



### Direct-acting 3/2-way plunger valve

- Direct-acting and compact small valve up to DN 1.6
- Slipped over coil system
- Banjo fitting for direct mounting on pneumatic valves
- Simple and fast push-in, flange or manifold mounting
- Explosion-proof variants



Product variants described in the data sheet may differ from the product presentation and description.

#### Type description

The 7012 valve is a direct-acting plunger valve. The stopper and the core guide tube are welded together to increase pressure resistance and leak-tightness. Various housing and seal material combinations are available depending on the actual application. A Bürkert-specific flange variant (SFB) enables the space-saving arrangement of valves on a multiple manifold. The range is supplemented by explosion-proof variants. Push-in fittings can be selected for a flexible hose connection. A banjo fitting with banjo bolt is the ideal solution for easy direct mounting on a pneumatic actuator. Optional manual override enables quick start-up and optimal maintenance. In combination with a plug to industry standard shape B or DIN EN 17301-803 shape C, the valves satisfy degree of protection IP65.

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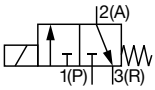
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## 1. General technical data


Product properties	
Dimensions	Detailed information can be found in chapter "5. Dimensions" on page 8.
Material	
Seal	FKM, EPDM
Body	Brass, polyamide (PA), stainless steel 1.4305
Manual override	Optional, standard for Type 7012 banjo version
Weight	
Standard version 24.5 mm solenoid coil	146 g (with G 1/8)
Standard version 20 mm solenoid coil	120 g (with G 1/8)
Banjo version	135 g
Circuit function	C and D. Detailed information can be found in chapter "2. Circuit functions" on page 4.
Thermal insulation class of solenoid coil	Epoxy: class H
Performance data	
Duty cycle	
Single valve	Continuous operation 100 % ED resp. 50 % ED
For block mounting on multiple manifold	With 4 W/5 W solenoid coil 100 % ED (at max. 55 °C)
Switching time <sup>1.)</sup>	
Standard version	Orifice 1.2...1.6 mm: opening 8...12 ms, closing 8...12 ms
Banjo version	Orifice 1.2 mm: opening 7...12 ms, closing 7...12 ms
Electrical data	
Operating voltage	24 V DC, 24 V / 50 Hz, 110 / 230 V / 50 Hz
Voltage tolerance	± 10 %
Medium data	
Operating medium	Neutral gases and fluids (e.g. compressed air, water, hydraulic oil, technical vacuum)
Medium temperature	
Standard version	- 10 °C...+ 100 °C
Banjo version	- 10 °C...+ 60 °C
Viscosity (max.)	21 mm <sup>2</sup> /s
Process/Port connection & communication	
Electrical connection	<ul style="list-style-type: none"> <li>• Acc. to DIN EN 175301 - 803 form C for cable plug Type 2516</li> <li>• Acc. to industry standard form B for cable plug Type 2507</li> <li>• Flat pin terminal as protection class III device</li> <li>• Flying leads connection on request for coil size 20 mm</li> <li>• ATEX/IECEX version with 3 m moulded-in cable</li> </ul>
Port connection	
Standard version	M5, G 1/8, Flange
Banjo version	G 1/8, G 1/4 and hose connector Ø 6 mm
Approvals and certificates	
Degree of protection	IP65 with cable plug and ATEX/IECEX cable connection version
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature	
Standard version	Max. + 55 °C resp. 75 °C, depending on power level
ATEX/IECEX version	Max. + 55 °C (max. + 60 °C on request)
Banjo version	- 10 °C...+ 40 °C

1.) Measured at valve outlet at 6 bar and +20 °C according to ISO 12238, opening: pressure rise 0...10 %, closing: pressure drop 100...90 %

## 2. Circuit functions

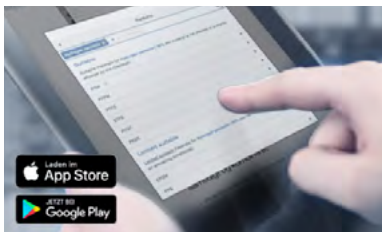
Circuit functions	Description
	<b>Type: C, solenoid valve</b> 3/2 way Direct-acting Normally closed
	<b>Type: D, solenoid valve</b> 3/2 way Direct-acting Normally open

## 3. Approvals

Approvals	Description
	<b>ATEX and IECEx approval for coils with fixed cable outlet</b> ATEX: EPS 21 ATEX 1 128 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db IECEx: IECEx EPS 21.0045X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db

## 4. Materials

### 4.1. Chemical Resistance Chart – Bürkert resistApp



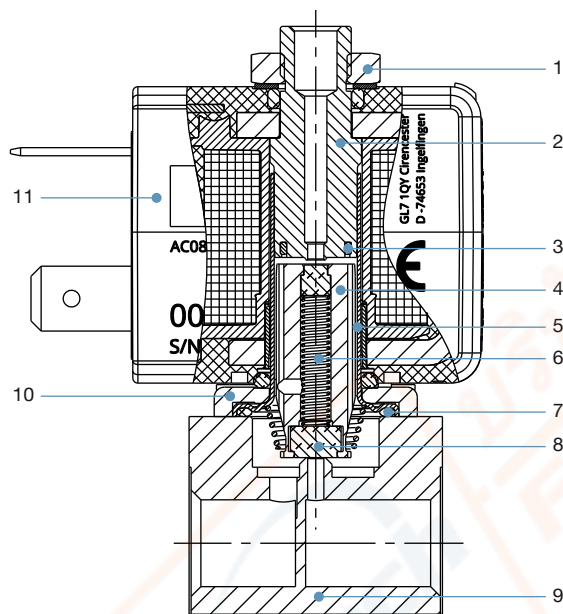
**Bürkert resistApp – Chemical Resistance Chart**

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start Chemical Resistance Check](#)

### 4.2. Material specifications

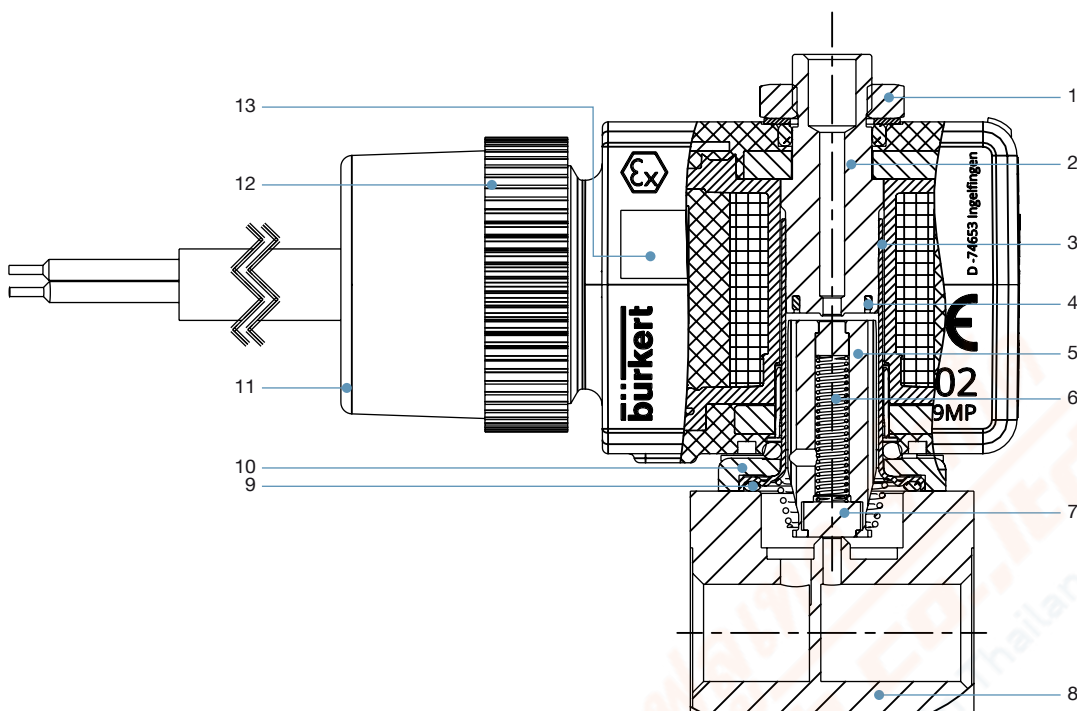
#### Standard version



No.	Element	Material
1	Locknut	DIN 176 Surface finish thick film passivated KOSA0101
2	Stopper	Stainless steel 1.4113
3	Shading ring	Copper (silver optional)
4	Core	Stainless steel 1.4113
5	Guide tube	Stainless steel 1.4303
6	Spring	Stainless steel 1.4310
7	O-ring	FKM/EPDM
8	Seal	FKM/EPDM
9	Valve body	Brass, stainless steel 1.4305 PA (polyamide)
10	Flange	<ul style="list-style-type: none"> <li>• Surface finish thick film passivated KOSA0101 (brass version)</li> <li>• Nickel-plated surface (stainless steel version)</li> </ul>
11	Coil	Epoxy

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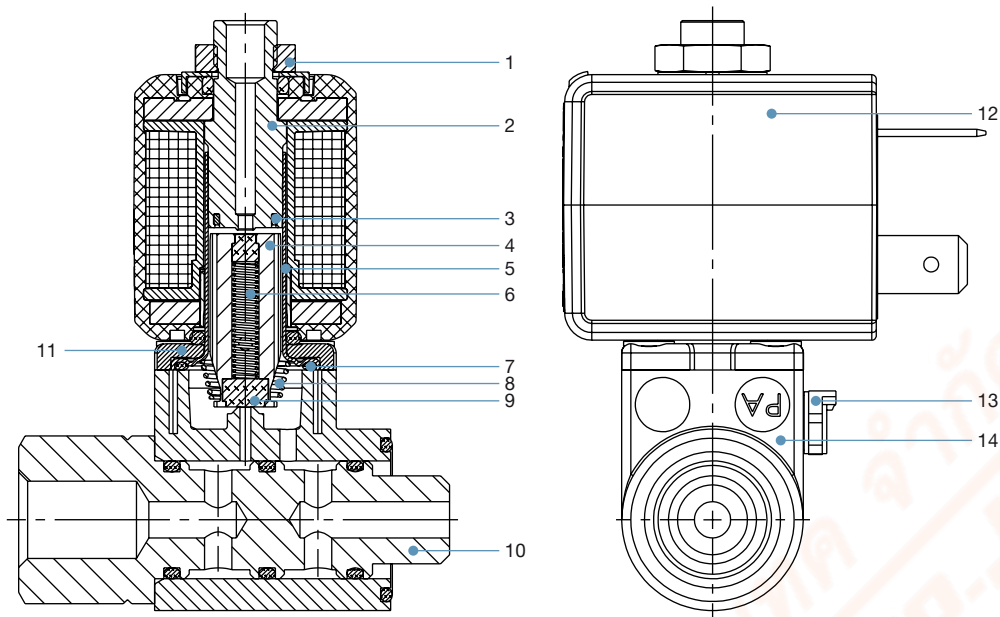
ATEX/IECEx cable version



No.	Element	Material
1	Locknut	DIN 176 Surface finish thick film passivated KOSA0101
2	Stopper	Stainless steel 1.4113
3	Guide tube	Stainless steel 1.4303 ST
4	Shading ring	Copper, (optional silver)
5	Core	Stainless steel 1.4113
6	Spring	Stainless steel 1.4310
7	Seal	FKM/EPDM
8	Valve body	Brass, stainless steel 1.4305 PA (polyamide)
9	O-Ring	FKM/EPDM
10	Flange	<ul style="list-style-type: none"> <li>• Surface finish thick film passivated KOSA0101 (brass version)</li> <li>• Nickel-plated surface (stainless steel version)</li> </ul>
11	Sealing ring	Silicone
12	Union nut	PA (Polyamide)
13	Coil	Epoxy

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Banjo version



No.	Element	Material
1	Locknut	DIN 176 Surface finish thick film passivated KOSA0101
2	Stopper	Stainless steel 1.4113
3	Shading ring	Copper (silver optional)
4	Core	Stainless steel 1.4113
5	Guide tube	Stainless steel 1.4303 ST
6	Spring	Stainless steel 1.4310
7	O-ring	FKM
8	Spring	Stainless steel 1.4310
9	Seal	FKM
10	Banjo bolt	Nickel-plated brass
11	Flange	<ul style="list-style-type: none"> <li>Surface finish thick film passivated KOSA0101 (brass version)</li> <li>Nickel-plated surface (stainless steel version)</li> </ul>
12	Coil	Epoxy
13	Manual override	Durethan
14	Body	PA (polyamide)

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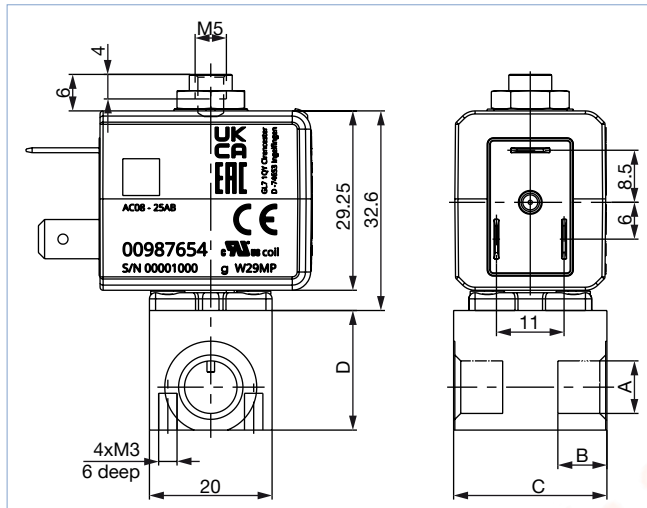
## 5. Dimensions

### 5.1. Standard version

#### Threaded version

**Note:**

- Dimensions in mm
- Versions according to industry standard form B

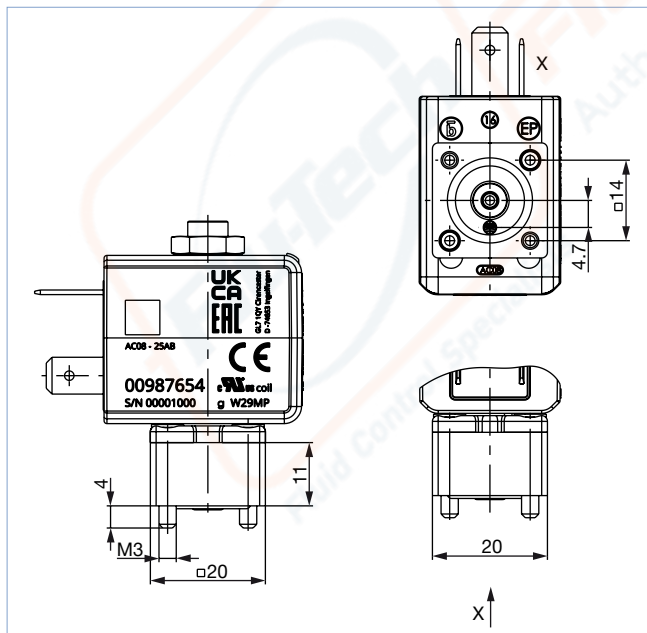


Port connection	A	B	C	D
Thread	M5	5	20	14
Thread	G 1/8	8	25	19.5

#### Flange version

**Note:**

- Dimensions in mm
- Versions according to industry standard form B



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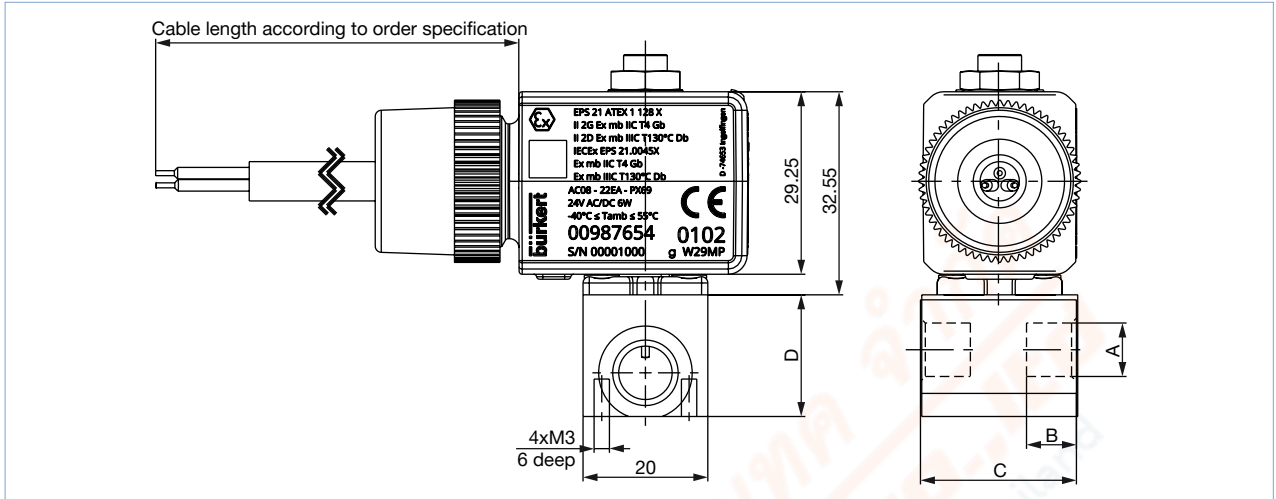


5.2. ATEX-/IECEx cable version

Threaded version

Note:

Dimensions in mm

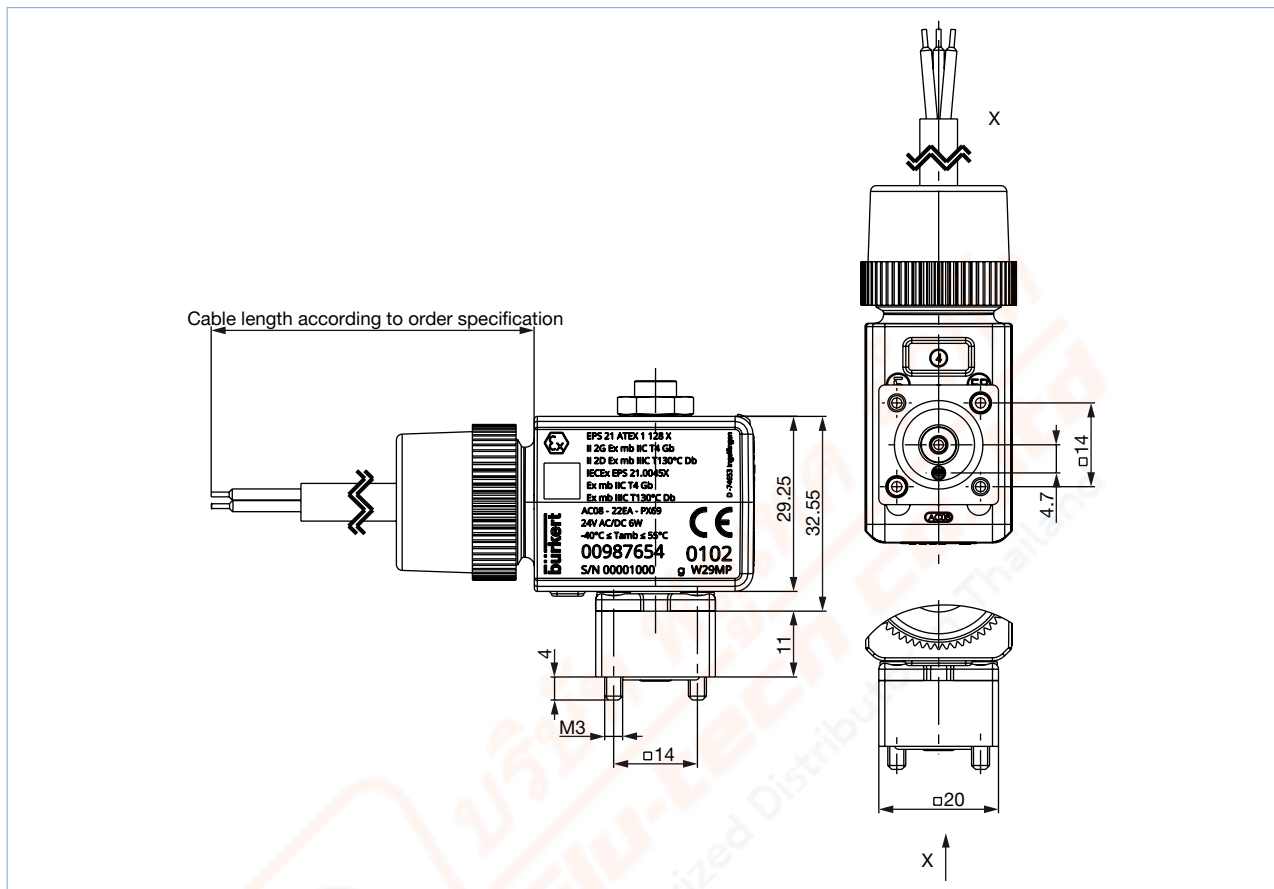


Port connection	A	B	C	D
Thread	M5	5	20	14
Thread	G 1/8	8	25	19.5

**Flange version**

**Note:**

Dimensions in mm



**PIN Assignments**

For the positions marked with \*, \*\* or \*\*\* in the drawing, the connections are marked with the letters shown in the table above, depending on the circuit function. Unused connections in circuit functions A or B will be closed off with a blanking plug or cap nut.

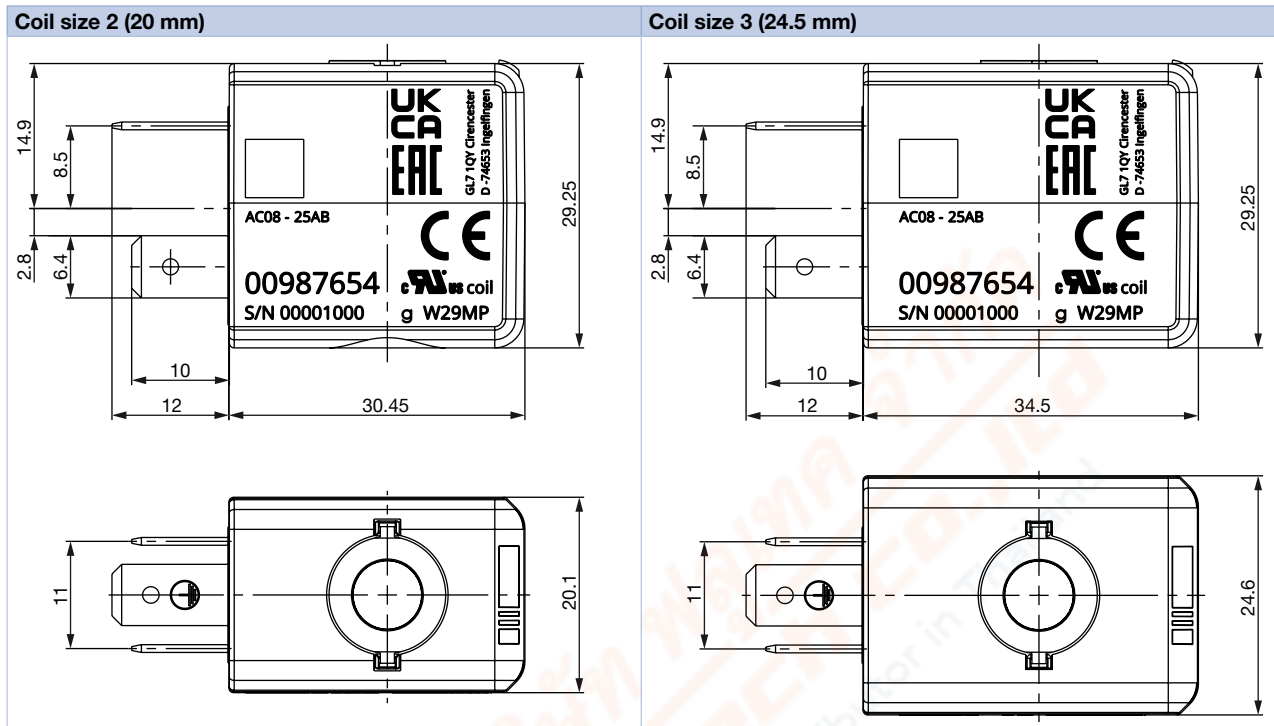
Circuit function	Connection Type			Threaded version	Flange version
	*	**	***		
A	P	to lock	A		
B	to lock	B	P		
C	P	R	A		
D	R	P	B		
T	P	R	A		

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Versions according to industry standard form B

Note:

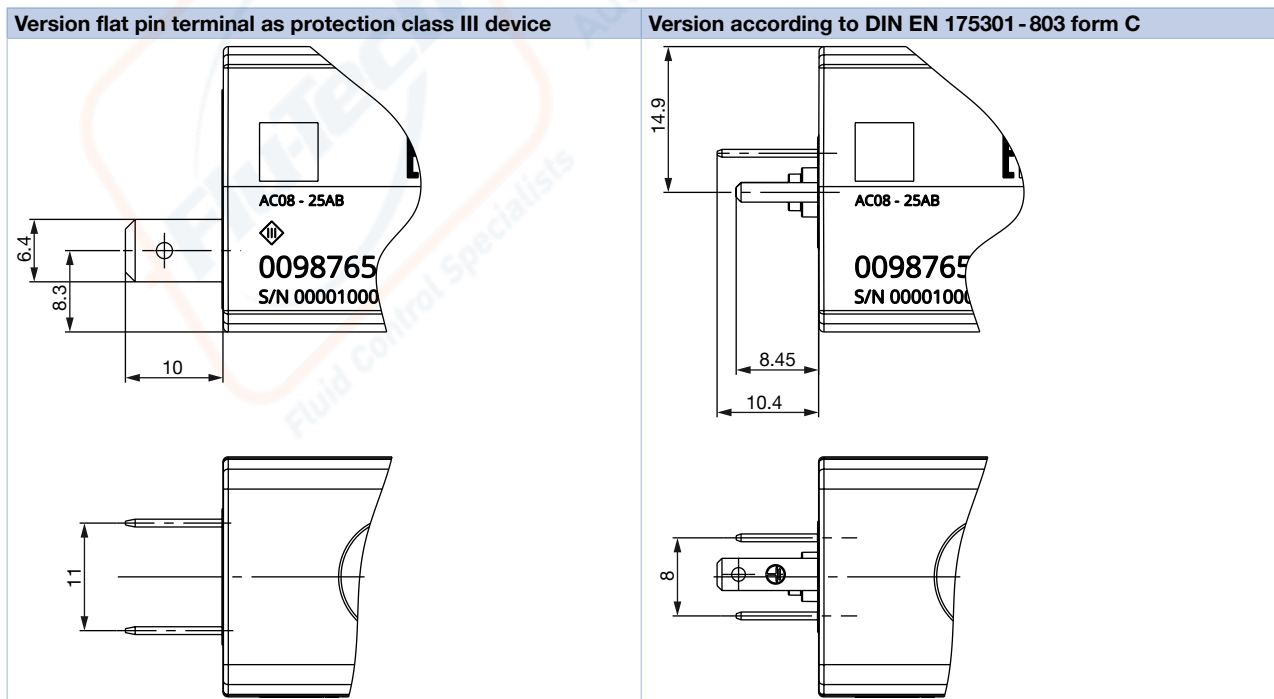
Dimensions in mm



Further electrical connections

Note:

- Specifications apply to coil sizes 20 mm and 24.5 mm
- Dimensions in mm



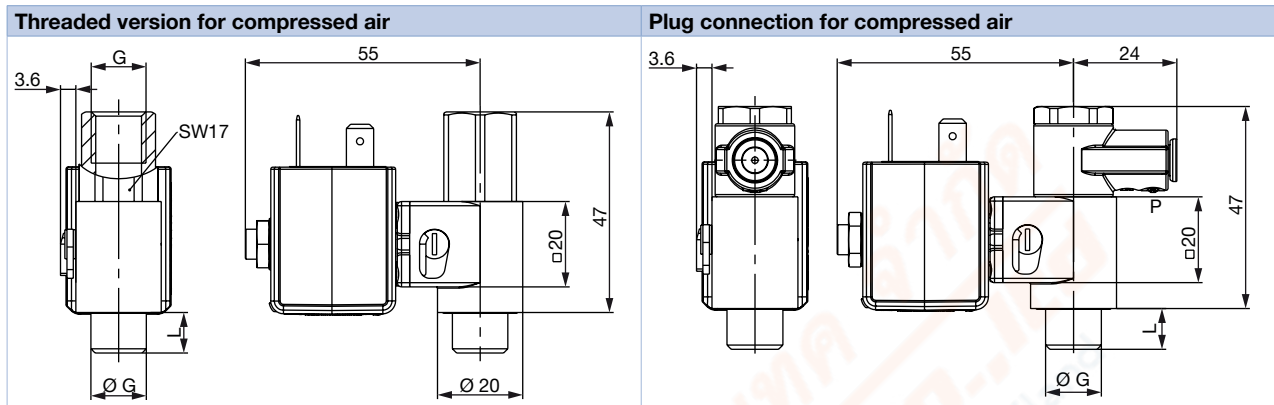
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### 5.3. Banjo version

Versions according to industry standard form B, coil size 24.5 mm

**Note:**

- Dimensions in mm
- Plug connection for compressed air: Pressure port P can be continuously rotated through 360°.
- Available orifices: 1.2 mm

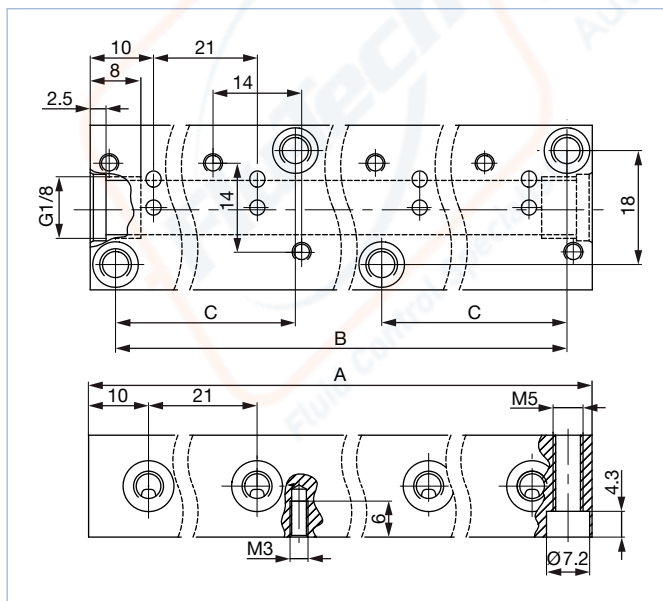


G	L
G 1/8	6.5
G 1/4	9.5

### 5.4. Multiple manifold

**Note:**

- Dimensions in mm
- Can only be combined with versions circuit function C (normally closed) and valves with coil size 20 mm
- Manifolds with valves of coil size 24.5 mm on request



Quantity of valve places	A	B	C	Article no.
	[mm]	[mm]	[mm]	
1	20	12	–	005312
2	41	33	–	005355
3	62	54	–	005313
4	83	75	–	005314
5	104	96	–	005315
6	125	117	–	005316
7	146	138	–	005893
8	167	159	54	005166
9	188	180	54	005241
10	209	201	75	005819
11	230	222	75	005242
12	251	243	96	005222

## 6. Performance specifications

### 6.1. Power consumption of standard coil version 24.5 mm

Coil	Orifice [mm]	Electrical power					Switching times <sup>1)</sup>	
		Inrush AC [VA]	Hold AC [VA]	[W]	DC Cold [W]	Hot [W]	Opening [ms]	Closing [ms]
24 V / DC / 7 W	1.2	–	–	–	7	5.5	8...12	8...12
	1.6							
	2.0							
24 V / DC / 5.5 W	1.2	–	–	–	5.5	4.5		
	1.6							
	2.0							
24 V / 50 Hz / 4 W	1.2	12	6.5	4	–	–		
	1.6							
	2.0							
230 V / 50 Hz / 4 W	1.2	12	6.5	4	–	–		
	1.6							
	2.0							

1.) Measured at valve outlet at 6 bar<sup>2)</sup> and +20 °C according to ISO 12238, opening: pressure rise 0...10%, closing: pressure drop 100...90%

2.) Measured as overpressure to the atmospheric pressure and air as a medium

### 6.2. Power consumption of standard coil version 20 mm


Coil	Orifice [mm]	Electrical power					Switching times <sup>1)</sup>	
		Inrush AC [VA]	Hold AC [VA]	[W]	DC Cold [W]	Hot [W]	Opening [ms]	Closing [ms]
24 V / DC / 6.5 W	1.2	–	–	–	6.5	5	8...12	8...12
	1.6							
	2.0							
24 V / 50 Hz / 6 W	1.2	11	7	6	–	–		
	1.6							
	2.0							
230 V / 50 Hz / 6 W	1.2	11	7	6	–	–		
	1.6							
	2.0							
24 V / DC / 5 W	1.2	–	–	–	5	4		
	1.6							
	2.0							
24 V / 50 Hz / 4 W	1.2	9	5	4	–	–		
	1.6							
	2.0							
230 V / 50 Hz / 4 W	1.2	9	5	4	–	–		
	1.6							
	2.0							

1.) Measured at valve outlet at 6 bar<sup>2)</sup> and +20 °C according to ISO 12238, opening: pressure rise 0...10%, closing: pressure drop 100...90%

2.) Measured as overpressure to the atmospheric pressure and air as a medium

## 7. Ordering information

### 7.1. Bürkert eShop – Easy ordering and quick delivery




**Bürkert eShop – Easy ordering and fast delivery**

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

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### 7.2. Bürkert product filter



**Bürkert product filter – Get quickly to the right product**

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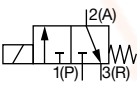
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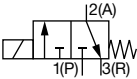
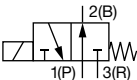
### 7.3. Ordering chart

Standard version according to industry standard form B, coil size 24.5 mm

**Note:**

All valves without cable plug

Circuit function	Port connection	Orifice	K <sub>v</sub> value H <sub>2</sub> O <sup>1)</sup>	Voltage/ Frequency/ Power	Maximum duty cycle	Medium pressure [bar] <sup>2) 3)</sup>		Article no. Body material Brass	Article no. Body material stainless steel
						Ambient temperature 75 °C	Ambient temperature 55 °C		
						FKM seal			
<b>C, solenoid valve</b> 3/2 way Direct-acting Normally closed 	M5	1.2	0.045	24 V / DC / 7 W	100 % ED	–	0...13	380922	381000
				24 V / DC / 5.5 W		0...11.5	0...11.5	390256	390258
				24 V / 50 Hz / 4 W		0...13	0...13	380924	381002
				230 V / 50 Hz / 4 W		0...13	0...13	380927	381004
		1.6	0.06	24 V / DC / 7 W	100 % ED	–	0...7.5	380932	381021
				24 V / DC / 5.5 W		0...6	0...6	390265	390267
				24 V / 50 Hz / 4 W		0...7.5	0...7.5	380931	381023
				230 V / 50 Hz / 4 W		0...7.5	0...7.5	380928	381025
		2.0 <sup>4)</sup>	0.11	24 V / DC / 7 W	100 % ED	–	0...7	X	X
				24 V / DC / 5.5 W		0...5	0...5	X	X
				24 V / 50 Hz / 4 W		0...6	0...6	X	X
				230 V / 50 Hz / 4 W		0...6	0...6	X	X
G 1/8	1.2	0.045	100 % ED	24 V / DC / 7 W	–	0...13	379906	380132	
				24 V / DC / 5.5 W	0...11.5	0...11.5	390269	390271	
				24 V / 50 Hz / 4 W	0...13	0...13	379928	380139	
				230 V / 50 Hz / 4 W	0...13	0...13	380116	380217	
	1.6	0.06	100 % ED	24 V / DC / 7 W	–	0...7.5	379915	380137	
				24 V / DC / 5.5 W	0...6	0...6	390275	390273	
				24 V / 50 Hz / 4 W	0...7.5	0...7.5	379930	380141	
				230 V / 50 Hz / 4 W	0...7.5	0...7.5	380118	380218	

Circuit function	Port connection	Orifice	K <sub>v</sub> value H <sub>2</sub> O <sup>1,3)</sup>	Voltage/ Frequency/ Power	Maximum duty cycle	Medium pressure [bar] <sup>2) 3)</sup>		Article no. Body material Brass	Article no. Body material stainless steel	
						Ambient temperature 75 °C	Ambient temperature 55 °C			
		[mm]	[m <sup>3</sup> /h]	[V/Hz/W]		Air + water	Air + water	FKM seal		
<b>C, solenoid valve</b> 3/2 way Direct-acting Normally closed 	G 1/8	2.0 <sup>4)</sup>	0.11	24 V / DC / 7 W	100 % ED	–	0...7	X	X	
				24 V / DC / 5.5 W		0...5	0...5	X	X	
				24 V / 50 Hz / 4 W		0...6	0...6	X	X	
				230 V / 50 Hz / 4 W		0...6	0...6	X	X	
	Flange (FK01)	1.2	0.045	24 V / DC / 7 W	100 % ED	–	0...13	380943 ㉞	390301 ㉞	
				24 V / DC / 5.5 W		0...11.5	0...11.5	390348 ㉞	390351 ㉞	
				24 V / 50 Hz / 4 W		0...13	0...13	380942 ㉞	381029 ㉞	
				230 V / 50 Hz / 4 W		0...13	0...13	380940 ㉞	390353 ㉞	
		1.6	0.06	24 V / DC / 7 W	100 % ED	–	0...7.5	380934 ㉞	390355 ㉞	
				24 V / DC / 5.5 W		0...6	0...6	390358 ㉞	390360 ㉞	
				24 V / 50 Hz / 4 W		0...7.5	0...7.5	380936 ㉞	390362 ㉞	
				230 V / 50 Hz / 4 W		0...7.5	0...7.5	380938 ㉞	389484 ㉞	
	2.0 <sup>4)</sup>	0.11	24 V / DC / 7 W	100 % ED	–	0...7	X	X		
			24 V / DC / 5.5 W		0...5	0...5	X	X		
			24 V / 50 Hz / 4 W		0...6	0...6	X	X		
			230 V / 50 Hz / 4 W		0...6	0...6	X	X		
<b>D, solenoid valve</b> 3/2 way Direct-acting Normally open 	M5	1.2	0.045	24 V / DC / 5.5 W	100 % ED	0...10	0...10	390363 ㉞	390365 ㉞	
				24 V / 50 Hz / 4 W		0...10	0...10	390367 ㉞	390382 ㉞	
				230 V / 50 Hz / 4 W		0...10	0...10	390385 ㉞	390384 ㉞	
		1.6	0.06	24 V / DC / 5.5 W	100 % ED	0...6	0...6	390390 ㉞	390392 ㉞	
				24 V / 50 Hz / 4 W		0...6	0...6	390396 ㉞	390398 ㉞	
				230 V / 50 Hz / 4 W		0...6	0...6	390400 ㉞	390401 ㉞	
		2.0 <sup>4)</sup>	0.11	24 V / DC / 5.5 W	100 % ED	0...8	0...8	X	X	
				24 V / 50 Hz / 4 W		0...7	0...7	X <sup>5)</sup>	X <sup>5)</sup>	
				230 V / 50 Hz / 4 W		0...7	0...7	X <sup>5)</sup>	X <sup>5)</sup>	
		G 1/8	1.2	0.045	24 V / DC / 5.5 W	100 % ED	0...10	0...10	385475 ㉞	390402 ㉞
					24 V / 50 Hz / 4 W		0...10	0...10	390406 ㉞	390409 ㉞
					230 V / 50 Hz / 4 W		0...10	0...10	390438 ㉞	390439 ㉞
	1.6		0.06	24 V / DC / 5.5 W	100 % ED	0...6	0...6	390440 ㉞	390442 ㉞	
				24 V / 50 Hz / 4 W		0...6	0...6	390444 ㉞	390446 ㉞	
				230 V / 50 Hz / 4 W		0...6	0...6	390448 ㉞	390449 ㉞	
	2.0 <sup>4)</sup>		0.11	24 V / DC / 5.5 W	100 % ED	0...8	0...8	X	X	
				24 V / 50 Hz / 4 W		0...7	0...7	X <sup>5)</sup>	X <sup>5)</sup>	
				230 V / 50 Hz / 4 W		0...7	0...7	X <sup>5)</sup>	X <sup>5)</sup>	
	Flange (FK01)		1.2	0.045	24 V / DC / 5.5 W	100 % ED	0...10	0...10	390450 ㉞	390452 ㉞
					24 V / 50 Hz / 4 W		0...10	0...10	390456 ㉞	390385 ㉞
					230 V / 50 Hz / 4 W		0...10	0...10	390459 ㉞	390460 ㉞
		1.6	0.06	24 V / DC / 5.5 W	100 % ED	0...6	0...6	390462 ㉞	390464 ㉞	
				24 V / 50 Hz / 4 W		0...6	0...6	390468 ㉞	390466 ㉞	
				230 V / 50 Hz / 4 W		0...6	0...6	390470 ㉞	390471 ㉞	
2.0 <sup>4)</sup>		0.11	24 V / DC / 5.5 W	100 % ED	0...8	0...8	X	X		
			24 V / 50 Hz / 4 W		0...7	0...7	X <sup>5)</sup>	X <sup>5)</sup>		
			230 V / 50 Hz / 4 W		0...7	0...7	X <sup>5)</sup>	X <sup>5)</sup>		

X: on request

1.) Flow value for water, measured at +20 °C, 1 bar<sup>2)</sup> pressure at valve inlet and free outlet

2.) Measured as overpressure to the atmospheric pressure and air as a medium

3.) Number of switching cycles under laboratory conditions (FKM seal, oiled air, unpressurised, DC): 5 million. Please note that an increase in switching pressure can limit the life of the seat seal.

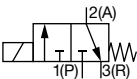
4.) Limited swelling compensation

5.) Can also be feasible with coil size 2

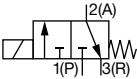
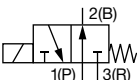
## Standard version according to industry standard form B, coil size 20 mm

## Note:

All valves without cable plug

Circuit function	Port connection	Orifice	K <sub>v</sub> value H <sub>2</sub> O <sup>1)</sup>	Voltage/ Frequency/ Power	Maximum duty cycle	Medium pressure [bar] <sup>2) 3)</sup>		Article no. Body material Brass	Article no. Body material stainless steel
						Ambient temperature 75 °C	Ambient temperature 55 °C		
		[mm]	[m <sup>3</sup> /h]	[V/Hz/W]		Air + water	Air + water	FKM seal	
<b>C, solenoid valve</b> 3/2 way Direct-acting Normally closed 	M5	1.2	0.045	24 V / DC / 6.5 W	100 % ED	–	0...11	X	X
				24 V / 50 Hz / 6 W		–	0...13	X	X
				230 V / 50 Hz / 6 W		–	0...13	X	X
				24 V / DC / 5 W		0...10	0...10	X	X
				24 V / 50 Hz / 4 W		0...11	0...11	X	X
				230 V / 50 Hz / 4 W		0...11	0...11	X	X
		1.6	0.06	24 V / DC / 6.5 W	100 % ED	–	0...6	X	X
				24 V / 50 Hz / 6 W		–	0...7.5	X	X
				230 V / 50 Hz / 6 W		–	0...7.5	X	X
				24 V / DC / 5 W		0...5.5	0...5.5	X	X
				24 V / 50 Hz / 4 W		0...6	0...6	X	X
				230 V / 50 Hz / 4 W		0...6	0...6	X	X
		2.0 <sup>4)</sup>	0.11	24 V / DC / 6.5 W	100 % ED	–	0...5	X	X
				24 V / 50 Hz / 6 W		–	0...6	X	X
				230 V / 50 Hz / 6 W		–	0...6	X	X
				24 V / DC / 5 W		0...4	0...4	X	X
				24 V / 50 Hz / 4 W		0...5.5	0...5.5	X	X
				230 V / 50 Hz / 4 W		0...5.5	0...5.5	X	X
	G 1/8	1.2	0.045	100 % ED	24 V / DC / 6.5 W	–	0...11	X	X
					24 V / 50 Hz / 6 W	–	0...13	X	X
					230 V / 50 Hz / 6 W	–	0...13	X	X
					24 V / DC / 5 W	0...10	0...10	X	X
					24 V / 50 Hz / 4 W	0...11	0...11	X	X
					230 V / 50 Hz / 4 W	0...11	0...11	X	X
		1.6	0.06	100 % ED	24 V / DC / 6.5 W	–	0...6	X	X
					24 V / 50 Hz / 6 W	–	0...7.5	X	X
					230 V / 50 Hz / 6 W	–	0...7.5	X	X
					24 V / DC / 5 W	0...5.5	0...5.5	X	X
					24 V / 50 Hz / 4 W	0...6	0...6	X	X
					230 V / 50 Hz / 4 W	0...6	0...6	X	X
		2.0 <sup>4)</sup>	0.11	100 % ED	24 V / DC / 6.5 W	–	0...5	X	X
					24 V / 50 Hz / 6 W	–	0...6	X	X
					230 V / 50 Hz / 6 W	–	0...6	X	X
					24 V / DC / 5 W	0...4	0...4	X	X
					24 V / 50 Hz / 4 W	0...5.5	0...5.5	X	X
					230 V / 50 Hz / 4 W	0...5.5	0...5.5	X	X
Flange (FK01)	1.2	0.045	100 % ED	24 V / DC / 6.5 W	–	0...11	X	X	
				24 V / 50 Hz / 6 W	–	0...13	X	X	
				230 V / 50 Hz / 6 W	–	0...13	X	X	
				24 V / DC / 5 W	0...10	0...10	X	X	
				24 V / 50 Hz / 4 W	0...11	0...11	X	X	
				230 V / 50 Hz / 4 W	0...11	0...11	X	X	



Circuit function	Port connection	Orifice		Voltage/ Frequency/ Power	Maximum duty cycle	Medium pressure [bar] <sup>2) 3)</sup>		Article no. Body material Brass	Article no. Body material stainless steel				
		K <sub>v</sub> value H <sub>2</sub> O <sup>1)</sup>				Ambient temperature 75 °C	Ambient temperature 55 °C						
		[mm]	[m <sup>3</sup> /h]	[V/Hz/W]		Air + water	Air + water	FKM seal					
<b>C, solenoid valve</b> 3/2 way Direct-acting Normally closed 	Flange (FK01)	1.6	0.06	24 V / DC / 6.5 W	100 % ED	–	0...6	X	X				
				24 V / 50 Hz / 6 W		–	0...7.5	X	X				
				230 V / 50 Hz / 6 W		–	0...7.5	X	X				
				24 V / DC / 5 W		0...5.5	0...5.5	X	X				
				24 V / 50 Hz / 4 W		0...6	0...6	X	X				
				230 V / 50 Hz / 4 W		0...6	0...6	X	X				
		2.0 <sup>4)</sup>	0.11	24 V / DC / 6.5 W	100 % ED	–	0...5	X	X				
				24 V / 50 Hz / 6 W		–	0...6	X	X				
				230 V / 50 Hz / 6 W		–	0...6	X	X				
				24 V / DC / 5 W		0...4	0...4	X	X				
				24 V / 50 Hz / 4 W		0...5.5	0...5.5	X	X				
				230 V / 50 Hz / 4 W		0...5.5	0...5.5	X	X				
				M5		1.2	0.045	100 % ED	24 V / DC / 5 W	0...10	0...10	X	X
									24 V / 50 Hz / 4 W	0...10	0...10	X	X
<b>D, solenoid valve</b> 3/2 way Direct-acting Normally open 	M5	1.6	0.06	100 % ED	24 V / DC / 5 W	0...6	0...6	X	X				
					24 V / 50 Hz / 4 W	0...6	0...6	X	X				
					230 V / 50 Hz / 4 W	0...6	0...6	X	X				
		2.0 <sup>4)</sup>	0.11	100 % ED	24 V / DC / 6.5 W	–	0...8	X	X				
					24 V / DC / 5 W	0...6	0...6	X	X				
					24 V / 50 Hz / 4 W	0...7	0...7	X	X				
					230 V / 50 Hz / 4 W	0...7	0...7	X	X				
					G 1/8	1.2	0.045	100 % ED	24 V / DC / 5 W	0...10	0...10	X	X
									24 V / 50 Hz / 4 W	0...10	0...10	X	X
		Flange (FK01)	1.6	0.06	100 % ED	24 V / DC / 5 W	0...6	0...6	X	X			
						24 V / 50 Hz / 4 W	0...6	0...6	X	X			
						230 V / 50 Hz / 4 W	0...6	0...6	X	X			
2.0 <sup>4)</sup>	0.11		100 % ED	24 V / DC / 6.5 W	–	0...8	X	X					
				24 V / DC / 5 W	0...6	0...6	X	X					
				24 V / 50 Hz / 4 W	0...7	0...7	X	X					

X: on request

1.) Flow value for water, measured at +20 °C, 1 bar<sup>2)</sup> pressure at valve inlet and free outlet

2.) Measured as overpressure to the atmospheric pressure and air as a medium

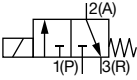
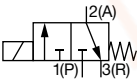
3.) Number of switching cycles under laboratory conditions (FKM seal, oiled air, unpressurised, DC): 5 million. Please note that an increase in switching pressure can limit the life of the seat seal.

4.) Limited swelling compensation

## Banjo version, coil size 24.5 mm

## Note:

All valves without cable plug

Circuit function	Port connection	Orifice	Q <sub>Nn</sub> value air	Voltage/Frequency/ Power	Maximum duty cycle	Medium pressure [bar] <sup>1,2)</sup>	Article no.
		[mm]	[l/min]	[V/Hz/W]		Ambient temperature +40 °C	
<b>C, solenoid valve</b> 3/2 way Direct-acting Normally closed 	BJ01 P: G 1/8 A: G 1/8	1.2	48	24 V / DC / 7 W	100 % ED	0...13	390839
				24 V / DC / 5.5 W		0...11.5	390842
				24 V / 50 Hz / 4 W		0...13	390845
				230 V / 50 Hz / 4 W		0...13	390847
	BJ02 P: G 1/4 A: G 1/4	1.2	48	24 V / DC / 7 W	100 % ED	0...13	390848
				24 V / DC / 5.5 W		0...11.5	390850
				24 V / 50 Hz / 4 W		0...13	390852
				230 V / 50 Hz / 4 W		0...13	390854
	BJ03 P: NPT 1/4 A: G 1/8	1.2	48	24 V / DC / 7 W	100 % ED	0...13	390855
				24 V / DC / 5.5 W		0...11.5	390858
				24 V / 50 Hz / 4 W		0...13	390860
				230 V / 50 Hz / 4 W		0...13	390862
	BJ05 P: G 1/4 A: G 1/8	1.2	48	24 V / DC / 7 W	100 % ED	0...13	384300
				24 V / DC / 5.5 W		0...11.5	390831
24 V / 50 Hz / 4 W				0...13		390832	
230 V / 50 Hz / 4 W				0...13		390835	
BJ07 P: NPT 1/8 A: G 1/8	1.2	48	24 V / DC / 7 W	100 % ED	0...13	390864	
			24 V / DC / 5.5 W		0...11.5	390867	
			24 V / 50 Hz / 4 W		0...13	390869	
			230 V / 50 Hz / 4 W		0...13	390871	
BJ08 P: Hose connection 6 mm A: G 1/8	1.2	48	24 V / DC / 7 W	100 % ED	0...13	390875	
			24 V / DC / 5.5 W		0...11.5	390880	
			24 V / 50 Hz / 4 W		0...13	390884	
			230 V / 50 Hz / 4 W		0...13	390887	
BJ09 P: Hose connection 6 mm A: G 1/4	1.2	48	24 V / DC / 7 W	100 % ED	0...13	390894	
			24 V / DC / 5.5 W		0...11.5	390905	
			24 V / 50 Hz / 4 W		0...13	390909	
			230 V / 50 Hz / 4 W		0...13	390911	
<b>C, solenoid valve</b> 3/2 way Direct-acting Normally closed 	BJ10 P: NPT 1/4 A: G 1/4	1.2	48	24 V / DC / 7 W	100 % ED	0...13	390916
				24 V / DC / 5.5 W		0...11.5	390918
				24 V / 50 Hz / 4 W		0...13	390922
				230 V / 50 Hz / 4 W		0...13	390924

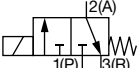
1.) Measured as overpressure to the atmospheric pressure and air as a medium

2.) Number of switching cycles under laboratory conditions (FKM seal, oiled air, unpressurised, DC): 5 million. Please note that an increase in switching pressure can limit the life of the seat seal.

## ATEX/IECEx version

## Note:

- The maximum media temperature must not exceed the permissible temperature class (T4 135 °C) minus 5 K under any circumstances.
- Only single mounting permissible
- With 3 m cable as standard. Other lengths on request.

Circuit function	Port connection	Orifice	K <sub>v</sub> value H <sub>2</sub> O <sup>1.)</sup>	Voltage/Frequency/ Power	Maximum duty cycle	Medium pressure [bar] <sup>2.)</sup>	Article no. Body material Brass	Article no. Body material stainless steel
						Ambient temperature +55 °C		
						Air + water	FKM seal	
<b>C, solenoid valve</b> 3/2 way Direct-acting Normally closed 	G 1/6	1.2	0.045	24 V / AC/DC / 6 W	100 % ED	0...11	20017950	X
				230 V / AC/DC / 6 W		0...11	20017953	X
		1.6	0.06	24 V / AC/DC / 6 W	100 % ED	0...7	20017954	X
				230 V / AC/DC / 6 W		0...7	20017958	X
		2.0	0.11	24 V / AC/DC / 6 W	100 % ED	0...5	20017961	X
				230 V / AC/DC / 6 W		0...5	20010156	X

X: on request

1.) Flow value for water, measured at +20 °C, 1 bar<sup>2.)</sup> pressure at valve inlet and free outlet

2.) Measured as overpressure to the atmospheric pressure and air as a medium

## Additional options

## Note:

Available on request

Option	Variable Code	Description
Oxygen versions	NL02	Suitable for applications with oxygen (non-metal materials that are in contact with the medium are tested and approved according to BAM)
Increased purity requirements e.g. oil, grease and silicone-free	NL50/NL05	Wetted parts are specially cleaned and packaged in accordance with the valves
Increased tightness requirements	PC05	Leakage rate *less than 10 <sup>-4</sup> mbar l/sec
	PC08	Leakage rate *less than 10 <sup>-5</sup> mbar l/sec
	PC06	Leakage rate *less than 10 <sup>-6</sup> mbar l/sec
Vacuum version	on request	–

## 7.4. Ordering chart accessories

### Multiple manifolds

**Note:**

Detailed order information can be found in chapter [“5.4. Multiple manifold”](#) on page 12.


### Accessories for manifolds

Accessory	Features	Article no.
Screw plug	With sealing ring, G 1/8	005041
Cover plate	For unoccupied valve position	005100

### Cable plug Type 2516, form C according to DIN EN 175301 - 803

**Note:**


- Delivery of cable plug includes a flat seal and a fixing screw.
- Further versions of cable plug with circuitry acc. to DIN EN 175 301 -803 form C as well as detailed technical data, see data sheet [Type 2516](#) ▶.

Cable plug	Version	Voltage	Article no.
	Without circuitry (standard)	0...250 V AC/DC	303141
	With LED	12...24 V AC/DC	303145
	With LED and varistor	12...24 V AC/DC	303148
	With rectifier, LED and varistor	12...24 V AC/DC	303142

### Cable plug Type 2507, form B according to industry standard

**Note:**

- Delivery of cable plug includes a flat seal and a fixing screw.
- Further versions of cable plug with circuitry acc. to industry standard connector form B as well as detailed technical data, see data sheet [Type 2507](#) ▶.

Cable plug	Version	Voltage	Article no.
	Without circuitry (standard)	2...250 V AC/DC	423845
	With LED	24 V AC/DC	423849
	With LED and free-wheeling diode	12...24 V AC/DC	423851
	With rectifier, LED and varistor	12...24 V AC/DC	423853

Visit [product website](#) ▶