





### Servo-assisted 2/2-way piston valve

- Servo-assisted piston valve with an orifice up to DN 50
- Explosion proof versions for Cat. 2
- Suitable for gas and steam applications up to 180 °C
- Relief valves for compressors
- Energy-saving double coil technology with kick and drop variant

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

#### Can be combined with

	<b>Type 2518</b> Cable plug, form A according to DIN EN 175301-803	▶
	<b>Type 2509</b> Cable plug, form A according to DIN EN 175301-803	▶

#### Type description

The 5404 valve is a servo-assisted piston valve available in NC and NO versions. A minimum differential pressure is required for the valve switching function. The solenoid coils are moulded with high-quality epoxy resin. To reduce power consumption in operation, coils with "Kick and Drop" (KD) electronics assembly (double coil technology) are available. In combination with a plug to DIN EN 175301 - 803 Form A, the valves satisfy degree of protection IP65. The cable plug is not included and must be ordered separately.



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## 1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "5. Dimensions" on page 11.
<b>Material</b>	
Seal	PTFE seat seal + FKM PTFE seat seal + Graphite (steam version) PTFE seat seal + EPDM (on request)
Body	Brass
Coil	Epoxy resin (polyamide on request)
Valve inner parts	Stainless steel, brass
Orifice	DN 12...DN 50
Circuit function	A and B Further information can be found in chapter "2. Circuit functions" on page 5.
Thermal insulation class of solenoid coil	Epoxy resin coil class H (class B on request)
Performance data	
Duty cycle	100 % continuous operation
<b>Switching time</b>	
DN 12...DN 25	Opening: 20...400 ms Closing: 100...1500 ms
DN 32...DN 50	Opening: 200...1500 ms Closing: 1000...3000 ms
Electrical data	
Operating voltage	24 V DC, 24 V 50 Hz, 24 V 60 Hz, 110 V 50 Hz, 120 V 60 Hz, 230 V 50 Hz, 240 V 60 Hz (further voltages on request)
<b>Power consumption</b>	
Circuit function A, DN 12...DN 25 (not in combination with high pressure PN 08)	Inrush AC: 24 VA Hold AC (hot coil): 14 VA/8 W Hold DC (hot/cold coil): 8/9.5 W
Circuit function B, DN 12...DN 25	Inrush AC: 24 VA Hold AC (hot coil): 14 VA/8 W Hold DC (hot/cold coil): 8/9.5 W
Explosion-proof version	Inrush AC: 9 VA Hold AC (hot coil): 9 VA Hold DC (hot/cold coil): 9 W
Circuit function A, DN 32...DN 50 and DN 12 as high pressure PN 08	Inrush AC: 24 VA Hold AC (hot coil): 16 VA/10 W Hold DC (hot/cold coil): 12/13 W
Voltage tolerance	± 10 %
Medium data	
Operating medium	Neutral gases and liquids (e.g. compressed air, water, hydraulic oil and steam)
<b>Medium temperature</b>	
Standard version	- 10 °C...+ 120 °C
Steam version	Up to + 160 °C, see "6.1. Temperature/duty cycle derating diagram for steam version NA07" on page 19 (from - 40 °C on request) Up to + 180 °C for AC 6 Watt
Viscosity	Max. 21 mm <sup>2</sup> /s (21 cSt)
Process/Port connection & communication	
Electrical connection	<ul style="list-style-type: none"> <li>Plug contacts according to DIN EN 175 301 - 803 form A for cable plug <b>Type 2518</b> ▶. Further information can be found in chapter "Cable plug Type 2518, form A according to DIN EN 175301 - 803" on page 25.</li> <li>Plug contacts according to DIN EN 175 301 - 803 form A for cable plug <b>Type 2509</b> ▶. Further information can be found in chapter "Cable plug Type 2509, form A according to DIN EN 175301 - 803" on page 25.</li> </ul>
Port connection	G ½, G ¾, G 1, G 1 ¼, G 1 ½, G 2 NPT ½, NPT ¾, NPT 1, NPT 1 ¼, NPT 1 ½, NPT 2

**Approvals and conformities**

Degree of protection	IP65 with cable plug <b>Type 2518</b> ▶ (IP67 on request) NEMA 4X with cable plug <b>Type 2509</b> ▶ with stainless steel screws and epoxy coil
Explosion protection	Further information can be found in chapter <b>"3.4. Explosion protection"</b> on page 6.
North America (USA/Canada)	Further information can be found in chapter <b>"3.5. North America (USA/Canada)"</b> on page 6.
Others	Further information can be found in chapter <b>"3.6. Others"</b> on page 7.

**Environment and installation**

Installation position	As required, preferably with actuator upright
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**Ambient temperature**

Standard version	- 10 °C...+ 55 °C (- 40 °C on request)	
<b>Version with Kick and Drop coil</b>	<b>30 switching cycles/min</b>	<b>1 switching cycle/min</b>
12/0.6 W	Max. + 70 °C	Max. + 85 °C
20/2.0 W	Max. + 70 °C	Max. + 85 °C
65/7.0 W	Max. + 55 °C	Max. + 70 °C

**2. Circuit functions**

Symbol	Description
	<b>Circuit function A (CF A)</b> 2/2-way solenoid valve Servo-controlled Normally closed
	<b>Circuit function B (CF B)</b> 2/2-way solenoid valve Servo-controlled Normally open

**3. Approvals and conformities**

**3.1. General notes**

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available verions can be supplied with the below mentioned approvals or conformities.

**3.2. Conformity**



In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

**3.3. Standards**






The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

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### 3.4. Explosion protection

Approval	Description						
  	<p><b>Optional: Explosion protection according to category 2 (zone 1/21)</b></p> <p>Ex marking of the components according to the following table:</p> <table border="1"> <thead> <tr> <th colspan="2">Coil Type AC10</th> </tr> <tr> <th>Coils with cable outlet</th> <th>Coils with terminal box</th> </tr> </thead> <tbody> <tr> <td> <b>ATEX:</b>                      EPS 18 ATEX 1232 X                      II 2G Ex mb IIC T4 Gb                      II 2D Ex mb IIIC T130 °C Db   <b>IECEx:</b>                      IECEx EPS 18.0110 X                      Ex mb IIC T4 Gb                      Ex mb IIIC T130 °C Db                 </td> <td> <b>ATEX:</b>                      EPS 18 ATEX 1232 X                      II 2G Ex eb mb IIC T4 Gb                      II 2D Ex mb tb IIIC T130 °C Db   <b>IECEx:</b>                      IECEx EPS 18.0110 X                      Ex eb mb IIC T4 Gb                      Ex mb tb IIIC T130 °C Db                 </td> </tr> </tbody> </table>	Coil Type AC10		Coils with cable outlet	Coils with terminal box	<b>ATEX:</b> EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db  <b>IECEx:</b> IECEx EPS 18.0110 X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db	<b>ATEX:</b> EPS 18 ATEX 1232 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db  <b>IECEx:</b> IECEx EPS 18.0110 X Ex eb mb IIC T4 Gb Ex mb tb IIIC T130 °C Db
	Coil Type AC10						
Coils with cable outlet	Coils with terminal box						
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<p><b>Optional: Explosion protection according to category 3 (zone 2/22)</b></p> <p>Ex marking of the components according to the following table:</p> <table border="1"> <thead> <tr> <th colspan="2">Coil Type AC10</th> </tr> <tr> <th colspan="2">Coil with plug contacts form A and cable plug Type 2509</th> </tr> </thead> <tbody> <tr> <td colspan="2"> <b>ATEX:</b>                      EPS 18 ATEX 1232 X                      II 2G Ex mb IIC T4 Gb                      II 2D Ex mb IIIC T130 °C Db   <b>IECEx:</b>                      IECEx EPS 18.0110 X                      Ex mb IIC T4 Gb                      Ex mb IIIC T130 °C Db                 </td> </tr> </tbody> </table>	Coil Type AC10		Coil with plug contacts form A and cable plug Type 2509		<b>ATEX:</b> EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db  <b>IECEx:</b> IECEx EPS 18.0110 X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db		
Coil Type AC10							
Coil with plug contacts form A and cable plug Type 2509							
<b>ATEX:</b> EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db  <b>IECEx:</b> IECEx EPS 18.0110 X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db							

### 3.5. North America (USA/Canada)

Approval	Description
	<p><b>Optional: UL Listed for the USA (valid for valves)</b></p> <p>The valves are UL Listed for the USA according to:</p> <ul style="list-style-type: none"> <li>UL 429 (electrically operated valves) and UL 429 A (Electrically Operated Valves for Fire Protection Service)</li> </ul>
	<p><b>Optional: UL Hazardous Locations – Explosion Protection (valid for coils)</b></p> <p>UL Listed for Hazardous Locations for USA and Canada</p> <p>Class I, Zone 1</p> <p>Class I, Division 2, Group A, B, C and D</p> <p>Class II + III, Division 2, Group F and G</p>
	<p><b>Optional: UL Recognized for the USA (valid for valves)</b></p> <p>The valves are UL Recognized for the USA according to:</p> <ul style="list-style-type: none"> <li>UL 429 (electrically operated valves) and UL 429 A (Electrically Operated Valves for Fire Protection Service)</li> </ul>
	<p><b>Optional: CSA for Canada (valid for valves)</b></p> <p>The valves are CSA approved for Canada according to:</p> <ul style="list-style-type: none"> <li>CSA 139 (electrically operated valves)</li> </ul>
	<p><b>Optional: FM (Factory Mutual) – Explosion Protection (valid for coils)</b></p> <p>FM for Hazardous Locations for USA and Canada</p> <p>Class I, Zone 1</p> <p>Class I, Division 1, Groups A, B, C and D</p> <p>Class II + III, Division 1, Groups E, F and G</p>

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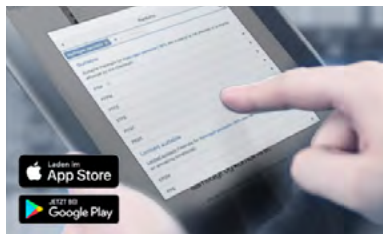
### 3.6. Others

#### Oxygen

Conformity	Description
<b>O<sub>2</sub></b>	<b>Optional: Suitability for oxygen (valid for the variable code NL02)</b> The products are suitable for use with gaseous oxygen, according to the manufacturer's declaration.

## 4. Materials

### 4.1. Bürkert resistApp



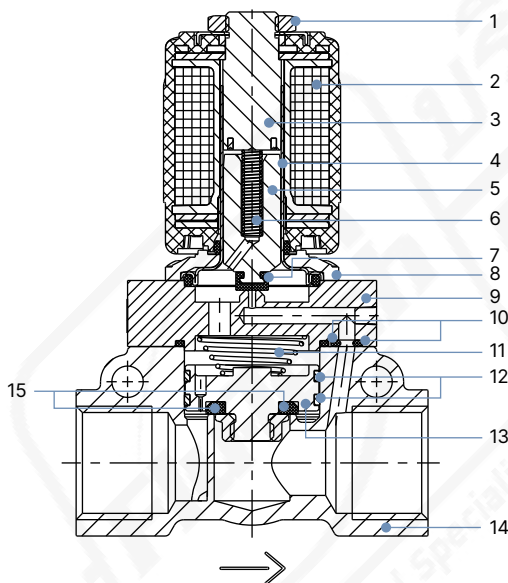
#### Bürkert resistApp – Chemical resistance chart

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

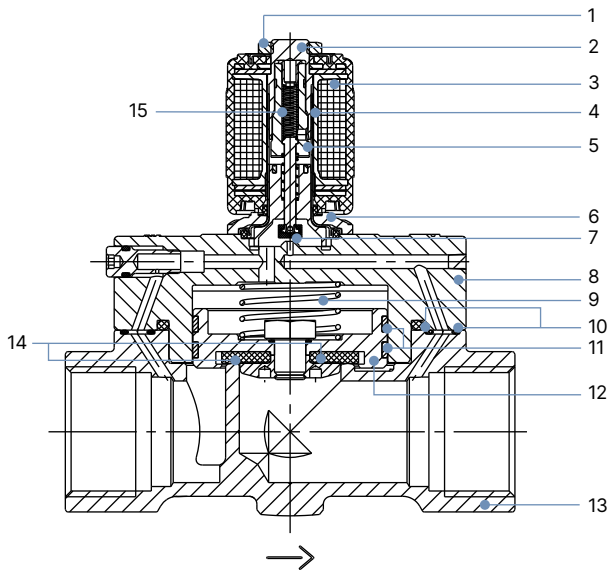
#### DN 12, circuit function A



No.	Element	Material
1	Nut	Steel (thick-film passivated according to RoHS)
2	Coil	Epoxy (polyamide optional)
3	Stopper	Stainless steel 1.4105/303 <sup>1)</sup>
4	Armature guide tube	Stainless steel 1.4303/305 <sup>1)</sup> /308 <sup>1)</sup>
5	Plunger	Stainless steel 1.4105/430F <sup>1)</sup>
6	Spring	Stainless steel 1.4310/301 <sup>1)</sup>
7	Plunger seal	FKM (EPDM optional)
8	Flange	Steel (thick-film passivated according to RoHS)
9	Cover	Brass
10	O-Rings	FKM (EPDM optional)
11	Spring	Stainless steel 1.4310/301 <sup>1)</sup>
12	Piston rings	PTFE
13	Piston	Brass
14	Valve body	Brass
15	Piston seal	PTFE

1.) Material designation according to AISI

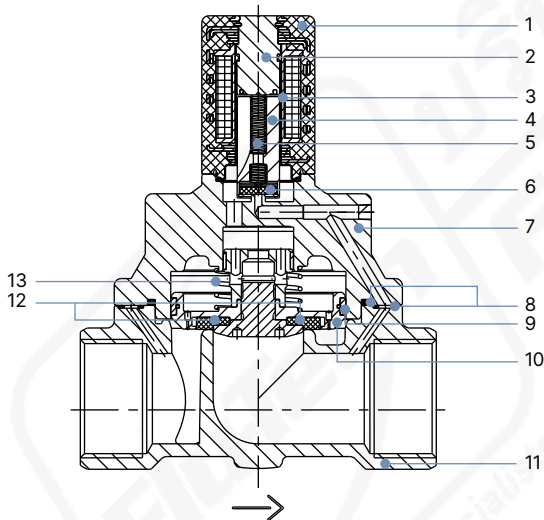
DN 25, circuit function B



No.	Element	Material
1	Nut	Steel (thick-film passivated according to RoHS)
2	Stopper	Stainless steel 1.4113/434 <sup>1)</sup>
3	Coil	Epoxy
4	Armature guide tube	Stainless steel 1.4303/305 <sup>1)</sup> /308 <sup>1)</sup>
5	Plunger	Stainless steel 1.4113/434 <sup>1)</sup> /1.4305/303 <sup>1)</sup>
6	Flange	Steel (thick-film passivated according to RoHS)
7	Plunger seal	FKM (EPDM optional)
8	Cover	Brass
9	Spring	Stainless steel 1.4310/301 <sup>1)</sup>
10	O-Rings	FKM (EPDM optional)
11	Piston rings	PTFE
12	Piston	Brass
13	Valve body	Brass
14	Piston seal	PTFE
15	Spring	Stainless steel 1.4310/301 <sup>1)</sup>

1.) Material designation according to AISI

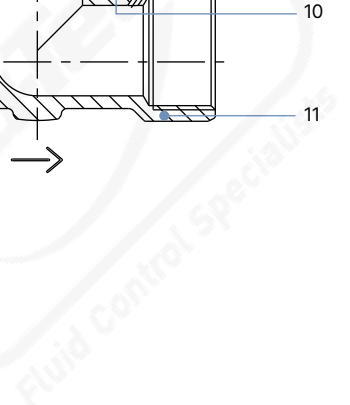
DN 32, circuit function A



No.	Element	Material
1	Coil	Epoxy
2	Stopper	Stainless steel 1.4105/430F <sup>1)</sup>
3	Armature guide tube	Stainless steel 1.4303/305 <sup>1)</sup> /308 <sup>1)</sup>
4	Plunger	Stainless steel 1.4105/430F <sup>1)</sup>
5	Spring	Stainless steel 1.4310/301 <sup>1)</sup>
6	Plunger seal	FKM
7	Cover	Brass
8	O-Rings	FKM
9	Piston rings	PTFE
10	Piston	Brass
11	Valve body	Brass
12	Piston seal	PTFE
13	Spring	Stainless steel 1.4310/301 <sup>1)</sup>

1.) Material designation according to AISI

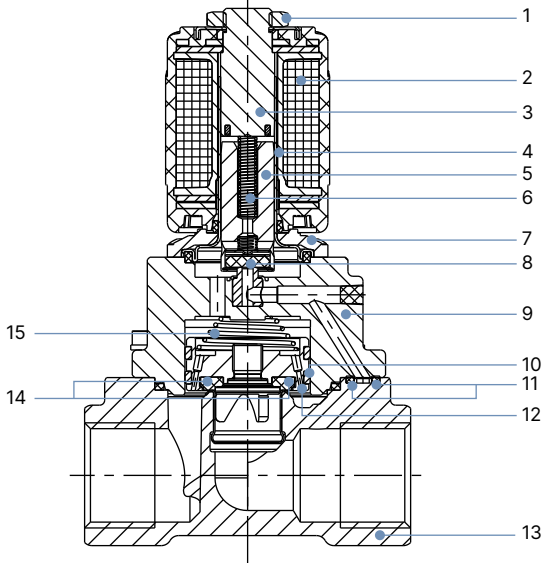
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4.3. Material specifications steam version NA07

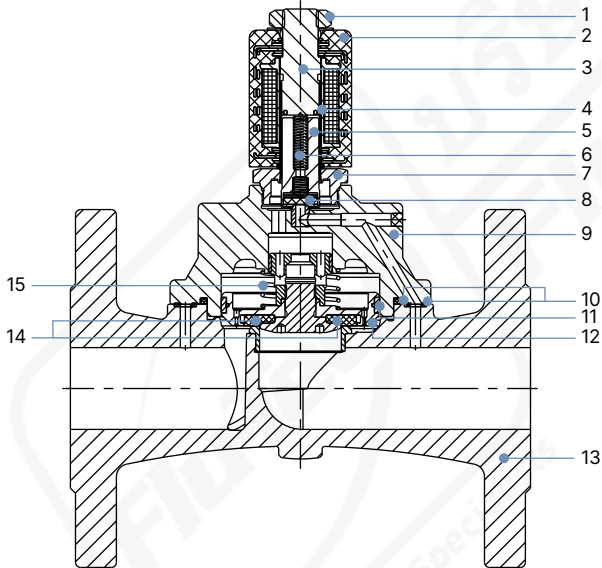
DN 13, circuit function A



No.	Element	Material
1	Nut	Steel (thick-film passivated according to RoHS)
2	Coil	Epoxy
3	Stopper	Stainless steel 1.4113/434 <sup>1)</sup>
4	Armature guide tube	Stainless steel 1.4303/305 <sup>1)</sup>
5	Plunger	Stainless steel 1.4113/434 <sup>1)</sup>
6	Spring	Stainless steel 1.4310/301 <sup>1)</sup>
7	Flange	Steel (thick-film passivated according to RoHS)
8	Plunger seal	PTFE
9	Cover	Brass
10	Piston rings	PTFE
11	O-Rings	Graphite
12	Piston	Brass
13	Valve body	Brass
14	Piston seal	PTFE
15	Spring	Stainless steel 1.4310/301 <sup>1)</sup>

1.) Material designation according to AISI

DN 32, circuit function A, flange body



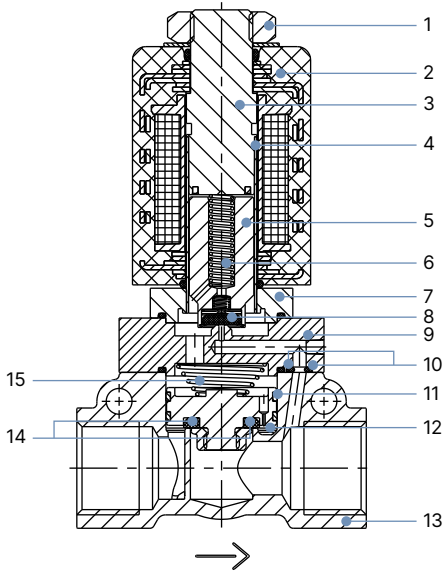
No.	Element	Material
1	Nut	Steel (thick-film passivated according to RoHS)
2	Coil	Epoxy
3	Stopper	Stainless steel 1.4113/434 <sup>1)</sup>
4	Armature guide tube	Stainless steel 1.4571/316Ti <sup>1)</sup>
5	Plunger	Stainless steel 1.4113/434 <sup>1)</sup>
6	Spring	Stainless steel 1.4310/301 <sup>1)</sup>
7	Threaded tube	Stainless steel 1.4401/316 <sup>1)</sup> or 1.4571/316Ti <sup>1)</sup>
8	Plunger seal	PTFE
9	Cover	Brass
10	O-Rings	Graphite
11	Piston rings	PTFE
12	Piston	Brass
13	Valve body	Stainless steel 1.4581/similar 316Ti <sup>1)</sup>
14	Piston seal	PTFE
15	Spring	Stainless steel 1.4310/301 <sup>1)</sup>

1.) Material designation according to AISI

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**4.4. Material specifications high pressure version PN 08**

DN 12, circuit function A

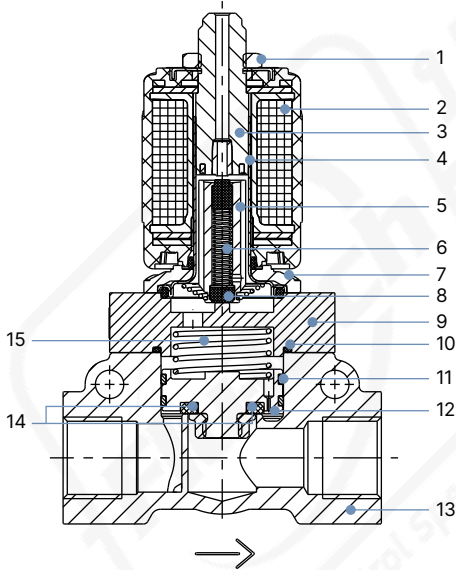


No.	Element	Material
1	Nut	Steel (thick-film passivated according to RoHS)
2	Coil	Epoxy (polyamide)
3	Stopper	Stainless steel 1.4113/434 <sup>1)</sup>
4	Armature guide tube	Stainless steel 1.4571/316Ti <sup>1)</sup>
5	Plunger	Stainless steel 1.4113/434 <sup>1)</sup>
6	Spring	Stainless steel 1.4310/301 <sup>1)</sup>
7	Flange	Stainless steel 1.4401/316 <sup>1)</sup>
8	Plunger seal	PTFE
9	Cover	Brass
10	O-Rings	FKM
11	Piston rings	PTFE
12	Piston	Brass
13	Valve body	Brass
14	Piston seal	PTFE
15	Spring	Stainless steel 1.4310/301 <sup>1)</sup>

1.) Material designation according to AISI

**4.5. Material specifications discharge valve for compressor systems CF05**

DN 12, circuit function B



No.	Element	Material
1	Nut	Steel (thick-film passivated according to RoHS)
2	Coil	Epoxy (polyamide optional)
3	Stopper	Stainless steel 1.4105/430F <sup>1)</sup>
4	Armature guide tube	Stainless steel 1.4303/305 <sup>1)</sup>
5	Plunger	Stainless steel 1.4105/430F <sup>1)</sup>
6	Spring	Stainless steel 1.4310/301 <sup>1)</sup>
7	Flange	Steel (thick-film passivated according to RoHS)
8	Plunger seal	FKM
9	Cover	Brass
10	O-Rings	FKM
11	Piston rings	PTFE
12	Piston	Brass
13	Valve body	Brass
14	Piston seal	PTFE
15	Spring	Stainless steel 1.4310/301 <sup>1)</sup>

1.) Material designation according to AISI

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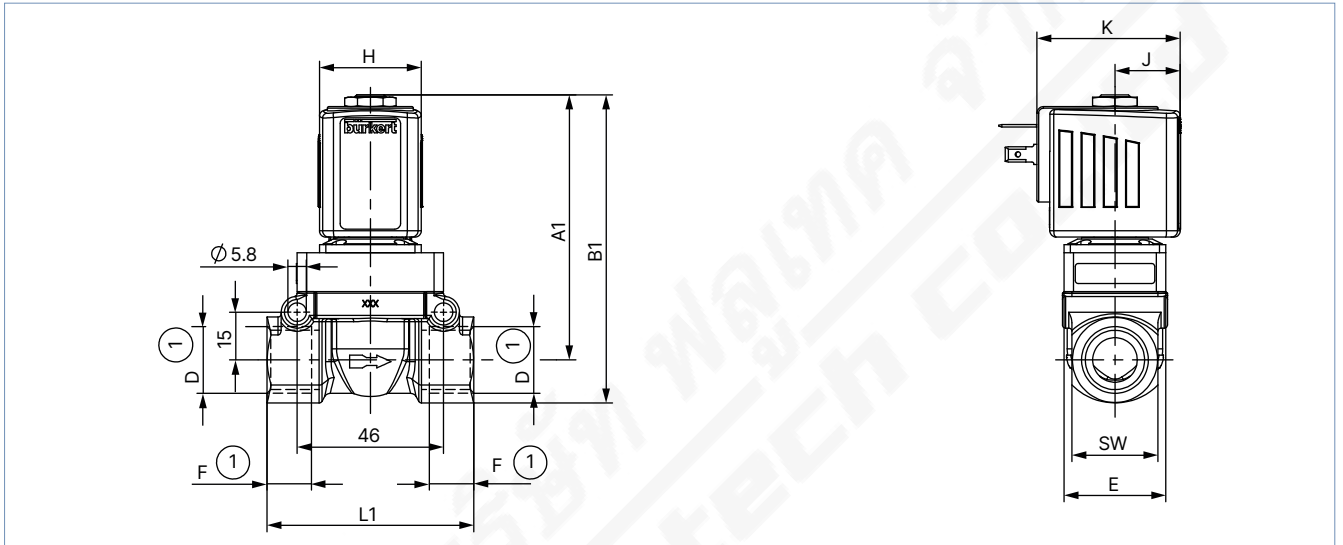
## 5. Dimensions

### 5.1. Standard version

#### Threaded version DN 12

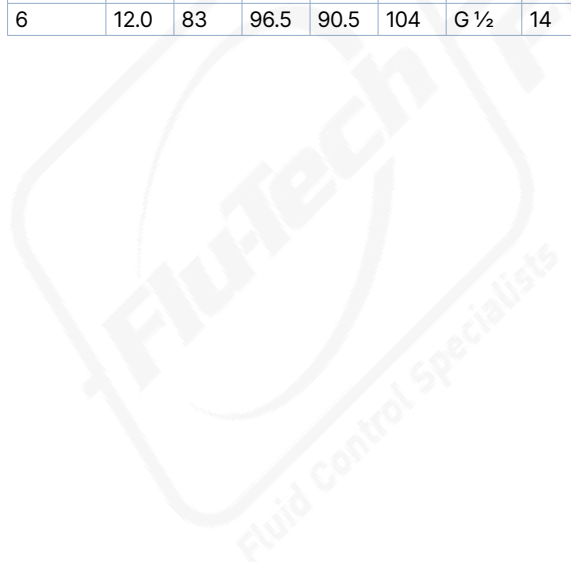
**Note:**

- Dimensions in mm
- The dimensions D1 and F1 apply to G-threads.
- The dimensions D2 and F2 apply to NPT-threads.
- The dimensions D3 and F3 apply to Rc-threads.



Coil size	DN	WWA		WWB		G thread		NPT thread		Rc thread		E	L1	SW	H	J	K
		A1	B1	A1	B1	D1	F1	D2	F2	D3	F3						
5	12.0	83	96.5	90.5	104	G ½	14	NPT ½	13.7	Rc ½	13.2	33	65	27	32	20.5	45
6	12.0	83	96.5	90.5	104	G ½	14	NPT ½	13.7	Rc ½	13.2	33	65	27	40	23.5	51

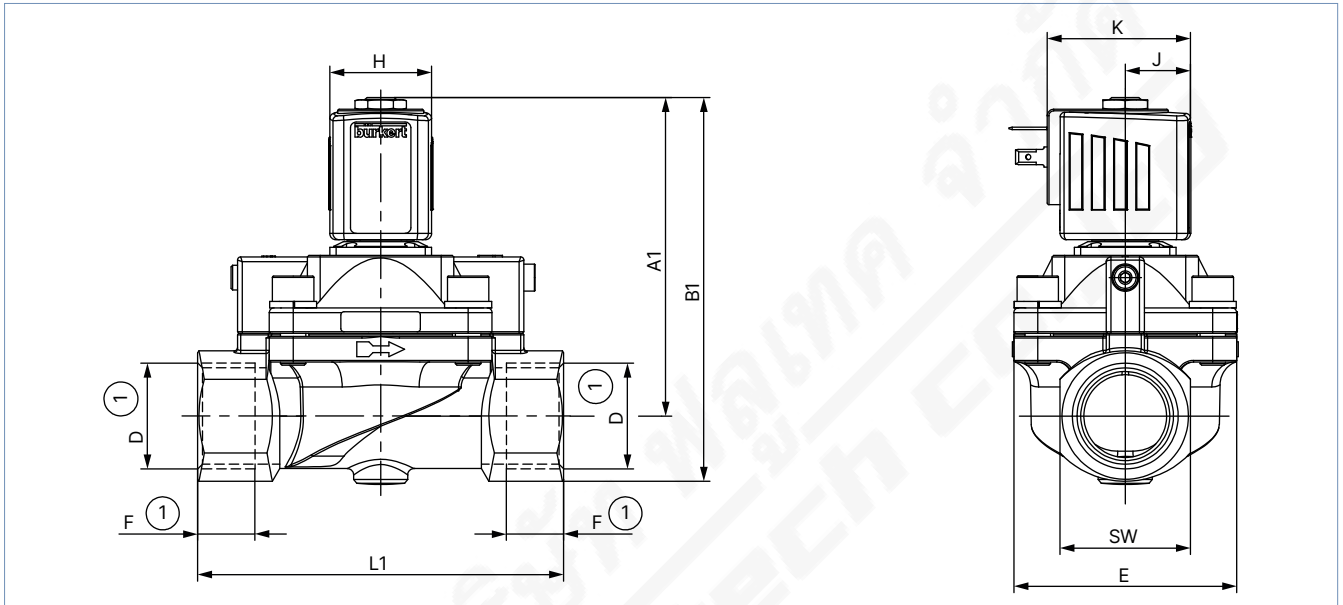
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**Threaded version DN 20 and DN 25**

**Note:**

- Dimensions in mm
- The dimensions D1 and F1 apply to G-threads.
- The dimensions D2 and F2 apply to NPT-threads.
- The dimensions D3 and F3 apply to Rc-threads.



Coil size	DN	WWA		WWB		G thread		NPT thread		Rc thread		E	L1	SW	H	J	K
		A1	B1	A1	B1	D1	F1	D2	F2	D3	F3						
5	20.0	93	109	90.5	104	G 3/4	16	NPT 3/4	14	Rc 3/4	14.5	60	100	32	32	20.5	45
	25.0	99.5	119			G 1	18	NPT 1	16.8	Rc 1	16.8						
6	20.0	93	109	90.5	104	G 3/4	16	NPT 3/4	14	Rc 3/4	14.5	60	100	32	40	23.5	51
	25.0	99.5	119			G 1	18	NPT 1	16.8	Rc 1	16.8						

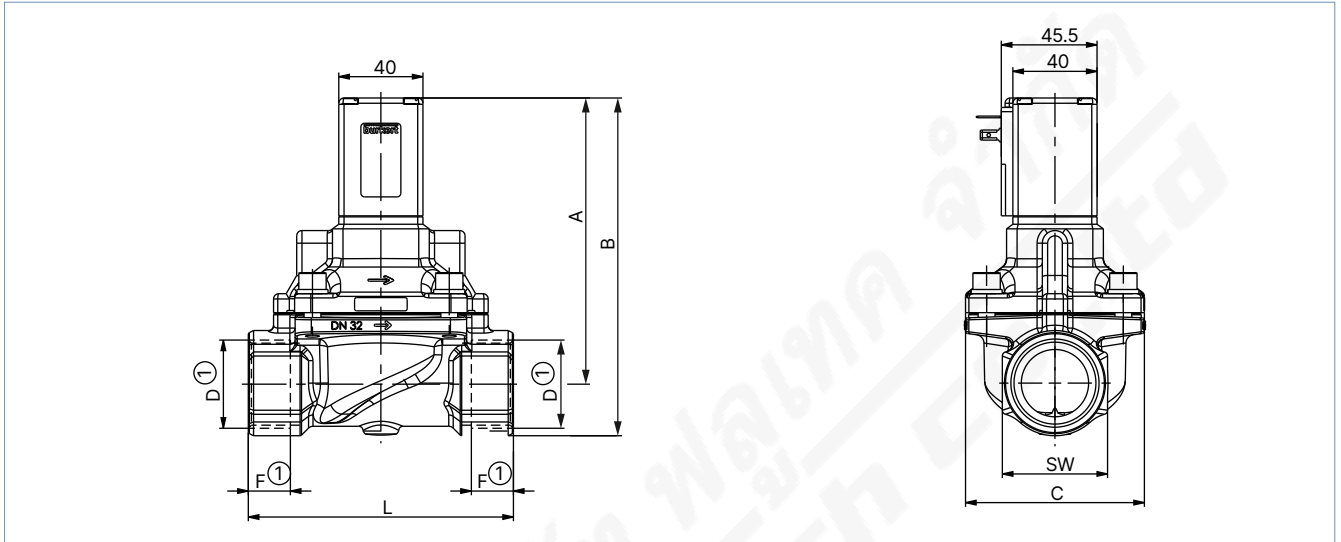
DTS 1000011017 EN Version: AD Status: RL (released | freigegeben | validé) printed: 18.12.2024



**Threaded version DN 32 and DN 50**

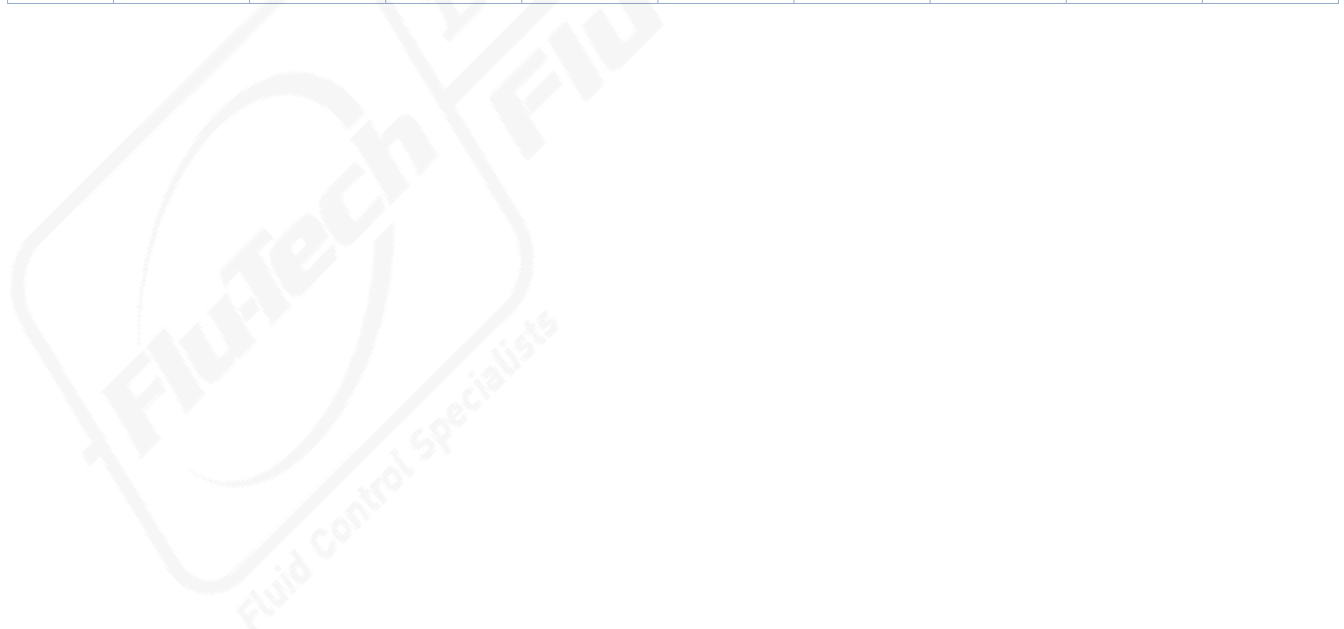
**Note:**

- Dimensions in mm
- The dimensions D1 and F1 apply to G-threads.
- The dimensions D2 and F2 apply to NPT-threads.



DN	A	B	G thread		NPT thread		C	L	SW
			D1	F1	D2	F2			
32	136	161	G 1¼	20	NPT 1¼	17.3	85	126	50
32	140	170	G 1½	22	NPT 1½	17.3	85	126	60
50	163	198	G 2	24	NPT 2	17.6	115	164	70

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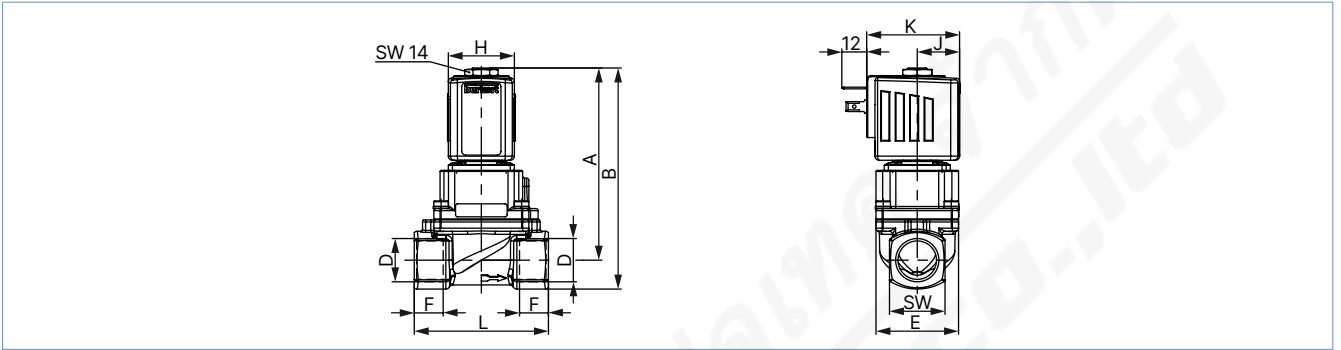


5.2. Steam version NA07

Threaded version DN 13

Note:

- Dimensions in mm
- The dimensions D1 and F1 apply to G-threads.
- The dimensions D2 and F2 apply to NPT-threads.
- The dimensions D3 and F3 apply to Rc-threads.

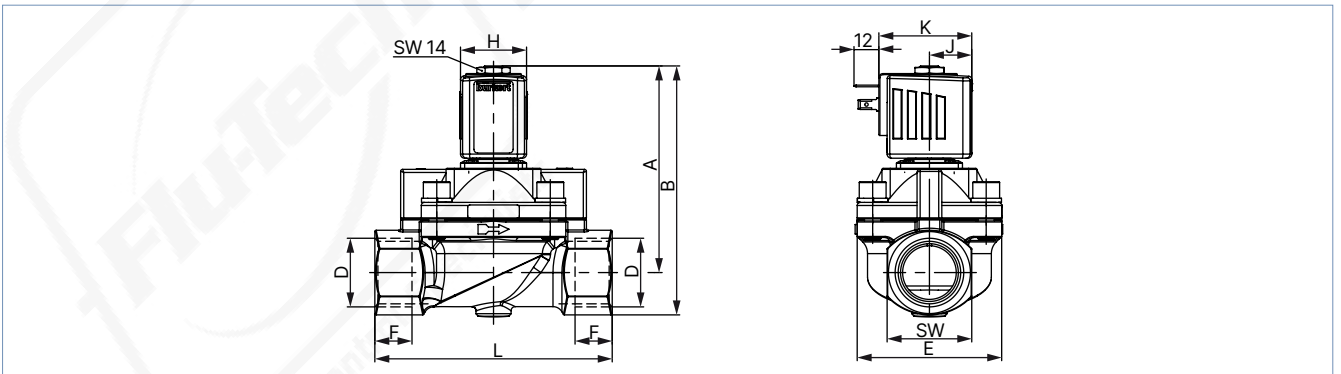


Coil size	DN	A	B	G thread		NPT thread		Rc thread		E	L	SW	H	J	K
				D1	F1	D2	F2	D3	F3						
5	13	93.1	107.1	G ½	14	NPT ½	13.7	Rc ½	13.2	40	65	27	32	20.5	45
6	13	93.1	107.1	G ½	14	NPT ½	13.7	Rc ½	13.2	40	65	27	40	23.5	51

Threaded version DN 20 and DN 25

Note:

- Dimensions in mm
- The dimensions D1 and F1 apply to G-threads.
- The dimensions D2 and F2 apply to NPT-threads.
- The dimensions D3 and F3 apply to Rc-threads.



Coil size	DN	A	B	G thread		NPT thread		Rc thread		E	L	SW	H	J	K
				D1	F1	D2	F2	D3	F3						
5	20	96.1	112.1	G ¾	16	NPT ¾	14	Rc ¾	14.5	60	100	32	32	20.5	45
	25	100.1	120.6	G 1	18	NPT 1	16.8	Rc 1	16.8	70	115	41			
6	20	96.1	112.1	G ¾	16	NPT ¾	14	Rc ¾	14.5	60	100	32	40	23.5	51
	25	100.1	120.6	G 1	18	NPT 1	16.8	Rc 1	16.8	70	115	41			

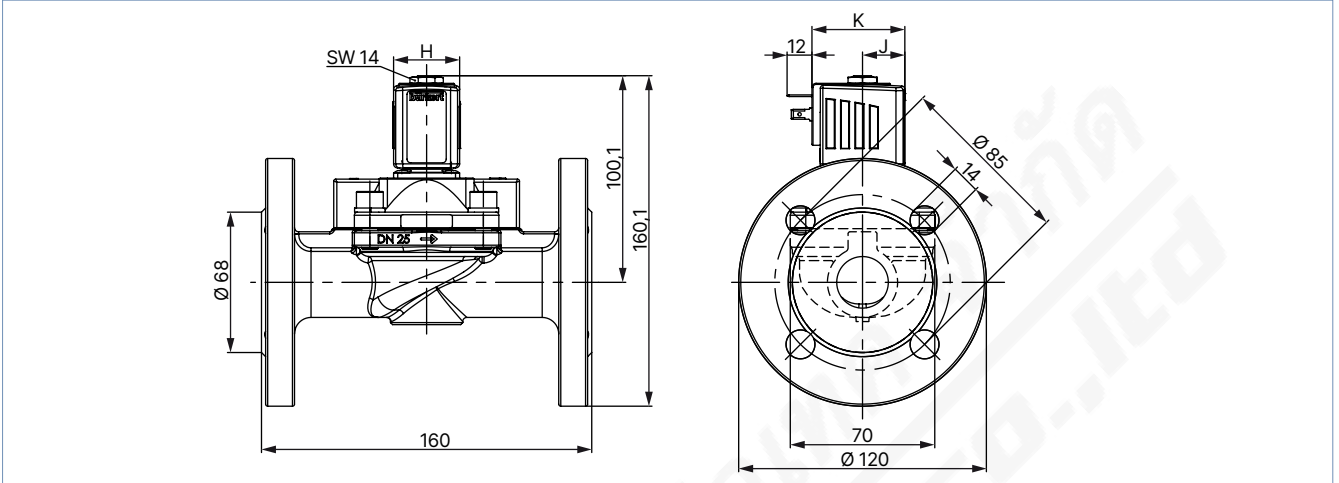
DTS 1000011017 EN Version: AD Status: RL (released | freigegeben | valide) printed: 18.12.2024



**Flange version DN 25**

**Note:**

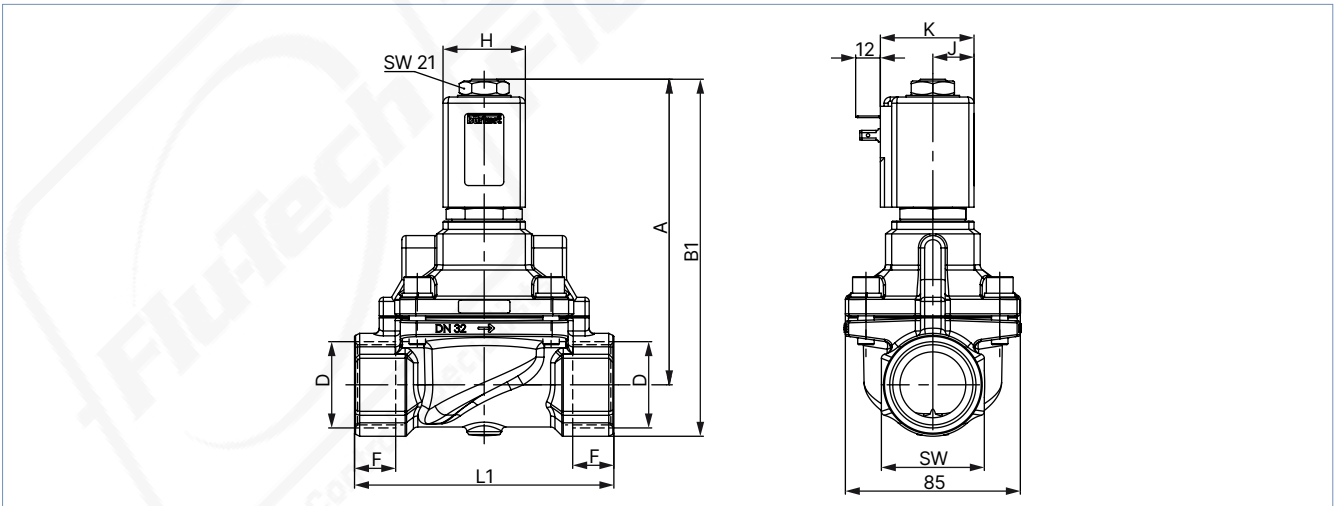
Dimensions in mm



Coil size	DN	E	H	J	K
5	25	70	32	20.5	45
6	25	70	40	23.5	51

**Threaded version DN 32 and DN 40**

- Dimensions in mm
- The dimensions D1 and F1 apply to G-threads.
- The dimensions D2 and F2 apply to NPT-threads.



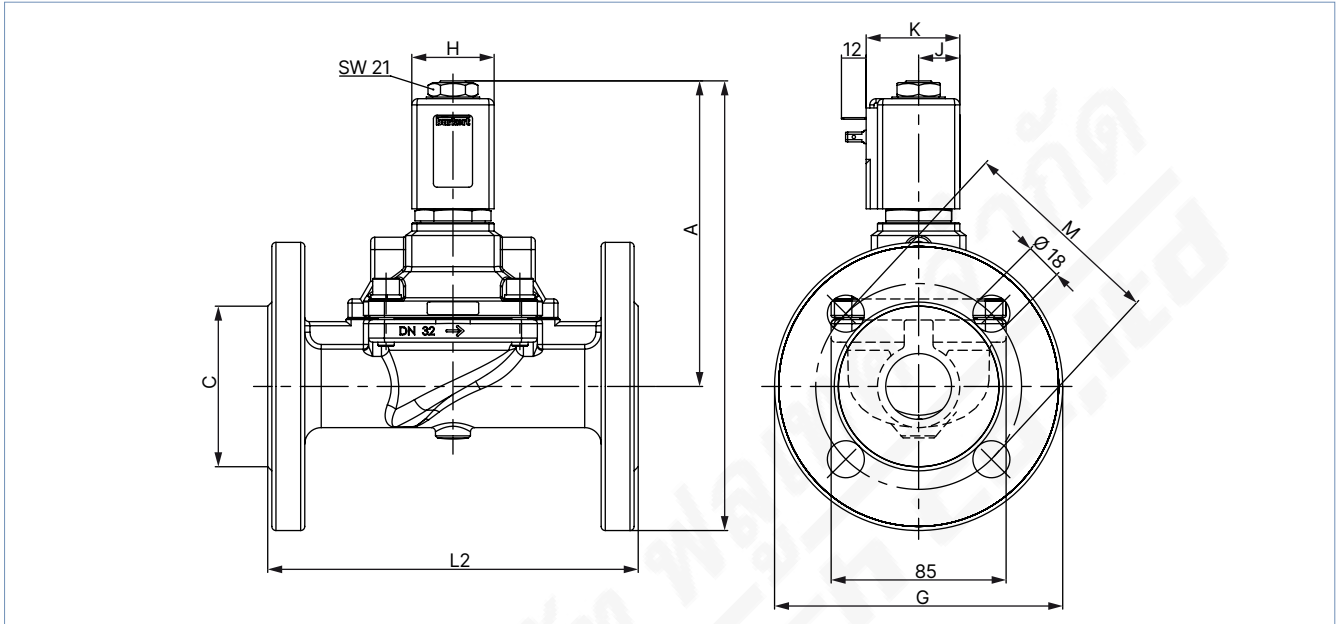
Coil size	DN	A	B1	G thread		NPT thread		L	B2	C	G	L2	M	SW	H	J	K
				D1	F1	D2	F2										
C	32	148	173	G 1¼	20	NPT 1¼	17.3	126	218	78	140	180	100	50	40	20	45
	40	153	181	G 1½	22	NPT 1½	17.3	126	227	88	150	200	110	60			

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Flange version DN 32 and DN 40

Note:

Dimensions in mm



Coil size	DN	A	B1	C	G	L2	M	H	J	K
C	32	148	173	78	140	180	100	40	20	45
	40	153	181	88	150	200	110			

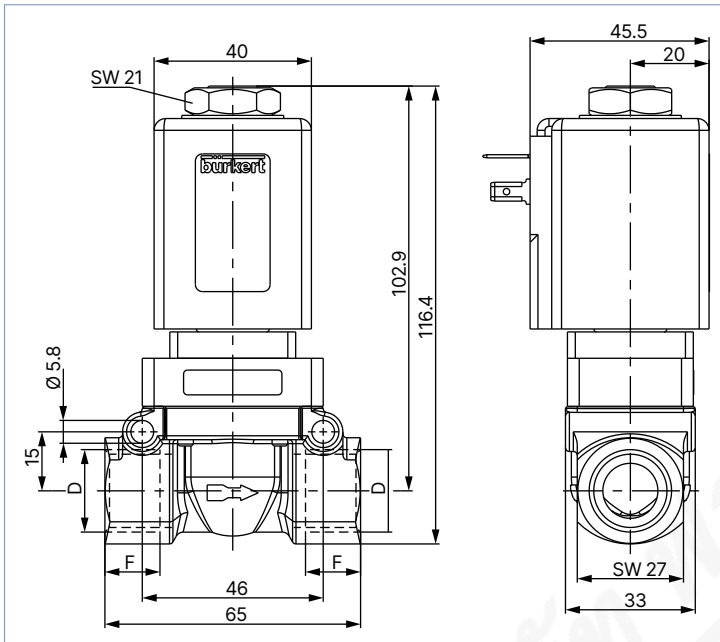
DTS 1000011017 EN Version: AD Status: RL (released | freigegeben | validé) printed: 18.12.2024



### 5.3. High pressure version PN 08

**Note:**

Dimensions in mm



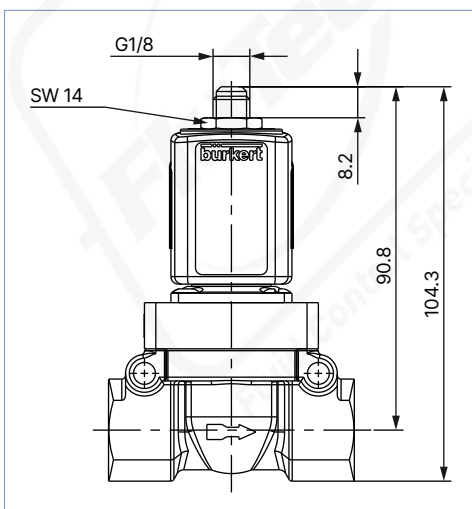
D	F
G 1/2	14
NPT 1/2	13.7

### 5.4. Discharge valve for compressor systems CF05

**Plug version with ventilation**

**Note:**

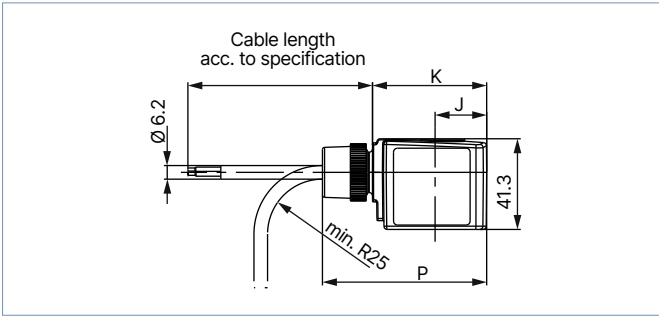
Dimensions in mm



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5.5. ATEX/IECEx version

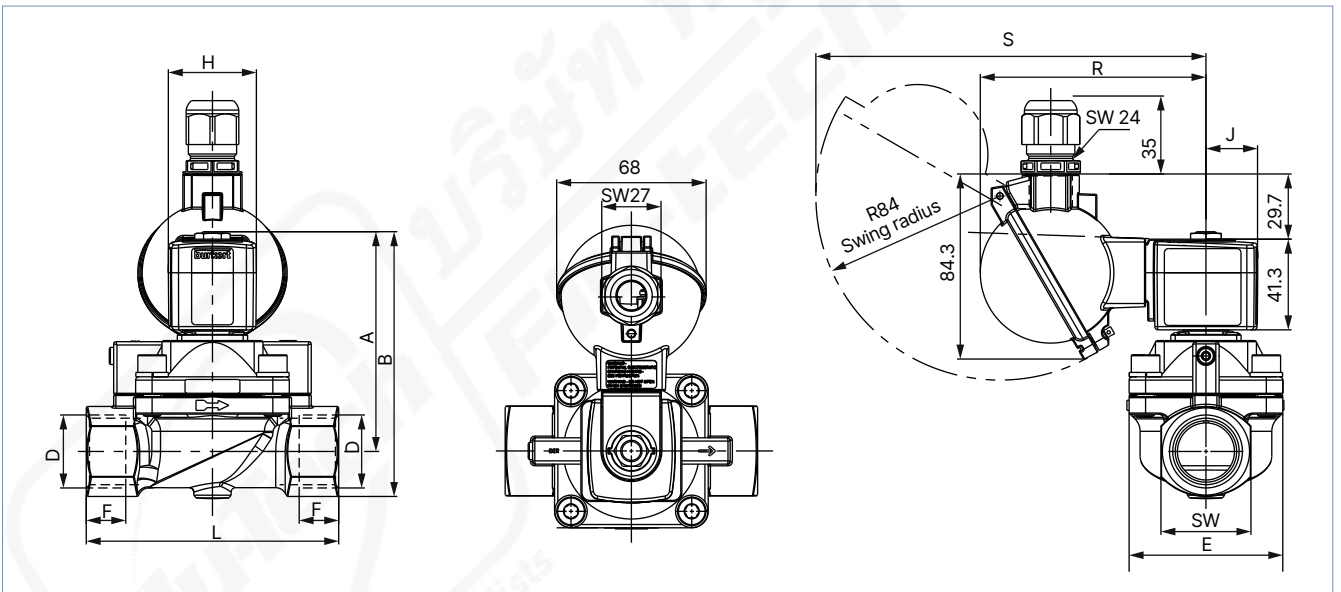
Cable version



Terminal box version

Note:

- Dimensions in mm
- The dimensions D1 and F1 apply to G-threads.
- The dimensions D2 and F2 apply to NPT-threads.
- The dimensions D3 and F3 apply to Rc-threads.

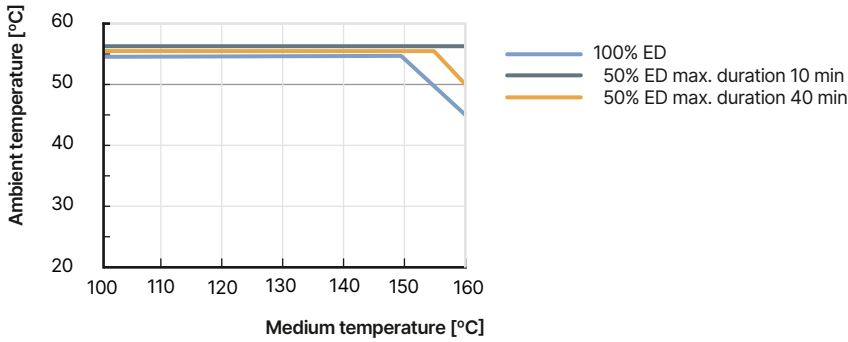


Coil size	DN	WWA		WWB		G thread		NPT thread		Rc thread		E	L	SW	H	J	K	P	R	S
		A	B	A	B	D1	F1	D2	F2	D3	F3									
5	12	83	96.5	90.8	104.3	G 1/2	14	NPT 1/2	13.7	Rc 1/2	13.2	33	65	27	32	20.5	46	68.8	99.8	174.7
	20	93	109			G 3/4	16	NPT 3/4	14	Rc 3/4	14.5	60	100	32						
	25	99.5	119			G 1	18	NPT 1	16.8	Rc 1	16.8	70	115	41						
6	12	83	96.5	90.8	104.3	G 1/2	14	NPT 1/2	13.7	Rc 1/2	13.2	33	65	27	40	23.5	52	74.8	102.8	177.7
	20	93	109			G 3/4	16	NPT 3/4	14	Rc 3/4	14.5	60	100	32						
	25	99.5	119			G 1	18	NPT 1	16.8	Rc 1	16.8	70	115	41						

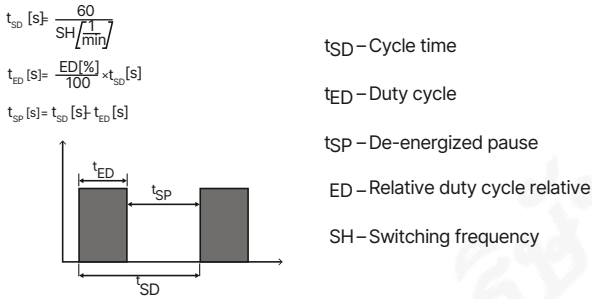
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## 6. Performance specifications

### 6.1. Temperature/duty cycle derating diagram for steam version NA07



### 6.2. Characteristic values of intermittent operation


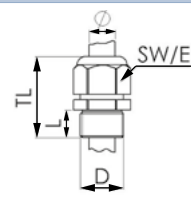

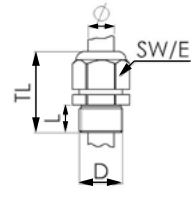


## 7. Product accessories

### 7.1. Cable glands for ATEX/IECEx terminal box

**Note:**

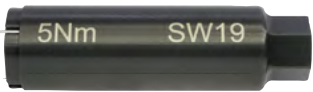
A polyamide cable gland is included in the scope of delivery. A nickel-plated brass version can be ordered for a surcharge, see “[Cable glands for ATEX/IECEx terminal box](#)” on page 25.

Description	Ex approvals		Dimensions										
	Certification	Identification											
Ex cable gland, Nickel-plated brass, 6...13 mm 	PTB 04 ATEX 1112 X, IECEx PTB 13.0027X	II 2 G Ex e IIC Gb, II 2 D Ex tb IIIC Db IP68	 <table border="1"> <tr><td>TL</td><td>29...37 mm</td></tr> <tr><td>L</td><td>6 mm</td></tr> <tr><td>D</td><td>20 mm</td></tr> <tr><td>SW</td><td>24 mm</td></tr> <tr><td>E</td><td>27 mm</td></tr> </table>	TL	29...37 mm	L	6 mm	D	20 mm	SW	24 mm	E	27 mm
TL	29...37 mm												
L	6 mm												
D	20 mm												
SW	24 mm												
E	27 mm												
Ex cable gland, Polyamide, 7...13 mm 	PTB 13 ATEX 1015 X, IECEx PTB 13.0034X	II 2 G Ex e IIC Gb, II 2 D Ex tb IIIC Db IP68	 <table border="1"> <tr><td>TL</td><td>36...45 mm</td></tr> <tr><td>L</td><td>10 mm</td></tr> <tr><td>D</td><td>20 mm</td></tr> <tr><td>SW</td><td>24 mm</td></tr> <tr><td>E</td><td>28 mm</td></tr> </table>	TL	36...45 mm	L	10 mm	D	20 mm	SW	24 mm	E	28 mm
TL	36...45 mm												
L	10 mm												
D	20 mm												
SW	24 mm												
E	28 mm												

## 7.2. Special tool to turn the terminal box


**Note:**

This special tool is not included in the scope of delivery of the valve, see [“Cable glands for ATEX/IECEX terminal box” on page 25.](#)

Description	Components of the set
Set SC02-AC10 	<ul style="list-style-type: none"> <li>• Special wrench</li> <li>• Service manual</li> </ul>

## 8. Ordering information

### 8.1. Bürkert eShop




**Bürkert eShop – Easy ordering and quick 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.

[Order online now](#)

### 8.2. Bürkert product filter

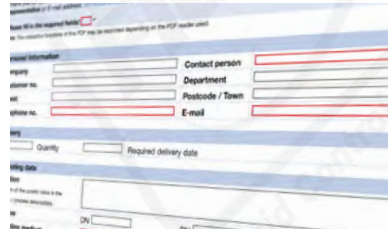


**Bürkert product filter – Get quickly to the right product**

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

[Try out our product filter](#)

### 8.3. Bürkert Product Enquiry Form



**Bürkert Product Enquiry Form – Your enquiry quickly and compactly**

Would you like to make a specific product enquiry based on your technical requirements? Use our Product Enquiry Form for this purpose. There you will find all the relevant information for your Bürkert contact. This will enable us to provide you with the best possible advice.

[Fill out the form now](#)

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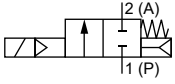
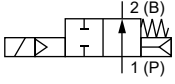


### 8.4. Ordering chart

#### Standard version DN 12...DN 25

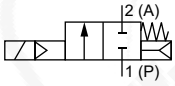
**Note:**

- Other versions are available on request.
- Please note that the cable plug must be ordered separately, see "8.5. Ordering chart accessories" on page 25 or separate data sheet **Type 2518** ▶

Circuit function	Port connection	Orifice [mm]	K <sub>v</sub> value water [m <sup>3</sup> /h]	Pressure range		Article no.		
				Liquids [bar]	Gases [bar]	024/DC [V/Hz]	024/50 [V/Hz]	230/50 [V/Hz]
<b>Seal material PTFE/FKM</b>								
<b>CF A</b> 2/2-way solenoid valve Servo-controlled Normally closed 	G 1/2	12	2.0	1...50	1...50	308501	177853	308502
	G 3/4	20	7.0	1...25	1...32	308503	–	–
				1...25	1...40	–	308504	308505
	G 1	25	10.0	1...25	1...32	308506	–	–
1...25				1...40	–	308507	308508	
<b>CF B</b> 2/2-way solenoid valve Servo-controlled Normally open 	G 1/2	12	2.0	1...32	1...32	309022	301170	295636
	G 3/4	20	7.0	1...25	1...25	303209	295276	295651
	G 1	25	10.0	1...25	1...25	295660	308120	301740

– = not available

#### Standard version DN 32...DN 50

Circuit function	Port connection	Orifice [mm]	K <sub>v</sub> value water [m <sup>3</sup> /h]	Pressure range		Article no.		
				Liquids [bar]	Gases [bar]	024/DC [V/Hz]	024/50 [V/Hz]	230/50 [V/Hz]
<b>Seal material PTFE/FKM</b>								
<b>CF A</b> 2/2-way solenoid valve Servo-controlled Normally closed 	G 1/4	32	18.0	1...16	1...16	122579	–	–
				1...25	1...25	–	085337	085340
	G 1/2	40	18.0	1...16	1...16	085343	–	–
				1...25	1...25	–	085342	085345
	G 2	50	36.0	1...8	1...8	307475	–	–
1...20				1...20	–	307476	085350	

– = not available

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**Steam version NA07, DN 13...DN 25**

**Note:**

- Please note that the cable plug must be ordered separately, see ["8.5. Ordering chart accessories" on page 25](#) or separate data sheet **Type 2518** ▶
- Due to the temperature range, the cable plug with silicone seal is provided for steam versions NA07.
- Please also note the derating diagram, see ["6.1. Temperature/duty cycle derating diagram for steam version NA07" on page 19](#).

Circuit function	Port connection	Orifice [mm]	K <sub>v</sub> value water [m³/h]	Pressure range [bar]	Max. medium temperature [°C]	Body material	Article no.		
							024/DC	024/50	230/50
							[V/Hz]	[V/Hz]	[V/Hz]
<b>Seal material PTFE/graphite</b>									
<b>CF A</b> 2/2-way solenoid valve Servo-controlled Normally closed 	G ½	13	3.7	1...5	150	Brass	307267	–	–
				1...12		Brass	–	307269	307276
				1...12		Brass	–	20004404	20004405
	G ¾	20	7.0	1...5	150	Brass	307286	–	–
				1...12		Brass	–	307284	307326
				1...12		Brass	–	20004406	20004407
	G 1	25	10.0	1...5	150	Brass	307342	–	–
				1...12		Brass	–	307343	307351
				1...12		Brass	–	20004409	20004410
	Flange acc. to DIN EN 1902 - 1	25	10.0	1...5	150	Stainless steel	354392	–	–
				1...12		Stainless steel	–	20004413	354392
				1...12		Stainless steel	–	20004411	20004412

– = not available

**Steam version NA07, DN 32...DN 40**

**Note:**

- Please note that the cable plug must be ordered separately, see ["8.5. Ordering chart accessories" on page 25](#) or separate data sheet **Type 2518** ▶
- Due to the temperature range, the cable plug with silicone seal is provided for steam versions NA07.
- Please also note the derating diagram, see ["6.1. Temperature/duty cycle derating diagram for steam version NA07" on page 19](#).

Circuit function	Port connection	Orifice [mm]	K <sub>v</sub> value water [m³/h]	Pressure range [bar]	Body material	Article no.		
						024/DC	024/50	230/50
						[V/Hz]	[V/Hz]	[V/Hz]
<b>Seal material PTFE/graphite</b>								
<b>CF A</b> 2/2-way solenoid valve Servo-controlled Normally closed 	G 1¼	32	18.0	1...4	Brass	316584	–	–
				1...12		Brass	–	316580
	Flange acc. to DIN EN 1902 - 1	32	18.0	1...4	Stainless steel	o. r.	–	–
				1...12		Stainless steel	–	o. r.
	G 1½	40	18.0	1...4	Brass	316592	–	–
				1...12		Brass	–	316586
	Flange acc. to DIN EN 1902 - 1	40	18.0	1...4	Stainless steel	o. r.	–	–
				1...12		Stainless steel	–	370111

– = not available

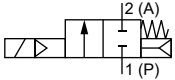
o. r. = on request

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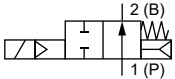
**High pressure version PN 08**

**Note:**

- Please note that the cable plug must be ordered separately, see "8.5. Ordering chart accessories" on page 25 or separate data sheet **Type 2518** ▶
- High shut off levels may occur with liquids and high differential pressure!
- Please note: fluids and high differential pressure may cause high pressure surges.

Circuit function	Port connection	Orifice [mm]	K <sub>v</sub> value water [m <sup>3</sup> /h]	Pressure range		Article no.		
				Liquids [bar]	Gases [bar]	024/DC [V/Hz]	024/50 [V/Hz]	230/50 [V/Hz]
<b>Seal material PTFE/FKM</b>								
<b>CF A</b> 2/2-way solenoid valve Servo-controlled Normally closed 	G 1/2	12	2.0	1...80	1...80	304191 𐀀	304193 𐀀	304194 𐀀

**Discharge valve for compressor systems CF05**

Circuit function	Port connection	Orifice [mm]	K <sub>v</sub> value water [m <sup>3</sup> /h]	Pressure range		Article no.		
				Liquids [bar]	Gases [bar]	024/DC [V/Hz]	024/50 [V/Hz]	230/50 [V/Hz]
<b>CF B</b> 2/2-way solenoid valve Servo-controlled Normally open 	G 1/2	12	2.0	1...40	1...40	301723 𐀀	308781 𐀀	308783 𐀀

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**ATEX/IECEX cable version**

**Note:**

The pressure values for liquid media are shown on the rating plate.

Circuit function	Port connection	Orifice [mm]	K <sub>v</sub> value water [m <sup>3</sup> /h]	Pressure range		Article no.	
				Liquids [bar]	Gases [bar]	24 / AC/DC [V/Hz]	230 / AC/DC [V/Hz]
<b>Seal material PTFE/FKM</b>							
<b>CF A</b> 2/2-way solenoid valve Servo-controlled Normally closed  	G 1/2	12	2.0	1...50	1...50	349290	349292
	G 3/4	20	7.0	1...25	1...32	349294	349296
	G 1	25	10.0	1...25	1...32	349300	349301
<b>CF B</b> 2/2-way solenoid valve Servo-controlled Normally open  	G 1/2	12	2.0	1...32	1...32	349302	349304
	G 3/4	20	7.0	1...25	1...25	349307	349309
	G 1	25	10.0	1...25	1...25	349310	349313

**ATEX/IECEX terminal box version**

**Note:**

- Please note that the cable plug must be ordered separately, see **"8.5. Ordering chart accessories" on page 25** or separate data sheet **Type 2509** ▶.
- The pressure values for liquid media are shown on the rating plate.

Circuit function	Port connection	Orifice [mm]	K <sub>v</sub> value water [m <sup>3</sup> /h]	Pressure range		Article no.	
				Liquids [bar]	Gases [bar]	24 / AC/DC [V/Hz]	230 / AC/DC [V/Hz]
<b>Seal material PTFE/FKM</b>							
<b>CF A</b> 2/2-way solenoid valve Servo-controlled Normally closed  	G 1/2	12	2.0	1...50	1...50	349289	349293
	G 3/4	20	7.0	1...25	1...32	349295	349297
	G 1	25	10.0	1...25	1...32	349299	349297
<b>CF B</b> 2/2-way solenoid valve Servo-controlled Normally open  	G 1/2	12	2.0	1...32	1...32	349303	349305
	G 3/4	20	7.0	1...25	1...25	349306	349308
	G 1	25	10.0	1...25	1...25	349311	349312

**Further versions on request**

<b>Approval</b> Further information can be found in chapter <b>"3. Approvals and conformities" on page 5.</b>	<b>Temperature</b> Special temperature ranges
<b>Process connection</b> <ul style="list-style-type: none"> <li>• NPT</li> <li>• UN</li> </ul>	<b>Voltage</b> 110/50, further voltages on request

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### 8.5. Ordering chart accessories

#### Cable plug Type 2518, form A according to DIN EN 175301 - 803

**Note:**

- Dimensions in mm
- For further versions see data sheet **Type 2518** ▶.

Cable plug	Dimensions	Version	Voltage	Article no.
		Without circuitry (AC/DC)	0...250 V AC/DC	314802 𐀀
		With LED (AC/DC)	12...24 V AC/DC	314812 𐀀
		With LED and varistor (AC/DC)	12...24 V AC/DC	314820 𐀀
		With rectifier, LED and varistor	12...24 V AC/DC	314816 𐀀
		Without circuitry (AC/DC) with silicone seal for higher ambient temperature, e.g. steam version (NA07)	0...250 V AC/DC	361687 𐀀

#### Cable plug Type 2509, form A according to DIN EN 175301 - 803

**Note:**

- Dimensions in mm
- Without circuitry (standard)
- The cable plug Type 2509 meets the requirements in accordance with ATEX Cat. 3 GD in assembly with a Bürkert solenoid valve.
- The cable plug Type 2509 meets the requirements in accordance with UL Listed (UL 429) in assembly with a Bürkert solenoid valve.
- Refer to data sheet **Type 2509** ▶ for more information about the cable plug.

Cable plug	Dimensions	Version	Voltage	Article no.
		Without circuitry	0...250 V AC/DC	137943 𐀀

#### Cable glands for ATEX/IECEx terminal box

**Note:**

- A cable gland in polyamide version is included in the delivery. A nickel-plated brass version can be ordered at surcharge.
- Refer to **"7.1. Cable glands for ATEX/IECEx terminal box"** on page 19 for more information about Ex cable glands.
- Refer to **"7.2. Special tool to turn the terminal box"** on page 20 for more information about special wrench.

Description	Article no.
Ex cable gland, nickel-plated brass, 6...13 mm <sup>1)</sup>	773278 𐀀
Ex cable gland, polyamide, 7...13 mm <sup>1)</sup>	773277 𐀀
Set SC02-AC10: special wrench <sup>2)</sup> incl. service manual	293488 𐀀

1.) Cable diameter

2.) Not included in the scope of delivery of the valve

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