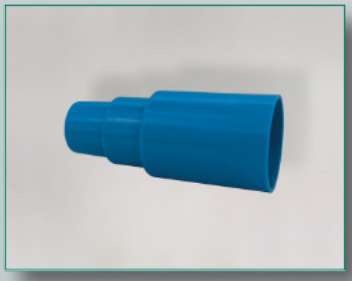
puteus



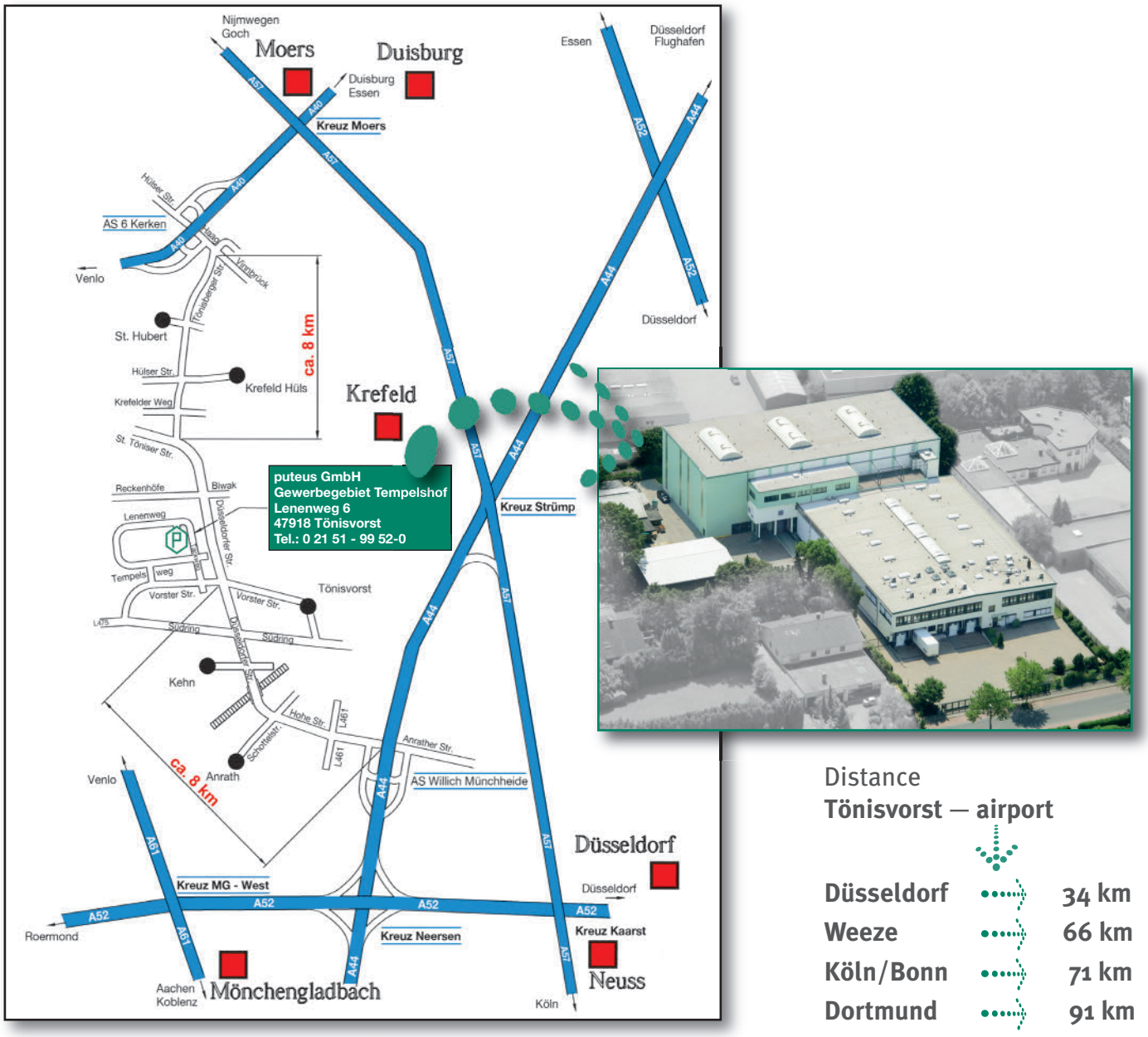
5 Ball valves + heating valves

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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Sales Department, Germany		9952-52	9952-55	verkauf@puteus.de
Sales Department, Export		9952-60	9952-55	export@puteus.de
Customer Service and order processing		9952-12	9952-15	vertrieb@puteus.de
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

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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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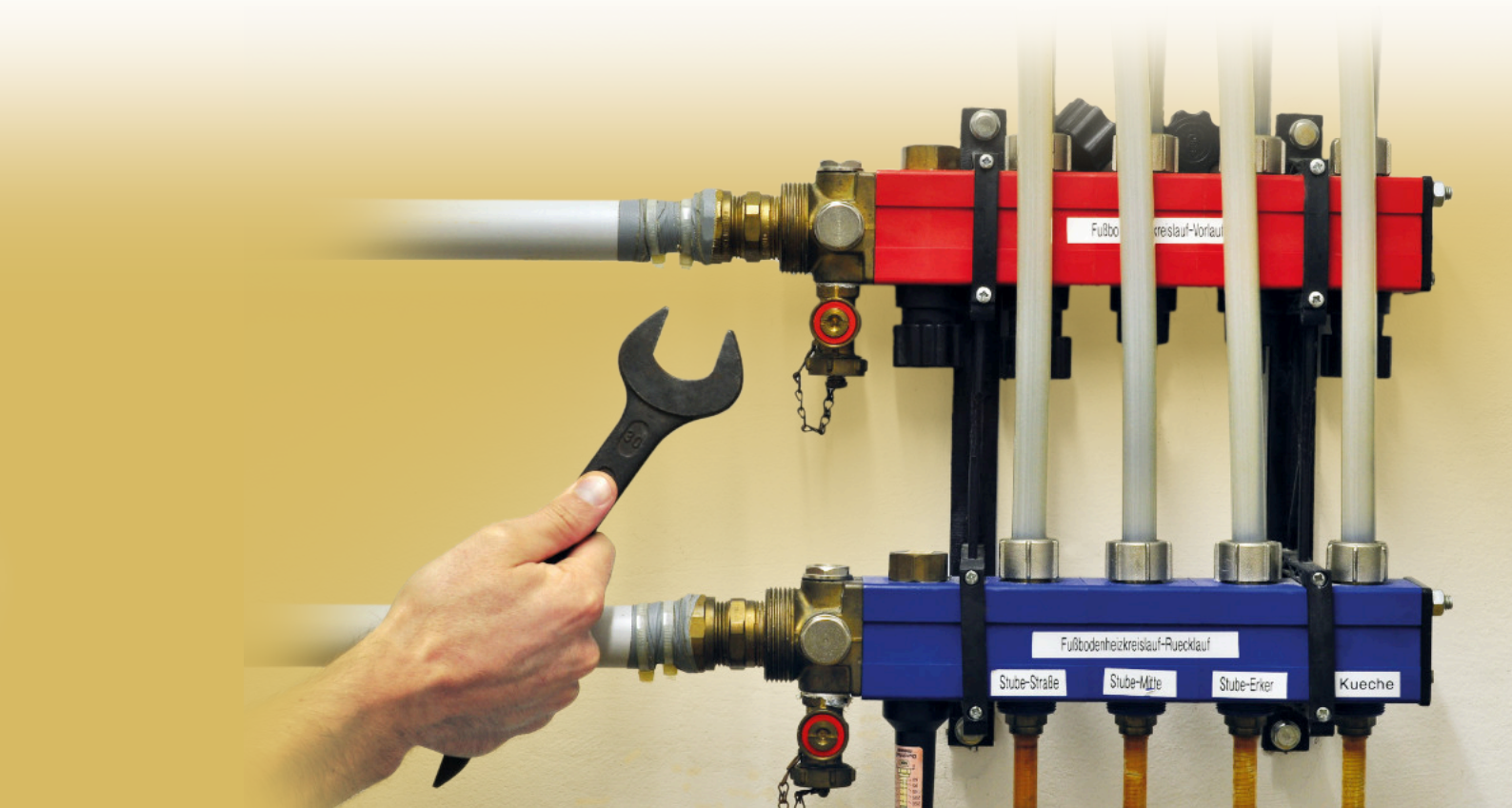
5


Fußbo
kreislauf-Vorlauf
Fußbodenheizkreislauf-Ruecklauf
Stube-Straße
Stube-Mitte
Stube-Erker
Kueche

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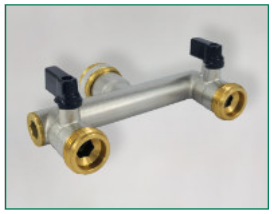
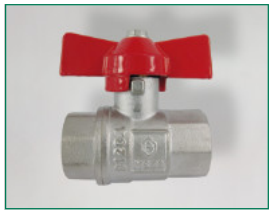
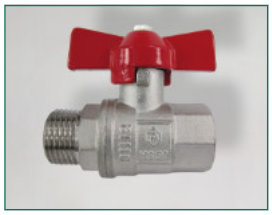
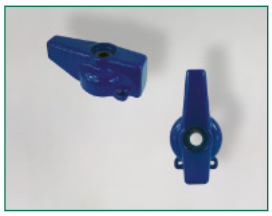


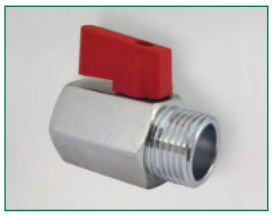
Brass ball valves Page 11

3-way-ball valves + air gates ball valves + lever + handle Page 17

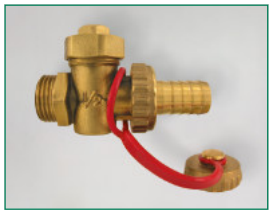


Mini-ball valves + ISO-pump valves + flanged valves Page 42



Pump ball valves of forged brass Page 46

Fill and drain valves of forged brass Page 49



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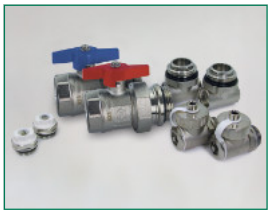
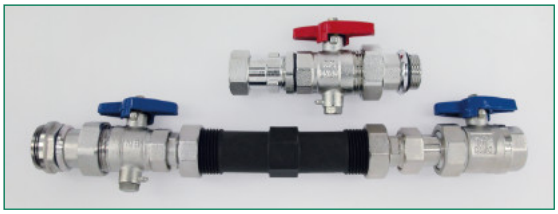
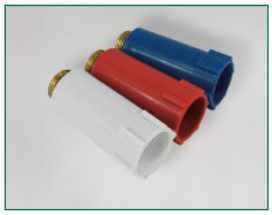



Radiator fittings + radiator valves + accessories Page 59

Pump fittings + braided hoses + construction plugs Page 74



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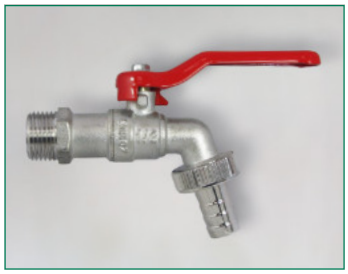
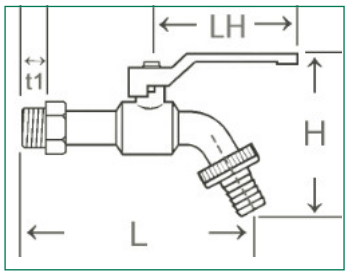
Check valves + foot valves + filters Page 91

Brass quarter turn tap (market model)

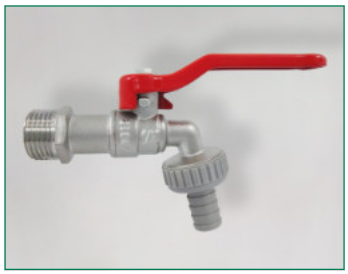


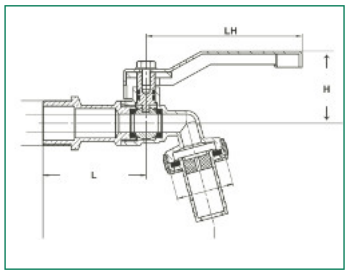


With spacer and hose tail, optionally made of plastic or metal sheet, red lacquer steel lever, material: brass 58 hot-pressed, nickel plated

Item-No.: plastic spout handle red	Item-No.: plastic spout handle blue	Item-No.: sheet metal spout handle red	Connection:	Thread length t1	Length: L	H	LH	Pack. unit:
53071 5	53071-Blau	53071-F	1/2"	13	112	54	77	6/ 90
53072 2	53072-Blau	53072-F	3/4"	13	120	58	77	5/ 75
53073 9		53073-F	1"	15	141	70	85	4/ 32
53077 7		53077-F	3/4" x 1/2" x 3/4"	13				6/120
53078 4		53078-F	3/4" x 3/4" x 1/2"	13			98	5/ 75

Brass quarter turn tap (market model)

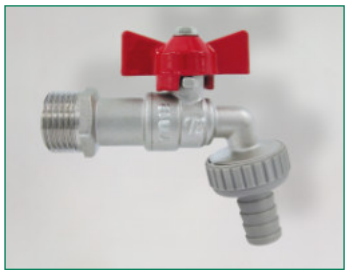


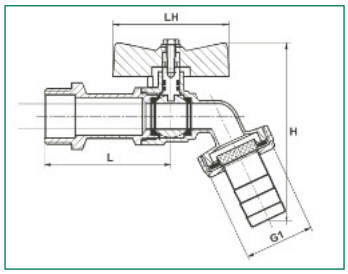


Nickel plated, with plastic hose tail, red lacquer steel lever

Item-No.:	Connection:	Thread length t1	Length: L	H	LH	Packing unit:
53275 7	1/2"	-	45,5	31,7	75,5	10/100
53277 1	3/4"	-	45,5	33,1	75,5	-/-

Brass quarter turn tap (market model)





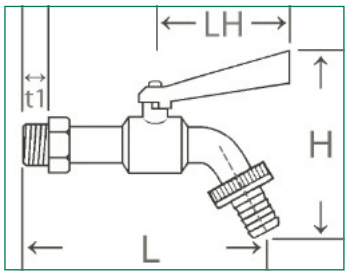
Nickel plated, with plastic hose tail, red lacquer aluminum T-handle

Item-No.:	Connection:	Thread length t1	Length: L	H	LH	Pack. unit:
53276 4	1/2"	-	75	77,5	44	12/120

Brass quarter turn tap (heavy version)

With spacer and metal sheet hose tail, aluminium lever with fixation (can be remounted, lockable), either red or blue, brass 58 hot-pressed, nickel plated

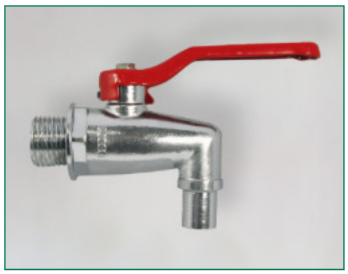
Item-No.: Lever blue	Item-No.: Lever red	Connection:	Thread length t1	Length: L	H	LH	Packing unit:
53271 9	53271-R	1/2"	12	102	103	56	4/64
53272 6	53272-R	3/4"	12,5	121	104,5	56	6/48
Replacement handles heavy version:							
53271-Griff	53271-R-Griff	1/2" + 3/4"				56	-/-

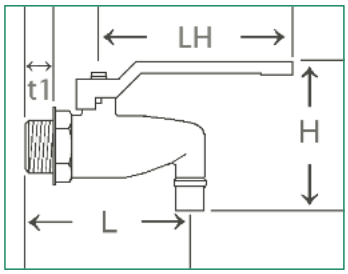


Brass drain valve, 90°

Forged brass, chrome plated, with straight spout, red lacquer steel lever

Item-No.:	Connect.:	Thread length: t1	Length: L	H	LH	Packing unit:
53075 3	1/2"	11	65,5	59	77	5/60

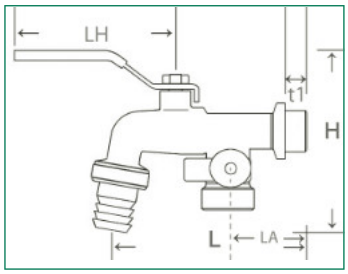




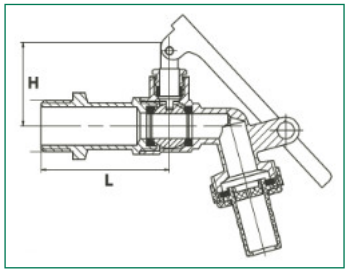
Brass quarter turn tap

With 2 lockable outlets, spacer, separately lockable, with metal sheet hose tail (see illu.) or plug-in connection system, steel lever with red plastic coating

Item-No.: with **hose tail**	Conn.: Entrance	Conn.: Leaving	Thread length: t1	Length: L	H	LH	Leaving LA	Pack. unit:
53076 0	1/2"	3/4"		99,2	100	82	41	4/32
53079 1	3/4"	1"		110		82	41	-/-
with **plug-in connection**								
53076-S	1/2"	3/4"		99,2	100	82	41	4/32
53079-S	3/4"	1"		110		82	41	-/-



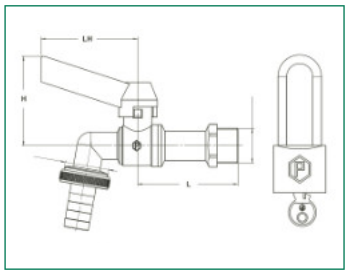
Brass drain valve, lockable



Lockable, nickel-plated, with plastic hose screw connection, red painted steel lever, **without** lock

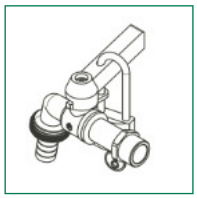
Item-No.:	Connec.:	Thread length:	Length:			Packing unit:
		t1	L	H	LH	
53273 3	1/2"		52	34		6/90
53274 0	3/4"		61,5	34		5/75

Brass drain valve, lockable

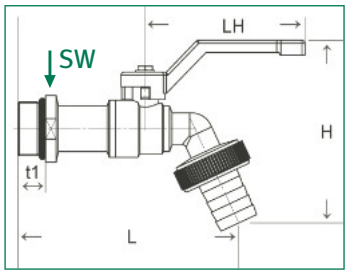


Lockable, nickel-plated, with brass padlock, 2 keys, blue aluminium handle

Item-No.:	Connec.:	Thread length:	Length:			Packing unit:
		t1	L	H	LH	
53081 4	1/2"		57,5	51,3	55,5	1/64
53082 1	3/4"		64,5	52,3	55,5	1/48
Spare part padlock, brass body, steel lock shackle chrome-plated, 2 keys						
53081-02	35 x 27 x 9,5 x 5,5 mm					



Brass quarter turn tap



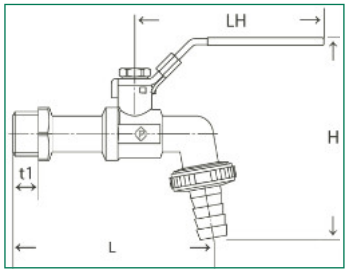
Heavy version, self sealing, O-ring EPDM, hose tail made of sheet, steel lever in blue, wrench size 30

Item-No.:	Connec.:	Thread length:	Length:			Packing unit:
		t1	L	H	LH	
53278-SD	3/4"	13	103	85	77	8/64

Stainless steel quarter turn tab

Water-carrying components AISI316 = 1.4401, stainless steel lever AISI304 = 1.4301 with blue plastic coating, lockable

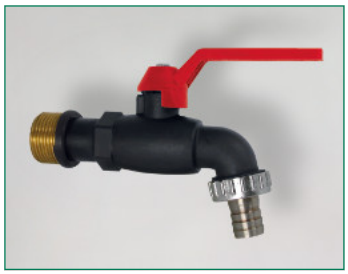
Item-No.:	Connec.:	Thread length:	Length:			Packing unit:
		t1	L	H	LH	
93071 3	1/2"	13	88	87	92	6/120
93072 0	3/4"	11	105	87	92	6/120
93073 7	1"	14	115	120	115	-/-

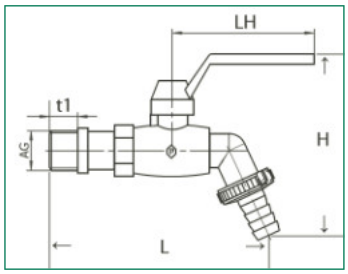


Polyamid drain valve

Lever red, with brass nut, hose tail stainless steel, PN 20

Item-No.:	Connec.:	Thread length:	Length:			Packing unit:
		t1	L	H	LH	
53971-F	1/2"	15	116	97	75	6/72
53972-F	3/4"	15	116	97	75	6/90

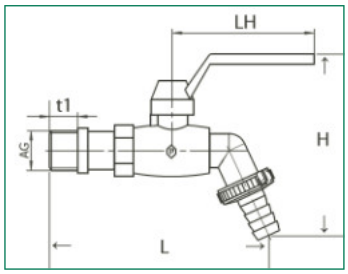




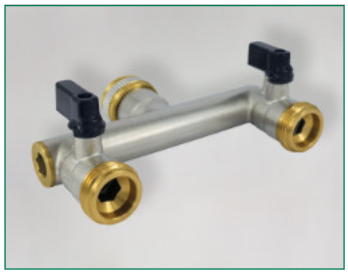
Polyamid ball valve

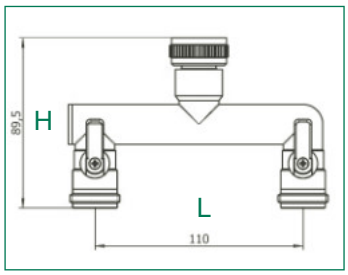
Lever blue, male thread made of brass, plug-in coupling made of plastic

Item-No.:	Connec.:	Thread-length:	Length:	Height:	Length handle:	Packing unit:
		t1	L	H	LH	
53975 6	1/2"	15	110	92	80	6/72



Multi-port ball valve, two-way valve

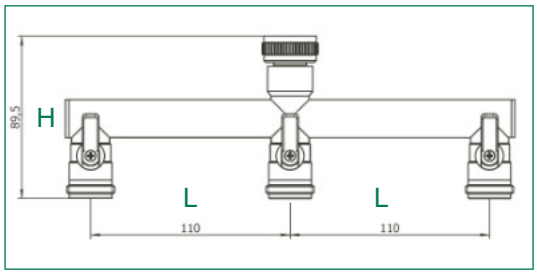




Brass nickel plated, straight, F/M, 2 x ball valve, separately lockable

Item-No.:	Connec.:	Passage:	Length:		Packing unit:
			L	H	
53304 4	3/4"	10 mm	110	89,5	6/36
53308 2	1"	14,5 mm	110	89,7	4/24

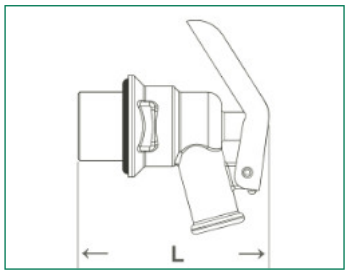
Multi-port ball valve, three-way valve



Brass nickel plated, straight, F/M, 3 x ball valve, separately lockable

Item-No.:	Connec.:	Passage:	Length:		Packing unit:
			L	H	
53305 1	3/4"	10 mm	110	89,5	3/18
53309 9	1"	14,5 mm	110	89,7	2/12

Brass valve for oily substances



Plain brass, lever sheet of metal

Item-No.:	Connec.:	Departure:	Length:		Packing unit:
	male		L	H	
S-3315	G 3/4"	Ø 13 mm	70,4		6/72

Full flow brass ball valves, nickel plated, ball: brass, hard chrome plated; ball seal made of PTFE: with red or blue painted steel or aluminium lever handle; brass spindle, spindle seal made of FKM, for temperatures of -20°C up to + 150°C, pressure stage for the series PN 25, material: brass according to DIN DVGW 50930-6 (CW 617 N), hot-pressed, cylindrical threads in according to ISO 228-2

(Valid for all ball valves, unless otherwise stated)

Various of our ball valves have been tested by the **Fraunhofer Institute for Building Physics** for their sound class and have received a testimony of their noise behavior according to DIN EN ISO 3822 (test reportP-BA 18572016).
These are marked separately **(GKP = noise class test)**

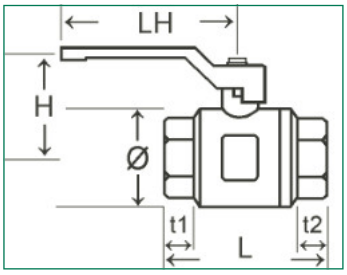
Attestation de Conformité Sanitaire (ACS)

Several of our ball valves have been tested by the French institute **"Institute Eurofins - expertises environnementales"** to demonstrate their conformity with the requirements of the French market and that the material is allowed for the use in contact with drinking water. These ball valves have been certified according to the standard XP P41-280.

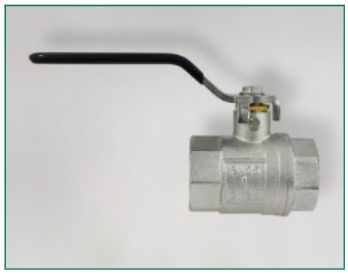
Item-No.: Lever steel red	Item-No.: Lever steel blue	Item-No.: Lever aluminium red	Con.:	Ball-passage:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Packing unit:
53089 0	-	53010 4	1/4"	10	9,4	9,4	40	23,5	36	77	12/120
53090 6	53090-Blau	53000 5	3/8"	10	9,4	9,4	40	23,5	36	77	12/120
53091 3	53091-Blau	53001 2	1/2"	14,5	12,5	12,5	50	29	41	97	10/ 80
53092 0	53092-Blau	53002 9	3/4"	19	12	12	54,5	36	49	97	10/ 60
53093 7	53093-Blau	53003 6	1"	24	12,8	12,8	63	42,5	52	117	6/ 36
53094 4	53094-Blau	53004 3	1 ¼"	31	15,5	15,5	77,5	55	65	140	4/ 24
53095 1	53095-Blau	53005 0	1 ½"	40	16	16	90	69	72	140	2/ 16
53096 8	53096-Blau	53006 7	2"	50	19,5	19,5	109	84,5	87	160	2/ 8
53097 5	-	-	2 ½"	63	24	24	131	103	102	200	2/ 4
53098 2	-	-	3"	75	24,5	24,5	145	123	111	200	2/ 4
53099 9	-	-	4"	95	26	26	174	151	129	250	2/ 2

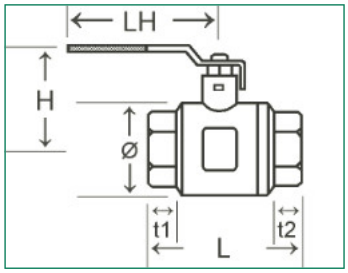
GKP

Ball valve (f/f)



Ball valve (f/f)



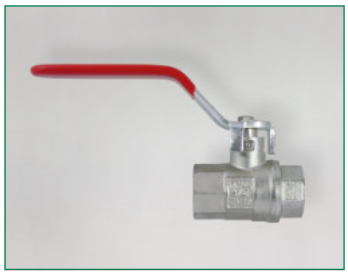


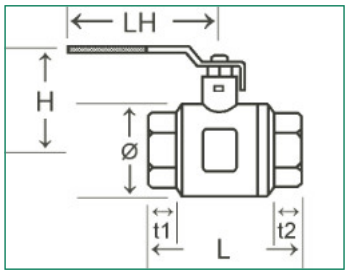
With stainless steel lever, plastic coated, black, with ball and shaft seal (gland) of PTFE

Item-No.:	Con.:	Ball-passage:	Thread length:		Length:				Packing unit:
			t1	t2	L	Ø	H	LH	
53151 4	1/2"	14,5	12,5	12,5	50	29	56	99	10/ 80
53152 1	3/4"	19	12	12	54,5	36	59,5	99	10/ 60
53153 8	1"	24	12,8	12,8	63	42,5	68,5	115	6/ 36
53154 5	1 ¼"	31	15,5	15,5	77,5	55	87,5	125	4/ 24
53155 2	1 ½"	40	16	16	90	69	94	125	4/ 16
53156 9	2"	50	19,5	19,5	109	84,5	112,2	144	2/ 8

GKP

Ball valve (f/f) ACS





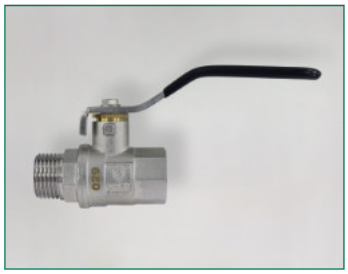
Galvanized steel lever with plastic coated, red, with ball seal of PTFE and shaft seals (O-rings) of EPDM

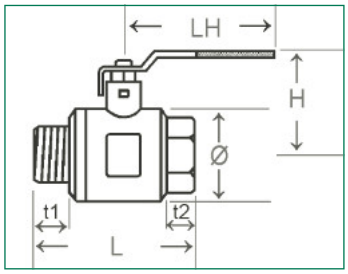
Item-No.:	Con.:	Ball-pas-sage:	Thread length:		Length:				Packing unit:
			t1	t2	L	Ø	H	LH	
53149-R	1/4"	-	-	-	-	-	-	-	12/120
53150-R	3/8"	9	8	8	38,5	22,5	43,1	83	12/120
53151-R	1/2"	13,5	10	10	47	27	46,9	93	10/ 80
53152-R	3/4"	18	11	11	53	34	50,2	93	10/ 60
53153-R	1"	23	11	11	61	41,5	58,3	116	6/ 36
53154-R	1 ¼"	30	14	14	73	53	73	135	4/ 24
53155-R	1 ½"	38	15	15	86	65,5	79	135	4/ 16
53156-R	2"	47	17	17	104	78,5	90,5	151,5	2/ 8
53157-R	2 ½"	63	22	22	132	103	119,5	242,5	2/ 4
53158-R	3"	75	22	22	145	123	128	242,5	2/ 4
53159-R	4"	95	28,5	28,5	180	153	139,6	242,5	1/ 2

GKP

Ball valve

F x M, nickel plated, with stuffing box, stainless steel handle with black plastic cover, PN 25



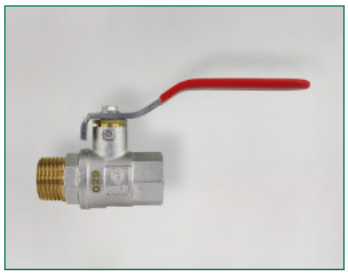


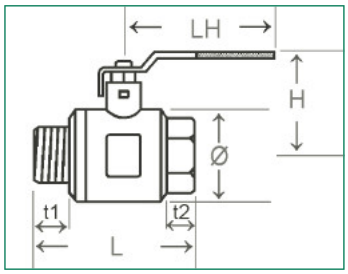
Item-No.:	Conn.:	Ball-passage:	Thread length: t1	t2	Length: L	Ø	H	LH	Packing unit:
53060 9	3/8"	10	9	9	47	23,5	44	96	12/240
53061 6	1/2"	14,5	13	13	58,5	29	56	96	-/-
53062 3	3/4"	19	14	14	65	36	59,5	96	-/-
53063 0	1"	24	17	17	74	42,5	68,5	112	-/-
53064 7	1 ¼"	32	17	17	90	55	87,5	112	-/-
53065 4	1 ½"	40	19	19	101	69	94	140	-/-
53066 1	2"	50	20	20	118	84,5	112,2	140	-/-
as above, but **without** GKP									
S-2445	1 ¼"	31	15,5	17	90	55	76	125	4/ 40

GKP

Ball valve ACS

F x M, full flow, steel lever with plastic cover



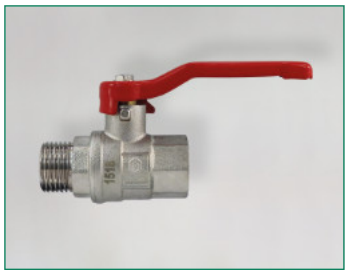


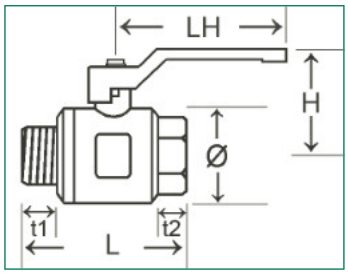
Item-No.:	Conn.:	Ball-passage:	Thread length: t1	t2	Length: L	Ø	H	LH	Packing unit:
53060-R	3/8"	9	8	8	44,5	22,5	43,1	83	12/120
53061-R	1/2"	13,5	10,5	10	54,5	27	46,9	93	10/ 80
53062-R	3/4"	18	12	11	61	34	50,2	93	10/ 60
53063-R	1"	23	14,5	11	70,5	41,5	58,3	116	6/ 36
53064-R	1 ¼"	30	15,5	14	85	53	73	135	4/ 24
53065-R	1 ½"	38	17,5	15	97,5	65,5	79	135	4/ 16
53066-R	2"	47	18,5	17	114	78,5	90,5	151,5	2/ 8

GKP

Ball valve

F x M, optionally with red painted steel or aluminium lever

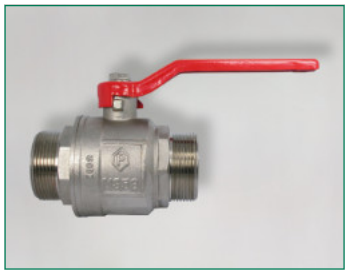


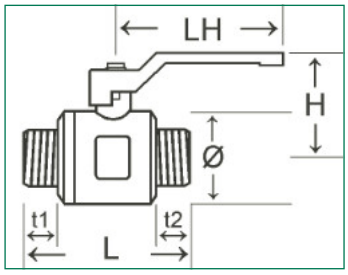


Item-No.: Lever steel	Item-No.: Lever alu	Conn.:	Ball-passage:	Thread length: t1	t2	Length: L	Ø	H	LH	Packing unit: Lever steel	Packing unit: Lever alu
53189 7	-	1/4"	10	9	9	46,7	23,5	36	75,5	12/120	-/-
53190 3	53050 0	3/8"	10	9	9	47,2	23,5	36	77	12/120	12/120
53191 0	53051 7	1/2"	14,5	13	13	58,5	29	40,5	77	10/ 80	10/ 80
53192 7	53052 4	3/4"	19	14	14	64,5	36	49	97	10/ 60	10/ 60
53193 4	53053 1	1"	24	17	17	74	42,5	52	117	6/ 36	6/ 36
53194 1	53054 8	1 ¼"	31	17	17	90	55	65	140	4/ 20	4/ 24
53195 8	53055 5	1 ½"	40	19	19	101	69	72	140	2/ 16	2/ 16
53196 5	53056 2	2"	50	20	20	118	84,5	87	160	2/ 8	2/ 8

GKP

Ball valve



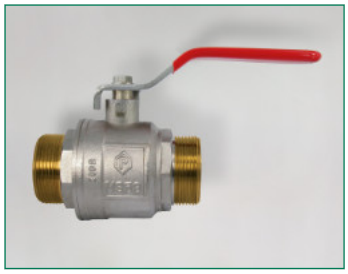


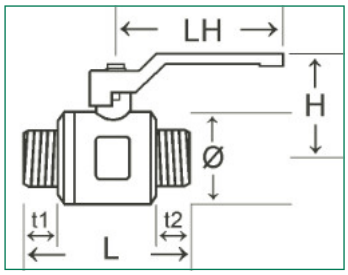
M x M, full passage, red painted steel- or aluminium lever

Item-No.: Lever red steel	Item-No.: Lever red alu	Conn.:	Ball-passage:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Packing unit:
53290 0	-	3/8"	10	9	9	54	23,5	36	77	12/120
53291 7	53161 3	1/2"	14,5	13	13	66	29	40,5	77	10/ 60
53292 4	53162 0	3/4"	19	14	14	72	36	49	97	10/ 40
53293 1	53163 7	1"	24	17	17	86	42,5	52	117	6/ 36
53294 8	53164 4	1 ¼"	32	17	17	99	55	65	140	4/ 16
53295 5	53165 1	1 ½"	40	19	19	109,5	69	72	140	2/ 12
53296 2	53166 8	2"	50	20	20	127	84,5	87	160	2/ 8

GKP

Ball valve ACS



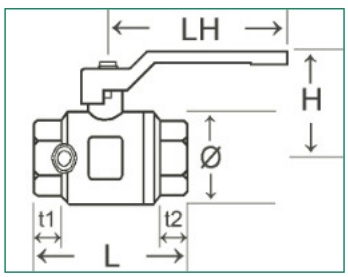


M x M, full passage, steel lever with red plastic cover

Item-No.:	Conn.:	Ball-passage:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Packing unit:
53290-R	3/8"	9	8	8	48,5	22,5	36	83	12/120
53291-R	1/2"	13,5	10,5	10,5	58,5	27	40,5	93	10/ 60
53292-R	3/4"	18	12	12	65,5	34	49	93	10/ 40
53293-R	1"	23	14,5	14,5	78,5	41,5	52	116	6/ 36
53294-R	1 ¼"	30	15,5	15,5	93,5	53	65	135	4/ 16
53295-R	1 ½"	40	17,5	17,5	105,5	65,5	72	135	2/ 12
53296-R	2"	47	18,5	18,5	123	78,5	87	151,5	2/ 8

GKP

Ball valve



With drain, red painted steel lever mountable on both sides

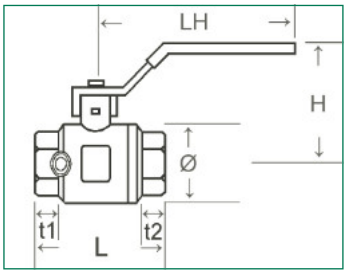
Item-No.:	Conn.:	Ball-passage:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Packing unit:
53391 4	1/2"	14,5	12,5	12,5	54,5	29	40,5	75,5	8/64
53392 1	3/4"	19	12,5	12,5	60,5	36	49	97,5	6/48
53393 8	1"	24	13	13	68	42,5	52	118	4/32
53394 5	1 ¼"	32	15,5	15,5	81,5	55	65	140	5/20
53395 2	1 ½"	40	16,5	16,5	92	69	72	140	3/12
53396 9	2"	50	19,5	19,5	110,5	84,5	87	160	2/ 8
Spare part: drain valve nickel plated									
S-81	1/4"								-/-

GKP

Ball valve ACS

With drain, lever steel plastic cover red, mountable on both sides

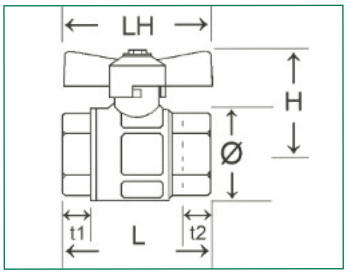
Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:				Packing unit:
			t1	t2	L	Ø	H	LH	
53391-R	1/2"	13,5	10	10	50,5	27	46,9	93	8/64
53392-R	3/4"	18	11	11	57	34	50,2	93	6/48
53393-R	1"	23	11	11	64,5	41,5	58,3	116	4/32
53394-R	1 ¼"	30	14	14	77	53	73	135	5/20
53395-R	1 ½"	38	15	15	90	65,5	79	135	3/12
53396-R	2"	47	17	17	107,5	78,5	90,5	151,5	2/ 8
Spare part: drain valve nickel plated									
S-81	1/4"								-/-



Ball valve

F x F, full flow, red or blue butterfly aluminum handle, PTFE ball seal, spindle seal 2 x O-ring FKM

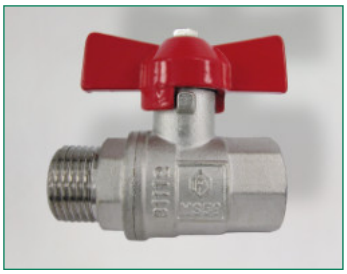
Item-No.: red handle	Item-No.: blue handle	Conn.:	Ball-passage:	Thread length:		Length:				Packing unit:
				t1	t2	L	Ø	H	LH	
53020 3	-	3/8"	10	9,4	9,4	40	23,5	34,5	45	12/120
53029 6	-	1/4"	8	10	10	39,5	23,5	34	44	12/120
53021 0	-	1/2"	14,5	12,5	12,5	50	29	40,5	54	10/ 80
53022 7	53022-Blau	3/4"	19	12	12	54,5	36	44	54	10/ 60
53023 4	-	1"	24	13	13	63	42,5	48,5	62	6/ 36
53024 1	-	1 ¼"	31	15,5	15,5	77,5	55	59,5	75	2/ 30

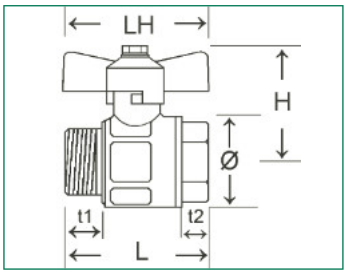


Ball valve

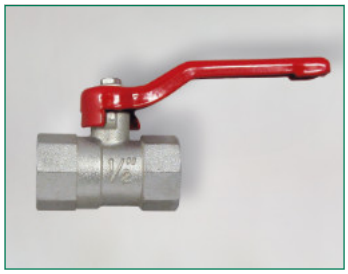
F x M, nickel plated, red or blue butterfly handle

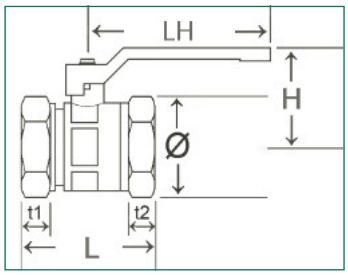
Lever:	Item-No.:	Con.:	Least pass:	Thread length:		Length:				Packing unit:
				t1	t2	L	Ø	H	LH	
Lever red	53210 8	3/8"	10	9	9	46,5	23,5	38	45	12/120
Lever red	53211 5	1/2"	14,5	14	14	58	29	41,5	54	10/ 80
Lever red	53212 2	3/4"	19	14	14	64,5	36	46	54	10/ 60
Lever red	53213-40734	1"	23	13	13	68	42,5	47	62	8/ 40
Lever blue	53212-Blau	3/4"	19	14	14	64,5	36	46	54	10/ 60
Lever blue	53213-40734-Blau	1"	23	13	13	68	42,5	47	62	6/ 60
Set red/blue	53213-40734-R + B	1"	23	13	13	68	42,5	47	62	1/ 20
Lever red	53217 7	1 ¼"	31			90				-/-





Ball valve



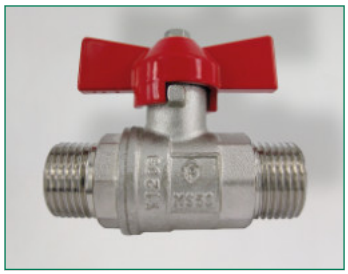


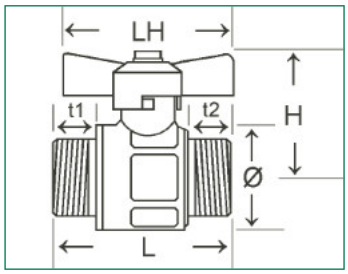
F x F, with reduced passage, spindle seal made of FKM

Item-No.: Lever steel	Item-No.: Butterfly handle alu.	Conn.:	Ball-passage:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Pack. unit: steel	Pack. unit: alu.
53041 8	-	1/2"	11	11	11	46,5	23,8	38	75,5	10/80	-/-
53042 5	53032 6	3/4"	15	12,5	12,5	54	29,8	45	75,5	10/60	10/80
53043 2	53033 3	1"	19	13,2	13,2	61	36,8	48	97,5	8/48	-/-
53044 9	-	1 ¼"	23	13,5	13,5	67	49,5	59	118	4/24	-/-
53045 6	-	1 ½"	32	14,5	14,5	79	57,5	63,5	140	4/16	-/-
53046 3	-	2"	37	17	17	93	70,5	72	140	2/24	-/-

GKP

Ball valve



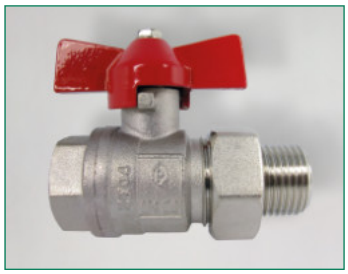


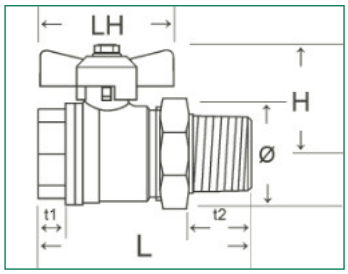
M x M, nickel plated, red butterfly handle of aluminium

Item-No.:	Conn.:	Ball-passage:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Packing unit:
53220 7	3/8"	10	9	9	54	23,5	34,4	44	12/240
53221 4	1/2"	14,5	13	13	66	29	40,5	55	10/ 80
53222 1	3/4"	19	14	14	72	36	44	55	10/ 60
53223 8	1"	24	17	17	86	42,5	48,3	61,5	6/ 60

GKP

Ball valve





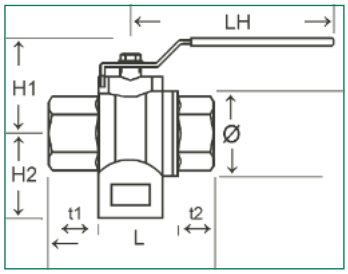
Nickel plated, one side female threaded, one side male threaded screw connection, red butterfly handle of aluminium

Item-No.: nickel plated		Con.:	Least pass:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Pack. unit:
53380 8	male cylindrical	3/8"	10	10	10	59	23,5	38	44	10/100
53381 5	male cylindrical	1/2"	14,5	10	12	69	31,5	41	54	12/144
53382 2	male cylindrical	3/4"	18	10	14	72	48	60	54	10/ 40
53383 9	male cylindrical	1"	24	12,5	20	96	47,5	48	60	2/ 32
plain										
53383-11635-bl	male conical	1"	24	12,5	20	96	47,5	48	60	2/ 60

GKP

3-way ball valve

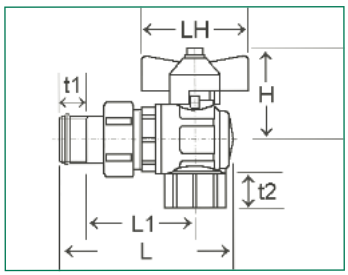
F x F, nickel plated, full flow, steel handle with black plastic cover



Item-No.:	Con.:	Ball-pas-sage:	Thread length:		Length:					Pack. unit:
T-form			t1	t2	L	Ø	H1	H2	LH	
53421 8	1/2"	15	15	15	64	34	55	33	93	6/48
53422 5	3/4"	20	16	16	74	43	59	39	118	1/48
53423 2	1"	25	20	20	89	53	63	47	118	2/18
L-form										
53341 9	1/2"	15	15	15	64	34	55	33	93	1/72
53342 6	3/4"	20	16	16	74	43	59	39	118	1/48
53343 3	1"	25	20	20	89	53	63	47	118	1/32

Angle ball valve

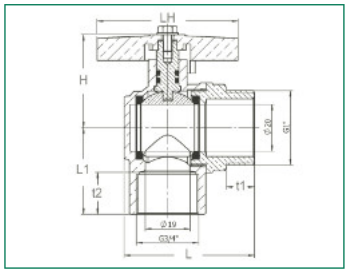
F x M, brass nickel plated, angular shape, screw connection with fixed O-ring, red or blue butterfly handle



Item-No.:	Conn.:	Ball-pas-sage:	Thread length:		Length:				Packing unit:
			t1	t2	L	L1	H	LH	
S-031	1"	20	9	18	100	43	43	60	2/18
S-031-blau	1"	20	9	18	100	43	43	60	2/18

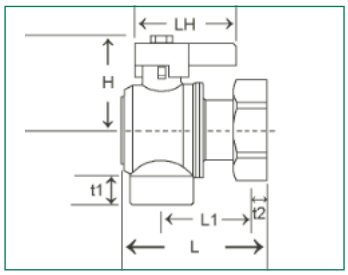
Angle ball valve

F x M, brass nickel plated, angular shape, red butterfly handle, DN 19



Item-No.:	Connection:	Ball-pas-sage:	Thread length:		Length:				Packing unit:
			t1	t2	L	L1	H	LH	
S-34	G 3/4" x G 1"	19	12	18	55,5	37	40	60	-/-
as S-34, but **with chamfer**									
S-34-12100	G 3/4" x G 1"	19	12	18	55,5	37	40	60	6/48
S-34-1	G 1" x G 1"	19	12	19,5	55,5	42	40	60	-/-
as S-34-1, but **short construction** (handle red/blue/set red + blue)									
S-3945	G 1" x G 1"	16	9,5	12	47	32	44	55	-/48
S-3945-b	G 1" x G 1"	16	9,5	12	47	32	44	55	-/48
S-3945-R+B	G 1" x G 1"	16	9,5	12	47	32	44	55	-/24

Angle ball valve



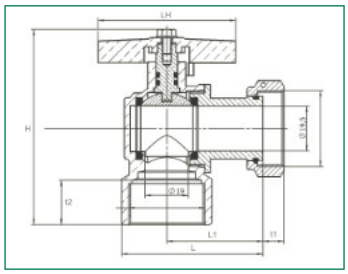
With union nut, **F x F**

	Item-No.:	Connection:	Least pass:	Thread-length: t1	t2	Length: L	L1	H	LH	Pack. unit:
Lever red	S-043	G 3/4" x 3/4"	13,5	11	11	50	34,5	36	52,5	-/72
Lever blue	S-043-blau	G 3/4" x 3/4"	13,5	11	11	50	34,5	36	52,5	-/72
Spare part butterfly handle of aluminium with sealing eye										
Lever red	53128-S043									-/-
Lever blue	53128-S043-B									-/-

With union nut, **M x F** (without illu.), ballpassage as stated above

	Item-No.:	Connection: m x f	t1	t2	L	L1	H	LH	Pack. unit:
Lever red	S-043-1"-AG	G1" M x ¾" nut 22 mm		11	50	34,5	36	52,5	8/48
Lever blue	S-043-1"-AG-B	G1" M x ¾" nut 22 mm		11	50	34,5	36	52,5	-/-

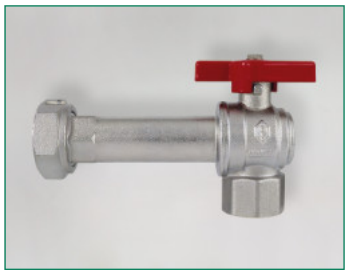
Angle ball valve

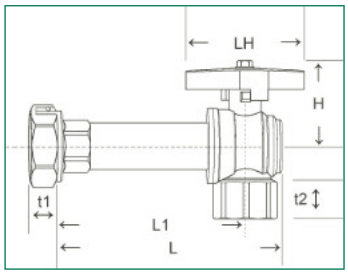


F x F, brass nickel plated, angular shape 42 mm, red/blue aluminium butterfly handle

Item-No.: Handle red	Item-No.: Handle blue	Con.:	Ball-passage:	Thread-length: t1	t2	Length: L	L1	H	LH	Pack. unit:
S-3713-¾-02	-	G 3/4" x G1"	19	9	18	60,5	42	80	60	6/36
S-3713-02	S-3713-02-b	G1" x G1"	19	9	19,5	62	42	85	60	6/36

Angle ball valve





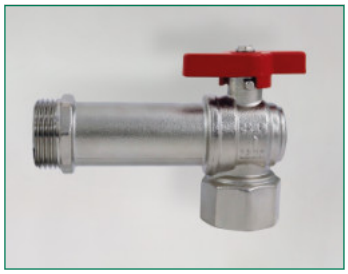
F x F, brass nickel plated, angular shape 100 mm, red/blue butterfly handle

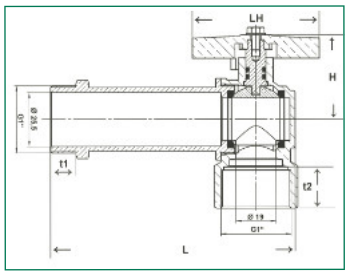
Item-No.: Handle red	Item-No.: Handle blue	Con.:	Ball-passage:	Thread-length: t1	t2	Length: L	L1	H	LH	Pack. unit:
53362 4	-	G1" x G¾"	19	9	18	118,5	100	39,5	60	6/36
S-3713-01	S-3713-01-b	G1" x G1"	19	9	19,5	140	120		60	4/24

Angle ball valve

F x M, brass nickel plated, angular shape 97 mm, red butterfly handle

Item-No.:	Connection:	Ball-passage:	Thread-length: t1	Thread-length: t2	Length: L	Length: L1	Length: H	Length: LH	Packing unit:
S-2596-1	G 1" x G 1"	19	12	19,5	115,5		39,7	60	-/-

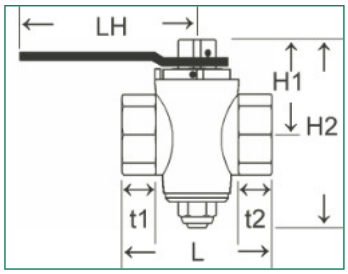




Air shut-off valve

Item-No.:		Connection:	Pack. unit:
With square head, **no** handle			
54715-N	Air shut-off valve, CW617N plain	F/F 1 ½"	1/ 8
54716-N	Air shut-off valve, CW617N plain	F/F 2"	1/ 8
With square head, **with** handle (as shown)			
54713-10939	Air shut-off valve, CW617N plain, right closing	F/F 1"	4/16
54713-b-10939	Air shut-off valve, CW617N plain, left closing	F/F 1"	4/16

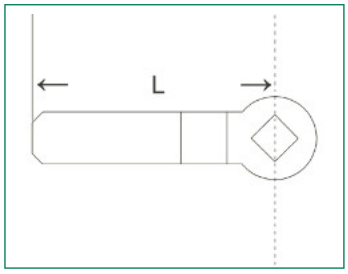
Item-No.:	Threadlength: t1	Threadlength: t2	Length: L	H1	H2	LH	Wrench size	PN
54715-N	23	23	110	70	138	-	22	6
54716-N	25	25	130	95	174	-	27	6
54713-10939	20	20	80	61	108,5	116	-	-
54713-b-10939	20	20	80	59,5	108,5	89	-	-



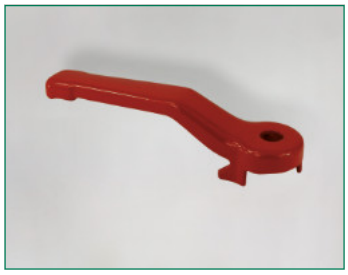
Replacement steel lever

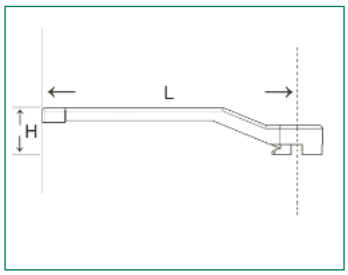
Steel lever for air shut-off valve, nickel plated

Item-No.:	Wrench size:	Length: L	Length: H	Packing unit:
54719b-10939, short, for item-no. 54713b-10939	16	89	-	-/-
54719-10939, long, for item-no. 54713-10939	16	116	-	-/-



Replacement steel

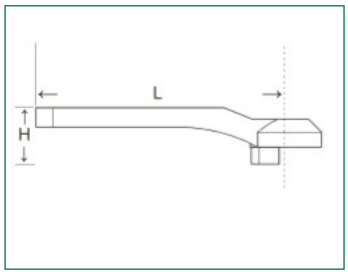




Steel lever, painted, red or blue

Item-No.: red	Item-No.: blue	Conn.:	Length: L	Length: H	Packing unit:
53100 2	53100-Blau	1/4"	75,5	21	-/100
53100 2	53100-Blau	3/8"	75,5	21	-/100
53102 6	53102-Blau	1/2"	97,5	26,5	-/-
53102 6	53102-Blau	3/4"	97,5	26,5	-/100
53103 3	53103-Blau	1"	118	26,5	-/ 50
53104 0	53104-Blau	1 ¼"	140	32,5	-/ 25
53104 0	53104-Blau	1 ½"	140	32,5	-/100
53106 4	53106-Blau	2"	160	38,5	-/-
53107 1	53107-Blau	2 ½"	202	37	-/100
53107 1	53107-Blau	3"	202	37	-/ 50
53109 5	53109-Blau	4"	250	41,5	-/-

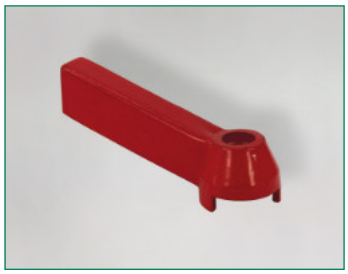
Replacement aluminium lever

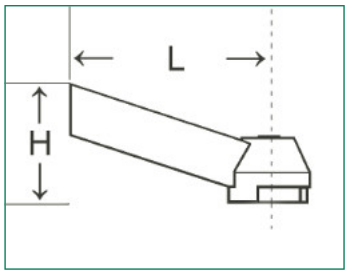


Aluminium lever, painted, red or blue

Item-No.: red	Item-No.: blue	Conn.:	Length: L	Length: H	Packing unit:
53110 1	53120 0	1/4"	76	18,2	-/-
53110 1	53120 0	3/8"	76	18,2	-/-
53111 8	53121 7	1/2"	76	18,2	-/-
53112 5	53122 4	3/4"	90	20,2	-/-
53113 2	53123 1	1"	90	20,2	-/100
53114 9	53124 8	1 ¼" + 1 ½"	115,5	30	-/-
53116 3	53126 2	2"	130,5	32,5	-/ 50

Replacement aluminium lever





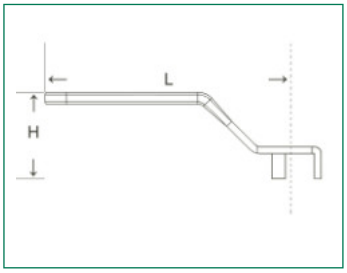
Aluminium lever, painted, red or blue (for item-no. 53271 + 53272), safety handle with blocking function

Item-No.: red	Item-No.: blue	Conn.:	Length: L	Length: H	Packing unit:
53271-R-Griff	53271-Griff	1/2" + 3/4"	56,5	34	-/-

Replacement steel lever

Steel lever with coat, red or black

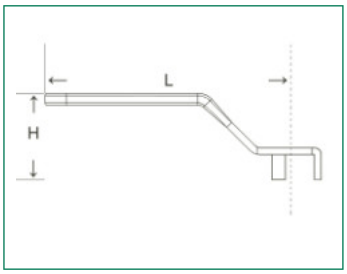
Item-No.: red	Item-No.: black	Conn.:	Length: L	Length: H	Packing unit:
53130-R	53130 9	1/4"	83	19,5	-/-
53130-R	53130 9	3/8"	83	19,5	-/-
53131-R	53131 6	1/2"	98	27	-/-
53132-R	53132 3	3/4"	98	27	-/-
53133-R	53133 0	1"	114	31	-/-
53134-R	53134 7	1 ¼"	124	30,5	-/50
53135-R	53135 4	1 ¼" + 1 ½"	124	30,5	-/50
53136-R	53136 1	2"	143	36	-/-



Replacement stainless steel lever

Stainless steel lever (1.4301) with coat, black

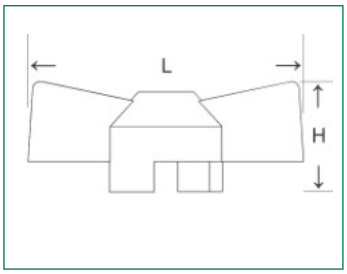
Item-No.: red	Item-No.: black	Conn.:	Length: L	Length: H	Packing unit:
-	53130-VA	1/4"	83	19,5	-/-
-	53130-VA	3/8"	83	19,5	-/-
-	53131-VA	1/2"	98	27	-/-
-	53131-VA	3/4"	98	27	-/-
-	53133-VA	1"	114	31	-/-
-	53134-VA	1 ¼" + 1 ½"	124	30,5	-/50
-	53134-VA	1 ¼" + 1 ½"	124	30,5	-/50
-	53136-VA	2"	143	36	-/-



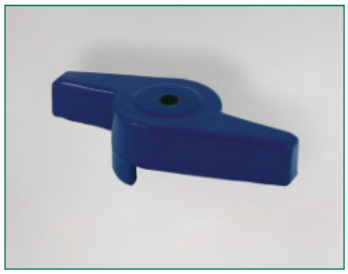
Replacement aluminium butterfly handle

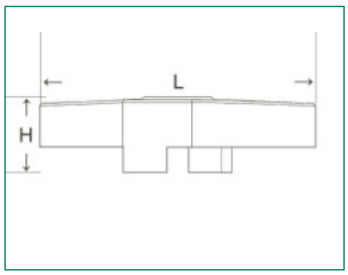
Aluminium butterfly handle, painted, red or blue

Item-No.: red	Item-No.: blue	Conn.:	Length: L	Length: H	Packing unit:
53127 9	-	3/8"	44	18,8	-/-
53128 6	53128-Blau	1/2"	55	22	-/-
53128-1/2"	-	1/2"	47	22	-/-
53128 6	53128-Blau	3/4"	55	22	-/-
53129 3	-	1"	61,5	22,5	-/-
Aluminium bare, unpainted					
53128-bl		1/2" + 3/4"	55	22	-/-



Replacement aluminium butterfly handle, flat

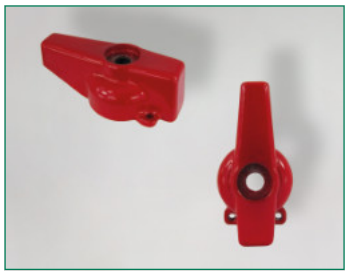


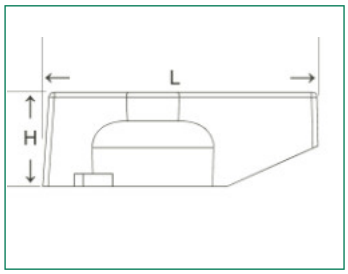


Aluminium butterfly handle, painted, red or blue

Item-No.: red	Item-No.: blue	Conn.:	Length: L	Length: H	Packing unit:
53128-11658	53128-11658-blau	1/2" + 3/4"	60	16,5	-/-
53129-53373-Griff-r	53129-53373-Griff-b	1"	60		-/-

Replacement aluminium butterfly handle for S-043

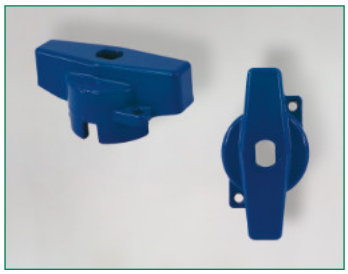


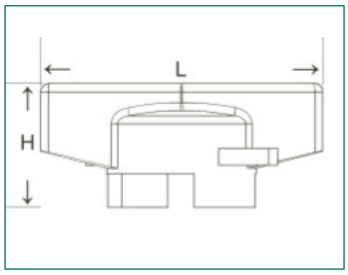


Aluminium, red or blue

Item-No.: red	Item-No.: blue	Conn.:	Length: L	Length: H	Packing unit:
53128-S043	53128-S043-B	1/2" + 3/4"	53	18,5	-/-

Replacement safety handle





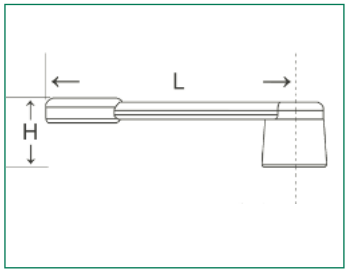
Aluminium, butterfly handle with blocking function and sealing hole, red or blue

Item-No.: red	Item-No.: blue	Conn.:	Length: L	Length: H	Packing unit:
53128-5333x	53128-5333x-blau	1/2" + 3/4"	50	22	-/-

Replacement plastic handle

Plastic handle for mini ball valve, long, black, incl. brass screw

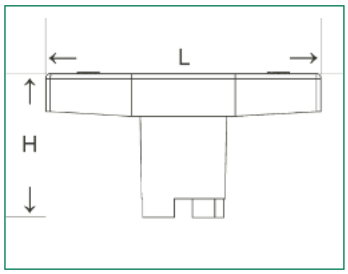
Item-No.: for example 53239-10880	Conn.:	Length: L	 H	Packing unit:
53239-10880-Griff	1/4"	73	38	-/100



Replacement plastic handle

Plastic handle for ISO-T ball valve, black, PA 66, suitable for receiving a thermometer or a clip

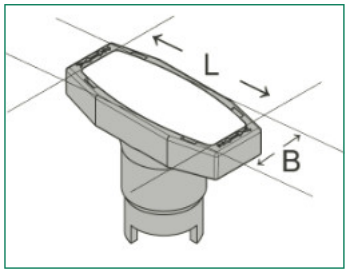
Item-No.:	Conn.:	Length: L	 H	Packing unit:
53012-Griff	3/8" – 3/4"	63	48	-/300
53013-Griff M6	1"	83	51,5	-/360
53013-Griff-B M4	1"	83	51,5	-/360
53014-Griff	1 ¼" + 1 ½"	100	55	-/180
53016-Griff	2"	110	57,5	-/168



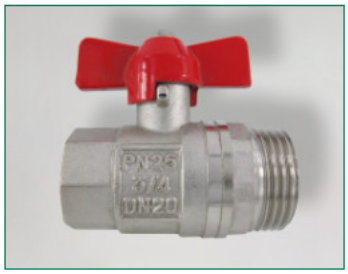
Clip for plastic handle

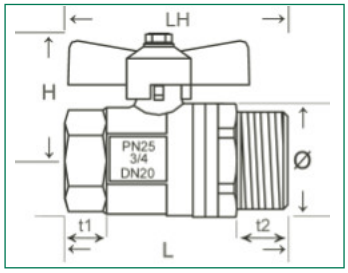
Clip for ISO-T ball valve, white, PA 66, printable

Item-No.:	Conn.:	Length: L	 B	Packing unit:
5301x-Clip-weiss		54,8	22,5	200/1000



Ball valve

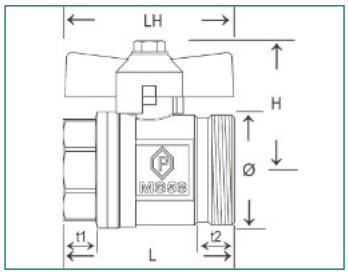




Red butterfly lever, F x M, PN 25, flat sealing, without sealing

Item-No.:	Connec.: F x M	Ball-passage:	Thread length: t1	t2	Length: L	H	Ø	LH	Pack. unit:
53283 2	3/4" x 1"	19	10,5	12,5	65	46	36	54	20/100
Seal for 53283									
49103 0	24 x 30 x 2 mm								

Ball valve



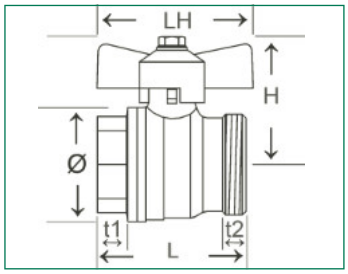
Brass nickel plated

Lever:	Item-No.:	Connection: F x M	Ball-pas-sage:	Thread length: t1	t2	Length: L	Ø	H	LH	P. u.:
Butterfly red	53214 6	G 3/4" x G 1 ¼"	19	12,5	14	60	33	45	54	-/-
Butterfly red	53215 3	G 1" x G 1 ¼"	24,5	12,8	8,5	56	42,5	50	61,5	-/-
Butterfly red	53216 0	G 1 ½" x G 2"	40	13	18	103,5	70	72	84,5	-/-
Butterfly red	53217 7	G 1 ¼" x G 1 ¼"	31	15	15	90	51,5	62,5	75	-/-
Set with lever in red **and** blue										
Flügelgriff	53214-R+B	G 3/4" x G 1 ¼"	19	12,5	14	60	33	45	54	-/24
Flügelgriff	53215-R+B	G 1" x G 1 ¼"	24,5	12	9,5	62	42,5	50	62	-/20
T-Griff	53216-R+B	G 1 ½" x G 2"	40	13	18	103,5	70	72	84,5	-/ 6
as 53215, but male thread **conically sealing**										
T-Griff rot	53218 4	G 1" x G 1 ¼"	24,5	12,8	8,5	56	42,5	50	61,5	-/-
T-Griff blau	53218-b	G 1" x G 1 ¼"	24,5	12,8	8,5	56	42,5	50	61,5	-/-
Set with lever in red **and** blue, male thread **conically sealing**										
T-Griff	53218-R+B	G 1" x G 1 ¼"	24,5	12,8	8,5	56	42,5	50	61,5	1/20
Spare seals, KTW-checked										
	53214/5-AFM	27 x 38 x 2 mm								-/-
	53216-AFM	57 x 42 x 2 mm								-/-

Ball valve

F x M, nickel plated, flat sealing, red or blue butterfly handle

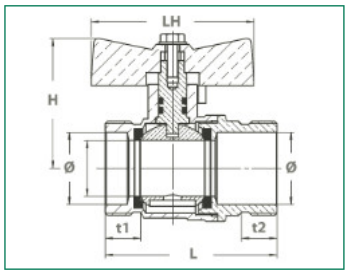
	Item-No.:	Connec.:	Ball-pas-sage:	Thread length:		Length:				Packing unit:
		F x M		t1	t2	L	Ø	H	LH	
Lever red	53287 0	3/4" x 3/4"	19	9	12	50	36	44	55	10/120
Lever red	53288 7	3/4" x 1"	19	9	12	50	36	44	55	10/120
Lever blue	53288-blau	3/4" x 1"	19	9	12	50	36	44	55	10/120
Set red/blue	53288-R+B	3/4" x 1"	19	9	12	50	36	44	55	1/ 30
Lever red	53289 4	1" x 1"	19	24	13	52	39	46	55	10/ 60



Ball valve

Nickel plated, full passage, blue butterfly handle, male thread/male thread

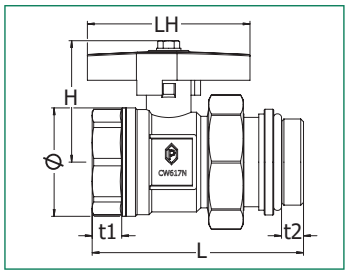
Item-No.:	Con.:	Ballpas-sage:	Thread length:		Length:				Packing unit:
			t1	t2	L	H	Ø	LH	
S-3904-B	1" x 1"	19	12	12	58	44	24,5	55	-/-



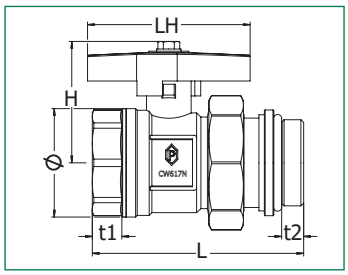
Ball valve

Nickel plated or plain, female thread/male thread, self-sealing screw connection with non-fixed O-ring of FKM, either red or blue butterfly handle

	Item-No.:	Item-No.:	Con.:	Least pass:	Thread length:		Length:				Pack. unit:
	nickel plat.	plain			t1	t2	L	Ø	H	LH	
Lever red	53373 0	53373-bl	1"	22	11	11	78	40	45	60	2/32
Lever blue	53373-Blau	53373-bl-Blau	1"	22	11	11	78	40	45	60	2/32
Spare parts:											
53373-Dichtung		FKM		38 x 29,8 x 2 mm							
53373-O-Ring		FKM		30 x 3,5 mm							



Ball valve



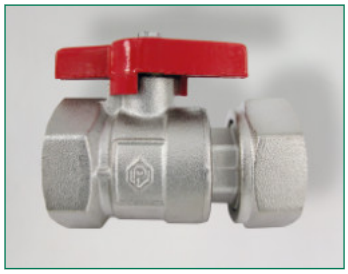
Nickel plated, self-sealing screw connection, O-ring (FKM) fixed, T-lever red or blue

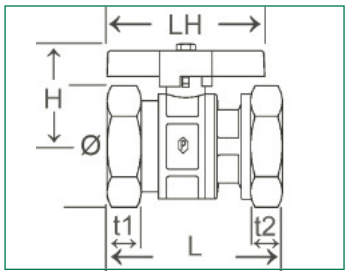
Item-No.:	Connection:	Least pass:	Thread length:		Length:				Pack. unit:
	F x M		t1	t2	L	Ø	H	LH	
53372-11658 (red)	G 3/4" x G 3/4"	18	12	8,5	80	36	44	55	10/40
53373-11658 (red)	G 1" x G 1"	22	11	10	78	40	45	60	2/32
53373-11658-blau	G 1" x G 1"	22	11	10	78	40	45	60	2/32
53374-11658 (red)	G 1 ¼" x G 1 ¼"	31	15	9	115	55	52	75	1/20
Set with lever red **and** blue									
53373-11658-R+B	G 1" x G 1"	22	12	10	78	40	45	60	1/16
Replacement screw connection, O-ring fixed (FKM)									
53372-Verschraubung (EPDM80°A)	F G 1" x M G 3/4"								-/144
53373-Verschraubung	F G 1 ¼" x M G 1"								-/120
Replacement screw connection, O-ring fixed (EPDM80°A)									
S-3578	F G 3/4" x M G 3/4"								-/-

Replacement seals, FKM, no approval KTW/W270

Item-No.:	Connection:
53372-Dichtung	29 x 24 x 2 mm
53373-Dichtung	38 x 29,8 x 2 mm
53374-Dichtung	44,5 x 36,5 x 2,6 mm
53372-O-Ring	23 x 3 mm
53373-O-Ring	30 x 3,5 mm
53374-O-Ring	46 x 38 x 4 mm

Ball valve



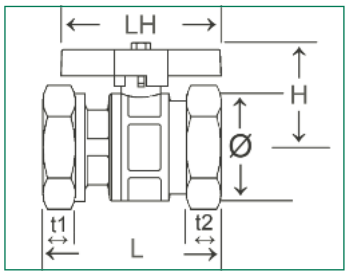


F x F, nickel plated or plain brass, reduced flow, red or blue butterfly handle, with union nut

Lever	Item-No.: nickel plat.	Item-No.: plain	Conn.: F x F	Least pass:	Thread length: t1	t2	Length: L	Ø	H	LH	Pack. unit:
Red	53329 7	53329-bl	1" x 1"	16	12,8	13	60	36	38	60	10/40
Blue	53329-Blau	53329-bl-Blau	1" x 1"	16	12,8	13	60	36	38	60	10/40
as above, only **lighter** version											
Red	S-3923	-	1" x 1"	17,5	12	-	58	-	43	47	-/-
Blue	S-3923-b	-	1" x 1"	17,5	12	-	58	-	43	47	-/-
Set	S-3923-R+B	-	1" x 1"	17,5	12	-	58	-	43	47	-/-

Ball valve

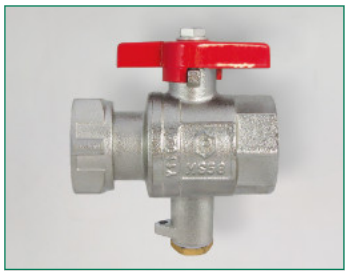
F x F, nickel plated, with union nut

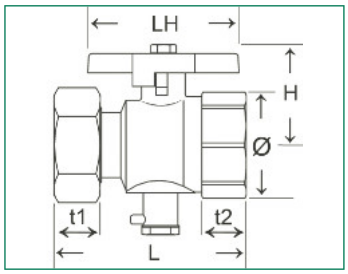


Item-No.: with **T-lever** (illu.)	Connection: F x F	Least pass:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Pack. unit:
S-2939	G1" x G1" x 22 mm	22	9	13,5	79,5	42,5	48	60	-/40
S-2939-1 1/4"	G1 ¼" x G1 ¼" x 32 mm	29	9,5		95	55	51	69	3/18
with long **L-lever**									
S-2939-1 1/2"	G1 ½" x G1 ½" x 40 mm	40	11	15	111	53	83	124	-/-
S-2939-2"	G2" x G2" x 50 mm	50	13	18,5	133	65	103	143	-/-

Ball valve

F x F, nickel plated, with union nut and connection for temperature sensors

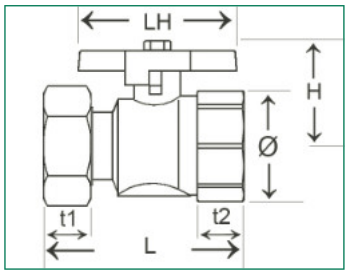




Item-No.: (illustration) with **T-lever**	Connection: F x F	Ball-passage:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	P. u.:
S-2939-1 ¼"-MF	G1 ¼" x G1 ¼" x 32 mm x M10 x 1	32	9,5	14,5	95	46	51	69	-/-
with **L-lever** (without illu.)									
S-2939-1 ½"-MF	G1 ½" x G1 ½" x 40 mm x M10 x 1	34	11	15	111	53	83	124	-/-
S-2939-2"-MF	G2" x G2" x 50 mm x M10 x 1	45	13	18,5	133	65	103	143	-/-
Replacement seal for sensor system									
53322-D	14,6 x 10,3 x 1,5 mm								
Replacement plugs for ball valves with sensor connection									
53322-11	M10 x 1								

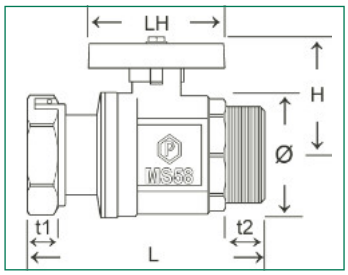
Ball valve

F x F, nickel plated, with union nut



Item-No.: with **T-lever**	Connection: F x F	Least pass:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Pack. unit:
S-3123-1-1 ¼"	G1" x G1 ¼" x 22 mm	22	9	12	75		48	60	-/32
S-3123-1 ¼"-1 ½"	G1 ¼" x G1 ½" x 32 mm	32	9,5	15,5	100	55	51	68,5	-/-
with plastic sheathed **L-lever**									
S-3123-1 ½"-2"	G1 ½" x G2" x 40 mm	40	13,5	15,5	120	69	58		-/-

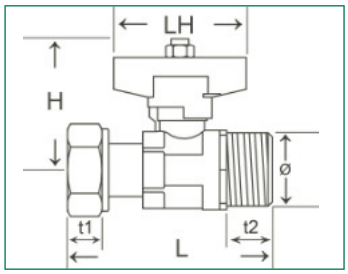
Ball valve



F x M, nickel plated, with union nut

Item-No.:	Connection:	Least pass:	Thread length:		Length:				Pack. unit:
	F x M		t1	t2	L	Ø	H	LH	
S-2983-1 ¼"	G1 ¼" x G1 ¼" x 32 mm	32	9,5	17	106	55	50	69,5	-/24
S-2983-1 ¼"-1 ½"	G1 ½" x G1 ¼" x 32 mm	32	9,5	17	108,5	55	50	69,5	-/25

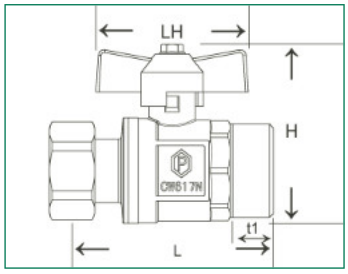
Ball valve



M x F, nickel plated, with union nut, red aluminum butterfly handle

Item-No.:		Conn.:	Least pass:	Thread length:		Length:				Pack. unit:
		M x F (nut)		t1	t2	L	Ø	H	LH	
53336 5	nick. pla.	3/4" x 1"	15		11	85,5	30	56	50	6/ 60
53336-bl	plain	3/4"x 1"	15		11	85,5	30	56	50	6/ 60
53337 2	nick. pla.	3/4"x 3/4"	15		12	76,4	30	51,5	51,5	10/120
53336-1"-1 ¼"	plain	1"x 1 ¼"	24		17	94	43,5	54,6	50	-/-

Ball valve



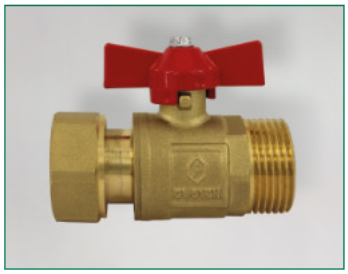
F x M, plain brass, full passage 16 mm, with union nut, **with** gravity brake, lever in red

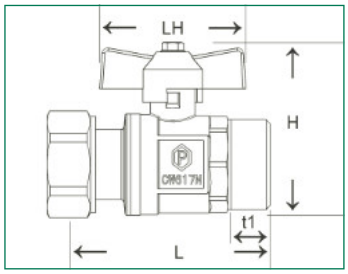
Item-No.:	Connection:	Least pass:	Thread length:		Length:					Packing unit:
	F x M		t1	t2	L	Ø	H	H2	LH	
53378-R	G 3/4" x G 1"	16	14,5		71	16	64		55	5/40
53377-R	G 1" x G 1"	16	14,5		71	20	64		55	5/40

Ball valve

F x M, plain brass, full passage 20 mm, with union nut, **without** gravity brake, lever in red or blue

Item-No.:	Connection:	Least pass:	Thread Length:		Length:					P.U.:
	F x M		t1	t2	L	Ø	H	H2	LH	
53379-R	G1" x G1"	20	14,5		71	20	64		55	5/40
53379-B	G1" x G1"	20	14,5		71	20	64		55	5/40

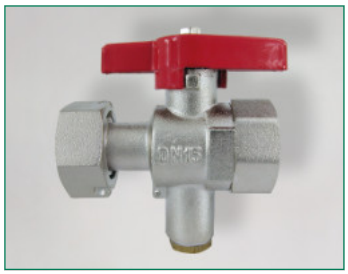


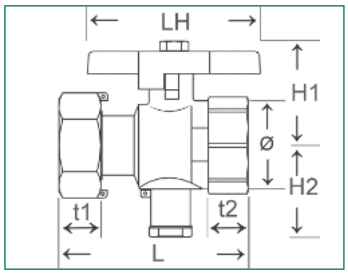


Ball valve

F x F, nickel plated, with union nut and sensor connection (M 10 x 1 mm), double O-ring

Item-No.:	Connection:	Least pass:	Thread length:		Length:					Pack. unit:
	F x F		t1	t2	L	Ø	H1	H2	LH	
53338 9	3/4" x 3/4" x M10/1 mm	13		12	67,5	29,5	36	31,5	60	10/60
53339 6	1"x 1" x M10/1 mm	20		12,7	75,5	29,5	36	31,5	60	-/-
Replacement seal for sensor system										
53322-D	14,6 x 10,3 x 1,5 mm									
Replacement plugs for ball valves with sensor connection										
53322-11	M10 x 1 mm									

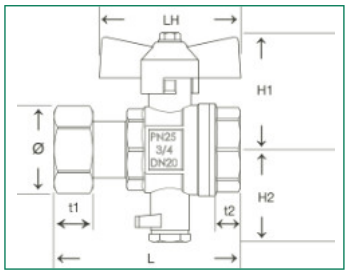




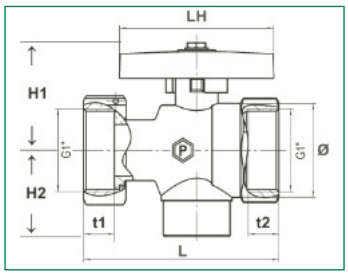
Ball valve

F x F, nickel plated, with union nut and sensor connection (M10 x 1 mm), double O-ring, aluminium butterfly handle red or blue

Item-No.:	Connection:	Least pass:	Thread length:		Length:					Pack. unit:
			t1	t2	L	Ø	H1	H2	LH	
S-3330-03-B	G3/4" x G3/4" x 16 mm	16					44	36	55	8/48
S-3330-03-R	G3/4" x G3/4" x 16 mm	16					44	36	55	8/48
Replacement seal for sensor system										
53322-D	14,6 x 10,3 x 1,5 mm									
Replacement plugs for ball valves with sensor connection										
53322-11	M10 x 1 mm									



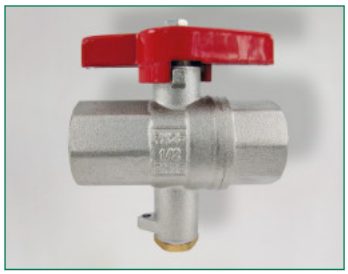
Ball valve

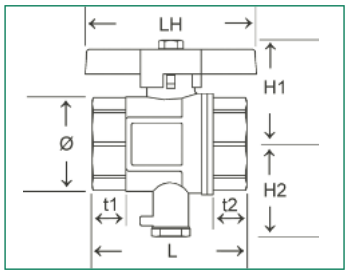


F x F, nickel plated, with union nut and sensor connection (1/2"), double O-ring

Item-No.:	Connection: F x F	Least pass:	Thread length: t1	t2	Length: L	Ø	H1	H2	LH	Pack. unit:
53326 6	1" x 1" x 1/2"	20	14	12,5	64	42,5	36	33,5	60	-/36
Replacement seal for sensor system										
53322-D	14,6 x 10,3 x 1,5 mm									
Replacement plugs for ball valves with sensor connection										
53322-11	M10 x 1 mm									

Ball valve

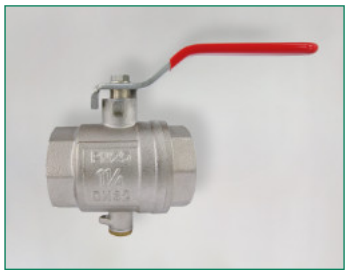


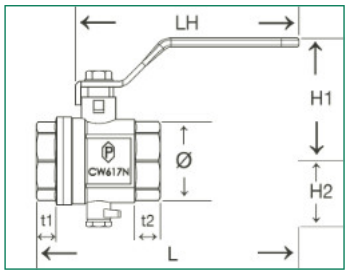


F x F, nickel plated, with sensor connection (M10 x 1 mm), double O-ring

Item-No.:	Connection: **Aluminium butterfly handle** with red plastic cover	Least pass:	Thread length: t1	t2	Length: L	Ø	H1	H2	LH	Pack. unit:
53321 1	G1/2" x G1/2" x M10 x 1 mm	15	17,5	17,5	64	31	31,5	40	60	10/60
53322 8	G3/4" x G3/4" x M10 x 1 mm	19	12,5	12,5	55,5	36	44	45	60	10/60
53323 5	1"x 1" x M10/1 mm	24	12,8	12,8	63	36	52	44	60	8/ 40
Replacement seal for sensor system										
53322-D	14,6 x 10,3 x 1,5 mm									
Replacement plugs for ball valves with sensor connection										
53322-11	M10 x 1 mm									

Ball valve



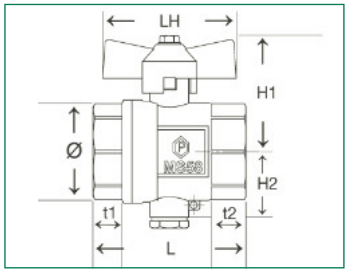


F x F, nickel plated, with sensor connection (M 10 x 1 mm), double O-ring

Item-No.:	Connection: **Steel lever** with red plastic coating	Ball-passage:	Thread length: t1	t2	Length: L	Ø	H1	H2	LH	Pack. unit:
53324 2	G1 ¼" x G1 ¼" x M10 x 1 mm	32	15	15	77	55	73,5	36	114	4/24
53325 9	G1 ½" x G1 ½" x M10 x 1 mm	40	16	16	90	69	82,5	42	124	2/ 12
53328 0	G2" x G2" x M10 x 1 mm	50	19,5	19,5	109	84,5	102,5	49	143	2/ 8
Replacement seal for sensor system										
53322-D	14,6 x 10,3 x 1,5 mm									
Replacement plugs for ball valves with sensor connection										
53322-11	M10 x 1 mm									

Ball valve for adapter

F x F, nickel plated, for diverse adapters for various commercially available sensor systems (M 10 x 1 mm), red butterfly handle



Item-No.:	Connection: F x F	Ball-passage:	Thread-length: t1	t2	Length: L	Ø	H1	H2	LH	Pack. unit:
53322-11727	G 3/4" x G 3/4" x M 10 x 1 mm	19	12	12	55	36	44	23,5	55	10/60
Replacement seal for sensor system										
53322-D	14,6 x 10,3 x 1,5 mm									
Replacement plugs for ball valves with sensor connection										
53322-11	M 10 x 1 mm									

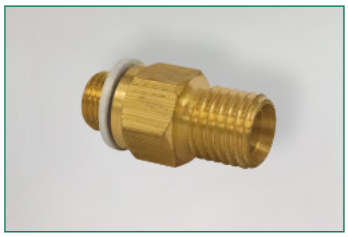
Adapter reducing nipple

M x F, plain brass

Item-No.:	Connection:	Packing unit:
53322-11727-01	M 10 x 1 mm x M 10 x 1 mm	-/-

Adapter nipple

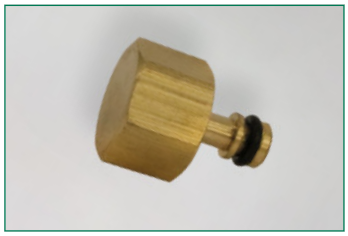
Plain brass, male thread/male thread



Item-No.:	Connection:	Packing unit:
53322-11727-02	M 10 x 1 mm x M 12 x 1,5 mm	-/-

Adapter plug

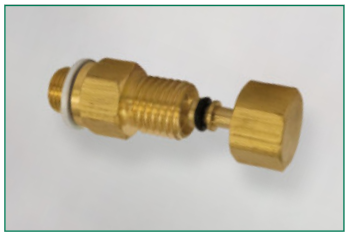
Plain brass, with O-ring



Item-No.:	Connection:	Packing unit:
53322-11727-03	M 12 x 1,5 mm	-/-

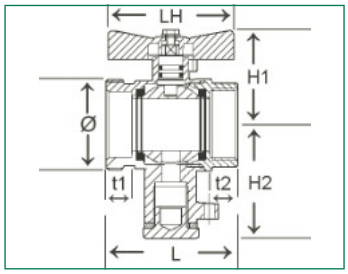
Adapter combination

53322-11727-02 **fitted with** 53322-11727-03



Item-No.:	Connection:	Packing unit:
53322-11727-04	M 10 x 1 mm x M 12 x 1,5 mm	-/-

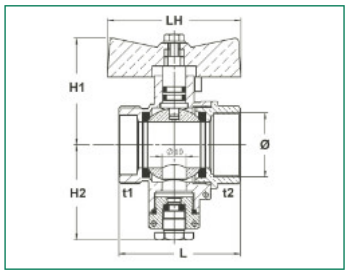
Ball valve



F x M, nickel plated, with sensor connection (M10 x 1 mm), **red handle**

Item-No.:	Connection:	Ball-pas-sage:	Thread length:		Length:					Pack. unit:
	F x M		t1	t2	L	Ø	H1	H2	LH	
53323-11555	G3/4" x G1" x M10 x 1 mm	19	9,5	12	50	36	44	34	55	6/54
Nickel plated, with sensor connection (M10 x 1 mm), F/M, **flat sealing, red handle**										
S-3082-5-R	G3/4" x G1" x M10 x 1 mm	19	9,5	12	50	36	44	34	55	-/72
Nickel plated, with sensor connection (M10 x 1 mm), F/M, **flat sealing, blue handle**										
S-3082-5-B	G3/4" x G1" x M10 x 1 mm	19	9,5	12	50	36	44	34	55	6/54
Replacement seal for sensor system										
53322-D	14,6 x 10,3 x 1,5 mm									
Replacement plugs for ball valves with sensor connection										
53322-11	M10 x 1 mm									

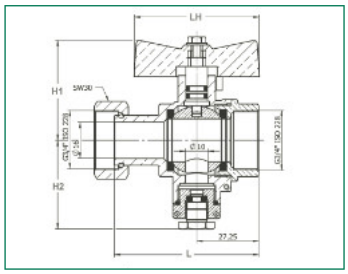
Ball valve



M x F, nickel plated, with double sensor connection (M10 x 1 mm), alu-handle red or blue

Item-No.:	Connection:	Ball-pas-Sage:	Thread length:		Length:					Pack. unit:
Alu-handle (red/blue)			t1	t2	L	Ø	H1	H2	LH	
S-3670-04	G1" x G3/4" x G3/8" x M10 x 1 mm	19	9,5	12	50	24,5	44	39	55	6/54
S-3670-04-b	G1" x G3/4" x G3/8" x M10 x 1 mm	19	9,5	12	50	24,5	44	39	55	6/54
S-3903	G1" x G1" x G3/8" x M10 x 1 mm	19	9,5	11,5	52	24,5	44	39	55	8/48
S-3903-b	G1" x G1" x G3/8" x M10 x 1 mm	19	9,5	11,5	52	24,5	44	39	55	8/48

Ball valve



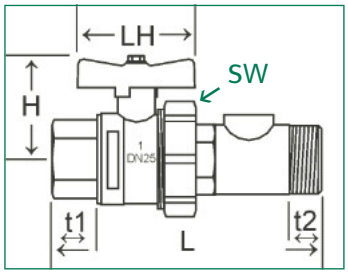
F x union nut, nickel plated, with double sensor connection (M10 x 1 mm), IG/ÜM, alu-handle red

Item-No.:	Connection:	Length:					Pack. unit:
Alu-handle red		L	Ø	H1	H2	LH	
S-4044-01	G3/4" x G3/4" x G3/8" x M10 x 1 mm	63,5	16	44	39	55	-/-

Ball valve

F x M, plain brass, female thread, red butterfly handle, with screwed on extension with sensor connection (1/2")

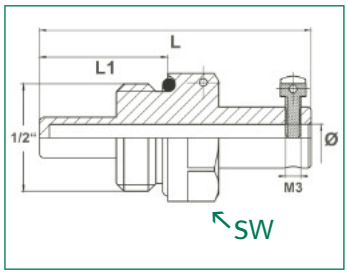
Item-No.:	Connection:	Least pass:	Threadlength:		Length:		Wre. size:		Pack. unit:
			t1	t2	L	H	SW	LH	
S-66	1" x 1/2" x 1"	25	24,5	16	131	52,5	52,5	62	4/32



Immersion sleeve

Plain brass, universal immersion sleeve, sealing against countersink

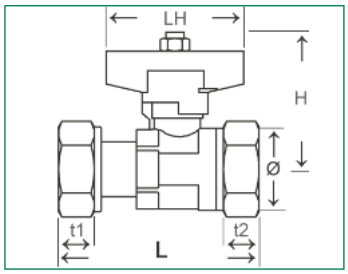
Item-No.:	Connection:	Length:		Wrench size:		Packing unit:
		L	L1	SW	Ø	
S-1244	1/2" M	53	25	22	5,2	-/240



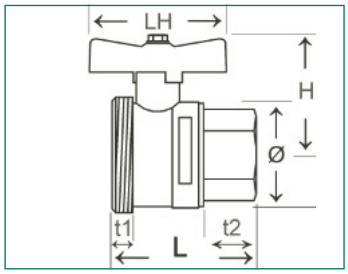
Ball valve

F x F, for the installation of water meters, nickel plated, with sealing eye, with union nut, safety grip with blocking function and sealing eye, stuffing box

Item-No.: handle red	Item-No.: handle blue	Connection: F x union nut	Least pass:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Packing unit:
53330 3	-	1/2" x 1/2"	15		17		32,5	51,5	50	-/-
53331 0	-	1/2" x 3/4"	14		17	73	32,5	51,5	50	10/60
53332 7	53332-Blau	3/4" x 3/4"	14		18	76	32,5	51,5	50	10/60
53333 4	-	3/4" x 1"	15		18	78	32,5	50,5	50	8/48
53334 1	-	1" x 1"	19		14	83	39,5	56	50	8/40



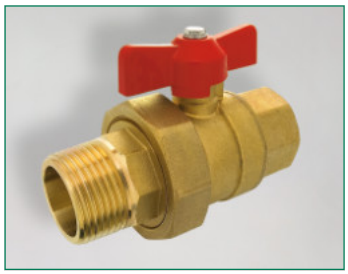
Ball valve

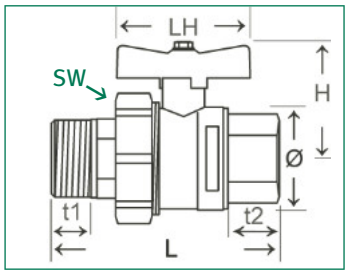


F x M, plain brass, red butterfly handle, stuffing box, heavy version

Item-No.:	Connection:	Ball-pas-sage:	Thread length:		Length:				Packing unit:
			t1	t2	L	Ø	H	LH	
S-48	1" x M47 x 1,5	25	8	24,5	60	44	52,5	62	8/ 48
Accessories: union nut brass (without illu.)						WS			
S-69	M47 x 1,5		15,5	-	19	52	-	-	25/300

Ball valve

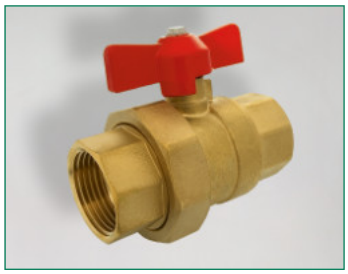


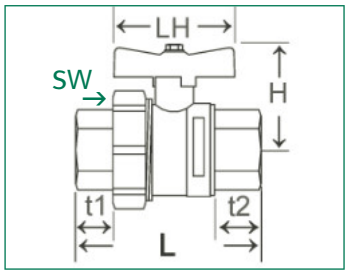


Plain brass, one side female thread/one side male threaded screw connector, red butterfly handle, stuffing box, heavy version

Item-No.:	Connection:	Least pass:	Thread length:		Length:		Wre. size:		Pack. unit:
			t1	t2	L	H	SW	LH	
S-63	1" x R1"	25	17	24,5	98	52,5	52,5	62	2/40
	Connection M47 x 1,5								

Ball valve





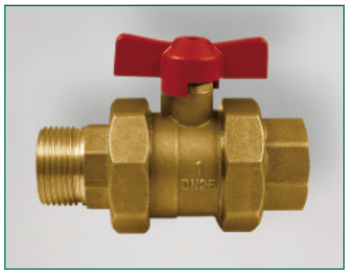
Plain brass, one side female thread/one side female threaded screw connector, red butterfly handle, stuffing box, heavy version

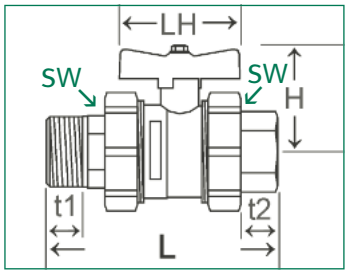
Item-No.:	Connection:	Least pass:	Thread length:		Length:			Wrench size:	Pack. unit:
			t1	t2	L	H	LH	SW	
S-64	1" x 1" Connection M47 x 1,5	25	17	24	87	52,5	62	52,5	4/40

Ball valve

Plain brass, screw connectors on both sides male thread/female thread, red butterfly handle, stuffing box, heavy version

Item-No.:	Connection:	Least pass:	Thread-length:		Length:		Wrench size:		Pack. unit:
	M x F		t1	t2	L	H	SW	LH	
S-65	R1" x 1" Connection M47 x 1,5	25	17	16	109	52,5	52,5	62	4/24

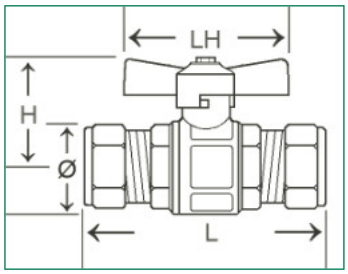




Ball valve

Nickel plated, with compression fittings, red aluminium butterfly handle

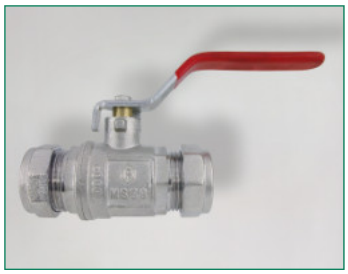
Item-No.:	Conn.:	Least pass:	Length:				Packing unit:
			L	Ø	H	LH	
53351 8	15 mm	14,5	75	29	43	62	10/ 60
53353 2	22 mm	19	83	36	45	62	10/120
53354 9	28 mm	24	96	42,5	55	62	6/ 60
53355 6	35 mm	31	120	55	61,5	62	3/ 24

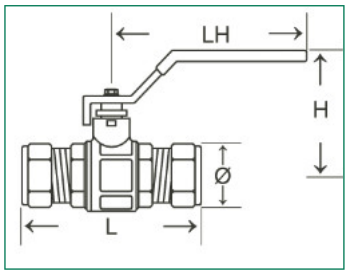


Ball valve

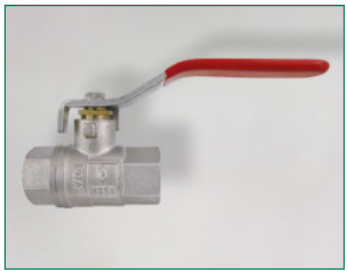
Nickel plated, with compression fittings, steel handle with red plastic coating

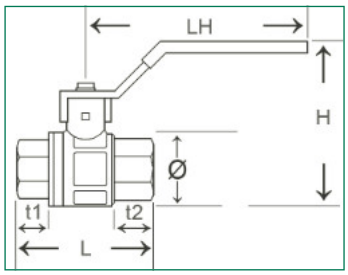
Item-No.:	Conn.:	Ball-passage:	Length:				Packing Unit:
			L	Ø	H	LH	
53361 7	15 mm	14,5	75	29	55	99	10/100
53363 1	22 mm	19	83	36	58	99	10/ 80
53364 8	28 mm	24	96	42,5	68,5	115,5	6/ 24
53365 5	35 mm	31	120	55	73	125	4/ 32





Ball valve, PN 40

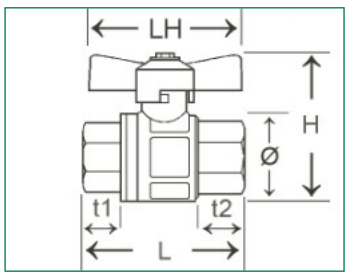




F x F (long), brass nickel plated, steel lever with red plastic coating, stuffing box/O-ring, thread according to DIN ISO 7-1

Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:					Packing unit:
	F x F		t1	t2	L	Ø	H	LH	PN	
53439 3	1/4"		13	13	48	24	40	80	40	-/-
53430 0	3/8"		13	13	48	24	40	80	40	12/180
53431 7	1/2"	14,5	17	17	61	29,5	40	95	40	10/120
53432 4	3/4"	19	19	19	70	36	40	95	32	10/ 80
53433 1	1"	24	23	23	84	44	40	110	32	6/ 48
53434 8	1 ¼"	32	24	24	98	57,5	40	130	25	2/ 32
53435 5	1 ½"	40	25	25	108	70	40	130	20	2/ 20
53436 2	2"	50	29	29	130	85,5	40	150	16	2/ 16

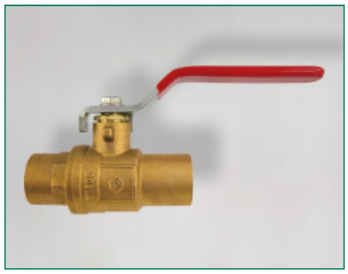
Ball valve, PN 40

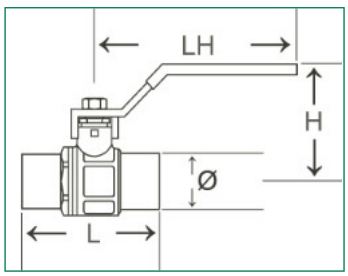


F x F (long), brass nickel plated, with red butterfly handle, stuffing box/O-ring, thread according to DIN ISO 7-1

Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:					Packing unit:
	F x F		t1	t2	L	Ø	H	LH	PN	
53450 8	3/8"		13	13	48	24		45	40	
53451 5	1/2"	14,5	17	17	61	29,5		54	40	
53452 2	3/4"	19	19	19	70	36		54	40	
53453 9	1"	24	23	23	84	44		62	40	

Ball valve





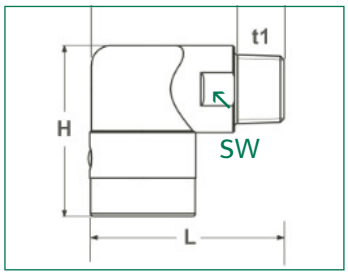
Plain brass, steel handle with red plastic coating, stuffing box, both sides with solder connections

Item-No.:	Connec.:	Ball-passage:	Length:				Packing unit:
			L	Ø	H	LH	
56321 8	15 mm	12	56	28	52,5	99	10/80
56322 5	18 mm	14,5	65	30,5	56	99	10/60
56323 2	22 mm	17	79	34,5	65	114	8/48
56324 9	28 mm	22	96	47	68,5	114	6/36

Allgas socket

For connection of gas stoves, brass nickel plated, with TAE, DIN DVGW, R 1/2" M x quick lock, thermal fuse, max. operating pressure 100 mbar, max. operating temperatur 80°C, HTB-consistent

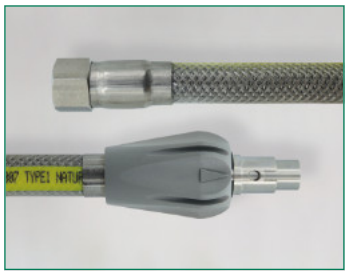
Item-No.:	Connec.:	Length:		Thread length:	Wrench size:	Packing unit:
		L	H	t1	SW	
67301 6	Rp 1/2"	60	53	16	25	20/60

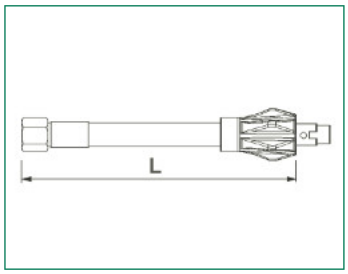


Safety gas hose

According to EN14800, DIN DVGW, Rp 1/2" F x standard plug, according to DIN 3383

Item-No.:	Conn.: Length L	Packing unit:
67310 8	500 mm	1/50
67311 5	750 mm	1/50
67312 2	1000 mm	1/50
67313 9	1250 mm	1/50
67314 6	1500 mm	1/40
67315 3	2000 mm	1/35

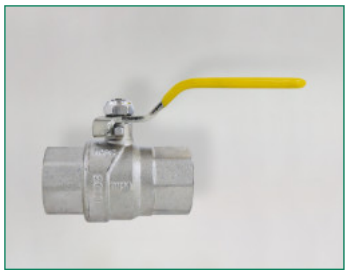


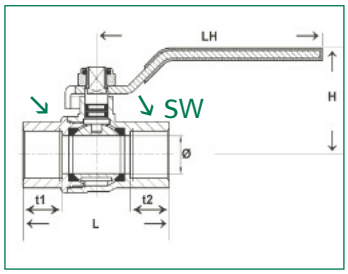


Ball valve brass DIN-DVGW gas, F/F

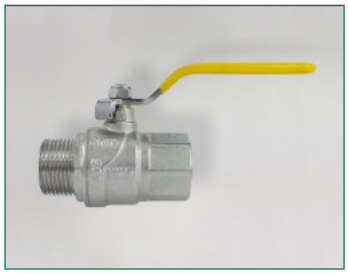
F x F, nickel plated, with yellow coated **steel handle**

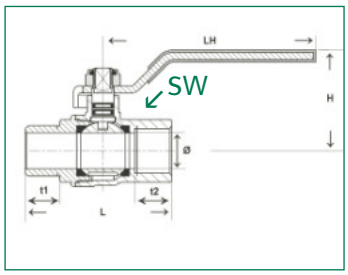
Item-No.:	Conn.:	Ball-pas-sage:	Thread length:		Length:		Wrench size:		Pack. unit:
	Rp/Rp	Ø	t1	t2	L	H	SW	LH	
67151 7	1/2"	15	15,5	15,5	58	42	25	89	8/64
67152 4	3/4"	20	17	17	67	46	31	89	6/36
67153 1	1"	25	22,5	20	81	60	38	112	2/20
67154 8	1 ¼"	30,5	23,5	23	95	70	47	131	2/18
67155 5	1 ½"	38,5	23	23	103	72	53	131	2/12
67156 2	2"	47,5	27,5	28	126	83	66	160	2/ 6





Ball valve brass DIN-DVGW gas, M/F

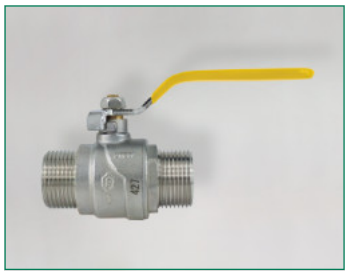


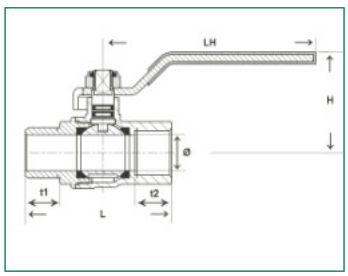


M x F, nickel plated, with yellow coated **steel handle**

Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:		Wrench size:		Pack. unit:
	R/Rp	Ø	t1	t2	L	H	SW	LH	
67251 4	1/2"	15	14,5	15,5	61	42		89	-/-
67252 1	3/4"	20	16	17	70	46		89	-/-
67253 8	1"	25	19,5	20	84	60		112	-/-
67254 5	1 ¼"	30,5	20,5	23	97	70		131	-/-
67255 2	1 ½"	38,5	21,5	23	111	72		131	-/-
67256 9	2"	47,5	26,2	28	137	83		160	-/-

Ball valve brass DIN-DVGW gas, M/M

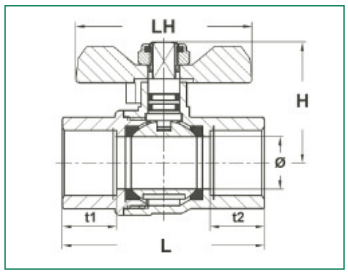




M x M, nickel plated, with yellow coated **steel handle**

Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:		Wrench size:		Pack. unit:
	R/R	Ø	t1	t2	L	H	SW	LH	
67351 1	1/2"	15	14,5	14,5	60	42		89	-/-
67352 8	3/4"	20	16	16	69	46		89	-/-
67353 5	1"	25	19,5	19,5	83	60		112	-/-
67354 2	1 ¼"	30,5	20,5	20,5	95	70		131	-/-
67355 9	1 ½"	38,5	21,5	21,5	111	72		131	-/-
67356 6	2"	47,5	26,2	26,2	135	83		160	-/-

Ball valve brass DIN-DVGW gas, F/F



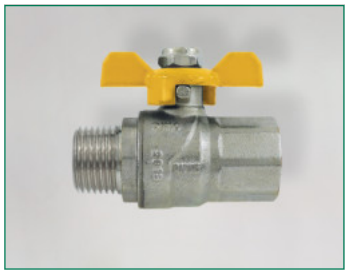
F x F, nickel plated, with yellow coated **butterfly handle**

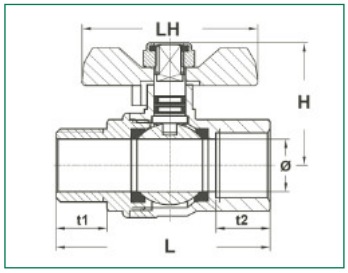
Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:		Wrench size:		VE:
	Rp/Rp	Ø	t1	t2	L	H	SW	LH	
67451 8	1/2"	15	15,5	15,5	58	35		50	8/64
67452 5	3/4"	20	17	17	67	39		50	6/36
67453 2	1"	25	22,5	20	81	48		67	2/20

Ball valve brass DIN-DVGW gas, M/F

M x F, nickel plated, with yellow coated **butterfly handle**

Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:		Wrench size:		VE:
	R/Rp	Ø	t1	t2	L	H	SW	LH	
67551 5	1/2"	15	14,5	15,5	61	35		50	-/-
67552 2	3/4"	20	16	17	70	39		50	-/-
67553 9	1"	25	19,5	20	84	48		67	-/-

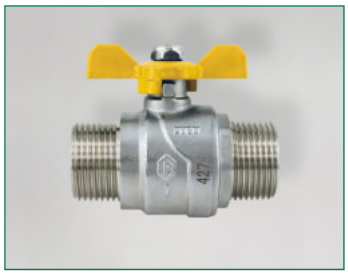


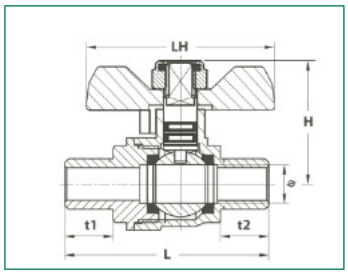


Ball valve brass DIN-DVGW gas, M/M

M x M, nickel plated, with yellow coated **butterfly handle**

Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:		Wrench size:		VE:
	R/R	Ø	t1	t2	L	H	SW	LH	
67651 2	1/2"	15	14,5	14,5	60	40		52,5	-/-
67652 9	3/4"	20	16	16	69	45		52,5	-/-
67653 6	1"	25	19,5	19,5	83	54,5		65	-/-

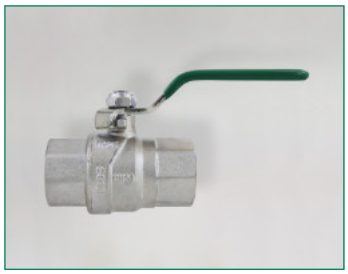


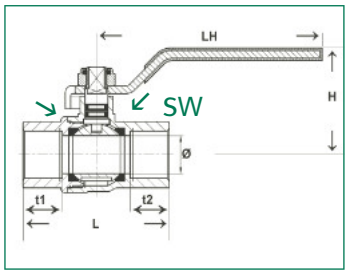


Ball valve brass DIN-DVGW water, F/F

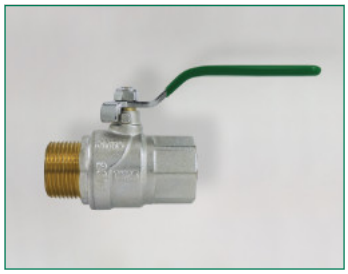
F x F, nickel plated, with green coated **steel handle**

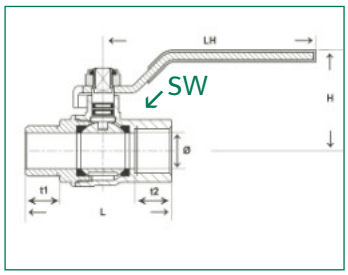
Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:		Wrench size:		Pack. unit:
	G/G	Ø	t1	t2	L	H	SW	LH	
67161 6	1/2"	15	15,5	15,5	58	42	25	89	8/64
67162 3	3/4"	20	17	17	67	46	31	89	6/36
67163 0	1"	25	22,5	20	81	60	38	112	2/20
67164 7	1 ¼"	30,5	23,5	23	95	70	47	131	2/18
67165 4	1 ½"	38,5	23	23	103	72	53	131	2/12
67166 1	2"	47,5	27,5	28	126	83	66	160	2/ 6





Ball valve brass DIN-DVGW water, M/F

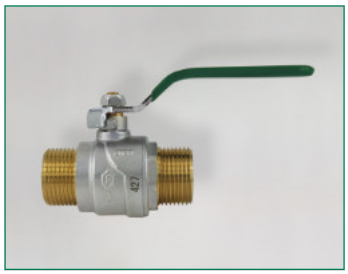


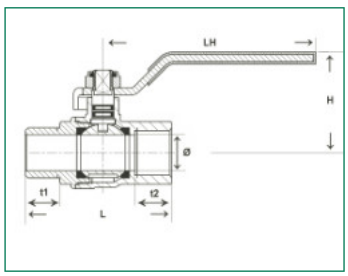


M x F, nickel plated, with green coated **steel handle**

Item-No.:	Conn.:	Ball-passage:	Thread-length:		Length:		Wrench size:		Pack. unit:
	G/G	Ø	t1	t2	L	H	SW	LH	
67261 3	1/2"	15	14,5	15,5	61	42		89	-/-
67262 0	3/4"	20	16	17	70	46		89	-/-
67263 7	1"	25	19,5	20	84	60		112	-/-
67264 4	1 ¼"	30,5	20,5	23	97	70		131	-/-
67265 1	1 ½"	38,5	21,5	23	111	72		131	-/-
67266 8	2"	47,5	26,2	28	137	83		160	-/-

Ball valve brass DIN-DVGW water, M/M

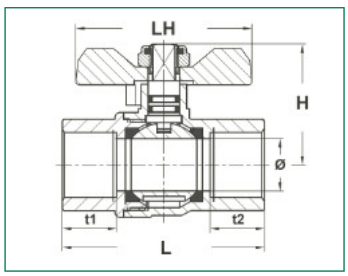




M x M, nickel plated, with green coated **steel handle**

Item-No.:	Conn.:	Ball-passage:	Thread-length:		Length:		Wrench size:		Pack. unit:
	G/G	Ø	t1	t2	L	H	SW	LH	
67361 0	1/2"	15	14,5	14,5	60	42		89	-/-
67362 7	3/4"	20	16	16	69	46		89	-/-
67363 4	1"	25	19,5	19,5	83	60		112	-/-
67364 1	1 ¼"	30,5	20,5	20,5	95	70		131	-/-
67365 8	1 ½"	38,5	21,5	21,5	111	72		131	-/-
67366 5	2"	47,5	26,2	26,2	135	83		160	-/-

Ball valve brass DIN-DVGW water, F/F



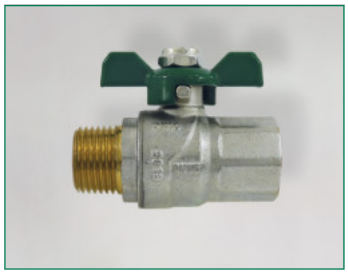
F x F, nickel plated, with green coated **butterfly handle**

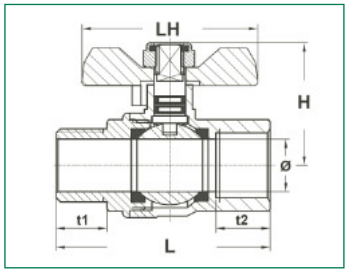
Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:		Wrench size:		VE:
	G/G	Ø	t1	t2	L	H	SW	LH	
67461 7	1/2"	15	15,5	15,5	58	35		50	8/64
67462 4	3/4"	20	17	17	67	39		50	6/36
67463 1	1"	25	22,5	20	81	48		67	2/20

Ball valve brass DIN-DVGW water, M/F

M x F, nickel plated, with green coated **butterfly handle**

Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:		Wrench size:		VE:
	G/G	Ø	t1	t2	L	H	SW	LH	
67561 4	1/2"	15	14,5	15,5	61	35		50	8/64
67562 1	3/4"	20	16	17	70	39		50	6/36
67563 8	1"	25	19,5	20	84	48		67	2/20

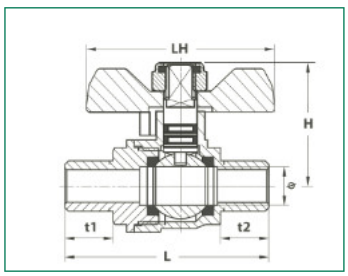




Ball valve brass DIN-DVGW water, M/M

M x M, nickel plated, with green coated **butterfly handle**

Item-No.:	Conn.:	Ball-passage:	Thread length:		Length:		Wrench size:		VE:
	G/G	Ø	t1	t2	L	H	SW	LH	
67661 1	1/2"	15	14,5	14,5	60	40		52,5	8/64
67662 8	3/4"	20	16	16	69	45		52,5	6/36
67663 5	1"	25	19,5	19,5	83	54,5		65	2/20

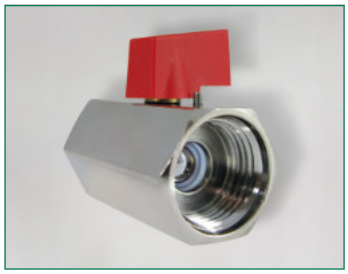


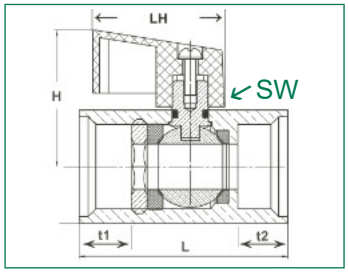
Brass mini ball valves

Brass mini ball valves, full flow, nickel plated, ball: brass hard chrome plated, ball seal made of PTFE; brass spindle, shaft seal made of FKM, for temperatures of – 20°C up to + 120°C, pressure stage for mini valves series: PN 10; material: brass according to DIN 50930-6, hot-pressed, cylindrical threads according to ISO 228-2.

(Valid for all mini ball valves, unless otherwise stated)

Mini ball valve

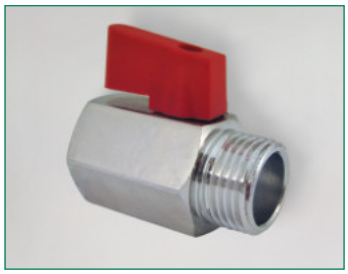


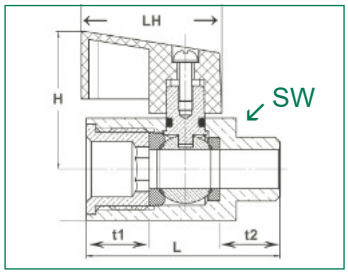


F x F, nickel plated, red plastic handle, external hexagon

Item-No.:	Conn.: F x F	Wrench size: SW	Ball-pas-sage:	Thread length: t1	t2	Length: L	H	LH	Packing unit:
53229 0	1/4"	21	8	10	9,5	40	28,3	28,5	25/150
53230 6	3/8"	21	8	10,5	10	40	28,3	28,5	25/150
53231 3	1/2"	25	10	11	11,5	46	30,1	28,5	20/120
53232 0	3/4"	30	14,5	14	13	54	32,6	28,5	14/ 70

Mini ball valve

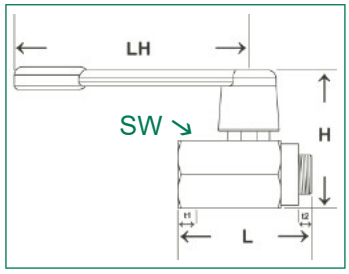




Like before, but F x M

Item-No.:	Conn.: F x M	Wrench size: SW	Ball-pas-sage:	Thread length: t1	t2	Length: L	H	LH	Packing unit:
53239 9	1/4"	21	8	9,5	9	40	28,3	28,5	25/150
53240 5	3/8"	21	8	10	9	40	28,3	28,5	25/150
53241 2	1/2"	25	10	11,5	12	45	30,1	28,5	20/120
53242 9	3/4"	30	14,5	13	15	54	32,6	28,5	14/ 70

Mini ball valve



F x M, **nickel plated**, long black plastic handle

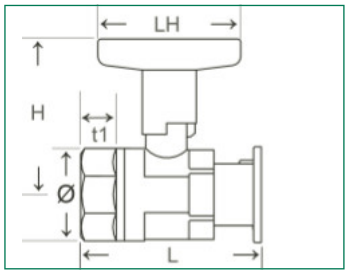
Item-No.:	Connection:	Ball-pas-sage:	Wre. size SW	Thread length: t1	t2	Length: L	H	LH	Packing unit:
53239-10880	1/4" f x m	8	21	9,5	10,5	41,5	33,5	73	16/128
S-2751	3/8" f x f	8	21	11	8	41,5	33,5	73	10/120
Chrome plated, long black T-handle (without illustration)									
53229-10848-S	1/4" f x f	8	21	11	15	41,5	25,5	39	-/200
53230-10848-S	3/8" f x f	8	21	9,5	10,5	41,5	25,5	39	-/240
53239-10848-S	1/4" f x m	8	21	9,5	10,5	41,5	25,5	39	-/-
Spare parts:									
53239-10880-Griff (handle)	Plastic, inclusive screw made of brass								-/100
53239-10880-PTFE-Dichtung	PTFE-Dichtungsring 5,5 mm								

ISO-Pump ball valve

Brass nickel plated, full flow, black plastic-T-handle, female thread/flange, PN 25

Item-No.:	Connection: f/flange	Ball-pas-sage:	Thread length: t1	Length: L	Ø	H	LH	Pack. unit:
53413 3	1" x 1"	24	15,5	88	44	75	83	8/48
53413-SK*	1" x 1"	24	15,5	87,5	42,5	76	83	8/48
53414 0	1 ¼" x 1"	24	14	90,5	44	75	83	8/48
53414-SK*	1 ¼" x 1"	24	15,5	87,5	42,5	76	83	8/48
53415 7	1 ¼" x 1 ¼"	32	18	101,5	57,5	84	83	2/20
53415-SK*	1 ¼" x 1 ¼"	31	15,5	111,5	55	86,5	100	2/20

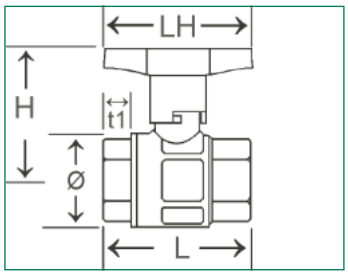
*= with gravity brake



ISO-ball valve

F x F, brass nickel plated, black plastic-T-handle, PN 25

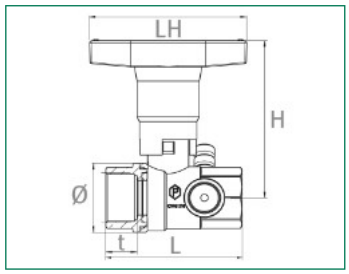
Item-No.:	Conn..: F x F	Ball-pas-sage:	Thread length: t1	Length: L	Ø	H	LH	Packing unit:
53400 3	3/8"	10	9,4	40	23,5	61,6	63	-/-
53401 0	1/2"	14,5	12,5	50	29	66	63	-/120
53402 7	3/4"	19	12	54,5	36	69,5	63	-/ 60
53403 4	1"	24	12,8	63	42,5	75,9	83	-/ 40
53404 1	1 ¼"	32	15,5	77,5	55	86,5	100	-/-
53405 8	1 ½"	40	16	90	69	93	100	-/-
53406 5	2"	50	19,5	109	84,5	104,7	110	-/-



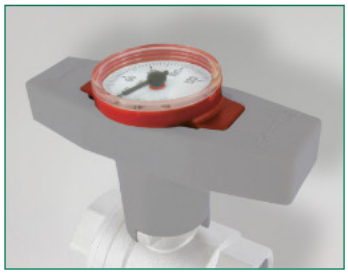
MS-ball valve

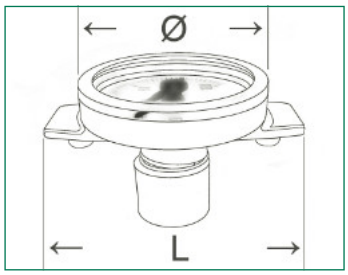
With drain, F x F, black plastic-T-handle, mountable on both sides, PN25

Item-No.:	Conn.:	Ball-pas-sage:	Thread length: t	Length: L	Ø	H	LH	Packing unit:
53491 1	1/2"	14,5	12,5	54,5	29	66	63	8/64
53492 8	3/4"	19	12	60	36	69,5	63	6/48
53493 5	1"	24	12,8	68	42,5	75,9	83	4/32
53494 2	1 ¼"	31	15,5	81,5	55	86,5	100	2/20
53495 9	1 ½"	40	16	92	69	93	100	2/16
53496 6	2"	50	19,5	110,5	84,5	104,7	110	2/ 8
Spare part: drain valve nickel plated								
S-81	1/4"							-/-



Thermometer for ISO-handle

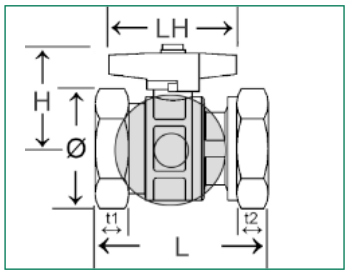




Plastic casing, 0 - 120° C, oval, red or blue

Item-No.:	Length:		Packing unit:
	L	Ø	
19134-R	55 mm	40 mm	20/200
19134-B	55 mm	40 mm	20/200

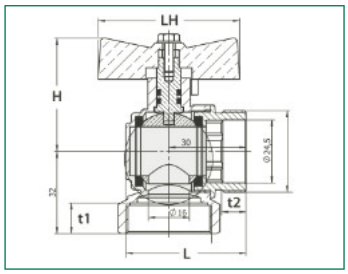
Ball valve with thermometer



F x F, with screw connection, thermometer Ø 41,5 mm, thermometer connection Ø 15 mm x 9 mm deep, range of temperature 0 - 60° C, metal casing

Item-No.: nickel pla. handle red or blue	Item-No.: brass handle red or blue	Con.:	Ball-passage:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Packing unit:
S-3317-Ni-R	S-3317-bl-R	G1" x G1"	16	12,8	13	60	36	40	60	-/-
S-3317-Ni-B	S-3317-bl-B	G1" x G1"	16	12,8	13	60	36	40	60	-/-
Set consisting of 2 valves with thermometer, handle red and blue										
S-3317-Ni-R+B	S-3317-bl-R+B	G1" x G1"	16	12,8	13	60	36	40	60	2/ 18
Spare part thermometer										
19121 4										20/240

Angle ball valve with thermometer

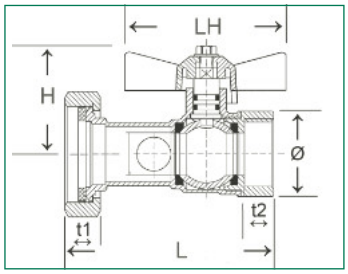


Nickel plated, short type, F x M, thermometer Ø 41,5 mm, thermometer connection Ø 15 mm x 9 mm deep, range of temperature 0 - 60° C, metal casing, wrench size 37

Item-No.: handle red or blue	Con.:	Ball-passage:	Thread length: t1	Thread length: t2	Length: L	Length: Ø	Length: H	Length: LH	Packing unit:
S-4004-MT (red)	G1" x G1"	16	12	9,5	47	24,5	44	55	-/48
S-4004-b-MT (blue)	G1" x G1"	16	12	9,5	47	24,5	44	55	-/48
Set consisting of 2 valves with thermometer, handle red and blue									
S-4004-MT-R+B	G1" x G1"	16	12	9,5	47	24,5	44	55	-/24
Spare part thermometer									
19121 4									20/240

Pump ball valve with union

F x F x F, plain brass, with 2 threaded connections for thermometers, butterfly handle, PN 25

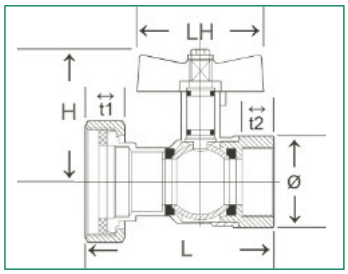


Item-No.:	Connection:	Ball-pas-sage:	Thread length:		Length:				Packing unit:
			t1	t2	L	Ø	H	LH	
S-2511	G 1 ½" x 1", 2 x G ½"	20	13,5	14	98	40	47	62	4/ 24
S-2511-SKB*	G 1 ½" x 1", 2 x G ½"	19	13,5	14	98	40	47	62	-/-
Spare part gravity brake for union nut G 1 ½"									
S-2512-SKB	M 30 x 1,5 mm x 14 mm	19							-/600

*= with gravity brake

Pump ball valve with union

Plain brass, with red T-handle



Item-No.:	Connection:	Ball-pas-sage:	Thread length:		Length:				Pack. unit:
			t1	t2	L	Ø	H	LH	
S-2520	G 1 ½" x 1"	22	14	18	88	46	68	62	-/48
S-2520-SKB*	G 1 ½" x 1"	19	14	18	88	46	68	62	-/-
S-3302	G 2" x 1 ¼"	22	13,5	18	102		65	85	-/-
S-3302-SKB*	G 2" x 1 ¼"	22	13,5	18	102		65	85	-/-

*= with gravity brake

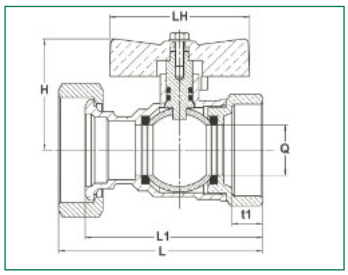
Gravity brake

For ball valves with union and ISO-T

Item-No.:	suitable for item-no.:	Ballpassage:	with thread:	Pack. unit:
S-2512	S-2520	19	M 30 x 1,5 mm	100/500
	53413-SK			
	53414-SK			

Item-No.:	suitable for item-no.:	Ballpassage:	with snap ring:	Pack. unit:
83824 8	S-3302		Ø 32 mm	-/50
	53415-SK			

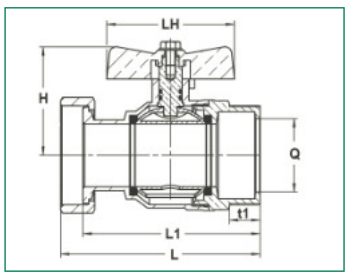
Pump flange multi-tap



Plain brass, with red T-handle, union nut x female thread

Item-No.:	Connection:	Ball-passage:	Thread length:	Length:					Pack. unit:
	Union nut X F		t1	L	L1	Ø	H	LH	
S-4264	G 1 ½" x G 1 ¼"		13,5	90	78	22	49	61,5	
S-4265	G 2" x G 2"		18	110	97	37	64	75	
S-4316	G 2" x 1 ½"		18	110	97	37	64	75	

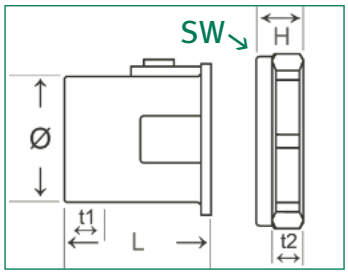
Pump flange multi-tap



Plain brass, with red T-handle, F x M

Item-No.:	Connection:	Ball-passage:	Thread length:	Length:					Pack. unit:
	F X M		t1	L	L1	Ø	H	LH	
S-4266	G 2" x G 2"		18	117	104	37	64	75	

Pump valve with union nut



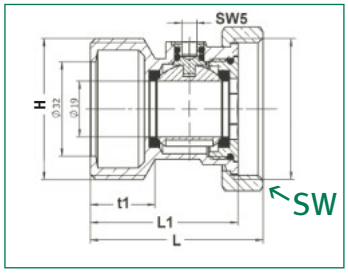
Plain brass, 1" female thread, including nut

Item-No.:	Connection:	Ball-passage:	Thread length:		Length:			Wrench size:	Packing unit:
			t1	t2	L	Ø	H	SW	
S-68	1" x 1 ½"	18,5	12,5	9	43,5	37,5	14	52	4/60

Ball valve

Plain brass, **union nut X M**, short design

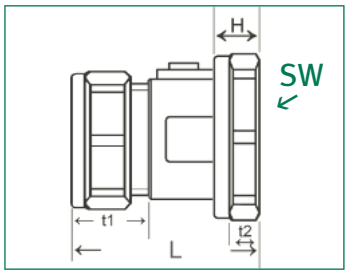
Item-No.:	Connection:	Ball-passage:	Thread length:	Length:					Pack. unit:
	Union nut X M		t1	L	L1	Ø	H	SW	
S-4267	G 1 ½" x G 1 ½"	19	22	58,5	50	32		52	



Pump ball valve with compression connector

Plain brass, including union nut

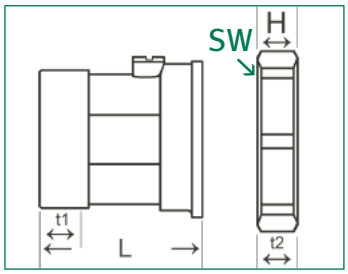
Item-No.:	Connection:	Ball-passage:	Thread length:		Length:		Wrench size:	Packing unit:
	Compre. nut x m		t1	t2	L	H	SW	
S-32	28 mm x G 1 ½"	18,5	12	9	58,5	14	52	6/60



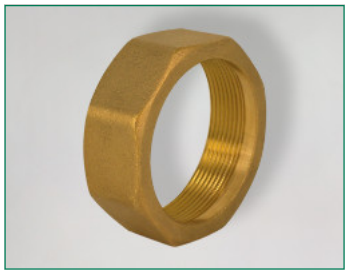
Pump ball valve

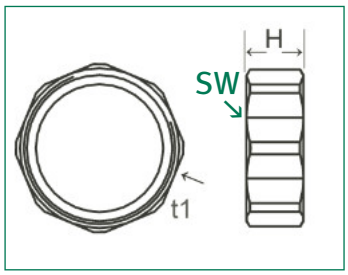
Brass nickel plated, 1" female thread, including union nut 1 1/2", heavy version

Item-No.:	Connection:	Ball-passage:	Thread length:		Length:		Wrench size:	Packing unit:
			t1	t2	L	H	SW	
S-42	G 1" x G 1 ½"	19	15	16	50	19	52	-/72



Union nut

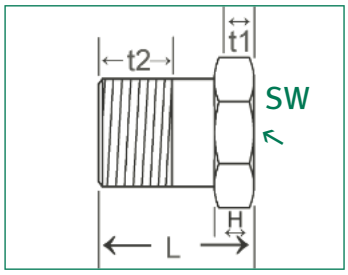




Plain brass, female threaded (matches to S-68)

Item-No.:	Connection:	Thread length: t1	Heigth: H	Wrench size: SW	Packing unit:
S-69	M 47 x 1,5	15,5	19	52	25/300

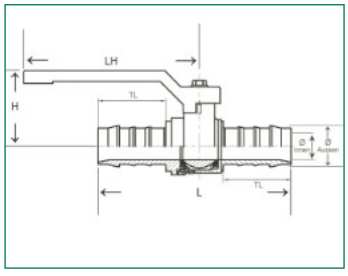
Screw connection for ball valves



M x F, brass nickel plated, flat sealing

Item-No.:	Connec.:	Thread length:		Length:		Wrench size:	Packing unit:
	M x F	t1	t2	L	H	SW	
S-107	3/4" x 1"	11	13	35	13	37	1/220

Ball valve



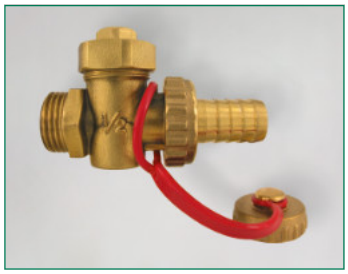
Plain brass, hose connectors on both sides, red steel lever

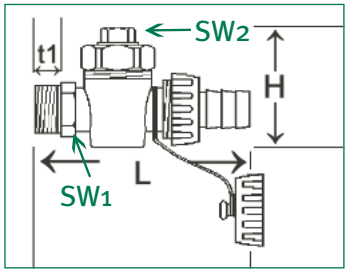
Item-No.:	Conn.:	Ball-passage:	Spout length: TL	Length: L	Inside Ø	Outside Ø	LH	Pack. unit:
S-029		12	30	92	12	17	75,5	10/80
S-3192		14,5	39	110,5	14,5	20	75,5	10/60
S-030		21	30	102	21	25,4	120	6/36

Fill and drain valve

Plain brass, with stuffing box, loop with cap, temperature range up to max. + 90° C, seals conical

Item-No.:	Conn.:	Ball-passage:	Thread length:	Length:		Wrench size:		PN:	Packing unit:
			t1	L	H	SW1	SW2		
54711 9	1/2"	9	8,5	72,5	47,5	22	12	10	10/100
54712 6	3/4"	-	11,5	92,3	55	28	14	-	10/ 60

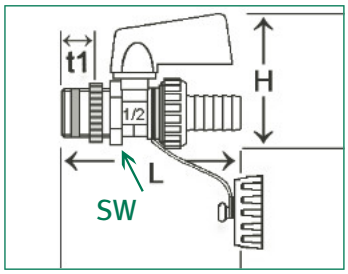




Fill and drain ball valve

Complete with cap, chain and hose connector, O-ring made of FKM, red butterfly handle, self sealing, with locking ring, temperature range up to max. + 110° C

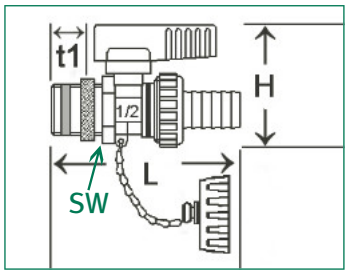
Item-No.: plain	Item-No.: nickel plat.	Conn.:	Ball-pas-sage:	Thread length:	Length:		Wrench size:	PN:	Packing unit:
				t1	L	H	SW		
54731 7	54736 2	1/2"	9	21	77,5	49	24	10	10/100



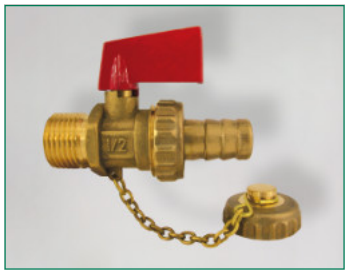
Fill and drain ball valve

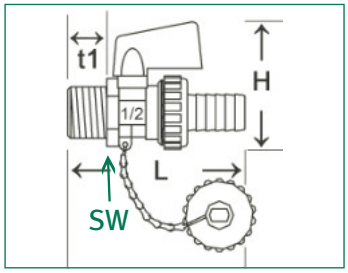
Heavy version, nickel plated, complete with cap, chain and hose connector, O-ring made of FKM, red butterfly handle, self sealing, with locking ring, temperature range up to max. + 110° C

Item-No.: plain	Item-No.: nickel plat.	Conn.:	Ball-pas-sage:	Thread length:	Length:		Wrench size:	PN:	Packing unit:
				t1	L	H	SW		
-	54738 6	1/2"	9	21	77,5	49	24	10	15/90



Fill and drain ball valve

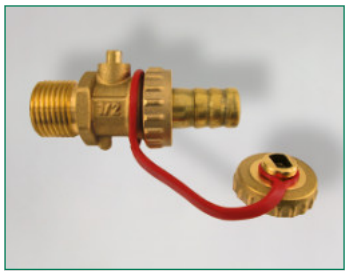


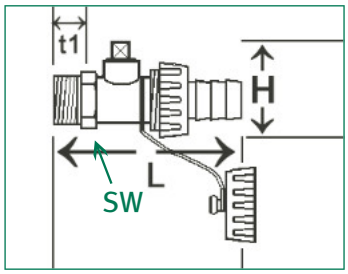


Complete with cap, chain, hose connector, not self-sealing, O-ring made of FKM, red aluminium butterfly handle

Item-No.: plain	Item-No.: nick. plat.	Conn.:	Ball-passage:	Thread length: t1	Length: L	Length: H	Wrench size: SW	PN:	Packing unit:
54741 6	54746 1	1/2"	9	16	72,5	52	24	10	12/144
54742 6	54747 8	3/4"	9	16	70,5	52	24		10/100

Fill and drain ball valve, PN 10

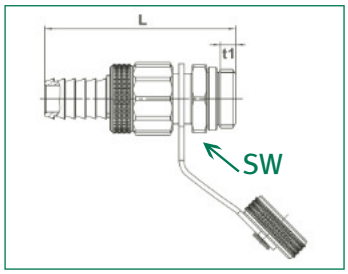




Plain brass, complete with cap, plastic loop and hose connector, O-ring made of FKM, temperature range up to max. + 110° C

Item-No.:	Conn.:	Ball-passage:	Thread length: t1	Length: L	Length: H	Wrench size: SW	PN:	Packing unit:
54720 1	3/8"							12/144
54721 8	1/2"	9	16	72,5	35,5	24	10	15/ 90

Fill and drain valve



Compact design, with cap and plastic loop, hose connector, self sealing

Item-No.:	Connection:	Thread length: t1	Length: L	Wrench size: SW	PN:	Packing unit:
54744-ver2	1/2" x M 21 x 1,5 mm	4	66,5	24	10	12/144

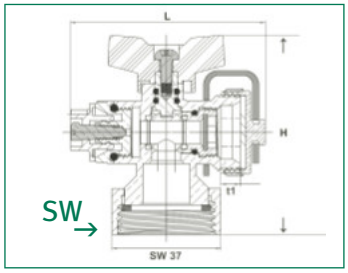
Spare part for 54744 (without illustration)

Item-No.:	Connection:
54744-Verschraubung	1/2" x M 21 x 1,5 mm

Fill and drain valve

Set of 2 union nuts made of plain brass or nickel-plated, with ventilation screw, red and blue handle, with removable nut

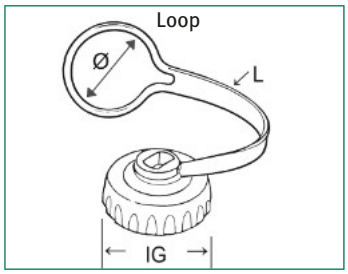
Item-No.: plain brass	Item-No.: nickel-plated	Connection: F x M	Ball-pas-sage:	Thread length: t1	Length: L	Length: H	Wr. size: SW	Pack. unit:
S-2678	S-2678-Ni	G1" x 3/4"	8	7	66	67,5	37	-/40



Replacement loop with cap

Black plastic loop with blank brass cap and sealing

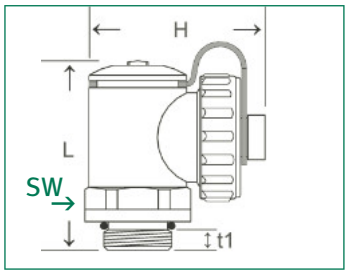
Item-No.:	Conn.:	Thread length: t1	Length: L loop	Length: Ø loop	IG	Packing unit:
S-2606-bl	3/4"	6,5	86	24	G3/4	1/1100



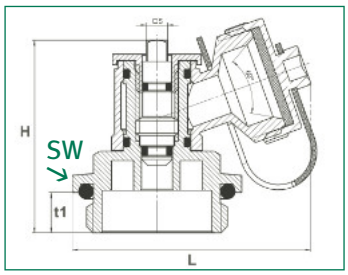
Radiator valve with turnable outlet

Brass, heavy version, swivel spout, with connection option for 3/4" hose connectors, captive cap with EPDM sealing

Item-No.: plain	Item-No.: nickel plated	Conn.:	Leav.:	Thread length: t1	Length: L	Length: H	Wr. size SW	PN:	Packing unit:
S-346-1/2	S-346-1/2-Ni	1/2"	3/4"	5	47	45	24	10	12/100
S-346-3/8	S-346-3/8-Ni	3/8"	3/4"	5	47	45	24	10	12/100
S-1947		1/2"	1/2"						12/100
Spare part for S-346-1/2/Ni:									
S-346-O-Ring		7,2 x 1,9 mm							



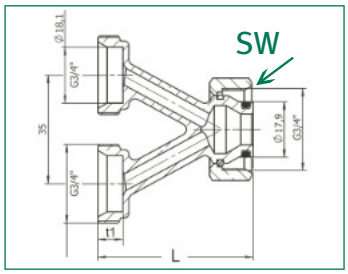
Radiator valve with turnable outlet



Brass, light version, swivel spout

Item-No.: plain	Item-No.: nickel plated	Connec.:	Thread length: t1	Length: L	H	Wr. size: SW	PN:	Packing unit:
S-1776-3/8	S-1776-3/8-Ni	3/8"	8	49	44	24		-/120
S-1776-1/2	S-1776-1/2-Ni	1/2"	8	49	44	24		-/120
S-1776-1	S-1776-1-Ni	1"	9,5	56	52	27		-/ 80
as above, only cap male thread x female thread 3/4" NPT								
-	S-1776-1-Ni-NPT	1" x 3/4"	7	61	53	27		-/-

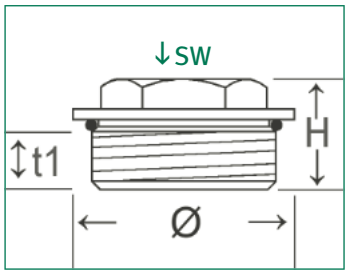
Heater fork piece



Brass nickel-plated, with Euro-cone

Item-No.:	Connec.: M x M x union nut	Thread length: t1 M	Length: L	Wrench size: SW	Packing unit:
36299 6	G3/4" x G3/4" x G3/4"	8	50	30	-/100

Connection nipple



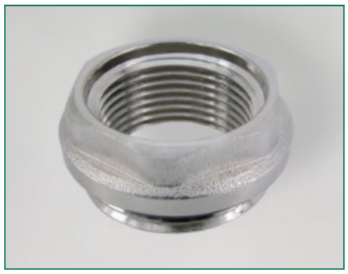
M x F, brass, with O-ring in groove

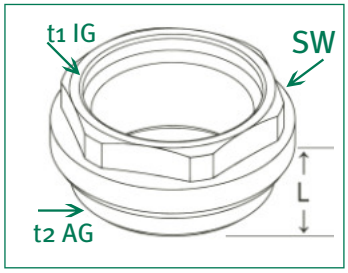
Item-No.: plain	Item-No.: nickel plated	Conn.:	Thread length: t1	Length: Ø		Wrench size: SW	Packing unit:
S-731-Nippel	S-731-Nippel-Ni	1" x 1/2"	6	39	19,5	27	10/350

Reducing nipple

Brass nickel plated, sandblasted, with O-ring in groove

Item-No.:	Thread:		Length:	Wrench size:	Packing unit:
	t1 F	t2 M	L	SW	
S-3082-4	3/4"	1"	18	32	-/300
Spare part:					
S-3082-4-O-Ring	30 x 3,5 mm				

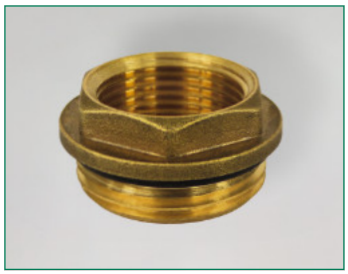


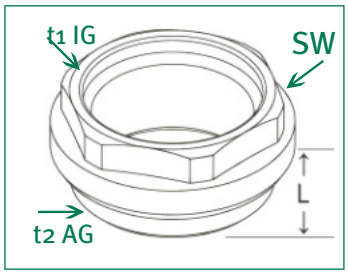


Reducing nipple

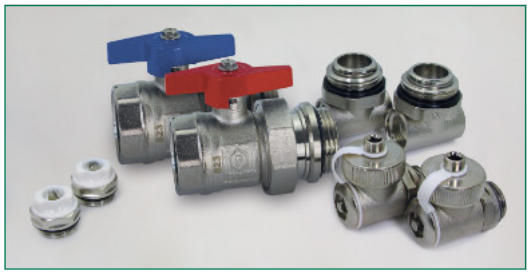
Plain brass, with O-ring, not routed

Item-No.:	Thread:		Length:	Wrench size:	Packing unit:
	t1 F	t2 M	L	SW	
S-730-3/4	3/4"	1"	19	30	-/-





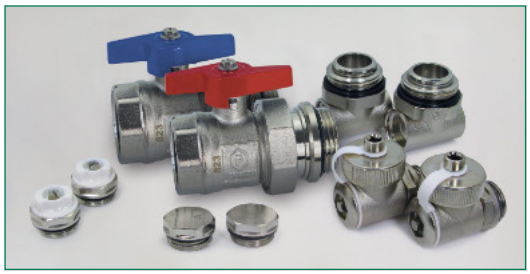
Mounting kit for manifolds



Consisting of 8 parts, 2 ball valves with screw connections (red/blue), 2 fill and drain valves, 2 T-pieces made of brass with turnable screw connection at the top, 2 airvent plugs

Qua.:	Item-No.:	Description:	
	54791 1		
Set consisting of:			
1	53373 0	Ball valve, brass, red lever	**f** G1" x **m** G1"
1	53373-Blau	Ball valve, brass, blue lever	**f** G1" x **m** G1"
2	S-346-½-Ni	Fill and drain valve	1/2" x 3/4"
2	S-822-Ni	T-piece, brass	**f** G1/2" x **m** G1" x **f** G1/2"
2	54761 4	Air vent plugs	1/2"

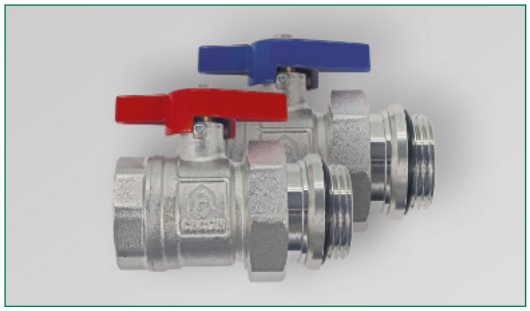
Mounting kit for manifolds

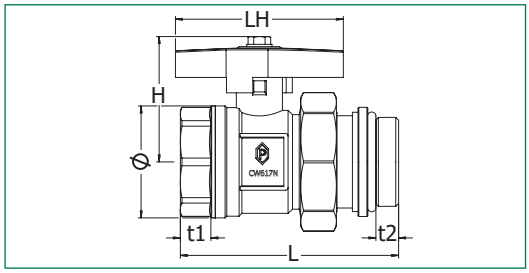


Consisting of 10 parts, 2 ball valves with screw connections (red/blue), 2 fill and drain valves, 2 T-pieces made of brass with turnable screw connection at the top, 2 airvent plugs, 2 plugs with O-ring

Qua.:	Item-No.:	Description:	
	54792 8		
Set consisting of:			
1	53373 0	Ball valve, brass, red lever	**f** G1" x **m** G1"
1	53373-Blau	Ball valve, brass, blue lever	**f** G1" x **m** G1"
2	S-346-½-Ni	Fill and drain valve	1/2" x 3/4"
2	S-822-Ni	T-piece, brass	**f** G1/2" x **m** G1" x **f** G1/2"
2	54761 4	Air vent plugs	1/2"
2	54760 7	Closure plugs	G1/2"

Ball valves for manifold connection





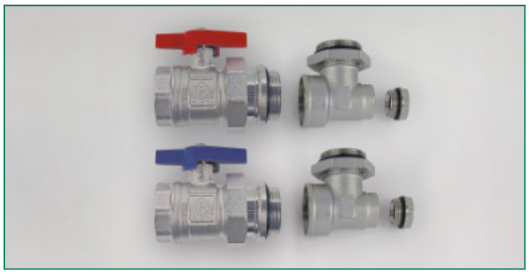
Set of 2 ball valves, nickel plated, with self-sealing screw connection with fixed O-ring (FKM), T-handle red and T-handle blue

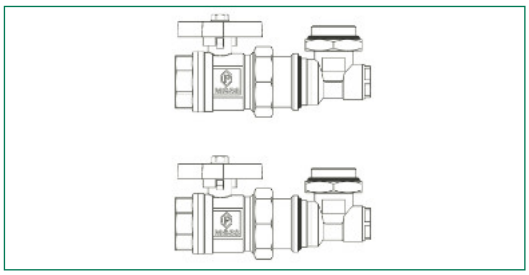
Item-No.: Brass*	Ball-pas-sage:	Thread length: **F** G1"	**M** G1"	Length: L	Heigth: H	Pack. unit:
53373-11658-R+B	22	12	10	78	45	-/16

Mounting kit for manifolds „S-3087“

Brass*, 90°, 1" male thread x 1" female thread, consisting of:

Qua.:	Item-No.:	Description:
1	53373-11658	Ball valve, brass, red lever G1" x G1"
1	53373-11658-B	Ball valve, brass, blue lever G1" x G1"
2	S-3087-1	T-piece, with turnable top screw connection **F** G1" x **M** G1" x **F** G1/2"
2	54760-11555	Plug with O-ring G1/2"

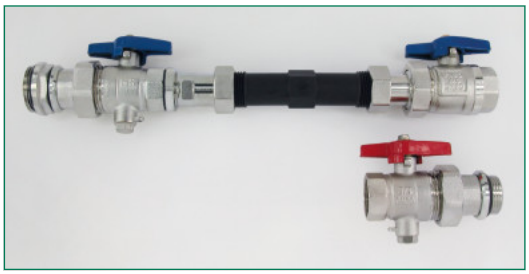


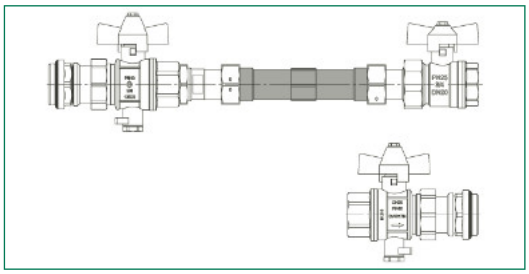


Heat meter mounting kit „S-3082“

Brass*, for heat meter mounting kits 1/2", full flow, length = 110 mm, consisting of:

Qua.:	Item-No.:	Description:
1	S-3082-2	3/4" glassfibre reinforced PA tube, black, 110 mm
1	S-3082-1	Screw connection, brass **F** G3/4" x **M** 3/4"
2	S-3082-4	Reducing nipple, brass, O-ring **F** G3/4" x **M** G1"
1	S-3082-3	Screw connection, brass **F** G1" x **F** G3/4"
2	53372-Verschr.	Screw connection for ball valve G3/4" x G1"
1	S-3082-5-R	Ball valve, brass, with sensor connection, red handle G3/4" x G1" x M10 x 1 mm
1	S-3082-5-B	Ball valve, brass, with sensor connection, blue handle G3/4" x G1" x M10 x 1 mm
1	53288-blau	Ball valve, brass, blue handle **F** G3/4" x **M** G1" L=50



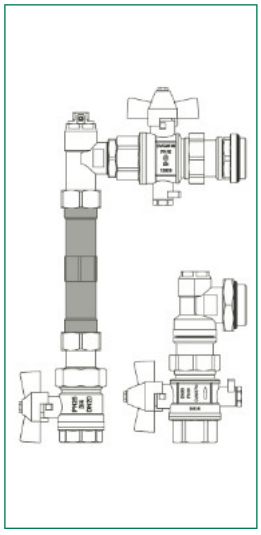


*** Brass parts are made of CW 617 N, nickel plated**

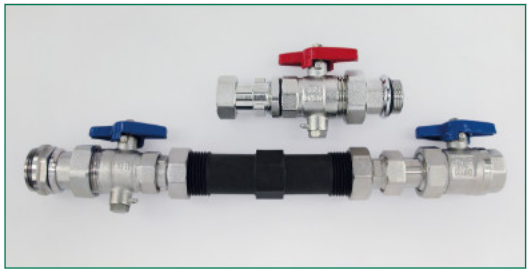
Heat meter mounting kit „S-3083“

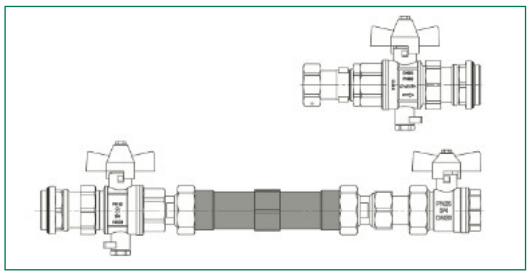
Brass*, for heat meter mounting kits 1/2", 90°, length = 110 mm, consisting of:

Qua.:	Item-No.:	Description:
1	S-3082-2	3/4" glassfibre reinforced PA tube, black, 110 mm
1	S-3082-3	Screw connection, brass **F** G1" x **F** G3/4"
1	S-3083-1	T-piece, brass **F** G3/4" x **M** G1" x **F** G1/2"
1	S-3083-2	T-piece, brass **F** G3/4" x **M** 3/4" x **F** G1/2"
1	S-3082-4	Reducing nipple, brass, O-ring **F** G3/4" x **M** G1"
1	54760-11555	Plug with O-ring G1/2"
1	54761 4	Airvent plug 1/2"
2	53372-Verschr.	Screw connection for ball valve G3/4" x G1"
1	S-3082-5-R	Ball valve, brass, with sensor connection, red handle G3/4" x G1" x M10 x 1 mm
1	S-3082-5-B	Ball valve, brass, with sensor connection, blue handle G3/4" x G1" x M10 x 1 mm
1	53288-blau	Ball valve, brass, blue handle **F** G3/4" x **M** G1" L=50



Heat meter mounting kit „S-3084“

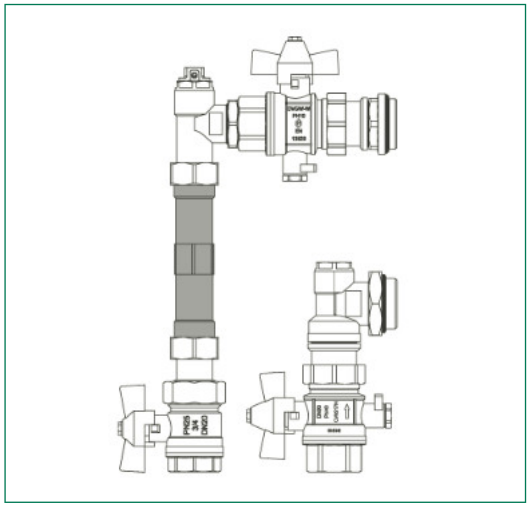




Brass*, for heat meter mounting kits 3/4", full flow, length = 130 mm, consisting of:

Qua.:	Item-No.:	Description:
1	S-3084-2	1" glassfibre reinforced PA tube, black, 130 mm
1	S-3082-1	Screw connection, brass **F** G 3/4" x **M** 3/4"
1	S-3082-3	Screw connection, brass **F** G 1" x **F** G 3/4"
2	S-3082-4	Reducing nipple, brass, O-ring **F** G 3/4" x **M** G 1"
2	S-3084-1	Screw connection, brass **M** G 3/4" x **F** 1"
2	53372-Verschr.	Screw connection for ball valve G 3/4" x G 1"
1	S-3082-5-R	Ball valve, brass, with sensor connection, red handle G 3/4" x G 1" x M10 x 1 mm
1	S-3082-5-B	Ball valve, brass, with sensor connection, blue handle G 3/4" x G 1" x M10 x 1 mm
1	53288-blau	Ball valve, brass, blue handle **F** G 3/4" x **M** G 1" L=50

Heat meter mounting kit „S-3085“



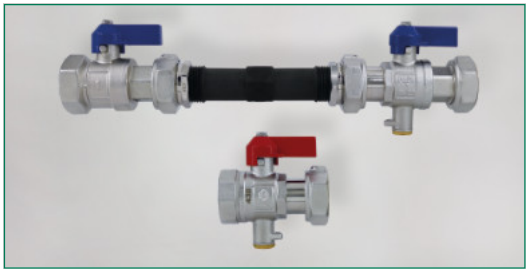
Brass*, for heat meter mounting kits 3/4", 90°, length = 130 mm, consisting of:

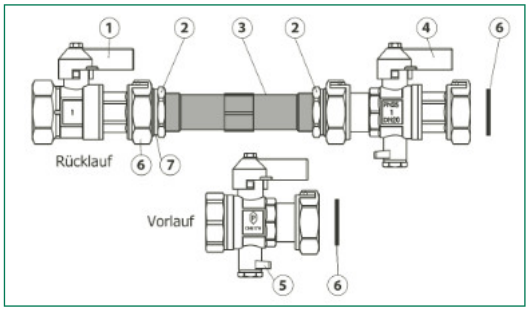
Qua.:	Item-No.:	Description:
1	S-3084-2	1" glassfibre reinforced PA tube, black, 130 mm
2	S-3084-1	Screw connection, brass **M** G 3/4" x **F** 1"
1	S-3083-1	T-piece, brass **F** G 3/4" x **M** G 1" x **F** G 1/2"
1	S-3083-2	T-piece, brass **F** G 3/4" x **M** 3/4" x **F** G 1/2"
1	S-3082-3	Screw connection, brass **F** G 1" x **F** G 3/4"
1	S-3082-4	Reducing nipple, brass, O-ring **F** G 3/4" x **M** G 1"
1	54760-11555	Plug with O-ring G 1/2"
1	54761	Airvent plug 1/2"
2	53372-Verschr.	Screw connection for ball valve G 3/4" x G 1"
1	S-3082-5-R	Ball valve, brass, with sensor connection, red handle G 3/4" x G 1" x M10 x 1 mm
1	S-3082-5-B	Ball valve, brass, with sensor connection, blue handle G 3/4" x G 1" x M10 x 1 mm
1	53288-blau	Ball valve, brass, blue handle **F** G 3/4" x **M** G 1" L=50

Detailed description in particular:

S-3082-1	Screw connection, brass	look page 71
S-3082-2	¾" glassfibre reinforced PA tube, black	look page 76
S-3082-3	Screw connection, brass	look page 71
S-3082-4	Reducing nipple, brass	look page 72
S-3082-5-R	Ball valve, brass, with sensor connection, red handle	look page 32
S-3082-5-B	Ball valve, brass, with sensor connection, blue handle	look page 32
S-3083-1	T-piece, brass	look page 70
S-3083-2	T-piece, brass	look page 71

Heat meter mounting kit-40160-1

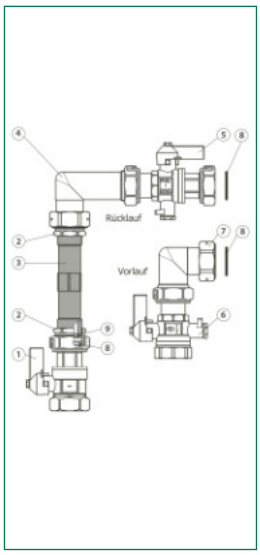




Heat meter mounting kit **horizontal**

Pos.:	Qua.:	Item-No.:	Description:
1	1	S-3818-02-b	Ball valve, brass, nickel-plated, blue, reduced, with union nut, **F/F,** G1" x G1"
2	2	S-3938-OD	Reducing nipple, brass, nickel-plated, flat sealing, without seal, **M/F,** G1" x G3/4"
3	1	S-3082-2	Connecting tube, black, **M/M,** G3/4" x 110 mm
4	1	S-3969-01-b	Ball valve, brass, nickel-plated, blue, 2 union nut, sensor connection, **F/F,** G1" x G1" x M10 x 1 mm
5	1	S-3818-03	Ball valve, brass, nickel-plated, red, union nut, sensor connection, **F/F,** G1" x G1" x M10 x 1 mm
6	4	49011	Seal ring, 1/2", 30 mm x 21 mm x 2 mm
7	2	WS-551-AFM	Sealing AFM, KTW audited, 16,9 mm x 23,7 mm x 2 mm (3/4")

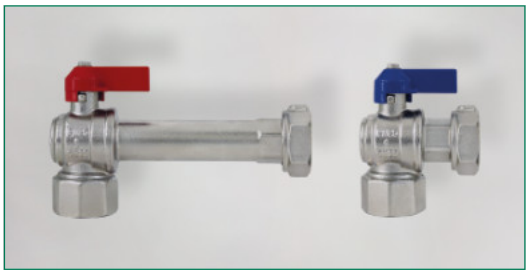
Heat meter mounting kit-40160-2

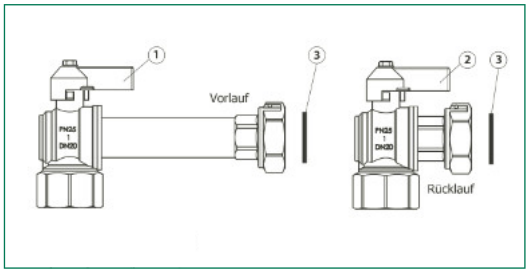


Heat meter mounting kit **vertical**

Pos.:	Qua.:	Item-No.:	Description:
1	1	S-3818-02-b	Ball valve, brass, nickel-plated, blue, reduced, with union nut, **F/F,** G1" x G1"
2	2	S-3938-OD	Reducing nipple, brass, nickel-plated, flat sealing, without seal, **M/F,** G1" x G3/4"
3	1	S-3082-2	Connecting tube, black, **M/M,** G3/4" x 110 mm
4	1	S-3818-04	Angle, brass, **F/M,** with 2 union nut, 90°, G1" x G1" x 35 mm x 65 mm
5	1	S-3969-01-b	Ball valve, brass, nickel-plated, blue, 2 union nut, sensor connection, **F/F,** G1" x G1" x M10 x 1 mm
6	1	S-3818-03	Ball valve, brass, nickel-plated, red, union nut, sensor connection, **F/F,** G1" x G1" x M10 x 1 mm
7	1	S-3037-Ni	Angle, brass, nickel-plated, **M/F,** with union nut, 90°, G1" x G1"
8	6	49011	Seal ring, 1/2", 30 mm x 21 mm x 2 mm
9	2	WS-551-AFM	Sealing AFM, KTW audited, 16,9 mm x 23,7 mm x 2 mm (3/4")

Heat meter mounting kit-40160-3



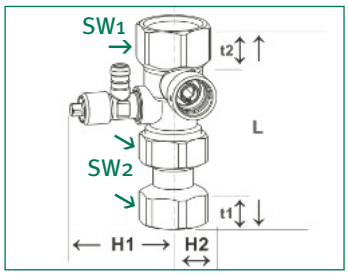


Angle-ball valve-set

Pos.:	Qua.:	Item-No.:	Description:
1	1	S-3816	Ball valve, brass, nickel-plated, red, union nut, angular shape 120 mm, **F/F,** G1" x G1" x DN19 x 120 mm
2	1	S-3817-b	Ball valve, brass, nickel-plated, blue, screw, angular shape 42 mm, **F/F,** G1" x G1" x DN19 x 42 mm
3	2	49011	Seal ring, 1/2", 30 mm x 21 mm x 2 mm

All components are pre-assembled, sealings of individual components using O-rings or flat sealings

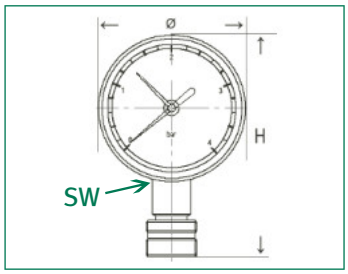
Cap valve



Completely plain brass, including drain valve, plastic cap, sealing wire and lead seal, suitable for solar applications as well

Item-No.:	Conn.:	Thread length:		Length:			Wrench size:		PN:	Packing unit:
plain		t1	t2	L	H1	H2	SW1	SW2		
S-2313-3/4	3/4"	13	17	94	50	37	30	30	10	-/ 36
S-2313-1	1"	15,5	15	99	50	37	37	37	10	-/ 36
Spare parts for cap valve:										
S-2312-1-2	Sealing wire + lead seal									/1000
S-2312-3	Plastic cap									10/1000
S 2312-1"-AFM	Replacement seal, AFM 34, KTW-tested, 30 x 20 x 2 mm (1")									/5000

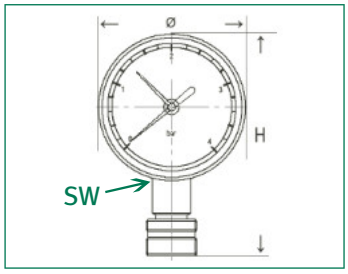
Bourdon tube pressure gauge



Plastic housing, self sealing, 0-4 bar, NG 63

Item-No.:	Dim.:	Ø	Hight H:	Wrench size:	Pack. unit:
19140 4	G 3/8"	62	84,4	14	1/100

Rohrfeder-Manometer



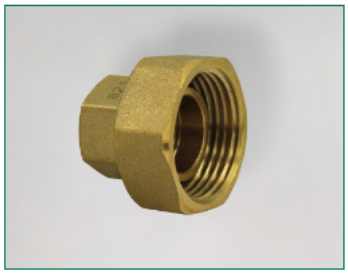
Plastic housing, self sealing, 0-6 bar, NG 63

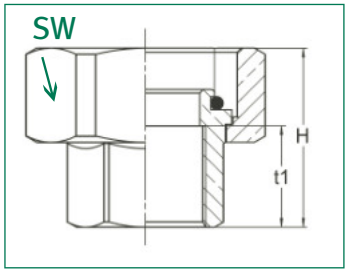
Item-No.:	Dim.:	Ø	Hight H:	Wrench size:	Pack. unit:
19141	G 1/4"	53	72	14	1/100

Union made of brass

Plain brass, F x union nut, with O-ring sealing

Item-No.:	Dim.:	Thread length: t1	Length: H	Wrench size:	Packing unit:
34695 8	G 3/8" conn., G 3/4" union nut	14	25	30	20/240

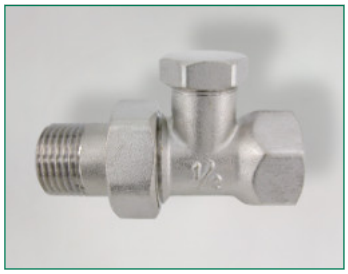


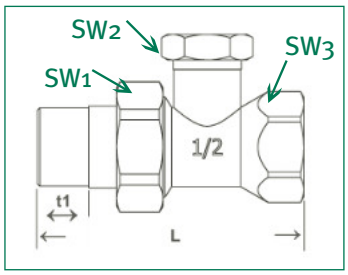


Radiator valve*, straight type

Brass, can be isolated and regulated, temperature range up to max. + 110° C, double-sided flow direction, spindle with O-ring seal, to be shut-off with hexagon socket (wrench size 8)

Item-No.: plain	Item-No.: nickel pla.	Conn.:	Thread length: t1	Length: L	Length: H	Wrench size: SW 1/2/3	PN:	Packing unit:
54610 5	54615 0	3/8"	10	63	36		10	12/108
54611 2	54616 7	1/2"	11	68,5	39	27/20/20	10	12/ 96
54612 9	54617 4	3/4"	13	80,5	41	38/26/32	10	8/ 80
54613 6	54618 1	1"		99			10	-/ 60
Spare part EPDM O-Ring for parking screw:								
54614 3	for 3/8" + 1/2"							

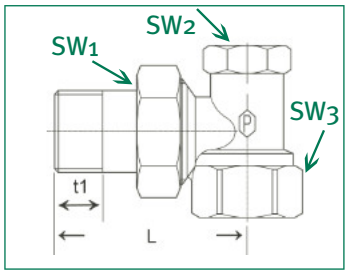




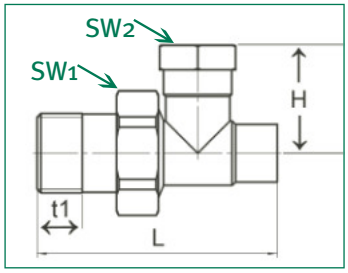
Radiator valve*, angular type

Brass, can be isolated and regulated, temperature range up to max. + 110° C, double-sided flow direction, spindle with O-ring seal, to be shut-off with hexagon socket (wrench size 8)

Item-No.: plain	Item-No.: nickel pla.	Conn.:	Thread length: t1	Thread length: t2	Length: L	Length: H	Wrench size: SW 1/2/3	PN:	Packing unit:
54620 4	54625 9	3/8"	11	8,5		45		10	12/108
54621 1	54626 6	1/2"	11,5	10	48	45	27/20/20	10	12/ 96
54622 8	54627 3	3/4"	12,5	11	59	49	38/26/32	10	8/ 80
54623 5	54628 0	1"			67			10	-/ 80
Spare part EPDM O-Ring for parking screw:									
54614 3	for 3/8" + 1/2"								



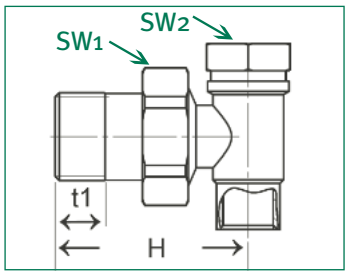
Radiator valve* with solder connection, straight type



Brass, can be isolated and regulated, temperature range up to max. + 110° C

Item-No.: plain	Item-No.: nickel pla.	Connection:	Thread length: t1	Length: L	Length: H	Wrench size: 1/2	PN:	Packing unit:
54630 3	54635 8	3/8" x 12 mm		62			10	12/144
54631 0	54636 5	1/2" x 12 mm	12	63,5	26	30/20	10	12/144
54632 7	54637 2	1/2" x 15 mm	11,5	65,5	26	30/27	10	12/ 96
Spare part EPDM O-Ring for parking screw:								
54614 3	for 3/8" + 1/2"							

Radiator valve* with solder connection, angular type

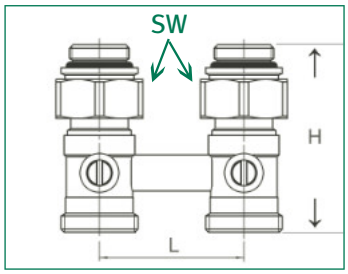


Brass, can be isolated and regulated, temperature range up to max. + 110° C

Item-No.: plain	Item-No.: nickel pla.	Connection:	Thread length: t1	Length: L	Length: H	Wrench size: SW 1/2	PN:	Packing unit:
54640 2	54645 7	3/8" x 12 mm			45		10	12/144
54641 9	54646 4	1/2" x 12 mm	12	43,5	46,5	30/20	10	12/144
54642 6	54647 1	1/2" x 15 mm	12,5	45	48	30/20	10	12/108
Spare part EPDM O-Ring for parking screw:								
54614 3	for 3/8" + 1/2"							

*** Note: radiator fittings are only for tension-free mounting**

Two-pipe valve block, straight type



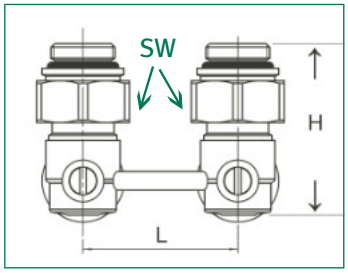
Brass nickel plated, 50 mm distance, ball shut-off, self-sealing connection nipple (O-ring), hexagon nut with tolerance compensation, non-slipping sealing insert, operating temperature max. 120° C, packed in single box

Item-No.:	Execution:	Conn.:	Thread length: t1	Thread length: t2	Length: L	Length: H	Wre. size: SW	PN:	Packing unit:
54511 5	with connection nipple	1/2"			50	67	30	10	1/40
54512 2	with Euro conus	3/4"			50	56	30	10	1/42

Two-pipe valve block, angular type

Brass nickel plated, 50 mm distance, self-sealing connection nipple (O-ring), hexagon nut with tolerance compensation, non-slipping sealing insert, operating temperature max. 120° C, packed in single box

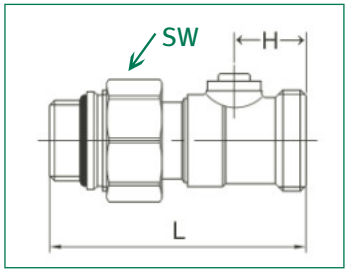
Item-No.:	Execution:	Conn.:	Thread length:	Length:			Wre. size:	PN:	Pack. unit:
			t1	L1	L2	H	SW		
54521 4	with connection nipple	1/2"		50		55	30	10	1/40
54522 1	with Euro conus	3/4"		50		45	30	10	1/42



Single-pipe valve block, straight type

Brass nickel plated, self-sealing connection nipple (O-ring), hexagon nut with tolerance compensation, non-slipping sealing insert, operating temperature max. 120° C, packed in single box

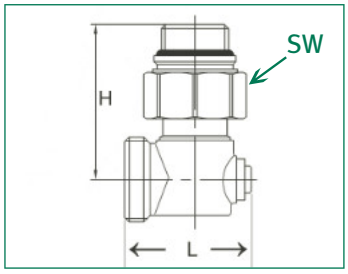
Item-No.:	Execution:	Conn.:	Thread length:		Length:		Wre. size:	PN:	Packing unit:
			t1	t2	L	H	SW		
54516 0	with connection nipple	1/2"			67	36	30	10	1/125
54517 7	with Euro conus	3/4"			56	36	30	10	1/175



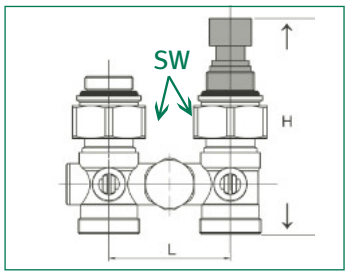
Single-pipe valve block, angular type

Brass nickel plated, self-sealing connection nipple (O-ring), hexagon nut with tolerance compensation, non-slipping sealing insert, operating temperature max. 120° C, packed in single box

Item-No.:	Execution:	Conn.:	Thread length:		Length:		Wre. size:	PN:	Packing unit:
			t1	t2	L	H	SW		
54526 9	with connection nipple	1/2"			46	61	30	10	1/125
54527 6	with Euro conus	3/4"			47	47	30	10	1/175



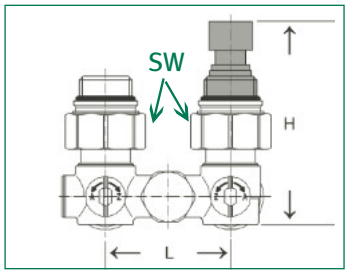
Single-pipe valve block, straight type



Brass nickel plated, with gravity brake, packed in single box

Item-No.:	Execution:	Conn.:	Thread length:		Length:			Wre. size:	PN:	Pack. unit:
	Center distance 50 mm		t1	t2	L1	L2	H	SW		
54531 3	with connection nipple	1/2"			50		89	30	10	1/60
54532 0	with Euro conus	3/4"			50		55	30	10	1/60

Single-pipe valve block, angular type



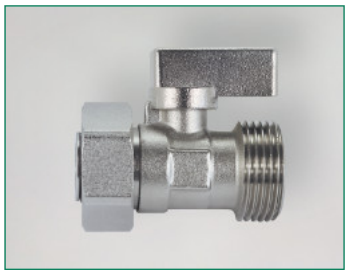
Brass nickel plated, with gravity brake, packed in single box

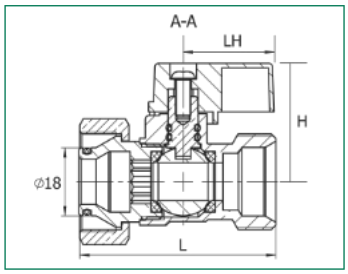
Item-No.:	Execution:	Conn.:	Thread length:		Length:			Wre. size:	PN:	Pack. unit:
	Center distance 50 mm		t1	t2	L1	L2	H	SW		
54541 6	with connection nipple	1/2"			50		89	30	10	1/60
54542 9	with Euro conus	3/4"			50		55	30	10	1/60

Spare parts for valve blocks without illustration

Item-No.:	Spare part:	Connection:	P. unit:
54518 4	Connection nipple made of brass	1/2" x 3/4"	-/-
54519 1	Euro conus for valve blocks made of brass	3/4"	-/-
54528 3	EPDM-moulded seal		-/-

Mini-Hahnblock mit Griff





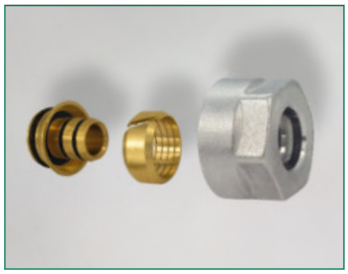
Brass nickel plated, 2 xEuro conuss, IG x AG , mit O-Ring in Einzelkarton verpackt

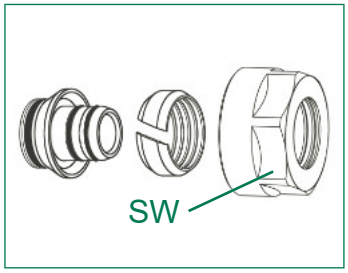
Item-No.:	Execution:	Conn.:	Thread length:	Length				PN:	P. unit:
				L	LH	H	SW		
54515	2 x Eurokonus	3/4"	10	51,8	28,5	31,5	30	10	25/100

Compression fitting for aluminium composite piping - and plastic pipes

Consisting of: 2 compression fittings 2-pieces, brass, 3/4" female thread, with round nut, packaged as 2 pcs-set

Item-No.: nickel plated	Item-No.: plain	Dimension:	Wrench size: SW:	Packing unit:
36210 1	36220 0	10 x 2 mm	27	-/-
36211 8	36221 7	12 x 1,8 mm	27	-/-
36212 5	36222 4	14 x 2 mm	27	-/-
36214 9	36224 8	16 x 2 mm	27	-/-
36215 6	36225 5	17 x 2 mm	27	-/-
36216 3	36226 2	18 x 2 mm	27	-/-
36217 0	36227 9	20 x 2 mm	27	-/-
for PEX-pipe, without corrosion protection and O-rings				
36218 7	36228 6	20 x 3,4 mm	27	-/-

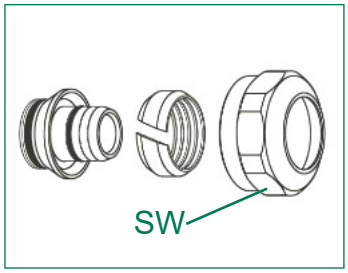




Compression fitting for aluminium composite piping - and plastic pipes

Consisting of: 2 compression fittings 3-pieces, brass, 3/4" female thread, packaged as 2 pcs-set

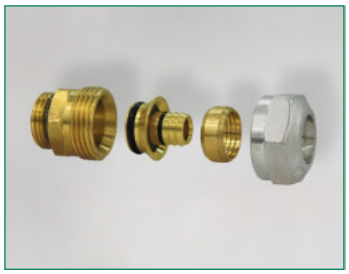
Item-No.: nickel plated	Item-No.: plain	Dimension:	Wrench size: SW:	Packing unit:
36230 9	36240 8	10 x 2 mm	30	-/-
36231 6	36241 5	12 x 2 mm	30	-/-
36232 3	36242 2	14 x 2 mm	30	-/100
36234 7	36244 6	16 x 2 mm	30	-/100
36235 4	36245 3	17 x 2 mm	30	-/100
36236 1	36246 0	18 x 2 mm	30	-/100
36237 8	36247 7	20 x 2 mm	30	-/100

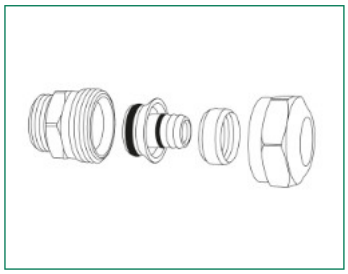


Connection fitting for aluminium composite piping - and plastic pipes

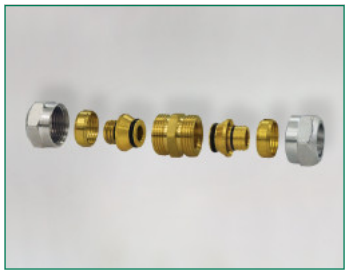
Consisting of: compression fitting 3-pieces, with reducing nipple (G 1/2" x G 3/4" Euro cone), brass nickel plated or brass

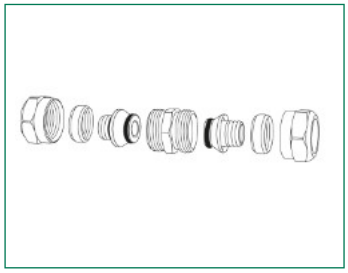
Item-No.: nickel plated	Item-No.: plain	Dimension:	Wrench size: SW:	Packing unit:
36270 5	36280 4	10 x 2 mm x G 1/2"		-/-
36271 2	36281 1	12 x 2 mm x G 1/2"		-/-
36272 9	36282 8	14 x 2 mm x G 1/2"		-/-
36274 3	36284 2	16 x 2 mm x G 1/2"		-/-
36275 0	36285 9	17 x 2 mm x G 1/2"		-/-
36276 7	36286 6	18 x 2 mm x G 1/2"		-/-
36277 4	36287 3	20 x 2 mm x G 1/2"		-/-





Pipe coupling for aluminium composite piping - and plastic pipes

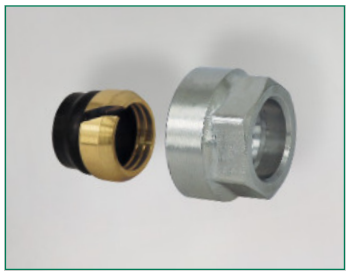


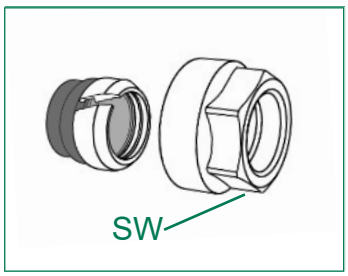


Consisting of: 2 x compression fitting 3-pieces with brass double nipple (3/4" Eurocone), brass nickel plated or brass

Item-No.: nickel plated	Item-No.: plain	Dimension:	Wrench size: SW:	Packing unit:
36250 7	36260 6	10 x 2 mm		-/-
36251 4	36261 3	12 x 2 mm		-/-
36252 1	36262 0	14 x 2 mm		-/-
36254 5	36264 4	16 x 2 mm		-/-
36255 2	36265 1	17 x 2 mm		-/-
36256 9	36266 8	18 x 2 mm		-/-
36257 6	36267 5	20 x 2 mm		-/-

Compression fitting

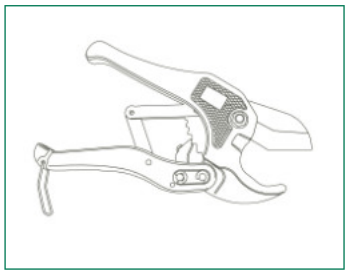




Compression fitting 2-pieces, brass nickel plated, female thread

Item-No.: nickel plated	Item-No.: plain	Dimension:	Wrench size: SW:	Packing unit:
S-1176-½"	-/-	G 1/2" x Ø 15 mm x 1 mm	24	-/500
S-1176	-/-	G 3/4" x Ø 15 mm x 1 mm	24	25/300

Scissors for aluminium composite- and corrugated piping



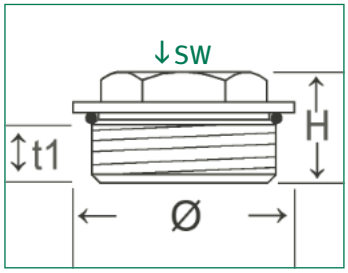
Aluminium red, cutting edge 65 Mn made of steel, suitable for pipes about 0-42 mm

Item-No.:	Packing unit:
S-3068-42	1/50

Connection nipple

M x F, plain brass, including O-ring in groove

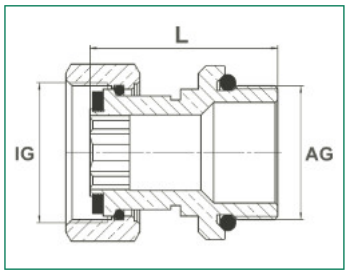
Item-No.: plain	Item-No.: nickel plated	Conn.:	Thread-length: t1	Length: Ø		Wrench size: SW	Packing unit:
S-731-Nippel	S-731-Nippel-Ni	1" x 1/2"	6	39	19,5	27	10/350



Screw connection

Plain brass, male thread with O-ring, union nut flat sealing, assembly with hexagon socket or external hexagon

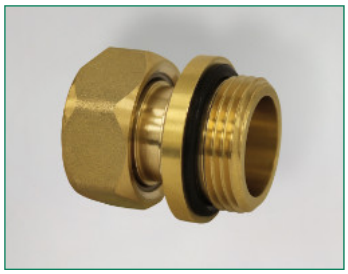
Item-No.:	Conn.: M x F	Length: L	Wrench size: outside	inside	screw connection	Packing unit:
S-3578	G 3/4" x G 3/4"	35,5	19	12	30	-/-
S-3076-bl	G 1" x G 3/4"	35,5	19	12	30	-/100

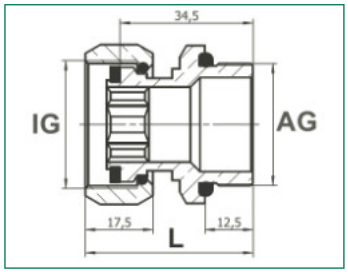


Screw connection

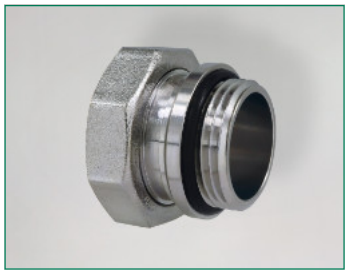
Plain brass or nickel-plated, male thread with O-ring, union nut flat sealing, assembly with hexagon socket

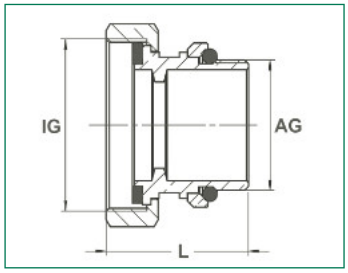
Item-No.: plain	Item-No.: nickel-plat.	Conn.: M x F	Length: L	Wrench size: inside	screw connection	Packing unit:
S-3131	S-3131-Ni	G 1" x G 1"	43,5	17	37	10/90





Screw connection

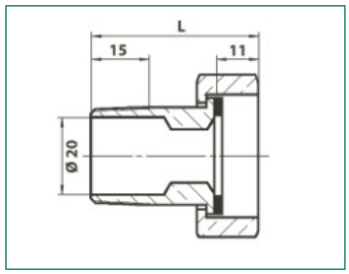




Brass nickel-plated, O-ring EPDM80°A, lead, union nut flat sealed

Item-No.:	Conn.: M x F	Length: L	Wrench size: inside	Wrench size: union nut	Packing unit:
53372-Verschraubung	G 3/4" x G 1"	32,5		37	-/144
53373-Verschraubung	G 1" x G 1 1/4"	35		46	
53374-Verschraubung	G 1 1/4" x G 1 1/2"	39,5		52	

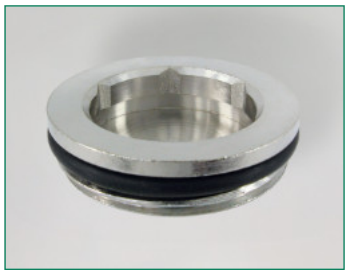
Screw connection

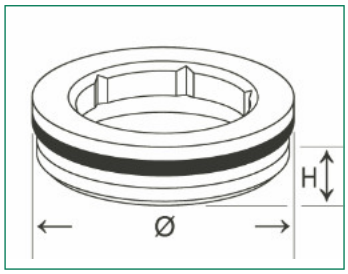


Plain brass, with thread made of AFM, 21 x 30 2 mm

Item-No.: plain	Item-No.: nickel-pla.	Conn.: M x F	Length: L		Wrench size: screw	Packing unit:
S-3289	-	R 3/4" x G 1"	43,5		37	-/130

Plug





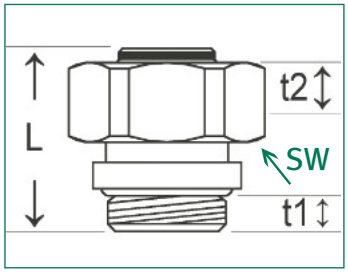
Brass nickel plated, with O-ring

Item-No.:	Conn.:	Length: H	Wrench size: SW	 Ø	Packing unit:
S-2496-Ni	G 1"	9	21	34,5	50/400

Fitting for heating distributors

F x M, plain brass, self sealing

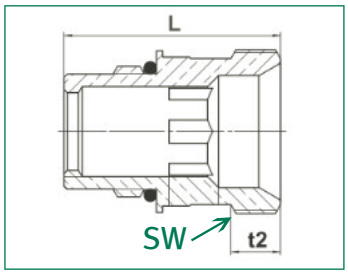
Item-No.:	Connection:	Thread length:		Length:	Wrench size:	Packing unit:
		t1	t2	L	SW	
S-752	3/4" x 1/2"	6,5	8,5	27,5	30	25/350



Flow nipple

Brass nickel plated, with O-ring

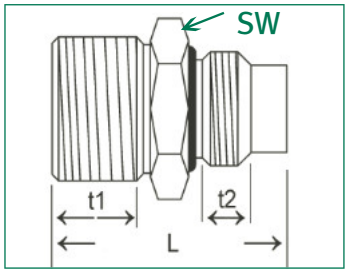
Item-No.:	Connection:	Thread length:		Length:	Wrench size:	Packing unit:
		t1	t2	L	SW	
S-2497-Ni	G 3/4" x G 1/2" x 26,5 mm		6,5 mm	26,5 mm	24	-/500
S-2498-Ni	G 3/4" x G 1/2" x 35 mm		8 mm	35 mm	24	-/400



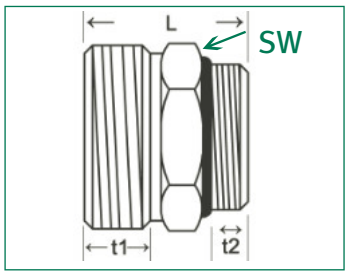
Flow nipple for heating circuit distributors

Plain brass, with O-ring

Item-No.:	Connection:	Thread length:		Length:	Wrench size:	Packing unit:
		t1	t2	L	SW	
S-750-32	3/4" x 1/2" x 12,5 mm	10,5	8	32 mm	27	-/396
S-1145	3/4" x 1/2" x 38,5 mm	13	12	38,5 mm	27	-/250
S-750	3/4" x 1/2" x 12,5 mm	15,5	8	43 mm	27	-/396
S-750-L	3/4" x 1/2" x 12,5 mm	15,5	8	46 mm	27	-/340



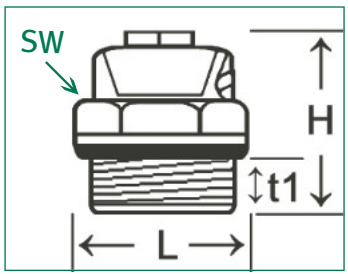
Reducing nipple



M x M, with O-ring, plain brass

Item-No.:	Connection:	Thread length:		Length:	Wrench size:	Packing unit:
		t1	t2	L	SW	
S-751	3/4" x 1/2" x 23,5 mm	10	6,5	23,5	24	/300
S-751b	3/4" x 1/2" x 25 mm	11	6,5	25	24	25/500

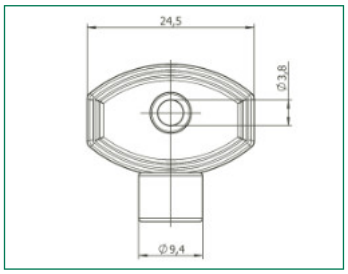
Airvent plug



Brass nickel plated, with rotating plastic head

Item-No.:	Connection:	Thread length:	Length:		Wrench size:	Packing unit:
		t1	L	H	SW	
54765 2	3/8"	5	22	21,5	19	50/700
54761 4	1/2"	5,5	24	20	22	50/700

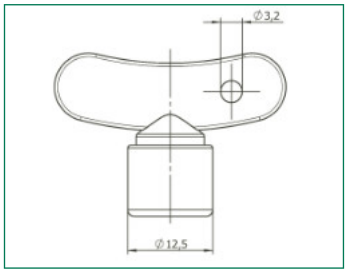
Socket wrench for heating emptying



Zamac

Item-No.:	Wrench size:	Packing unit:
54763 8 (e.g. 54761)	5 mm	100/1000

Socket wrench



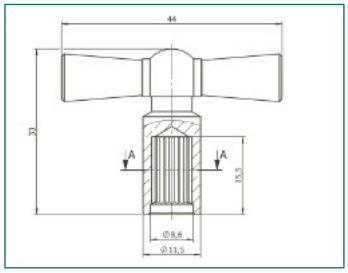
Zinc die cast chromium-plated, square

Item-No.:	Wrench size:	Packing unit:
52054 9	7 mm	250/1000
52057 0 (suitable for 52051/52)	6,2 mm	300/2400

Socket wrench for sanitary upper parts

Brass chromium-plated

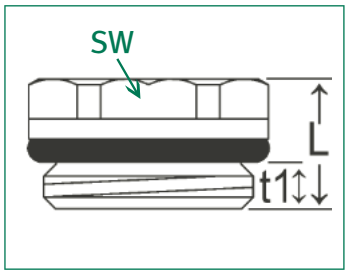
Item-No.:	Wrench size:	Packing unit:
52057-11712		50/450



Plug

Brass nickel plated, with O-ring

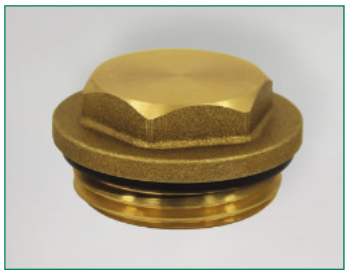
Item-No.:	Connec.:	Thread length: t1	Length: L	Wrench size: SW	Packing unit:
54760-1/4	1/4"	5,7	11,2	15	50/1000
54760-3/8	3/8"	6	12	19	-/-
54760-11555	1/2"	7	12,5	22	20/ 700
54760-3/4	3/4"	8	15	24	-/-

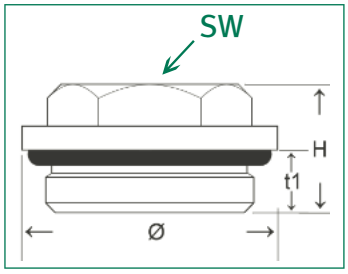


End stopper of the distributor (plumbing)

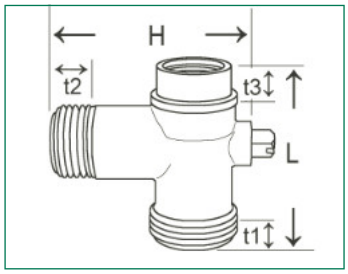
Plain brass, male threaded, with EPDM O-Ring

Item-No.:	Conn.:	Length: H	Length: t1	Wrench size: SW	Wrench size: Ø	Packing unit:
S-1192	G1"	19,5	9,5	27	39	-/250





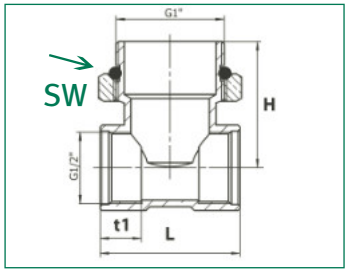
Lockable angle ball valve



Brass sandblasted, without draining valve, male threaded

Item-No.:	Connection:	Thread length:			Length:		Packing unit:
plain		t1	t2	t3	L	H	
S-434-3/8"	3/4" M x 3/8" F	8,5	11	9	51	56,5	4/100
S-434-1/2"	3/4" M x 1/2" M	8,5	12	9	51	56,5	4/100

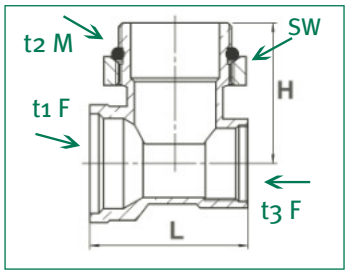
T-piece



Brass, with lock nut and O-ring, F/M/F

Item-No.:	Item-No.:	Connection:	Thread length:	Length:		Wr. size:	PN:	Pack. unit:
plain	nickel pla.	F x M x F	t1	L	H	SW		
S-3982	S-3982-Ni	G1/2" x G1" x G1/2"	12	41	37	39		

T-piece



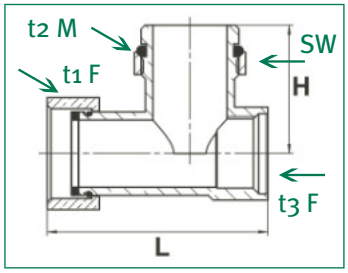
F x M x F, brass,with swiveling locknut and O-ring

Item-No.:	Thread:			Length:		Wrench size:	Packing unit:
	t1 F	t2 M	t3 F	L	H	SW	
S-3083-1	3/4"	1"	1/2"	45	40	40	-/ 90
S-3087-1	1"	1"	1/2"	50	41	40	-/100
Spare part O-Ring for S-3083-1:							
S-3083-1-O-Ring	28,7 x 3,5 mm						

T-piece

F x M x F, brass nickel plated, rigid screw connection with O-ring, one side union nut

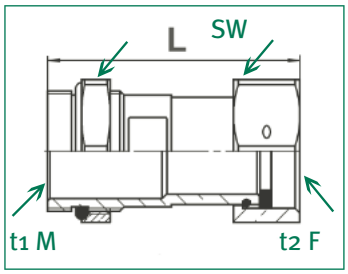
Item-No.:	Thread:			Length:		Wrench size:	Packing unit:
	t1 F	t2 M	t3 F	L	H	SW	
S-3083-2	3/4"	3/4"	1/2"	60	35		-/80



Screw connection

Screw connection made of brass, nickel plated, with lock nut

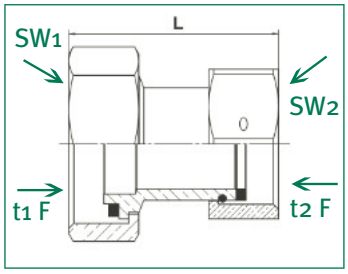
Item-No.:	Thread:		Length:	Wrench size:	Packing unit:
	t1 M	t2 F	L	SW	
S-3082-1	3/4"	3/4"	37	30	10/200
Spare parts:					
S-3082-1-O-Ring	23,47 x 2,65 mm				
S-3082-1-Dichtung	24 x 16,5 x 2,5 mm				



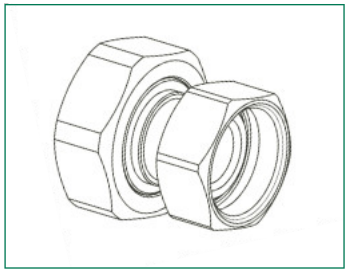
Screw connection

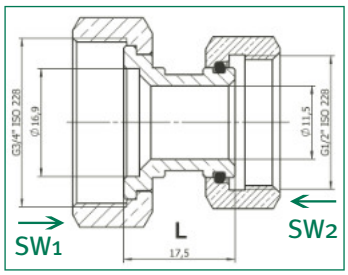
Screw connection made of brass, nickel plated, with union nut and sealing eye

Item-No.:	Thread:		Length:	Wrench size:		Packing unit:
	t1 F	t2 F	L	SW1	SW2	
S-3082-3	1"	3/4"	24	36	30	10/200
Spare part:						
S-3082-3-Dichtung	29 x 24 x 2 mm					



Screw connection

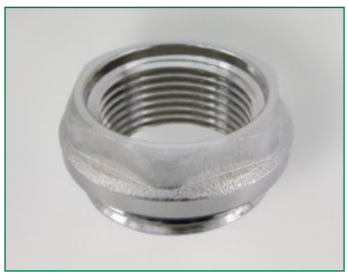


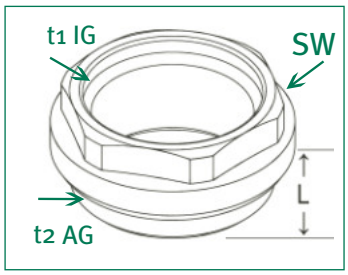


Screw connection made of brass, nickel plated, with union nut and sealing eye

Item-No.:	Thread:		Length:	Wrench size:		Packing unit:
	t1 F	t2 F	L	SW1	SW2	
S-4397	G 3/4"	G 1/2"	17,5	30	24	-/-

Reducing nipple

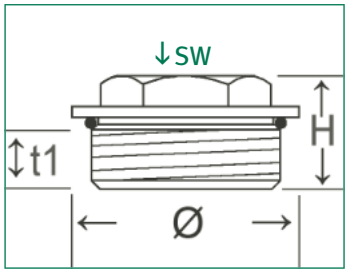




Brass nickel plated, sandblasted, with O-ring in groove

Item-No.:	Thread:		Length:	Wrench size:	Packing unit:
	t1 F	t2 M	L	SW	
S-3082-4	3/4"	1"	18	32	-/300
Spare part:					
S-3082-4-O-Ring	30 x 3,5 mm				

Connection nipple



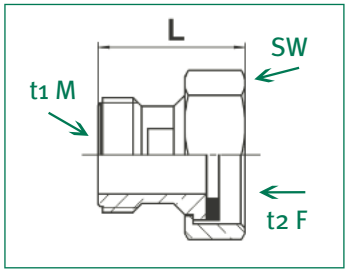
M x F, brass, with O-ring in groove

Item-No.:	Item-No.:	Conn.:	Thread length:	Length:		Wrench size:	Packing unit:
plain	nickel plated		t1	Ø	H	SW	
S-731-Nippel	S-731-Nippel-Ni	1" x 1/2"	6	39	19,5	27	10/350

Screw connection

M x F, screw connection made of brass, nickel plated

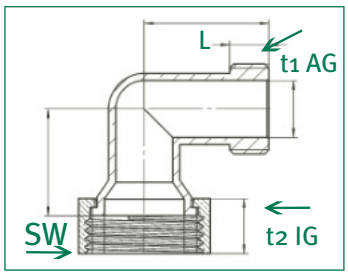
Item-No.:	Thread:		Length:	Wrench size:	Packing unit:
	t1 M	t2 F	L	SW	
S-3084-1	3/4"	1"	25	36	-/150
Spare part:					
S-3084-1-Dichtung	30 x 20 x 3 mm				



Angle 90°

M x F, brass nickel plated, with nut

Item-No.:	Thread:		Length:	Wrench-size:	Packing unit:
	t1 11 mm	t2 15,5 mm	L	SW	
S-3330-01	M G3/4"	F G1"	35	37	-/100

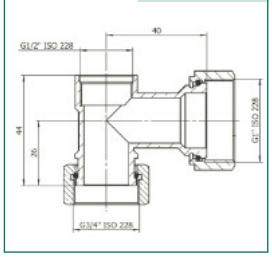


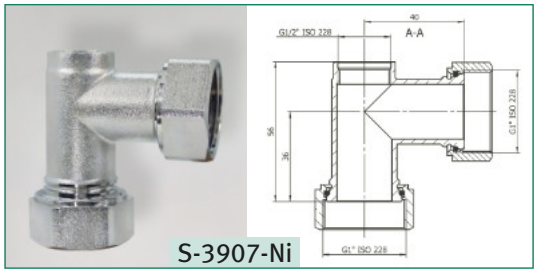
Angle

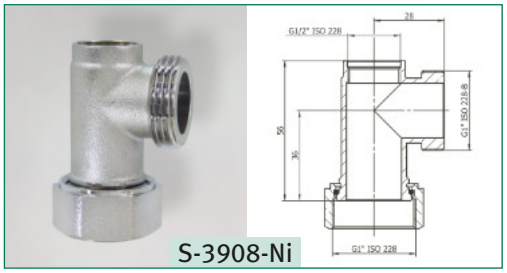
Brass nickel plated, snap ring stainless steel

Item-No.:	Thread: Union nut x Union nut x F	Length: L	Packing unit:
S-3906-Ni	G3/4" x G1" x G1/2"	26/40	
S-3907-Ni	G1" x G1" x G1/2"	36/40	
	Union nut x M x F		
S-3908-Ni	G1" x G1" x G1/2"	36/28	

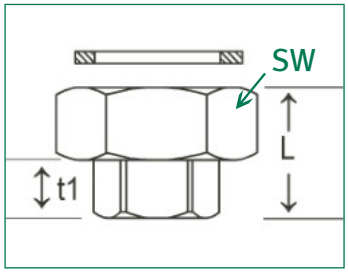
S-3906-Ni




S-3907-Ni


S-3908-Ni

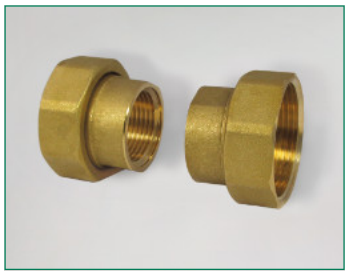
Union sets for pumps

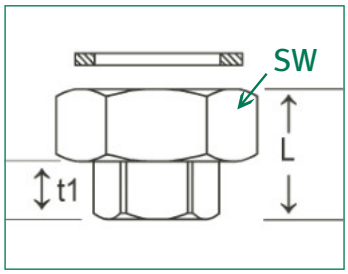


Malleable iron, black, consisting of two union nuts, 2 unions and 2 NBR flat joints, temperature range: ‹ 70°C

Item-No.:	Dimension:	Thread length: t1	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	1/65
43504-2	1 ¼" Connection, 2" union nut	22,9	47,6	70	1/35

Union sets for pumps made of brass

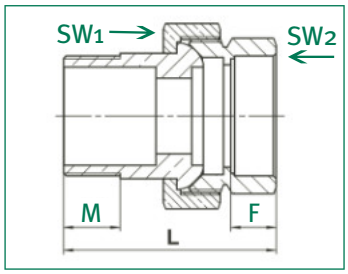




Plain brass, consisting of two union nuts, 2 unions and 2 joints, PN 10, temperature range: - 10°C to + 110°C

Item-No.:	Dimension:	Thread length: t1	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



M x F, plain brass, 3-pieces, with nut, **metallic sealing**

Item-No.:	Connection: M x 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

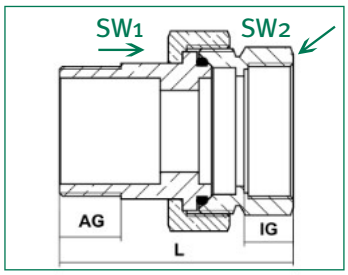
The items of the brass union nuts are not tested for compatibility with other market models.

Union made of brass with nut

M x F, plain brass, 3-pieces, with nut, **O-ring sealing**,

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	-/-
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.

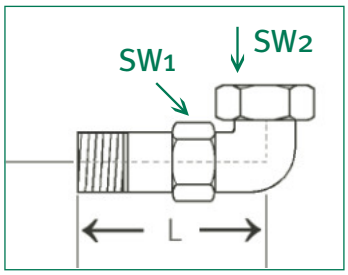


Union made of brass with nut, angle form

M x F, plain brass, 3-pieces, angle form, with nut, **metallic sealing**

Item-No.:	Connection: M x 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.

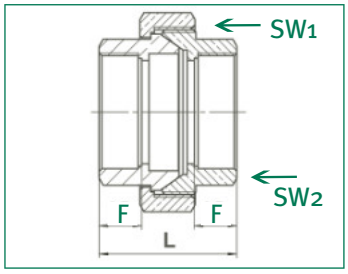


Union made of brass with nut

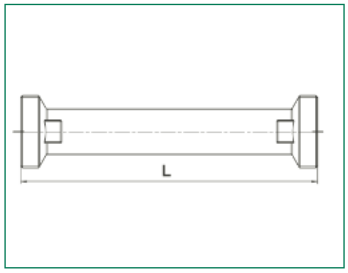
F x F, plain brass, with nut, **metallic sealing**

Item-No.:	Connection: F x F	Thread length: F x F	Length: L	Wrench size: SW1/SW2	Pack. unit:
33711 6	G1/2" connection, G1/2" nut	12/12	39	37,5/25	-/-
33712 3	G3/4" connection, G3/4" nut	11/ 11	37,5	47/30	-/-
33713 0	G1" connection, G1" nut	12/12	39,5	52/37	-/-

The parts of the brass union nut are not tested for compatibility with other market models.



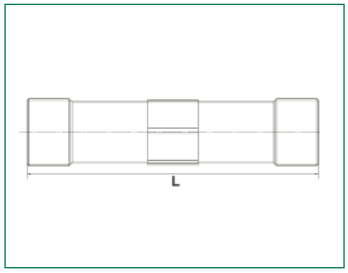
Connecting tube



Plain brass, CW 617 N, both sides male threaded

Item-No.:	Connection:	Length: L	Packing unit:
S-2592-81	G 3/4"	81 mm	10/120
S-2593-111	G 3/4"	111 mm	-/150
S-2593-131	G 3/4"	131 mm	-/150
S-2593-131-1"	G 1"	131 mm	-/150

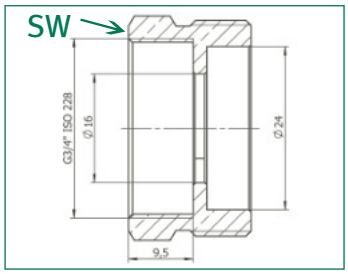
Connecting tube made of polyamide



M x M, PA66, glass fiber reinforced

Item-No.:	Connection:	Length: L	Packing unit:
S-3082-2	G 3/4"	110 mm	-/80
S-3084-2	G 1"	130 mm	-/80

Reducer made of brass



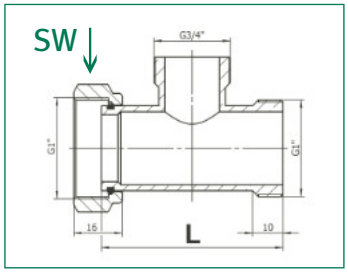
M x F, brass nickel plated, for heat meter

Item-No.:	Connection:	Thread length:		Length:	Wrench size:	Packing unit:
		t1	t2	L	SW	
S-3946	G 1" x G 3/4"	9,5		18	30	-/300

T-piece with union nut

F x M x F, plain brass, snap ring stainless steel

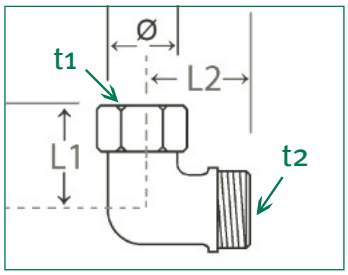
Item-No.:	Connec.:	Thread length:	Length:	Wrench size:	Packing unit:
	F x M x M	F/M	L	SW	
S-3412	G1" x G3/4" x G1"	16/10	60	37	-/-



Elbow made of brass (90°)

Union nut x male thread, plain brass or nickel-plated, for distributor connectors with 1" male thread

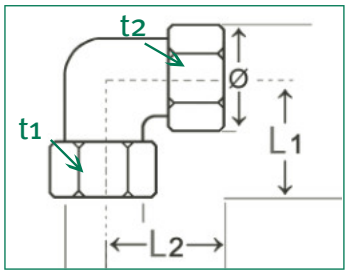
Item-No.:	Item-No.:	Con.:	Thread length:		Length:			Packing unit:
plain	nickel-plat.		union nut t1	male t2	L1	L2	Ø	
S-3037	S-3037-Ni	1"	9	11	46	35	24	10/70



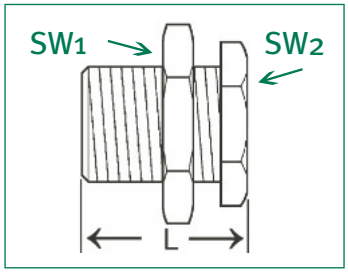
Elbow made of brass (90°)

Both sides with union nut, plain brass or nickel-plated, for distributor connectors with 1" union nut

Item-No.:	Item-No.:	Con.:	Thread length:		Length:			Packing unit:
plain	nickel-plat.		union nut t1	union nut t2	L1	L2	Ø	
S-3407	-	G3/4"	16	16	39	39	17	-/80
S-3038	S-3038-Ni	G1"	9	9	46	44	24	-/-



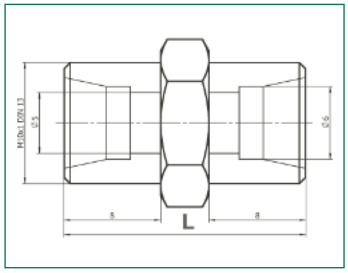
OEM-bulkhead fitting with nut



F x M, brass

Item-No.: plain	Item-No.: nickel pla.	Connection:	Length: L	Wrench size: SW 1	SW 2	Packing unit:
S-451		G 1/8" x M 16 x 1,5	18	22	19	50/1000
S-452	S-452-Ni	G 1/4" x M 20 x 1,5	25	27	24	25/ 450
S-453	S-453-Ni	G 1/2" x M 28 x 1,5	33	36	32	25/ 200

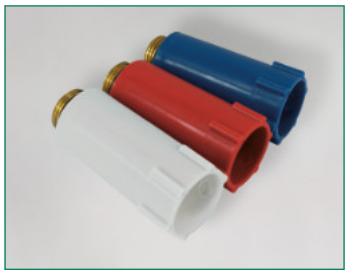
OEM-double nipple

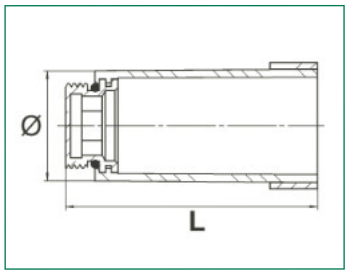


M x M, brass nickel plated, wrench size 12

Item-No.:	Connection:	Length: L	Packing unit:
S-2277	M 10 x 1	20 mm	-/1000

Assembly plug





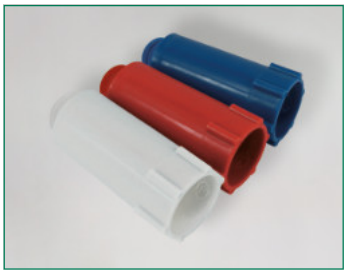
Plastic, brass connection thread, with hexagon socket, according to DIN 1988-2, for pressure tests, venting and rinsing, permanent use possible

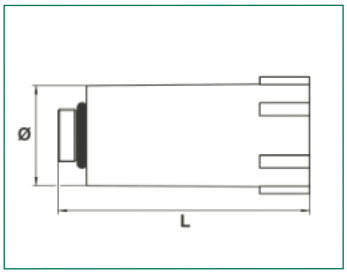
Item-No.:	Color:	Connection:	Length: L	Ø	Packing unit:
36391-B	blue	1/2"	75 mm	30 mm	10/400
36391-R	red	1/2"	75 mm	30 mm	10/400
36391-W	white	1/2"	75 mm	30 mm	10/400
36392-B	blue	3/4"	79 mm	34,5 mm	-/250
36392-R	red	3/4"	79 mm	34,5 mm	-/250
36392-W	white	3/4"	79 mm	34,5 mm	-/250
Spare part:					
36391-O-Ring	EPDM	Ø 18 x 2,5 mm			
36392-O-Ring	EPDM	Ø 21,8 x 3,1 mm			

Assembly plug

Completely made of plastic, according to DIN 1988-2, for one-off leak test, not suitable for permanent use

Item-No.:	Color:	Connection:	Length: L	Ø	Packing unit:
36394-B	blue	3/8"	75 mm	30 mm	25/400
36394-R	red	3/8"	75 mm	30 mm	25/400
36394-W	white	3/8"	75 mm	30 mm	25/400
36395-B	blue	1/2"	75 mm	30 mm	-/400
36395-R	red	1/2"	75 mm	30 mm	-/400
36395-W	white	1/2"	75 mm	30 mm	-/400

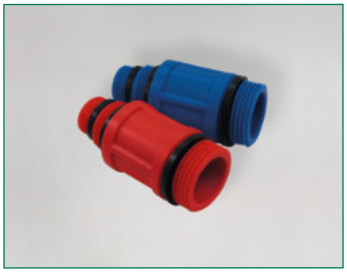


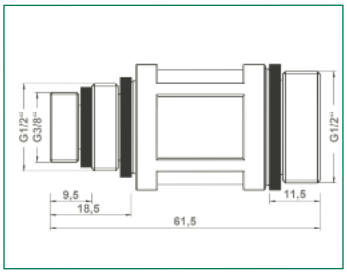


Assembly plug

Completely made of plastic with 3 x male threat (G 3/8", G 1/2", G 3/4"), not suitable for permanent use

Item-No.:	Color:	Connection:	Length: L	Ø	Packing unit:
36396-B	blue		61,5 mm		50/400
36396-R	red		61,5 mm		50/400

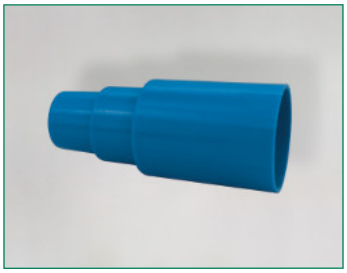


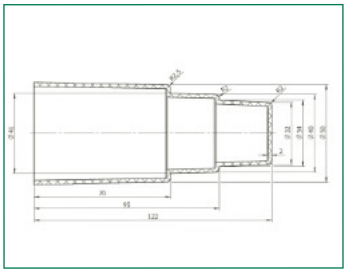


Drain construction plugs

Made entirely of plastic, blue, for drain pipes Ø 32/40/50 mm, universal

Item-No.:	Color:	Dim.:	Length: L	Ø	Pack. u.:
36399 3	blue		122 mm	32/40/50	5/300





Armoured hoses: flexible hoses for the heating sector

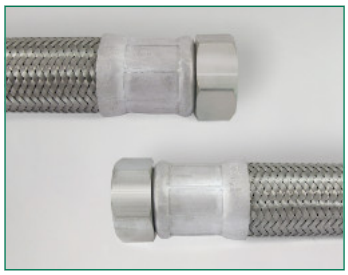
Stainless steel braiding, brass connecting fittings nickel plated, inner hose EPDM, working pressure: max. 20 bar, operating temperature: -10° C bis + 75° C

Armoured hose

Connection: **union nut x male thread**, inner hose EPDM

Item-No.:	Length (mm):	Connection:	Hose Ø: inside/outside	Packing unit:
52816 3	500	1/2" f x m	16 mm/22 mm	loose
52817 0	750	1/2" f x m	16 mm/22 mm	loose
52818 7	1000	1/2" f x m	16 mm/22 mm	loose
52819 4	1500	1/2" f x m	16 mm/22 mm	loose
52800 2	1000	3/4" f x m	13 mm/18 mm	loose
52801 9	1500	3/4" f x m	13 mm/18 mm	loose
52802 6	2000	3/4" f x m	13 mm/18 mm	loose
52803 3	2500	3/4" f x m	13 mm/18 mm	loose
52804 0	3000	3/4" f x m	13 mm/18 mm	loose
52836 1	500	3/4" f x m	19 mm/27 mm	loose
52837 8	750	3/4" f x m	19 mm/27 mm	loose
52838 5	1000	3/4" f x m	19 mm/27 mm	loose
52839 2	1500	3/4" f x m	19 mm/27 mm	loose
52824 8	300	1" f x m	25 mm/34 mm	loose
52823 1	400	1" f x m	25 mm/34 mm	loose
52825 5	500	1" f x m	25 mm/34 mm	loose
52827 9	750	1" f x m	25 mm/34 mm	loose
52806 4	1000	1" f x m	25 mm/34 mm	loose

Armoured hose



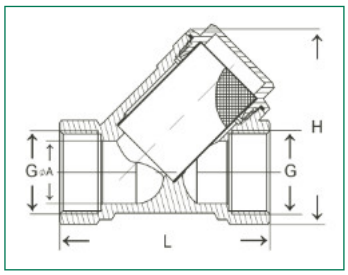
Item-No.:	Length (mm):	Connection:	Hose Ø: inside/outside	Packing unit:
Connection: **union nut x union nut**, inner hose EPDM				
52808 8	500	1/2" f x f	16 mm/22 mm	loose
52809 5	750	1/2" f x f	16 mm/22 mm	loose
52810 1	1000	1/2" f x f	16 mm/22 mm	loose
52811 8	1500	1/2" f x f	16 mm/22 mm	loose
52832 3	500	3/4" f x f	19 mm/27 mm	loose
52833 0	750	3/4" f x f	19 mm/27 mm	loose
52834 7	1000	3/4" f x f	19 mm/27 mm	loose
52835 4	1500	3/4" f x f	19 mm/27 mm	loose
52842 2	300	1" f x f	25 mm/34 mm	loose
52844 6	500	1" f x f	25 mm/34 mm	loose
52845 3	750	1" f x f	25 mm/34 mm	loose
52846 0	1000	1" f x f	25 mm/34 mm	loose
52847 7	1500	1" f x f	25 mm/34 mm	loose

Replacement joint

Replacement fiber joint for flexible hoses			
52766-Dichtung	union nut 1/2"		10
52800-Dichtung	union nut 3/4"		10
52822-Dichtung	union nut 1"		10

Socket strainers, red brass

F x F, sand filter made of red brass (CC491K) with fine-mesh screen made of stainless steel 1.4301, PN 20 for max. 120°C



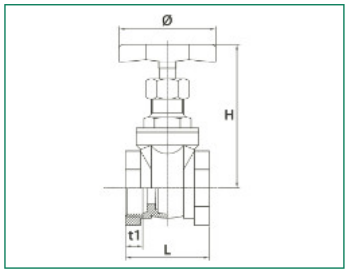
Item-No.:	Conn.:	Mesh size: mm	Thread length:	Length:			Wrench size:	Packing unit:
	G		IG	IG	L	H		
66400 7	3/8"	-	-	-	-	-	-	20/180
66401 4	1/2"	0,5	12,5	12,5	56,5	50	24,5	4/ 96
66402 1	3/4"	0,5	13	13	66,5	65	30,5	6/ 60
66403 8	1"	0,5	14	14	76	72	37,5	4/ 40
66404 5	1 ¼"	0,8	16	16	96	85	47,5	6/ 24
66405 2	1 ½"	0,8	17	17	105	100	54	10/ 20
66406 9	2"	0,8	19	19	125	120	66	12/ 12
66407 6	2 ½"	0,8	25	25	147	150	83	2/ 20
66408 3	3"	0,8	28	28	174	180	96	-/-
66409 0	4"	0,8	29	29	210	210	123	-/-

Spare parts for socket strainers, red brass

Item-No.:	Conn.:	Item-No.:	Conn.:	Item-No.:	Conn.:
Spare filter stainless steel:		Spare caps brass:		Replacement seals:	
66400-Filter	3/8"	66400-Kappe	3/8"	66400-Dichtung	3/8"
66401-Filter	1/2"	66401-Kappe	1/2"	66401-Dichtung	1/2"
66402-Filter	3/4"	66402-Kappe	3/4"	66402-Dichtung	3/4"
66403-Filter	1"	66403-Kappe	1"	66403-Dichtung	1"
66404-Filter	1 ¼"	66404-Kappe	1 ¼"	66404-Dichtung	1 ¼"
66405-Filter	1 ½"	66405-Kappe	1 ½"	66405-Dichtung	1 ½"
66406-Filter	2"	66406-Kappe	2"	66406-Dichtung	2"
66407-Filter	2 ½"	66407-Kappe	2 ½"	66407-Dichtung	2 ½"
66408-Filter	3"	66408-Kappe	3"	66408-Dichtung	3"
66409-Filter	4"	66409-Kappe	4"	66409-Dichtung	4"

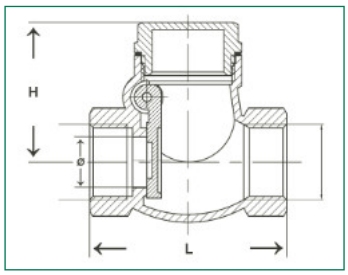
Gate valve, red brass

F x F, body made of red brass (CC491K), other pieces brass, full flow, sealing made of EPDM, PN 16 for max. 80°C, handwheel made of steel, painted red



Item-No.:	Conn.:	Thread length:	Length:			Packing unit:
		t1	L	H	Ø wheel	
66440 3	3/8"	9	38	66	45	-/160
66441 0	1/2"	9	38	68	45	-/140
66442 7	3/4"	10	45	78	50	-/100
66443 4	1"	11	48	92	55	-/ 70
66444 1	1 ¼"	11	51	108	60	-/ 40
66445 8	1 ½"	13	58	125	70	-/ 35
66446 5	2"	13	62	145	80	-/ 20
66447 2	2 ½"	16	76	175	100	-/ 14
66448 9	3"	16	80	200	100	-/ 12
66449 6	4"	19	96	240	120	-/ 6

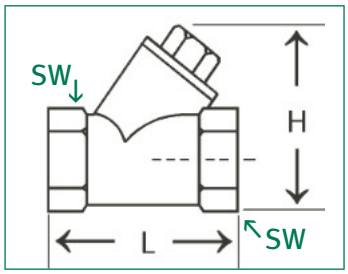
Swing check valve, red brass



F x F, body made of red brass (CC491K), other pieces brass, full flow, metallic sealing, only suitable for vertical installation

Item-No.:	Conn.:	Length:		Wrench size:		PN:	Packing unit:
		L	H	SW1	Ø A		
66460 1	3/8"			-		16	
66461 8	1/2"	55	39	-	14	16	
66462 5	3/4"	62	46,5	-	20	16	
66463 2	1"	72	53,5	-	25	16	
66464 9	1 ¼"	82	62,5	-	30	16	
66465 6	1 ½"	90	65,5	55	35	16	
66466 3	2"	105	73	-	47	16	

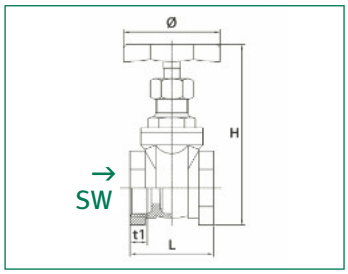
Socket strainers



F x F, sand filter made of brass with fine-mesh screen made of stainless steel 1.4301

Item-No.:	Conn.:	Mesh size: mm	Thread length:		Length:		Wrench size:	Packing unit:
			F	F	L	H	SW:	
51400 5	3/8"	0,5	11,5	11,5	54	48,5	25	16/128
51401 2	1/2"	0,5	11,5	11,5	54	48,5	25	15/ 90
51402 9	3/4"	0,5	11	11	70	63	31	15/ 60
51403 6	1"	0,5	12	12	78	70	39	10/ 40
51404 3	1 ¼"	1,3	16	16	96	89	48	5/ 20
51405 0	1 ½"	1,3	22	22	120	-	55	2/ 16
51406 7	2"	1,3	26	26	150	-	70	2/ 8

Gate valve, brass



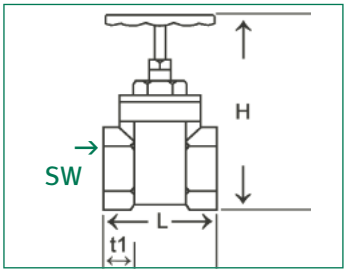
F x F, pressure stage fore this series PN 10, red enamelled handwheel, seals made of PTFE, stuffing box, up to and including 2" hot-pressed

Item-No.:	Connec.:	Thread length:	Length:		Wrench size:		Packing unit:
		t1	L	H	SW	Ø wheel	
50020 6	3/8"	7	37	74	21	45	10/120
50021 3	1/2"	7	37	74	24	50	20/ 80
50022 0	3/4"	10	40	81	30	50	20/ 80
50023 7	1"	10	44,5	93	36	60	15/ 60
50024 4	1 ¼"	11,5	50,5	114	46	60	5/ 30
50025 1	1 ½"	11,5	53	130	53	70	12/ 24
50026 8	2"	14	60	152	65	70	3/ 12
50027 5	2 ½"	14	66	188	82	88	-/ 8
50028 2	3"	21	83	240	94	110	-/ 6
50029 9	4"	16	80	290	123	130	-/ 3

Gate valve, brass

F x F, pressure stage fore this series PN 16, red enamelled handwheel, seals made of PTFE, stuffing box, up to and including 2" hot-pressed, full flow, heavy version

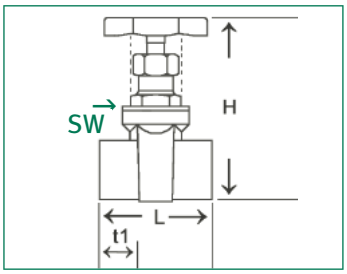
Item-No.:	Connec.:	Thread length: t1	Length: L	Heigth: H	Wrench size: SW	Packing unit:
50040 4	3/8"	9	40	78	21	20/80
50041 1	1/2"	10,5	41,5	89	25	20/80
50042 8	3/4"	12	46	100	31,5	15/ 45
50043 5	1"	13	50	118	37	10/ 40
50044 2	1 ¼"	13,5	57	136	47,5	3/ 18
50045 9	1 ½"	13,5	60	151	53	2/ 12
50046 6	2"	13,5	67,5	171	65,5	3/ 12
50047 3	2 ½"	19	79,5	216	83	-/ 8
50048 0	3"	19	82,5	245	97,5	-/ 6
50049 7	4"	19,5	96	294	123	-/ 3



Gate valve, brass

Pressure stage fore this series PN 10, red enamelled handwheel, seals made of PTFE, on both sides solder terminal, hot-pressed

Item-No.:	Connec.:	Thread length: t1	Length: L	Heigth:	Wrench size: SW	Packing unit:
50010 7	12 mm	10	36	75	20	10/100
50011 4	15 mm	11,5	40	78	20	10/ 50
50012 1	18 mm	15	46,5	79	20	10/ 50
50013 8	22 mm	16,5	52	84,5	20	10/ 50
50014 5	28 mm	20	62,5	100	25	5/ 50

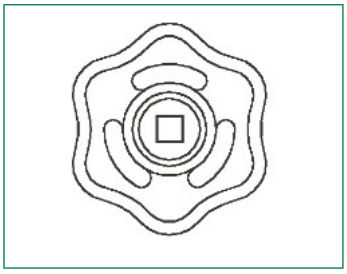


Reference:
For technical reasons, it is **not possible** to replace the upper part of the sleeve valves!

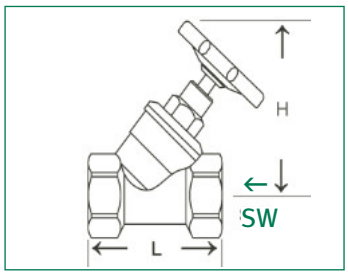
Replacement handwheels for gate valves

painted red

Item-No.:	for:	Wrench size + Ø:	for Item:	and for Item-No.:
50015 2	3/8" - 1"	6 mm + 50 mm	50010-50013	50020-50023
50016 9	1 ¼" + 1 ½"	6 mm + 58 mm	50014	50024-50025
50017 6	2"	6 mm + 70 mm		50026
50017-SW8	2"	8 mm + 90 mm		50046
50018 3	3" + 4"	10 mm + 130 mm	50028-50029	50048-50049



Angle seat valve, forged brass

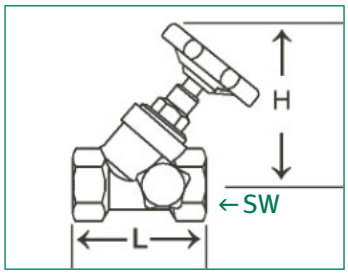


Market model, pressure stage fore this series PN 10, valve cone with rubber seal (EPDM), without draining, both sides female threaded, rising valve stem, double O-ring, hand-wheel made of durable plastic

Item-No.:	Conn.:	Thread length: t1	Length: L	Heigth: H	Wre.-size: SW	Packing unit:
52311 3	1/2"	12	56	73	25	15/90
52312 0	3/4"	13	63	80	30	14/56
52313 7	1"	15,5	76	103	37	6/36
52314 4	1 ¼"	21,5	95	103	48	4/ 16

On request 1 ½" and 2"

Angle seat valve, forged brass

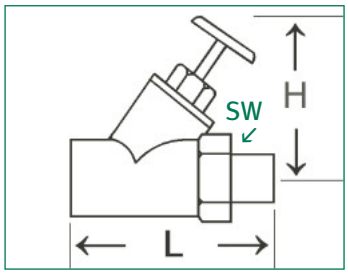


Description as item 52311-52314, however with draining, PN 10

Item-No.:	Conn.:	Thread length: t1	Length: L	Heigth: H	Wre.-size: SW	Packing unit:
52301 4	1/2"	12	56	73	25	13/78
52302 1	3/4"	13	63	80	30	11/ 44
52303 8	1"	15,5	76	103	37	6/ 36
52304 5	1 ¼"	21,5	95	103	48	4/ 16

On request 1 ½" and 2"

Angle seat valve, forged brass



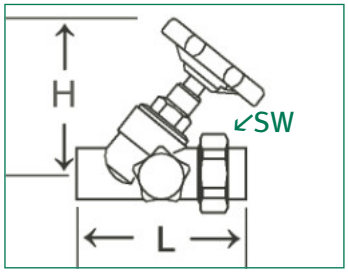
Description as item 52311-52314, without draining, with solder terminals, PN 10

Item-No.:	Dimension:	Length: L	Heigth: H	Wrench size: SW	Packing unit:
52325 0	12 mm	57	73	23	20/80
52326 7	15 mm	68	80	29	-/-
52327 4	18 mm	75,5	103	33	16/ 64
52328 1	22 mm	84	103	36	10/ 40
52329 8	28 mm	103	103	46	-/-

Angle seat valve, forged brass

Description as item 52311-52314, however with draining, with solder terminations

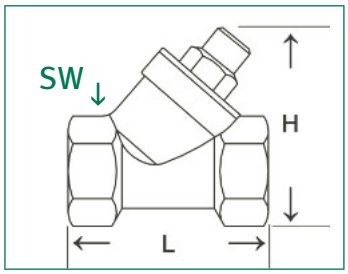
Item-No.:	Dimension:	Length: L	Heigth: H	Wrench size: SW	Packing unit:
52320 5	12 mm	60	64	23	18/72
52321 2	15 mm	68	65,5	29	15/60
52322 9	18 mm	76,5	67,5	33	12/48
52323 6	22 mm	84	71	36	10/40
52324 3	28 mm	103	92	46	-/32



Angle seat check valve

Brass hot-pressed, both sides female threaded, without draining, PN 10

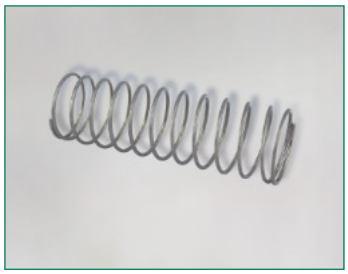
Item-No.: seals made of EPDM	Conn.:	Thread length: t1	Length: L	Heigth: H	Wrench size: SW	Packing unit:
52341 0	1/2"	12	54	53	25	22/88
52342 7	3/4"	13	63	60	30	16/ 64
52343 4	1"	15,5	76	78	37	10/ 40
52344 1	1 ¼"	21,5	95	92	48	5/ 20
52345 8	1 ½"	25	130	108	54	2/ 16
52346 5	2"	28	150	137	70	1/ 8
seals made of silicone						
52347-10948	2 ½"	30,2	180	178	85	-/-
52349-10948	3"	33,3	210	200	100	-/-

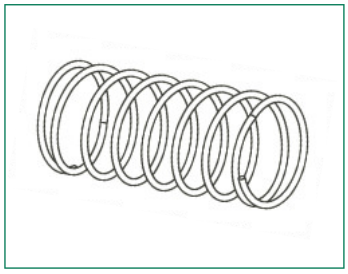


Spare part spring for angle seat check valves

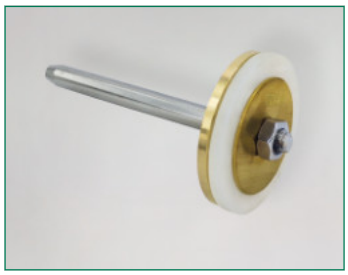
Stainless steel

Item-No.:	for item:	Conn.:
52345-Feder	52345-10948	1 ½"
52346-Feder	52345/48-10948	2"





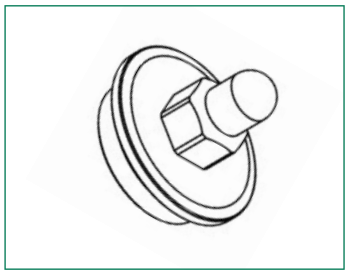
Spare part plunger for angle seat check valves



with sealing

Item-No.:	for item:	Conn.:	Packing unit:
52345-Stössel	52345-10948	1 ½"	10/150
52346-Stössel	52346/48-10948	2"	10/100
52347-Stössel-VA	52347-10948	2 ½"	5/ 50
52349-Stössel-VA	52349-10948	3"	5/ 40
Replacement sealing, silicone			
52345-Dichtung	52345-10948	1 ½"	-/-
52346-Dichtung	52346-10948	2"	-/-

Spare part lid for angle seat check valves



Plain brass, with O-ring

Item-No.:	for item:	Conn.:	Packing unit:
52345-Deckel	52345-10948	1 ½"	-/40
52346-Deckel	52346-10948	2"	-/-
52347-Deckel	52347-10948	2 ½"	-/-
52349-Deckel	52349-10948	3"	-/-
Replacement O-ring, silicone			
52345-O-Ring	52345-10948	1 ½"	-/-
52346-O-Ring	52346-10948	2"	-/-
52347-O-Ring	52347-10948	2 ½"	-/-
52349-O-Ring	52349-10948	3"	-/-

Spare parts body for angle seat check valves

without illu.

Item-No.:		Conn.:
52345-Körper	Body, plain brass	1 ½"
52346-Körper	Body, plain brass	2"
52347-Körper	Body, plain brass	2 ½"

Spare parts set for angle seat check valves

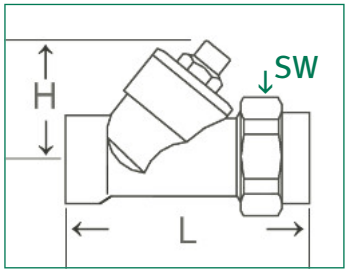
without illu.

Item-No.:		Conn.:
52345-REP-Set	consisting of lid,- plunger- and spring	1 ½"
52346-REP-Set	consisting of lid,- plunger- and spring	2"

Angle seat check valve with solder connection

Brass hot-pressed, without draining, PN 10

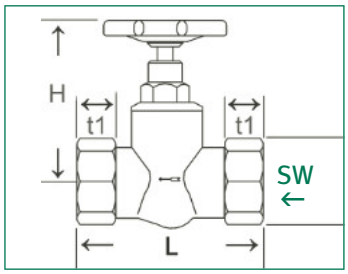
Item-No.:	Dimension:	Length: L	Heigth: H	Wrench size: SW	Packing unit:
52330 4	12 mm	57		23	-/-
52331 1	15 mm	68	54	29	-/-
52332 8	18 mm	75,5	54	33	-/-
52333 5	22 mm	84	61	36	12/48
52334 2	28 mm	103	80	46	6/24



Straight way valve

Brass hot-pressed, market model, valve cone with rubber seal, without draining, both sides female threaded, upper part with rising stem, double O-ring seal, PN 10

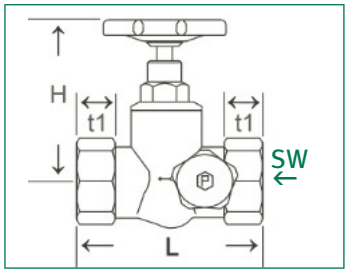
Item-No.:	Connec.:	Thread length: t1	Length: L	Heigth: H	Wrench size: SW	Packing unit:
52361 8	1/2"	13	52	62	25	14/112
52362 5	3/4"	14,5	61	70	30	8/ 64
52363 2	1"	16,5	72	92	37	6/ 36



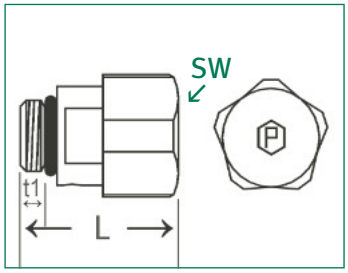
Straight way valve

Description as item 52361-52363, however with draining, PN 10

Item-No.:	Connec.:	Thread length: t1	Length: L	Heigth: H	Wrench size: SW	Packing unit:
52351 9	1/2"	12	66	62	25	15/60
52352 6	3/4"	14	74	70	30	10/40
52353 3	1"	17	88	92	37	4/ 24
52354 0	1 ¼"					-/-



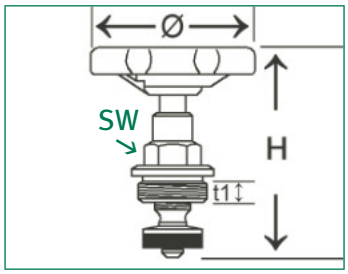
Spare parts for angle seat and straight way valves



Drain valve made of brass, with O-ring

Item-No.:	Connec.:	Thread length: t1	Length: L	Wrench size: SW	Packing unit:
52298 7	1/4" male	4	28	20	-/ 600
Plug made of brass, with O-ring (without illu.)					
52299 4	1/4"	4,2	8,7	17	200/3000

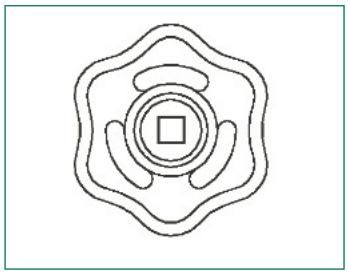
Spare parts for angle seat and straight way valves



Upper valve part with handwheel made of durable plastic, green

Item-No.:	Conn.:	Thread length: t1	Length: wheel - Ø	Heigth: H	Wrench size: SW	Packing unit:
52290 1	3/8"	5,5	50	62	15	40/240
52291 8	1/2"	6	50	63,5	15	30/ 180
52292 5	3/4"	7	50	72	15	-/ 150
52293 2	1"	7,5	60	94	19	-/ 96
52294 9	1 ¼"	10	60	104	22	10/ 60
52295 6	1 ½"	9	80	110	27	5/ 30
52296 3	2"	9,5	80	120	27	4/ 24

Spare parts for angle seat and straight way valves



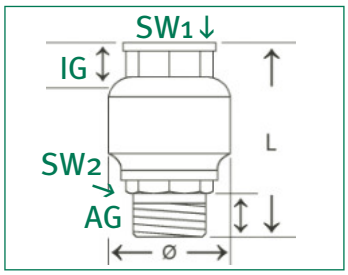
Handwheel made of durable plastic, green, with screw

Item-No.:	Connection:	Length: wheel - Ø	Length: Height	Wrench size: SW	Wrench size: square shaft	P. u.:
52281 9	1/2" + 3/4"	50	15	16	6	-/10
52282 6	1" + 1 ¼"	60	15	16	6	-/10

Pump check valve

F x M, brass, heavy version, closing cone with rubber seal, straight type, only suitable for vertical installation

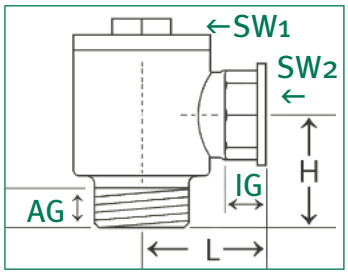
Item-No.:	Connec.:	Thread length:	Length:		Wrench size:		Packing unit:
		F x M	L	Ø	SW1	SW2	
51023 6	1"	16/18	90	56	38	38	3/27
51024 3	1 ¼"	20/18	100	68	48	48	4/16
Spare parts o-ring EPDM:							
51025 0	1"	for 51023		48 x 2 mm			
51026 7	1 ¼"	for 51024		58 x 2,5 mm			



Pump check valve

F x M, brass, heavy version, closing cone with rubber seal, angle type, only suitable for vertical installation

Item-No.:	Connec.:	Thread length:	Length:	Heigth:	Wrench size:		Packing unit:
		F x M	L	H	SW1	SW2	
51033 5	1"	14/18	50	50	23	38	2/16
51034 2	1 ¼"	21/20	56	58	23	48	2/16
Spare parts o-ring EPDM:							
51035 9	1"	for 51033		48 x 2 mm			
51036 6	1 ¼"	for 51034		58 x 2,5 mm			

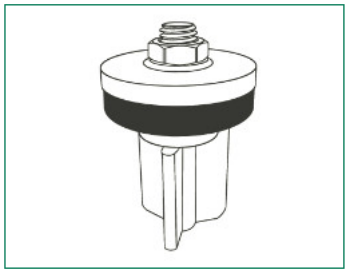


Closing cone with seal

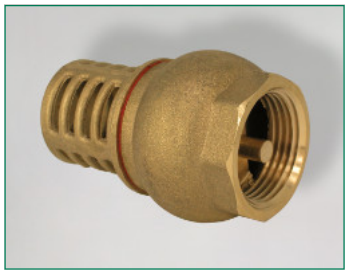
Spare parts for pump check valves

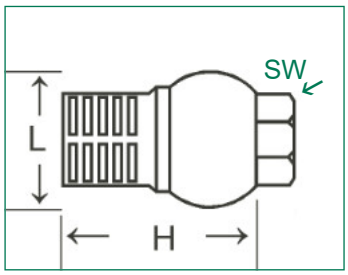
Complete, with seal (illu.)

Item-No.:	for item-No.:	Connection:	Packing unit:
51020 5	51023 6 + 51033 5	1"	10/250
51030 4	51024 2 + 51034 2	1 ¼"	10/100
Rubber seal for sealing cone (without illu.)			
Item-No.:	for item-No.:		
51021 2	51020 5		-/-
51031 1	51030 4		-/-



Foot valve made of brass

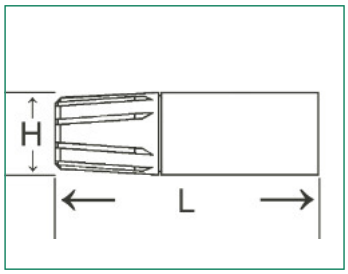




For pumps, suction strainer with slots, valve clap made of brass with rubber seal, only suitable for vertical installation

Item-No.:	Connection:	Length: L	Heigth: H	Wrench size: SW	Packing unit:
51321 3	1/2"	39	60	27	12/96
51322 0	3/4"	45	69	34	12/48
51323 7	1"	51	80	40	18/54
51324 4	1 ¼"	61	92	49	8/ 24
51325 1	1 ½"	68	100	55	3/ 18
51326 8	2"	80	117	66	2/ 12

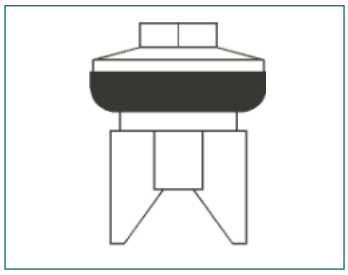
Foot valve for driven wells made of brass



With suction strainer, valve clap made of brass with rubber seal, only suitable for vertical installation

Item-No.:	Outside Ø	Connec.:	Thread length:	Length: L	Heigth: H	Packing unit:
51352 7	app. 31,0 mm	3/4"	17	99	30,5	10/60
51353 4	app. 36,5 mm	1"	20	114	36	16/48

Sealing cone with rubber moulded seal



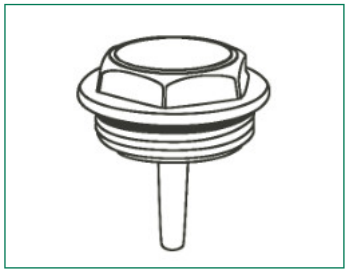
Spare parts for pump check valves

Item-No.:	Matches to item:	Connection:	Packing unit:
51090 8	51083	1"	25/350
51088 5	Seal loose	1"	-/-
51089 2	Seal loose	1 ¼"	-/-

Closure cap with seal

Spare parts for pump check valves

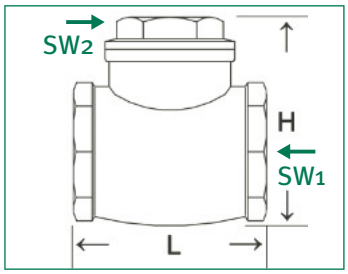
Item-No.:	Match to item:	Connection:	Packing unit:
51080 9	51083	1"	10/250



Swing check valve made of brass

F x F, plain brass, socket check valve, closure clap without spring, metallically sealing, only suitable for vertical installation

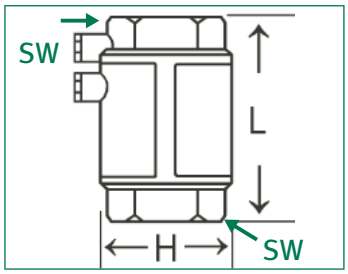
Item-No.:	Connec.:	Length: L	Heigth: H	Wrench size: SW1	Wrench size: SW2	PN:	Packing unit:
51061 8	1/2"	47	48,5	25	20	16	25/100
51062 5	3/4"	53	56,5	30	24	16	10/120
51063 2	1"	68	65	38	27	16	10/ 40
51064 9	1 ¼"	74	78	48	30	10	6/ 24
51065 6	1 ½"	86	88	54	38	10	4/ 16
51066 3	2"	100	103	68,5	40	10	3/ 12
51067 0	2 ½"	104	124	83	51,5	10	1/ 8
51068 7	3"	125	137	95,5	62,5	10	1/ 6
51069 4	4"	162	171	123	81,5	10	1/ 2



Check valve made of brass

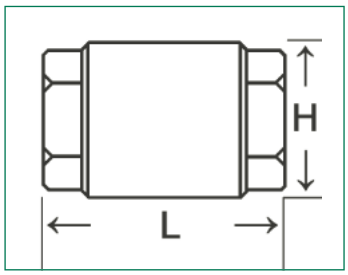
With double venting, heavy version, stainless steel swing check valve, 2 bleed screws, therefore particularly suitable for well construction, in winter no disassembly or risk of frost in the well system

Item-No.:	Connec.:	Thread length:	Length: L	Heigth: H	Wrench size: SW	Packing unit:
51042 7	3/4"	13	68	44	32	10/120
51043 4	1"	13	71	50	39	6/ 30
51044 1	1 ¼"	15	82	62	49	4/ 20
51045 8	1 ½"	15	92,5	73	56	2/ 24
Spare parts:						
51048 9	Vent screw					
51049 6	Replacement seal					



Check valve made of brass (System York)

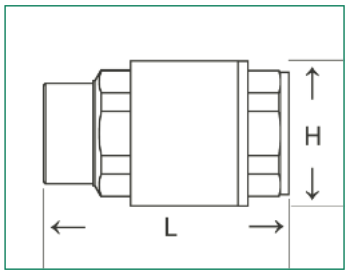
F x F, with spring, valve disc made of plastic with rubber seal, also suitable for horizontal mounting



Item-No.:	Connection:	Length: L	Heigth: H	PN:	Packing unit:
51000 7	3/8"	45	34	10	10/120
51001 4	1/2"	45	34	10	10/120
51002 1	3/4"	48	42	10	10/100
51003 8	1"	53	47	10	6/ 60
51004 5	1 ¼"	58	59	8	5/ 25
51005 2	1 ½"	69	68	8	6/ 24
51006 9	2"	77	80	8	2/ 18
51007 6	2 ½"	-	-	-	2/ 8
51008 3	3"	-	-	-	2/ 8
51009 0	4"	-	-	-	2/ 4

Check valve made of brass (System York)

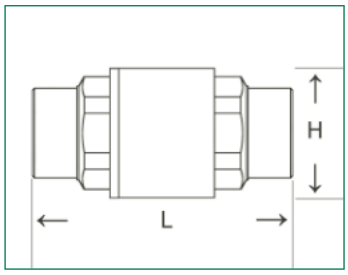
F x M, with spring, valve disc made of plastic with rubber seal, also suitable for horizontal mounting



Item-No.:	Connection:	Length: L	Length: H	PN:	Packing unit:
51122 6	3/4"	61	36,5	10	15/90
51123 3	1"	69	44	10	15/60

Check valve made of brass (System York)

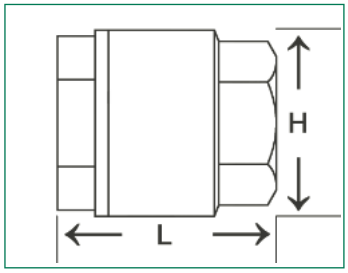
M x M, with spring, valve disc made of plastic with rubber seal, also suitable for horizontal mounting



Item-No.:	Connection:	Length: L	Length: H	PN:	Packing unit:
51132 5	3/4"	70	36,5	10	15/ 75
51133 2	1"	80	44	10	12/48

Check valve made of brass (Europa)

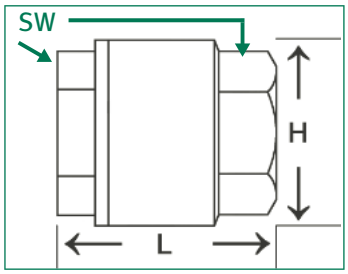
Long version, with spring, valve disc made of brass with rubber seal, also suitable for horizontal mounting



Item-No.:	Connection:	Length: L	Heigth: H	PN:	Packing unit:
51101 1	1/2"	58,5	34,5	25	10/170
51102 8	3/4"	65	41,5	25	8/120
51103 5	1"	74,5	48	25	6/ 88
51104 2	1 ¼"	83	60,5	18	6/ 54
51105 9	1 ½"	93	71	18	4/ 36
51106 6	2"	101	87	18	2/ 24
51107 3	2 ½"	-	-	-	1/ 12
51108 0	3"	-	-	-	1/ 8

Check valve made of brass

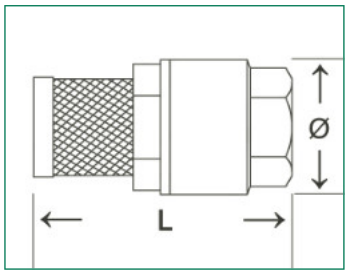
With spring, heavy Euro version, brass valve cone, stainless steel pressure washer, gasket EPDM



Item-No.:	Connection:	Length: L	H	Wrench size	PN:	Packing unit:
51140 0	3/8"	54	34,5	21	25	15/90
51141 7	1/2"	57	34,5	25	25	15/90
51142 4	3/4"	60	42	31	25	12/48
51143 1	1"	73	48	40	25	9/ 36
51144 8	1 ¼"	83	60,5	50	16	6/ 24
51145 5	1 ½"	93	70,8	55	16	2/ 8
51146 2	2"	100	87	67	16	2/ 8
51147 9	2 ½"	120	118,6	88	10	1/ 6
51148 6	3"	138,5	140	100	10	1/ 4
51149 3	4"	158	154	126	10	1/ 3

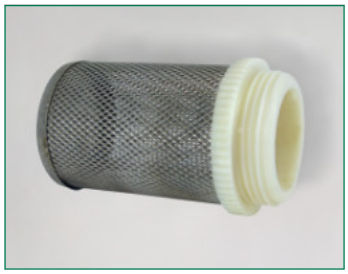
Foot valve made of brass

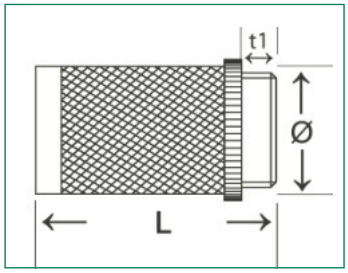
With spring, valve disc made of plastic with rubber seal, fine mesh strainer made of stainless steel



Item-No.:	Connection:	Length: L	Ø	PN:	Packing unit:
51301 5	1/2"	70	34	10	20/240
51302 2	3/4"	71,5	42	10	10/ 120
51303 9	1"	82,5	47	10	6/ 90
51304 6	1 ¼"	97	59	8	6/ 60
51305 3	1 ½"	112	68	8	4/ 48
51306 0	2"	129	80	8	4/ 16
51307 7	2 ½"	155	103	-	4/ 16
51308 4	3"	171	111	-	4/ 8
51309 1	4"	181	146	-	2/ 8

Stainless steel pre-filter male

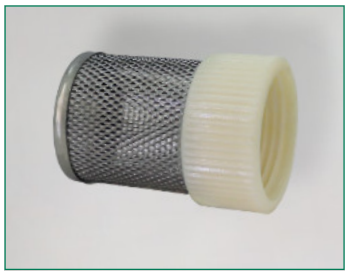


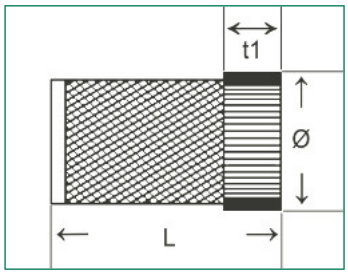


Fine-mesh stainless steel with plastic threaded connection, **without** eyelet

Item-No.:	Connection:	Thread length: t1	Length: L	Ø	Packing unit:
51311 4	1/2"	8	40	27,5	18/432
51312 1	3/4"	7	45	34	15/300
51313 8	1"	10	54	40	15/300
51314 5	1 ¼"	10	61	48	10/100
51315 2	1 ½"	10	69	58	5/100
51316 9	2"	12	84	68	5/100
51317 6	2 ½"	14	100	83	-/-
51319 0	4"	16	152,5	129	-/-

Stainless steel pre-filter female

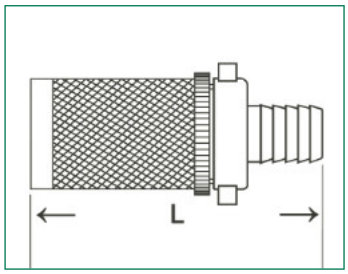




Fine-mesh stainless steel with plastic threaded connection, **without** eyelet

Item-No.:	Connection:	Thread length: t1	Length: L	Ø	Packing unit:
51313-IG	1"	13	57	31	15/300

Stainless steel pre-filter



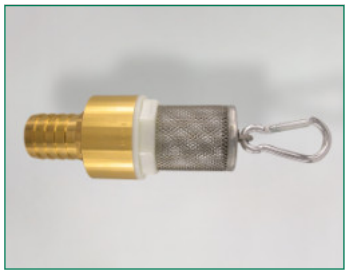
Fine-mesh stainless steel with plastic threaded connection and removable hose connection, **without** eyelet

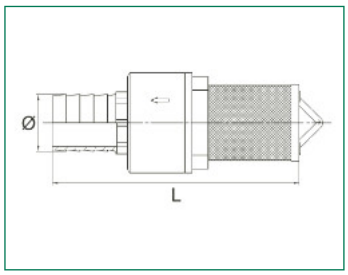
Item-No.:	Connection:	Length: L	Packing unit:
51331 2	1/2"	70	-/-
51332 9	3/4"	73	-/-
51333 6	1"	90	-/-
51334 3	1 ¼"	105	-/-
like 51333, but with **non-detachable** nut (without illu.)			
51333-10882	1"		-/-

Foot valve made of brass

Fine-mesh stainless steel with plastic threaded connection, **with** eyelet and snap hook (for 51363) and tube spout made of brass

Item-No.:	Connec.:	Thread length:	Length:		Packing unit:
		t1	L	Ø spout	
S-3064-1"	1" x G 1"		116,5	27 mm	-/100
S-3064-1¼	1 ¼" x 1 ¼"		120,5	32 mm	-/ 60

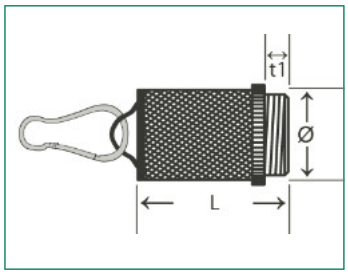




Stainless steel pre-filter

Fine-mesh stainless steel with plastic threaded connection, **with** eyelet and snap hook

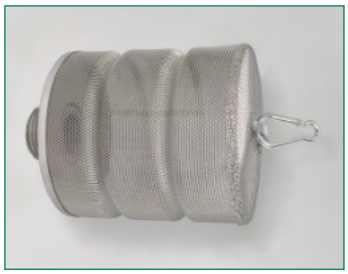
Item-No.:	Connec.:	Thread length:	Length:		Packing unit:
	M	t1	L	Ø	
S-91	1"	10	52,5	35 mm	10/180

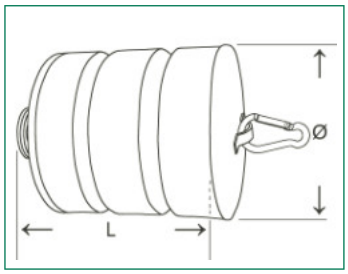


Stainless steel pre-filter

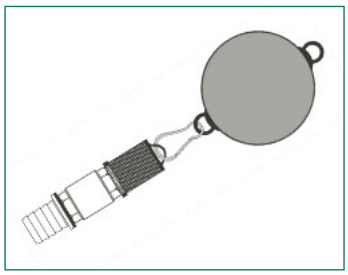
Fine-mesh stainless steel with eyelet and snap hook, male thread 1" stainless steel

Item-No.:	Connec.:	Thread length:	Length:		Packing unit:
	M		L	Ø	
S-1504	1"	14	132	100 mm	1/13





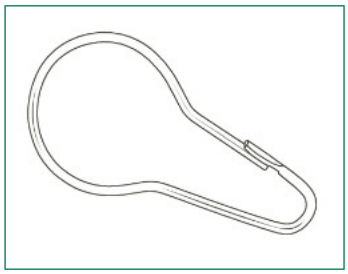
Floating suction filter



For rainwater cisterns or the like, black PE-ball (Ø 145 mm) with two eyelets, foot valve stainless steel strainer, hose tail 1"

Item-No.:	Connection:	Packing unit:
51363 3	1" x Ø 35 mm	1/10
51364 0	1" x Ø 100 mm	1/ 8
Individual components (depending on version)		
S-1668	Ø 145 mm	Float ball, black
S-91	M 1" x Ø 35 mm	Stainless steel pre-filter **with** eyelet
S-1504	M 1" x Ø 100 mm	Stainless steel pre-filter **with** eyelet
S-3064-1"	1" x G 1"	Check valve with spring and hose tail
S-91-Haken-B		Stainless steel spring hook

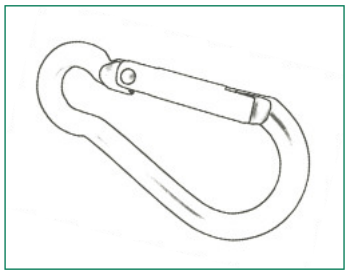
Replacement spring hook



Spare parts for filters, stainless steel spring hook, pear shape

Item-No.:	Suitable for item:	Connection: B x L x Ø	Packing unit:
S-91-Haken-B	S-91 + S-1504 + 51363 + 51364	35 x 65 x 2,3 mm	-/400

Replacement snap hook



Spare parts for filters, snap hook aluminium/stainless steel, anodized

Item-No.:	Suitable for item:	Connection: B x L x Ø	Packing unit:
S-91-Karabiner	S-91 + S-1504 + 51363 + 51364	26 x 51 x 5 mm	500/2000

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

puteus

puteus GmbH
Lenenweg 6
D-47918 Tönisvorst

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

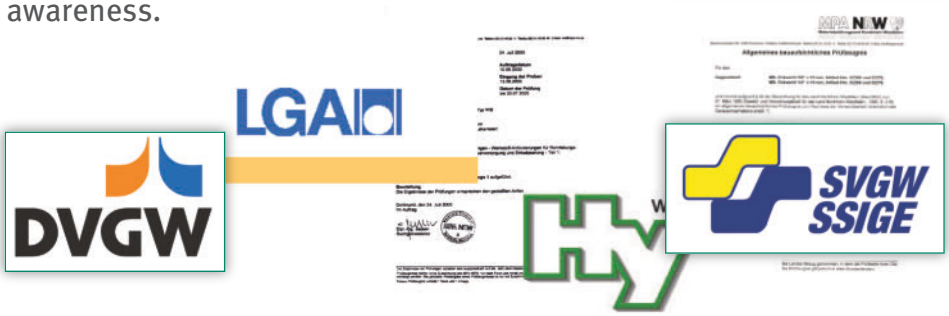
The process to comply with drinking water regulations in terms of deploying metallic materials for the manufacture and distribution of valves, fittings and other components according to the valid assessment base of the Federal Environmental Agency

Fraunhofer

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



Disclaimer:
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Domizil Tönisvorst | AG Krefeld | HRB 9505 | UST-IDNR. DE 120 581 001 | ILN 40 12167 00000 3
CEO: Hans de Gruyter | Peter de Gruyter
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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

www.eine-starke-gruppe.de

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