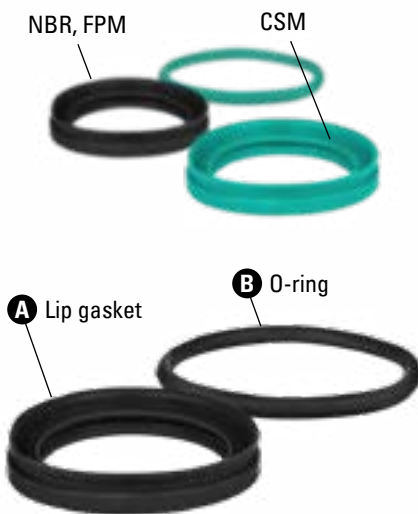
Brass & 316 one-piece MKS hose coupler EN14420-6



We offer MKS lever coupler by an integrated hose tail, made of brass and 316. Less potential leakage than combination of a coupler plus a thread fitting.

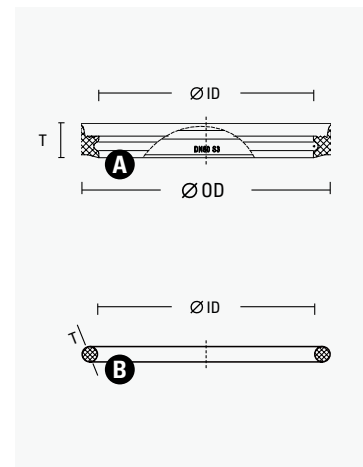
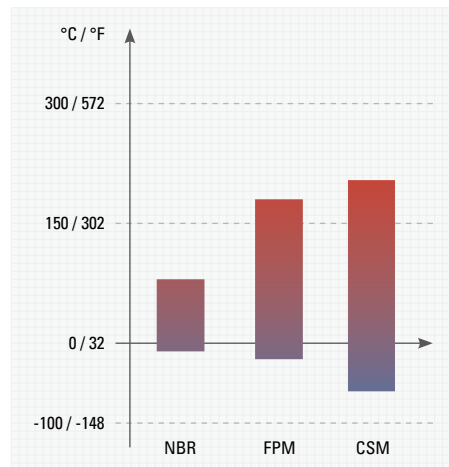
DN (MM)	Ø (INCH)	Ø (MM)	Ø D (MM)	BR NBR	316 CSM
50	2	70.5	50.4	011042	011052
80	3	102	75.4	011044	011054
100	4	-	-	-	-

Spare part MK lip gasket and O-ring, NBR FPM CSM



We offer gasket DN 50 & 80 and O-ring DN 100 as spare parts for TW MK couplers made from materials NBR, FPM and CSM. Hardness in Shore A is indicated.

GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
FPM	70 ± 5	-20 / 180	-4 / 356	fluorocarbon
CSM	70 ± 5	-60 / 204	-76 / 399	chlorosulfonated polyethylene



SIZE (INCH)	Ø ID (MM)	Ø OD (MM)	T (MM)	TYPE	NBR BLACK	FPM BLACK	CSM GREEN
50 (2)	55.5	62.2	10	A B	019081.9	019061.9	019071.9
80 (3)	75	92.5	12	A B	019082.9	019062.9	019072.9
100 (4)	99	-	7	A B	019083	019063	019073

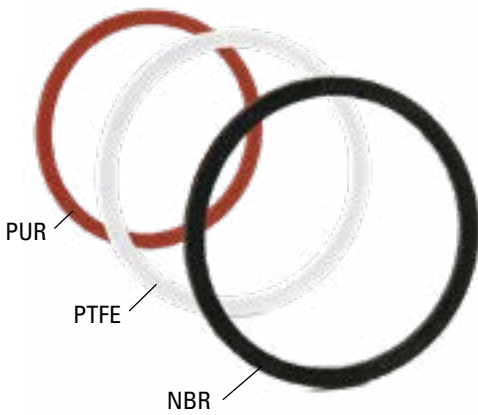
Brass & 316 VK BSPP thread adapter EN14420-6



We produce VK thread adapter by BSPP internal thread, made of forged brass and casted 316 which seals against the tension ring in MK part.

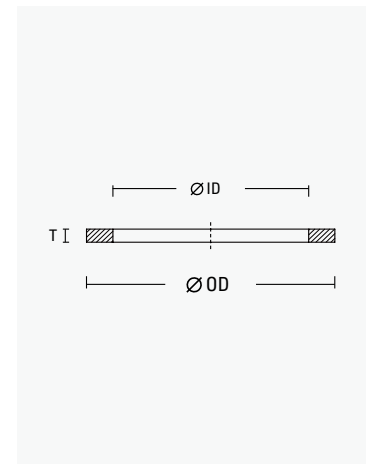
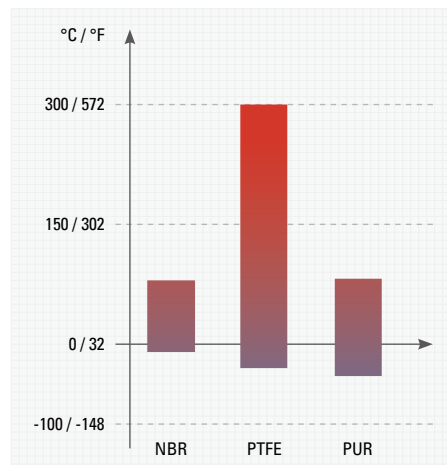
DN (MM)	THRD (INCH)	Ø (MM)	BR NBR	316 PTFE
50	G2 × 11	48	012011	012021
80	G3 × 11	76	012012	012022
100	G4 × 11	95	012013	012023

Spare part thread seal, fitted in TW VK & MK tension ring



We fit in thread seal in DIN standard TW couplings, securing sealing function with an outside threaded counterpart.

GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
PTFE	90 ± 5	-30 / 300	-22 / 572	poly tetrafluorethylene
PUR	70 ± 5	-40 / 82	-40 / 180	polyurethane



SIZE (INCH)	Ø ID (MM)	Ø OD (MM)	T (MM)	NBR BLACK	PTFE WHITE	PUR BROWN
50 (2)	49	60.2	2.0	022126.3	022126.2	022126.1
80 (3)	77	88.3	3.0	022128.3	022128.2	022128.1
100 (4)	100	114.3	3.0	022129.3	022129.2	022129.1

Brass & 316 one-piece VKS hose adapter EN14420-6



We offer VKS male adapter by an integrated hose tail, made of brass and 316. Less potential leakage than combination of an adapter plus a thread fitting.

DN (MM)	(INCH)	Ø (MM)	Ø D (MM)	BR	316
50	2	48	50.4	012042.1	012052.1
80	3	76	75.4	012044.1	012054.1
100	4	-	-	-	-

Brass, 316, PP & Aluminum VB plug EN14420-6



We produce in compliance with EN14420-6 VB plugs made of brass, 316, polypropylene and aluminum, chain attachment optional.

DN (MM)	(INCH)	Ø (MM)	BR	316	PP	ALU
50	2	48.5	013011	013021	013061	013051
80	3	77.5	013012	013022	013062	013052
100	4	99.5	013013	013023	013063	013053

Following items have chain attachment, brass, 316 and aluminum with stainless steel chain, PP with plated steel one.

DN (MM)	(INCH)	Ø (MM)	BR SS CHAIN	316 SS CHAIN	PP CS CHAIN	ALU SS CHAIN
50	2	48.5	013011.1	013021.1	013061.1	013051.21
80	3	77.5	013012.1	013022.1	013062.1	013052.21
100	4	99.5	013013.1	013023.1	013063.1	013053.21

Brass, 316 & Aluminum MB dust cap EN14420-6



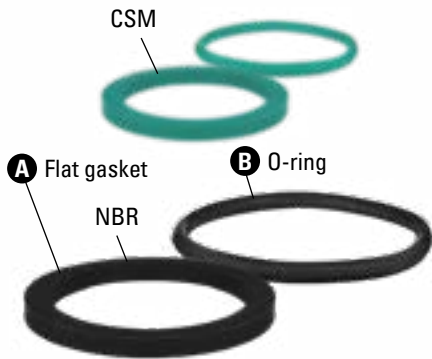
We produce in compliance with EN14420-6 MB plugs in brass, 316 and aluminum fitted with flat gasket, chain attachment optional.

DN (MM)	Ø (INCH)	Ø (MM)	BR NBR	316 CSM	ALU NBR
50	2	70.5	014011	014021	014051
80	3	102	014012	014022	014052
100	4	128	014013	014023	014053

Following items have chain attachment, 316 and aluminum with stainless steel chain, brass with plated steel one.

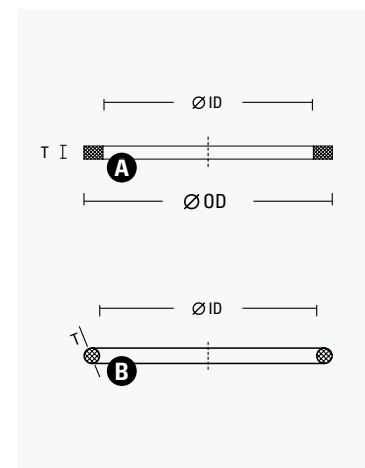
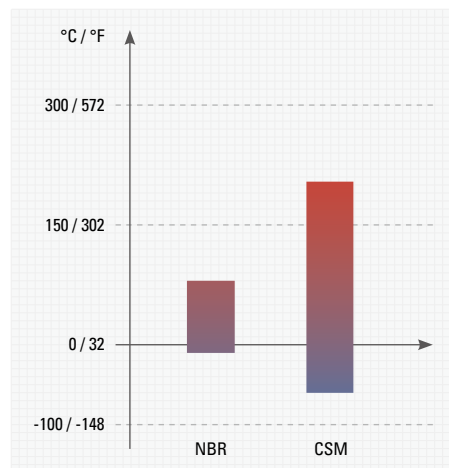
DN (MM)	Ø (INCH)	Ø (MM)	BR NBR CS CHAIN	316 CSM SS CHAIN	ALU NBR SS CHAIN
50	2	70.5	014011.2	014021.1	014051.1
80	3	102	014012.2	014022.1	014052.1
100	4	128	014013.2	014023.1	014053.1

Spare part MB flat gasket and O-ring, NBR CSM



We offer gasket DN 50 & 80 and O-ring DN 100 as spare parts for TW MB dust caps made of materials NBR and CSM. Hardness in Shore A is indicated.

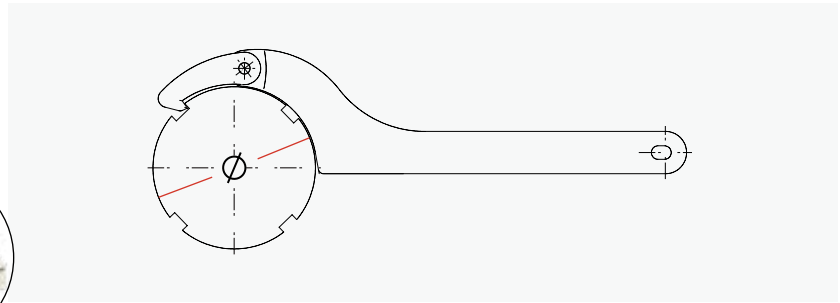
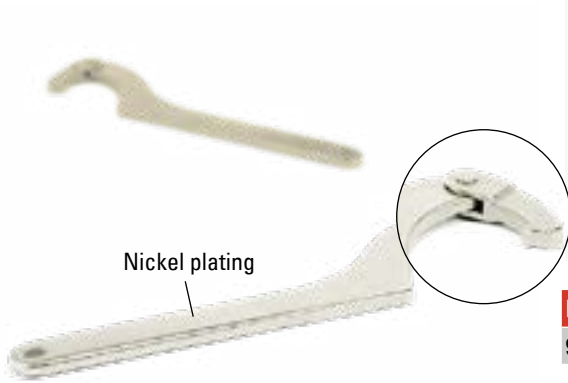
GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
CSM	70 ± 5	-60 / 204	-76 / 399	chlorosulfonated polyethylene



SIZE (INCH)	Ø ID (MM)	Ø OD (MM)	T (MM)	TYPE	NBR BLACK	CSM GREEN
50 (2)	49	61.5	5	A B	019051	019041
80 (3)	77	92.0	6	A B	019052	019042
100 (4)	99	-	7	A B	019083	019073

Nickel steel & 304 hinged hook wrench 90-155 mm

We design hook wrenches (spanners) with an adjusting hinge to work on slots in nuts and couplings, made in carbon steel nickel plating and SS304.



RANGE Ø (MM)	(INCH)	STEEL	304
90 - 155	3.54 - 6.10	084122	084122.1

CS & 316 hose tail by swivel flange, EN14420-4



We produce EN14420-4 compliant hose tail, smooth and serrated, by swivel (loose) flange connection, EN1092-1 and optional ASA.

DN (MM)	Ø (INCH)	Ø (MM)	FLG EN1092-1	TYPE	CS	316
15	1/2	13	PN40	A B	025031	025231
19	3/4	19	PN40	A B	025032	025232
25	1	25	PN40	A B	025033	025233
32	1¼	32	PN40	A B	025034	025234
38	1½	38	PN40	A B	025035	025235
38	1½	40	PN40	A B	025036	025236
50	2	50	PN16	A B	025037	025237
50	2	50.7	PN16	A B	025037.81	025237.81
65	2½	63	PN16	A B	025038	025238
65	2½	65	PN16	A B	025039	025239
75	3	75	PN16	A B	025040	025240
75	3	80	PN16	A B	025041	025241
100	4	100.3	PN16	A B	025042	025242
100	4	100	PN16	A B	025042.81	025242.81
100	4	101.9	PN16	A B	025042.82	025242.82
125	5	125	PN16	A B	025043	025243
150	6	150	PN16	A B	025044	025244
200	8	200.4	PN10	A B	025045	025245

DN (MM)	Ø (INCH)	Ø (MM)	FLG EN1092-1	TYPE	CS	316
15	1/2	13	PN40	A B	027031	027231
19	3/4	19	PN40	A B	027032	027232
25	1	25	PN40	A B	027033	027233
32	1¼	32	PN40	A B	027034	027234
38	1½	38	PN40	A B	027035	027235
38	1½	40	PN40	A B	027036	027236
50	2	50	PN16	A B	027037	027237
50	2	50.7	PN16	A B	027037.81	027237.81
65	2½	63	PN16	A B	027038	027238
65	2½	65	PN16	A B	027039	027239
75	3	75	PN16	A B	027040	027240
75	3	80	PN16	A B	027041	027241
100	4	100.3	PN16	A B	027042	027242
100	4	100	PN16	A B	027042.81	027242.81
100	4	101.9	PN16	A B	027042.82	027242.82
125	5	125	PN16	A B	027043	027243
150	6	150	PN16	A B	027044	027244
200	8	200.4	PN10	A B	027045	027245

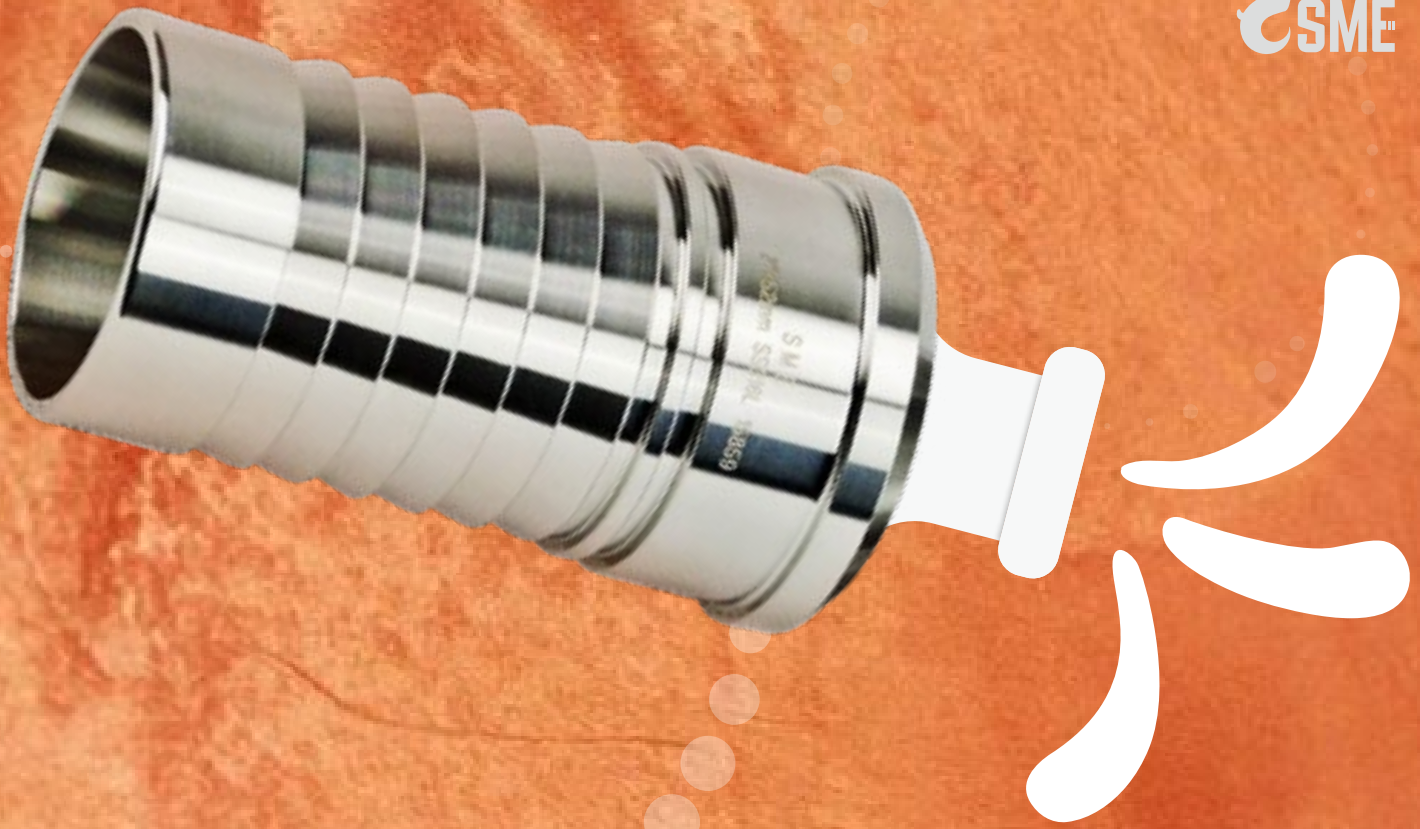
CS & 316 hose tail by fixed flange, EN14420-4



We produce EN14420-4 compliant hose tail, smooth and serrated, by swivel (loose) flange connection, EN1092-1 and optional ASA.

DN (MM)	Ø (INCH)	Ø (MM)	FLG EN1092-1	TYPE	CS	316
15	1/2	13	PN40	C D	026031	026231
19	3/4	19	PN40	C D	026032	026232
25	1	25	PN40	C D	026033	026233
32	1¼	32	PN40	C D	026034	026234
38	1½	38	PN40	C D	026035	026235
38	1½	40	PN40	C D	026036	026236
50	2	50	PN16	C D	026037	026237
50	2	50.7	PN16	C D	026037.81	026237.81
65	2½	63	PN16	C D	026038	026238
65	2½	65	PN16	C D	026039	026239
75	3	75	PN16	C D	026040	026240
75	3	80	PN16	C D	026041	026241
100	4	100.3	PN16	C D	026042	026242
100	4	100	PN16	C D	026042.81	026242.81
100	4	101.9	PN16	C D	026042.82	026242.82
125	5	125	PN16	C D	026043	026243
150	6	150	PN16	C D	026044	026244
200	8	200.4	PN10	C D	026045	026245

DN (MM)	Ø (INCH)	Ø (MM)	FLG EN1092-1	TYPE	CS	316
15	1/2	13	PN40	C D	028031	028231
19	3/4	19	PN40	C D	028032	028232
25	1	25	PN40	C D	028033	028233
32	1¼	32	PN40	C D	028034	028234
38	1½	38	PN40	C D	028035	028235
38	1½	40	PN40	C D	028036	028236
50	2	50	PN16	C D	028037	028237
50	2	50.7	PN16	C D	028037.81	028237.81
65	2½	63	PN16	C D	028038	028238
65	2½	65	PN16	C D	028039	028239
75	3	75	PN16	C D	028040	028240
75	3	80	PN16	C D	028041	028241
100	4	100.3	PN16	C D	028042	028242
100	4	100	PN16	C D	028042.81	028242.81
100	4	101.9	PN16	C D	028042.82	028242.82
125	5	125	PN16	C D	028043	028243
150	6	150	PN16	C D	028044	028244
200	8	200.4	PN10	C D	028045	028245



SANITARY FITTINGS

food processing - portable water - marine applications
DIN 11851 / AISI 316L / EN 1.4404 ra 0.6 to 1.8 microns



roughness metrology
quality assurance



The Symbol of Assurance



SME sanitary couplings are standardized couplings commonly used in food processing, portable water and marine applications in acc. to DIN 11851, Tri-clover and industry regulations with tri-clamp joints, hose shanks, and welding ends.

American 3-A Sanitary Standards and European EHEDG guidelines are one of the most demanding norms in industry. SME has certified our processes in acc. to 3-A #3036 and certified to be using 3-A symbol and EHEDG marks on relevant fittings.

Finest surface in combination with stainless steel is desired to process all sanitary-graded fittings. Using the low-carbon contained better durable and corrosion-resistant stainless steel AISI 316L, or EN 1.4404 (X2CrNiMo17132), we also introduce a highest level of CNC lathes from Japanese industrial techniques. That gives us the stability to control over the roughness as inner surface Ra 0.8µm and outer Ra 1.6µm.



Laser markings SME SS316L 3-A TRICLOVER **** SERIAL are applied and can be done as requested on each fitting. Before that the sanitary couplings are taken out of the ultrasonic cleaning water tanks getting rid of work oil in process. And shrinking foam is used after lazering as the standard package to keep them dry and intact from dust or hand sweating by any chance.

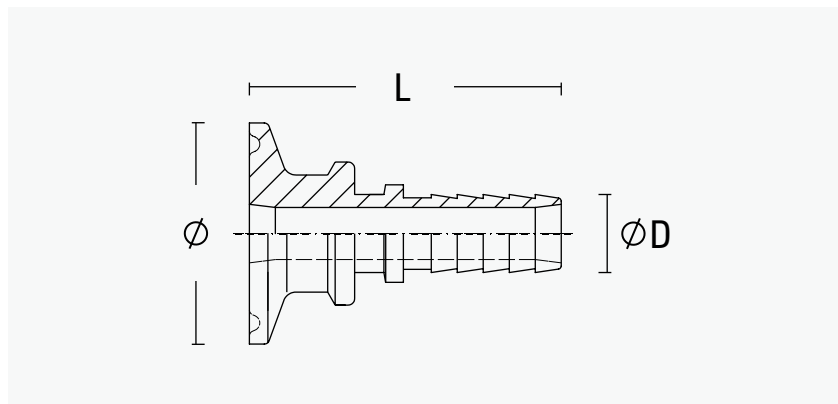
Type test with surface metrological instruments (roughness testers) is applied when we design and need to prove the capacity of work flows. Visual checks at final stages of fabrication with roughness calibers are made for further assurance.





316L Tri-clover fitting by hose tail and crimping collar

We work Ra 0.6 (internal) and 0.8 (external) on sanitary fittings made of 316L (1.4404), certified in category 63-03 per 3A regulations.



DN (MM)	(INCH)	Ø (MM)	Ø D (MM)	L (MM)	316L (1.4404)
10	3/8	25.2	10.0	48.0	204111.1
12	1/2	25.2	12.0	48.0	204112.1
16	5/8	25.2	16.0	48.0	204113.1
19	3/4	25.2	19.2	48.0	204114.1
10	3/8	50.5	10.0	48.8	204131
12	1/2	50.5	12.0	48.8	204132
16	5/8	50.5	16.0	48.8	204133.1
19	3/4	50.5	19.2	48.8	204134
19	3/4	50.5	19.5	57.0	204134.9
25	1	50.5	25.0	48.8	204135
25	1	50.5	25.5	57.0	204135.9
25	1	50.5	27.0	48.7	204136
32	1¼	50.5	32.2	64.0	204137.4
32	1¼	50.5	32.4	64.0	204137
40	1½	50.5	38.2	79.0	204138.9

DN (MM)	Ø (INCH)	Ø (MM)	Ø D (MM)	L (MM)	316L (1.4404)
40	1½	50.5	38.9	95.0	204138.21
40	1½	50.5	39.0	64.0	204138.1
40	1½	50.5	39.5	64.0	204138
40	1½	64.0	39.0	60.0	204144
50	2	64.0	50.8	90.0	204145.9
50	2	64.0	51.0	75.2	204145.1
50	2	64.0	52.0	75.2	204145
50	2	77.5	51.0	75.2	204153
65	2½	77.5	63.2	90.5	204154.4
65	2½	77.5	63.5	90.5	204154
65	2½	77.5	64.0	86.0	204155.1
65	2½	77.5	65.0	86.0	204155
75	3	91.0	75.4	89.0	204165.4
75	3	91.0	76.0	89.0	204165.1
75	3	91.0	76.5	114.0	204165.9
75	3	91.0	78.0	89.0	204165
100	4	119.0	100.8	128.5	204166
100	4	119.0	101.6	130	204166.1
100	4	119.0	102.5	133	204166.9
100	4	119.0	103.6	150	204166.21
150	6	167.0	150.1	200	204168.1



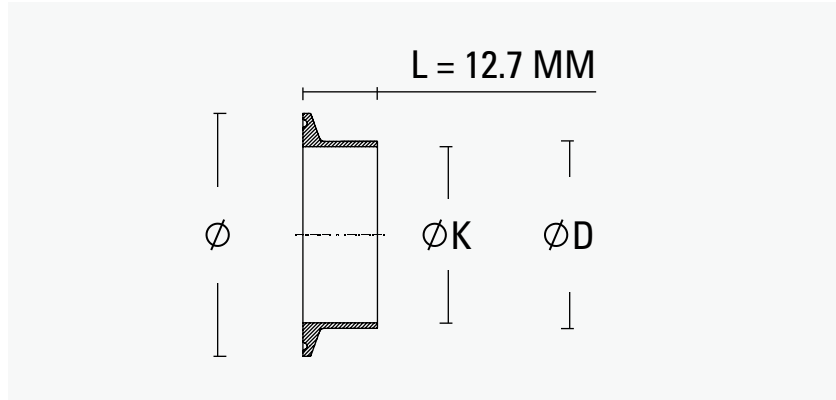
DN (MM)	Ø (INCH)	Ø (MM)	Ø D (MM)	L (MM)	316L (1.4404)
25	1	50.5	25.4	48.7	204035
32	1¼	50.5	32.4	64.0	204037
40	1½	50.5	38.4	64.0	204038
50	2	64.0	50.4	75.2	204045
65	2½	77.5	63.4	86	204055
75	3	91.0	75.4	89	204065
75	3	106.0	80.4	85	204076
100	4	119.0	100.3	130	204077
100	4	119.0	101.6	130	204077.1

316L Tri-clover BW fitting

L=12.7 MM

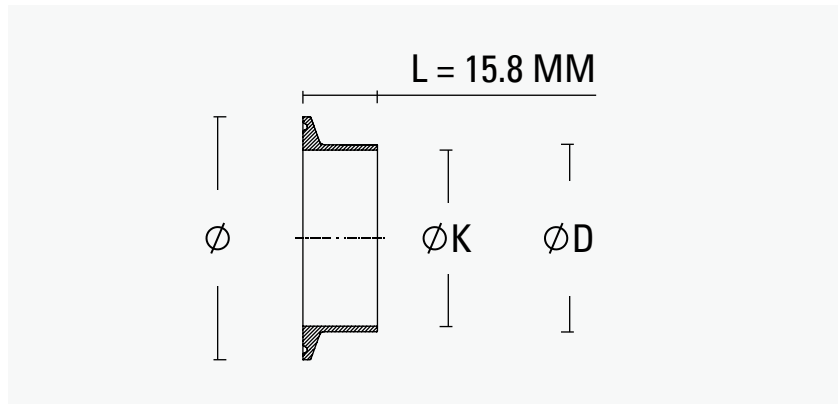


We work Ra 0.6 (internal) and 0.8 (external) on sanitary fittings made of 316L (1.4404), certified in category 63-03 per 3A regulations.



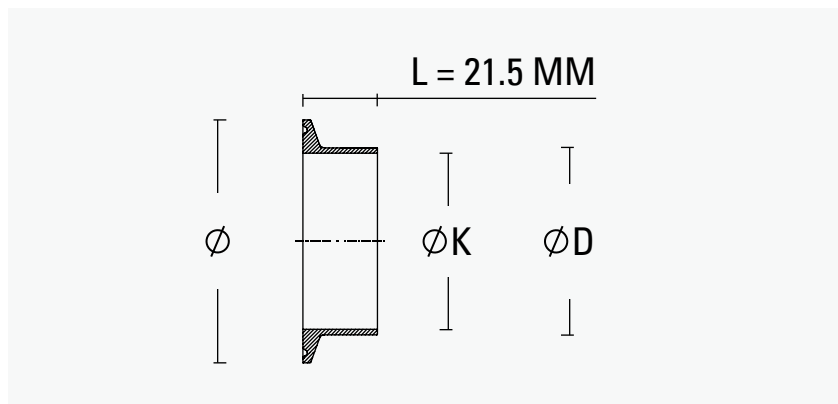
DN (MM)	(INCH)	Ø (MM)	Ø D (MM)	Ø K (MM)	L (MM)	316L (1.4404)
15	1/2	25.2	12.7	9.4	12.7	210309.11
20	3/4	25.2	19.05	15.75	12.7	210309.12
10	3/8	34.0	10.2	7.0	12.7	210310.1
15	1/2	34.0	13.0	10.0	12.7	210310.11
15	1/2	34.0	13.5	10.3	12.7	210310.12
20	3/4	34.0	17.2	14.0	12.7	210310.13
20	3/4	34.0	19.0	16.0	12.7	210310.14
20	3/4	34.0	21.3	18.1	12.7	210310.15
20	3/4	34.0	23.0	20.0	12.7	210310.16
25	1	50.5	25.4	22.2	12.7	210313.1
25	1	50.5	26.9	23.7	12.7	210313.11
32	1¼	50.5	29.0	26.0	12.7	210313.12
32	1¼	50.5	32.0	29.5	12.7	210313.13
32	1¼	50.5	33.7	29.7	12.7	210313.14
32	1¼	50.5	35.0	32.0	12.7	210313.15
40	1½	50.5	38.0	35.5	12.7	210313.16
40	1½	50.5	38.1	34.8	12.7	210313.17
40	1½	50.5	41.0	38.0	12.7	210313.18
40	1½	50.5	42.4	38.4	12.7	210313.19
50	2	64.0	51.0	48.5	12.7	210316.13
50	2	64.0	52.0	49.0	12.7	210316.14
50	2	64.0	53.0	50.0	12.7	210316.15
65	2½	77.5	60.3	56.3	12.7	210317.11
65	2½	77.5	63.5	60.2	12.7	210317.12
65	2½	77.5	63.5	60.3	12.7	210317.13
75	3	91.0	70.0	66.0	12.7	210318.1
75	3	91.0	76.1	72.9	12.7	210318.11
75	3	91.0	76.1	71.5	12.7	210318.12
75	3	91.0	76.2	72.9	12.7	210318.13
90	3½	106.0	85.0	81.0	12.7	210319.11
90	3½	106.0	88.9	84.3	12.7	210319.12

316L Tri-clover BW fitting
L=15.8 MM



DN (MM)	(INCH)	Ø (MM)	Ø D (MM)	Ø K (MM)	L (MM)	316L (1.4404)
100	4	119	101.6	97.38	15.8	210320.11
100	4	119	101.6	97.6	15.8	210320.12
100	4	119	104	100	15.8	210320.13
100	4½	130	114.3	109.1	15.8	210321.11
125	5	155	129	125	15.8	210322.11
125	5½	155	139.7	134.5	15.8	210322.12
150	6	183	154	150	15.8	210324.11
200	8	233.5	204	200	15.8	210326.11

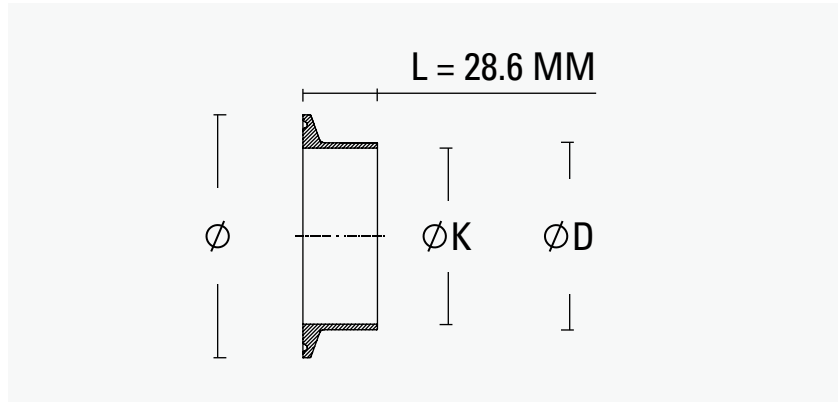
316L Tri-clover BW fitting
L=21.5 MM



DN (MM)	(INCH)	Ø (MM)	Ø D (MM)	Ø K (MM)	L (MM)	316L (1.4404)
15	1/2	25.2	12.7	9.4	21.5	210309.21
20	3/4	25.2	19.0	15.75	21.5	210309.22
10	3/8	34.0	10.2	7.0	21.5	210310.2
15	1/2	34.0	13.0	10.0	21.5	210310.21
15	1/2	34.0	13.5	10.3	21.5	210310.22
20	3/4	34.0	17.2	14.0	21.5	210310.23
20	3/4	34.0	19.0	16.0	21.5	210310.24
20	3/4	34.0	21.3	18.1	21.5	210310.25
25	1	50.5	25.4	22.2	21.5	210313.2
25	1	50.5	26.9	23.7	21.5	210313.21

DN (MM)	(INCH)	Ø (MM)	Ø D (MM)	Ø K (MM)	L (MM)	316L (1.4404)
32	1¼	50.5	29.0	26.0	21.5	210313.22
32	1¼	50.5	32.0	29.5	21.5	210313.23
32	1¼	50.5	33.7	29.7	21.5	210313.24
32	1¼	50.5	35.0	32.0	21.5	210313.25
40	1½	50.5	38.0	35.5	21.5	210313.26
40	1½	50.5	38.1	34.8	21.5	210313.27
40	1½	50.5	41.0	38.0	21.5	210313.28
40	1½	50.5	42.4	38.4	21.5	210313.29
50	2	64.0	48.3	44.3	21.5	210316.21
50	2	64.0	50.8	47.5	21.5	210316.22
50	2	64.0	51.0	48.5	21.5	210316.23
50	2	64.0	52.0	49.0	21.5	210316.24
50	2	64.0	53.0	50.0	21.5	210316.25
65	2½	77.5	60.3	56.3	21.5	210317.21
65	2½	77.5	63.5	60.2	21.5	210317.22
65	2½	77.5	63.5	60.3	21.5	210317.23
75	3	91.0	70.0	66.0	21.5	210318.2
75	3	91.0	76.1	72.9	21.5	210318.21
75	3	91.0	76.1	71.5	21.5	210318.22
75	3	91.0	76.2	72.9	21.5	210318.23
90	3½	106.0	85.0	81.0	21.5	210319.21
90	3½	106.0	88.9	84.3	21.5	210319.22
100	4	119.0	101.6	97.38	21.5	210320.21
100	4	119.0	101.6	97.6	21.5	210320.22
100	4	119.0	104.0	100.0	21.5	210320.23
100	4½	130.0	114.3	109.1	21.5	210321.21
125	5	155.0	129.0	125.0	21.5	210322.21
125	5½	155.0	139.7	134.5	21.5	210322.22
150	6	166.8	152.4	146.86	21.5	210323.21
150	6	183.0	154.0	150.0	21.5	210324.21
150	6½	183.0	168.3	163.1	21.5	210324.22
200	8	217.7	203.2	197.66	21.5	210325.21
200	8	233.5	204.0	200.0	21.5	210326.21
200	8½	233.5	219.1	213.9	21.5	210326.22
250	10	268.5	254.0	247.2	21.5	210327.21
300	12	319.3	304.8	298.0	21.5	210328.21

316L Tri-clover BW fitting
L=28.6 MM

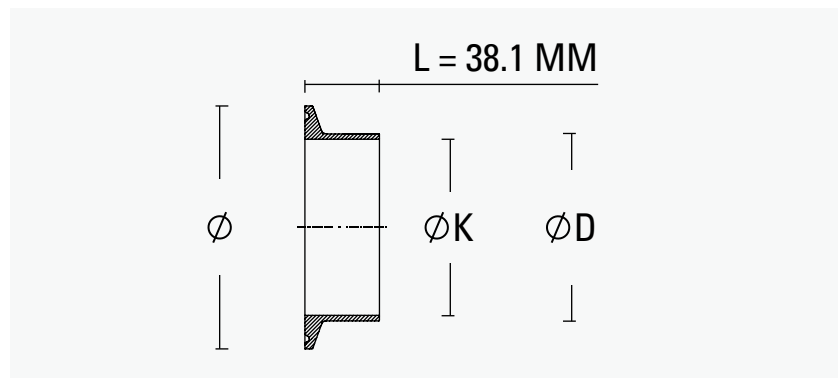


DN (MM)	(INCH)	Ø (MM)	Ø D (MM)	Ø K (MM)	L (MM)	316L (1.4404)
15	1/2	25.2	12.7	9.4	28.6	210309.31
20	3/4	25.2	19.05	15.75	28.6	210309.32
10	3/8	34.0	10.2	7.0	28.6	210310.3
15	1/2	34.0	13.0	10.0	28.6	210310.31
15	1/2	34.0	13.5	10.3	28.6	210310.32
20	3/4	34.0	17.2	14.0	28.6	210310.33
20	3/4	34.0	19.0	16.0	28.6	210310.34
20	3/4	34.0	21.3	18.1	28.6	210310.35
20	3/4	34.0	23.0	20.0	28.6	210310.36
25	1	50.5	25.4	22.2	28.6	210313.3
25	1	50.5	26.9	23.7	28.6	210313.31
32	1¼	50.5	29.0	26.0	28.6	210313.32
32	1¼	50.5	32.0	29.5	28.6	210313.33
32	1¼	50.5	33.7	29.7	28.6	210313.34
32	1¼	50.5	35.0	32.0	28.6	210313.35
40	1½	50.5	38.0	35.5	28.6	210313.36
40	1½	50.5	38.1	34.8	28.6	210313.37
40	1½	50.5	41.0	38.0	28.6	210313.38
40	1½	50.5	42.4	38.4	28.6	210313.39
50	2	64.0	48.3	44.3	28.6	210316.31
50	2	64.0	50.8	47.5	28.6	210316.32
50	2	64.0	51.0	48.5	28.6	210316.33
50	2	64.0	52.0	49.0	28.6	210316.34
50	2	64.0	53.0	50.0	28.6	210316.35
65	2½	77.5	60.3	56.3	28.6	210317.31
65	2½	77.5	63.5	60.2	28.6	210317.32
65	2½	77.5	63.5	60.3	28.6	210317.33
75	3	91.0	70.0	66.0	28.6	210318.3
75	3	91.0	76.1	72.9	28.6	210318.31
75	3	91.0	76.1	71.5	28.6	210318.32
75	3	91.0	76.2	72.9	28.6	210318.33



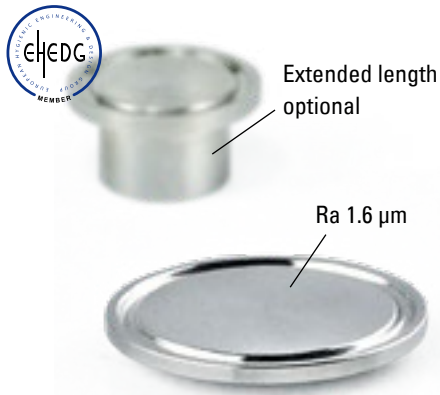
DN (MM)	(INCH)	Ø (MM)	Ø D (MM)	Ø K (MM)	L (MM)	316L (1.4404)
90	3½	106.0	85.0	81.0	28.6	210319.31
90	3½	106.0	88.9	84.3	28.6	210319.32
100	4	119.0	101.6	97.38	28.6	210320.31
100	4	119.0	101.6	97.6	28.6	210320.32
100	4	119.0	104.0	100.0	28.6	210320.33
100	4½	130.0	114.3	109.1	28.6	210321.31
125	5	155.0	129.0	125.0	28.6	210322.31
125	5½	155.0	139.7	134.5	28.6	210322.32
150	6	166.8	152.4	146.86	28.6	210323.31
150	6	183.0	154.0	150.0	28.6	210324.31
150	6½	183.0	168.3	163.1	28.6	210324.32
200	8	217.7	203.2	197.66	28.6	210325.31
200	8	233.5	204.0	200.0	28.6	210326.31
200	8½	233.5	219.1	213.9	28.6	210326.32
250	10	268.5	254.0	247.2	28.6	210327.31
300	12	319.3	304.8	298.0	28.6	210328.31

316L Tri-clover BW fitting
L=38.1 MM

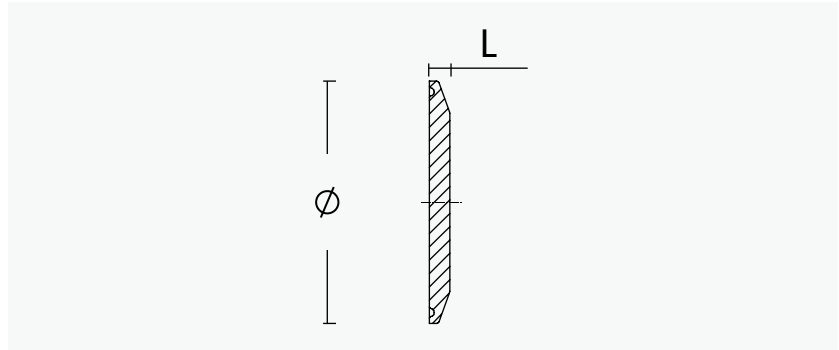


DN (MM)	(INCH)	Ø (MM)	Ø D (MM)	Ø K (MM)	L (MM)	316L (1.4404)
150	6	166.8	152.4	146.86	38.1	210323.41
200	8	217.7	203.2	197.66	38.1	210325.41
250	10	268.5	254.0	247.2	38.1	210327.41
300	12	319.3	304.8	298.0	38.1	210328.41

316L & 304 Tri-clover blind end

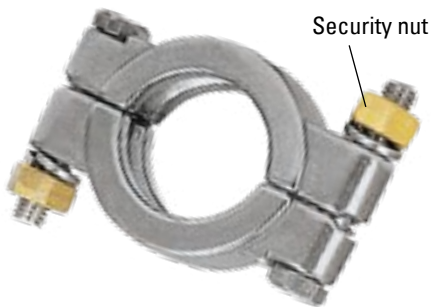


We offer blind ends of Tri-Clover with optional length of extended piping.

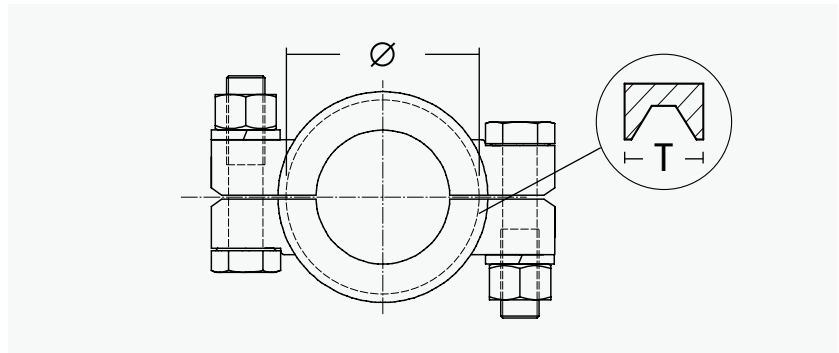


DN (MM)	Ø (INCH)	Ø (MM)	L (MM)	316L (1.4404)	304 (1.4301)
15	1/2	25.2	6.4	210341	210341.1
25	1	34.0	-	210342	210342.1
40	1½	50.5	6.5	210344	210344.1
50	2	64.0	6.5	210345	210345.1
65	2½	77.5	6.5	210346	210346.1
80	3	91.0	6.5	210347	210347.1
100	4	119.0	8.1	210348	210348.1
150	6	167.0	-	210349	210349.1

304 Tri-clamp heavy duty with security nut, 13MHP



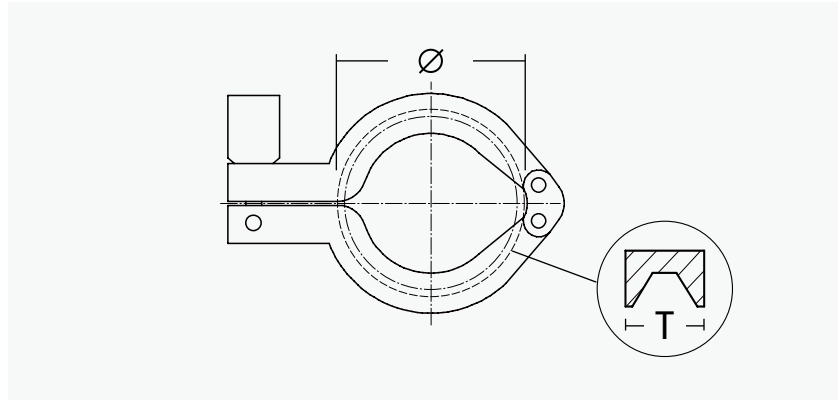
We offer heavy-duty Tri-clamp units made of 304 (1.4301) with anti-loose nuts.



DN (MM)	Ø (INCH)	Ø (MM)	T (MM)	304 (1.4301)
38	1½	51	20.9	211403
50	2	63	21	211404
63	2½	-	-	211405
76	3	90.5	21	211406
89	3½	-	-	211407
102	4	117	20.8	211408
125	5	-	-	211410
154	6	-	-	211412
159	6½	-	-	211413
202	8	-	-	211415
219	8½	-	-	211416

304 Tri-clamp with tightening wing nut operation, 13MHHM

We produce Tri-clamp units for full range of Tri-clover connection, made of 304 (1.4301), nut type optional.



DN (MM)	(INCH)	Ø (MM)	T (MM)	TYPE	304 (1.4301)
10	1/2	27.3	16.7	A B	211341
19	3/4	35	16	A B	211342
38	1½	53	17.3	A B	211343
51	2	63	17.1	A B	211344
63	2½	76	17	A B	211345
76	3	89	17.8	A B	211346
89	3½	104	18	A B	211347
102	4	112.5	17	A B	211348
114	4½	-	-	A B	211349
125	5	-	-	A B	211350
133	5½	-	-	A B	211351
154	6	-	-	A B	211352
159	6½	180	22.5	A B	211353
168	7	-	-	A B	211354
202	8	-	-	A B	211355
219	8½	-	-	A B	211356
254	10	-	-	A B	211357
279	11	-	-	A B	211358
305	12	-	-	A B	211359

DN (MM)	(INCH)	Ø (MM)	T (MM)	TYPE	304 (1.4301)
38	1½	52.5	16.8	A B	211373
51	2	66.8	16.8	A B	211374
63	2½	78.9	16.8	A B	211375
76	3	90	17	A B	211376
89	3½	104.3	17	A B	211377
102	4	121	17.2	A B	211378
133	5½	-	-	A B	211381
154	6	-	-	A B	211382
219	8½	-	-	A B	211386
254	10	-	-	A B	211387

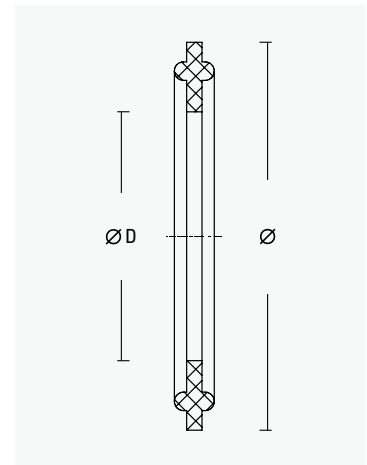
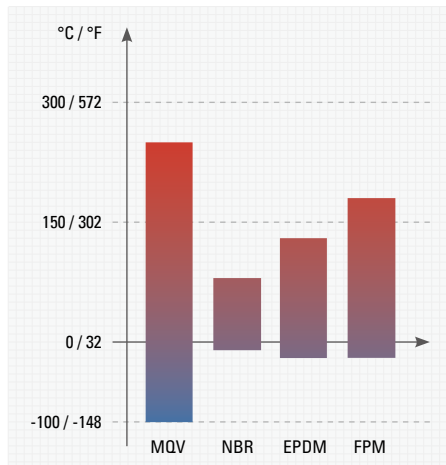
Spare part Tri-clover gasket MQV NBR EPDM FPM



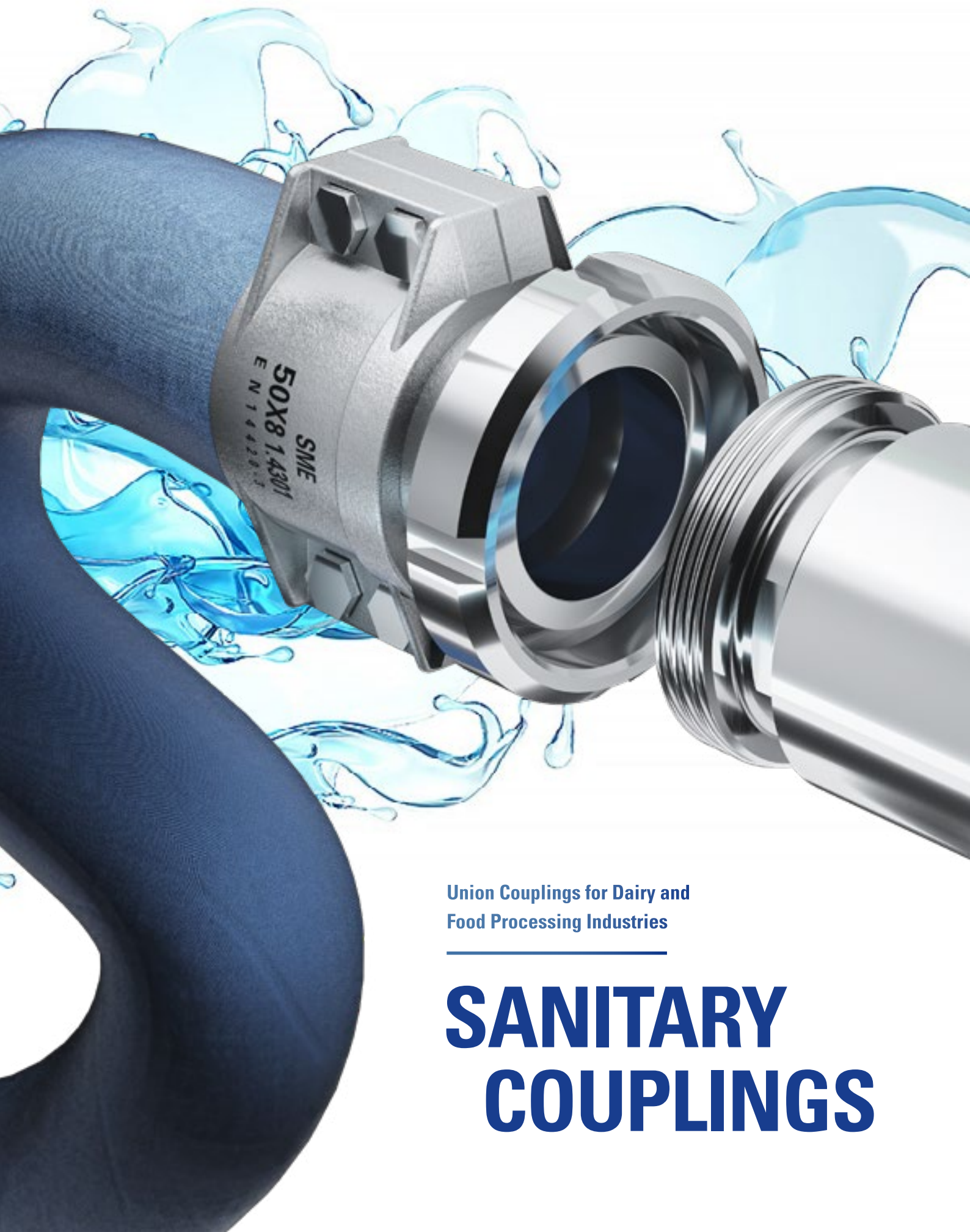
We offer gaskets for Tri-clover connection suitable for food transfer as spare part, not included in standard package of fittings.



GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
MQV	40 ± 5	-100 / 250	-148 / 482	silicone (industrial graded)
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
EPDM	70 ± 5	-20 / 130	-4 / 266	ethylene propylene
FPM	70 ± 5	-20 / 180	-4 / 356	fluorocarbon



SIZE (INCH)	Ø D (MM)	Ø (MM)	MQV CRYSTAL	NBR BLACK	EPDM WHITE	FPM WHITE
10 (3/8)	-	25.2	210351.2	210351	210351.1	210351.3
10 (3/8)	10.2	34.0	210352.2	210352	210352.1	210352.3
10 (3/8)	10.9	34.0	210352.21	210352.01	210352.11	210352.31
5/8	15.4	34.0	210352.22	210352.02	210352.12	210352.32
3/4	19.5	34.0	210352.23	210352.03	210352.13	210352.33
20 (3/4)	22.0	50.5	210353.2	210353	210353.1	210353.3
25 (1)	28.0	50.5	210353.21	210353.01	210353.11	210353.31
32 (1¼)	42.0	64.0	210354.2	210354	210354.1	210354.3
40 (1½)	48.8	64.0	210354.21	210354.01	210354.11	210354.31
50 (2)	57.0	77.5	210355.2	210355	210355.1	210355.3
65 (2½)	67.0	91.0	210356.2	210356	210356.1	210356.3
75 (3)	72.9	91.0	-	210356.01	-	-
89 (3½)	85.1	106.0	210358.2	210358	210358.1	210358.3
150 (6)	-	183.0	210363.2	210363	210363.1	210363.3



Union Couplings for Dairy and
Food Processing Industries

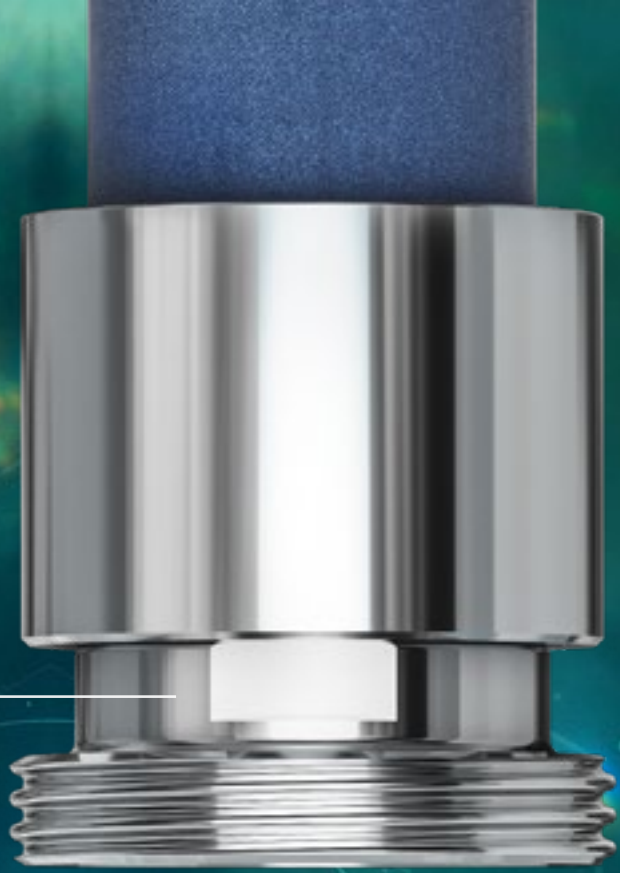
SANITARY COUPLINGS

SME SANITARY COUPLINGS

MALE COUPLINGS

Swage ferrule with internal serration in combination with male RD food-graded thread fittings, inserted with silicon flat gasket.

All interior surfaces are grinded and highly polished to roughness Ra 0.8-1.6 μm , eliminating the chance of residue after the transfer. Flat gasket sealing surface is substantially polished with the contact surfaces



FEMALE COUPLINGS

Female couplings incorporate a threaded union nut and a female sanitary liner coupling. Surface polished to less than roughness Ra 1.6 μm .



DIN SAFETY CLAMPS

Reuseable bolted clamps assembled in acc. to guideline EN 14420 series is desired for DIN sanitation hose couplings.



316L & 304 Liner coupling by collar and hose tail DIN11851

We produce female part, or the liner coupling of union set, worked from 316L (1.4404) or optional 304 (1.4301) bar stock.



DN (MM)	(INCH)	Ø (MM)	L (MM)	316L (1.4404)	304 (1.4301)
10	3/8	10.2	59	210010.27	210010.25
15	1/2	13.2	60	210011.27	210011.25
20	3/4	19.2	61	210012.27	210012.25
25	1	25.2	64.5	210013.27	210013.25
32	1¼	32.2	67	210014.27	210014.25
40	1½	38	68	210015.27	210015.25
50	2	51	79	210016.27	210016.25
65	2½	63.5	102	210017.27	210017.25
80	3	76.1	120	210018.27	210018.25
100	4	101.6	143	210019.27	210019.25
125	5	129	-	210020.27	210020.25
150	6	150.1	203	210021.27	210021.25

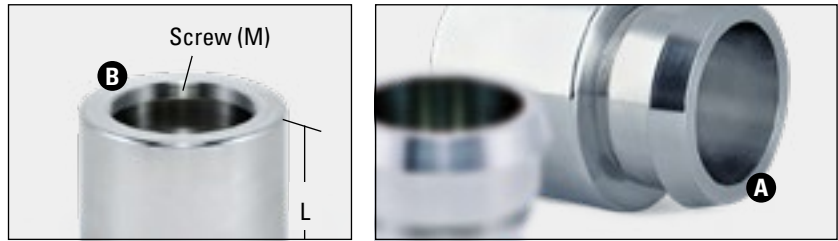


DN (MM)	(INCH)	Ø (MM)	L (MM)	316L (1.4404)	304 (1.4301)
10	3/8	10.2	59	210010.24	210010.23
15	1/2	13.2	60	210011.24	210011.23
20	3/4	19.2	61	210012.24	210012.23
25	1	25.2	64.5	210013.24	210013.23
32	1¼	32.2	67	210014.24	210014.23
40	1½	38.2	68	210015.24	210015.23
50	2	50.2	79	210016.24	210016.23
65	2½	63.2	96	210017.24	210017.23
80	3	75.5	105	210018.24	210018.23
100	4	100.2	140.5	210019.24	210019.23
125	5	129	-	210020.24	210020.23
150	6	150.1	203	210021.24	210021.23

304 Liner coupling screw-on crimping ferrule



We produce a liner coupling for crimping ferrule and additional screw-on threading, made of 304 (1.4301) bar stock.



DN (MM)	Ø (INCH)	M (SCREW) (MM)	L (MM)	TYPE	304 (1.4301)
50	2	M57×1.25	88	A B	210016.29
65	2½	M73×1.25	121	A B	210017.29
80	3	M84×1.25	155	A B	210018.29

DN (MM)	Ø (INCH)	M (SCREW) (MM)	L (MM)	TYPE	304 (1.4301)
50	2	M57×71.8	60	A B	211019.1
65	2½	M73×90	100	A B	211023.1
80	3	M84×106	106	A B	211026

316L & 304 Welding liner DIN1851 DIN14



We produce female liner for BW welding pipe, made of 316 (1.4404) and 304 (1.4301), done with internal serration.

DN (MM)	Ø (INCH)	Ø (MM)	L (MM)	316L (1.4404)	304 (1.4301)
10	3/8	15	17	210010.21	210010.2
15	1/2	21	17	210011.21	210011.2
20	3/4	25	18	210012.21	210012.2
25	1	31	22	210013.21	210013.2
32	1¼	37	25	210014.21	210014.2
40	1½	43	26	210015.21	210015.2
50	2	55	28	210016.21	210016.2
65	2½	72	32	210017.21	210017.2
80	3	87	37	210018.21	210018.2
100	4	106	44	210019.21	210019.2
125	5	132	34	210020.21	210020.2
150	6	157	37	210021.21	210021.2



316L & 304 Male RD thread hose coupling DIN11851

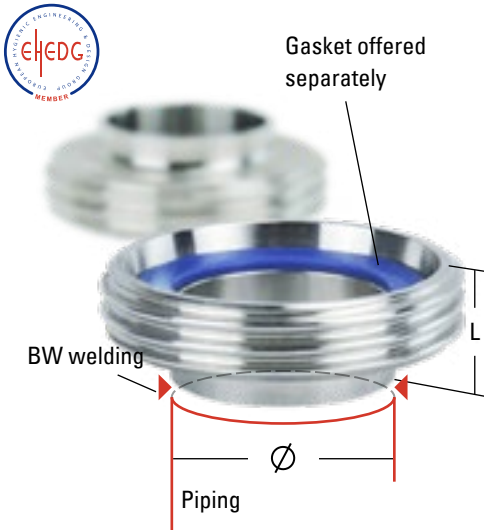
We produce male RD part of a union set, worked from 316L (1.4404) or optional 304 (1.4301) bar stock, gasket not included.



DN (MM)	THR (INCH)	Ø (MM)	L (MM)	TYPE	316L (1.4404)	304 (1.4301)
10	RD28×1/8"	10.2	59	A B	210010.36	210010.35
15	RD34×1/8"	13.2	63	A B	210011.36	210011.35
20	RD44×1/6"	19.2	65	A B	210012.36	210012.35
25	RD52×1/6"	25.2	64.5	A B	210013.36	210013.35
32	RD58×1/6"	32.2	67	A B	210014.36	210014.35
40	RD65×1/6"	38.0	68	A B	210015.36	210015.35
50	RD78×1/6"	51.0	79	A B	210016.36	210016.35
65	RD95×1/6"	63.5	102	A B	210017.36	210017.35
80	RD110×1/4"	76.1	120	A B	210018.36	210018.35
100	RD130×1/4"	101.6	143	A B	210019.36	210019.35
125	RD160×1/4"	-	-	A B	210020.36	210020.35
150	RD190×1/4"	150.1	213	A B	210021.36	210021.35

DN (MM)	THR (INCH)	Ø (MM)	L (MM)	TYPE	316L (1.4404)	304 (1.4301)
10	RD28×1/8"	10.2	59	A B	210010.34	210010.33
15	RD34×1/8"	13.2	63	A B	210011.34	210011.33
20	RD44×1/6"	19.2	65	A B	210012.34	210012.33
25	RD52×1/6"	25.2	64.5	A B	210013.34	210013.33
32	RD58×1/6"	32.2	67	A B	210014.34	210014.33
40	RD65×1/6"	38.2	68	A B	210015.34	210015.33
50	RD78×1/6"	50.2	79	A B	210016.34	210016.33
65	RD95×1/6"	63.2	96	A B	210017.34	210017.33
80	RD110×1/4"	75.2	105	A B	210018.34	210018.33
100	RD130×1/4"	100.2	140.5	A B	210019.34	210019.33
125	RD160×1/4"	-	-	A B	210020.34	210020.33
150	RD190×1/4"	150.1	213	A B	210021.34	210021.33

316L & 304 Welding male part DIN11851 DIN14

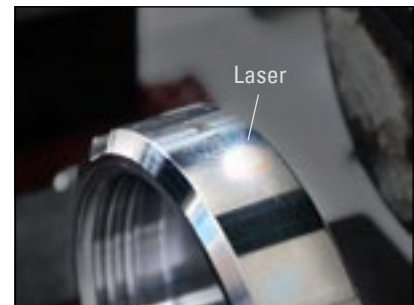
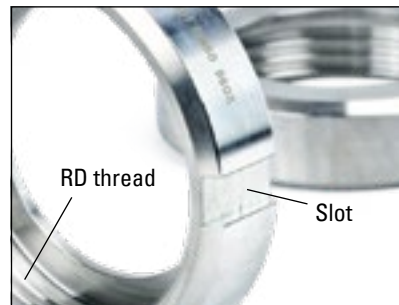


We produce male RD part for BW welding pipe, made of 316 (1.4404) and 304 (1.4301), done with internal serration.

DN (MM)	THRD (INCH)	∅ (MM)	L (MM)	316L (1.4404)	304 (1.4301)
10	RD28×1/8"	15	21	210010.31	210010.3
15	RD34×1/8"	21	21	210011.31	210011.3
20	RD44×1/6"	25	24	210012.31	210012.3
25	RD52×1/6"	31	29	210013.31	210013.3
32	RD58×1/6"	37	32	210014.31	210014.3
40	RD65×1/6"	43	33	210015.31	210015.3
50	RD78×1/6"	55	35	210016.31	210016.3
65	RD95×1/6"	72	40	210017.31	210017.3
80	RD110×1/4"	87	45	210018.31	210018.3
100	RD130×1/4"	106	54	210019.31	210019.3
125	RD160×1/4"	132	46	210020.31	210020.3
150	RD190×1/4"	157	50	210021.31	210021.3

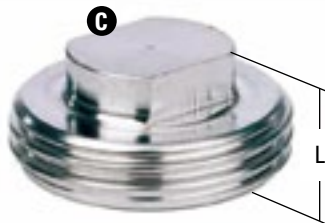
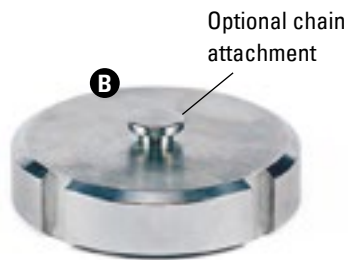
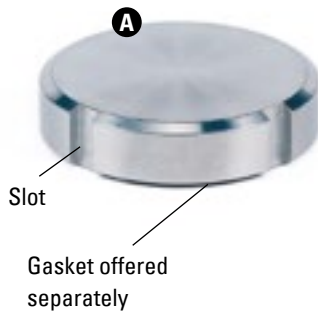
316L & 304 RD slotted nut DIN11851 DIN13

We produce RD threaded nut with slots, made of 316 (1.4404) and 304 (1.4301).



DN (MM)	THRD (INCH)	SLOT (NUM)	316L (1.4404)	304 (1.4301)
10	RD28×1/8"	4	210010.11	210010.1
15	RD34×1/8"	4	210011.11	210011.1
20	RD44×1/6"	4	210012.11	210012.1
25	RD52×1/6"	4	210013.11	210013.1
32	RD58×1/6"	4	210014.11	210014.1
40	RD65×1/6"	4	210015.11	210015.1
50	RD78×1/6"	4	210016.11	210016.1
65	RD95×1/6"	6	210017.11	210017.1
80	RD110×1/4"	6	210018.11	210018.1
100	RD130×1/4"	6	210019.11	210019.1
125	RD160×1/4"	6	210020.11	210020.1
150	RD190×1/4"	6	210021.11	210021.1

316L & 304 Slotted blank nut RD thread DIN11851 DIN13



We offer blank nut or dust cap with RD thread from sanitary-graded materials.

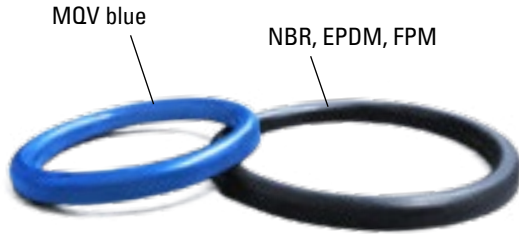
DN (MM)	THRD (INCH)	SLOT (NUM)	TYPE	304 (1.4301)
10	RD28×1/8"	4	A B C	210050
15	RD34×1/8"	4	A B C	210051
20	RD44×1/6"	4	A B C	210052
25	RD52×1/6"	4	A B C	210053
32	RD58×1/6"	4	A B C	210054
40	RD65×1/6"	4	A B C	210055
50	RD78×1/6"	4	A B C	210056
65	RD95×1/6"	6	A B C	210057
80	RD110×1/4"	6	A B C	210058
100	RD130×1/4"	6	A B C	210059

DN (MM)	THRD (INCH)	SLOT (NUM)	TYPE	316L (1.4404)	304 (1.4301)
10	RD28×1/8"	4	A B C	210030.1	210030
15	RD34×1/8"	4	A B C	210031.1	210031
20	RD44×1/6"	4	A B C	210032.1	210032
25	RD52×1/6"	4	A B C	210033.1	210033
32	RD58×1/6"	4	A B C	210034.1	210034
40	RD65×1/6"	4	A B C	210035.1	210035
50	RD78×1/6"	4	A B C	210036.1	210036
65	RD95×1/6"	6	A B C	210037.1	210037
80	RD110×1/4"	6	A B C	210038.1	210038
100	RD130×1/4"	6	A B C	210039.1	210039
125	RD160×1/4"	6	A B C	-	210040
150	RD190×1/4"	6	A B C	-	210041

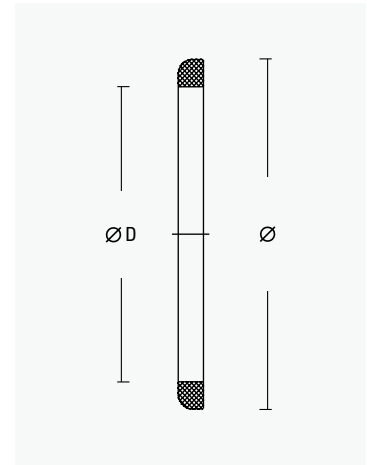
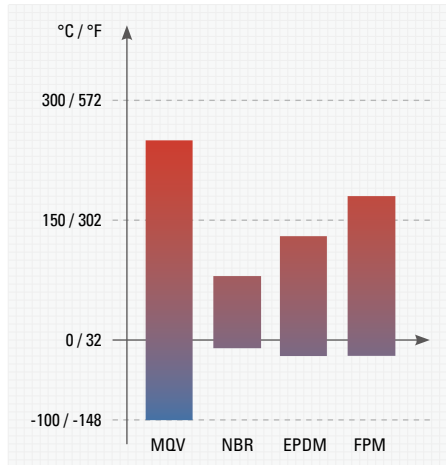
DN (MM)	THRD (INCH)	L (MM)	TYPE	316L (1.4404)	304 (1.4301)
15	RD34×1/8"	21	A B C	210071.1	210071
20	RD44×1/6"	24	A B C	210072.1	210072
25	RD52×1/6"	24	A B C	210073.1	210073
32	RD58×1/6"	24	A B C	210074.1	210074
40	RD65×1/6"	24	A B C	210075.1	210075
50	RD78×1/6"	24	A B C	210076.1	210076
65	RD95×1/6"	28	A B C	210077.1	210077
80	RD110×1/4"	30	A B C	210079.1	210079
100	RD130×1/4"	30	A B C	210080.1	210080
125	RD160×1/4"	36	A B C	210081.1	210081
150	RD190×1/4"	40	A B C	210082.1	210082

Spare part DIN11851 coupling gasket MQV NBR EPDM FPM

We offer gaskets for DIN11851 union connection suitable for food transfer as spare part, not included in standard package of fittings.

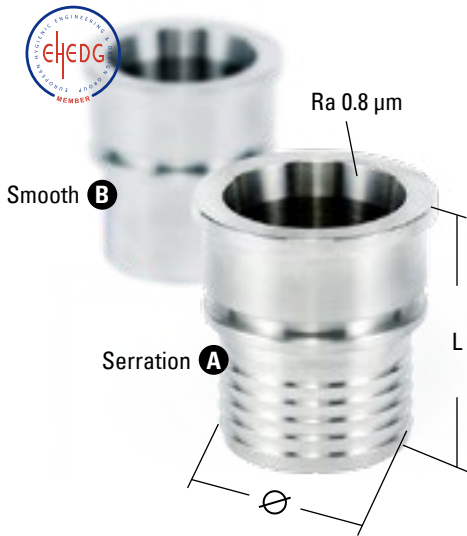


GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
MQV	40 ± 5	-100 / 250	-148 / 482	silicone (industrial graded)
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
EPDM	70 ± 5	-20 / 130	-4 / 266	ethylene propylene
FPM	70 ± 5	-20 / 180	-4 / 356	fluorocarbon



SIZE (INCH)	Ø D (MM)	Ø (MM)	MQV TRSPRNT	NBR BLACK	EPDM BLACK	FPM BLACK
10 (3/8)	12	20	210010.4	210010.41	210010.44	210010.45
15 (1/2)	18	26	210011.4	210011.41	210011.44	210011.45
20 (3/4)	23	33	210012.4	210012.41	210012.44	210012.45
25 (1)	30	40	210013.4	210013.41	210013.44	210013.45
32 (1¼)	36	46	210014.4	210014.41	210014.44	210014.45
40 (1½)	42	52	210015.4	210015.41	210015.44	210015.45
50 (2)	54	64	210016.4	210016.41	210016.44	210016.45
65 (2½)	71	81	210017.4	210017.41	210017.44	210017.45
80 (3)	85	95	210018.4	210018.41	210018.44	210018.45
100 (4)	104	114	210019.4	210019.41	210019.44	210019.45
125 (5)	130	142	210020.4	210020.41	210020.44	210020.45
150 (6)	155	167	210021.4	210021.41	210021.44	210021.45

316L Liner coupling by collar and hose tail SMS1145

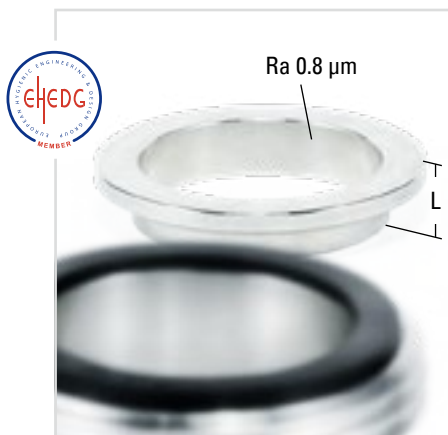


We produce female part, or the liner coupling of union set, worked from 316L (1.4404).

DN (MM)	(INCH)	Ø (MM)	L (MM)	TYPE	316L (1.4404)
25	1	19.4	61.5	A B	202011.27
25	1	25.0	61.0	A B	202011.23
27	1	27.0	51.7	A B	202012.23
32	1¼	32.2	65.0	A B	202013.23
38	1½	38.0	67.0	A B	202014.23
50	2	38.0	66.0	A B	202015.27
50	2	51.0	75.0	A B	202015.23
65	2½	51.0	80.0	A B	202016.27
65	2½	63.5	98.7	A B	202016.23
76	3	63.5	98.7	A B	202018.27
76	3	70.0	99.5	A B	202018.28
76	3	76.1	112.3	A B	202018.23
104	4	101.6	127.0	A B	202020.23
100	4	101.6	127.0	A B	202021.23

DN (MM)	(INCH)	Ø (MM)	L (MM)	TYPE	316L (1.4404)
19	¾	19.4	-	A B	202010.24
25	1	25.0	61.0	A B	202011.24
32	1¼	32.2	65.0	A B	202013.24
38	1½	38.0	67.0	A B	202014.24
50	2	51.0	75.0	A B	202015.24
65	2½	63.5	98.7	A B	202016.24
65	2½	65.0	98.7	A B	202017.24
76	3	76.1	112.3	A B	202018.24
80	3	80.0	112.3	A B	202019.24
104	4	100.3	127.0	A B	202020.24
100	4	101.6	127.0	A B	202021.24

316L Welding liner SMS1145

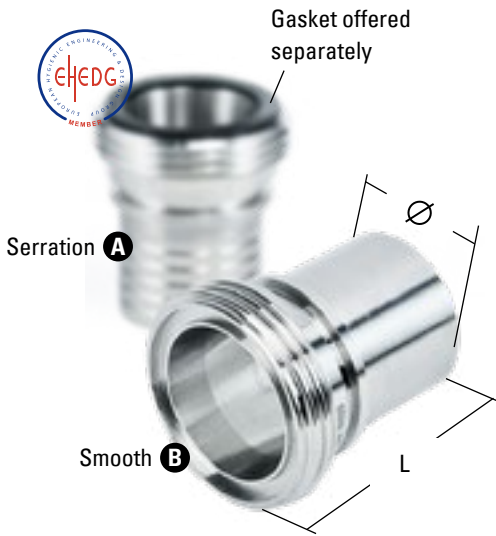


We produce SMS female liner for BW welding pipe made of 316 (1.4404).

DN (MM)	(INCH)	Ø (MM)	L (MM)	316L (1.4404)
25	1	25.0	15	202011.21
32	1¼	32.0	15	202013.21
38	1½	38.0	20	202014.21
50	2	51.0	20	202015.21
65	2½	63.5	24	202016.21
76	3	76.1	24	202018.21
100	4	101.6	30	202021.21
104	4	104.0	30	202020.21

SMS 1145
SVENSK STANDARD SANITATION

316L Male RD thread hose coupling SMS1145



We produce SMS male RD part of a union set, worked from 316L (1.4404), gasket not included.

DN (MM)	THRD (INCH)	Ø (MM)	L (MM)	TYPE	316L (1.4404)
25	RD40×1/6"	25.0	61.5	A B	202011.34
32	RD48×1/6"	32.2	64.5	A B	202013.34
38	RD60×1/6"	38.0	65.0	A B	202014.34
50	RD70×1/6"	51.0	74.0	A B	202015.34
65	RD85×1/6"	63.5	96.8	A B	202016.34
65	RD85×1/6"	65.0	96.8	A B	202017.34
76	RD98×1/6"	76.1	110.3	A B	202018.34
80	-	80.0	110.3	A B	202019.34
100	RD132×1/6"	101.6	126.5	A B	202020.34

DN (MM)	THRD (INCH)	Ø (MM)	L (MM)	TYPE	316L (1.4404)
25	RD40×1/6"	25.0	61.5	A B	202011.33
32	RD48×1/6"	32.2	64.5	A B	202013.33
38	RD60×1/6"	38.0	65.0	A B	202014.33
50	RD70×1/6"	51.0	74.0	A B	202015.33
65	RD85×1/6"	63.5	96.8	A B	202016.33
65	RD85×1/6"	65.0	96.8	A B	202017.33
76	RD98×1/6"	76.1	110.3	A B	202018.33
80	-	80.0	110.3	A B	202019.33
100	RD132×1/6"	101.6	126.5	A B	202020.33

316L Welding male part SMS1145



We produce SMS male RD part for BW welding pipe made of 316 (1.4404).

DN (MM)	THRD (INCH)	Ø (MM)	L (MM)	316L (1.4404)
25	RD40×1/6"	25.0	19	202011.31
32	RD48×1/6"	32.0	19	202013.31
38	RD60×1/6"	38.0	23	202014.31
50	RD70×1/6"	51.0	23	202015.31
65	RD85×1/6"	63.5	27	202016.31
76	RD98×1/6"	76.1	27	202018.31
100	RD125×1/6"	101.6	30	202021.31
104	RD132×1/6"	104.0	30	202020.31

304 RD slotted nut SMS1145

We produce SMS RD threaded nut with slots made of 304 (1.4301).



DN (MM)	THRD (INCH)	SLOT (NUM)	304 (1.4301)
25	RD40×1/6"	6	202011.1
32	RD48×1/6"	6	202013.1
38	RD60×1/6"	6	202014.1
50	RD70×1/6"	6	202015.1
65	RD85×1/6"	6	202016.1
76	RD98×1/6"	6	202018.1
100	RD125×1/6"	6	202021.1
104	RD132×1/6"	6	202020.1

MACON Sanitary Union Hose Fittings



316L & 304 Liner coupling by serrated hose tail MACON

We design MACON compliant couplings and slotted nut made of 316L (1.4404) or 304 (1.4301).



DN (MM)	Ø (INCH)	Ø (MM)	L (MM)	TYPE	316L (1.4404)	304 (1.4301)
40	1½	39.0	71.0	A B C	214104.25	214104.23
50	2	51.0	74.5	A B C	214105.25	214105.23
65	2½	63.2	64.5	A B C	214106.25	214106.23
70	3	70.0	95.0	A B C	214107.25	214107.23

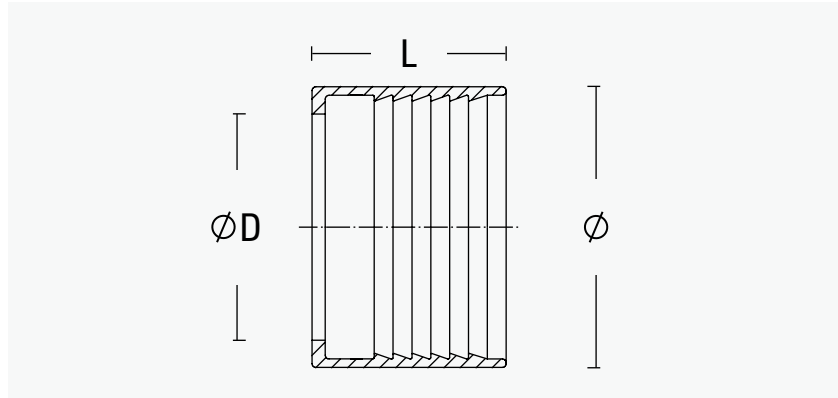
DN (MM)	THRD (INCH)	Ø (MM)	L (MM)	TYPE	316L (1.4404)	304 (1.4301)
40	RD65×1/6"	39.0	71.0	A B C	214104.25	214104.23
50	RD78×1/6"	51.0	74.5	A B C	214105.25	214105.23
65	RD95×1/6"	63.2	64.5	A B C	214106.25	214106.23
70	RD110×1/4"	70.0	95.0	A B C	214107.25	214107.23

DN (MM)	THRD (INCH)	SLOT (NUM)	TYPE	304 (1.4301)
40	M55×P3.0	4	A B C	214104.1
50	M67×P3.0	4	A B C	214105.1
65	M79×P3.5	4	A B C	214106.1
70	M90×P3.5	4	A B C	214107.1



304 Crimping ferrule with internal serration

We produce serrated ferrule clamping for heavy-duty and sanitary application, made from 304 (1.4301), optional other materials.



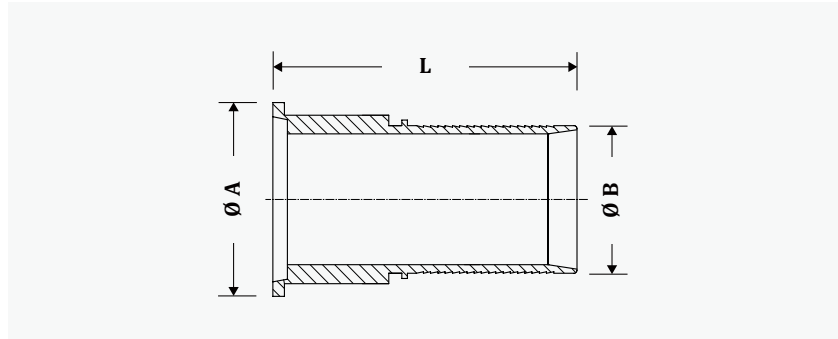
DN (MM)	Ø (INCH)	Ø (MM)	Ø D (MM)	L (MM)	304 (1.4301)
13×24.5	1/2	24.5	19.4	34	211011
15×27.5	1/2	27.5	21.9	38	211012
19×33	3/4	33	25.3	42.3	211013.1
19×32	3/4	32	26.5	41	211013
25×40	1	40	31.5	32.7	211014
25×39	1	39	32.5	41	211015
25×42	1	42	31.5	32.7	211015.2
25×39	1	39	32.5	41	211082
25×41	1	41	32.5	41	211082.1
25×41	1	41	32.5	46	211082.2
25×39	1	39	32.5	46	211082.8
25×39	1	39	32.5	44.5	211082.9
32×47	1¼	47	40	41	211083
32×53	1¼	53	40	41	211083.1
32×53	1¼	53	40	46	211083.2
32×47	1¼	47	40	46	211083.8
32×47	1¼	47	40	45	211083.9
38×54.5	1½	54.5	47	41.5	211016
38×52.5	1½	52.5	45.5	41	211017
40×52.5	1½	52.5	45.5	41	211084
40×55	1½	55	45.5	41	211084.1
40×55	1½	55	45.5	46	211084.2

DN (MM)	Ø (INCH)	Ø (MM)	Ø D (MM)	L (MM)	304 (1.4301)
40×52.5	1½	52.5	45.5	46	211084.8
40×52.5	1½	52.5	45.5	45	211084.9
50×68	2	68	59.3	41.6	211018
50×67	2	67	60	55	211019
50×67	2	67	60	51.5	211019.2
50×67.5	2	67.5	59.7	51	211019.3
50×73	2	73	59.3	51.5	211020
50×67	2	67	60	55	211085
50×71	2	71	60	55	211085.1
50×67	2	67	60	55	211085.5
50×67	2	67	60	54	211085.9
65×79	2½	79	72	57.7	211021
65×83.5	2½	83.5	72	57.7	211022
65×82	2½	82	73.5	65	211023
65×79	2½	79	73.5	65	211023.2
65×91	2½	91	72	57.7	211024
65×82	2½	82	73.5	65	211086
65×82	2½	82	73.5	68	211086.2
65×82	2½	82	73.5	74	211086.8
65×82	2½	80	73.5	66.5	211086.9
65×93.5	2½	93.5	72.5	61	211086.91
65×83.5	2½	83.5	73.5	66.5	211086.92
70×85	2½	85	74	62	211031
70×87	2½	87	80	63	211031.1
75×96	3	96	84.5	58.2	211025
75×93.6	3	93.6	84.5	83	211026
75×105	3	105	84.5	58.2	211028
75×110	3	110	84.5	58.2	211029
75×93.6	3	93.6	85.5	83	211087
75×96	3	96	85.5	83	211087.1
75×93.6	3	93.6	85.5	87	211087.2
75×96	3	96	85.5	87	211087.3
75×93.6	3	93.6	85.5	72	211087.8
75×93.6	3	93.6	85.5	70.5	211087.9
75×106.5	3	106.5	85	66	211087.91
75×94.5	3	94.5	85.5	70.5	211087.92
100×120	4	120	113	101	211029
100×120	4	120	113	101	211089
100×123	4	123	113	101	211089.1
100×123	4	123	113	103	211089.2
100×120	4	120	113	103	211089.8
100×120	4	120	113	104	211089.9
100×135	4	135	112	70.5	211089.91
100×123	4	123	113	104	211089.92

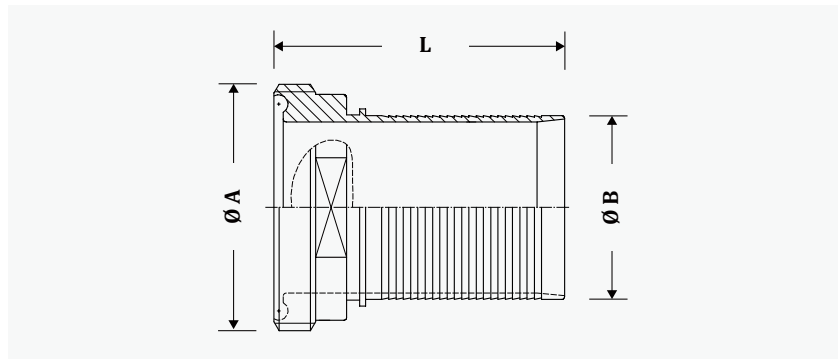
304 Liner coupling by serrated hose tail, RJT



We offer RJT compliant couplings and hexagonal nut made of 304 (1.4301).



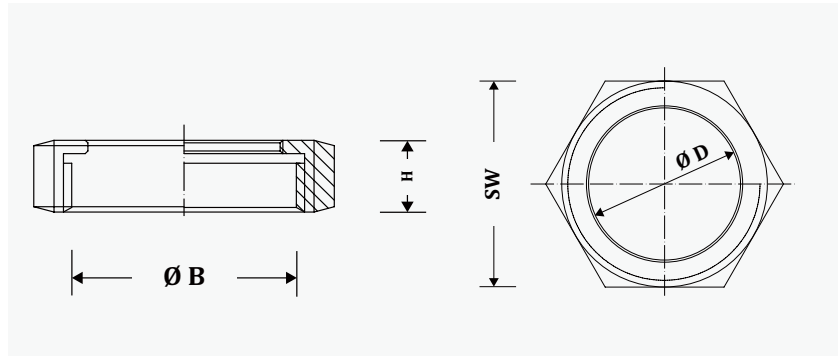
DN (MM)	(INCH)	ØA (MM)	ØB (MM)	L (MM)	304 (1.4301)
25	1	39.4	25.5	60	203113.27
38	1¼	54.0	38.2	75	203115.27
50	2	66.7	50.8	85	203116.27
65	2½	79.4	63.5	120	203117.27
80	3	88.5	76.0	105.5	203118.27
100	4	117.5	102.5	125.0	203119.27



DN (MM)	(INCH)	ØA (MM)	ØB (MM)	L (MM)	304 (1.4301)
25	1	45.72	25.5	62	203113.36
38	1¼	58.42	38.2	77	203115.36
50	2	72.72	51.0	90	203116.36
65	2½	85.42	63.5	100	203117.36
80	3	98.12	76.5	111	203118.36
100	4	123.52	102.5	139	203119.36

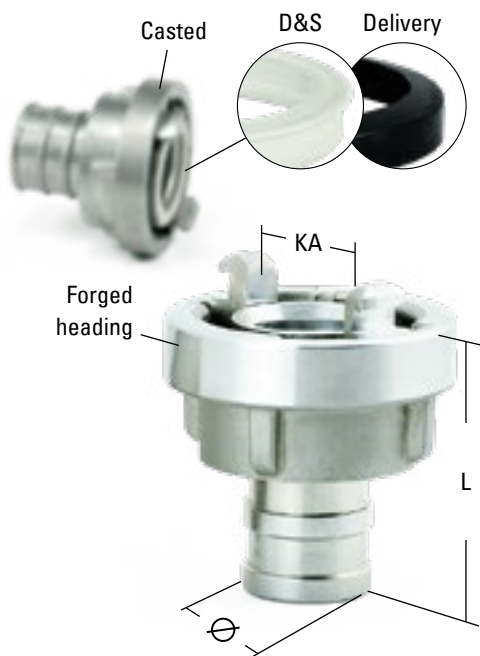
304 Hexagon nut RJT

We offer thread nut made of 304 (1.4301) for RJT compliant couplings.



DN (MM)	(INCH)	ØB (MM)	H (MM)	ØD (MM)	SW (MM)	304 (1.4301)
25	1	42.27	22.2	33.3	50.8	203113.2
38	1¼	54.97	22.2	46.0	65.0	203115.2
50	2	67.92	22.2	58.7	79.4	203116.2
65	2½	80.62	22.2	71.4	92.1	203117.2
80	3	93.32	22.2	84.1	104.8	203118.2
100	4	118.72	22.2	109.5	130.2	203119.2

Aluminum Storz coupling by hose tail, forged and casted



We both forge and cast from aluminum alloy for Storz heading, assembled with casted hose tail and fitted with suction possible NBR gasket.

DN (MM)	KA (INCH)	Ø (MM)	L (MM)	FORGED ALU NBR
25D	1	31	15	051850.1
25D	1	31	19	051850.2
25D	1	31	24.5	051850
38	1½	51	38	051852
52C	2	66	40	051854.6
52C	2	66	44.5	051854.8
52C	2	66	52	051854
65	2½	81	38	051855.1
65	2½	81	65	051855
75B	3	89	63	051856.2
75B	3	89	75	051856
110A	4	133	110	051858
125	5	148	126	051859
150	6	160	150	051860

DN (MM)	KA (INCH)	Ø (MM)	L (MM)	CASTED ALU NBR
25D	1	31	25	051050
32	1¼	45	32	051051
38	1½	51	25	051052.1
38	1½	51	32	051052.2
38	1½	51	38	051052
52C	2	66	32	051054.4
52C	2	66	38	051054.5
52C	2	66	42	051054.7
52C	2	66	51	051054
65	2½	81	38	051055.1
65	2½	81	51	051055.2
65	2½	81	63	051055.3
65	2½	81	65	051055
65	2½	81	70	051055.4
75B	3	89	52	051056.1
75B	3	89	63	051056.2
75B	3	89	70	051056.4
75B	3	89	75	051056
75B	3	89	80	051056.5
100	4	115	100	051057
110A	4	133	100	051058.2
110A	4	133	110	051058
125	5	148	128	051059
150	6	160	150	051061

Brass & 316 Storz coupling by hose tail



We offer forged brass and casted 316 Storz heading, assembled with casted hose tail and fitted with suction possible NBR gasket.

DN (MM)	(INCH)	KA (MM)	Ø (MM)	L (MM)	BRASS NBR
25D	1	31	15	60	051350.1
25D	1	31	19	60	051350.2
25D	1	31	25	53	051350
38	1½	51	25	90	051352.1
38	1½	51	32	90	051352.2
38	1½	51	38	90	051352
52C	2	66	25	90	051354.2
52C	2	66	52	90	051354
52C	2	66	51.5	75	051354.9
65	2½	81	63	90	051355
75B	3	89	75	125	051356
75B	3	89	65	95	051356.3
110A	4	133	100	170	051358.2
110A	4	133	110	170	051358

DN (MM)	(INCH)	KA (MM)	Ø (MM)	L (MM)	316 NBR
25D	1	31	24.5	54	051020
52C	2	66	52	90	051024
65	2½	81	65	100	051025
75B	3	89	75	105	051026
110A	4	133	102	170	051028

Aluminum, brass & 316 Storz by hose tail DIN EN14420-2



We design and mount DIN type of collared hose tail on the Storz heading.

DN	(INCH)	KA	Ø	L	TYPE	ALU / NBR
25D	1	31	25.4	77	A B	051850.18
52C	2	66	50.4	95	A B	051854.18
75B	3	89	75.4	103	A B	051856.18
110A	4	133	100.3	150	A B	051858.18

DN	(INCH)	KA	Ø	L	TYPE	BR / NBR
52C	2	66	25	95	A B	051854.18

DN	(INCH)	KA	Ø	L	TYPE	316 / FPM
52C	2	66	50.4	95	A B	051024.18
75B	3	89	75	105	A B	051026.18

DN	(INCH)	KA	Ø	L	TYPE	ALU / NBR
75B	3	89	75.4	103	A B	051816.9
75B	3	89	75.4	115	A B	051816

Aluminum Storz BSPP thread adapter, forged piece



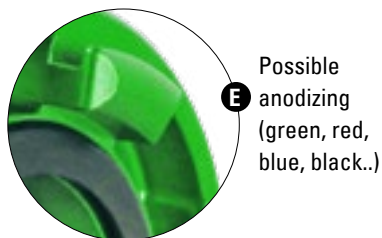
We produce Storz adapters by forging aluminum, fitted with gasket and thread seal. Additional design is done with security lock and self-swivelling.

DN (MM)	THRD (INCH)	KA (MM)	TYPE	FORGED ALU NBR / NBR
25D	1/2	31	A B C	052850.1
25D	3/4	31	A B C	052850.2
25D	1	31	A B C	052850
38	1½	51	A B C	052852
52C	1¼	66	A B C	052854.3
52C	1½	66	A B C	052854.4
52C	2	66	A B C	052854
65	2½	81	A B C	052855
75B	2	89	A B C	052856.1
75B	2½	89	A B C	052856.2
75B	3	89	A B C	052856
110A	4	133	A B C	052858
125	5	148	A B C	052859
150	6	160	A B C	052860

DN (MM)	THRD (INCH)	KA (MM)	TYPE	FORGED ALU NBR / NBR
25D	1/2	31	A B C	052870
100	4	115	A B C	052878
110A	4	133	A B C	052879
110A	4½	133	A B C	052880
125	5	148	A B C	052881
150	6	160	A B C	052882

DN (MM)	THRD (INCH)	KA (MM)	TYPE	FORGED ALU NBR / NBR
25D	3/4	31	A B C	052240.2
25D	1	31	A B C	052240
52C	1¼	66	A B C	052244.1
52C	1½	66	A B C	052244.2
52C	2	66	A B C	052244
65	2	81	A B C	052245.1
65	2½	81	A B C	052245
65	3	81	A B C	052245.2
75B	2	89	A B C	052246.1
75B	2½	89	A B C	052246.2
75B	3	89	A B C	052246
100	4	115	A B C	052247
110A	3	133	A B C	052248.1
110A	4	133	A B C	052248
125	5	148	A B C	052249

Aluminum Storz BSPP thread adapter, casted piece



We both forge and cast from aluminum alloy for Storz adapters, fitted with suction possible NBR gasket.

DN (MM)	THRD (INCH)	KA (MM)	TYPE	CASTED ALU NBR / NBR
25D	1/2	31	D E	052050.1
25D	3/4	31	D E	052050.2
25D	1	31	D E	052050
25D	1¼	31	D E	052050.3
32	1¼	45	D E	052051
38	1	51	D E	052052.1
38	1¼	51	D E	052052.2
38	1½	51	D E	052052
38	2	51	D E	052052.3
45	1½	59	D E	052053
52C	2	59	D E	052053.1
52C	¾	66	D E	052054.1
52C	1	66	D E	052054.2
52C	1¼	66	D E	052054.3
52C	1½	66	D E	052054.4
52C	2	66	D E	052054
52C	2½	66	D E	052054.5
65	1	81	D E	052055.1
65	1¼	81	D E	052055.2
65	1½	81	D E	052055.3
65	2	81	D E	052055.4
65	2½	81	D E	052055
65	3	81	D E	052055.5
75B	2	89	D E	052056.1
75B	2½	89	D E	052056.2
75B	3	89	D E	052056
110A	3	133	D E	052058.1
110A	4	133	D E	052058
110A	4½	133	D E	052058.2
110A	5	133	D E	052058.3
125	5	148	D E	052059
150	6	160	D E	052061

DN (MM)	THRD (INCH)	KA (MM)	TYPE	ALU NBR / NBR
65	2½	81	D E	045822.01

Aluminum Storz external BSPP adapter

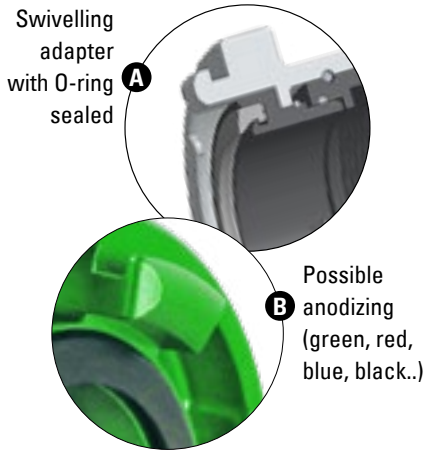


We both forge and cast from aluminum alloy for Storz adapters, fitted with suction possible NBR gasket.

DN (MM)	THRD (INCH)	KA (MM)	FORGED ALU NBR
25D	3/4	31	053850.2
25D	1	31	053850
38	1½	51	053852
52C	1½	66	053854.31
52C	2	66	053854
65	2	81	053855.3
65	2½	81	053855
75B	2½	89	053856.2
75B	3	89	053856
110A	4	133	053858

DN (MM)	THRD (INCH)	KA (MM)	CASTED ALU NBR
25D	3/4	31	053051.1
25D	1	31	053051
25D	1¼	31	053051.2
25D	1½	31	053051.3
38	1¼	51	053052.1
38	1½	51	053052
38	2	51	053052.2
45	2	59	053053
52C	1	66	053054.1
52C	1¼	66	053054.2
52C	1½	66	053054.3
52C	2	66	053054
52C	2½	66	053054.4
65	1¼	81	053055.1
65	1½	81	053055.2
65	2	81	053055.3
65	2½	81	053055
65	3	81	053055.4
75B	2	89	053056.1
75B	2½	89	053056.2
75B	3	89	053056
110A	4	133	053058
125	5	148	053059
150	6	160	053061

Aluminum Storz external BSPB swivelling, anodizing

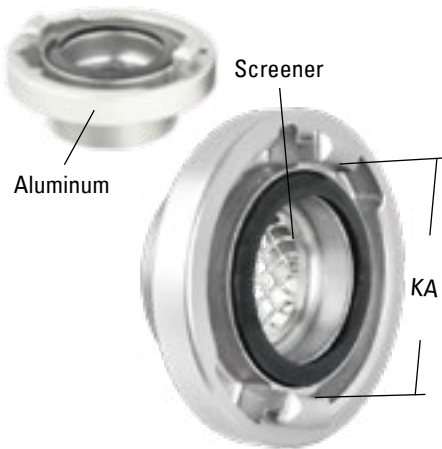


We both forge and cast from aluminum alloy for Storz adapters, fitted with suction possible NBR gasket.

DN (MM)	THRD (INCH)	KA (MM)	TYPE	ALU NBR
52C	2	66	A B	052274
65	2½	81	A B	052275
75B	3	89	A B	052276
110A	4	133	A B	052278

DN (MM)	THRD (INCH)	KA (MM)	TYPE	ALU NBR / NBR
65	2½	81	A B	045834.01

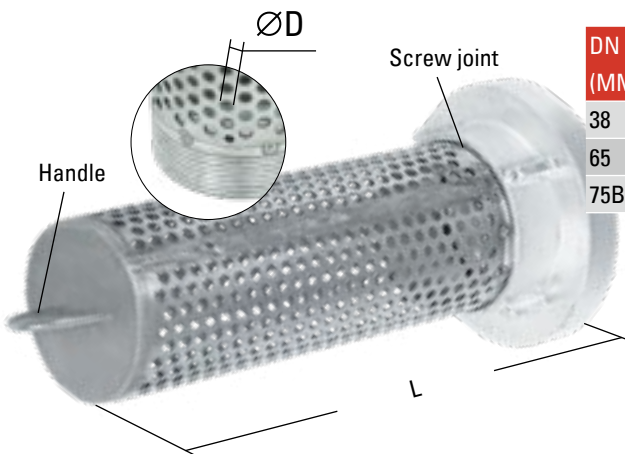
Integrated screening adapter



We integrate screen (filter) in Storz threaded adapters, applying large mesh to prevent alien falling objects.

DN (MM)	THRD (INCH)	KA (MM)	ALU NBR
65	2½	81	053873
75B	3	89	053874
100	4	115	053876

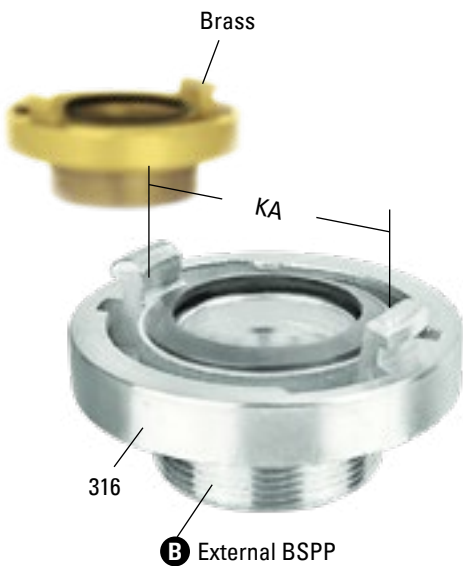
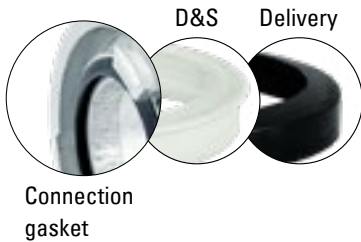
Screw-on strainer cage



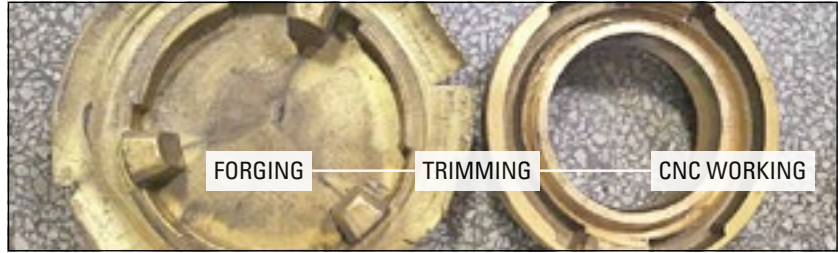
We offer screw-on strainer (filter) attachment to Storz adapters. Codes includes both a steel strainer and an internal threaded adapter.

DN (MM)	THRD (INCH)	KA (MM)	L (MM)	Ø D (MM)	ALU NBR / NBR
38	1½	51	236	3	051842
65	2½	81	239	5	051845
75B	3	89	238	5	051846

Brass & 316 Storz BSPP thread adapter



We produce Storz adapters by forging brass and casted 316, fitted with NBR or FPM connection gasket, thread sealing in NBR or PTFE.



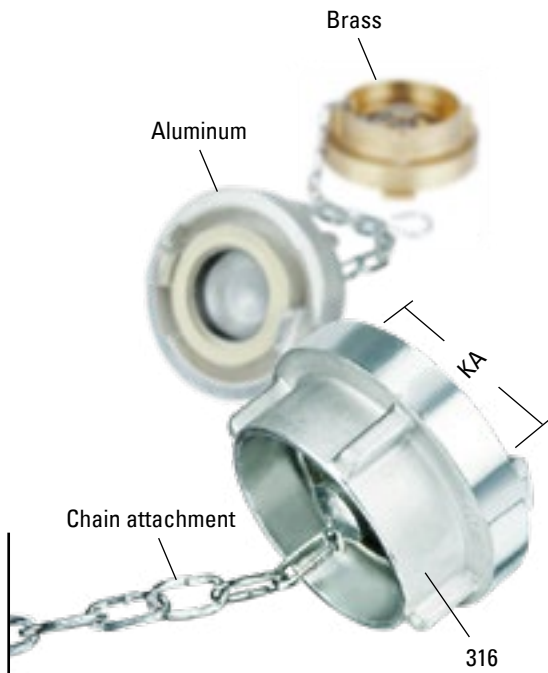
DN (MM)	THRD (INCH)	KA (MM)	TYPE	BRASS NBR / NBR
25D	3/4	31	A B	052080.1
25D	1	31	A B	052080
38	1½	51	A B	052082
52C	2	66	A B	052084
65	2½	81	A B	052085
75B	2½	89	A B	052086.1
75B	3	89	A B	052086
110A	4	133	A B	052088
125	5	148	A B	052089
150	6	160	A B	052090

DN (MM)	THRD (INCH)	KA (MM)	TYPE	316 FPM / PTFE
25D	1	31	A B	052020
52C	2	66	A B	052024
65	2½	81	A B	052025
75B	2½	89	A B	052026.1
75B	3	89	A B	052026
110A	4	133	A B	052028

DN (MM)	THRD (INCH)	KA (MM)	TYPE	BRASS NBR
25D	3/4	31	A B	053080.1
25D	1	31	A B	053080
38	1½	51	A B	053082
52C	2	66	A B	053084
65	2½	81	A B	053085
75B	2½	89	A B	053086.1
75B	3	89	A B	053086

DN (MM)	THRD (INCH)	KA (MM)	TYPE	316 NBR
25D	1	31	A B	053020
52C	2	66	A B	053024
65	2½	81	A B	053025
75B	3	89	A B	053026
110A	4	133	A B	053028

Aluminum, brass & 316 Storz chained blank cap



We produce Storz dust caps made of forging aluminum, brass and casted 316, fitted with gasket and chain attachment.

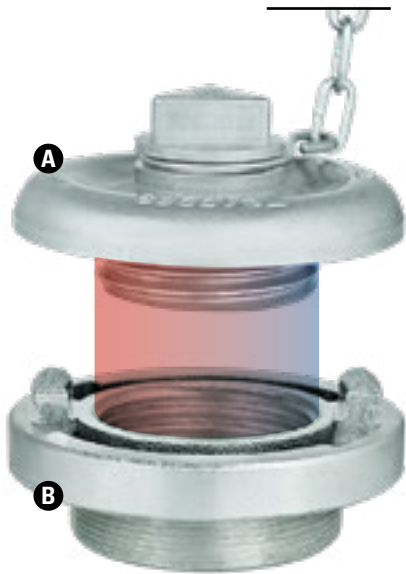
DN (MM)	(INCH)	KA (MM)	FORGED ALU NBR
25D	1	31	054850
52C	2	66	054854
65	2½	81	055855
75B	3	89	054856
110A	4	133	054858
125	5	148	054859
150	6	160	054860

DN (MM)	(INCH)	KA (MM)	CASTED ALU NBR
25D	1	31	054050
32	1¼	45	054051
38	1½	51	054052
45	2	59	054053
52C	2	66	054054
65	2½	81	054055
75B	3	89	054056
100	4	115	054057
110A	4	133	054058
125	5	148	054059
150	6	160	054061

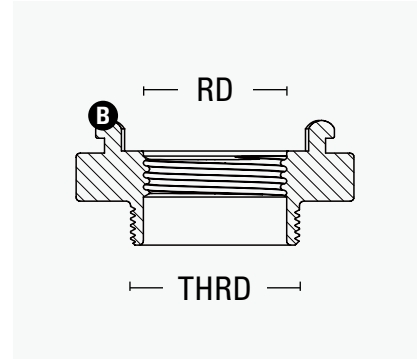
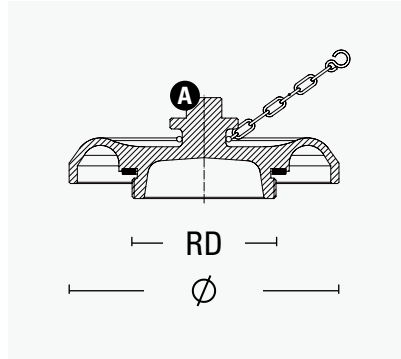
DN (MM)	(INCH)	KA (MM)	316 FPM
25D	1	31	054020
52C	2	66	054024
75B	3	89	054026
110A	4	133	054028

DN (MM)	(INCH)	KA (MM)	BRASS NBR
25D	1	31	054080
38	1½	51	054082
52C	2	66	054084
65	2½	81	054085
75B	3	89	054086
110A	4	133	054088
125	5	148	054089

Aluminum thread blank unit DIN14317



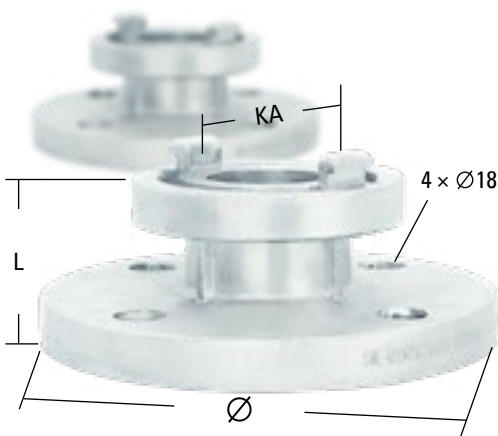
We produce DIN14317 compliant aluminum Storz blank cap and RD thread adapter, fitted with NBR gasket and attached with chain.



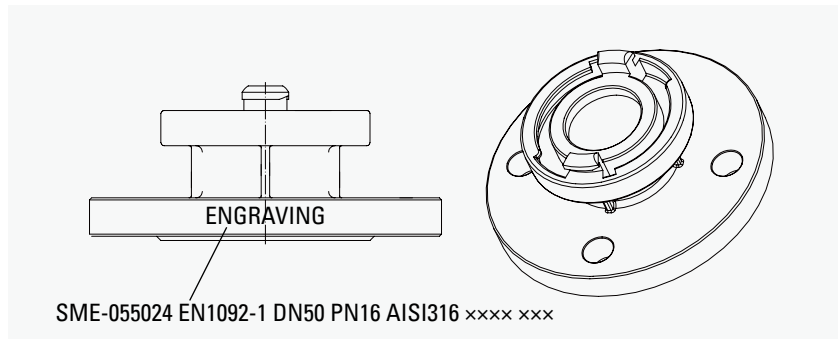
DN (MM)	RD (INCH)	Ø (MM)	TYPE	ALU NBR
52C	RD50×1/6	100	A B	053077
75B	RD65×1/6	125	A B	053078
110A	RD105×1/4	198	A B	053079

DN (MM)	THRD (INCH)	RD (INCH)	TYPE	ALU NBR
52C	2	RD50×1/6	A B	053854.61
75B	2½	RD65×1/6	A B	053856.61
110A	4	RD105×1/4	A B	053858.61

316 Flange connection DIN by Storz adapter

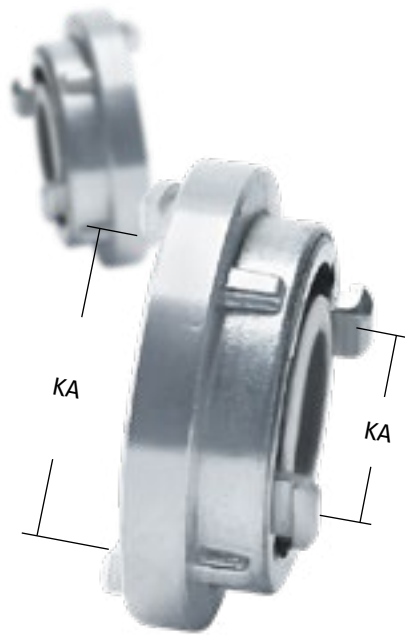


We offer stainless steel flange connection welded by a Storz adapter.



DN (MM)	THRD (INCH)	KA (MM)	Ø (MM)	L (MM)	316 (1.4408)
52C	2	66	25	61	055024

Aluminum Storz spool adapter



We produce spool adapter of Storz connection, one-piece body fitted with gasket.

DN (MM)	(INCH)	KA (MM)	FORGED ALU NBR
52C × 25D	2 × 1	66 × 31	055853
75B × 52C	3 × 2	89 × 66	055859
75B × 65	3 × 2½	89 × 81	055858
110A × 75B	4 × 3	133 × 89	055863

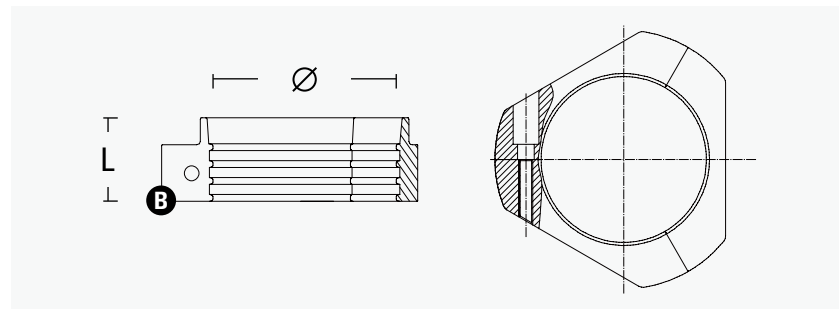
DN (MM)	(INCH)	KA (MM)	CASTED ALU NBR
45 × 25D	1¾ × 1	59 × 31	055050
52C × 25D	2 × 1	66 × 31	055051
65 × 45	2½ × 1¾	81 × 59	055052.1
65 × 38	2½ × 1½	81 × 51	055052.2
65 × 52C	2½ × 2	81 × 66	055052
75B × 52C	3 × 2	89 × 66	055053
75B × 65	3 × 2½	89 × 81	055053.1
110A × 52C	4 × 2	133 × 66	055054
110A × 65	4 × 2½	133 × 81	055054.1
110A × 75B	4 × 3	133 × 89	055054.2
125 × 110A	5 × 4	148 × 133	055055

Aluminum Storz connection of 6 - 12 in. with security



We produce three-clawed Storz connection for big sizes of 6, 8 & 12 inch, also three-piece clamp units in forging aluminum.

DN	(INCH)	KA	Ø	L	TYPE	ALU / NBR
150	6	160	150	180	A B	051061
150	6	215	165.1	107.5	A B	051062
200	8	220	203	-	A B	051063.2
300	12	316	304	-	A B	051065.1



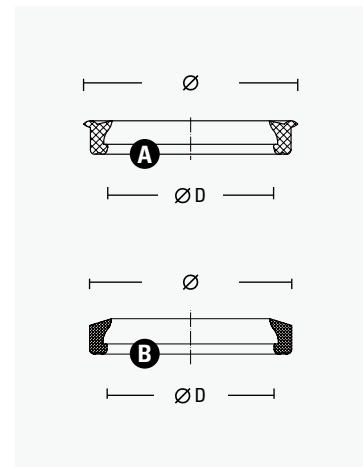
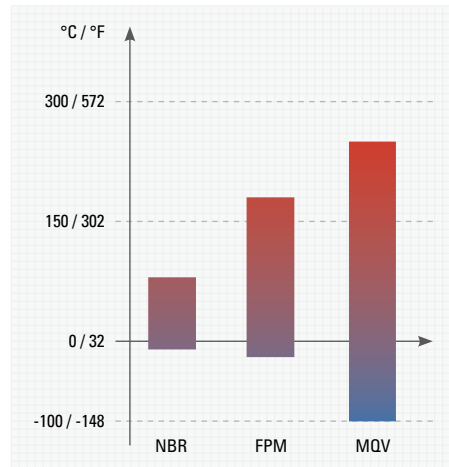
DN	(INCH)	Ø	L	TYPE	ALU
150	6	147	45	A B	023005.2
200	8	203	-	A B	023006.2
300	12	304	-	A B	-

Spare part Storz coupling gasket NBR FPM MQV

We offer suction applicable gaskets for Storz connection as spare part.



GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
FPM	70 ± 5	-20 / 180	-4 / 356	fluorocarbon
MQV	40 ± 5	-100 / 250	-148 / 482	silicone (industrial graded)

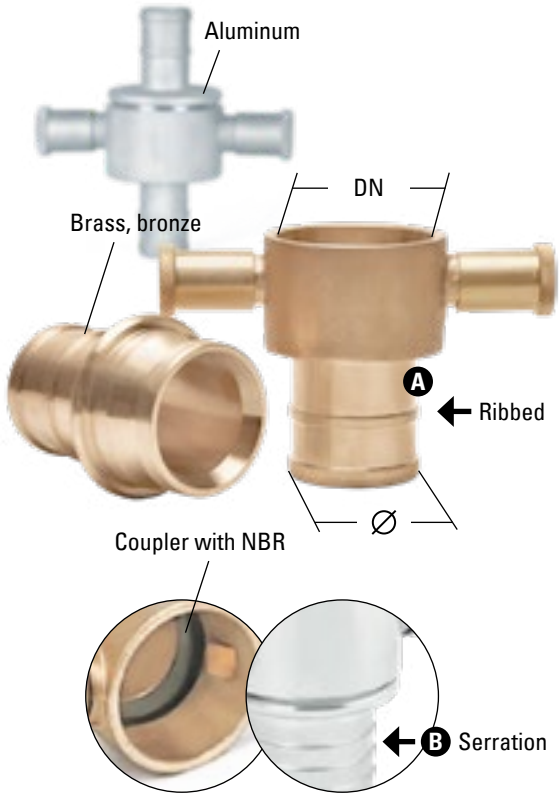


SIZE (INCH)	Ø (MM)	Ø D (MM)	TYPE	NBR BLACK	FPM GREEN	MQV WHITE
25D (1)	29.5	18	A B	059011.4	059011.7	059011.5
32 (1¼)	43	28	A B	059012.4	-	-
38 (1½)	49	35	A B	059013.4	-	-
52C (2)	64	49.5	A B	059014.4	059014.6	059014.5
65 (2½)	79	63	A B	059015.4	059015.6	-
75B (3)	87	70	A B	059016.4	059016.6	059016.5
110A (4)	129.8	109	A B	059018.4	059018.6	059018.5
125 (5)	145	123	A B	059019.4	-	-

SIZE (INCH)	Ø (MM)	Ø D (MM)	TYPE	NBR BLACK	MQV WHITE
25D (1)	29.5	18	A B	059011.2	-
32 (1¼)	43	28	A B	059012.2	059012.5
38 (1½)	49	35	A B	059013.2	-
52C (2)	64	49.5	A B	059014.2	059014.15
65 (2½)	79	63	A B	059015.2	-
75B (3)	87	70	A B	059016.2	059016.15
110A (4)	129.8	109	A B	059018.2	059018.15
125 (5)	145	123	A B	059019.2	-



Aluminum, brass & bronze BIC coupler & adapter BS336

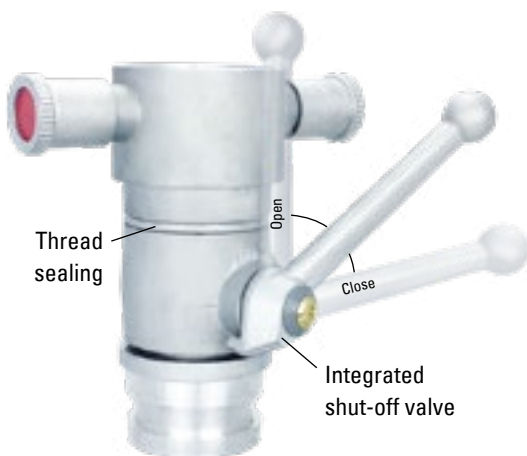


We produce BIC pull-clicking instantaneous couplings (a coupler and an adapter) made of aluminum, brass and bronze alloy fitted with durable gaskets.

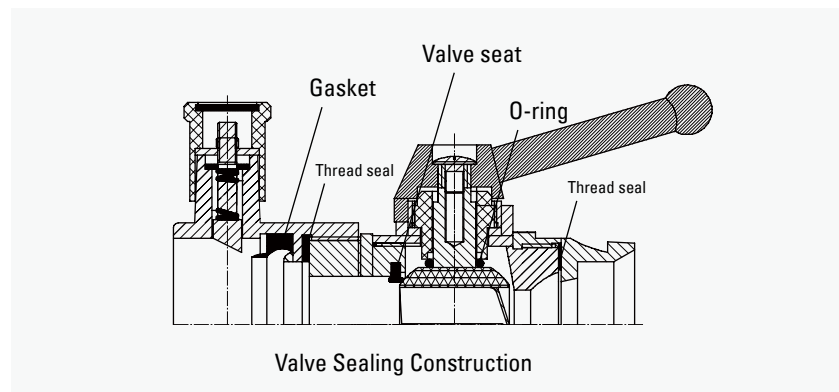
DN (MM)	(INCH)	Ø (MM)	TYPE	ALU NBR	BRASS NBR	BRONZE NBR
38	1½	38	A B	054320	054360	054370
50	2	50.5	A B	054321	-	-
65	2½	38	A B	054322	054362	054372
65	2½	45	A B	054323	054363	054373
65	2½	52	A B	054324	054364	054374
65	2½	63.5	A B	054325	054365	054375
65	2½	70	A B	054326	054366	054376
65	2½	75	A B	054327	-	-

DN (MM)	(INCH)	Ø (MM)	TYPE	ALU NBR	BR NBR
38	1½	38	A B	054350	-
50	2	50.5	A B	054351	-
65	2½	38	A B	054352	054362.2
65	2½	45	A B	054353	-
65	2½	52	A B	054354	-
65	2½	63.5	A B	054355	-
65	2½	70	A B	054356	-
65	2½	75	A B	054357	-

Aluminum shut-off valve by BIC connection

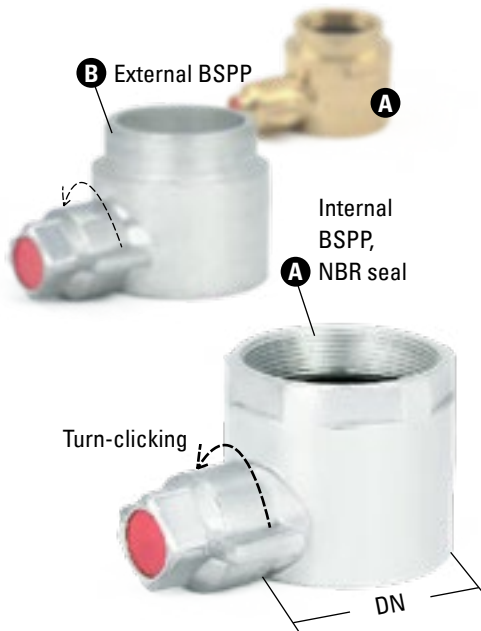


We produce BIC pull-clicking instantaneous couplings (a coupler and an adapter) made of aluminum, brass and bronze alloy fitted with durable gaskets.



DN	(INCH)	THRD SEAL	BALL	SEAT	ALUM
50	2	NBR	PLASTIC	NBR	310602

Aluminum & brass BIC thread couplers BS336



We offer threaded turn-clicking couplers in aluminum and brass by BSPP thread, fitted with gasket and thread seal in NBR.

DN (MM)	THRD (INCH)	TYPE	ALU NBR	BR NBR
38	1½	A B	054400	054440
38	2	A B	054401	054441
50	2	A B	054402	054442
65	1½	A B	054403	054443
65	2	A B	054404	054444
65	2½	A B	054405	054445
75	2½	A B	054406	-
80	2½	A B	054406.1	-

DN (MM)	THRD (INCH)	TYPE	ALU NBR	BR NBR
38	1½	A B	054420	054430
38	2	A B	054421	054431
50	2	A B	054422	054432
65	1½	A B	054423	054433
65	2	A B	054424	054434
65	2½	A B	054425	054435

Aluminum & brass BIC thread adapters BS336



We produce aluminum and brass BIC adapters by internal and external BSPP thread.

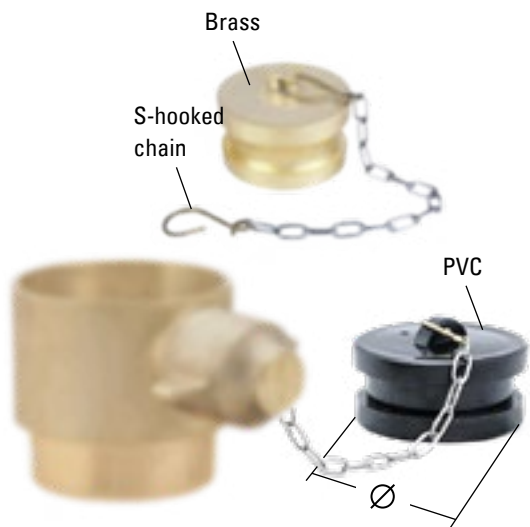
DN (MM)	THRD (INCH)	TYPE	ALU NBR	BR NBR
38	1½	C D	054240	054270
38	2	C D	054241	054271
50	2	C D	054242	054272
65	1½	C D	054243	054273
65	2	C D	054244	054274
65	2½	C D	054245	054275
75	2½	C D	054246.1	-
75	3	C D	054246	-

DN (MM)	THRD (INCH)	TYPE	ALU NBR	BR NBR
38	1½	C D	054250	054260
38	2	C D	054251	-
50	2	C D	-	054262
65	1½	C D	054253	054263
65	2	C D	054254	054264
65	2½	C D	054255	054265
65	3	C D	054256	-

PVC, brass & aluminum BIC blank plug, chain attached

We offer chain-linked blank caps for BIC connection in plastic, brass and aluminum.

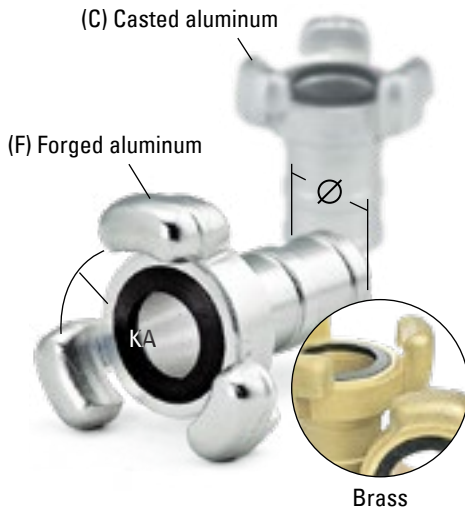
DN (MM)	(INCH)	Ø (MM)	PVC CS CHAIN	BR CS CHAIN	ALU CS CHAIN
38	1½	-	054470	054476	054473
50	2	56	054471	-	054474
65	2½	70.4	054472	054478	054475





FIRE HOSE COUPLINGS

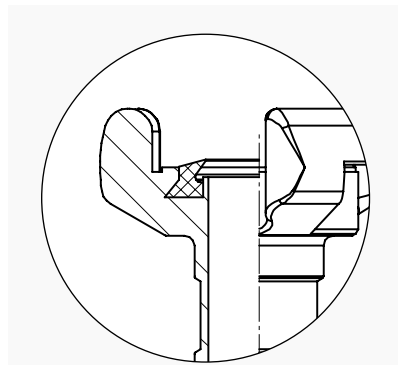
Aluminum & brass coupler by hose tail UNE23400



We design quick couplings in compliance with UNE23400-1/5 for fire engines, layflat hoses and hydrant outlets. They are 3-clawed and of turn-sealing connection.



We produce UNE turn-sealing quick disconnect couplers made of both forged and casted aluminum, also brass alloy fitted with NBR washers.



Barcelona couplers and adapters go in full compliance with UNE23400-1/5 requirements.



Simply rotate mating adapters, fire-fighters get adapters connected or replaced.

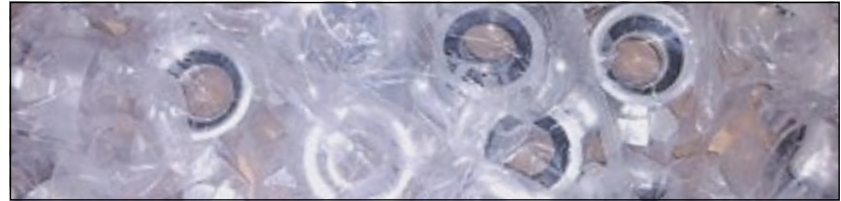
DN (MM)	KA (INCH)	Ø (MM)	ALU (F) NBR	ALU (C) NBR	BR NBR
25	1	42	057103	057031	057053
45	1½	62	057105	057033	057056
75	2½	88	057107	057036	057058

Aluminum & brass BSPP thread coupler UNE23400



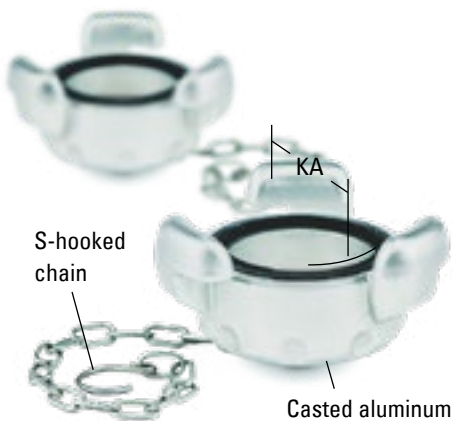
We provide Barcelona couplers by BSPP thread, fitted with NBR washer and seal.

DN (MM)	THRD (INCH)	KA (MM)	ALU (F) NBR / NBR	ALU (C) NBR / NBR	BR NBR / NBR
19	3/4	42	057122	-	-
25	1	42	057123	057021	057071
45	1½	62	057125	057023	057073
75	2½	88	057127	057026	057076
100	4	122	-	057028	057078



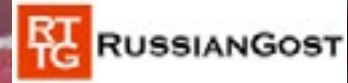
DN (MM)	THRD (INCH)	KA (MM)	ALU (F) NBR	ALU (C) NBR	BR NBR
19	3/4	42	057112	-	-
25	1	42	057113	057011	057061
40	1	62	057213	-	-
45	1½	62	057115	057013	057063
65	2½	88	057214	-	-
75	2½	88	057117	057016	057066
100	4	122	-	057018	057068

Aluminum & brass blank cap with chain attachment



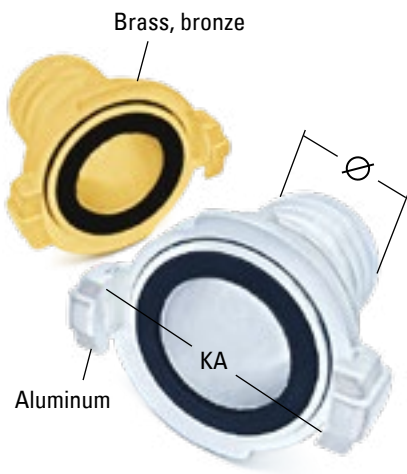
We produce blank cap with chain attachment, fitted with NBR gasket.

DN (MM)	THRD (INCH)	KA (MM)	ALU (C) CS CHAIN	BR CS CHAIN
25	1	42	057042	057082
45	1½	61	057043	057083
70	2½	86	057046	057086
100	4	120	057048	057088



FIRE HOSE COUPLINGS

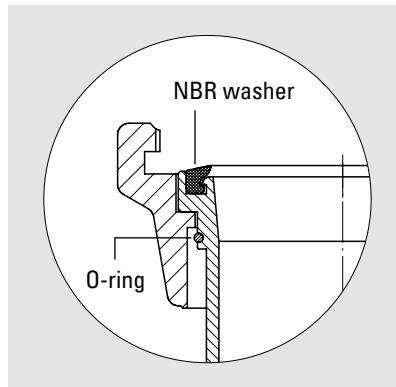
Aluminum, brass & bronze GOST coupler by hose tail



We produce Gost quick connections for fire engines, layflat hoses and hydrant outlets, in compliance with GOST 28352-89 (replacing GOST 2217-66). They are popular in post-Soviet countries, Cuba and Vietnam.

These are symmetric couplings, joint being created by a quarter turn of the head part. Rated pressure PN10-16 bar, and possible for vacuum pressure when suction/delivery washer is applied.

We offer GOST turn-sealing quick disconnect couplers made of aluminum, brass and bronze materials.



Russian couplers and adapters go in full compliance with GOST 28352-89 requirements.



Simply rotate mating adapters, fire-fighters get adapters connected or replaced.

DN (MM)	KA (INCH)	Ø (MM)	ALUM NBR	BRASS NBR	BRONZE NBR	
50	2	78	50.5	056015	056065	056065.4
70	2½	95	63.5	056016	056066	056066.4
80	3	107.5	75	056017	056067	056067.4
100	4	140	100	056018	056068	056068.4
125	5	166	126	056019	056069	056069.4

Aluminum, brass & bronze BSPP thread GOST coupler

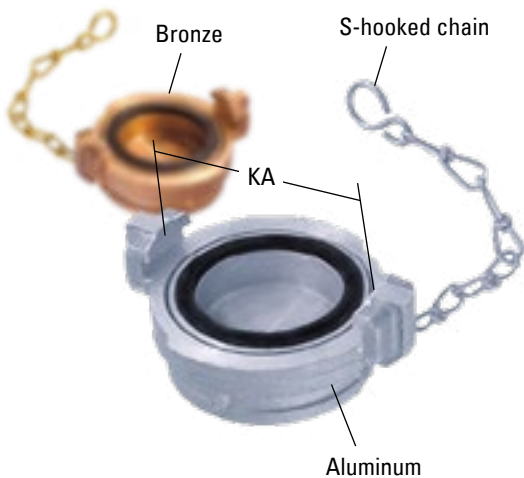


We provide GOST couplers by BSPP thread, fitted with NBR washer and seal.

DN (MM)	THRD (INCH)	KA (MM)	ALUM NBR / NBR	BRASS NBR / NBR	BRONZE NBR / NBR
50	1½	78	056035.1	-	-
50	2	78	056035	056075	056075.4
65	2	95	056036	056076	056076.4
65	2½	95	056036.1	-	-
80	2	107.5	056037.2	-	-
80	2½	107.5	056037.1	-	-
80	3	107.5	056037	056077	056077.4
100	4	140	056038	056078	056078.4
100	4½	140	056038.1	-	-
125	5	166	056039	056079	056079.4

DN (MM)	THRD (INCH)	KA (MM)	ALUM NBR	BRASS NBR	BRONZE NBR
50	1½	78	056025.1	-	-
50	1½	78	056025.2	-	-
50	2	78	056025	056085	056085.4
65	2½	95	056026	056086	056086.4
80	2	107.5	056027.1	-	-
80	2½	107.5	056027.2	-	-
80	3	107.5	056027	056087	056087.4
100	4	140	056028	056088	056088.4
125	5	166	056029	056089	056089.4

Aluminum & bronze blank cap with chain attachment



We produce blank cap with chain attachment, fitted with NBR gasket.

DN (MM)	THRD (INCH)	KA (MM)	ALUM CS CHAIN	BRONZE CS CHAIN
50	2	78	056045	056095.4
65	2½	95	056046	056096.4
80	3	107.5	056047	056097.4
100	4	140	056048	056098.4
125	5	166	056049	056099.4



FIRE HOSE COUPLINGS

Aluminum & bronze DSP, AR coupling by hose tail

We produce DSP and AR couplers by hose tail made of forged aluminum and casted bronze. Serration and band clamping are done on the tail.



DN (MM)	Ø (INCH)	Ø (MM)	TYPE	ALUM NBR	BRONZE NBR
DSP 40	1½	38	A B	031410.1	-
DSP 40	1½	35	A B	031416	-
DSP 40	1½	45	A B	031411.1	031501
DSP 65	2½	65	A B	031412.1	-
DSP 65	2½	70	A B	031413.1	031502
AR 100	4	110	A B	031414	-
AR 100	4	102	A B	031415	-
AR 100	4	110	A B	031414.1	031503
AR 100	4	102	A B	031415.1	-

DN (MM)	Ø (INCH)	Ø (MM)	TYPE	ALUM NBR
DSP 40	1½	45	A B	031411
DSP 65	2½	65	A B	031412
DSP 65	2½	70	A B	031413

Aluminum & bronze DSP, AR chained blank cap

We produce aluminum and bronze DSP & AR adaptable blank caps attached with chains and with NBR gasket.



DN (MM)	Ø (INCH)	Ø (MM)	ALUM CS CHAIN	BRONZE CS CHAIN
DSP 40	1½	54	031461	031507
DSP 65	2½	83	031463	031508
AR 100	4	-	031464	031509

Aluminum & bronze DSP, AR BSPP thread coupler



We offer DSP & AR coupler by internal and external BSPP thread, with and without lock ring. NBR is fitted in all types.

DN (MM)	THRD (INCH)	TYPE	ALUM NBR	BRONZE NBR
DSP 40	1½	A B C D	031431	031513
DSP 40	2	A B C D	031432	031513.6
DSP 65	2½	A B C D	031436	031514
AR 100	4	A B C D	031437	031515

DN (MM)	THRD (INCH)	TYPE	ALUM NBR	BRONZE NBR
DSP 40	1½	A B C D	031451	031517
DSP 40	2	A B C D	031452	-
DSP 65	2½	A B C D	031456	031518
AR 100	4	A B C D	031457	031519

DN (MM)	THRD (INCH)	TYPE	ALUM NBR	BRONZE NBR
DSP 40	1½	A B C D	031421	031523
DSP 40	2	A B C D	031422	-
DSP 65	2½	A B C D	031426	031524
AR 100	4	A B C D	031427	031525

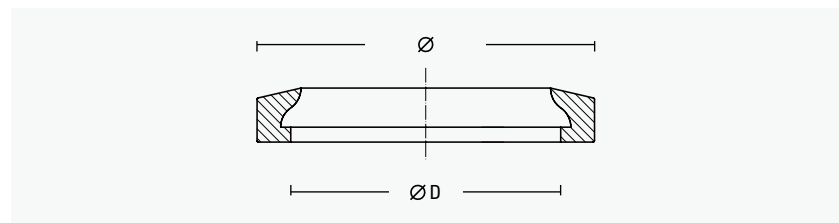
DN (MM)	THRD (INCH)	TYPE	ALUM NBR	BRONZE NBR
DSP 40	1½	A B C D	031441	031527
DSP 40	2	A B C D	031442	-
DSP 65	2½	A B C D	031446	031528
AR 100	4	A B C D	031447	031529

Spare part DSP & AR coupling gasket NBR



We offer delivery gaskets for DSP & AR connection as spare part.

GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	60 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene



DN (MM)	THRD (INCH)	Ø (MM)	Ø D (MM)	NBR BLACK
DSP 40	1½	50	40	031491
DSP 65	2½	79	63	031493
AR 100	4	117	99	031494

Branchpipe Tip to Storz Couplings



Branchpipe Nozzles

Branchpipes Jet Shooting Tip to Storz Quick Couplings

Standard Materials

2 optional materials aluminum alloys, and corrugated red polyamide covered combination

Size inch	KA mm	Outlet mm	Length mm	Cover Color	Poly-amide	Aluminum Alloys
1 ^{1/2}	51	9	405	red	☑	☑
1 ^{1/2}	51	9	375	black	☑	☑
1 ^{1/2}	51	9	395	black	☑	☑
1 ^{1/2}	51	9	420	red	☑	☑
1 ^{3/4}	59	9	405	red	☑	☑
1 ^{3/4}	59	9	425	red	☑	☑
1 ^{3/4}	59	12	350	black	☑	☑
1 ^{3/4}	59	12	375	black	☑	☑
1 ^{3/4}	59	12	400	black	☑	☑
1 ^{3/4}	59	12	405	black	☑	☑
2	66	9	410	red	☑	☑
2	66	9	430	red	☑	☑
2	66	12	350	black	☑	☑
2	66	12	375	black	☑	☑
2	66	12	380	black	☑	☑
2	66	12	405	black	☑	☑
2 ^{1/2}	81	9	350	black	☑	☑
2 ^{1/2}	81	9	410	red	☑	☑
2 ^{1/2}	81	9	420	red	☑	☑
2 ^{1/2}	81	12	380	black	☑	☑
2 ^{1/2}	81	12	410	black	☑	☑
3	89	9	430	red	☑	☑
3	89	12	405	black	☑	☑
3	89	13	410	black	☑	☑

Branchpipe Wash Curtain Tip to Storz Couplings



Branchpipe Nozzles

Branchpipes Wash Curtain Tip to Storz Quick Couplings

Standard Materials

Standard material aluminum alloys

Size inch	KA mm	Outlet mm	Length mm	Cover Color	Aluminum Alloys
1 ^{1/2}	51	9	425	black	☑
1 ^{3/4}	59	12	425	black	☑
2	66	12	425	black	☑

Branchpipe Tip to Storz Couplings No Shut-off



Branchpipe Nozzles

Branchpipes Jet Shooting Tip to Storz Quick Couplings With No Shut-Off Latch

Standard Materials

2 optional materials aluminum alloys, and corrugated red polyamide covered combination

Size inch	KA mm	Outlet mm	Length mm	Cover Color	Poly-amide	Aluminum Alloys
2	66	9	370	red	☑	☑
2	66	12	370	red	☑	☑
2	66	12	350	black	☑	☑
2	66	12	375	red	☑	☑
2	66	16	295	-	☑	☑

Branchpipe Tip to Barcelona Couplings



Branchpipe Nozzles Branchpipes Jet Shooting Tip to Barcelona Quick Couplings

Standard Materials 2 optional materials aluminum alloys, and corrugated red polyamide covered combination

Size inch	Outlet mm	Length mm	Cover Color	Poly-amide	Aluminum Alloys
1	4	315	red	☑	☑
1 ^{1/4}	12	405	black	☑	☑
1 ^{3/4}	12	450	red	☑	☑
2 ^{1/4}	12	420	black	☑	☑
2 ^{3/4}	12	455	red	☑	☑

Branchpipe Wash Curtain Tip to Barcelona Couplings



Branchpipe Nozzles Branchpipes Wash Curtain Tip to Barcelona Quick Couplings

Standard Materials Standard material aluminum alloys

Size inch	Outlet mm	Length mm	Cover Color	Aluminum Alloys
1	4	315	black	☑
1 ^{1/4}	12	405	black	☑
2 ^{1/4}	12	420	black	☑

Branchpipe Tip to Barcelona Couplings No Shut-off

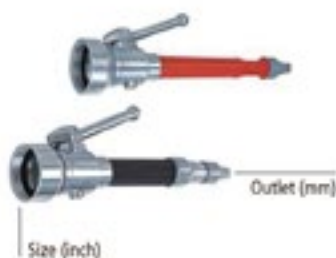


Branchpipe Nozzles Branchpipes Jet Shooting Tip to Barcelona Quick Couplings With No Shut-Off Latch

Standard Materials 2 optional materials aluminum alloys, and corrugated red polyamide covered combination

Size inch	Outlet mm	Length mm	Cover Color	Aluminum Alloys
1	4	315	black	☑
1 ^{1/4}	12	405	black	☑
2 ^{1/4}	12	420	black	☑

Branchpipe Tip to British Inside Thread Couplings



Branchpipe Nozzles Branchpipes Jet Shooting Tip to British Inside Thread Couplings

Standard Materials 2 optional materials aluminum alloys, and corrugated red polyamide covered combination

Size inch	Outlet mm	Length mm	Cover Color	Poly-amide	Aluminum Alloys
1 ^{1/2}	9	350	black	☑	☑
1 ^{1/2}	9	370	black	☑	☑
1 ^{1/2}	9	405	red	☑	☑
1 ^{3/4}	9	405	red	☑	☑
1 ^{3/4}	12	350	black	☑	☑
1 ^{3/4}	12	370	black	☑	☑
2	9	410	red	☑	☑
2	12	350	black	☑	☑
2	12	375	black	☑	☑
M56 × 4	9	405	red	☑	☑
M56 × 4	12	350	black	☑	☑
M56 × 4	12	370	black	☑	☑
2 ^{1/2}	9	410	red	☑	☑
2 ^{1/2}	12	375	black	☑	☑
2 ^{1/2}	16	455	black	☑	☑
M85 × 6	9	430	red	☑	☑
M85 × 6	12	395	black	☑	☑
M85 × 6	12	495	black	☑	☑

Branchpipe Wash Curtain Tip to British Inside Thread Couplings



Branchpipe Nozzles

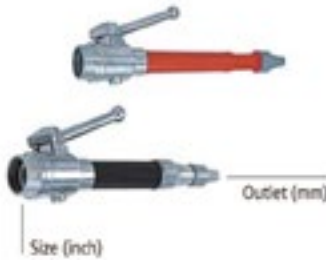
Branchpipes Wash Curtain Tip to British Inside Thread Couplings

Standard Materials

Standard material aluminum alloys

Size inch	Outlet mm	Length mm	Cover Color	Aluminum Alloys
1 ^{1/2}	9	415	black	☑
1 ^{3/4}	12	425	black	☑
2	12	425	black	☑
M56 × 4	12	430	black	☑
2 ^{1/2}	12	420	black	☑
M85 × 6	12	450	black	☑

Branchpipe Tip to British Outside Thread Couplings



Branchpipe Nozzles

Branchpipes Jet Shooting Tip to British Outside Thread Couplings

Standard Materials

2 optional materials aluminum alloys, and corrugated red polyamide covered combination

Size inch	Outlet mm	Length mm	Cover Color	Poly-amide	Aluminum Alloys
1 ^{1/2}	9	370	black	☑	☑
1 ^{1/2}	9	405	red	☑	☑
1 ^{3/4}	9	405	red	☑	☑
1 ^{3/4}	12	370	black	☑	☑
2	9	405	red	☑	☑
2	12	370	black	☑	☑
2 ^{1/2}	9	410	red	☑	☑
2 ^{1/2}	12	375	black	☑	☑

Branchpipe Wash Curtain Tip to British Outside Thread Couplings



Branchpipe Nozzles

Branchpipes Wash Curtain Tip to British Outside Thread Couplings

Standard Materials

Standard material aluminum alloys

Size inch	Outlet mm	Length mm	Cover Color	Aluminum Alloys
1 ^{1/2}	9	420	black	☑
1 ^{3/4}	12	420	black	☑
2	12	425	black	☑
2 ^{1/2}	12	430	black	☑

Branchpipe Tip to British Adapters



Branchpipe Nozzles

Branchpipes Jet Shooting Tip to British Adapters

Standard Materials

2 optional materials aluminum alloys, and corrugated red polyamide covered combination

Size inch	Outlet mm	Length mm	Cover Color	Poly-amide	Aluminum Alloys
1 ^{1/2}	9	360	black	☑	☑
1 ^{1/2}	9	380	black	☑	☑
1 ^{1/2}	9	415	red	☑	☑
1 ^{1/2}	12	375	black	☑	☑
2	9	425	red	☑	☑
2	12	360	black	☑	☑
2	12	385	black	☑	☑
2	12	390	black	☑	☑
2 ^{1/2}	9	430	red	☑	☑
2 ^{1/2}	12	360	black	☑	☑
2 ^{1/2}	12	395	black	☑	☑
2 ^{1/2}	16	305	black	☑	☑
2 ^{1/2}	16	470	black	☑	☑

Branchpipe Wash Curtain Tip to British Adapters



Branchpipe Nozzles

Branchpipes Wash Curtain Tip to British Adapters Couplings

Standard Materials

Standard material aluminum alloys

Size inch	Outlet mm	Length mm	Cover Color	Aluminum Alloys
1 ^{1/2}	9	435	black	☑
2	12	440	black	☑
2 ^{1/2}	12	450	black	☑

Branchpipe Wash Curtain Tip to British Adapters No Shut-off



Branchpipe Nozzles

Branchpipes Wash Curtain or Jet Shoot Tip to British Adapters with No Shut-Off Latch

Standard Materials

Standard material aluminum alloys

Size inch	Outlet mm	Length mm	Cover Color	Aluminum Alloys
1 ^{1/2}	9	435	black	☑
2	12	440	black	☑
2 ^{1/2}	12	450	black	☑

Right Angle Globe Valves by Flange



Hydrant Valves	Fire Hydrant Globe Pattern Valves Shaped Right Angle by Flange Inlet BS 5154
Standard Materials	Standard copper alloy, gun metal, bronze
Pressure	Maximum working pressure 16 bar
Size	2 ^{1/2} inch
Outlet	Female British instantaneous couplings to BS 336
Inlet	Flange to ASTM standards upon request
Article number	

Oblique Globe Valves by Flange



Hydrant Valves	Fire Hydrant Globe Pattern Valves Shaped Oblique by Flange Inlet BS 5154
Standard Materials	Standard copper alloy, gun metal, bronze
Pressure	Maximum working pressure 16 bar
Size	2 ^{1/2} inch
Outlet	Female British instantaneous couplings to BS 336
Inlet	Flange to ASTM standards upon request
Article number	

Horizontal Globe Valves by Flange



Hydrant Valves	Fire Hydrant Globe Pattern Valves Shaped Horizontal by Flange Inlet BS 5154
Standard Materials	Standard copper alloy, gun metal, bronze
Pressure	Maximum working pressure 16 bar
Size	2 ^{1/2} inch
Outlet	Female British instantaneous couplings to BS 336
Inlet	Flange to ASTM standards upon request
Article number	

Bib Nose Globe Valves by Flange



Hydrant Valves	Fire Hydrant Globe Pattern Valves Shaped Bib Nose by Flange Inlet BS 5154
Standard Materials	Standard copper alloy, gun metal, bronze
Pressure	Maximum working pressure 16 bar
Size	2 ^{1/2} inch
Outlet	Female British instantaneous couplings to BS 336
Inlet	Flange to ASTM standards upon request
Article number	

Dry Riser Landing Valves by Flange



Hydrant Valves	Fire Hydrant Dry Riser Landing Valves by Flange Inlet BS 5154
Standard Materials	Standard copper alloy, gun metal, bronze
Pressure	Maximum working pressure 16 bar
Size	2 ^{1/2} inch
Outlet	Female British instantaneous couplings to BS 336
Inlet	Flange to ASTM standards upon request
Article number	

Dry Riser Landing Valves by Inside Thread



Hydrant Valves	Fire Hydrant Dry Riser Landing Valves by Female Thread Inlet BS 5154
Standard Materials	Standard copper alloy, gun metal, bronze
Pressure	Maximum working pressure 16 bar
Size	2 ^{1/2} inch
Outlet	Female British instantaneous couplings to BS 336
Inlet	Flange to ASTM standards upon request
Article number	

Dry Riser Landing Valves by Outside Thread



Hydrant Valves	Fire Hydrant Dry Riser Landing Valves by Male Thread Inlet BS 5154
Standard Materials	Standard copper alloy, gun metal, bronze
Pressure	Maximum working pressure 16 bar
Size	2 ^{1/2} inch
Outlet	Female British instantaneous couplings to BS 336
Inlet	Flange to ASTM standards upon request
Article number	☎

Bib Nose Regulating Valves by Flange



Hydrant Valves	Fire Hydrant Regulating Valves Shaped Bib Nose by Flange Inlet BS 5154
Standard Materials	Standard copper alloy, gun metal, bronze
Pressure	Maximum working pressure 16 bar
Size	2 ^{1/2} inch
Outlet	Female British instantaneous couplings to BS 336
Inlet	Flange to ASTM standards upon request
Article number	☎

Coupling 90° Bends Serrated Hose Tail



Hydrant Bends	3/4" and 2 ^{1/2} " Hose Coupling 90° Bends with Hose Tail
Standard Materials	Brass alloy with chrome plating
Pressure	Maximum working pressure 10 bar
In- and Out-let	Serrated hose tail
Article number	☎

Coupling 90° Bend Socket Ends



Hydrant Bends	3/4" and 2 ^{1/2} " Hose Coupling 90° Bends with Socket Joints
Standard Materials	Brass alloy with chrome plating
Pressure	Maximum working pressure 10 bar
Article number	☎

Hydrant Bar with Operative Key



Standard Materials Body — Aluminum alloy;
Sealing — No sealing materials

Protection & Package 6 pieces in cartons



Length mm	Aluminum Alloy
1040	050 995

Hydrant Bar with Operative Key (Square)



Standard Materials Body — Aluminum alloy;
Sealing — No sealing materials

Protection & Package 6 pieces in cartons

Length mm	Aluminum Alloy
1040	050 995.1

STORZ Wrench
[Model A]



Standard Materials	Body — Carbon steel with plastic sleeve cover
General Markings	Branding SME
Range mm	Carbon Steel
A/B/C	084 104
B/C	084 104.1

STORZ Wrench
[Model B]



Standard Materials	Body — Carbon steel with plastic sleeve cover
General Markings	Branding SME
Range mm	Carbon Steel
A/B/C	084 103
B/C	084 107

STORZ Wrench
[Model C]



Standard Materials	Body — Polypropylene in black color
General Markings	Branding SME
Range mm	Polypropylene Black
A/B/C	☞

STORZ Wrench
[Model D]



Standard Materials	Body — Polypropylene in red color
General Markings	Branding SME
Range mm	Polypropylene Red
A/B/C	☞

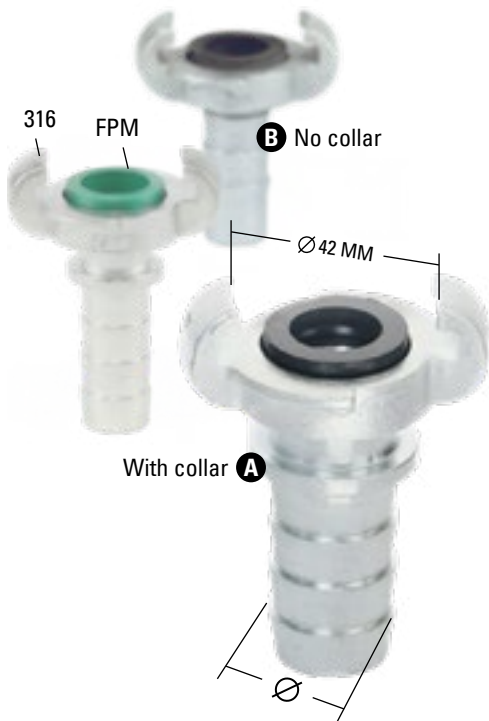


CROWFOOT

- FOR AIR COMPRESSOR HOSE CONNECTIONS



Steel & 316 crowfoot coupler by hose tail EA DIN3489



We offer rust-free steel and 316 made EA (European-styled) couplings by hose tail, with and without collar. NBR and FPM washer is always fitted.



DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL NBR	316 FPM
10	3/8	11.5	A B	071611.3	071511
13	1/2	14.5	A B	071612.3	071512
15	5/8	16.5	A B	071618.3	-
19	3/4	20.5	A B	071613.3	071513
25	1	26.5	A B	071614.3	071514

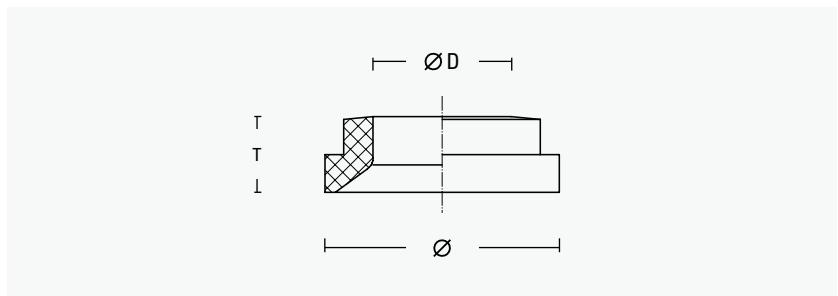
DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL NBR
10	3/8	11.5	A B	071611.4
13	1/2	14.5	A B	071612.4
19	3/4	20.5	A B	071613.4
25	1	26.5	A B	071614.4

Spare part EA washer, NBR FPM CSM



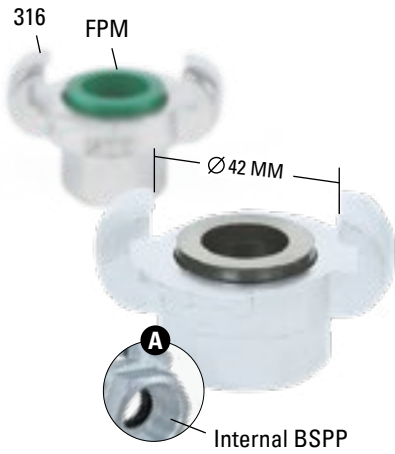
We develop formed gasket for EA connection made from materials NBR, FPM and EPDM. Hardness in Shore A is indicated.

GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	55 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
FPM	65 ± 5	-20 / 180	-4 / 356	fluorocarbon
EPDM	70 ± 5	-20 / 130	-4 / 266	ethylene propylene



SIZE (INCH)	Ø (MM)	Ø D (MM)	T (MM)	NBR BLACK	FPM GREEN	EPDM WHITE
-	34	20	11	072901.1	072901.3	072901.2

Steel & 316 crowfoot coupler by BSPP thread EA DIN3489



We produce rust-free steel and 316 made internal and external BSPP EA couplings, fitted with NBR and FPM washer.



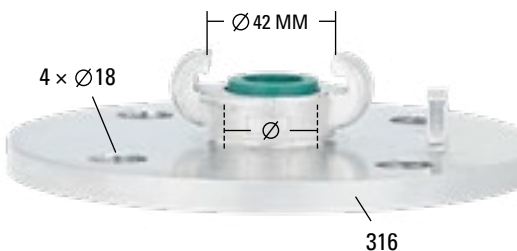
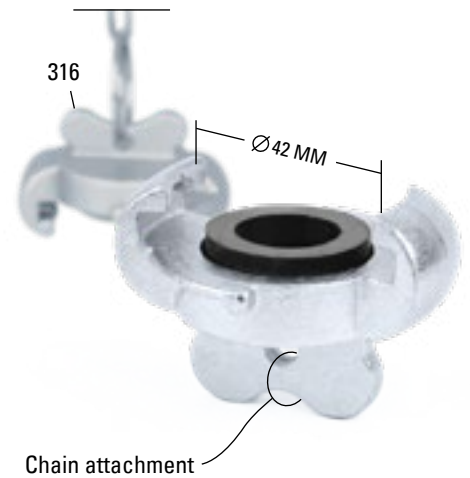
DN (MM)	THRD (INCH)	TYPE	STEEL NBR	316 FPM
6	1/4	A B	073611.3	-
10	3/8	A B	073612.3	-
13	1/2	A B	073613.3	073513
19	3/4	A B	073614.3	073514
25	1	A B	073615.3	073515

DN (MM)	THRD (INCH)	TYPE	STEEL NBR	316 FPM
6	1/4	A B	072611.3	-
10	3/8	A B	072612.3	-
13	1/2	A B	072613.3	072513
19	3/4	A B	072614.3	072514
25	1	A B	072615.3	072515

Steel & 316 EA blank cap

We offer SS chain attached blank caps, fitted with NBR and FPM washer.

DN	STEEL SS CHAIN	316 SS CHAIN
UNIVERSAL	074600.31	074500.3

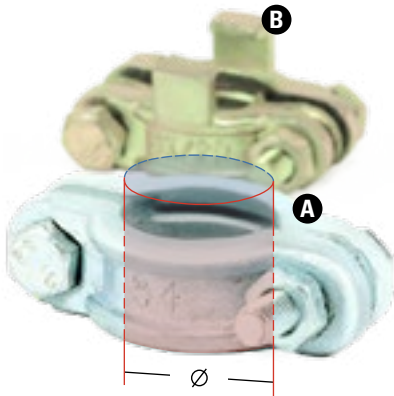


316 EA flanged coupler

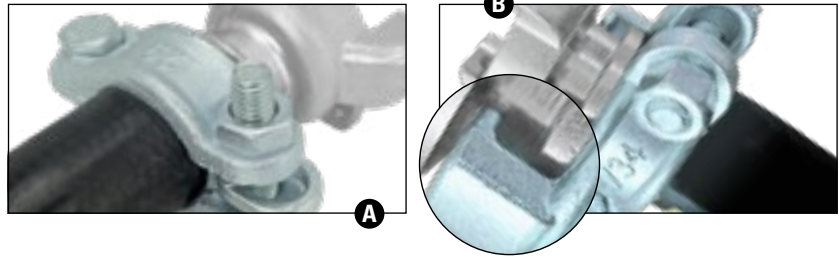
We weld 316 EA compliant couplers by flange connection.

DN	Ø (MM)	316 SS CHAIN
25	25.4	072575

Steel saddle clamps SL SK DIN20039A&B



We offer mating clamping units SL no claw (DIN20039A) and SK with claw (DIN20039B) to the EA connected hose assembly.



SIZE (MM)	(INCH)	∅ (MM)	TYPE	STEEL BOLT 4.8
SL 22	1/2	17-22	A B	081041
SL 29	1/2	22-29	A B	081042
SL 34	3/4	28-34	A B	081043
SL 40	1	32-40	A B	081044
SL 49	1¼	39-49	A B	081045
SL 60	1½	48-60	A B	081046
SL 76	2	60-76	A B	081047
SL 94	2½	77-94	A B	081048
SL 115	3	94-115	A B	081049
SL 400	3	89-101	A B	081050
SL 463	3	96-103	A B	081051
SL 525	3½	113-127	A B	081052
SL 550	4	127-140	A B	081053
SL 600	4	135-155	A B	081054
SL 675	5	155-175	A B	081055
SL 769	6	175-195	A B	081056
SL 818	7	195-208	A B	081057
SL 875	7	210-225	A B	081058
SL 988	8	227-250	A B	081059

SIZE (MM)	(INCH)	∅ (MM)	TYPE	STEEL BOLT 4.8
SK 29	1/2	22-29	A B	079221
SK 34	3/4	28-34	A B	079222
SK 40	1	32-40	A B	079223
SK 49	1¼	39-49	A B	079224
SK 60	1½	48-60	A B	079225
SK 76	2	60-76	A B	079226
SK 94	2½	77-94	A B	079227

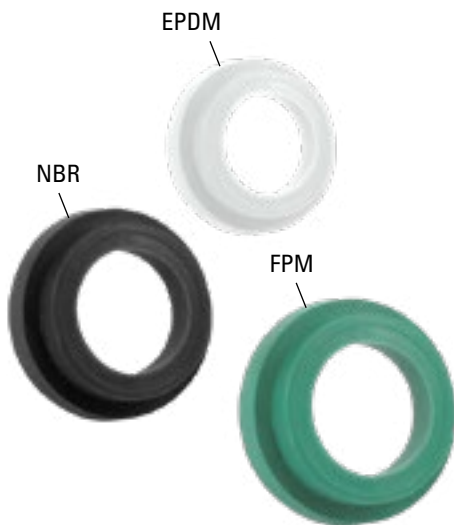
Steel, 304 & brass UA coupler by hose tail



We offer casted UA (universal-styled) couplings by hose tail with two and four claws in plating steel, 304 and brass alloy, fitted with NBR washer.

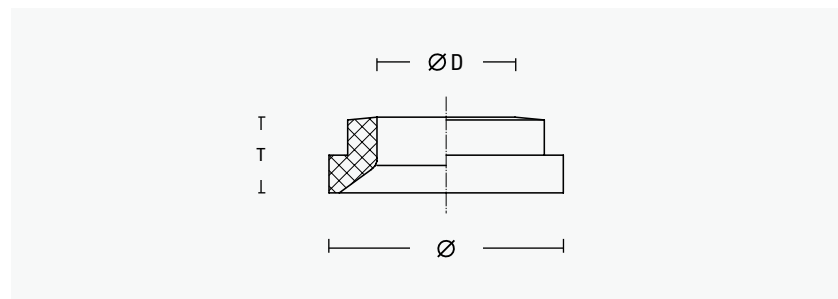
DN (MM)	Ø (INCH)	Ø (MM)	TYPE	STEEL NBR	304 NBR	BR NBR
6	1/4	7.3	A B	071311	-	-
10	3/8	11	A B	071312	071312.1	-
12	1/2	13	A B	071313	071313.1	071323
16	5/8	-	A B	071319	-	-
19	3/4	20	A B	071314	071314.1	071324
25	1	26	A B	071315	071315.1	071325
32	1¼	33	A B	071316	-	-
40	1½	39.5	A B	071317	-	-
50	2	52	A B	071318	-	-

Spare part UA washer, NBR EPDM CSM



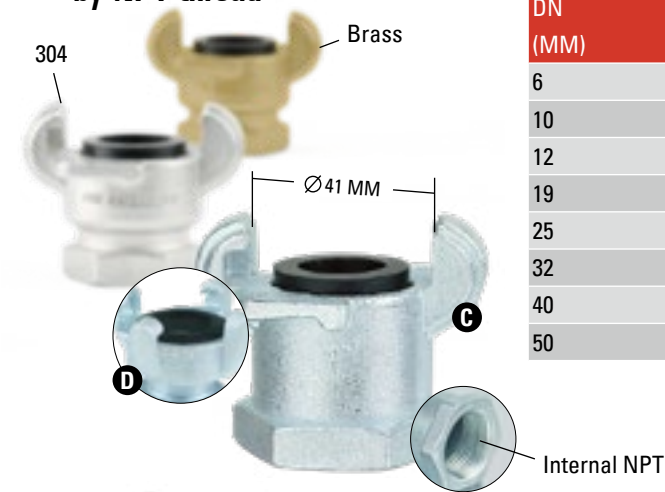
We develop formed gasket for UA connection made from materials NBR, EPDM and CSM. Hardness in Shore A is indicated.

GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	55 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
FPM	65 ± 5	-20 / 180	-4 / 356	fluorocarbon
EPDM	70 ± 5	-20 / 130	-4 / 266	ethylene propylene



SIZE (INCH)	Ø (MM)	Ø D (MM)	T (MM)	NBR BLACK	FPM GREEN	EPDM WHITE
-	34	20	11	072901.1	072901.3	072901.2

Steel, 304 & brass UA coupler by NPT thread



We produce casted UA couplers by internal and external NPT thread, fitted with NBR washer for all sizes.

DN (MM)	THRD (INCH)	TYPE	STEEL NBR	304 NBR	BR NBR
6	1/4	C D	073311	073311.1	-
10	3/8	C D	073312	073312.1	-
12	1/2	C D	073313	073313.1	073323
19	3/4	C D	073314	073314.1	073324
25	1	C D	073315	073315.1	073325
32	1¼	C D	073316	-	-
40	1½	C D	073317	-	-
50	2	C D	073318	-	-



DN (MM)	THRD (INCH)	TYPE	STEEL NBR	304 NBR	BR NBR
6	1/4	E F	072311	-	-
10	3/8	E F	072312	072312.1	-
12	1/2	E F	072313	072313.1	072323
19	3/4	E F	072314	072314.1	072324
25	1	E F	072315	072315.1	072325
32	1¼	E F	072316	-	-
40	1½	E F	072317	-	-
50	2	E F	072318	-	-

Steel, 304 & brass UA blank cap

We offer blank caps in three materials fitted with NBR washer, optional with chains.

SIZE	STEEL NBR	304 NBR	BR NBR
UNIVERSAL	074300	074300.1	074320



Steel UA three-way coupler

We offer casted steel integrated three-way UA couplers with NBR fitted.

SIZE	STEEL NBR
UNIVERSAL	074310



Steel AUS coupler by hose tail AS2554



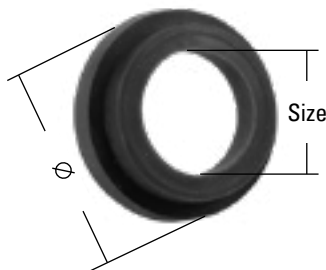
We produced AUS (minsup-styled) couplers by hose tail in plating steel fitted with NBR washer of hardness Shore A 55° for W.P 300 psi, and 74° for 1.000 psi.

DN	(INCH)	Ø KA	PN (PSI)	WASHER	STEEL
10	3/8	42	300	NBR 55°	072802
12	1/2	42	300	NBR 55°	072803
19	3/4	42	300	NBR 55°	072804
25	1	42	300	NBR 55°	072805

DN	(INCH)	Ø KA	PN (PSI)	WASHER	STEEL
12	1/2	45	300	NBR 55°	071632
19	3/4	45	300	NBR 55°	071633
25	1	45	300	NBR 55°	071634
32	1¼	45	300	NBR 55°	071635
40	1½	73	300	NBR 55°	071636
50	2	73	300	NBR 55°	071637
75	3	114	300	NBR 55°	071639

DN	(INCH)	Ø KA	PN (PSI)	WASHER	STEEL
12	1/2	45	1 000	NBR 74°	071632.1
19	3/4	45	1 000	NBR 74°	071633.1
25	1	45	1 000	NBR 74°	071634.1
32	1¼	45	1 000	NBR 74°	071635.1
40	1½	73	1 000	NBR 74°	071636.1
50	2	73	1 000	NBR 74°	071637.1
75	3	114	1 000	NBR 74°	071639.1

Spare part AUS washer NBR



We develop formed NBR gasket for AUS connection for rating 300 to 1 000 psi.

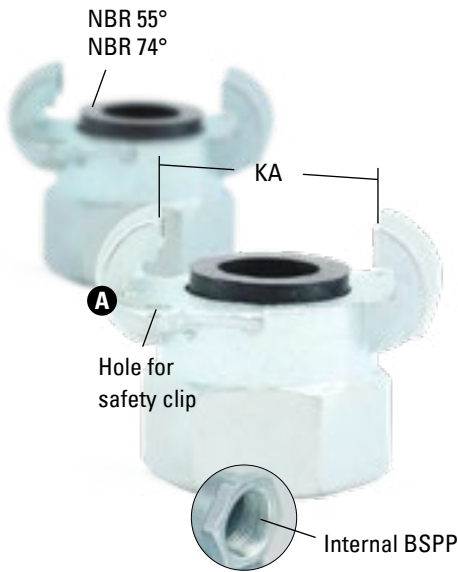
GASKET	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	-10 / 80	14 / 176	acrylonitrile butadiene

SIZE (INCH)	Ø (MM)	SHORE A	PN (PSI)	NBR (BLACK)
3/8, 1/2, 3/4, 1	42	55°	300	072832
3/8, 1/2, 3/4, 1, 1¼	45	55°	300	071671
1½, 2	73	55°	300	071672
3	114	55°	300	071673

SIZE (INCH)	Ø (MM)	SHORE A	PN (PSI)	NBR (BLACK)
3/8, 1/2, 3/4, 1, 1¼	45	74°	1 000	071675
1½, 2	73	74°	1 000	071676
3	114	74°	1 000	071677

Steel AUS coupler by BSPP thread AS2554

We offer casted steel AUS couplers by internal and external BSPP thread, fitted with NBR washers of hardness Shore A 55° for W.P 300 psi, and 74° for 1.000 psi.



DN	BSPP	Ø KA	(PSI)	WASHER	TYPE	STEEL
10	3/8	42	300	NBR 55°	A B	072822
12	1/2	42	300	NBR 55°	A B	072823
19	3/4	42	300	NBR 55°	A B	072824
25	1	42	300	NBR 55°	A B	072825

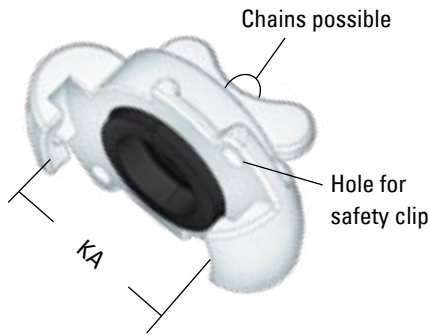
DN	BSPP	Ø KA	(PSI)	WASHER	TYPE	STEEL
12	1/2	45	300	NBR 55°	A B	071642
19	3/4	45	300	NBR 55°	A B	071643
25	1	45	300	NBR 55°	A B	071644
32	1¼	45	300	NBR 55°	A B	071645
40	1½	73	300	NBR 55°	A B	071646
50	2	73	300	NBR 55°	A B	071647
75	3	114	300	NBR 55°	A B	071649

DN	BSPP	Ø KA	(PSI)	WASHER	TYPE	STEEL
12	1/2	45	1 000	NBR 74°	A B	071642.1
19	3/4	45	1 000	NBR 74°	A B	071643.1
25	1	45	1 000	NBR 74°	A B	071644.1
32	1¼	45	1 000	NBR 74°	A B	071645.1
40	1½	73	1 000	NBR 74°	A B	071646.1
50	2	73	1 000	NBR 74°	A B	071647.1
75	3	114	1 000	NBR 74°	A B	071649.1

DN	BSPT	Ø KA	(PSI)	WASHER	TYPE	STEEL
10	3/8	42	300	NBR 55°	A B	072812
12	1/2	42	300	NBR 55°	A B	072813
19	3/4	42	300	NBR 55°	A B	072814
25	1	42	300	NBR 55°	A B	072815

DN	BSPT	Ø KA	(PSI)	WASHER	TYPE	STEEL
12	1/2	45	300	NBR 55°	A B	071652
19	3/4	45	300	NBR 55°	A B	071653
25	1	45	300	NBR 55°	A B	071654
32	1¼	45	300	NBR 55°	A B	071655
40	1½	73	300	NBR 55°	A B	071656
50	2	73	300	NBR 55°	A B	071657
75	3	114	300	NBR 55°	A B	071659

DN	BSPT	Ø KA	(PSI)	WASHER	TYPE	STEEL
12	1/2	45	1 000	NBR 74°	A B	071652.1
19	3/4	45	1 000	NBR 74°	A B	071653.1
25	1	45	1 000	NBR 74°	A B	071654.1
32	1¼	45	1 000	NBR 74°	A B	071655.1
40	1½	73	1 000	NBR 74°	A B	071656.1
50	2	73	1 000	NBR 74°	A B	071657.1
75	3	114	1 000	NBR 74°	A B	071659.1



Steel AUS blank cap, possible with chains

We offer AUS compliant blank caps, fitted with NBR washers rated 300 or 1 000 psi.

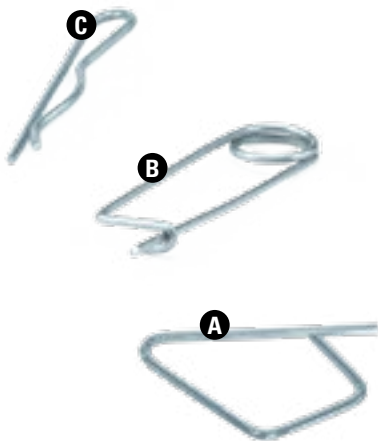
SIZE	Ø KA	PN (PSI)	WASHER	STEEL
UNIVERSAL	42	300	NBR 55°	072830
UNIVERSAL	42	300	NBR 55°	072870
UNIVERSAL	45	300	NBR 55°	071662
UNIVERSAL	45	1 000	NBR 74°	071662.1



Steel AUS three-way coupler

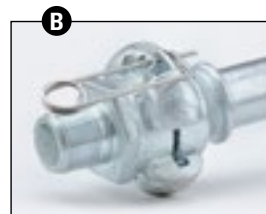
We offer AUS compliant three-way couplers, fitted with NBR washer rated 300 psi.

SIZE	Ø KA	PN (PSI)	WASHER	STEEL
UNIVERSAL	42	300	NBR 55°	072831



Spart part, steel safety clips

We offer safety clips that secure the connection from reverse force occuring from the vibration in work.



SIZE	TYPE	STEEL	304
3/8, 1/2, 3/4, 1, 1¼, 1½, 2	A B C	072800.1	072800
3/8, 1/2, 3/4, 1, 1¼, 1½, 2	A B C	072800.3	072800.4
3/8, 1/2, 3/4, 1	A B C	069521	069521.1
1¼, 1½, 2	A B C	069522	069522.1

Safety tool, whipcheck cable

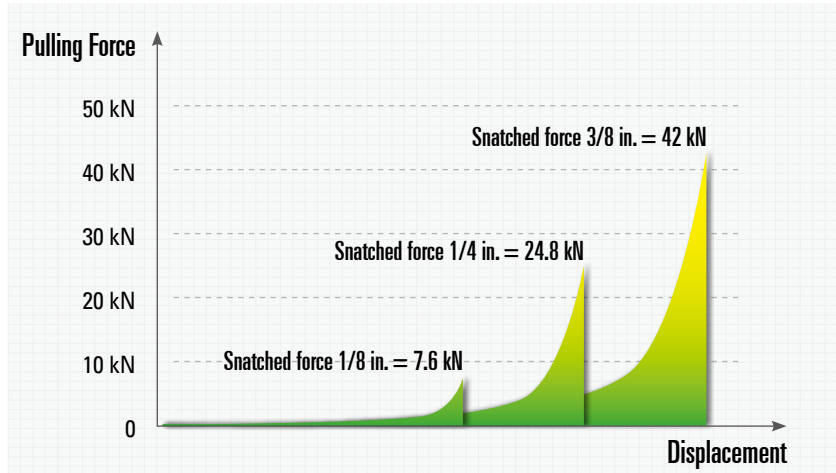
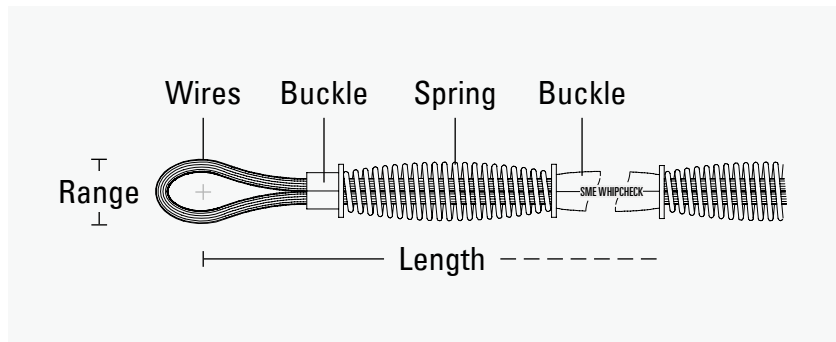


Snatch test to check the maximum straining force of whipcheck cables.



We provide double-wired and spring-loaded whipcheck cables as an essential part of safety tools for the compressed air hose connection. The cable should be installed in the extended position, with no slack.

Size	Cuffing dia. 1/2" to 3", total length no shorter than 450 mm
Core Material	Carbon steel double mix wiring, plus aluminum buckles; stainless steel plus aluminum and brass buckles
Snatch Force	Snatch test is done to check the maximum straining force. Those for hose range 1/8" hits 7.6 kN, 1/4" up to 24.8 kN and 3/8" reaching 42.0 kN before snatched
Connection	Hose to hose, and hose to tool version
Typical condition	Safety tool to check accidental whipping out situation for air compressed and water pressurized hose connections



SIZE (INCH)	RANGE (INCH)	LENGTH (MM)	TENSILE (N)	CS WIRE AL BUCKLE	304 WIRE AL BUCKLE	316 WIRE BR BUCKLE
1/8	1/2-1¼	450	7 600	242001.1	242026	242031
1/8	1/2-1¼	550	7 600	242001	-	-
1/8	1/2-1¼	500	7 600	242001.2	-	-
1/8	1/2-1¼	600	7 600	242001.3	-	-
1/4	1½-3	900	24 800	242002.2	242027	242032
1/4	1½-3	956	24 800	242002	-	-
1/4	1½-3	1200	24 800	242002.3	-	-
3/8	2½-4½	1118	42 000	242004	-	-



QUICK DISCONNECT COUPLINGS DPM ISO16028 QPA QPB ISO7241A&B QPT SNAP TITE

W C

can not

o b c r l c o j y r j c

p f f o p d



304 & 316L DPM threaded socket and plug, ISO16028



We offer ISO16028 compliant quick-disconnect with needle valve integration the sockets and plugs by BSPP thread ends.

SIZE (MM)	THRD (INCH)	Ø (MM)	TYPE	304 NBR	316L NBR
6.3	1/4	28.5	A B	011451	011431
10	3/8	33	A B	011452	011432
12.5	1/2	38.5	A B	011453	011433
16	3/4	42	A B	011454	011434
20	1	48.5	A B	011455	011435
25	1¼	55	A B	011456	011436
31.5	1½	80	A B	011457	011437
40	2	100	A B	011458	011438

SIZE (MM)	THRD (INCH)	Ø (MM)	TYPE	304 NBR	316L NBR
6.3	1/4	28.5	A B	011461	011441
10	3/8	33	A B	011462	011442
12.5	1/2	38.5	A B	011463	011443
16	3/4	42	A B	011464	011444
20	1	48.5	A B	011465	011445
25	1¼	55	A B	011466	011446
31.5	1½	80	A B	011467	011447
40	2	100	A B	011468	011448

304 & 316 QPA threaded socket and plug, ISO7241A



We provide ISO7241A standard quick-disconnect couplings by BSPP thread ends.

SIZE (MM)	THRD (INCH)	Ø (MM)	TYPE	304 NBR	316 NBR
6.3	1/4	28.5	A B	011521	011541
10	3/8	33	A B	011522	011542
12.5	1/2	38.5	A B	011523	011543
16	3/4	42	A B	011524	011544
20	1	48.5	A B	011525	011545
25	1¼	55	A B	011526	011546
31.5	1½	80	A B	011527	011547
40	2	100	A B	011528	011548

SIZE (MM)	THRD (INCH)	Ø (MM)	TYPE	304	316
6.3	1/4	28.5	A B	011531	011551
10	3/8	33	A B	011532	011552
12.5	1/2	38.5	A B	011533	011553
16	3/4	42	A B	011534	011554
20	1	48.5	A B	011535	011555
25	1¼	55	A B	011536	011556
31.5	1½	80	A B	011537	011557
40	2	100	A B	011538	011558

304 & 316 QPB threaded socket and plug, ISO7241B

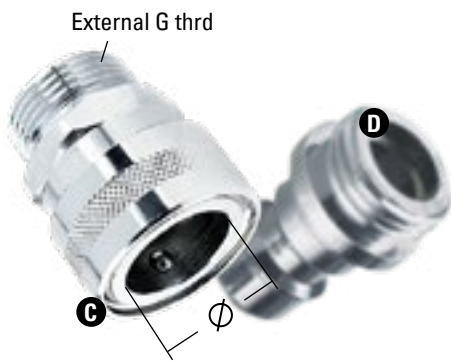
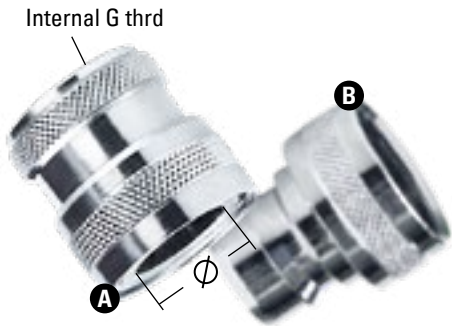


We provide ISO7241B standard quick-disconnect couplings by BSPP thread ends.

SIZE (MM)	THRD (INCH)	Ø (MM)	TYPE	304 NBR	316 NBR
6.3	1/4	28.5	C D	011721	011741
10	3/8	33	C D	011722	011742
12.5	1/2	38.5	C D	011723	011743
16	3/4	42	C D	011724	011744
20	1	48.5	C D	011725	011745

SIZE (MM)	THRD (INCH)	Ø (MM)	TYPE	304	316
6.3	1/4	28.5	C D	011731	011751
10	3/8	33	C D	011732	011752
12.5	1/2	38.5	C D	011733	011753
16	3/4	42	C D	011734	011754
20	1	48.5	C D	011735	011755

Nickel brass QPT threaded socket and plug



We produce quick-disconnect socket and plug packets in brass with nickel plating, parallel G thread applied.

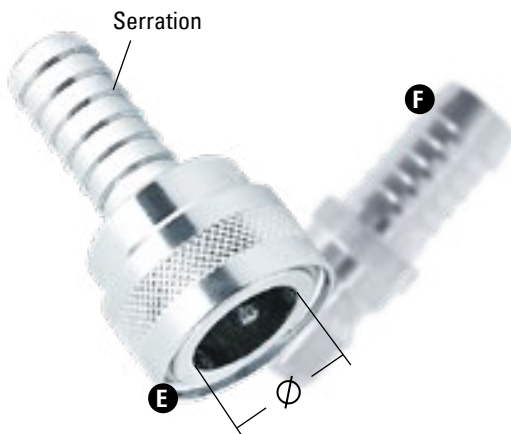
DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR NBR
15	1/2	17.0	A B	011611
19	3/4	22.0	A B	011612

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR
15	1/2	15.7	A B	011621
19	3/4	19.4	A B	011622

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR NBR
15	1/2	17.0	C D	011614
19	3/4	22.0	C D	011615

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR
15	1/2	15.7	C D	011624
19	3/4	19.4	C D	011625

Nickel brass QPT socket and plug by hose tail



We produce quick-disconnect socket and plug packets in brass with nickel plating, serrated hose tail applied.

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR
15	1/2	15.7	E F	011617
19	3/4	19.4	E F	011618

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	BR NBR
15	1/2	17.0	E F	011627
19	3/4	22.0	E F	011628

MORTAR COUPLINGS



Mortar couplings bear a striking resemblance to cam and groove type of couplings. Connection is made by evenly closing handles to seal two mating couplings without using tools. Therefore they are easy, fast and reliable to operate; plus mortar couplings are structurally reinforced.

Mortar couplings are widely used as the outlet quick-disconnect fitting in mixer and spraying mortar machines, **CONCRETE TRANSPORTATION VEHICLES** and plastering units. The Cam handles are designed and made of robust malleable iron and casting steels so that couplings can undertake the pressure over 25 bars and to maximum 50 at closure.

As dealing with abrasive mass granules as mortar and plaster, hard materials of casting carbon steel and malleable iron are commonly selected. In some cases plastic nylon (red) are required especially as the machine outlet coupling, fitted with strong stainless steel Cam handles and pull rings. The side figure as the coupling half with internal BSP-Parallel pipe thread of DN25 1" of "System 22" made of red nylon compound plus 25-30% acid resistant glass fiber by injection molding production.



System 22 & 23.5



Popular sizing 1-2 inch is commonly divided by its mating distance between lines of groove center and bottoms of adapters. They are referred to as **SYSTEM 22 AND 23.5** which cannot be exchanged.



Groove line checkers



An adapter of "System 22" has practically 22.0 mm high closing distance that must be connected with a 22 system coupling half of its nominal dimension. Same as to "System 23.5" female and male coupling halves with height of 23.5 mm.

A groove line checker is made applicable to all cam and groove types. "System 22" and "23.5" can also be measured and verified when the curve lines perfectly match with each other.



Coupler × Hose Tail [Mortar]



- Standard Materials** Body — Carbon steel zinc plating, Malleable iron, Nylon fiberglass combination;
Arm / Ring — Carbon steel;
Sealing — Black NBR gasket for all
- Protection & Package** 1 piece in plastic bags
- Hose Clamps** Crimping ferrule with internal gripping lines recommended (Details on p.45)
- General Markings** CS — DN35 PN50 SME

Coupling System	Size	ØA mm	ØB mm	Carbon Steel	Malleable Iron	Nylon
22	25	35.5	19	063 551	☒	☒
22	25	35.5	25	063 551.1	☒	☒
22	27	42	25	063 552	☒	☒
22	35	51	25	063 553	☒	☒
22	35	51	35	063 553.1	☒	☒
22	38	51	38	063 554	☒	☒
22	42	54	42	063 555	☒	☒
22	50	64	35	063 556	☒	☒
22	50	74	50	063 556.1	☒	☒
22	65	74	65	063 557	☒	☒
23.5	35	51	25	063 553	☒	☒
23.5	35	51	35	063 553.1	☒	☒
23.5	38	54	38	063 554	☒	☒
23.5	50	64	35	063 555	☒	☒
23.5	50	74	50	063 555.1	☒	☒

Coupler × Female BSP-P Thread [Mortar]



- Standard Materials** Body — Carbon steel zinc plating, Malleable iron, Nylon fiberglass combination;
Arm / Ring — Carbon steel;
Sealing — Black NBR gasket for all
- Protection & Package** 1 piece in plastic bags
- General Markings** CS — DN35 PN50 SME

Coupling System	Size	ØA mm	Thread BSPP	Carbon Steel	Malleable Iron	Nylon
22	25	35.5	1	064 551	☒	☒
22	27	51	1	064 552	☒	064 752
22	32	51	1½	064 553	☒	☒
22	38	54	1½	064 554	☒	☒
22	38	64	1½	064 555	☒	☒
22	50	64	2	064 556.1	☒	☒
22	50	74	2	064 557	☒	☒
23.5	27	51	1	☒	☒	☒
23.5	32	51	1½	☒	☒	☒
23.5	50	64	2	064 556	☒	☒

**Adapter × Hose Tail
[Mortar]**



- Standard Materials** Body — Carbon steel zinc plating, Malleable iron, Nylon fiberglass combination;
Sealing — No sealing materials
- Protection & Package** 1 piece in plastic bags
- Hose Clamps** Crimping ferrule with internal gripping lines recommended (Details on p.45)

Coupling System	Size	ØA mm	ØB mm	Carbon Steel	Malleable Iron	Nylon
22	25	35.0	19	063 551	☑	☑
22	27	41.0	19	063 552	☑	☑
22	27	41.0	25	063 552.1	☑	☑
22	35	49.5	25	063 553	☑	☑
22	35	49.5	35	063 553.1	☑	☑
22	38	49.5	38	063 554	☑	☑
22	42	53.0	42	063 555	☑	☑
22	50	63.0	35	063 556	☑	☑
22	50	63.0	42	063 556.1	☑	☑
22	50	63.0	50	063 556.2	☑	☑
22	65	73.0	65	063 557	☑	☑
23.5	35	49.5	35	063 563.1	☑	☑
23.5	38	49.5	38	063 564	☑	☑
23.5	50	73.0	50	063 566.2	☑	☑

**Adapter × Female
BSP-P Thread
[Mortar]**



- Standard Materials** Body — Carbon steel zinc plating, Malleable iron, Nylon fiberglass combination;
Sealing — Black NBR thread seal for all
- Protection & Package** 1 piece in plastic bags

Coupling System	Size	ØA mm	Thread BSPP	Carbon Steel	Malleable Iron	Nylon
22	25	35.0	1	061 551	☑	☑
22	27	41.0	1	061 552	☑	☑
22	27	41.0	1½	☑	☑	☑
22	35	49.5	1	061 553.1	☑	☑
22	35	49.5	1½	061 553	☑	☑
22	38	49.5	1½	061 554	☑	☑
22	38	49.5	2	061 554.1	☑	☑
22	42	53.0	1½	061 555	☑	☑
22	50	63.0	1½	061 556	☑	☑
22	50	63.0	1½	061 556.1	☑	☑
22	50	63.0	2	061 556.2	☑	☑
22	50	63.0	2½	061 556.3	☑	☑
22	50	73.0	2½	061 557	☑	☑
23.5	35	49.5	1	061 563.1	☑	☑
23.5	35	49.5	1½	061 563	☑	☑
23.5	38	49.5	1½	061 564	☑	☑
23.5	38	49.5	2	061 564.1	☑	☑
23.5	50	63.0	1½	061 566	☑	☑
23.5	50	63.0	1½	061 566.1	☑	☑
23.5	50	63.0	2	061 566.2	☑	☑
23.5	50	63.0	2½	061 566.3	☑	☑

Male BSP-P Thread × Hose Tail [Mortar]



Standard Materials Body — Carbon steel zinc plating, Malleable iron, Nylon fiberglass combination;
Sealing — No sealing materials

Protection & Package 1 piece in plastic bags

Hose Clamps Crimping ferrule with internal gripping lines recommended (Details on p.45)

Size	Ø mm	Thread BSPP	Carbon Steel	Malleable Iron	Nylon
25	24	1	067.551	☒	☒
25	32.5	1	067.551.1	☒	☒
35	42	1½	067.552	☒	☒
35	45	1½	067.552.1	☒	☒
38	50	1½	067.553	☒	☒
50	42	2	067.554	☒	☒
50	50	2	067.554.1	☒	☒
50	59	2	067.554.2	☒	☒

Adapter × Male BSP-P Thread [Mortar]



Standard Materials Body — Carbon steel zinc plating, Malleable iron, Nylon fiberglass combination;
Sealing — No sealing materials

Protection & Package Thread wrapped or covered by plastic blue web;
1 piece in plastic bags

Coupling System	Size	ØA mm	Thread BSPP	Carbon Steel	Malleable Iron	Nylon
	25	35.0	1	066.551	☒	☒
	27	41.0	1	066.552	☒	☒
	35	49.5	1½	066.553	☒	☒
	38	49.5	1½	066.553.1	☒	☒
	50	63.0	2	066.556	☒	☒
	23.5	35	1½	066.553	☒	☒
	23.5	50	2	066.556	☒	☒

Crimping Ferrule with Internal Lines [Mortar]

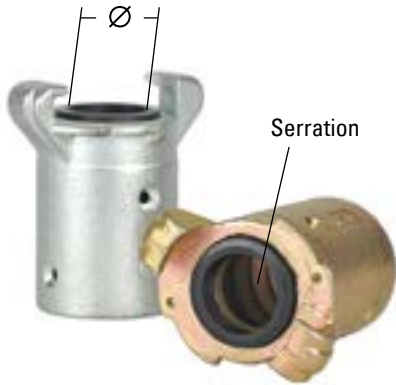


Standard Materials Body — Carbon steel zinc plating;

Protection & Package 1 piece in plastic bags

Size mm	Carbon Steel
19 × 6	068.551
25 × 7	068.552
35 × 7	068.553
38 × 7	068.554
42 × 7	068.555
50 × 9	068.556

Blasting SB couplers with drilling holes



For heavy-duty blasting use and the transfer of slurry, mortar and concrete media, we produce SB couplers fitted with NBR gasket. Wire attachment is optional.



ND Ø (MM)	(INCH)	STEEL NBR	NYLON NBR	ALU NBR
19 × 7	3/4	071222	071202.3	071202
25 × 7	1	071223	071203.3	071203
32 × 8	1¼	071224	071204.3	071204
38 × 9	1½	071225	071205.3	071205



We apply BSSP thread to SB adapters, optional to be fitted with linking wire.

ND Ø (MM)	THRD (INCH)	STEEL NBR	NYLON NBR	ALU NBR
19 × 7	3/4	-	-	-
25 × 7	1	-	-	-
32 × 8	1¼	071424	071404.3	071404
38 × 9	1½	071425	071405.3	071405

Blasting SB thread nozzle with drilling holes



We provide thread nozzles as blasting hose ends, connecting screw extensions, with drilling holes on bodies.



ND Ø (MM)	(INCH)	STEEL	NYLON	ALU
19 × 7	3/4	071332	071332.3	071302
25 × 7	1	071333	071333.3	071303
32 × 8	1¼	071334	071334.3	071304
38 × 9	1½	071335	071335.3	071305



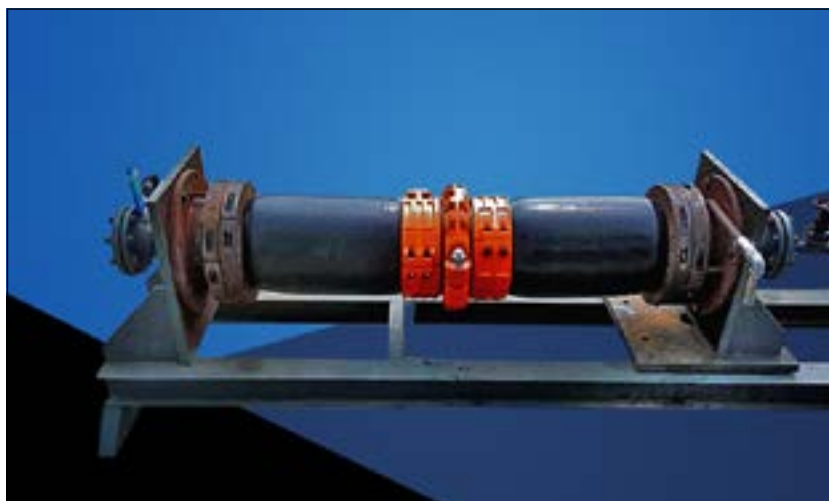
Grooved hose assembly, pressuring test

Grooved hose assembly incorporates grooved couplings, victaulic typed clamps and split-pieced (three-or-four) layflat hose clamping, tightened with screws. It is commonly applied for shale gas transfer, esp. for large-bored hose delivery.

The assembly features flexible joint, rigid connection, big flow rate and and easy disassembly. The diameter ranges from 4 to 12 inch. It is widely used in the shale gas market in northern America.



Four-piece clamps for diameters 10" and 12".



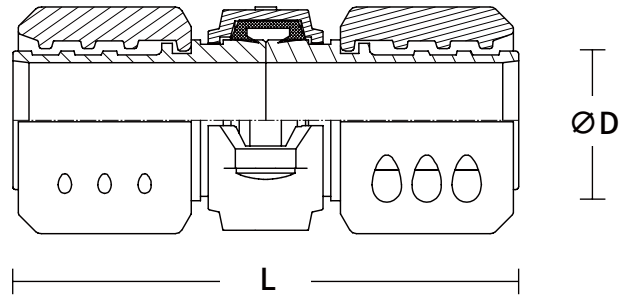
Grooved couplings	Aluminum alloy w/T6 heat treatment
Grooved clamps	Steel galvanized, red coating
Split clamps	Aluminum alloy w/T6 heat treatment, hardened
Application	Large-bored water transfer, and shale gas delivery
Connection	Grooved connection (Victaulic type)
Working pressure	0.5 ~ 2.8 psi (0.03 ~ 0.19 bar)

Grooved hose assembly, for shale gas transfer

The grooved hose assembly features flexible joint, rigid connection, big flow rate and easy disassembly. The diameter ranges from 4 to 12 inch. It is widely used in the shale gas market in northern America.



Three-piece clamps for diameters 4" through 8".



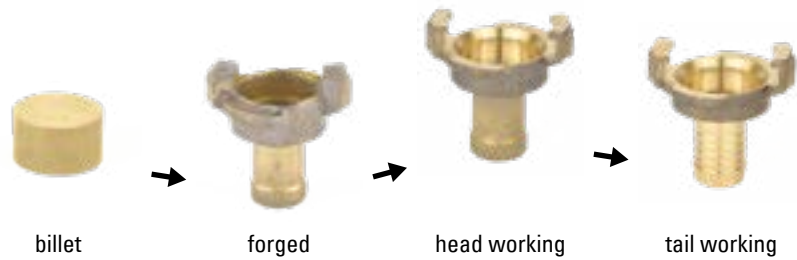
DN	INCH	Ø D	L	W.P (PSI)	ALU	SS316	CS
100	4	103.5	320	1.6-2.8	021404.4	021404.1	021404.3
150	6	152.5	320	1.6-2.8	021406	-	-
200	8	203.5	320	1.6-2.8	021407	-	-
250	10	254	320	1.3-1.6	021408	-	-
300	12	304	320	0.5-1.3	021409	-	-



Brass & 316 German GK coupler by hose tail

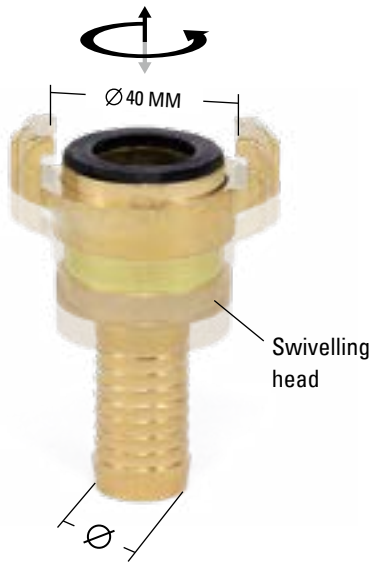


We forge brass GK coupling and cast 316 parts, fitted with NBR or FPM washer.



DN (MM)	(INCH)	Ø (MM)	BR NBR	316 FPM
6	1/4	8.3	071111	-
10	3/8	11.5	071112	-
13	1/2	13.5	071113	071213.1
15	5/8	17.5	071118	-
19	3/4	20.5	071114	071214.1
25	1	26.5	071115	071215.1
32	1¼	33.5	071116	071216.1
38	1½	40.7	071117	-

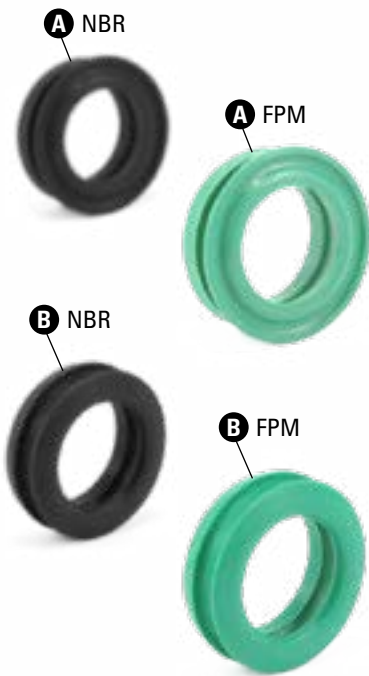
Brass German GK adjusting coupler by hose tail



We offer GK coupling with an adjusting head that makes it easier to connect by simply screwing the nut on and tight.

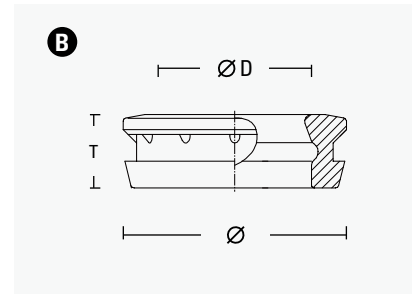
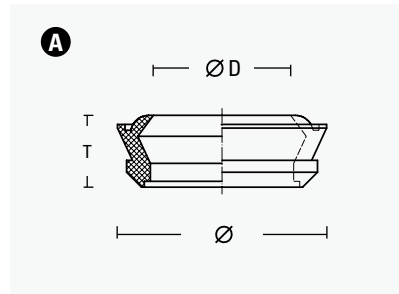
DN (MM)	(INCH)	Ø (MM)	BR NBR
6	1/4	8.3	-
10	3/8	11.5	-
13	1/2	13.5	071113.1
15	5/8	17.5	-
19	3/4	20.5	071114.1
25	1	26.5	071115.1
32	1¼	33.5	071116.1
38	1½	40.7	-

Spare part GK washer, NBR FPM



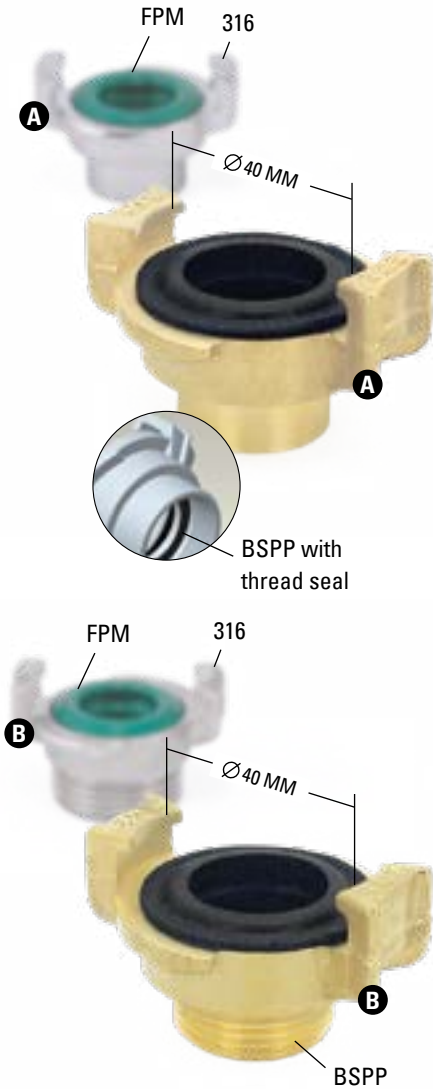
We develop formed gasket for German GK connection made from materials NBR and FPM. Hardness in Shore A is indicated.

GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	55 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
FPM	65 ± 5	-20 / 180	-4 / 356	fluorocarbon

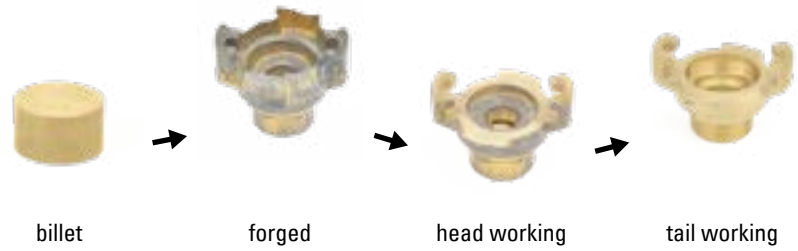


SIZE (INCH)	Ø (MM)	Ø D (MM)	T (MM)	TYPE	NBR BLACK	FPM GREEN
-	35	23	12	A B	079011.13	079011.3
-	33.5	23	11	A B	079011.2	079011.4

Brass & 316 German GK coupler by BSPP thread



We produce GK couplers by internal and external BSPP thread in forged brass and casted 316, fitted with NBR or FPM washer and NBR or PTFE thread seal.



DN (MM)	THRD (INCH)	TYPE	BR NBR / NBR	316 FPM / PTFE
6	1/4	A B	073111	-
10	3/8	A B	073112	-
13	1/2	A B	073113	073213.1
19	3/4	A B	073114	073214.1
25	1	A B	073115	073215.1
32	1¼	A B	073116	073216.1
38	1½	A B	073117	-

DN (MM)	THRD (INCH)	TYPE	BR NBR	316 FPM
6	1/4	A B	072111	-
10	3/8	A B	072112	-
13	1/2	A B	072113	072213.1
19	3/4	A B	072114	072214.1
25	1	A B	072115	072215.1
32	1¼	A B	072116	072216.1
38	1½	A B	072117	-



Brass GK three-way coupler

We offer three-way couplers for German GK connection, NBR washer fitted.

SIZE	BR / NBR
Universal	075101

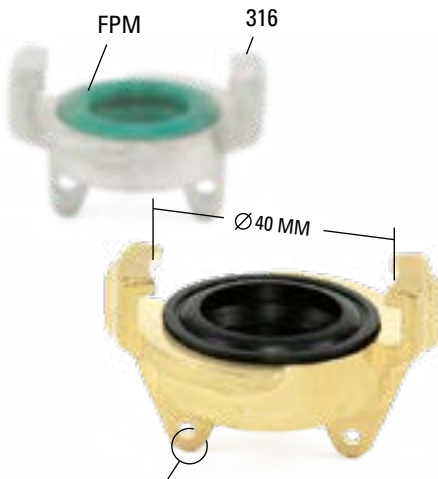
Brass German GK spray nozzle

We produce spraying nozzles by hose tail and GK connection.



DN (MM)	(INCH)	TYPE	BR NBR
13	1/2	C D	075131
19	3/4	C D	075132
25	1	C D	075133
32	1¼	C D	-
38	1½	C D	-

DN (MM)	(INCH)	∅ (MM)	TYPE	BR NBR
13	1/2	13.5	C D	075141
19	3/4	20.5	C D	075142
25	1	26.5	C D	075143
32	1¼	33.5	C D	-
38	1½	40.7	C D	-



Brass & 316 GK blank cap

We offer blank caps for GK connection, possible for chain attachment.

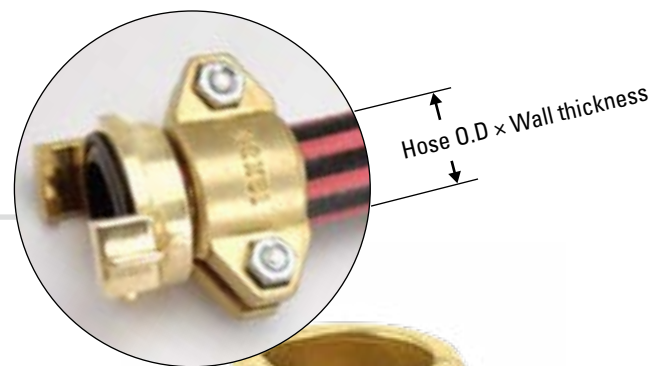
SIZE	BR NBR	316 FPM
Universal	074100	074200.1

Possible chain attachment

Brass screw clamp unit

We offer clamping unit with bolts and nut assembly for GK connection.

RANGE (MM)	(INCH)	BR CS BOLTINGS
19 × 3.5	3/8	074401
25 × 3.5	1	074402
32 × 3.5	1¼	074403



Steel graded 10.9

Brass & 316 French coupler by hose tail NFE29573

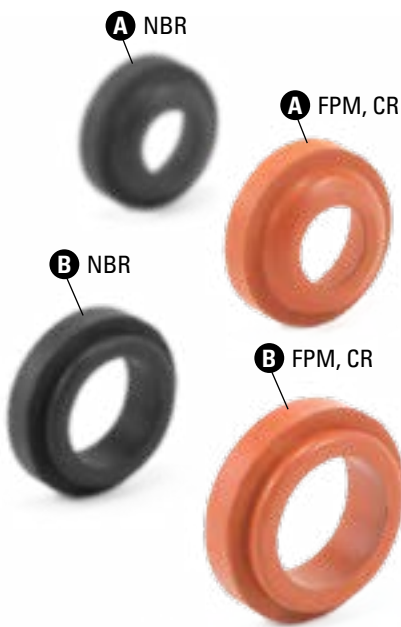


We forge brass NF express coupler and cast 316 ones with NBR or FPM washer.



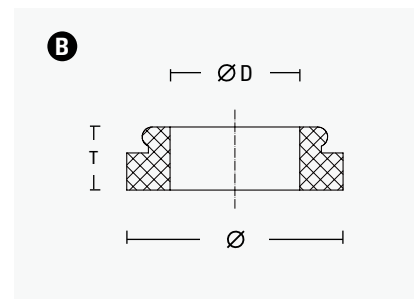
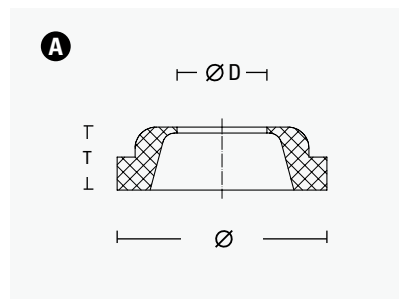
DN (MM)	(INCH)	Ø (MM)	BR NBR	316 FPM
7 - 9	1/4	8	071011	-
8 - 10	1/4	9	071010	-
9 - 11	3/8	10	071012	-
11 - 13	3/8	12	071013	071023.1
13 - 15	1/2	14	071014	071024.1
16 - 18	1/2	17	071015	071025.1
19 - 21	3/4	20	071016	071026.1
22 - 24	3/4	23	071017	-
25 - 27	1	26	071018	071028.1
30 - 32	1¼	31	071019	-

Spare part NF washer, NBR, FPM, CR



We develop formed gasket reduced and full through for French Express connection in NBR, FPM & CR. Hardness in Shore A is indicated.

GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	55 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene
FPM	65 ± 5	-20 / 180	-4 / 356	fluorocarbon
CR	90 ± 5	-40 / 82	-40 / 180	polychloroprene



Ø (MM)	Ø D (MM)	T (MM)	TYPE	NBR BLACK	FPM RED	CR RED
35	15	10.5	A B	079001.3	079001.5	079001.6
35	21	10.2	A B	079001.1	079001.0	079001.2

Brass & 316 BSPP thread coupler NFE29573



We produce internal and external BSPP thread coupler by forging brass and cast 316.

DN (MM)	THRD (INCH)	BR NBR	316 FPM
6	1/4	073011	-
10	3/8	073012	-
13	1/2	073013	073023.1
19	3/4	073014	073024.1
25	1	073015	073025.1
32	1¼	073016	-
38	1½	073017	-
50	2	073018	-

DN (MM)	THRD (INCH)	BR NBR	316 FPM
6	1/4	072011	-
10	3/8	072012	-
13	1/2	072013	072023.1
19	3/4	072014	072024.1
25	1	072015	072025.1
32	1¼	072016	-
38	1½	072017	-
50	2	072018	-

Nickel plated claw clamp

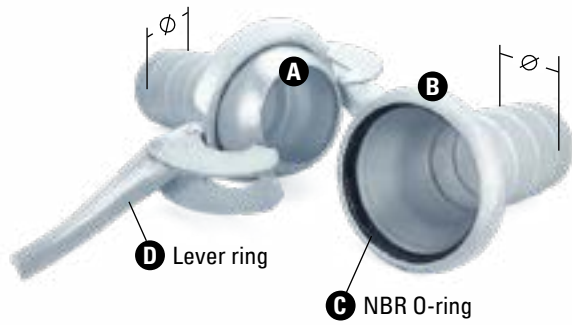
HOSE O.D (MM)	BR NBR
17	079121
20	079122
23	079123
26	079124
29	079125
32	079126
36	079127
38	079128



Brass & 316 NF blank cap

SIZE	BR NBR	316 FPM
Universal	074000	074000.1

Galvanized steel large-sized Bauer connection



We produce water-transferring steel quick couplings of Bauer type, O-ring fitted.

DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL NBR
50	2	54	A B C D	083001
80	3	80	A B C D	083003
90	3½	90	A B C D	083004
100	4	103.5	A B C D	083005
125	5	125	A B C D	083006
150	6	154	A B C D	083007
200	8	205.5	A B C D	083008

DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL
50	2	54	A B C D	083001.1
80	3	80	A B C D	083003.1
90	3½	90	A B C D	083004.1
100	4	103.5	A B C D	083005.1
125	5	125	A B C D	083006.1
150	6	154	A B C D	083007.1
200	8	205.5	A B C D	083008.1

DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL NBR
50	2	54	A B C D	083001.2
80	3	80	A B C D	083003.2
90	3½	90	A B C D	083004.2
100	4	103.5	A B C D	083005.2
125	5	125	A B C D	083006.2
150	6	154	A B C D	083007.2
200	8	205.5	A B C D	083008.2

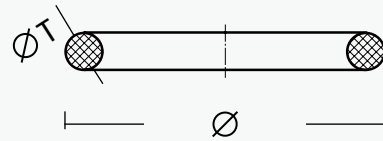
DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL
50	2	54	A B C D	083001.3
80	3	80	A B C D	083003.3
90	3½	90	A B C D	083004.3
100	4	103.5	A B C D	083005.3
125	5	125	A B C D	083006.3
150	6	154	A B C D	083007.3
200	8	205.5	A B C D	083008.3

NBR O-ring fitted for Bauer, Perrot & Miller connection



We develop O-ring seals for Bauer, Perrot & Miller connection in NBR. Hardness in Shore A is indicated.

GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
NBR	55 ± 5	-10 / 80	14 / 176	acrylonitrile butadiene



SIZE (INCH)	Ø (MM)	Ø T (MM)	NBR BLACK
2	81	10	083401
3	115	13	083403
3½	-	-	083404
4	164.5	14.7	083405
6	208	20	083407
8	259	19.2	083408

Steel (no coating) welding Bauer connection



We offer more Bauer connections by Tee, Y-typed and for reduction. Check with our sales for details.

DN (MM)	Ø (INCH)	Ø (MM)	TYPE	STEEL
50	2	54	E F	083131.1
80	3	80	E F	083133.1
90	3½	90	E F	083134.1
100	4	103.5	E F	083135.1
125	5	125	E F	083136.1
150	6	154	E F	083137.1
200	8	205.5	E F	083138.1

DN (MM)	Ø (INCH)	Ø (MM)	TYPE	STEEL
50	2	54	E F	083131.2
80	3	80	E F	083133.2
90	3½	90	E F	083134.2
100	4	103.5	E F	083135.2
125	5	125	E F	083136.2
150	6	154	E F	083137.2
200	8	205.5	E F	083138.2

Galvanized steel large-sized Perrot connection



We produce water-transferring steel quick couplings of Perrot type, O-ring fitted.

DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL NBR
50	2	52.3	A B C D	083011
65	2½	64.3	A B C D	083012
80	3	77.4	A B C D	083013
90	3½	90.0	A B C D	083014
100	4	102.4	A B C D	083015
125	5	128.6	A B C D	083016
150	6	152.8	A B C D	083017

DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL
50	2	52.3	A B C D	083011.1
65	2½	64.3	A B C D	083012.1
80	3	77.4	A B C D	083013.1
90	3½	90.0	A B C D	083014.1
100	4	102.4	A B C D	083015.1
125	5	128.6	A B C D	083016.1
150	6	152.8	A B C D	083017.1

DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL NBR
50	2	52.3	A B C D	083011.2
65	2½	64.3	A B C D	083012.2
80	3	77.4	A B C D	083013.2
90	3½	90.0	A B C D	083014.2
100	4	102.4	A B C D	083015.2
125	5	128.6	A B C D	083016.2
150	6	152.8	A B C D	083017.2

Galvanized steel large-sized Miller connection



We produce water-transferring steel quick couplings of Miller type, O-ring fitted.

DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL NBR
50	2	52.3	A B C D	083201
65	2½	64.3	A B C D	083202
80	3	77.4	A B C D	083203
90	3½	90.0	A B C D	083204
100	4	102.4	A B C D	083205
125	5	128.6	A B C D	083206
150	6	152.8	A B C D	083207

DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL
50	2	52.3	A B C D	083201.1
65	2½	64.3	A B C D	083202.1
80	3	77.4	A B C D	083203.1
90	3½	90.0	A B C D	083204.1
100	4	102.4	A B C D	083205.1
125	5	128.6	A B C D	083206.1
150	6	152.8	A B C D	083207.1

DN (MM)	(INCH)	Ø (MM)	TYPE	STEEL NBR
50	2	52.3	A B C D	083201.2
65	2½	64.3	A B C D	083202.2
80	3	77.4	A B C D	083203.2
90	3½	90.0	A B C D	083204.2
100	4	102.4	A B C D	083205.2
125	5	128.6	A B C D	083206.2
150	6	152.8	A B C D	083207.2



ZINC PLATING

WATER COUPLING

KC SS304

WATER NPT FITTING

CRIMPING FERRULE

ALUMINUM SCROLLING

HEXAGON

CASTING SS316

BRASS FITTINGS

KC BRASS

LIGHT DUTY

ALU KING COMBINATION

GRAVITY CASTING

COPPER HOSE MENDER

ALUMINUM MENDER

HOSE MENDER

COPPER TUBING

G THREAD FITTING

KC CARBON STEEL

KING COMBINATION

HEAVY DUTY CLAMPING

KC BY DIN FLANGE

Steel, SS, aluminum & brass combination fitting, KC



We produced scrolled and casted KC nipples from tubing material in steel, brass and aluminum. Serration is done for all sizes.

DN (MM)	THRD (INCH)	Ø (MM)	STEEL		STEEL HEXAGON	
			BSPT	NPT	BSPT	NPT
13	1/2	13.5	041010.8	041010.9	041010.7	041010.76
19	3/4	20	041011.8	041011.9	041011.7	041011.76
25	1	26	041012.8	041012.9	041012.7	041012.76
32	1¼	32	041013.8	041013.9	041013.7	041013.76
38	1½	39	041014.8	041014.9	041014.7	041014.76
50	2	51.5	041015.8	041015.9	041015.7	041015.76
65	2½	64	041016.8	041016.9	041016.7	041016.76
75	3	77	041017.8	041017.9	041017.7	041017.76
100	4	102.5	041018.8	041018.9	041018.7	041018.76
130	5	128.0	041019.8	041019.9	041019.7	041019.76
150	6	153.4	041020.8	041020.9	041020.7	041020.76
200	8	204.8	041021.8	041021.9	041021.7	041021.76
250	10	256.0	041022.8	041022.9	-	-

DN (MM)	THRD (INCH)	Ø (MM)	AL	BR	304	316
			BSPT	BSPT	BSPT	BSPT
13	1/2	13.5	041010.4	041010.3	041010.1	041010.2
19	3/4	20	041011.4	041011.3	041011.1	041011.2
25	1	26	041012.4	041012.3	041012.1	041012.2
32	1¼	32	041013.4	041013.3	041013.1	041013.2
38	1½	39	041014.4	041014.3	041014.1	041014.2
50	2	51.5	041015.4	041015.3	041015.1	041015.2
65	2½	64	041016.4	041016.3	041016.1	041016.2
75	3	77	041017.4	041017.3	041017.1	041017.2
100	4	102.5	041018.4	041018.3	041018.1	041018.2

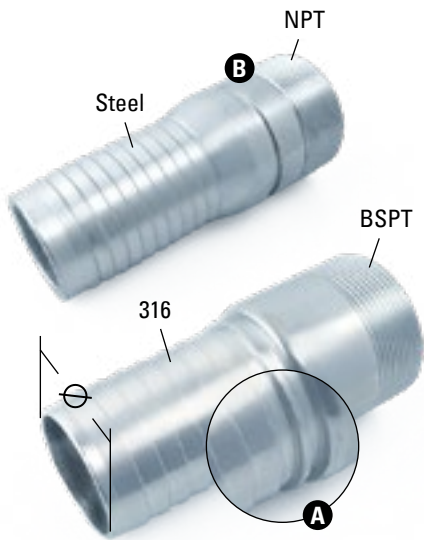
Steel & 316 KC for welding



We offer also BW connection KC fittings, in carbon steel and SS316, possible with oil or plating protection.

DN (MM)	THRD (INCH)	Ø (MM)	STEEL	316
			BW	BW
13	1/2	13.5	041010.5	041010.27
19	3/4	20	041011.5	041011.27
25	1	26	041012.5	041012.27
32	1¼	32	041013.5	041013.27
38	1½	39	041014.5	041014.27
50	2	51.5	041015.5	041015.27
65	2½	64	041016.5	041016.27
75	3	77	041017.5	041017.27
100	4	102.5	041018.5	041018.27

Steel combination nipple, with groove and collar



We produce grooved and collared KC fittings, for better crimping assembly.

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	STEEL BSPT
13	1/2	13.5	A B	041040
19	3/4	20	A B	041041
25	1	26	A B	041042
32	1¼	32	A B	041043
38	1½	39	A B	041044
50	2	51.5	A B	041045
65	2½	64	A B	041046
75	3	77	A B	041047
100	4	102.5	A B	041048

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	STEEL NPT
32	1¼	32	A B	041053
38	1½	39	A B	041054
50	2	51.5	A B	041055
65	2½	64	A B	041056
75	3	77	A B	041057
100	4	102.5	A B	041058
150	6	153.5	A B	041060

Steel & 316 flanged KC, EN1092-1



We offer KC fixed with DIN flange connection, possible with ANSI flanges.

DN (MM)	THRD (INCH)	Ø (MM)	STEEL EN1092-1	304 EN1092-1
13	1/2	13.5	028303	028353
19	3/4	20	028304	028354
25	1	26	028305	028355
32	1¼	32	028306	028356
38	1½	39	028307	028357
50	2	51.5	028308	028358
65	2½	64	028309	028359
75	3	77	028310	028360
100	4	102.5	028311	028361

Steel & 304 hose mender

We produce mender for hose joint made of steel and 304 tubing.



DN (MM)	THRD (INCH)	Ø (MM)	STEEL	304
13	1/2	13.5	042010.5	042010.5
19	3/4	20	042011.5	042011.5
25	1	26	042012.5	042012.5
32	1¼	32	042013.5	042013.5
38	1½	39	042014.5	042014.5
50	2	51.5	042015.5	042015.5
65	2½	64	042016.5	042016.5
75	3	77	042017.5	042017.5
100	4	102.5	042018.5	042018.5
130	5	128.0	042019.5	-
150	6	153.4	042020.5	-
200	8	204.8	042021.5	-
250	10	256.0	042022.5	-



NON-RETURN VERTICAL CHECK VALVES / FOOT VALVES

Spring loading non-return valves are automatic tools. The pressure of the fluid through the body holds the plunger in open position. It returns to closed position under spring force when depressurized. Reverse flow will firmly seat the plunger.

Non-return valves, commonly designed with spring-loaded force, are made to prevent reverse flow.

The valves function to open at downstream pressure exceeds that in the upper part. And they close when the pressure is equalized.

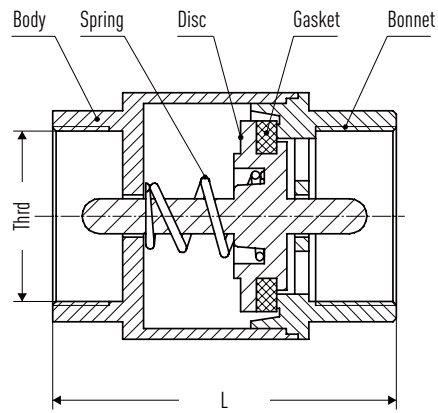
low pressure large volume strainer attachment for both water and sanitary use





Brass spring check non-return valve

Spring check non-return valves are simple, low cost but effective products providing back flow protection. As these products are fitted with a resilient seat they are suitable for use in systems for air, gas or low pressure applications where bubble tight closure is necessary.



Body	Brass, EN 12165 CW614N
Spring	Stainless steel
Disc	Plastic, or brass CW614N
Gasket	NBR, or EPDM
Bonnet	Brass, EN 12165 CW614N
Thread type	ISO 228 parallel
Working pressure	PN 10/12/16
Temperature	-10 ~ 100 °C
Markings	eg. Flow direction, size of inch, PN16 and trademark

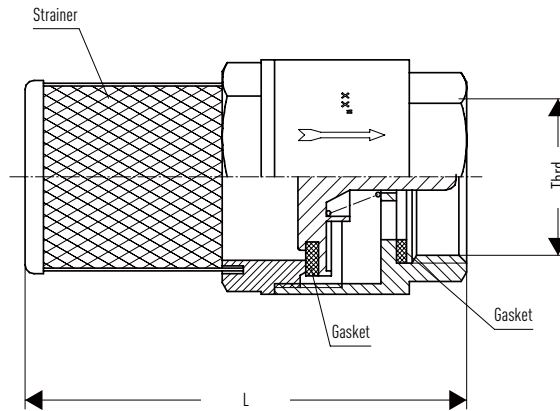
DN (MM)	THR	L (MM)	BRASS	
			PVC DISC	BR DISC
15	G1/2"×14	44	341031	341021
20	G3/4"×14	52	341032	341022
25	G1"×11	58	341033	341023
32	G1¼"×11	64	341034	341024
40	G1½"×11	69	341035	341025
50	G2"×11	79	341036	341026

Brass foot valve with strainer screen



Optional w/brass strainer screen.

Foot valve assemblies comprise a spring check non-return valve fitted with a strainer screen on the inlet side. These products are most often used in connection with drawing fluid from a well, tank or reservoir. The screen prevents soil, dirt and debris getting in the system, thus protecting the valves further along the pipe.

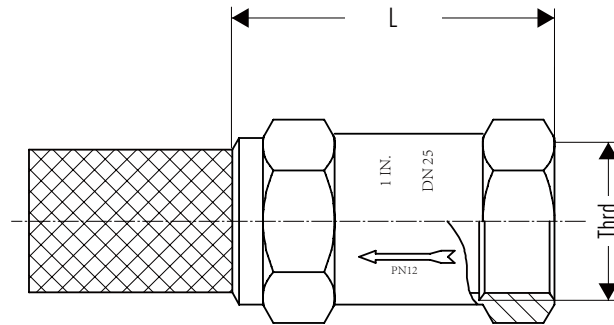


Body, bonnet	Brass, EN 12165 CW614N
Strainer screen	Stainless steel, or brass EN 12165 CW614N
Spring	Stainless steel
Disc	Plastic
Gasket	NBR, or EPDM
Thread type	BSPP, ISO 228 parallel thread
Working pressure	PN 16
Temperature	-10 ~ 100 °C
Markings	eg. Flow direction, size of inch, PN16 and trademark

DN (MM)	THRD	L (MM)	BRASS SS SCREEN
15	G1/2"×14	57	341081
20	G3/4"×14	75	341082
25	G1"×11	85	341083
32	G1¼"×11	110	341084
40	G1½"×11	123	341085
50	G2"×11	139	341086
65	G2½"×11	-	341087
80	G3"×11	-	341088
100	G4"×11	-	341089

Brass block foot valve by internal thread

Foot valve assemblies comprise a spring check non-return valve fitted with a strainer screen on the inlet side. These products are most often used in connection with drawing fluid from a well, tank or reservoir. The screen prevents soil, dirt and debris getting in the system, thus protecting the valves further along the pipe.



Body, bonnet	Brass, EN 12165 CW614N
Strainer screen	Plastic, stainless steel, or brass
Spring	Stainless steel
Disc	Plastic
Gasket	NBR, or EPDM
Thread type	BSPP, ISO 228 parallel thread
Working pressure	PN 10/12
Temperature	-10 ~ 100 °C
Markings	eg. Flow direction, size of inch, PN12 and trademark

DN (MM)	THRD	L (MM)	BRASS PVC SCREEN
15	G1/2"×14	-	341091
20	G3/4"×14	53	341092
25	G1"×11	60	341093

CAST IRON FOOT VALVE ASSEMBLY

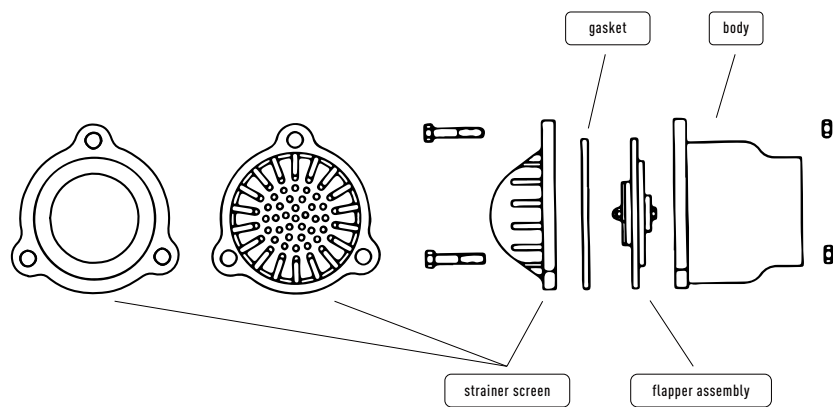


Cast iron NPT threaded foot valve, red coating

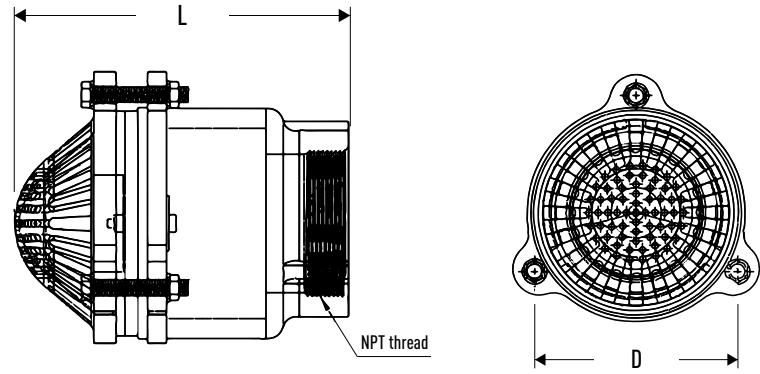


Complete foot valve assembly has female NPT threads to connect to a male NPT threaded connection for a tighter seal than straight threads.

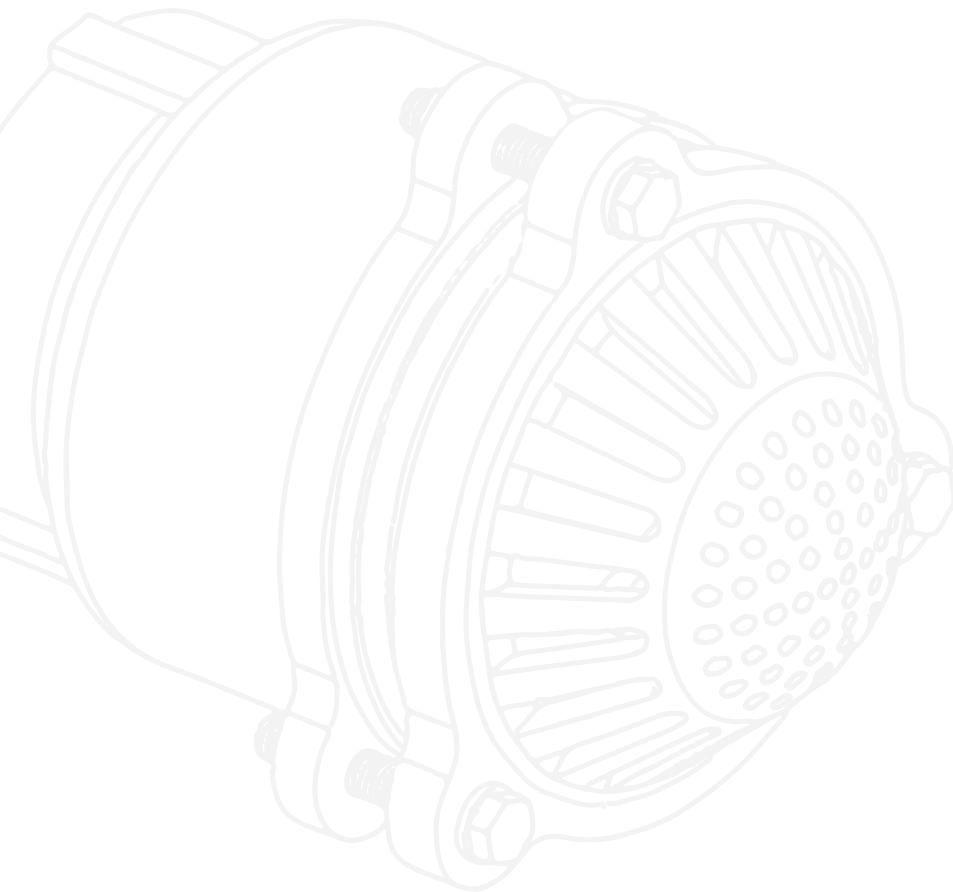
It is made of carbon steel for hardness and strength with a rubber valve in the flapper assembly to keep water in the valve when the pump stops pumping (priming the pump) and a strainer to keep debris from entering the system. It is painted to reduce corrosion. It must be installed in a vertical position. This foot valve is used to keep a pump primed in liquid flow applications.



Body	Cast iron red coating
Strainer screen	Cast iron red coating
Gasket	Leather material, NBR
Flapper assembly	Cast iron, carbon steel
Thread type	Female connection, NPT national pipe tapered
Working pressure	0.06 bar (75 psi) max.
Temperature	27 °C (80 °F) max.



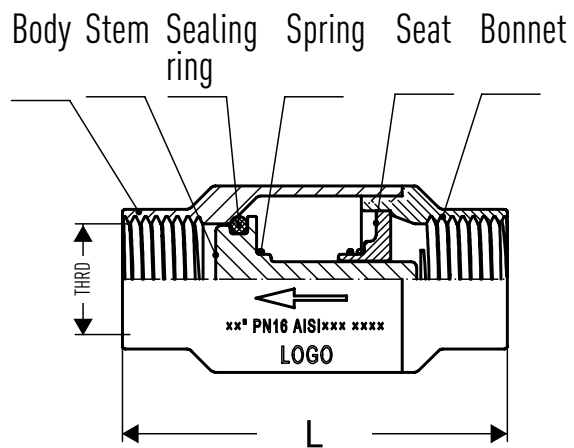
DN (MM)	THRD	D (MM)	L (MM)	STEEL COATING
15	1½" NPT	-	-	341202
20	2" NPT	-	-	341203
25	2½" NPT	-	-	341204
32	3" NPT	-	-	341205
40	4" NPT	-	-	341206
50	6" NPT	-	-	341208
65	8" NPT	-	-	341209





304 & 316 vertical lift check valve, 6-15 MM

Stainless steel vertical lift check valves are fitted for non-dangerous gas or liquids with pressure limits up to PN16. They can be applied for cleaning operation in sanitary industries like food and pharmaceutical plant working.



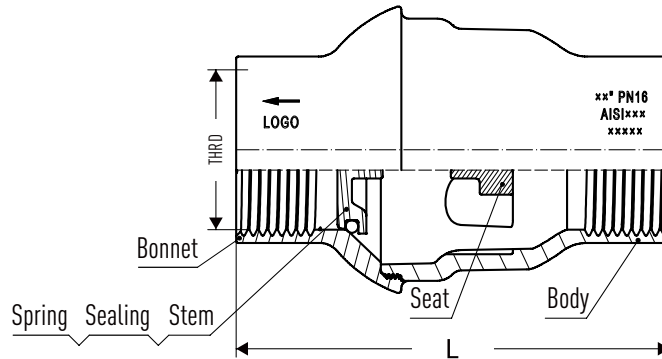
Body	Stainless steel AISI 304, optional 316
Stem	SS304, 316
Sealing rings	NBR, EPDM, FPM, Silicon
Spring	SS304, 316
Seat	SS304, 316
Bonnet	SS304, 316
Thread type	ISO 228 parallel
Working pressure	16 bar
Test pressure	Compressed air of 0.6 bar
Markings	eg. Flow direction, size, PN16 AISI 304 and trademark

DN (MM)	THRD	L (MM)	OPEN BAR	304 FPM	316 FPM
6	G1/4"×19	66	0.25	242100	242130
10	G3/8"×19	66	0.25	242101	242131
15	G1/2"×14	66	0.30	242102	242132

304 & 316 vertical lift check valve, 20-100 MM



Stainless steel vertical lift check valves are fitted for non-dangerous gas or liquids with pressure limits up to PN16. They can be applied for cleaning operation in sanitary industries like food and pharmaceutical plant working.

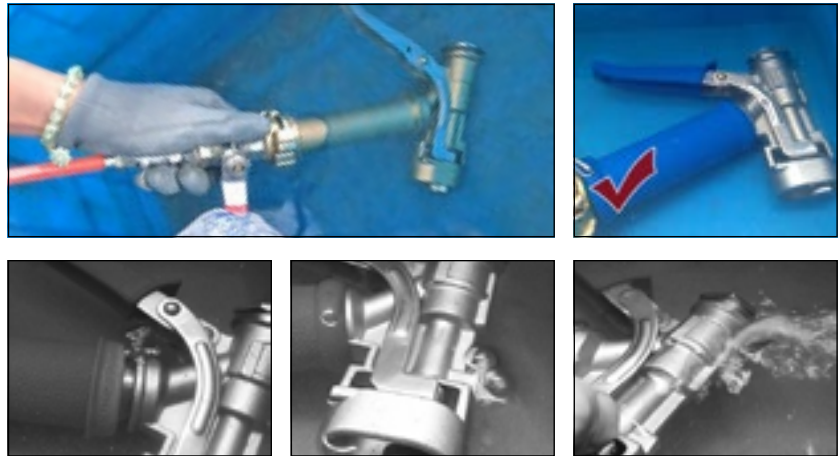
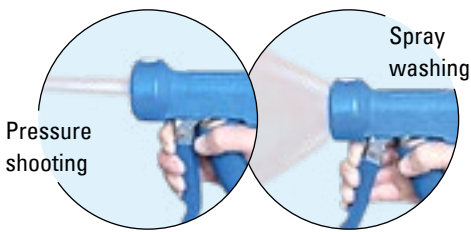


Body	Stainless steel AISI 304, optional 316
Stem	SS304, 316
Sealing rings	NBR, EPDM, FPM, Silicon
Spring	SS304, 316
Seat	SS304, 316
Bonnet	SS304, 316
Thread type	ISO 228 parallel
Working pressure	16 bar
Test pressure	Compressed air of 0.6 bar
Markings	eg. Flow direction, size, PN16 AISI 304 and trademark

DN (MM)	THRD	L (MM)	OPEN BAR	304 FPM	316 FPM
20	G3/4"×14	72.0	0.35	242103	242133
25	G1"×11	83.0	0.35	242104	242134
32	G1¼"×11	105.0	0.40	242105	242135
40	G1½"×11	115.0	0.50	242106	242136
50	G2"×11	125.0	0.50	242107	242137
65	G2½"×11	145.0	0.70	242108	242138
80	G3"×11	162.5	1.00	242109	242139
100	G4"×11	189.5	1.00	242110	242140

Brass low-pressure 65°C washdown trigger guns

We produce brass (original and chromeplated) spray guns. Suitable for low pressure (6 bar), warm water (up to 65°C), 1/2" BSPP internal inlet applied.



Rated Pressure	6 bar recommended, 10 bar maximum
Max. Flow	30 l/min 5 bar ~ 80 l/min 24 bar
Max. Temperature	65°C possible without additional tools, but personal precautions (heat insulating gloves, goggles and boots) still recommended
Inlet	1/2" BSPP
Insulated Cover	Silicone in blue, red, black and white
O-ring	FPM based sealant package
Marking	Arrow for outlet direction



INLET	TYPE	COVER	BR	BR, CHROMIUM
1/2	A B	● BLUE	590004	590003.1
1/2	A B	● RED	590004.01	-
1/2	A B	● BLACK	-	590003
1/2	A B	● WHITE	590001	-
1/2	A B	● BLUE	590005	-

304 medium-pressure 95°C washdown trigger guns

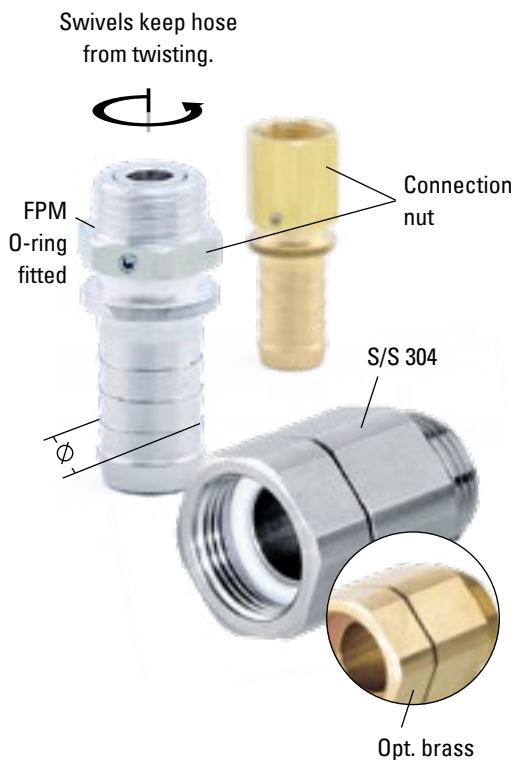


We produce spray guns made of SS 304. Suitable for medium pressure (16 bar), hot water (up to 95°C), 1/2" BSPP internal inlet applied.

Rated Pressure	16 bar recommended, 24 bar maximum
Max. Flow	30 l/min 5 bar ~ 80 l/min 24 bar
Max. Temperature	95°C possible without additional tools, but personal precautions (heat insulating gloves, goggles and boots) still recommended
Inlet	1/2" BSPP
Insulated Cover	Silicone in blue and red
O-ring	FPM based sealant package
Marking	Arrow for outlet direction

INLET	COVER	304
1/2	● BLUE	590002
1/2	● RED	590006

Brass & 304 low and medium pressure swivels, BSPP



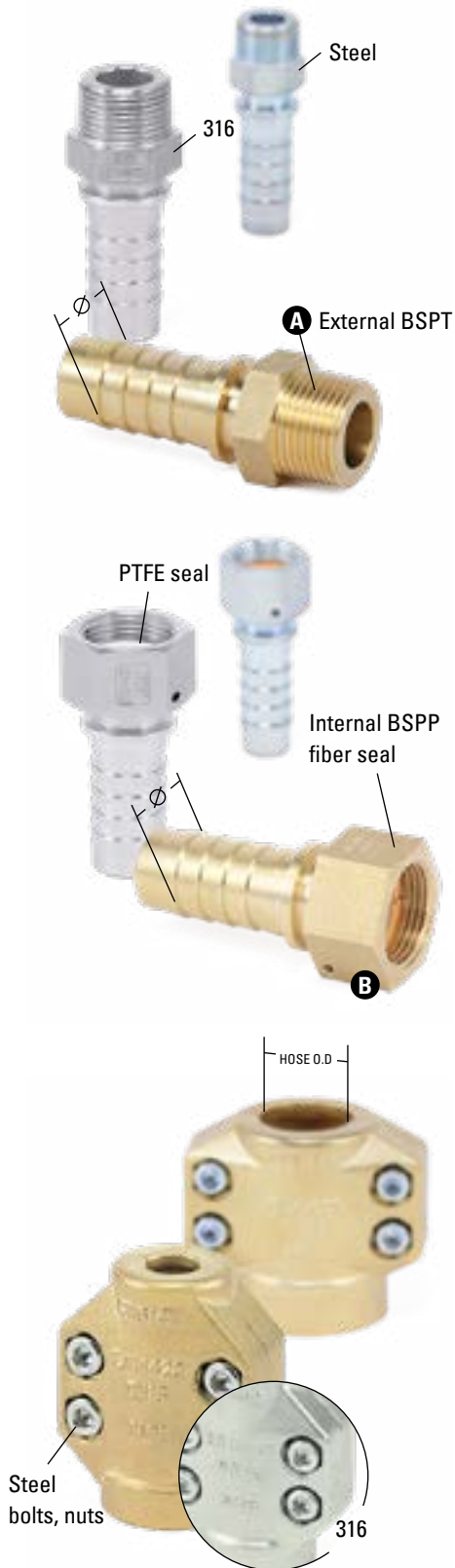
We offer BSPP swivels by hose tail or sealing thread for hose assembly to the trigger guns. The feature can keep the hose from twisting and easy to operate.

INSIDE (INCH)	Ø (MM)	NUT	BR FPM	304 FPM
1/2	13	BR	590015	590019
1/2	19	BR	590016	590020
1/2	13	316	-	590029
1/2	19	316	-	590030

OUTSIDE (INCH)	Ø (MM)	NUT	BR FPM	304 FPM
1/2	13	BR	590013	-
1/2	19	BR	590014	-
1/2	13	316	-	590050
1/2	19	316	-	590051

INSIDE (INCH)	OUTSIDE (INCH)	BR PTFE	304 PTFE
1/2	1/2	-	503900
1/2	1/2	-	-

Brass, steel & 304 steam hose couplings EN14423



We offer EN DIN standard steam hose couplings, fitted with high-temp applicable compressed fiber and PTFE seals, optional graphite ones.



DN (MM)	BSPT (INCH)	Ø (MM)	TYPE	BR	STEEL	304
15	1/2	15	A B	023221	023231	023211
20	3/4	21	A B	023222	023232	023212
25	1	27	A B	023223	023233	023213
32	1¼	34	A B	023224	023234	023214
40	1½	40.5	A B	023225	023235	023215
50	2	52.5	A B	023226	023236	023216

DN (MM)	BSPP (INCH)	Ø (MM)	TYPE	BR FIBER	STEEL FIBER	304 PTFE
15	1/2	15	A B	023321	023331	023311
20	3/4	21	A B	023322	023332	023312
25	1	27	A B	023323	023333	023313
32	1¼	34	A B	023324	023334	023314
40	1½	40.5	A B	023325	023335	023315
50	2	52.5	A B	023326	023336	023316

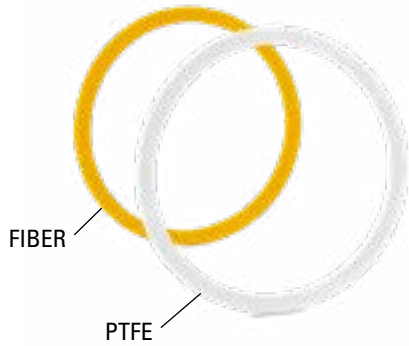
Brass & 316 bolted clamps EN14423

We offer EN14423 compliant bolted clamps for steam hose assemblies.

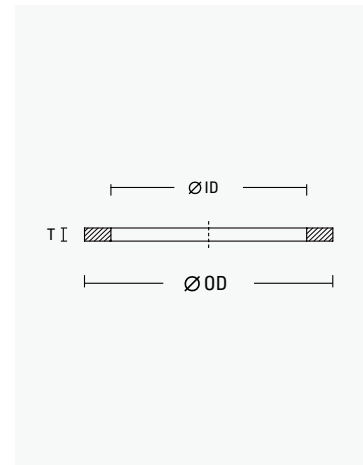
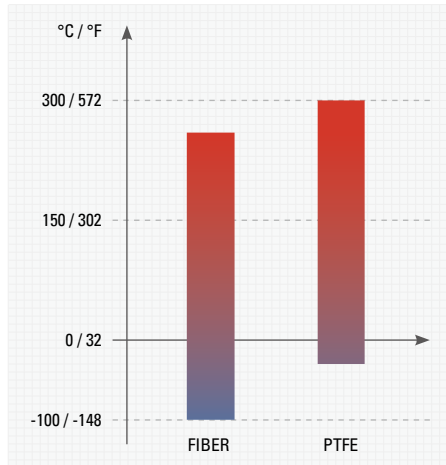
RANGE (MM)	BOLT (NUM)	HOSE O.D (MM)	BR	316
13×5	M6×20 (4)	13.5	-	023201.4
13×6	M6×20 (4)	13.5	023101	023201
19×5	M8×25 (4)	19.5	-	023202.4
19×7	M8×25 (4)	19.5	023102	023202
25×5	M8×25 (4)	25.5	-	023203.4
25×7.5	M8×25 (4)	25.5	023103	023203
32×8	M8×25 (4)	33.0	023104	023204
38×8	M10×40 (4)	39.0	023105	023205
50×8	M10×40 (4)	51.0	-	023206.4
50×9	M10×40 (4)	51.0	023106	023206

Thread seal, fitted in couplers EN14423

We fit in thread seal in EN14423 compliant steam hose couplers, securing sealing function with an outside threaded counterpart.



GASKET	SHORE A	TEMP (°C)	TEMP (°F)	COMPOUND
FIBER	6% (Compr.)	-100 / 260	-346 / 500	fiber graphite NBR bonds
PTFE	90 ± 5	-30 / 300	-22 / 572	poly tetrafluorethylene

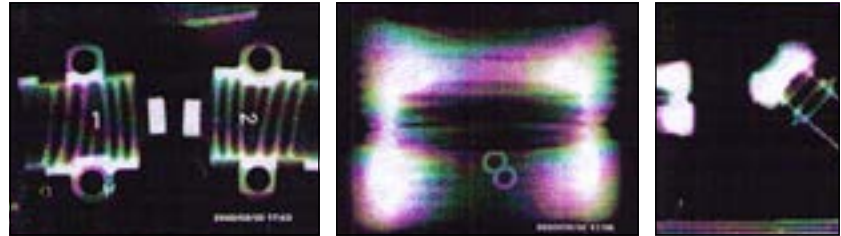
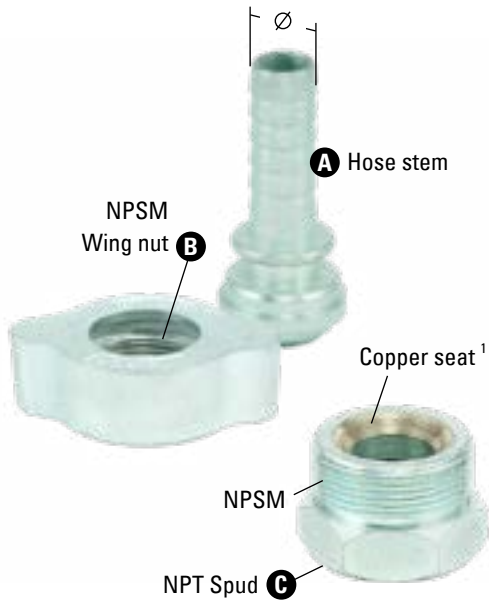


SIZE (INCH)	Ø ID (MM)	Ø OD (MM)	T (MM)	FIBER YELLOW	PTFE WHITE
050 (1/2)	13	20	2.0	023301	022121.2
075 (3/4)	18	26	2.0	023302	022122.2
100 (1)	23	33	2.0	023303	022123.2
125 (1¼)	33	42	2.0	023304	022124.2
150 (1½)	39	48	2.0	023305	022125.2
200 (2)	49	60	2.0	023306	022126.2

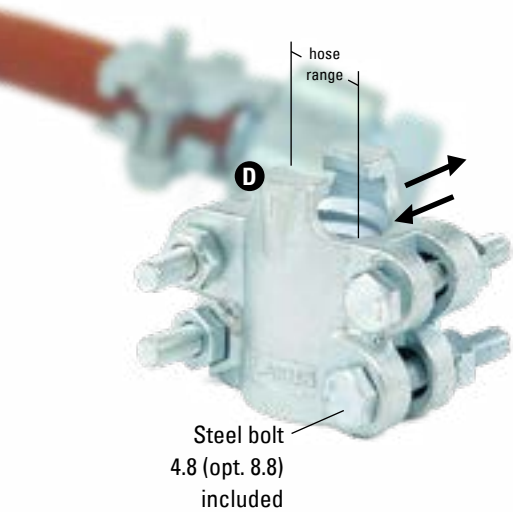
Steel ground joint couplings BOSS

We offer BOSS interchangeable steam hose coupling set, incl. a stem spud wing nut and an interlock clamp unit.

Type tests are done for mechanical intensity of casted pieces. Penetration films prove quality process that secures least possibility of accidental steam emission.



DN (MM)	NPT (INCH)	Ø (MM)	TYPE	STEEL
15	1/2	14.0	A B C D	081113.3
20	3/4	20.0	A B C D	081114.3
25	1	26.5	A B C D	081115.3
32	1¼	32.0	A B C D	081116.3
40	1½	38.0	A B C D	081117.3
50	2	53.5	A B C D	081118.3



SIZE (INCH)	RANGE (CODE)	RANGE (MM)	NUM. (BOLT 4.8)	TYPE	STEEL
3/8	CD	17.5-22.2	2	A B C D	082000
1/2	A4	25.4-30.2	2	A B C D	082001
3/4	A9	28.6-33.3	2	A B C D	082002
1	A10	46.6-38.1	2	A B C D	082003
1/2	B4	24.0-27.0	2	A B C D	082004
3/4	BU9S	29.5-32.5	2	A B C D	082006
3/4	BU9	30.0-33.0	2	A B C D	082007
3/4	B9	33.0-38.0	2	A B C D	082008
3/4	B10	38.0-43.0	2	A B C D	082009
1	BU14	39.0-43.5	4	A B C D	082012
1	B14	43.0-49.0	4	A B C D	082013
1	B15	-	4	A B C D	082014
1¼	BU19	45.5-53.0	4	A B C D	082018
1¼	B19	54.0-60.0	4	A B C D	082019
1½	BU24	55.5-60.0	4	A B C D	082024
1½	B24	60.0-65.0	4	A B C D	082025
2	BU29	63.5-71.0	4	A B C D	082030
2	B29	70.0-78.0	4	A B C D	082031
2½	BU34	78.5-87.5	4	A B C D	082035
3	B39	103.0-113.0	4	A B C D	082042
4	BU49	133.5-142.0	6	A B C D	082047

Steel coupler by NPT, BSPT BOSS



We produce steam applicable couplers by NPT and BSPT thread.

DN (MM)	NPT (INCH)	Ø (MM)	STEEL
15	1/2	14.0	081213
20	3/4	20.0	081214
25	1	26.5	081215
32	1¼	32.0	081216
40	1½	38.0	081217
50	2	53.5	081218

DN (MM)	BSPT (INCH)	Ø (MM)	STEEL
15	1/2	14.0	081213.5
20	3/4	20.0	081214.5
25	1	26.5	081215.5
32	1¼	32.0	081216.5
40	1½	38.0	081217.5
50	2	53.5	081218.5

Steel NPT/NPSM male spud BOSS



We produce steam applicable NPT/NPSM spud adapter of double and reduced sizes.

DN (MM)	NPT (INCH)	NPSM (INCH)	STEEL
40	1½	1½	081147
50	2	2	081148
80	3	3	081149

DN (MM)	NPT (INCH)	NPSM (INCH)	STEEL
15	1/2	1	081161
20	3/4	1½	081162
25	1	1½	081163
32	1¼	2	081164
40	1½	2	081165
50	2	2½	081166

Note 1, 2

Copper seat is done followed by electroplating, thus not visible on the end product.



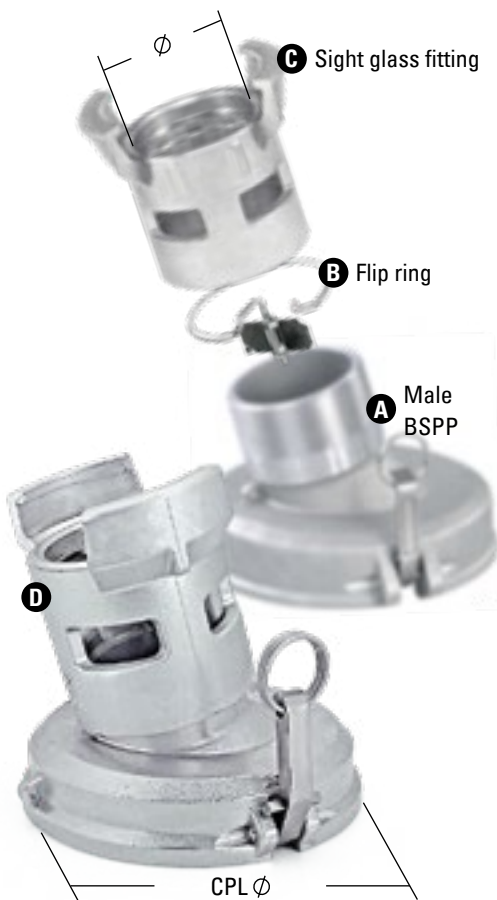
Thread failure of assemblies subjected to strained engagement is generally common when there are no labelled marks for the degrees or the amount of full closure. People count on the feeling of tension but that **can be misleading** esp. when wearing gloves or using some tools. That is more disturbing to deal with fluids like petroleum or chemicals between **APi couplers**. SME comes up with idea of thread set marks from safe combination for our thread-on symmetric fittings. That is perfect to tell visually when sealing is committed with no fail. Check with our sales for specified **threading techniques** for your conditions.

Check with our sales for specified **threading techniques** for your conditions. Check with our sales for specified **threading techniques** for your conditions. Check with our sales for specified **threading techniques** for your conditions.



Light alloyed outlets, thread BSPP and Guillemin add-on

We offer APi compliant truck couplers by thread BSPP, optional with a sight-glass Guillemin add-on with flip ring built in.



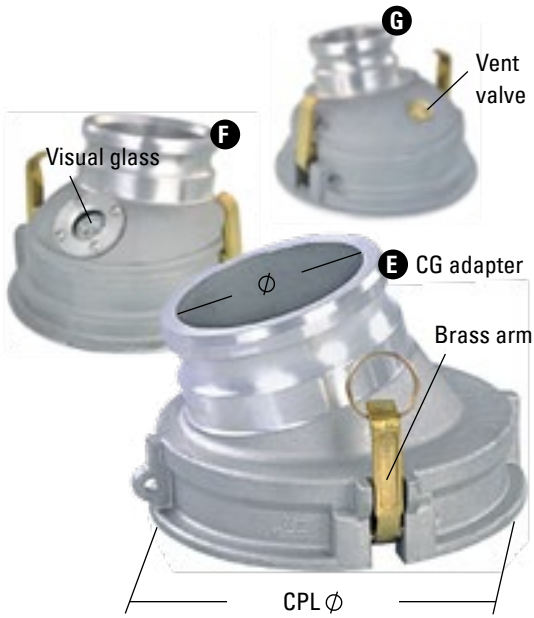
Standard	NF E 03-005, DIN 259, EN B315
Body material	Aluminum with T6 heat treatment
Arm package	SS 304 arms, pull rings and pins
Thread	Male BSPP
Washer	Black NBR O-ring, optional green FKM
Guillemin add-on	Aluminum A356+T6
Flip ring	Anti-rust SS 304
Sight glass	PC glass (100193.3), or PMMA reinforcement (100193.30)

CPL (MM)	BSPP (INCH)	TYPE	ALUM NBR
100	3	A B C D	100123
100	3	A B C D	100193

CPL (MM)	TYPE	304
80	A B C D	100193.4

CPL (MM)	Ø (MM)	TYPE	ALUM BSPP
80	80	A B C D	100193.1

Light alloyed outlets, cam adapter



We offer API compliant truck couplers by cam and groove adapter, and with inbuilt vent valve and sight glass. NBR sealing is fitted.

CPL (MM)	Ø (MM)	TYPE	ALUM NBR
100	80	E F G	100233
100	100	E F G	100234

CPL (MM)	Ø (MM)	TYPE	ALUM NBR
100	80	E F G	100243
100	100	E F G	100244

CPL (MM)	Ø (MM)	TYPE	ALUM NBR
100	80	E F G	100245

Light alloyed couplers, vapour recovery

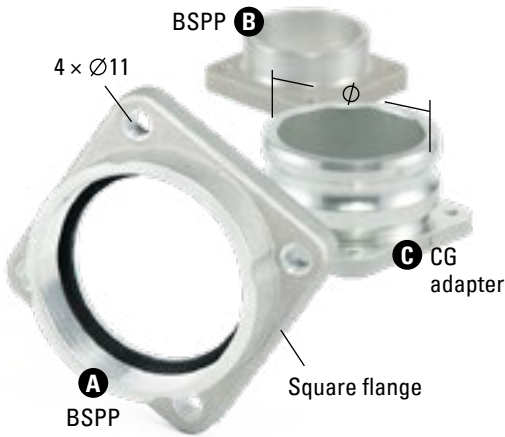


We offer truck adapters and hose couplers with vapour recovery feature, NBR fitted.

CPL (MM)	BSPP (INCH)	TYPE	ALUM NBR
80	3	H I	064547
100	3	H I	064558
100	4	H I	064548

CPL (MM)	TAIL Ø (MM)	TYPE	ALUM NBR
80	80	H I	063547
100	80	H I	063558
100	100	H I	063548

Light alloyed square flange by thread and adapter

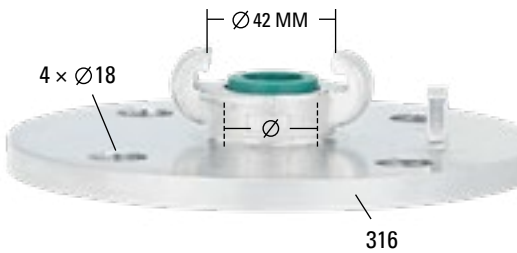


We offer square mounting flange pieces by multiple connections of aluminum alloy.

DN (MM)	BSPP (INCH)	TYPE	ALUM NBR
50	2	A B C	101414
80	3	A B C	101416
100	4	A B C	101417
150	6	A B C	101418

DN (MM)	BSPP (INCH)	TYPE	ALUM
50	2	A B C	101514
80	3	A B C	101516
100	4	A B C	101517
150	6	A B C	101518

DN (MM)	Ø (MM)	TYPE	ALUM
50	63.0	A B C	061815
80	91.5	A B C	061817
100	119.5	A B C	061818



316 EA flanged coupler

We weld 316 EA compliant couplers by flange connection.

DN	Ø (MM)	316 SS CHAIN
25	25.4	072575

Light alloyed wafer butterfly valve, single handle

We offer aluminum single-handled valve for bottom loading operation.



Body	Aluminum and coating
Shaft	SS 304
Disc	NBR, opt. EPDM
Handle	Steel, opt. D.I or aluminum
Coating	Blue
W.P.	16 bar

DN (MM)	Ø (MM)	WEIGHT (KG)	ALUM NBR
80		5.5	311080
100		6.0	311100

Aluminum Ball Valve

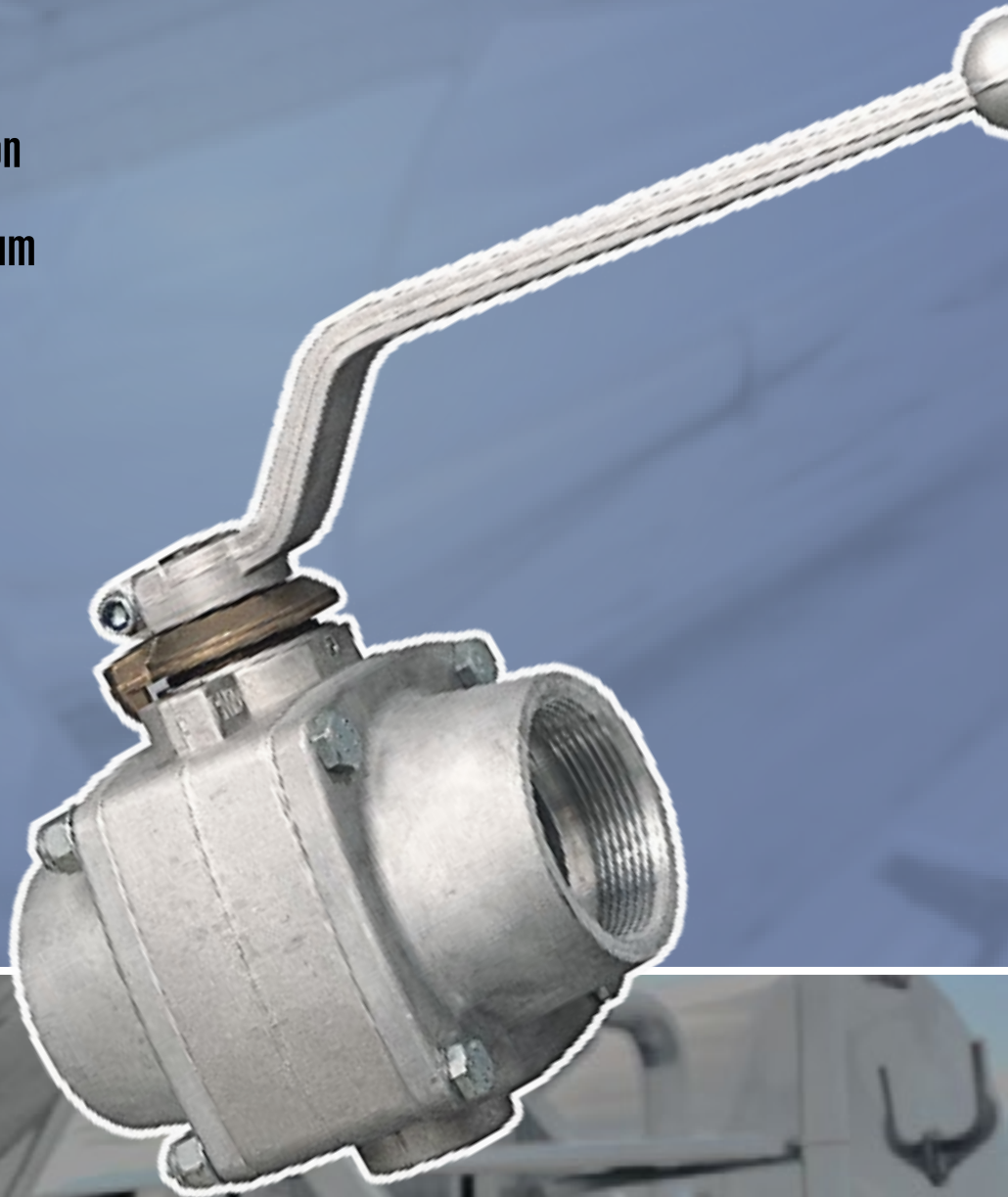
Compact construction

Lightweight aluminum

Anti-vibration

Full bore design

Stainless steel ball



DIN 2501

DIN 259

TW DIN 28460

2" 2½" 3" 4"

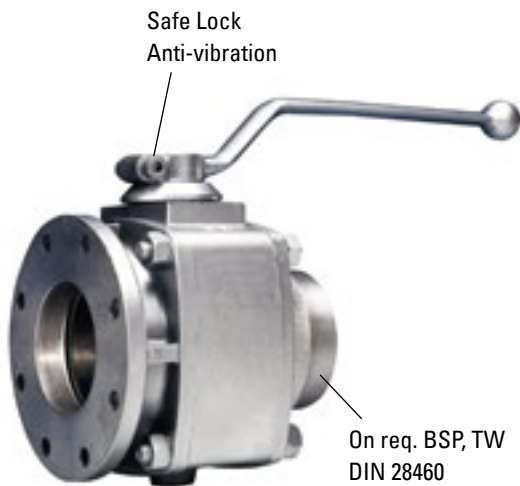
...



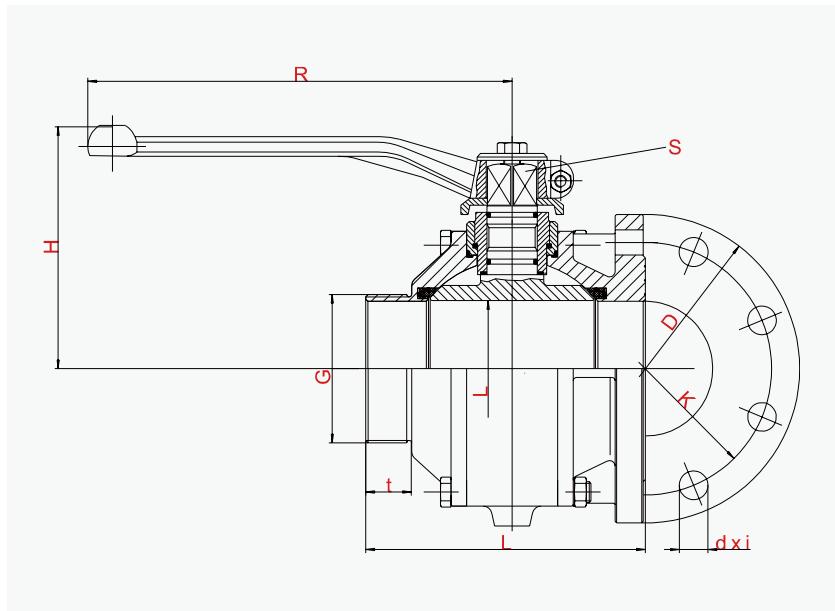


Aluminum Ball Valve

We offer compact and light-weighted ball valves for refuelling vehicles. Safe lock is made on the handle, ideal against vibration use.

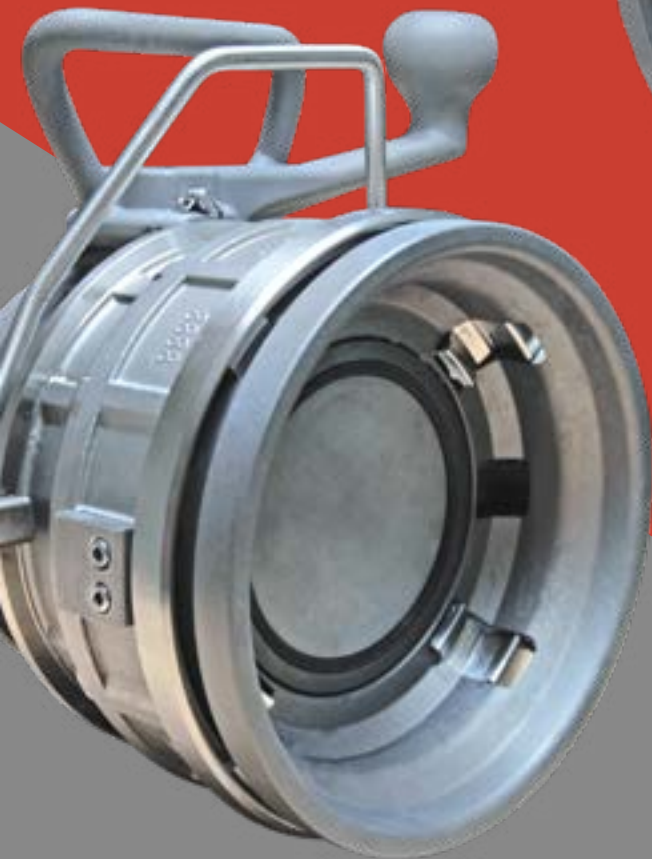


Body, flange	Aluminum
Handle	Aluminum, anti-vibration
Shaft, ball	Stainless steel 1.4301
Ball seat	Glass filled PTFE
Sealing	Shaft bearing: PTFE, O-ring: FPM
W.P.	16 bar, tested up to 25 bar



DN	LW	L	Ø D	Ø K	Ø DXI	T	H	R	G	SW	ALU
50	50	144	165	125	18×4	20	13	250	R2"	17	
65	64	163	185	145	18×4	20	14	270	R2½"	19	
80	78	180	200	160	18×8	24	15	270	R3"	19	
100	97	200	220	180	18×8	25	17	330	R4"	27	

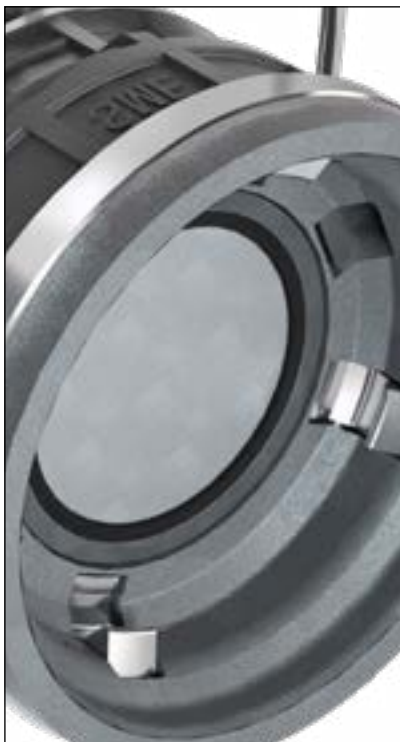
API Couplers BOTTOM-LOADING





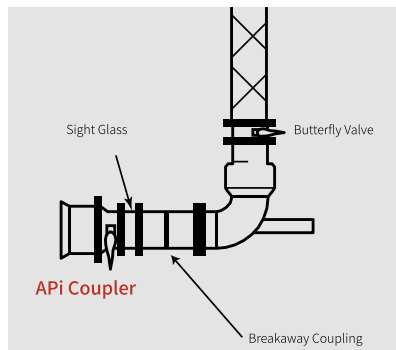
APi couplers for loading arm assembly

Standard and compatible



SME APi coupler for bottom loading and unloading is designed for tank vehicles for transport of petroleum and dangerous goods. It is designed, produced and tested in compliance with API RP1004 and BS EN 13083.

The coupler is better constructed with inbuilt pressure-loaded springs and integrated poppet valve, giving it less chance of damage from exterior engagement. On the other hand, that does not give it a harder time to replace all worn-out parts and seals, say loading spring, grab handle, poppet, wear bumper and nose seal or internal O-rings.



SME APi coupler goes in full compliance with API RP1004 and BS EN 13083 requirements.



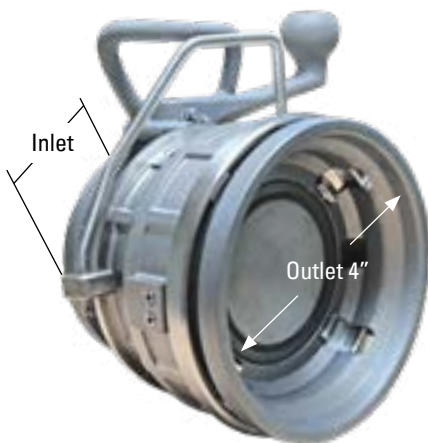
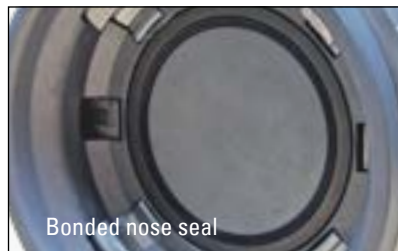
Ergonomic lever and grab handle assists to achieve smooth operation.



Minimising risk of accidental engagement

SME APi coupler incorporates dry-break scheme with addition safety interlocks, preventing it from accidental dispartment at risk.

The coupler applies poppet valve construction, minimizing pressure loss and keeping a high volume of flow rate. The structure is checked per standard with mutiple type tests including rated and burst test on the body, surge test on the sealing performance. Liquid loss is checked to see 5 cm³/avg. on the consecutive disconnects.



Inlet Size	DN100 (101.6 mm)
Max O.D	DN250 (254 mm) w/o interference to the adjacent
Rated W.P	75 Psi (5 Bar), 1.5 times the rated W.P without leakage
Surge Pressure	5 times the rated W.P without effect on integrity
Max Flow Rate	135 m ³ /hr
Pressure Loss	2-5 Psi (0.24 Bar) at 1.9~3.8 m ³ /min under ambient cond.
Liquid Loss	No exceed avg. 5 cm ³ on 3 consecutive disconnects
Weight	9.5 Kg

Standards	API RP1004, BS EN 13083
Body Material	Aluminum A356 hard-coated anodized, SS 316 (L)
Critical Materials	SS316 lever arm etc., EPDM/FPM seals
Connection	Flange TTMA with 8 holes
Sealing Nose	Roughness Ra 1.6
Markings	Norm, Trademark, Code, Production Serial, Rated W.P

OUTLET	INLET	ALU	316	316 L
DN100 4"	101.6 mm	100258	100259	100260

Manual and replacing kit

Our replacement kit provides an easy and efficient solution for replacing your API couplers. With operational and maintenance instructions, a manual for disassembling and reassembling, and all the necessary tools, our kit is a comprehensive and reliable solution.



We have included a manual for disassembling and reassembling the couplers. This manual provides step-by-step instructions that guide you through the entire process, making it easy to install the new couplers quickly and efficiently. The manual includes detailed diagrams and illustrations, ensuring that even those with minimal experience can perform the replacement with ease.





Dry Break

dmg couplings

SUBJECT TO SME'S DIRECTIVE SIZE RANGE 3/4 TO 4 IN BY FEMALE PARALLEL AND NPT THREAD TYPES STAINLESS STEEL BODY AND TRIMS AND VALVE CONSTRUCTION WITH FKM SEALING RINGS WORKING PRESSURE PN16-25 OPTIONAL CONNECTIONS THREAD EN AND ANSI FLANGES, POSSIBLE SIGHT-GLASS AND MORE VALVE DESIGNED AND PRODUCED BY SME INDUSTRIAL

HIGH FLOW
RATES LOW
PRESSURE
DROPS

HIGH ERGO-
NOMICS LOW
ACTUATING
FORCE

EASY CONNEC-
TION QUICK
DISCONNECTION

STAINLESS
STEEL HARD-
ENED MATERI-
ALS

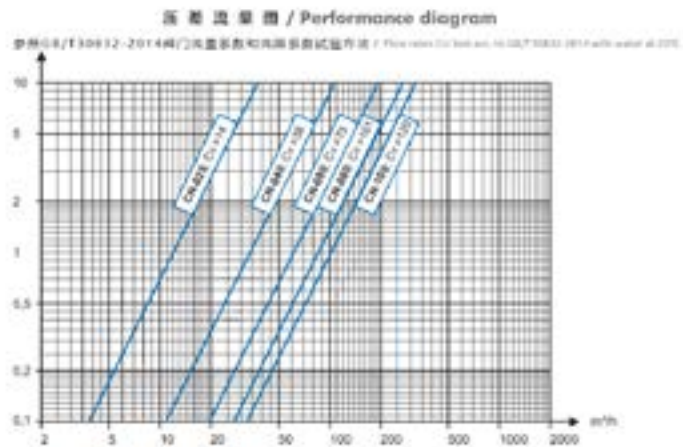
Dry break coupler, hose unit (DMG)



SME dry break coupler, form DMG, comes out and takes the priority of zero spillage between connection and disconnection. The structure is optimized for higher flow rates, retaining lower pressure drops. Easy connection and quick disconnection. Thanks to modular design we make it cost-efficient to maintain, least time loss for replacement work. The interlock and valving construction is closely developed making it possible to stay rigid in tough environments.

Standard	Subject to SME's directives
Size	DN20-100, ie. DN50 coupler by female G2" BSP thread
Body Material	Stainless steel AISI 316
Spare Parts	Stainless steel trims and valve construction
Sealing Material	FKM green sealing rings. NBR/Nitrile, EPDM more on req.
Working Pressure	PN16/232psi - PN25/363psi
Connection	BSP and NPT thread ISO7/1RC, EN and ANSI flanges, avail. sight adapter, ball valve or hose tail fittings
Dust Cap avail.	Aluminum, PE, Stainless steel
Suitable Media	Supply and loading operation for marine and offshore, oil and chemical, possible for sanitation with different material combinations.
Markings	Name tag or plate, model, bar coding, batch serial, W.P, standard, materials.

Pressure drop occurs due to the fact an integrated valve structure is made. The flow rates Cv test was made according to GB/T30832 with water at 20°C. See the performance diagram below.



SIZE	THRD	316	316
		BSPP	NPT
DN 20	3/4"	013209.31	013209.41
DN 25	1"	013210.1	013210.41
DN 50	2"	013203.2	-
DN 80	3"	013205.2	-
DN 100	4"	013206.2	-



Dry break adapter, tank unit (DMG)



Tank units are served as male adapter, and mounted on tank outlets. 316 construction with BSP and NPT threading, sealant package incl. FPM, FKM and EPDM O-rings.

Standard	Subject to SME's directives
Size	DN20-100, ie. DN50 adapter by female G2" BSP thread
Body Material	Stainless steel AISI 316
Spare Parts	Stainless steel trims and valve construction
Sealing Material	FKM green sealing rings. NBR/Nitrile, EPDM more on req.
Working Pressure	PN16/232psi - PN25/363psi
Connection	BSP and NPT thread, EN and ANSI flanges, avail. sight adapter, ball valve or hose tail fittings
Dust Cap avail.	Aluminum, PE, Stainless steel
Suitable Media	Supply and loading operation for marine and offshore, oil and chemical, possible for sanitation with different material combinations.
Markings	Name tag or plate, model, bar coding, batch serial, W.P, standard, materials.

SIZE	THRD	316	316
		BSPP	NPT
DN 20	3/4"	013209.32	013209.42
DN 25	1"	013210.2	013210.42
DN 50	2"	013203.1	-
DN 80	3"	013205.1	-
DN 100	4"	013206.1	-

Type test and certification

Our DMG dry break couplings are proved highly capable for both low and high pressurized transfer as type-tested and certified per both domestic GB/T 13927-2008 'Pressurized industrial valve construction' and in accordance with the requirements of Directive 2014/34/EU, Article 13, 1. (b) (ii), with approval to be marked Ex II 2G Ex H IIC T5 Gb.



Type Test Ref.	GB/T 13927-2008
Body Test	No visual leakage or structural failure under pressure 2.4MPa for lasting 180s.
Air Test	No visual leakage at either stage 0.1MPa, 0.2MPa, 0.3MPa, 0.4MPa, 0.5MPa or 0.6MPa.
High Pressure Test	No visual leakage under pressure 1.8MPa for lasting 30s.
Low Pressure Test	No visual leakage under pressure 0.6MPa for lasting 30s.

selectivity acc.
to STANAG
3756. size range
DN25-100 by
female G thread
1" 2" 2½" 3" 4"

S/S trims and
valve construc-
tion FKM green
sealing rings.

PN16-PN25.
connections
thread, EN and
ANSI flanges,
poss. sightglass,
valve..

designed &
produced by SME
Industrial. More
at [www.sme-coupling.com/
dtdrybreakcouplings](http://www.sme-coupling.com/dtdrybreakcouplings)



high flow rates
low pressure drops

high ergonomics
low actuating force

easy connection
quick disconnection

anodized aluminum
hardened material

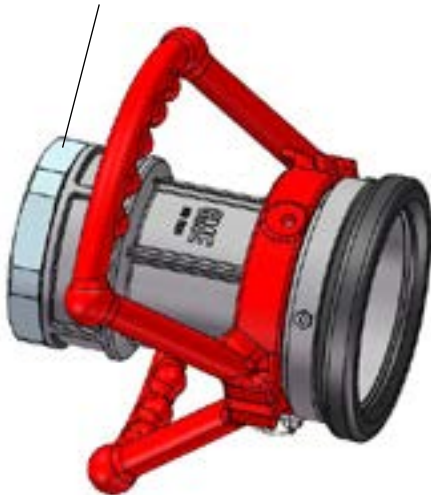
Dry Break



Dry break hose coupler (DTD), STANAG 3756

SME STANAG 3756 compliant dry break couplings (form DTD) incorporate a handle hose unit plus tank part. Aluminum construction, hard coating, with integration of valve and quick-disconnection, sealing done by FPM O-ring packet.

Internal thread type G, R, and NPT

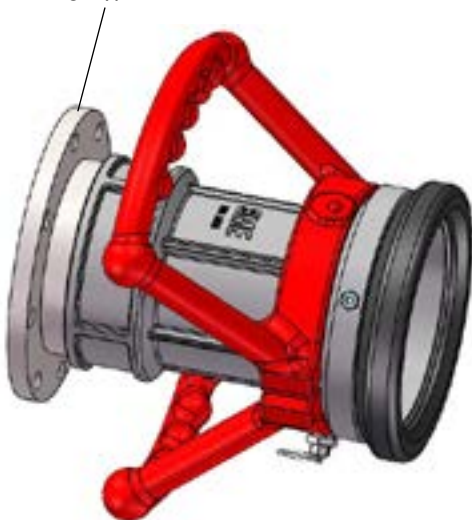


Standard	Subject to SME's directives
Size	DN20-100, ie. DN50 coupler by female G2" BSP thread
Body Material	Industrial graded aluminum, and AISI 316
Spare Parts	Stainless steel trims and valve construction
Sealing Material	FPM green sealing rings. NBR/Nitrile, EPDM more on req.
Working Pressure	PN16/232psi - PN25/363psi
Connection	BSP and NPT thread ISO7/1RC, EN and ANSI flanges, avail. sight adapter, ball valve or hose tail fittings
Dust Cap avail.	Aluminum, PE, Stainless steel
Suitable Media	Supply and loading operation for marine and offshore, oil and chemical, possible for sanitation with different material combinations.
Markings	Name tag or plate, model, bar coding, batch serial, W.P, standard, materials.

SIZE	THRD	PN	SS316, FPM		
			G	R	NPT
DN 50	2"	PN 25	013602.2	013154.61	013154.51
DN 80	3"	PN 25	013604.2	013156.61	013156.51
DN 100	4"	PN 25	013605.2	013157.61	013157.51

SIZE	THRD	PN	ALUMINUM, FPM		
			G	R	NPT
DN 50	2"	PN 25	013164.1	013164.61	013164.51
DN 80	3"	PN 16	013165.1	013165.61	013165.51
DN 100	4"	PN 16	013166.1	013166.61	013166.51

Flange type DIN, ASA, and T.T.M.A



SIZE	FLANGE	PN	SS316, FPM		
			EN	ASA	TTMA
50	2"	PN 16, 150 LB	013733.1	013743.1	013753.1
80	3"	PN 16, 150 LB	013735.1	013745.1	013755.1
100	4"	PN 16, 150 LB	013736.1	013746.1	013756.1

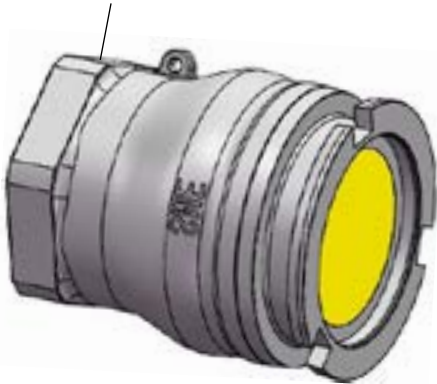
SIZE	FLANGE	PN	ALUMINUM, FPM	
			EN	ASA
50	2"	PN 16, 150 LB	013703.1	013713.1
80	3"	PN 16, 150 LB	013705.1	013715.1
100	4"	PN 16, 150 LB	013706.1	013716.1



Dry break tank adapter (DTD), STANAG 3756

SME STANAG 3756 compliant dry break couplings (form DTD) incorporate a handle hose unit plus tank part. Aluminum construction, hard coating, with integration of valve and quick-disconnection, sealing done by FPM O-ring packet.

Internal thread type G, R, and NPT



SIZE	THRD	PN	SS316, FPM		
			G	R	NPT
DN 50	2"	PN 25	013154.2	013154.62	013154.52
DN 80	3"	PN 25	013156.2	013156.62	013156.52
DN 100	4"	PN 25	013157.2	013157.62	013157.52

SIZE	THRD	PN	ALUMINUM, FPM		
			G	R	NPT
DN 50	2"	PN 25	013164.2	013164.62	013164.52
DN 80	3"	PN 16	013165.2	013165.62	013165.52
DN 100	4"	PN 16	013166.2	013166.62	013166.52

Flange type DIN, ASA, and T.T.M.A



SIZE	FLANGE	PN	SS316, FPM		
			EN	ASA	TTMA
50	2"	PN 16, 150 LB	013733.2	013743.2	013753.2
80	3"	PN 16, 150 LB	013735.2	013745.2	013755.2
100	4"	PN 16, 150 LB	013736.2	013746.2	013756.2

SIZE	FLANGE	PN	ALUMINUM, FPM	
			EN	ASA
50	2"	PN 16, 150 LB	013703.2	013713.2
80	3"	PN 16, 150 LB	013705.2	013715.2
100	4"	PN 16, 150 LB	013706.2	013716.2

Replacing kit (sealing rings)

Our replacement kit provides an easy and efficient solution for replacing DTD hose couplers and tank units. With operational and maintenance instructions, a manual for disassembling and reassembling, and all the necessary tools, our kit is a comprehensive and reliable solution.



We have included a manual for disassembling and reassembling the couplers. This manual provides step-by-step instructions that guide you through the entire process, making it easy to install the new couplers quickly and efficiently. The manual includes detailed diagrams and illustrations, ensuring that even those with minimal experience can perform the replacement with ease.



Breakaway coupling

Minimising the risk of liquid and gas spillage.

Loading arm and hose transfer applications.

Immediate reaction from only partial separation and minimal media spills.

Precise activation force tuning per site condition.

KLAW

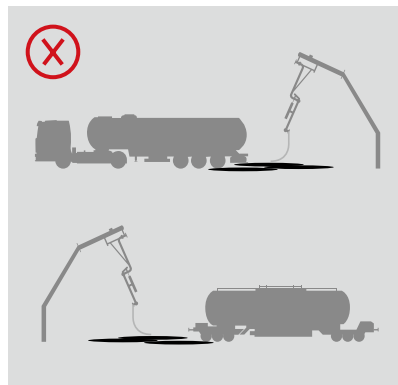


Minimising the risk of liquid and gas spillage

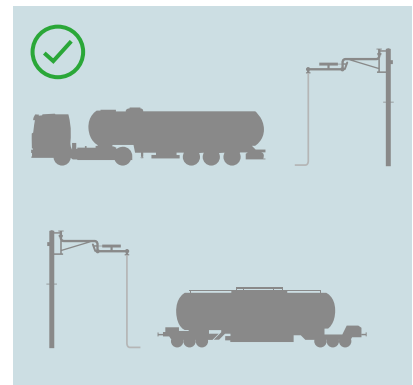


When fitting a KLaw Safety Breakaway Coupling you ensure that everything has been done to eliminate risk and mitigate legal action. The KLaw Safety Breakaway Coupling range offers a safe and identifiable parting point within the transfer system and will stop flow in an emergency such as when drive-off or other strain on the transfer system occurs.

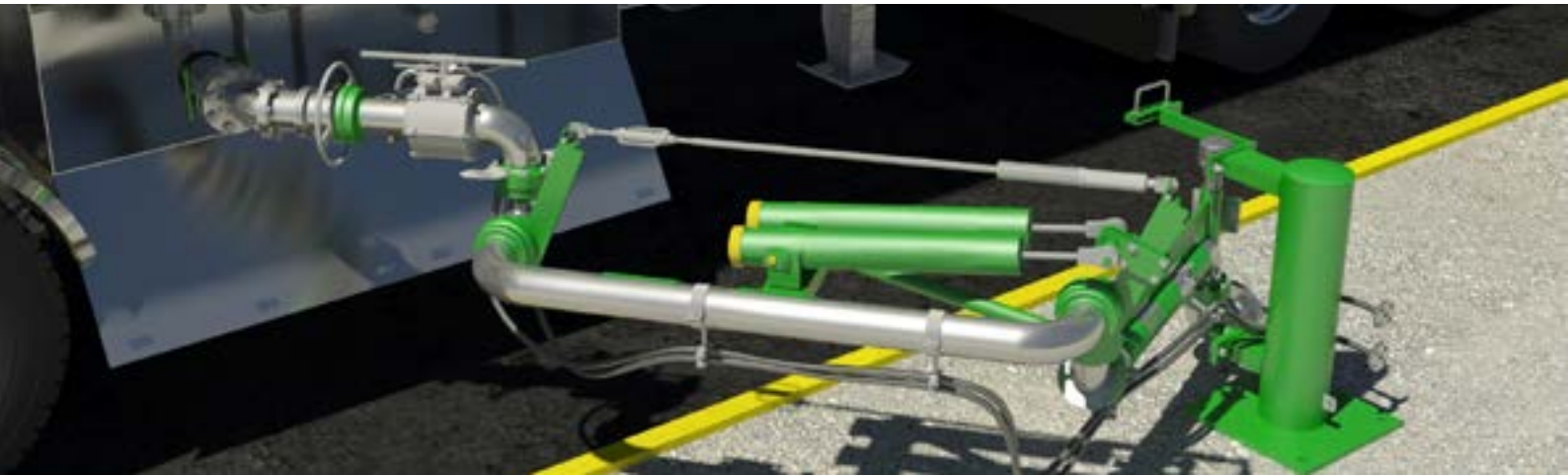
The experience and track-record of KLaw enables you to minimise risk to assets, personnel, the environment and reputation and protect against downtime and clean-up costs, litigation and injury.



The lack of a Breakaway System in the event of a drive-off can be catastrophic.

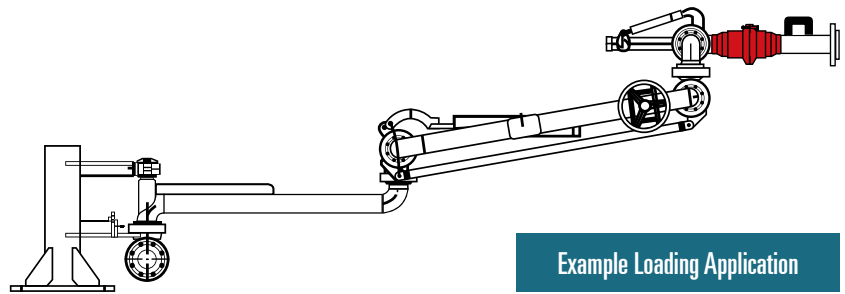


KLaw Breakaway Systems prevent spillage, damage to assets and injury to personnel.



Loading arm and hose transfer applications

KLAW breakaway couplings are typically used in road Tankers, railcars, loading bays and ship terminals, bunkering, refuelling and Loading Arm systems involved in the transfer of media. KLAW Breakaway Couplings are suitable for 99% of all liquids and gases. Typical media include:



Example Loading Application

- | | | |
|-------------------------------|--|--------------------------------------|
| <input type="radio"/> LPG | <input type="radio"/> Hydrochloric Acids | <input type="radio"/> Ammonia |
| <input type="radio"/> Ethanol | <input type="radio"/> Chlorine | <input type="radio"/> Sulphuric Acid |
| <input type="radio"/> Propane | <input type="radio"/> Diesel | <input type="radio"/> Jet Fuel |
| <input type="radio"/> Bitumen | <input type="radio"/> Fuel oil | |

Immediate reaction from only partial separation and minimal media spills



Flow Break 1"



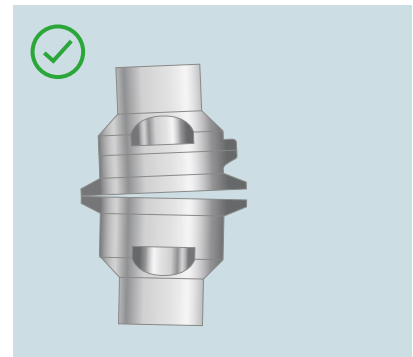
Flow Break 2"

The KLaw Flowbreak Breakaway Coupling minimises risk of media spills; this reduces the risk of damage to assets and injury to personnel in the event of a drive-off or extreme pressure flow.

Reset	Reset plugs deliver easy to reset procedure after service or activation.
Headloss	Minimum headloss.
Construction	Compact and lightweight.
Cable	ATEX cable fitted as standard.
Adapter	No need for separate end connectors; but still maintains multiple End Connection Flexibility.
Thread	Wrench spanner Flats for easy threaded end attachment.
Switch	Option to include proximity switch.
Flip-flap	KLaw Flip-Flap Valve and Breakstud technology.



Partial break occurs when a coupling only partially separates. A partial break event provides a situation where spillage is uncontrollable.



The valve mechanism within the KLaw range is designed to avoid 100% the risk and consequences of partial break.

FLOW BREAK

THE INDUSTRIAL BREAKAWAY COUPLING

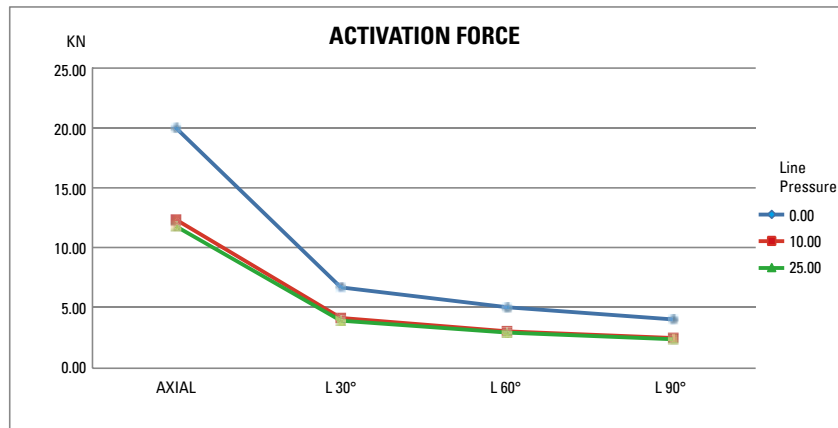
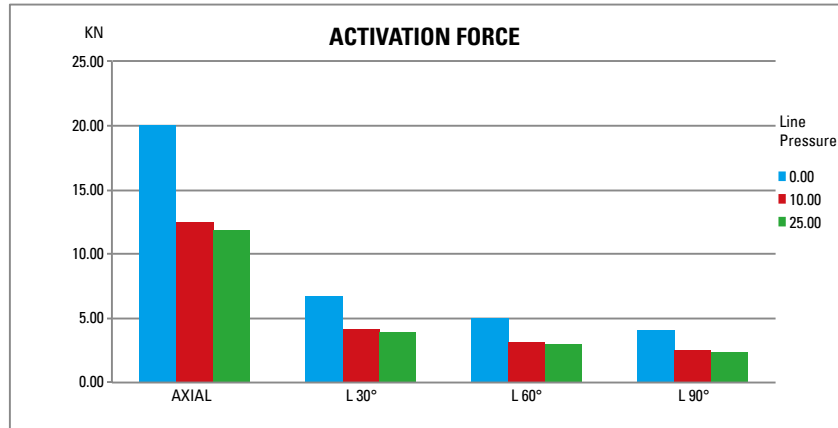


Precise activation force tuning per site condition

KLAW breakaway coupling functions to stop the flow at a rated force of activation, or at the desired angel of partial break. The rating is tuned according to the actual condition each time by our site engineers.

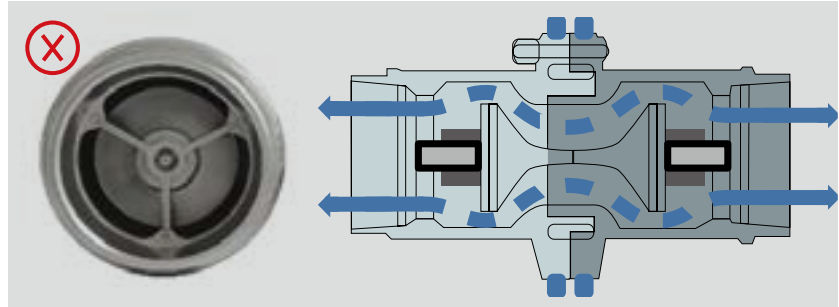
Below an example for the avtivation forces by different angels for a KLAW 4".

LINE PRESSURE BAR	AXIAL PULL KN	LATERAL PULL		
		30°	60°	90°
0.00	30.00	10.00	7.50	6.00
10.00	19.74	6.58	4.93	3.95
25.00	4.34	1.45	1.09	0.87

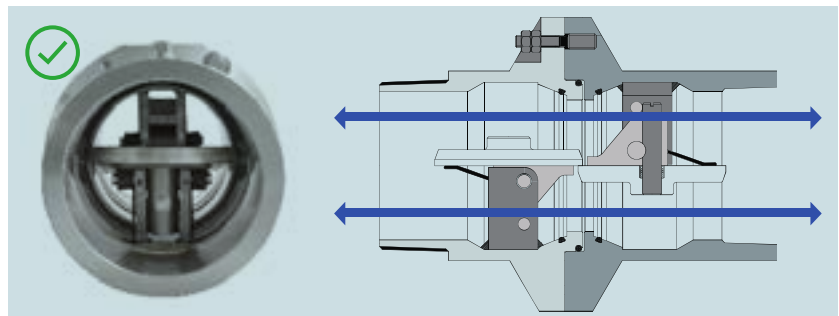


Higher flow rate, least pressure drop thanks to flip-flap valve construction

Why internal flip-flap valve design? Because in that way the discs rotate 90 degrees to go in line with the flow direction, giving least headloss or pressure drop during transfer. That increases the flow rate by 30% according to type tests data in laboratory.



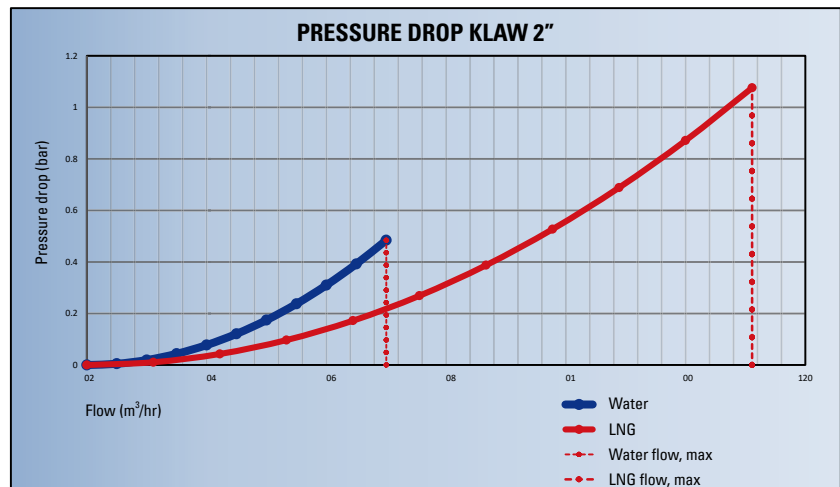
Counterpart lift-and-push construction gives a bolder water cut in open position, with heavy pressure loss and low rate of transfer. Chance of partial break increases.



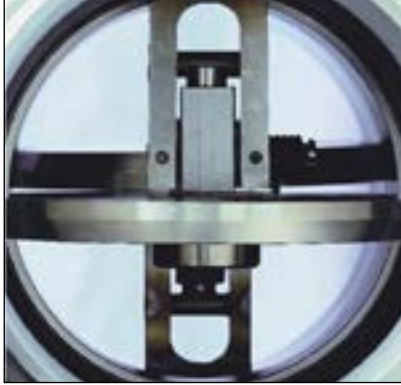
Klaw flip-flap design decreases the headloss, and enlarges rate of flow by 30%. Rigid construction makes it least possible for breaking partially unexpectedly.

Pressure drop vs. flowrate

Why internal flip-flap valve design? Because in that way the discs rotate 90 degrees to go in line with the flow direction, giving least headloss or pressure drop during transfer. That increases the flow rate by 30% according to type tests data in laboratory.

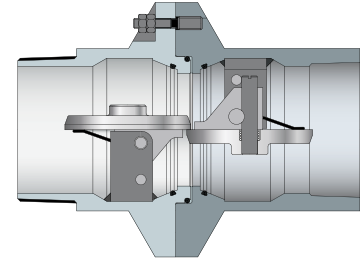


Minimum headloss from flip-flap valve construction during transfer

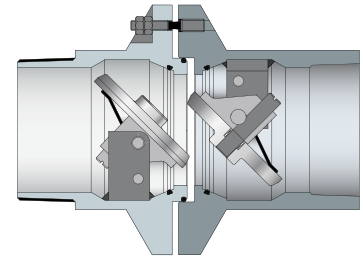


KLAW breakaway valve adopts flap technology with faster response speed and less pressure head loss, drawing on the principle of butterfly valve, in the connected state, the flow direction of the valve plate and the internal medium is consistent, the flow loss is minimized, and the transmission time of materials is effectively shortened up to 30% (laboratory type test data).

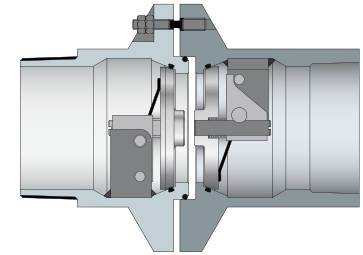
Internal flaps are positioned in line with the flow. These keep each other open, offering minimum headloss.



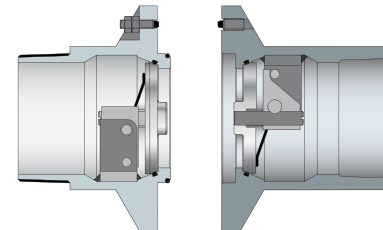
As the unit begins to separate, the discs flip through a controlled arc.



The discs snap onto their seats, providing 100% shut-off.



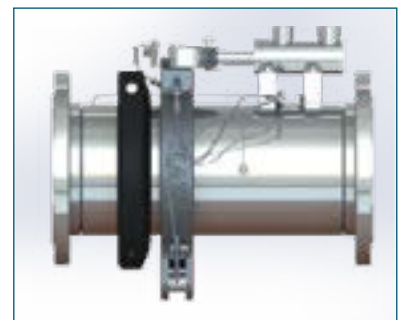
With the valves in the closed position the coupling now separates.



KLAW ERC various options of collar release mechanism

This provides the option for predetermined release of the Emergency Shutdown (ESD) system, rather than being reliant on forces applied through the transfer system.

- Cable release
- Spring retained
- Hydraulic release
- Dual release

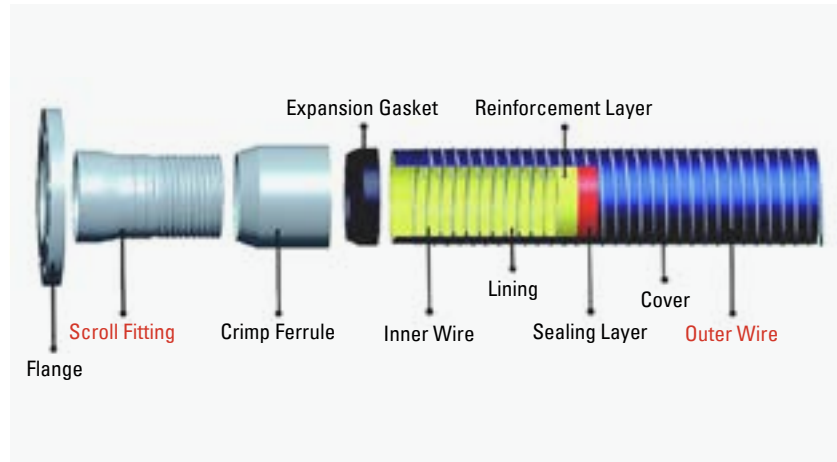




316, CS & Alu scroll tail by outside BSPP NPT thread



We offer thread fittings by helical tail (on page 63), also scroll tail perfect for composite hose assembly. Scrolling shape can be customized per wire construction.



DN (MM)	THRD (INCH)	Ø (MM)	316 BSPP	ALU BSPP	CS NPT
25	1	27.5	024461	024561	024420.1
40	1½	41.0	024463	024563	024422.1
50	2	54.0	024464	024564	024423.1
65	2½	67.5	024465	024565	024424.1
80	3	78.5	024466	024566	024425.1
100	4	103.0	024467	024567	024426.1
150	6	156.0	-	-	024428.1

316 scroll tail by stub end

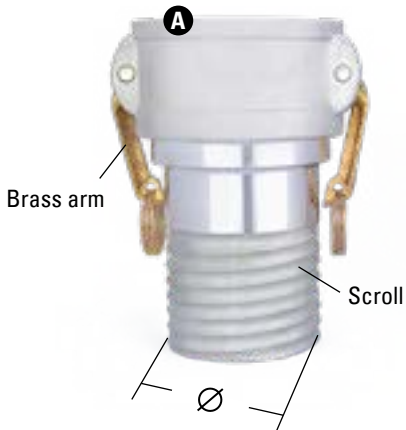


We offer scroll tail with flared stub end for easy flange connection and for piping adjustment. Scrolling shape can be customized per wire construction.

DN (MM)	THRD (INCH)	Ø (MM)	316
25	1	27.5	-
40	1½	41.0	-
50	2	54.0	024405
65	2½	67.5	-
80	3	78.5	024407
100	4	103.0	024408
150	6	156.0	-

Scroll tail is also available from a formed piping, working to reach desired thickness and length on request. Please contact our sales for confirmation.

316 scroll tail by quick connection, Camlock

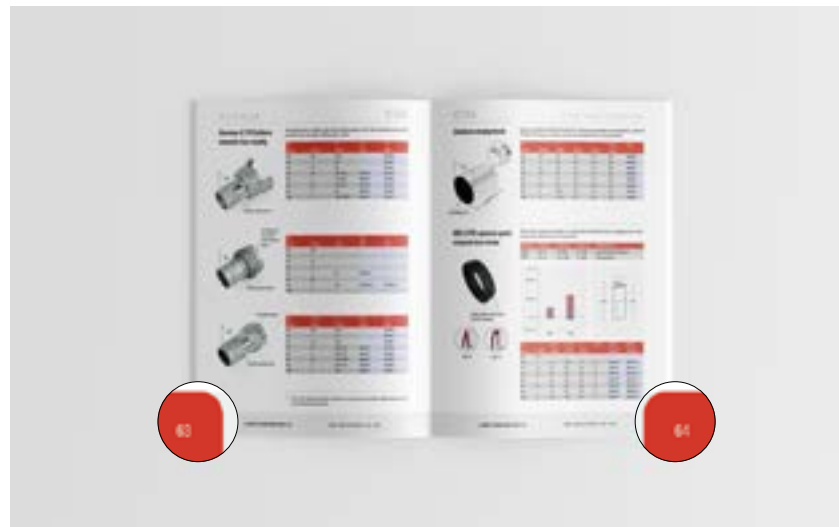


We offer scroll tail for quick disconnection, (Guillemin on page 63) and Camlock parts with both female coupler and male adapter.

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	CG FEMALE
25	1	27.5	A B	063702
40	1½	41.0	A B	063704
50	2	54.0	A B	063705
65	2½	67.5	A B	063706
80	3	78.5	A B	063707
100	4	103.0	A B	063708

DN (MM)	THRD (INCH)	Ø (MM)	TYPE	CG MALE
25	1	27.5	A B	065702
40	1½	41.0	A B	065704
50	2	54.0	A B	065705
65	2½	67.5	A B	065706
80	3	78.5	A B	065707
100	4	103.0	A B	065708

We have a comprehensive range of crimping ferrule, in case of composite hose assembly, refer to page 64 for the suitable sizes.



HOSE CLAMPS FORGED ALUMINUM

ISO 9001
QUALIFIED
FABRICATION
AND TRACE-
ABILITY



STEP 01 MOLD

A molding die is designed and produced for each half of clamps of each size.



STEP 02 FORGE

Using proper amount of billet cut from the qualified material to be stamped.



STEP 03 TRIM

Trim and work all dimensions to the desired parameters.



STEP 04 HEAT

Consolidate and enhance the material integrity by heating at very high temps.



STEP 05 MARK

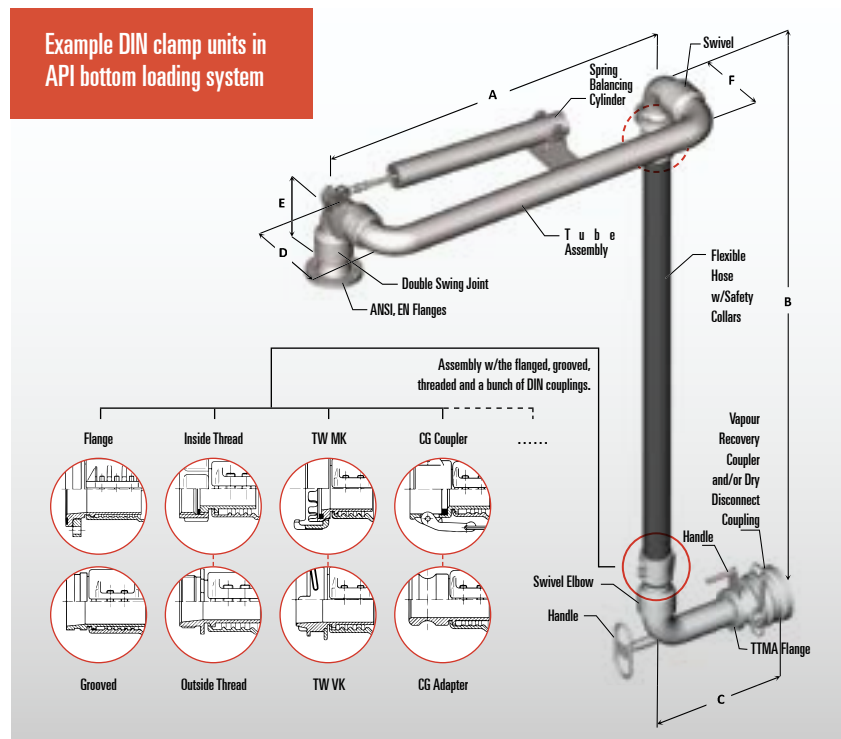
Mark the trademark and information with all necessity per PD and standard.

- ✓ EN Compatibility
- ✓ Reuseable
- ✓ Variety of Connections
- ✓ Easy Installation

Core clamped hose assembly for EN DIN standardization



SME safety clamps are two-piece clamp units secured with bolt sets or single pins in compliance with EN 14420-3. Bolt-fixed construction makes them reuseable when dismantled. A dozen of EN standard fittings go perfectly well with the clamps.



We continue the development, giving it a comprehensive range from DN 13 to DN 200, both aluminum and stainless steel.

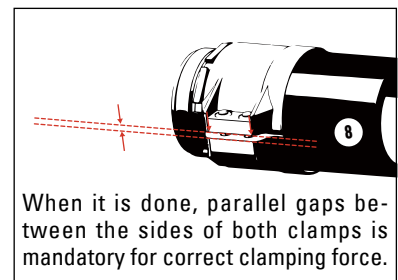
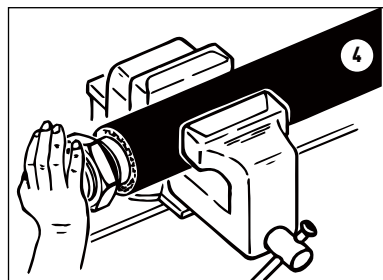
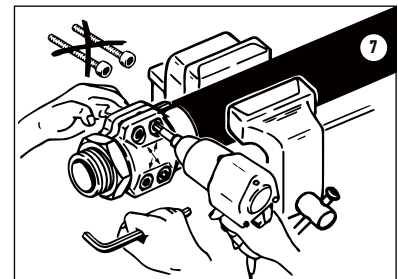
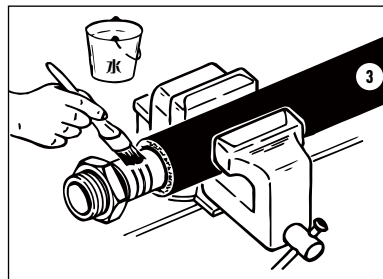
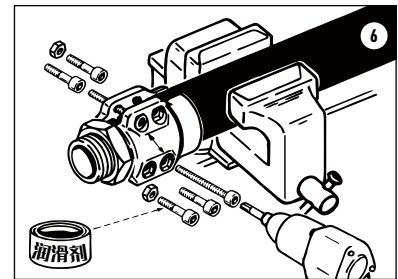
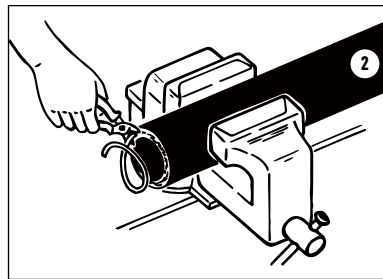
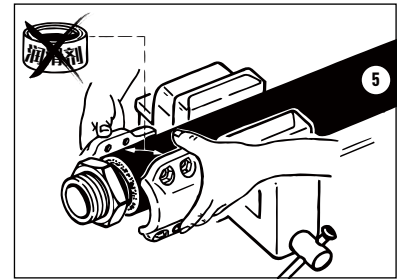
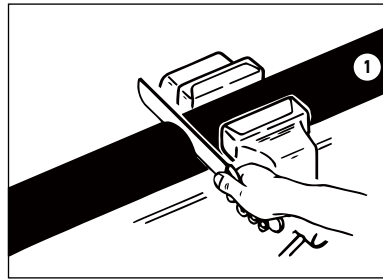
- Full standardization
- Reuseable fixing
- Air water gas, etc
- Ranging DN13-200
- Multi-connections
- Easy screw-on



Easy mounting with several screws only, no crimping necessary



To make a secured assembly, it is recommended to use long bolt in diagonal fashion, using an Allen wrench to complete the tightening in sequence. Lateral observation of the two halves edges, the gap should be of equal width.



When it is done, parallel gaps between the sides of both clamps is mandatory for correct clamping force.



Safety Clamps Reuseable EN 14420-3 (DIN 2817)

SME bolted safety clamp units go in compliance with EN 14420-3, being mounted with couplings containing collared hose tail per EN 14420-2. Bolts can be re-tightened, or reused after dismantled.

Standard	EN 14420-3 (replacing DIN 2817)
Size	DN 13 - DN 200 fitted with a variety of hose w/different thickness
Body Material	Aluminum forged, alum. casted for the large, opt. nickle plating, stainless steel and brass
Spare Parts	Bolts and nuts in carbon steel, stainless steel, opt. lock-nuts
Working Pressure	16-25 bar at ambient temperature 21°C
Connection	Mounted with hose couplings w/collared tail per EN 14420-2
Markings	SME EN14420-3 1.4408 **** SERIAL



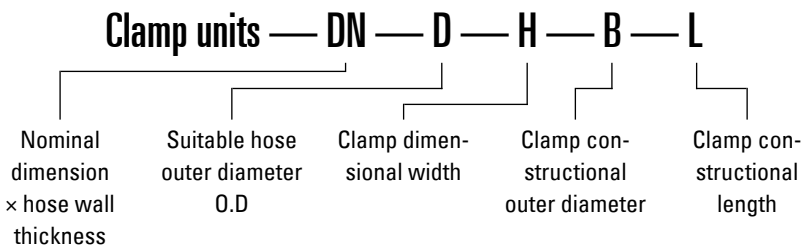
Mounted w/TWVKS hose adapter EN 14420-6.



Mounted w/Camlock adapter EN14420-7.



Designation for bolted clamps EN 14420-3 (DIN 2817) and EN 14423 (DIN 2828).

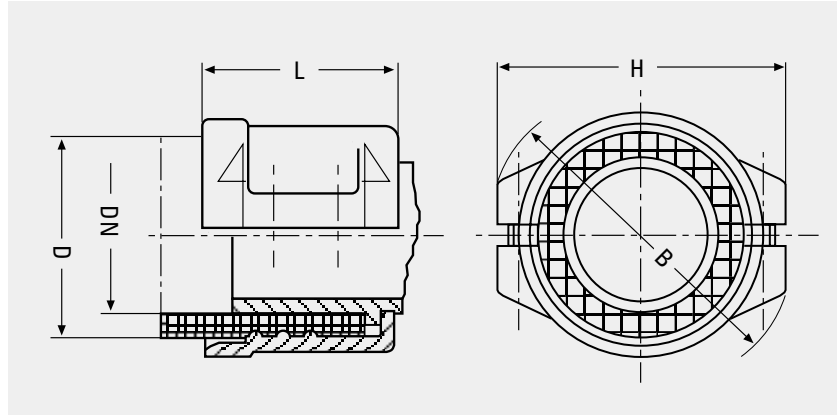


Packaging set incl. one half clamp plus bolts and nuts.



Safety Clamps Reuseable EN 14420-3 (DIN 2817)

SME bolted safety clamp units go in compliance with EN 14420-3, being mounted with couplings containing collared hose tail per EN 14420-2. Bolts can be re-tightened, or reused after dismantled.



Plating aluminum clamp units.

DN	Ø D	H	Ø B	L	BOLTS	AL	SS	BR
13×5	22-24	56	59	50	4×M6×20	023051	023021	-
19×6	30-33	65	68	50	4×M6×20	023052	023022	023152
25×5	34-37	70	73	50	4×M6×20	023053	-	-
25×6	36-39	73	75	50	4×M6×20	023054	023023	-
25×8	40-43	88	91	50	4×M6×20	023055	-	-
32×5	41-44	80	83	50	4×M6×20	023056	-	-
32×6	43-46	79	81	50	4×M6×20	023057	023025	-
32×8	47-50	83	85	50	4×M6×20	023058	-	-
38×5	47-51	83	85	50	4×M8×20	023059	-	-
38×6.5	50-53	83	85	50	4×M6×20	023060	023027	-
38×8	53-56	93	96	50	4×M8×20	023061	023028	-
38×10	57-60	90	92	50	4×M6×20	023062	-	-
40×7	53-56	85	87	50	4×M6×20	023063	-	-
40×10	58-61	92	94	50	4×M6×20	023064	-	023154
45×7	58-61	98	101	57	4×M8×25	023065	-	-
50×2	53-56			56	4×M8×25	023066	-	-
50×5	59-62			56	4×M8×25	023067	-	-
50×5.5	60-64			56	4×M8×25	023068	-	-
50×6	61-65			56	4×M8×25	023069	023033	-
50×8	63-67	103	106	56	4×M8×25	023070	023034	-
50×10	69-71	107	110	56	4×M8×25	023071	023035	-
63×6	74-77			74	4×M8×25	023073	023032	-
63×8	78-82	118	121	74	4×M8×25	023074	023036	-
65×7	78-82	118	121	74	4×M8×25	023074	023036	-
65×10	84-87	124	126	74	4×M8×25	023075	-	-
75×6	87-90			76	4×M8×25	023076	-	-
75×6.5	-	-	-	-	4×M8×25	-	023037	-
75×7.5	89-92	131	133	76	4×M8×25	023077	-	-
75×8	89-94	131	133	76	4×M8×25	023078	023038	-
75×10	94-97	138	140	76	4×M8×25	023079	-	-
75×12	99-102	141	142	77	4×M8×25	023081	-	-
80×8	94-97	138	140	76	4×M8×25	023080	023040	-

DN	Ø D	H	Ø B	L	BOLTS	AL	SS	BR
80×10	99-102	141	142	77	4×M8×25	023081	-	-
90×6.5	101-105			76	4×M8×25	023083	-	-
100×6.5	111-115			120	4×M8×25	023084	-	-
100×8	114-119	164	167	120	4×M10×40	023085	023039	-
100×10	118-122	167	169	120	4×M10×40	023086	-	-
100×12	122-126	174	176	120	4×M10×40	023087	-	-
100×14	126-130	180	182	120	4×M10×40	023088	-	-
100×16	130-134	185	187	120	4×M10×40	023089	-	-
125×10	143-148	190	192	147	6×M12×40	023091	-	-
150×10	167-173	231	235	180	6×M12×50	023093	-	-
150×13	174-180	233	237	182	6×M12×50	023094	-	-
200×12	222-229	288	291	240	8×M12×60	023096	-	-

Safety Clamps Pin-Fixing EN 14420-3 (DIN 2817)



Pin rivot not reusable when dismantled.



SME pin-fixing safety clamp units go in compliance with EN 14420-3, being mounted with couplings containing collared hose tail per EN 14420-2. The single pin is not retractable or replaced after mounted.

Standard	EN 14420-3 (replacing DIN 2817)
Size	DN 25 - DN 100 fitted with a variety of hose w/different thickness
Body Material	Aluminum forged, stainless steel
Spare Parts	Carbon steel or stainless steel fixing pins
Working Pressure	16-25 bar at ambient temperature 21°C
Connection	Mounted with hose couplings w/collared tail per EN 14420-2
Markings	SME EN14420-3 EN AW-6082 **** SERIAL

DN	Ø D	AL	SS316
25×6	36-39	023501	023521
32×6	43-46	023502	023522
38×6.5	50-53	023503	023523
50×8	63-67	023504	023524
63×8	78-82	023505	023525
75×8	89-94	023506	023526
100×8	114-119	023507	023527



SAFETY CLAMP

COMPLIANCE EN14420

POLYPROPYLENE

B.P 48 BAR

LIGHT-WEIGHTED

CHEM-RESISTANT

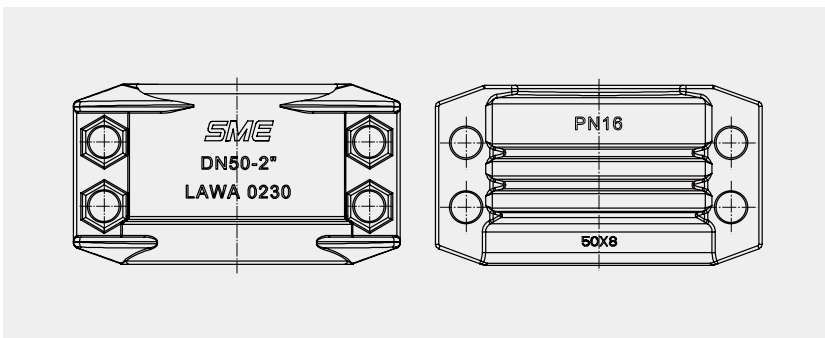
Safety Clamps Polypropylene EN 14420-3

SME polypropylene safety clamp units go in compliance with EN 14420-3, featuring light-weighted and robust in fiberglass compound, having greater resistance to aggressive chemicals.

Standard	EN 14420-3
Body Material	Polypropylene compound with reinforced fiberglass
Working Pressure	16 bar at ambient temp. 21°C, burst pressure 48 bar
Markings	SME LAWA DN **** SERIAL



Steel hexagon washer embedded gives it greater torque force, and enhances the threading stability.



DN	Ø D	H	Ø B	L	BOLTS	POLY	AL	SS
50x8	63-67	103	106	56	4xM8x25	023270	023070	023034

Choosing the right clamps for hoses requires more than dimensional measurements, it is in many cases based on technical parameters of the hoses applied like thickness, working values of pressure rating or temperature. And people are likely to choose clamps according to the habitual practice of its industry.



We have the inventory of hose clamps of bolt-and-nut system for re-useable purpose; or with worm-tightening for extra torque demands; and of crimping and swaging ferrules and sleeves that are always an option for many industries.

FERRULES & SLEEVES (Crimping and Swage)

Our ferrules are crimped onto the ends of hoses to provide a solid and reliable combined connection. Because of all-round closeness of hoses within the ferrule, they cannot come loose or slip one side out. With a crimping tool or large-sized crimping machines, ferrules are easy to apply, and help to ensure a good connection is made.

We have crimping ferrules with or without inside serration, the latter of which go mostly with crimping-typed hose shank couplings. For sizing the correct ferrule for hoses, please feel free to contact our sales for support.



GASOLINE FERRULE COUPLINGS

(Thread ferrule clamping for petrol dispensing)

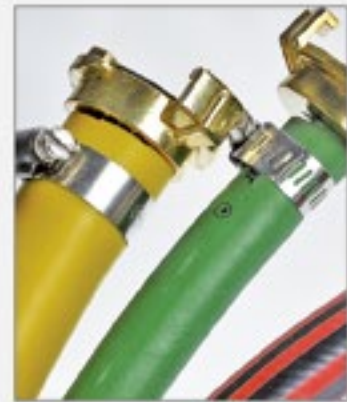
Gasoline couplings complying with EN 14424 are hose fittings with screwed ferrules for use with rubber and thermoplastic hoses carrying flammable and non-flammable liquids or gases.

The hose is fully inserted into the threaded ferrule. The hose can be accurately positioned using the inspection hole in the ferrule. The male or female hose shank is inserted into the hose and screwed into the ferrule. The inside of the hose shank consists of two opposing grooves. When male or female hose shanks are screwed into the ferrule, the assembly is tightened using a specially-designed petrol hose wrench, which slides over the two opposing grooves. When the petrol hose coupling is tightened, the threaded ferrule is pressed up to the hose.

SUPERIOR HOSE CLAMPS (One bolt screw tightening clamping)

Superior hose clamps are ideal for fitting couplings to hose where extra torque is required. They are simple to operate but highly effective.

Our superior clamps consist of two solid or hollow retaining screw bolts made from galvanized carbon steel or stainless steel.



SPIRAL HOSE CLAMPS

(Clockwise and un-clockwise clamping for composite hoses)

Spiral hose clamps, or tiger clamps are used on convoluted cover hoses. To determine which style clamp is needed for your hose look at the end of the hose; if the helix spirals in a clockwise direction away from you (along the hose), a right hand clamp is needed. If the helix spirals in a counter clockwise direction away from you, a left hand clamp is needed.

Our spiral clamps are therefore available with clockwise and un-clockwise types made of carbon steel.



BOLT SAFETY HOSE CLAMPS

(DIN standard reusable clamping DIN EN 14420-3)

The assembly of quick disconnect couplings and screw-type hose fittings DN 20 to DN 200 is widely used in hose connection for fuelling and pipeline hose assemblies in the field of supply and disposal.

Quick disconnection fittings incorporate DIN EN standard types as — TW tank truck couplings MK-hose and VK-hose to DIN EN 14420-6, Cam locking couplings to DIN EN 14420-7, Guillemin type of quick joint couplings to DIN EN 14420-8 and Storz form of couplings.

Screw-type hose fittings are referred to as LNC fittings per DIN EN 14420-5 by internal and external BSP pipe threads.

Combined with flange slip-ons, the whole hose coupling program features the hose tail suitability for coupling assembly with bolt-type safety clamps according to DIN EN 14420-3.



BOLT STEAM HOSE CLAMPS

(DIN standard reusable clamping for steam application EN 14423)

Ref. to details on page 158.





The clamps designed and made to be compatible with steam hose fittings according to BS EN 14423. Working pressure recommended 18 bar, for steam serve up to 210°C (410°F) or hot water 120°C (248°F). Materials of brass alloy and stainless steel available with plated steel screws as attachment.

SADDLE CLAMPS

(Two-bolt clamping with saddle fixer for air couplings EN DIN 20039 A & B)

Ref. to details on page 144.



Made of malleable iron and carbon steel, saddle clamps with and without gripping claws are designed and made in compliance with standard EN DIN 20039 A and EN DIN 20039 B. Wide coverage from 3/8" ~ 12". They are produced by casting technique. Anti rust yellowish and blue plating are commonly applied. Maximum working pressure recommended 16 bar.

INTERLOCKING HOSE CLAMPS

(Two / four -bolt clamping for "Boss" steam couplings)

Ref. to details on page 156.



Recommended for steam service up to 232°C (450°F), interlocking clamps are designed and produced to be compatible with "Boss" steam hose couplings and hose stems. They are produced by investment casting technique. Anti rust yellowish and blue plating are commonly applied. Maximum working pressure as recommended to 16 bar. Two sets of bolts and nuts graded 4.8 and 8.8 are attached for sizes 1/2" ~ 3/4". Four boltings applied for 1" ~ 4".

GEKA HOSE CLAMPS (Two-bolt clamping for Geka Plus couplings)

Ref. to details on page 165.

Made of material brass alloy, the Geka clamp is designed and produced to be compatible with Geka hose couplings and hose shanks. Maximum working pressure recommended up to 16 bar.

CLAW HOSE CLAMPS (Two-bolt clamping for Raccords Express)

Ref. to details on page 168.



Made of material carbon steel with nickel plating, the claw clamp is designed and produced exclusively for NF standard Express hose couplings. The claws takes a 90° bend gripping on the hose collar rings. Maximum working pressure to 16 bar.



Stainless Steel Ferrule Clamp 45°



Standard Materials

Body — Stainless steel AISI 304 of seamed and seamless steel bars on request

Protection & Package

Bulk package in carton

Size	Inch	Ød mm	ØD mm	Stainless Steel
DN 025	1	40	30	043 021.1
DN 025	1	42	27.5	043 021
DN 025	1	45	31	043 021.3
DN 025	1	45	33	043 021.2
DN 032	1¼	47	40	043 027.1
DN 032	1¼	50	36	043 027
DN 040	1½	54.5	43	043 022.4
DN 040	1½	57	41	043 022.3
DN 040	1½	57	43.5	043 022
DN 040	1½	57	45.5	043 022.1
DN 050	2	66	56	043 023.5
DN 050	2	67	55	043 023
DN 050	2	67	55	043 023.1
DN 050	2	67	55.6	043 023.4
DN 050	2	71	57.5	043 023.2
DN 050	2	72	55	043 023.6
DN 065	2½	81.5	68	043 024.1
DN 065	2½	82	68	043 024.8
DN 065	2½	83	68	043 024
DN 065	2½	85	68.3	043 024.2
DN 065	2½	85	71	043 024.3
DN 080	3	94.5	81	☞
DN 080	3	96	77	☞
DN 080	3	96.5	83.5	☞
DN 080	3	98	83	☞
DN 080	3	98	84	☞
DN 080	3	98.4	83.3	043 025.1
DN 080	3	98.5	83.5	043 025
DN 100	4	118.3	118.7	☞
DN 100	4	119	105.5	☞
DN 100	4	120	107	043 026
DN 100	4	122.5	107	043 026.3
DN 100	4	122.5	113	043 026.2
DN 100	4	123	107	043 026.1
DN 100	4	124	106	☞
DN 100	4	124	107	☞
DN 100	4	126	107	☞
DN 100	4	127	107	043 026.4
DN 100	4	127	111	☞
DN 150	6	186	162	☞
DN 200	8	239.6	213	☞

Aluminum Alloy Ferrule Clamp 45°



Standard Materials

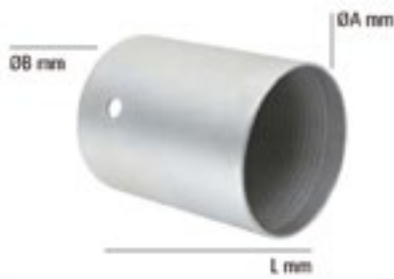
Body — Aluminum alloy

Protection & Package

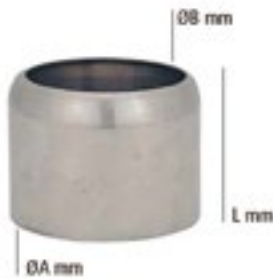
Bulk package in carton

Size	Inch	Ød mm	ØD mm	Aluminum Alloy
DN 025	1	28	21	043 050.3
DN 025	1	31	27	043 050.2
DN 025	1	37	33	043 050.4
DN 025	1	40	27.5	043 051
DN 025	1	40	30	043 051.1
DN 025	1	41	27	043 051.3
DN 025	1	42	27.5	☞
DN 025	1	45	31	☞
DN 032	1¼	47	36.0	043 057
DN 032	1¼	47.5	40	☞
DN 032	1¼	50	36.2	☞
DN 040	1½	54.5	43	043 052.2
DN 040	1½	56	41	043 052.1
DN 040	1½	57	43.5	043 052
DN 040	1½	57	41	043 052.3
DN 050	2	66.5	55.6	☞
DN 050	2	67	55	☞
DN 050	2	67	55	043 053.1
DN 050	2	67	55	043 053.3
DN 050	2	67	59	043 053.2
DN 050	2	70	55	043 054
DN 050	2	72	55	043 053
DN 065	2½	81.5	68	☞
DN 065	2½	82	68	043 054.2
DN 065	2½	83	68	☞
DN 065	2½	84	68	☞
DN 065	2½	85	68.3	043 054.3
DN 065	2½	86	71	☞
DN 065	2½	89	72	043 054.8
DN 080	3	94.5	81	☞
DN 080	3	96	91	043 055.6
DN 080	3	98	83	☞
DN 080	3	98	84	☞
DN 080	3	98.5	83.5	043 055
DN 080	3	102	91	043 055.8
DN 080	3	104	91	043 055.1
DN 080	3	101.5	86	043 055.2
DN 080	3	102	87	043 055.7
DN 100	4	122.5	107	043 056
DN 100	4	123	105.5	☞
DN 100	4	123	107	043 056.1
DN 100	4	123	107	☞
DN 100	4	123	107.2	☞
DN 100	4	124	106	☞
DN 100	4	124	111	043 056.8
DN 100	4	126	107	043 056.2
DN 100	4	126.5	111	043 056.4
DN 100	4	132	115	043 056.3

Aluminium Ferrules with Drilling Holes



Carbon Steel Ferrules



Stainless Steel Crimping Sleeves



Crimping Ferrules

Crimping Ferrule 45° Closure, with 2 Drilling Holes

Standard Materials

Standard aluminum alloy, seamless piping

Size mm	Inch	ØA mm	ØB mm	L mm	Aluminum Alloys
25	1	44	34	54	☑
40	1 ^{1/2}	57	43	57	☑
50	2	69	57	70	☑
65	2 ^{1/2}	73	74	90	☑
80	3	95.5	84	91	☑
100	4	123	111.5	107	☑

Crimping Ferrules

Crimping Ferrule 45° Closure

Standard Materials

Standard zinc plating carbon steel, seamed and seamless

Size mm	Inch	ØA mm	ØB mm	L mm	Carbon Steel
25	1	40.5	30	58	☑
25	1	45	30	50	☑
25	1	45	31	47	☑
32	1 ^{1/4}	47.5	40	58	☑
40	1 ^{1/2}	54.5	43	65	☑
40	1 ^{1/2}	57	41	56	☑
40	1 ^{1/2}	57	44	56	☑
50	2	67	55	73	043 073
50	2	72	54	66	☑
50	2	72	55	66.5	☑
65	2 ^{1/2}	82.5	68	83	☑
65	2 ^{1/2}	83	68	75	☑
65	2 ^{1/2}	85	68.3	71	☑
80	3	94.5	81	91	☑
80	3	96	81	91	043 075
80	3	97	83	86	☑
80	3	98	83	85	☑
80	3	99	83	86	043 075.1
100	4	123	105.5	100	☑
100	4	124	106	105	043 076
100	4	124	106	115	043 076.1
150	6	186	162	200	☑
150	6	187	165	195	☑
200	8	239.6	213	245	☑

Crimping Sleeves

Cylindrical Crimping Sleeves

Standard Materials

Standard stainless steel, seamed and seamless available

Size mm	Inch	Ø mm	L mm	Stainless Steel
25	1	35	20	044 021
25	1	42	25	044 021.1
40	1 ^{1/2}	50	25	044 022
40	1 ^{1/2}	50	50	044 022.1
50	2	57	30	044 023
50	2	67	50	044 023.1
50	2	67	63	044 023.2
65	2 ^{1/2}	85.5	55	044 024
80	3	111	70	044 025

Aluminium Crimping Sleeves



Crimping Sleeves

Cylindrical Crimping Sleeves

Standard Materials

Standard aluminum alloy, seamless piping

Size mm	Inch	Ø mm	L mm	Aluminum Alloys
25	1	35	20	044 051
25	1	36	30	044 051.1
25	1	36	38	044 051.2
40	1 ^{1/2}	46	25	044 052
40	1 ^{1/2}	50	25	044 052.1
50	2	50	30	044 053
50	2	50	44	044 053.1
50	2	56	25	044 053.2
65	2 ^{1/2}	79	38	044 054
65	2 ^{1/2}	80	30	044 054.1
65	2 ^{1/2}	84	50	044 054.2
65	2 ^{1/2}	80	45	044 054.3
65	2 ^{1/2}	80	50	044 054.4
80	3	101	75	044 055
100	4	122.5	60	044 056
150	6	122.5	85	044 056.1

Swage Ferrules



Swage Ferrules

Swage Ferrules with Internal Gripping Profiles for Sanitary Couplings

Standard Materials

Standard material stainless steel grade AISI 304 (1.4301)

Size	ØA mm	ØB mm	L mm	AISI 304
13 × 24.5	19.4	24.5	34	211 011
15 × 27.5	21.9	27.5	38	211 012
19 × 33	25.3	33	42.3	211 013.1
19 × 32	26.5	32	41	211 013
25 × 40	31.5	40	32.7	211 014
25 × 39	32.5	39	41	211 015
25 × 42	31.5	42	32.7	211 015.2
25 × 39	32.5	39	41	211 082
25 × 41	32.5	41	41	211 082.1
25 × 41	32.5	41	46	211 082.2
25 × 39	32.5	39	46	211 082.8
25 × 39	32.5	39	44.5	211 082.9
32 × 47	40	47	41	211 083
32 × 53	40	53	41	211 083.1
32 × 53	40	53	46	211 083.2
32 × 47	40	47	46	211 083.8
32 × 47	40	47	45	211 083.9
38 × 54.5	47	54.5	41.5	211 016
38 × 52.5	45.5	52.5	41	211 017
40 × 52.5	45.5	52.5	41	211 084
40 × 55	45.5	55	41	211 084.1
40 × 55	45.5	55	46	211 084.2
40 × 52.5	45.5	52.5	46	211 084.8
40 × 52.5	45.5	52.5	45	211 084.9

Size	ØA mm	ØB mm	L mm	AISI 304
50 × 68	59.3	68	41.6	211 018
50 × 67	60	67	55	211 019
M57 × 71.8	M57	71.8	60	211 019.1
50 × 67	60	67	51.5	211 019.2
50 × 67.5	59.7	67.5	51	211 019.3
50 × 73	59.3	73	51.5	211 020
50 × 67	60	67	55	211 085
50 × 71	60	71	55	211 085.1
50 × 67	60	67	55	211 085.5
50 × 67	60	67	54	211 085.9
65 × 79	72	79	57.7	211 021
65 × 83.5	72	83.5	57.7	211 022
65 × 82	73.5	82	65	211 023
M73 × 90	M73	90	100	211 023.1
65 × 79	73.5	79	65	211 023.2
65 × 91	72	91	57.7	211 024
65 × 82	73.5	82	65	211 086
65 × 82	73.5	82	68	211 086.2
65 × 82	73.5	82	74	211 086.8
65 × 82	73.5	80	66.5	211 086.9
65 × 93.5	72.5	93.5	61	211 086.91
65 × 83.5	73.5	83.5	66.5	211 086.92
70 × 85	74	85	62	211 031
70 × 87	80	87	63	211 031.1
75 × 96	84.5	96	58.2	211 025
75 × 93.6	84.5	93.6	83	211 026
M84 × 106	M84	106	111.5	211 027
75 × 105	84.5	105	58.2	211 028
75 × 110	84.5	110	58.2	211 029
75 × 93.6	85.5	93.6	83	211 087
75 × 96	85.5	96	83	211 087.1
75 × 93.6	85.5	93.6	87	211 087.2
75 × 96	85.5	96	87	211 087.3
75 × 93.6	85.5	93.6	72	211 087.8
75 × 93.6	85.5	93.6	70.5	211 087.9
75 × 106.5	85	106.5	66	211 087.91
75 × 94.5	85.5	94.5	70.5	211 087.92
100 × 120	113	120	101	211 029
100 × 120	113	120	101	211 089
100 × 123	113	123	101	211 089.1
100 × 123	113	123	103	211 089.2
100 × 120	113	120	103	211 089.8
100 × 120	113	120	104	211 089.9
100 × 135	112	135	70.5	211 089.91
100 × 123	113	123	104	211 089.92

Gasoline Ferrule × Female BSP-P Thread [DIN EN 14424]



Standard Materials	Body — Brass alloy with and without chrome plating; Sealing — Brown PU thread seal
Protection & Package	1 piece in plastic bags
General Markings	< DN 25×5 >

Size	Inch	Hose Ø × Thickness	Brass Alloy	Brass Chrome
13 × 4	½ BSP-P	M 16 × 1.0	029 009.47	029 009.1
13 × 5	½ BSP-P	M 16 × 1.0	☞	029 009
15 × 5	¾ BSP-P	M 19 × 1.0	☞	029 001
19 × 4	¾ BSP-P	M 22 × 1.5	☞	029 002.1
19 × 5	¾ BSP-P	M 22 × 1.5	029 002.47	☞
19 × 5	1 BSP-P	M 22 × 1.5	029 002.5	029 002
19 × 6	¾ BSP-P	M 22 × 1.5	029 002.2	☞
19 × 6	1 BSP-P	M 22 × 1.5	☞	029 002.3
25 × 5	1 BSP-P	M 28 × 1.5	☞	029 004
25 × 6	1 BSP-P	M 28 × 1.5	☞	029 004.2

Gasoline Ferrule × Male BSP-P, BSP-T & NPT Thread [DIN EN 14424]



Standard Materials	Body — Brass alloy with and without chrome plating
General Markings	< DN 25×5 >

Size	Inch	Hose Ø × Thickness	Brass Alloy	Brass Chrome
13 × 4	½ BSPP	M 16 × 1.0	☞	029 109.1
13 × 5	½ BSPP	M 16 × 1.0	☞	029 109
15 × 5	¾ BSPP	M 19 × 1.0	☞	029 101.4
15 × 5	1 BSPP	M 19 × 1.0	☞	029 101
19 × 4	¾ BSPP	M 22 × 1.5	☞	029 102.14
19 × 4	1 BSPP	M 22 × 1.5	☞	029 102.1
19 × 5	¾ BSPP	M 22 × 1.5	029 102.47	029 102.4
19 × 5	1 BSPP	M 22 × 1.5	☞	029 102
19 × 6	¾ BSPP	M 22 × 1.5	☞	029 102.24
19 × 6	1 BSPP	M 22 × 1.5	☞	029 102.2
25 × 5	1 BSPP	M 28 × 1.5	☞	029 104
25 × 6	1 BSPP	M 28 × 1.5	029 104.27	029 104.2
13 × 4	½ BSPT	M 16 × 1.0	☞	029 129.1
13 × 5	½ BSPT	M 16 × 1.0	☞	029 129
15 × 5	¾ BSPT	M 19 × 1.0	☞	029 121.4
15 × 5	1 BSPT	M 19 × 1.0	☞	029 121
19 × 4	¾ BSPT	M 22 × 1.5	☞	029 122.14
19 × 4	1 BSPT	M 22 × 1.5	☞	029 122.1
19 × 5	¾ BSPT	M 22 × 1.5	☞	29122.4
19 × 5	1 BSPT	M 22 × 1.5	☞	029 122
19 × 6	¾ BSPT	M 22 × 1.5	☞	029 122.24
19 × 6	1 BSPT	M 22 × 1.5	☞	029 122.2
25 × 5	1 BSPT	M 28 × 1.5	☞	029 124
25 × 6	1 BSPT	M 28 × 1.5	☞	029 124.2
13 × 4	½ NPT	M 16 × 1.0	☞	029 149.1
13 × 5	½ NPT	M 16 × 1.0	☞	029 149
15 × 5	¾ NPT	M 19 × 1.0	☞	029 141.4
15 × 5	1 NPT	M 19 × 1.0	☞	029 141
19 × 4	¾ NPT	M 22 × 1.5	☞	029 142.14
19 × 4	1 NPT	M 22 × 1.5	☞	029 142.1
19 × 5	¾ NPT	M 22 × 1.5	☞	029 142.4
19 × 5	1 NPT	M 22 × 1.5	☞	029 142
19 × 6	¾ NPT	M 22 × 1.5	☞	029 142.24
19 × 6	1 NPT	M 22 × 1.5	☞	029 142.2
25 × 5	1 NPT	M 28 × 1.5	☞	029 144
25 × 6	1 NPT	M 28 × 1.5	☞	029 144.2

Wrench Key to Gasoline Couplings [DIN EN 14424]



Standard Materials	Body — Carbon steel zinc plating	
		
Size	Carbon Steel	
Universal	029 000	

Solid-Bolt Superior Clamp (Welding & Buckle Constructions)



Standard Materials	Body — Carbon steel zinc plating, Stainless steel AISI 304
Protection & Package	50 pieces in cartons
General Markings	CS / SS — 60-63

Size	Bandwidth mm	Carbon Steel	Stainless Steel
17 - 19	18	081 401.21	081 501.21
20 - 22	18	081 403.21	081 503.21
23 - 25	18	081 404.21	081 504.21
26 - 28	18	081 405.21	081 505.21
29 - 31	20	081 406.21	081 506.21
32 - 35	20	081 407.21	081 507.21
36 - 39	20	081 408.21	081 508.21
40 - 43	20	081 409.21	081 509.21
44 - 47	22	081 410.21	081 510.21
48 - 51	22	081 411.21	081 511.21
52 - 55	22	081 412.21	081 512.21
56 - 59	22	081 413.21	081 513.21
60 - 63	22	081 414.21	081 514.21
64 - 67	22	081 415.21	081 515.21
68 - 73	24	081 416.21	081 516.21
74 - 79	24	081 417.21	081 517.21
80 - 85	24	081 418.21	081 518.21
86 - 91	24	081 419.21	081 519.21
92 - 97	24	081 420.21	081 520.21
98 - 103	24	081 421.21	081 521.21
104 - 112	24	081 422.21	081 522.21
113 - 121	24	081 423.21	081 523.21
122 - 130	24	081 424.21	081 524.21
131 - 139	26	081 425.21	081 525.21
140 - 148	26	081 426.21	081 526.21
149 - 161	26	081 427.21	081 527.21
162 - 174	26	081 428.21	081 528.21
175 - 187	26	081 429.21	081 529.21
188 - 200	26	081 430.21	081 530.21
201 - 213	26	081 431.21	081 531.21
214 - 226	26	081 432.21	081 532.21
227 - 239	26	081 433.21	081 533.21
240 - 252	26	081 434.21	081 534.21

Spiral Hose Clamps



Spiral Clamps

Spiral Clamps Wiring Clockwise and Unclockwise

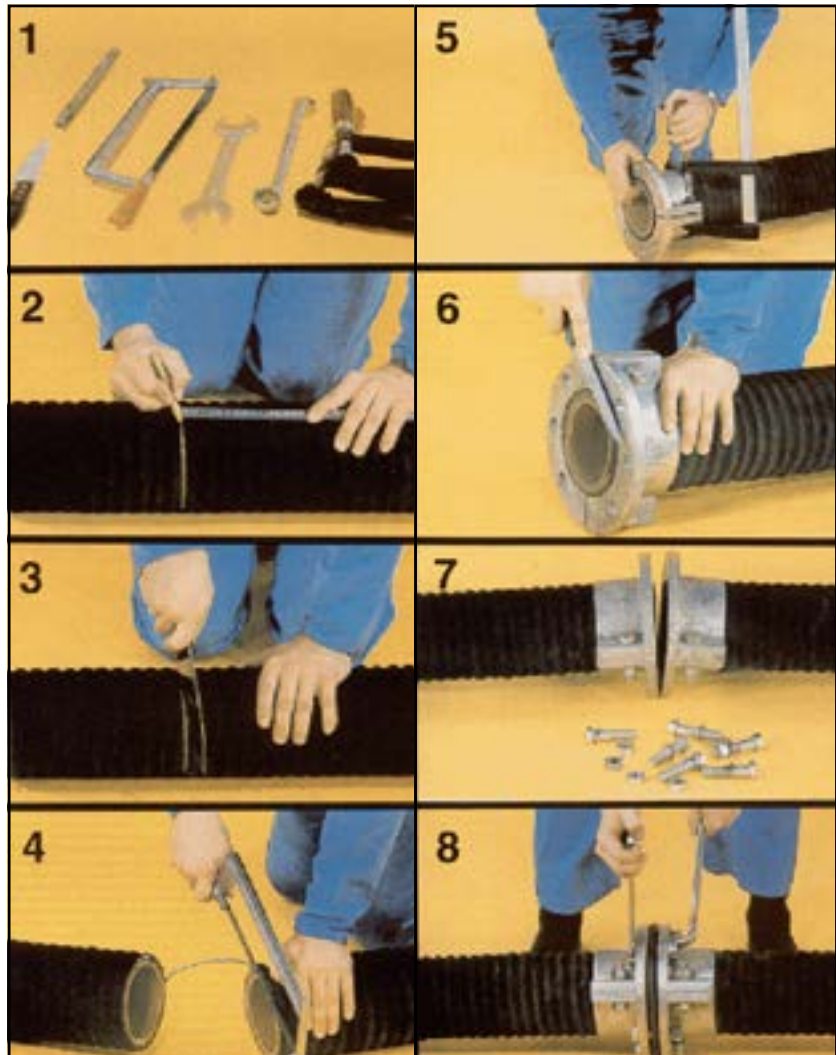
Standard Materials

Galvanised carbon steel

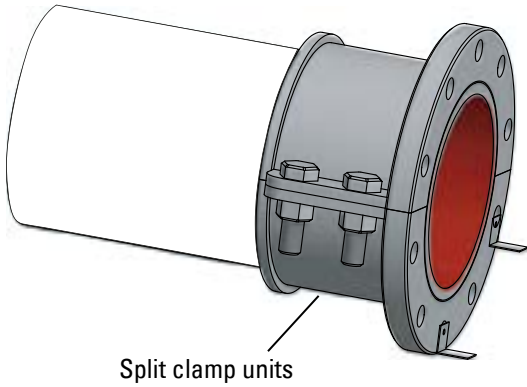
Size Inch	Type	Carbon Steel
1 ^{1/2}	Clockwise	081 705
2	Clockwise	081 706
2 ^{1/2}	Clockwise	081 707
3	Clockwise	081 708
4	Clockwise	081 709
5	Clockwise	081 710
6	Clockwise	081 711
8	Clockwise	081 712
1 ^{1/2}	Un-Clockwise	081 735
2	Un-Clockwise	081 736
2 ^{1/2}	Un-Clockwise	081 737
3	Un-Clockwise	081 738
4	Un-Clockwise	081 739
5	Un-Clockwise	081 740
6	Un-Clockwise	081 741
8	Un-Clockwise	081 742

This industrial engineered hose is as easy to assemble as a split flange coupling. It is perfect for field repairs, minimizing downtime. It can be used for vibration absorption, field transfer, cargo loading, tank transfer and slurry transport. Ideally, this product can be kept on-hand in frequently used sizes, allowing for immediate on-the-job repair and installation.

- 1 Tools required: measuring tape, chalk, knife, hacksaw, clamps and wrenches.
- 2 Measure and mark the required length of hose. Add a little extra length for trimming and lateral overlap.
- 3 Cut off the marked length of hose plus the extra length, using a sharp wet cutting tool, such as a knife.
- 4 Pull the cut surfaces apart so that the steel helix can be pulled out of the rubber. Cut off the steel helix.
- 5 Place the two split parts at the position marked and clamp them.
- 6 Bolt the two split parts through the joining flanges, inspect the lining of the hose at frequent intervals while tightening bolts. The end of the hose should extend about 1/8" beyond flange.
- 7 Installation is complete when corrugated deformations become clearly visible in the bore of the hose.
- 8 Place the form-shaped gasket between the flanges. The hose should be attached to a supporting structure over its entire length, but particularly in the area of bends.



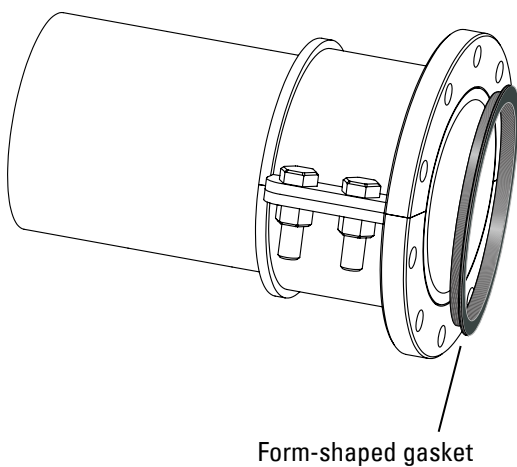
Split flanged hose clamping, incl. bolts and nuts



The split flange hose clamping is specially designed as connecting elements for slurry and material handling hoses. The clamps are made of high-strength aluminium alloy consist of two or four structurally identical segments for mechanical screw connection to the slurry handling hoses. As they do not get into contact with the transported materials, they are not exposed to any wear and are consequently reusable multiple times.

Body material	Aluminum alloy of two split clamp units
Bolts and Nuts	Carbon steel high tensile graded 8.8 or 10.9
Working Pressure	PN10 applied with flange DIN 2632
Suitability	Slurry, sand and heavy duty material handling hoses

SIZE	HOSE I.D	CPL O.D	RANGE	HOLE NUM	SPLITS	ALUMINUM
3"	76	195	147-171	4	2	-
4"	102	217	178-192	4	2	-
5"	127	254	200-229	8	2	-
6"	152	278	235-250	8	2	-
8"	204	338	295-310	8	2	-
10"	254	402	350-374	8	2	-
12"	305	477	400-445	12	2	-
14"	355	526	445-470	12	4	-



The gasket forms a secure connection to prevent leakages between hose parts, hose bends, slurry handling hoses and rubber-lined pipes.

Body material	NBR form shaped and in black
Application	Avoid turbulences
Mounting	Quick and easy installation without any special tools
Resistance	High resistance against chemicals

SIZE	HOSE I.D	NBR
3"	76	-
4"	102	-
5"	127	-
6"	152	-
8"	204	-
10"	254	-
12"	305	-
14"	355	-

Light-Duty Water Coupling × Female BSP-P Thread



Standard Materials Body — Brass alloy;
Sealing — Black NBR thread seal

Protection & Package Small quantity in box package

Size mm	Thread inch	Brass Alloy
10	3/8	045 502.3
13	1/2	045 503.3
13	3/4	045 504.3
19	1/2	045 505.3
25	1	045 506.3
32	1 1/4	045 507.3
38	1 1/2	045 508.3
51	2	045 509.3

Light-Duty Water Coupling × Male BSP-P Thread



Standard Materials Body — Brass alloy;
Sealing — No sealing materials

Protection & Package Small quantity in box package

Size mm	Thread inch	Brass Alloy
10	3/8	☒
13	1/2	☒
13	3/4	☒
19	1/2	☒
25	1	☒
32	1 1/4	☒
38	1 1/2	☒
51	2	☒

Light-Duty Water Coupling × Male BSP-P Thread, Hexagon



Standard Materials Body — Brass alloy;
Sealing — No sealing materials

Protection & Package Small quantity in box package

Size mm	Thread inch	Brass Alloy
10	3/8	045 502.1
13	1/2	045 503.1
13	3/4	045 504.1
19	1/2	045 505.1
25	1	045 506.1
32	1 1/4	045 507.1
38	1 1/2	045 508.1
51	2	045 509.1

Heavy-Duty Water Coupling × Male BSP-P Thread, Hexagon



Standard Materials

Body — Brass alloy;
Sealing — Black NBR thread seal

Protection & Package

Small quantity in box package

Size mm	Thread inch	Brass Alloy
13	1/2	021 111
19	3/4	021 112
25	1	021 113
32	1 1/4	021 114
38	1 1/2	021 115
50	2	021 116
63	2 1/2	021 117
75	3	021 118
80	3	021 120
100	4	021 119

Female × Female Thrd. Pipe Socket (Full-Through/Reduce)



Standard Materials

Body — Brass alloy, Stainless steel AISI 304, AISI 316, Aluminum alloy;
Sealing — Black NBR thread seal for all

Size inch	×	Size inch	Brass Alloy	St. Steel 304	St. Steel 316	Aluminum Alloy
1/4	BSPP ×	1/4	BSPP	080 501.1	080 501	080 501
1/4	BSPP ×	1/4	BSPP	080 502.1	080 502	080 502
1/4	BSPP ×	1/4	BSPP	080 521.1	080 521	080 521
1/4	BSPP ×	1/4	BSPP	080 503.1	080 503	080 503
1/4	BSPP ×	1/4	BSPP	080 522.1	080 522	080 522
1/2	BSPP ×	1/2	BSPP	080 085	080 504.1	080 504
1/2	BSPP ×	1/4	BSPP	080 523.1	080 523	080 523
1/2	BSPP ×	3/8	BSPP	080 524.1	080 524	080 524
3/4	BSPP ×	3/4	BSPP	080 086	080 505.1	080 505
3/4	BSPP ×	1/2	BSPP	080 525.1	080 525	080 525
3/4	BSPP ×	1/2	BSPP	080 526.1	080 526	080 526
1	BSPP ×	1	BSPP	080 087	080 506.1	080 506
1	BSPP ×	1/2	BSPP	080 527.1	080 527	080 527
1	BSPP ×	3/4	BSPP	080 528.1	080 528	080 528
1 1/4	BSPP ×	1 1/4	BSPP	080 088	080 507.1	080 507
1 1/4	BSPP ×	3/4	BSPP	080 529.1	080 529	080 529
1 1/4	BSPP ×	1	BSPP	080 530.1	080 530	080 530
1 1/2	BSPP ×	1 1/2	BSPP	080 089	080 508.1	080 508
1 1/2	BSPP ×	1	BSPP	080 531.1	080 531	080 531
1 1/2	BSPP ×	1 1/4	BSPP	080 532.1	080 532	080 532
2	BSPP ×	2	BSPP	080 090	080 509.1	080 509
2	BSPP ×	1 1/4	BSPP	080 533.1	080 533	080 533
2	BSPP ×	1 1/2	BSPP	080 534.1	080 534	080 534
2 1/2	BSPP ×	2 1/2	BSPP	080 510.1	080 510	080 510
2 1/2	BSPP ×	1 1/2	BSPP	080 535.1	080 535	080 535
2 1/2	BSPP ×	2	BSPP	080 536.1	080 536	080 536
3	BSPP ×	3	BSPP	080 511.1	080 511	080 511.9
3	BSPP ×	2	BSPP	080 537.1	080 537	080 537
3	BSPP ×	2 1/2	BSPP	080 538.1	080 538	080 538
4	BSPP ×	4	BSPP	080 512.1	080 512	080 512
4	BSPP ×	2 1/2	BSPP	080 539.1	080 539	080 539
4	BSPP ×	3	BSPP	080 540.1	080 540	080 540

Female × Female Thrd. Double Nipple



Standard Materials

Body — Brass alloy;
Sealing — Black NBR thread seal

Size inch		×	Size inch		Brass Alloy
¼	BSPP	×	¼	NPT	080 085
1¼	BSPP	×	1¼	BSPP	080 095
1½	NST	×	1½	NST	080 095.1
2	BSPP	×	2	BSPP	080 096
2½	BSPP	×	2½	BSPP	080 097
2¾	NST	×	2¾	NST	080 097.1

Female × Female Thrd. Double Nipple, Swivel



Standard Materials

Body — Brass alloy;
Sealing — Black NBR thread seal

Size inch		×	Size inch		Brass Alloy
1¼	BSPP	×	1¼	BSPP	080 130
2½	BSPP	×	2½	BSPP	080 132

Female Thread Tee Nipple



Standard Materials

Body — Brass alloy, Stainless steel AISI 304, AISI 316, Carbon steel;
Sealing — No sealing materials

Size inch		×	Size inch		Brass Alloy	St. Steel 304	St. Steel 316	Carbon Steel
¼	BSPP	×	¼	BSPP	☞	☞	080 831	☞
¼	BSPP	×	¼	BSPP	☞	☞	080 832	☞
¼	BSPP	×	¼	BSPP	☞	☞	080 833	☞
½	BSPP	×	½	BSPP	080 251	080 834.1	080 834	☞
¾	BSPP	×	¾	BSPP	080 252	080 835.1	080 835	☞
1	BSPP	×	1	BSPP	080 253	080 836.1	080 836	☞
1¼	BSPP	×	1¼	BSPP	080 254	080 837.1	080 837	☞
1½	BSPP	×	1½	BSPP	082 255	080 838.1	080 838	☞
2	BSPP	×	1	BSPP	☞	☞	☞	080 839.91
2	BSPP	×	2	BSPP	080 256	080 839.1	080 839	080 839.92
2½	BSPP	×	2½	BSPP	☞	☞	☞	☞
3	BSPP	×	3	BSPP	☞	☞	☞	☞
4	BSPP	×	4	BSPP	☞	☞	☞	☞

Female × Female Thrd. Elbow Nipple



Standard Materials

Body — Brass alloy;
Sealing — No sealing materials

Size inch		×	Size inch		Brass Alloy
¼	BSPP	×	¼	BSPP	080 211
¼	BSPP	×	¼	BSPP	080 212
¼	BSPP	×	¼	BSPP	080 213
1	BSPP	×	1	BSPP	080 214
1¼	BSPP	×	1¼	BSPP	080 215
1½	BSPP	×	1½	BSPP	080 216
2	BSPP	×	2	BSPP	080 217

Male x Male Thread Double Nipple, Brass



Standard Materials

Body — Brass alloy;
Sealing — No sealing materials

Size inch		x	Size inch		Brass Alloy
3/8	BSPP	x	3/8	BSPP	080 012
1/2	BSPP	x	1/2	BSPP	080 022
3/4	BSPP	x	3/4	BSPP	080 013
1	BSPP	x	1	BSPP	080 023
1 1/4	BSPP	x	1 1/4	BSPP	080 014
1 1/2	BSPP	x	1 1/2	BSPP	080 024
2	BSPP	x	2	BSPP	080 015
2 1/2	BSPP	x	2 1/2	BSPP	080 025
3	BSPP	x	3	BSPP	080 026
3 1/2	BSPP	x	3 1/2	BSPP	080 016
4	BSPP	x	4	BSPP	080 027
4 1/2	BSPP	x	4 1/2	BSPP	080 028
5	BSPP	x	5	BSPP	080 029
5 1/2	BSPP	x	5 1/2	BSPP	080 017
6	BSPP	x	6	NST	080 017.4
6 1/2	BSPP	x	6 1/2	BSPP	080 030
7	BSPP	x	7	BSPP	080 031
7 1/2	BSPP	x	7 1/2	BSPP	080 032
8	BSPP	x	8	BSPP	080 033
8 1/2	BSPP	x	8 1/2	BSPP	080 018
9	BSPP	x	9	BSPP	080 034
9 1/2	BSPP	x	9 1/2	BSPP	080 035
10	BSPP	x	10	BSPP	080 036
10 1/2	BSPP	x	10 1/2	BSPP	080 037
11	BSPP	x	11	BSPP	080 038
11 1/2	BSPP	x	11 1/2	BSPP	080 019
12	NST	x	12	NST	080 019.3
12 1/2	BSPP	x	12 1/2	BSPP	080 039
13	BSPP	x	13	BSPP	080 040
13 1/2	BSPP	x	13 1/2	BSPP	080 041
14	BSPP	x	14	BSPP	080 042
14 1/2	BSPP	x	14 1/2	BSPP	080 043
15	BSPP	x	15	BSPP	080 044
15 1/2	BSPP	x	15 1/2	BSPP	080 020
16	BSPP	x	16	BSPP	080 045
16 1/2	BSPP	x	16 1/2	BSPP	080 046
17	BSPP	x	17	BSPP	080 047
17 1/2	BSPP	x	17 1/2	BSPP	080 048
18	BSPP	x	18	BSPP	080 049
18 1/2	BSPP	x	18 1/2	BSPP	080 050
19	BSPP	x	19	BSPP	080 051

Male x Male Thread Double Nipple, St. Steel



Standard Materials

Body — Stainless steel AISI 304, AISI 316;
Sealing — No sealing materials

Size inch		x	Size inch		St. Steel 304	St. Steel 316
3/8	BSPT	x	3/8	BSPT	080 401.1	080 401
1/2	BSPT	x	1/2	BSPT	080 402.1	080 402
3/4	BSPT	x	3/4	BSPT	080 421.1	080 421
1	BSPT	x	1	BSPT	080 403.1	080 403
1 1/4	BSPT	x	1 1/4	BSPT	080 422.1	080 422
1 1/2	BSPT	x	1 1/2	BSPT	080 404.1	080 404
2	BSPT	x	2	BSPT	080 423.1	080 423
2 1/2	BSPT	x	2 1/2	BSPT	080 424.1	080 424
3	BSPT	x	3	BSPT	080 405.1	080 405
3 1/2	BSPT	x	3 1/2	BSPT	080 425.1	080 425
4	BSPT	x	4	BSPT	080 426.1	080 426

Size inch		×	Size inch		St. Steel 304	St. Steel 316
1	BSPT	×	1	BSPT	080 406.1	080 406
1	BSPT	×	1/4	BSPT	080 427.1	080 427
1	BSPT	×	3/4	BSPT	080 428.1	080 428
1	NPT	×	3/4	BSPT	080 428.9	☞
1 1/4	BSPT	×	1 1/4	BSPT	080 407.1	080 407
1 1/4	BSPT	×	3/4	BSPT	080 429.1	080 429
1 1/4	BSPT	×	1	BSPT	080 430.1	080 430
1 1/2	BSPT	×	1 1/2	BSPT	080 408.1	080 408
1 1/2	BSPP	×	1 1/2	BSPT	080 408.11	☞
1 1/2	BSPT	×	1	BSPT	080 431.1	080 431
1 1/2	BSPP	×	1	BSPP	080 431.12	☞
1 1/2	BSPT	×	1 1/4	BSPT	080 432.1	080 432
2	BSPT	×	2	BSPT	080 409.1	080 409
2	BSPT	×	1 1/4	BSPT	080 433.1	080 433
2	BSPT	×	1 1/2	BSPT	080 434.1	080 434
2	BSPT	×	1 1/2	NPT	080 434.9	☞
2 1/2	BSPT	×	2 1/2	BSPT	080 410.1	080 410
2 1/2	BSPT	×	1 1/2	BSPT	080 435.1	080 435
2 1/2	BSPT	×	2	BSPT	080 436.1	080 436
3	BSPT	×	3	BSPT	080 411.1	080 411
3	BSPT	×	2	BSPT	080 437.1	080 437
3	BSPT	×	2 1/2	BSPT	080 438.1	080 438
4	BSPT	×	3	BSPT	080 440.1	080 440

**Male × Male Thread
Double Nipple, Swivel**



Standard Materials

Body — Brass alloy;
Sealing — Black NBR thread seal

Size inch		×	Size inch		Brass Alloy
1 1/2	BSPP	×	1 1/2	BSPP	080 138
2 1/2	BSPP	×	2 1/2	BSPP	080 139

**Male × Male Thread
Elbow Nipple**



Standard Materials

Body — Brass alloy;
Sealing — No sealing materials

Size inch		×	Size inch		Brass Alloy
1/2	BSPP	×	1/2	BSPP	080 235
3/4	BSPP	×	3/4	BSPP	080 236
1	BSPP	×	1	BSPP	080 237
1 1/4	BSPP	×	1 1/4	BSPP	080 238
1 1/2	BSPP	×	1 1/2	BSPP	080 239
2	BSPP	×	2	BSPP	080 240

Female × Male Thread Adapter, Brass



Standard Materials

Body — Brass alloy with & without thread seal;
Sealing — Black NBR thread seal

Size inch		×	Size inch		Brass w.o Seal	Brass w. Seal
¼	BSPP	×	¼	BSPP	080 062	080 062
¼	BSPP	×	¼	NPT	080 062.1	080 062
¼	BSPP	×	½	BSPP	080 064	080 064
¼	BSPP	×	¾	BSPP	080 065	080 065
¼	BSPP	×	1	BSPP	080 066	080 066
¼	BSPP	×	1¼	BSPP	080 066.2	080 066.2
¼	BSPP	×	1½	BSPP	080 066.3	080 066.3
1	BSPP	×	1¼	BSPP	080 067	080 067
1	BSPP	×	2	BSPP	080 067.2	080 067.2
1¼	BSPP	×	1½	BSPP	080 068	080 068
1¼	BSPP	×	2	BSPP	080 068.1	080 068.1
1¼	BSPP	×	2½	BSPP	080 068.2	080 068.2
1½	BSPP	×	2	BSPP	080 069.1	080 069
1½	BSPP	×	2½	BSPP	080 070	080 070
2	BSPP	×	2½	BSPP	080 070.1	080 070.1
2	BSPP	×	3	BSPP	080 070.2	080 070.2
2½	BSPP	×	3	BSPP	080 071	080 071
2½	BSPP	×	4	BSPP	080 071.1	080 071.1
3	BSPP	×	4	BSPP	080 072	080 072
4	BSPP	×	4¼	BSPP	080 073	080 073

Female × Male Thread Adapter, St. Steel



Standard Materials

Body — Stainless steel AISI 304, AISI 316;
Sealing — No sealing materials

Size inch		×	Size inch		St. Steel 304	St. Steel 316
¼	BSPP	×	¼	BSPT	080 461.1	080 461
¼	BSPP	×	¼	BSPT	080 463.1	080 463
¼	BSPP	×	½	BSPT	080 464.1	080 464
¼	BSPP	×	¾	BSPT	080 462.1	080 462
¼	BSPP	×	½	BSPT	080 465.1	080 465
¼	BSPP	×	¾	BSPT	080 467.1	080 467
¼	BSPP	×	1	BSPT	080 470.1	080 470
¼	BSPP	×	¾	BSPT	080 466.1	080 466
¼	BSPP	×	¾	BSPT	080 468.1	080 468
¼	BSPP	×	1	BSPT	080 471.1	080 471
¼	BSPP	×	¾	BSPT	080 469.1	080 469
½	BSPP	×	1	BSPT	080 472.1	080 472
½	BSPP	×	1¼	BSPT	080 474.1	080 474
½	BSPP	×	1½	BSPT	080 477.1	080 477
½	BSPP	×	2	BSPT	080 481.1	080 481
¾	BSPP	×	1	BSPT	080 473.1	080 473
¾	BSPP	×	1¼	BSPT	080 475.1	080 475
¾	BSPP	×	1½	BSPT	080 478.1	080 478
¾	BSPP	×	2	BSPT	080 482.1	080 482
1	BSPP	×	1¼	BSPT	080 476.1	080 476
1	BSPP	×	1½	BSPT	080 479.1	080 479
1	BSPP	×	2	BSPT	080 483.1	080 483
1	BSPP	×	3	BSPT	080 486.1	080 486
1¼	BSPP	×	1½	BSPT	080 480.1	080 480
1¼	BSPP	×	2	BSPT	080 484.1	080 484
1¼	BSPP	×	3	BSPT	080 487.1	080 487
1¼	BSPP	×	2	BSPT	080 485.1	080 485
1¼	BSPP	×	3	BSPT	080 488.1	080 488
2	BSPP	×	3	BSPT	080 489.1	080 489
2½	BSPP	×	3	BSPT	080 490.1	080 490

Female x Male Thread Adapter, Swivel



Standard Materials

Body — Brass alloy;
Sealing — Black NBR thread seal

Size inch		x	Size inch		Brass Alloy
1 1/4	BSPP	x	1/4	BSPP	080 145
1 1/2	BSPP	x	1	BSPP	080 146
1 1/2	BSPP	x	1 1/2	BSPP	080 120
2 1/2	BSPP	x	1/4	BSPP	080 147
2 1/2	BSPP	x	1	BSPP	080 148
2 1/2	BSPP	x	1 1/2	BSPP	080 149
2 1/2	BSPP	x	2	BSPP	080 121
2 1/2	BSPP	x	2 1/2	BSPP	080 122
2 1/2	BSPP	x	3	BSPP	080 123

Female x Male Thread Elbow Adapter



Standard Materials

Body — Brass alloy;
Sealing — No thread materials

Size inch		x	Size inch		Brass Alloy
1/4	BSPP	x	1/4	BSPP	080 581
1/4	BSPP	x	1/2	BSPP	080 582
1/4	BSPP	x	3/4	BSPP	080 583
1/4	BSPP	x	1	BSPP	080 584
1/2	BSPP	x	1/4	BSPP	080 585
1/2	BSPP	x	1/2	BSPP	080 586
1/2	BSPP	x	3/4	BSPP	080 587
1	BSPP	x	1	BSPP	080 588
1	BSPP	x	1 1/4	BSPP	080 589
1 1/4	BSPP	x	1 1/4	BSPP	080 590
1 1/4	BSPP	x	2	BSPP	080 591
1 1/2	BSPP	x	1 1/2	BSPP	080 592
2	BSPP	x	2	BSPP	080 593
2 1/2	BSPP	x	2 1/2	BSPP	080 594
3	BSPP	x	3	BSPP	080 595
4	BSPP	x	4	BSPP	080 596

Pin Lug Female BSP-P Coupling



Standard Materials Body — Aluminum alloy, Polypropylene fiberglass combination, Brass alloy;
Sealing — Black NBR thread seal for all

Protection & Package 1 piece in plastic bags

General Markings AL — 1½" x 1½" SME
PP — BSP 50mm SME

Size inch	Aluminum Alloy	Polypropylene	Brass Alloy
¾	☹	045 062.2	☹
1	☹	045 063.2	☹
1¼	☹	045 064.2	☹
1½	045 010.2	045 065.2	045 110.2
2	045 012.2	045 066.2	045 112.2
2½	045 013.2	045 067.2	045 113.2
3	045 015.2	045 068.2	045 115.2
4	045 016.2	☹	045 116.2
6	045 017.2	☹	045 117.2

Pin Lug Female BSP-P Coupling (Light-Duty)



Standard Materials Body — Brass alloy;
Sealing — Black NBR thread seal

Protection & Package Small quantity in box package

Size mm	Thread inch	Brass Alloy
10	¾	045 502.2
13	¾	045 503.2
13	¾	045 504.2
19	¾	045 505.2
25	1	045 506.2
32	1¼	045 507.2
38	1½	045 508.2
51	2	045 509.2

Pin Lug Male BSP-P Coupling



Standard Materials Body — Aluminum alloy, Polypropylene fiberglass combination, Brass alloy;
Sealing — No sealing materials

Protection & Package 1 piece in plastic bags

General Markings AL — 1½" x 1½" SME
PP — BSP 50mm SME

Size inch	Aluminum Alloy	Polypropylene	Brass Alloy
¾	045 062.3	☹	☹
1	045 063.3	☹	☹
1¼	045 064.3	☹	☹
1½	045 065.3	045 110.3	045 010.3
2	045 066.3	045 112.3	045 012.3
2½	045 067.3	045 113.3	045 013.3
3	045 068.3	045 115.3	045 015.3
4	☹	045 116.3	045 016.3
6	☹	045 117.3	045 017.3



**通用机械塑料紧固件
卫浴、电子和五金塑胶**

**Fasteners fixings nails
Bathroom, Electronics and Plastics**



塑料紧固件

PLASTIC FASTENERS

ASCEND 检测合格

TUV 莱茵深度认证

RoHS 欧洲绿标

SGS 瑞士通用

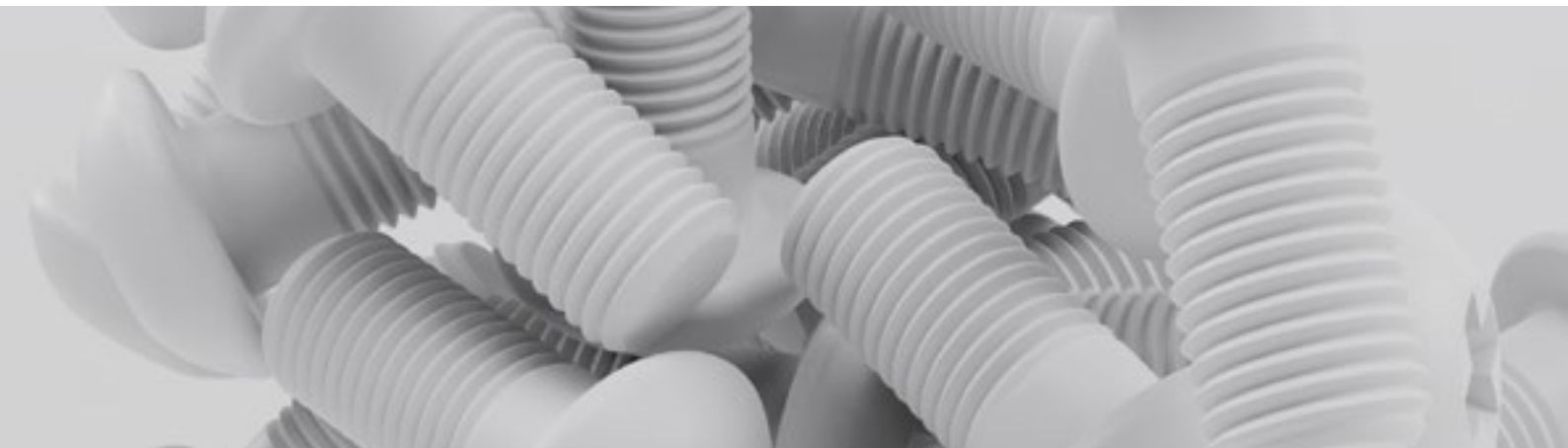
卫浴厨房

电子电器

精工制造

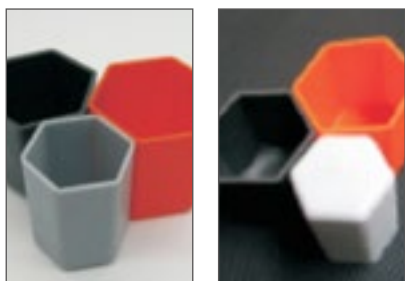
晟江
五星品质





平头六角螺丝保护帽

Flat head plastic screw cover

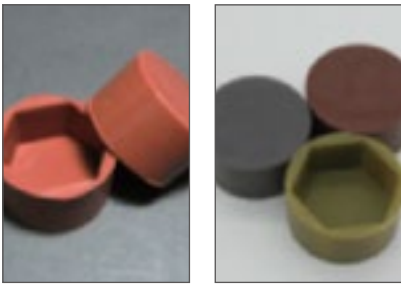


晟江塑料螺丝保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色RoHS检测认证。其他定制可选，详询销售。

尺寸	内对边 MM	外对边 MM	总高度 MM
M6	10	13	5
M6	10	13	8.5
M8	13	16	10
M8	14	17	7
M10	16	19	10
M10	17	21	20.5
M12	18	21	10.5
M12	19	22	20.5
M14	21	24	20.5
M16	21	24	20.5
M16	24	27	20.5
M18	27	30	20.5
M20	30	33	30
M30	45	49	67
M33	50	55	67
M36	54	60	67
M39	60	65	67
M42	65	68	80
M45	70	84	80
M48	75	78	85
M52	80	85	85
M56	85	80	82
M60	90	83	85
M64	95	83	90

内六角螺丝保护帽

Plastic screw cover



晟江塑料螺丝保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色RoHS检测认证。其他定制可选，详询销售。

尺寸	内对边 MM	外径 MM	总高度 MM
M6	11	15	10
M8	14	18	10
M10	17	20	12

内外圆螺丝保护帽

Round screw cover



晟江塑料螺丝保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色RoHS检测认证。其他定制可选，详询销售。

尺寸	内径 MM	外直径 MM	总高度 MM
M8	13	16	18
M10	16	19	20
M12	18	21	25
M14	21	24	27
M16	24	27	30
M18	27	30	35
M20	30	33	37
M24	36	39	44
M30	45	48	54
M36	50	53	65

圆管 牙杆 型材保护帽

Plastic pole cover



晟江塑料螺丝保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色RoHS检测认证。其他定制可选，详询销售。

尺寸	直径 MM	长度 MM	厚度 MM
-	≤180	1.4-267	0.2-15

外圆内六角螺丝保护帽

Round internal hexagon screw cover



晟江塑料螺丝保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色RoHS检测认证。其他定制可选，详询销售。

尺寸	内对边 MM	直边高度 MM	总高度 MM	外直径 MM
M4	7	4.5	8.5	9
M5	8	5.5	9.5	11
M6	10	8.5	14	14
M8	12	8	13.5	15
M8	13	9.5	16	17.5
M8	14	8.5	15.5	18
M10	16	10.5	20	21.5
M10	17	10.5	20	21
M12	18	11	20	24
M12	19	12	21.5	24
M14	22	14.5	26	27.5
M16	24	16.5	29	30.5
M18	26	15.5	28	32.5
M20	30	19.5	35	36
M22	32	19.5	38	39.5
M24	36	20.5	42	44
M27	41	32	56	49
M30	45	37	62	55
M33	50	35	53	60
M36	54	35	65	64
M36	54	55	65	67
M42	65	40	83	67
M45	70	55	85	85
M48	75	40	85	90

外圆内 12 角螺丝保护帽

Round cap 12 horned nut



晟江塑料螺丝保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色RoHS检测认证。其他定制可选，详询销售。

尺寸	内对边 MM	总高度 MM
M30	45	62
M33	50	67
M36	50	65
M39	60	75
M42	65	76
M45	70	80
M48	75	82

加高型内外六角螺丝保护帽

Extended hexagon screw cover

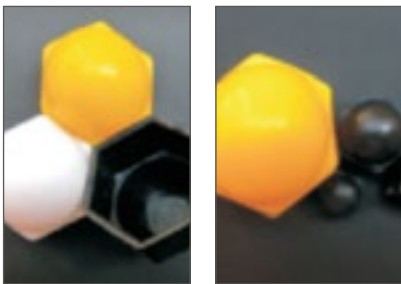


晟江塑料螺丝保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色RoHS检测认证。其他定制可选，详询销售。

尺寸	内对边 MM	外对边 MM	总高度 MM
M8	13	15	25
M10	17	20	34
M12	18	23	37
M12	19	23	37
M14	22	26	48
M16	24	27	36
M16	22	26	52
M18	28	31	47
M18	27	30	60
M20	31	34	45
M20	30	33	70
M24	35	39	48
M24	36	40	100
M27	41	45	80

内外六角螺丝保护帽

Hexagon screw cover



晟江塑料螺丝保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色RoHS检测认证。其他定制可选，详询销售。

尺寸	内对边 MM	外对边 MM	总高度 MM
M4	7	9	4.5
M5	8	9.5	11
M6	10	12	13
M8	13	15	15
M10	17	19	21
M12	19	22	22
M14	21	23	27
M14	22	24	27
M16	24	27	29
M18	27	29	29
M20	30	33	37
M22	32	36	37
M24	36	39	41
M27	41	44	47
M30	46	50	53
M32	50	54	65
M33	50	53	57
M36	56	60	65
M39	60	65	73
M42	65	70	78
M49	80	100	87

螺丝保护帽

Universal screw cover

晟江塑料螺丝保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色RoHS检测认证。其他定制可选，详询销售。



尺寸	内对边 MM	外对边 MM	总高度 MM
M8	13	25	13



尺寸	外径 MM	内径 MM	对边 MM	总高度 MM
-	19	16	8	7



材质	上盖高度	外径	内径	孔径	盖厚度	底盖高度
PE/PA	3.65	13.1	9.87	3.8	3	4.3
PE/PA	3.7	13.2	9.8	5	3	4.4
PE/PA	2.6	14	10.6	5.4	2.7	3.7



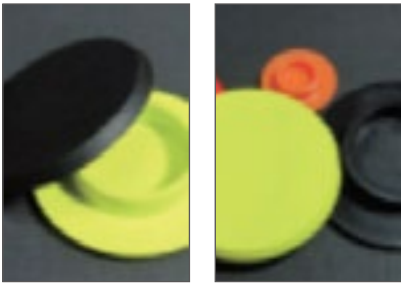
尺寸	内直径 MM	外直径 MM	总高度 MM	孔直径 MM
M6	6.4	10.5	4	7



尺寸	内直径 MM	内对边 MM	直边高度 MM	总高度 MM
M12	39	19	14	30
M16	33	24	17	36
M20	40	30	23	46

盖型内外圆螺丝保护帽

Round screw cap cover



晟江塑料螺丝保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色 RoHS 检测认证。其他定制可选，详询销售。

尺寸	内径 MM	直边高度 MM	总高度 MM	外直径 MM
M5	4.2	2.8	4.5	8
M6	5	2.3	3.3	9.45
M8	6.2	2.8	4.8	11.6
M10	8.3	2.9	5	14.05
M12	10.2	3	5	16.9
M14	12	7	9	19
M16	12.4	3.9	5.7	20.9
M20	14.4	4.4	6.4	26.8
M24	19.3	4.9	7	31.8

凸型双螺防锈帽

Double screw rust cap

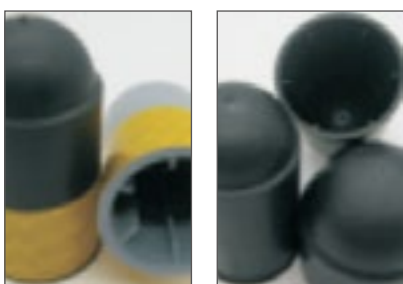


晟江塑料防锈帽，采用舒缓老化和预防光线直射的环保材料，通过绿色 RoHS 检测认证。其他定制可选，详询销售。

尺寸	内对边	总高度
M20	30	100
M22	32	100
M24	34	100
M24	35	100
M24	36	100
M27	39	100
M27	40	100
M27	41	100
M27	42	100
M30	43	100
M30	44	100
M30	45	100
M32	49	100
M33	50	100
M36	55	110
M39	60	115
M39	60	160
M42	65	120
M42	65	160
M45	70	130
M45	70	160
M48	75	130
M48	75	160
M52	80	160
M56	85	160

双螺母保护帽

Double nut protective cap



晟江塑料保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色 RoHS 检测认证。其他定制可选，详询销售。

尺寸	内加筋 / 内六边	内对边	总高度
M14	内加筋	21	85
M14	内加筋	22	85
M16	内加筋	23	85
M16	内加筋	24	85
M18	内加筋	27	85
M20	内加筋	30	85
M22	内加筋	32	85
M24	内加筋	34	85
M24	内加筋	35	85
M24	内加筋	36	85
M24	内六边	36	85

凸型单螺母保护帽

Single nut protective cap

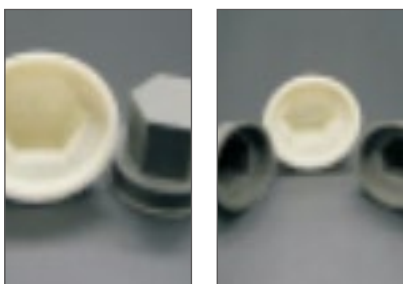


晟江塑料保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色 RoHS 检测认证。其他定制可选，详询销售。

尺寸	内加筋 / 内六边	内对边	总高度
M10	内加筋	17	46
M12	内加筋	18	46
M12	内加筋	19	46
M14	内加筋	21	46
M14	内加筋	22	46
M16	内加筋	23	46
M16	内六边	24	46
M18	内加筋	27	46
M20	内六边	30	46
M22	内加筋	32	52
M24	内六边	36	52

内外六角螺母保护帽

Hexagon nut case

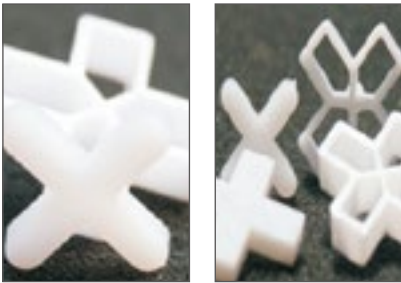


晟江塑料螺母保护帽，采用舒缓老化和预防光线直射的环保材料，通过绿色 RoHS 检测认证。其他定制可选，详询销售。

尺寸	内对边 MM	内直径 MM	总高度 MM
M24	36	64	55
M27	41	69	55
M30	46	73	55

瓷砖十字架

Tile spacer



晟江瓷砖十字架，用于调剂瓷砖缝大小，五星品质，使用广泛。适用无缝砖、抛光砖、瓷片、仿古砖、户外砖和大理石等。更多详询销售。

尺寸	厚度	宽度	钉子长度	材料	颜色	适用
1	3	1	21	PE	白色	无缝砖 抛光砖
1.5	3	1.5	21	PE	白色	无缝砖 抛光砖
2	3	2	21	PE	白色	瓷片 墙砖
2.5	3	2.5	21	PE	白色	瓷片 墙砖
3	4	3	22	PE	白色	户外砖 大尺寸抛转
3.5	4	3.5	22	PE	白色	户外砖 大尺寸抛转
4	4	4	22	PE	白色	户外砖 大尺寸抛转
5	5	5	24	PE	白色	仿古砖 大理石 户外砖
6	5	6	24	PE	白色	仿古砖 大理石 户外砖
8	5	8	26	PE	白色	仿古砖 大理石 户外砖
10	5	10	28	PA	白色	仿古砖 大理石 户外砖

钢钉线卡

Cable clip



晟江钢钉线卡具有弹性好、韧性强、更耐用的特点。适用木材、砖墙、水泥砂浆等材料。更多详询销售。

尺寸	形状	材料	颜色	线直径
3.5	圆	PE	白色	3-3.5
4	圆 / 方	PE	白色	3.5-4
5	圆 / 方	PE	白色	4.5-5
6	圆 / 方	PE	白色	5.5-6
7	圆 / 方	PE	白色	6.5-7
8	圆 / 方	PE	白色	7.5-8
9	圆 / 方	PE	白色	8.5-9
10	圆 / 方	PE	白色	9.5-10
12	圆 / 方	PE	白色	11.1-12
14	圆 / 方	PE	白色	13-14
16	圆	PE	白色	15-16
18	圆	PE	白色	17-18
20	圆	PE	白色	19-20
22	圆	PE	白色	21-22
25	圆	PE	白色	24-25
30	圆	PE	白色	28-30
32	圆	PE	白色	30-32
35	圆	PE	白色	33-35
40	圆	PE	白色	36-40
50	圆	PA	白色	45-50

圆头尼龙螺栓

Round nylon bolting



晟江尼龙螺栓具有韧性强、更耐用的特点，选用优质尼龙原材，耐疲劳性更好，软化点高，表面光滑，摩擦系数小。五星品质，详询销售。

颜色	3MM	4MM	5MM	6MM
白色	3×5	4×5	5×5	6×8
白色	3×8	4×8	5×8	6×10
白色	3×10	4×10	5×10	6×12
白色	3×12	4×12	5×12	6×16
白色	3×16	4×16	5×16	6×20
白色	3×20	4×20	5×20	6×25
白色	3×25	4×25	5×25	6×30
白色	3×30	4×30	5×30	6×35
白色	3×35	4×35	5×35	6×40
白色	3×40	4×40	5×40	6×45
白色	3×45	4×45	5×45	6×50
白色	3×50	4×50	5×50	6×55

外六角尼龙螺栓

Hexagon nylon bolting



晟江尼龙螺栓具有韧性强、更耐用的特点，选用优质尼龙原材，耐疲劳性更好，软化点高，表面光滑，摩擦系数小。五星品质，详询销售。

颜色	4MM	6MM	8MM	10MM	12MM	14MM	16MM
白色	4×5	6×5	8×6	-	-	-	-
白色	4×8	6×8	8×8	-	-	-	-
白色	4×10	6×10	8×10	-	-	-	-
白色	4×12	6×12	8×12	10×13	12×12	-	-
白色	4×16	6×16	8×16	10×16	12×16	14×16	-
白色	4×20	6×20	8×20	10×19	12×18	14×18	-
白色	4×25	6×25	8×25	10×20	12×20	14×20	-
白色	4×30	6×30	8×30	10×25	12×25	14×25	-
白色	4×35	6×35	8×35	10×30	12×30	14×30	16×30
白色	4×40	6×40	8×38	10×35	12×35	14×35	16×35
白色	4×45	6×45	8×40	10×40	12×40	14×40	16×40
白色	4×50	6×50	8×45	10×45	12×45	14×45	16×45
白色	4×55	6×55	8×50	10×50	12×50	14×50	16×50
白色	-	6×60	8×60	10×60	12×60	14×55	16×55
白色	-	6×65	8×70	10×70	12×70	14×60	16×60
白色	-	6×70	8×80	10×80	12×80	14×70	16×65
白色	-	6×75	8×90	10×90	12×90	14×80	16×70
白色	-	-	8×100	10×100	12×100	14×90	16×75
白色	-	-	-	-	-	14×100	16×80
白色	-	-	-	-	-	-	16×90



Flange rings ASME

ASME B16 standards covers pipes and fittings made from cast or forged materials. The ASME B16.5 pipe flanges and flange fittings standard covers pressure-temperature ratings, materials, dimensions, tolerances, marking, testing, and methods of designating openings for pipe flanges and flanged fittings.

Piping flanges are popular in shapes of lapped, reducing, butt or socket welded, Thread or screwed, plate, blind, spectacle and so on, among which Slip-on to weld is one of the most popular ways that benefits from low cost of fabrication and easy handling with less requirement of accuracy in operation.

Steel piping ASME B36.10

Welded and seamless piping of carbon and alloy steels are at options for ASME flanges Class 600 and 900 according to specs below.

NORMINAL PIPE SIZE		O.D	I.D,	SCH	SCH	SCH	SCH	STAN-	SCH	SCH	SCH	SCH	SCH	SCH	SCH	SCH	
INCH	MM	MM	MM	5	10	20	30	DARD	40	60	XS	80	100	120	140	160	XXS
1/8	6	10.3	I.D	-	7.8	-	7.4	6.8	6.8	-	5.5	5.5	-	-	-	-	-
1/8	6	10.3	W.T	-	1.2	-	1.5	1.7	1.7	-	2.4	2.4	-	-	-	-	-
1/4	8	13.7	I.D	-	10.4	-	10	9.2	9.2	-	7.7	7.7	-	-	-	-	-
1/4	8	13.7	W.T	-	1.7	-	1.9	2.2	2.2	-	3	3	-	-	-	-	-
3/8	10	17.1	I.D	-	13.8	-	13.4	12.5	12.5	-	10.7	10.7	-	-	-	-	-
3/8	10	17.1	W.T	-	1.7	-	1.9	2.3	2.3	-	3.2	3.2	-	-	-	-	-
1/2	15	21.3	I.D	18	17.1	-	16.5	15.8	15.8	-	13.8	13.8	-	-	-	11.7	6.4
1/2	15	21.3	W.T	1.7	2.1	-	2.4	2.8	2.8	-	3.7	3.7	-	-	-	4.8	7.5
3/4	20	26.7	I.D	23.4	22.5	-	21.9	21	21	-	18.9	18.9	-	-	-	15.6	11.1
3/4	20	26.7	W.T	1.7	2.1	-	2.4	2.9	2.9	-	3.9	3.9	-	-	-	5.6	7.8
1	25	33.4	I.D	30.1	27.9	-	27.6	26.6	26.6	-	24.3	24.3	-	-	-	20.7	15.2
1	25	33.4	W.T	1.7	2.8	-	2.9	3.4	3.4	-	4.6	4.6	-	-	-	6.4	9.1
1¼	32	42.2	I.D	38.9	36.7	-	36.3	35.1	35.1	-	32.5	32.5	-	-	-	29.5	22.8
1¼	32	42.2	W.T	1.7	2.8	-	3	3.6	3.6	-	4.9	4.9	-	-	-	6.4	9.7
1½	40	48.3	I.D	45	42.8	-	41.9	40.9	40.9	-	38.1	38.1	-	-	-	34	28
1½	40	48.3	W.T	1.7	2.8	-	3.2	3.7	3.7	-	5.1	5.1	-	-	-	7.1	10.2

NORMINAL PIPE SIZE		O.D	I.D, W.T	SCH	SCH	SCH	SCH	STAN-DARD	SCH	SCH	SCH	SCH	SCH	SCH	SCH	SCH	
INCH	MM	MM	MM	5	10	20	30	-	40	60	XS	80	100	120	140	160	XXS
2	50	60.3	I.D	57	54.8	-	53.9	52.5	52.5	-	49.2	49.2	-	-	-	42.8	38.2
2	50	60.3	W.T	1.7	2.8	-	3.2	3.9	3.9	-	5.5	5.5	-	-	-	8.7	11.1
2½	65	73	I.D	68.8	66.9	-	63.4	62.7	62.7	-	59	59	-	-	-	53.9	45
2½	65	73	W.T	2.1	3.1	-	4.8	5.2	5.2	-	7	7	-	-	-	9.5	14
3	80	88.9	I.D	84.7	82.8	-	79.3	77.9	77.9	-	73.7	73.7	-	-	-	66.6	58.4
3	80	88.9	W.T	2.1	3.1	-	4.8	5.5	5.5	-	7.6	7.6	-	-	-	11.1	15.2
3½	90	101.6	I.D	97.4	95.5	-	92	90.1	90.1	-	85.4	85.4	-	-	-	-	-
3½	90	101.6	W.T	2.1	3.1	-	4.8	5.7	5.7	-	8.1	8.1	-	-	-	-	-
4	100	114.3	I.D	110.1	108.2	-	104.7	102.3	102.3	-	97.2	97.2	-	92	-	87.3	80.1
4	100	114.3	W.T	2.1	3.1	-	4.8	6	6	-	8.6	8.6	-	11.1	-	13.5	17.1
5	125	141.3	I.D	135.8	134.5	-	-	128.2	128.2	-	122.2	122.2	-	115.9	-	109.5	103.2
5	125	141.3	W.T	2.8	3.4	-	-	6.6	6.6	-	9.5	9.5	-	12.7	-	15.9	19.1
6	150	168.3	I.D	162.8	161.5	-	-	154.1	154.1	-	146.4	146.4	-	139.8	-	131.8	124.4
6	150	168.3	W.T	2.8	3.4	-	-	7.1	7.1	-	11	11	-	14.3	-	18.3	22
8	200	219.1	I.D	213.6	211.6	206.4	205	202.7	202.7	198.5	193.7	193.7	188.9	182.6	177.9	173.1	174.6
8	200	219.1	W.T	2.8	3.8	6.4	7	8.2	8.2	10.3	12.7	12.7	15.1	18.3	20.6	23	22.2
10	250	273	I.D	266.2	264.6	260.3	257.4	254.5	254.5	247.6	247.6	242.8	236.5	230.1	222.2	215.8	222.2
10	250	273	W.T	3.4	4.2	6.4	7.8	9.3	9.3	12.7	12.7	15.1	18.3	21.4	25.4	28.6	25.4
12	300	323.8	I.D	315.9	314.7	311.1	307	304.7	303.2	295.3	298.4	288.8	280.9	273	266.6	257.2	273
12	300	323.8	W.T	4	4.6	6.4	8.4	9.5	10.3	14.3	12.7	17.5	21.4	25.4	28.6	33.3	25.4
14	350	355.6	I.D	347.7	342.9	339.8	336.5	336.5	333.3	325.4	330.2	317.5	307.9	300	292.1	284.2	-
14	350	355.6	W.T	4	3.7	7.9	9.5	9.5	11.1	15.1	12.7	19.1	23.8	27.8	31.8	35.7	-
16	400	406.4	I.D	398	393.7	390.6	387.3	387.3	381	373.1	381	363.5	354	344.5	333.3	325.4	-
16	400	406.4	W.T	4.2	6.4	7.9	9.5	9.5	12.7	16.7	12.7	21.4	26.2	31	36.5	40.5	-
18	450	457	I.D	448.6	444.3	441.2	434.7	437.9	428.5	418.9	431.6	409.3	398.3	387.1	377.7	366.5	-
18	450	457	W.T	4.2	6.4	7.9	11.1	9.5	14.3	19.1	12.7	23.8	29.4	34.9	39.7	45.2	-
20	500	508	I.D	498.4	495.3	488.9	482.6	488.9	477.8	466.9	482.6	455.6	442.9	431.8	419.1	408	-
20	500	508	W.T	4.8	6.4	9.5	12.7	9.5	15.1	20.6	12.7	26.2	32.5	38.1	44.5	50	-
22	550	559	I.D	549.4	546.3	539.9	533.6	539.9	-	514.5	533.6	501.8	489.1	476.4	463.7	451	-
22	550	559	W.T	4.8	6.4	9.5	12.7	9.5	-	22.2	12.7	28.6	34.9	41.3	47.6	54	-
24	600	610	I.D	598.9	597.3	590.9	581.5	590.9	575	560.8	584.6	548.1	532.2	518	505.3	490.9	-
24	600	610	W.T	5.5	6.4	9.5	14.3	9.5	17.5	24.6	12.7	31	38.9	46	52.4	59.5	-

Stainless steel piping ASME B36.19

Welded and seamless piping of stainless steels are at options for ASME flanges Class 600 and 900 according to specs below.

NORMINAL PIPING		O.D	I.D, W.T	SCH	SCH	SCH	SCH
INCH	MM	MM	MM	5S	10S	40S	80S
1/8	6	10.3	I.D	-	7.8	6.8	5.5
1/8	6	10.3	W.T	-	1.2	1.7	2.4
1/4	8	13.7	I.D	-	10.4	9.2	7.7
1/4	8	13.7	W.T	-	1.7	2.2	3
3/8	10	17.1	I.D	-	13.8	12.5	10.7
3/8	10	17.1	W.T	-	1.7	2.3	3.2
1/2	15	21.3	I.D	18	17.1	15.8	13.8
1/2	15	21.3	W.T	1.7	2.1	2.8	3.7
3/4	20	26.7	I.D	23.4	22.5	21	18.9
3/4	20	26.7	W.T	1.7	2.1	2.9	3.9
1	25	33.4	I.D	30.1	27.9	26.6	24.3
1	25	33.4	W.T	1.7	2.8	3.4	4.6
1¼	32	42.2	I.D	38.9	36.7	35.4	32.5
1¼	32	42.2	W.T	1.7	2.8	3.6	4.9
1½	40	48.3	I.D	45	42.8	40.9	38.1
1½	40	48.3	W.T	1.7	2.8	3.7	5.1
2	50	60.3	I.D	57	54.8	52.5	49.2
2	50	60.3	W.T	1.7	2.8	3.9	5.5
2½	65	73	I.D	68.8	66.9	62.7	59
2½	65	73	W.T	2.1	3.4	5.2	7
3	80	88.9	I.D	84.7	82.8	77.9	73.7
3	80	88.9	W.T	2.1	3.1	5.5	7.6
3½	90	101.6	I.D	97.4	95.5	90.1	85.4
3½	90	101.6	W.T	2.1	3.1	5.7	8.1
4	100	114.3	I.D	110.1	108.2	102.3	97.2
4	100	114.3	W.T	2.1	3.1	6	8.6
5	125	141.3	I.D	135.8	134.5	128.2	122.2
5	125	141.3	W.T	2.8	3.4	6.6	9.5
6	150	168.3	I.D	162.8	161.5	154.1	146.4
6	150	168.3	W.T	2.8	3.4	7.1	11
8	200	219.1	I.D	213.6	211.6	202.7	193.7
8	200	219.1	W.T	2.8	3.8	8.2	12.7
10	250	273	I.D	266.2	264.7	254.6	247.7
10	250	273	W.T	3.4	4.2	9.3	12.7
12	300	323.8	I.D	315.9	378.8	304.8	298.5
12	300	323.8	W.T	4	4.6	9.5	12.7
14	350	355.6	I.D	347.7	346	-	-
14	350	355.6	W.T	4	4.8	-	-
16	400	406.4	I.D	398	396.8	-	-
16	400	406.4	W.T	4.2	4.8	-	-
18	450	457	I.D	448.6	447.4	-	-
18	450	457	W.T	4.2	4.8	-	-
20	500	508	I.D	498.4	496.9	-	-
20	500	508	W.T	4.8	5.5	-	-
22	550	559	I.D	549.4	547.9	-	-
22	550	559	W.T	4.8	5.5	-	-
24	600	610	I.D	598.9	597.3	-	-
24	600	610	W.T	5.5	6.35	-	-

Flange materials ASTM

Flanges per ASME B16.5 are basically formed by forging techniques according to ASTM specs, grade or code of which are supposed to be visually identified on bodies in all cases.

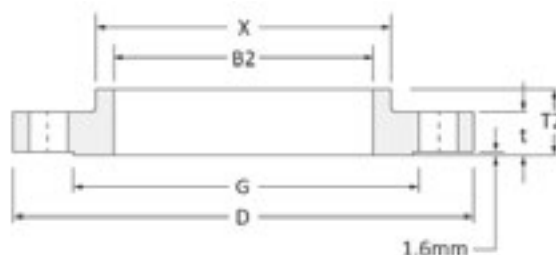
ASTM	GRD.	MATERIAL	C %	MN %	P %	S %	SI %	NI %	CR %	MO %	T.S PSI	Y.S PSI	EL %	RED %	HB
											MIN	MIN	MIN	MIN	
											(KG/MM ²)	(KG/MM ²)			
A105	-	Carbon Steel	Max 0.35	1.16-1.05	0.04	0.05	Max 0.35	Max 0.4	Max 0.3	Max 0.12	70-49.2	36-25.3	22	30	Max 187
A181	60	Carbon Steel	Max 0.35	Max 0.9	0.05	0.05	Max 0.35	-	-	-	60-42.2	30-21.1	22	35	Max 187
A181	70	Carbon Steel	Max 0.35	Max 0.9	0.05	0.05	Max 0.35	-	-	-	70-49.2	36-25.3	18	24	Max 187
A182	F1	½Mo	Max 0.28	0.60-0.9	0.045	0.045	0.15-0.35	-	-	0.44-0.65	70-49.2	40-28.1	20	30	143-192
A182	F5	5Cr-½Mo	Max 0.15	0.30-0.6	0.03	0.03	Max 0.5	Max 0.5	4.00-6	0.44-0.65	70-49.2	40-28.1	20	35	143-217
A182	F5a	5Cr-½Mo	Max 0.25	Max 0.6	0.04	0.03	Max 0.5	Max 0.5	4.00-6	0.44-0.65	90-63.3	65-45.7	22	50	187-248
A182	F11-1	1¼Cr-½Mo	0.05-0.15	0.30-0.6	0.03	0.03	0.50-1	-	1.00-1.5	0.44-0.65	60-42.2	30-21.1	20	45	121-174
A182	F11-2	1¼Cr-½Mo	0.10-0.2	0.30-0.8	0.04	0.04	0.50-1	-	1.00-1.5	0.44-0.65	70-49.2	40-28.1	20	30	143-207
A182	F11-3	1¼Cr-½Mo	0.10-0.2	0.30-0.8	0.04	0.04	0.50-1	-	1.00-1.5	0.44-0.65	75-52.7	45-31.6	20	30	156-207
A182	F12-1	1Cr-½Mo	0.05-0.15	0.30-0.6	0.045	0.045	Max 0.5	-	0.80-1.25	0.44-0.65	60-42.2	30-21.1	20	45	121-174
A182	F12-2	1Cr-½Mo	0.10-0.2	0.30-0.8	0.04	0.04	0.10-0.6	-	0.80-1.25	0.44-0.65	70-49.2	40-28.1	20	30	143-207
A182	F11	1¼Cr-½Mo	0.10-0.2	0.30-0.6	0.04	0.04	0.50-1	-	1.00-1.5	0.44-0.65	70-49.2	40-28.1	20	30	143-207
A182	F12	1Cr-½Mo	0.10-0.2	0.30-0.8	0.04	0.04	0.10-0.6	-	0.80-1.25	0.44-0.65	70-49.2	40-28.1	20	30	143-207
A182	F22	2¼Cr-½Mo	Max 0.15	0.30-0.6	0.04	0.04	Max 0.5	-	2.00-2.5	0.87-1.13	75-52.7	45-31.6	20	30	156-207
A182	F304	18Cr-8Ni	Max 0.08	Max 2	0.04	0.03	Max 1	8.00-11	18.00-	-	75-52.7	30-21.1	30	50	-
A182	F304L	18Cr-8Ni Low	Max 0.035	Max 2	0.04	0.03	Max 1	8.00-13	18.00-	-	70-49.2	25-17.6	30	50	-
A182	F316	18Cr-8Ni Mo	Max 0.08	Max 2	0.04	0.03	Max 1	10.00-14	16.00-18	2.00-3	75-52.7	30-21.7	30	50	-
A182	F316L	18Cr-8Ni Mo Low	Max 0.035	Max 2	0.04	0.03	Max 1	10.00-15	16.00-18	2.00-3	65-45.7	25-17.6	30	50	-
A182	F321	18Cr-8Ni Ti	Max 0.08	Max 2	0.03	0.03	Max 1	9.00-12	Min 17	-	75-52.7	30-21.1	30	50	-
A182	F347	18Cr-8Ni Cb	Max 0.08	Max 2	0.03	0.03	Max 1	9.00-13	17.00-20	-	75-52.7	30-21.1	30	50	-
A350	LF1	Carbon Steel	Max 0.3	0.75-1.05	0.035	0.04	0.15-0.3	Max 0.4	Max 0.3	Max 0.12	60.000-85 (42.2-59.7)	30-21.1	25	38	-
A350	LF2	Carbon Steel	Max 0.3	Max 1.35	0.035	0.04	0.15-0.3	Max 0.4	Max 0.3	Max 0.12	70.000-95 (49.2-66.8)	36-25.3	22	30	-
A350	LF3	3½Ni	Max 0.2	Max 0.9	0.035	0.04	0.20-0.35	3.25-3.75	Max 0.3	Max 0.12	70.000-95 (49.2-66.8)	37.5-26.4	22	35	-

Slip-on flanges 150 LB



Slip-on flanges are one of the most popular types in use. They are the type that slides over to the end of piping and requires less accuracy in positioning to weld thus fits for a much wider ranges of pipes lines. Smaller thickness allows for easier alignment of bolting holes.

Flange ring	Slip-On forged flanges of class 150 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B2	T2
INCH	MM	MM	MM	MM	MM	MM
1/2	89	30.2	35.1	11.2	22.4	15.7
3/4	99	38.1	42.9	12.7	27.7	15.7
1	108	49.3	50.8	14.2	34.5	17.5
1¼	117	58.7	63.5	15.7	43.2	20.6
1½	127	65	73.2	17.5	49.5	22.4
2	152	77.7	91.9	19.1	62	25.4
2½	178	90.4	104.6	22.4	74.7	28.4
3	191	108	127	23.9	90.7	30.2
3½	216	122.2	139.7	23.9	103.4	31.8
4	229	134.9	157.2	23.9	116.1	33.3
5	254	163.6	185.7	23.9	143.8	36.6
6	279	192	215.9	25.4	170.7	39.6
8	343	246.1	269.7	28.4	221.5	44.5
10	406	304.8	323.9	30.2	276.4	49.3
12	483	365.3	381	31.8	327.2	55.6
14	533	400.1	412.8	35.1	359.2	57.2
16	597	457.2	469.9	36.6	410.5	63.5
18	635	505	533.4	39.6	461.8	68.3
20	699	558.8	584.2	42.9	513.1	73.2
24	813	663.4	692.2	47.8	616	82.6

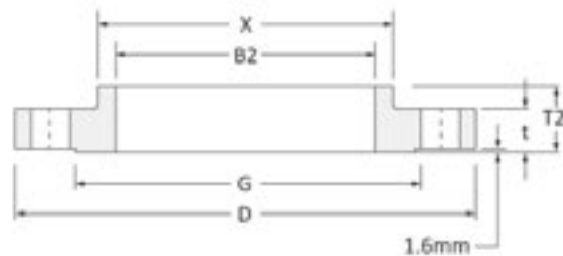
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	60.5	4	15.7	1/2	50.8	57.2	-
3/4	69.9	4	15.7	1/2	50.8	63.5	-
1	79.2	4	15.7	1/2	57.2	63.5	76.2
1¼	88.9	4	15.7	1/2	57.2	69.9	82.6
1½	98.6	4	15.7	1/2	63.5	69.9	82.6
2	120.7	4	19.1	5/8	69.9	82.6	95.3
2½	139.7	4	19.1	5/8	76.2	88.9	101.6
3	152.4	4	19.1	5/8	76.2	88.9	101.6
3½	177.8	8	19.1	5/8	76.2	88.9	101.6
4	190.5	8	19.1	5/8	76.2	88.9	101.6
5	215.9	8	22.4	3/4	82.6	95.3	108
6	241.3	8	22.4	3/4	82.6	101.6	114.3
8	298.5	8	22.4	3/4	88.9	108	120.7
10	362	12	25.4	7/8	101.6	114.3	127
12	431.8	12	25.4	7/8	101.6	120.7	133.4
14	476.3	12	28.4	1	114.3	133.4	146.1
16	539.8	16	28.4	1	114.3	133.4	146.1
18	577.9	16	31.8	1-1/8	127	146.1	158.8
20	635	20	31.8	1-1/8	139.7	158.8	171.5
24	749.3	20	35.1	1-1/4	152.4	171.5	184.2

Slip-on flanges 300 LB



Slip-on flanges are one of the most popular types in use. They are the type that slides over to the end of piping and requires less accuracy in positioning to weld thus fits for a much wider ranges of pipes lines. Smaller thickness allows for easier alignment of bolting holes.

Flange ring	Slip-On forged flanges of class 300 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B2	T2
INCH	MM	MM	MM	MM	MM	MM
1/2	95	38.1	35.1	14.2	22.4	22.4
3/4	117	47.8	42.9	15.7	27.7	25.4
1	124	53.8	50.8	17.5	34.5	26.9
1¼	133	63.5	63.5	19.1	43.2	26.9
1½	155	69.9	73.2	20.6	49.5	30.2
2	165	84.1	91.9	22.4	62.0	33.3
2½	191	100.1	104.6	25.4	74.7	38.1
3	210	117.3	127.0	28.4	90.7	42.9
3½	229	133.4	139.7	30.2	103.4	44.5
4	254	146.1	157.2	31.8	116.1	47.8
5	279	177.8	185.7	35.1	143.8	50.8
6	318	206.2	215.9	36.6	170.7	52.3
8	381	260.4	269.7	41.1	221.5	62.0
10	445	320.5	323.9	47.8	276.4	66.5
12	521	374.7	381.0	50.8	327.2	73.2
14	584	425.5	412.8	63.8	359.2	76.2
16	648	482.6	469.9	57.2	410.5	82.6
18	711	533.4	533.4	60.5	461.8	88.9
20	775	587.2	584.2	63.5	513.1	95.3
24	914	701.5	692.2	69.9	616.0	106.4

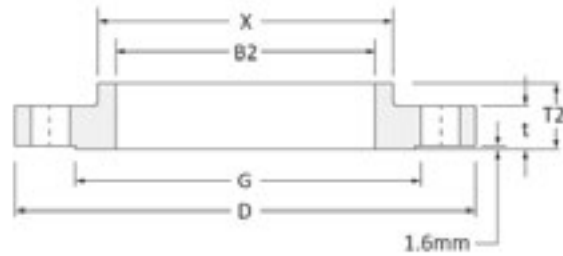
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	57.2	63.5	76.2
3/4	82.6	4	19.1	5/8	63.5	76.2	88.9
1	88.9	4	19.1	5/8	63.5	76.2	88.9
1¼	98.6	4	19.1	5/8	69.9	82.6	95.3
1½	114.3	4	22.4	3/4	76.2	88.9	101.6
2	127.0	8	19.1	5/8	76.2	88.9	101.6
2½	149.4	8	22.4	3/4	82.6	101.6	114.3
3	168.1	8	22.4	3/4	88.9	108.0	120.7
3½	184.2	8	22.4	3/4	95.3	108.0	127.0
4	200.2	8	22.4	3/4	95.3	114.3	127.0
5	235.0	8	22.4	3/4	108.0	120.7	133.4
6	269.7	12	22.4	3/4	108.0	120.7	139.7
8	330.2	12	25.4	7/8	120.7	139.7	152.4
10	387.4	16	28.4	1	139.7	158.8	171.5
12	450.9	16	31.8	1-1/8	146.1	171.5	184.2
14	514.4	20	31.8	1-1/8	158.8	177.8	190.5
16	571.5	20	35.1	1-1/4	165.1	190.5	203.2
18	628.7	24	35.1	1-1/4	171.5	196.9	209.6
20	685.8	24	35.1	1-1/4	184.2	203.2	222.3
24	812.8	24	41.1	1-1/2	203.2	228.6	254.0

Slip-on flanges 600 LB



Slip-on flanges are one of the most popular types in use. They are the type that slides over to the end of piping and requires less accuracy in positioning to weld thus fits for a much wider ranges of pipes lines. Smaller thickness allows for easier alignment of bolting holes.

Flange ring	Slip-On forged flanges of class 600 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B2	T2
INCH	MM	MM	MM	MM	MM	MM
1/2	95	38.1	35.1	14.2	22.4	22.4
3/4	117	47.8	42.9	15.7	27.7	25.4
1	124	53.8	50.8	17.5	34.5	26.9
1¼	133	63.5	63.5	20.6	43.2	28.4
1½	155	69.9	73.2	22.4	49.5	31.8
2	165	84.1	91.9	25.4	62.0	36.6
2½	191	100.1	104.6	28.4	74.7	41.1
3	210	117.3	127.0	31.8	90.7	46.0
3½	229	133.4	139.7	35.1	103.4	49.3
4	273	152.4	157.2	38.1	116.1	53.8
5	330	189.0	185.7	44.5	143.8	60.5
6	356	222.3	215.9	47.8	170.7	66.5
8	419	273.1	269.7	55.6	221.5	76.2
10	508	342.9	323.9	63.5	276.4	85.9
12	559	400.1	381.0	66.5	327.2	91.9
14	603	431.8	412.8	69.9	359.2	93.7
16	686	495.3	469.9	76.2	410.5	106.4
18	743	546.1	533.4	82.6	461.8	117.3
20	813	609.6	584.2	88.9	513.1	127.0
24	940	717.6	692.2	101.6	616.0	139.7

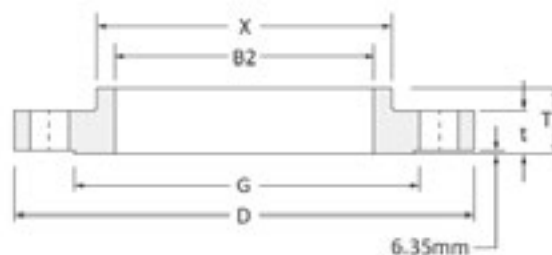
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	76.2	69.9	76.2
3/4	82.6	4	19.1	5/8	88.9	82.6	88.9
1	88.9	4	19.1	5/8	88.9	82.6	88.9
1¼	98.6	4	19.1	5/8	95.3	88.9	95.3
1½	114.3	4	22.4	3/4	108.0	101.6	108.0
2	127.0	8	19.1	5/8	108.0	101.6	108.0
2½	149.4	8	22.4	3/4	120.7	114.3	120.7
3	168.1	8	22.4	3/4	127.0	120.7	127.0
3½	184.2	8	25.4	7/8	139.7	133.4	139.7
4	215.9	8	25.4	7/8	146.1	139.7	146.1
5	266.7	8	28.4	1	165.1	158.8	165.1
6	292.1	12	28.4	1	171.5	165.1	171.5
8	349.3	12	31.8	1-1/8	190.5	184.2	196.9
10	431.8	16	35.1	1-1/4	215.9	209.6	215.9
12	489.0	20	35.1	1-1/4	222.3	215.9	222.3
14	527.1	20	38.1	1-3/8	235.0	228.6	235.0
16	603.3	20	41.1	1-1/2	254.0	247.7	254.0
18	654.1	20	44.5	1-5/8	273.1	266.7	273.1
20	723.9	24	44.5	1-5/8	285.8	279.4	292.1
24	838.2	24	50.8	1-7/8	330.2	323.9	336.6

Slip-on flanges 900 LB



Slip-on flanges are one of the most popular types in use. They are the type that slides over to the end of piping and requires less accuracy in positioning to weld thus fits for a much wider ranges of pipes lines. Smaller thickness allows for easier alignment of bolting holes.

Flange ring	Slip-On forged flanges of class 900 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B2	T2
INCH	MM	MM	MM	MM	MM	MM
1/2	121	38.1	35.1	22.4	22.4	31.8
3/4	130	44.5	42.9	25.4	27.7	35.1
1	149	52.3	50.8	28.4	34.5	41.1
1¼	159	63.5	63.5	28.4	43.2	41.1
1½	178	69.9	73.2	31.8	49.5	44.5
2	216	104.6	91.9	38.1	62.0	57.2
2½	244	124.0	104.6	41.1	74.7	63.5
3	241	127.0	127.0	38.1	90.7	53.8
4	292	158.8	157.2	44.5	116.1	69.9
5	349	190.5	185.7	50.8	143.8	79.2
6	381	235.0	215.9	55.6	170.7	85.9
8	470	298.5	269.7	63.5	221.5	101.6
10	546	368.3	323.9	69.9	276.4	108.0
12	610	419.1	381.0	79.2	327.2	117.3
14	641	450.9	412.8	85.9	359.2	130.0
16	705	508.0	469.9	88.9	410.5	133.4
18	787	565.2	533.4	101.6	461.8	152.4
20	857	622.3	584.2	108.0	513.1	158.8
24	1041	749.3	692.2	139.7	616.0	203.2

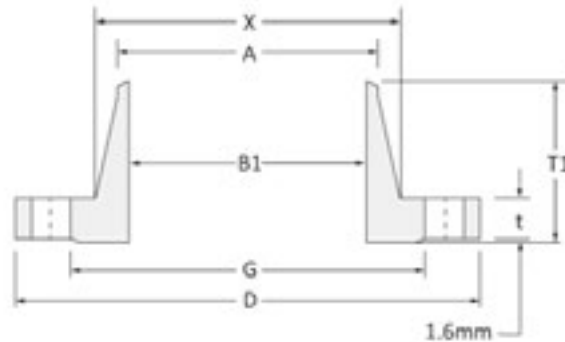
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	82.6	4	22.4	3/4	108.0	101.6	108.0
3/4	88.9	4	22.4	3/4	114.3	108.0	114.3
1	101.6	4	25.4	7/8	127.0	120.7	127.0
1¼	111.3	4	25.4	7/8	127.0	120.7	127.0
1½	124.0	4	28.4	1	139.7	133.4	139.7
2	165.1	8	25.4	7/8	146.1	139.7	146.1
2½	190.5	8	28.4	1	158.8	152.4	158.8
3	190.5	8	25.4	7/8	146.1	139.7	146.1
4	235.0	8	31.8	1-1/8	171.5	165.1	171.5
5	279.4	8	35.1	1-1/4	190.5	184.2	190.5
6	317.5	12	31.8	1-1/8	190.5	184.2	196.9
8	393.7	12	38.1	1-3/8	222.3	215.9	222.3
10	469.9	16	38.1	1-3/8	235.0	228.6	235.0
12	533.4	20	38.1	1-3/8	254.0	247.7	254.0
14	558.8	20	41.1	1-1/2	273.1	266.7	292.1
16	616.0	20	44.5	1-5/8	285.8	279.4	298.5
18	685.8	20	50.8	1-7/8	323.9	317.5	333.6
20	749.3	20	53.8	2	349.3	342.9	362.0
24	901.7	20	66.5	1-1/2	438.2	431.8	457.2

Welding neck flanges 150 LB



Welding neck flanges are the type that is joined to piping by butt welding end of the long neck, thickness transition along which gives it reinforcement under higher stress.

Flange ring	Welding neck forged flanges of class 150 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B1	T1	A
INCH	MM	MM	MM	MM	MM	MM	MM
1/2	89	30.2	35.1	11.2	15.7	47.8	21.3
3/4	99	38.1	42.9	12.7	20.8	52.3	26.7
1	108	49.3	50.8	14.2	26.7	55.6	33.5
1¼	117	58.7	63.5	15.7	35.1	57.2	42.2
1½	127	65.0	73.2	17.5	40.9	62.0	48.3
2	152	77.7	91.9	19.1	52.6	63.5	60.5
2½	178	90.4	104.6	22.4	62.7	69.9	73.2
3	191	108.0	127.0	23.9	78.0	69.9	88.9
3½	216	122.2	139.7	23.9	90.2	71.4	101.6
4	229	134.9	157.2	23.9	102.4	76.2	114.3
5	254	163.6	185.7	23.9	128.3	88.9	141.2
6	279	192.0	215.9	25.4	154.2	88.9	168.4
8	343	246.1	269.7	28.4	202.7	101.6	218.2
10	406	304.8	323.9	30.2	254.5	101.6	273.1
12	483	365.3	381.0	31.8	304.8	114.3	323.9
14	533	400.1	412.8	35.1	336.6	127.0	355.6
16	597	457.2	469.9	36.6	387.4	127.0	406.4
18	635	505.0	533.4	39.6	438.2	139.7	457.2
20	699	558.8	584.2	42.9	489.0	144.5	508.0
24	813	663.4	692.2	47.8	590.6	152.4	609.6

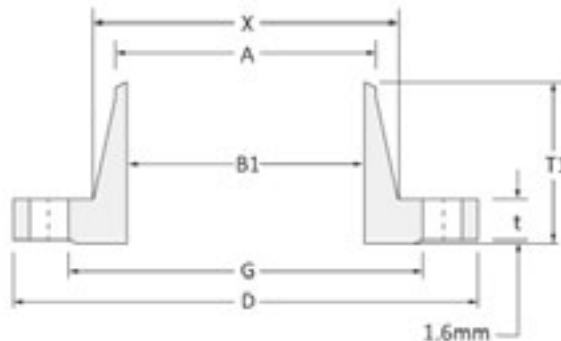
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	60.5	4	15.7	1/2	50.8	57.2	-
3/4	69.9	4	15.7	1/2	50.8	63.5	-
1	79.2	4	15.7	1/2	57.2	63.5	76.2
1¼	88.9	4	15.7	1/2	57.2	69.9	82.6
1½	98.6	4	15.7	1/2	63.5	69.9	82.6
2	120.7	4	19.1	5/8	69.9	82.6	95.3
2½	139.7	4	19.1	5/8	76.2	88.9	101.6
3	152.4	4	19.1	5/8	76.2	88.9	101.6
3½	177.8	8	19.1	5/8	76.2	88.9	101.6
4	190.5	8	19.1	5/8	76.2	88.9	101.6
5	215.9	8	22.4	3/4	82.6	95.3	108.0
6	241.3	8	22.4	3/4	82.6	101.6	114.3
8	298.5	8	22.4	3/4	88.9	108.0	120.7
10	362.0	12	25.4	7/8	101.6	114.3	127.0
12	431.8	12	25.4	7/8	101.6	120.7	133.4
14	476.3	12	28.4	1	114.3	133.4	146.1
16	539.8	16	28.4	1	114.3	133.4	146.1
18	577.9	16	31.8	1-1/8	127.0	146.1	158.8
20	635.0	20	31.8	1-1/8	139.7	158.8	171.5
24	749.3	20	35.1	1-1/4	152.4	171.5	184.2

Welding neck flanges 300 LB



Welding neck flanges are the type that is joined to piping by butt welding end of the long neck, thickness transition along which gives it reinforcement under higher stress.

Flange ring	Welding neck forged flanges of class 300 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B1	T1	A
INCH	MM	MM	MM	MM	MM	MM	MM
1/2	95	38.1	35.1	14.2	15.7	52.3	21.3
3/4	117	47.8	42.9	15.7	20.8	57.2	26.7
1	124	53.8	50.8	17.5	26.7	62.0	33.5
1¼	133	63.5	63.5	19.1	35.1	65.0	42.2
1½	155	69.9	73.2	20.6	40.9	68.3	48.3
2	165	84.1	91.9	22.4	52.6	69.9	60.5
2½	191	100.1	104.6	25.4	62.7	76.2	73.2
3	210	117.3	127.0	28.4	78.0	79.2	88.9
3½	229	133.4	139.7	30.2	90.2	81.0	101.6
4	254	146.1	157.2	31.8	102.4	85.9	114.3
5	279	177.8	185.7	35.1	128.3	98.6	141.2
6	318	206.2	215.9	36.6	154.2	98.6	168.4
8	381	260.4	269.7	41.1	202.7	111.3	219.2
10	445	320.5	323.9	47.8	254.5	117.3	273.1
12	521	374.7	381.0	50.8	304.8	130.0	323.9
14	584	425.5	412.8	63.8	336.6	142.7	355.6
16	648	482.6	469.9	57.2	387.4	146.1	406.4
18	711	533.4	533.4	60.5	438.2	158.8	457.2
20	775	587.2	584.2	63.5	489.0	162.1	508.0
24	914	701.5	692.2	69.9	590.6	168.1	609.6

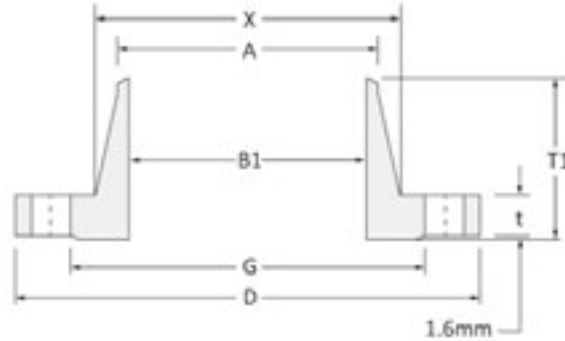
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	57.2	63.5	76.2
3/4	82.6	4	19.1	5/8	63.5	76.2	88.9
1	88.9	4	19.1	5/8	63.5	76.2	88.9
1¼	98.6	4	19.1	5/8	69.9	82.6	95.3
1½	114.3	4	22.4	3/4	76.2	88.9	101.6
2	127.0	8	19.1	5/8	76.2	88.9	101.6
2½	149.4	8	22.4	3/4	82.6	101.6	114.3
3	168.1	8	22.4	3/4	88.9	108.0	120.7
3½	184.2	8	22.4	3/4	95.3	108.0	127.0
4	200.2	8	22.4	3/4	95.3	114.3	127.0
5	235.0	8	22.4	3/4	108.0	120.7	133.4
6	269.7	12	22.4	3/4	108.0	120.7	139.7
8	330.2	12	25.4	7/8	120.7	139.7	152.4
10	387.4	16	28.4	1	139.7	158.8	171.5
12	450.9	16	31.8	1-1/8	146.1	171.5	184.2
14	514.4	20	31.8	1-1/8	158.8	177.8	190.5
16	571.5	20	35.1	1-1/4	165.1	190.5	203.2
18	628.7	24	35.1	1-1/4	171.5	196.9	209.6
20	685.8	24	35.1	1-1/4	184.2	203.2	222.3
24	812.8	24	41.1	1-1/2	203.2	228.6	254.0

Welding neck flanges 600 LB



Welding neck flanges are the type that is joined to piping by butt welding end of the long neck, thickness transition along which gives it reinforcement under higher stress.

Flange ring	Welding neck forged flanges of class 600 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B1	T1	A
INCH	MM	MM	MM	MM	MM	MM	MM
1/2	95	38.1	35.1	14.2	B36.10/.19	52.3	21.3
3/4	117	47.8	42.9	15.7	B36.10/.19	57.2	26.7
1	124	53.8	50.8	17.5	B36.10/.19	62.0	33.5
1¼	133	63.5	63.5	20.6	B36.10/.19	66.5	42.2
1½	155	69.9	73.2	22.4	B36.10/.19	69.9	48.3
2	165	84.1	91.9	25.4	B36.10/.19	73.2	60.5
2½	191	100.1	104.6	28.4	B36.10/.19	79.2	73.2
3	210	117.3	127.0	31.8	B36.10/.19	82.6	88.9
3½	229	133.4	139.7	35.1	B36.10/.19	85.9	101.6
4	273	152.4	157.2	38.1	B36.10/.19	101.6	114.3
5	330	189.0	185.7	44.5	B36.10/.19	114.3	141.2
6	356	222.3	215.9	47.8	B36.10/.19	117.3	168.4
8	419	273.1	269.7	55.6	B36.10/.19	133.4	219.2
10	508	342.9	323.9	63.5	B36.10/.19	152.4	273.1
12	559	400.1	381.0	66.5	B36.10/.19	155.4	323.9
14	603	431.8	412.8	69.9	B36.10/.19	165.1	355.6
16	686	495.3	469.9	76.2	B36.10/.19	177.8	406.4
18	743	546.1	533.4	82.6	B36.10/.19	184.2	457.2
20	813	609.6	584.2	88.9	B36.10/.19	190.5	508.0
24	940	717.6	692.2	101.6	B36.10/.19	203.2	609.6

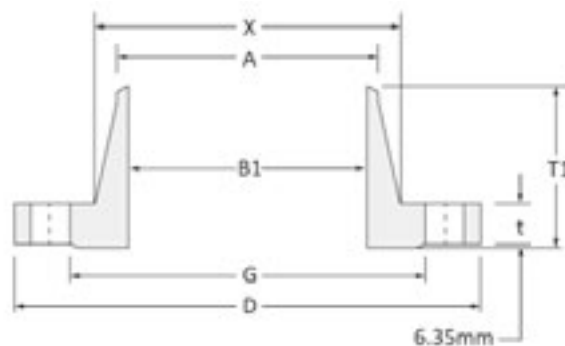
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	76.2	69.9	76.2
3/4	82.6	4	19.1	5/8	88.9	82.6	88.9
1	88.9	4	19.1	5/8	88.9	82.6	88.9
1¼	98.6	4	19.1	5/8	95.3	88.9	95.3
1½	114.3	4	22.4	3/4	108.0	101.6	108.0
2	127.0	8	19.1	5/8	108.0	101.6	108.0
2½	149.4	8	22.4	3/4	120.7	114.3	120.7
3	168.1	8	22.4	3/4	127.0	120.7	127.0
3½	184.2	8	25.4	7/8	139.7	133.4	139.7
4	215.9	8	25.4	7/8	146.1	139.7	146.1
5	266.7	8	28.4	1	165.1	158.8	165.1
6	292.1	12	28.4	1	171.5	165.1	171.5
8	349.3	12	31.8	1-1/8	190.5	184.2	196.9
10	431.8	16	35.1	1-1/4	215.9	209.6	215.9
12	489.0	20	35.1	1-1/4	222.3	215.9	222.3
14	527.1	20	38.1	1-3/8	235.0	228.6	235.0
16	603.3	20	41.1	1-1/2	254.0	247.7	254.0
18	654.1	20	44.5	1-5/8	273.1	266.7	273.1
20	723.9	24	44.5	1-5/8	285.8	279.4	292.1
24	838.2	24	50.8	1-7/8	330.2	323.9	336.6

Welding neck flanges 900 LB



Welding neck flanges are the type that is joined to piping by butt welding end of the long neck, thickness transition along which gives it reinforcement under higher stress.

Flange ring	Welding neck forged flanges of class 900 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B1	T1	A
INCH	MM	MM	MM	MM	MM	MM	MM
1/2	95	38.1	35.1	14.2	B36.10/.19	52.3	21.3
3/4	117	47.8	42.9	15.7	B36.10/.19	57.2	26.7
1	124	53.8	50.8	17.5	B36.10/.19	62.0	33.5
1¼	133	63.5	63.5	20.6	B36.10/.19	66.5	42.2
1½	155	69.9	73.2	22.4	B36.10/.19	69.9	48.3
2	165	84.1	91.9	25.4	B36.10/.19	73.2	60.5
2½	191	100.1	104.6	28.4	B36.10/.19	79.2	73.2
3	210	117.3	127.0	31.8	B36.10/.19	82.6	88.9
3½	229	133.4	139.7	35.1	B36.10/.19	85.9	101.6
4	273	152.4	157.2	38.1	B36.10/.19	101.6	114.3
5	330	189.0	185.7	44.5	B36.10/.19	114.3	141.2
6	356	222.3	215.9	47.8	B36.10/.19	117.3	168.4
8	419	273.1	269.7	55.6	B36.10/.19	133.4	219.2
10	508	342.9	323.9	63.5	B36.10/.19	152.4	273.1
12	559	400.1	381.0	66.5	B36.10/.19	155.4	323.9
14	603	431.8	412.8	69.9	B36.10/.19	165.1	355.6
16	686	495.3	469.9	76.2	B36.10/.19	177.8	406.4
18	743	546.1	533.4	82.6	B36.10/.19	184.2	457.2
20	813	609.6	584.2	88.9	B36.10/.19	190.5	508.0
24	940	717.6	692.2	101.6	B36.10/.19	203.2	609.6

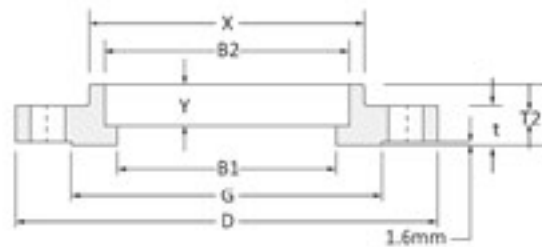
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	82.6	4	22.4	3/4	108.0	101.6	108.0
3/4	88.9	4	22.4	3/4	114.3	108.0	114.3
1	101.6	4	25.4	7/8	127.0	120.7	127.0
1¼	111.3	4	25.4	7/8	127.0	120.7	127.0
1½	124.0	4	28.4	1	139.7	133.4	139.7
2	165.1	8	25.4	7/8	146.1	139.7	146.1
2½	190.5	8	28.4	1	158.8	152.4	158.8
3	190.5	8	25.4	7/8	146.1	139.7	146.1
4	235.0	8	31.8	1-1/8	171.5	165.1	171.5
5	279.4	8	35.1	1-1/4	190.5	184.2	190.5
6	317.5	12	31.8	1-1/8	190.5	184.2	196.9
8	393.7	12	38.1	1-3/8	222.3	215.9	222.3
10	469.9	16	38.1	1-3/8	235.0	228.6	235.0
12	533.4	20	38.1	1-3/8	254.0	247.7	254.0
14	558.8	20	41.1	1-1/2	273.1	266.7	292.1
16	616.0	20	44.5	1-5/8	285.8	279.4	298.5
18	685.8	20	50.8	1-7/8	323.9	317.5	333.6
20	749.3	20	53.8	2	349.3	342.9	362.0
24	901.7	20	66.5	1-1/2	438.2	431.8	457.2

Socket-weld flanges 150 LB



Looking alike slip-on flanges, socket welding ones have smooth counterbore to the intended piping maximizing flow capacity. Great pressure understate can be achieved in this type of connection as the fatigue strength is 50% greater than double-weld slip-on flanges.

Flange ring	Socket welding forged flanges of class 150 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B1	B2	T2	Y
INCH	MM	MM	MM	MM	MM	MM	MM	MM
1/2	89	30.2	35.1	11.2	15.7	22.4	15.7	9.7
3/4	99	38.1	42.9	12.7	20.8	27.7	15.7	11.2
1	108	49.3	50.8	14.2	26.7	34.5	17.5	12.7
1¼	117	58.7	63.5	15.7	35.1	43.2	20.6	14.2
1½	127	65.0	73.2	17.5	40.9	49.5	22.4	15.7
2	152	77.7	91.9	19.1	52.6	62.0	25.4	17.5
2½	178	90.4	104.6	22.4	62.7	74.7	28.4	19.1
3	191	108.0	127.0	23.9	78.0	90.7	30.2	20.6
3½	216	122.2	139.7	23.9	90.2	103.4	31.8	22.4
4	229	134.9	157.2	23.9	102.4	116.1	33.3	23.9
5	254	163.6	185.7	23.9	128.3	143.8	36.6	23.9
6	279	192.0	215.9	25.4	154.2	170.7	39.6	26.9
8	343	246.1	269.7	28.4	202.7	221.5	44.5	31.8
10	406	304.8	323.9	30.2	254.5	276.4	49.3	33.3
12	483	365.3	381.0	31.8	304.8	327.2	55.6	39.6
14	533	400.1	412.8	35.1	336.6	359.2	57.2	41.4
16	597	457.2	469.9	36.6	387.4	410.5	63.5	44.5
18	635	505.0	533.4	39.6	438.2	461.8	68.3	49.3
20	699	558.8	584.2	42.9	489.0	513.1	73.2	54.1
24	813	663.4	692.2	47.8	590.6	616.0	82.6	63.5

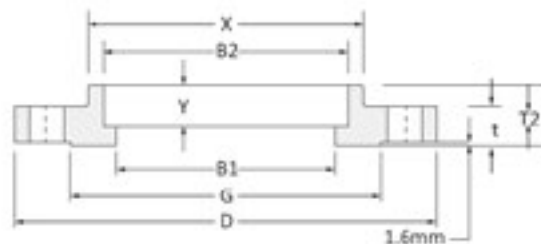
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	60.5	4	15.7	1/2	50.8	57.2	-
3/4	69.9	4	15.7	1/2	50.8	63.5	-
1	79.2	4	15.7	1/2	57.2	63.5	76.2
1¼	88.9	4	15.7	1/2	57.2	69.9	82.6
1½	98.6	4	15.7	1/2	63.5	69.9	82.6
2	120.7	4	19.1	5/8	69.9	82.6	95.3
2½	139.7	4	19.1	5/8	76.2	88.9	101.6
3	152.4	4	19.1	5/8	76.2	88.9	101.6
3½	177.8	8	19.1	5/8	76.2	88.9	101.6
4	190.5	8	19.1	5/8	76.2	88.9	101.6
5	215.9	8	22.4	3/4	82.6	95.3	108.0
6	241.3	8	22.4	3/4	82.6	101.6	114.3
8	298.5	8	22.4	3/4	88.9	108.0	120.7
10	362.0	12	25.4	7/8	101.6	114.3	127.0
12	431.8	12	25.4	7/8	101.6	120.7	133.4
14	476.3	12	28.4	1	114.3	133.4	146.1
16	539.8	16	28.4	1	114.3	133.4	146.1
18	577.9	16	31.8	1-1/8	127.0	146.1	158.8
20	635.0	20	31.8	1-1/8	139.7	158.8	171.5
24	749.3	20	35.1	1-1/4	152.4	171.5	184.2

Socket-weld flanges 300 LB



Looking alike slip-on flanges, socket welding ones have smooth counterbore to the intended piping maximizing flow capacity. Great pressure understate can be achieved in this type of connection as the fatigue strength is 50% greater than double-weld slip-on flanges.

Flange ring	Socket welding forged flanges of class 300 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B1	B2	T2	Y
INCH	MM	MM	MM	MM	MM	MM	MM	MM
1/2	95	38.1	35.1	14.2	15.7	22.4	22.4	9.7
3/4	117	47.8	42.9	15.7	20.8	27.7	25.4	11.2
1	124	53.8	50.8	17.5	26.7	34.5	26.9	12.7
1¼	133	63.5	63.5	19.1	35.1	43.2	26.9	14.2
1½	155	69.9	73.2	20.6	40.9	49.5	30.2	15.7
2	165	84.1	91.9	22.4	52.6	62.0	33.3	17.5
2½	191	100.1	104.6	25.4	62.7	74.7	38.1	19.1
3	210	117.3	127.0	28.4	78.0	90.7	42.9	20.6
3½	229	133.4	139.7	30.2	90.2	103.4	44.5	22.4
4	254	146.1	157.2	31.8	102.4	116.1	47.8	23.9
5	279	177.8	185.7	35.1	128.3	143.8	50.8	23.9
6	318	206.2	215.9	36.6	154.2	170.7	52.3	26.9
8	381	260.4	269.7	41.1	202.7	221.5	62.0	31.8
10	445	320.5	323.9	47.8	254.5	276.4	66.5	33.3
12	521	374.7	381.0	50.8	304.8	327.2	73.2	39.6
14	584	425.5	412.8	63.8	336.6	359.2	76.2	41.4
16	648	482.6	469.9	57.2	387.4	410.5	82.6	44.5
18	711	533.4	533.4	60.5	438.2	461.8	88.9	49.3
20	775	587.2	584.2	63.5	489.0	513.1	95.3	54.1
24	914	701.5	692.2	69.9	590.6	616.0	106.4	63.5

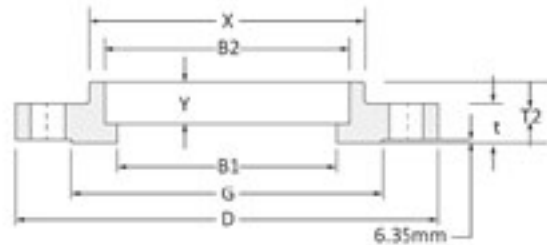
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	57.2	63.5	76.2
3/4	82.6	4	19.1	5/8	63.5	76.2	88.9
1	88.9	4	19.1	5/8	63.5	76.2	88.9
1¼	98.6	4	19.1	5/8	69.9	82.6	95.3
1½	114.3	4	22.4	3/4	76.2	88.9	101.6
2	127.0	8	19.1	5/8	76.2	88.9	101.6
2½	149.4	8	22.4	3/4	82.6	101.6	114.3
3	168.1	8	22.4	3/4	88.9	108.0	120.7
3½	184.2	8	22.4	3/4	95.3	108.0	127.0
4	200.2	8	22.4	3/4	95.3	114.3	127.0
5	235.0	8	22.4	3/4	108.0	120.7	133.4
6	269.7	12	22.4	3/4	108.0	120.7	139.7
8	330.2	12	25.4	7/8	120.7	139.7	152.4
10	387.4	16	28.4	1	139.7	158.8	171.5
12	450.9	16	31.8	1-1/8	146.1	171.5	184.2
14	514.4	20	31.8	1-1/8	158.8	177.8	190.5
16	571.5	20	35.1	1-1/4	165.1	190.5	203.2
18	628.7	24	35.1	1-1/4	171.5	196.9	209.6
20	685.8	24	35.1	1-1/4	184.2	203.2	222.3
24	812.8	24	41.1	1-1/2	203.2	228.6	254.0

Socket-weld flanges 600 LB



Looking alike slip-on flanges, socket welding ones have smooth counterbore to the intended piping maximizing flow capacity. Great pressure understate can be achieved in this type of connection as the fatigue strength is 50% greater than double-weld slip-on flanges.

Flange ring	Socket welding forged flanges of class 600 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B1	B2	T2	Y
INCH	MM	MM	MM	MM	MM	MM	MM	MM
1/2	95	38.1	35.1	14.2	B36.10/.19	22.4	22.4	9.7
3/4	117	47.8	42.9	15.7	B36.10/.19	27.7	25.4	11.2
1	124	53.8	50.8	17.5	B36.10/.19	34.5	26.9	12.7
1¼	133	63.5	63.5	20.6	B36.10/.19	43.2	28.4	14.2
1½	155	69.9	73.2	22.4	B36.10/.19	49.5	31.8	15.7
2	165	84.1	91.9	25.4	B36.10/.19	62.0	36.6	17.5
2½	191	100.1	104.6	28.4	B36.10/.19	74.7	41.1	19.1
3	210	117.3	127.0	31.8	B36.10/.19	90.7	46.0	20.6
3½	229	133.4	139.7	35.1	B36.10/.19	103.4	49.3	22.4
4	273	152.4	157.2	38.1	B36.10/.19	116.1	53.8	23.9
5	330	189.0	185.7	44.5	B36.10/.19	143.8	60.5	23.9
6	356	222.3	215.9	47.8	B36.10/.19	170.7	66.5	26.9
8	419	273.1	269.7	55.6	B36.10/.19	221.5	76.2	31.8
10	508	342.9	323.9	63.5	B36.10/.19	276.4	85.9	33.3
12	559	400.1	381.0	66.5	B36.10/.19	327.2	91.9	39.6
14	603	431.8	412.8	69.9	B36.10/.19	359.2	93.7	41.4
16	686	495.3	469.9	76.2	B36.10/.19	410.5	106.4	44.5
18	743	546.1	533.4	82.6	B36.10/.19	461.8	117.3	49.3
20	813	609.6	584.2	88.9	B36.10/.19	513.1	127.0	54.1
24	940	717.6	692.2	101.6	B36.10/.19	616.0	139.7	63.5

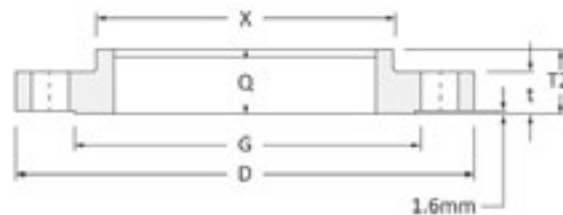
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	76.2	69.9	76.2
3/4	82.6	4	19.1	5/8	88.9	82.6	88.9
1	88.9	4	19.1	5/8	88.9	82.6	88.9
1¼	98.6	4	19.1	5/8	95.3	88.9	95.3
1½	114.3	4	22.4	3/4	108.0	101.6	108.0
2	127.0	8	19.1	5/8	108.0	101.6	108.0
2½	149.4	8	22.4	3/4	120.7	114.3	120.7
3	168.1	8	22.4	3/4	127.0	120.7	127.0
3½	184.2	8	25.4	7/8	139.7	133.4	139.7
4	215.9	8	25.4	7/8	146.1	139.7	146.1
5	266.7	8	28.4	1	165.1	158.8	165.1
6	292.1	12	28.4	1	171.5	165.1	171.5
8	349.3	12	31.8	1-1/8	190.5	184.2	196.9
10	431.8	16	35.1	1-1/4	215.9	209.6	215.9
12	489.0	20	35.1	1-1/4	222.3	215.9	222.3
14	527.1	20	38.1	1-3/8	235.0	228.6	235.0
16	603.3	20	41.1	1-1/2	254.0	247.7	254.0
18	654.1	20	44.5	1-5/8	273.1	266.7	273.1
20	723.9	24	44.5	1-5/8	285.8	279.4	292.1
24	838.2	24	50.8	1-7/8	330.2	323.9	336.6

Thread flanges 150 LB



Thread flanges are those with internal threads, being connected by screwing in pipes with matching external threads instead of high-temp welding. It is advisory to weld both rims after Thread though in no cases this type should be used for pressure piping.

Flange ring	Thread forged flanges of class 150 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	T2	Q
INCH	MM	MM	MM	MM	MM	MM
1/2	89	30.2	35.1	11.2	15.7	15.7
3/4	99	38.1	42.9	12.7	15.7	15.7
1	108	49.3	50.8	14.2	17.5	17.5
1¼	117	58.7	63.5	15.7	20.6	20.6
1½	127	65.0	73.2	17.5	22.4	22.4
2	152	77.7	91.9	19.1	25.4	25.4
2½	178	90.4	104.6	22.4	28.4	28.4
3	191	108.0	127.0	23.9	30.2	30.2
3½	216	122.2	139.7	23.9	31.8	31.8
4	229	134.9	157.2	23.9	33.3	33.3
5	254	163.6	185.7	23.9	36.6	36.6
6	279	192.0	215.9	25.4	39.6	39.6
8	343	246.1	269.7	28.4	44.5	44.5
10	406	304.8	323.9	30.2	49.3	49.3
12	483	365.3	381.0	31.8	55.6	55.6
14	533	400.1	412.8	35.1	57.2	57.2
16	597	457.2	469.9	36.6	63.5	63.5
18	635	505.0	533.4	39.6	68.3	68.3
20	699	558.8	584.2	42.9	73.2	73.2
24	813	663.4	692.2	47.8	82.6	82.6

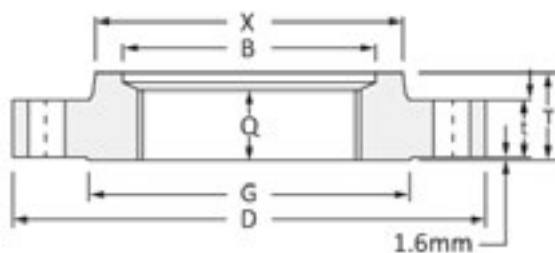
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	60.5	4	15.7	1/2	50.8	57.2	-
3/4	69.9	4	15.7	1/2	50.8	63.5	-
1	79.2	4	15.7	1/2	57.2	63.5	76.2
1¼	88.9	4	15.7	1/2	57.2	69.9	82.6
1½	98.6	4	15.7	1/2	63.5	69.9	82.6
2	120.7	4	19.1	5/8	69.9	82.6	95.3
2½	139.7	4	19.1	5/8	76.2	88.9	101.6
3	152.4	4	19.1	5/8	76.2	88.9	101.6
3½	177.8	8	19.1	5/8	76.2	88.9	101.6
4	190.5	8	19.1	5/8	76.2	88.9	101.6
5	215.9	8	22.4	3/4	82.6	95.3	108.0
6	241.3	8	22.4	3/4	82.6	101.6	114.3
8	298.5	8	22.4	3/4	88.9	108.0	120.7
10	362.0	12	25.4	7/8	101.6	114.3	127.0
12	431.8	12	25.4	7/8	101.6	120.7	133.4
14	476.3	12	28.4	1	114.3	133.4	146.1
16	539.8	16	28.4	1	114.3	133.4	146.1
18	577.9	16	31.8	1-1/8	127.0	146.1	158.8
20	635.0	20	31.8	1-1/8	139.7	158.8	171.5
24	749.3	20	35.1	1-1/4	152.4	171.5	184.2

Thread flanges 300 LB



Thread flanges are those with internal threads, being connected by screwing in pipes with matching external threads instead of high-temp welding. It is advisory to weld both rims after Thread though in no cases this type should be used for pressure piping.

Flange ring	Thread forged flanges of class 300 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B	T2	Q
INCH	MM	MM	MM	MM	MM	MM	MM
1/2	95	38.1	35.1	14.2	23.6	22.4	15.7
3/4	117	47.8	42.9	15.7	29.0	25.4	15.7
1	124	53.8	50.8	17.5	35.8	26.9	17.5
1¼	133	63.5	63.5	19.1	44.5	26.9	20.6
1½	155	69.9	73.2	20.6	50.5	30.2	22.4
2	165	84.1	91.9	22.4	63.5	33.3	28.4
2½	191	100.1	104.6	25.4	76.2	38.1	31.8
3	210	117.3	127.0	28.4	92.2	42.9	31.8
3½	229	133.4	139.7	30.2	104.9	44.5	36.6
4	254	146.1	157.2	31.8	117.6	47.8	36.6
5	279	177.8	185.7	35.1	144.5	50.8	42.9
6	318	206.2	215.9	36.6	171.5	52.3	46.0
8	381	260.4	269.7	41.1	222.3	62.0	50.8
10	445	320.5	323.9	47.8	276.4	66.5	55.6
12	521	374.7	381.0	50.8	328.7	73.2	60.5
14	584	425.5	412.8	63.8	360.4	76.2	63.5
16	648	482.6	469.9	57.2	411.2	82.6	68.3
18	711	533.4	533.4	60.5	462.0	88.9	69.9
20	775	587.2	584.2	63.5	512.8	95.3	73.2
24	914	701.5	692.2	69.9	614.4	106.4	82.6

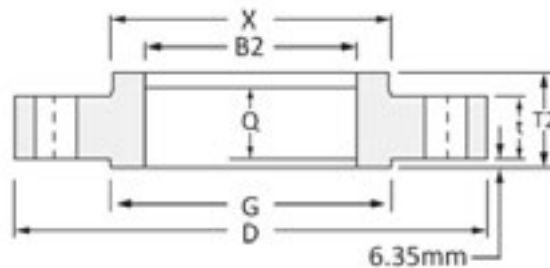
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	57.2	63.5	76.2
3/4	82.6	4	19.1	5/8	63.5	76.2	88.9
1	88.9	4	19.1	5/8	63.5	76.2	88.9
1¼	98.6	4	19.1	5/8	69.9	82.6	95.3
1½	114.3	4	22.4	3/4	76.2	88.9	101.6
2	127.0	8	19.1	5/8	76.2	88.9	101.6
2½	149.4	8	22.4	3/4	82.6	101.6	114.3
3	168.1	8	22.4	3/4	88.9	108.0	120.7
3½	184.2	8	22.4	3/4	95.3	108.0	127.0
4	200.2	8	22.4	3/4	95.3	114.3	127.0
5	235.0	8	22.4	3/4	108.0	120.7	133.4
6	269.7	12	22.4	3/4	108.0	120.7	139.7
8	330.2	12	25.4	7/8	120.7	139.7	152.4
10	387.4	16	28.4	1	139.7	158.8	171.5
12	450.9	16	31.8	1-1/8	146.1	171.5	184.2
14	514.4	20	31.8	1-1/8	158.8	177.8	190.5
16	571.5	20	35.1	1-1/4	165.1	190.5	203.2
18	628.7	24	35.1	1-1/4	171.5	196.9	209.6
20	685.8	24	35.1	1-1/4	184.2	203.2	222.3
24	812.8	24	41.1	1-1/2	203.2	228.6	254.0

Thread flanges 600 LB



Thread flanges are those with internal threads, being connected by screwing in pipes with matching external threads instead of high-temp welding. It is advisory to weld both rims after Thread though in no cases this type should be used for pressure piping.

Flange ring	Thread forged flanges of class 600 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B2	T2	Q
INCH	MM	MM	MM	MM	MM	MM	MM
1/2	95	38.1	35.1	14.2	22.4	22.4	15.7
3/4	117	47.8	42.9	15.7	27.7	25.4	15.7
1	124	53.8	50.8	17.5	34.5	26.9	17.5
1¼	133	63.5	63.5	20.6	43.2	28.4	20.6
1½	155	69.9	73.2	22.4	49.5	31.8	22.4
2	165	84.1	91.9	25.4	62.0	36.6	28.4
2½	191	100.1	104.6	28.4	74.7	41.1	31.8
3	210	117.3	127.0	31.8	90.7	46.0	35.1
3½	229	133.4	139.7	35.1	103.4	49.3	39.6
4	273	152.4	157.2	38.1	116.1	53.8	41.1
5	330	189.0	185.7	44.5	143.8	60.5	47.8
6	356	222.3	215.9	47.8	170.7	66.5	50.8
8	419	273.1	269.7	55.6	221.5	76.2	57.2
10	508	342.9	323.9	63.5	276.4	85.9	65.0
12	559	400.1	381.0	66.5	327.2	91.9	69.9
14	603	431.8	412.8	69.9	359.2	93.7	73.2
16	686	495.3	469.9	76.2	410.5	106.4	77.7
18	743	546.1	533.4	82.6	461.8	117.3	79.2
20	813	609.6	584.2	88.9	513.1	127.0	82.6
24	940	717.6	692.2	101.6	616.0	139.7	91.9

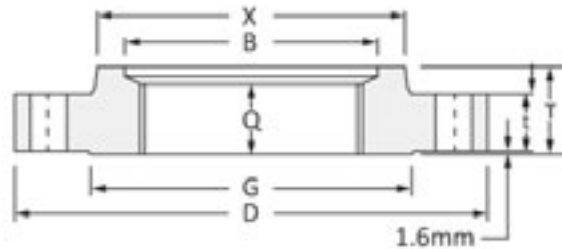
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	76.2	69.9	76.2
3/4	82.6	4	19.1	5/8	88.9	82.6	88.9
1	88.9	4	19.1	5/8	88.9	82.6	88.9
1¼	98.6	4	19.1	5/8	95.3	88.9	95.3
1½	114.3	4	22.4	3/4	108.0	101.6	108.0
2	127.0	8	19.1	5/8	108.0	101.6	108.0
2½	149.4	8	22.4	3/4	120.7	114.3	120.7
3	168.1	8	22.4	3/4	127.0	120.7	127.0
3½	184.2	8	25.4	7/8	139.7	133.4	139.7
4	215.9	8	25.4	7/8	146.1	139.7	146.1
5	266.7	8	28.4	1	165.1	158.8	165.1
6	292.1	12	28.4	1	171.5	165.1	171.5
8	349.3	12	31.8	1-1/8	190.5	184.2	196.9
10	431.8	16	35.1	1-1/4	215.9	209.6	215.9
12	489.0	20	35.1	1-1/4	222.3	215.9	222.3
14	527.1	20	38.1	1-3/8	235.0	228.6	235.0
16	603.3	20	41.1	1-1/2	254.0	247.7	254.0
18	654.1	20	44.5	1-5/8	273.1	266.7	273.1
20	723.9	24	44.5	1-5/8	285.8	279.4	292.1
24	838.2	24	50.8	1-7/8	330.2	323.9	336.6

Thread flanges 900 LB



Thread flanges are those with internal threads, being connected by screwing in pipes with matching external threads instead of high-temp welding. It is advisory to weld both rims after Thread though in no cases this type should be used for pressure piping.

Flange ring	Thread forged flanges of class 900 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	G	t	B	T2	Q
INCH	MM	MM	MM	MM	MM	MM	MM
1/2	121	38.1	35.1	22.4	23.6	31.8	22.4
3/4	130	44.5	42.9	25.4	29.0	35.1	25.4
1	149	52.3	50.8	28.4	35.8	41.1	28.4
1¼	159	63.5	63.5	28.4	44.5	41.1	30.2
1½	178	69.9	73.2	31.8	50.5	44.5	31.8
2	216	104.6	91.9	38.1	63.5	57.2	38.1
2½	244	124.0	104.6	41.1	76.2	63.5	47.8
3	241	127.0	127.0	38.1	92.2	53.8	41.1
4	292	158.8	157.2	44.5	117.6	69.9	47.8
5	349	190.5	185.7	50.8	144.5	79.2	53.8
6	381	235.0	215.9	55.6	171.5	85.9	57.2
8	470	298.5	269.7	63.5	222.3	101.6	63.5
10	546	368.3	323.9	69.9	276.4	108.0	71.4
12	610	419.1	381.0	79.2	328.7	117.3	76.2
14	641	450.9	412.8	85.9	360.4	130.0	82.6
16	705	508.0	469.9	88.9	411.2	133.4	85.9
18	787	565.2	533.4	101.6	462.0	152.4	88.9
20	857	622.3	584.2	108.0	512.8	158.8	91.9
24	1041	749.3	692.2	139.7	614.4	203.2	101.6

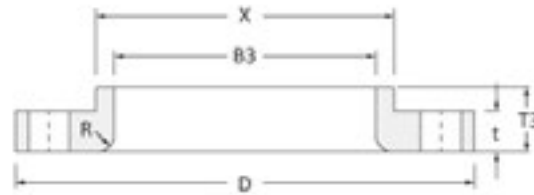
SIZE INCH	DRILLING			BOLTING			
	CIRCLE Ø MM	HOLE NR. EA	HOLES Ø MM	BOLT Ø INCH	BOLT LENGTH		
					MACH RF	STUD RF	STUD RJ
1/2	82.6	4	22.4	3/4	108.0	101.6	108.0
3/4	88.9	4	22.4	3/4	114.3	108.0	114.3
1	101.6	4	25.4	7/8	127.0	120.7	127.0
1¼	111.3	4	25.4	7/8	127.0	120.7	127.0
1½	124.0	4	28.4	1	139.7	133.4	139.7
2	165.1	8	25.4	7/8	146.1	139.7	146.1
2½	190.5	8	28.4	1	158.8	152.4	158.8
3	190.5	8	25.4	7/8	146.1	139.7	146.1
4	235.0	8	31.8	1-1/8	171.5	165.1	171.5
5	279.4	8	35.1	1-1/4	190.5	184.2	190.5
6	317.5	12	31.8	1-1/8	190.5	184.2	196.9
8	393.7	12	38.1	1-3/8	222.3	215.9	222.3
10	469.9	16	38.1	1-3/8	235.0	228.6	235.0
12	533.4	20	38.1	1-3/8	254.0	247.7	254.0
14	558.8	20	41.1	1-1/2	273.1	266.7	292.1
16	616.0	20	44.5	1-5/8	285.8	279.4	298.5
18	685.8	20	50.8	1-7/8	323.9	317.5	333.6
20	749.3	20	53.8	2	349.3	342.9	362.0
24	901.7	20	66.5	1-1/2	438.2	431.8	457.2

Lap joint flanges 150 LB



Lap joint flanges are used commonly together with stub-end fittings which frees flanges from being bolted and fixed in position. When the fitting is welded to piping, lap joint flange is easy to be slipped on, rotated thus can be frequently mounted and dismantled.

Flange ring	Lap joint forged flanges of class 150 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	t	B3	T3	R°
INCH	MM	MM	MM	MM	MM	
1/2	89	30.2	11.2	22.9	15.7	3.0
3/4	99	38.1	12.7	28.2	15.7	3.0
1	108	49.3	14.2	35.1	17.5	3.0
1¼	117	58.7	15.7	43.7	20.6	4.8
1½	127	65.0	17.5	50.0	22.4	6.4
2	152	77.7	19.1	62.5	25.4	7.9
2½	178	90.4	22.4	75.4	28.4	7.9
3	191	108.0	23.9	91.4	30.2	9.7
3½	216	122.2	23.9	104.1	31.8	9.7
4	229	134.9	23.9	116.8	33.3	11.2
5	254	163.6	23.9	144.5	36.6	11.2
6	279	192.0	25.4	171.5	39.6	12.7
8	343	246.1	28.4	223.3	44.5	12.7
10	406	304.8	30.2	277.4	49.3	12.7
12	483	365.3	31.8	328.2	55.6	12.7
14	533	400.1	35.1	360.2	79.2	12.7
16	597	457.2	36.6	411.2	87.4	12.7
18	635	505.0	39.6	462.3	96.8	12.7
20	699	558.8	42.9	514.4	103.1	12.7
24	813	663.4	47.8	616.0	111.3	12.7

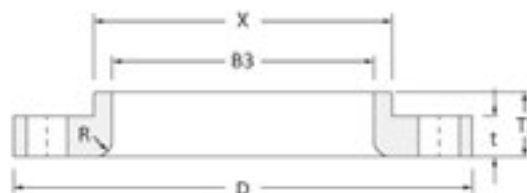
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	60.5	4	15.7	1/2	50.8	57.2	-
3/4	69.9	4	15.7	1/2	50.8	63.5	-
1	79.2	4	15.7	1/2	57.2	63.5	76.2
1¼	88.9	4	15.7	1/2	57.2	69.9	82.6
1½	98.6	4	15.7	1/2	63.5	69.9	82.6
2	120.7	4	19.1	5/8	69.9	82.6	95.3
2½	139.7	4	19.1	5/8	76.2	88.9	101.6
3	152.4	4	19.1	5/8	76.2	88.9	101.6
3½	177.8	8	19.1	5/8	76.2	88.9	101.6
4	190.5	8	19.1	5/8	76.2	88.9	101.6
5	215.9	8	22.4	3/4	82.6	95.3	108.0
6	241.3	8	22.4	3/4	82.6	101.6	114.3
8	298.5	8	22.4	3/4	88.9	108.0	120.7
10	362.0	12	25.4	7/8	101.6	114.3	127.0
12	431.8	12	25.4	7/8	101.6	120.7	133.4
14	476.3	12	28.4	1	114.3	133.4	146.1
16	539.8	16	28.4	1	114.3	133.4	146.1
18	577.9	16	31.8	1-1/8	127.0	146.1	158.8
20	635.0	20	31.8	1-1/8	139.7	158.8	171.5
24	749.3	20	35.1	1-1/4	152.4	171.5	184.2

Lap joint flanges 300 LB



Lap joint flanges are used commonly together with stub-end fittings which frees flanges from being bolted and fixed in position. When the fitting is welded to piping, lap joint flange is easy to be slipped on, rotated thus can be frequently mounted and dismounted.

Flange ring	Lap joint forged flanges of class 300 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	t	B3	T3	R°
INCH	MM	MM	MM	MM	MM	
1/2	95	38.1	14.2	22.9	22.4	3.0
3/4	117	47.8	15.7	28.2	25.4	3.0
1	124	53.8	17.5	35.1	26.9	3.0
1¼	133	63.5	19.1	43.7	26.9	4.8
1½	155	69.9	20.6	50.0	30.2	6.4
2	165	84.1	22.4	62.5	33.3	7.9
2½	191	100.1	25.4	75.4	38.1	7.9
3	210	117.3	28.4	91.4	42.9	9.7
3½	229	133.4	30.2	104.1	44.5	9.7
4	254	146.1	31.8	116.8	47.8	11.2
5	279	177.8	35.1	144.5	50.8	11.2
6	318	206.2	36.6	171.5	52.3	12.7
8	381	260.4	41.1	222.3	62.0	12.7
10	445	320.5	47.8	277.4	66.5	12.7
12	521	374.7	50.8	328.2	101.6	12.7
14	584	425.5	63.8	360.2	111.3	12.7
16	648	482.6	57.2	411.2	120.7	12.7
18	711	533.4	60.5	462.3	130.0	12.7
20	775	587.2	63.5	514.4	139.7	12.7
24	914	701.5	69.9	616.0	152.4	12.7

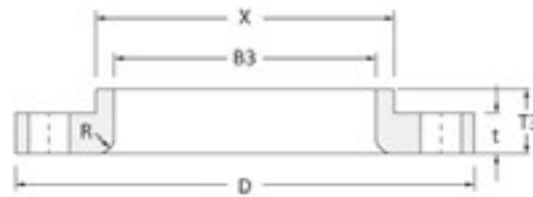
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	57.2	63.5	76.2
3/4	82.6	4	19.1	5/8	63.5	76.2	88.9
1	88.9	4	19.1	5/8	63.5	76.2	88.9
1¼	98.6	4	19.1	5/8	69.9	82.6	95.3
1½	114.3	4	22.4	3/4	76.2	88.9	101.6
2	127.0	8	19.1	5/8	76.2	88.9	101.6
2½	149.4	8	22.4	3/4	82.6	101.6	114.3
3	168.1	8	22.4	3/4	88.9	108.0	120.7
3½	184.2	8	22.4	3/4	95.3	108.0	127.0
4	200.2	8	22.4	3/4	95.3	114.3	127.0
5	235.0	8	22.4	3/4	108.0	120.7	133.4
6	269.7	12	22.4	3/4	108.0	120.7	139.7
8	330.2	12	25.4	7/8	120.7	139.7	152.4
10	387.4	16	28.4	1	139.7	158.8	171.5
12	450.9	16	31.8	1-1/8	146.1	171.5	184.2
14	514.4	20	31.8	1-1/8	158.8	177.8	190.5
16	571.5	20	35.1	1-1/4	165.1	190.5	203.2
18	628.7	24	35.1	1-1/4	171.5	196.9	209.6
20	685.8	24	35.1	1-1/4	184.2	203.2	222.3
24	812.8	24	41.1	1-1/2	203.2	228.6	254.0

Lap joint flanges 600 LB



Lap joint flanges are used commonly together with stub-end fittings which frees flanges from being bolted and fixed in position. When the fitting is welded to piping, lap joint flange is easy to be slipped on, rotated thus can be frequently mounted and dismounted.

Flange ring	Lap joint forged flanges of class 600 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	t	B3	T3	R°
INCH	MM	MM	MM	MM	MM	
1/2	95	38.1	14.2	22.9	22.4	3.0
3/4	117	47.8	15.7	28.2	25.4	3.0
1	124	53.8	17.5	35.1	26.9	3.0
1¼	133	63.5	20.6	43.7	28.4	4.8
1½	155	69.9	22.4	50.0	31.8	6.4
2	165	84.1	25.4	62.5	36.6	7.9
2½	191	100.1	28.4	75.4	41.1	7.9
3	210	117.3	31.8	91.4	46.0	9.7
3½	229	133.4	35.1	104.1	49.3	9.7
4	273	152.4	38.1	116.8	53.8	11.2
5	330	189.0	44.5	144.5	60.5	11.2
6	356	222.3	47.8	171.5	66.5	12.7
8	419	273.1	55.6	222.3	76.2	12.7
10	508	342.9	63.5	277.4	111.3	12.7
12	559	400.1	66.5	328.2	117.3	12.7
14	603	431.8	69.9	360.2	127.0	12.7
16	686	495.3	76.2	411.2	139.7	12.7
18	743	546.1	82.6	462.3	152.4	12.7
20	813	609.6	88.9	514.4	165.1	12.7
24	940	717.6	101.6	616.0	184.2	12.7

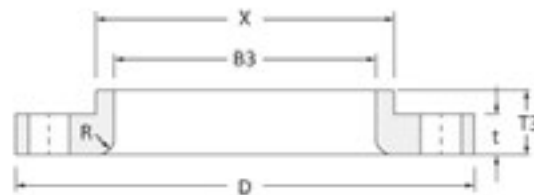
SIZE INCH	DRILLING			BOLTING			
	CIRCLE Ø MM	HOLE NR. EA	HOLES Ø MM	BOLT Ø INCH	BOLT LENGTH		
					MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	76.2	69.9	76.2
3/4	82.6	4	19.1	5/8	88.9	82.6	88.9
1	88.9	4	19.1	5/8	88.9	82.6	88.9
1¼	98.6	4	19.1	5/8	95.3	88.9	95.3
1½	114.3	4	22.4	3/4	108.0	101.6	108.0
2	127.0	8	19.1	5/8	108.0	101.6	108.0
2½	149.4	8	22.4	3/4	120.7	114.3	120.7
3	168.1	8	22.4	3/4	127.0	120.7	127.0
3½	184.2	8	25.4	7/8	139.7	133.4	139.7
4	215.9	8	25.4	7/8	146.1	139.7	146.1
5	266.7	8	28.4	1	165.1	158.8	165.1
6	292.1	12	28.4	1	171.5	165.1	171.5
8	349.3	12	31.8	1-1/8	190.5	184.2	196.9
10	431.8	16	35.1	1-1/4	215.9	209.6	215.9
12	489.0	20	35.1	1-1/4	222.3	215.9	222.3
14	527.1	20	38.1	1-3/8	235.0	228.6	235.0
16	603.3	20	41.1	1-1/2	254.0	247.7	254.0
18	654.1	20	44.5	1-5/8	273.1	266.7	273.1
20	723.9	24	44.5	1-5/8	285.8	279.4	292.1
24	838.2	24	50.8	1-7/8	330.2	323.9	336.6

Lap joint flanges 900 LB



Lap joint flanges are used commonly together with stub-end fittings which frees flanges from being bolted and fixed in position. When the fitting is welded to piping, lap joint flange is easy to be slipped on, rotated thus can be frequently mounted and dismounted.

Flange ring	Lap joint forged flanges of class 900 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE	D	X	t	B3	T3	R°
INCH	MM	MM	MM	MM	MM	
1/2	121	38.1	22.4	22.9	31.8	3.0
3/4	130	44.5	25.4	28.2	35.1	3.0
1	149	52.3	28.4	35.1	41.1	3.0
1¼	159	63.5	28.4	43.7	41.1	4.8
1½	178	69.9	31.8	50.0	44.5	6.4
2	216	104.6	38.1	62.5	57.2	7.9
2½	244	124.0	41.1	75.4	63.5	7.9
3	241	127.0	38.1	91.4	53.8	9.7
4	292	158.8	44.5	116.8	69.9	11.2
5	349	190.5	50.8	144.5	79.2	11.2
6	381	235.0	55.6	171.5	85.9	12.7
8	470	298.5	63.5	222.3	114.3	12.7
10	546	368.3	69.9	277.4	127.0	12.7
12	610	419.1	79.2	328.2	142.7	12.7
14	641	450.9	85.9	360.2	155.4	12.7
16	705	508.0	88.9	411.2	165.1	12.7
18	787	565.2	101.6	42.3	190.5	12.7
20	857	622.3	108.0	514.4	209.6	12.7
24	1041	749.3	139.7	616.0	266.7	12.7

SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	82.6	4	22.4	3/4	108.0	101.6	108.0
3/4	88.9	4	22.4	3/4	114.3	108.0	114.3
1	101.6	4	25.4	7/8	127.0	120.7	127.0
1¼	111.3	4	25.4	7/8	127.0	120.7	127.0
1½	124.0	4	28.4	1	139.7	133.4	139.7
2	165.1	8	25.4	7/8	146.1	139.7	146.1
2½	190.5	8	28.4	1	158.8	152.4	158.8
3	190.5	8	25.4	7/8	146.1	139.7	146.1
4	235.0	8	31.8	1-1/8	171.5	165.1	171.5
5	279.4	8	35.1	1-1/4	190.5	184.2	190.5
6	317.5	12	31.8	1-1/8	190.5	184.2	196.9
8	393.7	12	38.1	1-3/8	222.3	215.9	222.3
10	469.9	16	38.1	1-3/8	235.0	228.6	235.0
12	533.4	20	38.1	1-3/8	254.0	247.7	254.0
14	558.8	20	41.1	1-1/2	273.1	266.7	292.1
16	616.0	20	44.5	1-5/8	285.8	279.4	298.5
18	685.8	20	50.8	1-7/8	323.9	317.5	333.6
20	749.3	20	53.8	2	349.3	342.9	362.0
24	901.7	20	66.5	1-1/2	438.2	431.8	457.2

Blind flanges 150 LB



A blind flange is a solid disk used to block off a pipeline or to create a stop. The blind flange is machined in the same manner as a regular flange with the mounting holes around the perimeter and the gasket sealing rings machined into the mating surface.

Flange ring	Blind forged flanges of class 150 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE INCH	D MM	G MM	t MM
1/2	89	35.1	11.2
3/4	99	42.9	12.7
1	108	50.8	14.2
1¼	117	63.5	15.7
1½	127	73.2	17.5
2	152	91.9	19.1
2½	178	104.6	22.4
3	191	127.0	23.9
3½	216	139.7	23.9
4	229	157.2	23.9
5	254	185.7	23.9
6	279	215.9	25.4
8	343	269.7	28.4
10	406	323.9	30.2
12	483	381.0	31.8
14	533	412.8	35.1
16	597	469.9	36.6
18	635	533.4	39.6
20	699	584.2	42.9
24	813	692.2	47.8

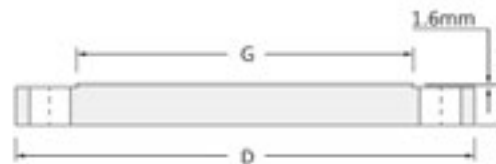
SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	60.5	4	15.7	1/2	50.8	57.2	-
3/4	69.9	4	15.7	1/2	50.8	63.5	-
1	79.2	4	15.7	1/2	57.2	63.5	76.2
1¼	88.9	4	15.7	1/2	57.2	69.9	82.6
1½	98.6	4	15.7	1/2	63.5	69.9	82.6
2	120.7	4	19.1	5/8	69.9	82.6	95.3
2½	139.7	4	19.1	5/8	76.2	88.9	101.6
3	152.4	4	19.1	5/8	76.2	88.9	101.6
3½	177.8	8	19.1	5/8	76.2	88.9	101.6
4	190.5	8	19.1	5/8	76.2	88.9	101.6
5	215.9	8	22.4	3/4	82.6	95.3	108.0
6	241.3	8	22.4	3/4	82.6	101.6	114.3
8	298.5	8	22.4	3/4	88.9	108.0	120.7
10	362.0	12	25.4	7/8	101.6	114.3	127.0
12	431.8	12	25.4	7/8	101.6	120.7	133.4
14	476.3	12	28.4	1	114.3	133.4	146.1
16	539.8	16	28.4	1	114.3	133.4	146.1
18	577.9	16	31.8	1-1/8	127.0	146.1	158.8
20	635.0	20	31.8	1-1/8	139.7	158.8	171.5
24	749.3	20	35.1	1-1/4	152.4	171.5	184.2

Blind flanges 300 LB



A blind flange is a solid disk used to block off a pipeline or to create a stop. The blind flange is machined in the same manner as a regular flange with the mounting holes around the perimeter and the gasket sealing rings machined into the mating surface.

Flange ring	Blind forged flanges of class 300 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE INCH	D MM	G MM	t MM
1/2	95	35.1	14.2
3/4	117	42.9	15.7
1	124	50.8	17.5
1¼	133	63.5	19.1
1½	155	73.2	20.6
2	165	91.9	22.4
2½	191	104.6	25.4
3	210	127.0	28.4
3½	229	139.7	30.2
4	254	157.2	31.8
5	279	185.7	35.1
6	318	215.9	36.6
8	381	269.7	41.1
10	445	323.9	47.8
12	521	381.0	50.8
14	584	412.8	63.8
16	648	469.9	57.2
18	711	533.4	60.5
20	775	584.2	63.5
24	914	692.2	69.9

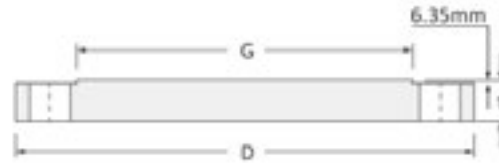
SIZE INCH	DRILLING			BOLTING			
	CIRCLE Ø MM	HOLE NR. EA	HOLES Ø MM	BOLT Ø INCH	BOLT LENGTH		
					MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	57.2	63.5	76.2
3/4	82.6	4	19.1	5/8	63.5	76.2	88.9
1	88.9	4	19.1	5/8	63.5	76.2	88.9
1¼	98.6	4	19.1	5/8	69.9	82.6	95.3
1½	114.3	4	22.4	3/4	76.2	88.9	101.6
2	127.0	8	19.1	5/8	76.2	88.9	101.6
2½	149.4	8	22.4	3/4	82.6	101.6	114.3
3	168.1	8	22.4	3/4	88.9	108.0	120.7
3½	184.2	8	22.4	3/4	95.3	108.0	127.0
4	200.2	8	22.4	3/4	95.3	114.3	127.0
5	235.0	8	22.4	3/4	108.0	120.7	133.4
6	269.7	12	22.4	3/4	108.0	120.7	139.7
8	330.2	12	25.4	7/8	120.7	139.7	152.4
10	387.4	16	28.4	1	139.7	158.8	171.5
12	450.9	16	31.8	1-1/8	146.1	171.5	184.2
14	514.4	20	31.8	1-1/8	158.8	177.8	190.5
16	571.5	20	35.1	1-1/4	165.1	190.5	203.2
18	628.7	24	35.1	1-1/4	171.5	196.9	209.6
20	685.8	24	35.1	1-1/4	184.2	203.2	222.3
24	812.8	24	41.1	1-1/2	203.2	228.6	254.0

Blind flanges 600 LB



A blind flange is a solid disk used to block off a pipeline or to create a stop. The blind flange is machined in the same manner as a regular flange with the mounting holes around the perimeter and the gasket sealing rings machined into the mating surface.

Flange ring	Blind forged flanges of class 600 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE INCH	D MM	G MM	t MM
1/2	95	35.1	14.2
3/4	117	42.9	15.7
1	124	50.8	17.5
1¼	133	63.5	20.6
1½	155	73.2	22.4
2	165	91.9	25.4
2½	191	104.6	28.4
3	210	127.0	31.8
3½	229	139.7	35.1
4	273	157.2	38.1
5	330	185.7	44.5
6	356	215.9	47.8
8	419	269.7	55.6
10	508	323.9	63.5
12	559	381.0	66.5
14	603	412.8	69.9
16	686	469.9	76.2
18	743	533.4	82.6
20	813	584.2	88.9
24	940	692.2	101.6

SIZE	DRILLING			BOLTING			
	CIRCLE Ø	HOLE NR.	HOLES Ø	BOLT Ø	BOLT LENGTH		
INCH	MM	EA	MM	INCH	MACH RF	STUD RF	STUD RJ
1/2	66.5	4	15.7	1/2	76.2	69.9	76.2
3/4	82.6	4	19.1	5/8	88.9	82.6	88.9
1	88.9	4	19.1	5/8	88.9	82.6	88.9
1¼	98.6	4	19.1	5/8	95.3	88.9	95.3
1½	114.3	4	22.4	3/4	108.0	101.6	108.0
2	127.0	8	19.1	5/8	108.0	101.6	108.0
2½	149.4	8	22.4	3/4	120.7	114.3	120.7
3	168.1	8	22.4	3/4	127.0	120.7	127.0
3½	184.2	8	25.4	7/8	139.7	133.4	139.7
4	215.9	8	25.4	7/8	146.1	139.7	146.1
5	266.7	8	28.4	1	165.1	158.8	165.1
6	292.1	12	28.4	1	171.5	165.1	171.5
8	349.3	12	31.8	1-1/8	190.5	184.2	196.9
10	431.8	16	35.1	1-1/4	215.9	209.6	215.9
12	489.0	20	35.1	1-1/4	222.3	215.9	222.3
14	527.1	20	38.1	1-3/8	235.0	228.6	235.0
16	603.3	20	41.1	1-1/2	254.0	247.7	254.0
18	654.1	20	44.5	1-5/8	273.1	266.7	273.1
20	723.9	24	44.5	1-5/8	285.8	279.4	292.1
24	838.2	24	50.8	1-7/8	330.2	323.9	336.6

Blind flanges 900 LB



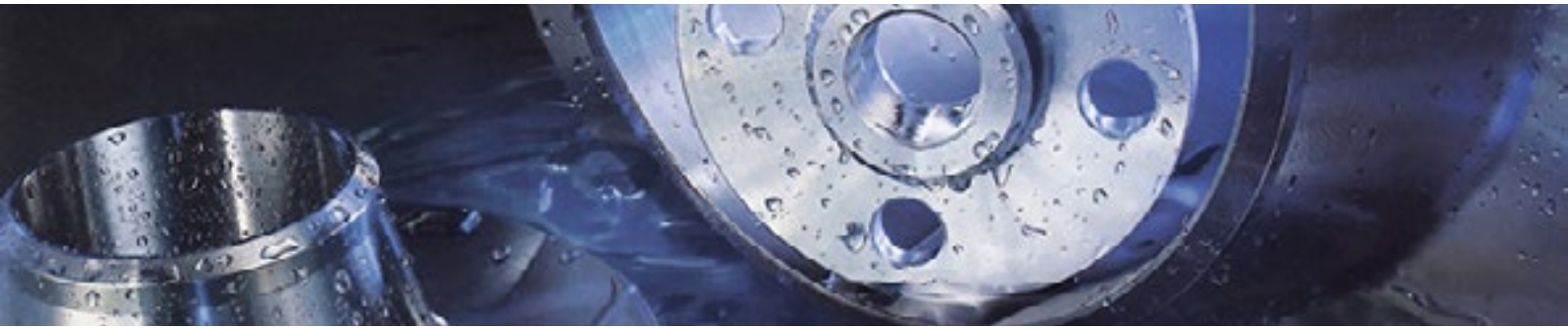
A blind flange is a solid disk used to block off a pipeline or to create a stop. The blind flange is machined in the same manner as a regular flange with the mounting holes around the perimeter and the gasket sealing rings machined into the mating surface.

Flange ring	Blind forged flanges of class 900 LB
Standard	ASME B16.5
Core material	Carbon steel and stainless steel
Connecting finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



SIZE INCH	D MM	G MM	t MM
1/2	121	35.1	22.4
3/4	130	42.9	25.4
1	149	50.8	28.4
1¼	159	63.5	28.4
1½	178	73.2	31.8
2	216	91.9	38.1
2½	244	104.6	41.1
3	241	127.0	38.1
4	292	157.2	44.5
5	349	185.7	50.8
6	381	215.9	55.6
8	470	269.7	63.5
10	546	323.9	69.9
12	610	381.0	79.2
14	641	412.8	85.9
16	705	469.9	88.9
18	787	533.4	101.6
20	857	584.2	108.0
24	1041	692.2	139.7

SIZE INCH	DRILLING			BOLTING			
	CIRCLE Ø MM	HOLE NR. EA	HOLES Ø MM	BOLT Ø INCH	BOLT LENGTH MACH RF	STUD RF	STUD RJ
1/2	82.6	4	22.4	3/4	108.0	101.6	108.0
3/4	88.9	4	22.4	3/4	114.3	108.0	114.3
1	101.6	4	25.4	7/8	127.0	120.7	127.0
1¼	111.3	4	25.4	7/8	127.0	120.7	127.0
1½	124.0	4	28.4	1	139.7	133.4	139.7
2	165.1	8	25.4	7/8	146.1	139.7	146.1
2½	190.5	8	28.4	1	158.8	152.4	158.8
3	190.5	8	25.4	7/8	146.1	139.7	146.1
4	235.0	8	31.8	1-1/8	171.5	165.1	171.5
5	279.4	8	35.1	1-1/4	190.5	184.2	190.5
6	317.5	12	31.8	1-1/8	190.5	184.2	196.9
8	393.7	12	38.1	1-3/8	222.3	215.9	222.3
10	469.9	16	38.1	1-3/8	235.0	228.6	235.0
12	533.4	20	38.1	1-3/8	254.0	247.7	254.0
14	558.8	20	41.1	1-1/2	273.1	266.7	292.1
16	616.0	20	44.5	1-5/8	285.8	279.4	298.5
18	685.8	20	50.8	1-7/8	323.9	317.5	333.6
20	749.3	20	53.8	2	349.3	342.9	362.0
24	901.7	20	66.5	1-1/2	438.2	431.8	457.2



Flange rings EN DIN

DIN - the German Institute for Standardization, is a private organization providing standardization services in Germany. DIN represents German national interests in Europe and throughout the world. The DIN EN 2527, 25.., 2630, 26.. series of standards cover pressure-temperature ratings, materials, dimensions, tolerances, marking for pipelines for fluid in liquid or gaseous condition.

Flange materials DIN

Crosscheck chemical compositions of common materials for DIN flanges, grade or code of which are supposed to be visually identified on bodies in all cases.

MTL	GRADE	CHEMICAL COMPOSITION %									
		C	MN	P	S	SI	CR	MO	NI	CU	REST
A234	WPB	0.3	0.29-1.06	0.05	0.058	≥0.10	0.4	0.15	0.4	0.4	V 0.06 Nb 0.02
A234	WPC	0.35	0.29-1.06	0.05	0.058	≥0.10	0.4	0.15	0.4	0.4	V 0.06 Nb 0.02
A234	WP1	0.28	0.30-0.90	0.045	0.045	0.10-0.50	-	0.44-0.65	-	-	-
A234	WP12 CL1	0.05-0.20	0.30-0.80	0.045	0.045	0.6	0.80-1.25	0.44-0.65	-	-	-
A234	WP12 CL2	0.05-0.20	0.30-0.80	0.045	0.045	0.6	0.80-1.25	0.44-0.65	-	-	-
A234	WP11 CL1	0.05-0.15	0.30-0.60	0.03	0.03	0.50-1.00	1.00-1.50	0.44-0.65	-	-	-
A234	WP11 CL2	0.05-0.20	0.30-0.80	0.04	0.04	0.50-1.00	1.00-1.50	0.44-0.65	-	-	-
A234	WP11 CL3	0.05-0.20	0.30-0.80	0.04	0.04	0.50-1.00	1.00-1.50	0.44-0.65	-	-	-
A234	WP22 CL1	0.05-0.15	0.30-0.60	0.04	0.04	0.5	1.90-2.60	0.87-1.13	-	-	-
A234	WP22 CL3	0.05-0.15	0.30-0.60	0.04	0.04	0.5	1.90-2.60	0.87-1.13	-	-	-
A234	WP5 CL1	0.15	0.30-0.60	0.04	0.03	0.5	4.0-6.0	0.44-0.65	-	-	-
A234	WP5 CL3	0.15	0.30-0.60	0.04	0.03	0.5	4.0-6.0	0.44-0.65	-	-	-
A234	WP9 CL1	0.15	0.30-0.60	0.03	0.03	1	8.0-10.0	0.90-1.10	-	-	-
A234	WP9 CL3	0.15	0.30-0.60	0.03	0.03	1	8.0-10.0	0.90-1.10	-	-	-
A234	WPR	0.2	0.40-1.06	0.045	0.05	-	-	-	1.60-2.24	0.75-1.25	-
A234	WP91	0.08-0.12	0.30-0.60	0.02	0.01	0.20-0.50	8.0-9.5	0.85-1.05	0.4	-	-
A234	WP911	0.09-0.13	0.30-0.60	0.02	0.01	0.10-0.50	8.5-10.5	0.90-1.10	0.4	-	-
A403	WP304	0.08	2	0.045	0.03	1	18.0-20.0	-	8.0-11.0	-	-
A403	WP304H	0.04-0.10	2	0.045	0.03	1	18.0-20.0	-	8.0-11.0	-	-
A403	WP304L	0.035	2	0.045	0.03	1	18.0-20.0	-	8.0-13.0	-	-
A403	WP304LN	0.03	2	0.045	0.03	0.75	18.0-20.0	-	8.0-10.5	-	N2 0.10-0.16
A403	WP304N	0.08	2	0.045	0.03	0.75	18.0-20.0	-	8.0-11.0	-	N2 0.10-0.16
A403	WP309	0.15	2	0.045	0.03	1	22.0-24.0	-	12.0-15.0	-	-
A403	WP310	0.15	2	0.045	0.03	1.5	24.0-26.0	-	19.0-22.0	-	-
A403	WP316	0.08	2	0.045	0.03	1	16.0-18.0	2.00-3.00	10.0-14.0	-	-
A403	WP316H	0.04-0.10	2	0.045	0.03	1	16.0-18.0	2.00-3.00	10.0-14.0	-	-

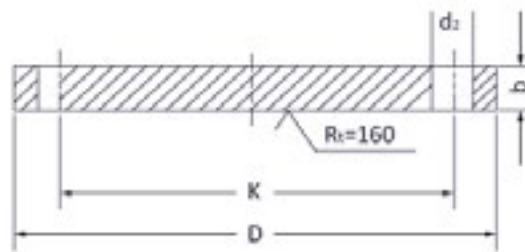
MTL	GRADE	CHEMICAL COMPOSITION %									
		C	MN	P	S	SI	CR	MO	NI	CU	REST
A403	WP316LN	0.03	2	0.045	0.03	0.75	16.0-18.0	2.00-3.00	11.0-14.0	-	N2 0.10-0.16
A403	WP316L	0.035	2	0.045	0.03	1	16.0-18.0	2.00-3.00	10.0-16.0	-	-
A403	WP316N	0.08	2	0.045	0.03	0.75	16.0-18.0	2.00-3.00	11.0-14.0	-	N2 0.10-0.16
A403	WP317	0.08	2	0.045	0.03	1	18.0-20.0	3.0-4.0	11.0-15.0	-	-
A403	WP317L	0.03	2	0.045	0.03	1	18.0-20.0	3.0-4.0	11.0-15.0	-	-
A403	WP321	0.08	2	0.045	0.03	1	17.0-20.0	-	9.0-13.0	-	Ti 5C-0.7
A403	WP321H	0.04-0.10	2	0.045	0.03	1	17.0-20.2	-	9.0-13.0	-	Ti 5C-0.7
A403	WP347	0.08	2	0.045	0.03	1	17.0-20.0	-	9.0-13.0	-	Nb+Ta 10C-1.10
A403	WP347H	0.04-0.10	2	0.045	0.03	1	17.0-20.0	-	9.0-13.0	-	Nb+Ta 8C-1.00
A403	WP348	0.08	2	0.045	0.03	1	17.0-20.0	-	9.0-13.0	-	Ta 0.10
A403	WP348H	0.04-0.10	2	0.045	0.03	1	17.0-20.0	-	9.0-13.0	-	Ta 0.10
A420	WPL6	0.3	0.60-1.35	0.035	0.04	0.15-0.30	0.3	0.12	0.4	0.4	Cb 0.02 V 0.08
A420	WPL9	0.2	0.40-1.06	0.03	0.03	-	-	-	1.60-2.24	0.75-1.25	-
A420	WPL3	0.2	0.31-0.64	0.05	0.05	0.13-0.37	-	-	3.2-3.8	-	-
A420	WPL8	0.13	0.9	0.03	0.03	0.13-0.37	-	-	8.4-9.6	-	-
A815	UNS S31803	0.03	2	0.03	0.02	0.1	21.0-23.0	2.50-3.50	4.50-6.50	-	N 0.08-0.20
A105	A105	0.35	0.60-1.05	0.035	0.04	0.10-0.35	0.3	0.12	0.4	0.4	V 0.05 Nb 0.02
A182	F11 CL1	0.05	0.30-0.60	0.03	0.03	0.50-1.00	1.00-1.50	0.44-0.65	-	-	-
A182	F11 CL2	0.15	0.30-0.80	0.04	0.04	0.50-1.00	1.00-1.50	0.44-0.65	-	-	-
A182	F11 CL3	0.10-0.20	0.30-0.80	0.04	0.04	0.50-1.00	1.00-1.50	0.44-0.65	-	-	-
A182	F12 CL1	0.10-0.20	0.30-0.60	0.045	0.045	0.5	0.80-1.25	0.44-0.65	-	-	-
A182	F12 CL2	0.05-0.15	0.30-0.80	0.04	0.04	0.10-0.60	0.80-1.25	0.44-0.65	-	-	-
A182	F304	0.08	2	0.045	0.03	1	18.0-20.0	-	8.0-11.0	-	N 0.10
A182	F304H	0.04-0.10	2	0.045	0.03	1	18.0-20.0	-	8.0-11.0	-	-
A182	F304L	0.035	2	0.045	0.03	1	18.2-20.0	-	8.0-13.0	-	N 0.10
A182	F316L	0.035	2	0.045	0.03	1	16.8-18.0	2.00-3.00	10.0-15.0	-	N 0.10
A182	F317	0.08	2	0.045	0.03	1	18.0-20.0	3.0-4.0	11.0-15.0	-	-
A182	F321	0.08	2	0.045	0.03	1	17.0-19.0	-	9.0-12.0	-	Ti 5C-0.7
A182	F347	0.08	2	0.045	0.03	1	17.0-20.0	-	9.0-13.0	-	Ti 10C-1.10
A53	B	0.3	1.2	0.05	0.045	-	0.4	0.15	0.4	0.4	V 0.08
A106	B	0.3	0.29-1.06	0.035	0.035	≥0.10	0.4	0.15	0.4	0.4	V 0.08
A106	C	0.35	0.29-1.06	0.035	0.035	≥0.10	0.4	0.15	0.4	0.4	V 0.08
A312	TP304	0.08	2	0.04	0.03	0.75	18.0-20.0	-	8.0-11.0	-	-
A312	TP304H	0.04-0.10	2	0.04	0.03	0.75	18.0-20.0	-	8.0-11.0	-	-
A312	TP304L	0.035	2	0.04	0.03	0.75	18.0-20.0	-	8.0-13.0	-	-
A312	TP316L	0.035	2	0.04	0.03	0.75	16.0-18.0	2.00-3.00	10.0-15.0	-	-
A312	TP321	0.08	2	0.04	0.03	0.75	17.0-20.0	-	9.0-13.0	-	Ti 5C-0.7
A335	P5	0.15	0.30-0.60	0.025	0.025	0.5	4.00-6.00	0.45-0.65	-	-	-
A335	P5b	0.15	0.30-0.60	0.025	0.025	1.00-2.00	4.00-6.00	0.45-0.65	-	-	-
A335	P5c	0.12	0.30-0.60	0.025	0.025	0.5	4.00-6.00	0.45-0.65	-	-	Ti 4C-0.7
A335	P9	0.15	0.30-0.60	0.025	0.025	0.50-1.00	8.00-10.00	0.90-1.10	-	-	-
A335	P11	0.05-0.15	0.30-0.60	0.025	0.025	0.50-1.00	1.00-1.15	0.44-0.65	-	-	-
A335	P12	0.05-0.15	0.30-0.61	0.025	0.025	0.5	0.80-1.25	0.44-0.65	-	-	-
A335	P22	0.05-0.15	0.30-0.60	0.025	0.025	0.5	1.90-2.60	0.87-1.13	-	-	-
A335	P91	0.08-0.12	0.30-0.60	0.02	0.01	0.20-0.50	8.00-9.50	0.85-1.05	0.4	-	-
A515	60	0.24	0.98	0.035	0.035	0.13-0.45	-	-	-	-	-
A515	65	0.28	0.98	0.035	0.035	0.13-0.45	-	-	-	-	-
A515	70	0.31	1.3	0.035	0.035	0.13-0.45	-	-	-	-	-

Blind flanges type B, PN 6 DIN 2527



A blind flange is a solid disk used to block off a pipeline or to create a stop. The blind flange is machined in the same manner as a regular flange with the mounting holes around the perimeter and the gasket sealing rings machined into the mating surface.

Flange ring	Blind flanges type B
Standard	DIN 2527
Core Material	Carbon steel and stainless steel
Pressure	PN 6-40
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



Type B

DN	INCH	D MM	b MM	K MM	d9 MM	d2 MM	THRD DIA.	WGT KG
10	3/8	75	12	50	-	11	4×M10	0.38
15	1/2	80	12	55	-	11	4×M10	0.44
20	3/4	90	14	65	-	11	4×M10	0.65
25	1	100	14	75	-	11	4×M10	0.82
32	1¼	120	14	90	-	14	4×M12	1.17
40	1½	130	14	100	-	14	4×M12	1.39
50	2	140	14	110	-	14	4×M12	1.62
65	2½	160	14	130	55	14	4×M12	2.44
80	3	190	16	150	70	18	4×M16	3.43
100	4	210	16	170	90	18	8×M16	4.76
125	5	240	18	200	115	18	8×M16	6.11
150	6	265	18	225	140	18	8×M16	7.51
175	7	295	20	255	165	18	8×M16	10.4
200	8	320	20	280	190	18	8×M16	12.3
250	10	375	22	335	235	18	12×M16	18.3
300	12	440	22	395	285	22	12×M20	25.3
350	14	490	22	445	330	22	12×M20	31.6
400	16	540	22	495	380	22	16×M20	38.4
500	20	645	22	600	470	22	20×M20	60.4

Blind flanges type B, PN 10 DIN 2527

DN	INCH	D MM	b MM	K MM	d9 MM	d2 MM	THRD DIA.	WGT KG
10	3/8	90	14	60	-	14	4×M12	0.63
15	1/2	95	14	65	-	14	4×M12	0.72
20	3/4	105	16	75	-	14	4×M12	1.01
25	1	115	16	85	-	14	4×M12	1.23
32	1¼	140	16	100	-	18	4×M16	1.80
40	1½	150	16	110	-	18	4×M16	2.09
50	2	165	18	125	-	18	4×M16	2.88
65	2½	185	18	145	55	18	4×M16	3.66
80	3	200	20	160	70	18	8×M16	4.77
100	4	220	20	180	90	18	8×M16	5.65
125	5	250	22	210	115	18	8×M16	8.42
150	6	285	22	240	140	22	8×M20	10.4
175	7	315	24	270	165	22	8×M20	14.0
200	8	340	24	295	190	22	8×M20	16.5
250	10	395	26	350	235	22	12×M20	24.0
300	12	445	26	400	285	22	12×M20	30.9
350	14	505	26	460	330	22	16×M20	40.6
400	16	565	26	515	380	26	16×M24	49.4
500	20	670	28	620	475	26	20×M24	75.0

Blind flanges type B, PN 16 DIN 2527

DN	INCH	D MM	b MM	K MM	d9 MM	d2 MM	THRD DIA.	WGT KG
10	3/8	90	14	60	-	14	4×M12	0.63
15	1/2	95	14	65	-	14	4×M12	0.72
20	3/4	105	16	75	-	14	4×M12	1.01
25	1	115	16	85	-	14	4×M12	1.23
32	1¼	140	16	100	-	18	4×M16	1.80
40	1½	150	16	110	-	18	4×M16	2.09
50	2	165	18	125	-	18	4×M16	2.88
65	2½	185	18	145	55	18	4×M16	3.66
80	3	200	20	160	70	18	8×M16	4.77
100	4	220	20	180	90	18	8×M16	5.65
125	5	250	22	210	115	18	8×M16	8.42
150	6	285	22	240	140	22	8×M20	10.4
175	7	315	24	270	165	22	8×M20	14.0
200	8	340	24	295	190	22	12×M20	16.1
250	10	405	26	355	235	26	12×M24	24.9
300	12	460	28	410	285	26	12×M24	35.1
350	14	520	30	470	330	26	16×M24	47.8
400	16	580	32	525	380	30	16×M27	63.5
500	20	715	36	650	475	33	20×M30	102.0

**Blind flanges type B, PN 25
DIN 2527**

DN	INCH	D MM	b MM	K MM	d9 MM	d2 MM	THRD DIA.	WGT KG
10	3/8	90	16	60	-	14	4×M12	0.72
15	1/2	95	16	65	-	14	4×M12	0.81
20	3/4	105	18	75	-	14	4×M12	1.24
25	1	115	18	85	-	14	4×M12	1.38
32	1¼	140	18	100	-	18	4×M16	2.03
40	1½	150	18	110	-	18	4×M16	2.35
50	2	165	20	125	-	18	4×M16	3.20
65	2½	185	22	145	55	18	8×M16	4.29
80	3	200	24	160	70	18	8×M16	5.88
100	4	235	24	190	90	22	8×M20	7.54
125	5	270	26	220	115	26	8×M24	10.8
150	6	300	28	250	140	26	8×M24	14.5
175	7	330	28	280	165	26	12×M24	17.3
200	8	360	30	310	190	26	12×M24	22.3
250	10	425	32	370	237	30	12×M27	33.5
300	12	485	34	430	285	30	16×M27	46.3
350	14	555	38	490	332	33	16×M30	68.0
400	16	620	40	550	380	36	16×M33	89.7
500	20	730	45	660	475	36	20×M33	138.0

**Blind flanges type B, PN 40
DIN 2527**

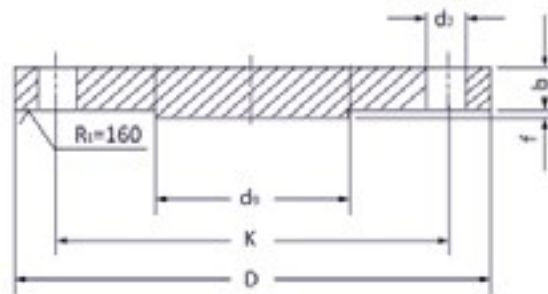
DN	INCH	D MM	b MM	K MM	d9 MM	d2 MM	THRD DIA.	WGT KG
10	3/8	90	16	60	-	14	4×M12	0.72
15	1/2	95	16	65	-	14	4×M12	0.81
20	3/4	105	18	75	-	14	4×M12	1.24
25	1	115	18	85	-	14	4×M12	1.38
32	1¼	140	18	100	-	18	4×M16	2.03
40	1½	150	18	110	-	18	4×M16	2.35
50	2	165	20	125	-	18	4×M16	3.20
65	2½	185	22	145	55	18	8×M16	4.29
80	3	200	24	160	70	18	8×M16	5.88
100	4	235	24	190	90	22	8×M20	7.54
125	5	270	26	220	115	26	8×M24	10.8
150	6	300	28	250	140	26	8×M24	14.5
175	7	350	32	295	165	30	12×M27	22.1
200	8	375	34	320	190	30	12×M27	27.2
250	10	450	38	385	235	33	12×M30	43.8
300	12	515	42	450	285	33	16×M30	63.3
350	14	580	46	510	330	36	16×M33	89.5
400	16	660	50	585	380	39	16×M36	127.0
500	20	755	56	670	475	42	20×M39	172.0

Blind flanges type T, PN 6 DIN 2527



A blind flange is a solid disk used to block off a pipeline or to create a stop. The blind flange is machined in the same manner as a regular flange with the mounting holes around the perimeter and the gasket sealing rings machined into the mating surface.

Flange ring	Blind flanges type T
Standard	DIN 2527
Core Material	Carbon steel and stainless steel
Pressure	PN 6-40
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



Type T

DN	INCH	D	b	K	d9	d2	THRD	WGT
		MM	MM	MM	MM	MM	DIA.	KG
65	2½	160	14	130	55	14	4×M12	2.48
80	3	190	16	150	70	18	4×M16	3.49
100	4	210	16	170	90	18	8×M16	4.86
125	5	240	18	200	115	18	8×M16	6.28
150	6	265	18	225	140	18	8×M16	7.75
175	7	295	20	255	165	18	8×M16	10.7
200	8	320	20	280	190	18	8×M16	12.7
250	10	375	22	335	235	18	12×M16	19.0
300	12	440	22	395	285	22	12×M20	26.3
350	14	490	22	445	330	22	12×M20	32.9
400	16	540	22	495	380	22	16×M20	40.2
500	20	645	22	600	475	22	20×M20	63.2

Blind flanges type T, PN 10 DIN 2527

DN	INCH	D MM	b MM	K MM	d9 MM	d2 MM	THRD DIA.	WGT KG
65	2½	185	18	145	55	18	4×M16	3.70
80	3	200	20	160	70	18	8×M16	4.83
100	4	220	20	180	90	18	8×M16	5.75
125	5	250	22	210	115	18	8×M16	8.59
150	6	285	22	240	140	22	8×M20	10.6
175	7	315	24	270	165	22	8×M20	14.3
200	8	340	24	295	190	22	8×M20	16.9
250	10	395	26	350	235	22	12×M24	24.7
300	12	445	26	400	285	22	12×M24	31.9
350	14	505	26	460	330	22	16×M24	41.9
400	16	565	26	515	380	26	16×M27	51.2
500	20	670	28	620	475	26	20×M30	77.8

Blind flanges type T, PN 16 DIN 2527

DN	INCH	D MM	b MM	K MM	d9 MM	d2 MM	THRD DIA.	WGT KG
65	2½	185	18	145	55	18	4×M16	3.70
80	3	200	20	160	70	18	8×M16	4.83
100	4	220	20	180	90	18	8×M16	5.75
125	5	250	22	210	115	18	8×M16	8.59
150	6	285	22	240	140	22	8×M20	10.6
175	7	315	24	270	165	22	8×M20	14.3
200	8	340	24	295	190	22	12×M20	16.5
250	10	405	26	355	235	26	12×M24	25.6
300	12	460	28	410	285	26	12×M24	36.1
350	14	520	30	470	330	26	16×M24	49.1
400	16	580	32	525	380	30	16×M27	65.3
500	20	715	36	650	475	33	20×M30	105

Blind flanges type T, PN 25 DIN 2527

DN	INCH	D MM	b MM	K MM	d9 MM	d2 MM	THRD DIA.	WGT KG
65	2½	185	22	145	55	18	8×M16	4.33
80	3	200	24	160	70	18	8×M16	5.94
100	4	235	24	190	90	22	8×M20	7.64
125	5	270	26	220	115	26	8×M24	11.0
150	6	300	28	250	140	26	8×M24	14.7
175	7	330	28	280	165	26	12×M24	17.6
200	8	360	30	310	190	26	12×M24	22.7
250	10	425	32	370	237	30	12×M27	34.5
300	12	485	34	430	285	30	16×M27	47.3
350	14	555	38	490	332	33	16×M30	69.3
400	16	620	40	550	380	36	16×M33	91.5
500	20	730	45	660	475	36	20×M33	141.0

Blind flanges type T, PN 40 DIN 2527

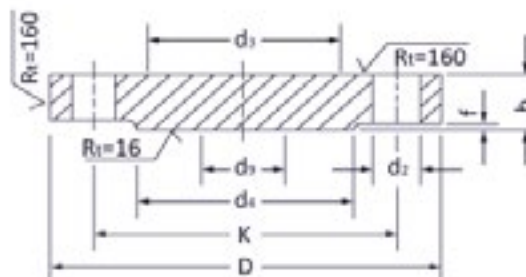
DN	INCH	D	b	K	d9	d2	THRD	WGT
		MM	MM	MM	MM	MM	DIA.	KG
65	2½	185	22	145	55	18	8×M16	4.33
80	3	200	24	160	70	18	8×M16	5.94
100	4	235	24	190	90	22	8×M20	7.64
125	5	270	26	220	115	26	8×M24	11.0
150	6	300	28	250	140	26	8×M24	14.7
175	7	350	32	295	165	30	12×M27	22.4
200	8	375	34	320	190	30	12×M27	27.6
250	10	450	38	385	235	33	12×M30	44.5
300	12	515	42	450	285	33	16×M30	64.3
350	14	580	46	510	330	36	16×M33	90.8
400	16	660	50	585	380	39	16×M36	129.0
500	20	755	56	670	475	42	20×M39	175.0

Blind flanges type E, PN 64 DIN 2527



A blind flange is a solid disk used to block off a pipeline or to create a stop. The blind flange is machined in the same manner as a regular flange with the mounting holes around the perimeter and the gasket sealing rings machined into the mating surface.

Flange ring	Blind flanges type E
Standard	DIN 2527
Core Material	Carbon steel and stainless steel
Pressure	PN 64-100
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



Type E

DN	INCH	D	b	K	d3	d4	d9	d2	f	THRD	WGT
		MM	MM	MM	MM	MM	MM	MM	MM	DIA.	KG
10	3/8	100	20	70	32	40	-	14	2	4×M12	1.00
15	1/2	105	20	75	34	45	-	14	2	4×M12	1.22
25	1	140	24	100	52	68	-	18	2	4×M16	2.65
32	1¼	155	24	110	62	78	-	22	2	4×M20	3.24
40	1½	170	26	125	70	88	-	22	3	4×M20	4.09
50	2	180	26	135	82	102	-	22	3	4×M20	4.51

DN	INCH	D	b	K	d3	d4	d9	d2	f	THRD	WGT
		MM	MM	MM	MM	MM	MM	MM	MM	DIA.	KG
65	2½	205	26	160	98	122	45	22	3	8×M20	5.71
80	3	215	28	170	112	138	60	22	3	8×M20	6.92
100	4	250	30	200	138	162	80	26	3	8×M24	10.1
125	5	295	34	240	168	188	105	30	3	8×M27	16.0
150	6	345	36	280	202	218	130	33	3	8×M30	23.5
175	7	375	40	310	228	260	155	33	3	12×M30	30.8
200	8	415	42	345	256	285	180	36	3	12×M33	39.7
250	10	470	46	400	316	345	220	36	3	12×M33	57.4
300	12	530	52	460	372	410	270	36	4	16×M33	81.0
350	14	600	56	525	420	465	310	39	4	16×M36	114.0
400	16	670	60	585	475	535	360	42	4	16×M39	153.0

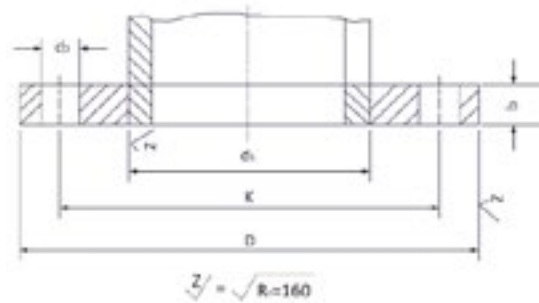
DN	INCH	D	b	K	d3	d4	d9	d2	f	THRD	WGT
		MM	MM	MM	MM	MM	MM	MM	MM	DIA.	KG
10	3/8	100	20	70	32	40	-	14	2	4×M12	1.00
15	1/2	105	20	75	34	45	-	14	2	4×M12	1.22
25	1	140	24	100	52	68	-	18	2	4×M16	2.65
32	1¼	155	24	110	62	78	-	22	2	4×M20	3.24
40	1½	170	26	125	70	88	-	22	3	4×M20	4.09
50	2	195	28	145	90	102	-	26	3	4×M24	5.84
65	2½	220	30	170	108	122	45	26	3	8×M24	8.03
80	3	230	32	180	120	138	60	26	3	8×M24	9.43
100	4	265	36	210	150	162	80	30	3	8×M27	14.3
125	5	315	40	250	180	188	105	33	3	8×M30	22.6
150	6	355	44	290	210	218	130	33	3	12×M30	31.8
175	7	385	48	320	245	260	155	33	3	12×M30	41.3
200	8	430	52	360	278	285	180	36	3	12×M33	56.1
250	10	505	60	430	340	345	210	39	3	12×M36	89.6
300	12	585	68	500	400	410	260	42	4	16×M39	119.0
350	14	655	74	560	460	465	300	48	4	16×M45	175.0

Flat flanges, PN 6 DIN 2573



Flat flanges are one of the most popular types in use. They are the type that slides over to the end of piping and requires less accuracy in positioning to weld thus fits for a much wider ranges of pipes lines. Smaller thickness allows for easier alignment of bolting holes.

Flange ring	Flat flanges
Standard	DIN 2573
Core Material	Carbon steel and stainless steel
Pressure	PN 6-10
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



DN	INCH	D	b	K	d1	d5	d2	THRD	WGT
		MM	MM	MM	MM	MM	MM	DIA.	KG
10	3/8	75	12	50	14	14.5	11	4×M10	0.36
15	1/2	80	12	55	20	21	11	4×M10	0.41
20	3/4	90	14	65	25	26	11	4×M10	0.60
25	1	100	14	75	30	31	11	4×M10	0.74
32	1¼	120	16	90	38	39	14	4×M12	1.19
40	1½	130	16	100	44.5	45.5	14	4×M12	1.39
50	2	140	16	110	57	58.1	14	4×M12	1.53
100	4	210	18	170	108	109.6	18	4×M16	3.46
125	5	240	20	200	133	134.8	18	8×M16	4.60
150	6	265	20	225	159	161.1	18	8×M16	5.22
250	10	375	24	335	267	270.2	18	12×M16	9.61
350	14	490	26	445	368	372.2	22	12×M20	15.6
400	16	540	28	495	419	423.7	22	16×M20	18.4

Flat flanges, PN 10 DIN 2576

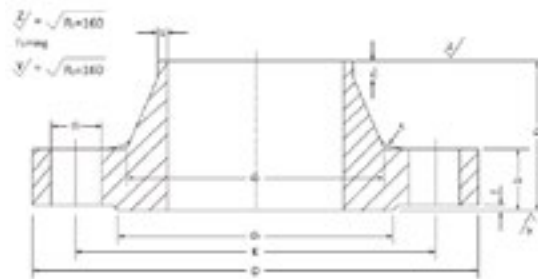
DN	INCH	D MM	b MM	K MM	d1 MM	d5 MM	d2 MM	THRD DIA.	WGT KG
10	3/8	90	14	60	14	14.5	14	4×M12	0.61
15	1/2	95	14	65	20	21	14	4×M12	0.68
20	3/4	105	16	75	25	26	14	4×M12	0.75
25	1	115	16	85	30	31	14	4×M12	1.14
32	1¼	140	16	100	38	39	18	4×M16	1.66
40	1½	150	16	110	44.5	45.5	18	4×M16	1.89
50	2	165	18	125	57	58.1	18	4×M16	2.51
100	4	220	20	180	108	109.6	18	8×M16	4.20
125	5	250	22	210	133	134.8	18	8×M16	5.71
150	6	285	22	240	159	161.1	22	8×M20	6.72
250	10	395	26	350	267	270.2	22	12×M20	12.5
350	14	505	28	460	368	372.2	22	16×M20	19.0
400	16	565	32	515	419	423.7	26	16×M24	25.9

Welding neck flanges, PN 6 DIN 2630, 2631



Welding neck flanges are the type that is joined to piping by butt welding end of the long neck, thickness transition along which gives it reinforcement under higher stress.

Flange ring	Welding neck flanges
Standard	DIN 2630, DIN 2631
Core Material	Carbon steel and stainless steel
Pressure	PN 1-6
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



DN	INCH	D	b	K	h1	d4	f	d2	d3	s	r	h2	THRD	WGT
		MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	DIA.	KG
10	3/8	75	12	50	28	35	2	11	22	1.8	4	6	4×M10	0.34
15	1/2	80	12	55	30	40	2	11	28	2	4	6	4×M10	0.39
20	3/4	90	14	65	32	50	2	11	35	2.3	4	6	4×M10	0.59
25	1	100	14	75	35	60	2	11	40	2.6	4	6	4×M10	0.75
32	1¼	120	14	90	35	70	2	14	50	2.6	6	6	4×M12	1.05
40	1½	130	14	100	38	80	3	14	58	2.6	6	7	4×M12	1.18
50	2	140	14	110	38	90	3	14	70	2.9	6	8	4×M12	1.34
100	4	210	16	170	45	148	3	18	122	3.6	8	10	4×M16	3.24
125	5	240	18	200	48	178	3	18	148	4	8	10	8×M16	4.49
150	6	265	18	225	48	202	3	18	172	4.5	10	12	8×M16	5.15
250	10	375	22	335	60	312	3	18	282	6.3	12	15	12×M16	10.8
350	14	490	22	445	62	415	4	22	385	7.1	12	15	12×M20	16.7
400	16	540	22	495	65	465	4	22	438	7.1	12	15	16×M20	19.0

Welding neck flanges, PN 10 DIN 2632

Flange ring	Welding neck flanges
Standard	DIN 2632
Core Material	Carbon steel and stainless steel
Pressure	PN 10
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface

DN	INCH	D	b	K	h1	d4	f	d2	d3	s	r	h2	THRD	WGT
		MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	DIA.	KG
10	3/8	90	14	60	35	40	2	14	25	1.8	4	6	4×M12	0.58
15	1/2	95	14	65	35	45	2	14	30	2	4	6	4×M12	0.65
20	3/4	105	16	75	38	58	2	14	38	2.3	4	6	4×M12	0.95
25	1	115	16	85	38	68	2	14	42	2.6	4	6	4×M12	1.14
32	1¼	140	16	100	40	78	2	18	52	2.6	6	6	4×M16	1.69
40	1½	150	16	110	42	88	3	18	60	2.6	6	7	4×M16	1.86
50	2	165	18	125	45	102	3	18	72	2.9	6	8	4×M16	2.53
100	4	220	20	180	52	158	3	18	125	3.6	8	12	8×M16	4.62
125	5	250	22	210	55	188	3	18	150	4	8	12	8×M16	6.30
150	6	285	22	240	55	212	3	22	175	4.5	10	12	8×M20	7.75
250	10	395	26	350	68	320	3	22	285	6.3	12	16	12×M20	14.7
350	14	505	26	460	68	430	4	22	385	7.1	12	16	16×M20	21.6
400	16	565	26	515	72	482	4	26	440	7.1	12	16	16×M24	26.2

Welding neck flanges, PN 16 DIN 2633

Flange ring	Welding neck flanges
Standard	DIN 2633
Core Material	Carbon steel and stainless steel
Pressure	PN 16
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface

DN	INCH	D MM	b MM	K MM	h1 MM	d4 MM	f MM	d2 MM	d3 MM	s MM	r MM	h2 MM	THRD DIA.	WGT KG
10	3/8	90	14	60	35	40	2	11	25	1.8	4	6	4×M12	0.58
15	1/2	95	14	65	35	45	2	11	30	2	4	6	4×M12	0.65
20	3/4	105	16	75	38	58	2	11	38	2.3	4	6	4×M12	0.95
25	1	115	16	85	38	68	2	11	42	2.6	4	6	4×M12	1.14
32	1¼	140	16	100	40	78	2	14	52	2.6	6	6	4×M16	1.69
40	1½	150	16	110	42	88	3	14	60	2.6	6	7	4×M16	1.86
50	2	165	18	125	45	102	3	14	72	2.9	6	8	4×M16	2.53
100	4	220	20	180	52	158	3	18	125	3.6	8	12	8×M16	4.62
125	5	250	22	210	55	188	3	18	150	4	8	12	8×M16	6.30
150	6	285	22	240	55	212	3	22	175	4.5	10	12	8×M20	7.75
250	10	405	26	355	70	320	3	26	285	6.3	12	16	12×M24	15.6
350	14	520	30	470	82	438	4	26	390	8	12	16	16×M24	28.8
400	16	580	32	525	85	490	4	30	445	8	12	16	16×M27	36.3

Welding neck flanges, PN 25 DIN 2634

Flange ring	Welding neck flanges
Standard	DIN 2634
Core Material	Carbon steel and stainless steel
Pressure	PN 25
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface

DN	INCH	D MM	b MM	K MM	h1 MM	d4 MM	f MM	d2 MM	d3 MM	s MM	r MM	h2 MM	THRD DIA.	WGT KG
10	3/8	90	16	60	35	40	2	14	25	1.8	4	6	4×M12	0.66
15	1/2	95	16	65	38	45	2	14	30	2	4	6	4×M12	0.75
20	3/4	105	18	75	40	58	2	14	38	2.3	4	6	4×M12	1.06
25	1	115	18	85	40	68	2	14	42	2.6	4	6	4×M12	1.29
32	1¼	140	18	100	42	78	2	18	52	2.6	6	6	4×M16	1.88
40	1½	150	18	110	45	88	3	18	60	2.6	6	7	4×M16	2.33
50	2	165	20	125	48	102	3	18	72	2.9	6	8	4×M16	2.82
100	4	235	24	190	65	162	3	22	128	3.6	8	12	8×M20	6.52
125	5	270	26	220	68	188	3	26	155	4	8	12	8×M24	9.07
150	6	300	28	250	75	218	3	26	182	4.5	10	12	8×M24	11.8
250	10	425	32	370	88	335	3	30	292	6.3	12	18	12×M27	24.4
350	14	555	38	490	100	450	4	33	398	8	12	20	16×M30	44.2
400	16	620	40	550	110	505	4	36	452	8.8	12	20	16×M33	57.6

Welding neck flanges, PN 40 DIN 2635

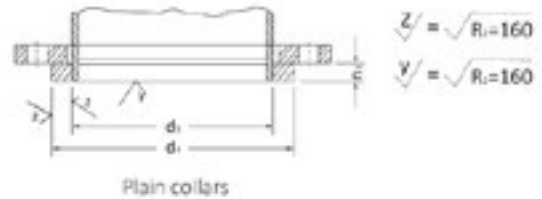
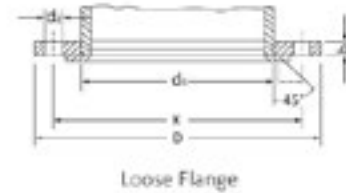
Flange ring	Welding neck flanges
Standard	DIN 2635
Core Material	Carbon steel and stainless steel
Pressure	PN 40
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface

DN	INCH	D MM	b MM	K MM	h1 MM	d4 MM	f MM	d2 MM	d3 MM	s MM	r MM	h2 MM	THRD DIA.	WGT KG
10	3/8	90	16	60	35	40	2	14	25	1.8	4	6	4×M12	0.66
15	1/2	95	16	65	38	45	2	14	30	2	4	6	4×M12	0.75
20	3/4	105	18	75	40	58	2	14	38	2.3	4	6	4×M12	1.06
25	1	115	18	85	40	68	2	14	42	2.6	4	6	4×M12	1.29
32	1¼	140	18	100	42	78	2	18	52	2.6	6	6	4×M16	1.88
40	1½	150	18	110	45	88	3	18	60	2.6	6	7	4×M16	2.33
50	2	165	20	125	48	102	3	18	72	2.9	6	8	4×M16	2.82
100	4	235	24	190	65	162	3	22	128	3.6	8	12	8×M20	6.52
125	5	270	26	220	68	188	3	26	155	4	8	12	8×M24	9.07
150	6	300	28	250	75	218	3	26	182	4.5	10	12	8×M24	11.8
250	10	450	38	385	105	345	3	33	298	7.1	12	18	12×M30	34.9
350	14	580	46	510	129	465	4	36	408	8.8	12	20	16×M33	68.1
400	16	660	50	585	135	535	4	39	462	11	12	20	16×M36	96.5

Lapped flanges, PN 10 DIN 2642



Flange ring	Lapped flanges
Standard	DIN 2642
Core Material	Carbon steel and stainless steel
Pressure	PN 10
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



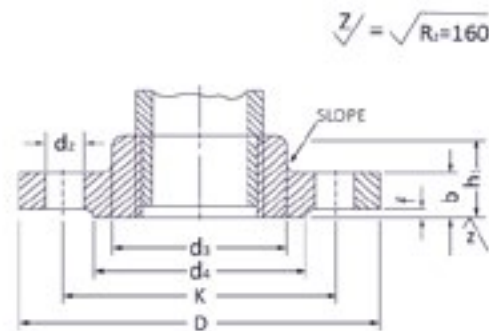
DN	INCH	D	b	K	d6	d5	d4	d3	THRD	WGT
		MM	MM	MM	MM	MM	MM	MM	DIA.	KG
10	3/8	90	14	60	16	14.5	≤40	10	4×M12	0.69
15	1/2	95	14	65	22	21	≤45	10	4×M12	0.79
20	3/4	105	14	75	28	26	≤58	12	4×M12	1.01
25	1	115	16	85	33	31	≤68	12	4×M12	1.39
32	1¼	140	16	100	42	39	≤78	12	4×M16	1.98
40	1½	150	16	110	50	45.5	≤88	12	4×M16	2.29
50	2	165	16	125	62	58.1	≤102	14	4×M16	2.82
100	4	220	18	180	113	109.6	≤158	16	8×M16	4.98
125	5	250	18	210	138	134.8	≤188	18	8×M16	6.5
150	6	285	18	240	164	161.1	≤212	18	8×M20	7.78
250	10	395	20	350	273	270.2	≤320	22	12×M20	14.52
350	14	505	28	460	362	359.7	≤430	22	16×M20	25.21
400	16	565	32	515	413	411	≤482	24	16×M24	33.28

Threaded flanges, PN 6 DIN 2565



Thread flanges are those with internal threads, being connected by screwing in pipes with matching external threads instead of high-temp welding. It is advisory to weld both rims after Thread though in no cases this type should be used for pressure piping.

Flange ring	Threaded flanges
Standard	DIN 2565
Core Material	Carbon steel and stainless steel
Pressure	PN 6
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



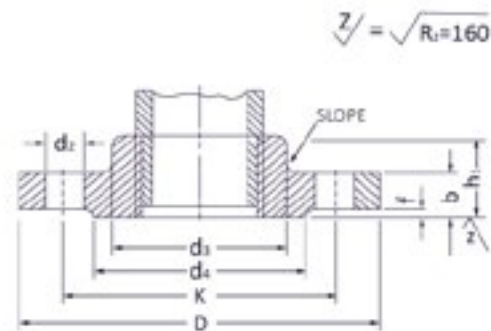
DN	INCH	D	b	K	h1	d3	f	d4	d2	THRD	WGT
		MM	MM	MM	MM	MM	MM	MM	MM	DIA.	KG
6	1/8	65	10	40	18	18	2	25	11	4×M10	0.19
8	1/4	70	10	45	18	22	2	30	11	4×M10	0.23
10	3/8	75	12	50	20	25	2	35	11	4×M10	0.33
15	1/2	80	12	55	20	30	2	40	11	4×M10	0.37
20	3/4	90	14	65	24	40	2	50	11	4×M10	0.59
25	1	100	14	75	24	50	2	60	11	4×M10	0.74
32	1¼	120	14	90	26	60	2	70	14	4×M12	1.05
40	1½	130	14	100	26	70	3	80	14	4×M12	1.2
50	2	140	14	110	28	80	3	90	14	4×M12	1.37
65	2½	160	14	130	32	100	3	110	14	4×M12	1.92
80	3	190	16	150	34	110	3	128	18	4×M16	2.82
100	4	210	16	170	38	130	3	148	18	4×M16	3.19
125	5	240	18	200	40	160	3	178	18	8×M16	4.47
150	6	265	20	225	44	185	3	202	18	8×M16	5.3

Threaded flanges, PN 10/16 DIN 2566



Thread flanges are those with internal threads, being connected by screwing in pipes with matching external threads instead of high-temp welding. It is advisory to weld both rims after Thread though in no cases this type should be used for pressure piping.

Flange ring	Threaded flanges
Standard	DIN 2566
Core Material	Carbon steel and stainless steel
Pressure	PN 10/16
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



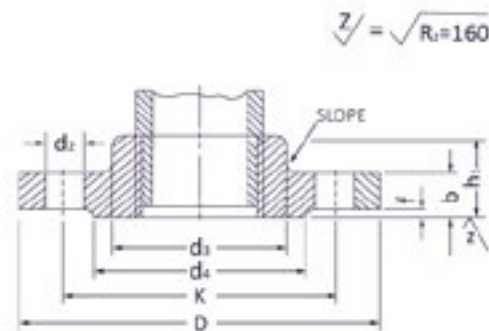
DN	INCH	D	b	K	h1	d3	f	d4	d2	THRD	WGT
		MM	MM	MM	MM	MM	MM	MM	MM	DIA.	KG
6	1/8	75	12	50	18	20	2	25	11	4×M10	0.33
8	1/4	80	12	55	18	25	2	30	11	4×M10	0.38
10	3/8	90	14	60	20	30	2	35	14	4×M12	0.54
15	1/2	95	14	65	20	35	2	40	14	4×M12	0.61
20	3/4	105	16	75	24	45	2	50	14	4×M12	0.91
25	1	115	16	85	24	52	2	60	14	4×M12	1.10
32	1¼	140	16	100	26	60	2	70	18	4×M16	1.60
40	1½	150	16	110	26	70	3	80	18	4×M16	1.78
50	2	165	18	125	28	85	3	90	18	4×M16	2.43
65	2½	185	18	145	32	105	3	110	18	4×M16	3.18
80	3	200	20	160	34	118	3	128	18	8×M16	4.12
100	4	220	20	180	38	140	3	148	18	8×M16	4.47
125	5	250	22	210	40	168	3	178	18	8×M16	6.13
150	6	285	22	240	44	195	3	202	22	8×M20	7.92

Threaded flanges, PN 25/40 DIN 2567



Thread flanges are those with internal threads, being connected by screwing in pipes with matching external threads instead of high-temp welding. It is advisory to weld both rims after Thread though in no cases this type should be used for pressure piping.

Flange ring	Threaded flanges
Standard	DIN 2567
Core Material	Carbon steel and stainless steel
Pressure	PN 25/40
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



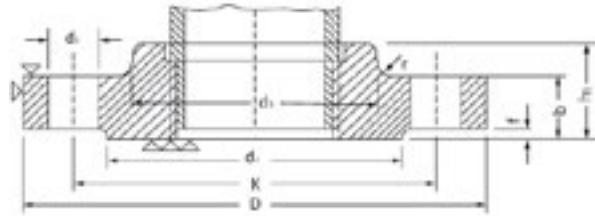
DN	INCH	D	b	K	h1	d3	f	d4	d2	THRD	WGT
		MM	MM	MM	MM	MM	MM	MM	MM	DIA.	KG
6	1/8	75	14	50	20	20	2	32	11	4×M10	0.39
8	1/4	80	14	55	20	25	2	38	11	4×M10	0.45
10	3/8	90	16	60	22	30	2	40	14	4×M12	0.63
15	1/2	95	16	65	22	35	2	45	14	4×M12	0.71
20	3/4	105	18	75	26	45	2	58	14	4×M12	1.03
25	1	115	18	85	28	52	2	68	14	4×M12	1.28
32	1¼	140	18	100	30	60	2	78	18	4×M16	1.87
40	1½	150	18	110	32	70	3	88	18	4×M16	2.14
50	2	165	20	125	34	85	3	102	18	4×M16	2.85
65	2½	185	22	145	38	105	3	122	18	8×M16	3.85
80	3	200	24	160	40	118	3	138	18	8×M16	4.80
100	4	235	24	190	44	145	3	162	22	8×M20	6.43
125	5	270	26	220	48	170	3	188	26	8×M24	8.77
150	6	300	28	250	52	200	3	218	26	8×M24	10.5

Threaded flanges, PN 64 DIN 2568



Thread flanges are those with internal threads, being connected by screwing in pipes with matching external threads instead of high-temp welding. It is advisory to weld both rims after Thread though in no cases this type should be used for pressure piping.

Flange ring	Threaded flanges
Standard	DIN 2568
Core Material	Carbon steel and stainless steel
Pressure	PN 64
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



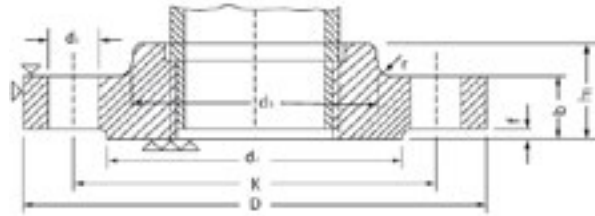
DN	INCH	D	b	K	h1	d3	f	d4	d2	THRD	WGT
		MM	MM	MM	MM	MM	MM	MM	MM	DIA.	KG
10	3/8	100	20	70	28	40	2	50	14	4×M12	1.08
15	1/2	105	20	75	28	43	2	55	14	4×M12	1.19
20	3/4	130	22	90	30	52	2	68	18	4×M16	2.00
25	1	140	24	100	32	60	2	78	18	4×M16	2.54
32	1¼	155	24	110	32	68	2	85	22	4×M20	2.99
40	1½	170	26	125	34	80	3	98	22	4×M20	3.87
50	2	180	26	135	36	90	3	108	22	4×M20	4.29
65	2½	205	26	160	40	112	3	132	22	8×M20	5.48
80	3	215	28	170	44	125	3	142	22	8×M20	6.42
100	4	250	30	200	52	152	3	170	26	8×M24	9.25
125	5	295	34	240	56	185	3	205	30	8×M27	14.4
150	6	345	36	280	60	215	3	240	33	8×M30	20.7
125	5	270	26	220	48	170	3	188	26	8×M24	8.77
150	6	300	28	250	52	200	3	218	26	8×M24	10.5

Threaded flanges, PN 100 DIN 2569



Thread flanges are those with internal threads, being connected by screwing in pipes with matching external threads instead of high-temp welding. It is advisory to weld both rims after Thread though in no cases this type should be used for pressure piping.

Flange ring	Threaded flanges
Standard	DIN 2568
Core Material	Carbon steel and stainless steel
Pressure	PN 64
Connecting Finish	Stock finish, spiral serration (or phonographic), concentric serration and smooth surface



DN	INCH	D	b	K	h1	d3	f	d4	d2	THRD	WGT
		MM	MM	MM	MM	MM	MM	MM	MM	DIA.	KG
10	3/8	100	20	70	28	40	2	50	14	4×M12	1.08
15	1/2	105	20	75	28	43	2	55	14	4×M12	1.19
20	3/4	130	22	90	30	52	2	68	18	4×M16	2.00
25	1	140	24	100	32	60	2	78	18	4×M16	2.54
32	1¼	155	24	110	32	68	2	85	22	4×M20	2.99
40	1½	170	26	125	34	80	3	98	22	4×M20	3.87
50	2	195	28	145	36	95	3	115	26	4×M24	5.42
65	2½	220	30	170	40	118	3	140	26	8×M24	7.11
80	3	230	32	180	44	130	3	150	26	8×M24	8.21
100	4	265	36	210	52	158	3	175	30	8×M27	12.1
125	5	315	40	250	56	188	3	210	33	8×M30	18.6
150	6	355	44	290	60	225	3	250	33	12×M30	25.1
125	5	270	26	220	48	170	3	188	26	8×M24	8.77
150	6	300	28	250	52	200	3	218	26	8×M24	10.5

APPENDIX 1 — SEALING MATERIALS

Sealing materials are crucial parts in almost every aspect. They are most likely made from rubber materials and function properly within a certain range of both temperature and pressure when the hardness is set to theoretical optimism. Sealants between two mating couplings are usually referred to as "gaskets"; those at the bottom of inside or female thread as "seals".

Table 1.1 shows the names for our major sealing materials for coupling programs.

Term	Chemical Name	Trade Name	Registered Trade Mark of Company
NBR	Acrylonitrile Butadiene	Pervunan N [®] , Buna N [®]	Bayer Corporation
EPDM	Ethylene Propylene	Nordel [®]	DuPont Dow Elastomers
FPM	Fluorocarbon	Viton [®]	DuPont Dow Elastomers
CSM	Chlorosulfonated Polyethylene	Hypalon [®]	DuPont Dow Elastomers
PTFE	Poly Tetrafluorethylene	Teflon [®]	DuPont Dow Elastomers
PU (AU/EU)	Polyurethane	Vulkolan [®]	Bayer Corporation
CR	Polychloroprene	Neoprene [®]	DuPont Dow Elastomers
MVQ	Silicone	Silastic [®]	Dow Corning Corp.

(Table 1.1)

Hardness of sealants is defined as a material's resistance to permanent indentation. We are using Shore A durometer scale hardness testers to verify the correctness specified in standards or required by customers.

Tests are made randomly on 5 pieces of thickness of no less than 6 mm and minimum width of 15 mm at room temperature of $23 \pm 5^{\circ}\text{C}$. In case of form shaped gaskets when thickness is less than required we do checks on big flat plates of satisfactory thickness that are made of compound from the same production.





Table 1.2 shows the applying hardness (Shore A avg. tolerance $\pm 5\text{HA}$) is recommended with reference to relevant standards and our experience throughout the years.

Term	Chemical Name	Trade Name	Hardness
NBR	Acrylonitrile Butadiene	Pervunan N [®] , Buna N [®]	60 ± 5 Shore A
EPDM	Ethylene Propylene	Nordel [®]	70 ± 5 Shore A
FPM	Fluorocarbon	Viton [®]	70 ± 5 Shore A
CSM	Chlorosulfonated Polyethylene	Hypalon [®]	70 ± 5 Shore A
PTFE	Poly Tetrafluoroethylene	Teflon [®]	90 ± 5 Shore A
PU (AU/EU)	Polyurethane	Vulkolan [®]	60 ± 5 Shore A
CR	Polychloroprene	Neoprene [®]	90 ± 5 Shore A
MVQ	Silicone	Silastic [®]	40 ± 5 Shore A

(Table 1.2)

By simulating two mating couplings under pressure water, referred to as hydrostatic testing, we check and confirm the suitability of each design (of both body structures and sealing durability) when dimensions are perfectly made to norms or to practical purposes.

Pressure testing on sealing functions are like yet different from hydrostatic test in producing process which is applied on every single piece prior to machining as Table 1.3.

Testing	On Sealing materials	On Bodies
Type of Test	Hydrostatic under water at room temperature	
Type of Connection	Sealants compressed or sealed by usually connecting a pair of mating couplings blinded at both ends 	Blind one coupling at both ends with no sealants insert by blind flanges where air can be pumped through 
Test Objects	End products after production esp. in stage of engineering development	Casts or forges during production prior to body machining
Test Pieces	No less than 5 pcs	Every single piece
Passed vs. Failed	Passed when a) no bubble observed at rated pressure; and b) no visible deformation of flared sealants observed during testing	Passed when no bubble observed at rated pressure
Blast test Requirement	Optional subject to engineering requirement	Optional

(Table 1.3)

Term	Trade Name	Working Temperature	
		°C	°F
NBR	Pervunan N®, Buna N®	-10 ~ +80	+14 ~ +176
CSM	Hypalon®	-60 ~ +204	-76 ~ +399
EPDM	Nordel®	-20 ~ +130	-4 ~ +266
FPM	Viton®	-20 ~ +180	-4 ~ +356
PTFE	Teflon®	-30 ~ +300	-22 ~ +572
CR	Neoprene®	-30 ~ +120	-22 ~ +248
PU (AU/EU)	Vulkolan®	-40 ~ +82	-40 ~ +180
MVQ	Silastic®	~	~

Table 1.4



Double ferrule fittings

SME double ferrule fittings are products designed for leak-free connections in process control, electric power, petrochemical, natural gas and other applications. And provide a wide range of sizes and joint forms.

Double ferrule fittings are used in instrumentation, process control systems, analysis and environmental monitoring equipment in petroleum, chemical, semiconductor, aviation and other industries. At the same time, ferrule joints are also widely used in other fields that have high requirements for the quality of ferrule joints.



Material and tubing

The material of the double ferrule joint is standard 316 stainless steel, and others include 304 stainless steel, PTFE, PFA, etc. Machined directly from bar stock, other joints are machined from forgings. Corresponding material testing and analysis documents can be provided.

Dual ferrule fittings are used with a wide variety of tubing materials and wall thicknesses. Whether it is thin wall tubing or thick wall tubing, JH-LOK fittings can achieve a good sealing effect. The materials selected for tubing and fittings must be compatible with the line media. In addition to considering thermal expansion and chemical stability, the tube material should be consistent with the fitting.

Transmit torque

Dual ferrule fittings do not transmit torque to the tubing when installed. Its superior ferrule design allows forces to be applied only in the direction of the tube axis during installation and reinstallation. Since no radial force is generated, the tube is stress-free, consistent with the mechanical stability of the tube.

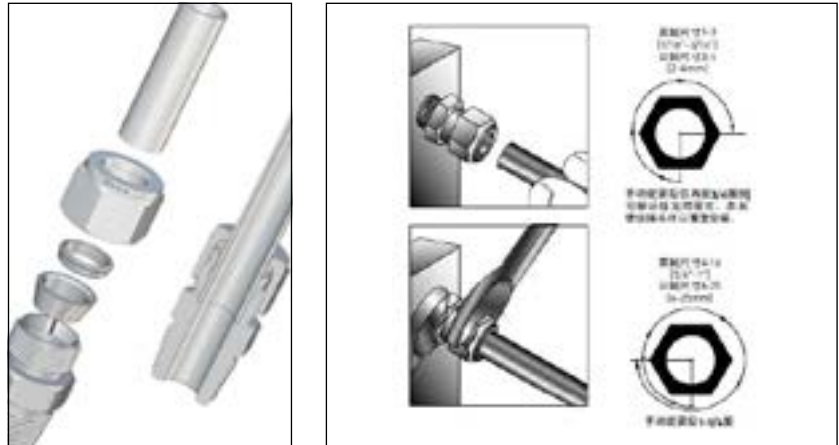
During the assembly process of JH-LOK double ferrule joint, there is no appropriate external force to deform the joint body or the ferrule, so there will be no situation where the ferrule and the nut cannot be tightly fitted. It makes it easy to disassemble when the nut is disassembled and greatly increases the number of repeated installations.

Sealing function

Double ferrule joint, precise double ferrule mechanical grip design, which separates the sealing function from the grip function of the ferrule. The front ferrule is used to form the seal, and the rear ferrule advances the front ferrule axially as the nut is tightened and exerts an effective tube grip radially.

Thread sealant must be used when assembling tapered threads; O-ring seal fittings consist of a 70 durometer Nitrile O-ring, other straight thread fittings use a 90 durometer fluorocarbon FKM O-rings.

Assembly and mounting



Jiehong ferrule fittings are sold as a whole, ready to use. When using, first insert the steel pipe into the bottom of the joint body as shown in the figure. (Please note that if the entire fitting is disassembled, be sure to confirm that the tapered end of the ferrule enters the fitting body.)

Tighten the nut by hand, then use a wrench to tighten an additional 3/4 or 1-1/4 turns. Use a wrench to hold the fitting body so that it does not rotate. Mark the nut to determine the number of subsequent turns.

To maximize reassembly times, mark fittings and nuts prior to disassembly. Before retightening, the ferrule is required to reach the fitting body and then manually retightened. Then use a wrench to turn the nut to the original marked position so that the marks are in a straight line. (When a significant increase in mechanical resistance is felt, the ferrule has re-entered the sealing position.)

Special reminder: It is necessary to turn the nut a little more than the original position only after repeated installations. Only an excess of 10°-20° (less than 1/3 hex nut flat) is required.

Pressure rating

In order to install a safe leak-free system, the selection of high-quality tubing is key, and a leak-free system that can withstand high pressure, vibration, vacuum, and temperature changes relies on precise tolerances and consistency, strict quality control, and sound design principles .

For both tube and pipe thread end connections, the pressure rating is determined by the end connection with the lower pressure rating. In addition, the tapered thread end pressure of male and female threads. To have the same pressure rating for female and male threads of the same size, female threads often require thicker pipe walls, which can result in a fitting that is too large and bulky to use.

Rated value

Pressure ratings are based on ASME Pressure Piping Standard B31.3 Process Piping at ambient temperature.

According to ASME B31.1, determine the pressure rating of the power pipeline: carbon steel material: $\times 0.85$; material ratings for stainless steel and brass remain the same Calculate bar $\times 0.10$ to get MPa.

THRD	SS316				BRASS			
	MALE		FEMALE		MALE		FEMALE	
INCH	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR
1/16	11000	757	6700	461	5500	378	3300	227
1/8	10000	689	6500	447	5000	344	3200	220
1/4	8000	551	6600	454	4000	275	3300	227
3/8	7800	537	5300	354	3900	268	2600	179
1/2	7700	530	4900	337	3800	261	2400	165
3/4	7300	502	4600	316	3600	248	2300	158
1	5300	365	4400	303	2600	179	2200	151
1 1/4	6000	413	5000	344	3000	206	2500	172
1 1/2	5000	344	4600	316	2500	172	2300	158
2	3900	268	3900	268	1900	130	1900	130

Pressure ratings are based on SAE J1926/3.

THRD	SS316, CARBON STEEL			
	FIXED		ADJUSTABLE	
INCH	PSIG	BAR	PSIG	BAR
5/16-24	4568	314	4568	314
7/16-20	4568	314	4568	314
1/2-20	4568	314	4568	314
9/16-18	4568	314	3626	250
3/4-16	4568	314	3626	250
7/8-14	3626	249	2900	199
1 1/16-12	3626	249	2900	199
1 3/16-12	2900	199	2320	159
1 5/16-12	2900	199	2320	159
1 5/8-12	2320	159	1813	124
1 7/8-12	2320	159	1813	124
2 1/2-12	1813	124	1450	99

Male AN (JIC) Fitting Pressure Ratings. Pressure ratings are measured at room temperature and apply to slip-on and crimp-on swivel nuts with internal cone connections.

THRD INCH	SS316 STRAIGHT		ROUND	
	PSIG	BAR	PSIG	BAR
5/16-24	10000	689	10000	689
7/16-20	10000	689	10000	689
9/16-18	8200	564	7600	523
3/4-16	8200	564	7600	523
1 1/16-12	7000	482	6300	434
1 5/16-12	5000	344	4100	282

O-Right Seal Pressure Ratings Stainless steel and carbon steel O-ring seal fittings in sizes 1 inch and 25mm and under are rated to 3000 psig (206 bar).

Adjustable ISO/BSP Parallel Thread (PR), pressure rated at room temperature.

THRD INCH	SS316, CARBON STEEL	
	PSIG	BAR
1/8, 1/4, 3/8	4568	314
1/2, 3/4, 1	2320	159

Pressure ratings for ISO 228/BSP parallel threads (RS and PR), hydraulic ratings based on ISO 1179 at room temperature.

RS and RP male fittings are tested with RP female fittings.

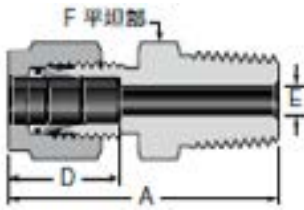
RS terminations are tested with bonded RS gaskets.

RP terminations are tested with gaskets.

Shim selection is the responsibility of the system designer and user and may affect product performance.

THRD INCH	SS316, CARBON STEEL	
	PSIG	BAR
1/8, 1/4, 3/8	5800	400
1/2	4700	324

Ferrule by male, NPT

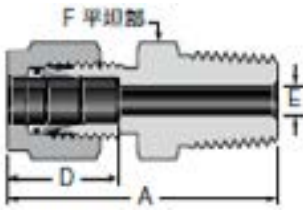


PIPE	THRD	A INCH	D	E	F	SME
1/16	1/16	0.94	0.34	0.05	5/16	
1/16	1/8	1.03	0.34	0.05	7/16	
1/16	1/4	1.22	0.34	0.05	9/16	
1/8	1/16	1.17	0.50	0.09	7/16	
1/8	1/8	1.20	0.50	0.09	7/16	
1/8	1/4	1.40	0.50	0.09	9/16	
1/8	3/8	1.41	0.50	0.09	11/16	
1/8	1/2	1.66	0.50	0.09	7/8	
3/16	1/16	1.23	0.54	0.12	7/16	
3/16	1/8	1.23	0.54	0.12	7/16	
3/16	1/4	1.43	0.54	0.12	9/16	
1/4	1/16	1.29	0.60	0.12	1/2	
1/4	1/8	1.29	0.60	0.19	1/2	
1/4	1/4	1.49	0.60	0.19	9/16	
1/4	3/8	1.51	0.60	0.19	11/16	
1/4	1/2	1.76	0.60	0.19	7/8	
1/4	3/4	1.82	0.60	0.19	1 1/16	
5/16	1/8	1.34	0.64	0.19	9/16	
5/16	1/4	1.52	0.64	0.25	9/16	
5/16	3/8	1.54	0.64	0.25	11/16	
5/16	1/2	1.79	0.64	0.25	7/8	
3/8	1/8	1.39	0.66	0.19	5/8	
3/8	1/4	1.57	0.66	0.28	5/8	
3/8	3/8	1.57	0.66	0.28	11/16	
3/8	1/2	1.82	0.66	0.28	7/8	
3/8	3/4	1.88	0.66	0.28	1 1/16	
1/2	1/8	1.53	0.90	0.19	13/16	
1/2	1/4	1.71	0.90	0.28	13/16	
1/2	3/8	1.71	0.90	0.38	13/16	
1/2	1/2	1.93	0.90	0.41	7/8	
1/2	3/4	1.99	0.90	0.41	1 1/16	
1/2	1	2.25	0.90	0.41	1 3/8	
5/8	3/8	1.74	0.96	0.38	15/16	
5/8	1/2	1.93	0.96	0.47	15/16	
5/8	3/4	1.99	0.96	0.50	1 1/16	
3/4	1/2	1.99	0.96	0.47	1 1/16	
3/4	3/4	1.99	0.96	0.62	1 1/16	
3/4	1	2.25	0.96	0.62	1 3/8	
7/8	3/4	1.99	1.02	0.62	1 3/16	
7/8	1	2.25	1.02	0.72	1 3/8	
1	1/2	2.26	1.23	0.47	1 3/8	
1	3/4	2.26	1.23	0.62	1 3/8	
1	1	2.45	1.23	0.88	1 3/8	

Ferrule by male, NPT

PIPE	THRD	A MM	D	E	F	SME
2	1/8	30.5	12.9	1.7	12	
3	1/8	30.5	12.9	2.4	12	
3	1/4	35.6	12.9	2.4	14	
4	1/8	31.2	13.7	2.4	12	
4	1/4	36.1	13.7	2.4	14	
6	1/8	32.8	15.3	4.8	14	
6	1/4	37.6	15.3	4.8	14	
6	3/8	38.4	15.3	4.8	18	
6	1/2	44.0	15.3	4.8	22	
8	1/8	34.2	16.2	4.8	1	
8	1/4	38.7	16.2	6.4	15	
8	3/8	39.2	16.2	6.4	18	
8	1/2	44.8	16.2	6.4	22	
10	1/8	36.0	17.2	4.8	18	
10	1/4	40.9	17.2	7.9	18	
10	3/8	40.9	17.2	7.9	18	
10	1/2	45.7	17.2	7.9	22	
10	3/4	46.4	17.2	7.9	27	
12	1/8	38.8	22.8	4.8	22	
12	1/4	43.4	22.8	7.9	18	
12	3/8	43.4	22.8	9.5	18	
12	1/2	48.2	22.8	9.5	18	
12	3/4	49.0	22.8	9.5	27	
14	1/4	44.1	24.4	7.9	24	
14	3/8	44.1	24.4	9.5	24	
14	1/2	49.0	24.4	11.1	24	
14	3/4	49.0	24.4	11.1	24	
15	1/2	49.0	24.4	11.9	24	
15	3/4	49.0	24.4	11.9	27	
16	1/4	44.1	24.4	7.9	24	
16	3/8	44.1	24.4	9.5	24	
16	1/2	49.0	24.4	11.9	24	
16	3/4	49.0	24.4	12.7	27	
18	3/8	43.9	24.4	9.5	27	
18	1/2	50.5	24.4	11.9	27	
18	3/4	50.5	24.4	15.1	27	
18	1	55.6	24.4	15.1	35	
20	1/2	52.3	26.0	11.9	30	
20	3/4	52.3	26.0	15.9	30	
20	1	57.7	26.0	15.9	35	
22	1/2	52.3	26.0	11.9	30	
22	3/4	52.3	26.0	15.9	30	
22	1	57.9	26.0	18.3	35	
25	1/2	57.5	31.3	11.9	35	
25	3/4	57.5	31.3	15.9	35	
25	1	62.3	31.3	21.8	35	

Ferrule by male, ISO/BSP tapered (RT)

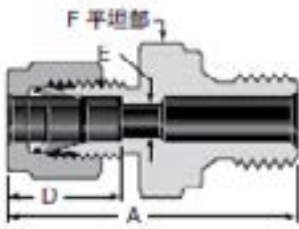


PIPE	THRD	A INCH	D	E	F	SME
1/8	1/8	1.20	0.50	0.09	7/16	
1/8	1/4	1.40	0.50	0.09	9/16	
1/4	1/8	1.29	0.60	0.19	1/2	
1/4	1/4	1.49	0.60	0.19	9/16	
1/4	3/8	1.51	0.60	0.19	11/16	
1/4	1/2	1.76	0.60	0.19	7/8	
5/16	1/8	1.34	0.64	0.19	9/16	
5/16	1/4	1.52	0.64	0.25	9/16	
3/8	1/8	1.39	0.66	0.19	5/8	
3/8	1/4	1.57	0.66	0.28	5/8	
3/8	3/8	1.57	0.66	0.28	11/16	
3/8	1/2	1.82	0.66	0.28	7/8	
3/8	3/4	1.88	0.66	0.28	1 1/16	
1/2	1/4	1.71	0.90	0.28	13/16	
1/2	3/8	1.71	0.90	0.38	13/16	
1/2	1/2	1.93	0.90	0.41	7/8	
1/2	3/4	1.99	0.90	0.41	1 1/16	
5/8	1/2	1.93	0.96	0.47	15/16	
3/4	3/4	1.99	0.96	0.62	1 1/16	
3/4	1	2.25	0.96	0.62	1 3/8	
1	3/4	2.26	1.23	0.63	1 3/8	
1	1	2.45	1.23	0.88	1 3/8	

Ferrule by male, ISO/BSP tapered (RT)

PIPE	THRD	A MM	D	E	F	SME
2	1/8	30.5	12.9	1.7	12	
3	1/8	30.5	12.9	2.4	12	
3	1/4	35.6	12.9	2.4	14	
4	1/8	31.2	13.7	2.4	12	
4	1/4	36.3	13.7	2.4	14	
6	1/8	32.8	15.3	4.8	14	
6	1/4	37.9	15.3	4.8	14	
6	3/8	38.4	15.3	4.8	18	
6	1/2	44.7	15.3	4.8	22	
8	1/8	34.2	16.2	4.8	15	
8	1/4	38.7	16.2	6.4	15	
8	3/8	39.2	16.2	6.4	18	
8	1/2	45.6	16.2	6.4	22	
10	1/8	36.3	17.2	4.8	18	
10	1/4	40.9	17.2	7.1	18	
10	3/8	40.9	17.2	7.9	18	
10	1/2	46.5	17.2	7.9	22	
10	3/4	48.0	17.2	7.9	27	
12	1/4	43.4	22.8	7.1	22	
12	3/8	43.4	22.8	9.5	22	
12	1/2	49.0	22.8	9.5	22	
12	3/4	50.5	22.8	9.5	27	
14	1/4	44.1	24.4	7.1	24	
14	3/8	44.1	24.4	9.5	24	
15	1/2	49.0	24.4	11.9	24	
16	1/4	44.1	24.4	7.1	24	
16	3/8	44.1	24.4	9.5	24	
16	1/2	49.0	24.4	11.9	24	
16	3/4	50.5	24.4	12.7	27	
18	1/2	50.5	24.4	11.9	27	
18	3/4	50.5	24.4	15.1	27	
20	1/2	52.3	26.0	11.9	30	
20	3/4	52.3	26.0	15.9	30	
22	3/4	52.3	26.0	15.9	30	
22	1	57.1	26.0	18.3	35	
25	1/2	57.5	31.3	11.9	35	
25	3/4	57.5	31.3	15.9	35	
25	1	62.3	31.3	21.8	35	

Ferrule by male, ISO/BSP tapered (RS)

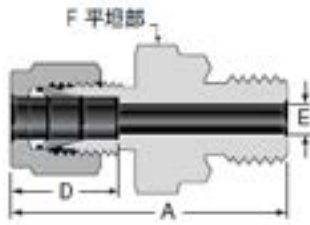


PIPE	THRD	A INCH	D	E	F	SME
1/8	1/8	1.31	0.50	0.09	9/16	
1/8	1/4	1.50	0.50	0.09	3/4	
1/8	3/8	1.53	0.50	0.09	7/8	
1/4	1/8	1.40	0.60	0.16	9/16	
1/4	1/4	1.59	0.60	0.19	3/4	
1/4	3/8	1.62	0.60	0.19	7/8	
1/4	1/2	1.70	0.60	0.19	1 1/16	
3/8	1/8	1.49	0.66	0.16	5/8	
3/8	1/4	1.65	0.66	0.23	3/4	
3/8	3/8	1.68	0.66	0.28	7/8	
3/8	1/2	1.76	0.66	0.28	1 1/16	
1/2	1/4	1.76	0.90	0.23	13/16	
1/2	3/8	1.79	0.90	0.31	7/8	
1/2	1/2	1.87	0.90	0.41	1 1/16	
3/4	1/2	1.92	0.96	0.47	1 1/16	
3/4	3/4	2.05	0.96	0.62	1 5/16	
1	1/2	2.19	1.23	0.47	1 3/8	
1	3/4	2.27	1.23	0.63	1 3/8	
1	1	2.35	1.23	0.78	1 3/8	

Ferrule by male, ISO/BSP tapered (RS)

PIPE	THRD	A MM	D	E	F	SME
2	1/8	33.3	12.9	1.7	14	
3	1/8	33.3	12.9	2.4	14	
3	1/4	38.1	12.9	2.4	19	
4	1/8	34.0	13.7	2.4	14	
6	1/8	35.6	15.3	4.0	14	
6	1/4	40.4	15.3	4.8	19	
6	3/8	41.1	15.3	4.8	22	
6	1/2	43.2	15.3	4.8	27	
8	1/8	36.6	16.2	4.8	15	
8	1/4	41.4	16.2	6.4	19	
8	3/8	42.2	16.2	6.4	22	
8	1/2	44.2	16.2	6.4	27	
10	1/4	42.2	17.2	5.9	19	
10	3/8	42.9	17.2	7.9	22	
10	1/2	45.0	17.2	7.9	27	
12	1/4	44.5	22.8	5.9	22	
12	3/8	45.5	22.8	7.9	22	
12	1/2	47.5	22.8	9.5	27	
12	3/4	52.1	22.8	9.5	35	
14	3/8	43.9	24.4	7.9	24	
14	1/2	47.5	24.4	11.1	27	
15	3/8	45.5	24.4	7.9	24	
15	1/2	47.5	24.4	11.9	27	
15	3/4	52.8	24.4	11.9	35	
16	3/8	45.5	24.4	7.9	24	
16	1/2	47.5	24.4	11.9	27	
16	3/4	52.8	24.4	12.7	35	
18	1/2	48.8	24.4	11.9	27	
18	3/4	52.1	24.4	15.1	35	
20	1/2	50.5	26.0	11.9	30	
20	3/4	52.6	26.0	15.9	35	
22	3/4	52.6	26.0	15.9	35	
22	1	54.9	26.0	18.3	41	
25	3/4	57.7	31.3	15.9	35	
25	1	59.7	31.3	19.8	41	

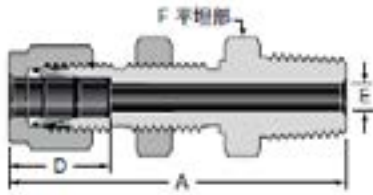
Ferrule by male, ISO/BSP tapered (RP)



PIPE	THRD	A INCH	D	E	F	SME
1/8	1/8	1.31	0.50	0.09	9/16	
1/8	1/4	1.50	0.50	0.09	3/4	
1/4	1/8	1.40	0.60	0.16	9/16	
1/4	1/4	1.59	0.60	0.19	3/4	
1/2	3/8	1.79	0.90	0.31	7/8	
1/2	1/2	1.87	0.90	0.41	1 1/16	
3/4	1/2	1.92	0.96	0.47	1 1/16	
3/4	3/4	2.05	0.96	0.62	1 5/16	
1	1	2.35	1.23	0.78	1 5/8	

PIPE	THRD	A MM	D	E	F	SME
3	1/8	33.3	12.9	2.4	14	
3	1/4	38.1	12.9	2.4	19	
4	1/8	34.0	13.7	2.4	14	
6	1/8	35.6	15.3	4.0	14	
6	1/4	40.4	15.3	4.8	19	
6	3/8	41.2	15.3	4.8	22	
6	1/2	43.2	15.3	4.8	27	
8	1/8	36.5	16.2	4.8	15	
8	1/4	41.3	16.2	6.4	19	
8	3/8	41.9	16.2	6.4	22	
8	1/2	44.1	16.2	6.4	27	
10	1/4	42.2	17.2	5.9	19	
10	3/8	42.9	17.2	7.9	22	
10	1/2	45.0	17.2	7.9	27	
12	1/4	45.4	22.8	5.9	22	
12	3/8	45.5	22.8	7.9	22	
12	1/2	47.5	22.8	9.5	27	
12	3/4	52.1	22.8	9.5	35	
15	1/2	47.5	24.4	11.9	27	
16	3/8	45.4	24.4	7.9	24	
16	1/2	47.5	24.4	11.9	27	
18	1/2	49.0	24.4	11.9	27	
18	3/4	52.3	24.4	15.1	35	
20	1/2	50.5	26.0	11.9	30	
20	3/4	52.5	26.0	15.9	35	
22	3/4	52.8	26.0	15.9	35	
22	1	54.5	26.0	18.3	41	
25	3/4	57.8	31.3	15.9	35	
25	1	59.8	31.3	19.8	41	

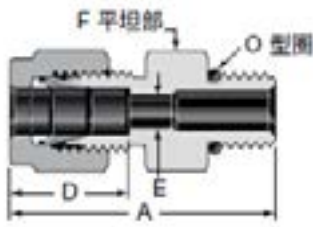
Ferrule by male NPT, bulkhead



PIPE	THRD	A INCH	D	E	F	HEAD	THICK	SME
1/8	1/8	1.83	0.50	0.09	1/2	21/64	0.5	
1/4	1/8	1.95	0.60	0.19	5/8	29/64	0.4	
1/4	1/4	2.13	0.60	0.19	5/8	29/64	0.4	
3/8	1/4	2.26	0.66	0.28	3/4	37/64	0.44	
3/8	3/8	2.26	0.66	0.28	3/4	37/64	0.44	
3/8	1/2	2.51	0.66	0.28	7/8	37/64	0.44	
1/2	3/8	2.49	0.90	0.38	15/16	9/64	0.5	
1/2	1/2	2.71	0.90	0.41	15/16	9/64	0.5	
3/4	1/2	3.00	0.96	0.62	1 3/16	1 1/64	0.66	
1	1	3.67	1.23	0.88	1 5/8	1 21/64	0.75	

PIPE	THRD	A MM	D	E	F	HEAD	THICK	SME
6	1/8	49.5	15.3	4.8	16	11.5	10.2	
6	1/4	53.6	15.3	4.8	16	11.5	10.2	
12	1/2	68.8	22.8	9.5	24	19.5	12.7	

Ferrule by male, SAE/MS (ST)



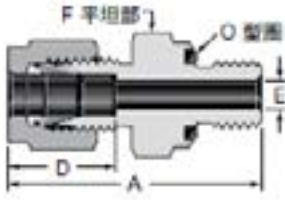
PIPE	THRD	A INCH	D	E	F	SME
1/8	5/16-24	1.18	0.50	0.09	7/16	
1/8	7/16-20	1.24	0.50	0.09	9/16	
1/8	9/16-18	1.31	0.50	0.09	1 1/16	
1/4	5/16-24	1.27	0.60	0.09	1/2	
1/4	7/16-20	1.34	0.60	0.19	9/16	
1/4	9/16-18	1.40	0.60	0.19	1 1/16	
1/4	3/4-16	1.48	0.60	0.19	7/8	
1/4	7/8-14	1.60	0.60	0.19	1	
5/16	1/2-20	1.37	0.64	0.25	5/8	
3/8	7/16-20	1.40	0.66	0.18	5/8	
3/8	9/16-18	1.46	0.66	0.28	1 1/16	
3/8	3/4-16	1.54	0.66	0.28	7/8	
3/8	7/8-14	1.66	0.66	0.28	1	
1/2	9/16-18	1.54	0.90	0.28	13/16	
1/2	3/4-16	1.65	0.90	0.41	7/8	
1/2	7/8-14	1.77	0.90	0.41	1	
1/2	1 1/16-12	1.93	0.90	0.41	1 1/4	
5/8	3/4-16	1.65	0.96	0.42	15/16	
5/8	7/8-14	1.78	0.96	0.50	1	
3/4	3/4-16	1.81	0.96	0.42	1 1/16	
3/4	1 1/16-12	1.93	0.96	0.62	1 1/4	
3/4	1 5/16-12	1.96	0.96	0.63	1 1/2	
7/8	1 3/16-12	1.93	1.02	0.72	1 3/8	
1	1 1/16-12	2.10	1.23	0.66	1 3/8	
1	1 5/16-12	2.14	1.23	0.88	1 1/2	

PIPE	THRD	A MM	D	E	F	SME
6	9/16-18	35.6	15.3	4.8	18	
10	9/16-18	37.3	17.2	7.1	18	
10	3/4-16	39.4	17.2	7.9	22	
12	7/16-20	40.6	22.8	5.2	22	
12	9/16-18	39.9	22.8	7.1	22	
12	3/4-16	41.9	22.8	9.5	22	

Straight fitting ferrule by long male SAE/MS (ST)

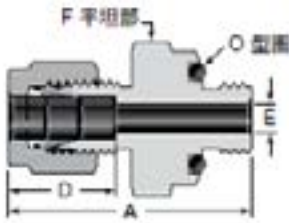
PIPE	THRD	A INCH	D	E	F	SME
1/4	7/16-20	2.26	0.60	0.19	9/16	
1/2	3/4-16	3.01	0.90	0.41	7/8	

**Ferrule by male parallel SAE/
MS (OR), O-ring**



PIPE	THRD	A INCH	D	E	F	SME
1/16	5/16-24	1.05	0.34	0.05	9/16	
1/8	5/16-24	1.29	0.50	0.09	9/16	
3/16	3/8-24	1.35	0.54	0.12	5/8	
1/4	7/16-20	1.51	0.60	0.19	3/4	
5/16	1/2-20	1.60	0.64	0.25	7/8	
3/8	9/16-18	1.67	0.66	0.28	15/16	
1/2	3/4-16	1.81	0.90	0.41	1 1/8	
3/4	1 1/16-12	2.06	0.96	0.62	1 1/2	
1	1 5/16-12	2.29	1.23	0.88	1 3/4	

**Ferrule by male tapered (NPT),
O-ring**



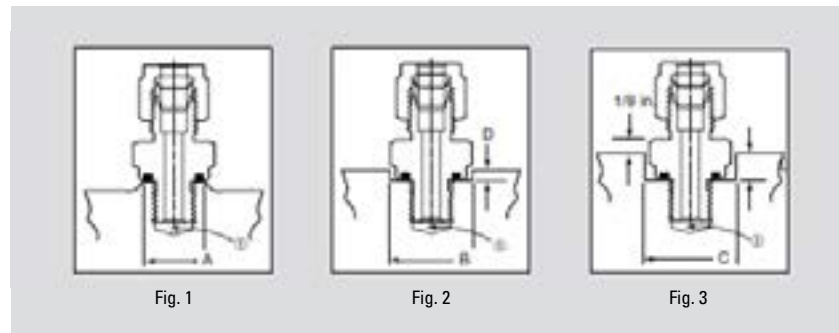
PIPE	THRD	A INCH	D	E	F	SME
1/8	1/8	1.29	0.50	0.09	3/4	
1/4	1/8	1.38	0.60	0.19	3/4	
1/4	1/4	1.51	0.60	0.19	15/16	
3/8	1/4	1.57	0.66	0.28	15/16	
3/8	3/8	1.63	0.66	0.28	1 1/8	
3/8	1/2	1.85	0.66	0.28	1 5/16	
1/2	1/2	1.96	0.90	0.41	1 5/16	

Safety dimensions for O-ring sealed fittings

Figure 1 is the case where a raised surface is used. Its smallest diameter achieves metal-to-metal contact on the outside of the O-ring seal to prevent O-ring extrusion.

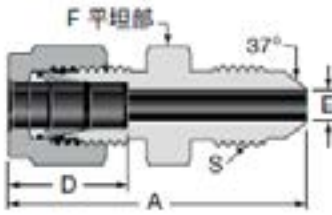
Fig. 2 is the situation of using concave Kongde. The recessed hole allows the rounded shoulder of the O-ring seal fitting to fit into the recessed hole.

Fig. 3 is also the case of using concave Kongde. The recess allows the hex part of the O-ring seal fitting to fit into the recess.



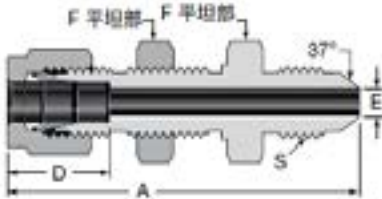
SAE/MS	THRD	A	B	C	D	E
		INCH				
5/16-24	-	0.50	0.59	0.66	0.09	0.16
5/16-24	-	0.50	0.59	0.66	0.09	0.22
-	1/8	0.69	0.78	0.88	0.16	0.28
3/8-24	-	0.56	0.66	0.75	0.09	0.22
7/16-20	-	0.69	0.78	0.88	0.16	0.28
-	1/8	0.69	0.78	0.88	0.16	0.28
-	1/4	0.87	0.97	1.09	0.16	0.31
1/2-20	-	0.75	0.91	1.03	0.16	0.31
9/16-18	-	0.81	0.97	1.09	0.16	0.31
-	1/4	0.87	0.97	1.09	0.16	0.31
-	3/8	1.00	1.16	1.31	0.16	0.34
-	1/2	1.22	1.34	1.53	0.22	0.44
3/4-16	-	1.00	1.16	1.31	0.16	0.34
-	1/2	1.22	1.34	1.53	0.22	0.44
1 1/16-12	-	1.41	1.53	1.75	0.22	0.50
1 5/16-12	-	1.69	1.78	2.03	0.22	0.56

Ferrule by male, AN



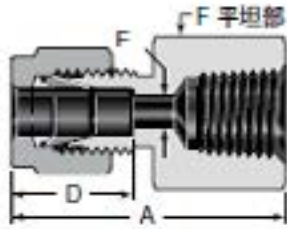
PIPE	THRD	A	D	E	F	S	SME
INCH							
1/16	1/8	1.07	0.34	0.05	7/6	5/16-24UNJF-3	
1/8	1/8	1.27	0.50	0.06	7/16	5/16-24UNJF-3	
1/8	1/4	1.38	0.50	0.09	1/2	7/16-20UNJF-3	
1/4	1/4	1.48	0.60	0.17	1/2	7/16-20UNJF-3	
5/16	5/16	1.51	0.64	0.23	9/16	1/2-20UNJF-3	
3/8	1/4	1.56	0.66	0.17	5/8	7/16-20UNJF-3	
3/8	3/8	1.56	0.66	0.28	5/8	9/16-18UNJF-3	
1/2	1/2	1.81	0.90	0.39	13/16	3/4-16UNJF-3	
3/4	3/4	2.10	0.96	0.61	1 1/8	1 1/16-12UNJF-3	
1	1	2.42	1.23	0.84	1 3/8	1 5/16-12UNJF-3	

Ferrule by male AN, bulkhead



PIPE	THRD	A	D	E	F	S	HEAD THICK	SME
INCH								
1/4	1/4	2.12	0.60	0.17	5/8	7/16-20UNJF-3	39/64	0.40
3/8	3/8	2.25	0.66	0.28	3/4	9/16-18UNJF-3	37/64	0.44
1/2	1/2	2.59	0.90	0.39	15/16	3/4-16UNJF-3	49/64	0.50
3/4	3/4	3.11	0.96	0.61	1 3/16	1 1/16-12UNJF-3	1 1/64	0.66
1	1	3.64	1.23	0.84	1 5/8	1 5/16-12UNJF-3	1 21/64	0.75
3/8	1/4	1.56	0.66	0.17	5/8	7/16-20UNJF-3		
3/8	3/8	1.56	0.66	0.28	5/8	9/16-18UNJF-3		
1/2	1/2	1.81	0.90	0.39	13/16	3/4-16UNJF-3		
3/4	3/4	2.10	0.96	0.61	1 1/8	1 1/16-12UNJF-3		
1	1	2.42	1.23	0.84	1 3/8	1 5/16-12UNJF-3		

Ferrule by female, NPT

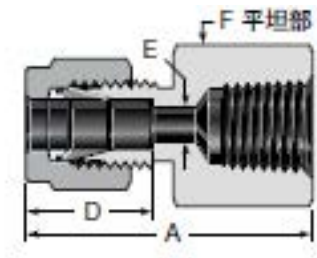


PIPE	THRD	A INCH	D	E	F	SME
1/16	1/16	0.93	0.34	0.05	7/16	
1/16	1/8	0.96	0.34	0.05	9/16	
1/8	1/8	1.13	0.50	0.09	9/16	
1/8	1/4	1.32	0.50	0.09	3/4	
1/4	1/8	1.23	0.60	0.19	9/16	
1/4	1/4	1.41	0.60	0.19	3/4	
1/4	3/8	1.48	0.60	0.19	7/8	
1/4	1/2	1.67	0.60	0.19	1 1/16	
5/16	1/8	1.26	0.64	0.25	9/16	
5/16	1/4	1.45	0.64	0.25	3/4	
3/8	1/8	1.29	0.66	0.28	5/8	
3/8	1/4	1.48	0.66	0.28	3/4	
3/8	3/8	1.54	0.66	0.28	7/8	
3/8	1/2	1.73	0.66	0.28	1 1/16	
3/8	3/4	1.88	0.66	0.28	1 5/16	
1/2	1/4	1.59	0.90	0.41	13/16	
1/2	3/8	1.65	0.90	0.41	7/8	
1/2	1/2	1.84	0.90	0.41	1 1/16	
1/2	3/4	1.90	0.90	0.41	1 5/16	
5/8	3/8	1.65	0.96	0.50	15/16	
5/8	1/2	1.84	0.96	0.50	1 1/16	
5/8	3/4	1.90	0.96	0.50	1 5/16	
3/4	1/2	1.84	0.96	0.62	1 1/16	
3/4	3/4	1.90	0.96	0.62	1 5/16	
7/8	3/4	1.96	1.02	0.72	1 5/16	
1	3/4	2.10	1.23	0.88	1 3/8	
1	1	2.45	1.23	0.88	1 5/8	

Ferrule by female, NPT

PIPE	THRD	A MM	D	E	F	SME
3	1/8	28.7	12.9	2.4	14	
3	1/4	33.5	12.9	2.4	19	
4	1/8	29.7	13.7	2.4	14	
6	1/8	31.3	15.3	4.8	14	
6	1/4	35.8	15.3	4.8	19	
6	3/8	37.6	15.3	4.8	22	
6	1/2	42.5	15.3	4.8	27	
8	1/8	32.1	16.2	6.4	15	
8	1/4	37.0	16.2	6.4	19	
8	3/8	38.5	16.2	6.4	22	
8	1/2	43.3	16.2	6.4	27	
10	1/4	37.8	17.2	7.9	19	
10	3/8	39.4	17.2	7.9	22	
10	1/2	44.2	17.2	7.9	27	
12	1/4	40.3	22.8	9.5	22	
12	3/8	41.9	22.8	9.5	22	
12	1/2	46.7	22.8	9.5	27	
15	1/2	46.7	24.4	11.9	27	
16	1/2	46.9	24.4	12.7	27	
20	1/2	47.9	26.0	15.9	30	
20	3/4	49.7	26.0	15.9	35	
22	3/4	49.7	26.0	18.3	35	
22	1	57.9	26.0	18.3	41	
25	3/4	53.4	31.3	21.8	35	
25	1	62.3	31.3	21.8	41	
1	3/4	2.10	1.23	0.88	1 3/8	
1	1	2.45	1.23	0.88	1 5/8	

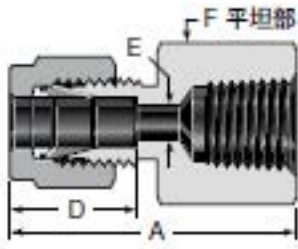
Ferrule by female tapered, ISO/BSP (RT)



PIPE	THRD	A INCH	D	E	F	SME
1/8	1/8	1.13	0.50	0.09	9/16	
1/4	1/8	1.23	0.60	0.19	9/16	
1/4	1/4	1.41	0.60	0.19	3/4	
1/4	3/8	1.48	0.60	0.19	7/8	
1/4	1/2	1.67	0.60	0.19	1 1/16	
3/8	1/4	1.48	0.66	0.28	3/4	
3/8	3/8	1.54	0.66	0.28	7/8	
3/8	1/2	1.73	0.66	0.28	1 1/16	
1/2	1/4	1.59	0.90	0.41	13/16	
1/2	3/8	1.65	0.90	0.41	7/8	
1/2	1/2	1.84	0.90	0.41	1 1/16	

PIPE	THRD	A MM	D	E	F	SME
3	1/8	28.7	12.9	2.4	14	
6	1/8	31.3	15.3	4.8	14	
6	1/4	35.8	15.3	4.8	19	
6	3/8	37.6	15.3	4.8	22	
6	1/2	42.5	15.3	4.8	27	
8	1/8	32.1	16.2	6.4	15	
8	1/4	37.0	16.2	6.4	19	
8	3/8	38.5	16.2	6.4	22	
8	1/2	43.3	16.2	6.4	27	
10	1/8	33.0	17.2	7.9	18	
10	1/4	37.8	17.2	7.9	19	
10	3/8	39.4	17.2	7.9	22	
10	1/2	44.2	17.2	7.9	27	
12	1/8	35.5	22.8	8.3	22	
12	1/4	40.3	22.8	9.5	22	
12	3/8	41.9	22.8	9.5	22	
12	1/2	46.7	22.8	9.5	27	
12	3/4	49.0	22.8	9.5	35	
15	3/8	41.9	24.4	11.9	24	
15	1/2	46.7	24.4	11.9	27	
20	1/2	47.9	26.0	15.9	30	
20	3/4	49.7	26.0	15.9	35	
22	3/4	49.7	26.0	18.3	35	
22	1	57.9	26.0	18.3	41	
25	3/4	53.4	31.3	21.8	35	
25	1	62.3	31.3	21.8	41	

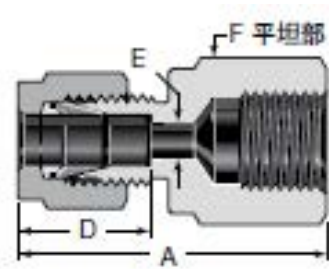
**Ferrule by female tapered,
ISO/BSP (RJ)**



PIPE	THRD	A INCH	D	E	F	SME
1/4	1/4	1.48	0.60	0.18	3/4	
1/4	3/8	1.48	0.60	0.19	15/16	
1/4	1/2	1.67	0.60	0.19	1 1/16	
5/16	1/4	1.51	0.64	0.22	3/4	
5/16	1/2	1.61	0.64	0.28	1 1/16	
3/8	1/4	1.54	0.66	0.22	3/4	
3/8	3/8	1.52	0.66	0.26	15/16	
3/8	1/2	1.65	0.66	0.28	1 1/16	
1/2	1/4	1.65	0.90	0.22	13/16	
1/2	3/8	1.75	0.90	0.26	15/16	
1/2	1/2	1.90	0.90	0.28	1 1/16	

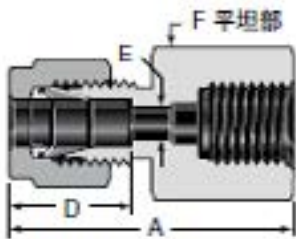
PIPE	THRD	A MM	D	E	F	SME
6	1/4	37.6	15.3	4.8	19	
6	3/8	37.6	15.3	4.8	24	
6	1/2	43.5	15.3	4.8	27	
8	1/4	38.5	16.2	5.5	19	
8	3/8	36.2	16.2	6.5	24	
8	1/2	41.0	16.2	7.0	27	
10	1/4	39.4	17.2	5.5	19	
10	3/8	38.8	17.2	6.5	24	
10	1/2	42.1	17.2	7.0	27	
12	1/4	41.9	22.8	5.5	22	
12	3/8	44.4	22.8	6.5	24	
12	1/2	48.2	22.8	7.0	27	

Ferrule by female parallel, ISO/BSP (RP)



PIPE	THRD	A MM	D	E	F	SME
6	1/8	33.5	15.3	4.8	14	
6	1/4	39.4	15.3	4.8	19	
22	3/4	53.3	26.0	18.3	35	
25	1	63.9	26.5	21.8	40	

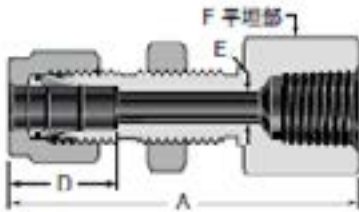
Ferrule by female parallel, ISO/BSP (RG, gauge)



PIPE	THRD	A INCH	D	E	F	SME
1/8	1/8	1.39	0.59	0.09	3/4	
1/4	1/8	1.26	0.60	0.18	9/16	
1/4	1/4	1.48	0.60	0.19	3/4	
1/4	3/8	1.48	0.60	0.19	15/16	
1/4	1/2	1.71	0.60	0.19	1 1/16	
5/16	1/4	1.51	0.64	0.22	3/4	
5/16	1/2	1.61	0.64	0.28	1 1/16	
3/8	1/4	1.54	0.66	0.22	3/4	
3/8	3/8	1.52	0.66	0.26	15/16	
3/8	1/2	1.65	0.66	0.28	1 1/16	
1/2	3/8	1.75	0.90	0.26	15/16	
1/2	1/2	1.90	0.90	0.28	1 1/16	

PIPE	THRD	A MM	D	E	F	SME
3	1/4	35.3	12.9	2.4	19	
6	1/8	32.0	15.3	4.5	14	
6	1/4	37.6	15.3	4.8	19	
6	3/8	37.6	15.3	4.8	24	
6	1/2	43.5	15.3	4.8	27	
8	1/4	38.5	16.2	5.5	19	
8	3/8	36.2	16.2	6.5	24	
8	1/2	41.0	16.2	7.0	27	
10	1/4	39.4	17.2	5.5	19	
10	3/8	38.8	17.2	6.5	24	
10	1/2	42.1	17.2	7.0	27	
12	1/4	41.9	22.8	5.6	22	
12	3/8	44.4	22.8	6.5	24	
12	1/2	48.2	22.8	7.0	27	
20	1/2	54.3	26.0	7.0	30	
22	1/2	54.3	26.0	7.0	30	

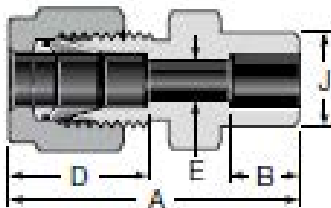
Ferrule by female parallel NPT, bulkhead



PIPE	THRD	A	D	E	F	HEAD	THICK	SME
		INCH						
1/8	1/8	1.76	0.50	0.09	9/16	21/64	0.50	
1/4	1/8	1.85	0.60	0.19	5/8	29/64	0.40	
1/4	1/4	2.04	0.60	0.19	3/4	29/64	0.40	
3/8	1/4	2.17	0.66	0.28	3/4	37/64	0.44	
1/2	3/8	2.43	0.90	0.41	15/16	49/64	0.50	
1/2	1/2	2.62	0.90	0.41	1 1/16	49/64	0.50	

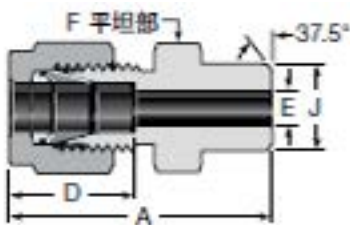
PIPE	THRD	A	D	E	F	HEAD	THICK	SME
		MM						
6	1/4	51.8	15.3	4.8	19	11.5	10.2	
12	1/2	66.5	22.8	9.5	27	19.5	12.7	

Ferrule by welding, BW



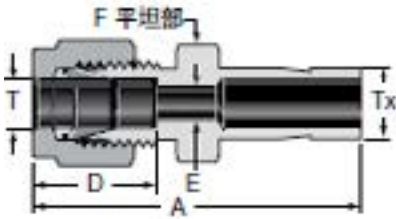
PIPE	BW	A	B	D	E	J	SME
		INCH					
1/8	1/8	1.14	0.10	0.50	0.09	0.29	
1/4	1/4	1.32	0.28	0.60	0.19	0.48	
3/8	3/8	1.48	0.31	0.66	0.28	0.60	
1/2	1/2	1.62	0.38	0.90	0.41	0.73	
3/4	3/4	1.71	0.44	0.96	0.62	1.04	
1	1	2.07	0.62	1.23	0.88	1.36	

Ferrule by welding, SW



PIPE	SW	A	B	D	E	J	SME
		INCH					
1/8	1/8	1.14	0.10	0.50	0.09	0.29	
1/4	1/4	1.32	0.28	0.60	0.19	0.48	
3/8	3/8	1.48	0.31	0.66	0.28	0.60	
1/2	1/2	1.62	0.38	0.90	0.41	0.73	
3/4	3/4	1.71	0.44	0.96	0.62	1.04	
1	1	2.07	0.62	1.23	0.88	1.36	

Ferrule by pipe reduction

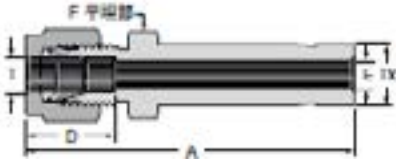


T	Tx	A INCH	D	E	F	SME
1/16	1/8	1.15	0.34	0.05	5/16	
1/16	1/4	1.24	0.34	0.05	7/16	
1/8	1/16	1.14	0.50	0.03	7/16	
1/8	1/8	1.32	0.50	0.08	7/16	
1/8	3/16	1.35	0.50	0.09	7/16	
1/8	1/4	1.42	0.50	0.09	7/16	
1/8	3/8	1.48	0.50	0.09	7/16	
1/8	1/2	1.74	0.50	0.09	9/16	
3/16	1/8	1.37	0.54	0.08	7/16	
3/16	1/4	1.46	0.54	0.12	7/16	
1/4	1/8	1.45	0.60	0.08	1/2	
1/4	3/16	1.48	0.60	0.12	1/2	
1/4	1/4	1.54	0.60	0.17	1/2	
1/4	5/16	1.57	0.60	0.19	1/2	
1/4	3/8	1.60	0.60	0.19	1/2	
1/4	1/2	1.82	0.60	0.19	9/16	
1/4	5/8	1.89	0.60	0.19	11/16	
1/4	3/4	1.88	0.60	0.19	13/16	
5/16	3/8	1.65	0.64	0.25	9/16	
5/16	1/2	1.87	0.64	0.25	9/16	
3/8	1/8	1.63	0.86	0.17	5/8	
3/8	1/4	1.70	0.86	0.27	5/8	
3/8	3/8	1.91	0.86	0.28	5/8	
3/8	1/2	1.98	0.86	0.28	11/16	
3/8	3/4	1.98	0.86	0.28	13/16	
1/2	1/4	1.77	0.90	0.17	13/16	
1/2	3/8	1.84	0.90	0.27	13/16	
1/2	1/2	2.06	0.90	0.37	13/16	
1/2	5/8	2.12	0.90	0.41	13/16	
1/2	3/4	2.12	0.90	0.41	13/16	
1/2	1	2.37	0.90	0.41	1 1/16	
5/8	3/4	2.15	0.96	0.50	15/16	
5/8	7/8	2.21	0.96	0.50	15/16	
5/8	1	2.40	0.96	0.50	1 1/16	
3/4	1/2	2.15	0.96	0.37	1 1/16	
3/4	1	2.46	0.96	0.62	1 1/16	

Ferrule by pipe reduction

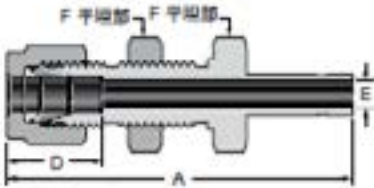
T	Tx	A MM	D	E	F	SME
2	3	33.5	12.9	1.7	12	
3	4	35.0	12.9	2.4	12	
3	6	36.1	12.9	2.4	12	
3	10	38.4	12.9	2.4	14	
4	6	37.1	13.7	2.4	12	
6	3	36.9	15.3	1.9	14	
6	8	39.9	15.3	4.8	14	
6	10	40.7	15.3	4.8	14	
6	12	46.3	15.3	4.8	14	
6	18	49.6	15.3	4.8	22	
8	6	40.3	16.2	4.1	15	
8	10	42.0	16.2	6.4	15	
8	12	47.6	16.2	6.4	15	
10	6	42.4	17.2	4.1	5/8	
10	8	43.4	17.2	5.6	3/4	
10	12	49.8	17.2	7.9	7/8	
10	15	51.3	17.2	7.9	1 1/16	
10	18	51.3	17.2	7.9	1 5/16	
12	6	44.9	22.8	4.1	22	
12	8	45.9	22.8	5.6	22	
12	10	46.7	22.8	7.1	22	
12	16	53.8	22.8	9.5	22	
12	18	53.8	22.8	9.5	22	
12	20	56.1	22.8	9.5	22	
12	22	56.1	22.8	9.5	24	
12	25	62.4	22.8	9.5	27	
14	12	53.0	24.4	8.8	24	
15	12	53.0	24.4	8.8	24	
16	12	53.0	24.4	8.8	24	
18	12	54.6	24.4	8.8	27	
18	16	56.1	24.4	12.0	27	
18	20	57.6	24.4	15.1	27	
18	22	57.6	24.4	15.1	27	
18	25	62.4	24.4	15.1	27	
20	16	57.9	26.0	12.0	30	
20	18	57.9	26.0	13.9	30	
20	22	59.4	26.0	15.9	30	
20	25	64.2	26.0	15.9	30	
22	18	57.9	26.0	13.9	30	
22	20	59.4	26.0	15.5	30	
22	25	64.2	26.0	18.3	30	
25	18	63.1	31.3	13.9	35	
25	20	64.6	31.3	15.5	35	

Ferrule by long pipe reduction



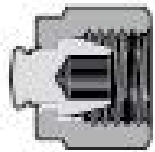
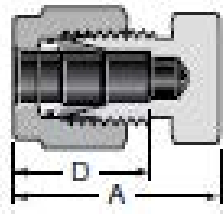
T	Tx	A	D	E	F	SME
INCH						
3/8	1/2	2.57	0.66	0.25	5/8	

Ferrule reduction, bulkhead



PIPE	A	D	E	F	HEAD	THICK	SME
INCH							
1/8	1.95	0.50	0.08	1/2	21/64	0.50	
1/4	2.20	0.60	0.17	5/8	29/64	0.40	
3/8	2.41	0.66	0.27	3/4	37/64	0.44	
1/2	2.87	0.90	0.37	15/16	49/64	0.50	
5/8	2.96	0.96	0.47	1 1/16	57/64	0.50	
3/4	3.21	0.96	0.58	1 3/16	1 1/64	0.66	
1	3.95	1.23	0.80	1 5/8	1 21/64	0.75	

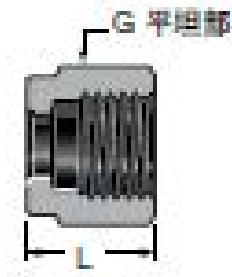
Ferrule cap and plug



PIPE	A	D	CAP	PLUG
INCH				
1/16	0.59	0.34		
1/8	0.79	0.50		
3/16	0.84	0.54		
1/4	0.92	0.60		
5/16	0.96	0.64		
3/8	1.01	0.66		
1/2	1.21	0.90		
5/8	1.24	0.96		
3/4	1.27	0.96		
7/8	1.37	1.02		
1	1.61	1.23		

PIPE	A	D	CAP	PLUG
MM				
2	20.1	12.9		
3	20.1	12.9		
4	21.3	13.7		
6	23.1	15.3		
8	24.5	16.2		
10	26.6	17.2		
12	30.6	22.8		
14	31.4	24.4		
15	31.4	24.4		
16	31.4	24.4		
18	32.2	24.4		
20	34.8	26.0		
22	34.8	26.0		
25	41.0	31.3		

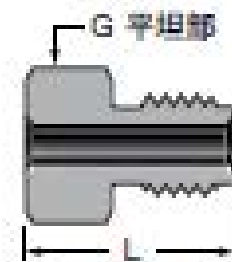
Ferrule thread nut



PIPE	A INCH	D	SME
1/16	5/16	0.31	
1/8	7/16	0.47	
3/16	1/2	0.47	
1/4	9/16	0.50	
5/16	5/8	0.53	
3/8	1 1/16	1.56	
1/2	7/8	0.69	
5/8	1	0.69	
3/4	1 1/8	0.69	
7/8	1 1/4	0.69	
1	1 1/2	0.69	

PIPE	A MM	D	SME
2	12	11.9	
3	12	11.9	
4	12	11.9	
6	14	12.7	
8	16	13.5	
10	19	15.1	
12	22	17.4	
14	25	17.4	
15	25	17.4	
16	25	17.4	
18	30	17.4	
20	32	17.4	
22	32	17.4	
25	38	20.6	

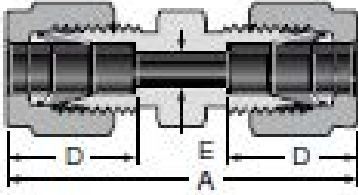
Ferrule thread nipple



PIPE	A INCH	D	SME
1/16	1/4	0.38	
1/8	3/8	0.53	
1/4	1/2	0.62	
1/2	15/16	0.87	

PIPE	A MM	D	SME
10	22	22.1	
12	24	22.1	

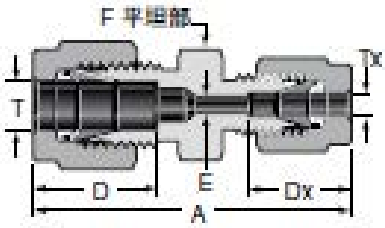
Ferrule joint, straight



PIPE	A INCH	D	E	SME
1/16	0.99	0.34	0.05	
1/8	1.40	0.50	0.09	
3/16	1.47	0.54	0.12	
1/4	1.61	0.60	0.19	
3/8	1.77	0.66	0.28	
1/2	2.02	0.90	0.41	
5/8	2.05	0.96	0.50	
3/4	2.11	0.96	0.62	
7/8	2.17	1.02	0.72	
1	2.55	1.23	0.88	

PIPE	A MM	D	E	SME
2	35.6	12.9	1.7	
3	35.3	12.9	2.4	
4	37.3	13.7	2.4	
6	41.0	15.3	4.8	
8	43.2	16.2	6.4	
10	46.2	17.2	7.9	
12	51.2	22.8	9.5	
14	52.0	24.4	11.1	
15	52.0	24.4	11.9	
16	52.0	24.4	12.7	
18	53.5	24.4	15.1	
20	55.0	26.0	15.9	
22	55.0	26.0	18.3	
25	65.0	31.3	21.8	

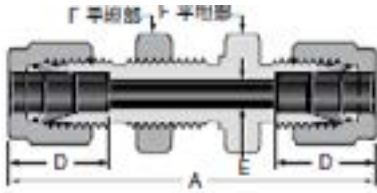
Ferrule joint, reduction



T	Tx	A INCH	D	Dx	E	SME
1/8	1/16	1.22	0.50	0.34	0.05	
3/16	1/16	1.27	0.54	0.34	0.05	
3/16	1/8	1.44	0.54	0.50	0.06	
1/4	1/16	1.35	0.60	0.34	0.05	
1/4	1/8	1.52	0.60	0.50	0.09	
1/4	3/16	1.55	0.60	0.54	0.12	
5/16	1/8	1.56	0.64	0.50	0.09	
5/16	1/4	1.66	0.64	0.60	0.19	
3/8	1/16	1.44	0.66	0.34	0.05	
3/8	1/8	1.61	0.66	0.50	0.09	
3/8	1/4	1.70	0.66	0.60	0.19	
3/8	5/16	1.74	0.66	0.64	0.25	
1/2	1/8	1.78	0.90	0.50	0.09	
1/2	1/4	1.85	0.90	0.60	0.19	
1/2	3/8	1.91	0.90	0.66	0.28	
5/8	3/8	1.94	0.96	0.66	0.28	
5/8	1/2	2.05	0.96	0.90	0.41	
3/4	1/4	1.94	0.96	0.60	0.19	
3/4	3/8	2.00	0.96	0.66	0.28	
3/4	1/2	2.11	0.96	0.90	0.41	
3/4	5/8	2.11	0.96	0.96	0.50	
1	1/2	2.38	1.23	0.90	0.41	
1	3/4	2.38	1.23	0.96	0.62	

T	Tx	A MM	D	Dx	E	SME
3	2	35.3	12.9	12.9	1.7	
6	2	38.6	15.3	12.9	1.7	
6	3	38.6	15.3	12.9	2.4	
6	4	39.4	15.3	13.7	2.4	
8	6	42.3	16.2	15.3	4.8	
10	6	44.5	17.2	15.3	4.8	
10	8	45.1	17.2	16.2	6.4	
12	6	47.0	22.8	15.3	4.8	
12	8	47.8	22.8	16.2	6.4	
12	10	48.7	22.8	17.2	7.9	
14	12	48.8	24.4	22.8	6.4	
16	10	49.5	24.4	17.2	7.9	
16	12	52.0	24.4	22.8	9.5	
18	12	53.5	24.4	22.8	9.5	
25	18	61.0	31.3	24.4	15.1	
25	20	62.3	31.3	26.0	15.9	
1	3/4	2.38	1.23	0.96	0.62	

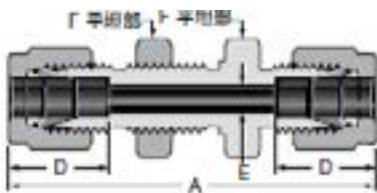
Ferrule joint, bulkhead



PIPE	A	D	E	F	HEAD	THICK	SME
	INCH						
1/16	1.24	0.34	0.05	5/16	13/64	0.12	
1/8	2.02	0.50	0.09	1/2	21/64	0.50	
3/16	2.11	0.54	0.12	9/16	25/64	0.50	
1/4	2.27	0.60	0.19	5/8	29/64	0.40	
5/16	2.39	0.64	0.25	11/16	33/64	0.44	
3/8	2.45	0.66	0.28	3/4	37/64	0.44	
1/2	2.80	0.90	0.41	15/16	49/64	0.50	
5/8	2.86	0.96	0.50	1 1/16	57/64	0.50	
3/4	3.11	0.96	0.62	1 3/16	1 1/64	0.66	
1	3.77	1.23	0.88	1 5/8	1 21/64	0.75	

PIPE	A	D	E	F	HEAD	THICK	SME
	MM						
3	51.3	12.9	2.4	14	8.3	12.7	
4	53.6	13.7	2.4	14	9.9	12.7	
6	57.7	15.3	4.8	16	11.5	10.2	
8	61.0	16.2	6.4	18	13.1	11.2	
10	63.7	17.2	7.9	22	16.3	11.2	
12	71.0	22.8	9.5	24	19.5	12.7	
14	72.5	24.4	11.1	27	22.5	12.7	
15	72.5	24.4	11.9	27	22.8	12.7	
16	72.5	24.4	12.7	27	22.8	12.7	
18	78.9	24.4	15.1	30	26.0	16.8	
20	84.5	26.0	15.9	35	29.0	19.0	
25	96.0	31.3	21.8	41	34.0	19.0	

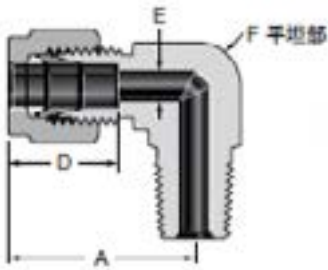
Ferrule joint reduction, bulk-head



T	Tx	A	D	Dx	E	F	HEAD	THICK	SME
	INCH								
1/8	1/16	1.85	0.50	0.34	0.05	1/2	21/64	0.50	
1/4	1/8	2.17	0.60	0.50	0.09	5/8	29/64	0.40	
3/8	1/4	2.39	0.66	0.60	0.19	3/4	37/64	0.44	
1/2	1/4	2.63	0.90	0.60	0.19	15/16	49/64	0.50	

T	Tx	A	D	Dx	E	F	HEAD	THICK	SME
	MM								
6	1/8	55.1	15.3	12.7	2.4	16	11.5	10.2	

Ferrule by male NPT, 90°

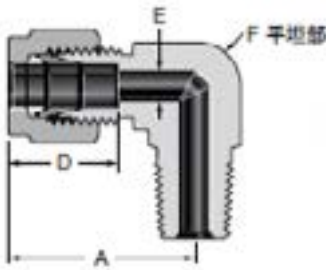


PIPE	THRD	A INCH	D	E	F	SME
1/16	1/16	0.75	0.34	0.05	7/16	
1/16	1/8	0.75	0.34	0.05	7/16	
1/8	1/16	0.93	0.50	0.09	7/16	
1/8	1/8	0.93	0.50	0.09	7/16	
1/8	1/4	0.97	0.50	0.09	1/2	
3/16	1/8	1.00	0.54	0.12	1/2	
3/16	1/4	1.00	0.54	0.12	1/2	
1/4	1/16	1.06	0.60	0.12	1/2	
1/4	1/8	1.06	0.60	0.19	1/2	
1/4	1/4	1.06	0.60	0.19	1/2	
1/4	3/8	1.17	0.60	0.19	11/16	
1/4	1/2	1.25	0.60	0.19	13/16	
5/16	1/8	1.13	0.64	0.19	9/16	
5/16	1/4	1.13	0.64	0.25	9/16	
5/16	3/8	1.20	0.64	0.25	11/16	
3/8	1/8	1.20	0.66	0.19	5/8	
3/8	1/4	1.20	0.66	0.28	5/8	
3/8	3/8	1.23	0.66	0.28	11/16	
3/8	1/2	1.31	0.66	0.28	13/16	
3/8	3/4	1.46	0.66	0.28	1 1/16	
1/2	1/4	1.42	0.90	0.28	13/16	
1/2	3/8	1.42	0.90	0.38	13/16	
1/2	1/2	1.42	0.90	0.41	13/16	
1/2	3/4	1.57	0.90	0.41	1 1/16	
5/8	3/8	1.50	0.96	0.38	15/16	
5/8	1/25	1.50	0.96	0.47	15/16	
5/8	3/4	1.57	0.96	0.50	1 1/16	
3/4	1/2	1.57	0.96	0.47	1 3/8	
3/4	3/4	1.57	0.96	0.62	1 3/8	
7/8	3/4	1.76	1.02	0.62	1 3/8	
1	3/4	1.93	1.23	0.62	1 3/8	
1	1	1.93	1.23	0.88	1 3/8	

Ferrule by male NPT, 90°

PIPE	THRD	A MM	D	E	F	SME
3	1/8	23.6	12.9	2.4	7/16	
3	1/4	24.6	12.9	2.4	1/2	
4	1/8	25.4	13.7	2.4	1/2	
4	1/4	25.4	13.7	2.4	1/2	
6	1/8	27.0	15.3	4.8	1/2	
6	1/4	27.0	15.3	4.8	1/2	
6	3/8	29.8	15.3	4.8	11/16	
6	1/2	31.8	15.3	4.8	13/16	
8	1/8	28.8	16.2	4.8	9/16	
8	1/4	28.8	16.2	6.4	9/16	
8	3/8	30.6	16.2	6.4	11/16	
8	1/2	32.6	16.2	6.4	13/16	
10	1/8	31.5	17.2	4.8	11/16	
10	1/4	31.5	17.2	7.1	11/16	
10	3/8	31.5	17.2	7.9	11/16	
10	1/2	33.5	17.2	7.9	13/16	
12	1/4	36.0	22.8	7.1	13/16	
12	3/8	36.0	22.8	9.5	13/16	
12	1/2	36.0	22.8	9.5	13/16	
12	3/4	39.8	22.8	9.5	1 1/16	
14	1/2	38.0	24.4	11.1	15/16	
15	1/2	38.0	24.4	11.9	15/16	
16	3/8	38.0	24.4	9.5	15/16	
16	1/2	38.0	24.4	11.9	15/16	
16	3/4	39.8	24.4	12.7	1 1/16	
18	1/2	39.8	24.4	11.9	1 1/16	
18	3/4	39.8	24.4	15.1	1 1/16	
20	1/2	44.6	26.0	11.9	1 3/8	
20	3/4	44.6	26.0	15.9	1 3/8	
22	3/4	44.6	26.0	15.9	1 3/8	
22	1	44.6	26.0	18.3	1 3/8	
25	3/4	49.1	31.3	15.9	1 3/8	
25	1	49.1	31.3	21.8	1 3/8	

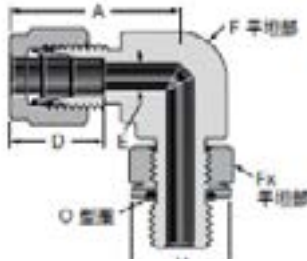
Ferrule by male ISO/BSP (RT),
90°



PIPE	THRD	A INCH	D	E	F	SME
1/8	1/8	0.83	0.50	0.09	7/16	
1/8	1/4	0.97	0.50	0.09	1/2	
1/4	1/8	1.06	0.60	0.19	1/2	
1/4	1/4	1.06	0.60	0.19	1/2	
1/4	3/8	1.17	0.60	0.19	11/16	
1/4	1/2	1.25	0.60	0.19	13/16	
5/16	1/4	1.13	0.64	0.25	9/16	
3/8	1/8	1.20	0.66	0.28	5/8	
3/8	1/4	1.20	0.66	0.28	5/8	
3/8	3/8	1.23	0.66	0.28	11/16	
1/2	1/4	1.42	0.90	0.28	13/16	
1/2	3/8	1.42	0.90	0.38	13/16	
1/2	1/2	1.42	0.90	0.41	13/16	
3/4	1/2	1.57	0.96	0.47	1 3/8	
1	1	1.93	1.23	0.88	1 3/8	

PIPE	THRD	A MM	D	E	F	SME
3	1/8	23.6	12.9	2.4	7/16	
3	1/4	24.6	12.9	2.4	1/2	
4	1/8	25.4	13.7	2.4	1/2	
4	1/4	25.4	13.7	2.4	1/2	
6	1/8	27.0	15.3	4.8	1/2	
6	1/4	27.0	15.3	4.8	1/2	
6	3/8	29.8	15.3	4.8	11/16	
6	1/2	31.8	15.3	4.8	13/16	
8	1/8	28.8	16.2	4.8	9/16	
8	1/4	28.8	16.2	6.4	9/16	
8	3/8	30.6	16.2	6.4	11/16	
8	1/2	32.6	16.2	6.4	13/16	
10	1/4	31.5	17.2	7.1	11/16	
10	3/8	31.5	17.2	7.9	11/16	
10	1/2	33.5	17.2	7.9	13/16	
12	1/8	36.0	22.8	4.8	13/16	
12	1/4	36.0	22.8	7.1	13/16	
12	3/8	36.0	22.8	9.5	13/16	
12	1/2	36.0	22.8	9.5	13/16	
12	3/4	39.8	22.8	9.5	1 1/16	
14	1/2	38.0	24.4	11.1	15/16	
15	1/2	38.0	24.4	11.9	15/16	
16	3/8	38.0	24.4	9.5	15/16	
16	1/2	38.0	24.4	11.9	15/16	
16	3/4	39.8	24.4	12.7	1 1/16	
18	1/2	39.8	24.4	11.9	1 1/16	
18	3/4	39.8	24.4	15.1	1 1/16	

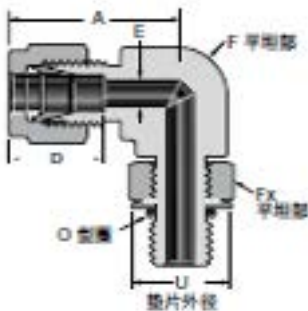
Ferrule by male ISO/BSP (PR) adjustable, 90°



PIPE	THRD	A	D	E	F	Fx	U	SME
		INCH						
1/4	1/8	1.06	0.60	0.16	1/2	9/16	0.60	
1/4	1/4	1.14	0.60	0.19	5/8	3/4	0.80	
3/8	1/4	1.20	0.66	0.23	5/8	3/4	0.80	
3/8	3/8	1.31	0.66	0.28	13/16	7/8	0.96	
1/2	1/4	1.42	0.90	0.23	13/16	3/4	0.80	
1/2	3/8	1.42	0.90	0.31	13/16	7/8	0.96	
1/2	1/2	1.50	0.90	0.41	15/16	1 1/16	1.16	
5/8	1/2	1.50	0.96	0.47	15/16	1 1/16	1.16	
3/4	1/2	1.57	0.96	0.47	1 1/16	1 1/16	1.16	
3/4	3/4	1.57	0.96	0.62	1 1/16	1 3/8	1.43	
1	3/4	1.93	1.23	0.62	1 3/8	1 3/8	1.43	
1	1	1.93	1.23	0.78	1 3/8	1 5/8	1.82	

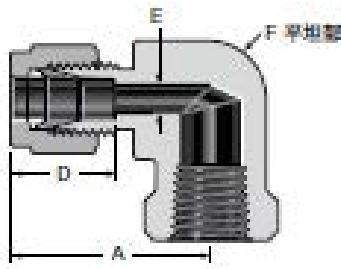
PIPE	THRD	A	D	E	F	Fx	U	SME
		MM						
6	1/8	27.0	15.3	4.0	1/2	9/16	15.2	
6	1/4	29.0	15.3	4.8	5/8	3/4	20.3	
8	1/8	28.8	16.2	4.0	9/16	9/16	15.2	
8	1/4	29.9	16.2	5.9	5/8	3/4	20.3	
10	1/4	33.5	17.2	5.9	13/16	3/4	20.3	
10	3/8	33.5	17.2	7.9	13/16	7/8	24.4	
12	1/4	36.0	22.8	5.9	13/16	3/4	20.3	
12	3/8	36.0	22.8	7.9	13/16	7/8	24.4	
12	1/2	38.0	22.8	9.5	15/16	1 1/16	29.5	
12	3/4	39.8	22.8	9.5	1 1/16	1 3/8	36.3	

Ferrule by male ISO/BSP (ST) adjustable, 90°



PIPE	THRD	A	D	E	F	Fx	U	SME
		INCH						
1/4	7/16-20	1.12	0.60	0.19	1/2	9/16	0.65	
1/4	9/16-18	1.20	0.60	0.19	5/8	11/16	0.79	
5/16	1/2-20	1.19	0.64	0.26	9/16	5/8	0.72	
3/8	7/16-20	1.26	0.66	0.20	5/8	9/16	0.65	
3/8	9/16-18	1.26	0.66	0.28	5/8	11/16	0.79	
3/8	3/4-16	1.37	0.66	0.28	13/16	7/8	1.01	
1/2	9/16-18	1.48	0.90	0.28	13/16	11/16	0.79	
1/2	3/4-16	1.48	0.90	0.41	13/16	7/8	1.01	
5/8	7/8-14	1.56	0.96	0.62	1 1/16	1 1/4	1.44	
3/4	1 1/16-12	1.63	0.96	0.62	1 1/16	1 1/4	1.44	
7/8	1 3/16-12	1.70	1.02	0.72	1 3/16	1 3/8	1.59	
1	1 5/16-12	1.99	1.23	0.88	1 3/8	1 1/2	1.73	

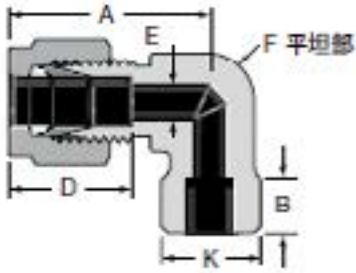
Ferrule by female NPT, 90°



PIPE	THRD	A INCH	D	E	F	SME
1/8	1/8	0.97	0.50	0.09	1/2	
1/8	1/4	1.08	0.50	0.09	11/16	
3/16	1/8	1.00	0.60	0.19	1/2	
1/4	1/8	1.06	0.60	0.19	1/2	
1/4	1/4	1.17	0.60	0.19	11/16	
1/4	3/8	1.25	0.60	0.19	13/16	
1/4	1/2	1.36	0.60	0.19	1	
5/16	1/8	1.13	0.64	0.25	9/16	
5/16	1/4	1.20	0.64	0.25	11/16	
3/8	1/8	1.20	0.66	0.28	5/8	
3/8	1/4	1.23	0.66	0.28	11/16	
3/8	3/8	1.31	0.66	0.28	13/16	
3/8	1/2	1.42	0.66	0.28	1	
1/2	1/4	1.42	0.90	0.41	13/16	
1/2	3/8	1.42	0.90	0.41	13/16	
1/2	1/2	1.53	0.90	0.41	1	
5/8	3/8	1.50	0.96	0.50	15/16	
5/8	1/2	1.57	0.96	0.50	1 1/16	
3/4	1/2	1.57	0.96	0.62	1 1/16	
3/4	3/4	1.76	0.96	0.62	1 3/8	
7/8	3/4	1.76	1.02	0.72	1 3/8	
1	3/4	1.93	1.23	0.88	1 3/8	
1	1	2.11	1.23	0.88	1 11/16	

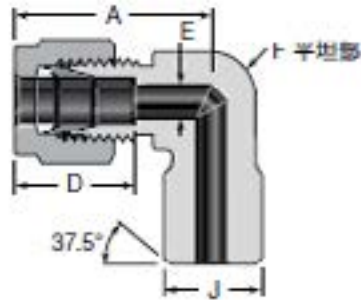
PIPE	THRD	A INCH	D	E	F	SME
6	1/8	27.0	15.3	4.8	1/2	
6	1/4	29.8	15.3	4.8	11/16	
6	1/2	34.6	15.3	4.8	1	
8	1/4	30.6	16.2	6.4	11/16	
10	1/8	31.5	17.2	7.9	11/16	
10	1/4	33.5	17.2	7.9	13/16	
12	1/4	36.0	22.8	9.5	13/16	
12	1/2	38.8	22.8	9.5	1	
16	1/2	39.5	24.4	12.7	1 1/16	

Ferrule by welding end SW, 90°



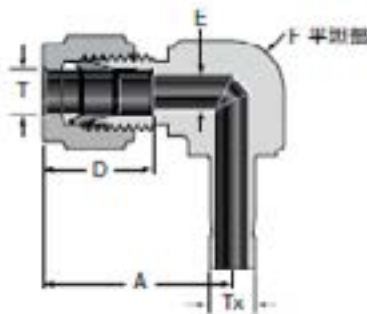
PIPE	SW	A	B	D	E	J	K	SME
		INCH						
1/4	1/4	1.06	0.28	0.60	0.19	1/2	0.50	
3/8	3/8	1.20	0.31	0.66	0.28	5/8	0.63	
1/2	1/2	1.42	0.38	0.90	0.41	13/16	0.81	
3/4	3/4	1.57	0.44	0.96	0.62	1 1/16	1.06	
1	1	1.93	0.62	1.23	0.88	1 3/8	1.38	

Ferrule by welding end BW, 90°



PIPE	BW	A	D	E	F	K	SME
		INCH					
1/4	1/8	1.06	0.60	0.19	1/2	0.405	
1/4	1/4	1.06	0.60	0.19	1/2	0.504	
3/8	1/4	1.20	0.66	0.28	5/8	0.540	
1/2	1/2	1.42	0.90	0.41	13/16	0.840	
3/4	3/4	1.57	0.96	0.62	1 1/16	1.050	

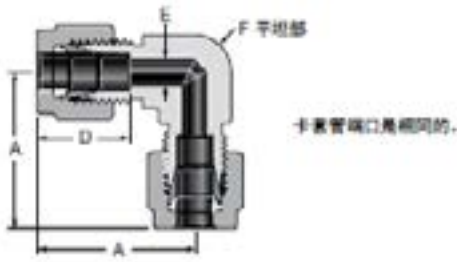
Ferrule by pipe reduction, 90°



T	Tx	A	D	E	F	SME
		INCH				
1/4	1/4	1.06	0.60	0.17	1/2	
3/8	1/4	1.20	0.66	0.17	5/8	
3/8	3/8	1.20	0.66	0.27	5/8	
1/2	3/8	1.42	0.90	0.27	13/16	
1/2	1/4	1.42	0.90	0.37	13/16	

T	Tx	A	D	E	F	SME
		MM				
6	6	27.0	15.3	4.6	1/2	
12	12	38.1	22.8	8.8	15/16	

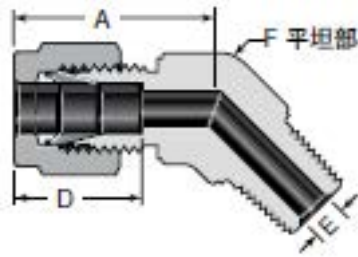
Ferrule joint, 90°



PIPE	A INCH	D	E	F	SME
1/16	0.70	0.34	0.05	3/8	
1/8	0.88	0.50	0.09	3/8	
3/16	1.00	0.54	0.12	1/2	
1/4	1.06	0.60	0.19	1/2	
5/16	1.13	0.64	0.25	9/16	
3/8	1.20	0.66	0.28	5/8	
1/2	1.42	0.90	0.41	13/16	
5/8	1.50	0.96	0.62	1 1/16	
3/4	1.57	0.96	0.62	1 1/16	
7/8	1.76	1.02	0.72	1 3/8	
1	1.93	1.23	0.88	1 3/8	

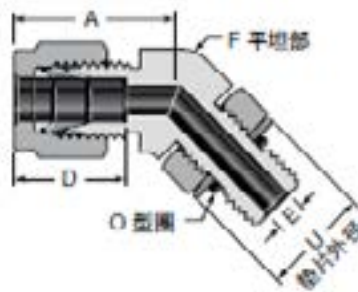
PIPE	A MM	D	E	F	SME
3	22.3	12.9	2.4	3/8	
4	25.4	13.7	2.4	1/2	
6	27.0	15.3	4.8	1/2	
8	28.8	16.2	6.4	9/16	
10	31.5	17.2	7.9	11/16	
12	36.0	22.8	9.5	13/16	
14	38.0	24.4	11.1	15/16	
15	38.0	24.4	11.9	15/16	
16	38.0	24.4	12.7	15/16	
18	39.8	24.4	15.1	1 1/16	
20	44.6	26.0	15.9	1 3/8	
22	44.6	26.0	18.3	1 3/8	
25	49.1	31.3	21.8	1 3/8	

Ferrule by male NPT, 45°



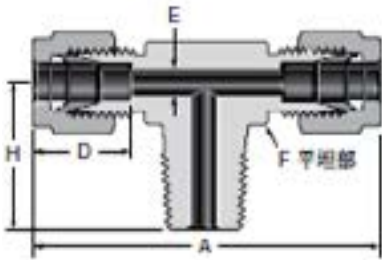
PIPE	THRD	A INCH	D	E	F	SME
1/4	1/8	0.97	0.60	0.19	1/2	
1/4	1/4	0.97	0.60	0.19	1/2	
3/8	1/8	1.10	0.66	0.19	5/8	
3/8	1/4	1.10	0.66	0.28	5/8	
3/8	3/8	1.15	0.66	0.28	13/16	
1/2	3/8	1.26	0.90	0.38	13/16	
1/2	1/2	1.26	0.90	0.41	13/16	
3/4	3/4	1.33	0.96	0.62	11/16	
1	1	1.59	1.23	0.88	1 3/8	

Ferrule by male SAE/MS (ST) adjustable, 45°



PIPE	THRD	A INCH	D	E	F	K	SME
1/4	7/16-20	1.01	0.60	0.19	1/2	0.65	
3/8	9/16-18	1.10	0.66	0.28	5/8	0.79	
1/2	3/4-16	1.26	0.90	0.41	13/16	1.01	
3/4	1 1/16-12	1.33	0.96	0.62	1 1/16	1.44	
1	1 5/16-12	1.59	1.23	0.88	1 3/8	1.73	

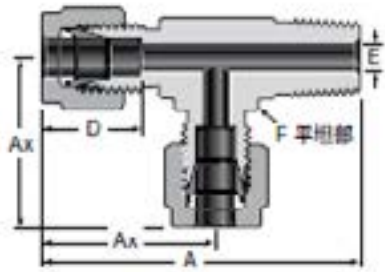
Ferrule three-way, one male NPT (TTM)



PIPE	THRD	A	D	E	F	K	SME
		INCH					
1/8	1/8	1.86	0.50	0.09	7/16	0.70	
1/8	1/4	1.94	0.50	0.09	1/2	0.92	
3/16	1/8	1.92	0.54	0.12	7/16	0.70	
1/4	1/8	2.12	0.60	0.19	1/2	0.74	
1/4	1/4	2.12	0.60	0.19	1/2	0.92	
5/16	1/8	2.34	0.64	0.19	5/8	0.82	
3/8	1/4	2.40	0.66	0.28	5/8	1.00	
3/8	3/8	2.62	0.66	0.28	13/16	1.11	
1/2	3/8	2.84	0.90	0.38	13/16	1.11	
1/2	1/2	2.84	0.90	0.41	13/16	1.30	
5/8	1/2	3.06	0.96	0.47	1	1.41	
3/4	3/4	3.14	0.96	0.47	1	1.41	

PIPE	THRD	A	D	E	F	K	SME
		MM					
6	1/8	53.9	15.3	4.8	1/2	18.8	
6	1/4	53.9	15.3	4.8	1/2	23.4	
8	1/8	59.7	16.2	4.8	5/8	20.8	
8	1/4	59.7	16.2	6.4	5/8	25.4	
10	1/4	67.0	17.2	7.1	13/16	26.2	
12	3/8	72.0	22.8	9.5	13/16	28.2	
12	1/4	72.0	22.8	7.1	13/16	28.2	
12	1/2	72.0	22.8	9.5	13/16	33.0	
16	1/2	77.6	24.4	11.9	1	35.8	

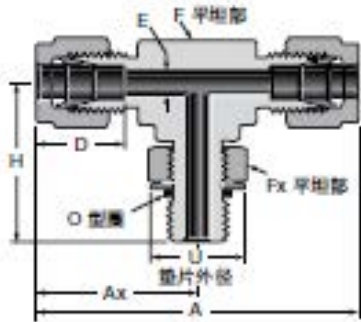
Ferrule three-way, one male NPT (TMT)



PIPE	THRD	A	Ax	D	E	F	SME
		INCH					
1/8	1/8	1.63	0.93	0.50	0.09	7/16	
1/8	1/4	1.89	0.97	0.50	0.09	1/2	
3/16	1/8	1.66	0.96	0.54	0.12	7/16	
1/4	1/8	1.80	1.06	0.60	0.19	1/2	
1/4	1/4	1.80	1.06	0.60	0.19	1/2	
5/16	1/8	1.99	1.17	0.64	0.19	5/8	
3/8	1/4	2.20	1.20	0.66	0.28	5/8	
3/8	3/8	2.42	1.31	0.66	0.28	13/16	
1/2	3/8	2.53	1.42	0.90	0.38	13/16	
1/2	1/2	2.72	1.42	0.90	0.41	13/16	
5/8	1/2	2.88	1.50	0.96	0.47	15/16	
3/4	3/4	3.02	1.57	0.96	0.62	1 1/16	

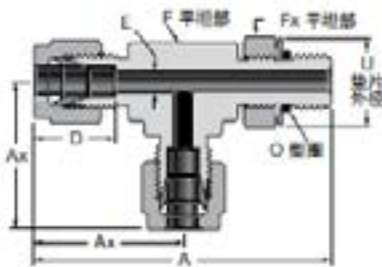
PIPE	THRD	A	Ax	D	E	F	SME
		MM					
6	1/8	45.8	27.0	15.3	4.8	1/2	
6	1/4	50.3	27.0	15.3	4.8	1/2	
8	1/4	55.3	29.9	16.2	6.4	5/8	
12	1/4	64.2	36.0	22.8	7.1	13/16	
12	1/4	69.0	36.0	22.8	9.5	13/16	
16	1/2	73.1	38.0	24.4	11.9	15/16	
12	1/4	72.0	22.8	7.1	13/16	28.2	
12	1/2	72.0	22.8	9.5	13/16	33.0	
16	1/2	77.6	24.4	11.9	1	35.8	

Ferrule three-way, one male parallel SAE/MS (TTS), adjustable



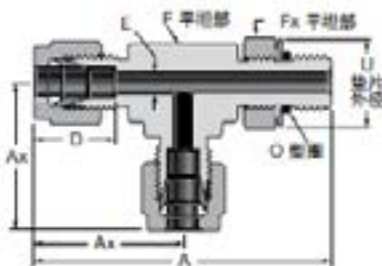
PIPE	THR D	A	A _x	D	E	F	F _x	H	U	SME
INCH										
1/4	7/16-20	2.24	1.12	0.60	0.19	1/2	9/16	1.12	0.65	
3/8	9/16-18	2.52	1.26	0.66	0.28	5/8	11/16	1.27	0.79	
1/2	3/4-16	2.96	1.48	0.90	0.41	13/16	7/8	1.49	1.01	
3/4	1 1/16-12	3.26	1.63	0.96	0.62	1 1/16	1 1/4	1.92	1.44	
1	1 5/16-12	3.98	1.99	1.23	0.88	1 3/8	1 1/2	2.11	1.73	

Ferrule three-way, one male parallel SAE/MS (TST), adjustable



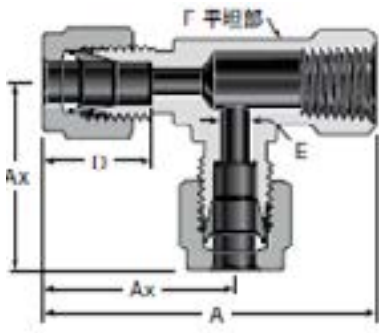
PIPE	THR D	A	A _x	D	E	F	F _x	U	SME	
INCH										
1/4	7/16-20	2.24	1.12	0.60	0.19	1/2	9/16	0.62		
3/8	9/16-18	2.53	1.26	0.66	0.28	5/8	11/16	0.79		
1/2	3/4-16	2.97	1.48	0.90	0.41	13/16	7/8	1.01		
3/4	1 1/16-12	3.55	1.63	0.96	0.62	1 1/16	1 1/4	1.44		
1	1 5/16-16	4.10	1.99	1.23	0.88	1 3/8	1 1/2	1.73		

Ferrule three-way, one male parallel ISO/BSP (TRT), adjustable



PIPE	THR D	A	A _x	D	E	F	F _x	U	SME	
INCH										
1/4	1/8	2.10	1.06	0.60	0.16	1/2	9/16	0.60		
1/4	1/4	2.41	1.16	0.60	0.19	5/8	3/4	0.80		
3/8	1/4	2.47	1.20	0.66	0.23	5/8	3/4	0.80		
1/2	3/8	2.88	1.42	0.90	0.31	13/16	7/8	0.96		
1/2	1/2	3.21	1.50	0.90	0.41	15/16	1 1/16	1.16		
5/8	1/2	3.21	1.50	0.96	0.47	15/16	1 1/16	1.16		
3/4	3/4	3.49	1.57	0.96	0.62	1 1/16	1 3/8	1.43		
3/4	1/2	3.35	1.57	0.96	0.47	1 1/16	1 1/16	1.16		
1	1	4.04	1.93	1.23	0.78	1 3/8	1 5/8	1.82		

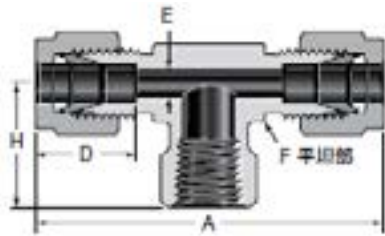
Ferrule three-way, one female NPT (TFT)



PIPE	THRD	A	A _x	D	E	F	SME
		INCH					
1/8	1/8	1.72	0.97	0.50	0.09	1/2	
1/4	1/8	1.81	1.06	0.60	0.19	1/2	
1/4	1/4	2.05	1.17	0.60	0.19	11/16	
3/8	1/4	2.11	1.23	0.66	0.28	11/16	
1/2	3/8	2.30	1.42	0.90	0.41	13/16	
1/2	1/2	2.69	1.57	0.90	0.41	1 1/16	
3/4	3/4	3.01	1.76	0.96	0.62	1 3/8	
1	3/4	3.18	1.93	1.23	0.88	1 3/8	
1	1	3.61	2.11	1.23	0.88	1 11/16	

PIPE	THRD	A	A _x	D	E	F	SME
		MM					
6	1/8	46.0	27.0	15.3	4.8	1/2	
6	1/4	52.1	29.8	15.3	4.8	11/16	
8	1/8	48.9	29.9	16.2	6.4	5/8	
8	1/4	53.0	30.6	16.2	6.4	11/16	
10	1/4	55.9	33.5	17.2	7.9	13/16	
12	1/4	58.4	36.0	22.8	9.5	13/16	
12	3/8	58.4	36.0	22.8	10.3	13/16	
12	1/2	68.3	39.8	22.8	9.5	1 1/16	
16	1/2	68.2	39.8	24.4	12.7	1 1/16	

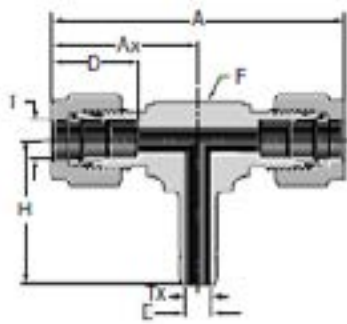
Ferrule three-way, one female NPT (TTF)



PIPE	THRD	A	D	E	F	H	SME
		INCH					
1/8	1/8	1.94	0.50	0.09	1/2	0.75	
1/4	1/8	2.12	0.60	0.19	1/2	0.75	
1/4	1/4	2.34	0.60	0.19	11/16	0.88	
3/8	1/4	2.46	0.66	0.28	11/16	0.88	
3/8	3/8	2.62	0.66	0.28	13/16	0.88	
3/8	1/2	2.84	0.66	0.28	1	1.12	
1/2	1/4	2.84	0.90	0.41	13/16	0.88	
1/2	3/8	2.84	0.90	0.41	13/16	0.88	
1/2	1/2	3.06	0.90	0.41	1	1.12	
5/8	1/2	3.06	0.96	0.50	1	1.12	
3/4	3/4	3.52	0.96	0.62	1 3/8	1.25	
1	3/4	3.86	1.23	0.88	1 3/8	1.25	
1	1	4.22	1.23	0.88	1 11/16	1.50	

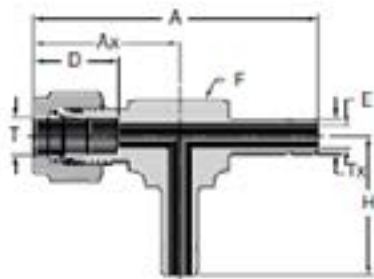
PIPE	THRD	A	D	E	F	H	SME
		MM					
6	1/8	46.0	27.0	15.3	4.8	1/2	
6	1/4	52.1	29.8	15.3	4.8	11/16	
8	1/8	48.9	29.9	16.2	6.4	5/8	
8	1/4	53.0	30.6	16.2	6.4	11/16	
10	1/4	55.9	33.5	17.2	7.9	13/16	
12	1/4	58.4	36.0	22.8	9.5	13/16	
12	3/8	58.4	36.0	22.8	10.3	13/16	
12	1/2	68.3	39.8	22.8	9.5	1 1/16	
16	1/2	68.2	39.8	24.4	12.7	1 1/16	

Ferrule three-way, one pipe connection (TTP)



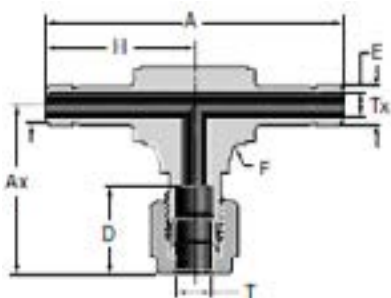
T	Tx	A	Ax	D	E	F	H	SME
INCH								
1/4	1/4	2.12	1.06	0.60	0.17	1/2	1.00	
3/8	3/8	2.40	1.20	0.66	0.27	5/8	1.14	
1/2	1/4	3.00	1.50	0.90	0.37	15/16	1.59	

Ferrule three-way, two pipe connection (TPP)



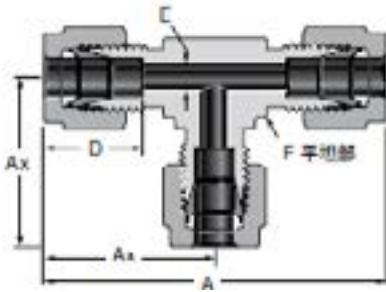
T	Tx	A	Ax	D	E	F	H	SME
INCH								
1/4	1/4	2.06	1.00	0.60	0.17	1/2	1.00	
3/8	1/4	2.28	1.08	0.66	0.17	5/8	1.08	
3/8	3/8	2.34	1.14	0.66	0.27	5/8	1.14	
1/2	3/8	2.67	1.25	0.90	0.27	13/16	1.25	
1/2	1/4	3.09	1.59	0.90	0.37	15/16	1.59	

Ferrule three-way, two pipe connection (PPT)



T	Tx	A	Ax	D	E	F	H	SME
INCH								
1/4	1/4	2.14	1.16	0.60	0.17	1/2	1.07	
3/8	3/8	2.66	1.39	0.66	0.27	13/16	1.33	
1/2	1/2	3.66	1.74	0.90	0.37	1 1/4	1.83	

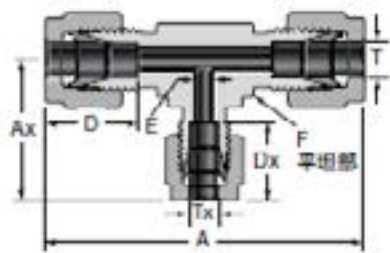
Ferrule fitting, three-way



PIPE	A INCH	Ax	D	E	F	SME
1/16	1.40	0.70	0.34	0.05	3/8	
1/8	1.76	0.88	0.50	0.09	3/8	
3/16	1.92	0.96	0.54	0.12	7/16	
1/4	2.12	1.06	0.60	0.19	1/2	
5/16	2.34	1.17	0.64	0.25	5/8	
3/8	2.40	1.20	0.66	0.28	5/8	
1/2	2.84	1.42	0.60	0.41	13/16	
5/8	3.06	1.53	0.96	0.50	1	
3/4	3.14	1.57	0.96	0.62	1 1/16	
7/8	3.52	1.76	1.02	0.72	1 3/8	
1	3.86	1.93	1.23	0.88	1 3/8	

PIPE	A MM	Ax	D	E	F	SME
2	44.7	22.3	12.9	1.7	3/8	
3	44.7	22.3	12.9	2.4	3/8	
4	50.8	25.4	13.7	2.4	1/2	
6	53.9	27.0	15.3	4.8	1/2	
8	59.7	29.9	16.2	6.4	5/8	
10	63.0	31.5	17.2	7.9	11/16	
12	72.0	36.0	22.8	9.5	13/16	
14	77.6	38.8	24.4	11.1	1	
15	77.6	38.8	24.4	11.9	1	
16	77.6	38.8	24.4	12.7	1	
18	79.6	39.8	24.4	15.1	1 1/16	
20	89.3	44.6	26.0	15.9	1 3/8	
22	89.3	44.6	26.0	18.3	1 3/8	
25	98.3	49.1	31.3	21.8	1 3/8	

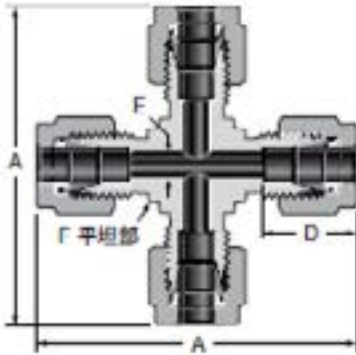
Ferrule fitting three-way, reduction



T	Tx	A	Ax	D	Dx	E	F	SME
INCH								
3/8	1/4	2.4	1.14	0.66	0.60	0.19	5/8	
1/2	1/4	2.84	1.25	0.92	0.60	0.19	13/16	
1/2	3/8	2.84	1.31	0.92	0.66	0.28	13/16	
5/8	3/8	3.06	1.42	0.96	0.66	0.28	1	
3/4	3/8	3.14	1.46	0.96	0.66	0.28	1 1/16	
3/4	1/2	3.14	1.57	0.96	0.90	0.41	1 1/16	
1	3/8	3.86	1.65	1.23	0.66	0.28	1 3/8	
1	1/2	3.86	1.76	1.23	0.90	0.41	1 3/8	
1	3/4	3.86	1.76	1.23	0.96	0.62	1 3/8	
7/8	3.52	1.76	1.02			0.72	1 3/8	
1	3.86	1.93	1.23			0.88	1 3/8	

T	Tx	A	Ax	D	Dx	E	F	SME
MM								
3	6	49.3	26.9	12.9	15.3	2.4	1/2	
8	6	59.9	29.0	16.2	15.3	4.8	5/8	
10	6	63.0	29.7	17.2	15.3	4.8	11/16	
12	6	63.0	29.7	17.2	15.3	4.8	11/16	
15	12	77.7	38.9	24.4	22.8	9.5	1	
16	12	77.6	38.9	24.4	22.8	9.5	1	
18	12	79.8	38.9	24.4	22.8	9.5	1 1/16	
22	12	89.4	44.7	26.0	22.8	9.5	1 3/8	
25	12	98.0	44.7	31.3	22.8	9.5	1 3/8	

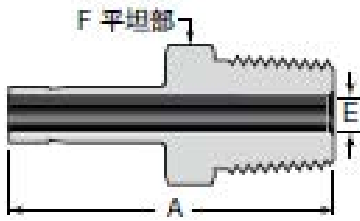
Ferrule fitting, cross



PIPE	A INCH	D	E	F	SME
1/8	1.76	0.50	0.09	3/8	
1/4	2.12	0.60	0.19	1/2	
5/16	2.34	0.64	0.25	5/8	
3/8	2.40	0.66	0.28	5/8	
1/2	2.84	0.90	0.41	13/16	
3/4	3.14	0.96	0.62	1 1/16	
1	3.86	1.23	0.88	1 3/8	

PIPE	A MM	D	E	F	SME
3	44.7	12.9	2.4	3/8	
6	53.9	15.3	4.8	1/2	
8	59.7	16.2	6.4	5/8	
10	67.0	17.0	7.9	13/16	
12	72.0	22.8	9.5	13/16	
16	74.0	24.4	12.7	15/16	
18	76.6	24.4	15.1	1 1/16	
20	89.3	26.0	15.9	1 3/8	
22	89.4	26.0	18.3	5/8	
25	98.3	31.3	21.8	1 3/8	

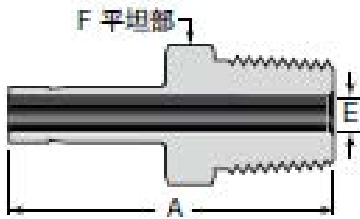
Pipe by male, NPT



PIPE	THRD	A INCH	E	F	SME
1/8	1/8	1.16	0.08	7/16	
1/8	1/4	1.37	0.08	9/16	
3/16	1/8	1.19	0.12	7/16	
3/16	1/4	1.40	0.12	9/16	
1/4	1/8	1.25	0.17	7/16	
1/4	1/4	1.46	0.17	9/16	
1/4	3/8	1.49	0.17	11/16	
1/4	1/2	1.71	0.17	7/8	
5/16	1/8	1.29	0.19	7/16	
5/16	1/4	1.50	0.22	9/16	
3/8	1/8	1.32	0.19	7/16	
3/8	1/4	1.53	0.27	9/16	
3/8	3/8	1.56	0.27	11/16	
3/8	1/2	1.78	0.27	7/8	
1/2	1/4	1.75	0.28	9/16	
1/2	3/8	1.78	0.37	11/16	
1/2	1/2	2.00	0.37	7/8	
5/8	1/2	2.06	0.47	7/8	
3/4	1/2	2.06	0.47	7/8	
3/4	3/4	2.06	0.58	1 1/16	
1	3/4	2.31	0.62	1 1/16	
1	1	2.60	0.80	1 3/8	

PIPE	THRD	A MM	E	F	SME
6	1/8	32.8	4.1	12	
6	1/4	38.1	4.1	14	
8	1/4	39.1	5.6	14	
8	3/8	39.9	5.6	19	
10	1/4	39.9	7.1	14	
10	3/8	40.6	7.1	18	
10	1/2	46.2	7.1	22	
12	1/4	46.5	7.1	16	
12	1/2	52.1	8.8	22	

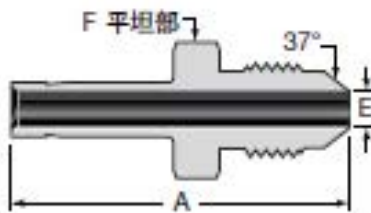
Pipe by male tapered, ISO/ BSP (RT)



PIPE	THRD	A INCH	E	F	SME
1/8	1/8	1.16	0.08	7/16	
1/8	1/4	1.37	0.08	9/16	
1/4	1/8	1.25	0.17	7/16	
1/4	1/4	1.46	0.17	9/16	
3/8	1/4	1.53	0.27	9/16	
3/8	3/8	1.56	0.27	11/16	
3/8	1/2	1.78	0.27	7/8	
1/2	1/4	1.75	0.28	9/16	
1/2	3/8	1.78	0.37	11/16	
1/2	1/2	2.00	0.37	7/8	
3/4	3/4	2.06	0.58	1 1/16	
1	1	2.60	0.80	1 3/8	

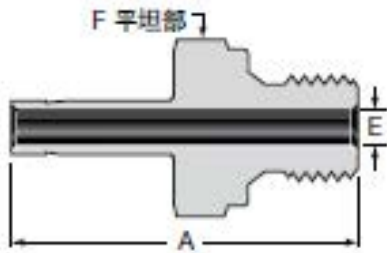
PIPE	THRD	A MM	E	F	SME
6	1/8	32.8	4.1	12	
6	1/4	38.1	4.1	14	
8	1/4	39.1	5.6	14	
10	1/4	39.9	7.1	14	
10	3/8	40.6	7.1	18	
12	1/4	46.5	7.1	16	
12	3/8	46.2	8.8	18	
12	1/2	52.1	8.8	22	

Pipe by male, AN



PIPE	THRD	A INCH	E	F	SME
1/4	1/4	1.46	0.17	1/2	
3/8	1/4	1.53	0.17	1/2	
3/8	3/8	1.56	0.27	5/8	
1/2	1/2	1.91	0.37	13/16	
3/4	3/4	2.21	0.58	1 1/8	
1	1	2.58	0.80	1 3/8	

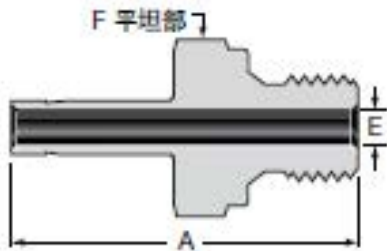
Pipe by male parallel, ISO/ BSP (RS)



PIPE	THRD	A INCH	E	F	SME
1/8	1/8	1.25	0.08	9/16	
1/8	1/4	1.43	0.08	3/4	
1/4	1/8	1.35	0.16	9/16	
1/4	1/4	1.53	0.17	3/4	
3/8	1/4	1.59	0.23	3/4	
3/8	3/8	1.62	0.27	7/8	
1/2	1/4	1.85	0.23	3/4	
1/2	3/8	1.88	0.31	7/8	
1/2	1/2	1.96	0.37	1 1/16	
3/4	3/4	2.20	0.58	1 5/16	
1	1	2.59	0.80	1 5/8	

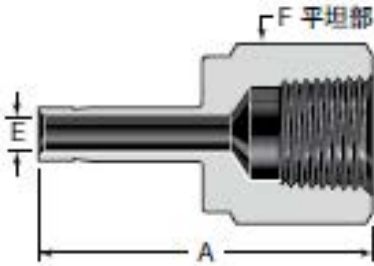
PIPE	THRD	A MM	E	F	SME
6	1/8	34.3	4.0	14	
6	1/4	38.9	4.1	19	
8	1/4	39.6	5.6	19	
10	1/4	40.4	5.9	19	
10	3/8	41.1	7.1	22	
10	1/2	43.2	7.1	27	
12	1/4	47.0	5.9	19	
12	3/8	47.8	7.9	22	
12	1/2	49.8	8.8	27	
18	1/2	51.3	11.9	27	
18	3/4	55.9	13.9	35	

Pipe by male parallel, SAE/ MS (ST)



PIPE	THRD	A INCH	E	F	SME
1/8	5/16-24	1.20	0.08	7/16	
1/4	7/16-20	1.39	0.17	9/16	
3/8	7/16-20	1.46	0.20	9/16	
3/8	9/16-18	1.52	0.27	11/16	
3/8	3/4-16	1.60	0.27	7/8	
1/2	9/16-18	1.74	0.28	11/16	
1/2	3/4-16	1.82	0.37	7/8	
5/8	7/8-14	1.94	0.47	1	
3/4	1 1/16-12	2.10	0.58	1 1/4	
1	1 5/1-12	2.41	0.80	1 1/2	

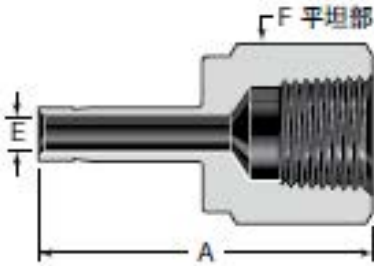
Pipe by female, NPT



PIPE	THRD	A INCH	E	F	SME
1/8	1/8	1.24	0.08	9/16	
1/8	1/4	1.39	0.08	3/4	
3/16	1/4	1.41	0.12	3/4	
1/4	1/8	1.30	0.17	9/16	
1/4	1/4	1.46	0.17	3/4	
1/4	3/8	1.55	0.17	7/8	
1/4	1/2	1.79	0.17	1 1/16	
5/16	1/4	1.48	0.22	3/4	
3/8	1/8	1.35	0.27	9/16	
3/8	1/4	1.50	0.27	3/4	
3/8	3/8	1.59	0.27	7/8	
3/8	1/2	1.84	0.27	1 1/16	
1/2	1/4	1.71	0.37	3/4	
1/2	3/8	1.79	0.37	7/8	
1/2	1/2	2.05	0.37	1 1/16	
5/8	1/2	2.09	0.47	1 1/16	
3/4	1/2	2.08	0.58	1 1/16	
3/4	3/4	2.16	0.58	1 5/16	
3/4	1	2.30	0.58	1 5/8	
1	3/4	2.39	0.80	1 5/16	
1	1	2.53	0.80	1 5/8	

PIPE	THRD	A MM	E	F	SME
6	1/8	32.5	4.1	14	
6	1/4	37.1	4.1	19	
8	1/4	37.6	5.6	19	
10	1/4	38.1	7.1	19	
10	3/8	40.1	7.1	22	
10	1/2	46.1	7.1	27	
12	1/4	43.7	8.8	19	
12	1/2	52.3	8.8	27	

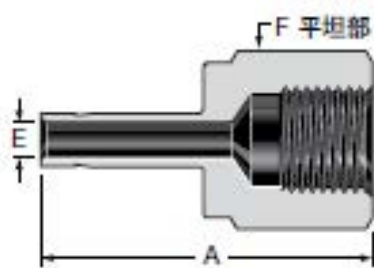
Pipe by female tapered, ISO/BSP (RT)



PIPE	THRD	A INCH	E	F	SME
1/4	1/8	1.30	0.17	9/16	
1/4	1/4	1.45	0.17	3/4	
3/8	1/4	1.50	0.27	3/4	
3/8	3/8	1.59	0.27	7/8	
1/2	1/4	1.71	0.37	3/4	
1/2	3/8	1.80	0.37	7/8	
1/2	1/2	2.05	0.37	1 1/16	

PIPE	THRD	A MM	E	F	SME
6	1/8	33.0	4.1	14	
8	1/4	37.6	5.6	19	
10	1/4	38.1	7.1	19	

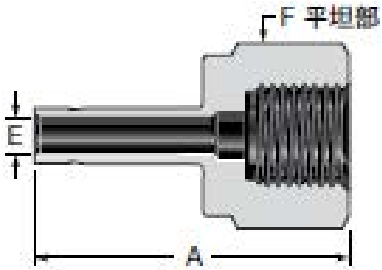
Pipe by female parallel, ISO/BSP (RP)



PIPE	THRD	A INCH	E	F	SME
1/8	1/8	1.17	0.08	9/16	
1/4	1/8	1.25	0.17	9/16	
1/4	1/4	1.50	0.17	3/4	
3/8	1/4	1.55	0.27	3/4	
3/8	3/8	1.57	0.27	15/16	
1/2	3/8	1.78	0.38	15/16	
1/2	1/2	2.02	0.38	1 1/16	

PIPE	THRD	A MM	E	F	SME
6	1/8	32.0	4.1	14	
6	1/4	37.8	4.1	19	
12	1/2	49.8	8.8	27	

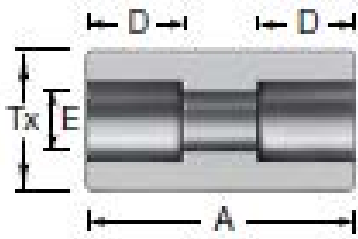
Pipe by female parallel ISO/
BSP (RG for pressure gauge)



PIPE	THRD	A INCH	E	F	SME
1/4	1/4	1.39	0.17	3/4	
3/8	3/8	1.55	0.25	15/16	
1/2	1/2	1.80	0.28	1 1/16	

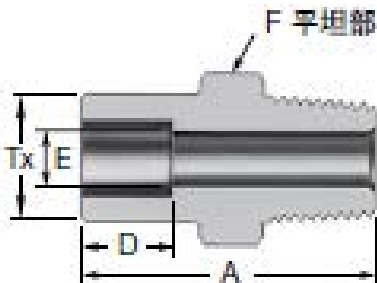
PIPE	THRD	A MM	E	F	SME
6	1/4	35.3	4.1	19	
6	3/8	38.4	4.1	24	
6	1/2	42.9	4.1	27	
8	1/4	33.0	5.5	19	
8	3/8	38.9	5.6	24	
8	1/2	43.7	5.6	27	
10	1/4	34.5	5.5	19	
10	3/8	36.1	6.5	24	
10	1/2	41.1	7.1	27	
12	1/4	40.1	5.5	19	
12	3/8	44.7	6.5	24	
12	1/2	48.8	7.0	27	
16	1	49.0	7.0	27	
18	1/2	49.3	7.0	27	

Pipe SW, dual



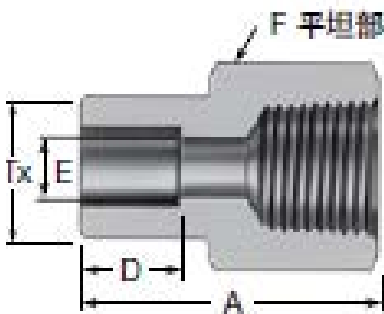
PIPE	A	D	E	Tx	PSIG	SME
	INCH					
1/4	0.75	0.28	0.19	0.48	10700	
3/8	0.88	0.31	0.28	0.60	8100	
1/2	1.06	0.38	0.41	0.73	6600	
3/4	1.31	0.44	0.63	1.04	5900	
1	1.44	0.62	0.88	1.36	5600	

Pipe SW by male thread



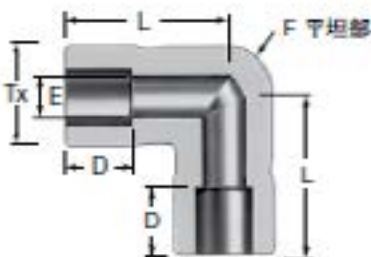
PIPE	THRD	A	D	E	F	Tx	PSIG	SME
		INCH						
1/4	1/4	1.15	0.28	0.19	9/16	0.48	8000	
3/8	1/4	1.25	0.31	0.28	5/8	0.60	8000	
3/8	3/8	1.25	0.31	0.28	11/16	0.60	7800	
3/8	1/2	1.47	0.31	0.28	7/8	0.60	7700	
1/2	1/4	1.31	0.38	0.28	3/4	0.73	6600	
1/2	3/8	1.31	0.38	0.38	3/4	0.73	6600	
1/2	1/2	1.53	0.38	0.41	7/8	0.73	6600	

Pipe SW by female thread



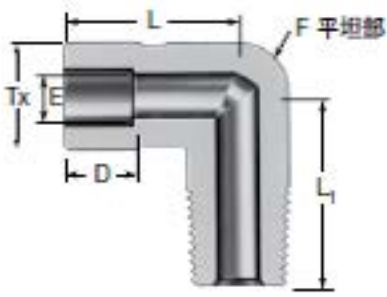
PIPE	THRD	A	D	E	F	Tx	PSIG	SME
		INCH						
1/8	1/8	0.83	0.10	0.09	9/16	0.29	6500	
1/4	1/8	1.05	0.28	0.19	9/16	0.48	6500	
1/4	1/4	1.18	0.28	0.19	3/4	0.48	6500	
3/8	1/4	1.24	0.31	0.28	3/4	0.60	6600	
1/2	3/8	1.36	0.38	0.41	7/8	0.73	5300	
1/2	1/2	1.59	0.38	0.41	1 1/16	0.73	4900	
3/4	3/4	1.73	0.44	0.63	1 5/16	1.04	4600	

Pipe SW, dual 90°



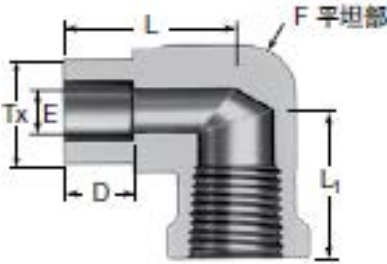
PIPE	D	E	F	L	Tx	PSIG	SME
	INCH						
1/4	0.28	0.19	7/16	0.86	0.53	10700	
3/8	0.31	0.28	1/2	1.04	0.64	8100	
1/2	0.38	0.41	11/16	1.17	0.81	6600	
3/4	0.44	0.63	1	1.56	1.12	5900	
1/2	3/8	1.36	0.38	0.41	7/8	0.73	
1/2	1/2	1.59	0.38	0.41	1 1/16	0.73	
3/4	3/4	1.73	0.44	0.63	1 5/16	1.04	

Pipe SW by male, 90°



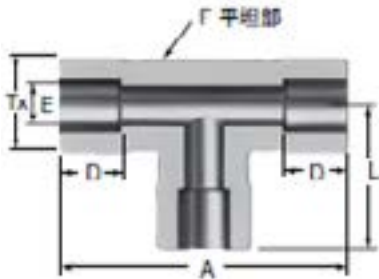
PIPE	TRHD	D	E	F	L	L1	Tx	PSIG	SME
		INCH							
1/4	1/4	0.28	0.19	1/2	0.90	1.17	0.48	7400	
3/8	1/4	0.31	0.28	1/2	1.04	1.05	0.64	8000	
3/8	3/8	0.31	0.28	11/16	0.97	1.17	0.60	7800	
3/8	1/2	0.31	0.28	13/16	1.02	1.45	0.60	7700	
1/2	1/2	0.38	0.41	13/16	1.08	1.45	0.73	6600	

Pipe SW by female, 90°



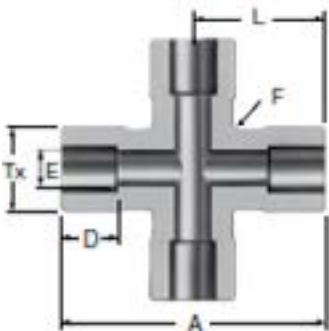
PIPE	TRHD	D	E	F	L	L1	Tx	PSIG	SME
		INCH							
1/4	1/4	0.28	0.19	11/16	0.90	1.17	0.48	7400	
3/8	1/4	0.31	0.28	11/16	0.99	1.17	0.60	7400	
3/8	1/2	0.31	0.28	1	1.13	1.56	0.60	5700	
1/2	1/2	0.38	0.41	1	1.19	1.56	0.73	5700	

Pipe SW, three-way



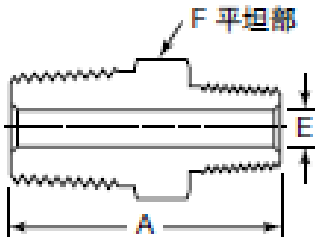
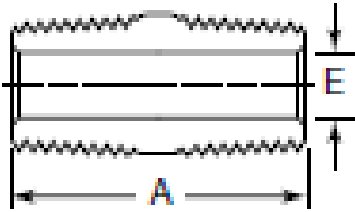
PIPE	A	D	E	F	L	Tx	PSIG	SME	
		INCH							
1/8	1.18	0.10	0.09	7/16	0.59	0.29	12600		
1/4	1.72	0.28	0.19	7/16	0.86	0.53	10700		
3/8	2.08	0.31	0.28	1/2	1.04	0.64	8100		
1/2	2.34	0.38	0.41	11/16	1.17	0.81	6600		
3/4	3.12	0.44	0.63	1	1.56	1.04	5900		

Pipe SW, cross



PIPE	A	D	E	F	L	Tx	PSIG	SME	
		INCH							
1/4	1.72	0.28	0.19	7/16	0.86	0.53	10700		
3/8	2.08	0.31	0.28	1/2	1.04	0.64	8100		
1/2	2.34	0.38	0.41	11/16	1.17	0.81	6600		
3/4	3.12	0.44	0.63	1	1.56	1.04	5900		
3/4	3.12	0.44	0.63	1	1.56	1.04	5900		

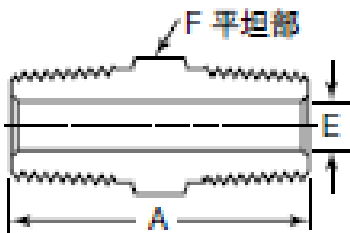
Male NPT



THRD	A INCH	E	PSIG	SME
1/8	0.75	0.19	10000	
1/4	1.12	0.28	8000	
3/8	1.12	0.38	7800	
1/2	1.50	0.47	7700	
3/4	1.50	0.62	7300	
1	1.88	0.88	5300	

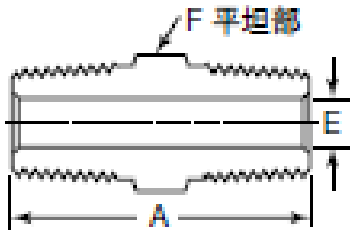
THRD		A INCH	E	F	PSIG	SME
1/8	1/16	1.01	0.12	7/16	11000	
1/4	1/8	1.22	0.19	9/16	10000	
3/8	1/8	1.25	0.19	11/16	1000	
3/8	1/4	1.43	0.28	11/16	8000	
1/2	1/8	1.47	0.19	7/8	7700	
1/2	1/4	1.65	0.28	7/8	8000	
1/2	3/8	1.65	0.38	7/8	7800	
3/4	1/4	1.65	0.28	1 1/16	8000	
3/4	1/2	1.84	0.47	1 1/16	7700	
1	1/4	1.94	0.28	1 3/8	5300	
1	1/2	2.13	0.47	1 3/8	7700	
1	3/4	2.13	0.62	1 3/8	7300	

Male NPT, hexagon



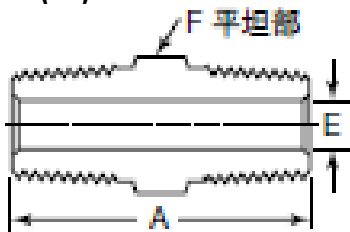
THRD	A INCH	E	F	PSIG	SME
1/16	1.01	0.12	5/16	11000	
1/8	1.01	0.19	7/16	10000	
1/4	1.40	0.28	9/16	8000	
3/8	1.43	0.38	11/16	7800	
1/2	1.84	0.47	7/8	7700	
3/4	1.84	0.62	1 1/16	7300	
1	2.32	0.88	1 3/8	5300	

Male ISO (RT)



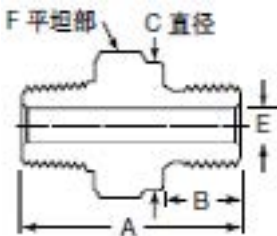
THRD	A INCH	E	F	PSIG	SME
1/8	1.01	0.19	7/16	10000	
1/4	1.40	0.28	9/16	8000	
3/8	1.43	0.38	11/16	7800	
1/2	1.84	0.47	7/8	7700	

Male NPT × Male tapered ISO (RT)



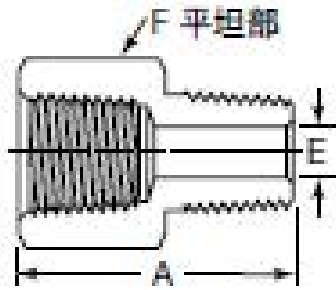
NPT	ISO	A INCH	E	F	PSIG	SME
1/8	1/8	1.01	0.19	7/16	10000	
1/4	1/4	1.40	0.28	9/16	8000	
3/8	3/8	1.43	0.38	11/16	7800	
1/2	1/2	1.84	0.47	7/8	7700	
3/4	3/4	1.84	0.62	1 1/16	7300	
1	1	2.32	0.88	1 3/8	5300	

Male NPT × Male parallel ISO (RS)



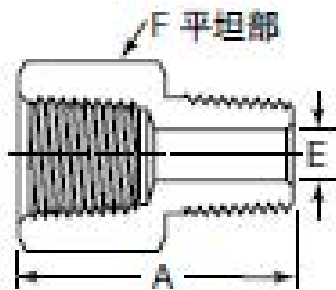
NPT	ISO	A INCH	B	C	E	F	PSIG	SME
1/8	1/8	1.09	0.32	0.54	0.16	9/16	11400	
1/4	1/4	1.45	0.47	0.70	0.23	3/4	10300	
3/8	3/8	1.48	0.47	0.86	0.31	7/8	10300	
1/2	1/2	1.75	0.55	1.02	0.47	1 1/16	7600	
3/4	3/4	1.93	0.63	1.25	0.62	1 5/16	7300	
1	1	2.23	0.71	1.53	0.78	1 5/8	7400	

Female NPT × Male NPT



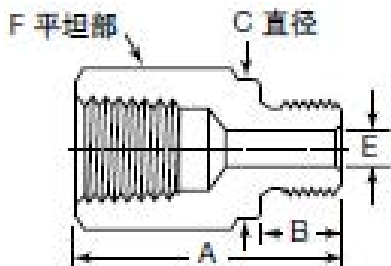
THRD	A INCH	E	F	PSIG	SME
1/8	1.10	0.19	9/16	6500	
1/4	1.40	0.28	3/4	6600	
3/8	1.51	0.38	7/8	5300	
1/2	1.94	0.47	1 1/16	4900	
3/4	2.02	0.62	1 5/16	4600	
1	2.28	0.88	1 5/8	4400	

Female tapered ISO × Male tapered RT



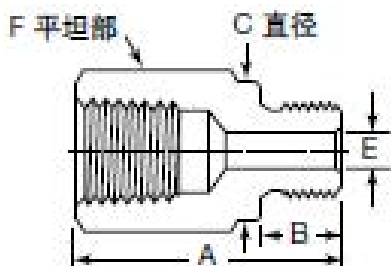
THRD	A INCH	E	F	PSIG	SME
1/8	1.09	0.19	9/16	6500	
1/4	1.42	0.28	3/4	6600	
3/8	1.50	0.38	7/8	5300	
1/2	1.95	0.47	1 1/16	4900	

Female NPT × Male parallel ISO (RS)



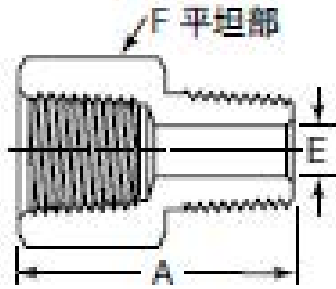
THRD	ISO	A INCH	B	C	E	F	PSIG	SME
1/8	1/8	0.99	0.32	0.54	0.16	9/16	6500	
1/4	1/4	1.32	0.47	0.70	0.23	3/4	6600	
3/8	3/8	1.41	0.47	0.86	0.31	7/8	5300	
1/2	1/2	1.74	0.55	1.02	0.47	1 1/16	4900	
3/4	3/4	1.89	0.63	1.25	0.62	1 5/16	4600	
1	1	2.10	0.71	1.53	0.78	1 5/8	4400	

Female NPT × Male tapered ISO (RT)



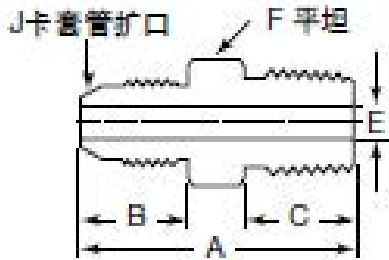
THRD	ISO	A INCH	B	E	F	PSIG	SME
1/8	1/8	1.09	0.38	0.19	9/16	6500	
1/4	1/4	1.42	0.56	0.28	3/4	6600	
3/8	3/8	1.50	0.56	0.38	7/8	5300	
1/2	1/2	1.94	0.75	0.47	1 1/16	4900	
3/4	3/4	2.02	0.75	0.62	1 5/16	4600	
1	1	2.30	0.94	0.88	1 5/8	4400	

Female tapered ISO × Male NPT



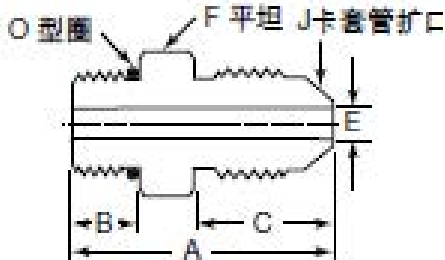
ISO	NPT	A	D	E	F	PSIG	SME
		INCH					
1/4	1/4	1.43	0.56	0.28	3/4	6600	
3/8	3/8	1.51	0.56	0.38	7/8	5300	
1/2	1/2	1.96	0.75	0.47	1 1/16	4900	

Male JIC (AN) × Male NPT



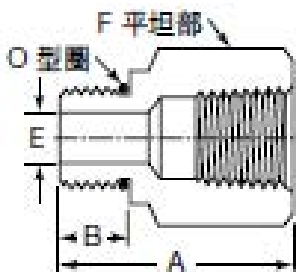
ISO	NPT	A	B	C	E	F	J	PSIG	SME
		INCH							
1/4	7/16-20	1.40	0.55	0.56	0.17	9/16	1/4	8000	
1/4	9/16-18	1.43	0.56	0.56	0.28	5/8	3/8	8000	
3/8	9/16-18	1.43	0.56	0.56	0.30	11/16	3/8	7800	
1/2	3/4-16	1.75	0.66	0.75	0.39	7/8	1/2	4500	
3/4	1 1/16-12	1.99	0.86	0.75	0.61	1 1/8	3/4	7000	
1	1 5/16-12	2.30	0.91	0.94	0.84	1 3/8	1	5000	

Male JIC (AN) × Male SAE/MS



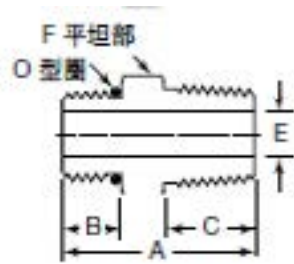
SAE/MS	NPT	A	B	C	E	F	J	PSIG	SME
		INCH							
7/16-20	7/16-20	1.19	0.36	0.55	0.17	9/16	1/4	4568	
9/16-18	9/16-18	1.26	0.39	0.56	0.29	11/16	3/8	4568	
3/4-16	3/4-16	1.44	0.44	0.66	0.39	7/8	1/2	4568	
1 1/16-12	1 1/16-12	1.87	0.59	0.86	0.61	1 1/8	3/4	3626	
1 5/16-12	1 5/16-12	1.98	0.59	0.91	0.84	1 1/2	1	2900	

Male SAE/MS × Female NPT



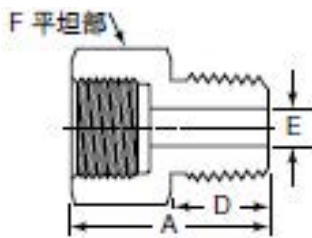
SAE/MS	NPT	A	B	E	F	PSIG	SME
		INCH					
7/16-20	1/4	1.32	0.36	0.20	3/4	4568	
9/16-18	3/8	1.36	0.39	0.28	15/16	4568	
3/4-16	1/2	1.62	0.44	0.42	1 1/16	4568	
1 1/16-12	3/4	1.82	0.59	0.66	1 3/8	3626	
1 5/16-12	1	2.12	0.59	0.88	1 5/8	2900	

Male SAE/MS × Male NPT



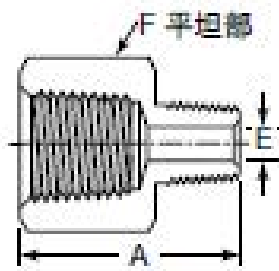
SAE/MS	NPT	A	B	C	E	F	PSIG	SME	
		INCH							
7/16-20	1/4	1.20	0.36	0.56	0.20	9/16	4568		
9/16-18	3/8	1.26	0.36	0.56	0.28	11/16	4568		
3/4-16	1/2	1.53	0.44	0.75	0.42	7/8	4568		
1 1/16-12	3/4	1.75	0.59	0.75	0.62	1 1/4	3626		
1 5/16-12	1	2.00	0.59	0.94	0.88	1 1/2	2900		

Female parallel ISO × Male NPT



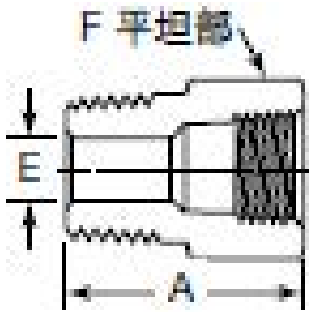
ISO	NPT	A	D	E	F	PSIG	SME	
		INCH						
1/4	1/4	1.19	0.56	0.22	3/4	5700		
3/8	3/8	1.27	0.56	0.26	15/16	5700		
1/2	1/2	1.68	0.85	0.28	1 1/16	3900		

Female tapered ISO × Male NPT



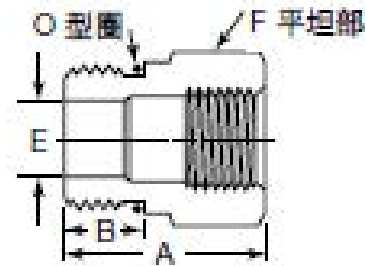
ISO	NPT	A	D	E	PSIG	SME	
		INCH					
1/8	1/16	1.09	0.12	9/16	6500		
1/4	1/8	1.26	0.19	3/4	6600		
3/8	1/8	1.33	0.19	7/8	5300		
3/8	1/4	1.50	0.28	7/8	5300		
1/2	1/8	1.58	0.19	1 1/16	4900		
1/2	1/4	1.76	0.28	1 1/16	4900		
1/2	3/8	1.75	0.38	1 1/16	4900		
3/4	1/4	1.85	0.28	1 5/16	4600		
3/4	3/8	1.85	0.38	1 5/16	4600		
3/4	1/2	2.02	0.47	1 5/16	4600		
1	1/4	1.96	0.28	1 5/8	4400		
1	1/2	2.16	0.47	1 5/8	4400		
1	3/4	2.17	0.62	1 5/8	4400		

Female NPT × Male NPT



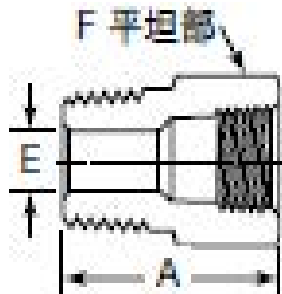
FEMALE	MALE	A INCH	D	E	PSIG	SME
1/8	1/16	1.03	0.19	7/16	6700	
1/4	1/8	1.06	0.28	9/16	6500	
3/8	1/8	0.86	0.34	11/16	9200	
3/8	1/4	1.19	0.38	3/4	6600	
1/2	1/8	1.08	0.34	7/8	12200	
1/2	1/4	1.08	0.45	7/8	8300	
1/2	3/8	1.41	0.47	7/8	5300	
3/4	1/4	1.08	0.45	1 1/16	12000	
3/4	3/8	1.08	0.59	1 1/16	8200	
3/4	1/2	1.63	0.62	1 1/16	4900	
1	1/4	1.37	0.45	1 3/8	14500	
1	3/8	1.37	0.59	1 3/8	11600	
1	1/2	1.37	0.73	1 3/8	8600	
1	3/4	1.85	0.88	1 3/8	5300	

Male parallel SAE/MS × Female ST



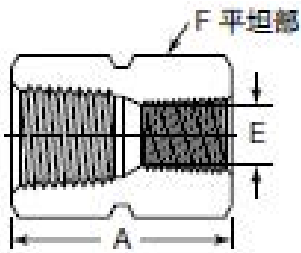
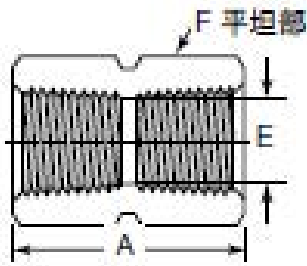
FEMALE	MALE	A INCH	B	E	F	PSIG	SME
7/16-20	9/16-18	1.12	0.39	0.28	13/16	4568	
7/16-20	3/4-16	0.98	0.44	0.39	7/8	4568	
9/16-18	3/4-16	1.19	0.44	0.42	1	4568	
9/16-18	7/8-14	1.10	0.50	0.50	1	3626	
3/4-16	7/8-14	1.42	0.50	0.50	1 3/16	3626	
3/4-16	1 1/16-12	1.27	0.59	0.65	1 1/4	3626	
1 1/16-12	1 5/16-12	1.61	0.59	0.87	1 5/8	2900	
1 5/16-12	1 5/8-12	1.98	0.59	1.09	2 1/8	2320	
1 5/16-12	1 7/8-12	1.27	0.59	1.23	2 1/8	2320	

Male tapered ISO × Female RT



FEMALE	MALE	A INCH	D	E	PSIG	SME
1/4	1/8	1.06	0.28	9/16	6500	
3/8	1/4	1.19	0.38	3/4	6600	
1/2	1/4	1.08	0.44	7/8	8300	
1/2	3/8	1.41	0.47	7/8	5300	

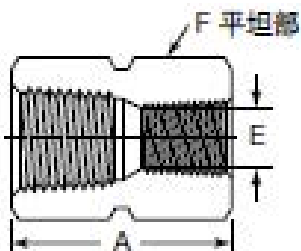
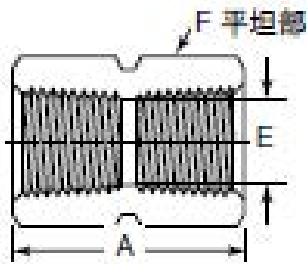
Female NPT, hexagon



THRD	A INCH	D	E	PSIG	SME
1/8	0.81	0.34	9/16	6500	
1/4	1.19	0.45	3/4	6600	
3/8	1.31	0.59	7/8	5300	
1/2	1.56	0.73	1 1/16	4900	
3/4	1.62	0.94	1 5/16	4600	
1	2.00	1.17	1 5/8	4400	

THRD	THRD	A INCH	D	E	PSIG	SME
1/4	1/2	1.22	0.34	3/4	6600	
3/8	1/4	1.38	0.45	7/8	5300	
1/2	1/8	1.56	0.34	1 1/16	4900	
1/2	1/4	1.75	0.45	1 1/16	4900	
1/2	3/8	1.78	0.59	1 1/16	4900	
3/4	1/4	1.81	0.45	1 5/16	4600	
3/4	1/2	2.06	0.73	1 5/16	4600	
1	1/2	2.19	0.73	1 5/8	4400	
1	3/4	2.25	0.94	1 5/8	4400	

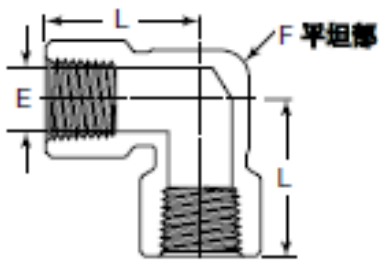
Female tapered ISO (RT), hexagon



THRD	A INCH	D	E	PSIG	SME
1/8	0.81	0.34	9/16	6500	
1/4	1.19	0.44	3/4	6600	
3/8	1.31	0.58	7/8	5300	
1/2	1.56	0.73	1 1/16	4900	

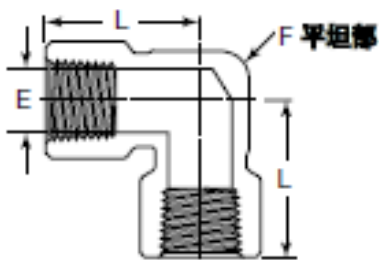
THRD	THRD	A INCH	D	E	PSIG	SME
3/8	1/4	1.38	0.44	7/8	5300	
1/2	1/4	1.75	0.44	1 1/16	4900	
1/2	3/8	1.78	0.58	1 1/16	4900	

Female NPT, 90°



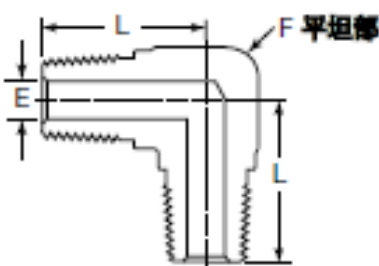
THRD	E INCH	L	F	PSIG	SME
1/8	0.34	1.04	1/2	6200	
1/4	0.45	1.17	11/16	7200	
3/8	0.59	1.42	13/16	5600	
1/2	0.73	1.56	1	5600	
3/4	0.94	1.92	1 1/4	5100	

Female tapered ISO (RT), 90°



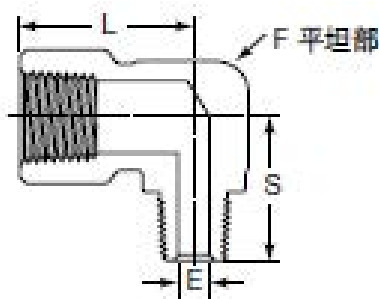
THRD	E INCH	L	F	PSIG	SME
1/4	0.44	1.17	11/16	7200	
3/8	0.58	1.42	13/16	5600	
1/2	0.72	1.56	1	5600	

Male NPT, 90°



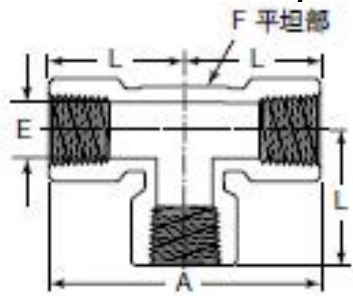
THRD	E INCH	L	F	PSIG	SME
1/8	0.19	0.88	7/16	1000	
1/4	0.28	1.05	1/2	8000	
3/8	0.38	1.17	11/16	7800	
1/2	0.47	1.45	13/16	7700	

Female × Male NPT, 90°



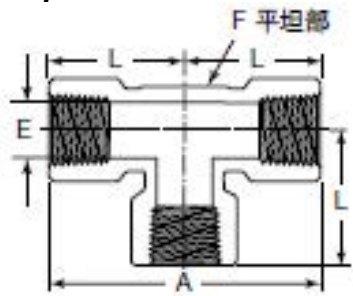
FEMALE	MALE	E INCH	L	S	F	PSIG	SME
1/8	1/16	0.12	1.04	0.87	1/2	6200	
1/4	1/8	0.19	1.17	1.00	11/16	7200	
3/8	1/4	0.28	1.40	1.26	13/16	5600	
1/2	1/4	0.28	1.56	1.38	1	5600	
1/2	3/8	0.38	1.56	1.38	1	5600	

Female NPT, three-way



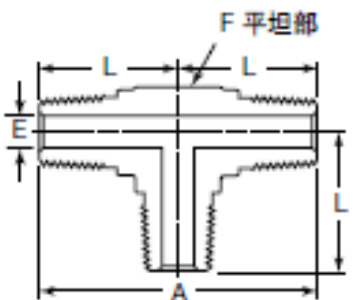
THRD	A INCH	E	L	F	PSIG	SME
1/8	2.08	0.34	1.04	1/2	6200	
1/4	2.34	0.45	1.17	11/16	7200	
3/8	2.84	0.59	1.42	13/16	5600	
1/2	3.12	0.73	1.56	1	5600	
3/4	3.84	0.94	1.92	1 1/4	5100	

Female tapered ISO, three-way



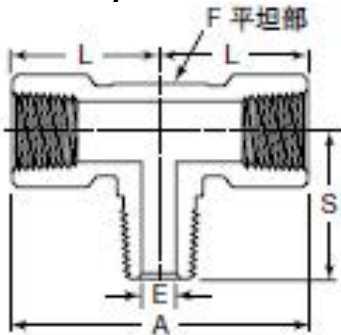
THRD	A INCH	E	L	F	PSIG	SME
1/4	2.34	0.44	1.17	11/16	7200	
3/8	2.84	0.58	1.42	13/16	5600	
1/2	3.12	0.72	1.56	1	5600	

Male NPT, three-way



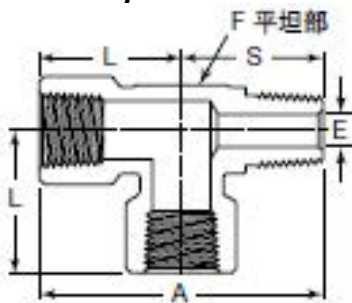
THRD	A INCH	E	L	F	PSIG	SME
1/8	1.76	0.19	0.88	7/16	10000	
1/4	2.10	0.28	1.05	1/2	8000	
3/8	2.34	0.38	1.17	11/16	7800	
1/2	2.09	0.47	1.45	13/16	7700	

Female, Female × Male NPT, three-way



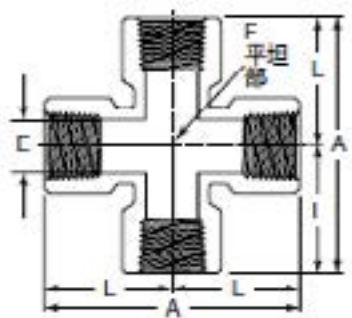
THRD	A INCH	E	L	S	F	PSIG	SME
1/8	2.08	0.19	1.04	0.87	1/2	6200	
1/4	2.34	0.28	1.17	1.17	11/16	7200	
3/8	2.84	0.38	1.42	1.26	13/16	5600	
1/2	3.12	0.47	1.56	1.56	1	5600	

Female, Male × Female NPT, three-way



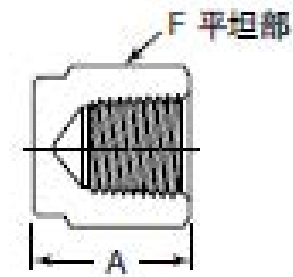
THRD	A INCH	E	L	S	F	PSIG	SME
1/8	1.91	0.19	1.04	0.87	1/2	6200	
1/4	2.34	0.28	1.17	1.17	11/16	7200	
3/8	2.68	0.38	1.42	1.26	13/16	5600	
1/2	3.12	0.47	1.56	1.56	1	5600	
3/4	3.59	0.62	1.92	1.67	1 1/4	5100	

Female NPT, cross



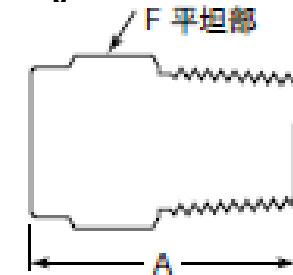
THRD	A INCH	E	L	F	PSIG	SME
1/8	2.08	0.34	1.04	1/2	6200	
1/4	2.34	0.45	1.17	11/16	7200	
3/8	2.84	0.59	1.42	13/16	5600	
1/2	3.12	0.73	1.56	1	5600	
3/4	3.84	0.94	1.92	1 1/4	5100	

Cap, female NPT



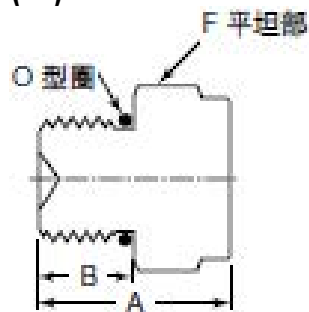
THRD	A INCH	F	SME
1/8	0.75	9/16	
1/4	0.91	3/4	
3/8	1.03	7/8	
1/2	1.34	1 1/16	
3/4	1.44	1 5/16	
1	1.62	1 5/8	

Plug, male NPT



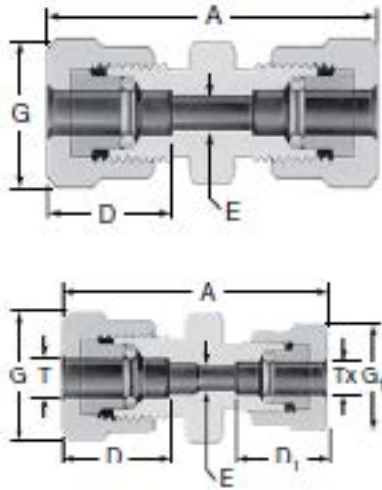
THRD	A INCH	F	SME
1/16	0.75	5/16	
1/8	0.75	7/16	
1/4	0.96	9/16	
3/8	0.99	11/16	
1/2	1.21	7/8	
3/4	1.21	1 1/16	
1	1.50	1 3/8	

Plug, male parallel SAE/MS (ST)



THRD	A INCH	B	C	F	SME
7/16-20	0.45	0.36	0.56	3/16	
9/16-18	0.48	0.39	0.69	1/4	
3/4-16	0.56	0.44	0.88	5/16	
1 1/16-12	0.75	0.59	1.25	9/16	
1 5/16-12	0.75	0.59	1.50	5/8	
3/4			1.21	1 1/16	
1			1.50	1 3/8	

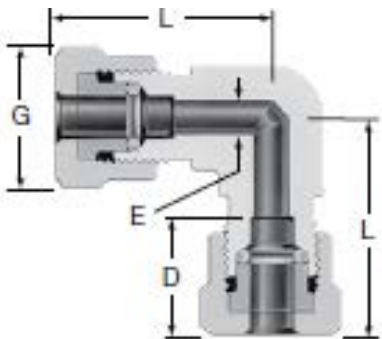
Vacuum fitting, straight



PIPE	A INCH	D	E	G	SME
1/16	1.23	0.45	0.05	3/8	
1/8	1.48	0.47	0.09	9/16	
1/4	1.48	0.47	0.19	11/16	
3/8	1.83	0.66	0.28	13/16	
1/2	1.85	0.81	0.41	15/16	
5/8	1.94	0.89	0.50	1 1/8	
3/4	2.17	0.99	0.63	1 1/4	
1	2.27	0.99	0.88	1 9/16	

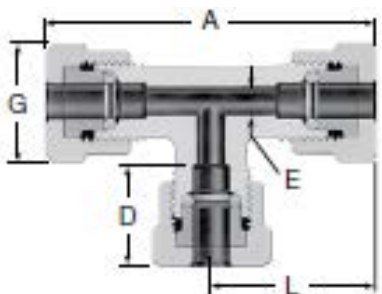
T	Tx	A INCH	D	D1	E	G	G1	SME
3/8	1/4	1.74	0.66	0.62	0.19	13/16	11/16	
1/2	1/4	1.77	0.81	0.62	0.19	15/16	11/16	

Vacuum fitting, 90°



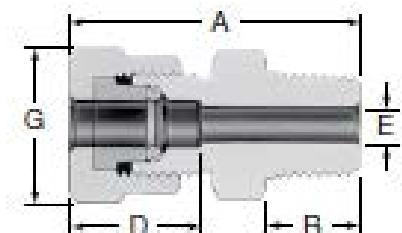
PIPE	A INCH	D	E	G	SME
PIPE	D	E	G	L	
1/4	0.62	0.19	11/16	1.15	
3/8	0.66	0.28	13/16	1.37	
1/2	0.81	0.41	15/16	1.37	

Vacuum fitting, three-way



PIPE	A INCH	D	E	G	L	SME
1/8	2.20	0.47	0.09	9/16	1.10	
1/4	2.32	0.62	0.19	11/16	1.16	
3/8	2.74	0.66	0.28	13/16	1.37	
1/2	2.74	0.81	0.41	15/16	1.37	

Vacuum ferrule by male, NPT



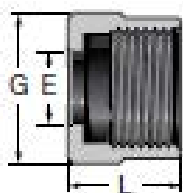
PIPE	THRD	A	B	D	E	G	SME
		INCH					
1/16	1/8	1.14	0.38	0.45	0.05	3/8	
1/8	1/8	1.26	0.38	0.47	0.09	9/16	
1/4	1/8	1.36	0.38	0.62	0.19	11/16	
1/4	1/4	1.54	0.56	0.62	0.19	11/16	
3/8	1/8	1.45	0.38	0.66	0.19	13/16	
3/8	1/4	1.63	0.56	0.66	0.28	13/16	
1/2	3/8	1.66	0.56	0.81	0.41	15/16	
1/2	1/2	1.85	0.75	0.81	0.41	15/16	
3/4	3/4	2.02	0.75	0.99	0.63	1 1/4	
1	1	2.31	0.94	0.99	0.88	1 9/16	

Vacuum ferrule by piping



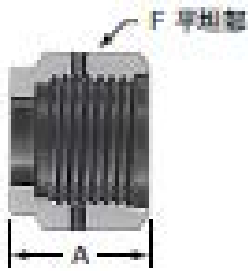
T	Tx	A	D	E	G	SME
		INCH				
1/16	1/4	1.14	0.45	0.05	3/8	
1/8	1/4	1.24	0.47	0.09	9/16	
1/8	3/8	1.25	0.47	0.09	9/16	
1/4	1/4	1.35	0.62	0.19	11/16	
1/4	3/8	1.34	0.62	0.19	11/16	
1/4	1/2	1.48	0.62	0.19	11/16	
3/8	3/8	1.48	0.66	0.28	13/16	
3/8	1/2	1.59	0.66	0.28	13/16	
1/2	5/8	1.65	0.81	0.41	15/16	
1/2	3/4	1.70	0.81	0.41	15/16	
3/4	1	1.84	0.99	0.63	1 1/4	
1	1 1/4	1.86	0.99	0.88	1 9/16	

Vacuum thread nut



PIPE	THRD	E	L	G	SME
		INCH			
1/16	1/4-20 UNC	0.07	0.38	3/8	
1/8	3/8-20 UN	0.13	0.41	9/16	
1/4	1/2-20 UNF	0.26	0.53	11/16	
3/8	5/8-20 UN	0.38	0.62	13/16	
1/2	3/4-20 UNEF	0.51	0.62	15/16	
5/8	15/16-20 UNEF	0.63	0.62	1 1/8	
3/4	1 1/16-20 UN	0.76	0.72	1 1/4	
1	1 3/8-20 UN	1.01	0.72	1 9/16	

O-ring face seal, thread nut



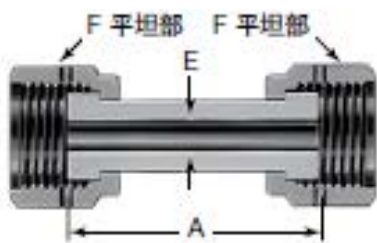
VCO	A INCH	F	SME
1/4	0.66	11/16	
1/2	0.69	1	
3/4	0.81	1 1/2	
1	0.81	1 3/4	

O-ring face seal, blind cap

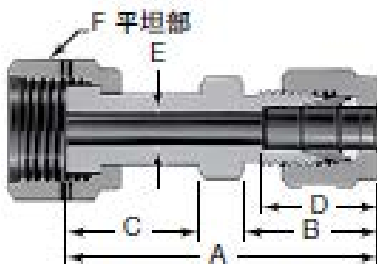


VCO	A INCH	F	SME
1/4	0.44	11/16	
1/2	0.56	1	
3/4	0.75	1 1/2	
1	0.81	1 3/4	

O-ring face seal, dual straight

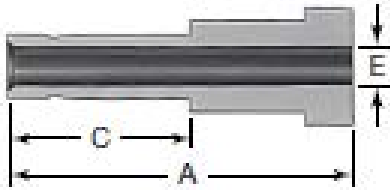


VCO	A INCH	E	F	PSIG	SME
1/4	1.42	0.18	11/16	10200	
1/2	1.61	0.40	1	5800	



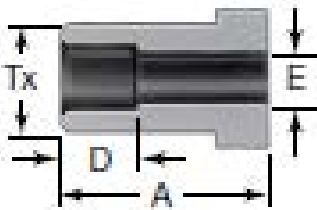
VCO	PIPE	A INCH	B	C	D	E	F	PSIG	SME
1/4	1/4	1.74	0.70	0.77	0.60	0.18	11/16	10200	
1/2	3/8	1.87	0.87	0.81	0.66	0.28	1	5800	
1/2	1/2	2.01	0.87	0.81	0.90	0.40	1	5800	
3/4	3/4	2.14	0.84	0.94	0.96	0.62	1 1/2	4000	
1	1	2.45	1.04	0.98	1.23	0.87	1 3/4	3000	

Ferrule fitting, pipe adapter

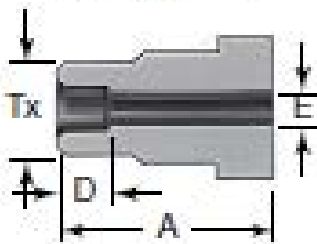


VCO	PIPE	A	C	E	PSIG	SME
		INCH				
1/4	1/4	1.31	0.64	0.18	10200	
1/2	3/8	1.38	0.70	0.27	7500	
1/2	1/2	1.62	0.96	0.37	6700	
3/4	3/4	1.80	1.02	0.58	5800	
1	1	2.05	1.30	0.80	4700	

Ferrule fitting, SW

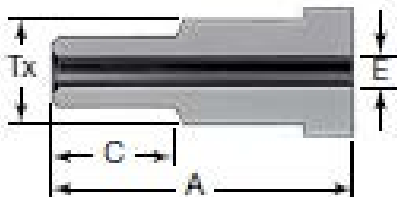


VCO	PIPE	A	D	E	Tx	PSIG	SME
		INCH					
1/8	1/8	0.77	0.10	0.09	0.38	15400	
1/4	1/4	0.77	0.28	0.18	0.38	6800	
3/8	3/8	0.81	0.10	0.28	0.60	8100	
1/2	1/2	0.81	0.38	0.40	0.60	3000	
3/4	3/4	0.94	0.44	0.62	0.92	3700	
1	1	0.98	0.62	0.87	1.19	3000	



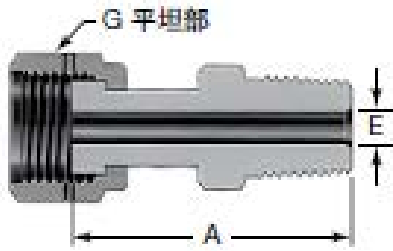
VCO	PIPE	A	D	E	Tx	PSIG	SME
		INCH					
1/4	1/8	0.77	0.10	0.09	0.29	12600	
1/2	1/4	0.71	0.28	0.18	0.48	10700	

Ferrule fitting, BW



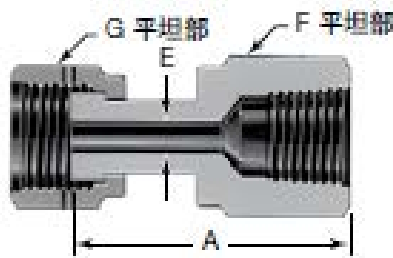
VCO	PIPE	A	C	E	Tx	PSIG	SME
		INCH					
1/4	1/8	0.77	0.28	0.06	0.38	11200	
1/4	1/4	1.12	0.41	0.12	0.38	11200	
1/2	1/4	0.91	0.41	0.12	0.60	11200	
1/2	3/8	0.84	0.41	0.23	0.60	8200	
1/2	1/2	1.06	0.50	0.33	0.60	7500	

O-ring face seal, male NPT



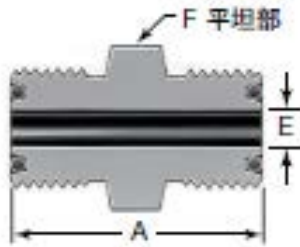
VCO	THRD	A	E	G	PSIG	SME
		INCH				
1/4	1/4	1.59	0.18	11/16	9800	
1/2	3/8	1.67	0.40	1	5600	
1/2	1/2	1.87	0.40	1	5600	
3/4	3/4	2.03	0.62	1 1/2	3900	
1	1	2.36	0.87	1 3/4	2900	

O-ring face seal, female NPT



VCO	THRD	A	C	E	Tx	PSIG	SME
		INCH					
1/4	1/4	1.57	0.18	3/4	11/16	6600	
1/2	3/8	1.73	0.40	7/8	1	5300	
1/2	1/2	1.96	0.40	1 1/16	1	4900	
3/4	3/4	2.12	0.62	1 5/16	1 1/2	4000	
1	1	2.29	0.87	1 5/8	1 3/4	3000	

O-ring face seal, male parallel SAE/MS

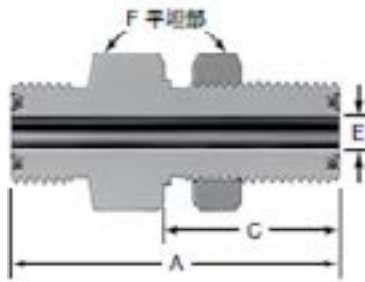


VCO	THRD	A	E	G	PSIG	SME
		INCH				
1/4	7/16-20	1.54	0.18	11/16	4500	
1/2	9/16-18	1.64	0.40	1	4500	
1/2	3/4-16	1.71	0.40	1	4500	
3/4	1 1/16-12	2.07	0.62	1 1/2	3600	
1	1 5/16-12	2.17	0.87	1 3/4	2900	

O-ring face seal, male

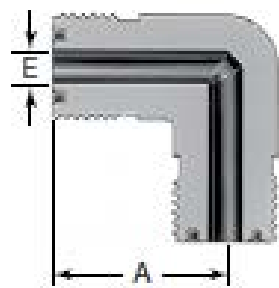
VCO	PIPE	A	E	F	PSIG	SME
		INCH				
1/4	1/4	1.25	0.18	5/8	14300	
1/2	1/4	1.43	0.18	15/16	11100	
1/2	1/2	1.50	0.40	15/16	11100	

O-ring face seal, bulkhead



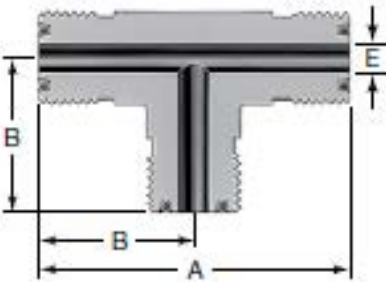
VCO	A INCH	C	E	F	HEAD	THICK	PSIG	SME
1/4	1.88	1.06	0.18	3/4	37/64	0.36	14300	
1/2	2.09	1.19	0.40	1 1/16	57/64	0.40	11100	

O-ring face seal, 90°



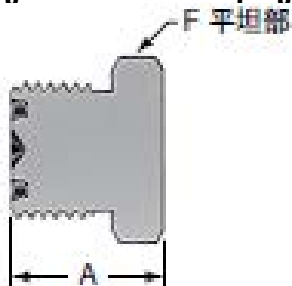
VCO	A INCH	E	PSIG	SME
1/4	0.96	0.18	14300	
1/2	1.26	0.40	11100	
3/4	1.48	0.62	10900	
1	1.56	0.87	8800	

O-ring face seal, three-way



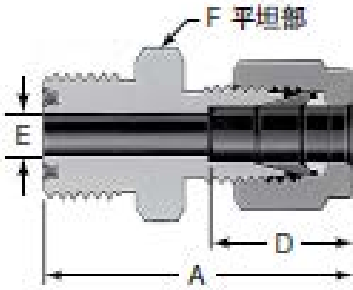
VCO	A INCH	B	E	PSIG	SME
1/4	1.92	0.96	0.18	14300	
1/2	2.52	1.26	0.40	11100	
3/4	2.96	1.48	0.62	10900	

O-ring face seal, blind plug



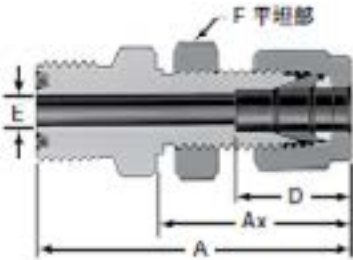
VCO	A INCH	F	SME
1/4	0.77	5/8	
1/2	0.89	15/16	
3/4	0.99	1 5/16	
1	1.02	1 5/8	

O-ring face seal, male



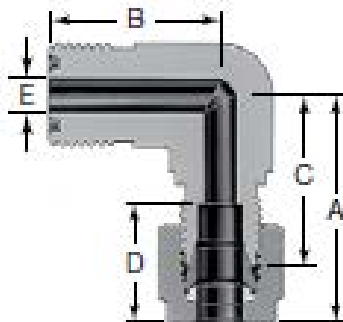
VCO	PIPE	A	D	E	F	PSIG	SME
INCH							
1/4	1/8	1.38	0.51	0.09	5/8	10900	
1/4	1/4	1.47	0.60	0.18	5/8	10200	
1/2	3/8	1.65	0.66	0.28	15/16	7500	
1/2	1/2	1.78	0.90	0.40	15/16	6700	
3/4	3/4	1.86	0.96	0.62	1 5/16	5800	
1	1	2.06	1.23	0.87	1 5/8	4700	

O-ring face seal, male bulk-head



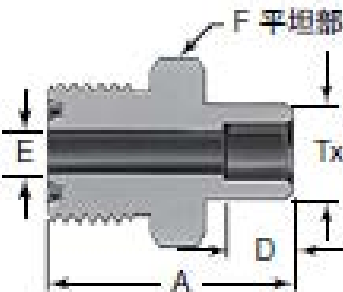
VCO	PIPE	A	AX	D	E	F	HEAD THICK	PSIG	SME
INCH									
1/4	1/4	2.10	1.32	0.60	0.18	5/8	29/64	0.40	10200
1/2	3/8	2.34	1.45	0.66	0.28	15/16	37/64	0.44	7500
1/2	1/2	2.34	1.45	0.66	0.28	15/16	49/64	0.50	6700
3/4	3/4	2.86	1.87	0.96	0.62	1 5/16	1 1/64	0.66	5800
1	1	3.29	2.26	1.23	0.87	1 5/8	1 21/64	0.75	4700

O-ring face seal, 90°



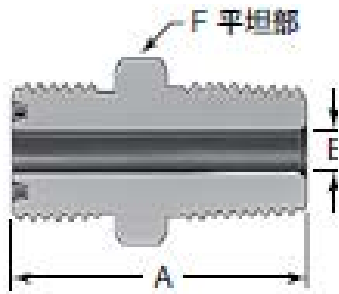
VCO	PIPE	A	B	C	D	E	PSIG	SME
INCH								
1/4	1/4	1.19	0.96	0.90	0.60	0.18	10200	
1/2	3/8	1.39	1.26	1.10	0.66	0.28	7500	
1/2	1/2	1.50	1.26	1.10	0.90	0.40	6700	
3/4	3/4	1.80	1.48	1.40	0.96	0.62	5800	
1	1	2.04	1.56	1.56	1.23	0.87	4700	

O-ring face seal, SW



VCO	PIPE	A	D	E	F	Tx	PSIG	SME
INCH								
1/8	1/8	0.88	0.10	0.09	5/8	0.29	12600	
1/4	1/4	1.09	0.28	0.18	5/8	0.38	6800	
3/8	3/8	1.28	0.31	0.28	15/16	0.60	8100	
1/2	1/2	1.34	0.38	0.40	15/16	0.60	3000	
3/4	3/4	1.50	0.44	0.62	1 5/16	0.60	3700	
1	1	1.72	0.62	0.87	1 5/8	1.19	3000	

O-ring face seal, male NPT



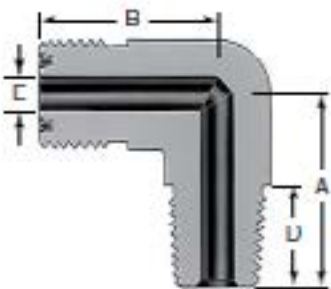
VCO	THRD	A	E	F	PSIG	SME
		INCH				
1/4	1/8	1.16	0.18	5/8	10000	
1/4	1/4	1.34	0.18	5/8	13400	
1/2	3/8	1.46	0.38	15/16	7800	
1/2	1/2	1.65	0.40	15/16	10000	
3/4	3/4	1.75	0.62	1 5/16	7300	
1	1	1.97	0.87	1 5/8	5300	

O-ring face seal, female NPT



VCO	THRD	A	E	F	PSIG	SME
		INCH				
1/4	1/8	1.25	0.18	5/8	8400	
1/4	1/4	1.39	0.18	3/4	6600	
1/2	3/8	1.57	0.40	15/16	6600	
1/2	1/2	1.77	0.40	1 1/16	4900	
3/4	3/4	1.93	0.62	1 5/16	4600	
1	1	2.02	0.87	1 5/8	4400	

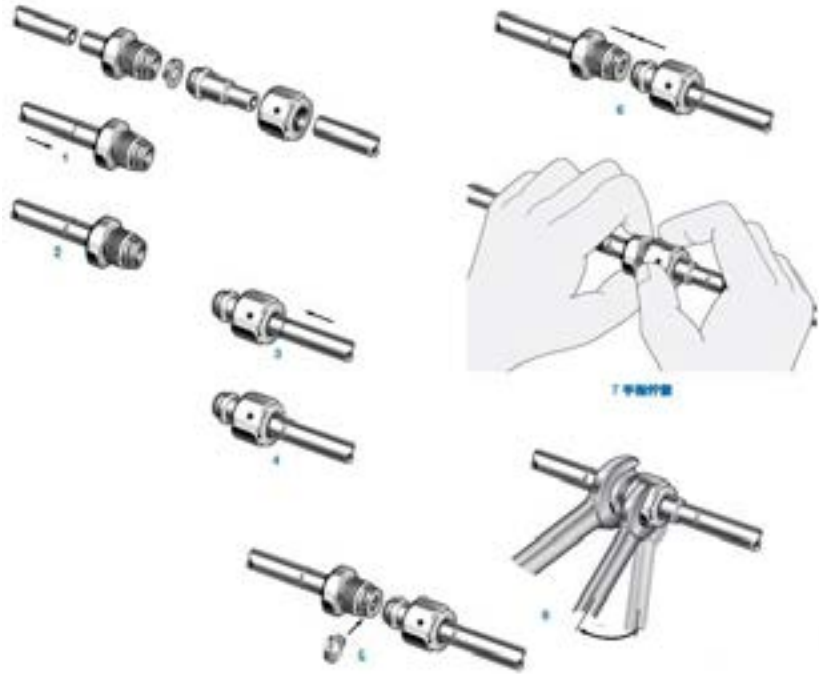
O-ring face seal, NPT 90°



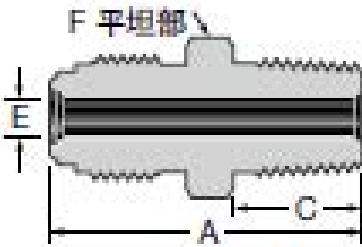
VCO	THRD	A	B	D	E	PSIG	SME
		INCH					
1/4	1/8	0.87	0.96	0.38	0.18	10000	
1/4	1/4	1.05	0.96	0.56	0.18	8000	
1/2	3/8	1.26	1.26	0.56	0.38	7800	
1/2	1/2	1.45	1.26	0.75	0.40	7700	
3/4	3/4	1.67	1.48	0.75	0.62	7300	
1	1	1.94	1.56	0.94	0.87	5300	

VCO	THRD	A	B	B1	E	U	PSIG	SME
		INCH						
1/4	7/16-20	1.19	0.96	0.39	0.19	0.65	4500	
1/2	9/16-18	1.54	1.33	0.44	0.30	0.79	3600	
1/2	3/4-16	1.65	1.33	0.50	0.40	1.01	3600	
3/4	1 1/16-1	2.13	1.53	0.66	0.62	1.44	2900	
1	1 5/16-12	2.31	1.72	0.66	0.87	1.73	2300	

Installation of metal gasket face seal fittings (VCR)

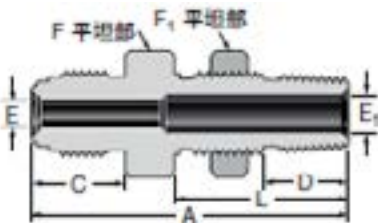


Metal gasket face seal, male NPT



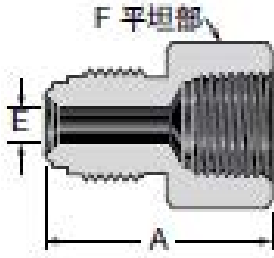
THRD	VCR	A	C	E	F	PSIG	SME
		INCH					
1/8	1/8	1.07	0.38	0.09	5/8	9000	
1/8	1/4	1.31	0.38	0.18	5/8	10000	
1/4	1/4	1.49	0.56	0.18	15/16	10000	
1/4	1/2	1.65	0.56	0.28	15/16	4300	
3/8	1/2	1.65	0.56	0.38	15/16	4300	
1/2	1/2	1.84	0.75	0.40	15/16	4300	
3/4	3/4	2.19	0.75	0.62	1 5/16	3700	
1	1	2.47	0.94	0.87	1 5/8	3000	

Metal gasket face seal male NPT, bulkhead



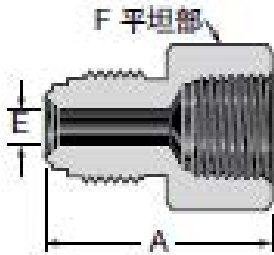
SIZE	VCR	A	C	D	E	E1	F	F1	L	HEAD THK	PSIG	SME
INCH												
1/4	1/4	2.21	0.62	0.56	0.18	0.28	13/16	13/16	1.24	21/32	0.38	8000
1/4	1/2	2.34	0.75	0.56	0.40	0.28	15/16	13/16	1.24	21/32	0.38	8000

Metal gasket face seal, female NPT



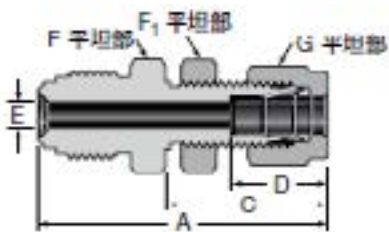
THRD	VCR INCH	A	E	F	PSIG	SME
1/16	1/8	1.10	0.09	7/16	6700	
1/8	1/8	1.19	0.09	9/16	6500	
1/8	1/4	1.41	0.09	9/16	8000	
1/4	1/4	1.54	0.18	3/4	6600	
3/8	1/2	1.76	0.40	15/16	4300	
1/2	1/2	1.99	0.40	1 1/16	4300	
3/4	3/4	2.36	0.62	1 5/16	3700	
1	1	2.51	0.87	1 5/8	3000	

Metal gasket face seal, ferrule



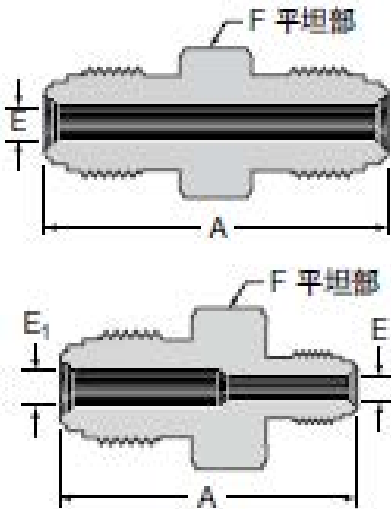
PIPE	VCR	A	C	D	E	F	G	F	PSIG	SME
INCH										
1/8	1/4	1.53	0.60	0.50	0.09	5/8	7/16	7/16	6700	
1/4	1/4	1.62	0.70	0.60	0.18	5/8	9/16	9/16	6500	
3/8	1/2	1.84	0.76	0.66	0.28	15/16	11/16	9/16	8000	
1/2	1/2	1.95	0.86	0.90	0.40	15/16	7/8	3/4	6600	

Metal gasket face seal, ferrule bulkhead



PIPE	VCR	A	C	D	E	F	F1	G	HEAD THICK	PSIG	SME
INCH											
1/4	1/4	2.25	1.32	0.60	0.18	5/8	5/8	9/16	12/32	0.40	10000
3/8	1/2	2.54	1.45	0.66	0.28	15/16	3/4	11/16	19/32	0.44	4300
1/2	1/2	2.74	1.65	0.90	0.40	15/16	15/16	7/8	25/32	0.50	4300

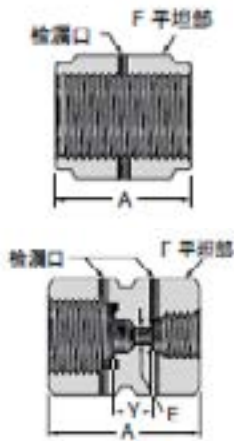
Metal gasket face seal, male dual



VCR	A INCH	E	F	PSIG	SME
1/8	1.13	0.09	3/8	11200	
1/4	1.55	0.18	5/8	10000	
1/2	1.84	0.40	15/16	4300	
3/4	1.76	0.40	15/16	4300	
1	2.59	0.87	1 5/8	3000	

VCR	VCR	A INCH	E	E1	F	PSIG	SME
1/4	1/8	1.37	0.09	0.18	5/8	10000	
1/2	1/4	1.71	0.18	0.40	15/16	4300	

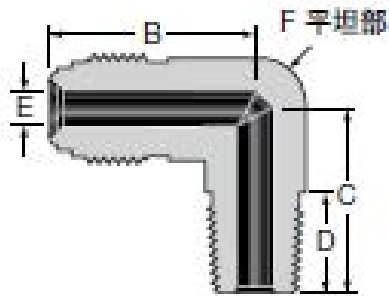
Metal gasket face seal, dual



VCR	A INCH	F	F	SME
1/8	0.66	7/16	3/8	
1/4	1.19	3/4	5/8	
1/2	1.31	1 1/16	15/16	
3/4	1.68	1 1/2	15/16	
1	2.04	1 3/4	1 5/8	

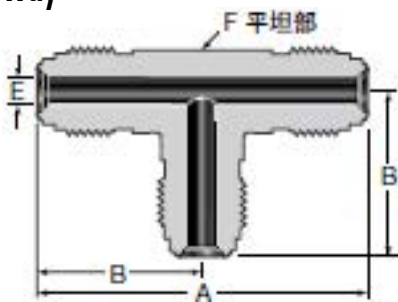
VCR	VCR	A INCH	E	F	Y	PSIG	SME
1/2	1/4	1.41	0.25	1 1/16	0.35	4300	

Metal gasket face seal NPT, 90°



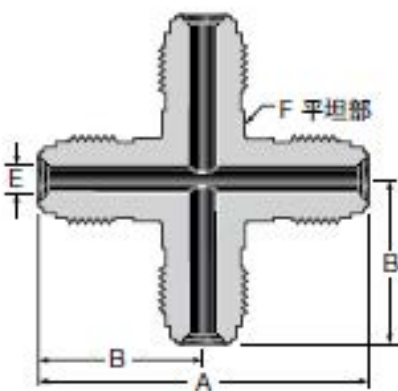
VCR	VCR	B	C	D	E	F	PSIG	SME	
		INCH							
1/8	1/4	1.07	0.87	0.38	0.18	1/2	10000		
1/4	1/4	1.07	1.05	0.56	0.18	1/2	8000		
3/8	1/2	1.45	1.26	0.56	0.40	13/16	4300		
1/2	1/2	1.45	1.45	0.75	0.40	13/16	4300		

Metal gasket face seal, three-way



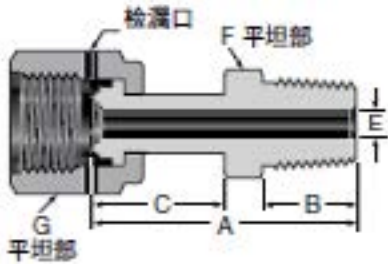
VCR	A	B	E	F	PSIG	SME	
		INCH					
1/8	1.78	0.89	0.09	7/16	11200		
1/4	2.14	1.07	0.18	1/2	10000		
1/2	2.90	1.45	0.40	13/16	4300		
3/4	3.84	1.92	0.62	1 1/4	3700		

Metal gasket face seal, cross



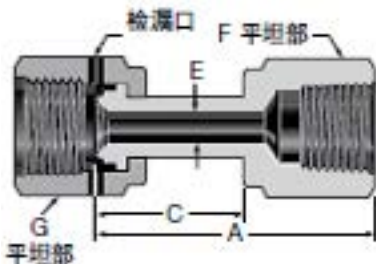
VCR	A	B	E	F	PSIG	SME	
		INCH					
1/8	1.78	0.89	0.09	7/16	11200		
1/4	2.14	1.07	0.18	1/2	10000		
1/2	2.90	1.45	0.40	13/16	4300		
3/4	3.84	1.92	0.62	1 1/4	3700		

Metal gasket face seal, male NPT



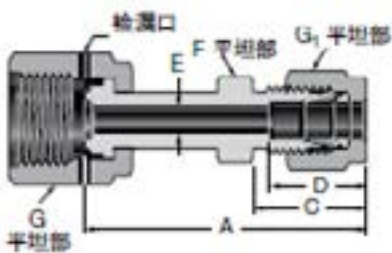
THRD	VCR	A	B	C	E	F	G	PSIG	SME
		INCH							
1/8	1/4	1.58	0.38	0.95	0.18	7/16	3/4	8000	
1/4	1/4	1.79	0.56	0.92	0.18	9/16	3/4	8000	
3/8	1/2	1.89	0.56	1.00	0.40	11/16	1 1/16	4300	
1/2	1/2	2.09	0.75	1.01	0.40	7/8	1 1/16	3700	

Metal gasket face seal, female NPT



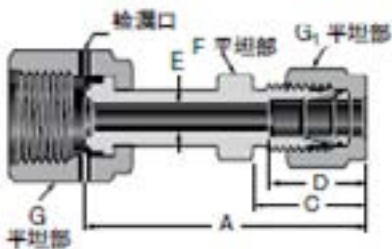
THRD	VCR	A	C	E	F	G	PSIG	SME	
		INCH							
1/4	1/4	1.77	0.92	0.18	3/4	3/4	6600		
3/8	1/2	1.95	0.06	0.40	7/8	1 1/16	4300		
1/2	1/2	2.18	1.04	0.40	1 1/16	1 1/16	4300		

Metal gasket face seal, ferrule



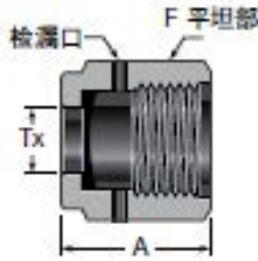
PIPE	VCR	A	C	D	E	F	G	G1	PSIG	SME
		INCH								
1/4	1/4	1.94	0.70	0.60	0.18	1/2	3/4	9/16	10000	
3/8	1/4	1.97	0.76	0.66	0.18	5/8	3/4	11/16	7500	
1/2	1/2	2.23	0.86	0.90	0.40	13/16	1 1/16	7/8	4300	
1/2	1/2	2.09		0.75	1.01	0.40	7/8	1 1/16	3700	

Metal gasket face seal, female



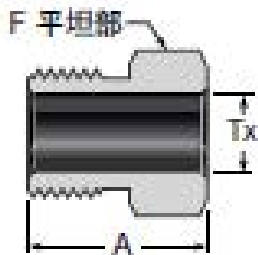
VCR	A	E	G	PSIG	SME
		INCH			
1/4	1.71	0.18	3/4	10000	
1/2	1.84	0.40	1 1/16	4300	
1/2	1/2	2.23	0.86	0.90	

Metal gasket face seal, female nut



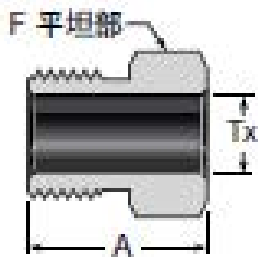
VCR	A INCH	F	Tx	SME
1/8	0.53	7/16	0.21	
1/4	0.81	3/4	0.36	
1/2	0.88	1 1/16	0.61	
5/8	0.88	1 3/16	0.74	
3/4	1.12	1 1/2	0.89	
1	1.34	1 3/4	1.20	

Metal gasket face seal, male nut



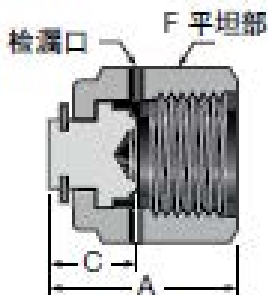
VCR	A INCH	F	Tx	SME
1/8	0.50	3/8	0.21	
1/4	0.71	5/8	0.36	
1/2	0.81	15/16	0.61	
5/8	0.81	1 1/16	0.74	
3/4	1.00	1 5/16	0.89	
1	1.19	1 5/8	1.20	

Metal gasket face seal, plug



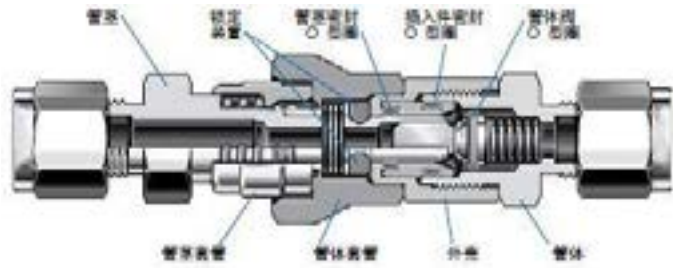
VCR	A INCH	F	Tx	SME
1/8	0.68	3/8	0.21	
1/4	0.92	5/8	0.36	
1/2	1.08	15/16	0.61	
3/4	1.43	1 5/16	0.74	
1	1.52	1 5/8	0.89	

Metal gasket face seal, cap

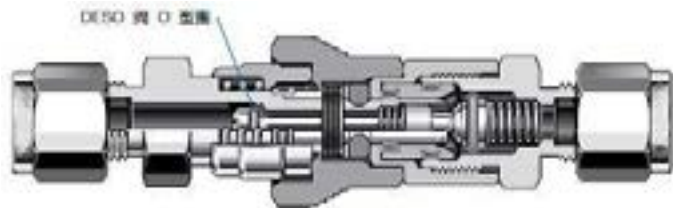


VCR	A INCH	C	F	Tx	SME
1/8	0.63	0.30	7/16	0.21	
1/4	0.94	0.44	3/4	0.36	
1/2	1.01	0.45	1 1/16	0.61	
3/4	1.29	0.54	1 1/2	0.74	
1	1.54	0.63	1 3/4	0.89	

Quick connection fittings, single end (SESO)



Quick connection fittings, dual end (DESO)



Overflow	QC4/0.3, QC6/1.0, QC8/3.0 (cm)
Flowrate	QC4/15, QC6/22, QC8/37 (L/min)
Temp vs. Rating	Acc. to below chart

TEMP °C	PSIG		
	QC4	QC6	QC8
-12	3000	1500	750
+15	3000	1500	750
+37	3000	1500	750
+65	2750	1350	680
+93	2300	1150	600
+121	1850	970	520
+148	1400	750	440
+176	950	580	360
+204	500	400	300

QC stem adapter by ferrule fitting



SIZE	LENGTH		SME
INCH	SESO	DESO	
1/8	2.32	2.77	
1/4	2.36	2.42	
3/8	2.52	2.64	
1/2	2.96	3.16	

SIZE	LENGTH		SME
MM	SESO	DESO	
6	59.9	61.5	
10	67.3	70.4	
12	75.2	80.3	
1/2	2.96	3.16	

QC stem adapter by male thread

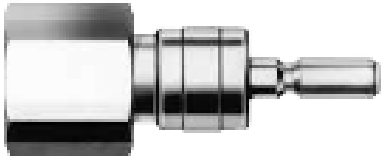


SIZE	LENGTH, NPT		SME
INCH	SESO	DESO	
1/8	2.07	2.13	
1/4	2.22	2.28	
1/4	2.32	2.44	
3/8	2.35	2.47	
1/2	2.84	3.04	

SIZE	LENGTH, ISO/BSP		SME
INCH	SESO	DESO	
1/4	2.22	2.28	
3/8	2.35	2.47	
1/2	2.84	3.04	
3/8	2.35	2.47	
1/2	2.84	3.04	

SIZE	LENGTH, SAE/MS		SME
INCH	SESO	DESO	
9/16-18	2.25	2.37	

QC stem adapter by female thread



SIZE	LENGTH, NPT		SME
INCH	SESO	DESO	
1/8	2.01	2.07	
1/4	2.26	2.32	
1/4	2.35	2.47	
3/8	2.35	2.47	
1/2	2.82	3.02	

SIZE	LENGTH, ISO/BSP		SME
INCH	SESO	DESO	
1/4	2.26	2.32	
3/8	2.35	2.47	
1/2	2.82	3.02	

SIZE	LENGTH, SAE/MS		SME
INCH	SESO	DESO	
3/8-24	1.96	2.04	
3/8-24	2.14	2.26	
9/16-18	2.38	2.46	

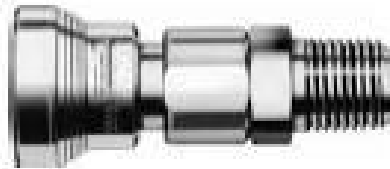
QC coupler by ferrule fitting



SIZE INCH	LENGTH	DIAMETER	SME
1/8	2.26	0.91	
1/4	2.30	0.91	
3/8	2.58	1.03	
1/2	3.09	1.21	

SIZE MM	LENGTH	DIAMETER	SME
6	58.4	23.1	
10	68.1	26.2	
12	78.5	30.7	

QC coupler by male thread



SIZE INCH	LENGTH NPT	DIAMETER	SME
1/8	2.01	0.91	
1/4	2.16	0.91	
1/4	2.38	1.03	
3/8	2.38	1.03	
1/2	2.97	1.21	

SIZE INCH	LENGTH ISO/BSP	DIAMETER	SME
1/4	2.16	0.91	
3/8	2.38	1.03	
1/2	2.97	1.21	

SIZE INCH	LENGTH SAE/MS	DIAMETER	SME
9/16-18	2.00	0.91	
9/16-18	2.24	1.03	

QC coupler by male thread



SIZE INCH	LENGTH NPT	DIAMETER	SME
1/8	2.16	0.91	
1/4	2.42	0.91	
1/4	2.54	1.03	
3/8	2.57	1.03	
1/2	3.22	1.21	

SIZE INCH	LENGTH ISO/BSP	DIAMETER	SME
1/4	2.42	0.91	
3/8	2.57	1.03	
1/2	3.22	1.21	

QC stem adapter bulkhead by ferrule fitting



SIZE INCH	LENGTH SESO	DES0	THICK	HEAD DIA.	SME
1/4	2.74	2.80	0.25	15/32	
3/8	2.92	3.07	0.27	19/32	
1/2	3.43	3.63	0.26	25/32	

SIZE MM	LENGTH SESO	DES0	THICK	HEAD DIA.	SME
6	69.6	71.1	6.4	11.5	
10	77.7	78.7	6.9	16.7	
12	87.1	92.2	6.6	19.6	

QC coupler bulkhead by ferrule fitting



SIZE INCH	LENGTH	DIAMETER	THICK	HEAD DIA.	SME
1/4	2.67	0.91	0.25	15/32	
3/8	2.98	1.03	0.27	19/32	
1/2	3.56	1.21	0.26	25/32	

SIZE MM	LENGTH	DIAMETER	THICK	HEAD DIA.	SME
6	67.8	23.1	6.4	11.9	
10	75.9	26.2	6.9	16.7	
12	90.4	30.7	6.6	19.6	

QC socket fitting, anti-block



COLOR	KEY	SOCKET DIAMETER						SME
		QC4		QC6		QC8		
		PIPE	STEM	PIPE	STEM	PIPE	STEM	
Black	K1	0.96	0.82	1.13	0.99	1.26	1.10	
Orange	K2	0.99	0.85	1.16	1.02	1.29	1.14	
Green	K3	1.02	0.88	1.19	1.05	1.32	1.17	
Yellow	K4	1.05	0.91	1.22	1.08	1.35	1.20	
Blue	K5	1.08	0.94	1.24	1.11	1.38	1.23	
White	K6	1.11	0.97	1.28	1.14	1.41	1.26	
Purple	K7	1.14	1.00	1.31	1.17	1.44	1.29	
Brown	K8	1.17	1.03	1.34	1.20	1.47	1.32	

VICTAULIC COUPLINGS

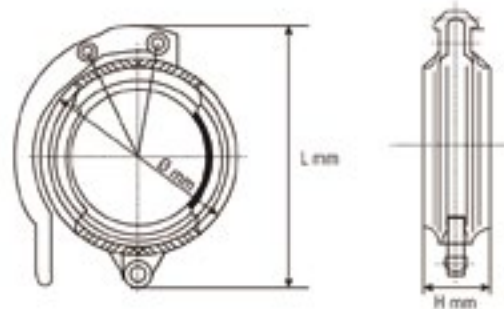


Victaulic Clamp with Spring-Load Safety Pin



Standard Materials Carbon steel ASTM 1040 zinc plating

General Markings DN50 046000 KD SME



Size inch	Pipe O.D. mm	Max W.P. psi	H mm	L mm	Ø mm	Weight kg	Carbon Steel
1½	48.3	550	16	128	78	1.2	045 996
1½	50.3	550	16	138	88	1.6	045 997
2	60.3	530	16	146	91	1.6	046 000
2	66.5	530	16	146	91	1.6	045 999
2½	73.0	480	16	161	106	1.5	046 001
2½	76.1	480	16	161	106	1.5	046 002
3	88.9	480	16	175	120	1.9	046 003
3¼	97.0	480	17	186	131	2.4	046 004
4	114.3	385	17	216	151	3.2	046 005
4½	122.0	385	17	219	160	3.3	046 007
4½	127.0	385	17	236	167	4.0	046 008
5	141.3	385	17	245	181	4.2	046 009
5½	148.0	385	17	156	190	4.7	046 010
6	168.3	360	17	276	211	5.4	046 011
6	168.3	360	22	291	219	9.3	046 012
6½	175.0	360	17	270	210	7.0	046 013
8	219.0	315	19	330	256	8.0	046 014

Victaulic Coupling with DIN-Collar Hose Tail [DIN EN 14420-3]



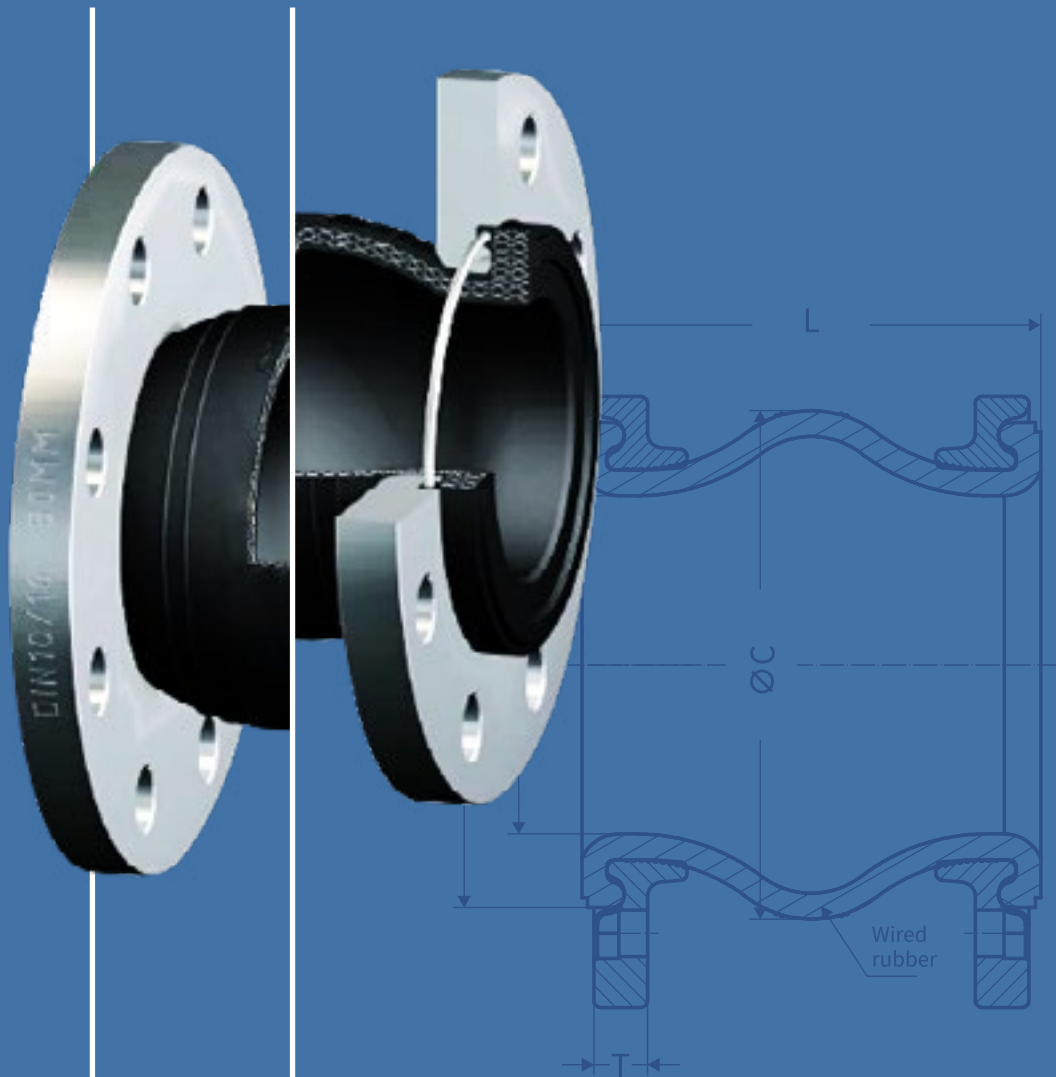
Standard Materials Carbon steel ASTM 1040 zinc plating

Hose Clamps Possible with safety clamps acc. to DIN EN 14420-3 / DIN 2817

Size inch	ØA mm	ØB mm	Length mm	Weight kg	Carbon Steel
1	33.7	25.4	69	0.18	046 301
1¼	42.4	32.4	69	0.25	046 302
1½	48.3	38.4	69	0.32	046 303
2	60.3	50.4	78	0.5	046 304
2½	73.0	63.4	92	0.7	046 306
3	88.9	75.4	98	1	046 309
3	88.9	80.4	98	1	046 310
4	114	100.6	135	2	046 315
4½	127	100.3	136	2.6	046 317
5	141	125.4	179	3.3	046 321
5½	148	125.4	180	3.8	046 322
6	168	152	205	5.8	046 325
8	219	203	275	9.2	046 326



More than Couplings



RUBBER JOINT

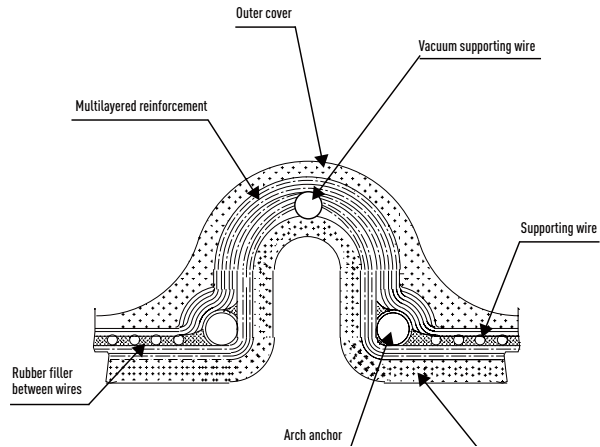
Rubber Joints are devised for piping works, consisting of a flexible main shell made of synthetic rubber with inner reinforcements to provide consistency, and pipe connections by means of loose flanges or threaded unions. Rubber joints are easy to install due to their light weight and relatively small space requirement and their importance in the industry today is of enormous value as they protect highly valued installations and equipment and provide many benefits when installed into any rigid pipe system.

Bellow construction



SME rubber joints are basically constructed with leak-proof rubber lining which is made of synthetic or natural rubber. This applies also for the outside rubber cover, which has the prime function to protect the canvass from outside damages.

Special polymers can be supplied to resist chemicals, oils, sunlight, acid fumes and ozone. The pressure supporting canvass consists of fabric and metal reinforcement, as wire or solid rings.



Spool, reducer and offset types

SME has the common range of spool type with single and double arch, flanged by plated steel rings per EN DIN and ANSI standards and with screw union; straight and tapered for reduction.



Single arch by flange
(available)



Double arch by flange
(available)



Thread union with double arch
(available)



Straight spool by flange
(coming..)



Reducing spool by flange
(coming..)

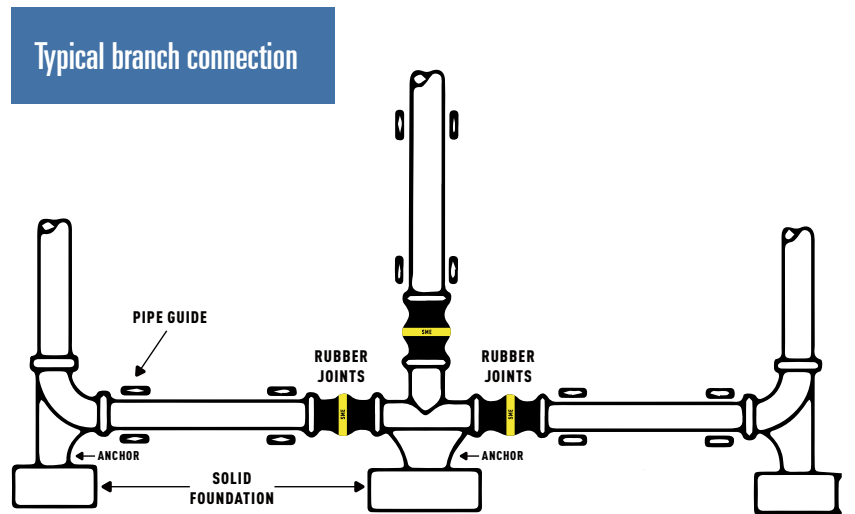
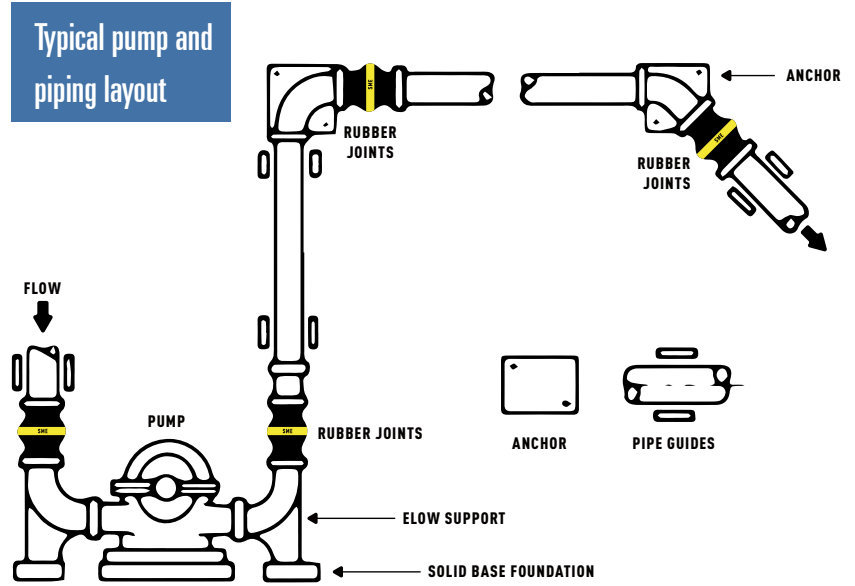


Multiple arch by flange
(coming..)

Pipeline compensation

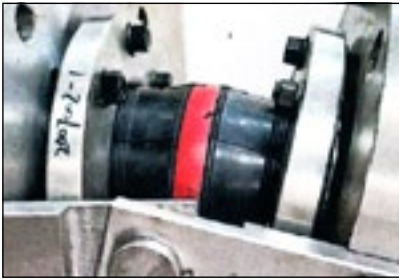
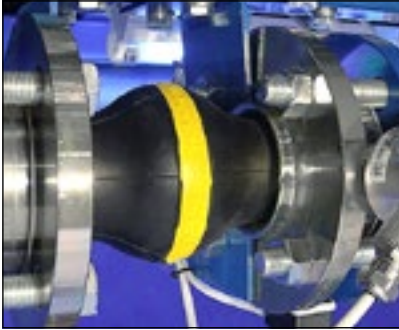


Rubber joints are used as compensator for working pipelines, applicable to reduce vibration, horizontal and vertical offset and to resist expansion and contraction out of thermal fluctuation in small, medium and large pipelines.

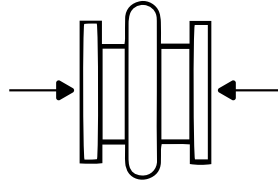


Proper use of anchors in branch connections

Adapting proper pipe movements

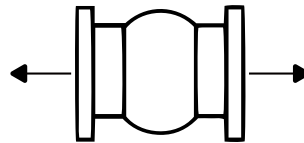


Rubber joints provide excellent compensating features by their highly rated rubber bellows which is consisted of special synthetic rubber, steel wire and nylon braid fiber. Applying more bellows as double-sphered structures is to adapt proper pipe movements of bigger range.



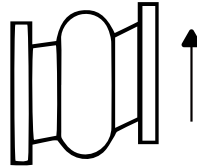
Axial compression

- Longitudinal movement shortens face-to-face dimension along axis of rubber joint or flexible coupling.
- Pipe flanges remain perpendicular to axis.



Axial elongation

- Longitudinal movement lengthens face-to-face dimension along axis of rubber joint or flexible coupling.
- Pipe flanges remain perpendicular to axis.

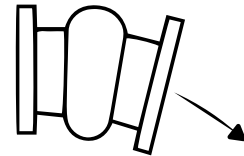


Lateral (transverse) movement

- Offset movement of one or both pipe flanges.
- Both flanges remain parallel to each other while forming angle to axis of joint.

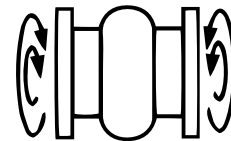
Angular movement

- Deflection or rotation of one or both flanges.
- Forms angle with axis of rubber joint or flexible coupling.



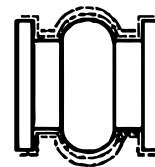
Torsional movement

- Rotation of one flange with stationary counterpart.
- Simultaneous rotation of both flanges in opposing motion.



Vibration

- Oscillating movement around axis of expansion joint or flexible coupling.
- Pipe flanges remain parallel with each other.
- Flanges remain perpendicular to axis.
- Mechanical vibration in steel piping system reduced with installation of pipe connectors or rubber joints.



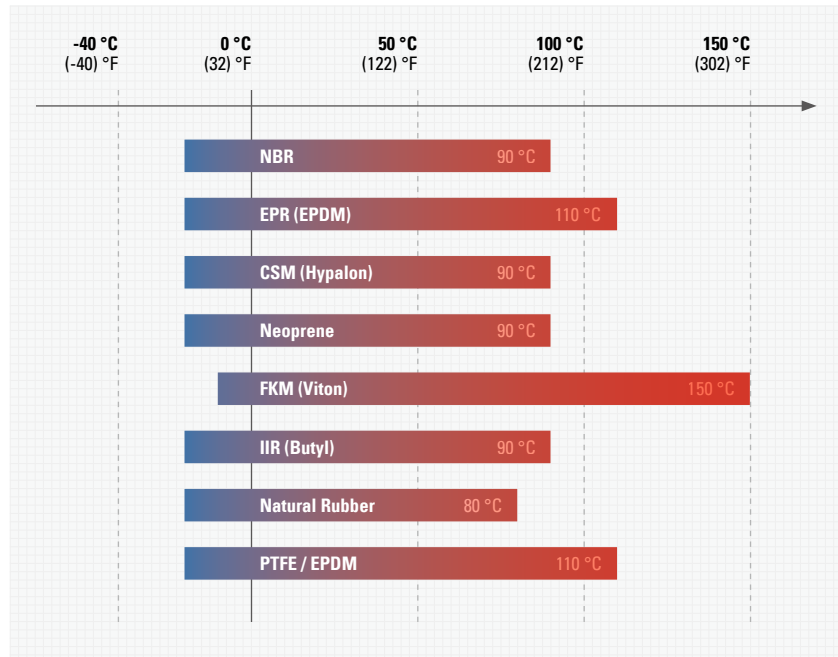
Material and application

Below material combination is standard for SME rubber joints. Double arch with ring is available in use with negative pressure. Check with sales for PTFE lining option.

COLOR STRIPE	INNER TUBE	OUTER COVER	WORKING TEMP.	APPLICATIONS
	NBR	NBR	-20 / 90 °C -4 / 194 °F	OIL Water, saline solutions, alkalis, mineral oils, vegetable or animal oils, oils aerosols, propane and butane gas, etc.
	EPDM	EPDM	-20 / 110 °C -4 / 230 °F	WATER Hot water, cooling water with salt solutions, chlorine solutions, esters and ketones.
	SBR	CR	-35 / 90 °C -31 / 194 °F	ABRASION Abrasive materials, suspended stones, mud, calcium, etc.
	CSM	CR	-25 / 90 °C -13 / 194 °F	CHEMICALS Strong and concentrated acids, etc. Compressed air that bears oil aerosols.
	FKM	FKM	-15 / 150 °C 5 / 302 °F	CHEMICAL HIGH TEMP. Chemical products highly aggressive with high temperature up to 150°C.

Temperature resistance of more elastomers

Given temperature range is for reference. Pressure-temp. rating and material compatibility is to be considered for rubber selection. Check with us for more options.



Typical properties of more elastomers

Properties/applications shown throughout this brochure are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. Check with us for more options.

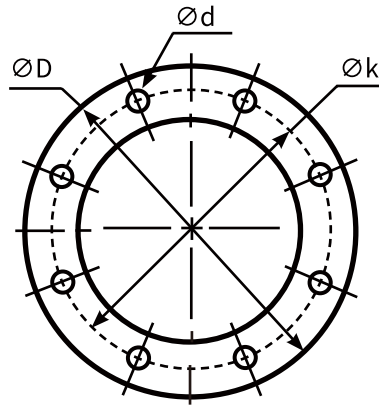
MATERIAL	RATING SCALE CODE	ELASTOMER PHYSICAL AND CHEMICAL PROPERTIES COMPARISON																											
		Water	Chemical	Animal and vegetable oil	Alkali, condensed	Alkali, dilute	Oil and gasoline	Lacquers	Oxygenated hydrocarbons	Aromatic hydrocarbons	Aliphatic hydrocarbons	Acid, concentrated	Acid, dilute	Swelling in oil	Radiation	Water absorption	Electrical insulation	Rebound, hot	Dynamic	Impermeability	Abrasion	Tear	Flame	Cold	Heat	Oxidation	Sunlight	Weather	Ozone
ANSI / ASTM D1418-77	7 - Outstanding 3 - Fair to good 6 - Excellent 2 - Fair 5 - Very good 1 - Poor to fair 4 - Good 0 - Poor × - Contact us																												
	COMMON NAME Chemical group name																												
CR	NEOPRENE Chloroprene	4	3	4	0	4	4	0	1	2	3	4	6	4	5	4	3	5	2	4	5	4	4	4	4	5	5	6	5
NR	GUM RUBBER Polyisoprene, synthetic	5	3	×	×	×	0	0	4	0	0	3	3	0	6	5	5	6	6	2	7	5	0	5	2	4	0	2	0
IR	NATURAL RUBBER Polyisoprene, synthetic	5	3	×	×	×	0	0	4	0	0	3	3	0	6	5	5	6	2	2	6	5	0	5	2	4	0	2	0
IIR	BUTYL Isobutene-isoprene	5	6	5	4	4	0	3	4	0	0	4	6	0	4	5	5	5	2	6	4	4	0	4	5	6	5	5	6
CIIR	CHLOROBUTYL Chloro-isobutene-isoprene	5	6	5	4	4	0	3	4	0	0	4	6	0	4	5	5	5	2	6	4	4	0	4	5	6	5	5	6
NBR	BUNA-N / NITRILE Nitrile-butadiene	4	3	5	0	4	5	2	0	4	6	4	4	5	5	4	1	4	5	4	4	3	0	3	4	4	0	2	2
SBR	SBR / GRS / BUNA-S Styrene-butadiene	5	3	×	2	4	0	0	4	0	0	3	3	0	6	5	5	4	4	2	5	3	0	5	3	2	0	2	0
CSM	HYPALON¹ Chloro-sulfonyl-polyethylene	5	6	4	4	4	4	3	1	2	3	4	6	4	5	4	3	4	2	4	4	3	4	4	4	6	7	6	7
FKM	VITON¹ / FLUOREL² Fluorocarbon elastomer	5	6	6	0	4	6	1	0	6	6	6	5	6	5	5	3	4	5	5	5	2	6	2	7	7	7	7	7
EPR	EPDM Ethylene-propylenediene-terpolymer	5	6	5	6	6	0	3	6	0	0	4	6	0	7	6	6	6	5	4	5	4	0	5	6	6	7	6	7
AFMU	TEFLON³ / TFE / FEP Fluoro-ethylene-polymers	7	7	7	7	7	7	7	7	7	7	7	7	7	3	7	×	×	×	×	4	×	×	×	7	7	7	7	7
S	SILICONE	5	5	5	0	2	×	0	2	0	0	2	6	2	5	6	6	6	0	2	0	2	3	6	7	6	6	6	6

Note:

1. Hypalon and Viton are registered trademarks of DuPont Dow Elastomers.
2. Fluorel is a registered trademark of 3M Companies.
3. Teflon and Kevlar are registered trademarks of DuPont.

Flange measurements, EN 1092-1, PN 10-16

Rubber joint includes slip-on flange pieces at both sides, commonly applied in acc. to DIN, ANSI (ASA) specifications. Standard drilling information is listed.

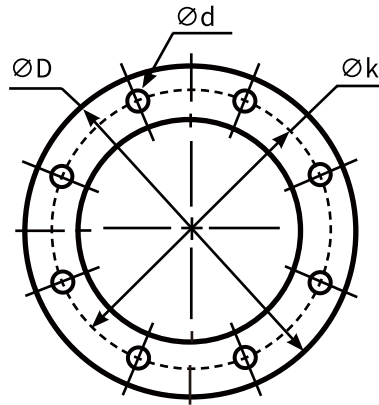


$\varnothing D$	Diameter
$\varnothing k$	Center diameter
n	Number of holes
$\varnothing d$	Hole diameter

DN	PN 10				PN 16				
	$\varnothing D$	$\varnothing k$	n	$\varnothing d$	$\varnothing D$	$\varnothing k$	n	$\varnothing d$	
20	mm	105	75	4	14	105	75	4	14
20	inch	4.13	2.95	4	0.55	4.13	2.95	4	0.55
25	mm	115	85	4	14	115	85	4	14
25	inch	4.53	3.35	4	0.55	4.53	3.35	4	0.55
32	mm	140	100	4	18	140	100	4	18
32	inch	5.51	3.94	4	0.71	5.51	3.94	4	0.71
40	mm	150	110	4	18	150	110	4	18
40	inch	5.91	4.33	4	0.71	5.91	4.33	4	0.71
50	mm	165	125	4	18	165	125	4	18
50	inch	6.50	4.92	4	0.71	6.50	4.92	4	0.71
65	mm	185	145	4	18	185	145	4	18
65	inch	7.28	5.71	4	0.71	7.28	5.71	4	0.71
80	mm	200	160	8	18	200	160	8	18
80	inch	7.87	6.30	8	0.71	7.87	6.30	8	0.71
100	mm	220	180	8	18	220	180	8	18
100	inch	8.66	7.09	8	0.71	8.66	7.09	8	0.71
125	mm	250	210	8	18	250	210	8	18
125	inch	9.84	8.27	8	0.71	9.84	8.27	8	0.71
150	mm	285	240	8	22	285	240	8	22
150	inch	11.22	9.45	8	0.87	11.22	9.45	8	0.87
200	mm	340	295	8	22	340	295	12	22
200	inch	13.39	11.61	8	0.87	13.39	11.61	12	0.87
250	mm	395	355	12	22	405	355	12	26
250	inch	15.55	13.98	12	0.87	15.94	13.98	12	1.02
300	mm	445	400	12	22	460	410	12	26
300	inch	17.52	15.75	12	0.87	18.11	16.14	12	1.02

Flange measurements, EN 1092-1, PN 25-40

Rubber joint includes slip-on flange pieces at both sides, commonly applied in acc. to DIN, ANSI (ASA) specifications. Standard drilling information is listed.

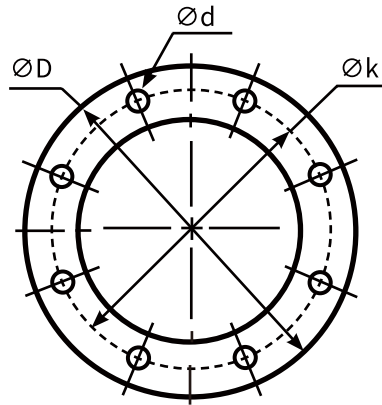


Ø D	Diameter
Ø k	Center diameter
n	Number of holes
Ø d	Hole diameter

DN	PN 25				PN 40				
	Ø D	Ø k	n	Ø d	Ø D	Ø k	n	Ø d	
20	mm	105	75	4	14	105	75	4	14
20	inch	4.13	2.95	4	0.55	4.13	2.95	4	0.55
25	mm	115	85	4	14	115	85	4	14
25	inch	4.53	3.35	4	0.55	4.53	3.35	4	0.55
32	mm	140	100	4	18	140	100	4	18
32	inch	5.51	3.94	4	0.71	5.51	3.94	4	0.71
40	mm	150	110	4	18	150	110	4	18
40	inch	5.91	4.33	4	0.71	5.91	4.33	4	0.71
50	mm	165	125	4	18	165	125	4	18
50	inch	6.50	4.92	4	0.71	6.50	4.92	4	0.71
65	mm	185	145	8	18	185	145	8	18
65	inch	7.28	5.71	8	0.71	7.28	5.71	8	0.71
80	mm	200	160	8	18	200	160	8	18
80	inch	7.87	6.30	8	0.71	7.87	6.30	8	0.71
100	mm	235	190	8	22	235	190	8	22
100	inch	9.25	7.48	8	0.87	9.25	7.48	8	0.87
125	mm	270	220	8	26	270	220	8	26
125	inch	10.63	8.66	8	1.02	10.63	8.66	8	1.02
150	mm	300	250	8	26	300	250	8	26
150	inch	11.81	9.84	8	1.02	11.81	9.84	8	1.02
200	mm	360	310	12	26	375	320	12	30
200	inch	14.17	12.20	12	1.02	14.76	12.60	12	1.18
250	mm	425	370	12	30	450	385	12	33
250	inch	16.73	14.57	12	1.18	17.72	15.16	12	1.30
300	mm	485	430	16	30	515	450	16	33
300	inch	19.09	16.93	16	1.18	20.28	17.65	16	1.30

Flange measurements, ANSI (ASA) B 16.5

Rubber joint includes slip-on flange pieces at both sides, commonly applied in acc. to DIN, ANSI (ASA) specifications. Standard drilling information is listed.

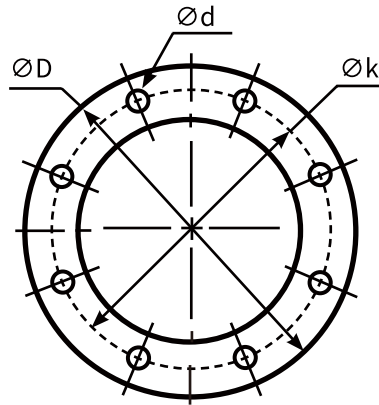


Ø D	Diameter
Ø k	Center diameter
n	Number of holes
Ø d	Hole diameter

INCH		150 PSI				300 PSI			
		Ø D	Ø k	n	Ø d	Ø D	Ø k	n	Ø d
3/4"	mm	98.4	69.8	4	15.9	117.5	82.5	4	19
3/4"	inch	3 7/8	2 3/4	4	5/8	4 5/8	3 1/4	4	3/4
1"	mm	107.7	79.4	4	15.9	123.8	88.9	4	19
1"	inch	4 1/4	3 1/8	4	5/8	4 7/8	3 1/2	4	3/4
1 1/4"	mm	117.5	88.9	4	15.9	133.3	98.4	4	19
1 1/4"	inch	4 5/8	3 1/2	4	5/8	5 1/4	3 7/8	4	3/4
1 1/2"	mm	127	98.4	4	15.9	155.6	114.3	4	22.2
1 1/2"	inch	5	3 7/8	4	5/8	6 1/8	4 1/2	4	7/8
2"	mm	152.4	120.6	4	19	165.1	127	8	19
2"	inch	6	4 3/4	4	3/4	6 1/2	5	8	3/4
2 1/2"	mm	177.8	139.7	4	19	190.5	149.2	8	22.2
2 1/2"	inch	7	5 1/2	4	3/4	7 1/2	5 7/8	8	7/8
3"	mm	190.5	152.4	4	19	209.5	168.3	8	22.2
3"	inch	7 1/2	6	4	3/4	8 1/4	6 5/8	8	7/8
4"	mm	228.5	190.5	8	19	254	200	8	22.2
4"	inch	9	7 1/2	8	3/4	10	7 7/8	8	7/8
5"	mm	254	215.9	8	22.2	279.4	234.9	8	22.2
5"	inch	10	8 1/2	8	7/8	11	9 1/4	8	7/8
6"	mm	279.4	241.3	8	22.2	317.5	269.9	12	22.2
6"	inch	11	9 1/2	8	7/8	12 1/2	10 5/8	12	7/8
8"	mm	342.9	298.4	8	22.2	381	330.2	12	25.4
8"	inch	13 1/2	11 3/4	8	7/8	15	13	12	1
10"	mm	406.4	361.9	12	25.4	444.5	387.3	16	28.6
10"	inch	16	14 1/4	12	1	17 1/2	15 1/4	16	1 1/8
12"	mm	482.6	431.8	12	25.4	520.7	450.8	16	31.7
12"	inch	19	17	12	1	20 1/2	17 3/4	16	1 1/4

Flange measurements, TW DIN 28459

Rubber joint includes slip-on flange pieces at both sides, commonly applied in acc. to DIN, ANSI (ASA) specifications. Standard drilling information is listed.



Ø D	Diameter
Ø k	Center diameter
n	Number of holes
Ø d	Hole diameter

SIZE				150 PSI			
				Ø D	Ø k	n	Ø d
TW1	50	mm		154	130	8	11
TW1	50	inch		6.06	5.12	8	0.43
TW1	80	mm		154	130	8	11
TW1	80	inch		6.06	5.12	8	0.43
TW3	100	mm		174	150	8	14
TW3	100	inch		6.85	5.91	8	0.55
TW5	125	mm		204	176	8	14
TW5	125	inch		8.03	6.93	8	0.55
TW7	150	mm		240	210	12	14
TW7	150	inch		9.45	8.27	12	0.55

Flange measurements, T.T.M.A

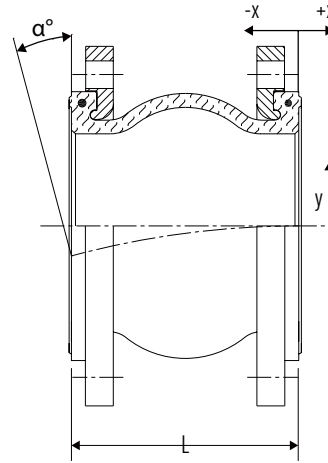
Rubber joint includes slip-on flange pieces at both sides, commonly applied in acc. to DIN, ANSI (ASA) specifications. Standard drilling information is listed.

INCH				150 PSI			
				Ø D	Ø k	n	Ø d
2"	mm			114.3	95.3	6	11.1
2"	inch			4.50	3.75	6	0.44
3"	mm			142.9	123.8	8	11.1
3"	inch			5.63	4.87	8	0.44
4"	mm			168.3	149.2	8	11.1
4"	inch			6.63	5.87	8	0.44
5"	mm			196.9	177.8	12	11.1
5"	inch			7.75	7.00	12	0.44
6"	mm			228.6	206.4	12	11.1
6"	inch			9.00	8.13	12	0.44
8"	mm			276.2	257.2	16	11.1
8"	inch			10.87	10.13	16	0.44

Single arch by flange, PN16 EN 1092-1



SME single arch flanged rubber joint can be used for all types of industrial applications, residential houses, industrial plants, industrial premises as well as heating and sanitary installations. The rubber joint compensates for thermal elongation and misalignment, isolates vibration, dampen noise and pressure surges coming from engines, pumps, turbines, etc.



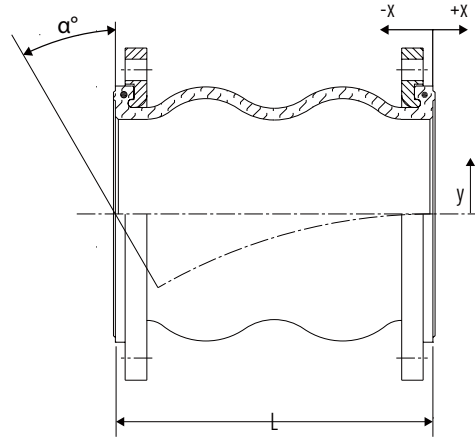
Elastic	Tube NBR, cover NBR, carcass Nylon cord. Check with sales for other materials EPDM, SBR, CR, CSM, FKM, and vacuum suitability with metal support
Flange	Carbon steel by zinc plating, optional ANSI flange on request
Working temp.	-20 ~ 90 °C (-4 ~ 194 °F)
Pressure	Working pressure 16 bar, burst pressure 60 bar
Pressure damping	100% under 70 °C; 70% between 70-90 °C
Electric resistivity	$10^3 \sim 10^6 \Omega$
Max. torque rec.	DN 25-50: 60 Nm, DN 65-80: 80 Nm, DN 100-125: 100 Nm, DN 150-200: 160 Nm, DN 250-300: 180 Nm
Markings	Yellow shape, eg. Logo DN80 PN16 EN 1092-1

SIZE	LENGTH		ALLOWABLE MOVEMENT (MM)				NBR / NBR
	mm	in.	Axial (-x)	Axial (+x)	Lateral (y)	Angular (α°)	
25	1	95 ± 2	8	4	8	15°	401001.1
32	1¼	95 ± 2	8	4	8	15°	401002.1
40	1½	95 ± 2	8	5	8	15°	401003.1
50	2	105 ± 2	8	6	8	15°	401004.1
65	2½	115 ± 2	12	6	10	15°	401005.1
80	3	130 ± 2	12	10	10	15°	401006.1
100	4	135 ± 3	18	10	12	15°	401007.1
125	5	170 ± 3	18	10	12	15°	401008.1
150	6	180 ± 3	18	10	12	15°	401009.1
200	8	205 ± 3	25	14	22	15°	401010.1
250	10	240 ± 3	25	14	22	15°	401011.1
300	12	260 ± 3	25	14	22	15°	401012.1

Double arch by flange, PN16 EN 1092-1



SME double arch flanged rubber joint can be used for all types of industrial applications, residential houses, industrial plants, industrial premises as well as heating and sanitary installations. The rubber joint compensates for thermal elongation and misalignment, isolates vibration, dampen noise and pressure surges coming from engines, pumps, turbines, etc.



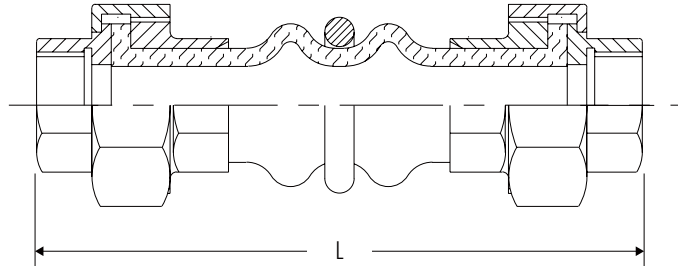
Elastic	Tube NBR, cover NBR, carcass Nylon cord. Check with sales for other materials EPDM, SBR, CR, CSM, FKM, and vacuum suitability with metal support
Flange	Carbon steel by zinc plating, optional ANSI flange on request
Working temp.	-20 ~ 90 °C (-4 ~ 194 °F)
Pressure	Working pressure 16 bar, burst pressure 60 bar
Pressure damping	100% under 70 °C; 70% between 70~90 °C
Electric resistivity	$10^3 \sim 10^6 \Omega$
Max. torque rec.	DN 25-50: 60 Nm, DN 65-80: 80 Nm, DN 100-125: 100 Nm, DN 150-200: 160 Nm, DN 250-300: 180 Nm
Markings	Yellow shape, eg. Logo DN80 PN16 EN 1092-1

SIZE	LENGTH	ALLOWABLE MOVEMENT (MM)				NBR / NBR	
		Axial (-x)	Axial (+x)	Lateral (y)	Angular (α°)		
25	1	175 ± 2	50	30	35	40°	
32	1¼	175 ± 2	50	30	35	40°	
40	1½	175 ± 2	50	30	35	40°	
50	2	175 ± 2	50	30	35	40°	
65	2½	175 ± 2	50	30	35	40°	
80	3	175 ± 2	50	30	35	40°	
100	4	225 ± 3	57	35	40	35°	
125	5	225 ± 3	57	35	40	35°	
150	6	225 ± 3	57	35	40	35°	
200	8	325 ± 3	63	35	45	30°	
250	10	325 ± 3	63	35	45	30°	
300	12	325 ± 3	63	35	45	30°	

Double arch by thread union, PN16 BSPP



SME thread union rubber joint can be used for all types of industrial applications, residential houses, industrial plants, industrial premises as well as heating and sanitary installations. The rubber joint compensates for thermal elongation and misalignment, isolates vibration, dampen noise and pressure surges coming from engines, pumps, turbines, etc.



Elastic	Tube NBR, cover NBR, carcass Nylon cord. Check with sales for other materials EPDM, SBR, CR, CSM, FKM, and vacuum suitability with metal support
Connection	Thread union by BSPP, other types on request
Working temp.	-20 ~ 90 °C (-4 ~ 194 °F)
Pressure	Working pressure 16 bar, burst pressure 60 bar
Pressure damping	100% under 70 °C; 70% between 70-90 °C
Electric resistivity	10 ³ ~ 10 ⁶ Ω
Max. torque rec.	DN 20-50: 60 Nm, DN 65-80: 80 Nm
Markings	Yellow shape, eg. Logo DN80 PN16 BSPP

SIZE		LENGTH	ALLOWABLE MOVEMENT (MM)				NBR / NBR
mm	in.	mm	Axial (-x)	Axial (+x)	Lateral (y)	Angular (α°)	
20	¾	200 ± 2	22	6	22	45°	
25	1	200 ± 2	22	6	22	45°	
32	1¼	200 ± 2	22	6	22	45°	
40	1½	200 ± 2	22	6	22	45°	
50	2	200 ± 2	22	6	22	45°	
65	2½	240 ± 2	22	6	22	45°	
80	3	240 ± 2	22	6	22	45°	

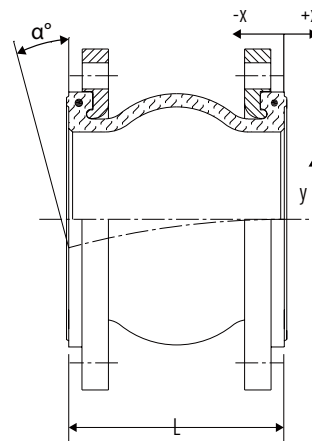


Single arch for tank truck mounting, TW DIN 28459

SME single arch rubber joint with DIN 28459 flange rings, to be mounted with tank truck applications. Standard markings with yellow stripe.



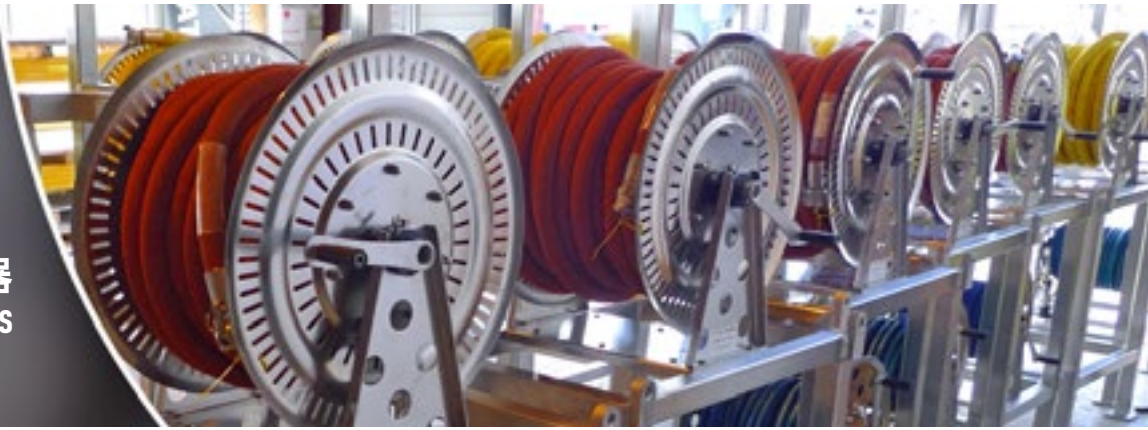
Aluminum flanges for tank trucks DIN 28459



Elastic	Tube NBR, cover NBR, carcass Nylon cord
Flange	Aluminum alloy, TW DIN 28459
Working temp.	-20 ~ 90 °C (-4 ~ 194 °F)
Pressure damping	100% under 70 °C; 70% between 70~90 °C
Electric resistivity	10 ³ ~ 10 ⁶ Ω
Markings	Yellow stripe saying, eg. Logo DN80 PN10 ERV TW-G

SIZE	LENGTH		ALLOWABLE MOVEMENT (MM)				NBR/NBR FLG. ALU
	mm	in.	Axial (-x)	Axial (+x)	Lateral (y)	Angular (α°)	
80	3"	130 ± 3	10	10	10	14°	401036
100	4"	130 ± 3	10	10	10	14°	401037

晟江工程集成器
UTILITY STATIONS



现有公用工程站弊端
Current hose station has
sufficient room to evolve

现有公用工程站亦称作软管站，其主要是为吹扫、清洗、置换、维修和小范围灭火等需要而设置；一般由管道、阀门、软管及其配套快速接头等组成。使用介质通常为氮气、装置空气、水和蒸汽四种管路，根据工艺要求在不同的位置上设置。

Hose station, commonly addressed as, is for the general use to constitute the equipment of cleaning, replacement, maintenance and small-scale fire supression. The station has to be set in group minimum pipes, valves, hoses and coupling accessories, applied with four major working media as nitrogen, compressed air, water and steam.

但是，这类集成工程站在实际操作中，存在诸多弊端：

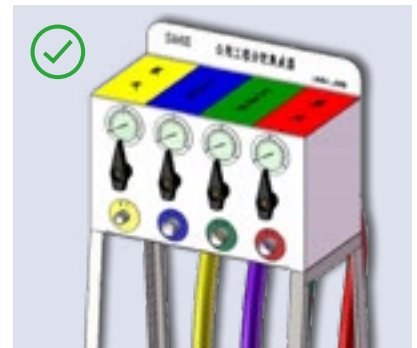
- 故障阀门和内漏位置，不易察觉
- 管路启闭状态，不易辨识
- 管路压力与温度，无法读取
- 接头防尘盖物品，容易丢失
- 连通、通断作业复杂耗时
- 通断操作存在滴漏，有安全隐患
- 管口连接标准不一，需要转接头

Current station for hose connections is poorly designed in following ways:

- Failing position, hard to detect
- Open status, hard to tell
- Pressure temp., visually impossible
- Couplings, constantly missing
- Connection jobs, time-consuming
- Spillage, potentially hazardous
- More than one standard, complicated connecting



故障阀门和内漏位置，不易察觉
Hard to detect failing position or valves



晟江公用工程分配集成器改良图
SME utility station of improved integration

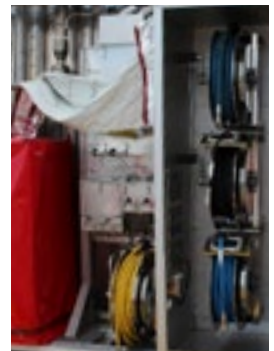
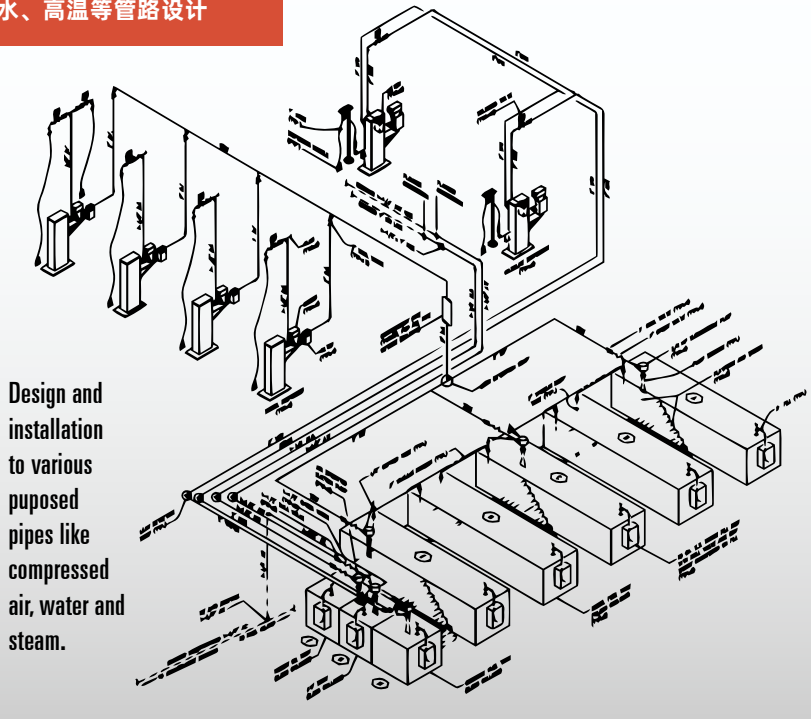


清晰可辨
VISUAL FRIENDLY

公用工程分配集成器 Utility station, modularized integration

晟江基于现有公用工程站的痛点，我们提供了改良方案的公用工程分配集成站。具备零滴漏、可视可控、空间节省，兼容性高、复用操作灵活等特点，且集成站充分考虑现场情况，模块化设计集标准化、定制化、安全性于一身。

典型应用: 集成器根据气、水、高温等管路设计



晟江改良公用工程分配集成器

SME utility station evolves with modularized integration



晟江基于现有公用工程站的痛点，我们提供了改良方案的公用工程分配集成站，优点如下：

避免泄漏	正面配四个干式接头，零滴漏快接软管
可视可控	接头对应独立压力表和阀门，开关压力情况一目了然
空间节省	根据现场物理空间，可升高、降低分配集成高度
兼容适配	反面预留四根短软管，匹配现在管路
复用灵活	集成器桌面平台式设计，方便移动、重复利用
模块设计	集成器为模块化标准化设计，降低维护成本和安全

SME comes up with an evolved utility station with modularized integration, featuring:

Leak free	Four dry couplers applied to perform zero spillage switch
Visual friendly	Independent pressure gauge and valve used for each joint
Space saving	Height can be adjusted per situation
Compatible	Four hose reserved to join current lines
Reuse possible	Integrated platform designed, convenient to move and reuse
Modularizing	Modular standardization reducing maintenance cost



进口伸缩范围	进口压力	开关控制	显示	总尺寸
INLET RANGE	INLET PR.	SWITCH	DISPLAY	Height / WxD
60 - 800 mm	0 - 16 bar	分别显示四路压力 Four lines respectively		900-1200 mm / 500x455 mm

