DATA SHEET

Type 6027

bürkert
FLUID CONTROL SYSTEMS

Direct-acting 2/2-way plunger valve

- Direct-acting, powerful valve with diameter of up to DN13
- 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 2513
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" (KD) 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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Visit product website

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1. General technical data

Product properties	
Dimensions	Detailed information can be found in chapter “4. Dimensions” on page 9.
Material	
Seal	FKM, EPDM, NBR, PTFE and PEEK
Body	Brass or stainless steel 1.4404/316L
Coil	Epoxy
Orifice	DN 1.0…DN 13.0
Circuit function	A and B Detailed information can be found in chapter “2. Circuit functions” on page 5.
Thermal insulation class of solenoid coil	Epoxy class H
Performance data	
Duty cycle / single valve	100 % continuous rating
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	
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 (MX32) or 160 psi (MX31)	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)
Approvals and certificates	
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
Process/Port connection & communication	
Electrical connection	Acc. to DIN EN 175 301-803 form A for cable plug **Type 2518** ▶ (see “Cable plug Type 2518, form A according to DIN EN 175301-803” on page 26)
Port connection	G ¼, G ⅜, G ½, G ¾, NPT ¼, NPT ⅜, NPT ½, NPT ¾ (RC on request)
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature (max.)	131 °F

1.) Measurement at 87 psi and +68 °F 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

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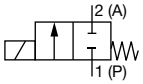
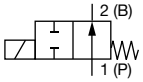
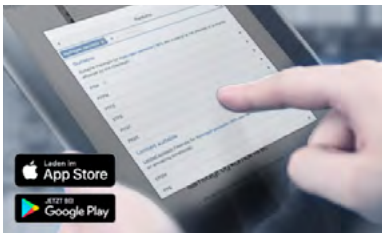
2. Circuit functions

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. Materials

3.1. Chemical Resistance Chart – Bürkert resistApp



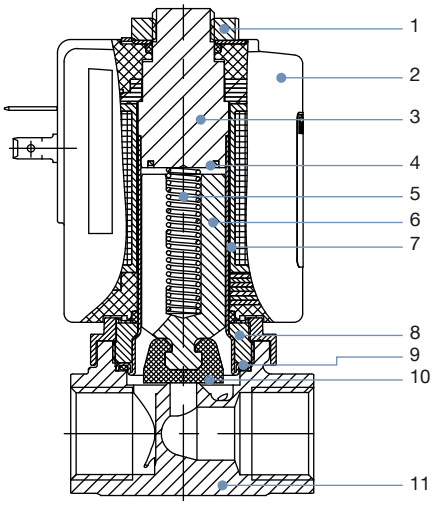
Bürkert resistApp – Chemical Resistance Chart

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

Start Chemical Resistance Check

3.2. Material specifications 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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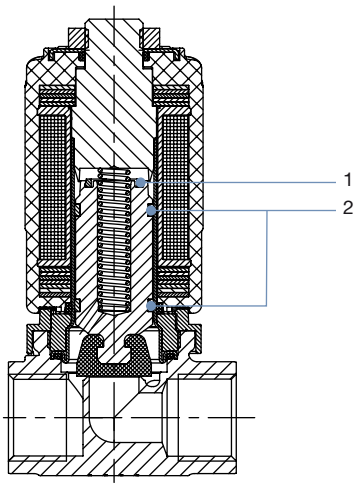
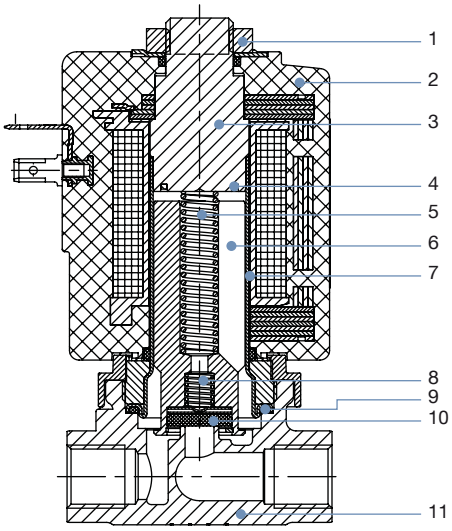
Version with increased lifespan (NF39)

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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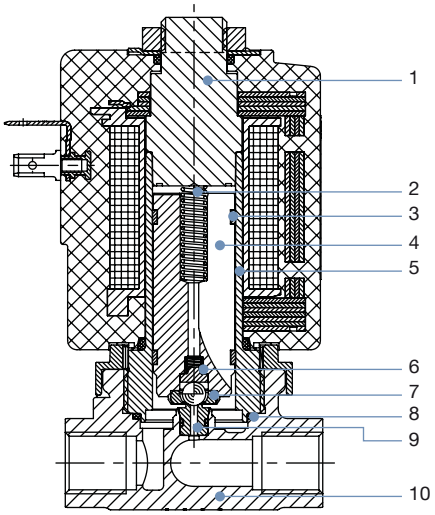
3.3. Material specifications high pressure version up to 3626 psi (MX32) or 2321 psi (MX31)

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

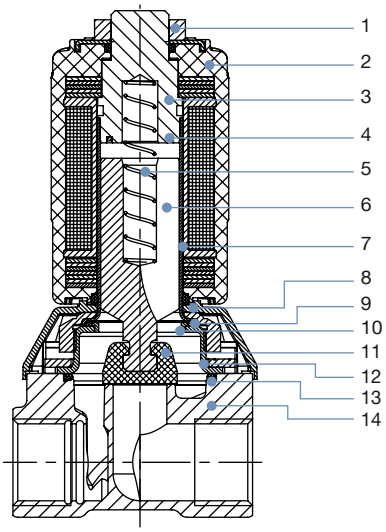


No.	Element	Material
1	Stopper	Stainless steel 1.4523/316[1.)]
2	Compression springs	Stainless steel 1.4310/301[1.)]
3	Glider	PTFE
4	Plunger	Stainless steel 1.4113/434[1.)]
5	Armature guide tube	Stainless steel 1.4571/316 Ti[1.)]
6	Ball seat	Stainless steel 1.4305/303[1.)]
7	Seat seal	Ceramic ball
8	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

3.4. Material specifications 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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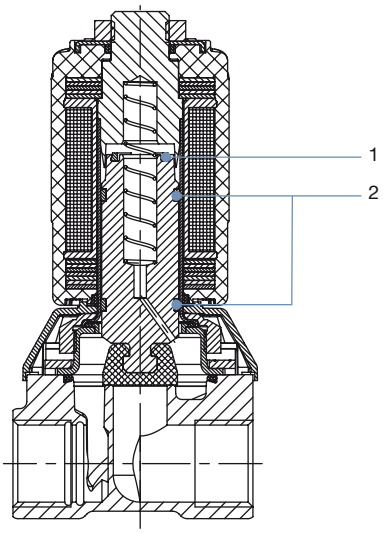
Version DN 13 with increased lifespan (NF39)

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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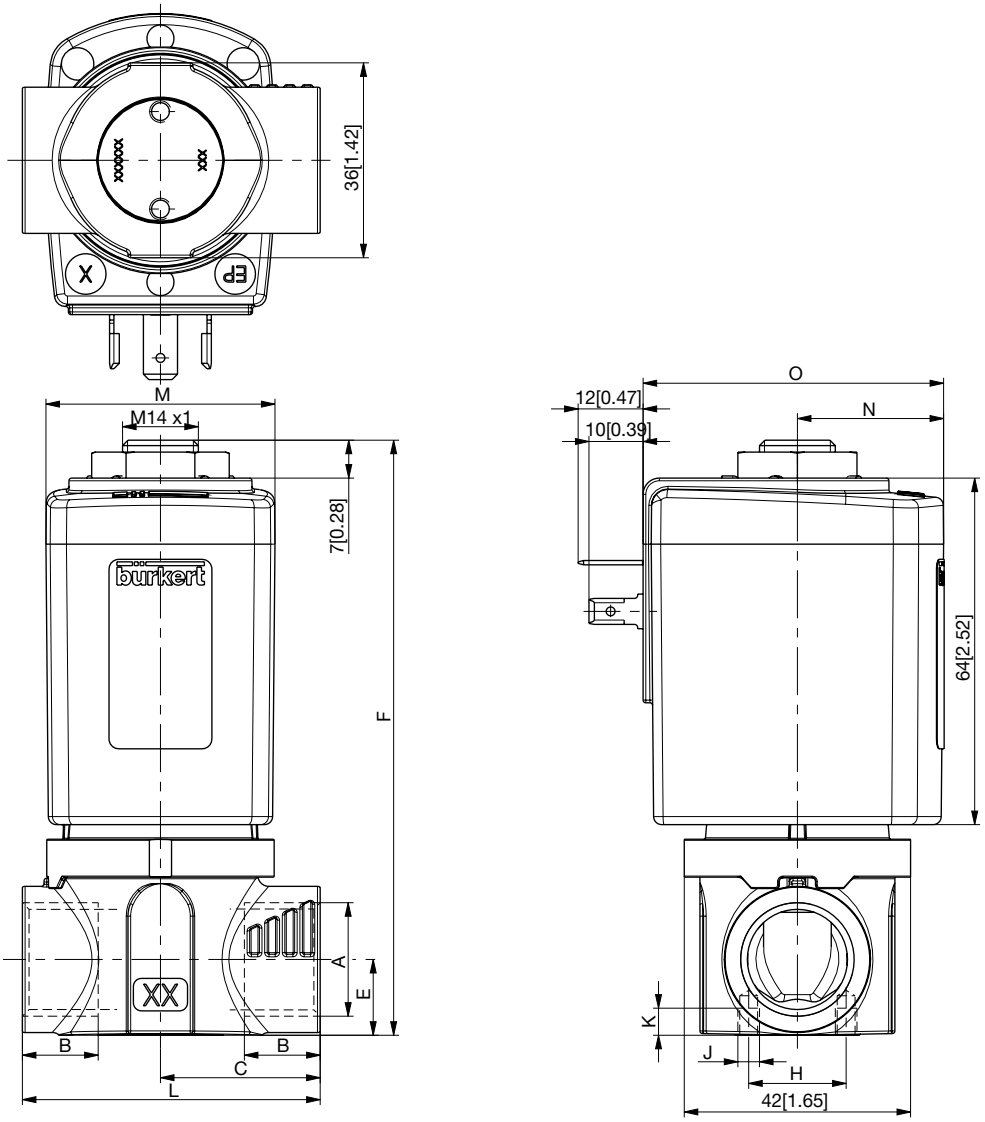
4. Dimensions

4.1. Standard version

Threaded version

Note:
Dimensions in mm [inch]



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

Version	L		A	B		C		E		F		H		J	K	
	[mm]	[in]	[Zoll]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[mm]	[in]
AG39	75		G ⅜	12	0.47	37.5	1.48	14	0.55	110	1.33	–	–	–	–	–
	75		G ½	14.5	0.57	37.5	1.48	14	0.55	110	4.33	–	–	–	–	–
AG48	40		G ⅛	8	0.32	20	0.79	10	0.39	105	4.13	15	0.59	M5	7	0.28
	40		G ¼	12	0.47	20	0.79	10	0.39	105	4.13	15	0.59	M5	7	0.28

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

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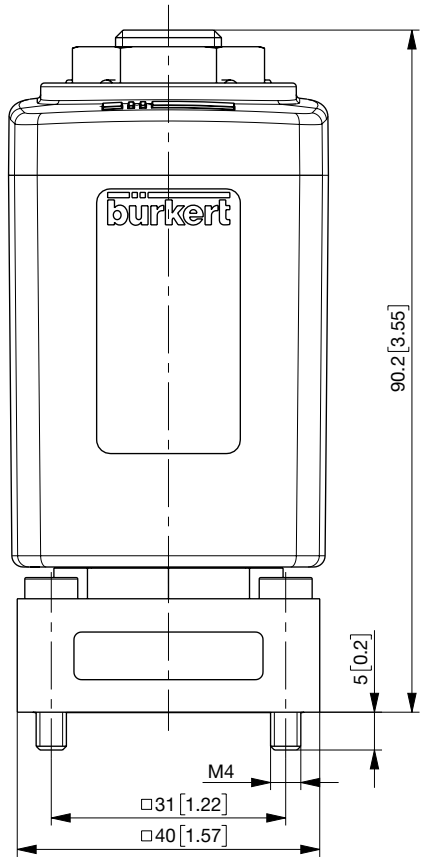
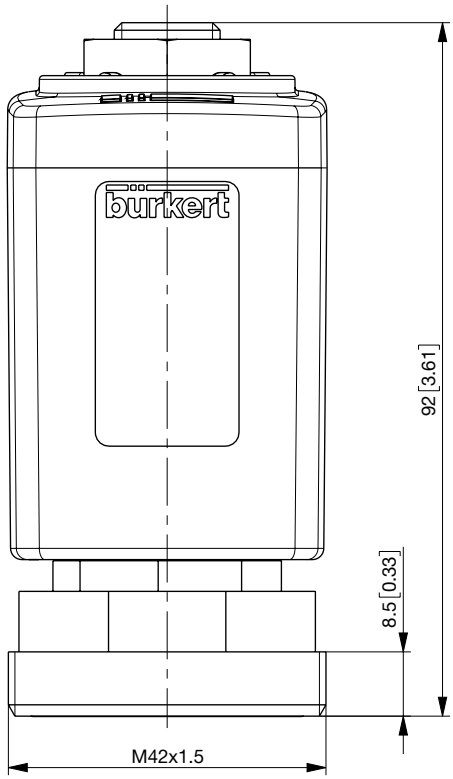
Flange and screw-in version

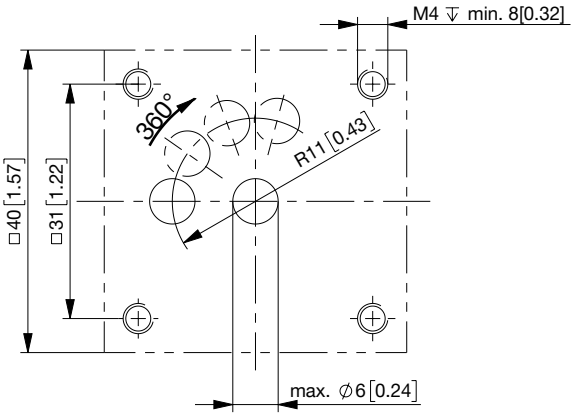
Note:
Dimensions in mm [inch]



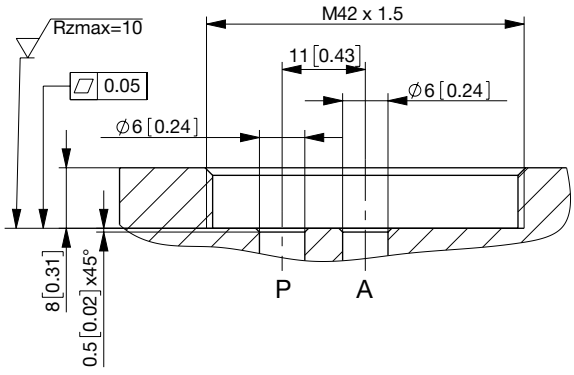
Connection outline



Connection outline



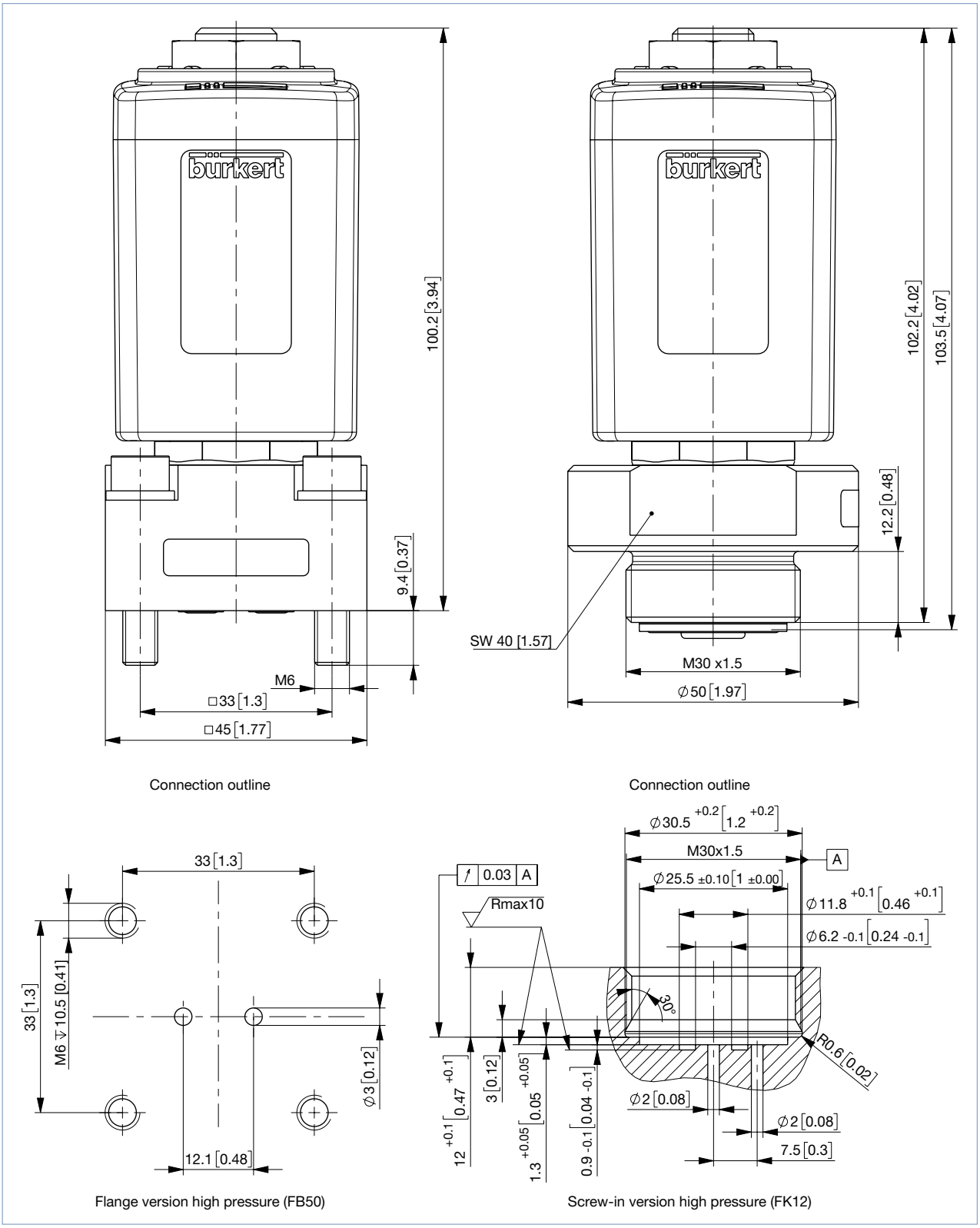
Flange version concentric (FK09)



Screw-in version concentric (FK01)

Flange and screw-in version high pressure up to 3626 psi (MX32) or 2321 psi (MX31)

Note:
Dimensions in mm [inch]



Connection outline

Connection outline

Flange version high pressure (FB50)

Screw-in version high pressure (FK12)

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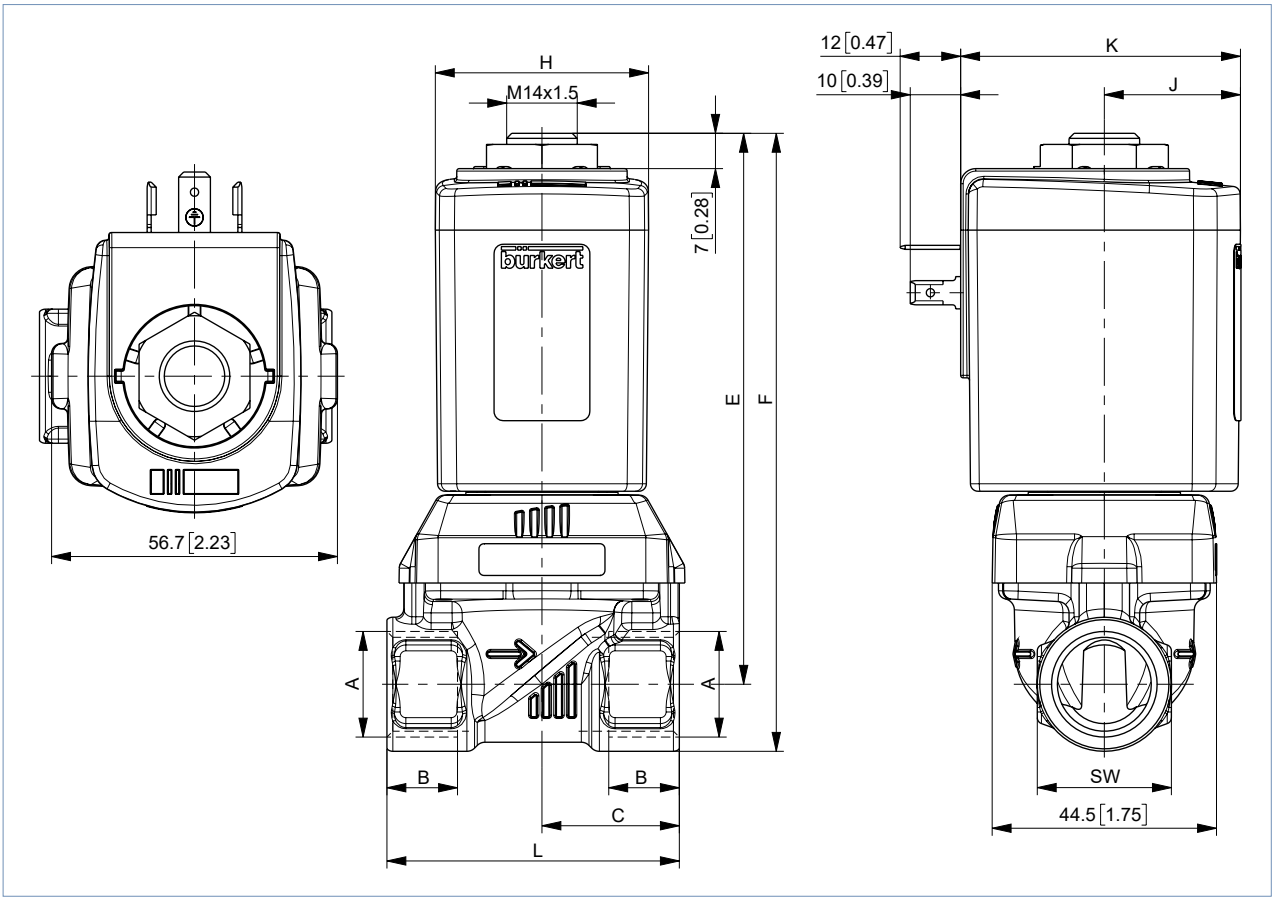
4.2. Version DN 13

Note:
Dimensions in mm [inch]



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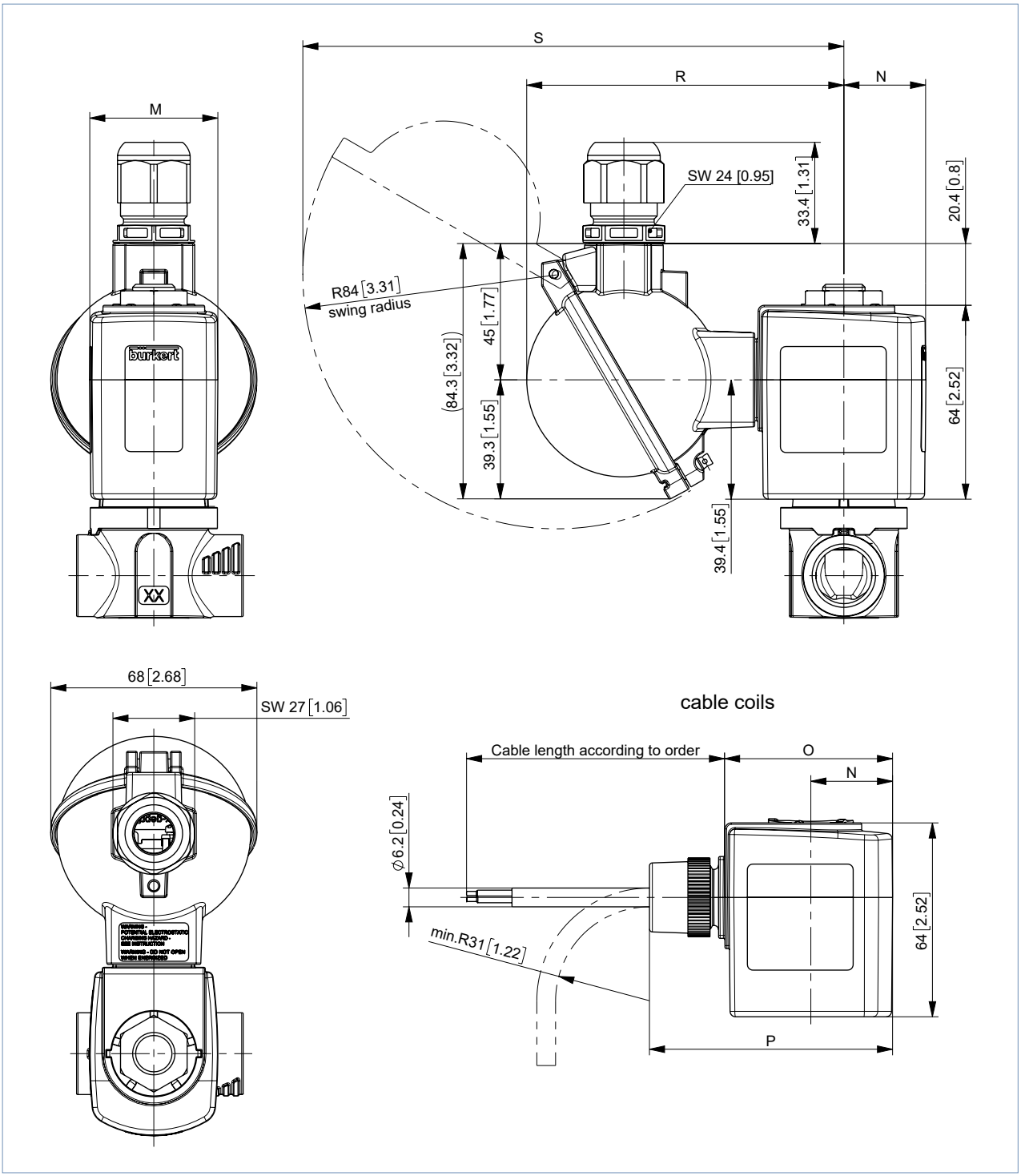
4.3. Coil UL Listed (cULus) for hazardous locations, Class I, Division 2

Note:

- Dimensions in mm [inch]
- Dimensions apply exclusively to Ex version of the solenoid coil. For other dimensions see previous versions.



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

5. Performance specifications

5.1. 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

6. Product accessories

6.1. Special tool to turn the terminal box

Note:
Detailed ordering information can be found in chapter **"Special tool to turn the terminal box" on page 27**.

7. Ordering information

7.1. Bürkert eShop – Easy ordering and quick delivery

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

7.2. 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.

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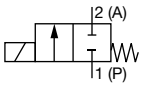
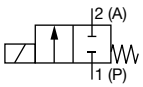
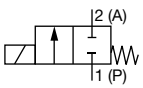
7.3. Ordering chart standard version elastomer seal up to 435 psi

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 26**.
- Further versions with alternative voltages, G or RC inner thread, as flange or screw-in version, seal material EPDM/EPDM 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							
Circuit function A (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	X	X
					120/60	463121	463147
					240/60	307812	307838
		4.0	0.62	0…174	024/DC	463122	463148
				0…189	024/60	X	X
					120/60	463123	463149
					240/60	307813	307839
		6.0	1.1	0…44	024/DC	463126	463152
				0…80	024/60	333191	X
					120/60	463127	463153
					240/60	307814	307840
Circuit function A (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	X	X
					120/60	463129	463155
					240/60	307815	307841
		4.0	0.62	0…174	024/DC	463130	463156
				0…189	024/60	X	X
					120/60	463131	463157
					240/60	307816	307842
		6.0	1.1	0…44	024/DC	463134	463160
				0…80	024/60	X	X
					120/60	463135	463161
					240/60	307817	307843
		8.0	1.9	0…15	024/DC	463136	463162
				0…33	024/60	X	X
					120/60	463137	463163
					240/60	307818	307844
Circuit function A (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	X	X
					120/60	463139	307795
					240/60	307819	307845
		8.0	1.9	0…15	024/DC	463140	463164
				0…33	024/60	X	X
					120/60	463141	463165
					240/60	307820	307847
		10.0	2.1	0…6	024/DC	463142	463166
				0…18.9	024/60	X	X
					120/60	463143	463167
					240/60	307821	307848
		12.0	2.3	0…14.5	024/60	–	X
					120/60	–	463169
					240/60	–	307849

X: on request

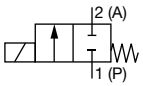
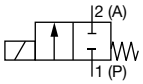
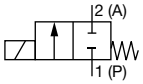
1.) Maximum allowable working pressure

DTS 1000576209 EN Version: A Status: RL (released | freigegeben | validé) printed: 11.05.2023

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 26.
- Further versions with alternative voltages, G or RC inner thread, as flange or screw-in version, seal material EPDM/EPDM 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							
Circuit function A (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	X
					120/60	307780	307796
					240/60	307822	307850
		4.0	0.62	0…174	024/DC	307749	307765
				0…189	024/60	X	X
					120/60	307781	307797
					240/60	307823	307852
		6.0	1.1	0…44	024/DC	307750	307766
				0…80	024/60	X	X
					120/60	307782	307798
					240/60	307824	307853
Circuit function A (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	X	X
					120/60	307783	307799
					240/60	307825	307854
		4.0	0.62	0…174	024/DC	307752	307768
				0…189	024/60	X	X
					120/60	307784	307800
					240/60	307826	307855
		6.0	1.1	0…44	024/DC	307753	307769
				0…80	024/60	X	X
					120/60	307785	307801
					240/60	307827	307856
		8.0	1.9	0…15	024/DC	307754	307770
				0…33	024/60	X	X
					120/60	307786	307802
					240/60	307828	307857
Circuit function A (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	X	X
					120/60	307787	307803
					240/60	307829	307858
		8.0	1.9	0…15	024/DC	307756	307772
				0…33	024/60	X	X
					120/60	307788	307804
					240/60	307830	307859
		10.0	2.1	0…6	024/DC	307757	307773
				0…18.9	024/60	X	X
					120/60	307789	307805
					240/60	307831	307860
		12.0	2.3	0…14.5	024/60	–	X
					120/60	–	307806
					240/60	–	307861

X: on request

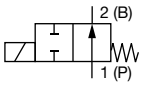
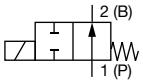
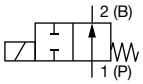
1.) Maximum allowable working pressure

DTS 1000576209 EN Version: A Status: RL (released | freigegeben | validé) printed: 11.05.2023

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 26**.
- Please note that only the electrical component as in the solenoid coil is UL Recognized.
- Further versions 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							
Circuit function B (CF B) 2/2-way solenoid valve Direct-acting Normally open 	NPT ¼	3.0	0.32	0…232	24/DC	X	X
					120/60	X	X
		4.0	0.62	0…145	24/DC	X	X
					120/60	X	20031716
		6.0	1.1	0…87	24/DC	X	X
					120/60	X	X
Circuit function B (CF B) 2/2-way solenoid valve Direct-acting Normally open 	NPT ⅜	6.0	1.1	0…87	24/DC	X	X
					120/60	X	X
		8.0	1.9	0…4	24/DC	X	X
					120/60	X	X
Circuit function B (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	–	X
					120/60	–	X

X: on request

1.) Maximum allowable working pressure

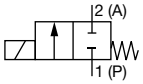
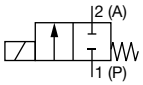
DTS 1000576209 EN Version: A Status: RL (released | freigegeben | validé) printed: 11.05.2023

7.4. 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 26**.
- Further versions with alternative voltages, G or RC inner thread, as flange or screw-in version, seal material EPDM/EPDM 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							
Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed  	NPT ¼	1.5	0.16	0…1450	024/DC	X	X
				0…1450	024/60	X	X
					120/60	X	X
					240/60	X	X
		2.0	0.16	0…870	024/DC	X	X
				0…1160	024/60	X	X
					120/60	X	X
					240/60	X	X
		3.0	0.32	0…406	024/DC	X	X
				0…696	024/60	X	X
					120/60	X	X
					240/60	X	X
		4.0	0.62	0…174	024/DC	X	X
				0…319	024/60	X	X
					120/60	X	X
					240/60	X	X
		6.0	1.1	0…44	024/DC	X	20029435
				0…102	024/60	X	X
					120/60	X	X
Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed  	NPT ⅜	3.0	0.32	0…406	024/DC	X	X
				0…696	024/60	X	X
					120/60	X	X
					240/60	X	X
		4.0	0.62	0…174	024/DC	X	X
				0…319	024/60	X	X
					120/60	X	X
					240/60	X	X
		6.0	1.1	0…44	024/DC	X	463184
				0…102	024/60	X	X
					120/60	X	463185
					240/60	X	X
		8.0	1.9	0…6	024/DC	X	463186
				0…29	024/60	X	X
					120/60	X	463187
					240/60	X	X

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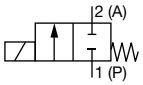
Circuit function	Port connection	Orifice	C_V value water	Pressure range water (MAWP[1.])	Voltage/ Frequency	Article no.	
						Brass body FKM seal	Stainless steel body FKM seal
		[mm]	[gal/min]	[psi]	[V/Hz]		
Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed  	NPT ½	6.0	1.1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

X: on request

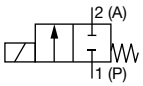
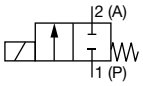
1.) Maximum allowable working pressure

DTS 1000576209 EN Version: A Status: RL (released | freigegeben | validé) printed: 11.05.2023

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 26.
- Further versions with alternative voltages, G or RC inner thread, as flange or screw-in version, seal material EPDM/EPDM 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							
Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	1.5	0.16	0…1450	024/DC	X	X
				0…1450	024/60	X	X
					120/60	X	X
					240/60	X	X
		2.0	0.16	0…870	024/DC	X	X
				0…1160	024/60	X	X
					120/60	X	X
					240/60	X	X
		3.0	0.32	0…406	024/DC	X	X
				0…696	024/60	X	X
					120/60	X	X
					240/60	X	X
		4.0	0.62	0…174	024/DC	X	298514
				0…319	024/60	X	X
					120/60	X	X
					240/60	X	X
		6.0	1.1	0…44	024/DC	X	X
				0…102	024/60	X	X
					120/60	X	X
Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed 	NPT ⅜	3.0	0.32	0…406	024/DC	X	X
				0…696	024/60	X	X
					120/60	X	X
					240/60	X	X
		4.0	0.62	0…174	024/DC	X	X
				0…319	024/60	X	X
					120/60	X	X
					240/60	X	X
		6.0	1.1	0…44	024/DC	X	20015239
				0…102	024/60	X	X
					120/60	X	X
					240/60	X	X
		8.0	1.9	0…6	024/DC	X	X
				0…29	024/60	X	X
					120/60	X	X
					240/60	X	X

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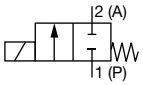
Circuit function	Port connection	Orifice	C_v value water	Pressure range water (MAWP[1.])	Voltage/ Frequency	Article no.	
						Brass body FKM seal	Stainless steel body FKM seal
		[mm]	[gal/min]	[psi]	[V/Hz]		
Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed 	NPT ½	6.0	1.1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

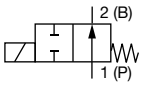
X: on request

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 26**.
- Please note that only the electrical component as in the solenoid coil is UL Recognized.
- Further versions 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							
Circuit function B (CF B) 2/2-way solenoid valve Direct-acting Normally open 	NPT ¼	1.5	0.8	0…870	024/DC	X	X
					120/60	X	X
		2.0	0.16	0…435	024/DC	X	X
					120/60	X	X
		3.0	0.32	0…232	024/DC	X	X
					120/60	X	X
		4.0	0.62	0…145	024/DC	X	X
					120/60	X	X
	NPT ⅜	4.0	0.62	0…145	024/DC	X	X
					120/60	X	X
		6.0	1.1	0…87	024/DC	X	X
					120/60	X	X
	NPT ½	6.0	1.1	0…87	024/DC	–	X
					120/60	–	X

X: on request

1.) Maximum allowable working pressure

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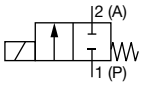
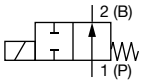
7.5. Ordering chart high pressure version up to 3626 psi (MX32) or 2321 psi (MX31)

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 26**.
- Please note that only the electrical component as in the solenoid coil is UL Recognized.
- Further versions with alternative voltages, NPT or RC inner thread, as flange or screw-in version, seal material PTFE/FKM or PTFE/EPDM 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									
Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	1.0	0.03	0…3626	0…3626	0…3626	308819	–	X
				0…3626	0…2901	0…3626	–	X	–
		1.5	0.08	0…2176	0…1160	0…2176	308842	–	X
				0…2176	0…1015	0…2176	–	X	–
Circuit function B (CF B) 2/2-way solenoid valve Direct-acting Normally open 	NPT ¼	1.0	0.03	0…2901	0…2176	0…3626	311570	X	X
		1.5	0.08	0…1450	0…1160	0…1885	311576	X	X

X: on request

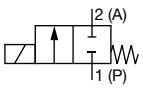
1.) Maximum allowable working pressure

7.6. 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 26**.
- The electrical component as in the solenoid coil is UL Recognized.
- Further versions with alternative voltages, stainless steel body, ¾" connection, seal material EPDM/EPDM on request.
- For all subsequent values, the nominal diameter is 13 mm and the C_v value water is 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								
Circuit function A (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	–	–

X: on request

1.) Maximum allowable working pressure

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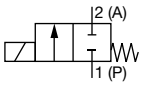
7.7. Ordering chart coil UL Listed (cULus) for hazardous locations, Class I, Division 2

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

Note:

- Further versions with normally open, alternative voltages, stainless steel body, G- or RC-inner thread, seal material EPDM/EPDM 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 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									
Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	3.0	0.32	0…435	X	X	0…435	X	X
		4.0	0.62	0…145	X	X	0…435	X	X
		6.0	1.1	0…22	X	X	0…87	X	X
	NPT ½	8.0	1.8	0…14.5	X	X	0…44	X	X
		10.0	2.1	0…8.7	X	X	0…29	X	X

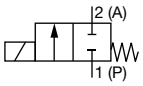
X: on request

1.) Maximum allowable working pressure

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

Note:

- Further versions with normally open, alternative voltages, brass housing, G- or RC-inner thread, seal material PTFE/FKM or PTFE/EPDM 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 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									
Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	2.0	0.16	0…870	X	X	0…1450	20050825	X
		3.0	0.32	0…290	X	X	0…725	20024385	X
		4.0	0.62	0…116	X	X	0…363	X	X
	NPT ½	6.0	0.84	0…21.8	X	X	0…87	X	X
		8.0	1.1	0…11.6	X	X	0…36	X	X
		10.0	1.8	0…7.3	X	X	0…21.8	X	X
		12.0	2.1	0…4.35	X	X	0…17.4	X	X

X: on request

1.) Maximum allowable working pressure

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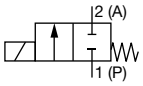
Version DN 13 with cable coil

Note:

- Further versions with alternative voltages, stainless steel body, G- and RC-inner thread, ¾" connection, seal material EPDM/EPDM or PTFE/PEEK 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 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						
Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed 	NPT ½	13.0	4.6	0…7.25	X	X

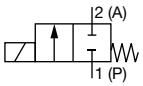
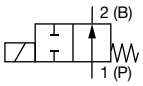
X: on request

1.) Maximum allowable working pressure

High pressure version up to 3626 psi (MX32) or 2321 psi (MX31) with cable coil

Note:

- Further versions with alternative voltages, G- and RC-inner thread, seal material PEEK/EPDM 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 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													
Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed 	NPT ¼	1.0	0.03	0… 2901	0… 2176	0… 3626	X	X	0… 3626	0… 3626	0… 3626	X	X
		1.5	0.08	0… 1160	0… 580	0… 1450	X	X	0… 2321	0… 2321	0… 2321	X	X
Circuit function B (CF B) 2/2-way solenoid valve Direct-acting Normally open 	NPT ¼	1.0	0.03	–	–	–	–	–	0… 200	0… 160	0… 3626	380794	X
		1.5	0.08	–	–	–	–	–	0… 1450	0… 1160	0… 1885	X	X

X: on request

1.) Maximum allowable working pressure

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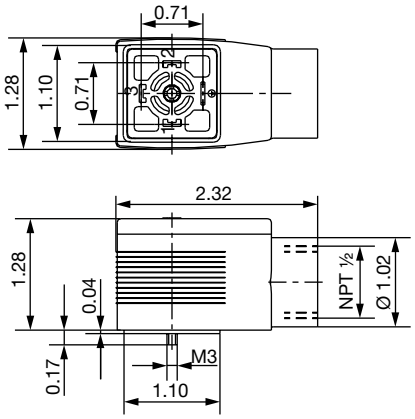
Further versions on request	
Certification • cULus (UL Listed) certification • cURus (UL Recognized) certification • Drinking water approval acc. to KTW/W270 • FDA (Food and Drug Administration) certification • Versions for oxygen applications	**Temperature** Special temperature ranges
Process connection • G • RC • Cartridge • Manifold	**Voltage** 110/50 and further non-standard voltages

7.8. Ordering chart accessories

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

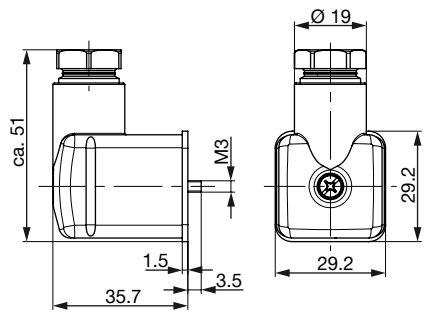
Note:

- The cable plug meets the requirements for UL hazloc Div. 2.
- Without circuitry (Standard)
- For more information on the cable plug, see data sheet **Type 2509** ▶.

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:
For other 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. oil burner version (PF15)	0…250 V AC/DC	361687

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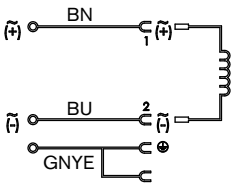
Cable plug Type 2513, form A according to DIN EN 175301 - 803

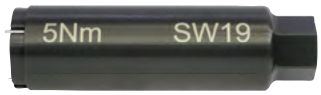
Note:

- The cable plug Type 2513 meets the requirements of ATEX category 3 GD.
- For more information on the cable plug, see data sheet **Type 2513** ▶.

Cable plug	Circuit diagram	Cable length [mm]	Article no.
		12000	260893
		5000	260892
		3000	260891
		300	260890

Special tool to turn the terminal box

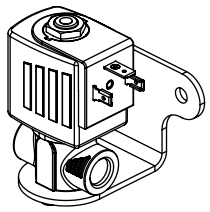
Note:
This special tool is not supplied with the valve.

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

Mounting bracket for Type 6027/6240

Note:

- The scope of delivery includes the mounting bracket, two cylinder screws M4x8 and two spring rings.
- The mounting bracket can be used for all standard and high-pressure versions including ATEX/IECEx and DIN EN 161 options up to orifice of 12 mm.
- The mounting bracket can not be used for the oil burner and DN 13 versions as well as various special housings made of solid material.

Description	Article no.
	282304

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