





# Solenoid Valve Series 166H

The stainless steel body attached to an electrically actuated solenoid valve offers the possibility to clock the spray application flexibly.

### Advantages:

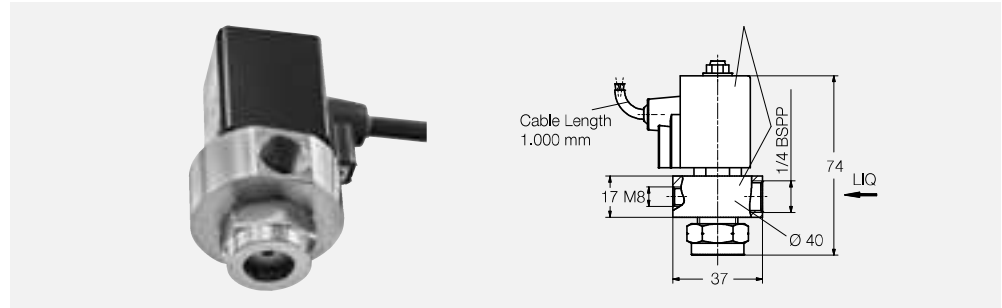
- Assembly with retaining nut – easy nozzle changing
- Simple jet alignment
- For flat fan and full cone nozzles

### Applications:

Cleaning and coating, moistening, lubrication.

### Scope of supply:

Nozzle valve with body and retaining nut. Nozzle has to be ordered separately.



### Materials:

303 SS  
Stainless steel combined with solenoid valve

### Power:

8 Watt

### Voltage:

24 V DC

### Protection:

IP 67

### Flow rate water $V_w$ :





Max. 3 l/min at 4 bar

### Max. operating pressure:

5 bar (valve closed)

### Max. frequency:

500/min

	Type	Up to size	Spray Pattern	Spray angle	Material
	<b>652</b> (See page 4.16)	51X	flat fan	See page 4.16	See page 4.16
	<b>684</b> (See page 4.30)	528	flat fan (tongue-type nozzle)	140°	See page 4.30
	<b>468</b> (See page 3.12)	52X	full cone	See page 3.12	See page 3.12
	<b>226</b> (See page 2.6)	285	hollow cone	See page 2.6	See page 2.6

### Ordering number:

166,000.16.H0.00.0 (Nozzle valve with body and retaining nut)



# TWISTLOC

## Quick-change nozzle system

### Lechler TWISTLOC-nozzle changing in less than no time.

The quick-change nozzle system makes you save time and money.

#### Quick:

For putting in or taking out a nozzle, just give it a twist.

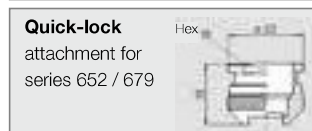
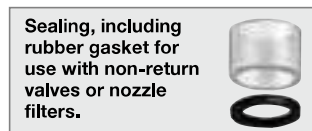
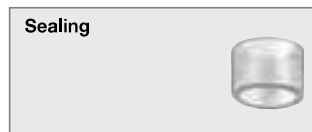
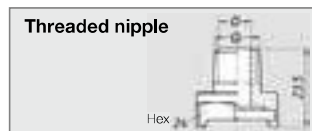
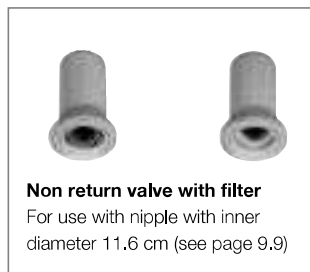
#### Easy:

Without tool, just with one hand, even at locations hard to get at and under bad lighting conditions.

#### Safe:

Constant pre-setting of the nozzle to the correct direction prevents any assembling errors.

**Max. pressure:** 15 bar.



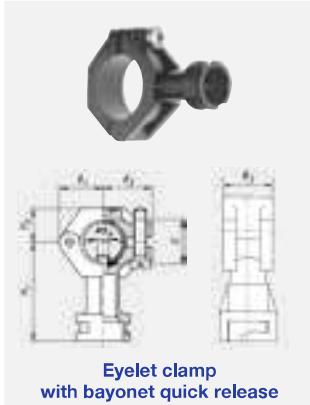
Type	Ordering no.							Inside-Ø D [mm]
	Material no.				Code			
	1C	16	5E	7A	1/4 BSPT	3/8 BSPT	Welding connection	
092.102	304 SS	303 SS	PVDF	Viton®	1/4 BSPT	3/8 BSPT	Welding connection	8,0
	-	○	-	-	CC	-	-	11,6
	-	-	○	-	-	CE	-	8,0
092.104	○	-	-	-	-	-	00	11,6
092.113	-	-	-	○	-	-	-	-
092.116	-	-	-	○	-	-	-	-
092.106	-	○	○	-	-	-	-	-
092.108	-	○	○	-	-	-	-	-

**Example** Type + Material no. + Code = Ordering no.  
for ordering: 092.102 + 16 + CC = 092.102.16.CC



# Accessories

## Bayonet quick release system



**Eyelet clamp with bayonet quick release**

For series	Ordering no.					Screw (Material)	Pipe Ø	D Ø [mm]	Opening pressure [bar]	Closing pressure [bar]	Dimensions [mm]						Weight		
	Type	Material no.									Code	H <sub>1</sub>	H <sub>2</sub>	B <sub>RO</sub> *	B** <sub>Ø</sub>	B <sub>1</sub>		B <sub>2</sub>	B <sub>3</sub>
		51	53	5E	56														
302 Bajonett/ 422 Bajonett/ 226/2TR/468/548/ 646/652/679/684	090.003	○	○	○	-	KA	304 SS	1/2"	20-22,0	-	-	49.5	16.5	6.0	6.2-6.4	21.2	23.8	18.5	22 g
	090.013	○	○	○	-	KA	304 SS	3/4"	25-27.5	-	-	52.5	17.5	7.6	7.8-8.0	24.5	26.5	22.0	26 g
	090.023	○	○	○	-	KA	304 SS	1"	32-34.5	-	-	57.0	21.0	10.6	10.8-11.0	30.0	31.0	22.0	32 g
302 Bajonett/ 422 Bajonett/ 226/2TR/468/548/ 646/652/679/684	065.272	-	-	-	○	KH	304 SS	1/2"	20-22,0	0.8	0.6	59	84	6.0	6.2-6.4	-	-	-	48 g
	065.272	-	-	-	○	KL	304 SS	3/4"	25-27.5	0.8	0.6	66	90	9.6	9.8-10.0	-	-	-	53 g

\*B<sub>RO</sub> Ø = spigot diameter

\*\*B Ø = recommended bore diameter

**Information:** Please consider the material combination if you use bayonet quick release eyelet clamps in combination with bayonet quick release retainer caps. When different materials are used, the cap may become difficult to turn.

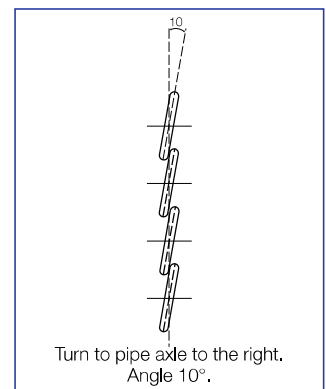


**Diaphragm non-return valve with bayonet quick release**



**Bayonet welding nipple**  
Turn to pipe axle:  
Direction: right, angle: 10°

For series	Ordering no.	Material	Dimensions [mm]	
			L	R
302 Bajonett/ 422 Bajonett/ 226/2TR/468/548/ 646/652/679/684	095.016.50.08.05	PVC	25	16
	095.016.53.08.05	PP	25	16



**Filter with gasket, for bayonet retainer cap 065.202**

For series	Ordering no.		Mesh width [mm]	Colour	Dimensions [mm]				Weight
	Type	Mat. no.			H <sub>1</sub>	H <sub>2</sub>	D <sub>1</sub>	D <sub>2</sub>	
		7J							
xxx.32x- xxx.44x	065.268	○	0.25	blue	21.5	2.5	18.0	11.0	2 g
xxx.48x- xxx.56x	065.269	○	0.65	red	21.5	2.5	18.0	11.0	2 g

**Example** Type + Material no. + Code = Ordering no.  
for ordering: 090.003 + 51 + KA = 090.003.51.KA



**Bayonet quick-release retainer caps**  
incl. gasket 065.242.73  
(Material: rubber)

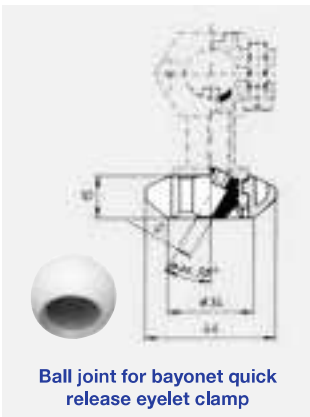


For series	Ordering no.	Material	Colour
652/679	<b>065.202.56.00</b>	POM	red
	<b>065.202.53.00</b>	Polypropylene	grey
	<b>065.202.5E.00</b>	PVDF	blue
226/2TR/468/ 548/684	<b>065.202.56.11</b>	POM	black
	<b>065.202.53.11</b>	Polypropylene	grey

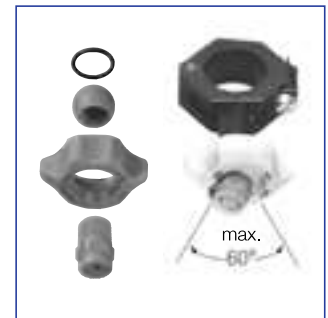
**Information:** Please consider the material combination if you use bayonet quick release eyelet clamps in combination with bayonet quick release retainer caps. When different materials are used, the cap may become difficult to turn.

## Ball joint for bayonet quick release system

**Inexpensive ball joint system for nozzles with 1/8 and 1/4 male thread.**



For series	Ordering no.			Colour
	Type	Mat. no.	Code	
		5E		
	PVDF	1/8 BSPP	1/4 BSPP	
For all nozzles with 1/8" - or 1/4" - male thread.	<b>092.150</b>	○	<b>AB AD</b>	blue



### Pressure/Temperature

T	p <sub>max</sub>
65 °C	10 bar
80 °C	8 bar
100 °C	4 bar



For series	Ordering no.	Material	Colour
For ball joint	<b>092.150.5E.00</b>	PVDF	blue



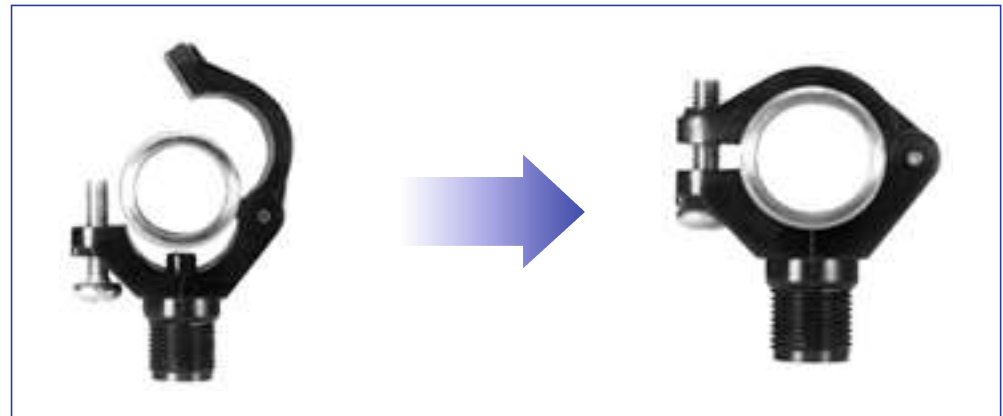
# Accessories

## Eyelet clamps/Retaining nuts



For Series	Ordering no.			Screw	Dimensions [mm]										Weight (Polyamid)	
	Type	Material no.			BSPP	Pipe Ø	D Ø	B <sub>s</sub> * Ø	B <sup>**</sup> Ø	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	H <sub>1</sub>	H <sub>2</sub>		
		51	53													5E
226/2TR/216/302/308/350 468/ 548/ 679/684/652	090.053	○	○	○	Material 304 SS	3/8	3/8"	16,5-18,0	6,0	6,2-6,4	19,0	22,0	18,5	34,5	14,5	20 g
	090.003	○	○	○		3/8	1/2"	20-22,0	6,0	6,2-6,4	21,2	23,8	18,5	36,5	16,5	20 g
	090.013	○	○	○		3/8	3/4"	25-27,5	7,6	7,8-8,0	24,5	26,5	22,0	39,5	17,5	25 g
	090.023	○	○	○		3/8	1"	32-34,5	10,6	10,8-11,0	30,0	31,0	22,0	44,0	21,0	32 g
	090.033	○	○	○		3/8	1 1/4"	40-43,0	12,6	12,8-13,0	34,0	35,5	25,0	48,0	25,0	38 g

\*B<sub>s</sub> Ø = spigot diameter  
 \*\*B Ø = recommended bore diameter



For Series	Ordering no.						Dimensions [mm]					Weight (Brass)	
	Type	Material no.					BSPP	H <sub>1</sub>	H <sub>2</sub>	D Ø	Hex		
		16	17 <sup>1</sup>	1Y	30	56							5E
226/2TR/468 548/652/660 679/684	065.200	○	○	-	○	-	-	3/8	13,0	10,0	12,8	22	25 g
	065.200	-	-	-	-	○	○	3/8	14,5	11,5	12,8	22	25 g
	069.000	○	-	○	○	-	-	UNF 11/16-16	14,3	8,7	13,1	21	25 g
656/657 664/665	065.600	○	○	-	○	-	○	3/4	16,0	13,0	20,1	32	60 g

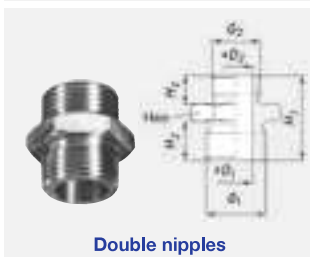
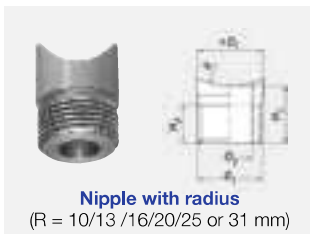
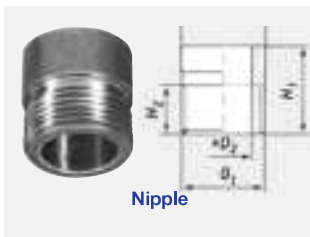
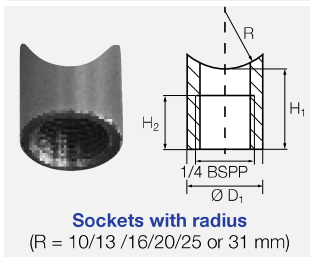
<sup>1</sup> We reserve the right to deliver 316Ti SS or 316L SS under the material no. 17.

<b>Example</b>	<b>Type</b>	<b>+</b>	<b>Material no.</b>	<b>=</b>	<b>Ordering no.</b>
<b>for ordering:</b>	<b>090.053</b>	<b>+</b>	<b>51</b>	<b>=</b>	<b>090.053.51</b>

For filters and non-return valves please refer to page 9.9.



# Accessories Sockets/Nipples



For Series	Ordering no.					Dimensions [mm]							Weight (Brass)		
	Type	Material no.					G <sub>1</sub>	G <sub>2</sub>	H <sub>1</sub>	H <sub>2</sub>	D <sub>1</sub>	D <sub>2</sub>		Hex	
		02	1Y	17	30	53									
		Steel	316L SS	316Ti SS	Brass	Polypropylene									
For all nozzles with 1/8 male thread.	<b>040.270</b>	-	○	-	○	-	-	1/8 BSPP	20	10	13.8	-	14	20 g	
For all nozzles with 1/4 male thread.	<b>061.220</b>	-	○	-	○	-	-	1/4 BSPP	20	10	16.8	-	17	25 g	
For all nozzles with 3/8 male thread.	<b>040.271</b>	-	-	○	○	-	-	3/8 BSPP	20	10	21.5	-	22	25 g	
	<b>040.271</b>	-	-	-	-	○	-	3/8 BSPP	20	10	24.5	-	22	25 g	
For all nozzles with 1/4 male thread.	<b>040.228.xx.yy*</b>	-	○	-	-	-	-	1/4 BSPP	-	18	2	17	-	16 g	
306/307 502/503 656/657	<b>065.210</b>	○	-	○	○	○	-	3/8 BSPP	-	18	10	17.2	11.5	-	20 g
	<b>065.610</b>	○	-	○	-	○	-	3/4 BSPP	-	27	14	28	18	-	61 g
226/2TR/216/302/308/350 548/468/679/684/652	<b>065.217.xx.yy*</b>	-	-	○	-	-	-	3/8 BSPP	-	15	10	17.2	11.5	-	20 g
226/2TR/216/302 308/350/548/468 679/684/652	<b>065.215<sup>1</sup></b>	-	-	○	○	-	-	3/8 BSPP	1/4 BSPP	25	10	10	7	22	30 g
	<b>065.211</b>	-	-	○	○	-	-	3/8 BSPP	3/8 BSPP	25	10	11.5	-	22	25 g
656/657	<b>065.611</b>	-	-	○	○	-	-	3/4 BSPP	3/4 BSPP	35	14	18	-	32	90 g

\* Replace **xx** by material no. and **yy** by radius R

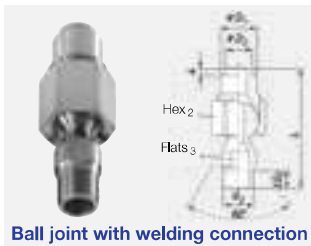
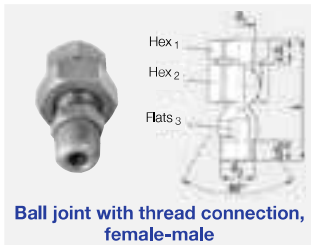
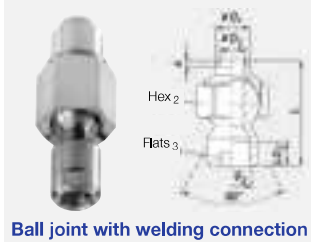
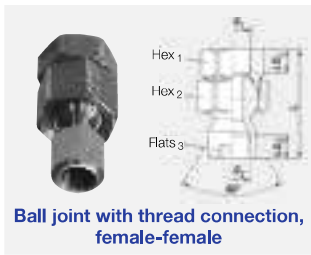
<sup>1</sup> Not to be used with non-return valve or filter.

**Example for ordering:** Type **040.270** + Material no. **1Y** = Ordering no. **040.270.1Y**



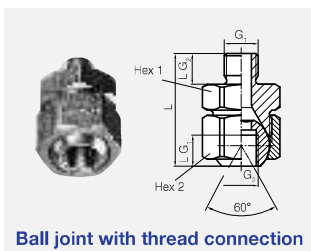
# Accessories Ball joints

**Allround swivelling action of 30°.**  
**No sealings, no wear.**  
**Long service life even after many adjustments.**  
**P<sub>max</sub>: 25 bar.**



For Series	Ordering no.				Dimensions [mm]											Weight (Brass)
	Type	Material no.			Code	D <sub>1</sub>	D <sub>2</sub>	G <sub>1</sub> BSPP	G <sub>2</sub> BSPP	L <sub>G1</sub>	L <sub>G2</sub>	L	Hex <sub>1</sub>	Hex <sub>2</sub>	Hex <sub>3</sub>	
		16 303 SS/ 316Ti SS	16 303 SS	30 Brass												
For all nozzles with 1/4 male thread.	092.020	-	○	○	AD	-	-	1/4	1/4	12.0	11.5	60.3	27	27	17	190 g
	092.021	-	○	○	AF	-	-	3/8	1/4	12.0	11.5	58.3	27	27	17	170 g
For all nozzles with 3/8 male thread.	092.030	-	○	○	AF	-	-	3/8	3/8	12.0	12.0	56.7	27	30	19	160 g
For all nozzles with 1/4 male thread.	092.020	○	-	-	SD	20.0	15.0	-	1/4	-	11.5	64.3	-	27	17	150 g
	092.030	○	-	-	SF	22.0	15.0	-	3/8	-	12.0	58.7	-	30	19	150 g
226/2TR/216/302/308/350 548/468/679/684/652	092.022	-	○	○	AD	-	-	1/4	3/8	12.0	10.0	63.8	27	27	17	135 g
	092.022	-	○	○	AF	-	-	3/8	3/8	12.0	10.0	61.8	27	27	17	165 g
226/2TR/216/302/308/350 548/468/679/684/652	092.022	○	-	-	SE	20.0	15.0	-	3/8	-	10.0	67.8	-	27	17	155 g

## Compact ball joints for narrow installation conditions



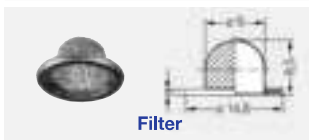
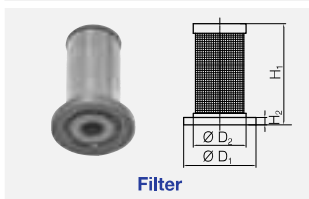
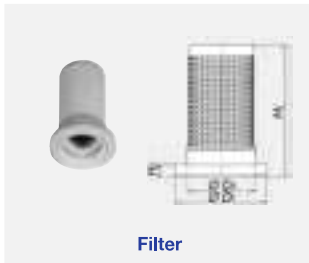
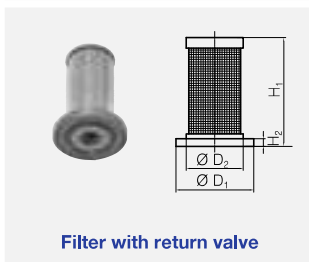
For all nozzles with 1/8 male thread	092.010	-	○	○	AA	-	-	1/8	1/8	8.0	8.0	29.3	22	24	-	70 g
For all nozzles with 1/4 male thread	092.024	-	○	○	AC	-	-	1/4	1/4	12.0	12.0	44	27	27	-	140 g
For all nozzles with 3/8 male thread	092.030	-	○	○	AE	-	-	3/8	3/8	12.0	12.0	44	27	30	-	160 g





# Accessories

## Non-return valves/filters



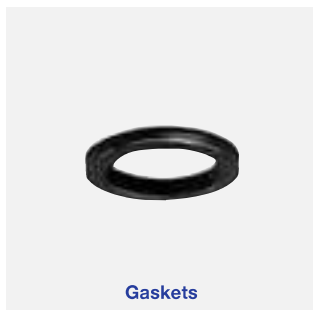
For nozzle size	Ordering no.				Colour	Opening pressure [bar]	Closing pressure [bar]	Mesh size [mm]	Dimensions [mm]				Weight
	Type	Material no.							H <sub>1</sub>	H <sub>2</sub>	D <sub>1</sub>	D <sub>2</sub>	
		56 POM	53 Polypropylen	26 Monel/ Copper									
xxx.32x-xxx.44x	<b>065.265</b> Ball 420 SS Spring 301 SS	○	-	-	blue	0,5-1,0	0,4-0,9	0,25	21,5	2,0	14,8	11,0	2 g
xxx.48x-xxx.56x	<b>065.266</b> Ball 420 SS Spring 301 SS	○	-	-	red	0,4-0,5	0,35-0,45	0,65	21,5	2,0	14,8	11,0	2 g
xxx.14x-xxx.36x	<b>095.016.53.11.00</b> Ball 304 SS Spring 301 SS	-	○	-	blue	approx. 0,5	approx. 0,3	0,08	21,0	1,6	15,0	11,0	2 g
xxx.14x-xxx.36x	<b>095.016.53.14.63</b> Ball 304 SS Spring 301 SS	-	○	-	green	approx. 2,8	approx. 1,6	0,08	21,0	1,6	15,0	11,0	2 g
xxx.32x-xxx.44x	<b>065.257</b>	○	-	-	blue	-	-	0,25	21,5	2,0	14,8	11,0	2 g
xxx.48x-xxx.56x	<b>065.256</b>	○	-	-	red	-	-	0,65	21,5	2,0	14,8	11,0	2 g
xxx.14x-xxx.36x	<b>095.016.53.15.62</b>	-	○	-	light pink	-	-	0,08	21,0	1,6	15,0	11,0	1 g
xxx.32x-xxx.44x	<b>065.252</b>	-	-	○	-	-	-	0,50	8,5	1,0	14,8	9,0	1 g

**Example for ordering:** Type 065.265 + Material no. 56 = Ordering no. 065.265.56



# Accessories

## Gaskets/Teflon sealing tape



For Series	For nozzle Series	Ordering no.				Dimensions [mm]	Weight ca.	
		Type	Material no.					
			55	71	72			73
		PTFE	Cu. ISOPL, 750	EWP 210 (asbestos free)	Soft rubber			
610	1/8 BSPP	<b>061.040</b>	-	-	○	-	Ø 10 x Ø 14 x 1	0.13 g
220/612	1/4 BSPP	<b>061.240</b>	○	○*	○	-	Ø 13.2 x Ø 17 x 1(*2)	0.20 g
460/461/ 490/491/ 616/617/ 689	3/4 BSPP	<b>061.640</b>	-	○*	○	-	Ø 26.5 x Ø 32 x 1(*2.5)	0.50 g
405	1 1/4 BSPP	<b>062.140</b>	-	-	○	-	Ø 42 x Ø 50 x 1	1.20 g
405	2 BSPP	<b>062.540</b>	-	-	○	-	Ø 60 x Ø 70 x 2	3.92 g
226/468/ 652/679/ 684	retaining nut 3/8	<b>065.240</b>	○	-	○	○	Ø 11 x Ø 15 x 1	0.14 g
656/657	retaining nut 3/4	<b>065.640</b>	-	-	○	-	Ø 18 x Ø 24 x 1	0.50 g

<b>Teflon sealing tape</b> for connecting cylindrical female threads and conical male threads.	<b>Ordering no. 095.009.55.09.30.0</b>	Dimensions: 12 mm x 0.1 mm x 12 m
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<b>Example</b>	<b>Type</b>	<b>+</b>	<b>Material no.</b>	<b>=</b>	<b>Ordering no.</b>
for ordering:	061.040	+	72	=	061.040.72