







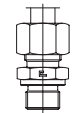
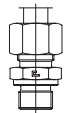
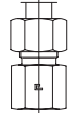
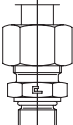
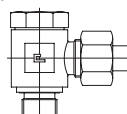
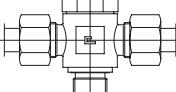
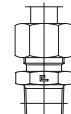

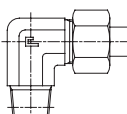
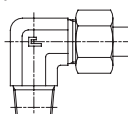
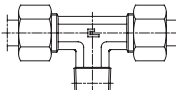
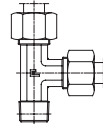
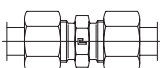
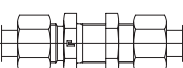
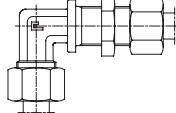
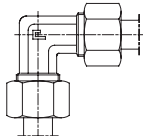
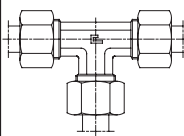
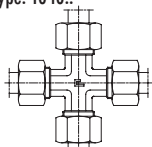
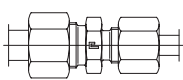
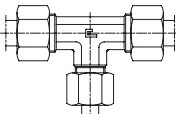
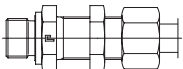
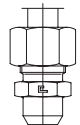
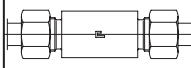
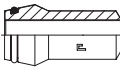
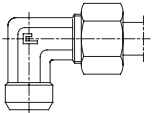

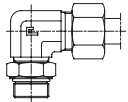
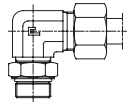
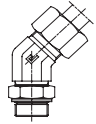
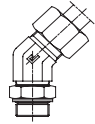
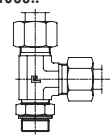
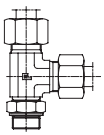
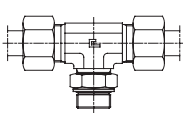
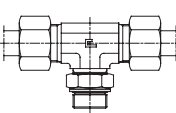
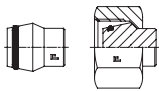




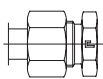
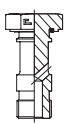



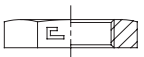
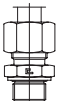
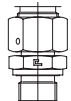
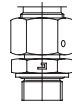
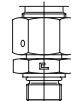
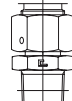
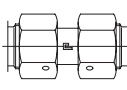
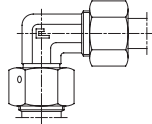
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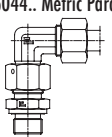
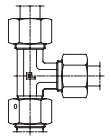
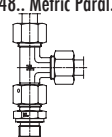
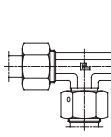
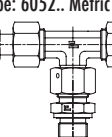
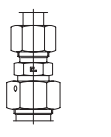
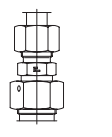
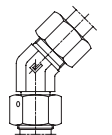
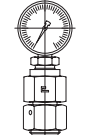
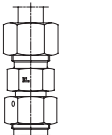
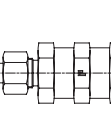
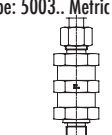
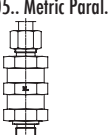
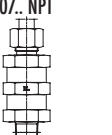
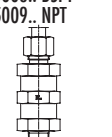
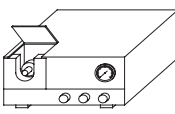
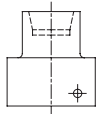
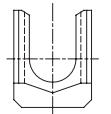
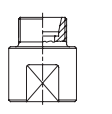

DIN

**CARBON STEEL AND STAINLESS STEEL
PRODUCT**

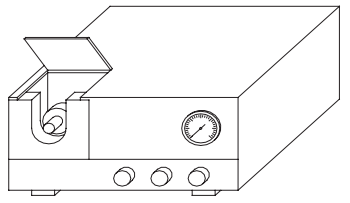
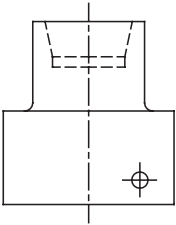
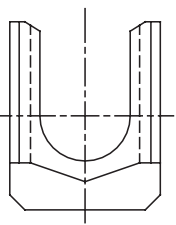
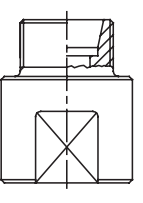

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General instructions	Quality assurance	Allowed temperatures	Finish treatments	Tubes to be used	Threaded ends	Prescriptions to comply with
Utilisation standards	Safety factors	Seals on threads	End treatments	Tables follow up	Gas - Metric UNF - NPT	Assembly instructions
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Type: 1009.. UNF/UN-2A 	Type: 1013.. BSPP Type: 1014.. Metric Paral. 	Type: 1015.. BSPP Type: 1016.. 	Type: 1017.. BSPT Type: 1018.. NPT 	Type: 1019.. Metric Taper 	Type: 1020.. BSPT 	Type: 1021.. NPT Type: 1022.. Metric Taper 
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Type: 6055.. 	Type: 6060.. BSPP 	Type: 6061.. 	Type: 5001.. 	Type: 5002.. BSPP Type: 5003.. Metric Paral. 	Type: 5004.. BSPP Type: 5005.. Metric Paral. 	Type: 5006.. BSPT Type: 5007.. NPT 
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Type: 5008.. BSPT Type: 5009.. NPT 	Type: 100000 	Type: 1000.. 	Type: 1000.. 	Type: 1000.. 	Type: 1000.. 	Compatible fluids table
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ASSEMBLY TOOLS DIN 2353 - ISO 8434-1

PREASSEMBLY MACHINE		MANDREL MACHINE	PLATFORM MACHINE	MANUAL PREASSEMBLY TOOL	24° TOOL	
						
Series	Ø Tube	Ordering Machine	Ordering Mandrel	Ordering Platform	Ordering Preassembly	Ordering 24° tool
L	6	100000	100001	100021-83 M	100061	204
	8		100002	100022-83 M	100062	205
	10		100003	100023-83 M	100063	206
	12		100004	100024-83 M	100064	207
	15		100005	100025-83 M	100065	208
	18		100006	100026-83 M	100066	209
	22		100007	100027-83 M	100067	210
	28		100008	100028-83 M	100068	211
	35		100009	100029-83 M	100069	212
	42		100010	100030-83 M	100070	213
S	6	100000	100011	100031-83 M	100071	204
	8		100012	100032-83 M	100072	205
	10		100013	100033-83 M	100073	206
	12		100014	100034-83 M	100074	207
	14		100015	100035-83 M	100075	214
	16		100016	100036-83 M	100076	215
	20		100017	100037-83 M	100077	216
	25		100018	100038-83 M	100078	217
	30		100019	100039-83 M	100079	218
	38		100020	100040-83 M	100080	219

ORDERING EXAMPLES (Carbon steel)

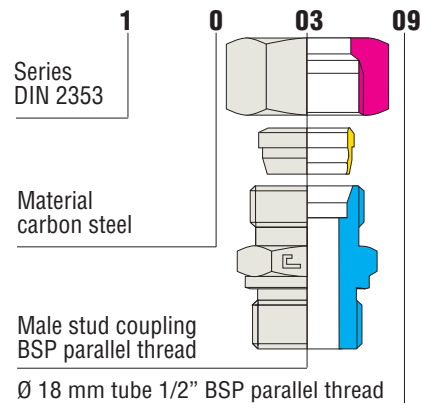
ORDERING EXAMPLES (Stainless steel)

B3 STANDARD RING

- If you require a male stud coupling for a Ø 18 mm tube with 1/2" BSP parallel thread made of carbon steel with standard ring, order: 100309

B3 STANDARD RING

- If you require a male stud coupling for a Ø 18 mm tube with 1/2" BSP parallel thread made of stainless steel with standard ring, order: 110309

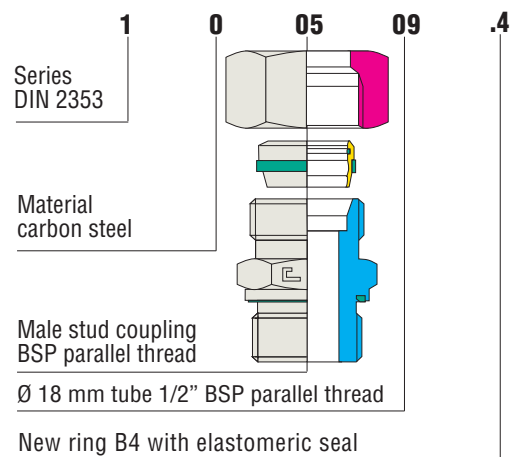


B4 PATENTED RING

- If you require a male stud coupling for a Ø 18 mm tube with 1/2" BSP parallel thread made of carbon steel with elastomeric NBR seal on the threaded end, specify: 100509.4
- If you require the VITON® seal, add "V" after the last fourth number 100509.4V

B4 PATENTED RING

- If you require a male stud coupling for a Ø 18 mm tube with 1/2" BSP parallel thread made of stainless steel with elastomeric Viton® seal on the threaded end, specify: 110309.4
- If you require the NBR seal, add "N" after the last fourth number 110309.4N

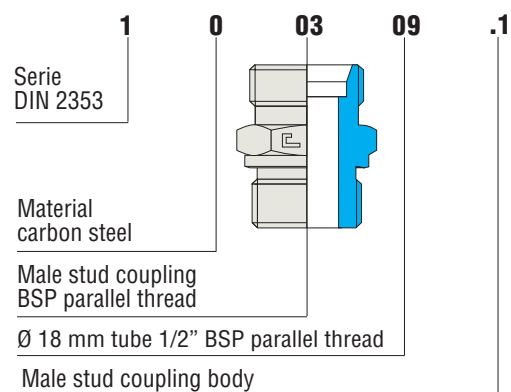


BODY FOR B3 – B4

- If you require the carbon steel body add 1 at the end of the fitting code to order: 100309.1

BODY FOR B3 – B4

- If you require the stainless steel body only, add 1 at the end of the fitting code to order: 110309.1



DELIVERIES

- Cast S.p.A. fittings are delivered in the configurations shown in the pictures of this catalogue.
- Available on scheduled orders only: it means that the article is slow moving and will be delivered within 90 days.
- Available on request only: it means that the article is not commonly in stock; please contact our offices for further delivery details.

VITON® is a DuPont Dow Elastomers Trade Mark



DIN 2353



B3

**CARBON STEEL AND STAINLESS STEEL PRODUCT
STANDARD DOUBLE CUTTING EDGE RING ASSEMBLED ON
ALL CAST PRODUCTION TO ASSURE SEALING AND SAFETY.**

AVAILABLE IN CARBON AND STAINLESS STEEL

THEORY OF OPERATION

The Cast fitting, manufactured according to ISO 8434-1/DIN 2353, is a mechanical fitting with a double cutting edge ring for double stapling on the tube.

The B3 ring helps fast assembly of removable tubes, avoids welding, tapping and flaring, thus assuring maximum simplicity for complex oleo-dynamic systems. During tightening by the nut, the ring deforms according to the bore of the 24° cone of the fitting and bites into the steel tube, producing two deep cuts, the first of which is visible due to the lifting of an outer edge on the diameter of the tube, ensuring water tightness and anti-unthreading of the ring. The second groove (invisible) balances the forces on the whole ring, prevents vibrations from reaching the first groove and stops the stapling of the tube at a predetermined value.

COUPLING SYSTEM DIN 2353

Reference prescriptions:

Tube E 235
EN 10305-4

Nut
DIN 3870

Cutting ring
DIN 3861-B

Shape of housing
DIN 3861

Fitting body
DIN 3901

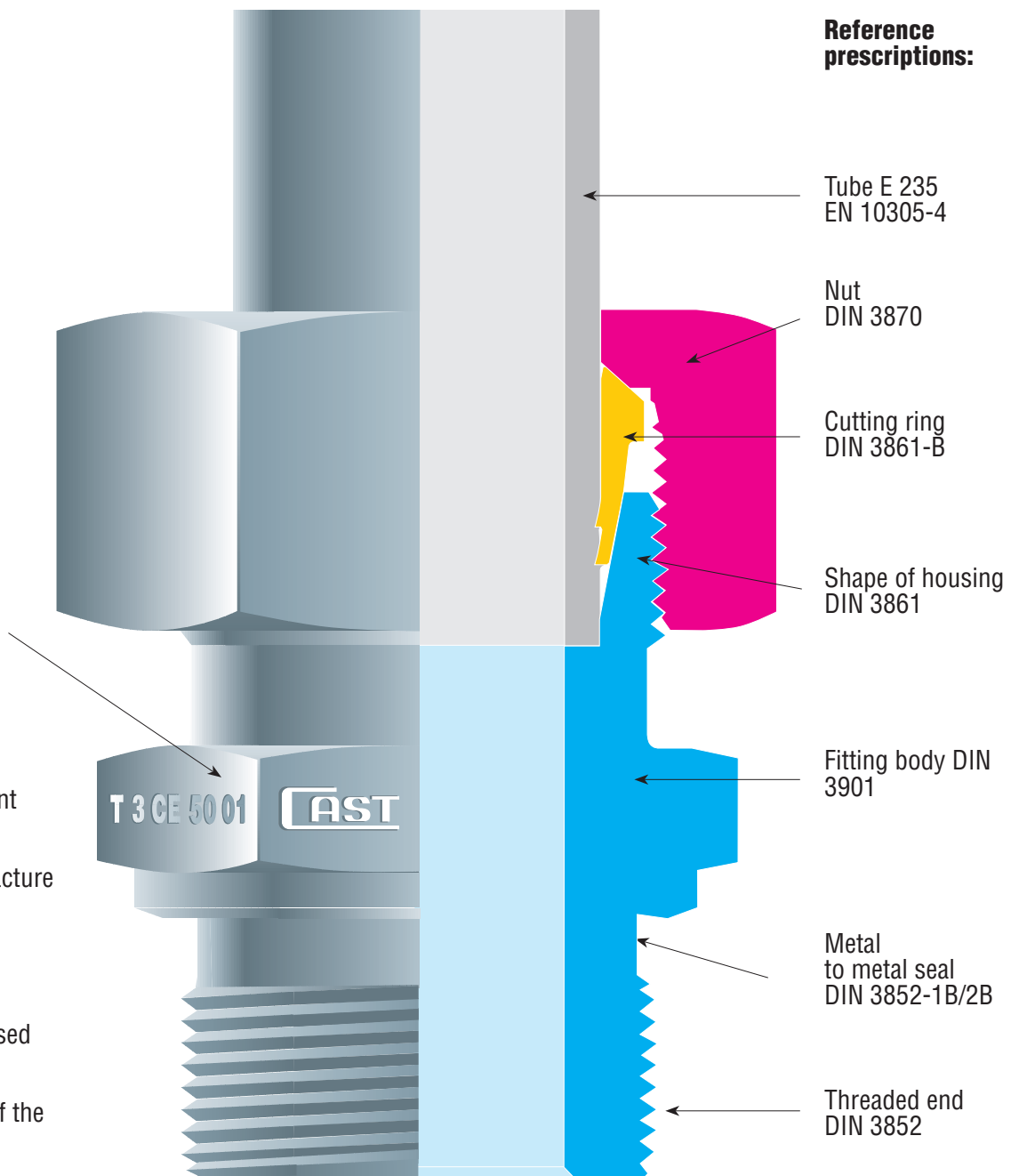
Metal to metal seal
DIN 3852-1B/2B

Threaded end
DIN 3852

Traceability decoding:

CAST =
Logo of the
Manufacturer

- T =
Production plant
- 3 =
Year of manufacture
- CE =
Made in EEC
- 50 =
Type of steel used
- 01 =
Heat number of the
steel used



TECHNICAL CHARACTERISTICS

CAST fittings assure perfect seal regardless of the fluid used, provided that no corrosive fluids are employed and the nominal pressures be respected.

Fittings are manufactured in three ranges to be chosen according to the required working conditions.

The "LL" extra light range, suitable for low and medium working pressures up to 100 bars.

The "L" light duty series for applications characterised by medium high pressures of maximum 500 bars.

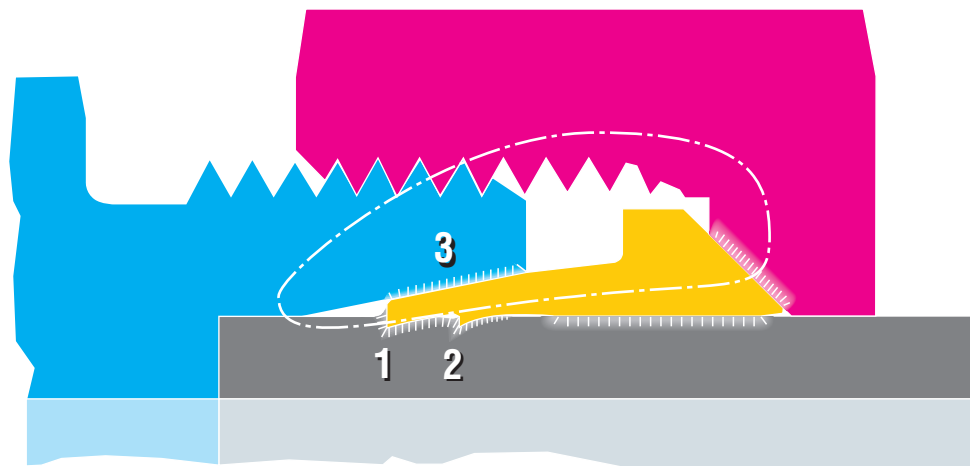
The "S" heavy duty series for harsh applications characterised by high temperatures and a maximum pressure of 800 bars.

Normal vibrations do not alter the fitting's performance, which, even at maximum values, retains its characteristics of absolute reliability.

Before assembly on the metal tube



After assembly on the metal tube



Field of force



Pressure surfaces



Sealing points

1 - 2 - 3



DIN 2353



**NEW SIX-SEALS CUTTING RING.
THE INTERNATIONAL INDUSTRIAL PATENT NR. 864061 OF 10/03/99
COMPLEMENTS AND DOES NOT REPLACE THE STANDARD RING CUR-
RENTLY IN USE.**

AVAILABLE IN CARBON AND STAINLESS STEEL

B4

THEORY OF OPERATION

The Cast fitting, manufactured according to ISO 8434-1/DIN 2353, is a mechanical fitting with a double cutting edge ring for double stapling on the tube.

“B4” is a highly innovative, deformable, double clinching, double edge ring with double elastomer seal.

It is assembled according to well-known techniques and is perfectly interchangeable with all types of rings used on 24° cone fittings complying with ISO 8434-1/DIN 2353 standards.

The ring helps fast assembly of removable tubes, avoids welding, tapping and flaring, thus assuring maximum simplicity for complex oleo-dynamic systems. During tightening by the nut, the ring deforms according to the bore of the 24° cone of the fitting and bites into the steel tube, producing two deep cuts, the first of which is visible due to the lifting of an outer edge on the diameter of the tube, ensuring water tightness and anti-unthreading of the ring. The second groove (invisible) balances the forces on the whole ring, prevents vibrations from reaching the first groove and stops the stapling of the tube at a predetermined value.

COUPLING SYSTEM DIN 2353

Reference prescriptions:

Tube E 235
EN 10305-4

Nut
DIN 3870

O-ring seal

CAST

Cutting ring
DIN 3861-B

Flat washer seal **CAST**

Shape of housing
DIN 3861

Fitting body
DIN 3901

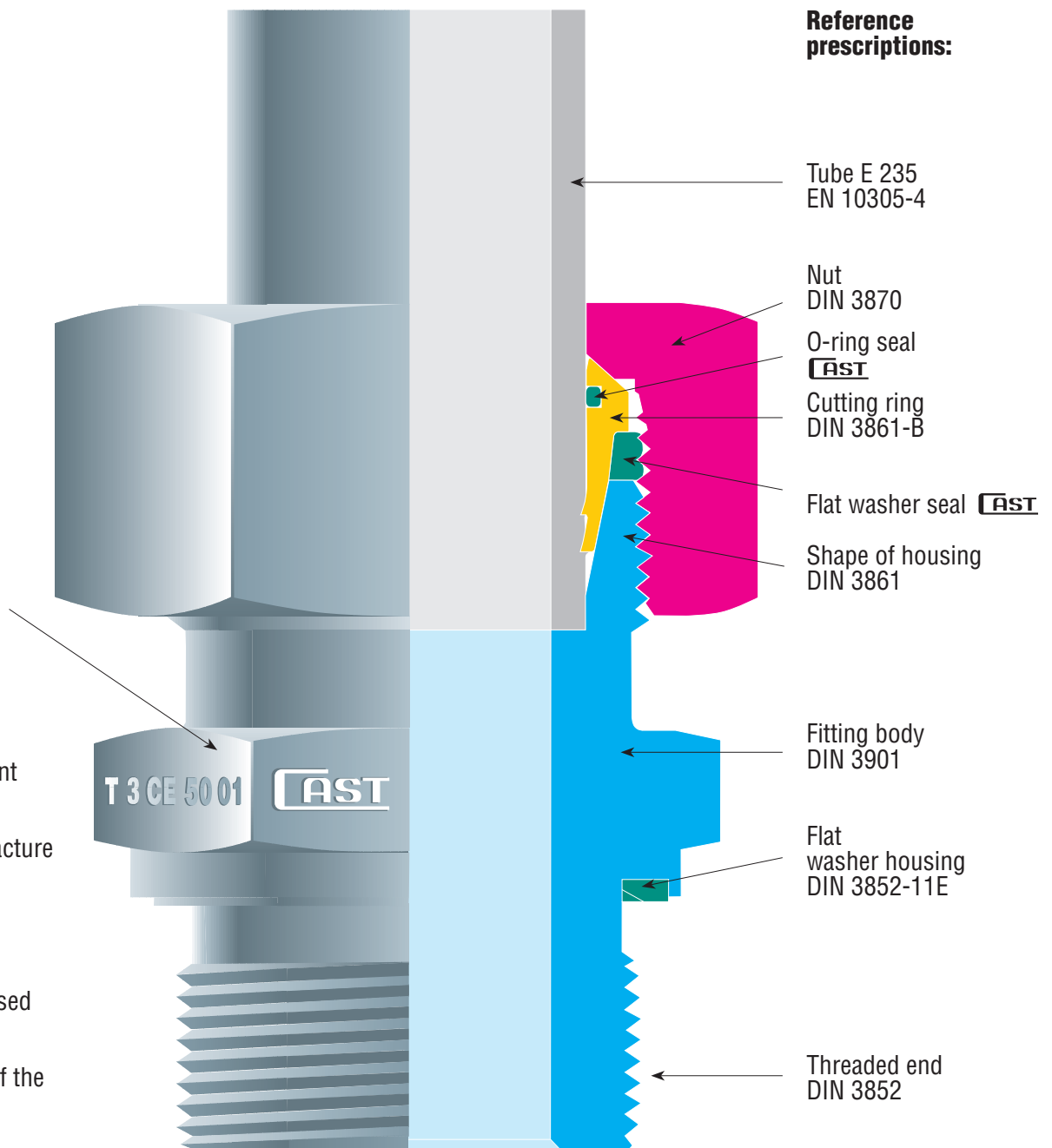
Flat washer housing
DIN 3852-11E

Threaded end
DIN 3852

Traceability decoding:

CAST =
Logo of the
Manufacturer

- T =
Production plant
- 3 =
Year of manufacture
- CE =
Made in EEC
- 50 =
Type of steel used
- 01 =
Heat number of the
steel used



TECHNICAL CHARACTERISTICS

The “B4” ring assures perfect tightness of the circuit regardless of the fluid used, provided that corrosive fluids are avoided and the nominal pressures of the fittings are complied with. The fittings on which the “B4” rings are mounted are manufactured in two series, which are used according to the operating conditions.

The “L” light duty series for applications characterised by medium high pressures of maximum 500 bars.

The “S” heavy duty series for harsh applications characterised by high temperatures and a maximum pressure of 800 bars.

Normal vibrations do not alter the fitting’s performance, which, even at maximum values, retains its characteristics of absolute reliability.

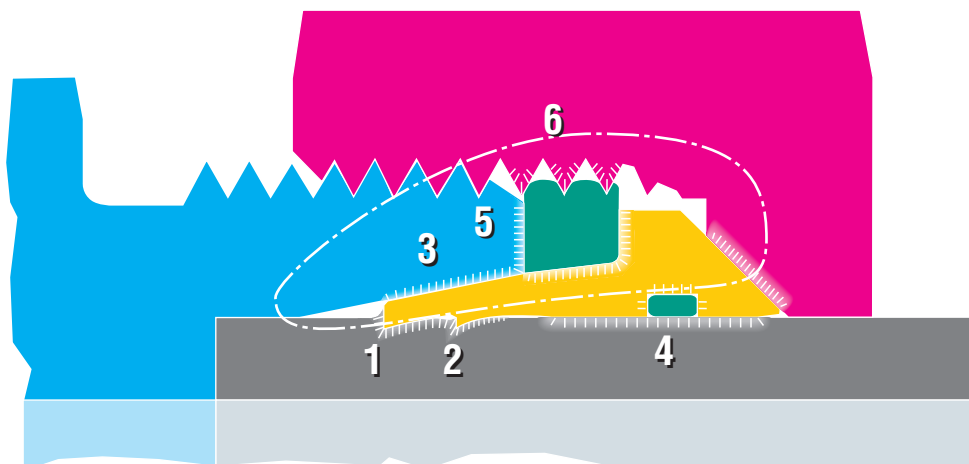
When the fitting, ring, nut, tube system is assembled, the flat seal is compressed between the head of the cutting ring and the front of the fitting body. The mechanical pressure applied to the flat seal causes flexure towards the outside, with a consequent increase in diameter. The deformation causes the compressed material of the seal to fill the turns of the thread of the nut free from the closing coupling with the fitting body, assuring locking of the nut and preventing any vibration-induced loosening of this.

When the fitting is disassembled with the tool and nut, the flat seal goes back to its original shape, without any damage, freeing the nut threads used previously, also allowing for the manual unscrewing of the same nut.

Before assembly on the metal tube



After assembly on the metal tube



Field of force



Pressure surfaces



Sealing points

1 - 2 - 3 - 4 - 5 - 6

TECHNICAL INNOVATION

For many years now there has been an increasing imperative market demand for fluid system components that guarantee three main factors:

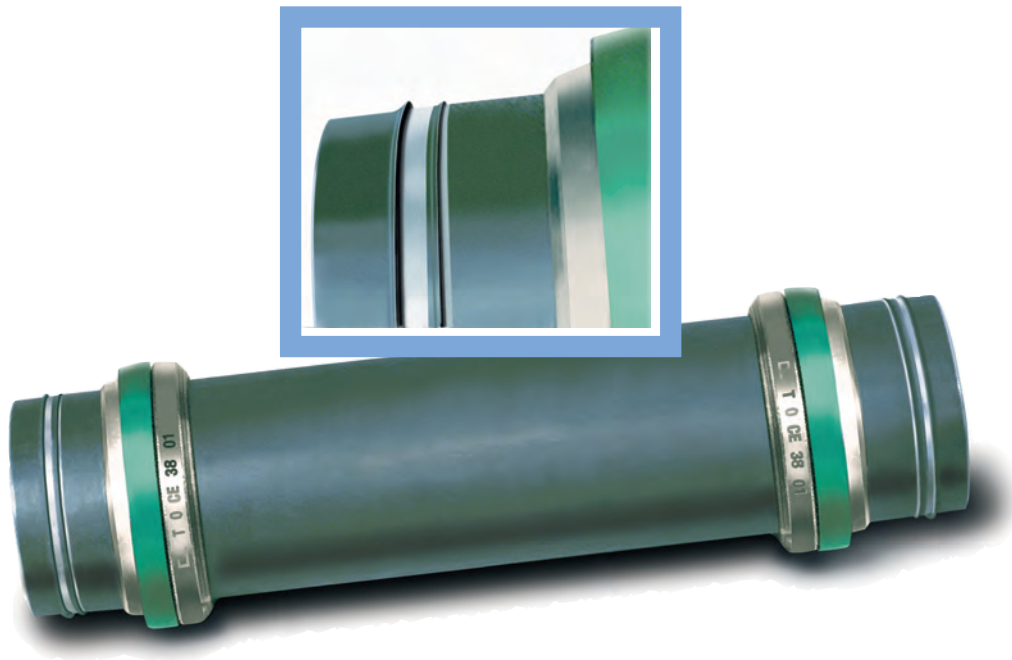
SAFETY, EASY ASSEMBLY, LEAKAGE-FREE TIGHTNESS.

These elements, now considered essential for a safe working environment (Law 626/94), product liability (Presidential Decree 224-EEC 85/374) and for the entire environmental protection system, have promoted the development of the new “B4” ring as an effective response to all the above-mentioned problems.

PRODUCT CONCEPT

The most original aspect of the product is that the structure of the existing ring has been used, inserting an O-Ring in the inside part to obtain another seal on the tube used; a flat seal has been used on the outer diameter to obtain two additional seals.

The main idea behind the development of the “B4” was to design a new cutting ring able to go one step beyond the known techniques and solve the problem of minor losses of tightness, leaks, sweating and loosening of the system fastening nut. With this new ring, the double clinching of the steel tube is still possible, as well as, for obvious reasons of safety, the visual inspection of the correct coupling between the ring and the steel tube, maintaining the perfectly functional current system of assembly that is widely known to product users.



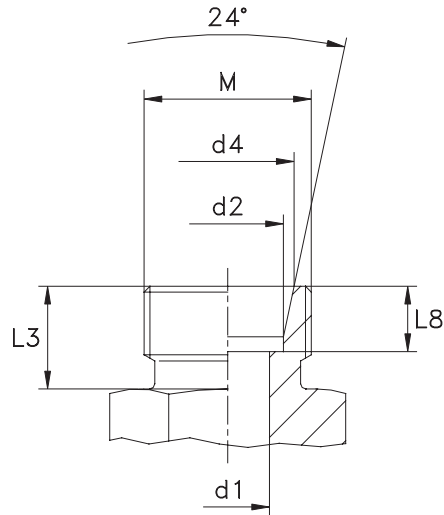
SEALING

B4” solves the problem of absolute tightness in the following way:

- On the outer diameter of the steel tube, with the double cutting edges and with an O-Ring placed inside the ring that provides a first seal with an elastomeric material that did not exist before.
- In the 24° cone of the fitting body, with an increase in the metal-on-metal contact area and with a flat seal placed statically on the outer diameter of the cutting ring which, when compressed between the head of the ring and the front of the fitting body, provides a second seal with an elastomeric material that did not exist before.
- In the thread of the system fastening nut, with the flat seal. When this is compressed between the head of the ring and the front of the fitting body, it fills the threads of the nut that are not engaged in clinching of the coupling system, thus providing a third seal with an elastomeric material that did not exist before.
- Basically, the “B4” provides six points of seal, of which three metal to metal and three by means of two soft elastomeric seals (the flat seal assures two sealing points), thus obtaining a product that ensures complete tightness without any leakage risk, even in particularly harsh operating conditions.

DEFINITION OF CONE SIZE TO DIN 3861 STANDARDS THREAD DIAMETERS TO DIN 3853 STANDARDS

Allowed for B3-B4-BP rings



Series	Bar (DIN 2353)	ØTube	Metric Thread	d1	d2 ^{B11}	d4 ^{+0,1}	L3	L8 ^{+0,3}
LL	100	4	M8x1	3	4	5	8	4
		6	M10x1	4,5	6	7,5	8	5,5
		8	M12x1	6	8	9,5	9	5,5
L	250	6	M12x1,5	4	6	8,1	10	7
		8	M14x1,5	6	8	10,1	10	7
		10	M16x1,5	8	10	12,3	11	7
		12	M18x1,5	10	12	14,3	11	7
		15	M22x1,5	12	15	17,3	12	7
	160	18	M26x1,5	15	18	20,3	12	7,5
		22	M30x2	19	22	24,3	14	7,5
	100	28	M36x2	24	28	30,3	14	7,5
		35	M45x2	30	35	38	16	10,5
42		M52x2	36	42	45	16	11	
S	630	6	M14x1,5	4	6	8,1	12	7
		8	M16x1,5	5	8	10,1	12	7
		10	M18x1,5	7	10	12,3	12	7,5
		12	M20x1,5	8	12	14,3	12	7,5
		14	M22x1,5	10	14	16,3	14	8
	400	16	M24x1,5	12	16	18,3	14	8,5
		20	M30x2	16	20	22,9	16	10,5
		25	M36x2	20	25	27,9	18	12
	250	30	M42x2	25	30	33	20	13,5
		38	M52x2	32	38	41	22	16

GENERAL INSTRUCTIONS FOR B3 - B4 - BP RINGS

- Before starting the preassembly make sure that the pierce of the machine and the hardened blocks are in perfect working order. Further inspections are necessary during the preassembly (every 30-50 tightenings). For this purpose we recommend you to use a control buffer 1000... pierce and replace any block out of tolerance.
- Over the whole tightening phase the tube must be in touch with the inner part of the body of the fitting. If this does not happen, the ring will advance with the tube without indenting it, making the coupling not functional and requiring the operation to be carried out again. The tube must not turn with the nut during the tightening phase; the capability of the ring to rotate, once the pre-assembly is done, is not a deficiency but rather a consequence of the right elasticity of the ring. Always check that the tube is correctly indented. If the indentation does not cover 80% of the cutting ring front side then the assembly is not functional and must be done again. Indicated pressures in the catalogue are for steel tubes only.
- In case thin wall tubes are used, specially mild tubes, or tubes in RILSAN or similar, the assembling is possible, but a suitable reinforcement must be inserted into the end of the tube that is going to be tightened. Without the reinforcement it is not possible to operate with the materials mentioned above. In this case, carefully assess the working pressure.
- Before assembling the preassembled tube to the equipment it is necessary to check that the tube and the fitting are aligned. Fittings should never be used to correct a wrong alignment or to be a support for the tube. Extremely long tubes or tubes undergoing high stress must be fixed by using some support to avoid excessive vibrations. A poor alignment could damage the operation of the system.
- The proper lubrication of the components involved in the tightening is essential for good system operation. We advise the use of mineral oils or torquen tension for carbon steel fittings, consisting of anti-seizing compound (Nickel based), Chesterton or similar, for stainless steel fittings.
- The fittings and the valves in this technical catalogue may be used for fluid-dynamic connections only. Indicated pressures in the catalogue are for steel tubes only.
- Mixing carbon and stainless steel components is not allowed.

UTILISATION STANDARDS FOR B3 - B4 - BP

CARBON STEEL FITTINGS

- High quality tubes must be employed to assure correct use and related technical performance of the carbon steel fitting. The use of tubes without the aforementioned characteristics may seriously impair the efficiency of the fitting. We recommend using the following tubes only: calibrated, seamless, cold drawn and threaded tubes. Normalised with inert gas, made of material E235 according to EN 10305-4 (ST 37.4 according to DIN 1630 I DIN 2391). The maximum hardness allowed on the outside diameter of the tube is 75 HRB.
- All carbon steel tubes with a diameter of more than 10 mm must be pre-assembled using the specific preassembly machine. If this is not available, hardened blocks, to be clamped in vice for manual preassembly, must be used. Remember to oil the thread, nut and ring. If hardened pre-assembly blocks are not available, normal straight fittings can be used. The fitting used once must be replaced at each tightening. During preassembly, pay special attention to parts such as reducing standpipes and nipples as these are made of raw materials characterised by higher resistance compared with the cuts made on annealed tubes. These parts must always be pre-assembled on hardened or 24° cones (for all diameters).

STAINLESS STEEL FITTINGS

- High quality tubes must be employed to assure correct use and related technical performance of stainless steel fittings. The use of tubes without the aforementioned characteristics may seriously impair the efficiency of the fitting. We recommend using the following tubes only: calibrated and polished, cold drawn seamless tubes 1.4571 as per UNI EN 10216-5 or ASTM A 269; the maximum permitted hardness, measured on the outer diameter of the tube, is 85 HRB. Electrically welded tubes may be used, provided that these comply with the mechanical tolerances of the aforementioned standards and related hardness values for fittings compliant with SAE J514, BS 5200, SAE J1453.
- All stainless steel tubes must be pre-assembled using the specific preassembly machine. If this is not available, hardened blocks must be used for manual preassembly. In this case, make sure that the bench and vice in which the block is clamped are firmly fastened to prevent any possibility of movement caused by the twisting moment applied to the nut during the preassembly phase. Assembly or preassembly operations directly on the stainless steel fitting are not allowed.

QUALITY ASSURANCE ACCORDING TO UNI EN ISO 9001:2008

The Quality Assurance System complies with UNI EN ISO 9001:2008, certificate (N.90/94/S) issued by the RINA certification authority recognised by IQNET at European level.

CAST S.p.A. has obtained the product homologation with the following registers:

- Germanischer Lloyd for carbon steel fittings with "B3" standard ring;
- RINA for carbon steel and stainless steel fittings with "B3" standard ring and "B4" patented ring;
- DNV for carbon steel and stainless steel fittings with "B3" standard ring and "B4" patented ring, JIC 37° complying with SAE J514, ORFS complying with SAE J1453 and for fittings for braided flexible tubes of the 80 series. CAST S.p.A. fully complies with the reference standards.

At the customer's request, our Quality Service will issue certificates of origin for the materials used to manufacture the products delivered. E.g.: Document 3.1.

Our Quality Experts are always ready to provide customers with advice, guide them around our facilities and inform them about the traceability system applied on our entire production range.

METROLOGY-TESTING LAB

A metrology lab equipped with state-of-the-art metallography microscopes, profile projectors, durometers, profilometers, micro-durometers, micro-meters, surface plates, comparators, buffers for various series of threads, etc., and a testing lab, equipped with three benches for static and dynamic tests, up to a pressure of 4000 bars, ensure the right tools for research, development, quality and safety control of our production.

Highly trained specialised staff ensure that the technology is always up-to-date and that the knowledge and means are used in the best way possible, in compliance with the company's ethics.

COMPONENT TESTING ON THE ENTIRE PRODUCT RANGE

In addition to the normal dimensional checks carried out during machining, percentage inspections of the finished product, practical tightness and fatigue tests, CAST fittings undergo coupling tests between the various parts. This check is carried out on the entire production. At the customer's request, our Product Test and Inspection Service issues a certificate of the tests carried out: checking of static seal at low and high pressure, dynamic seal at high pressure (maximum working pressure + 33%) as per ISO 19879 and ISO 6803. If required by the customer, tests can be carried out by various Third Party Authorities including: RINA-DVGW-Lloyd's Register of Shipping-Det Norske Veritas-Germanischer Lloyd-American Bureau of Shipping (to be specified on the order).

SAFETY FACTORS

"B3", "B4" and "BP" rings provide the right answer to safety problems so that absolute functional reliability between the ring, the steel tube and the fitting body is guaranteed by the double clinching and automatic locking of the cuts on the steel tube (assured by the particular shape of the ring). If on one side we increase the safe fastening, on the other we set a precise mechanical limit at the cutting of the tube, with the certainty of correct function.

- The nominal working pressures (bar) given in the catalogue indicate the maximum permissible pressures (including pressure peaks). For higher pressure the items must be tested in accordance with the manufacturer for specific applications.
- The safety factor is 4:1 and is intended with static load and with the temperature at the values indicated in the CAST S.p.A. Catalogue (series DI N, JIC, BS and ORFS) for tube connection. The same safety factor 4:1 is intended for parallel threaded end fittings with elastomeric seal.
- For stud couplings with taper or parallel threaded end fittings with metal to metal seal, the safety factor is 2.5:1.
- It is understood that the product is guaranteed only if the full connection is made entirely with our products and components.



*Destructive testing with 28x3 carbon steel tube.
The tube burst at 1050 bars without any leakage or sweating from the sealing points.*

GENERAL INFORMATION

• STEEL USED ON ALL SERIES

With a view to R&D and continuous improvement, our company has examined the issues of best usage of the raw material for the creation of our product. The steels used are all of the finest quality and are exclusively purchased from leading European steel works. All the batches used have testing documentation 3.1 reporting the number of heat as well as the chemical characteristics and mechanical characteristics. The above applies to carbon steel and stainless steel. The reference standards for the raw material normally used before are in line with the following principles: UNI EN 10087, UNI EN 10083-2, UNI EN 10025, UNI EN 10088-3 and so on.

• ALLOWED STEEL TEMPERATURES

Carbon Steel -40°C to + 120°C, according to ISO 8434
Stainless steel -60°C to + 200°C, according to ISO 8434

• PRESSURE REDUCTIONS

The allowed working pressure for stainless steel fittings manufactured with 1.4571 must be reduced according to the working temperature registered as per ISO 8434.
In case of multi-components systems all the parameters must be calculated on the weakest component used.

Type of steel	Working temperature	Lowering percentage
1.4571	≥ 50°C	- 4%
1.4571	≥ 100°C	- 11%
1.4571	≥ 200°C	- 20%

• GASKETS AND O-RINGS

The gaskets and o-rings used on valves and fittings are normally manufactured in NBR and have a working temperature of -35°C and +100°C. For higher temperatures VITON® gaskets and o-rings are suggested with working temperatures between -25°C and +200°C.

The gaskets made of NBR used in the valves and for the end seals have a hardness of 85±5 shores, while those in VITON® have a hardness of 80±5 shores.

The o-rings made of NBR and VITON® have a hardness of 80±5 shores, except for those used on the tube side seal of the ORFS fittings, which have a hardness of 90±5 shores.

The gaskets and o-rings, just like the products they are assembled on, must be managed according to DIN 7716 (requisites for the stocking of rubber and India rubber products).

• SEALS ON THREADED ENDS

To obtain the maximum performance, the taper male thread is to be matched with the taper female thread. The cylindrical male thread is to be matched with the cylindrical female thread. It is possible to match a taper male thread with a cylindrical female thread, but this combination is technically valid only in pipings where medium/low performance is required, and is never to be used where high pressures are applied. In case of matching of a cylindrical thread with relatively soft material, it is advisable to use the plain gasket type of seal that guarantees a perfect seal even with a relatively low tightening torque.

• CARBON STEEL FITTINGS FINISH TREATMENT

All Cast S.p.A. fittings, valves and components undergo surface treatment protection of the type: Zinc plating Fe/Zn 7 IV-Fe/Zn8 b/c 1 B UNI ISO 2081-4520, plus top coat, equivalent to a Cathodic electrolytic zinc-plating with trivalent chromium. The fitting acts as a cathode (negative), the zinc which is deposited acts as an anode (positive), the deposited thickness is around 8÷12 µm. To be able to reach the resistance of 400 hours ±15% to white salt and 750 hours ±15% to red salt, (control criteria as for ISO 10289 and internal Cast procedure), a top coat is applied which, in addition to guaranteeing the required performance, facilitates assembly.

The top coat has the task of filling all the micro cavities in the zinc-plating treatment, which represent an initial part of the corrosion outbreaks. By sealing these micro defects, the zinc-plating treatment significantly improves its protective performance to the values indicated previously.

The resistance to corrosion of this new type of zinc-plating notably increases compared to the previous one. The appearance has a silver iridescent colour.

It complies with current European environmental laws on hazardous waste and with the European EVL standard as it uses trivalent chromium (CrIII), in compliance with local laws protecting the health of people and the precautionary principle of protecting our environment.

The zinc-plating will be identified by reading the traceability codes of the year of production, starting from 2013. The new zinc-plating applies from this date onwards.

• STAINLESS STEEL FITTINGS FINISH TREATMENT

All the fittings and valves are treated with a chemical cleaning process that eliminates all oxides and burrs due to the machining phase, without altering or damaging the product. After this, a bath cleans the product and takes away any residual impurities. The piece at the end of the treatment looks really bright, perfect for oleo-dynamic industrial applications.

• THERMAL TREATMENTS FOR STAINLESS STEEL RINGS

After being machined, the rings are heat treated to harden the surface. This type of treatment, on stainless steel cutting rings, may decrease the amagneticity of the ring itself. A slight amagneticity is therefore inevitable and does not indicate a defect.

• ANTI-POLLUTION TREATMENT

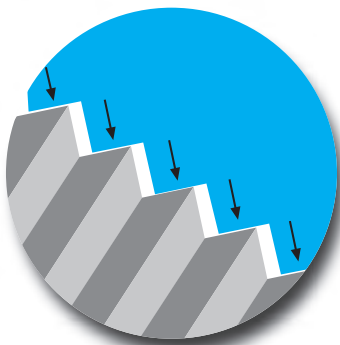
• CAST S.p.A, with a view to “Continuous Improvement”, has implemented an operating system to avoid contamination from dust or working residues occurring inside its production facilities, which may in some way jeopardise the function of the component and damage the actuators (valves, cylinder, etc) from the entire circuit.

• In short, all of CAST S.p.A.’s fittings, after various checks and treatments during the entire production cycle, undergo a last process/check to cancel the micro bubbles on the threads, insert any o-Rings or gaskets, clean dust, burrs or processing dross and cap the component to maintain the result obtained with these operations until the use.

• The reference standards that CAST S.p.A. uses to check the level of cleanliness of its pipe fittings are the following: ISO 16232-3 and ISO 16323-1 O.

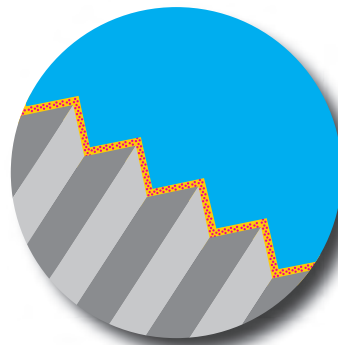
• For flexible hoses and rigid steel tubes, flushing is advised before installation or system execution.

• LUBRICATION OF THE STAINLESS STEEL THREADS



STAINLESS STEEL FITTINGS

- The special characteristics of this type of steel (hard but mild) require special attention to be paid to avoid problems.
- One of these requirements is the correct lubrication of all the components to be done during pre-assembling and assembling.
- Therefore, always use the right lubricant to create functional and safe systems to be able to assemble and dismantle the system without effort, seizures and at an affordable price.



ANTI-SEIZING COMPOUND (NICKEL BASIS)

- The anti-seizing compound (Nickel Basis) exposed to a strong pressure originates “millions of grains of Nickel” rolling between the surfaces.
- It allows a safer tightening and an easier unblocking. This compound may be used both indoors and outdoors.
- It protects the threads from wearing out and breaking, keeps away rust and corrosion.
- Nickel covers the connected surfaces avoiding any founding or welding and moreover there is only pure colloidal nickel and no trace of carbonic deposits.
- Compliant with specification Mi I. 907 D.
- Approved by the Ministry of Agriculture of the United States of America (USAD).
- Packaging weight 227 gr. Art. 82356. N.B.:
- Do not use on systems with oxygen or in the presence of ammonia or acetylene.



• CARBON STEEL TUBES ALLOWED ON ALL SERIES

- For carbon steel tubes we advise using calibrated seamless cold drawn tubes, normalised with inert gas, in E235 material according to EN 10305-4 (ST 37.4 according to DIN 1630 I DIN 2391).
- Maximum allowed hardness on the outside diameter of the tube is 75HRB.
- The pressures stated in the table below are generally intended at a constant rate and with temperatures ranging between -40°C and + 120°C.

ØTube mm	Tolerance EN 10305-4 mm	Thickness mm	Static DIN 2413-I pressure bar	Dynamic DIN 2413-III pressure bar	Weight Kg/m
4	±0,1	0,5	313	274	0,047
4		1	522	502	0,075
6	±0,1	1	389	374	0,123
6		1,5	549	528	0,166
6		2	692	665	0,197
8	±0,1	1	333	289	0,222
8		1,5	431	441	0,240
8		2	549	528	0,296
8		2,5	658	632	0,339
10	±0,1	1	282	249	0,222
10		1,5	373	358	0,314
10		2	478	460	0,395
10		2,5	576	553	0,462
10		3	666	641	0,518
12	±0,08	1 ⁽¹⁾	235	210	0,271
12		1,5	353	305	0,388
12		2	409	393	0,493
12		2,5	495	476	0,586
12		3	576	553	0,666
12		3,5	651	627	0,734
14	±0,08	1,5	302	265	0,462
14		2	403	343	0,592
14		2,5	434	417	0,709
14		3	507	487	0,814
14		3,5	576	553	0,906
15	±0,08	1,5	282	249	0,499
15		2	376	323	0,641
15		2,5 ⁽³⁾	409	393	0,771
15		3	478	460	0,888
16	±0,08	1 ⁽³⁾	176	161	0,370
16		1,5 ⁽²⁻³⁾	264	234	0,536
16		2	353	305	0,691
16		2,5	386	372	0,832
16		3	452	435	0,962
18		±0,08	1 ⁽³⁾	157	143
18	1,5 ⁽¹⁾		235	210	0,610
18	2		313	274	0,789
18	2,5		392	335	0,956
18	3		409	393	1,111
18	4 ⁽³⁾		522	502	1,381

ØTube mm	Tolerance EN 10305-4 mm	Thickness mm	Static DIN 2413-I pressure bar	Dynamic DIN 2413-III pressure bar	Weight Kg/m
20	±0,08	2 ⁽²⁻³⁾	282	249	0,888
20		2,5	353	305	1,079
20		3	373	358	1,258
20		3,5	426	410	1,424
20		4	478	460	1,578
22	±0,08	1,5 ⁽³⁾	192	174	0,758
22		2 ⁽¹⁾	256	228	0,986
22		2,5	320	280	1,202
22		3	385	329	1,406
22		4 ⁽³⁾	441	424	1,766
22		5 ⁽³⁾	532	512	2,367
25	±0,08	2 ⁽¹⁾	226	202	1,134
25		2,5	282	249	1,387
25		3	338	294	1,628
25		4	394	379	2,072
25		4,5	437	420	2,275
25		5 ⁽³⁾	478	460	2,466
28	±0,08	2 ⁽¹⁾	201	182	1,282
28		2,5	252	224	1,572
28		3	302	265	1,850
28		4 ⁽³⁾	403	343	2,368
28		5 ⁽³⁾	434	417	2,836
30	±0,08	2 ⁽²⁻³⁾	168	171	1,381
30		2,5	235	210	1,695
30		3	282	249	1,998
30		4	376	323	2,565
30		5 ⁽³⁾	409	393	3,083
32	±0,15	3 ⁽³⁾	265	235	2,146
32		4 ⁽³⁾	353	305	2,762
32		5 ⁽³⁾	387	372	3,329
35	±0,15	2 ⁽¹⁾	161	147	2,189
35		2,5	201	182	2,004
35		3	242	216	2,367
35		4	322	281	3,058
38		±0,15	3 ⁽²⁻³⁾	223	200
38	4		297	261	3,354
38	5		371	319	4,069
42	±0,2 ⁽⁴⁾	3	201	182	2,885
42		4	269	238	3,749

(1) Tubes that require a support sleeve if used for DIN 2353 applications only

(2) Tubes to be used for 37° fittings compliant with ISO 8434-2/SAE J514

(3) Tubes to be used for ORFS fittings compliant with ISO 8434-3/SAE J1453

(4) Due to a technical choice, CAST S.p.A. builds the 042 tube housing with a tolerance of 811.

CALCULATION PRESSURES

The calculation of the pressure with static load is made to DIN 2413-1 with yield point K= 235N/mm².

For tubes with an external/internal diameter ratio >1.35, calculation is made to DIN 2413-III but with yield point K= 235N/mm².

The calculation of the pressure with dynamic stress is made to DIN 2413-III with permanent fatigue strength K= 226N/mm².

Safety factor S= 1.5

Allowance factor c= 0.8 for 4mm Ø tube, c= 0.85 for 6-8mm Ø tube, c= 0.9 for >8mm Ø tube

Corrosion: no additional allowance is considered for pressure calculations.

• STAINLESS STEEL TUBES ALLOWED ON ALL SERIES

- For stainless steel tubes we advise using calibrated and polished, seamless, cold drawn tubes in material 1.4571 as per UNI EN 10216-5 or ASTM
- Maximum allowed duration on the outside diameter of the tube is 85 HRB.
- The pressures stated in the table below are generally intended at a constant rate and with temperatures ranging between -60°C and + 200°C.

ØTube mm	Tolerance EN 10305-4 mm	Thickness mm	Static DIN 2413-I pressure bar	Weight Kg/m	
4	±0,1	0,5	326	0,048	
4		1	544	0,076	
6	±0,1	1	406	0,125	
6		1,5	572	0,169	
6		2	721	0,200	
8	±0,1	1	347	0,225	
8		1,5	449	0,244	
8		2	572	0,301	
8		2,5	686	0,344	
10	±0,1	1	294	0,225	
10		1,5	389	0,319	
10		2	498	0,401	
10		2,5	601	0,469	
10	±0,1	3	694	0,526	
12		±0,08	1 ⁽¹⁾	245	0,275
12			1,5	368	0,394
12	2		426	0,500	
12	2,5		516	0,595	
12	3		601	0,676	
12	±0,08	3,5	679	0,745	
14		±0,08	1,5	315	0,469
14			2	420	0,601
14	2,5		452	0,720	
14	3		529	0,826	
14	±0,08	3,5	601	0,920	
15		±0,08	1,5	294	0,507
15			2	392	0,651
15	2,5 ⁽³⁾		426	0,782	
15	3		498	0,902	
16	±0,08	1 ⁽³⁾	183	0,373	
16		1,5 ⁽²⁻³⁾	275	0,544	
16		2	368	0,702	
16		2,5	402	0,845	
16	±0,08	3	471	0,977	
18		±0,08	1 ⁽³⁾	163	0,423
18			1,5 ⁽¹⁾	245	0,619
18	2		326	0,801	
18	2,5		409	0,971	
18	3		426	1,128	
18	±0,08	4 ⁽³⁾	544	1,401	

ØTube mm	Tolerance EN 10305-4 mm	Thickness mm	Static DIN 2413-I pressure bar	Weight Kg/m	
20	±0,08	2 ⁽²⁻³⁾	294	0,902	
20		2,5	368	1,095	
20		3	389	1,277	
20		3,5	444	1,446	
20	±0,08	4	498	1,602	
22		±0,08	1,5 ⁽³⁾	200	0,764
22			2 ⁽¹⁾	267	1,001
22	2,5		334	1,220	
22	3		401	1,427	
22	4 ⁽³⁾		459	1,802	
22	±0,08	5 ⁽³⁾	555	2,402	
25		±0,08	2 ⁽¹⁾	236	1,151
25			2,5	294	1,408
25			3	352	1,653
25	4		411	2,104	
25	4,5		456	2,310	
25	±0,08	5 ⁽³⁾	498	2,490	
28		±0,08	2 ⁽¹⁾	210	1,301
28			2,5	263	1,596
28	3		315	1,878	
28	4 ⁽³⁾		420	2,403	
28	5 ⁽³⁾		452	2,878	
30	±0,08	2 ⁽²⁻³⁾	175	1,402	
30		2,5	245	1,721	
30		3	294	2,028	
30		4	392	2,604	
30	±0,08	5 ⁽³⁾	426	3,110	
32		±0,15	3 ⁽³⁾	275	2,177
32			4 ⁽³⁾	368	2,803
32	5 ⁽³⁾		403	3,378	
35	±0,15	2 ⁽¹⁾	168	2,222	
35		2,5	210	2,034	
35		3	252	2,403	
35		4	336	3,104	
38	±0,15	3 ⁽²⁻³⁾	232	2,628	
38		4	310	3,405	
38		5	387	4,131	
42	±0,2 ⁽⁴⁾	3	210	2,929	
42		4	280	3,806	

- (1) Tubes that require a support sleeve if used for DIN 2353 applications only
(2) Tubes to be used for 37° fittings compliant with ISO 8434-2/SAE J514
(3) Tubes to be used for ORFS fittings compliant with ISO 8434-3/SAE J453
(4) Due to a technical choice, CAST S.p.A. builds the O42 tube housing with a tolerance of 811.

CALCULATION PRESSURES

The calculation of the pressure with static load is made to DIN 2413-1 with yield point K= 245N/mm².

For tubes with an external/internal diameter ratio >1.35 calculation is made to DIN 2413-111 but with yield point K= 245N/mm².

Pressures with dynamic stress according to DIN 2413-111 are not listed because in EN 10216-5 the permanent fatigue stress K is also not listed. We recommend, for calculation in accordance to DIN 2413-111, to assume a value K= 190N/mm².

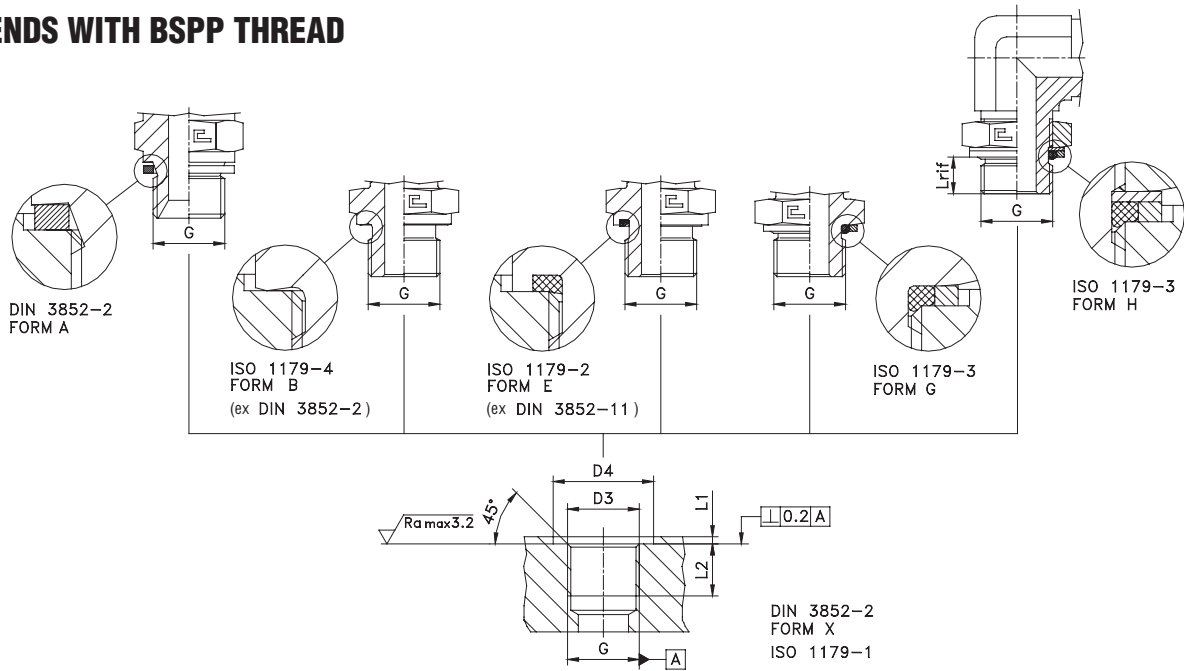
Safety factor S= 1.5

Allowance factor c= 0.9

Corrosion: no additional allowance is considered for pressure calculations.

- The insufficient thickness of the tube walls, or the too low longitudinal resistance of the tubes (particularly mild soft steel) may result in problems with the cutting, with relevant loss of seal and a drastic decrease in the safety factor. This aspect must be considered when choosing the tube. It is a good rule to pick tubes that make it so that the internal flare (decreasing of the internal diameter) does not exceed 3/10 of a millimetre up to an outer diameter of 16mm and 4/10 of a millimetre for greater diameters.

STUD ENDS WITH BSPP THREAD



Series	Ø Tube	Thread Gas	D3	D4 min			L1 max	L2 min	L ref	Torque [Nm] ^{+10%}						
				form A/B/E	form G/H	form A				form B	form E	form E (caps 1076..)	form G	form G (caps 1078..)	form H	
DIN	L	6	G 1/8	9,8	15	17,2	1	8	7,5	-	20	20	10	20	10	20
		8-10	G 1/4	13,2	20	20,7	1,5	12	10,2	-	45	45	25	45	25	45
		12	G 3/8	16,7	23	24,5	2	12	10,4	-	70	70	40	70	40	70
		15-18	G 1/2	21	28	29,6	2,5	14	13,1	-	130	85	75	85	75	85
		22	G 3/4	26,5	33	36,9	2,5	16	13,5	-	170	170	120	170	120	170
		28	G 1	33,3	41	46,1	2,5	18	14,7	-	330	330	230	330	230	330
		35	G 1 1/4	42	51	54	2,5	20	14,7	-	510	430	300	430	300	430
	42	G 1 1/2	47,9	56	60,5	2,5	22	14,7	-	600	510	360	510	360	510	
	S	6-8	G 1/4	13,2	20	20,7	1,5	12	10,2	-	55	55	25	55	25	55
		10-12	G 3/8	16,7	23	24,5	2	12	10,4	-	85	80	40	80	40	80
		14-16	G 1/2	21	28	29,6	2,5	14	13,1	-	150	110	75	110	75	110
		20	G 3/4	26,5	33	36,9	2,5	16	13,5	-	280	170	120	170	120	170
		25	G 1	33,3	41	46,1	2,5	18	14,7	-	330	330	230	330	230	330
		30	G 1 1/4	42	51	54	2,5	20	14,7	-	510	430	300	430	300	430
38		G 1 1/2	47,9	56	60,5	2,5	22	14,7	-	680	510	360	510	360	510	
JIC 37° - BS 5200	6	G 1/8	9,8	15	17,2	1	8	7,5	20	-	20	-	20	-	20	
	8-10	G 1/4	13,2	20	20,7	1,5	12	10,2	35	-	45	-	45	-	45	
	12	G 3/8	16,7	23	24,5	2	12	10,4	70	-	70	-	70	-	70	
	14-15-16	G 1/2	21	28	29,6	2,5	14	13,1	85	-	85	-	85	-	85	
	-	G 5/8	23	31	-	2,5	16	-	105	-	-	-	-	-	-	
	18-20	G 3/4	26,5	33	36,9	2,5	16	13,5	120	-	170	-	170	-	170	
	25	G 1	33,3	41	46,1	2,5	18	14,7	180	-	330	-	330	-	330	
	30-32	G 1 1/4	42	51	54	2,5	20	14,7	260	-	430	-	430	-	430	
38	G 1 1/2	47,9	56	60,5	2,5	22	14,7	290	-	510	-	510	-	510		
-	G 2	59,7	69	73,3	3	24	-	380	-	640	-	640	-	640		
ORFS	6	G 1/8	9,8	15	17,2	1	8	7,5	-	-	20	-	20	-	20	
	8-10	G 1/4	13,2	20	20,7	1,5	12	10,2	-	-	55	-	55	-	55	
	12	G 3/8	16,7	23	24,5	2	12	10,4	-	-	80	-	80	-	80	
	14-15-16	G 1/2	21	28	29,6	2,5	14	13,1	-	-	110	-	110	-	110	
	18-20	G 3/4	26,5	33	36,9	2,5	16	13,5	-	-	170	-	170	-	170	
	22-25	G 1	33,3	41	46,1	2,5	18	14,7	-	-	330	-	330	-	330	
	28-30-32	G 1 1/4	42	51	54	2,5	20	14,7	-	-	430	-	430	-	430	
	35-38	G 1 1/2	47,9	56	60,5	2,5	22	14,7	-	-	510	-	510	-	510	

Performance:

-pressure capacity
 -sealing characteristics
 -additional sealing required
 -safety factor

Sealing form A

good
 good
 no
 2,5:1

Sealing form B:

good
 good
 no
 2,5:1

Sealing form E:

excellent
 excellent
 no
 4:1

Sealing form G:

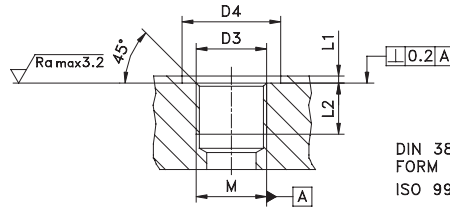
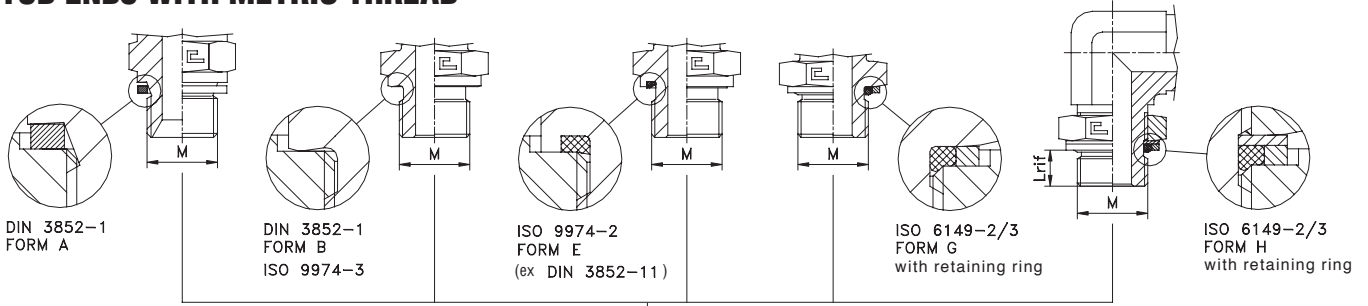
excellent
 excellent
 no
 4:1

Sealing form H:

excellent
 excellent
 no
 4:1

Notes: The values in the tightening tables are approximate and derive from practical tests run at the laboratory in Casalgrasso (CN), which may vary based on the materials and tolerances of the components used.

STUD ENDS WITH METRIC THREAD



DIN 3852-1
FORM X
ISO 9974-1

Series	Ø Tube	Thread Gas	D3	D4 min		L1 max	L2 min	L ref	Torque [Nm] ^{+10%} / ₀							
				form A/B/E	form G/H				form A	form B	form E	form E (caps 1076..)	form G	form G (caps 1078..)	form H	
DIN	L	6	M10x1	10	15	16	1	8	7,6	-	20	20	10	20	10	20
		8	M12x1,5	12	18	19	1,5	12	9,7	-	30	30	20	30	20	30
		10	M14x1,5	14	20	21	1,5	12	9,7	-	45	45	35	50	35	50
		12	M16x1,5	16	23	24	1,5	12	10,2	-	60	55	40	55	40	55
		15	M18x1,5	18	25	26	2	12	10,9	-	80	70	45	70	45	70
		18	M22x1,5	22	28	29	2,5	14	12	-	130	120	90	120	90	120
		22	M26x1,5	26	33	-	2,5	16	-	-	180	170	120	-	120	-
		22	M27x2	27	33	35	2,5	16	13,8	-	-	-	120	170	120	170
		28	M33x2	33	41	43	2,5	18	13,8	-	330	330	230	330	230	330
	35	M42x2	42	51	52	2,5	20	13,8	-	470	430	300	430	300	430	
	42	M48x2	48	56	57	2,5	22	15,3	-	600	510	360	510	360	510	
	S	6	M12x1,5	12	18	19	1,5	12	9,7	-	40	40	20	40	20	40
		8	M14x1,5	14	20	21	1,5	12	9,7	-	55	55	35	55	35	55
		10	M16x1,5	16	23	24	1,5	12	10,2	-	80	70	40	70	40	70
		12	M18x1,5	18	25	26	2	12	10,9	-	105	85	45	85	45	85
		14	M20x1,5	20	27	28	2	14	12	-	150	120	85	120	85	120
		16	M22x1,5	22	28	29	2,5	14	12	-	170	130	90	130	90	130
		20	M27x2	27	33	35	2,5	16	13,8	-	200	170	120	170	120	170
25		M33x2	33	41	43	2,5	18	13,8	-	390	330	230	330	230	330	
30		M42x2	42	51	52	2,5	20	13,8	-	510	430	300	430	300	430	
38	M48x2	48	56	57	2,5	22	15,3	-	680	510	360	510	360	510		
JIC 37° - BS 5200	6	M10x1	10	15	16	1	8	7,6	20	-	20	-	20	-	20	
	8	M12x1,5	12	18	19	1,5	12	9,7	30	-	30	-	30	-	30	
	10	M14x1,5	14	20	21	1,5	12	9,7	45	-	45	-	45	-	45	
	12	M16x1,5	16	23	24	1,5	12	10,2	60	-	55	-	55	-	55	
	14-15-16	M18x1,5	18	25	26	2	12	10,9	80	-	70	-	70	-	70	
	14-15-16	M20x1,5	20	27	28	2	14	12	105	-	105	-	105	-	105	
	14-15-16	M22x1,5	22	28	29	2,5	14	12	130	-	120	-	120	-	120	
	-	M26x1,5	26	33	-	2,5	16	-	160	-	-	-	-	-	-	
	18-20	M27x2	27	33	35	2,5	16	13,8	-	-	170	-	170	-	170	
	-	M30x1,5	30	37	-	2,5	-	-	190	-	-	-	-	-	-	
	22-25	M33x2	33	41	43	2,5	18	13,8	-	-	330	-	330	-	330	
	-	M38x1,5	38	45	-	2,5	-	-	230	-	-	-	-	-	-	
28-30-32	M42x2	42	51	52	2,5	20	13,8	-	-	430	-	430	-	430		
-	M45x1,5	45	53	-	2,5	-	-	280	-	-	-	-	-	-		
35-38	M48x2	48	56	57	2,5	22	15,3	-	-	510	-	510	-	510		
ORFS	6	M10x1	10	15	16	1	8	8,6	-	-	20	-	20	-	20	
	8-10	M12x1,5	12	18	19	1,5	12	9,7	-	-	40	-	40	-	40	
	8-10	M14x1,5	14	20	21	1,5	12	9,7	-	-	55	-	55	-	55	
	12	M16x1,5	16	23	24	1,5	12	11,2	-	-	70	-	70	-	70	
	14-15-16	M18x1,5	18	25	26	2	12	12,4	-	-	85	-	85	-	85	
	14-15-16	M22x1,5	22	28	29	2,5	14	14	-	-	130	-	130	-	130	
	18-20	M27x2	27	33	35	2,5	16	16,3	-	-	170	-	170	-	170	
	22-25	M33x2	33	41	43	2,5	18	16,3	-	-	330	-	330	-	330	
	28-30-32	M42x2	42	51	52	2,5	20	16,8	-	-	430	-	430	-	430	
	35-38	M48x2	48	56	57	2,5	22	19,3	-	-	510	-	510	-	510	

Performance:

-pressure capacity
-sealing characteristics
-additional sealing required
-safety factor

Sealing form A

good
good
no
2,5:1

Sealing form B:

good
good
no
2,5:1

Sealing form E:

excellent
excellent
no
4:1

Sealing form G:

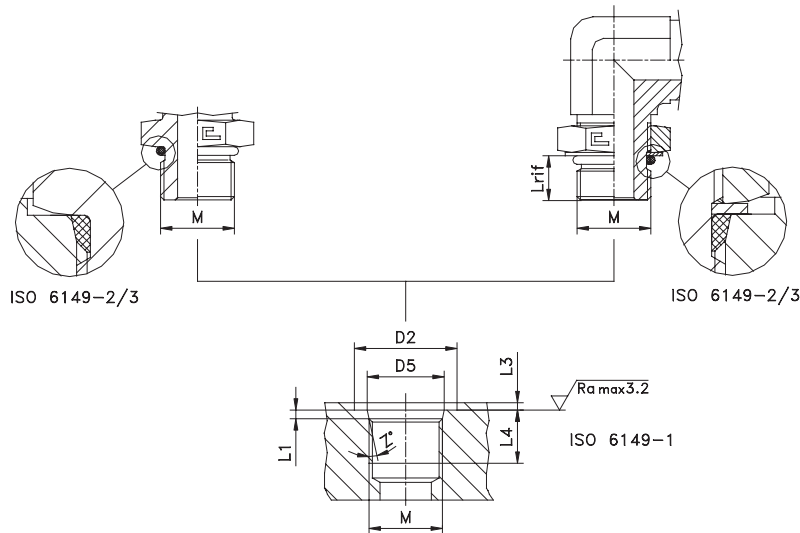
excellent
excellent
no
4:1

Sealing form H:

excellent
excellent
no
4:1

Notes: The values in the tightening tables are approximate and derive from practical tests run at the laboratory in Casalgrasso (CN), which may vary based on the materials and tolerances of the components used.

STUD ENDS WITH METRIC THREAD (ISO 6149)



Series	Maximum working pressure (bar)		Ø Tube	Metric Thread	D2 min	D5	L1	L3 max	L4 min	L rif	Z°	Torque [Nm] ^{+10%} ₀		
	ISO 6149 STRAIGHT	ISO 6149 SWIVEL										ISO 6149 STRAIGHT	ISO 6149 SWIVEL	
DIN	L	315	315	6	M10x1	16	11.1	1.6	1	10	8.6	12	15	15
		315	315	8	M12x1.5	19	13.8	2.4	1.5	11.5	11.1	15	25	25
		315	315	10	M14x1.5	21	15.8	2.4	1.5	11.5	11.1	15	30	30
		315	250	12	M16x1.5	24	17.8	2.4	1.5	13	11.6	15	35	35
		315	250	15	M18x1.5	26	19.8	2.4	2	14.5	12.3	15	40	40
		315	250	18	M22x1.5	29	23.8	2.4	2	15.5	13.4	15	55	55
		160	160	22	M27x2	34	29.4	3.1	2	19	15.8	15	85	85
		160	160	28	M33x2	43	35.4	3.1	2.5	19	15.8	15	140	140
		160	160	35	M42x2	52	44.4	3.1	2.5	19.5	15.8	15	180	180
	160	160	42	M48x2	57	50.4	3.1	2.5	22	17.3	15	230	230	
	S	630	400	6	M12x1.5	19	13.8	2.4	1.5	11.5	11.1	15	30	30
		630	400	8	M14x1.5	21	15.8	2.4	1.5	11.5	11.1	15	40	40
		630	400	10	M16x1.5	24	17.8	2.4	1.5	13	11.6	15	50	50
		630	400	12	M18x1.5	26	19.8	2.4	2	14.5	12.3	15	60	60
		400	400	14	M20x1.5	27	21.8	2.4	2	14.5	13.4	15	70	70
		400	400	16	M22x1.5	29	23.8	2.4	2	15.5	13.4	15	85	85
		400	400	20	M27x2	34	29.4	3.1	2	19	15.8	15	150	150
		400	315	25	M33x2	43	35.4	3.1	2.5	19	15.8	15	260	260
250		250	30	M42x2	52	44.4	3.1	2.5	19.5	15.8	15	280	280	
250	200	38	M48x2	57	50.4	3.1	2.5	22	17.3	15	360	360		
JIC 37° - BS 5200	400	315	6	M10x1	16	11.1	1.6	1	10	8.6	12	15	15	
	400	315	8-10	M12x1.5	19	13.8	2.4	1.5	11.5	11.1	15	25	25	
	350	315	8-10	M14x1.5	21	15.8	2.4	1.5	11.5	11.1	15	30	30	
	315	250	12	M16x1.5	24	17.8	2.4	1.5	13	11.6	15	35	35	
	315	250	14-15-16	M18x1.5	26	19.8	2.4	2	14.5	12.3	15	40	40	
	315	250	14-15-16	M20x1.5	27	21.8	2.4	2	14.5	13.4	15	50	50	
	315	250	14-15-16	M22x1.5	29	23.8	2.4	2	15.5	13.4	15	55	55	
	200	160	18-20	M27x2	34	29.4	3.1	2	19	15.8	15	85	85	
	200	160	22-25	M33x2	43	35.4	3.1	2.5	19	15.8	15	140	140	
	200	160	28-30-32	M42x2	52	44.4	3.1	2.5	19.5	15.8	15	180	180	
200	160	35-38	M48x2	57	50.4	3.1	2.5	22	17.3	15	230	230		
ORFS	630	400	6	M10x1	16	11.1	1.6	1	10	9.6	12	15	15	
	630	400	8-10	M12x1.5	19	13.8	2.4	1.5	11.5	11.1	15	30	30	
	630	400	8-10	M14x1.5	21	15.8	2.4	1.5	11.5	11.1	15	40	40	
	630	400	12	M16x1.5	24	17.8	2.4	1.5	13	12.6	15	50	50	
	630	400	14-15-16	M18x1.5	26	19.8	2.4	2	14.5	12.3	15	60	60	
	400	400	14-15-16	M22x1.5	29	23.8	2.4	2	15.5	15.4	15	85	85	
	400	400	18-20	M27x2	34	29.4	3.1	2	19	18.3	15	150	150	
	400	315	22-25	M33x2	43	35.4	3.1	2.5	19	18.3	15	260	260	
	250	250	28-30-32	M42x2	52	44.4	3.1	2.5	19.5	18.8	15	280	280	
	250	250	35-38	M48x2	57	50.4	3.1	2.5	22	21.3	15	360	360	

Performance:

-pressure capacity
 -sealing characteristics
 -additional sealing required
 -safety factor

Seal STRAIGHT:

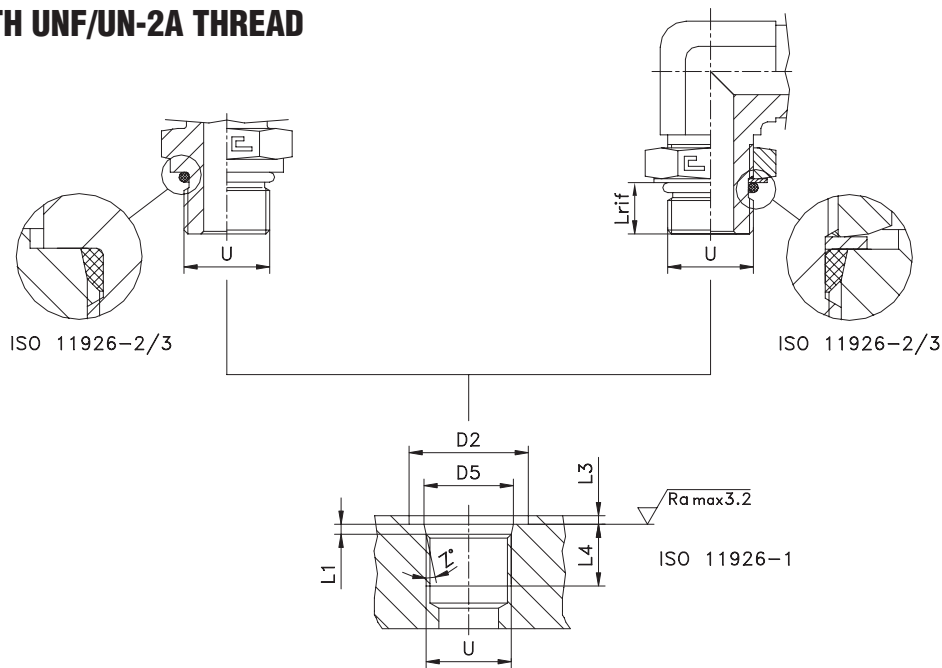
excellent
 excellent
 no
 4:1

Seal SWIVEL:

excellent
 excellent
 no
 4:1

Note: 1) To obtain the ISO 6149 type of sealing please take out the retaining ring from the standard fitting.
 2) The values in the tightening tables are approximate and derive from practical tests run at the laboratory in Casalgrasso (CN), which may vary based on the materials and tolerances of the components used.

STUD END WITH UNF/UN-2A THREAD



Series	Ø Tube	UnF/Un thread	D2 min	D5	L1	L3 max	L4 min	L rif	Z°	Torque [Nm] ^{+10%} ₀		
										STRAIGHT	SWIVEL	
DIN	L	6	7/16-20 UNF-2A	21	12,45	2,4	1,6	11,5	9,9	12	20	20
		8-10	1/2-20 UNF-2A	23	14,05	2,4	1,6	11,5	9,9	12	25	25
		12	9/16-18 UNF-2A	25	15,7	2,5	1,6	12,7	11,1	12	30	30
		15-18	3/4-16 UNF-2A	30	20,65	2,5	2,4	14,3	12,5	15	45	45
		18	7/8-14 UNF-2A	34	24	2,5	2,4	16,7	14,5	15	55	55
		22	1 1/16-12 UN-2A	41	29,2	3,3	2,4	19	16,8	15	85	85
		28	1 5/16-12 UN-2A	49	35,55	3,3	3,2	19	16,8	15	130	130
		35	1 5/8-12 UN-2A	58	43,55	3,3	3,2	19	16,8	15	170	170
	S	42	1 7/8-12 UN-2A	65	49,9	3,3	3,2	19	16,8	15	180	180
		6-8	1/2-20 UNF-2A	23	14,05	2,4	1,6	11,5	9,9	12	25	25
		10-12	9/16-18 UNF-2A	25	15,7	2,5	1,6	12,7	11,1	12	35	35
		14-16	3/4-16 UNF-2A	30	20,65	2,5	2,4	14,3	12,5	15	60	60
		16	7/8-14 UNF-2A	34	24	2,5	2,4	16,7	14,5	15	85	85
		20	1 1/16-12 UN-2A	41	29,2	3,3	2,4	19	16,8	15	150	150
JIC 37°	25	1 5/16-12 UN-2A	49	35,55	3,3	3,2	19	16,8	15	230	230	
	30	1 5/8-12 UN-2A	58	43,55	3,3	3,2	19	16,8	15	250	250	
	38	1 7/8-12 UN-2A	65	49,9	3,3	3,2	19	16,8	15	320	320	
	6	7/16-20 UNF-2A	21	12,45	2,4	1,6	11,5	9,9	12	20	20	
	8	1/2-20 UNF-2A	23	14,05	2,4	1,6	11,5	9,9	12	25	25	
	10	9/16-18 UNF-2A	25	15,7	2,5	1,6	12,7	11,1	12	30	30	
	12	3/4-16 UNF-2A	30	20,65	2,5	2,4	14,3	12,5	15	45	45	
	14-15-16	7/8-14 UNF-2A	34	24	2,5	2,4	16,7	14,5	15	55	55	
ORFS	18-20	1 1/16-12 UN-2A	41	29,2	3,3	2,4	19	16,8	15	85	85	
	25	1 5/16-12 UN-2A	49	35,55	3,3	3,2	19	16,8	15	130	130	
	30-32	1 5/8-12 UN-2A	58	43,55	3,3	3,2	19	16,8	15	170	170	
	38	1 7/8-12 UN-2A	65	49,9	3,3	3,2	19	16,8	15	180	180	
	6	7/16-20 UNF-2A	21	12,45	2,4	1,6	11,5	11,4	12	20	20	
	8-10	9/16-18 UNF-2A	25	15,7	2,5	1,6	12,7	12,2	12	35	55	
	12	3/4-16 UNF-2A	30	20,65	2,5	2,4	14,3	13,8	15	60	60	
	14-15-16	7/8-14 UNF-2A	34	24	2,5	2,4	16,7	16,3	15	85	85	
18-20	1 1/16-12 UN-2A	41	29,2	3,3	2,4	19	18,6	15	150	150		
22-25	1 5/16-12 UN-2A	49	35,55	3,3	3,2	19	18,6	15	230	230		
28-30-32	1 5/8-12 UN-2A	58	43,55	3,3	3,2	19	18,6	15	250	250		
35-38	1 7/8-12 UN-2A	65	49,9	3,3	3,2	19	18,6	15	320	320		

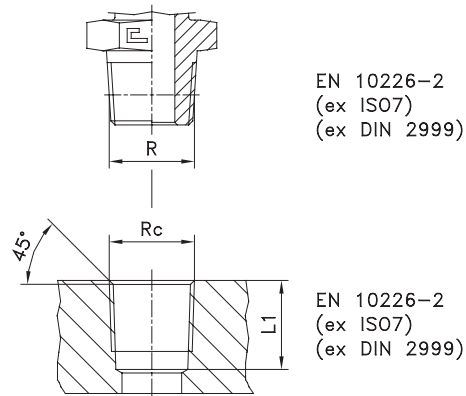
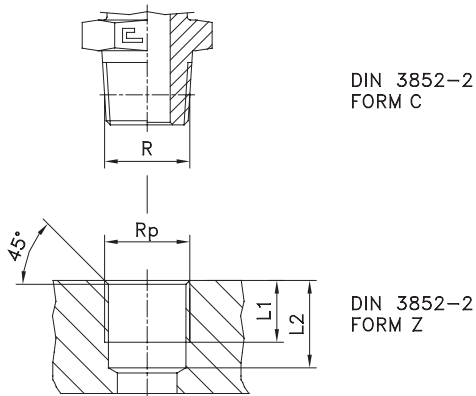
Performance:
 -pressure capacity
 -sealing characteristics
 -additional sealing required
 -safety factor

Seal STRAIGHT:
 excellent
 excellent
 no
 4:1

Seal SWIVEL:
 excellent
 excellent
 no
 4:1

Note: The values in the tightening tables are approximate and derive from practical tests run at the laboratory in Casalgrasso (CN), which may vary based on the materials and tolerances of the components used.

STUD ENDS WITH BSPT THREAD



Series	Ø Tube	BsPt thread (DIN 3852-2 form C)	L1	L2	
DIN	L	6	R 1/8	5,5	8,5
		8-10	R 1/4	8,5	12,5
		12	R 3/8	8,5	12,5
		15-18	R 1/2	10,5	16,5
		22	R 3/4	13	19
		28	R 1	-	-
		35	R 1 1/4	-	-
	S	42	R 1 1/2	-	-
		6-8	R 1/4	8,5	12,5
		10-12	R 3/8	8,5	12,5
		14-16	R 1/2	10,5	16,5
		20	R 3/4	13	19
		25	R 1	-	-
		30	R 1 1/4	-	-
	38	R 1 1/2	-	-	

Series	Ø Tube	BSPT thread (EN 10226-2)	L1
JIC 37°	6	R 1/8	7,4
	8	R 1/4	11
	10	R 3/8	11,4
	12-14-15-16	R 1/2	15
	18-20	R 3/4	16,3
	25	R 1	19,1
	30-32	R 1 1/4	21,4
BS 5200	38	R 1 1/2	21,4
	-	R 1/8	7,4
	-	R 1/4	11
	-	R 3/8	11,4
	-	R 1/2	15
	-	R 3/4	16,3
	-	R 1	19,1
	-	R 1 1/4	21,4
	-	R 1 1/2	21,4
	-	R 2	25,7

Performance:
-pressure capacity
-sealing characteristics
-additional sealing required
-safety factor

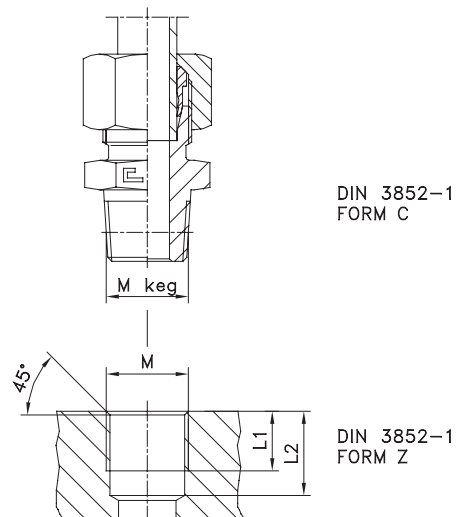
Sealing form C:
low-medium
low-medium
Yes
2,5:1

Performance:
-pressure capacity
-sealing characteristics
-additional sealing required
-safety factor

Taper sealing:
low-medium
low-medium
Yes
2,5:1

STUD ENDS WITH BSPT THREAD

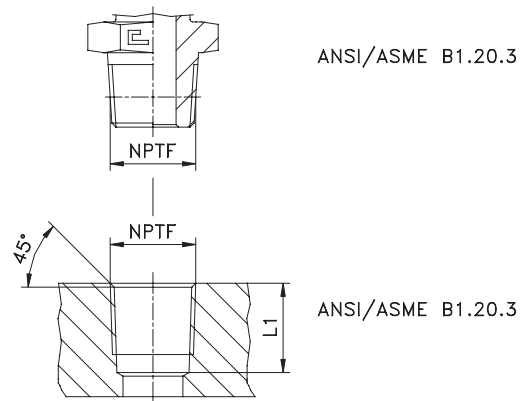
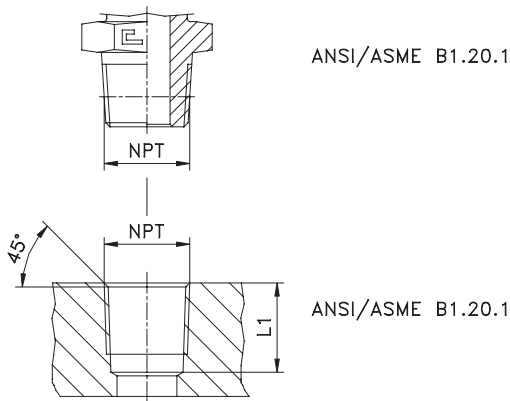
Serie	Ø Tubo	Thread Metric Taper	L1	L2	
DIN	L	6	M10x1 keg	5,5	10
		8	M12x1,5 keg	8,5	13,5
		10	M14x1,5 keg	8,5	13,5
		12	M16x1,5 keg	8,5	13,5
		15	M18x1,5 keg	8,5	13,5
		18	M22x1,5 keg	10,5	15,5
	S	6	M12x1,5 keg	8,5	13,5
		8	M14x1,5 keg	8,5	13,5
		10	M16x1,5 keg	8,5	13,5
		12	M18x1,5 keg	8,5	13,5
		14	M20x1,5 keg	10,5	15,5
		16	M22x1,5 keg	10,5	15,5



Performance:
-pressure capacity
-sealing characteristics
-additional sealing required
-safety factor

Taper sealing C:
low-medium
low-medium
Yes
2,5:1

STUD ENDS WITH NPT/NPTF THREAD



Series	Ø Tube	NPT thread	L1	
DIN	L	6	1/8-27 NPT	11,6
		8-10	1/4-18 NPT	16,4
		12	3/8-18 NPT	17,4
		15-18	1/2-14 NPT	22,6
		22	3/4-14 NPT	23,1
		28	1-11,5 NPT	27,8
		35	1 1/4-11,5 NPT	28,3
		42	1 1/2-11,5 NPT	28,3
	S	6-8	1/4-18 NPT	16,4
		10-12	3/8-18 NPT	17,4
		14-16	1/2-14 NPT	22,6
		20	3/4-14 NPT	23,1
		25	1-11,5 NPT	27,8
		30	1 1/4-11,5 NPT	28,3
BS 5200	-	1/8-27 NPT	11,6	
	-	1/4-18 NPT	16,4	
	-	3/8-18 NPT	17,4	
	-	1/2-14 NPT	22,6	
	-	3/4-14 NPT	23,1	
	-	1-11,5 NPT	27,8	
	-	1 1/4-11,5 NPT	28,3	
	-	1 1/2-11,5 NPT	28,3	
-	2-11,5 NPT	29		

Series	Ø Tube	NPTF thread	L1
JIC 37° - ORFS	6-8	1/8-27 NPTF	11,6
	8-10	1/4-18 NPTF	16,4
	12	3/8-18 NPTF	17,4
	14-15-16	1/2-14 NPTF	22,6
	18-20	3/4-14 NPTF	23,1
	22-25	1-11,5 NPTF	27,8
	28-30-32	1 1/4-11,5 NPTF	28,3
	35-38	1 1/2-11,5 NPTF	28,3

Performance:
 -pressure capacity
 -sealing characteristics
 -additional sealing required
 -safety factor

Taper sealing:
 low-medium
 low-medium
 Yes
 2,5:1

Performance:
 -pressure capacity
 -sealing characteristics
 -additional sealing required
 -safety factor

Taper sealing:
 low-medium
 low-medium
 Yes
 2,5:1

• PRESCRIPTIONS TO COMPLY WITH FOR ALL THE SERIES

- Only use CAST products and components for the same assembly to prevent claims and damage to people and objects.
- Apply completely the general instructions, utilisation standards, safety factors, assembly instructions and working pressures for the specific fitting used.
- Closely respect the working temperature ranges, the relevant pressure changes reported and stay within the set values in bars.
- Respect the indicated tightening values as well as the assembly instructions.
- Lubricate all the components, as indicated in the assembly instructions, with specific products.
- All carbon steel connections must be pre-assembled before being mounted onboard the machine. It is not allowed to assemble them directly on the machine.
- All stainless steel connections must be pre-assembled or flared with hardened tools before being mounted onboard the machine. It is not allowed to assemble them directly on the machine.
- Only use the carbon steel and stainless steel tubes mentioned on pages 25 and 26.
- Use support sleeves on thin tubes.
- It is not advisable to mix carbon and stainless steel components together in the same connection.
- Always check the correct alignment of the system, tubes, connections and actuators.
- It is mandatory to always check the correct incision of the cutting ring on the tube!
- Thoroughly check the collapse of the fitting hole (insert) with the prescribed “P-N P” buffers to ensure the correct stapling of the tube, fitting and sleeve for series 80
- The use of non-compliant tubes, fittings or connections is not allowed.
- It is not allowed to alter CAST products in any way.
- Fully comply with all the indications contained in this Technical Commercial Catalogue.
- In case of doubt always follow the principle of prudence

Failure to follow any of these prescriptions may alter the functionality of the products and void any guarantee.



It is not allowed to mix and use components from production of different manufacturers of oleo-dynamic fittings. The product traceability coding applies.



Users are not allowed to made changes to or repair the oleo-dynamic fittings we manufacture; in such case lawbreakers will be liable for their actions and any damage caused to the environment, people and objects.



Fluids under pressure may cause serious damage to people and objects; it is thus necessary to always pay the utmost attention, fully respecting the applicable prescriptions and adopting the principle of prudence to avoid any accident to oneself and the others.

• PRODUCT LIABILITY - VALID FOR ALL THE SERIES

Pres. Decree 224- EEC 85/347 states that: “ ... the responsibility will be charged to the negligent part ... “. This means that the manufacturer will be held legally liable only if the product actually proves faulty in terms of project, execution/production due to negligence or malice.

The distributor making the sale must make sure that its customer is aware of all the technical issues relating the product, such as assembly instructions, and that the product is used for the right applications.

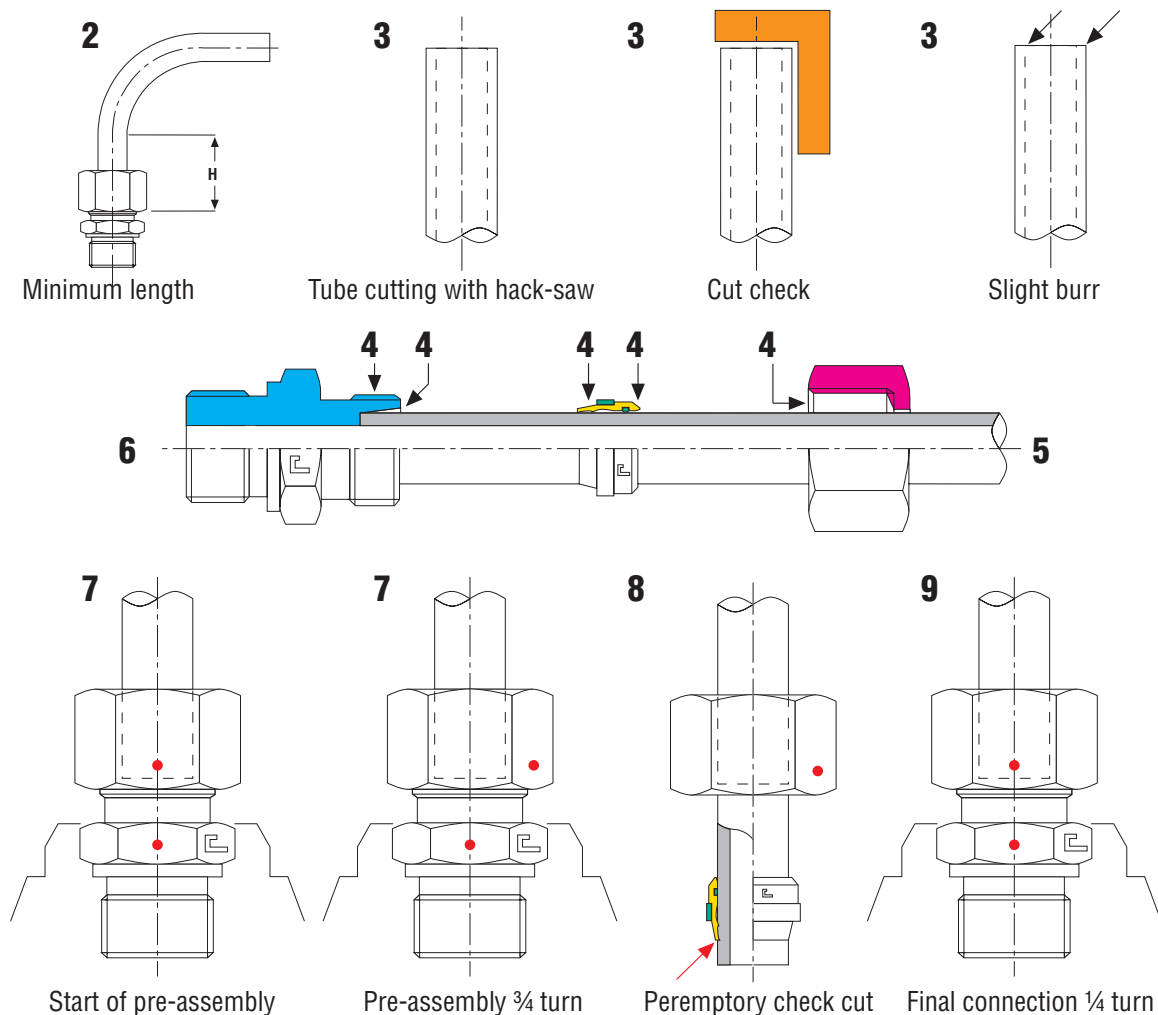
Likewise the End User will be considered liable if, due to negligence, superficiality or malice, he/she did not scrupulously follow the Manufacturer’s prescriptions (Commercial Technical Catalogue), which must be provided to him/her as technical support by the Distributor selling the product. Should the end user be lack this technical documentation, our offices will be glad to send it to him/her.

By virtue of this legal regulation, CAST S.p.A. declines any responsibility in case the user fails to strictly and entirely comply with the GENERAL INSTRUCTIONS, UTILISATION STANDARDS, SAFETY FACTORS, ASSEMBLY INSTRUCTIONS, WORKING PRESSURES as well as any other technical indication clearly stated in this Commercial Technical Catalogue and/or the product was changed or altered by anyone other than CAST S.p.A.. Failure to respect these imperative prescriptions

or any changes made may alter the functionality of the products and void any guarantee. The mentioned regulation provides for an excess of €500.00.

ASSEMBLY INSTRUCTIONS ACCORDING TO DIN 3859-2 FOR B3 - B4 - BP

1. Before pre-assembly, make sure that all the tools to be used are in perfect working order. Replace any non-complying tool.
2. The segment of the tube to be pre-assembled must have a straight section at least twice the length of the nut (length H). Roundness must comply with DIN 2391.
3. Cut the tube square by using an appropriate hack-saw (do not use roller type tube cutters). Check that the cut is properly made at 90°. Remove any internal and external burrs.
4. Oil the 24° cone, the thread of the body, the cutting ring and the nut with suitable products. = →
5. Fit the nut and the cutting ring on the tube as shown. The larger diameter of the cutting ring must face the nut.
6. Insert the tube on the 24° cone until it comes into contact with the stop. Tighten the nut by hand until the cutting ring rests firmly on the nut. Then tighten the nut with a wrench until the cutting edge of the ring is in contact with the tube and prevents rotation of this.
7. Holding the tube against its stop and making sure it does not rotate, tighten the nut by 3/4 of a turn. This way, the cutting edge of the ring cuts into the outer part of the tube for the necessary depth and raises an edge in front of its cutting edge while the second cutting edge clinches the tube at the same time.
8. Loosen the nut and check that there is a clearly raised edge all round the tube. The edge must cover 80% of the front of the cutting ring according to DIN 3859 part II. This check is peremptory for the safety of all concerned!!! If the raised edge is not satisfactory, pre-assembly must be repeated.
9. If pre-assembly has been carried out correctly, fit the tube on the machine, close with a wrench until a certain resistance is encountered and then tighten for a further 1/4 turn with wrench to wrench contrast.
10. ISO 19879 envisages a maximum of six couplings to be made on the same connection opening. Increase the blocking by 15° at every closure.
11. All the pre-assembly of stainless steel fittings must be performed with hardened tools (blocks or machines).

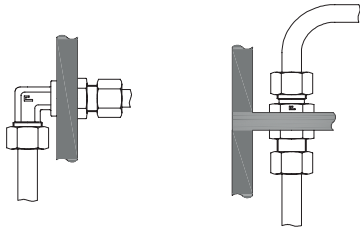


PRESCRIPTIONS FOR THE INSTALLATION OF RIGID TUBES

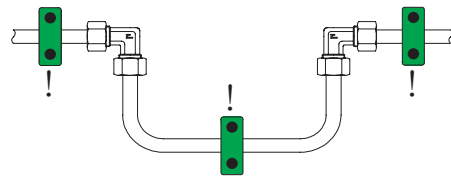
To ensure the correct cabling of an oleo-dynamic system made of (steel) rigid tubes for high pressures it is necessary to respect the provisions of the standards and of the manufacturer of the fittings. Only use high quality tubes and related fittings, scrupulously complying with the maximum working pressures and temperatures allowed. Correctly assemble the selected tubes, using collars that fit the size of the tubes. Do not fasten the tubes to electric conduits or other tubes.

When arranging the system, take into account the space needed for maintenance interventions. The tube support must be created according to the tables below. It is important to obtain the correct alignment between tubes, fittings and actuators. An aesthetically well structured system is synonym with functionality and safety.

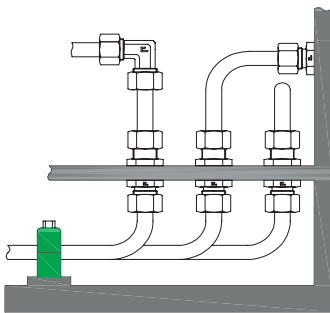
Some examples of correct installation:



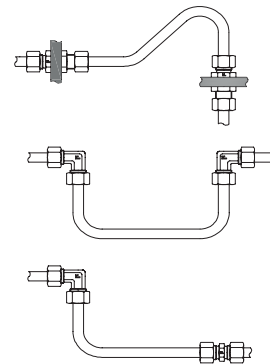
Properly fasten the fittings that host the tubes



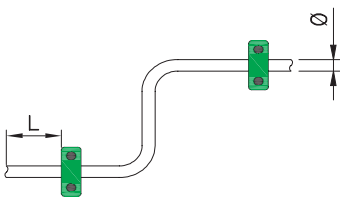
Do not excessively fasten the tubes as these must always be allowed to dilate without any problem



Do not overlay the tubes to facilitate maintenance

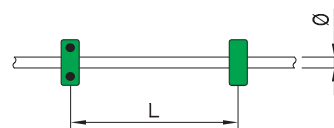


Do not subject the fittings to stress deriving from a poor alignment of the tube which must be able to expand



Follow the table indicated as closely as possible.

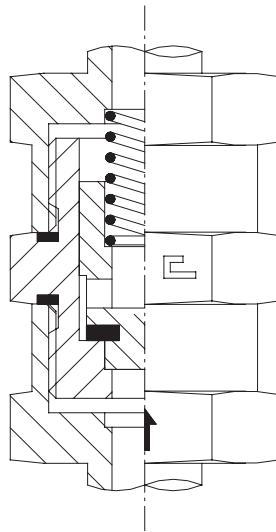
Ø Tube (mm)	L (mt)
6-12	0,5
12-22	0,6
22-32	0,7
32-38	1,0
38-42	1,3



Follow the table indicated as closely as possible.

Ø Tube (mm)	L (mt)
6-12	1,0
12-22	1,2
22-32	1,5
32-38	2,0
38-42	2,7

CAST NON RETURN VALVE



THEORY OF OPERATION

Cast S.p.A. non return valve is used in all those circuits where the fluid must flow in one way only, avoiding the flow in the opposite direction

TO OBTAIN PERFECT SEALING:

1. Make sure that all tubes are perfectly clean and that there are no impurities in the system where the fluid will flow.
2. Remove protective caps only when ready to assemble, making sure that in the assembly phase no impurities enter the system.

TECHNICAL CHARACTERISTICS

1. Cast S.p.A. non return valve assures a perfect tightness of the circuit, provided that the indicated nominal working pressures are kept as referred to in this catalogue.
2. The particular profile of its inner elements assures the correct flow with a minimum pressure drop.
3. The valve is a compact, particularly sturdy element; the seal is obtained by a plain seat metal to metal plug with an elastomeric seal gasket assuring tightness at low working pressures.
4. A basic body allows to different types of non return valves to be interchanged by applying, from time to time, the different engaged stud ends as chosen by the customer, allowing for easy logistic of the stock.
5. The valve may be used for conveying mineral oils, fuels, compressed air or gases. When ordering please specify if the fluid needs specific type of gaskets.
6. The nominal working temperature is between -40C° and $+120\text{C}^{\circ}$ Celsius degrees for carbon steel, and between -60C° and $+200\text{C}^{\circ}$ Celsius degrees for stainless steel. The limit may change according to the type of gasket used.

TECHNICAL DATA

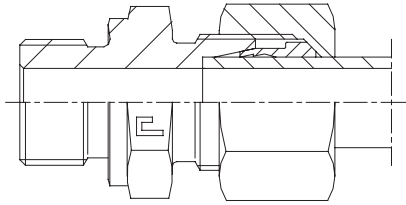
Maximum advised flow speed is 5mt/sec. The standard opening pressure is 1 bar; if specified when ordering, we can supply non return valves with an opening pressure up to 3 bars with 0.5 bar steps.

COMPONENT TESTING

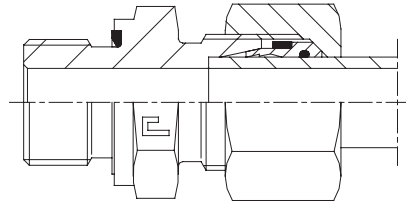
All the valves are checked for leaks at low pressure and at the opening value; high pressure tests are carried out at the maximum nominal working pressures plus 33%.

TIGHTENING TORQUES FOR B3, B4 AND BP CUTTING RINGS

DIN 3861 cone for carbon and stainless steel



Assembly of B3 ring on fitting body



Assembly of B4 ring on fitting body

Series	Ø Tube	Metric thread	Manual carbon (Nm)	Manual Stainless (Nm)	Machine carbon (Kg)	Machine Stainless (Kg)
L	6	M12x1,5	20	30	1200	1400
	8	M14x1,5	25	55	1400	1700
	10	M16x1,5	30	85	2000	2200
	12	M18x1,5	40	120	2100	2400
	15	M22x1,5	60	130	2400	3300
	18	M26x1,5	90	220	2500	3600
	22	M30x2	170	320	2600	3800
	28	M36x2	210	500	3000	6900
	35	M45x2	360	970	5500	10000
	42	M52x2	490	1110	6700	12500
S	6	M14x1,5	25	45	1200	1400
	8	M16x1,5	30	55	1400	1700
	10	M18x1,5	40	90	2000	2200
	12	M20x1,5	50	105	2100	2400
	14	M22x1,5	70	150	2400	3300
	16	M24x1,5	80	180	2500	3600
	20	M30x2	140	340	2600	6400
	25	M36x2	230	530	5000	9300
	30	M42x2	300	610	5500	10000
	38	M52x2	430	850	6700	12500

Notes:

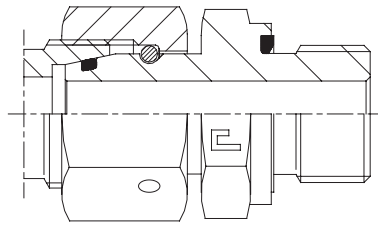
The values in the tightening tables are approximate and derive from practical tests run at the laboratory in Casalgrasso (CN), which may vary based on the materials and tolerances of the components used.

All the values expressed in Newton Meters (Nm) for the tightening torques on the cone DIN 3861 represent the torquing moment needed to have the correct incision of the pre-assembly of the tube, lifting the required 80% of the front of the edge of the cutting ring.

All the values expressed in Kilograms (Kg) for the linear push on the preassembly machine, represent the right strength necessary to have the correct incision of the preassembly lifting the required 80% of the front of the edge of the cutting ring.

Once the preassembly has been carried out correctly and after checking that all the components conform to the system requirements, complete the assembly on the system itself, first closing by wrench until you feel a certain resistance, and then doing the last 1/4 of a turn to close the fitting completely.

SERIES 60... SWIVEL NUT DIN 2353



According to DIN 2353 standards, 24° cone as per DIN 3861 and o-ring seal as per DIN 3865.

This series of fittings with revolving nut and seal on the 24° cone guaranteed by an o-ring meets the requirements of customers asking for high pressure, absolute tightness and low tightening torque.

Due to its technical characteristics this type of fitting is suitable for demanding applications, such as assembly on heavy machinery. The result is a safe fastening of the nut to the body improving the whole sealing system.

The limit of this series lies in that the sealing performed with the o-ring is limited to a single connection, leaving all the others uncovered by this excellent solution.

A new step forward was needed to improve the research and find a solution that could grant a double sealing system on all the connections involved, metal to metal plus the elastomeric sealing.

This problem has been solved by CAST S.p.A. with the new “B4” cutting ring, guaranteeing a double sealing (metal and gasket) on all the connections of the fitting.

ASSEMBLY INSTRUCTIONS FOR SWIVEL CONE SERIES DIN 2353

1. Before the assembly, check for the correct parameters of all the tools to be used and substitute those not complying to the requirements.
2. Clean the nut, fitting and tube and lubricate with the suggested products.
3. Check the correct alignment of the parts involved, then using a wrench tighten until reaching the metal to metal contact of the conical parts.
4. Repeated assembly and disassembly will not alter the functionality of the system which, each time is closed, will always provide an immediate seal, which will last over time.
5. Please refer to the related tables for the correct tightening torques to be applied.

TIGHTENING TORQUES ON THE SWIVEL CONE DIN 3861 cone for carbon and stainless steel

Series	Ø Tube	Metric thread	Torque ^{+10%} ₀ (Nm)
L	6	M12x1.5	20
	8	M14x1.5	35
	10	M16x1.5	40
	12	M18x1.5	45
	15	M22x1.5	55
	18	M26x1.5	110
	22	M30x2	130
	28	M36x2	200
	35	M45x2	220
S	42	M52x2	240
	6	M14x1.5	40
	8	M16x1.5	45
	10	M18x1.5	50
	12	M20x1.5	60
	14	M22x1.5	80
	16	M24x1.5	100
	20	M30x2	160
	25	M36x2	240
	30	M42x2	260
38	M52x2	350	

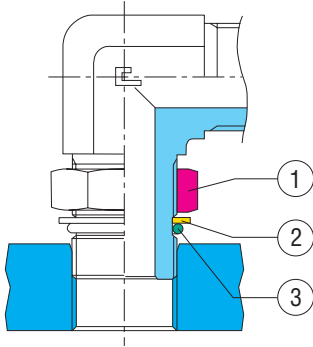
Notes:

The values in the tightening tables are approximate and derive from practical tests run at the laboratory in Casalgrasso (CN), which may vary based on the materials and tolerances of the components used.

All the values expressed in Newton Meters (Nm) for the tightening torques on the swivel cone represent the torquing moment needed to obtain the correct tightness.

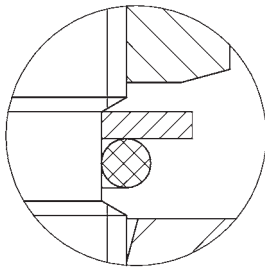
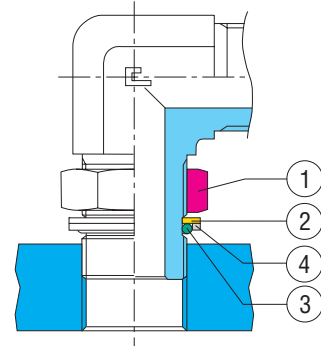
ASSEMBLY INSTRUCTIONS FOR ADJUSTABLE FITTINGS

**ISO 6149 Metric thread
ISO 11926 UNF/UN-2A thread**

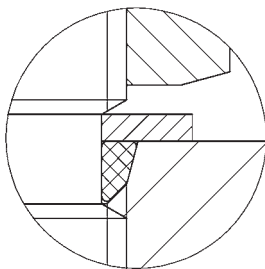
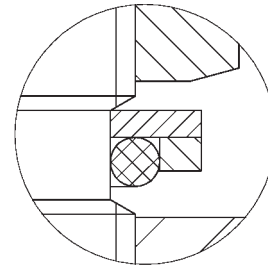


- 1 Back up hexagonal nut
- 2 Back up sleeve
- 3 O-ring
- 4 Retaining ring

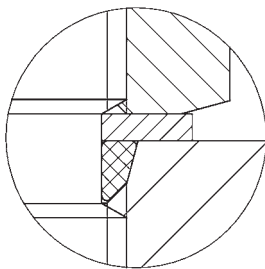
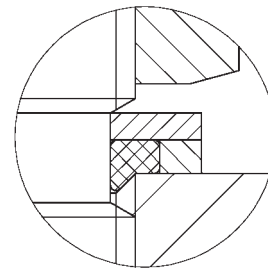
**BSPP Thread (in revision phase)
ISO 6149 Metric thread
with retaining ring**



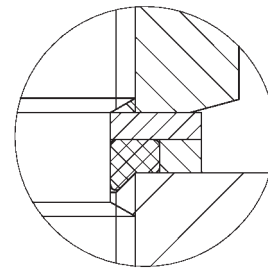
Lubricate the o-ring.
Unscrew the back up hexagonal nut and check that the back up sleeve is positioned as in the picture.
The correct position of the back up sleeve may be obtained when the fitting is screwed into the female thread.



Screw the fitting up to the point where the back up sleeve or the retaining ring is in contact with the machined surface, checking that the o-ring is positioned correctly into its shaped housing.



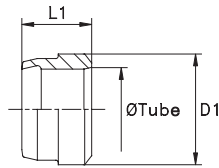
Unscrew the fitting up to a maximum of 1 turn to obtain the desired positioning.
Keep the fitting still with a wrench and block the back up hexagonal nut.
Please refer to the related tables for the correct tightening torques to be applied.



N.B. To obtain the ISO 6149 type of seal please take out the retaining ring from the standard fitting.

STAINLESS STEEL «BP» SINGLE EDGE CUTTING RING

Type: 1101..-BP



Series DIN	11.... [bar]	BP ring ordering	Ø Tube	L1	D1	
L	250	110104-BP	6	9	9	
		110105-BP	8	9	11	
		110106-BP	10	9,5	13	
		110107-BP	12	9,5	15	
		110108-BP	15	9,5	18	
	160	110109-BP	18	9,5	22	
		110110-BP	22	10,5	26	
		100	110111-BP	28	11	32
			110112-BP	35	13	41
110113-BP	42		13	48		
S	630	110104-BP	6	9	9	
		110105-BP	8	9	11	
		110106-BP	10	9,5	13	
		110107-BP	12	9,5	15	
		110118-BP	14	10	19	
		110119-BP	16	10,5	21	
	400	110120-BP	20	12	26	
		110121-BP	25	12	32	
		250	110122-BP	30	13	36
	110123-BP		38	13	44	

“BP” CUTTING RING

This new ring (working pressure as per DIN 2353 / ISO 8434-1), due to its particular geometric configuration with acute corner cutting, allows the cabling onboard the machine in complete absence of losses, leakages or sweating. It may be assembled on all the fittings with opening DIN 3861.

FINISHED ELEMENTS METHOD

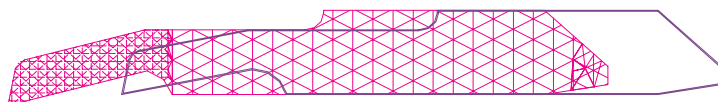
The design in the field of mechanical engineering and construction is becoming more and more sophisticated, requiring for the related calculations to be made by using more advanced tools.

The “Finished elements method” is one of the numeric techniques used to solve the problems of structural calculation, quickly providing an idea of the strain and deformation distribution of the element.

The main concept underlying this methodology is to subdivide the model subject to analysis into triangles and therefore approximate the solution by using polynomial interpolation.



SECTIONAL REPRESENTATION OF THE CAST “BP” RING



REPRESENTATION OF DEFORMED RETICULATION

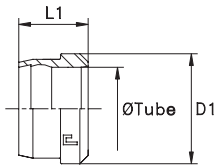
Deformation
Max X:2.0500mm
Max Y:-0.480mm



REPRESENTATION OF VON-MISES STRESSE

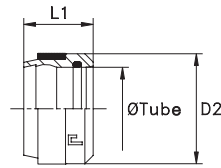
CUTTING RING "B3"

Type: 1001..



CUTTING RING "B4"

Type: 1001...4

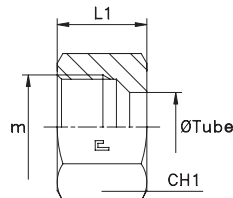


Series DIN	10.... [bar]	11.... [bar]	Ordering B3 Ring	Ø Tube	L1	D1	D2	Ordering B4 Ring
LL	100	100	100101	4	6	6	-	-
			100102	6	7	8	-	-
			100103	8	7	10	-	-
L	500	315	100104	6	9,5	10	10	100104.4
			100105	8	9,5	12	12	100105.4
			100106	10	10	14	14	100106.4
			100107	12	10	16	16	100107.4
	400	100108	15	10	19	20	100108.4	
		100109	18	10	23	23	100109.4	
		100110	22	10,5	27	27	100110.4	
	250	160	100111	28	11	33	33	100111.4
			100112	35	13	41	41	100112.4
			100113	42	13	48	48	100113.4
S	800	630	100104	6	9,5	10	10	100114.4
			100105	8	9,5	12	12	100115.4
			100106	10	10	14	14	100116.4
	630	100107	12	10	16	16	100117.4	
		100118	14	10	19	19	100118.4	
		100119	16	10,5	21	21	100119.4	
	420	400	100120	20	12	26	26	100120.4
			100121	25	12	32	32	100121.4
			100122	30	13	36	38	100122.4
			100123	38	13	48	48	100123.4
		315	100123	38	13	48	48	100123.4

Note: If you wish to order a fitting in stainless steel, please change the first two digit from 10.... to 11....

TIGHTNING NUT

Type: 1002..



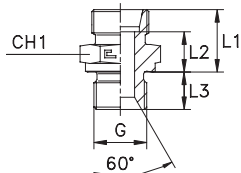
Series DIN	10.... [bar]	11.... [bar]	Ordering Nut	Ø Tube	m	L1	CH1
LL	100	100	100201	4	8x1	11	10
			100202	6	10x1	11,5	12
			100203	8	12x1	12	14
L	500	315	100204	6	12x1,5	14,5	14
			100205	8	14x1,5	14,5	17
			100206	10	16x1,5	15,5	19
			100207	12	18x1,5	15,5	22
	400	100208	15	22x1,5	17	27	
		100209	18	26x1,5	18	32	
		100210	22	30x2	20	36	
	250	160	100211	28	36x2	21	41
			100212	35	45x2	24	50
			100213	42	52x2	24	60
S	800	630	100214	6	14x1,5	16,5	17
			100215	8	16x1,5	16,5	19
			100216	10	18x1,5	17,5	22
	630	100217	12	20x1,5	17,5	24	
		100218	14	22x1,5	20,5	27	
		100219	16	24x1,5	20,5	30	
	420	400	100220	20	30x2	24	36
			100221	25	36x2	27	46
			100222	30	42x2	29	50
			100223	38	52x2	32,5	60

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from 10.... to 11....
If you wish to order AISI 304 stainless steel fittings, please change the first two digits from 10.... to 14....

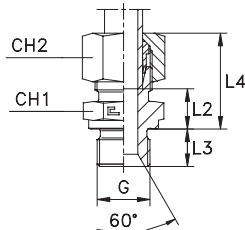
MALE STUD COUPLING

Thread BSP Parallel

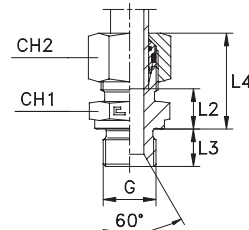
Type: **1003...1** Body



Type: **1003.. B3** Ring



Type: **1003...4** B4 Ring



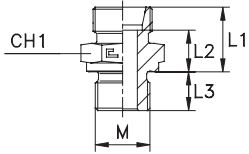
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
L	315	315	100304.1	100304	6	1/8	15,5	8,5	8	23	14	14	100304.4
			100305.1	100305	8	1/4	17	10	12	25	19	17	100305.4
			100306.1	100306	10	1/4	18	11	12	26	19	19	100306.4
			100307.1	100307	12	3/8	19,5	12,5	12	27	22	22	100307.4
			100308.1	100308	15	1/2	21	14	14	29	27	27	100308.4
	100309.1	100309	18	1/2	22	14,5	14	31	27	32	100309.4		
	160	160	100310.1	100310	22	3/4	24	16,5	16	33	32	36	100310.4
			100311.1	100311	28	1	25	17,5	18	34	41	41	100311.4
			100312.1	100312	35	1 1/4	28	17,5	20	39	50	50	100312.4
			100313.1	100313	42	1 1/2	30	19	22	42	55	60	100313.4
100314.1			100314	6	1/4	20	13	12	28	19	17	100314.4	
S	630	630	100315.1	100315	8	1/4	22	15	12	30	19	19	100315.4
			100316.1	100316	10	3/8	22,5	15	12	31	22	22	100316.4
			100317.1	100317	12	3/8	24,5	17	12	33	22	24	100317.4
			100318.1	100318	14	1/2	27	19	14	37	27	27	100318.4
			100319.1	100319	16	1/2	27	18,5	14	37	27	30	100319.4
	400	400	100320.1	100320	20	3/4	31	20,5	16	42	32	36	100320.4
			100321.1	100321	25	1	35	23	18	47	41	46	100321.4
			100322.1	100322	30	1 1/4	37	23,5	20	50	50	50	100322.4
			100323.1	100323	38	1 1/2	42	26	22	57	55	60	100323.4
			100324.1*	100324*	6	1/4	17	10	12	24,5	19	14	100324.4*
L	315	315	100325.1*	100325*	8	1/8	16,5	9,5	8	24,5	14	17	100325.4*
			100326.1*	100326*	8	3/8	18,5	11,5	12	26,5	22	17	100326.4*
			100327.1*	100327*	8	1/2	19	12	14	27	27	17	100327.4*
			100328.1*	100328*	10	1/8	17,5	10,5	8	25,5	17	19	100328.4*
			100329.1*	100329*	10	3/8	19,5	12,5	12	27,5	22	19	100329.4*
			100330.1*	100330*	10	1/2	20	13	14	28	27	19	100330.4*
			100331.1*	100331*	12	1/4	19	12	12	26,5	19	22	100331.4*
			100332.1*	100332*	12	1/2	20	13	14	27,5	27	22	100332.4*
			100333.1*	100333*	15	3/8	20,5	13,5	12	28,5	24	27	100333.4*
			100334.1*	100334*	18	3/4	22	14,5	16	31	32	32	100334.4*
S	630	630	100335.1*	100335*	12	1/2	25	17,5	14	33,5	27	24	100335.4*
			100336.1*	100336*	14	3/8	26,5	18,5	12	36,5	24	27	100336.4*
	400	400	100337.1*	100337*	16	3/8	26,5	18	12	36,5	27	30	100337.4*
			100338.1*	100338*	20	1/2	31	20,5	14	42	32	36	100338.4*
			100339.1*	100339*	25	3/4	35	23	16	47	41	46	100339.4*
			100340.1*	100340*	30	1	37	23,5	18	50	46	50	100340.4*
	630	630	100341.1*	100341*	8	3/8	22,5	15,5	12	30,5	22	19	100341.4*
			100342.1*	100342*	10	1/4	22	14,5	12	30,5	19	22	100342.4*
			100343.1*	100343*	10	1/2	25	17,5	14	33,5	27	22	100343.4*
			100344.1*	100344*	12	1/4	24	16,5	12	32,5	22	24	100344.4*
400	400	100345.1*	100345*	16	3/4	29	20,5	16	39	32	30	100345.4*	
		100346.1*	100346*	20	1	33	22,5	18	44	41	36	100346.4*	
315	315	100347.1*	100347*	38	1 1/4	42	26	20	57	55	60	100347.4*	
L	315	315	100348.1*	100348*	15	3/4	22	15	16	30	32	27	100348.4*
			100349.1*	100349*	22	1/2	24	16,5	14	33	32	36	100349.4*
	160	160	100350.1*	100350*	22	1	25	17,5	18	34	41	36	100350.4*
			100351.1*	100351*	28	3/4	25	17,5	16	34	41	41	100351.4*
			100352.1*	100352*	35	1	28	17,5	18	39	46	50	100352.4*
			100353.1*	100353*	6	3/8	18,5	11,5	12	26	22	14	100353.4*
	160	160	100354.1*	100354*	42	1 1/4	30	19	20	42	55	60	100354.4*

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 * Items available on request only.

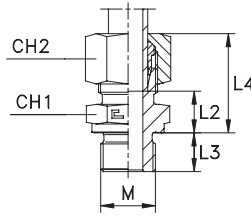
MALE STUD COUPLING

Thread Metric Parallel

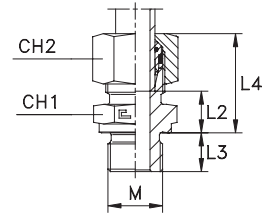
Type: **1004...1** Body



Type: **1004.. B3** Ring



Type: **1004...4** B4 Ring



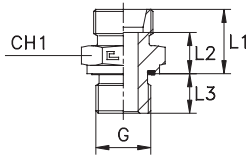
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
L	315	315	100404.1	100404	6	10x1	15,5	8,5	8	23	14	14	100404.4
			100405.1	100405	8	12x1,5	17	10	12	25	17	17	100405.4
			100406.1	100406	10	14x1,5	18	11	12	26	19	19	100406.4
			100407.1	100407	12	16x1,5	19,5	12,5	12	27	22	22	100407.4
			100408.1	100408	15	18x1,5	20,5	13,5	12	29	24	27	100408.4
	100409.1	100409	18	22x1,5	22	14,5	14	31	27	32	100409.4		
	160	160	100410.1	100410	22	26x1,5	24	16,5	16	33	32	36	100410.4
			100411.1	100411	28	33x2	25	17,5	18	34	41	41	100411.4
			100412.1	100412	35	42x2	28	17,5	20	39	50	50	100412.4
			100413.1	100413	42	48x2	30	19	22	42	55	60	100413.4
100414.1			100414	6	12x1,5	20	13	12	28	17	17	100414.4	
S	630	630	100415.1	100415	8	14x1,5	22	15	12	30	19	19	100415.4
			100416.1	100416	10	16x1,5	22,5	15	12	31	22	22	100416.4
			100417.1	100417	12	18x1,5	24,5	17	12	33	24	24	100417.4
			100418.1	100418	14	20x1,5	27	19	14	37	27	27	100418.4
			100419.1	100419	16	22x1,5	27	18,5	14	37	27	30	100419.4
	400	400	100420.1	100420	20	27x2	31	20,5	16	42	32	36	100420.4
			100421.1	100421	25	33x2	35	23	18	47	41	46	100421.4
			100422.1	100422	30	42x2	37	23,5	20	50	50	50	100422.4
			100423.1	100423	38	48x2	42	26	22	57	55	60	100423.4
			100425.1*	100425*	8	18x1,5	18,5	11,5	12	26,5	24	17	100425.4*
L	315	315	100426.1*	100426*	10	16x1,5	19,5	12,5	12	27,5	22	19	100426.4*
			100427.1*	100427*	10	18x1,5	19,5	12,5	12	27,5	24	19	100427.4*
			100428.1*	100428*	10	22x1,5	21	14	14	29	27	19	100428.4*
			100429.1*	100429*	12	14x1,5	19,5	12,5	12	27	19	22	100429.4*
			100430.1*	100430*	12	18x1,5	19,5	12,5	12	27	24	22	100430.4*
			100431.1*	100431*	12	22x1,5	21	14	14	28,5	27	22	100431.4*
			100432.1*	100432*	15	16x1,5	20	13	12	28	24	27	100432.4*
			100433.1*	100433*	15	22x1,5	22	15	14	30	27	27	100433.4*
			100434.1*	100434*	18	18x1,5	21,5	14	12	30,5	27	32	100434.4*
			160	160	100435.1*	100435*	22	22x1,5	24	16,5	14	33	32
S	630	630	100436.1*	100436*	12	22x1,5	25	17,5	14	33,5	27	24	100436.4*
			100437.1*	100437*	16	18x1,5	26,5	18	12	36,5	27	30	100437.4*
	400	400	100438.1*	100438*	20	22x1,5	31	20,5	14	42	32	36	100438.4*
			100439.1*	100439*	25	27x2	35	23	16	47	41	46	100439.4*
			100440.1*	100440*	30	33x2	37	23,5	18	50	46	50	100440.4*
			100440.1*	100440*	30	33x2	37	23,5	18	50	46	50	100440.4*

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 * Items available on request only.

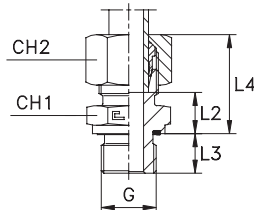
MALE STUD COUPLING WITH ELASTOMER SEAL

Thread BSP Parallel

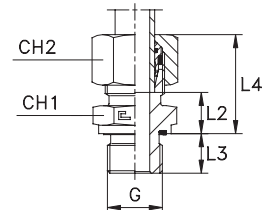
Type: **1005...1** Body



Type: **1005.. B3** Ring



Type: **1005...4** B4 Ring



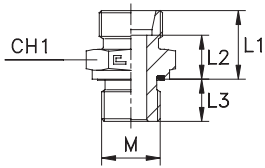
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4		
LL	100	100	100501.1	100501	4	1/8	13,5	9,5	8	20	14	10	-		
			100502.1	100502	6	1/8	13,5	8	8	20	14	12	-		
			100503.1	100503	8	1/8	14,5	9	8	21	14	14	-		
L	500	315	100504.1	100504	6	1/8	15,5	8,5	8	23	14	14	100504.4		
			100505.1	100505	8	1/4	17	10	12	25	19	17	100505.4		
			100506.1	100506	10	1/4	18	11	12	26	19	19	100506.4		
			100507.1	100507	12	3/8	19,5	12,5	12	27	22	22	100507.4		
			100508.1	100508	15	1/2	21	14	14	29	27	27	100508.4		
	400	160	100509.1	100509	18	1/2	22	14,5	14	31	27	32	100509.4		
			100510.1	100510	22	3/4	24	16,5	16	33	32	36	100510.4		
			100511.1	100511	28	1	25	17,5	18	34	41	41	100511.4		
			100512.1	100512	35	1 1/4	28	17,5	20	39	50	50	100512.4		
			100513.1	100513	42	1 1/2	30	19	22	42	55	60	100513.4		
S	800	630	100514.1	100514	6	1/4	20	13	12	28	19	17	100514.4		
			100515.1	100515	8	1/4	22	15	12	30	19	19	100515.4		
			100516.1	100516	10	3/8	22,5	15	12	31	22	22	100516.4		
	630	400	100517.1	100517	12	3/8	24,5	17	12	33	22	24	100517.4		
			100518.1	100518	14	1/2	27	19	14	37	27	27	100518.4		
			100519.1	100519	16	1/2	27	18,5	14	37	27	30	100519.4		
			100520.1	100520	20	3/4	31	20,5	16	42	32	36	100520.4		
	420	315	100521.1	100521	25	1	35	23	18	47	41	46	100521.4		
			100522.1	100522	30	1 1/4	37	23,5	20	50	50	50	100522.4		
			100523.1	100523	38	1 1/2	42	26	22	57	55	60	100523.4		
	L	500	315	100524.1	100524	6	1/4	17	10	12	24,5	19	14	100524.4	
				100525.1	100525	8	1/8	16,5	9,5	8	24,5	14	17	100525.4	
		400		100526.1	100526	8	3/8	18,5	11,5	12	26,5	22	17	100526.4	
100527.1				100527	8	1/2	19	12	14	27	27	17	100527.4		
500		100528.1		100528	10	1/8	17,5	10,5	8	25,5	17	19	100528.4		
		100529.1		100529	10	3/8	19,5	12,5	12	27,5	22	19	100529.4		
		100530.1		100530	10	1/2	20	13	14	28	27	19	100530.4		
		100531.1		100531	12	1/4	19	12	12	26,5	19	22	100531.4		
		100532.1		100532	12	1/2	20	13	14	27,5	27	22	100532.4		
		100533.1		100533	15	3/8	20,5	13,5	12	28,5	24	27	100533.4		
S	630	630	100534.1	100534	18	3/4	22	14,5	16	31	32	32	100534.4		
			100535.1	100535	12	1/2	25	17,5	14	33,5	27	24	100535.4		
			100536.1	100536	14	3/8	26,5	18,5	12	36,5	24	27	100536.4		
	420	400	100537.1	100537	16	3/8	26,5	18	12	36,5	27	30	100537.4		
			100538.1	100538	20	1/2	31	20,5	14	42	32	36	100538.4		
			100539.1	100539	25	3/4	35	23	16	47	41	46	100539.4		
			100540.1	100540	30	1	37	23,5	18	50	46	50	100540.4		
	800	630	100541.1	100541	8	3/8	22,5	15,5	12	30,5	22	19	100541.4		
			100542.1	100542	10	1/4	22	14,5	12	30,5	19	22	100542.4		
			100543.1	100543	10	1/2	25	17,5	14	33,5	27	22	100543.4		
	630	400	100544.1	100544	12	1/4	24	16,5	12	32,5	22	24	100544.4		
			100545.1	100545	16	3/4	29	20,5	16	39	32	30	100545.4		
			100546.1	100546	20	1	33	22,5	18	44	41	36	100546.4		
100547.1			100547	38	1 1/4	42	26	20	57	55	60	100547.4			
L	250	160	100548.1	100548	15	3/4	22	15	16	30	32	27	100548.4		
			100549.1	100549	22	1/2	24	16,5	14	33	32	36	100549.4		
			100550.1	100550	22	1	25	17,5	18	34	41	36	100550.4		
			100551.1	100551	28	3/4	25	17,5	16	34	41	41	100551.4		
			100552.1	100552	35	1	28	17,5	18	39	46	50	100552.4		
			400	315	100553.1	100553	6	3/8	18,5	11,5	12	26	22	14	100553.4
			250	160	100554.1	100554	42	1 1/4	30	19	20	42	55	60	100554.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .

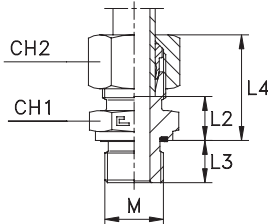
MALE STUD COUPLING WITH ELASTOMER SEAL

Thread Metric Parallel

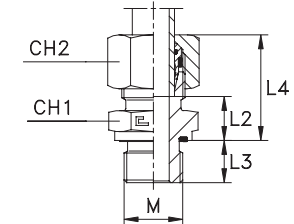
Type: **1006...1** Body



Type: **1006.. B3** Ring



Type: **1006...4** B4 Ring



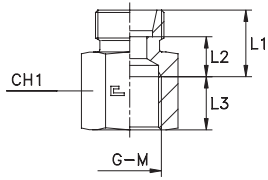
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
LL	100	100	100601.1	100601	4	8x1	13,5	9,5	8	20	12	10	-
			100602.1	100602	6	10x1	13,5	8	8	20	14	12	-
			100603.1	100603	8	10x1	14,5	9	8	21	14	14	-
L	500	315	100604.1	100604	6	10x1	15,5	8,5	8	23	14	14	100604.4
			100605.1	100605	8	12x1,5	17	10	12	25	17	17	100605.4
			100606.1	100606	10	14x1,5	18	11	12	26	19	19	100606.4
			100607.1	100607	12	16x1,5	19,5	12,5	12	27	22	22	100607.4
			100608.1	100608	15	18x1,5	20,5	13,5	12	29	24	27	100608.4
			100609.1	100609	18	22x1,5	22	14,5	14	31	27	32	100609.4
	250	160	100610.1	100610	22	26x1,5	24	16,5	16	33	32	36	100610.4
			100611.1	100611	28	33x2	25	17,5	18	34	41	41	100611.4
			100612.1	100612	35	42x2	28	17,5	20	39	50	50	100612.4
			100613.1	100613	42	48x2	30	19	22	42	55	60	100613.4
S	800	630	100614.1	100614	6	12x1,5	20	13	12	28	17	17	100614.4
			100615.1	100615	8	14x1,5	22	15	12	30	19	19	100615.4
			100616.1	100616	10	16x1,5	22,5	15	12	31	22	22	100616.4
			100617.1	100617	12	18x1,5	24,5	17	12	33	24	24	100617.4
	630	400	100618.1	100618	14	20x1,5	27	19	14	37	27	27	100618.4
			100619.1	100619	16	22x1,5	27	18,5	14	37	27	30	100619.4
	420	315	100620.1	100620	20	27x2	31	20,5	16	42	32	36	100620.4
			100621.1	100621	25	33x2	35	23	18	47	41	46	100621.4
			100622.1	100622	30	42x2	37	23,5	20	50	50	50	100622.4
			100623.1	100623	38	48x2	42	26	22	57	55	60	100623.4
L	400	315	100625.1	100625	8	18x1,5	18,5	11,5	12	26,5	24	17	100625.4
			100626.1	100626	10	16x1,5	19,5	12,5	12	27,5	22	19	100626.4
			100627.1	100627	10	18x1,5	19,5	12,5	12	27,5	24	19	100627.4
			100628.1	100628	10	22x1,5	21	14	14	29	27	19	100628.4
			100629.1	100629	12	14x1,5	19,5	12,5	12	27	19	22	100629.4
			100630.1	100630	12	18x1,5	19,5	12,5	12	27	24	22	100630.4
			100631.1	100631	12	22x1,5	21	14	14	28,5	27	22	100631.4
			100632.1	100632	15	16x1,5	20	13	12	28	24	27	100632.4
			100633.1	100633	15	22x1,5	22	15	14	30	27	27	100633.4
			100634.1	100634	18	18x1,5	21,5	14	12	30,5	27	32	100634.4
250	160	100635.1	100635	22	22x1,5	24	16,5	14	33	32	36	100635.4	
S	630	630	100636.1	100636	12	22x1,5	25	17,5	14	33,5	27	24	100636.4
			100637.1	100637	16	18x1,5	26,5	18	12	36,5	27	30	100637.4
	420	400	100638.1	100638	20	22x1,5	31	20,5	14	42	32	36	100638.4
			100639.1	100639	25	27x2	35	23	16	47	41	46	100639.4
			100640.1	100640	30	33x2	37	23,5	18	50	46	50	100640.4
L	500	315	100641.1	100641	8	10x1	16,5	8,5	8	24,5	14	17	100641.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .

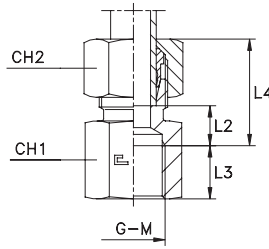
FEMALE STUD COUPLING

Thread BSP Parallel - Thread Metric Parallel

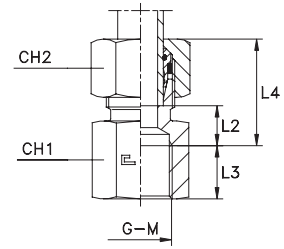
Type: **1007...1** Body
Type: **1008...1** Body



Type: **1007.. B3** Ring
Type: **1008.. B3** Ring



Type: **1007...4** B4 Ring
Type: **1008...4** B4 Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
L	315	315	100704.1	100704	6	1/8	16	9	10	23,5	14	14	100704.4
			100705.1	100705	8	1/4	17	10	14	25	19	17	100705.4
			100706.1	100706	10	1/4	18	11	14	26	19	19	100706.4
			100707.1	100707	12	3/8	19	12	14	26,5	24	22	100707.4
			100708.1	100708	15	1/2	21	14	17	29	27	27	100708.4
	100709.1	100709	18	1/2	21	13,5	17	30	27	32	100709.4		
	160	160	100710.1	100710	22	3/4	24	16,5	19	33	36	36	100710.4
			100711.1	100711	28	1	23,5	16	21,5	32,5	41	41	100711.4
			100712.1	100712	35	1 1/4	28,5	18	23,5	39,5	55	50	100712.4
			100713.1	100713	42	1 1/2	28,5	17,5	25,5	40,5	60	60	100713.4
100714.1			100714	6	1/4	19	12	14	27	19	17	100714.4	
S	400	400	100715.1	100715	8	1/4	19	12	14	27	19	19	100715.4
			100716.1	100716	10	3/8	20	12,5	14	28,5	24	22	100716.4
			100717.1	100717	12	3/8	20	12,5	14	28,5	24	24	100717.4
			100718.1	100718	14	1/2	23	15	17	33	30	27	100718.4
			100719.1	100719	16	1/2	23	14,5	17	33	30	30	100719.4
	315	315	100720.1	100720	20	3/4	26	15,5	19	37	36	36	100720.4
			100721.1	100721	25	1	27,5	15,5	21,5	39,5	41	46	100721.4
			100722.1	100722	30	1 1/4	32,5	19	23,5	45,5	55	50	100722.4
	250	250	100723.1	100723	38	1 1/2	34,5	18,5	25,5	49,5	60	60	100723.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .

Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
L	315	315	100804.1	100804	6	10x1	16	9	10	23,5	14	14	100804.4
			100805.1	100805	8	12x1,5	16,5	9,5	14,5	24,5	17	17	100805.4
			100806.1	100806	10	14x1,5	17,5	10,5	14,5	25,5	19	19	100806.4
			100807.1	100807	12	16x1,5	18,5	11,5	14,5	26	22	22	100807.4
			100808.1	100808	15	18x1,5	23,5	16,5	14,5	31,5	24	27	100808.4
	100809.1	100809	18	22x1,5	21,5	14	16,5	30,5	30	32	100809.4		
	160	160	100810.1	100810	22	26x1,5	23,5	16	18,5	32,5	32	36	100810.4
			100811.1	100811	28	33x2	24	16,5	21	33	41	41	100811.4
			100812.1	100812	35	42x2	28	17,5	23	39	55	50	100812.4
			100813.1	100813	42	48x2	29	18	25	41	60	60	100813.4
100814.1			100814	6	12x1,5	18,5	11,5	14,5	26,5	17	17	100814.4	
S	400	400	100815.1	100815	8	14x1,5	18,5	11,5	14,5	26,5	19	19	100815.4
			100816.1	100816	10	16x1,5	19,5	12	14,5	28	22	22	100816.4
			100817.1	100817	12	18x1,5	19,5	12	14,5	28	24	24	100817.4
			100818.1	100818	14	20x1,5	23,5	15,5	16,5	33,5	27	27	100818.4
			100819.1	100819	16	22x1,5	23,5	15	16,5	33,5	30	30	100819.4
	315	315	100820.1	100820	20	27x2	26	15,5	19	37	36	36	100820.4
			100821.1	100821	25	33x2	28	16	21	40	41	46	100821.4
			100822.1	100822	30	42x2	33	19,5	23	46	55	50	100822.4
	250	250	100823.1	100823	38	48x2	35	19	25	50	60	60	100823.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
* Items available on request only.

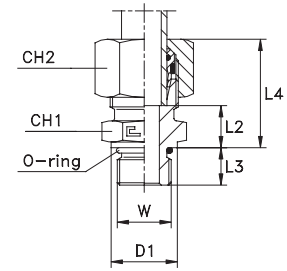
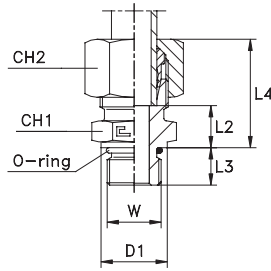
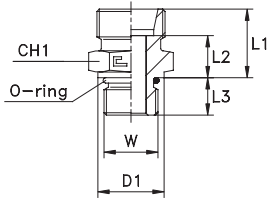
MALE STUD COUPLING WITH O-RING

Thread UNF/UN-2A

Type: **1009...1** Body

Type: **1009.. B3** Ring

Type: **1009...4** B4 Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	W	D1	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
L	315	315	100904.1	100904	6	7/16-20	13,8	16,9	9,9	9,1	24,5	14	14	100904.4
			100905.1	100905	8	1/2-20	16,8	16,9	9,9	9,1	25	17	17	100905.4
			100906.1	100906	10	1/2-20	16,8	17,9	10,9	9,1	26	17	19	100906.4
			100907.1	100907	12	9/16-18	18,8	18	11	10	25,5	19	22	100907.4
			100908.1	100908	15	3/4-16	21,8	20,9	13,9	11,1	29	24	27	100908.4
	100909.1	100909	18	3/4-16	21,8	21,9	14,4	11,1	31	27	32	100909.4		
	160	160	100910.1	100910	22	1 1/16-12	31,8	23,9	16,4	15,1	33	32	36	100910.4
			100911.1	100911	28	15/16-12	40,8	24,9	17,4	15,1	34	41	41	100911.4
			100912.1	100912	35	15/8-12	49,8	27,9	17,4	15,1	39	50	50	100912.4
			100913.1	100913	42	1 7/8-12	54,8	29,9	18,9	15,1	42	55	60	100913.4
100914.1			100914	6	1/2-20	16,8	21,9	14,9	9,1	30	17	17	100914.4	
S	630	630	100915.1	100915	8	1/2-20	16,8	21,9	14,9	9,1	30	17	19	100915.4
			100916.1	100916	10	9/16-18	18,8	22	14,5	10	30,5	19	22	100916.4
			100917.1	100917	12	9/16-18	18,8	22	14,5	10	30,5	22	24	100917.4
			100918.1	100918	14	3/4-16	21,8	23,9	15,9	11,1	34	24	27	100918.4
			100919.1	100919	16	3/4-16	21,8	23,9	15,4	11,1	34	27	30	100919.4
	400	400	100920.1	100920	20	1 1/16-12	31,8	30,9	20,4	15,1	42	32	36	100920.4
			100921.1	100921	25	15/16-12	40,8	34,9	22,9	15,1	47	41	46	100921.4
			100922.1	100922	30	15/8-12	49,8	36,9	23,4	15,1	50	50	50	100922.4
			100923.1	100923	38	1 7/8-12	54,8	41,9	25,9	15,1	57	55	60	100923.4
			100924.1	100924	8	7/16-20	13,8	16,9	9,9	9,1	25	14	17	100924.4
L	315	315	100925.1	100925	10	7/16-20	13,8	17,9	10,9	9,1	26	17	19	100925.4
			100926.1	100926	12	3/4-16	21,8	19,9	12,9	11,1	27,5	22	22	100926.4
			100927.1	100927	12	7/8-14	26,8	21,3	14,3	12,7	29	27	22	100927.4
			100928.1	100928	18	7/8-14	26,8	22,3	14,8	12,7	31,5	27	32	100928.4
			100929.1	100929	22	7/8-14	26,8	24,3	16,8	12,7	33,5	32	36	100929.4
	160	160	100930.1	100930	22	15/16-12	40,8	24,9	17,4	15,1	34	41	36	100930.4
			100931.1	100931	28	1 1/16-12	31,8	24,9	17,4	15,1	34	41	41	100931.4
			100932.1	100932	35	15/16-12	40,8	27,9	17,4	15,1	39	46	50	100932.4
			100933.1	100933	42	15/8-12	49,8	29,9	18,9	15,1	42	55	60	100933.4
			100934.1	100934	8	7/16-20	13,8	21,9	14,9	9,1	30	17	19	100934.4
S	630	630	100935.1	100935	12	3/4-16	21,8	24,9	17,4	11,1	33,5	22	24	100935.4
			100936.1	100936	16	7/8-14	26,8	27,3	18,8	12,7	37,5	27	30	100936.4
	400	400	100937.1	100937	20	3/4-16	21,8	30,9	20,4	11,1	42	32	36	100937.4
			100938.1	100938	20	7/8-14	26,8	31,3	20,8	12,7	42,5	32	36	100938.4
			100939.1	100939	25	1 1/16-12	31,8	34,9	22,9	15,1	47	36	46	100939.4
			100940.1	100940	30	15/16-12	40,8	36,9	23,4	15,1	50	46	50	100940.4
			100941.1	100941	38	15/8-12	49,8	41,9	25,9	15,1	57	55	60	100941.4

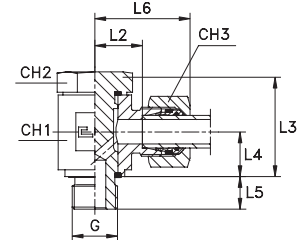
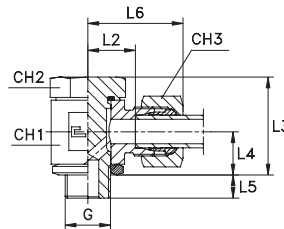
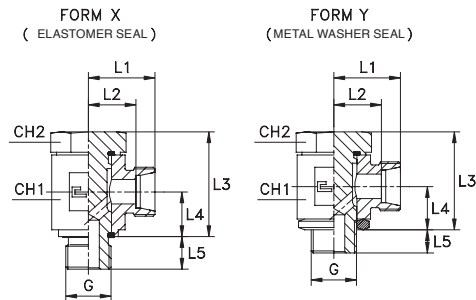
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 * Items available on scheduled orders only.

BANJO COUPLING WITH Thread BSP Parallel

Type: **1013...1** Body

Type: **1013..** B3 Ring

Type: **1013...4** B4 Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	FORM	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	Ordering Equipped B4
LL	100	100	101301.1	101301	4	1/8	X	18	14	24	10,5	8	24	17	17	10	-
			101302.1	101302	6	1/8	X	18	12,5	24	10,5	8	24	17	17	12	-
			101303.1	101303	8	1/8	X	19	13,5	24	10,5	8	25	17	17	14	-
L	315	315	101304.1	101304	6	1/8	X	19	12	24	10,5	8	27	17	17	14	101304.4
			101305.1	101305	8	1/4	X	21,5	14,5	32	14	12	29,5	22	19	17	101305.4
			101306.1	101306	10	1/4	X	22,5	15,5	32	14	12	30,5	22	19	19	101306.4
			101307.1	101307	12	3/8	X	25	18	38,5	16,5	12	33	27	24	22	101307.4
			101308.1	101308	15	1/2	X	29	22	46,5	21,5	14	37	32	30	27	101308.4
			101309.1	101309	18	1/2	X	29	21,5	46,5	21,5	14	38	32	30	32	101309.4
			101310.1	101310	22	3/4	X	34	26,5	54	24	16	43	41	36	36	101310.4
	160	160	101311.1	101311	28	1	X	38,5	31	66,5	30,5	18	47,5	50	46	41	101311.4
			101312.1	101312	35	1 1/4	X	45,5	35	80	35,5	20	56,5	60	55	50	101312.4
			101313.1	101313	42	1 1/2	X	50,5	39,5	90	40,5	22	62,5	70	60	60	101313.4
S	400	400	101314.1	101314	6	1/4	X	23,5	16,5	32	14	12	31,5	22	19	17	101314.4
			101315.1	101315	8	1/4	X	23,5	16,5	32	14	12	31,5	22	19	19	101315.4
			101316.1	101316	10	3/8	X	26	18,5	38,5	16,5	12	35	27	24	22	101316.4
			101317.1	101317	12	3/8	X	26	18,5	38,5	16,5	12	35	27	24	24	101317.4
	315	315	101318.1	101318	14	1/2	X	31	23	46,5	21,5	14	41	32	30	27	101318.4
			101319.1	101319	16	1/2	X	31	22,5	46,5	21,5	14	41	32	30	30	101319.4
	250	250	101320.1	101320	20	3/4	X	36	25,5	54	24	16	47	41	36	36	101320.4
			101321.1	101321	25	1	X	42,5	30,5	66,5	30,5	18	54,5	50	46	46	101321.4
	200	200	101322.1	101322	30	1 1/4	X	49,5	36	80	35,5	20	62,5	60	55	50	101322.4
			101323.1	101323	38	1 1/2	X	56,5	40,5	90	40,5	22	71,5	70	60	60	101323.4
LL	100	100	101351.1	101351	4	1/8	Y	17,5	13,5	21,5	10	6	23,5	14	14	10	-
			101352.1	101352	6	1/8	Y	17,5	12	21,5	10	6	23,5	14	14	12	-
			101353.1	101353	8	1/8	Y	18,5	13	21,5	10	6	24,5	14	14	14	-
L	250	250	101354.1	101354	6	1/8	Y	18,5	11,5	21,5	10	6	26,5	14	14	14	101354.4
			101355.1	101355	8	1/4	Y	21	14	27,5	13	9	29	19	19	17	101355.4
			101356.1	101356	10	1/4	Y	22	15	27,5	13	9	30	19	19	19	101356.4
			101357.1	101357	12	3/8	Y	24	17	32,5	15	9	32	22	22	22	101357.4
			101358.1	101358	15	1/2	Y	27	20	45	21,5	10	35	30	27	27	101358.4
	160	160	101359.1	101359	18	1/2	Y	27	19,5	45	21,5	10	36	30	27	32	101359.4
			101360.1	101360	22	3/4	Y	33	25,5	48	23	13	42	36	32	36	101360.4
S	250	250	101364.1	101364	6	1/4	Y	23	16	27,5	13	9	31	19	19	17	101364.4
			101365.1	101365	8	1/4	Y	23	16	27,5	13	9	31	19	19	19	101365.4
			101366.1	101366	10	3/8	Y	25	17,5	32,5	15	9	34	22	22	22	101366.4
			101367.1	101367	12	3/8	Y	25	17,5	32,5	15	9	34	22	22	24	101367.4
			101368.1	101368	14	1/2	Y	29	21	45	21,5	10	39	30	27	27	101368.4
	160	160	101369.1	101369	16	1/2	Y	29	20,5	45	21,5	10	39	30	27	30	101369.4
			101370.1	101370	20	3/4	Y	35	24,5	48	23	13	46	36	32	36	101370.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm.

BANJO COUPLING

Thread Metric Parallel

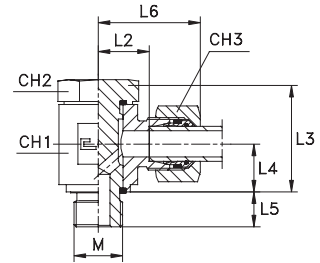
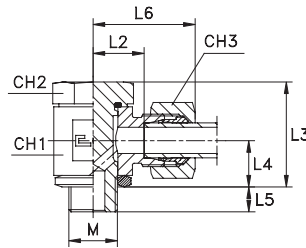
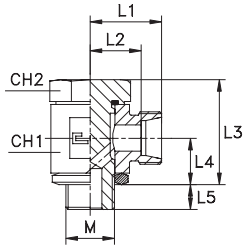
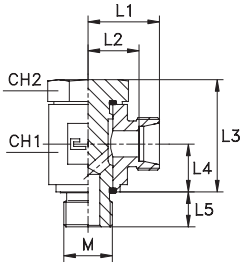
Type: **1014...1** Body

Type: **1014.. B3** Ring

Type: **1014...4** B4 Ring

FORM X
(ELASTOMER SEAL)

FORM Y
(METAL WASHER SEAL)



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	FORM	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	Ordering Equipped B4
LL	100	100	101401.1	101401	4	8x1	X	18	14	24	10,5	8	24	17	14	10	-
			101402.1	101402	6	10x1	X	18	12,5	24	10,5	8	24	17	17	12	-
			101403.1	101403	8	10x1	X	19	13,5	24	10,5	8	25	17	17	14	-
L	315	315	101404.1	101404	6	10x1	X	19	12	24	10,5	8	27	17	17	14	101404.4
			101405.1	101405	8	12x1,5	X	21,5	14,5	32	14	12	29,5	22	19	17	101405.4
			101406.1	101406	10	14x1,5	X	22,5	15,5	32	14	12	30,5	22	19	19	101406.4
			101407.1	101407	12	16x1,5	X	25	18	38,5	16,5	12	33	27	24	22	101407.4
			101408.1	101408	15	18x1,5	X	29	22	42	18,5	12	37	32	27	27	101408.4
			101409.1	101409	18	22x1,5	X	29	21,5	46,5	21,5	14	38	32	30	32	101409.4
	160	160	101410.1	101410	22	26x1,5	X	34	26,5	54	24	16	43	41	36	36	101410.4
			101411.1	101411	28	33x2	X	38,5	31	66,5	30,5	18	47,5	50	46	41	101411.4
			101412.1	101412	35	42x2	X	45,5	35	80	35,5	20	56,5	60	55	50	101412.4
			101413.1	101413	42	48x2	X	50,5	39,5	90	40,5	22	62,5	70	60	60	101413.4
S	400	400	101414.1	101414	6	12x1,5	X	23,5	16,5	32	14	12	31,5	22	19	17	101414.4
			101415.1	101415	8	14x1,5	X	23,5	16,5	32	14	12	31,5	22	19	19	101415.4
			101416.1	101416	10	16x1,5	X	26	18,5	38,5	16,5	12	35	27	24	22	101416.4
			101417.1	101417	12	18x1,5	X	29	21,5	42	18,5	12	38	32	27	24	101417.4
	315	315	101418.1	101418	14	20x1,5	X	31	23	45	20	14	41	32	30	27	101418.4
			101419.1	101419	16	22x1,5	X	31	22,5	46,5	21,5	14	41	32	30	30	101419.4
	250	250	101420.1	101420	20	27x2	X	36	25,5	54	24	16	47	41	36	36	101420.4
			101421.1	101421	25	33x2	X	42,5	31,5	66,5	30,5	18	54,5	50	46	46	101421.4
	200	200	101422.1	101422	30	42x2	X	49,5	36	80	35,5	20	62,5	60	55	50	101422.4
			101423.1	101423	38	48x2	X	56,5	40,5	90	40,5	22	71,5	70	60	60	101423.4
LL	100	100	101451.1	101451	4	8x1	Y	17,5	13,5	21,5	10	6	23,5	14	12	10	-
			101452.1	101452	6	10x1	Y	17,5	12	21,5	10	6	23,5	14	14	12	-
			101453.1	101453	8	10x1	Y	18,5	13	21,5	10	6	24,5	14	14	14	-
L	250	250	101454.1	101454	6	10x1	Y	18,5	11,5	21,5	10	6	26,5	14	14	14	101454.4
			101455.1	101455	8	12x1,5	Y	21	14	27,5	13	9	29	19	17	17	101455.4
			101456.1	101456	10	14x1,5	Y	22	15	27,5	13	9	30	19	19	19	101456.4
			101457.1	101457	12	16x1,5	Y	24	17	32,5	15	9	32	22	22	22	101457.4
	160	160	101458.1	101458	15	18x1,5	Y	25	18	37	17	9	33	24	24	27	101458.4
			101459.1	101459	18	22x1,5	Y	27	19,5	45	21,5	10	36	30	27	32	101459.4
S	250	250	101460.1	101460	22	26x1,5	Y	33	25,5	48	23	13	42	36	32	36	101460.4
			101464.1	101464	6	12x1,5	Y	23	16	27,5	13	9	31	19	17	17	101464.4
			101465.1	101465	8	14x1,5	Y	23	16	27,5	13	9	31	19	19	19	101465.4
			101466.1	101466	10	16x1,5	Y	25	17,5	32,5	15	9	34	22	22	22	101466.4
			101467.1	101467	12	18x1,5	Y	25	17,5	37	17	9	34	24	24	24	101467.4
			101468.1	101468	14	20x1,5	Y	28	20	45	21,5	10	38	27	27	27	101468.4
	160	160	101469.1	101469	16	22x1,5	Y	29	20,5	45	21,5	10	39	30	27	30	101469.4
			101470.1	101470	20	27x2	Y	35	24,5	48	23	13	46	36	32	36	101470.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 Items not included in the ISO 8434-1 Norm.

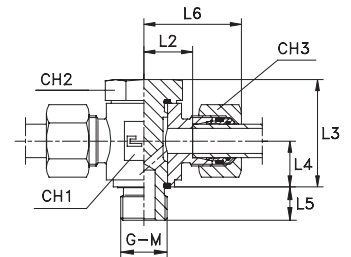
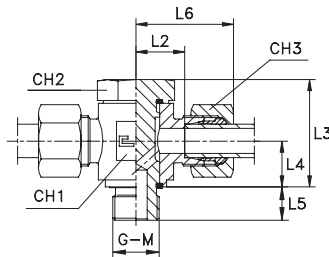
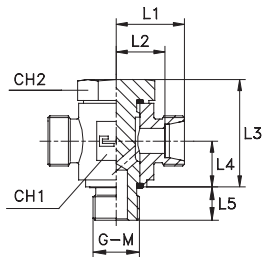
BANJO TEE COUPLING WITH ALLOW SCREW AND ELASTOMER SEAL

Thread BSP Parallel - Thread Metric Parallel

Type: **1015...1** Body
Type: **1016...1** Body

Type: **1015.. B3** Ring
Type: **1016.. B3** Ring

Type: **1015...4** B4 Ring
Type: **1016...4** B4 Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	101504.1	101504	6	1/8	19	12	24	10,5	8	27	17	17	14	101504.4
			101505.1	101505	8	1/4	21,5	14,5	32	14	12	29,5	22	19	17	101505.4
			101506.1	101506	10	1/4	22,5	15,5	32	14	12	30,5	22	19	19	101506.4
			101507.1	101507	12	3/8	25	18	38,5	16,5	12	33	27	24	22	101507.4
			101508.1	101508	15	1/2	29	22	46,5	21,5	14	37	32	30	27	101508.4
	101509.1	101509	18	1/2	29	21,5	46,5	21,5	14	38	32	30	32	101509.4		
	160	160	101510.1	101510	22	3/4	34	26,5	54	24	16	43	41	36	36	101510.4
			101511.1	101511	28	1	38,5	31	66,5	30,5	18	47,5	50	46	41	101511.4
			101512.1	101512	35	1 1/4	45,5	35	80	35,5	20	56,5	60	55	50	101512.4
			101513.1	101513	42	1 1/2	50,5	39,5	90	40,5	22	62,5	70	60	60	101513.4
101514.1			101514	6	1/4	23,5	16,5	32	14	12	31,5	22	19	17	101514.4	
S	400	400	101515.1	101515	8	1/4	23,5	16,5	32	12	12	31,5	22	19	19	101515.4
			101516.1	101516	10	3/8	26	18,5	38,5	16,5	12	35	27	24	22	101516.4
			101517.1	101517	12	3/8	26	18,5	38,5	16,5	12	35	27	24	24	101517.4
			101518.1	101518	14	1/2	31	23	46,5	21,5	14	41	32	30	27	101518.4
	315	315	101519.1	101519	16	1/2	31	22,5	46,5	21,5	14	41	32	30	30	101519.4
			101520.1	101520	20	3/4	36	25,5	54	24	16	47	41	36	36	101520.4
	250	250	101521.1	101521	25	1	42,5	30,5	66,5	30,5	18	54,5	50	46	46	101521.4
			101522.1	101522	30	1 1/4	49,5	36	80	35,5	20	62,5	60	55	50	101522.4
	200	200	101523.1	101523	38	1 1/2	56,5	40,5	90	40,5	22	71,5	70	60	60	101523.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on scheduled orders only

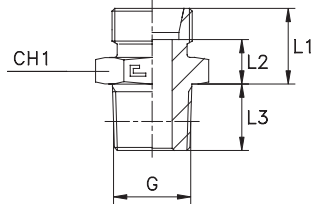
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	101604.1	101604	6	10x1	19	12	24	10,5	8	26	17	17	14	101604.4
			101605.1	101605	8	12x1,5	21,5	14,5	32	14	12	29,5	22	19	17	101605.4
			101606.1	101606	10	14x1,5	22,5	15,5	32	14	12	30,5	22	19	19	101606.4
			101607.1	101607	12	16x1,5	25	18	38,5	16,5	12	33	27	24	22	101607.4
			101608.1	101608	15	18x1,5	29	22	42	18,5	12	37	32	27	27	101608.4
	101609.1	101609	18	22x1,5	29	21,5	46,5	21,5	14	38	32	30	32	101609.4		
	160	160	101610.1	101610	22	26x1,5	34	26,5	54	24	16	43	41	36	36	101610.4
			101611.1	101611	28	33x2	38,5	31	66,5	30,5	18	47,5	50	46	41	101611.4
			101612.1	101612	35	42x2	45,5	35	80	35,5	20	56,5	60	55	50	101612.4
			101613.1	101613	42	48x2	50,5	39,5	90	40,5	22	62,5	70	60	60	101613.4
101614.1			101614	6	12x1,5	23,5	16,5	32	14	12	31,5	22	19	17	101614.4	
S	400	400	101615.1	101615	8	14x1,5	23,5	16,5	32	14	12	31,5	22	19	19	101615.4
			101616.1	101616	10	16x1,5	26	18,5	38,5	16,5	12	35	27	24	22	101616.4
			101617.1	101617	12	18x1,5	29	21,5	42	18,5	12	38	32	27	24	101617.4
			101618.1	101618	14	20x1,5	31	23	45	20	14	41	32	30	27	101618.4
	315	315	101619.1	101619	16	22x1,5	31	22,5	46,5	21,5	14	41	32	30	30	101619.4
			101620.1	101620	20	27x2	36	25,5	54	24	16	47	41	36	36	101620.4
	250	250	101621.1	101621	25	33x2	42,5	31,5	66,5	30,5	18	54,5	50	46	46	101621.4
			101622.1	101622	30	42x2	49,5	36	80	35,5	20	62,5	60	55	50	101622.4
	200	200	101623.1	101623	38	48x2	56,5	40,5	90	40,5	22	71,5	70	60	60	101623.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on scheduled orders only

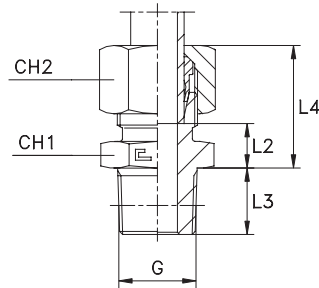
MALE STUD COUPLING

Thread BSP Taper

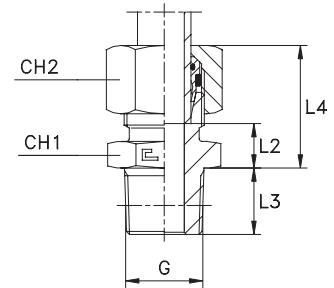
Type: **1017...1** Body



Type: **1017... B3** Ring



Type: **1017...4** B4 Ring



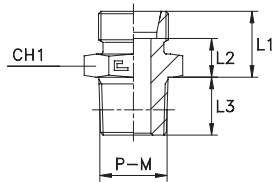
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
LL	100	100	101701.1	101701	4	1/8	12	8	8	18,5	12	10	-
			101702.1	101702	6	1/8	12	6,5	8	18,5	12	12	-
			101703.1	101703	8	1/8	14	8,5	8	20,5	12	14	-
L	315	315	101704.1	101704	6	1/8	14	7	8	22	12	14	101704.4
			101705.1	101705	8	1/4	15	8	12	23	17	17	101705.4
			101706.1	101706	10	1/4	16	9	12	24	17	19	101706.4
			101707.1	101707	12	3/8	17	10	12	24,5	19	22	101707.4
			101708.1	101708	15	1/2	18	11	14	26	24	27	101708.4
			101709.1	101709	18	1/2	19	11,5	14	28	27	32	101709.4
	160	160	101710.1	101710	22	3/4	21	13,5	16	30	32	36	101710.4
			101711.1	101711	28	1	22	14,5	18	31	41	41	101711.4
			101712.1	101712	35	1 1/4	25	14,5	20	36	46	50	101712.4
			101713.1	101713	42	1 1/2	27	16	22	39	55	60	101713.4
S	630	630	101714.1	101714	6	1/4	18	11	12	26	17	17	101714.4
			101715.1	101715	8	1/4	20	13	12	28	17	19	101715.4
			101716.1	101716	10	3/8	20	12,5	12	28,5	19	22	101716.4
			101717.1	101717	12	3/8	22	14,5	12	30,5	22	24	101717.4
	400	400	101718.1	101718	14	1/2	24	16	14	34	24	27	101718.4
			101719.1	101719	16	1/2	24	15,5	14	34	27	30	101719.4
			101720.1	101720	20	3/4	28	17,5	16	39	32	36	101720.4
			101721.1	101721	25	1	32	20	18	44	41	46	101721.4
			101722.1	101722	30	1 1/4	34	20,5	20	47	46	50	101722.4
			101723.1	101723	38	1 1/2	39	23	22	54	55	60	101723.4
L	315	315	101724.1	101724	6	1/4	15	8	12	22,5	14	14	101724.4
			101725.1	101725	8	1/8	15	8	8	22	14	17	101725.4
			101726.1	101726	8	3/8	16	9	12	25	19	17	101726.4
			101727.1	101727	8	1/2	16	9	14	25	22	17	101727.4
			101728.1	101728	10	1/8	16	9	8	24	17	19	101728.4
			101729.1	101729	10	3/8	17	10	12	25	19	19	101729.4
			101730.1	101730	10	1/2	17	10	14	25	22	19	101730.4
			101731.1	101731	12	1/4	17	10	12	24,5	19	22	101731.4
			101732.1	101732	12	1/2	17	10	14	24,5	22	22	101732.4
			101733.1	101733	15	3/8	18	11	12	26	24	27	101733.4
S	630	630	101734.1	101734	18	3/4	19	11,5	16	28	32	32	101734.4
			101735.1	101735	12	1/2	22	14,5	14	30,5	22	24	101735.4
	400	400	101736.1	101736	14	3/8	24	16	12	34	24	27	101736.4
			101737.1	101737	16	3/8	24	15,5	12	34	27	30	101737.4
			101738.1	101738	20	1/2	28	17,5	14	39	32	36	101738.4
			101739.1	101739	25	3/4	32	20	16	44	41	46	101739.4
101740.1	101740	30	1	34	20,5	18	47	46	50	101740.4			

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
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 Items not included in the ISO 8434-1 Norm.

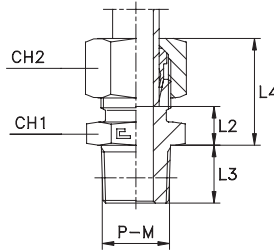
MALE STUD COUPLING

Thread NPT - Thread Metric Taper

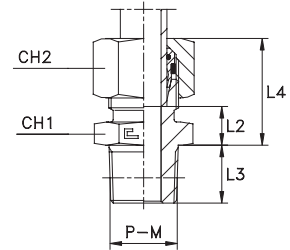
Type: **1018...1** Body
Type: **1019...1** Body



Type: **1018.. B3** Ring
Type: **1019.. B3** Ring



Type: **1018...4** B4 Ring
Type: **1019...4** B4 Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	P	L1	L2	L3	L4	CH1	CH2	Ordering Completo B4
L	315	315	101804.1	101804	6	1/8	14	7	10	22	12	14	101804.4
			101805.1	101805	8	1/4	15	8	15	23	17	17	101805.4
			101806.1	101806	10	1/4	16	9	15	24	17	19	101806.4
			101807.1	101807	12	3/8	17	10	15	24,5	19	22	101807.4
			101808.1	101808	15	1/2	18,5	11,5	19,5	26,5	24	27	101808.4
	101809.1	101809	18	1/2	19,5	12	19,5	28,5	27	32	101809.4		
	101810.1	101810	22	3/4	21	13,5	20	30	32	36	101810.4		
	101811.1	101811	28	1	22	14,5	25	31	41	41	101811.4		
	101812.1	101812	35	1 1/4	25,5	15	25,5	36,5	46	50	101812.4		
	101813.1	101813	42	1 1/2	27	16	26	39	55	60	101813.4		
S	630	630	101814.1	101814	6	1/4	18	11	15	26	17	17	101814.4
			101815.1	101815	8	1/4	20	13	15	28	17	19	101815.4
			101816.1	101816	10	3/8	20	12,5	15	28,5	19	22	101816.4
			101817.1	101817	12	3/8	22	14,5	15	30,5	22	24	101817.4
			101818.1	101818	14	1/2	24,5	16,5	19,5	34,5	24	27	101818.4
	101819.1	101819	16	1/2	24,5	16	19,5	34,5	27	30	101819.4		
	101820.1	101820	20	3/4	28	17,5	20	39	32	36	101820.4		
	101821.1	101821	25	1	32	20	25	44	41	46	101821.4		
	101822.1	101822	30	1 1/4	34,5	21	25,5	47,5	46	50	101822.4		
	101823.1	101823	38	1 1/2	39	23	26	54	55	60	101823.4		
L	315	315	101824.1	101824	6	1/4	15	8	15	22,5	14	14	101824.4
			101825.1	101825	8	1/8	15	8	10	23	17	17	101825.4
			101826.1	101826	8	3/8	16	9	15	24	19	17	101826.4
			101827.1	101827	8	1/2	16,5	9,5	19,5	24,5	22	17	101827.4
			101828.1	101828	10	1/8	16	9	10	24	17	19	101828.4
			101829.1	101829	10	3/8	17	10	15	25	19	19	101829.4
			101830.1	101830	10	1/2	17,5	10,5	19,5	25,5	22	19	101830.4
			101831.1	101831	12	1/4	17	10	15	24,5	19	22	101831.4
			101832.1	101832	12	1/2	17,5	10,5	19,5	25	22	22	101832.4
			101833.1	101833	15	3/8	18	11	15	26	24	27	101833.4
101834.1	101834	18	3/4	19	11,5	20	28	32	32	101834.4			
S	630	630	101835.1	101835	12	1/2	22,5	15	19,5	31	22	24	101835.4
			101836.1	101836	14	3/8	24	16	15	34	24	27	101836.4
	101837.1	101837	16	3/8	24	15,5	15	34	27	30	101837.4		
	101838.1	101838	20	1/2	28,5	18	19,5	39,5	32	36	101838.4		
	101839.1	101839	25	3/4	32	20	20	44	41	46	101839.4		
	101840.1	101840	30	1	34	20,5	25	47	46	50	101840.4		

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Items not included in the ISO 8434-1 Norm.

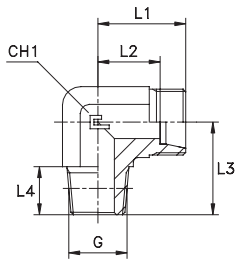
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
L	315	315	101904.1	101904	6	10x1	14	7	8	22	12	14	101904.4
			101905.1	101905	8	12x1,5	15	8	12	23	17	17	101905.4
			101906.1	101906	10	14x1,5	16	9	12	24	17	19	101906.4
			101907.1	101907	12	16x1,5	17	10	12	24,5	19	22	101907.4
			101908.1	101908	15	18x1,5	18	11	12	26	24	27	101908.4
			101909.1	101909	18	22x1,5	19	11,5	14	28	27	32	101909.4
S	630	630	101914.1	101914	6	12x1,5	18	11	12	26	17	17	101914.4
			101915.1	101915	8	14x1,5	20	13	12	28	17	19	101915.4
			101916.1	101916	10	16x1,5	20	12,5	12	28,5	19	22	101916.4
			101917.1	101917	12	18x1,5	22	14,5	12	30,5	22	24	101917.4
			101918.1	101918	14	20x1,5	24	16	14	34	24	27	101918.4
			101919.1	101919	16	22x1,5	24	15,5	14	34	27	30	101919.4

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If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

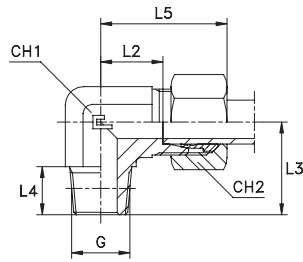
MALE STUD ELBOW

Thread BSP Taper

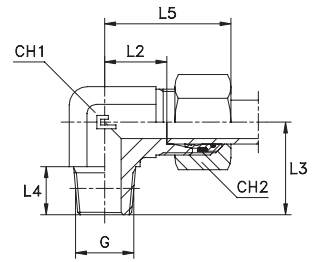
Type: **1020...1** Body



Type: **1020.. B3** Ring



Type: **1020...4** B4 Ring



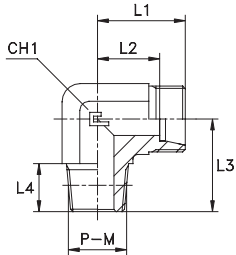
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	L5	CH1	CH2	Ordering Equipped B4
LL	100	100	102001.1	102001	4	1/8	15	11	17	8	21	9	10	-
			102002.1	102002	6	1/8	15	9,5	17	8	21	9	12	-
			102003.1	102003	8	1/8	17	11,5	20	8	23	12	14	-
L	315	315	102004.1	102004	6	1/8	19	12	20	8	27	12	14	102004.4
			102005.1	102005	8	1/4	21	14	26	12	29	12	17	102005.4
			102006.1	102006	10	1/4	22	15	27	12	30	14	19	102006.4
			102007.1	102007	12	3/8	24	17	28	12	32	17	22	102007.4
			102008.1	102008	15	1/2	28	21	34	14	36	19	27	102008.4
			102009.1	102009	18	1/2	31	23,5	36	14	40	24	32	102009.4
	160	160	102010.1	102010	22	3/4	35	27,5	42	16	44	27	36	102010.4
			102011.1	102011	28	1	38	30,5	48	18	47	36	41	102011.4
			102012.1	102012	35	1 1/4	45	34,5	54	20	56	41	50	102012.4
			102013.1	102013	42	1 1/2	51	40	61	22	63	50	60	102013.4
S	630	630	102014.1	102014	6	1/4	23	16	26	12	31	12	17	102014.4
			102015.1	102015	8	1/4	24	17	27	12	32	14	19	102015.4
			102016.1	102016	10	3/8	25	17,5	28	12	34	17	22	102016.4
			102017.1	102017	12	3/8	29	21,5	28	12	38	17	24	102017.4
			102018.1	102018	14	1/2	30	22	32	14	40	19	27	102018.4
	400	400	102019.1	102019	16	1/2	33	24,5	32	14	43	24	30	102019.4
			102020.1	102020	20	3/4	37	26,5	42	16	48	27	36	102020.4
			102021.1	102021	25	1	42	30	48	18	54	36	46	102021.4
			102022.1	102022	30	1 1/4	49	35,5	54	20	62	41	50	102022.4
			102023.1	102023	38	1 1/2	57	41	61	22	72	50	60	102023.4
L	315	315	102024.1	102024	6	1/4	21	14	26	12	29	12	14	102024.4
			102025.1	102025	8	1/8	21	14	22	8	29	12	17	102025.4
			102026.1	102026	8	3/8	23	16	28	12	31	17	17	102026.4
			102027.1	102027	8	1/2	26	19	34	14	34	19	17	102027.4
			102028.1	102028	10	1/8	22	15	22	8	30	14	19	102028.4
			102029.1	102029	10	3/8	24	17	28	12	32	17	19	102029.4
			102030.1	102030	10	1/2	27	20	34	14	35	19	19	102030.4
			102031.1	102031	12	1/4	24	17	28	12	32	17	22	102031.4
			102032.1	102032	12	1/2	27	20	34	14	34	19	22	102032.4
			102033.1	102033	15	3/8	28	21	30	12	36	19	27	102033.4
102034.1	102034	18	3/4	34	26,5	42	16	43	27	32	102034.4			
S	630	630	102035.1	102035	12	1/2	28	20,5	32	14	37	19	24	102035.4
			102036.1	102036	14	3/8	30	22	30	12	40	19	27	102036.4
	400	400	102037.1	102037	16	3/8	33	24,5	37	12	43	24	30	102037.4
			102038.1	102038	20	1/2	37	26,5	36	14	48	27	36	102038.4
			102039.1	102039	25	3/4	42	30	42	16	54	36	46	102039.4
			102040.1	102040	30	1	49	35,5	48	18	62	41	50	102040.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 Items not included in the ISO 8434-1 Norm.

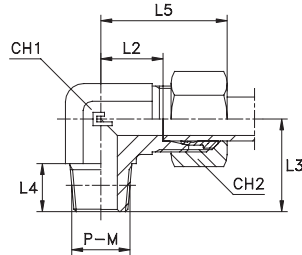
MALE STUD ELBOW

Thread NPT - Thread Metric Taper

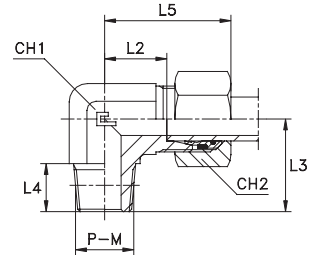
Type: **1021...1** Body
Type: **1022...1** Body



Type: **1021.. B3** Ring
Type: **1022.. B3** Ring



Type: **1021...4 B4** Ring
Type: **1022...4 B4** Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	P	L1	L2	L3	L4	L5	CH1	CH2	Ordering Equipped B4
L	315	315	102104.1	102104	6	1/8	19	12	20	10	27	12	14	102104.4
			102105.1	102105	8	1/4	21	14	26	15	29	12	17	102105.4
			102106.1	102106	10	1/4	22	15	27	15	30	14	19	102106.4
			102107.1	102107	12	3/8	24	17	28	15	32	17	22	102107.4
			102108.1	102108	15	1/2	28	21	34	19.5	36	19	27	102108.4
	102109.1	102109	18	1/2	31	23.5	36	19.5	40	24	32	102109.4		
	102110.1	102110	22	3/4	35	27.5	42	20	44	27	36	102110.4		
	102111.1	102111	28	1	38	30.5	48	25	47	36	41	102111.4		
	102112.1	102112	35	1 1/4	45	34.5	57	25.5	56	41	50	102112.4		
	102113.1	102113	42	1 1/2	51	40	61	26	63	50	60	102113.4		
S	630	630	102114.1	102114	6	1/4	23	16	26	15	31	12	17	102114.4
			102115.1	102115	8	1/4	24	17	27	15	32	14	19	102115.4
			102116.1	102116	10	3/8	25	17.5	28	15	34	17	22	102116.4
			102117.1	102117	12	3/8	29	21.5	28	15	38	17	24	102117.4
			102118.1	102118	14	1/2	30	22	34	19.5	40	19	27	102118.4
	102119.1	102119	16	1/2	33	24.5	36	19.5	43	24	30	102119.4		
	102120.1	102120	20	3/4	37	26.5	42	20	48	27	36	102120.4		
	102121.1	102121	25	1	42	30	48	25	54	36	46	102121.4		
	102122.1	102122	30	1 1/4	49	35.5	57	25.5	62	41	50	102122.4		
	102123.1	102123	38	1 1/2	57	41	61	26	72	50	60	102123.4		
L	315	315	102124.1	102124	6	1/4	21	14	26	15	29	12	14	102124.4
			102125.1	102125	8	1/8	21	14	24	10	29	12	17	102125.4
			102126.1	102126	8	3/8	23	16	28	15	31	17	17	102126.4
			102127.1	102127	8	1/2	26	19	34	19.5	34	19	17	102127.4
			102128.1	102128	10	1/8	22	15	24	10	30	14	19	102128.4
			102129.1	102129	10	3/8	24	17	28	15	32	17	19	102129.4
			102130.1	102130	10	1/2	27	20	34	19.5	35	19	19	102130.4
			102131.1	102131	12	1/4	24	17	28	15	32	17	22	102131.4
			102132.1	102132	12	1/2	27	20	34	19.5	35	19	22	102132.4
			102133.1	102133	15	3/8	28	21	33	15	36	19	27	102133.4
102134.1	102134	18	3/4	34	26.5	42	20	43	27	32	102134.4			
S	630	630	102135.1	102135	12	1/2	28	20.5	34	19.5	37	19	24	102135.4
			102136.1	102136	14	3/8	30	22	33	15	40	19	27	102136.4
	102137.1	102137	16	3/8	33	24.5	37	15	43	24	30	102137.4		
	102138.1	102138	20	1/2	37	26.5	42	19.5	48	27	36	102138.4		
	102139.1	102139	25	3/4	42	30	46	20	54	36	46	102139.4		
	102140.1	102140	30	1	49	35.5	55	25	62	41	50	102140.4		

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm.

Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	L5	CH1	CH2	Ordering Equipped B4
L	315	315	102204.1	102204	6	10x1	19	12	20	8	27	12	14	102204.4
			102205.1	102205	8	12x1.5	21	14	26	12	29	12	17	102205.4
			102206.1	102206	10	14x1.5	22	15	27	12	30	14	19	102206.4
			102207.1	102207	12	16x1.5	24	17	28	12	32	17	22	102207.4
			102208.1	102208	15	18x1.5	28	21	32	12	36	19	27	102208.4
102209.1	102209	18	22x1.5	31	23.5	36	14	40	24	32	102209.4			
S	630	630	102214.1	102214	6	12x1.5	23	16	26	12	31	12	17	102214.4
			102215.1	102215	8	14x1.5	24	17	27	12	32	14	19	102215.4
			102216.1	102216	10	16x1.5	25	17.5	28	12	34	17	22	102216.4
	102217.1	102217	12	18x1.5	29	21.5	28	12	38	17	24	102217.4		
	102218.1	102218	14	20x1.5	30	22	32	14	40	19	27	102218.4		
	102219.1	102219	16	22x1.5	33	24.5	32	14	43	24	30	102219.4		

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

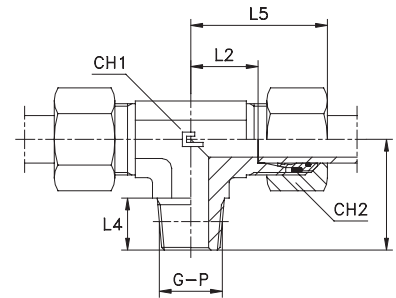
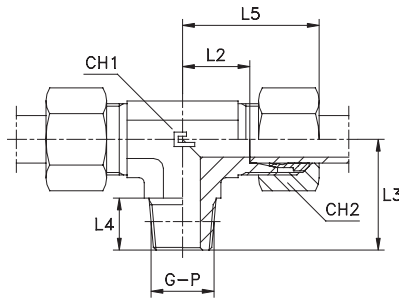
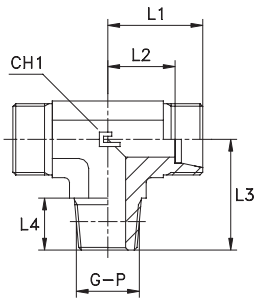
MALE STUD BRANCH TEE

Thread BSP Taper - Thread NPT

Type: **1025...1** Body
Type: **1026...1** Body

Type: **1025... B3** Ring
Type: **1026... B3** Ring

Type: **1025...4** B4 Ring
Type: **1026...4** B4 Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	L5	CH1	CH2	Ordering Equipped B4
LL	100	100	102501.1	102501	4	1/8	15	11	17	8	21	9	10	-
			102502.1	102502	6	1/8	15	9.5	17	8	21	9	12	-
			102503.1	102503	8	1/8	17	11.5	20	8	23	12	14	-
L	315	315	102504.1	102504	6	1/8	19	12	20	8	27	12	14	102504.4
			102505.1	102505	8	1/4	21	14	26	12	29	12	17	102505.4
			102506.1	102506	10	1/4	22	15	27	12	30	14	19	102506.4
			102507.1	102507	12	3/8	24	17	28	12	32	17	22	102507.4
			102508.1	102508	15	1/2	28	21	34	14	36	19	27	102508.4
			102509.1	102509	18	1/2	31	23.5	36	14	40	24	32	102509.4
	160	160	102510.1	102510	22	3/4	35	27.5	42	16	44	27	36	102510.4
			102511.1	102511	28	1	38	30.5	48	18	47	36	41	102511.4
			102512.1	102512	35	1 1/4	45	34.5	54	20	56	41	50	102512.4
			102513.1	102513	42	1 1/2	51	40	61	22	63	50	60	102513.4
S	630	630	102514.1	102514	6	1/4	23	16	26	12	31	12	17	102514.4
			102515.1	102515	8	1/4	24	17	27	12	32	14	19	102515.4
			102516.1	102516	10	3/8	25	17.5	28	12	34	17	22	102516.4
			102517.1	102517	12	3/8	29	21.5	28	12	38	17	24	102517.4
			102518.1	102518	14	1/2	30	22	32	14	40	19	27	102518.4
	400	400	102519.1	102519	16	1/2	33	24.5	32	14	43	24	30	102519.4
			102520.1	102520	20	3/4	37	26.5	42	16	48	27	36	102520.4
			102521.1	102521	25	1	42	30	48	18	54	36	46	102521.4
			102522.1	102522	30	1 1/4	49	35.5	54	20	62	41	50	102522.4
			102523.1	102523	38	1 1/2	57	41	61	22	72	50	60	102523.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on scheduled orders only

Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	P	L1	L2	L3	L4	L5	CH1	CH2	Ordering Equipped B4
L	315	315	102604.1	102604	6	1/8	19	12	20	10	27	12	14	102604.4
			102605.1	102605	8	1/4	21	14	26	15	29	12	17	102605.4
			102606.1	102606	10	1/4	22	15	27	15	30	14	19	102606.4
			102607.1	102607	12	3/8	24	17	28	15	32	17	22	102607.4
			102608.1	102608	15	1/2	28	21	34	19.5	36	19	27	102608.4
			102609.1	102609	18	1/2	31	23.5	36	19.5	40	24	32	102609.4
			102610.1	102610	22	3/4	35	27.5	42	20	44	27	36	102610.4
S	160	160	102611.1	102611	28	1	38	30.5	48	25	47	36	41	102611.4
			102612.1	102612	35	1 1/4	45	34.5	57	25.5	56	41	50	102612.4
			102613.1	102613	42	1 1/2	51	40	61	26	63	50	60	102613.4
			102614.1	102614	6	1/4	23	16	26	15	31	12	17	102614.4
			102615.1	102615	8	1/4	24	17	27	15	32	14	19	102615.4
	630	630	102616.1	102616	10	3/8	25	17.5	28	15	34	17	22	102616.4
			102617.1	102617	12	3/8	29	21.5	28	15	38	17	24	102617.4
			102618.1	102618	14	1/2	30	22	34	19.5	40	19	27	102618.4
			102619.1	102619	16	1/2	33	24.5	36	19.5	43	24	30	102619.4
			102620.1	102620	20	3/4	37	26.5	42	20	48	27	36	102620.4
400	400	102621.1	102621	25	1	42	30	48	25	54	36	46	102621.4	
		102622.1	102622	30	1 1/4	49	35.5	57	25.5	62	41	50	102622.4	
		102623.1	102623	38	1 1/2	57	41	61	26	72	50	60	102623.4	

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on scheduled orders only

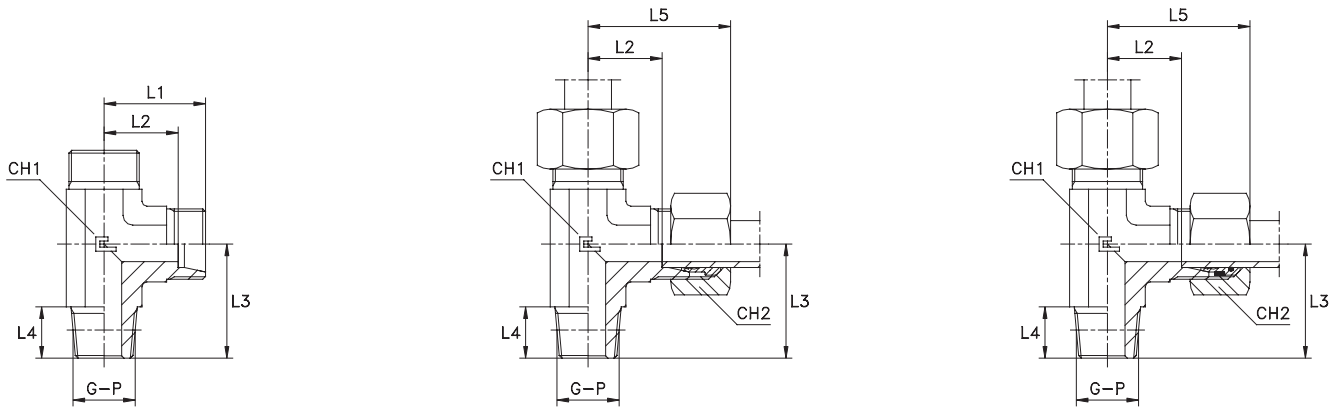
MALE STUD BARREL TEE

Thread BSP Taper - Thread NPT

Type: **1030...1** Body
Type: **1031...1** Body

Type: **1030.. B3** Ring
Type: **1031.. B3** Ring

Type: **1030...4 B4** Ring
Type: **1031...4 B4** Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	L5	CH1	CH2	Ordering Equipped B4
LL	100	100	103001.1	103001	4	1/8	15	11	17	8	21	9	10	-
			103002.1	103002	6	1/8	15	9.5	17	8	21	9	12	-
			103003.1	103003	8	1/8	17	11.5	20	8	23	12	14	-
L	315	315	103004.1	103004	6	1/8	19	12	20	8	27	12	14	103004.4
			103005.1	103005	8	1/4	21	14	26	12	29	12	17	103005.4
			103006.1	103006	10	1/4	22	15	27	12	30	14	19	103006.4
			103007.1	103007	12	3/8	24	17	28	12	32	17	22	103007.4
			103008.1	103008	15	1/2	28	21	34	14	36	19	27	103008.4
			103009.1	103009	18	1/2	31	23.5	36	14	40	24	32	103009.4
	630	630	103010.1	103010	22	3/4	35	27.5	42	16	44	27	36	103010.4
			103011.1	103011	28	1	38	30.5	48	18	47	36	41	103011.4
			103012.1	103012	35	1 1/4	45	34.5	54	20	56	41	50	103012.4
			103013.1	103013	42	1 1/2	51	40	61	22	63	50	60	103013.4
S	400	400	103014.1	103014	6	1/4	23	16	26	12	31	12	17	103014.4
			103015.1	103015	8	1/4	24	17	27	12	32	14	19	103015.4
			103016.1	103016	10	3/8	25	17.5	28	12	34	17	22	103016.4
			103017.1	103017	12	3/8	29	21.5	28	12	38	17	24	103017.4
			103018.1	103018	14	1/2	30	22	32	14	40	19	27	103018.4
			103019.1	103019	16	1/2	33	24.5	32	14	43	24	30	103019.4
	315	315	103020.1	103020	20	3/4	37	26.5	42	16	48	27	36	103020.4
			103021.1	103021	25	1	42	30	48	18	54	36	46	103021.4
			103022.1	103022	30	1 1/4	49	35.5	54	20	62	41	50	103022.4
			103023.1	103023	38	1 1/2	57	41	61	22	72	50	60	103023.4

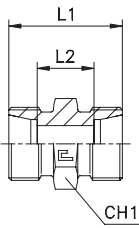
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on scheduled orders only

Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	P	L1	L2	L3	L4	L5	CH1	CH2	Ordering Equipped B4
L	315	315	103104.1	103104	6	1/8	19	12	20	10	27	12	14	103104.4
			103105.1	103105	8	1/4	21	14	26	15	29	12	17	103105.4
			103106.1	103106	10	1/4	22	15	27	15	30	14	19	103106.4
			103107.1	103107	12	3/8	24	17	28	15	32	17	22	103107.4
			103108.1	103108	15	1/2	28	21	34	19.5	36	19	27	103108.4
			103109.1	103109	18	1/2	31	23.5	36	19.5	40	24	32	103109.4
S	630	630	103110.1	103110	22	3/4	35	27.5	42	20	44	27	36	103110.4
			103111.1	103111	28	1	38	30.5	48	25	47	36	41	103111.4
			103112.1	103112	35	1 1/4	45	34.5	57	25.5	56	41	50	103112.4
			103113.1	103113	42	1 1/2	51	40	61	26	63	50	60	103113.4
			103114.1	103114	6	1/4	23	16	26	15	31	12	17	103114.4
			103115.1	103115	8	1/4	24	17	27	15	32	14	19	103115.4
	400	400	103116.1	103116	10	3/8	25	17.5	28	15	34	17	22	103116.4
			103117.1	103117	12	3/8	29	21.5	28	15	38	17	24	103117.4
			103118.1	103118	14	1/2	30	22	34	19.5	40	19	27	103118.4
			103119.1	103119	16	1/2	33	24.5	36	19.5	43	24	30	103119.4
315	315	103120.1	103120	20	3/4	37	26.5	42	20	48	27	36	103120.4	
		103121.1	103121	25	1	42	30	48	25	54	36	46	103121.4	
		103122.1	103122	30	1 1/4	49	35.5	57	25.5	62	41	50	103122.4	
		103123.1	103123	38	1 1/2	57	41	61	26	72	50	60	103123.4	

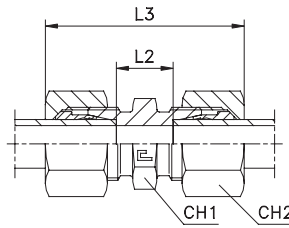
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on scheduled orders only

STRAIGHT COUPLING

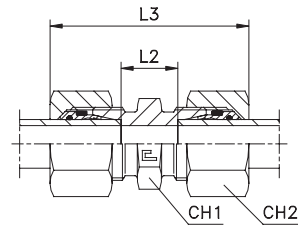
Type: 1035...1 Body



Type: 1035.. B3 Ring



Type: 1035...4 B4 Ring

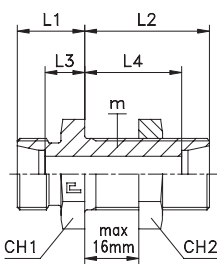


Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	L1	L2	L3	CH1	CH2	Ordering Equipped B4
LL	100	100	103501.1	103501	4	20	12	31	12	10	-
			103502.1	103502	6	20	9	32	12	12	-
			103503.1	103503	8	23	12	35	12	14	-
L	500	315	103504.1	103504	6	24	10	39	12	14	103504.4
			103505.1	103505	8	25	11	40	14	17	103505.4
			103506.1	103506	10	27	13	42	17	19	103506.4
			103507.1	103507	12	28	14	43	19	22	103507.4
			103508.1	103508	15	30	16	46	24	27	103508.4
	400	160	103509.1	103509	18	31	16	48	27	32	103509.4
			103510.1	103510	22	35	20	52	32	36	103510.4
			103511.1	103511	28	36	21	54	41	41	103511.4
			103512.1	103512	35	41	20	63	46	50	103512.4
			103513.1	103513	42	43	21	66	55	60	103513.4
S	800	630	103514.1	103514	6	30	16	45	14	17	103514.4
			103515.1	103515	8	32	18	47	17	19	103515.4
			103516.1	103516	10	32	17	49	19	22	103516.4
			103517.1	103517	12	34	19	51	22	24	103517.4
			103518.1	103518	14	38	22	57	24	27	103518.4
	630	400	103519.1	103519	16	38	21	57	27	30	103519.4
			103520.1	103520	20	44	23	66	32	36	103520.4
			103521.1	103521	25	50	26	74	41	46	103521.4
			103522.1	103522	30	54	27	80	46	50	103522.4
			103523.1	103523	38	61	29	90	55	60	103523.4

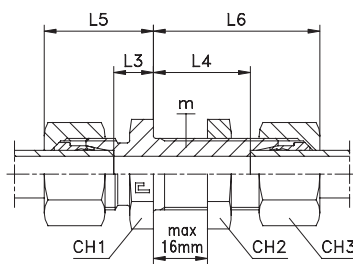
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from 10.... to 11....
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from 10.... to 14....

BULKHEAD CONNECTION

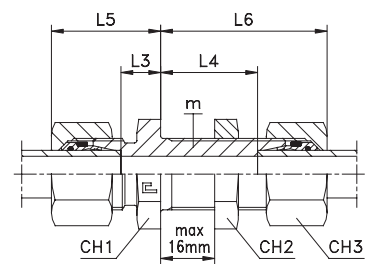
Type: 1036...1 Body



Type: 1036.. B3 Ring



Type: 1036...4 B4 Ring

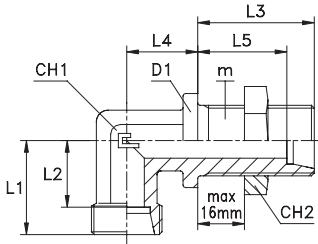


Series	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	m	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	Ordering Equipped B4	
L	500	315	103604.1	103604	6	12x1,5	14	34	7	27	22	42	17	17	14	103604.4	
			103605.1	103605	8	14x1,5	15	34	8	27	23	23	42	19	19	17	103605.4
			103606.1	103606	10	16x1,5	17	35	10	28	25	43	22	22	19	19	103606.4
			103607.1	103607	12	18x1,5	17	36	10	29	25	44	24	24	22	22	103607.4
			103608.1	103608	15	22x1,5	19	38	12	31	27	46	27	30	27	27	103608.4
	400	160	103609.1	103609	18	26x1,5	21	40	13,5	32,5	30	49	32	36	32	32	103609.4
			103610.1	103610	22	30x2	24	42	16,5	34,5	33	51	36	41	36	36	103610.4
			103611.1	103611	28	36x2	26	43	18,5	35,5	35	52	41	46	41	41	103611.4
			103612.1	103612	35	45x2	29	47	18,5	36,5	40	58	50	55	50	50	103612.4
			103613.1	103613	42	52x2	30	47	19	36	42	59	60	65	60	60	103613.4
S	800	630	103614.1	103614	6	14x1,5	19	36	12	29	27	44	19	19	17	103614.4	
			103615.1	103615	8	16x1,5	20	36	13	29	28	44	22	22	19	19	103615.4
			103616.1	103616	10	18x1,5	22	37	14,5	29,5	31	46	24	24	22	22	103616.4
			103617.1	103617	12	20x1,5	22	38	14,5	30,5	31	47	27	27	24	24	103617.4
			103618.1	103618	14	22x1,5	25	40	17	32	35	50	30	30	27	27	103618.4
	630	400	103619.1	103619	16	24x1,5	25	40	16,5	31,5	35	50	32	32	30	30	103619.4
			103620.1	103620	20	30x2	28	44	17,5	33,5	39	55	41	41	36	36	103620.4
			103621.1	103621	25	36x2	32	47	20	35	44	59	46	46	46	46	103621.4
			103622.1	103622	30	42x2	35	51	21,5	37,5	48	64	50	50	50	50	103622.4
			103623.1	103623	38	52x2	38	53	22	37	53	68	65	65	60	60	103623.4

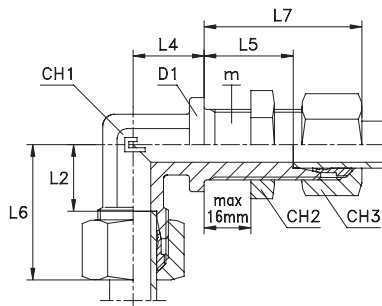
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from 10.... to 11....
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from 10.... to 14....

BULKHEAD ELBOW

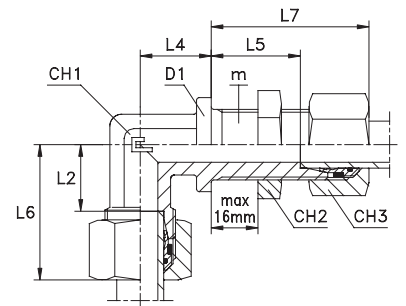
Type: **1037...1** Body



Type: **1037.. B3** Ring



Type: **1037...4** B4 Ring

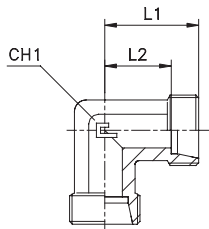


Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	m	L1	L2	L3	L4	L5	L6	L7	D1	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	103704.1	103704	6	12x1,5	19	12	34	14	27	27	42	17	12	17	14	103704.4
			103705.1	103705	8	14x1,5	21	14	34	17	27	29	42	19	12	19	17	103705.4
			103706.1	103706	10	16x1,5	22	15	35	18	28	30	43	22	14	22	19	103706.4
			103707.1	103707	12	18x1,5	24	17	36	20	29	32	44	24	17	24	22	103707.4
			103708.1	103708	15	22x1,5	28	21	38	23	31	36	46	27	19	30	27	103708.4
	103709.1	103709	18	26x1,5	31	23,5	40	24	32,5	40	49	32	24	36	32	103709.4		
	103710.1	103710	22	30x2	35	27,5	42	30	34,5	44	51	36	27	41	36	103710.4		
	103711.1	103711	28	36x2	38	30,5	43	34	35,5	47	52	42	36	46	41	103711.4		
	103712.1	103712	35	45x2	45	34,5	47	39	36,5	56	58	50	41	55	50	103712.4		
	103713.1	103713	42	52x2	51	40	47	43	36	63	59	60	50	65	60	103713.4		
S	630	630	103714.1	103714	6	14x1,5	23	16	36	17	29	31	44	19	12	19	17	103714.4
			103715.1	103715	8	16x1,5	24	17	36	18	29	32	44	22	14	22	19	103715.4
			103716.1	103716	10	18x1,5	25	17,5	37	20	29,5	34	46	24	17	24	22	103716.4
			103717.1	103717	12	20x1,5	29	21,5	38	21	30,5	38	47	27	17	27	24	103717.4
			103718.1	103718	14	22x1,5	30	22	40	23	32	40	50	27	19	30	27	103718.4
	103719.1	103719	16	24x1,5	33	24,5	40	24	31,5	43	50	30	24	32	30	103719.4		
	400	400	103720.1	103720	20	30x2	37	26,5	44	30	33,5	48	55	36	27	41	36	103720.4
			103721.1	103721	25	36x2	42	30	47	34	35	54	59	42	36	46	46	103721.4
			103722.1	103722	30	42x2	49	35,5	51	39	37,5	62	64	50	41	50	50	103722.4
	315	315	103723.1	103723	38	52x2	57	41	53	43	37	72	68	60	50	65	60	103723.4

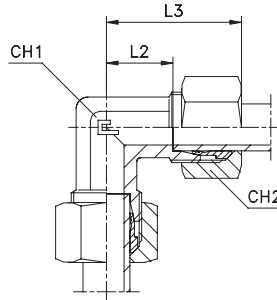
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .

EQUAL ELBOW

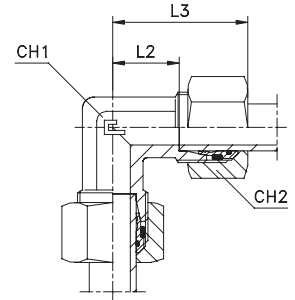
Type: **1038...1** Body



Type: **1038.. B3** Ring



Type: **1038...4** B4 Ring

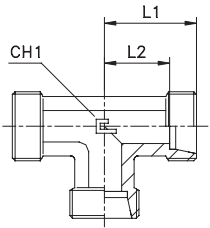


Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	L1	L2	L3	CH1	CH2	Ordering Equipped B4
LL	100	100	103801.1	103801	4	15	11	21	9	10	-
			103802.1	103802	6	15	9,5	21	9	12	-
			103803.1	103803	8	17	11,5	23	12	14	-
L	500	315	103804.1	103804	6	19	12	27	12	14	103804.4
			103805.1	103805	8	21	14	29	12	17	103805.4
			103806.1	103806	10	22	15	30	14	19	103806.4
			103807.1	103807	12	24	17	32	17	22	103807.4
			103808.1	103808	15	28	21	36	19	27	103808.4
	400	160	103809.1	103809	18	31	23,5	40	24	32	103809.4
			103810.1	103810	22	35	27,5	44	27	36	103810.4
			103811.1	103811	28	38	30,5	47	36	41	103811.4
			103812.1	103812	35	45	34,5	56	41	50	103812.4
			103813.1	103813	42	51	40	63	50	60	103813.4
S	800	630	103814.1	103814	6	23	16	31	12	17	103814.4
			103815.1	103815	8	24	17	32	14	19	103815.4
			103816.1	103816	10	25	17,5	34	17	22	103816.4
			103817.1	103817	12	29	21,5	38	17	24	103817.4
			103818.1	103818	14	30	22	40	19	27	103818.4
	630	400	103819.1	103819	16	33	24,5	43	24	30	103819.4
			103820.1	103820	20	37	26,5	48	27	36	103820.4
			103821.1	103821	25	42	30	54	36	46	103821.4
			103822.1	103822	30	49	35,5	62	41	50	103822.4
			103823.1	103823	38	57	41	72	50	60	103823.4

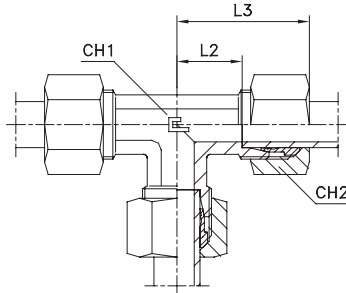
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .

EQUAL TEE

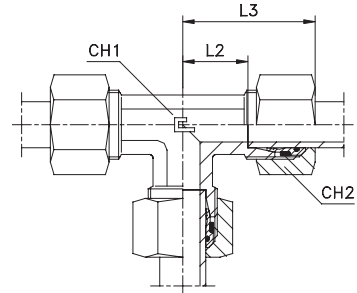
Type: **1039...1** Body



Type: **1039.. B3 Ring**



Type: **1039...4 B4 Ring**

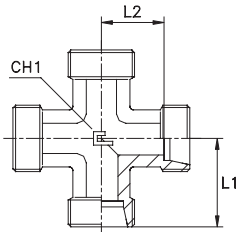


Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	L1	L2	L3	CH1	CH2	Ordering Equipped B4
LL	100	100	103901.1	103901	4	15	11	21	9	10	-
			103902.1	103902	6	15	9.5	21	9	12	-
			103903.1	103903	8	17	11.5	23	12	14	-
L	500	315	103904.1	103904	6	19	12	27	12	14	103904.4
			103905.1	103905	8	21	14	29	12	17	103905.4
			103906.1	103906	10	22	15	30	14	19	103906.4
			103907.1	103907	12	24	17	32	17	22	103907.4
			103908.1	103908	15	28	21	36	19	27	103908.4
			103909.1	103909	18	31	23.5	40	24	32	103909.4
	250	160	103910.1	103910	22	35	27.5	44	27	36	103910.4
			103911.1	103911	28	38	30.5	47	36	41	103911.4
			103912.1	103912	35	45	34.5	56	41	50	103912.4
			103913.1	103913	42	51	40	63	50	60	103913.4
			103914.1	103914	6	23	16	31	12	17	103914.4
			103915.1	103915	8	24	17	32	14	19	103915.4
S	800	630	103916.1	103916	10	25	17.5	34	17	22	103916.4
			103917.1	103917	12	29	21.5	38	17	24	103917.4
			103918.1	103918	14	30	22	40	19	27	103918.4
			103919.1	103919	16	33	24.5	43	24	30	103919.4
			103920.1	103920	20	37	26.5	48	27	36	103920.4
			103921.1	103921	25	42	30	54	36	46	103921.4
	420	400	103922.1	103922	30	49	35.5	62	41	50	103922.4
			103923.1	103923	38	57	41	72	50	60	103923.4

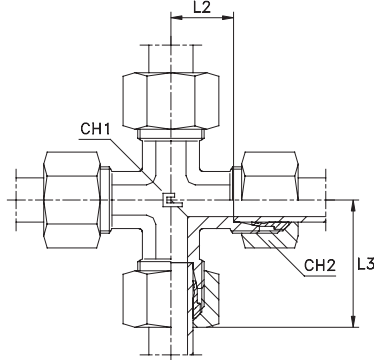
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .

EQUAL CROSS

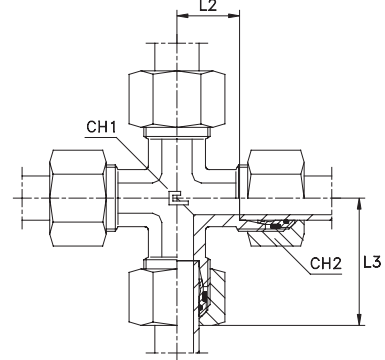
Type: **1040...1** Body



Type: **1040.. B3 Ring**



Type: **1040...4 B4 Ring**

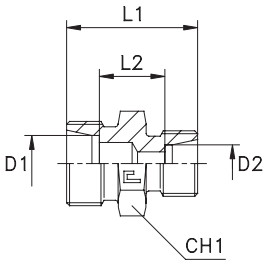


Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	L1	L2	L3	CH1	CH2	Ordering Equipped B4
LL	100	100	104001.1	104001	4	15	11	21	9	10	-
			104002.1	104002	6	15	9.5	21	9	12	-
			104003.1	104003	8	17	11.5	23	12	14	-
L	315	315	104004.1	104004	6	19	12	27	12	14	104004.4
			104005.1	104005	8	21	14	29	12	17	104005.4
			104006.1	104006	10	22	15	30	14	19	104006.4
			104007.1	104007	12	24	17	32	17	22	104007.4
			104008.1	104008	15	28	21	36	19	27	104008.4
			104009.1	104009	18	31	23.5	40	24	32	104009.4
	160	160	104010.1	104010	22	35	27.5	44	27	36	104010.4
			104011.1	104011	28	38	30.5	47	36	41	104011.4
			104012.1	104012	35	45	34.5	56	41	50	104012.4
			104013.1	104013	42	51	40	63	50	60	104013.4
			104014.1	104014	6	23	16	31	12	17	104014.4
			104015.1	104015	8	24	17	32	14	19	104015.4
S	630	630	104016.1	104016	10	25	17.5	34	17	22	104016.4
			104017.1	104017	12	29	21.5	38	17	24	104017.4
			104018.1	104018	14	30	22	40	19	27	104018.4
			104019.1	104019	16	33	24.5	43	24	30	104019.4
			104020.1	104020	20	37	26.5	48	27	36	104020.4
			104021.1	104021	25	42	30	54	36	46	104021.4
	400	400	104022.1	104022	30	49	35.5	62	41	50	104022.4
			104023.1	104023	38	57	41	72	50	60	104023.4

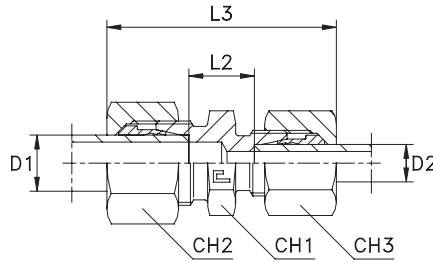
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .

STRAIGHT REDUCING COUPLING

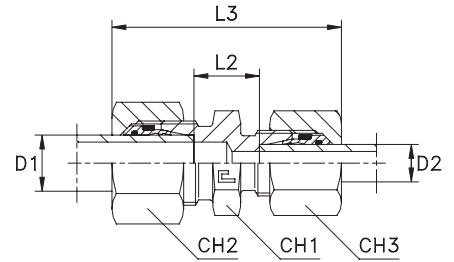
Type: **1041...1** Body



Type: **1041.. B3** Ring



Type: **1041...4** B4 Ring

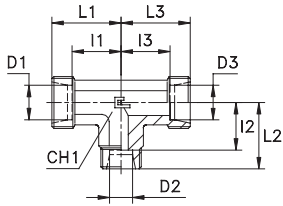


Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube		L1	L2	L3	CH1	CH2	CH3	Ordering Equipped B4
					D1	D2							
L	500	315	104104.1	104104	8	6	25	11	40,5	14	17	14	104104.4
			104105.1	104105	10	6	26	12	41,5	17	19	14	104105.4
			104106.1	104106	10	8	26	12	42	17	19	17	104106.4
	104107.1		104107	12	6	27	13	42	19	22	14	104107.4	
	104108.1		104108	12	8	27	13	42,5	19	22	17	104108.4	
	104109.1		104109	12	10	28	14	43,5	19	22	19	104109.4	
	104110.1		104110	15	10	29	15	45	24	27	19	104110.4	
	104111.1		104111	15	12	29	15	44,5	24	27	22	104111.4	
	104112.1		104112	18	10	30	15,5	47	27	32	19	104112.4	
	104113.1	104113	18	12	30	15,5	46,5	27	32	22	104113.4		
	104114.1	104114	18	15	31	16,5	48	27	32	27	104114.4		
	104115.1	104115	22	12	32	17,5	48,5	32	36	22	104115.4		
	104116.1	104116	22	15	33	18,5	50	32	36	27	104116.4		
	104117.1	104117	22	18	33	18	51	32	36	32	104117.4		
	104118.1	104118	28	18	34	19	52	41	41	32	104118.4		
	104119.1	104119	28	22	36	21	54	41	41	36	104119.4		
104120.1	104120	35	22	39	21	59	46	50	36	104120.4			
104121.1	104121	35	28	39	21	59	46	50	41	104121.4			
S	800	630	104122.1	104122	8	6	32	18	48	17	19	17	104122.4
			104123.1	104123	10	6	32	17,5	48,5	19	22	17	104123.4
			104124.1	104124	10	8	32	17,5	48,5	19	22	19	104124.4
	104125.1		104125	12	6	34	19,5	50,5	22	24	17	104125.4	
	104126.1		104126	12	8	34	19,5	50,5	22	24	19	104126.4	
	104127.1		104127	12	10	34	19	51	22	24	22	104127.4	
	104128.1		104128	14	10	36	20,5	54,5	24	27	22	104128.4	
	104129.1		104129	14	12	36	20,5	54,5	24	27	24	104129.4	
	104130.1		104130	16	12	36	20	54,5	27	30	24	104130.4	
	104131.1	104131	16	14	38	21,5	58	27	30	27	104131.4		
	104132.1	104132	20	10	40	22	59,5	32	36	22	104132.4		
	104133.1	104133	20	12	40	22	59,5	32	36	24	104133.4		
	104134.1	104134	20	16	42	23	63	32	36	30	104134.4		
	104135.1	104135	25	16	46	25,5	68	41	46	30	104135.4		
	104136.1	104136	25	20	48	25,5	71	41	46	36	104136.4		
	104137.1	104137	30	20	50	26	74	46	50	36	104137.4		
104138.1	104138	30	25	52	26,5	77	46	50	46	104138.4			
315	104139.1	104139	38	30	59	29,5	87	55	60	50	104139.4		

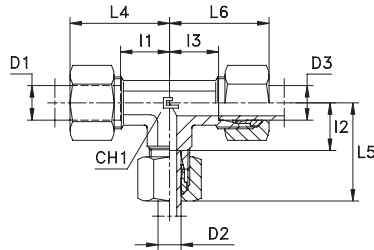
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 Items not included in the ISO 8434-1 Norm available on scheduled orders only

REDUCING TEE

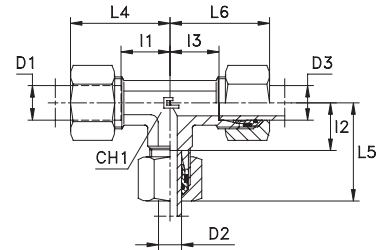
Type: **1045...1** Body



Type: **1045.. B3** Ring



Type: **1045...4** B4 Ring



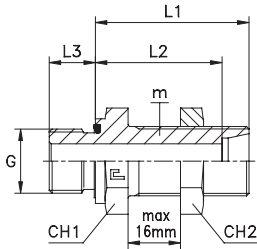
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube			L1	L2	L3	L4	L5	L6	I1	I2	I3	CH1	Ordering Equipped B4	
					D1	D2	D3												
L	500		104503.1	104503	6	8	6	21	21	21	29	29	29	14	14	14	12	104503.4	
			104504.1	104504	8	6	8	21	21	21	29	29	29	14	14	14	12	104504.4	
			104505.1	104505	6	10	6	21	22	21	29	30	29	14	15	14	14	104505.4	
			104506.1	104506	8	10	8	21	22	21	29	30	29	14	15	14	14	104506.4	
			104507.1	104507	10	6	10	22	21	22	30	29	30	15	14	15	14	104507.4	
			104508.1	104508	10	8	10	22	21	22	30	29	30	15	14	15	14	104508.4	
	104509.1	104509	10	10	6	22	22	21	30	30	29	15	15	14	14	104509.4			
	315	400		104510.1	104510	8	12	8	23	24	23	31	32	31	16	17	16	17	104510.4
				104511.1	104511	12	6	12	24	23	24	32	31	32	17	16	17	17	104511.4
				104512.1	104512	12	8	8	24	23	23	32	31	31	17	16	16	17	104512.4
				104513.1	104513	12	8	12	24	23	24	32	31	32	17	16	17	17	104513.4
				104514.1	104514	12	10	10	24	24	24	32	32	32	17	17	17	17	104514.4
				104515.1	104515	12	10	12	24	24	24	32	32	32	17	17	17	17	104515.4
				104516.1	104516	12	12	10	24	24	24	32	32	32	17	17	17	17	104516.4
				104517.1	104517	10	15	10	27	28	27	35	36	35	20	21	20	19	104517.4
				104518.1	104518	12	15	12	27	28	27	35	36	35	20	21	20	19	104518.4
				104519.1	104519	15	6	15	28	25	28	36	33	36	21	18	21	19	104519.4
				104520.1	104520	15	10	15	28	27	28	36	35	36	21	20	21	19	104520.4
				104521.1	104521	15	12	12	28	27	27	36	35	35	21	20	20	19	104521.4
	104522.1	104522	15	12	15	28	27	28	36	35	36	21	20	21	19	104522.4			
	104523.1	104523	15	15	12	28	28	27	36	36	35	21	21	20	19	104523.4			
	104524.1	104524	12	18	12	30	31	30	38	40	38	23	23,5	23	24	104524.4			
	104525.1	104525	18	10	10	31	30	30	40	38	38	23,5	23	23	24	104525.4			
	104526.1	104526	18	10	18	31	30	31	40	38	40	23,5	23	23,5	24	104526.4			
	104527.1	104527	18	12	18	31	30	31	40	38	40	23,5	23	23,5	24	104527.4			
	104528.1	104528	18	15	18	31	31	31	40	39	40	23,5	24	23,5	24	104528.4			
	104529.1	104529	18	18	10	31	31	30	40	40	38	23,5	23,5	23	24	104529.4			
	250	160		104530.1	104530	22	10	22	35	33	35	44	41	44	27,5	26	27,5	27	104530.4
104531.1				104531	22	12	22	35	33	35	44	41	44	27,5	26	27,5	27	104531.4	
104532.1				104532	22	15	15	35	34	34	44	42	42	27,5	27	27	27	104532.4	
104533.1				104533	22	15	22	35	34	35	44	42	44	27,5	27	27,5	27	104533.4	
104534.1				104534	22	18	18	35	34	34	44	43	43	27,5	26,5	26,5	27	104534.4	
104535.1				104535	22	18	22	35	34	35	44	43	44	27,5	26,5	27,5	27	104535.4	
104536.1				104536	22	22	18	35	35	34	44	44	43	27,5	27,5	26,5	27	104536.4	
104537.1				104537	28	10	28	38	36	38	47	44	47	30,5	29	30,5	36	104537.4	
104538.1				104538	28	12	28	38	36	38	47	44	47	30,5	29	30,5	36	104538.4	
104539.1				104539	28	15	28	38	37	38	47	45	47	30,5	30	30,5	36	104539.4	
104540.1				104540	28	18	28	38	37	38	47	46	47	30,5	29,5	30,5	36	104540.4	
104541.1				104541	28	22	22	38	38	38	47	47	47	30,5	30,5	30,5	36	104541.4	
104542.1	104542	28	22	28	38	38	38	47	47	47	30,5	30,5	30,5	36	104542.4				
800	630		104543.1	104543	10	6	10	25	25	25	34	33	34	17,5	18	17,5	17	104543.4	
			104544.1	104544	12	8	8	29	25	25	38	33	33	21,5	18	18	17	104544.4	
			104545.1	104545	12	8	12	29	25	29	38	33	38	21,5	18	21,5	17	104545.4	
			104546.1	104546	12	10	12	29	25	29	38	34	38	21,5	17,5	21,5	17	104546.4	
			104547.1	104547	12	16	12	31	33	31	40	43	40	23,5	24,5	23,5	24	104547.4	
			104548.1	104548	16	6	16	33	31	33	43	39	43	24,5	24	24,5	24	104548.4	
	630		104549.1	104549	16	8	16	33	31	33	43	39	43	24,5	24	24,5	24	104549.4	
			104550.1	104550	16	10	16	33	31	33	43	40	43	24,5	23,5	24,5	24	104550.4	
			104551.1	104551	16	12	16	33	31	33	43	40	43	24,5	23,5	24,5	24	104551.4	
			104552.1	104552	16	20	16	36	37	36	46	48	46	27,5	26,5	27,5	27	104552.4	
			104553.1	104553	20	10	20	37	34	37	48	43	48	26,5	26,5	26,5	27	104553.4	
			104554.1	104554	20	12	20	37	34	37	48	43	48	26,5	26,5	26,5	27	104554.4	
420		104555.1	104555	20	16	20	37	36	37	48	46	48	26,5	27,5	26,5	27	104555.4		
		104556.1	104556	20	25	20	40	42	40	51	54	51	29,5	30	29,5	36	104556.4		
		104557.1	104557	25	16	25	42	39	42	54	49	54	30	30,5	30	36	104557.4		
		104558.1	104558	25	20	25	42	40	42	54	51	54	30	29,5	30	36	104558.4		
		104559.1	104559	25	30	25	47	49	47	59	62	59	35	35,5	35	41	104559.4		

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 Items available on request only.

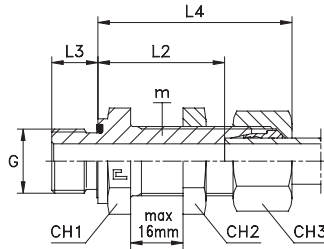
BULKHEAD CONNECTION WITH ELASTOMER SEAL

Thread BSP Parallel

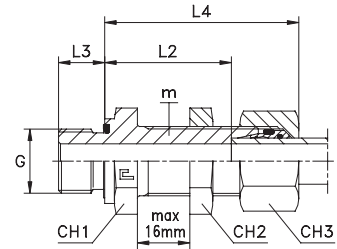
Type: **1049...1** Body



Type: **1049.. B3** Ring



Type: **1049...4** B4 Ring

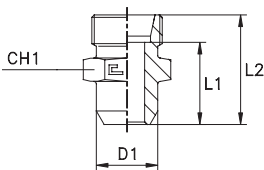


Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	m	G	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	104904.1	104904	6	12x1,5	1/8	39,5	32,5	8	47,5	17	17	14	104904.4
			104905.1	104905	8	14x1,5	1/4	41	34	12	49	19	19	17	104905.4
			104906.1	104906	10	16x1,5	1/4	43	36	12	51	22	22	19	104906.4
			104907.1	104907	12	18x1,5	3/8	44,5	37,5	12	52,5	24	24	22	104907.4
			104908.1	104908	15	22x1,5	1/2	48	41	14	56	27	30	27	104908.4
	104909.1	104909	18	26x1,5	1/2	52	44,5	14	61	32	36	32	104909.4		
	160	160	104910.1	104910	22	30x2	3/4	55	47,5	16	64	36	41	36	104910.4
			104911.1	104911	28	36x2	1	58	50,5	18	67	41	46	41	104911.4
			104912.1	104912	35	45x2	1 1/4	63	52,5	20	74	50	55	50	104912.4
104913.1			104913	42	52x2	1 1/2	64	53	22	76	60	65	60	104913.4	
S	630	630	104914.1	104914	6	14x1,5	1/4	45	38	12	53	19	19	17	104914.4
			104915.1	104915	8	16x1,5	1/4	46	39	12	54	22	22	19	104915.4
			104916.1	104916	10	18x1,5	3/8	49	41,5	12	58	24	24	22	104916.4
			104917.1	104917	12	20x1,5	3/8	50	42,5	12	59	27	27	24	104917.4
	104918.1	104918	14	22x1,5	1/2	54	46	14	64	30	30	27	104918.4		
	400	400	104919.1	104919	16	24x1,5	1/2	54	45,5	14	64	32	32	30	104919.4
			104920.1	104920	20	30x2	3/4	59	48,5	16	72	41	41	36	104920.4
			104921.1	104921	25	36x2	1	64	52	18	76	46	46	46	104921.4
	104922.1	104922	30	42x2	1 1/4	69	55,5	20	82	50	50	50	104922.4		
	315	315	104923.1	104923	38	52x2	1 1/2	72	56	22	87	65	65	60	104923.4

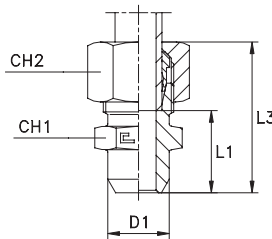
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

WELDING BOSS

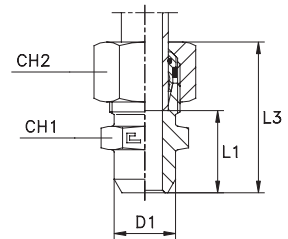
Type: **1055...1** Body



Type: **1055.. B3** Ring



Type: **1055...4** B4 Ring

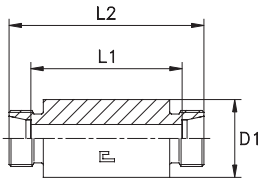


Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	D1	L1	L2	L3	CH1	CH2	Ordering Equipped B4
L	315	315	105504.1	105504	6	10	14	21	29	12	14	105504.4
			105505.1	105505	8	12	16	23	31	14	17	105505.4
			105506.1	105506	10	14	18	25	33	17	19	105506.4
			105507.1	105507	12	16	18	25	33	19	22	105507.4
			105508.1	105508	15	19	22	29	37	22	27	105508.4
	105509.1	105509	18	22	23,5	31	40	27	32	105509.4		
	160	160	105510.1	105510	22	27	28,5	36	45	32	36	105510.4
			105511.1	105511	28	32	30,5	38	47	41	41	105511.4
			105512.1	105512	35	40	32,5	43	54	46	50	105512.4
105513.1			105513	42	46	35	46	58	55	60	105513.4	
S	630	630	105514.1	105514	6	11	19	26	34	14	17	105514.4
			105515.1	105515	8	13	21	28	36	17	19	105515.4
			105516.1	105516	10	15	22,5	30	39	19	22	105516.4
			105517.1	105517	12	17	24,5	32	41	22	24	105517.4
	105518.1	105518	14	19	27	35	45	24	27	105518.4		
	105519.1	105519	16	21	26,5	35	45	27	30	105519.4		
	400	400	105520.1	105520	20	26	29,5	40	51	32	36	105520.4
			105521.1	105521	25	31	32	44	56	41	46	105521.4
			105522.1	105522	30	36	35,5	49	62	46	50	105522.4
	315	315	105523.1	105523	38	44	38	54	69	55	60	105523.4

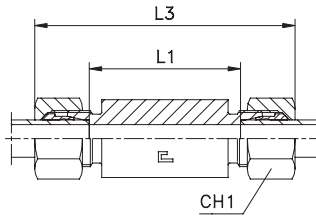
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .

WELDING BULKHEAD CONNECTION

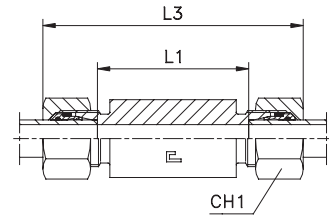
Type: **1056...1** Body



Type: **1056.. B3** Ring



Type: **1056...4** B4 Ring



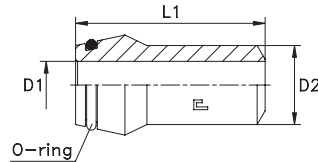
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	D1	L1	L2	L3	CH1	Ordering Equipped B4
L	315	315	105604.1	105604	6	18	56	70	85	14	105604.4
			105605.1	105605	8	20	56	70	85	17	105605.4
			105606.1	105606	10	22	58	72	87	19	105606.4
			105607.1	105607	12	25	58	72	87	22	105607.4
			105608.1	105608	15	28	70	84	100	27	105608.4
	105609.1	105609	18	32	69	84	101	32	105609.4		
	160	160	105610.1	105610	22	36	73	88	105	36	105610.4
			105611.1	105611	28	40	73	88	106	41	105611.4
			105612.1	105612	35	50	71	92	114	50	105612.4
			105613.1	105613	42	60	70	92	115	60	105613.4
105614.1			105614	6	20	60	74	89	17	105614.4	
S	630	630	105615.1	105615	8	22	60	74	89	19	105615.4
			105616.1	105616	10	25	59	74	91	22	105616.4
			105617.1	105617	12	28	59	74	91	24	105617.4
			105618.1	105618	14	30	72	88	107	27	105618.4
			105619.1	105619	16	35	71	88	107	30	105619.4
	400	400	105620.1	105620	20	38	71	92	114	36	105620.4
			105621.1	105621	25	45	72	96	120	46	105621.4
			105622.1	105622	30	50	73	100	126	50	105622.4
			105623.1	105623	38	60	72	104	133	60	105623.4
			315	315	105623.1	105623	38	60	72	104	133

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .

WELDING NIPPLE WITH O-RING

Delivered separately (unassembled)

Type: **1057..**

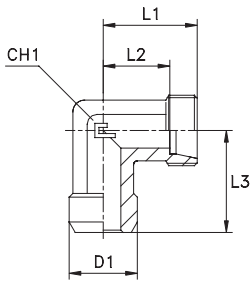


Series DIN	10.... [bar]	11.... [bar]	Ordering Complete	Thickness	Ø Tube	D1	D2	L1
L/S	630	630	105701	6x1.75	6	2.5	6	31
			105702	8x2	8	4	8	31
	315	315	105703	10x1.5	10	7	10	32.5
			105704	10x2	10	6	10	32.5
	400	400	105705	12x1.5	12	9	12	32.5
			105706	12x2	12	8	12	32.5
630	630	105707	12x2.5	12	7	12	32.5	
L	315	315	105708	15x2.5	15	10	15	34
			105709	18x2.5	18	13	18	35.5
	160	160	105710	22x2.5	22	17	22	38.5
			105711	28x2.5	28	23	28	41.5
			105712	35x3	35	29	35	47.5
105713	42x3	42	36	42	47.5			
S	400	400	105714	14x3	14	8	14	38.5
	250	250	105715	16x2	16	12	16	39
	315	315	105716	16x2.5	16	11	16	39
	400	400	105717	16x3	16	10	16	39
	250	250	105718	20x2.5	20	15	20	45
	315	315	105719	20x3	20	14	20	45
	400	400	105720	20x4	20	12	20	45
	250	250	105721	25x3	25	19	25	49.5
	315	315	105722	25x4	25	17	25	49.5
	400	315	105723	25x5	25	15	25	49.5
	160	160	105724	30x3	30	24	30	52
	250	250	105725	30x4	30	22	30	52
	315	315	105726	30x5	30	20	30	52
			105727	30x6	30	18	30	52
	160	160	105728	38x3	38	32	38	56.5
	250	250	105729	38x5	38	28	38	56.5
315	315	105730	38x6	38	26	38	56.5	
		105731	38x8	38	22	38	56.5	

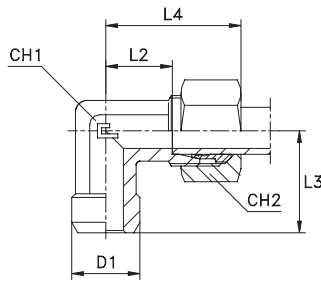
Note: If you wish to order a fitting in stainless steel, please change the first two digit from **10....** to **11....** .

WELDING ELBOW

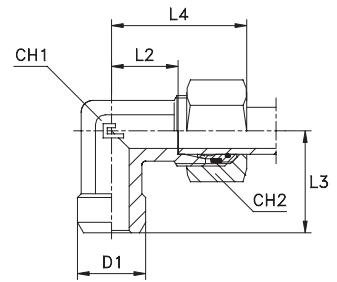
Type: **1058...1** Body



Type: **1058.. B3** Ring



Type: **1058...4** B4 Ring



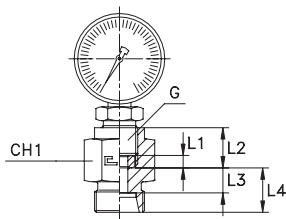
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	D1	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
L	315	315	105804.1	105804	6	10	19	12	19	27	12	14	105804.4
			105805.1	105805	8	12	21	14	21	29	12	17	105805.4
			105806.1	105806	10	14	22	15	22	30	14	19	105806.4
			105807.1	105807	12	16	24	17	24	32	17	22	105807.4
			105808.1	105808	15	19	28	21	28	36	19	27	105808.4
			105809.1	105809	18	22	31	23.5	31	40	24	32	105809.4
	160	160	105810.1	105810	22	27	35	27.5	35	44	27	36	105810.4
			105811.1	105811	28	32	38	30.5	38	47	36	41	105811.4
			105812.1	105812	35	40	45	34.5	45	56	41	50	105812.4
			105813.1	105813	42	46	51	40	51	63	50	60	105813.4
S	630	630	105814.1	105814	6	11	23	16	23	31	12	17	105814.4
			105815.1	105815	8	13	24	17	24	32	14	19	105815.4
			105816.1	105816	10	15	25	17.5	25	34	17	22	105816.4
			105817.1	105817	12	17	29	21.5	29	38	17	24	105817.4
			105818.1	105818	14	19	30	22	30	40	19	27	105818.4
			105819.1	105819	16	21	33	24.5	33	43	24	30	105819.4
	400	400	105820.1	105820	20	26	37	26.5	37	48	27	36	105820.4
			105821.1	105821	25	31	42	30	42	54	36	46	105821.4
			105822.1	105822	30	36	49	35.5	49	62	41	50	105822.4
			105823.1	105823	38	44	57	41	57	72	50	60	105823.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

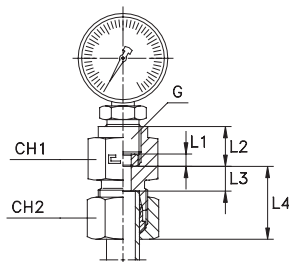
GAUGE COUPLING

Thread BSP Parallel

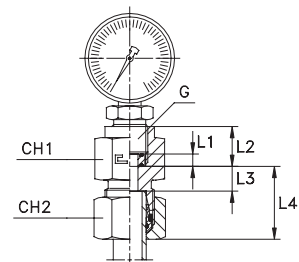
Type: **1059...1** Body
Metal washer seal



Type: **1059.. B3** Ring
Metal washer seal



Type: **1059...4** B4 Ring
O-ring washer seal



Series DIN	10.... [bar]	11.... [bar]	Ordering Body + Ferrule	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
L	315	315	105904.1	105904	6	1/4	4.5	14.5	7.5	14.5	19	14	105904.4
			105905.1	105905	8	1/4	4.5	14.5	7.5	14.5	19	17	105905.4
			105906.1	105906	10	1/4	4.5	14.5	8.5	15.5	19	19	105906.4
			105907.1	105907	12	1/4	4.5	14.5	8.5	15.5	19	22	105907.4
S	630	630	105914.1	105914	6	1/2	5	20	11	18	30	17	105914.4
			105915.1	105915	8	1/2	5	20	11	18	30	19	105915.4
			105916.1	105916	10	1/2	5	20	10.5	18	30	22	105916.4
			105917.1	105917	12	1/2	5	20	10.5	18	30	24	105917.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm.
Gauge not included.

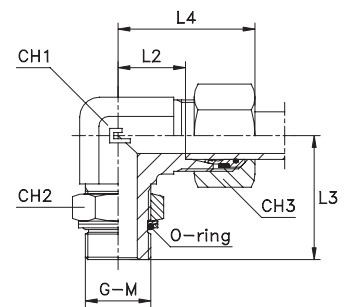
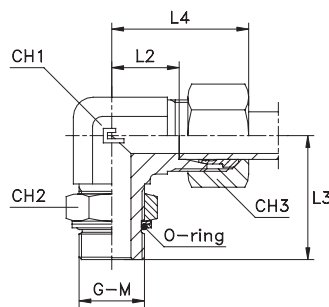
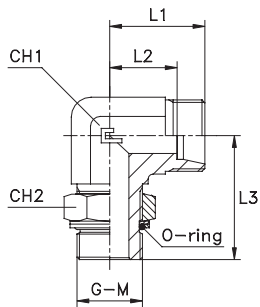
ADJUSTABLE DIN MALE STUD ELBOW WITH O-RING AND WASHER

Thread BSP Parallel - Thread Metric Parallel

Type: **1061...1** Body
Type: **1062...1** Body

Type: **1061..** B3 Ring
Type: **1062..** B3 Ring

Type: **1061...4** B4 Ring
Type: **1062...4** B4 Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	106104.1	106104	6	1/8	19	12	26	27	11	14	14	106104.4
			106105.1	106105	8	1/4	21	14	32	29	14	19	17	106105.4
			106106.1	106106	10	1/4	22	15	32	30	14	19	19	106106.4
	250	250	106107.1	106107	12	3/8	24	17	37	32	19	22	22	106107.4
			106108.1	106108	15	1/2	28	21	44	36	22	27	27	106108.4
			106109.1	106109	18	1/2	31	23,5	47	40	27	27	32	106109.4
	160	160	106110.1	106110	22	3/4	35	27,5	51	44	27	36	36	106110.4
			106111.1	106111	28	1	38	30,5	53	47	33	41	41	106111.4
			106112.1	106112	35	1 1/4	45	34,5	59	56	41	50	50	106112.4
S	315	315	106113.1	106113	42	1 1/2	51	40	64	63	48	55	60	106113.4
			106114.1	106114	6	1/4	23	16	32	31	14	19	17	106114.4
	250	250	106115.1	106115	8	1/4	24	17	32	32	14	19	19	106115.4
			106116.1	106116	10	3/8	25	17,5	37	34	19	22	22	106116.4
			106117.1	106117	12	3/8	29	21,5	37	38	19	22	24	106117.4
			106118.1	106118	14	1/2	30	22	44	40	22	27	27	106118.4
			106119.1	106119	16	1/2	33	24,5	47	43	27	27	30	106119.4
	200	200	106120.1	106120	20	3/4	37	26,5	51	48	27	36	36	106120.4
			106121.1	106121	25	1	42	30	53	54	33	41	46	106121.4
	160	160	106122.1	106122	30	1 1/4	49	35,5	59	62	41	50	50	106122.4
			106123.1	106123	38	1 1/2	57	41	64	72	48	55	60	106123.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

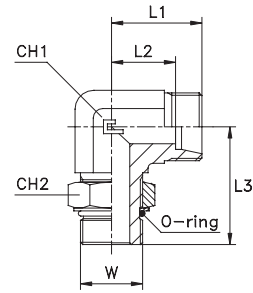
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	106204.1	106204	6	10x1	19	12	27	27	11	14	14	106204.4
			106205.1	106205	8	12x1,5	21	14	31	29	14	17	17	106205.4
			106206.1	106206	10	14x1,5	22	15	33	30	14	19	19	106206.4
			106207.1	106207	12	16x1,5	24	17	38	32	19	22	22	106207.4
	250	250	106208.1	106208	15	18x1,5	28	21	40	36	22	24	27	106208.4
			106209.1	106209	18	22x1,5	31	23,5	46	40	27	27	32	106209.4
			106210.1	106210	22	27x2	35	27,5	50,5	44	27	32	36	106210.4
			106211.1	106211	28	33x2	38	30,5	52,5	47	33	41	41	106211.4
			106212.1	106212	35	42x2	45	34,5	58	56	41	50	50	106212.4
S	315	315	106213.1	106213	42	48x2	51	40	63	63	48	55	60	106213.4
			106214.1	106214	6	12x1,5	23	16	31	31	14	17	17	106214.4
			106215.1	106215	8	14x1,5	24	17	33	32	14	19	19	106215.4
	250	250	106216.1	106216	10	16x1,5	25	17,5	38	34	19	22	22	106216.4
			106217.1	106217	12	18x1,5	29	21,5	38	38	19	24	24	106217.4
			106218.1	106218	14	20x1,5	30	22	44	40	22	27	27	106218.4
			106219.1	106219	16	22x1,5	33	24,5	48	43	27	27	30	106219.4
			106220.1	106220	20	27x2	37	26,5	50,5	48	27	32	36	106220.4
	200	200	106221.1	106221	25	33x2	42	30	52,5	54	33	41	46	106221.4
			106222.1	106222	30	42x2	49	35,5	58	62	41	50	50	106222.4
	160	160	106223.1	106223	38	48x2	57	41	63	72	48	55	60	106223.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

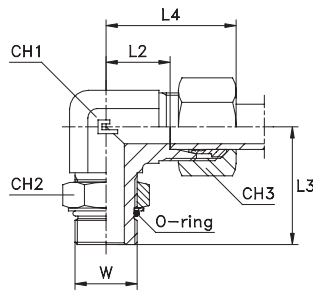
ADJUSTABLE DIN MALE STUD ELBOW WITH O-RING

Thread UNF/UN-2A

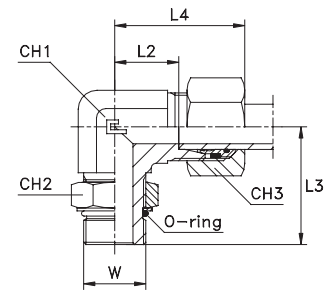
Type: **1063...1** Body



Type: **1063..** B3 Ring



Type: **1063...4** B4 Ring



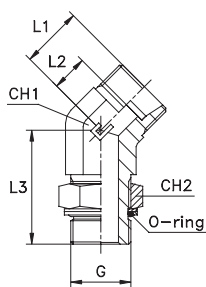
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	W	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	106304.1	106304	6	7/16-20	19	12	27	27	11	14	14	106304.4
			106305.1	106305	8	7/16-20	21	14	28	29	14	14	17	106305.4
			106306.1	106306	10	9/16-18	22	15	32	30	14	17	19	106306.4
			106307.1	106307	12	3/4-16	24	17	37	32	19	22	22	106307.4
			106308.1	106308	15	7/8-14	28	21	43	36	22	27	27	106308.4
	106309.1	106309	18	7/8-14	31	23.5	47	40	27	27	32	106309.4		
	160	160	106310.1	106310	22	1 1/16-12	35	27.5	49.5	44	27	32	36	106310.4
			106311.1	106311	28	1 5/16-12	38	30.5	52	47	33	41	41	106311.4
			106312.1	106312	35	1 5/8-12	45	34.5	58	56	41	50	50	106312.4
			106313.1	106313	42	1 7/8-12	51	40	60	63	48	55	60	106313.4
106314.1			106314	6	7/16-20	23	16	29	31	14	14	17	106314.4	
S	400	400	106315.1	106315	8	9/16-18	24	17	33	32	14	17	19	106315.4
			106316.1	106316	10	9/16-18	25	17.5	37.5	34	19	17	22	106316.4
			106317.1	106317	12	3/4-16	29	21.5	38	38	19	22	24	106317.4
			106318.1	106318	14	7/8-14	30	22	44	40	22	27	27	106318.4
			106319.1	106319	16	7/8-14	33	24.5	48	43	27	27	30	106319.4
			106320.1	106320	20	1 1/16-12	37	26.5	51	48	27	32	36	106320.4
			106321.1	106321	25	1 5/16-12	42	30	53	54	33	41	46	106321.4
			106322.1	106322	30	1 5/8-12	49	35.5	59	62	41	50	50	106322.4
	106323.1	106323	38	1 7/8-12	57	41	62	72	48	55	60	106323.4		
	250	250												

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 Items not included in the ISO 8434-1 Norm available on request only.

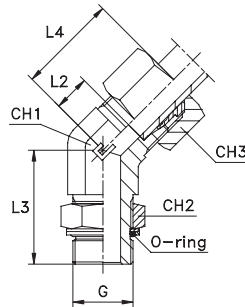
ADJUSTABLE DIN MALE 45° STUD ELBOW WITH O-RING AND WASHER

Thread BSP Parallel

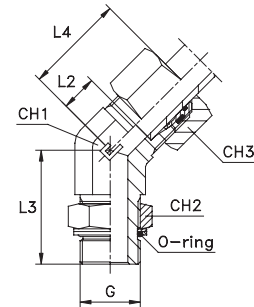
Type: **1064...1** Body



Type: **1064..** B3 Ring



Type: **1064...4** B4 Ring



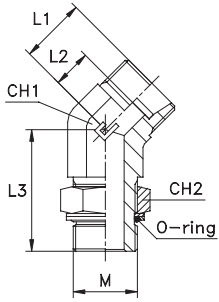
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	106404.1	106404	6	1/8	16	9	26	24	11	14	14	106404.4
			106405.1	106405	8	1/4	19	12	29	27	14	19	17	106405.4
			106406.1	106406	10	1/4	19	12	29	27	14	19	19	106406.4
			106407.1	106407	12	3/8	21	14	33	29	19	22	22	106407.4
			106408.1	106408	15	1/2	24	17	38.5	32	22	27	27	106408.4
	106409.1	106409	18	1/2	24.5	17	38.5	33.5	27	27	32	106409.4		
	160	160	106410.1	106410	22	3/4	26	18.5	44	35	27	36	36	106410.4
			106411.1	106411	28	1	30.5	23	47	39.5	33	41	41	106411.4
			106412.1	106412	35	1 1/4	33	22.5	48	44	41	50	50	106412.4
			106413.1	106413	42	1 1/2	37	26	48	49	48	55	60	106413.4
106414.1			106414	6	1/4	16	9	29	24	14	19	17	106414.4	
S	315	315	106415.1	106415	8	1/4	19	12	29	27	14	19	19	106415.4
			106416.1	106416	10	3/8	20	12.5	33	29	19	22	22	106416.4
	250	250	106417.1	106417	12	3/8	21	13.5	33	30	19	22	24	106417.4
			106418.1	106418	14	1/2	24	16	38.5	34	22	27	27	106418.4
			106419.1	106419	16	1/2	24	15.5	38.5	34	27	27	30	106419.4
			106420.1	106420	20	3/4	26.5	16	44	37.5	27	36	36	106420.4
			106421.1	106421	25	1	31	19	47	43	33	41	46	106421.4
			106422.1	106422	30	1 1/4	35	21.5	48	48	41	50	50	106422.4
	160	160	106423.1	106423	38	1 1/2	39	23	48	54	48	55	60	106423.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 Items not included in the ISO 8434-1 Norm available on request only.

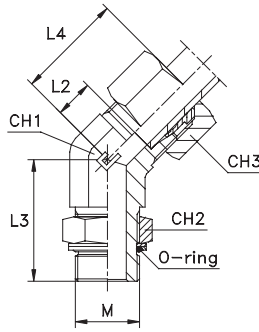
ADJUSTABLE DIN MALE 45° STUD ELBOW WITH O-RING AND WASHER

Thread Metric Parallel

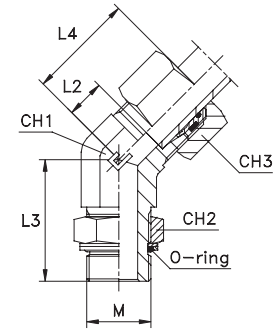
Type: **1065...1** Body



Type: **1065.. B3 Ring**



Type: **1065...4 B4 Ring**



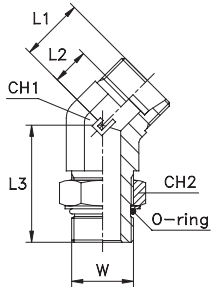
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	106504.1	106504	6	10x1	16	9	27	24	11	14	14	106504.4
			106505.1	106505	8	12x1.5	19	12	27	27	14	17	17	106505.4
			106506.1	106506	10	14x1.5	19	12	28	27	14	19	19	106506.4
			106507.1	106507	12	16x1.5	21	14	33	29	19	22	22	106507.4
			106508.1	106508	15	18x1.5	24	17	36	32	22	24	27	106508.4
	250	250	106509.1	106509	18	22x1.5	24.5	17	38	33.5	27	27	32	106509.4
			106510.1	106510	22	27x2	26	18.5	46	35	27	32	36	106510.4
			106511.1	106511	28	33x2	30.5	23	46	39.5	33	41	41	106511.4
			106512.1	106512	35	42x2	33	22.5	48	44	41	50	50	106512.4
			106513.1	106513	42	48x2	37	26	50	49	48	55	60	106513.4
S	315	315	106514.1	106514	6	12x1.5	16	9	27	24	14	17	17	106514.4
			106515.1	106515	8	14x1.5	19	12	28	27	14	19	19	106515.4
			106516.1	106516	10	16x1.5	20	12.5	33	29	19	22	22	106516.4
			106517.1	106517	12	18x1.5	21	13.5	33	30	19	24	24	106517.4
			106518.1	106518	14	20x1.5	24	16	39	34	22	27	27	106518.4
	250	250	106519.1	106519	16	22x1.5	24	15.5	40	34	27	27	30	106519.4
			106520.1	106520	20	27x2	26.5	16	46	37.5	27	32	36	106520.4
			106521.1	106521	25	33x2	31	19	46	43	33	41	46	106521.4
			106522.1	106522	30	42x2	35	21.5	48	48	41	50	50	106522.4
			106523.1	106523	38	48x2	39	23	50	54	48	55	60	106523.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 Items not included in the ISO 8434-1 Norm available on request only.

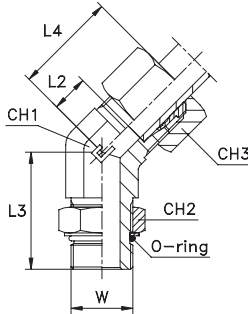
ADJUSTABLE DIN MALE 45° STUD ELBOW WITH O-RING

Thread UNF/UN-2A

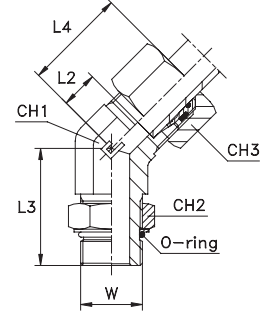
Type: **1066...1** Body



Type: **1066.. B3 Ring**



Type: **1066...4 B4 Ring**



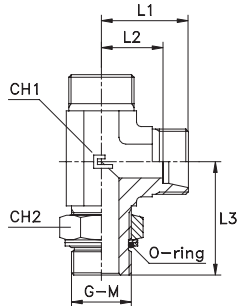
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	W	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	106604.1	106604	6	7/16-20	16	9	26.5	24	11	14	14	106604.4
			106605.1	106605	8	7/16-20	19	12	26.5	27	14	14	17	106605.4
			106606.1	106606	10	9/16-18	19	12	29	27	14	17	19	106606.4
			106607.1	106607	12	3/4-16	21	14	33	29	19	22	22	106607.4
			106608.1	106608	15	7/8-14	24	17	39	32	22	27	27	106608.4
	250	250	106609.1	106609	18	7/8-14	24.5	17	39	33.5	27	27	32	106609.4
			106610.1	106610	22	1 1/16-12	26	18.5	44	35	27	32	36	106610.4
			106611.1	106611	28	1 5/16-12	30.5	23	47	39.5	33	41	41	106611.4
			106612.1	106612	35	1 5/8-12	33	22.5	48	44	41	50	50	106612.4
			106613.1	106613	42	1 7/8-12	37	26	48.5	49	48	55	60	106613.4
S	400	400	106614.1	106614	6	7/16-20	16	9	27	24	14	14	17	106614.4
			106615.1	106615	8	9/16-18	19	12	30	27	14	17	19	106615.4
			106616.1	106616	10	9/16-18	20	12.5	34	29	19	17	22	106616.4
			106617.1	106617	12	3/4-16	21	13.5	34	30	19	22	24	106617.4
			106618.1	106618	14	7/8-14	24	16	39	34	22	27	27	106618.4
	315	315	106619.1	106619	16	7/8-14	24	15.5	39	34	27	27	30	106619.4
			106620.1	106620	20	1 1/16-12	26.5	16	44	37.5	27	32	36	106620.4
			106621.1	106621	25	1 5/16-12	31	19	47	43	33	41	46	106621.4
			106622.1	106622	30	1 5/8-12	35	21.5	48	48	41	50	50	106622.4
			106623.1	106623	38	1 7/8-12	39	23	50	54	48	55	60	106623.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 Items not included in the ISO 8434-1 Norm available on request only.

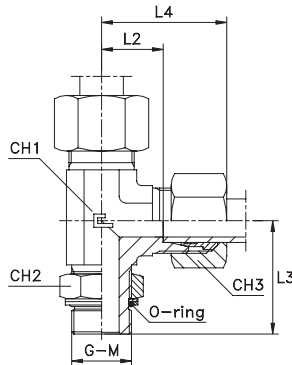
ADJUSTABLE DIN MALE STUD BARREL TEE WITH O-RING AND WASHER

Thread BSP Parallel - Thread Metric Parallel

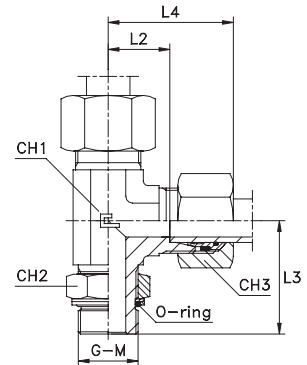
Type: **1067...1** Body
Type: **1068...1** Body



Type: **1067.. B3** Ring
Type: **1068.. B3** Ring



Type: **1067...4** B4 Ring
Type: **1068...4** B4 Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	106704.1	106704	6	1/8	19	12	26	27	11	14	14	106704.4
			106705.1	106705	8	1/4	21	14	32	29	14	19	17	106705.4
			106706.1	106706	10	1/4	22	15	32	30	14	19	19	106706.4
	250	250	106707.1	106707	12	3/8	24	17	37	32	19	22	22	106707.4
			106708.1	106708	15	1/2	28	21	44	36	22	27	27	106708.4
			106709.1	106709	18	1/2	31	23,5	47	40	27	27	32	106709.4
	160	160	106710.1	106710	22	3/4	35	27,5	51	44	27	36	36	106710.4
			106711.1	106711	28	1	38	30,5	53	47	33	41	41	106711.4
			106712.1	106712	35	1 1/4	45	34,5	59	56	41	50	50	106712.4
			106713.1	106713	42	1 1/2	51	40	64	63	48	55	60	106713.4
S	315	315	106714.1	106714	6	1/4	23	16	32	31	14	19	17	106714.4
			106715.1	106715	8	1/4	24	17	32	32	14	19	19	106715.4
	250	250	106716.1	106716	10	3/8	25	17,5	37	34	19	22	22	106716.4
			106717.1	106717	12	3/8	29	21,5	37	38	19	22	24	106717.4
			106718.1	106718	14	1/2	30	22	44	40	22	27	27	106718.4
			106719.1	106719	16	1/2	33	24,5	47	43	27	27	30	106719.4
			106720.1	106720	20	3/4	37	26,5	51	48	27	36	36	106720.4
	200	200	106721.1	106721	25	1	42	30	53	54	33	41	46	106721.4
			106722.1	106722	30	1 1/4	49	35,5	59	62	41	50	50	106722.4
			106723.1	106723	38	1 1/2	57	41	64	72	48	55	60	106723.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

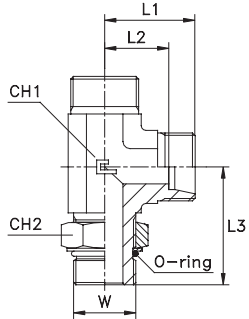
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	106804.1	106804	6	10x1	19	12	27	27	11	14	14	106804.4
			106805.1	106805	8	12x1,5	21	14	31	29	14	17	17	106805.4
			106806.1	106806	10	14x1,5	22	15	33	30	14	19	19	106806.4
			106807.1	106807	12	16x1,5	24	17	38	32	19	22	22	106807.4
			106808.1	106808	15	18x1,5	28	21	40	36	22	24	27	106808.4
	250	250	106809.1	106809	18	22x1,5	31	23,5	46	40	27	27	32	106809.4
			106810.1	106810	22	27x2	35	27,5	50,5	44	27	32	36	106810.4
			106811.1	106811	28	33x2	38	30,5	52,5	47	33	41	41	106811.4
			106812.1	106812	35	42x2	45	34,5	58	56	41	50	50	106812.4
			106813.1	106813	42	48x2	51	40	63	63	48	55	60	106813.4
S	315	315	106814.1	106814	6	12x1,5	23	16	31	31	14	17	17	106814.4
			106815.1	106815	8	14x1,5	24	17	33	32	14	19	19	106815.4
			106816.1	106816	10	16x1,5	25	17,5	38	34	19	22	22	106816.4
			106817.1	106817	12	18x1,5	29	21,5	38	38	19	24	24	106817.4
	250	250	106818.1	106818	14	20x1,5	30	22	44	40	22	27	27	106818.4
			106819.1	106819	16	22x1,5	33	24,5	48	43	27	27	30	106819.4
			106820.1	106820	20	27x2	37	26,5	50,5	48	27	32	36	106820.4
			106821.1	106821	25	33x2	42	30	52,5	54	33	41	46	106821.4
	200	200	106822.1	106822	30	42x2	49	35,5	58	62	41	50	50	106822.4
			106823.1	106823	38	48x2	57	41	63	72	48	55	60	106823.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

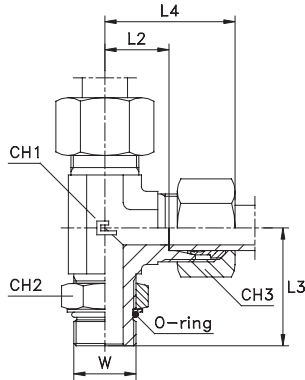
ADJUSTABLE DIN MALE STUD BARREL TEE WITH O-RING

Thread UNF/UN-2A

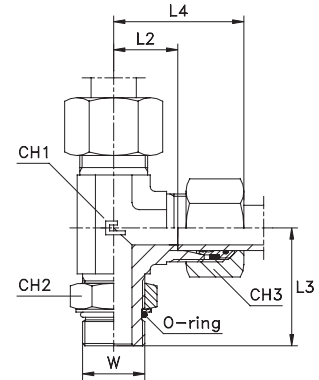
Type: **1069...1** Body



Type: **1069.. B3** Ring



Type: **1069...4** B4 Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	W	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	106904.1	106904	6	7/16-20	19	12	27	27	11	14	14	106904.4
			106905.1	106905	8	7/16-20	21	14	28	29	14	14	17	106905.4
			106906.1	106906	10	9/16-18	22	15	32	30	14	17	19	106906.4
			106907.1	106907	12	3/4-16	24	17	37	32	19	22	22	106907.4
			106908.1	106908	15	7/8-14	28	21	43	36	22	27	27	106908.4
	106909.1	106909	18	7/8-14	31	23,5	47	40	27	27	32	106909.4		
	160	160	106910.1	106910	22	1 1/16-12	35	27,5	49,5	44	27	32	36	106910.4
			106911.1	106911	28	1 5/16-12	38	30,5	52	47	33	41	41	106911.4
			106912.1	106912	35	1 5/8-12	45	34,5	58	56	41	50	50	106912.4
			106913.1	106913	42	1 7/8-12	51	40	60	63	48	55	60	106913.4
106914.1			106914	6	7/16-20	23	16	29	31	14	14	17	106914.4	
S	400	400	106915.1	106915	8	9/16-18	24	17	33	32	14	17	19	106915.4
			106916.1	106916	10	9/16-18	25	17,5	37,5	34	19	17	22	106916.4
			106917.1	106917	12	3/4-16	29	21,5	38	38	19	22	24	106917.4
			106918.1	106918	14	7/8-14	30	22	44	40	22	27	27	106918.4
			106919.1	106919	16	7/8-14	33	24,5	48	43	27	27	30	106919.4
			106920.1	106920	20	1 1/16-12	37	26,5	51	48	27	32	36	106920.4
			106921.1	106921	25	1 5/16-12	42	30	53	54	33	41	46	106921.4
	250	250	106922.1	106922	30	1 5/8-12	49	35,5	59	62	41	50	50	106922.4
			106923.1	106923	38	1 7/8-12	57	41	62	72	48	55	60	106923.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 Items not included in the ISO 8434-1 Norm available on request only.

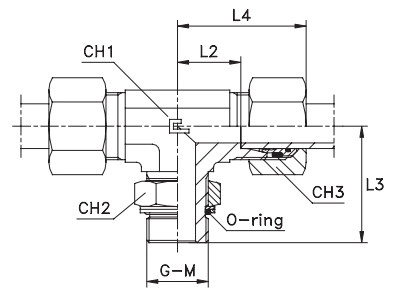
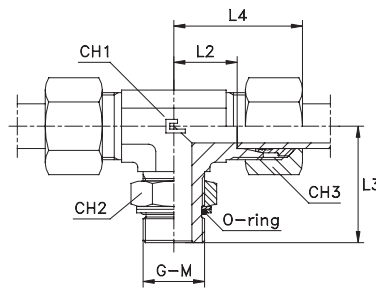
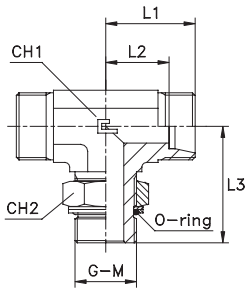
JUSTABLE DIN MALE STUD BRANCH TEE WITH O-RING AND WASHER

Thread BSP Parallel - Thread Metric Parallel

Type: **1070...1** Body
Type: **1071...1** Body

Type: **1070... B3** Ring
Type: **1071... B3** Ring

Type: **1070...4 B4** Ring
Type: **1071...4 B4** Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	107004.1	107004	6	1/8	19	12	26	27	11	14	14	107004.4
			107005.1	107005	8	1/4	21	14	32	29	14	19	17	107005.4
			107006.1	107006	10	1/4	22	15	32	30	14	19	19	107006.4
	250	250	107007.1	107007	12	3/8	24	17	37	32	19	22	22	107007.4
			107008.1	107008	15	1/2	28	21	44	36	22	27	27	107008.4
			107009.1	107009	18	1/2	31	23,5	47	40	27	27	32	107009.4
	160	160	107010.1	107010	22	3/4	35	27,5	51	44	27	36	36	107010.4
			107011.1	107011	28	1	38	30,5	53	47	33	41	41	107011.4
			107012.1	107012	35	1 1/4	45	34,5	59	56	41	50	50	107012.4
S	315	315	107013.1	107013	42	1 1/2	51	40	64	63	48	55	60	107013.4
			107014.1	107014	6	1/4	23	16	32	31	14	19	17	107014.4
	250	250	107015.1	107015	8	1/4	24	17	32	32	14	19	19	107015.4
			107016.1	107016	10	3/8	25	17,5	37	34	19	22	22	107016.4
			107017.1	107017	12	3/8	29	21,5	37	38	19	22	24	107017.4
			107018.1	107018	14	1/2	30	22	44	40	22	27	27	107018.4
			107019.1	107019	16	1/2	33	24,5	47	43	27	27	30	107019.4
			107020.1	107020	20	3/4	37	26,5	51	48	27	36	36	107020.4
	200	200	107021.1	107021	25	1	42	30	53	54	33	41	46	107021.4
			107022.1	107022	30	1 1/4	49	35,5	59	62	41	50	50	107022.4
160	160	107023.1	107023	38	1 1/2	57	41	64	72	48	55	60	107023.4	

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
L	315	315	107104.1	107104	6	10x1	19	12	27	27	11	14	14	107104.4
			107105.1	107105	8	12x1,5	21	14	31	29	14	17	17	107105.4
			107106.1	107106	10	14x1,5	22	15	33	30	14	19	19	107106.4
			107107.1	107107	12	16x1,5	24	17	38	32	19	22	22	107107.4
	250	250	107108.1	107108	15	18x1,5	28	21	40	36	22	24	27	107108.4
			107109.1	107109	18	22x1,5	31	23,5	46	40	27	27	32	107109.4
			107110.1	107110	22	27x2	35	27,5	50,5	44	27	32	36	107110.4
			107111.1	107111	28	33x2	38	30,5	52,5	47	33	41	41	107111.4
			107112.1	107112	35	42x2	45	34,5	58	56	41	50	50	107112.4
S	160	160	107113.1	107113	42	48x2	51	40	63	63	48	55	60	107113.4
			107114.1	107114	6	12x1,5	23	16	31	31	14	17	17	107114.4
			107115.1	107115	8	14x1,5	24	17	33	32	14	19	19	107115.4
	315	315	107116.1	107116	10	16x1,5	25	17,5	38	34	19	22	22	107116.4
			107117.1	107117	12	18x1,5	29	21,5	38	38	19	24	24	107117.4
			107118.1	107118	14	20x1,5	30	22	44	40	22	27	27	107118.4
	250	250	107119.1	107119	16	22x1,5	33	24,5	48	43	27	27	30	107119.4
			107120.1	107120	20	27x2	37	26,5	50,5	48	27	32	36	107120.4
	200	200	107121.1	107121	25	33x2	42	30	52,5	54	33	41	46	107121.4
			107122.1	107122	30	42x2	49	35,5	58	62	41	50	50	107122.4
160	160	107123.1	107123	38	48x2	57	41	63	72	48	55	60	107123.4	

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

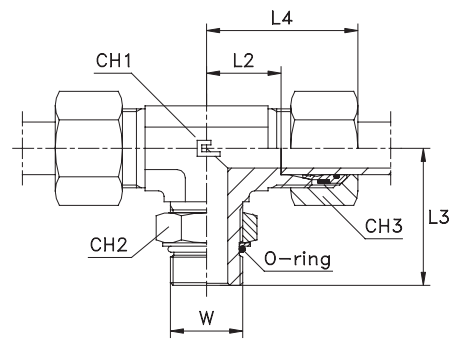
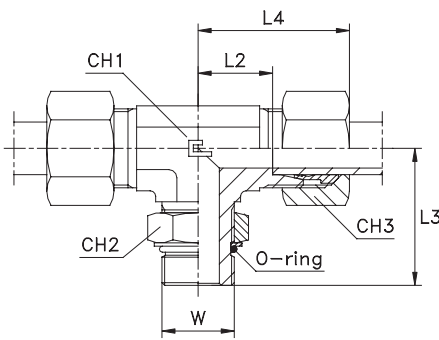
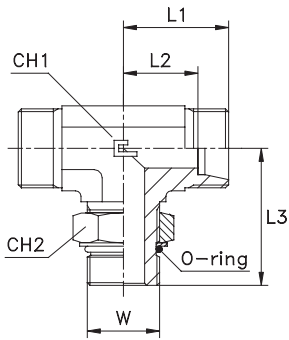
ADJUSTABLE DIN MALE STUD BRANCH TEE WITH O-RING

Thread UNF/UN-2A

Type: **1072...1** Body

Type: **1072.. B3** Ring

Type: **1072...4** B4 Ring

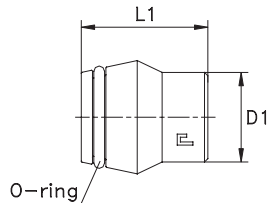


Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	W	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4	
L	315	315	107204.1	107204	6	7/16-20	19	12	27	27	11	14	14	107204.4	
			107205.1	107205	8	7/16-20	21	14	28	29	29	14	14	17	107205.4
			107206.1	107206	10	9/16-18	22	15	32	30	32	14	17	19	107206.4
			107207.1	107207	12	3/4-16	24	17	37	32	32	19	22	22	107207.4
			107208.1	107208	15	7/8-14	28	21	43	36	40	22	27	27	107208.4
	107209.1	107209	18	7/8-14	31	23.5	47	40	44	27	27	32	107209.4		
	107210.1	107210	22	1 1/16-12	35	27.5	49.5	44	47	27	32	36	107210.4		
	107211.1	107211	28	1 5/16-12	38	30.5	52	47	52	33	41	41	107211.4		
	107212.1	107212	35	1 5/8-12	45	34.5	58	56	58	41	50	50	107212.4		
107213.1	107213	42	1 7/8-12	51	40	60	63	60	48	55	60	107213.4			
S	400	400	107214.1	107214	6	7/16-20	23	16	29	31	14	14	17	107214.4	
			107215.1	107215	8	9/16-18	24	17	33	32	14	17	19	107215.4	
			107216.1	107216	10	9/16-18	25	17.5	37.5	34	19	17	22	107216.4	
			107217.1	107217	12	3/4-16	29	21.5	38	38	19	22	24	107217.4	
			107218.1	107218	14	7/8-14	30	22	44	40	22	27	27	107218.4	
			107219.1	107219	16	7/8-14	33	24.5	48	43	27	27	30	107219.4	
			107220.1	107220	20	1 1/16-12	37	26.5	51	48	27	32	36	107220.4	
	107221.1	107221	25	1 5/16-12	42	30	53	54	33	41	46	107221.4			
	250	250	107222.1	107222	30	1 5/8-12	49	35.5	59	62	41	50	50	107222.4	
			107223.1	107223	38	1 7/8-12	57	41	62	72	48	55	60	107223.4	

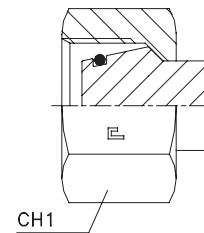
Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
 Items not included in the ISO 8434-1 Norm available on request only.

BLANKING PLUG WITH O-RING - Per cono a 24° DIN 3861

Type: **1073..** Body
O-ring



Type: **1073..-D**
With o-ring and nut



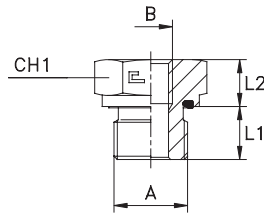
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Complete	Ø Tube	D1	L1	CH1
L	500	315	107304	107304-D	6	6	17	14
			107305	107305-D	8	8	17	17
			107306	107306-D	10	10	20	19
			107307	107307-D	12	12	21	22
			107308	107308-D	15	15	21	27
	107309	107309-D	18	18	23	32		
	250	160	107310	107310-D	22	22	23	36
			107311	107311-D	28	28	25	41
			107312	107312-D	35	35	29	50
107313			107313-D	42	42	30	60	
S	800	630	107304	107314-D	6	6	17	17
			107305	107315-D	8	8	17	19
			107306	107316-D	10	10	20	22
	630	400	107307	107317-D	12	12	21	24
			107318	107318-D	14	14	23	27
			107319	107319-D	16	16	24	30
	420	315	107320	107320-D	20	20	28	36
			107321	107321-D	25	25	31	46
			107322	107322-D	30	30	34	50
			107323	107323-D	38	38	38	50

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
 If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .

MALE - FEMALE ADAPTER WITH ELASTOMER SEAL

Thread BSP Parallel

Type: 1074..



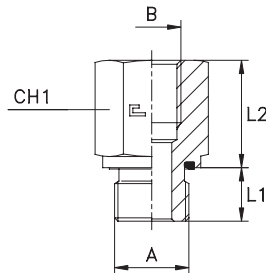
Series DIN	10.... [bar]	11.... [bar]	Ordering Complete	A	B	L1	L2	CH1
L/S	400	400	107401	3/8	1/8	12	10,5	22
			107402	1/2	1/8	14	10	27
			107403	1/2	1/4	14	10	27
	315	315	107404	3/4	1/4	16	10	32
			107405	3/4	3/8	16	10	32
			107406	1	1/4	18	11	41
			107407	1	3/8	18	11	41
			107408	1	1/2	18	11	41
			107409	1 1/4	1/2	20	12	50
			107410	1 1/4	3/4	20	12	50
	250	250	107411	1 1/2	1/2	22	14	55
			107412	1 1/2	3/4	22	14	55
			107413	1 1/2	1	22	14	55

Note: If you wish to order a fitting in stainless steel, please change the first two digit from 10.... to 11....

MALE - FEMALE ADAPTER WITH ELASTOMER SEAL

Thread BSP Parallel

Type: 1075..



Series DIN	10.... [bar]	11.... [bar]	Ordering Complete	A	B	L1	L2	CH1
L/S	400	400	107501	1/8	1/4	8	23	19
			107502	1/8	3/8	8	24	24
			107503	1/4	1/8	12	16	19
			107504	1/4	3/8	12	24	24
			107505	1/4	1/2	12	28	30
			107506	1/4	3/4	12	31	36
			107507	3/8	1/4	12	24	22
			107508	3/8	1/2	12	29	30
	315	315	107509	3/8	3/4	12	32	36
	400	400	107510	1/2	3/8	14	22	27
	315	315	107511	1/2	3/4	14	32	36
			107512	1/2	1	14	35	41
			107513	1/2	1 1/4	14	39	55
			107514	3/4	1/2	16	26	32
			107515	3/4	1	16	35	41
			107516	3/4	1 1/4	16	39	55
	250	250	107517	3/4	1 1/2	16	41	60
	315	315	107518	1	3/4	18	29	41
	250	250	107519	1	1 1/4	18	39	55
	250	250	107520	1	1 1/2	18	41	60
	315	315	107521	1 1/4	1	20	31	50
	250	250	107522	1 1/4	1 1/2	20	40	60
			107523	1 1/2	1 1/4	22	36	55

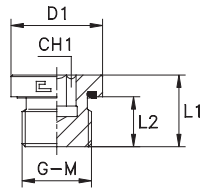
Note: If you wish to order a fitting in stainless steel, please change the first two digit from 10.... to 11....

CLOSURE PLUG WITH EXAGON SOCKET HEAD WITH ELASTOMER SEAL

Thread BSP Parallel - Thread Metric Parallel

Type: 1076..

Type: 1077..



Series DIN	10.... [bar]	11.... [bar]	Ordering Complete	G	D1	L1	L2	CH1
S	400	400	107601	1/8	14	12	8	5
			107602	1/4	19	17	12	6
			107603	3/8	22	17	12	8
			107604	1/2	27	19	14	10
			107605	3/4	32	21	16	12
			107606	1	40	22.5	16	17
	250	250	107607	1 1/4	50	22.5	16	22
			107608	1 1/2	55	22.5	16	24

Note: If you wish to order a fitting in stainless steel, please change the first two digit from 10.... to 11.....

Series DIN	10.... [bar]	11.... [bar]	Ordering Complete	M	D1	L1	L2	CH1
S	400	400	107701	10x1	14	12	8	5
			107702	12x1.5	17	17	12	6
			107703	14x1.5	19	17	12	6
			107704	16x1.5	22	17	12	8
			107705	18x1.5	24	17	12	8
			107706	20x1.5	26	19	14	10
			107707	22x1.5	27	19	14	10
			107708	26x1.5	32	21	16	12
			107709	27x2	32	21	16	12
			107710	33x2	40	22.5	16	17
	250	250	107711	42x2	50	22.5	16	22
			107712	48x2	55	22.5	16	24

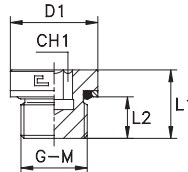
Note: If you wish to order a fitting in stainless steel, please change the first two digit from 10.... to 11.....

CLOSURE PLUG WITH EXAGON SOCKET HEAD WITH O-RING AND WASHER

Thread BSP Parallel - Thread Metric Parallel

Type: 1078..

Type: 1079..



Series DIN	10.... [bar]	11.... [bar]	Ordering Complete	G	D1	L1	L2	CH1
L	315	315	107801	1/8	14	11.5	6.7	5
			107802	1/4	19	16	10.2	6
			107803	3/8	22	16	10.2	8
			107804	1/2	27	18	12.2	10
			107805	3/4	36	20	14.2	12
			107806	1	41	23	15.4	17
	200	200	107807	1 1/4	50	25	17.4	22
			107808	1 1/2	60	27	19.4	24

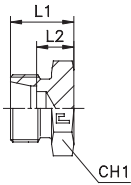
Note: If you wish to order a fitting in stainless steel, please change the first two digit from 10.... to 11.....

Series DIN	10.... [bar]	11.... [bar]	Ordering Complete	M	D1	L1	L2	CH1
L	315	315	107901	10x1	14	12	7.5	5
			107902	12x1.5	17	15	9.6	6
			107903	14x1.5	19	15	9.6	6
			107904	16x1.5	22	16.5	11.1	8
			107905	18x1.5	24	18	12.6	8
			107906	20x1.5	26	18	12.6	10
			107907	22x1.5	27	19	13.6	10
			107908	27x2	32	22.5	16.5	12
			107909	33x2	40	22.5	16.5	17
			160	160	107910	42x2	50	24
	107911	48x2			55	26.5	19.5	24

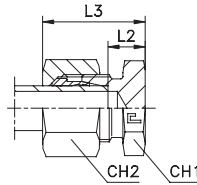
Note: If you wish to order a fitting in stainless steel, please change the first two digit from 10.... to 11.....

BLANKING PLUG FOR TUBE ENDS

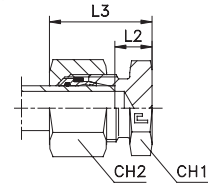
Type: **1080...1** Body



Type: **1080.. B3** Ring



Type: **1080...4** B4 Ring

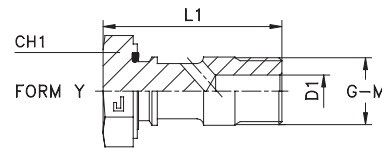
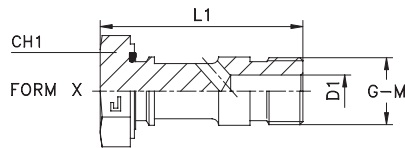


Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	L1	L2	L3	CH1	CH2	Ordering Equipped B4
L	315	315	108004.1	108004	6	14	7	21,5	12	14	108004.4
			108005.1	108005	8	15	8	23	14	17	108005.4
			108006.1	108006	10	16	9	24	17	19	108006.4
			108007.1	108007	12	17	10	24,5	19	22	108007.4
			108008.1	108008	15	18	11	26	24	27	108008.4
	108009.1	108009	18	19	11,5	28	27	32	108009.4		
	160	160	108010.1	108010	22	21	13,5	30	32	36	108010.4
			108011.1	108011	28	22	14,5	31	41	41	108011.4
			108012.1	108012	35	25	14,5	36	46	50	108012.4
108013.1			108013	42	27	16	39	55	60	108013.4	
S	630	630	108014.1	108014	6	18	11	26	14	17	108014.4
			108015.1	108015	8	20	13	28	17	19	108015.4
			108016.1	108016	10	20	12,5	28,5	19	22	108016.4
			108017.1	108017	12	22	14,5	30,5	22	24	108017.4
			108018.1	108018	14	24	16	34	24	27	108018.4
	400	400	108019.1	108019	16	24	15,5	34	27	30	108019.4
			108020.1	108020	20	28	17,5	39	32	36	108020.4
			108021.1	108021	25	32	20	44	41	46	108021.4
			108022.1	108022	30	34	20,5	47	46	50	108022.4
			108023.1	108023	38	39	23	54	55	60	108023.4
	315	315									

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .

ALLOW SCREW FOR BANJOS - Thread BSP Parallel - Thread Metric Parallel

Type: **1081..**
Type: **1082..**



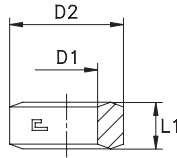
Series DIN	10.... [bar]	11.... [bar]	Ordering Complete	G	Allow's form	Banjós form 1013.. 1014..	D1	L1	CH1			
L/S			108101	1/8	X	X	4	32	17			
			108102	1/4	X	X	5	44	19			
			108103	3/8	X	X	8	50,5	24			
			108104	1/2	X	X	10	60,5	30			
			108105	3/4	X	X	14,5	70	36			
			108106	1	X	X	21	84,5	46			
			108107	1 1/4	X	X	26	100	55			
			108108	1 1/2	X	X	30	112	60			
			108151	1/8	Y	Y	4	27,5	14			
			108152	1/4	Y	Y	5	36,5	19			
			108153	3/8	Y	Y	8	41,5	22			
			108154	1/2	Y	Y	10	55	27			
			108155	3/4	Y	Y	14,5	61	32			
			L/S			108201	8x1	X	X	3	32	14
						108202	10x1	X	X	4	32	17
108203	12x1,5	X				X	4	44	19			
108204	14x1,5	X				X	5	44	19			
108205	16x1,5	X				X	8	50,5	24			
108206	18x1,5	X				X	8	54	27			
108207	20x1,5	X				X	10	59	30			
108208	22x1,5	X				X	10	60,5	30			
108209	26x1,5	X				X	14,5	70	36			
108210	27x2	X				X	14,5	70	36			
108211	33x2	X				X	21	84,5	46			
108212	42x2	X				X	26	100	55			
108213	48x2	X				X	30	112	60			
108251	8x1	Y				Y	3	27,5	12			
108252	10x1	Y				Y	4	27,5	14			
108253	12x1,5	Y				Y	4	36,5	17			
108254	14x1,5	Y				Y	5	36,5	19			
108255	16x1,5	Y				Y	8	41,5	22			
108256	18x1,5	Y				Y	8	46	24			
108257	20x1,5	Y				Y	10	55	27			
108258	22x1,5	Y				Y	10	55	27			
108259	26x1,5	Y	Y	14,5	61	32						
108260	27x2	Y	Y	14,5	61	32						

Note: If you wish to order a fitting in stainless steel, please change the first two digit from **10....** to **11....** .
Items not included in the ISO 8434-1 Norm.

SEALING WASHER

Gauge fitting – Adjustable elbow
Thread BSP Parallel - Thread Metric Parallel

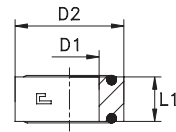
Type: 1084..



O-RING SEALING WASHER

Gauge fitting
Thread BSP Parallel

Type: 1085..



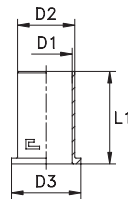
Series DIN	10.... [bar]	11.... [bar]	Ordering Complete	D1	D2	L1	Thread	Applications
L/S	-	-	108401	6	11	4,5	G 1/4	Gauge fitting 1059..
			108402	9	18	5	G 1/2	Gauge fitting 1059..
			108411	9,8	14,5	3	G 1/8	Adjustable elbow 1013..
			108412	13,3	18	3	G 1/4	Adjustable elbow 1013..
			108413	16,8	22	3	G 3/8	Adjustable elbow 1013..
			108414	21,1	26	4	G 1/2	Adjustable elbow 1013..
			108415	26,5	32	4	G 3/4	Adjustable elbow 1013..
			108421	8,1	12,5	3	M 8x1	Adjustable elbow 1014..
			108422	10,1	14,5	3	M 10x1	Adjustable elbow 1014..
			108423	12,1	17	3	M 12x1,5	Adjustable elbow 1014..
			108424	14,1	19	3	M 14x1,5	Adjustable elbow 1014..
			108425	16,1	21	3	M 16x1,5	Adjustable elbow 1014..
			108426	18,1	23	3	M 18x1,5	Adjustable elbow 1014..
			108427	20,1	25	4	M 20x1,5	Adjustable elbow 1014..
			108428	22,1	27	4	M 22x1,5	Adjustable elbow 1014..
108429	26,1	32	4	M 26x1,5	Adjustable elbow 1014..			
108430	27,1	32	4	M 27x2	Adjustable elbow 1014..			
L/S	-	-	108501	6	11	4,5	1/4	Gauge fitting 1059...4
			108502	9	18	5	1/2	Gauge fitting 1059...4

Note: If you wish to order a fitting in stainless steel, please change the first two digit from 10.... to 11.... .
Items not included in the ISO 8434-1 Norm.

PIPE INSERT

Thin wall pipe

Type: 1086..



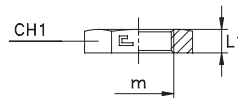
Series DIN	10.... [bar]	11.... [bar]	Ordering Complete	Ø Tube	D1	D2	D3	L1
L/S	-	-	108601	6	3	3,9	6	11
			108602	8	5	5,9	8	14
			108603	10	7	7,9	10	15
			108604	12	9	9,9	12	16
			108605	15	12	12,9	15	17
			108606	18	14	14,9	18	20
			108607	20	15	15,9	20	20
			108608	22	16	17,9	22	20
			108609	28	22	23,9	28	23,5
			108610	30	24	25,9	30	23,5
			108611	35	28	30,9	35	26,5

Note: If you wish to order a fitting in stainless steel, please change the first two digit from 10.... to 11.... .
Items not included in the ISO 8434-1 Norm.

EXAGONAL NUT

Bulkhead fitting

Type: 1087..



Series DIN	10.... [bar]	11.... [bar]	Ordering Complete	m	L1	CH1	Ø Tube	Ø Tube
L/S	-	-	108704	12x1,5	6	17	6L	-
			108705	14x1,5	6	19	8L	6S
			108706	16x1,5	6	22	10L	8S
			108707	18x1,5	6	24	12L	10S
			108708	20x1,5	6	27	-	12S
			108709	22x1,5	7	30	15L	14S
			108710	24x1,5	7	32	-	16S
			108711	26x1,5	8	36	18L	-
			108712	30x2	8	41	22L	20S
			108713	36x2	9	46	28L	25S
			108714	42x2	9	50	-	30S
			108715	45x2	9	55	35L	-
			108716	52x2	10	65	42L	38S

Note: If you wish to order a fitting in stainless steel, please change the first two digit from 10.... to 11.... .

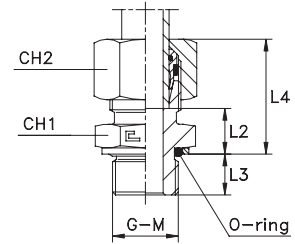
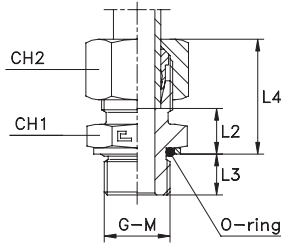
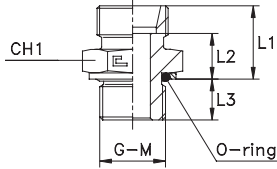
MALE STUD COUPLING WITH O-RING AND WASHER

Thread BSP Parallel - Thread Metric Parallel

Type: **1088...1** Body
Type: **1089...1** Body

Type: **1088.. B3** Ring
Type: **1089.. B3** Ring

Type: **1088...4** B4 Ring
Type: **1089...4** B4 Ring



Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
LL	100	100	108801.1	108801	4	1/8	13,3	9,3	6,7	19,8	14	10	-
			108802.1	108802	6	1/8	13,3	7,8	6,7	19,8	14	12	-
			108803.1	108803	8	1/8	14,3	8,8	6,7	20,8	14	14	-
L	315	315	108804.1	108804	6	1/8	15,3	8,3	6,7	22,8	14	14	108804.4
			108805.1	108805	8	1/4	16,8	9,8	10,2	24,8	19	17	108805.4
			108806.1	108806	10	1/4	17,8	10,8	10,2	25,8	19	19	108806.4
			108807.1	108807	12	3/8	19,3	12,3	10,2	26,8	22	22	108807.4
			108808.1	108808	15	1/2	20,8	13,8	12,2	28,8	27	27	108808.4
			108809.1	108809	18	1/2	21,8	14,3	12,2	30,8	27	32	108809.4
	160	160	108810.1	108810	22	3/4	23,8	16,3	12,7	32,8	36	36	108810.4
			108811.1	108811	28	1	25,1	17,6	15,4	34,1	41	41	108811.4
			108812.1	108812	35	1 1/4	28	17,6	16	39,1	50	50	108812.4
			108813.1	108813	42	1 1/2	30	19,1	16	42,1	55	60	108813.4
S	400	400	108814.1	108814	6	1/4	19,8	12,8	10,2	27,8	19	17	108814.4
			108815.1	108815	8	1/4	21,8	14,8	10,2	29,8	19	19	108815.4
	315	315	108816.1	108816	10	3/8	22,3	14,8	10,2	30,8	22	22	108816.4
			108817.1	108817	12	3/8	24,3	16,8	10,2	32,8	22	24	108817.4
			108818.1	108818	14	1/2	26,8	18,8	12,2	36,8	27	27	108818.4
			108819.1	108819	16	1/2	26,8	18,3	12,2	36,8	27	30	108819.4
	280	280	108820.1	108820	20	3/4	30,8	20,3	12,7	41,8	36	36	108820.4
			108821.1	108821	25	1	35,1	23,1	15,4	47,1	41	46	108821.4
	250	250	108822.1	108822	30	1 1/4	37	23,6	16	50,1	50	50	108822.4
			108823.1	108823	38	1 1/2	42	26,1	16	57,1	55	60	108823.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

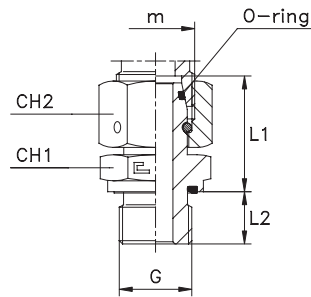
Series DIN	10.... [bar]	11.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	Ordering Equipped B4
LL	100	100	108901.1	108901	4	10x1	13,5	9,5	7,5	20	14	10	-
			108902.1	108902	6	10x1	13,5	8	7,5	20	14	12	-
			108903.1	108903	8	10x1	14,5	9	7,5	21	14	14	-
L	315	315	108904.1	108904	6	10x1	15,5	8,5	7,5	23	14	14	108904.4
			108905.1	108905	8	12x1,5	16,9	9,9	9,6	24,9	17	17	108905.4
			108906.1	108906	10	14x1,5	17,9	10,9	9,6	25,9	19	19	108906.4
			108907.1	108907	12	16x1,5	19,4	12,4	11,1	26,9	22	22	108907.4
			108908.1	108908	15	18x1,5	20,4	13,4	12,6	28,3	24	27	108908.4
			108909.1	108909	18	22x1,5	21,9	14,4	13,6	30,3	27	32	108909.4
	160	160	108910.1	108910	22	27x2	24	16,5	16,5	33	32	36	108910.4
			108911.1	108911	28	33x2	25	17,5	16,5	34	41	41	108911.4
			108912.1	108912	35	42x2	28	17,5	17	39	50	50	108912.4
			108913.1	108913	42	48x2	30	19	19,5	42	55	60	108913.4
S	400	400	108914.1	108914	6	12x1,5	19,9	12,9	9,6	27,9	17	17	108914.4
			108915.1	108915	8	14x1,5	21,9	14,9	9,6	29,9	19	19	108915.4
			108916.1	108916	10	16x1,5	22,4	14,9	11,1	30,9	22	22	108916.4
	315	315	108917.1	108917	12	18x1,5	24,4	16,9	12,6	32,9	24	24	108917.4
			108918.1	108918	14	20x1,5	26,9	18,9	12,6	36,9	27	27	108918.4
			108919.1	108919	16	22x1,5	26,9	18,4	13,6	36,9	27	30	108919.4
			108920.1	108920	20	27x2	31	20,5	16,5	42	32	36	108920.4
	280	280	108921.1	108921	25	33x2	35	23	16,5	47	41	46	108921.4
			108922.1	108922	30	42x2	37	23,5	17	50	50	50	108922.4
	250	250	108923.1	108923	38	48x2	42	26	19,5	57	55	60	108923.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **10....** to **11....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **10....** to **14....** .
Items not included in the ISO 8434-1 Norm available on request only.

MALE STUD COUPLING WITH SWIVEL NUT AND ELASTOMER SEAL

Thread BSP Parallel

Type: 6005..



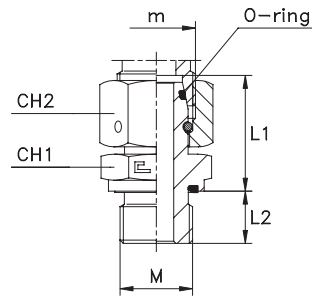
Series DIN	60.... [bar]	61.... [bar]	Ordering Complete	Ø Tube	m	G	L1	L2	CH1	CH2			
L	500	315	600504	6	12x1,5	1/8	24,5	8	14	14			
			600505	8	14x1,5	1/4	29,5	12	19	17			
			600506	10	16x1,5	1/4	27,5	12	19	19			
			600507	12	18x1,5	3/8	34	12	22	22			
			600508	15	22x1,5	1/2	32	14	27	27			
			600509	18	26x1,5	1/2	31,5	14	27	32			
	250	160	600510	22	30x2	3/4	32,5	16	32	36			
			600511	28	36x2	1	35	18	41	41			
			600512	35	45x2	1 1/4	42,5	20	50	50			
			600513	42	52x2	1 1/2	46,5	22	55	60			
			S	800	630	600514	6	14x1,5	1/4	27	12	19	17
						600515	8	16x1,5	1/4	29,5	12	19	19
600516	10	18x1,5				3/8	32,5	12	22	22			
600517	12	20x1,5				3/8	34,5	12	22	24			
600518	14	22x1,5				1/2	36,5	14	27	27			
600519	16	24x1,5				1/2	37	14	27	30			
630	400	600520		20	30x2	3/4	43	16	32	36			
		600521		25	36x2	1	48	18	41	46			
		600522		30	42x2	1 1/4	51	20	50	50			
		600523		38	52x2	1 1/2	60	22	55	60			
		L		500	315	600524	6	12x1,5	1/4	27	12	19	14
						600525	10	16x1,5	3/8	29	12	22	19
600526	12		18x1,5			1/4	27,5	12	19	22			
600527	12		18x1,5			1/2	30	14	27	22			
600528	15		22x1,5			3/8	31,5	12	22	27			
600529	15		22x1,5			3/4	30,5	16	32	27			
250	160		600530	18	26x1,5	3/4	31,5	16	32	32			
			600531	22	30x2	1	34	18	41	36			
			600532	28	36x2	3/4	33,5	16	32	41			
			600533	35	45x2	1	39,5	18	41	50			
			600534	35	45x2	1 1/2	46,5	22	55	50			
			S	500	315	600535	6	14x1,5	1/8	24,5	8	14	17
600536	8	16x1,5				3/8	31,5	12	22	19			
800	630	600537				10	18x1,5	1/4	30,5	12	19	22	
		600538				10	18x1,5	1/2	32	14	27	22	
		600539				12	20x1,5	1/4	30,5	12	19	24	
		600540				12	20x1,5	1/2	34	14	27	24	
		600541		14	22x1,5	3/8	37	12	22	27			
		600542		16	24x1,5	3/8	39,5	12	22	30			
630	400	600543		20	30x2	1/2	41,5	14	27	36			
		600544		20	30x2	1	45,5	18	41	36			
		600545		25	36x2	1/2	42	14	32	46			
		600546		25	36x2	3/4	45,5	16	32	46			
		600547	25	36x2	1 1/4	48,5	20	50	46				
		600548	30	42x2	1	50,5	18	41	50				
420	315	600549	30	42x2	1 1/2	58	22	55	50				
		600550	38	52x2	1 1/4	53	20	50	60				

Note: If you wish to order a fitting in stainless steel, please change the first two digit from 60.... to 61.....

MALE STUD COUPLING WITH SWIVEL NUT AND ELASTOMER SEAL

Thread Metric Parallel

Type: 6006..



Series DIN	60.... [bar]	61.... [bar]	Ordering Complete	Ø Tube	m	M	L1	L2	CH1	CH2
L	500	315	600604	6	12x1,5	10x1	24,5	8	14	14
			600605	8	14x1,5	12x1,5	26,5	12	17	17
			600606	10	16x1,5	14x1,5	27,5	12	19	19
	600607		12	18x1,5	16x1,5	30,5	12	22	22	
	600608		15	22x1,5	18x1,5	31,5	12	24	27	
	600609		18	26x1,5	22x1,5	31,5	14	27	32	
	400	160	600610	22	30x2	26x1,5	32,5	16	32	36
			600611	28	36x2	33x2	35	18	41	41
			600612	35	45x2	42x2	42,5	20	50	50
			600613	42	52x2	48x2	46	22	55	60
S	800	630	600614	6	14x1,5	12x1,5	27	12	17	17
			600615	8	16x1,5	14x1,5	29,5	12	19	19
			600616	10	18x1,5	16x1,5	32,5	12	22	22
	600617		12	20x1,5	18x1,5	34,5	12	24	24	
	600618		14	22x1,5	20x1,5	36,5	14	27	27	
	600619		16	24x1,5	22x1,5	37	14	27	30	
	630	400	600620	20	30x2	27x2	43	16	32	36
			600621	25	36x2	33x2	48	18	41	46
			600622	30	42x2	42x2	51	20	50	50
			600623	38	52x2	48x2	60	22	55	60
L	500	315	600624	6	12x1,5	12x1,5	26,5	12	17	14
			600625	8	14x1,5	14x1,5	27	12	19	17
			600626	10	16x1,5	16x1,5	30,5	12	22	19
	600627		12	18x1,5	14x1,5	27,5	12	19	22	
	600628		12	18x1,5	18x1,5	29,5	12	24	22	
	600629		12	18x1,5	22x1,5	30	14	27	22	
	400	160	600630	15	22x1,5	22x1,5	30,5	14	27	27
			600631	18	26x1,5	26x1,5	31,5	16	32	32
			600632	6	14x1,5	10x1	24,5	8	14	17
			600633	8	16x1,5	12x1,5	27,5	12	17	19
S	500	630	600634	10	18x1,5	14x1,5	30,5	12	19	22
			600635	12	20x1,5	14x1,5	30,5	12	19	24
	600636		12	20x1,5	16x1,5	34,5	12	22	24	
	800	400	600637	12	20x1,5	22x1,5	35	14	27	24

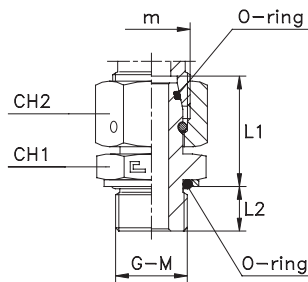
Note: If you wish to order a fitting in stainless steel, please change the first two digit from 60.... to 61....

MALE STUD COUPLING WITH SWIVEL NUT O-RING AND WASHER

Thread BSP Parallel - Thread Metric Parallel

Type: 6007..

Type: 6008..



Series DIN	60.... [bar]	61.... [bar]	Ordering Complete	Ø Tube	m	G	L1	L2	CH1	CH2
L	315	315	600704	6	12x1,5	1/8	25,8	6,7	14	14
			600705	8	14x1,5	1/4	31,3	10,2	19	17
			600706	10	16x1,5	1/4	29,3	10,2	19	19
			600707	12	18x1,5	3/8	35,8	10,2	22	22
			600708	15	22x1,5	1/2	33,8	12,2	27	27
	600709	18	26x1,5	1/2	33,3	12,2	27	32		
	160	160	600710	22	30x2	3/4	34,3	12,7	36	36
			600711	28	36x2	1	37,6	15,4	41	41
			600712	35	45x2	1 1/4	45	16	50	50
			600713	42	52x2	1 1/2	49	16	55	60
600714			6	14x1,5	1/4	28,8	10,2	19	17	
S	400	400	600715	8	16x1,5	1/4	31,3	10,2	19	19
			600716	10	18x1,5	3/8	34,3	10,2	22	22
	315	315	600717	12	20x1,5	3/8	36,3	10,2	22	24
			600718	14	22x1,5	1/2	38,3	12,2	27	27
			600719	16	24x1,5	1/2	38,8	12,2	27	30
			600720	20	30x2	3/4	44,8	12,7	36	36
			600721	25	36x2	1	50,6	15,4	41	46
	280	280	600722	30	42x2	1 1/4	53,5	16	50	50
			600723	38	52x2	1 1/2	62,5	16	55	60

Note: If you wish to order a fitting in stainless steel, please change the first two digit from 60.... to 61.... .
Items available on request only.

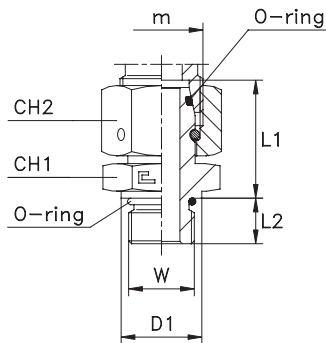
Series DIN	60.... [bar]	61.... [bar]	Ordering Complete	Ø Tube	m	M	L1	L2	CH1	CH2
L	315	315	600804	6	12x1,5	10x1	25	7,5	14	14
			600805	8	14x1,5	12x1,5	28,9	9,6	17	17
			600806	10	16x1,5	14x1,5	29,9	9,6	19	19
			600807	12	18x1,5	16x1,5	31,4	11,1	22	22
			600808	15	22x1,5	18x1,5	30,9	12,6	24	27
	600809	18	26x1,5	22x1,5	31,9	13,6	27	32		
	160	160	600810	22	30x2	27x2	32	16,5	32	36
			600811	28	36x2	33x2	36,5	16,5	41	41
			600812	35	45x2	42x2	45,5	17	50	50
			600813	42	52x2	48x2	47,5	19,5	55	60
600814			6	14x1,5	12x1,5	28,4	9,6	17	17	
S	400	400	600815	8	16x1,5	14x1,5	30,9	9,6	19	19
			600816	10	18x1,5	16x1,5	33,4	11,1	22	22
			600817	12	20x1,5	18x1,5	33,9	12,6	24	24
	315	315	600818	14	22x1,5	20x1,5	35,4	12,6	27	27
			600819	16	24x1,5	22x1,5	36,4	13,6	27	30
			600820	20	30x2	27x2	42,5	16,5	32	36
	280	280	600821	25	36x2	33x2	46,5	16,5	41	46
			600822	30	42x2	42x2	52	17	50	50
	250	250	600823	38	52x2	48x2	62,5	19,5	55	60

Note: If you wish to order a fitting in stainless steel, please change the first two digit from 60.... to 61.... .
Items available on request only.

MALE STUD COUPLING WITH SWIVEL NUT AND O-RING

Thread UNF/UN-2A

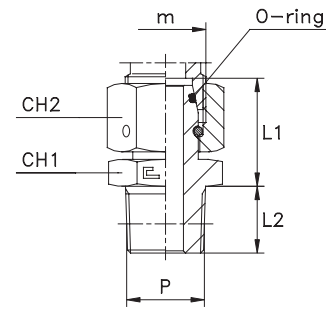
Type: **6009..**



MALE STUD COUPLING WITH SWIVEL NUT

Thread NPT

Type: **6010..**



Series DIN	60.... [bar]	61.... [bar]	Ordering Complete	Ø Tube	m	W	D1	L1	L2	CH1	CH2
L	315	315	600904	6	12x1,5	7/16-20	13,8	24,4	9,1	14	14
			600905	8	14x1,5	7/16-20	13,8	24,4	9,1	14	17
			600906	10	16x1,5	9/16-18	18,8	27,5	10	19	19
			600907	12	18x1,5	3/4-16	21,8	33,9	11,1	22	22
			600908	15	22x1,5	7/8-14	26,8	32,3	12,7	27	27
	600909	18	26x1,5	7/8-14	26,8	31,8	12,7	27	32		
	160	160	600910	22	30x2	1 1/16-12	31,8	32,4	15,1	32	36
			600911	28	36x2	1 5/16-12	40,8	34,9	15,1	41	41
			600912	35	45x2	1 5/8-12	49,8	42,4	15,1	50	50
			600913	42	52x2	1 7/8-12	54,8	46,4	15,1	55	60
S			630	630	600914	6	14x1,5	7/16-20	13,8	26,9	9,1
	600915	8			16x1,5	9/16-18	18,8	29,5	10	17	19
	600916	10			18x1,5	9/16-18	18,8	30,5	10	17	22
	600917	12			20x1,5	3/4-16	21,8	34,4	11,1	22	24
	600918	14			22x1,5	7/8-14	26,8	36,3	12,7	27	27
	400	400	600919	16	24x1,5	7/8-14	26,8	36,8	12,7	27	30
			600920	20	30x2	1 1/16-12	31,8	42,9	15,1	32	36
			600921	25	36x2	1 5/16-12	40,8	47,9	15,1	41	46
			600922	30	42x2	1 5/8-12	49,8	50,9	15,1	50	50
			600923	38	52x2	1 7/8-12	54,8	59,9	15,1	55	60

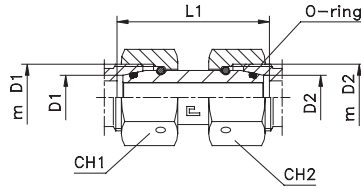
Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .
Items available on request only.

Series DIN	60.... [bar]	61.... [bar]	Ordering Complete	Ø Tube	m	P	L1	L2	CH1	CH2
L	315	315	601004	6	12x1,5	1/8	23	10	12	14
			601005	8	14x1,5	1/4	27,5	15	14	17
			601006	10	16x1,5	1/4	25,5	15	14	19
			601007	12	18x1,5	3/8	31,5	15	19	22
			601008	15	22x1,5	1/2	29	19,5	22	27
	601009	18	26x1,5	1/2	28,5	19,5	24	32		
	160	160	601010	22	30x2	3/4	29,5	20	27	36
			601011	28	36x2	1	32	25	36	41
			601012	35	45x2	1 1/4	39,5	25,5	46	50
			601013	42	52x2	1 1/2	43,5	26	50	60
S			630	630	601014	6	14x1,5	1/4	25	15
	601015	8			16x1,5	1/4	27,5	15	14	19
	601016	10			18x1,5	3/8	30	15	19	22
	601017	12			20x1,5	3/8	32	15	19	24
	601018	14			22x1,5	1/2	33,5	19,5	22	27
	400	400	601019	16	24x1,5	1/2	34	19,5	22	30
			601020	20	30x2	3/4	40	20	27	36
			601021	25	36x2	1	45	25	36	46
			601022	30	42x2	1 1/4	48	25,5	46	50
			601023	38	52x2	1 1/2	57	26	50	60

Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .
Items available on request only.

STRAIGHT COUPLING WITH SWIVEL NUT

Type: 6035..

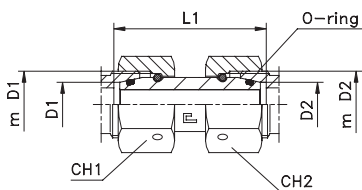


Series DIN	60.... [bar]	61.... [bar]	Ordering Complete	Ø Tube		m D1	m D2	L1	CH1	CH2	
				D1	D2						
L	500	315	603504	6	6	12x1,5	12x1,5	40	14	14	
			603505	8	8	14x1,5	14x1,5	40	17	17	
			603506	10	10	16x1,5	16x1,5	40	19	19	
	603507		12	12	18x1,5	18x1,5	40	22	22		
	603508		15	15	22x1,5	22x1,5	44	27	27		
	603509		18	18	26x1,5	26x1,5	43	32	32		
	400	160	603510	22	22	30x2	30x2	50	36	36	
			603511	28	28	36x2	36x2	51	41	41	
			603512	35	35	45x2	45x2	62	50	50	
			603513	42	42	52x2	52x2	62	60	60	
S	800	630	603514	6	6	14x1,5	14x1,5	41	17	17	
			603515	8	8	16x1,5	16x1,5	41	19	19	
			603516	10	10	18x1,5	18x1,5	44	22	22	
	603517		12	12	20x1,5	20x1,5	45	24	24		
	603518		14	14	22x1,5	22x1,5	49	27	27		
	603519		16	16	24x1,5	24x1,5	52	30	30		
	630	400	603520	20	20	30x2	30x2	61	36	36	
			603521	25	25	36x2	36x2	68	46	46	
			603522	30	30	42x2	42x2	74	50	50	
			603523	38	38	52x2	52x2	83	60	60	
L	500	315	603524	8	6	14x1,5	12x1,5	37	17	14	
			603525	10	6	16x1,5	12x1,5	36,5	19	14	
			603526	12	6	18x1,5	12x1,5	36,5	22	14	
	603527		10	8	16x1,5	14x1,5	36,5	19	17		
	603528		12	8	18x1,5	14x1,5	36,5	22	17		
	603529		15	8	22x1,5	14x1,5	40,5	27	17		
	400		315	603530	12	10	18x1,5	16x1,5	36	22	19
				603531	15	10	22x1,5	16x1,5	40	27	19
				603532	18	10	26x1,5	16x1,5	39,5	32	19
				603533	15	12	22x1,5	18x1,5	40	27	22
		603534		18	12	26x1,5	18x1,5	39,5	32	22	
		603535		22	12	30x2	18x1,5	42,5	36	22	
		603536		18	15	26x1,5	22x1,5	43,5	32	27	
	250	160	160	603537	22	15	30x2	22x1,5	46,5	36	27
				603538	28	15	36x2	22x1,5	47,5	41	27
	250	160	160	603539	22	18	30x2	26x1,5	46	36	32
				603540	28	18	36x2	26x1,5	47	41	32
				603541	35	18	45x2	26x1,5	52,5	50	32
				603542	28	22	36x2	30x2	50	41	36
				603543	35	22	45x2	30x2	55,5	50	36
603544				42	22	52x2	30x2	55,5	60	36	
603545				35	28	45x2	36x2	56,5	50	41	
603546				42	28	52x2	36x2	56,5	60	41	
603547				42	35	52x2	45x2	62	60	50	

Note: If you wish to order a fitting in stainless steel, please change the first two digit from 60.... to 61....

STRAIGHT COUPLING WITH SWIVEL NUT

Type: 6035..

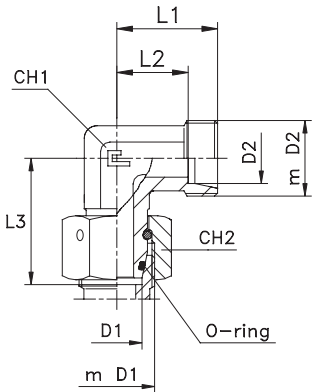


Series DIN	60.... [bar]	61.... [bar]	Ordering Complete	Ø Tube		m D1	m D2	L1	CH1	CH2
				D1	D2					
S	800	630	603548	8	6	16x1,5	14x1,5	37	19	17
			603549	10	6	18x1,5	14x1,5	38	22	17
	630		603550	12	6	20x1,5	14x1,5	39	24	17
	800		603551	10	8	18x1,5	16x1,5	38	22	19
		603552	12	8	20x1,5	16x1,5	39	24	19	
		603553	12	10	20x1,5	18x1,5	40	24	22	
		603554	16	10	24x1,5	18x1,5	44	30	22	
		603555	16	12	24x1,5	20x1,5	45	30	24	
		603556	20	12	30x2	20x1,5	48,5	36	24	
		603557	20	16	30x2	24x1,5	52,5	36	30	
		603558	25	16	36x2	24x1,5	56	46	30	
		603559	30	16	42x2	24x1,5	58,5	50	30	
		603560	25	20	36x2	30x2	59,5	46	36	
		603561	30	20	42x2	30x2	62	50	36	
		315	603562	38	20	52x2	30x2	64	60	36
		400	603563	30	25	42x2	36x2	65,5	50	46
	315	603564	38	25	52x2	36x2	67,5	60	46	
		603565	38	30	52x2	42x2	70	60	50	
S/L	500	315	603566	6	6	14x1,5	12x1,5	37	17	14
			603567	8	8	16x1,5	14x1,5	37	19	17
			603568	10	10	18x1,5	16x1,5	37,5	22	19
	603569		12	12	20x1,5	18x1,5	38,5	24	22	
	603570		16	15	24x1,5	22x1,5	46,5	30	27	
L/S	400	603571	18	16	26x1,5	24x1,5	46	32	30	
S/L		603572	20	18	30x2	26x1,5	49,5	36	32	
L/S	250	160	603573	22	20	30x2	30x2	52,5	36	36
S/L			603574	25	22	36x2	30x2	56	46	36
L/S			603575	28	25	36x2	36x2	57	41	46
S/L			603576	30	28	42x2	36x2	59,5	50	41
L/S			603577	35	30	45x2	42x2	65	50	50
S/L			603578	38	35	52x2	45x2	67	60	50
L/S			603579	42	38	52x2	52x2	67	60	60

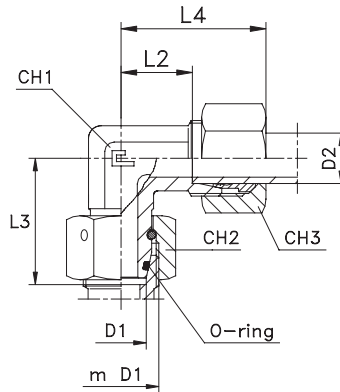
Note: If you wish to order a fitting in stainless steel, please change the first two digit from 60.... to 61.....

ADJUSTABLE MALE STUD ELBOW

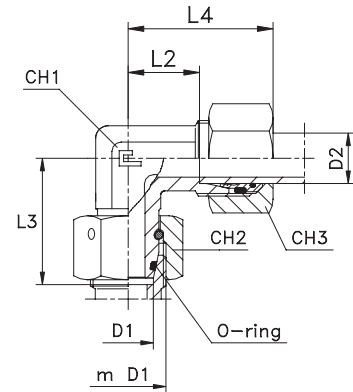
Type: **6042...1** Body



Type: **6042.. B3** Ring



Type: **6042...4** B4 Ring



Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube		m D1	m D2	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
					D1	D2										
L	500	315	604204.1	604204	6	6	12x1,5	12x1,5	19	12	26	27	12	14	14	604204.4
			604205.1	604205	8	8	14x1,5	14x1,5	21	14	27,5	29	12	17	17	604205.4
			604206.1	604206	10	10	16x1,5	16x1,5	22	15	29	30	14	19	19	604206.4
	400		604207.1	604207	12	12	18x1,5	18x1,5	24	17	29,5	32	17	22	22	604207.4
			604208.1	604208	15	15	22x1,5	22x1,5	28	21	32,5	36	19	27	27	604208.4
			604209.1	604209	18	18	26x1,5	26x1,5	31	23,5	35,5	40	24	32	32	604209.4
	250	160	604210.1	604210	22	22	30x2	30x2	35	27,5	38,5	44	27	36	36	604210.4
			604211.1	604211	28	28	36x2	36x2	38	30,5	41,5	47	36	41	41	604211.4
			604212.1	604212	35	35	45x2	45x2	45	34,5	51,5	56	41	50	50	604212.4
			604213.1	604213	42	42	52x2	52x2	51	40	56	63	50	60	60	604213.4
S	800	630	604214.1	604214	6	6	14x1,5	14x1,5	23	16	27	31	12	17	17	604214.4
			604215.1	604215	8	8	16x1,5	16x1,5	24	17	27,5	32	14	19	19	604215.4
			604216.1	604216	10	10	18x1,5	18x1,5	25	17,5	30,5	34	17	22	22	604216.4
	630		604217.1	604217	12	12	20x1,5	20x1,5	29	21,5	31,5	38	17	24	24	604217.4
			604218.1	604218	14	14	22x1,5	22x1,5	30	22	35	40	19	27	27	604218.4
			604219.1	604219	16	16	24x1,5	24x1,5	33	24,5	36,5	43	24	30	30	604219.4
	420	400	604220.1	604220	20	20	30x2	30x2	37	26,5	44,5	48	27	36	36	604220.4
			604221.1	604221	25	25	36x2	36x2	42	30	50	54	36	46	46	604221.4
			604222.1	604222	30	30	42x2	42x2	49	35,5	55,5	62	41	50	50	604222.4
			604223.1	604223	38	38	52x2	52x2	57	41	63	72	50	60	60	604223.4
S/L	500	315	604224.1	604224	6 S	6 L	14x1,5	12x1,5	19	12	27	27	12	17	14	604224.4
			604225.1	604225	8 S	8 L	16x1,5	14x1,5	21	14	27,5	29	14	19	17	604225.4
			604226.1	604226	10 S	10 L	18x1,5	16x1,5	24	17	30	32	17	22	19	604226.4
400	604227.1		604227	12 S	12 L	20x1,5	18x1,5	24	17	31	32	17	24	22	604227.4	
	604228.1		604228	6 L	6 S	12x1,5	14x1,5	23	16	26	31	12	14	17	604228.4	
	604229.1		604229	8 L	8 S	14x1,5	16x1,5	24	17	27,5	32	14	17	19	604229.4	
L/S	500	315	604230.1	604230	10 L	10 S	16x1,5	18x1,5	25	17,5	29,5	34	17	19	22	604230.4
			604231.1	604231	12 L	12 S	18x1,5	20x1,5	29	21,5	30	38	17	22	24	604231.4

Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .

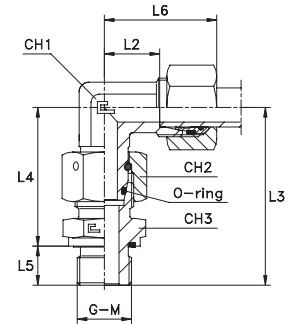
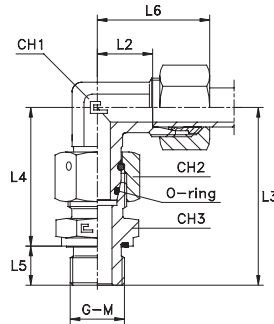
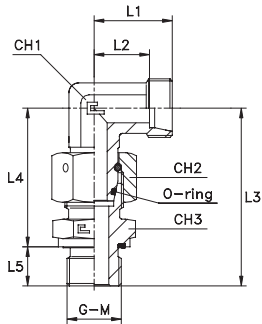
ADJUSTABLE MALE STUD ELBOW WITH MALE STUD

Thread BSP Parallel - Thread Metric Parallel

Type: **6043...1** Body
Type: **6044...1** Body

Type: **6043.. B3** Ring
Type: **6044.. B3** Ring

Type: **6043...4** B4 Ring
Type: **6044...4** B4 Ring



Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	Ordering Equipped B4	
L	500	315	604304.1	604304	6	1/8	19	12	42,5	34,5	8	27	12	14	14	604304.4	
			604305.1	604305	8	1/4	21	14	49,5	37,5	12	29	12	17	19	19	604305.4
			604306.1	604306	10	1/4	22	15	52	40	12	30	14	19	19	19	604306.4
	400		604307.1	604307	12	3/8	24	17	54	42	12	32	17	22	22	22	604307.4
			604308.1	604308	15	1/2	28	21	60,5	46,5	14	36	19	27	27	27	604308.4
			604309.1	604309	18	1/2	31	23,5	64	50	14	40	24	32	27	27	604309.4
	250		604310.1	604310	22	3/4	35	27,5	71	55	16	44	27	36	32	32	604310.4
			604311.1	604311	28	1	38	30,5	77	59	18	47	36	41	41	41	604311.4
			604312.1	604312	35	1 1/4	45	34,5	89	69	20	56	41	50	50	50	604312.4
S	800	630	604313.1	604313	42	1 1/2	51	40	97	75	22	63	50	60	55	604313.4	
			604314.1	604314	6	1/4	23	16	52	40	12	31	12	17	19	19	604314.4
			604315.1	604315	8	1/4	24	17	54,5	42,5	12	32	14	19	19	19	604315.4
	630		604316.1	604316	10	3/8	25	17,5	57,5	45,5	12	34	17	22	22	22	604316.4
			604317.1	604317	12	3/8	29	21,5	60,5	48,5	12	38	17	24	22	22	604317.4
			604318.1	604318	14	1/2	30	22	68	54	14	40	19	27	27	27	604318.4
	420		604319.1	604319	16	1/2	33	24,5	69	55	14	43	24	30	27	27	604319.4
			604320.1	604320	20	3/4	37	26,5	81	65	16	48	27	36	32	32	604320.4
			604321.1	604321	25	1	42	30	91	73	18	54	36	46	41	41	604321.4
	315	604322.1	604322	30	1 1/4	49	35,5	99	79	20	62	41	50	50	50	604322.4	
		604323.1	604323	38	1 1/2	57	41	111	89	22	72	50	60	55	55	604323.4	

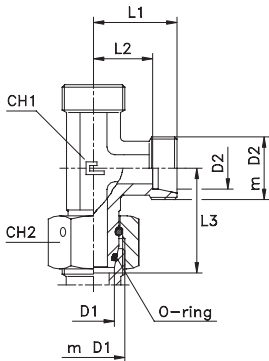
Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....**

Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	Ordering Equipped B4	
L	500	315	604404.1	604404	6	10x1	19	12	42,5	34,5	8	27	12	14	14	604404.4	
			604405.1	604405	8	12x1,5	21	14	49,5	37,5	12	29	12	17	17	17	604405.4
			604406.1	604406	10	14x1,5	22	15	52	40	12	30	14	19	19	19	604406.4
	400		604407.1	604407	12	16x1,5	24	17	54	42	12	32	17	22	22	22	604407.4
			604408.1	604408	15	18x1,5	28	21	58	46	14	36	19	27	24	24	604408.4
			604409.1	604409	18	22x1,5	31	23,5	64	50	14	40	24	32	27	27	604409.4
	250		604410.1	604410	22	26x1,5	35	27,5	71	55	16	44	27	36	32	32	604410.4
			604411.1	604411	28	33x2	38	30,5	77	59	18	47	36	41	41	41	604411.4
			604412.1	604412	35	42x2	45	34,5	89	69	20	56	41	50	50	50	604412.4
S	800	630	604413.1	604413	42	48x2	51	40	97	75	22	63	50	60	55	604413.4	
			604414.1	604414	6	12x1,5	23	16	52	40	12	31	12	17	17	17	604414.4
			604415.1	604415	8	14x1,5	24	17	54,5	42,5	12	32	14	19	19	19	604415.4
	630		604416.1	604416	10	16x1,5	25	17,5	57,5	45,5	12	34	17	22	22	22	604416.4
			604417.1	604417	12	18x1,5	29	21,5	60,5	48,5	12	38	17	24	24	24	604417.4
			604418.1	604418	14	20x1,5	30	22	68	54	14	40	19	27	27	27	604418.4
	420		604419.1	604419	16	22x1,5	33	24,5	69	55	14	43	24	30	27	27	604419.4
			604420.1	604420	20	27x2	37	26,5	81	65	16	48	27	36	32	32	604420.4
			604421.1	604421	25	33x2	42	30	91	73	18	54	36	46	41	41	604421.4
	315	604422.1	604422	30	42x2	49	35,5	99	79	20	62	41	50	50	50	604422.4	
		604423.1	604423	38	48x2	57	41	111	89	22	72	50	60	55	55	604423.4	

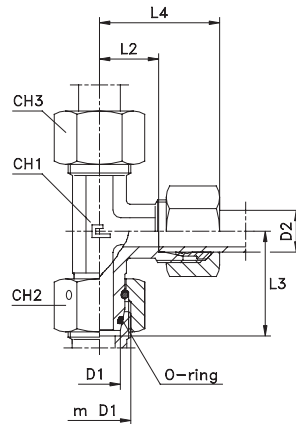
Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....**

ADJUSTABLE MALE STUD BARREL TEE

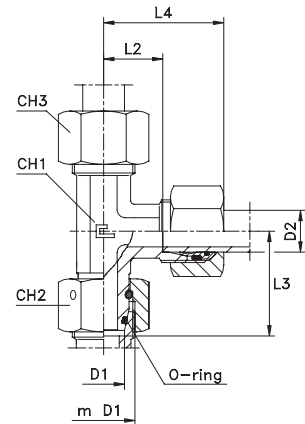
Type: **6046...1** Body



Type: **6046.. B3** Ring



Type: **6046...4** B4 Ring



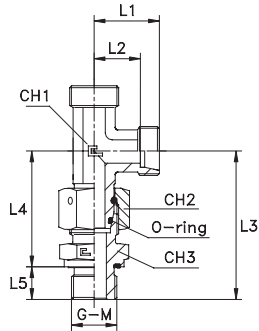
Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube		m D1	m D2	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
					D1	D2										
L	500	315	604604.1	604604	6	6	12x1,5	12x1,5	19	12	26	27	12	14	14	604604.4
			604605.1	604605	8	8	14x1,5	14x1,5	21	14	27,5	29	12	17	17	604605.4
			604606.1	604606	10	10	16x1,5	16x1,5	22	15	29	30	14	19	19	604606.4
			604607.1	604607	12	12	18x1,5	18x1,5	24	17	29,5	32	17	22	22	604607.4
			604608.1	604608	15	15	22x1,5	22x1,5	28	21	32,5	36	19	27	27	604608.4
	400	160	604609.1	604609	18	18	26x1,5	26x1,5	31	23,5	35,5	40	24	32	32	604609.4
			604610.1	604610	22	22	30x2	30x2	35	27,5	38,5	44	27	36	36	604610.4
			604611.1	604611	28	28	36x2	36x2	38	30,5	41,5	47	36	41	41	604611.4
			604612.1	604612	35	35	45x2	45x2	45	34,5	51,5	56	41	50	50	604612.4
			604613.1	604613	42	42	52x2	52x2	51	40	56	63	50	60	60	604613.4
S	800	630	604614.1	604614	6	6	14x1,5	14x1,5	23	16	27	31	12	17	17	604614.4
			604615.1	604615	8	8	16x1,5	16x1,5	24	17	27,5	32	14	19	19	604615.4
			604616.1	604616	10	10	18x1,5	18x1,5	25	17,5	30,5	34	17	22	22	604616.4
			604617.1	604617	12	12	20x1,5	20x1,5	29	21,5	31,5	38	17	24	24	604617.4
			604618.1	604618	14	14	22x1,5	22x1,5	30	22	35	40	19	27	27	604618.4
	630	400	604619.1	604619	16	16	24x1,5	24x1,5	33	24,5	36,5	43	24	30	30	604619.4
			604620.1	604620	20	20	30x2	30x2	37	26,5	44,5	48	27	36	36	604620.4
			604621.1	604621	25	25	36x2	36x2	42	30	50	54	36	46	46	604621.4
			604622.1	604622	30	30	42x2	42x2	49	35,5	55,5	62	41	50	50	604622.4
			604623.1	604623	38	38	52x2	52x2	57	41	63	72	50	60	60	604623.4
420	315	604624.1	604624	6 S	6 L	14x1,5	12x1,5	19	12	27	27	12	17	14	604624.4	
		604625.1	604625	8 S	8 L	16x1,5	14x1,5	21	14	27,5	29	14	19	17	604625.4	
		604626.1	604626	10 S	10 L	18x1,5	16x1,5	24	17	30	32	17	22	19	604626.4	
S/L	500	315	604627.1	604627	12 S	12 L	20x1,5	18x1,5	24	17	31	32	17	24	22	604627.4
			604628.1	604628	6 L	6 S	12x1,5	14x1,5	23	16	26	31	12	14	17	604628.4
			604629.1	604629	8 L	8 S	14x1,5	16x1,5	24	17	27,5	32	14	17	19	604629.4
L/S	400	315	604630.1	604630	10 L	10 S	16x1,5	18x1,5	25	17,5	29,5	34	17	19	22	604630.4
			604631.1	604631	12 L	12 S	18x1,5	20x1,5	29	21,5	30	38	17	22	24	604631.4

Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .

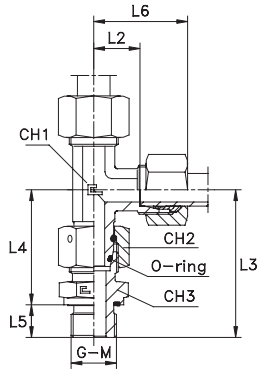
ADJUSTABLE MALE STUD BARREL TEE WITH MALE STUD

Thread BSP Parallel - Thread Metric Parallel

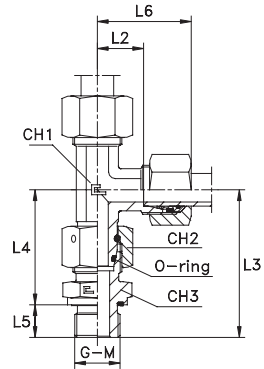
Type: **6047...1** Body
Type: **6048...1** Body



Type: **6047... B3** Ring
Type: **6048... B3** Ring



Type: **6047...4** B4 Ring
Type: **6048...4** B4 Ring



Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	Ordering Equipped B4
L	500	315	604704.1	604704	6	1/8	19	12	42,5	34,5	8	27	12	14	14	604704.4
			604705.1	604705	8	1/4	21	14	49,5	37,5	12	29	12	17	19	604705.4
			604706.1	604706	10	1/4	22	15	52	40	12	30	14	19	19	604706.4
			604707.1	604707	12	3/8	24	17	54	42	12	32	17	22	22	604707.4
			604708.1	604708	15	1/2	28	21	60,5	46,5	14	36	19	27	27	604708.4
	400	160	604709.1	604709	18	1/2	31	23,5	64	50	14	40	24	32	27	604709.4
			604710.1	604710	22	3/4	35	27,5	71	55	16	44	27	36	32	604710.4
			604711.1	604711	28	1	38	30,5	77	59	18	47	36	41	41	604711.4
			604712.1	604712	35	1 1/4	45	34,5	89	69	20	56	41	50	50	604712.4
			604713.1	604713	42	1 1/2	51	40	97	75	22	63	50	60	55	604713.4
S	800	630	604714.1	604714	6	1/4	23	16	52	40	12	31	12	17	19	604714.4
			604715.1	604715	8	1/4	24	17	54,5	42,5	12	32	14	19	19	604715.4
			604716.1	604716	10	3/8	25	17,5	57,5	45,5	12	34	17	22	22	604716.4
			604717.1	604717	12	3/8	29	21,5	60,5	48,5	12	38	17	24	22	604717.4
			604718.1	604718	14	1/2	30	22	68	54	14	40	19	27	27	604718.4
	630	400	604719.1	604719	16	1/2	33	24,5	69	55	14	43	24	30	27	604719.4
			604720.1	604720	20	3/4	37	26,5	81	65	16	48	27	36	32	604720.4
			604721.1	604721	25	1	42	30	91	73	18	54	36	46	41	604721.4
			604722.1	604722	30	1 1/4	49	35,5	99	79	20	62	41	50	50	604722.4
			604723.1	604723	38	1 1/2	57	41	111	89	22	72	50	60	55	604723.4

Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .

Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	Ordering Equipped B4
L	500	315	604804.1	604804	6	10x1	8	34,5	42,5	34,5	8	27	12	14	14	604804.4
			604805.1	604805	8	12x1,5	12	37	49,5	37,5	12	29	12	17	17	604805.4
			604806.1	604806	10	14x1,5	12	39,5	52	40	12	30	14	19	19	604806.4
			604807.1	604807	12	16x1,5	12	41,5	54	42	12	32	17	22	22	604807.4
			604808.1	604808	15	18x1,5	14	45,5	58	46	14	36	19	27	24	604808.4
	400	160	604809.1	604809	18	22x1,5	14	49,5	64	50	14	40	24	32	27	604809.4
			604810.1	604810	22	26x1,5	16	54,5	71	55	16	44	27	36	32	604810.4
			604811.1	604811	28	33x2	18	59	77	59	18	47	36	41	41	604811.4
			604812.1	604812	35	42x2	20	68,5	89	69	20	56	41	50	50	604812.4
			604813.1	604813	42	48x2	22	75	97	75	22	63	50	60	55	604813.4
S	800	630	604814.1	604814	6	12x1,5	12	40	52	40	12	31	12	17	17	604814.4
			604815.1	604815	8	14x1,5	12	42	54,5	42,5	12	32	14	19	19	604815.4
			604816.1	604816	10	16x1,5	12	44,5	57,5	45,5	12	34	17	22	22	604816.4
			604817.1	604817	12	18x1,5	12	47,5	60,5	48,5	12	38	17	24	24	604817.4
			604818.1	604818	14	20x1,5	14	53,5	68	54	14	40	19	27	27	604818.4
	630	400	604819.1	604819	16	22x1,5	14	54,5	69	55	14	43	24	30	27	604819.4
			604820.1	604820	20	27x2	16	64,5	81	65	16	48	27	36	32	604820.4
			604821.1	604821	25	33x2	18	72,5	91	73	18	54	36	46	41	604821.4
			604822.1	604822	30	42x2	20	78,5	99	79	20	62	41	50	50	604822.4
			604823.1	604823	38	48x2	22	89	111	89	22	72	50	60	55	604823.4

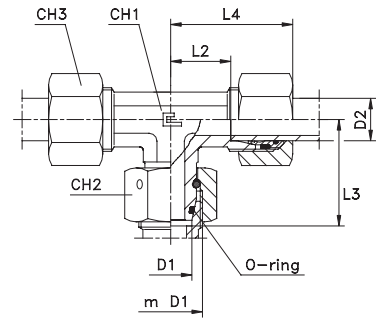
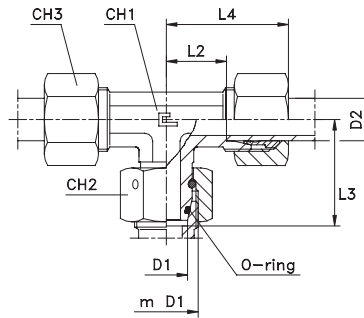
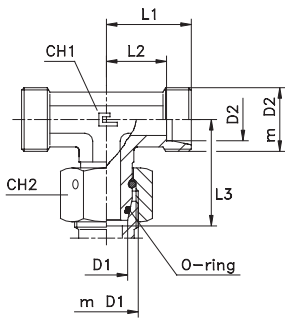
Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .

ADJUSTABLE MALE STUD BRANCH TEE

Type: **6050...1** Body

Type: **6050..** B3 Ring

Type: **6050...4** B4 Ring



Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube		m D1	m D2	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
					D1	D2										
L	500	315	605004.1	605004	6	6	12x1,5	12x1,5	19	12	26	27	12	14	14	605004.4
			605005.1	605005	8	8	14x1,5	14x1,5	21	14	27,5	29	12	17	17	605005.4
			605006.1	605006	10	10	16x1,5	16x1,5	22	15	29	30	14	19	19	605006.4
			605007.1	605007	12	12	18x1,5	18x1,5	24	17	29,5	32	17	22	22	605007.4
			605008.1	605008	15	15	22x1,5	22x1,5	28	21	32,5	36	19	27	27	605008.4
	400	160	605009.1	605009	18	18	26x1,5	26x1,5	31	23,5	35,5	40	24	32	32	605009.4
			605010.1	605010	22	22	30x2	30x2	35	27,5	38,5	44	27	36	36	605010.4
			605011.1	605011	28	28	36x2	36x2	38	30,5	41,5	47	36	41	41	605011.4
			605012.1	605012	35	35	45x2	45x2	45	34,5	51,5	56	41	50	50	605012.4
			605013.1	605013	42	42	52x2	52x2	51	40	56	63	50	60	60	605013.4
S	800	630	605014.1	605014	6	6	14x1,5	14x1,5	23	16	27	31	12	17	17	605014.4
			605015.1	605015	8	8	16x1,5	16x1,5	24	17	27,5	32	14	19	19	605015.4
			605016.1	605016	10	10	18x1,5	18x1,5	25	17,5	30,5	34	17	22	22	605016.4
			605017.1	605017	12	12	20x1,5	20x1,5	29	21,5	31,5	38	17	24	24	605017.4
	630	400	605018.1	605018	14	14	22x1,5	22x1,5	30	22	35	40	19	27	27	605018.4
			605019.1	605019	16	16	24x1,5	24x1,5	33	24,5	36,5	43	24	30	30	605019.4
			605020.1	605020	20	20	30x2	30x2	37	26,5	44,5	48	27	36	36	605020.4
	420	315	605021.1	605021	25	25	36x2	36x2	42	30	50	54	36	46	46	605021.4
			605022.1	605022	30	30	42x2	42x2	49	35,5	55,5	62	41	50	50	605022.4
			605023.1	605023	38	38	52x2	52x2	57	41	63	72	50	60	60	605023.4
S/L	500	315	605024.1	605024	6 S	6 L	14x1,5	12x1,5	19	12	27	27	12	17	14	605024.4
			605025.1	605025	8 S	8 L	16x1,5	14x1,5	21	14	27,5	29	14	19	17	605025.4
	400	315	605026.1	605026	10 S	10 L	18x1,5	16x1,5	24	17	30	32	17	22	19	605026.4
			605027.1	605027	12 S	12 L	20x1,5	18x1,5	24	17	31	32	17	24	22	605027.4
L/S	500	315	605028.1	605028	6 L	6 S	12x1,5	14x1,5	23	16	26	31	12	14	17	605028.4
			605029.1	605029	8 L	8 S	14x1,5	16x1,5	24	17	27,5	32	14	17	19	605029.4
	400	315	605030.1	605030	10 L	10 S	16x1,5	18x1,5	25	17,5	29,5	34	17	19	22	605030.4
			605031.1	605031	12 L	12 S	18x1,5	20x1,5	29	21,5	30	38	17	22	24	605031.4

Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .

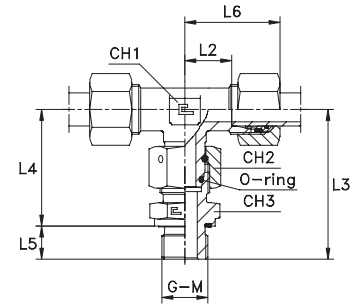
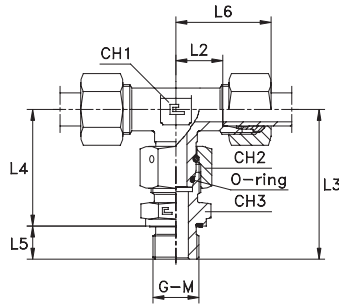
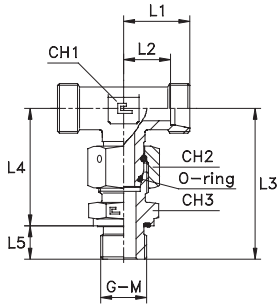
ADJUSTABLE MALE STUD BRANCH TEE WITH MALE STUD

Thread BSP Parallel - Thread Metric Parallel

Type: **6051...1** Body
Type: **6052...1** Body

Type: **6051.. B3** Ring
Type: **6052.. B3** Ring

Type: **6051...4** B4 Ring
Type: **6052...4** B4 Ring



Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	Ordering Equipped B4
L	500	315	605104.1	605104	6	1/8	19	12	42,5	34,5	8	27	12	14	14	605104.4
			605105.1	605105	8	1/4	21	14	49,5	37,5	12	29	12	17	19	605105.4
			605106.1	605106	10	1/4	22	15	52	40	12	30	14	19	19	605106.4
			605107.1	605107	12	3/8	24	17	54	42	12	32	17	22	22	605107.4
			605108.1	605108	15	1/2	28	21	60,5	46,5	14	36	19	27	27	605108.4
	400	160	605109.1	605109	18	1/2	31	23,5	64	50	14	40	24	32	27	605109.4
			605110.1	605110	22	3/4	35	27,5	71	55	16	44	27	36	32	605110.4
			605111.1	605111	28	1	38	30,5	77	59	18	47	36	41	41	605111.4
			605112.1	605112	35	1 1/4	45	34,5	89	69	20	56	41	50	50	605112.4
			605113.1	605113	42	1 1/2	51	40	97	75	22	63	50	60	55	605113.4
S	800	630	605114.1	605114	6	1/4	23	16	52	40	12	31	12	17	19	605114.4
			605115.1	605115	8	1/4	24	17	54,5	42,5	12	32	14	19	19	605115.4
			605116.1	605116	10	3/8	25	17,5	57,5	45,5	12	34	17	22	22	605116.4
			605117.1	605117	12	3/8	29	21,5	60,5	48,5	12	38	17	24	22	605117.4
	630	400	605118.1	605118	14	1/2	30	22	68	54	14	40	19	27	27	605118.4
			605119.1	605119	16	1/2	33	24,5	69	55	14	43	24	30	27	605119.4
			605120.1	605120	20	3/4	37	26,5	81	65	16	48	27	36	32	605120.4
			605121.1	605121	25	1	42	30	91	73	18	54	36	46	41	605121.4
			605122.1	605122	30	1 1/4	49	35,5	99	79	20	62	41	50	50	605122.4
			605123.1	605123	38	1 1/2	57	41	111	89	22	72	50	60	55	605123.4

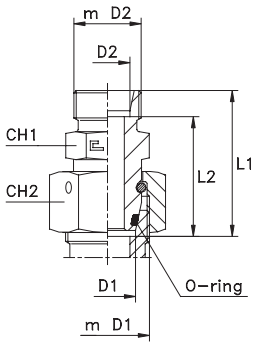
Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .

Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	L5	L6	CH1	CH2	CH3	Ordering Equipped B4
L	500	315	605204.1	605204	6	10x1	19	12	42,5	34,5	8	27	12	14	14	605204.4
			605205.1	605205	8	12x1.5	21	14	49,5	37,5	12	29	12	17	17	605205.4
			605206.1	605206	10	14x1.5	22	15	52	40	12	30	14	19	19	605206.4
			605207.1	605207	12	16x1.5	24	17	54	42	12	32	17	22	22	605207.4
			605208.1	605208	15	18x1.5	28	21	58	46	14	36	19	27	24	605208.4
	400	160	605209.1	605209	18	22x1.5	31	23,5	64	50	14	40	24	32	27	605209.4
			605210.1	605210	22	26x1.5	35	27,5	71	55	16	44	27	36	32	605210.4
			605211.1	605211	28	33x2	38	30,5	77	59	18	47	36	41	41	605211.4
			605212.1	605212	35	42x2	45	34,5	89	69	20	56	41	50	50	605212.4
			605213.1	605213	42	48x2	51	40	97	75	22	63	50	60	55	605213.4
S	800	630	605214.1	605214	6	12x1.5	23	16	52	40	12	31	12	17	17	605214.4
			605215.1	605215	8	14x1.5	24	17	54,5	42,5	12	32	14	19	19	605215.4
			605216.1	605216	10	16x1.5	25	17,5	57,5	45,5	12	34	17	22	22	605216.4
			605217.1	605217	12	18x1.5	29	21,5	60,5	48,5	12	38	17	24	24	605217.4
	630	400	605218.1	605218	14	20x1.5	30	22	68	54	14	40	19	27	27	605218.4
			605219.1	605219	16	22x1.5	33	24,5	69	55	14	43	24	30	27	605219.4
			605220.1	605220	20	27x2	37	26,5	81	65	16	48	27	36	32	605220.4
			605221.1	605221	25	33x2	42	30	91	73	18	54	36	46	41	605221.4
			605222.1	605222	30	42x2	49	35,5	99	79	20	62	41	50	50	605222.4
			605223.1	605223	38	48x2	57	41	111	89	22	72	50	60	55	605223.4

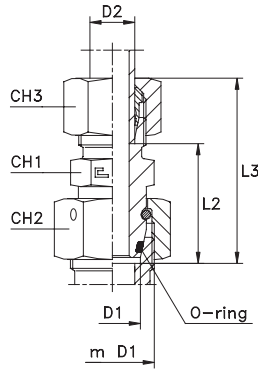
Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .

REDUCING TUBE ADAPTER WITH SWIVEL NUT L SERIES

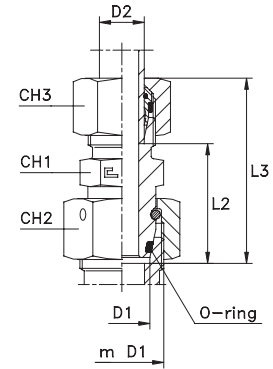
Type: **6053...1** Body



Type: **6053.. B3** Ring



Type: **6053...4** B4 Ring

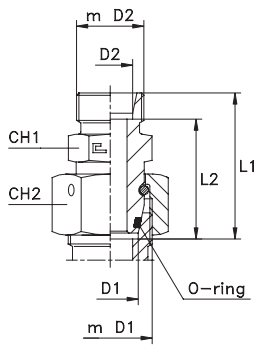


Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube		m D1	m D2	L1	L2	L3	CH1	CH2	CH3	Ordering Equipped B4
					D1	D2									
L	500	315	605301.1	605301	8	6	14x1,5	12X1,5	31	24	39	12	17	14	605301.4
			605302.1	605302	10	6	16x1,5	12X1,5	32,5	25,5	40,5	14	19	14	605302.4
	605303.1		605303	12	6	18x1,5	12X1,5	32,5	25,5	40,5	17	22	14	605303.4	
	605304.1		605304	15	6	22x1,5	12X1,5	35,5	28,5	43,5	19	27	14	605304.4	
	400	160	605305.1	605305	18	6	26x1,5	12X1,5	36,5	29,5	44,5	24	32	14	605305.4
			605306.1	605306	22	6	30x2	12X1,5	38,5	31,5	46,5	27	36	14	605306.4
			605307.1	605307	28	6	36x2	12X1,5	39,5	32,5	47,5	32	41	14	605307.4
			605308.1	605308	35	6	45x2	12X1,5	45	38	53	41	50	14	605308.4
	250	315	605309.1	605309	42	6	52x2	12X1,5	46	39	54	50	60	14	605309.4
			605310.1	605310	10	8	16x1,5	14X1,5	32,5	25,5	40,5	14	19	17	605310.4
			605311.1	605311	12	8	18x1,5	14X1,5	32,5	25,5	40,5	17	22	17	605311.4
			605312.1	605312	15	8	22x1,5	14X1,5	35,5	28,5	43,5	19	27	17	605312.4
	400	160	605313.1	605313	18	8	26x1,5	14X1,5	36,5	29,5	44,5	24	32	17	605313.4
			605314.1	605314	22	8	30x2	14X1,5	38,5	31,5	46,5	27	36	17	605314.4
			605315.1	605315	28	8	36x2	14X1,5	39,5	32,5	47,5	32	41	17	605315.4
			605316.1	605316	35	8	45x2	14X1,5	45	38	53	41	50	17	605316.4
	250	315	605317.1	605317	42	8	52x2	14X1,5	46	39	54	50	60	17	605317.4
			605318.1	605318	12	10	18x1,5	16X1,5	33,5	26,5	41,5	17	22	19	605318.4
			605319.1	605319	15	10	22x1,5	16X1,5	36,5	29,5	44,5	19	27	19	605319.4
			605320.1	605320	18	10	26x1,5	16X1,5	37,5	30,5	45,5	24	32	19	605320.4
	400	160	605321.1	605321	22	10	30x2	16X1,5	39,5	32,5	47,5	27	36	19	605321.4
			605322.1	605322	28	10	36x2	16X1,5	40,5	33,5	48,5	32	41	19	605322.4
			605323.1	605323	35	10	45x2	16X1,5	46	39	54	41	50	19	605323.4
			605324.1	605324	42	10	52x2	16X1,5	47	40	55	50	60	19	605324.4
	250	315	605325.1	605325	15	12	22x1,5	18X1,5	36,5	29,5	44,5	19	27	22	605325.4
			605326.1	605326	18	12	26x1,5	18X1,5	37,5	30,5	45,5	24	32	22	605326.4
			605327.1	605327	22	12	30x2	18X1,5	39,5	32,5	47,5	27	36	22	605327.4
			605328.1	605328	28	12	36x2	18X1,5	40,5	33,5	48,5	32	41	22	605328.4
	400	160	605329.1	605329	35	12	45x2	18X1,5	46	39	54	41	50	22	605329.4
			605330.1	605330	42	12	52x2	18X1,5	47	40	55	50	60	22	605330.4
			605331.1	605331	18	15	26x1,5	22X1,5	38,5	31,5	46,5	24	32	27	605331.4
			605332.1	605332	22	15	30x2	22X1,5	39,5	32,5	47,5	27	36	27	605332.4
	250	160	605333.1	605333	28	15	36x2	22X1,5	41,5	34,5	49,5	32	41	27	605333.4
			605334.1	605334	35	15	45x2	22X1,5	47	40	55	41	50	27	605334.4
			605335.1	605335	42	15	52x2	22X1,5	48	41	56	50	60	27	605335.4
			605336.1	605336	22	18	30x2	26X1,5	40,5	33	49,5	27	36	32	605336.4
			605337.1	605337	28	18	36x2	26X1,5	41,5	34	50,5	32	41	32	605337.4
			605338.1	605338	35	18	45x2	26X1,5	47	39,5	56	41	50	32	605338.4
			605339.1	605339	42	18	52x2	26X1,5	48	40,5	57	50	60	32	605339.4
			605340.1	605340	28	22	36x2	30X2	43,5	36	52,5	32	41	36	605340.4
605341.1			605341	35	22	45x2	30X2	49	41,5	58	41	50	36	605341.4	
605342.1			605342	42	22	52x2	30X2	50	42,5	59	50	60	36	605342.4	
605343.1			605343	35	28	45x2	36X2	49	41,5	58	41	50	41	605343.4	
605344.1			605344	42	28	52x2	36X2	50	42,5	59	50	60	41	605344.4	
605345.1			605345	42	35	52x2	45X2	52	41,5	63	50	60	50	605345.4	
L/S			500	315	605346.1	605346	8	6	14x1,5	14x1,5	35	28	43	14	17
	605347.1	605347			10	6	16x1,5	14x1,5	35,5	28,5	43,5	14	19	17	605347.4
	605348.1	605348	10		8	16x1,5	16x1,5	37,5	30,5	45,5	17	19	19	605348.4	
	605349.1	605349	12		8	18x1,5	16x1,5	37,5	30,5	45,5	17	22	19	605349.4	
	605350.1	605350	12		10	18x1,5	18x1,5	37,5	30	46,5	19	22	22	605350.4	
	605351.1	605351	15		12	22x1,5	20x1,5	41,5	34	50,5	22	27	24	605351.4	

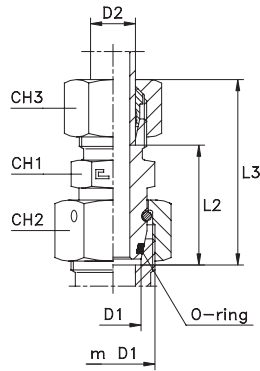
Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .

REDUCING TUBE ADAPTER WITH SWIVEL NUT S SERIES

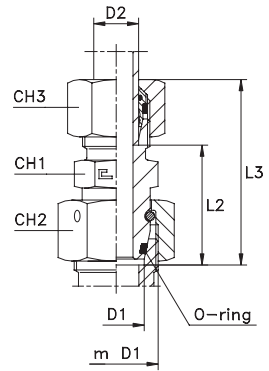
Type: 6054...1 Body



Type: 6054.. B3 Ring



Type: 6054...4 B4 Ring

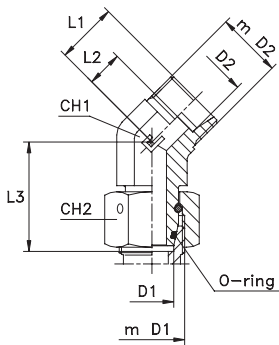


Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube		m D1	m D2	L1	L2	L3	CH1	CH2	CH3	Ordering Equipped B4	
					D1	D2										
S	800	630	605401.1	605401	8	6	16x1,5	14x1,5	36	29	44	14	19	17	605401.4	
			605402.1	605402	10	6	18x1,5	14x1,5	39	32	47	17	22	17	605402.4	
	630	630	605403.1	605403	12	6	20x1,5	14x1,5	38,5	31,5	46,5	17	24	17	605403.4	
			605404.1	605404	14	6	22x1,5	14x1,5	41	34	49	19	27	17	605404.4	
	420	400	400	605405.1	605405	16	6	24x1,5	14x1,5	45,5	38,5	53,5	22	30	17	605405.4
				605406.1	605406	20	6	30x2	14x1,5	48	41	56	27	36	17	605406.4
	315	315	315	605407.1	605407	25	6	36x2	14x1,5	52,5	45,5	60,5	32	46	17	605407.4
				605408.1	605408	30	6	42x2	14x1,5	57	50	65	41	50	17	605408.4
	800	630	630	605409.1	605409	38	6	52x2	14x1,5	59	52	67	50	60	17	605409.4
				605410.1	605410	10	8	18x1,5	16x1,5	38,5	31,5	46,5	17	22	19	605410.4
	630	400	400	605411.1	605411	12	8	20x1,5	16x1,5	38,5	31,5	46,5	17	24	19	605411.4
				605412.1	605412	14	8	22x1,5	16x1,5	41	34	49	19	27	19	605412.4
	420	400	400	605413.1	605413	16	8	24x1,5	16x1,5	45,5	38,5	53,5	22	30	19	605413.4
				605414.1	605414	20	8	30x2	16x1,5	48	41	56	27	36	19	605414.4
	315	315	315	605415.1	605415	25	8	36x2	16x1,5	52,5	45,5	60,5	32	46	19	605415.4
				605416.1	605416	30	8	42x2	16x1,5	57	50	65	41	50	19	605416.4
	630	630	630	605417.1	605417	38	8	52x2	16x1,5	59	52	67	50	60	19	605417.4
				605418.1	605418	12	10	20x1,5	18x1,5	38,5	31	47,5	19	24	22	605418.4
	420	400	400	605419.1	605419	14	10	22x1,5	18x1,5	41	33,5	50	19	27	22	605419.4
				605420.1	605420	16	10	24x1,5	18x1,5	45,5	38	54,5	22	30	22	605420.4
	630	400	400	605421.1	605421	20	10	30x2	18x1,5	48	40,5	57	27	36	22	605421.4
				605422.1	605422	25	10	36x2	18x1,5	52,5	45	61,5	32	46	22	605422.4
	420	250	250	605423.1	605423	30	10	42x2	18x1,5	57	49,5	66	41	50	22	605423.4
				605424.1	605424	38	10	52x2	18x1,5	59	51,5	68	50	60	22	605424.4
	630	630	630	605425.1	605425	14	12	22x1,5	20x1,5	43	35,5	52	22	27	24	605425.4
				605426.1	605426	16	12	24x1,5	20x1,5	45,5	38	54,5	22	30	24	605426.4
	420	400	400	605427.1	605427	20	12	30x2	20x1,5	48	40,5	57	27	36	24	605427.4
				605428.1	605428	25	12	36x2	20x1,5	52,5	45	61,5	32	46	24	605428.4
	315	315	315	605429.1	605429	30	12	42x2	20x1,5	57	49,5	66	41	50	24	605429.4
				605430.1	605430	38	12	52x2	20x1,5	59	51,5	68	50	60	24	605430.4
	630	400	400	605431.1	605431	16	14	24x1,5	22x1,5	47,5	39,5	57,5	24	30	27	605431.4
				605432.1	605432	20	14	30x2	22x1,5	50	42	60	27	36	27	605432.4
420	250	250	605433.1	605433	25	14	36x2	22x1,5	54,5	46,5	64,5	32	46	27	605433.4	
			605434.1	605434	30	14	42x2	22x1,5	59	51	69	41	50	27	605434.4	
315	315	315	605435.1	605435	38	14	52x2	22x1,5	61	53	71	50	60	27	605435.4	
			605436.1	605436	20	16	30x2	24x1,5	50	41,5	60	27	36	30	605436.4	
420	400	400	605437.1	605437	25	16	36x2	24x1,5	54,5	46	64,5	32	46	30	605437.4	
			605438.1	605438	30	16	42x2	24x1,5	59	50,5	69	41	50	30	605438.4	
315	315	315	605439.1	605439	38	16	52x2	24x1,5	61	52,5	71	50	60	30	605439.4	
			605440.1	605440	25	20	36x2	30x2	56,5	46	67,5	32	46	36	605440.4	
400	400	400	605441.1	605441	30	20	42x2	30x2	61	50,5	72	41	50	36	605441.4	
			605442.1	605442	38	20	52x2	30x2	63	52,5	74	50	60	36	605442.4	
315	315	315	605443.1	605443	30	25	42x2	36x2	63	51	75	41	50	46	605443.4	
			605444.1	605444	38	25	52x2	36x2	65	53	77	50	60	46	605444.4	
400	400	400	605445.1	605445	38	30	52x2	42x2	67	53,5	80	50	60	50	605445.4	
			605446.1	605446	8	6	16x1,5	12x1,5	34	27	42	14	19	14	605446.4	
S/L	500	315	605447.1	605447	10	6	18x1,5	12x1,5	37	30	45	17	22	14	605447.4	
			605448.1	605448	10	8	18x1,5	14x1,5	37	30	45	17	22	17	605448.4	
400	400	400	605449.1	605449	12	8	20x1,5	14x1,5	36,5	29,5	44,5	17	24	17	605449.4	
			605450.1	605450	12	10	20x1,5	16x1,5	37,5	30,5	45,5	17	24	19	605450.4	
400	400	400	605451.1	605451	16	12	24x1,5	18x1,5	44,5	37,5	52,5	22	30	22	605451.4	

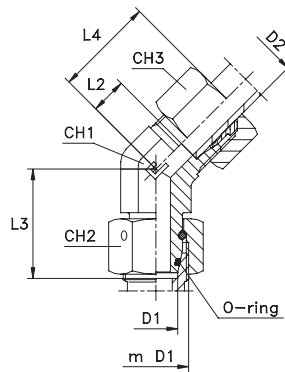
Note: If you wish to order a fitting in stainless steel, please change the first two digit from 60.... to 61....

ADJUSTABLE MALE 45° STUD ELBOW

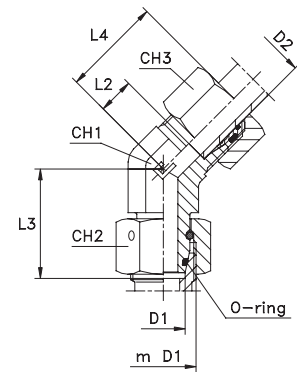
Type: **6055...1** Body



Type: **6055.. B3** Ring



Type: **6055...4** B4 Ring



Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube		m D1	m D2	L1	L2	L3	L4	CH1	CH2	CH3	Ordering Equipped B4
					D1	D2										
L	315	315	605504.1	605504	6	6	12x1,5	12x1,5	16	9	26	24	11	14	14	605504.4
			605505.1	605505	8	8	14x1,5	14x1,5	17	10	27,5	25	14	17	17	605505.4
			605506.1	605506	10	10	16x1,5	16x1,5	18	11	29	26	14	19	19	605506.4
			605507.1	605507	12	12	18x1,5	18x1,5	19	12	29,5	27	19	22	22	605507.4
			605508.1	605508	15	15	22x1,5	22x1,5	22	15	32,5	30	22	27	27	605508.4
	605509.1	605509	18	18	26x1,5	26x1,5	24	16,5	35,5	33	27	32	32	605509.4		
	605510.1	605510	22	22	30x2	30x2	26	18,5	38,5	35	27	36	36	605510.4		
	605511.1	605511	28	28	36x2	36x2	30,5	23	41,5	39,5	33	41	41	605511.4		
	605512.1	605512	35	35	45x2	45x2	34	23,5	51,5	45	41	50	50	605512.4		
605513.1	605513	42	42	52x2	52x2	37	26	53	49	48	60	60	605513.4			
S	630	630	605514.1	605514	6	6	14x1,5	14x1,5	18	11	27	26	14	17	17	605514.4
			605515.1	605515	8	8	16x1,5	16x1,5	19	12	27,5	27	14	19	19	605515.4
			605516.1	605516	10	10	18x1,5	18x1,5	20	12,5	30,5	29	19	22	22	605516.4
			605517.1	605517	12	12	20x1,5	20x1,5	23	15,5	31,5	32	19	24	24	605517.4
			605518.1	605518	14	14	22x1,5	22x1,5	24	16	35	34	22	27	27	605518.4
	605519.1	605519	16	16	24x1,5	24x1,5	24	15,5	36,5	34	27	30	30	605519.4		
	605520.1	605520	20	20	30x2	30x2	26,5	16	44,5	37,5	27	36	36	605520.4		
	605521.1	605521	25	25	36x2	36x2	32	20	50	44	33	46	46	605521.4		
	605522.1	605522	30	30	42x2	42x2	37,5	24	55,5	50,5	41	50	50	605522.4		
605523.1	605523	38	38	52x2	52x2	40	24	58	55	48	60	60	605523.4			
S/L	315	315	605524.1	605524	6 S	6 L	14x1,5	12x1,5	16	9	27	24	14	17	14	605524.4
			605525.1	605525	8 S	8 L	16x1,5	14x1,5	17	10	27,5	25	14	19	17	605525.4
			605526.1	605526	10 S	10 L	18x1,5	16x1,5	18	11	30	26	19	22	19	605526.4
			605527.1	605527	12 S	12 L	20x1,5	18x1,5	19	12	31	27	19	24	22	605527.4
L/S	315	315	605528.1	605528	6 L	6 S	12x1,5	14x1,5	18	11	26	26	14	14	17	605528.4
			605529.1	605529	8 L	8 S	14x1,5	16x1,5	19	12	27,5	27	14	17	19	605529.4
			605530.1	605530	10 L	10 S	16x1,5	18x1,5	20	12,5	29,5	29	19	19	22	605530.4
			605531.1	605531	12 L	12 S	18x1,5	20x1,5	23	15,5	30	32	19	22	24	605531.4

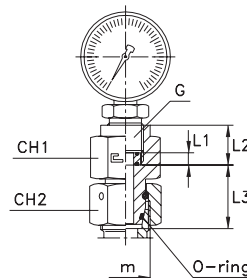
Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .

GAUGE COUPLING WITH SWIVEL NUT

Thread BSP Parallel

Type: **6060..**

O-ring washer seal

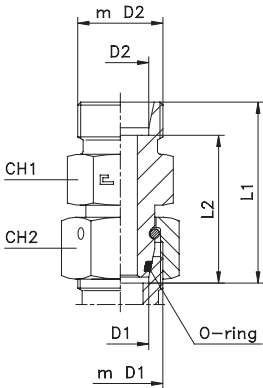


Series DIN	60.... [bar]	61.... [bar]	Ordering Complete	Ø Tube	G	m	L1	L2	L3	CH1	CH2
L	315	315	606004	6	1/4	12x1,5	4,5	14,5	21,5	19	14
			606005	8	1/4	14x1,5	4,5	14,5	21,5	19	17
			606006	10	1/4	16x1,5	4,5	14,5	22	19	19
			606007	12	1/4	18x1,5	4,5	14,5	22	19	22
S	630	630	606014	6	1/2	14x1,5	5	20	23	30	17
			606015	8	1/2	16x1,5	5	20	23,5	30	19
			606016	10	1/2	18x1,5	5	20	24,5	30	22
			606017	12	1/2	20x1,5	5	20	24,5	30	24

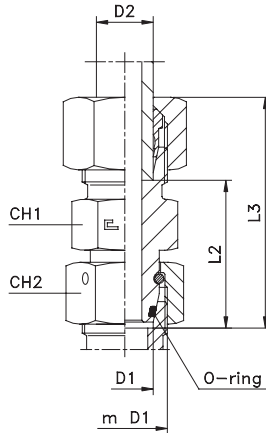
Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .
Items not included in the ISO 8434-1 Norm available on request only.
Gauge not included.

DISTANCE PIECE ADAPTER WITH SWIVEL NUT

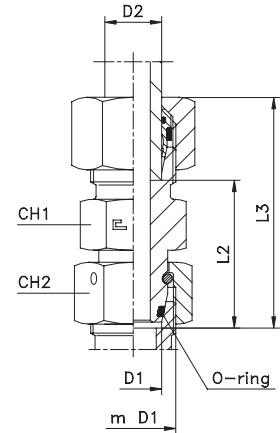
Type: **6061...1** Body



Type: **6061... B3** Ring



Type: **6061...4** B4 Ring

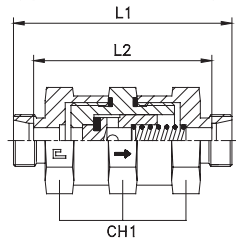


Series DIN	60.... [bar]	61.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube D1 D2	m D1 m D2	L1	L2	L3	CH1	CH2	Ordering Equipped B4
L	500	315	606104.1	606104	6	12x1,5	43	36	51	12	14	606104.4
			606105.1	606105	8	14x1,5	43	36	51	14	17	606105.4
			606106.1	606106	10	16x1,5	43	36	51	17	19	606106.4
			606107.1	606107	12	18x1,5	43,5	36,5	51,5	19	22	606107.4
			606108.1	606108	15	22x1,5	43,5	36,5	51,5	24	27	606108.4
	606109.1	606109	18	26x1,5	44	36,5	53	27	32	606109.4		
	606110.1	606110	22	30x2	47	39,5	56	32	36	606110.4		
	606111.1	606111	28	36x2	47	39,5	56	41	41	606111.4		
	606112.1	606112	35	45x2	60	49,5	71	46	50	606112.4		
	606113.1	606113	42	52x2	71	60	83	55	60	606113.4		
S	800	630	606114.1	606114	6	14x1,5	43,5	36,5	51,5	14	17	606114.4
			606115.1	606115	8	16x1,5	43,5	36,5	51,5	17	19	606115.4
			606116.1	606116	10	18x1,5	44	36,5	53	19	22	606116.4
			606117.1	606117	12	20x1,5	44	36,5	53	22	24	606117.4
			606118.1	606118	14	22x1,5	48	40	58	24	27	606118.4
	606119.1	606119	16	24x1,5	48,5	40	58,5	27	30	606119.4		
	606120.1	606120	20	30x2	56	45,5	67	32	36	606120.4		
	606121.1	606121	25	36x2	62	50	74	41	46	606121.4		
	606122.1	606122	30	42x2	69	55,5	82	46	50	606122.4		
	606123.1	606123	38	52x2	75,5	59,5	90,5	55	60	606123.4		

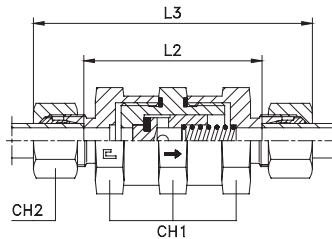
Note: If you wish to order a fitting in stainless steel, please change the first two digit from **60....** to **61....** .

EQUAL NON RETURN VALVE

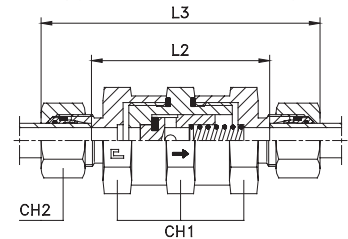
Type: **5001...1** Body



Type: **5001... B3** Ring



Type: **5001...4** B4 Ring



Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	L1	L2	L3	CH1	CH2	Ø pass.	Ordering Equipped B4
L	250	250	500104.1	500104	6	68	54	83	19	14	4	500104.4
			500105.1	500105	8	68	54	83	19	17	4	500105.4
			500106.1	500106	10	70	56	85	19	19	4	500106.4
			500107.1	500107	12	76	62	91	32	22	8	500107.4
			500108.1	500108	15	81	67	97	41	27	11	500108.4
	500109.1	500109	18	81	66	98	41	32	11	500109.4		
	500110.1	500110	22	94	79	111	50	36	18	500110.4		
	500111.1	500111	28	94	79	112	50	41	18	500111.4		
	500112.1	500112	35	116	95	138	70	50	29	500112.4		
	500113.1	500113	42	116	94	139	70	60	29	500113.4		
S	400	400	500114.1	500114	6	72	58	87	19	17	4	500114.4
			500115.1	500115	8	72	58	87	19	19	4	500115.4
			500116.1	500116	10	78	63	95	32	22	7	500116.4
			500117.1	500117	12	78	63	95	32	24	8	500117.4
			500118.1	500118	14	85	69	104	41	27	10	500118.4
	500119.1	500119	16	85	68	104	41	30	11	500119.4		
	500120.1	500120	20	98	77	120	50	36	16	500120.4		
	500121.1	500121	25	102	78	126	50	46	18	500121.4		
	500122.1	500122	30	124	97	150	70	50	25	500122.4		
	500123.1	500123	38	128	96	157	70	60	29	500123.4		

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .

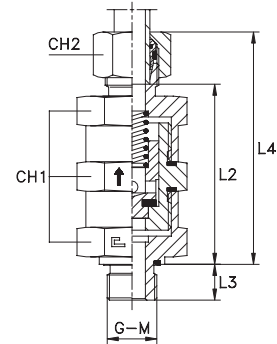
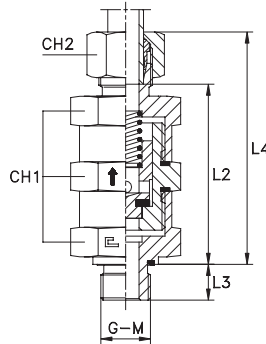
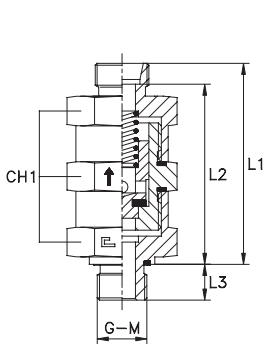
MALE STUD NON RETURN VALVE WITH ELASTOMER SEAL

Thread BSP Parallel - Thread Metric Parallel

Type: **5002...1** Body
Type: **5003...1** Body

Type: **5002... B3** Ring
Type: **5003... B3** Ring

Type: **5002...4** B4 Ring
Type: **5003...4** B4 Ring



Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	500204.1	500204	6	1/8	60	53	8	67,5	19	14	4	500204.4
			500205.1	500205	8	1/4	60	53	12	67,5	19	17	4	500205.4
			500206.1	500206	10	1/4	61	54	12	68,5	19	19	4	500206.4
			500207.1	500207	12	3/8	67,5	60,5	12	75	32	22	8	500207.4
			500208.1	500208	15	1/2	72	65	14	80	41	27	11	500208.4
	160	160	500209.1	500209	18	1/2	72	64,5	14	80,5	41	32	11	500209.4
			500210.1	500210	22	3/4	83	75,5	16	91,5	50	36	16	500210.4
			500211.1	500211	28	1	83	75,5	18	92	50	41	18	500211.4
			500212.1	500212	35	1 1/4	103	92,5	20	114	70	50	25	500212.4
			500213.1	500213	42	1 1/2	103	92	22	114,5	70	60	29	500213.4
S	400	400	500214.1	500214	6	1/4	62	55	12	69,5	19	17	4	500214.4
			500215.1	500215	8	1/4	62	55	12	69,5	19	19	4	500215.4
			500216.1	500216	10	3/8	68,5	61	12	77	32	22	7	500216.4
			500217.1	500217	12	3/8	68,5	61	12	77	32	24	8	500217.4
			500218.1	500218	14	1/2	74	66	14	83,5	41	27	10	500218.4
			500219.1	500219	16	1/2	74	65,5	14	83,5	41	30	11	500219.4
	250	250	500220.1	500220	20	3/4	85	74,5	16	96	50	36	16	500220.4
			500221.1	500221	25	1	87	75	18	99	50	46	18	500221.4
			500222.1	500222	30	1 1/4	107	93,5	20	120	70	50	25	500222.4
			500223.1	500223	38	1 1/2	109	93	22	123,5	70	60	29	500223.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .

Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	500304.1	500304	6	10x1	60	53	8	67,5	19	14	4	500304.4
			500305.1	500305	8	12x1,5	60	53	12	67,5	19	17	4	500305.4
			500306.1	500306	10	14x1,5	61	54	12	68,5	19	19	4	500306.4
			500307.1	500307	12	16x1,5	67	60	12	74,5	32	22	8	500307.4
			500308.1	500308	15	18x1,5	72	65	12	80	41	27	11	500308.4
	160	160	500309.1	500309	18	22x1,5	72	64,5	14	80,5	41	32	11	500309.4
			500310.1	500310	22	26x1,5	83	75,5	16	91,5	50	36	18	500310.4
			500311.1	500311	28	33x2	83	75,5	18	92	50	41	18	500311.4
			500312.1	500312	35	42x2	103	92,5	20	114	70	50	25	500312.4
			500313.1	500313	42	48x2	103	92	22	114,5	70	60	29	500313.4
S	400	400	500314.1	500314	6	12x1,5	62	55	12	69,5	19	17	4	500314.4
			500315.1	500315	8	14x1,5	62	55	12	69,5	19	19	4	500315.4
			500316.1	500316	10	16x1,5	68,5	61	12	77	32	22	7	500316.4
			500317.1	500317	12	18x1,5	68,5	61	12	77	32	24	8	500317.4
			500318.1	500318	14	20x1,5	74	66	14	83,5	41	27	10	500318.4
			500319.1	500319	16	22x1,5	74	65,5	14	83,5	41	30	11	500319.4
	250	250	500320.1	500320	20	27x2	85	74,5	16	96	50	36	16	500320.4
			500321.1	500321	25	33x2	87	75	18	99	50	46	18	500321.4
			500322.1	500322	30	42x2	107	93,5	20	120	70	50	25	500322.4
			500323.1	500323	38	48x2	109	93	22	123,5	70	60	29	500323.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .

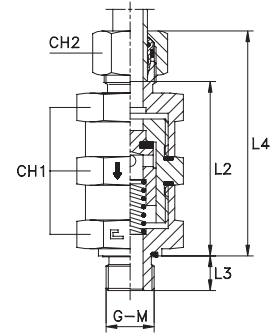
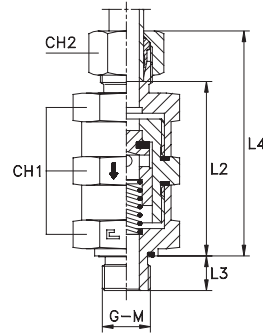
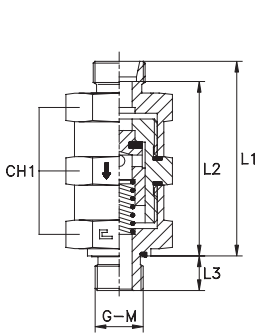
MALE STUD NON RETURN VALVE WITH ELASTOMER SEAL

Thread BSP Parallel - Thread Metric Parallel

Type: **5004...1** Body
Type: **5005...1** Body

Type: **5004.. B3** Ring
Type: **5005.. B3** Ring

Type: **5004...4** B4 Ring
Type: **5005...4** B4 Ring



Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4		
L	250	250	500404.1	500404	6	1/8	60	53	8	67,5	19	14	4	500404.4		
			500405.1	500405	8	1/4	60	53	12	67,5	19	17	4	500405.4		
			500406.1	500406	10	1/4	61	54	12	68,5	19	19	4	500406.4		
			500407.1	500407	12	3/8	67,5	60,5	12	75	32	22	8	500407.4		
			500408.1	500408	15	1/2	72	65	14	80	41	27	11	500408.4		
			500409.1	500409	18	1/2	72	64,5	14	80,5	41	32	11	500409.4		
	160	160	500410.1	500410	22	3/4	83	75,5	16	91,5	50	36	16	500410.4		
			500411.1	500411	28	1	83	75,5	18	92	50	41	18	500411.4		
			500412.1	500412	35	1 1/4	103	92,5	20	114	70	50	25	500412.4		
			500413.1	500413	42	1 1/2	103	92	22	114,5	70	60	29	500413.4		
			100	100	500414.1	500414	6	1/4	62	55	12	69,5	19	17	4	500414.4
					500415.1	500415	8	1/4	62	55	12	69,5	19	19	4	500415.4
500416.1	500416	10			3/8	68,5	61	12	77	32	22	7	500416.4			
500417.1	500417	12			3/8	68,5	61	12	77	32	24	8	500417.4			
500418.1	500418	14			1/2	74	66	14	83,5	41	27	10	500418.4			
500419.1	500419	16			1/2	74	65,5	14	83,5	41	30	11	500419.4			
S	400	400	500420.1	500420	20	3/4	85	74,5	16	96	50	36	16	500420.4		
			500421.1	500421	25	1	87	75	18	99	50	46	18	500421.4		
			500422.1	500422	30	1 1/4	107	93,5	20	120	70	50	25	500422.4		
			500423.1	500423	38	1 1/2	109	93	22	123,5	70	60	29	500423.4		
			250	250	500424.1	500424	6	1/4	62	55	12	69,5	19	17	4	500424.4
					500425.1	500425	8	1/4	62	55	12	69,5	19	19	4	500425.4
500426.1	500426	10			3/8	68,5	61	12	77	32	22	7	500426.4			
500427.1	500427	12			3/8	68,5	61	12	77	32	24	8	500427.4			
500428.1	500428	14			1/2	74	66	14	83,5	41	27	10	500428.4			
500429.1	500429	16			1/2	74	65,5	14	83,5	41	30	11	500429.4			

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .

Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	M	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4		
L	250	250	500504.1	500504	6	10x1	60	53	8	67,5	19	14	4	500504.4		
			500505.1	500505	8	12x1,5	60	53	12	67,5	19	17	4	500505.4		
			500506.1	500506	10	14x1,5	61	54	12	68,5	19	19	4	500506.4		
			500507.1	500507	12	16x1,5	67	60,5	12	74,5	32	22	8	500507.4		
			500508.1	500508	15	18x1,5	72	65	12	80	41	27	11	500508.4		
			500509.1	500509	18	22x1,5	72	64,5	14	80,5	41	32	11	500509.4		
	160	160	500510.1	500510	22	26x1,5	83	75,5	16	91,5	50	36	18	500510.4		
			500511.1	500511	28	33x2	83	75,5	18	92	50	41	18	500511.4		
			500512.1	500512	35	42x2	103	92,5	20	114	70	50	25	500512.4		
			500513.1	500513	42	48x2	103	92	22	114,5	70	60	29	500513.4		
			100	100	500514.1	500514	6	12x1,5	62	55	12	69,5	19	17	4	500514.4
					500515.1	500515	8	14x1,5	62	55	12	69,5	19	19	4	500515.4
500516.1	500516	10			16x1,5	68,5	61	12	77	32	22	7	500516.4			
500517.1	500517	12			18x1,5	68,5	61	12	77	32	24	8	500517.4			
500518.1	500518	14			20x1,5	74	66	14	83,5	41	27	10	500518.4			
500519.1	500519	16			22x1,5	74	65,5	14	83,5	41	30	11	500519.4			
S	400	400	500520.1	500520	20	27x2	85	74,5	16	96	50	36	16	500520.4		
			500521.1	500521	25	33x2	87	75	18	99	50	46	18	500521.4		
			500522.1	500522	30	42x2	107	93,5	20	120	70	50	25	500522.4		
			500523.1	500523	38	48x2	109	93	22	123,5	70	60	29	500523.4		
			250	250	500524.1	500524	6	12x1,5	62	55	12	69,5	19	17	4	500524.4
					500525.1	500525	8	14x1,5	62	55	12	69,5	19	19	4	500525.4
500526.1	500526	10			16x1,5	68,5	61	12	77	32	22	7	500526.4			
500527.1	500527	12			18x1,5	68,5	61	12	77	32	24	8	500527.4			
500528.1	500528	14			20x1,5	74	66	14	83,5	41	27	10	500528.4			
500529.1	500529	16			22x1,5	74	65,5	14	83,5	41	30	11	500529.4			

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .

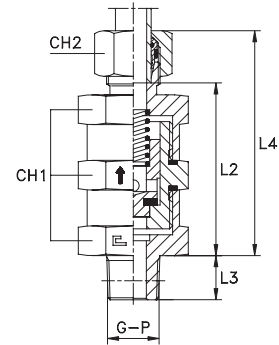
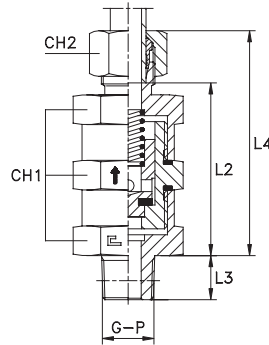
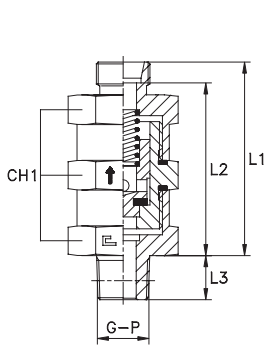
MALE STUD NON RETURN VALVE

Thread BSP Taper - Thread NPT

Type: **5006...1** Body
Type: **5007...1** Body

Type: **5006.. B3** Ring
Type: **5007.. B3** Ring

Type: **5006...4 B4** Ring
Type: **5007...4 B4** Ring



Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	500604.1	500604	6	1/8	58	51	10	65,5	19	14	4	
			500605.1	500605	8	1/4	58	51	15	65,5	19	17	4	500605.4
			500606.1	500606	10	1/4	59	52	15	66,5	19	19	4	500606.4
			500607.1	500607	12	3/8	65	58	15	72,5	32	22	8	500607.4
			500608.1	500608	15	1/2	69	62	19	77	41	27	11	500608.4
	160	160	500609.1	500609	18	1/2	69	61,5	19	77,5	41	32	11	500609.4
			500610.1	500610	22	3/4	80	72,5	19	88,5	50	36	16	500610.4
			500611.1	500611	28	1	80	72,5	24	89	50	41	18	500611.4
			500612.1	500612	35	1 1/4	100	89,5	25	111	70	50	25	500612.4
			500613.1	500613	42	1 1/2	100	89	25	111,5	70	60	29	500613.4
S	400	400	500614.1	500614	6	1/4	60	53	15	67,5	19	17	4	500614.4
			500615.1	500615	8	1/4	60	53	15	67,5	19	19	4	500615.4
			500616.1	500616	10	3/8	66	58,5	15	74,5	32	22	7	500616.4
			500617.1	500617	12	3/8	66	58,5	15	74,5	32	24	8	500617.4
			500618.1	500618	14	1/2	71	63	19	80,5	41	27	10	500618.4
	250	250	500619.1	500619	16	1/2	71	62,5	19	80,5	41	30	11	500619.4
			500620.1	500620	20	3/4	82	71,5	19	93	50	36	16	500620.4
			500621.1	500621	25	1	84	72	24	96	50	46	18	500621.4
			500622.1	500622	30	1 1/4	104	90,5	25	117	70	50	25	500622.4
			500623.1	500623	38	1 1/2	106	90	25	120,5	70	60	29	500623.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .
Items available on scheduled orders only

Series DIN	50.... [bar]	51.... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	P	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	500704.1	500704	6	1/8	58	51	10	65,5	19	14	4	500704.4
			500705.1	500705	8	1/4	58	51	15	65,5	19	17	4	500705.4
			500706.1	500706	10	1/4	59	52	15	66,5	19	19	4	500706.4
			500707.1	500707	12	3/8	65	58	15	72,5	32	22	8	500707.4
			500708.1	500708	15	1/2	69	62	19	77	41	27	11	500708.4
	160	160	500709.1	500709	18	1/2	69	61,5	19	77,5	41	32	11	500709.4
			500710.1	500710	22	3/4	80	72,5	19	88,5	50	36	16	500710.4
			500711.1	500711	28	1	80	72,5	24	89	50	41	18	500711.4
			500712.1	500712	35	1 1/4	100	89,5	25	111	70	50	25	500712.4
			500713.1	500713	42	1 1/2	100	89	25	111,5	70	60	29	500713.4
S	400	400	500714.1	500714	6	1/4	60	53	15	67,5	19	17	4	500714.4
			500715.1	500715	8	1/4	60	53	15	67,5	19	19	4	500715.4
			500716.1	500716	10	3/8	66	58,5	15	74,5	32	22	7	500716.4
			500717.1	500717	12	3/8	66	58,5	15	74,5	32	24	8	500717.4
			500718.1	500718	14	1/2	71	63	19	80,5	41	27	10	500718.4
	250	250	500719.1	500719	16	1/2	71	62,5	19	80,5	41	30	11	500719.4
			500720.1	500720	20	3/4	82	71,5	19	93	50	36	16	500720.4
			500721.1	500721	25	1	84	72	24	96	50	46	18	500721.4
			500722.1	500722	30	1 1/4	104	90,5	25	117	70	50	25	500722.4
			500723.1	500723	38	1 1/2	106	90	25	120,5	70	60	29	500723.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .
Items available on scheduled orders only

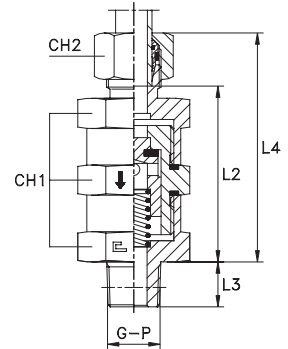
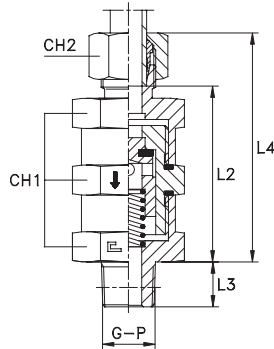
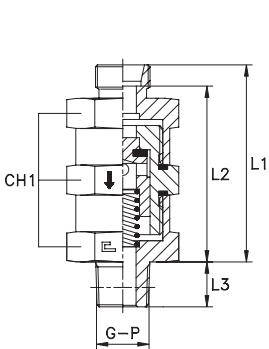
MALE STUD NON RETURN VALVE

Thread BSP Taper - Thread NPT

Type: **5008...1** Body
Type: **5009...1** Body

Type: **5008.. B3** Ring
Type: **5009.. B3** Ring

Type: **5008...4** B4 Ring
Type: **5009...4** B4 Ring



Series DIN	50... [bar]	51... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	G	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	500804.1	500804	6	1/8	58	51	10	65,5	19	14	4	500805.4
			500805.1	500805	8	1/4	58	51	15	65,5	19	17	4	500805.4
			500806.1	500806	10	1/4	59	52	15	66,5	19	19	4	500806.4
			500807.1	500807	12	3/8	65	58	15	72,5	32	22	8	500807.4
			500808.1	500808	15	1/2	69	62	19	77	41	27	11	500808.4
	160	160	500809.1	500809	18	1/2	69	61,5	19	77,5	41	32	11	500809.4
			500810.1	500810	22	3/4	80	72,5	19	88,5	50	36	16	500810.4
			500811.1	500811	28	1	80	72,5	24	89	50	41	18	500811.4
			500812.1	500812	35	1 1/4	100	89,5	25	111	70	50	25	500812.4
			500813.1	500813	42	1 1/2	100	89	25	111,5	70	60	29	500813.4
S	400	400	500814.1	500814	6	1/4	60	53	15	67,5	19	17	4	500814.4
			500815.1	500815	8	1/4	60	53	15	67,5	19	19	4	500815.4
			500816.1	500816	10	3/8	66	58,5	15	74,5	32	22	7	500816.4
			500817.1	500817	12	3/8	66	58,5	15	74,5	32	24	8	500817.4
			500818.1	500818	14	1/2	71	63	19	80,5	41	27	10	500818.4
			500819.1	500819	16	1/2	71	62,5	19	80,5	41	30	11	500819.4
	250	250	500820.1	500820	20	3/4	82	71,5	19	93	50	36	16	500820.4
			500821.1	500821	25	1	84	72	24	96	50	46	18	500821.4
			500822.1	500822	30	1 1/4	104	90,5	25	117	70	50	25	500822.4
			500823.1	500823	38	1 1/2	106	90	25	120,5	70	60	29	500823.4

Note: If you wish to order AISI 316 stainless steel fittings, please change the first two digits from **50....** to **51....** .
If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .
Items available on scheduled orders only

Series DIN	50... [bar]	51... [bar]	Ordering Body	Ordering Equipped B3	Ø Tube	P	L1	L2	L3	L4	CH1	CH2	Øpass.	Ordering Equipped B4
L	250	250	500904.1	500904	6	1/8	58	51	10	65,5	19	14	4	500904.4
			500905.1	500905	8	1/4	58	51	15	65,5	19	17	4	500905.4
			500906.1	500906	10	1/4	59	52	15	66,5	19	19	4	500906.4
			500907.1	500907	12	3/8	65	58	15	72,5	32	22	8	500907.4
			500908.1	500908	15	1/2	69	62	19	77	41	27	11	500908.4
	160	160	500909.1	500909	18	1/2	69	61,5	19	77,5	41	32	11	500909.4
			500910.1	500910	22	3/4	80	72,5	19	88,5	50	36	16	500910.4
			500911.1	500911	28	1	80	72,5	24	89	50	41	18	500911.4
			500912.1	500912	35	1 1/4	100	89,5	25	111	70	50	25	500912.4
			500913.1	500913	42	1 1/2	100	89	25	111,5	70	60	29	500913.4
S	400	400	500914.1	500914	6	1/4	60	53	15	67,5	19	17	4	500914.4
			500915.1	500915	8	1/4	60	53	15	67,5	19	19	4	500915.4
			500916.1	500916	10	3/8	66	58,5	15	74,5	32	22	7	500916.4
			500917.1	500917	12	3/8	66	58,5	15	74,5	32	24	8	500917.4
			500918.1	500918	14	1/2	71	63	19	80,5	41	27	10	500918.4
			500919.1	500919	16	1/2	71	62,5	19	80,5	41	30	11	500919.4
	250	250	500920.1	500920	20	3/4	82	71,5	19	93	50	36	16	500920.4
			500921.1	500921	25	1	84	72	24	96	50	46	18	500921.4
			500922.1	500922	30	1 1/4	104	90,5	25	117	70	50	25	500922.4
			500923.1	500923	38	1 1/2	106	90	25	120,5	70	60	29	500923.4

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If you wish to order AISI 316 stainless steel fittings with AISI 304 stainless steel nuts, please change the first two digits from **50....** to **54....** .
Items available on scheduled orders only