



Servo-assisted 2/2-way diaphragm valve

- Servo-assisted diaphragm valve up to DN 50
- Vibration-resistant, centrally screwed coil system
- Damped design for quiet closing
- Energy-saving double coil technology with kick and drop variant
- Explosion-proof variants



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

Can be combined with



Type 2518

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



Type 2509

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

Type description

Valve 6281 is a servo-assisted diaphragm valve. A minimum differential pressure is always required for the valve to function. Various diaphragm materials and circuit functions are available depending on the actual application. The standard brass body meets European drinking water requirements. For other markets, dezincification-resistant brass is available. The range includes a variant with a stainless steel body. To reduce electrical power consumption during operation, coils with integrated Kick-and-Drop (KD) electronics featuring double coil technology are available. The valve can be supplied with manual operation for easy maintenance and commissioning.

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 Cable glands for ATEX/IECEX terminal box 25

 Mounting bracket kit for DN 10 25

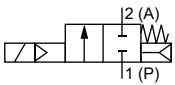
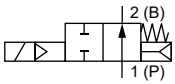
valvesgo.com

1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "5. Dimensions" on page 8.
Material	
Seal	NBR, EPDM, FKM
Body	Brass acc. to DIN EN 50930 - 6, stainless steel (dezincification resistant on request)
Inner valve parts	Stainless steel, brass, plastic (PPS)
Orifice	DN 10...DN 50
Circuit function	Further information can be found in chapter "2. Circuit functions" on page 5.
Thermal insulation class of solenoid coil	Polyamide coil class B Epoxy coil class H
Performance data	
Duty cycle	100 % continuous operation
Switching time ¹⁾	Opening: 0.1...1.5 s Closing: 0.2...4 s
Electrical data	
Operating voltage	24 V DC, 24 V UC, 24 V 50/60 Hz, 230 V UC, 230 V 50/60 Hz
Power consumption	Further information can be found in chapter "6. Performance specifications" on page 15.
Voltage tolerance	± 10 %
Medium data	
Operating medium	Medium that does not attack the housing and sealing materials Further information can be found in chapter "4.1. Bürkert resistApp" on page 7.
Medium temperature	
With NBR	- 10 °C...+ 80 °C
With EPDM	- 30 °C...+ 90 °C (with epoxy coil to + 100 °C) 0 °C...+ 60 °C (with drinking water approval according to UBA (PF36))
With FKM	0 °C...+ 90 °C (with epoxy coil to + 120 °C)
Product connections	
Electrical connection	- Cable plug Type 2518 ▶, form A according to DIN EN 175301 - 803 Further information can be found in chapter "Cable plug Type 2518, form A according to DIN EN 175301 - 803" on page 24. - Cable plug Type 2509 ▶, form A according to DIN EN 175301 - 803 Further information can be found in chapter "Cable plug Type 2509, form A according to DIN EN 175301 - 803" on page 25.
Approvals and conformities	
Directives	CE, EAC
Degree of protection	IP65 with cable plug, cable connection and terminal box
Explosion protection	Further information can be found in chapter "3.4. Explosion protection" on page 5.
North America (USA/Canada)	Further information can be found in chapter "3.5. North America (USA/Canada)" on page 6.
Drinking water	Further information can be found in chapter "3.6. Drinking water" on page 6.
Others	Further information can be found in chapter "3.7. Others" on page 6.
Environment and installation	
Installation	As required, preferably with actuator upright
Ambient temperature	
Standard variant	Max. + 55 °C
Variant with kick and drop coil	Max. + 70 °C (max. 30 switching operations/min) Max. + 85 °C (max. 1 switching operation/min) Max. + 55 °C (for variants with UR/UL approval)

1) Measurement at + 20 °C, 6 bar at the valve inlet and free outlet, opening: pressure reduction to 90 % of the difference to the flow pressure, closing: pressure build-up to 90 % of the inlet pressure

2. Circuit functions

Symbol	Description
	Circuit function A (CF A) 2/2-way solenoid valve Servo-controlled Normally closed
	Circuit function B (CF 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 variants 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.

3.4. Explosion protection

Approval	Description
 	Optional: Explosion protection ATEX: EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db IECEx: IECEx EPS 18.0110 X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db Ex eb mb IIC T4 Gb Ex mb tb IIIC T130 °C Db

3.5. North America (USA/Canada)

Approval	Description
	Valid for valves: UL Listed for the USA The valves are UL Listed for the USA according to: UL 429 (electrically operated valves) and UL 429A (Electrically Operated Valves for Fire Protection Service)
	Valid for coils: UL Hazardous Locations – Explosion Protection UL Listed for Hazardous Locations for USA and Canada Class I, Zone 1 Class I, Division 2, Group A, B, C and D Class II + III, Division 2, Group F and G
	Valid for valves: UL Recognized for the USA The valves are UL Recognized for the USA according to: UL 429 (electrically operated valves) and UL 429A (Electrically Operated Valves for Fire Protection Service)
	Valid for coils: UL Recognized for the USA and Canada The coils are UL Recognized for the USA and Canada according to: - UL 429 (electrically operated valves) - CAN/CSA-C22.2 No. 61010-1
	Valid for valves: CSA for Canada The valves are CSA approved for Canada according to: CSA 139 (electrically operated valves)

3.6. Drinking water

Conformity	Description
	Suitable for use in drinking water applications The materials comply with the assessment principles (UBA) for materials in contact with drinking water (Trinkwasser). PF39: Suitable for products with a maximum temperature of + 85 °C (hot water) PF36: Suitable for products with a maximum temperature of + 60 °C (warm water)

3.7. Others

DNV GL classification

Approval	Description
	DNV GL classification – Ships, offshore units, and high speed and light craft The products are accepted for installation on all vessels classed by DNV GL.

Oxygen

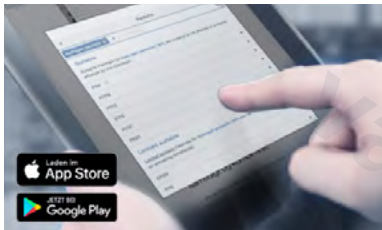
Conformity	Description
	Optional: Suitability for oxygen (valid for the variable code NL02) The products are suitable for use with gaseous oxygen, according to the manufacturer's declaration.

VDE – Certificate of conformity with factory surveillance

Approval	Description
	Optional: Certificate of conformity with factory surveillance (VDE Testing and Certification Institute) (valid for the variable code PW01 and PW02) The electrically operated water valves are tested and certified according to: • DIN EN 60730-1 (VDE 0631-1) • EN 60730-1 • DIN EN IEC 60730-2-8 (VDE 0631-2-8) The electrically operated water valves also fulfill the requirements of: • IEC 60730-1 • IEC 60730-2-8

4. Materials

4.1. Bürkert resistApp

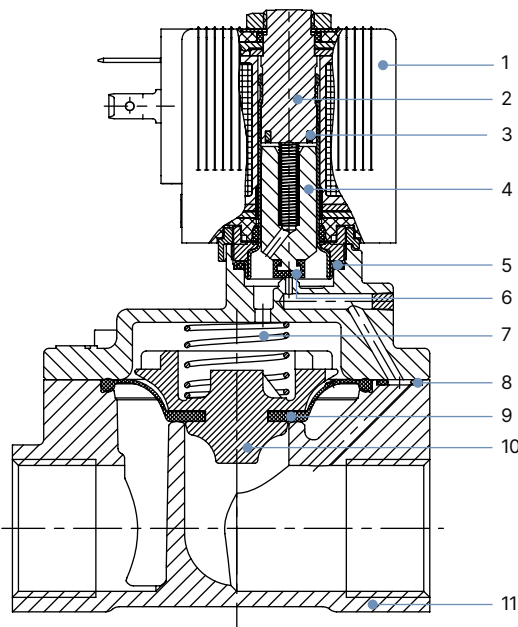


Bürkert resistApp – Chemical resistance chart

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



No.	Element	Material
1	Coil	Polyamide ^{1.)} or epoxy ^{2.)}
2	Stopper	Stainless steel 1.4113
3	Shading ring	Cu (brass variant) Ag (stainless steel variant)
4	Magnetic core	Stainless steel 1.4113
5	O-ring	NBR, FKM, EPDM
6	Core seal	NBR, FKM, EPDM
7	Spring	Stainless steel 1.4310
8	O-ring	NBR, FKM, EPDM
9	Diaphragm	NBR, FKM, EPDM
10	Diaphragm holder	PPSGF40, DN 50: brass and stainless steel
11	Valve body	Brass acc. to DIN EN 50930 - 6 or stainless steel 1.4408 (CF8M)

1.) With NBR/EPDM seal
2.) With FKM seal

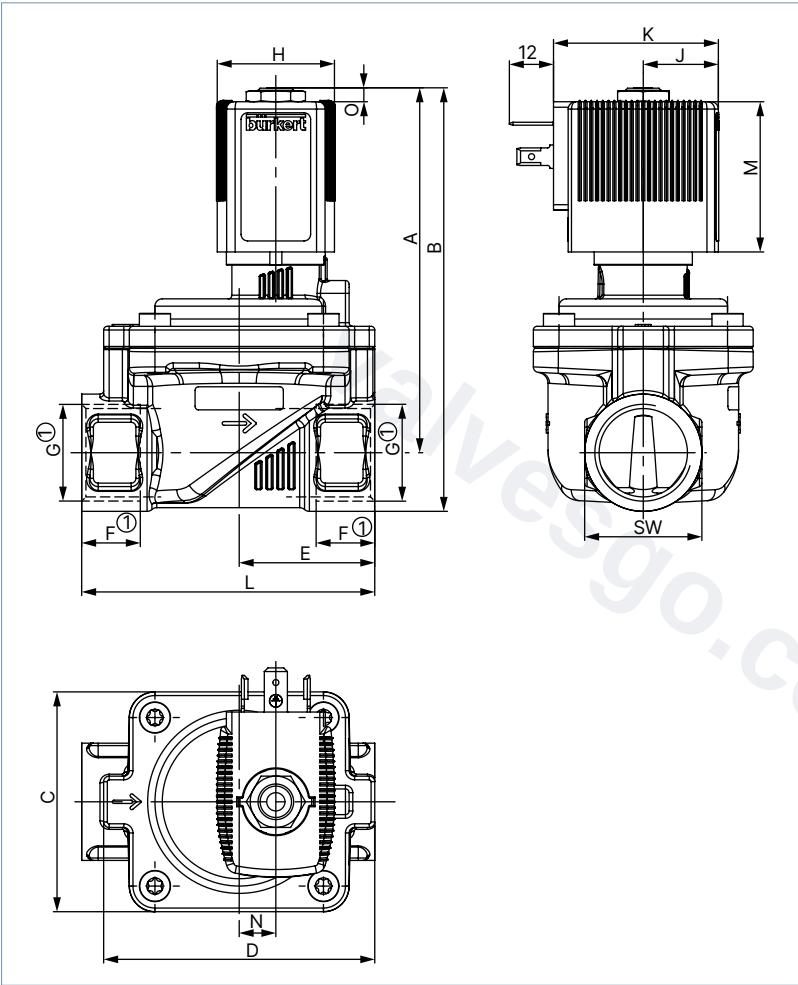
5. Dimensions

5.1. Standard variant

Threaded variant

Note:

- Dimensions in mm
- The dimensions F1 and G1 apply to G thread.
- The dimensions F2 and G2 apply to NPT thread.
- The dimensions F3 and G3 apply to Rc thread.



Coil size	H	J	K	M	O
5	32	20.5	45	41	3.4
6	40	23.5	51	41.4	3.8

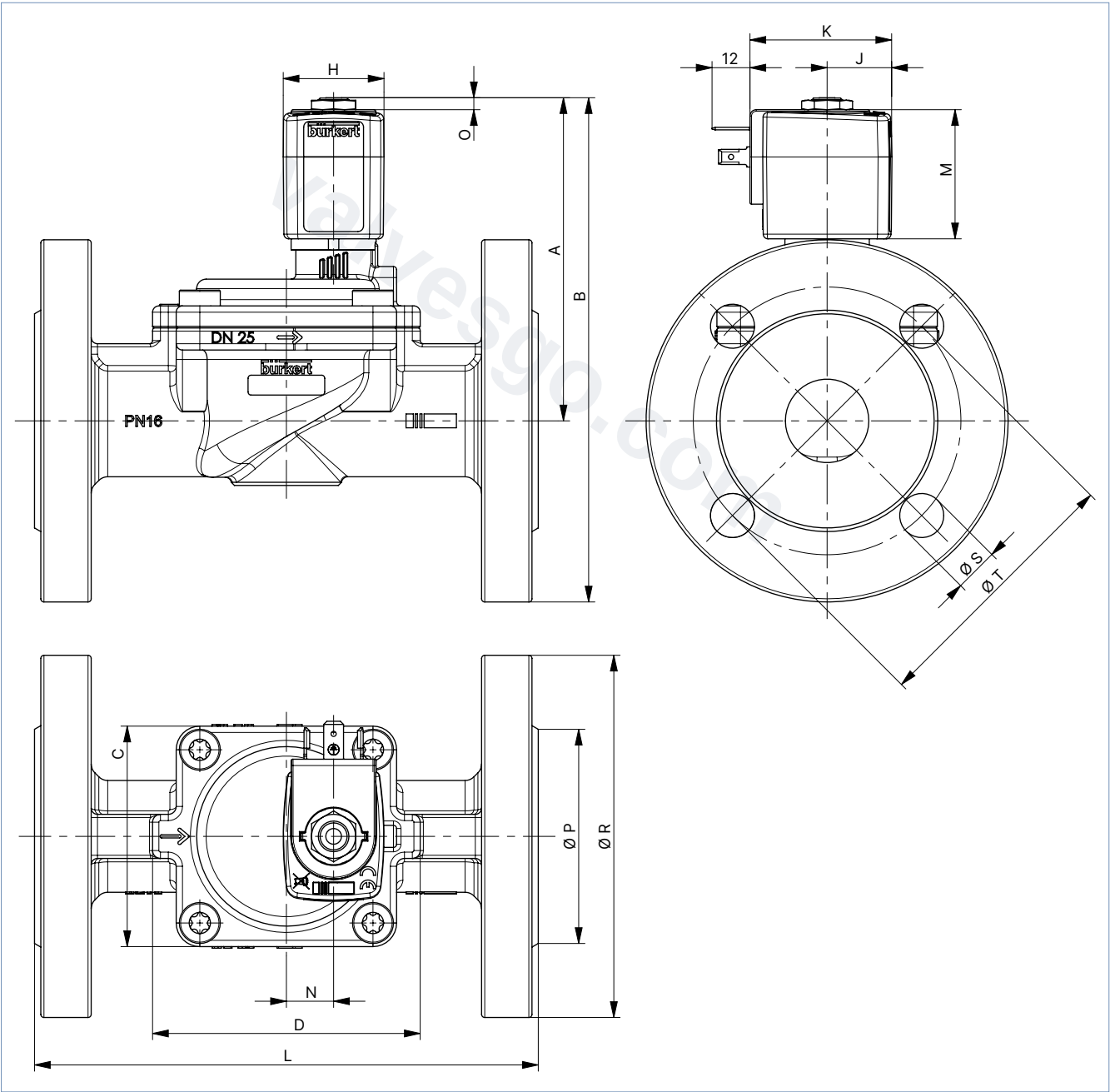
DN	A	B	C	D	E	G		NPT		Rc		L	SW	N
						F1	G1	F2	G2	F3	G3			
10 ¹⁾	83.1	94.1	32	44	22	12	G ¼	10	NPT ¼	–	–	50	22	–
						12	G ⅜	10.3	NPT ⅜	10.1	Rc ⅜			
	85.1	98.6			24.5	14	G ½	13.7	NPT ½	–	–			
10 ²⁾	83.6	94.6	32	44	22	12	G ¼	10	NPT ¼	–	–	50	22	–
						12	G ⅜	10.3	NPT ⅜	10.1	Rc ⅜			
	85.6	99.1			24.5	14	G ½	13.7	NPT ½	–	–			
13 ¹⁾	91.1	104.6	42	54.5	27.25	12	G ⅜	–	–	–	–	58	27	–
13					32.5	14	G ½	13.7	NPT ½	13.2	Rc ½	65	27	–
	93.1	109.1				16	G ¾	14	NPT ¾	–	–	65	32	
20	99.6	115.6	60	74	37	16	G ¾	14	NPT ¾	14.5	Rc ¾	80	32	10
	102.1	122.6			37.5	18	G 1	16.8	NPT 1	–	–	80	41	
25	106.6	127.1	70	85	46	18	G 1	16.8	NPT 1	16.8	Rc 1	95	41	15
	111.6	136.6				20	G 1¼	17.3	NPT 1¼	19.1	Rc 1¼	95	50	

DN	A	B	C	D	E	G		NPT		Rc		L	SW	N
						F1	G1	F2	G2	F3	G3			
40 ^{1.)}	120.1	145.1	99	114	61	20	G 1¼	17.3	NPT 1¼	19.1	Rc 1¼	126	50	23
40	125.6	155.6				22	G 1½		NPT 1½		Rc 1½	126	60	
	131.6	166.6				64	G 2		NPT 2		Rc 2	132	70	
50 ^{1.)}	119.9	154.9	115	132	82	24	G 2	17.6	NPT 2	23.4	Rc 2	164	70	37
	119.6	162.1				89.5	G 2½		NPT 2½		–	–	85	

1.) Only threaded brass connection
2.) Only threaded stainless steel connection

Flange variant according to DIN EN 1092 - 1

Note:
Dimensions in mm



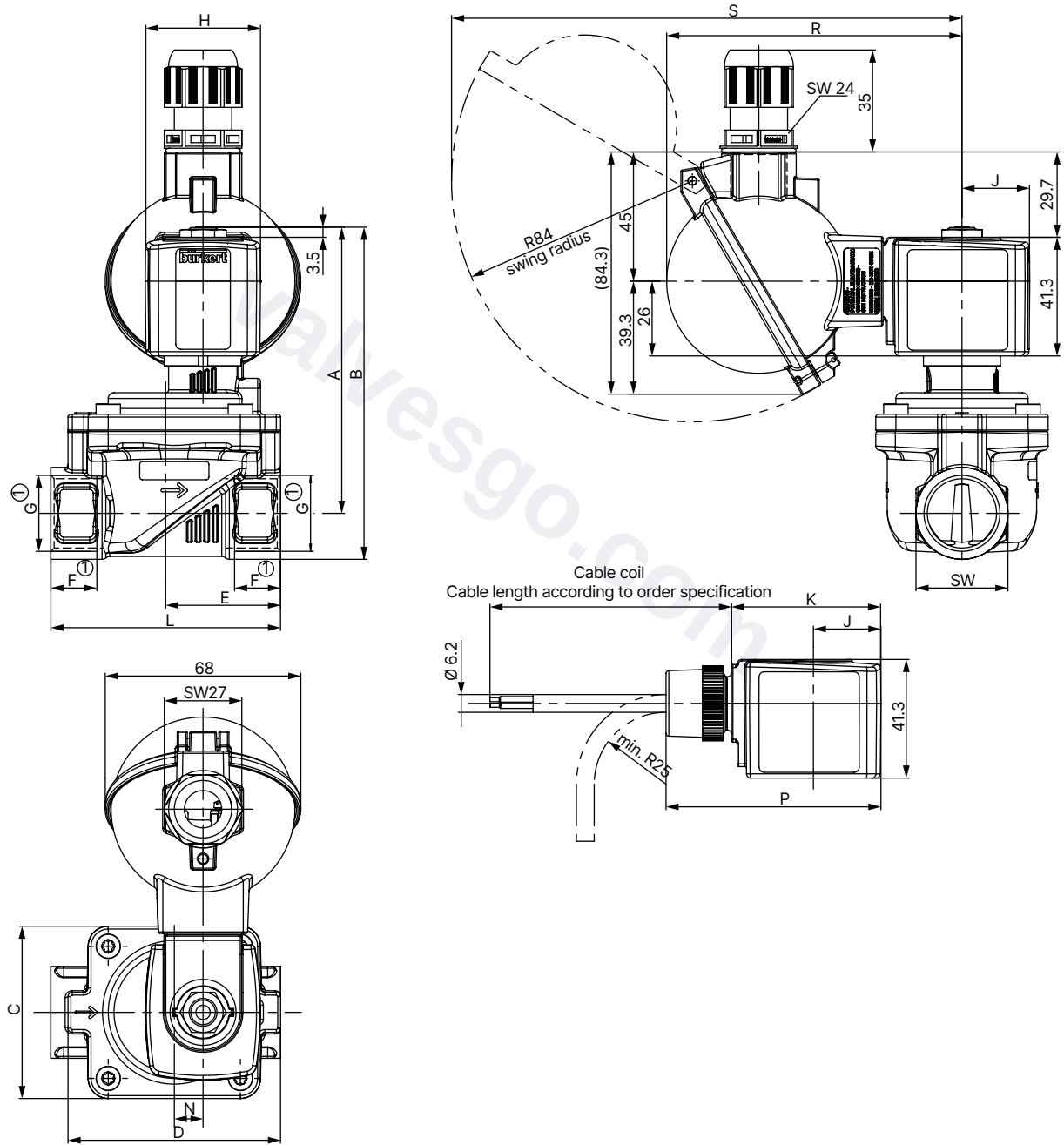
DN	A	B	C	D	L	N	P	R	S	T
25	102.6	160.1	70	85	160	15	68	115	14	85
40	116.2	186.6	99	114	180	23	78	140	18	100
40	125.6	200.6			200		88	150	18	110
50	119.9	202.4	115	132	230	37	102	165	18	125

5.2. ATEX/IECEx variant

Cable variant

Note:

- Dimensions in mm
- The dimensions F1 and G1 apply to G thread.
- The dimensions F2 and G2 apply to NPT thread.
- The dimensions F3 and G3 apply to Rc thread.
- For DN 50 see dimensions “Terminal box variant” on page 12

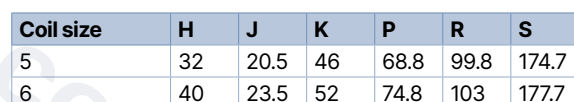


Coil size	H	J	K	P	R	S
5	32	20.5	46	68.8	99.8	174.7
6	40	23.5	52	74.8	103	177.7

- 1.) Only threaded brass connection
- 2.) Only threaded stainless steel connection

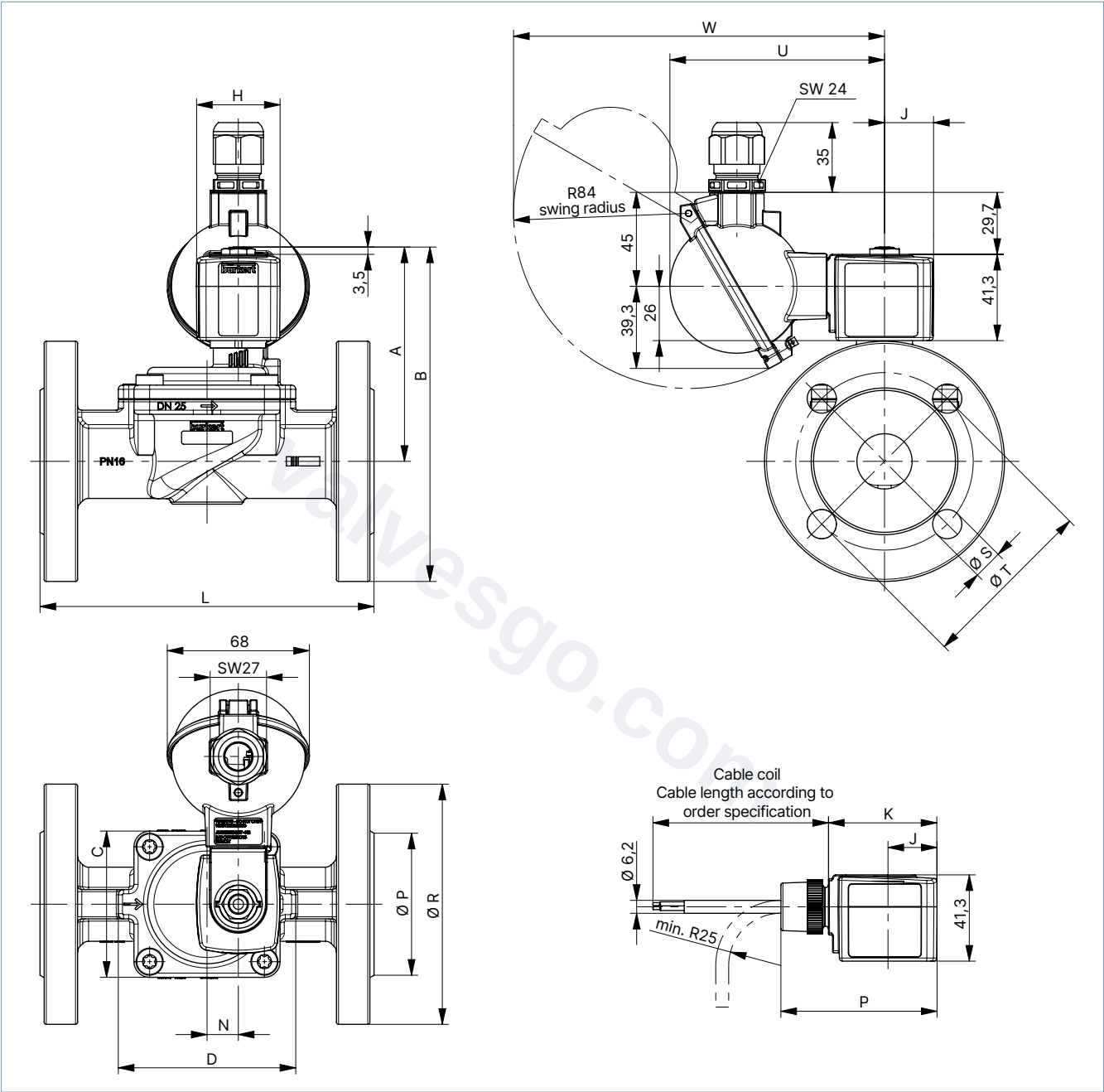
Note:

- Dimensions in mm
- Standard at DN 50



Flange variant according to DIN EN 1092 - 1

Note:
Dimensions in mm

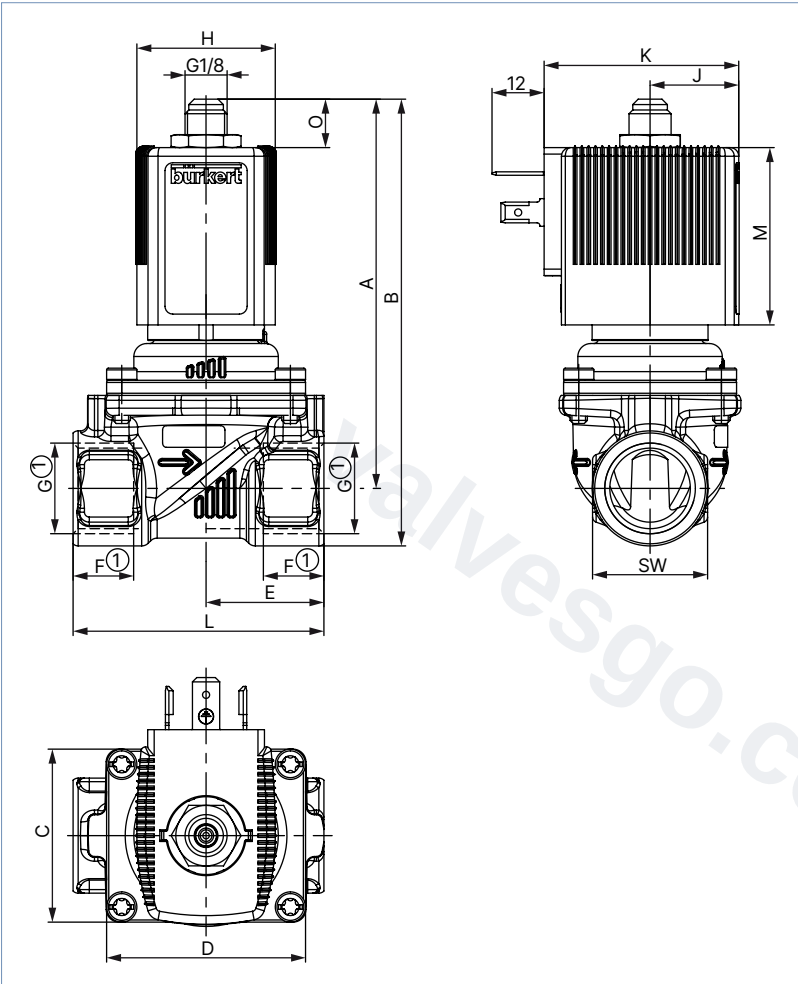


DN	A	B	C	D	L	N	P	R	S	T
25	102.6	160.1	70	85	160	15	68	115	14	85
40	116.2	186.6	99	114	180	23	78	140	18	100
40	125.6	200.6			200		88	150	18	110
50	119.9	202.4	115	132	230	37	102	165	18	125
40	125.6	200.6	99	114	200	23	88	150	18	110

5.3. Compressor relief valves

Note:

- Dimensions in mm
- The dimensions F1 and G1 apply to G thread.
- The dimensions F2 and G2 apply to NPT thread.
- The dimensions F3 and G3 apply to Rc thread.



Coil size	H	J	K	M	O
5	32	20.5	46	41	11.2
6	40	23.5	52	41.4	10.8

DN	A	B	C	D	E	G		NPT		Rc		L	SW
						F1	G1	F2	G2	F3	G3		
10	90.5	101.5	32	44	22	12	G ¼	10	NPT ¼	–	–	50	22
	92.5	106			24.5	12	G ⅜	10.3	NPT ⅜	10.1	Rc ⅜		27
						14	G ½	13.7	NPT ½	13.2	Rc ½		
13	90	103.5	42	54.5	27.25	12	G ⅜	–	–	–	–	58	27
	92	108			32.5	14	G ½	13.7	NPT ½	13.2	Rc ½		65
						16	G ¾	14	NPT ¾	14.5	Rc ¾		
20	107	123	60	74	37	16	G ¾	14	NPT ¾	14.5	Rc ¾	80	32
	109.5	130			37.5	18	G 1	16.8	NPT 1	–	–		41

6. Performance specifications

6.1. Power consumption

Standard variant

Circuit function	Orifice [mm]	Coil size [mm]	AC			DC		ATEX AC/DC Nominal power [W]
			Inrush power [VA]	Holding power [VA] [W]		Cold power [W]	Warm power [W]	
A	10...50	32	24	14	8	9.5	8	–
A	10...50	32	24	16	7	9.5	8	–
A / B	13...50	40	–	–	–	–	–	9
A	10	32	–	–	–	–	–	7
B	10	40	–	–	–	–	–	9
B u. CF05	10	32	18	11	5	6	5	–
B u. MX62	13	32	24	14	8	–	–	–
B u. MX62	13	40	–	–	–	11	9.5	–

With Kick and Drop coil

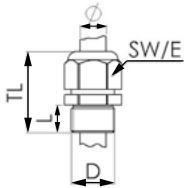
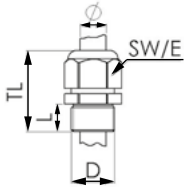
Circuit function	Orifice [mm]	Coil size [mm]	Voltage [V]	Inrush power (approx. 500 ms)		Holding power [W]
				[VA]	[W]	
A	10...50	40	024/UC	–	12	0.6
A	10...50	40	230/56	20	–	2
B	10...50	40	024/UC	–	20	2
B	10...50	40	230/56	20	–	2

7. Product accessories

7.1. Cable glands for ATEX/IECEx terminal box

Note:

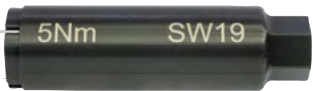
A polyamide cable gland is included in the scope of delivery. A nickel-plated brass variant can be ordered for a surcharge, see ["Cable glands for ATEX/IECEx terminal box"](#) on page 25.

Description	Ex approval		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><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><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 	• Special tool • Service manual

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

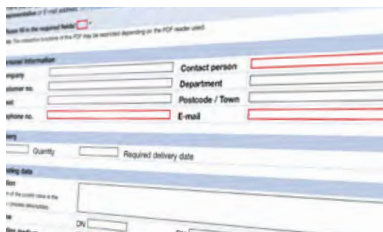


Bürkert product filter – Get quickly to the right product

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](#)

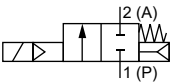
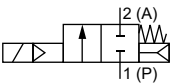
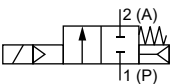
8.4. Ordering chart

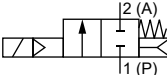
Standard variant with brass body

Circuit function A

Note:

Please note that the cable plug must be ordered separately, see **"8.5. Ordering chart accessories"** on page 24 or separate data sheet for **Type 2518** ▶.

Circuit function	Port connection	Orifice	K _v value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.		
		[mm]	[m³/h]	[bar]	[kg]	024/DC [V/Hz]	024/50...60 [V/Hz]	230/50...60 [V/Hz]
Seal material NBR, polyamide coil, medium temperature - 10 °C...+ 80 °C								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G ¼	10	1.5	0.2...16	0.43	322499 	322500 	322501 
	G ⅜	10	1.9	0.2...16	0.40	322502 	322503 	322504 
	G ⅜	13	3.8	0.2...16	0.58	221841 	221842 	221843 
	G ½	13	3.8	0.2...16	0.54	221844 	221845 	221846 
	G ¾	13	3.8	0.2...16	0.59	221847 	221848 	221849 
	G ¾	20	8.5	0.2...16	0.89	221850 	221851 	221852 
	G 1	20	8.5	0.2...16	1.0	221853 	221854 	221855 
	G 1	25	12	0.2...16	1.3	221856 	221857 	221858 
	G 1¼	25	12	0.2...16	1.5	221859 	221860 	221861 
	G 1¼	40	23	0.2...16	2.7	270131 	268550 	270132 
	G 1½	40	30	0.2...16	3.0	221862 	221863 	221864 
	G 2	40	30	0.2...16	3.2	221865 	221866 	221867 
	G 2	50	40	0.2...16	4.5	253156 	253157 	253158 
	G 2½	50	40	0.2...16	5.2	253159 	253160 	253161 
Seal material NBR, polyamide coil, medium temperature - 10 °C...+ 80 °C, with manual override								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G ¼	10	1.5	0.2...16	0.43	322505 	322506 	322507 
	G ⅜	10	1.9	0.2...16	0.40	322508 	322509 	322510 
	G ½	13	3.8	0.2...16	0.54	221952 	o. r.	221953 
	G ¾	13	3.8	0.2...16	0.59	221954 	o. r.	221955 
	G ¾	20	8.5	0.2...16	0.89	221956 	o. r.	221957 
	G 1	20	8.5	0.2...16	1.0	221958 	o. r.	221959 
	G 1	25	12	0.2...16	1.3	221960 	o. r.	221961 
	G 1¼	25	12	0.2...16	1.5	221962 	o. r.	221963 
	G 1¼	40	23	0.2...16	2.7	270142 	o. r.	270143 
	G 1½	40	30	0.2...16	3.0	221964 	o. r.	221965 
	G 2	40	30	0.2...16	3.2	221966 	o. r.	221967 
	Seal material FKM, epoxy coil, medium temperature 0 °C...+ 120 °C							
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G ¼	10	1.5	0.2...16	0.43	322511 	322512 	322513 
	G ⅜	10	1.9	0.2...16	0.40	322514 	322515 	322516 
	G ⅜	13	3.8	0.2...16	0.58	221868 	221869 	221870 
	G ½	13	3.8	0.2...16	0.54	221871 	221872 	221873 
	G ¾	13	3.8	0.2...16	0.59	221874 	221875 	221876 
	G ¾	20	8.5	0.2...16	0.89	221877 	221878 	221879 
	G 1	20	8.5	0.2...16	1.0	221880 	221881 	221882 
	G 1	25	12	0.2...16	1.3	221883 	221884 	221885 
	G 1¼	25	12	0.2...16	1.5	221886 	221887 	221888 
	G 1¼	40	23	0.2...16	2.7	270133 	270134 	270135 
	G 1½	40	30	0.2...16	3.0	221889 	221890 	221891 
	G 2	40	30	0.2...16	3.2	221892 	221893 	221894 
	G 2	50	40	0.2...16	4.5	253168 	253169 	253170 
	G 2½	50	40	0.2...16	5.2	253171 	253172 	253173 

Circuit function	Port connection	Orifice	K _v value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.		
		[mm]	[m³/h]	[bar]	[kg]	024/DC [V/Hz]	024/50...60 [V/Hz]	230/50...60 [V/Hz]
Seal material EPDM, polyamide coil, medium temperature - 30 °C...+ 90 °C								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G ¼	10	1.5	0.2...16	0.43	322517 	322518 	322519 
	G ⅜	10	1.9	0.2...16	0.40	322520 	322521 	322522 
	G ⅜	13	3.8	0.2...16	0.58	221895 	221896 	221897 
	G ½	13	3.8	0.2...16	0.54	221898 	221899 	221900 
	G ¾	13	3.8	0.2...16	0.59	221901 	221902 	221903 
	G ¾	20	8.5	0.2...16	0.89	221904 	221905 	221906 
	G 1	20	8.5	0.2...16	1.0	221907 	221908 	221909 
	G 1	25	12	0.2...16	1.3	221910 	221911 	221912 
	G 1¼	25	12	0.2...16	1.5	221913 	221914 	221915 
	G 1¼	40	23	0.2...16	2.7	270136 	270137 	270138 
	G 1½	40	30	0.2...16	3.0	221916 	221917 	221918 
	G 2	40	30	0.2...16	3.2	221919 	221920 	221921 
	G 2	50 ^{4.)}	40	0.2...16	4.5	253162 	253163 	253164 
	G 2½	50 ^{4.)}	40	0.2...16	5.2	253165 	253166 	253167 

o. r. = on request

1.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

2.) A pressure difference of 0.5 bar is required to open the full cross-section.

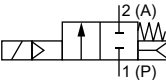
3.) Pressure data: overpressure to atmospheric pressure

4.) Approved for drinking water according to KTW and W270

Standard variant in brass with stainless steel flange body

Note:

Please note that the cable plug must be ordered separately, see ["8.5. Ordering chart accessories"](#) on page 24 or separate data sheet for **Type 2518** ▶.

Circuit function	Port connection	Orifice	K _v value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.		
		[mm]	[m³/h]	[bar]	[kg]	024/DC [V/Hz]	024/50...60 [V/Hz]	230/50...60 [V/Hz]
Flange connection according to DIN EN 1092 - 1, seal material NBR, medium temperature - 10 °C...+ 80 °C								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Flange DN 25	25	12	0.2...16	3.75	20131970 	20131971 	20131972 
	Flange DN 32	40	23	0.2...16	6.10	20131976 	20131977 	20131978 
	Flange DN 40	40	30	0.2...16	6.10	20131982 	20131983 	20131985 
	Flange DN 50	50	40	0.2...16	10	20131989 	20131991 	20131992 

1.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

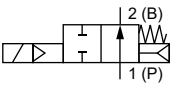
2.) A pressure difference of 0.5 bar is required to open the full cross-section.

3.) Pressure data: overpressure to atmospheric pressure

Circuit function B

Note:

Please note that the cable plug must be ordered separately, see **"8.5. Ordering chart accessories" on page 24** or separate data sheet for **Type 2518** ▶.

Circuit function	Port connection	Orifice	K _V value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.		
						024/DC	024/50	230/50
		[mm]	[m³/h]	[bar]	[kg]	[V/Hz]	[V/Hz]	[V/Hz]
Seal material NBR, epoxy coil, medium temperature - 10 °C...+ 80 °C								
CF B 2/2-way solenoid valve Servo-controlled Normally open 	G ¼	10	1.5	0.2...16	0.43	322523 	322524 	322525 
	G ⅜	10	1.9	0.2...16	0.40	322526 	322527 	322528 
	G ⅜	13	3.8	0.2...16	0.58	221923 	221924 	221925 
	G ½	13	3.8	0.2...16	0.54	221926 	221928 	221929 
	G ¾	13	3.8	0.2...16	0.59	221930 	221931 	221933 
	G ¾	20	8.5	0.2...16	0.89	221934 	221935 	221936 
	G 1	20	8.5	0.2...16	1.0	221937 	221938 	221939 
	G 1	25	12	0.2...16	1.3	221940 	221941 	221942 
	G 1¼	25	12	0.2...16	1.5	221943 	221944 	221945 
	G 1¼	40	23	0.2...16	2.7	270139 	270140 	270141 
	G 1½	40	30	0.2...16	3.0	221946 	221947 	221948 
	G 2	40	30	0.2...16	3.2	221949 	221950 	221951 
	G 2	50	40	0.2...16	4.5	253174 	253175 	253176 
	G 2½	50	40	0.2...16	5.2	253177 	253178 	253179 

1.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

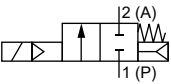
2.) A pressure difference of 0.5 bar is required to open the full cross-section.

3.) Pressure data: overpressure to atmospheric pressure

Circuit function A, with Kick and Drop coil

Note:

- Please note that the cable plug must be ordered separately, see **"8.5. Ordering chart accessories" on page 24** or separate data sheet for **Type 2518** ▶.
- The Kick and Drop coil (AC/DC) features integrated electronics for short-term power increase and decrease in double coil technology.

Circuit function	Port connection	Orifice	K _v value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.	
						024 / AC/DC	230 / 50...60
		[mm]	[m³/h]	[bar]	[kg]	[V/Hz]	[V/Hz]
Seal material FKM, epoxy coil, medium temperature 0 °C...+ 120 °C							
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G ¼	10	1.5	0.2...16	0.43	20046906 	20046961 
	G ⅜	10	1.9	0.2...16	0.40	20046907 	20046960 
	G ½	13	3.8	0.2...16	0.54	20046908 	20046963 
	G ¾	20	8.5	0.2...16	0.89	20046909 	20046964 
	G 1	25	12	0.2...16	1.3	20046910 	20046965 
	G 1¼	40	23	0.2...16	2.7	20046911 	20046966 
	G 1½	40	30	0.2...16	3.0	20046912 	20046967 
	G 2	50	40	0.2...16	4.5	20046913 	20046968 
	G 2½	50	40	0.2...16	5.2	20046914 	20046969 

1.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

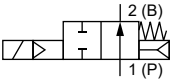
2.) A pressure difference of 0.5 bar is required to open the full cross-section.

3.) Pressure data: overpressure to atmospheric pressure

Circuit function B, with Kick and Drop coil

Note:

- Please note that the cable plug must be ordered separately, see ["8.5. Ordering chart accessories" on page 24](#) or separate data sheet for **Type 2518** ▶.
- The Kick and Drop coil (AC/DC) features integrated electronics for short-term power increase and decrease in double coil technology.

Circuit function	Port connection	Orifice	K _v value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.	
						024 / AC/DC	230 / 50...60
		[mm]	[m³/h]	[bar]	[kg]	[V/Hz]	[V/Hz]
Seal material FKM, epoxy coil, medium temperature 0 °C...+ 120 °C							
CF B 2/2-way solenoid valve Servo-controlled Normally open 	G ¼	10	1.5	0.2...16	0.43	20046924 	20046970 
	G ⅜	10	1.9	0.2...16	0.40	20046925 	20046971 
	G ½	13	3.8	0.2...16	0.54	20046927 	20046972 
	G ¾	20	8.5	0.2...16	0.89	20046928 	20046973 
	G 1	25	12	0.2...16	1.3	20046929 	20046974 
	G 1¼	40	23	0.2...16	2.7	20046930 	20046975 
	G 1½	40	30	0.2...16	3.0	20046931 	20046976 
	G 2	50	40	0.2...16	4.5	20046932 	20046978 
	G 2½	50	40	0.2...16	5.2	20046933 	20046979 

1.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

2.) A pressure difference of 0.5 bar is required to open the full cross-section.

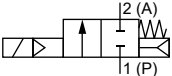
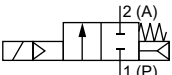
3.) Pressure data: overpressure to atmospheric pressure

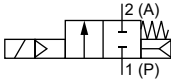
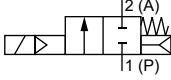
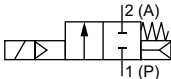
Standard variant with stainless steel body

Circuit function A

Note:

Please note that the cable plug must be ordered separately, see ["8.5. Ordering chart accessories" on page 24](#) or separate data sheet for **Type 2518** ▶.

Circuit function	Port connection	Orifice	K _v value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.		
		[mm]	[m³/h]	[bar]	[kg]	024/DC [V/Hz]	024/50...60 [V/Hz]	230/50...60 [V/Hz]
Seal material NBR, polyamide coil, medium temperature - 10 °C...+ 80 °C								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G ¼	10	1.5	0.2...16	0.43	322529 	322530 	322531 
	G ⅜	10	1.9	0.2...16	0.40	322532 	322533 	322534 
	G ½	13	3.8	0.2...16	0.54	221968 	221969 	221970 
	G ¾	20	8.5	0.2...16	0.86	221971 	221972 	221973 
	G 1	20	8.5	0.2...16	0.97	221974 	221975 	221976 
	G 1	25	12	0.2...16	1.3	221977 	221978 	221979 
	G 1¼	25	12	0.2...16	1.4	221980 	221981 	221982 
	G 1½	40	30	0.2...16	2.8	221983 	221984 	221985 
	G 2	40	30	0.2...16	3.0	221986 	221987 	221988 
Seal material FKM, epoxy coil, medium temperature 0 °C...+ 120 °C								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G ¼	10	1.5	0.2...16	0.43	322535 	322536 	322537 
	G ⅜	10	1.9	0.2...16	0.40	322538 	322539 	322540 
	G ½	13	3.8	0.2...16	0.54	221989 	221990 	221991 
	G ¾	20	8.5	0.2...16	0.86	221992 	221993 	221994 
	G 1	20	8.5	0.2...16	0.97	221995 	221996 	221997 
	G 1	25	12	0.2...16	1.3	221998 	221999 	222000 
	G 1¼	25	12	0.2...16	1.4	222001 	222002 	222003 
	G 1½	40	30	0.2...16	2.8	222004 	222005 	222006 
	G 2	40	30	0.2...16	3.0	222007 	222008 	222009 

Circuit function	Port connection	Orifice	K _v value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.		
		[mm]				024/DC	024/50...60	230/50...60
			[m ³ /h]	[bar]	[kg]	[V/Hz]	[V/Hz]	[V/Hz]
Seal material FKM, epoxy coil, medium temperature 0 °C...+ 120 °C, with manual override								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G ¼	10	1.5	0.2...16	0.43	323894 ☞	o. r.	323968 ☞
	G ⅜	10	1.9	0.2...16	0.40	323971 ☞	o. r.	323972 ☞
	G ½	13	3.8	0.2...16	0.54	323973 ☞	o. r.	323975 ☞
	G ¾	20	8.5	0.2...16	0.86	323977 ☞	o. r.	323978 ☞
	G 1	25	12	0.2...16	1.3	323979 ☞	o. r.	323980 ☞
	G 1¼	25	1.4	0.2...16	1.4	323982 ☞	o. r.	323984 ☞
	G 1½	40	30	0.2...16	2.8	323986 ☞	o. r.	323987 ☞
	G 2	40	30	0.2...16	3.0	323988 ☞	o. r.	323989 ☞
Seal material EPDM, polyamide coil, medium temperature - 30 °C...+ 90 °C								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G ¼	10	1.5	0.2...16	0.43	322541 ☞	322542 ☞	322543 ☞
	G ⅜	10	1.9	0.2...16	0.40	322544 ☞	322545 ☞	322546 ☞
	G ½	13	3.8	0.2...16	0.54	222010 ☞	222011 ☞	222012 ☞
	G ¾	20	8.5	0.2...16	0.86	222013 ☞	222014 ☞	222015 ☞
	G 1	20	8.5	0.2...16	0.97	222016 ☞	222017 ☞	222018 ☞
	G 1	25	12	0.2...16	1.3	222019 ☞	222020 ☞	222021 ☞
	G 1¼	25	12	0.2...16	1.4	222022 ☞	222023 ☞	222024 ☞
	G 1½	40	30	0.2...16	2.8	222025 ☞	222026 ☞	222027 ☞
	G 2	40	30	0.2...16	3.0	222028 ☞	222029 ☞	222031 ☞
Flange connection according to DIN EN 1092-1, seal material FKM, medium temperature 0 °C...+ 120 °C								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Flange DN 25	25	12	0.2...16	3.75	20131973 ☞	20131974 ☞	20131975 ☞
	Flange DN 32	40	23	0.2...16	6.10	20131979 ☞	20131980 ☞	20131981 ☞
	Flange DN 40	40	30	0.2...16	6.10	20131986 ☞	20131987 ☞	20131988 ☞

o. r. = on request

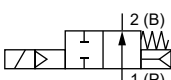
1.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

2.) A pressure difference of 0.5 bar is required to open the full cross-section.

3.) Pressure data: overpressure to atmospheric pressure

Circuit function B**Note:**

Please note that the cable plug must be ordered separately, see **"8.5. Ordering chart accessories"** on page 24 or separate data sheet for **Type 2518** ▶.

Circuit function	Port connection	Orifice	K _v value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.		
		[mm]				024/DC	024/50	230/50
			[m ³ /h]	[bar]	[kg]	[V/Hz]	[V/Hz]	[V/Hz]
Seal material FKM, epoxy coil, medium temperature 0 °C...+ 120 °C								
CF B 2/2-way solenoid valve Servo-controlled Normally open 	G ¼	10	1.5	0.2...16	0.43	322547 ☞	322548 ☞	322549 ☞
	G ⅜	10	1.9	0.2...16	0.40	322550 ☞	322551 ☞	322552 ☞
	G ½	13	3.8	0.2...16	0.54	228387 ☞	228388 ☞	228389 ☞
	G ¾	20	8.5	0.2...16	0.86	228390 ☞	228391 ☞	228392 ☞
	G 1	25	12	0.2...16	1.3	228393 ☞	228394 ☞	228395 ☞
	G 1¼	25	12	0.2...16	1.4	228396 ☞	228397 ☞	228398 ☞
	G 1½	40	30	0.2...16	2.8	228399 ☞	228400 ☞	228401 ☞
	G 2	40	30	0.2...16	3.0	228402 ☞	228403 ☞	228404 ☞

1.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

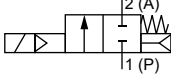
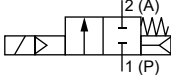
2.) A pressure difference of 0.5 bar is required to open the full cross-section.

3.) Pressure data: overpressure to atmospheric pressure

ATEX/IECEx cable variant

Note:

- The maximum medium temperature must never exceed the permitted temperature class (T4: +135 °C, T5: +100 °C, T6: +85 °C) minus 5 K.
- Delivery includes 3 metre cable.
- Refer to chapter “3. Approvals and conformities” on page 5 for more information about the approvals.

Circuit function	Port connection	Orifice	K _v value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.	
		[mm]	[m ³ /h]	[bar]	[kg]	024 / AC/DC	230 / AC/DC
						[V/Hz]	[V/Hz]
Seal material NBR, brass body, medium temperature -10 °C...+80 °C							
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G 1/4	10	1.5	0.2...16	0.62	349656	349658
	G 3/8	10	1.9	0.2...16	0.59	349660	349662
	G 1/2	13	3.8	0.2...16	0.84	349690	349696
	G 3/4	20	8.5	0.2...16	1.2	349717	349719
	G 1	25	12	0.2...16	1.7	349731	349734
	G 1 1/4	25	12	0.2...16	1.8	349737	349739
	G 1 1/4	40	23	0.2...16	3.0	349751	349754
	G 1 1/2	40	30	0.2...16	3.3	349756	349758
	G 2	40	30	0.2...16	3.5	349760	349762
	G 2	50	40	0.2...16	4.8	349773	349775
	G 2 1/2	50	40	0.2...16	5.5	349777	349778
Seal material FKM, stainless steel body, medium temperature 0 °C...+90 °C							
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G 1/4	10	1.5	0.2...16	0.62	349665	349666
	G 3/8	10	1.9	0.2...16	0.59	349669	349670
	G 1/2	13	3.8	0.2...16	0.84	349707	349708
	G 3/4	20	8.5	0.2...16	1.2	349724	349727
	G 1	25	12	0.2...16	1.6	349742	349744
	G 1 1/4	25	12	0.2...16	1.7	349747	349750
	G 1 1/2	40	30	0.2...16	3.1	349765	349767
	G 2	40	30	0.2...16	3.3	349770	349771

1.) Measurement at +20 °C, 1 bar at the valve inlet and free outlet

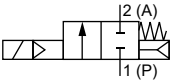
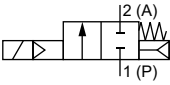
2.) A pressure difference of 0.5 bar is required to open the full cross-section.

3.) Pressure data: overpressure to atmospheric pressure

ATEX/IECEx terminal box variant

Note:

- The maximum medium temperature must never exceed the permitted temperature class (T4: +135 °C, T5: +100 °C, T6: +85 °C) minus 5 K.
- Refer to chapter "3. Approvals and conformities" on page 5 for more information about the approvals.

Circuit function	Port connection	Orifice	K _V value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.	
						024 / AC/DC	230 / AC/DC
		[mm]	[m³/h]	[bar]	[kg]	[V/Hz]	[V/Hz]
Seal material NBR, brass body, medium temperature - 10 °C...+ 80 °C							
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G ¼	10	1.5	0.2...16	0.62	349657 ㉞	349659 ㉞
	G ⅜	10	1.9	0.2...16	0.59	349661 ㉞	349663 ㉞
	G ½	13	3.8	0.2...16	0.84	349691 ㉞	349697 ㉞
	G ¾	20	8.5	0.2...16	1.2	349718 ㉞	349720 ㉞
	G 1	25	12	0.2...16	1.7	349733 ㉞	349735 ㉞
	G 1¼	25	12	0.2...16	1.8	349738 ㉞	349740 ㉞
	G 1¼	40	23	0.2...16	3.0	349753 ㉞	349755 ㉞
	G 1½	40	30	0.2...16	3.3	349757 ㉞	349759 ㉞
	G 2	40	30	0.2...16	3.5	349761 ㉞	349763 ㉞
G 2	50	40	0.2...16	4.8	349774 ㉞	349776 ㉞	
Seal material FKM, stainless steel body, medium temperature 0 °C...+ 90 °C							
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	G ¼	10	1.5	0.2...16	0.62	349664 ㉞	349667 ㉞
	G ⅜	10	1.9	0.2...16	0.59	349668 ㉞	349671 ㉞
	G ½	13	3.8	0.2...16	0.84	349705 ㉞	349709 ㉞
	G ¾	20	8.5	0.2...16	1.2	349725 ㉞	349728 ㉞
	G 1	25	12	0.2...16	1.6	349743 ㉞	349745 ㉞
	G 1¼	25	12	0.2...16	1.7	349748 ㉞	349749 ㉞
	G 1½	40	30	0.2...16	3.1	349766 ㉞	349768 ㉞
	G 2	40	30	0.2...16	3.3	349769 ㉞	349772 ㉞

1.) Measurement at +20 °C, 1 bar at the valve inlet and free outlet

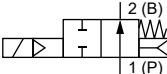
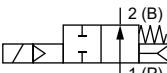
2.) A pressure difference of 0.5 bar is required to open the full cross-section.

3.) Pressure data: overpressure to atmospheric pressure

Compressor relief valve with brass body

Note:

- Please note that the cable plug must be ordered separately, see **"8.5. Ordering chart accessories" on page 24** or separate data sheet for **Type 2518** ▶.
- The valve is open in the rest position. The medium also flows via the exhaust port on the solenoid.

Circuit function	Port connection	Orifice	K _v value water ^{1.) 2.)}	Pressure range ^{3.)}	Weight	Article no.			
						024/DC	024/50...60	110/50...60	230/50...60
		[mm]	[m³/h]	[bar]	[kg]	[V/Hz]	[V/Hz]	[V/Hz]	[V/Hz]
Seal material FKM, polyamide coil, medium temperature 0 °C...+ 90 °C, DN 10									
CF B 2/2-way solenoid valve Servo-controlled Normally open 	G 3/8	10	1.9	0.2...16	0.43	330985 	330986 	330987 	330988 
	G 1/2	10	1.9	0.2...16	0.40	330989 	331007 	331008 	331009 
Seal material FKM, polyamide coil, medium temperature 0 °C...+ 90 °C, DN 13									
CF B 2/2-way solenoid valve Servo-controlled Normally open 	G 3/8	13	3.6	0.5...16	0.58	310663 	310662 	310661 	310659 
	G 1/2	13	3.6	0.5...16	0.54	310667 	310666 	310665 	310664 

1.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

2.) A pressure difference of 0.5 bar is required to open the full cross-section.

3.) Pressure data: overpressure to atmospheric pressure

Further variants on request

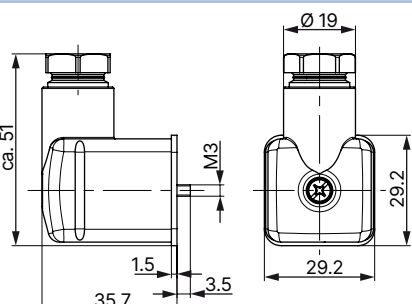
 Material Brass dezincification resistant	 Temperature • EPDM variant up to + 100 °C with epoxy coil • FKM variant up to + 120 °C with epoxy coil
 Process connection NPT, Rc	 Approval Further information can be found in chapter "3. Approvals and conformities" on page 5 .
 Voltage Further voltages	

8.5. Ordering chart accessories

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

Note:

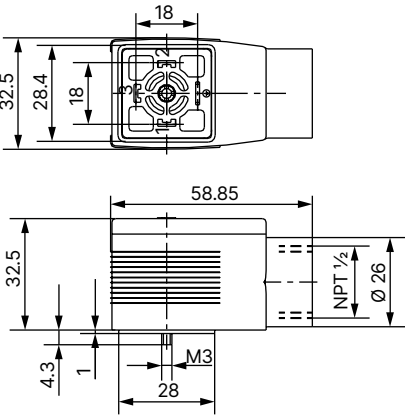
For further variants see data sheet **Type 2518** ▶.

Cable plug	Dimensions	Variant	Voltage	Article no.
		Without wiring (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 wiring (AC/DC) with silicone seal for higher ambient temperature, e.g. steam variant (NA07)	0...250 V AC/DC	361687 𐀀

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

Note:

- Without wiring (standard)
- Refer to data sheet **Type 2509** ▶ for more information about the cable plug.

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

Cable glands for ATEX/IECEx terminal box

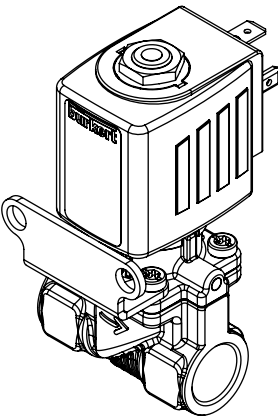
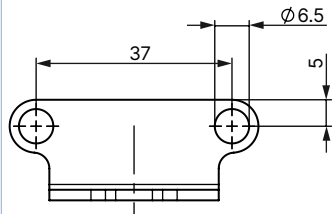
Note:

- A polyamide cable gland is included in the scope of delivery. A nickel-plated brass variant can be ordered for a surcharge.
- Refer to **"7.1. Cable glands for ATEX/IECEx terminal box"** on page 15 for more information about Ex cable glands.
- Refer to **"7.2. Special tool to turn the terminal box"** on page 16 for more information about Special tool.

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

- 1.) Cable diameter
2.) Not included in the scope of delivery of the valve

Mounting bracket kit for DN 10

Mounting bracket kit	Dimensions	Description	Article no.
		Mounting bracket kit (consisting of mounting bracket and screws)	365730 𐀀