

Hydraulic catalogue





Hydraulic catalogue

2008 edition

Editorial

This latest version of the Legris hydraulic catalogue is a significant and exciting event.

It is the result of daily collaboration and information sharing between Legris marketing and commercial teams, our distributor partners and our customers.

Thanks to the assistance of all parties, the contents and layout of this catalogue are designed to meet all requirements

- To identify and select the required products, you will find in this catalogue:
 - a panorama of our “products and services” offer,
 - the Legris hydraulic range, now Chromium VI free, enhanced with flange couplings and ball valves,
 - detailed technical information,
 - assembly instructions for couplings
- This catalogue is available in a traditional paper format and a dynamic version on CD-ROM.

It marks a new stage in the development of our “products and services” offer and reflects our desire to provide the best adapted solution for each hydraulic application.

Gilles Mavier
Legris Connectic Hydraulic Manager

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Cutting ring couplings to ISO 8434-1/DIN 2353 pages 16 to 129

Non-return valves to ISO 8434-1/DIN 2353 pages 130 to 139

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Ball valves pages 174 to 187

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Technical information pages 200 to 214

Assembly instructions pages 215 to 223

Legris, a division of Group Legris Industries, designs, manufactures and markets **innovative industrial components** for conveying and controlling fluids.

Leader in hydraulic and pneumatic connection solutions, Legris has based its development and success on essential strategic **customer-focused values**.

To meet your needs, wherever you are in the world

With 25 sales subsidiaries, 10 industrial and logistic locations and a network of distributors and agents, Legris is **present** in **76 countries**. This worldwide presence enables Legris to better identify the changes and specific requirements of each market, in order to offer the best solutions, whilst meeting local standards.



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To be close to you in order to serve you better

An expert network of more than 1,000 official Legris distributors, a genuine sales and technical relay team, ensures that there is a close relationship with each local market, providing it with support, advice and product logistics. In this way, over **2,000 stocking points** support local product availability for the Legris range, wherever you may be in the world.



To innovate in order to develop new opportunities

Legris adopts an ongoing strategy of research and product innovation in order to offer a continuous range of **new solutions** and wider applications to its customers.

On average, Legris takes out 1 patent every month. Legris is certified ISO 9001:2000 and ISO TS 16949.



To adapt our production continuously to match your requirements

In order to satisfy the requests of many industrial sectors, Legris has 10 manufacturing units throughout Europe, America and Asia. This geographical structure and manufacturing dimension provides great **flexibility**. At the same time, each plant is highly **automated**, in order to ensure excellence in quality and coordinated production.

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To meet current and future industrial requirements

Legris Connectic works closely with companies that are present in all industrial markets and offers a wide range of products and services in order to meet the requirements of various sectors: public works equipment, transport, automotive process, shipbuilding etc.



A comprehensive range of services

Legris offers an extensive range of services worldwide aimed at ensuring customer service and satisfaction.

Order placement systems suited to all customers

Legris provides different ways of placing an order depending on the customer's structure or organization. Each customer can choose the most economical, the quickest or the easiest method: **EDI** or Internet transmissions via **legris.com**, **e-mail**, **traditional** order (post, fax, phone).

Assistance in selecting a product

Legris offers numerous brochures to assist the user in selecting products. Accessible to everyone and available in most languages: printed versions, CD ROM and downloadable from legris.com.



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Bar codes: easier inventory management

All Legris Connectic standard product packaging boxes ("Small Packs" or "Big Packs") feature a **bar code label** enabling automatic product **identification** and the prevention of manual errors. Input and output operations are **accelerated**, stocking and restocking inventory are **easier** and **continuous**. Upon request we can also provide **personalised** bar codes: customer specific, EAN or UPC.



An **expert network** of more than 1,000 official Legris distributors, a genuine sales and technical partnership, ensures that there is a close relationship with each local market. Do not hesitate to contact them for further information and advice.



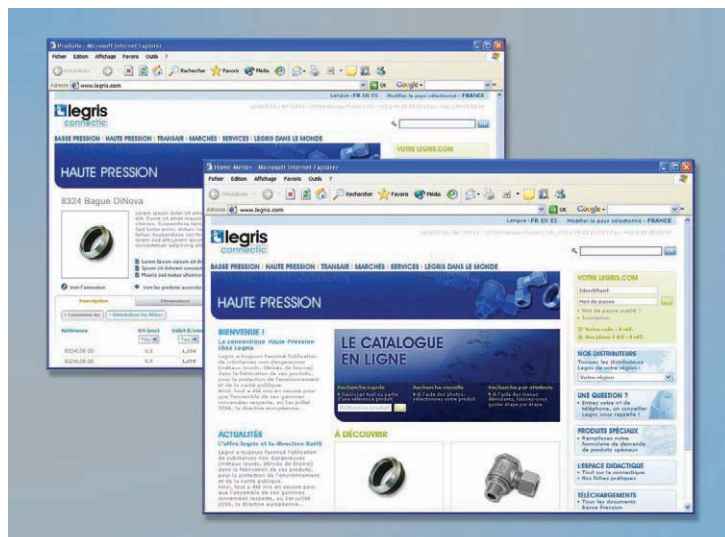
A comprehensive range of services

Legris Connectic proposes a range of services to support its customers, especially helping them to reinforce their productivity.

Additional information accessible to everyone via the Legris website

Legris.com includes a wide range of products and gives access to thousands of product part numbers. Three search tools direct the user to a complete and **real-time, updated** product file with technical drawings and pictures. Each catalogue offers the possibility to place and receive **quotation requests**, which will be sent to distributors within the same corresponding geographical area.

A hydraulic **training module**, **learning** sections and animated presentations give optimized comprehension of product technologies and their applications.



Saving on design time with downloadable CAD drawings

CAD drawings are available for a large number of products on the **E³ catalogue** or to download from **legris.com**. The formats provided (2D and 3D) are compatible with the main CAD systems used worldwide. This enables **time saving** in equipment design: each downloaded component can be directly integrated into an assembly, with the associated nomenclature. In addition, this service guarantees choice and with Legris CAD drawings, you can ensure that the selected components are suitable for use with other components within an assembly.

Optimized supplies by the use of e-catalogues

Legris Connectic electronic catalogues (e-catalogues) are specifically designed for customers who purchase via the Internet (e-procurement). These databases are **"tailor-made"** for the user and show all product details: product codes description, dimensions, pictures, drawings...etc and are provided to our distributors for their e-commerce activity. Through the design of these e-catalogues, Legris Connectic assists its customers in the automation of their purchasing process. The result: **lower** purchasing and administrative **costs**, **rationalization** of internal processes and top quality supplier information.



A wide range of applications

Used in various fields of activity, **Legris** hydraulic products provide solutions adapted to specific conditions of use for each customer. Special products can be developed upon request.

Public works equipment

The power used on public works equipment requires very high pressure levels. Couplings to **ISO 8434-1 series S** and **ISO 8434-4** (sealing cone and O-ring) are designed to withstand working pressures **up to 630 bar** while providing excellent **sealing** performance.



Agricultural machinery

In order to meet the increasing demand for compact hydraulic couplings, **Legris** offers specific solutions suited to the dimensional constraints of its customers: adjustable couplings with lock nuts, banjo couplings. Couplings to **ISO 8434-1 series L** and **ISO 8434-2** are the ranges which are most commonly used on agricultural machinery.



Transport equipment

In order to meet car and trucks manufacturers' specifications and to respect the latest regulations, the Legris hydraulic couplings range is coated with a new **Chromium VI free** surface treatment which provides excellent **corrosion resistance**. As a complement to the ISO 8434-1 range widely used for transport applications, **Legris** proposes, for truck braking systems, couplings which conform DIN 74304 and 74319 standards.



A wide range of applications

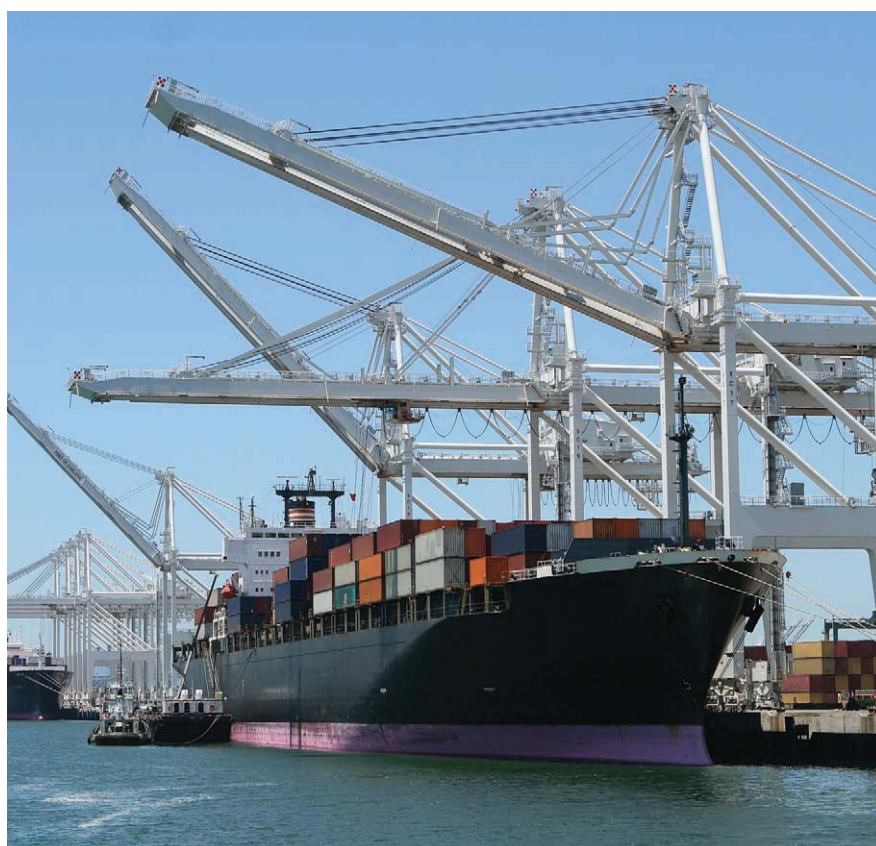
Automotive process industry

Legris is present in many motor vehicle production sites where equipment productivity and clean installations require **safe connection**. The **DiNova ring for couplings to ISO 8434-1** meets these requirements and offers safe connection and **long lasting sealing**.

Suited to environments submitted to strong vibrations and compatible with a wide range of fluids, the **DiNova ring** is also recommended for applications such as stamping presses, injection moulding machines and test benches.



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Ship building

Homologated by the most important international standards organizations, the Legris hydraulic couplings range meets the high performance and quality requirements of the ship building industry.



Chromium VI free hydraulic couplings

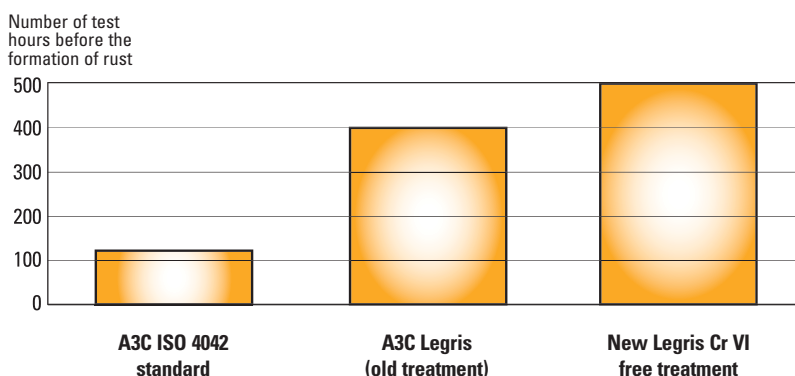
excellent corrosion resistance

The new, chromium VI free, surface treatment of Legris high pressure couplings has been salt spray tested :

500 hours resistance to red rust*

Corrosion resistance is significantly better than that of the A3C surface treatment previously used.

Salt spray tests resistance (DIN 50021-SS) in hours



**Tests run according to the DIN 50021-SS standard, average value.*

All Legris high pressure couplings are coated with this new surface treatment, except weld nipples that remain phosphated.



respect for the environment and public health

Legris has always promoted the use of non dangerous substances in the manufacture of its products in order to protect the environment and to safeguard public health.

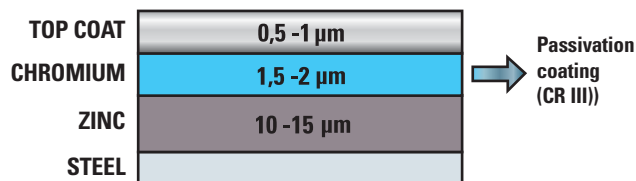
With this new surface treatment, Legris' high pressure ranges respect European directive **ELV 2000/53/CE** - restriction of dangerous substances used in the production of cars – applicable 1st July 2007.

industrial process entirely controlled by Legris

This new Chrome VI free surface treatment has been specifically designed and developed by Legris for its high pressure ranges of couplings.

It is designed with:

- reinforced zinc-coating (thickness of 10 to 15mm)
- high thickness passivation-coating, with a Chromium III base
- final-coating (top coat), reinforcing corrosion resistance.



Manufactured in Legris industrial units, this surface treatment is submitted to quality control at all stages of production, which guarantees reliable and consistent quality.

easy assembly

The antifriction specification of the final-coating (top coat) reduces the tightening torque and thus **facilitates the assembly** of couplings.



Homologations

A range of products conforming to international standards

In keeping with the Legris policy for high quality, our couplings conform to the DIN 3859-3 international standard.

A range of products certified by international standards organizations

Legris couplings are also certified by the most important international standards organizations (copies of certificates are available on request).

• Ship building

- American Bureau of Shipping
- China Classification Society
- Det Norske Veritas
- Germanischer Lloyd
- Lloyd's Register

• Water and gas

- DVGW

Products that meet the main car manufacturers' specifications

Approved and included in many car manufacturers' specifications, Legris hydraulic products can be used for all automotive process applications: stamping presses, body shop, powertrain, assembly and control.



Select the coupling adapted to your installation

The optimum efficiency of a hydraulic system depends, most importantly, on the choice of a connection system perfectly adapted to each installation. The principal criteria to consider are:

Connection technology

Two connection technologies are featured in this catalogue:

• cutting ring couplings to DIN 2353/ISO 8434-1

Their characteristics and solutions diversity make these couplings suitable for all applications.

- **flexible assembly:** use of a pre-assembly machine, standard manufacturing process or direct manual assembly, for individual assembly or maintenance.
- **adaptor solutions** to ISO 8434-1 / ISO 8434-2, to go directly from cutting ring technology to 37° flare couplings.
- **weld nipples**, for severe conditions of use (whip-lash, excessive vibrations...) and particularly high nominal pressures



3 types of cutting ring depending on the installation :

-DiNova ring:

durable sealing, thanks to three gripping bites and two seals; safety installations thanks to a controlled mechanical stop; resistance to aggressive fluids and high temperatures ensured by PTFE seal material (PTFE).

-double-bite ring: for all standard applications.

ease and safety of assembly, as well as excellent sealing performances.

-single bite ring: for all applications under 100 bar.

for use with the series LL (limited tightening torques).



• 37° flare couplings to ISO 8434-2

This coupling range is suited to many applications. Its principal specifications:

- **metal/metal** sealing, enabling use with many fluids and at very high temperatures.
- maximum tube gripping and safety, due to the 37° flare.
- **assembly ease**, and low tightening torques
- adapted to metric and inch tubes.



Select the coupling adapted to your installation

Constituent materials (couplings and seals)

When selecting the constituent materials of couplings and seals, the followings factors have to be taken into account

- the chemical corrosiveness and temperature of the conveyed fluid
- the operating environment of the hydraulic system

Our coupling ranges can be used with a large variety of fluids. The compatibility chart, at the beginning of this catalogue, is designed to be used as a selection guide. For working temperatures exceeding the authorised range for NBR or FPM seals, we recommend the use of metal/metal sealing.



Working pressure (PN)

The working pressure required by the hydraulic circuit will also determine the type of the coupling.

- **cutting ring couplings**

- series **LL**: up to **100 bar**
- series **L** : up to **400 bar**
- series **S** : up to **630 bar**

- **37° flare couplings**

- acceptable pressures up to 350 bar.



Thread type

In general, we recommend male parallel connections which ensure the best seal. Furthermore, under high pressure or vibrations, they are more efficient than male taper connections.

- **male parallel thread , sealing by O-ring.**

DIN 3852, form E – metric ISO 6149 – UN/UNF

This is the preferred connection type as it enables the coupling to be used at high pressure and guarantees excellent sealing performance.

- **male parallel thread, sealing by metal face.**

DIN 3852, form B

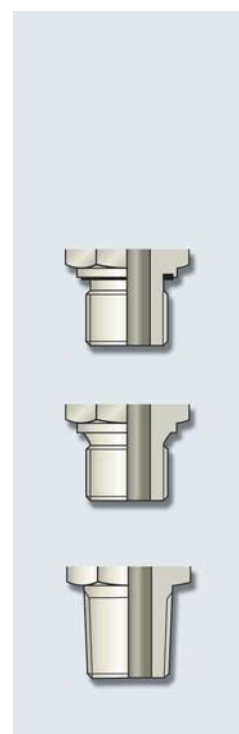
This type of connection is ideally suited for **aggressive fluids** or for use in **severe temperature** conditions, which exceeds the acceptable limits for NBR or FPM seals.

- **male thread, sealing by taper thread.**

DIN 3852, form C

This type of connection should be reserved for moderate working pressures.

To guarantee the taper thread sealing (DIN 3859 form C, NPT), the thread seal should be coated before tightening.



Legris correspondance table/International standards

Norms	ISO/DIN codes	Legris part numbers
ISO 8434-1 	ISO 8434-1-BH-...	8016
	ISO 8434-1-BH-...+ LN-...	8V16
	ISO 8434-1-BHE-...	8012
	ISO 8434-1-BHE-...+LN-...	8V12
	ISO 8434-1-CR-...	8124, 8224, 8324
	ISO 8434-1-E-...	8002
	ISO 8434-1-K-...	8007
	ISO 8434-1-LN-...	8V00
	ISO 8434-1-N-...	8010
	ISO 8434-1-REBT-...	8004 reduction
	ISO 8434-1-RES-...	8006 reduction
	ISO 8434-1-S-...	8006
	ISO 8434-1-SDS-...	8001, 8011, 8021
	ISO 8434-1-SW-...	8241, 8242
	ISO 8434-1-SWBT-...	8047
	ISO 8434-1-SWE-...	8046
	ISO 8434-1-SWRT-...	8048
	ISO 8434-1-T-...	8004
	ISO 8434-1-WDBH-...	8033
	ISO 8434-1-WDS-...	8031
ISO 8434-2 	ISO 8434-2-BHE-...	8V12
	ISO 8434-2-BHLN-...	8V00
	ISO 8434-2-BHS-...	8V16
	ISO 8434-2-CP-...	8426
	ISO 8434-2-E-...	8002
	ISO 8434-2-K-...	8007
	ISO 8434-2-MSL-...	8424
	ISO 8434-2-N-...	8410
	ISO 8434-2-PL-...	8425
	ISO 8434-2-RERT-...	8004
	ISO 8434-2-RES-...	8006
	ISO 8434-2-S-...	8006
	ISO 8434-2-SDBT-...	8098
	ISO 8434-2-SDE-...	8099
	ISO 8434-2-SDE45-...	8033
	ISO 8434-2-SDRT-...	8093
	ISO 8434-2-SDS-...	8001, 8005, 8021
	ISO 8434-2-SWBT-...	8047
	ISO 8434-2-SWE-...	8046
	ISO 8434-2-SWE45-...	8036
	ISO 8434-2-SWRT-...	8048
	ISO 8434-2-T-...	8004

Norms	ISO/DIN codes	Legris part numbers
ISO 8434-4 	ISO 8434-4-A-...	8020
	ISO 8434-4-RESWS-...	8076
	ISO 8434-4-SWBT-...	8074
	ISO 8434-4-SWE-...	8072
	ISO 8434-4-SWRT-...	8073
	ISO 8434-4-SWSDS-...G...	8501
DIN EN ISO 8434-1 	DIN EN ISO 8434-1-BHC ...	8216
	DIN EN ISO 8434-1-BHEC ...	8212
	DIN EN ISO 8434-1-EC ...	8202
	DIN EN ISO 8434-1-KC ...	8207
	DIN EN ISO 8434-1-SC ...	8206
	DIN EN ISO 8434-1-SDSC ...***	8201, 8211, 8221
	DIN EN ISO 8434-1-SW- ... M...***	8241, 8242
	DIN EN ISO 8434-1-SWBTC ...	8247
	DIN EN ISO 8434-1-SWEC ...	8246
	DIN EN ISO 8434-1-SWRTC ...	8248
	DIN EN ISO 8434-1-TC ...	8204
	DIN EN ISO 8434-1-WDBHC ...	8233
	DIN EN ISO 8434-1-WDSC ...	8231
DIN 2353 	DIN 2353 A ...	8205 metric
	DIN 2353 AA ...	8203 metric
	DIN 2353 AB ...	8203 BSP
	DIN 2353 B ...	8205 BSP
	DIN 2353 BA ...**	8293 metric
	DIN 2353 BB ...**	8293 BSP
	DIN 2353 C ...**	8201, 8211, 8221 metric
	DIN 2353 D ...**	8201, 8211 BSP
	DIN 2353 F ...	8209 metric
	DIN 2353 G ...	8209 BSP
	DIN 2353 H ...**	8299 metric
	DIN 2353 J ...**	8299 BSP
	DIN 2353 M ...	8208 metric
	DIN 2353 N ...	8208 BSP
	DIN 2353 O ...**	8298 metric
	DIN 2353 P ...**	8298 BSP

* seal form A, B or E ** seal form A or B *** seal form A, B, E or F
for DIN EN ISO 8434-1 no seal form A

Identification of Legris part numbers

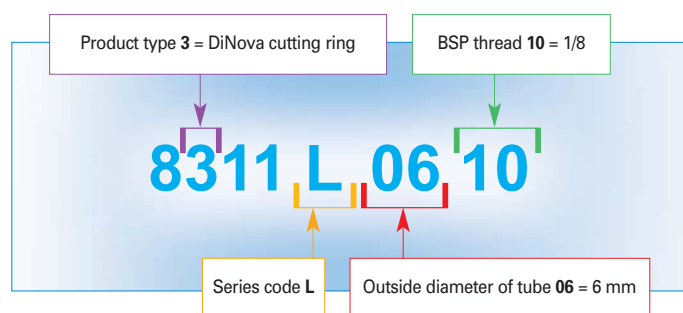
To help users, Legris classifies its product ranges with specific part numbers which provide easy identification of each item.

Part numbers have been chosen by a method of mnemonics. Each coupling is identified by:

- the **product type** (4 numbers)
- the **series** (1 letter)
- the **outside diameter of tube** (2 numbers)
- the **thread code** (2 numbers)

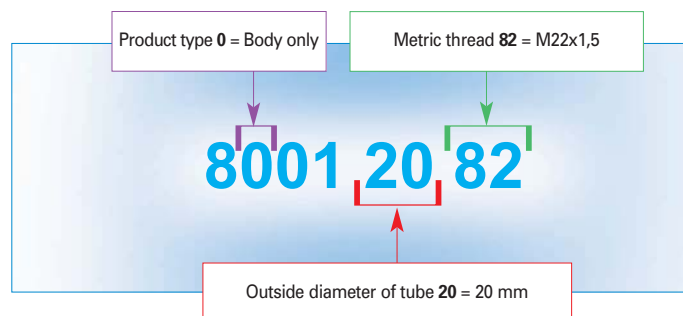
Series code

E	Series LL
L	Series L
S	Series S



Product type

the 2nd number corresponds to the model according to the following code:	
0	Body only
1	Single-bite cutting ring
2	Double-bite cutting ring
3	DiNova cutting ring
4	37° degree flare couplings and adaptors
5	24° cone sealing couplings



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Outside diameter of tube

ØD mm	Code	ØD inch	Code
4	04		
5	05		
6	06		
8	08	1/4"	56
10	10	5/16"	58
12	12	3/8"	60
14	14	1/2"	62
15	15		
16	16		
18	18	5/8"	66
20	20	3/4"	69
22	22		
25	25		
28	28	1"	75
30	30		
35	35	1"1/4	82
38	38	1"1/2	88
42	42		

thread

metric thread	Code	BSP thread	Code	NPT thread	Code
M6x1	52	1/8	10	1/8	11
M8x1	56	1/4	13	1/4	14
M10x1	60	3/8	17	3/8	18
M12x1	65	1/2	21	1/2	22
M12x1,5	67	3/4	27	3/4	28
M14x1	69	1"	34	1"	35
M14x1,5	71	1"1/4	42	1"1/4	43
M16x1,5	75	1"1/2	49	1"1/2	50
M18x1,5	78				
M20x1,5	80	UN/UNF thread		Code	
M22x1,5	82	7/16-20			103
M24x1,5	83	1/2-20			104
M26x1,5	89	9/16-18			105
M27x2	86	3/4-16			107
M33x2	91	7/8-14			108
M36x2	93	1 1/16-12			153
M42x2	96	1 5/16-12			157
M48x2	98	1 5/8-12			162
		1 7/8-12			166





**Cutting ring couplings
to ISO 8434-1/DIN 2353**

Applications

Couplings to ISO 8434-1/DIN 2353

With more than **50 years experience in the manufacture of hydraulic fittings**, Legris offers a comprehensive range of high quality DIN couplings. The Legris range of products and services meets **most high pressure requirements**, combining both mobile (transport, public works, agricultural equipment) and stationary applications (automotive process, chemical industry, steel industry) enabling Legris to have high profile customers in many fields of activity.

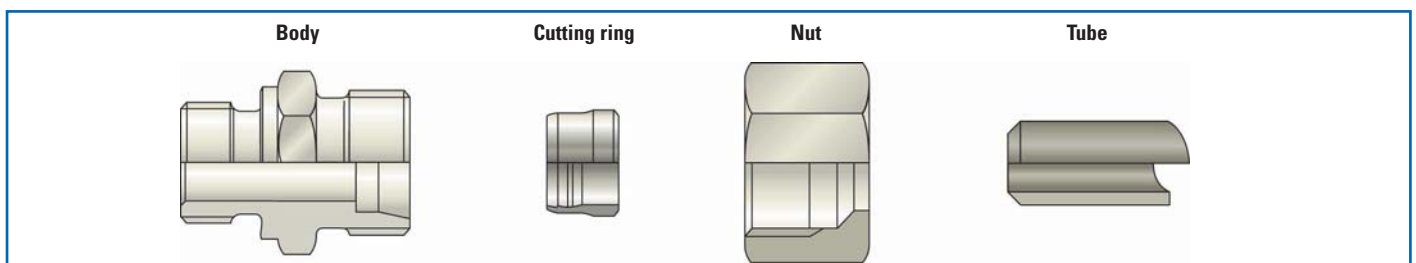
The Legris approach to product design and manufacture incorporates **total quality control**. This policy of high quality results in product homologations that comply with international standards (DIN 3859-3) and certifications from the largest official organizations.

By actively listening to its customers, Legris offers solutions that meet the end users' requirements through **continuous product development and innovation**. Thus, the DiNova ring, launched in 2004, provides safe connection and long lasting sealing on installations resulting in clean equipment and safe working environments. Furthermore, the Dinova connection technology is protected by several international patents.



Principle

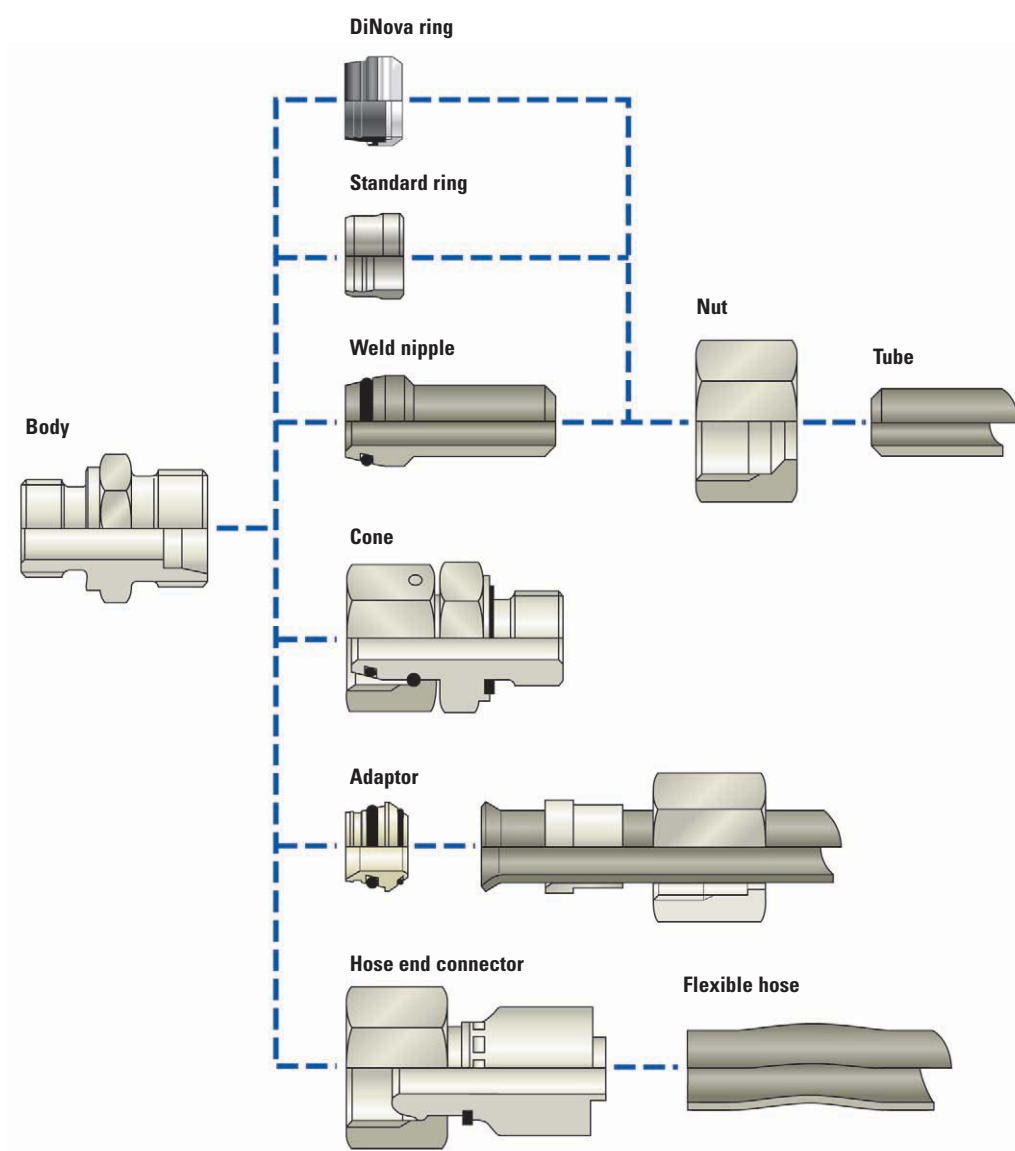
Couplings to ISO 8434-1/DIN 2353 comprise a body, a cutting ring and a tightening nut.



Principal advantages

A wide range of products offering solutions for all applications with :

- **couplings with 24° sealing cone and O-ring** : for guaranteed optimum sealing on high pressure applications, allowing simple and repetitive assembly without loss of sealing performance since, if necessary, the O-ring seal can be easily replaced.
- **couplings with assembled cutting ring** : for extreme conditions of use at high temperatures or with aggressive fluids
- **weld couplings** : for the most severe hydraulic applications (whip-lash, excessive vibration...).
- **24°/37° bulkhead couplings** : for a direct switch from cutting ring technology to 37° design.



Principal advantages

"Elbows and tees" solutions suitable for use in restricted space

- **adjustable couplings** : designed for medium and high pressures



- **adjustable couplings with lock-nut** : the best compromise for use in reduced spaces and for resistance to low and medium pressures.



- **banjos** : characterized by their compactness.
3 models depending on the working pressure and pressure loss:
 - standard pressure: $P_b \text{ maxi} = 250 \text{ bar}$
 - high pressure : $P_b \text{ maxi} = 400 \text{ bar}$
 - full flow : low pressure drop is guaranteed



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Easy installation :

the method of installing the Legris DIN range is well suited for series production (using a pre crimping machine), maintenance operations or individual unit assembly (direct manual installation).

Resistance to high nominal pressures :

DIN couplings are an optimized solution for different working pressures. 3 series of couplings (LL, L and S) are offered :

- LL for low pressures (up to 100 bar) and 4 to 12 mm o.d. tube.
Example: lubrication, braking systems.
- L for medium pressures (up to 400 bar) and 6 to 42 mm o.d. tube.
Example: machine tools, agricultural equipment.
- S for high pressures (up to 630 bar) and 6 to 38 mm o.d. tube.
Example: hydraulic presses, public works equipment

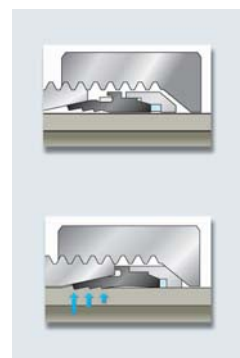
In addition, three cutting ring designs are available, offering maximum performance dependant upon the constraints of each specific installation.

Cutting rings

The DiNova ring

Designed to ensure total safety and long lasting sealing, the DiNova cutting ring guarantees clean equipment and safe working conditions. This solution reduces maintenance operations and is designed for all mobile and stationary applications when used with couplings series L and S.

- **Metal/metal sealing reinforced by 2 PTFE seals** : the geometry of the seal cavity prevents distortion and guarantees resistance to vibration. Protection of the seal is ensured throughout assembly - it will not compress until final crimping has been achieved (Legris patent). The PTFE seal material allows repeated assembly without any deterioration in performance over time. It is resistant to most aggressive fluids and to a wide range of temperatures (-40°C to +200°C).
- **Reliable and easy assembly** : a mechanical stop clearly indicates the crimp position and avoids the risk of insufficient tightening or over-tightening.
- **Safe connection** : three bites ensure more precise assembly and less tube distortion, thus reinforcing the safety of connection, even in extreme conditions of use. The **DiNova** ring guarantees resistance to strong vibrations, thanks to an increased area of interface with the tube upon tightening and the seal position within the assembly.

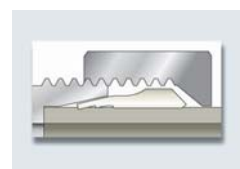


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The double-bite cutting ring

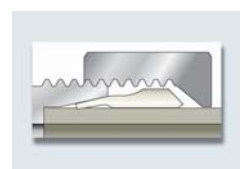
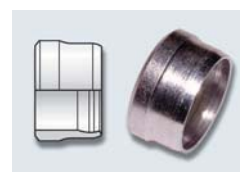
The double-bite ring constitutes an excellent solution for numerous hydraulic applications and can be used with coupling series L and S.

- **Easy assembly** and excellent **sealing** performance.
- **The geometry of the ring** prevents distortion of the tube, if overtightened.
- **Thermal treatment** guarantees resistance to vibrations and to shocks and enables repeated assembly without replacing the cutting ring.



The single-bite cutting ring

The single-bite cutting ring is suitable for coupling series LL. Its low tightening torque enables easy use and prevents distortion of the tube.



the product offer

rings, nuts

8124
single-bite



26

8224
double-bite



26

8324
DiNova



26

8010
nut



27

male stud couplings

8211
elastomer seal



28 29

8221
O-ring seal



30 31

8201
sealing bite



32 33 34

8205
taper



35 36

tube-tube couplings

8206
straight couplings



37

8206
straight reducer couplings



38

8202
equal elbows



39

8204
equal tees



40

8204
reducer tee couplings



41

8207
equal crosses



42

8216
bulkhead straight couplings



43

8212
bulkhead equal elbows



44

adjustable couplings

with 24° sealing cone and O-ring

8272
elbows



45

8270
45° elbows



46

8274
tees



47

8273
run tees



48

with pre-assembled ring

8246
elbows



49

8247
tees



50

8248
run tees



51

with threaded fitting, 24° cone and O-ring

8272
elbows



52 53

8274
tees



54 55

8273
run tees



56 57

with threaded fitting, 24° cone and sealing edge

8246
elbows



58 59

8247
tees



60 61

8248
run tees



62 63

With O-ring and lock nut

8251
elbows



64

8255
tees



65

8257
run tees



66

banjo couplings

8218
banjo couplings



67 68

8228
high pressure banjo couplings



69 70

8238
chock-free banjo couplings



71 72

8229
high pressure double banjo couplings



73 74

8239
chock-free double banjo couplings



75 76

the product offer

non adjustable couplings

8209

taper elbows



77 78 79

8299

parallel elbows



80

8208

tees



81 82

8203

run tees



83 84

square head flange couplings

square

8625

straight couplings



85

8626

elbows



85

SAE 3000 psi

8621

straight couplings



86

8622

elbows



86

SAE 6000 psi

8623

straight couplings



87

8624

elbows



87

butt weld couplings

8020

nipples



88

8231

straight couplings



89

8232

elbows



90

8233

bulkhead straight weld couplings



91

adaptors

with 24° sealing cone and O-ring

8501

adjustable male couplings



92 93

8276

standpipe reducers



94 95

8566

reducer adaptors



96

8506

adjustable straight couplings



97 98

with pre-assembled ring

8242

adjustable male with seal



99 100

8241

adjustable male with sealing bite



101 102

8245

adjustable male taper



103

8240

reducer adaptors



104 105

24°/37° (DIN 3949)

8430

nuts



106

8431

flare sleeves



106

8432

intermediate cones



106

8434

complete adaptors



107

(ISO 8434-1)/BSP 60°

8260

stud adaptor with pre-assembled ring



108

8261

stud adaptor



109

the product offer

M/F reducers/increasers and female thread adaptors

8075

reducer with seal



110

8078

reducer with seal



110

8079

increaser with seal



111

8065

reducer with sealing bite



112

8068

reducer with sealing bite



112

8069

increaser with sealing bite



113

8214

female thread adaptors



114 115

standpipe couplings for pressure gauge connection

8234

standpipe couplings



116

8514

adjustable standpipe couplings



117

8244

female thread adaptors



118

plugs

8023

plugs with O-ring



119

8022

plugs with elastomer seal



120

8026

plugs for 24° cone



121

8025

plugs for tubes



122

component parts

8V00

lock nuts



123

8027

ferrules



124

8W00

O-rings



125 126

8W01

captive seals



127

8W02

seal rings



128

8W03

composite seals



129

Find easily the DIN product that you require

Body only

Assembled couplings
equipped with different rings

Product pictures and technical drawings

Raccords selon norme ISO 8434-1/DIN 2353

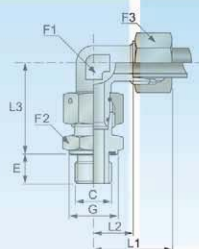


Product description

Type of thread

Coudes orientables

BSP cylindrique
joint élastomère
ISO 1179-2



Nominal pressure

Series

Series

	PN	ØD	C	 corps nu	 bague 2 arêtes	 bague DiNova	Bell code	E	F1*	F2	F3	G	L1	L2	L3	
L	400	6	G1/8	8072L06 10	8272L06 10	8372L06 10	ZS14/1-29/L6RD-DM	8	12	14	14	13,9	27	12	34,5	0,060
		8	G1/4	8072L08 13	8272L08 13	8372L08 13	ZS14/1-29/L8RD-DM	12	14	19	17	18,9	29	14	37,5	0,080
		10	G1/4	8072L10 13	8272L10 13	8372L10 13	ZS14/1-29/L10RD-DM	12	17	19	19	18,9	30	15	40	0,090
		12	G3/8	8072L12 17	8272L12 17	8372L12 17	ZS14/1-29/L12RD-DM	12	19	22	22	21,9	32	17	42	0,130
		15	G1/2	8072L15 21	8272L15 21	8372L15 21	ZS14/1-29/L15RD-DM	14	19	27	27	26,9	36	21	46,5	0,230
		18	G1/2	8072L18 21	8272L18 21	8372L18 21	ZS14/1-29/L18RD-DM	14	24	27	32	26,9	40	23,5	50	0,290
S	630	22	G3/4	8072L22 27	8272L22 27	8372L22 27	ZS14/1-29/L22RD-DM	16	27	32	36	31,9	44	27,5	55	0,410
		28	G1	8072L28 34	8272L28 34	8372L28 34	ZS14/1-29/L28RD-DM	18	36	41	41	39,9	47	30,5	59	0,580
		35	G1*1/4	8072L35 42	8272L35 42	8372L35 42	ZS14/1-29/L35RD-DM	20	41	50	50	49,9	56	34,5	68,5	0,890
		42	G1*1/2	8072L42 49	8272L42 49	8372L42 49	ZS14/1-29/L42RD-DM	22	50	55	60	54,9	63	40	75	1,230
		6	G1/4	8072S06 13	8272S06 13	8372S06 13	ZS14/1-29/S6RD-DM	12	14	19	17	18,9	31	16	40	0,095
		8	G1/4	8072S08 13	8272S08 13	8372S08 13	ZS14/1-29/S8RD-DM	12	17	19	19	18,9	32	17	42,5	0,112
S	400	10	G3/8	8072S10 17	8272S10 17	8372S10 17	ZS14/1-29/S10RD-DM	12	19	22	22	21,9	34	17,5	45	0,166
		12	G3/8	8072S12 17	8272S12 17	8372S12 17	ZS14/1-29/S12RD-DM	12	22	22	24	21,9	38	21,5	48	0,197
		14	G1/2	8072S14 21	8272S14 21	8372S14 21	ZS14/1-29/S14RD-DM	14	19	27	27	26,9	40	22	54	0,290
		16	G1/2	8072S16 21	8272S16 21	8372S16 21	ZS14/1-29/S16RD-DM	14	24	27	30	26,9	43	24,5	55	0,338
		20	G3/4	8072S20 27	8272S20 27	8372S20 27	ZS14/1-29/S20RD-DM	16	27	32	36	31,9	48	26,5	65	0,545
		25	G1	8072S25 34	8272S25 34	8372S25 34	ZS14/1-29/S25RD-DM	18	36	41	46	39,9	54	30	73	0,998
S	315	30	G1*1/4	8072S30 42	8272S30 42	8372S30 42	ZS14/1-29/S30RD-DM	20	41	50	50	49,9	62	35,5	78,5	1,397
		38	G1*1/2	8072S38 49	8272S38 49	8372S38 49	ZS14/1-29/S38RD-DM	22	50	55	60	54,9	72	41	89	2,000

* ØD 6 à 12 mm en acier profilé

o.d.
of tube

Thread

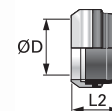
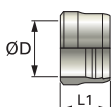
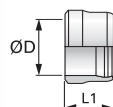
Legris part numbers

Dimensions

Bell part numbers

Weight

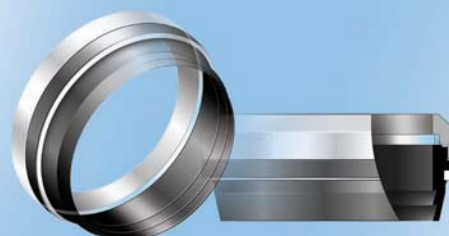
Cutting rings



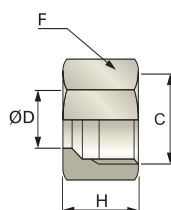
	PN	ØD	C	Single-bite ring	Bell code	Double-bite ring	Bell code	L1	kg	DiNova ring	Bell code	L2	kg
LL	100	4	M8x1	8124E04 00	15-31/LL4			6	0,001				
		5	M10x1	8124E05 00	15-31/LL5			7	0,001				
		6	M10x1	8124E06 00	15-31/LL6			7	0,001				
		8	M12x1	8124E08 00	15-31/LL8			7	0,001				
		10	M14x1	8124E10 00	15-31/LL10			7	0,001				
		12	M16x1	8124E12 00	15-31/LL12			7,5	0,002				
L	400	6	M12x1,5			8224L06 00	07-31/L6	9,5	0,002	8324L06 00	06-36/L6	9,7	0,002
		8	M14x1,5			8224L08 00	07-31/L8	10	0,003	8324L08 00	06-36/L8	10,2	0,003
		10	M16x1,5			8224L10 00	07-31/L10	10,5	0,004	8324L10 00	06-36/L10	10,6	0,004
		12	M18x1,5			8224L12 00	07-31/L12	10,5	0,005	8324L12 00	06-36/L12	10,6	0,004
		15	M22x1,5			8224L15 00	07-31/L15	10,5	0,006	8324L15 00	06-36/L15	10,8	0,006
	315	18	M26x1,5			8224L18 00	07-31/L18	10,5	0,007	8324L18 00	06-36/L18	11,1	0,007
		22	M30x2			8224L22 00	07-31/L22	11	0,009	8324L22 00	06-36/L22	12,3	0,010
	250	28	M36x2			8224L28 00	07-31/L28	11	0,012	8324L28 00	06-36/L28	12,1	0,011
		35	M45x2			8224L35 00	07-31/L35	13,5	0,021	8324L35 00	06-36/L35	14,3	0,021
		42	M52x2			8224L42 00	07-31/L42	13,5	0,024	8324L42 00	06-36/L42	14,3	0,028
S	630	6	M14x1,5			8224S06 00	07-31/S6	9,5	0,002	8324S06 00	06-36/S6	9,7	0,002
		8	M16x1,5			8224S08 00	07-31/S8	10	0,003	8324S08 00	06-36/S8	10,2	0,003
		10	M18x1,5			8224S10 00	07-31/S10	10,5	0,004	8324S10 00	06-36/S10	10,6	0,004
		12	M20x1,5			8224S12 00	07-31/S12	10,5	0,005	8324S12 00	06-36/S12	10,6	0,004
		14	M22x1,5			8224S14 00	07-31/S14	10,5	0,006	8324S14 00	06-36/S14	10,8	0,005
	400	16	M24x1,5			8224S16 00	07-31/S16	10,5	0,007	8324S16 00	06-36/S16	11	0,006
		20	M30x2			8224S20 00	07-31/S20	13	0,012	8324S20 00	06-36/S20	13,6	0,012
		25	M36x2			8224S25 00	07-31/S25	13,5	0,016	8324S25 00	06-36/S25	14,6	0,017
		30	M42x2			8224S30 00	07-31/S30	13,5	0,020	8324S30 00	06-36/S30	14,6	0,020
		315	M52x2			8224S38 00	07-31/S38	13,5	0,023	8324S38 00	06-36/S38	15,1	0,028

The DiNova ring guarantees:

- long lasting **sealing** for safe, clean equipment
- **reliable** and easy assembly
- **safe** connection



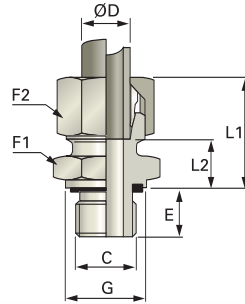
Nuts



	PN	ØD	C		Bell code	F	H	
LL	100	4	M8x1	8010E04 00	15-30/LL4	10	11	0,004
		5	M10x1	8010E05 00	15-30/LL5	12	11,5	0,006
		6	M10x1	8010E06 00	15-30/LL6	12	11,5	0,006
		8	M12x1	8010E08 00	15-30/LL8	14	12	0,007
		10	M14x1	8010E10 00	15-30/LL10	17	12,5	0,011
		12	M16x1	8010E12 00	15-30/LL12	19	13	0,012
L	400	6	M12x1,5	8010L06 00	15-30/L6	14	14,5	0,010
		8	M14x1,5	8010L08 00	15-30/L8	17	14,5	0,015
		10	M16x1,5	8010L10 00	15-30/L10	19	15,5	0,018
		12	M18x1,5	8010L12 00	15-30/L12	22	15,5	0,024
		15	M22x1,5	8010L15 00	15-30/L15	27	17	0,041
	315	18	M26x1,5	8010L18 00	15-30/L18	32	18	0,058
		22	M30x2	8010L22 00	15-30/L22	36	20	0,079
	250	28	M36x2	8010L28 00	15-30/L28	41	21	0,089
		35	M45x2	8010L35 00	15-30/L35	50	24	0,138
		42	M52x2	8010L42 00	15-30/L42	60	24	0,216
S	630	6	M14x1,5	8010S06 00	15-30/S6	17	16,5	0,016
		8	M16x1,5	8010S08 00	15-30/S8	19	16,5	0,019
		10	M18x1,5	8010S10 00	15-30/S10	22	17,5	0,030
		12	M20x1,5	8010S12 00	15-30/S12	24	17,5	0,035
		14	M22x1,5	8010S14 00	15-30/S14	27	20,5	0,050
		16	M24x1,5	8010S16 00	15-30/S16	30	20,5	0,064
	400	20	M30x2	8010S20 00	15-30/S20	36	24	0,100
		25	M36x2	8010S25 00	15-30/S25	46	27	0,199
		30	M42x2	8010S30 00	15-30/S30	50	29	0,223
		38	M52x2	8010S38 00	15-30/S38	60	32,5	0,310

Male stud couplings

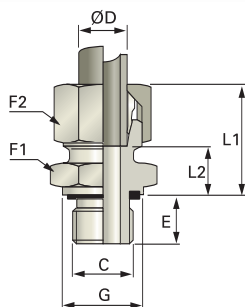
BSP parallel
elastomer seal
ISO 1179-2



	PN	ØD	C	body only	double-bite ring	DiNova ring	Bell code	E	F1	F2	G	L1	L2	
L	400	6	G1/8	8011L06 10	8211L06 10	8311L06 10	ZS15-01/L6RD	8	14	14	13,9	23	8,5	0,025
		6	G1/4	8011L06 13	8211L06 13	8311L06 13	ZS15-01/L6RD1/4"	12	19	14	18,9	24,5	10	0,040
		8	G1/8	8011L08 10	8211L08 10	8311L08 10	ZS15-01/L8RD1/8"	8	14	17	13,9	24,5	9,5	0,033
		8	G1/4	8011L08 13	8211L08 13	8311L08 13	ZS15-01/L8RD	12	19	17	18,9	25	10	0,045
		8	G3/8	8011L08 17	8211L08 17	8311L08 17	ZS15-01/L8RD3/8"	12	22	17	21,9	27	11,5	0,061
		8	G1/2	8011L08 21	8211L08 21	8311L08 21	ZS15-01/L8RD1/2"	14	27	17	26,9	26	12	0,070
		10	G1/4	8011L10 13	8211L10 13	8311L10 13	ZS15-01/L10RD	12	19	19	18,9	26	11	0,047
		10	G3/8	8011L10 17	8211L10 17	8311L10 17	ZS15-01/L10RD3/8"	12	22	19	21,9	27,5	12,5	0,067
		10	G1/2	8011L10 21	8211L10 21	8311L10 21	ZS15-01/L10RD1/2"	14	27	19	26,9	27,5	13	0,094
		12	G1/4	8011L12 13	8211L12 13	8311L12 13	ZS15-01/L12RD1/4"	12	19	22	18,9	25,5	11	0,057
		12	G3/8	8011L12 17	8211L12 17	8311L12 17	ZS15-01/L12RD	12	22	22	21,9	27	12,5	0,069
		12	G1/2	8011L12 21	8211L12 21	8311L12 21	ZS15-01/L12RD1/2"	14	27	22	26,9	27,5	13	0,106
		12	G3/4	8011L12 27	8211L12 27	8311L12 27	ZS15-01/L12RD3/4"	16	32	22	31,9	28,5	14	0,120
		15	G3/8	8011L15 17	8211L15 17	8311L15 17	ZS15-01/L15RD3/8"	12	22	27	21,9	28,5	13,5	0,097
		15	G1/2	8011L15 21	8211L15 21	8311L15 21	ZS15-01/L15RD	14	27	27	26,9	29	14	0,115
		15	G3/4	8011L15 27	8211L15 27	8311L15 27	ZS15-01/L15RD3/4"	16	32	27	31,9	30	15	0,167
		18	G1/2	8011L18 21	8211L18 21	8311L18 21	ZS15-01/L18RD	14	27	32	26,9	31	14,5	0,129
		18	G3/4	8011L18 27	8211L18 27	8311L18 27	ZS15-01/L18RD3/4"	16	32	32	31,9	33	14,5	0,180
	315	22	G1/2	8011L22 21	8211L22 21	8311L22 21	ZS15-01/L22RD1/2"	14	32	36	26,9	32,5	16,5	0,220
		22	G3/4	8011L22 27	8211L22 27	8311L22 27	ZS15-01/L22RD	16	32	36	31,9	33,5	16,5	0,176
		22	G1	8011L22 34	8211L22 34	8311L22 34	ZS15-01/L22RD1"	18	41	36	39,9	34	17,5	0,283
		28	G3/4	8011L28 27	8211L28 27	8311L28 27	ZS15-01/L28RD3/4"	16	41	41	31,9	34	17,5	0,251
250		28	G1"1/4	8011L28 34	8211L28 34	8311L28 34	ZS15-01/L28RD	18	41	41	39,9	34	17,5	0,247
		28	G1"1/4	8011L28 42	8211L28 42	8311L28 42	ZS15-01/L28RD1 1/4"	20	50	41	49,9	35	18,5	0,260
		35	G1	8011L35 34	8211L35 34	8311L35 34	ZS15-01/L35RD1"	18	50	50	39,9	39	17,5	0,400
		35	G1"1/4	8011L35 42	8211L35 42	8311L35 42	ZS15-01/L35RD	20	50	50	49,9	39	17,5	0,407
		42	G1"1/2	8011L42 49	8211L42 49	8311L42 49	ZS15-01/L42RD	22	55	60	54,9	42	19	0,456
S	630	6	G1/4	8011S06 13	8211S06 13	8311S06 13	ZS15-01/S6RD	12	19	17	18,9	28	13	0,050
		8	G1/4	8011S08 13	8211S08 13	8311S08 13	ZS15-01/S8RD	12	19	19	18,9	30	15	0,055
		8	G3/8	8011S08 17	8211S08 17	8311S08 17	ZS15-01/S8RD3/8"	12	22	19	21,9	30,5	15,5	0,070
		10	G1	8011S10 13	8211S10 13	8311S10 13	ZS15-01/S10RD1/4"	12	19	22	18,9	30,5	14,5	0,078
		10	G3/8	8011S10 17	8211S10 17	8311S10 17	ZS15-01/S10RD	12	22	22	21,9	31	15	0,082
		10	G1/2	8011S10 21	8211S10 21	8311S10 21	ZS15-01/S10RD1/2"	14	27	22	26,9	33,5	17,5	0,090
		12	G1/4	8011S12 13	8211S12 13	8311S12 13	ZS15-01/S12RD1/4"	12	22	24	18,9	32,5	16,5	0,096
		12	G3/8	8011S12 17	8211S12 17	8311S12 17	ZS15-01/S12RD	12	22	24	21,9	33	17	0,095
		12	G1/2	8011S12 21	8211S12 21	8311S12 21	ZS15-01/S12RD1/2"	14	27	24	26,9	33,5	17,5	0,135
		14	G1/2	8011S14 21	8211S14 21	8311S14 21	ZS15-01/S14RD	14	27	27	26,9	37	19	0,148
		16	G3/8	8011S16 17	8211S16 17	8311S16 17	ZS15-01/S16RD3/8"	12	24	30	21,9	36,5	18	0,146
		16	G1/2	8011S16 21	8211S16 21	8311S16 21	ZS15-01/S16RD	14	27	30	26,9	37	18,5	0,154
		16	G3/4	8011S16 27	8211S16 27	8311S16 27	ZS15-01/S16RD3/4"	16	32	30	31,9	39	20,5	0,226
		20	G1/2	8011S20 21	8211S20 21	8311S20 21	ZS15-01/S20RD1/2"	14	32	36	26,9	42	20,5	0,205
	400	20	G3/4	8011S20 27	8211S20 27	8311S20 27	ZS15-01/S20RD	16	32	36	31,9	42	20,5	0,253
		20	G1	8011S20 34	8211S20 34	8311S20 34	ZS15-01/S20RD1"	18	41	36	39,9	44	22,5	0,270
		25	G3/4	8011S25 27	8211S25 27	8311S25 27	ZS15-01/S25RD3/4"	16	41	46	31,9	47	23	0,378
		25	G1	8011S25 34	8211S25 34	8311S25 34	ZS15-01/S25RD	18	41	46	39,9	47	23	0,465
		30	G1	8011S30 34	8211S30 34	8311S30 34	ZS15-01/S30RD1"	18	46	50	39,9	50	23,5	0,583
		30	G1"1/4	8011S30 42	8211S30 42	8311S30 42	ZS15-01/S30RD	20	50	50	49,9	50	23,5	0,644
315		38	G1"1/4	8011S38 42	8211S38 42	8311S38 42	ZS15-01/S38RD1 1/4"	20	55	60	49,9	57	26	0,880
		38	G1"1/2	8011S38 49	8211S38 49	8311S38 49	ZS15-01/S38RD	22	55	60	54,9	57	26	0,889

Male stud couplings

metric parallel
elastomer seal
ISO 9974-2



	PN	ØD	C	body only	double-bite ring	DiNova ring	Bell code	E	F1	F2	G	L1	L2	
L	400	6	M10x1	8011L06 60	8211L06 60	8311L06 60	ZS15-01/L6MD	8	14	14	13,9	23	8,5	0,025
		8	M10x1	8011L08 60	8211L08 60	8311L08 60	ZS15-01/L8MD10X1	8	14	17	13,9	24	9,5	0,040
		8	M12x1,5	8011L08 67	8211L08 67	8311L08 67	ZS15-01/L8MD	12	17	17	16,9	25	10	0,040
		8	M14x1,5	8011L08 71	8211L08 71	8311L08 71	ZS15-01/L8MD14X1,5	12	19	17	18,9	25	10	0,048
		8	M16x1,5	8011L08 75	8211L08 75	8311L08 75	ZS15-01/L8MD16X1,5	12	22	17	21,9	26,5	11,5	0,060
		8	M18x1,5	8011L08 78	8211L08 78	8311L08 78	ZS15-01/L8MD18X1,5	12	24	17	23,9	26,5	11,5	0,070
		10	M12x1,5	8011L10 67	8211L10 67	8311L10 67	ZS15-01/L10MD12X1,5	12	17	19	16,9	26	11	0,047
		10	M14x1,5	8011L10 71	8211L10 71	8311L10 71	ZS15-01/L10MD	12	19	19	18,9	26	11	0,047
		10	M16x1,5	8011L10 75	8211L10 75	8311L10 75	ZS15-01/L10MD16X1,5	12	22	19	21,9	27,5	12,5	0,066
		10	M18x1,5	8011L10 78	8211L10 78	8311L10 78	ZS15-01/L10MD18X1,5	12	24	19	23,9	27,5	12,5	0,075
		10	M22x1,5	8011L10 82	8211L10 82	8311L10 82	ZS15-01/L10MD22X1,5	14	27	19	26,9	29	14	0,106
		12	M14x1,5	8011L12 71	8211L12 71	8311L12 71	ZS15-01/L12MD14X1,5	12	19	22	18,9	27	12,5	0,064
		12	M16x1,5	8011L12 75	8211L12 75	8311L12 75	ZS15-01/L12MD	12	22	22	21,9	27	12,5	0,063
		12	M18x1,5	8011L12 78	8211L12 78	8311L12 78	ZS15-01/L12MD18X1,5	12	24	22	23,9	27	12,5	0,080
		12	M22x1,5	8011L12 82	8211L12 82	8311L12 82	ZS15-01/L12MD22X1,5	14	27	22	26,9	28,5	14	0,110
		15	M16x1,5	8011L15 75	8211L15 75	8311L15 75	ZS15-01/L15MD16X1,5	12	24	27	21,9	29	13,5	0,090
		15	M18x1,5	8011L15 78	8211L15 78	8311L15 78	ZS15-01/L15MD	12	24	27	23,9	29	13,5	0,095
		15	M22x1,5	8011L15 82	8211L15 82	8311L15 82	ZS15-01/L15MD22X1,5	14	27	27	26,9	30,5	15	0,124
	315	18	M18x1,5	8011L18 78	8211L18 78	8311L18 78	ZS15-01/L18MD18X1,5	12	27	32	23,9	31	14,5	0,120
		18	M22x1,5	8011L18 82	8211L18 82	8311L18 82	ZS15-01/L18MD	14	27	32	26,9	31	14,5	0,129
		22	M22x1,5	8011L22 82	8211L22 82	8311L22 82	ZS15-01/L22MD22X1,5	14	32	36	26,9	33	16,5	0,170
		22	M26x1,5	8011L22 89	8211L22 89	8311L22 89	ZS15-01/L22MD	16	32	36	31,9	33	16,5	0,176
28		M33x2	8011L28 91	8211L28 91	8311L28 91	ZS15-01/L28MD	18	41	41	39,9	34	17,5	0,247	
250	35	M42x2	8011L35 96	8211L35 96	8311L35 96	ZS15-01/L35MD	20	50	50	49,9	39	17,5	0,407	
	42	M48x2	8011L42 98	8211L42 98	8311L42 98	ZS15-01/L42MD	22	55	60	54,9	42	19	0,456	
S	630	6	M12x1,5	8011S06 67	8211S06 67	8311S06 67	ZS15-01/S6MD	12	17	17	16,9	28	13	0,045
		8	M14x1,5	8011S08 71	8211S08 71	8311S08 71	ZS15-01/S8MD	12	19	19	18,9	30	15	0,055
		10	M16x1,5	8011S10 75	8211S10 75	8311S10 75	ZS15-01/S10MD	12	22	22	21,9	31	15	0,082
		12	M18x1,5	8011S12 78	8211S12 78	8311S12 78	ZS15-01/S12MD	12	24	24	23,9	33	17	0,105
		14	M20x1,5	8011S14 80	8211S14 80	8311S14 80	ZS15-01/S14MD	14	27	27	25,9	37	19	0,148
	400	16	M22x1,5	8011S16 82	8211S16 82	8311S16 82	ZS15-01/S16MD	14	27	30	26,9	37	18,5	0,154
		20	M27x2	8011S20 86	8211S20 86	8311S20 86	ZS15-01/S20MD	16	32	36	31,9	42	20,5	0,253
		25	M33x2	8011S25 91	8211S25 91	8311S25 91	ZS15-01/S25MD	18	41	46	39,9	47	23	0,465
		30	M42x2	8011S30 96	8211S30 96	8311S30 96	ZS15-01/S30MD	20	50	50	49,9	50	23,5	0,644
		315	38	M48x2	8011S38 98	8211S38 98	8311S38 98	ZS15-01/S38MD	22	55	60	54,9	57	26

Bell code

These part numbers are provided as a general guide and correspond to double-bite ring models.

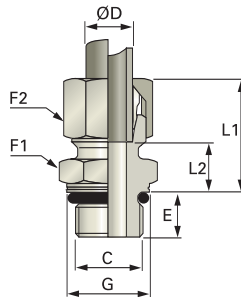


Bell code

8311L06 60 ZS 15-01/L6MD

Male stud couplings

metric parallel
O-ring
ISO 6149



	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	G	O-ring	L1	L2	kg
L	400	6	M10X1	8021L06 60	8221L06 60	8321L06 60	ZS15-01/L6MO	8,5	14	14	13,8	8,1x1,6	23	8,5	0,025
		8	M12X1,5	8021L08 67	8221L08 67	8321L08 67	ZS15-01/L8MO	11	17	17	16,8	9,3x2,2	24,5	10	0,039
		10	M14X1,5	8021L10 71	8221L10 71	8321L10 71	ZS15-01/L10MO	11	19	19	18,8	11,3x2,2	25,5	11	0,046
		12	M16X1,5	8021L12 75	8221L12 75	8321L12 75	ZS15-01/L12MO	11,5	22	22	21,8	13,3x2,2	27	12,5	0,063
		15	M18X1,5	8021L15 78	8221L15 78	8321L15 78	ZS15-01/L15MO	12,5	24	27	23,8	15,3x2,2	28,5	13,5	0,095
	315	18	M22X1,5	8021L18 82	8221L18 82	8321L18 82	ZS15-01/L18MO	13	27	32	26,8	19,3x2,2	30,5	14,5	0,129
		22	M27X2*	8021L22 86	8221L22 86	8321L22 86	ZS15-01/L22MO	16	32	36	31,8	23,6x2,9	32,5	16,5	0,176
	250	28	M33X2	8021L28 91	8221L28 91	8321L28 91	ZS15-01/L28MO	16	41	41	40,8	29,6x2,9	34	17,5	0,247
		35	M42X2	8021L35 96	8221L35 96	8321L35 96	ZS15-01/L35MO	16	50	50	49,8	38,6x2,9	39	17,5	0,407
		42	M48X2	8021L42 98	8221L42 98	8321L42 98	ZS15-01/L42MO	17,5	55	60	54,8	44,6x2,9	41,5	19	0,456
S	630	6	M12X1,5	8021S06 67	8221S06 67	8321S06 67	ZS15-01/S6MO	11	17	17	16,8	9,3x2,2	27,5	13	0,045
		8	M14X1,5	8021S08 71	8221S08 71	8321S08 71	ZS15-01/S8MO	11	19	19	18,8	11,3x2,2	29,5	15	0,055
		10	M16X1,5	8021S10 75	8221S10 75	8321S10 75	ZS15-01/S10MO	12,5	22	22	21,8	13,3x2,2	31	15	0,082
		12	M18X1,5	8021S12 78	8221S12 78	8321S12 78	ZS15-01/S12MO	14	24	24	23,8	15,3x2,2	33	17	0,105
		14	M20X1,5	8021S14 80	8221S14 80	8321S14 80	ZS15-01/S14MO	14	27	27	26,8	17,3x2,2	36,5	19	0,148
	400	16	M22X1,5	8021S16 82	8221S16 82	8321S16 82	ZS15-01/S16MO	15	27	30	26,8	19,3x2,2	36	18,5	0,154
		20	M27X2	8021S20 86	8221S20 86	8321S20 86	ZS15-01/S20MO	18,5	32	36	31,8	23,6x2,9	42	20,5	0,253
		25	M33X2	8021S25 91	8221S25 91	8321S25 91	ZS15-01/S25MO	18,5	41	46	40,8	29,6x2,9	47	23	0,465
		30	M42X2	8021S30 96	8221S30 96	8321S30 96	ZS15-01/S30MO	19	50	50	48,8	38,6x2,9	50	23,5	0,644
		315	M48X2	8021S38 98	8221S38 98	8321S38 98	ZS15-01/S38MO	21,5	55	60	54,8	44,6x2,9	56,5	26	0,889

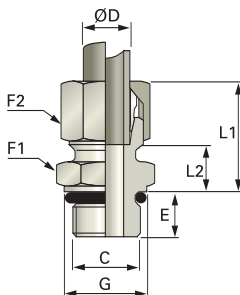
* according to DIN 3852 part 3 = M26x1.5

Male stud couplings

UN/UNF

O-ring

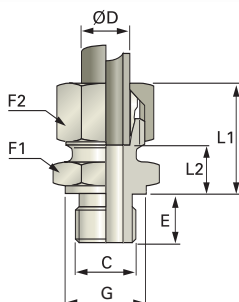
ISO 11926-2/3



	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	G	L1	L2	O-ring	
L	400	6	7/16"-20UNF	8021L06 103	8221L06 103	8321L06 103	ZS15-01/L6-7/16"-20UNF	9	17	14	16	23	8,5	8,92x1,83	0,030
		6	9/16"-18UNF	8021L06 105	8221L06 105	8321L06 105	ZS15-01/L6-9/16"-18UNF	10	19	14	17,6	25	10	11,89x1,98	0,037
		8	7/16"-20UNF	8021L08 103	8221L08 103	8321L08 103	ZS15-01/L8-7/16"-20UNF	9	17	17	16	25	10	8,92x1,83	0,032
		8	1/2"-20UNF	8021L08 104	8221L08 104	8321L08 104	ZS15-01/L8-1/2"-20UNF	9	17	17	17	25	10	10,52x1,83	0,035
		8	9/16"-18UNF	8021L08 105	8221L08 105	8321L08 105	ZS15-01/L8-9/16"-18UNF	10	19	17	17,6	25	10	11,89x1,98	0,030
		10	7/16"-20UNF	8021L10 103	8221L10 103	8321L10 103	ZS15-01/L10-7/16"-20UNF	9	17	19	16	26	11	8,92x1,83	0,040
		10	9/16"-18UNF	8021L10 105	8221L10 105	8321L10 105	ZS15-01/L10-9/16"-18UNF	10	19	19	17,6	26	11	11,89x1,98	0,046
		10	3/4"-16UNF	8021L10 107	8221L10 107	8321L10 107	ZS15-01/L10-3/4"-16UNF	11	24	19	22,3	28	13	16,36x2,2	0,060
		12	9/16"-18UNF	8021L12 105	8221L12 105	8321L12 105	ZS15-01/L12-9/16"-18UNF	10	19	22	17,6	26	11	11,89x1,98	0,050
		12	3/4"-16UNF	8021L12 107	8221L12 107	8321L12 107	ZS15-01/L12-3/4"-16UNF	11	24	22	22,3	28	13	16,36x2,2	0,070
		12	7/8"-14UNF	8021L12 108	8221L12 108	8321L12 108	ZS15-01/L12-7/8"-14UNF	12,7	27	22	25,5	29	14,3	19,18x2,46	0,075
		15	3/4"-16UNF	8021L15 107	8221L15 107	8321L15 107	ZS15-01/L15-3/4"-16UNF	11	24	27	22,3	29	14	16,36x2,2	0,095
		15	7/8"-14UNF	8021L15 108	8221L15 108	8321L15 108	ZS15-01/L15-7/8"-14UNF	12,5	27	27	25,5	30,5	15,5	19,18x2,46	0,090
		18	3/4"-16UNF	8021L18 107	8221L18 107	8321L18 107	ZS15-01/L18-3/4"-16UNF	11	27	32	22,3	31	14,5	16,36x2,2	0,125
		18	7/8"-14UNF	8021L18 108	8221L18 108	8321L18 108	ZS15-01/L18-7/8"-14UNF	12,7	27	32	25,5	31	14,8	19,18x2,46	0,132
315		22	7/8"-14UNF	8021L22 108	8221L22 108	8321L22 108	ZS15-01/L22-7/8"-14UNF	12,7	32	36	25,5	33	16,8	19,18x2,46	0,172
		22	1 1/16"-12UN	8021L22 153	8221L22 153	8321L22 153	ZS15-01/L22-1 1/16"-12UN	15	32	36	31,9	33	16,5	23,47x2,95	0,185
		22	1 5/16"-12UN	8021L22 157	8221L22 157	8321L22 157	ZS15-01/L22-1 5/16"-12UN	15	41	36	38,2	34	17,5	29,74x2,95	0,235
		28	1 1/16"-12UN	8021L28 153	8221L28 153	8321L28 153	ZS15-01/L28-1 1/16"-12UN	15	41	41	31,9	34	17,5	23,47x2,95	0,242
		28	1 5/16"-12UN	8021L28 157	8221L28 157	8321L28 157	ZS15-01/L28-1 5/16"-12UN	15	41	41	38,2	34	17,5	29,74x2,95	0,250
		35	15/16"-12UN	8021L35 157	8221L35 157	8321L35 157	ZS15-01/L35-1 5/16"-12UN	15	46	50	38,2	39	17,5	29,74x2,95	0,362
		35	15/8"-12UN	8021L35 162	8221L35 162	8321L35 162	ZS15-01/L35-1 5/8"-12UN	15	50	50	48	39	17,5	37,47x3	0,400
		42	15/8"-12UN	8021L42 162	8221L42 162	8321L42 162	ZS15-01/L42-1 5/8"-12UN	15	55	60	48	42	19	37,47x3	0,560
S		42	17/8"-12UN	8021L42 166	8221L42 166	8321L42 166	ZS15-01/L42-1 7/8"-12UN	15	17	60	55	42	19	43,69x3	0,600
	630	6	7/16"-20UN	8021S06 103	8221S06 103	8321S06 103	ZS15-01/S6-7/16"-20UNF	9	17	17	16	30	15	8,92x1,83	0,047
		8	7/16"-20UNF	8021S08 103	8221S08 103	8321S08 103	ZS15-01/S8-7/16"-20UNF	9	17	19	16	30	15	8,92x1,83	0,050
		10	9/16"-18UNF	8021S10 105	8221S10 105	8321S10 105	ZS15-01/S10-9/16"-18UNF	10	19	22	17,6	31	14,5	11,98x1,98	0,065
		12	9/16"-18UNF	8021S12 105	8221S12 105	8321S12 105	ZS15-01/S12-9/16"-18UNF	10	22	24	17,6	31	14,5	11,98x1,98	0,080
		14	3/4"-16UNF	8021S14 107	8221S14 107	8321S14 107	ZS15-01/S14-3/4"-16UNF	11	24	27	22,3	34	16	16,36x2,2	0,123
		16	7/8"-14UNF	8021S16 108	8221S16 108	8321S16 108	ZS15-01/S16-7/8"-14UNF	12,7	27	30	25,5	37	18,8	19,18x2,46	0,150
		20	7/8"-14UNF	8021S20 108	8221S20 108	8321S20 108	ZS15-01/S20-7/8"-14UNF	12,7	32	36	25,5	42	20,8	19,18x2,46	0,230
		20	1 1/16"-12UN	8021S20 153	8221S20 153	8321S20 153	ZS15-01/S20-1 1/16"-12UN	15	32	36	31,9	42	20,5	23,47x2,95	0,250
	400	25	1 1/16"-12UN	8021S25 153	8221S25 153	8321S25 153	ZS15-01/S25-1 1/16"-12UN	15	36	46	31,9	47	23	23,47x2,95	0,400
		25	1 5/16"-12UN	8021S25 157	8221S25 157	8321S25 157	ZS15-01/S25-1 5/16"-12UN	15	41	46	38,2	47	23	29,74x2,95	0,460
		30	1 5/16"-12UN	8021S30 157	8221S30 157	8321S30 157	ZS15-01/S30-1 5/16"-12UN	15	46	50	38,2	50	23,5	29,74x2,95	0,530
		30	1 5/8"-12UN	8021S30 162	8221S30 162	8321S30 162	ZS15-01/S30-1 5/8"-12UN	15	50	50	48	50	23,5	37,47x3	0,620
	315	38	1 5/8"-12UN	8021S38 162	8221S38 162	8321S38 162	ZS15-01/S38-1 5/8"-12UN	15	55	60	48	57	26	37,47x3	0,852

Male stud couplings

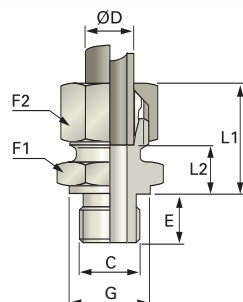
BSP parallel
sealing bite
ISO 1179-4



	PN	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	E	F1	F2	G	L1	L2	kg
LL	100	6	G1/8	8001E06 10	8101E06 10		15-01/LL6RB	8	14	12	14	20	8	0,018
		8	G1/8	8001E08 10	8101E08 10		15-01/LL8RB	8	14	14	14	21	9	0,020
L	315	6	G1/8	8001L06 10		8201L06 10	ZS15-01/L6RB	8	14	14	14	23	8,5	0,025
		6	G1/4	8001L06 13		8201L06 13	ZS15-01/L6RB1/4"	12	19	14	18	25	10	0,040
		6	G3/8	8001L06 17		8201L06 17	ZS15-01/L6RB3/8"	12	22	14	22	26	11,5	0,047
		8	G1/8	8001L08 10		8201L08 10	ZS15-01/L8RB1/8"	8	14	17	14	24,5	9,5	0,034
		8	G1/4	8001L08 13		8201L08 13	ZS15-01/L8RB	12	19	17	18	25	10	0,045
		8	G3/8	8001L08 17		8201L08 17	ZS15-01/L8RB3/8"	12	22	17	22	26,5	11,5	0,062
		8	G1/2	8001L08 21		8201L08 21	ZS15-01/L8RB1/2"	14	27	17	26	28	13	0,095
		10	G1/8	8001L10 10		8201L10 10	ZS15-01/L10RB1/8"	8	17	19	14	26	11	0,040
		10	G1/4	8001L10 13		8201L10 13	ZS15-01/L10RB	12	19	19	18	26	11	0,047
		10	G3/8	8001L10 17		8201L10 17	ZS15-01/L10RB3/8"	12	22	19	22	27,5	12,5	0,063
		10	G1/2	8001L10 21		8201L10 21	ZS15-01/L10RB1/2"	14	27	19	26	28	13	0,095
		12	G1/4	8001L12 13		8201L12 13	ZS15-01/L12RB1/4"	12	19	22	18	26	11	0,060
		12	G3/8	8001L12 17		8201L12 17	ZS15-01/L12RB	12	22	22	22	27,5	12,5	0,069
		12	G1/2	8001L12 21		8201L12 21	ZS15-01/L12RB1/2"	14	27	22	26	28	13	0,098
		12	G3/4	8001L12 27		8201L12 27	ZS15-01/L12RB3/4"	16	32	22	32	29	14	0,146
	250	15	G1/4	8001L15 13		8201L15 13	ZS15-01/L15RB1/4"	12	22	27	18	28,5	13	0,090
		15	G3/8	8001L15 17		8201L15 17	ZS15-01/L15RB3/8"	12	22	27	22	29	13,5	0,100
		15	G1/2	8001L15 21		8201L15 21	ZS15-01/L15RB	14	27	27	26	29,5	14	0,115
		15	G3/4	8001L15 27		8201L15 27	ZS15-01/L15RB3/4"	16	32	27	32	30,5	15	0,167
		18	G3/8	8001L18 17		8201L18 17	ZS15-01/L18RB3/8"	12	27	32	22	30,5	14	0,120
		18	G1/2	8001L18 21		8201L18 21	ZS15-01/L18RB	14	27	32	26	31	14,5	0,129
		18	G3/4	8001L18 27		8201L18 27	ZS15-01/L18RB3/4"	16	32	32	32	31	14,5	0,190
		22	G1/2	8001L22 21		8201L22 21	ZS15-01/L22RB1/2"	14	32	36	26	33	16,5	0,220
		22	G3/4	8001L22 27		8201L22 27	ZS15-01/L22RB	16	32	36	32	33	16,5	0,176
		22	G1	8001L22 34		8201L22 34	ZS15-01/L22RB1"	18	41	36	39	34	17,5	0,283
		28	G3/4	8001L28 27		8201L28 27	ZS15-01/L28RB3/4"	16	41	41	32	34	17,5	0,251
		28	G1	8001L28 34		8201L28 34	ZS15-01/L28RB	18	41	41	39	34	17,5	0,247
		35	G1	8001L35 34		8201L35 34	ZS15-01/L35RB1"	18	50	50	39	39	17,5	0,340
		35	G1"1/4	8001L35 42		8201L35 42	ZS15-01/L35RB	20	50	50	49	39	17,5	0,407
		42	G1"1/4	8001L42 42		8201L42 42	ZS15-01/L42RB1 1/4"	20	55	60	49	42	19	0,450
		42	G1"1/2	8001L42 49		8201L42 49	ZS15-01/L42RB	22	55	60	55	42	19	0,456

Male stud couplings

BSP parallel
sealing bite
ISO 1179-4

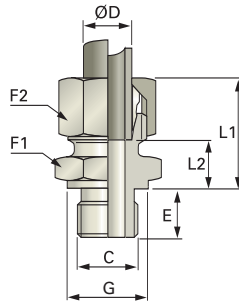


														
PN	ØD	C	Body only	Double-bite ring	Bell code		E	F1	F2	G	L1	L2		
S	PB 630*	6	G1/4	8001S06 13	8201S06 13	ZS15-01/S6RB	12	19	17	18	28	13	0,050	
		8	G1/4	8001S08 13	8201S08 13	ZS15-01/S8RB	12	19	19	18	30	15	0,055	
		8	G3/8	8001S08 17	8201S08 17	ZS15-01/S8RB3/8"	12	22	19	22	30,5	15,5	0,070	
		10	G1/4	8001S10 13	8201S10 13	ZS15-01/S10RB1/4"	12	19	22	18	30,5	14,5	0,070	
		10	G3/8	8001S10 17	8201S10 17	ZS15-01/S10RB	12	22	22	22	31	15	0,082	
		10	G1/2	8001S10 21	8201S10 21	ZS15-01/S10RB1/2"	14	27	22	26	33,5	17,5	0,110	
		12	G1/4	8001S12 13	8201S12 13	ZS15-01/S12RB1/4"	12	22	24	18	32,5	16,5	0,090	
		12	G3/8	8001S12 17	8201S12 17	ZS15-01/S12RB	12	22	24	22	33	17	0,095	
		12	G1/2	8001S12 21	8201S12 21	ZS15-01/S12RB1/2"	14	27	24	26	33,5	17,5	0,125	
		12	G3/4	8001S12 27	8201S12 27	ZS15-01/S12RB3/4"	16	32	24	32	35,5	19,5	0,130	
		14	G3/8	8001S14 17	8201S14 17	ZS15-01/S14RB3/8"	12	22	27	22	36,5	18,5	0,140	
		14	G1/2	8001S14 21	8201S14 21	ZS15-01/S14RB	14	27	27	26	37	19	0,148	
		400	16	G3/8	8001S16 17	8201S16 17	ZS15-01/S16RB3/8"	12	24	30	22	36,5	18	0,146
			16	G1/2	8001S16 21	8201S16 21	ZS15-01/S16RB	14	27	30	26	37	18,5	0,154
			16	G3/4	8001S16 27	8201S16 27	ZS15-01/S16RB3/4"	16	32	30	32	39	20,5	0,223
	20		G1/2	8001S20 21	8201S20 21	ZS15-01/S20RB1/2"	14	32	36	26	40	18,5	0,205	
	20		G3/4	8001S20 27	8201S20 27	ZS15-01/S20RB	16	32	36	32	42	20,5	0,253	
	20		G1	8001S20 34	8201S20 34	ZS15-01/S20RB1"	18	41	36	39	44	22,5	0,260	
	25		G3/4	8001S25 27	8201S25 27	ZS15-01/S25RB3/4"	16	41	46	32	47	23	0,378	
	25		G1	8001S25 34	8201S25 34	ZS15-01/S25RB	18	41	46	39	47	23	0,465	
	30		G1	8001S30 34	8201S30 34	ZS15-01/S30RB1"	18	46	50	39	50	23,5	0,640	
	30		G1"1/4	8001S30 42	8201S30 42	ZS15-01/S30RB	20	50	50	49	50	23,5	0,645	
	250	38	G1"1/4	8001S38 42	8201S38 42	ZS15-01/S38RB1 1/4"	20	55	60	49	57	26	0,880	
		38	G1"1/2	8001S38 49	8201S38 49	ZS15-01/S38RB	22	55	60	55	57	26	0,889	

* Safety factor 3.

Male stud couplings

metric parallel
sealing bite
ISO 9974-3

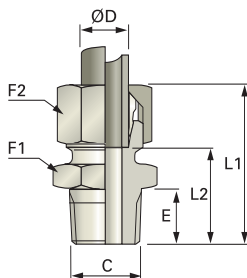


	PN	ØD	C	Body only	Double-bite ring	Bell code	E	F1	F2	G	L1	L2	kg
L	315	6	M10x1	8001L06 60	8201L06 60	ZS15-01/L6MB	8	14	14	14	23	8,5	0,025
		8	M12x1,5	8001L08 67	8201L08 67	ZS15-01/L8MB	12	17	17	17	25	10	0,040
		8	M14x1,5	8001L08 71	8201L08 71	ZS15-01/L8MB14X1,5	12	19	17	19	25	10	0,048
		8	M16x1,5	8001L08 75	8201L08 75	ZS15-01/L8MB16X1,5	12	22	17	21	26,5	11,5	0,058
		8	M18x1,5	8001L08 78	8201L08 78	ZS15-01/L8MB18X1,5	12	24	17	23	26,5	11,5	0,070
		10	M12x1,5	8001L10 67	8201L10 67	ZS15-01/L10MB12X1,5	12	17	19	17	26	11	0,047
		10	M14x1,5	8001L10 71	8201L10 71	ZS15-01/L10MB	12	19	19	19	26	11	0,047
		10	M16x1,5	8001L10 75	8201L10 75	ZS15-01/L10MB16X1,5	12	22	19	21	27,5	12,5	0,066
		10	M18x1,5	8001L10 78	8201L10 78	ZS15-01/L10MB18X1,5	12	24	19	23	27,5	12,5	0,075
		10	M22x1,5	8001L10 82	8201L10 82	ZS15-01/L10MB22X1,5	14	27	19	27	29	14	0,106
		12	M14x1,5	8001L12 71	8201L12 71	ZS15-01/L12MB14X1,5	12	19	22	19	27	12,5	0,064
		12	M16x1,5	8001L12 75	8201L12 75	ZS15-01/L12MB	12	22	22	21	27	12,5	0,063
		12	M18x1,5	8001L12 78	8201L12 78	ZS15-01/L12MB18X1,5	12	24	22	23	27	12,5	0,080
		12	M22x1,5	8001L12 82	8201L12 82	ZS15-01/L12MB22X1,5	14	27	22	27	28,5	14	0,110
		15	M16x1,5	8001L15 75	8201L15 75	ZS15-01/L15MB16X1,5	12	24	27	21	29	13,5	0,090
		15	M18x1,5	8001L15 78	8201L15 78	ZS15-01/L15MB	12	24	27	23	29	13,5	0,095
		15	M22x1,5	8001L15 82	8201L15 82	ZS15-01/L15MB22X1,5	14	27	27	27	30	15	0,124
		18	M18x1,5	8001L18 78	8201L18 78	ZS15-01/L18MB18X1,5	12	27	32	23	31	14,5	0,120
		18	M22x1,5	8001L18 82	8201L18 82	ZS15-01/L18MB	14	27	32	27	31	14,5	0,129
	250	22	M22x1,5	8001L22 82	8201L22 82	ZS15-01/L22MB22X1,5	14	32	36	27	33	16,5	0,170
		22	M26x1,5	8001L22 89	8201L22 89	ZS15-01/L22MB	16	32	36	31	33	16,5	0,176
		28	M33x2	8001L28 91	8201L28 91	ZS15-01/L28MB	18	41	41	39	34	17,5	0,247
		35	M42x2	8001L35 96	8201L35 96	ZS15-01/L35MB	20	50	50	49	39	17,5	0,407
		42	M48x2	8001L42 98	8201L42 98	ZS15-01/L42MB	22	55	60	55	42	19	0,456
S	PB 630*	6	M12x1,5	8001S06 67	8201S06 67	ZS15-01/S6MB	12	17	17	17	28	13	0,045
		8	M14x1,5	8001S08 71	8201S08 71	ZS15-01/S8MB	12	19	19	19	30	15	0,055
		10	M16x1,5	8001S10 75	8201S10 75	ZS15-01/S10MB	12	22	22	21	31	15	0,082
		12	M18x1,5	8001S12 78	8201S12 78	ZS15-01/S12MB	12	24	24	23	33	17	0,105
		12	M22x1,5	8001S12 82	8201S12 82	ZS15-01/S12MB22X1,5	14	27	24	27	33,5	17,5	0,120
		14	M20x1,5	8001S14 80	8201S14 80	ZS15-01/S14MB	14	27	27	25	37	19	0,148
	400	16	M18x1,5	8001S16 78	8201S16 78	ZS15-010/S16MB18X1,5	12	24	30	23	35	16,5	0,140
		16	M22x1,5	8001S16 82	8201S16 82	ZS15-01/S16MB	14	27	30	27	37	18,5	0,154
		20	M27x2	8001S20 86	8201S20 86	ZS15-01/S20MB	16	32	36	32	42	20,5	0,253
		25	M33x2	8001S25 91	8201S25 91	ZS15-01/S25MB	18	41	46	39	47	23	0,465
		30	M42x2	8001S30 96	8201S30 96	ZS15-01/S30MB	20	50	50	49	50	23,5	0,644
	250	38	M48x2	8001S38 98	8201S38 98	ZS15-01/S38MB	22	55	60	55	57	26	0,889

* Safety factor 3.

Male stud couplings

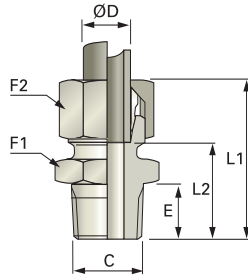
metric taper
and BSP taper
DIN 3852 form C



PN	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	E	F1	F2	L1	L2	kg
LL 100	4	M8x1	8005E04 56	8105E04 56		15-01/LL4MK	8	10	10	26	16	0,014
	5	M8x1	8005E05 56	8105E05 56		15-01/LL5MK	8	11	12	26	14,5	0,015
	6	M6x1	8005E06 52	8105E06 52		15-01/LL6MK6x1	8	11	12	26	14,5	0,020
	6	M8x1	8005E06 56	8105E06 56		15-01/LL6MK8x1	8	11	12	26	14,5	0,020
	6	M10x1	8005E06 60	8105E06 60		15-01/LL6MK	8	11	12	26	14,5	0,016
	8	M10x1	8005E08 60	8105E08 60		15-01/LL8MK	8	12	14	28	16,5	0,018
LL 100	4	R1/8	8005E04 10	8105E04 10		15-01/LL4RK	8	11	10	26	16	0,015
	5	R1/8	8005E05 10	8105E05 10		15-01/LL5RK	8	11	12	26	14,5	0,015
	6	R1/8	8005E06 10	8105E06 10		15-01/LL6RK	8	11	12	26	14,5	0,016
	8	R1/8	8005E08 10	8105E08 10		15-01/LL8RK	8	12	14	28	16,5	0,018
	10	R1/4	8005E10 13	8105E10 13		15-01/LL10RK	12	14	17	32	20,5	0,033
	12	R1/4	8005E12 13	8105E12 13		15-01/LL12RK	12	17	19	32	20	0,040
L 315	6	R1/8	8005L06 10		8205L06 10	ZS15-01/L6RK	8	14	14	31	16	0,025
	6	R1/4	8005L06 13		8205L06 13	ZS15-01/L6RK1/4"	12	14	14	34,5	20	0,032
	8	R1/8	8005L08 10		8205L08 10	ZS15-01/L8RK1/8"	8	14	17	31	16	0,032
	8	R1/4	8005L08 13		8205L08 13	ZS15-01/L8RK	12	17	17	35	20	0,040
	8	R3/8	8005L08 17		8205L08 17	ZS15-01/L8RK3/8"	12	19	17	36	21	0,049
	10	R1/4	8005L10 13		8205L10 13	ZS15-01/L10RK	12	17	19	36	21	0,047
	10	R3/8	8005L10 17		8205L10 17	ZS15-01/L10RK3/8"	12	19	19	37	22	0,058
	10	R1/2	8005L10 21		8205L10 21	ZS15-01/L10RK1/2"	14	22	19	39	24	0,088
	12	R1/4	8005L12 13		8205L12 13	ZS15-01/L12RK1/4"	12	19	22	36	21	0,048
	12	R3/8	8005L12 17		8205L12 17	ZS15-01/L12RK	12	19	22	37	22	0,063
	12	R1/2	8005L12 21		8205L12 21	ZS15-01/L12RK1/2"	14	22	22	39	24	0,088
	15	R3/8	8005L15 17		8205L15 17	ZS15-01/L15RK3/8"	12	24	27	38,5	23	0,090
	15	R1/2	8005L15 21		8205L15 21	ZS15-01/L15RK	14	24	27	39	24	0,095
	18	R1/2	8005L18 21		8205L18 21	ZS15-01/L18RK	14	27	32	43	26,5	0,129
	22	R3/4	8005L22 27		8205L22 27	ZS15-01/L22RK	16	32	36	45	28,5	0,176

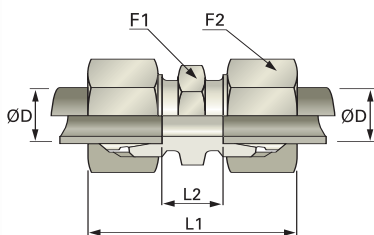
Male stud couplings

NPT



	PN	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	E	F1	F2	L1	L2	
LL	100	4	1/8	8005E04 11	8105E04 11		ZS15-01/LL4NPT	9,97	11	10	28	18	0,015
		6	1/8	8005E06 11	8105E06 11		ZS15-01/LL6NPT	9,97	11	12	28	16,5	0,015
		8	1/8	8005E08 11	8105E08 11		ZS15-01/LL8NPT	9,97	12	14	30	18,5	0,020
L	315	6	1/8	8005L06 11		8205L06 11	ZS15-01/L6NPT	9,97	12	14	32	17	0,026
		6	1/4	8005L06 14		8205L06 14	ZS15-01/L6NPT1/4"	15,1	14	14	37	22	0,034
		8	1/4	8005L08 14		8205L08 14	ZS15-01/L8NPT	15,1	17	17	38	23	0,040
		10	1/4	8005L10 14		8205L10 14	ZS15-01/L10NPT	15,1	17	19	39	24	0,048
		10	3/8	8005L10 18		8205L10 18	ZS15-01/L10NPT3/8"	15,26	19	19	39	24	0,069
		12	1/4	8005L12 14		8205L12 14	ZS15-01/L12NPT1/4"	15,1	19	22	39,5	25	0,053
	160	12	3/8	8005L12 18		8205L12 18	ZS15-01/L12NPT	15,26	19	22	39,5	25	0,065
		12	1/2	8005L12 22		8205L12 22	ZS15-01/L12NPT1/2"	19,85	22	22	44,5	30	0,094
		15	1/2	8005L15 22		8205L15 22	ZS15-01/L15NPT	19,85	24	27	46,5	31	0,090
		18	1/2	8005L18 22		8205L18 22	ZS15-01/L18NPT	19,85	27	32	48	31,5	0,135
		22	3/4	8005L22 28		8205L22 28	ZS15-01/L22NPT	20,16	32	36	50	33,5	0,190
		28	1"	8005L28 35		8205L28 35	ZS15-01/L28NPT	25	41	41	56	39,5	0,275
S	630	35	1"1/4	8005L35 43		8205L35 43	ZS15-01/L35NPT	25,62	46	50	62	40,5	0,405
		42	1"1/2	8005L42 50		8205L42 50	ZS15-01/L42NPT	26,04	55	60	65	42	0,570
		6	1/4	8005S06 14		8205S06 14	ZS15-01/S6NPT	15,1	17	17	41	26	0,050
		8	1/4	8005S08 14		8205S08 14	ZS15-01/S8NPT	15,1	17	19	43	28	0,055
		10	1/4	8005S10 14		8205S10 14	ZS15-01/S10NPT1/4"	15,1	19	22	43,5	27,5	0,070
		10	3/8	8005S10 18		8205S10 18	ZS15-01/S10NPT	15,26	19	22	43,5	27,5	0,080
	400	12	3/8	8005S12 18		8205S12 18	ZS15-01/S12NPT	15,26	22	24	46	29,5	0,100
		12	1/2	8005S12 22		8205S12 22	ZS15-01/S12NPT1/2"	19,85	24	24	51	34,5	0,130
		14	1/2	8005S14 22		8205S14 22	ZS15-01/S14NPT	19,85	24	27	54	36	0,155
		16	1/2	8005S16 22		8205S16 22	ZS15-01/S16NPT	19,85	27	30	54	35,5	0,160
		20	3/4	8005S20 28		8205S20 28	ZS15-01/S20NPT	20,16	32	36	59	37,5	0,250
		25	1"	8005S25 35		8205S25 35	ZS15-01/S25NPT	25	41	46	69	45	0,475
315	315	30	1"1/4	8005S30 43		8205S30 43	ZS15-01/S30NPT	25,62	46	50	73	46,5	0,620
		38	1"1/2	8005S38 50		8205S38 50	ZS15-01/S38NPT	26,04	55	60	79	49	0,890

Straight couplings



	PN	ØD	Body only	Single-bite ring	Double-bite ring	DiNova ring	Bell code	F1	F2	L1	L2	kg
LL	100	4	8006E04 00	8106E04 00			15-10/LL4	9	10	31	12	0,014
		5	8006E05 00	8106E05 00			15-10/LL5	11	12	32	9	0,019
		6	8006E06 00	8106E06 00			15-10/LL6	11	12	32	9	0,021
		8	8006E08 00	8106E08 00			15-10/LL8	12	14	35	12	0,026
		10	8006E10 00	8106E10 00			15-10/LL10	14	17	35	12	0,035
		12	8006E12 00	8106E12 00			15-10/LL12	17	19	35	11	0,042
L	400	6	8006L06 00		8206L06 00	8306L06 00	ZS15-10/L6	12	14	39	10	0,035
		8	8006L08 00		8206L08 00	8306L08 00	ZS15-10/L8	14	17	40	11	0,049
		10	8006L10 00		8206L10 00	8306L10 00	ZS15-10/L10	17	19	42	13	0,069
		12	8006L12 00		8206L12 00	8306L12 00	ZS15-10/L12	19	22	43	14	0,085
	315	15	8006L15 00		8206L15 00	8306L15 00	ZS15-10/L15	24	27	46	16	0,138
		18	8006L18 00		8206L18 00	8306L18 00	ZS15-10/L18	27	32	48	16	0,195
		22	8006L22 00		8206L22 00	8306L22 00	ZS15-10/L22	32	36	52	20	0,262
	250	28	8006L28 00		8206L28 00	8306L28 00	ZS15-10/L28	41	41	54	21	0,315
		35	8006L35 00		8206L35 00	8306L35 00	ZS15-10/L35	46	50	63	20	0,494
		42	8006L42 00		8206L42 00	8306L42 00	ZS15-10/L42	55	60	66	21	0,728
S	630	6	8006S06 00		8206S06 00	8306S06 00	ZS15-10/S6	14	17	45	16	0,059
		8	8006S08 00		8206S08 00	8306S08 00	ZS15-10/S8	17	19	47	18	0,078
		10	8006S10 00		8206S10 00	8306S10 00	ZS15-10/S10	19	22	49	17	0,110
		12	8006S12 00		8206S12 00	8306S12 00	ZS15-10/S12	22	24	51	19	0,136
		14	8006S14 00		8206S14 00	8306S14 00	ZS15-10/S14	24	27	57	22	0,182
		16	8006S16 00		8206S16 00	8306S16 00	ZS15-10/S16	27	30	57	21	0,223
	400	20	8006S20 00		8206S20 00	8306S20 00	ZS15-10/S20	32	36	66	23	0,347
		25	8006S25 00		8206S25 00	8306S25 00	ZS15-10/S25	41	46	74	26	0,669
		30	8006S30 00		8206S30 00	8306S30 00	ZS15-10/S30	46	50	80	27	0,809
		315	8006S38 00		8206S38 00	8306S38 00	ZS15-10/S38	55	60	90	29	1,194

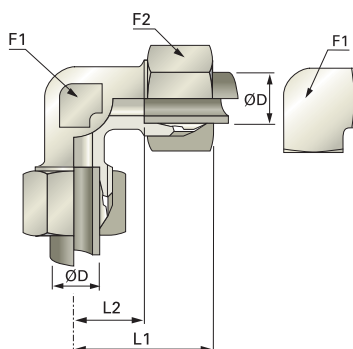
Straight reducing couplings



	PN	ØD1	ØD2	Body only	Single-bite ring	Double-bite ring	DiNova ring	Bell code	F1	F2	F3	L1	L2	kg
LL	100	6	4	8006E06 04	8106E06 04			15-14/LL6-4	11	12	10	31,5	10,5	0,021
		8	4	8006E08 04	8106E08 04			15-14/LL8-4	12	14	10	33,5	12,5	0,022
		8	6	8006E08 06	8106E08 06			15-14/LL8-6	12	14	12	34	11	0,024
L	400	8	6	8006L08 06		8206L08 06	8306L08 06	ZS15-14/L8-6	14	17	14	40	11	0,042
		10	6	8006L10 06		8206L10 06	8306L10 06	ZS15-14/L10-6	17	19	14	41	12	0,052
		10	8	8006L10 08		8206L10 08	8306L10 08	ZS15-14/L10-8	17	19	17	41	12	0,058
		12	6	8006L12 06		8206L12 06	8306L12 06	ZS15-14/L12-6	19	22	14	42	13	0,063
		12	8	8006L12 08		8206L12 08	8306L12 08	ZS15-14/L12-8	19	22	17	42	13	0,070
		12	10	8006L12 10		8206L12 10	8306L12 10	ZS15-14/L12-10	19	22	19	43	14	0,077
		15	6	8006L15 06		8206L15 06	8306L15 06	ZS15-14/L15-6	24	27	14	43,5	14	0,095
		15	8	8006L15 08		8206L15 08	8306L15 08	ZS15-14/L15-8	24	27	17	43,5	14	0,110
		15	10	8006L15 10		8206L15 10	8306L15 10	ZS15-14/L15-10	24	27	19	44,5	15	0,115
	315	15	12	8006L15 12		8206L15 12	8306L15 12	ZS15-14/L15-12	24	27	22	44,5	15	0,120
		18	8	8006L18 08		8206L18 08	8306L18 08	ZS15-14/L18-8	27	32	17	45	14,5	0,145
		18	10	8006L18 10		8206L18 10	8306L18 10	ZS15-14/L18-10	27	32	19	46	15,5	0,150
		18	12	8006L18 12		8206L18 12	8306L18 12	ZS15-14/L18-12	27	32	22	46	15,5	0,190
		18	15	8006L18 15		8206L18 15	8306L18 15	ZS15-14/L18-15	27	32	27	47,5	16,5	0,175
		22	12	8006L22 12		8206L22 12	8306L22 12	ZS15-14/L22-12	32	36	22	48	17,5	0,188
		22	15	8006L22 15		8206L22 15	8306L22 15	ZS15-14/L22-15	32	36	27	49,5	18,5	0,225
		22	18	8006L22 18		8206L22 18	8306L22 18	ZS15-14/L22-18	32	36	32	50	18	0,250
	250	28	15	8006L28 15		8206L28 15	8306L28 15	ZS15-14/L28-15	41	41	27	51	19,5	0,256
		28	18	8006L28 18		8206L28 18	8306L28 18	ZS15-14/L28-18	41	41	32	51,5	19	0,307
		28	22	8006L28 22		8206L28 22	8306L28 22	ZS15-14/L28-22	41	41	36	53,5	21	0,309
		35	22	8006L35 22		8206L35 22	8306L35 22	ZS15-14/L35-22	46	50	36	58,5	21	0,421
		35	28	8006L35 28		8206L35 28	8306L35 28	ZS15-14/L35-28	46	50	41	59	21	0,455
S	630	8	6	8006S08 06		8206S08 06	8306S08 06	ZS15-14/S8-6	17	19	17	47	18	0,068
		10	6	8006S10 06		8206S10 06	8306S10 06	ZS15-14/S10-6	19	22	17	48	17,5	0,090
		10	8	8006S10 08		8206S10 08	8306S10 08	ZS15-14/S10-8	19	22	19	48	17,5	0,093
		12	6	8006S12 06		8206S12 06	8306S12 06	ZS15-14/S12-6	22	24	17	50	19,5	0,107
		12	8	8006S12 08		8206S12 08	8306S12 08	ZS15-14/S12-8	22	24	19	50	19,5	0,112
		12	10	8006S12 10		8206S12 10	8306S12 10	ZS15-14/S12-10	22	24	22	51	19	0,128
		14	10	8006S14 10		8206S14 10	8306S14 10	ZS15-14/S14-10	24	27	22	54	20,5	0,154
		14	12	8006S14 12		8206S14 12	8306S14 12	ZS15-14/S14-12	24	27	24	54	20,5	0,159
		16	10	8006S16 10		8206S16 10	8306S16 10	ZS15-14/S16-10	27	30	22	54	20	0,186
	400	16	12	8006S16 12		8206S16 12	8306S16 12	ZS15-14/S16-12	27	30	24	54	20	0,187
		16	14	8006S16 14		8206S16 14	8306S16 14	ZS15-14/S16-14	27	30	27	57	21,5	0,206
		20	10	8006S20 10		8206S20 10	8306S20 10	ZS15-14/S20-10	32	36	22	59,5	22	0,261
		20	12	8006S20 12		8206S20 12	8306S20 12	ZS15-14/S20-12	32	36	24	63,5	26	0,301
		20	14	8006S20 14		8206S20 14	8306S20 14	ZS15-14/S20-14	32	36	27	62,5	23,5	0,302
		20	16	8006S20 16		8206S20 16	8306S20 16	ZS15-14/S20-16	32	36	30	62,5	23	0,303
		25	16	8006S25 16		8206S25 16	8306S25 16	ZS15-14/S25-16	41	46	30	67,5	25,5	0,552
		25	20	8006S25 20		8206S25 20	8306S25 20	ZS15-14/S25-20	41	46	36	71	25,5	0,564
		30	20	8006S30 20		8206S30 20	8306S30 20	ZS15-14/S30-20	46	50	36	74	26	0,628
		30	25	8006S30 25		8206S30 25	8306S30 25	ZS15-14/S30-25	46	50	46	77	26,5	0,755
	315	38	30	8006S38 30		8206S38 30	8306S38 30	ZS15-14/S38-30	55	60	50	86,5	29,5	1,088

Other dimensions are available upon request.

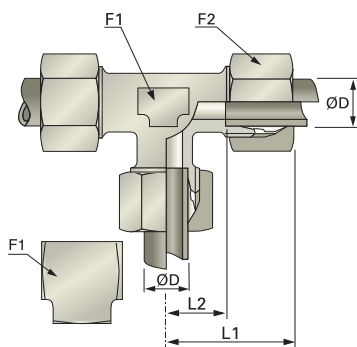
Equal elbows



	PN	ØD	Body only	Single-bite ring	Double-bite ring	DiNova ring	Bell code	F1*	F2	L1	L2	
LL	100	4	8002E04 00	8102E04 00			15-11/LL4	9	10	21	11	0,023
		6	8002E06 00	8102E06 00			15-11/LL6	11	12	21	9,5	0,027
		8	8002E08 00	8102E08 00			15-11/LL8	12	14	23	11,5	0,037
		10	8002E10 00	8102E10 00			15-11/LL10	14	17	27	15,5	0,051
		12	8002E12 00	8102E12 00			15-11/LL12	17	19	27	15	0,072
L	400	6	8002L06 00		8202L06 00	8302L06 00	ZS15-11/L6	12	14	27	12	0,051
		8	8002L08 00		8202L08 00	8302L08 00	ZS15-11/L8	14	17	29	14	0,075
		10	8002L10 00		8202L10 00	8302L10 00	ZS15-11/L10	17	19	30	15	0,106
		12	8002L12 00		8202L12 00	8302L12 00	ZS15-11/L12	19	22	32	17	0,137
		15	8002L15 00		8202L15 00	8302L15 00	ZS15-11/L15	19	27	36	21	0,158
	315	18	8002L18 00		8202L18 00	8302L18 00	ZS15-11/L18	24	32	40	23,5	0,239
		22	8002L22 00		8202L22 00	8302L22 00	ZS15-11/L22	27	36	44	27,5	0,317
	250	28	8002L28 00		8202L28 00	8302L28 00	ZS15-11/L28	36	41	47	30,5	0,420
		35	8002L35 00		8202L35 00	8302L35 00	ZS15-11/L35	41	50	56	34,5	0,759
		42	8002L42 00		8202L42 00	8302L42 00	ZS15-11/L42	50	60	63	40	1,078
S	630	6	8002S06 00		8202S06 00	8302S06 00	ZS15-11/S6	14	17	31	16	0,086
		8	8002S08 00		8202S08 00	8302S08 00	ZS15-11/S8	17	19	32	17	0,112
		10	8002S10 00		8202S10 00	8302S10 00	ZS15-11/S10	19	22	34	17,5	0,165
		12	8002S12 00		8202S12 00	8302S12 00	ZS15-11/S12	22	24	38	21,5	0,216
		14	8002S14 00		8202S14 00	8302S14 00	ZS15-11/S14	19	27	40	22	0,207
	400	16	8002S16 00		8202S16 00	8302S16 00	ZS15-11/S16	24	30	43	24,5	0,258
		20	8002S20 00		8202S20 00	8302S20 00	ZS15-11/S20	27	36	48	26,5	0,407
		25	8002S25 00		8202S25 00	8302S25 00	ZS15-11/S25	36	46	54	30	0,776
		30	8002S30 00		8202S30 00	8302S30 00	ZS15-11/S30	41	50	62	35,5	0,974
	315	38	8002S38 00		8202S38 00	8302S38 00	ZS15-11/S38	50	60	72	41	1,318

* Models ØD 4 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

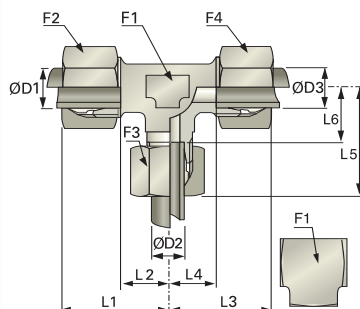
Equal tees



	PN	ØD	Body only	Single-bite ring	Double-bite ring	DiNova ring	Bell code	F1*	F2	L1	L2	kg
LL	100	4	8004E04 00	8104E04 00			15-12/LL4	9	10	21	11	0,031
		6	8004E06 00	8104E06 00			15-12/LL6	11	12	21	9,5	0,036
		8	8004E08 00	8104E08 00			15-12/LL8	12	14	23	11,5	0,052
L	400	6	8004L06 00		8204L06 00	8304L06 00	ZS15-12/L6	12	14	27	12	0,071
		8	8004L08 00		8204L08 00	8304L08 00	ZS15-12/L8	14	17	29	14	0,101
		10	8004L10 00		8204L10 00	8304L10 00	ZS15-12/L10	17	19	30	15	0,137
		12	8004L12 00		8204L12 00	8304L12 00	ZS15-12/L12	19	22	32	17	0,174
		15	8004L15 00		8204L15 00	8304L15 00	ZS15-12/L15	19	27	36	21	0,244
	315	18	8004L18 00		8204L18 00	8304L18 00	ZS15-12/L18	24	32	40	23,5	0,353
		22	8004L22 00		8204L22 00	8304L22 00	ZS15-12/L22	27	36	44	27,5	0,473
	250	28	8004L28 00		8204L28 00	8304L28 00	ZS15-12/L28	36	41	47	30,5	0,737
		35	8004L35 00		8204L35 00	8304L35 00	ZS15-12/L35	41	50	56	34,5	0,901
		42	8004L42 00		8204L42 00	8304L42 00	ZS15-12/L42	50	60	63	40	1,484
S	630	6	8004S06 00		8204S06 00	8304S06 00	ZS15-12/S6	14	17	31	16	0,118
		8	8004S08 00		8204S08 00	8304S08 00	ZS15-12/S8	17	19	32	17	0,148
		10	8004S10 00		8204S10 00	8304S10 00	ZS15-12/S10	19	22	34	17,5	0,215
		12	8004S12 00		8204S12 00	8304S12 00	ZS15-12/S12	22	24	38	21,5	0,284
		14	8004S14 00		8204S14 00	8304S14 00	ZS15-12/S14	19	27	40	22	0,295
		16	8004S16 00		8204S16 00	8304S16 00	ZS15-12/S16	24	30	43	24,5	0,387
	400	20	8004S20 00		8204S20 00	8304S20 00	ZS15-12/S20	27	36	48	26,5	0,590
		25	8004S25 00		8204S25 00	8304S25 00	ZS15-12/S25	36	46	54	30	1,096
		30	8004S30 00		8204S30 00	8304S30 00	ZS15-12/S30	41	50	62	35,5	1,313
		315	8004S38 00		8204S38 00	8304S38 00	ZS15-12/S38	50	60	72	41	2,027
		38										

* Models ØD 4 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Reducing tee couplings



	PN	ØD1	ØD2	ØD3	Body only	Double-bite ring	DiNova ring	Bell code	F1*	F2	F3	F4	L1	L2	L3	L4	L5	L6		
L	400	6	10	6	8004L06 10	8204L06 10	8304L06 10	ZS15-16/L6-10-6	17	14	19	14	30	15	30	15	30	15	0,108	
		8	6	8	8004L08 06	8204L08 06	8304L08 06	ZS15-16/L8-6-8	14	17	14	17	29	14	29	14	29	14	0,099	
		8	10	8	8004L08 10	8204L08 10	8304L08 10	ZS15-16/L8-10-8	17	17	19	17	30	15	30	15	30	15	0,127	
		10	6	10	8004L10 06	8204L10 06	8304L10 06	ZS15-16/L10-6-10	17	19	14	19	30	15	30	15	30	15	0,122	
		10	8	10	8004L10 08	8204L10 08	8304L10 08	ZS15-16/L10-8-10	17	19	17	19	30	15	30	15	30	15	0,128	
		10	15	10	8004L10 15	8204L10 15	8304L10 15	ZS15-16/L10-15-10	19	19	27	19	36	21	36	21	36	21	0,225	
		12	6	12	8004L12 06	8204L12 06	8304L12 06	ZS15-16/L12-6-12	19	22	14	22	32	17	32	17	32	17	0,160	
		12	8	12	8004L12 08	8204L12 08	8304L12 08	ZS15-16/L12-8-12	19	22	17	22	32	17	32	17	32	17	0,161	
		12	10	12	8004L12 10	8204L12 10	8304L12 10	ZS15-16/L12-10-12	19	22	19	22	32	17	32	17	32	17	0,163	
		15	6	15	8004L15 06	8204L15 06	8304L15 06	ZS15-16/L15-6-15	19	27	14	27	36	21	36	21	36	21	0,210	
		15	8	15	8004L15 08	8204L15 08	8304L15 08	ZS15-16/L15-8-15	19	27	17	27	36	21	36	21	36	21	0,224	
		15	10	15	8004L15 10	8204L15 10	8304L15 10	ZS15-16/L15-10-15	19	27	19	27	36	21	36	21	36	21	0,225	
	15	12	15	8004L15 12	8204L15 12	8304L15 12	ZS15-16/L15-12-15	19	27	22	27	36	21	36	21	36	21	0,235		
	315	15	18	15	8004L15 18	8204L15 18	8304L15 18	ZS15-16/L15-18-15	24	27	32	27	39	24	39	24	40	23,5	0,327	
		18	12	18	8004L18 12	8204L18 12	8304L18 12	ZS15-16/L18-12-18	24	32	22	32	40	23,5	40	23,5	39	24	0,317	
		18	15	18	8004L18 15	8204L18 15	8304L18 15	ZS15-16/L18-15-18	24	32	27	32	40	23,5	40	23,5	39	24	0,343	
		22	10	22	8004L22 10	8204L22 10	8304L22 10	ZS15-16/L22-10-22	27	36	19	36	44	27,5	44	27,5	43	28	0,435	
		22	12	22	8004L22 12	8204L22 12	8304L22 12	ZS15-16/L22-12-22	27	36	22	36	44	27,5	44	27,5	43	28	0,430	
		22	15	22	8204L22 15	8204L22 15	8304L22 15	ZS15-16/L22-15-22	27	36	27	36	44	27,5	44	27,5	43	28	0,472	
		22	18	22	8004L22 18	8204L22 18	8304L22 18	ZS15-16/L22-18-22	27	36	32	36	44	27,5	44	27,5	44	27,5	0,470	
		28	10	28	8004L28 10	8204L28 10	8304L28 10	ZS15-16/L28-10-28	36	41	19	41	47	30,5	47	30,5	46	31	0,530	
		250	28	12	28	8004L28 12	8204L28 12	8304L28 12	ZS15-16/L28-12-28	36	41	22	41	47	30,5	47	30,5	46	31	0,542
			28	15	28	8004L28 15	8204L28 15	8304L28 15	ZS15-16/L28-15-28	36	41	27	41	47	30,5	47	30,5	46	31	0,561
			28	18	28	8004L28 18	8204L28 18	8304L28 18	ZS15-16/L28-18-28	36	41	32	41	47	30,5	47	30,5	47	30,5	0,586
			28	22	28	8004L28 22	8204L28 22	8304L28 22	ZS15-16/L28-22-28	36	41	36	41	47	30,5	47	30,5	47	30,5	0,558
	S	400	16	12	16	8004S16 12	8204S16 12	8304S16 12	ZS15-16/S16-12-16	24	30	24	30	43	24,5	43	24,5	42	25,5	0,360

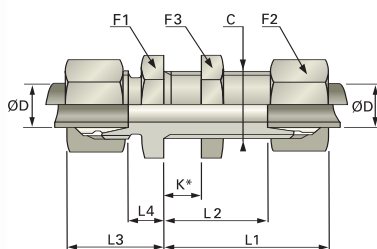
* Models ØD 4 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Equal crosses



	PN	ØD	 Body only	 Double-bite ring	 DiNova ring	Bell code	F1	F2	L1	L2	
L	400	6	8007L06 00	8207L06 00	8307L06 00	ZS15-13/L6	12	14	27	12	0,077
		8	8007L08 00	8207L08 00	8307L08 00	ZS15-13/L8	12	17	29	14	0,109
		10	8007L10 00	8207L10 00	8307L10 00	ZS15-13/L10	14	19	30	15	0,155
		12	8007L12 00	8207L12 00	8307L12 00	ZS15-13/L12	17	22	32	17	0,192
		15	8007L15 00	8207L15 00	8307L15 00	ZS15-13/L15	19	27	36	21	0,311
	315	18	8007L18 00	8207L18 00	8307L18 00	ZS15-13/L18	24	32	40	23,5	0,483
		22	8007L22 00	8207L22 00	8307L22 00	ZS15-13/L22	27	36	44	27,5	0,724
	250	28	8007L28 00	8207L28 00	8307L28 00	ZS15-13/L28	36	41	47	30,5	1,010
		35	8007L35 00	8207L35 00	8307L35 00	ZS15-13/L35	41	50	56	34,5	1,228
			42	8007L42 00	8207L42 00	8307L42 00	ZS15-13/L42	50	60	63	40
S	630	6	8007S06 00	8207S06 00	8307S06 00	ZS15-13/S6	12	17	31	16	0,123
		8	8007S08 00	8207S08 00	8307S08 00	ZS15-13/S8	14	19	32	17	0,148
		10	8007S10 00	8207S10 00	8307S10 00	ZS15-13/S10	17	22	34	17,5	0,230
		12	8007S12 00	8207S12 00	8307S12 00	ZS15-13/S12	17	24	38	21,5	0,282
		14	8007S14 00	8207S14 00	8307S14 00	ZS15-13/S14	19	27	40	22	0,354
	400	16	8007S16 00	8207S16 00	8307S16 00	ZS15-13/S16	24	30	43	24,5	0,451
		20	8007S20 00	8207S20 00	8307S20 00	ZS15-13/S20	27	36	48	26,5	0,704
		25	8007S25 00	8207S25 00	8307S25 00	ZS15-13/S25	36	46	54	30	1,402
		30	8007S30 00	8207S30 00	8307S30 00	ZS15-13/S30	41	50	62	35,5	1,761
		315	38	8007S38 00	8207S38 00	8307S38 00	ZS15-13/S38	50	60	72	41

Bulkhead straight couplings

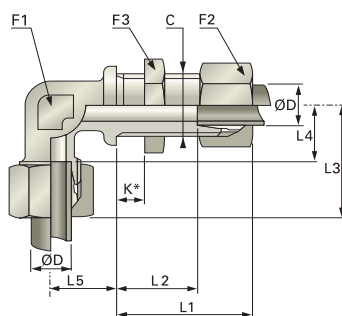


	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	F1	F2	F3	L1	L2	L3	L4	kg
L	400	6	M12x1,5	8V16L06 00	8216L06 00	8316L06 00	ZS15-22/L6	17	14	17	42	27	22	7	0,067
		8	M14x1,5	8V16L08 00	8216L08 00	8316L08 00	ZS15-22/L8	19	17	19	42	27	23	8	0,084
		10	M16x1,5	8V16L10 00	8216L10 00	8316L10 00	ZS15-22/L10	22	19	22	43	28	25	10	0,125
		12	M18x1,5	8V16L12 00	8216L12 00	8316L12 00	ZS15-22/L12	24	22	24	44	29	25	10	0,147
		15	M22x1,5	8V16L15 00	8216L15 00	8316L15 00	ZS15-22/L15	27	27	30	46	31	27	12	0,228
	315	18	M26x1,5	8V16L18 00	8216L18 00	8316L18 00	ZS15-22/L18	32	32	36	49	32,5	29	13,5	0,332
		22	M30x2	8V16L22 00	8216L22 00	8316L22 00	ZS15-22/L22	36	36	41	51	34,5	33	16,5	0,415
	250	28	M36x2	8V16L28 00	8216L28 00	8316L28 00	ZS15-22/L28	41	41	46	52	35,5	35	18,5	0,525
		35	M45x2	8V16L35 00	8216L35 00	8316L35 00	ZS15-22/L35	50	50	55	58	36,5	40	18,5	0,800
		42	M52x2	8V16L42 00	8216L42 00	8316L42 00	ZS15-22/L42	60	60	65	59	36	42	19	1,193
S	630	6	M14x1,5	8V16S06 00	8216S06 00	8316S06 00	ZS15-22/S6	19	17	19	44	29	27	12	0,096
		8	M16x1,5	8V16S08 00	8216S08 00	8316S08 00	ZS15-22/S8	22	19	22	44	29	28	13	0,124
		10	M18x1,5	8V16S10 00	8216S10 00	8316S10 00	ZS15-22/S10	24	22	24	46	29,5	31	14,5	0,181
		12	M20x1,5	8V16S12 00	8216S12 00	8316S12 00	ZS15-22/S12	27	24	27	47	30,5	31	14,5	0,210
		14	M22x1,5	8V16S14 00	8216S14 00	8316S14 00	ZS15-22/S14	30	27	30	50	32	35	17	0,267
	400	16	M24x1,5	8V16S16 00	8216S16 00	8316S16 00	ZS15-22/S16	32	30	32	50	31,5	35	16,5	0,310
		20	M30x2	8V16S20 00	8216S20 00	8316S20 00	ZS15-22/S20	36	36	41	56	33,5	39	17,5	0,545
		25	M36x2	8V16S25 00	8216S25 00	8316S25 00	ZS15-22/S25	46	46	46	59	35	44	20	0,890
		30	M42x2	8V16S30 00	8216S30 00	8316S30 00	ZS15-22/S30	50	50	50	64	37,5	48	21,5	1,077
	315	38	M52x2	8V16S38 00	8216S38 00	8316S38 00	ZS15-22/S38	65	60	65	68	37	53	22	1,438

* K = 16 mm max.

Bodies only are delivered with lock nut. Bodies only without lock nut are available upon request.

Bulkhead elbow couplings

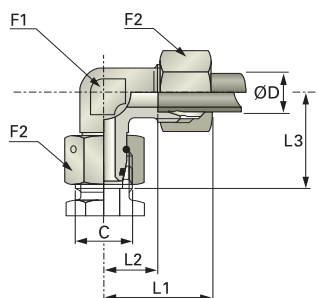


	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	F1	F2	F3	L1	L2	L3	L4	L5	kg
L	400	6	M12x1,5	8V12L06 00	8212L06 00	8312L06 00	ZS15/1-22/L6	12	14	17	42	27	27	12	14	0,067
		8	M14x1,5	8V12L08 00	8212L08 00	8312L08 00	ZS15/1-22/L8	12	17	19	42	27	29	14	17	0,099
		10	M16x1,5	8V12L10 00	8212L10 00	8312L10 00	ZS15/1-22/L10	14	19	22	43	28	30	15	18	0,135
		12	M18x1,5	8V12L12 00	8212L12 00	8312L12 00	ZS15/1-22/L12	17	22	24	44	29	32	17	20	0,187
		15	M22x1,5	8V12L15 00	8212L15 00	8312L15 00	ZS15/1-22/L15	19	27	30	46	31	36	21	23	0,273
	315	18	M26x1,5	8V12L18 00	8212L18 00	8312L18 00	ZS15/1-22/L18	24	32	36	49	32,5	40	23,5	24	0,372
		22	M30x2	8V12L22 00	8212L22 00	8312L22 00	ZS15/1-22/L22	27	36	41	51	34,5	44	27,5	30	0,465
	250	28	M36x2	8V12L28 00	8212L28 00	8312L28 00	ZS15/1-22/L28	36	41	46	52	35,5	47	30,5	34	0,640
		35	M45x2	8V12L35 00	8212L35 00	8312L35 00	ZS15/1-22/L35	41	50	55	58	36,5	56	34,5	39	0,994
		42	M52x2	8V12L42 00	8212L42 00	8312L42 00	ZS15/1-22/L42	50	60	65	59	36	63	40	43	1,563
S	630	6	M14x1,5	8V12S06 00	8212S06 00	8312S06 00	ZS15/1-22/S6	12	17	19	44	29	31	16	17	0,096
		8	M16x1,5	8V12S08 00	8212S08 00	8312S08 00	ZS15/1-22/S8	14	19	22	44	29	32	17	18	0,124
		10	M18x1,5	8V12S10 00	8212S10 00	8312S10 00	ZS15/1-22/S10	17	22	24	46	29,5	34	17,5	20	0,181
		12	M20x1,5	8V12S12 00	8212S12 00	8312S12 00	ZS15/1-22/S12	17	24	27	47	30,5	38	21,5	21	0,225
		14	M22x1,5	8V12S14 00	8212S14 00	8312S14 00	ZS15/1-22/S14	19	27	30	50	32	40	22	23	0,287
	400	16	M24x1,5	8V12S16 00	8212S16 00	8312S16 00	ZS15/1-22/S16	24	30	32	50	31,5	43	24,5	24	0,365
		20	M30x2	8V12S20 00	8212S20 00	8312S20 00	ZS15/1-22/S20	27	36	41	55	33,5	48	26,5	30	0,580
		25	M36x2	8V12S25 00	8212S25 00	8312S25 00	ZS15/1-22/S25	36	46	46	59	35	54	30	34	1,000
		30	M42x2	8V12S30 00	8212S30 00	8312S30 00	ZS15/1-22/S30	41	50	50	68	37,5	66	35,5	39	1,122
	315	38	M52x2	8V12S38 00	8212S38 00	8312S38 00	ZS15/1-22/S38	50	60	65	68	37	72	41	43	1,758

* K = 16 mm max.

Adjustable and standpipe elbows (DKO)

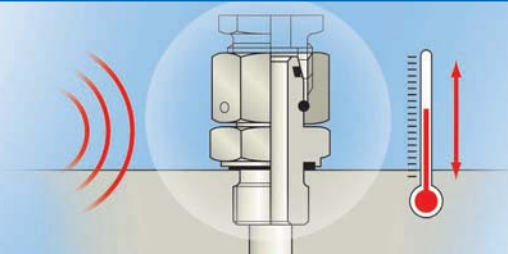
24° sealing cone and O-ring



	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	F1*	F2	L1	L2	L3	O-ring	
L	400	6	M12x1,5	8072L06 00	8272L06 00	8372L06 00	ZS14/1-29/L6V-DM	12	14	27	12	26	4x1,5	0,045
		8	M14x1,5	8072L08 00	8272L08 00	8372L08 00	ZS14/1-29/L8V-DM	14	17	29	14	27,5	6x1,5	0,057
		10	M16x1,5	8072L10 00	8272L10 00	8372L10 00	ZS14/1-29/L10V-DM	17	19	30	15	29	7,5x1,5	0,069
		12	M18x1,5	8072L12 00	8272L12 00	8372L12 00	ZS14/1-29/L12V-DM	19	22	32	17	29,5	9x1,5	0,093
		15	M22x1,5	8072L15 00	8272L15 00	8372L15 00	ZS14/1-29/L15V-DM	19	27	36	21	32,5	12x2	0,160
	315	18	M26x1,5	8072L18 00	8272L18 00	8372L18 00	ZS14/1-29/L18V-DM	24	32	40	23,5	35,5	15x2	0,232
		22	M30x2	8072L22 00	8272L22 00	8372L22 00	ZS14/1-29/L22V-DM	27	36	44	27,5	38,5	20x2	0,313
	250	28	M36x2	8072L28 00	8272L28 00	8372L28 00	ZS14/1-29/L28V-DM	36	41	47	30,5	41,5	26x2	0,426
		35	M45x2	8072L35 00	8272L35 00	8372L35 00	ZS14/1-29/L35V-DM	41	50	56	34,5	51	32x2,5	0,643
		42	M52x2	8072L42 00	8272L42 00	8372L42 00	ZS14/1-29/L42V-DM	50	60	63	40	56	38x2,5	1,013
S	630	6	M14x1,5	8072S06 00	8272S06 00	8372S06 00	ZS14/1-29/S6V-DM	14	17	31	16	27	4x1,5	0,063
		8	M16x1,5	8072S08 00	8272S08 00	8372S08 00	ZS14/1-29/S8V-DM	17	19	32	17	27,5	6x1,5	0,078
		10	M18x1,5	8072S10 00	8272S10 00	8372S10 00	ZS14/1-29/S10V-DM	19	22	34	17,5	30	7,5x1,5	0,117
		12	M20x1,5	8072S12 00	8272S12 00	8372S12 00	ZS14/1-29/S12V-DM	22	24	38	21,5	31	9x1,5	0,140
		14	M22x1,5	8072S14 00	8272S14 00	8372S14 00	ZS14/1-29/S14V-DM	19	27	40	22	35	10x2	0,196
	400	16	M24x1,5	8072S16 00	8272S16 00	8372S16 00	ZS14/1-29/S16V-DM	24	30	43	24,5	36,5	12x2	0,252
		20	M30x2	8072S20 00	8272S20 00	8372S20 00	ZS14/1-29/S20V-DM	27	36	48	26,5	44,5	16,3x2,4	0,401
		25	M36x2	8072S25 00	8272S25 00	8372S25 00	ZS14/1-29/S25V-DM	36	46	54	30	50	20,3x2,4	0,727
		30	M42x2	8072S30 00	8272S30 00	8372S30 00	ZS14/1-29/S30V-DM	41	50	62	35,5	55	25,3x2,4	0,990
	315	38	M52x2	8072S38 00	8272S38 00	8372S38 00	ZS14/1-29/S38V-DM	50	60	72	41	63	33,3x2,4	1,439

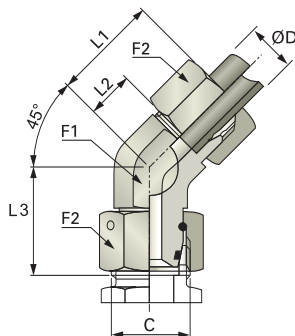
* Models ØD 6 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Couplings with 24° sealing cone and O-ring ensure high safety, particularly when strong vibration, whip-lash and temperature fluctuations may be present.



Adjustable and standpipe 45° elbows (DKO)

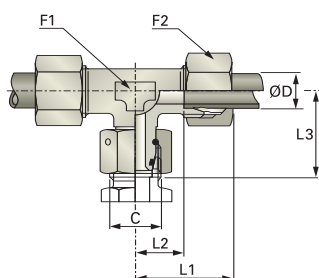
24° sealing cone and O-ring



	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	F1	F2	L1	L2	L3	O-ring	kg
L	400	6	M12x1,5	8070L06 00	8270L06 00	8370L06 00	ZS14/7-29/L6V-DM	14	14	24	9	26	4x1,5	0,050
		8	M14x1,5	8070L08 00	8270L08 00	8370L08 00	ZS14/7-29/L8V-DM	14	17	27	12	27,5	6x1,5	0,069
		10	M16x1,5	8070L10 00	8270L10 00	8370L10 00	ZS14/7-29/L10V-DM	19	19	27	12	29	7,5x1,5	0,101
		12	M18x1,5	8070L12 00	8270L12 00	8370L12 00	ZS14/7-29/L12V-DM	19	22	28	14	29,5	9x1,5	0,119
		15	M22x1,5	8070L15 00	8270L15 00	8370L15 00	ZS14/7-29/L15V-DM	22	27	32	17	32,5	12x2	0,189
	315	18	M26x1,5	8070L18 00	8270L18 00	8370L18 00	ZS14/7-29/L18V-DM	27	32	33	17	35,5	15x2	0,285
		22	M30x2	8070L22 00	8270L22 00	8370L22 00	ZS14/7-29/L22V-DM	30	36	35	19	38,5	20x2	0,348
	250	28	M36x2	8070L28 00	8270L28 00	8370L28 00	ZS14/7-29/L28V-DM	36	41	40	23	41,5	26x2	0,450
		35	M45x2	8070L35 00	8270L35 00	8370L35 00	ZS14/7-29/L35V-DM	50	50	48	27	51	32x2,5	0,959
		42	M52x2	8070L42 00	8270L42 00	8370L42 00	ZS14/7-29/L42V-DM	50	60	49	26	56	38x2,5	1,080
S	630	6	M14x1,5	8070S06 00	8270S06 00	8370S06 00	ZS14/7-29/S6V-DM	14	17	24	9	27	4x1,5	0,070
		8	M16x1,5	8070S08 00	8270S08 00	8370S08 00	ZS14/7-29/S8V-DM	19	19	27	12	27,5	6x1,5	0,104
		10	M18x1,5	8070S10 00	8270S10 00	8370S10 00	ZS14/7-29/S10V-DM	19	22	29	13	30	7,5x1,5	0,134
		12	M20x1,5	8070S12 00	8270S12 00	8370S12 00	ZS14/7-29/S12V-DM	19	24	33	17	31	9x1,5	0,153
		16	M24x1,5	8070S16 00	8270S16 00	8370S16 00	ZS14/7-29/S16V-DM	27	30	34	16	36,5	12x2	0,277
	400	20	M30x2	8070S20 00	8270S20 00	8370S20 00	ZS14/7-29/S20V-DM	30	36	38	16	44,5	16,3x2,4	0,432
		25	M36x2	8070S25 00	8270S25 00	8370S25 00	ZS14/7-29/S25V-DM	36	46	43	19	50	20,3x2,4	0,765
		30	M42x2	8070S30 00	8270S30 00	8370S30 00	ZS14/7-29/S30V-DM	50	50	50	24	55	25,3x2,4	1,153
		315	M52x2	8070S38 00	8270S38 00	8370S38 00	ZS14/7-29/S38V-DM	50	60	52	21	63	33,3x2,4	1,363

Adjustable male stud branch tees (DKO)

24° sealing cone and O-ring

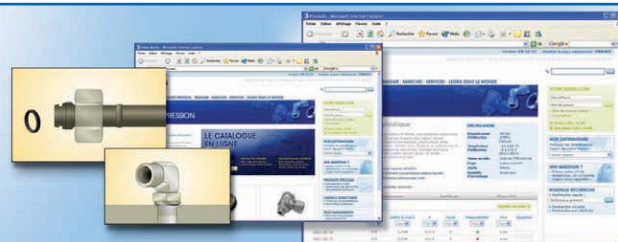


	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	F1*	F2	L1	L2	L3	O-ring	kg
L	400	6	M12x1,5	8074L06 00	8274L06 00	8374L06 00	ZS14/2-29/L6V-DM	12	14	27	12	26	4x1,5	0,065
		8	M14x1,5	8074L08 00	8274L08 00	8374L08 00	ZS14/2-29/L8V-DM	14	17	29	14	27,5	6x1,5	0,077
		10	M16x1,5	8074L10 00	8274L10 00	8374L10 00	ZS14/2-29/L10V-DM	17	19	30	15	29	7,5x1,5	0,100
		12	M18x1,5	8074L12 00	8274L12 00	8374L12 00	ZS14/2-29/L12V-DM	19	22	32	17	29,5	9x1,5	0,132
		15	M22x1,5	8074L15 00	8274L15 00	8374L15 00	ZS14/2-29/L15V-DM	19	27	36	21	32,5	12x2	0,226
	315	18	M26x1,5	8074L18 00	8274L18 00	8374L18 00	ZS14/2-29/L18V-DM	24	32	40	23,5	35,5	15x2	0,337
		22	M30x2	8074L22 00	8274L22 00	8374L22 00	ZS14/2-29/L22V-DM	27	36	44	27,5	38,5	20x2	0,436
	250	28	M36x2	8074L28 00	8274L28 00	8374L28 00	ZS14/2-29/L28V-DM	36	41	47	30,5	41,5	26x2	0,616
		35	M45x2	8074L35 00	8274L35 00	8374L35 00	ZS14/2-29/L35V-DM	41	50	56	34,5	51	32x2,5	0,918
		42	M52x2	8074L42 00	8274L42 00	8374L42 00	ZS14/2-29/L42V-DM	50	60	63	40	56	38x2,5	1,063
S	630	6	M14x1,5	8074S06 00	8274S06 00	8374S06 00	ZS14/2-29/S6V-DM	14	17	31	16	27	4x1,5	0,097
		8	M16x1,5	8074S08 00	8274S08 00	8374S08 00	ZS14/2-29/S8V-DM	17	19	32	17	27,5	6x1,5	0,118
		10	M18x1,5	8074S10 00	8274S10 00	8374S10 00	ZS14/2-29/S10V-DM	19	22	34	17,5	30	7,5x1,5	0,157
		12	M20x1,5	8074S12 00	8274S12 00	8374S12 00	ZS14/2-29/S12V-DM	22	24	38	21,5	31	9x1,5	0,214
		14	M22x1,5	8074S14 00	8274S14 00	8374S14 00	ZS14/2-29/S14V-DM	19	27	40	22	35	10x2	0,280
	400	16	M24x1,5	8074S16 00	8274S16 00	8374S16 00	ZS14/2-29/S16V-DM	24	30	43	24,5	36,5	12x2	0,367
		20	M30x2	8074S20 00	8274S20 00	8374S20 00	ZS14/2-29/S20V-DM	27	36	48	26,5	44,5	16,3x2,4	0,601
		25	M36x2	8074S25 00	8274S25 00	8374S25 00	ZS14/2-29/S25V-DM	36	46	54	30	50	20,3x2,4	1,028
		30	M42x2	8074S30 00	8274S30 00	8374S30 00	ZS14/2-29/S30V-DM	41	50	62	35,5	55	25,3x2,4	1,338
	315	38	M52x2	8074S38 00	8274S38 00	8374S38 00	ZS14/2-29/S38V-DM	50	60	72	41	63	33,3x2,4	1,988

* Models ØD 6 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

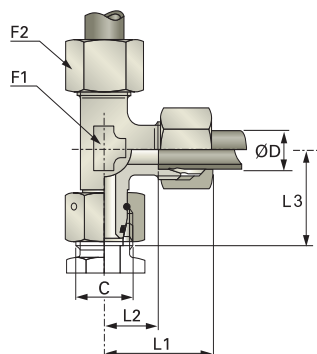
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Standpipe run tees (DKO)

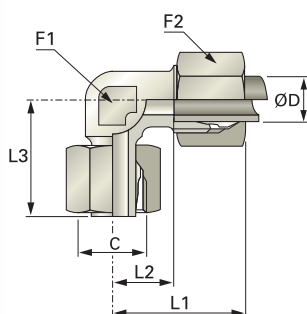
24° sealing cone and O-ring



	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	F1*	F2	L1	L2	L3	O-ring	
L	400	6	M12x1,5	8073L06 00	8273L06 00	8373L06 00	ZS14/3-29/L6V-DM	12	14	27	12	26	4x1,5	0,065
		8	M14x1,5	8073L08 00	8273L08 00	8373L08 00	ZS14/3-29/L8V-DM	14	17	29	14	27,5	6x1,5	0,081
		10	M16x1,5	8073L10 00	8273L10 00	8373L10 00	ZS14/3-29/L10V-DM	17	19	30	15	29	7,5x1,5	0,100
		12	M18x1,5	8073L12 00	8273L12 00	8373L12 00	ZS14/3-29/L12V-DM	19	22	32	17	29,5	9x1,5	0,141
		15	M22x1,5	8073L15 00	8273L15 00	8373L15 00	ZS14/3-29/L15V-DM	19	27	36	21	32,5	12x2	0,230
	315	18	M26x1,5	8073L18 00	8273L18 00	8373L18 00	ZS14/3-29/L18V-DM	24	32	40	23,5	35,5	15x2	0,317
		22	M30x2	8073L22 00	8273L22 00	8373L22 00	ZS14/3-29/L22V-DM	27	36	44	27,5	38,5	20x2	0,433
	250	28	M36x2	8073L28 00	8273L28 00	8373L28 00	ZS14/3-29/L28V-DM	36	41	47	30,5	41,5	26x2	0,561
		35	M45x2	8073L35 00	8273L35 00	8373L35 00	ZS14/3-29/L35V-DM	41	50	56	34,5	51	32x2,5	0,908
		42	M52x2	8073L42 00	8273L42 00	8373L42 00	ZS14/3-29/L42V-DM	50	60	63	40	56	38x2,5	1,340
S	630	6	M14x1,5	8073S06 00	8273S06 00	8373S06 00	ZS14/3-29/S6V-DM	14	17	31	16	27	4x1,5	0,091
		8	M16x1,5	8073S08 00	8273S08 00	8373S08 00	ZS14/3-29/S8V-DM	17	19	32	17	27,5	6x1,5	0,117
		10	M18x1,5	8073S10 00	8273S10 00	8373S10 00	ZS14/3-29/S10V-DM	19	22	34	17,5	30	7,5x1,5	0,167
		12	M20x1,5	8073S12 00	8273S12 00	8373S12 00	ZS14/3-29/S12V-DM	22	24	38	21,5	31	9x1,5	0,213
		14	M22x1,5	8073S14 00	8273S14 00	8373S14 00	ZS14/3-29/S14V-DM	19	27	40	22	35	10x2	0,279
	400	16	M24x1,5	8073S16 00	8273S16 00	8373S16 00	ZS14/3-29/S16V-DM	24	30	43	24,5	36,5	12x2	0,369
		20	M30x2	8073S20 00	8273S20 00	8373S20 00	ZS14/3-29/S20V-DM	27	36	48	26,5	44,5	16,3x2,4	0,577
		25	M36x2	8073S25 00	8273S25 00	8373S25 00	ZS14/3-29/S25V-DM	36	46	54	30	50	20,3x2,4	1,043
		30	M42x2	8073S30 00	8273S30 00	8373S30 00	ZS14/3-29/S30V-DM	41	50	62	35,5	55	25,3x2,4	1,358
	315	38	M52x2	8073S38 00	8273S38 00	8373S38 00	ZS14/3-29/S38V-DM	50	60	72	41	63	33,3x2,4	1,983

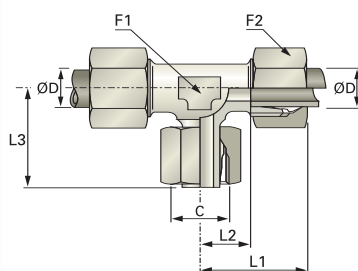
* Models ØD 6 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Adjustable stud standpipe elbows pre-assembled ring



	PN	ØD	C	Body only	Double-bite ring	Bell code	F1	F2	L1	L2	L3	kg
L	400	6	M12x1,5	8046L06 00	8246L06 00	ZS15/1-29/L6V	12	14	27	12	26	0,040
		8	M14x1,5	8046L08 00	8246L08 00	ZS15/1-29/L8V	12	17	29	14	27,5	0,046
		10	M16x1,5	8046L10 00	8246L10 00	ZS15/1-29/L10V	14	19	30	15	29	0,065
		12	M18x1,5	8046L12 00	8246L12 00	ZS15/1-29/L12V	17	22	32	17	29,5	0,090
		15	M22x1,5	8046L15 00	8246L15 00	ZS15/1-29/L15V	19	27	36	21	32,5	0,149
	315	18	M26x1,5	8046L18 00	8246L18 00	ZS15/1-29/L18V	24	32	40	23,5	35,5	0,215
		22	M30x2	8046L22 00	8246L22 00	ZS15/1-29/L22V	27	36	44	27,5	38,5	0,285
		28	M36x2	8046L28 00	8246L28 00	ZS15/1-29/L28V	36	41	47	30,5	41,5	0,410
	250	35	M45x2	8046L35 00	8246L35 00	ZS15/1-29/L35V	41	50	56	34,5	51	0,590
		42	M52x2	8046L42 00	8246L42 00	ZS15/1-29/L42V	50	60	63	40	56	1,045
S	630	6	M14x1,5	8046S06 00	8246S06 00	ZS15/1-29/S6V	12	17	31	16	27	0,051
		8	M16x1,5	8046S08 00	8246S08 00	ZS15/1-29/S8V	14	19	32	17	27,5	0,074
		10	M18x1,5	8046S10 00	8246S10 00	ZS15/1-29/S10V	17	22	34	17,5	30	0,100
		12	M20x1,5	8046S12 00	8246S12 00	ZS15/1-29/S12V	17	24	38	21,5	31	0,133
		14	M22x1,5	8046S14 00	8246S14 00	ZS15/1-29/S14V	19	27	40	22	35	0,165
	400	16	M24x1,5	8046S16 00	8246S16 00	ZS15/1-29/S16V	24	30	43	24,5	36,5	0,235
		20	M30x2	8046S20 00	8246S20 00	ZS15/1-29/S20V	27	36	48	26,5	44,5	0,340
		25	M36x2	8046S25 00	8246S25 00	ZS15/1-29/S25V	36	46	54	30	50	0,680
		30	M42x2	8046S30 00	8246S30 00	ZS15/1-29/S30V	41	50	62	35,5	55	0,885
	315	38	M52x2	8046S38 00	8246S38 00	ZS15/1-29/S38V	50	60	72	41	63	1,420

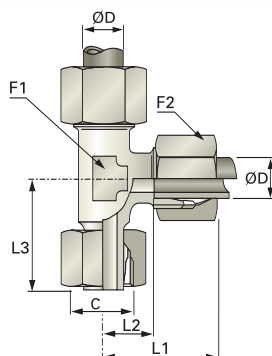
Adjustable male stud branch tees pre-assembled ring



	PN	ØD	C	Body only	Double-bite ring	Bell code	F1	F2	L1	L2	L3	kg
L	400	6	M12x1,5	8047L06 00	8247L06 00	ZS15/2-29/L6V	12	14	27	12	26	0,060
		8	M14x1,5	8047L08 00	8247L08 00	ZS15/2-29/L8V	12	17	29	14	27,5	0,066
		10	M16x1,5	8047L10 00	8247L10 00	ZS15/2-29/L10V	14	19	30	15	29	0,090
		12	M18x1,5	8047L12 00	8247L12 00	ZS15/2-29/L12V	17	22	32	17	29,5	0,130
		15	M22x1,5	8047L15 00	8247L15 00	ZS15/2-29/L15V	19	27	36	21	32,5	0,209
	315	18	M26x1,5	8047L18 00	8247L18 00	ZS15/2-29/L18V	24	32	40	23,5	35,5	0,320
		22	M30x2	8047L22 00	8247L22 00	ZS15/2-29/L22V	27	36	44	27,5	38,5	0,420
		28	M36x2	8047L28 00	8247L28 00	ZS15/2-29/L28V	36	41	47	30,5	41,5	0,600
	250	35	M45x2	8047L35 00	8247L35 00	ZS15/2-29/L35V	41	50	56	34,5	51	0,865
		42	M52x2	8047L42 00	8247L42 00	ZS15/2-29/L42V	50	60	63	40	56	1,095
S	630	6	M14x1,5	8047S06 00	8247S06 00	ZS15/2-29/S6V	12	17	31	16	27	0,086
		8	M16x1,5	8047S08 00	8247S08 00	ZS15/2-29/S8V	14	19	32	17	27,5	0,119
		10	M18x1,5	8047S10 00	8247S10 00	ZS15/2-29/S10V	17	22	34	17,5	30	0,140
		12	M20x1,5	8047S12 00	8247S12 00	ZS15/2-29/S12V	17	24	38	21,5	31	0,198
		14	M22x1,5	8047S14 00	8247S14 00	ZS15/2-29/S14V	19	27	40	22	35	0,270
	400	16	M24x1,5	8047S16 00	8247S16 00	ZS15/2-29/S16V	24	30	43	24,5	36,5	0,356
		20	M30x2	8047S20 00	8247S20 00	ZS15/2-29/S20V	27	36	48	26,5	44,5	0,540
		25	M36x2	8047S25 00	8247S25 00	ZS15/2-29/S25V	36	46	54	30	50	1,020
		30	M42x2	8047S30 00	8247S30 00	ZS15/2-29/S30V	41	50	62	35,5	55	1,329
	315	38	M52x2	8047S38 00	8247S38 00	ZS15/2-29/S38V	50	60	72	41	63	2,100

Standpipe run tees

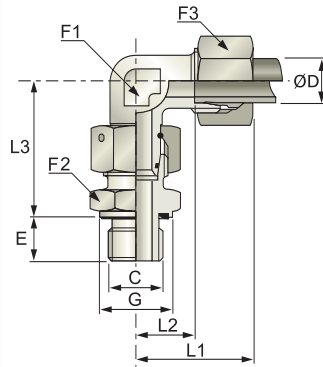
pre-assembled ring



	PN	ØD	C	Body only	Double-bite ring	Bell code	F1	F2	L1	L2	L3	kg
L	400	6	M12x1,5	8048L06 00	8248L06 00	ZS15/3-29/L6V	12	14	27	12	26	0,060
		8	M14x1,5	8048L08 00	8248L08 00	ZS15/3-29/L8V	12	17	29	14	27,5	0,071
		10	M16x1,5	8048L10 00	8248L10 00	ZS15/3-29/L10V	14	19	30	15	29	0,095
		12	M18x1,5	8048L12 00	8248L12 00	ZS15/3-29/L12V	17	22	32	17	29,5	0,125
		15	M22x1,5	8048L15 00	8248L15 00	ZS15/3-29/L15V	19	27	36	21	32,5	0,199
	315	18	M26x1,5	8048L18 00	8248L18 00	ZS15/3-29/L18V	24	32	40	23,5	35,5	0,300
		22	M30x2	8048L22 00	8248L22 00	ZS15/3-29/L22V	27	36	44	27,5	38,5	0,400
	250	28	M36x2	8048L28 00	8248L28 00	ZS15/3-29/L28V	36	41	47	30,5	41,5	0,545
		35	M45x2	8048L35 00	8248L35 00	ZS15/3-29/L35V	41	50	56	34,5	51	0,720
		42	M52x2	8048L42 00	8248L42 00	ZS15/3-29/L42V	50	60	63	40	56	1,080
S	630	6	M14x1,5	8048S06 00	8248S06 00	ZS15/3-29/S6V	12	17	31	16	27	0,076
		8	M16x1,5	8048S08 00	8248S08 00	ZS15/3-29/S8V	14	19	32	17	27,5	0,109
		10	M18x1,5	8048S10 00	8248S10 00	ZS15/3-29/S10V	17	22	34	17,5	30	0,160
		12	M20x1,5	8048S12 00	8248S12 00	ZS15/3-29/S12V	17	24	38	21,5	31	0,193
		14	M22x1,5	8048S14 00	8248S14 00	ZS15/3-29/S14V	19	27	40	22	35	0,250
	400	16	M24x1,5	8048S16 00	8248S16 00	ZS15/3-29/S16V	24	30	43	24,5	36,5	0,345
		20	M30x2	8048S20 00	8248S20 00	ZS15/3-29/S20V	27	36	48	26,5	44,5	0,505
		25	M36x2	8048S25 00	8248S25 00	ZS15/3-29/S25V	36	46	54	30	50	0,970
		30	M42x2	8048S30 00	8248S30 00	ZS15/3-29/S30V	41	50	62	35,5	55	1,245
	315	38	M52x2	8048S38 00	8248S38 00	ZS15/3-29/S38V	50	60	72	41	63	1,915

Adjustable stud standpipe elbows (DKO)

BSP parallel
elastomer seal
ISO 1179-2

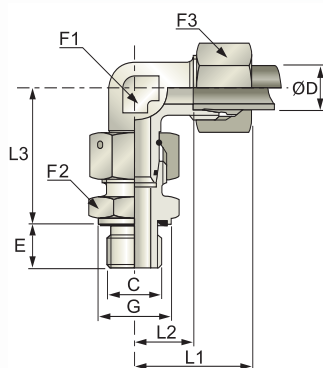


	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1*	F2	F3	G	L1	L2	L3	
L	400	6	G1/8	8072L06 10	8272L06 10	8372L06 10	ZS14/1-29/L6RD-DM	8	12	14	14	13,9	27	12	34,5	0,060
		8	G1/4	8072L08 13	8272L08 13	8372L08 13	ZS14/1-29/L8RD-DM	12	14	19	17	18,9	29	14	37,5	0,080
		10	G1/4	8072L10 13	8272L10 13	8372L10 13	ZS14/1-29/L10RD-DM	12	17	19	19	18,9	30	15	40	0,090
		12	G3/8	8072L12 17	8272L12 17	8372L12 17	ZS14/1-29/L12RD-DM	12	19	22	22	21,9	32	17	42	0,130
		15	G1/2	8072L15 21	8272L15 21	8372L15 21	ZS14/1-29/L15RD-DM	14	19	27	27	26,9	36	21	46,5	0,230
	315	18	G1/2	8072L18 21	8272L18 21	8372L18 21	ZS14/1-29/L18RD-DM	14	24	27	32	26,9	40	23,5	50	0,290
		22	G3/4	8072L22 27	8272L22 27	8372L22 27	ZS14/1-29/L22RD-DM	16	27	32	36	31,9	44	27,5	55	0,410
	250	28	G1	8072L28 34	8272L28 34	8372L28 34	ZS14/1-29/L28RD-DM	18	36	41	41	39,9	47	30,5	59	0,580
		35	G1"1/4	8072L35 42	8272L35 42	8372L35 42	ZS14/1-29/L35RD-DM	20	41	50	50	49,9	56	34,5	68,5	0,890
		42	G1"1/2	8072L42 49	8272L42 49	8372L42 49	ZS14/1-29/L42RD-DM	22	50	55	60	54,9	63	40	75	1,230
S	630	6	G1/4	8072S06 13	8272S06 13	8372S06 13	ZS14/1-29/S6RD-DM	12	14	19	17	18,9	31	16	40	0,095
		8	G1/4	8072S08 13	8272S08 13	8372S08 13	ZS14/1-29/S8RD-DM	12	17	19	19	18,9	32	17	42,5	0,112
		10	G3/8	8072S10 17	8272S10 17	8372S10 17	ZS14/1-29/S10RD-DM	12	19	22	22	21,9	34	17,5	45	0,166
		12	G3/8	8072S12 17	8272S12 17	8372S12 17	ZS14/1-29/S12RD-DM	12	22	22	24	21,9	38	21,5	48	0,197
		14	G1/2	8072S14 21	8272S14 21	8372S14 21	ZS14/1-29/S14RD-DM	14	19	27	27	26,9	40	22	54	0,290
	400	16	G1/2	8072S16 21	8272S16 21	8372S16 21	ZS14/1-29/S16RD-DM	14	24	27	30	26,9	43	24,5	55	0,338
		20	G3/4	8072S20 27	8272S20 27	8372S20 27	ZS14/1-29/S20RD-DM	16	27	32	36	31,9	48	26,5	65	0,545
		25	G1	8072S25 34	8272S25 34	8372S25 34	ZS14/1-29/S25RD-DM	18	36	41	46	39,9	54	30	73	0,980
		30	G1"1/4	8072S30 42	8272S30 42	8372S30 42	ZS14/1-29/S30RD-DM	20	41	50	50	49,9	62	35,5	78,5	1,397
	315	38	G1"1/2	8072S38 49	8272S38 49	8372S38 49	ZS14/1-29/S38RD-DM	22	50	55	60	54,9	72	41	89	2,000

* Models ØD 6 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Adjustable stud standpipe elbows (DKO)

metric parallel
elastomer seal
ISO 9974-2

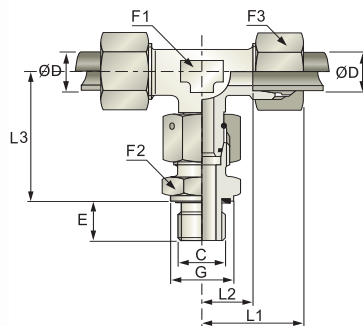


	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1*	F2	F3	G	L1	L2	L3	kg
L	400	6	M10x1	8072L06 60	8272L06 60	8372L06 60	ZS14/1-29/L6MD-DM	8	12	14	14	13,9	27	12	34,5	0,060
		8	M12x1,5	8072L08 67	8272L08 67	8372L08 67	ZS14/1-29/L8MD-DM	12	14	17	17	16,9	29	14	37,5	0,080
		10	M14x1,5	8072L10 71	8272L10 71	8372L10 71	ZS14/1-29/L10MD-DM	12	17	19	19	18,9	30	15	40	0,090
		12	M16x1,5	8072L12 75	8272L12 75	8372L12 75	ZS14/1-29/L12MD-DM	12	19	22	22	21,9	32	17	42	0,130
		15	M18x1,5	8072L15 78	8272L15 78	8372L15 78	ZS14/1-29/L15MD-DM	12	19	24	27	23,9	36	21	46	0,230
	315	18	M22x1,5	8072L18 82	8272L18 82	8372L18 82	ZS14/1-29/L18MD-DM	14	24	27	32	26,9	40	23,5	50	0,290
		22	M26x1,5	8072L22 89	8272L22 89	8372L22 89	ZS14/1-29/L22MD-DM	16	27	32	36	31,9	44	27,5	55	0,410
	250	28	M33x2	8072L28 91	8272L28 91	8372L28 91	ZS14/1-29/L28MD-DM	18	36	41	41	39,9	47	30,5	59	0,580
		35	M42x2	8072L35 96	8272L35 96	8372L35 96	ZS14/1-29/L35MD-DM	20	41	50	50	49,9	56	34,5	68,5	0,890
		42	M48x2	8072L42 98	8272L42 98	8372L42 98	ZS14/1-29/L42MD-DM	22	50	55	60	54,9	63	40	75	1,230
S	630	6	M12x1,5	8072S06 67	8272S06 67	8372S06 67	ZS14/1-29/S6MD-DM	12	14	17	17	16,9	31	16	40	0,095
		8	M14x1,5	8072S08 71	8272S08 71	8372S08 71	ZS14/1-29/S8MD-DM	12	17	19	19	18,9	32	17	42,5	0,112
		10	M16x1,5	8072S10 75	8272S10 75	8372S10 75	ZS14/1-29/S10MD-DM	12	19	22	22	21,9	34	17,5	45	0,166
		12	M18x1,5	8072S12 78	8272S12 78	8372S12 78	ZS14/1-29/S12MD-DM	12	22	24	24	23,9	38	21,5	48	0,197
		14	M20x1,5	8072S14 80	8272S14 80	8372S14 80	ZS14/1-29/S14MD-DM	14	19	27	27	25,9	40	22	54	0,290
	400	16	M22x1,5	8072S16 82	8272S16 82	8372S16 82	ZS14/1-29/S16MD-DM	14	24	27	30	26,9	43	24,5	55	0,338
		20	M27x2	8072S20 86	8272S20 86	8372S20 86	ZS14/1-29/S20MD-DM	16	27	32	36	31,9	48	26,5	65	0,545
		25	M33x2	8072S25 91	8272S25 91	8372S25 91	ZS14/1-29/S25MD-DM	18	36	41	46	39,9	54	30	73	0,980
		30	M42x2	8072S30 96	8272S30 96	8372S30 96	ZS14/1-29/S30MD-DM	20	41	50	50	49,9	62	35,5	78,5	1,397
	315	38	M48x2	8072S38 98	8272S38 98	8372S38 98	ZS14/1-29/S38MD-DM	22	50	55	60	54,9	72	41	89	2,006

* Models ØD 6 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Adjustable male stud branch tees (DKO)

BSP parallel
elastomer seal
ISO 1179-2

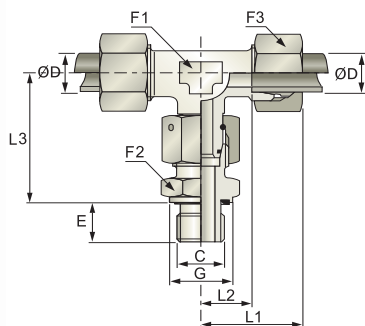


	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1*	F2	F3	G	L1	L2	L3	kg
L	400	6	G1/8	8074L06 10	8274L06 10	8374L06 10	ZS14/2-29/L6RD-DM	8	12	14	14	13,9	27	12	34,5	0,070
		8	G1/4	8074L08 13	8274L08 13	8374L08 13	ZS14/2-29/L8RD-DM	12	14	19	17	18,9	29	14	37,5	0,110
		10	G1/4	8074L10 13	8274L10 13	8374L10 13	ZS14/2-29/L10RD-DM	12	17	19	19	18,9	30	15	40	0,130
		12	G3/8	8074L12 17	8274L12 17	8374L12 17	ZS14/2-29/L12RD-DM	12	19	22	22	21,9	32	17	42	0,170
		15	G1/2	8074L15 21	8274L15 21	8374L15 21	ZS14/2-29/L15RD-DM	12	19	27	27	26,9	36	21	46,5	0,290
	315	18	G1/2	8074L18 21	8274L18 21	8374L18 21	ZS14/2-29/L18RD-DM	14	24	27	32	26,9	40	23,5	50	0,400
		22	G3/4	8074L22 27	8274L22 27	8374L22 27	ZS14/2-29/L22RD-DM	16	27	32	36	31,9	44	27,5	55	0,530
	250	28	G1	8074L28 34	8274L28 34	8374L28 34	ZS14/2-29/L28RD-DM	18	36	41	41	39,9	47	30,5	59	0,770
		35	G1"1/4	8074L35 42	8274L35 42	8374L35 42	ZS14/2-29/L35RD-DM	20	41	50	50	49,9	56	34,5	68,5	1,170
		42	G1"1/2	8074L42 49	8274L42 49	8374L42 49	ZS14/2-29/L42RD-DM	22	50	55	60	54,9	63	40	75	1,280
S	630	6	G1/4	8074S06 13	8274S06 13	8374S06 13	ZS14/2-29/S6RD-DM	12	14	19	17	18,9	31	16	40	0,130
		8	G1/4	8074S08 13	8274S08 13	8374S08 13	ZS14/2-29/S8RD-DM	12	17	19	19	18,9	32	17	42,5	0,150
		10	G3/8	8074S10 17	8274S10 17	8374S10 17	ZS14/2-29/S10RD-DM	12	19	22	22	21,9	34	17,5	45	0,210
		12	G3/8	8074S12 17	8274S12 17	8374S12 17	ZS14/2-29/S12RD-DM	12	22	22	24	21,9	38	21,5	48	0,290
		14	G1/2	8074S14 21	8274S14 21	8374S14 21	ZS14/2-29/S14RD-DM	14	19	27	27	26,9	40	22	54	0,370
	400	16	G1/2	8074S16 21	8274S16 21	8374S16 21	ZS14/2-29/S16RD-DM	14	24	27	30	26,9	43	24,5	55	0,450
		20	G3/4	8074S20 27	8274S20 27	8374S20 27	ZS14/2-29/S20RD-DM	16	27	32	36	31,9	48	26,5	65	0,750
		25	G1	8074S25 34	8274S25 34	8374S25 34	ZS14/2-29/S25RD-DM	18	36	41	46	39,9	54	30	73	1,280
		30	G1"1/4	8074S30 42	8274S30 42	8374S30 42	ZS14/2-29/S30RD-DM	20	41	50	50	49,9	62	35,5	78,5	1,740
	315	38	G1"1/2	8074S38 49	8274S38 49	8374S38 49	ZS14/2-29/S38RD-DM	22	50	55	60	54,9	72	41	89	2,550

* Models ØD 6 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Adjustable male stud branch tees (DKO)

metric parallel
elastomer seal
ISO 9974-2

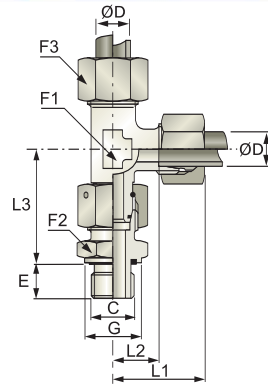


	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1*	F2	F3	G	L1	L2	L3	kg
L	400	6	M10x1	8074L06 60	8274L06 60	8374L06 60	ZS14/2-29/L6MD-DM	8	12	14	14	13,9	27	12	34,5	0,070
		8	M12x1,5	8074L08 67	8274L08 67	8374L08 67	ZS14/2-29/L8MD-DM	12	14	17	17	16,9	29	14	37,5	0,110
		10	M14x1,5	8074L10 71	8274L10 71	8374L10 71	ZS14/2-29/L10MD-DM	12	17	19	19	18,9	30	15	40	0,130
		12	M16x1,5	8074L12 75	8274L12 75	8374L12 75	ZS14/2-29/L12MD-DM	12	19	22	22	21,9	32	17	42	0,170
		15	M18x1,5	8074L15 78	8274L15 78	8374L15 78	ZS14/2-29/L15MD-DM	12	19	24	27	23,9	36	21	46	0,290
	315	18	M22x1,5	8074L18 82	8274L18 82	8374L18 82	ZS14/2-29/L18MD-DM	14	24	27	32	26,9	40	23,5	50	0,400
		22	M26x1,5	8074L22 89	8274L22 89	8374L22 89	ZS14/2-29/L22MD-DM	16	27	32	36	31,9	44	27,5	55	0,530
	250	28	M33x2	8074L28 91	8274L28 91	8374L28 91	ZS14/2-29/L28MD-DM	18	36	41	41	39,9	47	30,5	59	0,770
		35	M42x2	8074L35 96	8274L35 96	8374L35 96	ZS14/2-29/L35MD-DM	20	41	50	50	49,9	56	34,5	68,5	1,117
		42	M48x2	8074L42 98	8274L42 98	8374L42 98	ZS14/2-29/L42MD-DM	22	50	55	60	54,9	63	40	75	1,128
S	630	6	M12x1,5	8074S06 67	8274S06 67	8374S06 67	ZS14/2-29/S6MD-DM	12	14	17	17	16,9	31	16	40	0,130
		8	M14x1,5	8074S08 71	8274S08 71	8374S08 71	ZS14/2-29/S8MD-DM	12	17	19	19	18,9	32	17	42,5	0,150
		10	M16x1,5	8074S10 75	8274S10 75	8374S10 75	ZS14/2-29/S10MD-DM	12	19	22	22	21,9	34	17,5	45	0,210
		12	M18x1,5	8074S12 78	8274S12 78	8374S12 78	ZS14/2-29/S12MD-DM	12	22	24	24	23,9	38	21,5	48	0,290
		14	M20x1,5	8074S14 80	8274S14 80	8374S14 80	ZS14/2-29/S14MD-DM	14	19	27	27	25,9	40	22	54	0,370
	400	16	M22x1,5	8074S16 82	8274S16 82	8374S16 82	ZS14/2-29/S16MD-DM	14	24	27	30	26,9	43	24,5	55	0,450
		20	M27x2	8074S20 86	8274S20 86	8374S20 86	ZS14/2-29/S20MD-DM	16	27	32	36	31,9	48	26,5	65	0,750
		25	M33x2	8074S25 91	8274S25 91	8374S25 91	ZS14/2-29/S25MD-DM	18	36	41	46	39,9	54	30	73	1,280
		30	M42x2	8074S30 96	8274S30 96	8374S30 96	ZS14/2-29/S30MD-DM	20	41	50	50	49,9	62	35,5	78,5	1,174
	315	38	M48x2	8074S38 98	8274S38 98	8374S38 98	ZS14/2-29/S38MD-DM	22	50	55	60	54,9	72	41	89	2,550

* Models ØD 6 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Standpipe run tees (DKO)

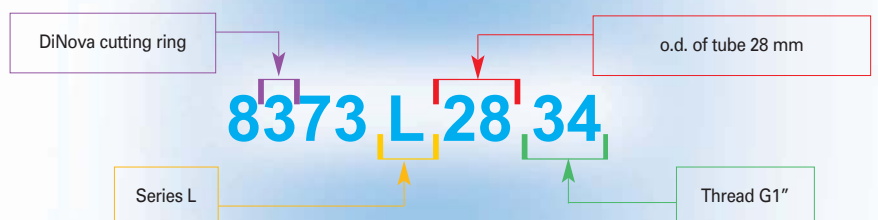
BSP parallel
elastomer seal
ISO 1179-2



	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	G	F1*	F2	F3	G	L1	L2	L3	kg
L	400	6	G1/8	8073L06 10	8273L06 10	8373L06 10	ZS14/3-29/L6RD-DM	8	12	14	14	13,9	27	12	34,5	0,070
		8	G1/4	8073L08 13	8273L08 13	8373L08 13	ZS14/3-29/L8RD-DM	12	14	19	17	18,9	29	14	37,5	0,100
		10	G1/4	8073L10 13	8273L10 13	8373L10 13	ZS14/3-29/L10RD-DM	12	17	17	19	18,9	30	15	40	0,130
		12	G3/8	8073L12 17	8273L12 17	8373L12 17	ZS14/3-29/L12RD-DM	12	19	22	22	21,9	32	17	42	0,180
		15	G1/2	8073L15 21	8273L15 21	8373L15 21	ZS14/3-29/L15RD-DM	14	19	27	27	26,9	36	21	46,5	0,290
	315	18	G1/2	8073L18 21	8273L18 21	8373L18 21	ZS14/3-29/L18RD-DM	14	24	27	32	26,9	40	23,5	50	0,380
		22	G3/4	8073L22 27	8273L22 27	8373L22 27	ZS14/3-29/L22RD-DM	16	27	32	36	31,9	44	27,5	55	0,522
	250	28	G1	8073L28 34	8273L28 34	8373L28 34	ZS14/3-29/L28RD-DM	18	36	41	41	39,9	47	30,5	59	0,720
		35	G1"1/4	8073L35 42	8273L35 42	8373L35 42	ZS14/3-29/L35RD-DM	20	41	50	50	49,9	56	34,5	68,5	1,116
		42	G1"1/2	8073L42 49	8273L42 49	8373L42 49	ZS14/3-29/L42RD-DM	22	50	55	60	54,9	63	40	75	1,150
S	630	6	G1/4	8073S06 13	8273S06 13	8373S06 13	ZS14/3-29/S6RD-DM	12	14	19	17	18,9	31	16	40	0,120
		8	G1/4	8073S08 13	8273S08 13	8373S08 13	ZS14/3-29/S8RD-DM	12	17	19	19	18,9	32	17	42,5	0,150
		10	G3/8	8073S10 17	8273S10 17	8373S10 17	ZS14/3-29/S10RD-DM	12	19	22	22	21,9	34	17,5	45	0,220
		12	G3/8	8073S12 17	8273S12 17	8373S12 17	ZS14/3-29/S12RD-DM	12	22	22	24	21,9	38	21,5	48	0,280
		14	G1/2	8073S14 21	8273S14 21	8373S14 21	ZS14/3-29/S14RD-DM	14	19	27	27	26,9	40	22	54	0,370
	400	16	G1/2	8073S16 21	8273S16 21	8373S16 21	ZS14/3-29/S16RD-DM	14	24	27	30	26,9	43	24,5	55	0,450
		20	G3/4	8073S20 27	8273S20 27	8373S20 27	ZS14/3-29/S20RD-DM	16	27	32	36	31,9	48	26,5	65	0,720
		25	G1	8073S25 34	8273S25 34	8373S25 34	ZS14/3-29/S25RD-DM	18	36	41	46	39,9	54	30	73	1,300
		30	G1"1/4	8073S30 42	8273S30 42	8373S30 42	ZS14/3-29/S30RD-DM	20	41	50	50	49,9	62	35,5	78,5	1,765
		38	G1"1/2	8073S38 49	8273S38 49	8373S38 49	ZS14/3-29/S38RD-DM	22	50	55	60	54,9	72	41	89	2,543

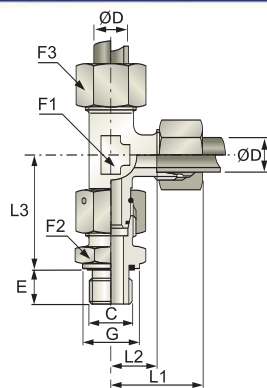
* Models ØD 6 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Identification of Legris part numbers
Example of product codes



Adjustable male stud run tees (DKO)

metric parallel
elastomer seal
ISO 9974-2

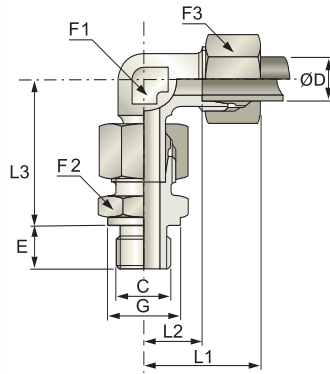


	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1*	F2	F3	G	L1	L2	L3	
L	400	6	M10x1	8073L06 60	8273L06 60	8373L06 60	ZS14/3-29/L6MD-DM	8	12	14	14	13,9	27	12	34,5	0,075
		8	M12x1,5	8073L08 67	8273L08 67	8373L08 67	ZS14/3-29/L8MD-DM	12	14	17	17	16,9	29	14	37,5	0,109
		10	M14x1,5	8073L10 71	8273L10 71	8373L10 71	ZS14/3-29/L10MD-DM	12	17	19	19	18,9	30	15	40	0,127
		12	M16x1,5	8073L12 75	8273L12 75	8373L12 75	ZS14/3-29/L12MD-DM	12	19	22	22	21,9	32	17	42	0,180
		15	M18x1,5	8073L15 78	8273L15 78	8373L15 78	ZS14/3-29/L15MD-DM	12	19	24	27	23,9	36	21	46	0,290
	315	18	M22x1,5	8073L18 82	8273L18 82	8373L18 82	ZS14/3-29/L18MD-DM	14	24	27	32	26,9	40	23,5	50	0,382
		22	M26x1,5	8073L22 89	8273L22 89	8373L22 89	ZS14/3-29/L22MD-DM	16	27	32	36	31,9	44	27,5	55	0,524
	250	28	M33x2	8073L28 91	8273L28 91	8373L28 91	ZS14/3-29/L28MD-DM	18	36	41	41	39,9	47	30,5	59	0,716
		35	M42x2	8073L35 96	8273L35 96	8373L35 96	ZS14/3-29/L35MD-DM	20	41	50	50	49,9	56	34,5	68,5	1,160
		42	M48x2	8073L42 98	8273L42 98	8373L42 98	ZS14/3-29/L42MD-DM	22	50	55	60	54,9	63	40	75	1,559
S	630	6	M12x1,5	8073S06 67	8273S06 67	8373S06 67	ZS14/3-29/S6MD-DM	12	14	17	17	16,9	31	16	40	0,122
		8	M14x1,5	8073S08 71	8273S08 71	8373S08 71	ZS14/3-29/S8MD-DM	12	17	19	19	18,9	32	17	42,5	0,151
		10	M16x1,5	8073S10 75	8273S10 75	8373S10 75	ZS14/3-29/S10MD-DM	12	19	22	22	21,9	34	17,5	45	0,216
		12	M18x1,5	8073S12 78	8273S12 78	8373S12 78	ZS14/3-29/S12MD-DM	12	22	24	24	23,9	38	21,5	48	0,275
		14	M20x1,5	8073S14 80	8273S14 80	8373S14 80	ZS14/3-29/S14MD-DM	14	19	27	27	25,9	40	22	54	0,374
	400	16	M22x1,5	8073S16 82	8273S16 82	8373S16 82	ZS14/3-29/S16MD-DM	14	24	27	30	26,9	43	24,5	55	0,455
		20	M27x2	8073S20 86	8273S20 86	8373S20 86	ZS14/3-29/S20MD-DM	16	27	32	36	31,9	48	26,5	65	0,722
		25	M33x2	8073S25 91	8273S25 91	8373S25 91	ZS14/3-29/S25MD-DM	18	36	41	46	39,9	54	30	73	1,300
		30	M42x2	8073S30 96	8273S30 96	8373S30 96	ZS14/3-29/S30MD-DM	20	41	50	50	49,9	62	35,5	78,5	1,765
		38	M48x2	8073S38 98	8273S38 98	8373S38 98	ZS14/3-29/S38MD-DM	22	50	55	60	54,9	72	41	89	2,543

* Models ØD 6 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Adjustable stud and standpipe elbows

BSP parallel
sealing bite
ISO 1179-4

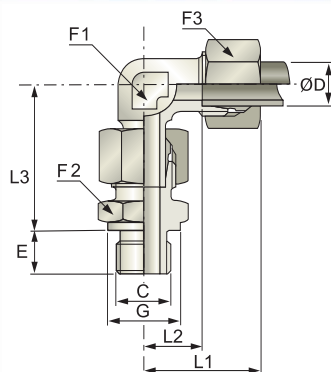


	PN	ØD	C	Body only	Double-bite ring	Bell code	E	F1	F2	F3	G	L1	L2	L3	kg
L	315	6	G1/8	8046L06 10	8246L06 10	ZS15/1-29/L6RB	8	12	14	14	14	27	12	34,5	0,050
		8	G1/4	8046L08 13	8246L08 13	ZS15/1-29/L8RB	12	12	19	17	18	29	14	37,5	0,070
		10	G1/4	8046L10 13	8246L10 13	ZS15/1-29/L10RB	12	14	19	19	18	30	15	40	0,090
		12	G3/8	8046L12 17	8246L12 17	ZS15/1-29/L12RB	12	17	22	22	22	32	17	42	0,120
		15	G1/2	8046L15 21	8246L15 21	ZS15/1-29/L15RB	14	19	27	27	26	36	21	46	0,220
	250	18	G1/2	8046L18 21	8246L18 21	ZS15/1-29/L18RB	14	24	27	32	26	40	23,5	50	0,280
		22	G3/4	8046L22 27	8246L22 27	ZS15/1-29/L22RB	16	27	32	36	32	44	27,5	55	0,370
		28	G1	8046L28 34	8246L28 34	ZS15/1-29/L28RB	18	36	41	41	39	47	30,5	59	0,560
		35	G1"1/4	8046L35 42	8246L35 42	ZS15/1-29/L35RB	20	41	50	50	49	56	34,5	68,5	0,850
		42	G1"1/2	8046L42 49	8246L42 49	ZS15/1-29/L42RB	22	50	55	60	55	63	40	75	1,270
S	PB630*	6	G1/4	8046S06 13	8246S06 13	ZS15/1-29/S6RB	12	12	19	17	18	31	16	40	0,080
		8	G1/4	8046S08 13	8246S08 13	ZS15/1-29/S8RB	12	14	19	19	18	32	17	42,5	0,110
		10	G3/8	8046S10 17	8246S10 17	ZS15/1-29/S10RB	12	17	22	22	22	34	17,5	45	0,150
		12	G3/8	8046S12 17	8246S12 17	ZS15/1-29/S12RB	12	17	22	24	22	38	21,5	48	0,190
		14	G1/2	8046S14 21	8246S14 21	ZS15/1-29/S14RB	14	19	27	27	26	40	22	54	0,260
	400	16	G1/2	8046S16 21	8246S16 21	ZS15/1-29/S16RB	14	24	27	30	26	43	24,5	55	0,330
		20	G3/4	8046S20 27	8246S20 27	ZS15/1-29/S20RB	16	27	32	36	32	48	26,5	65	0,490
		25	G1	8046S25 34	8246S25 34	ZS15/1-29/S25RB	18	36	41	46	39	54	30	73	0,940
	250	30	G1"1/4	8046S30 42	8246S30 42	ZS15/1-29/S30RB	20	41	50	50	49	62	35,5	78,5	1,300
		38	G1"1/2	8046S38 49	8246S38 49	ZS15/1-29/S38RB	22	50	55	60	55	72	41	89	1,980

* Safety factor 3.

Adjustable stud and standpipe elbows

metric parallel
sealing bite
ISO 9974-3

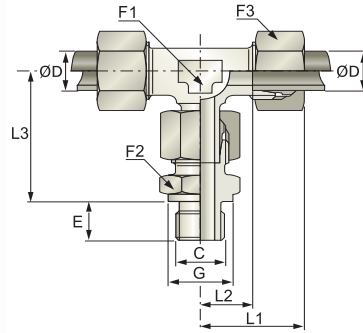


	PN	ØD	C	Body only	Double-bite ring	Bell code	E	F1	F2	F3	G	L1	L2	L3	kg
L	315	6	M10x1	8046L06 60	8246L06 60	ZS15/1-29/L6MB	8	12	14	14	14	27	12	34,5	0,050
		8	M12x1,5	8046L08 67	8246L08 67	ZS15/1-29/L8MB	12	12	17	17	17	29	14	37,5	0,070
		10	M14x1,5	8046L10 71	8246L10 71	ZS15/1-29/L10MB	12	14	19	19	19	30	15	40	0,090
		12	M16x1,5	8046L12 75	8246L12 75	ZS15/1-29/L12MB	12	17	22	22	21	32	17	42	0,120
		15	M18x1,5	8046L15 78	8246L15 78	ZS15/1-29/L15MB	12	19	24	27	23	36	21	46	0,220
		18	M22x1,5	8046L18 82	8246L18 82	ZS15/1-29/L18MB	14	24	27	32	27	40	23,5	50	0,280
	250	22	M26x1,5	8046L22 89	8246L22 89	ZS15/1-29/L22MB	16	27	32	36	31	44	27,5	55	0,370
		28	M32x2	8046L28 91	8246L28 91	ZS15/1-29/L28MB	18	36	41	41	39	47	30,5	59	0,560
		35	M42x2	8046L35 96	8246L35 96	ZS15/1-29/L35MB	20	41	50	50	49	56	34,5	68,5	0,850
		42	M48x2	8046L42 98	8246L42 98	ZS15/1-29/L42MB	22	50	55	60	55	63	40	75	1,270
S	PB630*	6	M12x1,5	8046S06 67	8246S06 67	ZS15/1-29/S6MB	12	12	17	17	17	31	16	40	0,080
		8	M14x1,5	8046S08 71	8246S08 71	ZS15/1-29/S8MB	12	14	19	19	19	32	17	42,5	0,110
		10	M16x1,5	8046S10 75	8246S10 75	ZS15/1-29/S10MB	12	17	22	22	21	34	17,5	45	0,150
		12	M18x1,5	8046S12 78	8246S12 78	ZS15/1-29/S12MB	12	17	24	24	23	38	21,5	48	0,190
		14	M20x1,5	8046S14 80	8246S14 80	ZS15/1-29/S14MB	14	19	27	27	25	40	22	54	0,260
		16	M22x1,5	8046S16 82	8246S16 82	ZS15/1-29/S16MB	14	24	27	30	27	43	24,5	55	0,330
	400	20	M27x2	8046S20 86	8246S20 86	ZS15/1-29/S20MB	16	27	32	36	32	48	26,5	65	0,490
		25	M33x2	8046S25 91	8246S25 91	ZS15/1-29/S25MB	18	36	41	46	39	54	30	73	0,940
	250	30	M42x2	8046S30 96	8246S30 96	ZS15/1-29/S30MB	20	41	50	50	49	62	35,5	78,5	1,300
		38	M48x2	8046S38 98	8246S38 98	ZS15/1-29/S38MB	22	50	55	60	55	72	41	89	1,980

* Safety factor 3.

Adjustable male stud branch tees

BSP parallel
sealing bite
ISO 1179-4

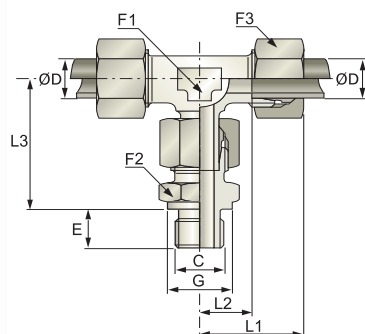


	PN	ØD	C	Body only	Double-bite ring	Bell code	E	F1	F2	F3	G	L1	L2	L3	kg
L	315	6	G1/8	8047L06 10	8247L06 10	ZS15/2-29/L6RB	8	12	14	14	14	27	12	34,5	0,070
		8	G1/4	8047L08 13	8247L08 13	ZS15/2-29/L8RB	12	12	19	17	18	29	14	37,5	0,090
		10	G1/4	8047L10 13	8247L10 13	ZS15/2-29/L10RB	12	14	19	19	18	30	15	40	0,110
		12	G3/8	8047L12 17	8247L12 17	ZS15/2-29/L12RB	12	17	22	22	22	32	17	42	0,160
		15	G1/2	8047L15 21	8247L15 21	ZS15/2-29/L15RB	14	19	27	27	26	36	21	46	0,280
		18	G1/2	8047L18 21	8247L18 21	ZS15/2-29/L18RB	14	24	27	32	26	40	23,5	50	0,380
	250	22	G3/4	8047L22 27	8247L22 27	ZS15/2-29/L22RB	16	27	32	36	32	44	27,5	55	0,510
		28	G1	8047L28 34	8247L28 34	ZS15/2-29/L28RB	18	36	41	41	39	47	30,5	59	0,750
		35	G1"1/4	8047L35 42	8247L35 42	ZS15/2-29/L35RB	20	41	50	50	49	56	34,5	68,5	1,120
		42	G1"1/2	8047L42 49	8247L42 49	ZS15/2-29/L42RB	22	50	55	60	55	63	40	75	1,320
S	PB630*	6	G1/4	8047S06 13	8247S06 13	ZS15/2-29/S6RB	12	12	19	17	18	31	16	40	0,120
		8	G1/4	8047S08 13	8247S08 13	ZS15/2-29/S8RB	12	14	19	19	18	32	17	42,5	0,150
		10	G3/8	8047S10 17	8247S10 17	ZS15/2-29/S10RB	12	17	22	22	22	34	17,5	45	0,190
		12	G3/8	8047S12 17	8247S12 17	ZS15/2-29/S12RB	12	17	22	24	22	38	21,5	48	0,250
		14	G1/2	8047S14 21	8247S14 21	ZS15/2-29/S14RB	14	19	27	27	26	40	22	54	0,360
		16	G1/2	8047S16 21	8247S16 21	ZS15/2-29/S16RB	14	24	27	30	26	43	24,5	55	0,450
	400	20	G3/4	8047S20 27	8247S20 27	ZS15/2-29/S20RB	16	27	32	36	32	48	26,5	65	0,690
		25	G1	8047S25 34	8247S25 34	ZS15/2-29/S25RB	18	36	41	46	39	54	30	73	1,280
	250	30	G1"1/4	8047S30 42	8247S30 42	ZS15/2-29/S30RB	20	41	50	50	49	62	35,5	78,5	1,720
		38	G1"1/2	8047S38 49	8247S38 49	ZS15/2-29/S38RB	22	50	55	60	55	72	41	89	2,660

* Safety factor 3.

Adjustable male stud branch tees

metric parallel
sealing bite
ISO 9974-3

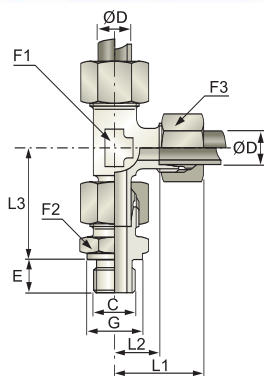


	PN	ØD	C	Body only	Double-bite ring	Bell code	E	F1	F2	F3	G	L1	L2	L3	kg
L	315	6	M10x1	8047L06 60	8247L06 60	ZS15/2-29/L6MB	8	14	12	14	14	27	12	34,5	0,070
		8	M12x1,5	8047L08 67	8247L08 67	ZS15/2-29/L8MB	12	17	12	17	17	29	14	37,5	0,090
		10	M14x1,5	8047L10 71	8247L10 71	ZS15/2-29/L10MB	12	19	14	19	19	30	15	40	0,120
		12	M16x1,5	8047L12 75	8247L12 75	ZS15/2-29/L12MB	12	22	17	22	21	32	17	42	0,160
		15	M18x1,5	8047L15 78	8247L15 78	ZS15/2-29/L15MB	12	24	19	27	23	36	21	46	0,280
	250	18	M22x1,5	8047L18 82	8247L18 82	ZS15/2-29/L18MB	14	27	24	32	27	40	23,5	50	0,380
		22	M26x1,5	8047L22 89	8247L22 89	ZS15/2-29/L22MB	16	32	27	36	31	44	27,5	55	0,510
		28	M33x2	8047L28 91	8247L28 91	ZS15/2-29/L28MB	18	41	36	41	39	47	30,5	59	0,750
		35	M42x2	8047L35 96	8247L35 96	ZS15/2-29/L35MB	20	50	41	50	49	56	34,5	68,5	1,150
		42	M48x2	8047L42 98	8247L42 98	ZS15/2-29/L42MB	22	55	50	60	55	63	40	75	1,320
S	PB630*	6	M12x1,5	8047S06 67	8247S06 67	ZS15/2-29/S6MB	12	17	12	17	17	31	16	40	0,120
		8	M14x1,5	8047S08 71	8247S08 71	ZS15/2-29/S8MB	12	19	14	19	19	32	17	42,5	0,150
		10	M16x1,5	8047S10 75	8247S10 75	ZS15/2-29/S10MB	12	22	17	22	21	34	17,5	45	0,190
		12	M18x1,5	8047S12 78	8247S12 78	ZS15/2-29/S12MB	12	24	17	24	23	38	21,5	48	0,250
		14	M20x1,5	8047S14 80	8247S14 80	ZS15/2-29/S14MB	14	27	19	27	25	40	22	54	0,360
	400	16	M22x1,5	8047S16 82	8247S16 82	ZS15/2-29/S16MB	14	27	24	30	27	43	24,5	55	0,450
		20	M27x2	8047S20 86	8247S20 86	ZS15/2-29/S20MB	16	32	27	36	32	48	26,5	65	0,690
		25	M33x2	8047S25 91	8247S25 91	ZS15/2-29/S25MB	18	41	36	46	39	54	30	73	1,280
	250	30	M42x2	8047S30 96	8247S30 96	ZS15/2-29/S30MB	20	50	41	50	49	62	35,5	78,5	1,172
		38	M48x2	8047S38 98	8247S38 98	ZS15/2-29/S38MB	22	55	50	60	55	72	41	89	2,660

* Safety factor 3.

Standpipe run tees

BSP parallel
sealing bite
ISO 1179-4

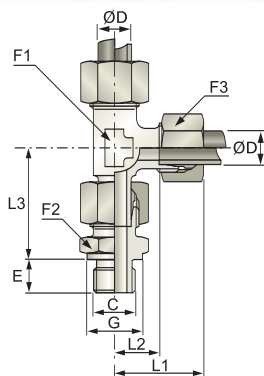


	PN	ØD	C	Body only	Double-bite ring	Bell code	E	F1	F2	F3	G	L1	L2	L3	kg
L	315	6	G1/8	8048L06 10	8248L06 10	ZS15/3-29/L6RB	8	12	14	14	14	27	12	34,5	0,070
		8	G1/4	8048L08 13	8248L08 13	ZS15/3-29/L8RB	12	12	19	17	18	29	14	37,5	0,100
		10	G1/4	8048L10 13	8248L10 13	ZS15/3-29/L10RB	12	14	19	19	18	30	15	40	0,120
		12	G3/8	8048L12 17	8248L12 17	ZS15/3-29/L12RB	12	17	22	22	22	32	17	42	0,160
		15	G1/2	8048L15 21	8248L15 21	ZS15/3-29/L15RB	14	19	27	27	26	36	21	46	0,270
		18	G1/2	8048L18 21	8248L18 21	ZS15/3-29/L18RB	14	24	27	32	26	40	23,5	50	0,360
	250	22	G3/4	8048L22 27	8248L22 27	ZS15/3-29/L22RB	16	27	32	36	32	44	27,5	55	0,490
		28	G1	8048L28 34	8248L28 34	ZS15/3-29/L28RB	18	36	41	41	39	47	30,5	59	0,700
		35	G1"1/4	8048L35 42	8248L35 42	ZS15/3-29/L35RB	20	41	50	50	49	56	34,5	68,5	0,980
		42	G1"1/2	8048L42 49	8248L42 49	ZS15/3-29/L42RB	22	50	55	60	55	63	40	75	1,300
S	PB630*	6	G1/4	8048S06 13	8248S06 13	ZS15/3-29/S6RB	12	12	19	17	18	31	16	40	0,110
		8	G1/4	8048S08 13	8248S08 13	ZS15/3-29/S8RB	12	14	19	19	18	32	17	42,5	0,140
		10	G3/8	8048S10 17	8248S10 17	ZS15/3-29/S10RB	12	17	22	22	22	34	17,5	45	0,210
		12	G3/8	8048S12 17	8248S12 17	ZS15/3-29/S12RB	12	17	22	24	22	38	21,5	48	0,250
		14	G1/2	8048S14 21	8248S14 21	ZS15/3-29/S14RB	14	19	27	27	26	40	22	54	0,340
		16	G1/2	8048S16 21	8248S16 21	ZS15/3-29/S16RB	14	24	27	30	26	43	24,5	55	0,430
	400	20	G3/4	8048S20 27	8248S20 27	ZS15/3-29/S20RB	16	27	32	36	32	48	26,5	65	0,650
		25	G1	8048S25 34	8248S25 34	ZS15/3-29/S25RB	18	36	41	46	39	54	30	73	1,230
	250	30	G1"1/4	8048S30 42	8248S30 42	ZS15/3-29/S30RB	20	41	50	50	49	62	35,5	78,5	1,660
		38	G1"1/2	8048S38 49	8248S38 49	ZS15/3-29/S38RB	22	50	55	60	55	72	41	89	2,470

* Safety factor 3.

Standpipe run tees

metric parallel
sealing bite
ISO 9974-3

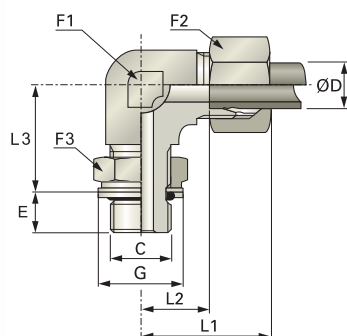


	PN	ØD	C	Body only	Double-bite ring	Bell code	E	F1	F2	F3	G	L1	L2	L3	kg
L	315	6	M10x1	8048L06 60	8248L06 60	ZS15/3-29/L6MB	8	12	14	14	14	27	12	34,5	0,070
		8	M12x1,5	8048L08 67	8248L08 67	ZS15/3-29/L8MB	12	12	17	17	17	29	14	37,5	0,100
		10	M14x1,5	8048L10 71	8248L10 71	ZS15/3-29/L10MB	12	14	19	19	19	30	15	40	0,110
		12	M16x1,5	8048L12 75	8248L12 75	ZS15/3-29/L12MB	12	17	22	22	21	32	17	42	0,160
		15	M18x1,5	8048L15 78	8248L15 78	ZS15/3-29/L15MB	12	19	24	27	23	36	21	46	0,270
	250	18	M22x1,5	8048L18 82	8248L18 82	ZS15/3-29/L18MB	14	24	27	32	27	40	23,5	50	0,350
		22	M26x1,5	8048L22 89	8248L22 89	ZS15/3-29/L22MB	16	27	32	36	31	44	27,5	55	0,490
		28	M33x2	8048L28 91	8248L28 91	ZS15/3-29/L28MB	18	36	41	41	39	47	30,5	59	0,700
		35	M42x2	8048L35 96	8248L35 96	ZS15/3-29/L35MB	20	41	50	50	49	56	34,5	68,5	0,980
		42	M48x2	8048L42 98	8248L42 98	ZS15/3-29/L42MB	22	50	55	60	55	63	40	75	1,300
S	PB630*	6	M12x1,5	8048S06 67	8248S06 67	ZS15/3-29/S6MB	12	12	17	17	17	31	16	40	0,110
		8	M14x1,5	8048S08 71	8248S08 71	ZS15/3-29/S8MB	12	14	19	19	19	32	17	42,5	0,140
		10	M16x1,5	8048S10 75	8248S10 75	ZS15/3-29/S10MB	12	17	22	22	21	34	17,5	45	0,210
		12	M18x1,5	8048S12 78	8248S12 78	ZS15/3-29/S12MB	12	17	24	24	23	38	21,5	48	0,250
		14	M20x1,5	8048S14 80	8248S14 80	ZS15/3-29/S14MB	14	19	27	27	25	40	22	54	0,340
	400	16	M22x1,5	8048S16 82	8248S16 82	ZS15/3-29/S16MB	14	24	27	30	27	43	24,5	55	0,430
		20	M27x2	8048S20 86	8248S20 86	ZS15/3-29/S20MB	16	27	32	36	32	48	26,5	65	0,650
		25	M33x2	8048S25 91	8248S25 91	ZS15/3-29/S25MB	18	36	41	46	39	54	30	73	1,230
	250	30	M42x2	8048S30 96	8248S30 96	ZS15/3-29/S30MB	20	41	50	50	49	62	35,5	78,5	1,660
		38	M48x2	8048S38 98	8248S38 98	ZS15/3-29/S38MB	22	50	55	60	55	72	41	89	2,470

* Safety factor 3.

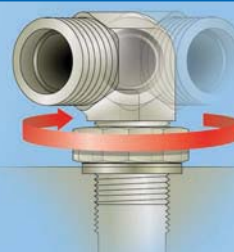
Adjustable male stud elbows with lock nut

BSP parallel
O-ring and lock nut
ISO 6149-2/3



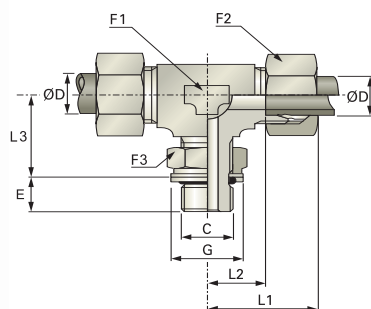
PN	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	G	L1	L2	L3	O-ring	kg
315 500	6	G1/8		8051L06 10	8251L06 10	8351L06 10	ZS15/1-02/L6R	7	14	14	14	15	29	14	19	8,1x1,6	0,057
	8	G1/4		8051L08 13	8251L08 13	8351L08 13	ZS15/1-02/L8R	9	14	17	19	20	31	16	23	11,3x2,2	0,071
	10	G1/4		8051L10 13	8251L10 13	8351L10 13	ZS15/1-02/L10R	9	19	19	19	20	32	17	25	11,3x2,2	0,101
	12	G3/8		8051L12 17	8251L12 17	8351L12 17	ZS15/1-02/L12R	9	19	22	22	23	34	19	28	13,94x2,62	0,122
L 200 315	15	G1/2		8051L15 21	8251L15 21	8351L15 21	ZS15/1-02/L15R	13	22	27	27	28	36	21	30	17,86x2,62	0,200
	18	G1/2		8051L18 21	8251L18 21	8351L18 21	ZS15/1-02/L18R	13	27	32	27	28	40	24	36	17,86x2,62	0,255
	22	G3/4		8051L22 27	8251L22 27	8351L22 27	ZS15/1-02/L22R	13	32	36	36	33	44	28	39	23,47x2,62	0,440
	28	G1		8051L28 34	8251L28 34	8351L28 34	ZS15/1-02/L28R	15	36	41	41	41	47	31	44	29,74x2,95	0,751
160 250	35	G1"1/4		8051L35 42	8251L35 42	8351L35 42	ZS15/1-02/L35R	15	48	50	50	51	59	38	50	37,7x3,53	1,107
	42	G1"1/2		8051L42 49	8251L42 49	8351L42 49	ZS15/1-02/L42R	15	48	60	55	56	61	38	52	44,04x3,53	1,180
315 500	6	G1/4		8051S06 13	8251S06 13	8351S06 13	ZS15/1-02/S6R	9	14	17	19	20	30	15	23	11,3x2,2	0,072
	8	G1/4		8051S08 13	8251S08 13	8351S08 13	ZS15/1-02/S8R	9	19	19	19	20	32	17	27	11,3x2,2	1,110
	10	G3/8		8051S10 17	8251S10 17	8351S10 17	ZS15/1-02/S10R	9	19	22	22	23	34	18	29	13,94x2,62	0,139
	12	G3/8		8051S12 17	8251S12 17	8351S12 17	ZS15/1-02/S12R	9	22	24	22	23	38	22	29	13,94x2,62	0,176
S 200 315	16	G1/2		8051S16 21	8251S16 21	8351S16 21	ZS15/1-02/S16R	13	27	30	27	28	43	25	36	17,86x2,62	0,314
	20	G3/4		8051S20 27	8251S20 27	8351S20 27	ZS15/1-02/S20R	13	32	36	36	33	49	28	39	23,47x2,62	0,434
	25	G1		8051S25 34	8251S25 34	8351S25 34	ZS15/1-02/S25R	15	36	46	41	41	54	30	44	29,74x2,95	0,730
	30	G1"1/4		8051S30 42	8251S30 42	8351S30 42	ZS15/1-02/S30R	15	48	50	50	51	62	36	49	37,7x3,53	1,215
160 250	38	G1"1/2		8051S38 49	8251S38 49	8351S38 49	ZS15/1-02/S38R	15	48	60	55	56	65	34	55	44,04x3,53	1,370

These couplings can swivel 360° and take up less space than alternate couplings. They have high sealing capability and require reduced assembly force. They can be loosened and retightened as required.



Adjustable male stud branch tees with lock nut

BSP parallel
O-ring and lock nut
ISO 6149-2/3



PN	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	G	L1	L2	L3	O-ring	kg
315 500	6	G1/8		8055L06 10	8255L06 10	8355L06 10	ZS15/1-03/L6R	7	14	14	14	15	29	14	19	8,1x1,6	0,089
	8	G1/4		8055L08 13	8255L08 13	8355L08 13	ZS15/1-03/L8R	9	14	17	19	20	31	16	23	11,3x2,2	0,098
	10	G1/4		8055L10 13	8255L10 13	8355L10 13	ZS15/1-03/L10R	9	19	19	19	20	32	17	25	11,3x2,2	0,148
	12	G3/8		8055L12 17	8255L12 17	8355L12 17	ZS15/1-03/L12R	9	19	22	22	23	34	19	28	13,94x2,62	0,189
L 200 315	15	G1/2		8055L15 21	8255L15 21	8355L15 21	ZS15/1-03/L15R	13	22	27	27	28	36	21	30	17,86x2,62	0,258
	18	G1/2		8055L18 21	8255L18 21	8355L18 21	ZS15/1-03/L18R	13	27	32	27	28	40	24	36	17,86x2,62	0,401
	22	G3/4		8055L22 27	8255L22 27	8355L22 27	ZS15/1-03/L22R	13	32	36	36	33	44	28	39	23,47x2,62	0,596
	28	G1		8055L28 34	8255L28 34	8355L28 34	ZS15/1-03/L28R	15	36	41	41	41	47	31	44	29,74x2,95	0,795
160 250	35	G1"1/4		8055L35 42	8255L35 42	8355L35 42	ZS15/1-03/L35R	15	48	50	50	51	59	38	50	37,7x3,53	1,160
	42	G1"1/2		8055L42 49	8255L42 49	8355L42 49	ZS15/1-03/L42R	15	48	60	55	56	61	38	52	44,04x3,53	1,390
315 500	6	G1/4		8055S06 13	8255S06 13	8355S06 13	ZS15/1-03/S6R	9	14	17	19	20	30	15	23	11,3x2,2	0,104
	8	G1/4		8055S08 13	8255S08 13	8355S08 13	ZS15/1-03/S8R	9	19	19	19	20	32	17	27	11,3x2,2	0,158
	10	G3/8		8055S10 17	8255S10 17	8355S10 17	ZS15/1-03/S10R	9	19	22	22	23	34	18	29	13,94x2,62	0,198
	12	G3/8		8055S12 17	8255S12 17	8355S12 17	ZS15/1-03/S12R	9	22	24	22	23	38	22	29	13,94x2,62	0,280
S 200 315	16	G1/2		8055S16 21	8255S16 21	8355S16 21	ZS15/1-03/S16R	13	27	30	27	28	43	25	36	17,86x2,62	0,398
	20	G3/4		8055S20 27	8255S20 27	8355S20 27	ZS15/1-03/S20R	13	32	36	36	33	49	28	39	23,47x2,62	0,594
	25	G1		8055S25 34	8255S25 34	8355S25 34	ZS15/1-03/S25R	15	36	46	41	41	54	30	44	29,74x2,95	0,905
	30	G1"1/4		8055S30 42	8255S30 42	8355S30 42	ZS15/1-03/S30R	15	48	50	50	51	62	36	49	37,7x3,53	1,350
160 250	38	G1"1/2		8055S38 49	8255S38 49	8355S38 49	ZS15/1-03/S38R	15	48	60	55	56	65	34	55	44,04x3,53	1,595



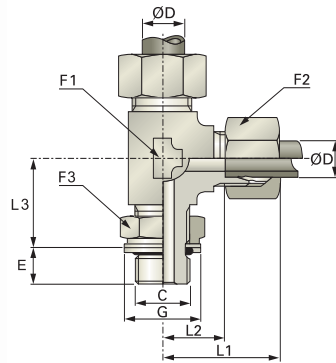
Also available upon request :

- metric parallel thread models ISO 9974-1 or ISO 6149 (8255/8355- 8256/8356)
- UN, UNF thread models with O-ring (8256/8356)

Find these models on legris.com

Adjustable male stud run tees with lock nut

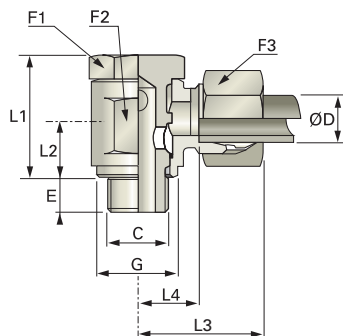
BSP parallel
O-ring and lock nut
ISO 6149-2/3



PN	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	G	L1	L2	L3	O-ring	kg
315 500	6	G1/8		8057L06 10	8257L06 10	8357L06 10	ZS15/1-04/L6R	7	14	14	14	15	29	14	19	8,1x1,6	0,089
	8	G1/4		8057L08 13	8257L08 13	8357L08 13	ZS15/1-04/L8R	9	14	17	19	20	31	16	23	11,3x2,2	0,098
	10	G1/4		8057L10 13	8257L10 13	8357L10 13	ZS15/1-04/L10R	9	19	19	19	20	32	17	25	11,3x2,2	0,148
	12	G3/8		8057L12 17	8257L12 17	8357L12 17	ZS15/1-04/L12R	9	19	22	22	23	34	19	28	13,94x2,62	0,189
L 200 315	15	G1/2		8057L15 21	8257L15 21	8357L15 21	ZS15/1-04/L15R	13	22	27	27	28	36	21	30	17,86x2,62	0,258
	18	G1/2		8057L18 21	8257L18 21	8357L18 21	ZS15/1-04/L18R	13	27	32	27	28	40	24	36	17,86x2,62	0,401
	22	G3/4		8057L22 27	8257L22 27	8357L22 27	ZS15/1-04/L22R	13	32	36	36	33	44	28	39	23,47x2,62	0,596
	28	G1		8057L28 34	8257L28 34	8357L28 34	ZS15/1-04/L28R	15	36	41	41	41	47	31	44	29,74x2,95	0,795
160 250	35	G1"1/4		8057L35 42	8257L35 42	8357L35 42	ZS15/1-04/L35R	15	48	50	50	51	59	38	50	37,7x3,53	1,160
	42	G1"1/2		8057L42 49	8257L42 49	8357L42 49	ZS15/1-04/L42R	15	48	60	55	56	61	38	52	44,04x3,53	1,390
315 500	6	G1/4		8057S06 13	8257S06 13	8357S06 13	ZS15/1-04/S6R	9	14	17	19	20	30	15	23	11,3x2,2	0,104
	8	G1/4		8057S08 13	8257S08 13	8357S08 13	ZS15/1-04/S8R	9	19	19	19	20	32	17	27	11,3x2,2	0,158
	10	G3/8		8057S10 17	8257S10 17	8357S10 17	ZS15/1-04/S10R	9	19	22	22	23	34	18	29	13,94x2,62	0,198
	12	G3/8		8057S12 17	8257S12 17	8357S12 17	ZS15/1-04/S12R	9	22	24	22	23	38	22	29	13,94x2,62	0,280
S 200 315	16	G1/2		8057S16 21	8257S16 21	8357S16 21	ZS15/1-04/S16R	13	27	30	27	28	43	25	36	17,86x2,62	0,398
	20	G3/4		8057S20 27	8257S20 27	8357S20 27	ZS15/1-04/S20R	13	32	36	36	33	49	28	39	23,47x2,62	0,594
	25	G1		8057S25 34	8257S25 34	8357S25 34	ZS15/1-04/S25R	15	36	46	41	41	54	30	44	29,74x2,95	0,905
	30	G1"1/4		8057S30 42	8257S30 42	8357S30 42	ZS15/1-04/S30R	15	48	50	50	51	62	36	49	37,7x3,53	1,350
160 250	38	G1"1/2		8057S38 49	8257S38 49	8357S38 49	ZS15/1-04/S38R	15	48	60	55	56	65	34	55	44,04x3,53	1,595

Banjo couplings

BSP parallel

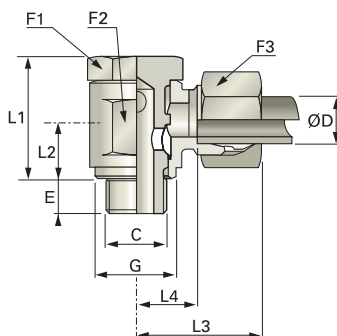


	PB	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	E	F1	F2	F3	G	L1	L2	L3	L4	MA* (Nm)	
LL	100	4	G1/8	8018E04 10	8118E04 10		15-07/LL4R	6	14	14	10	13	18	8	21	11,5	15	0,030
		6	G1/8	8018E06 10	8118E06 10		15-07/LL6R	6	14	14	12	13	20	9,5	22	10	15	0,033
		8	G1/8	8018E08 10	8118E08 10		15-07/LL8R	6	14	14	14	13	21,5	10	23	11	15	0,035
L	250	6	G1/8	8018L06 10		8218L06 10	ZS15-07/L6R	6	14	17	14	14,5	22	10	26	11,5	20	0,040
		8	G1/4	8018L08 13		8218L08 13	ZS15-07/L8R	9	19	19	17	18	26	12,5	28	13	35	0,077
		10	G1/4	8018L10 13		8218L10 13	ZS15-07/L10R	9	19	22	19	19	28	13,5	30	15	35	0,085
		10	G3/8	8018L10 17		8218L10 17	ZS15-07/L10R3/8"	9	22	24	19	21,8	32	15,5	31	16	35	0,100
		12	G1/4	8018L12 13		8218L12 13	ZS15-07/L12R1/4"	9	19	24	22	19	28	13,5	31	16	35	0,130
		12	G3/8	8018L12 17		8218L12 17	ZS15-07/L12R	9	22	24	22	21,8	32	15,5	31	16	70	0,142
		12	G1/2	8018L12 21		8218L12 21	ZS15-07/L12R1/2"	11	27	30	22	26,5	37	18,5	34,5	19,5	90	0,150
	160	15	G1/2	8018L15 21		8218L15 21	ZS15-07/L15R	11	27	30	27	26,5	37	18,5	35	19,5	90	0,195
		18	G1/2	8018L18 21		8218L18 21	ZS15-07/L18R	11	27	30	32	26,5	45	22	36	19,5	120	0,205
		22	G3/4	8018L22 27		8218L22 27	ZS15-07/L22R	13	32	36	36	32	49	24	41	24,5	160	0,383
S	250	6	G1/4	8018S06 13		8218S06 13	ZS15-07/S6R	9	19	19	17	18	26	12,5	29	14,5	35	0,080
		8	G1/4	8018S08 13		8218S08 13	ZS15-07/S8R	9	19	22	19	19	28	13,5	31	16	35	0,095
		10	G3/8	8018S10 17		8218S10 17	ZS15-07/S10R	9	22	24	22	21,8	32	15,5	32	16	70	0,120
		12	G3/8	8018S12 17		8218S12 17	ZS15-07/S12R	9	24	24	24	23,5	37	18,5	34	17,5	70	0,145
		14	G1/2	8018S14 21		8218S14 21	ZS15-07/S14R	11	27	30	27	26,5	37	18,5	38	20,5	120	0,215
	160	16	G1/2	8018S16 21		8218S16 21	ZS15-07/S16R	11	27	30	30	26,5	45	22	40	21,5	120	0,277
		20	G3/4	8018S20 27		8218S20 27	ZS15-07/S20R	13	32	36	36	32	49	24	45	23,5	160	0,425

* recommended tightening torque for the banjo bolt.

Banjo couplings

metric parallel



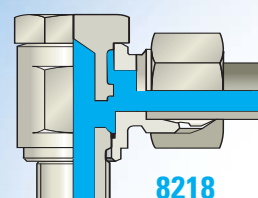
	PB	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	E	F1	F2	F3	G	L1	L2	L3	L4	MA* (Nm)	kg
LL	100	4	M8x1	8018E04 56	8118E04 56		15-07/LL4M	6	14	14	10	13	18	8	21	11,5	15	0,028
		6	M10x1	8018E06 60	8118E06 60		15-07/LL6M	6	14	14	12	13	20	9,5	22	10	15	0,033
		8	M10x1	8018E08 60	8118E08 60		15-07/LL8M	6	14	14	14	13	21,5	10	23	11	15	0,035
L	250	6	M10x1	8018L06 60		8218L06 60	ZS15-07/L6M	6	14	17	14	14,5	22	10	26	11,5	20	0,038
		8	M12x1,5	8018L08 67		8218L08 67	ZS15-07/L8M	9	19	19	17	18	26	12,5	28	13	35	0,070
		10	M14x1,5	8018L10 71		8218L10 71	ZS15-07/L10M	9	19	22	19	19	28	13,5	30	15	40	0,080
		12	M16x1,5	8018L12 75		8218L12 75	ZS15-07/L12M	9	22	24	22	21,8	32	15,5	31	16	70	0,110
		12	M18x1,5	8018L12 78		8218L12 78	ZS15-07/L12M18X1,5	8	24	24	22	23,5	37	18,5	33	18	75	0,160
	160	15	M18x1,5	8018L15 78		8218L15 78	ZS15-07/L15M	9	24	24	27	23,5	37	18,5	33	18	75	0,165
		18	M22x1,5	8018L18 82		8218L18 82	ZS15-07/L18M	11	27	30	32	26,5	45	22	36	19,5	140	0,265
		22	M26x1,5	8018L22 89		8218L22 89	ZS15-07/L22M	13	32	36	36	32	49	24	41	24,5	160	0,350
S	250	6	M12x1,5	8018S06 67		8218S06 67	ZS15-07/S6M	9	19	19	17	18	26	12,5	29	14,5	35	0,067
		8	M14x1,5	8018S08 71		8218S08 71	ZS15-07/S8M	9	19	22	19	19	28	13,5	31	16	40	0,093
		10	M16x1,5	8018S10 75		8218S10 75	ZS15-07/S10M	9	22	24	22	21,8	32	15,5	32	16	70	0,130
		12	M18x1,5	8018S12 78		8218S12 78	ZS15-07/S12M	9	24	24	24	23,5	37	18,5	34	17,5	75	0,168
		14	M20x1,5	8018S14 80		8218S14 80	ZS15-07/S14M	11	27	30	27	26,5	37	18,5	38	20,5	120	0,215
	160	16	M22x1,5	8018S16 82		8218S16 82	ZS15-07/S16M	11	27	30	30	26,5	45	22	40	21,5	140	0,275
		20	M27x2	8018S20 86		8218S20 86	ZS15-07/S20M	13	32	36	36	32	49	24	45	23,5	170	0,425

* Recommended tightening torque for the banjo bolt

Technical characteristics

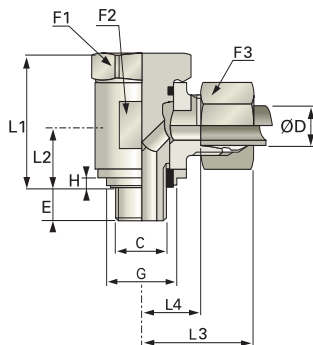
- Metal/metal sealing
- For medium pressure
- Low pressure loss
- Safety coefficient : 2.5
- Working pressure : 100 to 250 bar

90° internal passage



High pressure banjo couplings

BSP parallel

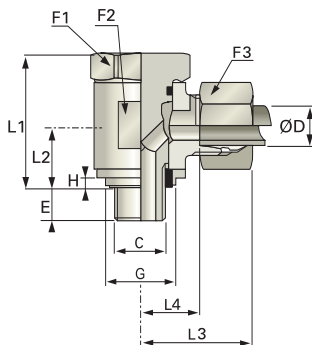


	PB	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	E	F1	F2	F3	G	H	L1	L2	L3	L4	MA* (Nm)	kg
L	400	6	G1/8	8028L06 10	8228L06 10	8328L06 10	ZS15/3-07/L6RF	8	19	19	14	14,9	1,5	21	10,5	28	13	25	0,074
		8	G1/4	8028L08 13	8228L08 13	8328L08 13	ZS15/3-07/L8RF	12	22	22	17	18,9	2	27	13,5	29	14,5	50	0,117
		10	G1/4	8028L10 13	8228L10 13	8328L10 13	ZS15/3-07/L10RF	12	22	22	19	18,9	2	27	13,5	30	15,5	50	0,128
		12	G3/8	8028L12 17	8228L12 17	8328L12 17	ZS15/3-07/L12RF	12	27	27	22	22,9	2,5	33	16,5	33	18	90	0,215
		15	G1/2	8028L15 21	8228L15 21	8328L15 21	ZS15/3-07/L15RF	14	32	32	27	26,9	3	42	19,5	37	22	130	0,310
		18	G1/2	8028L18 21	8228L18 21	8328L18 21	ZS15/3-07/L18RF	14	32	36	32	26,9	3	43	21,5	38	21	150	0,380
	315	22	G3/4	8028L22 27	8228L22 27	8328L22 27	ZS15/3-07/L22RF	16	41	46	36	32,9	3	48	24	45	27,5	250	0,645
	250	28	G1"	8028L28 34	8228L28 34	8328L28 34	ZS15/3-07/L28RF	18	46	50	41	39,9	3	59,5	30,5	48	31,5	400	0,890
		35	G1"1/4	8028L35 42	8228L35 42	8328L35 42	ZS15/3-07/L35RF	20	60	60	50	49,9	3	70,5	35,5	57	35,5	600	1,500
		42	G1"1/2	8028L42 49	8228L42 49	8328L42 49	ZS15/3-07/L42RF	22	65	70	60	55,9	3	80	40,5	63	40	800	2,400
S	400	6	G1/4	8028S06 13	8228S06 13	8328S06 13	ZS15/3-07/S6RF	12	22	22	17	18,9	2	27	13,5	31	16,5	50	0,119
		8	G1/4	8028S08 13	8228S08 13	8328S08 13	ZS15/3-07/S8RF	12	22	22	19	18,9	2	27	13,5	31	16,5	50	0,140
		10	G3/8	8028S10 17	8228S10 17	8328S10 17	ZS15/3-07/S10RF	12	27	27	22	22,9	2,5	33	16,5	35	18,5	90	0,200
		12	G3/8	8028S12 17	8228S12 17	8328S12 17	ZS15/3-07/S12RF	12	27	27	24	22,9	2,5	33	16,5	35	18,5	100	0,212
		14	G1/2	8028S14 21	8228S14 21	8328S14 21	ZS15/3-07/S14RF	14	32	32	27	26,9	3	42	19,5	41	23	130	0,320
		16	G1/2	8028S16 21	8228S16 21	8328S16 21	ZS15/3-07/S16RF	14	32	36	30	26,9	3	43	21,5	41	22	150	0,410
	315	20	G3/4	8028S20 27	8228S20 27	8328S20 27	ZS15/3-07/S20RF	16	41	46	36	32,9	3	48	24	49	26,5	250	0,770
	250	25	G1"	8028S25 34	8228S25 34	8328S25 34	ZS15/3-07/S25RF	18	46	50	46	39,9	3	59,5	30,5	55	31	400	1,020
		30	G1"1/4	8028S30 42	8228S30 42	8328S30 42	ZS15/3-07/S30RF	20	60	60	50	49,9	3	70,5	35,5	63	36,5	600	1,630
		38	G1"1/2	8028S38 49	8228S38 49	8328S38 49	ZS15/3-07/S38RF	22	65	70	60	55,9	3	80	40,5	72	41	800	2,520

* Recommended tightening torque for the banjo bolt

8228 : banjo designed for high pressure applications

High pressure banjo couplings metric parallel



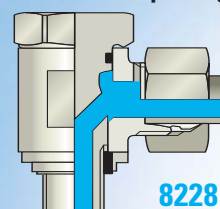
	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	G	H	L1	L2	L3	L4	MA* (Nm)	kg
L	400	6	M10x1	8028L06 60	8228L06 60	8328L06 60	ZS15/3-07/L6MF	8	19	19	14	14,9	1,5	21	10	28	13	30	0,074
		8	M12x1,5	8028L08 67	8228L08 67	8328L08 67	ZS15/3-07/L8MF	12	22	22	17	17,9	2	27	13,5	29	14,5	40	0,120
		10	M14x1,5	8028L10 71	8228L10 71	8328L10 71	ZS15/3-07/L10MF	12	22	22	19	19,9	2	27	13,5	30	15,5	60	0,130
		12	M16x1,5	8028L12 75	8228L12 75	8328L12 75	ZS15/3-07/L12MF	12	27	27	22	21,9	2	33	16,5	33	18	100	0,207
		15	M18x1,5	8028L15 78	8228L15 78	8328L15 78	ZS15/3-07/L15MF	12	30	30	27	23,9	2,5	37	18,5	36	20,5	130	0,305
		18	M22x1,5	8028L18 82	8228L18 82	8328L18 82	ZS15/3-07/L18MF	14	32	36	32	27,9	3	43	21,5	38	21	160	0,365
	315	22	M26x1,5	8028L22 89	8228L22 89	8328L22 89	ZS15/3-07/L22MF	16	36	41	36	31,9	3	48	24	43	27	250	0,565
	250	28	M33x2	8028L28 91	8228L28 91	8328L28 91	ZS15/3-07/L28MF	18	46	50	41	39,9	3	59,5	30,5	48	31,5	400	0,925
		35	M42x2	8028L35 96	8228L35 96	8328L35 96	ZS15/3-07/L35MF	20	60	60	50	49,9	3	70,5	35,5	57	35,5	600	1,520
		42	M48x2	8028L42 98	8228L42 98	8328L42 98	ZS15/3-07/L42MF	22	65	70	60	55,9	3	80	40,5	63	40	800	2,400
S	400	6	M12x1,5	8028S06 67	8228S06 67	8328S06 67	ZS15/3-07/S6MF	12	22	22	17	17,9	2	27	13,5	31	16,5	40	0,120
		8	M14x1,5	8028S08 71	8228S08 71	8328S08 71	ZS15/3-07/S8MF	12	22	22	19	19,9	2	27	13,5	31	16,5	60	0,136
		10	M16x1,5	8028S10 75	8228S10 75	8328S10 75	ZS15/3-07/S10MF	12	27	27	22	21,9	2	33	16,5	35	18,5	100	0,200
		12	M18x1,5	8028S12 78	8228S12 78	8328S12 78	ZS15/3-07/S12MF	12	30	30	24	23,9	2,5	37	18,5	37	20,5	130	0,280
		14	M20x1,5	8028S14 80	8228S14 80	8328S14 80	ZS15/3-07/S14MF	12	32	32	27	25,9	2,5	42	19,5	41	23	160	0,330
		16	M22x1,5	8028S16 82	8228S16 82	8328S16 82	ZS15/3-07/S16MF	14	32	36	30	27,9	3	43	21,5	41	22	160	0,418
	315	20	M27x2	8028S20 86	8228S20 86	8328S20 86	ZS15/3-07/S20MF	16	41	46	36	32,9	3	48	24	49	26,5	250	0,765
	250	25	M33x2	8028S25 91	8228S25 91	8328S25 91	ZS15/3-07/S25MF	18	46	50	46	39,9	3	59,5	30,5	55	31	400	1,050
		30	M42x2	8028S30 96	8228S30 96	8328S30 96	ZS15/3-07/S30MF	20	60	60	50	49,9	3	70,5	35,5	63	36,5	600	1,640
		38	M48x2	8028S38 98	8228S38 98	8328S38 98	ZS15/3-07/S38MF	22	65	70	60	55,9	3	80	40,5	72	41	800	2,520

* Recommended tightening torque for the banjo bolt

Technical characteristics

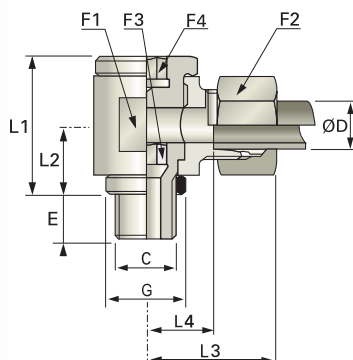
- PTFE seal
- For high pressure
- Low pressure loss
- Safety coefficient : 2.5
- Working pressure : 250 to 400 bar

45° internal passage



Chock-free banjo couplings

BSP parallel



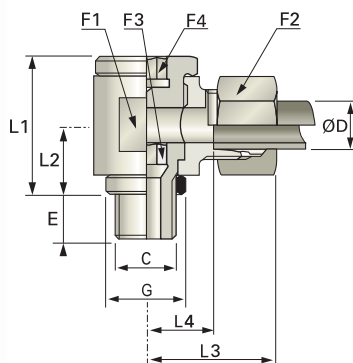
	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	F4	G	L1	L2	L3	L4	kg
L	250	6	G1/8	8038L06 10	8238L06 10	8338L06 10	ZS15/1-09/L6R	8	19	14	6	6	14	24	12	28	13	0,059
		8	G1/4	8038L08 13	8238L08 13	8338L08 13	ZS15/1-09/L8R	12	22	17	8	8	18	30,5	16	29	14,5	0,105
		10	G1/4	8038L10 13	8238L10 13	8338L10 13	ZS15/1-09/L10R	12	22	19	8	8	18	30,5	16	30	15,5	0,113
		12	G3/8	8038L12 17	8238L12 17	8338L12 17	ZS15/1-09/L12R	12	27	22	10	10	22	36	18	33	18	0,180
		15	G1/2	8038L15 21	8238L15 21	8338L15 21	ZS15/1-09/L15R	14	32	27	12	12	26	42	21	37	22	0,247
	100	18	G1/2	8038L18 21	8238L18 21	8338L18 21	ZS15/1-09/L18R	14	36	32	12	12	26	46	23,5	38	21,5	0,269
		22	G3/4	8038L22 27	8238L22 27	8338L22 27	ZS15/1-09/L22R	16	46	36	17	17	32	57,5	28	45	28,5	0,546
		28	G1"	8038L28 34	8238L28 34	8338L28 34	ZS15/1-09/L28R	18	50	41	22	22	39	63	32	48	31,5	0,701
		35	G1"1/4	8038L35 42	8238L35 42	8338L35 42	ZS15/1-09/L35R	20	60	50	27	27	49	75	37	57	35,5	1,173
		42	G1"1/2	8038L42 49	8238L42 49	8338L42 49	ZS15/1-09/L42R	22	70	60	32	32	55	85	42	63	40	2,244
S	400*	6	G1/4	8038S06 13	8238S06 13	8338S06 13	ZS15/1-09/S6R	12	22	17	8	8	18	30,5	16	31	16,5	0,109
		8	G1/4	8038S08 13	8238S08 13	8338S08 13	ZS15/1-09/S8R	12	22	19	8	8	18	30,5	16	31	16,5	0,114
		10	G3/8	8038S10 17	8238S10 17	8338S10 17	ZS15/1-09/S10R	12	27	22	10	10	22	36	18	35	18,5	0,190
		12	G3/8	8038S12 17	8238S12 17	8338S12 17	ZS15/1-09/S12R	12	27	24	10	10	22	36	18	35	18,5	0,196
		14	G1/2	8038S14 21	8238S14 21	8338S14 21	ZS15/1-09/S14R	14	32	27	12	12	26	42	21	41	23	0,297
		16	G1/2	8038S16 21	8238S16 21	8338S16 21	ZS15/1-09/S16R	14	36	30	12	12	26	46	23,5	41	22,5	0,307
		20	G3/4	8038S20 27	8238S20 27	8338S20 27	ZS15/1-09/S20R	16	46	36	17	17	32	57,5	28	49	27,5	0,753
	250*	25	G1"	8038S25 34	8238S25 34	8338S25 34	ZS15/1-09/S25R	18	50	46	22	22	39	63	32	55	31	1,019
		30	G1"1/4	8038S30 42	8238S30 42	8338S30 42	ZS15/1-09/S30R	20	60	50	27	27	49	75	37	63	36,5	1,580
		38	G1"1/2	8038S38 49	8238S38 49	8338S38 49	ZS15/1-09/S38R	22	70	60	32	32	55	85	42	72	41	2,432

* Safety factor 1,6 mini

8238: chock-free banjo couplings are ideal for reducing pressure loss and optimizing the efficiency of a hydraulic system

Chock-free banjo couplings

metric parallel



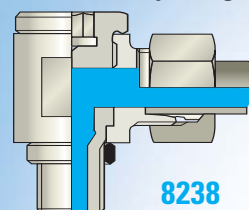
	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	F4	G	L1	L2	L3	L4	kg
L	250	6	M10x1	8038L06 60	8238L06 60	8338L06 60	ZS15/1-09/L6M	8	19	14	6	6	14	24	12	28	13	0,062
		8	M12x1,5	8038L08 67	8238L08 67	8338L08 67	ZS15/1-09/L8M	12	22	17	6	6	17	30,5	15	29	14,5	0,076
		10	M14x1,5	8038L10 71	8238L10 71	8338L10 71	ZS15/1-09/L10M	12	22	19	8	8	19	30,5	16	30	15,5	0,114
		12	M16x1,5	8038L12 75	8238L12 75	8338L12 75	ZS15/1-09/L12M	12	27	22	10	10	21	36	18	33	18	0,179
		15	M18x1,5	8038L15 78	8238L15 78	8338L15 78	ZS15/1-09/L15M	12	30	27	12	12	23	40,5	20	36	21	0,241
	100	18	M22x1,5	8038L18 82	8238L18 82	8338L18 82	ZS15/1-09/L18M	14	36	32	14	14	27	46	23	38	21,5	0,301
		22	M26x1,5	8038L22 89	8238L22 89	8338L22 89	ZS15/1-09/L22M	16	41	36	17	17	31	50,5	25	42	26	0,399
		28	M33x2	8038L28 91	8238L28 91	8338L28 91	ZS15/1-09/L28M	18	50	41	22	22	39	63	32	48	31,5	0,696
		35	M42x2	8038L35 96	8238L35 96	8338L35 96	ZS15/1-09/L35M	20	60	50	27	27	49	75	37	57	35,5	1,161
		42	M48x2	8038L42 98	8238L42 98	8338L42 98	ZS15/1-09/L42M	22	70	60	32	32	55	85	42	63	40	2,240
S	400*	6	M12x1,5	8038S06 67	8238S06 67	8338S06 67	ZS15/1-09/S6M	12	22	17	6	6	17	30,5	15	31	16,5	0,092
		8	M14x1,5	8038S08 71	8238S08 71	8338S08 71	ZS15/1-09/S8M	12	22	19	8	8	19	30,5	16	31	16,5	0,116
		10	M16x1,5	8038S10 75	8238S10 75	8338S10 75	ZS15/1-09/S10M	12	27	22	10	10	21	36	18	35	18,5	0,189
		12	M18x1,5	8038S12 78	8238S12 78	8338S12 78	ZS15/1-09/S12M	12	30	24	12	12	23	40,5	20	37	20,5	0,240
		14	M20x1,5	8038S14 80	8238S14 80	8338S14 80	ZS15/1-09/S14M	14	32	27	12	12	25	42	21	41	23	0,302
	250*	16	M22x1,5	8038S16 82	8238S16 82	8338S16 82	ZS15/1-09/S16M	14	36	30	14	14	27	46	23	41	22,5	0,389
		20	M27x2	8038S20 86	8238S20 86	8338S20 86	ZS15/1-09/S20M	16	46	36	17	17	32	57,5	28	49	27,5	0,578
		25	M33x2	8038S25 91	8238S25 91	8338S25 91	ZS15/1-09/S25M	18	50	46	22	22	39	63	32	55	31	1,014
		30	M42x2	8038S30 96	8238S30 96	8338S30 96	ZS15/1-09/S30M	20	60	50	27	27	49	75	37	63	36,5	1,568
		38	M48x2	8038S38 98	8238S38 98	8338S38 98	ZS15/1-09/S38M	22	70	60	32	32	55	85	42	72	41	2,428

* Safety factor 1,6 mini

Technical characteristics

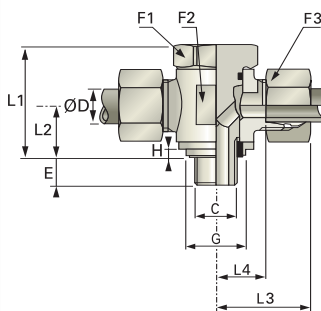
- Metal/metal sealing
- For low pressure
- Low pressure loss
- Safety coefficient : 1.6 minimum for series S
- Working pressure : 100 to 400 bar

90° full flow passage



High pressure double banjo couplings

BSP parallel



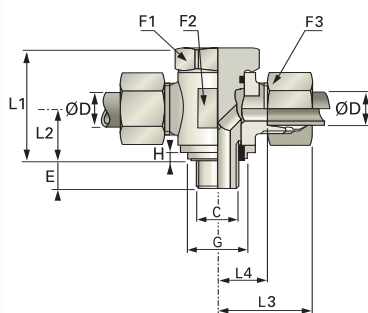
	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	G	H	L1	L2	L3	L4	MA* (Nm)	
L	400	6	G1/8	8029L06 10	8229L06 10	8329L06 10	ZS15/4-07/L6RF	8	19	19	14	14,9	1,5	21	10	28	13	25	0,085
		8	G1/4	8029L08 13	8229L08 13	8329L08 13	ZS15/4-07/L8RF	12	22	22	17	18,9	2	27	13,5	29	14,5	50	0,145
		10	G1/4	8029L10 13	8229L10 13	8329L10 13	ZS15/4-07/L10RF	12	22	22	19	18,9	2	27	13,5	30	15,5	50	0,165
		12	G3/8	8029L12 17	8229L12 17	8329L12 17	ZS15/4-07/L12RF	12	27	27	22	22,9	2,5	33	16,5	33	18	90	0,235
		15	G1/2	8029L15 21	8229L15 21	8329L15 21	ZS15/4-07/L15RF	14	32	32	27	26,9	3	42	19,5	37	22	130	0,380
		18	G1/2	8029L18 21	8229L18 21	8329L18 21	ZS15/4-07/L18RF	14	32	36	32	26,9	3	43	21,5	38	21	150	0,450
	315	22	G3/4	8029L22 27	8229L22 27	8329L22 27	ZS15/4-07/L22RF	16	41	46	36	32,9	3	48	24	45	27,5	250	0,795
	250	28	G1"	8029L28 34	8229L28 34	8329L28 34	ZS15/4-07/L28RF	18	46	50	41	39,9	3	59,5	30,5	48	31,5	400	1,080
		35	G1"1/4	8029L35 42	8229L35 42	8329L35 42	ZS15/4-07/L35RF	20	60	60	50	49,9	3	70,5	35,5	57	35,5	600	1,720
		42	G1"1/2	8029L42 49	8229L42 49	8329L42 49	ZS15/4-07/L42RF	22	65	70	60	55,9	3	80	40,5	63	40	800	2,750
S	400	6	G1/4	8029S06 13	8229S06 13	8329S06 13	ZS15/4-07/S6RF	12	22	22	17	18,9	2	27	13,5	31	16,5	50	0,150
		8	G1/4	8029S08 13	8229S08 13	8329S08 13	ZS15/4-07/S8RF	12	22	22	19	18,9	2	27	13,5	31	16,5	50	0,160
		10	G3/8	8029S10 17	8229S10 17	8329S10 17	ZS15/4-07/S10RF	12	27	27	22	22,9	2,5	33	16,5	35	18,5	90	0,255
		12	G3/8	8029S12 17	8229S12 17	8329S12 17	ZS15/4-07/S12RF	12	27	27	24	22,9	2,5	33	16,5	35	18,5	100	0,275
		14	G1/2	8029S14 21	8229S14 21	8329S14 21	ZS15/4-07/S14RF	14	32	32	27	26,9	3	42	19,5	41	23	130	0,418
		16	G1/2	8029S16 21	8229S16 21	8329S16 21	ZS15/4-07/S16RF	14	32	36	30	26,9	3	43	21,5	41	22	150	0,480
	315	20	G3/4	8029S20 27	8229S20 27	8329S20 27	ZS15/4-07/S20RF	16	41	46	36	32,9	3	48	24	49	26,5	250	0,875
	250	25	G1"	8029S25 34	8229S25 34	8329S25 34	ZS15/4-07/S25RF	18	46	50	46	39,9	3	59,5	30,5	55	31	400	1,320
		30	G1"1/4	8029S30 42	8229S30 42	8329S30 42	ZS15/4-07/S30RF	20	60	60	50	49,9	3	70,5	35,5	63	36,5	600	2,000
		38	G1"1/2	8029S38 49	8229S38 49	8329S38 49	ZS15/4-07/S38RF	22	65	70	60	55,9	3	80	40,5	72	41	800	3,130

* Recommended tightening torque for the banjo bolt

8229 : double banjo coupling for high pressure applications

High pressure double banjo couplings

metric parallel



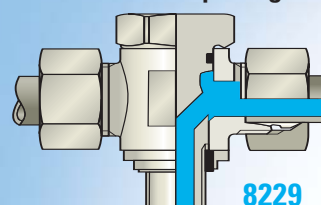
	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	G	H	L1	L2	L3	L4	MA* (Nm)	kg
L	400	6	M10x1	8029L06 60	8229L06 60	8329L06 60	ZS15/4-07/L6MF	8	19	19	14	14,9	1,5	21	10	28	13	30	0,085
		8	M12x1,5	8029L08 67	8229L08 67	8329L08 67	ZS15/4-07/L8MF	12	22	22	17	17,9	2	27	13,5	29	14,5	40	0,145
		10	M14x1,5	8029L10 71	8229L10 71	8329L10 71	ZS15/4-07/L10MF	12	22	22	19	19,9	2	27	13,5	30	15,5	60	0,160
		12	M16x1,5	8029L12 75	8229L12 75	8329L12 75	ZS15/4-07/L12MF	12	27	27	22	21,9	2	33	16,5	33	18	100	0,240
		15	M18x1,5	8029L15 78	8229L15 78	8329L15 78	ZS15/4-07/L15MF	12	30	30	27	23,9	2,5	37	18,5	36	20,5	130	0,345
		18	M22x1,5	8029L18 82	8229L18 82	8329L18 82	ZS15/4-07/L18MF	14	32	36	32	27,9	3	43	21,5	38	21	160	0,445
	315	22	M26x1,5	8029L22 89	8229L22 89	8329L22 89	ZS15/4-07/L22MF	16	36	41	36	31,9	3	48	24	43	27	250	0,625
	250	28	M33x2	8029L28 91	8229L28 91	8329L28 91	ZS15/4-07/L28MF	18	46	50	41	39,9	3	59,5	30,5	48	31,5	400	1,100
		35	M42x2	8029L35 96	8229L35 96	8329L35 96	ZS15/4-07/L35MF	20	60	60	50	49,9	3	70,5	35,5	57	35,5	600	1,730
		42	M48x2	8029L42 98	8229L42 98	8329L42 98	ZS15/4-07/L42MF	22	65	70	60	55,9	3	80	40,5	63	40	800	2,750
S	400	6	M12x1,5	8029S06 67	8229S06 67	8329S06 67	ZS15/4-07/S6MF	12	22	22	17	17,9	2	27	13,5	31	16,5	40	0,150
		8	M14x1,5	8029S08 71	8229S08 71	8329S08 71	ZS15/4-07/S8MF	12	22	22	19	19,9	2	27	13,5	31	16,5	60	0,160
		10	M16x1,5	8029S10 75	8229S10 75	8329S10 75	ZS15/4-07/S10MF	12	27	27	22	21,9	2	33	16,5	35	18,5	100	0,255
		12	M18x1,5	8029S12 78	8229S12 78	8329S12 78	ZS15/4-07/S12MF	12	30	30	24	23,9	2,5	37	18,5	37	20,5	130	0,345
		14	M20x1,5	8029S14 80	8229S14 80	8329S14 80	ZS15/4-07/S14MF	12	32	32	27	25,9	2,5	42	19,5	41	23	160	0,413
		16	M22x1,5	8029S16 82	8229S16 82	8329S16 82	ZS15/4-07/S16MF	14	32	36	30	27,9	3	43	21,5	41	22	160	0,450
	315	20	M27x2	8029S20 86	8229S20 86	8329S20 86	ZS15/4-07/S20MF	16	41	46	36	32,9	3	48	24	49	26,5	250	0,855
	250	25	M33x2	8029S25 91	8229S25 91	8329S25 91	ZS15/4-07/S25MF	18	46	50	46	39,9	3	59,5	30,5	55	31	400	1,330
		30	M42x2	8029S30 96	8229S30 96	8329S30 96	ZS15/4-07/S30MF	20	60	60	50	49,9	3	70,5	35,5	63	36,5	600	1,990
		38	M48x2	8029S38 98	8229S38 98	8329S38 98	ZS15/4-07/S38MF	22	65	70	60	55,9	3	80	40,5	72	41	800	3,120

* Recommended tightening torque for the banjo bolt

Technical characteristics

- PTFE seal
- For high pressure
- Low pressure loss
- Safety coefficient : 2.5
- Working pressure : 250 to 400 bar

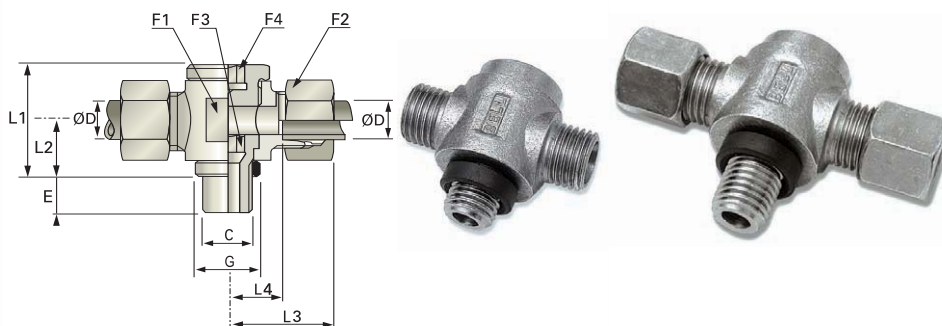
45° internal passage



8229

Chock-free double banjo couplings

BSP parallel



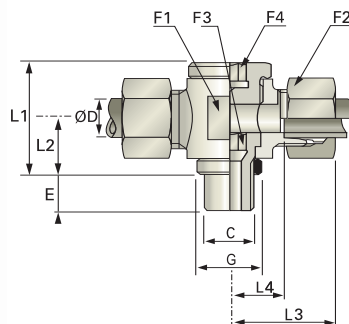
	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	F4	G	L1	L2	L3	L4	
L	250	6	G1/8	8039L06 10	8239L06 10	8339L06 10	ZS15/2-09/L6R	8	19	14	6	6	14	24	12	28	13	0,076
		8	G1/4	8039L08 13	8239L08 13	8339L08 13	ZS15/2-09/L8R	12	22	17	8	8	18	30,5	16	29	14,5	0,123
		10	G1/4	8039L10 13	8239L10 13	8339L10 13	ZS15/2-09/L10R	12	22	19	8	8	18	30,5	16	30	15,5	0,141
		12	G3/8	8039L12 17	8239L12 17	8339L12 17	ZS15/2-09/L12R	12	27	22	10	10	22	36	18	33	18	0,223
		15	G1/2	8039L15 21	8239L15 21	8339L15 21	ZS15/2-09/L15R	14	32	27	12	12	26	42	21	37	22	0,299
	100	18	G1/2	8039L18 21	8239L18 21	8339L18 21	ZS15/2-09/L18R	14	36	32	12	12	26	46	23,5	38	21,5	0,356
S	400*	22	G3/4	8039L22 27	8239L22 27	8339L22 27	ZS15/2-09/L22R	16	46	36	17	17	32	57,5	28	45	28,5	0,646
		6	G1/4	8039S06 13	8239S06 13	8339S06 13	ZS15/2-09/S6R	12	22	17	8	8	18	30,5	16	31	16,5	0,134
		8	G1/4	8039S08 13	8239S08 13	8339S08 13	ZS15/2-09/S8R	12	22	19	8	8	18	30,5	16	31	16,5	0,145
		10	G3/8	8039S10 17	8239S10 17	8339S10 17	ZS15/2-09/S10R	12	27	22	10	10	22	36	18	35	18,5	0,234
		12	G3/8	8039S12 17	8239S12 17	8339S12 17	ZS15/2-09/S12R	12	27	24	10	10	22	36	18	35	18,5	0,250
		16	G1/2	8039S16 21	8239S16 21	8339S16 21	ZS15/2-09/S16R	14	36	30	12	12	26	46	23,5	41	22,5	0,394
		20	G3/4	8039S20 27	8239S20 27	8339S20 27	ZS15/2-09/S20R	16	46	36	17	17	32	57,5	28	49	27,5	0,881

* Safety factor 1,6 mini

8239: chock-free banjo couplings are ideal for reducing pressure loss and optimizing the efficiency of a hydraulic system

Chock-free double banjo couplings

metric parallel



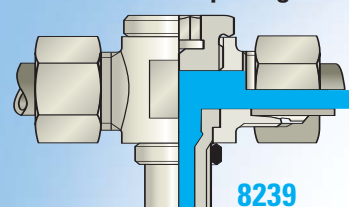
	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	F4	G	L1	L2	L3	L4	kg
L	250	6	M10x1	8039L06 60	8239L06 60	8339L06 60	ZS15/2-09/L6M	8	19	14	6	6	14	24	12	28	13	0,076
		8	M12x1,5	8039L08 67	8239L08 67	8339L08 67	ZS15/2-09/L8M	12	22	17	6	6	17	30,5	15	29	14,5	0,106
		10	M14x1,5	8039L10 71	8239L10 71	8339L10 71	ZS15/2-09/L10M	12	22	19	8	8	19	30,5	16	30	15,5	0,144
	100	12	M16x1,5	8039L12 75	8239L12 75	8339L12 75	ZS15/2-09/L12M	12	27	22	10	10	21	36	18	33	18	0,212
		15	M18x1,5	8039L15 78	8239L15 78	8339L15 78	ZS15/2-09/L15M	12	30	27	12	12	23	40,5	20	36	21	0,297
		18	M22x1,5	8039L18 82	8239L18 82	8339L18 82	ZS15/2-09/L18M	14	36	32	14	14	27	46	23	38	21,5	0,382
S	400*	22	M26x1,5	8039L22 89	8239L22 89	8339L22 89	ZS15/2-09/L22M	16	41	36	17	17	31	50,5	25	42	26	0,510
		6	M12x1,5	8039S06 67	8239S06 67	8339S06 67	ZS15/2-09/S6M	12	22	17	6	6	17	30,5	15	31	16,5	0,117
		8	M14x1,5	8039S08 71	8239S08 71	8339S08 71	ZS15/2-09/S8M	12	22	19	8	8	19	30,5	16	31	16,5	0,145
		10	M16x1,5	8039S10 75	8239S10 75	8339S10 75	ZS15/2-09/S10M	12	27	22	10	10	21	36	18	35	18,5	0,230
		12	M18x1,5	8039S12 78	8239S12 78	8339S12 78	ZS15/2-09/S12M	12	30	24	12	12	23	40,5	20	37	20,5	0,288
		16	M22x1,5	8039S16 82	8239S16 82	8339S16 82	ZS15/2-09/S16M	14	36	30	14	14	27	46	23	41	22,5	0,472
		20	M27x2	8039S20 86	8239S20 86	8339S20 86	ZS15/2-09/S20M	16	46	36	17	17	32	57,5	28	49	27,5	0,886

* Safety factor 1,6 mini

Technical characteristics

- Metal/metal sealing
- For low pressure
- Low pressure loss
- Safety coefficient : 1.6 minimum for series S
- Working Pressure : 100 to 400 bar

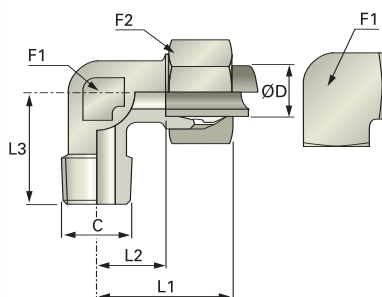
90° full flow passage



Male stud elbows

BSP taper

DIN 3852-2 form C

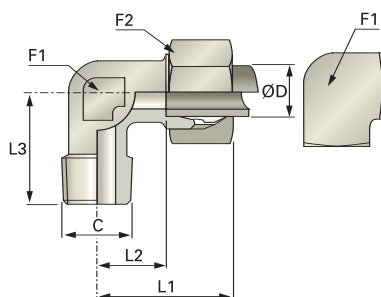


	PN	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	F1*	F2	L1	L2	L3	kg
LL	100	4	R1/8	8009E04 10	8109E04 10		15-02/LL4R	11	10	21	11	18	0,022
		5	R1/8	8009E05 10	8109E05 10		15-02/LL5RK	11	12	22	10	17	0,023
		6	R1/8	8009E06 10	8109E06 10		15-02/LL6RK	11	12	22	10	17	0,023
		8	R1/8	8009E08 10	8109E08 10		15-02/LL8RK	12	14	23	11,5	20	0,032
		10	R1/4	8009E10 13	8109E10 13		15-02/LL10RK	14	17	27	15,5	26	0,049
		12	R1/4	8009E12 13	8109E12 13		15-02/LL12RK	17	19	27	15	27	0,073
L	315	6	R1/8	8009L06 10		8209L06 10	ZS15-02/L6RK	12	14	26	11,5	20	0,040
		6	R1/4	8009L06 13		8209L06 13	ZS15-02/L6RK1/4"	14	14	28,5	14	26	0,057
		8	R1/4	8009L08 13		8209L08 13	ZS15-02/L8RK	14	17	29	14	27	0,063
		8	R3/8	8009L08 17		8209L08 17	ZS15-02/L8RK3/8"	17	17	31,5	17	28	0,068
		10	R1/4	8009L10 13		8209L10 13	ZS15-02/L10RK	17	19	30	15	27	0,088
		10	R3/8	8009L10 17		8209L10 17	ZS15-02/L10RK3/8"	17	19	31,5	17	28	0,070
		12	R1/4	8009L12 13		8209L12 13	ZS15-02/L12RK1/4"	17	22	31,5	17	28	0,072
		12	R3/8	8009L12 17		8209L12 17	ZS15-02/L12RK	19	22	32	17	28	0,118
		12	R1/2	8009L12 21		8209L12 21	ZS15-02/L12RK1/2"	19	22	35,5	21	34	0,114
		15	R3/8	8009L15 17		8209L15 17	ZS15-02/L15RK3/8"	19	27	35,5	21	34	0,127
		15	R1/2	8009L15 21		8209L15 21	ZS15-02/L15RK	19	27	36	21	34	0,130
		18	R1/2	8009L18 21		8209L18 21	ZS15-02/L18RK	24	32	40	23,5	36	0,166
		22	R3/4	8009L22 27		8209L22 27	ZS15-02/L22RK	27	36	44	27,5	42	0,240
		28	R1"	8009L28 34		8209L28 34	ZS15-02/L28RK	36	41	47	30,5	48	0,380
S	400	42	R1"1/2	8009L42 49		8209L42 49	ZS15-02/L42RK	50	60	63	40	61	0,830
		6	R1/4	8009S06 13		8209S06 13	ZS15-02/S6RK	14	17	31	16	27	0,070
		8	R1/4	8009S08 13		8209S08 13	ZS15-02/S8RK	17	19	32	17	27	0,094
		10	R3/8	8009S10 17		8209S10 17	ZS15-02/S10RK	19	22	34	17,5	28	0,133
		12	R3/8	8009S12 17		8209S12 17	ZS15-02/S12RK	22	24	38	21,5	28	0,168
		14	R1/2	8009S14 21		8209S14 21	ZS15-02/S14RK	19	27	40	22	32	0,153
		16	R1/2	8009S16 21		8209S16 21	ZS15-02/S16RK	24	30	43	24,5	32	0,189

* Models ØD 4 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Male stud elbows

metric taper
DIN 3852-1 form C

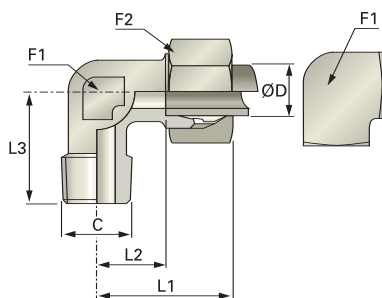


	PN	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	F1*	F2	L1	L2	L3	kg
LL	100	4	M8x1	8009E04 56	8109E04 56		15-02/LL4MK	9	10	21	11	17	0,020
		5	M8x1	8009E05 56	8109E05 56		15-02/LL5MK	11	12	21	9,5	17	0,023
		6	M6x1	8009E06 52	8109E06 52		15-02/LL6MK6X1	9	12	21	9,5	17	0,023
		6	M8x1	8009E06 56	8109E06 56		15-02/LL6MK8X1	9	12	21	9,5	17	0,023
		6	M10x1	8009E06 60	8109E06 60		15-02/LL6MK	11	12	21	9,5	17	0,023
		8	M10x1	8009E08 60	8109E08 60		15-02/LL8MK	12	14	23	11,5	20	0,032
L	315	6	M10x1	8009L06 60		8209L06 60	ZS15-02/L6MK	12	14	27	12	20	0,040
		8	M12x1,5	8009L08 67		8209L08 67	ZS15-02/L8MK	14	17	29	14	26	0,063
		10	M14x1,5	8009L10 71		8209L10 71	ZS15-02/L10MK	17	19	30	15	27	0,088
		12	M16x1,5	8009L12 75		8209L12 75	ZS15-02/L12MK	19	22	32	17	28	0,118
		15	M18x1,5	8009L15 78		8209L15 78	ZS15-02/L15MK	19	27	36	21	32	0,120
		18	M22x1,5	8009L18 82		8209L18 82	ZS15-02/L18MK	24	32	40	23,5	36	0,166
S	400	6	M12x1,5	8009S06 67		8209S06 67	ZS15-02/S6MK	14	17	31	16	26	0,070
		8	M14x1,5	8009S08 71		8209S08 71	ZS15-02/S8MK	17	19	32	17	27	0,094
		10	M16x1,5	8009S10 75		8209S10 75	ZS15-02/S10MK	19	22	34	17,5	28	0,133
		12	M18x1,5	8009S12 78		8209S12 78	ZS15-02/S12MK	22	24	38	21,5	28	0,168
		14	M20x1,5	8009S14 80		8209S14 80	ZS15-02/S14MK	19	27	40	22	32	0,153
		16	M22x1,5	8009S16 82		8209S16 82	ZS15-02/S16MK	24	30	43	24,5	36	0,189

* Models ØD 4 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Male stud elbows

NPT

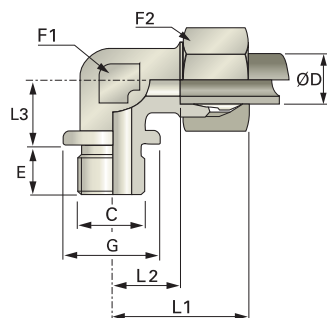


	PN	ØD	C	 Body only	 Single-bite ring	 Double-bite ring	Bell code	F1*	F2	L1	L2	L3	
LL	100	4	1/8	8009E04 11	8109E04 11		15-02/LL4NPT	11	10	21	11	18	0,022
		6	1/8	8009E06 11	8109E06 11		15-02/LL6NPT	11	12	21	9,5	17	0,023
		8	1/8	8009E08 11	8109E08 11		15-02/LL8NPT	12	14	23	11,5	20	0,032
L	315	6	1/8	8009L06 11		8209L06 11	ZS15-02/L6NPT	12	14	27	12	20	0,040
		8	1/4	8009L08 14		8209L08 14	ZS15-02/L8NPT	14	17	29	14	26	0,063
		10	1/4	8009L10 14		8209L10 14	ZS15-02/L10NPT	17	19	30	15	27	0,088
		12	1/4	8009L12 14		8209L12 14	ZS15-02/L12NPT1/4"	17	22	32	17	28	0,110
		12	3/8	8009L12 18		8209L12 18	ZS15-02/L12NPT	19	22	32	17	28	0,118
	160	12	1/2	8009L12 22		8209L12 22	ZS15-02/L12NPT1/2"	19	22	36	21	34	0,130
		15	1/2	8009L15 22		8209L15 22	ZS15-02/L15NPT	19	27	36	21	34	0,140
		18	1/2	8009L18 22		8209L18 22	ZS15-02/L18NPT	24	32	40	23,5	36	0,165
		22	3/4	8009L22 28		8209L22 28	ZS15-02/L22NPT	27	36	44	27,5	42	0,235
		28	1"	8009L28 35		8209L28 35	ZS15-02/L28NPT	36	41	47	30,5	48	0,375
S	630	35	1"1/4	8009L35 43		8209L35 43	ZS15-02/L35NPT	41	50	56	34,5	54	0,575
		42	1"1/2	8009L42 50		8209L42 50	ZS15-02/L42NPT	50	60	62	39	61	0,830
		6	1/4	8009S06 14		8209S06 14	ZS15-02/S6NPT	14	17	31	16	26	0,070
		8	1/4	8009S08 14		8209S08 14	ZS15-02/S8NPT	17	19	32	17	27	0,094
		10	3/8	8009S10 18		8209S10 18	ZS15-02/S10NPT	19	22	34	17,5	28	0,133
	400	12	3/8	8009S12 18		8209S12 18	ZS15-02/S12NPT	22	24	38	21,5	28	0,168
		14	1/2	8009S14 22		8209S14 22	ZS15-02/S14NPT	19	27	40	22	34	0,166
		16	1/2	8009S16 22		8209S16 22	ZS15-02/S16NPT	24	30	43	24,5	36	0,200
		20	3/4	8009S20 28		8209S20 28	ZS15-02/S20NPT	27	36	48	26,5	42	0,300
		25	1"	8009S25 35		8209S25 35	ZS15-02/S25NPT	36	46	54	30	48	0,565
315	30	1"1/4	8009S30 43		8209S30 43	ZS15-02/S30NPT	41	50	62	35,5	54	0,820	
	38	1"1/2	8009S38 50		8209S38 50	ZS15-02/S38NPT	50	60	72	41	61	1,160	

* Models ØD 4 to 12mm are manufactured from profile steel

Male stud elbows

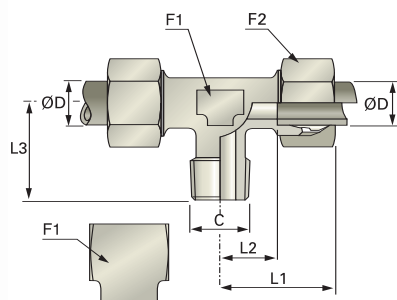
BSP parallel
sealing bite
ISO 1179-4



	PN	ØD	C	Body only	Double-bite ring	Bell code	E	F1	F2	G	L1	L2	L3	kg
L	250	22	G ^{3/4}	8099L22 27	8299L22 27	ZS15-02/L22RB	16	27	36	32	44	27,5	26	0,246
		28	G1	8099L28 34	8299L28 34	ZS15-02/L28RB	18	36	41	39	47	30,5	30	0,347
		35	G1 ^{1/4}	8099L35 42	8299L35 42	ZS15-02/L35RB	20	41	50	49	56	34,5	34	0,612
		42	G1 ^{1/2}	8099L42 49	8299L42 49	ZS15-02/L42RB	22	50	60	55	63	40	39	0,846
S	400	20	G ^{3/4}	8099S20 27	8299S20 27	ZS15-02/S20RB	16	27	36	32	48	26,5	26	0,303
		25	G1	8099S25 34	8299S25 34	ZS15-02/S25RB	18	36	46	39	54	30	30	0,580
	250	30	G1 ^{1/4}	8099S30 42	8299S30 42	ZS15-02/S30RB	20	41	50	49	62	35,5	34	0,744
		38	G1 ^{1/2}	8099S38 49	8299S38 49	ZS15-02/S38RB	22	50	60	55	72	41	39	0,989

Male stud branch tees

BSP taper
DIN 3852-2 form C

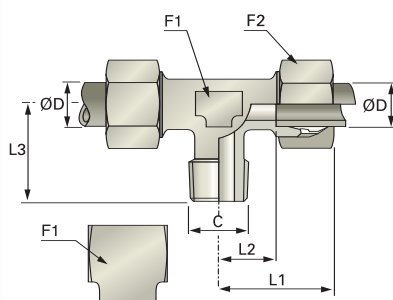


	PN	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	F1*	F2	L1	L2	L3	kg
LL	100	4	R1/8	8008E04 10	8108E04 10		15-03/LL4RK	9	10	21	11	17	0,032
		6	R1/8	8008E06 10	8108E06 10		15-03/LL6RK	9	12	21	9,5	17	0,034
		8	R1/8	8008E08 10	8108E08 10		15-03/LL8RK	12	14	23	11,5	20	0,044
L	315	6	R1/8	8008L06 10		8208L06 10	ZS15-03/L6RK	12	14	27	12	20	0,059
		8	R1/4	8008L08 13		8208L08 13	ZS15-03/L8RK	14	17	29	14	26	0,087
		10	R1/4	8008L10 13		8208L10 13	ZS15-03/L10RK	17	19	30	15	27	0,119
		12	R3/8	8008L12 17		8208L12 17	ZS15-03/L12RK	19	22	32	17	28	0,156
		15	R1/2	8008L15 21		8208L15 21	ZS15-03/L15RK	19	27	36	21	34	0,215
		18	R1/2	8008L18 21		8208L18 21	ZS15-03/L18RK	24	32	40	23,5	36	0,304
S	400	6	R1/4	8008S06 13		8208S06 13	ZS15-03/S6RK	14	17	31	16	26	0,106
		8	R1/4	8008S08 13		8208S08 13	ZS15-03/S8RK	17	19	32	17	27	0,135
		10	R3/8	8008S10 17		8208S10 17	ZS15-03/S10RK	19	22	34	17,5	28	0,186
		12	R3/8	8008S12 17		8208S12 17	ZS15-03/S12RK	22	24	38	21,5	28	0,236
		14	R1/2	8008S14 21		8208S14 21	ZS15-03/S14RK	19	27	40	22	32	0,242
		16	R1/2	8008S16 21		8208S16 21	ZS15-03/S16RK	24	30	43	24,5	32	0,309

* Models ØD 4 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel.

Male stud branch tees

metric taper
DIN 3852-1 form C

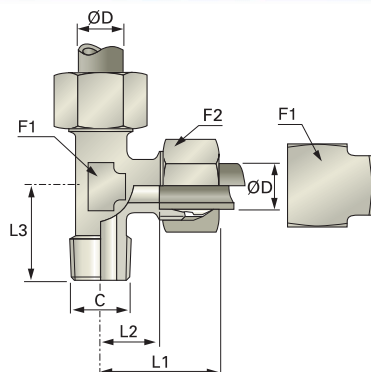


	PN	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	F1*	F2	L1	L2	L3	
LL	100	4	M8x1	8008E04 56	8108E04 56		15-03/LL4MK	9	10	21	11	17	0,030
		6	M10x1	8008E06 60	8108E06 60		15-03/LL6MK	9	12	21	9,5	17	0,034
		8	M10x1	8008E08 60	8108E08 60		15-03/LL8MK	12	14	23	11,5	20	0,044
L	315	6	M10x1	8008L06 60		8208L06 60	ZS15-03/L6MK	12	14	27	12	20	0,059
		8	M12x1,5	8008L08 67		8208L08 67	ZS15-03/L8MK	14	17	29	14	26	0,087
		10	M14x1,5	8008L10 71		8208L10 71	ZS15-03/L10MK	17	19	30	15	27	0,119
		12	M16x1,5	8008L12 75		8208L12 75	ZS15-03/L12MK	19	22	32	17	28	0,156
		15	M18x1,5	8008L15 78		8208L15 78	ZS15-03/L15MK	19	27	36	21	32	0,205
		18	M22x1,5	8008L18 82		8208L18 82	ZS15-03/L18MK	24	32	40	23,5	36	0,304
S	400	6	M12x1,5	8008S06 67		8208S06 67	ZS15-03/S6MK	14	17	31	16	26	0,106
		8	M14x1,5	8008S08 71		8208S08 71	ZS15-03/S8MK	17	19	32	17	27	0,135
		10	M16x1,5	8008S10 75		8208S10 75	ZS15-03/S10MK	19	22	34	17,5	28	0,186
		12	M18x1,5	8008S12 78		8208S12 78	ZS15-03/S12MK	22	24	38	21,5	28	0,236
		14	M20x1,5	8008S14 80		8208S14 80	ZS15-03/S14MK	19	27	40	22	32	0,242
		16	M22x1,5	8008S16 82		8208S16 82	ZS15-03/S16MK	24	30	43	24,5	36	0,309

* Models ØD 4 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Male stud run tees

BSP taper
DIN 3852-2 form C

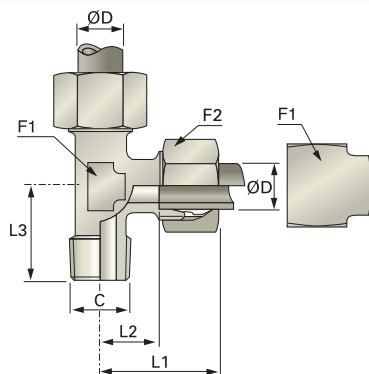


PN	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	F1*	F2	L1	L2	L3	
LL	100	4 R1/8	8003E04 10	8103E04 10		15-04/LL4RK	11	10	21	11	17	0,032
		6 R1/8	8003E06 10	8103E06 10		15-04/LL6RK	11	12	21	9,5	17	0,034
		8 R1/8	8003E08 10	8103E08 10		15-04/LL8RK	12	14	23	11,5	20	0,046
L	315	6 R1/8	8003L06 10		8203L06 10	ZS15-04/L6RK	12	14	26	12	20	0,058
		8 R1/4	8003L08 13		8203L08 13	ZS15-04/L8RK	14	17	29	14	26	0,088
		10 R1/4	8003L10 13		8203L10 13	ZS15-04/L10RK	17	19	30	15	27	0,121
		12 R3/8	8003L12 17		8203L12 17	ZS15-04/L12RK	19	22	32	17	28	0,156
		15 R1/2	8003L15 21		8203L15 21	ZS15-04/L15RK	19	27	36	21	34	0,210
		18 R1/2	8003L18 21		8203L18 21	ZS15-04/L18RK	24	32	40	23,5	36	0,304
S	400	6 R1/4	8003S06 13		8203S06 13	ZS15-04/S6RK	14	17	31	16	26	0,105
		8 R1/4	8003S08 13		8203S08 13	ZS15-04/S8RK	17	19	32	17	27	0,137
		10 R3/8	8003S10 17		8203S10 17	ZS15-04/S10RK	19	22	34	17,5	28	0,196
		12 R3/8	8003S12 17		8203S12 17	ZS15-04/S12RK	22	24	38	21,5	28	0,246
		14 R1/2	8003S14 21		8203S14 21	ZS15-04/S14RK	19	27	40	22	32	0,252
		16 R1/2	8003S16 21		8203S16 21	ZS15-04/S16RK	24	30	43	24,5	32	0,323

* Models ØD 4 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Male stud run tees

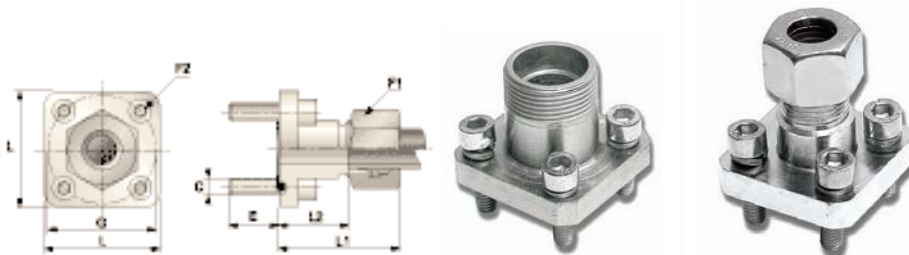
metric taper
DIN 3852-1 form C



	PN	ØD	C	Body only	Single-bite ring	Double-bite ring	Bell code	F1*	F2	L1	L2	L3	kg
LL	100	4	M8x1	8003E04 56	8103E04 56		15-04/LL4MK	9	10	21	11	17	0,030
		6	M10x1	8003E06 60	8103E06 60		15-04/LL6MK	11	12	21	9,5	17	0,034
		8	M10x1	8003E08 60	8103E08 60		15-04/LL8MK	12	14	23	11,5	20	0,046
L	315	6	M10x1	8003L06 60		8203L06 60	ZS15-04/L6MK	12	14	27	12	20	0,058
		8	M12x1,5	8003L08 67		8203L08 67	ZS15-04/L8MK	14	17	29	14	26	0,088
		10	M14x1,5	8003L10 71		8203L10 71	ZS15-04/L10MK	17	19	30	15	27	0,121
		12	M16x1,5	8003L12 75		8203L12 75	ZS15-04/L12MK	19	22	32	17	28	0,156
		15	M18x1,5	8003L15 78		8203L15 78	ZS15-04/L15MK	19	27	36	21	32	0,200
		18	M22x1,5	8003L18 82		8203L18 82	ZS15-04/L18MK	24	32	40	23,5	36	0,304
S	400	6	M12x1,5	8003S06 67		8203S06 67	ZS15-04/S6MK	14	17	31	16	26	0,105
		8	M14x1,5	8003S08 71		8203S08 71	ZS15-04/S8MK	17	19	32	17	27	0,137
		10	M16x1,5	8003S10 75		8203S10 75	ZS15-04/S10MK	19	22	34	17,5	28	0,196
		12	M18x1,5	8003S12 78		8203S12 78	ZS15-04/S12MK	22	24	38	21,5	28	0,246
		14	M20x1,5	8003S14 80		8203S14 80	ZS15-04/S14MK	19	27	40	22	32	0,252
		16	M22x1,5	8003S16 82		8203S16 82	ZS15-04/S16MK	24	30	43	24,5	36	0,319

* Models ØD 4 to 10mm are manufactured from profile steel
Models ØD > 10mm are manufactured from forged steel

Straight flange couplings with square flange head



	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	ØG	L	L1	L2	MA	
L	315	10	M6	8605L10 00	8625L10 00	8635L10 00	ZS15-25/L10-250	12.5	19	5	35	39	38	23	10	0.150
		12	M6	8605L12 00	8625L12 00	8635L12 00	ZS15-25/L12-250	12.5	22	5	35	39	38	23	10	0.150
	250	15	M6	8605L15 00	8625L15 00	8635L15 00	ZS15-25/L15-250	12.5	27	5	35	39	38	23	10	0.170
		15	M6	8605L15 01	8625L15 01	8635L15 01	ZS15-25/L15-100	12.5	27	5	40	42	43	28	10	0.210
	100	18	M6	8605L18 00	8625L18 00	8635L18 00	ZS15-25/L18-100	12.5	32	5	40	42	44	27.5	10	0.220
		22	M6	8605L22 00	8625L22 00	8635L22 00	ZS15-25/L22-100	12.5	36	5	40	42	44	27.5	10	0.230
		28	M6	8605L28 00	8625L28 00	8635L28 00	ZS15-25/L28-100	12.5	41	5	40	42	44	27.5	10	0.280
S	315	16	M6	8605S16 00	8625S16 00	8635S16 00	ZS15-25/S16-315	12.5	30	5	35	39	40	21.5	10	0.210

Bodies only delivered with bolts

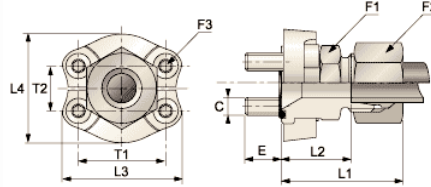
Elbow flange couplings with square flange head



	PN	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	ØG	L	L2	L3	L4	MA	
L	315	10	M6	8606L10 00	8626L10 00	8636L10 00	ZS15/1-25/L10-250	12.5	19	5	35	39	16.5	46	31	10	0.185
		12	M6	8606L12 00	8626L12 00	8636L12 00	ZS15/1-25/L12-250	12.5	22	5	35	39	16.5	46	31	10	0.196
	250	15	M6	8606L15 00	8626L15 00	8636L15 00	ZS15/1-25/L15-250	12.5	27	5	35	39	16.5	46	31	10	0.224
		15	M6	8606L15 01	8626L15 01	8636L15 01	ZS15/1-25/L15-100	12.5	27	5	40	42	22.5	46	31	10	0.212
	100	18	M6	8606L18 00	8626L18 00	8636L18 00	ZS15/1-25/L18-100	12.5	32	5	40	42	22.5	47	30.5	10	0.235
		22	M6	8606L22 00	8626L22 00	8636L22 00	ZS15/1-25/L22-100	12.5	36	5	40	42	22.5	47	30.5	10	0.283
		28	M6	8606L28 00	8626L28 00	8636L28 00	ZS15/1-25/L28-100	12.5	41	5	40	42	28	49	32.5	10	0.371
		35	M6	8606L35 00	8626L35 00	8636L35 00	ZS15/1-25/L35-100	12.5	50	5	40	42	32	52	30.5	10	0.550
S	315	16	M6	8606S16 00	8626S16 00	8636S16 00	ZS15/1-25/S16-315	12.5	30	5	35	39	20	48	29.5	10	0.272
		20	M6	8606S20 00	8626S20 00	8636S20 00	ZS15/1-25/S20-315	12.5	36	5	35	39	25	56	34.5	10	0.387
	250	20	M8	8606S20 02	8626S20 02	8636S20 02	ZS15/1-25/S20-250	12.5	36	5	40	42.5	22.5	51	29.5	25	0.344
		25	M8	8606S25 00	8626S25 00	8636S25 00	ZS15/1-25/S25-250	12.5	46	6	55	58	30	61	37	25	0.775
		30	M8	8606S30 00	8626S30 00	8636S30 00	ZS15/1-25/S30-250	12.5	50	6	55	58	32	62	35.5	25	0.820

Bodies only delivered with bolts.

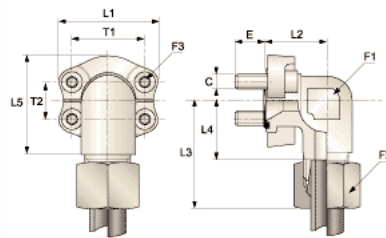
Straight flange couplings SAE (3000 PSI)



	PN	ØD	C	type	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	L1	L2	L3	L4	T1	T2	MA	
L	350	15	M8	1/2"	8601L15 62	8621L15 62	8631L15 62	ZS15/3-80/L15-1/2"	16.5	24	27	6	56	41	54	46	38.1	17.5	25	0.363
	315	18	M10	3/4"	8601L18 69	8621L18 69	8631L18 69	ZS15/3-80/L18-3/4"	20.5	30	32	8	62	45.5	65	52	47.6	22.3	49	0.592
		22	M10	3/4"	8601L22 69	8621L22 69	8631L22 69	ZS15/3-80/L22-3/4"	20.5	30	36	8	62	45.5	65	52	47.6	22.3	49	0.574
	250	28	M10	1"	8601L28 75	8621L28 75	8631L28 75	ZS15/3-80/L28-1"	18.5	36	41	8	63	46.5	70	59	52.4	26.2	49	0.738
		35	M12	1 1/4"	8601L35 82	8621L35 82	8631L35 82	ZS15/3-80/L35-1 1/4"	25.5	41	50	10	69	47.5	79	73	58.7	30.2	85	1.007
S	210	42	M12	1 1/2"	8601L42 88	8621L42 88	8631L42 88	ZS15/3-80/L42-1 1/2"	23.5	46	60	10	76	53	94	82	69.9	35.7	85	1.440
	350	16	M8	1/2"	8601S16 62	8621S16 62	8631S16 62	ZS15/3-80/S16-1/2"	16.5	24	30	6	60	41.5	54	46	38.1	17.5	25	0.396
		20	M10	3/4"	8601S20 69	8621S20 69	8631S20 69	ZS15/3-80/S20-3/4"	20.5	30	36	8	68	46.5	65	52	47.6	22.3	49	0.648
		25	M10	3/4"	8601S25 69	8621S25 69	8631S25 69	ZS15/3-80/S25-3/4"	20.5	30	46	8	69	45	65	52	47.6	22.3	49	0.759
		30	M10	1"	8601S30 75	8621S30 75	8631S30 75	ZS15/3-80/S30-1"	18.5	36	50	8	76	49.5	70	59	52.4	26.2	49	0.974
	280	25	M12	1 1/4"	8601S25 82	8621S25 82	8631S25 82	ZS15/3-80/S25-1 1/4"	25.5	41	46	10	72	48	79	73	58.7	30.2	85	1.182
		30	M12	1 1/4"	8601S30 82	8621S30 82	8631S30 82	ZS15/3-80/S30-1 1/4"	25.5	41	50	10	75	48.5	79	73	58.7	30.2	85	1.190
		38	M12	1 1/4"	8601S38 82	8621S38 82	8631S38 82	ZS15/3-80/S38-1 1/4"	25.5	46	60	10	81	50	79	73	58.7	30.2	85	1.380
	210	38	M12	1 1/2"	8601S38 88	8621S38 88	8631S38 88	ZS15/3-80/S38-1 1/2"	23.5	46	60	10	85	54	94	82	69.9	35.7	85	1.680

Bodies only delivered with bolts

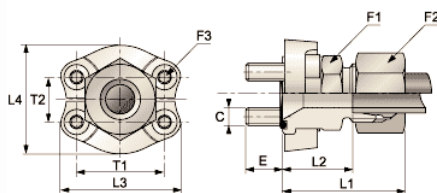
Elbow flange couplings SAE (3000 PSI)



	PN	ØD	C	type	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	L1	L2	L3	L4	L5	T1	T2	MA	
L	350	15	M8	1/2"	8602L15 62	8622L15 62	8632L15 62	ZS15/3-81L15-1/2"	16.5	24	27	6	54	36	44	29	46	38.1	17.5	25	0.400
	315	18	M10	3/4"	8602L18 69	8622L18 69	8632L18 69	ZS15/3-81L18-3/4"	20.5	30	32	8	65	42	48	31.5	52	47.6	22.3	49	0.672
		22	M10	3/4"	8602L22 69	8622L22 69	8632L22 69	ZS15/3-81L22-3/4"	20.5	30	36	8	65	42	50	33.5	52	47.6	22.3	49	0.664
	250	28	M10	1"	8602L28 75	8622L28 75	8632L28 75	ZS15/3-81L28-1"	18.5	36	41	8	70	45	53	36.5	59	52.4	26.2	49	0.878
		35	M12	1 1/4"	8602L35 82	8622L35 82	8632L35 82	ZS15/3-81L35-1 1/4"	25.5	41	50	10	79	50	68	46.5	73	58.7	30.2	85	1.227
S	210	42	M12	1 1/2"	8602L42 88	8622L42 88	8632L42 88	ZS15/3-81L42-1 1/2"	23.5	50	60	10	94	55	70	47	82	69.9	35.7	85	1.630
	350	16	M8	1/2"	8602S16 62	8622S16 62	8632S16 62	ZS15/3-81S16-1/2"	16.5	24	30	6	54	36	48	29.5	46	38.1	17.5	25	0.430
		20	M10	3/4"	8602S20 69	8622S20 69	8632S20 69	ZS15/3-81S20-3/4"	20.5	30	36	8	65	42	54	32.5	52	47.6	22.3	49	0.740
		25	M10	3/4"	8602S25 69	8622S25 69	8632S25 69	ZS15/3-81S25-3/4"	20.5	30	46	8	65	42	57	33	52	47.6	22.3	49	0.840
		30	M10	1"	8602S30 75	8622S30 75	8632S30 75	ZS15/3-81S30-1"	18.5	36	50	8	70	45	63	36.5	59	52.4	26.2	49	1.060
	280	25	M12	1 1/4"	8602S25 82	8622S25 82	8632S25 82	ZS15/3-81S25-1 1/4"	25.5	41	46	10	79	50	67	43	73	58.7	30.2	85	1.492
		30	M12	1 1/4"	8602S30 82	8622S30 82	8632S30 82	ZS15/3-81S30-1 1/4"	25.5	41	50	10	79	50	70	43.5	73	58.7	30.2	85	1.450
		38	M12	1 1/4"	8602S38 82	8622S38 82	8632S38 82	ZS15/3-81S38-1 1/4"	25.5	41	60	10	79	50	79	43	73	68.7	30.2	85	1.520
	210	38	M12	1 1/2"	8602S38 88	8622S38 88	8632S38 88	ZS15/3-81S38-1 1/2"	23.5	50	60	10	94	55	79	48	82	69.9	35.7	85	1.950

Bodies only delivered with bolts

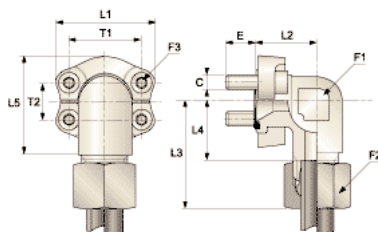
Straight flange couplings SAE (6000 PSI)



PN	ØD	C	type	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	L1	L2	L3	L4	T1	T2	MA	
S	400	16	M8 1/2"	8603S16 62	8623S16 62	8633S16 62	ZS15/6-80/S16-1/2"	18.5	24	30	6	63	44.5	56	47	40.5	18.2	25	0.455
		16	M10 3/4"	8603S16 69	8623S16 69	8633S16 69	ZS15/6-80/S16-3/4"	15.5	30	30	8	69	50.5	71	60	50.8	23.8	49	0.832
		20	M10 3/4"	8603S20 69	8623S20 69	8633S20 69	ZS15/6-80/S20-3/4"	15.5	30	36	8	72	50.5	71	60	50.8	23.8	49	0.862
		25	M10 3/4"	8603S25 69	8623S25 69	8633S25 69	ZS15/6-80/S25-3/4"	15.5	30	46	8	75	51	71	60	50.8	23.8	49	0.984
		25	M12 1"	8603S25 75	8623S25 75	8633S25 75	ZS15/6-80/S25-1"	20.5	36	46	10	84	60	81	70	57.2	27.8	85	1.380
		30	M12 1"	8603S30 75	8623S30 75	8633S30 75	ZS15/6-80/S30-1"	20.5	36	50	10	87	60.5	81	70	57.2	27.8	85	1.410
		30	M14 1 1/4"	8603S30 82	8623S30 82	8633S30 82	ZS15/6-80/S30-1 1/4"	22.5	41	50	12	92	65.5	95	77	66.7	31.8	135	1.980
	315	38	M14 1 1/4"	8603S38 82	8623S38 82	8633S38 82	ZS15/6-80/S38-1 1/4"	22.5	46	60	12	98	67	95	77	66.7	31.8	135	2.130
		38	M16 1 1/2"	8603S38 88	8623S38 88	8633S38 88	ZS15/6-80/S38-1 1/2"	24.5	46	60	14	104	73	113	95	79.4	36.5	210	2.980

Bodies only delivered with bolts

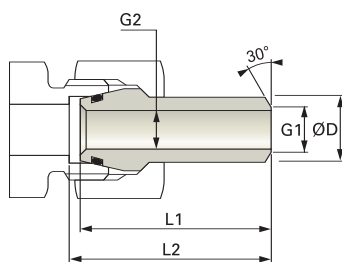
Elbow flange couplings SAE (6000 PSI)



PN	ØD	C	type	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	L1	L2	L3	L4	L5	T1	T2	MA	
S	400	16	M8 1/2"	8604S16 62	8624S16 62	8634S16 62	ZS15/6-81/S16-1/2"	18.5	24	30	6	56	39	48	29.5	47	40.5	18.2	25	0.483
		16	M10 3/4"	8604S16 69	8624S16 69	8634S16 69	ZS15/6-81/S16-3/4"	15.5	32	30	8	71	48	55	36.5	60	50.8	23.8	49	0.992
		20	M10 3/4"	8604S20 69	8624S20 69	8634S20 69	ZS15/6-81/S20-3/4"	15.5	32	36	8	71	48	57	35.5	60	50.8	23.8	49	0.982
		25	M10 3/4"	8604S25 69	8624S25 69	8634S25 69	ZS15/6-81/S25-3/4"	15.5	32	46	8	71	48	60	36	60	50.8	23.8	49	1.694
		25	M12 1"	8604S25 75	8624S25 75	8634S25 75	ZS15/6-81/S25-1"	20.5	41	46	10	81	60	65	41	70	57.2	27.8	85	1.680
		30	M12 1"	8604S30 75	8624S30 75	8634S30 75	ZS15/6-81/S30-1"	20.5	41	50	10	81	60	68	41.5	70	57.2	27.8	85	1.630
		30	M14 1 1/4"	8604S30 82	8624S30 82	8634S30 82	ZS15/6-81/S30-1 1/4"	22.5	46	50	12	95	68	71	44.5	77	66.7	31.8	135	2.360
	315	38	M14 1 1/4"	8604S38 82	8624S38 82	8634S38 82	ZS15/6-81/S38-1 1/4"	22.5	46	60	12	95	68	76	45	77	66.7	31.8	135	2.320
		38	M16 1 1/2"	8604S38 88	8624S38 88	8634S38 88	ZS15/6-81/S38-1 1/2"	24.5	50	60	14	113	76	87	56	95	79.4	36.5	210	3.580

Bodies only delivered with bolts

Straight weld nipples



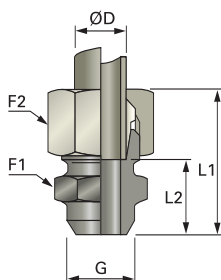
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	ØD mm		Bell code	G1	G2	L1	L2	O-ring	Calculated pressure	For precision steel tube DIN 2391	
L	6	8020S06 00	14-002/S6	2,5	3	31,2	32	4x1,5	365	6x1	0,008
	8	8020S08 00	14-002/S8	4	4,5	31,2	32	6x1,5	259	8x1	0,010
	10	8020S10 00	14-002/S10	6	6,5	32,7	33	7,5x1,5	201	10x1	0,014
	12	8020S12 00	14-002/S12	7,5	8	32,7	33	9x1,5	259	12x1,5	0,017
	15	8020L15 00	14-002/L15	10	10,5	34,7	35	12x2	201	15x1,5	0,026
	15	8020L15 00	14-002/L15	10	10,5	34,7	35	12x2	259	15x2	0,026
	15	8020L15 00	14-002/L15	10	10,5	34,7	35	12x2	365	15x2,5	0,026
	18	8020L18 00	14-002/L18	13	13,5	35,5	37	15x2	164	18x1,5	0,034
	18	8020L18 00	14-002/L18	13	13,5	35,5	37	15x2	226	18x2	0,034
	18	8020L18 00	14-002/L18	13	13,5	35,5	37	15x2	293	18x2,5	0,034
	22	8020L22 00	14-002/L22	17	17,5	38	39,5	20x2	181	22x2	0,046
	22	8020L22 00	14-002/L22	17	17,5	38	39,5	20x2	232	22x2,5	0,046
	28	8020L28 00	14-002/L28	23	24	41	42,5	26x2	139	28x2	0,065
	28	8020L28 00	14-002/L28	23	24	41	42,5	26x2	177	28x2,5	0,065
	35	8020L35 00	14-002/L35	29	29,5	47	49,5	32x2,5	109	35x2	0,112
	35	8020L35 00	14-002/L35	29	29,5	47	49,5	32x2,5	169	35x3	0,112
	42	8020L42 00	14-002/L42	36	36,5	47	50	38x2,5	139	42x3	0,136
S	6	8020S06 00	14-002/S6	3	2,5	31,2	32	4x1,5	624	6x1,5	0,008
	8	8020S08 00	14-002/S8	4,5	4	31,2	32	6x1,5	423	8x1,5	0,010
	8	8020S08 00	14-002/S8	4,5	4	31,2	32	6x1,5	624	8x2	0,010
	10	8020S10 00	14-002/S10	6,5	6	32,7	33,5	7,5x1,5	321	10x1,5	0,014
	10	8020S10 00	14-002/S10	6,5	6	32,7	33,5	7,5x1,5	460	10x2	0,014
	12	8020S12 00	14-002/S12	8	7,5*	32,7	33,5	9x1,5	365	12x2	0,017
	12	8020S12 30	14-002/S12X3	6,5	6*	32,7	33,5	9x1,5	485	12x2,5	0,022
	12	8020S12 30	14-002/S12X3	6,5	6*	32,7	33,5	9x1,5	624	12x3	0,022
	14**	8020S14 00	14-002/S14X3	8,5	8	38	40	10x2	303	14x2	0,032
	14**	8020S14 00	14-002/S14X3	8,5	8	38	40	10x2	398	14x2,5	0,032
	14**	8020S14 00	14-002/S14X3	8,5	8	38	40	10x2	504	14x3	0,032
	16	8020S16 00	14-002/S16	10,5	10*	38	40,5	12x2	259	16x2	0,037
	16	8020S16 00	14-002/S16	10,5	10*	38	40,5	12x2	337	16x2,5	0,037
	16	8020S16 00	14-002/S16	10,5	10*	38	40,5	12x2	423	16x3	0,037
	20	8020S20 00	14-002/S20	13,5	13*	44	47	16,3x2,4	259	20x2,5	0,063
	20	8020S20 00	14-002/S20	13,5	13*	44	47	16,3x2,4	321	20x3	0,063
	20	8020S20 00	14-002/S20	13,5	13*	44	47	16,3x2,4	388	20x3,5	0,063
	20	8020S20 40	14-002/S20X4	12,5	16*	44	47	16,3x2,4	460	20x4	0,070
	25	8020S25 00	14-002/S25	17	16*	49	53,5	20,3x2,4	247	25x3	0,112
	25	8020S25 00	14-002/S25	17	16*	49	53,5	20,3x2,4	347	25x4	0,112
	30	8020S30 00	14-002/S30	24,5	24	52	57,5	25,3x2,5	201	30x3	0,103
	30	8020S30 40	14-002/S30X4	22,5	22*	52	57,5	25,3x2,4	279	30x4	0,133
	30	8020S30 50	14-002/S30X6	18,5	18*	52	57,5	25,3x2,4	365	30x5	0,185
	30	8020S30 50	14-002/S30X6	18,5	18*	52	57,5	25,3x2,4	460	30x6	0,185
	38	8020S38 00	14-002/S38	30,5	30*	56,5	64,5	33,3x2,4	213	38x4	0,189
	38	8020S38 60	14-002/S38X6	26,5	26*	56,5	64,5	33,3x2,4	275	38x5	0,267
	38	8020S38 60	14-002/S38X6	26,5	26*	56,5	64,5	33,3x2,4	342	38x6	0,267

* bore diameter differs between DIN 3865 A and ISO 8434-4

** not included in DIN 3865 A and ISO 8434-4

Butt weld straight couplings



	PN	ØD	Body only	Double-bite ring	DiNova ring	Bell code	F1	F2	G	L1	L2	kg
L	400	6	8031L06 10	8231L06 10	8331L06 10	ZS15-20/L6	12	14	10	29	14	0,025
		8	8031L08 12	8231L08 12	8331L08 12	ZS15-20/L8	14	17	12	31	16	0,036
		10	8031L10 14	8231L10 14	8331L10 14	ZS15-20/L10	17	19	14	33	18	0,047
		12	8031L12 16	8231L12 16	8331L12 16	ZS15-20/L12	19	22	16	33	18	0,063
		15	8031L15 19	8231L15 19	8331L15 19	ZS15-20/L15	22	27	19	37	22	0,084
	315	18	8031L18 22	8231L18 22	8331L18 22	ZS15-20/L18	27	32	22	40	23,5	0,139
		22	8031L22 27	8231L22 27	8331L22 27	ZS15-20/L22	32	36	27	45	28,5	0,181
	250	28	8031L28 32	8231L28 32	8331L28 32	ZS15-20/L28	41	41	32	47	30,5	0,302
		35	8031L35 40	8231L35 40	8331L35 40	ZS15-20/L35	46	50	40	54	32,5	0,377
		42	8031L42 46	8231L42 46	8331L42 46	ZS15-20/L42	55	60	46	58	35	0,641
S	630	6	8031S06 11	8231S06 11	8331S06 11	ZS15-20/S6	14	17	11	34	19	0,032
		8	8031S08 13	8231S08 13	8331S08 13	ZS15-20/S8	17	19	13	36	21	0,049
		10	8031S10 15	8231S10 15	8331S10 15	ZS15-20/S10	19	22	15	39	22,5	0,072
		12	8031S12 17	8231S12 17	8331S12 17	ZS15-20/S12	22	24	17	41	24,5	0,083
		14	8031S14 19	8231S14 19	8331S14 19	ZS15-20/S14	24	27	19	45	27	0,108
	400	16	8031S16 21	8231S16 21	8331S16 21	ZS15-20/S16	27	30	21	45	26,5	0,144
		20	8031S20 26	8231S20 26	8331S20 26	ZS15-20/S20	32	36	26	51	29,5	0,218
		25	8031S25 31	8231S25 31	8331S25 31	ZS15-20/S25	41	46	31	56	32	0,377
		30	8031S30 36	8231S30 36	8331S30 36	ZS15-20/S30	46	50	36	62	35,5	0,449
	315	38	8031S38 44	8231S38 44	8331S38 44	ZS15-20/S38	55	60	44	69	38	0,684

body: material C 15.

Bell code

These part numbers are given as a general guide and correspond to double-bite ring models.

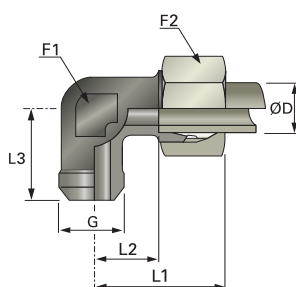


Bell code

8331L06 10

ZS 15-20/L6

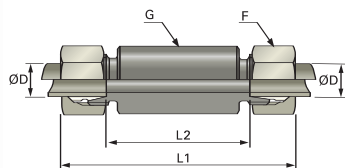
Butt weld elbow couplings



	PN	ØD	Body only	Double-bite ring	DiNova ring	Bell code	F1	F2	G	L1	L2	L3	kg
L	400	6	8032L06 10	8232L06 10	8332L06 10	ZS15/1-20/L6	12	14	10	27	12	18,5	0,030
		8	8032L08 12	8232L08 12	8332L08 12	ZS15/1-20/L8	12	17	12	29	14	21	0,036
		10	8032L10 14	8232L10 14	8332L10 14	ZS15/1-20/L10	14	19	14	30	15	22	0,052
		12	8032L12 16	8232L12 16	8332L12 16	ZS15/1-20/L12	17	22	16	32	17	24	0,073
		15	8032L15 19	8232L15 19	8332L15 19	ZS15/1-20/L15	19	27	19	36	21	28	0,120
	315	18	8032L18 22	8232L18 22	8332L18 22	ZS15/1-20/L18	24	32	22	40	23,5	30	0,166
		22	8032L22 27	8232L22 27	8332L22 27	ZS15/1-20/L22	27	36	27	44	27,5	42	0,246
	250	28	8032L28 32	8232L28 32	8332L28 32	ZS15/1-20/L28	36	41	32	47	30,5	48	0,347
		35	8032L35 40	8232L35 40	8332L35 40	ZS15/1-20/L35	41	50	40	56	34,5	54	0,612
		42	8032L42 46	8232L42 46	8332L42 46	ZS15/1-20/L42	50	60	46	63	40	61	0,846
S	630	6	8032S06 11	8232S06 11	8332S06 11	ZS15/1-20/S6	12	17	11	31	16	23	0,052
		8	8032S08 13	8232S08 13	8332S08 13	ZS15/1-20/S8	14	19	13	32	17	22,5	0,064
		10	8032S10 15	8232S10 15	8332S10 15	ZS15/1-20/S10	17	22	15	34	17,5	23,5	0,097
		12	8032S12 17	8232S12 17	8332S12 17	ZS15/1-20/S12	17	24	17	38	21,5	23,5	0,108
		14	8032S14 19	8232S14 19	8332S14 19	ZS15/1-20/S14	19	27	19	40	22	25,5	0,153
	400	16	8032S16 21	8232S16 21	8332S16 21	ZS15/1-20/S16	24	30	21	43	24,5	33	0,189
		20	8032S20 26	8232S20 26	8332S20 26	ZS15/1-20/S20	27	36	26	48	26,5	42	0,303
		25	8032S25 31	8232S25 31	8332S25 31	ZS15/1-20/S25	36	46	31	54	30	48	0,580
		30	8032S30 36	8232S30 36	8332S30 36	ZS15/1-20/S30	41	50	36	62	35,5	54	0,744
	315	38	8032S38 44	8232S38 44	8332S38 44	ZS15/1-20/S38	50	60	44	72	41	57	0,989

body: material C 15.

Bulkhead straight weld couplings

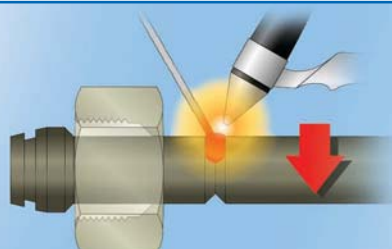


PN	ØD	Body only	Double-bite ring	DiNova ring	Bell code	F	G	L1	L2	kg
L	6	8033L06 18	8233L06 18	8333L06 18	ZS15-21/L6	14	18	85	56	0,131
	8	8033L08 20	8233L08 20	8333L08 20	ZS15-21/L8	17	20	85	56	0,162
	10	8033L10 22	8233L10 22	8333L10 22	ZS15-21/L10	19	22	87	58	0,195
	12	8033L12 25	8233L12 25	8333L12 25	ZS15-21/L12	22	25	87	58	0,241
	15	8033L15 28	8233L15 28	8333L15 28	ZS15-21/L15	27	28	100	70	0,353
	18	8033L18 32	8233L18 32	8333L18 32	ZS15-21/L18	32	32	101	69	0,469
	22	8033L22 36	8233L22 36	8333L22 36	ZS15-21/L22	36	36	105	73	0,582
	28	8033L28 40	8233L28 40	8333L28 40	ZS15-21/L28	41	40	106	73	0,660
	35	8033L35 50	8233L35 50	8333L35 50	ZS15-21/L35	50	50	114	71	1,029
	42	8033L42 60	8233L42 60	8333L42 60	ZS15-21/L42	60	60	115	70	1,488
S	6	8033S06 20	8233S06 20	8333S06 20	ZS15-21/S6	17	20	89	60	0,169
	8	8033S08 22	8233S08 22	8333S08 22	ZS15-21/S8	9	22	89	60	0,204
	10	8033S10 25	8233S10 25	8333S10 25	ZS15-21/S10	22	25	91	59	0,270
	12	8033S12 28	8233S12 28	8333S12 28	ZS15-21/S12	24	28	91	59	0,331
	14	8033S14 30	8233S14 30	8333S14 30	ZS15-21/S14	27	30	107	72	0,447
	16	8033S16 35	8233S16 35	8333S16 35	ZS15-21/S16	30	35	107	71	0,578
	20	8033S20 38	8233S20 38	8333S20 38	ZS15-21/S20	36	38	114	71	0,732
	25	8033S25 45	8233S25 45	8333S25 45	ZS15-21/S25	46	45	120	72	1,146
	30	8033S30 50	8233S30 50	8333S30 50	ZS15-21/S30	50	50	126	73	1,344
	38	8033S38 60	8233S38 60	8333S38 60	ZS15-21/S38	60	60	133	72	1,913

body: material C 15.

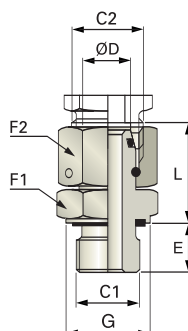
Discover it on legris.com

- In one click, display an **animated presentation** of how these couplings are assembled.



Male stud standpipe (DKO)

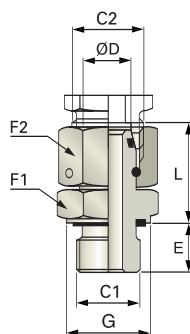
BSP parallel
elastomer seal
ISO 1179-2
24° sealing cone and O-ring



	PN	ØD	C1	C2		Bell code	E	F1	F2	G	L	O-ring	
L	400	6	G1/8	M12x1,5	8501L06 10	14-28/L6RD-DM	8	14	14	13,9	24,5	4x1,5	0,024
		8	G1/4	M14x1,5	8501L08 13	14-28/L8RD-DM	12	19	17	18,9	29,5	6x1,5	0,055
		10	G1/4	M16x1,5	8501L10 13	14-28/L10RD-DM	12	19	19	18,9	27,5	7,5x1,5	0,053
		10	G3/8	M16x1,5	8501L10 17	14-28/L10RD3/8"-DM	12	22	19	21,9	34	7,5x1,5	0,060
		12	G1/4	M18x1,5	8501L12 13	14-28/L12RD1/4"-DM	12	19	22	18,9	34	9x1,5	0,080
		12	G3/8	M18x1,5	8501L12 17	14-28/L12RD-DM	12	22	22	21,9	34	9x1,5	0,100
		12	G1/2	M18x1,5	8501L12 21	14-28/L12RD1/2"-DM	14	27	22	26,9	30,5	9x1,5	0,100
		15	G1/2	M22x1,5	8501L15 21	14-28/L15RD-DM	14	27	27	26,9	32	12x2	0,128
	315	18	G1/2	M26x1,5	8501L18 21	14-28/L18RD-DM	14	27	32	26,9	31,5	15x2	0,143
		22	G3/4	M30x2	8501L22 27	14-28/L22RD-DM	16	32	36	31,9	32,5	20x2	0,207
		28	G1	M36x2	8501L28 34	14-28/L28RD-DM	18	41	41	39,9	35	26x2	0,290
	250	35	G1"1/4	M45x2	8501L35 42	14-28/L35RD-DM	20	50	50	49,9	42,5	32x2,5	0,503
		42	G1"1/2	M52x2	8501L42 49	14-28/L42RD-DM	22	55	60	54,9	46,5	38x2,5	0,596
	S	6	G1/4	M14x1,5	8501S06 13	14-28/S6RD-DM	12	19	17	18,9	27	4x1,5	0,048
		8	G1/4	M16x1,5	8501S08 13	14-28/S8RD-DM	12	19	19	18,9	29,5	6x1,5	0,057
		10	G3/8	M18x1,5	8501S10 17	14-28/S10RD-DM	12	22	22	21,9	32	7,5x1,5	0,086
		12	G3/8	M20x1,5	8501S12 17	14-28/S12RD-DM	12	22	24	21,9	34	9x1,5	0,101
		12	G1/2	M20x1,5	8501S12 21	14-28/S12RD1/2"-DM	14	27	24	26,9	34,5	9x1,5	0,110
		14	G1/2	M22x1,5	8501S14 21	14-28/S14RD-DM	14	27	27	26,9	36,5	10x2	0,154
		16	G1/2	M24x1,5	8501S16 21	14-28/S16RD-DM	14	27	30	26,9	37	12x2	0,161
		20	G3/4	M30x2	8501S20 27	14-28/S20RD-DM	16	32	36	31,9	43	16,3x2,4	0,275
		25	G3/4	M36x2	8501S25 27	14-28/S25RD3/4"-DM	16	32	46	31,9	44,6	20,3x2,4	0,500
		25	G1	M36x2	8501S25 34	14-28/S25RD-DM	18	41	46	39,9	48	20,3x2,4	0,509
	400	30	G1"1/4	M42x2	8501S30 42	14-28/S30RD-DM	20	50	50	49,9	51	25,3x2,4	0,693
	315	38	G1"1/2	M52x2	8501S38 49	14-28/S38RD-DM	22	55	60	54,9	60	33,3x2,4	0,960

Male stud standpipe (DKO)

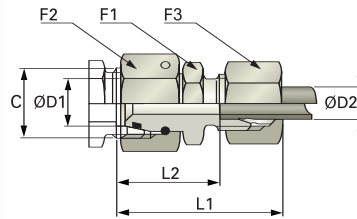
metric parallel
elastomer seal
ISO 9974-2
24° sealing cone and O-ring



	PN	ØD	C1	C2		Bell code	E	F1	F2	G	L	O-ring	
L	400	6	M10x1	M12x1,5	8501L06 60	14-28/L6MD-DM	8	14	14	13,9	24,5	4x1,5	0,028
		8	M12x1,5	M14x1,5	8501L08 67	14-28/L8MD-DM	12	17	17	16,9	26,5	6x1,5	0,044
		10	M14x1,5	M16x1,5	8501L10 71	14-28/L10MD-DM	12	19	19	18,9	27,5	7,5x1,5	0,054
		12	M16x1,5	M18x1,5	8501L12 75	14-28/L12MD-DM	12	22	22	21,9	30,5	9x1,5	0,078
		15	M18x1,5	M22x1,5	8501L15 78	14-28/L15MD-DM	12	24	27	23,9	31,5	12x2	0,111
	315	18	M22x1,5	M26x1,5	8501L18 82	14-28/L18MD-DM	14	27	32	26,9	31,5	15x2	0,148
		22	M26x1,5	M30x2	8501L22 89	14-28/L22MD-DM	16	32	36	31,9	32,5	20x2	0,200
	250	28	M33x2	M36x2	8501L28 91	14-28/L28MD-DM	18	41	41	39,9	35	26x2	0,291
		35	M42x2	M45x2	8501L35 96	14-28/L35MD-DM	20	50	50	49,9	42,5	32x2,5	0,508
		42	M48x2	M52x2	8501L42 98	14-28/L42MD-DM	22	55	60	54,9	46,5	38x2,5	0,679
S	630	6	M12x1,5	M14x1,5	8501S06 67	14-28/S6MD-DM	12	17	17	16,9	27	4x1,5	0,041
		8	M14x1,5	M16x1,5	8501S08 71	14-28/S8MD-DM	12	19	19	18,9	29,5	6x1,5	0,058
		10	M16x1,5	M18x1,5	8501S10 75	14-28/S10MD-DM	12	22	22	21,9	32	7,5x1,5	0,089
		12	M18x1,5	M20x1,5	8501S12 78	14-28/S12MD-DM	12	24	24	23,9	34	9x1,5	0,108
		14	M20x1,5	M22x1,5	8501S14 80	14-28/S14MD-DM	14	27	27	25,9	36,5	10x2	0,161
	400	16	M22x1,5	M24x1,5	8501S16 82	14-28/S16MD-DM	14	27	30	26,9	37	12x2	0,164
		20	M27x2	M30x2	8501S20 86	14-28/S20MD-DM	16	32	36	31,9	43	16,3x2,4	0,293
		25	M33x2	M36x2	8501S25 91	14-28/S25MD-DM	18	41	46	39,9	48	20,3x2,4	0,525
		30	M42x2	M42x2	8501S30 96	14-28/S30MD-DM	20	50	50	49,9	51	25,3x2,4	0,703
		315	M48x2	M52x2	8501S38 98	14-28/S38MD-DM	22	55	60	54,9	60	33,3x2,4	1,045

Standpipe reducers for tubes (DKO)

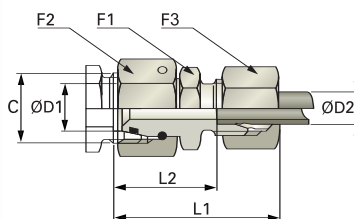
24° sealing cone and O-ring



PN	ØD1	ØD2	C	Body only	Double-bite ring	DiNova ring	Bell code	F1	F2	F3	L1	L2	O-ring	kg
400	8	6	M14x1,5	8076L08 06	8276L08 06	8376L08 06	ZS14-29/L8-6V-DM	12	17	14	38	23,5	6x1,5	0,041
	10	6	M16x1,5	8076L10 06	8276L10 06	8376L10 06	ZS14-29/L10-6V-DM	14	19	14	39,5	25	7,5x1,5	0,052
	10	8	M16x1,5	8076L10 08	8276L10 08	8376L10 08	ZS14-29/L10-8V-DM	14	19	17	39,5	25	7,5x1,5	0,058
	12	6	M18x1,5	8076L12 06	8276L12 06	8376L12 06	ZS14-29/L12-6V-DM	17	22	14	39,5	25	9x1,5	0,063
	12	8	M18x1,5	8076L12 08	8276L12 08	8376L12 08	ZS14-29/L12-8V-DM	17	22	17	39,5	25	9x1,5	0,071
	12	10	M18x1,5	8076L12 10	8276L12 10	8376L12 10	ZS14-29/L12-10V-DM	17	22	19	40,5	26	9x1,5	0,081
	15	6	M22x1,5	8076L15 06	8276L15 06	8376L15 06	ZS14-29/L15-6V-DM	19	27	14	42,5	28	12x2	0,091
	15	8	M22x1,5	8076L15 08	8276L15 08	8376L15 08	ZS14-29/L15-8V-DM	19	27	17	42,5	28	12x2	0,104
	15	10	M22x1,5	8076L15 10	8276L15 10	8376L15 10	ZS14-29/L15-10V-DM	19	27	19	43,5	29	12x2	0,106
	15	12	M22x1,5	8076L15 12	8276L15 12	8376L15 12	ZS14-29/L15-12V-DM	19	27	22	43,5	29	12x2	0,111
	18	6	M26x1,5	8076L18 06	8276L18 06	8376L18 06	ZS14-29/L18-6V-DM	24	32	14	42,5	28	15x2	0,128
	18	8	M26x1,5	8076L18 08	8276L18 08	8376L18 08	ZS14-29/L18-8V-DM	24	32	17	42,5	28	15x2	0,128
315	18	10	M26x1,5	8076L18 10	8276L18 10	8376L18 10	ZS14-29/L18-10V-DM	24	32	19	43,5	29	15x2	0,140
	18	12	M26x1,5	8076L18 12	8276L18 12	8376L18 12	ZS14-29/L18-12V-DM	24	32	22	43,5	29	15x2	0,143
	18	15	M26x1,5	8076L18 15	8276L18 15	8376L18 15	ZS14-29/L18-15V-DM	24	32	27	45	30	15x2	0,160
	22	6	M30x2	8076L22 06	8276L22 06	8376L22 06	ZS14-29/L22-6V-DM	27	36	14	46,5	32	20x2	0,188
	22	8	M30x2	8076L22 08	8276L22 08	8376L22 08	ZS14-29/L22-8V-DM	27	36	17	46,5	32	20x2	0,196
	22	10	M30x2	8076L22 10	8276L22 10	8376L22 10	ZS14-29/L22-10V-DM	27	36	19	47,5	33	20x2	0,197
	22	12	M30x2	8076L22 12	8276L22 12	8376L22 12	ZS14-29/L22-12V-DM	27	36	22	47,5	33	20x2	0,199
	22	15	M30x2	8076L22 15	8276L22 15	8376L22 15	ZS14-29/L22-15V-DM	27	36	27	49	34	20x2	0,216
	22	18	M30x2	8076L22 18	8276L22 18	8376L22 18	ZS14-29/L22-18V-DM	27	36	32	49,5	33,5	20x2	0,230
	28	8	M36x2	8076L28 08	8276L28 08	8376L28 08	ZS14-29/L28-8V-DM	32	41	17	48	34	26x2	0,257
	28	10	M36x2	8076L28 10	8276L28 10	8376L28 10	ZS14-29/L28-10V-DM	32	41	19	49	35	26x2	0,263
	28	12	M36x2	8076L28 12	8276L28 12	8376L28 12	ZS14-29/L28-12V-DM	32	41	22	49	35	26x2	0,271
250	28	15	M36x2	8076L28 15	8276L28 15	8376L28 15	ZS14-29/L28-15V-DM	32	41	27	51	36	26x2	0,285
	28	18	M36x2	8076L28 18	8276L28 18	8376L28 18	ZS14-29/L28-18V-DM	32	41	32	51	35,5	26x2	0,314
	28	22	M36x2	8076L28 22	8276L28 22	8376L28 22	ZS14-29/L28-22V-DM	32	41	36	53	37,5	26x2	0,351
	35	12	M45x2	8076L35 12	8276L35 12	8376L35 12	ZS14-29/L35-12V-DM	41	50	22	52,5	38	32x2,5	0,445
	35	15	M45x2	8076L35 15	8276L35 15	8376L35 15	ZS14-29/L35-15V-DM	41	50	27	54	39	32x2,5	0,461
	35	18	M45x2	8076L35 18	8276L35 18	8376L35 18	ZS14-29/L35-18V-DM	41	50	32	54,5	38,5	32x2,5	0,471
	35	22	M45x2	8076L35 22	8276L35 22	8376L35 22	ZS14-29/L35-22V-DM	41	50	36	56,5	40,5	32x2,5	0,476
	35	28	M45x2	8076L35 28	8276L35 28	8376L35 28	ZS14-29/L35-28V-DM	41	50	41	57	40,5	32x2,5	0,446
	42	22	M52x2	8076L42 22	8276L42 22	8376L42 22	ZS14-29/L42-22V-DM	50	60	36	60	44	38x2,5	0,668
	42	28	M52x2	8076L42 28	8276L42 28	8376L42 28	ZS14-29/L42-28V-DM	50	60	41	60,5	44	38x2,5	0,670
	42	35	M52x2	8076L42 35	8276L42 35	8376L42 35	ZS14-29/L42-35V-DM	50	60	50	64,5	43	38x2,5	0,720

Standpipe reducers for tubes (DKO)

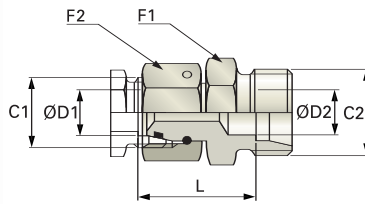
24° sealing cone and O-ring



	PN	ØD1	ØD2	C	 Body only	 Double-bite ring	 DiNova ring	Bell code	F1	F2	F3	L1	L2	O-ring	
S	630	8	6	M16x1,5	8076S08 06	8276S08 06	8376S08 06	ZS14-29/S8-6V-DM	14	19	17	41,5	27	6x1,5	0,065
		10	6	M18x1,5	8076S10 06	8276S10 06	8376S10 06	ZS14-29/S10-6V-DM	17	22	17	42	27,5	7,5x1,5	0,082
		10	8	M18x1,5	8076S10 08	8276S10 08	8376S10 08	ZS14-29/S10-8V-DM	17	22	19	42	27,5	7,5x1,5	0,088
		12	6	M20x1,5	8076S12 06	8276S12 06	8376S12 06	ZS14-29/S12-6V-DM	19	24	17	44,5	30	9x1,5	0,100
		12	8	M20x1,5	8076S12 08	8276S12 08	8376S12 08	ZS14-29/S12-8V-DM	19	24	19	44,5	30	9x1,5	0,102
		12	10	M20x1,5	8076S12 10	8276S12 10	8376S12 10	ZS14-29/S12-10V-DM	19	24	22	45,5	29,5	9x1,5	0,115
		14	10	M22x1,5	8076S14 10	8276S14 10	8376S14 10	ZS14-29/S14-10V-DM	19	27	22	47	31	10x2	0,137
		14	12	M22x1,5	8076S14 12	8276S14 12	8376S14 12	ZS14-29/S14-12V-DM	22	27	24	47	31	10x2	0,151
		16	6	M24x1,5	8076S16 06	8276S16 06	8376S16 06	ZS14-29/S16-6V-DM	22	30	17	46,5	32	12x2	0,148
		16	8	M24x1,5	8076S16 08	8276S16 08	8376S16 08	ZS14-29/S16-8V-DM	22	30	19	46,5	32	12x2	0,154
	400	16	10	M24x1,5	8076S16 10	8276S16 10	8376S16 10	ZS14-29/S16-10V-DM	22	30	22	47,5	31,5	12x2	0,161
		16	12	M24x1,5	8076S16 12	8276S16 12	8376S16 12	ZS14-29/S16-12V-DM	22	30	24	47,5	31,5	12x2	0,189
		16	14	M24x1,5	8076S16 14	8276S16 14	8376S16 14	ZS14-29/S16-14V-DM	24	30	27	50,5	33	12x2	0,192
		20	8	M30x2	8076S20 08	8276S20 08	8376S20 08	ZS14-29/S20-8V-DM	27	36	19	50,5	36	16,3x2,4	0,251
		20	10	M30x2	8076S20 10	8276S20 10	8376S20 10	ZS14-29/S20-10V-DM	27	36	22	51,5	35,5	16,3x2,4	0,256
		20	12	M30x2	8076S20 12	8276S20 12	8376S20 12	ZS14-29/S20-12V-DM	27	36	24	51,5	35,5	16,3x2,4	0,262
		20	14	M30x2	8076S20 14	8276S20 14	8376S20 14	ZS14-29/S20-14V-DM	27	36	27	54,5	37	16,3x2,4	0,277
		20	16	M30x2	8076S20 16	8276S20 16	8376S20 16	ZS14-29/S20-16V-DM	27	36	30	54,5	36,5	16,3x2,4	0,285
		25	8	M36x2	8076S25 08	8276S25 08	8376S25 08	ZS14-29/S25-8V-DM	32	46	19	53	38,5	20,3x2,4	0,403
		25	10	M36x2	8076S25 10	8276S25 10	8376S25 10	ZS14-29/S25-10V-DM	32	46	22	54	38	20,3x2,4	0,413
315	25	12	M36x2	8076S25 12	8276S25 12	8376S25 12	ZS14-29/S25-12V-DM	32	46	24	54	38	20,3x2,4	0,421	
	25	16	M36x2	8076S25 16	8276S25 16	8376S25 16	ZS14-29/S25-16V-DM	32	46	30	57	39	20,3x2,4	0,440	
	25	20	M36x2	8076S25 20	8276S25 20	8376S25 20	ZS14-29/S25-20V-DM	32	46	36	60,5	39	20,3x2,4	0,448	
	30	16	M42x2	8076S30 16	8276S30 16	8376S30 16	ZS14-29/S30-16V-DM	41	50	30	62,5	44,5	25,3x2,4	0,564	
	30	20	M42x2	8076S30 20	8276S30 20	8376S30 20	ZS14-29/S30-20V-DM	41	50	36	66	44,5	25,3x2,4	0,594	
	30	25	M42x2	8076S30 25	8276S30 25	8376S30 25	ZS14-29/S30-25V-DM	41	50	46	69	45	25,3x2,4	0,694	
	38	16	M52x2	8076S38 16	8276S38 16	8376S38 16	ZS14-29/S38-16V-DM	50	60	30	66	48	33,3x2,4	0,866	
	38	20	M52x2	8076S38 20	8276S38 20	8376S38 20	ZS14-29/S38-20V-DM	50	60	36	69,5	48	33,3x2,4	0,921	
	38	25	M52x2	8076S38 25	8276S38 25	8376S38 25	ZS14-29/S38-25V-DM	50	60	46	72,5	48,5	33,3x2,4	0,977	
	38	30	M52x2	8076S38 30	8276S38 30	8376S38 30	ZS14-29/S38-30V-DM	50	60	50	75,5	49	33,3x2,4	0,990	

Increasesers for tubes (DKO)

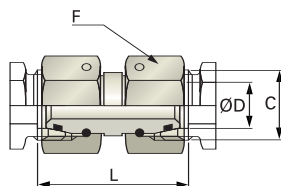
24° sealing cone and O-ring



PN	ØD1	ØD2	C1	C2		Bell code	F1	F2	L	O-ring	
L	L6	L8	M12x1,5	M14x1,5	8566L06 08	14/8-290/L6-8V-DM	14	14	24,5	4x1,5	0,028
	L6	L10	M12x1,5	M16x1,5	8566L06 10	14/8-290/L6-10V-DM	17	14	25,5	4x1,5	0,032
	L8	L10	M14x1,5	M16x1,5	8566L08 10	14/8-290/L8-10V-DM	17	17	25,5	6x1,5	0,035
	L8	L12	M14x1,5	M18x1,5	8566L08 12	14/8-290/L8-12V-DM	19	17	26,5	6x1,5	0,045
	L10	L12	M16x1,5	M18x1,5	8566L10 12	14/8-290/L10-12V-DM	19	19	26	7,5x1,5	0,051
	L10	L15	M16x1,5	M22x1,5	8566L10 15	14/8-290/L10-15V-DM	24	19	27	7,5x1,5	0,066
	L12	S12	M18x1,5	M20x1,5	8566L12S12	14/8-290/L12-S12V-DM	22	22	26,5	9x1,5	0,072
	L12	L15	M18x1,5	M22x1,5	8566L12 15	14/8-290/L12-15V-DM	24	22	27	9x1,5	0,075
	L15	S16	M22x1,5	M24x1,5	8566L15S16	14/8-290/L15-S16V-DM	27	27	30	12x2	0,115
	L12	L18	M18x1,5	M26x1,5	8566L12 18	14/8-290/L12-18V-DM	27	22	27,5	9x1,5	0,090
	L15	L18	M22x1,5	M26x1,5	8566L15 18	14/8-290/L15-18V-DM	27	27	29	12x2	0,115
	L15	L22	M22x1,5	M30x2	8566L15 22	14/8-290/L15-22V-DM	32	27	31	12x2	0,136
315	L18	L22	M26x1,5	M30x2	8566L18 22	14/8-290/L18-22V-DM	32	32	32,5	15x2	0,155
	L22	L28	M30x2	M36x2	8566L22 28	14/8-290/L22-28V-DM	41	36	34,5	20x2	0,226
	L28	L35	M36x2	M45x2	8566L28 35	14/8-290/L28-35V-DM	46	41	35	26x2	0,298
	L28	L42	M36x2	M52x2	8566L28 42	14/8-290/L28-42V-DM	55	41	36,5	26x2	0,430
	L35	L42	M45x2	M52x2	8566L35 42	14/8-290/L35-42V-DM	55	50	40,5	32x2,5	0,504
250	S8	S12	M16x1,5	M20x1,5	8566S08 12	14/8-290/S8-12V-DM	22	19	27,5	6x1,5	0,065
	S10	S12	M18x1,5	M20x1,5	8566S10 12	14/8-290/S10-12V-DM	22	22	28	7,5x1,5	0,079
	S12	S16	M20x1,5	M24x1,5	8566S12 16	14/8-290/S12-16V-DM	27	24	30,5	9x1,5	0,109
	S16	S20	M24x1,5	M30x2	8566S16 20	14/8-290/S16-20V-DM	32	30	33	12x2	0,173
	S16	S25	M24x1,5	M36x2	8566S16 25	14/8-290/S16-25V-DM	41	30	34,5	12x2	0,238
	S20	S25	M30x2	M36x2	8566S20 25	14/8-290/S20-25V-DM	41	36	38	16,3x2,4	0,296
	S25	S30	M36x2	M42x2	8566S25 30	14/8-290/S25-30V-DM	46	46	41,5	20,3x2,4	0,483
	S16	L18	M24x1,5	M26x1,5	8566S16L18	14/8-290/S16-L18V-DM	27	30	32	12x2	0,143
	S20	L22	M30x2	M30x2	8566S20L22	14/8-290/S20-L22V-DM	32	36	37,5	16,3x2,4	0,223
	S25	S38	M36x2	M52x2	8566S25 38	14/8-290/S25-38V-DM	55	46	43	20,3x2,4	0,629
	S25	L28	M36x2	M36x2	8566S25L28	14/8-290/S25-L28V-DM	41	46	40,5	20,3x2,4	0,394
	S25	L35	M36x2	M45x2	8566S25L35	14/8-290/S25-L35V-DM	46	46	41	20,3x2,4	0,460
	S25	L42	M36x2	M52x2	8566S25L42	14/8-290/S25-L42V-DM	55	46	42	20,3x2,4	0,566

Reducer straight connectors (DKO)

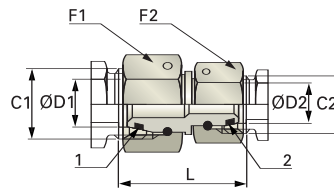
24° sealing cone and O-ring



	PN	ØD	C		Bell code	F	L	O-ring	
L	400	6	M12x1,5	8506L06 00	14/8-10/L6-DM	14	36	4x1,5	0,024
		8	M14x1,5	8506L08 00	14/8-10/L8-DM	17	36	6x1,5	0,041
		10	M16x1,5	8506L10 00	14/8-10/L10-DM	19	37	7,5x1,5	0,050
		12	M18x1,5	8506L12 00	14/8-10/L12-DM	22	37	9x1,5	0,069
		15	M22x1,5	8506L15 00	14/8-10/L15-DM	27	40	12x2	0,120
	315	18	M26x1,5	8506L18 00	14/8-10/L18-DM	32	42,5	15x2	0,160
		22	M30x2	8506L22 00	14/8-10/L22-DM	36	47	20x2	0,224
	250	28	M36x2	8506L28 00	14/8-10/L28-DM	41	49	26x2	0,373
		35	M45x2	8506L35 00	14/8-10/L35-DM	50	58	32x2,5	0,414
		42	M52x2	8506L42 00	14/8-10/L42-DM	60	59	38x2,5	0,705
S	630	6	M14x1,5	8506S06 00	14/8-10/S6-DM	17	39	4x1,5	0,039
		8	M16x1,5	8506S08 00	14/8-10/S8-DM	19	39	6x1,5	0,048
		10	M18x1,5	8506S10 00	14/8-10/S10-DM	22	43	7,5x1,5	0,069
		12	M20x1,5	8506S12 00	14/8-10/S12-DM	24	44	9x1,5	0,083
		14	M22x1,5	8506S14 00	14/8-10/S14-DM	27	48	10x2	0,122
	400	16	M24x1,5	8506S16 00	14/8-10/S16-DM	30	50	12x2	0,140
		20	M30x2	8506S20 00	14/8-10/S20-DM	36	60	16,3x2,4	0,236
		25	M36x2	8506S25 00	14/8-10/S25-DM	46	66	20,3x2,4	0,390
		30	M42x2	8506S30 00	14/8-10/S30-DM	50	73	25,3x2,4	0,499
	315	38	M52x2	8506S38 00	14/8-10/S38-DM	60	83	33,3x2,4	0,740

Double reducer adaptors (DKO)

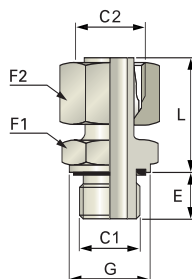
24° sealing cone and O-ring



	PN	ØD1	ØD2	C1	C2		Bell code	F1	F2	L	O-ring 1	O-ring 2		
L	400	L8	L6	M14x1,5	M12x1,5	8506L08 06	14/8-14/L8-6-DM	17	14	35	6x1,5	4x1,5	0,032	
		L10	L6	M16x1,5	M12x1,5	8506L10 06	14/8-14/L10-6-DM	19	14	34,5	7,5x1,5	4x1,5	0,037	
		L10	L8	M16x1,5	M14x1,5	8506L10 08	14/8-14/L10-8-DM	19	17	34,5	7,5x1,5	6x1,5	0,046	
		L12	L6	M18x1,5	M12x1,5	8506L12 06	14/8-14/L12-6-DM	22	14	34,5	9x1,5	4x1,5	0,047	
		L12	L8	M18x1,5	M14x1,5	8506L12 08	14/8-14/L12-8-DM	22	17	34,5	9x1,5	6x1,5	0,055	
		L12	L10	M18x1,5	M16x1,5	8506L12 10	14/8-14/L12-10-DM	22	19	34	9x1,5	7,5x1,5	0,060	
		L15	L8	M22x1,5	M14x1,5	8506L15 08	14/8-14/L15-8-DM	27	14	36	12x2	6x1,5	0,080	
		L15	L10	M22x1,5	M16x1,5	8506L15 10	14/8-14/L15-10-DM	27	19	35,5	12x2	7,5x1,5	0,085	
	315	L15	L12	M22x1,5	M18x1,5	8506L15 12	14/8-14/L15-12-DM	27	22	35,5	12x2	9x1,5	0,094	
		L18	L12	M26x1,5	M18x1,5	8506L18 12	14/8-14/L18-12-DM	32	22	37	15x2	9x1,5	0,114	
		L18	L15	M26x1,5	M22x1,5	8506L18 15	14/8-14/L18-15-DM	32	27	38,5	15x2	12x2	0,140	
		L18	S16	M26x1,5	M24x1,5	8506L18S16	14/8-14/L18-S16-DM	32	30	41,5	15x2	12x2	0,150	
		L22	L12	M30x2	M18x1,5	8506L22 12	14/8-14/L22-12-DM	36	22	39	20x2	9x1,5	0,146	
		L22	L15	M30x2	M22x1,5	8506L22 15	14/8-14/L22-15-DM	36	27	40,5	20x2	12x2	0,172	
		L22	L18	M30x2	M26x1,5	8506L22 18	14/8-14/L22-18-DM	36	32	42	20x2	15x2	0,192	
		L22	S20	M30x2	M30x2	8506L22S20	14/8-14/L22-S20-DM	36	36	47	20x2	16,3x2,4	0,230	
	250	L28	L18	M36x2	M26x1,5	8506L28 18	14/8-14/L28-18-DM	41	32	42,5	26x2	15x2	0,266	
		L28	L22	M36x2	M30x2	8506L28 22	14/8-14/L28-22-DM	41	36	43,5	26x2	20x2	0,298	
		L35	L28	M45x2	M36x2	8506L35 28	14/8-14/L35-28-DM	50	41	48	32x2,5	26x2	0,394	
S	400	630	S12	S10	M20x1,5	M18x1,5	8506S12 10	14/8-14/S12-10-DM	24	22	37,5	9x1,5	7,5x1,5	0,076
		S10	L10	M18x1,5	M16x1,5	8506S10L10	14/8-14/S10-L10-DM	22	19	35,5	7,5x1,5	7,5x1,5	0,060	
		S12	L8	M20x1,5	M14x1,5	8506S12L08	14/8-14/S12-L8-DM	24	17	36,5	9x1,5	6x1,5	0,062	
		S12	L10	M20x1,5	M16x1,5	8506S12L10	14/8-14/S12-L10-DM	24	19	36	9x1,5	7,5x1,5	0,067	
		S12	L12	M20x1,5	M18x1,5	8506S12L12	14/8-14/S12-L12-DM	24	22	36	9x1,5	9x1,5	0,076	
		S16	L12	M24x1,5	M18x1,5	8506S16L12	14/8-14/S16-L12-DM	30	22	38,5	12x2	9x1,5	0,105	
		S16	S12	M24x1,5	M20x1,5	8506S16 12	14/8-14/S16-12-DM	30	24	40,5	12x2	9x1,5	0,112	
		S16	L15	M24x1,5	M22x1,5	8506S16L15	14/8-14/S16-L15-DM	30	27	40	12x2	12x2	0,130	
		S20	S16	M30x2	M24x1,5	8506S20 16	14/8-14/S20-16-DM	36	30	47,5	16,3x2,4	12x2	0,188	
		S25	S16	M36x2	M24x1,5	8506S25 16	14/8-14/S25-16-DM	46	30	49,5	20,3x2,4	12x2	0,265	
		S25	S20	M36x2	M30x2	8506S25 20	14/8-14/S25-20-DM	46	36	53	20,3x2,4	16,3x2,4	0,313	
		S30	S20	M42x2	M30x2	8506S30 20	14/8-14/S30-20-DM	50	36	56,5	25,3x2,4	16,3x2,4	0,368	
		S30	S25	M42x2	M36x2	8506S30 25	14/8-14/S30-25-DM	50	46	55,5	25,3x2,4	20,3x2,4	0,445	
		315	S38	S30	M52x2	M42x2	8506S38 30	14/8-14/S38-30-DM	60	50	66	33,3x2,4	25,3x2,4	0,620

Male stud standpipe

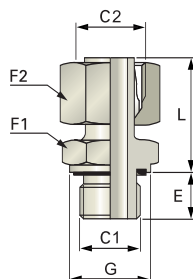
metric parallel
elastomer seal
ISO 9974-2
pre-assembled ring



	PN	ØD	C1	C2	Double-bite ring	Bell code	E	F1	F2	G	L	kg
L	400	6	G1/8	M12x1,5	8242L06 10	ZS15-28/L6RD	8	14	14	13,9	24,5	0,025
		8	G1/4	M14x1,5	8242L08 13	ZS15-28/L8RD	12	19	17	18,9	29,5	0,045
		10	G1/4	M16x1,5	8242L10 13	ZS15-28/L10RD	12	19	19	18,9	27,5	0,047
		12	G1/4	M18x1,5	8242L12 13	ZS15-28/L12RD1/4"	12	19	22	18,9	29	0,064
		12	G3/8	M18x1,5	8242L12 17	ZS15-28/L12RD	12	22	22	21,9	34	0,063
		12	G1/2	M18x1,5	8242L12 21	ZS15-28/L12RD1/2"	14	27	22	26,9	32	0,097
		15	G3/8	M22x1,5	8242L15 17	ZS15-28/L15RD3/8"	12	22	27	21,9	34	0,110
		15	G1/2	M22x1,5	8242L15 21	ZS15-28/L15RD	14	27	27	26,9	32	0,115
	315	18	G1/2	M26x1,5	8242L18 21	ZS15-28/L18RD	14	27	32	26,9	31,5	0,129
		22	G3/4	M30x2	8242L22 27	ZS15-28/L22RD	16	32	36	31,9	32,5	0,176
	250	28	G1	M36x2	8242L28 34	ZS15-28/L28RD	18	41	41	39,9	35	0,247
		35	G1"1/4	M45x2	8242L35 42	ZS15-28/L35RD	20	50	50	49,9	42,5	0,407
S	630	42	G1"1/2	M52x2	8242L42 49	ZS15-28/L42RD	22	55	60	54,9	46,5	0,456
		6	G1/4	M14x1,5	8242S06 13	ZS15-28/S6RD	12	19	17	18,9	27	0,050
		8	G1/4	M16x1,5	8242S08 13	ZS15-28/S8RD	12	19	19	18,9	29,5	0,055
		10	G3/8	M18x1,5	8242S10 17	ZS15-28/S10RD	12	22	22	21,9	32	0,082
		12	G3/8	M20x1,5	8242S12 17	ZS15-28/S12RD	12	22	24	21,9	34	0,095
		12	G1/2	M20x1,5	8242S12 21	ZS15-28/S12RD1/2"	14	27	24	26,9	34,5	0,095
		14	G1/2	M22x1,5	8242S14 21	ZS15-28/S14RD	14	27	27	26,9	36,5	0,148
		16	G1/2	M24x1,5	8242S16 21	ZS15-28/S16RD	14	27	30	26,9	37	0,154
	400	20	G3/4	M30x2	8242S20 27	ZS15-28/S20RD	16	32	36	31,9	43	0,253
		25	G1	M36x2	8242S25 34	ZS15-28/S25RD	18	41	46	39,9	48	0,465
		30	G1"1/4	M42x2	8242S30 42	ZS15-28/S30RD	20	50	50	49,9	51	0,644
	315	38	G1"1/2	M52x2	8242S38 49	ZS15-28/S38RD	22	55	60	54,9	60	0,889

Male stud standpipe

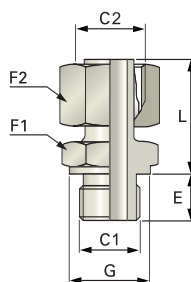
BSP parallel
elastomer seal
ISO 1179-2
pre-assembled ring



	PN	ØD	C1	C2	Double-bite ring	Bell code	E	F1	F2	G	L	kg
L	400	6	M10x1	M12x1,5	8242L06 60	ZS15-28/L6MD	8	14	14	13,9	24,5	0,025
		8	M12x1,5	M14x1,5	8242L08 67	ZS15-28/L8MD	12	17	17	16,9	26,5	0,040
		10	M14x1,5	M16x1,5	8242L10 71	ZS15-28/L10MD	12	19	19	18,9	27,5	0,047
		12	M16x1,5	M18x1,5	8242L12 75	ZS15-28/L12MD	12	22	22	21,9	30,5	0,063
		15	M18x1,5	M22x1,5	8242L15 78	ZS15-28/L15MD	12	24	27	23,9	31,5	0,095
	315	15	M22x1,5	M22x1,5	8242L15 82	ZS15-28/L15MD22X1,5	14	27	27	26,9	31	0,140
		18	M22x1,5	M26x1,5	8242L18 82	ZS15-28/L18MD	14	27	32	26,9	31,5	0,129
		22	M26x1,5	M30x2	8242L22 89	ZS15-28/L22MD	16	32	36	31,9	32,5	0,176
	250	28	M33x2	M36x2	8242L28 91	ZS15-28/L28MD	18	41	41	39,9	35	0,247
		35	M42x2	M45x2	8242L35 96	ZS15-28/L35MD	20	50	50	49,9	42,5	0,407
S		42	M48x2	M52x2	8242L42 98	ZS15-28/L42MD	22	55	60	54,9	46,5	0,456
	630	6	M12x1,5	M14x1,5	8242S06 67	ZS15-28/S6MD	12	17	17	16,9	27	0,045
		8	M14x1,5	M16x1,5	8242S08 71	ZS15-28/S8MD	12	19	19	18,9	29,5	0,055
		10	M16x1,5	M18x1,5	8242S10 75	ZS15-28/S10MD	12	22	22	21,9	32	0,082
		12	M18x1,5	M20x1,5	8242S12 78	ZS15-28/S12MD	12	24	24	23,9	34	0,095
		14	M20x1,5	M22x1,5	8242S14 80	ZS15-28/S14MD	14	27	27	25,9	36,5	0,148
	400	16	M22x1,5	M24x1,5	8242S16 82	ZS15-28/S16MD	14	27	30	26,9	37	0,154
		20	M27x2	M30x2	8242S20 86	ZS15-28/S20MD	16	32	36	31,9	43	0,253
		25	M33x2	M36x2	8242S25 91	ZS15-28/S25MD	18	41	46	39,9	48	0,465
		30	M42x2	M42x2	8242S30 96	ZS15-28/S30MD	20	50	50	49,9	51	0,644
		38	M48x2	M52x2	8242S38 98	ZS15-28/S38MD	22	55	60	54,9	60	0,889

Male stud standpipe

BSP parallel
sealing bite
ISO 1179-4
pre-assembled ring

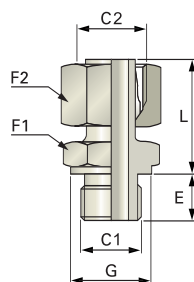


	PN	ØD	C1	C2	 Double-bite ring	Bell code	E	F1	F2	G	L		
L	315	6	G1/8	M12x1,5	8241L06 10	ZS15-28/L6RB	8	14	14	14	24,5	0,025	
		8	G1/4	M14x1,5	8241L08 13	ZS15-28/L8RB	12	19	17	18	29,5	0,045	
		10	G1/4	M16x1,5	8241L10 13	ZS15-28/L10RB	12	19	19	18	27,5	0,047	
		12	G1/4	M18x1,5	8241L12 13	ZS15-28/L12RB1/4"	12	19	22	18	29	0,057	
		12	G3/8	M18x1,5	8241L12 17	ZS15-28/L12RB	12	22	22	22	34	0,063	
		12	G1/2	M18x1,5	8241L12 21	ZS15-28/L12RB1/2"	14	27	22	26	32	0,097	
		15	G1/2	M22x1,5	8241L15 21	ZS15-28/L15RB	14	27	27	26	32	0,115	
		18	G1/2	M26x1,5	8241L18 21	ZS15-28/L18RB	14	27	32	26	31,5	0,129	
	250	22	G3/4	M30x2	8241L22 27	ZS15-28/L22RB	16	32	36	32	32,5	0,176	
		28	G1	M36x2	8241L28 34	ZS15-28/L28RB	18	41	41	39	35	0,247	
		35	G1"1/4	M45x2	8241L35 42	ZS15-28/L35RB	20	50	50	49	42,5	0,407	
		42	G1"1/2	M52x2	8241L42 49	ZS15-28/L42RB	22	55	60	55	46,5	0,456	
S	PB 630*	6	G1/4	M14x1,5	8241S06 13	ZS15-28/S6RB	12	19	17	18	27	0,050	
		8	G1/4	M16x1,5	8241S08 13	ZS15-28/S8RB	12	19	19	18	29,5	0,055	
		10	G3/8	M18x1,5	8241S10 17	ZS15-28/S10RB	12	22	22	22	32	0,082	
		12	G3/8	M20x1,5	8241S12 17	ZS15-28/S12RB	12	22	24	22	34	0,095	
		12	G1/2	M20x1,5	8241S12 21	ZS15-28/S12RB1/2"	14	27	24	26	34,5	0,095	
		14	G1/2	M22x1,5	8241S14 21	ZS15-28/S14RB	14	27	27	26	36,5	0,148	
		400	16	G1/2	M24x1,5	8241S16 21	ZS15-28/S16RB	14	27	30	26	37	0,154
			20	G3/4	M30x2	8241S20 27	ZS15-28/S20RB	16	32	36	32	43	0,253
	25		G1	M36x2	8241S25 34	ZS15-28/S25RB	18	41	46	39	48	0,465	
	250		30	G1"1/4	M42x2	8241S30 42	ZS15-28/S30RB	20	50	50	49	51	0,644
		38	G1"1/2	M52x2	8241S38 49	ZS15-28/S38RB	22	55	60	55	60	0,889	

* Safety factor 3

Male stud standpipe

metric parallel
sealing bite
ISO 9974-3
pre-assembled ring



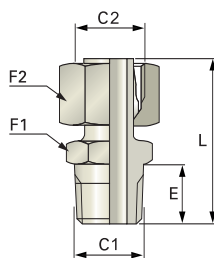
	PN	ØD	C1	C2	Double-bite ring	Bell code	E	F1	F2	G	L	kg
L	315	6	M10x1	M12x1,5	8241L06 60	ZS15-28/L6MB	8	14	14	14	24,5	0,025
		8	M12x1,5	M14x1,5	8241L08 67	ZS15-28/L8MB	12	17	17	17	26,5	0,040
		10	M14x1,5	M16x1,5	8241L10 71	ZS15-28/L10MB	12	19	19	19	27,5	0,047
		12	M16x1,5	M18x1,5	8241L12 75	ZS15-28/L12MB	12	22	22	21	30,5	0,063
		15	M18x1,5	M22x1,5	8241L15 78	ZS15-28/L15MB	12	24	27	23	31,5	0,095
		18	M22x1,5	M26x1,5	8241L18 82	ZS15-28/L18MB	14	27	32	27	31,5	0,129
	250	22	M26x1,5	M30x2	8241L22 89	ZS15-28/L22MB	16	32	36	31	32,5	0,176
		28	M33x2	M36x2	8241L28 91	ZS15-28/L28MB	18	41	41	39	35	0,247
		35	M42x2	M45x2	8241L35 96	ZS15-28/L35MB	20	50	50	49	42,5	0,407
		42	M48x2	M52x2	8241L42 98	ZS15-28/L42MB	22	55	60	55	46,5	0,456
S	PB 630*	6	M12x1,5	M14x1,5	8241S06 67	ZS15-28/S6MB	12	17	17	17	27	0,045
		8	M14x1,5	M16x1,5	8241S08 71	ZS15-28/S8MB	12	19	19	19	29,5	0,055
		10	M16x1,5	M18x1,5	8241S10 75	ZS15-28/S10MB	12	22	22	21	32	0,082
		12	M18x1,5	M20x1,5	8241S12 78	ZS15-28/S12MB	12	24	24	23	34	0,105
		14	M20x1,5	M22x1,5	8241S14 80	ZS15-28/S14MB	14	27	27	25	36,5	0,148
		16	M22x1,5	M24x1,5	8241S16 82	ZS15-28/S16MB	14	27	30	27	37	0,154
	400	20	M27x2	M30x2	8241S20 86	ZS15-28/S20MB	16	32	36	32	43	0,253
		25	M33x2	M36x2	8241S25 91	ZS15-28/S25MB	18	41	46	39	48	0,465
	250	30	M42x2	M42x2	8241S30 96	ZS15-28/S30MB	20	50	50	49	51	0,644
		38	M48x2	M52x2	8241S38 98	ZS15-28/S38MB	22	55	60	55	60	0,889

* Safety factor 3

Male stud standpipe

NPT

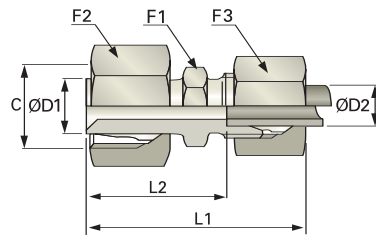
pre-assembled ring



	PN	ØD	C1	C2	Double-bite ring	Bell code	E	F1	F2	L	kg
L	315	6	1/8	M12x1,5	8245L06 11	ZS15-28/L6NPT	9,97	11	14	33	0,026
		8	1/4	M14x1,5	8245L08 14	ZS15-28/L8NPT	15,1	14	17	38	0,039
		10	1/4	M16x1,5	8245L10 14	ZS15-28/L10NPT	15,1	14	19	38,5	0,047
		12	3/8	M18x1,5	8245L12 18	ZS15-28/L12NPT	15,26	19	22	41,5	0,063
		15	1/2	M22x1,5	8245L15 22	ZS15-28/L15NPT	19,85	22	27	47	0,109
		18	1/2	M26x1,5	8245L18 22	ZS15-28/L18NPT	19,85	22	32	47,5	0,135
	160	22	3/4	M30x2	8245L22 28	ZS15-28/L22NPT	20,16	27	36	49	0,190
		28	1	M36x2	8245L28 35	ZS15-28/L28NPT	25,0	36	41	55,5	0,275
		35	1"1/4	M45x2	8245L35 43	ZS15-28/L35NPT	25,62	46	50	62,5	0,405
		42	1"1/2	M52x2	8245L42 50	ZS15-28/L42NPT	26,04	50	60	65	0,570
S	630	6	1/4	M14x1,5	8245S06 14	ZS15-28/S6NPT	15,1	14	17	39	0,049
		8	1/4	M16x1,5	8245S08 14	ZS15-28/S8NPT	15,1	14	19	41	0,056
		10	3/8	M18x1,5	8245S10 18	ZS15-28/S10NPT	15,26	19	22	44	0,080
		12	3/8	M20x1,5	8245S12 18	ZS15-28/S12NPT	15,26	19	24	44,5	0,100
		14	1/2	M22x1,5	8245S14 22	ZS15-28/S14NPT	19,85	22	27	51	0,153
		16	1/2	M24x1,5	8245S16 22	ZS15-28/S16NPT	19,85	22	30	51,5	0,158
	400	20	3/4	M30x2	8245S20 28	ZS15-28/S20NPT	20,16	27	36	58	0,250
		25	1	M36x2	8245S25 35	ZS15-28/S25NPT	25	36	46	68	0,475
		30	1"1/4	M42x2	8245S30 43	ZS15-28/S30NPT	25,62	46	50	73,5	0,620
	315	38	1"1/2	M52x2	8245S38 50	ZS15-28/S38NPT	26,04	50	60	78	0,890

Standpipe reducers for tubes

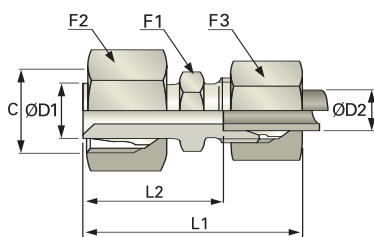
pre-assembled ring



PN	ØD1	ØD2	C	Body only	Double-bite ring	Bell code	F1	F2	F3	L1	L2	kg
400	8	6	M14x1,5	8040L08 06	8240L08 06	ZS15-29/L8-6V	12	17	14	40	25,5	0,041
	10	6	M16x1,5	8040L10 06	8240L10 06	ZS15-29/L10-6V	12	19	14	42	27,5	0,050
	10	8	M16x1,5	8040L10 08	8240L10 08	ZS15-29/L10-8V	14	19	17	42	27,5	0,058
	12	6	M18x1,5	8040L12 06	8240L12 06	ZS15-29/L12-6V	14	22	14	42	27,5	0,060
	12	8	M18x1,5	8040L12 08	8240L12 08	ZS15-29/L12-8V	14	22	17	42	27,5	0,068
	12	10	M18x1,5	8040L12 10	8240L12 10	ZS15-29/L12-10V	17	22	19	43	28,5	0,080
	15	6	M22x1,5	8040L15 06	8240L15 06	ZS15-29/L15-6V	17	27	14	44	29	0,086
	15	8	M22x1,5	8040L15 08	8240L15 08	ZS15-29/L15-8V	17	27	17	44	29	0,099
	15	10	M22x1,5	8040L15 10	8240L15 10	ZS15-29/L15-10V	17	27	19	45	30	0,101
	15	12	M22x1,5	8040L15 12	8240L15 12	ZS15-29/L15-12V	17	27	22	45	30	0,109
315	18	8	M26x1,5	8040L18 08	8240L18 08	ZS15-29/L18-8V	19	32	17	46	31	0,123
	18	10	M26x1,5	8040L18 10	8240L18 10	ZS15-29/L18-10V	19	32	19	46	31	0,133
	18	12	M26x1,5	8040L18 12	8240L18 12	ZS15-29/L18-12V	19	32	22	46	31	0,136
	18	15	M26x1,5	8040L18 15	8240L18 15	ZS15-29/L18-15V	22	32	27	48	33	0,160
	22	8	M30x2	8040L22 08	8240L22 08	ZS15-29/L22-8V	24	36	17	48	33	0,189
	22	10	M30x2	8040L22 10	8240L22 10	ZS15-29/L22-10V	24	36	19	49	34	0,190
	22	12	M30x2	8040L22 12	8240L22 12	ZS15-29/L22-12V	24	36	22	49	34	0,191
	22	15	M30x2	8040L22 15	8240L22 15	ZS15-29/L22-15V	24	36	27	50	35	0,209
	22	18	M30x2	8040L22 18	8240L22 18	ZS15-29/L22-18V	27	36	32	51	34,5	0,230
	28	10	M36x2	8040L28 10	8240L28 10	ZS15-29/L28-10V	30	41	19	49	34	0,257
250	28	12	M36x2	8040L28 12	8240L28 12	ZS15-29/L28-12V	30	41	22	49	34	0,265
	28	15	M36x2	8040L28 15	8240L28 15	ZS15-29/L28-15V	30	41	27	50	35	0,279
	28	18	M36x2	8040L28 18	8240L28 18	ZS15-29/L28-18V	30	41	32	51	34,5	0,308
	28	22	M36x2	8040L28 22	8240L28 22	ZS15-29/L28-22V	30	41	36	53	36,5	0,345
	35	15	M45x2	8040L35 15	8240L35 15	ZS15-29/L35-15V	36	50	27	56	40,5	0,440
	35	18	M45x2	8040L35 18	8240L35 18	ZS15-29/L35-18V	36	50	32	56	40	0,450
	35	22	M45x2	8040L35 22	8240L35 22	ZS15-29/L35-22V	36	50	36	58	42	0,455
	35	28	M45x2	8040L35 28	8240L35 28	ZS15-29/L35-28V	36	50	41	59	42	0,425
	42	22	M52x2	8040L42 22	8240L42 22	ZS15-29/L42-22V	46	60	36	61	44,5	0,667
	42	28	M52x2	8040L42 28	8240L42 28	ZS15-29/L42-28V	46	60	41	61	44,5	0,668
	42	35	M52x2	8040L42 35	8240L42 35	ZS15-29/L42-35V	46	60	50	65	43,5	0,720

Standpipe reducers for tube

pre-assembled ring

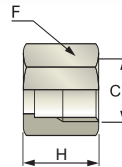


	PN	ØD1	ØD2	C			Bell code	F1	F2	F3	L1	L2	
					Body only	Double-bite ring							
S	630	8	6	M16x1,5	8040S08 06	8240S08 06	ZS15-29/S8-6V	14	19	17	43	28	0,064
		10	6	M18x1,5	8040S10 06	8240S10 06	ZS15-29/S10-6V	14	22	17	45	30,5	0,074
		10	8	M18x1,5	8040S10 08	8240S10 08	ZS15-29/S10-8V	17	22	19	45	30,5	0,084
		12	6	M20x1,5	8040S12 06	8240S12 06	ZS15-29/S12-6V	14	24	17	47	32,5	0,091
		12	8	M20x1,5	8040S12 08	8240S12 08	ZS15-29/S12-8V	17	24	19	47	32,5	0,098
		12	10	M20x1,5	8040S12 10	8240S12 10	ZS15-29/S12-10V	19	24	22	48	32	0,114
		14	10	M22x1,5	8040S14 10	8240S14 10	ZS15-29/S14-10V	19	27	22	52	36	0,136
		14	12	M22x1,5	8040S14 12	8240S14 12	ZS15-29/S14-12V	22	27	24	52	36	0,144
	400	16	6	M24x1,5	8040S16 06	8240S16 06	ZS15-29/S16-6V	17	30	17	53	38,5	0,147
		16	8	M24x1,5	8040S16 08	8240S16 08	ZS15-29/S16-8V	17	30	19	53	38,5	0,153
		16	10	M24x1,5	8040S16 10	8240S16 10	ZS15-29/S16-10V	19	30	22	54	38	0,163
		16	12	M24x1,5	8040S16 12	8240S16 12	ZS15-29/S16-12V	22	30	24	55	38,5	0,183
		16	14	M24x1,5	8040S16 14	8240S16 14	ZS15-29/S16-14V	22	30	27	57	39,5	0,190
		20	8	M30x2	8040S20 08	8240S20 08	ZS15-29/S20-8V	22	36	19	58	43	0,234
		20	10	M30x2	8040S20 10	8240S20 10	ZS15-29/S20-10V	22	36	22	59	42,5	0,239
		20	12	M30x2	8040S20 12	8240S20 12	ZS15-29/S20-12V	22	36	24	59	42,5	0,245
		20	16	M30x2	8040S20 16	8240S20 16	ZS15-29/S20-16V	24	36	30	62	43,5	0,274
		25	8	M36x2	8040S25 08	8240S25 08	ZS15-29/S25-8V	27	46	19	62	47,5	0,400
		25	10	M36x2	8040S25 10	8240S25 10	ZS15-29/S25-10V	27	46	22	63	47	0,410
		25	12	M36x2	8040S25 12	8240S25 12	ZS15-29/S25-12V	27	46	24	63	47	0,418
		25	16	M36x2	8040S25 16	8240S25 16	ZS15-29/S25-16V	27	46	30	66	48	0,437
		25	20	M36x2	8040S25 20	8240S25 20	ZS15-29/S25-20V	30	46	36	70	48	0,445
		30	16	M42x2	8040S30 16	8240S30 16	ZS15-29/S30-16V	32	50	30	71	52,5	0,556
		30	20	M42x2	8040S30 20	8240S30 20	ZS15-29/S30-20V	32	50	36	74	52,5	0,586
		30	25	M42x2	8040S30 25	8240S30 25	ZS15-29/S30-25V	36	50	46	77	53	0,697
315	38	20	M52x2	8040S38 20	8240S38 20	ZS15-29/S38-20V	41	60	36	79	57,5	0,902	
	38	25	M52x2	8040S38 25	8240S38 25	ZS15-29/S38-25V	41	60	46	82	58	0,958	
	38	30	M52x2	8040S38 30	8240S38 30	ZS15-29/S38-30V	46	60	50	89	58,5	1,001	

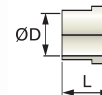
Nuts Flare sleeves Intermediate cones

Connection components
for 24°/ 37° adaptors
DIN 3949

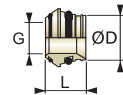
8430



8431



8432



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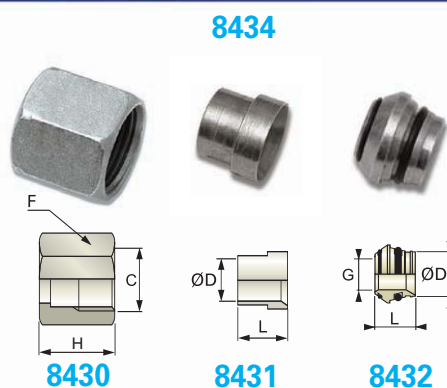
	PN	ØD	C	Nut	Bell code	F	H	
L	400	6	M12x1,5	8430L06 00	12-30/L6	14	17	0,011
		8	M14x1,5	8430L08 00	12-30/L8	17	18	0,018
		10	M16x1,5	8430L10 00	12-30/L10	19	19,5	0,023
		12	M18x1,5	8430L12 00	12-30/L12	22	20,5	0,031
		15	M22x1,5	8430L15 00	12-30/L15	27	23	0,055
	315	18	M26x1,5	8430L18 00	12-30/L18	32	23	0,074
		22	M30x2	8430L22 00	12-30/L22	36	27,5	0,105
	250	28	M36x2	8430L28 00	12-30/L28	41	27,5	0,112
		35	M45x2	8430L35 00	12-30/L35	50	30	0,164
		42	M52x2	8430L42 00	12-30/L42	60	34	0,299
S	630	6	M14x1,5	8430S06 00	12-30/S6	17	18	0,019
		8	M16x1,5	8430S08 00	12-30/S8	19	19	0,025
		10	M18x1,5	8430S10 00	12-30/S10	22	20,5	0,036
		12	M20x1,5	8430S12 00	12-30/S12	24	21	0,041
		16	M24x1,5	8430S16 00	12-30/S16	30	26,5	0,083
	400	20	M30x2	8430S20 00	12-30/S20	36	27,5	0,105
		25	M36x2	8430S25 00	12-30/S25	46	30,5	0,205
	315	30	M42x2	8430S30 00	12-30/S30	50	32	0,228
		38	M52x2	8430S38 00	12-30/S38	60	38	0,374

	PN	ØD	C	Flare sleeve	Bell code	L	
L	400	6	M12x1,5	8431L06 00	12-31/L6	10,5	0,002
		8	M14x1,5	8431L08 00	12-31/L8	11	0,002
		10	M16x1,5	8431L10 00	12-31/L10	12,5	0,002
		12	M18x1,5	8431L12 00	12-31/L12	13	0,005
		15	M22x1,5	8431L15 00	12-31/L15	14	0,011
	315	18	M26x1,5	8431L18 00	12-31/L18	14,5	0,016
		22	M30x2	8431L22 00	12-31/L22	18	0,017
	250	28	M36x2	8431L28 00	12-31/L28	17	0,022
		35	M45x2	8431L35 00	12-31/L35	19	0,042
		42	M52x2	8431L42 00	12-31/L42	21	0,059
S	630	6	M14x1,5	8431S06 00	12-31/S6	10,5	0,002
		8	M16x1,5	8431S08 00	12-31/S8	11	0,002
		10	M18x1,5	8431S10 00	12-31/S10	12,5	0,002
		12	M20x1,5	8431S12 00	12-31/S12	13	0,005
		16	M24x1,5	8431S16 00	12-31/S16	17	0,008
	400	20	M30x2	8431S20 00	12-31/S20	17,5	0,026
		25	M36x2	8431S25 00	12-31/S25	20	0,022
	315	30	M42x2	8431S30 00	12-31/S30	21,5	0,049
		38	M52x2	8431S38 00	12-31/S38	26,5	0,051

	PN	ØD	Intermediate cone	Bell code	G	L	O-ring 1	O-ring 2	
L	400	6	8432L06 00	12-32/BL6	3	11,5	4x1,5	4,4x0,8	0,003
		8	8432L08 00	12-32/BL8	5	12	6x1,5	6x0,8	0,004
		10	8432L10 00	12-32/BL10	6	12,5	7,5x1,5	7,5x0,8	0,006
		12	8432L12 00	12-32/BL12	8	12,5	9x1,5	9,5x0,8	0,008
		15	8432L15 00	12-32/BL15	11	12,5	12x2	12,5x0,8	0,010
	315	18	8432L18 00	12-32/BL18	14	13	15x2	15x1	0,012
		22	8432L22 00	12-32/BL22	17	14,2	20x2	18x1	0,018
	250	28	8432L28 00	12-32/BL28	23	14,7	26x2	23x1	0,024
		35	8432L35 00	12-32/BL35	28	18,5	32x2,5	30x1	0,049
		42	8432L42 00	12-32/BL42	35	20,5	38x2,5	37x1	0,064
S	630	6	8432S06 00	12-32/BS6	3	11,5	4x1,5	4,4x0,8	0,003
		8	8432S08 00	12-32/BS8	5	12	6x1,5	6x0,8	0,004
		10	8432S10 00	12-32/BS10	6	12,5	7,5x1,5	7,5x0,8	0,006
		12	8432S12 00	12-32/BS12	8	12,5	9x1,5	9,5x0,8	0,008
		16	8432S16 00	12-32/BS16	11	15	12x2	12,5x1	0,013
	400	20	8432S20 00	12-32/BS20	14	18,5	16,3x2,4	16x1	0,022
		25	8432S25 00	12-32/BS25	19	20	20,3x2,4	20x1	0,031
	315	30	8432S30 00	12-32/BS30	23	22	25,3x2,4	25x1	0,042
		38	8432S38 00	12-32/BS38	30	26	33,3x2,4	32x1,78	0,063

Adaptors for 24°/37° couplings

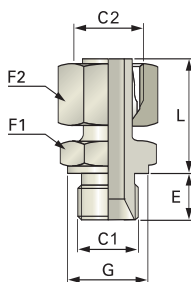
DIN 3949



	PN	ØD		Bell code	
L	400	6	8434L06 00	12-40/BL6	0,016
		8	8434L08 00	12-40/BL8	0,024
		10	8434L10 00	12-40/BL10	0,031
		12	8434L12 00	12-40/BL12	0,044
		15	8434L15 00	12-40/BL15	0,076
	315	18	8434L18 00	12-40/BL18	0,102
		22	8434L22 00	12-40/BL22	0,140
		28	8434L28 00	12-40/BL28	0,158
	250	35	8434L35 00	12-40/BL35	0,255
		42	8434L42 00	12-40/BL42	0,422
S	630	6	8434S06 00	12-40/BS6	0,024
		8	8434S08 00	12-40/BS8	0,031
		10	8434S10 00	12-40/BS10	0,044
		12	8434S12 00	12-40/BS12	0,054
		16	8434S16 00	12-40/BS16	0,104
	400	20	8434S20 00	12-40/BS20	0,250
		25	8434S25 00	12-40/BS25	0,258
		30	8434S30 00	12-40/BS30	0,319
	315	38	8434S38 00	12-40/BS38	0,488

BSP 60° adaptors

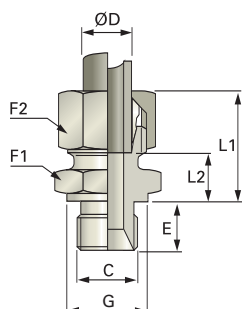
BSP parallel
pre-assembled ring



	PN	ØD	C1	C2	 Double-bite ring	Bell code	E	F1	F2	G	L	
L	315	6	G1/8	M12x1,5	8260L06 10	ZS15-28/L6RB-KS	8	14	14	14	24,5	0,025
		8	G1/4	M14x1,5	8260L08 13	ZS15-28/L8RB-KS	12	19	17	18	29,5	0,045
		10	G1/4	M16x1,5	8260L10 13	ZS15-28/L10RB-KS	12	19	19	18	27,5	0,047
		12	G3/8	M18x1,5	8260L12 17	ZS15-28/L12RB-KS	12	22	22	22	34	0,063
		15	G1/2	M22x1,5	8260L15 21	ZS15-28/L15RB-KS	14	27	27	26	32	0,115
		18	G1/2	M26x1,5	8260L18 21	ZS15-28/L18RB-KS	14	27	32	26	31,5	0,129
	250	22	G3/4	M30x2	8260L22 27	ZS15-28/L22RB-KS	16	32	36	32	32,5	0,176
		28	G1	M36x2	8260L28 34	ZS15-28/L28RB-KS	18	41	41	39	35	0,247
		35	G1"1/4	M45x2	8260L35 42	ZS15-28/L35RB-KS	20	50	50	49	42,5	0,407
		42	G1"1/2	M52x2	8260L42 49	ZS15-28/L42RB-KS	22	55	60	55	46,5	0,456
S	630*	6	G1/4	M14x1,5	8260S06 13	ZS15-28/S6RB-KS	12	19	17	18	27	0,05
		8	G1/4	M16x1,5	8260S08 13	ZS15-28/S8RB-KS	12	19	19	18	29,5	0,055
		10	G3/8	M18x1,5	8260S10 17	ZS15-28/S10RB-KS	12	22	22	22	32	0,082
		12	G3/8	M20x1,5	8260S12 17	ZS15-28/S12RB-KS	12	22	24	22	34	0,095
		14	G1/2	M22x1,5	8260S14 21	ZS15-28/S14RB-KS	14	27	27	26	36,5	0,148
		16	G1/2	M24x1,5	8260S16 21	ZS15-28/S16RB-KS	14	27	30	26	37	0,154
	400	20	G3/4	M30x2	8260S20 27	ZS15-28/S20RB-KS	16	32	36	32	43	0,253
		25	G1	M36x2	8260S25 34	ZS15-28/S25RB-KS	18	41	46	39	48	0,465
	250	30	G1"1/4	M42x2	8260S30 42	ZS15-28/S30RB-KS	20	50	50	49	51	0,644
		38	G1"1/2	M52x2	8260S38 49	ZS15-28/S38RB-KS	22	55	60	55	60	0,889

* Safety factor 3

BSP 60° adaptors

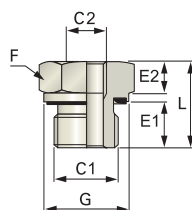


	PN	ØD	C	Body only	Double-bite ring	Bell code	E	F1	F2	G	L1	L2	
L	315	6	G1/8	8061L06 10	8261L06 10	ZS15-01/L6RB-KS	8	14	14	14	23	8,5	0,025
		6	G1/4	8061L06 13	8261L06 13	ZS15-01/L6RB1/4"-KS	12	19	14	18	25	10	0,040
		8	G1/4	8061L08 13	8261L08 13	ZS15-01/L8RB-KS	12	19	17	18	25	10	0,045
		8	G3/8	8061L08 17	8261L08 17	ZS15-01/L8RB3/8"-KS	12	22	17	22	26	11,5	0,062
		10	G1/4	8061L10 13	8261L10 13	ZS15-01/L10RB-KS	12	19	319	18	26	11	0,047
		10	G3/8	8061L10 17	8261L10 17	ZS15-01/L10RB3/8"-KS	12	22	19	22	27	12,5	0,063
		10	G1/2	8061L10 21	8261L10 21	ZS15-01/L10RB1/2"-KS	14	27	19	26	28	13	0,095
		12	G1/4	8061L12 13	8261L12 13	ZS15-01/L12RB1/4"-KS	12	19	22	18	26	11	0,06
		12	G3/8	8061L12 17	8261L12 17	ZS15-01/L12RB-KS	12	22	22	22	27	12,5	0,069
		12	G1/2	8061L12 21	8261L12 21	ZS15-01/L12RB1/2"-KS	14	27	22	26	28	13	0,098
		15	G3/8	8061L15 17	8261L15 17	ZS15-01/L15RB3/8"-KS	12	22	27	22	29	13,5	0,1
		15	G1/2	8061L15 21	8261L15 21	ZS15-01/L15RB-KS	14	27	27	26	29	14	0,115
		18	G1/2	8061L18 21	8261L18 21	ZS15-01/L18RB-KS	14	27	32	26	31	14,5	0,129
		18	G3/4	8061L18 27	8261L18 27	ZS15-01/L18RB3/4"-KS	16	32	32	32	31	14,5	0,19
		22	G3/4	8061L22 27	8261L22 27	ZS15-01/L22RB-KS	16	32	36	32	33	16,5	0,176
		28	G1	8061L28 34	8261L28 34	ZS15-01/L28RB-KS	18	41	41	39	34	17,5	0,247
		35	G1"1/4	8061L35 42	8261L35 42	ZS15-01/L35RB-KS	20	50	50	49	39	17,5	0,407
		42	G1"1/2	8061L42 49	8261L42 49	ZS15-01/L42RB-KS	22	500	60	55	42	19	0,456
S	PB 630*	6	G1/4	8061S06 13	8261S06 13	ZS15-01/S6RB-KS	12	19	17	18	28	13	0,05
		8	G1/4	8061S08 13	8261S08 13	ZS15-01/S8RB-KS	12	19	19	18	30	15	0,055
		10	G3/8	8061S10 17	8261S10 17	ZS15-01/S10RB-KS	12	22	22	22	31	15	0,082
		12	G3/8	8061S12 17	8261S12 17	ZS15-01/S12RB-KS	12	22	24	22	33	17	0,095
		12	G1/2	8061S12 21	8261S12 21	ZS15-01/S12RB1/2"-KS	14	27	24	26	34	17,5	0,125
		14	G1/2	8061S14 21	8261S14 21	ZS15-01/S14RB-KS	14	27	27	26	37	19	0,148
	400	16	G1/2	8061S16 21	8261S16 21	ZS15-01/S16RB-KS	14	27	30	26	37	18,5	0,154
		20	G3/4	8061S20 27	8261S20 27	ZS15-01/S20RB-KS	16	32	36	32	42	20,5	0,253
		25	G3/4	8061S25 27	8261S25 27	ZS15-01/S25RB3/4"-KS	16	41	46	32	47	23	0,378
		25	G1	8061S25 34	8261S25 34	ZS15-01/S25RB-KS	18	41	46	39	47	23	0,465
	250	30	G1	8061S30 34	8261S30 34	ZS15-01/S30RB1"-KS	18	46	50	39	50	23,5	0,588
		30	G1"1/4	8061S30 42	8261S30 42	ZS15-01/S30RB-KS	20	50	50	49	50	23,5	0,645
		38	G1"1/2	8061S38 49	8261S38 49	ZS15-01/S38RB-KS	22	55	60	55	57	26	0,889

* Safety factor 3

Male-female reducer adaptors

BSP parallel
elastomer seal
ISO 1179-2

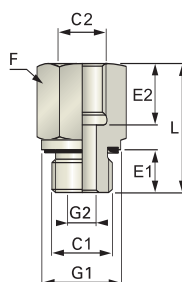


PN	C1	C2		Bell code	E1	E2	F	G	L	kg
630	G3/8	G1/8	8075 17 10	17-123/AR3/8-IR1/8/D	12	8	22	21,9	22,5	0,040
	G1/2	G1/8	8075 21 10	17-123/AR1/2-IR1/8/D	14	8	27	26,9	24	0,069
	G1/2	G1/4	8075 21 13	17-123/AR1/2-IR1/4/D	14	12	27	26,9	24	0,060
	G3/4	G1/4	8075 27 13	17-123/AR3/4-IR1/4/D	16	12	32	31,9	26	0,095
	G3/4	G3/8	8075 27 17	17-123/AR3/4-IR3/8/D	16	12	32	31,9	26	0,090
400	G1	G1/4	8075 34 13	17-123/AR1-IR1/4/D	18	12	41	39,9	29	0,200
	G1	G3/8	8075 34 17	17-123/AR1-IR3/8/D	18	12	41	39,9	29	0,180
	G1	G1/2	8075 34 21	17-123/AR1-IR1/2/D	18	14	41	39,9	29	0,160
	G1"1/4	G1/2	8075 42 21	17-123/AR1 1/4-IR1/2/D	20	14	50	49,9	32	0,310
	G1"1/4	G3/4	8075 42 27	17-123/AR1 1/4-IR3/4/D	20	16	50	49,9	32	0,270
315	G1"1/2	G1/2	8075 49 21	17-123/AR1 1/2-IR1/2/D	22	14	55	54,9	36	0,470
	G1"1/2	G3/4	8075 49 27	17-123/AR1 1/2-IR3/4/D	22	16	55	54,9	36	0,430
	G1"1/2	G1	8075 49 34	17-123/AR1 1/2-IR1/D	22	18	55	54,9	36	0,345

110

Male-female reducer adaptors

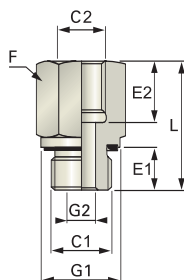
BSP parallel
elastomer seal
ISO 1179-2



PN	C1	C2		Bell code	E1	E2	F	G1	G2	L	kg
630	G1/4	G1/8	8078 13 10	17-122/AR1/4-IR1/8/D	12	12	19	18,9	5	29	0,038
	G3/8	G1/4	8078 17 13	17-122/AR3/8-IR1/4/D	12	17	22	21,9	8	36	0,030
	G1/2	G3/8	8078 21 17	17-122/AR1/2-IR3/8/D	14	17	27	26,9	12	37	0,098
400	G3/4	G1/2	8078 27 21	17-122/AR3/4-IR1/2/D	16	20	32	31,9	16	43	0,145
	G1	G3/4	8078 34 27	17-122/AR1-IR3/4/D	18	22	41	39,9	20	47	0,280
	G1"1/4	G1	8078 42 34	17-122/AR1 1/4-IR1/D	20	24,5	50	49,9	25	53	0,459
315	G1"1/2	G1"1/4	8078 49 42	17-122/AR1 1/2-IR1 1/4/D	22	26,5	55	54,9	32	58	0,530
250	G2	G1"1/2	8078 48 49	17-122/AR2-IR1 1/2/D	24	28,5	70	68,9	40	65	0,995

Male-female increaser adaptors

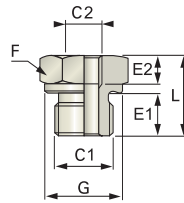
BSP parallel
elastomer seal
ISO 1179-2



PN	C1	C2		Bell code	E1	E2	F	G1	G2	L	
630	G1/8	G1/4	8079 10 13	17-122/AR1/8-IR1/4/D	8	17	19	13,9	4	31	0,036
	G1/8	G3/8	8079 10 17	17-122/AR1/8-IR3/8/D	8	17	22	13,9	4	32	0,045
	G1/4	G3/8	8079 13 17	17-122/AR1/4-IR3/8/D	12	17	22	18,9	5	36	0,066
	G1/4	G1/2	8079 13 21	17-122/AR1/4-IR1/2/D	12	20	27	18,9	5	40	0,085
	G1/4	G3/4	8079 13 27	17-122/AR1/4-IR3/4/D	12	22	36	18,9	5	43	0,173
	G3/8	G1/2	8079 17 21	17-122/AR3/8-IR1/2/D	12	20	27	21,9	8	41	0,090
400	G3/8	G3/4	8079 17 27	17-122/AR3/8-IR3/4/D	12	22	36	21,9	8	44	0,175
	G1/2	G3/4	8079 21 27	17-122/AR1/2-IR3/4/D	14	22	36	26,9	12	46	0,180
	G1/2	G1	8079 21 34	17-122/AR1/2-IR1/D	14	24,5	41	26,9	12	49	0,225
	G1/2	G1"1/4	8079 21 42	17-122/AR1/2-IR1 1/4/D	14	26,5	55	26,9	12	53	0,470
	G3/4	G1	8079 27 34	17-122/AR3/4-IR1/D	16	24,5	41	31,9	16	51	0,235
	G3/4	G1"1/4	8079 27 42	17-122/AR3/4-IR1 1/4/D	16	26,5	55	31,9	16	55	0,483
315	G1	G1"1/4	8079 34 42	17-122/AR1-IR1 1/4/D	18	26,5	55	39,9	20	57	0,510
	G3/4	G1"1/2	8079 27 49	17-122/AR3/4-IR1 1/2/D	16	28,5	60	31,9	16	57	0,545
	G1	G1"1/2	8079 34 49	17-122/AR1-IR1 1/2/D	18	28,5	60	39,9	20	59	0,565
	G1"1/4	G1"1/2	8079 42 49	17-122/AR1 1/4-IR1 1/2/D	20	28,5	60	49,9	25	60	0,580

Male-female reducer adaptors

BSP parallel
ISO 1179-4

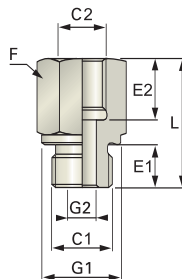


PN	C1	C2		Bell code	E1	E2	F	G	L	
630	G3/8	G1/8	8065 17 10	17-123/AR3/8"-IR1/8"	12	8	22	22	22,5	0,040
	G1/2	G1/8	8065 21 10	17-123/AR1/2"-IR1/8"	14	8	27	26	24	0,069
	G1/2	G1/4	8065 21 13	17-123/AR1/2"-IR1/4"	14	12	27	26	24	0,060
	G3/4	G1/4	8065 27 13	17-123/AR3/4"-IR1/4"	16	12	32	32	26	0,095
400	G3/4	G3/8	8065 27 17	17-123/AR3/4"-IR3/8"	16	12	32	32	26	0,090
	G1	G1/4	8065 34 13	17-123/AR1"-IR1/4"	18	12	41	39	29	0,200
	G1	G3/8	8065 34 17	17-123/AR1"-IR3/8"	18	12	41	39	29	0,180
	G1	G1/2	8065 34 21	17-123/AR1"-IR1/2"	18	14	41	39	29	0,160
250	G1"1/4	G1/2	8065 42 21	17-123/AR1 1/4"-IR1/2"	20	14	50	49	32	0,310
	G1"1/4	G3/4	8065 42 27	17-123/AR1 1/4"-IR3/4"	20	16	50	49	32	0,270
	G1"1/2	G1/2	8065 49 21	17-123/AR1 1/2"-IR1/2"	22	14	55	55	36	0,470
	G1"1/2	G3/4	8065 49 27	17-123/AR1 1/2"-IR3/4"	22	16	55	55	36	0,430
	G1"1/2	G1	8065 49 34	17-123/AR1 1/2"-IR1"	22	18	55	55	36	0,345

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Male-female reducer adaptors

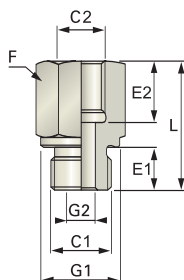
BSP parallel
ISO 1179-4



PN	C1	C2		Bell code	E1	E2	F	G1	G2	L	
630	G1/4	G1/8	8068 13 10	17-122/AR1/4"-IR1/8"	12	12	19	18	5	28	0,036
	G3/8	G1/4	8068 17 13	17-122/AR3/8"-IR1/4"	12	17	22	22	8	36	0,030
	G1/2	G3/8	8068 21 17	17-122/AR1/2"-IR3/8"	14	17	27	26	12	36	0,095
400	G3/4	G1/2	8068 27 21	17-122/AR3/4"-IR1/2"	16	20	32	32	16	41	0,150
	G1	G3/4	8068 34 27	17-122/AR1"-IR3/4"	18	22	41	39	20	47	0,280
250	G1"1/4	G1	8068 42 34	17-122/AR1 1/4"-IR1"	20	24,5	50	49	25	52	0,455
	G1"1/2	G1"1/4	8068 49 42	17-122/AR1 1/2"-IR1 1/4"	22	26,5	55	55	32	58	0,530

Male-female increaser adaptors

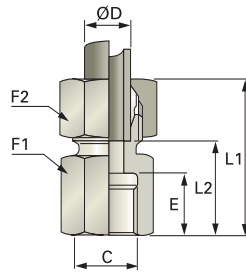
BSP parallel
sealing O-ring
ISO 1179-4



PN	C1	C2		Bell code	E1	E2	F	G1	G2	L	
630	G1/8	G1/4	8069 10 13	17-122/AR1/8"-IR1/4"	8	17	19	14	4	31	0,036
	G1/8	G3/8	8069 10 17	17-122/AR1/8"-IR3/8"	8	17	22	14	4	32	0,045
	G1/4	G3/8	8069 13 17	17-122/AR1/4"-IR3/8"	12	17	22	18	5	36	0,066
	G1/4	G1/2	8069 13 21	17-122/AR1/4"-IR1/2"	12	20	27	18	5	40	0,085
	G3/8	G1/2	8069 17 21	17-122/AR3/8"-IR1/2"	12	20	27	22	8	41	0,090
400	G1/4	G3/4	8069 13 27	17-122/AR1/4"-IR3/4"	12	22	36	18	5	43	0,173
	G3/8	G3/4	8069 17 27	17-122/AR3/8"-IR3/4"	12	22	36	22	8	44	0,175
	G1/2	G3/4	8069 21 27	17-122/AR1/2"-IR3/4"	14	22	36	26	12	46	0,180
	G1/2	G1	8069 21 34	17-122/AR1/2"-IR1"	14	24,5	41	26	12	49	0,225
	G3/4	G1	8069 27 34	17-122/AR3/4"-IR1"	16	24,5	41	32	16	51	0,235
250	G1/2	G1"1/4	8069 21 42	17-122/AR1/2"-IR1 1/4"	14	26,5	55	26	12	53	0,470
	G3/4	G1"1/4	8069 27 42	17-122/AR3/4"-IR1 1/4"	16	26,5	55	32	16	55	0,483
	G3/4	G1"1/2	8069 27 49	17-122/AR3/4"-IR1 1/2"	16	28,5	60	32	16	57	0,545
	G1	G1"1/4	8069 34 42	17-122/AR1"-IR1 1/4"	18	26,5	55	39	20	57	0,510
	G1	G1"1/2	8069 34 49	17-122/AR1"-IR1 1/2"	18	28,5	60	39	20	59	0,565
	G1"1/4	G1"1/2	8069 42 49	17-122/AR1 1/4"-IR1 1/2"	20	28,5	60	49	25	60	0,580

Female adaptors

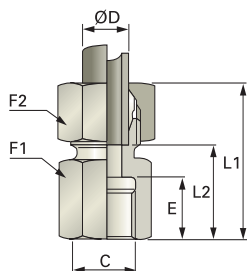
BSP parallel



PN	ØD	C	 Body only	 Double-bite ring	Bell code	E	F1	F2	L1	L2	
L	6	G1/8	8014L06 10	8214L06 10	ZS15-24/L6R	12	14	14	34	19	0,025
	6	G3/8	8014L06 17	8214L06 17	ZS15-24/L6R3/8"	12	22	14	36	21	0,053
	8	G1/4	8014L08 13	8214L08 13	ZS15-24/L8R	17	19	17	39	24	0,045
	8	G3/8	8014L08 17	8214L08 17	ZS15-24/L8R3/8"	12	22	17	36	21	0,058
	10	G1/4	8014L10 13	8214L10 13	ZS15-24/L10R	17	19	19	40	25	0,055
	10	G3/8	8014L10 17	8214L10 17	ZS15-24/L10R3/8"	12	22	19	36	21	0,057
	10	G1/2	8014L10 21	8214L10 21	ZS15-24/L10R1/2"	14,5	27	19	39	24	0,070
	12	G3/8	8014L12 17	8214L12 17	ZS15-24/L12R	12	22	22	36	21	0,090
	12	G1/2	8014L12 21	8214L12 21	ZS15-24/L12R1/2"	14	27	22	39	24	0,092
	15	G1/2	8014L15 21	8214L15 21	ZS15-24/L15R	20	27	27	46	31	0,130
	18	G1/2	8014L18 21	8214L18 21	ZS15-24/L18R	20	27	32	47	30,5	0,150
	22	G3/4	8014L22 27	8214L22 27	ZS15-24/L22R	22	36	36	52	35,5	0,255
	28	G1	8014L28 34	8214L28 34	ZS15-24/L28R	24,5	41	41	55	38	0,300
	35	G1"1/4	8014L35 42	8214L35 42	ZS15-24/L35R	26,5	55	50	63	41	0,420
	42	G1"1/2	8014L42 49	8214L42 49	ZS15-24/L42R	28,5	60	60	65	42,5	0,605
S	6	G1/4	8014S06 13	8214S06 13	ZS15-24/S6R	17	19	17	41	26	0,060
	8	G1/4	8014S08 13	8214S08 13	ZS15-24/S8R	17	19	19	41	26	0,065
	10	G3/8	8014S10 17	8214S10 17	ZS15-24/S10R	17	24	22	43	26,5	0,090
	12	G3/8	8014S12 17	8214S12 17	ZS15-24/S12R	17	24	24	43	26,5	0,105
	14	G1/2	8014S14 21	8214S14 21	ZS15-24/S14R	20	27	27	50	32	0,130
	16	G1/2	8014S16 21	8214S16 21	ZS15-24/S16R	20	27	30	50	31,5	0,160
	20	G3/4	8014S20 27	8214S20 27	ZS15-24/S20R	22	36	36	56	34,5	0,260
	25	G1	8014S25 34	8214S25 34	ZS15-24/S25R	24,5	41	46	62	37,5	0,400
	30	G1"1/4	8014S30 42	8214S30 42	ZS15-24/S30R	26,5	55	50	69	42	0,720
	38	G1"1/2	8014S38 49	8214S38 49	ZS15-24/S38R	28,5	60	60	74	43,5	0,855

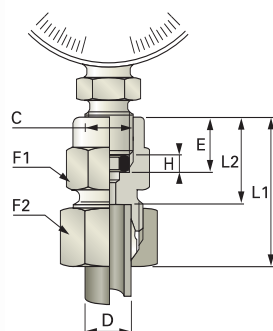
Female adaptors

metric parallel



	PN	ØD	C	Body only	Double-bite ring	Bell code	E	F1	F2	L1	L2	kg
L	400	6	M10x1	8014L06 60	8214L06 60	ZS15-24/L6M	12,5	14	14	34	19,5	0,025
		8	M12x1,5	8014L08 67	8214L08 67	ZS15-24/L8M	17	17	17	39	24	0,040
		8	M22x1,5	8014L08 82	8214L08 82	ZS15-24/L8M22X1,5	12	27	17	35	20	0,068
		10	M14x1,5	8014L10 71	8214L10 71	ZS15-24/L10M	17	19	19	40	25	0,050
		10	M22x1,5	8014L10 82	8214L10 82	ZS15-24/L10M22X1,5	12	27	19	36	21	0,074
		12	M16x1,5	8014L12 75	8214L12 75	ZS15-24/L12M	17	22	22	41	26	0,080
		12	M22x1,5	8014L12 82	8214L12 82	ZS15-24/L12M22X1,5	12	27	22	36	21	0,080
		15	M18x1,5	8014L15 78	8214L15 78	ZS15-24/L15M	17	24	27	43	28	0,100
	315	18	M22x1,5	8014L18 82	8214L18 82	ZS15-24/L18M	19	27	32	46	29,5	0,170
		22	M26x1,5	8014L22 89	8214L22 89	ZS15-24/L22M	21	32	36	51	34,5	0,180
S	630	6	M12x1,5	8014S06 67	8214S06 67	ZS15-24/S6M	17	17	17	41	26	0,045
		8	M14x1,5	8014S08 71	8214S08 71	ZS15-24/S8M	17	19	19	41	26	0,062
		10	M16x1,5	8014S10 75	8214S10 75	ZS15-24/S10M	17	22	22	43	26,5	0,080
		12	M18x1,5	8014S12 78	8214S12 78	ZS15-24/S12M	17	24	24	44	27,5	0,105
		14	M20x1,5	8014S14 80	8214S14 80	ZS15-24/S14M	19	27	27	49	31	0,135
	400	16	M22x1,5	8014S16 82	8214S16 82	ZS15-24/S16M	19	27	30	49	30,5	0,185
		20	M27x2	8014S20 86	8214S20 86	ZS15-24/S20M	22	36	36	56	34,5	0,255

Standpipe couplings for pressure gauge connection

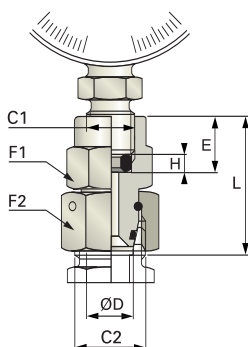


	PN	ØD	C	Body only	Double-bite ring	Bell code	E	F1	F2	L1	L2	H	kg
L	400	6	G1/4	8V34L06 13	8234L06 13	ZS15-23/L6R	14,5	19	14	37	22	4,5	0,047
		8	G1/4	8V34L08 13	8234L08 13	ZS15-23/L8R	14,5	19	17	37	22	4,5	0,054
		10	G1/4	8V34L10 13	8234L10 13	ZS15-23/L10R	14,5	19	19	38	23	4,5	0,063
		12	G1/4	8V34L12 13	8234L12 13	ZS15-23/L12R	14,5	19	22	38	23	4,5	0,070
S	630	6	G1/2	8V34S06 21	8234S06 21	ZS15-23/S6R	20	27	17	46	31	5	0,105
		8	G1/2	8V34S08 21	8234S08 21	ZS15-23/S8R	20	27	19	46	31	5	0,107
		10	G1/2	8V34S10 21	8234S10 21	ZS15-23/S10R	20	27	22	47	30,5	5	0,125
		12	G1/2	8V34S12 21	8234S12 21	ZS15-23/S12R	20	27	24	47	30,5	5	0,134

Supplied with seal ring

Standpipe couplings for pressure gauge connection

24° sealing cone and O-ring

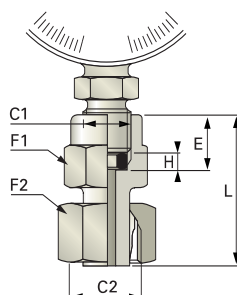


	PN	ØD	C1	C2		Bell code	E	F1	F2	H	L	O-ring	
L	400	6	G1/4	M12x1,5	8514L06 13	14/2-23/L6R-DM	14,5	19	14	4,5	35,5	4x1,5	0,011
		8	G1/4	M14x1,5	8514L08 13	14/2-23/L8R-DM	14,5	19	17	4,5	35,5	6x1,5	0,016
		10	G1/4	M16x1,5	8514L10 13	14/2-23/L10R-DM	14,5	19	19	4,5	36	7,5x1,5	0,019
		12	G1/4	M18x1,5	8514L12 13	14/2-23/L12R-DM	14,5	19	22	4,5	36	9x1,5	0,025
S	630	6	G1/4	M14x1,5	8514S06 13	14/2-23/S6R1/4"-DM	14,5	19	17	4,5	36	4x1,5	0,016
		6	G1/2	M14x1,5	8514S06 21	14/2-23/S6R-DM	20	27	17	5	43	4x1,5	0,019
		8	G1/4	M16x1,5	8514S08 13	14/2-23/S8R1/4"-DM	14,5	19	19	4,5	36	6x1,5	0,019
		8	G1/2	M16x1,5	8514S08 21	14/2-23/S8R-DM	20	27	19	5	43	6x1,5	0,021
		10	G1/4	M18x1,5	8514S10 13	14/2-23/S10R1/4"-DM	14,5	19	22	4,5	37,5	7,5x1,5	0,025
		10	G1/2	M18x1,5	8514S10 21	14/2-23/S10R-DM	20	27	22	5	43,5	7,5x1,5	0,028
		12	G1/4	M20x1,5	8514S12 13	14/2-23/S12R1/4"-DM	14,5	19	24	4,5	39	9x1,5	0,034
		12	G1/2	M20x1,5	8514S12 21	14/2-23/S12R-DM	20	27	24	5	45	9x1,5	0,037

Supplied with seal ring

Standpipe couplings for pressure gauge connection

BSP parallel pre-assembled ring

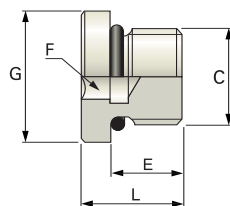


	PN	ØD	C1	C2	Double-bite ring	Bell code	E	F1	F2	H	L	
L	400	6	G1/4	M12x1,5	8244L06 13	ZS15/2-23/L6R	14,5	19	14	4,5	38	0,046
		8	G1/4	M14x1,5	8244L08 13	ZS15/2-23/L8R	14,5	19	17	4,5	38	0,053
		10	G1/4	M16x1,5	8244L10 13	ZS15/2-23/L10R	14,5	19	19	4,5	39,5	0,062
		12	G1/4	M18x1,5	8244L12 13	ZS15/2-23/L12R	14,5	19	22	4,5	40,5	0,070
S	630	6	G1/2	M14x1,5	8244S06 21	ZS15/2-23/S6R	20	27	17	5	45	0,105
		8	G1/2	M16x1,5	8244S08 21	ZS15/2-23/S8R	20	27	19	5	45	0,107
		10	G1/2	M18x1,5	8244S10 21	ZS15/2-23/S10R	20	27	22	5	47	0,125
		12	G1/2	M20x1,5	8244S12 21	ZS15/2-23/S12R	20	27	24	5	47,5	0,134

Supplied with seal ring

Internal hexagon head plug

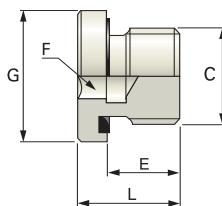
metric parallel
O-ring



PB	C		Bell code	E	F	G	L	O-ring	
630	M10x1	8023 60 00	15-34/MO10X1	9,5	5	13,8	13,5	8,1x1,6	0,007
	M12x1,5	8023 67 00	15-34/MO12X1,5	11	6	16,8	16	9,3x2,2	0,014
	M14x1,5	8023 71 00	15-34/MO14X1,5	11	6	18,8	16	11,3x2,2	0,020
	M16x1,5	8023 75 00	15-34/MO16X1,5	12,5	8	21,8	17,5	13,3x2,2	0,025
	M18x1,5	8023 78 00	15-34/MO18X1,5	14	8	23,8	19	15,3x2,2	0,031
	M20x1,5	8023 80 00	15-34/MO20X1,5	14	10	26,8	19	17,3x2,2	0,041
400	M22x1,5	8023 82 00	15-34/MO22X1,5	15	10	26,8	20	19,3x2,2	0,051
	M27x2	8023 86 00	15-34/MO27X2	18,5	12	31,8	23,5	23,6x2,9	0,079
	M33x2	8023 91 00	15-34/MO33X2	18,5	17	40,8	25	29,6x2,9	0,137
	M42x2	8023 96 00	15-34/MO42X2	19	22	49,8	25,5	38,6x2,9	0,196
315	M48x2	8023 98 00	15-34/MO48X2	21,5	24	54,8	28	44,6x2,9	0,298

Internal hexagon head plug

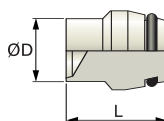
BSP parallel and metric parallel
elastomer seal
ISO 1179-2 and ISO 9974-2



PB	C		Bell code	E	F	G	L	
400	M10x1	8022 60 00	15-34/M10X1	8	5	13,9	12	0,007
	M12x1,5	8022 67 00	15-34/M12X1,5	12	6	16,9	17	0,012
	M14x1,5	8022 71 00	15-34/M14X1,5	12	6	18,9	17	0,017
	M16x1,5	8022 75 00	15-34/M16X1,5	12	8	21,9	17	0,021
	M18x1,5	8022 78 00	15-34/M18X1,5	12	8	23,9	17	0,031
	M20x1,5	8022 80 00	15-34/M20X1,5	14	10	25,9	19	0,041
	M22x1,5	8022 82 00	15-34/M22X1,5	14	10	26,9	19	0,047
	M26x1,5	8022 89 00	15-34/M26X1,5	16	12	31,9	21	0,075
	M27x2	8022 86 00	15-34/M27X2	16	12	31,9	21	0,076
	M33x2	8022 91 00	15-34/M33X2	16	17	39,9	22,5	0,127
250	M42x2	8022 96 00	15-34/M42X2	16	22	49,9	22,5	0,216
	M48x2	8022 98 00	15-34/M48X2	16	24	54,9	22,5	0,284
400	G1/8	8022 10 00	15-34/R1/8"	8	5	13,9	12	0,007
	G1/4	8022 13 00	15-34/R1/4"	12	6	18,9	17	0,015
	G3/8	8022 17 00	15-34/R3/8"	12	8	21,9	17	0,023
	G1/2	8022 21 00	15-34/R1/2"	14	10	26,9	19	0,043
	G3/4	8022 27 00	15-34/R3/4"	16	12	31,9	21	0,076
	G1	8022 34 00	15-34/R1"	16	17	39,9	22,5	0,130
250	G1"1/4	8022 42 00	15-34/R1 1/4"	16	22	49,9	22,5	0,210
	G1"1/2	8022 49 00	15-34/R1 1/2"	16	24	54,9	22,5	0,266

Plugs for 24° cone

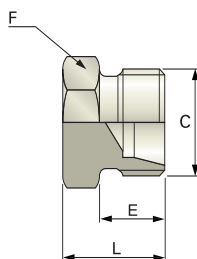
with and without nut
O-ring



	PN	ØD		Bell code	L	O-ring			Bell code	
			without nut					with nut		
L	400	6	8026L06 00	15-370/L6	17,5	4x1,5	0,005	8026L06 01	15-37/L6	0,014
		8	8026L08 00	15-370/L8	18,5	6x1,5	0,008	8026L08 01	15-37/L8	0,022
		10	8026L10 00	15-370/L10	19	7,5x1,5	0,013	8026L10 01	15-37/L10	0,033
		12	8026L12 00	15-370/L12	19	9x1,5	0,018	8026L12 01	15-37/L12	0,043
		15	8026L15 00	15-370/L15	19,5	12x2	0,027	8026L15 01	15-37/L15	0,067
	315	18	8026L18 00	15-370/L18	20	15x2	0,038	8026L18 01	15-37/L18	0,098
		22	8026L22 00	15-370/L22	20,5	20x2	0,057	8026L22 01	15-37/L22	0,137
	250	28	8026L28 00	15-370/L28	21	26x2	0,093	8026L28 01	15-37/L28	0,178
		35	8026L35 00	15-370/L35	23,5	32x2,5	0,161	8026L35 01	15-37/L35	0,291
		42	8026L42 00	15-370/L42	23,5	38x2,5	0,224	8026L42 01	15-37/L42	0,434
S	630	6	8026S06 00	15-370/L6	17,5	4x1,5	0,005	8026S06 01	15-37/S6	0,020
		8	8026S08 00	15-370/L8	18,5	6x1,5	0,008	8026S08 01	15-37/S8	0,025
		10	8026S10 00	15-370/L10	19	7,5x1,5	0,013	8026S10 01	15-37/S10	0,043
		12	8026S12 00	15-370/L12	19	9x1,5	0,018	8026S12 01	15-37/S12	0,053
		14	8026S14 00	15-370/S14	20	10x2	0,024	8026S14 01	15-37/S14	0,074
	400	16	8026S16 00	15-370/S16	20	12x2	0,027	8026S16 01	15-37/S16	0,087
		20	8026S20 00	15-370/S20	24	16,3x2,4	0,062	8026S20 01	15-37/S20	0,157
		25	8026S25 00	15-370/S25	25	20,3x2,4	0,093	8026S25 01	15-37/S25	0,288
		30	8026S30 00	15-370/S30	26,5	25,3x2,4	0,133	8026S30 01	15-37/S30	0,348
	315	38	8026S38 00	15-370/S38	28,5	33,3x2,4	0,240	8026S38 01	15-37/S38	0,550

Plugs

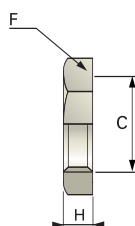
24° inner cones



	PN	ØD	C		Bell code	E	F	L	
L	400	6	M12x1,5	8025L06 00	15-360/L6	10	12	14	0,008
		8	M14x1,5	8025L08 00	15-360/L8	10	14	15	0,012
		10	M16x1,5	8025L10 00	15-360/L10	11	17	16	0,018
		12	M18x1,5	8025L12 00	15-360/L12	11	19	17	0,025
		15	M22x1,5	8025L15 00	15-360/L15	12	24	18	0,041
	315	18	M26x1,5	8025L18 00	15-360/L18	12	27	19	0,059
		22	M30x2	8025L22 00	15-360/L22	14	32	21	0,087
	250	28	M36x2	8025L28 00	15-360/L28	14	41	22	0,143
		35	M45x2	8025L35 00	15-360/L35	16	46	25	0,209
		42	M52x2	8025L42 00	15-360/L42	16	55	27	0,308
S	630	6	M14x1,5	8025S06 00	15-360/S6	12	14	18	0,017
		8	M16x1,5	8025S08 00	15-360/S8	12	17	20	0,027
		10	M18x1,5	8025S10 00	15-360/S10	12	19	20	0,033
		12	M20x1,5	8025S12 00	15-360/S12	12	22	22	0,049
		14	M22x1,5	8025S14 00	15-360/S14	14	24	24	0,063
	400	16	M24x1,5	8025S16 00	15-360/S16	14	27	24	0,077
		20	M30x2	8025S20 00	15-360/S20	16	32	28	0,127
		25	M36x2	8025S25 00	15-360/S25	18	41	32	0,230
		30	M42x2	8025S30 00	15-360/S30	20	46	34	0,309
	315	38	M52x2	8025S38 00	15-360/S38	22	55	39	0,510

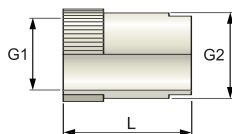
Lock nuts

DIN 80705



	ØD	C		Bell code	F	H	
L	6	M12x1,5	8V00L06 00	15-32/L6	17	6	0,007
	8	M14x1,5	8V00L08 00	15-32/L8	19	6	0,008
	10	M16x1,5	8V00L10 00	15-32/L10	22	6	0,011
	12	M18x1,5	8V00L12 00	15-32/L12	24	6	0,012
	15	M22x1,5	8V00L15 00	15-32/L15	30	7	0,023
	18	M26x1,5	8V00L18 00	15-32/L18	36	8	0,040
	22	M30x2	8V00L22 00	15-32/L22	41	8	0,049
	28	M36x2	8V00L28 00	15-32/L28	46	9	0,062
	35	M45x2	8V00L35 00	15-32/L35	55	9	0,077
	42	M52x2	8V00L42 00	15-32/L42	65	10	0,112
S	6	M14x1,5	8V00L08 00	15-32/L8	19	6	0,008
	8	M16x1,5	8V00L10 00	15-32/L10	22	6	0,011
	10	M18x1,5	8V00L12 00	15-32/L12	24	6	0,012
	12	M20x1,5	8V00S12 00	15-32/S12	27	6	0,016
	14	M22x1,5	8V00L15 00	15-32/L15	30	7	0,023
	16	M24x1,5	8V00S16 00	15-32/S16	32	7	0,025
	20	M30x2	8V00L22 00	15-32/L22	41	8	0,049
	25	M36x2	8V00L28 00	15-32/L28	46	9	0,062
	30	M42x2	8V00S30 00	15-32/S30	50	9	0,060
	38	M52x2	8V00L42 00	15-32/L42	65	10	0,112

Reinforcing rings for tubes

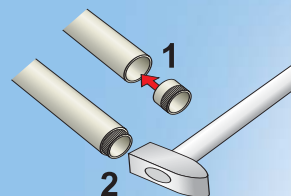


o.d. x thickness		Bell code	G1	G2	L	
6x1	8027 06 04	MS15-007/6X1	2,6	3,8	15,5	0,008
8x1	8027 08 06	MS15-007/8X1	4,6	5,8	15,5	0,013
10x1,5	8027 10 07	MS15-007/10X1,5	5,6	6,8	17	0,017
10x1	8027 10 08	MS15-007/10X1	6,6	7,8	16,5	0,019
12x1,5	8027 12 09	MS15-007/12X1,5	7,6	8,8	16,5	0,022
12x1	8027 12 10	MS15-007/12X1	8,6	9,8	16,5	0,023
15x1,5	8027 15 12	MS15-007/15X1,5	10,2	11,8	17	0,039
15x1	8027 15 13	MS15-007/15X1	11,2	12,8	17	0,041
18x1,5	8027 18 15	MS15-007/18X1,5	13,2	14,8	17,5	0,052
18x1	8027 18 16	MS15-007/18X1	14,2	15,8	17,5	0,058
20x1	8027 20 18	MS15-007/20X1	16,2	17,8	22	0,080
22x1,5	8027 22 19	MS15-007/22X1,5	17,2	18,8	18	0,069
28x2	8027 28 24	MS15-007/28X2	22,2	23,8	18	0,088
28x1,5	8027 28 25	MS15-007/28X1,5	23,2	24,8	18	0,092

Thin wall tube, generally used for low pressure, should be assembled using reinforcing rings in order to ensure reliable connection. Normally, this is also the case for nonferrous metal tubes, such as copper, brass and aluminium.

Assembly

Insert a reinforcing ring into the tube up to the knurled collar. Drive the reinforcing ring completely in by means of a hammer (plastic or hard rubber). The knurled collar is then pressed into the inner wall of the tube and secures the reinforcing ring, preventing displacement or loss.



O-rings for for adjustable banjos and weld nipples



ØD		Bell code	D1	D2
6	8W00 06 15	14-004/6X1,5	6	1,5
7	8W00 07 15	14-004/7,5X1,5	7,5	1,5
9	8W00 09 15	14-004/9X1,5	9	1,5
10	8W00 10 20	14-004/10X2	10	2
12	8W00 12 20	14-004/12X2	12	2
16	8W00 16 24	14-004/16,3X2,4	16,3	2,4
20	8W00 20 24	14-004/20,3X2,4	20,3	2,4
25	8W00 25 24	14-004/25,3X2,4	25,3	2,4
33	8W00 33 24	14-004/33,3X2,4	33,3	2,4
37	8W00 37 10	14-004/37X1	37	1
38	8W00 38 25	14-004/38X2,5	38	2,5
42	8W00 42 25	14-004/42X2,5	42	2,5
44	8W00 44 25	14-004/44X2,5	44	2,5
46	8W00 46 30	14-004/46X3	46	3

FPM available upon request

Storage conditions

Couplings with elastomer seals must be stocked in keeping with the DIN 7716 standard. Components must be stored in a cool place –maxi temperature of 25°C–, dry and free of dust. They must also be protected from direct exposure to sunlight, intense artificial electric light and ozone.

O-rings

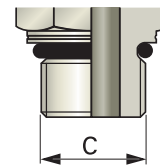
for threaded fittings



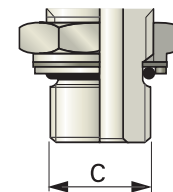
for metric thread ISO 6149-2 and ISO 261

C		Bell code	D1	D2
M8x1	8W00 06 16	14-004/6,1X1,6	6,10	1,60
M10x1	8W00 08 16	14-004/8,1X1,6	8,10	1,60
M12x1,5	8W00 09 22	14-004/9,3X2,2	9,30	2,20
M14x1,5	8W00 11 22	14-004/11,3X2,2	11,30	2,20
M16x1,5	8W00 13 22	14-004/13,3X2,2	13,30	2,20
M18x1,5	8W00 15 22	14-004/15,3X2,2	15,30	2,20
M20x1,5	8W00 17 22	14-004/17,3X2,2	17,30	2,20
M22x1,5	8W00 19 22	14-004/19,3X2,2	19,30	2,20
M26x1,5	8W00 23 28	14-004/22,7X2,8	22,70	2,80
M27x2	8W00 24 29	14-004/23,6X2,9	23,60	2,90
M33x2	8W00 30 29	14-004/29,6X2,9	29,60	2,90
M42x2	8W00 39 29	14-004/38,6X2,9	38,60	2,90
M48x2	8W00 45 29	114-004/44,6X2,9	44,60	2,90

ISO 6149 - 2 and 3



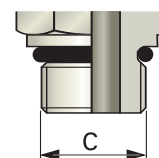
ISO 261



for UN/UNF thread ISO 11926-1

C		Bell code	D1	D2
7/16"-20 UNF	8W00 09 18	14-004/8,92X1,83	8,92	1,83
1/2"-20 UNF	8W00 10 18	14-004/10,52X1,83	10,52	1,83
9/16"-18 UNF	8W00 12 19	14-004/11,89X1,98	11,89	1,98
3/4"-16 UNF	8W00 16 22	14-004/16,36X2,2	16,36	2,20
7/8"-14 UNF	8W00 19 25	14-004/19,18X2,46	19,18	2,46
1 1/16"-12 UN	8W00 23 26	14-004/23,47X2,62	23,47	2,62
1 5/16"-12 UN	8W00 30 30	14-004/29,74X2,95	29,74	2,95
1 5/8"-12 UN	8W00 37 30	14-004/37,47X3	37,47	3,00
1 7/8"-12 UN	8W00 44 30	14-004/43,69X3	43,69	3,00

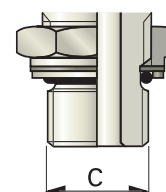
ISO 11926 - 1



for BSP thread ISO 1179-3

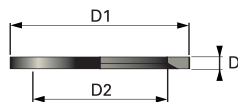
C		Bell code	D1	D2
G 1/8 A	8W00 08 16	14-004/8,1X1,6	8,10	1,60
G 1/4 A	8W00 11 22	14-004/11,3X2,2	11,32	2,20
G 3/8 A	8W00 14 26	14-004/13,94X2,62	13,94	2,62
G 1/2 A	8W00 18 26	14-004/17,86X2,62	17,86	2,62
G 3/4 A	8W00 23 26	14-004/23,47X2,62	23,47	2,62
G 1 A	8W00 30 35	14-004/29,74X3,53	29,74	3,53
G 1 1/4 A	8W00 38 35	14-004/37,7X3,53	37,70	3,53
G 1 1/2 A	8W00 44 35	14-004/44,04X3,53	44,04	3,53

ISO 1179-3



Captive seals

for BSP and metric threads



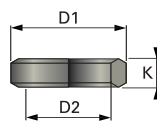
for thread			Bell code	D	D1	D2
M8x1		8W01 56 00	15-004/6,5X9,9	1	9,9	6,5
M10x1	G1/8	8W01 60 00	15-004/8,4X11,9	1	11,9	8,4
M12x1,5		8W01 67 00	15-004/9,8X14,4	1,5	14,4	9,8
M14x1,5	G1/4	8W01 71 00	15-004/11,6X16,5	1,5	16,5	11,6
M16x1,5		8W01 75 00	15-004/13,8X18,9	1,5	18,9	13,8
	G3/8	8W01 17 00	15-004/14,7X18,9	1,5	18,9	14,7
M18x1,5		8W01 78 00	15-004/15,7X20,9	1,5	20,9	15,7
M20x1,5		8W01 80 00	15-004/17,8X22,9	1,5	22,9	17,8
	G1/2	8W01 21 00	15-004/18,5X23,9	1,5	23,9	18,5
M22x1,5		8W01 82 00	15-004/19,6X24,3	1,5	24,3	19,6
M26x1,5	G3/4	8W01 89 00	15-004/23,9X29,2	1,5	29,2	23,9
M27x2		8W01 89 00	15-004/23,9X29,2	1,5	29,2	23,9
M33x2	G1A	8W01 91 00	15-004/29,7X35,7	2	35,7	29,7
M42x2	G1"1/4	8W01 96 00	15-004/38,8X45,8	2	45,8	38,8
M48x2	G1"1/2	8W01 98 00	15-004/44,7X50,7	2	50,7	44,7

FPM available upon request

Storage conditions

Couplings with elastomer seals must be stocked in keeping with the DIN 7716 standard. Components must be stored in a cool place –maxi temperature of 25°C-, dry and free of dust. They must also be protected from direct exposure to sunlight, intense artificial electric light and ozone..

Metal seal rings for banjo couplings

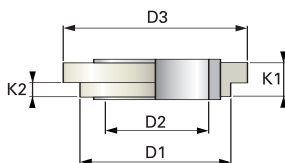


for thread		Bell code	D1	D2	K
M10x1 G ¹ / ₈	8W02 60 00	15/1-093/M10X1	14	10	4
M12x1,5	8W02 67 00	15/1-093/M12X1,5	17	12	5
M14x1,5	8W02 71 00	15/1-093/M14X1,5	19	14	5
M16x1,5	8W02 75 00	15/1-093/M16X1,5	21	16	5
M18x1,5	8W02 78 00	15/1-093/M18X1,5	23	18	5
M20x1,5	8W02 80 00	15/1-093/M20X1,5	25	20	5
M22x1,5	8W02 82 00	15/1-093/M22X1,5	27	22	5
M26x1,5	8W02 89 00	15/1-093/M26X1,5	31	26	5
M27x2	8W02 86 00	15/1-093/M27X2	32	27	5,5
M33x2	8W02 91 00	15/1-093/M33X2	39	33	7
M42x2 G1 ¹ / ₄	8W02 96 00	15/1-093/M42X2	49	42	
M48x2 G1 ¹ / ₂	8W02 98 00	15/1-093/M48X2	55	48	7
G ¹ / ₄	8W02 13 00	15/1-093/R1/4"	18	13,2	5
G ³ / ₈	8W02 17 00	15/1-093/R3/8"	22	16,8	5
G ¹ / ₂	8W02 21 00	15/1-093/R1/2"	26	21	5,5
G ¹ / ₂	8W02 21 01	15/1-093/R1/2"SO1	26,5	21	5,5
G ³ / ₄	8W02 27 00	15/1-093/R3/4"	32	26,5	5,5
G1	8W02 34 00	15/1-093/R1"	39	33,3	7

Composite seals

for adjustable banjos

for BSP and metric thread



for thread			Bell code	D1	D2	D3	K1	K2
M10x1	G1/8	8W03 60 00	15/3-074/M10x1	14,9	10	18	4	1,5
M12x1,5		8W03 67 00	15/3-074/M12x1,5	17,9	12	22	5	2
M14x1,5		8W03 71 00	15/3-074/M14x1,5	19,9	14	23	5	2
M16x1,5		8W03 75 00	15/3-074/M16x1,5	21,9	16	27	5	2
M18x1,5		8W03 78 00	15/3-074/M18x1,5	23,9	18	28	5	2,5
M20x1,5		8W03 80 00	15/3-074/M20x1,5	25,9	20	31	5	2,5
M22x1,5		8W03 82 00	15/3-074/M22x1,5	27,9	22	33	5	3
M26x1,5		8W03 89 00	15/3-074/M26x1,5	31,9	26	39	5	3
M27x2		8W03 86 00	15/3-074/M27x2	32,9	27	41	5,5	3
M33x2	G1	8W03 91 00	15/3-074/M33x2	39,9	33,3	46	7	3
M42x2	G1"1/4	8W03 96 00	15/3-074/M42x2	49,9	42	57	7	3
M48x2	G1"1/2	8W03 98 00	15/3-074/M48x2	55,9	48	64	7	3
	G1/4	8W03 13 00	15/3-074/R1/4"	18,9	13,2	22	5	2
	G3/8	8W03 17 00	15/3-074/R3/8"	22,9	16,7	27	5	2,5
	G1/2	8W03 21 00	15/3-074/R1/2"	26,9	21	33	5,5	3
	G3/4	8W03 27 00	15/3-074/R3/4"	32,9	26,5	41	5,5	3

Material : Steel/PTFE





Non-return valves

Applications

Legris non-return valves allow fluids to pass in one direction whilst blocking flow in the other direction. They can be used both for hydraulic circuits and for compressed air applications and are an essential complementary range of Legris high pressure couplings.



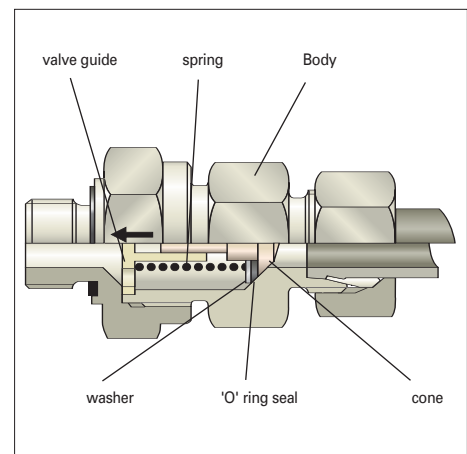
Principle and advantages

Non-return valves are designed with a 90° cone face and an elastomer seal ensuring **perfect sealing**. In the open position, the cross-sectional flow area of non-return valves is not reduced and enables **full fluid flow** with **reduced pressure loss**. Efficiency of the valve is guaranteed with a maximum flow of 4 to 5 m/s.

The different versions of Legris non-return valves are :

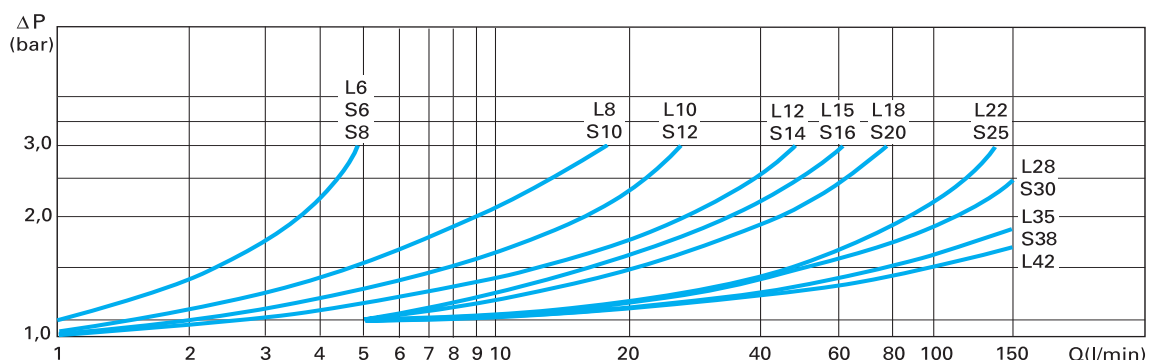
- valves for assembly on screwed couplings (flow towards screwed plug or flow from screwed plug)
- straight coupling valves for assembly on hydraulic tubing
- double female valves, BSP parallel

All valves are marked with flow direction and valve opening pressure. Legris non-return valves are supplied with a standard valve opening pressure of 1 bar. Valves with alternative opening pressures are available on request (0,2 bar / 0,5 bar / 2 bar / 3 bar).



Choosing a non-return valve

The non-return valve must be selected according to the flow required by the hydraulic application. You will find below the curves showing pressure loss, dependant on the working fluid, with a valve opening pressure of 1 bar:



Product range

flow towards screwed plug

8280

BSP parallel



134

8280

metric parallel



135

flow from screwed plug

8281

BSP parallel



136

8281

metric parallel



137

straight coupling (non-return valves)

8282

133



138

double female (non-return valves)

8083

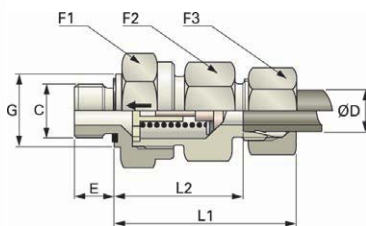
BSP parallel



139

Non-return valves, flow towards screwed plug

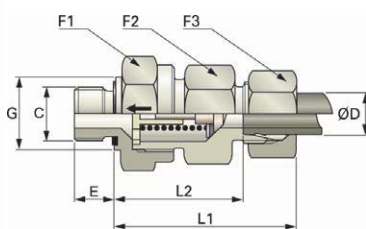
BSP parallel
elastomer seal
ISO 1179-2



	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	G	L1	L2	kg
L	250	6	G1/8	8080L06 10	8280L06 10	8380L06 10	ZS15/A-52/L6RD	8	17	17	14	13,9	41	26,5	0,051
		8	G1/4	8080L08 13	8280L08 13	8380L08 13	ZS15/A-52/L8RD	12	19	17	17	18,9	43	28,5	0,065
		10	G1/4	8080L10 13	8280L10 13	8380L10 13	ZS15/A-52/L10RD	12	24	22	19	18,9	53	38,5	0,085
		12	G3/8	8080L12 17	8280L12 17	8380L12 17	ZS15/A-52/L12RD	12	30	27	22	21,9	55	40,5	0,180
		15	G1/2	8080L15 21	8280L15 21	8380L15 21	ZS15/A-52/L15RD	14	30	27	27	26,9	58	42,5	0,210
	160	18	G1/2	8080L18 21	8280L18 21	8380L18 21	ZS15/A-52/L18RD	14	36	36	32	26,9	64	48	0,320
		22	G3/4	8080L22 27	8280L22 27	8380L22 27	ZS15/A-52/L22RD	16	46	41	36	31,9	72	56	0,490
	100	28	G1	8080L28 34	8280L28 34	8380L28 34	ZS15/A-52/L28RD	18	55	50	41	39,9	81	64	0,770
		35	G1"1/4	8080L35 42	8280L35 42	8380L35 42	ZS15/A-52/L35RD	20	60	60	50	49,9	92	70	1,140
		42	G1"1/2	8080L42 49	8280L42 49	8380L42 49	ZS15/A-52/L42RD	22	70	65	60	54,9	93	70,5	1,510
S	400	6	G1/4	8080S06 13	8280S06 13	8380S06 13	ZS15/A-52/S6RD	12	19	19	17	18,9	46	31,5	0,075
		8	G1/4	8080S08 13	8280S08 13	8380S08 13	ZS15/A-52/S8RD	12	22	19	19	18,9	46	31,5	0,085
		10	G3/8	8080S10 17	8280S10 17	8380S10 17	ZS15/A-52/S10RD	12	27	24	22	21,9	54	38	0,150
		12	G3/8	8080S12 17	8280S12 17	8380S12 17	ZS15/A-52/S12RD	12	30	27	24	21,9	57	41	0,180
		14	G1/2	8080S14 21	8280S14 21	8380S14 21	ZS15/A-52/S14RD	14	32	27	27	26,9	61	43,5	0,252
		16	G1/2	8080S16 21	8280S16 21	8380S16 21	ZS15/A-52/S16RD	14	36	32	30	26,9	64	46	0,325
		20	G3/4	8080S20 27	8280S20 27	8380S20 27	ZS15/A-52/S20RD	16	46	41	36	31,9	72	50	0,590
	250	25	G1	8080S25 34	8280S25 34	8380S25 34	ZS15/A-52/S25RD	18	50	46	46	39,9	79	54,5	0,820
		30	G1"1/4	8080S30 42	8280S30 42	8380S30 42	ZS15/A-52/S30RD	20	60	55	50	49,9	91	64	1,155
		38	G1"1/2	8080S38 49	8280S38 49	8380S38 49	ZS15/A-52/S38RD	22	70	65	60	54,9	102	71,5	1,615

Non-return valves, flow towards screwed plug

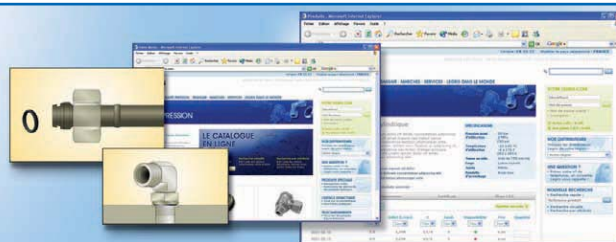
metric parallel
elastomer seal
ISO 9974-2



	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	G	L1	L2	kg
L	250	6	M10x1	8080L06 60	8280L06 60	8380L06 60	ZS15/A-52/L6MD	8	17	17	14	13,9	41	26,5	0,051
		8	M12x1,5	8080L08 67	8280L08 67	8380L08 67	ZS15/A-52/L8MD	12	19	17	17	16,9	43	28,5	0,065
		10	M14x1,5	8080L10 71	8280L10 71	8380L10 71	ZS15/A-52/L10MD	12	24	22	19	18,9	53	38,5	0,085
		12	M16x1,5	8080L12 75	8280L12 75	8380L12 75	ZS15/A-52/L12MD	12	30	27	22	21,9	55	40,5	0,180
		15	M18x1,5	8080L15 78	8280L15 78	8380L15 78	ZS15/A-52/L15MD	12	30	27	27	23,9	58	42,5	0,210
	160	18	M22x1,5	8080L18 82	8280L18 82	8380L18 82	ZS15/A-52/L18MD	14	36	36	32	26,9	64	48	0,320
		22	M26x1,5	8080L22 89	8280L22 89	8380L22 89	ZS15/A-52/L22MD	16	46	41	36	31,9	72	56	0,490
	100	28	M33x2	8080L28 91	8280L28 91	8380L28 91	ZS15/A-52/L28MD	18	55	50	41	39,9	81	64	0,770
		35	M42x2	8080L35 96	8280L35 96	8380L35 96	ZS15/A-52/L35MD	20	60	60	50	49,9	92	70	1,140
		42	M48x2	8080L42 98	8280L42 98	8380L42 98	ZS15/A-52/L42MD	22	70	65	60	54,9	93	70,5	1,510
S	400	6	M12x1,5	8080S06 67	8280S06 67	8380S06 67	ZS15/A-52/S6MD	12	19	19	17	16,9	46	31,5	0,075
		8	M14x1,5	8080S08 71	8280S08 71	8380S08 71	ZS15/A-52/S8MD	12	22	19	19	18,9	46	31,5	0,085
		10	M16x1,5	8080S10 75	8280S10 75	8380S10 75	ZS15/A-52/S10MD	12	27	24	22	21,9	54	38	0,150
		12	M18x1,5	8080S12 78	8280S12 78	8380S12 78	ZS15/A-52/S12MD	12	30	27	24	23,9	57	41	0,180
		14	M20x1,5	8080S14 80	8280S14 80	8380S14 80	ZS15/A-52/S14MD	14	32	27	27	25,9	61	43,5	0,252
		16	M22x1,5	8080S16 82	8280S16 82	8380S16 82	ZS15/A-52/S16MD	14	36	32	30	26,9	64	46	0,325
		20	M27x2	8080S20 86	8280S20 86	8380S20 86	ZS15/A-52/S20MD	16	46	41	36	31,9	72	50	0,590
	250	25	M33x2	8080S25 91	8280S25 91	8380S25 91	ZS15/A-52/S25MD	18	50	46	46	39,9	79	54,5	0,820
		30	M42x2	8080S30 96	8280S30 96	8380S30 96	ZS15/A-52/S30MD	20	60	55	50	49,9	91	64	1,155
		38	M48x2	8080S38 98	8280S38 98	8380S38 98	ZS15/A-52/S38MD	22	70	65	60	54,9	102	71,5	1,615

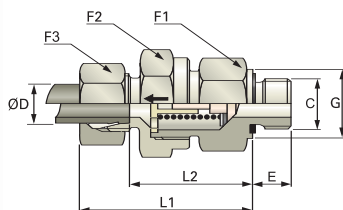
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Non-return valves, flow from screwed plug

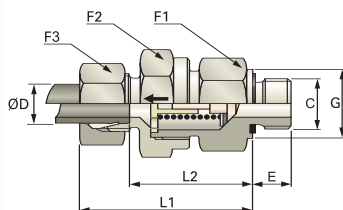
BSP parallel
elastomer seal
ISO 1179-2



	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	G	L1	L2	kg
L	250	6	G1/8	8081L06 10	8281L06 10	8381L06 10	ZS15/E-52/L6RD	8	17	17	14	13,9	43	28	0,050
		8	G1/4	8081L08 13	8281L08 13	8381L08 13	ZS15/E-52/L8RD	12	19	19	17	18,9	45	30	0,072
		10	G1/4	8081L10 13	8281L10 13	8381L10 13	ZS15/E-52/L10RD	12	22	24	19	18,9	53	38,5	0,090
		12	G3/8	8081L12 17	8281L12 17	8381L12 17	ZS15/E-52/L12RD	12	27	30	22	21,9	57	42,5	0,185
		15	G1/2	8081L15 21	8281L15 21	8381L15 21	ZS15/E-52/L15RD	14	27	30	27	26,9	61	45,5	0,225
	160	18	G1/2	8081L18 21	8281L18 21	8381L18 21	ZS15/E-52/L18RD	14	36	36	32	26,9	66	50	0,335
		22	G3/4	8081L22 27	8281L22 27	8381L22 27	ZS15/E-52/L22RD	16	41	46	36	31,9	71	55	0,500
	100	28	G1	8081L28 34	8281L28 34	8381L28 34	ZS15/E-52/L28RD	18	50	55	41	39,9	80	63	0,785
		35	G1"1/4	8081L35 42	8281L35 42	8381L35 42	ZS15/E-52/L35RD	20	60	60	50	49,9	91	69	1,152
		42	G1"1/2	8081L42 49	8281L42 49	8381L42 49	ZS15/E-52/L42RD	22	65	70	60	54,9	91	68,5	1,510
S	400	6	G1/4	8081S06 13	8281S06 13	8381S06 13	ZS15/E-52/S6RD	12	19	19	17	18,9	46	31,5	0,090
		8	G1/4	8081S08 13	8281S08 13	8381S08 13	ZS15/E-52/S8RD	12	19	22	19	18,9	46	31,5	0,115
		10	G3/8	8081S10 17	8281S10 17	8381S10 17	ZS15/E-52/S10RD	12	24	27	22	21,9	54	38	0,150
		12	G3/8	8081S12 17	8281S12 17	8381S12 17	ZS15/E-52/S12RD	12	27	30	24	21,9	57	41	0,185
		14	G1/2	8081S14 21	8281S14 21	8381S14 21	ZS15/E-52/S14RD	14	27	32	27	26,9	62	44,5	0,255
		16	G1/2	8081S16 21	8281S16 21	8381S16 21	ZS15/E-52/S16RD	14	32	36	30	26,9	66	48	0,320
		20	G3/4	8081S20 27	8281S20 27	8381S20 27	ZS15/E-52/S20RD	16	41	46	36	31,9	74	52	0,595
	250	25	G1	8081S25 34	8281S25 34	8381S25 34	ZS15/E-52/S25RD	18	46	50	46	39,9	79	54,5	0,780
		30	G1"1/4	8081S30 42	8281S30 42	8381S30 42	ZS15/E-52/S30RD	20	55	60	50	49,9	91	64	1,170
		38	G1"1/2	8081S38 49	8281S38 49	8381S38 49	ZS15/E-52/S38RD	22	65	70	60	54,9	100	69,5	1,630

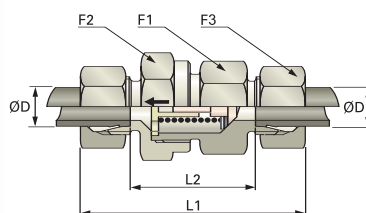
Non-return valves, flow from screwed plug

metric parallel
elastomer seal
ISO 9974-2



	PB	ØD	C	Body only	Double-bite ring	DiNova ring	Bell code	E	F1	F2	F3	G	L1	L2	kg
L	250	6	M10x1	8081L06 60	8281L06 60	8381L06 60	ZS15/E-52/L6MD	8	17	17	14	13,9	43	28	0,050
		8	M12x1,5	8081L08 67	8281L08 67	8381L08 67	ZS15/E-52/L8MD	12	17	19	17	16,9	44	29	0,072
		10	M14x1,5	8081L10 71	8281L10 71	8381L10 71	ZS15/E-52/L10MD	12	22	24	19	18,9	53	38,5	0,090
		12	M16x1,5	8081L12 75	8281L12 75	8381L12 75	ZS15/E-52/L12MD	12	27	30	22	21,9	57	42,5	0,185
		15	M18x1,5	8081L15 78	8281L15 78	8381L15 78	ZS15/E-52/L15MD	12	27	30	27	23,9	61	45,5	0,225
	160	18	M22x1,5	8081L18 82	8281L18 82	8381L18 82	ZS15/E-52/L18MD	14	36	36	32	26,9	66	50	0,335
		22	M26x1,5	8081L22 89	8281L22 89	8381L22 89	ZS15/E-52/L22MD	16	41	46	36	31,9	71	55	0,500
	100	28	M33x2	8081L28 91	8281L28 91	8381L28 91	ZS15/E-52/L28MD	18	50	55	41	39,9	80	63	0,785
		35	M42x2	8081L35 96	8281L35 96	8381L35 96	ZS15/E-52/L35MD	20	60	60	50	49,9	91	69	1,152
		42	M48x2	8081L42 98	8281L42 98	8381L42 98	ZS15/E-52/L42MD	22	65	70	60	54,9	91	68,5	1,510
S	400	6	M12x1,5	8081S06 67	8281S06 67	8381S06 67	ZS15/E-52/S6MD	12	19	19	17	16,9	46	31,5	0,090
		8	M14x1,5	8081S08 71	8281S08 71	8381S08 71	ZS15/E-52/S8MD	12	19	22	19	18,9	46	31,5	0,115
		10	M16x1,5	8081S10 75	8281S10 75	8381S10 75	ZS15/E-52/S10MD	12	24	27	22	21,9	54	38	0,150
		12	M18x1,5	8081S12 78	8281S12 78	8381S12 78	ZS15/E-52/S12MD	12	27	30	24	23,9	57	41	0,185
		14	M20x1,5	8081S14 80	8281S14 80	8381S14 80	ZS15/E-52/S14MD	14	27	32	27	25,9	62	44,5	0,255
		16	M22x1,5	8081S16 82	8281S16 82	8381S16 82	ZS15/E-52/S16MD	14	32	36	30	26,9	66	48	0,320
		20	M27x2	8081S20 86	8281S20 86	8381S20 86	ZS15/E-52/S20MD	16	41	46	36	31,9	74	52	0,595
	250	25	M33x2	8081S25 91	8281S25 91	8381S25 91	ZS15/E-52/S25MD	18	46	50	46	39,9	79	54,5	0,780
		30	M42x2	8081S30 96	8281S30 96	8381S30 96	ZS15/E-52/S30MD	20	55	60	50	49,9	91	64	1,170
		38	M48x2	8081S38 98	8281S38 98	8381S38 98	ZS15/E-52/S38MD	22	65	70	60	54,9	100	69,5	1,630

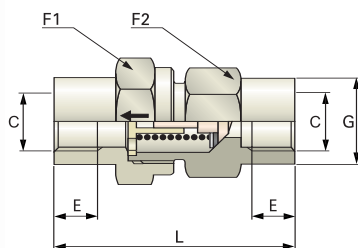
Non-return valves, straight coupling



	PB	ØD	Body only	Double-bite ring	DiNova ring	Bell code	F1	F2	F3	L1	L2	kg
L	250	6	8082L06 00	8282L06 00	8382L06 00	ZS15-53/L6	17	17	14	58	29	0,065
		8	8082L08 00	8282L08 00	8382L08 00	ZS15-53/L8	17	19	17	59	30	0,080
		10	8082L10 00	8282L10 00	8382L10 00	ZS15-53/L10	22	24	19	70	40,5	0,140
		12	8082L12 00	8282L12 00	8382L12 00	ZS15-53/L12	27	30	22	73	43,5	0,210
		15	8082L15 00	8282L15 00	8382L15 00	ZS15-53/L15	27	30	27	78	47,5	0,250
	160	18	8082L18 00	8282L18 00	8382L18 00	ZS15-53/L18	36	36	32	84	51,5	0,400
		22	8082L22 00	8282L22 00	8382L22 00	ZS15-53/L22	41	46	36	94	61,5	0,610
	100	28	8082L28 00	8282L28 00	8382L28 00	ZS15-53/L28	50	55	41	103	69,5	0,830
		35	8082L35 00	8282L35 00	8382L35 00	ZS15-53/L35	60	60	50	118	74,5	1,705
		42	8082L42 00	8282L42 00	8382L42 00	ZS15-53/L42	65	70	60	118,5	73,5	1,820
S	400	6	8082S06 00	8282S06 00	8382S06 00	ZS15-53/S6	19	19	17	64	34,5	0,095
		8	8082S08 00	8282S08 00	8382S08 00	ZS15-53/S8	19	22	19	64	34,5	0,110
		10	8082S10 00	8282S10 00	8382S10 00	ZS15-53/S10	24	27	22	73	40,5	0,180
		12	8082S12 00	8282S12 00	8382S12 00	ZS15-53/S12	27	30	24	75	42,5	0,215
		14	8082S14 00	8282S14 00	8382S14 00	ZS15-53/S14	27	32	27	83	47,5	0,300
		16	8082S16 00	8282S16 00	8382S16 00	ZS15-53/S16	32	36	30	87	50,5	0,400
		20	8082S20 00	8282S20 00	8382S20 00	ZS15-53/S20	41	46	36	98	54,5	0,690
	250	25	8082S25 00	8282S25 00	8382S25 00	ZS15-53/S25	46	50	46	107	58,5	1,020
		30	8082S30 00	8282S30 00	8382S30 00	ZS15-53/S30	55	60	50	123	69,5	1,380
		38	8082S38 00	8282S38 00	8382S38 00	ZS15-53/S38	65	70	60	137	75,5	1,940

non-return valves double female

BSP parallel



PB	C		Bell code	F1	F2	G	L	E	
400	G1/8	8083 00 10	15-55/R1/8"	19	19	19	42,5	8	0,085
	G1/4	8083 00 13	15-55/R1/4"	19	19	19	51	12	0,100
	G3/8	8083 00 17	15-55/R3/8"	27	24	24	60	12	0,195
	G1/2	8083 00 21	15-55/R1/2"	36	32	32	72	15	0,350
	G3/4	8083 00 27	15-55/R3/4"	46	41	41	84	16,5	0,660
250	G1	8083 00 34	15-55/R1"	50	46	46	95	19	0,830
	G1"1/4	8083 00 42	15-55/R1 1/4"	60	55	55	110	21,5	1,420
	G1"1/2	8083 00 49	15-55/R1 1/2"	70	65	65	114	22	1,900





37° flare couplings to ISO 8434-2

Applications

Widely used throughout the world, 37° flare couplings are designed for most medium pressure mobile and stationary applications. These couplings are characterized by easy, compact assembly and are perfectly suited for series assembly or maintenance use.

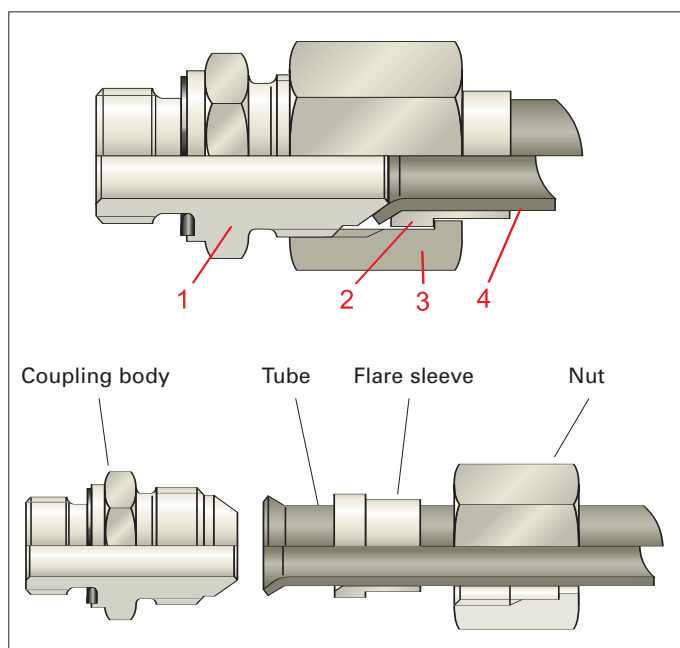


Principle

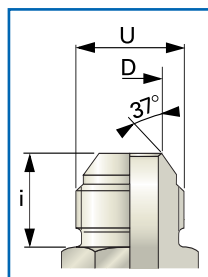
37° flare couplings to ISO 8434-2 comprise a body (1), pressure sleeve (2) and securing nut (3).

By exchanging the pressure sleeve, the same coupling can be used with both metric and inch size tube flared at less than 37°.

Once assembled, the flared tube (4) is wedged and held between the pressure ring and the coupling body. The pressure sleeve centres and supports the tube, at the same time preventing it from twisting and dampening vibration. Since the tube does not turn with the securing nut, no tension is transmitted to the tube system. The result is an extremely reliable metal seal.



Technical specifications



o.d. tube mm	6	8	10	12	14, 15, 16	18, 20	25	30, 32	38
o.d. tube inch	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"
U UN/UNF-2A ANSI B1.1 (ISO 725)	7/16"-20 UNF	1/2"-20 UNF	9/16"-20 UNF	3/4"-20 UNF	7/8"-14 UNF	1 1/16"-12 UN	1 5/16"-12 UN	1 5/8"-12 UN	1 7/8"-12 UN
D ±0,08	4,9	6,48	8,08	10,82	13,69	16,87	23,19	29,13	35,08
i ±0,4	14	14	14,1	16,7	19,3	21,9	23,1	24,3	27,5

All products in the 37° flare couplings range are supplied as body only:



Principal advantages

- **Extensive applications :**

metal/metal sealing ensures good fluid flow and connection capability across a wide range of working temperatures.

- **Secure sealing :**

37° flare couplings have only sealing one point between the coupling body and the flared tube.

- **Maximum safety, thanks to the 37° flare :**

all parts are mechanically in contact with each other, eliminating the risk of the tube pulling out.

- **Easy use :**

the low tightening torques of these couplings makes assembly very straightforward and the ease of disassembly simplifies maintenance.

- **Double use :**

for both metric and inch tubes with 37° flare.

- **High resistance :**

these couplings withstand nominal pressures up to 350 bar, dependant on the diameter.

- **Cost savings and stock reduction :**

different o.d. tubes can be used with the same dimension of couplings.

Product offer

Nuts, flare sleeves

8410

Nuts



146

8424

Flare sleeves



146

Male stud couplings

8001

elastomer
seals



147 148

8021

O-ring



149

8005

Taper



150 151

Tube-tube couplings

8006

straight
couplings



152

8002

equal
elbows



153

8004

equal
tees



153

8007

equal
crosses



154

8V16

bulkhead straight
couplings



155

8V12

bulkhead elbow
couplings



155

Adjustable couplings

8046

elbows



156

8036

45° elbows



156

8047

tees



157

8048

run tees



157

Adjustable couplings with lock nut

8099

elbows



158 159

8098

tees



160 161

8093

run tees



162 163

Product offer

Non-adjustable couplings

8009

elbows



164

8008

tees



165

8003

run tees



166

adaptors and reducing adaptors

8441

adjustable
adaptors parallel



167 168

8445

adjustable
adaptors taper



169

8066

Straight reducing
couplings



170

8014

pressure gauge
connectors



171

8415

adaptors for
pressure gauge
connections



172

component parts

8426

end plug



173

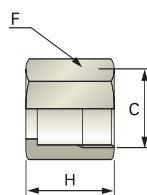
8425

socket head
port plug



173

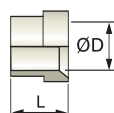
Nuts



ØD mm	ØD inch	C UN/UNF		Bell code	F	H	
6	1/4	7/16-20	8410 06 00	09-30/6	14	15,5	0,010
8	5/16	1/2-20	8410 08 00	09-30/8	17	17	0,018
10	3/8	9/16-18	8410 10 00	09-30/10	19	18,3	0,024
12	1/2	3/4-16	8410 12 00	09-30/12	22	21,3	0,026
14-15-16	5/8	7/8-14	8410 16 00	09-30/16	27	24,6	0,055
18-20	3/4	1"1/16-12	8410 20 00	09-30/20	32	25,9	0,075
25	1	1"5/16-12	8410 25 00	09-30/25	41	28,4	0,140
30-32	1"1/4	1"5/8-12	8410 32 00	09-30/32	50	31	0,220
38	1"1/2	1"7/8-12	8410 38 00	09-30/38	60	35,8	0,400

146

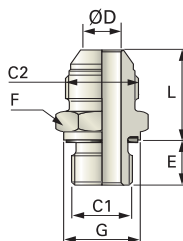
Flare sleeves



ØD mm	ØD inch	 ØD mm	 ØD pouce	Bell code mm	Bell code pouce	L	
6	1/4	8424 06 00	8424 56 00	09-31/6	09-31/1/4	10,4	0,002
8	5/16	8424 08 00	8424 08 00	09-31/8	09-31/8	11,2	0,003
10	3/8	8424 10 00	8424 60 00	09-31/10	09-31/3/8	12,7	0,003
12	1/2	8424 12 00	8424 62 00	09-31/12	09-31/1/2	14,2	0,008
14		8424 14 00		09-31/14		16,8	0,014
15		8424 15 00		09-31/15		16,8	0,011
16	5/8	8424 16 00	8424 16 00	09-31/16	09-31/16	16,8	0,008
18		8424 18 00		09-31/18		17,3	0,016
20	3/4	8424 20 00	8424 69 00	09-31/20	09-31/3/4	17,3	0,010
25	1	8424 25 00	8424 75 00	09-31/25	09-31/1	19,8	0,020
30		8424 30 00		09-31/30		23,1	0,046
32	1"1/4	8424 32 00	8424 82 00	09-31/32	09-31/1 1/4	23,1	0,031
38	1"1/2	8424 38 00	8424 38 00	09-31/38	09-31/38	28,4	0,052

Male stud couplings

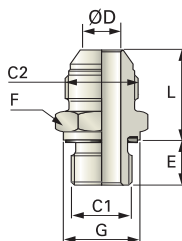
BSP parallel
elastomer seal
ISO 1179-2



ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F	G	L	
6	1/4	G1/8	7/16-20	8001 06 10	09-010/6-RD1/8	6,5	14	13,9	22,5	0,030
6	1/4	G1/4	7/16-20	8001 06 13	09-010/6-RD1/4	9,5	19	18,9	22,5	0,042
6	1/4	G3/8	7/16-20	8001 06 17	09-010/6-RD3/8	9,5	22	21,9	23,5	0,055
8	5/16	G1/4	1/2-20	8001 08 13	09-010/8-RD1/4	9,5	19	18,9	22,5	0,051
8	5/16	G3/8	1/2-20	8001 08 17	09-010/8-RD3/8	9,5	22	21,9	23,5	0,062
10	3/8	G1/4	9/16-18	8001 10 13	09-010/10-RD1/4	9,5	19	18,9	22,5	0,057
10	3/8	G3/8	9/16-18	8001 10 17	09-010/10-RD3/8	9,5	22	21,9	23,5	0,067
10	3/8	G1/2	9/16-18	8001 10 21	09-010/10-RD1/2	13	27	26,9	25,6	0,107
12	1/2	G1/4	3/4-16	8001 12 13	09-010/12-RD1/4	9,5	22	18,9	26,5	0,084
12	1/2	G3/8	3/4-16	8001 12 17	09-010/12-RD3/8	9,5	22	21,9	26,5	0,090
12	1/2	G1/2	3/4-16	8001 12 21	09-010/12-RD1/2	13	27	26,9	28,4	0,120
12	1/2	G3/4	3/4-16	8001 12 27	09-010/12-RD3/4	13	32	31,9	29,4	0,170
14-15-16	5/8	G3/8	7/8-14	8001 16 17	09-010/16-RD3/8	9,5	24	21,9	29,5	0,138
14-15-16	5/8	G1/2	7/8-14	8001 16 21	09-010/16-RD1/2	13	27	26,9	31	0,159
14-15-16	5/8	G3/4	7/8-14	8001 16 27	09-010/16-RD3/4	13	32	31,9	32	0,198
18-20	3/4	G1/2	1"1/16-12	8001 20 21	09-010/20-RD1/2	13	30	26,9	33,7	0,215
18-20	3/4	G3/4	1"1/16-12	8001 20 27	09-010/20-RD3/4	13	32	31,9	34,5	0,225
18-20	3/4	G1	1"1/16-12	8001 20 34	09-010/20-RD1	16	41	39,9	36,5	0,342
25	1	G3/4	1"5/16-12	8001 25 27	09-010/25-RD3/4	13	36	31,9	35,5	0,365
25	1	G1	1"5/16-12	8001 25 34	09-010/25-RD1	16	41	39,9	37,5	0,385
25	1	G1"1/4	1"5/16-12	8001 25 42	09-010/25-RD1 1/4	16	50	49,9	39	0,580
30-32	1"1/4	G1"1/4	1"5/8-12	8001 32 42	09-010/32-RD1 1/4	16	50	49,9	41	0,620
38	1"1/2	G1"1/4	1"7/8-12	8001 38 42	09-010/38-RD1 1/4	16	50	49,9	44,5	0,990
38	1"1/2	G1"1/2	1"7/8-12	8001 38 49	09-010/38-RD1 1/2	16	55	54,9	45	0,920

Male stud couplings

metric parallel
elastomer seal
ISO 9974-2



ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F	G	L	kg
6	1/4	M10x1	7/16-20	8001 06 60	09-010/6-MD10X1	8	14	13,9	21	0,031
6	1/4	M12x1,5	7/16-20	8001 06 67	09-010/6-MD12X1,5	12	17	16,9	21	0,042
8	5/16	M12x1,5	1/2-20	8001 08 67	09-010/8-MD12X1,5	12	17	16,9	21	0,048
10	3/8	M14x1,5	9/16-18	8001 10 71	09-010/10-MD14X1,5	12	19	18,9	21	0,057
10	3/8	M16x1,5	9/16-18	8001 10 75	09-010/10-MD16X1,5	12	22	21,9	22	0,067
12	1/2	M16x1,5	3/4-16	8001 12 75	09-010/12-MD16X1,5	12	22	21,9	24,5	0,092
12	1/2	M18x1,5	3/4-16	8001 12 78	09-010/12-MD18X1,5	12	24	23,9	26	0,089
14-15-16	5/8	M18x1,5	7/8-14	8001 16 78	09-010/16-MD18X1,5	12	24	23,9	28	0,138
14-15-16	5/8	M22x1,5	7/8-14	8001 16 82	09-010/16-MD22X1,5	14	27	26,9	29,5	0,156
18-20	3/4	M22x1,5	1"1/16-12	8001 20 82	09-010/20-MD22X1,5	14	27	26,9	32	0,204
18-20	3/4	M27x2	1"1/16-12	8001 20 86	09-010/20-MD27X2	16	32	31,9	32,5	0,226
25	1	M33x2	1"5/16-12	8001 25 91	09-010/25-MD33X2	18	41	39,9	34,5	0,390
30-32	1"1/4	M42x2	1"5/8-12	8001 32 96	09-010/32-MD42X2	20	50	49,9	38	0,608
38	1"1/2	M48x2	1"7/8-12	8001 38 98	09-010/38-MD48X2	22	55	54,9	41,5	0,920

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Identification of Legris part numbers
Example of product codes

Body only

Metric thread: M16x1,5

8001 08 75

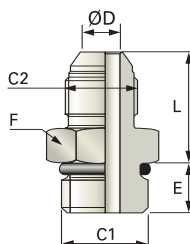
o.d. tube: 8 mm

Male stud couplings

UN, UNF

O-ring

ISO 11926-2/3

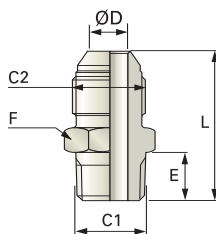


ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F	L	
6	1/4	7/16-20	7/16-20	8021 06 103	09-010/6-7/16-20UNF	9	14	22	0,031
6	1/4	1/2-20	7/16-20	8021 06 104	09-010/6-1/2-20UNF	9	17	22	0,038
8	5/16	1/2-20	1/2-20	8021 08 104	09-010/8-1/2-20UNF	9	17	22	0,048
10	3/8	9/16-18	9/16-18	8021 10 105	09-010/10-9/16-18UNF	10	17	23,1	0,057
10	3/8	3/4-16	9/16-18	8021 10 107	09-010/10-3/4-16UNF	11	22	24,1	0,077
12	1/2	3/4-16	3/4-16	8021 12 107	09-010/12-3/4-16UNF	11	22	26,5	0,092
12	1/2	7/8-14	3/4-16	8021 12 108	09-010/12-7/8-14UNF	12,7	27	27,9	0,124
12	1/2	1"1/16-12	3/4-16	8021 12 153	09-010/12-1 1/16-12UN	15	32	29,7	0,140
14-15-16	5/8	3/4-16	7/8-14	8021 16 107	09-010/16-3/4-16UNF	11	24	29,5	0,143
14-15-16	5/8	7/8-14	7/8-14	8021 16 108	09-010/16-7/8-14UNF	12,7	27	30,5	0,153
14-15-16	5/8	1"1/16-12	7/8-14	8021 16 153	09-010/16-1 1/16-12UN	15	32	32	0,208
18-20	3/4	3/4-16	1"1/16-12	8021 20 107	09-010/20-3/4-16UNF	11	27	34	0,215
18-20	3/4	7/8-14	1"1/16-12	8021 20 108	09-010/20-7/8-14UNF	12,7	27	33,7	0,210
18-20	3/4	1"1/16-12	1"1/16-12	8021 20 153	09-010/20-1 1/16-12UN	15	32	35	0,235
18-20	3/4	1"5/16-12*	1"1/16-12	8021 20 157	09-010/20-1 5/16-12UN	15	41*	35,7	0,330
25	1	1"1/16-12	1"5/16-12	8021 25 153	09-010/25-1 1/16-12UN	15	36	36	0,380
25	1	1"5/16-12*	1"5/16-12	8021 25 157	09-010/25-1 5/16-12UN	15	41*	36,7	0,375
25	1	1"5/8-12	1"5/16-12	8021 25 162	09-010/25-1 5/8-12UN	15	50	38,7	0,515
30-32	1"1/4	1"5/8-12	1"5/8-12	8021 32 162	09-010/32-1 5/8-12UN	15	50	40	0,610
38	1"1/2	1"7/8-12	1"7/8-12	8021 38 166	09-010/38-1 7/8-12UN	15	55	45	0,920

* With shoulder Ø 38,2

Male stud couplings

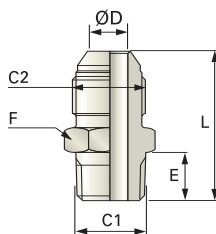
BSPT
ISO 7



ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F	L	
6	1/4	R1/8	7/16-20	8005 06 10	09-010/6-RK1/8	9,7	13	30,7	0,030
6	1/4	R1/4	7/16-20	8005 06 13	09-010/6-RK1/4	14,2	14	35,7	0,039
8	5/16	R1/8	1/2-20	8005 08 10	09-010/8-RK1/8	9,7	14	30,7	0,042
8	5/16	R1/4	1/2-20	8005 08 13	09-010/8-RK1/4	14,2	14	35,3	0,046
10	3/8	R1/4	9/16-18	8005 10 13	09-010/10-RK1/4	14,2	17	35,6	0,058
10	3/8	R3/8	9/16-18	8005 10 17	09-010/10-RK3/8	14,2	19	35,6	0,065
10	3/8	R1/2	9/16-18	8005 10 21	09-010/10-RK1/2	19	22	41,1	0,099
12	1/2	R1/4	3/4-16	8005 12 13	09-010/12-RK1/4	14,2	19	38,1	0,084
12	1/2	R3/8	3/4-16	8005 12 17	09-010/12-RK3/8	14,2	19	38,1	0,089
12	1/2	R1/2	3/4-16	8005 12 21	09-010/12-RK1/2	19	22	43,7	0,080
14-15-16	5/8	R3/8	7/8-14	8005 16 17	09-010/16-RK3/8	14,2	24	41,9	0,145
14-15-16	5/8	R1/2	7/8-14	8005 16 21	09-010/16-RK1/2	19	24	46,7	0,149
14-15-16	5/8	R3/4	7/8-14	8005 16 27	09-010/16-RK3/4	19	27	48,3	0,193
18-20	3/4	R1/2	1"1/16-12	8005 20 21	09-010/20-RK1/2	19	27	50,8	0,216
18-20	3/4	R3/4	1"1/16-12	8005 20 27	09-010/20-RK3/4	19	27	50,8	0,216
25	1	R3/4	1"5/16-12	8005 25 27	09-010/25-RK3/4	19	36	53,1	0,347
25	1	R1	1"5/16-12	8005 25 34	09-010/25-RK1	23,9	36	57,9	0,376
30-32	1"1/4	R1"1/4	1"5/8-12	8005 32 42	09-010/32-RK1 1/4	24,6	46	61	0,609
38	1"1/2	R1"1/2	1"7/8-12	8005 38 49	09-010/38-RK1 1/2	25,4	50	66,3	0,910

Male stud couplings

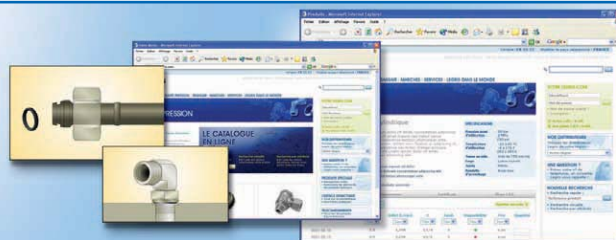
NPT



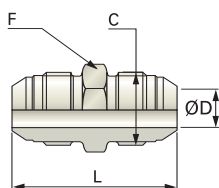
ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F	L	
6	1/4	1/8	7/16-20	8005 06 11	09-010/6-NPT1/8	9,97	13	31	0,030
6	1/4	1/4	7/16-20	8005 06 14	09-010/6-NPT1/4	15,10	14	36	0,039
8	5/16	1/8	1/2-20	8005 08 11	09-010/8-NPT1/8	9,97	14	31	0,042
10	3/8	1/4	9/16-18	8005 10 14	09-010/10-NPT1/4	15,10	17	36,3	0,062
10	3/8	3/8	9/16-18	8005 10 18	09-010/10-NPT3/8	15,25	19	36,3	0,068
12	1/2	1/2	3/4-16	8005 12 22	09-010/12-NPT1/2	19,85	22	45,4	0,114
12	1/2	3/4	3/4-16	8005 12 28	09-010/12-NPT3/4	20,12	27	47	0,164
14-15-16	5/8	3/8	7/8-14	8005 16 18	09-010/16-NPT3/8	15,25	24	43,1	0,152
14-15-16	5/8	1/2	7/8-14	8005 16 22	09-010/16-NPT1/2	19,85	24	48	0,150
14-15-16	5/8	3/4	7/8-14	8005 16 28	09-010/16-NPT3/4	20,15	27	49,5	0,194
18-20	3/4	3/4	1"1/16-12	8005 20 28	09-010/20-NPT3/4	20,15	27	52,3	0,250
18-20	3/4	1	1"1/16-12	8005 20 35	09-010/20-NPT1	25,01	36	57,1	0,330
25	1	1	1"5/16-12	8005 25 35	09-010/25-NPT1	25,01	36	58,4	0,370
30-32	1"1/4	1"1/4	1"5/8-12	8005 32 43	09-010/32-NPT1 1/4	25,62	46	62,2	0,615
38	1"1/2	1"1/2	1"7/8-12	8005 38 50	09-010/38-NPT1 1/2	26,04	50	68,1	0,920

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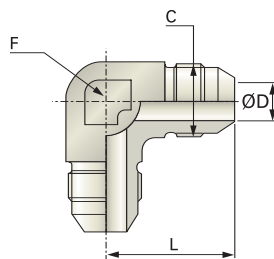


Straight couplings



ØD mm	ØD inch	C UN/UNF		Bell code	F	L	
6	1/4	7/16-20	8006 06 00	09-100/6	12	34,8	0,042
8	5/16	1/2-20	8006 08 00	09-100/8	14	34,8	0,061
10	3/8	9/16-18	8006 10 00	09-100/10	17	35,8	0,087
12	1/2	3/4-16	8006 12 00	09-100/12	19	41,1	0,118
14-15-16	5/8	7/8-14	8006 16 00	09-100/16	24	47,8	0,211
18-20	3/4	1"1/16-12	8006 20 00	09-100/20	27	54,9	0,300
25	1	1"5/16-12	8006 25 00	09-100/25	36	57,2	0,515
30-32	1"1/4	1"5/8-12	8006 32 00	09-100/32	46	61,7	0,825
38	1"1/2	1"7/8-12	8006 38 00	09-100/38	50	69,8	1,345

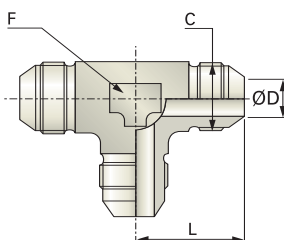
Equal elbows



ØD mm	ØD inch	C UN/UNF		Bell code	F	L	
6	1/4	7/16-20	8002 06 00	09-110/6	11	22,6	0,045
8	5/16	1/2-20	8002 08 00	09-110/8	13	24,1	0,071
10	3/8	9/16-18	8002 10 00	09-110/10	14	26,9	0,097
12	1/2	3/4-16	8002 12 00	09-110/12	19	31,8	0,153
14-15-16	5/8	7/8-14	8002 16 00	09-110/16	22	36,8	0,256
18-20	3/4	1"1/16-12	8002 20 00	09-110/20	27	42,2	0,385
25	1	1"5/16-12	8002 25 00	09-110/25	32	46	0,630
30-32	1"1/4	1"5/8-12	8002 32 00	09-110/32	41	52,3	1,040
38	1"1/2	1"7/8-12	8002 38 00	09-110/38	48	59,2	1,710

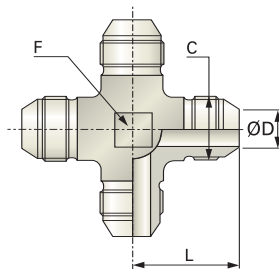
153

Equal tees



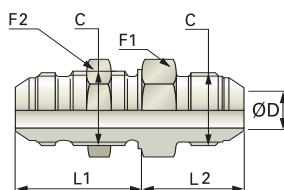
ØD mm	ØD inch	C UN/UNF		Bell code	F	L	
6	1/4	7/16-20	8004 06 00	09-120/6	11	22,6	0,065
8	5/16	1/2-20	8004 08 00	09-120/8	13	24,1	0,102
10	3/8	9/16-18	8004 10 00	09-120/10	14	26,9	0,139
12	1/2	3/4-16	8004 12 00	09-120/12	19	31,8	0,217
14-15-16	5/8	7/8-14	8004 16 00	09-120/16	22	36,8	0,364
18-20	3/4	1"1/16-12	8004 20 00	09-120/20	27	42,2	0,535
25	1	1"5/16-12	8004 25 00	09-120/25	32	46	0,870
30-32	1"1/4	1"5/8-12	8004 32 00	09-120/32	41	52,3	1,440
38	1"1/2	1"7/8-12	8004 38 00	09-120/38	48	59,2	2,340

Equal crosses



ØD mm	ØD inch	C UN/UNF		Bell code	F	L	
6	1/4	7/16-20	8007 06 00	09-130/6	11	22,6	0,088
8	5/16	1/2-20	8007 08 00	09-130/8	13	24,1	0,137
10	3/8	9/16-18	8007 10 00	09-130/10	14	26,9	0,173
12	1/2	3/4-16	8007 12 00	09-130/12	19	31,8	0,281
14-15-16	5/8	7/8-14	8007 16 00	09-130/16	22	36,8	0,467
18-20	3/4	1"1/16-12	8007 20 00	09-130/20	27	42,2	0,685
25	1	1"5/16-12	8007 25 00	09-130/25	32	46	1,120
30-32	1"1/4	1"5/8-12	8007 32 00	09-130/32	41	52,3	1,800
38	1"1/2	1"7/8-12	8007 38 00	09-130/38	48	59,2	3,000

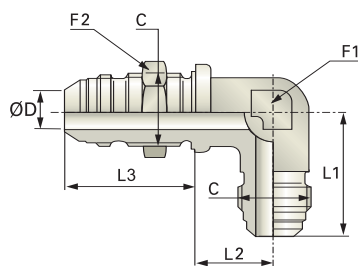
Bulkhead straight couplings



ØD mm	ØD inch	C UN/UNF		Bell code	F1	F2	L1	L2	
6	1/4	7/16-20	8V16 06 00	09-220/6-KM	17	17	31,3	21,3	0,065
8	5/16	1/2-20	8V16 08 00	09-220/8-KM	19	19	31,3	21,3	0,091
10	3/8	9/16-18	8V16 10 00	09-220/10-KM	22	22	33,3	22,1	0,122
12	1/2	3/4-16	8V16 12 00	09-220/12-KM	24	24	37,4	24,6	0,169
14-15-16	5/8	7/8-14	8V16 16 00	09-220/16-KM	30	30	40,9	28,7	0,291
18-20	3/4	1"1/16-12	8V16 20 00	09-220/20-KM	36	36	45,2	33,3	0,456
25	1	1"5/16-12	8V16 25 00	09-220/25-KM	41	41	45,2	34,6	0,673
30-32	1"1/4	1"5/8-12	8V16 32 00	09-220/32-KM	50	50	46,5	37,6	1,054
38	1"1/2	1"7/8-12	8V16 38 00	09-220/38-KM	55	55	46,8	42,6	1,596

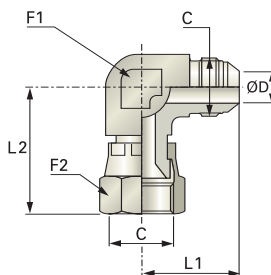
155

Bulkhead elbow couplings



ØD mm	ØD inch	C UN/UNF		Bell code	F1	F2	L1	L2	L3	
6	1/4	7/16-20	8V12 06 00	09/1-220/6-KM	11	17	24,6	12,1	28,3	0,067
8	5/16	1/2-20	8V12 08 00	09/1-220/8-KM	13	19	26,2	12,8	28,3	0,095
10	3/8	9/16-18	8V12 10 00	09/1-220/10-KM	14	22	27,7	15,9	30,1	0,128
12	1/2	3/4-16	8V12 12 00	09/1-220/12-KM	19	24	34,5	18,6	35	0,213
14-15-16	5/8	7/8-14	8V12 16 00	09/1-220/16-KM	22	30	39,6	22,2	38,5	0,331
18-20	3/4	1"1/16-12	8V12 20 00	09/1-220/20-KM	27	36	45,2	25	42,8	0,519
25	1	1"5/16-12	8V12 25 00	09/1-220/25-KM	32	41	49,3	28,3	42,8	0,783
30-32	1"1/4	1"5/8-12	8V12 32 00	09/1-220/32-KM	41	50	55,1	35,1	44,1	1,284
38	1"1/2	1"7/8-12	8V12 38 00	09/1-220/38-KM	48	55	59,4	42,6	44,3	1,980

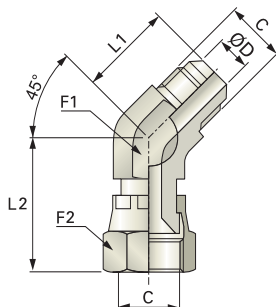
Standpipe elbows



ØD mm	ØD inch	C UN/UNF		Bell code	F1	F2	L1	L2	
6	1/4	7/16-20	8046 06 00	09/1-290/6V	11	14	22,6	25,4	0,041
8	5/16	1/2-20	8046 08 00	09/1-290/8V	13	17	24,1	26,9	0,060
10	3/8	9/16-18	8046 10 00	09/1-290/10V	14	19	26,9	31,8	0,080
12	1/2	3/4-16	8046 12 00	09/1-290/12V	19	22	31,8	35,1	0,130
14-15-16	5/8	7/8-14	8046 16 00	09/1-290/16V	22	27	36,8	41,1	0,220
18-20	3/4	1"1/16-12	8046 20 00	09/1-290/20V	27	32	42,2	44,4	0,326
25	1	1"5/16-12	8046 25 00	09/1-290/25V	32	41	46	50,8	0,530
30-32	1"1/4	1"5/8-12	8046 32 00	09/1-290/32V	41	50	52,3	58,7	0,900
38	1"1/2	1"7/8-12	8046 38 00	09/1-290/38V	48	60	59,2	65,8	1,450

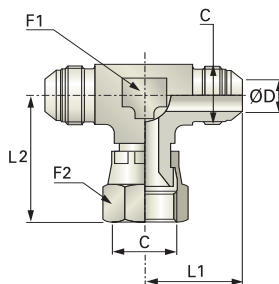
156

45° standpipe elbows



ØD mm	ØD inch	C UN/UNF		Bell code	F1	F2	L1	L2	
6	1/4	7/16-20	8036 06 00	09/7-290/6V	11	14	18,5	24	0,041
8	5/16	1/2-20	8036 08 00	09/7-290/8V	13	17	19,5	25,5	0,064
10	3/8	9/16-18	8036 10 00	09/7-290/10V	14	19	21	28,5	0,087
12	1/2	3/4-16	8036 12 00	09/7-290/12V	19	22	25	32,5	0,138
14-15-16	5/8	7/8-14	8036 16 00	09/7-290/16V	22	27	28	36,5	0,230
18-20	3/4	1"1/16-12	8036 20 00	09/7-290/20V	27	32	32,5	38	0,347
25	1	1"5/16-12	8036 25 00	09/7-290/25V	32	41	37,5	44,5	0,567
30-32	1"1/4	1"5/8-12	8036 32 00	09/7-290/32V	41	50	40,5	51,5	0,936
38	1"1/2	1"7/8-12	8036 38 00	09/7-290/38V	50	60	45	57	1,539

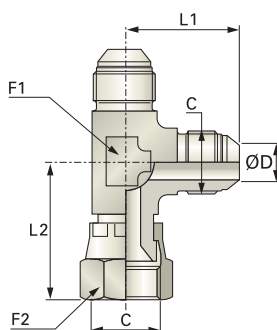
Standpipe branch tees



ØD mm	ØD inch	C UN/UNF		Bell code	F1	F2	L1	L2	
6	1/4	7/16-20	8047 06 00	09/2-290/6V	11	14	22,6	25,4	0,039
8	5/16	1/2-20	8047 08 00	09/2-290/8V	13	17	24,1	26,9	0,054
10	3/8	9/16-18	8047 10 00	09/2-290/10V	14	19	26,9	31,8	0,058
12	1/2	3/4-16	8047 12 00	09/2-290/12V	19	22	31,8	35,1	0,128
14-15-16	5/8	7/8-14	8047 16 00	09/2-290/16V	22	27	36,8	41,1	0,203
18-20	3/4	1"1/16-12	8047 20 00	09/2-290/20V	27	32	42,2	44,4	0,330
25	1	1"5/16-12	8047 25 00	09/2-290/25V	32	41	46	50,8	0,465
30-32	1"1/4	1"5/8-12	8047 32 00	09/2-290/32V	41	50	52,3	58,7	0,808
38	1"1/2	1"7/8-12	8047 38 00	09/2-290/38V	48	60	59,2	65,8	1,196

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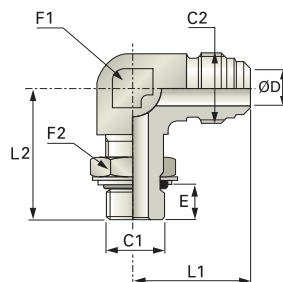
Standpipe run tees



ØD mm	ØD inch	C UN/UNF		Bell code	F1	F2	L1	L2	
6	1/4	7/16-20	8048 06 00	09/3-290/6V	11	14	22,6	25,4	0,063
8	5/16	1/2-20	8048 08 00	09/3-290/8V	13	19	24,1	26,9	0,095
10	3/8	9/16-18	8048 10 00	09/3-290/10V	14	19	26,9	31,8	0,112
12	1/2	3/4-16	8048 12 00	09/3-290/12V	19	19	31,8	35,1	0,196
14-15-16	5/8	7/8-14	8048 16 00	09/3-290/16V	22	22	36,8	41,1	0,329
18-20	3/4	1"1/16-12	8048 20 00	09/3-290/20V	27	27	42,2	44,4	0,500
25	1	1"5/16-12	8048 25 00	09/3-290/25V	32	32	46	50,8	0,785
30-32	1"1/4	1"5/8-12	8048 32 00	09/3-290/32V	41	41	52,3	58,7	1,310
38	1"1/2	1"7/8-12	8048 38 00	09/3-290/38V	48	48	59,2	61,5	2,100

Adjustable male stud elbows with lock nut

BSP parallel
O-ring and lock nut
ISO 1179-3

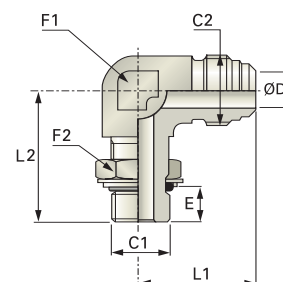


ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F1	F2	L1	L2	kg
6	1/4	G1/8	7/16-20	8099 06 10	09/1-020/6-G1/8	6,5	11	14	22,6	26	0,042
6	1/4	G1/4	7/16-20	8099 06 13	09/1-020/6-G1/4	9,5	14	19	26,9	32	0,071
8	5/16	G1/4	1/2-20	8099 08 13	09/1-020/8-G1/4	9,5	14	19	26,9	33	0,079
10	3/8	G1/4	9/16-18	8099 10 13	09/1-020/10-G1/4	9,5	14	19	26,9	33	0,086
10	3/8	G3/8	9/16-18	8099 10 17	09/1-020/10-G3/8	9,5	19	22	29	37	0,128
12	1/2	G3/8	3/4-16	8099 12 17	09/1-020/12-G3/8	9,5	19	22	31,8	37	0,143
12	1/2	G1/2	3/4-16	8099 12 21	09/1-020/12-G1/2	13	22	27	33,7	43	0,198
14-15-16	5/8	G1/2	7/8-14	8099 16 21	09/1-020/16-G1/2	13	22	27	36,8	43	0,222
18-20	3/4	G1/2	1"1/16-12	8099 20 21	09/1-020/20-G1/2	13	27	27	42,2	49,5	0,329
18-20	3/4	G3/4	1"1/16-12	8099 20 27	09/1-020/20-G3/4	13	27	36	42,2	49,5	0,375
25	1	G3/4	1"5/16-12	8099 25 27	09/1-020/25-G3/4	13	32	36	46	53	0,550
25	1	G1	1"5/16-12	8099 25 34	09/1-020/25-G1	16	32	41	46	53	0,563
30-32	1"1/4	G1"1/4	1"5/8-12	8099 32 42	09/1-020/32-G1 1/4	16	41	50	52,3	58	0,942
38	1"1/2	G1"1/2	1"7/8-12	8099 38 49	09/1-020/38-G1 1/2	16	48	55	59,2	61,5	1,400

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Adjustable male stud elbows with lock nut

metric parallel
O-ring and lock nut



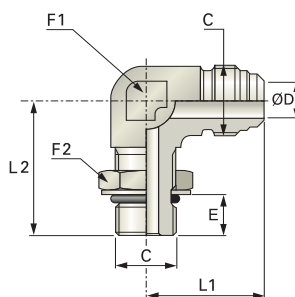
ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F1	F2	L1	L2	kg
6	1/4	M12x1,5	7/16-20	8099 06 67	09/1-020/6-M12X1,5	7,5	14	19	27	32	0,070
8	5/16	M14x1,5	1/2-20	8099 08 71	09/1-020/8-M14X1,5	8,5	14	19	27	32	0,077
10	3/8	M16x1,5	9/16-18	8099 10 75	09/1-020/10-M16X1,5	8,5	19	22	29	37	0,127
12	1/2	M18x1,5	3/4-16	8099 12 78	09/1-020/12-M18X1,5	9	22	24	34	43	0,194
14-15-16	5/8	M22x1,5	7/8-14	8099 16 82	09/1-020/16-M22X1,5	10,5	22	27	37	43	0,225
18-20	3/4	M27x2	1"1/16-12	8099 20 86	09/1-020/20-M27X2	13	27	32	42	49,5	0,354
25	1	M33x2	1"5/16-12	8099 25 91	09/1-020/25-M33X2	13	32	41	46	52	0,556

Adjustable male stud elbows with lock nut

UN, UNF

O-ring

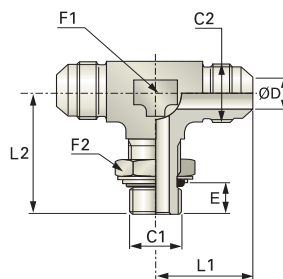
ISO 11926-2/3



ØD mm	ØD inch	C UN/UNF		Bell code	E	F1	F2	L1	L2	O-ring	
6	1/4	7/16-20	8099 06 103	09/1-020/6-7/16-20UNF	9	11	14	22,6	26,2	8,92x1,83	0,044
8	5/16	1/2-20	8099 08 104	09/1-020/8-1/2-20UNF	9	13	17	24,1	27,7	10,52x1,83	0,072
10	3/8	9/16-18	8099 10 105	09/1-020/10-9/16-18UNF	10	14	17	26,9	31,8	11,89x1,98	0,089
12	1/2	3/4-16	8099 12 107	09/1-020/12-3/4-16UNF	11	19	22	31,8	36,8	16,36x2,2	0,162
14-15-16	5/8	7/8-14	8099 16 108	09/1-020/16-7/8-14UNF	12,5	22	27	36,8	43,2	19,18x2,46	0,237
18-20	3/4	1"1/16-12	8099 20 153	09/1-020/20-1 1/16-12UN	15	27	32	42,2	49,3	23,47x2,95	0,379
25	1	1"5/16-12	8099 25 157	09/1-020/25-1 5/16-12UN	15	32	41	46	52,1	29,74x2,95	0,563
30-32	1"1/4	1"5/8-12	8099 32 162	09/1-020/32-1 5/8-12UN	15	41	50	52,3	57,2	37,47x3	0,947
38	1"1/2	1"7/8-12	8099 38 166	09/1-020/38-1 7/8-12UN	15	48	55	59,2	60,7	43,69x3	1,390

Adjustable male stud branch tees with lock nut

BSP parallel
O-ring and lock nut
ISO 1179-3

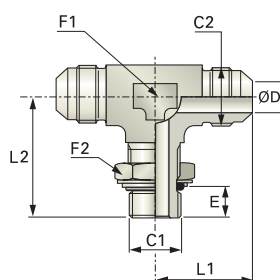


ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F1	F2	L1	L2	kg
6	1/4	G1/8	7/16-20	8098 06 10	09/1-030/6-G1/8	6,5	11	14	22,6	26	0,061
8	5/16	G1/4	1/2-20	8098 08 13	09/1-030/8-G1/4	9,5	14	19	26,9	33	0,112
10	3/8	G1/4	9/16-18	8098 10 13	09/1-030/10-G1/4	9,5	14	19	26,9	33	0,129
12	1/2	G3/8	3/4-16	8098 12 17	09/1-030/12-G3/8	9,5	19	22	31,8	37	0,206
14-15-16	5/8	G1/2	7/8-14	8098 16 21	09/1-030/16-G1/2	13	22	27	36,8	43	0,326
18-20	3/4	G3/4	1"1/16-12	8098 20 27	09/1-030/20-G3/4	13	27	36	42,2	49,5	0,530
25	1	G1	1"5/16-12	8098 25 34	09/1-030/25-G1	16	32	41	46	53	0,803
30-32	1"1/4	G1"1/4	1"5/8-12	8098 32 42	09/1-030/32-G1 1/4	16	41	50	52,3	58	1,320
38	1"1/2	G1"1/2	1"7/8-12	8098 38 49	09/1-030/38-G1 1/2	16	48	55	59,2	61,5	2,040

160

Adjustable male stud branch tees with lock nut

metric parallel
O-ring and lock nut



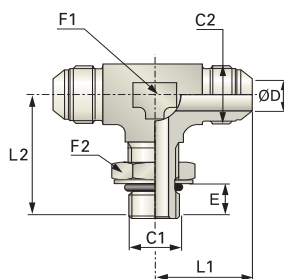
ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F1	F2	L1	L2	kg
6	1/4	M12x1,5	7/16-20	8098 06 67	09/1-030/6-M12X1,5	7,5	14	19	27	32	0,092
8	5/16	M14x1,5	1/2-20	8098 08 71	09/1-030/8-M14X1,5	8,5	14	19	27	32	0,110
10	3/8	M16x1,5	9/16-18	8098 10 75	09/1-030/10-M16X1,5	8,5	19	22	29	37	0,192
12	1/2	M18x1,5	3/4-16	8098 12 78	09/1-030/12-M18X1,5	9	22	24	34	43	0,238
14-15-16	5/8	M22x1,5	7/8-14	8098 16 82	09/1-030/16-M22X1,5	10,5	22	27	37	43	0,324
18-20	3/4	M27x2	1"1/16-12	8098 20 86	09/1-030/20-M27X2	13	27	32	42	49,5	0,509
25	1	M33x2	1"5/16-12	8098 25 91	09/1-030/25-M33X2	13	32	41	46	52	0,796

Adjustable male stud branch tees with lock nut

UN, UNF

O-ring

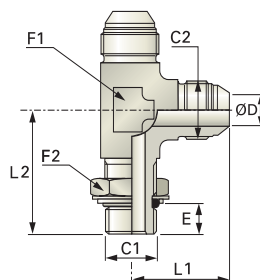
ISO 11926-2/3



ØD mm	ØD inch	C UN/UNF		Bell code	E	F1	F2	L1	L2	O-ring	
6	1/4	7/16-20	8098 06 103	09/1-030/6-7/16-20UNF	9	11	14	22,6	26,2	8,92x1,83	0,066
8	5/16	1/2-20	8098 08 104	09/1-030/8-1/2-20UNF	9	13	17	24,1	27,7	10,52x1,83	0,098
10	3/8	9/16-18	8098 10 105	09/1-030/10-9/16-18UNF	10	14	17	26,9	31,8	11,89x1,98	0,132
12	1/2	3/4-16	8098 12 107	09/1-030/12-3/4-16UNF	11	19	22	31,8	36,8	16,36x2,2	0,216
14-15-16	5/8	7/8-14	8098 16 108	09/1-030/16-7/8-14UNF	12,5	22	27	36,8	43,2	19,18x2,46	0,450
18-20	3/4	1"1/16-12	8098 20 153	09/1-030/20-1 1/16-12UN	15	27	32	42,2	49,3	23,47x2,95	0,534
25	1	1"5/16-12	8098 25 157	09/1-030/25-1 5/16-12UN	15	32	41	46	52,1	29,74x2,95	0,803
30-32	1"1/4	1"5/8-12	8098 32 162	09/1-030/32-1 5/8-12UN	15	41	50	52,3	57,2	37,47x3	1,320
38	1"1/2	1"7/8-12	8098 38 166	09/1-030/38-1 7/8-12UN	15	48	55	59,2	60,7	43,69x3	2,030

Adjustable male stud run tees with lock nut

BSP parallel
O-ring and lock nut
ISO 1179-3

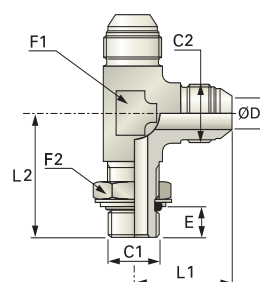


ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F1	F2	L1	L2	kg
6	1/4	G1/8	7/16-20	8093 06 10	09/1-040/6-G1/8	6,5	11	14	22,6	26	0,061
8	5/16	G1/4	1/2-20	8093 08 13	09/1-040/8-G1/4	9,5	14	19	26,9	33	0,112
10	3/8	G1/4	9/16-18	8093 10 13	09/1-040/10-G1/4	9,5	14	19	26,9	33	0,129
12	1/2	G3/8	3/4-16	8093 12 17	09/1-040/12-G3/8	9,5	19	22	31,8	37	0,206
14-15-16	5/8	G1/2	7/8-14	8093 16 21	09/1-040/16-G1/2	13	22	27	36,8	43	0,326
18-20	3/4	G3/4	1"1/16-12	8093 20 27	09/1-040/20-G3/4	13	27	36	42,2	49,5	0,530
25	1	G1	1"5/16-12	8093 25 34	09/1-040/25-G1	16	32	41	46	53	0,803
30-32	1"1/4	G1"1/4	1"5/8-12	8093 32 42	09/1-040/32-G1 1/4	16	41	50	52,3	58	1,320
38	1"1/2	G1"1/2	1"7/8-12	8093 38 49	09/1-040/38-G1 1/2	16	48	55	59,2	61,5	2,040

162

Adjustable male stud run tees with lock nut

metric parallel
O-ring and lock nut



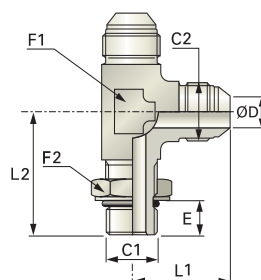
ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F1	F2	L1	L2	kg
6	1/4	M12x1,5	7/16-20	8093 06 67	09/1-040/6-M12X1,5	7,5	14	19	27	32	0,092
8	5/16	M14x1,5	1/2-20	8093 08 71	09/1-040/8-M14X1,5	8,5	14	19	27	32	0,110
10	3/8	M16x1,5	9/16-18	8093 10 75	09/1-040/10-M16X1,5	8,5	19	22	29	37	0,192
12	1/2	M18x1,5	3/4-16	8093 12 78	09/1-040/12-M18X1,5	9	22	24	34	43	0,238
14-15-16	5/8	M22x1,5	7/8-14	8093 16 82	09/1-040/16-M22X1,5	10,5	22	27	37	43	0,324
18-20	3/4	M27x2	1"1/16-12	8093 20 86	09/1-040/20-M27X2	13	27	32	42	49,5	0,509
25	1	M33x2	1"5/16-12	8093 25 91	09/1-040/25-M33X2	13	32	41	46	52	0,796

Adjustable male stud run tees with lock nut

UN, UNF

O-ring

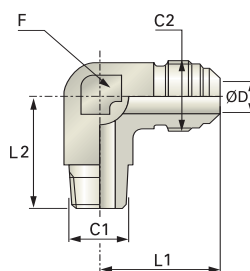
ISO 11926-2/3



ØD mm	ØD inch	C UN/UNF		Bell code	E	F1	F2	L1	L2	O-ring	
6	1/4	7/16-20	8093 06 103	09/1-040/6-7/16-20UNF	9	11	14	22,6	26,2	8,92x1,83	0,066
8	5/16	1/2-20	8093 08 104	09/1-040/8-1/2-20UNF	9	13	17	24,1	27,7	10,52x1,83	0,098
10	3/8	9/16-18	8093 10 105	09/1-040/10-9/16-18UNF	10	14	17	26,9	31,8	11,89x1,98	0,132
12	1/2	3/4-16	8093 12 107	09/1-040/12-3/4-16UNF	11	19	22	31,8	36,8	16,36x2,2	0,216
14-15-16	5/8	7/8-14	8093 16 108	09/1-040/16-7/8-14UNF	12,5	22	27	36,8	43,2	19,18x2,46	0,450
18-20	3/4	1"1/16-12	8093 20 153	09/1-040/20-1 1/16-12UN	15	27	32	42,2	49,3	23,47x2,95	0,534
25	1	1"5/16-12	8093 25 157	09/1-040/25-1 5/16-12UN	15	32	41	46	52,1	29,74x2,95	0,803
30-32	1"1/4	1"5/8-12	8093 32 162	09/1-040/32-1 5/8-12UN	15	41	50	52,3	57,2	37,47x3	1,320
38	1"1/2	1"7/8-12	8093 38 166	09/1-040/38-1 7/8-12UN	15	48	55	59,2	60,7	43,69x3	2,030

Male stud elbows

BSPT
ISO 7

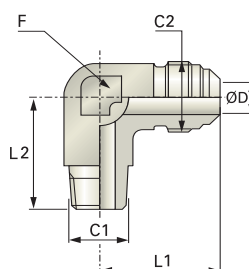


ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	F	L1	L2	kg
6	1/4	R1/8	7/16-20	8009 06 10	09-020/6-RK1/8	11	22,6	19,8	0,032
6	1/4	R1/4	7/16-20	8009 06 13	09-020/6-RK1/4	14	26,9	27,7	0,052
8	5/16	R1/8	1/2-20	8009 08 10	09-020/8-RK1/8	13	24,1	19,8	0,049
8	5/16	R1/4	1/2-20	8009 08 13	09-020/8-RK1/4	14	26,9	27,7	0,053
10	3/8	R1/4	9/16-18	8009 10 13	09-020/10-RK1/4	14	26,9	27,7	0,067
10	3/8	R3/8	9/16-18	8009 10 17	09-020/10-RK3/8	19	29	31	0,095
10	3/8	R1/2	9/16-18	8009 10 21	09-020/10-RK1/2	22	31,2	37,3	0,149
12	1/2	R1/4	3/4-16	8009 12 13	09-020/12-RK1/4	19	31,8	31	0,117
12	1/2	R3/8	3/4-16	8009 12 17	09-020/12-RK3/8	19	31,8	31	0,120
12	1/2	R1/2	3/4-16	8009 12 21	09-020/12-RK1/2	22	33,7	37,3	0,169
14-15-16	5/8	R3/8	7/8-14	8009 16 17	09-020/16-RK3/8	22	36,8	33	0,193
14-15-16	5/8	R1/2	7/8-14	8009 16 21	09-020/16-RK1/2	22	36,8	37,3	0,200
14-15-16	5/8	R3/4	7/8-14	8009 16 27	09-020/16-RK3/4	27	38,9	40,4	0,263
18-20	3/4	R1/2	1"1/16-12	8009 20 21	09-020/20-RK1/2	27	42,2	40,4	0,295
18-20	3/4	R3/4	1"1/16-12	8009 20 27	09-020/20-RK3/4	27	42,2	40,4	0,305
25	1	R3/4	1"5/16-12	8009 25 27	09-020/25-RK3/4	32	46	45,2	0,480
30-32	1"1/4	R1"1/4	1"5/8-12	8009 32 42	09-020/32-RK1 1/4	41	52,3	60,5	0,860

164

Male stud elbows

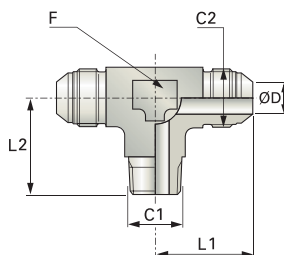
NPT



ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	F	L1	L2	kg
6	1/4	1/8	7/16-20	8009 06 11	09-020/6-NPT1/8	11	22,6	19,8	0,032
8	5/16	1/8	1/2-20	8009 08 11	09-020/8-NPT1/8	13	24,1	19,8	0,049
8	5/16	1/4	1/2-20	8009 08 14	09-020/8-NPT1/4	14	26,9	27,7	0,053
10	3/8	1/4	9/16-18	8009 10 14	09-020/10-NPT1/4	14	26,9	27,7	0,067
12	1/2	1/2	3/4-16	8009 12 22	09-020/12-NPT1/2	22	33,7	37,3	0,169
14-15-16	5/8	1/2	7/8-14	8009 16 22	09-020/16-NPT1/2	22	36,8	37,3	0,200
14-15-16	5/8	3/4	7/8-14	8009 16 28	09-020/16-NPT3/4	27	38,9	40,4	0,263
18-20	3/4	3/4	1"1/16-12	8009 20 28	09-020/20-NPT3/4	27	42,2	40,4	0,305
25	1	3/4	1"5/16-12	8009 25 34	09-020/25-NPT3/4	32	46	50	0,510
25	1	1	1"5/16-12	8009 25 35	09-020/25-NPT1	32	46	50	0,510
30-32	1"1/4	1"1/4	1"5/8-12	8009 32 43	09-020/32-NPT1 1/4	41	52,3	60,5	0,860

Male stud branch tees

BSPT
ISO 7

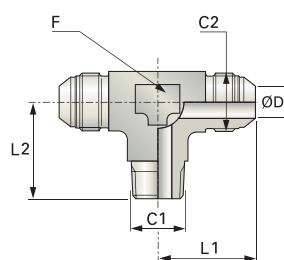


ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	F	L1	L2	
6	1/4	R1/8	7/16-20	8008 06 10	09-030/6-RK1/8	11	22,6	19,8	0,052
8	5/16	R1/8	1/2-20	8008 08 10	09-030/8-RK1/4	13	24,1	19,8	0,081
10	3/8	R1/4	9/16-18	8008 10 13	09-030/10-RK1/4	14	26,9	27,7	0,111
12	1/2	R3/8	3/4-16	8008 12 17	09-030/12-RK3/8	19	31,8	31	0,183
14-15-16	5/8	R1/2	7/8-14	8008 16 21	09-030/16-RK1/2	22	36,8	37,3	0,294
18-20	3/4	R3/4	1"1/16-12	8008 20 27	09-030/20-RK3/4	27	42,2	40,4	0,458
25	1	R1	1"5/16-12	8008 25 34	09-030/25-RK1	32	46	50	0,720

165

Male stud branch tees

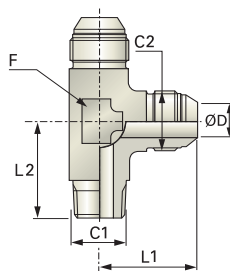
NPT



ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	F	L1	L2	
6	1/4	1/8	7/16-20	8008 06 11	09-030/6-NPT1/8	11	22,6	19,8	0,052
8	5/16	1/8	1/2-20	8008 08 11	09-030/8-NPT1/8	13	24,1	19,8	0,081
10	3/8	1/4	9/16-18	8008 10 14	09-030/10-NPT1/4	14	26,9	27,7	0,111
12	1/2	3/8	3/4-16	8008 12 18	09-030/12-NPT3/8	19	31,8	31	0,183
14-15-16	5/8	1/2	7/8-14	8008 16 22	09-030/16-NPT1/2	22	36,8	37,3	0,294
18-20	3/4	3/4	1"1/16-12	8008 20 28	09-030/20-NPT3/4	27	42,2	40,4	0,458
25	1	1	1"5/16-12	8008 25 35	09-030/25-NPT1	32	46	50	0,720

Male stud run tees

BSPT
ISO 7

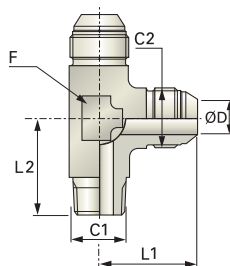


ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	F	L1	L2	kg
6	1/4	R1/8	7/16-20	8003 06 10	09-040/6-RK1/8	11	22,6	19,8	0,052
8	5/16	R1/8	1/2-20	8003 08 10	09-040/8-RK1/8	13	24,1	19,8	0,081
10	3/8	R1/4	9/16-18	8003 10 13	09-040/10-RK1/4	14	26,9	27,7	0,111
12	1/2	R3/8	3/4-16	8003 12 17	09-040/12-RK3/8	19	31,8	31	0,183
14-15-16	5/8	R1/2	7/8-14	8003 16 21	09-040/16-RK1/2	22	36,8	37,3	0,294
18-20	3/4	R3/4	1"1/16-12	8003 20 27	09-040/20-RK3/4	27	42,2	40,4	0,458
25	1	R1	1"5/16-12	8003 25 34	09-040/25-RK1	32	46	50	0,720

166

Male stud run tees

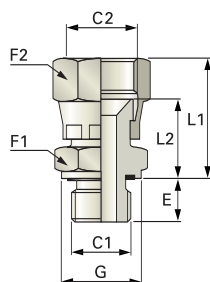
NPT



ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	F	L1	L2	kg
6	1/4	1/8	7/16-20	8003 06 11	09-040/6-NPT1/8	11	22,9	19,8	0,052
8	5/16	1/8	1/2-20	8003 08 11	09-040/8-NPT1/8	13	24,1	19,8	0,081
10	3/8	1/4	9/16-18	8003 10 14	09-040/10-NPT1/4	14	26,9	27,7	0,111
12	1/2	3/8	3/4-16	8003 12 18	09-040/12-NPT3/8	19	31,8	31	0,183
14-15-16	5/8	1/2	7/8-14	8003 16 22	09-040/16-NPT1/2	22	36,8	37,3	0,294
18-20	3/4	3/4	1"1/16-12	8003 20 28	09-040/20-NPT3/4	27	42,2	40,4	0,458
25	1	1	1"5/16-12	8003 25 35	09-040/25-NPT1	32	46	50	0,720

Adjustable male stud standpipes

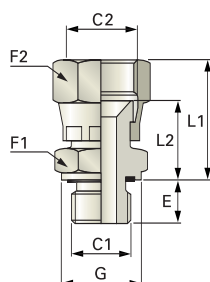
BSP parallel
elastomer seal
ISO 1179-2



ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F1	F2	G	L1	L2	
6	1/4	G1/8	7/16-20	8441 06 10	09-28/6-RD1/8	6,5	14	14	13,9	25,6	16,9	0,024
8	5/16	G1/4	1/2-20	8441 08 13	09-28/8-RD1/4	9,5	19	17	18,9	26,5	17	0,045
10	3/8	G1/4	9/16-18	8441 10 13	09-28/10-RD1/4	9,5	19	19	18,9	27,5	18	0,049
10	3/8	G3/8	9/16-18	8441 10 17	09-28/10-RD3/8	9,5	22	19	21,9	28,5	19	0,064
12	1/2	G3/8	3/4-16	8441 12 17	09-28/12-RD3/8	12	22	22	21,9	39,5	20,5	0,072
14-15-16	5/8	G1/2	7/8-14	8441 16 21	09-28/16-RD1/2	13	30	27	26,9	35,9	23,2	0,135
18-20	3/4	G3/4	1"1/16-12	8441 20 27	09-28/20-RD3/4	13	36	32	31,9	38,3	24	0,193
25	1	G1	1"5/16-12	8441 25 34	09-28/25-RD1	16	46	41	39,9	43,1	28	0,357
30-32	1"1/4	G1"1/4	1"5/8-12	8441 32 42	09-28/32-RD1 1/4	16	50	50	49,9	48,4	32,5	0,519
38	1"1/2	G1"1/2	1"7/8-12	8441 38 49	09-28/38-RD1 1/2	16	55	60	54,9	53,6	35	0,712

Adjustable male stud standpipes

metric parallel
elastomer seal
ISO 9974-2



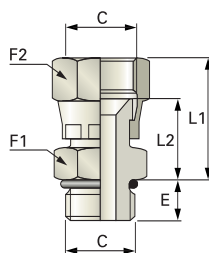
ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F1	F2	G	L1	L2	
6	1/4	M10x1	7/16-20	8441 06 60	09-28/6-MD10X1	8	14	14	13,9	25,2	16,5	0,025
8	5/16	M12x1,5	1/2-20	8441 08 67	09-28/8-MD12X1,5	12	17	17	16,9	26,5	17	0,042
10	3/8	M14x1,5	9/16-18	8441 10 71	09-28/10-MD14X1,5	12	19	19	18,9	27	17,5	0,052
12	1/2	M16x1,5	3/4-16	8441 12 75	09-28/12-MD16X1,5	12	22	22	21,9	30,7	20	0,072
14-15-16	5/8	M22x1,5	7/8-14	8441 16 82	09-28/16-MD22X1,5	14	27	27	26,9	35,7	23	0,122
18-20	3/4	M27x2	1"1/16-12	8441 20 86	09-28/20-MD27X2	16	32	32	31,9	38,3	24	0,181
25	1	M33x2	1"5/16-12	8441 25 91	09-28/25-MD33X2	18	41	41	39,9	43,1	28	0,321
30-32	1"1/4	M42x2	1"5/8-12	8441 32 96	09-28/32-MD42X2	20	50	50	49,9	48,6	32,5	0,544

Adjustable male stud standpipes

UN, UNF

O-ring

ISO 11926-2/3

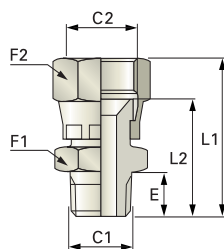


ØD mm	ØD inch	C UN/UNF		Bell code	E	F1	F2	L1	L2	O-ring	
6	1/4	7/16-20	8441 06 103	09-28/6-7/16-20UNF	9	14	14	25,3	16,6	8,92x1,83	0,027
8	5/16	1/2-20	8441 08 104	09-28/8-1/2-20UNF	9	17	17	26,1	16,6	10,52x1,83	0,039
10	3/8	9/16-18	8441 10 105	09-28/10-9/16-18UNF	10	17	19	28	18,5	11,89x1,98	0,047
12	1/2	3/4-16	8441 12 107	09-28/12-3/4-16UNF	11	22	22	31,2	20,5	16,36x2,2	0,073
14-15-16	5/8	7/8-14	8441 16 108	09-28/16-7/8-14UNF	12,7	27	27	35,5	22,8	19,18x2,46	0,123
18-20	3/4	1"1/16-12	8441 20 153	09-28/20-1 1/16-12UN	15	32	32	38,6	24,3	23,47x2,95	0,195
25	1	1"5/16-12*	8441 25 157	09-28/25-1 5/16-12UN	15	41*	41	42,4	27,3	29,47x2,95	0,346
30-32	1"1/4	1"5/8-12	8441 32 162	09-28/32-1 5/8-12UN	15	50	50	48	32,1	37,47x3	0,505

* With shoulder Ø 38,2

Adjustable male stud standpipes

BSPT
ISO 7

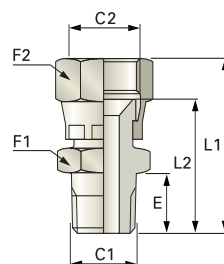


ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F1	F2	L1	L2	
6	1/4	R1/4	7/16-20	8445 06 13	09-28/6-RK1/4	14,2	14	14	38,4	29,7	0,033
8	5/16	R1/4	1/2-20	8445 08 13	09-28/8-RK1/4	14,2	14	17	39,2	29,7	0,037
10	3/8	R1/4	9/16-18	8445 10 13	09-28/10-RK1/4	14,2	14	19	40,2	30,7	0,041
12	1/2	R1/4	3/4-16	8445 12 13	09-28/12-RK1/4	14,2	19	22	42,7	32	0,058
12	1/2	R3/8	3/4-16	8445 12 17	09-28/12-RK3/8	14,2	19	22	42,7	32	0,064
14-15-16	5/8	R1/2	7/8-14	8445 16 21	09-28/16-RK1/2	19	22	27	51,3	38,6	0,105
18-20	3/4	R1/2	1"1/16-12	8445 20 21	09-28/20-RK1/2	19	27	32	54,5	40,2	0,146
25	1	R1	1"5/16-12	8445 25 34	09-28/25-RK1	23,9	36	50	64,5	48,6	0,285
30-32	1"1/4	R1"1/4	1"5/8-12	8445 32 42	09-28/32-RK1 1/4	24,6	46	50	68,9	53	0,482
38	1"1/2	R1"1/2	1"7/8-12	8445 38 49	09-28/38-RK1 1/2	25,4	50	60	74,6	56	0,664

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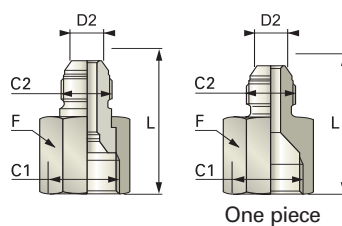
Adjustable male stud standpipes

NPT



ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	E	F1	F2	L1	L2	
6	1/4	1/4	7/16-20	8445 06 14	09-28/6-NPT1/4	15,1	14	14	38,4	29,7	0,033
8	5/16	1/4	1/2-20	8445 08 14	09-28/8-NPT1/4	15,1	14	17	39,2	29,7	0,037
10	3/8	1/4	9/16-18	8445 10 14	09-28/10-NPT1/4	15,1	14	19	40,2	30,7	0,041
12	1/2	3/8	3/4-16	8445 12 18	09-28/12-NPT3/8	15,25	19	22	42,7	32	0,064
14-15-16	5/8	1/2	7/8-14	8445 16 22	09-28/16-NPT1/2	19,85	22	27	51,3	38,6	0,105
18-20	3/4	1/2	1"1/16-12	8445 20 22	09-28/20-NPT1/2	19,85	27	32	54,5	40,2	0,146
25	1	3/4	1"5/16-12	8445 25 28	09-28/25-NPT3/4	20,15	32	41	58,8	43,7	0,212
30-32	1"1/4	1"1/4	1"5/8-12	8445 32 43	09-28/32-NPT1 1/4	25,62	46	50	68,9	53	0,482
38	1"1/2	1"1/2	1"7/8-12	8445 38 50	09-28/38-NPT1 1/2	26	50	60	76,2	57,6	0,664

Reducing couplings for tubes

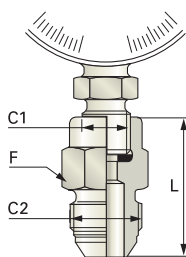


ØD1	ØD2	ØD1 inch	ØD2 inch	C1 UN/UNF	C2 UN/UNF		Bell code	F	L	
10	6	3/8	1/4	9/16-18	7/16-20	8066 10 06	09-290/10-6V	19	35,6	0,048
12	6	1/2	1/4	3/4-16	7/16-20	8066 12 06	09-290/12-6V	22	38,2	0,056
12	8	1/2	5/16	3/4-16	1/2-20	8066 12 08	09-290/12-8V	22	38,2	0,067
12	10	1/2	3/8	3/4-16	9/16-18	8066 12 10	09-290/12-10V	22	38,2	0,070
14-15-16	10	5/8	3/8	7/8-14	9/16-18	8066 16 10	09-290/16-10V	27	41,2	0,105
18-20	10	3/4	3/8	1"1/16-12	9/16-18	8066 20 10	09-290/20-10V	32	42,8	0,134
18-20	12	3/4	1/2	1"1/16-12	3/4-16	8066 20 12	09-290/20-12V	32	45,3	0,154
18-20	16	3/4	5/8	1"1/16-12	7/8-14	8066 20 16*	09-290/20-16	32	42,1	0,171
25	20	1	3/4	1"5/16-12	1"1/16-12	8066 25 20	09-290/25-20V	41	54,6	0,318

* one piece

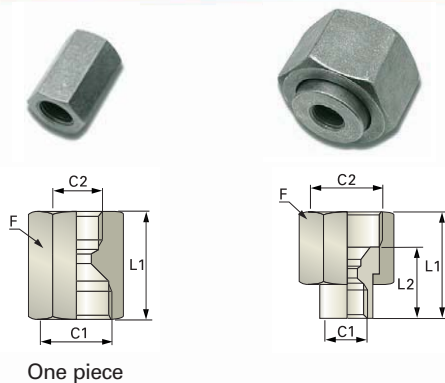
Pressure gauge connectors

BSP parallel



ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	F	L	
6	1/4	G1/4	7/16-20	8014 06 13	09-230/6-R1/4-CU	19	31	0,047
6	1/4	G1/2	7/16-20	8014 06 21	09-230/6-R1/2-CU	27	41	0,098
8	5/16	G1/4	1/2-20	8014 08 13	09-230/8-R1/4-CU	19	28	0,051
8	5/16	G1/2	1/2-20	8014 08 21	09-230/8-R1/2-CU	27	41	0,107
10	3/8	G1/4	9/16-18	8014 10 13	09-230/10-R1/4-CU	19	28	0,061
10	3/8	G1/2	9/16-18	8014 10 21	09-230/10-R1/2-CU	27	35	0,098
12	1/2	G1/4	3/4-16	8014 12 13	09-230/12-R1/4-CU	19	31	0,081
12	1/2	G1/2	3/4-16	8014 12 21	09-230/12-R1/2-CU	27	38	0,120

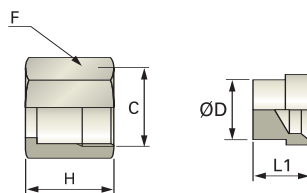
Adaptors for pressure gauge connection



ØD mm	ØD inch	C1	C2 UN/UNF		Bell code	F	L1	L2	
6	1/4	G1/4	7/16-20	8415 06 13*	09-400/6-R1/4	19	29		0,024
8	5/16	G1/4	1/2-20	8415 08 13*	09-400/8-R1/4	19	29		0,022
10	3/8	G1/4	9/16-18	8415 10 13*	09-400/10-R1/4	19	29		0,020
12	1/2	G1/4	3/4-16	8415 12 13*	09-400/12-R1/4	22	32		0,062
14-15-16	5/8	G1/4	7/8-14	8415 16 13*	09-400/16-R1/4	27	33		0,105
18-20	3/4	G1/4	1"1/16-12	8415 20 13	09-40/20-R1/4	32	35	19,9	0,110
25	1	G1/4	1"5/16-12	8415 25 13	09-40/25-R1/4	41	35	17,7	0,197
30-32	1"1/4	G1/4	1"5/8-12	8415 32 13	09-40/32-R1/4	50	37	19,1	0,320
38	1"1/2	G1/4	1"7/8-12	8415 38 13	09-40/38-R1/4	60	43	21,9	0,550

* One piece

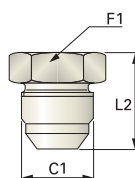
Standpipe end plug with nut



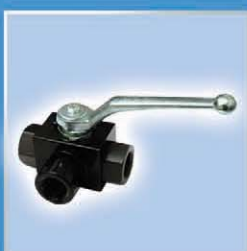
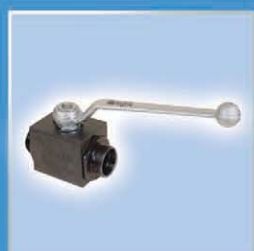
ØD mm	ØD inch		Bell code	F	H	L1	
6	1/4	8426 06 01	09-37/6	14	15,5	11	0,004
8	5/16	8426 08 01	09-37/8	17	17	12	0,007
10	3/8	8426 10 01	09-37/10	19	18,3	12	0,008
12	1/2	8426 12 01	09-37/12	22	21,3	14	0,019
14-15-16	5/8	8426 16 01	09-37/16	27	24,6	15	0,027
18-20	3/4	8426 20 01	09-37/20	32	25,9	16	0,040
25	1	8426 25 01	09-37/25	41	28,4	18	0,071
30-32	1 1/4	8426 32 01	09-37/32	50	31	21	0,120
38	1 1/2	8426 38 01	09-37/38	60	35,8	22	0,175

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Socket head port plug



ØD mm	ØD inch	C1 UN/UNF		Bell code	F1	L2	
6	1/4	7/16-20	8425 06 00	09-360/6	12	20,5	0,013
8	5/16	1/2-20	8425 08 00	09-360/8	14	20,5	0,017
10	3/8	9/16-18	8425 10 00	09-360/10	17	21,5	0,019
12	1/2	3/4-16	8425 12 00	09-360/12	19	24	0,039
14-15-16	5/8	7/8-14	8425 16 00	09-360/16	24	28	0,060
18-20	3/4	1 1/16-12	8425 20 00	09-360/20	27	32,5	0,093
25	1	1 5/16-12	8425 25 00	09-360/25	36	34	0,298
30-32	1 1/4	1 5/8-12	8425 32 00	09-360/32	46	37	0,269
38	1 1/2	1 7/8-12	8425 38 00	09-360/38	50	45	0,360





**High pressure
industrial ball valves**

Applications

Legris high pressure ball valves are well suited for a wide range of industrial applications. They are designed both for mobile applications (cargo ships...) and stationary applications (offshore platforms...).



Principle and description

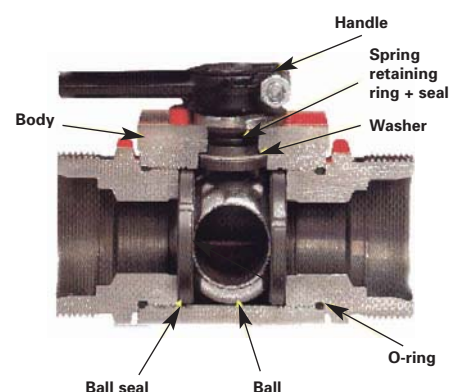
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Operation

This type of ball valve operates according to the floating ball principle. In the closed position, pressure presses the floating ball against the seals, for full sealing. The seals also act as a guide

Two-way ball valves must strictly be used in an open or closed position.

Use in an intermediate position, for controlling the flow, must be avoided.



Technical specifications

Material:

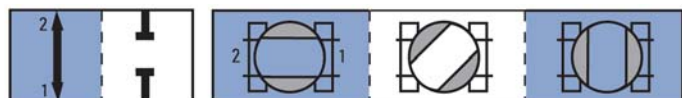
- Body : steel
- Stem : steel
- Ball : hard-chromed brass
- Surface treatment: phosphated

Specifications of seals :

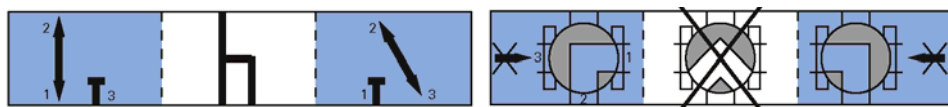
- POM: working temperature : -40°C to +100°C
Characteristics : excellent resistance to high pressures, low absorption of humidity, self-lubricating, limited suitability for low pressures (< 6 bar) with gas fluids.
- NBR: working temperature: - 30°C to +100°C
Characteristics : good wear resistance.
- PTFE: working temperature: - 100°C to + 250°C
Characteristics: good chemical and high temperature resistance, low friction coefficient.
- FPM: working temperature: - 25°C to + 200°C
Characteristics: good chemical and high temperature resistance.

Types of ball valves

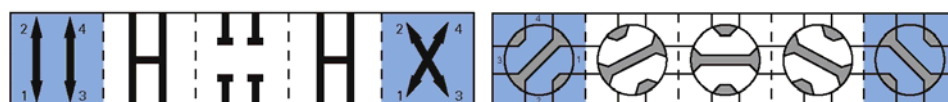
2 way ball valves, full bore (4730-4731)



3 way ball valves, "L" ported (4760)



4 way ball valves, "L" ported (4780)



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Principal advantages

- Large range of diameters: from DN4 to DN50
- Resistance against harsh conditions of use, withstanding high pressures (up to 500 bar) and temperatures.
- Safe sealing ensured by the POM/NBR and PTFE/FPM seals and the ball valve technology
- No leakage in closed position (EN14141) irrespective of the side against which pressure is applied
- Compact dimensions for easy assembly
- Low pressure drop in the open position, due to high fluid flow
- Options available on request : locking device, etc.

Choosing your ball valve

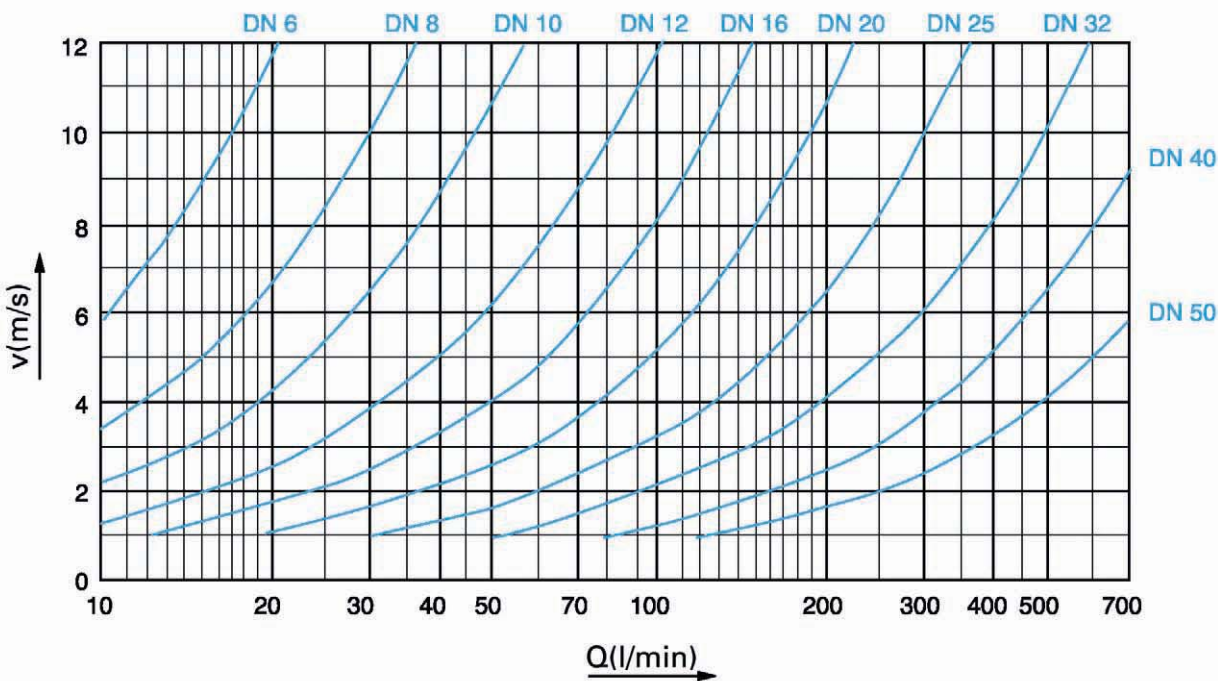
Selection criteria:

- fluid used
- working pressure and flow
- fluid passage area
- working temperature

Select the size of the Legris high pressure ball valve required to optimize the performance and cost of your hydraulic installation:

- too small a diameter increases the flow velocity, causing turbulence and pressure drops
- too large a diameter increases space and installation costs

The chart below shows, for each nominal diameter (DN in mm) the fluid flow speed (V) according to the flow rate (Q):



We recommend that due regard is paid to the following velocities, dependant on the application for which the ball valve will be used.

Description	Pressure	Speed
Suction line	Low	0,5 to 1,5 m/s
Pressure or working line	Working pressure	2,0 to 6,0 m/s
Return line	Low	1,0 to 3,0 m/s
Pilot control line	Pilot control pressure	2,0 to 6,0 m/s
Outlet line	Low	Low

Choosing your ball valve

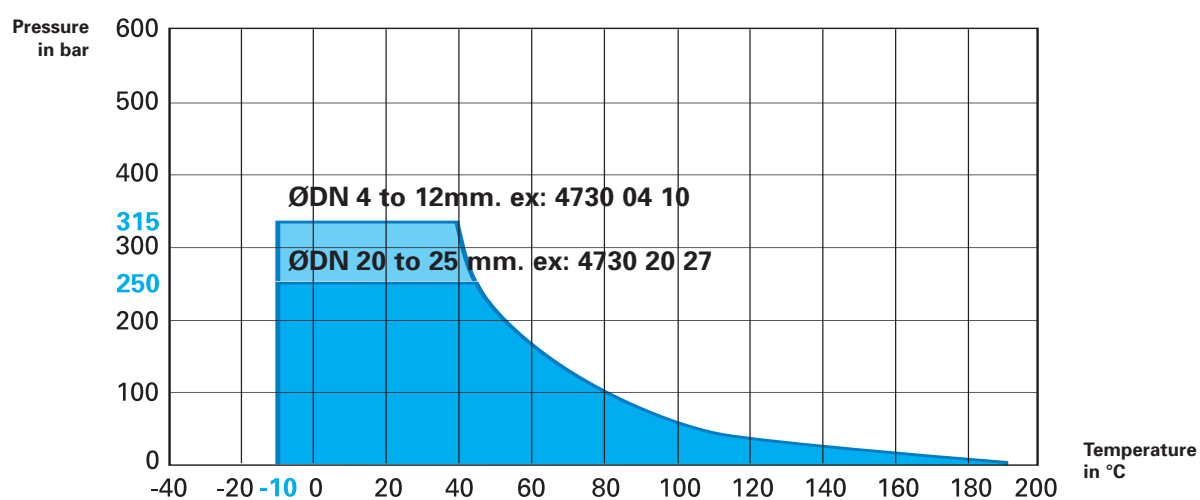
2 way ball valves, full bore, BSP parallel and NPT

Available with PTFE Comp 3 seals or POM/NBR seals

The 2 curves below indicate the maximum acceptable pressure at a given temperature, per passage.

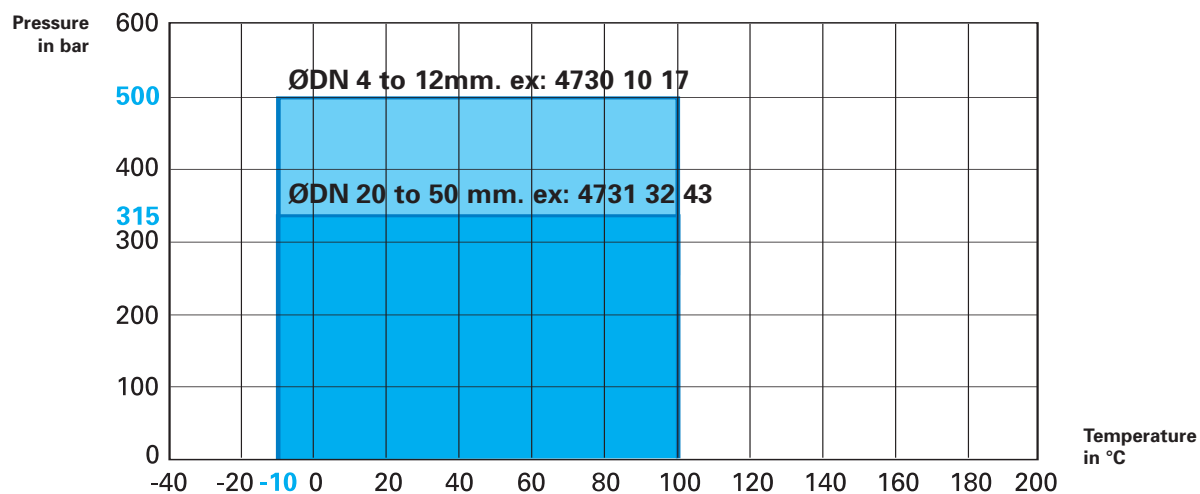
2 way ball valves, full bore, BSP parallel and NPT

PTFE Comp3 seals: Pressure/temperature resistance



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POM/NBR seals: Pressure/temperature resistance

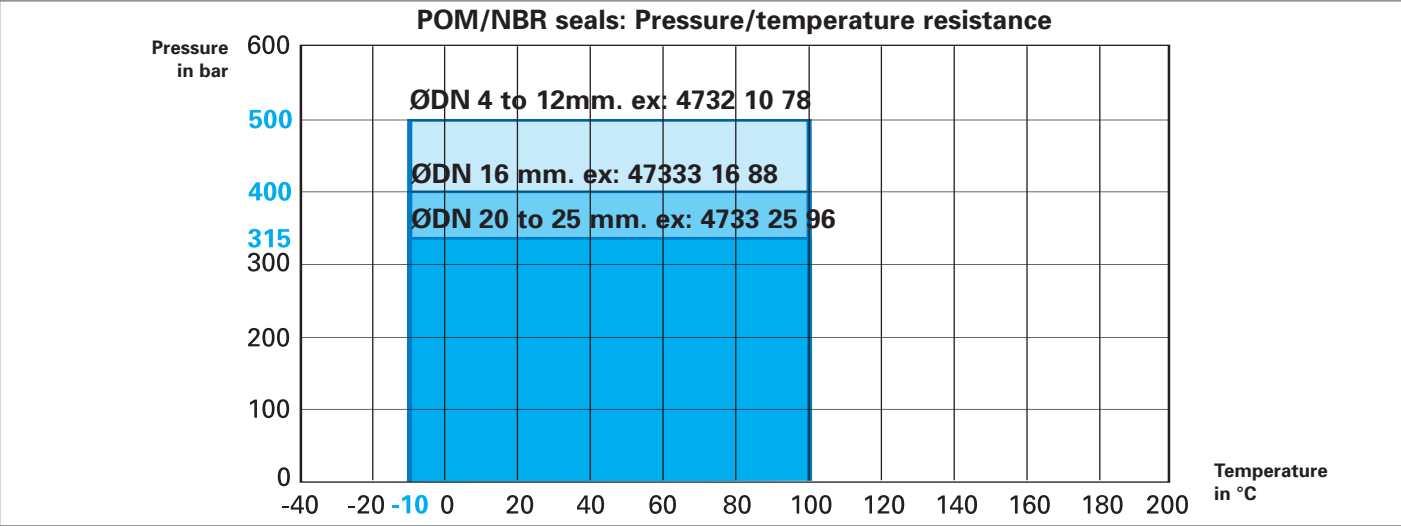


Choosing your ball valve

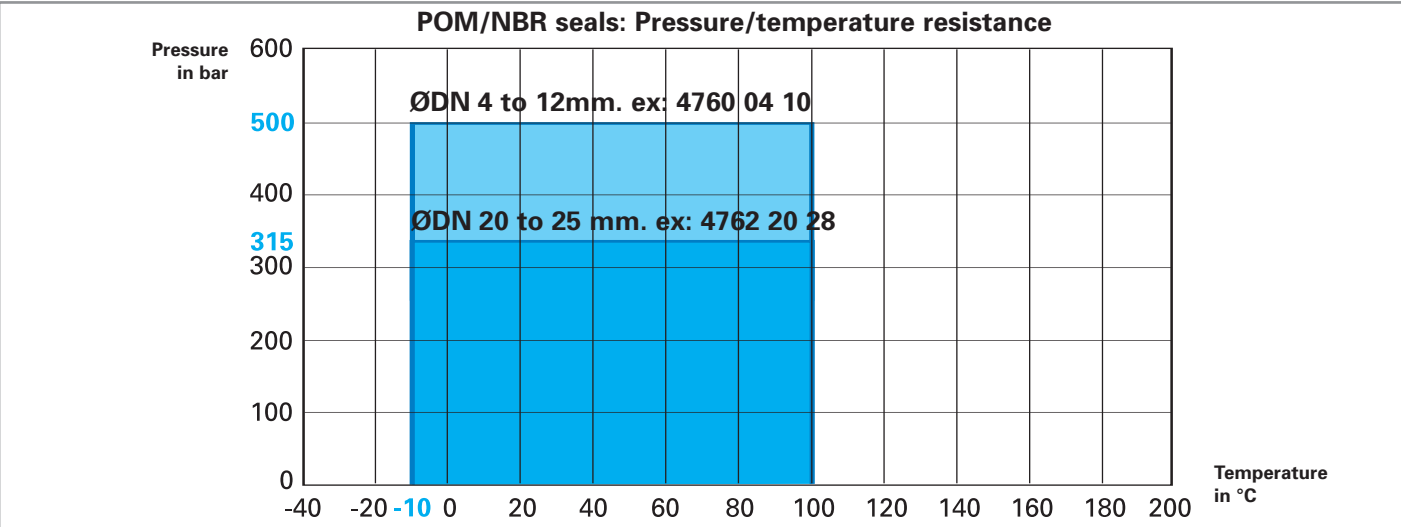
The 3 curves below indicate the pressure/temperature resistance for each type of ball valve with POM/NBR seals.

For each nominal diameter, the acceptable pressure at a given temperature is stated.

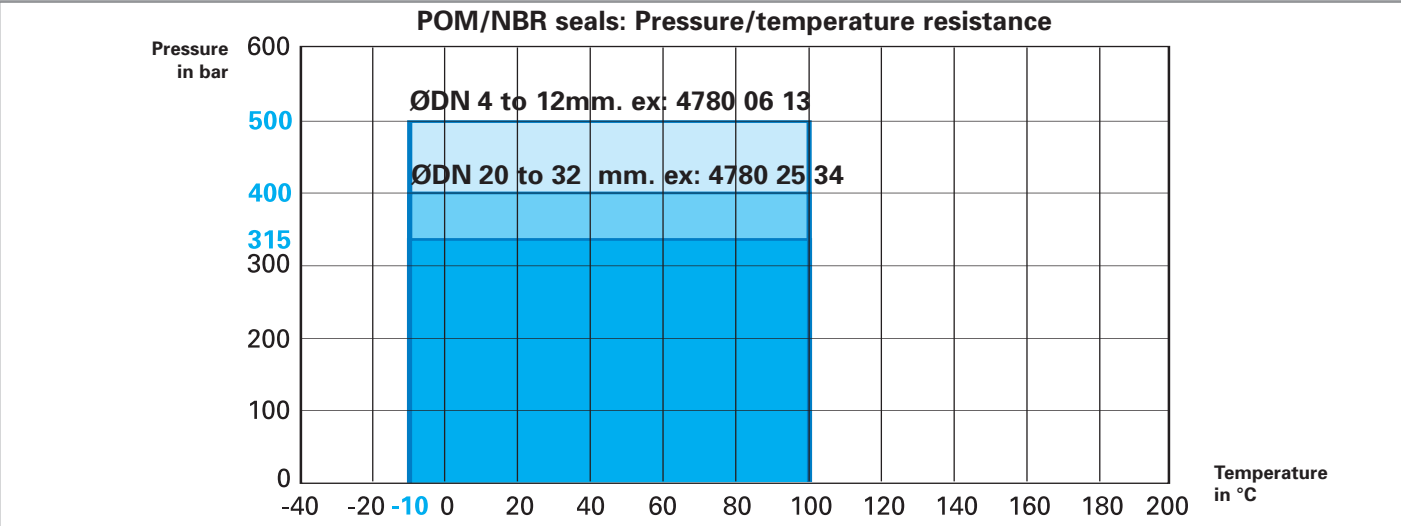
2 way female ball valves



3 way, "L" ported, ball valves



4 way, "L" ported, ball valves



Product offer

2 way, full bore, ball valves

4730-4731

Female,
BSP parallel and NPT



182 183

4732-4733



184

3 way, "L" ported, ball valves

4760-4762

Female,
BSP parallel and NPT



185

4 way, "L" ported, ball valves

4780

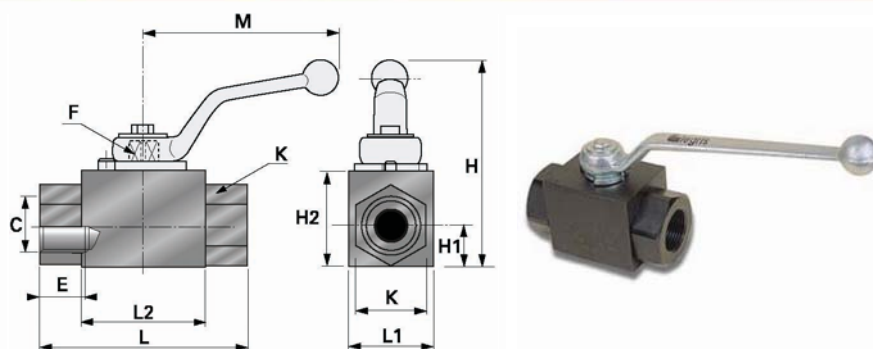
Female,
BSP parallel



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2 way, full bore, ball valves

female, BSP parallel
according to DIN/ISO 228-1
and NPT,
according to ANSI B1.20.1

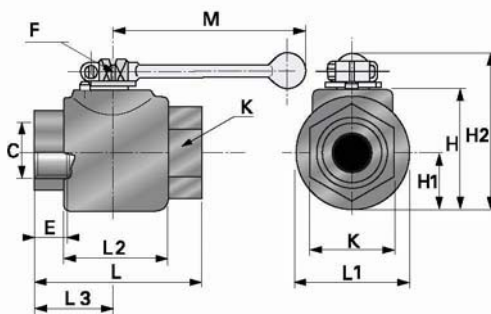


PN POM/NBR	PN PTFE/FPM	DN	C	POM/NBR	PTFE/FPM	E	F	H	H1	H2	K	L	L1	L2	M	
500	315	4	G1/8	4730 04 10	4730 04 10 22	12	7	55	10	25	19	69	20	36	76	0,220
500	315	6	G1/4	4730 06 13	4730 06 13 22	12	7	55	10	25	19	69	20	36	76	0,210
500	315	10	G3/8	4730 10 17	4730 10 17 22	14	8	68	14,5	35	24	73	30	45	100	0,430
500	315	12	G1/2	4730 12 21	4730 12 21 22	15	10	92	17	40	30	82	35	51	112	0,670
315	250	20	G3/4	4730 20 27	4730 20 27 22	18	14	113	24	55	41	93	45	60	187	1,280
315	250	25	G1"	4730 25 34	4730 25 34 22	20	14	118	26	60	50	113	55	70	187	1,970
315	250	25	G1"1/4	4730 25 42*	4730 25 42 22*	20	14	118	26	60	50	134	55	70	187	2,050
315	250	25	G1"1/2	4730 25 49*	4730 25 49 22*	20	14	118	26	60	55	139	55	70	187	2,290
500		4	1/8 NPT	4731 04 11		7	7	55	10	25	19	69	20	36	76	0,220
500		6	1/4 NPT	4731 06 14		10	7	55	10	25	19	69	20	36	76	0,210
500		10	3/8 NPT	4731 10 18		10,4	8	68	14,5	35	24	73	30	45	100	0,430
500		12	1/2 NPT	4731 12 22		13,6	10	92	17	40	30	82	35	51	112	0,670
315		20	3/4 NPT	4731 20 28		14	14	113	24	55	41	93	45	60	187	1,280
315		25	1" NPT	4731 25 35		16,8	14	118	26	60	50	113	55	70	187	1,970
315		25	1"1/4 NPT	4731 25 43*		17,3	14	118	26	60	50	134	55	70	187	2,050
315		25	1"1/2 NPT	4731 25 50*		17,3	14	118	26	60	55	139	55	70	187	2,290

* reduced bore (please consult us for flow details)

2 way, full bore, ball valves

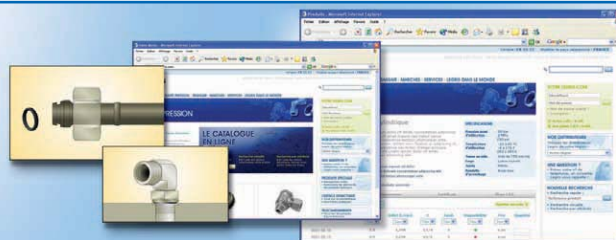
female, BSP parallel
according to DIN/ISO 228-1
and NPT,
according to ANSI B1.20.1



PN	DN	C	 POM/NBR	E	F	H	H1	H2	K	L	L1	L2	L3	M	
315	32	G1"1/4	4730 32 42	20	17	80	36,5	104,5	60	110	73	70	58,5	240	2,370
315	40	G1"1/2	4730 40 49	22	17	90	42,5	114,5	70	114	85	75	57	240	3,170
315	50	G2	4730 50 48	24	17	104	49,5	132	85	130	99	89	65	320	4,390
315	32	1"1/4NPT	4731 32 43	17,3	17	80	36,5	104,5	60	110	73	70	58,5	240	2,370
315	40	1"1/2NPT	4731 40 50	17,3	17	90	42,5	114,5	70	114	85	75	57	240	3,170
315	50	2NPT	4731 50 44	17,7	17	104	49,5	132	85	130	99	89	65	320	4,390

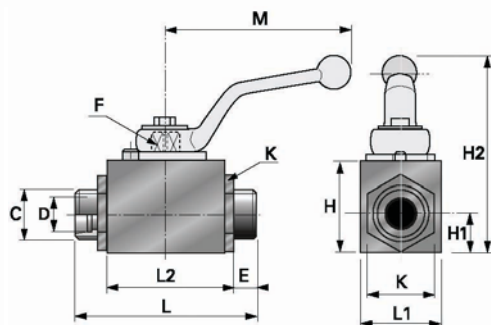
Find out more on legris.com

- A dynamic catalogue of the full range – **consult it** for full details and request a **quotation**.
- A technical guide with **animated presentations** of this range.
- More than 3000 CAD drawings available.



2 way, full bore, ball valves

according to
DIN2353/ISO 8434-1

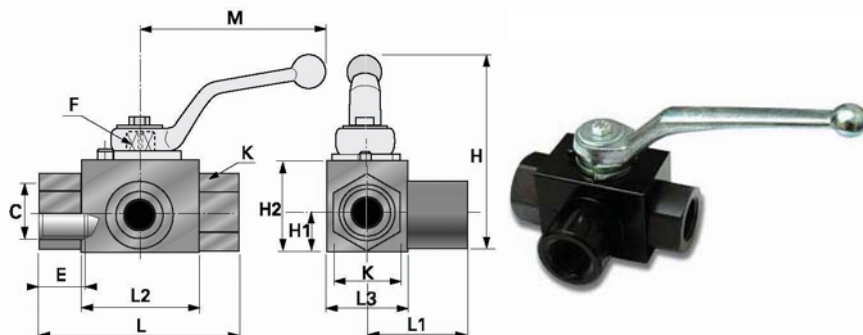


Serie	PN	DN	C	POM/NBR	D	E	F	H	H1	H2	K	L	L1	L2	M	kg
L	500	4	M12x1.5	4732 04 67	6	10	7	25	10	55	19	67	20	36	76	0,200
		6	M14x1.5	4732 06 71	8	10	7	25	10	55	19	67	20	36	76	0,200
		8	M16x1.5	4732 08 75	10	11	8	35	14,5	68	24	75	30	45	100	0,420
		10	M18x1.5	4732 10 78	12	11	8	35	14,5	68	24	75	30	45	100	0,420
		12	M22x1.5	4732 12 82	15	12	10	40	17	92	30	82	35	50	112	0,630
	400	16	M26x1.5	4732 16 89	18	12	11	45	20	105	36	82	45	50	166	0,770
		20	M30x2	4732 20 88	22	14	14	55	24	113	41	99	45	60	187	1,210
	315	25	M36x2	4732 25 93	28	14	14	60	26	118	50	108	55	70	187	1,750
		25	M45x2	4732 25 97*	35	16	14	60	26	118	50	116	55	70	187	1,820
		25	M52x2	4732 25 95*	42	16	14	60	26	118	55	121	55	70	187	1,940
S	500	4	M16x1.5	4733 04 75	8	12	7	25	10	55	19	73	20	36	76	0,220
		6	M18x1.5	4733 06 78	10	12	7	25	10	55	19	73	20	36	76	0,220
		8	M20x1.5	4733 08 80	12	12	8	35	14,5	68	24	77	30	45	100	0,430
		10	M22x1.5	4733 10 82	14	14	8	35	14,5	68	24	81	30	45	100	0,440
		12	M24x1.5	4733 12 83	16	14	10	40	17	92	30	87	35	51	112	0,650
	400	16	M30x2	4733 16 88	20	16	11	45	20	105	36	90	45	50	166	0,810
		20	M36x2	4733 20 93	25	18	14	55	24	113	41	107	45	60	187	1,290
	315	25	M42x2	4733 25 96	30	20	14	60	26	118	50	120	55	70	187	1,880
		25	M52x2	4733 25 95*	38	22	14	60	26	118	55	134	55	70	187	1,950

* reduced bore

3 way, "L" ported, ball valves

female, BSP parallel and NPT according to DIN / ISO 228-1

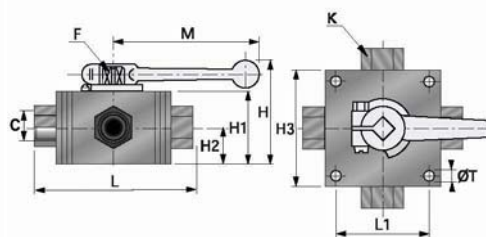


PN	DN	C	 POM/NBR	E	F	H	H1	H2	K	L	L1	L2	L3	M	
500	4	G1/8	4760 04 10	12	7	55	10	25	19	69	34,5	36	20	76	0,230
500	6	G1/4	4760 06 13	12	7	55	10	25	19	69	34,5	36	20	76	0,220
500	10	G3/8	4760 10 17	14	8	68	14,5	35	24	73	36,5	45	30	100	0,470
500	12	G1/2	4760 12 21	15	10	92	17	40	30	82	41	51	35	112	0,730
315	20	G3/4	4760 20 27	18	14	113	24	55	41	93	46,5	60	45	187	1,410
315	25	G1"	4760 25 34	20	14	118	26	60	50	113	56,5	70	55	187	2,200
315	25	G1"1/4	4760 25 42*	20	14	118	26	60	55	134	67	70	55	187	2,280
315	25	G1"1/2	4760 25 49*	22	14	118	26	60	55	139	69,5	70	55	187	2,430
500	4	1/8 NPT	4762 04 11	7	7	55	10	25	19	69	34,5	36	20	76	0,230
500	6	1/4NPT	4762 06 14	10	7	55	10	25	19	69	34,5	36	20	76	0,220
500	10	3/8 NPT	4762 10 18	10,4	8	68	14,5	35	24	73	36,5	45	30	100	0,470
500	12	1/2NPT	4762 12 22	13,6	10	92	17	40	30	82	41	51	35	112	0,730
315	20	3/4NPT	4762 20 28	14	14	113	24	55	41	93	46,5	60	45	187	1,410
315	25	1" NPT	4762 25 35	16,8	14	118	26	60	50	113	56,5	70	55	187	2,200

* reduced bore (please consult us for flow details)

4 way, "L" ported, ball valves

female, BSP parallel,
according to DIN / ISO 228-1



PN	DN	C	 POM/NBR	F	H	H1	H2	H3	K	L	L1	M	T	
400	4	G1/8	4780 04 10*	12	63	40	20	70	19	102	55	200	6,7	1,650
400	6	G1/4	4780 06 13*	12	63	40	20	70	19	102	55	200	6,7	1,620
400	10	G3/8	4780 10 17*	14	73	50	25	80	24	107	65	200	6,7	2,510
400	12	G1/2	4780 12 21*	14	78	55	27,5	100	30	129	80	200	8,4	4,170
315	20	G1/4	4780 20 27*	19	102	75	40	100	41	132	85	280	8,4	4,500
315	25	G1"	4780 25 34*	19	108	81	43,5	120	50	162	105	280	10,5	7,400
315	32	G1"1/4	4780 32 42	19	127	100	50	180	60	188	106	280	10,5	12,900

* ball: hard-chromed brass

Locking system

A locking device is available on request. This device can be attached to a standard ball valve.







Tube preparation and installation tools

Applications

As a complement to its range of hydraulic couplings, Legris offers a range of tools which are designed for both tube preparation and installation.

Several models are available ranging from manual accessories, for the installation of individual couplings or small quantities, to automatic assembly machines, designed for medium and large volume applications.

Pre-installation dies for manual installation guarantee the correct pre-crimping of tube, without cone distortion, particularly for large diameters.

Pre-crimping machines allow quick and precise installation of cutting rings and nuts on tubes. They ensure high quality pre-crimping and provide significant savings in both installation time and associated costs.



Product range

Tube preparation tools

8M02

tube cutting jig



192

8M01

tube bender



192

8M03

combined tube cutting jig
and tube bender



193

8M04

burring reamer



193

Installation tools

8000

pre-installation unit for manual installation



194

8M05

pre-installation unit, with automatic
pressure regulation



195

8M07 - 8M08 - 8M09

pre-installation dies and backing-plates



195

191

8M20

machine for 37° flaring



196

8M21 - 8M22

flare jaws



196

8M23

machine for 37° flaring with pre-installation
unit for cutting rings



197

8M21 - 8M22 - 8M07 - 8M24

pre-installation dies and backing plates



197

8M25

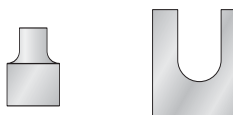
pre-installation unit for cutting rings



198

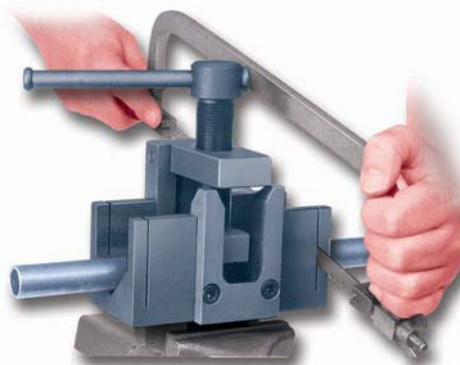
8M07 - 8M24

pre-installation dies and backing plates



198

Tube cutting jig



tube o.d.		Bell code	
6 - 42	8M02 00 01	ASV 01	4,90

Technical specifications

The tube cutting jig has a saw-blade guide which allows the tube to be cut fast, neat and square, suitable for 6 to 42 mm o.d. tube.

192

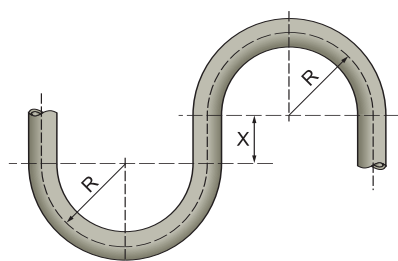
Tube bender



tube o.d.		Bell code	
6 - 18	8M01 00 01	RBV01A	6,25

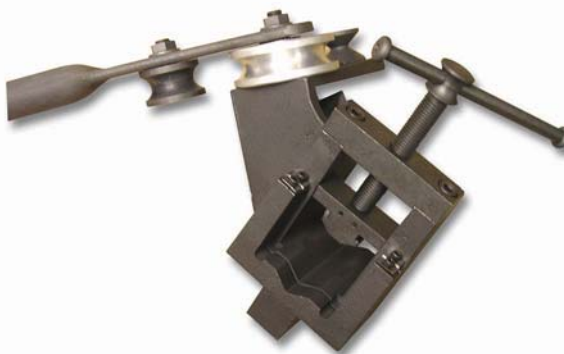
Technical specifications

Tube bender with interchangeable formers for 6 to 18 mm o.d. tube.



formers for tube o.d.	bending radius R	approx.
6/8	25	35
10	25	35
12	36,5	35
14	36,5	35
15	44	38
16	44	38
18	51,5	42

Combined tube cutting jig and tube bender



sawing of tube o.d.	bending of tube o.d.		Bell code	
6 - 42	6-18	8M03 00 01	SBB02	12,5

Burring reamer



193

		Bell code	
burring reamer	8M04 00 01	TUBOGRAT TG 0001	21
inside reamer	8M04 01 01	TUB 032 015	
outside reamer	8M04 02 01	TUB 032 020	

For deburring the inside and outside ends of 6 to 42 mm o.d. tube.
Inside and outside deburring reamers need to be ordered separately.

Technical specifications

Careful deburring is essential for the reliable pre-installation of cutting rings and for tube flaring. Thanks to this burring reamer, all types of tube, with an o.d. of 6 to 42 mm can, by brief pressure, be perfectly deburred inside and outside in seconds. The special HSS steel tube reamers are driven by an electro-motor at a fixed speed which guarantees an exceptionally long working life and a clean deburring action.

- wide: 430 mm
- deep: 320 mm
- high: 280 mm
- fixed speed: 183 rpm
- mains supply: 380 V/50 Hz/3 3-phase

Pre-installation dies

for manual installation



	ØD		Bell code	F	
L	6	8000L06 00	15-99/L6	14	0,074
	8	8000L08 00	15-99/L8	14	0,074
	10	8000L10 00	15-99/L10	14	0,073
	12	8000L12 00	15-99/L12	14	0,075
	15	8000L15 00	15-99/L15	19	0,116
	18	8000L18 00	15-99/L18	22	0,173
	22	8000L22 00	15-99/L22	24	0,208
	28	8000L28 00	15-99/L28	30	0,280
	35	8000L35 00	15-99/L35	41	0,470
	42	8000L42 00	15-99/L42	46	0,555
S	6	8000S06 00	15-99/S6	14	0,078
	8	8000S08 00	15-99/S8	14	0,078
	10	8000S10 00	15-99/S10	14	0,076
	12	8000S12 00	15-99/S12	19	0,116
	14	8000S14 00	15-99/S14	19	0,121
	16	8000S16 00	15-99/S16	22	0,159
	20	8000S20 00	15-99/S20	24	0,215
	25	8000S25 00	15-99/S25	30	0,342
	30	8000S30 00	15-99/S30	36	0,420
	38	8000S38 00	15-99/S38	46	0,693

Pre-installation unit

with automatic pressure regulation



for tube o.d.		Bell code	
6 - 42	8M05 00 01	TRACTOPRESS TPMS 90	54

Technical specifications

This portable unit enables the fast and accurate pre-installation of cutting rings. The changeover is fast and simple thanks to interchangeable dies and backing plates. Inserting the appropriate backing plate automatically presets the ideal pre-installation pressure. The reaming action of the backing plate automatically adjusts the contact pressure. Pre-installation is completed in less than 3 seconds. This unit ensures optimal pre-installation.

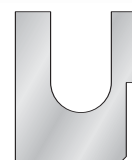
- **wide** : 450 mm
- **deep** : 450 mm
- **high** : 250 mm
- **electro-hydraulic drive**
- **hydraulic pump** : 1,1 kW/3,7/min
- **fluid** : hydraulic oil ESSO Nuto H32 - quantity 3 l
- **working pressure** : 5-200 bar cont.variable
- **mains supply** : 230 V/50 Hz/1 single-phase – consumption 8,3 A
- **noise emission** : < 80 dBA

195

Pre-installation dies and backing-plates



pre-installation dies



backing-plates

tube o.d.	pre-installation dies		backing-plates for cutting rings		backing-plates for double-bite rings	
		Bell code		Bell code		Bell code
6L	8M07L06 00	VS106L	8M08 06 00	GP1006	8M09 06 00	GP0106
6S	8M07S06 00	VS106S	8M08 06 00	GP1006	8M09 06 00	GP0106
8L	8M07L08 00	VS108L	8M08 08 00	GP1008	8M09 08 00	GP0108
8S	8M07S08 00	VS108S	8M08 08 00	GP1008	8M09 08 00	GP0108
10L	8M07L10 00	VS110L	8M08 10 00	GP1010	8M09 10 00	GP0110
10S	8M07S10 00	VS110S	8M08 10 00	GP1010	8M09 10 00	GP0110
12L	8M07L12 00	VS112L	8M08 12 00	GP1012	8M09 12 00	GP0112
12S	8M07S12 00	VS112S	8M08 12 00	GP1012	8M09 12 00	GP0112
14	8M07 14 00	VS114	8M08 14 00	GP1014	8M09 14 00	GP0114
15	8M07 15 00	VS115	8M08 15 00	GP1015	8M09 15 00	GP0115
16	8M07 16 00	VS116	8M08 16 00	GP1016	8M09 16 00	GP0116
18	8M07 18 00	VS118	8M08 18 00	GP1018	8M09 18 00	GP0118
20	8M07 20 00	VS120	8M08 20 00	GP1020	8M09 20 00	GP0120
22	8M07 22 00	VS122	8M08 22 00	GP1022	8M09 22 00	GP0122
25	8M07 25 00	VS125	8M08 25 00	GP1025	8M09 25 00	GP0125
28	8M07 28 00	VS128	8M08 28 00	GP1028	8M09 28 00	GP0128
30	8M07 30 00	VS130	8M08 30 00	GP1030	8M09 30 00	GP0130
35	8M07 35 00	VS135	8M08 35 00	GP1035	8M09 35 00	GP0135
38	8M07 38 00	VS138	8M08 38 00	GP1038	8M09 38 00	GP0138
42	8M07 42 00	VS142	8M08 42 00	GP1042	8M09 42 00	GP0142

Pre-installation dies and backing-plates need to be ordered separately.

Machine for 37° flaring



for tube o.d.



Bell code



6 - 42

8M20 00 01

UNIPRESS 105 UP 1000

65

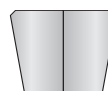
Technical specifications

This portable machine enables rapid, reliable and precise flaring of all flangeable tubes. The hydraulic pressure required is set on a contact manometer. A set of jaws is required for each tube size.

- **wide** : 450 mm
- **deep** : 450 mm
- **high** : 250 mm
- **electro-hydraulic drive**
- **hydraulic pump** : 1,1 kW/3,7/min
- **fluid** : hydraulic oil ESSO Nuto H32 - quantity 3 l
- **working pressure** : 5-200 bar cont.variable
- **mains supply** : 230 V/50 Hz/1 single-phase – consumption 8,3 A
- **noise emission** : < 80 dBA

196

Flare jaws



flare jaws

tube o.d.	flare jaw set for SAE flange couplings		flare jaw set for Legris flare couplings	
		Bell code		Bell code
6	8M21 06 00	BBS106	8M22 06 00	BBS306
8	8M21 08 00	BBS108	8M22 08 00	BBS308
10	8M21 10 00	BBS110	8M22 10 00	BBS310
12	8M21 12 00	BBS112	8M22 12 00	BBS312
14	8M21 14 00	BBS114	8M22 14 00	BBS314
15	8M21 15 00	BBS115	8M22 15 00	BBS315
16	8M21 16 00	BBS116	8M22 16 00	BBS316
18	8M21 18 00	BBS118	8M22 18 00	BBS318
20	8M21 20 00	BBS120	8M22 20 00	BBS320
22	8M21 22 00	BBS122	8M22 22 00	BBS322
25	8M21 25 00	BBS125	8M22 25 00	BBS325
28	8M21 28 00	BBS128	8M22 28 00	BBS328
30	8M21 30 00	BBS130	8M22 30 00	BBS330
35	8M21 35 00	BBS135	8M22 35 00	BBS335
38	8M21 38 00	BBS138	8M22 38 00	BBS338
42	8M21 42 00	BBS142	8M22 42 00	BBS342

Flare jaws need to be ordered separately.

Machine for 37° flaring

with cutting ring
pre-installation unit



for tube o.d.



Bell code



6 - 42

8M23 00 01

UNIPRESS 105 UP 1001

65

Technical specifications

This portable unit enables rapid, reliable and precise flaring of all flangeable tubes and the pre-installation of cutting rings. The hydraulic pressure required for flaring or pre-installation is set on a contact manometer. A set of jaws is required for each tube size and for each of the two types of flaring. For pre-installation, both a pre-installation die and backing-plate are needed for each tube size.

- **wide** : 450 mm
- **deep** : 450 mm
- **high** : 250 mm
- **electro-hydraulic drive**
- **hydraulic pump** : 1,1 kW/3,7/min
- **fluid** : hydraulic oil ESSO Nuto H32 - quantity 3 l
- **working pressure** : 5-200 bar cont. variable
- **mains supply** : 230 V/50 Hz/1 single phase- consumption 8.3 A
- **noise emission** : < 80 dBA

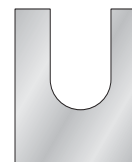
Flare jaws, pre-installation dies and backing plates



flare jaws



pre-installation dies



backing plates

tube o.d.	flare jaw set for SAE flange couplings		flare jaw set for Legris flare coupling		pre-installation dies		backing plates	
	Bell code	Bell code	Bell code	Bell code	Bell code	Bell code	Bell code	Bell code
6L	8M21 06 00	BBS106	8M22 06 00	BBS306	8M07L06 00	VS106L	8M24 06 00	GP1606
6S	8M21 06 00	BBS106	8M22 06 00	BBS306	8M07S06 00	VS106S	8M24 06 00	GP1606
8L	8M21 08 00	BBS108	8M22 08 00	BBS308	8M07L08 00	VS108L	8M24 08 00	GP1608
8S	8M21 08 00	BBS108	8M22 08 00	BBS308	8M07S08 00	VS108S	8M24 08 00	GP1608
10L	8M21 10 00	BBS110	8M22 10 00	BBS310	8M07L10 00	VS110L	8M24 10 00	GP1610
10S	8M21 10 00	BBS110	8M22 10 00	BBS310	8M07S10 00	VS110S	8M24 10 00	GP1610
12L	8M21 12 00	BBS112	8M22 12 00	BBS312	8M07L12 00	VS112L	8M24 12 00	GP1612
12S	8M21 12 00	BBS112	8M22 12 00	BBS312	8M07S12 00	VS112S	8M24 12 00	GP1612
14	8M21 14 00	BBS114	8M22 14 00	BBS314	8M07 14 00	VS114	8M24 14 00	GP1614
15	8M21 15 00	BBS115	8M22 15 00	BBS315	8M07 15 00	VS115	8M24 15 00	GP1615
16	8M21 16 00	BBS116	8M22 16 00	BBS316	8M07 16 00	VS116	8M24 16 00	GP1616
18	8M21 18 00	BBS118	8M22 18 00	BBS318	8M07 18 00	VS118	8M24 18 00	GP1618
20	8M21 20 00	BBS120	8M22 20 00	BBS320	8M07 20 00	VS120	8M24 20 00	GP1620
22	8M21 22 00	BBS122	8M22 22 00	BBS322	8M07 22 00	VS122	8M24 22 00	GP1622
25	8M21 25 00	BBS125	8M22 25 00	BBS325	8M07 25 00	VS125	8M24 25 00	GP1625
28	8M21 28 00	BBS128	8M22 28 00	BBS328	8M07 28 00	VS128	8M24 28 00	GP1628
30	8M21 30 00	BBS130	8M22 30 00	BBS330	8M07 30 00	VS130	8M24 30 00	GP1630
35	8M21 35 00	BBS135	8M22 35 00	BBS335	8M07 35 00	VS135	8M24 35 00	GP1635
38	8M21 38 00	BBS138	8M22 38 00	BBS338	8M07 38 00	VS138	8M24 38 00	GP1638
42	8M21 42 00	BBS142	8M22 42 00	BBS342	8M07 42 00	VS142	8M24 42 00	GP1642

Flare jaws, pre-installation dies and backing plates need to be ordered separately.

Pre-installation dies for cutting rings



for tube o.d.		Bell code	
6 - 42	8M25 00 01	VM+WGS	60

Technical specifications

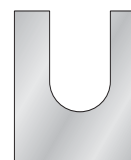
This portable unit enables rapid, reliable and precise flaring of cutting rings. The hydraulic pressure required for flaring or pre-installation is set on a contact manometer. A set of jaws is required for each tube size and for each of the two types of flaring.

- **wide** : 450 mm
- **deep** : 450 mm
- **high** : 250 mm
- **electro-hydraulic drive**
- **hydraulic pump** : 1,1 kW/3,7/min
- **fluid** : hydraulic oil ESSO Nuto H32 - quantity 3 l
- **working pressure** : 5-200 bar cont. variable
- **mains supply** : 230 V/50 Hz/1 single phase- consumption 8.3 A
- **noise emission** : < 80 dBA

Pre-installation dies and backing plates



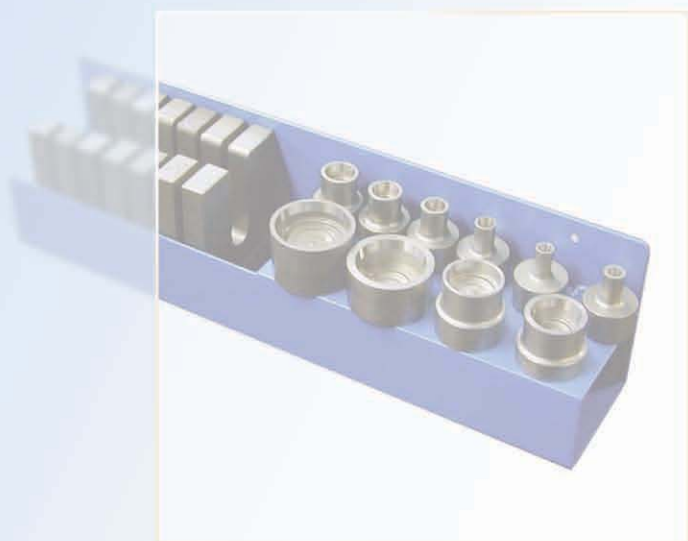
pre-installation dies

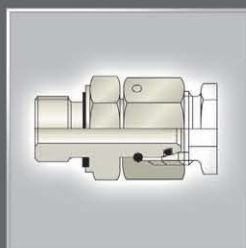
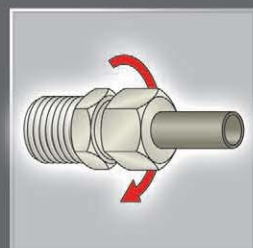
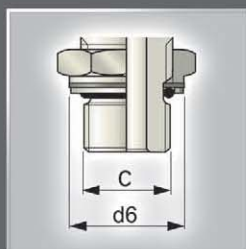
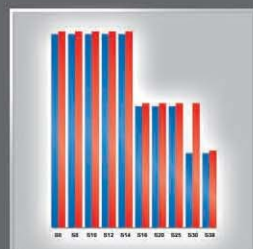


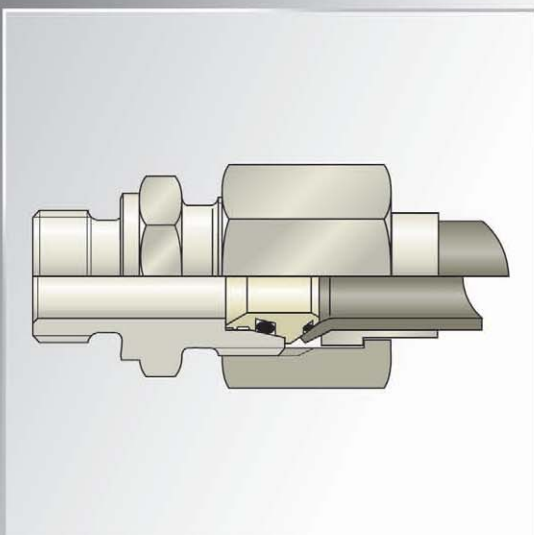
backing plates

tube o.d.	pre-installation dies		backing plates	
		Bell code		Bell code
6L	8M07L06 00	VS106L	8M24 06 00	GP1606
6S	8M07S06 00	VS106S	8M24 06 00	GP1606
8L	8M07L08 00	VS108L	8M24 08 00	GP1608
8S	8M07S08 00	VS108S	8M24 08 00	GP1608
10L	8M07L10 00	VS110L	8M24 10 00	GP1610
10S	8M07S10 00	VS110S	8M24 10 00	GP1610
12L	8M07L12 00	VS112L	8M24 12 00	GP1612
12S	8M07S12 00	VS112S	8M24 12 00	GP1612
14	8M07 14 00	VS114	8M24 14 00	GP1614
15	8M07 15 00	VS115	8M24 15 00	GP1615
16	8M07 16 00	VS116	8M24 16 00	GP1616
18	8M07 18 00	VS118	8M24 18 00	GP1618
20	8M07 20 00	VS120	8M24 20 00	GP1620
22	8M07 22 00	VS122	8M24 22 00	GP1622
25	8M07 25 00	VS125	8M24 25 00	GP1625
28	8M07 28 00	VS128	8M24 28 00	GP1628
30	8M07 30 00	VS130	8M24 30 00	GP1630
35	8M07 35 00	VS135	8M24 35 00	GP1635
38	8M07 38 00	VS138	8M24 38 00	GP1638
42	8M07 42 00	VS142	8M24 42 00	GP1642

Pre-installation dies and backing plates need to be ordered separately.







**Technical information
and
installation recommendations**

Conformity to standards

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Materials

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Surface treatment/corrosion resistance

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Fluids compatibility

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Pressures / safety coefficients

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Temperatures

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Storage conditions

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Threaded fittings – Tapped holes

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Tightening torques

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Tube preparation page 216

Installation of couplings to ISO 8434-1 pages 217 to 219

Installation of 24° sealing cone and O-ring couplings page 220

Installation of pre-assembled couplings page 220

Installation of adjustable couplings with lock nut page 220

Installation of weld nipples page 221

Installation of adaptors for 24°/37° couplings to ISO 8434-1 page 222

Installation of 37° flare couplings to ISO 8434-2 page 223

Conformity to standards

Couplings

Legris couplings are manufactured in accordance with :

Couplings	International standard	DIN standard
Cutting ring couplings	ISO 8434-1	DIN 2353
Cutting rings	ISO 8434-1	DIN 3861
24° cone sealing and O-ring couplings	ISO 8434-4	DIN 3942-45
Weld nipples	ISO 8434-4	DIN 3865
37° flare couplings	ISO 8434-2	DIN 3865

Technical characteristics of the packaging used for cutting ring couplings conform to DIN 3859 standard.

Threaded fittings – Tapped holes

Coupling threads conform to the following standards :

			Thread		Hole	
Coupling standard	Thread	Sealing	International standard	DIN standard	International standard	DIN standard
ISO 8434-1 ISO 8434-4	BSP parallel	Ring BS (Din 7603)		DIN 3852-2 Form A	ISO 1179-1	DIN 3852-2 Form X
		Sealing bite	ISO 1179-4	DIN 3852-2 Form B	ISO 1179-1	DIN 3852-2 Form X
		Integral elastomer seal	ISO 1179-2	DIN 3852-11 Form E	ISO 1179-1	DIN 3852-2 Form X
		O-ring	ISO 6149-2/3		ISO 6149-1	
		O-ring and retaining ring	ISO 1179-3		ISO 1179-1	DIN 3852-2 Form X
	Metric parallel	Ring BS (Din 7603)		DIN 3852-1 Form A	ISO 9974-1	DIN 3852-1 Form X
		Sealing bite	ISO 9974-3	DIN 3852-1 Form B	ISO 9974-1	DIN 3852-1 Form X
		Integral elastomer seal	ISO 9974-2	DIN 3852-11 Form E	ISO 9974-1	DIN 3852-1 Form X
	UN/UNF		ISO 11926-2/3		ISO 11926-1	
	NPT		ANSI/ASME B1.20.1-1983		ANSI/ASME B1.20.1-1983	
	BSP taper			DIN 3852-2 Form C		DIN 3852-2 Form Z
	Metric taper			DIN 3852-1 Form C		DIN 3852-1 Form Z
ISO 8434-2	BSP parallel	Integral elastomer seal	ISO 1179-2	DIN 3852-11 Form E	ISO 1179-1	DIN 3852-2 Form X
		O-ring and retaining ring	ISO 1179-3		ISO 1179-1	DIN 3852-2 Form X
	Metric parallel	Integral elastomer seal	ISO 9974-2	DIN 3852-11 Form E	ISO 9974-1	DIN 3852-1 Form X
	UN/UNF		ISO 11926-2/3		ISO 11926-1	
	NPT		ANSI/ASME B1.20.1-1983		ANSI/ASME B1.20.1-1983	
	BSPT		ISO 7		ISO 7/1-Rc	

Our couplings always conform to the latest standards and are continuously being optimised.
We, thus, reserve the right to change their design and construction.

Materials

- Our couplings are manufactured from drawn or forged steel according to DIN 3859-1 norm.
- Weld nipples are made of smelted weld steel – material C15, St 37-2, according to DIN 3859-1 norm.
- O-rings and soft seals are supplied in NBR, as standard ; on request they are also available in FPM.

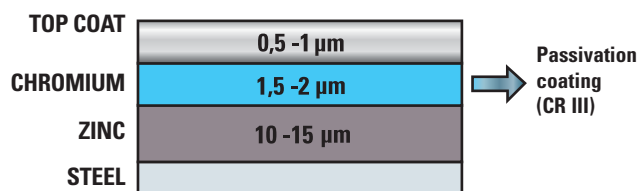
Surface treatment

- Legris hydraulic couplings are coated with a high quality chromium VI free surface treatment. This new surface treatment offers excellent corrosion resistance, significantly better than that for the A3C surface treatment, and respects European directive ELV 2000/53/CE.

This new surface treatment has been **specifically designed** and developed by Legris for its high pressure ranges of couplings.

It is designed with :

- reinforced zinc-coating (thickness of 10 to 15mm)
- passivation-coating, with a Chromium III base, of high thickness
- final-coating (top coat), reinforcing corrosion resistance.



Manufactured in Legris' own factories, this surface treatment is submitted to quality control at all stages of production, which guarantees reliable and consistent quality.

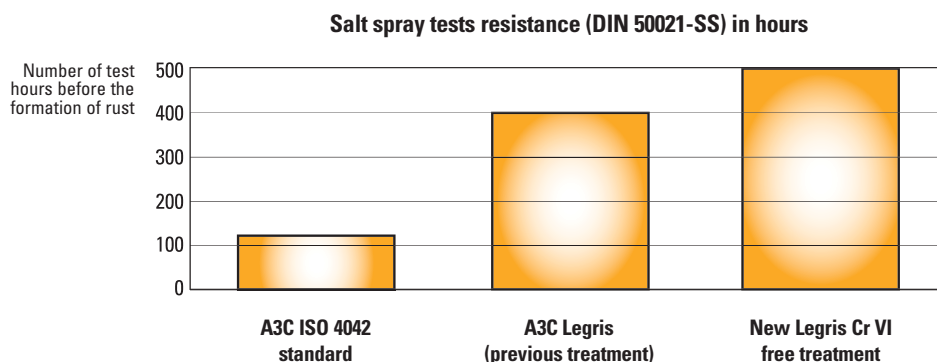
The antifriction specification of the final-coating (top coat) reduces the tightening torque and thus **facilitates the assembly** of couplings.

- Weld nipples and couplings are phosphated and lubricated
- Ball valves are phosphated

On request, the surface treatment of couplings can be phosphated and lubricated.

Excellent corrosion resistance

The chromium VI free surface treatment of Legris high pressure couplings has been salt spray tested*, indicating **500 hours** resistance to the formation of **red rust**.



Corrosion resistance is significantly better than that of the previous A3C surface treatment.

**tests conducted according to the DIN 50021-SS standard, average value.
For further information, please contact us.*

Compatability chart

Coupling and seal materials should be selected according to the fluids to be conveyed, specific environments and operating temperatures. The following table indicates the compatibility of metals and elastomers with the fluids to be conveyed, for standard products.

1 recommended

2 satisfactory

3 inappropriate

fluid	Steel	S/Steel	Brass	NBR	PTFE	FPM
Acetic acid	3	1	2	3	1	3
Acetone	1	1	1	3	1	3
Acetylene	1	1	3	2	1	2
Acrylonitrile	1	1	1	3	1	3
Air	1	1	1	1	1	1
Aleic acid	2	2	2	3	1	2
Aluminium chloride	3	1	3	2	1	1
Ammonia	1	1	3	2	1	3
Benzene	2	2	2	3	1	2
Bitumen	1	1	2	3	1	3
Brake fluid	2	1	2	3	1	3
Bromine	3	3	3	3	1	2
Butane	2	2	1	2	1	1
Carbon dioxide	1	1	1	2	1	1
Carbonic acid	2	2	3	2	1	2
Castor oil	2	1	1	1	1	1
Chlorine	3	3	3	3	1	2
Chloroform	2	1	2	3	1	2
Chromic acid	3	2	3	3	1	2
Crude oil	1	1	1	1	1	1
Crude oil (petroleum)	2	1	3	2	1	1
Cutting oil	3	2	3	2	1	1
Diesel fuel	1	1	1	2	1	1
Ethane	1	1	2	1	1	1
Fatty acid	3	1	-	2	1	1
Fluorine	3	3	3	3	3	3
Formaldehyde	3	1	1	2	1	2
Formic acid	3	2	2	3	1	3
Fruit juice	3	1	3	2	1	1
Gas	2	1	2	1	1	1
Glucose	2	1	1	1	1	1
Glycerine	2	1	2	1	1	2
Glycol	2	2	2	2	1	2
Heavy fuel oil	2	1	2	3	1	3
Helium	2	1	1	1	1	2
Hydraulic fluid A	1	2	3	1	1	1
Hydraulic fluid B	1	2	3	1	1	1
Hydraulic fluid C (glycol water)	1	2	3	1	1	1
Hydraulic fluid with a petroleum base	1	1	1	1	1	1
Hydrochloric acid	3	3	3	3	1	1
Hydrocyanic acid	3	1	3	-	1	-
Hydrogen peroxide	3	2	3	3	1	3
Ink	3	1	3	1	1	1
Iron chloride	3	3	2	2	1	1
Iron sulphate	3	2	2	2	1	1
Isopropanol	2	2	2	2	1	1
Kerosene	1	1	2	3	1	1
Latex	2	1	1	3	1	-
Light fuel oil	2	1	2	2	1	2

fluid	Steel	S/Steel	Brass	NBR	PTFE	FPM
Lighting gas	1	1	1	2	1	1
Linseed oil	1	2	2	2	1	2
Lubricating oil	1	1	2	1	1	1
Magnesium hydroxide	2	1	3	1	1	1
Magnesium sulphate	3	2	2	2	1	1
Mercury	1	1	3	1	1	1
Methane	2	2	1	1	1	1
Methanol	2	2	2	2	1	3
Milk	3	1	3	2	1	2
Mineral oil	2	1	2	1	1	1
Naphtha	2	1	2	2	1	1
Naphthalene	2	2	2	3	1	1
Nitric acid	1	1	3	3	1	3
Nitrobenzene	-	1	3	3	1	3
Nitrogen	1	1	1	1	1	1
Oil	2	1	2	2	1	1
Olive oil	2	1	2	2	1	1
Oxygen	2	1	1	3	1	2
Ozone	3	1	2	3	1	1
Paraffin	2	1	1	1	1	1
Pentane	2	1	1	2	1	1
Petrol	1	1	1	3	1	1
Phenol	2	2	-	3	1	2
Phosphoric acid	3	2	3	2	1	1
Potassium chloride	3	3	2	1	1	1
Potassium sulphate	3	3	2	1	1	1
Sea water	3	1	3	1	1	1
Silver nitrate	3	2	3	3	1	1
Sodium acetate	2	2	2	2	1	3
Sodium bicarbonate	2	2	2	2	1	1
Sodium borate	3	2	3	1	1	1
Sodium chloride	2	2	3	1	1	1
Sodium hydroxide	2	1	2	2	1	2
Sodium nitrate	2	2	2	2	1	3
Sodium sulphate	2	2	2	2	1	3
Sodium sulphide	2	2	3	2	1	1
Soluble oil	2	1	1	2	1	1
Steam at 100°C	2	1	1	3	1	3
Sulphuric acid	2	2	3	3	1	2
Tannic acid	3	1	2	2	1	2
Tar and creosote	1	1	1	2	1	2
Toluene	1	1	1	3	1	2
Treacle	3	1	1	1	1	1
Underground water	2	1	1	1	1	1
Vinegar	3	1	3	3	1	3
Water	3	1	1	2	1	2
Wax	1	1	1	3	1	2
Wine	3	2	2	2	1	1
Xylene	2	1	1	3	1	2
Zinc chloride	3	3	3	2	1	1
Zinc sulphate	3	2	2	1	1	1

This information is for guidance only. Each use is a specific application and we cannot be held responsible. Please consult us.

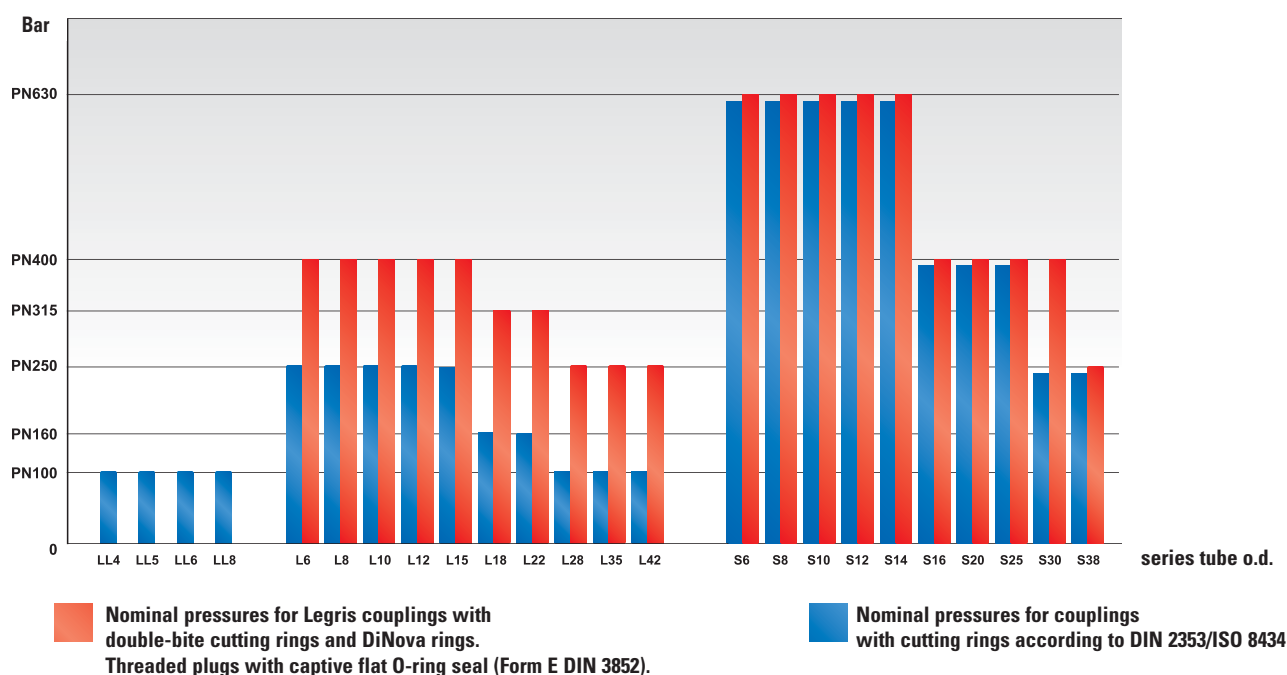
Pressures

The pressure levels given in this catalogue are those applicable to steel couplings that have been installed correctly.

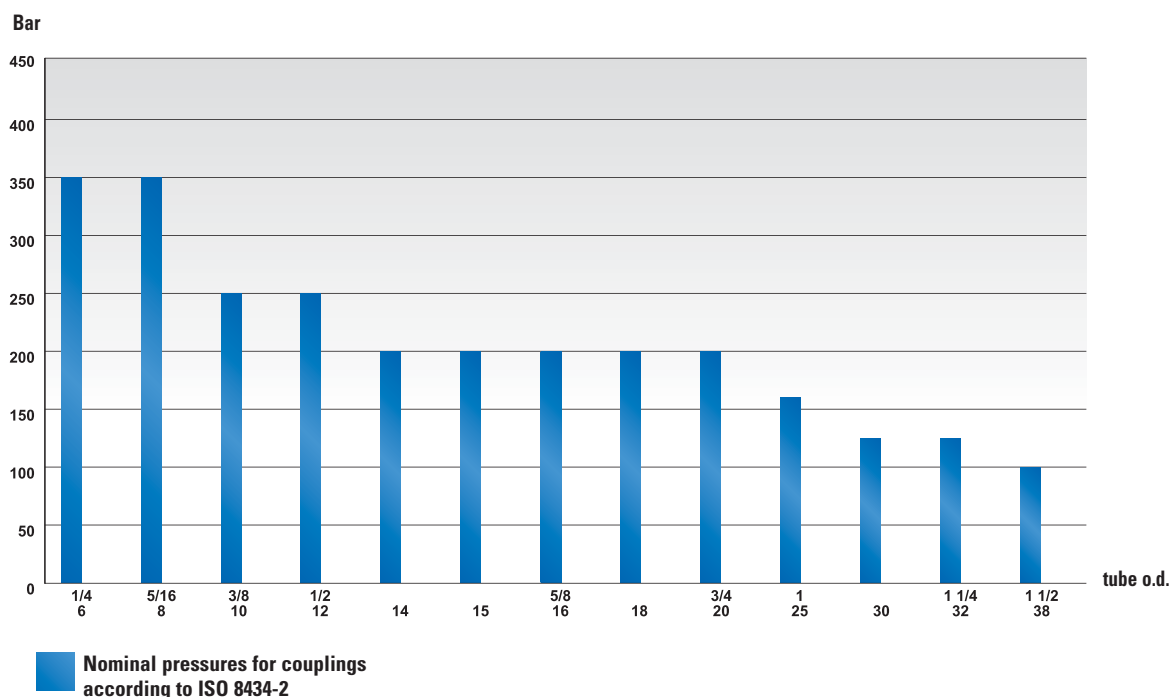
Nominal pressures (PN) represent the acceptable working pressures, with a safety factor of 4, a constant load and temperatures from -20° to $+120^{\circ}\text{C}$, according to ISO 8434-1 and ISO 8434-2.

Working pressures (PB) represent the maximum acceptable pressures, with a safety factor of 2,5, a constant charge and temperatures from -20° to $+120^{\circ}\text{C}$, according to DIN 2401.

When higher temperatures and mechanical vibrations are involved, the working pressures should be reduced accordingly.



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Safety coefficients

When using combined types of couplings, the lowest pressure must always be taken. It may be necessary to reduce pressure for threaded stud couplings when the lock nut is not made of steel.

The figures also assume that our mounting instructions have been followed, stud couplings tightened with the prescribed torque and the fitting holes tapped according to the DIN 3852 norm.

Pipework should be installed to ensure that couplings are not subjected to additional stress or vibration.

Temperatures

Acceptable working temperatures

Dependant on constituent materials:

● Couplings:

- **Steel** (DIN 3859-1): - 40° to + 250°C (PN and PB are given for a temperature range from – 20° to + 120°C. When higher temperatures and mechanical vibrations are involved, the working pressures should be reduced accordingly).

● Seals:

- **NBR**: - 25°C to + 100°C.
- **FPM**: - 15°C to + 200°C.
- **PTFE**: - 100°C to + 250°C.

When combining several different types of material, the highest minimum and the lowest maximum temperature figures should be used.

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Ambient temperatures:

Down to – 35°C with NBR seals, down to – 25° with FPM seals.

Storage conditions

Couplings with elastomer seals should be stored according to the DIN 7716 norm. Components should be stored cold –at a maximum temperature of 25°C - dry and dust free.

They should also be protected against direct sunlight, intense artificial light and ozone.

Threaded fittings, tapped holes

Threaded fittings form A

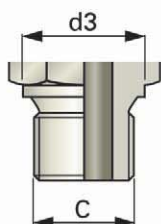
Sealing by O-ring

Metric threads:

DIN 3852-1

BSP threads:

DIN 3852-2



Threaded fittings form B

Sealing by sealing face

Metric threads:

ISO 9974-3 / DIN3852-1

BSP threads:

ISO 1179-4 / DIN 3852-2



Threaded fittings form E

Sealing by O-ring

Metric threads:

ISO 9974-2 / DIN3852-11

BSP threads:

ISO 1179-2 / DIN 3852-11



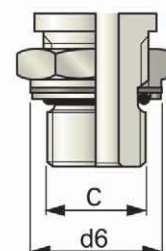
Threaded fittings for adjustable couplings with lock nut form H

Sealing by O-ring

Metric threads: -

BSP threads:

ISO 1179-3



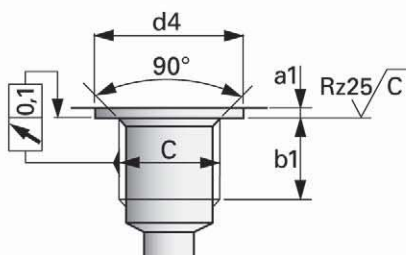
Tapped hole form X

Metric threads:

ISO 9974-1 / DIN 3852-1

BSP threads:

ISO 1179-1 / DIN 3852-2



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C	d3 -0,4	d5 -0,2	d6* 24° couplings with cutting ring	d6* 37° flare couplings	d4 min.	d4+0,4	b1 min.	a1 max.
M8x1	12				13	17	8	1
M10x1	14	13,9	14,9	15,5	15	20	8	1
M12x1,5	17	16,9	17,9	18,5	18	20	12	1,5
M14x1,5	19	18,9	19,9	20	20	21,5	12	1,5
M16x1,5	21	21,9	22,9	23	23	24,5	12	1,5
M18x1,5	23	23,9	24,9	26	25	27,5	12	2
M20x1,5	25	25,9		28	27	30	14	2
M22x1,5	27	26,9	27,9	29	28	31,5	14	2,5
M26x1,5	31	31,9		35	33	36,5	16	2,5
M27x2	32	31,9	32,9	36	33	37,5	16	2,5
M33x2	39	39,9	40,9	43	41	45	18	2,5
M42x2	49	49,9	50,9	53	51	55	20	2,5
M48x2	55	54,9	55,9	59	56	62,5	22	2,5

C	d3 -0,4	d5 -0,2	d6* 24° couplings with cutting ring	d6* 37° flare couplings	d4 min.	d4+0,4	b1 min.	a1 max.
G1/8	14	13,9	14,9	16	15	17	8	1
G1/4	18	18,9	19,9	21	20	21,5	12	1,5
G3/8	22	21,9	22,9	24	23	25,5	12	2
G1/2	26	26,9	27,9	28,5	28	30	14	2,5
G3/4	32	31,9	32,9	35	33	37	16	2,5
G1	39	39,9	40,9	45,5	41	47	18	2,5
G1 1/4	49	49,9	50,9	52,5	51	58	20	2,5
G1 1/2	55	54,9	55,9	58,5	56	63,5	22	2,5

* Legris dimensions

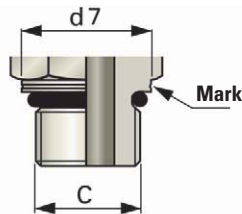
Threaded fittings, tapped holes

Threaded fittings

Sealing by O-ring

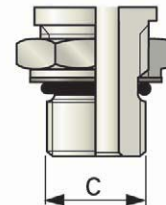
Metric threads: ISO 6149-2 and 3

UN-UNF threads: ISO 11926-2 and 3



Adjustable threaded fittings with lock-nut

Sealing by O-ring: ISO 6149-2 and 3



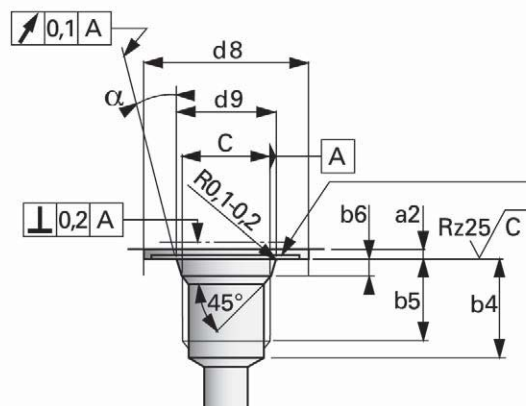
Tapped hole

Metric threads:

ISO 6149-1

UN-UNF threads:

ISO 11926-1



ISO 6149

C	d7 +/- 0,2	d8 min.	d9 + 0,1	b4 min.	b5 min.	b6 +0,4	a2 max.	α +/-1°
M10x1	13,8	20	11,1	11,5	10	1,6	1	12°
M12x1,5	16,8	23	13,8	14	11,5	2,4	1,5	15°
M14x1,5	18,8	25	15,8	14	11,5	2,4	1,5	15°
M16x1,5	21,8	28	17,8	15,5	13	2,4	1,5	15°
M18x1,5	23,8	30	19,8	17	14,5	2,4	2	15°
M20x1,5	26,8	32	21,8	17	14,5	2,4	2	15°
M22x1,5	26,8	34	23,8	18	15,5	2,4	2	15°
M26x1,5	30,9	37	29,05	18,5	16	3,1	2	15°
M27x2	31,8	40	29,4	22	19	3,1	2	15°
M33x2	40,8	49	35,4	22	19	3,1	2,5	15°
M42x2	49,8	60	44,4	22,5	19,5	3,1	2,5	15°
M48x2	54,8	66	50,4	25	22	3,1	2,5	15°

ISO 11926

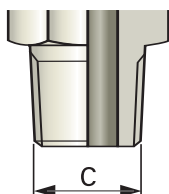
C	d7 SAE J 514	d8 min.	d9 +/- 0,05	b4 min.	b5 min.	b6 +0,4	a2 max.	α +/-1°
7/16"-20UNF	16	21	12,45	14	11,5	2,4	1,6	12°
1/2"-20UNF	17	23	14,05	14	11,5	2,4	1,6	12°
9/16"-18UNF	17,6	25	15,7	15,5	12,7	2,5	1,6	12°
3/4"-16UNF	22,3	30	20,65	17,5	14,3	2,5	2,4	15°
7/8"-14UNF	25,5	34	24	20	16,7	2,5	2,4	15°
1 1/16"-12UN	31,9	41	29,2	23	19	3,3	2,4	15°
1 5/16"-12UN	38,2	49	35,55	23	19	3,3	3,2	15°
1 5/8"-12UN	48	58	43,55	23	19	3,3	3,2	15°
1 7/8"-12UN	55	65	49,9	23	19	3,3	3,2	15°

Threaded fittings, tapped holes

Threaded fittings form C

Metric threads: DIN 3852-1

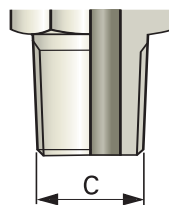
BSP threads: DIN 3852-2



Threaded fittings NPT

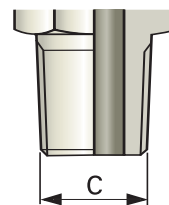
NPT: ANSI/ASME B1.20.1-1983

NPTF: ANSI/ASME B1.20.3-1976



Threaded fittings BSPT*

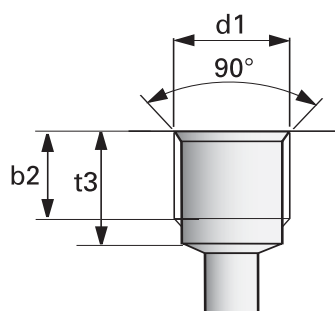
BSPT threads: ISO 7



Tapped hole form Z

Metric threads: DIN 3852-1

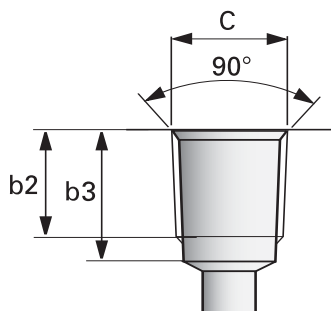
BSP threads: DIN 3852-2



Tapped hole NPT

NPT: ANSI/ASME B1.20.1-1983

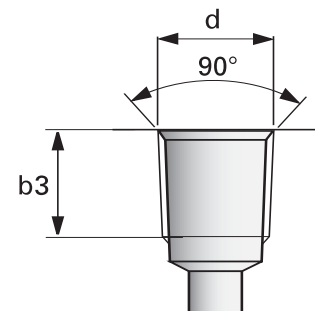
NPTF: ANSI/ASME B1.20.3-1976



Tapped hole BSPT

Etanchéité par filetage conique

BSP threads: ISO 7



Metric

C	d1	b2 min.	t3 min.
M8x1	M8x1	5,5	10,0
M10x1	M10x1	5,5	10,0
M12x1,5	M12x1,5	8,5	13,5
M14x1,5	M14x1,5	8,5	13,5
M16x1,5	M16x1,5	8,5	13,5
M18x1,5	M18x1,5	8,5	13,5
M20x1,5	M20x1,5	10,5	15,5
M22x1,5	M22x1,5	10,5	15,5

NPT

C	b2 min.	b3 min.
1/8 NPT	6,9	11,6
1/4 NPT	10,0	16,4
3/8 NPT	10,3	17,4
1/2 NPT	13,6	22,6
3/4 NPT	14,1	23,1
1 NPT	16,8	27,8
1 1/4 NPT	17,3	28,3
1 1/2 NPT	17,3	28,3

BSPT

C	d min.	b min.
R1/8	Rc 1/8	6,5
R1/4	Rc 1/4	9,7
R3/8	Rc 3/8	10,1
R1/2	Rc 1/2	13,2
R3/4	Rc 3/4	14,5
R1	Rc 1	16,8
R1 1/4	Rc 1 1/2	19,1
R1 1/2	Rc 1 1/2	19,1

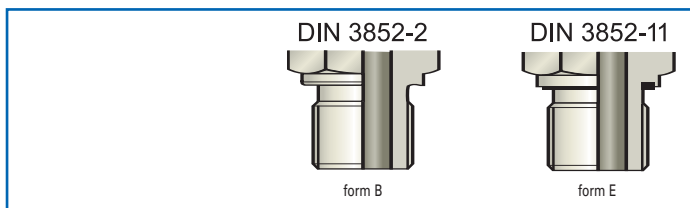
* for couplings to ISO 8434-2

BSP

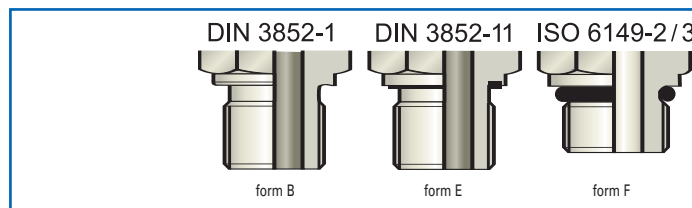
C	d1	b2 min.	t3 min.
R1/8	Rp1/8	5,5	8,5
R1/4	Rp1/4	8,5	12,5
R3/8	Rp3/8	8,5	12,5
R1/2	Rp1/2	10,5	16,5

Tightening torques

Cutting ring couplings to ISO 8434-1



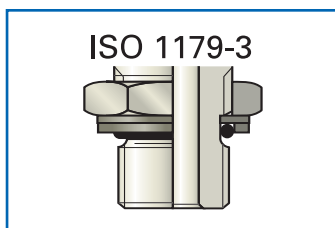
Series	BSP parallel	Tightening torque (Nm)	
		form B	form E
LL	G1/8	18	18
	G1/8	18	18
L	G1/4	40	40
	G3/8	80	80
	G1/2	140	110
	G1/2	110	110
	G3/4	180	180
	G1	330	300
	G1 1/4	540	470
	G1 1/2	630	540
S	G1/4	55	50
	G3/8	90	80
	G1/2	160	120
	G1/2	140	120
	G3/4	270	180
	G1	400	300
	G1 1/4	580	470
	G1 1/2	700	560



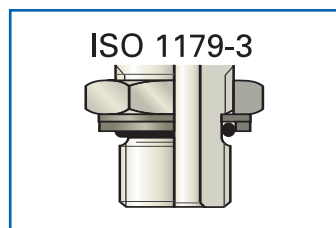
Series	Metric parallel	Tightening torque (Nm)		
		form B	form E	form F
L	M10x1	18	18	15
	M12x1,5	30	25	25
	M14x1,5	45	45	35
	M16x1,5	60	60	40
	M18x1,5	80	80	45
	M22x1,5	150	125	60
	M26x1,5	190	180	100
	M27x2	220		100
	M33x2	300	300	160
	M42x2	500	450	210
	M48x2	700	540	260
S	M12x1,5	40	35	35
	M14x1,5	55	55	45
	M16x1,5	70	70	55
	M18x1,5	110	90	70
	M20x1,5	150	125	80
	M22x1,5	170	135	100
	M27x2	270	180	170
	M33x2	430	310	310
	M42x2	540	470	330
	M48x2	700	580	420

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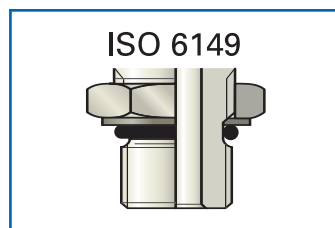
Adjustable couplings with lock nut and threaded fittings



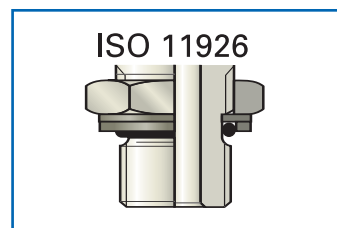
Series	BSP parallel	Tightening torque (Nm) +/-10%
L	G1/8A	10
	G1/4A	35
	G3/8A	80
	G1/2A	105
	G3/4A	220
	G1A	370
	G1"1/4A	500
	G1"1/2A	600
S	G1/4A	35
	G3/8A	80
	G1/2A	105
	G3/4A	220
	G1A	370
	G1"1/4A	500
	G1"1/2A	600



Series	Métrique parallel	Tightening torque (Nm) +/-10%
L	M10x1	18
	M12x1,5	25
	M14x1,5	35
	M16x1,5	80
	M18x1,5	105
	M22x1,5	125
	M27x2	220
	M33x2	370
S	M42x2	500
	M48x2	600
	M12x1,5	25
	M14x1,5	45
	M16x1,5	80
	M18x1,5	105
	M22x1,5	125
	M27x2	220
	M33x2	370
	M42x2	500
	M48x2	600



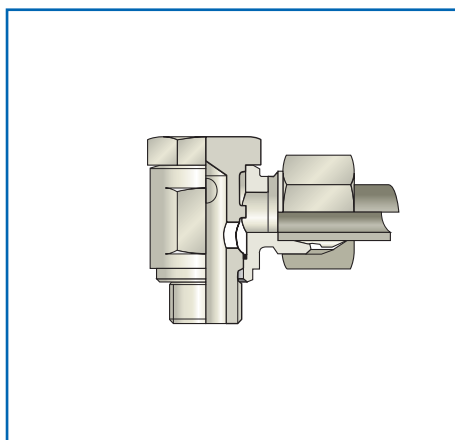
Series	Metric parallel	Tightening torque (Nm) +/-10%
L	M10x1	15
	M12x1,5	25
	M14x1,5	35
	M16x1,5	40
	M18x1,5	45
	M22x1,5	60
	M27x2	100
	M33x2	160
S	M42x2	210
	M48x2	260
	M12x1,5	25
	M14x1,5	45
	M16x1,5	55
	M18x1,5	70
	M22x1,5	100
	M27x2	170
	M33x2	310
	M42x2	330
	M48x2	420



Series	UN/UNF	Tightening torque (Nm) +/-10%
L	7/16"-20UNF	19
	1/2"-20UNF	25
	9/16"-18UNF	40
	3/4"-16UNF	60
	7/8"-14UNF	80
	1 1/16"-12UN	110
	1 5/16"-12UN	160
	1 5/8"-12UN	300
S	1 7/8"-12UN	340
	7/16"-20UNF	21
	1/2"-20UNF	25
	9/16"-18UNF	50
	3/4"-16UNF	80
	7/8"-14UNF	140
	1 1/16"-12UN	190
	1 5/16"-12UN	160
	1 5/8"-12UN	350
	1 7/8"-12UN	430

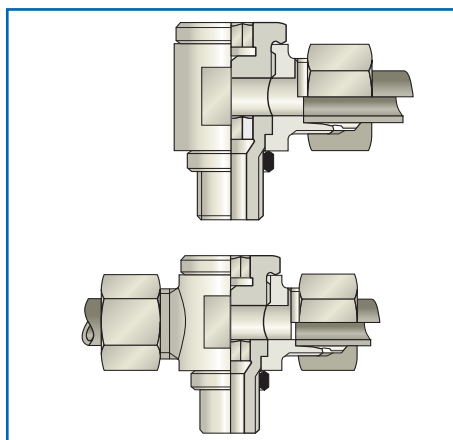
Tightening torques

Banjo couplings



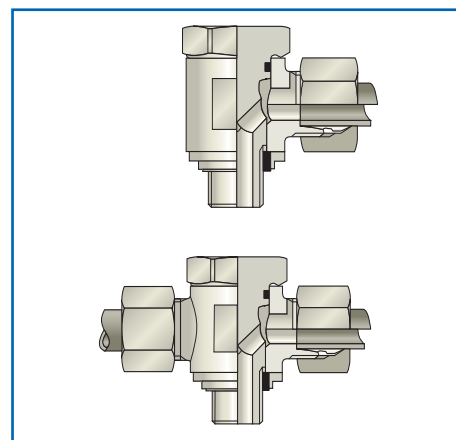
Series	Mini tube o.d.	Metric thread	Tightening torque Nm +/-5%
LL	4	M8x1	15
	5	M8x1	15
	6	M10x1	15
	8	M10x1	15
L	6	M10x1	20
	8	M12x1,5	35
	10	M14x1,5	40
	12	M16x1,5	70
	15	M18x1,5	75
	18	M22x1,5	140
S	22	M26x1,5	170
	6	M12x1,5	35
	8	M14x1,5	40
	10	M16x1,5	70
	12	M18x1,5	75
S	14	M20x1,5	120
	16	M22x1,5	140
	20	M27x2	190

Chock-free banjo couplings



Series	Mini tube o.d.	Metric thread	Tightening torque Nm
L	6	M10x1	25
	8	M12x1,5	40
	10	M14x1,5	60
	12	M16x1,5	100
	15	M18x1,5	120
	18	M22x1,5	150
	22	M26x1,5	200
	28	M33x2	350
	35	M42x2	550
	42	M48x2	650
S	6	M12x1,5	40
	8	M14x1,5	60
	10	M16x1,5	100
	12	M18x1,5	120
	14	M20x1,5	160
	16	M22x1,5	160
	20	M27x2	270
	25	M33x2	350
	30	M42x2	550
	38	M48x2	650

High pressure banjo couplings



Series	Mini tube o.d.	Metric thread	Tightening torque Nm
L	6	M10x1	30
	8	M12x1,5	40
	10	M14x1,5	60
	12	M16x1,5	100
	15	M18x1,5	130
	18	M22x1,5	160
	22	M26x1,5	250
	28	M33x2	400
	35	M42x2	600
	42	M48x2	800
S	6	M12x1,5	40
	8	M14x1,5	60
	10	M16x1,5	100
	12	M18x1,5	130
	14	M20x1,5	160
	16	M22x1,5	160
	20	M27x2	250
	25	M33x2	400
	30	M42x2	600
	38	M48x2	800

Series	Mini tube o.d.	BSP thread	Tightening torque Nm +/-5%
LL	4	G1/8A	14
	5	G1/8A	14
	6	G1/8A	14
	8	G1/8A	14
L	6	G1/8A	20
	8	G1/4A	35
	10	G1/4A	35
	12	G3/8A	70
	15	G1/2A	90
	18	G1/2A	140
S	22	G3/4A	180
	6	G1/4A	35
	8	G1/4A	35
	10	G3/8A	70
	12	G3/8A	80
S	14	G1/2A	120
	16	G1/2A	140
	20	G3/4A	180

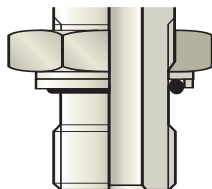
Series	Mini tube o.d.	BSP thread	Tightening torque Nm
L	6	G1/8A	23
	8	G1/4A	50
	10	G1/4A	50
	12	G3/8A	100
	15	G1/2A	150
	18	G1/2A	150
	22	G3/4A	300
	28	G1A	350
	35	G1 1/4A	550
	42	G1 1/2A	650
S	6	G1/4A	50
	8	G1/4A	50
	10	G3/8A	100
	12	G3/8A	100
	14	G1/2A	160
	16	G1/2A	160
	20	G3/4A	300
	25	G1A	350
	30	G1 1/4A	550
	38	G1 1/2A	650

Series	Mini tube o.d.	BSP thread	Tightening torque Nm
L	6	G1/8A	25
	8	G1/4A	50
	10	G1/4A	50
	12	G3/8A	90
	15	G1/2A	130
	18	G1/2A	150
	22	G3/4A	250
	28	G1A	400
	35	G1 1/4A	600
	42	G1 1/2A	800
S	6	G1/4A	50
	8	G1/4A	50
	10	G3/8A	90
	12	G3/8A	100
	14	G1/2A	130
	16	G1/2A	150
	20	G3/4A	250
	25	G1A	400
	30	G1 1/4A	600
	38	G1 1/2A	800

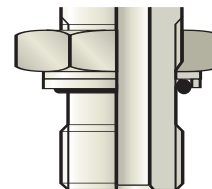
Tightening torques

37° flare couplings ISO 8434-2

ISO 1179-3



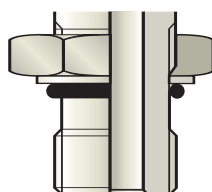
BSP parallel	Tightening torque (Nm)
G 1/8"	20
G 1/4"	35
G 3/8"	70
G 1/2"	100
G 3/4"	190
G1	300
G1 1/4"	330
G1 1/2"	400



Metric parallel	Tightening torque (Nm)
M10x1	20
M12x1,5	35
M14x1,5	45
M16x1,5	55
M18x1,5	68
M20x1,5	80
M22x1,5	98
M26x1,5	170
M27x2	180
M33x2	310
M42x2	330
M48x2	400

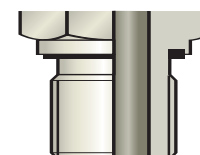
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ISO 11926



UN/UNF	Tightening torque (Nm)
7/16"-20	21
1/2"-20	27
9/16"-18	40
3/4"-16	78
7/8"-14	110
1 1/16"-12	180
1 3/16"-12	230
1 5/16"-12	285
1 5/8"-12	320
1 7/8"-12	400

ISO 1179-2 ISO 9974-2



BSP parallel – ISO 1179-2	Tightening torque (Nm)	Metric parallel – ISO 9974-2	Tightening torque (Nm)
G 1/8"	20	M10x1	20
G 1/4"	35	M12x1,5	35
G 3/8"	70	M14x1,5	45
G 1/2"	100	M16x1,5	55
G 3/4"	190	M18x1,5	68
G1	300	M20x1,5	80
G1 1/4"	330	M22x1,5	98
G1 1/2"	400	M26x1,5	170
		M27x1,5	180
		M33x2	310
		M42x2	330
		M48x2	400

Tube selection

Tube material

- We recommend cold drawn steel tube, without welding, St 37,4 or St 52,4, DIN 1630 (or R 37 or R 50 ISO 3304), annealed in white NBK under neutral atmosphere, with tolerances on the outside and inside diameters according to DIN 2391 (or ISO 3304). Depending on the use, tubes can be phosphated, lubricated or electro-coated and bi-chromated.
- For **flare couplings**, a tube quality that is suitable for flaring should be used. For **weld nipples**, tube that can be welded should be used.

Tube thickness

The tables below show the nominal pressure in accordance with the tube bore thickness.

The design pressures stated have been calculated in accordance with the following formula:

$$p = 10K \cdot \ln\left(\frac{D_a}{D_i}\right) \cdot \frac{1}{S} \text{ (bar)}$$

K= 360 N/mm² (tensile strength)

D_a= outside diameter in mm

D_i= inside diameter in mm

S= safety coefficient

ln= natural logarithm

The formula is based on Hooke's law, in that the maximum stress in tangential direction impinges on the inside of the pipe. It is more accurate than previously used formulae (DIN 2413) and, in the future, will be adopted as the normal international standard (ISO 10763).

Safety factor S : S = 4 according to ISO 10763 standard

tube o.d.	wall thickness	Calculated pressure S = 4 (bar)	tube o.d.	wall thickness	Calculated pressure S = 4 (bar)	tube o.d.	wall thickness	Calculated pressure S = 4 (bar)
4	0,5	259	15	1,5*	201	28	2*	139
4	1	624	15	2	279	28	2,5	177
5	0,5	201	15	2,5	365	28	3	217
5	1	460	15	3	460	28	3,5	259
6	1	365	16	2	259	30	2*	129
6	1,5	624	16	2,5	337	30	3	201
6	2	989	16	3	423	30	4	279
8	1	259	18	1,5*	164	30	5	365
8	1,5	423	18	2	226	30	6	460
8	2	624	18	2,5	293	32	2	120
8	2,5	883	18	3	365	32	2,5	153
10	1	201	20	2	201	32	3	187
10	1,5	321	20	2,5	259	35	2*	109
10	2	460	20	3	321	35	2,5	139
10	2,5	624	20	3,5	388	35	3	169
10	3	825	20	4	460	35	4	234
12	1*	164	22	1,5*	132	35	5	303
12	1,5	259	22	2	181	38	2*	100
12	2	365	22	2,5	232	38	3	155
12	2,5	485	22	3	287	38	4	213
12	3	624	22	3,5	345	38	5	275
12	3,5	788	25	2	157	38	6	342
14	2	303	25	2,5	201	42	2*	90
14	2,5	398	25	3	247	42	3	139
14	3	504	25	4	347	42	4	190
14	3,5	624	25	5	460	42	5	245
14	4	763						

* Tube reinforcement is recommended, especially in applications subject to frequent dismantling or vibrations.

Tube diameter

- **Tube diameters** which are **too small** increase the speed of fluid flow, whilst causing turbulence, an increase in temperature and pressure drop (called pressure loss). The result is an overconsumption of hydraulic system energy and more severe operating conditions (fluid temperatures, cavitation), which can lead to a premature wear of the system components.
- **Tube diameters** which are **too big** increase both the dimensions and cost of the system.

We recommend the following **flow speeds** for hydraulic pipe systems:

- high pressure circuit: 3 to 5 m/s - return circuit: 2 to 4 m/s maxi - venting circuit: 1 m/s maxi

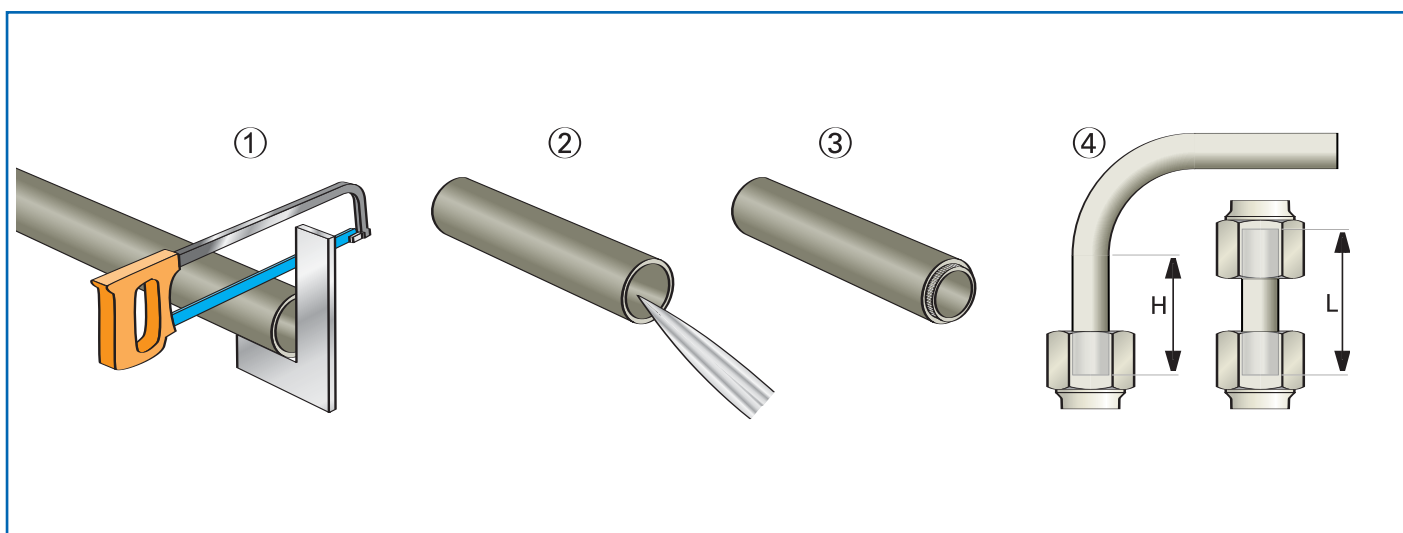
To determine the inside diameter of the tube, the following formula can be also used :

$$\text{i.d. tube (mm)} = 4,61 \times \sqrt{\frac{\text{flow capacity (L/min)}}{\text{flow speed (m/s)}}}$$

Tube preparation

- 1- Saw the tube square (do not use a tube cutter). A 0,5° angular gap is acceptable.
- 2- Deburr the tube inside and outside. Acceptable chamfer 0,2 x 45°. Clean.
- 3- To ensure safe assembly, reinforcement should be used for tubes which are made of copper or aluminium and for thin walled steel tubes. (see chapter 2).
- 4- Minimum length of straight tube with tube bends and minimum straight tube length, see table.

Series	LL				L										S									
tube o.d.	4	5	6	8	6	8	10	12	15	18	22	28	35	42	6	8	10	12	14	16	20	25	30	38
H min.	24	25	25	26	31	31	33	33	36	38	42	42	48	48	35	35	37	37	43	43	50	54	58	65
L min.	30	32	32	33	39	39	42	42	45	48	53	53	60	60	44	44	47	47	54	54	63	68	73	82



Note on lubrication

Zinc coated couplings have a colourless lubricant coating. Lubrication of coupling components is unnecessary (diameters smaller than 20 mm).

When using phosphated couplings that are still in circulation, the thread of the nut and the cone of the coupling body should be lubricated.

Installation of couplings

Installation with pre-assembly unit for single-bite, double-bite, and DiNova rings

Pre-assembly

- 1- Select the retainer plates and the pre-installed body, according to the model series and pipe size.
- 2- Push the nut and the cutting ring onto the sawn-off and deburred pipe.
- 3- Insert the pipe so that the nut and cutting ring lie between the retainer plates and the installed body.
- 4- Press the pipe end firmly against the stop of the pre-installed body.
- 5- Firmly hold the pipe end in position and press the control button until the pre-assembly unit automatically stops.
- 6- After completion of pre-assembly, remove the pipe.

The pre-assembled pressure is different from one ring model to another. Please refer to the pressure data in the following table.

Pre-assembled pressures recommended for pipes St 37-4 to DIN 1630 and DIN 2391
(pressure for Legris pre-assembly machines 8M05 00 01 and 8M23 00 01)

tube o.d. (mm)	6	8	10	12	14	15	16	18	20	22	25		28	30		35		38		42	
tube thickness (mm)	1-2	1-2,5	1-3	1-3,5	2-4	1,5-3	2-3	1,5-3	2-4	1,5-3,5	2	2,5-5	2-3,5	2-4	5-6	2	2,5-5	2-3	4-6	2	3-5
double-bite ring (bar)	25	30	35	40	45	45	55	55	70	70	90		80	110		100		135		125	
DiNova ring (bar)	25	25	25	45	45	45	55	55	70	80	90	130	80	130	160	130	160	130	170	130	170

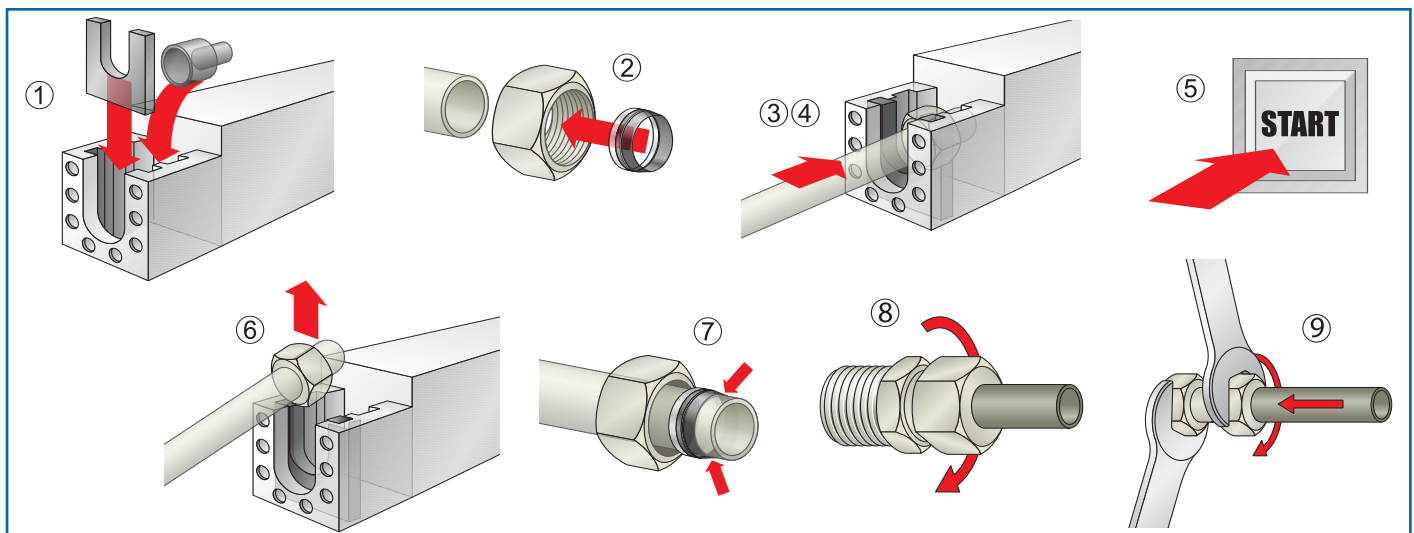
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Control of pre-installation

- 7- Check whether a visible flange projection is present.

Final installation

- 8- Screw on the nut, by hand, until contact is perceptible.
- 9- Hold the coupling body with a wrench and tighten the nut past the point of perceptible increase in force approximately 1/4 to 1/3 turns, until no further tightening is possible.



Installation of cutting ring couplings to ISO 8434-1

Installation with pre-assembly block for single-bite, double-bite and DiNova rings

Pre-installation:

Lubricate the thread and the end of the pre-assembly block.

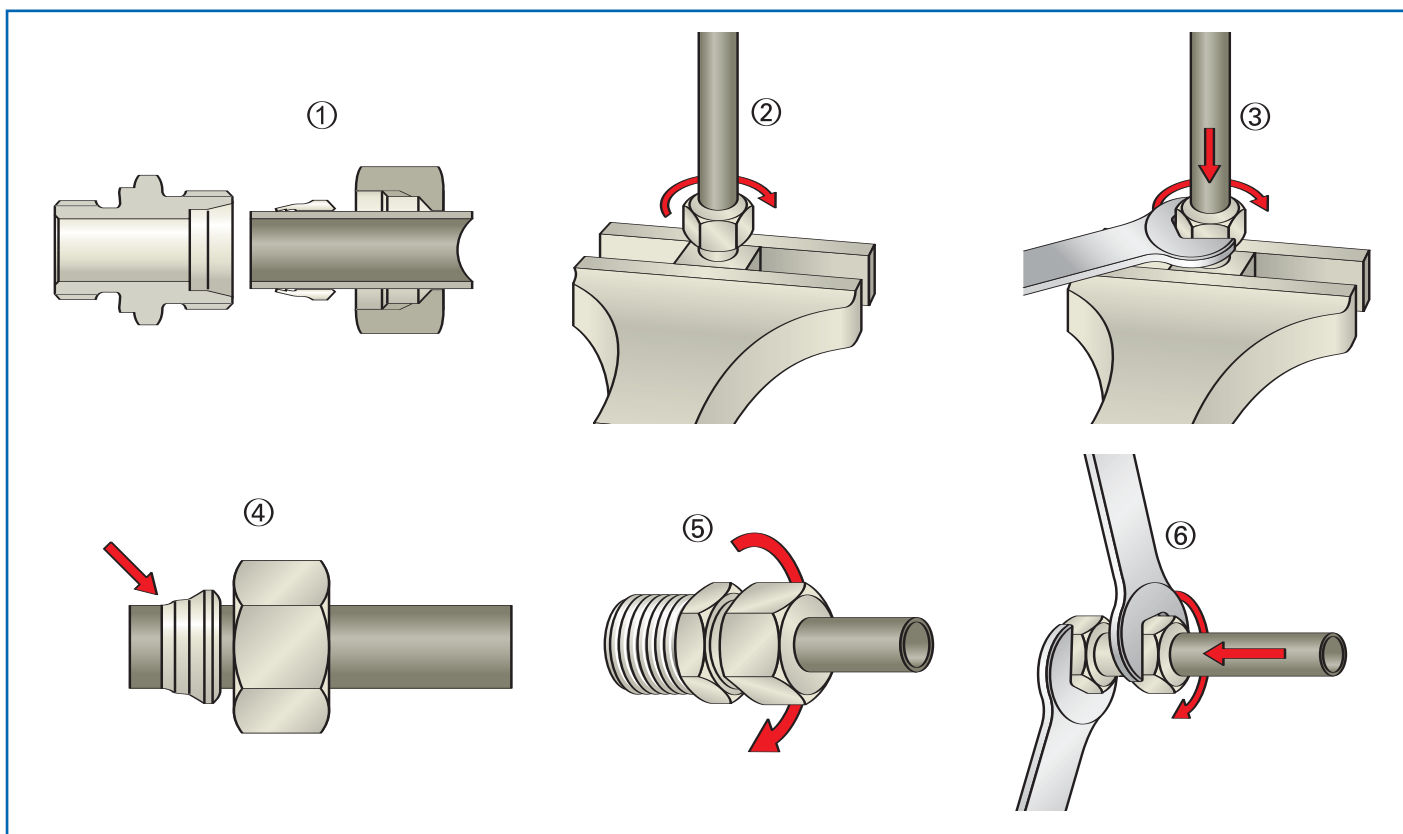
- 1- Push the nut and the cutting ring onto the pipe.
- 2- Screw on the nut until contact is perceptible.
- 3- Push the pipe against the end of the lubricated pre-assembly block, tightening the nut approximately 1 1/4 turns (1 1/2 turns for DiNova ring), with the help of a wrench.

Checking pre-assembly:

- 4 - After pre-assembly, slacken the nut. A visible cut edge must be present in front of the cutting ring. The cutting ring may rotate, but will not allow axial displacement.

Final installation in the coupling body:

- 5- Screw on the nut, by hand, until perceptible contact is made.
- 6- Hold the coupling body with the wrench. Tighten the nut past the point of perceptible increase in force approximately 1/4 to 1/3 turns.



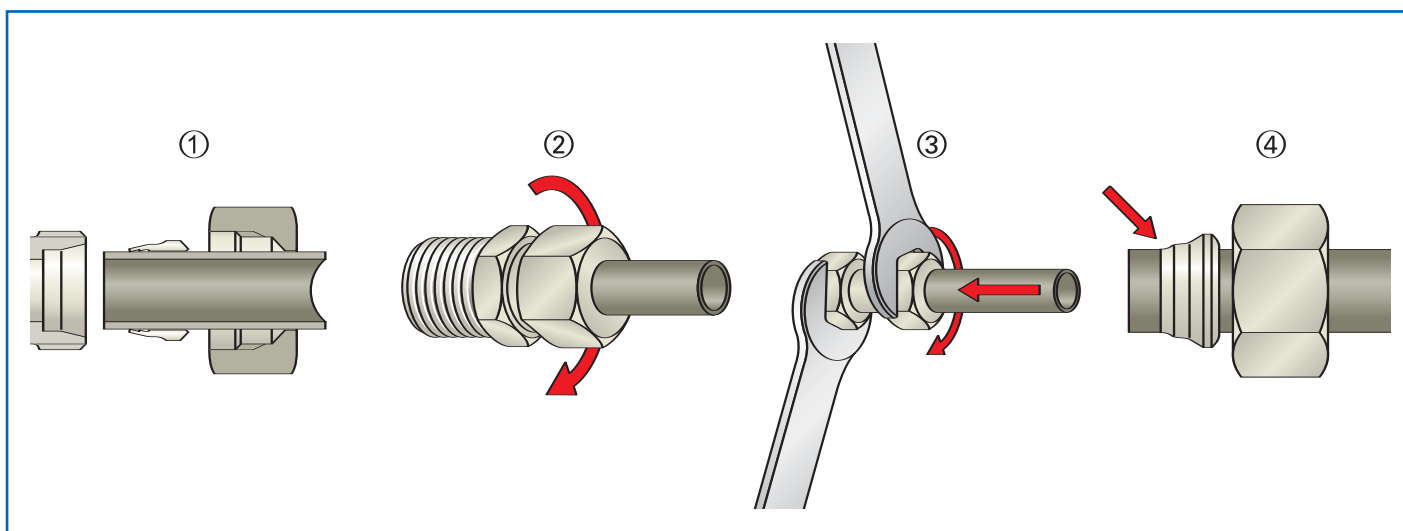
Installation of cutting ring couplings to ISO 8434-1

Manual installation - single-bite and double-bite rings

- 1- Push the nut and the cutting ring onto the pipe.
- 2- Screw on the nut until contact is perceptible.
- 3- Press the pipe against the stop in the coupling body to ensure correct incision of the pipe.
With a wrench, tighten the nut approximately 1 1/2 turns, whilst holding the coupling body in position.
- 4- **Checking:** Disassemble the tube connection by slackening the nut. A visible cut edge must be apparent in front of the cutting ring. The cutting ring may rotate, but will not permit axial displacement.

Re-installation:

For the re-installation process, tighten the nut with the same torque as the initial installation. In this case, screw on the nut until contact is perceptible, then tighten approximately 1/8 turn with a wrench.



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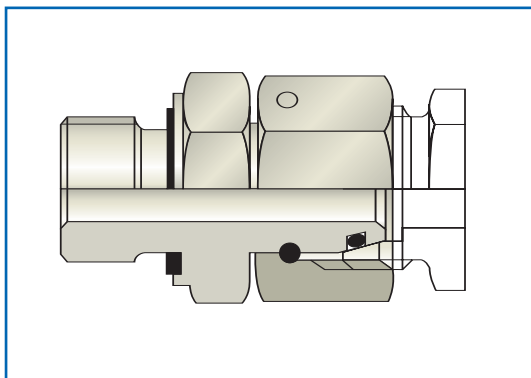
Manual installation - DiNova ring

- 1- Push the nut and the DiNova ring onto the pipe.
- 2- Screw on the nut until contact is perceptible.
- 3- With the help of a wrench, tighten the nut until contact is perceptible, that is, approximately 1 3/4 turns.
- 4- **Checking:** Disassemble the connection by slackening the nut. A visible cut edge must be apparent in front of the cutting ring.

Re-installation:

Screw on, then tighten with a wrench, until contact is perceptible (approximately 1/6 turn).

Installation of couplings with 24° sealing cone and O-ring



Whilst holding the coupling body with a wrench, tighten the nut by 1/4 to 1/3 turn on the pre-assembled side after having determined a perceptible increase in force.

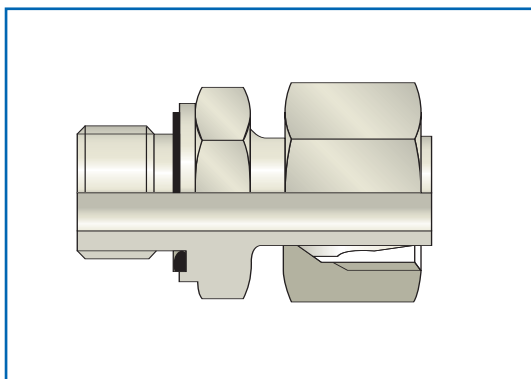
The tube end with cutting ring, with flare or weld nipple-connection coupling is to be assembled according to the relevant assembly instructions for these couplings.

To ensure the repeatability of the process, it is also possible to assemble 24° cone couplings by controlling the tightening torque. See the following table

Series	L											S									
tube o.d.	6	8	10	12	15	18	22	28	35	42		6	8	10	12	14	16	20	25	30	38
Tightening torque NM Min.	18	23	28	40	50	65	100	110	170	260		18	23	28	40	55	65	100	140	170	260
Tightening torque NM Max.	20	25	35	45	60	85	110	130	215	330		25	40	50	60	75	80	120	170	250	350

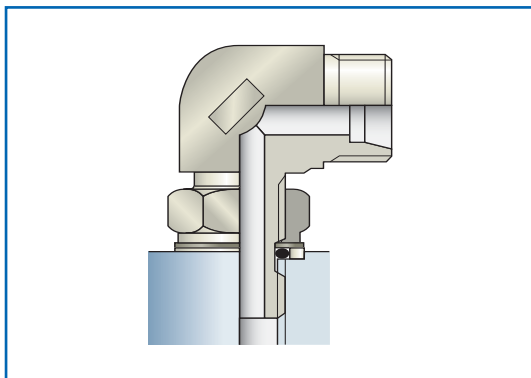
Installation of pre-assembled couplings

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Whilst holding the coupling body with a wrench, tighten the nut by 1/4 to 1/3 turn on the pre-assembled side after having determined a perceptible increase in force.

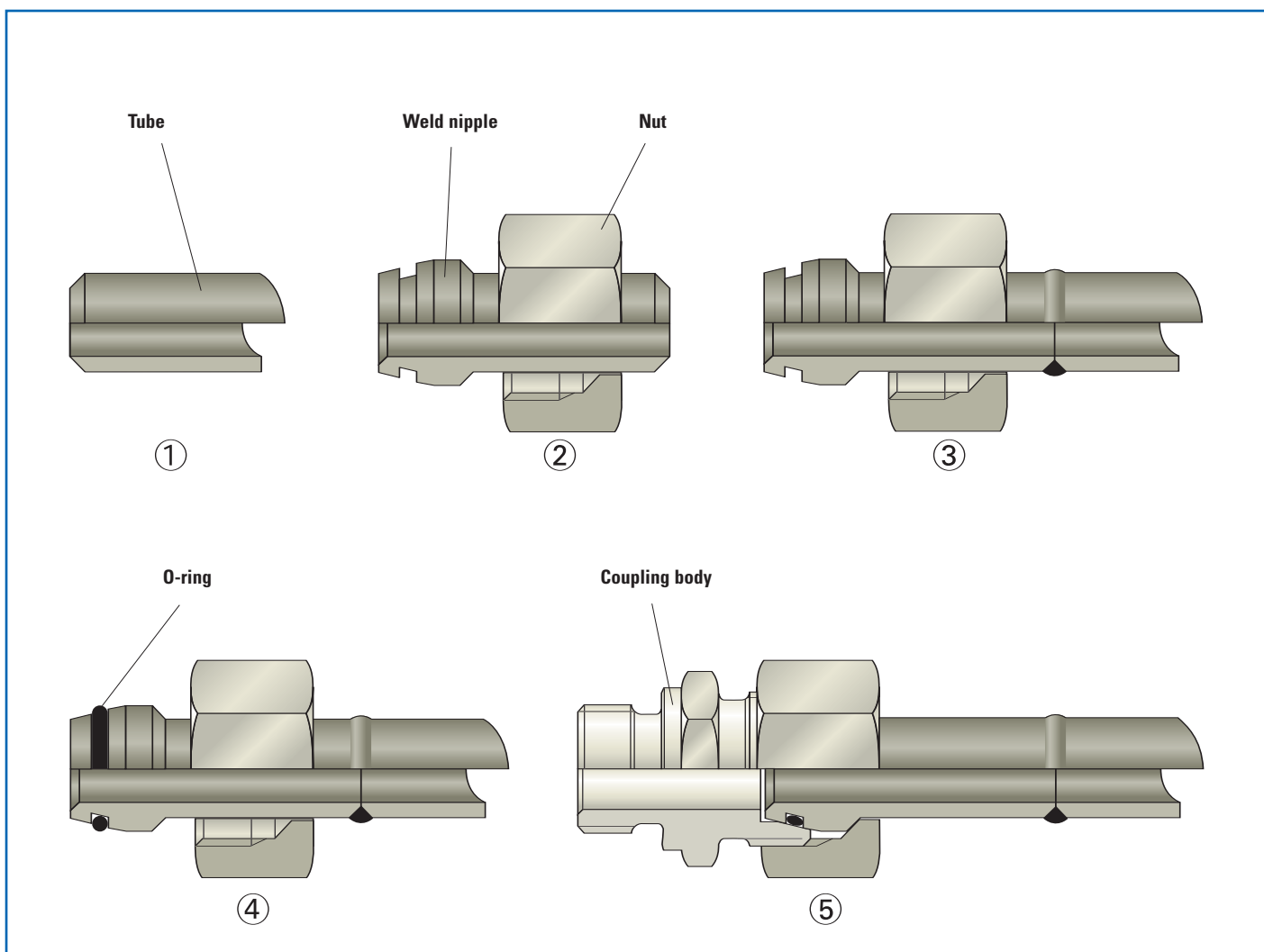
Installation of adjustable couplings with lock nut



- 1- Screw the lock nut onto the coupling body. Release the assembly and O-ring until contact with coupling body is made. Lubricate the O-ring.
- 2- For BSP and metric threaded couplings, for tapped holes to ISO 1179 and ISO 9974, push the ring onto the O-ring.
- 3- Screw the coupling body, by hand, into the tapped hole until contact with lock nut or ring is perceptible.
- 4- Adjust the coupling body to the required direction (1 maximum turn).
- 5- Screw the lock nut onto the seal and tighten with a wrench, according to the information given at the beginning of this catalogue.

Installation of weld nipples to ISO 8434-4

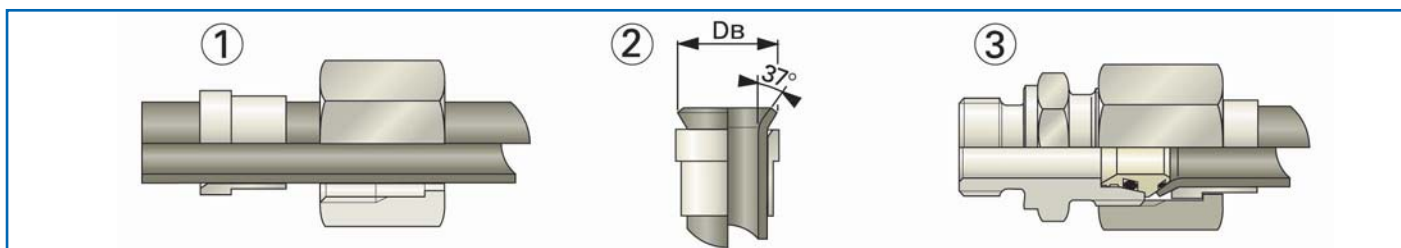
- 1- Cut the tube at right angles and chamfer it to obtain a V-welding seam to DIN 2559.
- 2- Slide the nut over the weld nipple as shown in the illustration.
- 3- Weld the nipple and tube according to general welding practise. Please ensure that no globules of weld enter the inside of the tube. Nipple, groove and taper must also be clean.
- 4- Insert the O-ring into the groove only after welding. Do not grease, but lubricate nipple taper, inside and outside threads.
- 5- Screw the nut, by hand, onto the body with a wrench, then tighten approximately 1/4 to 1/3 turn. The tube, complete with weld nipple, should be screwed and installed free from tension.



Installation of adaptors for 24°/37° couplings to ISO 8434-1

Installation

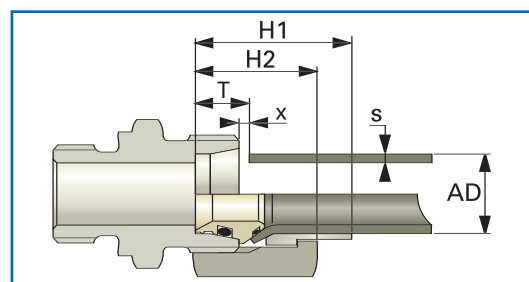
- 1- Slide the nut and the collar over the tube as shown in the illustration.
- 2- Flare the tube by means of flaring tools or a flaring machine. The flare diameter DB must not be beyond the limits given in the table below. The flare cone must be square to the tubular axis and concentric to the collar. The inner cone must be clean and free of burrs.
- 3- Insert the adaptor into the coupling body and press the flared tube onto the adaptor. Screw on the nut, by hand, then, tighten with a spanner until the adaptor is pressed securely into the coupling body. When torque needs to be intensified, tighten the nut approximately 1/4 turn more. Each time the connection is slackened, it can be retightened without any intensified torque.



tube o.d.	6	8	10	12	14	15	16	18	20	22	25	28	30	35	38	42
DB min.	9,1	11,3	13,1	15,3	18,6	19,1	20,6	23,2	25,6	26,5	31,1	32,7	37	41,8	46	48,8
DB max.	10,0	12,0	14,0	16,0	19,6	20,0	22,0	24,0	26,8	27,5	33,0	33,3	38,7	42,7	47,2	49,8

Determining tube lengths - overall length

In order to determine the length of the tube before flaring, the dimension X must be deducted from each tube end which is to be connected to a coupling body. When using the dimension tables to calculate the tube length, the dimension T must be used. T represents the difference in tube length between the flare coupling and the cutting ring coupling. The overall lengths for flare couplings can be determined by using dimensions H1 and H2.



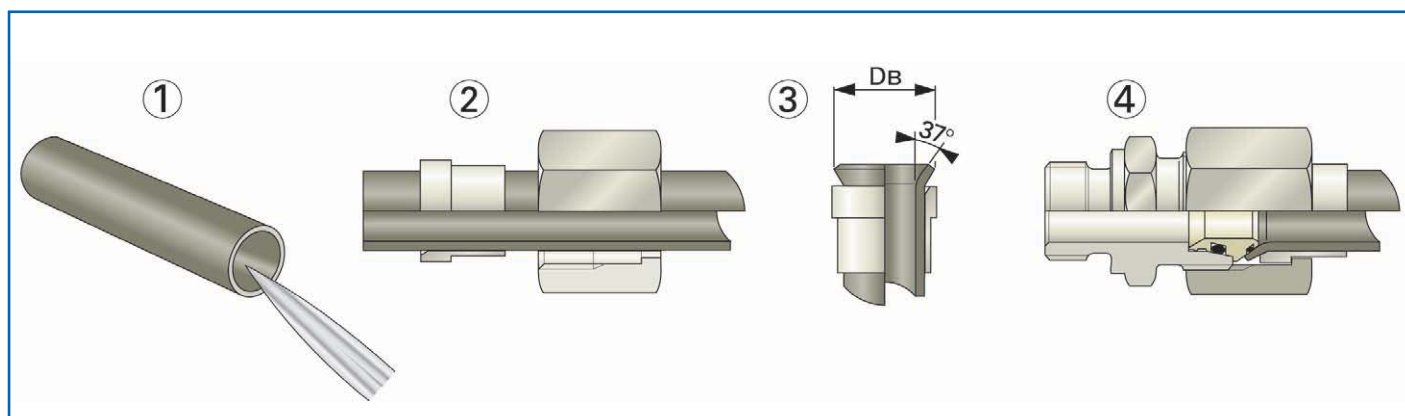
Series	Tube size AD x s	T	x	H1	H2
L	6x1	8,5	1,5	21,5	17,5
	6x1,5	9	2	22	18
	8x1	9	2	22	18
	8x1,5	9,5	2,5	23	19
	8x2	10	3	24	20
	10x1	9	2	24	19
	10x1,5	10	3	25	20
	10x2	11	4	25,5	20,5
	12x1	9	2	25	19,5
	12x1,5	9,5	2,5	25,5	20
	12x2	10	3	26,5	21
	15x1,5	9	2	28,5	21
	15x2	9,5	2,5	29	21,5
	15x2,5	10	3	30	22,5
	18x1,5	8,5	1	28,5	22,5
	18x2	9	1,5	29,5	23,5
	18x2,5	9,5	2	30	24
	22x1,5	8,5	1	30,5	23,5
	22x2	9	1,5	31,5	24,5
	22x2,5	9,5	2	32	25
	22x3	11	3,5	33	26
	28x2	11,5	4	33,5	25
	28x2,5	12	4,5	34,5	26
	28x3	12,5	5	35	26,5
	35x2	12	1,5	39,5	29,5
	35x2,5	12,5	2	40	30
	35x3	13,5	3	41	31
	35x4	15	4,5	42,5	32,5
	42x2	12	1	46	32,5
	42x3	13,5	2,5	47,5	34
	42x4	15	4	49	35,5

Series	Tube size AD x s	T	x	H1	H2
S	6x1	8,5	1,5	21,5	17,5
	6x1,5	9	2	22	18
	8x1	9	2	22	18
	8x1,5	9,5	2,5	23	19
	8x2	10	3	24	20
	10x1	10	2,5	25	20
	10x1,5	10,5	3	25,5	20,5
	10x2	11,5	4	26	21
	12x1	9,5	2	25,5	20
	12x1,5	10	2,5	26	20,5
	12x2	10,5	3	27	21,5
	14x1,5	9,5	1,5	29	21,5
	14x2	10,5	2,5	30	22,5
	14x2,5	11	3	31	23,5
	14x3	11,5	3,5	32	24,5
	16x1,5	10	1,5	30,5	24,5
	16x2	11	2,5	31,5	25,5
	16x2,5	11,5	3	32	26
	16x3	12	3,5	33	27
	20x2	12,5	2	35	28
	20x2,5	13	2,5	35,5	28,5
	20x3	13,5	3	36	29
	20x3,5	14,5	4	37	30
	25x2	15,5	3,5	39	30,5
	25x2,5	16	4	40	31,5
	25x3	17	5	41	32,5
	25x4	18	6	42,5	34
	30x2	14	0,5	43	33
	30x2,5	14,5	1	43,5	33,5
	30x3	15,5	2	44	34
	30x4	16,5	3	45,5	35,5
	30x5	17,5	4	47	37
	38x2,5	17	1	52,5	39
	38x3	17,5	1,5	53	39,5
	38x4	19	3	54,5	41
	38x5	20,5	4,5	56	42,5

Installation of adaptors for 37° flared tube to ISO 8434-2

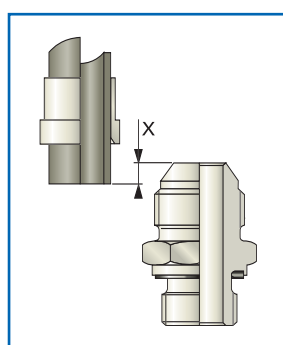
Installation

- 1- Deburr the pipe inside and outside, do not chamfer. Clean the tube end, otherwise the sealing surface of the tube will be damaged when it is flared.
- 2- Slide the nut and the flare sleeve over the tube.
- 3- Flare the tube by means of flaring tools or a flaring machine. The flare diameter DB must not exceed the limits given in the table. The flare cone must be square to the tubular axis and be concentric to the collar. The inner cone must be clean and free of burrs.
- 4- Screw the retaining nut onto the coupling body fingertight. Tighten the nut with a spanner 1/4 to max. 1/2 turn, or with a torque wrench, to the values shown in the following table.



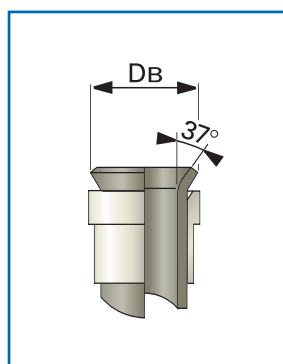
Determining tube length

For calculating the overall tube length, you should add length X to the required length - this corresponds to the insertion of the coupling cone in the flare part of the tube. Please refer to the following table.



tube o.d. mm	6	8	10	12	14	15	16	18	20	25	30	32	38
tube o.d. inch	1/4"	5/16"	3/8"	1/2"			5/8"		3/4"	1"		1 1/4"	1 1/2"
additional length X mm	2	2	2	2,5	2,5	2,5	2,5	3	3	3	4	4	4

Flaring diameter and tightening torques



tube o.d. mm	6	8	10	12	14	15	16	18	20	25	30	32	38
tube o.d. inch	1/4"	5/16"	3/8"	1/2"			5/8"		3/4"	1"		1 1/4"	1 1/2"
DB min.	8	9,5	11,2	14,9	17,9	17,9	17,9	22,3	22,3	28,7	35,8	35,8	41,4
DB max.	9,7	11,3	12,7	17,3	20,2	20,2	20,2	24,7	24,7	31	38,9	38,9	45,3
MA min. tightening torque in NM	18	23	29	45	59	77	77	93	93	151	198	198	209
MA max. tightening torque in NM	20	26	33	52	64	85	85	102	102	166	216	216	231

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