

water in motion

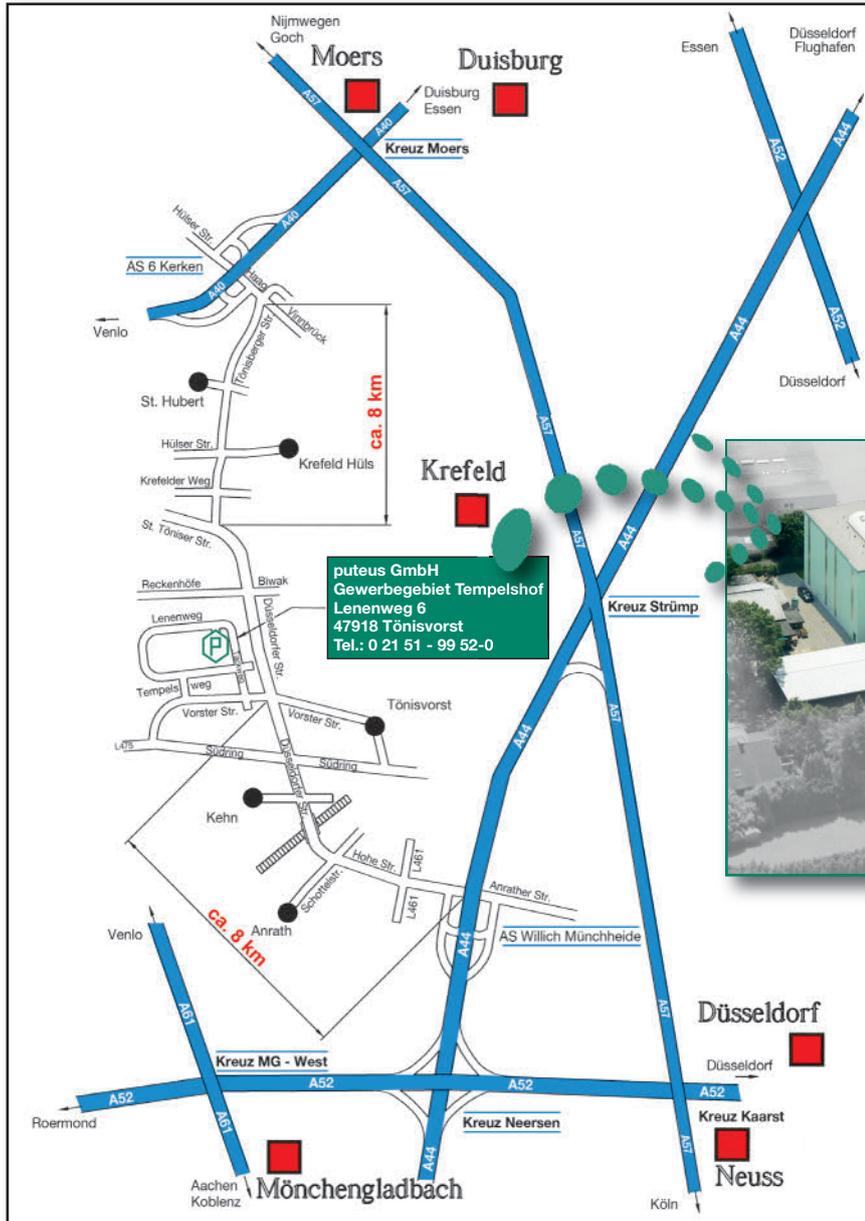


1 Appliance connection fittings

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
9952-22	9952-25	h-degruyter@puteus.de
9952-42	9952-45	p-degruyter@puteus.de
9952-42	9952-45	b-brender@puteus.de
9952-50	9952-55	verkauf@puteus.de
9952-52	9952-55	verkauf@puteus.de
9952-60	9952-55	export@puteus.de
9952-12	9952-15	vertrieb@puteus.de
9952-22	9952-24	finanzen@puteus.de
9952-23	9952-24	finanzen@puteus.de

Management

Hans de Gruyter
Purchasing/Finance
Peter de Gruyter
Distribution

Management Assistance

Sales Manager

Sales Department, Germany

Sales Department, Export

Customer Service and order processing

Accounting Department

Import/Export customs clearance

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.



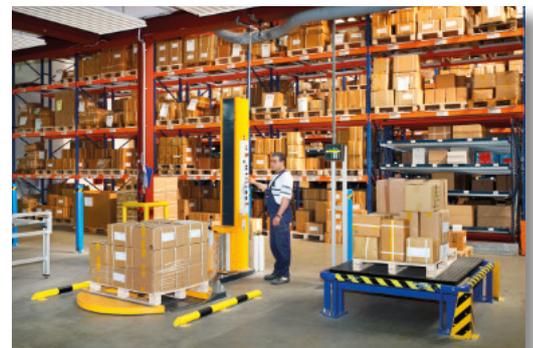
The company is based in Tönisvorst



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.



Whether the customer orders full pallet units ...



... we supply individually and promptly.

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.



... or wishes smaller packing units ...

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.



Ready for shipment.

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



► **Schloesser Armaturen GmbH & Co. KG**

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

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

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



► **Heinrich Schulte GmbH & Co. KG**

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

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

Exclusive sanitary taps and mixers



► **Heinrich Schulte GmbH & Co. KG**

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

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

Exclusive sanitary taps and mixers

www.eine-starke-gruppe.de



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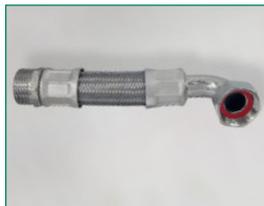
Flexible hoses for drinking water

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Reinforced hoses + washing machine hoses

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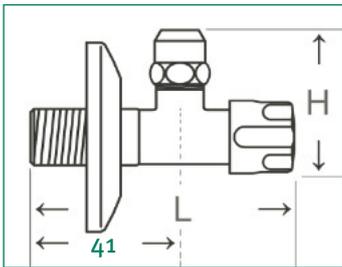
**Brass valves in accordance with the drinking water ordinance,
seal with KTW/W270 certificates, without chrome plating inside;
partly with PA/DVGW-certification**

Bathroom angle-valve



Forged brass, chrome-plated and polished, with length compensation and sliding rosette, tensile brass cone compression nut 3/8" (Ø 10 mm) with length compensation, certification mark PA-IX692/IA; noise category I, packaging in single carton*

Item-No.:	Connection:	Length: L	Packing unit:
52268 0	3/8"	76 - 81	1/100
52269 7	1/2"	76 - 81	1/100

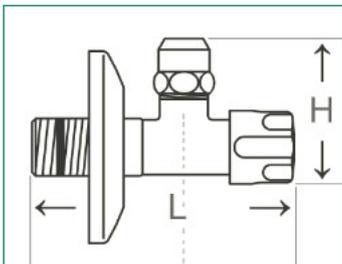


Bathroom angle-valve, self-sealing



Forged brass, chrome-plated and polished, with length compensation and sliding rosette, tensile brass cone compression nut 3/8" (Ø 10 mm) with length compensation, certification mark PA-IX692/IA; noise category I, self-sealing connection thread (PTFE), packaging in single carton*

Item-No.:	Connection:	Length: L	Packing unit:
52278 9	3/8"	76 - 81	1/100
52279 6	1/2"	76 - 81	1/100

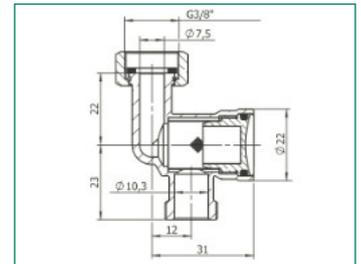


* Pictures of carton packaging see inside cover

Top mud flap for bathroom angle valve

Mud flap chrome-plated, union nut x M, with AFM-sealing, stainless steel filter, P-IX-7479/1

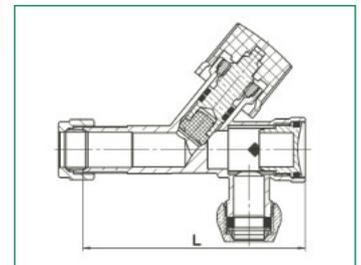
Item-No.:	Connection:	Execution:	Length: H	Packing unit:
52244 4	G 3/8" x G 3/8"		45	10/200



Bathroom angle valve with dirt filter

Angle valve with filter, brass, chrome-plated and polished, O-rings EPDM 70°A with KTW/W270 admission, seal PA6, filter and rosette stainless steel, packaging in single carton*

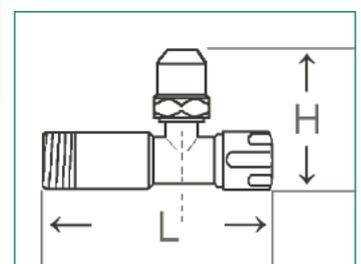
Item-No.:	Connection:	Execution:	Length: L	Packing unit:
52275 8	3/8" x 10 mm x 12 mm	Comfort grip	75	-/-
52276 5	1/2" x 10 mm x 15 mm	Comfort grip	75	-/-



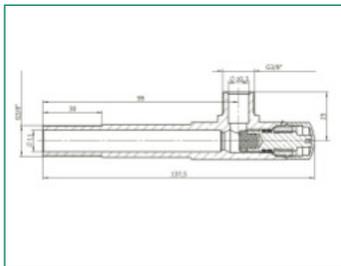
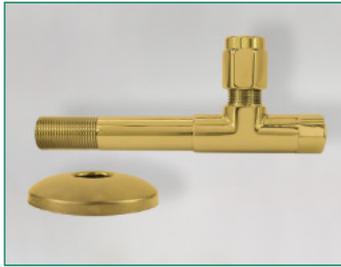
Bathroom valve with dirt filter

Forged brass, with filter and non-return valve, chrome-plated and polished, tensile brass cone compression 3/8" (Ø 10 mm) with length compensation, packaging in single carton*

Item-No.:	Connection:	Length: L	Height: H	Packing unit:
52277 2 (illustration) not self-sealing	1/2"	85	48,5	1/150
52277-sd-K1 (without illustration) self sealing	1/2"	85	48,5	1/150



Bathroom angle valve

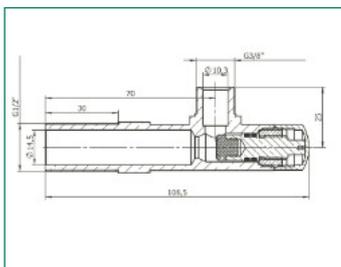


Brass or nickel-plated, with or without rosette, with or without pinch screwing, 3/8", with DVGW-certification

Item-No.:	Item-No.:	Con.:	Length:		Pack. unit:
			L	H	
with rosette without screw brass	without rosette without screw brass				
52540 7	52540-OR	3/8"	137,5	25	1/100
with rosette with screw brass	without rosette with screw brass				
52542 1	52542-OR	3/8"	137,5	45	1/100
with rosette without screw nickel-plated	without rosette without screw nickel-plated				
52544 5	52544-OR	3/8"	137,5	25	1/100
with rosette with screw nickel-plated	without rosette with screw nickel-plated				
52546 9	52546-OR	3/8"	137,5	45	1/100



Bathroom angle valve



Brass or nickel-plated, with or without rosette, with or without pinch screwing 1/2", with DVGW- and SVGW-certification

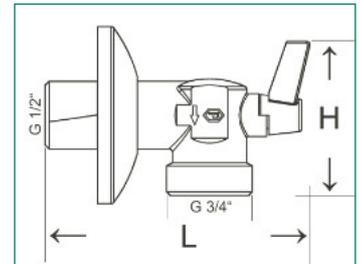
Item-No.:	Item-No.:	Con.:	Length:		Pack. unit:
			L	H	
with rosette without screw brass	without rosette without screw brass				
52541 4	52541-OR	1/2"	108,5	25	1/100
with rosette with screw brass	without rosette with screw brass				
52543 8	52543-OR	1/2"	108,5	45	1/100
with rosette without screw nickel-plated	without rosette without screw nickel-plated				
52545 2	52545-OR	1/2"	108,5	25	1/100
with rosette with screw nickel-plated	without rosette with screw nickel-plated				
52547 6	52547-OR	1/2"	108,5	45	1/100



Appliance valve

Appliance valve with Neoperl® non-return valve, chrome-plated, rosette stainless steel, lever PA 6, max. pressure range: PN10, max. temperature range: 65°C (shortly to 90°C)

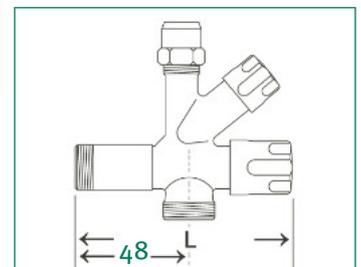
Item-No.:	Connection:	Length:		Packing unit:
		L	H	
52237 6	G1/2" x G3/4"	80,5	47	1/80



Washing machine valve

Forged brass, chrome-plated and polished, with length compensation, with non-return valve, tensile brass cone compression nut 3/8" (Ø 10 mm) with length compensation, certification mark PA-IX672/II; departure 3/4" male thread

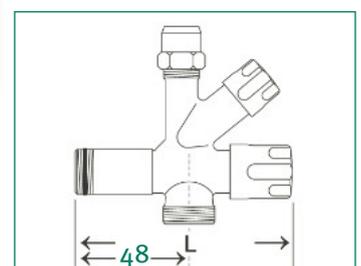
Item-No.:	Connection:	Execution:	Length:	Packing unit:
			L	
52210 9	3/8"	Comfort grip	100	6/48
52211 6	1/2"	Comfort grip	100	6/48
52211-Haube	1/2"	3-cornered handle	100	6/72



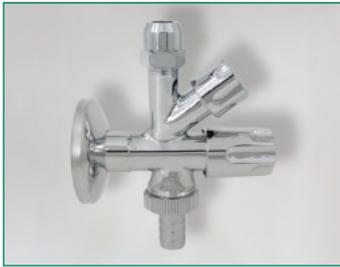
Washing machine valve

Forged brass, chrome-plated and polished, with length compensation, with non-return valve, tensile brass cone compression nut 3/8" (Ø 10 mm) with length compensation, certification mark PA-IX672/II; departure 3/4" male thread, with self-sealing connection thread

Item-No.:	Connection:	Execution:	Length:	Packing unit:
			L	
52212 3	3/8"	Comfort grip	100	6/48
52213 0	1/2"	Comfort grip	100	6/48

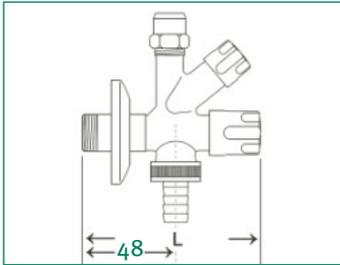


Washing machine valve



As described above, but in single box packing*, with sliding rosette, 1/2" plastic hose fitting and comfort grip

Item-No.:	Connection:	Execution:	Length:	Packing unit:
52210-K	3/8"	Comfort grip	L	1/54
52211-K	1/2"	Comfort grip	100	1/54



As described above, but in single box packing*, with sliding rosette, 1/2" plastic hose fitting and comfort grip, **self sealing**

52212-K	3/8"	Comfort grip	100	1/54
52213-K	1/2"	Comfort grip	100	1/54

Washing machine valve

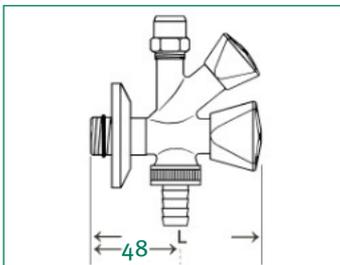


As described above, but in single box packing*, with sliding rosette, 1/2" plastic hose fitting and 3-cornered handle

Item-No.:	Connection:	Execution:	Length:	Packing unit:
52211-K-Haube	1/2"	3-cornered handle	L	1/54
52212-K-Haube	3/8"	3-cornered handle	100	1/54

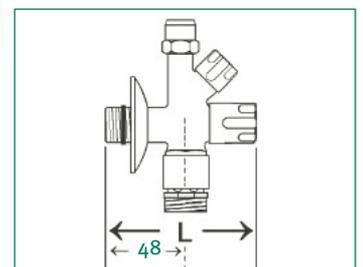
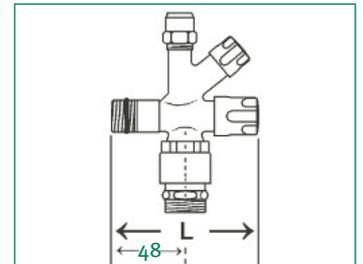
As described above, but in single box packing*, with sliding rosette, 1/2" plastic hose fitting and 3-cornered handle, **self sealing**

52213-K-Haube	1/2"	3-cornered handle	100	1/54
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Washing machine valve

Description as washing machine valve 52210/52211, but with aerator according to DIN DVGW and backflow preventer



Item-No.:	Connection:	Execution:	Length:	Packing unit:
52215 4	3/8"	Comfort grip	100	6/48
52214 7	1/2"	Comfort grip	100	6/48
52214-Haube	1/2"	3-cornered handle	100	1/ 54

Packaging in individual box * with sliding rosette and **plastic** hose connection

52215-K	3/8"	Comfort grip	100	1/ 54
52214-K	1/2"	Comfort grip	100	1/ 36
52214-K-Haube	1/2"	3-cornered handle	100	1/ 36

Description as washing machine valve 52210/52211, however, with self-sealing connection thread, with aerator according to DIN DVGW and backflow preventer

52217 8	3/8"	Comfort grip	100	6/48
52216 1	1/2"	Comfort grip	100	6/48
52216-K-Haube	1/2"	3-cornered handle	100	1/ 36

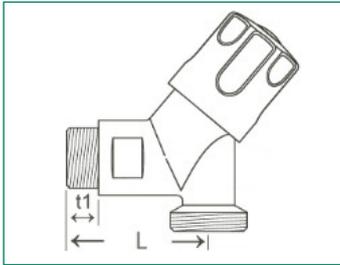
Packaging in individual box * with sliding rosette and **plastic** hose connection, self sealing

52217-K	3/8"	Comfort grip	100	1/ 54
52216-K	1/2"	Comfort grip	100	1/ 36



* Pictures of carton packaging see inside cover

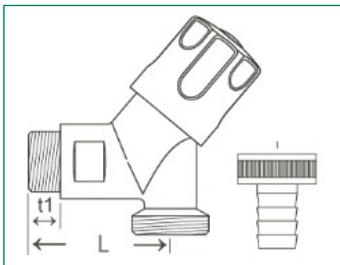
Inclined-seat valve



Market model in forged brass, chrome plated, with backflow preventer, short distance from wall

Item-No.:	Connection:	Discontinued:	Execution:	Length: L	Thread-length: t1	Packing unit:
52218 5	1/2"	3/4"	Comfort grip	49	11	6/48
52218-Haube	1/2"	3/4"	3-corn. handle	49	11	6/72

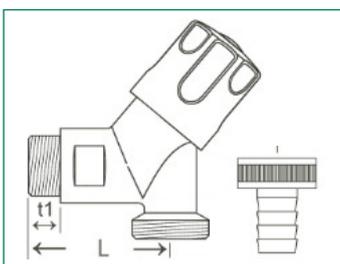
Inclined-seat valve



Market model in forged brass, chrome plated, with backflow preventer, short distance from wall, packaging in individual box* with 1/2" **plastic** hose connection

Item-No.:	Connection:	Discontinued:	Execution:	Length: L	Thread-length: t1	Packing unit:
52218-K	1/2"	3/4"	Comfort grip	49	11	1/50

Inclined-seat valve



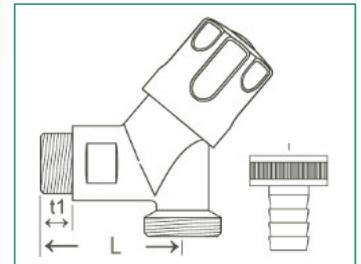
Market model in forged brass, chrome plated, with backflow preventer, short distance from wall, packaging in individual box* with 1/2" **sheet** hose connection

Item-No.:	Connection:	Discontinued:	Execution:	Length: L	Thread-length: t1	Packing unit:
52218-K-B	1/2"	3/4"	Comfort grip	49	11	1/75

Inclined-seat valve, sanitary model

Heavy version in forged brass, chrome plated, with backflow preventer, short distance from wall

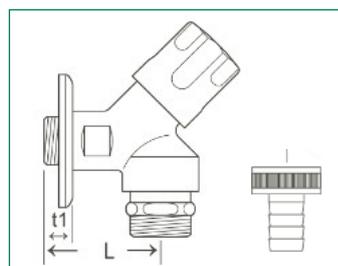
Item-No.:	Connection:	Discontinued:	Execution:	Length:	Thread-length:	Packing unit:
				L	t1	
52220 8	1/2"	3/4"	Comfort grip	51	13,5	6/72
Packaging in individual box* with 1/2" sheet hose connection, without rosette						
52220-K	1/2"	3/4"	Comfort grip	51	13,5	1/50



Forged brass, polished chrome, with backflow preventer and pipe aerator according to DIN DVGW, certification mark PA IX9341/I, short distance from wall

Item-No.:	Connection:	Discontinued:	Execution:	Length:	Thread-length:	Packing unit:
				L	t1	
52219 2	1/2"	3/4"	Comfort grip	49	11	6/48
52219-Haube	1/2"	3/4"	3-corn. handle	49	11	6/48
Packaging in individual box* with rosette and 1/2" plastic hose connection						
52219-K	1/2"	3/4"	Comfort grip	49	11	1/40
52219-K-Haube	1/2"	3/4"	3-corn. handle	49	11	1/40
Packaging in individual box* with rosette and 1/2" sheet hose connection						
52219-K-B	1/2"	3/4"	Comfort grip	49	11	1/60

Inclined-seat valve



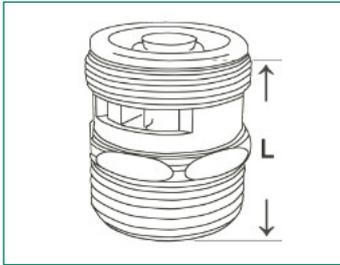
* Pictures of carton packaging see inside cover

Aerator, chrome-plated



Without housing, shape C, DIN DVGW, suitable for washing machine valves (for example 52219)

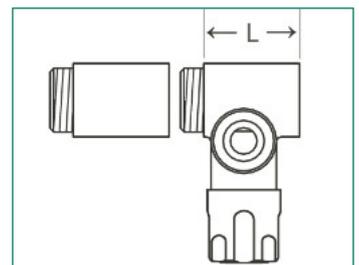
Item-No.:	Connection:	Execution:	Length:	Packing unit:
	various inserts (Illu. plastic)		L	
52262-M28	M28 x 1 x 3/4" (m.th.) brass	loose	30,5	-/360
52262-M27	M27 x 1 x 3/4" (m.th.) plastic	loose	30,5	-/360



Device battery valve

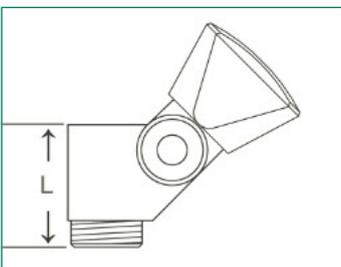
For wall-mounted valves, forged brass, polished and chrome-plated, with non-return valve and spacer

Item-No.:	Leaving:	Connection:	Execution:	Length: L	Packing unit:
52251 2	3/4" left	1/2"	Comfort grip		5/60
52252 9	3/4" left	3/4"	Comfort grip	39,5	5/60
52253 6	3/4" right	1/2"	Comfort grip		5/60
52254 3	3/4" right	3/4"	Comfort grip	39,5	5/60
Device battery valve like 52254, but with aerator (DIN DVGW)					
52255 3	3/4" right	3/4"	Comfort grip	39,5	5/60
Device battery valve like 52254, but with union nut					
52258 1	3/4" right	3/4"	3-corn. handle	39,5	5/60
Device battery valve like 52258, but with aerator (DIN DVGW)					
52259 8	3/4" right	3/4"	Comfort grip	39,5	5/60



* Pictures of carton packaging see inside cover

Appliance valve



Forged brass, polished and chrome-plated, with non-return valve

Item-No.:	Leaving:	Connection:	Execution:	Length: L	Packing unit:
52241 3	3/8"	3/8" x 3/4" m x f	Comfort grip	43,5	5/80
52242 0	1/2"	1/2" x 3/4" m x f	Comfort grip	45	5/80
52241-Haube	3/8"	3/8" x 3/4" m x f	3-corn. handle	43,5	5/80
52242-Haube	1/2"	1/2" x 3/4" m x f	3-corn. handle	45	5/60
As 52242, but packaging in individual box*					
52242-K	1/2"	1/2" x 3/4" m x f	Comfort grip	45	1/72
52242-K-Haube	1/2"	1/2" x 3/4" m x f	3-corn. handle	45	1/72
Same as before, but with aerator (DIN DVGW) and packaging in individual box*					
52243-K	1/2"	1/2" x 3/4" m x f	Comfort grip	45	-/-
52243-K-Haube	1/2"	1/2" x 3/4" m x f	3-corn. handle	45	-/-

Appliance valve

Washing machine valve, for subsequent installation to an already mounted angle valve, forged brass, polished and chrome-plated, with non-return valve, tensile brass cone compression nut 3/8" (Ø 10 mm) with length compensation

Item-No.:	Leaving:	Connection:	Execution:	Length- Leaving:	Length:	Packing unit:
				LA	L	

Appliance valve short version (31,5 mm)

52240 6	3/4" m	3/8" f	Comfort grip	27,5	31,5	7/84
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Packaging in individual box* with hose connector

52240-K	3/4" m	3/8" f	Comfort grip	27,5	31,5	1/90
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52240-K-Haube	3/4" m	3/8" f	3-corn. handle	27,5	31,5	1/90
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Appliance valve long version

Description as item 52240, but extended dimension (53/60 mm)

52239 0	3/4" m	3/8" f	Comfort grip	27,5	53 mm	7/56
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As 52239, however, packaging in individual box* with plastic hose connector

52239-K	3/4" m	3/8" f	Comfort grip	27,5	53 mm	1/54
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52239-K-Haube	3/4" m	3/8" f	3-corn. handle	27,5	53 mm	1/54
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52239-60-K	3/4" m	3/8" f	Comfort grip	33	60 mm	1/20
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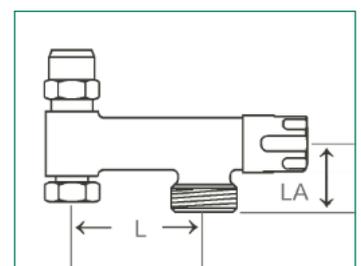
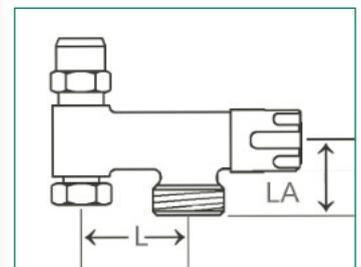
Description as item 52239, but extended dimension (39,5 mm)

52239-39,5mm	3/4" m	3/8" f	Comfort grip	39,5	53	6/72
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52239-39,5mm-Haube	3/4" m	3/8" f	3-corn. handle	39,5	53	6/72
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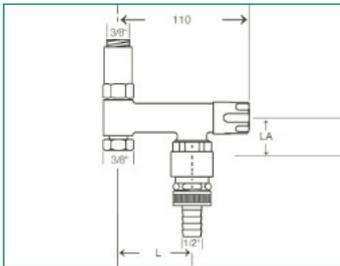
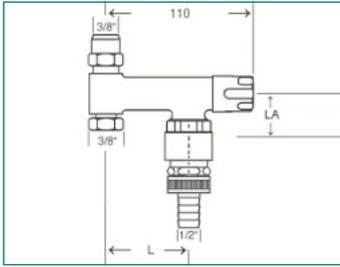
Replacement seal for 52239/40, red

Item-No.:	Connection:	Packing unit:
52240-Dichtung	10 x 15 x 1,5 mm	



* Pictures of carton packaging see inside cover

Appliance valve



Washing machine valve, for subsequent installation to an already mounted angle valve, forged brass, polished and chrome-plated, with non-return valve, pipe aerator and hose connection, tensile brass cone compression nut 3/8" (Ø 10 mm) with length compensation, packaging in individual box

Item-No.:	Leaving:	Connection:	Execution:	Length leaving: LA	Length: L	P. unit:
52246-60-K3	3/4" M	3/8" F	Comfort grip	33	60	1/80

as 52246-60-K3, but with **compensation piece**

52247-60-K3	3/4" M	3/8" F	Comfort grip	33	60	1/80
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Spare-**compensation piece** for 52247-60-K3

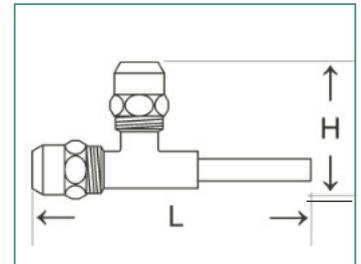
52247-60-03		3/8" F				
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T-branch fitting

For angle valve: T-fitting with extension and two tensile brass cone compression nuts, chrome-plated, copper pipe connection Ø 10 mm

Item-No.:	Connection:	Leaving:	Length:		Packing unit:
			L	H	
52267 3	3/8"	3/8" x 10 mm	123,5	56	25/100

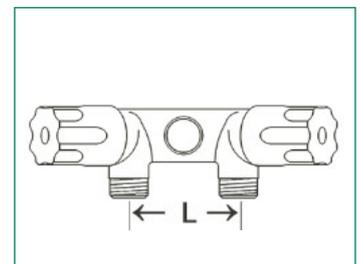
More branch fittings see chapter "compression fittings for copper pipes"



Double connection valve

Forged brass, polished and chrome-plated, with non-return valve

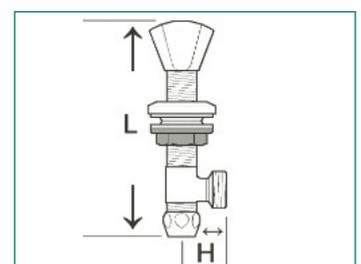
Item-No.:	Connection:	Execution:	Length:		P. unit:
			L	H	
52232 1	2 x 3/4" m, 1/2" f, 1/2" m	Comfort grip	61	50	4/24
52233 8	2 x 3/4" m, without 1/2" f	Comfort grip	61	50	4/40



Undersink appliance valve

Forged brass, chrome-plated, with non-return valve, top with plastic triangular hood handle

Item-No.:	Connection:	Length:		Packing unit:
		L	H	
52272 7	male 3/4" laterally, 10 mm below	155	32	7/56

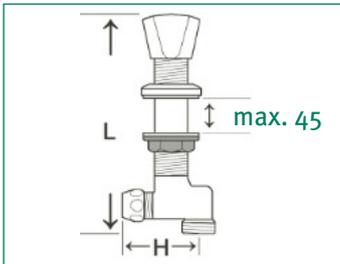


Undersink appliance valve

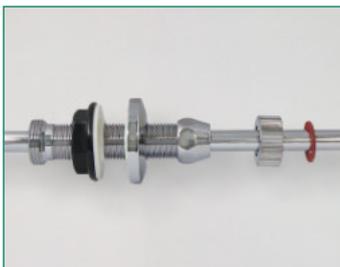


Forged brass, chrome-plated, with non-return valve, top with plastic triangular hood handle

Item-No.:	Connection:	Length:	Height:	Packing unit:
		L	H	
52273 4	male 3/4" below, 10 mm laterally	124	49	4/32

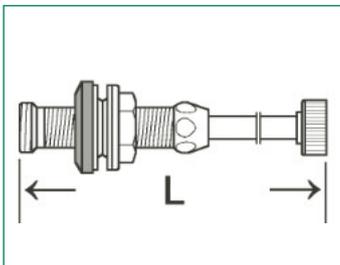


Sink set



Chrome-plated, with copper pipe

Item-No.:	Connection:	Length:	Packing unit:
		L	
52274 1	12 mm x G 3/4"	500	8/64

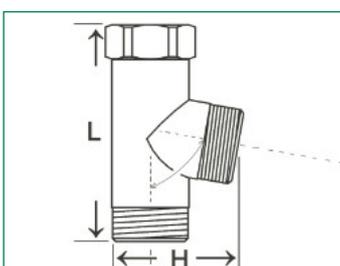


Accessories



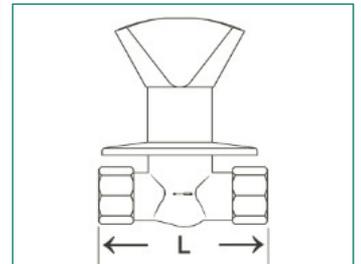
Double hose connection, brass chrome-plated, for washing machine valves and sink-feedthrough, T-form, with 2 seals

Item-No.:	Connection:	Length:	Height:	Packing unit:
		L	H	
52207 9	3/4"	61	31,9	8/48



Concealed valve

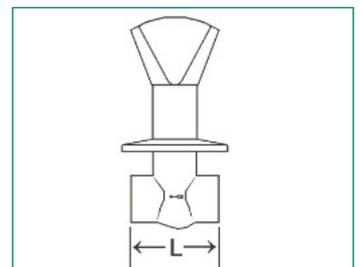
Forged brass, cone with rubber seal, female thread on both sides, with sliding rosette (with rubber seal) and triangular hood handle, installation protection, pin in red and blue



Item-No.:	Connection:	Length:	Packing unit:
		L	
52381 6	1/2"	52	6/36
52382 3	3/4"	60	5/30
52383 0	1"	72	3/18

Concealed valve

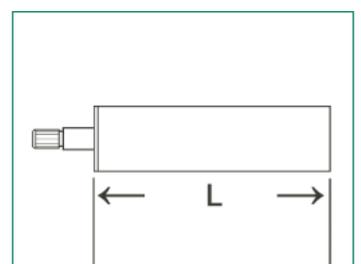
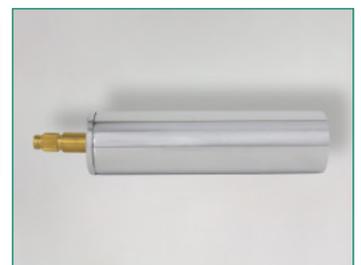
Forged brass, cone with rubber seal, solder terminal both sides, with sliding rosette (with rubber seal) and triangular hood handle, installation protection, pin in red and blue



Item-No.:	Connection:	Length:	Packing unit:
		L	
52391 5	15 mm	54	6/36
52392 2	18 mm	57,5	6/36
52393 9	22 mm	65	6/30

Extension especially for puteus concealed valves

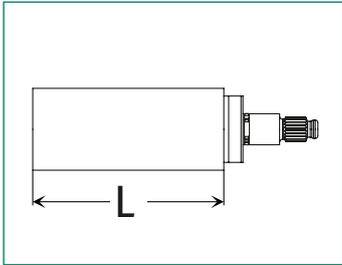
Item-No.:	For item-No.:	Connection:	Length:	Pack. unit:
			L	
52397 7	52381/52382	M24 x 1	95	20/100



Extension for concealed valves with short spindle



Item-No.:	Connection:	Length: L (mm)	Packing unit:
S-2588-43	M 24 x 1	40	-/ 160
S-2588-60	M 24 x 1	60	-/ 120



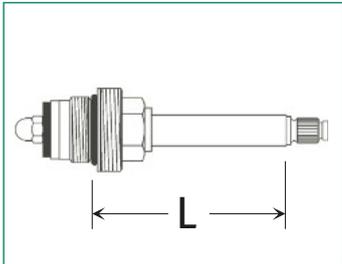
Upper valve part for concealed valve



Item-No.:	for item-No.:	Size:	Packing unit:
52385 4	52381, -91, -92	G 1/2"	10/100
52386 1	52382, -93	G 3/4"	10/100
52387 8	52383	G 1"	10/100

Accessories: wall rose for concealed valve (without illu.)

52388 5	26 mm x 69 mm		-/800
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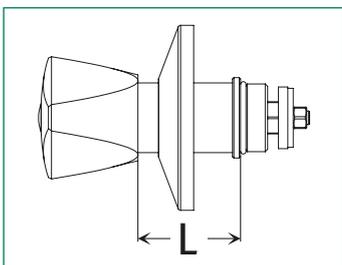


Valve tops for concealed valve, complete



Forged brass, cone with rubber seal, female thread on both sides, with solid brass sliding rosette (with rubber seal) and triangular hood handle, installation protection, pin in red and blue

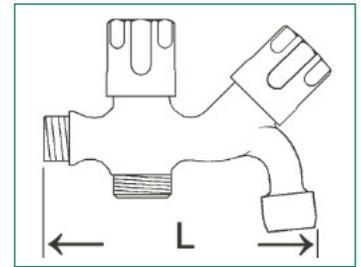
Item-No.:	Connection: L (mm)	Size:	Packing unit:
52386-11469	38	G 3/4"	1/40
52387-11469	38	G 1"	1/40



Polished chrome-plated, tops with comfort grips, spout with aerator, for cold water

Item-No.:	Connection:	Leaving: male thread	Length: L	Packing unit:
52231 4	1/2"	3/4"	125	4/32

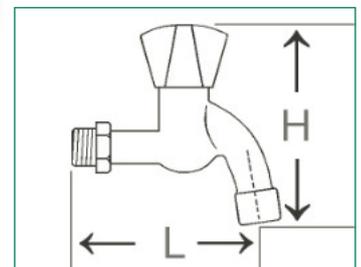
Combination valve



Brass, polished and chrome-plated, for cold water

Item-No.:	Connection:	Length: L	Height: H	Packing unit:
with chrome-plated plastic bonnet handle				
52081 5	1/2"	103	95	4/40
with chrome-plated zinc die casting handle				
52085 3	1/2"	103	95	4/40

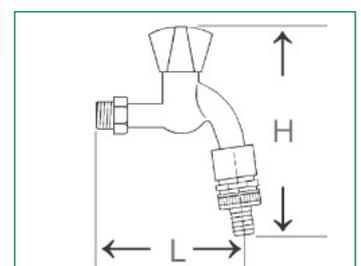
Bib tap with aerator



Bib tap with aerator and non-return valve

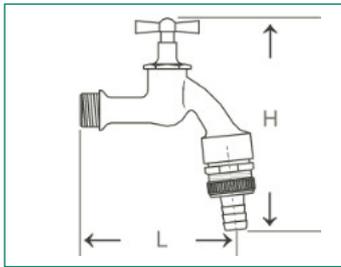
Aerator according to DIN DVGW (1/2"), polished and chrome-plated, with hood handle and plastic hose coupling, for cold water

Item-No.:	Connection:	Length: L	Height: H	Packing unit:
52065 5	1/2"	100	141	5/60
Packaging in individual box*				
52065-K	1/2"	100	141	1/48



* Pictures of carton packaging see inside cover

Bib tap



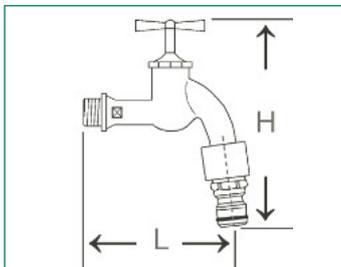
With T-handle and hose connection optionally made of plastic or metal sheet.
With aerator according to DIN DVGW (size 1/2") and backflow preventer

Item-No.:	Spout:	Conn.:	Execution:	Length:	Height:	Packing unit:
	Plasticspout			Sheetspout	L	
52041 9		1/2"	matt chrome-plat.	92	140	5/ 60
52042 6		3/4"	matt chrome-plat.	93	145	4/ 28
52061 7		1/2"	poli. chrome-plat.	92	140	5/ 60
52062 4		3/4"	poli. chrome-plat.	93	145	4/ 28

Packaging in individual box*:

52041-K	52041-K-B	1/2"	matt chrome-plat.	92	140	1/ 60
52042-K	52042-K-B	3/4"	matt chrome-plat.	93	145	1/ 28
52061-K	52061-K-B	1/2"	poli. chrome-plat.	92	140	1/ 60
52062-K	52062-K-B	3/4"	poli. chrome-plat.	93	145	1/ 28

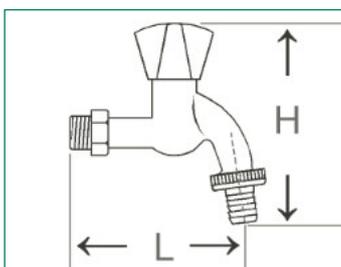
Bib tap with brass coupling



Like 52061, but with aerator DIN DVGW (1/2") and hose connection for brass coupling, with integrated drain plug to drain before the frost period

Item-No.:	Conn.:	Execution:	Length:	Height:	Packing unit:
			L	H	
52064 8	1/2"	poli. chrome-plat.	92	150	5/60

Bib tap



Brass, polished and chrome-plated, with triangular hood handle and and plastic hose coupling, pin in red and blue

Item-No.:	Connection:	Length:	Height:	Packing unit:
		L	H	
52007 5	1/2"	9,5	10,5	5/60

* Pictures of carton packaging see inside cover

Garden bib tap with handwheel

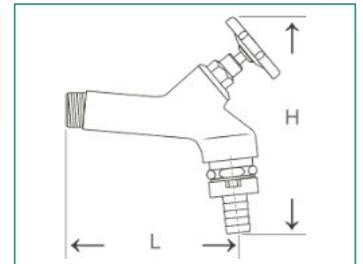
Brass bib tap, matt chrome-plated, with aerator, hose coupling, top with handwheel

Item-No.:	Connection:	Leaving:	Length:	Height:	Packing unit:
			L	H	
52049 5	1/2"	3/4"	110	139	6/24



Replacement top part with handwheel (without illu.)

Item-No.:	Conn.:	Execution:	Length: L	Packing unit:
52291-52049	1/2"	matt-chrome	75	10/250



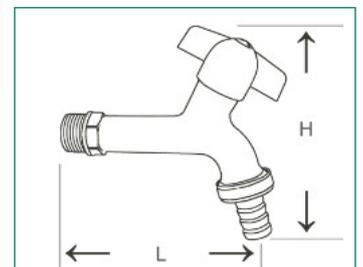
Valve body/handle made of PA6, RoHs- (Kat.2) / REACH-compliant, o-ring made of EPDM with KTW/W270 certification, upper part brass in accordance with DIN 50930-6, brass union nut, stainless steel spout

Item-No.:	Conne.:	Length:		Packing unit:
		L	H	
52024-Blau	1/2"	103	110	-/180



as above, but without stainless steel spout

52024-B-OT	1/2"	103		-/180
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Bib tap

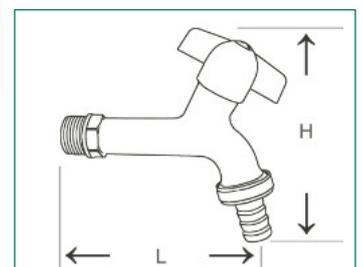
Valve body/handle made of PA6, RoHs- (Kat.2) / REACH-compliant, o-ring made of EPDM with KTW/W270 certification, upper part brass in accordance with DIN 50930-6, brass union nut, stainless steel spout

Item-No.:	Conne.:	Length:		Packing unit:
		L	H	
52024-Grün	1/2"	103	110	-/180



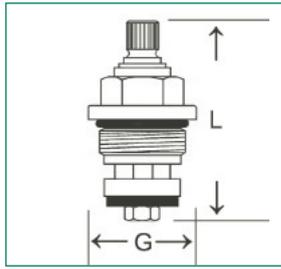
as above, but without stainless steel spout

52024-G-OT	1/2"	103		-/180
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Bib tap

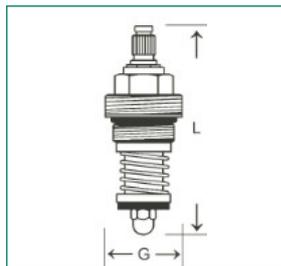
Inner top part



Forged brass, without grease chamber

Item-No.:	Connec.:	Thread:		Packing unit:
suitable for 52024		L	G	
52028 0		43	20	-/-

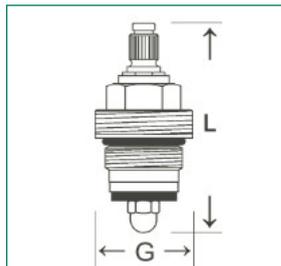
Inner top part



Forged brass, with backflow preventer, for washing machine valves

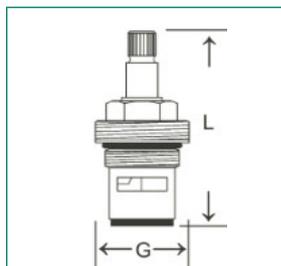
Item-No.:	Connec.:	Thread:		Packing unit:
		L	G	
52263 5	3/8"			40/480
52264 2	1/2"			30/360

Upper valve part with grease chamber/sanitary upper part



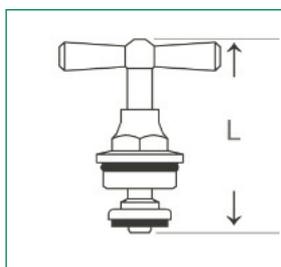
Item-No.:	Connec.:	Thread:		Packing unit:
		L	G	
52418 9	3/8"	50	M21 x 1	30/300
52419 6	1/2"	54	M24 x 1	20/200
52419-M19 x 1,5 mm	M19 x 1,5	55		50/400
52417-11783	3/4"	55	M24 x 1	25/100

Ceramic top part



Item-No.:	Conn.:	Execution:	Thread:		Pack. unit:
			L	G	
80915-K	1/2"	cold water, right closing	51	23	25/250
80915-W	1/2"	warm water, left closing	51	23	25/250

Upper valve part with toggle



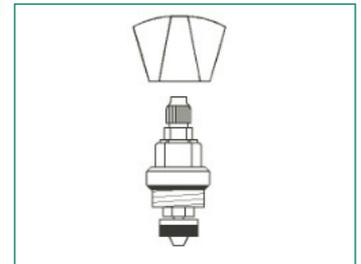
Made of brass with a double O-ring and backflow preventer

Item-No.:	Conn.:	Execution:	Length:	Packing unit:
52046 4	1/2"	matt chrome-plated	60	10/300
52046-3/4	3/4"	matt chrome-plated	69	10/250
52066 2	1/2"	poli. chrome-plat.	60	10/300

Triangular handle

Made of Zamak, including sanitary upper part

Item-No.:	Connection:	Marking:	Length:	Packing unit:
52410 3	3/8"	blue	54	1/160
52411 0	3/8"	red	54	1/160
52412 7	1/2"	blue	52	10/ 80
52413 4	1/2"	red	52	10/ 80



With inner top part including sanitary upper part

Item-No.: Brass grip	Connection:	Marking:	Length:	Packing unit:
52400 4	3/8"	blue	58	10/ 80
52401 1	3/8"	red	58	10/ 80
52402 8	1/2"	blue	56	10/ 80
52403 5	1/2"	red	56	10/ 80
52402-M19 x 1,5	M19 x 1,5 mm	blue		10/160
52403-M19 x 1,5	M19 x 1,5 mm	red		10/160

Item-No.: **Zamak grip**

52405 9	3/8"	blue	58	10/ 80
52406 6	3/8"	red	58	10/ 80
52407 3	1/2"	blue	56	10/ 80
52408 0	1/2"	red	56	10/ 80
52407-M19 x 1,5	M19 x 1,5 mm	blue		10/160
52408-M19 x 1,5	M19 x 1,5 mm	red		10/160

3-Star-handle

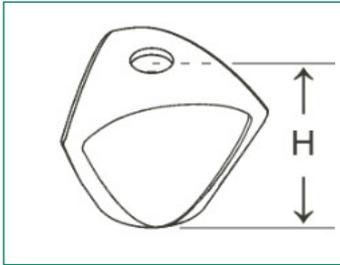


Crystal handle incl. upper part with grease chamber

Item-No.:	Connection:	Marking:	Length:	Packing unit:
80270 6	3/8"	blue	62	10/160
80271 3	3/8"	red	62	10/160
80272 0	1/2"	blue	77	10/100
80273 7	1/2"	red	77	10/100



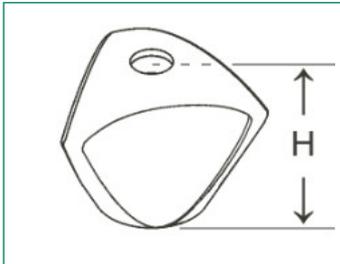
Triangular handle



Plastic, chrome-plated, for cold water

Item-No.:	Con.:	Execution:	Length:	Packing unit:
loose handle			H	
52208-Haube	3/8"	3-corn. handle	36	-/-
52209-Haube	1/2"	3-corn. handle	36	-/-
Set 1 with integrated grid socket				
52203-Haube-Set1	3/8"	3-corn. handle	36	-/-
52204-Haube-Set1	1/2"	3-corn. handle	36	-/-
Set 2 with integrated grid socket and upper part (52263 or 52264)				
52203-Haube-Set2	3/8"	3-corn. handle	36	-/-
52204-Haube-Set2	1/2"	3-corn. handle	36	-/-

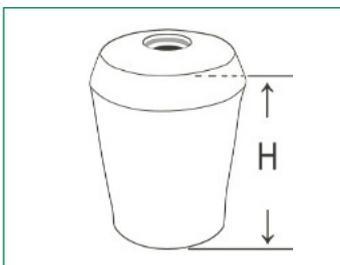
Triangular handle



Zamak, chrome-plated, for cold water

Item-No.:	Con.:	Execution:	Length:	Packing unit:
loose handle			H	
52208-Haube-Zamak	3/8"	3-corn. handle	36	-/-
52209-Haube-Zamak	1/2"	3-corn. handle	36	-/-

Round handle



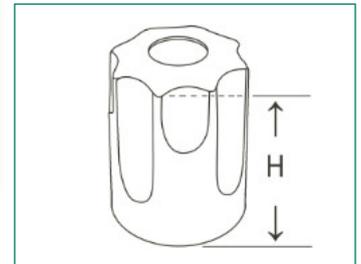
Round handle, plastic, chrome-plated, for hot water appliances

Item-No.:	Con.:	Execution:	Length:	Packing unit:
loose handle		Pin	H	
80281-R	3/8"	red	39	1/300
80281-B	3/8"	blue	39	1/300
80281-W	3/8"	white	39	1/300
Set 1 with grid socket				
80281-R-Set1	3/8"	red	39	1/200
80281-B-Set1	3/8"	blue	39	1/200
80281-W-Set1	3/8"	white	39	1/200
Set 2 with grid socket and upper part				
80281-R-Set2	3/8"	red	39	1/200
80281-B-Set2	3/8"	blue	39	1/200
80281-W-Set2	3/8"	white	39	1/200

Plastic, chrome-plated, for cold water

Item-No.:	Con.:	Execution:	Length:	Packing unit:
loose handle			H	
52208 6	3/8"	Comfort grip	36	-/-
52209 3	1/2"	Comfort grip	36	10/100
Set 1 with grid socket				
52208-Set1	3/8"	Comfort grip	36	-/-
52209-Set1	1/2"	Comfort grip	36	-/-
Set 2 with grid socket and upper part				
52208-Set2	3/8"	Comfort grip	36	-/-
52209-Set2	1/2"	Comfort grip	36	-/-

Round handle



Plastic, chrome-plated, for hot water units

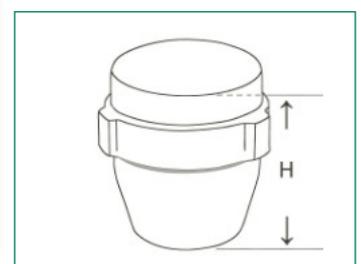
Item-No.:	Con.:	Execution:	Length:	Packing unit:
loose handle		Pin	H	
80282-R		red	48	10/200
80282-B		blue	48	10/200
80282-W		white	48	10/200
Set 1 with grid socket				
80282-R-Set1		red	48	1/200
80282-B-Set1		blue	48	1/200
80282-W-Set1		white	48	1/200
Set 2 with grid socket and upper part				
80282-R-Set2		red	48	1/200
80282-B-Set2		blue	48	1/200
80282-W-Set2		white	48	1/200

Round handle

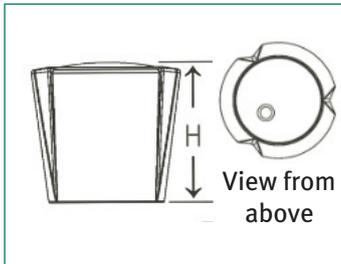


Item-No.:	Con.:	Execution:	Length:	Packing unit:
loose handle		Pin	H	
80286-B		blue	53	10/200
80286-R		red	53	10/200
Set 1 with grid socket				
80286-B-Set1		blue	53	10/200
80286-R-Set1		red	53	10/200
Set 2 with grid socket and upper part				
80286-B-Set2		blue	53	10/200
80286-R-Set2		red	53	10/200

Crown handle



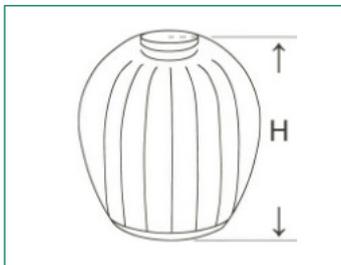
Round handle



Zamak-handle, chrome-plated

Item-No.:	Con.:	Execution:	Length:	Packing unit:
loose handle		Pin	H	
S-2584-B		blue	45	10/80
S-2584-R		red	45	10/80
Set 1 with grid socket				
S-2584-B-Set1		blue	45	-/160
S-2584-R-Set1		red	45	-/160
Set 2 with grid socket and upper part (3/8" 52418 / 1/2" 52419)				
S-2584-B-Set2		blue	45	-/160
S-2584-R-Set2		red	45	-/160

Crystal handle



Acrylic handle, oval, for grid sockets

Item-No.:	Con.:	Execution:	Length:	Packing unit:
loose handle		Pin	H	
80283-B		blue	55	10/200
80283-R		red	55	10/200
Set 1 with grid socket				
80283-B-Set1		blue	55	10/200
80283-R-Set1		red	55	10/200
Set 2 with grid socket and upper part (3/8" 52418 / 1/2" 52419)				
80283-B-Set2		blue	55	10/200
80283-R-Set2		red	55	10/200

Diamond handle



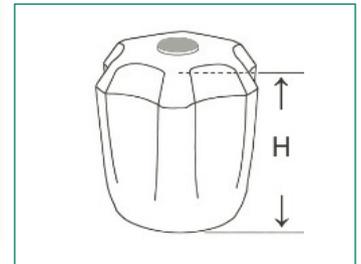
Acrylic handle, chrome-plated, for grid sockets

Item-No.:	Con.:	Execution:	Length:	Packing unit:
loose handle			H	
80284-B		3-corn. handle	50	10/200
80284-R		3-corn. handle	50	10/200
Set 1 with grid socket				
80284-B-Set1		3-corn. handle	50	10/200
80284-R-Set1		3-corn. handle	50	10/200
Set 2 with grid socket and upper part (3/8" 52418 / 1/2" 52419)				
80284-B-Set2		3-corn. handle	50	10/200
80284-R-Set2		3-corn. handle	50	10/200

Acrylic handle

Acrylic handle, conical, for grid sockets

Item-No.:	Con.:	Execution:	Length:	Packing unit:
loose handle		Pin	H	
80285-B		blue	45	10/200
80285-R		red	45	10/200
Set 1 with grid socket				
80285-B-Set1		blue	45	10/200
80285-R-Set1		red	45	10/200
Set 2 with grid socket and upper part (3/8" 52418 / 1/2" 52419)				
80285-B-Set2		blue	45	10/200
80285-R-Set2		red	45	10/200



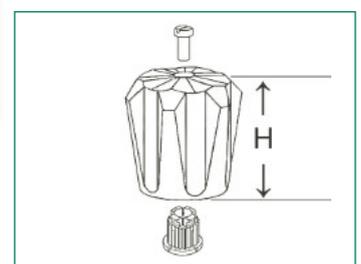
Acrylic handle, cylindrical, for grid sockets

Item-No.:	Con.:	Execution:	Length:	Packing unit:
loose handle		Pin	H	
80287-B		blue	45	10/200
80287-R		red	45	10/200
Set 1 with grid socket				
80287-B-Set1		blue	45	10/200
80287-R-Set1		red	45	10/200
Set 2 with grid socket and upper part (3/8" 52418 / 1/2" 52419)				
80287-B-Set2		blue	45	10/200
80287-R-Set2		red	45	10/200

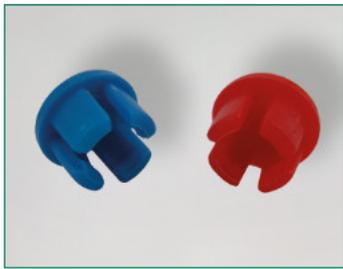


Acrylic handle with screw and grid socket

Item-No.:	Con.:	Execution:	Length:	Packing unit:
without pin (see image)		Pin	H	
80272-G	1/2"		47	-/-
with blue pin				
80272-Griff	1/2"	blue	47	-/-
with red pin				
80273-Griff	1/2"	red	47	-/-

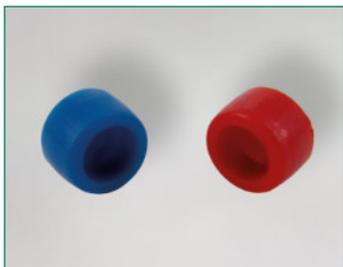


Spare parts for handles



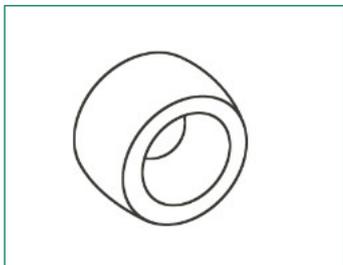
Pin for comfort- and triangular hood handle, plastic red or blue

Item-No.:	Execution:	Connection:		Height:	Packing unit:
loose handle	Pin		Ø		
52209-Haube-Pin-R	red	3/8" + 1/2"	10,5	7,3	-/-
52209-Haube-Pin-B	blue	3/8" + 1/2"	10,5	7,3	-/-



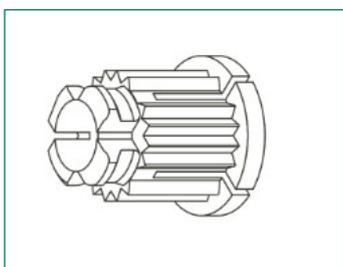
Pin for Zamac- and triangular hood handle, plastic red or blue

Item-No.:	Execution:	Connection:		Height:	Packing unit:
loose handle	Pin		Ø		
5240x-Pin-R	red	3/8" + 1/2"	7	4	-/-
5240x-Pin-B	blue	3/8" + 1/2"	7	4	-/-



Grid socket for sanitary handle, plastic, white

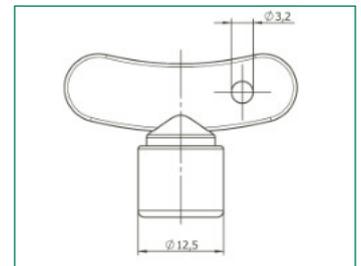
Item-No.:	Connection:	Execution:	Height:	Packing unit:
			H	
52202 4				-/5000



Socket wrench

Zinc die cast chromium-plated, square

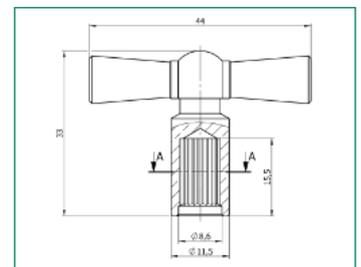
Item-No.:	Wrench size:	Packing unit:
52054 9	7 mm	250/1000
52057 0 (suitable for 52051/52)	6,2 mm	300/2400



Socket wrench for sanitary upper parts

Brass chromium-plated

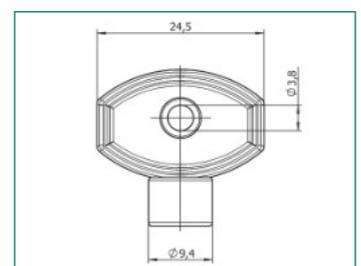
Item-No.:	Wrench size:	Packing unit:
52057-11712		50/450



Socket wrench for heating emptying

Zamac

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

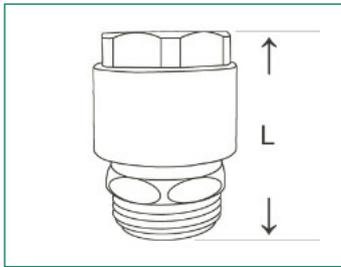


Aerator with housing



Chrome-plated, with housing, DIN DVGW

Item-No.:	Connection	Length:	Packing unit:
52205 5	3/4" female/male	47,5	25/200

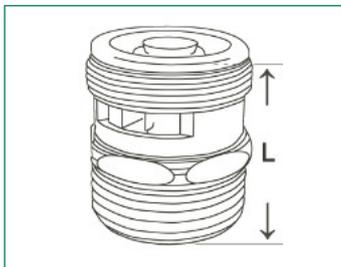


Aerator, chrome-plated



Without housing, shape C, DIN DVGW, suitable for washing machine valves (for example 52219)

Item-No.:	Connection:	Execution:	Length:	Packing unit:
	various inserts (illu. plastic)		L	
52262-M28	M28 x 1 x 3/4" (male) brass	loose	30,5	-/360
52262-M27	M27 x 1 x 3/4" (male) plastic	loose	30,5	-/360

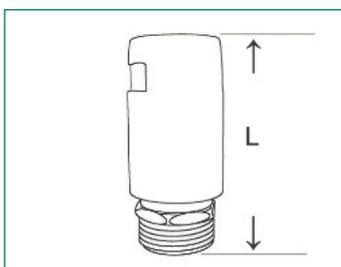


Flow pipe aerator with backflow preventer, chrome plated



Flow direction from top to bottom

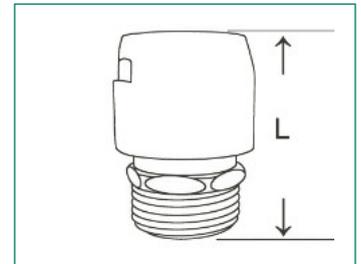
Item-No.:	Connection:	Nominal width:	Length:	Packing unit:
		DN	L	
52191 1	female 3/4" x male 3/4"	20	70	-/-



Flow pipe aerator without backflow preventer, chrome plated

Flow direction from top to bottom, only for valves with integrated backflow preventer

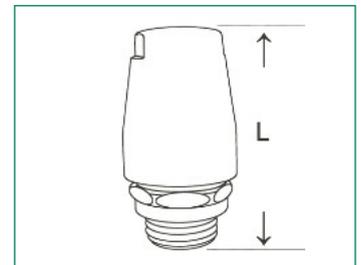
Item-No.:	Connection:	Nominal width:	Length:	Packing unit:
		DN	L	
52193 5	female 1/2" x male 1/2"	15	45	-/-
52194 2	female 3/4" x male 3/4"	20	45	-/-



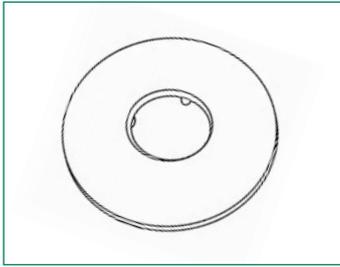
Flow pipe aerator with backflow preventer, chrome plated

Flow direction from top to bottom, especially for bath and shower mixers

Item-No.:	Connection:	Nominal width:	Length:	Packing unit:
		DN	L	
52192 8	female 1/2" x male 1/2"	15	58	-/-



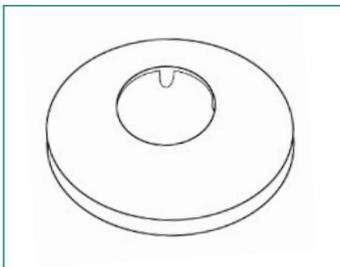
Sliding rosette



Stainless steel

Item-No.:	for example to Item-No.:	Conne.:	Ø outside	Ø inside	Height:	Packing unit:
52266 6	52210	3/8"	54	17	11,5	100/1200

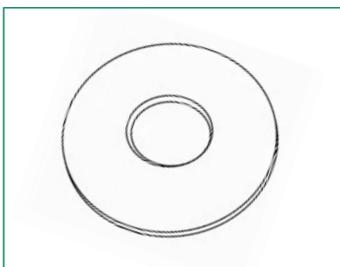
Sliding rosette



Stainless steel

Item-No.:	for example to Item-No.:	Connection:	Ø outside	Ø inside	Height:	Packing unit:
52265 9	52211	1/2"	54	21	12	100/1200

Sliding rosette



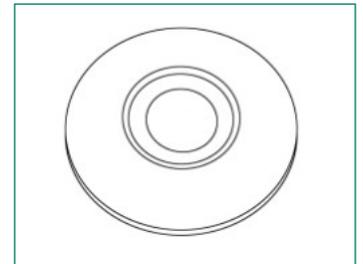
Stainless steel

Item-No.:	for example to Item-No.:	Connection:	Ø outside	Ø inside	Height:	Packing unit:
52265-flach	52219	1/2"	56	20	8,5	100/1200

Sliding rosette

Stainless steel, polished

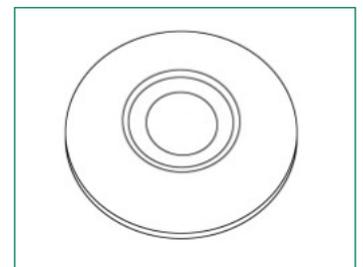
Item-No.:	for example to Item-No.:	Connection:	∅ outside	∅ inside	Height:	Packing unit:
52265-52219	52219	1/2"	58	22	6,5	100/1200



Sliding rosette

Brass, polished

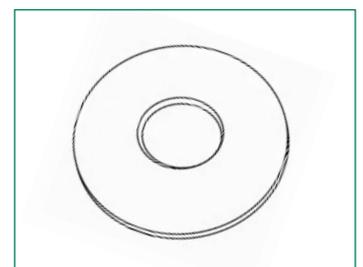
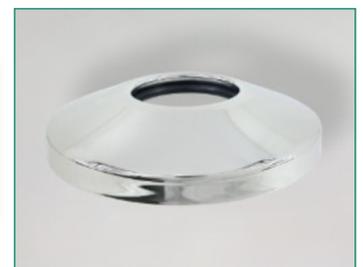
Item-No.:	for example to Item-No.:	Connection:	∅ outside	∅ inside	Height:	Packing unit:
52265-52141	52141-N	1/2"	58	22	5	100/1200
52265-52142	52142-N	3/4"	66	27	6	100/1200



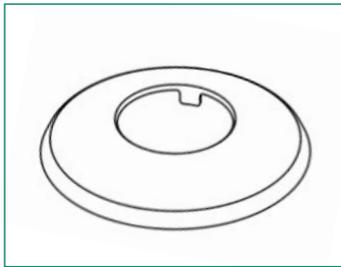
Sliding rosette

Brass chrome-plated, suitable for all concealed valves, with inner seal

Item-No.:	for example to Item-No.:	Connection:	∅ outside	∅ inside	Height:	Packing unit:
52388 5			69	24,5	14,5	-/-



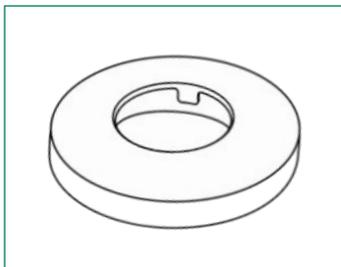
Sliding rosette



Brass, polished and chrome-plated, for connection fittings

Item-No.:	for example to Item-No.:	Connection:	Ø outside	Ø inside	Height:	Packing unit:
35732 9			65	28	10,5	50/450

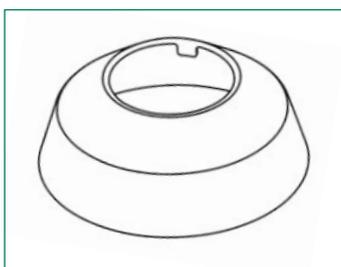
Sliding rosette



Brass, polished and chrome-plated, cylindrical, for connection fittings

Item-No.:	for example to Item-No.:	Connection:	Ø outside	Ø inside	Height:	Packing unit:
35743 5			70	28	11	50/450

Sliding rosette



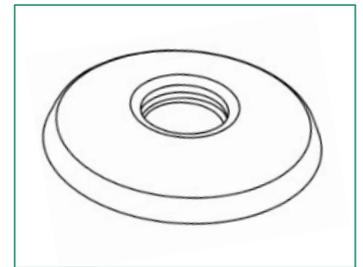
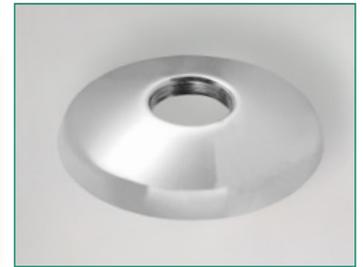
Brass, polished and chrome-plated, for connection fittings

Item-No.:	for example to Item-No.:	Connection:	Ø outside	Ø inside	Height:	Packing unit:
35734 3	35725-30		69	30	27	40/240

Screw rosette

Brass, polished and chrome-plated, with thread, for connection fittings

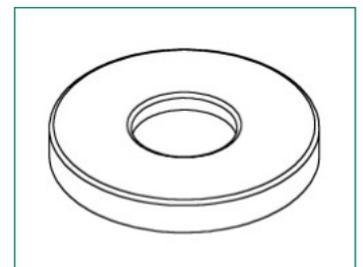
Item-No.:	for example to Item-No.:	Connection:	Ø outside	Ø inside	Height:	Packing unit:
35733 6	35710	3/8"	57	16	11,5	64/384
35731 2	35711/12/13	1/2"	69	20	11,5	55/330



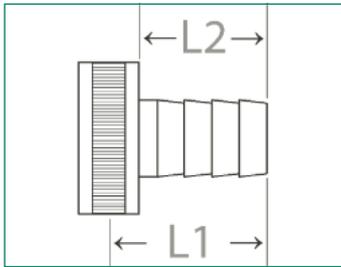
Screw rosette

Brass, polished and chrome-plated, with thread, for connection fittings

Item-No.:	for example to Item-No.:	Connection:	Ø outside	Ø inside	Height:	Packing unit:
35740 4		1/2"	64,5		9	-/-
35735 0		3/4"	64,5		9	-/-



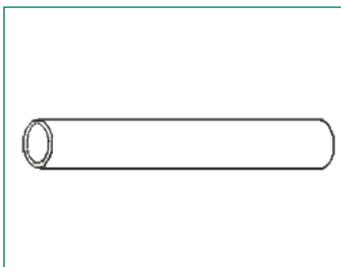
Hose screw connectors with knurled nut



For use in the sanitary sector

Item-No.:	Spout:	Thread:	Length:		Packing unit:
			L1	L2	
2-pieces, brass sheet, chrome-plated, with knurled nut					
35081-K taper joint	1/2"	3/4"	31,5	22,5	50/1500
35082-K taper joint	3/4"	1"	33,5	23,5	50/ 900
2-pieces, plastic, chrome-plated, with knurled nut					
35081-KU with O-ring	1/2"	3/4"	34,3	23,3	50/1000
35082-KU flat joint	3/4"	1"	33,5	22,5	50/ 900
2-pieces, forged brass, chrome-plated, with knurled nut					
35081 8 flat joint	1/2"	3/4"	31,5	22,5	50/1000
35082 5 flat joint	3/4"	1"	33,5	23,5	50/ 900
35119 8 flat joint	1/2"	M 22 x 1	34,5	23	25/ 400
2-pieces, brass sheet, blank, with knurled nut					
35081-K-52141	1/2"	3/4"	31,5	22,5	50/1500
35082-K-52142	3/4"	1"	33,5	23,5	50/ 900
2-pieces, plastic, blank, with knurled nut					
35081-KU-52141	1/2"	3/4"	31,5	22,5	50/1500
35082-KU-52142	3/4"	1"	33,5	23,5	50/ 900

Copper pipe, ring shape



Ring shape 5 m, chrome-plated

Item-No.:	Diameter (Ø):	Length:	Packing unit:
52501 8	8 mm	5000 mm	1/20
52502 5	10 mm	5000 mm	1/ 10
52503 2	12 mm	5000 mm	1/ 9

Compression fittings for copper pipes

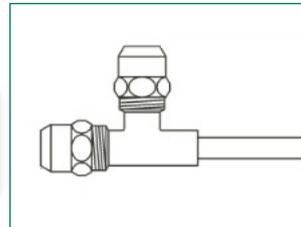
Material in accordance with DIN 50960-6, operating temperature max. 90°C,
operating pressure max. 10 bar.

Important note: compression fittings are for single use only!

T-branch piece

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

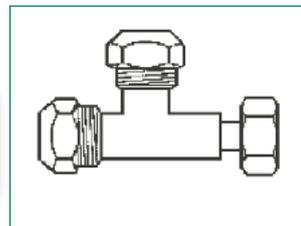
Item-No.:	Connection:	Leaving:	Packing unit:
52267 3	3/8"	3/8" x 10 mm	25/100



T-branch piece

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

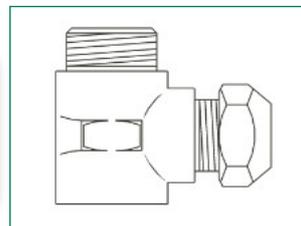
Item-No.:	Connection:	Leaving:	Packing unit:
52267-3/8"	3/8"	3/8" x 10 mm	25/150



T-branch piece

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

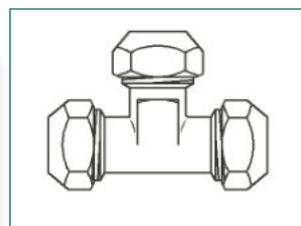
Item-No.:	Connection:	Leaving:	Packing unit:
52463 9	1/2" x 1/2"	3/8" x 10 mm	10/200
52464 6	1/2" x 1/2"	1/2" x 12 mm	10/200



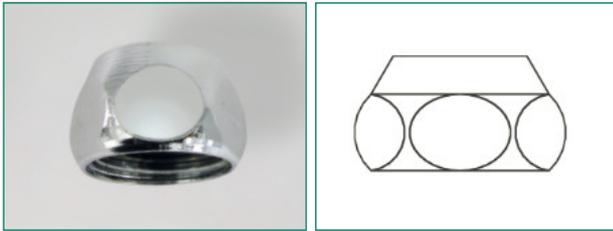
T-branch piece

T-piece with 3 x compression fittings, chrome plated

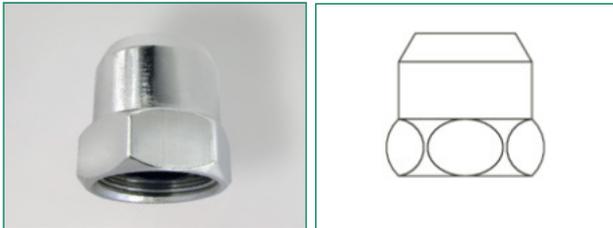
Item-No.:	Connection:	Packing unit:
52470 7	3/8" x 8 mm	10/200
52471 4	3/8" x 10 mm	10/200
52472 1	1/2" x 12 mm	10/160



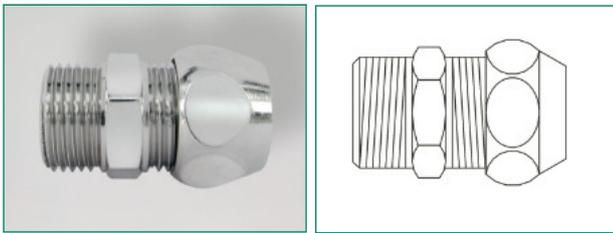
Compression fitting, loose



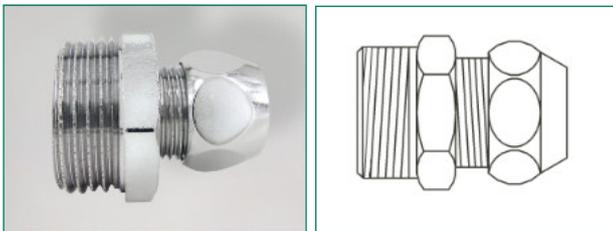
Compression fitting, loose



Single compression fitting



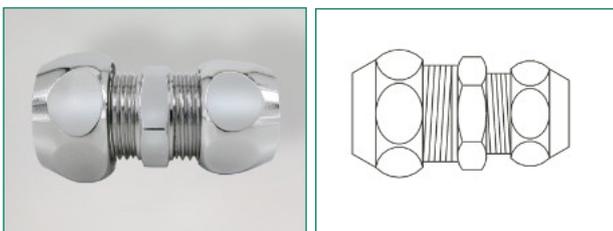
Single compression fitting



Double compression fitting



Double compression fitting



Compression fitting without length compensation, chrome-plated

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

Compression fitting with length compensation, chrome-plated

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

On nipple, chrome-plated

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

Reducing nipple, chrome-plated

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

Chrome-plated

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

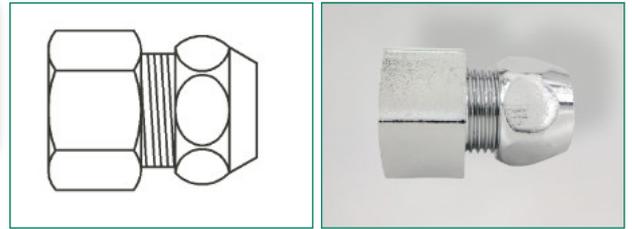
Reduced, chrome-plated

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

On nipple with female thread, chrome-plated

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

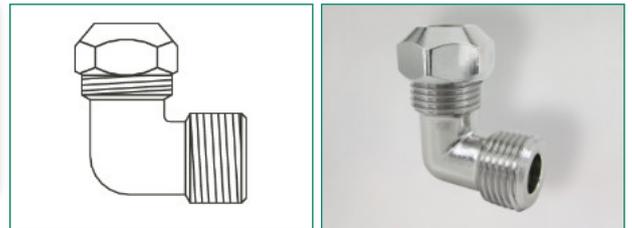
Compression fitting



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

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

Elbow with one compression fitting



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

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

Elbow with two compression fittings



Elbow female/male with compression fitting, chrome-plated

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

Elbow with one compression fitting



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

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

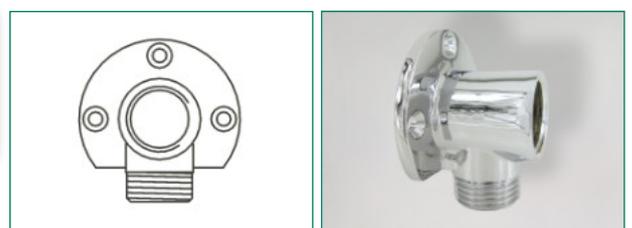
Elbow with compression fitting



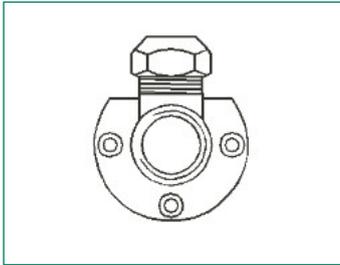
Wall plate elbow, without compression fitting, chrome-plated

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

Wall plate elbow



Wall plate elbow



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

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

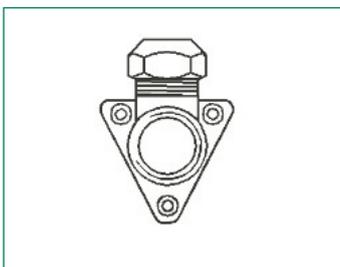
Accessories for compression fittings



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

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

Wall plate elbow



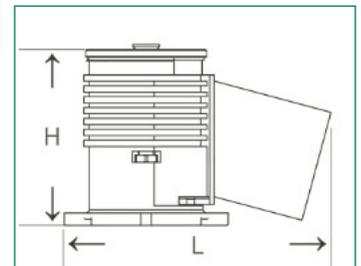
Wall plate elbow, brass blank, with one compression fitting

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

Wall box

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

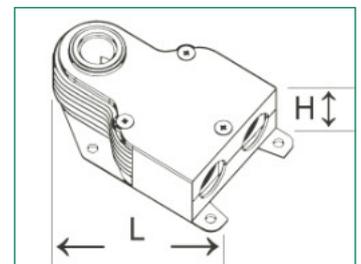
Item-No.:	Connection:	Length:		Packing unit::
		L	H	
S-2828	1/2" x 3/4"	95	63	/80
Spare seals				
S-2828-Dichtung	Ø12 x Ø37 x 25,5 mm			50/450



Wall box

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

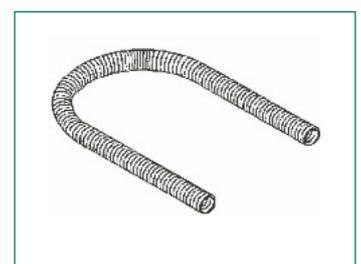
Item-No.:	Connection:	Length:		Packing unit:
		L	H	
S-2829	1/2" x 3/4"	132	40,5	-/54



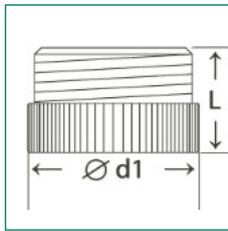
Bending spring

Bending spring for compound pipe, galvanized steel

Item-No.:	Connection: Ø inside/outside	Length:		Packing unit:
		L	H	
S-2928-16	16,7 / 20,85	500		1/40
S-2928-20	20,6 / 24,6	500		1/35

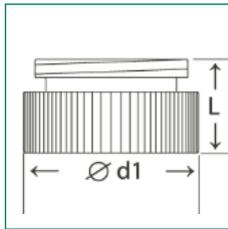


Adapter fitting

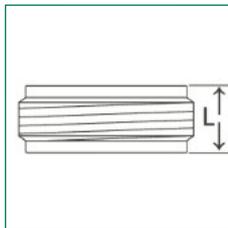


Brass chrome-plated

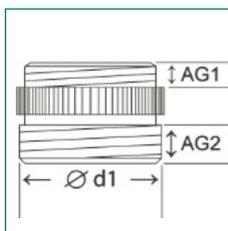
Item-No.:	Connection:	Thread-length:		Length		Packing unit:	Illu.:
		f	m	L	Ø d1		
35630 8	M 22 x 1" f x 1/2" m	5,5	8,5	16	24	50/1000	①
35631 5	M 22 x 1" f x 3/4" m	6	9,5	16	26	50/ 500	①



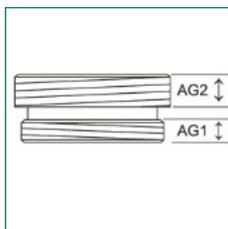
Item-No.:	Connection:	Thread-length:		Length		Packing unit:	Illu.:
		m	f	L	Ø d1		
35632 2	M 22 x 1" m x 1/2" f	2,5	7,5	13	24	50/1000	②
35633 9	M 22 x 1" m x 3/4" f	6,5	8,5	16,5	29	50/1000	②



Item-No.:	Connection:	Length:		Packing unit:	Illu.:
		L	Ø d1		
35634 6	M 22 x 1" f x 3/4" m x 1/2" f	10	24	50/2000	③



Item-No.:	Connection:	Threadlength:		Length:		Packing unit:	Illu.:
		m	m	L	Ø d1		
35635 3	M 24 x 1" m x 3/4" m	4,5	7	18,5	27	50/600	④



Item-No.:	Connection:	Threadlength:		Length		Packing unit:	Illu.:
		m	m	L	Ø d1		
35636 0	M 24 x 1" m x M 22 x 1 m with sealing	4	3,5	9,5	27	50/1000	⑤

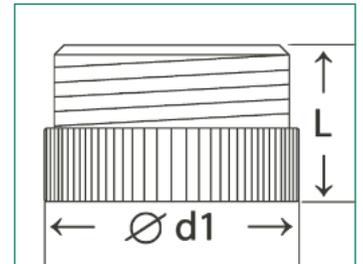
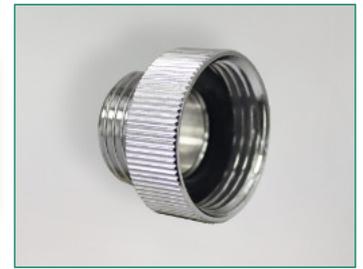
Seals

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

Adapter fitting

Brass chrome-plated, knurled, with sealing

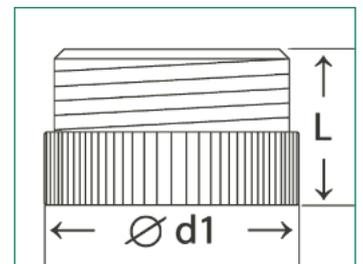
Item-No.:	Connection:	Threadlength:		Length:		Wrench-size: SW:	Packing unit:
		m	f	L	Ø d1		
35638 4	1/2" f x 3/4" m	10	9,5	20	29	-	50/600



Adapter fitting

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

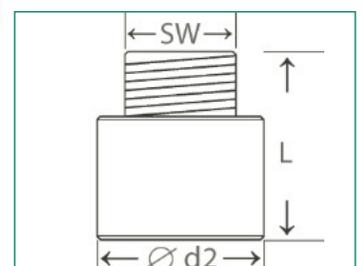
Item-No.:	Connection:	Threadlength:		Length:		Wrench-size: SW:	Packing unit:
		m	f	L	Ø d1		
35639 1	1" f x 3/4" m	10	10	22	38	-	25/250



Brass extension, reduced

Adapter piece

Item-No.:	Item-No.:	Connection:	Threadlength:		Length:		Wrench-size: SW	Packing unit:
			f	m	f/m	Ø d2		
34637 8	35637 7	1/2" f x 3/8" m	14	10	29	25,5	11	30/600
34690 3	35690 2	3/4" f x 1/2" m	13	11	30	31,5	12	10/200
34691 9	35691 0	3/4" f x 3/8" m	14	10	29	32	11	20/360

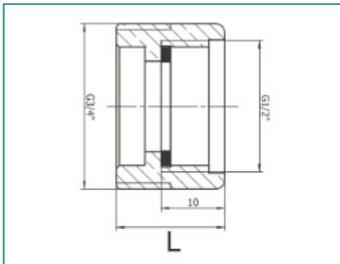


Brass reducing nipple



Brass chrome-plated, knurled or with external hexagon, for the sanitary sector, with sealing

Item-No.:	Connection:	Threadlength:		Length:		Wrench-size: SW	Packing unit:
		m	f	L	Ø d1		
35432-40758	1/2" f x 3/4" m	8	10	17	26	23	50/500

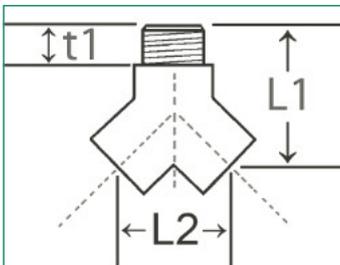


Y-connector



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

Item-No.:	Item-No.:	Conn.:	Threadlength:	Length:		Packing unit:
plain	chrome-pla.		t1	L1	L2	
-	35991 0	1/2"	12	42	32	10/120

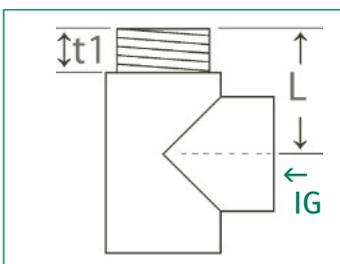


Brass tee



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

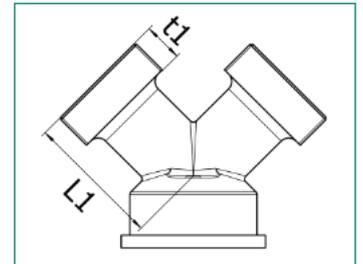
Item-No.:	Connection:	Threadlength:		Length:	Packing unit:
chrome-plated		male t1	female IG	L	
35997 2	1/2"	10	15	28	10/120



Y-connector

Nominal diameter 1/2", 2 x male, 1 x female, without sealing

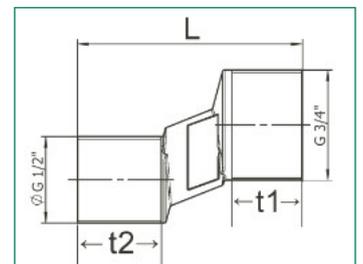
Item-No.:	Item-No.:	Connection:	Thread-Length:	Length:	Packing unit:
plain	chrome-pl.	f/m	t1	L1	
34992 8	35992 7	3/4"	9	26	10/150
34999 7	35999 6	3/4"	9	32	-/-



S-Connection

S-nipple, chrome-plated, reach 12,5 mm, 3/4" male x 1/2" male, wrench opening 16, without rosette

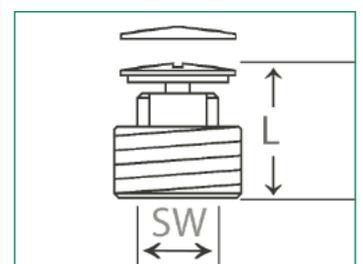
Item-No.:	Item-No.:	Connection:	Threadlength:		Length:	Wrench size:	Packing unit:
plain	chro.-pla.		t1	t2	L	SW	
-	35610 0	3/4" m x 1/2" m	16	19	51	16	25/ 350



Blind plugs with slotted screw

Sealing plug plain brass with chrome-plated slotted screw

Item-No.:	Connection:	Thread-Length:	Length:	Wrench-size:	Packing unit:
			L	SW	
34618 7	3/8"	10	20	9	25/1000
34611 8	1/2"	11	21	9	50/ 500
34612 5	3/4"	14	26	12	25/ 500



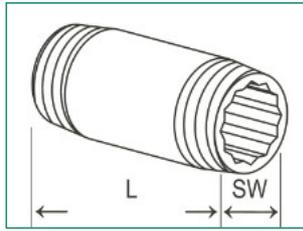
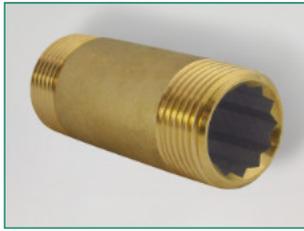
Accessories: cap plastic

34611-Kappe	universal				500/10000
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Sealing plug plain brass with chrome-plated slotted screw + cap plastic

34618-11325	3/8"	14	26	12	25/1000
34611-11325	1/2"	10	20	9	25/ 800
34612-11325	3/4"	11	21	9	25/ 500

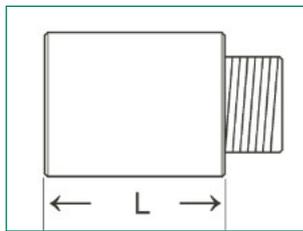
Brass pipe



With internal polygon, on both sides tapered male threads according to EN10226-1/ISO 7

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

Brass tap extension



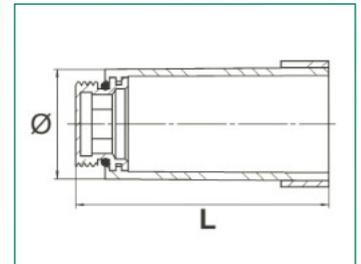
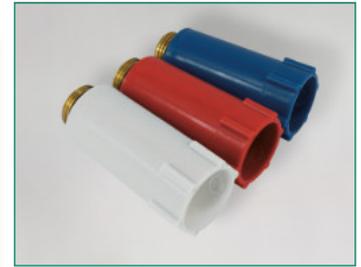
Brass plain or chrome-plated, according to DIN 3523

Con.:	plain	chr.pla.	Packing unit:									
L mm	G3/8"	G3/8"		G1/2"	G1/2"		G3/4"	G3/4"		G1"	G1"	
10	34810 9	35810 4	10/500	34811 2	35811 1	10/400	34812 9	35812 8	10/200	-	-	-
15	34815 0	35815 9	10/500	34816 7	35816 6	10/300	34817 4	35817 3	10/200	-	-	-
20	34820 4	35820 3	10/400	34821 1	35821 0	10/250	34822 8	35822 7	10/150	34823 5	35823 4	10/100
25	34825 9	35825 8	10/300	34826 6	35826 5	10/200	34827 3	35827 2	10/150	34828 0	35828 9	10/100
30	34830 3	35830 2	10/250	34831 0	35831 9	10/150	34832 7	35832 6	10/150	34833 4	35833 3	10/50
35	34835 8	-	10/200	34836 5	-	10/100	34837 2	-	10/100	-	-	-
40	34840 2	35840 1	10/200	34841 9	35841 8	10/150	34842 6	35842 5	10/100	34843 3	35843 2	10/100
45	34845 7	-	10/150	34846 4	35846 3	5/100	34847 1	35847 0	5/50	-	-	-
50	34850 1	35850 0	5/150	34851 8	35851 7	5/100	34852 5	35852 4	5/50	34854 9	35854 8	5/50
60	34855 6	-	5/100	34856 3	-	5/100	34857 0	-	5/50	-	-	-
65	34860 0	35860 9	5/100	34861 7	35861 6	5/100	34862 4	35862 3	5/50	-	-	-
80	34865 5	35865 4	5/100	34866 2	35866 1	5/50	34867 9	35867 8	5/100	-	-	-
100	34859 4	35859 3	5/50	34858 7	35858 6	5/50	34868 6	-	5/50	34864 8	35864 7	5/30

Plastic, brass insert with hexagon socket, according to DIN 1988-2, for pressurising, venting and rinsing, permanent use possible

Assembly plug

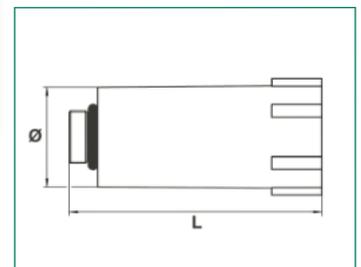
Item-No.:	Color:	Connection:	Length: L	Ø	Packing unit:
36391-B	blue	1/2"	75 mm	30 mm	10/400
36391-R	red	1/2"	75 mm	30 mm	10/400
36391-W	white	1/2"	75 mm	30 mm	10/400
36392-B	blue	3/4"	79 mm	34,5 mm	-/250
36392-R	red	3/4"	79 mm	34,5 mm	-/250
36392-W	white	3/4"	79 mm	34,5 mm	-/250
Spare part:					
36391-O-Ring	EPDM	Ø18 x 2,5 mm			
36392-O-Ring	EPDM	Ø21,8 x 3,1 mm			



Assembly plug, plastic

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

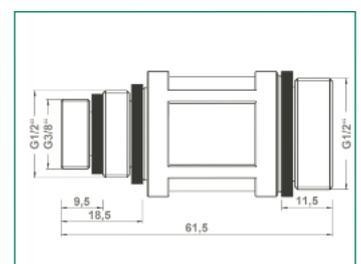
Item-No.:	Color:	Connection:	Length: L	Ø	Packing unit:
36394-B	blue	3/8"	75 mm	30 mm	25/400
36394-R	red	3/8"	75 mm	30 mm	25/400
36394-W	white	3/8"	75 mm	30 mm	25/400
36395-B	blue	1/2"	75 mm	30 mm	-/400
36395-R	red	1/2"	75 mm	30 mm	-/400
36395-W	white	1/2"	75 mm	30 mm	-/400



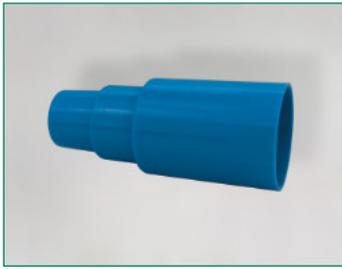
Assembly plug, plastic

Completely made of plastic with 3 x male thread (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

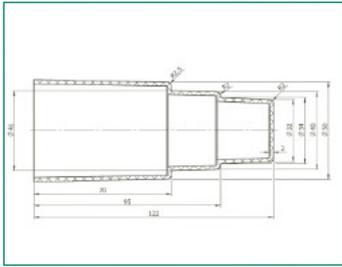


Drain construction plugs



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

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



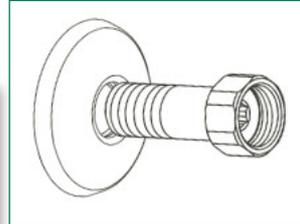
Fittings, model SUISSSE, with SVGW-certification



Screw fitting

Screw fitting straight, chrome-plated and polished, with screw rosette

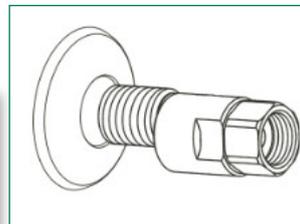
Item-No.:	Connection:	Packing unit:
35710 7	3/8" x 1/2" x 55 mm	-/100
35711 4	1/2" x 1/2" x 55 mm	-/100
35712 1	1/2" x 1/2" x 65 mm	-/100
35713 8	1/2" x 3/4" x 60 mm	-/100



Screw fitting

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

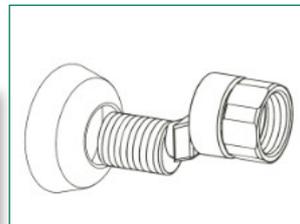
Item-No.:	Connection:	Packing unit:
35723 7	1/2" x 1/2" x 63 mm	-/100
35724 4	1/2" x 3/4" x 68 mm	-/100



Screw fitting

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

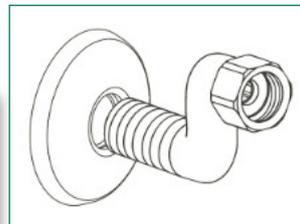
Item-No.:	Connection:	Packing unit:
35728 2	3/8" x 1/2" x 68 mm	-/100
35729 9	1/2" x 1/2" x 68 mm	-/100
35730 5	1/2" x 3/4" x 68 mm	-/100



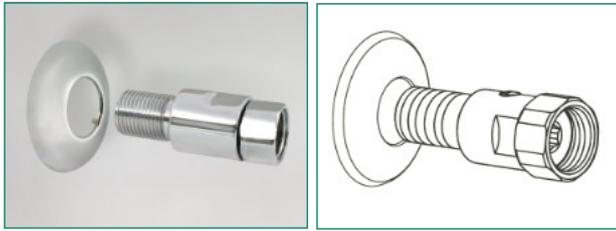
Screw fitting

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

Item-No.:	Connection:	Packing unit:
35717 6	3/8" x 1/2" x 65 mm	-/100
35718 3	1/2" x 1/2" x 65 mm	-/100
35719 0	1/2" x 3/4" x 68 mm	-/100



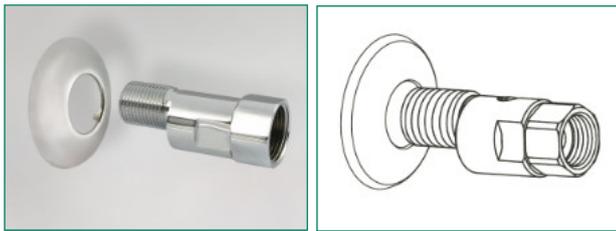
Screw fitting



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

Item-No.:	Connection:	Packing unit:
35714 5	3/8" x 1/2" x 62 mm	-/100
35715 2	1/2" x 1/2" x 62 mm	-/100
35716 9	1/2" x 3/4" x 65 mm	-/100

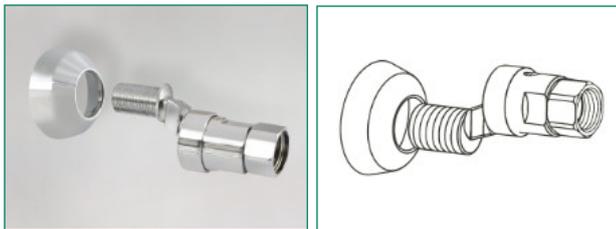
Screw fitting



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

Item-No.:	Connection:	Packing unit:
35720 6	3/8" x 1/2" x 62 mm	-/100
35721 3	1/2" x 1/2" x 62 mm	-/100
35722 0	1/2" x 3/4" x 65 mm	-/100

Screw fitting



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

Item-No.:	Connection:	Packing unit:
35725 1	3/8" x 1/2" x 82 mm	-/100
35726 8	1/2" x 1/2" x 82 mm	-/100
35727 5	1/2" x 3/4" x 85 mm	-/100

Screw fitting



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

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

Replacement seals for connection fittings

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

Item-No. seal:	for item-No.:											
35710-AFM	35710	35711	35712	35714	35715	35717	35718	35720	35721	35723	35725	35726
	35728	35729	35739									

Novapress 260 or equivalent, 24 x 14 x 3 mm

WS-551-Dtg-3mm	35713	35716	35719	35722	35724	35727	35730	35739				
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Flexible connection hoses for drinking water
Stainless steel braiding 1.4301, inner hose from polyethylene (PE-Xc),
tested in accordance with DVGW W 270 and W 543, stamped sleeves according to DVGW

Connection: compression nut x pipe socket 10 mm

Flexible hose

Item-No.:	Length (mm):	Compression nut:	Packing unit:
52750-150-TVO	150	3/8" x 10 mm	-/25
52750-TVO	200	3/8" x 10 mm	-/25
52751-TVO	300	3/8" x 10 mm	-/25
52750-400-TVO	400	3/8" x 10 mm	-/25
52752-TVO	500	3/8" x 10 mm	-/25
52753-TVO	800	3/8" x 10 mm	-/25
52754-TVO	1000	3/8" x 10 mm	-/25



Connection: union nut x pipe socket 10 mm

Flexible hose

Item-No.:	Length (mm):	Union nut:	Pack. u.	Seal:
52760-TVO	200	3/8"	-/25	52771-TVO-Dichtung
52761-TVO	300	3/8"	-/25	52771-TVO-Dichtung
52762-TVO	500	3/8"	-/25	52771-TVO-Dichtung
52763-TVO	800	3/8"	-/25	52771-TVO-Dichtung
52764-TVO	1000	3/8"	-/25	52771-TVO-Dichtung
52766-TVO	300	1/2"	-/25	52772-TVO-Dichtung
52767-TVO	500	1/2"	-/25	52772-TVO-Dichtung
52768-TVO	800	1/2"	-/25	52772-TVO-Dichtung
52769-TVO	1000	1/2"	-/25	52772-TVO-Dichtung



Connection: union nut 3/8" x compression nut

Flexible hose

Item-No.:	Length (mm):	Comp. nut:	Pack. u.	Seal:
52770-TVO	200	3/8" x 10 mm	-/25	52771-TVO-Dichtung
52771-TVO	300	3/8" x 10 mm	-/25	52771-TVO-Dichtung
52772-TVO	500	3/8" x 10 mm	-/25	52771-TVO-Dichtung
52773-TVO	800	3/8" x 10 mm	-/25	52771-TVO-Dichtung
52774-TVO	1000	3/8" x 10 mm	-/25	52771-TVO-Dichtung
52776-TVO	300	3/8" x 8 mm	-/25	52771-TVO-Dichtung
52777-TVO	500	3/8" x 8 mm	-/25	52771-TVO-Dichtung
52778-TVO	800	3/8" x 8 mm	-/25	52771-TVO-Dichtung
52779-TVO	1000	3/8" x 8 mm	-/25	52771-TVO-Dichtung



Flexible hose



Connection: union nut x union nut

Item-No.:	Length (mm):	Union nut:	Packing unit:
52781-TVO	300	3/8" x 3/8"	-/25
52783-TVO	500	3/8" x 3/8"	-/25
52784-TVO	300	3/8" x 1/2"	-/25
52786-TVO	500	3/8" x 1/2"	-/25
52787-TVO	300	1/2" x 1/2"	-/25
52789-TVO	500	1/2" x 1/2"	-/25

Flexible hose



Connection: union nut x male thread (ISO 228)

Item-No.:	Length (mm):	Union nut x male thread:	Packing unit:
52790-TVO	200	3/8" x 3/8"	-/25
52791-TVO	300	3/8" x 3/8"	-/25
52792-TVO	400	3/8" x 3/8"	-/25
52793-TVO	500	3/8" x 3/8"	-/25
52797-TVO	300	1/2" x 1/2"	-/25
52799-TVO	500	1/2" x 1/2"	-/25
52743-TVO-E	500	3/4" x 3/4"	-/25
52745-TVO-E	1000	3/4" x 3/4"	-/25
52747-TVO-E	2000	3/4" x 3/4"	-/25
52748-TVO-E	3000	3/4" x 3/4"	-/25

Flexible hose



Connection: union nut 3/8" x male thread (DIN 13)

Item-No.:	Length (mm):	Male thread:	Packing unit:
52794-TVO	300	M10/1	-/25
52792-M15-TVO	400	M15/1	-/25
52795-TVO	500	M10/1	-/25
52795-M10L-TVO	500	M10/1 long	-/25
52798-TVO	400	M8/1	-/25
52795-M8-TVO	500	M8/1	-/25
52795-M8L-TVO	500	M8/1 long	-/25
52796-TVO	350	M10/1	-/25
52796-M8-Lang-TVO	350	M8/1 long	-/25
52796-M10-kurz-TVO	350	M10/1 short	-/25

Flexible hose, torsion-proof!

Connection: compression nut torsion-proof x pipe socket 10 mm

Item-No.:	Length (mm):	Compression nut:	Packing unit:
52751-V-TVO	300	3/8" x 10 mm	-/25
52752-V-TVO	500	3/8" x 10 mm	-/25

Further lengths on demand!



Flexible hose, torsion-proof!

Connection: union nut 3/8" torsion-proof x compression nut

Item-No.:	Length (mm):	Compression nut:	Packing unit:
52771-V-TVO	300	3/8" x 10 mm	-/25
52772-V-TVO	500	3/8" x 10 mm	-/25

Further lengths on demand!



Flexible hose, torsion-proof!

Connection: union nut torsion-proof x compression nut

Item-No.:	Length (mm):	Union nut:	Packing unit:
52781-V-TVO	300	3/8" x 3/8"	-/25
52782-V-TVO	500	3/8" x 3/8"	-/25

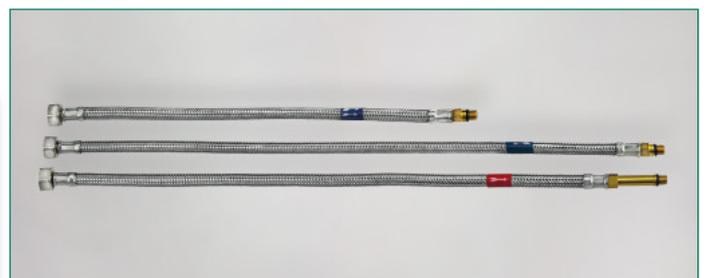
Further lengths on demand!



Flexible hose kit

For low-pressure mixers, stainless steel, DVGW, compression nut 3/8" x male thread, DN 6

Item-No.:	Length (mm):	Male thread:	Packing unit:
86650-Set	350	M 8 short	-/50
	500	M 8 short	
	500	M 8 long	



Armoured hoses: flexible hoses for the heating sector
 Stainless steel braiding, brass connecting fittings nickel plated, EPDM hose,
 working pressure: max. 20 bar, operating temperature: -10° C bis + 75° C

Armoured hose



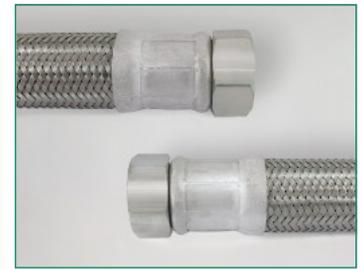
Connection: union nut x male thread, EPDM-hose

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

Connection: **union nut x union nut**, EPDM-hose

Item-No.:	Length (mm):	Connection:	Hose Ø: inside/outside	Packing unit:
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



Armoured hose with angle connector

Union nut, **female elbow x male thread**, EPDM hose

Item-No.:	Length (mm):	Connection:	Hose Ø: inside/outside	Packing unit:
52823-W	200	1" f x m	25 mm/34 mm	-/-



Replacement fibre seals for flexible hoses

Item-No.:	Connection:	Packing unit:
52766-Dichtung	Union nut 1/2"	10
52800-Dichtung	Union nut 3/4"	10
52822-Dichtung	Union nut 1"	10

Washing machine hoses

(working pressure max. 20 bar, bursting pressure 60 bar at 25°C)

Connection hose



Including clamped connections, one-side with plastic straight connector female thread 3/4", the other side with plastic angle connector female thread 3/4", for cold water

Item-No.:	Length (mm):	Connection:	Packing unit:
39505 5	1000	3/8"	-/10
39510 9	1500	3/8"	-/10
39520 8	2000	3/8"	-/10
39530 7	2500	3/8"	-/10
39540 6	3000	3/8"	-/10
39545 1	3500	3/8"	-/10
39550 5	4000	3/8"	-/10
39560 4	5000	3/8"	-/10
39570 3	6000	3/8"	-/10

Safety inlet hose



With burst safety device, with VDE-certificate, female thread on both sides, for cold water

Item-No.:	Length (mm):	Connection:	Packing unit:
39519 2	1500	3/4"	-/10
39529 1	2000	3/4"	-/10
39547 5	2500	3/4"	-/10
39549 9	3000	3/4"	-/10
39559 8	3900	3/4"	-/10
39548 2	5000	3/4"	-/10

Extension for inlet hoses

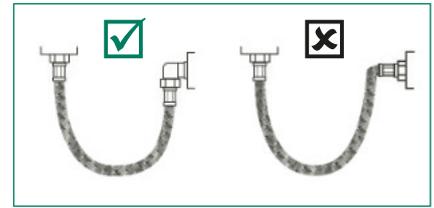
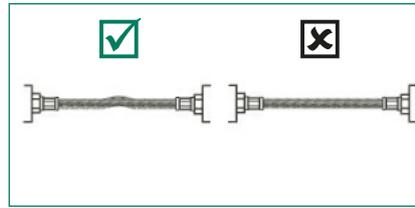
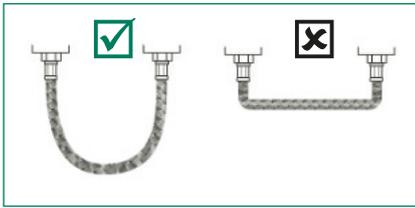


Including clamped connections, female 3/4" x male 3/4", both-sided straight connectors, 50 bar, for cold water

Item-No.:	Length (mm):	Hose Ø:	Packing unit:
39511 6	1500	3/8"	-/10
39521 5	2000	3/8"	-/10
39531 4	2500	3/8"	-/10
39536 9	3000	3/8"	-/10
39546 8	3500	3/8"	-/10

Installation of flexible hose

You should avoid the twisting of hoses when installing them!



Please respect the flexibility of the hoses, avoid too much tension and sharp bends. Choose the correct length of the hose. If necessary, use an angle connection to reach a sufficient water flow and to avoid kinks. Tighten the union nuts only by hand, this also applies to the connection side for the fitting. Cement, plaster and other caustic and corrosive materials (e.g. chloride-containing media and/or cleaning media) may damage the braid. Do not repress the sleeve with pliers or other tools. Do not install flexible hoses with loosely fitted press sleeves. Flexible hoses must be installed easily accessible.

Inlet hose, reels

Grey, working pressure 10 bar, with certificate, rolls of 40 m, without connectors, for cold water

Item-No.:	Length:	Connection:	Packing unit:
39500 0	40 m	13 x 3 mm (3/8")	bulk packing
39501 7	40 m	13 x 3,5 mm (1/2")	bulk packing



Spiral outlet hose

Grooved, with sockets 19/22, extendible, both sides with sockets

Item-No.:	Length (mm):	Connection:	Packing unit:
39580 2	600 - 2000	3/4"	-/10
39581 9	1200 - 4000	3/4"	-/10



Grooved, with sockets 19/22, including suspension bracket (180°), both sides with sockets, in poly-bag

Item-No.:	Length (mm):	Connection:	Packing unit:
39590 1	1500	3/4"	-/10
39594 9	2000	3/4"	-/10
39591 8	2500	3/4"	-/10
39592 5	3500	3/4"	-/10



Suspension bracket



Bulk packing, plastic, for outlet hoses up to 3/4", curved 180°

Item-No.:	Length (mm):	Connection:	Packing unit:
39599 4	-	3/4", 180°	-/10

Heavy version hose fastener



For washing machine outlet hoses, grey plastic coating

Item-No.:	Length (mm):	Connection:	Packing unit:
39382 2	-	3/4"	1/36
39382-K3-E	in single carton with euro perforation		

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, conflicting 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 confirmations, 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 notifications by the Buyer in relation to the contract (e.g. setting deadlines, providing notification 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 clarification purposes only. Even without such clarification, 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 specific 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 identifications 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 reflects 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 sufficient 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 specified 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 confirmation) 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 confidentiality. 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 specified by us upon acceptance of the order. The periods and dates we state for deliveries and services are always only approximate, unless a fixed 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 notification 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 notified 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 clarified.
3. We may demand that Customers extend delivery periods or postpone delivery dates by the period during which our Customer fails to fulfill 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; difficulties in procuring materials or energy; transport delays; strikes; lawful lockouts; shortages of labour, energy or raw materials; difficulties in obtaining necessary official approvals; pandemics or epidemics; official 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 significantly more difficult 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 significant 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 fixed-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 significantly less damage than the value of the above lump sum.
5. We shall only insure the shipment against theft, breakage, transport damage, fire 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 notified 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 significantly 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 fixed 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 filed 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 filed 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 specified 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 specifications 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 modifies the delivery item or has it modified by third parties without our consent, and this renders it impossible or unreasonably difficult to rectify the defect. In any case, the Buyer shall bear the additional cost of rectifying the defect resulting from the modification.

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 fulfilled his statutory obligations to inspect and provide notification 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 notified of this in writing without delay. In any case, written notification of obvious defects is to be provided within seven working days of delivery, and written notification of defects that are not apparent upon inspection is to be provided within the same time period once such defects are identified. If the Buyer fails to conduct the proper inspection and/or provide notification of defects, our liability for defects for which notification 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 fitting, 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 justified 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 fitting, attachment or fitting 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 unjustified 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 notified 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 insignificant 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 specified 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; insignificant 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 fulfilment 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 benefit) 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 fulfil 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 specifications, the Buyer undertakes – contrary to the preceding sub-sections – to indemnify us and, as part of a contract for the benefit 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 office 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.

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 excessive 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. Sealing wedges cannot be replaced.

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 installing 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 function 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.

We offer no guarantee for wearing parts in the event of corrosion or malfunction due to very hard water or contaminated water lines (e.g., with respect to sealing or mixing jets) or due to improper assembly; chemical or mechanical events during transportation, storage, connection, repair, or use; or improper handling of products.

We provide the statutory guarantee for defects in our products that arise due to material or manufacturing defects or through normal use. Defects due to non-observance of the information above are excluded from that guarantee.

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 Too2, §§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.

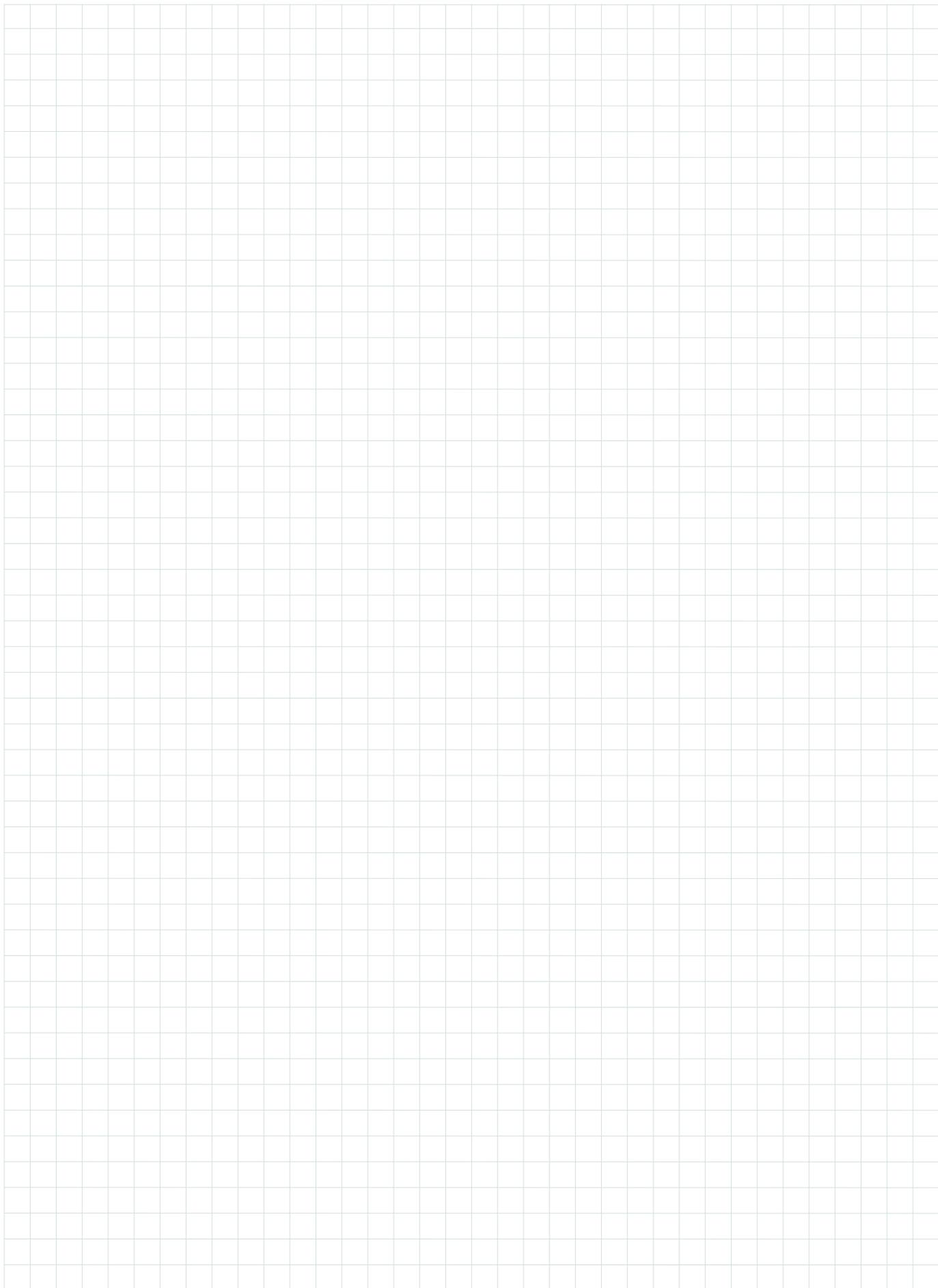
We reserve the right to make technical and formal changes in the interest of further technical development or that are necessary for financial reasons.

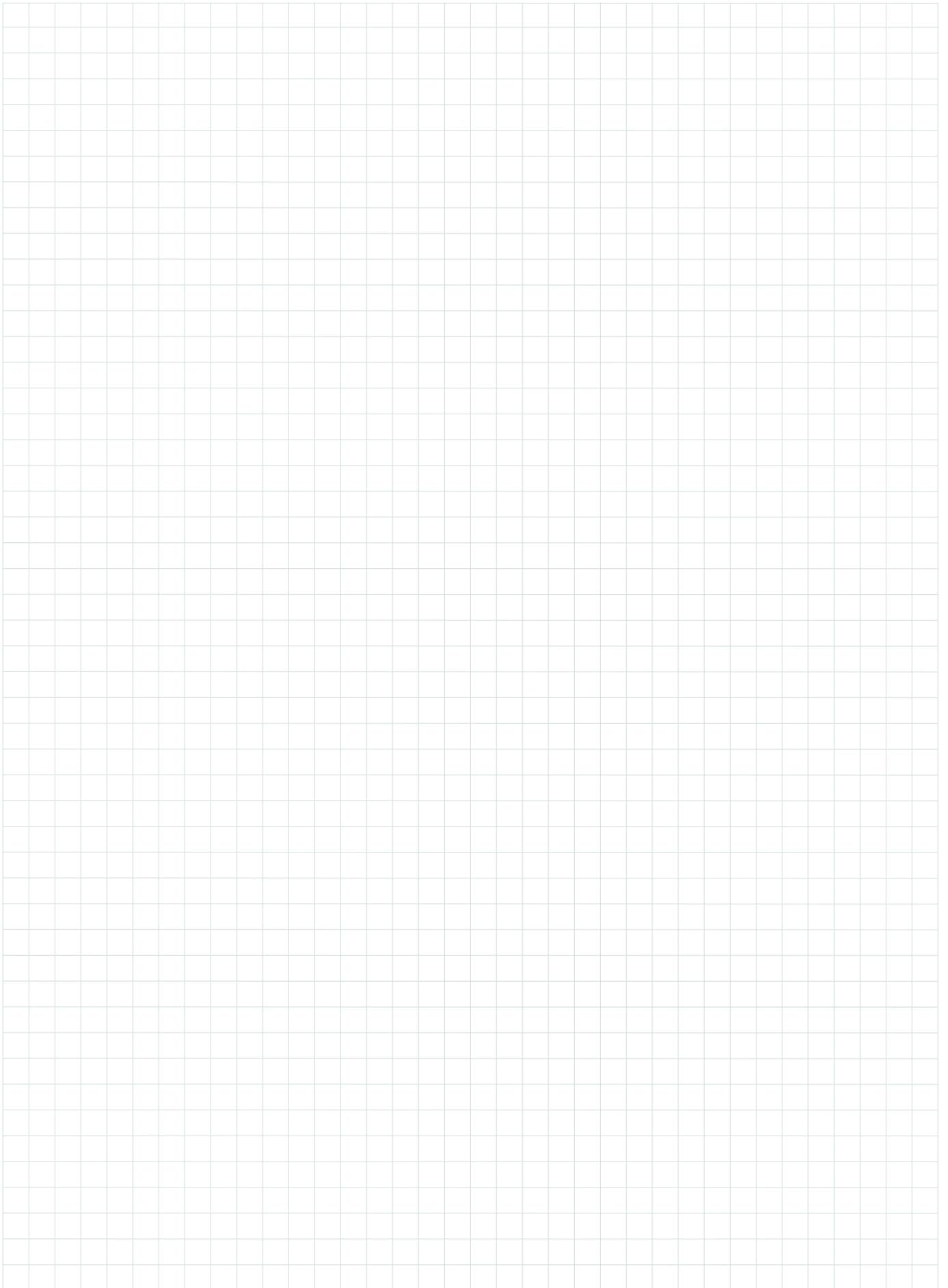
Alterations and additions are made continuously.

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 3/4"	44,450 mm
1/4"	6,350 mm	2"	50,800 mm
3/8"	9,525 mm	2 1/4"	57,150 mm
1/2"	12,700 mm	2 1/2"	63,500 mm
5/8"	15,875 mm	2 3/4"	69,850 mm
3/4"	19,050 mm	3"	76,200 mm
7/8"	22,225 mm	3 1/4"	82,550 mm
1"	25,400 mm	3 1/2"	88,900 mm
1 1/4"	31,750 mm	3 3/4"	95,250 mm
1 1/2"	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 qualities 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 leak-testing and material tests are performed.

Our products meet several requirements, such as DVGW, SVGW, KTW, noise class tests (PA-Nr.), ACS and are also complying 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 requirements of the drinking water ordinance. Long before the reference 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 materials 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.

Disclaimer:
 puteus GmbH | Lenenweg 6 | 47918 Tönisvorst
 Domizil Tönisvorst | AG Krefeld | HRB 9505 | UST-IDNR. DE 120 581 001 | ILN 40 12167 0000 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

puteus GmbH

Lenenweg 6

D-47918 Tönisvorst

Tel.: +49 2151 9952-0

Fax: +49 2151 9952-99

E-mail: info@puteus.de

Web: www.puteus.de

