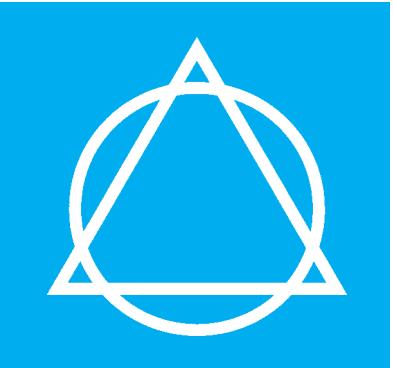


BLANKE
ARMATUREN

COMPRESSION FITTINGS
blago



better than good ... **blago**



blago



High pressure pipe fittings

according to DIN 2353 with
safety cutting ring

in
steel
brass
and stainless steel
as well as
ball valves
brass valves
high pressure needle valves
non return valves
flanges
pressure gauge fittings

GENERAL CATALOGUE



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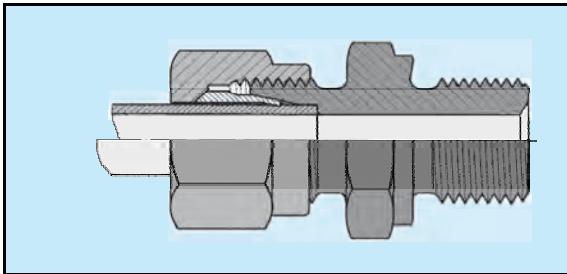
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Overview of the Blago coupling system

Blago push-in couplings

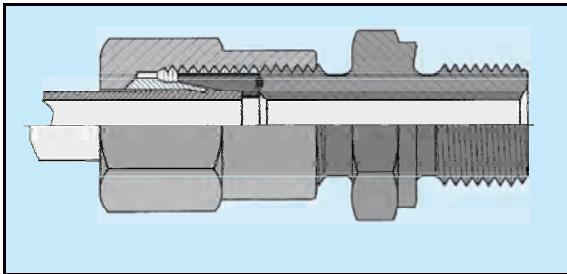
Complying to ISO 8434 (DIN 2353). They are used as universal tube connections for hydraulic and pneumatic applications, machine construction, the automotive and ship building industry as well as in the food industry. The couplings are suitable up to 640 bars depending on the series as well as for light vacuum applications. Moreover, they can withstand temperatures up to 500°C depending on the material type. Material : steel, stainless steel, brass and special materials.



Blago butt-joint brake-pipe couplings

Compared to the push-in fittings, this system has the advantage of being radially assembled. In cramped conditions the assembly of these couplings is advantageous. A wide proven range is available for the automotive industry from DIN 74297 to DIN 74319.

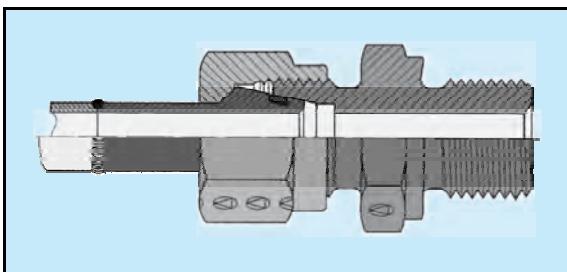
Material : steel, stainless steel.



Blago weld-on taper couplings

These couplings can be used in extreme conditions and comprise bodies only and nuts according to ISO 8434 (DIN 2353) heavy duty series and weld-on tapers according to DIN 3861/3865. Sealing of the weld-on tapers in the coupling can be either metallic only or with an additional O-ring.

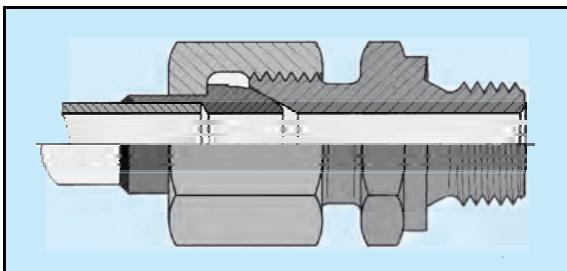
Material : steel



Blago taper compression couplings

These consist of bodies only with 60° internal cone, tapers and nuts. Standard couplings are manufactured from DIN 7604 to 7647 and can also be used for hydraulic and pneumatic applications. Special couplings of this type can also be manufactured with BSP and NPT threads.

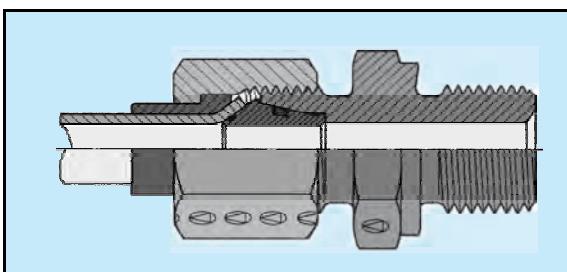
Material : steel, stainless steel, brass and special materials.



Blago flare adapters

The blago flare adapter kit is composed of an inter ring, pressure ring and nut. They are used to connect 24° taper couplings according to ISO 8434 (DIN 2353) with flared tubes. The sealing is metallic with an additional safety through O-rings.

Material : steel, stainless steel and special materials.





Introduction

Blago compression couplings have been manufactured for several decades with steadily increasing success and are used in all industrial fields of activities.

The robust construction, modern production and storage methods as well as a careful control system have guaranteed a consistent high quality standard of our products, which has been universally proven billions of time over many years.

Compression fittings from Blanke Armaturen are manufactured to guarantee an extremely high safety level avoiding any leakages.

An important characteristic is the Blago safety cutting ring. The design of the cutting ring was patented in the 1950's and has undergone changes to reflect steadily increasing pressures in hydraulic circuitry. This process gave rise to the shape of today's safety cutting ring.

Blago compression fittings are manufactured according to DIN ISO 8434 (DIN 2353) and are suitable for use with metric tubes and tools.

Principle of the Blago cutting ring coupling

Blago cutting ring couplings are used to enable safe connections of tubes in the hydraulic industry without any leakages. The most important component of this connection is our optimized safety cutting ring. The special geometry of the safety cutting ring allows safe cutting onto the tube and prevents overcutting the tube due to its special construction. The most important features making the ring unique is three folds :

1. Cutting onto the tube

Safe cutting onto the tube allows the necessary hold.

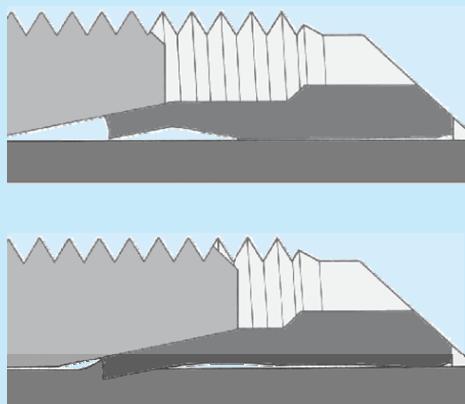
2. Tube clamping

The tube is safely clamped in the shoulder area to dampen any movements.

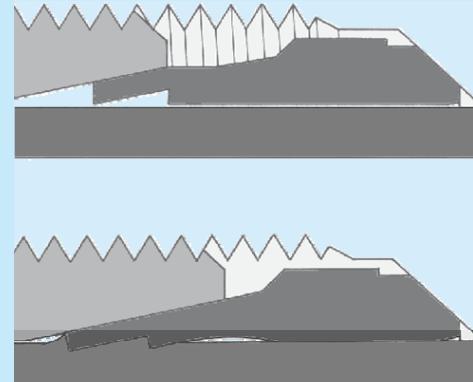
3. Spring effect

The cutting ring is elastically stretched after a correct assembly to strongly avoid any loosening of the nut caused by mechanical strains or movements. A loosening of the nut through mechanical interference or movement is then completely avoided.

The Blago cutting ring is available either as single or double cutting ring in steel, stainless steel and brass.



The Blago single cutting ring before and after assembly



The Blago double cutting ring before and after assembly



Blago weld-on adapter, Blago flaring adapter

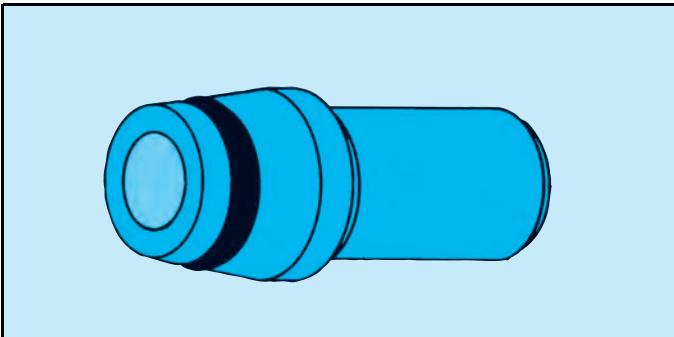
Blago weld-on adapter

All Blago compression fittings can be delivered if requested with weld-on adapters instead of cutting rings.

Weld-on adapters have been used for decades whenever very high mechanical strains arose on the couplings. Blago weld-on adapters offer the following advantages:

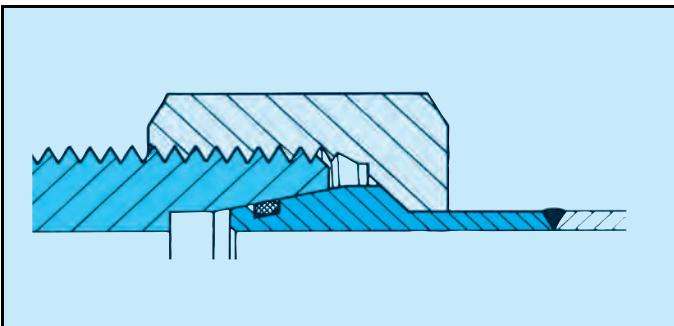
1. Universal usage

Blago weld-on adapters can be combined with any compression fittings. All existing weld-on instructions can be applied.



2. Minor demands

Dimensions and surface data of the used hydraulic tubes do not correspond to so high demands as when using cutting ring compression fittings.



3. High pressure stability

Blago weld-on adapters can withstand pressures up to 550 bar.

4. High sealing

Leakage free sealing can be guaranteed even for low viscous media through the geometry and the surface constitution of the weld-on adapter with the elastomer sealing.

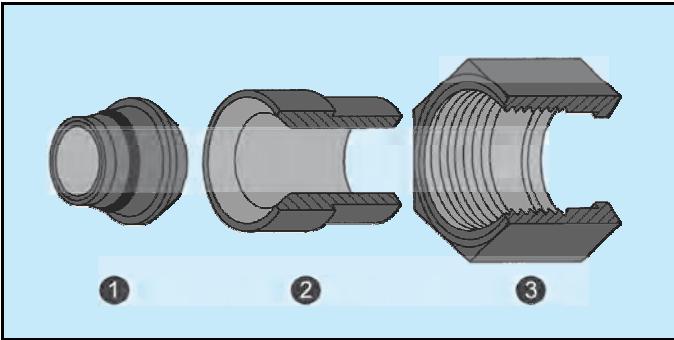
5. Sustainability

The coupling does not need to be retightened even after many working years if the assembly has been properly performed.

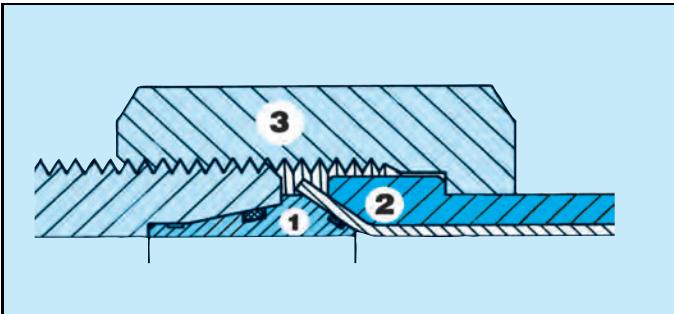
Blago flare adapter

The Blago flare adapter is used to connect flared tube with 37° flaring with compression fittings with 24° tapers according to DIN ISO 8434-1. The flare adapter is compatible with all Blago compression fittings according to DIN ISO 8431-1.

The Blago flare adapter kit is composed of an inter ring (1), pressure ring (2) and nut (3). During the assembly the pressure ring and nut must be pushed in the right direction onto the tube before flaring. The inter ring will be pushed until it hits the tube edge into the 24° taper of the body. This enables a metal sealing with an additional safety through the O-ring.



An enlargement of the taper is not possible as the inter ring lays at the tube edge.



The tube will be properly clamped between the pressure ring and inter ring when the nut is tightened. The sealing is also performed metallically with an additional safety through O-ring.



Blago-compression fittings 24° ISO 8434 (DIN 2353)

Tube connections

- DIN 3861
- DIN 8434-1
- DIN 3853

Port tapping metric

- DIN 3852 T1
- DIN 3852 T11
- DIN 9974-2/3
- DIN ISO 6149-2
- DIN ISO 6149-3

Port tapping BSP thread

- DIN 3852 T2
- DIN 3852 T11
- ISO 1179-2
- ISO 1179-4

Port tapping UN/UNF thread

- ISO 11926-2
- ISO 11926-3

Port tapping NPT thread

- ANSI/ASME B 1.20.1-1983

Technical delivery conditions

- DIN 3859 T1

Assembly instr.

- DIN 3859 T2

Tests

- DIN 3859 T3
- ISO 8434-5

Taper and weld-on couplings ISO 8434

Tube connections

- DIN 3861
- ISO 8434-1

Port tapping metric

- DIN 3852 T1
- DIN 3852 T11
- ISO 9974-2
- DIN ISO 6149-2
- DIN ISO 6149-3

Port tapping BSP thread

- DIN 3852 T2
- ISO 1179-2

Technical delivery conditions

- DIN 3859 T1

Tests

- DIN 3859 T3
- ISO 8434-5

ISO compression fittings

24° compression fittings with cutting ring

- ISO 8434-1

37° flare couplings

- ISO 8434-2

24° taper couplings
weld-on couplings

- ISO 8434-4

Tubes (Blago product range)

Seamless hydraulic tubes

- DIN 2391-C
- DIN 1630
- ISO 3304

Seamless hydraulic tubes (stainless steel, austenitic), rust free

- DIN 17458
- DIN EN ISO 1128
- Tolerances acc. to DIN 2391-C



Material, surface treatment

Materials

We use only material from certified suppliers to maintain our high quality standards. Additionally, we carry out additional controls in our own laboratory.

Steel

Blago compression fittings are generally delivered in steel. Straight compression fitting types are manufactured from 11SMnPb30 (Material No. 1.0715). We use only forged material from 11SMn30 (1.0718) to manufacture elbows, Tees and crosses. Forged material provides many advantages with regard to firmness and sustainability compared to profile material. Big advantages are obtained from material sealing during the forging process and a better fibre thickness of the forging.



Brass

Compression fittings in brass are generally made from CuZn40Pb2 (Material No. 2.0402, Ms58) unless otherwise specified. Special brass can also be delivered as an alternative made from CuZn35Ni (Material No. 2.0540, SoMs59). All non-straight parts will be manufactured out of forged material as it is the case for steel compression fittings.



Stainless steel

Drawn or forged material is on principle used for compression fittings in stainless steel. Bodies only are manufactured from X10CrNiMoTi 18 10 (Material No. 1.4571, stainless steel with Titanium) and nuts from X12CrNiS 18 8 (Material No. 1.4305, without Titanium).

Other material types like Cromel, Hastelloy or Titan can be delivered on request.

Surface treatment

Blago compression fittings in steel are delivered in the standard version in zinc plated and yellow chromated (A3C according to DIN/ISO 4042).

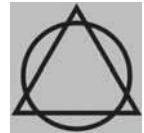
Other versions as zinc plated or phosphated and oiled can be delivered on request.

The surface treatment of our products is performed by the most up to date processes and are in excess of DIN, ISO and SAE required standards .

Special surface treatments like Chrome VI free or ZnNi treatments can be performed on request.



Medium stability



Please make sure that the used medium can withstand the chosen compression fitting material and sealing.

Medium	Material					Medium	Material				
	Steel	Stainless	Brass	NBR	FKM		Steel	Stainless	Brass	NBR	FKM
Acetone	2	1	1	3	3	Houghton Safe 620	1	1	x	1	2
Acetylene	2	1	3	3	3	Hydraulic oil, mineral basis	1	1	1	1	1
Ammoniac liquid	2	1	3	2	3	Hydrolube	1	1	1	1	1
Ammoniac, gas, cold	1	1	3	1	3	Iodine	3	1	3	2	1
Aral, Vitam BAF	1	1	x	1	1	Kerosene	1	1	1	1	1
Argon	3	1	1	1	1	Carbon oxid	1	1	1	1	1
ASTM oil, No. 1	1	1	1	1	1	Carbonic acid	3	1	3	2	1
ASTM oil, No. 2	1	1	1	1	1	Air	1	1	1	1	1
ASTM oil, No. 3	1	1	1	1	1	Sea water	3	2	3	1	1
ASTM oil, No. 4	1	1	1	2	1	Methan	1	1	1	1	1
Ethanol	1	1	1	1	3	Methanol	1	1	1	1	3
Ether	1	1	1	3	3	Mineral oils	1	1	1	1	1
Petrol	1	1	1	1	1	Neon	3	1	1	1	1
Benzol	1	1	1	3	1	Ozone	1	1	3	3	1
Brake liquid	1	1	1	3	3	Petroleum	1	1	3	1	1
Butan	1	1	3	1	1	Phosphoric acid	3	3	1	3	1
Castrol Biotec HVX	1	1	x	1	1	Plantohyd 32 S	1	1	x	1	x
Chlor, dry	3	1	3	3	1	Plantohyd 40 N	1	1	x	1	1
Steam	2	1	2	3	3	Propane	1	1	1	1	1
DEA Econa E22	1	1	x	1	x	Smoke gas	3	1	3	3	2
DEA Econa E46	1	1	x	1	x	Salpetre acid	3	1	3	3	2
Diesel fuel	1	1	2	1	1	Salt acid	3	2	3	3	1
Air Pressure	1	1	1	1	1	Oxygen, gas, cold	3	1	2	3	3
ECOOL	1	1	x	1	1	Sulphur dioxyd	3	1	3	3	1
Natural gas	1	1	2	1	1	Sulphur carbon	1	1	3	3	1
Natural gas, sour	3	1	3	3	3	Sulphuric acid	3	2	3	3	1
Petroleum	1	1	3	2	1	SHELL Naturelle HF-E-46	1	1	x	1	1
ESSO Univis 13	1	1	x	1	1	SHELL Tellus Öl DO 32	1	1	x	1	1
ESSO Univis 26	1	1	x	1	1	Silicon oil	1	1	x	1	1
ESSO Univis 32	1	1	x	1	1	Skydrol 500	1	1	3	3	3
ESSO Univis 46	1	1	x	1	1	Skydrol 7000	1	1	3	3	2
FIAN Biohydran RS 38	1	1	x	1	1	Nitrogen	1	1	1	1	1
FRAGOL Hydrolub 125	1	1	x	1	x	Turpentine	2	1	3	1	1
Gear petroleum	1	1	1	1	1	Toluol	1	1	1	3	2
Glycerine	2	1	2	1	1	Water	2	1	1	1	2
Glycol	1	1	2	1	1	Hydrogen	1	1	1	1	1
Heating oil	1	1	1	1	1	Hydrogen peroxyde	3	1	3	3	1
Helium	1	1	1	1	1	Xylol	1	1	1	3	1
Houghton Safe 1120	1	1	x	3	1						

1 = stable

2 = partly stable

3 = unstable

x = no information

NBR = Nitril-Butadien-Kautschuk

FKM = Fluor-Kautschuk



Pressure data, pressure ratios, temperatures

Pressure data

Nominal pressure NP

The nominal pressure indicates to which pressure a part can withstand constant dynamic strains. The figures have been rounded according to the international valid values. The component with the lowest value was given for combined parts.

The listed nominal pressures are in conformity with the 4 times safety. Several Blago fittings underwent large strain tests.

Maximum working pressure Pmax

The maximum working pressure is the pressure that a component has to withstand with limited dynamic strains. The safety is at least 2,5-times the Pmax value.

Pressure ratios

Pressure ratio depending on material and temperature compared to the pressure ratio listed in the catalogue have to be taken into consideration.

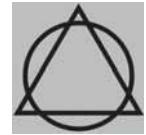
Material	Pressure ratio [%]							
	-60	-40 bis +100	+120	+150	+175	+200	+250	+300 bis +400
Steel			0%		11%	19%		35%
Stainless (1.4571)	0%		11%			20%		30%
Brass (2.0540)	35%							

Recommended operating temperatures

Whenever you select the compression fitting material as well as seals, please respect the recommended operating temperature and avoid being above or below this temperature ratio.

Material	Allowed working temperature [°C]							
	-60	-40	-25	+100	+125	+175	+200	+400
Steel		X	X	X	X	X	X	
Stainless (1.4571)	X	X	X	X	X	X	X	X
Brass (2.0540)	X	X	X	X	X	X		
NBR (example Perbunan)		X	X	X				
FKM (example Viton)			X	X	X	X		

Port tapping/Tapping holes for Blago compression fittings



ISO thread, metric acc. to DIN 3852 T1 and T11; ISO 9974-1, -2 and -3

Tube thread acc. to DIN 3852 T2 and T11, ISO 1179-1, -2, -3 and -4

Port tapping

Form A

Sealing by sealing ring acc. to DIN 7603

Port tapping

Form B

Sealing by sealing edge

Port tapping

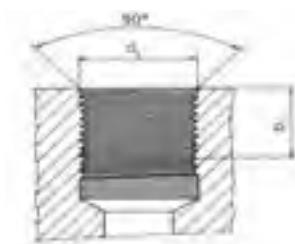
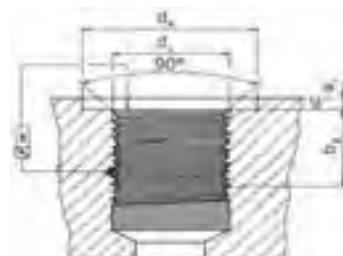
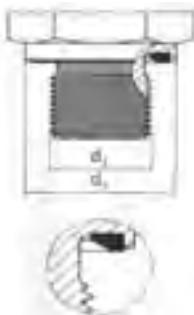
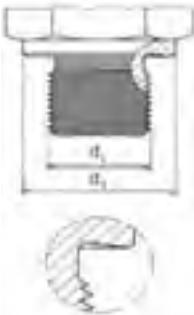
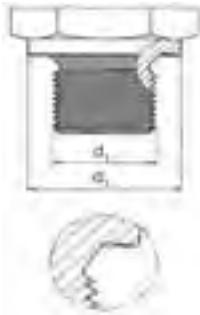
Form E

Sealing by captive seal (WD)

Port tapping

Form C

Sealing by taper thread



Tapping hole form X
(for cylindric ports)

Tapping hole form Z
(for tapper ports)

d₁	d₃	d₇	d₈	d₄ min	d₄ max	a₁ max	b₁ min	Thread d₂	b₂ min	W
M 8 x 1								M 8 x 1 taper		
M 10 x 1	14	13,9	14,8	15	20	1,0	8	M 10 x 1 taper		5,5
M 12 x 1,5	17	16,9	17,8	18	25			M 12 x 1,5 taper		
M 14 x 1,5	19	18,9	19,8	20				M 14 x 1,5 taper		
M 16 x 1,5	21	21,9	22,8	23	28			M 16 x 1,5 taper		
M 18 x 1,5	23	23,9	24,8	25	30			M 18 x 1,5 taper		
M 20 x 1,5	25	25,9	26,8	27	34			M 20 x 1,5 taper		
M 22 x 1,5	27	26,9	27,8	28				M 22 x 1,5 taper		10,5
M 26 x 1,5	31									
M 27 x 2	32	31,9	32,8	33	42					
M 33 x 2	39	39,9	40,8	41	47					
M 42 x 2	49	49,9	50,8	51	58					
M 48 x 2	55	54,9	55,8	56	65					
R 1/8	14	13,9	14,8	15	19	1,0	8	R 1/8 taper	5,5	
R 1/4	18	18,9	19,8	20	25	1,5	12	R 1/4 taper	8,5	
R 3/8	22	21,9	22,8	23	28	2,0		R 3/8 taper		
R 1/2	26	26,9	27,8	28	34			R 1/2 taper	10,5	
R 3/4	32	31,9	32,8	33	42					
R 1	39	39,9	40,8	41	47					
R 1 1/4	49	49,9	50,8	51	58					
R 1 1/2	55	54,9	55,8	56	65					

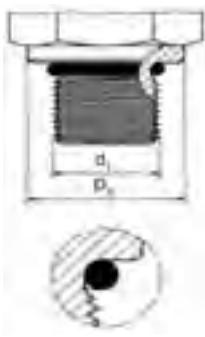


Port tapping/Tapping holes for Blago compression fittings

ISO thread, metric acc. to ISO 6149-1 and -3; UN/UNF threads acc. to ISO 11926-1, -2 and -3

NPT threads acc. to ANSI/ASME B 1.20.1-1983

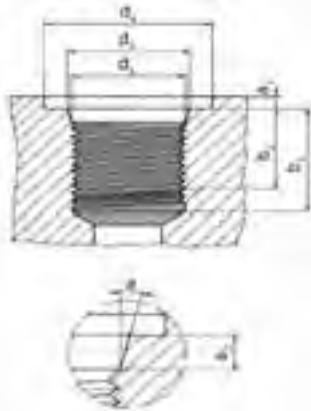
**Port tapping
form UN/UNF**
Sealing by
O-ring



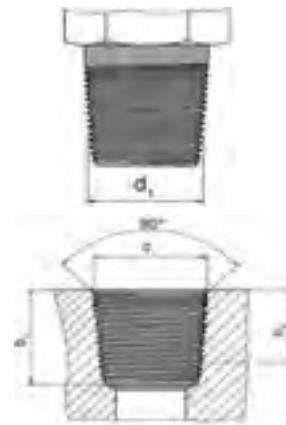
**Port tapping
adjustable**
Sealing by
O-ring



**Tapping hole
form UN/UNF**



**Port tapping
form NPT**
Sealing by taper thread

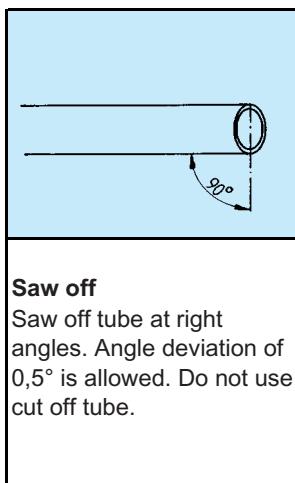


**Tapping hole
form NPT**

d_1	D_5	$d_4 \text{ min}$	$d_2 +0,1$	$a_1 \text{ max}$	$a_2 +0,4$	$b_1 \text{ min}$	$b_2 \text{ min}$	$a \pm 1^\circ$
M 8 x 1	11,8	14	9,1	1,0	1,6	11,5	10,0	12°
M 10 x 1	13,8	16	11,1					
M 12 x 1,5	16,8	19	13,8	1,5		14,0	11,5	
M 14 x 1,5	18,8	21	15,8			15,5	13,0	
M 16 x 1,5	21,8	24	17,8	2,4		17,0	14,5	
M 18 x 1,5	23,8	26	19,8			18,0	15,5	
M 22 x 1,5	26,8	29	23,8	2,0		22,0	19,0	
M 27 x 2	31,8	34	29,4					
M 33 x 2	40,8	43	35,4	2,5	3,1	22,5	19,5	
M 42 x 2	49,8	52	44,4			25,0	22,0	
M 48 x 2	54,8	57	50,4					
7/16-20 UNF	13,8	21	12,40	1,6	2,4	14,0	11,5	
9/16-18 UNF	16,8	25	15,65			15,5	12,7	12°
3/4-16 UNF	21,8	30	20,60	2,5		17,5	14,3	
7/8-14 UNF	26,8	34	23,95			20,0	16,7	
11/16-12 UN	31,8	41	29,15	2,4				
15/16-12 UN	40,8	49	35,50		3,3	23,0	19,0	
15/8-12 UN	49,8	58	43,50	3,2				
17/8-12 UN	54,8	65	49,85					
1/8-27 NPT						11,6	6,9	
1/4-18 NPT						16,4	10,0	
3/8-18 NPT						17,4	10,3	
1/2-14 NPT						22,6	13,6	
3/4-14 NPT						23,1	14,1	
1-11,5 NPT						27,8	16,8	
11/4-11,5 NPT						28,3	17,3	
11/2-11,5 NPT								

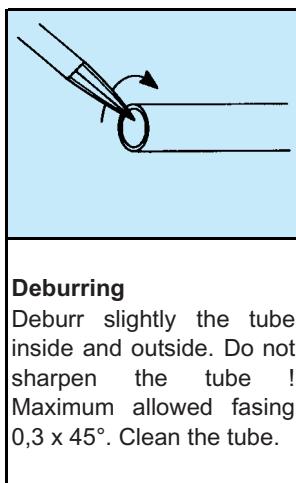


Tube preparation



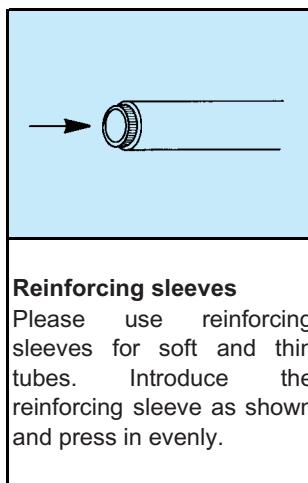
Saw off

Saw off tube at right angles. Angle deviation of 0,5° is allowed. Do not use cut off tube.



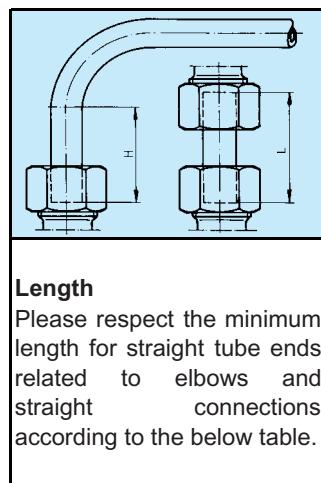
Deburring

Deburr slightly the tube inside and outside. Do not sharpen the tube ! Maximum allowed fasing 0,3 x 45°. Clean the tube.



Reinforcing sleeves

Please use reinforcing sleeves for soft and thin tubes. Introduce the reinforcing sleeve as shown and press in evenly.



Length

Please respect the minimum length for straight tube ends related to elbows and straight connections according to the below table.

Minimum lengths for straight tube ends

OD	LL				L									S										
	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

Material combination

The Blago compression fitting must be selected according to the related tube material. Please respect the assembly instructions in the table on the right hand side.

Tube material	Compression fitting	Notes
Steel	Steel	-
Stainless steel	Stainless steel	Pre-assembly necessary
Copper	Brass	-
Plastic	Steel	Reinforcing sleeve necessary

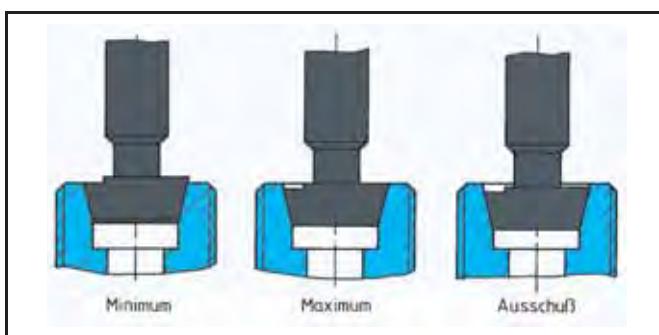
Notes

Lubrication material

Zinc plated Blago compression fittings with lubrication surface do not need to be oiled before assembly. The thread of the nut and the taper of the body must be oiled before assembly when blank or phosphated compression fittings and pre-assembly bodies are used.

VOMO control

Please check tapers of pre-assembly bodies regularly regarding diameters and damage to ensure a correct assembly.



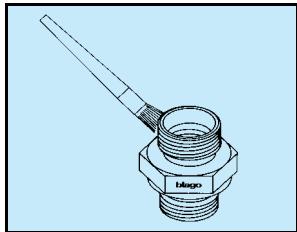
Safety note

Hydraulic connections have to withstand very high strains. We therefore recommend that the assembly is only carried out by trained staff. A correctly assembled compression fitting does not show any leakage up to tube failure.



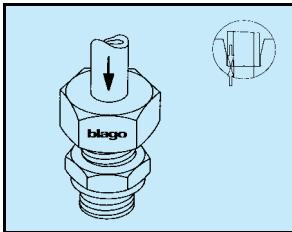
Assembly of compression fittings with safety cutting ring

Direct assembly



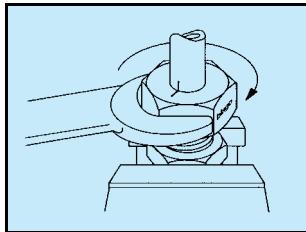
Oil

Slightly oil thread of the body and taper.



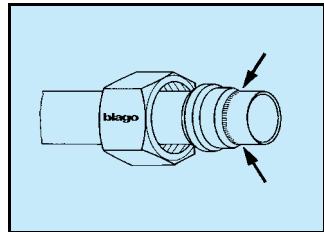
Combination

Nut and cutting ring must be put over the tube and introduce the tube into the body. Tube must lay at the tube edge of the body.



Final assembly

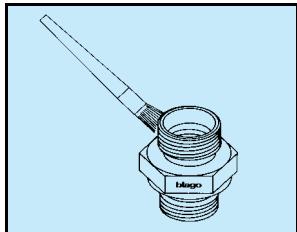
Tighten nut by hand as far as possible. Mark position and finish the assembly with 1 1/2 turns.



Visual inspection

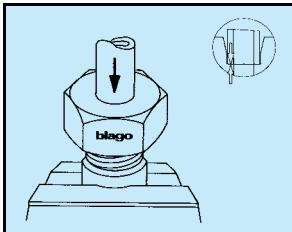
Loosen the nut. Check that the cutting ring completely covers the outer end of the tube.

Assembly with pre-assembly bodies (VOMO)



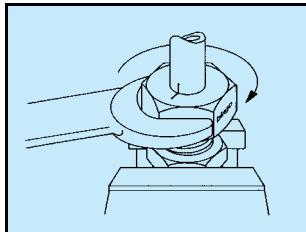
Oil

Slightly oil thread of the body and taper of the VOMO.



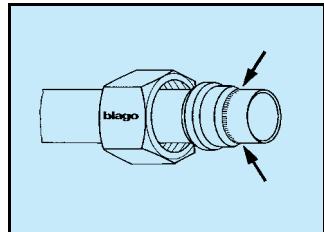
Combination

Nut and cutting ring must be put over the tube and introduce the tube into the pre-assembly body. Tube must lay at the tube edge of the body.



Final assembly

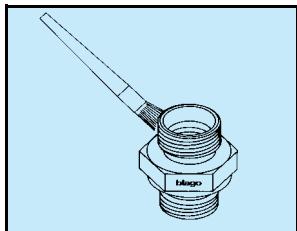
Tighten nut by hand as far as possible. Mark position and finish the assembly with 1 1/4 turns.



Visual inspection

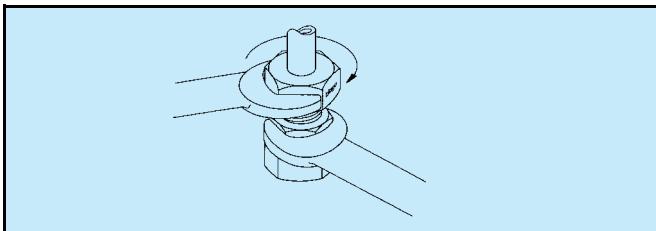
Loosen the nut. Check that the cutting ring completely covers the outer end of the tube.

Repeated assembly



Oil

Slightly oil thread of the body and taper.



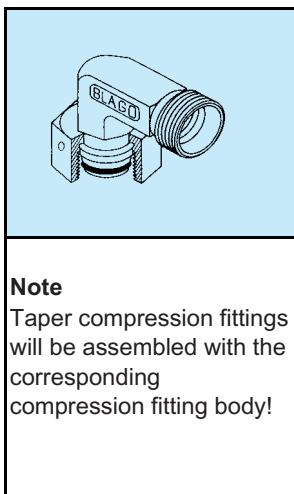
Final assembly

Tighten by hand the nut as long as possible and hold the body against it. Note : Clamp always the body with an hexagon or work with two keys (counter hold).

Assembly of taper, weld-on and flare compression fittings

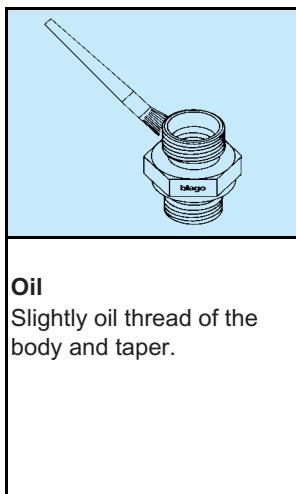


Taper compression fittings



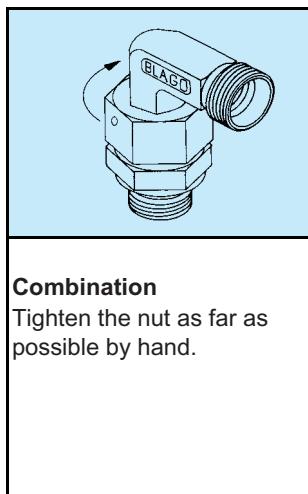
Note

Taper compression fittings will be assembled with the corresponding compression fitting body!



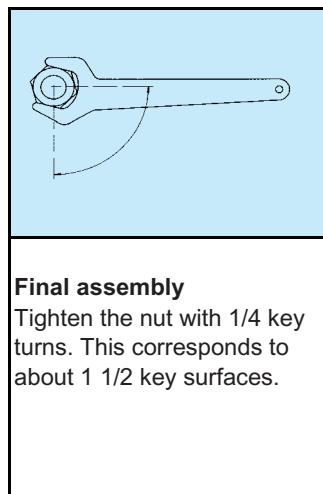
Oil

Slightly oil thread of the body and taper.



Combination

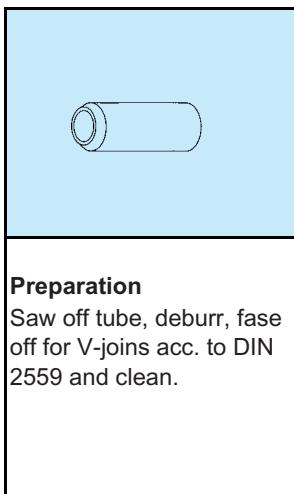
Tighten the nut as far as possible by hand.



Final assembly

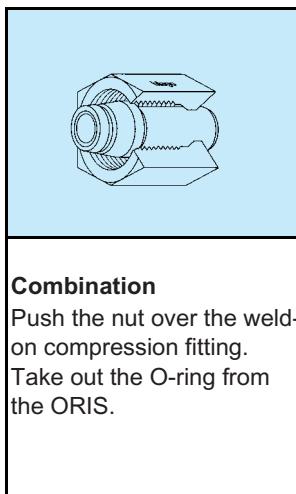
Tighten the nut with 1/4 key turns. This corresponds to about 1 1/2 key surfaces.

Weld-on compression fittings



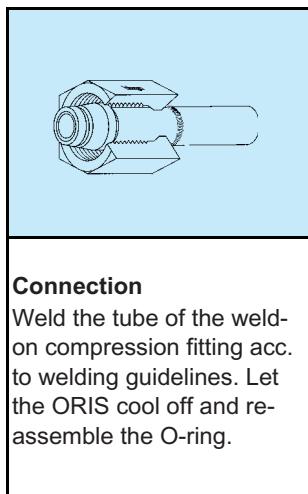
Preparation

Saw off tube, deburr, fase off for V-joins acc. to DIN 2559 and clean.



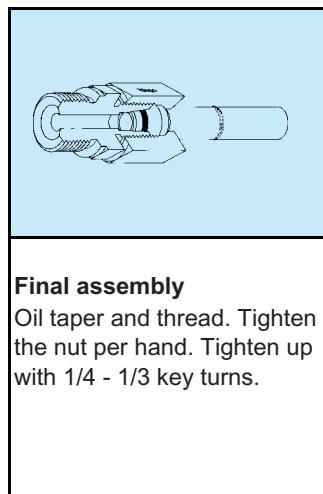
Combination

Push the nut over the weld-on compression fitting. Take out the O-ring from the ORIS.



Connection

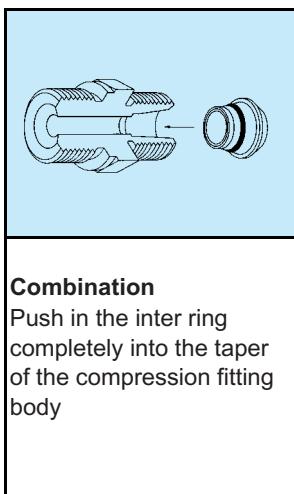
Weld the tube of the weld-on compression fitting acc. to welding guidelines. Let the ORIS cool off and re-assemble the O-ring.



Final assembly

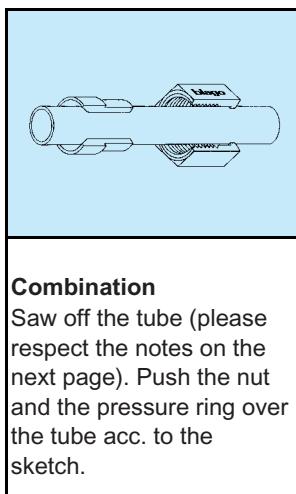
Oil taper and thread. Tighten the nut per hand. Tighten up with 1/4 - 1/3 key turns.

Compression fittings with flare adapters (BOE)



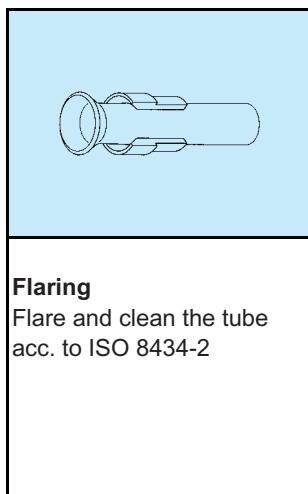
Combination

Push in the inter ring completely into the taper of the compression fitting body



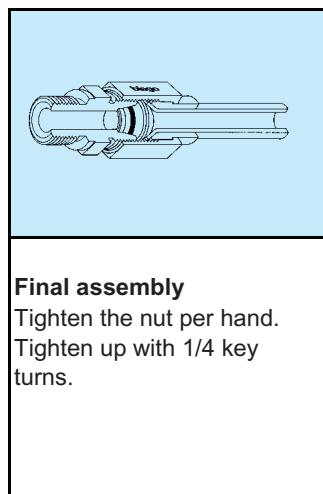
Combination

Saw off the tube (please respect the notes on the next page). Push the nut and the pressure ring over the tube acc. to the sketch.



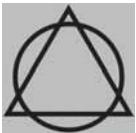
Flaring

Flare and clean the tube acc. to ISO 8434-2



Final assembly

Tighten the nut per hand. Tighten up with 1/4 key turns.

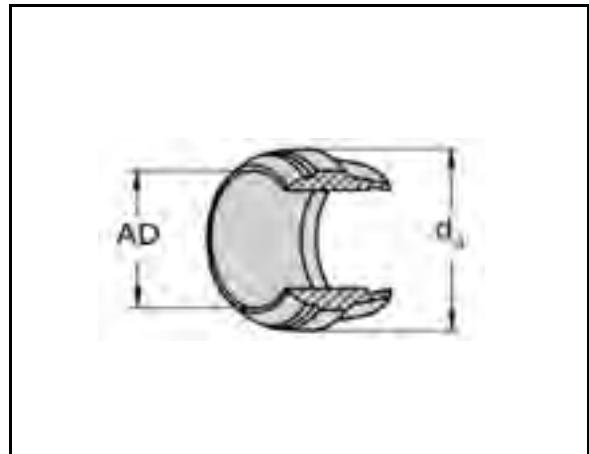
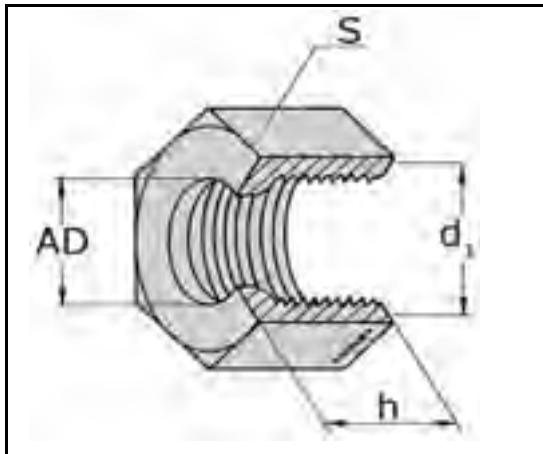


Nuts DIN 3870
Cutting rings DIN 3861

Nuts

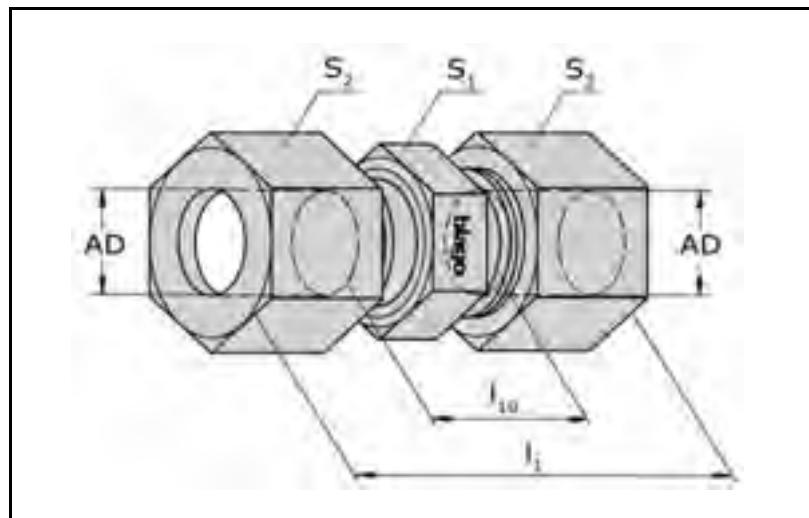
DIN 3870

Cutting rings
DIN 3861



Series	NP	OD	h	S	d ₁	Blago Part No.	DIN 2353	kg %	d ₄	Blago Part No.	DIN 2353	kg %
LL	100	4	11,0	10	M 8 x 1	mLL 4	ALL 4	0,4	5,5	dll 4	LL 4	0,05
		5	11,5	12	M 10 x 1	mLL 5	ALL 5	0,5	7,0	dll 5	LL 5	0,07
		6	11,5	12	M 10 x 1	mLL 6	ALL 6	0,5	8,5	dll 6	LL 6	0,09
		8	12,0	14	M 12 x 1	mLL 8	ALL 8	0,7	10,5	dll 8	LL 8	0,10
L	500	6	14,5	14	M 12 x 1,5	mL 6	AL 6	0,9	10	zdl 6	L 6	0,15
		8	14,5	17	M 14 x 1,5	mL 8	AL 8	1,4	12	zdl 8	L 8	0,20
		10	15,5	19	M 16 x 1,5	mL 10	AL 10	2,0	14	zdl 10	L 10	0,25
	400	12	15,5	22	M 18 x 1,5	mL 12	AL 12	2,5	16	zdl 12	L 12	0,30
		15	17,0	27	M 22 x 1,5	mL 15	AL 15	4,0	19	zdl 15	L 15	0,40
		18	18,0	32	M 26 x 1,5	mL 18	AL 18	6,0	22	zdl 18	L 18	0,45
	250	22	20,0	36	M 30 x 2	mL 22	AL 22	8,0	26	zdl 22	L 22	0,60
		28	21,0	41	M 36 x 2	mL 28	AL 28	8,5	32	zdl 28	L 28	0,75
		35	24,0	50	M 45 x 2	mL 35	AL 35	13,0	41	zdl 35	L 35	1,70
		42	24,0	60	M 52 x 2	mL 42	AL 42	21,0	48	zdl 42	L 42	2,10
S	800	6	16,5	17	M 14 x 1,5	mS 6	AS 6	1,5	10	zds 6	S 6	0,15
		8	16,5	19	M 16 x 1,5	mS 8	AS 8	1,7	12	zds 8	S 8	0,20
		10	17,5	22	M 18 x 1,5	mS 10	AS 10	3,0	14	zds 10	S 10	0,25
	630	12	17,5	24	M 20 x 1,5	mS 12	AS 12	3,5	16	zds 12	S 12	0,30
		14	20,5	27	M 22 x 1,5	mS 14	AS 14	5,0	18	zds 14	S 14	0,35
		16	20,5	30	M 24 x 1,5	mS 16	AS 16	6,0	21	zds 16	S 16	0,40
	420	20	24,0	36	M 30 x 2	mS 20	AS 20	9,5	26	zds 20	S 20	0,85
		25	27,0	46	M 36 x 2	mS 25	AS 25	19,5	31	zds 25	S 25	1,05
		30	29,0	50	M 42 x 2	mS 30	AS 30	21,5	36	zds 30	S 30	1,45
		38	32,5	60	M 52 x 2	mS 38	AS 38	31,0	45	zds 38	S 38	1,90

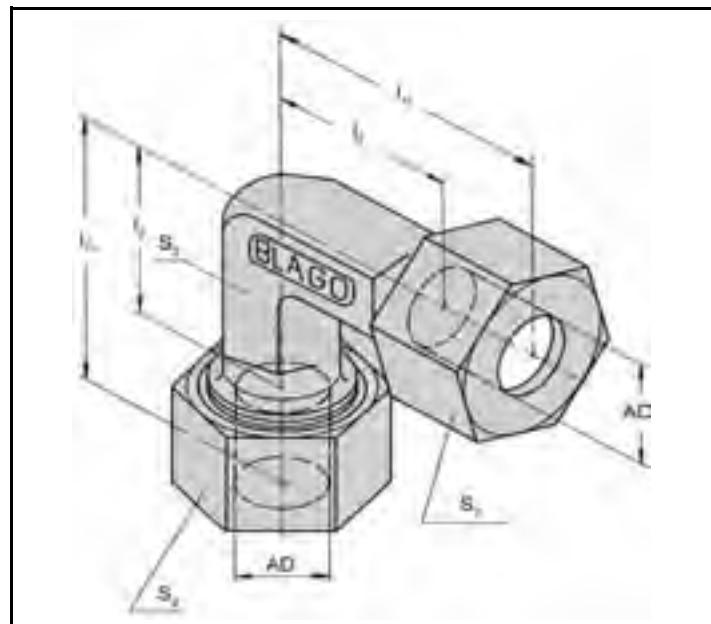
Straight couplings



Series	NP	Tube OD	S_1	S_2	l_{10} ~	l_1 ~	DIN 2353	kg %	Blago Part No.
LL	100	4	11	10	12	31	ELL 4	1,4	DLL 4
		5	11	12	9	32	ELL 5	1,9	DLL 5
		6	11	12	9	32	ELL 6	2,1	DLL 6
		8	12	14	12	35	ELL 8	2,6	DLL 8
L	500	6	12	14	10	39	EL 6	3,5	DL 6
		8	14	17	11	40	EL 8	4,9	DL 8
		10	17	19	13	42	EL 10	6,9	DL 10
	400	12	19	22	14	43	EL 12	8,5	DL 12
		15	24	27	16	46	EL 15	13,8	DL 15
		18	27	32	16	48	EL 18	19,5	DL 18
	250	22	32	36	20	52	EL 22	26,2	DL 22
		28	41	41	21	54	EL 28	31,5	DL 28
		35	46	50	20	63	EL 35	49,4	DL 35
		42	55	60	21	66	EL 42	72,8	DL 42
S	800	6	14	17	16	45	ES 6	5,9	DS 6
		8	17	19	18	47	ES 8	7,8	DS 8
		10	19	22	17	49	ES 10	11,0	DS 10
	630	12	22	24	19	51	ES 12	13,6	DS 12
		14	24	27	22	57	ES 14	18,2	DS 14
		16	27	30	21	57	ES 16	22,3	DS 16
	420	20	32	36	23	66	ES 20	34,7	DS 20
		25	41	46	26	74	ES 25	66,9	DS 25
		30	46	50	27	80	ES 30	80,9	DS 30
		38	55	60	29	90	ES 38	119,4	DS 38

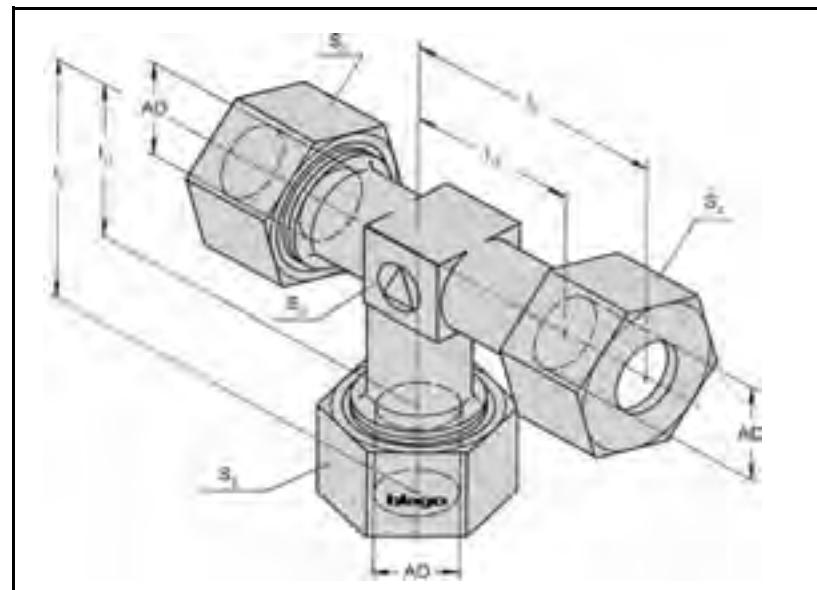


Elbow couplings



Series	NP	Tube OD	S_2	S_3	l_2 ~	l_{11} ~	DIN 2353	kg %	Blago Part No.
LL	100	4	10	9	11	21	KLL 4	2,5	ELL 4
		5	12	9	9,5	21	KLL 5	2,1	ELL 5
		6	12	9	9,5	21	KLL 6	2,8	ELL 6
		8	14	12	11,5	23	KLL 8	3,8	ELL 8
L	500	6	14	12	12	27	KL 6	4,9	EL 6
		8	17	12	14	29	KL 8	7,6	EL 8
		10	19	14	15	30	KL 10	9,6	EL 10
	400	12	22	19	17	32	KL 12	13,5	EL 12
		15	27	19	21	36	KL 15	15,8	EL 15
		18	32	24	23,5	40	KL 18	23,9	EL 18
	250	22	36	27	27,5	44	KL 22	31,7	EL 22
		28	41	36	30,5	47	KL 28	42,0	EL 28
		35	50	41	34,5	56	KL 35	75,9	EL 35
		42	60	50	40	63	KL 42	107,8	EL 42
S	800	6	17	12	16	31	KS 6	8,5	ES 6
		8	19	14	17	32	KS 8	11,7	ES 8
		10	22	19	17,5	34	KS 10	16,1	ES 10
	630	12	24	17	21,5	38	KS 12	20,5	ES 12
		14	27	19	22	40	KS 14	20,7	ES 14
		16	30	24	24,5	43	KS 16	25,0	ES 16
	420	20	36	27	26,5	48	KS 20	40,7	ES 20
		25	46	36	30	54	KS 25	77,6	ES 25
		30	50	41	35,5	62	KS 30	97,4	ES 30
		38	60	50	41	72	KS 38	131,8	ES 38

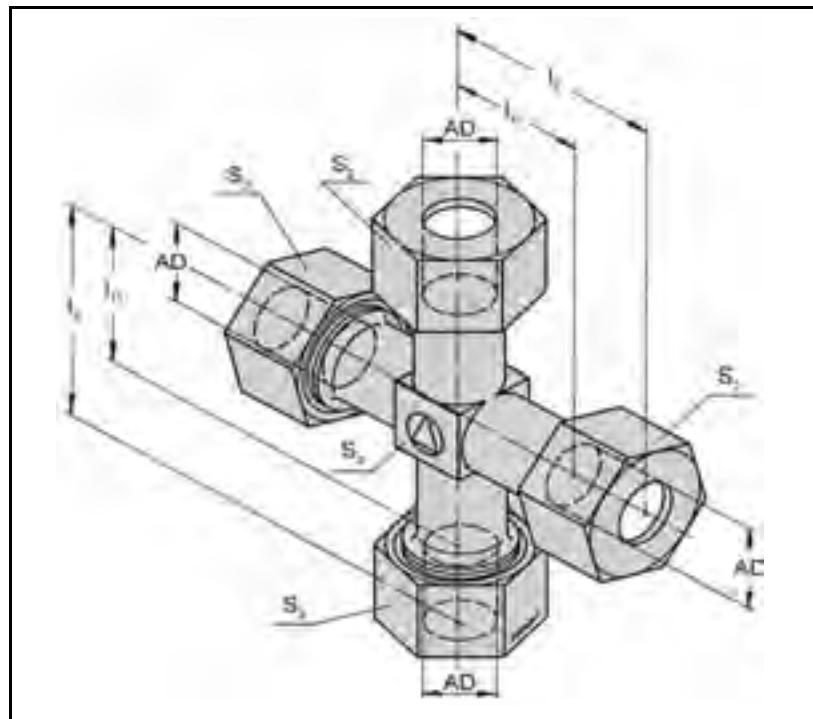
Tee couplings



Series	NP	Tube OD	S ₂	S ₃	I ₁₁ ~	I ₂ ~	DIN 2353	kg %	Blago Part No.
LL	100	4	10	12	11	21	QLL 4	2,9	TLL 4
		5	12	12	9,5	21	QLL 5	4,0	TLL 5
		6	12	12	9,5	21	QLL 6	3,8	TLL 6
		8	14	12	11,5	23	QLL 8	5,1	TLL 8
L	500	6	14	12	12	27	QL 6	7,1	TL 6
		8	17	12	14	29	QL 8	10,1	TL 8
		10	19	14	15	30	QL 10	13,9	TL 10
	400	12	22	17	17	32	QL 12	17,7	TL 12
		15	27	19	21	36	QL 15	23,2	TL 15
		18	32	24	23,5	40	QL 18	35,4	TL 18
	250	22	36	27	27,5	44	QL 22	44,3	TL 22
		28	41	36	30,5	47	QL 28	61,1	TL 28
		35	50	41	34,5	56	QL 35	90,1	TL 35
		42	60	50	40	63	QL 42	136,8	TL 42
S	800	6	17	12	16	31	QS 6	12,0	TS 6
		8	19	14	17	32	QS 8	15,7	TS 8
		10	22	17	17,5	34	QS 10	21,2	TS 10
	630	12	24	17	21,5	38	QS 12	28,5	TS 12
		14	27	19	22	40	QS 14	28,5	TS 14
		16	30	24	24,5	43	QS 16	35,9	TS 16
	420	20	36	27	26,5	48	QS 20	55,8	TS 20
		25	46	36	30	54	QS 25	106,7	TS 25
		30	50	41	35,5	62	QS 30	134,9	TS 30
		38	60	50	41	72	QS 38	202,2	TS 38



Cross couplings

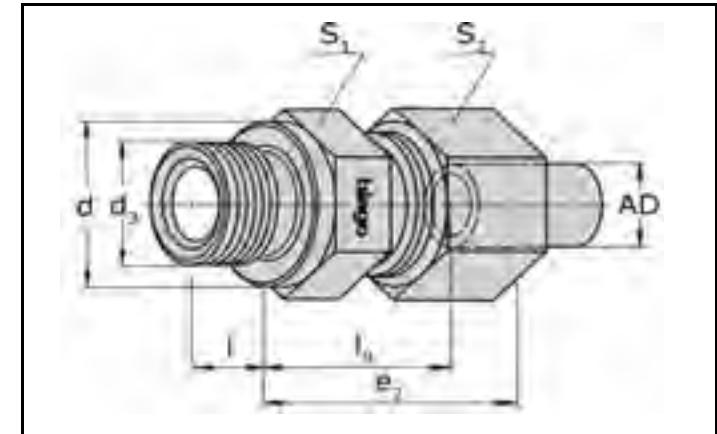


Series	NP	Tube OD	S ₂	S ₃	l ₁₁ ~	l ₂ ~	DIN 2353	kg %	Blago Part No.
L	315	6	14	12	12	27	ZL 6	7,7	KVL 6
		8	17	12	14	29	ZL 8	10,9	KVL 8
		10	19	14	15	30	ZL 10	15,5	KVL 10
		12	22	17	17	32	ZL 12	19,2	KVL 12
		15	27	19	21	36	ZL 15	31,1	KVL 15
		18	32	24	23,5	40	ZL 18	48,3	KVL 18
	160	22	36	27	27,5	44	ZL 22	72,4	KVL 22
		28	41	36	30,5	47	ZL 28	101,0	KVL 28
		35	50	41	34,5	56	ZL 35	122,8	KVL 35
		42	60	50	40	63	ZL 42	175,6	KVL 42
S	640	6	17	12	16	31	ZS 6	12,3	KVS 6
		8	19	14	17	32	ZS 8	14,8	KVS 8
		10	22	17	17,5	34	ZS 10	23,0	KVS 10
		12	24	17	21,5	38	ZS 12	28,2	KVS 12
	400	14	27	19	22	40	ZS 14	35,4	KVS 14
		16	30	24	24,5	43	ZS 16	45,1	KVS 16
	315	20	36	27	26,5	48	ZS 20	70,4	KVS 20
		25	46	36	30	54	ZS 25	125,7	KVS 25
		30	50	41	35,5	62	ZS 30	150,3	KVS 30
		38	60	50	41	72	ZS 38	205,1	KVS 38

Straight male stud couplings



Stud thread :
Metric thread, parallel
Port tapping
with metal seal
Form B DIN 3852 (ISO 9974)
See page 10/11

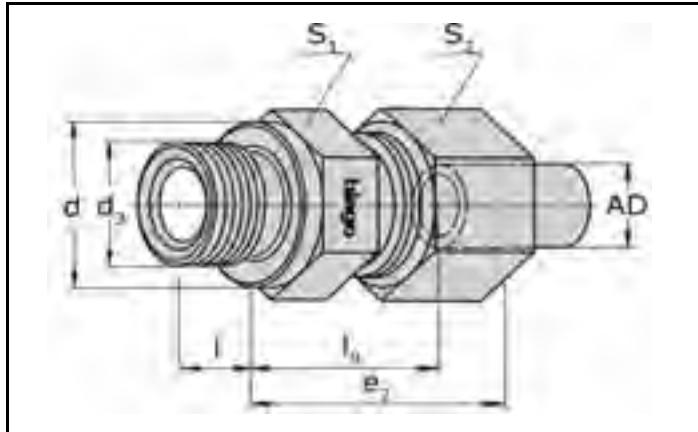


Series	NP	Tube OD	d ₃	e ₂ ~	l ₉	i	S ₁	S ₂	d	DIN 2353	kg %	Blago Part No.
L	315	06	M 10 x 1	23,5	8,5	8	14	14	14	CL 6 B	2,5	AL 06-M 10 x 1
		08	M 12 x 1,5	25	10,0	12	17	17	17	CL 8 B	3,9	AL 08-M 12 x 1,5
		08	M 18 x 1,5	27	12,0	12	24	17	23		7,1	AL 08-M 18 x 1,5
		10	M 14 x 1,5	26	11,0	12	19	19	19	CL 10 B	5,2	AL 10-M 14 x 1,5
		10	M 16 x 1,5	27,5	12,5	12	22	19	21		6,1	AL 10-M 16 x 1,5
		10	M 18 x 1,5	27,5	12,5	12	24	19	23		7,1	AL 10-M 18 x 1,5
		10	M 22 x 1,5	29	14,0	14	27	19	27		9,3	AL 10-M 22 x 1,5
		12	M 16 x 1,5	27	12,5	12	22	22	21	CL 12 B	6,9	AL 12-M 16 x 1,5
		12	M 14 x 1,5	26	11,0	12	19	22	19		5,9	AL 12-M 14 x 1,5
		12	M 18 x 1,5	27,5	12,5	12	24	22	23		7,6	AL 12-M 18 x 1,5
		12	M 22 x 1,5	29	14,0	14	27	22	27		10,5	AL 12-M 22 x 1,5
250	250	15	M 18 x 1,5	28,5	13,5	12	24	27	23	CL 15 B	9,8	AL 15-M 18 x 1,5
		15	M 16 x 1,5	28	13,0	12	24	27	21		9,6	AL 15-M 16 x 1,5
		15	M 22 x 1,5	29	14,0	14	27	27	27		12,3	AL 15-M 22 x 1,5
		18	M 22 x 1,5	31	14,5	14	27	32	27	CL 18 B	14,4	AL 18-M 22 x 1,5
		18	M 18 x 1,5	31	14,5	12	27	32	23		13,6	AL 18-M 18 x 1,5
160	160	22	M 26 x 1,5	33	16,5	16	32	36	31	CL 22 B	19,2	AL 22-M 26 x 1,5
		22	M 22 x 1,5	33	16,5	14	32	36	27		18,1	AL 22-M 22 x 1,5
		28	M 33 x 2	34	17,5	18	41	41	39	CL 28 B	26,6	AL 28-M 33 x 2
		35	M 42 x 2	39	17,5	20	50	50	49	CL 35 B	43,6	AL 35-M 42 x 2
		42	M 48 x 2	42	19,0	22	55	60	55	CL 42 B	59,3	AL 42-M 48 x 2
S	400	06	M 12 x 1,5	28	13,0	12	17	17	17	CS 6 B	4,9	AS 06-M 12 x 1,5
		08	M 14 x 1,5	30	15,0	12	19	19	19	CS 8 B	6,5	AS 08-M 14 x 1,5
		10	M 16 x 1,5	31,5	15,0	12	22	22	21	CS 10 B	8,8	AS 10-M 16 x 1,5
		12	M 14 x 1,5	33	16,5	12	22	24	19		9,9	AS 12-M 14 x 1,5
		12	M 18 x 1,5	33,5	17,0	12	24	24	23	CS 12 B	11,0	AS 12-M 18 x 1,5
		12	M 22 x 1,5	34	17,5	14	27	24	27		14,5	AS 12-M 22 x 1,5
		14	M 20 x 1,5	37	19,0	14	27	27	25	CS 14 B	15,2	AS 14-M 20 x 1,5
		16	M 18 x 1,5	36,5	18,0	12	24	30	23		15,9	AS 16-M 18 x 1,5
		16	M 22 x 1,5	37	18,5	14	27	30	27	CS 16 B	16,8	AS 16-M 22 x 1,5
		20	M 27 x 2	42	20,5	16	32	36	32	CS 20 B	26,5	AS 20-M 27 x 2
	250	25	M 33 x 2	47	23,0	18	41	46	39	CS 25 B	48,4	AS 25-M 33 x 2
160	160	30	M 42 x 2	50	23,5	20	50	50	49	CS 30 B	65,9	AS 30-M 42 x 2
		38	M 48 x 2	57	26,0	22	55	60	55	CS 38 B	92,9	AS 38-M 48 x 2



Straight male stud couplings

Stud thread :
BSP thread, parallel
Port tapping
with metal seal
Form B DIN 3852 (ISO 1179)
See page 10/11

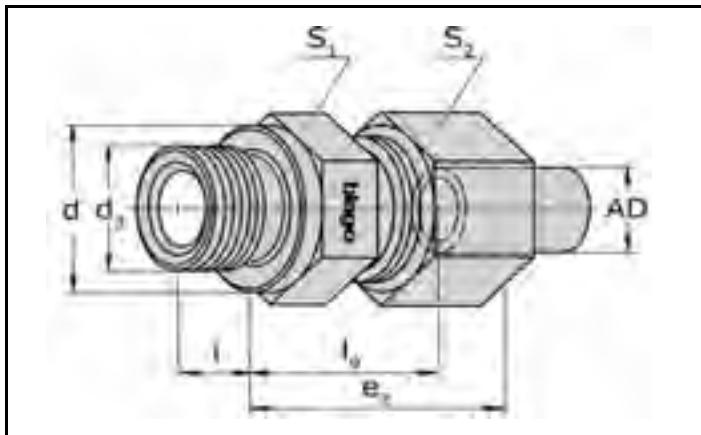


Series	NP	Tube OD	d ₃	e ₂ ~	l ₉	i	S ₁	S ₂	d	DIN 2353	kg %	Blago Part No.
315	L	06	G 1/8 A	23,5	8,5	8	14	14	14	DL 6 B	2,5	AL 06-R 1/8
		06	G 1/4 A	25	10,0	12	19	14	18		4,0	AL 06-R 1/4
		06	G 3/8 A	26,5	11,5	12	22	14	22		5,9	AL 06-R 3/8
		06	G 1/2 A	27	12,0	14	27	14	26		9,4	AL 06-R 1/2
		08	G 1/4 A	25	10,0	12	19	17	18	DL 8 B	4,5	AL 08-R 1/4
		08	G 1/8 A	24,5	9,5	8	14	17	14		3,0	AL 08-R 1/8
		08	G 3/8 A	26,5	11,5	12	22	17	22		6,0	AL 08-R 3/8
		08	G 1/2 A	27	12,0	14	27	17	26		9,5	AL 08-R 1/2
		10	G 1/4 A	26	11,0	12	19	19	18	DL 10 B	4,7	AL 10-R 1/4
		10	G 3/8 A	27,5	12,5	12	22	19	22		6,0	AL 10-R 3/8
		10	G 1/2 A	28	13,0	14	27	19	26		10,0	AL 10-R 1/2
		12	G 3/8 A	27,5	12,5	12	22	22	22	DL 12 B	7,0	AL 12-R 3/8
		12	G 1/4 A	27	12,0	12	19	22	18		6,0	AL 12-R 1/4
		12	G 1/2 A	28	13,0	14	27	22	26		9,5	AL 12-R 1/2
		12	G 3/4 A	29	14,0	16	32	22	32		14,8	AL 12-R 3/4
250	L	15	G 1/2 A	29	14,0	14	27	27	26	DL 15 B	11,5	AL 15-R 1/2
		15	G 3/8 A	28,5	13,5	12	24	27	22		9,9	AL 15-R 3/8
		15	G 3/4 A	30	15,0	16	32	27	32		16,0	AL 15-R 3/4
		18	G 1/2 A	31	14,5	14	27	32	26	DL 18 B	13,2	AL 18-R 1/2
		18	G 3/8 A	30,5	14,0	12	27	32	22		12,5	AL 18-R 3/8
		18	G 3/4 A	31	14,5	16	32	32	32		16,5	AL 18-R 3/4
160	L	22	G 3/4 A	33	16,5	16	32	36	32	DL 22 B	18,5	AL 22-R 3/4
		22	G 1/2 A	33	16,5	14	32	36	26		17,0	AL 22-R 1/2
		22	G 1 A	34	17,5	18	41	36	39		27,3	AL 22-R 1
		28	G 1 A	34	17,5	18	41	41	39	DL 28 B	25,9	AL 28-R 1
		28	G 3/4 A	34	17,5	16	41	41	32		23,4	AL 28-R 3/4
		28	G 1 1/4 A	35	18,5	20	50	41	49		41,4	AL 28-R 1 1/4
		35	G 1 1/4 A	39,5	18,0	20	50	50	49	DL 35 B	42,2	AL 35-R 1 1/4
		35	G 1 1/2 A	41	19,5	22	55	50	55		53,2	AL 35-R 1 1/2
		35	G 1 A	39	18,0	18	46	50	39		36,7	AL 35-R 1
		42	G 1 1/2 A	42	19,0	22	55	60	55	DL 42 B	56,9	AL 42-R 1 1/2

Straight male stud couplings



Stud thread :
BSP thread, parallel
Port tapping
with metal seal
Form B DIN 3852 (ISO 1179)
See page 10/11



Series	NP	Tube OD	d ₃	e ₂ ~	l ₉	i	S ₁	S ₂	d	DIN 2353	kg %	Blago Part No.
S	400	06	G 1/4 A	28	13,0	12	19	17	18	DS 6 B	5,0	AS 06-R 1/4
		06	G 1/8 A	29,5	14,5	8	17	17	14		4,1	AS 06-R 1/8
		06	G 3/8 A	30,5	15,5	12	22	17	22		7,9	AS 06-R 3/8
		06	G 1/2 A	33	18,0	14	27	17	26		10,1	AS 06-R 1/2
		08	G 1/4 A	30	15,0	12	19	19	18	DS 8 B	5,5	AS 08-R 1/4
		08	G 3/8 A	30,5	15,5	12	22	19	22		7,9	AS 08-R 3/8
		08	G 1/2 A	33	18,0	14	27	19	26		10,3	AS 08-R 1/2
		10	G 3/8 A	31,5	15,0	12	22	22	22	DS 10 B	8,8	AS 10-R 3/8
		10	G 1/4 A	31	14,5	12	19	22	18		8,0	AS 10-R 1/4
		10	G 1/2 A	34	17,5	14	27	22	26		10,5	AS 10-R 1/2
		12	G 3/8 A	33,5	17,0	12	22	24	22	DS 12 B	10,0	AS 12-R 3/8
		12	G 1/4 A	33	16,5	12	22	24	18		9,0	AS 12-R 1/4
		12	G 1/2 A	34	17,5	14	27	24	26		13,5	AS 12-R 1/2
		14	G 1/2 A	37	19,0	14	27	27	26	DS 14 B	14,8	AS 14-R 1/2
		14	G 3/8 A	36,5	18,5	12	24	27	22		13,0	AS 14-R 3/8
		16	G 1/2 A	37	18,5	14	27	30	26	DS 16 B	16,1	AS 16-R 1/2
		16	G 3/8 A	36,5	18,0	12	24	30	22		15,4	AS 16-R 3/8
		16	G 3/4 A	39	20,5	16	32	30	32		19,9	AS 16-R 3/4
		20	G 3/4 A	42	20,5	16	32	36	32	DS 20 B	25,3	AS 20-R 3/4
		20	G 1/2 A	42	20,5	14	32	36	26		23,2	AS 20-R 1/2
	250	20	G 1 A	44	22,5	18	41	36	39		38,7	AS 20-R 1
	160	20	G 1 1/4 A	44	22,5	20	50	36	49		46,0	AS 20-R 1 1/4
	250	25	G 1 A	47	23,0	18	41	46	39	DS 20 B	46,5	AS 25-R 1
		25	G 3/4 A	47	23,0	16	41	46	32		40,9	AS 25-R 3/4
160	25	G 1 1/4 A	47	23,0	20	50	46	49			55,0	AS 25-R 1 1/4
	30	G 1 1/4 A	50	23,5	20	50	50	49	DS 30 B	63,5		AS 30-R 1 1/4
	30	G 1 A	50	23,5	18	46	50	39			51,5	AS 30-R 1
	38	G 1 1/2 A	57	26,0	22	55	60	55	DS 38 B	87,0		AS 38-R 1 1/2
	38	G 1 1/4 A	57	26,0	20	55	60	49			78,7	AS 38-R 1 1/4



Straight male stud couplings

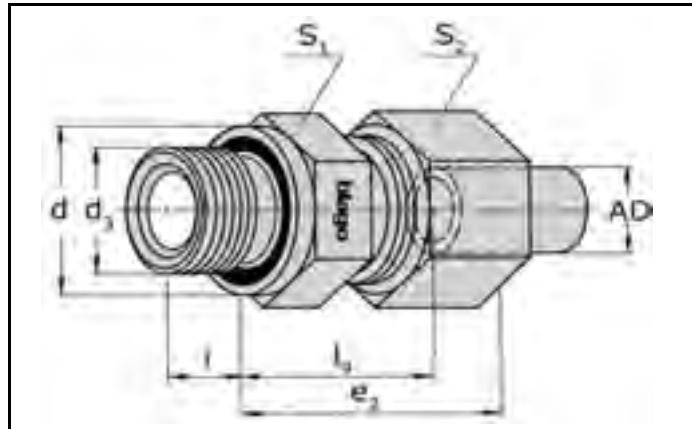
Stud thread :

Metric thread, parallel

Port tapping with captive seal

Form E DIN 3852 (ISO 9974)

See page 10/11



Series	NP	Tube OD	d ₃	e ₂ ~	l ₉	i	S ₁	S ₂	d	DIN 2353	kg %	Blago Part No.
L	500	06	M 10 x 1	23,5	8,5	8	14	14	14	CL 6 E	2,5	AL 06-M 10 x 1 WD
		08	M 12 x 1,5	25	10,0	12	17	17	17	CL 8 E	3,9	AL 08-M 12 x 1,5 WD
	400	08	M 18 x 1,5	27	12,0	12	24	17	24		7,1	AL 08-M 18 x 1,5 WD
	500	10	M 14 x 1,5	26	11,0	12	19	19	19	CL 10 E	5,2	AL 10-M 14 x 1,5 WD
	420	10	M 16 x 1,5	27,5	12,5	12	22	19	22		6,1	AL 10-M 16 x 1,5 WD
	400	10	M 18 x 1,5	27,5	12,5	12	24	19	24		7,1	AL 10-M 18 x 1,5 WD
		10	M 22 x 1,5	29	14,0	14	27	19	27		9,3	AL 10-M 22 x 1,5 WD
		12	M 16 x 1,5	27,5	12,5	12	22	22	22	CL 12 E	6,9	AL 12-M 16 x 1,5 WD
		12	M 14 x 1,5	26	11,0	12	19	22	19		5,9	AL 12-M 14 x 1,5 WD
		12	M 18 x 1,5	27,5	12,5	12	24	22	24		7,6	AL 12-M 18 x 1,5 WD
		12	M 22 x 1,5	29	14,0	14	27	22	27		10,5	AL 12-M 22 x 1,5 WD
		15	M 18 x 1,5	28,5	13,5	12	24	27	24	CL 15 E	9,8	AL 15-M 18 x 1,5 WD
		15	M 16 x 1,5	28	13,0	12	24	27	22		9,6	AL 15-M 16 x 1,5 WD
		15	M 22 x 1,5	29	14,0	14	27	27	27		12,3	AL 15-M 22 x 1,5 WD
		18	M 22 x 1,5	31	14,5	14	27	32	27	CL 18 E	14,4	AL 18-M 22 x 1,5 WD
		18	M 18 x 1,5	31	14,5	12	27	32	24		13,6	AL 18-M 18 x 1,5 WD
S	250	22	M 26 x 1,5	33	16,5	16	32	36	32	CL 22 E	19,2	AL 22-M 26 x 1,5 WD
		22	M 22 x 1,5	33	16,5	14	32	36	27		18,1	AL 22-M 22 x 1,5 WD
		28	M 33 x 2	34	17,5	18	41	41	40	CL 28 E	26,6	AL 28-M 33 x 2 WD
		35	M 42 x 2	39	17,5	20	50	50	50	CL 35 E	43,6	AL 35-M 42 x 2 WD
		42	M 48 x 2	42	19,0	22	55	60	55	CL 42 E	59,3	AL 42-M 48 x 2 WD
S	800	06	M 12 x 1,5	28	13,0	12	17	17	17	CS 6 E	4,9	AS 06-M 12 x 1,5 WD
		08	M 14 x 1,5	30	15,0	12	19	19	19	CS 8 E	6,5	AS 08-M 14 x 1,5 WD
		10	M 16 x 1,5	31,5	15,0	12	22	22	22	CS 10 E	8,8	AS 10-M 16 x 1,5 WD
	630	12	M 14 x 1,5	33	16,5	12	22	24	19		9,9	AS 12-M 14 x 1,5 WD
		12	M 18 x 1,5	33,5	17,0	12	24	24	24	CS 12 E	11,0	AS 12-M 18 x 1,5 WD
		12	M 22 x 1,5	34	17,5	14	27	24	27		14,5	AS 12-M 22 x 1,5 WD
		14	M 20 x 1,5	37	19,0	14	27	27	26	CS 14 E	15,2	AS 14-M 20 x 1,5 WD
		16	M 18 x 1,5	36,5	18,0	12	27	30	24		15,9	AS 16-M 18 x 1,5 WD
		16	M 22 x 1,5	37	18,5	14	27	30	27	CS 16 E	16,8	AS 16-M 22 x 1,5 WD
	420	20	M 27 x 2	42	20,5	16	32	36	32	CS 20 E	26,5	AS 20-M 27 x 2 WD
		25	M 33 x 2	47	23,0	18	41	46	40	CS 25 E	48,4	AS 25-M 33 x 2 WD
		30	M 42 x 2	50	23,5	20	50	50	50	CS 30 E	65,9	AS 30-M 42 x 2 WD
		38	M 48 x 2	57	26,0	22	55	60	55	CS 38 E	92,9	AS 38-M 48 x 2 WD



Straight male stud couplings



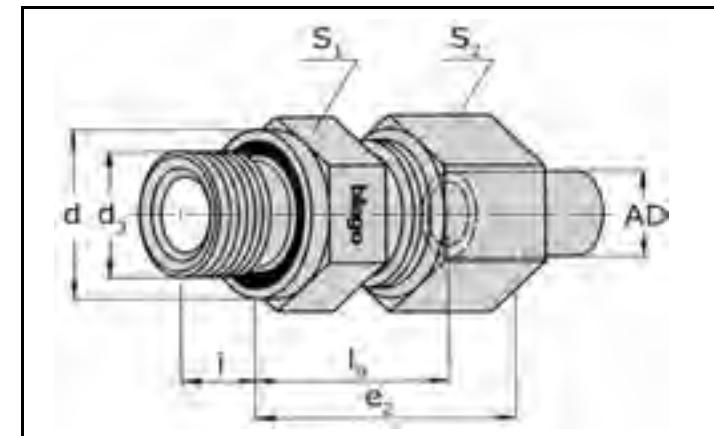
Stud thread :

BSP thread, parallel

Port tapping with captive seal

Form E DIN 3852 (ISO 1179)

See page 10/11



Series	NP	Tube OD	d ₃	e ₂ ~	l ₉	i	S ₁	S ₂	d	DIN 2353	kg %	Blago Part No.
L	500	06	G 1/8 A	23,5	8,5	8	14	14	14	DL 6 E	2,5	AL 06-R 1/8 WD
		06	G 1/4 A	25	10,0	12	19	14	19		4,0	AL 06-R 1/4 WD
	420	06	G 3/8 A	26,5	11,5	12	22	14	22		5,9	AL 06-R 3/8 WD
	400	06	G 1/2 A	27	12,0	14	27	14	27		9,4	AL 06-R 1/2 WD
	500	08	G 1/4 A	25	10,0	12	19	17	19	DL 8 E	4,5	AL 08-R 1/4 WD
		08	G 1/8 A	24,5	9,5	8	14	17	14		3,0	AL 08-R 1/8 WD
	420	08	G 3/8 A	26,5	11,5	12	22	17	22		6,0	AL 08-R 3/8 WD
	400	08	G 1/2 A	27	12,0	14	27	17	27		9,5	AL 08-R 1/2 WD
	500	10	G 1/4 A	26	11,0	12	19	19	19	DL 10 E	4,7	AL 10-R 1/4 WD
	420	10	G 3/8 A	27,5	12,5	12	22	19	22		6,0	AL 10-R 3/8 WD
	400	10	G 1/2 A	28	13,0	14	27	19	27		10,0	AL 10-R 1/2 WD
	420	12	G 3/8 A	27,5	12,5	12	22	22	22	DL 12 E	7,0	AL 12-R 3/8 WD
		12	G 1/4 A	27	12,0	12	19	22	19		6,0	AL 12-R 1/4 WD
	400	12	G 1/2 A	28	13,0	14	27	22	27		9,5	AL 12-R 1/2 WD
		250	G 3/4 A	29	14,0	16	32	22	32		14,8	AL 12-R 3/4 WD
	400	15	G 1/2 A	29	14,0	14	27	27	27	DL 15 E	11,5	AL 15-R 1/2 WD
		15	G 3/8 A	28,5	13,5	12	24	27	22		9,9	AL 15-R 3/8 WD
	250	15	G 3/4 A	30	15,0	16	32	27	32		16,0	AL 15-R 3/4 WD
	400	18	G 1/2 A	31	14,5	14	27	32	27	DL 18 E	13,2	AL 18-R 1/2 WD
		18	G 3/8 A	30,5	14,0	12	27	32	22		12,5	AL 18-R 3/8 WD
250	250	18	G 3/4 A	31	14,5	16	32	32	32		16,5	AL 18-R 3/4 WD
		22	G 3/4 A	33	16,5	16	32	36	32	DL 22 E	18,5	AL 22-R 3/4 WD
		22	G 1/2 A	33	16,5	14	32	36	27		17,0	AL 22-R 1/2 WD
		22	G 1 A	34	17,5	18	41	36	40		27,3	AL 22-R 1 WD
		28	G 1 A	34	17,5	18	41	41	40	DL 28 E	25,9	AL 28-R 1 WD
		28	G 3/4 A	34	17,5	16	41	41	32		23,4	AL 28-R 3/4 WD
		28	G 1 1/4 A	35	18,5	20	50	41	50		41,4	AL 28-R 1 1/4 WD
		35	G 1 1/4 A	39	17,5	20	50	50	50	DL 35 E	42,2	AL 35-R 1 1/4 WD
	35	35	G 1 1/2 A	41	19,5	22	55	50	55		53,2	AL 35-R 1 1/2 WD
		35	G 1 A	39	17,5	18	46	50	40		36,7	AL 35-R 1 WD
	42	42	G 1 1/2 A	42	19,0	22	55	60	55	DL 42 E	56,9	AL 42-R 1 1/2 WD



Straight male stud couplings

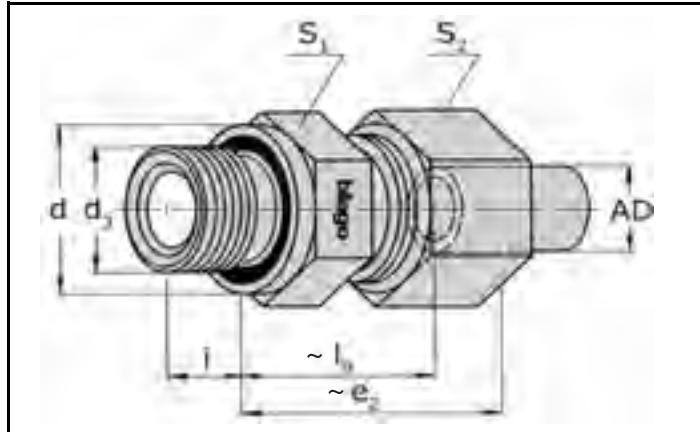
Stud thread :

BSP thread, parallel

Port tapping with captive seal

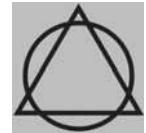
Form E DIN 3852 (ISO 1179)

See page 10/11



Series	NP	Tube OD	d ₃	e ₂ ~	l ₉	i	S ₁	S ₂	d	DIN 2353	kg %	Blago Part No.
S	800	06	G 1/4 A	28	13,0	12	19	17	19	DS 6 E	5,0	AS 06-R 1/4 WD
	500	06	G 1/8 A	27,5	12,5	8	14	17	14		4,0	AS 06-R 1/8 WD
	630	06	G 3/8 A	30,5	15,5	12	22	17	22		7,2	AS 06-R 3/8 WD
	630	06	G 1/2 A	33	18,0	14	27	17	27		10,2	AS 06-R 1/2 WD
	800	08	G 1/4 A	30	15,0	12	19	19	19	DS 8 E	5,5	AS 08-R 1/4 WD
		08	G 3/8 A	30,5	15,5	12	22	19	22		7,9	AS 08-R 3/8 WD
	630	08	G 1/2 A	33	18,0	14	27	19	27		10,8	AS 08-R 1/2 WD
	800	10	G 3/8 A	31,5	15,0	12	22	22	22	DS 10 E	8,8	AS 10-R 3/8 WD
		10	G 1/4 A	31	14,5	12	19	22	19		7,4	AS 10-R 1/4 WD
	630	10	G 1/2 A	34	17,5	14	27	22	27		13,0	AS 10-R 1/2 WD
		12	G 3/8 A	33,5	17,0	12	22	24	22	DS 12 E	10,0	AS 12-R 3/8 WD
		12	G 1/4 A	33	16,5	12	22	24	19		9,5	AS 12-R 1/4 WD
		12	G 1/2 A	34	17,5	14	27	24	27		13,7	AS 12-R 1/2 WD
		14	G 1/2 A	37	19,0	14	27	27	27	DS 14 E	14,8	AS 14-R 1/2 WD
		14	G 3/8 A	36,5	18,5	12	24	27	22		13,1	AS 14-R 3/8 WD
	420	14	G 3/4 A	39	21,0	16	32	27	32		19,8	AS 14-R 3/4 WD
	630	16	G 1/2 A	37	18,5	14	27	30	27	DS 16 E	16,1	AS 16-R 1/2 WD
		16	G 3/8 A	36,5	18,0	12	27	30	22		15,2	AS 16-R 3/8 WD
	420	16	G 3/4 A	39	20,5	16	32	30	32		22,3	AS 16-R 3/4 WD
		20	G 3/4 A	42	20,5	16	32	36	32	DS 20 E	25,3	AS 20-R 3/4 WD
		20	G 1/2 A	42	20,5	14	32	36	27		25,5	AS 20-R 1/2 WD
		20	G 1 A	44	22,5	18	41	36	40		36,9	AS 20-R 1 WD
		20	G 1 1/4 A	44	22,5	20	50	36	50		40,9	AS 20-R 1 1/4 WD
		25	G 1 A	47	23,0	18	41	46	40	DS 20 E	46,5	AS 25-R 1 WD
		25	G 1/2 A	47	23,0	14	41	46	27		44,4	AS 25-R 1/2 WD
		25	G 3/4 A	47	23,0	16	41	46	32		47,1	AS 25-R 3/4 WD
		25	G 1 1/4 A	47	23,0	20	50	46	50		65,6	AS 25-R 1 1/4 WD
	315	25	G 1 1/2 A	47	23,0	22	55	46	55		65,3	AS 25-R 1 1/2 WD
	420	30	G 1 1/4 A	50	23,5	20	50	50	50	DS 30 E	63,5	AS 30-R 1 1/4 WD
		30	G 1 A	50	23,5	18	46	50	40		59,8	AS 30-R 1 WD
	315	30	G 1 1/2 A	53	26,5	22	55	50	55		76,5	AS 30-R 1 1/2 WD
	420	38	G 1 1/2 A	57	26,0	22	55	60	55	DS 38 E	87,0	AS 38-R 1 1/2 WD
		38	G 1 1/4 A	57	26,0	20	55	60	50		93,6	AS 38-R 1 1/4 WD

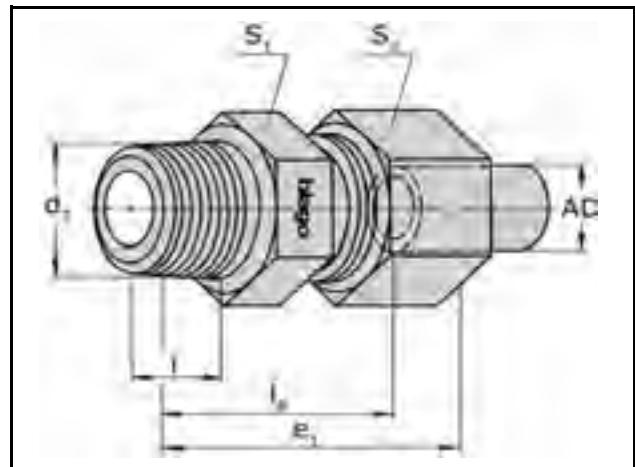
Straight male stud couplings



Stud thread :
Metric thread, taper

Form C DIN 3852

See page 10/11



Series	NP	Tube OD	d_3	l_8	e_1	i	S_1	S_2	DIN 2353	kg %	Blago Part No.
LL	100	4	M 8 x 1	10,5	20	8	10	10	ALL 4	1,2	AKLL 04-M 8 x 1
		5	M 8 x 1	9,0	20,5	8	11	12	ALL 5	1,5	AKLL 05-M 8 x 1
		6	M 10 x 1	9,0	20,5	8	11	12	ALL 6	1,5	AKLL 06-M 10 x 1
		8	M 10 x 1	11,0	23,5	8	12	14	ALL 8	1,8	AKLL 08-M 10 x 1
L	315	6	M 10 x 1	9,5	24,5	8	12	14	AL 6	2,7	AKL 06-M 10 x 1
		8	M 12 x 1,5	12,0	27	12	14	17	AL 8	3,3	AKL 08-M 12 x 1,5
		10	M 14 x 1,5	12,0	27	12	17	19	AL 10	4,7	AKL 10-M 14 x 1,5
		12	M 16 x 1,5	14,0	29	12	19	22	AL 12	6,2	AKL 12-M 16 x 1,5
		15	M 18 x 1,5	14,0	29	12	22	27	AL 15	10,5	AKL 15-M 18 x 1,5
		18	M 22 x 1,5	17,0	33,5	14	27	32	AL 18	14,5	AKL 18-M 22 x 1,5
	160	22	M 26 x 1,5	21,0	37,5	16	32	36	AL 22	18,8	AKL 22-M 26 x 1,5
S	640	6	M 12 x 1,5	15,0	30	12	17	17	AS 6	4,7	AKS 06-M 12 x 1,5
		8	M 14 x 1,5	17,0	32	12	17	19	AS 8	6,5	AKS 08-M 14 x 1,5
		10	M 16 x 1,5	16,5	33	12	19	22	AS 10	8,6	AKS 10-M 16 x 1,5
		12	M 18 x 1,5	16,0	33	12	22	24	AS 12	10,9	AKS 12-M 18 x 1,5
		14	M 20 x 1,5	16,0	34	12	24	27	AS 14	14,8	AKS 14-M 20 x 1,5
	400	16	M 22 x 1,5	18,0	36	12	24	30	AS 16	16,6	AKS 16-M 22 x 1,5
		20	M 27 x 2	25,0	41,5	16	32	36	AS 20	25,3	AKS 20-M 27 x 2

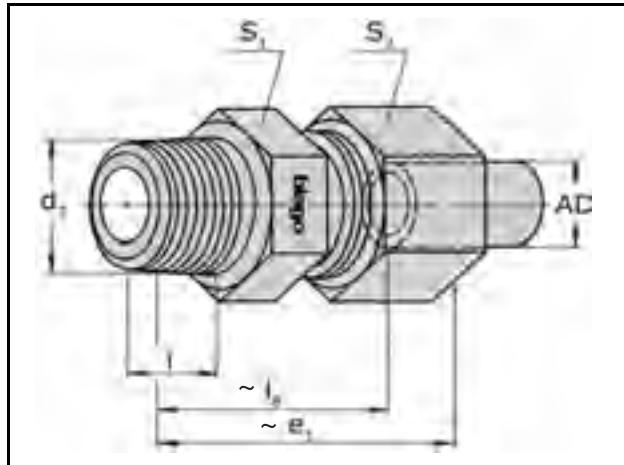


Straight male stud couplings

Stud thread :
BSP thread, taper

Form C DIN 3852

See page 10/11



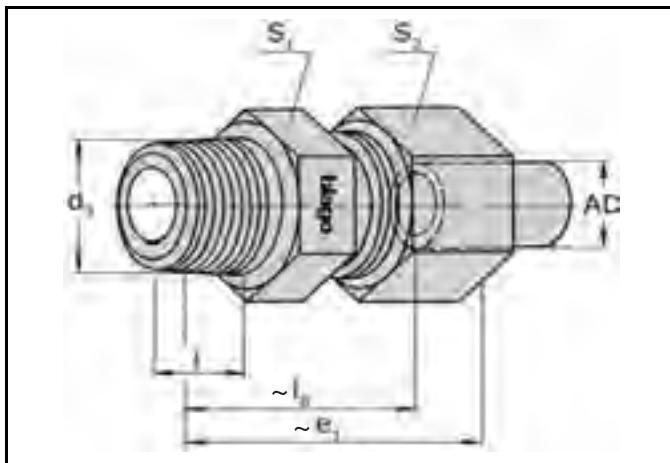
Series	NP	Tube OD	d_3	l_8	e_1	i	S_1	S_2	DIN 2353	kg %	Blago Part No.
LL	100	4	R 1/8	11	21	8	11	10	BLL 4	1,4	AKLL 04-R 1/8
		5	R 1/8	10,5	22	8	11	12	BLL 5	1,5	AKLL 05-R 1/8
		6	R 1/8	10,5	22	8	11	12	BLL 6	1,6	AKLL 06-R 1/8
		8	R 1/8	12,5	24	8	12	14	BLL 8	1,8	AKLL 08-R 1/8
L	315	6	R 1/8	11	26	8	12	14	BL 6	2,5	AKL 06-R 1/8
		6	R 1/4	13	28	12	17	14		2,7	AKL 06-R 1/4
		6	R 3/8	14,5	29,5	12	19	14		3,6	AKL 06-R 3/8
		8	R 1/4	14	29	12	17	17	BL 8	4,5	AKL 08-R 1/4
		8	R 3/8	13,5	28,5	12	19	17		5,8	AKL 08-R 3/8
		8	R 1/2	14	29	14	22	17		7,2	AKL 08-R 1/2
		10	R 1/4	15	29	12	17	19	BL 10	4,4	AKL 10-R 1/4
		10	R 3/8	14,5	29	12	19	19		5,7	AKL 10-R 3/8
		10	R 1/2	16	31	14	22	19		7,6	AKL 10-R 1/2
		12	R 3/8	15,5	30,5	12	19	22	BL 12	6,2	AKL 12-R 3/8
		12	R 1/2	16	31	14	24	22		8,0	AKL 12-R 1/2
		15	R 1/2	16,5	31,5	14	24	27	BL 15	10,5	AKL 15-R 1/2
		18	R 1/2	17	33,5	14	27	32	BL 18	14,5	AKL 18-R 1/2
S	640	22	R 3/4	20	36,5	16	32	36	BL 22	18,5	AKL 22-R 3/4
		6	R 1/4	17	32	12	17	17	BS 6	5,0	AKS 06-R 1/4
		8	R 1/4	19	34	12	17	19	BS 8	5,5	AKS 08-R 1/4
		10	R 3/8	18	34,5	12	19	22	BS 10	8,8	AKS 10-R 3/8
		12	R 3/8	18,5	35	12	22	24	BS 12	10,0	AKS 12-R 3/8
	400	14	R 1/2	18,5	36,5	14	22	274	BS 14	14,8	AKS 14-R 1/2
		16	R 1/2	19	37,5	14	27	30	BS 16	16,1	AKS 16-R 1/2
		20	R 3/4	22	43,5	16	32	36	BS 20	25,3	AKS 20-R 3/4

Straight male stud couplings



Stud thread :
NPT thread, taper

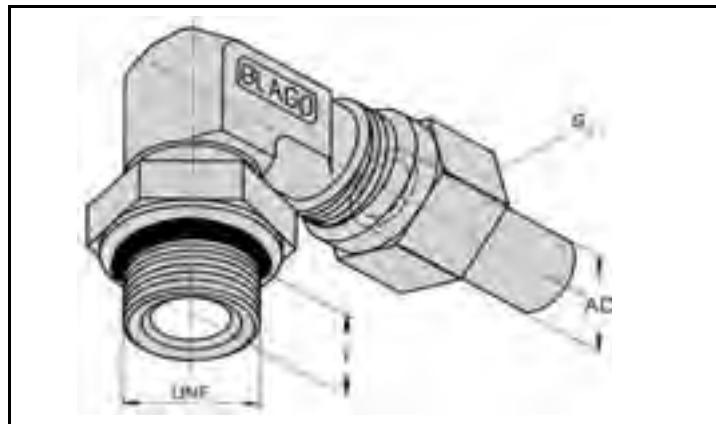
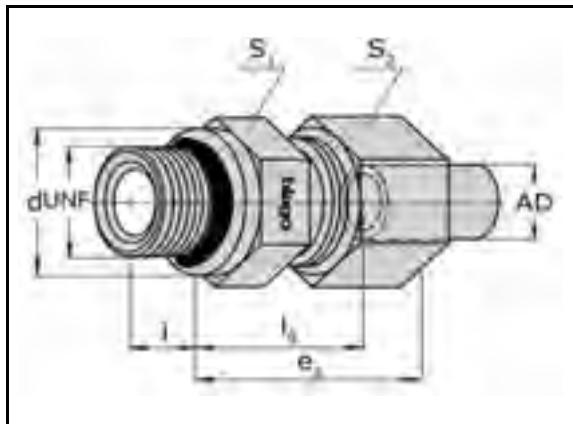
Form NPT
See page 10/11



Series	NP	Tube OD	d_3	l_8	l_1	i	S_1	S_2	kg %	Blago Part No.
LL	100	4	1/8 NPT	13,5	23,5	9,9	11	10	1,5	AKLL 04- 1/8 NPT
		5	1/8 NPT	12	23,5	9,9	11	12	1,6	AKLL 05- 1/8 NPT
		6	1/8 NPT	12	23,5	9,9	11	12	1,5	AKLL 06- 1/8 NPT
		8	1/8 NPT	14	25,5	9,9	12	14	2,0	AKLL 08- 1/8 NPT
L	315	6	1/8 NPT	10,5	25,5	9,9	12	14	2,5	AKL 06- 1/8 NPT
		6	1/4 NPT	16	31	15,1	17	14	4,2	AKL 06- 1/4 NPT
		6	1/2 NPT	21	36	19,8	22	14	8,2	AKL 06- 1/2 NPT
		8	1/4 NPT	16,5	31,5	15,1	17	17	4,3	AKL 08- 1/4 NPT
		8	3/8 NPT	17	32	15,2	19	17	6,0	AKL 08- 3/8 NPT
		8	1/2 NPT	21	36	19,8	22	17	8,5	AKL 08- 1/2 NPT
		10	1/4 NPT	17,5	32,5	15,1	17	19	5,0	AKL 10- 1/4 NPT
		10	3/8 NPT	18	33	15,2	19	19	6,5	AKL 10- 3/8 NPT
		10	1/2 NPT	21	36	19,8	22	19	8,5	AKL 10- 1/2 NPT
		12	1/4 NPT	18,5	33,5	15,1	19	22	5,9	AKL 12- 1/4 NPT
		12	3/8 NPT	18	33	15,2	19	22	6,6	AKL 12- 3/8 NPT
		12	1/2 NPT	21	36	19,8	22	22	8,5	AKL 12- 1/2 NPT
		15	1/4 NPT	19,5	34,5	15,1	24	27	11,0	AKL 15- 1/4 NPT
		15	1/2 NPT	22	37	19,8	22	27	11,5	AKL 15- 1/2 NPT
		18	1/2 NPT	22,5	39	19,8	27	32	13,5	AKL 18- 1/2 NPT
160	160	22	3/4 NPT	24,5	41	20,1	32	36	19,6	AKL 22- 3/4 NPT
		28	1 NPT	28,5	45	25,0	41	41	28,5	AKL 28- 1 NPT
		35	1 1/4 NPT	29	50,5	25,6	46	50	43,0	AKL 35- 1 1/4 NPT
		42	1 1/2 NPT	30,5	53,5	26,0	55	60	61,5	AKL 42- 1 1/2 NPT
S	630	6	1/4 NPT	22	37	15,1	17	17	5,5	AKS 06- 1/4 NPT
		6	1/2 NPT	24	39	19,8	22	17	9,3	AKS 06- 1/2 NPT
		8	1/4 NPT	22	37	15,1	17	19	6,0	AKS 08- 1/4 NPT
		8	1/2 NPT	24	39	19,8	22	19	10,8	AKS 08- 1/2 NPT
		10	1/4 NPT	21,5	38	15,1	19	22	7,1	AKS 10- 1/4 NPT
		10	3/8 NPT	20,5	37	15,2	19	22	8,6	AKS 10- 3/8 NPT
		10	1/2 NPT	23	39,5	19,8	22	22	10,4	AKS 10- 1/2 NPT
		12	3/8 NPT	20,5	37	15,2	22	24	10,0	AKS 12- 3/8 NPT
		12	1/2 NPT	23	39,5	19,8	22	24	12,1	AKS 12- 1/2 NPT
		14	1/2 NPT	27	45	19,8	24	27	16,0	AKS 14- 1/2 NPT
400	400	16	1/2 NPT	26	44,5	19,8	32	30	17,0	AKS 16- 1/2 NPT
		20	3/4 NPT	28	49,5	20,1	32	36	26,8	AKS 20- 3/4 NPT
		25	1 NPT	34	58	25,0	41	46	50,3	AKS 25- 1 NPT
		30	1 1/4 NPT	33,5	60	25,6	46	50	65,0	AKS 30- 1 1/4 NPT
		315	38	1 1/2 NPT	37,5	68,5	26,0	55	60	93,5



Straight male stud couplings, male stud elbows UN/UNF

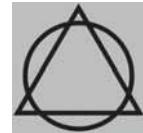


Stud thread: UN/UNF thread, parallel, port tapping with O-ring
See page 10/11

Series	NP	Tube OD	l_9	e_2	S_1	S_2	d	i	Blago Part No. Straight type	kg %	Blago Part No. Elbow type
L	315	8	10	25	17	17	14,4	9	AL 8 7/16-20 UNF	3,2	CBL 8 7/16-20 UNF
		10	11	26	17	19	14,4	9	AL 10 7/16-20 UNF	4,0	CBL 10 7/16-20 UNF
		12	11	26	19	22	17,6	10	AL 12 9/16-18 UNF	5,0	CBL 12 9/16-18 UNF
		12	13	28	24	22	22,3	11	AL 12 3/ 4-16 UNF	7,0	CBL 12 3/ 4-16 UNF
		12	14,3	29,3	27	22	25,5	12,7	AL 12 7/ 8-14 UNF	7,5	CBL 12 7/ 8-14 UNF
		15	14	29	24	27	22,3	11	AL 15 3/ 4-16 UNF	9,5	CBL 15 3/ 4-16 UNF
		18	14,5	31	27	32	22,3	11	AL 18 3/ 4-16 UNF	12,5	CBL 18 3/ 4-16 UNF
		18	14,8	31,3	27	32	25,5	12,7	AL 18 7/ 8-14 UNF	13,2	CBL 18 7/ 8-14 UNF
	160	22	16,8	33,3	32	36	25,5	12,7	AL 22 7/ 8-14 UNF	17,2	CBL 22 7/ 8-14 UNF
		22	16,5	33	32	36	31,9	15	AL 22 1 1/16-12 UN	18,5	CBL 22 1 1/16-12 UN
		22	17,5	34	41	36	38,2	15	AL 22 1 5/16-12 UN	23,5	CBL 22 1 5/16-12 UN
		28	17,5	34	41	41	31,9	15	AL 28 1 1/16-12 UN	24,2	CBL 28 1 1/16-12 UN
		28	17,5	34	41	41	38,2	15	AL 28 1 5/16-12 UN	25,0	CBL 28 1 5/16-12 UN
		35	17,5	39	46	50	38,2	15	AL 35 1 5/16-12 UN	36,2	CBL 35 1 5/16-12 UN
		35	17,5	39	50	50	47,7	15	AL 35 1 5/ 8-12 UN	40,0	CBL 35 1 5/ 8-12 UN
		42	19	42	55	60	47,7	15	AL 42 1 5/ 8-12 UN	56,0	CBL 42 1 5/ 8-12 UN
S	630	8	15	30	17	19	14,4	9	AS 8 7/16-20 UNF	5,0	CBS 8 7/16-20 UNF
		10	14,5	31	19	22	17,6	10	AS 10 9/16-18 UNF	6,5	CBS 10 9/16-18 UNF
		12	14,5	31	22	24	17,6	10	AS 12 9/16-18 UNF	8,0	CBS 12 9/16-18 UNF
		12	17,5	34	24	24	22,3	11	AS 12 3/ 4-16 UNF	10,0	CBS 12 3/ 4-16 UNF
	400	16	15,5	34	24	30	22,3	11	AS 16 3/ 4-16 UNF	13,0	CBS 16 3/ 4-16 UNF
		16	18,5	37,3	27	30	25,5	12,7	AS 16 7/ 8-14 UNF	15,0	CBS 16 7/ 8-14 UNF
		20	20,5	42	32	36	22,3	11	AS 20 3/ 4-16 UNF	22,0	CBS 20 3/ 4-16 UNF
		20	20,8	42,3	32	36	25,5	12,7	AS 20 7/ 8-14 UNF	23,0	CBS 20 7/ 8-14 UNF
		20	20,5	42	32	36	31,9	15	AS 20 1 1/16-12 UN	25,0	CBS 20 1 1/16-12 UN
		25	23	47	36	46	31,9	15	AS 25 1 1/16-12 UN	40,0	CBS 25 1 1/16-12 UN
		30	23	47	41	46	38,2	15	AS 30 1 1/16-12 UN	46,0	CBS 30 1 1/16-12 UN
		30	23,5	50	46	50	38,2	15	AS 30 1 5/16-12 UN	53,0	CBS 30 1 5/16-12 UN
		30	23,5	50	50	50	47,7	15	AS 30 1 5/ 8-12 UN	62,0	CBS 30 1 5/ 8-12 UN
		315	38	26	57	55	60	47,7	15	AS 38 1 5/ 8-12 UN	85,2



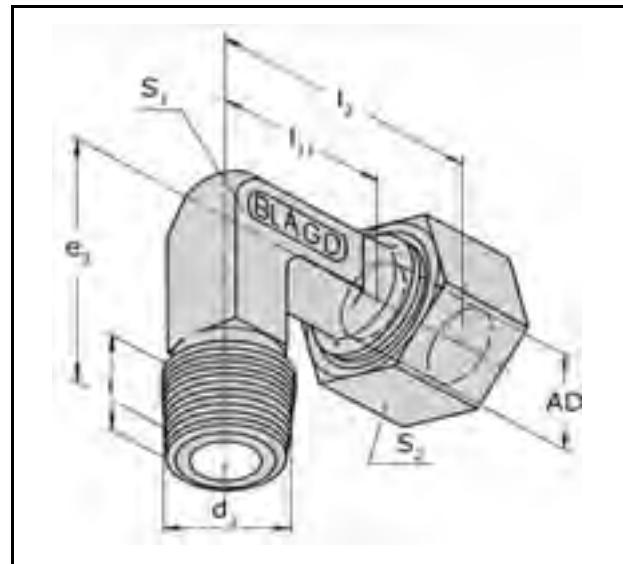
Male stud elbows



Stud thread :
Metric, taper

Form C DIN 3852

See page 10/11



Series	NP	Tube OD	d_3	l_{11}	l_2	e_3	i	S_2	S_1	DIN 2353	kg %	Blago Part No.
LL	100	4	M 8 x 1 taper	11	20,5	12	8	10	9	FLL 4	1,4	CKLL 04-M 8 x 1
		5	M 8 x 1 taper	9,5	21	12	8	12	9	FLL 5	1,5	CKLL 05-M 8 x 1
		6	M 10 x 1 taper	9,5	21	12	8	12	9	FLL 6	1,6	CKLL 06-M 10 x 1
		8	M 10 x 1 taper	11,5	24	15	8	14	12	FLL 8	2,3	CKLL 08-M 10 x 1
L	315	6	M 10 x 1 taper	12	27	15	8	14	12	FL 6	3,0	CKL 06-M 10 x 1
		8	M 12 x 1,5 taper	14	29	18	12	17	12	FL 8	3,6	CKL 08-M 12 x 1,5
		10	M 14 x 1,5 taper	15	30	19	12	19	14	FL 10	5,2	CKL 10-M 14 x 1,5
		12	M 16 x 1,5 taper	17	32	20	12	22	17	FL 12	7,3	CKL 12-M 16 x 1,5
		15	M 18 x 1,5 taper	21	36	24	12	27	19	FL 15	12,0	CKL 15-M 18 x 1,5
		18	M 22 x 1,5 taper	23,5	40	26,5	14	32	24	FL 18	16,6	CKL 18-M 22 x 1,5
S	400	6	M 12 x 1,5 taper	16	31	18	12	17	12	FS 6	5,2	CKS 06-M 12 x 1,5
		8	M 14 x 1,5 taper	17	32	19	12	19	14	FS 8	6,4	CKS 08-M 14 x 1,5
		10	M 16 x 1,5 taper	17,5	34	20	12	22	17	FS 10	9,7	CKS 10-M 16 x 1,5
		12	M 18 x 1,5 taper	21,5	38	20	12	24	17	FS 12	10,8	CKS 12-M 18 x 1,5
		14	M 20 x 1,5 taper	22	40	22,5	14	27	19	FS 14	15,3	CKS 14-M 20 x 1,5
		16	M 22 x 1,5 taper	24,5	43	22,5	14	30	24	FS 16	18,9	CKS 16-M 22 x 1,5

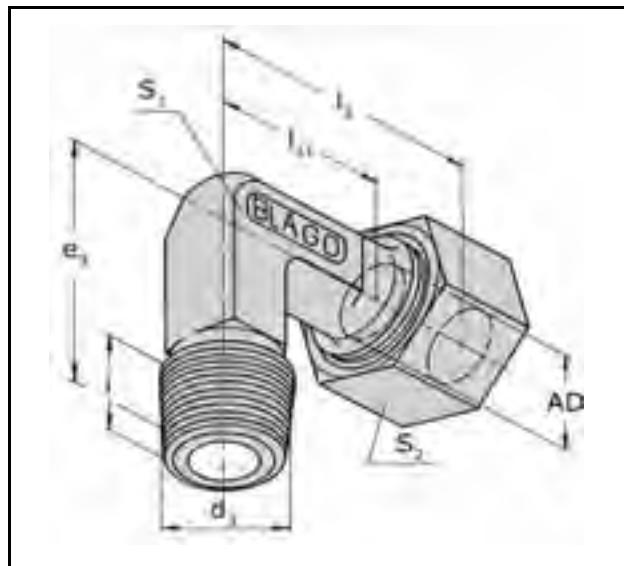


Male stud elbows

Stud thread :
BSP thread, taper

Form C DIN 3852

See page 10/11



Series	NP	Tube OD	d ₃	l ₁₁	l ₂	e ₃	i	S ₂	S ₁	DIN 2353	kg %	Blago Part No.
LL	100	4	R 1/8	11	20,5	12	8	10	9	GLL 4	1,4	CKLL 04-R 1/8
		5	R 1/8	9,5	21	12	8	12	9	GLL 5	1,5	CKLL 05-R 1/8
		6	R 1/8	9,5	21	12	8	12	9	GLL 6	1,6	CKLL 06-R 1/8
		8	R 1/8	11,5	24	15	8	14	12	GLL 8	2,3	CKLL 08-R 1/8
L	315	6	R 1/8	12	27	15	8	14	12	GL 6	3,0	CKL 06-R 1/8
		8	R 1/4	14	29	18	12	17	12	GL 8	3,6	CKL 08-R 1/4
		10	R 1/4	15	30	19	12	19	14	GL 10	5,2	CKL 10-R 1/4
		12	R 3/8	17	32	20	12	22	17	GL 12	7,3	CKL 12-R 3/8
		15	R 1/2	21	36	24	16	27	19	GL 15	13,0	CKL 15-R 1/2
		18	R 1/2	23,5	40	26,5	16	32	24	GL 18	16,6	CKL 18-R 1/2
S	400	6	R 1/4	16	31	18	12	17	12	GS 6	5,2	CKS 06-R 1/4
		8	R 1/4	17	32	19	12	19	14	GS 8	6,4	CKS 08-R 1/4
		10	R 3/8	17,5	34	20	12	22	17	GS 10	9,7	CKS 10-R 3/8
		12	R 3/8	21,5	38	20	12	24	17	GS 12	10,8	CKS 12-R 3/8
		14	R 1/2	22	40	22,5	14	27	19	GS 14	15,3	CKS 14-R 1/2
		16	R 1/2	24,5	43	22,5	14	30	24	GS 16	18,9	CKS 16-R 1/2

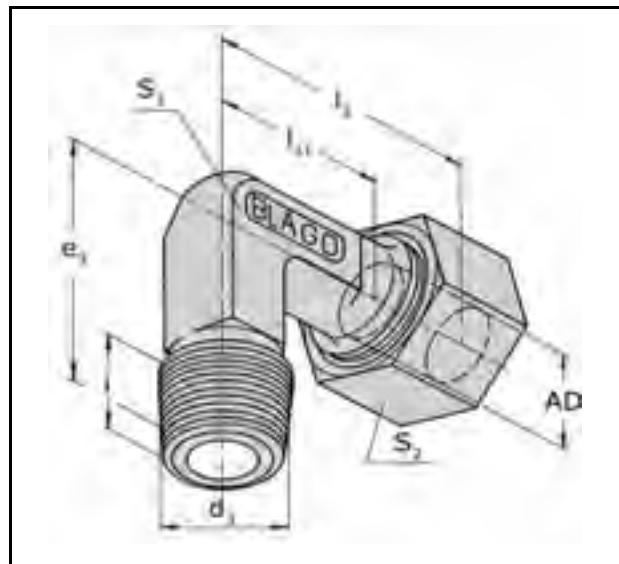
Male stud elbows



Stud thread :
BSP thread, taper

Form NPT

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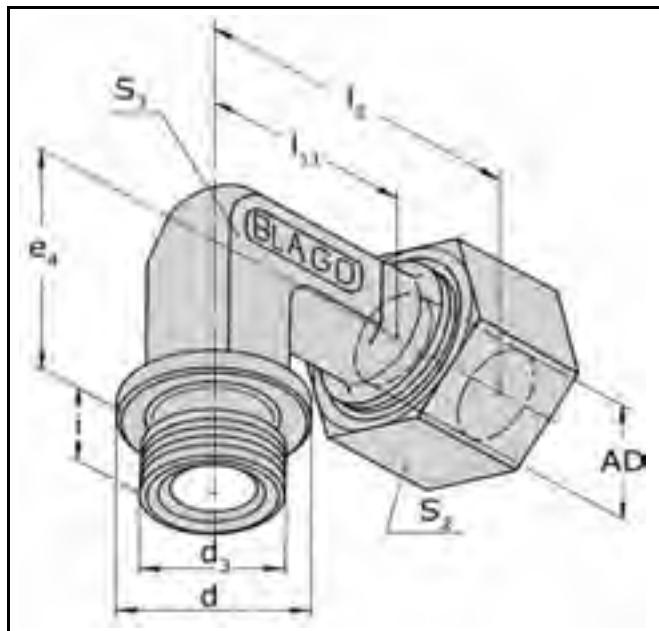


Series	NP	Tube OD	d ₃	l ₁₁	l ₂	e ₃	i	S ₂	S ₁	kg %	Blago Part No.
LL	100	4	1/8 NPT	11	20,5	11,5	8	10	9	2,0	CKLL 04- 1/8 NPT
		5	1/8 NPT	9,5	21	11,5	8	12	9	1,5	CKLL 05- 1/8 NPT
		6	1/8 NPT	9,5	21	11,5	8	12	9	1,5	CKLL 06- 1/8 NPT
		8	1/8 NPT	11,5	23	14,5	9,9	14	12	2,5	CKLL 08- 1/8 NPT
L	315	6	1/8 NPT	12	27	14,5	9,9	14	12	3,0	CKL 06- 1/8 NPT
		8	1/4 NPT	14	29	18	12	17	12	4,5	CKL 08- 1/4 NPT
		10	1/4 NPT	15	30	18	15,1	19	14	5,5	CKL 10- 1/4 NPT
		12	3/8 NPT	17	32	20	13	22	17	7,5	CKL 12- 3/8 NPT
		15	1/2 NPT	21	36	22,5	16	27	19	14,0	CKL 15- 1/2 NPT
		18	1/2 NPT	23,5	40	24,5	19,8	32	24	16,5	CKL 18- 1/2 NPT
	160	22	3/4 NPT	27,5	44	28,5	20,1	36	27	23,5	CKL 22- 3/4 NPT
		28	1 NPT	30,5	47	32,5	25	41	36	37,5	CKL 28- 1 NPT
		35	1 1/4 NPT	34,5	56	37	25,6	50	41	57,5	CKL 35- 1 1/4 NPT
		42	1 1/2 NPT	40	63	44	26	60	50	83,0	CKL 42- 1 1/2 NPT
S	630	6	1/4 NPT	16	31	18	12	17	12	3,5	CKS 06- 1/4 NPT
		8	1/4 NPT	17	32	19	13	19	14	7,0	CKS 08- 1/4 NPT
		10	3/8 NPT	17,5	34	19	12	22	17	9,0	CKS 10- 3/8 NPT
		12	3/8 NPT	21,5	38	19	15,2	24	17	11,0	CKS 12- 3/8 NPT
		14	1/2 NPT	22	40	19,5	16	27	19	16,6	CKS 14- 1/2 NPT
	400	16	1/2 NPT	24,5	43	21,5	19,8	30	24	20,0	CKS 16- 1/2 NPT
		20	3/4 NPT	26,5	48	27,5	20,1	36	27	30,0	CKS 20- 3/4 NPT
		25	1 NPT	30	54	32,5	25	46	36	56,5	CKS 25- 1 NPT
		30	1 1/4 NPT	35,5	62	37	25	50	41	82,0	CKS 30- 1 1/4 NPT
		315	38	1 1/2 NPT	41	72	44	26	60	50	116,0



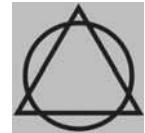
Male stud elbows

Stud thread :
Metric, parallel
BSP thread, parallel
Form B DIN 3852
See page 10/11



Series	NP	Tube OD	d ₃	l ₁₁	l ₂	e ₄	i	d	S ₂	S ₃	DIN 2353	kg %	Blago Part No.
L	160	22	M 26 x 1,5	27,5	44	26	16	31	36	27	HL 22	24,6	CBL 22-M 26 x 1,5
		28	M 33 x 2	30,5	47	30	18	39	41	36	HL 28	34,7	CBL 28-M 33 x 2
		35	M 42 x 2	34,5	56	34	20	49	50	41	HL 35	61,2	CBL 35-M 42 x 2
		42	M 48 x 2	40	63	39	22	55	60	50	HL 42	84,6	CBL 42-M 48 x 2
S	400	20	M 27 x 2	26,5	48	26	16	32	36	27	HS 20	30,3	CBS 20-M 27 x 2
	250	25	M 33 x 2	30	54	30	18	39	46	36	HS 25	58,0	CBS 25-M 33 x 2
	160	30	M 42 x 2	35,5	62	34	20	49	50	41	HS 30	82,5	CBS 30-M 42 x 2
		38	M 48 x 2	41	72	39	22	55	60	50	HS 38	113,4	CBS 38-M 48 x 2
L	160	22	G 3/4	27,5	44	26	16	32	36	27	JL 22	24,6	CBL 22-R 3/4
		28	G 1	30,5	47	30	18	39	41	36	JL 28	38,3	CBL 28-R 1
		35	G 1 1/4	34,5	56	34	20	49	50	41	JL 35	61,2	CBL 35-R 1 1/4
		42	G 1 1/2	40	63	39	22	55	60	50	JL 42	80,6	CBL 42-R 1 1/2
S	400	20	G 3/4	26,5	48	26	16	32	36	27	JS 20	30,3	CBS 20-R 3/4
	250	25	G 1	30	54	30	18	39	46	36	JS 25	57,5	CBS 25-R 1
	160	30	G 1 1/4	35,5	62	34	20	49	50	41	JS 30	74,4	CBS 30-R 1 1/4
		38	G 1 1/2	41	72	39	22	55	60	50	JS 38	114,0	CBS 38-R 1 1/2

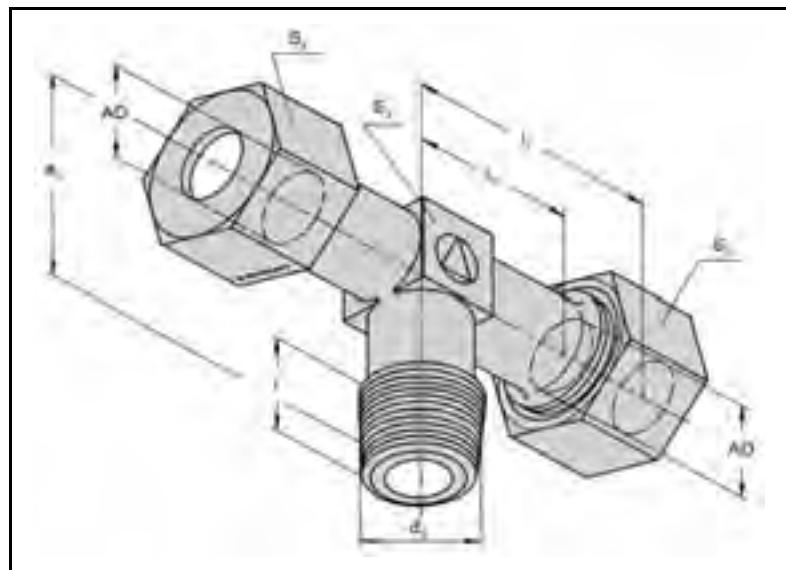
Male stud branch tees



Stud thread :
Metric, taper

Form C DIN 3852

See page 10/11



Series	NP	Tube OD	d_3	l_{11}	l_2	e_3	i	S_2	S_3	DIN 2353	kg %	Blago Part No.
LL	100	4	M 8 x 1 taper	11	20,5	12	8	10	12	MLL 4	2,4	FKLL 04-M 8 x 1
		5	M 8 x 1 taper	9,5	21	12	8	12	12	MLL 5	2,6	FKLL 05-M 8 x 1
		6	M 10 x 1 taper	9,5	21	12	8	12	12	MLL 6	2,7	FKLL 06-M 10 x 1
		8	M 10 x 1 taper	11,5	24	15	8	14	12	MLL 8	4,1	FKLL 08-M 10 x 1
L	315	6	M 10 x 1 taper	12	27	15	8	14	12	ML 6	5,1	FKL 06-M 10 x 1
		8	M 12 x 1,5 taper	14	29	18	12	17	12	ML 8	7,2	FKL 08-M 12 x 1,5
		10	M 14 x 1,5 taper	15	30	19	12	19	14	ML 10	10,0	FKL 10-M 14 x 1,5
		12	M 16 x 1,5 taper	17	32	20	12	22	17	ML 12	12,6	FKL 12-M 16 x 1,5
		15	M 18 x 1,5 taper	21	36	24	12	27	19	ML 15	20,5	FKL 15-M 18 x 1,5
		18	M 22 x 1,5 taper	23,5	40	26,5	14	32	24	ML 18	30,4	FKL 18-M 22 x 1,5
S	400	6	M 12 x 1,5 taper	16	31	18	12	17	12	MS 6	8,9	FKS 06-M 12 x 1,5
		8	M 14 x 1,5 taper	17	32	19	12	19	14	MS 8	11,4	FKS 08-M 14 x 1,5
		10	M 16 x 1,5 taper	17,5	34	20	12	22	17	MS 10	15,0	FKS 10-M 16 x 1,5
		12	M 18 x 1,5 taper	21,5	38	20	12	24	17	MS 12	19,6	FKS 12-M 18 x 1,5
		14	M 20 x 1,5 taper	22	40	22,5	14	27	19	MS 14	24,2	FKS 14-M 20 x 1,5
		16	M 22 x 1,5 taper	24,5	43	22,5	14	30	24	MS 16	30,9	FKS 16-M 22 x 1,5

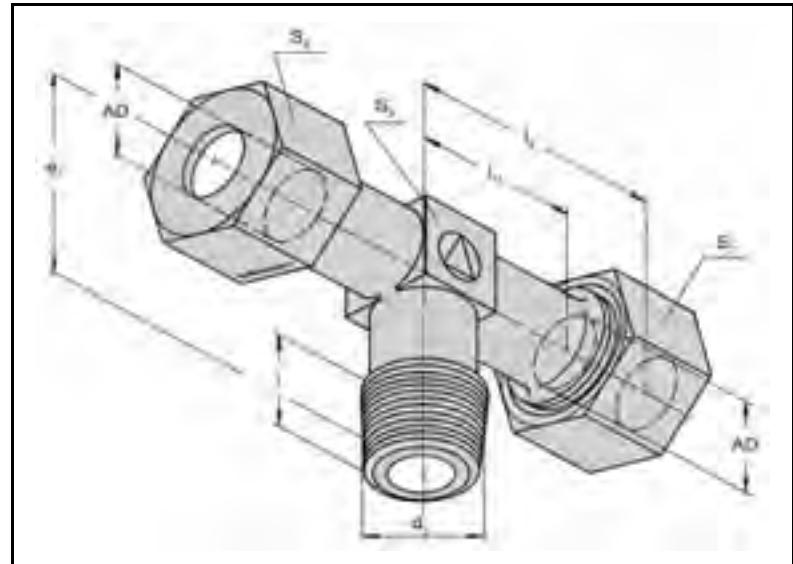


Male stud branch tees

Stud thread :
BSP thread, taper

Form C DIN 3852

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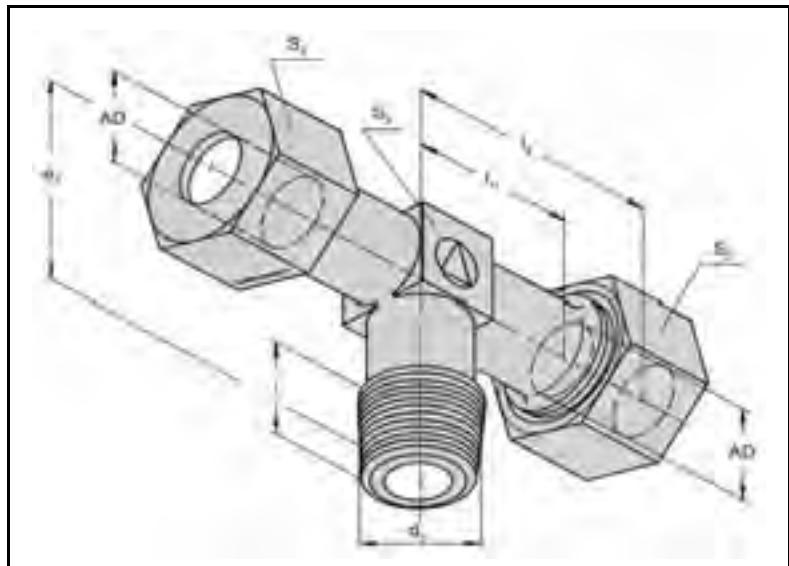
Series	NP	Tube OD	d ₃	l ₁₁	l ₂	e ₃	i	S ₂	S ₃	DIN 2353	kg %	Blago Part No.
LL	100	4	R 1/8	11	20,5	12	8	10	12	NLL 4	2,4	FKLL 04-R 1/8
		5	R 1/8	9,5	21	12	8	12	12	NLL 5	2,6	FKLL 05-R 1/8
		6	R 1/8	9,5	21	12	8	12	12	NLL 6	2,7	FKLL 06-R 1/8
		8	R 1/8	11,5	24	15	8	14	12	NLL 8	4,1	FKLL 08-R 1/8
L	315	6	R 1/8	12	27	15	8	14	12	NL 6	5,1	FKL 06-R 1/8
		8	R 1/4	14	29	18	12	17	12	NL 8	7,2	FKL 08-R 1/4
		10	R 1/4	15	30	19	12	19	14	NL 10	10,0	FKL 10-R 1/4
		12	R 3/8	17	32	20	12	22	17	NL 12	12,6	FKL 12-R 3/8
		15	R 1/2	21	36	24	16	27	19	NL 15	21,5	FKL 15-R 1/2
		18	R 1/2	23,5	40	26,5	16	32	24	NL 18	30,4	FKL 18-R 1/2
S	400	6	R 1/4	16	31	18	12	17	12	NS 6	8,9	FKS 06-R 1/4
		8	R 1/4	17	32	19	12	19	14	NS 8	11,4	FKS 08-R 1/4
		10	R 3/8	17,5	34	20	12	22	17	NS 10	15,0	FKS 10-R 3/8
		12	R 3/8	21,5	38	20	12	24	17	NS 12	19,6	FKS 12-R 3/8
		14	R 1/2	22	40	22,5	14	27	19	NS 14	24,2	FKS 14-R 1/2
		16	R 1/2	24,5	43	22,5	14	30	24	NS 16	30,9	FKS 16-R 1/2

Male stud branch tees



Stud thread :
NPT thread, taper

Form NPT
See page 10/11

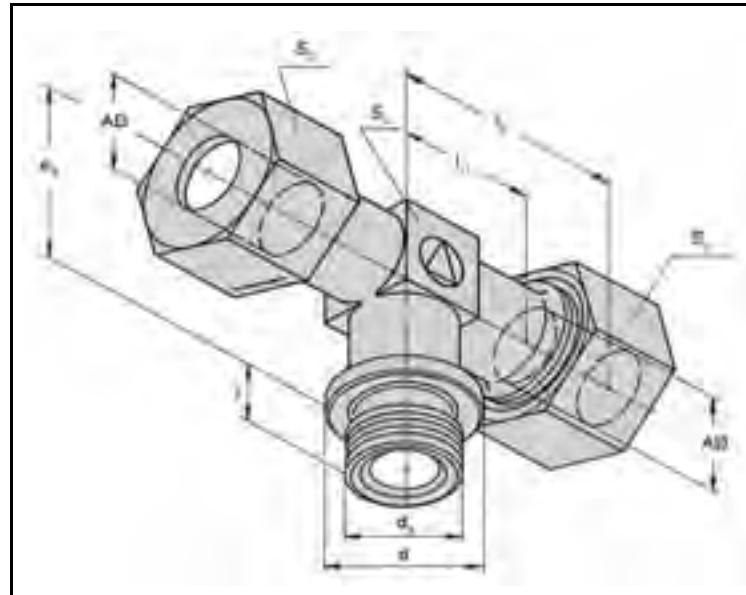


Series	NP	Tube OD	d ₃	l ₁₁	l ₂	e ₃	i	S ₂	S ₃	kg %	Blago Part No.
LL	100	4	1/8 NPT	11	20,5	11,5	8	10	12	2,3	FKLL 04- 1/8 NPT
		5	1/8 NPT	9,5	21	11,5	8	12	12	2,6	FKLL 05- 1/8 NPT
		6	1/8 NPT	9,5	21	11,5	8	12	12	2,9	FKLL 06- 1/8 NPT
		8	1/8 NPT	11,5	24	11,5	9,9	14	12	3,7	FKLL 08- 1/8 NPT
L	315	6	1/8 NPT	12	27	14,5	9,9	14	12	5,0	FKL 06- 1/8 NPT
		8	1/4 NPT	14	29	18	12	17	12	6,5	FKL 08- 1/4 NPT
		10	1/4 NPT	15	30	18	13	19	14	8,5	FKL 10- 1/4 NPT
		12	3/8 NPT	17	32	20	12	22	17	12,5	FKL 12- 3/8 NPT
		15	1/2 NPT	21	36	22,5	16	27	19	20,5	FKL 15- 1/2 NPT
		18	1/2 NPT	23,5	40	24,5	19,8	32	24	26,5	FKL 18- 1/2 NPT
	160	22	3/4 NPT	27,5	44	28,5	20,1	36	27	36,5	FKL 22- 3/4 NPT
		28	1 NPT	30,5	47	32,5	23	41	36	56,0	FKL 28- 1 NPT
		35	1 1/4 NPT	34,5	56	37	25,6	50	41	81,0	FKL 35- 1 1/4 NPT
		42	1 1/2 NPT	40	63	44	26	60	50	115,5	FKL 42- 1 1/2 NPT
S	640	6	1/4 NPT	16	31	18	12	17	12	9,0	FKS 06- 1/4 NPT
		8	1/4 NPT	17	32	19	13	19	14	10,5	FKS 08- 1/4 NPT
		10	3/8 NPT	17,5	34	19	12	22	17	15,6	FKS 10- 3/8 NPT
		12	3/8 NPT	21,5	38	19	12	24	17	18,0	FKS 12- 3/8 NPT
		14	1/2 NPT	22	40	19,5	16	27	19	24,5	FKS 14- 1/2 NPT
	400	16	1/2 NPT	24,5	43	21,5	19,8	30	24	32,0	FKS 16- 1/2 NPT
		20	3/4 NPT	26,5	48	28,5	20,1	36	27	49,0	FKS 20- 3/4 NPT
		25	1 NPT	30	54	32,5	23	46	36	82,2	FKS 25- 1 NPT
		30	1 1/4 NPT	35,5	62	37	25	50	41	109,0	FKS 30- 1 1/4 NPT
		315	38	1 1/2 NPT	41	72	44	26	60	50	155,0



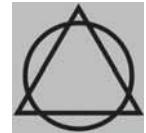
Male stud branch tees

Stud thread :
 Metric, parallel
 BSP thread, parallel
Form B DIN 3852
 See page 10/11



Series	NP	Tube OD	d ₃	l ₁₁	l ₂	e ₄	i	d	S ₂	S ₃	DIN 2353	kg %	Blago Part No.
L	160	22	M 26 x 1,5	27,5	44	26	16	31	36	27	OL 22	36,9	FBL 22-M 26 x 1,5
		28	M 33 x 2	30,5	47	30	18	39	41	36	OL 28	55,0	FBL 28-M 33 x 2
		35	M 42 x 2	34,5	56	34	20	49	50	41	OL 35	84,9	FBL 35-M 42 x 2
		42	M 48 x 2	40	63	39	22	55	60	50	OL 42	142,2	FBL 42-M 48 x 2
S	400	20	M 27 x 2	26,5	48	26	16	32	36	27	OS 20	45,5	FBS 20-M 27 x 2
		250	M 33 x 2	30	54	30	18	39	46	36	OS 25	87,5	FBS 25-M 33 x 2
	160	30	M 42 x 2	35,5	62	34	20	49	50	41	OS 30	121,5	FBS 30-M 42 x 2
		38	M 48 x 2	41	72	39	22	55	60	50	OS 38	174,0	FBS 38-M 48 x 2
L	160	22	G 3/4	27,5	44	26	16	32	36	27	PL 22	36,9	FBL 22-R 3/4
		28	G 1	30,5	47	30	18	39	41	36	PL 28	55,0	FBL 28-R 1
		35	G 1 1/4	34,5	56	34	20	49	50	41	PL 35	84,9	FBL 35-R 1 1/4
		42	G 1 1/2	40	63	39	22	55	60	50	PL 42	142,2	FBL 42-R 1 1/2
S	400	20	G 3/4	26,5	48	26	16	32	36	27	PS 20	45,5	FBS 20-R 3/4
		250	G 1	30	54	30	18	39	46	36	PS 25	87,5	FBS 25-R 1
	160	30	G 1 1/4	35,5	62	34	20	49	50	41	PS 30	121,5	FBS 30-R 1 1/4
		38	G 1 1/2	41	72	39	22	55	60	50	PS 38	174,0	FBS 38-R 1 1/2

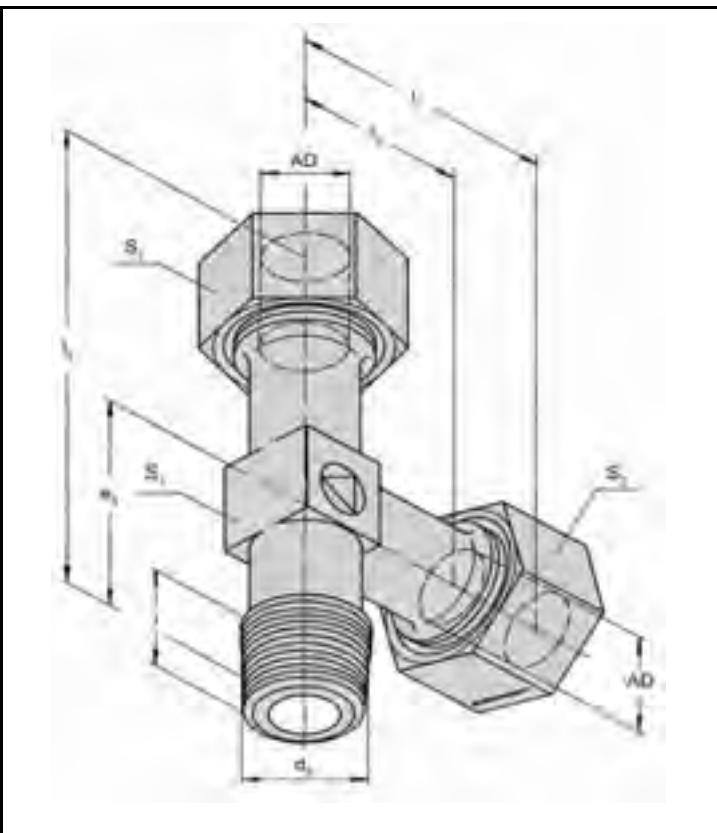
Male stud barrel tees



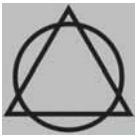
Stud thread :
Metric, taper

Form C DIN 3852

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Series	NP	Tube OD	d ₃	l ₁	l ₂	l ₃	e ₃	i	S ₂	S ₁	DIN 2353	kg %	Blago Part No.
LL	100	4	M 8 x 1 taper	11	20,5	32,5	12	8	10	12	AALL 4	2,4	LKLL 04-M 8 x 1
		5	M 8 x 1 taper	9,5	21	33	12	8	12	12	AALL 5	2,6	LKLL 05-M 8 x 1
		6	M 10 x 1 taper	9,5	21	33	12	8	12	12	AALL 6	2,7	LKLL 06-M 10 x 1
		8	M 10 x 1 taper	11,5	24	39	15	8	14	12	AALL 8	4,1	LKLL 08-M 10 x 1
L	315	6	M 10 x 1 taper	12	27	42	15	8	14	12	AAL 6	5,1	LKL 06-M 10 x 1
		8	M 12 x 1,5 taper	14	29	47	18	12	17	12	AAL 8	7,2	LKL 08-M 12 x 1,5
		10	M 14 x 1,5 taper	15	30	49	19	12	19	14	AAL 10	10,0	LKL 10-M 14 x 1,5
		12	M 16 x 1,5 taper	17	32	52	20	12	22	17	AAL 12	12,6	LKL 12-M 16 x 1,5
		15	M 18 x 1,5 taper	21	36	60	24	12	27	19	AAL 15	20,5	LKL 15-M 18 x 1,5
		18	M 22 x 1,5 taper	23,5	40	66,5	26,5	14	32	24	AAL 18	30,4	LKL 18-M 22 x 1,5
S	400	6	M 12 x 1,5 taper	16	31	49	18	12	17	12	AAS 6	8,9	LKS 06-M 12 x 1,5
		8	M 14 x 1,5 taper	17	32	51	19	12	19	14	AAS 8	11,4	LKS 08-M 14 x 1,5
		10	M 16 x 1,5 taper	17,5	34	54	20	12	22	17	AAS 10	15,0	LKS 10-M 16 x 1,5
		12	M 18 x 1,5 taper	21,5	38	58	20	12	24	17	AAS 12	19,6	LKS 12-M 18 x 1,5
		14	M 20 x 1,5 taper	22	40	62,5	22,5	14	27	19	AAS 14	24,2	LKS 14-M 20 x 1,5
		16	M 22 x 1,5 taper	24,5	43	65,5	22,5	14	30	24	AAS 16	30,9	LKS 16-M 22 x 1,5

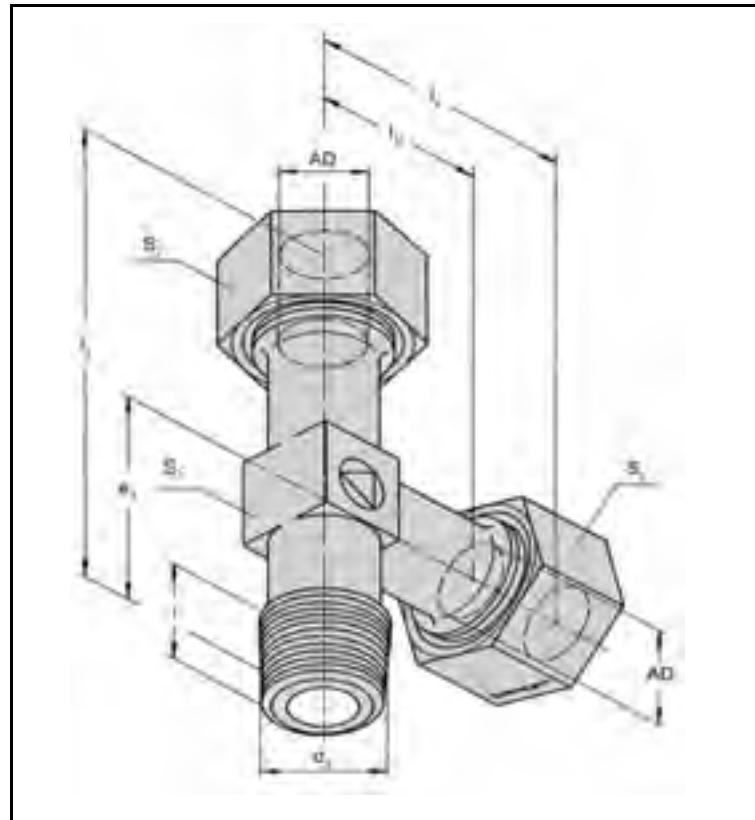


Male stud barrel tees

Stud thread :
BSP thread, taper

Form C DIN 3852

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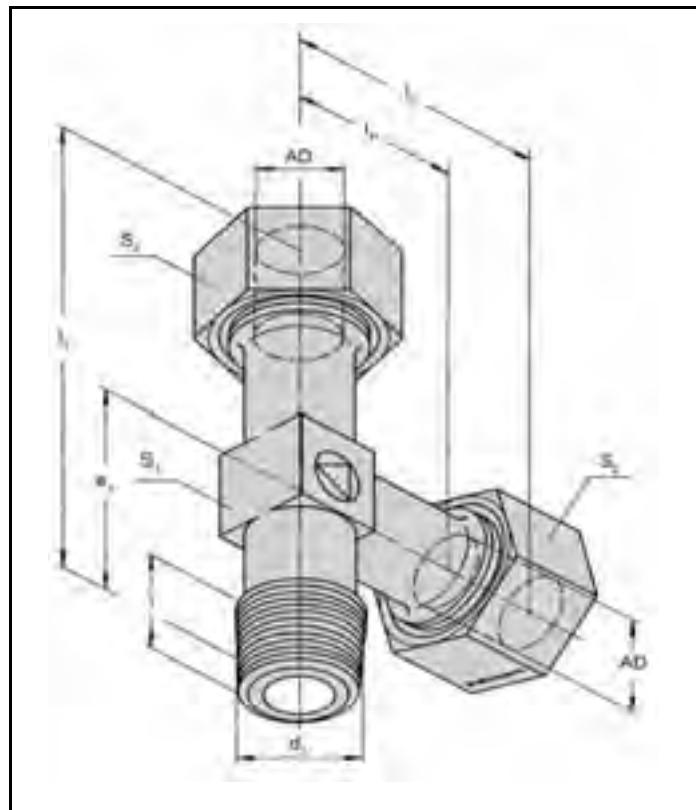
Series	NP	Tube OD	d ₃	l ₁₁	l ₂	l ₃	e ₃	i	S ₂	S ₁	DIN 2353	kg %	Blago Part No.
LL	100	4	R 1/8	11	20,5	33	12	8	10	12	ABLL 4	2,4	LKLL 04-R 1/8
		5	R 1/8	9,5	21	33	12	8	12	12	ABLL 5	2,6	LKLL 05-R 1/8
		6	R 1/8	9,5	21	33	12	8	12	12	ABLL 6	2,7	LKLL 06-R 1/8
		8	R 1/8	11	24	38	15	8	14	12	ABLL 8	4,1	LKLL 08-R 1/8
L	315	6	R 1/8	12	27	42	15	8	14	12	ABL 6	5,1	LKL 06-R 1/8
		8	R 1/4	14	29	47	18	12	17	12	ABL 8	7,2	LKL 08-R 1/4
		10	R 1/4	15	30	49	19	12	19	14	ABL 10	10,0	LKL 10-R 1/4
		12	R 3/8	17	32	52	20	12	22	17	ABL 12	12,6	LKL 12-R 3/8
		15	R 1/2	21	36	60	24	16	27	19	ABL 15	21,5	LKL 15-R 1/2
		18	R 1/2	23,5	40	66,5	26,5	16	32	24	ABL 18	30,4	LKL 18-R 1/2
S	400	6	R 1/4	16	31	49	18	12	17	12	ABS 6	8,9	LKS 06-R 1/4
		8	R 1/4	17	32	51	19	12	19	14	ABS 8	11,4	LKS 08-R 1/4
		10	R 3/8	17,5	34	54	20	12	22	17	ABS 10	15,0	LKS 10-R 3/8
		12	R 3/8	21,5	38	58	20	12	24	17	ABS 12	19,6	LKS 12-R 3/8
		14	R 1/2	22	40	62,5	22,5	14	27	19	ABS 14	24,2	LKS 14-R 1/2
		16	R 1/2	24,5	43	65,5	22,5	14	30	24	ABS 16	30,9	LKS 16-R 1/2

Male stud barrel tees



Stud thread :
NPT thread, taper

Form NPT
See page 10/11

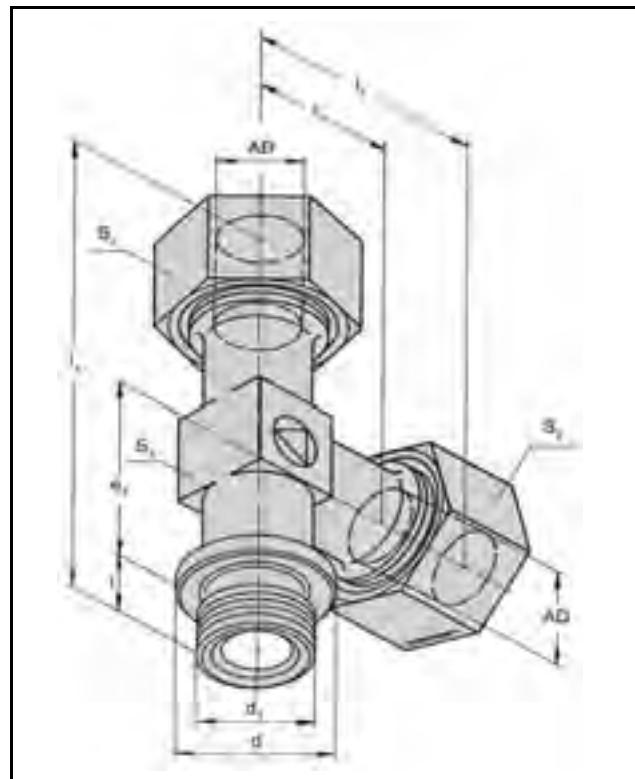


Series	NP	Tube OD	d ₃	l ₁₁	l ₂	l ₃	e ₃	i	S ₂	S ₁	kg %	Blago Part No.
LL	100	4	1/8 NPT	11	20,5	32,5	11,5	8	10	12	2,3	LKLL 04- 1/8 NPT
		5	1/8 NPT	9,5	21	32,5	11,5	8	12	12	2,6	LKLL 05- 1/8 NPT
		6	1/8 NPT	9,5	21	32,5	11,5	8	12	12	2,9	LKLL 06- 1/8 NPT
		8	1/8 NPT	11,5	24	34,5	11,5	9,9	14	12	3,7	LKLL 08- 1/8 NPT
L	315	6	1/8 NPT	12	27	41,5	14,5	9,9	14	12	5,0	LKL 06- 1/8 NPT
		8	1/4 NPT	14	29	47	18	12	17	12	6,5	LKL 08- 1/4 NPT
		10	1/4 NPT	15	30	18	18	13	19	14	8,5	LKL 10- 1/4 NPT
		12	3/8 NPT	17	32	52	20	12	22	17	12,5	LKL 12- 3/8 NPT
		15	1/2 NPT	21	36	58,5	22,5	16	27	19	20,5	LKL 15- 1/2 NPT
		18	1/2 NPT	23,5	40	65,5	24,5	19,8	32	24	26,5	LKL 18- 1/2 NPT
	160	22	3/4 NPT	27,5	44	72,5	28,5	20,1	36	27	36,5	LKL 22- 3/4 NPT
		28	1 NPT	30,5	47	79,5	32,5	23	41	36	56,0	LKL 28- 1 NPT
		35	1 1/4 NPT	34,5	56	93	37	25,6	50	41	81,0	LKL 35- 1 1/4 NPT
		42	1 1/2 NPT	40	63	107	44	26	60	50	115,5	LKL 42- 1 1/2 NPT
S	640	6	1/4 NPT	16	31	49	18	12	17	12	9,0	LKS 06- 1/4 NPT
		8	1/4 NPT	17	32	51	19	13	19	14	10,5	LKS 08- 1/4 NPT
		10	3/8 NPT	17,5	34	53	19	12	22	17	15,6	LKS 10- 3/8 NPT
		12	3/8 NPT	21,5	38	57	19	12	24	17	18,0	LKS 12- 3/8 NPT
		14	1/2 NPT	22	40	59,5	19,5	16	27	19	24,5	LKS 14- 1/2 NPT
	400	16	1/2 NPT	24,5	43	64,5	21,5	19,8	30	24	32,0	LKS 16- 1/2 NPT
		20	3/4 NPT	26,5	48	75,5	27,5	20,1	36	27	49,0	LKS 20- 3/4 NPT
		25	1 NPT	30	54	86,5	32,5	23	46	36	82,2	LKS 25- 1 NPT
		30	1 1/4 NPT	35,5	62	99	37	25	50	41	109,0	LKS 30- 1 1/4 NPT
		315	38	1 1/2 NPT	41	72	116	44	26	60	50	155,0



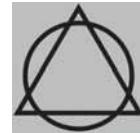
Male stud barrel tees

Stud thread :
Metric thread, parallel
BSP thread, parallel
Form B DIN 3852
See page 10/11

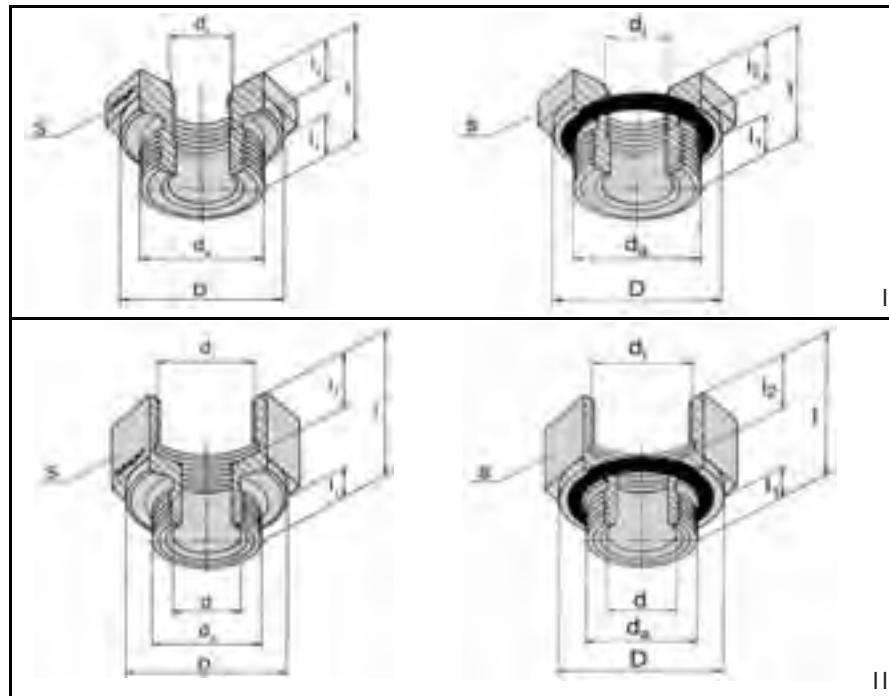


Series	NP	Tube OD	d ₃	l ₁₁	l ₂	l ₄	e ₄	i	d	S ₂	S ₃	DIN 2353	kg %	Blago Part No.
L	160	22	M 26 x 1,5	27,5	44	70	26	16	31	36	27	BAL 22	36,9	LBL 22-M 26 x 1,5
		28	M 33 x 2	30,5	47	77	30	18	39	41	36	BAL 28	55,0	LBL 28-M 33 x 2
		35	M 42 x 2	34,5	56	90	34	20	49	50	41	BAL 35	84,9	LBL 35-M 42 x 2
		42	M 48 x 2	40	63	102	39	22	55	60	50	BAL 42	142,2	LBL 42-M 48 x 2
S	400	20	M 27 x 2	26,5	48	74	26	16	32	36	27	BAS 20	45,5	LBS 20-M 27 x 2
	250	25	M 33 x 2	30	54	84	30	18	39	46	36	BAS 25	87,5	LBS 25-M 33 x 2
	160	30	M 42 x 2	35,5	62	96	34	20	49	50	41	BAS 30	121,5	LBS 30-M 42 x 2
		38	M 48 x 2	41	72	111	39	22	55	60	50	BAS 38	174,0	LBS 38-M 48 x 2
L	160	22	G 3/4	27,5	44	70	26	16	32	36	27	BBL 22	36,9	LBL 22-R 3/4
		28	G 1	30,5	47	77	30	18	39	41	36	BBL 28	55,0	LBL 28-R 1
		35	G 1 1/4	34,5	56	90	34	20	49	50	41	BBL 35	84,9	LBL 35-R 1 1/4
		42	G 1 1/2	40	63	102	39	22	55	60	50	BBL 42	142,2	LBL 42-R 1 1/2
S	400	20	G 3/4	26,5	48	74	26	16	32	36	27	BBS 20	45,5	LBS 20-R 3/4
	250	25	G 1	30	54	84	30	18	39	46	36	BBS 25	87,5	LBS 25-R 1
	160	30	G 1 1/4	35,5	62	96	34	20	49	50	41	BBS 30	121,5	LBS 30-R 1 1/4
		38	G 1 1/2	41	72	111	39	22	55	60	50	BBS 38	174,0	LBS 38-R 1 1/2

Reducing adaptors



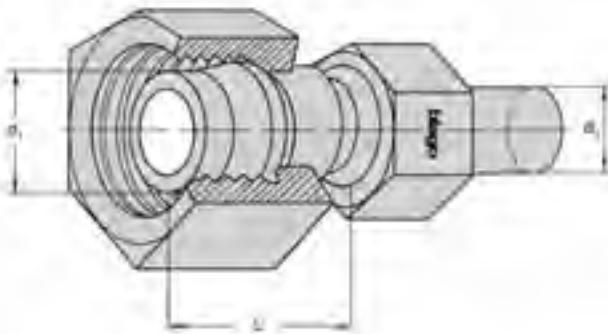
Internal and external thread:
BSP thread, parallel
Port tapping
with captive seal
Form E DIN 3852
(ISO 1179)
or
Port tapping
Form B DIN 3852
(ISO 1179)
See page 10/11



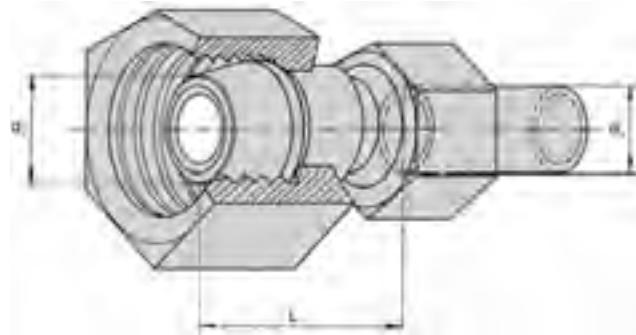
External thread d_a	Internal thread d_i	NP	l_1	l_2	I	S	D	d	Draw.	Blago Part No. Form B	Blago Part No. Form E
G 1/8 A	G 1/4	400	8	17	31	19	14	4	II	RI - R 1/8 x 1/4	RI - R 1/8 WD x 1/4
G 1/8 A	G 3/8			17	32	24				RI - R 1/8 x 3/8	RI - R 1/8 WD x 3/8
G 1/4 A	G 1/8		12	12	28	19		5	II	RI - R 1/4 x 1/8	RI - R 1/4 WD x 1/8
G 1/4 A	G 3/8			17	36	24				RI - R 1/4 x 3/8	RI - R 1/4 WD x 3/8
G 1/4 A	G 1/2		20	40	32	19	5	II	RI - R 1/4 x 1/2	RI - R 1/4 WD x 1/2	
G 1/4 A	G 3/4	315		22	43	36			RI - R 1/4 x 3/4	RI - R 1/4 WD x 3/4	
G 3/8 A	G 1/8	400	10	22,5	22	22	8,7	I	RI - R 3/8 x 1/8	RI - R 3/8 WD x 1/8	
G 3/8 A	G 1/4			17	36					RI - R 3/8 x 1/4	RI - R 3/8 WD x 1/4
G 3/8 A	G 1/2		20	41	32		8	II	RI - R 3/8 x 1/2	RI - R 3/8 WD x 1/2	
G 3/8 A	G 3/4	315		22	44	36			RI - R 3/8 x 3/4	RI - R 3/8 WD x 3/4	
G 1/2 A	G 1/8	400	10	24	27	27	8,7	I	RI - R 1/2 x 1/8	RI - R 1/2 WD x 1/8	
G 1/2 A	G 1/4			14	24					RI - R 1/2 x 1/4	RI - R 1/2 WD x 1/4
G 1/2 A	G 3/8		17	36	27		11,7	I	RI - R 1/2 x 3/8	RI - R 1/2 WD x 3/8	
G 1/2 A	G 3/4	315		22	46					RI - R 1/2 x 3/4	RI - R 1/2 WD x 3/4
G 1/2 A	G 1	315	24,5	49	41	27	12	II	RI - R 1/2 x 1	RI - R 1/2 WD x 1	
G 1/2 A	G 1 1/4			26,5	53					RI - R 1/2 x 1 1/4	RI - R 1/2 WD x 1 1/4
G 3/4 A	G 1/4	315	14	26	32	32	11,7	I	RI - R 3/4 x 1/4	RI - R 3/4 WD x 1/4	
G 3/4 A	G 3/8			14	26					RI - R 3/4 x 3/8	RI - R 3/4 WD x 3/8
G 3/4 A	G 1/2		20	41	32		15,2	I	RI - R 3/4 x 1/2	RI - R 3/4 WD x 1/2	
G 3/4 A	G 1			24,5	51					RI - R 3/4 x 1	RI - R 3/4 WD x 1
G 3/4 A	G 1 1/4	160	26,5	55	55	32	16	II	RI - R 3/4 x 1 1/4	RI - R 3/4 WD x 1 1/4	
G 3/4 A	G 1 1/2			28,5	57					RI - R 3/4 x 1 1/2	RI - R 3/4 WD x 1 1/2
G 1 A	G 1/4	315	14	29	41	40	11,7	I	RI - R 1 x 1/4	RI - R 1 WD x 1/4	
G 1 A	G 3/8			14	29					RI - R 1 x 3/8	RI - R 1 WD x 3/8
G 1 A	G 1/2		16	29	41		15,2	I	RI - R 1 x 1/2	RI - R 1 WD x 1/2	
G 1 A	G 3/4			22	47					RI - R 1 x 3/4	RI - R 1 WD x 3/4
G 1 A	G 1 1/4	160	26,5	57	55	20	II	RI - R 1 x 1 1/4	RI - R 1 WD x 1 1/4		
G 1 A	G 1 1/2			28,5	59				RI - R 1 x 1 1/2	RI - R 1 WD x 1 1/2	
G 1 1/4 A	G 1/2		16	32	50		19	I	RI - R 1 1/4 x 1/2	RI - R 1 1/4 WD x 1/2	
G 1 1/4 A	G 3/4			18	32					RI - R 1 1/4 x 3/4	RI - R 1 1/4 WD x 3/4
G 1 1/4 A	G 1	160	24,5	52	60		24,5	I	RI - R 1 1/4 x 1	RI - R 1 1/4 WD x 1	
G 1 1/4 A	G 1 1/2			28,5	60					RI - R 1 1/4 x 1 1/2	RI - R 1 1/4 WD x 1 1/2
G 1 1/2 A	G 1/2	22	16	36	55	55	19	I	RI - R 1 1/2 x 1/2	RI - R 1 1/2 WD x 1/2	
G 1 1/2 A	G 3/4			18	36					RI - R 1 1/2 x 3/4	RI - R 1 1/2 WD x 3/4
G 1 1/2 A	G 1		20	36	55		24,5	I	RI - R 1 1/2 x 1	RI - R 1 1/2 WD x 1	
G 1 1/2 A	G 1 1/4			26,5	58					RI - R 1 1/2 x 1 1/4	RI - R 1 1/2 WD x 1 1/4



Taper reducing couplings



Type I: with cutting ring



Type II: with pre-manufactured taper

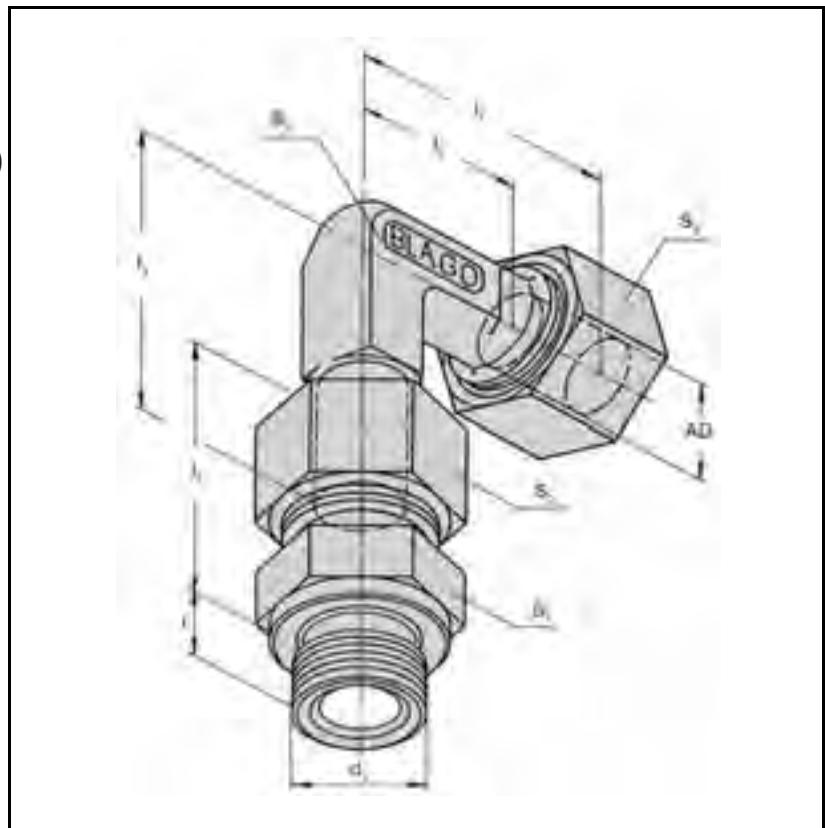
Other combinations and hexagon types can be supplied on request.

d ₁	d ₂	L	Typ	kg %	Blago Part No.	d ₁	d ₂	L	Type	kg %	Blago Part No.
8	6	23,5	I	4,0	KORL 8/ 6	8	6	25	I	6,5	KORS 8/ 6
10	6	23,5	I	4,7	KORL 10/ 6	10	6	26	I	7,0	KORS 10/ 6
10	8	23,5	I	5,2	KORL 10/ 8	10	8	26	I	7,5	KORS 10/ 8
12	6	23,5	II	5,9	KORL 12/ 6	12	6	27	I	8,0	KORS 12/ 6
12	8	23,5	I	6,3	KORL 12/ 8	12	8	27	I	8,5	KORS 12/ 8
12	10	24,5	I	6,9	KORL 12/10	12	10	27	I	9,9	KORS 12/10
15	6	23,5	II	8,2	KORL 15/ 6	14	6	29	II	10,4	KORS 14/ 6
15	8	23,5	II	8,9	KORL 15/ 8	14	8	29	I	10,9	KORS 14/ 8
15	10	24,5	I	9,3	KORL 15/10	14	10	28,5	I	12,1	KORS 14/10
15	12	24,5	I	10,0	KORL 15/12	14	12	28,5	I	12,6	KORS 14/12
18	6	24,5	II	10,8	KORL 18/ 6	16	6	29	II	12,1	KORS 16/ 6
18	8	24,5	II	11,0	KORL 18/ 8	16	8	29	II	12,6	KORS 16/ 8
18	10	25,5	II	11,7	KORL 18/10	16	10	28,5	I	14,0	KORS 16/10
18	12	25,5	II	12,5	KORL 18/12	16	12	28,5	I	14,5	KORS 16/12
18	15	26,5	I	14,9	KORL 18/15	16	14	30	I	16,1	KORS 16/14
22	6	25,5	II	14,1	KORL 22/ 6	20	6	34	II	17,9	KORS 20/ 6
22	8	25,5	II	14,9	KORL 22/ 8	20	8	34	II	18,4	KORS 20/ 8
22	10	26,5	II	15,1	KORL 22/10	20	10	33,5	II	19,5	KORS 20/10
22	12	26,5	II	16,0	KORL 22/12	20	12	33,5	I	20,4	KORS 20/12
22	15	27,5	II	18,0	KORL 22/15	20	14	35	I	22,5	KORS 20/14
25	18	27	I	19,8	KORL 25/18	20	16	34,5	I	23,9	KORS 20/16
28	22	30	I	26,8	KORL 28/22	25	20	37,5	I	40,8	KORS 25/20
35	22	35	II	37,8	KORL 35/22	30	20	39,5	II	47,6	KORS 30/20
35	28	35	I	39,5	KORL 35/28	30	25	40	I	59,1	KORS 30/25
42	22	36	II	51,0	KORL 42/22	38	20	43,5	II	65,2	KORS 38/20
42	28	36	II	53,0	KORL 42/28	38	25	44	II	76,9	KORS 38/25
42	35	35	I	58,3	KORL 42/35	38	30	44,5	I	80,0	KORS 38/30

Adjustable elbow couplings



Stud thread :
Metric, parallel
Port tapping
with metal seal
Form B DIN 3852 (ISO 9974)
See page 10/11

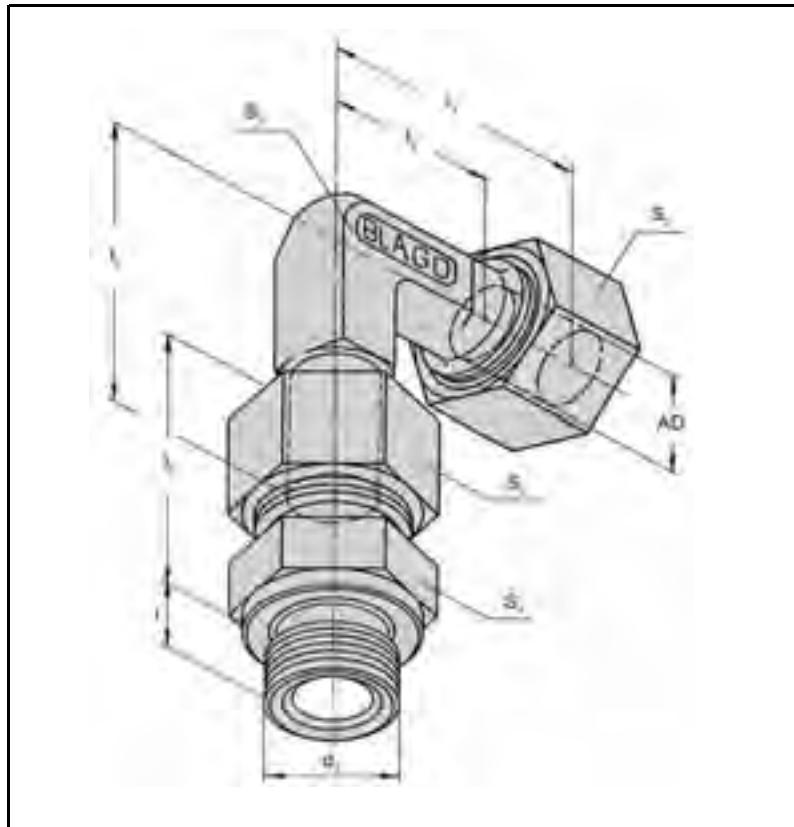


Series	NP	Tube OD	d ₃	S ₁	S ₂	S ₃	l ₁	l ₂	l ₃	l ₅	i	Blago Part No.
L	315	06	M 10 x 1	14	14	12	29	14	27	23	8	EEL 06 M
		08	M 12 x 1.5	17	17	12	29	14	27,5	25	12	EEL 08 M
		10	M 14 x 1.5	19	19	14	30	15	29	26	12	EEL 10 M
		12	M 16 x 1.5	22	22	17	32	17	29,5	27	12	EEL 12 M
	250	15	M 18 x 1.5	24	27	19	36	21	32,5	29	12	EEL 15 M
		18	M 22 x 1.5	27	32	24	40,5	23,5	35,5	31	14	EEL 18 M
	160	22	M 26 x 1.5	32	36	27	44	27,5	38,5	33	16	EEL 22 M
		28	M 33 x 2	41	41	36	47	30,5	41,5	34	18	EEL 28 M
		35	M 42 x 2	50	50	41	56	34,5	51	39	20	EEL 35 M
		42	M 48 x 2	55	60	50	63	40	56	42	22	EEL 42 M
S	400	06	M 12 x 1.5	17	17	12	31	16	27	28	12	EES 06 M
		08	M 14 x 1.5	19	19	14	32	17	27	30	12	EES 08 M
		10	M 16 x 1.5	22	22	17	34	17,5	30	31	12	EES 10 M
		12	M 18 x 1.5	24	24	17	38	21,5	31	33	12	EES 12 M
		14	M 20 x 1.5	27	27	19	40	22	35	37	14	EES 14 M
		16	M 22 x 1.5	27	30	24	43	24,5	36,5	37	14	EES 16 M
		20	M 27 x 2	32	36	27	48	26,5	44,5	42	16	EES 20 M
		250	M 33 x 2	41	46	36	54	30	50	47	18	EES 25 M
	160	30	M 42 x 2	50	50	41	62	35,5	55	50	20	EES 30 M
		38	M 48 x 2	55	60	50	72	41	63	57	22	EES 38 M



Adjustable elbow couplings

Stud thread :
 BSP thread, parallel
 Port tapping
 with metal seal
Form B DIN 3852 (ISO 1179)
 See page 10/11

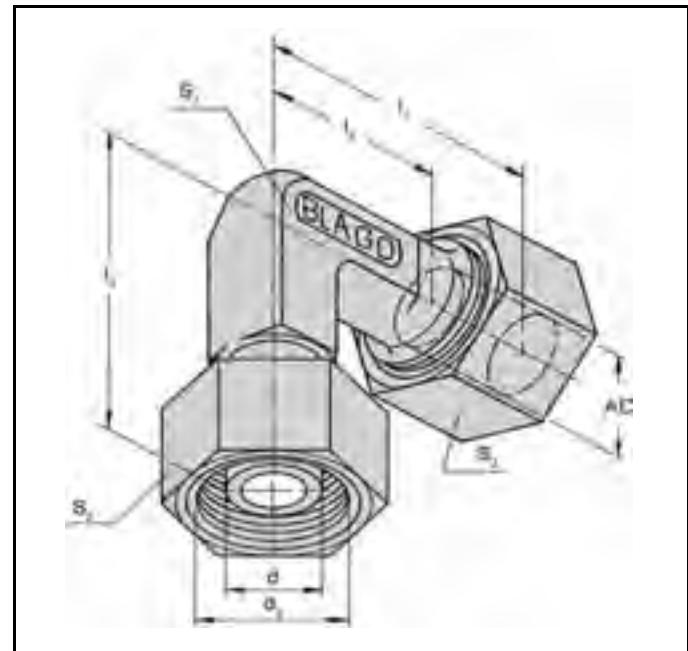


Series	NP	Tube OD	d ₃	S ₁	S ₂	S ₃	l ₁	l ₂	l ₃	l ₅	i	Blago Part No.
L	315	06	R 1/8	14	14	12	29	14	27	23	8	EEL 06 R
		08	R 1/4	19	17	12	29	14	27,5	25	12	EEL 08 R
		10	R 1/4	19	19	14	30	15	29	26	12	EEL 10 R
		12	R 3/8	22	22	17	32	17	29,5	27	12	EEL 12 R
	250	15	R 1/2	27	27	19	36	21	32,5	29	14	EEL 15 R
		18	R 1/2	27	32	24	40,5	23,5	35,5	31	14	EEL 18 R
	160	22	R 3/4	32	36	27	44	27,5	38,5	33	16	EEL 22 R
		28	R 1	41	41	36	47	30,5	41,5	34	18	EEL 28 R
		35	R 1 1/4	50	50	41	56	34,5	51	39	20	EEL 35 R
		42	R 1 1/2	55	60	50	63	40	56	42	22	EEL 42 R
S	400	06	R 1/4	19	17	12	31	16	27	28	12	EES 06 R
		08	R 1/4	19	19	14	32	17	27,5	30	12	EES 08 R
		10	R 3/8	22	22	17	34	17,5	30	31	12	EES 10 R
		12	R 3/8	22	24	17	38	21,5	31	33	12	EES 12 R
		14	R 1/2	27	27	19	40	22	35	37	14	EES 14 R
		16	R 1/2	27	30	24	43	24,5	36,5	37	14	EES 16 R
		20	R 3/4	32	36	27	48	26,5	44,5	42	16	EES 20 R
	160	25	R 1	41	46	36	54	30	50	47	18	EES 25 R
		30	R 1 1/4	50	50	41	62	35,5	55	50	20	EES 30 R
		38	R 1 1/2	55	60	50	72	41	63	57	22	EES 38 R

Adjustable elbow couplings



Pre-assembled
with cutting ring

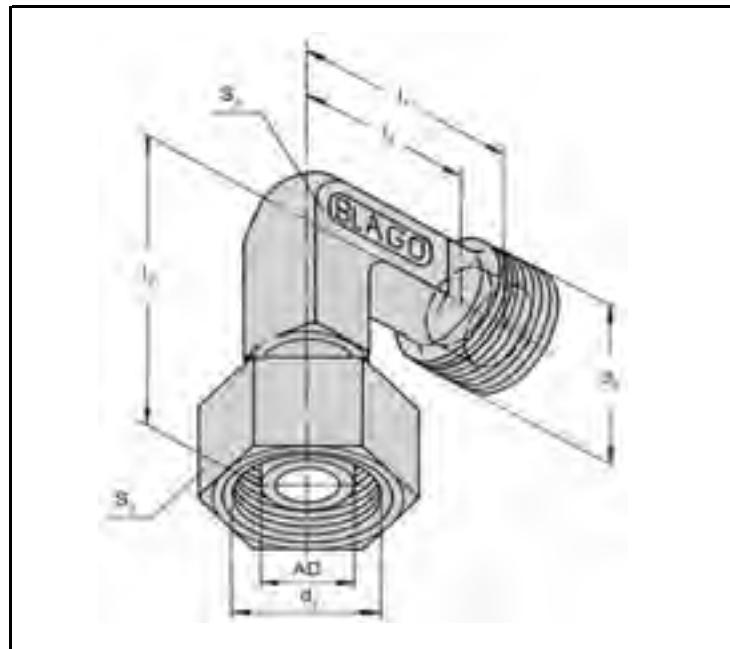


Series	NP	Tube OD	d_3	S_2	S_3	l_1	l_2	l_3	Blago Part No.
L	315	06	M 12 x 1,5	14	12	29	14	27	EEL 06 OHNE
		08	M 14 x 1,5	17	12	29	14	27	EEL 08 OHNE
		10	M 16 x 1,5	19	14	30	15	29	EEL 10 OHNE
		12	M 18 x 1,5	22	17	32	17	29,5	EEL 12 OHNE
	250	15	M 22 x 1,5	27	19	36	21	32,5	EEL 15 OHNE
		18	M 26 x 1,5	32	24	40,5	23,5	35,5	EEL 18 OHNE
	160	22	M 30 x 2	36	27	44	27,5	38,5	EEL 22 OHNE
		28	M 36 x 2	41	36	47	30,5	41,5	EEL 28 OHNE
		35	M 45 x 2	50	41	56	34,5	51	EEL 35 OHNE
		42	M 52 x 2	60	50	63	40	56	EEL 42 OHNE
S	400	06	M 14 x 1,5	17	12	31	16	27	EES 06 OHNE
		08	M 16 x 1,5	19	14	32	17	27,5	EES 08 OHNE
		10	M 18 x 1,5	22	17	34	17,5	30	EES 10 OHNE
		12	M 20 x 1,5	24	17	38	21,5	31	EES 12 OHNE
		14	M 22 x 1,5	27	19	40	22	35	EES 14 OHNE
		16	M 24 x 1,5	30	24	43	24,5	36,5	EES 16 OHNE
		20	M 30 x 2	36	27	48	26,5	44,5	EES 20 OHNE
	250	25	M 36 x 2	46	36	54	30	50	EES 25 OHNE
	160	30	M 42 x 2	50	41	62	35,5	55	EES 30 OHNE
		38	M 52 x 2	60	50	72	41	63	EES 38 OHNE



Adjustable elbow bodies

Pre-assembled
with cutting ring

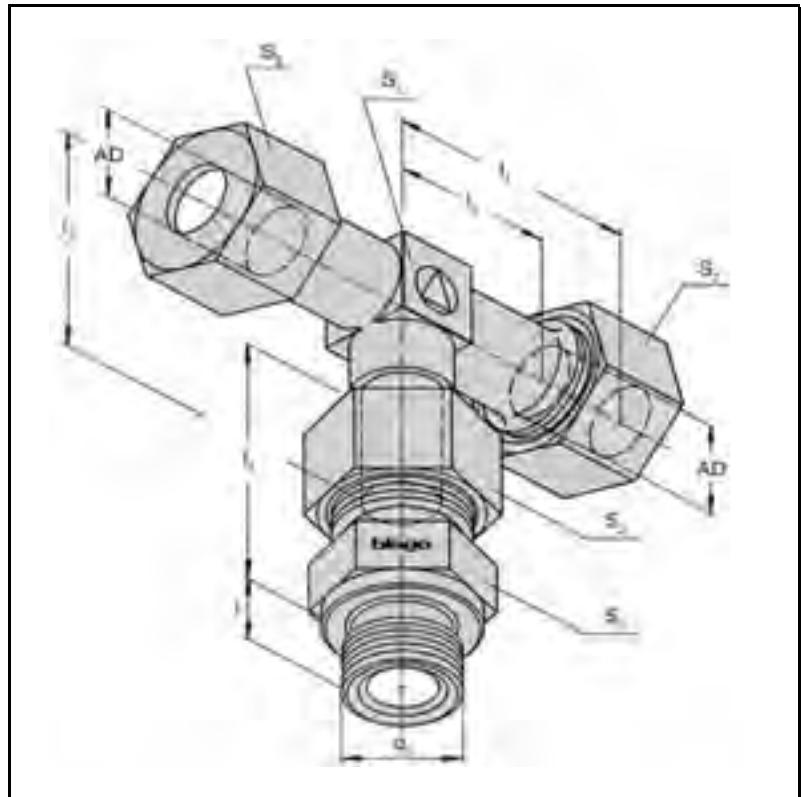


Series	NP	Tube OD	d ₃	S ₂	S ₃	l ₁	l ₂	l ₃	Blago Part No.
L	315	06	M 12 x 1,5	14	12	21	14	27	EEL 06 OMD
		08	M 14 x 1,5	17	12	21	14	27,5	EEL 08 OMD
		10	M 16 x 1,5	19	14	22	15	29	EEL 10 OMD
		12	M 18 x 1,5	22	17	24	17	29,5	EEL 12 OMD
	250	15	M 22 x 1,5	27	19	28	21	32,5	EEL 15 OMD
		18	M 26 x 1,5	32	24	31	23,5	35,5	EEL 18 OMD
	160	22	M 30 x 2	36	27	35	27,5	38,5	EEL 22 OMD
		28	M 36 x 2	41	36	38	30,5	41,5	EEL 28 OMD
		35	M 45 x 2	50	41	45	34,5	51	EEL 35 OMD
		42	M 52 x 2	60	50	51	40	56	EEL 42 OMD
S	400	06	M 14 x 1,5	17	12	23	16	27	EES 06 OMD
		08	M 16 x 1,5	19	14	24	17	27,5	EES 08 OMD
		10	M 18 x 1,5	22	17	25	17,5	30	EES 10 OMD
		12	M 20 x 1,5	24	17	29	21,5	31	EES 12 OMD
		14	M 22 x 1,5	27	19	30	22	35	EES 14 OMD
		16	M 24 x 1,5	30	24	33	24,5	36,5	EES 16 OMD
		20	M 30 x 2	36	27	37	26,5	44,5	EES 20 OMD
	250	25	M 36 x 2	46	36	42	30	50	EES 25 OMD
	160	30	M 42 x 2	50	41	49	35,5	55	EES 30 OMD
		38	M 52 x 2	60	50	59	41	63	EES 38 OMD

Adjustable branch tee couplings



Stud thread :
Metric, parallel
Port tapping
with metal seal
Form B DIN 3852 (ISO 9974)
See page 10/11

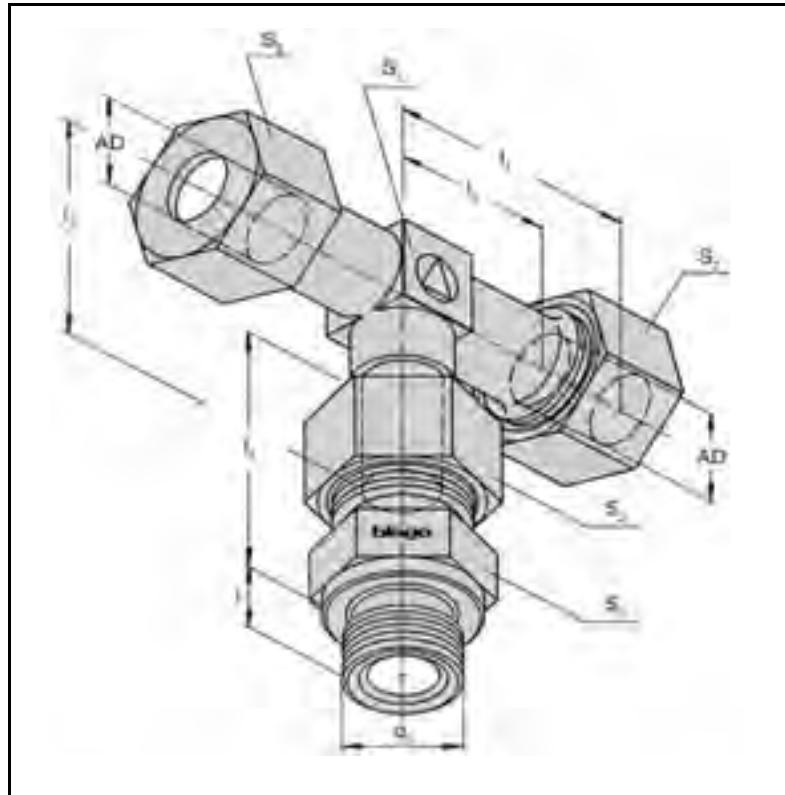


Series	NP	Tube OD	d_3	S_1	S_2	S_3	l_1	l_2	l_3	l_5	i	Blago Part No.
L	315	06	M 10 x 1	14	14	12	29	14	27	23	8	TEL 06 M
		08	M 12 x 1.5	17	17	12	29	14	27	25	12	TEL 08 M
		10	M 14 x 1.5	19	19	14	30	15	29	26	12	TEL 10 M
		12	M 16 x 1.5	22	22	17	32	17	29,5	27	12	TEL 12 M
	250	15	M 18 x 1.5	24	27	19	36	21	32,5	29	12	TEL 15 M
		18	M 22 x 1.5	27	32	24	40	23,5	35,5	31	14	TEL 18 M
	160	22	M 26 x 1.5	32	36	27	44	27,5	38,5	33	16	TEL 22 M
		28	M 33 x 2	41	41	36	47	30,5	41,5	34	18	TEL 28 M
		35	M 42 x 2	50	50	41	56	34,5	51	39	20	TEL 35 M
		42	M 48 x 2	55	60	50	63	40	56	42	22	TEL 42 M
S	400	06	M 12 x 1.5	17	17	12	31	16	27	28	12	TES 06 M
		08	M 14 x 1.5	19	19	14	32	17	27,5	30	12	TES 08 M
		10	M 16 x 1.5	22	22	17	34	17,5	30	31	12	TES 10 M
		12	M 18 x 1.5	24	24	17	38	21,5	31	33	12	TES 12 M
		14	M 20 x 1.5	27	27	19	40	22	35	37	14	TES 14 M
		16	M 22 x 1.5	27	30	24	43	24,5	36,5	37	14	TES 16 M
		20	M 27 x 2	32	36	27	48	26,5	44,5	42	16	TES 20 M
		25	M 33 x 2	41	46	36	54	30	50	47	18	TES 25 M
	160	30	M 42 x 2	50	50	41	62	35,5	55	50	20	TES 30 M
		38	M 48 x 2	55	60	50	72	41	63	57	22	TES 38 M



Adjustable branch tee couplings

Stud thread :
 BSP thread, parallel
 Port tapping
 with metal seal
Form B DIN 3852 (ISO 1179)
 See page 10/11

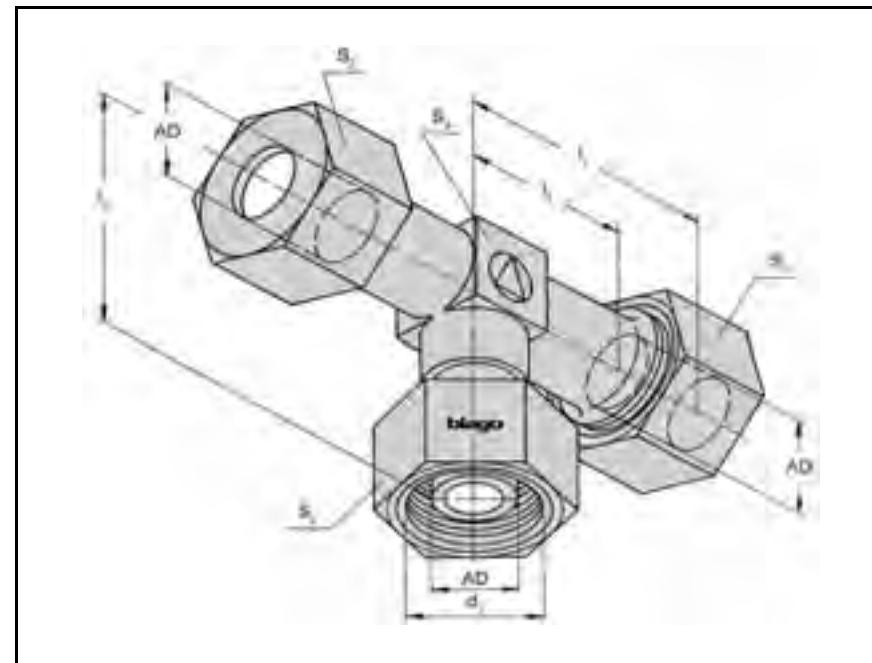


Series	NP	Tube OD	d ₃	S ₁	S ₂	S ₃	l ₁	l ₂	l ₃	l ₅	i	Blago Part No.
L	315	06	R 1/8	14	14	12	29	14	27	23	8	TEL 06 R
		08	R 1/4	19	17	12	29	14	27	25	12	TEL 08 R
		10	R 1/4	19	19	14	30	15	29	26	12	TEL 10 R
		12	R 3/8	22	22	17	32	17	29,5	27	12	TEL 12 R
	250	15	R 1/2	27	27	19	36	21	32,5	29	14	TEL 15 R
		18	R 1/2	27	32	24	40,5	23,5	35,5	31	14	TEL 18 R
	160	22	R 3/4	32	36	27	44	27,5	38,5	33	16	TEL 22 R
		28	R 1	41	41	36	47	30,5	41,5	34	18	TEL 28 R
		35	R 1 1/4	50	50	41	56	34,5	51	39	20	TEL 35 R
		42	R 1 1/2	55	60	50	63	40	56	42	22	TEL 42 R
S	400	06	R 1/4	19	17	12	31	16	27	28	12	TES 06 R
		08	R 1/4	19	19	14	32	17	27,5	30	12	TES 08 R
		10	R 3/8	22	22	17	34	17,5	30	31	12	TES 10 R
		12	R 3/8	22	24	17	38	21,5	31	33	12	TES 12 R
		14	R 1/2	27	27	19	40	22	35	37	14	TES 14 R
		16	R 1/2	27	30	24	43	24,5	36,5	37	14	TES 16 R
		20	R 3/4	32	36	27	48	26,5	44,5	42	16	TES 20 R
		250	R 1	41	46	36	54	30	50	47	18	TES 25 R
	160	30	R 1 1/4	50	50	41	62	35,5	55	50	20	TES 30 R
		38	R 1 1/2	55	60	50	72	41	63	57	22	TES 38 R

Adjustable branch tee couplings



Pre-assembled
with cutting ring

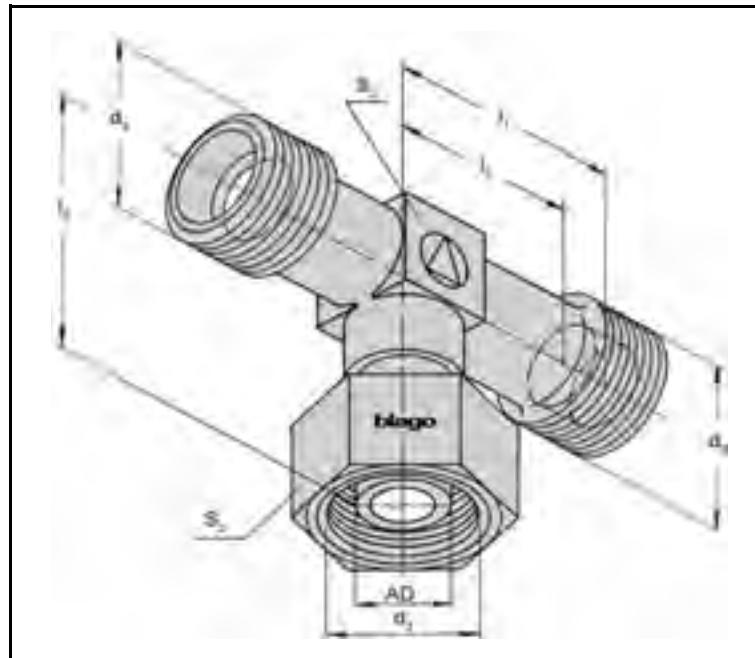


Series	NP	Tube OD	d_3	S_2	S_3	l_1	l_2	l_3	Blago Part No.
L	315	06	M 12 x 1,5	14	12	29	14	27	TEL 06 OHNE
		08	M 14 x 1,5	17	12	29	14	27	TEL 08 OHNE
		10	M 16 x 1,5	19	14	30	15	29	TEL 10 OHNE
		12	M 18 x 1,5	22	17	32	17	29,5	TEL 12 OHNE
	250	15	M 22 x 1,5	27	19	36	21	32,5	TEL 15 OHNE
		18	M 26 x 1,5	32	24	40,5	23,5	35,5	TEL 18 OHNE
	160	22	M 30 x 2	36	27	44	27,5	38,5	TEL 22 OHNE
		28	M 36 x 2	41	36	47	30,5	41,5	TEL 28 OHNE
		35	M 45 x 2	50	41	56	34,5	51	TEL 35 OHNE
		42	M 52 x 2	60	50	63	40	56	TEL 42 OHNE
S	400	06	M 14 x 1,5	17	12	31	16	27	TES 06 OHNE
		08	M 16 x 1,5	19	14	32	17	27,5	TES 08 OHNE
		10	M 18 x 1,5	22	17	34	17,5	30	TES 10 OHNE
		12	M 20 x 1,5	24	17	38	21,5	31	TES 12 OHNE
		14	M 22 x 1,5	27	19	40	22	35	TES 14 OHNE
		16	M 24 x 1,5	30	24	43	24,5	36,5	TES 16 OHNE
		20	M 30 x 2	36	27	48	26,5	44,5	TES 20 OHNE
	250	25	M 36 x 2	46	36	54	30	50	TES 25 OHNE
	160	30	M 42 x 2	50	41	62	35,5	55	TES 30 OHNE
		38	M 52 x 2	60	50	72	41	63	TES 38 OHNE



Adjustable branch tee bodies

Pre-assembled
with cutting ring



Series	NP	Tube OD	d ₃	S ₂	S ₃	l ₁	l ₂	l ₃	Blago Part No.
L	315	06	M 12 x 1,5	14	12	21	14	27	TEL 06 OMD
		08	M 14 x 1,5	17	12	21	14	27	TEL 08 OMD
		10	M 16 x 1,5	19	14	22	15	29	TEL 10 OMD
		12	M 18 x 1,5	22	17	24	17	29,5	TEL 12 OMD
	250	15	M 22 x 1,5	27	19	28	21	32,5	TEL 15 OMD
		18	M 26 x 1,5	32	24	31	23,5	35,5	TEL 18 OMD
	160	22	M 30 x 2	36	27	35	27,5	38,5	TEL 22 OMD
		28	M 36 x 2	41	36	38	30,5	41,5	TEL 28 OMD
		35	M 45 x 2	50	41	45	34,5	51	TEL 35 OMD
		42	M 52 x 2	60	50	51	40	56	TEL 42 OMD
S	400	06	M 14 x 1,5	17	12	23	16	27	TES 06 OMD
		08	M 16 x 1,5	19	14	24	17	27	TES 08 OMD
		10	M 18 x 1,5	22	17	25	17,5	30	TES 10 OMD
		12	M 20 x 1,5	24	17	29	21,5	31	TES 12 OMD
		14	M 22 x 1,5	27	19	30	22	35	TES 14 OMD
		16	M 24 x 1,5	30	24	33	24,5	36,5	TES 16 OMD
		20	M 30 x 2	36	27	37	26,5	44,5	TES 20 OMD
		25	M 36 x 2	46	36	42	30	50	TES 25 OMD
	160	30	M 42 x 2	50	41	49	35,5	55	TES 30 OMD
		38	M 52 x 2	60	50	57	41	63	TES 38 OMD

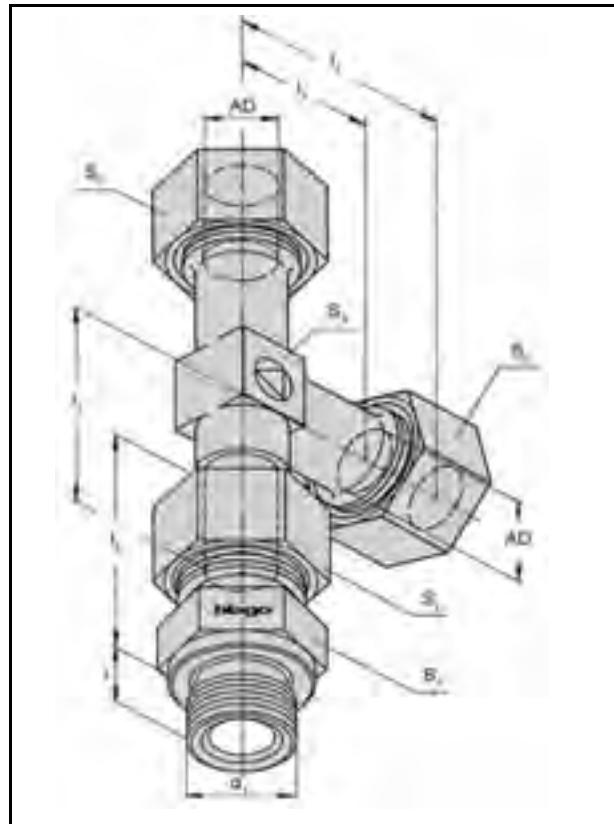
Adjustable barrel tee couplings



Stud thread :
Metric, parallel
Port tapping
with metal seal

Form B DIN 3852 (ISO 9974)

See page 10/11

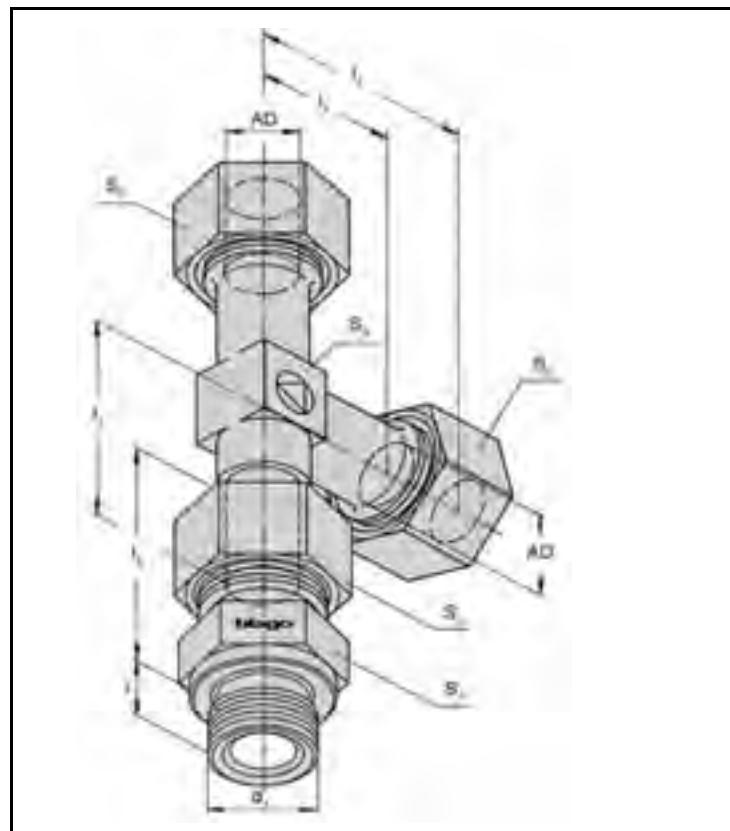


Series	NP	Tube OD	d_3	S_1	S_2	S_3	l_1	l_2	l_3	l_5	i	Blago Part No.
L	315	06	M 10 x 1	14	14	12	29	14	27	23	8	LEL 06 M
		08	M 12 x 1.5	17	17	12	29	14	27	25	12	LEL 08 M
		10	M 14 x 1.5	19	19	14	30	15	29	26	12	LEL 10 M
		12	M 16 x 1.5	22	22	17	32	17	29,5	27	12	LEL 12 M
	250	15	M 18 x 1.5	24	27	19	36	21	32,5	29	12	LEL 15 M
		18	M 22 x 1.5	27	32	24	40,5	23,5	35,5	31	14	LEL 18 M
	160	22	M 26 x 1.5	32	36	27	44	27,5	38,5	33	16	LEL 22 M
		28	M 33 x 2	41	41	36	47	30,5	41,5	34	18	LEL 28 M
		35	M 42 x 2	50	50	41	56	34,5	51	39	20	LEL 35 M
		42	M 48 x 2	55	60	50	63	40	56	42	22	LEL 42 M
S	400	06	M 12 x 1.5	17	17	12	31	16	27	28	12	LES 06 M
		08	M 14 x 1.5	19	19	14	32	17	27	30	12	LES 08 M
		10	M 16 x 1.5	22	22	17	34	17,5	30	31	12	LES 10 M
		12	M 18 x 1.5	24	24	17	38	21,5	31	33	12	LES 12 M
		14	M 20 x 1.5	27	27	19	40	22	35	37	14	LES 14 M
		16	M 22 x 1.5	27	30	24	43	24,5	36,5	37	14	LES 16 M
		20	M 27 x 2	32	36	27	48	26,5	44,5	42	16	LES 20 M
		25	M 33 x 2	41	46	36	54	30	50	47	18	LES 25 M
	160	30	M 42 x 2	50	50	41	62	35,5	55	50	20	LES 30 M
		38	M 48 x 2	55	60	50	72	41	63	57	22	LES 38 M



Adjustable barrel tee couplings

Stud thread :
BSP thread, parallel
Port tapping
with metal seal
Form B DIN 3852 (ISO 1179)
See page 10/11

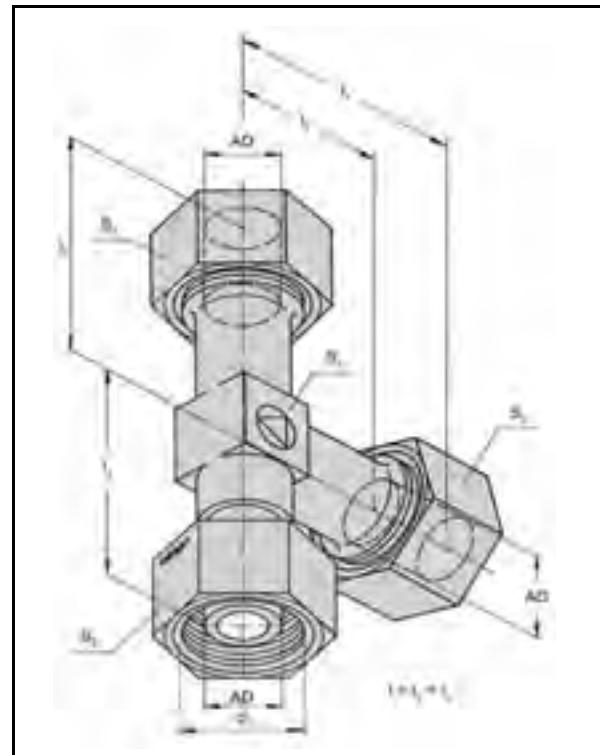


Series	NP	Tube OD	d ₃	S ₁	S ₂	S ₃	l ₁	l ₂	l ₃	l ₅	i	Blago Part No.
L	315	06	R 1/8	14	14	12	29	14	27	23	8	LEL 06 R
		08	R 1/4	19	17	12	29	14	27	25	12	LEL 08 R
		10	R 1/4	19	19	14	30	15	29	26	12	LEL 10 R
		12	R 3/8	22	22	17	32	17	29,5	27	12	LEL 12 R
	250	15	R 1/2	27	27	19	36	21	32,5	29	14	LEL 15 R
		18	R 1/2	27	32	24	40	23,5	35,5	31	14	LEL 18 R
	160	22	R 3/4	32	36	27	44	27,5	38,5	33	16	LEL 22 R
		28	R 1	41	41	36	47	30,5	41,5	34	18	LEL 28 R
		35	R 1 1/4	50	50	41	56	34,5	51	39	20	LEL 35 R
		42	R 1 1/2	55	60	50	63	40	56	42	22	LEL 42 R
S	400	06	R 1/4	19	17	12	31	16	27	28	12	LES 06 R
		08	R 1/4	19	19	14	32	17	27	30	12	LES 08 R
		10	R 3/8	22	22	17	34	17,5	30	31	12	LES 10 R
		12	R 3/8	22	24	17	38	21,5	31	33	12	LES 12 R
		14	R 1/2	27	27	19	40	22	35	37	14	LES 14 R
		16	R 1/2	27	30	24	43	24,5	36,5	37	14	LES 16 R
		20	R 3/4	32	36	27	48	26,5	44,5	42	16	LES 20 R
		25	R 1	41	46	36	54	30	50	47	18	LES 25 R
	160	30	R 1 1/4	50	50	41	62	35,5	55	50	20	LES 30 R
		38	R 1 1/2	55	60	50	72	41	63	57	22	LES 38 R

Adjustable barrel tee couplings



Pre-assembled
with cutting ring

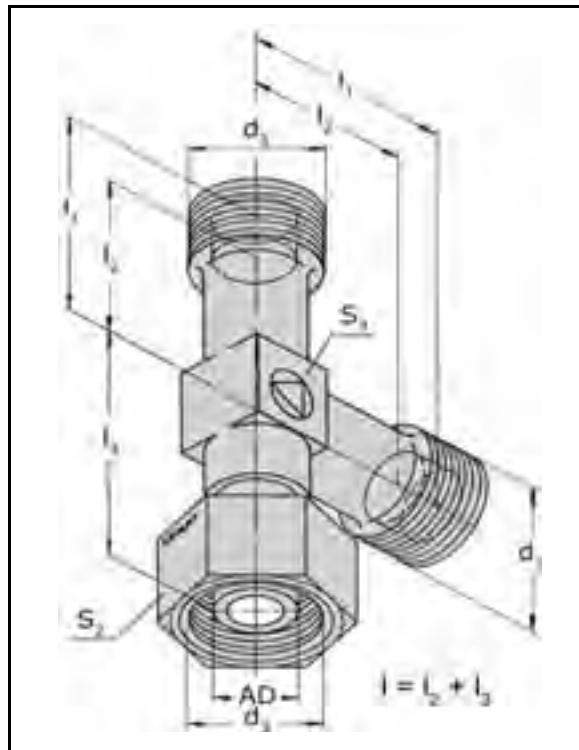


Series	NP	Tube OD	d_3	S_2	S_3	l_1	l_2	l_3	Blago Part No.
L	315	06	M 12 x 1,5	14	12	29	14	27	LEL 06 OHNE
		08	M 14 x 1,5	17	12	29	14	27	LEL 08 OHNE
		10	M 16 x 1,5	19	14	30	15	29	LEL 10 OHNE
		12	M 18 x 1,5	22	17	32	17	29,5	LEL 12 OHNE
	250	15	M 22 x 1,5	27	19	36	21	32,5	LEL 15 OHNE
		18	M 26 x 1,5	32	24	40,5	23,5	35,5	LEL 18 OHNE
	160	22	M 30 x 2	36	27	44	27,5	38,5	LEL 22 OHNE
		28	M 36 x 2	41	36	47	30,5	41,5	LEL 28 OHNE
S	640	35	M 45 x 2	50	41	56	34,5	51	LEL 35 OHNE
		42	M 52 x 2	60	50	63	40	56	LEL 42 OHNE
		06	M 14 x 1,5	17	12	31	16	27	LES 06 OHNE
		08	M 16 x 1,5	19	14	32	17	27	LES 08 OHNE
		10	M 18 x 1,5	22	17	34	17,5	30	LES 10 OHNE
		12	M 20 x 1,5	24	17	38	21,5	31	LES 12 OHNE
		14	M 22 x 1,5	27	19	40	22	35	LES 14 OHNE
		16	M 24 x 1,5	30	24	43	24,5	36,5	LES 16 OHNE
	160	20	M 30 x 2	36	27	48	26,5	44,5	LES 20 OHNE
		25	M 36 x 2	46	36	54	30	50	LES 25 OHNE
		30	M 42 x 2	50	41	62	35,5	55	LES 30 OHNE
		38	M 52 x 2	60	50	72	41	63	LES 38 OHNE



Adjustable barrel tee bodies

Pre-assembled
with cutting ring



Series	NP	Tube OD	d_3	S_2	S_3	l_1	l_2	l_3	Blago Part No.
L	315	06	M 12 x 1,5	14	12	21	14	27	LEL 06 OMD
		08	M 14 x 1,5	17	12	21	14	27	LEL 08 OMD
		10	M 16 x 1,5	19	14	22	15	29	LEL 10 OMD
		12	M 18 x 1,5	22	17	24	17	29,5	LEL 12 OMD
	250	15	M 22 x 1,5	27	19	28	21	32,5	LEL 15 OMD
		18	M 26 x 1,5	32	24	31	23,5	35,5	LEL 18 OMD
	160	22	M 30 x 2	36	27	35	27,5	38,5	LEL 22 OMD
		28	M 36 x 2	41	36	38	30,5	41,5	LEL 28 OMD
		35	M 45 x 2	50	41	45	34,5	51	LEL 35 OMD
		42	M 52 x 2	60	50	51	40	56	LEL 42 OMD
S	400	06	M 14 x 1,5	17	12	23	16	27	LES 06 OMD
		08	M 16 x 1,5	19	14	24	17	27,5	LES 08 OMD
		10	M 18 x 1,5	22	17	25	17,5	30	LES 10 OMD
		12	M 20 x 1,5	24	17	29	21,5	31	LES 12 OMD
		14	M 22 x 1,5	27	19	30	22	35	LES 14 OMD
		16	M 24 x 1,5	30	24	33	24,5	36,5	LES 16 OMD
		20	M 30 x 2	36	27	37	26,5	44,5	LES 20 OMD
		25	M 36 x 2	46	36	42	30	50	LES 25 OMD
	160	30	M 42 x 2	50	41	49	35,5	55	LES 30 OMD
		38	M 52 x 2	60	50	57	41	63	LES 38 OMD

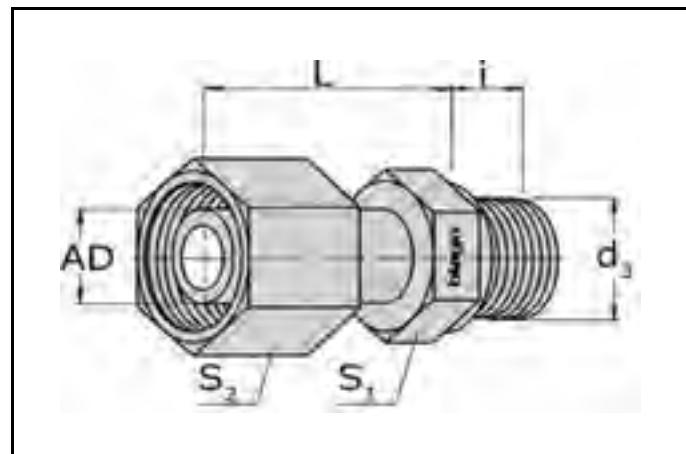
**Stud adaptors
with standpipe**



Stud thread :
Metric, parallel
Port tapping
with metal seal

Form B DIN 3852 (ISO 9974)

See page 10/11
Pre-assembled
with cutting ring



Series	NP	Tube OD	d ₃	i	L	S ₁	S ₂	DIN 2353	kg %	Blago Part No.
L	315	06	M 10 x 1	8	24,5	14	14	CAL 6	2,5	RAL 06-M 10 x 1
		08	M 12 x 1,5	12	26,5	17	17	CAL 8	4,5	RAL 08-M 12 x 1,5
		10	M 14 x 1,5	12	27,5	19	19	CAL 10	4,7	RAL 10-M 14 x 1,5
		12	M 16 x 1,5	12	30,5	22	22	CAL 12	6,3	RAL 12-M 16 x 1,5
		15	M 18 x 1,5	12	31,5	24	27	CAL 15	11,5	RAL 15-M 18 x 1,5
		18	M 22 x 1,5	14	31,5	27	32	CAL 18	12,9	RAL 18-M 22 x 1,5
	160	22	M 26 x 1,5	16	32,5	32	36	CAL 22	17,6	RAL 22-M 26 x 1,5
		28	M 33 x 2	18	35,0	41	41	CAL 28	24,7	RAL 28-M 33 x 2
		35	M 42 x 2	20	42,5	50	50	CAL 35	40,7	RAL 35-M 42 x 2
		42	M 48 x 2	22	46,5	55	60	CAL 42	45,6	RAL 42-M 48 x 2
S	630	06	M 12 x 1,5	12	27,0	17	17	CAS 6	5,0	RAS 06-M 12 x 1,5
		08	M 14 x 1,5	12	29,5	19	19	CAS 8	5,5	RAS 08-M 14 x 1,5
		10	M 16 x 1,5	12	32,0	22	22	CAS 10	8,2	RAS 10-M 16 x 1,5
		12	M 18 x 1,5	12	34,0	24	24	CAS 12	9,5	RAS 12-M 18 x 1,5
		14	M 20 x 1,5	14	36,5	27	27	CAS 14	14,8	RAS 14-M 20 x 1,5
	400	16	M 22 x 1,5	14	37,0	27	30	CAS 16	15,4	RAS 16-M 22 x 1,5
		20	M 27 x 2	16	43,0	32	36	CAS 20	25,3	RAS 20-M 27 x 2
		25	M 33 x 2	18	48,0	41	46	CAS 25	46,5	RAS 25-M 33 x 2
		30	M 42 x 2	20	51,0	50	50	CAS 30	64,4	RAS 30-M 42 x 2
		315	38	M 48 x 2	22	60,0	55	CAS 38	88,9	RAS 38-M 48 x 2

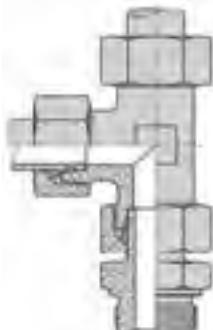
Usage examples



EAL-M



TAL-M



LAL-M



KAL-M

Order example: EAL12-M 16 x 1,5 = RAL 12-M 16 x 1,5 + EL 12

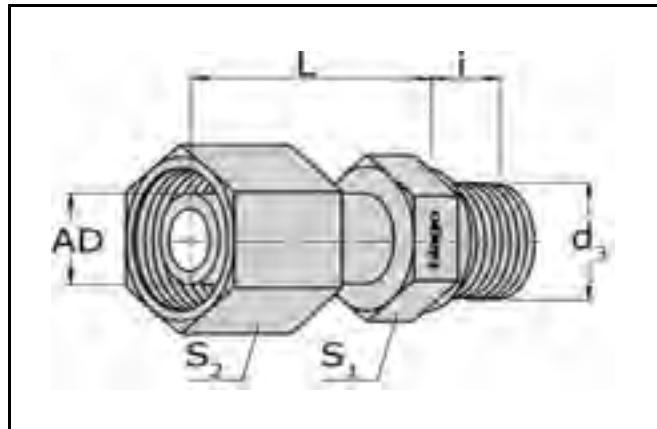


Stud adaptors with standpipe

Stud thread :
BSP thread, parallel
Port tapping
with metal seal

Form B DIN 3852 (ISO 1179)

See page 10/11
Pre-assembled
with cutting ring

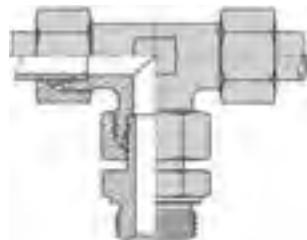


Series	NP	Tube OD	d ₃	i	L	S ₁	S ₂	DIN 2353	kg %	Blago Part No.
L	315	06	G 1/8 A	8	24,5	14	14	CBL 6	2,5	RAL 06-R 1/8
		08	G 1/4 A	12	29,5	19	17	CBL 8	4,5	RAL 08-R 1/4
		10	G 1/4 A	12	27,5	19	19	CBL 10	4,7	RAL 10-R 1/4
		12	G 3/8 A	12	34,0	22	22	CBL 12	6,3	RAL 12-R 3/8
		12	G 1/4 A	12	29,5	19	22		5,8	RAL 12-R 1/4
		15	G 1/2 A	14	32,0	27	27	CBL 15	11,5	RAL 15-R 1/2
		18	G 1/2 A	14	31,5	27	32	CBL 18	12,9	RAL 18-R 1/2
	160	22	G 3/4 A	16	32,5	32	36	CBL 22	17,6	RAL 22-R 3/4
		28	G 1 A	18	35,0	41	41	CBL 28	24,7	RAL 28-R 1
		35	G 1 1/4 A	20	42,5	50	50	CBL 35	40,7	RAL 35-R 1 1/4
		42	G 1 1/2 A	22	46,5	55	60	CBL 42	45,6	RAL 42-R 1 1/2
S	630	06	G 1/4 A	12	27,0	19	17	CBS 6	5,0	RAS 06-R 1/4
		08	G 1/4 A	12	29,5	19	19	CBS 8	5,5	RAS 08-R 1/4
		10	G 3/8 A	12	32,0	22	22	CBS 10	8,2	RAS 10-R 3/8
		12	G 3/8 A	12	34,0	22	24	CBS 12	9,5	RAS 12-R 3/8
		12	G 1/2 A	14	34,5	27	24		12,5	RAS 12-R 1/2
		14	G 1/2 A	14	36,5	27	27	CBS 14	14,8	RAS 14-R 1/2
	400	16	G 1/2 A	14	37,0	27	30	CBS 16	15,4	RAS 16-R 1/2
		20	G 3/4 A	16	43,0	32	36	CBS 20	25,3	RAS 20-R 3/4
		25	G 1 A	18	48,0	41	46	CBS 25	46,5	RAS 25-R 1
		30	G 1 1/4 A	20	51,0	50	50	CBS 30	64,4	RAS 30-R 1 1/4
	315	38	G 1 1/2 A	22	60,0	55	60	CBS 38	88,9	RAS 38-R 1 1/2

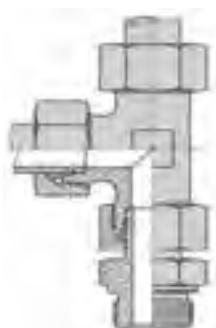
Usage example



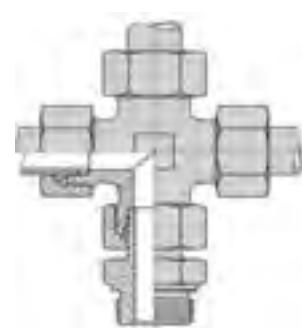
EAL-R



TAL-R



LAL-R



KAL-R

Order example: EAL12-R 1/4 = RAL 12-R 1/4 + EL 12

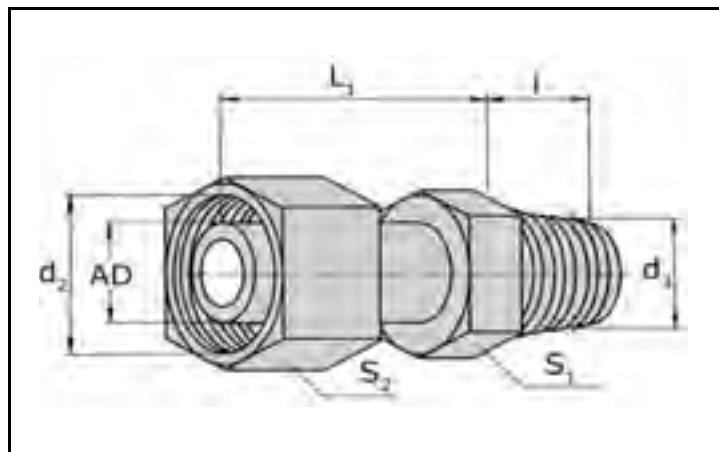
Stud adaptors with standpipe



Stud thread :
NPT thread, taper

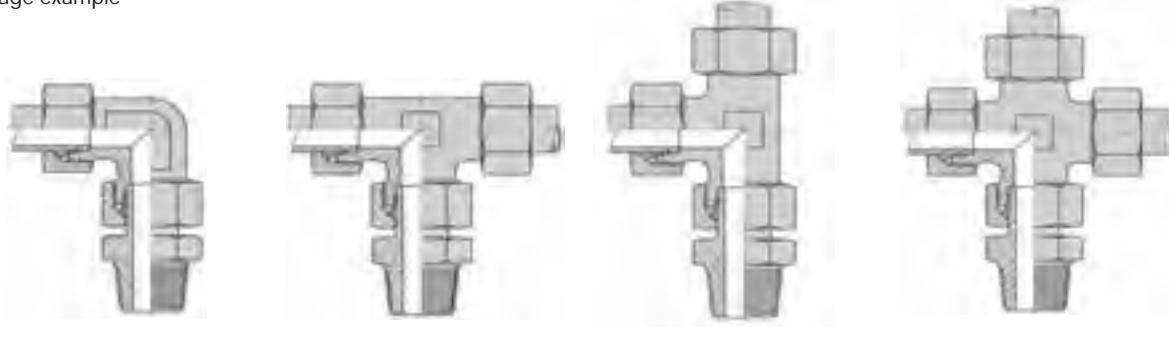
Form NPT

See page 10/11
Pre-assembled
with cutting ring



Series	NP	Tube OD	d_3	i	L_1	S_1	S_2	d_2	DIN 2353	kg %	Blago Part No.
L	315	6	1/8 NPT	10	24,0	12	14	M 12 x 1,5	CBL 6	2,5	RAL 06- 1/8 NPT
		8	1/4 NPT	15	29,0	14	17	M 14 x 1,5	CBL 8	4,5	RAL 08- 1/4 NPT
		10	1/4 NPT	15	29,0	14	19	M 16 x 1,5	CBL 10	4,7	RAL 10- 1/4 NPT
		12	3/8 NPT	15,2	31,0	22	22	M 18 x 1,5	CBL 12	6,3	RAL 12- 3/8 NPT
		12	1/4 NPT	15,1	29,0	14	22	M 18 x 1,5		5,8	RAL 12- 1/4 NPT
		15	1/2 NPT	19,8	35,0	22	27	M 22 x 1,5	CBL 15	11,5	RAL 15- 1/2 NPT
		18	1/2 NPT	19,8	35,0	22	32	M 26 x 1,5	CBL 18	12,9	RAL 18- 1/2 NPT
	160	22	3/4 NPT	20	39,0	32	36	M 30 x 2	CBL 22	17,6	RAL 22- 3/4 NPT
		28	1 NPT	25	45,0	36	41	M 36 x 2	CBL 28	24,7	RAL 28- 1 NPT
		35	1 1/4 NPT	25,5	49,0	46	50	M 45 x 2	CBL 35	40,7	RAL 35- 1 1/4 NPT
		42	1 1/2 NPT	26	59,5	50	60	M 52 x 2	CBL 42	45,6	RAL 42- 1 1/2 NPT
S	640	6	1/4 NPT	15	29,0	14	17	M 14 x 1,5	CBS 6	5,0	RAS 06- 1/4 NPT
		8	1/4 NPT	15	29,0	14	19	M 16 x 1,5	CBS 8	5,5	RAS 08- 1/4 NPT
		10	3/8 NPT	15,2	31,0	19	22	M 18 x 1,5	CBS 10	8,2	RAS 10- 3/8 NPT
		12	3/8 NPT	15,2	31,0	22	24	M 20 x 1,5	CBS 12	9,5	RAS 12- 3/8 NPT
		12	1/2 NPT	20,0	35,0	22	24	M 20 x 1,5		14,2	RAS 12- 1/2 NPT
		14	1/2 NPT	19,8	35,0	22	27	M 22 x 1,5	CBS 14	14,8	RAS 14- 1/2 NPT
		16	1/2 NPT	19,8	35,0	22	30	M 24 x 1,5	CBS 16	15,4	RAS 16- 1/2 NPT
	400	20	3/4 NPT	20	39,0	27	36	M 30 x 2	CBS 20	25,3	RAS 20- 3/4 NPT
		25	1 NPT	25	45,0	36	46	M 36 x 2	CBS 25	46,5	RAS 25- 1 NPT
		30	1 1/4 NPT	25,5	49,0	46	50	M 42 x 2	CBS 30	64,4	RAS 30- 1 1/4 NPT
		315	38	1 1/2 NPT	26	55,5	50	M 52 x 2	CBS 38	88,9	RAS 38- 1 1/2 NPT

Usage example



EAL-NPT

TAL-NPT

LAL-NPT

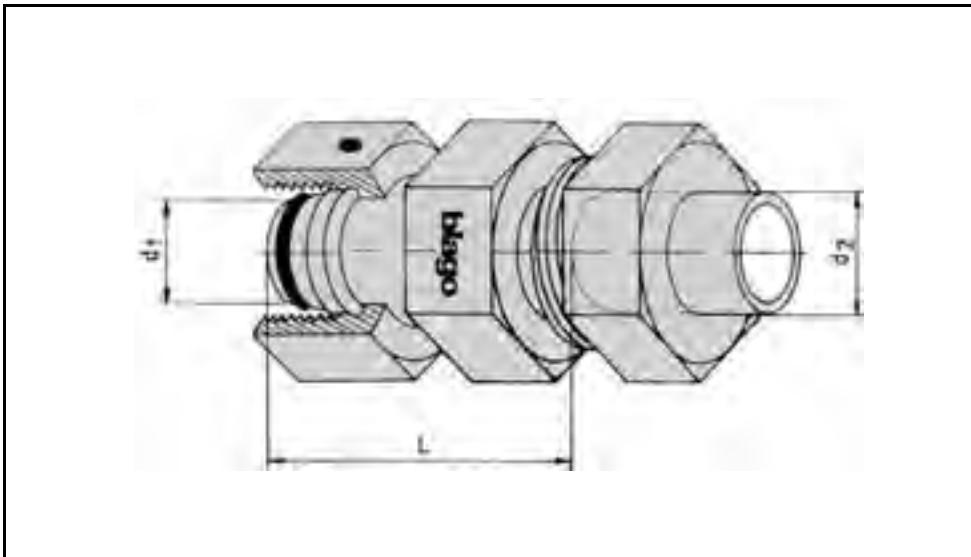
KAL-NPT

Order example : EAL12-1/4 NPT = RAL 12-1/4 NPT + EL 12



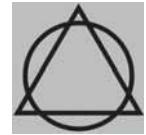
Reducing couplings with taper sealing

Nut
pre-assembled

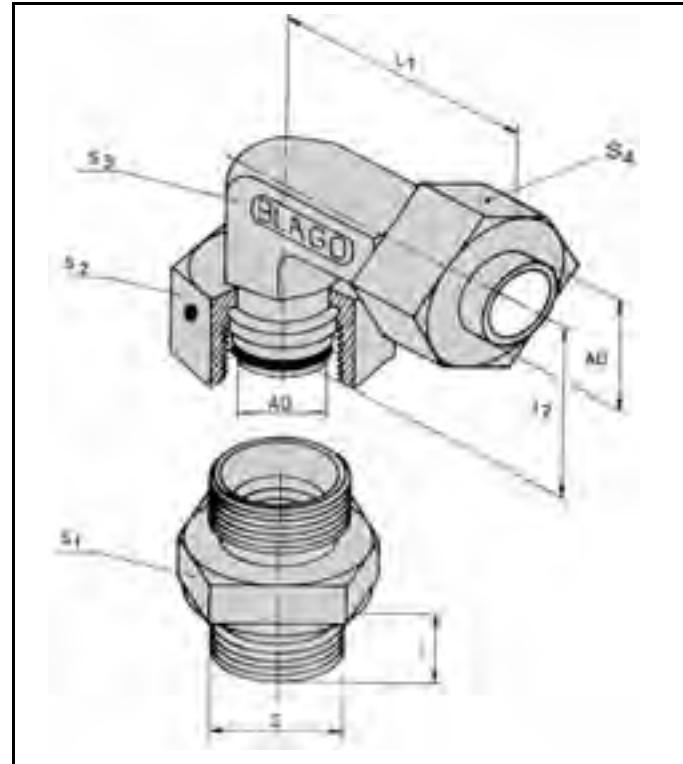


d ₁	d ₂	L	kg %	Blago Part No.	d ₁	d ₂	L	kg %	Blago Part No.
08	06	28,5	4,0	KORL 08/06 - DKO	08	06	33,5	6,1	KORS 08/06 - DKO
10	06	23,5	4,8	KORL 10/06 - DKO	10	06	36,0	7,0	KORS 10/06 - DKO
10	08	30,5	5,5	KORL 10/08 - DKO	10	08	36,0	8,0	KORS 10/08 - DKO
12	06	31	6,0	KORL 12/06 - DKO	12	06	36,5	8,5	KORS 12/06 - DKO
12	08	31	6,8	KORL 12/08 - DKO	12	08	36,5	9,2	KORS 12/08 - DKO
12	10	32	7,2	KORL 12/10 - DKO	12	10	36,0	10,9	KORS 12/10 - DKO
15	06	32,5	9,5	KORL 15/06 - DKO	16	06	40,0	14,4	KORS 16/06 - DKO
15	08	32,5	10,1	KORL 15/08 - DKO	16	08	40,0	15,0	KORS 16/08 - DKO
15	10	33,5	10,4	KORL 15/10 - DKO	16	10	39,5	15,8	KORS 16/10 - DKO
15	12	33,5	11,2	KORL 15/12 - DKO	16	12	39,5	16,3	KORS 16/12 - DKO
18	08	34,5	14,1	KORL 18/08 - DKO	20	06	44,0	21,3	KORS 20/06 - DKO
18	10	35,5	14,3	KORL 18/10 - DKO	20	08	44,0	21,6	KORS 20/08 - DKO
18	12	35,5	14,7	KORL 18/12 - DKO	20	10	35,0	22,6	KORS 20/10 - DKO
18	15	36,5	16,5	KORL 18/15 - DKO	20	12	43,5	23,1	KORS 20/12 - DKO
22	10	38	20,8	KORL 22/10 - DKO	20	16	44,5	26,0	KORS 20/16 - DKO
22	12	38	21,0	KORL 22/12 - DKO	25	08	47,0	35,3	KORS 25/08 - DKO
22	15	39	22,7	KORL 22/15 - DKO	25	10	46,5	36,4	KORS 25/10 - DKO
22	18	39	24,2	KORL 22/18 - DKO	25	12	46,5	36,8	KORS 25/12 - DKO
28	10	39	28,3	KORL 28/10 - DKO	25	14	48,0	38,9	KORS 25/14 - DKO
28	12	39	28,6	KORL 28/12 - DKO	25	16	47,5	39,9	KORS 25/16 - DKO
28	15	40	30,9	KORL 28/15 - DKO	25	20	47,5	44,0	KORS 25/20 - DKO
28	18	39,5	31,9	KORL 28/18 - DKO	30	12	48,5	44,3	KORS 30/12 - DKO
28	22	41,5	32,8	KORL 28/22 - DKO	30	16	49,5	48,9	KORS 30/16 - DKO
35	15	43	37,4	KORL 35/15 - DKO	30	20	52,0	53,5	KORS 30/20 - DKO
35	18	42,5	39,6	KORL 35/18 - DKO	30	25	53,0	67,0	KORS 30/25 - DKO
35	22	44,5	42,0	KORL 35/22 - DKO	38	16	50,5	65,1	KORS 38/16 - DKO
35	28	44,5	42,5	KORL 35/28 - DKO	38	20	52,5	71,5	KORS 38/20 - DKO
42	18	44	61,2	KORL 42/18 - DKO	38	25	53,0	83,0	KORS 38/25 - DKO
42	22	46,5	63,2	KORL 42/22 - DKO	38	30	53,5	86,3	KORS 38/30 - DKO
42	28	46,5	63,7	KORL 42/28 - DKO					
42	35	48,5	69,7	KORL 42/35 - DKO					

Adjustable elbow couplings with taper sealing



Stud thread :
 Metric, parallel
 Port tapping with captive seal
Form E DIN 3852 (ISO 9974)
 Nut pre-assembled



Series	NP	Tube OD	G	S ₁	S ₂	S ₃	S ₄	L ₁	L ₂	i	Blago Part No.
L	500	06	M 10 x 1	14	17	12	14	29	24,5	8	EEL 06 M - DKO
		08	M 12 x 1.5	17	17	12	17	29	26	12	EEL 08 M - DKO
		10	M 14 x 1.5	19	19	14	19	30	27,5	12	EEL 10 M - DKO
	400	12	M 16 x 1.5	22	22	17	22	32	29	12	EEL 12 M - DKO
		15	M 18 x 1.5	24	27	19	27	36	31,5	12	EEL 15 M - DKO
		18	M 22 x 1.5	27	32	24	32	40,5	34,5	14	EEL 18 M - DKO
	250	22	M 26 x 1.5	32	36	27	36	44	37,5	16	EEL 22 M - DKO
		28	M 33 x 2	41	41	36	41	47	40,5	18	EEL 28 M - DKO
		35	M 42 x 2	50	50	41	50	56	49	20	EEL 35 M - DKO
		42	M 48 x 2	55	60	50	60	63	53,5	22	EEL 42 M - DKO
S	800	06	M 12 x 1.5	17	17	12	17	31	26	12	EES 06 M - DKO
		08	M 14 x 1.5	19	19	14	19	32	26,5	12	EES 08 M - DKO
		10	M 16 x 1.5	22	22	17	22	34	29	12	EES 10 M - DKO
	630	12	M 18 x 1.5	24	24	17	24	38	29,5	12	EES 12 M - DKO
		14	M 20 x 1.5	27	27	19	27	40	33	14	EES 14 M - DKO
		16	M 22 x 1.5	27	30	24	30	43	35	14	EES 16 M - DKO
	420	20	M 27 x 2	32	36	27	36	48	42,5	16	EES 20 M - DKO
		25	M 33 x 2	41	46	36	46	54	46,5	18	EES 25 M - DKO
		30	M 42 x 2	50	50	41	50	62	50	20	EES 30 M - DKO
		38	M 48 x 2	55	60	50	60	72	56	22	EES 38 M - DKO

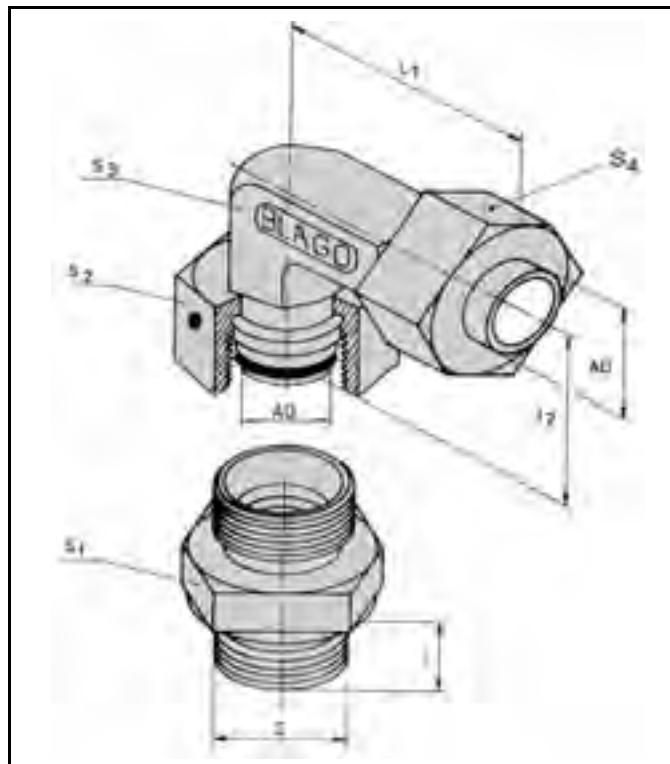


Adjustable elbow couplings with taper sealing

Stud thread :
BSP thread, parallel
Port tapping with captive seal

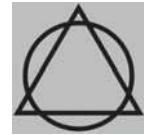
Form E DIN 3852 (ISO 1179)

Nut pre-assembled

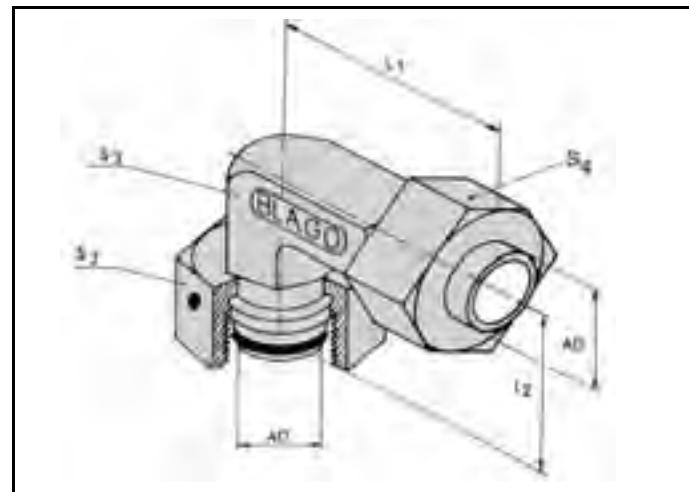


Series	NP	Tube OD	G	S ₁	S ₂	S ₃	S ₄	L ₁	L ₂	i	Blago Part No.
L	500	06	R 1/8	14	17	12	14	29	24,5	8	EEL 06 R - DKO
		08	R 1/4	19	17	12	17	29	26	12	EEL 08 R - DKO
		10	R 1/4	19	19	14	19	30	27,5	12	EEL 10 R - DKO
	400	12	R 3/8	22	22	17	22	32	29	12	EEL 12 R - DKO
		15	R 1/2	27	27	19	27	36	31,5	14	EEL 15 R - DKO
		18	R 1/2	27	32	24	32	40,5	34,5	14	EEL 18 R - DKO
	250	22	R 3/4	32	36	27	36	44	37,5	16	EEL 22 R - DKO
		28	R 1	41	41	36	41	47	40,5	18	EEL 28 R - DKO
		35	R 1 1/4	50	50	41	50	56	49	20	EEL 35 R - DKO
		42	R 1 1/2	55	60	50	60	63	53,5	22	EEL 42 R - DKO
S	800	06	R 1/4	19	17	12	17	31	26	12	EES 06 R - DKO
		08	R 1/4	19	19	14	19	32	26,5	12	EES 08 R - DKO
		10	R 3/8	22	22	17	22	34	29	12	EES 10 R - DKO
	630	12	R 3/8	22	24	17	24	38	29,5	12	EES 12 R - DKO
		14	R 1/2	27	27	19	27	40	33	14	EES 14 R - DKO
		16	R 1/2	27	30	24	30	43	35	14	EES 16 R - DKO
	420	20	R 3/4	32	36	27	36	48	42,5	16	EES 20 R - DKO
		25	R 1	41	46	36	46	54	46,5	18	EES 25 R - DKO
		30	R 1 1/4	50	50	41	50	62	50	20	EES 30 R - DKO
		38	R 1 1/2	55	60	50	60	72	56	22	EES 38 R - DKO

Adjustable elbow couplings with taper sealing



Nut pre-assembled

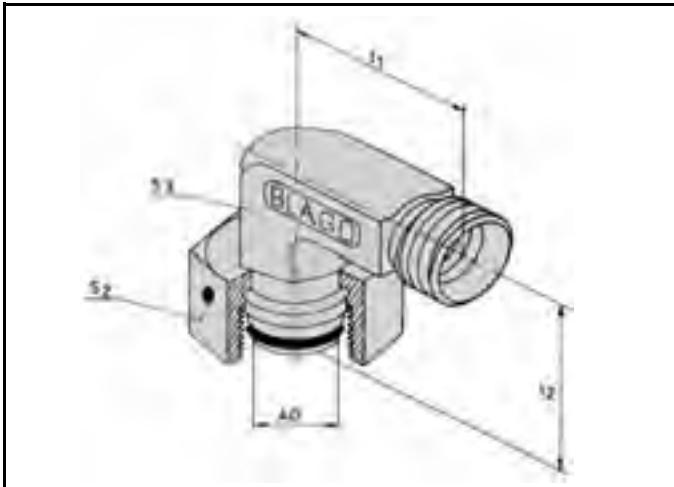


Series	NP	Tube OD	S ₂	S ₃	S ₄	L ₁	L ₂	Blago Part No.
L	500	06	17	12	14	29	24,5	EEL 06 OHNE - DKO
		08	17	12	17	29	26	EEL 08 OHNE - DKO
		10	19	14	19	30	27,5	EEL 10 OHNE - DKO
	400	12	22	17	22	32	29	EEL 12 OHNE - DKO
		15	27	19	27	36	31,5	EEL 15 OHNE - DKO
		18	32	24	32	40,5	34,5	EEL 18 OHNE - DKO
	250	22	36	27	36	44	37,5	EEL 22 OHNE - DKO
		28	41	36	41	47	40,5	EEL 28 OHNE - DKO
		35	50	41	50	56	49	EEL 35 OHNE - DKO
		42	60	50	60	63	53,5	EEL 42 OHNE - DKO
S	800	06	17	12	17	31	26	EES 06 OHNE - DKO
		08	19	14	19	32	26,5	EES 08 OHNE - DKO
		10	22	17	22	34	29	EES 10 OHNE - DKO
	630	12	24	17	24	38	29,5	EES 12 OHNE - DKO
		14	27	19	27	40	33	EES 14 OHNE - DKO
		16	30	24	30	43	35	EES 16 OHNE - DKO
	420	20	36	27	36	48	42,5	EES 20 OHNE - DKO
		25	46	36	46	54	46,5	EES 25 OHNE - DKO
		30	50	41	50	62	50	EES 30 OHNE - DKO
		38	60	50	60	72	56	EES 38 OHNE - DKO



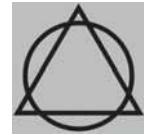
Adjustable elbow couplings with taper sealing

Nut pre-assembled

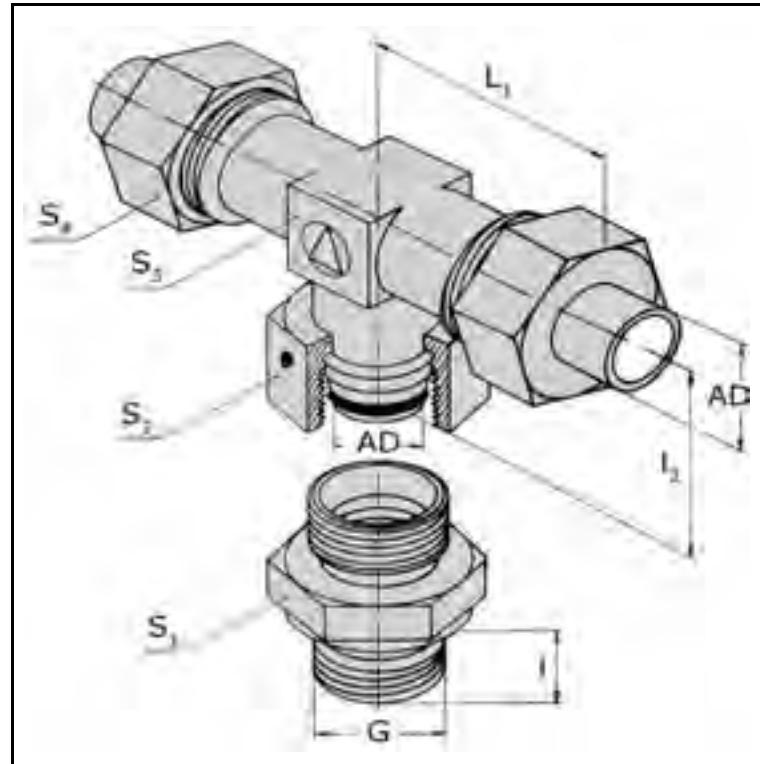


Series	NP	Tube OD	S ₂	S ₃	l ₁	l ₂	Blago Part No.
L	500	06	17	12	21	24,5	EEL 06 - DKO OMD
		08	17	12	21	26	EEL 08 - DKO OMD
		10	19	14	22	27,5	EEL 10 - DKO OMD
	400	12	22	17	24	29	EEL 12 - DKO OMD
		15	27	19	28	31,5	EEL 15 - DKO OMD
		18	32	24	31	34,5	EEL 18 - DKO OMD
	250	22	36	27	35	37,5	EEL 22 - DKO OMD
		28	41	36	38	40,5	EEL 28 - DKO OMD
		35	50	41	45	49	EEL 35 - DKO OMD
		42	60	50	51	53,5	EEL 42 - DKO OMD
S	800	06	17	12	23	26	EES 06 - DKO OMD
		08	19	14	24	26,5	EES 08 - DKO OMD
		10	22	17	25	29	EES 10 - DKO OMD
	630	12	24	17	29	29,5	EES 12 - DKO OMD
		14	27	19	30	33	EES 14 - DKO OMD
		16	30	24	33	35	EES 16 - DKO OMD
	420	20	36	27	37	42,5	EES 20 - DKO OMD
		25	46	36	42	46,5	EES 25 - DKO OMD
		30	50	41	49	50	EES 30 - DKO OMD
		38	60	50	57	56	EES 38 - DKO OMD

Adjustable branch tee couplings with taper sealing



Stud thread :
Metric, parallel
Port tapping with captive seal
Form E DIN 3852 (ISO 9974)
Nut pre-assembled

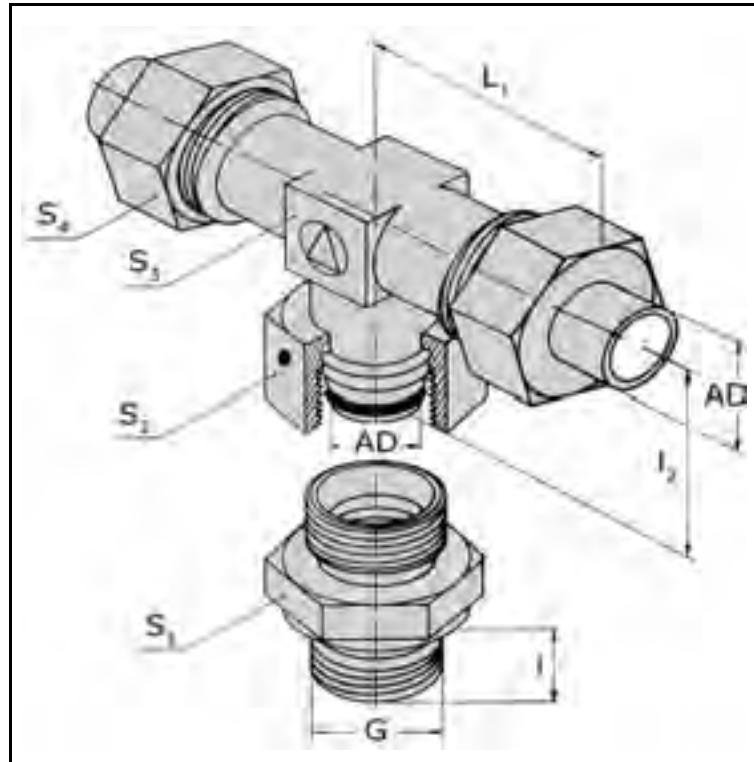


Series	NP	Tube OD	G	S ₁	S ₂	S ₃	S ₄	L ₁	L ₂	i	Blago Part No.
L	500	06	M 10 x 1	14	17	12	14	29	24,5	8	TEL 06 M - DKO
		08	M 12 x 1.5	17	17	12	17	29	26	12	TEL 08 M - DKO
		10	M 14 x 1.5	19	19	14	19	30	27,5	12	TEL 10 M - DKO
	400	12	M 16 x 1.5	22	22	17	22	32	29	12	TEL 12 M - DKO
		15	M 18 x 1.5	24	27	19	27	36	31,5	12	TEL 15 M - DKO
		18	M 22 x 1.5	27	32	24	32	40,5	34,5	14	TEL 18 M - DKO
	250	22	M 26 x 1.5	32	36	27	36	44	37,5	16	TEL 22 M - DKO
		28	M 33 x 2	41	41	36	41	47	40,5	18	TEL 28 M - DKO
		35	M 42 x 2	50	50	41	50	56	49	20	TEL 35 M - DKO
		42	M 48 x 2	55	60	50	60	63	53,5	22	TEL 42 M - DKO
S	800	06	M 12 x 1.5	17	17	12	17	31	26	12	TES 06 M - DKO
		08	M 14 x 1.5	19	19	14	19	32	26,5	12	TES 08 M - DKO
		10	M 16 x 1.5	22	22	17	22	34	29	12	TES 10 M - DKO
	630	12	M 18 x 1.5	24	24	17	24	38	29,5	12	TES 12 M - DKO
		14	M 20 x 1.5	27	27	19	27	40	33	14	TES 14 M - DKO
		16	M 22 x 1.5	27	30	24	30	43	35	14	TES 16 M - DKO
	420	20	M 27 x 2	32	36	27	36	48	42,5	16	TES 20 M - DKO
		25	M 33 x 2	41	46	36	46	54	46,5	18	TES 25 M - DKO
		30	M 42 x 2	50	50	41	50	62	50	20	TES 30 M - DKO
		38	M 48 x 2	55	60	50	60	72	56	22	TES 38 M - DKO



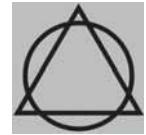
Adjustable branch tee couplings with taper sealing

Stud thread :
BSP thread, parallel
Port tapping with captive seal
Form E DIN 3852 (ISO 1179)
Nut pre-assembled

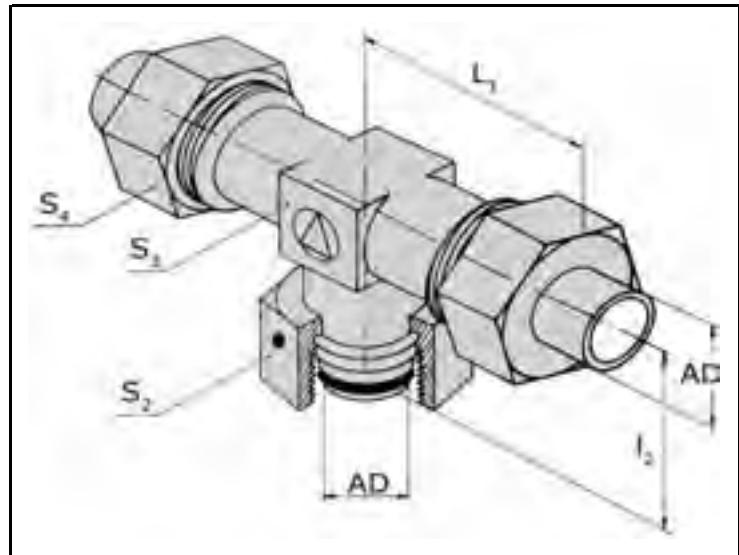


Series	NP	Tube OD	G	S ₁	S ₂	S ₃	S ₄	L ₁	I ₂	i	Blago Part No.
L	500	06	R 1/8	14	17	12	14	29	24,5	8	TEL 06 R - DKO
		08	R 1/4	19	17	12	17	29	26	12	TEL 08 R - DKO
		10	R 1/4	19	19	14	19	30	27,5	12	TEL 10 R - DKO
	400	12	R 3/8	22	22	17	22	32	29	12	TEL 12 R - DKO
		15	R 1/2	27	27	19	27	36	31,5	14	TEL 15 R - DKO
		18	R 1/2	27	32	24	32	40,5	34,5	14	TEL 18 R - DKO
	250	22	R 3/4	32	36	27	36	44	37,5	16	TEL 22 R - DKO
		28	R 1	41	41	36	41	47	40,5	18	TEL 28 R - DKO
		35	R 1 1/4	50	50	41	50	56	49	20	TEL 35 R - DKO
		42	R 1 1/2	55	60	50	60	63	53,5	22	TEL 42 R - DKO
S	800	06	R 1/4	19	17	12	17	31	26	12	TES 06 R - DKO
		08	R 1/4	19	19	14	19	32	26,5	12	TES 08 R - DKO
		10	R 3/8	22	22	17	22	34	29	12	TES 10 R - DKO
	630	12	R 3/8	22	24	17	24	38	29,5	12	TES 12 R - DKO
		14	R 1/2	27	27	19	27	40	33	14	TES 14 R - DKO
		16	R 1/2	27	30	24	30	43	35	14	TES 16 R - DKO
	420	20	R 3/4	32	36	27	36	48	42,5	16	TES 20 R - DKO
		25	R 1	41	46	36	46	54	46,5	18	TES 25 R - DKO
		30	R 1 1/4	50	50	41	50	62	50	20	TES 30 R - DKO
		38	R 1 1/2	55	60	50	60	72	56	22	TES 38 R - DKO

Adjustable branch tee couplings with taper sealing



Nut pre-assembled

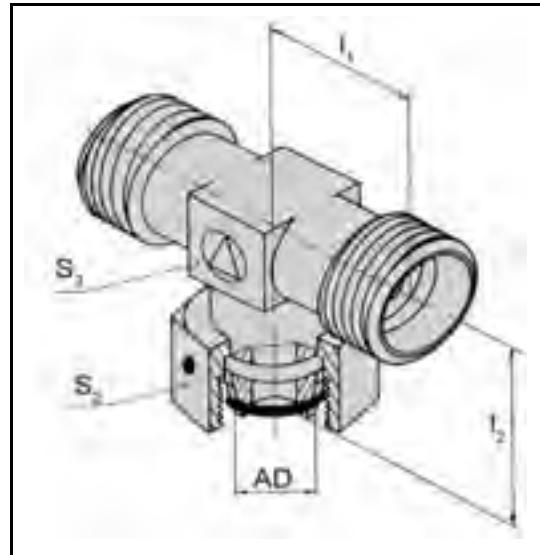


Series	NP	Tube OD	S ₂	S ₃	S ₄	L ₁	L ₂	Blago Part No.
L	500	06	17	12	14	29	24,5	TEL 06 OHNE - DKO
		08	17	12	17	29	26	TEL 08 OHNE - DKO
		10	19	14	19	30	27,5	TEL 10 OHNE - DKO
	400	12	22	17	22	32	29	TEL 12 OHNE - DKO
		15	27	19	27	36	31,5	TEL 15 OHNE - DKO
		18	32	24	32	40,5	34,5	TEL 18 OHNE - DKO
	250	22	36	27	36	44	37,5	TEL 22 OHNE - DKO
		28	41	36	41	47	40,5	TEL 28 OHNE - DKO
		35	50	41	50	56	49	TEL 35 OHNE - DKO
		42	60	50	60	63	53,5	TEL 42 OHNE - DKO
S	800	06	17	12	17	31	26	TES 06 OHNE - DKO
		08	19	14	19	32	26,5	TES 08 OHNE - DKO
		10	22	17	22	34	29	TES 10 OHNE - DKO
	630	12	24	17	24	38	29,5	TES 12 OHNE - DKO
		14	27	19	27	40	33	TES 14 OHNE - DKO
		16	30	24	30	43	35	TES 16 OHNE - DKO
	420	20	36	27	36	48	42,5	TES 20 OHNE - DKO
		25	46	36	46	54	46,5	TES 25 OHNE - DKO
		30	50	41	50	62	50	TES 30 OHNE - DKO
		38	60	50	60	72	56	TES 38 OHNE - DKO



Adjustable branch tee couplings with taper sealing

Nut pre-assembled

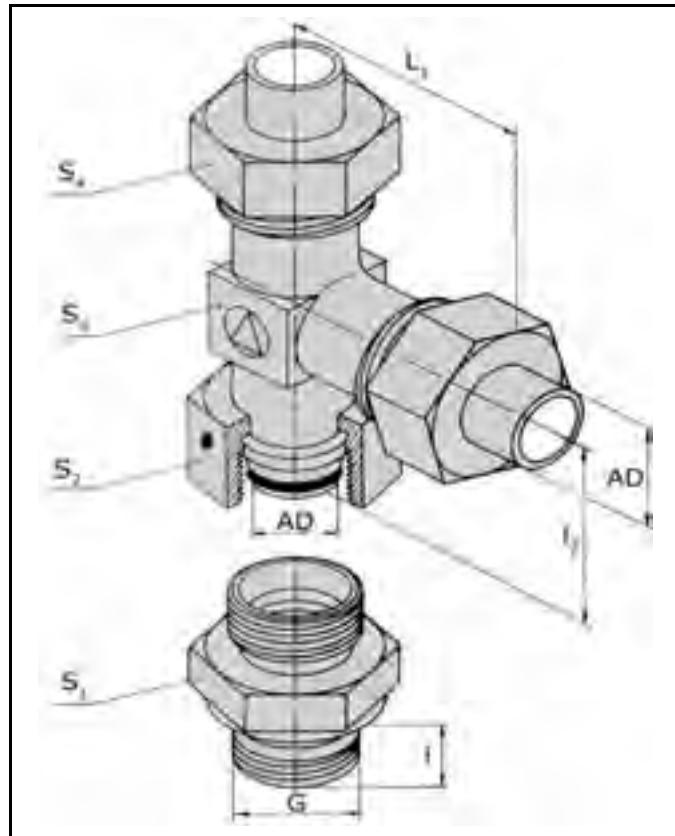


Series	NP	Tube OD	S ₂	S ₃	l ₁	l ₂	Blago Part No.
L	500	06	17	12	21	24,5	TEL 06 - DKO OMD
		08	17	12	21	26	TEL 08 - DKO OMD
		10	19	14	22	27,5	TEL 10 - DKO OMD
	400	12	22	17	24	29	TEL 12 - DKO OMD
		15	27	19	28	31,5	TEL 15 - DKO OMD
		18	32	24	31	34,5	TEL 18 - DKO OMD
	250	22	36	27	35	37,5	TEL 22 - DKO OMD
		28	41	36	38	40,5	TEL 28 - DKO OMD
		35	50	41	45	49	TEL 35 - DKO OMD
		42	60	50	51	53,5	TEL 42 - DKO OMD
S	800	06	17	12	23	26	TES 06 - DKO OMD
		08	19	14	24	26,5	TES 08 - DKO OMD
		10	22	17	25	29	TES 10 - DKO OMD
	630	12	24	17	29	29,5	TES 12 - DKO OMD
		14	27	19	30	33	TES 14 - DKO OMD
		16	30	24	33	35	TES 16 - DKO OMD
	420	20	36	27	37	42,5	TES 20 - DKO OMD
		25	46	36	42	46,5	TES 25 - DKO OMD
		30	50	41	49	50	TES 30 - DKO OMD
		38	60	50	57	56	TES 38 - DKO OMD

**Adjustable barrel tee couplings
with taper sealing**



Stud thread :
Metric, parallel
Port tapping with captive seal
Form E DIN 3852 (ISO 9974)
Nut pre-assembled



Series	NP	Tube OD	G	S ₁	S ₂	S ₃	S ₄	L ₁	I ₂	i	Blago Part No.
L	500	06	M 10 x 1	14	17	12	14	29	24,5	8	LEL 06 M - DKO
		08	M 12 x 1.5	17	17	12	17	29	26	12	LEL 08 M - DKO
		10	M 14 x 1.5	19	19	14	19	30	27,5	12	LEL 10 M - DKO
	400	12	M 16 x 1.5	22	22	17	22	32	29	12	LEL 12 M - DKO
		15	M 18 x 1.5	24	27	19	27	36	31,5	12	LEL 15 M - DKO
		18	M 22 x 1.5	27	32	24	32	40,5	34,5	14	LEL 18 M - DKO
	250	22	M 26 x 1.5	32	36	27	36	44	37,5	16	LEL 22 M - DKO
		28	M 33 x 2	41	41	36	41	47	40,5	18	LEL 28 M - DKO
		35	M 42 x 2	50	50	41	50	56	49	20	LEL 35 M - DKO
		42	M 48 x 2	55	60	50	60	63	53,5	22	LEL 42 M - DKO
S	800	06	M 12 x 1.5	17	17	12	17	31	26	12	LES 06 M - DKO
		08	M 14 x 1.5	19	19	14	19	32	26,5	12	LES 08 M - DKO
		10	M 16 x 1.5	22	22	17	22	34	29	12	LES 10 M - DKO
	630	12	M 18 x 1.5	24	24	17	24	38	29,5	12	LES 12 M - DKO
		14	M 20 x 1.5	27	27	19	27	40	33	14	LES 14 M - DKO
		16	M 22 x 1.5	27	30	24	30	43	35	14	LES 16 M - DKO
	420	20	M 27 x 2	32	36	27	36	48	42,5	16	LES 20 M - DKO
		25	M 33 x 2	41	46	36	46	54	46,5	18	LES 25 M - DKO
		30	M 42 x 2	50	50	41	50	62	50	20	LES 30 M - DKO
		38	M 48 x 2	55	60	50	60	72	56	22	LES 38 M - DKO

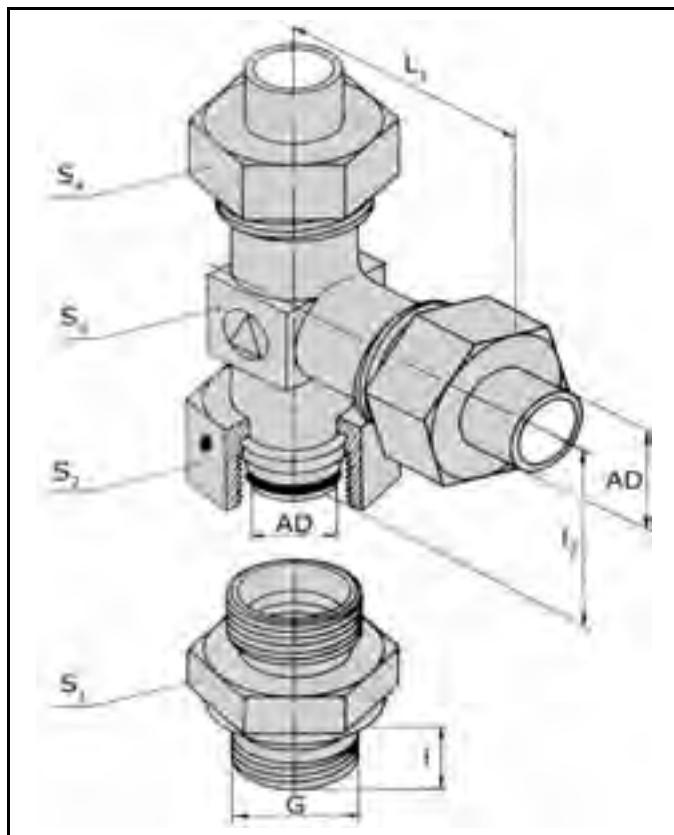


Adjustable barrel tee couplings with taper sealing

Stud thread :
BSP thread, parallel
Port tapping with captive seal

Form E DIN 3852 (ISO 1179)

Nut pre-assembled

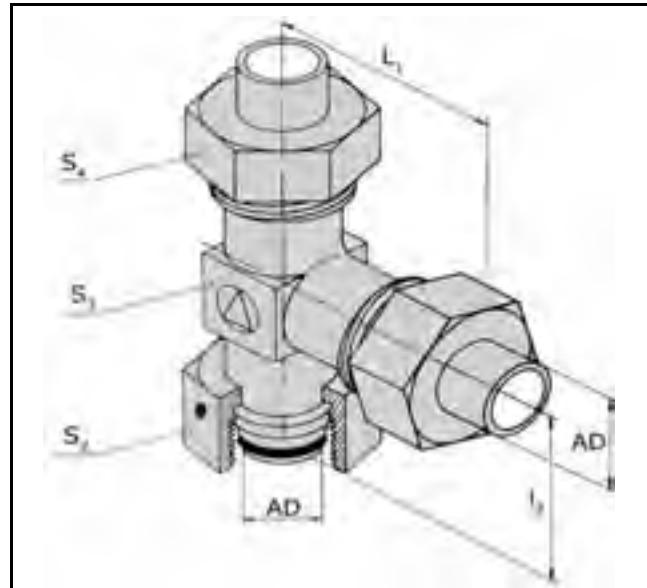


Series	NP	Tube OD	G	S ₁	S ₂	S ₃	S ₄	L ₁	I ₂	i	Blago Part No.
L	500	06	R 1/8	14	17	12	14	29	24,5	8	LEL 06 R - DKO
		08	R 1/4	19	17	12	17	29	26	12	LEL 08 R - DKO
		10	R 1/4	19	19	14	19	30	27,5	12	LEL 10 R - DKO
	400	12	R 3/8	22	22	17	22	32	29	12	LEL 12 R - DKO
		15	R 1/2	27	27	19	27	36	31,5	14	LEL 15 R - DKO
		18	R 1/2	27	32	24	32	40,5	34,5	14	LEL 18 R - DKO
	250	22	R 3/4	32	36	27	36	44	37,5	16	LEL 22 R - DKO
		28	R 1	41	41	36	41	47	40,5	18	LEL 28 R - DKO
		35	R 1 1/4	50	50	41	50	56	49	20	LEL 35 R - DKO
		42	R 1 1/2	55	60	50	60	63	53,5	22	LEL 42 R - DKO
S	800	06	R 1/4	19	17	12	17	31	26	12	LES 06 R - DKO
		08	R 1/4	19	19	14	19	32	26,5	12	LES 08 R - DKO
		10	R 3/8	22	22	17	22	34	29	12	LES 10 R - DKO
	630	12	R 3/8	22	24	17	24	38	29,5	12	LES 12 R - DKO
		14	R 1/2	27	27	19	27	40	33	14	LES 14 R - DKO
		16	R 1/2	27	30	24	30	43	35	14	LES 16 R - DKO
	420	20	R 3/4	32	36	27	36	48	42,5	16	LES 20 R - DKO
		25	R 1	41	46	36	46	54	46,5	18	LES 25 R - DKO
		30	R 1 1/4	50	50	41	50	62	50	20	LES 30 R - DKO
		38	R 1 1/2	55	60	50	60	72	56	22	LES 38 R - DKO

Adjustable barrel tee couplings with taper sealing



Nut pre-assembled

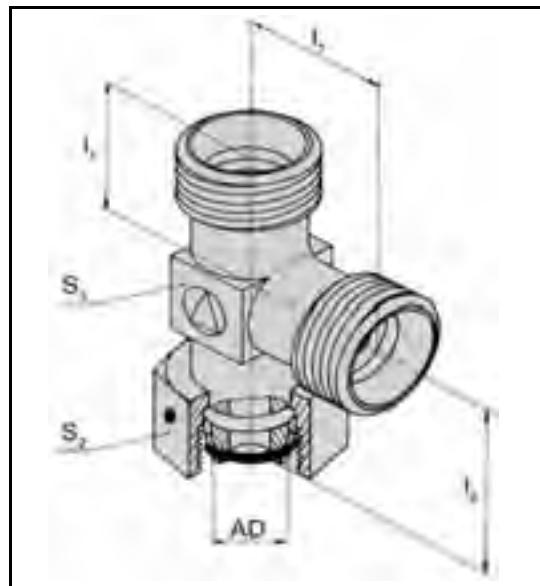


Series	NP	Tube OD	S ₂	S ₃	S ₄	L ₁	l ₂	Blago Part No.
L	500	06	17	12	14	29	24,5	LEL 06 OHNE - DKO
		08	17	12	17	29	26	LEL 08 OHNE - DKO
		10	19	14	19	30	27,5	LEL 10 OHNE - DKO
	400	12	22	17	22	32	29	LEL 12 OHNE - DKO
		15	27	19	27	36	31,5	LEL 15 OHNE - DKO
		18	32	24	32	40,5	34,5	LEL 18 OHNE - DKO
	250	22	36	27	36	44	37,5	LEL 22 OHNE - DKO
		28	41	36	41	47	40,5	LEL 28 OHNE - DKO
		35	50	41	50	56	49	LEL 35 OHNE - DKO
		42	60	50	60	63	53,5	LEL 42 OHNE - DKO
S	800	06	17	12	17	31	26	LES 06 OHNE - DKO
		08	19	14	19	32	26,5	LES 08 OHNE - DKO
		10	22	17	22	34	29	LES 10 OHNE - DKO
	630	12	24	17	24	38	29,5	LES 12 OHNE - DKO
		14	27	19	27	40	33	LES 14 OHNE - DKO
		16	30	24	30	43	35	LES 16 OHNE - DKO
	420	20	36	27	36	48	42,5	LES 20 OHNE - DKO
		25	46	36	46	54	46,5	LES 25 OHNE - DKO
		30	50	41	50	62	50	LES 30 OHNE - DKO
		38	60	50	60	72	56	LES 38 OHNE - DKO



Adjustable barrel tee couplings with taper sealing

Nut pre-assembled



Series	NP	Tube OD	S ₂	S ₃	l ₁	l ₂	Blago Part No.
L	500	06	17	12	21	24,5	LEL 06 - DKO OMD
		08	17	12	21	26	LEL 08 - DKO OMD
		10	19	14	22	27,5	LEL 10 - DKO OMD
	400	12	22	17	24	29	LEL 12 - DKO OMD
		15	27	19	28	31,5	LEL 15 - DKO OMD
		18	32	24	31	34,5	LEL 18 - DKO OMD
	250	22	36	27	35	37,5	LEL 22 - DKO OMD
		28	41	36	38	40,5	LEL 28 - DKO OMD
		35	50	41	45	49	LEL 35 - DKO OMD
		42	60	50	51	53,5	LEL 42 - DKO OMD
S	800	06	17	12	23	26	LES 06 - DKO OMD
		08	19	14	24	26,5	LES 08 - DKO OMD
		10	22	17	25	29	LES 10 - DKO OMD
	630	12	24	17	29	29,5	LES 12 - DKO OMD
		14	27	19	30	33	LES 14 - DKO OMD
		16	30	24	33	35	LES 16 - DKO OMD
	420	20	36	27	37	42,5	LES 20 - DKO OMD
		25	46	36	42	46,5	LES 25 - DKO OMD
		30	50	41	49	50	LES 30 - DKO OMD
		38	60	50	57	56	LES 38 - DKO OMD

**Stud adaptors
with taper sealing**



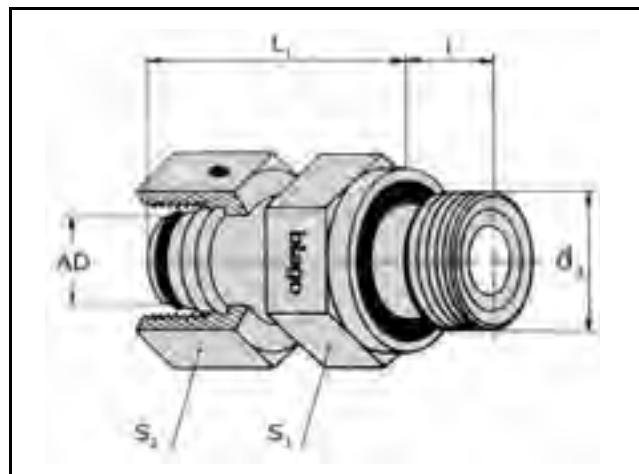
Stud thread :

Metric, parallel

Port tapping with captive seal

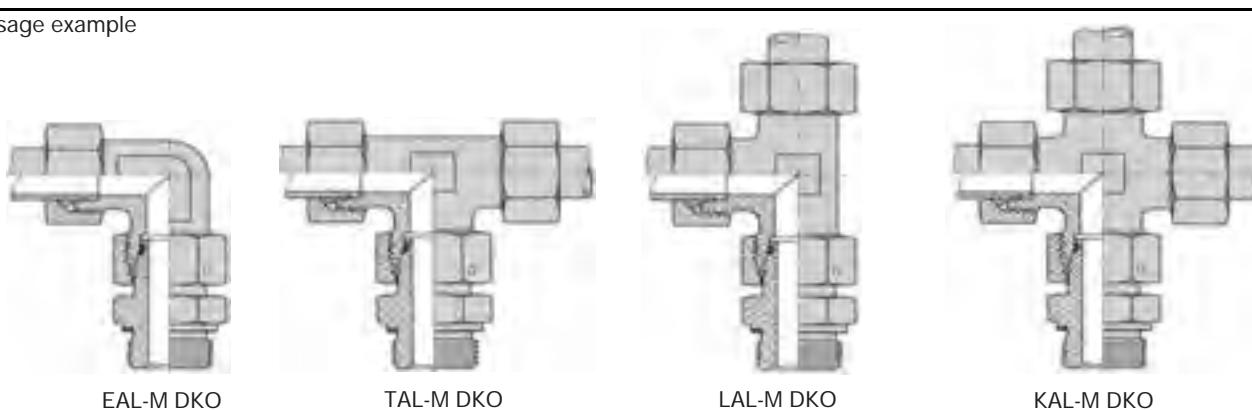
Form E DIN 3852 (ISO 9974)

Nut pre-assembled



Series	NP	Tube OD	d ₃	i	L ₁	S ₁	S ₂	Blago Part No.
L	500	06	M 10 x 1	8	23,0	14	17	RAL 06-M 10 x 1 WD - DKO
		08	M 12 x 1,5	12	28,0	17	17	RAL 08-M 12 x 1,5 WD - DKO
		10	M 14 x 1,5	12	28,0	19	19	RAL 10-M 14 x 1,5 WD - DKO
	400	12	M 16 x 1,5	12	29,5	22	22	RAL 12-M 16 x 1,5 WD - DKO
		15	M 18 x 1,5	12	31,5	24	27	RAL 15-M 18 x 1,5 WD - DKO
		18	M 22 x 1,5	14	30,5	27	32	RAL 18-M 22 x 1,5 WD - DKO
	250	22	M 26 x 1,5	16	31,5	32	36	RAL 22-M 26 x 1,5 WD - DKO
		28	M 33 x 2	18	34,0	41	41	RAL 28-M 33 x 2 WD - DKO
		35	M 42 x 2	20	40,5	50	50	RAL 35-M 42 x 2 WD - DKO
		42	M 48 x 2	22	44,0	55	60	RAL 42-M 48 x 2 WD - DKO
S	800	06	M 12 x 1,5	12	25,5	17	17	RAS 06-M 12 x 1,5 WD - DKO
		08	M 14 x 1,5	12	28,0	19	19	RAS 08-M 14 x 1,5 WD - DKO
		10	M 16 x 1,5	12	30,5	22	22	RAS 10-M 16 x 1,5 WD - DKO
	630	12	M 18 x 1,5	12	32,0	24	24	RAS 12-M 18 x 1,5 WD - DKO
		14	M 20 x 1,5	14	34,0	27	27	RAS 14-M 20 x 1,5 WD - DKO
		16	M 22 x 1,5	14	35,5	27	30	RAS 16-M 22 x 1,5 WD - DKO
	420	20	M 27 x 2	16	41,0	32	36	RAS 20-M 27 x 2 WD - DKO
		25	M 33 x 2	18	44,5	41	46	RAS 25-M 33 x 2 WD - DKO
		30	M 42 x 2	20	46,0	50	50	RAS 30-M 42 x 2 WD - DKO
		38	M 48 x 2	22	52,5	55	60	RAS 38-M 48 x 2 WD - DKO

Usage example

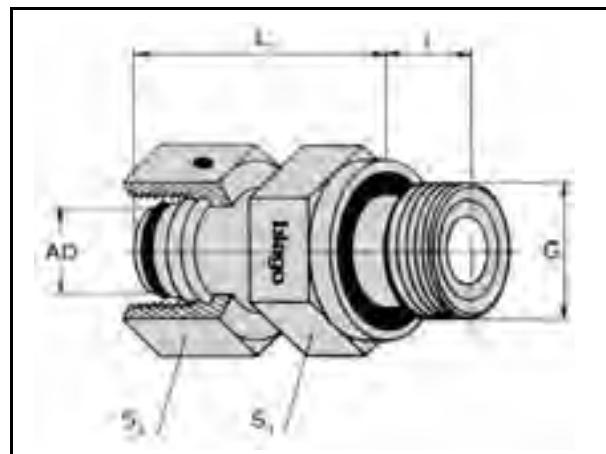


Order example: EAL12-M 16 x 1,5 DKO = RAL 12-M 16 x 1,5 DKO + EL 12



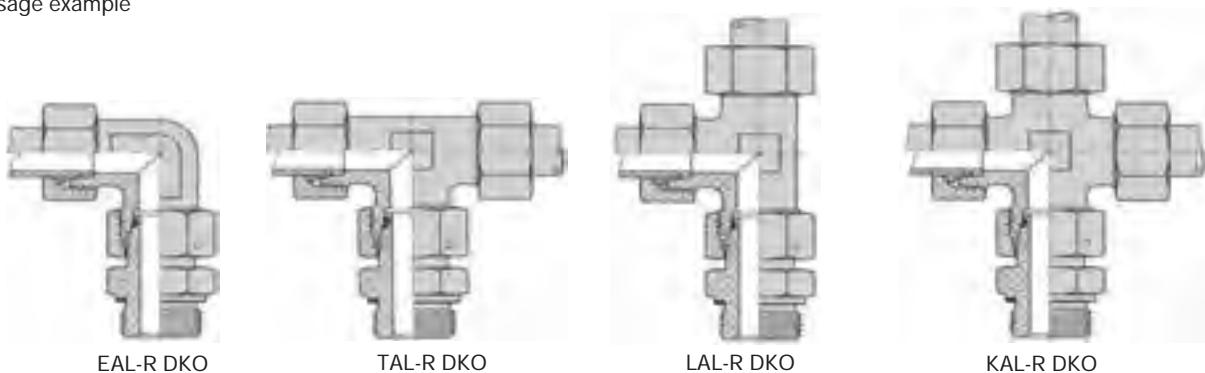
Stud adaptors with taper sealing

Stud thread :
BSP thread, parallel
Port tapping with captive seal
Form E DIN 3852 (ISO 1179)
Nut pre-assembled



Series	NP	Tube OD	G	i	L ₁	S ₁	S ₂	Blago Part No.
L	500	06	G 1/8 A	8	23,0	14	17	RAL 06-R 1/8 WD - DKO
		08	G 1/4 A	12	28,0	19	17	RAL 08-R 1/4 WD - DKO
		10	G 1/4 A	12	28,0	19	19	RAL 10-R 1/4 WD - DKO
	400	12	G 3/8 A	12	32,0	22	22	RAL 12-R 3/8 WD - DKO
		12	G 1/4 A	12	29,5	19	22	RAL 12-R 1/4 WD - DKO
		15	G 1/2 A	14	32,0	27	27	RAL 15-R 1/2 WD - DKO
		18	G 1/2 A	14	30,5	27	32	RAL 18-R 1/2 WD - DKO
	250	22	G 3/4 A	16	31,5	32	36	RAL 22-R 3/4 WD - DKO
		28	G 1 A	18	34,0	41	41	RAL 28-R 1 WD - DKO
		35	G 1 1/4 A	20	40,5	50	50	RAL 35-R 1 1/4 WD - DKO
		42	G 1 1/2 A	22	44,0	55	60	RAL 42-R 1 1/2 WD - DKO
S	800	06	G 1/4 A	12	25,5	19	17	RAS 06-R 1/4 WD - DKO
		08	G 1/4 A	12	28,0	19	19	RAS 08-R 1/4 WD - DKO
		10	G 3/8 A	12	30,5	22	22	RAS 10-R 3/8 WD - DKO
	630	12	G 3/8 A	12	32,0	22	24	RAS 12-R 3/8 WD - DKO
		12	G 1/2 A	14	32,5	27	24	RAS 12-R 1/2 WD - DKO
		14	G 1/2 A	14	34,5	27	27	RAS 14-R 1/2 WD - DKO
		16	G 1/2 A	14	35,5	27	30	RAS 16-R 1/2 WD - DKO
	420	20	G 3/4 A	16	41,0	32	36	RAS 20-R 3/4 WD - DKO
		25	G 1 A	18	44,5	41	46	RAS 25-R 1 WD - DKO
		30	G 1 1/4 A	20	46,0	50	50	RAS 30-R 1 1/4 WD - DKO
		38	G 1 1/2 A	22	52,5	55	60	RAS 38-R 1 1/2 WD - DKO

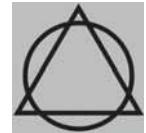
Usage example



Order example: EAL12-R 1/4 DKO = RAL 12-R 1/4 DKO + EL 12

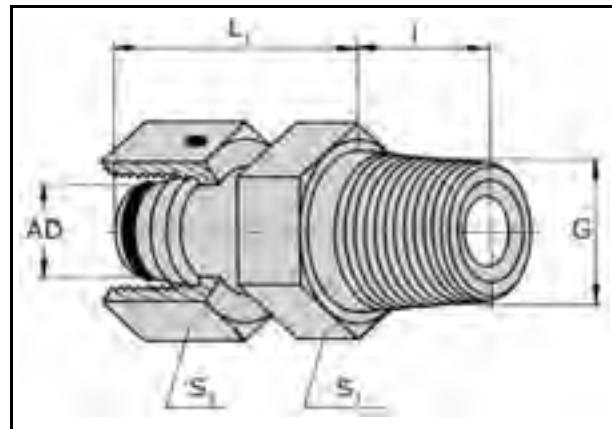


**Stud adaptors
with taper sealing**



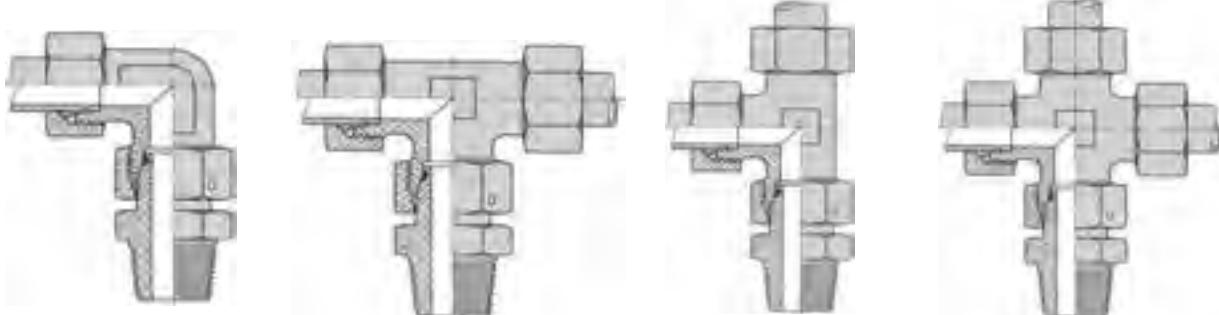
Stud thread :
NPT thread, taper

Form C
Nut pre-assembled



Series	NP	Tube OD	G	i	L ₁	S ₁	S ₂	Blago Part No.
L	315	06	1/8 NPT	10	21,5	11	17	RAL 06- 1/8 NPT - DKO
		08	1/4 NPT	15	23,0	14	17	RAL 08- 1/4 NPT - DKO
		10	1/4 NPT	15	23,0	14	19	RAL 10- 1/4 NPT - DKO
		12	3/8 NPT	15,2	26,0	19	22	RAL 12- 3/8 NPT - DKO
		12	1/4 NPT	15	25,0	17	22	RAL 12- 1/4 NPT - DKO
		15	1/2 NPT	19,8	28,0	22	27	RAL 15- 1/2 NPT - DKO
		18	1/2 NPT	19,8	28,0	24	32	RAL 18- 1/2 NPT - DKO
	160	22	3/4 NPT	20	28,5	27	36	RAL 22- 3/4 NPT - DKO
		28	1 NPT	25	31,0	36	41	RAL 28-1 NPT - DKO
		35	1 1/4 NPT	25,5	37,5	46	50	RAL 35-1 1/4 NPT - DKO
		42	1 1/2 NPT	26	41,0	50	60	RAL 42-1 1/2 NPT - DKO
S	630	06	1/4 NPT	15	23,5	14	17	RAS 06- 1/4 NPT - DKO
		08	1/4 NPT	15	24,0	17	19	RAS 08- 1/4 NPT - DKO
		10	3/8 NPT	15,2	28,0	19	22	RAS 10- 3/8 NPT - DKO
		12	3/8 NPT	15,2	28,0	19	24	RAS 12- 3/8 NPT - DKO
		12	1/2 NPT	19,8	29,5	22	24	RAS 12- 1/2 NPT - DKO
		14	1/2 NPT	19,8	31,5	22	27	RAS 14- 1/2 NPT - DKO
	400	16	1/2 NPT	19,8	32,5	22	30	RAS 16- 1/2 NPT - DKO
		20	3/4 NPT	20	38,0	27	36	RAS 20- 3/4 NPT - DKO
		25	1 NPT	25	39,5	36	46	RAS 25-1 NPT - DKO
		30	1 1/4 NPT	25,5	43,0	46	50	RAS 30-1 1/4 NPT - DKO
	315	38	1 1/2 NPT	26	43,0	50	60	RAS 38-1 1/2 NPT - DKO

Usage example



EAL-NPT DKO

TAL-NPT DKO

LAL-NPT DKO

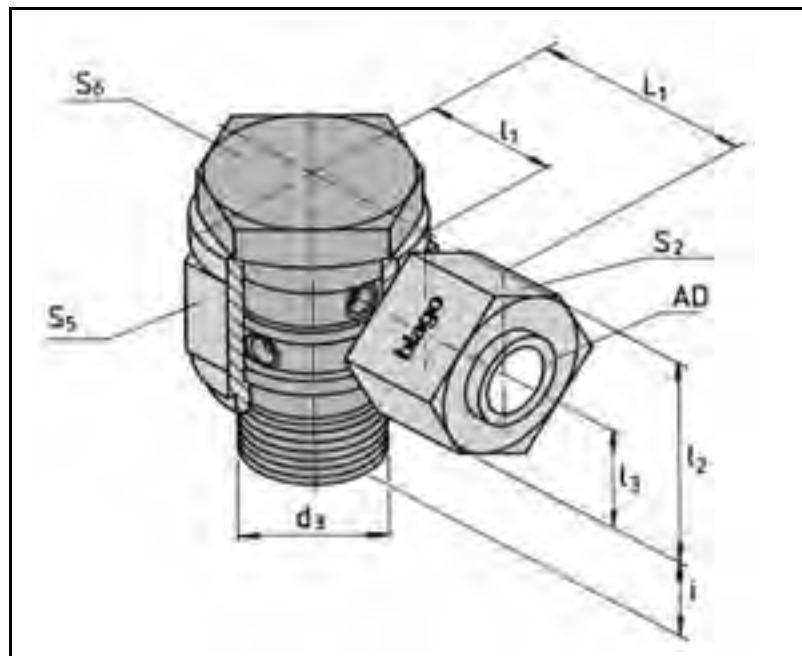
KAL-NPT DKO

Order example: EAL12-1/4 NPT DKO = RAL 12-1/4 NPT DKO + EL 12



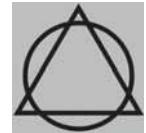
Elbow banjo couplings

Stud thread :
Metric thread, parallel
See page 10/11

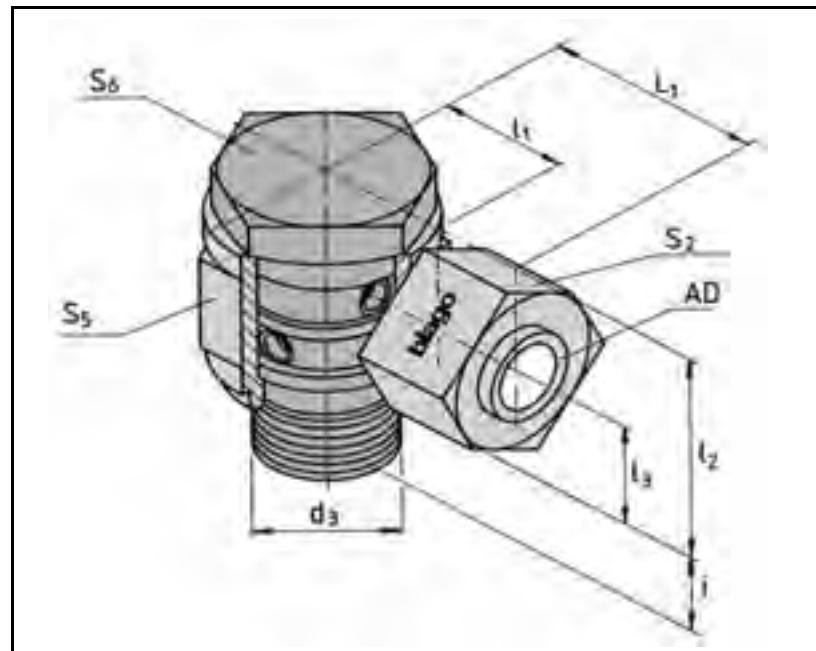


Series	NP	Tube OD	d ₃	l ₁	l ₂	l ₃	i	S ₂	S ₅	S ₆	L ₁	kg %	Blago Part No.
LL	63	4	M 8 x 1	11,5	21,5	9	6	10	14	14	21,5	2,8	WSVLL 04 M
		5	M 8 x 1	12	21,5	9	6	12	14	14	23,5	3,2	WSVLL 05 M
		6	M 10 x 1	12	21,5	9	6	12	14	14	23,5	3,3	WSVLL 06 M
		8	M 10 x 1	13	21,5	9	6	14	14	14	25,5	3,5	WSVLL 08 M
L	160	6	M 10 x 1	10,5	21,5	9	6	14	14	14	25,5	3,8	WSVL 06 M
		8	M 12 x 1,5	13,5	26	12	9	17	19	17	28,5	7,0	WSVL 08 M
		10	M 14 x 1,5	13,5	27	13	9	19	19	19	28,5	8,0	WSVL 10 M
	100	12	M 16 x 1,5	15	32	15	9	22	22	22	30	11,2	WSVL 12 M
		15	M 18 x 1,5	17	37	17	9	27	24	24	32	16,5	WSVL 15 M
		18	M 22 x 1,5	20,5	43,5	20,5	11,5	32	32	27	37	26,5	WSVL 18 M
		22	M 26 x 1,5	24,5	48	23	13	36	36	32	41	35,0	WSVL 22 M
S	160	6	M 12 x 1,5	14,5	26	12	9	17	19	17	29,5	6,7	WSVS 06 M
		8	M 14 x 1,5	14,5	27	13	9	19	19	19	29,5	9,3	WSVS 08 M
	100	10	M 16 x 1,5	16,5	32	15	9	22	22	22	33,5	13,0	WSVS 10 M
		12	M 18 x 1,5	17	37	17	9	24	24	24	33	16,8	WSVS 12 M
		14	M 20 x 1,5	19,5	38	17	11	27	27	27	37,5	21,5	WSVS 14 M
		16	M 22 x 1,5	21,5	43,5	20,5	11,5	30	32	27	40	27,5	WSVS 16 M
		20	M 27 x 2	24,5	48	23	13	36	36	32	46	42,5	WSVS 20 M

Elbow banjo couplings



Stud thread :
BSP thread, parallel
See page 10/11

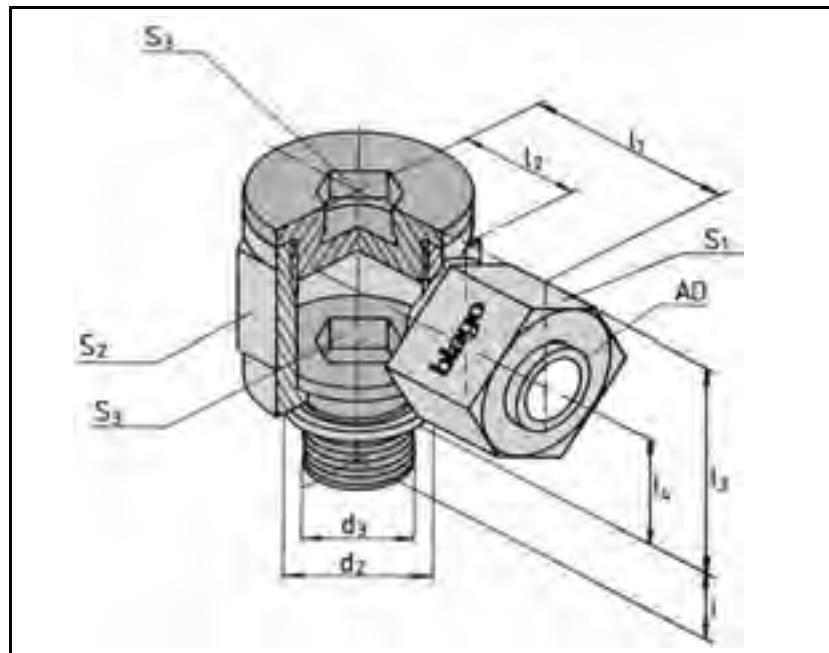


Series	NP	Tube OD	d_3	l_1	l_2	l_3	i	S_2	S_5	S_6	L_1	kg %	Blago Part No.
LL	63	4	G 1/8 A	11,5	21,5	9	6	10	14	14	21,5	3,0	WSVLL 04 R
		5	G 1/8 A	12	21,5	9	6	12	14	14	23,5	3,2	WSVLL 05 R
		6	G 1/8 A	12	21,5	9	6	12	14	14	23,5	3,3	WSVLL 06 R
		8	G 1/8 A	13	21,5	9	6	14	14	14	25,5	3,5	WSVLL 08 R
L	160	6	G 1/8 A	10,5	21,5	9	6	14	14	14	25,5	4,0	WSVL 06 R
		8	G 1/4 A	13,5	27	13	9	17	19	19	28,5	7,7	WSVL 08 R
		10	G 1/4 A	13,5	27	13	9	19	19	19	28,5	8,5	WSVL 10 R
	100	12	G 1/4 A	17	30	15	9	22	22	19	32	9,5	WSVL 12 R 1/4
		12	G 3/8 A	15	32	15	9	22	22	22	30	14,2	WSVL 12 R
		12	G 1/2 A	17,5	38	17	11	22	27	27	33,5	16,1	WSVL 12 R 1/2
		15	G 1/2 A	17	38	17	11	27	27	27	33,5	19,5	WSVL 15 R
		18	G 1/2 A	20,5	43,5	20,5	11,5	32	32	27	37	20,5	WSVL 18 R
		22	G 3/4 A	24,5	48	23	13	36	36	32	41	38,5	WSVL 22 R
S	160	6	G 1/4 A	14,5	27	27	9	17	19	19	29,5	8,0	WSVS 06 R
		8	G 1/4 A	14,5	27	13	9	19	19	19	29,5	9,5	WSVS 08 R
	100	10	G 3/8 A	17	32	15	9	22	22	22	33,5	12,0	WSVS 10 R
		12	G 3/8 A	15,5	32	15	9	24	22	22	32,5	14,5	WSVS 12 R
		14	G 1/2 A	19,5	38	17	11	27	27	27	37,5	21,5	WSVS 14 R
		16	G 1/2 A	21,5	43,5	24,5	11,5	30	32	27	40	27,7	WSVS 16 R
		20	G 3/4 A	24,5	48	23	13	36	36	32	46	42,5	WSVS 20 R



Throttle free elbow banjo couplings

Stud thread :
Metric, parallel
See page 10/11

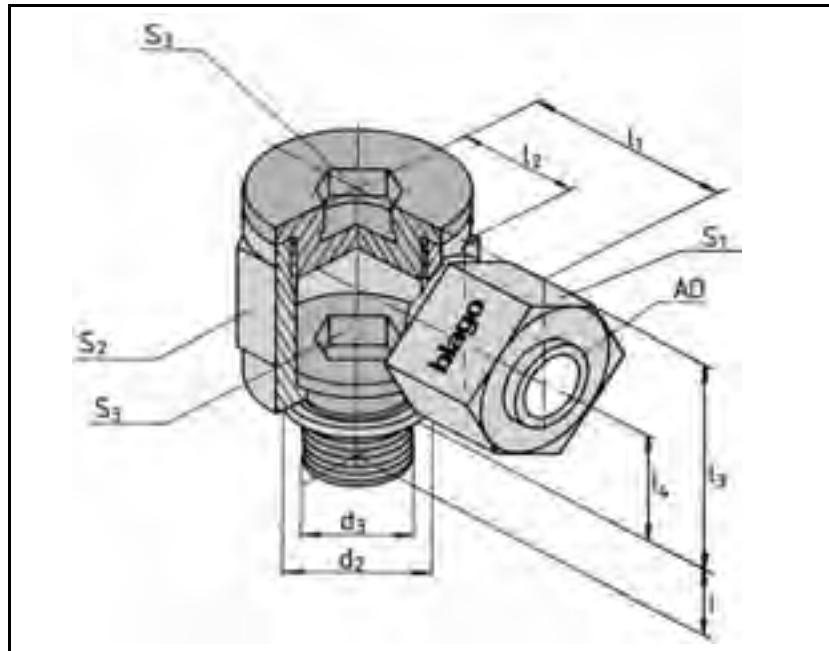


Series	NP	Tube OD	d ₃	l ₁	l ₂	l ₃	d ₂	l ₄	i	S ₁	S ₂	S ₃	kg %	Blago Part No.
L	160	6	M 10 x 1	30	15	24	14	12	8	14	19	6	6,2	DWSVL 06 M
		8	M 12 x 1.5	29,5	14,5	30,5	18,4	15	12	17	22	8	10,0	DWSVL 08 M
	100	10	M 14 x 1.5	30,5	15,5	30,5	18,4	15	12	19	22	8	11,4	DWSVL 10 M
		12	M 16 x 1.5	34	19	36	22	18	12	22	27	10	17,9	DWSVL 12 M
		15	M 18 x 1.5	37	22	40	23	20,5	12	27	32	12	24,1	DWSVL 15 M
		18	M 22 x 1.5	39	22,5	45	27	22,5	14	32	36	14	30,1	DWSVL 18 M
		22	M 26 x 1.5	45	28,5	56	32	28	16	36	46	17	39,9	DWSVL 22 M
		28	M 33 x 2	49	32,5	62	39	32	18	41	50	22	82,5	DWSVL 28 M
	63	35	M 42 x 2	54,5	33	71,5	49	36	20	50	60	27	116,1	DWSVL 35 M
		42	M 48 x 2	63	40	82,5	55	41	22	60	70	32	224,0	DWSVL 42 M
S	160	6	M 12 x 1.5	31,5	16,5	30,5	18,4	15	12	17	22	8	9,2	DWSVS 06 M
		8	M 14 x 1.5	31,5	16,5	30,5	18,4	15	12	19	22	8	11,6	DWSVS 08 M
	100	10	M 16 x 1.5	35	18,5	36	22	18	12	22	27	10	18,9	DWSVS 10 M
		12	M 18 x 1.5	37	20,5	40	23	20,5	12	24	32	12	24,0	DWSVS 12 M
		14	M 20 x 1.5	41	23	41,5	26	21	14	27	32	12	30,2	DWSVS 14 M
		16	M 22 x 1.5	42	23,5	45,5	27	22,5	14	30	36	14	38,9	DWSVS 16 M
		20	M 27 x 2	49	27,5	56	32	28	16	36	46	17	75,8	DWSVS 20 M
		25	M 33 x 2	55	31	62	39	32	18	46	50	22	101,4	DWSVS 25 M
	63	30	M 42 x 2	63	36,5	71,5	49	36	20	50	60	27	156,8	DWSVS 30 M
		38	M 48 x 2	72	41	82,5	55	41	22	60	70	32	242,8	DWSVS 38 M

Throttle free elbow banjo couplings



Stud thread :
BSP thread, parallel
See page 10/11

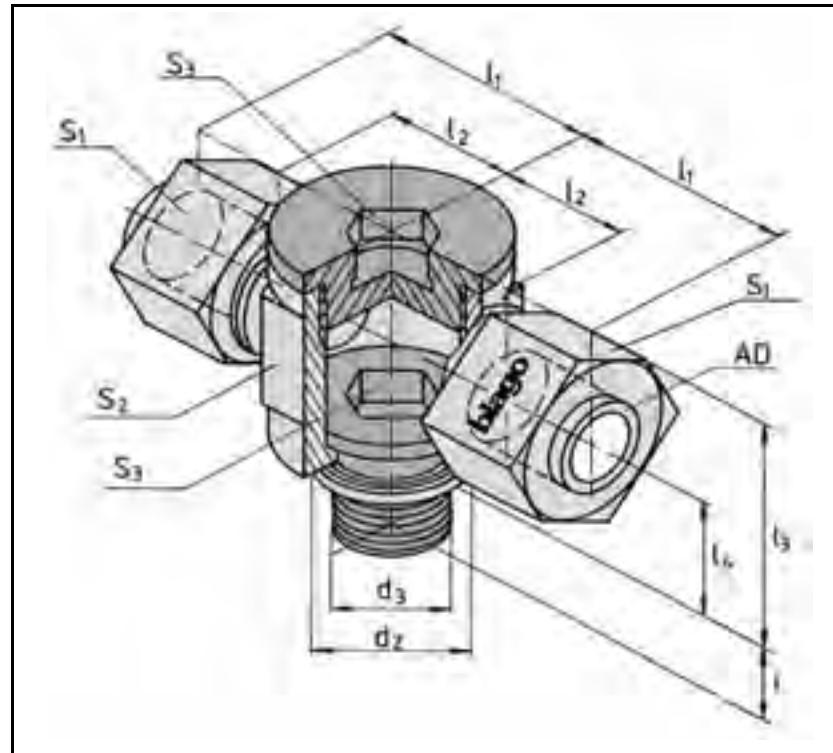


Series	NP	Tube OD	d ₃	l ₁	l ₂	l ₃	d ₂	l ₄	i	S ₁	S ₂	S ₃	kg %	Blago Part No.
L	160	6	G 1/8 A	30	15	24	14	12	8	14	19	6	6,2	DWSVL 6 R
		8	G 1/4 A	29,5	14,5	30,5	18,4	15	12	17	22	8	10,0	DWSVL 8 R
	100	10	G 1/4 A	30,5	15,5	30,5	18,4	15	12	19	22	8	11,4	DWSVL 10 R
		12	G 1/4 A	32,5	17,5	30,5	18,4	15	12	22	22	8	12,8	DWSVL 12 R 1/4
		12	G 3/8 A	34	19	36	22	18	12	22	27	10	17,9	DWSVL 12 R
		12	G 1/2 A	37	22	41,5	26	21	14	22	32	12	20,0	DWSVL 12 R 1/2
		15	G 1/2 A	37	22	41,5	26	21	14	27	32	12	24,1	DWSVL 15 R
		18	G 1/2 A	37	20,5	41,5	26	21	14	32	32	12	30,1	DWSVL 18 R
		22	G 3/4 A	45	28,5	56	32	28	16	36	46	17	39,9	DWSVL 22 R
	63	28	G 1 A	49	32,5	62	39	32	18	41	50	22	82,5	DWSVL 28 R
		35	G 1 1/4 A	54,5	33	71,5	49	36	20	50	60	27	116,1	DWSVL 35 R
		42	G 1 1/2 A	63	40	82,5	55	41	22	60	70	32	224,0	DWSVL 42 R
S	160	6	G 1/4 A	31,5	16,5	30,5	18,4	15	12	17	22	8	9,2	DWSVS 6 R
		8	G 1/4 A	31,5	16,5	30,5	18,4	15	12	19	22	8	11,6	DWSVS 8 R
	100	10	G 3/8 A	35	18,5	36	22	18	12	22	27	10	18,9	DWSVS 10 R
		12	G 3/8 A	35	18,5	37	22	18,5	12	24	27	10	24,0	DWSVS 12 R
		14	G 1/2 A	41	23	41,5	26	21	14	27	32	12	30,2	DWSVS 14 R
		16	G 1/2 A	39,5	21	41,5	26	21	14	30	32	12	38,9	DWSVS 16 R
		20	G 3/4 A	49	27,5	56	32	28	16	36	46	17	75,8	DWSVS 20 R
		25	G 1 A	55	31	62	39	32	18	46	50	22	101,4	DWSVS 25 R
	63	30	G 1 1/4 A	63	36,5	71,5	49	36	20	50	60	27	156,8	DWSVS 30 R
		38	G 1 1/2 A	72	41	82,5	55	41	22	60	70	32	242,8	DWSVS 38 R



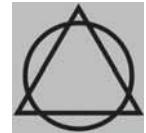
Throttle free tee banjo couplings

Stud thread :
Metric, parallel
See page 10/11

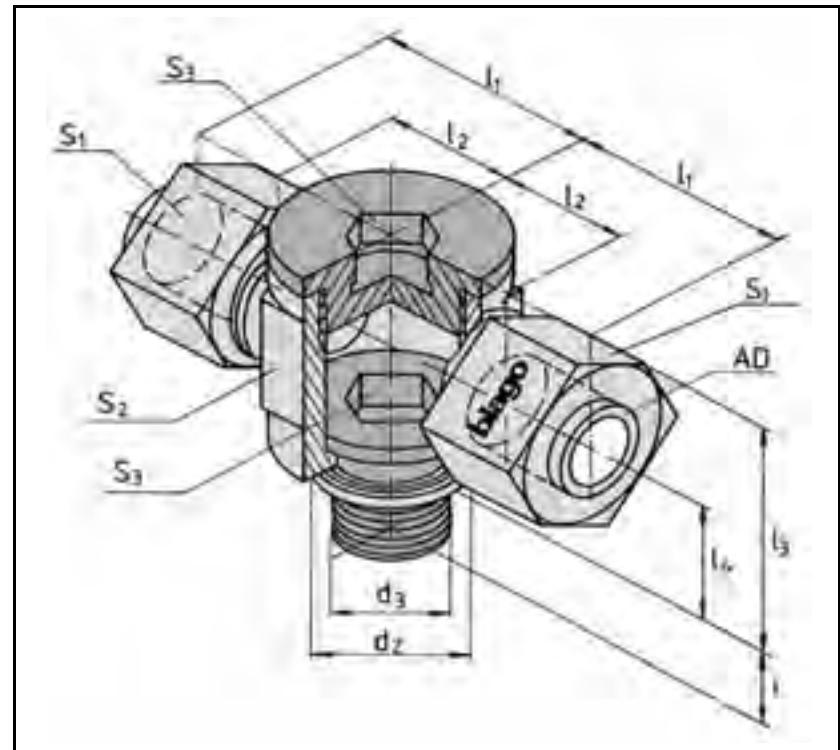


Series	NP	Tube OD	d_3	l_1	l_2	l_3	l_4	i	d_2	S_1	S_2	S_3	kg %	Blago Part No.
L	160	6	M 10 x 1	31	16	25,5	14	8	14	14	22	6	7,4	DTSVL 06 M
		8	M 12 x 1.5	31	16	29,5	15	12	18,4	17	22	8	10,6	DTSVL 08 M
	100	10	M 14 x 1.5	31	16	29,5	15	12	18,4	19	22	8	14,4	DTSVL 10 M
		12	M 16 x 1.5	34	19	36	18	12	22	22	27	10	21,2	DTSVL 12 M
		15	M 18 x 1.5	37	22	40	20,5	12	23	27	32	12	29,7	DTSVL 15 M
		18	M 22 x 1.5	37	20,5	42	21	14	27	32	32	14	38,2	DTSVL 18 M
		22	M 26 x 1.5	45	28,5	56	27	16	32	36	46	17	51,0	DTSVL 22 M
		28	M 33 x 2	48	31,5	56	28,5	18	39	41	50	22	81,0	DTSVL 28 M
	63	35	M 42 x 2	54,5	33	69	33	20	49	50	55	27	134,3	DTSVL 35 M
		42	M 48 x 2	63	40	82,5	41	22	55	60	70	32	245,5	DTSVL 42 M
S	160	6	M 12 x 1.5	32	17	29,5	15	12	18,4	17	22	8	11,7	DTSVS 06 M
		8	M 14 x 1.5	32	17	29,5	15	12	18,4	19	22	8	14,5	DTSVS 08 M
	100	10	M 16 x 1.5	36	19,5	36	18	12	22	22	27	10	23,0	DTSVS 10 M
		12	M 18 x 1.5	38	21,5	40	19	12	23	24	32	12	28,8	DTSVS 12 M
		14	M 20 x 1.5	41	23	41	20	14	26	27	32	12	37,5	DTSVS 14 M
		16	M 22 x 1.5	42	23,5	45	22	14	27	30	36	14	47,2	DTSVS 16 M
		20	M 27 x 2	50	28,5	56	28	16	32	36	45	17	88,6	DTSVS 20 M
		25	M 33 x 2	55	31	61	31	18	39	46	50	22	125,9	DTSVS 25 M
	63	30	M 42 x 2	63	36,5	71,5	36	20	49	50	60	27	184,8	DTSVS 30 M
		38	M 48 x 2	72	41	82,5	41	22	55	60	70	32	284,8	DTSVS 38 M

Throttle free tee banjo couplings



Stud thread :
BSP thread, parallel
See page 10/11



Series	NP	Tube OD	d ₃	l ₁	l ₂	l ₃	l ₄	d ₂	i	S ₁	S ₂	S ₃	kg %	Blago Part No.
L	160	6	G 1/8 A	31	16	25,5	14	14	8	14	22	6	7,4	DTSVL 6 R
		8	G 1/4 A	31	16	29,5	15	18,4	12	17	22	8	10,6	DTSVL 8 R
	100	10	G 1/4 A	31	16	29,5	15	18,4	12	19	22	8	14,4	DTSVL 10 R
		12	G 1/4 A	32,5	17,5	29,5	15	18,4	12	22	22	8	15,9	DTSVL 12 R 1/4
		12	G 3/8 A	34	19	36	18	22	12	22	27	10	21,2	DTSVL 12 R
		12	G 1/2 A	36	21	41,5	21	26	14	22	32	12	23,1	DTSVL 12 R 1/2
		15	G 1/4 A	37	21	41,5	21	26	12	27	32	12	29,7	DTSVL 15 R
		18	G 1/2 A	37	20,5	41,5	21	26	14	32	32	12	38,2	DTSVL 18 R
		22	G 1/2 A	45	28,5	56	28	32	16	36	46	17	51,0	DTSVL 22 R
		28	G 1 A	48	29	56	28,5	39	18	41	50	22	81,0	DTSVL 28 R
	63	35	G 1 1/4 A	54,5	33	69	33	49	20	50	55	27	134,3	DTSVL 35 R
		42	G 1 1/2 A	63	40	82,5	41	55	22	60	70	32	245,5	DTSVL 42 R
S	160	6	G 1/4 A	32	17	29,5	15	18,4	12	17	22	8	11,7	DTSVS 6 R
		8	G 1/4 A	32	17	29,5	15	18,4	12	19	22	8	14,5	DTSVS 8 R
	100	10	G 3/8 A	36	19,5	36	18	22	12	22	27	10	23,0	DTSVS 10 R
		12	G 3/8 A	36	19,5	36	19	22	12	24	27	10	28,8	DTSVS 12 R
		14	G 1/2 A	40	22	41	20	26	14	27	32	12	37,5	DTSVS 14 R
		16	G 1/2 A	40	21,5	41,5	21	26	14	30	32	12	47,2	DTSVS 16 R
		20	G 3/2 A	50	28,5	56	28	32	16	36	46	17	88,6	DTSVS 20 R
		25	G 1 1/4 A	55	31	61	31	39	18	46	50	22	125,9	DTSVS 25 R
	63	30	G 1 1/4 A	63	36,5	71,5	36	49	20	50	60	27	184,8	DTSVS 30 R
		38	G 1 1/2 A	72	41	82,5	41	55	22	60	70	32	284,8	DTSVS 38 R



Banjo couplings

Stud thread :

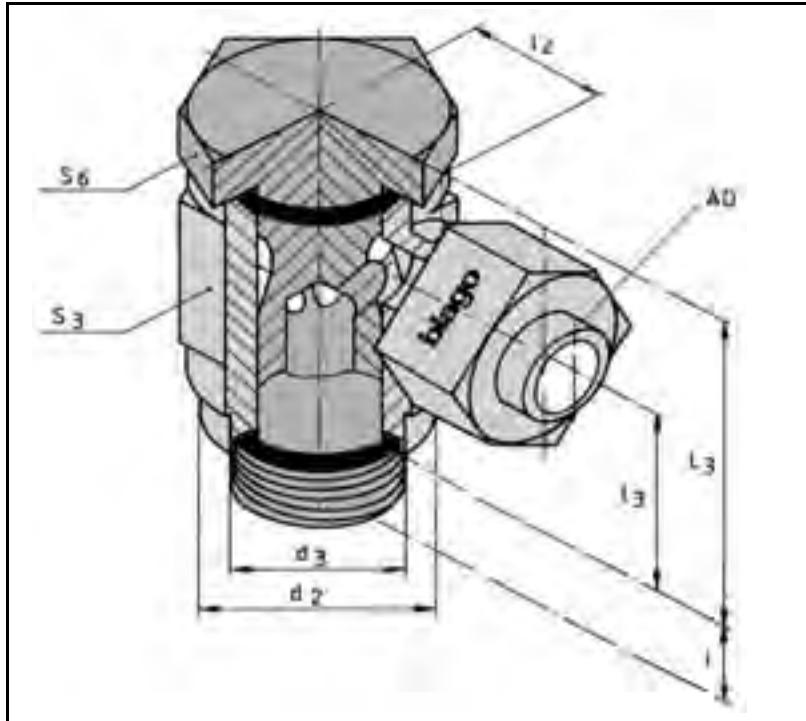
Metric thread, parallel

Port tapping with O-ring

Oblic usage

acc. to DIN 3852 (ISO 9974)

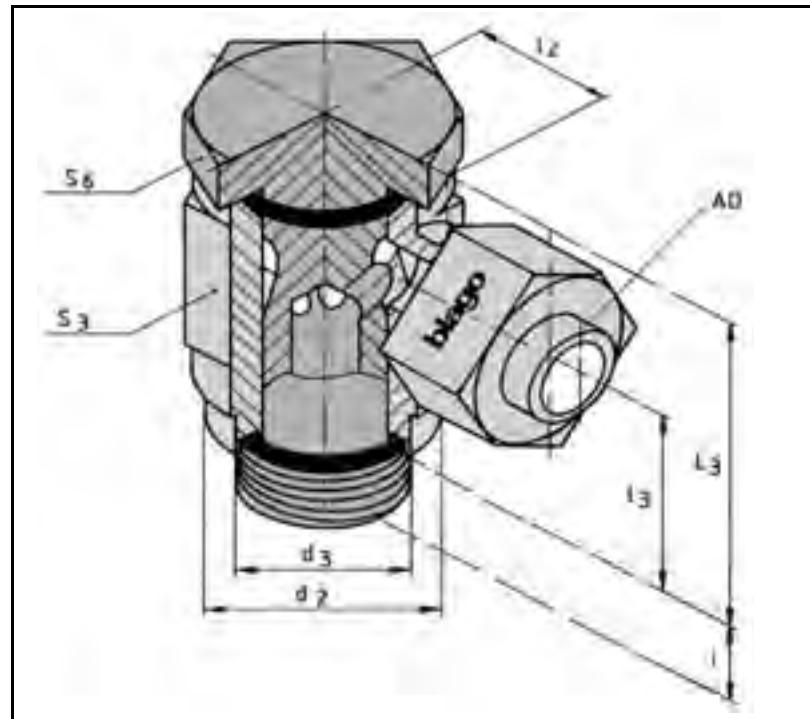
See page 10/11



Series	Tube OD	d_3	NP	i	l_3	l_2	L_3	d_2	S_3	S_6	Blago Part No.
L	06	M 10 x 1	250	8	11	15	25,5	18	19	19	WHOL 06-M 10 x 1
	08	M 12 x 1,5		12	14,5	19	33	22,5	24	24	WHOL 08-M 12 x 1,5
	10	M 14 x 1,5		12	14,5	19,5	33	22,5	24	24	WHOL 10-M 14 x 1,5
	12	M 16 x 1,5		12	18	21,5	39	27	27	27	WHOL 12-M 16 x 1,5
	15	M 18 x 1,5		12	19,5	24	43	28	32	30	WHOL 15-M 18 x 1,5
	18	M 22 x 1,5		14	23	25,5	49,5	33	36	36	WHOL 18-M 22 x 1,5
	22	M 26 x 1,5	160	16	25,5	33	55,5	41	46	41	WHOL 22-M 26 x 1,5
	28	M 33 x 2		18	31	35,5	66	46	50	46	WHOL 28-M 33 x 2
	35	M 42 x 2		20	34	39,5	76	57	60	60	WHOL 35-M 42 x 2
	42	M 48 x 2		22	40	44	86	64	70	65	WHOL 42 M-48 x 2
S	06	M 12 x 1,5	315	12	14,5	19,5	33	22,5	24	24	WHOS 06-M 12 x 1,5
	08	M 14 x 1,5		12	14,5	19,5	33	22,5	24	24	WHOS 08-M 14 x 1,5
	10	M 16 x 1,5		12	18	21,5	39	27	27	27	WHOS 10-M 16 x 1,5
	12	M 18 x 1,5		12	19,5	23,5	43	28	32	30	WHOS 12-M 18 x 1,5
	14	M 20 x 1,5		14	20	25	44	32	32	32	WHOS 14-M 20 x 1,5
	16	M 22 x 1,5		14	23	26,5	49,5	33	36	36	WHOS 16-M 22 x 1,5
	20	M 27 x 2	250	16	25,5	32	55,5	41	46	41	WHOS 20-M 27 x 2
	25	M 33 x 2		18	31	35	66	46	50	46	WHOS 25-M 33 x 2
	30	M 42 x 2		20	34	40,5	76	57	60	60	WHOS 30-M 42 x 2
	38	M 48 x 2		22	40	45	86	64	70	65	WHOS 38-M 48 x 2



Stud thread :
BSP thread, parallel
Port tapping with O-ring
Oblic usage
acc. to DIN 3852 (ISO 1179)
See page 10/11

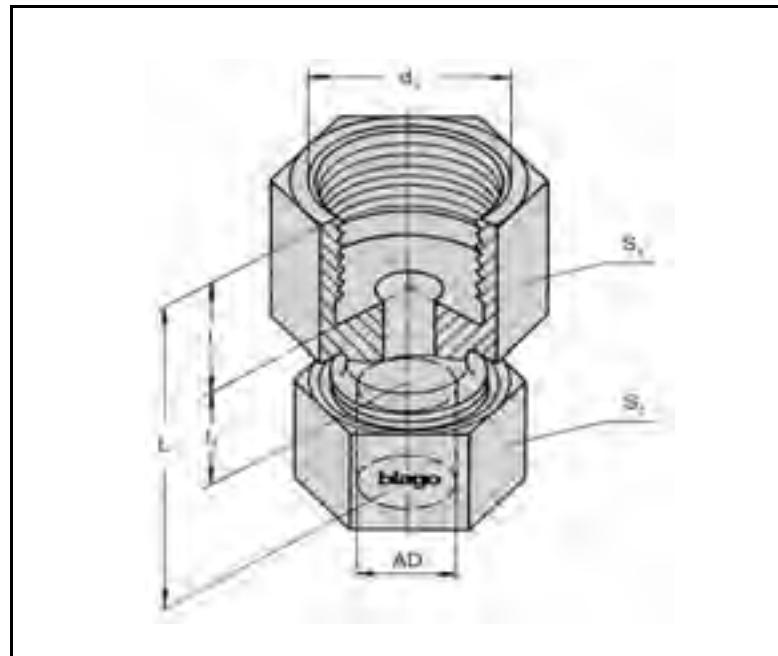


Series	Tube OD	d ₃	NP	i	l ₃	l ₂	L ₃	d ₂	S ₃	S ₆	Blago Part No.
L	06	G 1/8 A	250	8	11	15	25,5	18	19	19	WHOL 06-R 1/8
	08	G 1/4 A		12	14,5	19	33	22,5	24	24	WHOL 08-R 1/4
	10	G 1/4 A		12	14,5	19,5	33	22,5	24	24	WHOL 10-R 1/4
	12	G 1/4 A		12	15,5	16,0	33	21,5	22	24	WHOL 12-R 1/4
	12	G 3/8 A		12	18	21,5	39	27	27	27	WHOL 12-R 3/8
	12	G 1/2 A		14	20	25,0	44	32	32	32	WHOL 12-R 1/2
	15	G 1/2 A		14	20	25	44	32	32	32	WHOL 15-R 1/2
	18	G 1/2 A		14	23	25,5	49,5	33	36	36	WHOL 18-R 1/2
	22	G 3/4 A	160	16	25,5	33	55,5	41	46	41	WHOL 22-R 3/4
	28	G 1 A		18	31	35,5	66	46	50	46	WHOL 28-R 1
	35	G 1 1/4 A		20	34	39,5	76	57	60	60	WHOL 35-R 1 1/4
	42	G 1 1/2 A		22	40	44	86	64	70	65	WHOL 42-R 1 1/2
S	06	G 1/4 A	315	12	14,5	19,5	33	22,5	24	24	WHOS 06-R 1/4
	08	G 1/4 A		12	14,5	19,5	33	22,5	24	24	WHOS 08-R 1/4
	10	G 3/8 A		12	18	21,5	39	27	27	27	WHOS 10-R 3/8
	12	G 3/8 A		12	18	22	39	27	27	27	WHOS 12-R 3/8
	14	G 1/2 A		14	20	25	44	32	32	32	WHOS 14-R 1/2
	16	G 1/2 A		14	23	26,5	49,5	33	36	36	WHOS 16-R 1/2
	20	G 3/4 A	250	16	25,5	32	55,5	41	46	41	WHOS 20-R 3/4
	25	G 1 A		18	31	35	66	46	50	46	WHOS 25-R 1
	30	G 1 1/4 A		20	34	40,5	76	57	60	60	WHOS 30-R 1 1/4
	38	G 1 1/2 A		22	40	45	86	64	70	65	WHOS 38-R 1 1/2



Female stud couplings

Female stud thread :
BSP thread, parallel



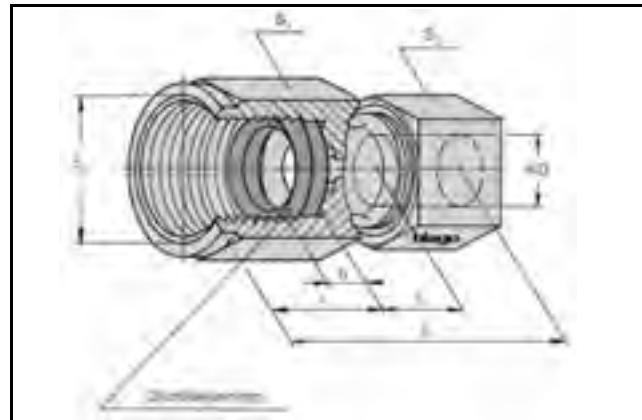
Series	NP	Tube OD	d ₃	i	l ₁	L	S ₁	S ₂	kg %	Blago Part No.
L	315	6	G 1/8	12	7	34	14	14	2,5	GAIL 06-R 1/8
		8	G 1/4	17	7	39	19	17	4,5	GAIL 08-R 1/4
		8	G 3/8	17	8	40	24	17	5,5	GAIL 08-R 3/8
		8	G 1/2	20	8	43	27	17	4,5	GAIL 08-R 1/2
		10	G 1/4	17	8	40	19	19	4,5	GAIL 10-R 1/4
		12	G 3/8	17	9	41	24	22	9,0	GAIL 12-R 3/8
		12	G 1/2	20	9	44	27	22	8,5	GAIL 12-R 1/2
		15	G 1/2	20	11	46	27	27	13,0	GAIL 15-R 1/2
		15	G 3/8	17	10	42	22	27	8,5	GAIL 15-R 3/8
	160	18	G 1/2	20	10,5	47	27	32	15,0	GAIL 18-R 1/2
		18	G 3/8	17	9,5	43	27	32	14,0	GAIL 18-R 3/8
		22	G 3/4	22	13,5	52	36	36	25,5	GAIL 22-R 3/4
S	400	28	G 1	24,5	13,5	54,5	41	41	30,0	GAIL 28-R 1
		35	G 1 1/4	26,5	14,5	62,5	55	50	42,0	GAIL 35-R 1 1/4
		6	G 1/4	17	9	41	19	17	6,0	GAIS 06-R 1/4
		8	G 1/4	17	9	41	19	19	6,5	GAIS 08-R 1/4
		10	G 3/8	17	9,5	43	24	22	9,0	GAIS 10-R 3/8
		12	G 3/8	17	9,5	43	24	24	10,0	GAIS 12-R 3/8
	315	14	G 1/2	20	12	50,5	30	27	13,0	GAIS 14-R 1/2
		16	G 1/2	20	11,5	50	30	30	16,0	GAIS 16-R 1/2
	315	20	G 3/4	22	12,5	56	36	36	26,0	GAIS 20-R 3/4
		25	G 1	24,5	13,5	62	41	46	40,0	GAIS 25-R 1

Seite wurde Bearbeitet!

Gauge couplings with taper sealing



Female stud thread :
BSP thread, parallel

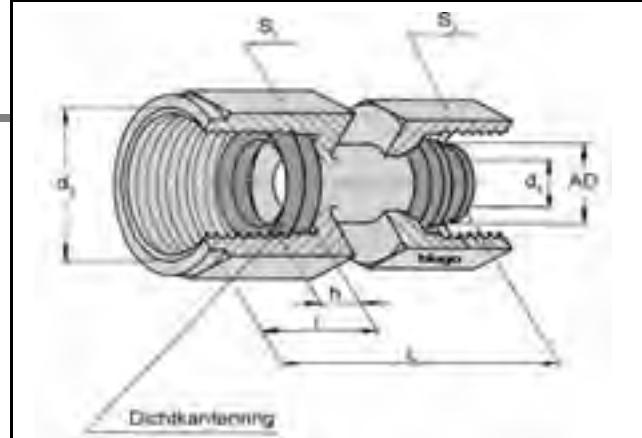


Series	NP	Tube OD	d_3	i	l_2	L	S_1	S_2	h	kg %	Blago Part No.		
L	315	06	G 1/4	13	9	37	19	14	4,5	4,6	MAVL 06-R 1/4		
		08						17		5,3	MAVL 08-R 1/4		
		10				38		19		6,2	MAVL 10-R 1/4		
		12						22		7,0	MAVL 12-R 1/4		
S	630	06	G 1/2	19	12	46	27	17	5	10,5	MAVS 06-R 1/2		
		08						19		10,7	MAVS 08-R 1/2		
		10		11,5	47			22		12,5	MAVS 10-R 1/2		
		12						24		13,4	MAVS 12-R 1/2		

Gauge couplings adjustable

Female stud thread :
BSP thread, parallel

Pre-assembled
with cutting ring



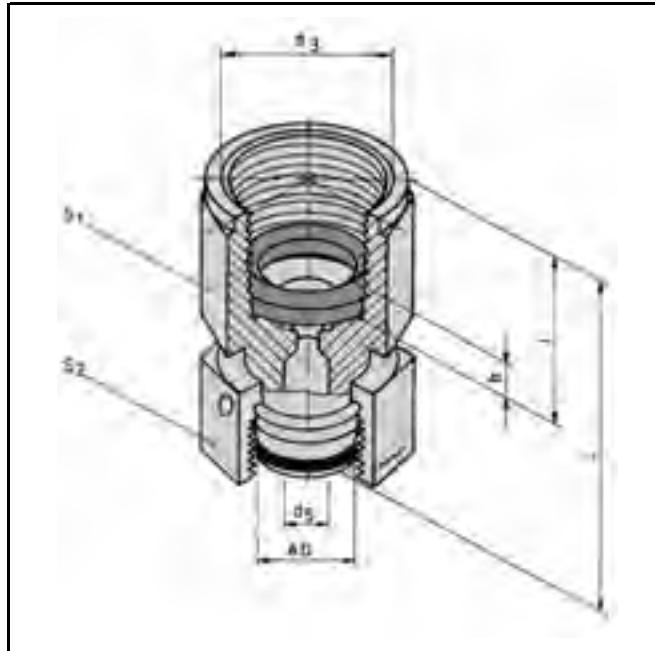
Series	NP	Tube OD	d_3	i	d_5	L	S_1	S_2	h	kg %	Blago= Part No.
L	315	06	G 1/4	13	3,5	40,5	19	14	4,5	4,6	MAVEL 06-R 1/4
		08						17		5,3	MAVEL 08-R 1/4
		10						19		6,2	MAVEL 10-R 1/4
		12						22		7,0	MAVEL 12-R 1/4
S	640	06	G 1/2	19	3,5	47,5	27	17	5	10,5	MAVES 06-R 1/2
		08						19		10,7	MAVES 08-R 1/2
		10						22		12,5	MAVES 10-R 1/2
		12						24		13,4	MAVES 12-R 1/2



Gauge couplings with taper sealing

Internal thread :
BSP thread, parallel

Nut pre-assembled



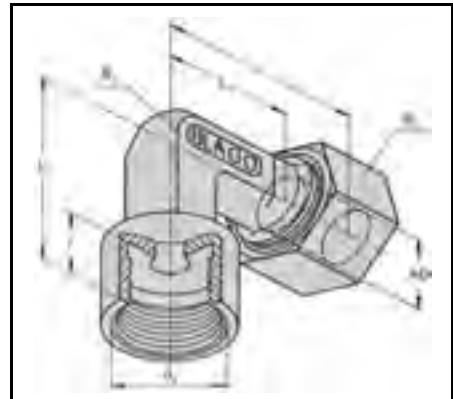
Series	NP	Tube OD	d ₃	i	d ₅	L	S ₁	S ₂	h	Blago Part No.
L	315	06	G 1/4	13	3,0	38,5	19	17	4,5	MAVEL 06-R 1/4 - DKO
		08			4,0	38,5		17		MAVEL 08-R 1/4 - DKO
		10			5,5	38,5		19		MAVEL 10-R 1/4 - DKO
		12			5,5	38,5		22		MAVEL 12-R 1/4 - DKO
S	630	06	G 1/2	19	3,0	45,5	27	17	5	MAVES 06-R 1/2 - DKO
		08			4,0	45,5		19		MAVES 08-R 1/2 - DKO
		10			6,0	45,5		22		MAVES 10-R 1/2 - DKO
		12			7,0	45,5		24		MAVES 12-R 1/2 - DKO

Female elbow stud couplings



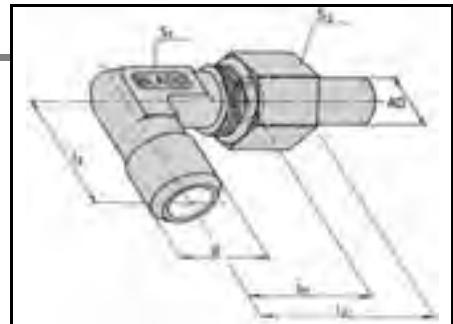
Female elbow stud couplings

Female stud thread :
BSP thread, parallel



Series	NP	Tube OD	i	L ₁	L ₁₁	L	S ₁	S ₂	d ₃	kg %	Blago Part No.
L	250	8	15	31	18	33	17	17	G 1/4	3,2	WAIL 08-R 1/4
		8	15	37	22	37	19	17	G 3/8	3,1	WAIL 08-R 3/8
		8	17	36	23	38	19	17	G 1/2	3,0	WAIL 08-R 1/2
		10	15	31	18	33	17	19	G 1/4	5,1	WAIL 10-R 1/4
		10	15	37	22	37	19	19	G 3/8	5,8	WAIL 10-R 3/8
		10	17	36	23	38	19	19	G 1/2	6,5	WAIL 10-R 1/2
		12	15	35	23	38	19	22	G 3/8	7,4	WAIL 12-R 3/8
	160	12	17	36	23	38	19	22	G 1/2	7,3	WAIL 12-R 1/2
		15	17	42	30	45	27	27	G 1/2	12,2	WAIL 15-R 1/2
		15	15	35	21	36	19	27	G 3/8	12,0	WAIL 15-R 3/8
		18	18	42	29,5	46	27	32	G 1/2	16,9	WAIL 18-R 1/2
		18	15	36	23,5	40	24	32	G 3/8	16,8	WAIL 18-R 3/8
		22	20	48	34,5	51	36	36	G 3/4	24,2	WAIL 22-R 3/4

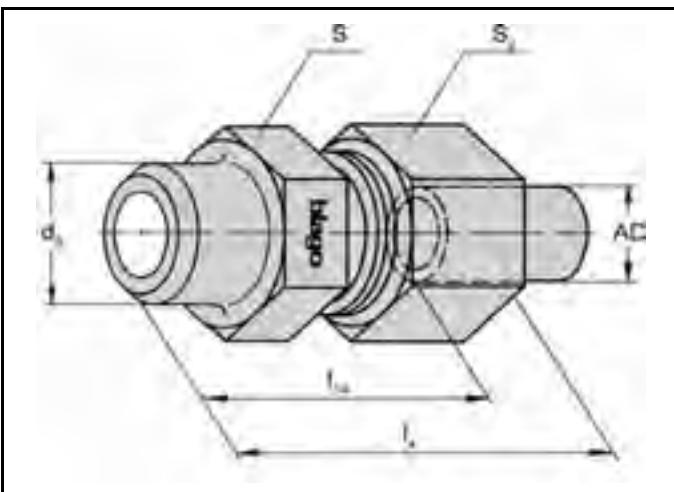
Weldable couplings



Series	NP	Tube OD	S ₂	S ₁	d	I ₁₁	I ₂	I ₃	kg %	Blago Part No.
L	315	6	14	12	10	12	27	20	3,0	CASL 06
		8	17	12	12	14	29	26	3,6	CASL 08
		10	19	14	14	15	30	27	5,2	CASL 10
		12	22	17	16	17	32	28	7,3	CASL 12
		15	27	19	19	21	36	32	12,0	CASL 15
		18	32	24	22	23,5	40	36	16,6	CASL 18
		22	36	27	27	27,5	44	35	24,6	CASL 22
S	630	6	17	12	11	16	31	26	5,2	CASS 06
		8	19	14	13	17	32	27	6,4	CASS 08
		10	22	17	16	17,5	34	23,5	9,7	CASS 10
		12	24	17	17	21,5	38	28	10,8	CASS 12
		14	27	19	19	22	40	32	15,3	CASS 14
	400	16	30	24	21	24,5	43	33	18,8	CASS 16
		20	36	27	26	26,5	48	37	30,3	CASS 20

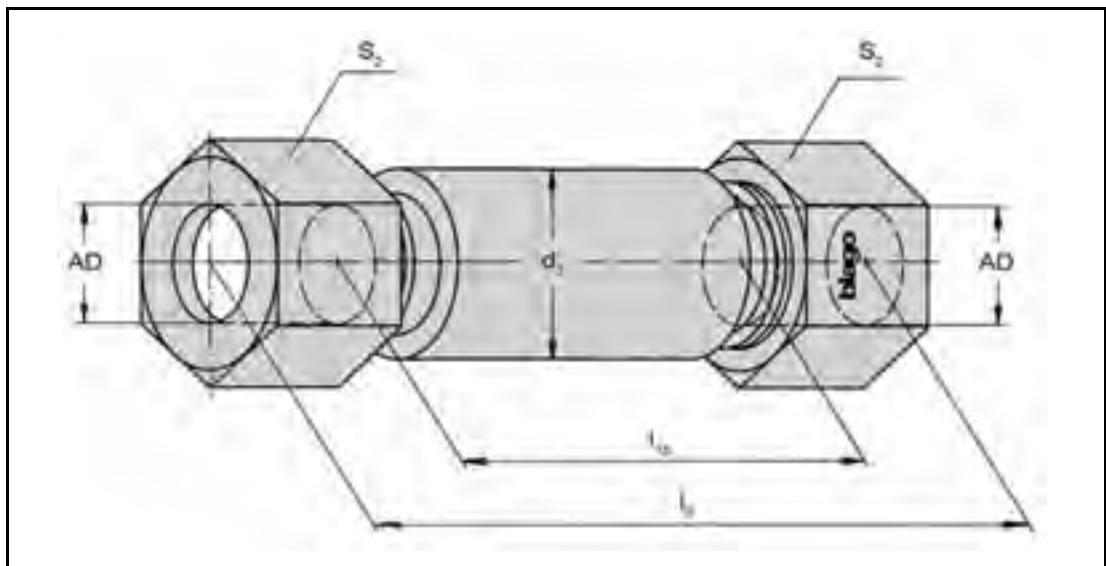


Weld-on bosses

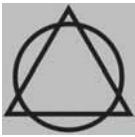


Series	NP	Tube OD	S	S ₂	d ₅	l ₁₄	l ₄	DIN 2353	kg %	Blago Part No.
L	315	6	12	14	10	14	29	XL 6	2,5	ASL 06
		8	14	17	12	16	31	XL 8	3,6	ASL 08
		10	17	19	14	18	33	XL 10	4,7	ASL 10
		12	19	22	16	18	33	XL 12	6,3	ASL 12
		15	22	27	19	22	37	XL 15	8,4	ASL 15
		18	27	32	22	23,5	40	XL 18	13,9	ASL 18
	160	22	32	36	27	28,5	45	XL 22	18,1	ASL 22
		28	41	41	32	30,5	47	XL 28	30,2	ASL 28
		35	46	50	40	32,5	54	XL 35	37,7	ASL 35
		42	55	60	46	35	58	XL 42	64,1	ASL 42
S	630	6	14	17	11	19	34	XS 6	3,2	ASS 06
		8	17	19	13	21	36	XS 8	4,9	ASS 08
		10	19	22	15	22,5	39	XS 10	7,2	ASS 10
		12	22	24	17	24,5	41	XS 12	8,3	ASS 12
		14	24	27	19	27	45	XS 14	10,8	ASS 14
	400	16	27	30	21	26,5	45	XS 16	14,4	ASS 16
		20	32	36	26	29,5	51	XS 20	21,8	ASS 20
		25	41	46	31	32	56	XS 25	37,7	ASS 25
		30	46	50	36	35,5	62	XS 30	44,9	ASS 30
		315	38	55	60	44	38	XS 38	68,4	ASS 38

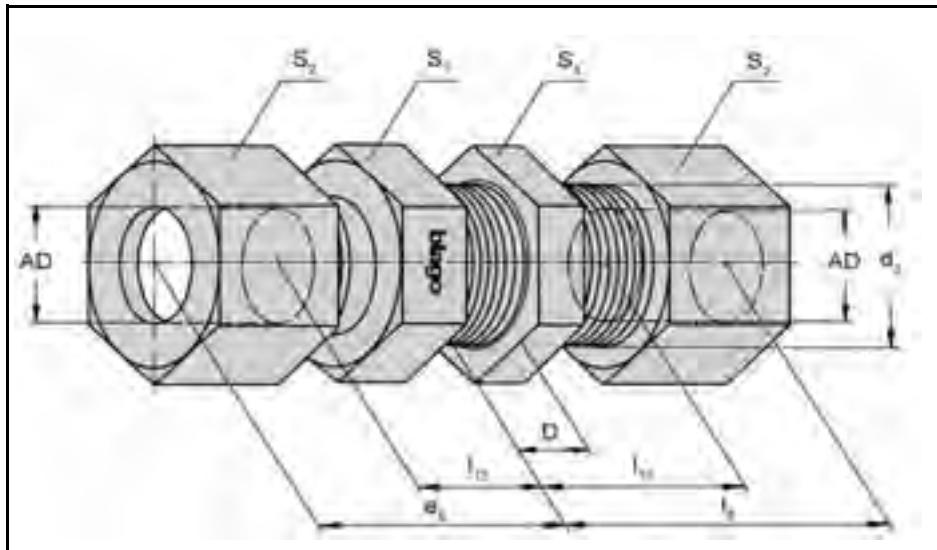
Weld-on bulkhead couplings



Series	NP	Tube OD	S ₂	d ₃	l ₁₅	l ₅	DIN 2353	kg %	Blago Part No.
L	500	6	14	18	56	86	YL 6	13,1	ESVL 06
		8	17	20	56	86	YL 8	16,2	ESVL 08
		10	19	22	58	88	YL 10	19,5	ESVL 10
	400	12	22	25	58	88	YL 12	24,1	ESVL 12
		15	27	28	70	100	YL 15	35,3	ESVL 15
		18	32	32	69	102	YL 18	46,9	ESVL 18
	250	22	36	36	73	106	YL 22	58,2	ESVL 22
		28	41	40	73	106	YL 28	66,0	ESVL 28
		35	50	50	71	114	YL 35	102,9	ESVL 35
		42	60	60	70	116	YL 42	148,8	ESVL 42
S	800	6	17	20	60	90	YS 6	16,9	ESVS 06
		8	19	22	60	90	YS 8	20,4	ESVS 08
		10	22	25	59	92	YS 10	27,0	ESVS 10
	630	12	24	28	59	92	YS 12	33,1	ESVS 12
		14	27	30	72	108	YS 14	44,7	ESVS 14
		16	30	35	71	108	YS 16	57,8	ESVS 16
	420	20	36	38	71	114	YS 20	73,2	ESVS 20
		25	46	45	72	120	YS 25	114,6	ESVS 25
		30	50	50	73	126	YS 30	134,4	ESVS 30
		38	60	60	72	134	YS 38	191,3	ESVS 38

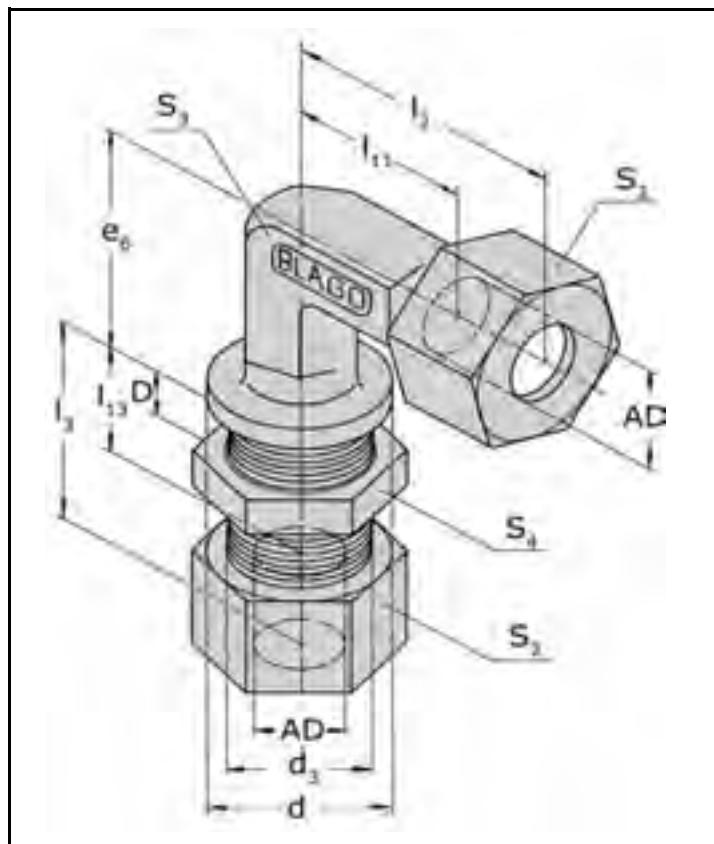
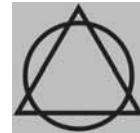


Straight bulkhead couplings



$D_{max} = 16 \text{ mm}$

Series	NP	Tube OD	S_1	S_2	S_4	l_3	l_{12}	l_{13}	e_5	d_3	DIN 2353	kg %	Blago Part No.
L	500	6	17	14	17	42	7	27	22	M 12 x 1,5	RL 6	6,7	SVL 06
		8	19	17	19	42	8	27	23	M 14 x 1,5	RL 8	8,4	SVL 08
		10	22	19	22	43	10	28	25	M 16 x 1,5	RL 10	11,0	SVL 10
	400	12	24	22	24	44	10	29	25	M 18 x 1,5	RL 12	13,3	SVL 12
		15	27	27	30	46	12	31	27	M 22 x 1,5	RL 15	22,8	SVL 15
		18	32	32	36	49	13,5	32,5	30	M 26 x 1,5	RL 18	33,2	SVL 18
	250	22	36	36	41	51	16,5	34,5	33	M 30 x 2	RL 22	41,5	SVL 22
		28	41	41	46	52	18,5	35,5	35	M 36 x 2	RL 28	52,5	SVL 28
		35	50	50	55	58	18,5	36,5	40	M 45 x 2	RL 35	80,0	SVL 35
		42	60	60	65	59	19	36	42	M 52 x 2	RL 42	119,3	SVL 42
S	800	6	19	17	19	44	12	29	27	M 14 x 1,5	RS 6	9,6	SVS 06
		8	22	19	22	44	13	29	28	M 16 x 1,5	RS 8	12,4	SVS 08
		10	24	22	24	46	14,5	29,5	31	M 18 x 1,5	RS 10	18,1	SVS 10
	630	12	27	24	27	47	14,5	30,5	31	M 20 x 1,5	RS 12	21,0	SVS 12
		14	30	27	30	50	17	32	35	M 22 x 1,5	RS 14	29,0	SVS 14
		16	32	30	32	50	16,5	31,5	35	M 24 x 1,5	RS 16	31,0	SVS 16
	420	20	41	36	41	55	17,5	33,5	39	M 30 x 2	RS 20	54,5	SVS 20
		25	46	46	46	59	20	35	44	M 36 x 2	RS 25	89,0	SVS 25
		30	50	50	50	64	21,5	37,5	48	M 42 x 2	RS 30	107,7	SVS 30
		38	65	60	65	68	22	37	53	M 52 x 2	RS 38	173,0	SVS 38

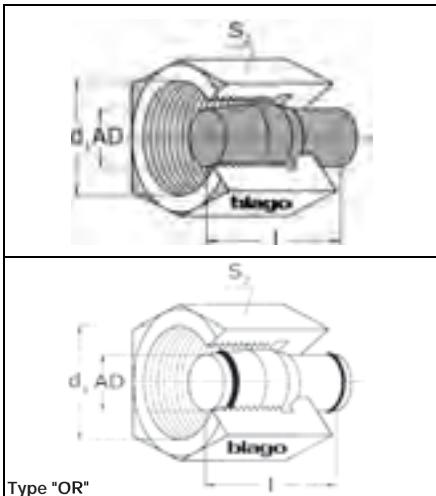


D_{max} = 16 mm

Series	NP	Tube OD	S ₂	S ₃	S ₄	I ₂	I ₃	I ₁₁	I ₁₃	e ₆	d	d ₃	DIN 2353	kg %	Blago Part No.
L	315	6	14	12	17	29	42	14	27	17	17	M 12 x 1,5	UL 6	7,5	USVL 06
		8	17	12	19	29	42	14	27	17	19	M 14 x 1,5	UL 8	9,9	USVL 08
		10	19	14	22	30	43	15	28	18	22	M 16 x 1,5	UL 10	12,0	USVL 10
		12	22	17	24	32	44	17	29	20	24	M 18 x 1,5	UL 12	15,0	USVL 12
		15	27	19	30	36	46	21	31	23	27	M 22 x 1,5	UL 15	25,0	USVL 15
		18	32	24	36	40	49	23,5	32,5	24	32	M 26 x 1,5	UL 18	35,5	USVL 18
	160	22	36	27	41	44	51	27,5	34,5	30	36	M 30 x 2	UL 22	46,5	USVL 22
		28	41	36	46	47	52	30,5	35,5	34	42	M 36 x 2	UL 28	64,0	USVL 28
		35	50	41	55	56	58	34,5	36,5	39	50	M 45 x 2	UL 35	99,4	USVL 35
		42	60	50	65	63	59	40	36	43	60	M 52 x 2	UL 42	149,0	USVL 42
S	630	6	17	12	19	31	44	16	29	17	19	M 14 x 1,5	US 6	10,5	USVS 06
		8	19	14	22	32	44	17	29	18	22	M 16 x 1,5	US 8	14,0	USVS 08
		10	22	17	24	34	46	17,5	29,5	20	24	M 18 x 1,5	US 10	19,0	USVS 10
		12	24	19	27	38	47	21,5	30,5	21	27	M 20 x 1,5	US 12	22,5	USVS 12
		14	27	19	30	40	50	22	32	23	27	M 22 x 1,5	US 14	30,0	USVS 14
	400	16	30	24	32	43	50	24,5	31,5	24	30	M 24 x 1,5	US 16	36,5	USVS 16
		20	36	27	41	48	55	26,5	33,5	30	36	M 30 x 2	US 20	58,0	USVS 20
		25	46	36	46	54	59	30	35	34	42	M 36 x 2	US 25	100,0	USVS 25
		30	50	41	50	62	64	35,5	37,5	39	50	M 42 x 2	US 30	130,0	USVS 30
		315	38	60	50	65	72	68	41	37	43	M 52 x 2	US 38	197,0	USVS 38

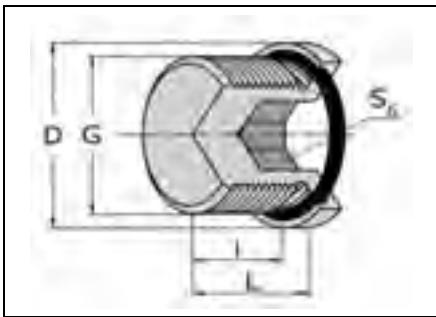


Blanking plugs with Blago tapers



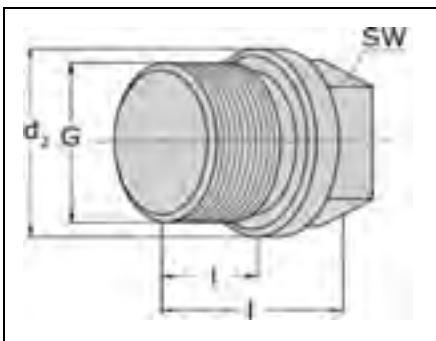
Series	NP	AD	i	d ₁	S ₂	Blago Part No.		kg %
L	500	6	19	M 12x1,5	14	Butzen L 6	Butzen L 6 OR	1,90
		8	19	M 14x1,5	17	Butzen L 8	Butzen L 8 OR	2,70
		10	21	M 16x1,5	19	Butzen L 10	Butzen L 10 OR	3,65
	400	12	21	M 18x1,5	22	Butzen L 12	Butzen L 12 OR	4,50
		15	21	M 22x1,5	27	Butzen L 15	Butzen L 15 OR	6,30
		18	22	M 26x1,5	32	Butzen L 18	Butzen L 18 OR	9,00
	250	22	23	M 30x2	36	Butzen L 22	Butzen L 22 OR	12,80
		28	22	M 36x2	41	Butzen L 28	Butzen L 28 OR	17,60
		35	25	M 42x2	50	Butzen L 35	Butzen L 35 OR	30,00
		42	26	M 52x2	60	Butzen L 42	Butzen L 42 OR	43,65
S	800	6	19	M 14x1,5	17	Butzen S 06	Butzen S 06 OR	2,40
		8	19	M 16x1,5	19	Butzen S 08	Butzen S 08 OR	2,70
		10	21	M 18x1,5	22	Butzen S 10	Butzen S 10 OR	4,65
	630	12	21	M 20x1,5	24	Butzen S 12	Butzen S 12 OR	5,50
		14	21	M 22x1,5	27	Butzen S 14	Butzen S 14 OR	7,30
		16	22	M 24x1,5	30	Butzen S 16	Butzen S 16 OR	9,20
	420	20	23	M 30x2	36	Butzen S 20	Butzen S 20 OR	14,50
		25	26	M 36x2	46	Butzen S 25	Butzen S 25 OR	29,70
		30	27	M 42x2	50	Butzen S 30	Butzen S 30 OR	35,20
		38	31	M 52x2	60	Butzen S 38	Butzen S 38 OR	51,55

Locking screws with captive seal



G	D	L	i	S ₆	Blago Part No.
M 10x1	14	12	8	5	VST-M 10 x 1 WD
M 12x1,5	17	17	12	6	VST-M 12 x 1,5 WD
M 14x1,5	19	17	12	6	VST-M 14 x 1,5 WD
M 16x1,5	22	17	12	8	VST-M 16 x 1,5 WD
M 18x1,5	24	17	12	8	VST-M 18 x 1,5 WD
M 20x1,5	26	19	14	10	VST-M 20 x 1,5 WD
M 22x1,5	27	19	14	10	VST-M 22 x 1,5 WD
M 26x1,5	32	21	16	12	VST-M 26 x 1,5 WD
M 27x1,5	32	21	16	12	VST-M 27 x 2 WD
M 33x2	40	22,5	16	17	VST-M 33 x 2 WD
M 42x2	50	22,5	16	22	VST-M 42 x 2 WD
M 48x2	55	22,5	16	24	VST-M 48 x 2 WD
R 1/8	14	12	8	5	VST-R 1/8 WD
R 1/4	19	17	12	6	VST-R 1/4 WD
R 3/8	22	17	12	8	VST-R 3/8 WD
R 1/2	27	19	14	10	VST-R 1/2 WD
R 3/4	32	21	16	12	VST-R 3/4 WD
R 1	40	22,5	16	17	VST-R 1 WD
R 1 1/4	50	22,5	16	22	VST-R 1 1/4 WD
R 1 1/2	55	22,5	16	24	VST-R 1 1/2 WD

Locking screws with external hexagon DIN 910

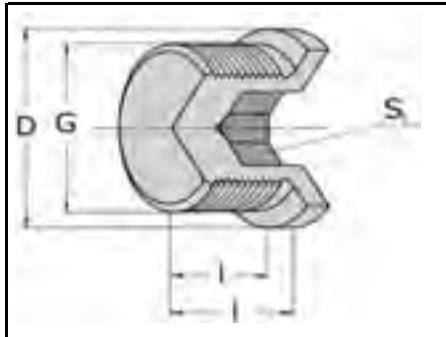
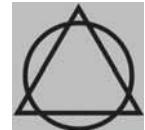


d ₂	i	i	SW	Blago Part No.	R
14	17	8	10	910-M 10x1	910-R 1/8
17	21	12	13	910-M 12x1,5	
18	17	8	13		910-R 1/4
18	21	12	13		910-R 1/4
19	21	12	13	910-M 14x1,5	
21	21	12	17	910-M 16x1,5	
22	17	8	17		910-R 3/8
22	21	12	17		910-R 3/8
23	24	12	17	910-M 18x1,5	
25	26	14	19	910-M 20x1,5	
26	22	10	19		910-R 1/2
26	26	14	19		910-R 1/2
27	26	14	19	910-M 22x1,5	
28	22	10	19		910-R 5/8
28	26	14	19		910-R 5/8
29	27	14	22	910-M 24x1,5	
31	28	16	24	910-M 26x1,5	
32	26	12	24		910-R 3/4
32	30	16	24		910-R 3/4
36	26	12	24		910-R 7/8
36	30	16	24	910-M 30x1,5	910-R 7/8
39	32	16	27		910-R 1
42	32	16	27	910-M 36x1,5	
44	32	16	27	910-M 38x1,5	910-R 1 1/8
46	32	16	27		
49	33	16	30	910-M 42x1,5	910-R 1 1/4
52	33	16	30	910-M 45x1,5	
55	33	16	30	910-M 48x1,5	910-R 1 1/2
60	33	16	30	910-M 52x1,5	

G: see Blago Part No.



Locking screws with internal hexagon DIN 908



DIN 908

Metric, parallel

BSP thread

Parallel

Form A DIN 3852

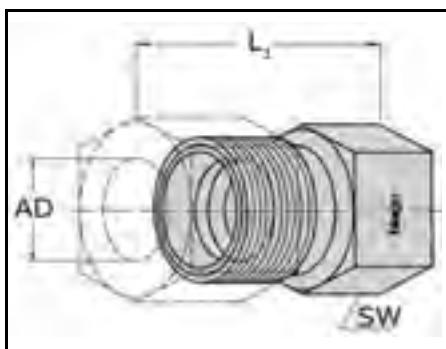
see page 10/11

Sealing ring DIN 7603 required

G: see Blago Part No.

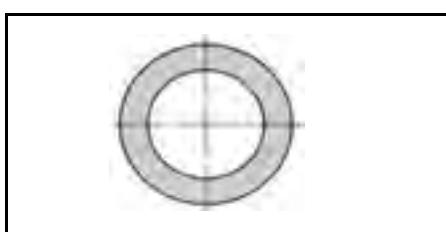
D	I	i	S ₆	Blago Part No.	
14	11	15	5	DIN 908-M 10 x 1	DIN 908-R 1/8
17			6	DIN 908-M 12 x 1,5	
18					DIN 908-R 1/4
19			12	DIN 908-M 14 x 1,5	
21			8	DIN 908-M 16 x 1,5	
22					DIN 908-R 3/8
23			16	DIN 908-M 18 x 1,5	
25		18	10	DIN 908-M 20 x 1,5	
26					DIN 908-R 1/2
27			14	DIN 908-M 22 x 1,5	
28			12		DIN 908-R 3/8
29				DIN 908-M 24 x 1,5	
31			20	DIN 908-M 26 x 1,5	
32		21			DIN 908-R 3/4
36			17	DIN 908-M 30 x 1,5	DIN 908-R 7/8
39					DIN 908-M 33 x 2
42			19	DIN 908-M 36 x 1,5	DIN 908-R 1 1/8
44				DIN 908-M 38 x 1,5	
46			22	DIN 908-M 42 x 1,5	DIN 908-R 1 1/4
49				DIN 908-M 45 x 1,5	DIN 908-R 45 x 2
52					
55			24	DIN 908-M 48 x 1,5	DIN 908-R 48 x 2
60				DIN 908-M 52 x 1,5	DIN 908-R 52 x 2

Blanking ends



Series	NP	Tube OD	Hexagon	L	kg %	Blago Part No.
L	315	6	12	21,5	1,0	VL 06
		8	14	22,5	1,4	VL 08
		10	17	23,5	1,8	VL 10
		12	19	24,5	2,5	VL 12
		15	24	26	4,3	VL 15
		18	27	27,5	6,4	VL 18
160	160	22	32	29,5	8,8	VL 22
		28	41	31	14,5	VL 28
		35	46	36	20,4	VL 35
		42	55	38,5		VL 42
S	630	6	14	25,5	2,0	VS 06
		8	17	25,5	2,6	VS 08
		10	19	28,5	3,7	VS 10
		12	22	30,5	4,9	VS 12
		14	24	33,5	6,7	VS 14
400	400	16	27	33,5	8,7	VS 16
		20	32	39	13,6	VS 20
		25	41	44	24,8	VS 25
		30	46	47	34,9	VS 30
		315	55	54	54,0	VS 38

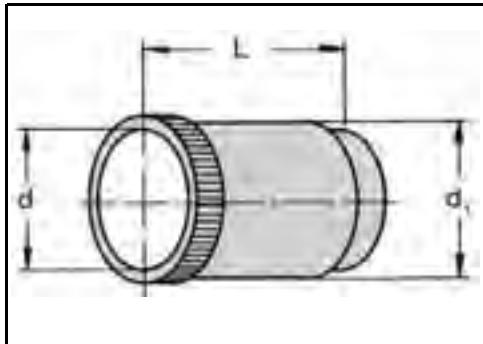
Sealing rings DIN 7603



For locking screws acc. to DIN 908, 910 and 7604 as well as stud thread DIN 3852 - Form A. Can be supplied in different dimensions. Please indicate thickness, internal and external diameter when you inquire.

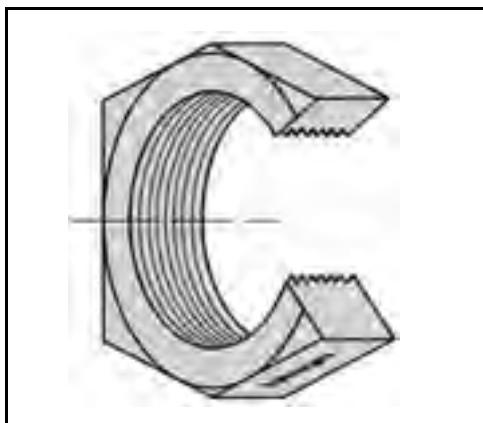


Reinforcing sleeves in brass



Tube Dimension	Tube ID	L	d	d ₁	kg %	Blago Part No.
6 x 1	4	15,5	2,6	3,8	0,08	VSH 6 x 1 MS
8 x 1	6	15,5	4,6	5,8	0,13	VSH 8 x 1 MS
10 x 1,5	7	16,5	5,6	6,8	0,17	VSH 10 x 1,5 MS
10 x 1	8	16,5	6,6	7,8	0,14	VSH 10 x 1 MS
12 x 1,5	9	16,5	7,6	8,8	0,22	VSH 12 x 1,5 MS
12 x 1	10	16,5	8,6	9,8	0,23	VSH 12 x 1 MS
14 x 1	12	16,5	10,2	11,8	0,33	VSH 14 x 1 MS
15 x 1,5	12	16,5	10,2	11,8	0,40	VSH 15 x 1,5 MS
15 x 1	13	16,5	11,2	12,8	0,44	VSH 15 x 1 MS
18 x 1,5	15	16,5	13,2	14,8	0,52	VSH 18 x 1,5 MS
18 x 1	16	16,5	14,2	15,8	0,56	VSH 18 x 1 MS
20 x 1	18	21	16,2	17,8	0,80	VSH 20 x 1 MS
22 x 1,5	19	18	17,2	18,8	0,69	VSH 22 x 1,5 MS
22 x 1	20	18	18,2	19,8	0,73	VSH 22 x 1 MS
25 x 1,5	22	21	20,2	21,8	1,05	VSH 25 x 1,5 MS
25 x 1	23	21	21,2	22,8	1,10	VSH 25 x 1 MS
28 x 2	24	18	22,2	23,8	0,88	VSH 28 x 2 MS
28 x 1,5	25	18	23,2	24,8	0,92	VSH 28 x 1,5 MS
28 x 1	26	18	24,2	25,8	0,96	VSH 28 x 1 MS

Counter nuts DIN 80 705



Tube OD	d ₃	h	S	kg %	Blago Part No.
6	M 12 x 1,5	6	17	0,7	KML 06
8	M 14 x 1,5	6	19	0,8	KML 08
10	M 16 x 1,5	6	22	1,1	KML 10
12	M 18 x 1,5	6	24	1,2	KML 12
15	M 22 x 1,5	7	30	2,3	KML 15
18	M 26 x 1,5	8	36	4,0	KML 18
22	M 30 x 2	8	41	4,9	KML 22
28	M 36 x 2	9	46	6,2	KML 28
35	M 45 x 2	9	55	7,7	KML 35
42	M 52 x 2	10	65	11,2	KML 42
6	M 14 x 1,5	6	19	0,8	KMS 06
8	M 16 x 1,5	6	22	1,1	KMS 08
10	M 18 x 1,5	6	24	1,2	KMS 10
12	M 20 x 1,5	6	27	1,6	KMS 12
14	M 22 x 1,5	7	30	2,3	KMS 14
16	M 24 x 1,5	7	32	2,5	KMS 16
20	M 30 x 2	8	41	4,9	KMS 20
25	M 36 x 2	9	46	6,2	KMS 25
30	M 42 x 2	9	50	6,0	KMS 30
38	M 52 x 2	10	65	11,2	KMS 38

Blagoflex non return valves
Tube connection on both sides



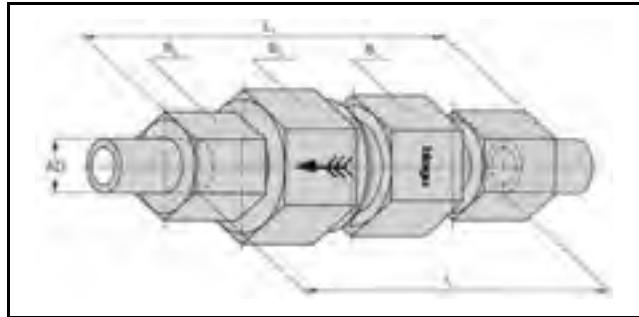
Blagoflex non return valves
Tube connection on both sides

Standard type :
Opening pressure 1 bar

Operating temperature :
-20 to +100 °C

Special types with opening pressure
0,2; 0,25; 0,5; 2; 3 bar on request.

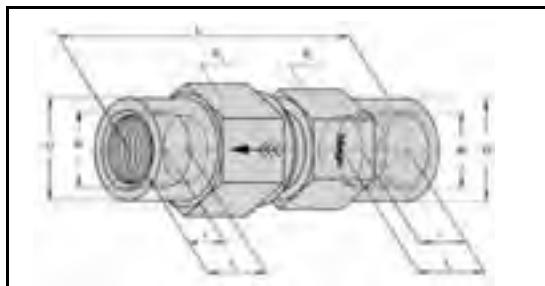
Please respect flow direction !



Series	NP	Tube OD	NW	LW Drilling	S ₁	S ₂	S ₃	L ₁	L ₂	kg %	Blago Part No.
L	400	6	4	3,5	17	14	17	58	29	6,5	RHDL 06
		8	6	5,5	19	17	19	59	30	8,0	RHDL 08
		10	8	7,5	22	19	24	69,5	40,5	14,0	RHDL 10
		12	10	9,5	27	22	30	72,5	43,5	21,0	RHDL 12
		15	12	11,5	27	27	32	77,5	47,5	25,0	RHDL 15
	250	18	16	14	36	32	41	83,5	51,5	40,0	RHDL 18
		22	20	18	41	36	46	93,5	61,5	61,0	RHDL 22
		28	25	23	50	41	55	102,5	69,5	88,0	RHDL 28
		35	32	29	60	50	65	117,5	74,5	170,5	RHDL 35
		42	32	29	65	60	70	119	74		RHDL 42
S	420	6	3	3,5	19	17	19	63,5	34,5	9,5	RHDS 06
		8	4	3,5	19	19	19	63,5	34,5	11,0	RHDS 08
		10	6	5,5	22	22	24	72,5	40,5	18,0	RHDS 10
		12	8	7,5	24	24	27	74,5	42,5	21,5	RHDS 12
		14	10	9,5	27	27	32	82,5	47,5	30,0	RHDS 14
	250	16	12	11,5	32	30	36	86,5	50,5	40,0	RHDS 16
		20	16	15	41	36	50	97,5	54,5	69,0	RHDS 20
		25	20	19	46	46	55	106,5	58,5	103,5	RHDS 25
		30	25	24	60	50	60	122,5	69,5	159,0	RHDS 30
		38	32	29	65	60	70	136,5	75,5	227,0	RHDS 38

Blagoflex non return valves
Tube connection / Stud thread

Standard type :
Opening pressure 1 bar
Operating temperature :
-20 to +100 °C
Special type with
opening pressure 0,2; 0,25; 0,5; 2; 3 bar on
request.
Please respect flow direction !



NP	d ₃	S ₁	S ₃	L	t _{1 min}	t ₂	D	NW metric	NW inch	kg %	Blago Part No.
400	G 1/8	19	19	42,5	8	12	19	3	-	8,5	RHDI-R 1/8
	G 1/4	19	19	51	12	16	19	4	-	7,6	RHDI-R 1/4
	G 3/8	24	27	60	12	17	24	8	1/4	8,4	RHDI-R 3/8
315	G 1/2	32	36	72	15	20	32	12	1/2	34,4	RHDI-R 1/2
	G 3/4	41	46	84	16,5	22	41	16	1/2	48,5	RHDI-R 3/4
	G 1	46	50	95	19	25,5	46	20	3/4	82,3	RHDI-R 1
	G 1 1/4	60	60	110	21,5	28	60	25	1	153,6	RHDI-R 1 1/4
	G 1 1/2	65	70	114	22	28,5	65	32	1 1/2	193,0	RHDI-R 1 1/2
250											

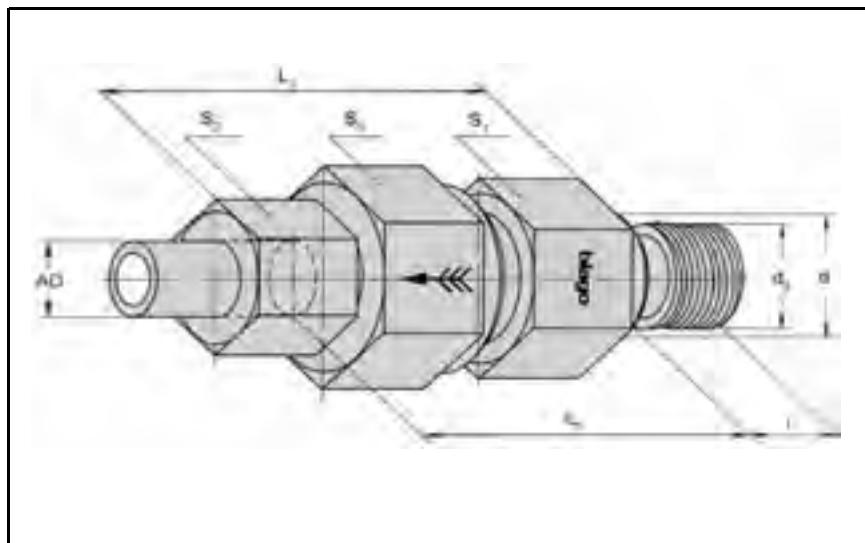


Blagoflex non return valves

Tube connection / Stud thread

Stud thread :
 Metric, parallel
 Stud thread
 with captive seal
Form E DIN 3852
(ISO 9974)
 See page 10/11

Standard type :
 Opening pressure 1 bar
 Operating temperature :
 -20 to +100 °C
 Special type with opening pressure
 0,2; 0,25; 0,5; 2; 3 bar on request.
 Please respect flow direction !



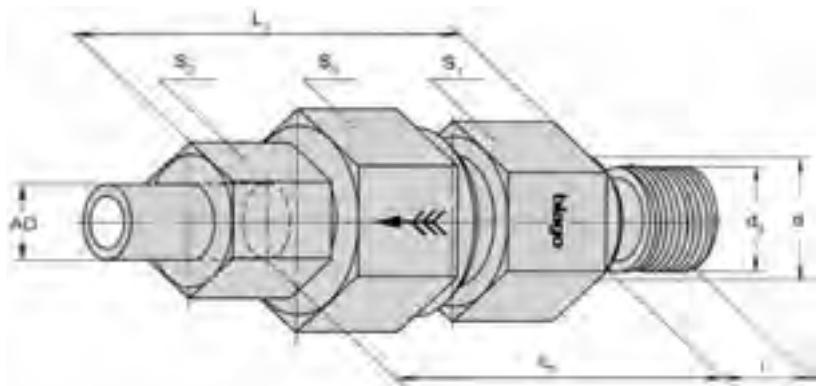
Series	NP	Tube OD	d ₃	NW	LW Drilling	S ₁	S ₂	S ₃	L ₁	L ₂	i	d	kg %	Blago Part No.
L	400	6	M 10 x 1	4	3,5	17	14	17	42,5	28	8	14	5,7	RHVL 06-M
		8	M 12 x 1,5	6	5,5	19	17	19	43,5	29	12	17	7,5	RHVL 08-M
		10	M 14 x 1,5	8	7,5	22	19	24	53	38,5	12	19	12,9	RHVL 10-M
		12	M 16 x 1,5	10	9,5	27	22	30	57	42,5	12	22	20,1	RHVL 12-M
		15	M 18 x 1,5	12	11,5	27	27	32	60,5	45,5	12	24	23,9	RHVL 15-M
		18	M 22 x 1,5	16	14	36	32	41	66	50	14	27	36,4	RHVL 18-M
	250	22	M 26 x 1,5	20	18	41	36	46	71	55	16	32	52,7	RHVL 22-M
		28	M 33 x 2	25	23	50	41	55	79,5	63	18	40	80,4	RHVL 28-M
		35	M 42 x 2	32	29	60	50	65	90,5	69	20	50	116,4	RHVL 35-M
		42	M 48 x 2	32	29	65	60	70	91	68,5	22	55	179,9	RHVL 42-M
S	420	6	M 12 x 1,5	3	3,5	19	17	19	46	31,5	12	17	8,9	RHVS 06-M
		8	M 14 x 1,5	4	3,5	19	19	19	46	31,5	12	19	9,9	RHVS 08-M
		10	M 16 x 1,5	6	5,5	22	22	24	54	38	12	22	15,7	RHVS 10-M
		12	M 18 x 1,5	8	7,5	24	24	27	57	41	12	24	19,5	RHVS 12-M
		14	M 20 x 1,5	10	9,5	27	27	32	62	44,5	14	26	27,4	RHVS 14-M
		16	M 22 x 1,5	12	11,5	32	30	36	66	48	14	27	36,9	RHVS 16-M
		20	M 27 x 2	16	15	41	36	50	73,5	52	16	32	62,8	RHVS 20-M
		25	M 33 x 2	20	19	46	46	55	78,5	54,5	18	40	86,7	RHVS 25-M
	250	30	M 42 x 2	25	24	60	50	60	90,5	64	20	50	140,9	RHVS 30-M
		38	M 48 x 2	32	29	65	60	70	100	69,5	22	55	197,0	RHVS 38-M

Blagoflex non return valves
Tube connection / Stud thread



Stud thread :
 Metric, parallel
 Stud thread
 with captive seal
Form E DIN 3852
(ISO 1179)
 See page 10/11

Standard type :
 Opening pressure 1 bar
 Operating temperature :
 -20 to +100 °C
 Special type with opening pressure
 0,2; 0,25; 0,5; 2; 3 bar on request.
 Please respect flow direction !



Series	NP	Tube OD	d ₃	NW	LW Drilling	S ₁	S ₂	S ₃	L ₁	L ₂	i	d	kg %	Blago Part No.
L	400	6	G 1/8	4	3,5	17	14	17	42,5	28	8	14	6,2	RHVL 06-R
		8	G 1/4	6	5,5	19	17	19	44,5	30	12	19	8,0	RHVL 08-R
		10	G 1/4	8	7,5	22	19	24	53	38,5	12	19	12,6	RHVL 10-R
		12	G 3/8	10	9,5	27	22	30	57	42,5	12	22	20,4	RHVL 12-R
		15	G 1/2	12	11,5	27	27	32	60,5	45,5	12	27	25,3	RHVL 15-R
		18	G 1/2	16	14	36	32	41	66	50	14	27	36,0	RHVL 18-R
	250	22	G 3/4	20	18	41	36	46	71	55	16	32	53,2	RHVL 22-R
		28	G 1	25	23	50	41	55	79,5	63	18	40	80,7	RHVL 28-R
		35	G 1 1/4	32	29	60	50	65	90,5	69	20	50	117,8	RHVL 35-R
		42	G 1 1/2	32	29	65	60	70	91	68,5	22	55	179,8	RHVL 42-R
S	420	6	G 1/4	3	3,5	19	17	19	46	31,5	12	19	9,2	RHVS 06-R
		8	G 1/4	4	3,5	19	19	19	46	31,5	12	19	9,7	RHVS 08-R
		10	G 3/8	6	5,5	22	22	24	54	38	12	22	16,5	RHVS 10-R
		12	G 3/8	8	7,5	24	24	27	57	41	12	22	19,1	RHVS 12-R
		14	G 1/2	10	9,5	27	27	32	62	44,5	14	27	27,7	RHVS 14-R
		16	G 1/2	12	11,5	32	30	36	66	48	14	27	36,6	RHVS 16-R
		20	G 3/4	16	15	41	36	50	73,5	52	16	32	63,1	RHVS 20-R
		25	G 1	20	19	46	46	55	78,5	54,5	18	40	86,3	RHVS 25-R
	250	30	G 1 1/4	25	24	60	50	60	90,5	64	20	50	140,3	RHVS 30-R
		38	G 1 1/2	32	29	65	60	70	100	69,5	22	55	196,9	RHVS 38-R

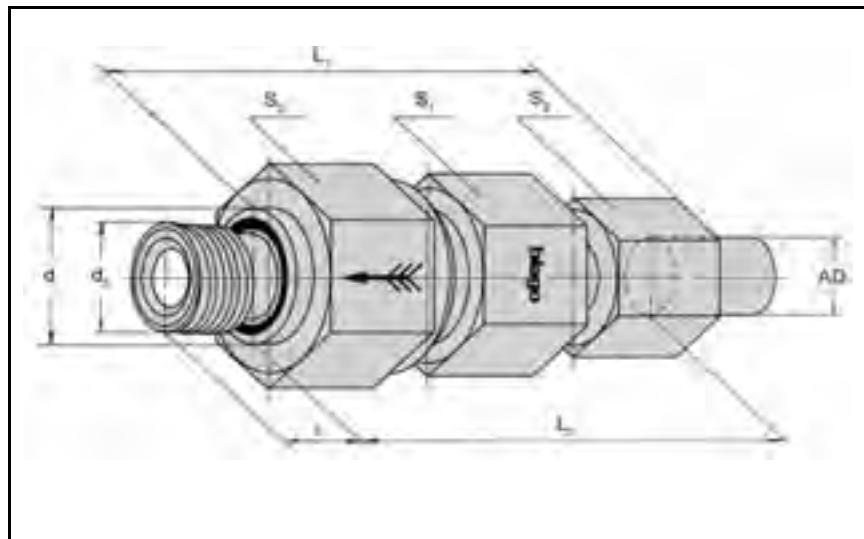


Blagoflex non return valves

Tube connection / Stud thread

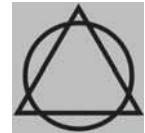
Stud thread :
 Metric, parallel
 Stud thread
 with captive seal
Form E DIN 3852
(ISO 9974)
 See page 10/11

Standard type :
 Opening pressure 1 bar
 Operating temperature :
 -20 to +100 °C
 Special type with opening pressure
 0,2; 0,25; 0,5; 2; 3 bar on request.
 Please respect flow direction !



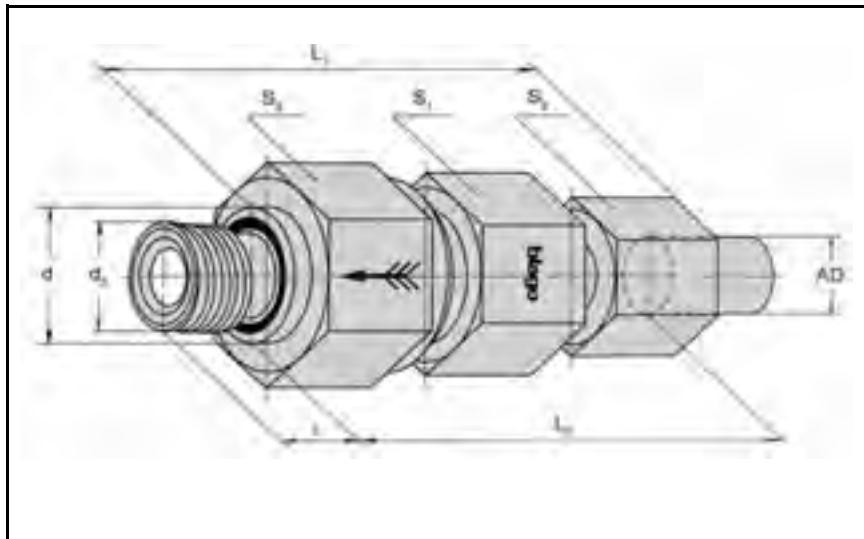
Series	NP	Tube OD	d ₃	NW	LW Drilling	S ₁	S ₂	S ₃	L ₁	L ₂	i	d	kg %	Blago Part No.
L	400	6	M 10 x 1	4	3,5	17	14	17	41	26,5	8	14	5,5	RHZL 06-M
		8	M 12 x 1,5	6	5,5	19	17	19	43	28,5	12	17	7,5	RHZL 08-M
		10	M 14 x 1,5	8	7,5	22	19	24	53	38,5	12	19	12,5	RHZL 10-M
		12	M 16 x 1,5	10	9,5	27	22	30	55	40,5	12	22	18,9	RHZL 12-M
		15	M 18 x 1,5	12	11,5	27	27	32	57,5	42,5	12	24	22,2	RHZL 15-M
		18	M 22 x 1,5	16	14	36	32	41	64	48	14	27	34,6	RHZL 18-M
	250	22	M 26 x 1,5	20	18	41	36	46	72	56	16	32	53,0	RHZL 22-M
		28	M 33 x 2	25	23	50	41	55	80,5	64	18	40	81,3	RHZL 28-M
		35	M 42 x 2	32	29	60	50	65	91,5	70	20	50	119,1	RHZL 35-M
		42	M 48 x 2	32	29	65	60	70	93	70,5	22	55	180,7	RHZL 42-M
S	420	6	M 12 x 1,5	3	3,5	19	17	19	46	31,5	12	17	8,9	RHZS 06-M
		8	M 14 x 1,5	4	3,5	19	19	19	46	31,5	12	19	9,8	RHZS 08-M
		10	M 16 x 1,5	6	5,5	22	22	24	54	38	12	22	15,6	RHZS 10-M
		12	M 18 x 1,5	8	7,5	24	24	27	57	41	12	24	19,5	RHZS 12-M
		14	M 20 x 1,5	10	9,5	27	27	32	61	43,5	14	26	27,2	RHZS 14-M
		16	M 22 x 1,5	12	11,5	32	30	36	64	46	14	27	35,2	RHZS 16-M
		20	M 27 x 2	16	15	41	36	50	71,5	50	16	32	60,8	RHZS 20-M
		25	M 33 x 2	20	19	46	46	55	78,5	54,5	18	40	96,5	RHZS 25-M
	250	30	M 42 x 2	25	24	60	50	60	90,5	64	20	50	139,6	RHZS 30-M
		38	M 48 x 2	32	29	65	60	70	102	71,5	22	55	197,8	RHZS 38-M

Blagoflex non return valves
Tube connection / Stud thread



Stud thread :
 BSP thread, parallel
 Stud thread
 with captive seal
Form E DIN 3852
(ISO 1179)
 See page 10/11

Standard type :
 Opening pressure 1 bar
 Operating temperature :
 -20 to +100 °C
 Special type with opening pressure
 0,2; 0,25; 0,5; 2; 3 bar on request.
 Please respect flow direction !

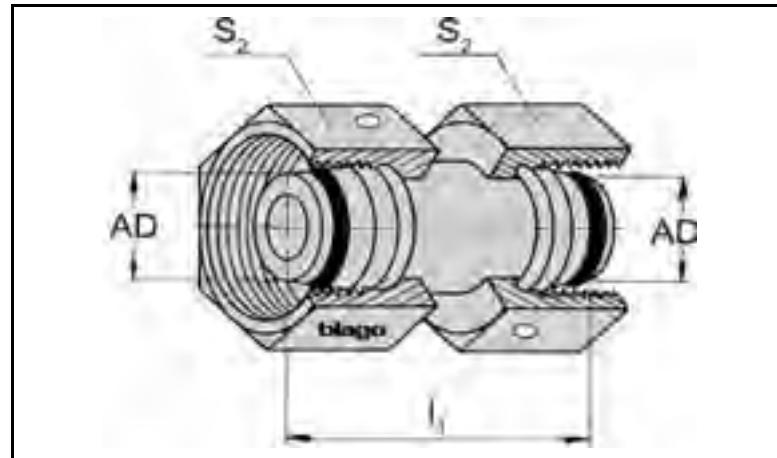


Series	NP	Tube OD	d ₃	NW	LW Drilling	S ₁	S ₂	S ₃	L ₁	L ₂	i	d	kg %	Blago Part No.
L	400	6	G 1/8	4	3,5	17	14	17	42,5	28	8	14	5,5	RHZL 06-R
		8	G 1/4	6	5,5	19	17	19	44,5	30	12	19	8,3	RHZL 08-R
		10	G 1/4	8	7,5	22	19	24	53	38,5	12	19	12,5	RHZL 10-R
		12	G 3/8	10	9,5	27	22	30	57	42,5	12	22	19,0	RHZL 12-R
		15	G 1/2	12	11,5	27	27	32	60,5	45,5	14	27	23,4	RHZL 15-R
		18	G 1/2	16	14	36	32	41	66	50	14	27	34,2	RHZL 18-R
	250	22	G 3/4	20	18	41	36	46	71	55	16	32	53,4	RHZL 22-R
		28	G 1	25	23	50	41	55	79,5	63	18	40	80,0	RHZL 28-R
		35	G 1 1/4	32	29	60	50	65	90,5	69	20	50	118,5	RHZL 35-R
		42	G 1 1/2	32	29	65	60	70	91	68,5	22	55	183,0	RHZL 42-R
S	420	6	G 1/4	3	3,5	19	17	19	46	31,5	12	19	9,1	RHXS 06-R
		8	G 1/4	4	3,5	19	19	19	46	31,5	12	19	9,7	RHXS 08-R
		10	G 3/8	6	5,5	22	22	24	54	38	12	22	16,1	RHXS 10-R
		12	G 3/8	8	7,5	24	24	27	57	41	12	22	19,0	RHXS 12-R
		14	G 1/2	10	9,5	27	27	32	62	44,5	14	27	27,8	RHXS 14-R
		16	G 1/2	12	11,5	32	30	36	66	48	14	27	34,8	RHXS 16-R
		20	G 3/4	16	15	41	36	50	73,5	52	16	32	63,4	RHXS 20-R
		25	G 1	20	19	46	46	55	78,5	54,5	18	40	86,3	RHXS 25-R
	250	30	G 1 1/4	25	24	60	50	60	90,5	64	20	50	139,7	RHXS 30-R
		38	G 1 1/2	32	29	65	60	70	100	69,5	22	55	200,1	RHXS 38-R

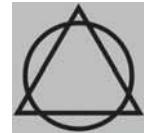


Intermediary pieces with taper seal

Nut pre-assembled

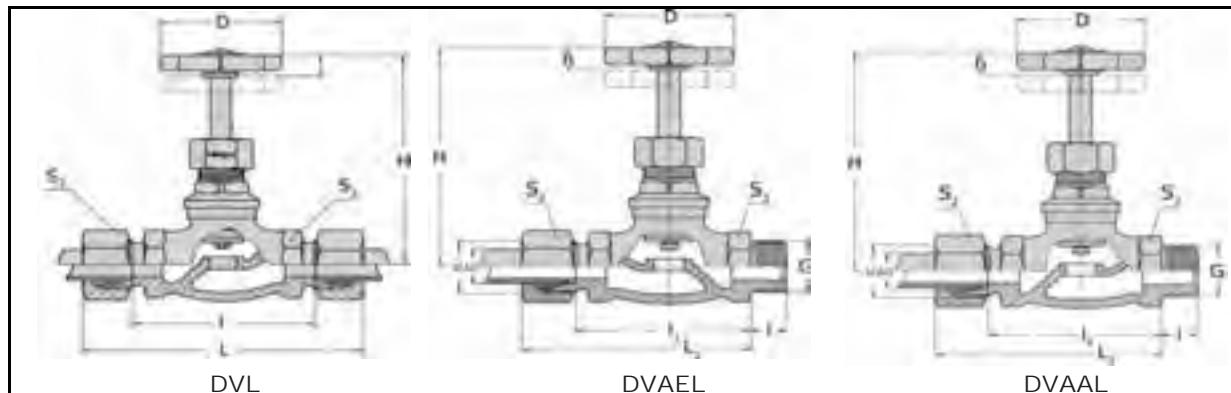


Series	NP	Tube OD	l_1	S_2	Blago Part No.	
L	500	06	32	17	ZWSTL 06	
		08	32	17	ZWSTL 08	
		10	33	19	ZWSTL 10	
	400	12	33,5	22	ZWSTL 12	
		15	38	27	ZWSTL 15	
		18	36	32	ZWSTL 18	
	250	22	42	36	ZWSTL 22	
		28	46	41	ZWSTL 28	
S		35	48	50	ZWSTL 35	
		42	54	60	ZWSTL 42	
800	06	32	17	ZWSTS 06		
	08	33	19	ZWSTS 08		
	10	33	22	ZWSTS 10		
630	12	36	24	ZWSTS 12		
	14	39	27	ZWSTS 14		
	16	39	30	ZWSTS 16		
420	20	45,5	36	ZWSTS 20		
	25	47	46	ZWSTS 25		
	30	52	50	ZWSTS 30		
	38	54	60	ZWSTS 38		



Shut-off valves PN 4

DIN 3512



Appropriate for warm water up to 100 °C, pressurized air and heating oil type EL and L up to 6 bar and 80°C

DVL: tube connection on both sides

DVAEL: inlet = BSP thread, outlet = tube connection

DVAAL: inlet : tube connection, outlet : BSP thread

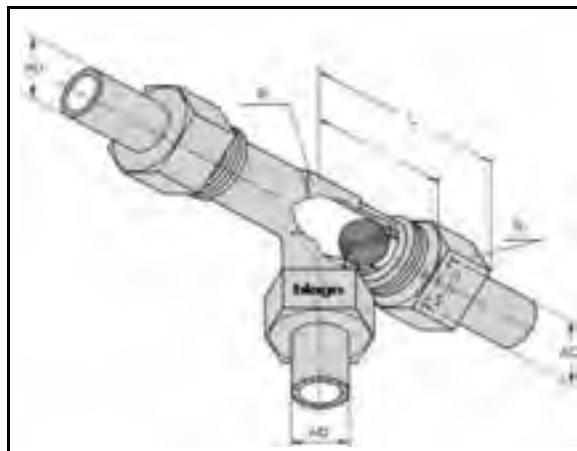
Tube OD	NW	S ₁	S ₂	G	M	H	h	I	L	I1	L1	i	D	Blago Part No.	kg %	Blago Part No.	kg %	Blago Part No.	kg %
6	4	19	14	R 1/8	M 12 x 1,5	77	6	46	61	43	51	10	50	DVL 6	22,5	DVAEL 6	20,0	DVAAL 6	20,0
8	6	19	17	R 1/4	M 14 x 1,5	77	6	46	61	43	51	10	50	DVL 8	22,5	DVAEL 8	21,2	DVAAL 8	21,2
10	8	19	19	R 1/4	M 16 x 1,5	77	6	46	61	42	50	11	50	DVL 10	23,0	DVAEL 10	21,2	DVAAL 10	21,2
12	10	22	22	R 3/8	M 18 x 1,5	80	6	61	76	57	65	11	50	DVL 12	29,5	DVAEL 12	25,5	DVAAL 12	25,5
15	12	27	27	R 1/2	M 22 x 1,5	83	7	64	80	59	67	12	50	DVL 15	42,5	DVAEL 15	37,0	DVAAL 15	37,0
18	16	27	32	R 1/2	M 26 x 1,5	83	7	63	80	58,5	67	12	50	DVL 18	46,5	DVAEL 18	42,0	DVAAL 18	42,0
22	20	32	36	R 3/4	M 30 x 2	100	9	77	94	70,5	79	14	55	DVL 22	70,5	DVAEL 22	57,8	DVAAL 22	57,8
28	25	41	41	R 1	M 36 x 2	115	10	94	112	87,5	97	14	70	DVL 28	107,5	DVAEL 28	91,5	DVAAL 28	91,5
35	32	46	50	-	M 45 x 2	130	10	111	133	-	-	-	80	DVL 35	151,0	-	-	-	-

Shuttle valves

Tube connection on 3 sides

Shuttle valves are valves with 2 inlet flows and one outlet flow. The inlet flow with the higher pressure ratio is linked with the outlet flow. The other inlet flow is automatically shut. There is no connection between both inlet flows.

Shuttle valves should not be used with compressed air and gas. Not appropriate for weld-on bosses, taper weld-on and other elements for which there is no tube edge. Leakage ratio with a static pressure ratio under a test pressure Pmax : about 20 drops per minute.



Series	Tube OD	NP	P _{max}	d	d ₁	L	I	S ₁	S ₂	d ₃	kg %	Blago Part No.	
L	8	160	250		4,5	4,5	29	14	14	17	M 14 x 1,5	10,7	WVL 08
	10				6,0	6,0	30	15	17	19	M 16 x 1,5	13,1	WVL 10
	12				7,5	7,5	32	17	19	22	M 18 x 1,5	17,5	WVL 12
	15				10,0	10,0	36	21	19	27	M 22 x 1,5	25,3	WVL 15

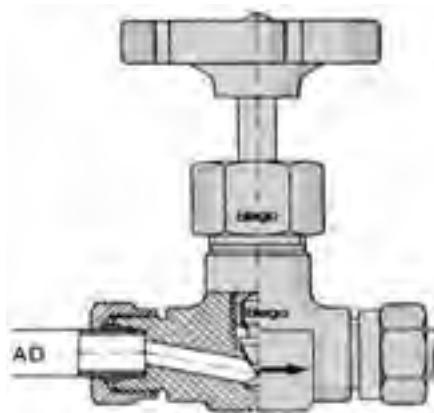


Blagoflex high pressure steel valves PN 250/400

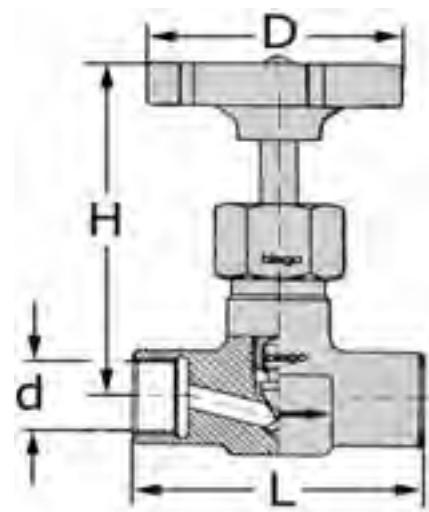
NW 4 - 8

Type steel, forged

Material	
Casing	C22
Spindle	4104
Valve cone	4034
Packing	Fibrous composite
Stuffing box	11SMn30
Nut	11SMn30
Hand wheel	Moulding material



Type I



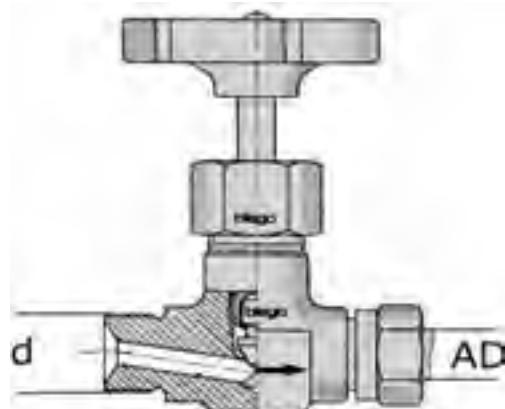
Type II

Internal thread can also be supplied with BSP thread.

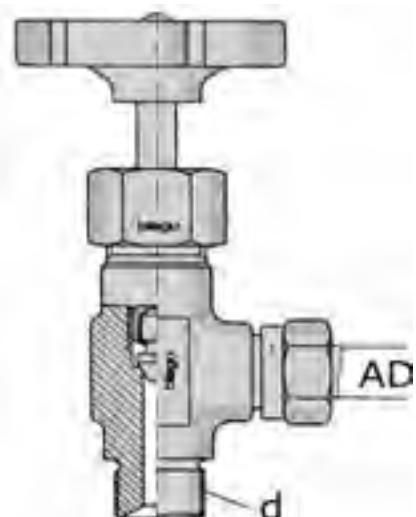
Material, connection type, medium, pressure and temperature should always be stated !

Series	NW	NP	Tube OD	Main dimensions				Blago Part No.	kg %
				d	L	~H	D		
L	4	250	6	M 12 x 1,5	64	95	63	DVEL - 6	0,35
	5		8	M 14 x 1,5				DVEL - 8	
	6		10	M 16 x 1,5				DVEL - 10	
	6 (8)		12	M 18 x 1,5				DVEL - 12	
S	4	400	6	M 14 x 1,5	64	95	63	DVES - 6	0,35
	5		8	M 16 x 1,5				DVES - 8	
	6		10	M 18 x 1,5				DVES - 10	
	6 (8)		12	M 20 x 1,5				DVES - 12	

External and internal threads can also be supplied with BSP thread.



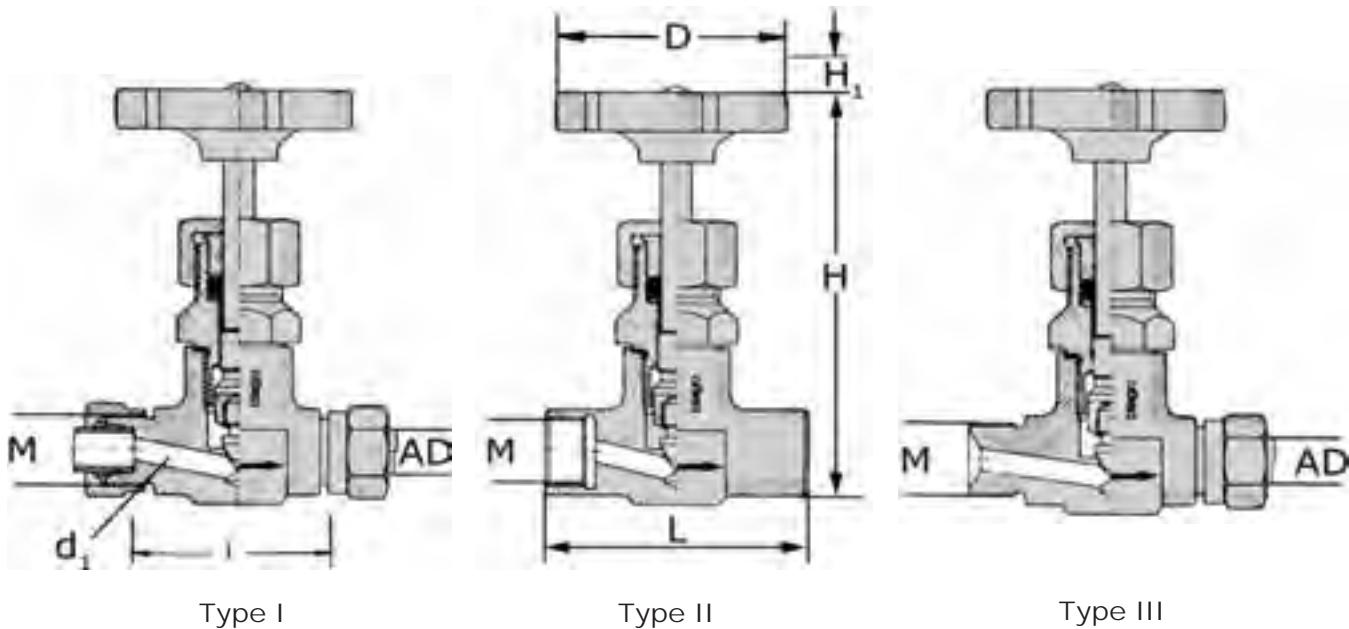
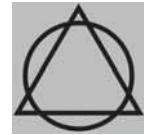
Type III



Type IV



**Blagoflex high pressure steel valves PN 640/400
NW 4 - 25**

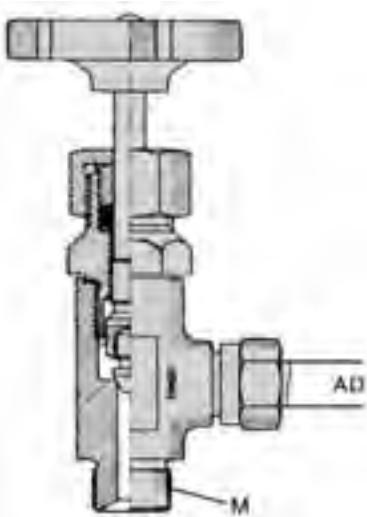


High pressure small valves in flow form
Body from chrom steel rust free,
Material No. 4104

Forged and coated
Hexagon head piece screwed in
Cone movable, hardened and grinding
Spindle with back sealing out of unrusty steel
appropriate up to 400 °C acc. to DIN 2401

Hand wheel out of special plastic with low
melting ratio for hydraulic, etc.
Appropriate for temperatures up to 80 °C
For higher temperatures undestructible hand wheel in
steel need to be used.
For lighter series please inquire L15, L18, L22.

Type in steel C22 or stainless steel 1.4571 only on request.



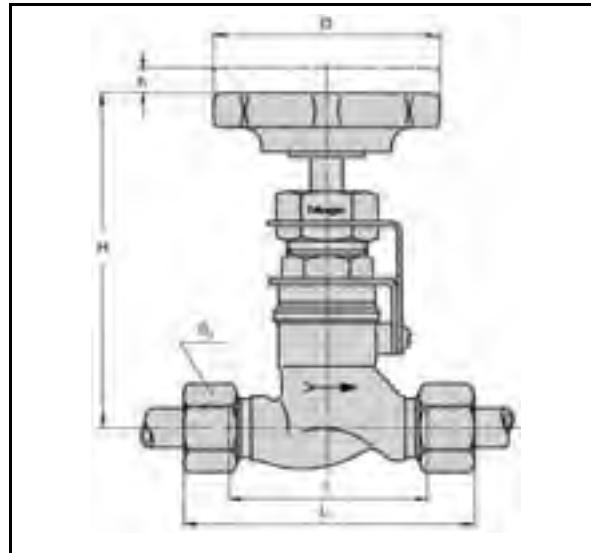
Material, connection type, medium, pressure and temperature should always be stated !

Tube OD	NW	NP	H	L	I	H1	D	Thread M	Blago Part No.	kg %	
6	4	680	80	120	66	5,5	90	M 14 x 1,5	DVHS - 6	100	
8	5				66			M 16 x 1,5	DVHS - 8	100	
10	7				65			M 18 x 1,5	DVHS - 10	110	
12	8				65			M 20 x 1,5	DVHS - 12	110	
14	10				84		100	M 22 x 1,5	DVHS - 14	130	
16	12	400	100		83			M 24 x 1,5	DVHS - 16	130	
20	13				79			M 30 x 2	DVHS - 20	130	
25	17				108	6		M 36 x 2	DVHS - 25	220	
30	20	250	140	130	103	120	M 42 x 2	DVHS - 30	210		
38	25				118		M 52 x 2	DVHS - 38	390		



Shut off valves PN 15 DIN 3512

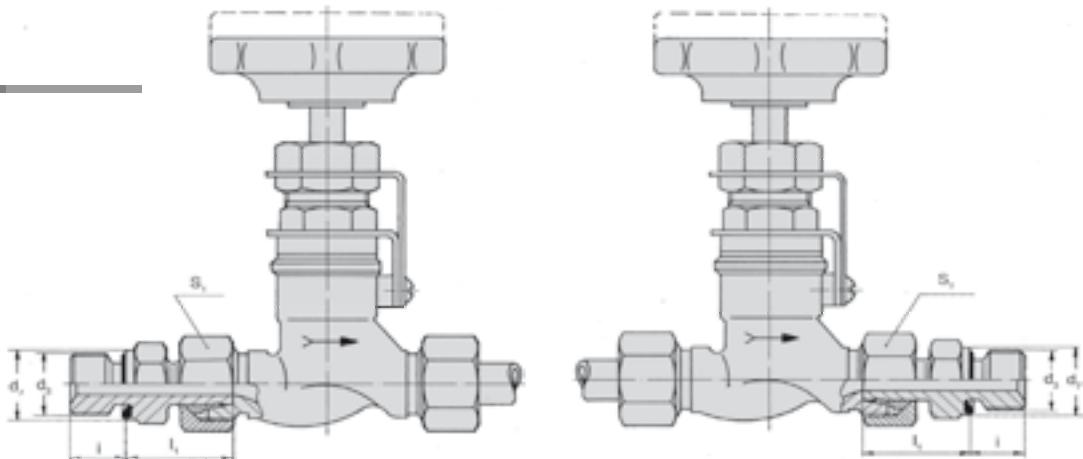
Hand wheel :	Plastic material type 74, DIN 388 form C (up to max. 150°C)
Spindle:	increasing with internal thread Material : CuZn35Ni (SoMs59)
Stuffing box packing	Asbest-Teflon impregnated
Head piece :	Material : CuZn39Pb3 (brass)
Sealing :	Copper ring
Locking plates :	Material : St 37
Valve cone :	Movable
Casing :	Material : G-CuSn5ZnPb (Rg5, DIN 1705)
Blago tube connection :	For copper tubes : nuts, cutting rings in brass. For steel tubes : nuts, cutting rings in steel (please indicate when you place the order)



Tube OD	NW	S2	I	L	h	H	D	kg %	Blago Part No.
10	6	22	45	77	7	98	63	45,4	LDS 6
12	8	24	49	81	7	98	63	48,3	LDS 8
14	10	27	54	89	7	98	63	53,4	LDS 10
16	12	30	67	103	9	116	80	78,0	LDS 12
20	16	36	69	112	9	116	80	92,7	LDS 15
25	20	46	86	134	12	129	100	167,4	LDS 18
30	25	50	93	146	12	129	100	192,9	LDS 22
38	32	60	108	169	12	158	100	301,5	LDS 35

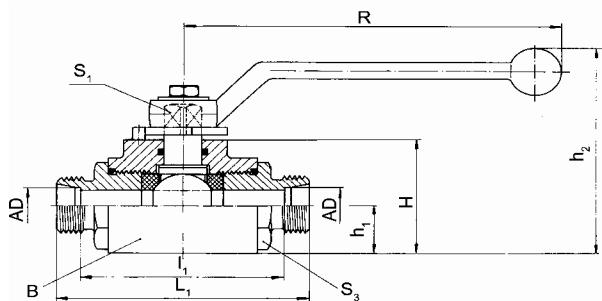
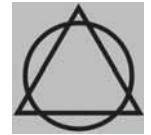
Shut off valves PN 15

with stud thread



Tube OD	NW	d3	i	d7	S1	~I1	Blago Part No.	Blago Part No.
10	6	R 3/8	12	22	22	31,5	LDVS 10 dk	LDZS 10 dk
12	8	R 1/2	14	27	27	34,5	LDVS 12 R 1/2 dk	LDZS 12 R 1/2 dk
14	10	R 1/2	14	27	27	36,5	LDVS 14 dk	LDZS 14 dk
16	12	R 3/4	16	32	32	38,5	LDVS 16 R 3/4 dk	LDZS 16 R 3/4 dk
20	16	R 3/4	16	32	32	43	LDVS 20 dk	LDZS 20 dk
25	20	R 1	18	40	41	48	LDVS 25 dk	LDZS 25 dk
30	25	R 1 1/4	20	50	50	51	LDVS 30 dk	LDZS 30 dk
38	32	R 1 1/2	22	55	55	58	LDVS 38 dk	LDZS 38 dk





Blagoflex High pressure ball valves

Material :

Body in steel, burnished.
Cone ball in steel, hard chromium plated.
Spindle in steel, yellow chromated.
All parts supplied in stainless steel for the stainless type.

Seals :

Cone ball sealing in POM (Delrin), spindle sealing in NBR (perbunan).

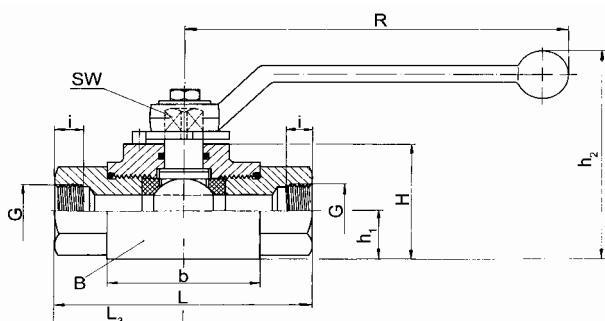
Application :

Hydraulic and organic oil, light heating oil, air (for stainless steel as well appropriate with water).

Temperature range :

- 20 to +100 °C, special seals up to +260 °C can be delivered.

Reihe	PN	Rohr-AD	NW	I ₁	L ₁	B	H	h ₁	h ₂	S ₁	S ₃	R	kg %	Blago- Part No.
L	500	6	4	53	82	20	25	10,0	55,0	7	19	76	21,8	HOKU L 06
		8	6	53	82	20	25	10,0	55,0	7	19	76	22,6	HOKU L 08
		10	8	61	90	30	35	14,5	68,0	8	24	100	46,2	HOKU L 10
		12	10	61	90	30	35	14,5	68,0	8	24	100	46,7	HOKU L 12
		15	12	69	99	35	40	17,0	92,0	10	30	112	72,3	HOKU L 15
	400	18	16	67	99	45	45	20,0	105,0	11	36	166	98,6	HOKU L 18
		22	20	84	116	45	55	24,0	113,0	14	41	187	138,9	HOKU L 22
		28	25	93	136	55	60	26,0	118,0	14	50	187	194,7	HOKU L 28
		35	25	101	144	55	60	26,0	118,0	17	60	187	303,0	HOKU L 35
		315	42	40	96	141	85	90	42,5	114,5	17	70	240	357,8
S	500	8	4	59	88	20	25	10,0	55,0	7	19	76	25,9	HOKU S 08
		10	6	58	90	20	25	10,0	55,1	7	19	76	28,8	HOKU S 10
		12	8	62	94	30	35	14,5	68,0	8	24	100	50,5	HOKU S 12
		14	10	65	100	30	35	14,5	68,0	8	24	100	55,4	HOKU S 14
		16	12	70	106	35	40	17,0	92,0	10	30	112	79,2	HOKU S 16
	400	20	16	69	112	40	45	20,0	105,0	11	36	166	112,8	HOKU S 20
		25	20	83	131	45	55	24,0	113,0	14	41	187	172,1	HOKU S 25
		30	25	93	146	55	60	36,0	118,0	14	50	187	235,6	HOKU S 30
		315	38	32	95	156	73	80	36,5	104,5	17	60	240	345,1

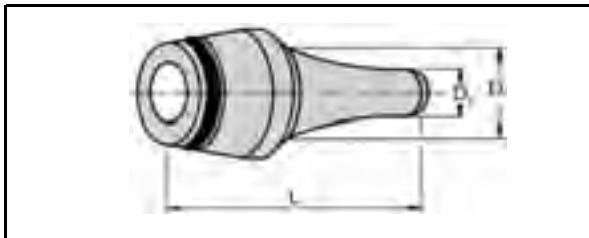
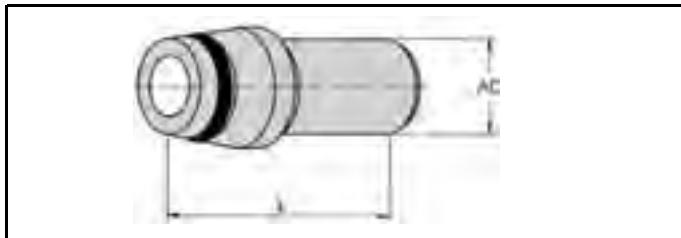


Blagoflex high pressure ball valves

G	DN	PN	i	b	L ₃	L	B	H	h ₁	h ₂	SW	R	kg %	Blago- Part No.
G 1/8	4	500	12	36	-	69	20	25	10,0	55,0	7	76	22,0	HOKU R 1/8
	1/4		12	36	-	69	20	25	10,0	55,0	7	76	21,0	HOKU R 1/4
	3/8		14	45	-	73	30	35	14,5	68,0	8	100	43,0	HOKU R 3/8
	1/2		16	51	-	82	35	40	17,0	92,0	10	112	67,0	HOKU R 1/2
G 5/8	16	400	18	50	-	88	40	45	20,0	105,0	11	166	97,3	HOKU R 5/8
G 3/4	20		19	60	-	93	45	55	24,0	113,0	14	187	128,0	HOKU R 3/4
G 1	25		22	70	-	113	55	60	26,0	118,0	14	187	198,2	HOKU R 1
G 1 1/4	32		20	70	58,5	110	73	80	36,5	104,5	17	240	245,0	HOKU R 1 1/4
G 1 1/2	40	315	22	75	57,0	114	85	90	42,5	114,5	17	240	340,1	HOKU R 1 1/2



Welding nipples, welding nipple reductions

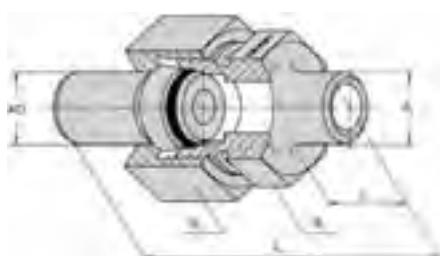


With O-ring sealing, appropriate in 24° tapers drilling form W DIN 3861

Series	Tube OD	L ₁	D	D ₁	Blago Part No.
L	6	30	6	3	ORIS 6 x 1,5
	8	30	8	5	ORIS 8 x 1,5
	8	30	8	4	ORIS 8 x 2
	10	32,5	10	7	ORIS 10 x 1,5
	10	32,5	10	6	ORIS 10 x 2
	12	32,5	12	9	ORIS 12 x 1,5
	12	32,5	12	8	ORIS 12 x 2
	22	38	22	17	ORIS 22 x 2,5
	28	41	28	23	ORIS 28 x 2,5
	28	41	28	22	ORIS 28 x 3
	35	47,5	35	28	ORIS 35 x 3,5
	35	47,5	35	27	ORIS 35 x 4
	42	47,5	42	36	ORIS 42 x 3
	42	47,5	42	34	ORIS 42 x 4
S	16	39,5	16	12	ORIS 16 x 2
	16	39,5	16	11	ORIS 16 x 2,5
	16	39,5	16	10	ORIS 16 x 3
	20	44,5	20	15	ORIS 20 x 2,5
	20	44,5	20	14	ORIS 20 x 3
	20	44,5	20	12	ORIS 20 x 4
	25	50,5	25	19	ORIS 25 x 3
	25	50,5	25	17	ORIS 25 x 4
	30	53,5	30	24	ORIS 30 x 3
	30	53,5	30	22	ORIS 30 x 4
	38	58,5	38	30	ORIS 38 x 4
	38	58,5	38	28	ORIS 38 x 5
	38	58,5	38	26	ORIS 38 x 6

Series	D ₁	D ₂	L	Blago Part No.
L	10	6	35	ORIS 10/06 x 1,5
	10	8	35	ORIS 10/08 x 2
	12	6	35	ORIS 12/06 x 1,5
	12	8	35	ORIS 12/08 x 2
	12	10	35	ORIS 12/10 x 1,5
S	16	6	42	ORIS 16/06 x 1,5
	16	8	42	ORIS 16/08 x 2
	16	10	33	ORIS 16/10 x 2
	16	12	42	ORIS 16/12 x 2,5
	20	6	48	ORIS 20/06 x 1,5
	20	8	48	ORIS 20/08 x 2
	20	10	44	ORIS 20/10 x 2
	20	12	48	ORIS 20/12 x 2,5
	20	16	45	ORIS 20/16 x 3
	25	6	52	ORIS 25/06 x 1,5
	25	8	52	ORIS 25/08 x 2
	25	10	52	ORIS 25/10 x 2
	25	12	52	ORIS 25/12 x 2,5
	25	16	52	ORIS 25/16 x 3
	25	20	49,5	ORIS 25/20 x 4
	30	6	59	ORIS 30/06 x 1
	30	8	59	ORIS 30/08 x 1,5
	30	10	52	ORIS 30/10 x 1,5
	30	12	59	ORIS 30/12 x 2
	30	16	52	ORIS 30/16 x 2
	30	20	52	ORIS 30/20 x 2,5
	30	25	59	ORIS 30/25 x 3
	38	6	66	ORIS 38/06 x 1
	38	8	66	ORIS 38/08 x 1,5
	38	10	57	ORIS 38/10 x 1,5
	38	12	66	ORIS 38/12 x 2
	38	16	57	ORIS 38/16 x 2
	38	20	57	ORIS 38/20 x 2,5
	38	25	57	ORIS 38/25 x 3
	38	30	57	ORIS 38/30 x 4

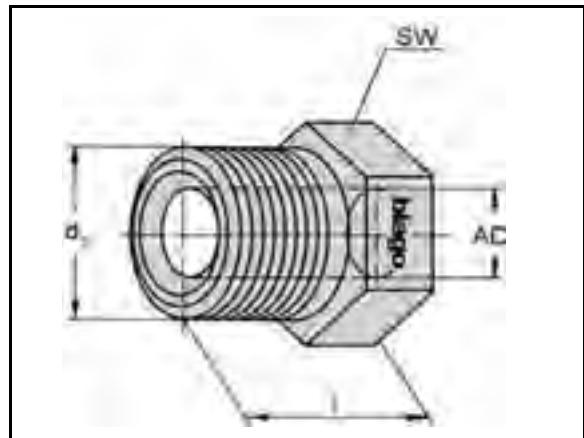
Straight weld-on connections



Tube OD	PB	L	L ₁	d ₃	S ₁	S ₂	Blago Part No.
10	460	10	61	10	19	22	GAVS 10 x 2
12	476	15	66	12	22	24	GAVS 12 x 2,5
14	400	15,5	74	14	24	27	GAVS 14 x 3
16	400	16,5	77	16	27	30	GAVS 16 x 3
20	400	19	87	20	32	36	GAVS 20 x 4
25	379	19,5	96	25	41	46	GAVS 25 x 4
25	400	19,5	96	25	41	46	GAVS 25 x 5
30	323	23	109	30	46	50	GAVS 30 x 4
30	393	23	109	30	46	50	GAVS 30 x 5
38	315	22	118	38	55	60	GAVS 38 x 5
38	315	22	118	38	55	60	GAVS 38 x 6

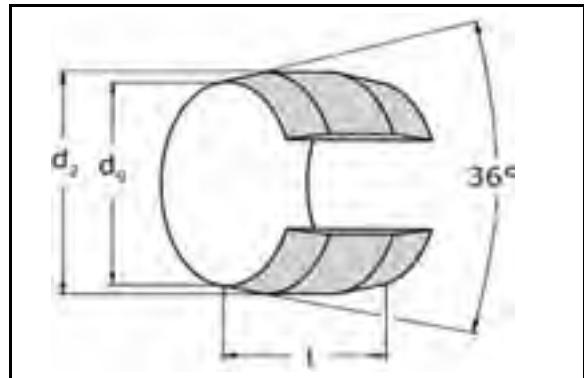


**Internal coupling nuts
DIN 3871**



Series	NP	Tube OD	Hexagon	l	d ₃	kg %	Blago Part No.
LL	100	4	8	12	M 8 x 1	0,2	LL 4
		5	10	13	M 10 x 1	0,5	LL 5
		6	10	13	M 10 x 1	0,4	LL 6
		8	12	14	M 12 x 1	0,6	LL 8
L	400	6	12	16	M 12 x 1,5	0,9	L 6
		8	14	16	M 14 x 1,5	1,1	L 8
		10	17	17	M 16 x 1,5	1,5	L 10
		12	19	18	M 18 x 1,5	1,9	L 12

**Twin taper rings in brass
DIN 3862**



Series	Tube OD	d ₂	d ₉	l	kg %	Blago Part No.
LL	4	6	4	5,5	0,040	3862-LL 04
	6	8	6	6,5	0,065	3862-LL 06
	8	10	8	6,5	0,080	3862-LL 08
L	6	8	6	6,5	0,065	3862- L 06
	8	10	8	6,5	0,080	3862- L 08
	10	12	10	7,5	0,110	3862- L 10
	12	14	12	8	0,140	3862- L 12
	15	18	15	9	0,295	3862- L 15
	18	20	18	9	0,225	3862- L 18
	22	22	22	10	0,450	3862- L 22

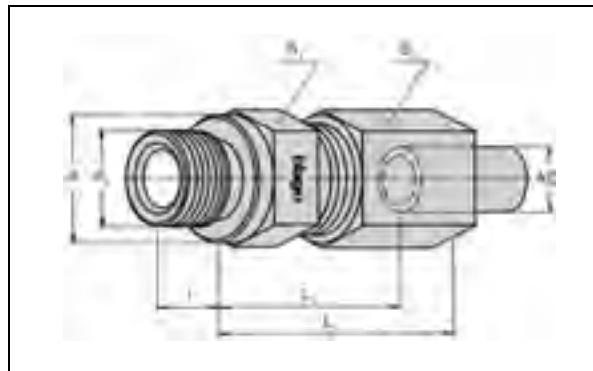


Straight brakeaway fitting (High pressure)

Butt-joint brake industry

Straight brakeaway fitting (High pressure)

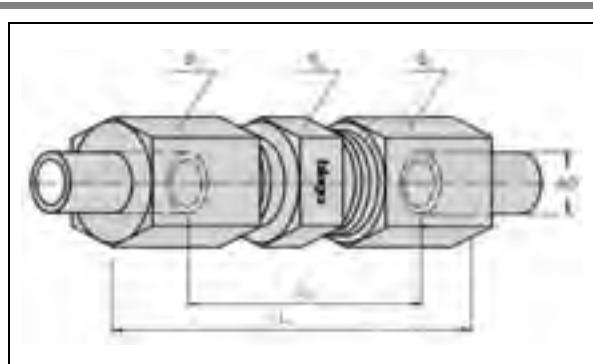
Butt-joint brake industry



Series	Tube OD	L ₁	L ₂	i	S ₁	S ₂	d ₃	Blago Part No.	S ₁	d ₃	Blago Part No.	kg %
L	15	38	23	14	24	27	M 18 x 1,5	AL 15-M STOSS	27	G 1/2	AL 15-R STOSS	12,3
	18	40	23,5	14	27	32	M 22 x 1,5	AL 18-M STOSS	27	G 1/2	AL 18-R STOSS	16,7
	22	43	26,5	16	32	36	M 26 x 1,5	AL 22-M STOSS	32	G 3/4	AL 22-R STOSS	25,6
	28	44	27,5	18	41	41	M 33 x 2	AL 28-M STOSS	41	G 1	AL 28-R STOSS	33,9
	35	52	30,5	20	50	50	M 42 x 2	AL 35-M STOSS	50	G 1 1/4	AL 35-R STOSS	54,9
	42	55	32,5	22	55	60	M 48 x 2	AL 42-M STOSS	55	G 1 1/2	AL 42-R STOSS	79,3
S	10	40	24	12	22	22	M 16 x 1,5	AS 10-M STOSS	22	G 3/8	AS 10-R STOSS	11,0
	12	42	26	12	24	24	M 18 x 1,5	AS 12-M STOSS	22	G 3/8	AS 12-R STOSS	12,7
	14	46	28,5	14	27	27	M 20 x 1,5	AS 14-M STOSS	27	G 1/2	AS 14-R STOSS	18,3
	16	47	28,5	14	27	30	M 22 x 1,5	AS 16-M STOSS	27	G 1/2	AS 16-R STOSS	21,6
	20	55	33	16	32	36	M 27 x 2	AS 20-M STOSS	32	G 3/4	AS 20-R STOSS	32,8
	25	62	37,5	18	41	46	M 33 x 2	AS 25-M STOSS	41	G 1	AS 25-R STOSS	60,5
	30	66	39,5	20	50	50	M 42 x 2	AS 30-M STOSS	50	G 1 1/4	AS 30-R STOSS	79,9
	38	75	44,5	22	55	60	M 48 x 2	AS 38-M STOSS	55	G 1 1/2	AS 38-R STOSS	116,9

Straight couplings brakeaway fitting (High pressure)

Butt-joint brake industry

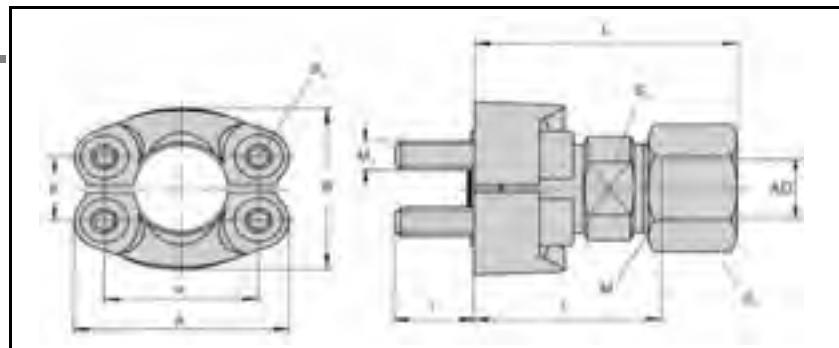


Series	Tube OD	S ₁	S ₂	L ₁	L ₂	kg %	Blago Part No.
L	15	24	27	70	35	19,9	DL 15 STOSS
	18	27	32	70	35	27,4	DL 18 STOSS
	22	32	36	72	40	39,7	DL 22 STOSS
	28	41	41	74	41	48,8	DL 28 STOSS
	35	46	50	89	46	77,8	DL 35 STOSS
	42	55	60	93	48	117,6	DL 42 STOSS
S	10	19	22	67	35	16,5	DS 10 STOSS
	12	22	24	69	37	18,5	DS 12 STOSS
	14	24	27	76	41	25,1	DS 14 STOSS
	16	27	30	77	41	31,2	DS 16 STOSS
	20	32	36	91	48	49,8	DS 20 STOSS
	25	41	46	103	55	94,0	DS 25 STOSS
	30	46	50	112	59	114,8	DS 30 STOSS
	38	55	60	127	66	176,8	DS 38 STOSS

Straight SAE hydraulic flanges

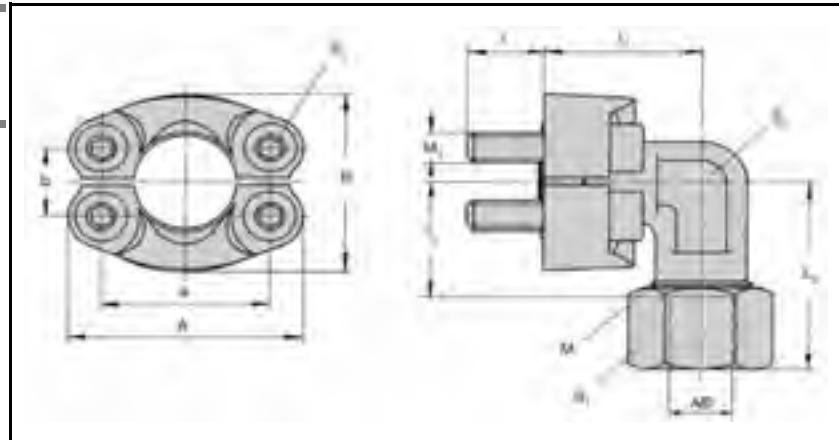


Straight SAE hydraulic flanges



NW	Tube OD	PN	A	a	B	b	M	d ₁	L ₁	i1	i	M ₁	S ₁	S ₂	S ₃	kg %	Blago Part No.
1/2	16	350	56	40,5	47	18,2	M 24 x 1,5	12	63	44,5	13,5	M 8	30	24	6	46,6	SFG 16 - 1/2
3/4	16		71	50,8	60	23,8	M 24 x 1,5	12	69	50,5	15,5	M 10	30	30	8	79,1	SFG 16 - 3/4
3/4	20		71	50,8	60	23,8	M 30 x 2	16	72	50,5	15,5	M 10	36	30	8	85,6	SFG 20 - 3/4
3/4	25		71	50,8	60	23,8	M 36 x 2	17	75	51,0	15,5	M 10	46	30	8	97,2	SFG 25 - 3/4
1	25		81	57,2	70	27,8	M 36 x 2	20	84	60,0	20,5	M 12	46	36	10	141,8	SFG 25 - 1
1	30		81	57,2	70	27,8	M 42 x 2	24	87	60,5	20,5	M 12	50	36	10	140,3	SFG 30 - 1
1 1/4	30	200	95	66,7	77	31,8	M 42 x 2	25	92	65,5	17,5	M 12	50	41	10	195,4	SFG 30 - 1 1/4
1 1/4	38		95	66,7	77	31,8	M 52 x 2	30	98	67,0	17,5	M 12	60	46	10	215,9	SFG 38 - 1 1/4
1 1/2	38		113	79,4	95	36,5	M 52 x 2	30	104	73,0	24,5	M 16	60	46	14	305,7	SFG 38 - 1 1/2

Elbow SAE hydraulic flanges

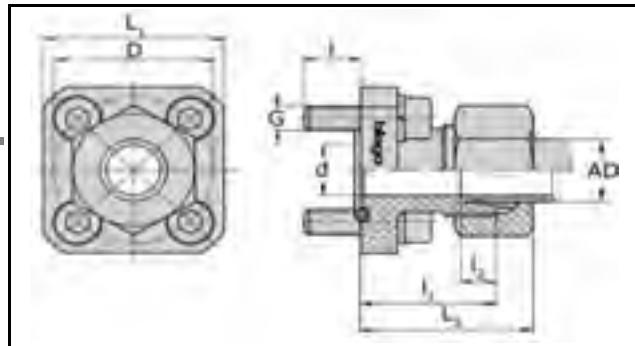


NW	Tube OD	NP	A	a	B	b	M	d ₁	L ₂	i ₂	i ₃	i	M ₁	S ₁	S ₂	S ₃	kg %	Blago Part No.
1/2	16	350	56	40,5	47	18,2	M 24 x 1,5	12	48	29,5	39	13,5	M 8	30	24	6	49,9	SFW 16 - 1/2
3/4	16		71	50,8	60	23,8	M 24 x 1,5	12	55	36,5	48	15,5	M 10	30	32	8	92,9	SFW 16 - 3/4
3/4	20		71	50,8	60	23,8	M 30 x 2	16	57	35,5	48	15,5	M 10	36	32	8	97,1	SFW 20 - 3/4
3/4	25		71	50,8	60	23,8	M 36 x 2	17	60	36,0	48	15,5	M 10	46	32	8	110,1	SFW 25 - 3/4
1	25		81	57,2	70	27,8	M 36 x 2	20	65	44,0	60	20,5	M 12	46	41	10	169,5	SFW 25 - 1
1	30		81	57,2	70	27,8	M 42 x 2	24	68	41,5	60	20,5	M 12	50	41	10	162,3	SFW 30 - 1
1 1/4	30	200	95	66,7	77	31,8	M 42 x 2	25	71	44,5	68	17,5	M 12	50	46	10	223,0	SFW 30 - 1 1/4
1 1/4	38		95	66,7	77	31,8	M 52 x 2	30	76	45,0	68	17,5	M 12	60	46	10	240,0	SFW 38 - 1 1/4
1 1/2	38		113	79,4	95	36,5	M 52 x 2	30	87	56,0	76	24,5	M 16	60	50	14	358,3	SFW 38 - 1 1/2



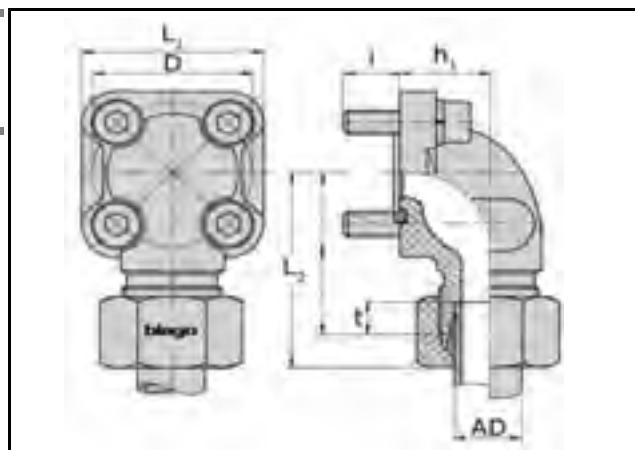
Straight SAE hydraulic flanges

Straight SAE hydraulic flanges



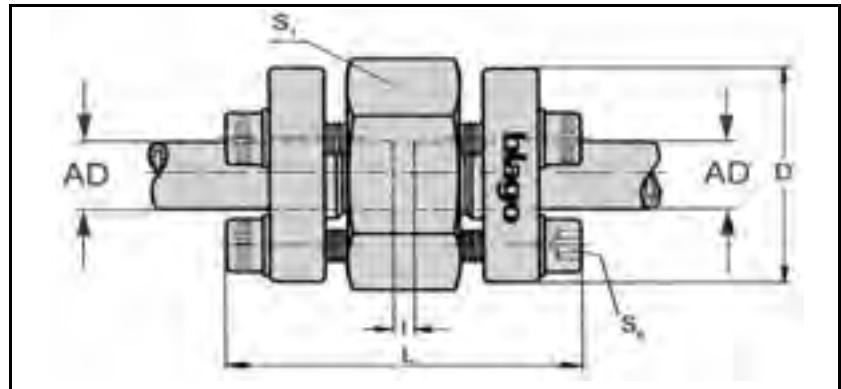
NP	OD	L ₁	D	L ₂	l ₁	l ₂	d	i	G	Blago Part No.
315	10	39	35	39	30	7	8	12,5	M 6	BFG 10-L/LK 35
	12	39	35	39	30	7	10			BFG 12-L/LK 35
250	15	39	35	38	30	7	12			BFG 15-L/LK 35
100	15	42	40	43	35	7	12			BFG 15-L/LK 40
	18	42	40	44	35	7,5	15			BFG 18-L/LK 40
	22	42	40	44	35	7,5	19			BFG 22-L/LK 40

Elbow SAE hydraulic flanges



NP	OD	L ₁	D	L ₂	l ₁	t	i	h ₁	G	Blago Part No.
100	15	42	40	46	38	7	12,5	22,5	M6	BFW 15-L/LK 40
	18	42	40	47	38	7,5		22,5		BFW 18-L/LK 40
	22	42	40	47,5	38	7,5		22,5		BFW 22-L/LK 40
	28	42	40	49	40	7,5		28		BFW 28-L/LK 40
	35	42	40	52	41	10,5		32		BFW 35-L/LK 40
250	35	58	55	62	49	10,5	32	32	M6	BFW 35-L/LK 55
	42	58	55	61	49	11		40		BFW 42-L/LK 55
315	15	39	35	46	38	7		16,5		BFW 15-L/LK 35
250	20	58	55	56	45	10,5	24	24	M6	BFW 20-S/LK 55
	20	42	40	50	40	10,5		22,5		BFW 20-S/LK 40
	25	58	55	61	49	12		30		BFW 25-S/LK 55
315	30	58	55	62	49	13,5	32	32	M6	BFW 30-S/LK 55
	10	39	35	47	38	7		16,5		BFW 10-L/LK 35
	12	39	35	47	38	7		16,5		BFW 12-L/LK 35
16	16	39	35	48	38	8,5	20	20	M6	BFW 16-S/LK 35
	20	39	35	56	45	10,5		25		BFW 20-S/LK 35

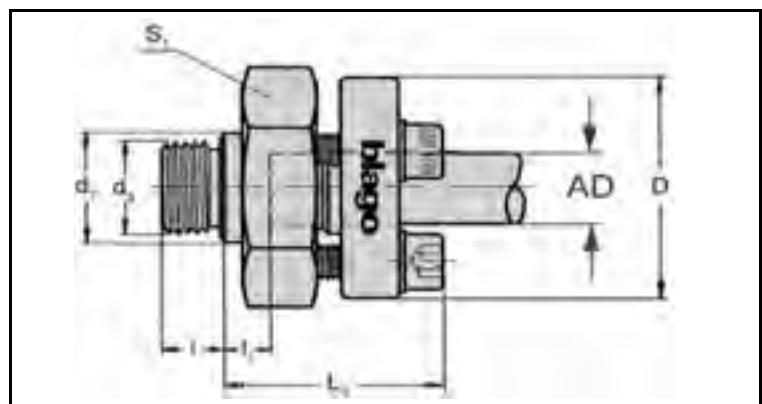
Straight flange connection



NP	OD	D	L	I	S ₁	S ₆	kg %	Blago Part No.
250	50	110	130	10	95	12	4,7	FD 50-250
	65	130	152	12	115	14	7,5	FD 65-250
	80	168	187	16	150	17	16,8	FD 80-250
400	30	79	118	8	70	10	2,5	FD 30-400
	38	95	142	10	85	12	4,4	FD 38-400
	50	113	164	14	100	14	6,9	FD 50-400

Straight flange stud thread connections

Stud thread :
 BSP thread or
 metric thread, parallel
 Port tapping with captive seal
 Form E DIN 3852 (ISO 1179)
 See page 10/11



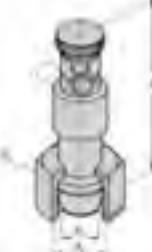
NP	OD	d ₇	D	i	L ₁	I ₁	S ₁	d ₃		kg %	Blago Part No.	
								M	G		M	G
250	50	72	110	24	78	18	95	M 60 x 2	G 2	3,0	FAS 50-M/250	FAS 50-R /250
	65	87	130	26	90	20	115	M 75 x 2	G 2 1/2	3,0	FAS 65-M/250	FAS 65-R /250
	80	103	168	28	111	26	150	M 88 x 2	G 3	10,2	FAS 80-M/250	FAS 80-R /250
400	30	50	79	20	68	13	70	M 42 x 2	G 1 1/4	1,6	FAS 30-M/400	FAS 30-R /400
	38	55	95	22	81	15	85	M 48 x 2	G 1 1/2	2,6	FAS 38-M/400	FAS 38-R /400
	50	72	113	24	91	16	100	M 60 x 2	G 2	4,0	FAS 50-M/400	FAS 50-R /400



Straight pressure gauge connectors with pin lock and gauge connectors for taper couplings



MV



MA

Series	NP	D ₁	L ₁	I ₁	h	S ₃	S ₂	d ₃	L	Blago Part No.
L	315	6	50	20,5	30	24	14	M 12 x 1,5	46	MA 1/ 6-L MV 1/ 6-L
		8	50	20,5	30	24	17	M 14 x 1,5	47	MA 1/ 8-L MV 1/ 8-L
		10	52	22,5	30	24	19	M 16 x 1,5	49	MA 1/10-L MV 1/10-L
		12	52	22,5	30	27	22	M 18 x 1,5	49	MA 1/12-L MV 1/12-L
		15	55	24,5	33	30	27	M 22 x 1,5	40	MA 1/15-L MV 1/15-L
		18	56	23,5	34	32	32	M 26 x 1,5	42	MA 1/18-L MV 1/18-L
	100	22	60	27,5	36	36	36	M 30 x 2	44	MA 1/22-L MV 1/22-L
		28	61	27,5	38	41	41	M 36 x 2	44	MA 1/28-L MV 1/28-L
S	400	35	69	25,5	41	46	50	M 45 x 2	50	MA 1/35-L MV 1/35-L
		42	70	24,5	45	55	60	M 52 x 2	50	MA 1/42-L MV 1/42-L
		6	54	24,5	30	24	17	M 14 x 1,5	46	MA 1/ 6-S MV 1/ 6-S
		8	54	24,5	30	24	19	M 16 x 1,5	47	MA 1/ 8-S MV 1/ 8-S
		10	56	23,5	30	24	22	M 18 x 1,5	49	MA 1/10-S MV 1/10-S
		12	56	23,5	30	24	24	M 20 x 1,5	49	MA 1/12-S MV 1/12-S
		14	62	26,5	31	27	27	M 22 x 1,5	51	MA 1/14-S MV 1/14-S
		16	62	25,5	33	30	30	M 24 x 1,5	43	MA 1/16-S MV 1/16-S
	250	20	69	25,5	36	36	36	M 30 x 2	48	MA 1/20-S MV 1/20-S
		25	75	26,5	38	41	46	M 36 x 2	50	MA 1/25-S MV 1/25-S
	250	30	81	27,5	41	46	50	M 42 x 2	53	MA 1/30-S MV 1/30-S
		38	90	29,0	45	55	60	M 52 x 2	58	MA 1/38-S MV 1/38-S

Pressure gauge connectors with pin lock



A



B

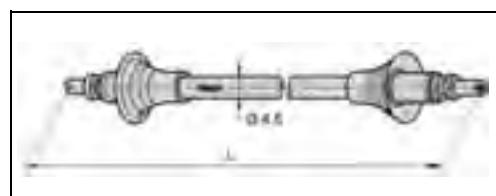
Series	NP	Draw.	i	S ₁	I	d ₁	h	d ₃	Blago Part No.
R	400	B	8	17	27	14	37	G 1/8	MA 1/G 1/8
			12	19	31	18	37	G 1/4	MA 1/G 1/4
			12	22	31	22	37	G 3/8	MA 1/G 3/8
			14	27	23	26	27	G 1/2	MA 1/G 1/2
		A	16	32	26	32	28	G 3/4	MA 1/G 3/4
			18	41	29	39	29	G 1	MA 1/G 1
	250	B	20	50	32	49	30	G 1 1/4	MA 1/G 1 1/4
			22	55	36	55	32	G 1 1/2	MA 1/G 1 1/2
M	400	A	8,5	-	-	9,5	26	M 8 x 1	MA 1/M 8 x 1 OR
			8,5	-	-	11,5	26	M 10 x 1	MA 1/M 10 x 1 OR
			8	17	27	14	37	M 10 x 1	MA 1/M 10 x 1
			12	17	31	17	37	M 12 x 1,5	MA 1/M 12 x 1,5
		B	12	19	31	19	37	M 14 x 1,5	MA 1/M 14 x 1,5
			12	22	31	21	37	M 16 x 1,5	MA 1/M 16 x 1,5
			12	24	20,5	23	26	M 18 x 1,5	MA 1/M 18 x 1,5
			14	27	22,5	25	26	M 20 x 1,5	MA 1/M 20 x 1,5
		250	14	27	24	27	28	M 22 x 1,5	MA 1/M 22 x 1,5
			16	32	26	31	28	M 26 x 1,5	MA 1/M 26 x 1,5
			16	32	26	32	28	M 27 x 2	MA 1/M 27 x 2
			18	41	29	39	29	M 33 x 2	MA 1/M 33 x 2
		A	20	50	32	19	30	M 42 x 2	MA 1/M 42 x 2
			22	55	36	55	32	M 48 x 2	MA 1/M 48 x 2

Bulkhead gauge connectors with pin lock and high pressure hoses up to 400 bar



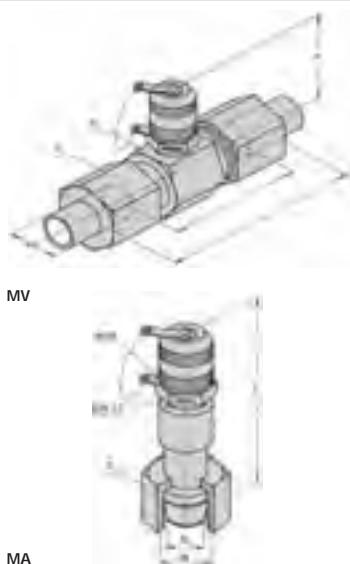
MAV

Series	NP	G	S ₁	S ₄	-h	Blago Part No.
R	400	R 1/4	19	22	58	MAV 1/4-MA 1
		R 1/2	27	22	70	MAV 1/2-MA 1



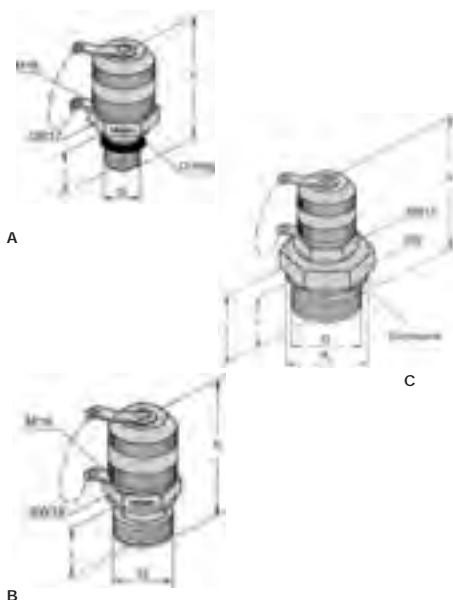
Length	Blago Part No.
200	HDS 1 - 200
300	HDS 1 - 300
400	HDS 1 - 400
630	HDS 1 - 630
800	HDS 1 - 800
1000	HDS 1 - 1000
1500	HDS 1 - 1500
2000	HDS 1 - 2000
2500	HDS 1 - 2500
3200	HDS 1 - 3200
4000	HDS 1 - 4000

Straight pressure gauge connectors with pin lock and gauge connectors for taper couplings



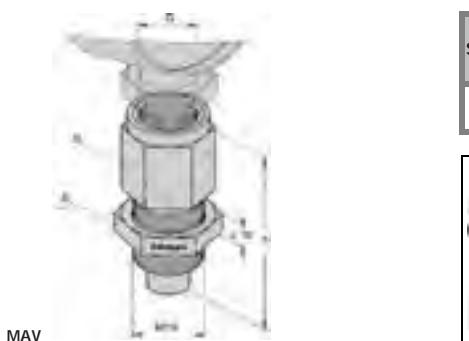
Series	NP	D ₁	L ₁	I ₁	h	S ₃	S ₂	M	L	Blago Part No.
L	315	6	50	20,5	30	24	14	M 12 x 1,5	46	MA 3/ 6-L
		8	50	20,5	30	24	17	M 14 x 1,5	47	MA 3/ 8-L
		10	52	22,5	30	24	19	M 16 x 1,5	49	MA 3/10-L
		12	52	22,5	30	27	22	M 18 x 1,5	49	MA 3/12-L
		15	55	24,5	33	30	27	M 22 x 1,5	40	MA 3/15-L
	160	18	56	23,5	34	32	32	M 26 x 1,5	42	MA 3/18-L
S	630	22	60	27,5	36	36	36	M 30 x 2	44	MA 3/22-L
		28	61	27,5	38	41	41	M 36 x 2	44	MA 3/28-L
		35	69	25,5	41	46	50	M 45 x 2	50	MA 3/35-L
		42	70	24,5	45	55	60	M 52 x 2	50	MA 3/42-L
		6	54	24,5	30	24	17	M 14 x 1,5	46	MA 3/ 6-S
	400	8	54	24,5	30	24	19	M 16 x 1,5	47	MA 3/ 8-S
		10	56	23,5	30	24	22	M 18 x 1,5	49	MA 3/10-S
		12	56	23,5	30	24	24	M 20 x 1,5	49	MA 3/12-S
		14	62	26,5	31	27	27	M 22 x 1,5	51	MA 3/14-S
		16	62	25,5	33	30	30	M 24 x 1,5	43	MA 3/16-S
M	400	20	69	25,5	36	36	36	M 30 x 2	48	MA 3/20-S
		25	75	26,5	38	41	46	M 36 x 2	50	MA 3/25-S
		30	81	27,5	41	46	50	M 42 x 2	53	MA 3/30-S
		315	38	90	29,0	45	55	M 52 x 2	58	MA 3/38-S
		38	90	29,0	45	55	60	M 52 x 2	58	MV 3/38-S

Gauge connectors with pin lock



Series	NP	Draw.	i	SW	I	d ₁	h	G	Blago Part No.
R	400	C	8	17	27	14	56	G 1/8	MA 3/G 1/8
		B	12	19	31	18	37	G 1/4	MA 3/G 1/4
		C	12	22	31	22	37	G 3/8	MA 3/G 3/8
		C	14	27	23	26	27	G 1/2	MA 3/G 1/2
		C	16	32	26	32	28	G 3/4	MA 3/G 3/4
	250	C	18	41	29	39	29	G 1	MA 3/G 1
		C	20	50	32	49	30	G 1 1/4	MA 3/G 1 1/4
		C	22	55	36	55	32	G 1 1/2	MA 3/G 1 1/2
M	400	A	250	8,5	-	9,5	26	M 8 x 1	MA 3/M 8 x 1 OR
		A	630	8,5	-	11,5	26	M 10 x 1	MA 3/M 10 x 1 OR
		C	8	17	27	14	37	M 10 x 1	MA 3/M 10 x 1
		C	12	17	31	17	37	M 12 x 1,5	MA 3/M 12 x 1,5
		C	12	19	31	19	37	M 14 x 1,5	MA 3/M 14 x 1,5
		C	12	22	31	21	37	M 16 x 1,5	MA 3/M 16 x 1,5
		C	12	24	20,5	23	26	M 18 x 1,5	MA 3/M 18 x 1,5
		C	14	27	22,5	25	26	M 20 x 1,5	MA 3/M 20 x 1,5
		C	14	27	24	27	28	M 22 x 1,5	MA 3/M 22 x 1,5
		C	16	32	26	31	28	M 26 x 1,5	MA 3/M 26 x 1,5
	250	C	16	32	26	32	28	M 27 x 2	MA 3/M 27 x 2
		C	18	41	29	39	29	M 33 x 2	MA 3/M 33 x 2
		C	20	50	32	19	30	M 42 x 2	MA 3/M 42 x 2
		C	22	55	36	55	32	M 48 x 2	MA 3/M 48 x 2

Bulkhead gauge connectors with pin lock and high pressure hoses up to 400 bar



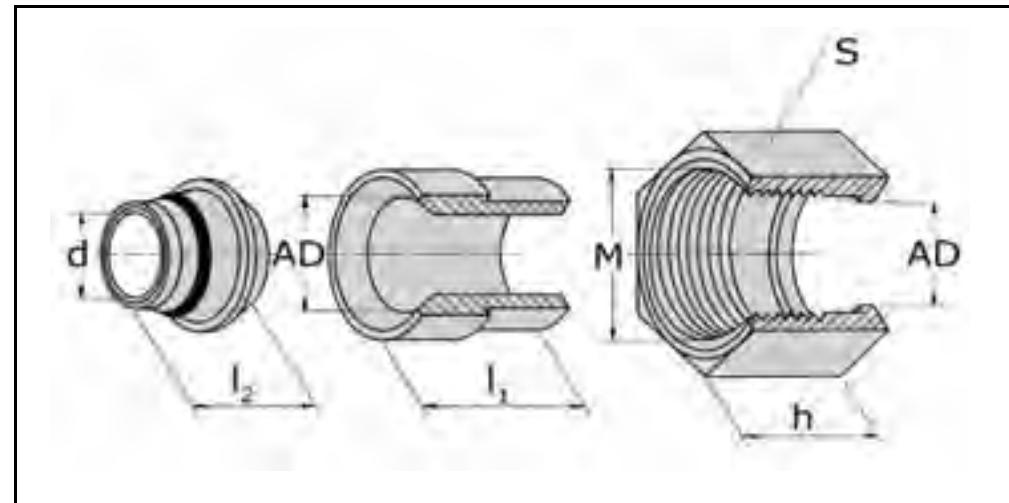
Series	NP	G	S ₁	S ₄	~h	Blago part No.
R	630	R 1/4	19	22	58	MAV 3/4-MA 3
		R 1/2	27	22	70	MAV 3/2-MA 3

Length	Blago Part no.
200	HDS 3 - 200
300	HDS 3 - 300
400	HDS 3 - 400
630	HDS 3 - 630
800	HDS 3 - 800
1000	HDS 3 - 1000
1500	HDS 3 - 1500
2000	HDS 3 - 2000
2500	HDS 3 - 2500
3200	HDS 3 - 3200
4000	HDS 3 - 4000



Flare adaptors

Comprising :
 nut
 pressure ring
 Intermediary ring with O-rings
 Metal sealing at the flared tube
 Appropriate for 24° internal tapers
 Drilling form W DIN 3861



Tube OD	NP	M	h	l_1	l_2	d	S	Blago Part No.
6	400	M 12 x 1.5	17	10,5	11,5	3	14	BOE L 06
8		M 14 x 1.5	18	11	12	5	17	BOE L 08
10		M 16 x 1.5	19,5	12,5	12,5	6	19	BOE L 10
12		M 18 x 1.5	20,5	13	12,5	8	22	BOE L 12
15		M 22 x 1.5	23	14	12,5	11	27	BOE L 15
18	315	M 26 x 1.5	23	14,5	13	14	32	BOE L 18
22		M 30 x 2	27,5	18	14,3	17	36	BOE L 22
28	250	M 36 x 2	27,5	17	14,7	23	41	BOE L 28
35		M 45 x 2	30	19	18,5	28	50	BOE L 35
42		M 52 x 2	34	21	20,5	35	60	BOE L 42
6	630	M 14 x 1.5	18	10,5	11,5	3	17	BOE S 06
8		M 16 x 1.5	19	11	12	5	19	BOE S 08
10		M 18 x 1.5	20,5	12,5	12,5	6	22	BOE S 10
12		M 20 x 1.5	21	13	12,5	8	24	BOE S 12
14		M 22 x 1.5	23	14,5	14	9	27	BOE S 14
16	400	M 24 x 1.5	26,5	17	15	11	30	BOE S 16
20		M 30 x 2	27,5	17,5	18,5	14	36	BOE S 20
25		M 36 x 2	30,5	20	20	19	46	BOE S 25
30		M 42 x 2	32	21,5	22	23	50	BOE S 30
38	315	M 52 x 2	38	26,5	26	30	60	BOE S 38

Assembly look at page 14



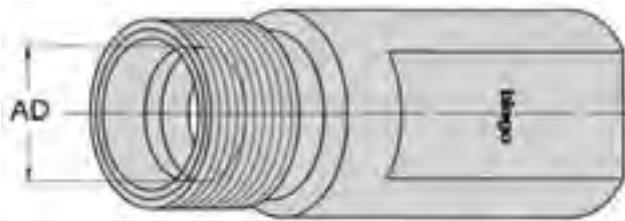
VOMOs are used for manual assemblies of Blago compression fittings. They guarantee that the cutting ring cuts perfectly on the tube without damaging the taper.

VOMOs are manufactured from tooling steel and are hardened. This is the reason why they have a lasting life and steady good results for pre-assemblies.

A pre-assembly is a prerequisite for outer diameter tubes higher than 20 in steel, for compression fittings with standpipe (for instance TE) and for stainless steel compression fittings.

VOMO is one of the best tools for pre-assemblies on mobile sites and for small series. VOMO are economically not suitable for large series and stationary pre-assemblies. In this case we recommend to use our HAMO or BLAGOPRESS.

Blago pre-assembly bodies can be used with all compression fittings manufactured according to ISO 8434. Interchangeability is guaranteed.



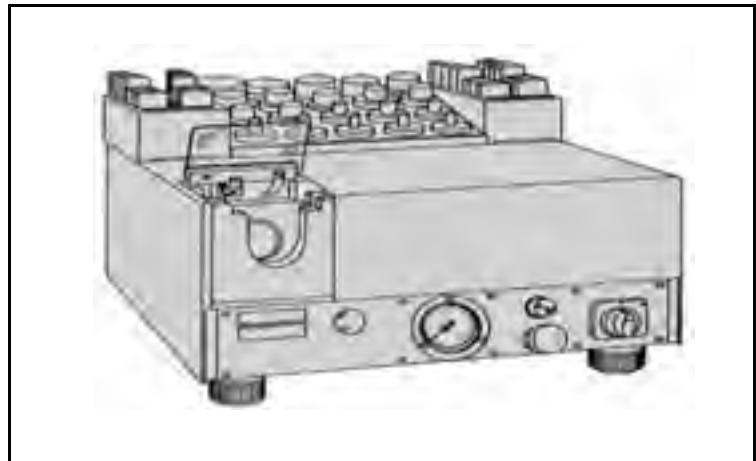
Tube OD	Blago Part No.	Tube OD	Blago Part No.
6	VOMO L 6	6	VOMO S 6
8	VOMO L 8	8	VOMO S 8
10	VOMO L 10	10	VOMO S 10
12	VOMO L 12	12	VOMO S 12
15	VOMO L 15	14	VOMO S 14
18	VOMO L 18	16	VOMO S 16
22	VOMO L 22	20	VOMO S 20
28	VOMO L 28	25	VOMO S 25
35	VOMO L 35	30	VOMO S 30
42	VOMO L 42	38	VOMO S 38

Electro-hydraulic pre-assembly machine BLAGOPRESS

The BLAGOPRESS was especially developed for the pre-assembly of Blago cutting ring compression fittings. This machine is particularly suitable for large series.

It is very handy and fast to use. Wrong assemblies are almost completely avoided through the automatic setting of the pre-assembly strength. Fast changes, lasting life and flexibility are a few other advantages of the BLAGOPRESS (outer diameter tubes from 6 to 42 mm light series as well as 6 to 38 heavy series). Those factors make the BLAGOPRESS to the unavoidable machine through its correct and identical pre-assembly process for serial assemblies.

The BLAGOPRESS is delivered with the complete toolings for the pre-assembly of cutting rings for diameters from L6 to L42 as well as S6 to S38.





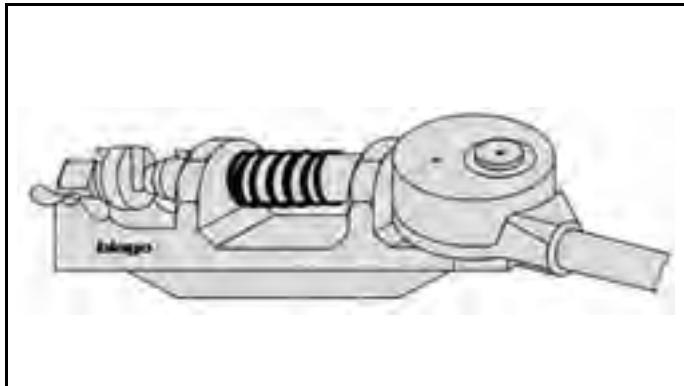
Hand pre-assembly machine – HAMO

This pre-assembling machine is a device enabling a fast and secure assembly. This machine is very practical and especially appropriate for small and medium series.

Due to the reduced weight and to the compact construction, this device can be taken to any assembly site.

Tubes with outer diameter from L6 to L22 as well as S6 to S20 OD can be assembled. The same results are guaranteed through the automated distance setting assembly.

The HAMO was especially developed for Blago cutting rings. Adjustments need to be performed for the usage of different brands.



1. Screw vice assembly : the HAMO is inserted into a screw vice for an easy use in the repair shop or on the job site. Other aids are not required.

2. Easy assembly : through the large bending handle the bending process is easy to achieve with minimum strength.

3. Optimized geometry : the special geometry enables identical and correct assemblies. The HAMO can be set individually for different cutting rings.

4. Compact construction form : the HAMO is very compact and weighs only about 4 kg. It can be easily transported to any job sites.

Blago Tube bending machine - BIMO

The BIMO is a bending machine for hydraulic tubes. It is suitable for tubes from L6 to L18, S6 to S20 as well as for inch size tubes 1/8 to 1/2 . 6 interchangeable rolls are supplied to achieve the best results. The holding roll can be individually set.

Advantages of the tube bending machine :

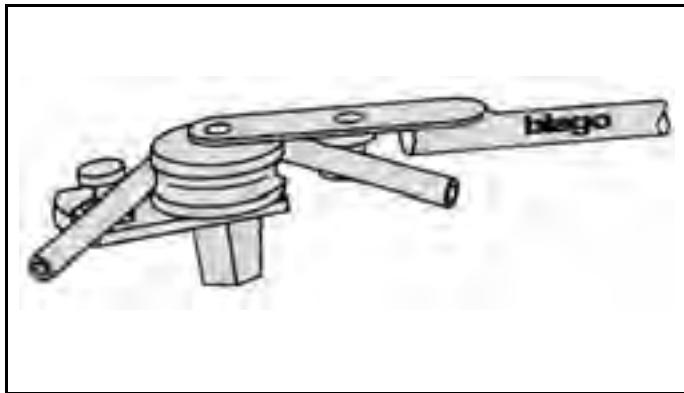
1. Screw vise assembly : the BIMO is inserted into a screw vice for an easy use in the repair shop or on the job site. Other aids are not required.

2. Easy assembly : through the large bending handle the bending process is easy to achieve with minimum strength.

3. Optimized geometry : the special form of the tube rolls enable small radius without any tube damages. The holding rolls can be individually set.

4. Compact construction form : the BIMO is very compact and weighs only about 4 kg. It can be easily transported to any job sites.

5. Robust construction : the stable design of the BIMO enables to bent tubes without any prior heating of the tubes.

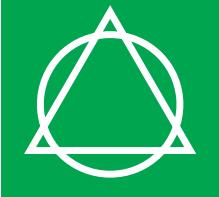


Rolls for tube OD	Gas tube	r	~ x
6		33	35
8		34	35
10	1/8	35,5	35
12		36,5	35
14	1/4	36,5	35
15		44	38
16		44	38
18	3/8	51,5	42
22	1/2		
20			



BLANKE
ARMATUREN

PIPE CLAMPS
blagoflex



PIPE CLAMPS DIN 3015



Our other product range:

sight glasses
grease nipples & acc.
lubrication equipment
fluid level gauges

valves & shut-off cocks
breathers & breather valves
low-pressure brass valves
high-pressure stainless valves

since 1887
more than 120 years
of experience in the
production of fittings



EXPERIENCE AND PROGRESS