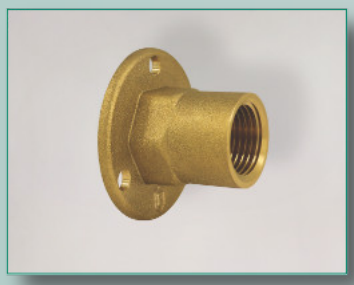
puteus



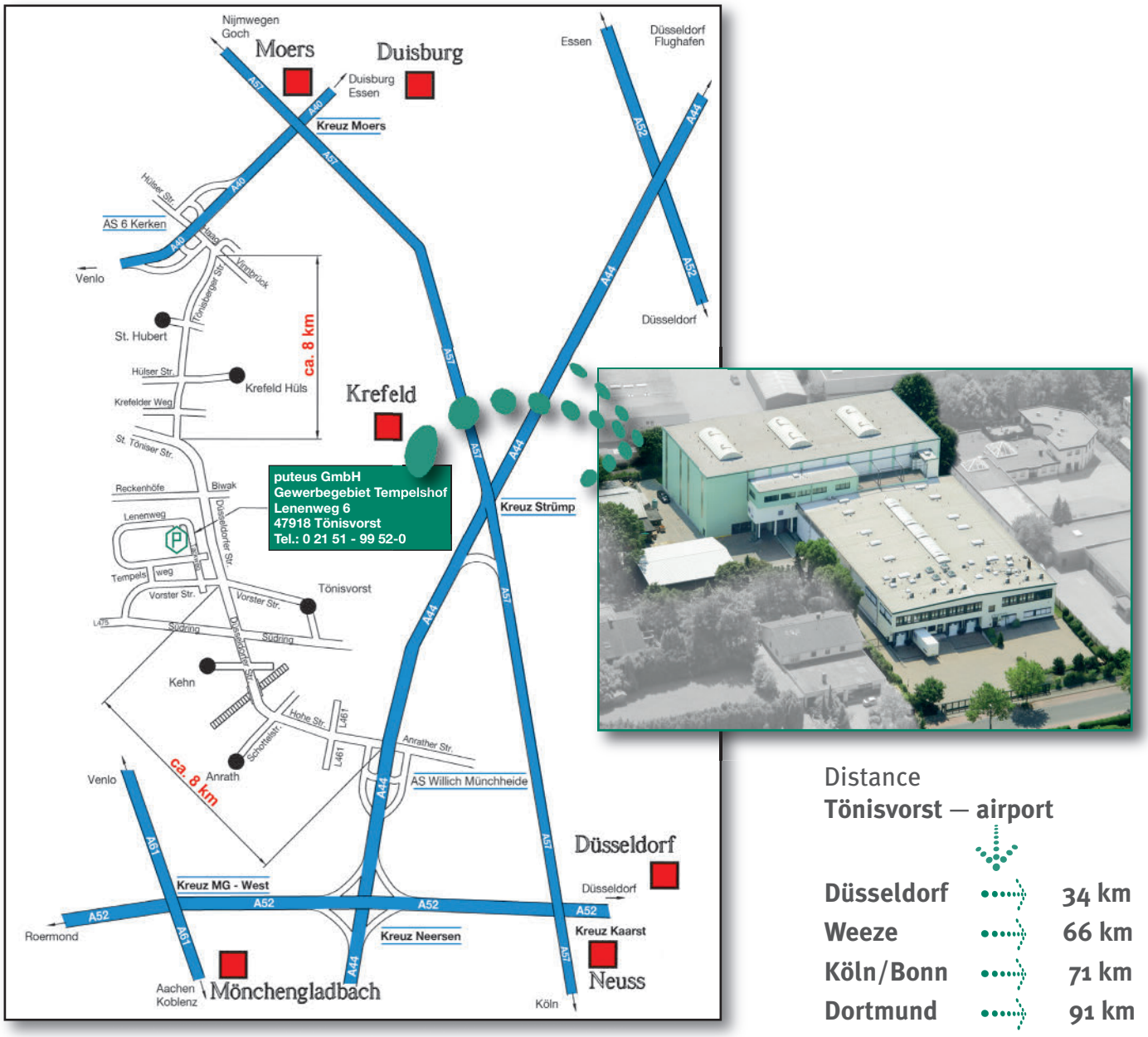
4 Fittings

Validity date September 2026

puteus

How to find us? **How to reach us?**

Phone: +49-(0) 2151-9952-0 • Fax: +49-(0)2151-9952-99 • e-mail: info@puteus.de



Distance
Tönisvorst — airport

Düsseldorf	**34 km**
Weeze	**66 km**
Köln/Bonn	**71 km**
Dortmund	**91 km**

Contact:	**Prefix: +49(0)2151...**	**Phone**	**Fax**	**E-Mail**
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Accounting Department		9952-22	9952-24	finanzen@puteus.de
Import/Export customs clearance		9952-23	9952-24	finanzen@puteus.de

Puteus GmbH, a manufacturing and distributing company, was founded in 1979 by the parents of the present share holders. Puteus experienced a rapid development - from a supplier for products of the gardening and irrigation sector to a large range of the heating, plumbing- and garden components.

The company is based in Tönisvorst

The high-bay warehouse

Our modern warehouse with a capacity of 10.000 pallets and a picking area for further 3.000 pallets allows short delivery times.

In addition to our standard product range we also design and manufacture lots of OEM products for the sanitary and heating industries in production sites spread all over the world. Many of our products meet the different requirements and regulations, e.g. DVGW, PA-certificates, KIWA, ACS or SVGW.

Qualified employees in all areas of the company use their skills to satisfy your individual needs – from the standard fitting to the construction of customer-specific items.

In our German production sites we own different production lines, electroplating and modern robot plants, tool- and mould making as well as turnery and metalwork departments.

... we supply individually and promptly.

Whether the customer orders full pallet units ...

... or wishes smaller packing units ...

Ready for shipment.

The owner-managed family company **puteus GmbH** was the starting point for a group of companies of, today, about 250 employees. It has set itself the target of combining optimal quality and service and – at the same time – responding flexibly and promptly to the changes in the market. We are distinguished both by continuous development of knowledge and quality improvements of our products that are in the interest of our customers as well as commitment and curiosity for what is new and feasible.

www.puteus.de • www.eine-starke-gruppe.de

These following companies also belong to the de Gruyter-Stach-Group

▶ Schlösser Armaturen GmbH & Co. KG

Im Dohm 3 | D-57462 Olpe
Phone: +49-27 61-607-0 | Fax: +49-27 61-607-10
E-Mail: info@schloesser-armaturen.de

Commercial register entry:
AG Siegen | HRA 8076 | UST-IDNR DE 814 779 086 | Sitz Olpe
CEO: Henning de Gruyter | Olaf Stach

Water and heating connection valves
bib taps · appliance connection fittings
heating fittings · water meters
state-certified calibration unit for water meters

▶ Heinrich Schulte GmbH & Co. KG

Grünlandweg 11 | D-58640 Iserlohn
Phone: +49-23 71-90 90-0 | Fax: +49-23 71-90 90-99
E-Mail: info@heinrichschulte.com

Commercial register entry:
AG Iserlohn | HRA 2276
UST-IDNR DE 233 202 839 | Sitz Iserlohn
CEO: Henning de Gruyter | Olaf Stach

Exclusive sanitary taps and mixers

▶ Heinrich Schulte GmbH & Co. KG

Giesestrasse 30 | D-58636 Iserlohn
Phone: +49-23 71-90 90-0 | Fax: +49-23 71-90 90-99
E-Mail: info@heinrichschulte.com

Commercial register entry:
AG Iserlohn | HRA 2276
UST-IDNR DE 233 202 839 | Sitz Iserlohn
CEO: Henning de Gruyter | Olaf Stach

Exclusive sanitary taps and mixers

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4

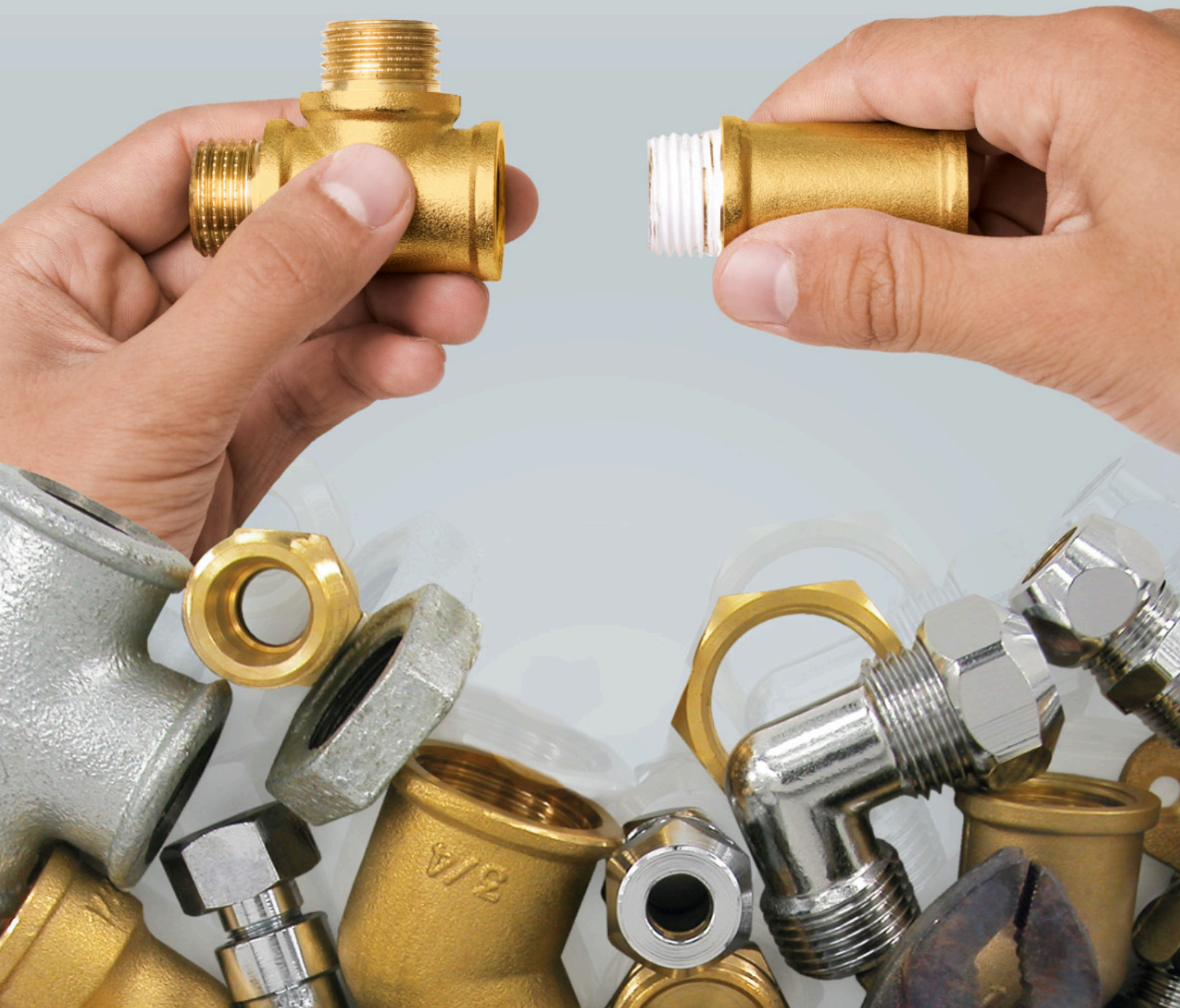
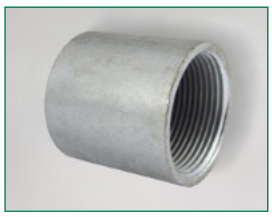


Table of contents

Brass fittings: bright and chrome plated **Page 6**

Malleable iron fittings: galvanized and black **Page 29**

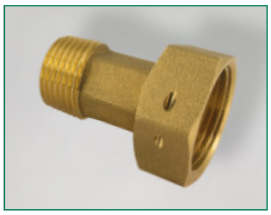
Steel sockets and steel pipes **Page 48**



Barrel nipples: galvanized and black **Page 50**

Table of contents

Brass connections, fittings + unions **Page 52**



Brass compression fittings **Page 57**

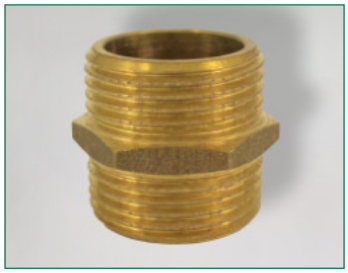
Compression fittings of polypropylene **Page 60**

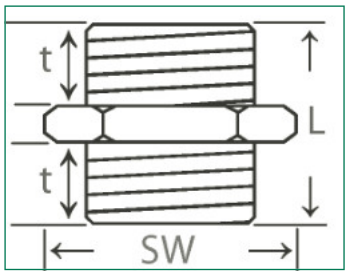
Compression fittings of brass for corrugated pipes **Page 63**

Fittings made of brass

Material according to drinking water ordinance 50930-6, hot-pressed, thread to DIN EN ISO 228-1

Double nipple

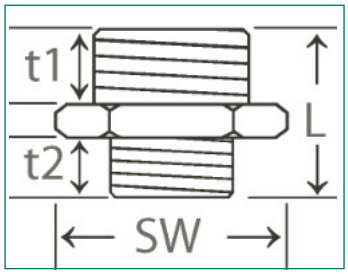




Both sides male threaded, hot-pressed

Item-No.: plain	Item-No.: chro.-plat.	Connection: male x male	Thread-length: t	Length: L	Wrench size: SW	Packing unit:
34408 4	-	1/8"	7	18	10	50/2000
34409 1	-	1/4"	8	20	14	25/1000
34410 7	35410 6	3/8"	9	22	17	50/ 800
34411 4	35411 3	1/2"	10	24	21	50/ 500
34412 1	35412 0	3/4"	11	26	27	15/ 240
34413 8	-	1"	12	29	34	15/ 180
34414 5	-	1 ¼"	15,5	37	42	10/ 150
34415 2	-	1 ½"	17	38	48	10/ 70
34416 9	-	2"	18	48	60	1/ 36
34417 6	-	2 ½"	22	50	76	1/ 36
34418-10948	-	3"	25	56	93	2/ 32
34419 0	-	4"	25	64	125	1/ 12

Double nipple, reduced



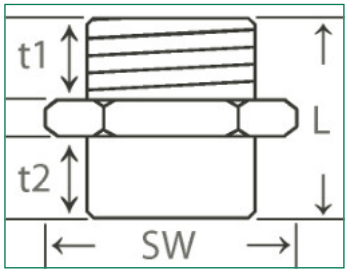
Both sides male threaded, hot-pressed

Item-No.: plain	Item-No.: chro.-plat.	Connection: male x male	Threadlength: t1	Threadlength: t2	Length: L	W.s.: SW	Packing unit:
34418 3	-	1/8" x 1/4"	9	8	21	17	50/1200
34428 2	-	1/8" x 3/8"	10	9	23	17	50/ 700
34420 6	-	1/4" x 3/8"	10	9	23	17	50/ 700
34429 9	-	1/4" x 1/2"	10	9	23	21	25/ 500
34421 3	35421 2	3/8" x 1/2"	10	9	23	21	25/ 600
34427 5	35427 4	3/8" x 3/4"	10	9	24	27	25/ 500
34422 0	35422 9	1/2" x 3/4"	10,5	10,5	26	27	25/ 300
34877 8	-	1/2" x 1"	12	10,5	28	34	25/ 200
34875	-	1/2" x 1 ¼"	16	10,5	34	43	-/ -
34423 7	-	3/4" x 1"	12	11	28	34	10/ 150
34870 9	-	3/4" x 1 ¼"	15	10	35	42	10/ 150
34424 4	-	1" x 1 ¼"	14	12	32	42	10/ 100
34871 6	-	1" x 1 ½"	18	13	39	50	10/ 70
34425 1	-	1 ¼" x 1 ½"	18	14	38	48	10/ 80
34426 8	-	1 ½" x 2"	18	14	44	60	1/ 48
34872 3	-	2" x 2 ½"	22	22	54	80	1/ 54
34873 0	-	2" x 3"	20	22	52	89	1/ 18
34874 7	-	2 ½" x 3"	30	27	67	89	1/ 30
34428-10948	-	3" x 4"	25	25	50	-	2/ 12

Double nipple, reduced

Female thread x male thread, female thread with flat seal, including seals made of NBR, hot-pressed

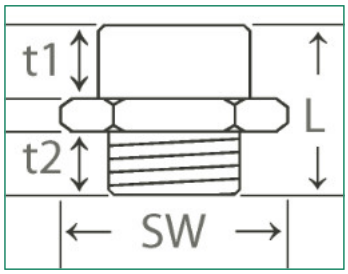
Item-No.: plain	Item-No.: chro.-plat.	Connection: female x male	Threadlength: t1	t2	Length: L	Wr.size: SW	Pack. unit:
34430 5	-	1/4" x 3/8"	11	10	24	17	50/1000
34431 2	-	3/8" x 1/2"	12	10	25	21	20/ 400
34432 9	35432 8	1/2" x 3/4"	10,5	11	25	27	15/ 300
34433 6	-	3/4" x 1"	12	11	26	33	15/ 150
34434 3	-	1" x 1 ¼"	14	12	30	41	10/ 200
34435 0	-	1 ¼" x 1 ½"	18	17	43	47	10/ 100
34436 7	-	1 ½" x 2"	20	19	46	60	1/ 60



Double nipple, reduced

Male thread x female thread, female thread with flat seal, including seals made of NBR, hot-pressed

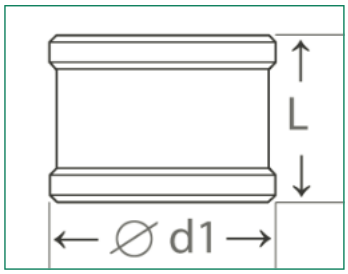
Item-No.: plain	Item-No.: chro.-plat.	Connection: male x female	Threadlength: t1	t2	Length: L	Wr.size: SW	Pack. unit:
34440 4	-	1/4" x 3/8"	7	9	22	21	50/500
34441 1	35441 0	3/8" x 1/2"	7	11	25	25	20/300
34442 8	35442 7	1/2" x 3/4"	7	10	23	29,7	20/300
34443 5	-	3/4" x 1"	8	11	26	36	15/ 150
34444 2	-	1" x 1 ¼"	9	12	29	45	10/ 100
34445 9	-	1 ¼" x 1 ½"	17	14	38	55	10/ 70
34446 6	-	1 ½" x 2"	18	18	44	70	10/ 60



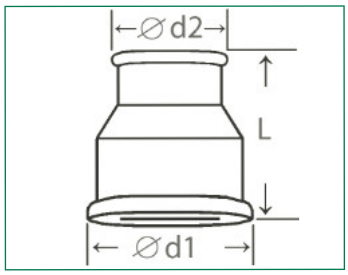
Socket

Female thread, hot-pressed

Item-No.: plain	Item-No.: chro.-plat.	Connection:	Length: L	Ø d1	Packing unit:
34468 8	35468 7	1/8"	16	13,8	50/1000
34469 5	35469 4	1/4"	18	18	50/ 900
34460 2	35460 1	3/8"	24	23	20/ 400
34461 9	35461 8	1/2"	25,5	26,8	15/ 300
34462 6	35462 5	3/4"	29	34	10/ 200
34463 2	-	1"	30,5	41	10/ 100
34464 0	-	1 ¼"	36	51	10/ 80
34465 7	-	1 ½"	40,1	58	5/ 60
34466 4	-	2"	43	69	5/ 50



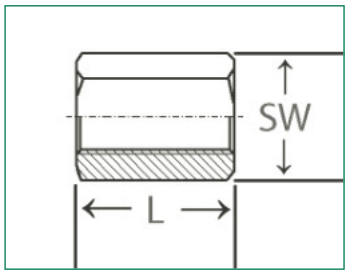
Socket, reduced



Both sides female threaded, hot-pressed

Item-No.: plain	Item-No.: chro.-plat.	Connection:	Length: L	Ø d1	Ø d2	Packing unit:
34470 1	35470 0	1/4" x 3/8"	23	23	18	25/ 450
34478 7	35478 6	3/8" x 1/2"	27	27	23	20/300
34472 5	35472 4	1/2" x 3/4"	27	34	27	10/ 200
34479 4	35479 3	1/2" x 1"	40	41,5	27,5	10/ 100
34473 2	35473 1	3/4" x 1"	37,5	41,5	34	10/ 100
34477 0	-	3/4" x 1 ¼"	40	51	34	10/ 120
34474 9	35474 8	1" x 1 ¼"	43	51	41,5	10/ 80

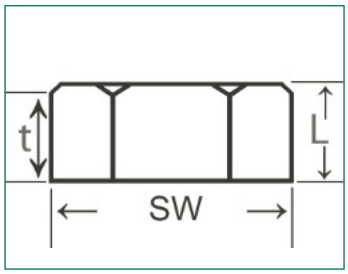
Socket, with external hexagon



Female thread, hot-pressed

Item-No.: plain	Item-No.: nickel plat.	Connection:	Thread-length:	Length: L	Wrench size: SW	Packing unit:
-	S-467	1/8"	15	15	13	100/2500
-	S-468	1/4"	22	22	17	50/1000
-	S-699	3/8"	22	22	22	25/ 600
-	S-469	1/2"	26	26	27	25/ 350
-	S-769	3/4"	34	34	32	25/ 200

Cap



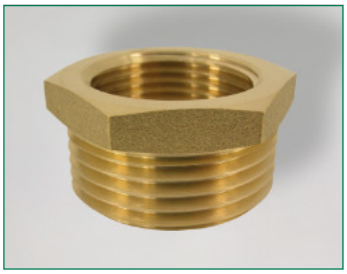
External hexagon, male thread, hot-pressed

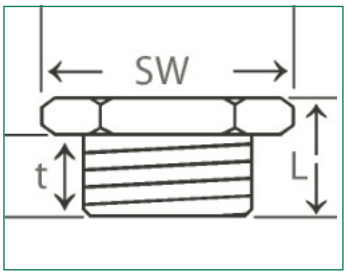
Item-No.: plain	Item-No.: chro. plat.	Connection: male	Thread-length:	Length: L	Wrench size: SW	Packing unit:
34488 8	-	1/8"	8	10	12,9	100/2400
34489 3	-	1/4"	8	10	15,9	50/ 1500
34480 0	35480 9	3/8"	8	10,5	18,5	50/ 1200
34481 7	35481 6	1/2"	9	12	23	50/ 700
34482 4	35482 3	3/4"	12	14	29	50/ 400
34483 1	35483 0	1"	12,5	15	38	25/ 200
34484 8	35484 7	1 ¼"	14	17	46	25/ 150
34485 5	-	1 ½"	16	19,5	53	10/ 150
34486 2	-	2"	17	19,5	64	10/ 90

Bushing

Male thread x female thread, hot-pressed

Item-No.: plain	Item-No.: chro.-plat.	Connection: male x female	Threadlength: m	f	Length L	W.s.: SW	Pack. unit:
34449 7	-	1/4" x 1/8"	7	11	11	14	100/2000
34458 9	-	3/8" x 1/8"	10	15	15	17	50/1000
34450 3	35450 2	3/8" x 1/4"	10	15	15	17	100/1200
34451 0	35451 9	1/2" x 3/8"	12	16	16	21	25/ 600
S-3761	-	1/2" x 3/8"	12	18	18	24	50/ 500
34459 6	-	1/2" x 1/4"	12	16	16	21	25/ 600
S-3760	-	1/2" x 1/4"	12	18	18	24	50/ 400
34457 2	35457 1	3/4" x 3/8"	13	19	19	27	25/ 300
34452 7	35452 6	3/4" x 1/2"	13	18	18	27	25/ 500
34683 5	-	1 " x 3/8"	14	14	21	34	10/ 150
34447 3	35447 2	1" x 1/2"	14	14	22	34	25/ 150
34453 4	35453 3	1" x 3/4"	13	19	19	34	25/ 250
34684 2	-	1 ¼" x 3/4"	20	16	31	44	10/ 80
34454 1	-	1 ¼" x 1"	15	22	22	42	10/ 150
34685 9	-	1 ½" x 3/4"	16	19	25	50	10/ 120
34686 6	-	1 ½" x 1"	16	18	25	50	-/ 80
34455 8	-	1 ½" x 1 ¼"	13	23	23	50	10/ 160
34687 3	-	2" x 1"	17	20	26,5	60	-/ 40
34448 0	-	2" x 1 ¼"	17	18	26,5	60	10/ 50
34456 5	-	2" x 1 ½"	18	26,5	26,5	60	5/ 50
34438 1	-	2 ½" x 2"	22	32	32	78	1/ 44
34688 0	-	3" x 2"	23	26,5	36	90	1/ 36
34439 8	-	3" x 2 ½"	23	36	36	93	1/ 36

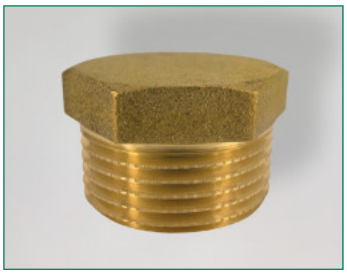


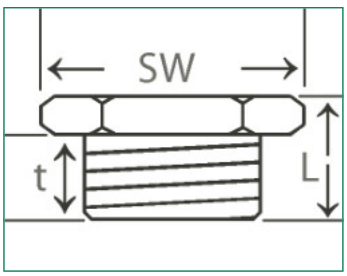


Brass plug

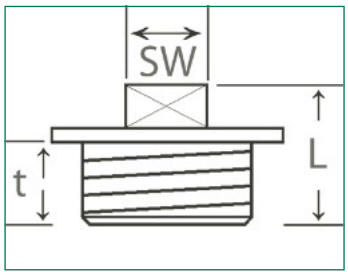
External hexagon, hot-pressed

Item-No.: plain	Item-No.: chro. plat.	Connection: male	Thread-length: t	Length: L	Wrench size: SW	Packing unit:
34001 7	-	1/8"	7	12	13	100/1300
34002 4	-	1/4"	7	12	14	100/1500
34003 1	-	3/8"	9	15	17	50/1250
34004 8	-	1/2"	9	15	21	50/1200
34005 5	-	3/4"	11	18,5	27	25/ 300
34006 2	-	1"	12	20	34	25/ 150





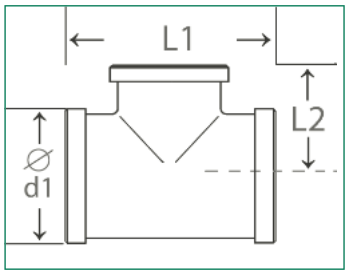
Brass plug



Square head, with collar, hot-pressed

Item-No.: plain	Item-No.: chro. plat.	Connection: male	Thread-length: t	Length: L	Wrench size: SW	Packing unit:
34490 9	35490 8	3/8"	8	15,5	12	50/800
34491 6	35491 5	1/2"	8,5	17,5	12	50/600
34492 3	35492 2	3/4"	8,5	17,5	14	20/400
34493 0	35493 9	1"	13	22,5	17	25/200
34494 7	-	1 ¼"	13	23	19	10/ 150
34495 4	-	1 ½"	13	26	22	10/ 100
34496 1	-	2"	14	28	24	10/ 70

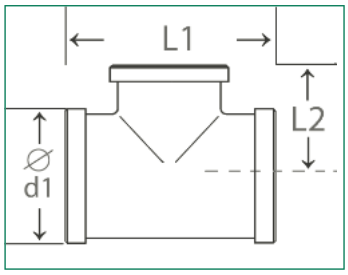
Tee



All sides female threaded, hot-pressed

Item-No.: plain	Item-No.: chro. plat.	Connect.: female	Thread-length: t	Length: L1	Length: L2	Ø d1	Pack. unit:
S-1821	-	1/8"	9,5	31	15,75	14,5	10/120
34609 5	-	1/4"	13	35	16,5	21	25/250
34600 2	35600 1	3/8"	12	48	24,5	21	10/180
34601 9	35601 8	1/2"	13	51	27,25	28,5	10/100
34602 6	35602 5	3/4"	14	61	30,4	30,7	10/ 80
34603 3	35603 2	1"	18	75	34,5	40	5/ 50
34604 0	-	1 ¼"	19	89	44	50	5/ 30
34605 7	-	1 ½"	21	95	47	58	1/ 30
34606 4	-	2"	20	101	50,5	69	1/ 16

Tee, reduced



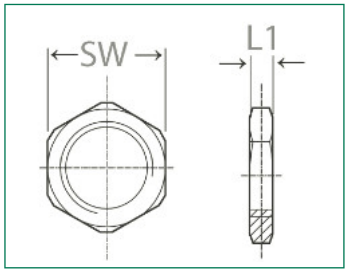
All sides female threaded, hot-pressed

Item-No.: plain	Item-No.: chro.plat.	Connection: female	Thread-length: t	Length: L1	Length: L2	Ø d1	Pack. unit:
34671 2	-	1/2" x 3/8" x 1/2"	13	44	22	28,5	25/180
34672 9	-	3/4" x 1/2" x 3/4"	16	53,5	27,4	33,2	10/100
34673 6	-	1" x 3/4" x 1"	18	68	32	40	10/ 70
34678 1	-	3/4" x 3/4" x 1/2"	15	59	29,4	33,2	10/ 80

Locknut

External hexagon, hot-pressed

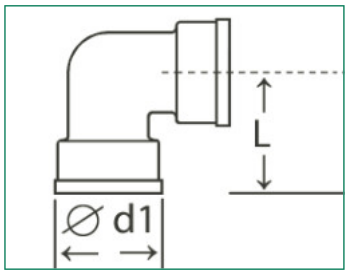
Item-No.: plain	Item-No.: chro.plat.	Connection: female	Length: L1	Wrenchsize: SW:	Packing unit:
34613 2	-	1/8"	4,5	14	100/3200
34614 9	-	1/4"	5	17	100/3200
34615 6	-	3/8"	5	25	-/ 1100
34615-SW19 6	-	3/8"	5	19	-/-
52075 4	-	1/2"	5	27	-/ 1100
34616 3	-	3/4"	6	32	50/ 800
34617 0	-	1"	8	38	-/ 500
34610 1	-	1 ¼"	7	50	50/ 500
34619 4	-	1 ½"	7	56	50/ 400



Elbow (90°)

Both sides female threaded, hot-pressed

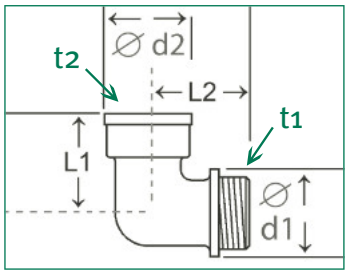
Item-No.: plain	Item-No.: chro.plat.	Connection: female	Thread-length:	Length: L	Length: Ø d1	Packing unit:
S-1699	-	1/8"	10	15	14	50/1000
34629 3	-	1/4"	10	18,5	21	25/400
34620 0	35620 9	3/8"	11	21,5	23	10/ 200
34621 7	35621 6	1/2"	13	25,25	27,5	25/ 150
34622 4	35622 3	3/4"	16	28,75	35,5	10/ 120
34623 1	35623 0	1"	18	33,5	41	10/ 70
34624 8	-	1 ¼"	19	46,5	51	5/ 40
34625 5	-	1 ½"	21	57	58	5/ 30
34626 2	-	2"	23	58,5	71	1/ 20



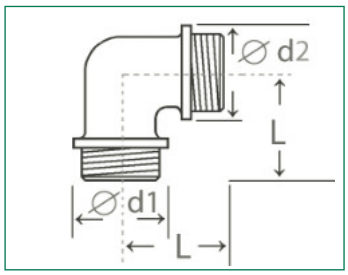
Elbow (90°)

Female thread x male thread, hot-pressed

Item-No.: plain	Item-No.: chro. plat.	Conn.: f x m	Threadlength: m t1	Threadlength: f t2	Length: L1	Length: L2	Length: Ø d1	Length: Ø d2	Packing unit:
34649 1	-	1/4"	9	9	25	34,5	18	21	50/300
34640 8	35640 7	3/8"	10	11	25,75	29,25	22,5	23,5	25/ 250
34641 5	35641 4	1/2"	11	13	30,35	30,75	25,5	27,5	10/ 120
34642 2	35642 1	3/4"	14	16	38,5	38,5	32	34	10/ 100
34643 9	35643 8	1"	15	19	44	44	38	40	10/ 60
34644 6	-	1 ¼"	18	19	53	57	47	50	5/ 40
34645 3	-	1 ½"	21	21	57	62	53	58	5/ 30
34646 0	-	2"	22	23	70	76	66	70	1/ 16
34648 4		3"	27	27	95	95	100	100	-/-



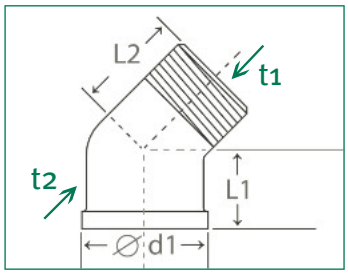
Elbow (90°)



Both sides male threaded, hot-pressed

Item-No.: plain	Item-No.: chro. plat.	Connection: male x male	Thread-length:	Length: L	Length: Ø d1	Packing unit:
34650 7	35650 6	3/8"	10	30	22,5	25/250
34651 4	35651 3	1/2"	10,5	30,75	26,5	25/150
34652 1	35652 0	3/4"	14	38,5	32	10/100
34653 8	-	1"	15	43	38	10/ 70

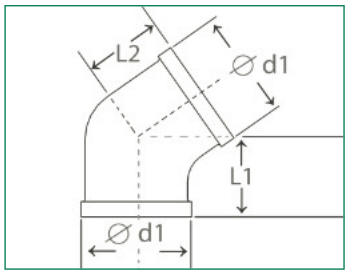
Elbow (45°)



Male thread x female thread, hot-pressed

Item-No.: plain	Item-No.: chro. plat.	Conn.: m x f	Threadlength: m t1	Threadlength: f t2	Length: L1	Length: L2	Length: Ø d1	Packing unit:
34770 2	-	3/8"	10	12	20	22	26	25/250
34771 9	-	1/2"	12	14	22	25,5	28	25/240
34772 6	-	3/4"	12	14	25	32	35	10/120
34773 3	-	1"	15	18	26,5	32	41	-/ 70
34778 8	-	3"	29,5	27	60	60	100	1/ 6

Elbow (45°)



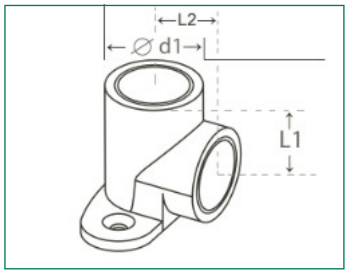
Female thread x female thread, hot-pressed

Item-No.: plain	Item-No.: chro. plat.	Conn.: f x f	Thread-length:	Length: L1	Length: L2	Length: Ø d1	Packing unit:
34780 0	-	3/8"	12	20	20	26	-/-
34781 7	-	1/2"	14	22	22	28	-/200
34782 5	-	3/4"	14	25	25	35	10/120

Wall bracket (90°)

Female thread x female thread, hot-pressed

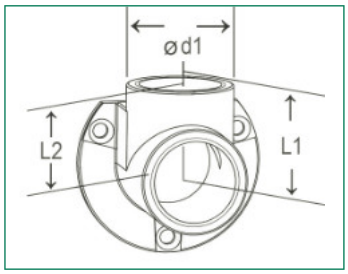
Item-No.: plain	Item-No.: chro. plat.	Conn.: f x f	Thread-length:	Length: L1	Length: L2	Ø d1	Packing unit:
34791 7	35791 6	1/2"	11	22	19	26	10/160



Wall bracket (90°)

Female thread x female thread, hot-pressed

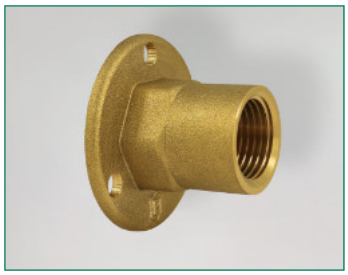
Item-No.: plain	Item-No.: chro. plat.	Conn.: f x f	Thread-length:	Length: L1	Length: L2	Ø d1	Packing unit:
34792 4	-	3/4"	12	23,7	25,5	31,5	10/100

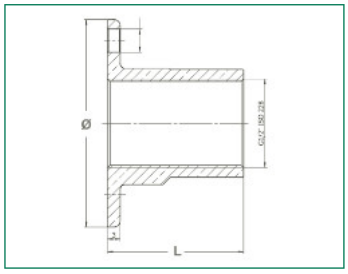


Wall plate (90°)

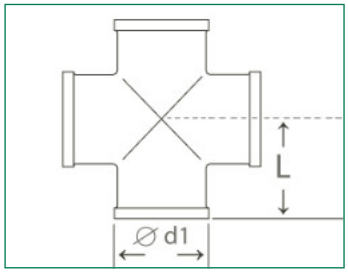
Female thread x female thread, hot-pressed, horizontal passage

Item-No.: plain	Item-No.: chro. plat.	Conn.:	Thread-length:	Length: L	Length: Ø	Wrench size:	Packing unit:
S-4106	-	G1/2"		32	49	26	-/180





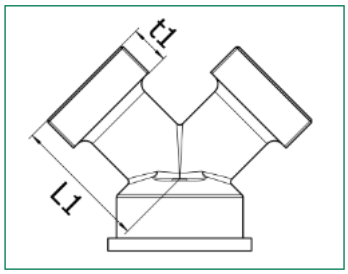
Cross fitting, 90°



Female thread, hot-pressed

Item-No.: plain	Item-No.: chro. plat.	Connection: female	Thread-length:	Length: L	Ø d1	Packing unit:
34801 3	-	1/2"	15	28,5	24	10/120
34803 7	-	1"	18	37,5	38	-/-

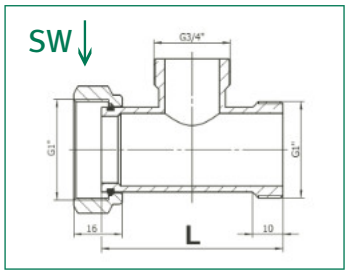
Y-connector



Nominal diameter 1/2", 2 x male threads, 1 x female thread, without seal

Item-No.: plain	Item-No.: chro. plat.	Connection: f/m	Threadlength: t1	Length: L1	Packing unit:
34992 8	35992 7	3/4"	9	26	10/150
34999 7	35999 6	3/4"	9	32	-/-

T-piece with union nut



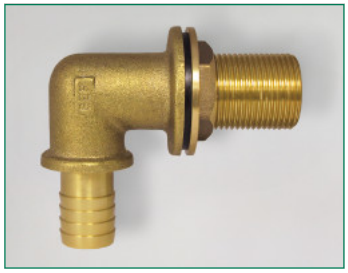
Plain brass, f x m x f, snap ring stainless steel

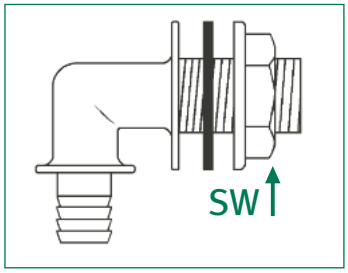
Item-No.:	Connec.: F x M (1) x M (2)	Thread-length: t1 IG/t2 AG	Length: L	Wrench size: SW	Packing unit:
S-3412	G1" x G3/4" x G1"	16/10	60	37	-/-

Tank connector

Incl. lock nut and NBR-thread

Item-No.:	Connection:	NW-spout:	Wrench size:	Packing unit:
S-385-11463-N	F 1" x M 1"	25 mm	38	5/40
Replacement seal				
S-385-Dichtung	34 x 50 x 3 mm			-/-
S-385-Körper	only body, M 1"	25 mm		5/40
S-385-Mutter	F 1", Ø55 x 10,5 mm		38	

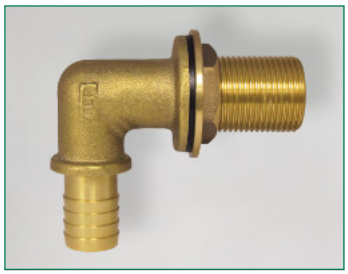


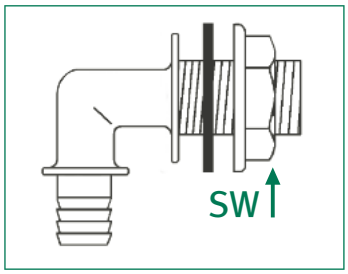


Tank connector (market model)

Incl. lock nut and NBR-thread

Item-No.:	Connection:	NW-spout:	Wrench size SW:	Packing unit:
S-3213	f 1" x m 1"	25 mm	37	5/40
Replacement seal				
S-3222-1/2-D	33 x 29 x Ø11 mm			

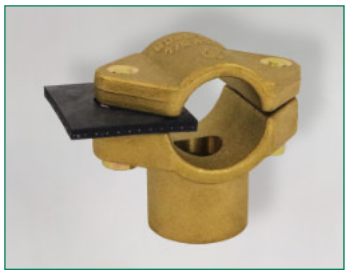


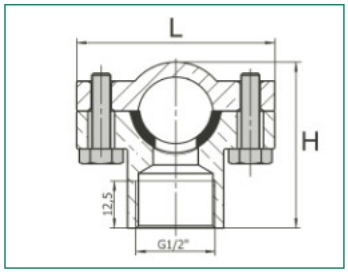


Compression fitting

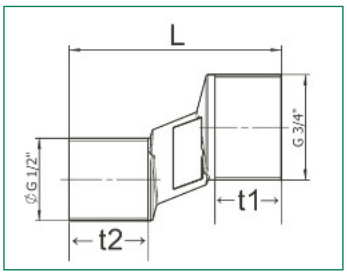
SBR-thread with textile insert

Item-No.:	Connection:	Length L:	H:	Packing unit:
S-3222-½	22 mm x G1/2"	52,5 mm	44	-/90





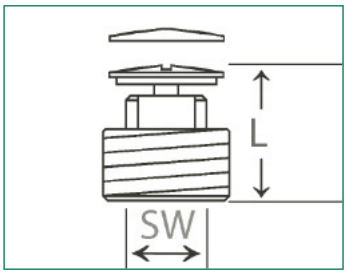
S-connector



S-connector nipple, nickel plated, extension 12,5 mm, 3/4" m x 1/2" m, wrench size 16

Item-No.: plain	Item-No.: chro. plat.	Connection:	Threadlength: t1	t2	Length: L	Wrench size: SW:	Pack. unit:
-	35610 0	3/4" m x 1/2" m	16	19	51	16	25/200

Plug with slotted screw



Plug, plain brass with slotted screw chrome-plated

Item-No.:	Item-No.:	Connection: male	Thread-length:	Length: L	Wrench size: SW:	Packing unit:
34618 7	-	3/8"	10	20	9	25/1000
34611 8	-	1/2"	11	21	9	50/ 500
34612 5	-	3/4"	14	26	12	25/ 500
Accessories: Protective plastic cap						
34611-Kappe		universal				500/10000
Closing plug, plain brass with slotted screw chrome-plated + protective plastic cap						
34618-11325		3/8"	10	20	9	25/1000
34611-11325		1/2"	11	21	9	25/ 800
34612-11325		3/4"	14	26	12	25/ 500

Compression fittings for copper pipes

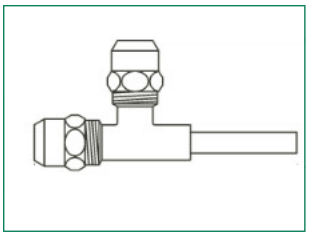
Material in accordance with DIN 50960-6, operating temperature max. 90°C, operating pressure max. 10 bar.

Important note: compression fittings are for single use only!

T-branch piece

T-piece with extension and two high tensile brass cone compression fittings with length compensation, chrome plated

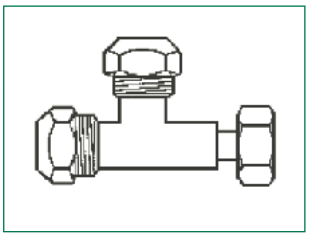
Item-No.:	Connection:	Leaving:	Packing unit:
52267 3	3/8"	3/8" x 10 mm	25/100



T-branch piece

T-piece with union nut and two high tensile brass cone compression fittings with length compensation, chrome plated

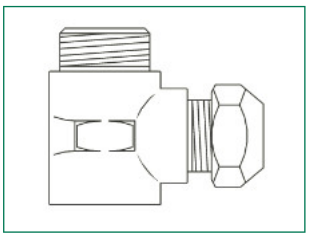
Item-No.:	Connection:	Leaving:	Packing unit:
52267-3/8"	3/8"	3/8" x 10 mm	25/150



T-branch piece

T-piece female/male with a compression fitting, chrome plated

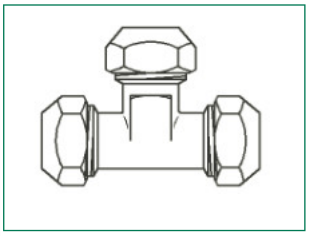
Item-No.:	Connection:	Leaving:	Packing unit:
52463 9	1/2" x 1/2"	3/8" x 10 mm	10/200
52464 6	1/2" x 1/2"	1/2" x 12 mm	10/200

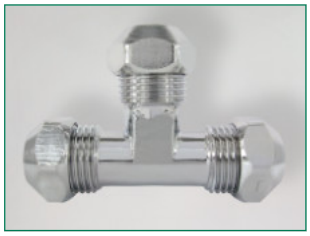


T-branch piece

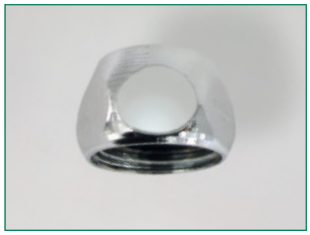
T-piece with 3 x compression fittings, chrome plated

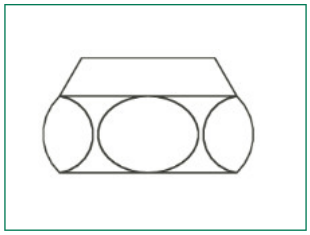
Item-No.:	Connection:	Packing unit:
52470 7	3/8" x 8 mm	10/200
52471 4	3/8" x 10 mm	10/200
52472 1	1/2" x 12 mm	10/160





Compression fitting, loose

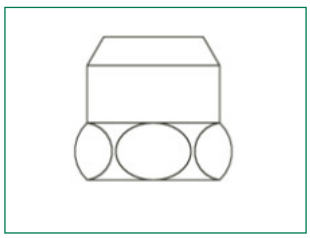




Compression fitting without length compensation, chrome-plated

Item-No.:	Connection:	Packing unit:
52450 9	3/8" x 8 mm	25/1000
52451 6	3/8" x 10 mm	25/1000
52452 3	3/8" x 12 mm	25/1000
52450-1/2"	1/2" x 8 mm	25/1000
52451-1/2"	1/2" x 10 mm	25/1000
52452-1/2"	1/2" x 12 mm	25/1000

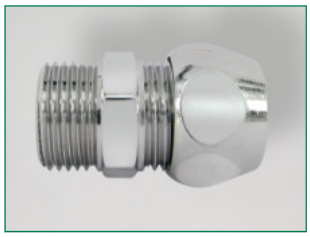
Compression fitting, loose

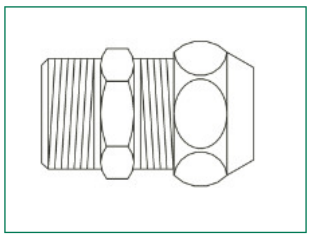


Compression fitting with length compensation, chrome-plated

Item-No.:	Connection:	Packing unit:
52451-lang	3/8" x 10 mm	150/750

Single compression fitting

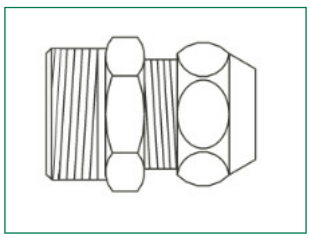




On nipple, chrome-plated

Item-No.:	Connection: m x m x Ø	Packing unit:
52494 3	3/8" x 3/8" x 8 mm	25/250
52495 0	3/8" x 3/8" x 10 mm	25/250
52497 4	1/2" x 1/2" x 10 mm	25/200
52496 7	1/2" x 1/2" x 12 mm	25/200

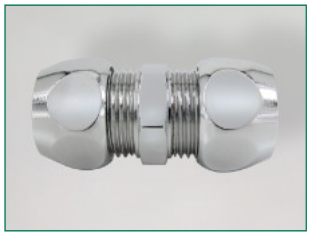
Single compression fitting

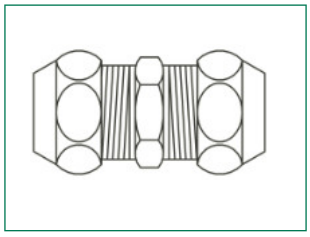


On reducing nipple, chrome-plated

Item-No.:	Connection: m x m x Ø	Packing unit:
52498 1	3/4" x 3/8" x 10 mm	25/-

Double compression fitting

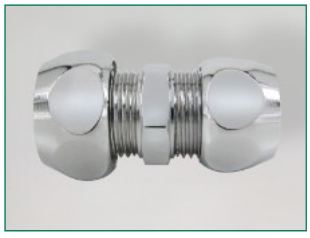


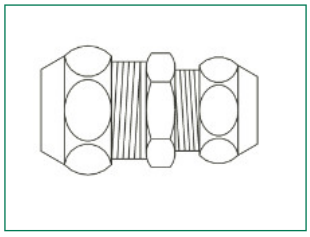


Chrome-plated

Item-No.:	Connection: m x m x Ø	Packing unit:
52490 5	3/8" x 3/8" x 8 mm	25/250
52491 2	3/8" x 3/8" x 10 mm	25/250
52491-12 mm	3/8" x 3/8" x 12 mm	25/250
52492 9	1/2" x 1/2" x 12 mm	25/250

Double compression fitting





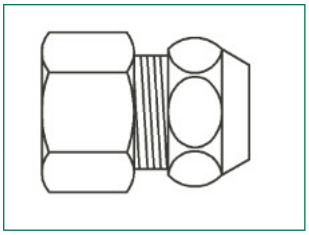
Reduced, chrome-plated

Item-No.:	Connection: m x m x Ø	Packing unit:
52493 6	3/8" x 10 mm x 3/8" x 8 mm	25/400
52499 8	1/2" x 12 mm x 3/8" x 10 mm	50/700

Compression fitting

On nipple with female thread, chrome-plated

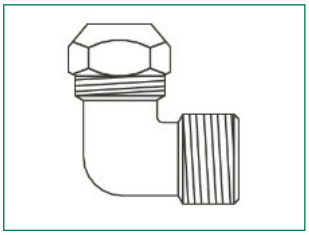
Item-No.:	Connection: f x m x Ø	Packing unit:
52495-IG	3/8" x 3/8" x 10 mm	50/500
52499-IG	1/2" x 3/8" x 10 mm	25/300



Elbow with one compression fitting

Elbow male/male with single compression fitting, chrome-plated

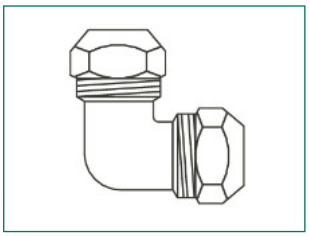
Item-No.:	Connection: m x m x Ø	Packing unit:
52486 8	3/8" x 3/8" x 10 mm	25/300
52486-1/2"	1/2" x 1/2" x 10 mm	10/ 250
52487 5	1/2" x 1/2" x 12 mm	25/ 150



Elbow with two compression fittings

Elbow male/male with two compression fittings, chrome-plated

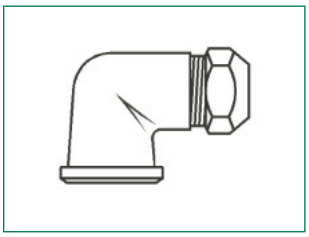
Item-No.:	Connection: m x m x Ø	Packing unit:
52480 6	3/8" x 3/8" x 8 mm	25/400
52481 3	3/8" x 3/8" x 10 mm	25/400
52487-11001	1/2" x 1/2" x 12 mm	25/-



Elbow with one compression fitting

Elbow female/male with compression fitting, chrome-plated

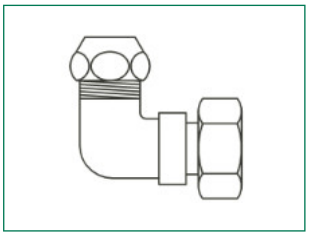
Item-No.:	Connection: f x m x Ø	Packing unit:
52483 7	1/2" x 3/8" x 10 mm	10/150



Elbow with one compression fitting

Elbow, rotable, union nut at one and compression fitting at the other end, chrome-plated

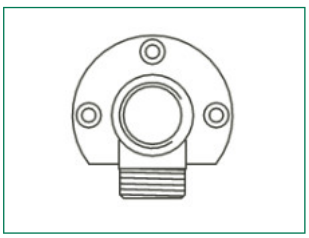
Item-No.:	Connection: f x m x Ø	Packing unit:
52489 9	3/8" x 3/8" x 10 mm	10/250



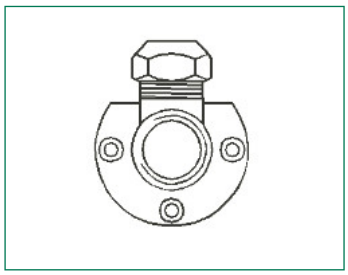
Wall plate elbow

Wall plate elbow, without compression fitting, chrome-plated

Item-No.:	Connection: f x m x Ø	Packing unit:
52466 0	1/2" x 3/8" x 12,5 mm	10/120
52467 7	1/2" x 1/2" x 12,5 mm	15/180



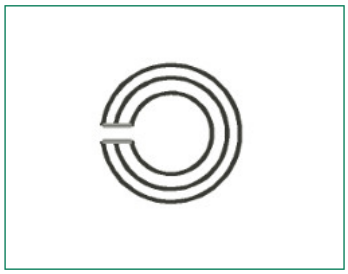
Wall plate elbow



Wall plate elbow, with one compression fitting, chrome-plated

Item-No.:	Connection: f x m x Ø	Packing unit:
52461 5	1/2" x 3/8" x 10 mm	10/100
52462 2	1/2" x 1/2" x 12 mm	10/150

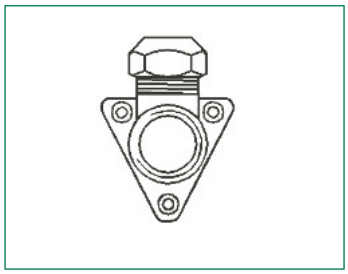
Accessories for compression fittings



Clamping ring for brass compression fittings, series 524xx, chrome-plated

Item-No.:	Connection:	Packing unit:
52455 4	3/8" x 8 mm	1000/15000
52456 1	3/8" x 10 mm	1000/15000

Wall plate elbow



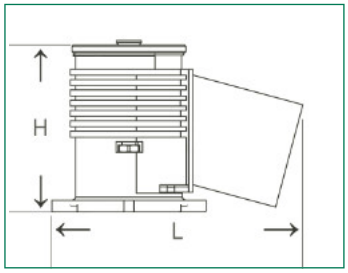
Wall plate elbow, brass plain, with one compression fitting

Item-No.:	Connection: f x m x Ø	Packing unit:
34881 5	1/2" x 1/2" x 16 mm	25/150

Wall box

Wall box easy with Euro adapter connection, female thread/male thread, housing polypropylene with talc, fitting brass, screws stainless steel

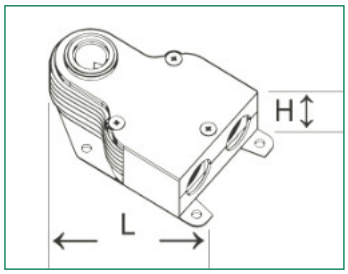
Item-No.:	Connection:	Length:		Packing unit:
		L	H	
S-2828	1/2" x 3/4"	95	63	-/72
Replacement gasket				
S-2828-Dichtung	Ø12 x Ø37 x 25,5 mm			50/450



Wall box

Wall box double with Euro adapter connection, female thread/male thread, housing polypropylene with talc, fitting brass, screws stainless steel

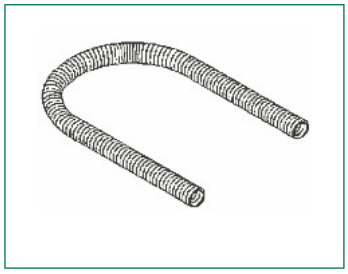
Item-No.:	Connection:	Length:		Packing unit:
		L	H	
S-2829	1/2" x 3/4"	132	40,5	-/48



Bending spring

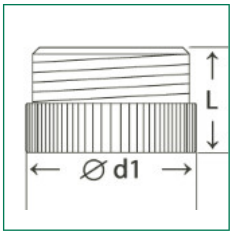
Bending spring for compound pipe, galvanized steel

Item-No.:	Connection:	Length:		Packing unit:
	∅ inside/outside	L	H	
S-2928-16	16,7 / 20,85	500		1/40
S-2928-20	20,6 / 24,6	500		1/34

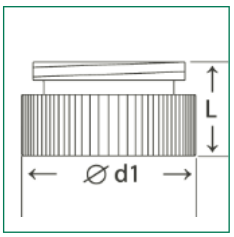


Adapter fitting

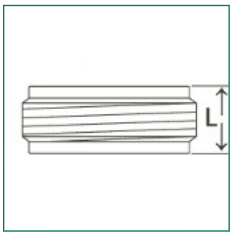
Brass chrome-plated



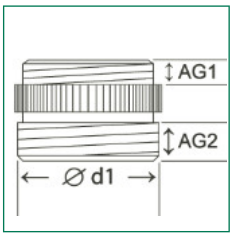
Item-No.:	Connection:	Thread-length: f	Thread-length: m	Length L	Ø d1	Packing unit:
35630 8	M 22 x 1" f x 1/2" m	5,5	8,5	16	24	50/1000
35631 5	M 22 x 1" f x 3/4" m	6	9,5	16	26	50/ 500



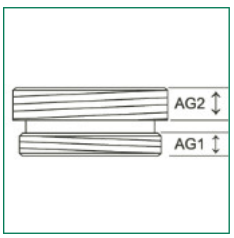
Item-No.:	Connection:	Thread-length: m	Thread-length: f	Length L	Ø d1	Packing unit:
35632 2	M 22 x 1" m x 1/2" f	2,5	7,5	13	24	50/1000
35633 9	M 22 x 1" m x 3/4" f	6,5	8,5	16,5	29	50/ 700



Item-No.:	Connection:	Length: L	Packing unit:
35634 6	M 22 x 1" f x 3/4" m x 1/2" f	10	50/2000



Item-No.:	Connection:	Threadlength: m AG1	Threadlength: m AG2	Length: L	Ø d1	Packing unit:
35635 3	M 24 x 1" m x 3/4 m	4,5	7	18,5	27	50/400



Item-No.: with sealing	Connection:	Threadlength: m AG1	Threadlength: m AG2	Length L	Packing unit:
35636 0	M 24 x 1" m x M 22 x 1 m	4	3,5	9,5	50/1000

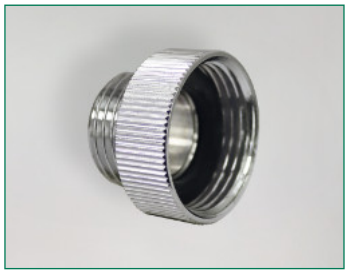
Seals

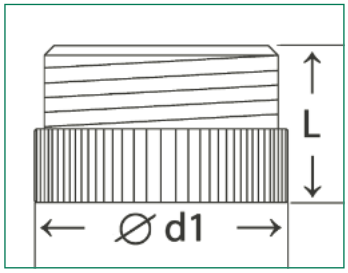
Item-No.:	for item:	Connection:	Item-No.:	for item:	Connection:
35630/31-Dichtung	35630/31	21 x 15 x 1,5 mm	35633/38/39-Dichtung	35633/38/39	24 x 16 x 2,5 mm
35632-Dichtung	35632	18,5 x 15 x 2 mm	35636-Dichtung	35636	21 x 15 x 2,5 mm
35635-Dichtung	35635	22 x 17 x 1,5 mm			

Adapter fitting

Brass chrome-plated, knurled, with sealing

Item-No.:	Connection:	Threadlength:		Length:		Packing unit:
		male	female	L	Ø d1	
35638 4	1/2" m x 3/4" f	10	9,5	20	29	50/600

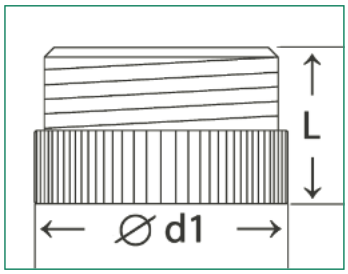




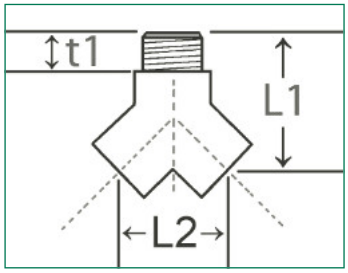
Adapter fitting

Brass chrome-plated, corded or with external hexagon, with sealing

Item-No.:	Connection:	Threadlength:		Length:		Wrench-size:	Packing unit:
		m	f	L	Ø d1	SW:	
35639 1	1" f x 3/4" m	10	10	22	38	-	25/250
35432-40748	1/2" f x 3/4" m	8	8	17	26	23	50/800



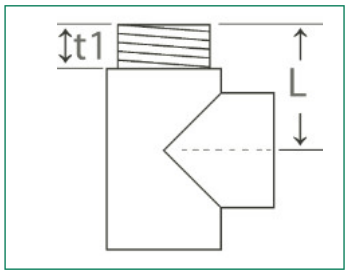
Y-connector



Brass polished chrome-plated, 2 x female, 1 x male thread

Item-No.: plain	Item-No.: chrom. plat.	Connec.:	Thread-length: t1	Length: L1	Length: L2	Packing unit:
-	35991 0	1/2"	12	42	32	10/120

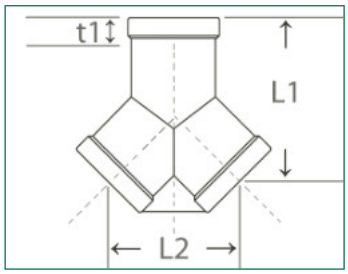
Tee



Brass, polished chrome-plated, 1/2" male x 1/2" female x 1/2" female thread

Item-No.: chrome-plated	Connection:	Threadlength: m t1	Threadlength: f	Length: L	Packing unit:
35997 2	1/2"	10	15	28	10/120

Y-connector



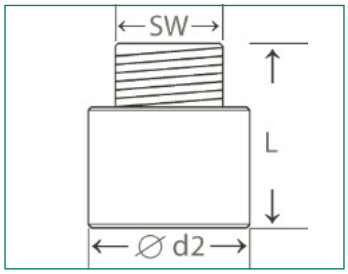
3 x 3/8" female thread

Item-No.: plain	Item-No.: chrom. plat.	Connec.:	Thread-length: t1	Length: L1	Length: L2	Packing unit:
S-1828	-	3/8"	16	39	30	10/150

Extension, reduced

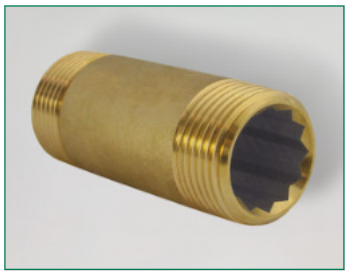
Adapter fitting

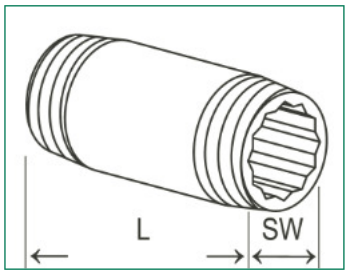
Item-No.: plain	Item-No.: chro. pla.	Connection:	Threadlength: f	Threadlength: m	Length: f/m	Length: Ø d2	Wre.-size: SW	Packing unit:
34637 8	35637 7	1/2" f x 3/8" m	14	10	29	25,5	11	20/300
34690 3	35690 2	3/4" f x 1/2" m	13	11	30	31,5	12	20/180
34691 9	35691 0	3/4" f x 3/8" m	14	10	29	32	11	20/240



Brass pipe

With internal polygon, on both sides tapered male thread according to EN10226-1/ISO7-1

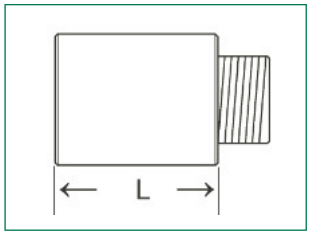




Length:	R3/8" w. s. 10 plain	R3/8" w. s. 10 chrom plat.	Pack. unit:	R1/2" w. s. 12 plain	R1/2" w. s. 12 chrom plat.	Pack. unit:	R3/4" w. s. 17 plain	R3/4" w. s. 17 chrom plat.	Pack. unit:	R1" w. s. 22 plain	R1" w. s. 22 chrom plat.	Pack. unit:
30 mm	29210 1	29215 6	-/10	29211 8	29216 3	25/300	29212 5	29217 0	25/300	29213 2	29218 7	25/100
40 mm	29220 0	29225 5	25/250	29221 7	29226 2	25/200	29222 4	29227 9	25/200	29223 1	29228 6	25/100
50 mm	29230 9	29235 4	-/10	29231 6	29236 1	25/200	29232 3	29237 8	25/150	29233 0	29238 5	10/100
60 mm	29240 8	29245 3	25/200	29241 5	29246 0	25/150	29242 2	29247 7	25/125	29243 9	29248 4	10/80
80 mm	29250 7	29255 2	20/160	29251 4	29256 9	15/120	29252 1	29257 6	25/100	29253 8	29258 3	-/50
100 mm	29260 6	29265 1	-/10	29261 3	29266 8	15/75	29262 0	29267 5	10/70	29263 7	29268 2	10/50
120 mm	29270 5	29275 0	-/10	29271 2	29276 7	6/60	29272 0	29277 4	5/50	29283 5	29278 1	-/10
130 mm	-	-	-/-	-	-	-/-	-	-	-/-	29293 4	-	-/10
150 mm	29280 4	29285 9	-/10	29281 1	29286 6	5/50	29282 8	29287 3	-/10	-	29288 0	-/10
200 mm	29290 3	29295 8	-/10	29291 0	29296 5	-/10	29292 7	29297 2	-/10	-	29298 9	-/10

Tap extension

Plain brass or chrome-plated brass, according to DIN 3523



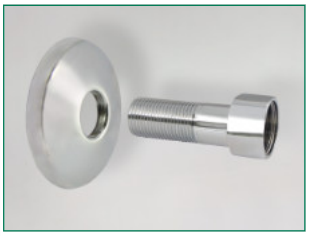
Con.:	plain	chr. pla.	Packing unit:	plain	chr. pla.	Packing unit:	plain	chr. pla.	Packing unit:	plain	chr. pla.	Packing unit:
L mm	G 3/8"	G 3/8"		G 1/2"	G 1/2"		G 3/4"	G 3/4"		G 1"	G 1"	
10	34810 9	35810 4	10/500	34811 2	35811 1	10/400	34812 9	35812 8	10/200	-	-	-
15	34815 0	35815 9	10/500	34816 7	35816 6	10/300	34817 4	35817 3	10/200	-	-	-
20	34820 4	35820 3	10/400	34821 1	35821 0	10/250	34822 8	35822 7	10/ 150	34823 5	35823 4	10/100
25	34825 9	35825 8	10/300	34826 6	35826 5	10/200	34827 3	35827 2	10/ 150	34828 0	35828 9	10/100
30	34830 3	35830 2	10/250	34831 0	35831 9	10/ 150	34832 7	35832 6	10/ 150	34833 4	35833 3	10/ 50
35	34835 8	-	10/200	34836 5	-	10/ 100	34837 2	-	10/100	-	-	-
40	34840 2	35840 1	10/200	34841 9	35841 8	10/ 150	34842 6	35842 5	10/100	34843 3	35843 2	10/100
45	34845 7	-	10/ 150	34846 4	35846 3	5/ 100	34847 1	35847 0	5/ 50	-	-	-
50	34850 1	35850 0	5/ 150	34851 8	35851 7	5/ 100	34852 5	35852 4	5/ 50	34854 9	35854 8	5/ 50
60	34855 6	-	5/ 100	34856 3	-	5/ 100	34857 0	-	5/ 50	-	-	-
65	34860 0	35860 9	5/ 100	34861 7	35861 6	5/ 100	34862 4	35862 3	5/ 50	-	-	-
80	34865 5	35865 4	5/ 100	34866 2	35866 1	5/ 50	34867 9	35867 8	5/ 50	-	-	-
100	34859 4	35859 3	5/ 50	34858 7	35858 6	5/ 50	34868 6	-	5/ 50	34864 8	35864 7	5/ 30

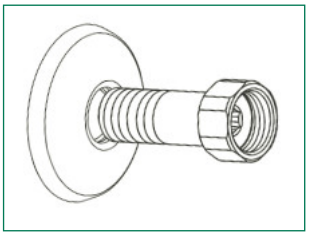
Fittings, model SUISSE, with SVGW-certification

Straight screw fitting, chrome-plated and polished, with screw rosette

Screw fitting

Item-No.:	Connection:	Packing unit:
35710 7	3/8" x 1/2" x 55 mm	18/216
35711 4	1/2" x 1/2" x 55 mm	18/162
35712 1	1/2" x 1/2" x 65 mm	-/-
35713 8	1/2" x 3/4" x 60 mm	12/120

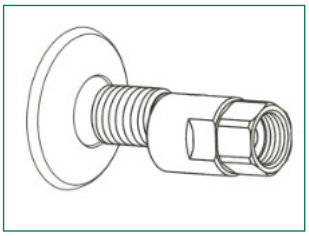




Eccentric screw fitting, 5 mm, chrome-plated and polished, with push-on rosette

Screw fitting

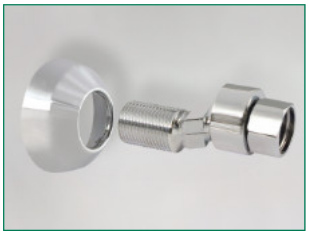
Item-No.:	Connection:	Packing unit:
35723 7	1/2" x 1/2" x 63 mm	20/80
35724 4	1/2" x 3/4" x 68 mm	20/80

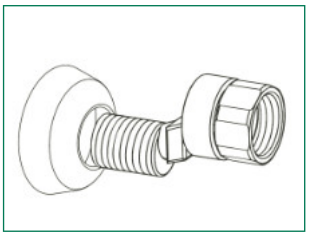


Eccentric screw fitting, 17 mm, chrome-plated and polished, with push-on rosette

Screw fitting

Item-No.:	Connection:	Packing unit:
35728 2	3/8" x 1/2" x 68 mm	1/60
35729 9	1/2" x 1/2" x 68 mm	1/60
35730 5	1/2" x 3/4" x 68 mm	1/60

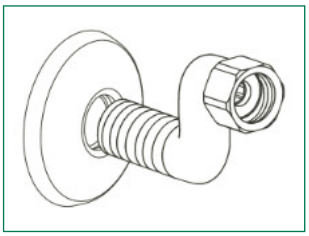




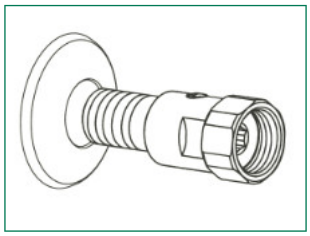
Eccentric screw fitting, 30 mm, chrome-plated and polished, with screw rosette

Screw fitting

Item-No.:	Connection:	Packing unit:
35717 6	3/8" x 1/2" x 65 mm	12/120
35718 3	1/2" x 1/2" x 65 mm	14/112
35719 0	1/2" x 3/4" x 68 mm	12/ 96



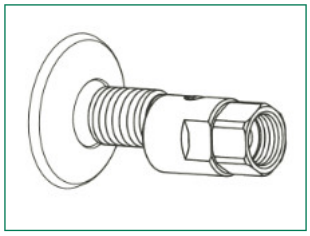
Screw fitting



Straight screw fitting, chrome-plated and polished, with push-on rosette

Item-No.:	Connection:	Packing unit:
35714 5	3/8" x 1/2" x 62 mm	10/60
35715 2	1/2" x 1/2" x 62 mm	10/60
35716 9	1/2" x 3/4" x 65 mm	10/60

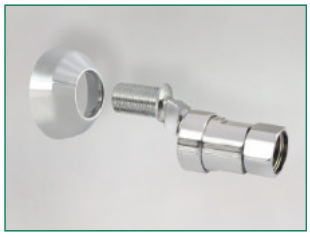
Screw fitting

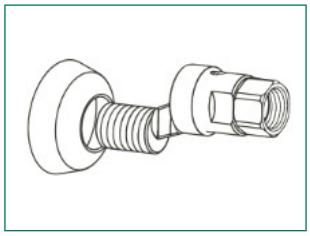


Eccentric screw fitting, 5 mm, chrome-plated and polished, with push-on rosette

Art.-Nr.:	Abm.:	VE:
35720 6	3/8" x 1/2" x 62 mm	20/80
35721 3	1/2" x 1/2" x 62 mm	20/80
35722 0	1/2" x 3/4" x 65 mm	20/80

Screw fitting

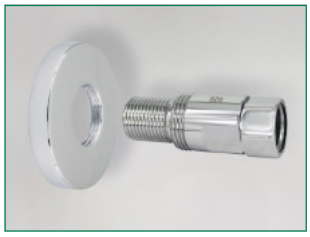


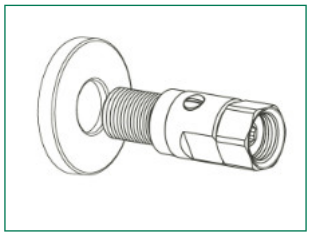


Eccentric screw fitting, 17 mm, chrome-plated and polished, with push-on rosette

Item-No.:	Connection:	Packing unit:
35725 1	3/8" x 1/2" x 82 mm	1/60
35726 8	1/2" x 1/2" x 82 mm	1/60
35727 5	1/2" x 3/4" x 85 mm	1/60

Screw fitting





Straight screw fitting, 17 mm, chrome-plated and polished, with screw rosette

Item-No.:	Connection:	Packing unit:
35738 1	1/2" x 1/2" x 72 mm	10/60
35739 8	1/2" x 3/4" x 75 mm	10/60

Replacement gaskets for connecting couplings

AFM 34, KTW-certified, 18 x 10 x 2 mm (1/2")

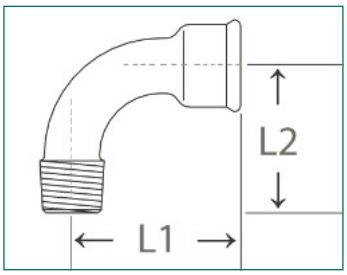
Item-No. seal:	for Item-No.:											
35710-AFM	35710	35711	35712	35714	35715	35717	35718	35720	35721	35723	35725	35726
	35728	35729	35739									
Novapress 260 or equivalent, 24 x 14 x 3 mm												
WS-551-Dtg-3mm	35713	35716	35719	35722	35724	35727	35730	35739				

Malleable galvanized fittings according to DIN EN 10242, design symbol A, material according to DIN EN 1562 (EN-GJMB-350-10), threads according to ISO 7.1, connection thread to DIN EN ISO 228-1, max. 0° - 120° C 25 bar, 120° - 300° C 20 bar

Long bend (1), ISO G 4

Female thread x male thread, long, 90°

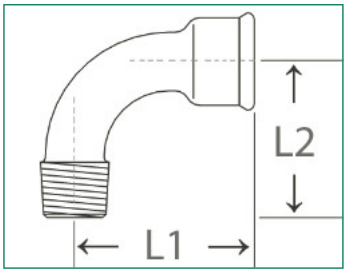
Item-No.: zinc plated	Item-No.: black	Connec.:	Threadlength: f	Threadlength: m	Length: L1	Length: L2	Packing unit:
40000 1	40000-S	1/4"	10	13	40	36	10/400
40010 0	40010-S	3/8"	10	12	48	42	10/280
40011 7	40011-S	1/2"	13	15	55	48	10/180
40012 4	40012-S	3/4"	15	18	69	60	10/ 80
40013 1	40013-S	1"	17	20	85	75	10/ 50
40014 8	40014-S	1 ¼"	19	22	105	95	10/ 30
40015 5	40015-S	1 ½"	20	22	116	105	5/ 20
40016 2	40016-S	2"	23	26	140	130	1/ 10
40017 9	40017-S	2 ½"	27	30	176	165	1/ 4
40018 6	40018-S	3"	30	33	205	190	1/ 3
40019 3	40019-S	4"	37	45	240	258	1/ 4



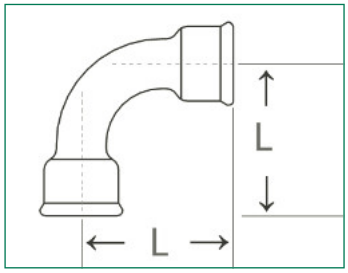
Short bend (1a), ISO D 4

Female thread x male thread, short, 90°

Item-No.: zinc plated	Item-No.: black	Connec.:	Threadlength: f	Threadlength: m	Length: L	Packing unit:
40111 4	40111-S	1/2"	13	15	45	10/200
40112 1	40112-S	3/4"	15	18	50	10/120
40113 8	40113-S	1"	17	20	63	10/ 60
40114 5	40114-S	1 ¼"	-	-	76	10/ 35
40115 2	40115-S	1 ½"	20	21	85	10/ 20
40116 9	40116-S	2"	-	-	102	-/ 18



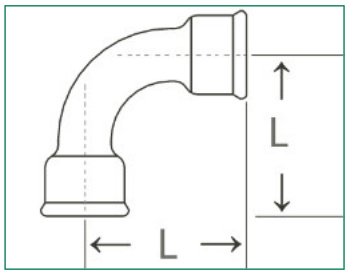
Long bend (2), ISO G 1



Female thread x female thread, long, 90°

Item-No.: zinc plated	Item-No.: black	Connec.:	Thread-Length:	Length: L	Packing unit:
40020 9	40020-S	3/8"	-	-	10/200
40021 6	40021-S	1/2"	13	55	10/150
40022 3	40022-S	3/4"	15	69	10/ 80
40023 0	40023-S	1"	17	85	10/ 40
40024 7	40024-S	1 ¼"	19	105	1/ 25
40025 4	40025-S	1 ½"	20	116	5/ 15
40026 1	40026-S	2"	24	140	1/ 8
40027 8	40027-S	2 ½"	27	176	1/ 4
40028 5	40028-S	3"	30	205	1/ 2
40029 2	40029-S	4"	-	-	1/ 3

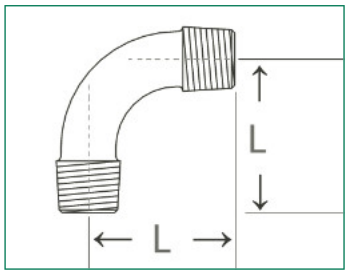
Short bend (2a), ISO D 1



Female thread x female thread, short, 90°

Item-No.: zinc plated	Item-No.: black	Connec.:	Thread-Length:	Length: L	Packing unit:
40121 3	40121-S	1/2"	13	45	10/180
40122 0	40122-S	3/4"	15	50	10/100
40123 7	40123-S	1"	17	63	10/ 50
40124 4	40124-S	1 ¼"	19	76	10/ 30
40125 1	40125-S	1 ½"	19	85	1/ 20
40126 8	40126-S	2"	24	102	1/ 14

Long bend (3), ISO G 8



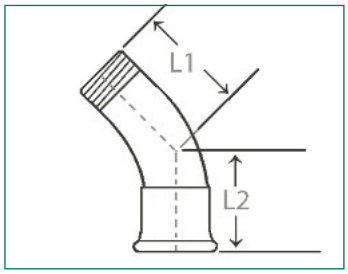
Male thread x male thread, long, 90°

Item-No.: zinc plated	Item-No.: black	Connec.:	Thread-Length:	Length: L	Packing unit:
40030 8	40030-S	3/8"	12	42	-/-
40031 5	40031-S	1/2"	15	48	10/250
40032 2	40032-S	3/4"	18	60	10/120
40033 9	40033-S	1"	20	75	10/ 50
40034 6	40034-S	1 ¼"	22	95	10/ 40
40035 3	40035-S	1 ½"	22	105	1/ 20
40036 0	40036-S	2"	24	130	-/ 3
40037 7	40037-S	2 ½"	29	165	1/ 5
40038 4	40038-S	3"	35	190	1/ 1
40039 1	40039-S	4"	37	245	1/ 1

Long bend 45° (40), ISO G4

Female thread x male thread, long, 45°

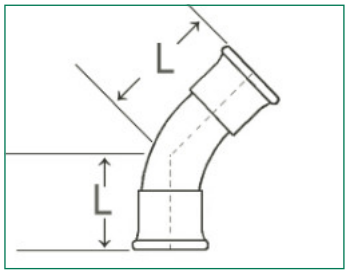
Item-No.: zinc plated	Item-No.: black	Conn.:	Threadlength: f	Threadlength: m	Length: L1	Length: L2	Packing unit:
40399	40399-S	1/4"					10/300
40400 9	40400-S	3/8"	12	13	25	31	10/300
40401 6	40401-S	1/2"	13	15	30	36	10/200
40402 3	40402-S	3/4"	15	18	36	43	10/ 120
40403 0	40403-S	1"	17	20	42	51	10/ 50
40404 7	40404-S	1 ¼"	19	22	54	64	10/ 40
40405 4	40405-S	1 ½"	19	22	58	68	10/ 30
40406 1	40406-S	2"	24	27	70	81	10/ 15
40407 8	40407-S	2 ½"	27	29	86	99	1/ 10
40408 5	40408-S	3"	30	35	100	113	1/ 5



Long bend 45° (41), ISO G1

Female thread x female thread, long, 45°

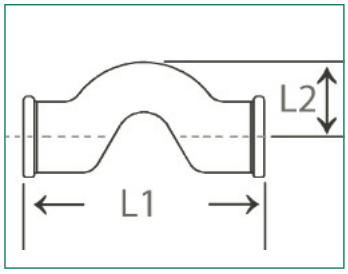
Item-No.: zinc plated	Item-No.: black	Connection:	Thread-length:	Length: L	Packing unit:
40410 8	40410-S	3/8"	12	32	10/300
40411 5	40411-S	1/2"	13	36	10/180
40412 2	40412-S	3/4"	15	43	10/ 110
40413 0	40413-S	1"	17	51	10/ 40
40414 6	40414-S	1 ¼"	19	64	10/ 30
40415 3	40415-S	1 ½"	20	68	-/ 65
40416 0	40416-S	2"	24	81	-/ 35



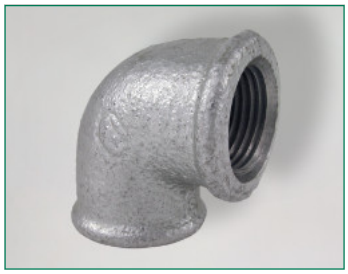
Crossover (85)

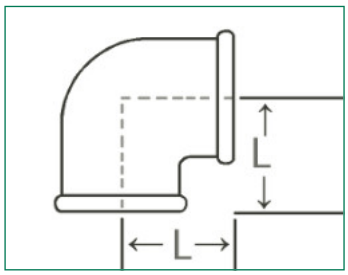
Female thread x female thread

Item-No.: zinc plated	Item-No.: black	Connection:	Thread-length:	Length: L1	Length: L2	Packing unit:
40851 9	40851-S	1/2"	13	91	28,5	10/ 100
40852 6	40852-S	3/4"	15	108	41	10/ 60



Elbow (90), ISO A 1

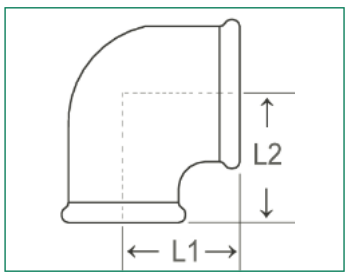




Female thread x female thread, 90°

Item-No.: zinc plated	Item-No.: black	Connection:	Threadlength:	Length: L	Packing unit:
40899 1	40899-S	1/4"	-	21	10/500
40900 4	40900-S	3/8"	10	25	10/350
40901 1	40901-S	1/2"	13	28	10/250
40902 8	40902-S	3/4"	15	33	10/140
40903 5	40903-S	1"	17	38	10/ 80
40904 2	40904-S	1 ¼"	19	45	10/ 40
40905 9	40905-S	1 ½"	19	50	10/ 30
40906 6	40906-S	2"	24	58	5/ 20
40917 2	40917-S	2 ½"	28	69	1/ 10
40918 9	40918-S	3"	28	78	1/ 8
40919 6	40919-S	4"	30	96	1/ 8

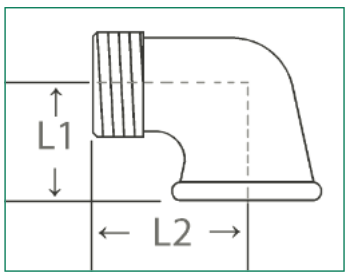
Elbow reducing (90 R), ISO A 1



Female thread x female thread, reduced, 90°

Item-No.: zinc plated	Item-No.: black	Connection: f1 f2	Threadlength: f1	f2	Length: L1	L2	Packing unit:
40911 0	40911-S	1/2" x 3/8"	13	10	26	26	10/260
40908 0	40908-S	3/4" x 1/2"	15	13	30	31	10/160
40907 3	40907-S	1" x 1/2"	18	15	30	31	10/100
40909 7	40909-S	1" x 3/4"	17	15	35	36	10/100
40898 4	40898-S	1 ¼" x 3/4"	19	24	50	64	10/ 60
40914 1	40914-S	1 ¼" x 1"	19	17	40	42	10/ 50
40915 8	40915-S	1 ½" x 1"	19	17	42	46	10/ 40
40935 6	40935-S	1 ½" x 1 ¼"	17,5	22	44,5	62	10/ 30
40936 3	40936-S	2" x 1 ½"	-	-	-	-	10/ 30

Elbow (92), ISO A 4



Female thread x male thread, 90°

Item-No.: zinc plated	Item-No.: black	Connec.:	Threadlength: IG	AG	Length: L1	L2	Packing unit:
40929 5	40929-S	1/4"	10	13	21	28	10/700
40920 2	40920-S	3/8"	11	12	25	32	10/350
40921 9	40921-S	1/2"	13	15	28	37	10/250
40922 6	40922-S	3/4"	15	18	33	43	10/140
40923 3	40923-S	1"	17	20	38	52	10/ 80
40924 0	40924-S	1 ¼"	19	22	45	60	10/ 40
40925 7	40925-S	1 ½"	19	22	50	65	10/ 30
40926 4	40926-S	2"	24	28	58	74	6/ 18
40927 1	40927-S	2 ½"	27	29	69	88	1/ 30
40928 8	40928-S	3"	30	35	78	98	1/ 8

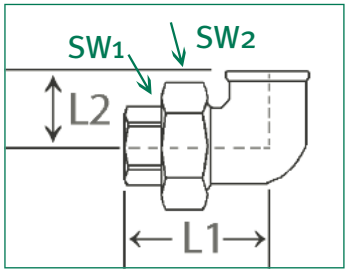
Female thread x male thread, **reduced**, 90°

40933 2	40933-S	1" x 3/4"	17	18	34	45	10/100

Union elbow (95), ISO UA 1

Female thread x female thread, flat seat, without seal

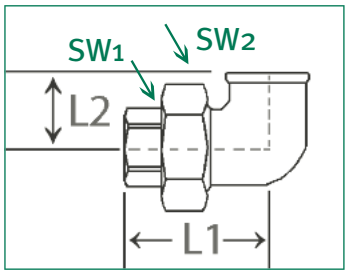
Item-No.: zinc plated	Item-No.: black	Connec.:	Thread-length:	Length: L1	Length: L2	Wrench size: SW1	Wrench size: SW2	Packing unit:
40951 6	40951-S	1/2"	13	58	28	27	45	10/80
40952 3	40952-S	3/4"	15	62	33	32	50	10/60
40953 0	40953-S	1"	17	72	38	39	55	10/40
40954 7	40954-S	1 ¼"	19	82	45	47	69	10/20
40955 4	40955-S	1 ½"	20	87	50	54	75	1/ 25
40956 1	40956-S	2"	25	90	65	67	92	1/ 8



Union elbow (96), ISO UA 11

Female thread x female thread, taper seat

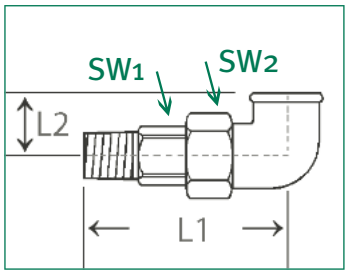
Item-No.: zinc plated	Item-No.: black	Connec.:	Thread-length:	Length: L1	Length: L2	Wrench size: SW1	Wrench size: SW2	Packing unit:
40960 0	40960-S	3/8"	-	-	-	-	-	10/120
40961 5	40961-S	1/2"	13	58	28	27	45	10/ 80
40962 2	40962-S	3/4"	15	62	33	32	50	10/ 60
40963 9	40963-S	1"	17	72	38	38	55	10/ 40
40964 6	40964-S	1 ¼"	19	82	45	48	70	10/ 20
40965 3	40965-S	1 ½"	19	90	50	55	75	5/ 15
40966 0	40966-S	2"	24	100	58	65	90	1/ 8
40967 7	40967-S	2 ½"	28	116	76	87	110	1/ 1
40968 4	40968-S	3"	34	128	68	100	127	1/ 1



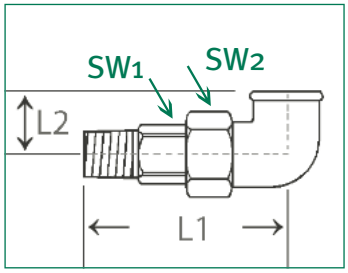
Union elbow (97), ISO UA 2

Female thread x male thread, flat seat, without seal

Item-No.: zinc plated	Item-No.: black	Connec.:	Thread-length:	Length: L1	Length: L2	Wrench size: SW1	Wrench size: SW2	Packing unit:
40971 4	40971-S	1/2"	13	76	28	27	45	10/70
40972 1	40972-S	3/4"	15	82	33	32	50	10/50
40973 8	40973-S	1"	17	94	38	38	55	10/30
40974 5	40974-S	1 ¼"	19	107	45	48	70	10/20
40975 2	40975-S	1 ½"	19	115	50	55	75	5/ 15
40976 9	40976-S	2"	24	128	58	65	90	1/ 6



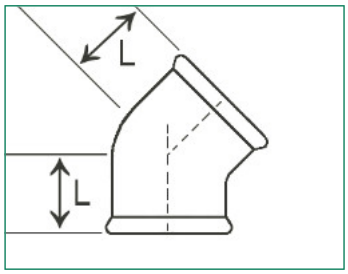
Union elbow (98), ISO UA 12



Female thread x male thread, taper seat

Item-No.: zinc plated	Item-No.: black	Connec.:	Thread-length:	Length: L1	Length: L2	Wrench size: SW1	Wrench size: SW2	Packing unit:
40980 6	40980-S	3/8"	-	-	-	-	-	10/80
40981 3	40981-S	1/2"	13	76	28	27	45	10/70
40982 0	40982-S	3/4"	15	82	33	32	50	10/50
40983 7	40983-S	1"	17	94	38	38	55	10/30
40984 4	40984-S	1 ¼"	19	107	45	48	69	10/20
40985 1	40985-S	1 ½"	19	115	50	55	69	5/ 18
40986 8	40986-S	2"	24	128	58	65	90	1/ 8
40987 5	40987-S	2 ½"						1/ 1
40988 2	40988-S	3"	32	154	65	98	125	1/ 1

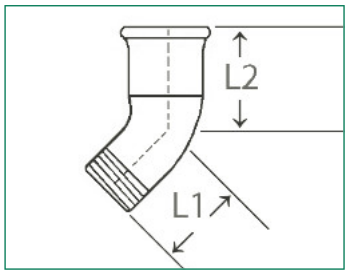
Elbow 45° (120), ISO A 1



Female thread x female thread, 45°

Item-No.: zinc plated	Item-No.: black	Connec.:	Thread-length:	Length: L	Packing unit:
41201 1	41201-S	1/2"	13	22	10/250
41202 8	41202-S	3/4"	15	25	10/ 150
41203 5	41203-S	1"	17	28	10/ 80
41204 2	41204-S	1 ¼"	19	41	-/ 50
41205 9	41205-S	1 ½"	20	45	-/ 30
41206 6	41206-S	2"	25	51	5/ 20

Elbow 45° (121), ISO A 4



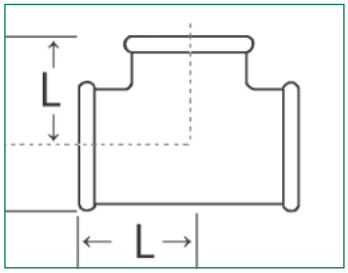
Female thread x male thread, 45°

Item-No.: zinc plated	Item-No.: black	Connec.:	Threadlength: f	Threadlength: m	Length: L1	Length: L2	Packing unit:
41211 0	41211-S	1/2"	13	15	28	22	10/250
41212 7	41212-S	3/4"	15	18	32	25	10/160
41213 4	41213-S	1"	17	20	37	28	10/100
41214 1	-	1 ¼"	19	19	43	33	5/ 40
41215 8	41215-S	1 ½"	20	19	46	36	5/ 40
41216 5	41216-S	2"	23	24	55	43	-/ 24

90°, female thread

Tee equal (130), ISO B 1

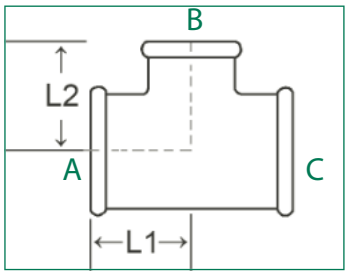
Item-No.: zinc plated	Item-No.: black	Connection: female thread	Thread-length:	Length: L	Packing unit:
41299 8	41299-S	1/4"	10	21	10/300
41300 1	41300-S	3/8"	10	25	10/250
41301 8	41301-S	1/2"	13	28	10/ 150
41302 5	41302-S	3/4"	15	33	10/ 80
41303 2	41303-S	1"	17	38	10/ 50
41304 9	41304-S	1 ¼"	19	45	5/ 30
41305 6	41305-S	1 ½"	19	50	5/ 20
41306 3	41306-S	2"	24	58	4/ 12
41307 0	41307-S	2 ½"	27	69	1/ 10
41308 7	41308-S	3"	30	78	1/ 6
41309 4	41309-S	4"	38	96	1/ 6



90°, reduced, female thread

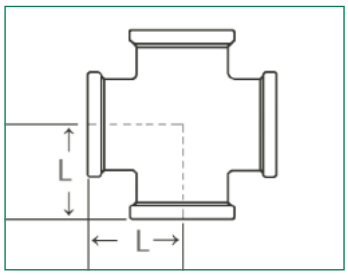
Tee reducing (130 R), ISO B 1

Item-No.: zinc plated	Item-No.: black	Connection: A x B x C	Thread-length:	Length: L1	L2	Packing unit:
41344 5	41344-S	1/2" x 3/8" x 3/8"	12	26	27	10/120
41310 0	41310-S	1/2" x 3/8" x 1/2"	13	26	26	10/150
41345 2	41345-S	1/2" x 1/2" x 3/8"	21	44	50	10/180
41320 9	-	1/2" x 3/4" x 1/2"	14	30	30	10/120
41311 7	41311-S	3/4" x 3/8" x 3/4"	15	28	28	10/120
41340 7	41340-S	3/4" x 1/2" x 1/2"	15	27	27	10/100
41312 4	41312-S	3/4" x 1/2" x 3/4"	15	30	31	10/120
41341 4	41341-S	3/4" x 3/4" x 1/2"	15/13	33	33	10/ 90
41343 8	41343-S	3/4" x 1" x 3/4"	16	34	36	10/ 60
41323 0	41323-S	1" x 1/2" x 1"	17	32	34	10/ 60
41313 1	41313-S	1" x 3/4" x 1"	17	35	36	10/ 60
41342 1	41342-S	1" x 1" x 3/4"	16	34	37	10/ 60
41317 9	41317-S	1 ¼" x 1/2" x 1 ¼"	19	34	38	5/ 50
41324 7	41324-S	1 ¼" x 3/4" x 1 ¼"	19	36	41	5/ 40
41314 8	41314-S	1 ¼" x 1" x 1 ¼"	19	40	42	5/ 30
41318 6	41318-S	1 ½" x 1/2" x 1 ½"	19	36	42	10/ 30
41319 3	41319-S	1 ½" x 3/4" x 1 ½"	19	38	44	-/ 30
41316 2	41316-S	1 ½" x 1" x 1 ½"	19	42	46	5/ 30
41315 5	41315-S	1 ½" x 1 ¼" x 1 ½"	19	46	48	10/ 20
41327 8	41327-S	2" x 1/2" x 2"	24	38	48	-/ 20
41325 4	41325-S	2" x 3/4" x 2"	19	34	38	10/ 20
41326 1	41326-S	2" x 1" x 2"	24	44	52	5/ 20
41328 5	41328-S	2" x 1 ¼" x 2"	24	48	54	-/ 20
41329 2	41329-S	2" x 1 ½" x 2"	24	52	55	1/ 15
41330 8	41330-S	3" x 2" x 3"	30	64	73	1/ 6



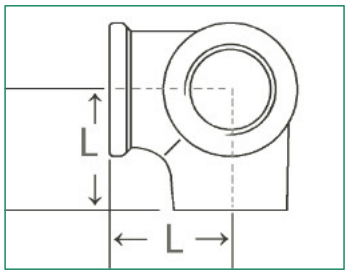
Cross fitting 90° (180), ISO C 1

4 x female thread



Item-No.: zinc plated	Item-No.: black	Connection:	Thread-length:	Length: L	Packing unit:
41790 6	41790-S	1/4"	12	21	10/100
41800 6	41800-S	3/8"	13	25	10/150
41801 3	41801-S	1/2"	13	28	10/100
41802 0	41802-S	3/4"	15	33	10/ 60
41803 7	41803-S	1"	17	38	10/ 40
41804 4	41804-S	1 ¼"	19	45	5/ 20
41805 1	41805-S	1 ½"	19	50	15/ 20
41806 8	41806-S	2"	24	58	10/ 10
41812 9	41812-S	3/4" x 1/2"	13	23	10/ 80
41813 6	41813-S	1" x 1/2"	14	32	10/ 40

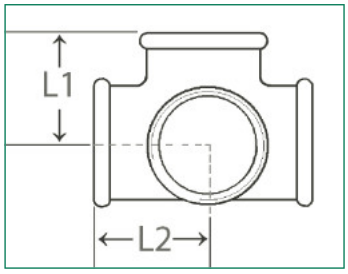
Side outlet elbow (221), ISO Za 1



3 x female thread

Item-No.: zinc plated	Item-No.: black	Connection:	Thread-length:	Length: L	Packing unit:
42211 9	42211-S	1/2"	13	28	10/140
42212 6	42212-S	3/4"	15	33	10/ 80
42213 3	-	1"	18	35	10/ 60

Tee with side outlet (223)

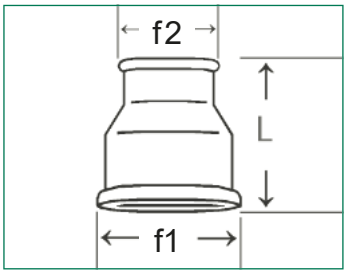


90°, female threaded, equal

Item-No.: zinc plated	Item-No.: black	Connection:	Thread-length: L1	Length: L2	Packing unit:
42231 7	-	1/2"	-	-	10/100
42232 4	-	3/4"	-	-	10/ 60
42233 1	-	1"	-	-	10/ 50

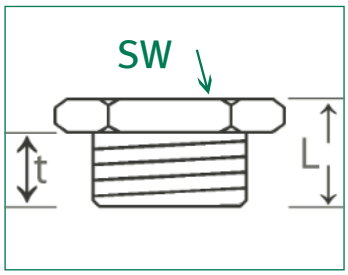
Reducing socket (240), ISO M 2

Female thread x female thread



Item-No.:	Item-No.:	Connection:	Threadlength:		Length:	Packing unit:
zinc plated	black	f1 f2	f1	f2	L	
42399 4	42399-S	3/8" x 1/4"	10	10	30	10/400
42400 7	42400-S	1/2" x 1/4"	13	10	36	10/300
42401 4	42401-S	1/2" x 3/8"	12	11	36	10/350
42398 7	42398-S	3/4" x 3/8"	15	10	39	10/250
42402 1	42402-S	3/4" x 1/2"	15	13	39	10/220
42393 2	42393-S	1" x 1/2"	17	13	45	10/140
42403 8	42403-S	1" x 3/4"	17	15	45	10/140
42397 0	42397-S	1 ¼" x 1/2"	19	13	50	10/ 80
42394 9	42394-S	1 ¼" x 3/4"	19	15	50	10/ 80
42404 5	42404-S	1 ¼" x 1"	19	17	50	10/ 80
42396 3	42396-S	1 ½" x 3/4"	19	15	55	10/ 60
42395 6	42395-S	1 ½" x 1"	19	17	55	10/ 60
42405 2	42405-S	1 ½" x 1 ¼"	19	19	55	10/ 60
42392 5	42392-S	2" x 1"	24	17	65	-/ 35
42391 8	42391-S	2" x 1 ¼"	24	19	65	10/ 30
42406 9	42406-S	2" x 1 ½"	22	21	65	10/ 30
42390 1	42390-S	2 ½" x 2"	27	24	74	1/ 24

Bushing (241), ISO N 4



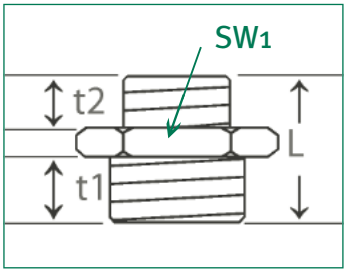
Male thread x female thread

Item-No.:	Item-No.:	Connection:	Threadlength:		Length:	Wrench size:	Packing unit:
zinc plat.	black	m f	m (t)	f	L	SW	
42410 6	42410-S	3/8" x 1/4"	14	10	20	19	10/900
42430 4	42430-S	1/2" x 1/4"	17	12	25	23	10/800
42411 3	42411-S	1/2" x 3/8"	16	13	24	22	10/500
42433 5	42433-S	3/4" x 1/4"	16	10	25	31	10/300
42422 9	42422-S	3/4" x 3/8"	17	13	26	30	10/300
42412 0	42412-S	3/4" x 1/2"	17	13	26	30	10/350
42432 8	42432-S	1" x 3/8"	19	12	30	39	10/200
42423 6	42423-S	1" x 1/2"	19	13	29	36	10/200
42413 7	42413-S	1" x 3/4"	19	15	29	36	10/240
42434 2	42434-S	1 ¼" x 1/2"	22	13	31	46	10/100
42424 3	42424-S	1 ¼" x 3/4"	20	15	31	46	5/120
42414 4	42414-S	1 ¼" x 1"	21,5	17	31	46	5/150
42435 9	42435-S	1 ½" x 1/2"	23	13	33	52	10/120
42436 6	42436-S	1 ½" x 3/4"	21	15	31	55	5/ 80
42425 0	42425-S	1 ½" x 1"	22	16	33	51	5/ 90
42415 1	42415-S	1 ½" x 1 ¼"	21,5	19	31	50	10/100
42437 3	42437-S	2" x 1/2"	25	14	47	68	10/ 50
42438 0	42438-S	2" x 1"	24	16	36	67	5/ 50
42417 5	42417-S	2" x 1 ¼"	24	19	35	65	5/ 55
42416 8	42416-S	2" x 1 ½"	26	19	35	65	10/ 60
42439 7	42439-S	2 ½" x 1 ¼"	29	20	55	54	10/ 40
42440 3	42440-S	2 ½" x 1 ½"	28	20	42	81	1/ 40
42441 0	42441-S	2 ½" x 2"	27	24	41	81	10/ 40
42442 7	42442-S	3" x 2"	30	26	46	96	1/ 20
42446 5	42446-S	3" x 2 ½"	30	26	43	96	1/ 30
42447 2	42447-S	4" x 3"	33	26	51	122	1/ 18

Reducing nipple (245), ISO N 8

Male thread x male thread, with hexagon

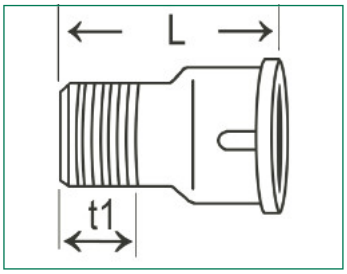
Item-No.: zinc plat.	Item-No.: black	Connection: m x m	Threadlength: t1	t2	Length: L	Wrench size: SW	Packing unit:
42457 1	42457-S	3/8" x 1/4"	11	10	38	19	10/500
42450 2	42450-S	1/2" x 1/4"	16	14	43	23	10/360
42451 9	42451-S	1/2" x 3/8"	13	11	44	26	10/360
42458 8	42458-S	3/4" x 3/8"	20	14	48	34	10/190
42452 6	42452-S	3/4" x 1/2"	13	13	47	30	10/230
42443 4	42443-S	1" x 1/2"	17	13	53	36	10/150
42453 3	42453-S	1" x 3/4"	17	13	53	36	10/130
42459 5	42459-S	1 ¼" x 1/2"	24	18	58	46	10/ 90
42444 1	42444-S	1 ¼" x 3/4"	18	13	57	46	10/ 80
42454 0	42454-S	1 ¼" x 1"	18	17	57	48	10/ 70
42460 1	42460-S	1 ½" x 3/4"	26	20	60	51	10/ 90
42445 8	42445-S	1 ½" x 1"	21	17	59	56	10/ 60
42455 7	42455-S	1 ½" x 1 ¼"	21	18	59	56	10/ 60
42448 9	-	2" x 3/4"	-	-	-	-	-/-
42461 8	42461-S	2" x 1 ¼"	24	18	68	65	10/ 40
42456 4	42456-S	2" x 1 ½"	24	21	68	65	10/ 40
42470 0	-	2 ½" x 2"	27	24	80	-	-/ 25



Reducing socket (246), ISO M 4

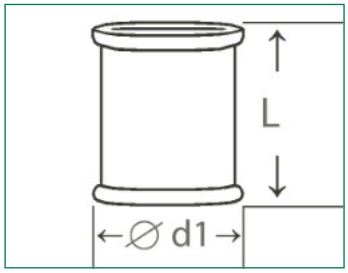
Female thread x male thread

Item-No.: zinc plated	Item-No.: black	Connection.: f x m	Threadlength: f t2	m t1	Length: L	Packing unit:
42471 7	42471-S	3/8" x 1/4"	10	14	35	10/700
42472 4	42472-S	1/2" x 1/4"	13	12	43	10/350
42464 9	42464-S	1/2" x 3/8"	13	10	43	10/350
42473 1	42473-S	3/4" x 3/8"	15	12	48	10/210
42462 5	42462-S	3/4" x 1/2"	15	13	48	10/210
42465 6	42465-S	1" x 1/2"	17	13	55	10/140
42463 2	42463-S	1" x 3/4"	17	15	55	10/120
42474 8	42474-S	1 ¼" x 3/4"	19	17	60	10/100
42466 3	42466-S	1 ¼" x 1"	19	17	60	10/ 80
42467 0	42467-S	1 ½" x 1"	19	17	63	10/ 60
42468 7	42468-S	1 ½" x 1 ¼"	21	19	63	10/ 60
42469 4	42469-S	2" x 1 ½"	23	19	70	10/ 50
42477 9	-	2 ½" x 2"	30	27	74	5/ 20



Socket (270), ISO M 2

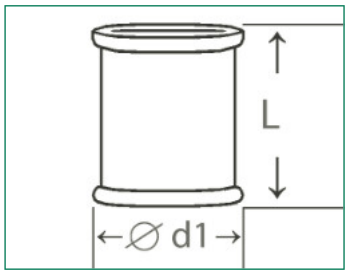
Female thread x female thread



Item-No.: zinc plated	Item-No.: black	Connection:	Thread-length:	Length: L	Length: Ø d1	Packing unit:
42699 5	42699-S	1/4"	10	27	22	10/600
42700 8	42700-S	3/8"	10	30	25	10/400
42701 5	42701-S	1/2"	13	36	30	10/340
42702 2	42702-S	3/4"	15	39	36	10/220
42703 9	42703-S	1"	17	45	44	10/120
42704 6	42704-S	1 ¼"	19	50	53	5/ 60
42705 3	42705-S	1 ½"	19	55	60	5/ 50
42706 0	42706-S	2"	20	65	74	5/ 25
42707 7	42707-S	2 ½"	27	74	91	-/ 24
42708 4	42708-S	3"	30	80	105	-/ 15
42709 1	42709-S	4"	36	94	135	-/ 15

Socket (271), ISO M 2 R-L

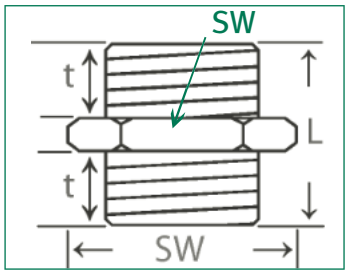
Female thread x female thread, with right and left hand thread



Item-No.: zinc plated	Item-No.: black	Connection:	Thread-length:	Length: L	Length: Ø d1	Packing unit:
42711 4	-	1/2"	13	36	30	10/340
42712 1	-	3/4"	15	39	36	10/220
42713 8	-	1"	17	45	44	10/120

Nipple (280), ISO N 8

Male thread x male thread, with hexagon

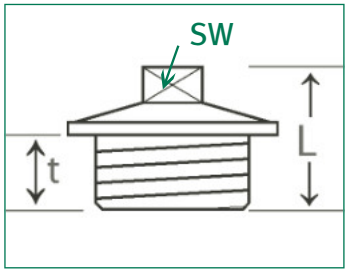


Item-No.: zinc plated	Item-No.: black	Connection:	Thread-length:	Length: L	Wrench size: SW	Packing unit:
42791 6	42791-S	1/4"	10	36	19	10/600
42800 5	42800-S	3/8"	11	38	22	10/500
42801 2	42801-S	1/2"	15	44	27	10/350
42802 9	42802-S	3/4"	18	47	32	10/220
42803 6	42803-S	1"	20	53	41	10/130
42804 3	42804-S	1 ¼"	22	57	50	10/ 70
42805 0	42805-S	1 ½"	21	59	55	5/ 50
42806 7	42806-S	2"	20	68	63	5/ 25
42807 4	42807-S	2 ½"	27	75	85	10/ 20
42808 1	42808-S	3"	30	83	100	1/ 22
42809 8	42809-S	4"	36	95	130	1/ 20

Plug, beaded (290), ISO T 9

with border

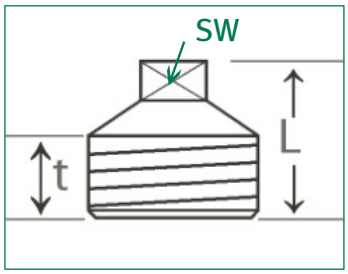
Item-No.: zinc plated	Item-No.: black	Connection: male	Thread-length: t	Length: L	Wrench size: SW	Packing unit:
42890 6	42890-S	1/4"	10	22	8	10/1000
42900 2	42900-S	3/8"	11,5	24	10	10/ 700
42901 9	42901-S	1/2"	13	26	11	10/ 350
42902 6	42902-S	3/4"	14,5	32	17	10/ 250
42903 3	42903-S	1"	17	36	19	10/ 170
42904 0	42904-S	1 ¼"	21	39	22	10/ 100
42905 7	42905-S	1 ½"	23	41	22	10/ 80
42906 4	42906-S	2"	26	48	27	10/ 50
42907 1	42907-S	2 ½"	30	54	32	1/ 34
42908 8	42908-S	3"	34	60	36	1/ 24
42909 5	42909-S	4"	40	70	41	1/ 12



Plug, plain (291), ISO T 8

without border

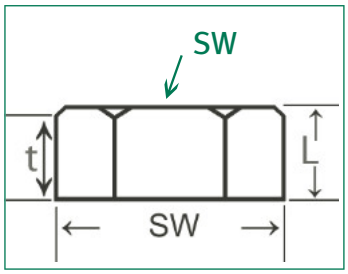
Item-No.: zinc plated	Item-No.: black	Connection: male	Thread-length: t	Length: L	Wrench size: SW	Packing unit:
42917 0	42917-S	1/8"	-	-	-	10/5400
42918 7	42918-S	1/4"	-	-	-	10/3600
42910 1	42910-S	3/8"	15	24	10	10/1000
42911 8	42911-S	1/2"	16	26	11	10/ 800
42912 5	42912-S	3/4"	21	32	17	10/ 400
42913 2	42913-S	1"	25	36	19	10/ 250
42914 9	42914-S	1 ¼"	28	39	22	10/ 160
42915 6	42915-S	1 ½"	30	41	22	10/ 130
42916 3	42916-S	2"	34	48	27	10/ 60



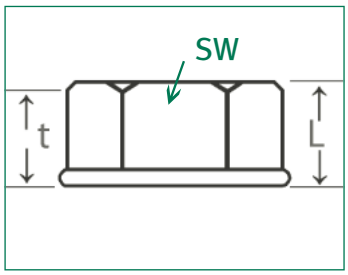
Cap (300), ISO T 1

not beaded, ≤ 1" hexagonal, ≥ 1" octagonal

Item-No.: zinc plated	Item-No.: black	Connection: female	Thread-length: t	Length: L	Wrench size: SW	Packing unit:
43020 6	43020-S	1/4"	-	-	-	10/800
43000 8	43000-S	3/8"	11	17	22	10/660
43001 5	43001-S	1/2"	13	19	26	10/400
43002 2	43002-S	3/4"	15	22	32	10/ 250
43003 9	43003-S	1"	17	24	39	10/ 130
43004 6	43004-S	1 ¼"	20	27	48	10/ 100
43005 3	43005-S	1 ½"	20	27	54	10/ 90
43006 0	43006-S	2"	24	32	66	10/ 50
43007 7	43007-S	2 ½"	26	35	84	5/ 40
43008 4	43008-S	3"	28	38	96	1/ 28
43009 1	43009-S	4"	35	46	124	1/ 12



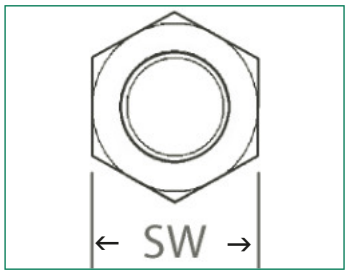
Cap (301)



beaded

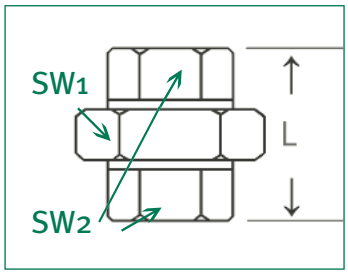
Item-No.: zinc plated	Item-No.: black	Connection: female	Thread-length: t	Length: L	Wrench size: SW	Packing unit:
43021 3	43021-S	1/4"	-	-	-	10/1800
43010 7	43010-S	3/8"	11	17	22	10/ 800
43011 4	43011-S	1/2"	13	19	26	10/ 800
43012 1	43012-S	3/4"	15	22	32	10/ 400
43013 8	43013-S	1"	17	24	39	10/ 250
43014 5	43014-S	1 ¼"	20	27	48	10/ 100
43015 2	43015-S	1 ½"	20	27	54	10/ 90
43016 9	43016-S	2"	24	32	66	10/ 70
43017 6	43017-S	2 ½"	26	35	84	5/ 40
43018 3	43018-S	3"	28	38	96	1/ 1
43019 0	43019-S	4"	-	-	-	1/ 1

Lock nut (310), ISO P 4



Item-No.: zinc plated	Item-No.: black	Connection: female	Thread-length: t	Length: L	Wrench size: SW	Packing unit:
43101 2	43101-S	1/2"	8	8	32	10/700
43102 9	43102-S	3/4"	9	9	36	10/300
43103 6	-	1"	10	10	45	10/350
43104 3	43104-S	1 ¼"	-	-	-	10/250

Union (330), ISO U 1



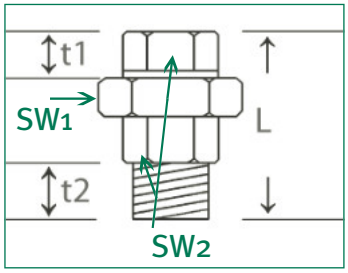
Female thread x female thread, flat seat, without seal

Item-No.: zinc plat.	Item-No.: zinc plat.+seal	Item-No.: black	Conn.:	Thread-length: t	Length: L	Wrenchsize: SW1	Wrenchsize: SW2	Packing unit:
43301 6	43301-D	43301-S	1/2"	14	48	42	26	10/ 80
43302 3	43302-D	43302-S	3/4"	16	52	50	32	10/ 70
43303 0	43303-D	43303-S	1"	20	58	55	38	10/ 60
43304 7	43304-D	43304-S	1 ¼"	18	65	69	49	5/ 35
43305 4	43305-D	43305-S	1 ½"	70	70	72	53	5/ 25
43306 1	43306-D	43306-S	2"	78	78	90	68	5/ 20
43307 8	43307-D	43307-S	2 ½"	85	85	110	85	1/ 12
43308 5	43308-D	43308-S	3"	95	95	128	98	1/ 7

Union (331), ISO U 2

Female thread x male thread, flat seat, without seal

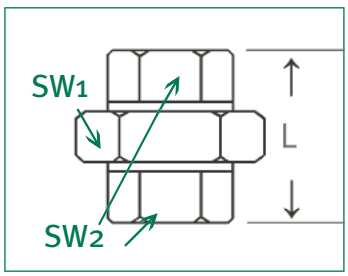
Item-No.: zinc pla.	Item-No.: zinc plat.+seal	Item-No.: black	Con.:	Thread length: F t1	M t2	Length L	Wrench-size: SW1	SW2	Packing unit:
43311 5	43311-D	43311-S	1/2"	15	17	66	41	24	10/90
43312 2	43312-D	43312-S	3/4"	15	20	72	50	32	10/60
43313 9	43313-D	43313-S	1"	16	21	80	55	39	10/50
43314 6	43314-D	43314-S	1 ¼"	19	26	90	69	47	10/30
43315 3	43315-D	43315-S	1 ½"	24	25	95	75	55	4/20
43316 0	43316-D	43316-S	2"	25	29	106	90	65	1/ 10



Union (340), ISO U 11

Female thread x female thread, taper seat

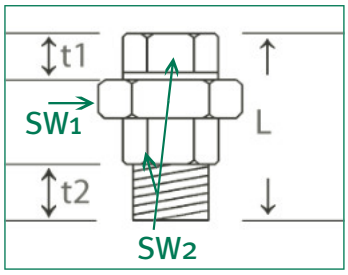
Item-No.: zinc plat.	Item-No.: black	Conn.:	Thread-length:	Length: L	Wrenchsize: SW1	SW2	Packing unit:
43400 6	43400-S	3/8"	12	45	38	22	10/150
43401 3	43401-S	1/2"	13	48	45	27	10/ 80
43402 0	43402-S	3/4"	15/20	52	50	32	10/ 70
43403 7	43403-S	1"	17/20	58	55	38	10/ 60
43404 4	43404-S	1 ¼"	17/20	65	70	47	10/ 40
43405 1	43405-S	1 ½"	19/20	70	74	54	5/ 25
43406 8	43406-S	2"	24/20	78	90	66	5/ 15
43407 5	43407-S	2 ½"	27/27	85	110		1/ 8
43408 2	43408-S	3"	30/30	95	130	96	1/ 7
43409 9	43409-S	4"	45/45	109	153	126	1/ 1



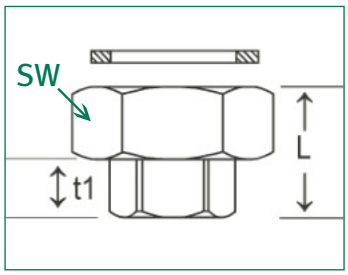
Union nut (341), ISO U 12

Female thread x male thread, taper seat

Item-No.: zinc plat.	Item-No.: black	Conn.:	Threadlength: F t1	M t2	Length: L	Wrench size: SW1	SW2	Packing unit:
43410 5	43410-S	3/8"	15,5	16	58	36	22	10/150
43411 2	43411-S	1/2"	14,5	17	66	45	27	10/ 80
43412 9	43412-S	3/4"	15,5	20	72	50	32	10/ 70
43413 6	43413-S	1"	18	22	80	55	39	10/ 40
43414 3	43414-S	1 ¼"	20,5	26	90	69	47	5/ 25
43415 0	43415-S	1 ½"	25	28	95	75	55	10/ 20
43416 7	43416-S	2"	26	27	106	90	65	5/ 10
43417 4	43417-S	2 ½"	27	39	118	90	85	-/ 9
43418 1	43418-S	3"	-	-	-	-	-	-/ 6



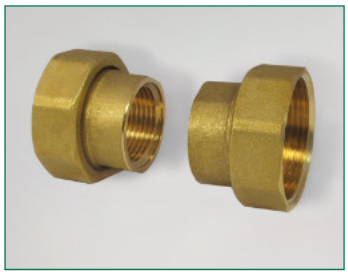
Union for pumps made of malleable iron

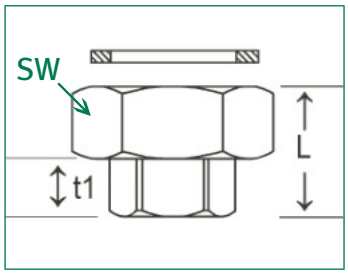


Malleable iron, black, consisting of two union ends, 2 union nuts and 2 NBR seals, temperature range: ‹ 70°C

Item-No.: black	Connection:	Thread-length:	Length: L	Wrench-size: SW	Pack. unit:
43502-2	3/4" Connection, 1 ¼" union nut	18	35	50	1/75
43503-2	1" Connection, 1 ½" union nut	20	39	55	1/40
43504-2	1 ¼" Connection, 2" union nut	22,9	47,6	70	1/35

Union for pumps made of brass

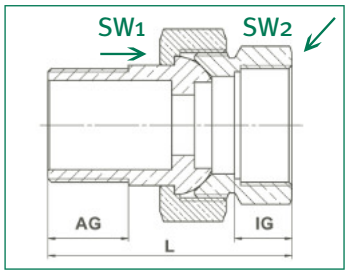




Consisting of: 2 union nuts, 2 union ends and 2 seals, PN 10, temperature range: - 10°C to + 110°C

Item-No.:	Connection:	Thread-length:	Length: L	Wrench-size: SW	Pack. unit:
34693 4	1" Connection, 1 ½" union nut	20	38	52	-/25

Union made of brass with nut



Plain brass, 3-pieces, with nut and **metal sealing**, male thread x female thread

Item-No.:	Connection: M/F	Thread-length: M/F	Length: L	Wrench-size: SW1/SW2	Pack. unit:
33700 0	G 3/8" connection, G 3/8", nut	10/8	41	25/20	20/200
33701 7	G 1/2" connection, G 1/2", nut	12/12	49	30/25	15/150
33702 4	G 3/4" connection, G 3/4", nut	13/11	54	38/30	10/100
33703 1	G 1" connection, G 1", nut	15/12	60	47/37	8/ 48
33704 8	G 1 ¼" connection, G 1 ¼", nut	15/16	71	53/48	8/ 32

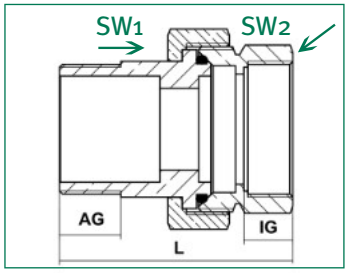
The items of the brass union nuts are not tested for compatibility with other market models.

Union made of brass with nut

Plain brass, 3-pieces, with nut and **O-ring sealing**, male thread x female thread

Item-No.:	Connection: M/F	Thread-length: M/F	Length: L	Wrench-size: SW1/SW2	Pack. unit:
33723 9	G1" connection, G1", nut	15/12	60	47/37	8/48
33725 3	G1 ½" connection, G1 ½", nut	20/15	75	66/54	-/-

The items of the brass union nuts are not tested for compatibility with other market models.

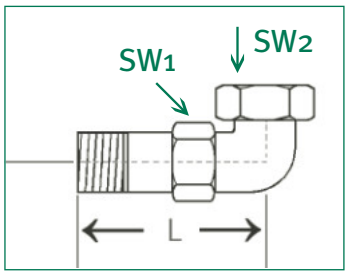


Union made of brass with nut, angle form

Plain brass, 3-pieces, angle form, with nut, **metal sealing**, male thread x female thread

Item-No.:	Connection: M/F	Thread-length: M/F	Length: L	Wrench-size: SW1/SW2	Pack. unit:
33705 5	G3/8" connection, G3/8", nut	10/9	46	25/21	15/150
33706 2	G1/2" connection, G1/2", nut	12/10	53	30/25	10/100
33707 9	G3/4" connection, G3/4", nut	12/11,5	62,5	37/31	10/ 50
33708 6	G1" connection, G1", nut	12/11,5	70	46/37	8/ 32
33709 3	G1 ¼" connection, G1 ¼", nut	16/18	83,5	53/48	1/ 30

The items of the brass union nuts are not tested for compatibility with other market models.

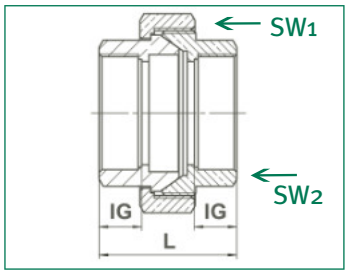


Union made of brass with nut

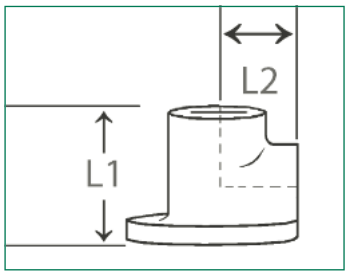
Plain brass, with nut, **metal sealing**, female thread x female thread

Item-No.:	Connection: F/F	Thread-length: F/F	Length: L	Wrench-size: SW1/SW2	Pack. unit:
33711 6	G1/2" connection, G1/2" nut	12/12	38,4	37,5/25	-/-
33712 3	G3/4" connection, G3/4" nut	11/11	36,8	47/30	-/-
33713 0	G1" connection, G1" nut	12/12	38,8	52/37	-/-

The items of the brass union nuts are not tested for compatibility with other market models.



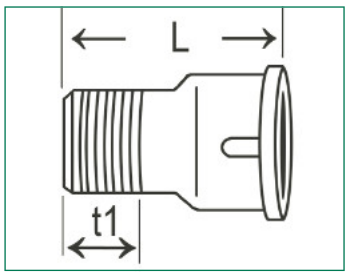
Bracket elbow (471)



Female thread x female thread

Item-No.: zinc plated	Item-No.: black	Connection:	Thread-length:	Length: L	Length: L2	Packing unit:
44711 2	44711-S	1/2"	13	46	26	10/80
44712 9	44712-S	3/4"	15	52	33	10/50
44713 6	44713-S	1"	20	61	40	10/50

Extension socket (529a)



Socket with female thread and male thread

Item-No.: zinc plated	Item-No.: black	Connection:	Thread-length: t1	Thread-length: t2	Length: L	Packing unit:
45291 8	-	1/2"	13	-	43	10/300
45292 5	-	3/4"	15	-	48	10/180

Sealing tape

12 m x 12 mm x 0,075 mm, material PTFE

Item-No.:	Packing unit:
29010 7	50/1000

Hemp yarn-Mazzoni

approx. 200 g

Wrapping:	Item-No.:	Packing unit:
loose	29016 9	10/250
packed for self-service	29015 2	10/100

Spare gaskets, according to DIN EN 10242

Item-No.:	Connection:		Packing unit:
49011 8	1/2"	30 x 21 x 2 mm	10/100
49001 9	1/2"	34 x 24 x 2 mm	10/100
49012 5		31,5 x 26 x 2 mm	10/100
49002 6	3/4"	38 x 27 x 2 mm	10/100
49013 2		29 x 22 x 2 mm	10/100
49003 3	1"	44 x 32 x 2 mm	10/100
49004 0	1 ¼"	55 x 42 x 2 mm	10/100
49005 7	1 ½"	62 x 46 x 2 mm	10/100
49006 4	2"	78 x 60 x 2 mm	10/100

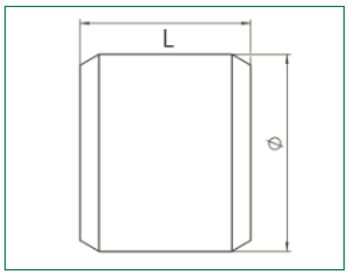
For flat-sealing screw connections (Nr. 330/331/95/97), except for Item-No. 49011, 49012 and 49013. Synthetic fibers bonded with NBR. Suitable for oils, water, steam, gases, salt solutions, fuels, alcohols, weak organic and inorganic acids, hydrocarbons, lubricants and refrigerants. DIN-DVGW/SVGW-certificates. BAM-, HTB- and KTW- tested.

Steel pipes

According to DIN EN 10255 Class M (DIN 2440), zinc plated/black, both sides male threaded, without socket

Length:	Item-No.: **3/8"** zinc plat.	Item-No.: **1/2"** zinc plat.	Item-No.: **1/2"** black	Item-No.: **3/4"** zinc plat.	Item-No.: **3/4"** black	Item-No.: **1"** zinc plat.	Item-No.: **1 1/4"** zinc plat.	Item-No.: **1 1/2"** zinc plat.	Item-No.: **2"** zinc plat.	Packing unit:
350 mm	–	20101 1	25401 7	20012 0	25402 4	–	–	–	–	10/-
400 mm	20120 2	20111 0	25411 6	20112 7	25412 3	20113 4	20114 1	–	–	10/-
450 mm	–	20121 9	25421 5	20122 6	25422 2	–	–	–	–	10/-
500 mm	20200 1	20201 8	25601 1	20202 5	25602 8	20203 2	20204 9	–	–	10/-
550 mm	–	20131 8	25431 4	20132 5	25432 1	–	–	–	–	10/-
600 mm	20210 0	20211 7	25611 0	20212 4	25612 7	20213 1	20214 8	–	–	10/-
650 mm	–	20141 7	25441 3	20142 4	25442 0	–	–	–	–	10/-
700 mm	–	20151 6	25451 2	20152 3	25452 9	20153 0	–	–	–	10/-
750 mm	–	20161 5	25461 1	20162 2	25462 8	–	–	–	–	10/-
800 mm	20220 9	20221 6	25621 9	20222 3	25622 6	20223 0	20224 7	–	–	10/-
850 mm	–	20171 4	25471 0	20172 1	25472 7	–	–	–	–	10/-
900 mm	–	20181 3	25481 9	20182 0	25482 6	20183 7	–	–	–	10/-
950 mm	–	20191 2	25491 8	20192 9	25492 5	–	–	–	–	10/-
1000 mm	20300 8	20301 5	25631 8	20302 2	25632 5	20303 9	20304 6	20305 3	20306 0	10/-
1050 mm	–	20311 4	25511 3	20312 1	25512 0	–	–	–	–	10/-
1100 mm	–	20321 3	25521 2	20322 0	25522 9	–	–	–	–	10/-
1150 mm	–	20331 2	25531 1	20332 9	25532 8	–	–	–	–	10/-
1200 mm	–	20341 1	25541 0	20342 8	25542 7	–	–	–	–	10/-
1500 mm	20400 5	20401 2	–	20402 9	–	20403 6	20404 3	20405 0	20406 7	10/-
2000 mm	20500 2	20501 9	–	20502 6	–	20503 3	20504 0	20505 7	20506 4	10/-

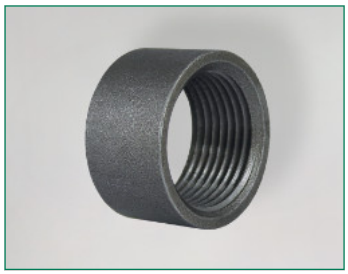
Steel socket, both sides chamfered

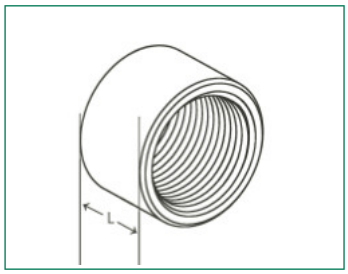


Zinc plated, extra strong, ideal for well construction, according to DIN 2448

Item-No.:	Connec.:	Thread-length:	Length:	Ø	Packing unit:
22024 1	1 ¼"	47	47	50	10/100

Steel socket (half length)

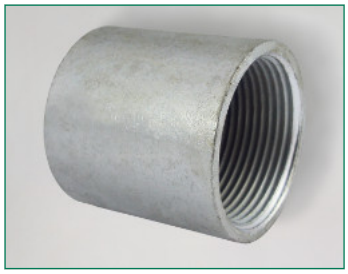


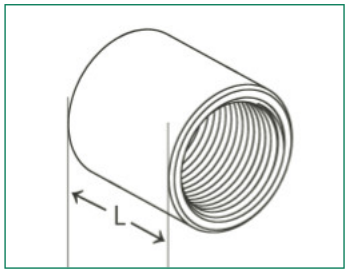


According to EN 10241 (DIN 2986), one-sided chamfered

Item-No.: zinc plated	Item-No.: black	Conn.:	Nominal diameter	Thread-length:	Length:	Ø	Packing unit:
-	21971 9	1/2"		15	15	26,6	-/1000
-	21972 6	3/4"		17	17	31,8	-/ 600
-	21973 3	1"		20	20	39,5	-/ 320
-	21975 7	1 ½"		22	22	54,5	-/ 160

Steel socket (16)





According to EN 10241 (DIN 2986)

Item-No.: zinc plated	Item-No.: black	Conn.:	Nominal diameter	Thread-length:	Length:	Ø	Packing unit:
-	21989 4	1/4"	8	25	25	18,5	-/700
22000 5	21990 0	3/8"	10	26	26	21,3	-/600
22001 2	21991 7	1/2"	15	34	34	26,6	-/500
22002 9	21992 4	3/4"	20	36	36	31,8	-/300
22003 6	21993 1	1"	25	43	43	39,5	-/160
22004 3	21994 8	1 ¼"	32	48	48	48,3	-/120
22005 0	21995 5	1 ½"	40	48	48	54,5	-/ 80
22006 7	21996 2	2"	50	56	56	66,2	-/ 50
22007 4	21997 9	2 ½"	65	65	65	82	-/ 33
22008 1	21998 6	3"	80	71	71	95	-/ 24
22009 8	21999 3	4"	100	83	83	121,4	-/ 12

Long sleeve socket

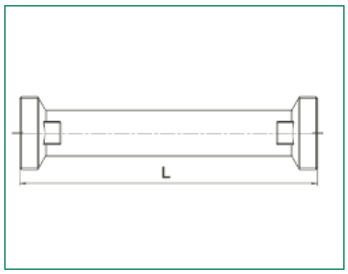
Steel, black, both sides threaded according to ISO 7

Item-No.:	Connection:	Length: L	Packing unit:
21932 0	1/2"	60 mm	-/280
21934 4	1/2"	80 mm	-/200
21936 8	1/2"	100 mm	-/160

Connecting tube

Plain brass, CW 617 N, both sides male threaded

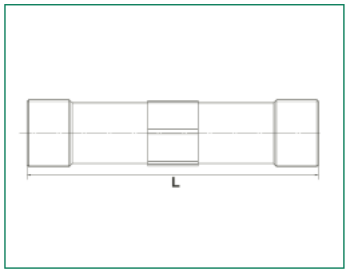
Item-No.:	Connection:	Length: L	Packing unit:
S-2592-81	G3/4"	81 mm	-/200
S-2593-111	G3/4"	111 mm	-/150
S-2593-131	G3/4"	131 mm	-/150
S-2593-131-1"	G1"	131 mm	-/150



Connecting tube

Polyamide, black, both sides male threaded

Item-No.:	Connection:	Length: L	Packing unit:
S-3082-2	G3/4"	110 mm PA6	-/80
S-3084-2	G1"	130 mm PA6	-/80



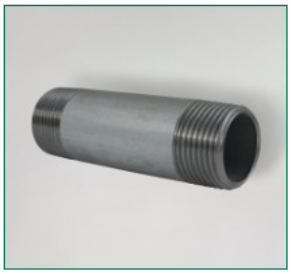
Con.: Length mm	1/4" Item-No.	Pack. unit: bag/ carton	3/8" Item-No.	Pack. unit: bag/ carton	1/2" Item-No.	Pack. unit: bag/ carton	3/4" Item-No.	Pack. unit: bag/ carton	1" Item-No.	Pack. unit: bag/ carton	1 1/4" Item-No.	Pack. unit: bag/ carton
30	-	-	24000 3	-/-	24001 0	10/400	24002 7	-/-	24003 4	10/200	-	-
40	24049 2	10/640	24040 9	10/500	24011 9	10/300	24012 6	10/200	24013 3	10/150	24014 0	10/120
50	-	-	24050 8	-/-	24021 8	10/240	24022 5	10/160	24023 2	-/-	24024 9	10/ 90
60	24069 0	-/-	24060 7	10/280	24031 7	10/210	24032 4	10/140	24063 8	10/120	24034 8	10/ 80
70	-	-	-	-	24111 6	-/-	24092 8	-/-	24173 4	-/-	24074 4	-/-
80	24089 8	10/400	24080 5	10/380	24041 6	10/160	24042 3	10/110	24083 6	10/ 80	24084 3	10/ 80
90	-	-	24070 6	-/-	24091 1	-/-	24112 3	-/-	24103 1	-/-	24094 2	10/ 60
100	24109 3	10/500	24100 0	10/500	24051 5	10/130	24052 2	10/ 90	24053 9	10/ 60	24054 6	10/ 50
110	-	-	24110 9	-/-	24121 5	-/-	24122 2	-/-	24113 0	-/-	24114 7	-/-
120	24129 1	-/-	24120 8	-/-	24131 4	10/ 110	24132 1	10/ 70	24123 9	10/ 80	24124 6	10/ 50
140	-	-	24140 6	-/-	24151 2	-/-	24152 9	-/-	24143 7	-/-	24174 1	-/-
150	24159 8	-/-	24150 5	-/-	24061 4	10/ 90	24062 1	10/120	24153 6	-/ 78	24154 3	10/ 45
160	-	-	-	-	24161 1	-/-	24162 8	-/-	24163 5	-/-	24164 2	-/-
180	-	-	-	-	24081 2	10/ 70	24142 0	10/100	24183 3	-/ 72	24184 0	-/ 10
190	-	-	-	-	-	-	-	-	24193 2	-/-	24194 9	10/ 70
200	24209 0	-/-	24200 7	10/ 90	24071 3	10/ 90	24072 0	10/ 40	24073 7	10/ 30	24204 5	10/ 20
220	-	-	-	-	-	-	-	-	24223 6	10/120	-	-
250	-	-	-	-	24141 3	10/120	24082 9	10/ 70	24253 3	-/ 45	24144 4	-/ 10
300	20109 7	-/-	20100 4	-/-	20110 3	10/100	20102 8	10/ 60	20103 5	-/ 40	20104 2	-/ 20

Con.: Length mm	1/4" Item-No.	Pack. unit: bag/ carton	3/8" Item-No.	Pack. unit: bag/ carton	1/2" Item-No.	Pack. unit: bag/ carton	3/4" Item-No.	Pack. unit: bag/ carton	1" Item-No.	Pack. unit: bag/ carton	1 1/4" Item-No.	Pack. unit: bag/ carton
30	-	-	25000 2	-/-	25001 9	-/-	25002 6	-/-	25003 3	-/-	-	-
40	25049 1	10/640	25040 8	-/-	25011 8	10/500	25012 5	10/380	25013 2	10/180	25014 9	10/120
50	-	-	25050 7	-/-	25021 7	-/-	25022 4	-/-	25023 1	-/-	25024 8	-/-
60	25069 9	-/-	25060 6	-/-	25031 6	10/360	25032 3	10/200	25063 7	10/120	25034 7	-/ 10
70	-	-	-	-	25111 2	-/-	25092 7	-/-	25173 3	-/-	25074 3	-/-
80	25089 7	10/400	25080 4	-/-	25041 5	10/250	25042 2	10/200	25083 5	10/120	25084 2	10/ 80
90	-	-	25070 5	-/-	25091 0	-/-	25112 2	-/-	25103 0	-/-	25094 1	-/-
100	25109 2	10/500	25100 9	10/500	25051 4	10/260	25052 1	10/ 170	25053 8	10/120	25054 5	10/ 70
110	-	-	25110 8	-/-	25121 4	-/-	25122 1	-/-	25113 9	-/-	25114 6	-/-
120	25129 0	-/-	25120 7	-/-	25131 3	10/230	25132 0	10/140	25123 8	10/ 80	25124 5	10/ 50
140	-	-	25140 5	-/-	25151 1	-/-	25152 8	-/-	25143 6	-/-	25174 0	-/-
150	25159 7	-/-	25150 4	-/-	25061 3	10/200	25062 0	10/120	25153 5	10/ 40	25154 2	10/ 45
160	-	-	-	-	25161 0	-/-	25162 7	-/-	25163 4	-/-	25164 1	-/-
180	-	-	-	-	25081 1	-/ 10	25142 9	10/100	25183 2	10/ 72	25184 9	-/ 10
190	-	-	-	-	-	-	-	-	25193 1	10/ 72	25194 8	10/ 70
200	25209 9	-/-	25200 6	-/-	25071 2	10/120	25072 9	10/ 85	25073 6	10/ 55	25204 4	-/ 32
220	-	-	-	-	-	-	-	-	25223 5	10/120	-	-
250	-	-	-	-	25141 2	10/120	25082 8	10/ 70	25253 2	10/ 45	25144 3	-/ 10
300	25309 6	-/-	25300 3	-/-	25301 0	10/100	25302 7	10/ 60	25303 4	10/ 40	25304 1	-/ 20

Pipe nipples (23)

According to EN 10241,
zinc plated

Con.: Length mm	1 1/2" Item-No.	Pack. unit: bag/ carton	2" Item-No.	Pack. unit: bag/ carton	2 1/2" Item-No.	Pack. unit: bag/ carton	3" Item-No.	Pack. unit: bag/ carton	4" Item-No.	Pack. unit: bag/ carton
30	-	-	-	-	-	-	-	-	-	-
40	24045 4	-/168	24046 1	-/-	-	-	-	-	-	-
50	24005 8	-/-	24056 0	-/-	-	-	-	-	-	-
60	24065 2	-/-	24066 9	-/-	24067 6	-/-	24068 3	-/-	24169 7	-/-
70	24075 1	-/-	24076 8	-/-	-	-	-	-	-	-
80	24085 0	-/64	24086 7	10/40	24087 4	-/-	24088 1	-/-	24229 8	-/-
90	24095 9	-/-	24096 6	-/-	-	-	-	-	-	-
100	24105 5	-/-	24106 2	10/30	24107 9	10/10	24108 6	10/20	24239 7	
110	24115 4	-/-	24116 1	-/-	-	-	-	-	-	-
120	24125 3	-/40	24126 0	-/30	24127 7	-/-	24128 4	-/-	24249 6	-/-
140	24145 1	-/-	24146 8	-/-	-	-	24148 2	-/-	-	-
150	24155 0	10/30	24156 7	10/20	24157 4	-/-	24158 1	10/10	24269 4	-/-
160	24165 9	-/-	24166 6	-/-	-	-	24168 0	-/-	-	-
180	24185 7	-/-	24186 4	-/-	24187 1	-/-	24188 8	-/-	24279 3	-/-
190	-	-	24196 3	-/-	-	-	-	-	-	-
200	24205 2	-/ 28	24206 9	10/10	24207 6	-/-	24208 3	-/ 8	24219 9	-/4
220	-	-	-	-	-	-	-	-	-	-
250	24255 7	-/24	24256 4	-/-	24257 1	-/-	24258 8	-/-	24289 2	-/-
300	20105 9	-/24	20106 6	-/-	20107 3	-/-	20108 0	-/-	20119 6	-/-

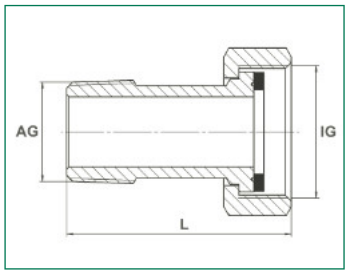


According to EN 10241,
black

Con.: Length mm	1 1/2" Item-No.	Pack. unit: bag/ carton	2" Item-No.	Pack. unit: bag/ carton	2 1/2" Item-No.	Pack. unit: bag/ carton	3" Item-No.	Pack. unit: bag/ carton	4" Item-No.	Pack. unit: bag/ carton
30	-	-	-	-	-	-	-	-	-	-
40	25045 3	-/-	25046 0	-/-	-	-	-	-	-	-
50	25005 7	-/-	25056 9	-/-	-	-	-	-	-	-
60	25065 8	-/-	25066 8	-/-	25067 5	-/-	25068 2	-/-	25169 6	-/-
70	25075 0	-/-	25076 7	-/-	-	-	-	-	-	-
80	25085 9	-/64	25086 6	-/-	25087 3	-/-	25088 0	-/-	25229 7	-/-
90	25095 8	-/-	25096 5	-/-	-	-	-	-	-	-
100	25105 4	-/-	25106 1	-/-	25107 8	-/-	25108 5	10/20	25239 6	10/10
110	25115 3	-/-	25116 0	-/-	-	-	-	-	-	-
120	25125 2	-/40	25126 9	-/30	25127 6	-/-	25128 3	-/-	25249 5	-/-
140	25145 0	-/-	25146 7	-/-	-	-	25148 1	-/-	-	-
150	25155 9	-/-	25156 0	-/-	25157 3	-/-	25158 0	-/-	25269 3	-/-
160	25165 8	-/-	25166 5	-/-	-	-	25168 9	-/-	-	-
180	25185 6	-/-	25186 3	-/-	25187 0	-/-	25188 7	-/-	25279 2	-/-
190	-	-	25196 2	-/-	-	-	-	-	-	-
200	25205 8	-/28	25206 8	10/10	25207 5	-/-	25208 2	-/ 8	25219 8	7/7
220	-	-	-	-	-	-	-	-	-	-
250	25255 6	-/24	25256 3	-/-	25257 0	-/-	25258 7	-/-	25289 1	-/-
300	25305 3	-/24	25306 5	10/10	25307 2	-/-	25308 9	-/-	25319 5	-/-

Water meter screw connections made of brass

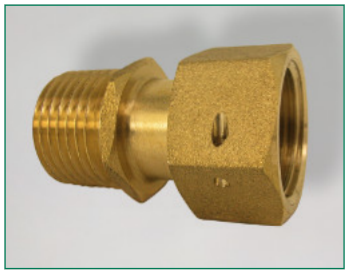
Water meter screw according to the drinking water ordinance

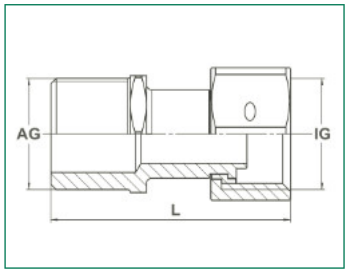


Brass hot-pressed, plain or chrome-plated, union nut with sealing eye, connecting piece with external thread, **with sealing**

Item-No.: plain	Item-No.: chrome plated	Socket: M	Union nut: F	Length: L	Packing unit:
WS-551-b-11780	WS-551-a-11780	R1/2"	G3/4"	45	-/100
WS-562-b-11780	WS-562-a-11780	R3/4"	G1"	58	-/100
WS-664-b-11780	-	R1"	G1¼"	60	2/ 50
WS-665-11780	-	R1¼"	G1½"	71	0/ 25
WS-666-b-11780	-	R1½"	G2"	82,5	0/ 25
as above, but **without sealing**					
WS-551-b-11780-OD	WS-551-a-11780-OD	R1/2"	G3/4"	45	0/100
WS-562-b-11780-OD	WS-562-a-11780-OD	R3/4"	G1"	58	0/100
WS-664-b-11780-OD	-	R1"	G1¼"	60	0/ 50
WS-665-11780-OD	-	R1¼"	G1½"	71	0/ 25
WS-666-b-11780-OD	-	R1½"	G2"	82,5	0/ 25
WS-667-b-G-N	-	R2"	G2½"	75	-/-
Union nut loose, with sealing (without illustration)					
WS-685-b-Mutter	-	-	G3/4"	13,5	-/700
WS-686-b-Mutter	-	-	G1"	18	-/400
WS-664-b-Mutter	-	-	G1¼"	20	-/200
Male threaded connecting piece, without sealing (without illustration)					
WS-685-b-Tülle	-	R1/2"	-	39,5	-/500
WS-686-b-Tülle	-	R3/4"	-	48	-/250
WS-664-b-Tülle	-	R1"	-	56	-/140

Water meter screw according to the drinking water ordinance, reduced





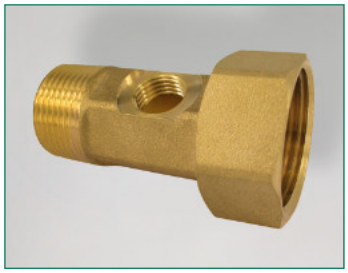
Brass hot-pressed, plain, union nut with sealing eye, connecting piece with external thread, **with sealing**

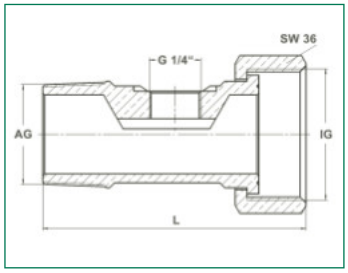
Item-No.: plain	Socket: M	Union nut: F	Length: L	Wrench size:	Packing unit:
WS-2159 (with fuse ring)	R1/2"	G1/2"	45		-/-
WS-1555-b-11780	R3/4"	G3/4"	61,5	30	1/150
WS-1556-b-11780	R1"	G1"	60,5	38	1/100

Water meter screw according to the drinking water ordinance

Brass hot-pressed, plain, without sealing, with drain connection G1/4", wrench size 36

Item-No.: plain	Drain connec.: F	Socket: M	Union nut: F	Length: L	Packing unit:
WS-3265-OD	G1/4"	R3/4"	G1"	67	-/-

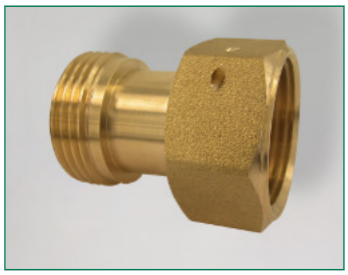


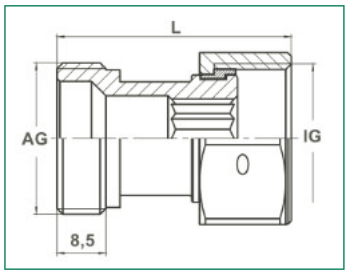


Water meter screw according to the drinking water ordinance

Brass hot-pressed, plain, without sealing, with locking ring and sealing eye

Item-No.: plain	Item-No.: chrome plated	Socket: M	Union nut: F	Length: L	Packing unit:
S-1228-A	-	G3/4"	G3/4"	41	25/150

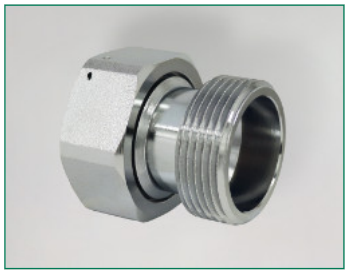


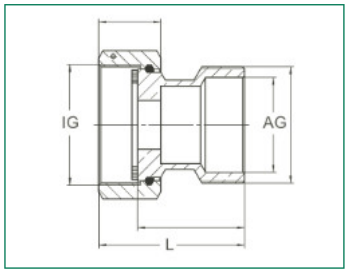


Screw connection with union nut

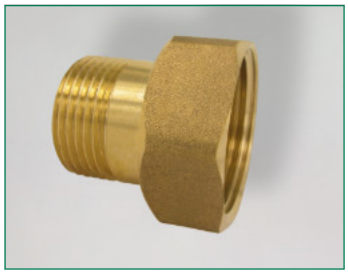
Chrome-plated, with AFM sealing, F/M

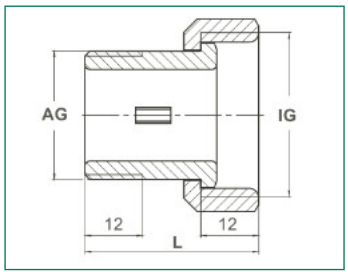
Item-No.:	Dim.:	Length: L	Wrench size:	Packing unit:
S-3381	G1 ¼" x G1 ¼"	50,5	46,5	10/50
S-3382	G2" x G2"	56	65	5/30





Water meter screw according to the drinking water ordinance

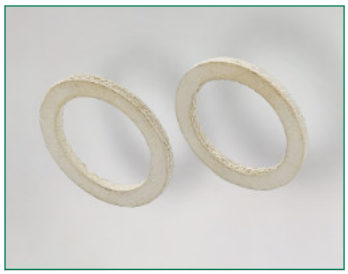




Brass hot-pressed, plain, without seal

Item-No.: plain	Item-No.: chrome plated	Socket: M	Union nut: F	Length: L	Packing unit:
S-1229	-	G3/4"	G1"	36	1/200

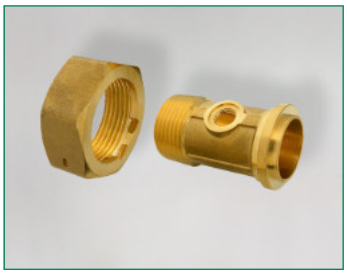
AFM gaskets

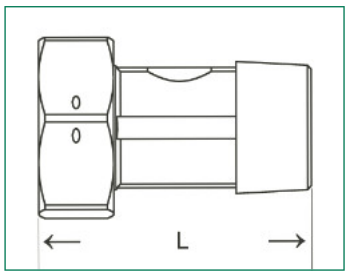


Spare parts water seals AFM 34 (DVGW/KTW W-270, SVGW, ÖVGW), temperature up to 200°C at 25 bar

Item-No.:	Connection:	Size:	Packing unit:
WS-551-AFM	16,9 x 23,7 x 2 mm	3/4"	-/-
WS-562-AFM	23,2 x 29,8 x 2 mm	1"	-/5000
WS-1556-AFM	23,0 x 28,0 x 2 mm	1"	-/5000
WS-664-AFM	29,2 x 38,0 x 2 mm	1 ¼"	-/-
WS-665-AFM	32,0 x 44,0 x 2 mm	1 ½"	-/-
WS-666-AFM	43,4 x 55,0 x 2 mm	2"	-/-

Screw connection with injection point / connection M 10x1





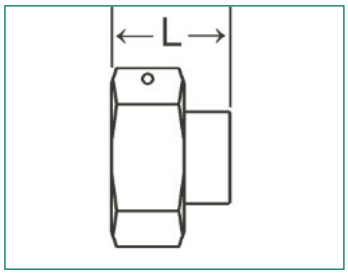
Plain brass, union nut with sealing eye

Item-No.: plain	Connection: socket M	Union nut:	Length: L	Packing unit:
WS-1475-b	R1"	G1 ¼"	-	10/100

Screw connection with solder connection

Plain brass, union nut with sealing eye, with sealing

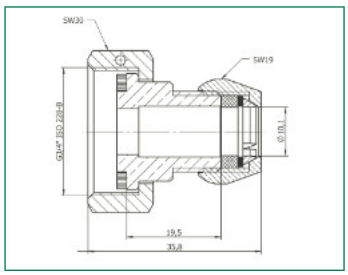
Item-No.: plain	Connection: solder socket	Union nut:	Length: L	Packing unit:
WS-563	15 mm	G3/4"	22	-/100
WS-564	18 mm	G3/4"	22	20/500
WS-565	22 mm	G1"	31,5	-/100

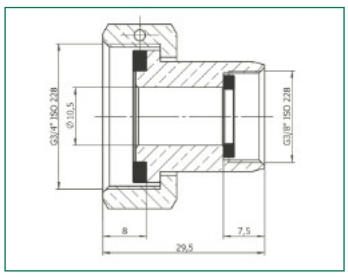


Screw connection for washstand meters

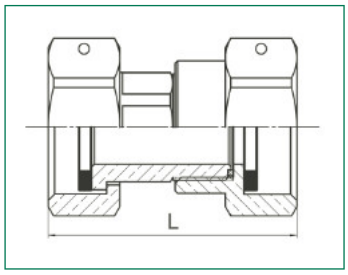
Brass chrome-plated, union nut with sealing eye

Item-No.:	Connection:	Union nut:	Length:	Packing unit:
WS-568-11780 (**with** sealing)	**Srew connection outlet:** Compression nut 3/4" x 10 mm	G3/4"	34	-/ 80
WS-569 (**without** sealing)	**Srew connection inlet:** Female thread 3/8"	G3/4"	29,5	-/100
WS-570	**Set** consisting of: WS-568-11780 + WS-569			10/500





Screw connection for tap water meter

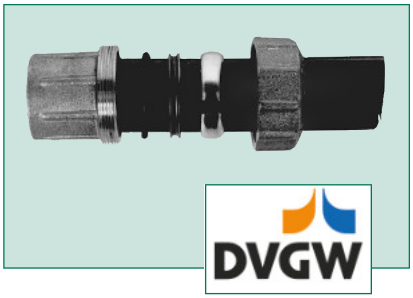


Brass chrome-plated, female thread on both sides, for connection with outlet valves 1/2" and 3/4", union nut with sealing eye

Item-No.:	Connection:	suitable for: outlet valves size	Length: L	Packing unit:
WS-566	G3/4" x G3/4"	1/2"	47	-/100
WS-566-11780 (with AFM sealing)	G3/4" x G3/4"	1/2"	47	-/100
WS-567 (**without** sealing)	G3/4" x G1"	3/4"	49	-/100

Compression fittings, brass, for PE-pipes

Compression fittings for plastic pipes (HDPE and LDPE) in sizes from 1/2 "x 20 mm to 3" x 90 mm. Suitable for piping systems underground or above ground level for fixed or mobile installation. For conveying potable water, waste water and other liquid media.



Material: brass (MS 58)

maximum operating pressure: 16 bar
operating temperature: -20°C to + 120°C
application range: Gas approved, tested according to DIN DVGW V 114 W

Consisting of housing, for example female thread, O-ring, pressure ring, clamping ring and screws (nut).
For the medium gas a gas sleeve or a support tube must be used in addition.

Straight form, with female thread and union nut

Item-No.:	Female thread: Size	PE-pipe- Size	PE-pipe- outside Ø	Packing unit:
34501 2	G 1/2"	1/2"	20 mm	20/320
34502 9	G 3/4"	3/4"	25 mm	15/240
34503 6	G 1"	1"	32 mm	12/120
34504 3	G 1 ¼"	1 ¼"	40 mm	6/ 60
34505 0	G 1 ½"	1 ½"	50 mm	4/ 72
34506 7	G 2"	2"	63 mm	2/ 38

Straight form, with male thread and union nut

Item-No.:	Female thread: Size	PE-pipe- Size	PE-pipe- outside Ø	Packing unit:
34511 1	G 1/2"	1/2"	20 mm	20/320
34512 8	G 3/4"	3/4"	25 mm	15/240
34513 5	G 1"	1"	32 mm	12/120
34514 2	G 1 ¼"	1 ¼"	40 mm	6/ 60
34515 9	G 1 ½"	1 ½"	50 mm	4/ 72
34516 6	G 2"	2"	63 mm	2/ 38

Elbow, with two union nuts

Item-No.:	Female thread: Size	PE-pipe- Size	PE-pipe- outside Ø
34571 5	1/2"	20 mm	12/216
34572 2	3/4"	25 mm	10/100
34573 9	1"	32 mm	6/ 78
34574 6	1 ¼"	40 mm	4/ 48
34575 3	1 ½"	50 mm	2/ 36
34576 0	2"	63 mm	2/ 14

Elbow, with female thread and union nut

Item-No.:	Female thread-size	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
34521 0	G1/2"	1/2"	20 mm	15/240
34522 7	G3/4"	3/4"	25 mm	12/192
34523 4	G1"	1"	32 mm	8/ 104
34524 1	G1 ¼"	1 ¼"	40 mm	6/ 72
34525 8	G1 ½"	1 ½"	50 mm	4/ 48

Elbow, with male thread and union nut

Item-No.:	Male thread-size	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
34531 9	G1/2"	1/2"	20 mm	15/240
34532 6	G3/4"	3/4"	25 mm	12/120
34533 3	G1"	1"	32 mm	8/ 80
34534 0	G1 ¼"	1 ¼"	40 mm	6/ 72
34535 7	G1 ½"	1 ½"	50 mm	4/ 48
34536 4	2"	2"	63 mm	2/ 38

Elbow, with female thread union nut and wall fixation

Item-No.:	Female thread-size	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
34541 8	G1/2"	1/2"	20 mm	15/150
34542 5	G3/4"	3/4"	25 mm	12/156
34543 2	G1"	1"	32 mm	8/ 64

T-piece, with three union nuts

Item-No.:	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
34566 1	1/2"	20 mm	6/144
34567 8	3/4"	25 mm	6/108
34568 5	1"	32 mm	4/ 52
34569 2	1 ¼"	40 mm	4/ 36
34570 8	1 ½"	50 mm	2/ 28
34560 9	2"	63 mm	-/-

T-piece, with female thread and two union nuts

Item-No.:	Female thread-size	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
34551 7	G1/2"	1/2"	20 mm	8/192
34552 4	G3/4"	3/4"	25 mm	6/ 96
34553 1	G1"	1"	32 mm	4/ 72
34554 8	G1 ¼"	1 ¼"	40 mm	4/ 36
34555 5	G1 ½"	1 ½"	50 mm	2/ 26

Straight short form, with two union nuts

Item-No.:	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
34581 4	1/2"	20 mm	12/192
34582 1	3/4"	25 mm	10/160
34583 8	1"	32 mm	8/104
34584 5	1 ¼"	40 mm	4/ 80
34585 2	1 ½"	50 mm	2/ 48
34580 7	2"	63 mm	-/-

Straight long form, with two union nuts

Item-No.:	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
34586 9	1"	32 mm	6/72
34587 6	1 ¼"	40 mm	4/36
34588 3	1 ½"	50 mm	2/36
34589 0	2"	63 mm	2/14

Sealing set for PE pipe compression fittings

Item-No.:	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
34591 3	1/2"	20 mm	-/100
34592 0	3/4"	25 mm	-/ 75
34593 7	1"	32 mm	-/ 50
34594 4	1 ¼"	40 mm	-/ 30

Supporting ferrule

Stainless steel, necessary for the use with the medium gas, only for PE pipe compression fittings made of brass

Item-No.:	PE-pipe-size	Packing unit:
34500 5	1/2"	-/100
34510 4	3/4"	-/ 75
34520 3	1"	-/ 50
34530 2	1 ¼"	-/ 30

Compression fittings, polypropylene, for PE-pipes

Material: PP

maximum operating pressure: 10 bar
operating temperature : 0°C to + 30°C
application range : Irrigation and spray irrigation, not suitable for gas or compressed air.
Consisting of housing, for example female thread, O-ring, pressure ring, clamping ring and union nut.

Straight form, with two union nuts

Item-No.:	Female thread-size	PE-pipe-outside Ø	Packing unit:
35581 3	1/2"	20 mm	50/300
35582 0	3/4"	25 mm	50/200
35583 7	1"	32 mm	50/ 150
35584 4	1 ¼"	40 mm	-/ 90
35585 1	1 ½"	50 mm	-/ 50
35586 8	2"	63 mm	-/ 30

Straight form, with female thread and union nut

Item-No.:	Female thread-size	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
35501 1	1/2"	1/2"	20 mm	50/350
35502 8	3/4"	3/4"	25 mm	50/350
35503 5	1"	1"	32 mm	50/200
35504 2	1 ¼"	1 ¼"	40 mm	-/ 125
35505 9	1 ½"	1 ½"	50 mm	-/ 75
35506 6	2"	2"	63 mm	-/ 65

Straight form, with male thread and union nut

Item-No.:	Male thread-size	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
35511 0	1/2"	1/2"	20 mm	50/550
35512 7	3/4"	3/4"	25 mm	50/350
35513 4	1"	1"	32 mm	50/200
35514 1	1 ¼"	1 ¼"	40 mm	-/ 130
35515 8	1 ½"	1 ½"	50 mm	-/ 80
35516 5	2"	2"	63 mm	-/ 45

Elbow, with two union nuts

Item-No.:	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
35571 7	1/2"	20 mm	50/250
35572 1	3/4"	25 mm	50/200
35573 8	1"	32 mm	-/ 50
35574 5	1 ¼"	40 mm	-/ 70
35575 2	1 ½"	50 mm	-/ 40
35576 9	2"	63 mm	-/ 23

Elbow, with female thread and union nut

Item-No.:	Female thread-size	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
35521 9	1/2"	1/2"	20 mm	20/460
35522 6	3/4"	3/4"	25 mm	20/300
35523 3	1"	1"	32 mm	50/ 150
35524 0	1 ¼"	1 ¼"	40 mm	5/ 90
35525 7	1 ½"	1 ½"	50 mm	-/ 55
35526 4	2"	2"	63 mm	-/ 30

Elbow, with male thread and union nut

Item-No.:	Male thread-size	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
35531 8	1/2"	1/2"	20 mm	50/450
35532 5	3/4"	3/4"	25 mm	50/300
35533 2	1"	1"	32 mm	50/ 150
35534 9	1 ¼"	1 ¼"	40 mm	-/ 120
35535 6	1 ½"	1½"	50 mm	-/ 60
35536 3	2"	2"	63 mm	-/ 35

T-piece, with three union nuts

Item-No.:	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
35566 0	1/2"	20 mm	50/150
35567 7	3/4"	25 mm	50/150
35568 4	1"	32 mm	-/ 80
35569 1	1 ¼"	40 mm	-/ 45
35559 2	1 ½"	50 mm	-/ 25
35560 8	2"	63 mm	-/ 14

T-piece, with female thread and two union nuts

Item-No.:	Female thread-size	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
35551 6	1/2"	1/2"	20 mm	20/240
35552 3	3/4"	3/4"	25 mm	10/ 150
35553 0	1"	1"	32 mm	50/ 100
35554 7	1 ¼"	1 ¼"	40 mm	-/ 60
35555 4	1 ½"	1 ½"	50 mm	-/ 33
35556 1	2"	2"	63 mm	-/ 20
35550 9	3/4"	1"	32 mm	-/ 100

T-piece, with male thread and two union nuts

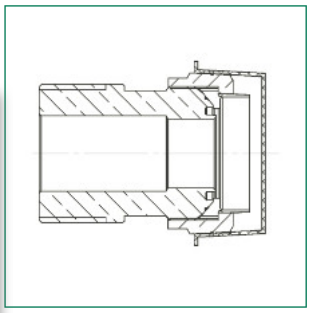
Item-No.:	Male thread-size	PE-pipe-size	PE-pipe-outside Ø	Packing unit:
35541 7	1/2"	1/2"	20 mm	50/200
35542 4	3/4"	3/4"	25 mm	50/ 150
35543 1	1"	1"	32 mm	-/ 100
35544 8	1 ¼"	1 ¼"	40 mm	-/ 50
35545 5	1 ½"	1 ½"	50 mm	-/ 30
35546 2	2"	2"	63 mm	-/ 18

Brass fittings for solar corrugated stainless steel pipes
material: CW617N, surface: plain

Screw connection with male thread

Corrugated screw connection with male thread, metal sealing, safety clamps with teeth, with red plastic protection cap

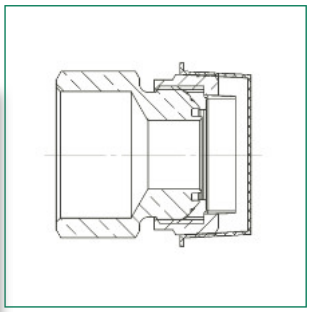
Item-No.:	Connection:	Packing unit:
36321 4	1/2" x DN 12	-/50
36322 1	R1/2" x DN 16	-/50
36323 8	R3/4" x DN 16	-/50
36324 5	R3/4" x DN 20	-/50
36325 2	R1" x DN 20	-/50



Screw connection with female thread

Corrugated screw connection with female thread, metal sealing, safety clamps with teeth, with red plastic protection cap

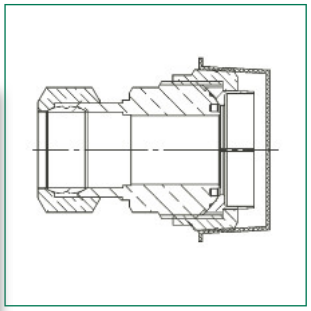
Item-No.:	Connection:	Packing unit:
36311 5	1/2" x DN 12	-/100
36312 2	Rp 1/2" x DN 16	-/100
36313 9	Rp 3/4" x DN 16	-/ 50
36314 6	Rp 3/4" x DN 20	-/ 50
36315 3	Rp 1" x DN 20	-/ 50



Screw connection for copper pipe

For connection with corrugated tube/copper pipe, safety clamps with teeth, with red plastic protection cap

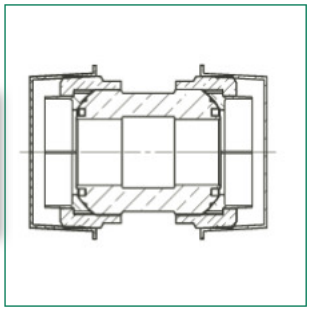
Item-No.:	Connection:	Packing unit:
36331 3	15 mm x DN 16	-/50
36332 0	18 mm x DN 16	-/50
36333 7	18 mm x DN 20	-/50
36334 4	22 mm x DN 20	-/50
36335 1	22 mm x DN 16	-/50



Screw connection (coupling)

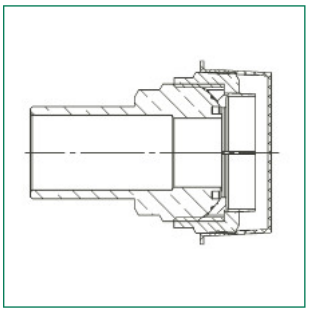
Corrugated screw connection (coupling), metal sealing, safety clamps with teeth, with red plastic protection cap

Item-No.:	Connection:	Packing unit:
36301 6	DN 16 x DN 16	-/50
36302 3	DN 20 x DN 20	-/50



Brass fittings for solar corrugated stainless steel pipes
material: CW617N, surface: plain

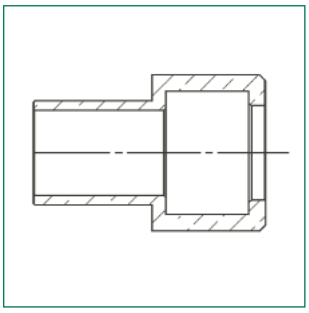
Connecting piece



Metal sealing, safety clamps with teeth, with red plastic protection cap

Item-No.:	Connection:	Packing unit:
36343 6	22 mm x DN 16	-/100
36345 0	22 mm x DN 20	-/ 50

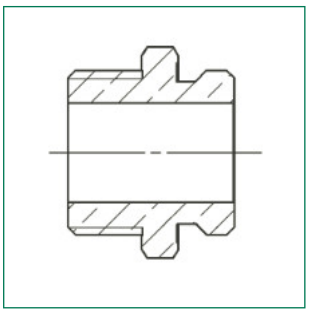
Connecting piece



Socket with smooth spout, hexagonal

Item-No.:	Connection:	Packing unit:
36371 9	G 3/4" x 18/22 mm	-/250
36372 6	G 1" x 18/22 mm	25/150

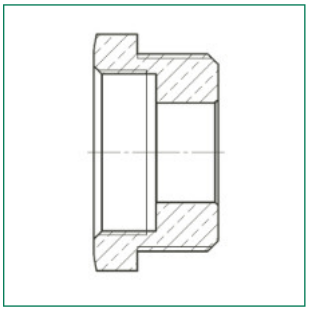
Nipple male thread / male thread



Nipple with male thread/male thread, delivery without O-ring

Item-No.:	Connection:	Packing unit:
36373 3	G 3/4" x G 3/4" L= 27 mm	25/350

Bushing



With male thread/female thread for flat-sealing connections

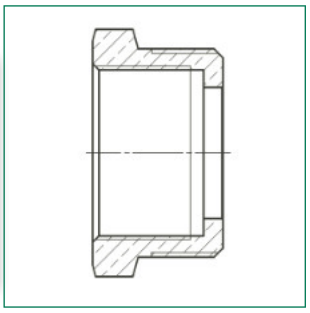
Item-No.:	Connection:	Packing unit:
36350-¾	G 3/4" x G 1/2"	-/250
36350-1	G 1" x G 3/4"	-/ 175
36350-1¼	G 1¼" x G 1"	-/ 80

Brass fittings for solar corrugated stainless steel pipes
material: CW617N, surface: plain

Bushing

With male thread/female thread, metal sealing (conical thread)

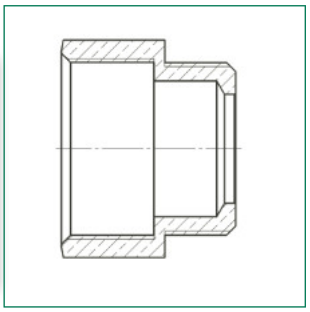
Item-No.:	Connection:	Packing unit:
36351-¾	G 3/4" x Rp 1/2"	-/350
36351-1	G 1" x Rp 3/4"	-/200
36351-1¼	G 1¼" x Rp 1"	-/ 80
36351-1½	G 1½" x Rp 1¼"	-/100

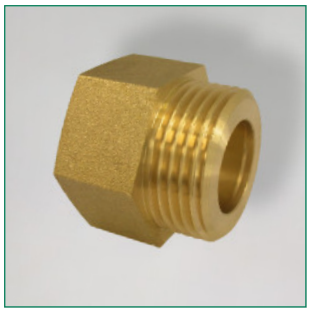


Socket nipple

With male thread/female thread, with enlarged wrench flat

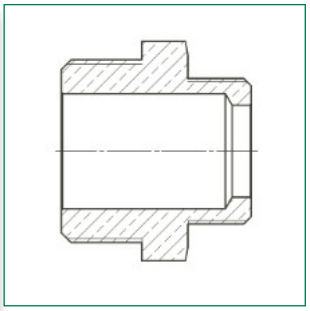
Item-No.:	Connection:	Packing unit:
36352-½	G 1/2" x Rp 1/2"	-/350
36352-¾	G 3/4" x Rp 3/4"	-/200
36352-1	G 1" x Rp 1"	-/120
36352-1¼	G 1¼" x Rp 1¼"	-/ 90





Hexagon double nipple

Item-No.:	Connection:	Pack. unit:
With male thread/male thread, **cylindrical thread**, flat sealing		
36353-¾	G 3/4" x G 1/2"	10/200
36353-1	G 1" x G 3/4"	-/ 110
36353-1¼	G 1¼" x G 1"	-/ 50
36353-1½	G 1½" x G 1¼"	-/ 50
With male thread/male thread, **reduced thread**, conical sealing		
36354-¾	G 3/4" x R 1/2"	-/200
36354-1	G 1" x R 3/4"	-/ 80
36354-1¼	G 1¼" x R 1"	-/ 50
36354-1½	G 1½" x R 1¼"	-/ 50
With male thread/male thread, **equal**, flat sealing		
36355-½	G 1/2", L= 28 mm, WS 21	15/300
36355-¾	G 3/4", L= 29 mm, WS 27	10/200
36355-1	G 1", L= 31 mm, WS 34	10/100
36355-1¼	G 1¼", L= 36 mm, WS 42/6	-/ 45
36355-1½	G 1½", L= 40 mm, WS 48/8	-/ 50



G = cylindrical
R = conical

General Terms and Conditions of Sale of puteus GmbH

Section 1 Area of application, form

1. These General Terms and Conditions of Sale apply to all our business relationships with our Customers (hereinafter also referred to as Buyers). The General Terms and Conditions of Business apply only if the Buyer is an entrepreneur (Section 14 BGB (German Civil Code)), a legal entity under public law or a special fund under public law.

2. The General Terms and Conditions of Business apply, in particular, to contracts for the sale and/or delivery of movable Goods ("Goods"), irrespective of whether or not we manufacture the Goods ourselves or purchase them from suppliers (Sections 433, 650 BGB). Unless otherwise agreed, the General Terms and Conditions valid at the time of the Buyer's order or, in any case, as stated in the version last communicated to the Buyer in text form, shall also apply as a framework agreement to similar future contracts, without us being required to refer to them again in each individual case.

3. Our General Terms and Conditions of Business apply exclusively. Any varying, con icting or supplementary general terms and conditions of business of the Buyer shall only become an integral part of the contract if and to the extent that we have expressly agreed to their validity. This consent requirement applies in all cases, for example including if the Buyer refers to their general terms and conditions of Business when placing an order and we do not expressly object to this.

4. Individual agreements (e.g. framework supply agreements, quality assurance agreements) and any information contained in our order con rmations, take precedence over the General Terms and Conditions of Business. In the case of doubt, trade clauses shall be interpreted in accordance with the Incoterms® issued by the International Chamber of Commerce in Paris (ICC), as stated in the version valid at the time of entering into the contract.

5. Legally relevant declarations and noti cations by the Buyer in relation to the contract (e.g. setting deadlines, providing noti cation of defects, withdrawal or reduction), as well as subsequent amendments to the contract, are subject to the written form. The written form within the meaning of these General Terms and Conditions of Business includes written and text form (e.g. letter, e-mail). This does not affect statutory formal requirements or further proof, in particular in cases of doubt regarding the legitimacy of the party issuing a statement.

6. References to the validity of statutory provisions are for clari cation purposes only. Even without such clari cation, the statutory provisions shall, therefore, apply, unless they are directly amended or expressly excluded in these General Terms and Conditions of Business.

Section 2 Entering into a contract

1. Our offers are subject to change without notice and are non-binding, unless they are expressly marked as having binding force or contain a speci c acceptance period. Our Customer may accept orders or contracts within 14 days of receipt.

2. Information made available by us regarding the subject matter of delivery or service (e.g. weights, dimensions, utility values, load-bearing capacity, tolerances and technical data or data sheets), as well as representations thereof (e.g. drawings and illustrations), are only approximate, unless the usability for the contractually agreed purpose requires precise conformity. They are not warranted characteristics, but descriptions or identi cations of the delivery. Standard variations and variations due to legal regulations or technical improvements, as well as the replacement of parts with equivalent parts, are permissible, provided they do not impair the usability for the contractually intended purpose. Public statements (e.g. advertising statements, general promotions) made by us or other third parties (e.g. manufacturers) do not constitute an agreement regarding the quality and, in particular, do not contain any promise of guarantee.

3. The written contract, including these General Terms and Conditions of Business, is solely authoritative in respect of our legal relationship with the Buyer. This fully re ects all agreements between us and our Customer regarding the subject matter of contract. Verbal commitments made by us prior to entering into the contract are not legally binding, and verbal agreements between us and the Buyer shall be replaced by the written contract, insofar nothing to the contrary is expressly agreed between us and the Buyer in each case. Supplementary information or amendments to the agreement entered into, including these General Terms and Conditions of Business, are subject to the written form in order to be deemed valid. Telecommunication transmission, e.g. by e-mail, is suf cient to safeguard the written form requirement.

4. The order of Goods by the Buyer applies as a binding contractual offer. Insofar as nothing to the contrary is speci ed in the order, we shall be entitled to accept this contract offer within 4 weeks of receiving it. Acceptance may be stated either in writing (e.g. by order con rmation) or by delivering the Goods to the Buyer.

Section 3 Samples, product data

1. Delivered samples shall be invoiced at the contract prices and are to be remunerated.

2. The provisions of Section 454 BGB (purchase on trial basis) do not apply to the provision of samples.

3. Insofar as we make product data available to our Customers (e.g. drawings, technical data, data sheets, calculations and estimates) for products purchased by them, such product data may only be used and referenced in direct connection with the sale or resale of the products purchased from us. Furthermore, product data is subject to strict con dentiality. The same applies to visual representations and images (uniformly referred to as representations) that we provide or make available (e.g. on the internet or on our homepage).

4. We expressly prohibit the use of our product data and/or representations thereof to advertise competing products. Using our product data and representations beyond the scope of the distribution of our products for technical and/or sales-related purposes of any kind is similarly prohibited.

Section 4 Delivery period, force majeure, delay in delivery, partial deliveries

1. The delivery period shall be agreed individually or speci ed by us upon acceptance of the order. The periods and dates we state for deliveries and services are always only approximate, unless a xed period or date has been expressly agreed. If we are unable to meet binding delivery periods for reasons for which we are not responsible (non-availability of the service), we shall inform the Buyer of this without delay and simultaneously provide noti cation of the expected new delivery period. The delivery period shall be deemed to have been complied with if, by the end of this period, the Goods have left our factory, or we have noti ed the Customer that they are ready for dispatch. If shipment has been agreed, delivery periods and delivery dates refer to the time of handover to the forwarding agent, carrier or other third party commissioned with the transport operation.

2. With regard to the start of the delivery period, it is taken for granted that all technical questions have been clari ed.

3. We may demand that Customers extend delivery periods or postpone delivery dates by the period during which our Customer fails to ful l their contractual obligations to us (e.g. failure to cooperate properly in the case of sampling).

4. We shall not be liable for the impossibility of delivery or for delays in delivery insofar as these are attributable to force majeure or other events that were not foreseeable at the time of entering into the contract (e.g. operational disruptions of any kind; dif culties in procuring materials or energy; transport delays; strikes; lawful lockouts; shortages of labour, energy or raw materials; dif culties in obtaining necessary of cial approvals; pandemics or epidemics; of cial measures or the non-delivery, incorrect delivery or late delivery by suppliers despite a congruent covering transaction entered into by us) for which we are not responsible. We shall be entitled to withdraw from the contract if such events render delivery or performance signi cantly more dif cult or impossible for us, and the hindrance is not only temporary. In the event of temporary obstacles, the delivery or service deadlines shall be extended, or the delivery or service dates postponed by the duration of the hindrance plus a reasonable start-up period. If the Buyer cannot reasonably be expected to accept the delivery or service as a result of the delay, they may withdraw from the contract by notifying us in writing without delay.

5. We are only entitled to make partial deliveries if (i) the partial delivery is usable for the Buyer as part of the contractual purpose, (ii) delivery of the remaining ordered Goods is ensured, and (iii) this does not result in signi cant additional expenditure or additional costs for the Buyer (unless we agree to bear such costs).

6. The occurrence of delay in the delivery on our part, it shall be determined in accordance with the statutory provisions, subject to the proviso that delay shall only occur after a written reminder and expiry of a reasonable additional period, insofar as a xed-date transaction does not apply.

7. This does not affect the Buyer's rights in accordance with Section 8 of these General Terms and Conditions of Business and our statutory rights, in particular in the event of an exclusion of the obligation to perform (e.g. due to impossibility or unreasonableness of performance and/or subsequent performance).

Section 5 Delivery, call-off, transfer of risk, default in acceptance

1. Delivery shall be made ex works, which shall also be the place of performance for the delivery and any subsequent performance. The Goods shall be shipped to another destination (sales shipment) at the Buyer's request and expense. Insofar as nothing to the contrary is agreed, we shall be entitled to determine the type of shipment (in particular, the transport company, shipping route and packaging).

2. If delivery on call has been agreed, all call-offs must be made by the Buyer within 12 months of entering into the contract at the latest, insofar as nothing to the contrary is agreed in writing.

3. The risk of accidental loss of and accidental deterioration in the Goods shall pass onto to the Buyer upon delivery at the latest. In the case of sales shipments, the risk of accidental loss of and accidental deterioration in the Goods, as well as the risk of delay, shall pass onto the carrier, freight forwarder or other person or company designated to perform the shipment, at the time the goods are handed over If acceptance has been agreed, this shall be authoritative over the transfer of risk. In other respects, the statutory provisions of the law governing work and service contracts apply accordingly to an agreed acceptance. The handover or acceptance shall be deemed to have occurred if the Buyer defaults in acceptance.

4. If the Buyer defaults in acceptance, fails to cooperate or delays our delivery for any other reason for which the Buyer is responsible, we shall be entitled to demand compensation for the resulting damage, including additional expenses (e.g. storage costs). The same applies following the passing of risk. If we store the Goods, the storage costs shall be 0.25% of the invoice amount of the delivery items for each full week that they are stored. This does not affect proof of higher damages and our legal claims (particularly reimbursement of additional expenses, reasonable compensation, termination). The asserted storage costs are to be counted towards further-reaching monetary claims. The Buyer is entitled to furnish proof that we have incurred no damage at all, or only signi cantly less damage than the value of the above lump sum.

5. We shall only insure the shipment against theft, breakage, transport damage, re and water damage or other insurable risks at the Buyer's express request and expense.

6. The Buyer undertakes to return to us free of charge any reusable packaging we use. In the absence of statutory regulations to the contrary, disposable packaging must be disposed of by the Customer at their own expense.

7. If acceptance is required, the object of sale shall be deemed accepted if • Delivery has been completed, • We have noti ed the Buyer of this with reference to the deemed acceptance in accordance with this sub-section, and requested the Buyer to accept the item, • 20 working days have passed since delivery, or the Buyer has started to use the object of sale (e.g. has further processed the delivered object of sale (e.g. installation in a building) or resold it) and, in this case, 10 working days have passed since delivery, and • The Buyer has failed to accept the Goods within this period for a reason other than a defect reported to us that renders using the object of sale impossible or signi cantly impairs such use.

Section 6 Prices, terms and conditions of payment

1. Insofar as nothing to the contrary is agreed in individual cases, our prices in EUR valid at the time of entering into the contract shall apply, ex works, plus statutory value added tax. Additional or special services shall be charged separately. Insofar as the agreed prices are based on our list prices and delivery is to occur more than four months after entering into the contract, our list prices valid at the time of delivery shall apply (in each case less an agreed percentage or xed discount).

2. a) In the case of sales shipments, the Buyer shall bear the transport costs ex works and the cost of any transport insurance requested by the Buyer. **b)** Any customs duties, fees, taxes and other public charges shall be borne by the Buyer.

3. The purchase price falls due and is payable within 14 days of invoicing and delivery or acceptance of the Goods.

4. The Buyer shall be in default upon expiry of the above payment period. During the period of default, interest shall be charged on the purchase price at the applicable statutory default interest rate (9 percentage points above the base rate in accordance with Section 288 (2) BGB). We reserve the right to assert a claim for further-reaching damage caused by default. This does not affect our claim to commercial interest on arrears (Section 353 HGB (German Commercial Code)) in dealings with merchants.

5. The Buyer shall only be entitled to set-off or retention rights, insofar as his claim has become res judicata, is recognised, is undisputed, or results from the same contract under which the affected delivery was made.

6. If, after entering into the contract, it becomes apparent (e.g. as a result of an application led for the institution of insolvency proceedings) that our claim to the purchase price is at risk due to the Buyer's inability to pay, we shall be entitled to refuse performance in accordance with the statutory provisions and, if necessary, withdraw from the contract after setting a period (Section 321 BGB). In the case of contracts for the manufacture of non-fungible Goods (custom-made/one-off products), we may state our withdrawal immediately. This does not affect the statutory provisions regarding the dispensability of setting a period. In the event of late payment, we shall be entitled to withhold further deliveries until outstanding invoice amounts, including interest, have been settled.

Section 7 Reservation of title, tools

1. We shall retain ownership of the sold Goods up until all our current and future claims, resulting from the purchase contract and an ongoing business relationship (secured claims), have been paid in full.

2. The reserved Goods may not be pledged to third parties or transferred as security before the secured claims have been paid in full. The Buyer is to notify us without delay in writing if an application is led for the institution of insolvency proceedings. The same applies in the event of an application for insolvency under self-administration or proceedings under the StaRUG (German Act on the Restructuring of Companies) or insofar as third parties (e.g. seizures) gain access to the Goods in our possession.

3. In the event of a breach of the contract by the Buyer, in particular non-payment of the due purchase price, we shall be entitled to withdraw from the contract in accordance with the statutory provisions and/or demand the return of the Goods as a result of the reservation of title. The demand for surrender does not simultaneously include a statement of withdrawal. Rather, we are entitled to demand only the return of the Goods and reserve the right to withdraw. If the Buyer fails to pay the due purchase price, we may only assert these rights if we have previously set the Buyer a reasonable period for payment in vain, or if such a period is dispensable according to the statutory provisions.

4. Until withdrawn in accordance with sub-section **c)** below, the Buyer shall be authorised to resell and/or process the reserved Goods in the ordinary course of business. In such a case, the following provisions apply in addition. The Customer shall store the Goods for us free of charge and shall be liable for the proper condition of the Goods. **a)** The reservation of title extends to the full value of the products created by processing or combining our Goods, whereby we are deemed the manufacturer. If the third party's ownership rights remain in force in the event of processing or combining with third party Goods, we shall acquire co-ownership in proportion to the invoice values of the processed, mixed or combined Goods. In other respects, the same shall apply to the resulting product as what applies to the delivered reserved Goods. **b)** The Buyer hereby assigns to us as security all claims against third parties resulting from the resale of the Goods or products, either in full or in the amount of our potential co-ownership share, in accordance with the above sub-section. We accept the assignment. The Buyer's obligations referred to in sub-section 2 also apply with regard to the assigned claims. **c)** The Buyer remains authorised to collect the claim alongside us. We undertake not to collect the claim, as long as the Buyer meets his payment obligations to us, there are no shortcomings in respect of his ability to pay and, we do not assert our reservation of title by exercising a right in accordance with sub-section 3. However, if this is the case, we may demand that the Buyer informs us of the assigned claims and their debtors, makes available all information necessary for collection, hands over the relevant documents, and informs the debtors (third parties) of the assignment. In addition, we shall be entitled in such a case to withdraw the Buyer's authority to resell and process the reserved Goods. **d)** If the realisable value of the securities exceeds our claims by more than 10%, we shall release securities of our choice at the Buyer's request.

5. a) Tools shall not become the Buyer's property, including if full costs are charged. They remain our property, unless expressly agreed otherwise. **b)** We draw attention to the fact that we shall scrap or otherwise recycle tools two years after the last parts have been manufactured.

Section 8 Buyer's warranty claims

1. Insofar as nothing to the contrary is speci ed below, the statutory provisions shall apply to the Buyer's rights in the event of material defects and defects in title, including incorrect or short delivery or faulty instructions. In all cases, this does not affect the special statutory provisions governing the sale of consumer Goods (Sections 474 et seq. BGB) or the Buyer's rights resulting from separately issued guarantees.

2. Our liability for defects is based primarily on the agreement entered into regarding the quality and intended use of the Goods. All product descriptions and manufacturer speci cations that are the subject matter of the individual contract shall be deemed to be quality agreements in this sense. If the quality has not been agreed, the statutory provisions shall be used to assess whether or not a defect applies (Section 434 (3) BGB). We accept no liability for public statements made by the manufacturer or other third parties (e.g. advertising claims). 3. The warranty shall lapse if the Buyer modi es the delivery item or has it modi ed by third parties without our consent, and this renders it impossible or unreasonably dif cult to rectify the defect. In any case, the Buyer shall bear the additional cost of rectifying the defect resulting from the modi cation.

4. We are generally not liable for defects that the Buyer is aware of at the time of entering into the contract or is unaware of due to gross negligence (Section 442 BGB). Furthermore, in the case of the Buyer's claims for defects, it is taken for granted that the Buyer has ful lled his statutory obligations to inspect and provide noti cation of defects (Sections 377, 381 HGB). In the case of Goods intended for installation or further processing, an inspection is to be performed without delay at all times prior to installation/processing. If a defect becomes apparent upon delivery, inspection, or at any subsequent time, we are to be noti ed of this in writing without delay. In any case, written noti cation of obvious defects is to be provided within seven working days of delivery, and written noti cation of defects that are not apparent upon inspection is to be provided within the same time period once such defects are identi ed. If the Buyer fails to conduct the proper inspection and/or provide noti cation of defects, our liability for defects for which noti cation is not provided, is not provided in good time, or is not properly provided, is excluded in accordance with the statutory provisions. In the case of Goods intended for tting, attachment or installation, this shall also apply if the defect only became apparent after processing as a result of a breach of one of these obligations. In such a case, the Buyer shall have no claims for reimbursement of corresponding costs ("Dismantling and installation costs").

5. a) If the delivered item is faulty, we may initially choose whether or not to provide subsequent performance by eliminating the fault (subsequent improvement) or by delivering a fault-free item (substitute delivery). If the type of subsequent performance chosen by us is unreasonable for the Buyer in individual cases, the Buyer may reject it. This does not affect our right to refuse subsequent performance under the statutory conditions. At our request, an existing delivery item is to be returned to us carriage paid. In the event of a justi ed complaint, we shall reimburse the costs of the cheapest shipping method. However, this shall not apply if the costs are increased by the fact that the delivery item is located at a place other than the place of intended use. **b)** In the event of defects in Goods from other manufacturers, which we are unable to rectify for licensing or practical reasons, we shall be entitled, at our discretion, to assert our warranty claims against the manufacturer or Supplier at the Buyer's expense or assign them to the Buyer. Warranty claims against us for such defects shall only apply under the other conditions and in accordance with these General Terms and Conditions of Business if the legal enforcement of the aforementioned claims against the manufacturer or Supplier was unsuccessful or offers no prospects of success, for example, due to insolvency.

6. We are entitled to render the required subsequent performance dependent on the Buyer paying the due purchase price. However, the Buyer is entitled to retain a portion of the purchase price that is proportionate to the defect.

7. The Buyer is to grant us the time and opportunity required to rectify the defect, in particular, to hand over for inspection the Goods for which a complaint has been lodged. In the event of a substitute delivery, the Buyer is to return the faulty item to us at our request in accordance with the statutory provisions. However, the Buyer has no right to demand a return. Subsequent performance shall neither include the removal, dismantling or uninstalling of the faulty item, nor the tting, attachment or tting of a non-faulty item, if we did not originally undertake to render these services. This does not affect claims by the Buyer for reimbursement of corresponding costs ("Dismantling and installation costs").

8. We shall bear or reimburse the expenses required for the purpose of inspection and subsequent performance, in particular transport, travel, labour and material costs and, where applicable, removal and installation costs, in accordance with the statutory provisions and these General Terms and Conditions, if a defect actually exists. Otherwise, we may demand reimbursement from the Buyer for the costs incurred as a result of the unjusti ed request to rectify the defect, if the Buyer knew or could have realised that in fact no defect existed.

9. In urgent cases, e.g. if operational safety is at risk or to prevent disproportionate damage, the Buyer has the right to rectify the defect himself and demand that we reimburse him for the objectively required expenses incurred in that regard. We are to be noti ed without delay, if possible, in advance, of any such action taken by the Buyer. The right to independently take such action shall not apply if we were entitled to refuse corresponding subsequent performance in accordance with the statutory provisions.

10. If a reasonable period set by the Buyer for subsequent performance has expired in vain, or is dispensable according to the statutory provisions, the Buyer may withdraw from the purchase contract or reduce the purchase price in accordance with the statutory provisions. However, there is no right of withdrawal in the case of an insigni cant defect.

11. The Buyer's claims for reimbursement of expenses in accordance with Section 445a (1) BGB are excluded, unless the last contract in the supply chain is a consumer Goods purchase (Sections 478, 474 BGB). The Buyer's claims for damages or reimbursement of expenses in vain (Section 284 BGB) shall only exist in the event of defects in the Goods in accordance with the following provisions in Section 9 and Section 11.

12. In the case of the sale of used movable items, rights resulting from defects and all claims for damages are excluded. The above provisions on the exclusion of claims for damages in the case of used Goods neither apply to damage resulting from loss of life, physical injury or detrimental effects on health if we are responsible for the breach of duty, nor to other damage resulting from an intentional or grossly negligent breach of duty on our part. Breaches of duty by our legal representatives or vicarious agents are deemed equivalent breaches. This does not affect claims in accordance with the German Product Liability Act or the assumption of a guarantee or procurement risk.

Section 9 Other liability

1. Insofar as nothing to the contrary is speci ed in these General Terms and Conditions of Business, including the following provisions, we shall be liable for any breach of contractual and non-contractual obligations in accordance with the statutory provisions.

2. We shall be liable for damages – irrespective on whichever grounds these apply, – as part of fault-based liability in cases of intent and gross negligence. In cases of simple negligence, we shall only be liable, subject to statutory limitations of liability (e.g. diligence in our own affairs; insigni cant breach of duty), **a)** for damages resulting from the loss of life, physical injury or detrimental effects on health, **b)** for damages resulting from the breach of an essential contractual obligation (an obligation the ful lment of which is essential for the proper execution of the contract and on whose compliance the contractual partner regularly relies and may rely). However, in such a case, our liability is limited to compensation for foreseeable, common damage.

3. The limitations of liability resulting from sub-section 2 shall also apply to third parties and in the event of breaches of duty by persons (including for their bene t) for whose fault we are responsible under statutory provisions. The above exclusions and limitations of liability apply, in particular, to the same extent in favour of our executive bodies, legal representatives, employees and other vicarious agents. They shall neither apply in cases in which a defect has been fraudulently concealed, or a guarantee has been provided for the quality of the Goods, nor shall they apply to claims by the Buyer in accordance with the German Product Liability Act.

4. In the event of a breach of duty that does not constitute a defect, the Buyer may only withdraw from the contract or terminate it if we are responsible for the breach of duty. The Buyer's right to arbitrarily terminate the contract (in particular in accordance with Sections 650 and 648 BGB) is excluded. In other respects, the statutory requirements and legal consequences apply.

Section 10 Industrial property rights, copyrights

1. In accordance with this Section 10, we provide a guarantee such that the delivery item is free from third party industrial property rights or copyrights. Each contracting party shall notify the other without delay in writing if claims are asserted against them for the infringement of such rights.

2. In the event that the delivery item infringes a third party's industrial property right or copyright, we shall, at our discretion and expense, modify or replace the delivery item in such a way that no third party rights are infringed, but the delivery item continues to ful l the contractually agreed functions, or procure the right of use for the Buyer by entering into a licensing agreement with the third party. If we do not succeed in doing so within a reasonable period of time, the Buyer shall be entitled to withdraw from the contract or reduce the purchase price appropriately. Any claims for damages by the Buyer are subject to the limitations of these General Terms and Conditions of Business.

3. We reserve the right of ownership and copyright to all offers and cost estimates we submit, as well as any documents made available to our Customers, such as drawings, technical data, data sheets, illustrations, calculations, catalogues, models, tools and other documents and aids. The Customer may not make such items or documents available to third parties, disclose them, use them himself or via third parties, or reproduce them without our express consent. At our request, our Customer is to return the items to us in full and destroy any copies made if they are no longer required by the Customer in the ordinary course of business, or if negotiations do not result in the parties entering into a contract. This does not apply to the storage of data made available electronically for the purpose of standard data back-up.

4. If we manufacture according to the Buyer's instructions, or render services according to their speci cations, the Buyer undertakes – contrary to the preceding sub-sections – to indemnify us and, as part of a contract for the bene t of third parties, our suppliers against any third party claims resulting from infringements of property rights/copyrights and the like that are asserted against us.

Section 11 Statute of limitations

1. Irrespective of Section 438 (1) No. 3 BGB, the general limitation period for claims resulting from material defects and defects of title is one year from delivery. If acceptance has been agreed, the limitation period shall commence upon acceptance.

2. If the Goods are items that have been used for a building in accordance with their normal use and have caused its faulty nature, the limitation period shall be 5 years from delivery in accordance with the statutory provision (Section 438 (1) No. 2 BGB). Similarly, this does not affect other special statutory provisions on the statute of limitations (in particular Section 438 (1) No. 1, (3), Sections 444, 445b BGB).

3. The above limitation periods under sales law also apply to contractual and non-contractual claims for damages by the Buyer based on a defect in the Goods, unless application of the regular statutory limitation period (Sections 195, 199 BGB) would lead to a shorter limitation period in individual cases. The Buyer's claims for damages in accordance with Section 9 (2) Sentence 1 and Sentence 2 a), and in accordance with the German Product Liability Act, shall fall under the statute of limitations exclusively in accordance with the statutory limitation periods.

Section 12 Reservation of title

1. Executing the contract is subject to the proviso that no obstacles arise due to government sanctions or other delivery restrictions under foreign trade law, and that no embargo or other sanctions prevent delivery. The Buyer undertakes to furnish information and documents required for delivery or import.

2. This does not affect the provision in Section 4 (4) (force majeure and self-supply etc.).

Section 13 Choice of law, place of jurisdiction, contract language

1. The law of the Federal Republic of Germany, excluding international uniform law, in particular the UN Convention on Contracts for the International Sale of Goods (CISG), applies to these General Terms and Conditions and the contractual relationship between us and the Buyer.

2. German is deemed the contract language.

3. If the Buyer is a merchant within the meaning of the German Commercial Code, a legal entity under public law or a special fund under public law, our registered of ce shall be deemed the exclusive – including international – place of jurisdiction for all disputes resulting directly or indirectly from the contractual relationship. The same applies if the Buyer is an entrepreneur within the meaning of Section 14 BGB. However, in all cases we shall also be entitled to bring legal action at the place of performance of the delivery obligation in accordance with these General Terms and Conditions of Business or a prior individual agreement, or at the Buyer's general place of jurisdiction. This does not affect legal provisions that have priority, in particular those relating to exclusive competences.

puteus GmbH, Lenenweg 6, D-47918 Tönisvorst as of 2025

TECHNICAL INFORMATION

Size and weight

Unless otherwise stated, all dimensions are in millimeters (mm) and weights are in grams (g).

PN = nominal pressure in bars 1 bar 10N / cm² => ca. 10 m column of water
DN = nominal diameter in inches or mm 1" = 25,4 mm => ca. 25 mm

Nominal pressure is the maximum applicable pressure at the standard temperature, which, unless otherwise stated, is 20°C.

Nominal diameter is the excess pressure when all operational conditions are taken into consideration, including pressure surges. It depends on the operating temperature, the medium, the size of the component/valve, and, where applicable, the type of seal.

There are legal provisions or regulations that apply to certain areas of application and that take precedence over the guidelines provided in this catalog.

Medium

The details presented in this catalog with respect to pressure and temperature conditions refer to water.

Suitability for gases, oils, or glycolic or other media should be investigated in light of the operating pressure and operating temperature. Our applicability information may not be applied to media or operating conditions other than those that have been approved without our clearance.

Custom models

If there are no articles in our standard program that are suitable for your needs, we can also create custom models upon request. For this, we would need a detailed letter of inquiry with the corresponding number of units as well as drawings or sample parts.

Installation instructions

A)Screw thread

Connection dimensions and screw thread of complementary proportions must always be selected.

The screw thread should not be too strongly sealed with hemp or sealing tape, which is to say that after the hemp has been applied, the crest of the thread must still be visible. Sealing the thread too strongly will increase the pressure in the component. Over time, that pressure can cause cracks.

To avoid causing damage during installation, the components should be conventionally screwed in with the appropriate, customary tools, without ex cessive force and without lever extension.

Self-sealing valves must not be sealed further with hemp or sealing tape. The corresponding mating thread must be of sufficient length (min. 12 mm). Where applicable, components are only to be installed on the spanner flats provided for that purpose by means of a suitable spanner/pliers. Our products must be installed without tension in due consideration for the information above. Alignment, e.g., of connections that we provide by means of heating appliances, is prohibited because this can also cause tension cracks and secondary damage later on.

Where applicable, connecting different metals or alloys can cause corrosion, for which puteus GmbH cannot be held liable (e.g., connections between brass and stainless steel or copper with zinc-plated metals). These characteristics are to be checked before our products are installed. The components' pressure and sealing are to be carefully tested after installation. Where applicable, the installation instructions that are enclosed with the components are to be observed when doing so.

B) Gate valve

After disassembly/repairs/maintenance work, the upper section is only to be reassembled with a raised sealing wedge. Do not damage sealing surfaces/key seats. Tops are not available as spare parts.

C) Socket slide valve

These must only be installed in closed position. Key seats must not be damaged by screwing in pipes by force.

D) Ball valves

To ensure operability, for example, only set ball valves on very low static and dynamic power. Where applicable, the component should be supported by appropriate measures (e.g., pipe clamps or similar). The torque to be applied to the ball valve must only be applied to the spanner flats at the end that is being screwed in, otherwise there is a risk that the ball valve could be unsealed or cracked. Likewise, bodies and ball valve screwing components must not be screwed against one another. Doing so would also cause leaks and/or the risk of breakage.

E) Pipe and hose connections

According to DIN EN 1717 pipe and hose connections for devices that contain non-potable water (e.g. washing machines) must be connected to a water intake using a backflow preventer to avoid any backflow of polluted water into the potable water line.

Recommendations for the use of ball valves

1. General information

Ball valves serve as shut-off valves for pressurized media. The manufacturer's information on flow media, operating pressure and temperature range must be respected. Using other than approved media may shorten the ball valve´s lifespan or lead to a failure of the ball valve.

The installation may only be carried out in systems with equal pressures. Any possible pressure surges due to the quick-lock system must be taken into account as these may damage the piping system. The valve can be opened and closed by a 90° turn of the lever, intermediate positions of the lever are not allowed during the operating condition.

Ball valves should be stored in a dry place, free of dirt and without direct sunlight.

2. Installation and removal instructions

Ball valves may only be used in compliance with the requirements for their intended use. The installation must be carried out stress-free and with appropriate tools in a pressure less state only by qualified and trained staff. Do not turn the ball valve forcibly and do not use it to align the pipeline. The ball valve must be checked for damage before installation. Plumbing lines must be rinsed before first commissioning after maintenance and repairs.

Do not clamp the ball valve too tightly in a vise or something similar for pre-assembly in order to avoid damage and stress cracks on the body. According to the general installation instructions you must not seal the threads with too much hemp. The tips of the threads must remain visible. When in stalling the ball valve only use the designated spanner flat at the installation side to apply the counter-torque. Never apply the wrench to the body or to the side opposite of the installation side. Do not exceed the recommended tightening torque, any existing sensor plugs must be tightened to 15 Nm.

The handle must not be used as a mounting lever.

The use of quarter-turn ball taps is only allowed with free outflow to avoid a backflow of sewage into the pipeline. Quarter-turn ball taps are not suitable for the use in domestic water-pipe systems or as device connection taps. It is necessary to carry out functional and leak tests after installing and before the ball valve is put into operation for the first time.

3. Commissioning

Operating conditions and installation works must be checked again before commissioning. Notice: Due to a long-term storage or long downtimes the release torque may be much higher than the usual turning moment.

Before initial start-up or putting into operation after maintenance work the pipeline has to be deaerated. In case of pressure surges air bubbles may cause explosions or damages to the piping system. Therefore the pressure should only be slowly increased.

Ball valves at the end of a pipeline must be sealed professionally with a blind flange to avoid the valve being forcibly teared off. Caution! Danger!

The ball valve may not be operated with a tool that shall serve to increase the leverage (e.g. hammer, pliers, extension tubes etc.)

4. Maintenance and inspection

Depending on the assembly situation, ball valves have to be drained before the first frost sets in as well as before cleaning works. When emptying the valve the handle should be in a 45-degree-position to make sure that the dead space may be emptied, too. Tests for tightness, functionality and damages should be carried out regularly. Depending on the operating situation this should be done in shorter time intervals. During long periods of disuse the ball valve should be put into operation every few months to guarantee proper functioning.

Defective or corroded valves or valves that do not work properly must be replaced during maintenance work. Replacement and removal may only be carried out by qualified personnel whilst the pipeline is not under pressure.

5. Warnings

The manufacturer will not accept any liability for deficiencies caused by assembly errors, improper handling, the use of impermissible media or not allowed operating situations as well as for damages due to normal wear and tear.

Ball valves may not be used as throttle valves! They may only be used in a fully opened or closed situation to avoid damages to seals in the spherical area. Depending on the operating situation the ball valve´s body can get very warm. Caution!

Legal health and safety regulations, national rules and technical rules and standards for certain operating and mounting situations have to be observed Viscous fluids or hardenable media as well as certain chemical substances may impede the funcion or make it impossible. Please refer to the manufacturer´s information.

Polluted or sandy media may cause damages to the seals. In case of neglecting the given information on working pressure or working temperature leaks may occur or the ball valve may tear apart. Caution! (as of November 2023)

Further Information:

Unless otherwise indicated or unless they are provided with drain plugs that are used to empty the valve before the frost season, no valves (taps, check valves, foot valves, gate valves, ball valves, etc.) are frost-resistant.

Our ball valves, valves and fittings have to be installed without mechanical tension. They must not be used for adjusting pipings.

Chrome plated surfaces, e.g., on bathroom fixtures or device connector valves, are sensitive to lime-dissolving agents, acidic cleaners, and all types of abrasives. These surfaces must only be cleaned with clear water and a soft cloth (leather).

Our pumps, wall and standing fountains are provided with a protective coating for transport purposes by the manufacturer. This first layer of paint is not considered to be a permanent corrosion protection or optical coating.

Our products are covered by statutory warranty rights.

We are not liable for any damage or malfunction resulting from normal wear and tear, limescale buildup, unsuitable water quality or contaminated water pipes, improper installation or handling, or chemical or mechanical influences occurring during transportation, storage, connection, repair, or use.

Statutory warranty rights remain unaffected.

Previous documents cease to be valid upon publication of the catalog. Our catalog serves exclusively as a basis for wholesale, industrial, and technical information and work. It is not a sales document.

Returns are only permitted based on prior written agreement; this particularly applies to custom production. Return deliveries that are not prepaid will not be accepted.

Recommendations for the handling of hoses

A number of factors can have an impact on how long the hose lasts:

- application
- medium
- abrasion
- storage etc.

Therefore it is not possible to give a general information about the durability of a hose. The end user should regularly check the hose for leaks and replace it if necessary.

The rubber compound can change its characteristics over time because of its chemical properties. This process can be accelerated by improper use of the hose or other influences. Therefore we give the following recommendations:

Storage

1. Avoid long storage periods! Otherwise, a check is important at the 1st use.
2. Ideally you should store the hose at a temperature between +10°C and +25°C. Temperatures of less than 0°C or more than +40°C will damage the hose. Keep the hose away from all sources of heat! Avoid dry air as well as high air humidity!
3. No direct solar radiation or aggressive artificial light!
4. Airflow and ozone can ruin the material. Do not store near electric motors, high-voltage units etc. because of the danger of sparks or electrostatic charge or uncontrolled heating of eventually mounted metal couplings.
5. Different substances can affect the material of the hose. Therefore please avoid any contacts with: solvents, fuels, acids, disinfectants, wood preservers, volatile or organic chemical substances or mixtures. Manganese, iron, copper and copper alloys may affect some kinds of rubber mixtures.
6. Store loosely rolled and stress-free to avoid compressing the tube. Coiled hose should be stored in a horizontal position. Do not pile up and pay attention to the weight to avoid any deformations! If given by the supplier, please note the minimum bend radii to prevent kinks.
7. Check the hose for suitability and proper seat of mounted couplings before delivery or resale.
8. Clean the hose before re-storage (please check suitability of the cleaning agent !). This applies particularly in case of the use of chemical, explosive or abrasive materials. Checks for reusability are essential.

Use

1. Hoses should only be used in accordance to their intended purpose. The misuse – e.g. as towing rope – is not allowed.
2. Before using the hose you have to check its suitability with regard to its characteristics, type or size.
3. Exercise due diligence when transporting the hose. The hose may not be exposed to severe shocks or tensile forces across rough surfaces. Avoid twisting, kinks and knots.
4. Please note the mentioned operating pressures! If checking the hose for leaks, the pressure in a hose free of air bubbles must only be increased gradually until the maximum pressure is reached.
5. The hose has been developed to channel liquids which are approved by the manufacturer. This does not give the permission to immerse the hose in the liquids.
6. Please note the ambient temperature and the maximum operating temperature which depend on the medium. Keep hose line away from sources of heat!
7. The material of the hose must be resistant to all media used. Check this before use. Changes in the concentration of media, period of use or temperature may cause changes in the suitability and chemical resistance of the hose.
8. Varying degrees of abrasion may occur depending on the kind of medium used or pulling the hose across different surfaces. Therefore you have to control the wear and tear of the tube regularly.

9. Make sure that installed hoses and hose connections are protected against impurities to avoid a contamination of hose and medium; particularly when used with drinking water.
10. Do not install hose lines on driveways or rather protect them against running over. If necessary, use hose bridges or the like.
11. Mounted hose fittings or spray nozzles should not be used as end or shut-off valves as they are not constructed for that purpose. Do not expose them to a permanent water pressure to prevent the valve/nozzles from being torn off and/or avoid bursting of the hose. After finishing work the water supply to the hose has to be shut off.

Assembly and commissioning of hose lines in technical fields

Please note:

1. When using hoses fitted with connectors, ensure that they are the correct length. An extension through the use of several connecting hoses is not permissible.
2. Before putting a hose line into operation please check if it is in accordance with eligible regulations and directives, e.g. the instructions of the Trade Association To02,§§14 and 15; the Industrial Safety Regulation (BetrSichV) or the Technical Rules for operating safety (TRBS).
3. Do not use a hose line if there are any visible damages!
4. Hose lines with given inspection intervals may not be used when the inspection date has expired. After repair or modification the hose line must be checked.
5. The hose line must be cleaned before putting it into operation. Do not forget to check the suitability of the cleaning agent!
6. With regard to electrostatic discharge the following instructions have to be observed: TRBS 2153
   ("Avoiding of ignition hazards due to electrostatic charges")
7. The hose line must be cleaned when changing from one to another flow medium to avoid a possible chemical reaction or contamination of the new medium.
8. For special applications or construction projects, it is essential to comply with the manufacturer's instructions.

Disposal

Please follow local regulations if you want to dispose hose materials and/or hose fittings.

Legal information: According to the Drinking Water Ordinance [esp. §§ 3 and 17], every tapping point of water that is not intended for human use must be permanently marked with a notice "no drinking water" and safeguarded against inappropriate use!

Tapping systems for non-drinking water that are installed in the household in addition to the drinking water supply system must be reported to the health authority!

Specifications and illustrations as well as descriptions and packing units are non-binding. They are purely informational and no legal obligation may be derived from them.

We reserve the right to make technical and formal changes in the interest of further technical development or that are necessary for financial reasons.

Alterations and additions are made continuously.

We assume no liability for any printing errors or divergent illustrations. In the event of erroneous size information, the figures at the start of printing will no longer apply.

Conversion table inch/millimetre

inch fractional value	mm metric	inch fractional value	mm metric
1/8"	3,175 mm	1 ¾"	44,450 mm
1/4"	6,350 mm	**2**"	50,800 mm
3/8"	9,525 mm	2 ¼"	57,150 mm
1/2"	12,700 mm	2 ½"	63,500 mm
5/8"	15,875 mm	2 ¾"	69,850 mm
3/4"	19,050 mm	**3**"	76,200 mm
7/8"	22,225 mm	3 ¼"	82,550 mm
1"	25,400 mm	3 ½"	88,900 mm
1 ¼"	31,750 mm	3 ¾"	95,250 mm
1 ½"	38,100 mm	**4**"	101,600 mm

We keep an eye on our qualities:

Both our quality and environmental management system have been certified on the standard basis DIN EN 9001 (Nov. 2015) and DIN EN 14001 (Nov.2015). We face the challenge to guarantee highest qua-lities for our products and services. All raw materials and external products are checked for quality and suitability. Our own products are tested on a random basis during the production processes, final lea-king and material tests are performed.

Our products meet several requirements, such as DVGW, SVGW, KTW, noise class tests (PA-Nr.), ACS and are also com-plying with binding DIN standards in respect to dimensions or noise behaviour.

With regard to the brass alloy puteus valves, fittings and the seals we use are in full compliance with the amended require-ments of the drinking water ordinance. Long before the refe-rence date in April 2017 we made sure that the regulations of the valuation basis of the Federal Environmental Agency (UBA) were implemented. These regulations apply to metallic mate-rials which may get in contact with drinking water. They also include the list of materials that are in accordance with the drinking water hygiene (known as the “UBA Positive List”). On the basis of these standards our quality management has also been certified for the process to comply with the nickel values for valves, fittings and other components in drinking water under the terms of the drinking water regulations and recommendations of the Federal Environmental Agency.

Therefore we can ensure a high product quality for our customers because of our high quality awareness.

CERTIFICATE

TÜV AUSTRIA

Management system as per
EN ISO 9001:2015, EN ISO 14001:2015, ISO 45001:2018

In accordance with TÜV AUSTRIA procedures, it is hereby certified that

puteus

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applies a management system in line with the above standard for the following scope

Design, purchase, storage and distribution of fittings, valves and other components for water application and other liquids

The process to comply with the nickel values for valves, fittings and other components in drinking water under the terms of drinking water regulations and recommendations of the Federal Environmental Agency

The process to comply with drinking water regulations in terms of deploying metallic materials for the manufacture and distribution of valves, fittings and other components according to the valid assessment base of the Federal Environmental Agency

Certificate Registration No. 20100243019160 / 00
20104243019161 / 00
20116243019162 / 00

Valid until: 2028-04-26
Initial certification: 2022-04-27

Certification Body
at TÜV AUSTRIA GMBH

Vienna, 2025-04-30

This certification was conducted in accordance with TÜV AUSTRIA auditing and certification procedures and is subject to regular surveillance audits.
TÜV AUSTRIA GMBH Deutschstraße 10 A-1230 Wien www.tuv.at

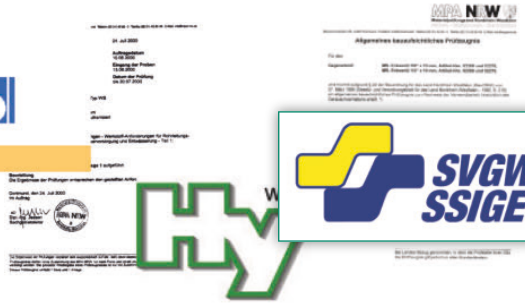
IAF

Fraunhofer IBP

Prüfbericht / Test report P-BA 185/2016

Geräuschverhalten von Sanitärarmaturen nach DIN EN ISO 3822

noise emission from sanitary tabs according to EN ISO 3822



LGA

DVGW

SVGW SSIGE

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Our packaging and labelling proposals

Four-colour cartons – version 1 –

with Euro-standard-holes, colour prints and product descriptions on the front-side, pictographs and installation dimensions on the back, top and bottom. Items that are available in carton packaging can be found in our catalogue. The item numbers are marked with an additional “-K”.

Four-colour cartons – version 2 –

Promotional four-colour cartons with product photos and descriptions.

Labels with EAN-barcodes

Nearly all articles can be labelled with EAN-codes. The self-adhesive and tear-resistant labels contain a product description, barcode and EAN-code.
The complete EAN-code consists of:
4012167 + item-no. + verification digit
(without “-E” or other extensions).

Self-service cards

These cards can be used for certain products of the irrigation sector. The cards are printed with article descriptions, sizes and EAN-codes.

Polybags

We offer customized polybags for single products. Each polybag can be printed according to your wishes.

Note: All information is subject to possible printing errors or changes in design or construction. Reprinting and photomechanical reproduction- also including excerpts - only with the authorization of puteus GmbH, Lenenweg 6, D-47918 Tönisvorst.

Other catalogs to our range:

1 Appliance connection fittings

2 Sanitary fittings, kitchen + bathroom

3 Garden fittings + valves

4 Fittings

5 Ball valves + heating valves

6 Hand pumps, hoses + accessories

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