DATA SHEET

Type 6027

bürkert
FLUID CONTROL SYSTEMS

Direct-acting 2/2-way plunger valve

- Direct-acting, powerful valve with diameter of up to DN 13
- Vibration-proof, bolted coil system
- Energy-saving double coil technology with kick and drop variant
- Explosion proof versions
- High pressure variants for gases and liquids

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 6027 is a direct-acting plunger valve. The stopper and plunger guide tube are welded together to enhance pressure resistance and leak-tightness. Various seal material combinations are available depending on the application. The coils are moulded with chemically resistant epoxy. An optional sliding ring bearing increases the service life with dry gases. Special seal technology is used for high-pressure applications. To reduce power consumption in operation, coils with Kick and Drop electronics assembly (double coil technology) are available. In combination with a plug in accordance with DIN EN 175301-803 Form A, the valves satisfy protection class IP65. NEMA 4X is available on request.

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1. General technical data

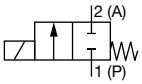
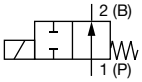
Product properties	
Dimensions	Further information can be found in chapter "5. Dimensions" on page 11.
Material	
Seal	FKM, EPDM, NBR, PTFE and PEEK
Body	Brass, stainless steel 1.4404/316L
Coil	Epoxy
Valve inner parts	Further information can be found in chapter "4. Materials" on page 7.
Orifice	DN 1.0…DN 13.0
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 coil class H
Performance data	
Duty cycle	100 % continuous operation
Switching time [1.]	
Switching time AC	Opening: 10…30 ms Closing: 50…80 ms
Switching time DC	Opening: 20…30 ms Closing: 50…80 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
Voltage tolerance	±10 %
Medium data	
Operating medium [2.]	Vacuum, neutral gases and liquids (e.g. compressed air, water, hydraulic oil, petrol, DVGW 1-3 gas family) and slightly aggressive medium, hot liquids and steam
Medium temperature	**Seat seal/external seal**
Standard version [3.]	FKM/FKM: 14 °F…+284 °F EPDM/EPDM: -22 °F…+248 °F NBR/NBR: 14 °F…+176 °F PTFE/FKM: 14 °F…+284 °F PTFE/PEEK: -40 °F..+356 °F
High pressure version up to 250 psi (PN25) or 160 psi (PN16)	PEEK/FKM: 14 °F…+176 °F PEEK/EPDM: -22 °F…+176 °F PEEK/PEEK: -40 °F…+176 °F
Viscosity	Max. 21 cSt (21 mm^2/s)
Process/Port connection & communication	
Electrical connection	• Plug contacts according to DIN EN 175 301-803 form A for cable plug **Type 2518** ▶. Further information can be found in chapter "Cable plug Type 2518, form A according to DIN EN 175301-803" on page 27. • Plug contacts according to DIN EN 175 301-803 form A for cable plug **Type 2509** ▶. Further information can be found in chapter "Cable plug Type 2509, form A according to DIN EN 175301-803" on page 27.
Port connection	G ¼, G ⅜, G ½, G ¾, NPT ¼, NPT ⅜, NPT ½, NPT ¾ (RC on request)
Approvals and conformities	
Degree of protection	IP65 with cable plug **Type 2518** ▶ UL HazLoc Class I, Div 2 with terminal box or cable version NEMA 4X with cable plug **Type 2509** ▶ with stainless steel versions
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.
Foods and beverages/Hygiene	Further information can be found in chapter "3.7. Foods and beverages/Hygiene" on page 6.
Others	Further information can be found in chapter "3.8. Others" on page 6.
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature	Max. 131 °F

1.) Measurement at +68 °F, 87 psi at the valve outlet, opening: pressure build-up 0…90 %, closing: pressure reduction 100…10 %

2.) Medium resistance according to material combination

3.) Circuit function normally open in conjunction with AC voltage is limited to max. 212 °F

2. Circuit functions

Symbol	Description
	**Circuit function A (CF A)** 2/2-way solenoid valve Direct-acting Normally closed
	**Circuit function B (CF B)** 2/2-way solenoid valve Direct-acting 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 versions 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

<table>
<tr><th>Approval</th><th>Description</th></tr>
<tr><td></td><td>Optional: Explosion protection according to category 2 (zone 1/21)

Ex marking of the components according to the following table:

<table>
<tr><th colspan="2">Coil Type AC10</th></tr>
<tr><th>Coils with cable outlet</th><th>Coils with terminal box</th></tr>
<tr><td>ATEX:
EPS 18 ATEX 1232 X
II 2G Ex mb IIC T4 Gb
II 2D Ex mb IIIC T130 °C Db

IECEx:
IECEx EPS 18.0110 X
Ex mb IIC T4 Gb
Ex mb IIIC T130 °C Db</td><td>ATEX:
EPS 18 ATEX 1232 X
II 2G Ex eb mb IIC T4 Gb
II 2D Ex mb tb IIIC T130 °C Db

IECEx:
IECEx EPS 18.0110 X
Ex eb mb IIC T4 Gb
Ex mb tb IIIC T130 °C Db</td></tr>
</table>
</td></tr>
</table>

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3.5. North America (USA/Canada)

Approval	Description
c UL us LISTED	**Optional: UL Listed for the USA and Canada** The products are UL Listed for the USA and Canada according to: • UL 429 (electrically operated valves) • CAN/CSA-C22.2 No. 139-19
c UL us LISTED SOLENOID FOR USE IN HAZARDOUS LOCATIONS E504714	**Optional (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
c UL us	**Optional: UL Recognized for the USA and Canada** The products are UL Recognized for the USA and Canada according to: • UL 429 (electrically operated valves) • CAN/CSA-C22.2 No. 139-19

3.6. Drinking water

Conformity	Description
H_2O	**Suitable for use in drinking water applications** The materials comply with the assessment principles (UBA) for materials in contact with drinking water (TrinkwasserV). **Brass body/stainless steel body:** PF36: Suitable for products with a maximum temperature of 60 °C (warm water)

3.7. Foods and beverages/Hygiene

Conformity	Description
FDA	**FDA – Code of Federal Regulations (valid for the variable code PL03)** All wetted materials are compliant with the Code of Federal Regulations published by the FDA (Food and Drug Administration, USA) according to the manufacturer's declaration.
USP	**United States Pharmacopeial Convention (USP) (valid for the variable code PL04)** All wetted materials are biocompatible according to the manufacturer's declaration.

3.8. Others

Oxygen

Conformity	Description
O_2	**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.

Safety shut-off valves

Approval	Description
DIN Geprüft	**Safety shut-off valves as a piece of equipment with safety function according to DIN EN IS0 23553-1 (valid for the variable code PF15)** The automatic and semi-automatic valves are suitable for use with oil, according to the manufacturer's declaration.

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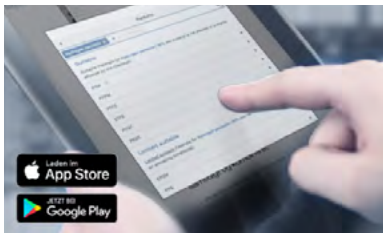
Fuel gases

Conformity	Description
CE	**Fuel gases (valid for the variable code PO19)** The products comply with: • Regulation (EU) 2016/426 – Appliances burning gaseous fuels and • DVGW DIN EN 161 (Automatic shut-off valves for gas burners and gas appliances) and • DIN EN 16678, Class A or Class D (Safety and control devices for gas burners and gas burning appliances – Automatic shut-off valves for operating pressure of above 500 kPa up to and including 6300 kPa)
DVGW	**Optional: DIN EN 549:2023-07 certification** The wetted valve seals are compliant with DIN EN 549:2023-07 (Rubber materials for seals and diaphragms for gas appliances and gas equipment) for medium temperatures of -20 °C…+125 °CC.

4. Materials

4.1. Bürkert resistApp



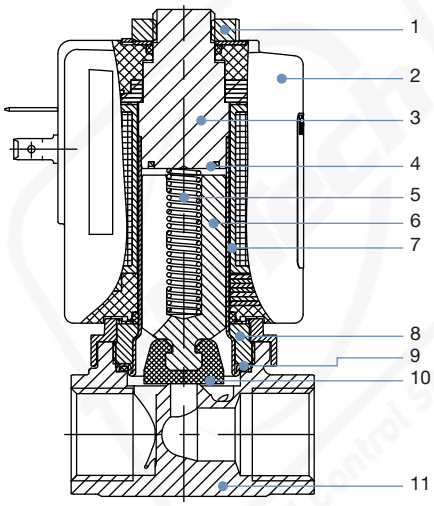
Bürkert resistApp – Chemical resistance chart

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. Standard version

Elastomer seal version up to 435 psi



No.	Element	Material
1	Locknut	DIN 176 thick-film passivated or stainless steel
2	Coil	Epoxy
3	Stopper	Stainless steel 1.4113/434 [1.)]
4	Shading ring	Copper (brass body) Silver (stainless steel body)
5	Spring	Stainless steel 1.4310/301 [1.)]
6	Plunger	Stainless steel 1.4113/434 [1.)]
7	Guide tube	Stainless steel 1.4303/305/308 [1.)]
8	Nipple	Brass, stainless steel 1.4305/303 [1.)]
9	Seal	FKM, PEEK (EPDM on request)
10	Seat seal	FKM (EPDM on request)
11	Housing	Brass, stainless steel 1.4404/316L [1.)] (CF3M)

1.) Material designation according to AISI

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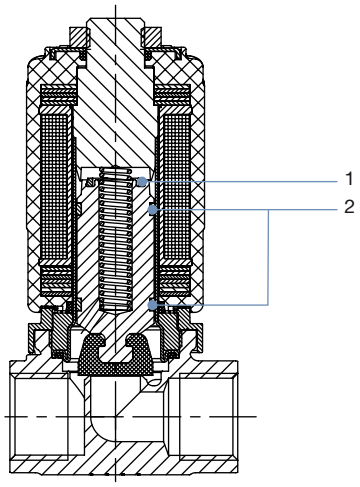
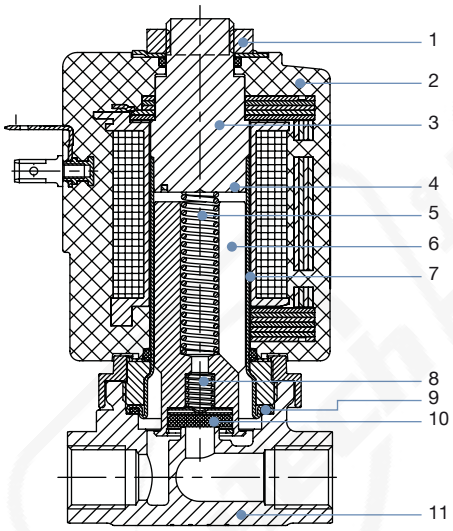
Version with increased lifespan (NF39)

Note:
All parts are the same as standard, but with two additional parts as follows.



No.	Element	Material
1	Damping ring	PEEK
2	Glider	PTFE carbon filled

Version PTFE pendulum seal up to 1450 psi



No.	Element	Material
1	Locknut	DIN 176 thick-film passivated or stainless steel
2	Coil	Epoxy
3	Stopper	Stainless steel 1.4113/434 [1.)]
4	Shading ring	Silver (stainless steel body)
5	Spring	Stainless steel 1.4310/301 [1.)]
6	Core	Stainless steel 1.4113/434 [1.)]
7	Guide tube	Stainless steel 1.4303/305/308 [1.)]
8	Spring	Stainless steel 1.4310/301 [1.)]
9	Seat	FKM, PEEK (EPDM on request)
10	Seat seal	PTFE pendulum seal
11	Housing	Brass, stainless steel 1.4404/316L [1.)] (CF3M)

1.) Material designation according to AISI

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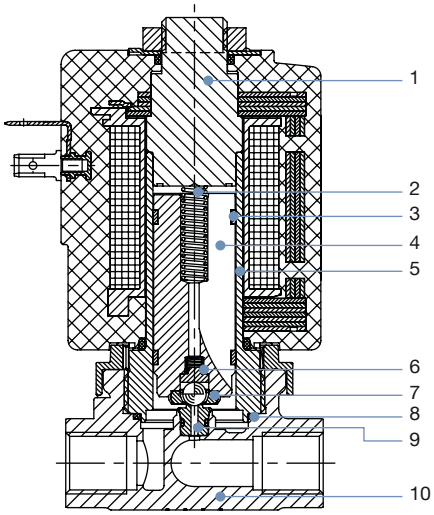
4.3. High pressure version up to 3626 psi (PN25) or 2321 psi (PN16)

Note:
High pressure version from 1958 psi , circuit function A

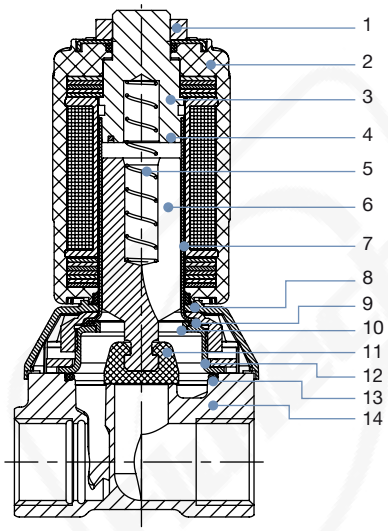


No.	Element	Material
1	Stopper	Stainless steel 1.4523/316 1.)
2	Compression springs	Stainless steel 1.4310/301 1.)
3	Glider	PTFE
4	Plunger	Stainless steel 1.4113/434 1.)
5	Armature guide tube	Stainless steel 1.4571/316 Ti 1.)
6	Ball seat	Stainless steel 1.4305/303 1.)
7	Seat seal	Ceramic ball
8	O-rings	FKM
9	Seat	PEEK
10	Housing	Stainless steel 1.4404/316L 1.) (CF3M) only in ¼" G and NPT

1.) Material designation according to AISI

4.4. Version DN 13

Version DN 13 standard



No.	Element	Material
1	Locknut	DIN 176 thick-film passivated or stainless steel
2	Coil	Epoxy
3	Stopper	Stainless steel 1.4113/434 1.)
4	Shading ring	Copper (brass body) Silver (stainless steel body)
5	Spring	Stainless steel 1.4310/301 1.)
6	Core	Stainless steel 1.4113/434 1.)
7	Guide tube	Stainless steel 1.4303/305/308 1.)
8	Hood	PA6
9	Seal	FKM, EPDM
10	Support ring	PPS Fortron
11	Core seal	FKM, EPDM, NBR
12	Cover	DN 10…DN 25 stainless steel 1.4301/304 1.)
13	Seal	FKM, EPDM
14	Housing	Brass, stainless steel 1.4408/316 1.)

1.) Material designation according to AISI

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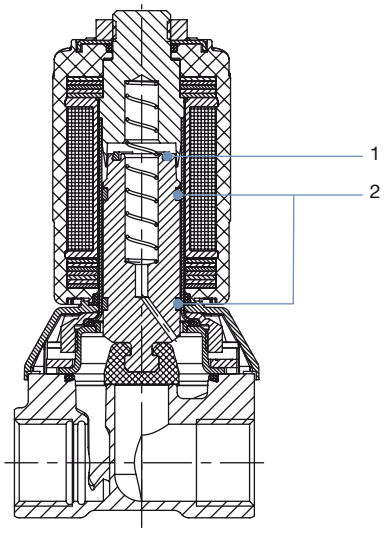
Version DN 13 with increased lifespan (NF39)

Note:
All parts are the same as standard, but with two additional parts as follows.



No.	Element	Material
1	Damping ring	PEEK
2	Glider	PTFE carbon filled

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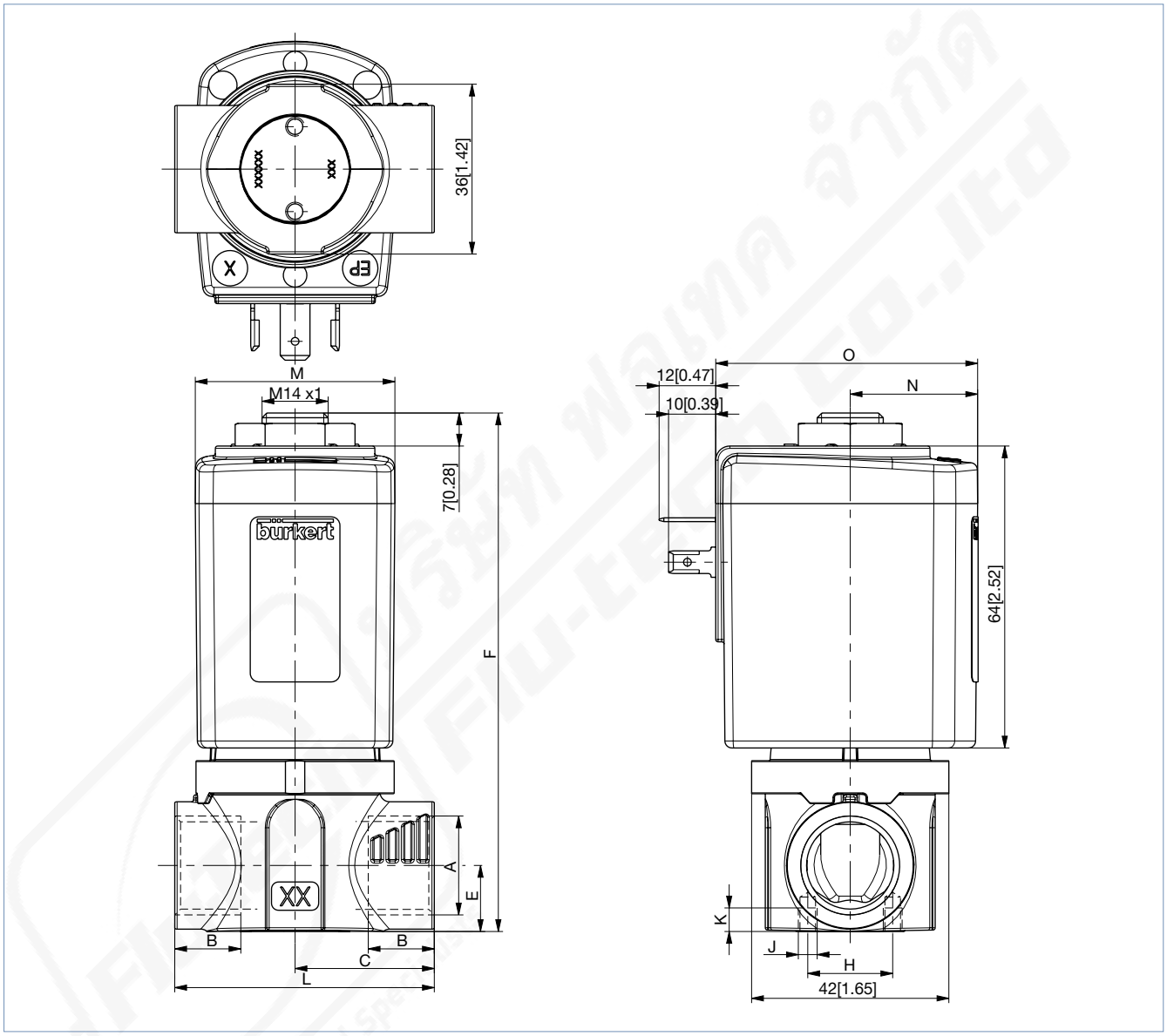
5. Dimensions

5.1. Standard version

Threaded version

Note:
Dimensions in mm [inch]



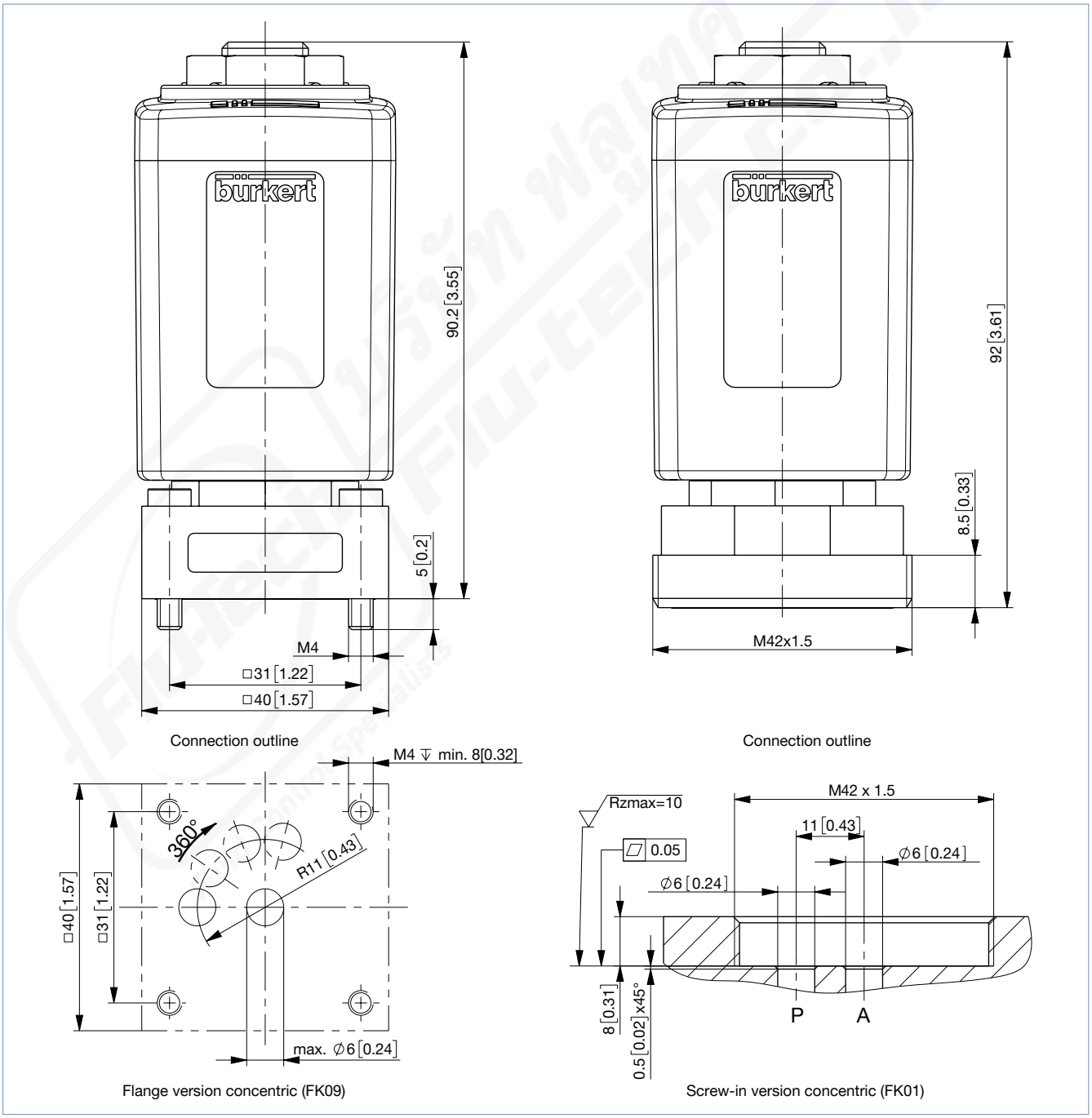
Version	A	B		C		E		F		H		J	K		L	
	[Zoll]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[mm]	[in]	[mm]	[in]
Standard	G ¼	12	0.47	27.5	1.08	10	0.39	105	4.13	18	0.71	M4	5	0.2	55	2.17
	NPT ¼	10	0.39													
	RC ¼	9.7	0.38													
	G ⅜	12	0.47	27.5	1.08	12	0.47	108	4.25	18	0.71	M4	5	0.2	55	2.17
	NPT ⅜	10.3	0.41													
	RC ⅜	10.1	0.4													
	G ½	14	0.55	29.5	1.16	14	0.55	110	4.33	18	0.71	M4	5	0.2	55	2.17
	NPT ½	13.7	0.54													
	RC ½	13.2	0.52													
AG39	G ⅜	12	0.47	37.5	1.48	14	0.55	110	1.33	–	–	–	–	–	75	2.95
	G ½	14.5	0.57	37.5	1.48	14	0.55	110	4.33	–	–	–	–	–	75	2.95

Version	A	B		C		E		F		H		J	K		L	
	[Zoll]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[mm]	[in]	[mm]	[in]
AG48	G ⅛	8	0.32	20	0.79	10	0.39	105	4.13	15	0.59	M5	7	0.28	40	1.58
	G ¼	12	0.47	20	0.79	10	0.39	105	4.13	15	0.59	M5	7	0.28	40	1.58

Coil size	M		N		O	
	[mm]	[in]	[mm]	[in]	[mm]	[in]
L	65	2.56	37.5	1.48	72	2.83
K	42	1.65	27	1.06	55.5	2.19

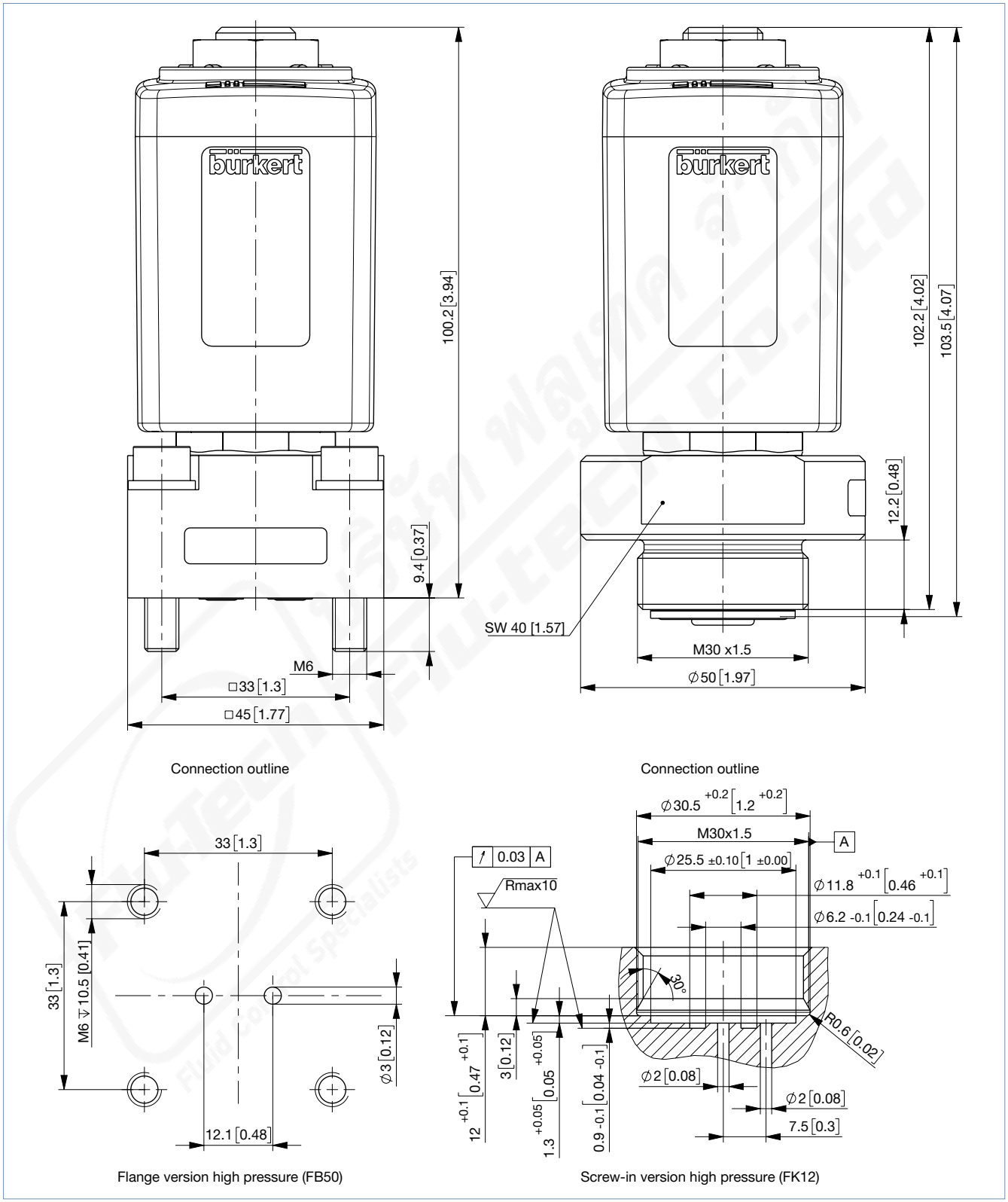
Flange and screw-in version

Note:
Dimensions in mm [inch]



Flange and screw-in version high pressure up to 3626 psi (PN25) or 2321 psi (PN16)

Note:
Dimensions in mm [inch]



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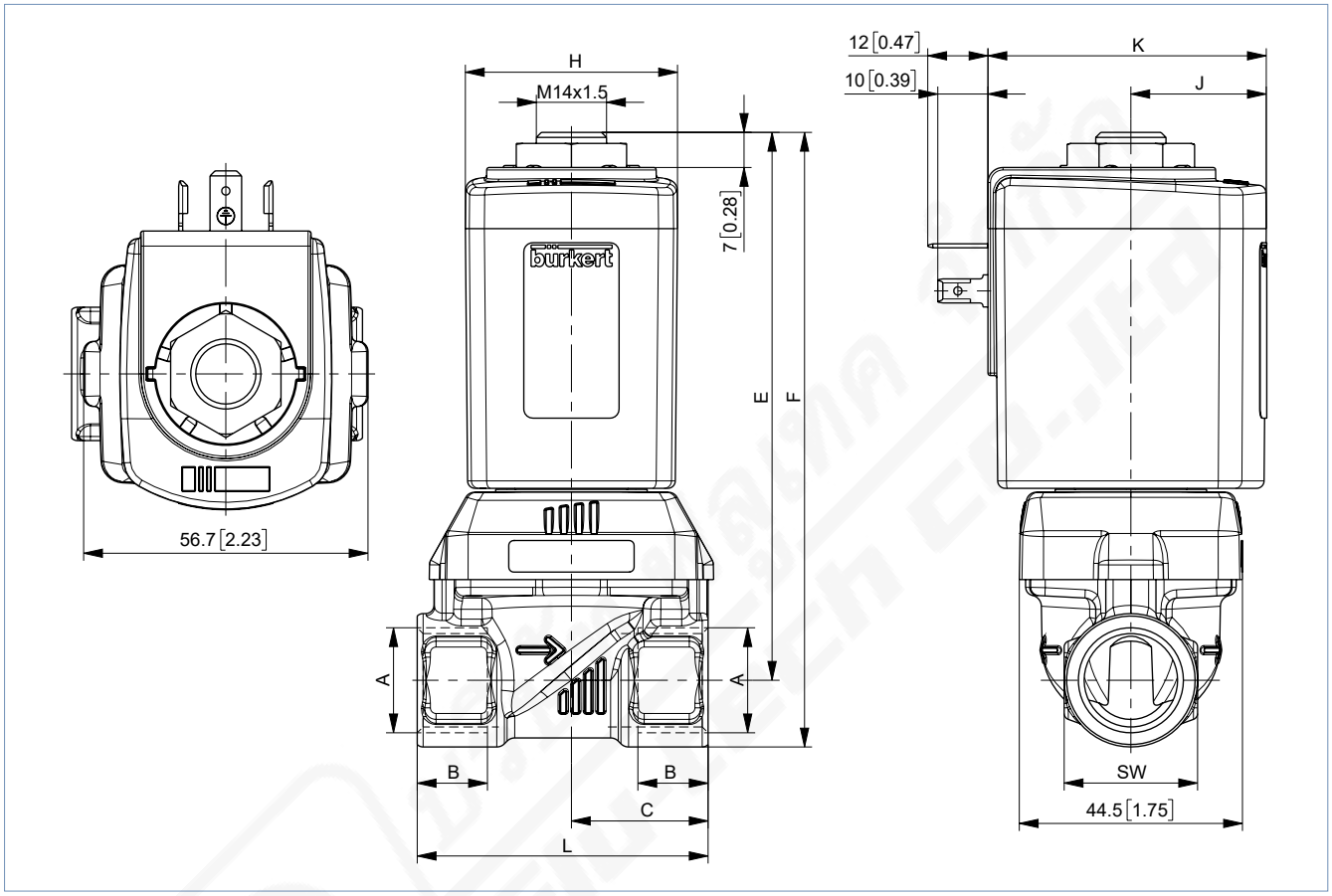
5.2. Version DN 13

Note:
Dimensions in mm [inch]



Body material	A	B		C		E		F		L		SW	
	[Zoll]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
Brass	G ½	14	0.55	27.25	1.07	109.3	4.3	122.6	4.83	58	2.28	27	1.06
	NPT ½	13.7	0.54										
	RC ½	13.2	0.52										
Stainless steel	G ½	14	0.55	32.5	1.28	109.3	4.3	122.6	4.83	65	2.56	27	1.06
	NPT ½	13.7	0.54										
	RC ½	13.2	0.52										
Brass/ stainless steel	G ¾	16	0.63	32.5	1.28	111.3	4.38	127.6	5.02	65	2.56	32	1.26
	NPT ¾	14	0.55										
	RC ¾	14.5	0.57										

Coil size	H		J		K	
	[mm]	[in]	[mm]	[in]	[mm]	[in]
L	65	2.56	37.5	1.48	72	2.83
K	42	1.65	27	1.06	55.5	2.19

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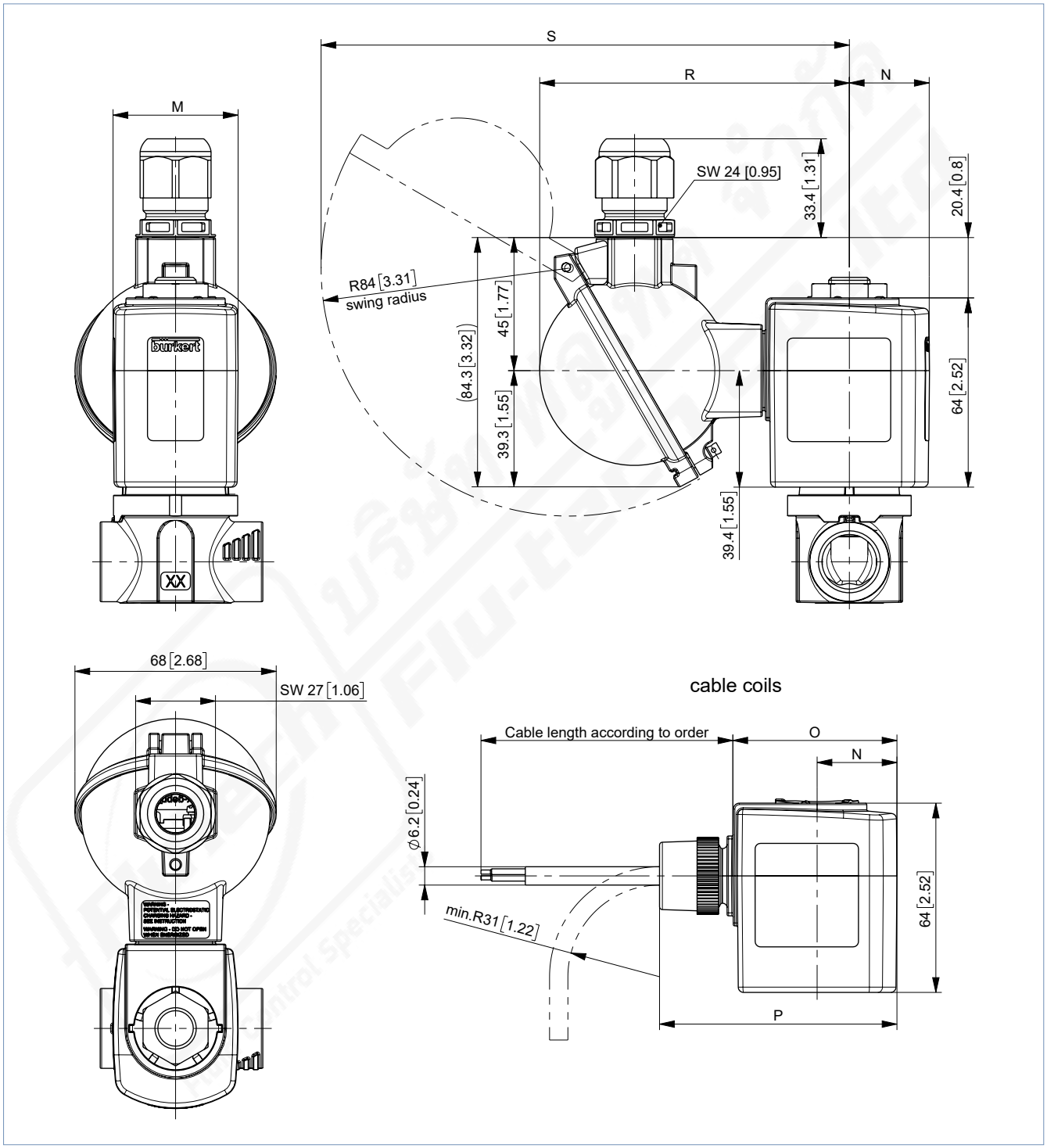
5.3. Coil UL Listed (cULus) for hazardous locations, Class I, Division 2

Note:

- Dimensions in mm [inch]
- The dimensions only apply to the Ex version of the solenoid coil. See the versions listed above for all other dimensions.



Coil size	M		N		O		P		R		S	
	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
L	65	2.56	37.5	1.48	72	2.83	97	3.82	110.8	4.36	185.8	7.31
K	42	1.65	27	1.06	55.5	2.19	80.3	3.16	104.8	4.13	179.8	7.08

6. Performance specifications

6.1. Power consumption

Coil size	AC			DC		Kick and Drop coil AC/DC [1.)]		
	Inrush power	Holding power		Cold performance	Warm performance	Cold performance inrush power	Cold performance holding power	Warm performance holding power
[mm]	[VA]	[VA]	[W]	[W]	[W]	[W] 500 ms	[W]	[W]
42 (K)	150	37	16	21	16	85	8.5	7
42 (K) ATEX	–	–	–	15	12	44	6.5	5.5
65 (L)	–	–	–	28	21	–	–	–

1.) Kick and Drop coil: Integrated electronics for short-term power increase and reduction in dual coil technology

7. Product accessories

7.1. Special tool to turn the terminal box

Note:
Refer to chapter **"Special tool to turn the terminal box" on page 28** for more order information.

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

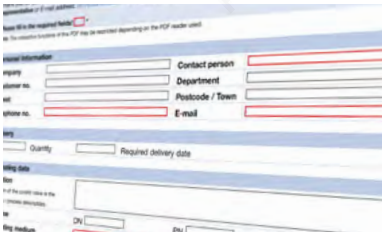
8.2. Bürkert product filter

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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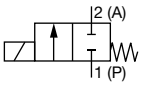
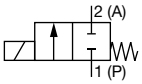
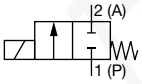
8.4. Ordering chart standard version elastomer seal up to 435 psi

UL Recognized (cURus), normally closed

Note:

- Please note that the cable plug **Type 2518** ▶ is included. UL Listed and other versions are available on request. For details see **"Cable plug Type 2518, form A according to DIN EN 175301-803" on page 27**.
- Further variants with alternative voltages, G or RC inner thread, as flange or screw-in version, seal material EPDM/EPDM are available on request.

Circuit function	Port connection	Orifice	C_V value water	Pressure range water (MAWP [1.])	Voltage/ Frequency	Article no.	
		[mm]	[gal/min]	[psi]	[V/Hz]	Brass body FKM seal	Stainless steel body FKM seal
Housing material brass or stainless steel, NPT-inner thread, seal material FKM/FKM							
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	3.0	0.32	0…435	024/DC	463120	463146
				0…406	024/60	o. r.	o. r.
					120/60	463121	463147
					240/60	307812	307838
		4.0	0.62	0…174	024/DC	463122	463148
				0…189	024/60	o. r.	o. r.
					120/60	463123	463149
					240/60	307813	307839
		6.0	1.1	0…44	024/DC	463126	463152
				0…80	024/60	333191	o. r.
					120/60	463127	463153
					240/60	307814	307840
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ⅜	3.0	0.32	0…435	024/DC	463128	463154
				0…406	024/60	o. r.	o. r.
					120/60	463129	463155
					240/60	307815	307841
		4.0	0.62	0…174	024/DC	463130	463156
				0…189	024/60	o. r.	o. r.
					120/60	463131	463157
					240/60	307816	307842
		6.0	1.1	0…44	024/DC	463134	463160
				0…80	024/60	o. r.	o. r.
					120/60	463135	463161
					240/60	307817	307843
		8.0	1.9	0…15	024/DC	463136	463162
				0…33	024/60	o. r.	o. r.
					120/60	463137	463163
					240/60	307818	307844
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ½	6.0	1.1	0…44	024/DC	463138	307763
				0…80	024/60	o. r.	o. r.
					120/60	463139	307795
					240/60	307819	307845
		8.0	1.9	0…15	024/DC	463140	463164
				0…33	024/60	o. r.	o. r.
					120/60	463141	463165
					240/60	307820	307847
		10.0	2.1	0…6	024/DC	463142	463166
				0…18.9	024/60	o. r.	o. r.
					120/60	463143	463167
					240/60	307821	307848
		12.0	2.3	0…14.5	024/60	–	o. r.
					120/60	–	463169
					240/60	–	307849

o. r. = on request

– = not available

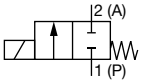
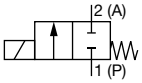
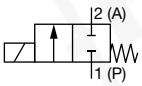
1.) Maximum allowable working pressure

DTS 1000576209 EN Version: B Status: RL (released | freigegeben | validé) printed: 15.05.2024

UL Listed (cULus), normally closed

Note:

- Please note that the cable plug **Type 2509** ▶ is included. UL Recognized and other versions are available on request. For details see **"Cable plug Type 2509, form A according to DIN EN 175301-803" on page 27**.
- Further variants with alternative voltages, G or RC inner thread, as flange or screw-in version, seal material EPDM/EPDM are available on request.

Circuit function	Port connection	Orifice	C_v value water	Pressure range water (MAWP 1.))	Voltage/ Frequency	Article no.	
		[mm]	[gal/min]	[psi]	[V/Hz]	Brass body FKM seal	Stainless steel body FKM seal
Housing material brass or stainless steel, NPT-inner thread, seal material FKM/FKM							
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	3.0	0.32	0…435	024/DC	307748	307764
				0…406	024/60	328455	o. r.
					120/60	307780	307796
					240/60	307822	307850
		4.0	0.62	0…174	024/DC	307749	307765
				0…189	024/60	o. r.	o. r.
					120/60	307781	307797
					240/60	307823	307852
		6.0	1.1	0…44	024/DC	307750	307766
				0…80	024/60	o. r.	o. r.
					120/60	307782	307798
					240/60	307824	307853
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ⅜	3.0	0.32	0…435	024/DC	307751	307767
				0…406	024/60	o. r.	o. r.
					120/60	307783	307799
					240/60	307825	307854
		4.0	0.62	0…174	024/DC	307752	307768
				0…189	024/60	o. r.	o. r.
					120/60	307784	307800
					240/60	307826	307855
		6.0	1.1	0…44	024/DC	307753	307769
				0…80	024/60	o. r.	o. r.
					120/60	307785	307801
					240/60	307827	307856
		8.0	1.9	0…15	024/DC	307754	307770
				0…33	024/60	o. r.	o. r.
					120/60	307786	307802
					240/60	307828	307857
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ½	6.0	1.1	0…44	024/DC	307755	307771
				0…80	024/60	o. r.	o. r.
					120/60	307787	307803
					240/60	307829	307858
		8.0	1.9	0…15	024/DC	307756	307772
				0…33	024/60	o. r.	o. r.
					120/60	307788	307804
					240/60	307830	307859
		10.0	2.1	0…6	024/DC	307757	307773
				0…18.9	024/60	o. r.	o. r.
					120/60	307789	307805
					240/60	307831	307860
		12.0	2.3	0…14.5	024/60	–	o. r.
					120/60	–	307806
					240/60	–	307861

o. r. = on request

– = not available

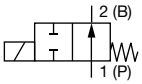
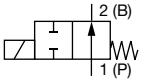
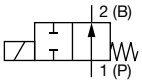
1.) Maximum allowable working pressure

DTS 1000576209 EN Version: B Status: RL (released | freigegeben | validé) printed: 15.05.2024

Coil UL Recognized (cURus), normally open

Note:

- Please note that the cable plug **Type 2518** ▶ is included. Other versions are available on request. For details see **"Cable plug Type 2518, form A according to DIN EN 175301-803" on page 27**.
- Please note that only the electrical component as in the solenoid coil is UL Recognized.
- Further variants with alternative voltages, G or RC inner thread, as flange or screw-in version and other seal materials are available on request.

Circuit function	Port connection	Orifice	C_v value water	Pressure range water (MAWP [1])	Voltage/ Frequency	Article no.	
						Brass body FKM seal	Stainless steel body FKM seal
		[mm]	[gal/min]	[psi]	[V/Hz]		
Housing material brass or stainless steel, NPT-inner thread, seal material FKM/FKM							
CF B 2/2-way solenoid valve Direct-acting Normally open 	NPT ¼	3.0	0.32	0…232	24/DC	o. r.	o. r.
					120/60	o. r.	o. r.
		4.0	0.62	0…145	24/DC	o. r.	o. r.
					120/60	o. r.	20031716
		6.0	1.1	0…87	24/DC	o. r.	o. r.
					120/60	o. r.	o. r.
CF B 2/2-way solenoid valve Direct-acting Normally open 	NPT ⅜	6.0	1.1	0…87	24/DC	o. r.	o. r.
					120/60	o. r.	o. r.
		8.0	1.9	0…4	24/DC	o. r.	o. r.
					120/60	o. r.	o. r.
CF B 2/2-way solenoid valve Direct-acting Normally open 	NPT ½	8.0	1.9	0…44	24/DC	307761	307778
					120/60	307793	307810
		10.0	2.1	0…29	24/DC	307762	307779
					120/60	307794	307811
		12.0	2.3	0…14.5	24/DC	–	o. r.
					120/60	–	o. r.

o. r. = on request
– = not available
1.) Maximum allowable working pressure

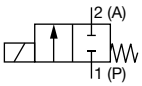
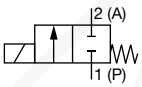
DTS 1000576209 EN Version: B Status: RL (released | freigegeben | validé) printed: 15.05.2024

8.5. Ordering chart standard version pendulum seal up to 1450 psi

UL Recognized (cURus), normally closed

Note:

- Please note that the cable plug **Type 2518** ▶ is included. UL Listed and other versions are available on request. For details see **"Cable plug Type 2518, form A according to DIN EN 175301-803" on page 27**.
- Further variants with alternative voltages, G or RC inner thread, as flange or screw-in version, seal material EPDM/EPDM are available on request.

Circuit function	Port connection	Orifice	C_v value water	Pressure range water (MAWP [1,])	Voltage/ Frequency	Article no.	
						Brass body FKM seal	Stainless steel body FKM seal
		[mm]	[gal/min]	[psi]	[V/Hz]		
Housing material brass or stainless steel, NPT-inner thread, seal material PTFE/PEEK							
CF A 2/2-way solenoid valve Direct-acting Normally closed  	NPT ¼	1.5	0.16	0…1450	024/DC	o. r.	o. r.
				0…1450	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		2.0	0.16	0…870	024/DC	o. r.	o. r.
				0…1160	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		3.0	0.32	0…406	024/DC	o. r.	o. r.
				0…696	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		4.0	0.62	0…174	024/DC	o. r.	o. r.
				0…319	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		6.0	1.1	0…44	024/DC	o. r.	20029435
				0…102	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
CF A 2/2-way solenoid valve Direct-acting Normally closed  	NPT ⅜	3.0	0.32	0…406	024/DC	o. r.	o. r.
				0…696	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		4.0	0.62	0…174	024/DC	o. r.	o. r.
				0…319	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		6.0	1.1	0…44	024/DC	o. r.	463184
				0…102	024/60	o. r.	o. r.
					120/60	o. r.	463185
					240/60	o. r.	o. r.
		8.0	1.9	0…6	024/DC	o. r.	463186
				0…29	024/60	o. r.	o. r.
					120/60	o. r.	463187
					240/60	o. r.	o. r.

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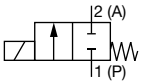
Circuit function	Port connection	Orifice	C_v value water	Pressure range water (MAWP [1.])	Voltage/ Frequency	Article no.	
						Brass body FKM seal	Stainless steel body FKM seal
		[mm]	[gal/min]	[psi]	[V/Hz]		
CF A 2/2-way solenoid valve Direct-acting Normally closed  	NPT ½	6.0	1.1	0…44	024/DC	o. r.	o. r.
				0…102	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		8.0	1.9	0…6	024/DC	o. r.	o. r.
				0…29	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		10.0	2.1	0…1.45	024/DC	o. r.	463188
				0…17	024/60	o. r.	o. r.
					120/60	o. r.	463189
					240/60	o. r.	o. r.
		12.0	2.3	0…10.9	024/DC	–	463190
					120/60	–	463191
					240/60	–	o. r.

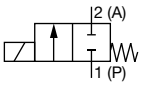
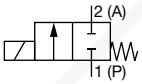
o. r. = on request
– = not available
1.) Maximum allowable working pressure

DTS 1000576209 EN Version: B Status: RL (released | freigegeben | validé) printed: 15.05.2024

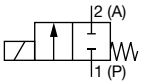
UL Listed (cULus), normally closed

Note:

- Please note that the cable plug **Type 2509** ▶ is included. UL Recognized and other versions are available on request. For details see **"Cable plug Type 2509, form A according to DIN EN 175301-803" on page 27**.
- Further variants with alternative voltages, G or RC inner thread, as flange or screw-in version, seal material EPDM/EPDM are available on request.

Circuit function	Port connection	Orifice	C_v value water	Pressure range water (MAWP [1,)]	Voltage/ Frequency	Article no.	
						Brass body FKM seal	Stainless steel body FKM seal
		[mm]	[gal/min]	[psi]	[V/Hz]		
Housing material brass or stainless steel, NPT-inner thread, seal material PTFE/PEEK							
CF A 2/2-way solenoid valve Direct-acting Normally closed  	NPT ¼	1.5	0.16	0…1450	024/DC	o. r.	o. r.
				0…1450	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		2.0	0.16	0…870	024/DC	o. r.	o. r.
				0…1160	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		3.0	0.32	0…406	024/DC	o. r.	o. r.
				0…696	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		4.0	0.62	0…174	024/DC	o. r.	298514
				0…319	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		6.0	1.1	0…44	024/DC	o. r.	o. r.
				0…102	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
CF A 2/2-way solenoid valve Direct-acting Normally closed  	NPT ⅜	3.0	0.32	0…406	024/DC	o. r.	o. r.
				0…696	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		4.0	0.62	0…174	024/DC	o. r.	o. r.
				0…319	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		6.0	1.1	0…44	024/DC	o. r.	20015239
				0…102	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		8.0	1.9	0…6	024/DC	o. r.	o. r.
				0…29	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.

DTS 1000576209 EN Version: B Status: RL (released | freigegeben | validé) printed: 15.05.2024

Circuit function	Port connection	Orifice	C_v value water	Pressure range water (MAWP 1.))	Voltage/ Frequency	Article no.	
						Brass body FKM seal	Stainless steel body FKM seal
		[mm]	[gal/min]	[psi]	[V/Hz]		
CF A 2/2-way solenoid valve Direct-acting Normally closed  	NPT ½	6.0	1.1	0…44	024/DC	o. r.	o. r.
				0…102	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		8.0	1.9	0…6	024/DC	20012783	20018094
				0…29	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		10.0	2.1	0…1.45	024/DC	o. r.	o. r.
				0…17	024/60	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.
		12.0	2.3	0…10.9	024/DC	o. r.	o. r.
					120/60	o. r.	o. r.
					240/60	o. r.	o. r.

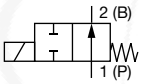
o. r. = on request

1.) Maximum allowable working pressure

Coil UL Recognized (cURus), normally open

Note:

- Please note that the cable plug **Type 2518** ▶ is included. Other versions are available on request. For details see **"Cable plug Type 2518, form A according to DIN EN 175301-803" on page 27**.
- Please note that only the electrical component as in the solenoid coil is UL Recognized.
- Further variants with alternative voltages, G or RC inner thread, as flange or screw-in version and other seal materials are available on request.

Circuit function	Port connection	Orifice	C_v value water	Pressure range water (MAWP 1.))	Voltage/ Frequency	Article no.	
						Brass body FKM seal	Stainless steel body FKM seal
		[mm]	[gal/min]	[psi]	[V/Hz]		
Housing material stainless steel, NPT-inner thread, seal material PTFE/PEEK							
CF B 2/2-way solenoid valve Direct-acting Normally open  	NPT ¼	1.5	0.8	0…870	024/DC	o. r.	o. r.
					120/60	o. r.	o. r.
		2.0	0.16	0…435	024/DC	o. r.	o. r.
					120/60	o. r.	o. r.
		3.0	0.32	0…232	024/DC	o. r.	o. r.
					120/60	o. r.	o. r.
		4.0	0.62	0…145	024/DC	o. r.	o. r.
					120/60	o. r.	o. r.
	NPT ⅜	4.0	0.62	0…145	024/DC	o. r.	o. r.
					120/60	o. r.	o. r.
		6.0	1.1	0…87	024/DC	o. r.	o. r.
					120/60	o. r.	o. r.
	NPT ½	6.0	1.1	0…87	024/DC	–	o. r.
					120/60	–	o. r.

o. r. = on request

– = not available

1.) Maximum allowable working pressure

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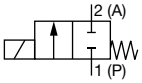
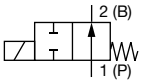
8.6. Ordering chart high pressure version up to 3626 psi (PN25) or 2321 psi (PN16)

Coil UL Recognized (cURus)

Note:

- Please note that the cable plug **Type 2518** ▶ is included. Other versions are available on request. For details see **"Cable plug Type 2518, form A according to DIN EN 175301-803" on page 27**.
- Please note that only the electrical component as in the solenoid coil is UL Recognized.
- Further variants with alternative voltages, NPT or RC inner thread, as flange or screw-in version, seal material PTFE/FKM or PTFE/EPDM are available on request.

Circuit function	Port connection	Orifice	C_v value water	Pressure range (MAWP [1.])			Article no.		
				Water	Oil	Air	24/DC	24/60	120/60
		[mm]	[gal/min]	[psi]	[psi]	[psi]	[V/Hz]	[V/Hz]	[V/Hz]
Housing material stainless steel, NPT-inner thread, seal material PEEK/FKM, cable head with integrated rectifier for AC part of delivery									
High pressure version with ball sealing									
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	1.0	0.03	0…3626	0…3626	0…3626	308819	–	o. r.
				0…3626	0…2901	0…3626	–	o. r.	–
		1.5	0.08	0…2176	0…1160	0…2176	308842	–	o. r.
				0…2176	0…1015	0…2176	–	o. r.	–
CF B 2/2-way solenoid valve Direct-acting Normally open 	NPT ¼	1.0	0.03	0…2901	0…2176	0…3626	311570	o. r.	o. r.
		1.5	0.08	0…1450	0…1160	0…1885	311576	o. r.	o. r.

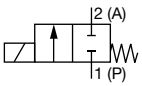
o. r. = on request
– = not available
1.) Maximum allowable working pressure

8.7. Ordering chart version DN 13 with increased lifespan (NF39)

Coil UL Recognized (cURus)

Note:

- Cable plug **Type 2518** ▶ is included. Other versions are available on request. For details see **"Cable plug Type 2518, form A according to DIN EN 175301-803" on page 27**.
- The electrical component as in the solenoid coil is UL Recognized.
- Further variants with alternative voltages, stainless steel body, ¾" connection, seal material EPDM/EPDM are available on request.
- The following applies to all subsequent values: orifice size 13 mm and C_v value water 4.6 gal/min.

Circuit function	Port connection	Orifice	C_v value water	Pressure range (MAWP [1.])		Article no.		
				DC	AC	024/DC	120/60	240/60
		[mm]	[gal/min]	[psi]	[psi]	[V/Hz]	[V/Hz]	[V/Hz]
Housing material brass with NPT-inner thread seal material FKM/FKM								
For liquid and gaseous medium								
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ½	13.0	4.6	0…2.18	0…2.18	315095	315097	315100
				0…10.88	–	315102	–	–

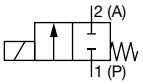
– = not available
1.) Maximum allowable working pressure

8.8. Ordering chart coil UL Listed (cULus) for hazardous locations, Class I, Division 2

Standard version with elastomer seal up to 435 psi and cable coil

Note:

- Further variants with normally open, alternative voltages, stainless steel body, G- or RC-inner thread, seal material EPDM/EPDM are available on request.
- The Kick and Drop coil features integrated electronics for short-term power increase and decrease in double-coil technology.
- With 3 m / 9' 10" cable as standard. Other lengths or version with terminal box are available on request.

Circuit function	Port connection	Orifice	C_v value water	Medium pressure standard (MAWP 1.))	Article no.		Medium pressure Kick and Drop coil (MAWP 1.))	Article no. Kick and Drop coil	
					024 / AC/DC	120 / AC		024 / AC/DC	120 / AC
		[mm]	[gal/min]	[psi]	[V/Hz]	[V/Hz]	[psi]	[V/Hz]	[V/Hz]
Body material brass with NPT-inner thread, seal material FKM/FKM									
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	3.0	0.32	0…435	o. r.	o. r.	0…435	o. r.	o. r.
		4.0	0.62	0…145	o. r.	o. r.	0…435	o. r.	o. r.
		6.0	1.1	0…22	o. r.	o. r.	0…87	o. r.	o. r.
	NPT ½	8.0	1.8	0…14.5	o. r.	o. r.	0…44	o. r.	o. r.
		10.0	2.1	0…8.7	o. r.	o. r.	0…29	o. r.	o. r.

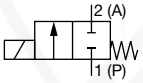
o. r. = on request

1.) Maximum allowable working pressure

Standard version with pendulum seal up to 1450 psi and cable coil

Note:

- Further variants with normally open, alternative voltages, brass housing, G- or RC-inner thread, seal material PTFE/FKM or PTFE/EPDM are available on request.
- The Kick and Drop coil features integrated electronics for short-term power increase and decrease in double-coil technology.
- With 3 m/9' 10" cable as standard. Other lengths or version with terminal box are available on request.

Circuit function	Port connection	Orifice	C_v value water	Medium pressure standard (MAWP 1.))	Article no.		Medium pressure Kick and Drop coil (MAWP 1.))	Article no. Kick and Drop coil	
					024 / AC/DC	120 / AC		024 / AC/DC	120 / AC
		[mm]	[gal/min]	[psi]	[V/Hz]	[V/Hz]	[psi]	[V/Hz]	[V/Hz]
Body material stainless steel with NPT-inner thread, seal material PTFE/PEEK									
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	2.0	0.16	0…870	o. r.	o. r.	0…1450	20050825	o. r.
		3.0	0.32	0…290	o. r.	o. r.	0…725	20024385	o. r.
		4.0	0.62	0…116	o. r.	o. r.	0…363	o. r.	o. r.
	NPT ½	6.0	0.84	0…21.8	o. r.	o. r.	0…87	o. r.	o. r.
		8.0	1.1	0…11.6	o. r.	o. r.	0…36	o. r.	o. r.
		10.0	1.8	0…7.3	o. r.	o. r.	0…21.8	o. r.	o. r.
		12.0	2.1	0…4.35	o. r.	o. r.	0…17.4	o. r.	o. r.

o. r. = on request

1.) Maximum allowable working pressure

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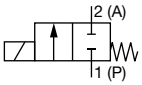
Version DN 13 with cable coil

Note:

- Further variants with alternative voltages, stainless steel body, G- and RC-inner thread, ¾" connection, seal material EPDM/EPDM or PTFE/PEEK are available on request.
- The Kick and Drop coil features integrated electronics for short-term power increase and decrease in double-coil technology.
- With 3 m/9' 10" cable as standard. Other lengths or version with terminal box are available on request.

Circuit function	Port connection	Orifice	C_v value water	Medium pressure Kick and Drop coil (MAWP [1,)]	Article no. Kick and Drop coil	
					024 / AC/DC	120/AC
		[mm]	[gal/min]	[psi]	[V/Hz]	[V/Hz]
Body material brass with NPT-inner thread, seal material FKM/FKM						
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ½	13.0	4.6	0…7.25	o. r.	o. r.

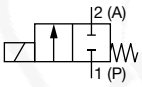
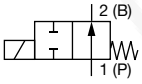
o. r. = on request

1.) Maximum allowable working pressure

High pressure version up to 3626 psi (PN25) or 2321 psi (PN16) with cable coil

Note:

- Further variants with alternative voltages, G- and RC-inner thread, seal material PEEK/EPDM are available on request.
- The Kick and Drop coil features integrated electronics for short-term power increase and decrease in double-coil technology.
- With 3 m/9' 10" cable as standard. Other lengths or version with terminal box are available on request.

Circuit function	Port connection	Orifice	C_v value water	Medium pressure standard (MAWP [1,)]			Article no.		Medium pressure Kick and Drop coil (MAWP [1,)]			Article no. Kick and Drop coil	
				Water	Oil	Air	024 / AC/DC	120 / AC/DC	Water	Oil	Air	024 / AC/DC	120/AC
		[mm]	[gal/min]	[psi]	[psi]	[psi]	[V/Hz]	[V/Hz]	[psi]	[psi]	[psi]	[V/Hz]	[V/Hz]
Body material stainless steel with G-inner thread, seal material PEEK/FKM													
CF A 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	1.0	0.03	0… 2901	0… 2176	0… 3626	o. r.	o. r.	0… 3626	0… 3626	0… 3626	o. r.	o. r.
		1.5	0.08	0… 1160	0… 580	0… 1450	o. r.	o. r.	0… 2321	0… 2321	0… 2321	o. r.	o. r.
CF B 2/2-way solenoid valve Direct-acting Normally open 	NPT ¼	1.0	0.03	–	–	–	–	–	0… 200	0… 160	0… 3626	380794	o. r.
		1.5	0.08	–	–	–	–	–	0… 1450	0… 1160	0… 1885	o. r.	o. r.

o. r. = on request

– = not available

1.) Maximum allowable working pressure

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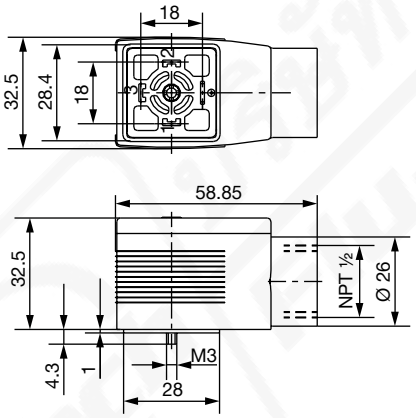
Further versions on request	
Approval Further information can be found in chapter "3. Approvals and conformities" on page 5.	**Temperature** Special temperature ranges
Process connection • G • RC • Cartridge • Manifold	**Voltage** 110/50 and further non-standard voltages

8.9. Ordering chart accessories

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

Note:

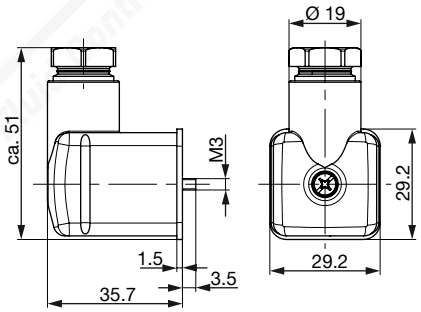
- Dimensions in mm
- Without circuitry (standard)
- The cable plug meets the requirements for UL hazloc Div. 2.
- The cable plug Type 2509 meets the requirements in accordance with UL Listed (UL 429) in assembly with a Bürkert solenoid valve.
- Refer to data sheet **Type 2509** ▶ for more information about the cable plug.

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

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
		With LED (AC/DC)	12…24 V AC/DC	314812
		With LED and varistor (AC/DC)	12…24 V AC/DC	314820
		With rectifier, LED and varistor	12…24 V AC/DC	314816
		Without circuitry (AC/DC) with silicone seal for higher ambient temperature, e.g. steam version (NA07)	0…250 V AC/DC	361687

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Special tool to turn the terminal box

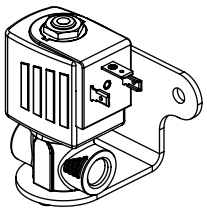
Note:
This special tool is not included in the scope of delivery of the valve.

Description	Components of the set	Article no.
Set SC02-AC10 	• Special wrench • Service manual	293488

Mounting bracket

Note:

- The mounting bracket, two cylinder screws M4x8 and two spring rings are included in the scope of delivery.
- The mounting bracket can be used for all standard and high-pressure versions, including ATEX/IECEx and DIN EN 161 option up to orifice size 12 mm.
- The mounting bracket cannot be used for oil burner versions, DN 13 versions and various special bodies made of solid material.

Description	Article no.
Mounting bracket for Type 6020/6027/6240/6440 	282304

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