



Servo-assisted 2/2-way piston valve

- Servo-assisted and compact piston valve with diameter of up to DN 13
- Vibration-resistant , screwed coil system
- Energy-saving double coil technology with kick and drop variant
- Safe opening with hard-coupled piston system
- Explosion proof variants

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

Can be combined with



Type 2518

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



Type 2509

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



Type description

The 6240 valve is a servo-assisted piston valve. The stopper and plunger guiding tube are welded together to enhance pressure resistance and leak-tightness. Various seal material combinations are available depending on the application. The housing design and surface quality enable maximum flow rates. The coils are moulded with chemically resistant epoxy. An optional sliding ring bearings increases the life cycle with dry gases. To reduce power consumption in operation, coils with Kick and Drop electronics assembly (double coil technology) are available.

Table of contents

1. General technical data	4
2. Circuit functions	5
3. Approvals and conformities	5
3.1. General notes	5
3.2. Conformity	5
3.3. Standards	5
3.4. Explosion protection	6
3.5. North America (USA/Canada)	7
3.6. Foods and beverages/Hygiene	7
3.7. Others	7
Oxygen	7
Fuel gases	7
4. Materials	8
4.1. Bürkert resistApp	8
4.2. Material specifications	8
Standard variant	8
High pressure variant up to 3626 psi or 2321 psi – DN 6	9
High pressure variant up to 3626 psi – DN 12	9
Steam variant (NA67) – DN 13	10
5. Dimensions	11
5.1. Standard variant	11
5.2. High pressure variant up to 3626 psi or 2321 psi – DN 6	12
5.3. High pressure variant up to 3626 psi – DN 12	13
5.4. Variant for self-service car wash up to 2321 psi – Type 8820 - 6240	14
5.5. Coil UL Listed (cULus) for hazardous locations, Class I, Division 2	15
5.6. DN 13 variant	16
5.7. Flange variant (FK01 and FK13)	17
Complete valve	17
Flange connection diagram	18
6. Performance specifications	18
6.1. Power consumption	18
6.2. Ambient temperatures with Kick and Drop coils	19
7. Product accessories	19
7.1. Special tool to turn the terminal box	19
8. Ordering information	19
8.1. Bürkert eShop	19
8.2. Bürkert product filter	19
8.3. Bürkert Product Enquiry Form	20
8.4. Ordering chart standard variant elastomer sealing up to 232 psi	20
UL Recognized	20
UL Listed	20
8.5. Ordering chart standard variant up to 363 psi	21
UL Recognized	21
UL Listed	21
8.6. Ordering chart high pressure variant DN 6 – pressure ranges up to 2321 psi with coil UL Recognized (cURus)	22
8.7. Ordering chart high pressure variant DN 6 – pressure ranges up to 3626 psi with coil UL Recognized (cURus)	22

8.8.	Ordering chart high pressure variant DN 12 – pressure range up to 3626 psi with coil UL Recognized (cURus)	23
8.9.	Ordering chart variant self-service car wash 1740 psi – Type 8820 - 6240 with coil UL Recognized (cURus)	23
8.10.	Ordering chart steam variant DN 13 with coil UL Recognized (cURus)	24
8.11.	Ordering chart coil UL Listed (cULus) for hazardous locations, Class I, Division 2	24
	Standard variant with cable coil	24
	High pressure variant up to 3626 psi or 2321 psi with cable coil	25
8.12.	Ordering chart accessories	26
	Cable plug Type 2518, form A according to DIN EN 175301 - 803	26
	Cable plug Type 2509, form A according to DIN EN 175301 - 803	26
	Special tool to turn the terminal box	26
	Mounting bracket	27

1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "5. Dimensions" on page 11.
Material	
Body	Brass, stainless steel 1.4404 / 316L
Coil	Epoxy
Pressure	
Nominal pressure standard variant	580 psi
Nominal pressure high pressure variant	PN14: 2030 psi PN16: 2321 psi PN20: 2600 psi PN25: 3626 psi PN35: 5076 psi
Burst pressure standard variant	> 4350 psi for flanged and threaded housings
Burst pressure high pressure variant	> 18130 psi for threaded housings (≥PN16)
Orifice	DN 6, DN 12, DN 13 (steam variant)
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 time¹⁾	
Standard variant DN 6	Opening: 10...20 ms Closing: 40...50 ms
Standard variant DN 12	Opening: 20...40 ms Closing: 80...100 ms
Steam variant DN 13	Opening: 80...100 ms Closing: 200...300 ms
High pressure variant	Opening: 100...200 ms Closing: 300...600 ms
Electrical data	
Operating voltage	24 V DC, 24 V 50 Hz, 24 V 60 Hz, 110 V 50 Hz, 120 V 60 Hz, 230 V 50 Hz, 240 V 60 Hz (further voltages on request)
Power consumption	Further information can be found in chapter "6.1. Power consumption" on page 18.
Voltage tolerance	± 10 %
Medium data	
Operating medium ²⁾	Neutral gases and liquids (e.g. compressed air, water, hydraulic oil, steam and hot mediums)
Medium temperature	
Seat seal/External seal	
Standard variant	FKM/FKM: + 14 °F...+ 284 °F EPDM/EPDM: - 22 °F...+ 248 °F PTFE/FKM: + 14 °F...+ 284 °F
High temperature variant	PTFE/PEEK DN 6: - 40 °F...+ 356 °F PTFE/PEEK DN 12: - 40 °F...+ 284 °F
Steam variant DN 13	FKM/FKM: + 32 °F...+ 284 °F
Approval DIN EN 161 (PO17)	NBR/NBR (PO17): + 14 °F...+ 176 °F
High pressure variant up to 3625 bar or 2321 bar	PCTFE/FKM: + 14 °F...+ 176 °F PCTFE/EPDM: - 22 °F...+ 176 °F PCTFE/PEEK: - 40 °F...+ 176 °F
Viscosity	Max. 21 cSt

Product connections

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 26. - 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 26.
Port connections	G ¼, G ⅜, G ½, NPT ¼, NPT ⅜, NPT ½ (Rc on request), steam variant DN 13 also in G ¾

Approvals and conformities

Degree of protection	IP65 with cable plug Type 2518 ▶ NEMA 4X with cable plug Type 2509 ▶ with stainless steel variants (other variants on request)
Explosion protection	Further information can be found in chapter " 3.4. Explosion protection " on page 6.
North America (USA/Canada)	Further information can be found in chapter " 3.5. North America (USA/Canada) " on page 7.
Foods and beverages/Hygiene	Further information can be found in chapter " 3.6. Foods and beverages/Hygiene " on page 7.
Others	Further information can be found in chapter " 3.7. Others " on page 7.

Environment and installation

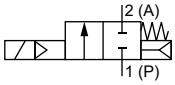
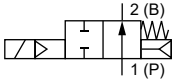
Installation position	As required, preferably with actuator upright
Ambient temperature	Max. + 131 °F Max. + 158 °F with Kick and Drop coil ^{3.)}

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.) The temperature specifications correspond to the specified switchable differential pressures. Higher temperatures are possible on request, depending on the differential pressure, duty cycle and number of switching operations Further information can be found in chapter "[6.2. Ambient temperatures with Kick and Drop coils](#)" on page 19.

2. Circuit functions

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

3. Approvals and conformities

3.1. General notes

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

3.2. Conformity

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

3.3. Standards

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

3.4. Explosion protection

Approval	Description														
 	Optional: Explosion protection according to category 2 (zone 1/21) Ex marking of the components according to the following table: <table><tr><th>Coil Type AC10</th><th>Coil Type AC19</th></tr><tr><td colspan="2">Coil with cable outlet</td></tr><tr><td>ATEX: EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db</td><td>ATEX: EPS 16 ATEX 1072 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db</td></tr><tr><td>IECEx: IECEx EPS 18.0110 X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db</td><td>IECEx: IECEx EPS 16.0030 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db</td></tr><tr><td colspan="2">Coil with terminal box</td></tr><tr><td>ATEX: EPS 18 ATEX 1232 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db</td><td>ATEX: EPS 16 ATEX 1072 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db</td></tr><tr><td>IECEx: IECEx EPS 18.0110 X Ex eb mb IIC T4 Gb Ex mb tb IIIC T130 °C Db</td><td>IECEx: IECEx EPS 16.0030 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db</td></tr></table>	Coil Type AC10	Coil Type AC19	Coil with cable outlet		ATEX: EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db	ATEX: EPS 16 ATEX 1072 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	IECEx: IECEx EPS 16.0030 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db	Coil with terminal box		ATEX: EPS 18 ATEX 1232 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db	ATEX: EPS 16 ATEX 1072 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	IECEx: IECEx EPS 16.0030 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db
Coil Type AC10	Coil Type AC19														
Coil with cable outlet															
ATEX: EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db	ATEX: EPS 16 ATEX 1072 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	IECEx: IECEx EPS 16.0030 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db														
Coil with terminal box															
ATEX: EPS 18 ATEX 1232 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db	ATEX: EPS 16 ATEX 1072 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	IECEx: IECEx EPS 16.0030 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db														
	Optional: Explosion protection according to category 3 (zone 2/22) Ex marking of the components according to the following table: <table><tr><th>Coil Type AC10</th><th>Coil Type AC19</th></tr><tr><td colspan="2">Coil with plug contacts form A and cable plug Type 2509</td></tr><tr><td>ATEX: EPS 21 ATEX 1234 X II 3G Ex ec IIC T4 Gc II 3D Ex tc IIIC T130 °C Dc</td><td>ATEX: EPS 22 ATEX 1136 X II 3G Ex ec IIC T3 Gc II 3D Ex tc IIIC T200 °C Dc</td></tr><tr><td>IECEx: IECEx EPS 21.0078 X Ex ec IIC T4 Gc Ex tc IIIC T130 °C Dc</td><td>IECEx: IECEx EPS 22.0018 X Ex ec IIC T3 Gc Ex tc IIIC T200 °C Dc</td></tr></table>	Coil Type AC10	Coil Type AC19	Coil with plug contacts form A and cable plug Type 2509		ATEX: EPS 21 ATEX 1234 X II 3G Ex ec IIC T4 Gc II 3D Ex tc IIIC T130 °C Dc	ATEX: EPS 22 ATEX 1136 X II 3G Ex ec IIC T3 Gc II 3D Ex tc IIIC T200 °C Dc	IECEx: IECEx EPS 21.0078 X Ex ec IIC T4 Gc Ex tc IIIC T130 °C Dc	IECEx: IECEx EPS 22.0018 X Ex ec IIC T3 Gc Ex tc IIIC T200 °C Dc						
Coil Type AC10	Coil Type AC19														
Coil with plug contacts form A and cable plug Type 2509															
ATEX: EPS 21 ATEX 1234 X II 3G Ex ec IIC T4 Gc II 3D Ex tc IIIC T130 °C Dc	ATEX: EPS 22 ATEX 1136 X II 3G Ex ec IIC T3 Gc II 3D Ex tc IIIC T200 °C Dc														
IECEx: IECEx EPS 21.0078 X Ex ec IIC T4 Gc Ex tc IIIC T130 °C Dc	IECEx: IECEx EPS 22.0018 X Ex ec IIC T3 Gc Ex tc IIIC T200 °C Dc														

3.5. North America (USA/Canada)

Approval	Description
	Optional: UL Listed for the USA (valid for valves) The valves are UL Listed for the USA according to: • UL 429 (electrically operated valves)
	Optional: UL Hazardous Locations – Explosion Protection (valid for coils) 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
	Optional: UL Recognized for the USA (valid for valves) The valves are UL Recognized for the USA according to: • UL 429 (electrically operated valves)
	Optional: CSA for Canada (valid for valves) The valves are CSA approved for Canada according to: • CSA 139 (electrically operated valves)

3.6. Foods and beverages/Hygiene

Conformity	Description
FDA	FDA – Code of Federal Regulations (valid for the variable code PL02, 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.
	EC Regulation 1935/2004 of the European Parliament and of the Council (valid for the variable code PL01, PL02) All wetted materials are compliant with EC Regulation 1935/2004/EC according to the manufacturer's declaration.

3.7. Others

Oxygen

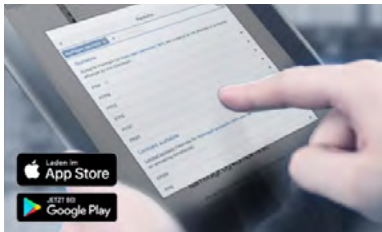
Conformity	Description
	Optional: Suitability for oxygen (valid for the variable code NL02) The products are suitable for use with gaseous oxygen, according to the manufacturer's declaration.

Fuel gases

Conformity	Description
	Fuel gases (valid for the variable code PO17) 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), class B
	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 -10 °C...+ 80 °C.

4. Materials

4.1. Bürkert resistApp



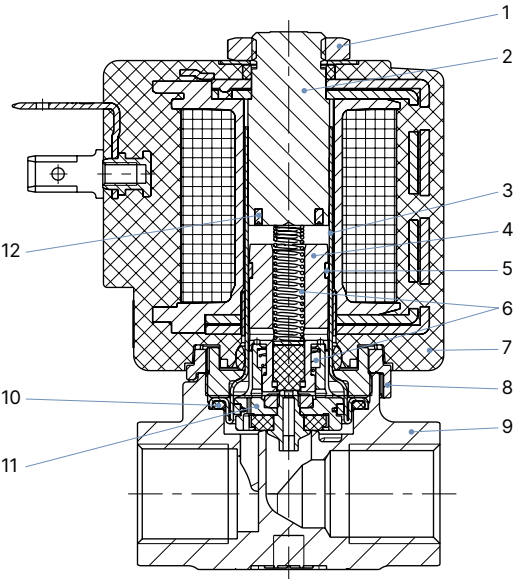
Bürkert resistApp – Chemical resistance chart

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

[Start chemical resistance check](#)

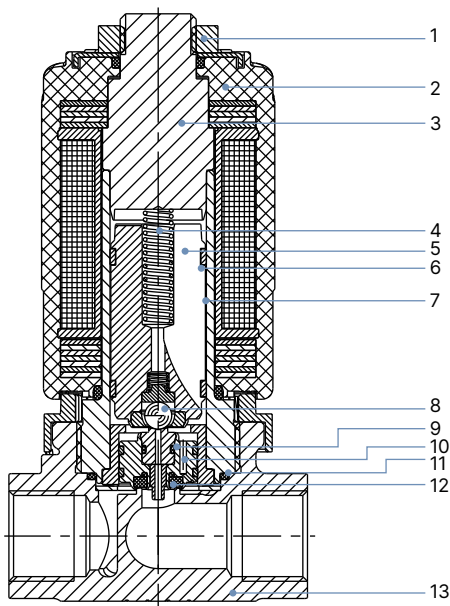
4.2. Material specifications

Standard variant



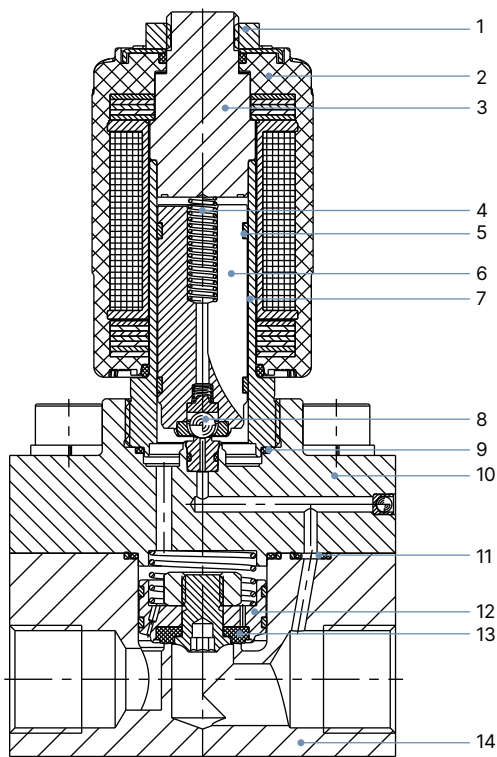
No.	Element	Material
1	Nut	Steel (surface finish thick film passivated) (Brass variant) Stainless steel 1.4305/303 ^{1.)} PTFE (Stainless steel variant)
2	Stopper	Stainless steel 1.4113/434 ^{1.)}
3	Armature guide tube	Stainless steel 1.4303/305 ^{1.)} /308 ^{1.)}
4	Core	Stainless steel 1.4113/434 ^{1.)}
5	Guide ring	PTFE coal-filled
6	Springs	Stainless steel 1.4310/301 ^{1.)}
7	Coil	Epoxy
8	Safety lock	PPS
9	Body	Brass/stainless steel 1.4404/316L ^{1.)} (CF3M)
10	Seal facing outwards	FKM/EPDM/PEEK (high temperature variant)
11	Piston complete	Brass/stainless steel 1.4305/303 ^{1.)} Stainless steel PEEK PTFE coal-filled FKM/EPDM/PTFE (PTFE for high temperature and PTFE/FKM for high pressure variants)
12	Shading ring	Copper/silver

1.) Material designation according to AISI

High pressure variant up to 3626 psi or 2321 psi – DN 6


No.	Element	Material
1	Nut	Stainless steel 1.4305/303 ¹⁾
2	Coil	Epoxy
3	Stopper	Stainless steel 1.4523/316 ¹⁾
4	Spring	Stainless steel 1.4310/301 ¹⁾
5	Core coupling	Stainless steel 1.4113/434 ¹⁾ , 1.4305/303 ¹⁾
6	Glide ring	PTFE coal-filled
7	Guide tube	Stainless steel 1.4571/316 Ti ¹⁾
8	Core seal	Ceramic ball
9	Piston coupling	Stainless steel 1.4305/303 ¹⁾ , PEEK, PTFE coal-filled
10	Piston guide	Stainless steel 1.4305/303 ¹⁾
11	Seal	FKM, EPDM
12	Seat seal	PCTFE
13	Body	Stainless steel 1.4404/316L ¹⁾ (CF3M)

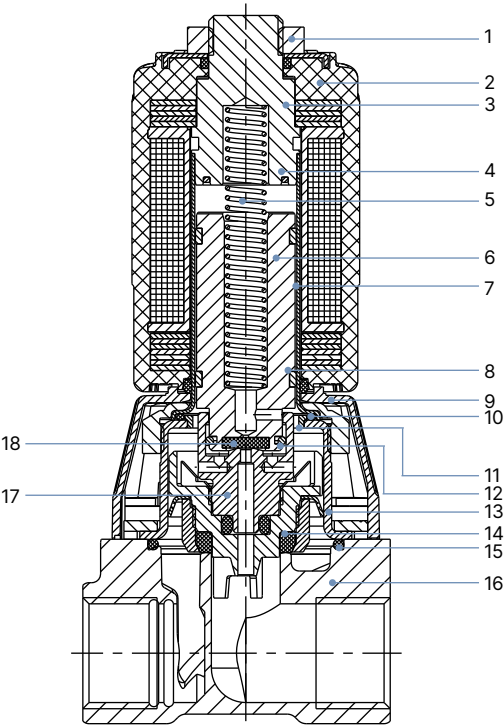
1.) Material designation according to AISI

High pressure variant up to 3626 psi – DN 12


No.	Element	Material
1	Nut	Stainless steel 1.4305/303 ¹⁾ PTFE coated
2	Coil	Epoxy
3	Stopper	Stainless steel 1.4523/316 ¹⁾
4	Spring	Stainless steel 1.4310/301 ¹⁾
5	Glide ring	PTFE coal-filled
6	Core coupling	Stainless steel 1.4113/434 ¹⁾ , 1.4305/303 ¹⁾
7	Guide tube	Stainless steel 1.4571/316 Ti ¹⁾
8	Core seal	Ceramic ball
9	Outer seal	FKM, EPDM
10	Flange coupling	Stainless steel 1.4404/316L (CF3M), PEEK, FKM/EPDM
11	Outer seal	FKM, EPDM
12	Piston coupling	Stainless steel 1.4305/303 ¹⁾ , PTFE coal-filled
13	Seat seal	PCTFE
14	Body	Stainless steel 1.4404/316L (CF3M)

1.) Material designation according to AISI

Steam variant (NA67) – DN 13



No.	Element	Material
1	Nut	Stainless steel 1.4305/303 ^{1.)}
2	Coil	Epoxy
3	Stopper	Stainless steel 1.4113/434 ^{1.)}
4	Shading ring	Silver
5	Spring	Stainless steel 1.4310/301 ^{1.)}
6	Core	Stainless steel 1.4113/434 ^{1.)}
7	Guide tube	Stainless steel 1.4303/305 ^{1.)} /308 ^{1.)}
8	Glide ring	PTFE coal filled
9	Cover	PA6
10	Seal	FKM
11	Support ring	PPS Fortron
12	Coupling ring	PEEK
13	Holding cap	Stainless steel 1.4301/304 ^{1.)}
14	Seat gasket	FKM
15	Outer seal	FKM
16	Body	Brass, stainless steel 1.4408/316 ^{1.)}
17	Piston coupling	Stainless steel 1.4401/316 ^{1.)} , PPS Fortron, PTFE, PEEK, FKM
18	Core seal	FKM

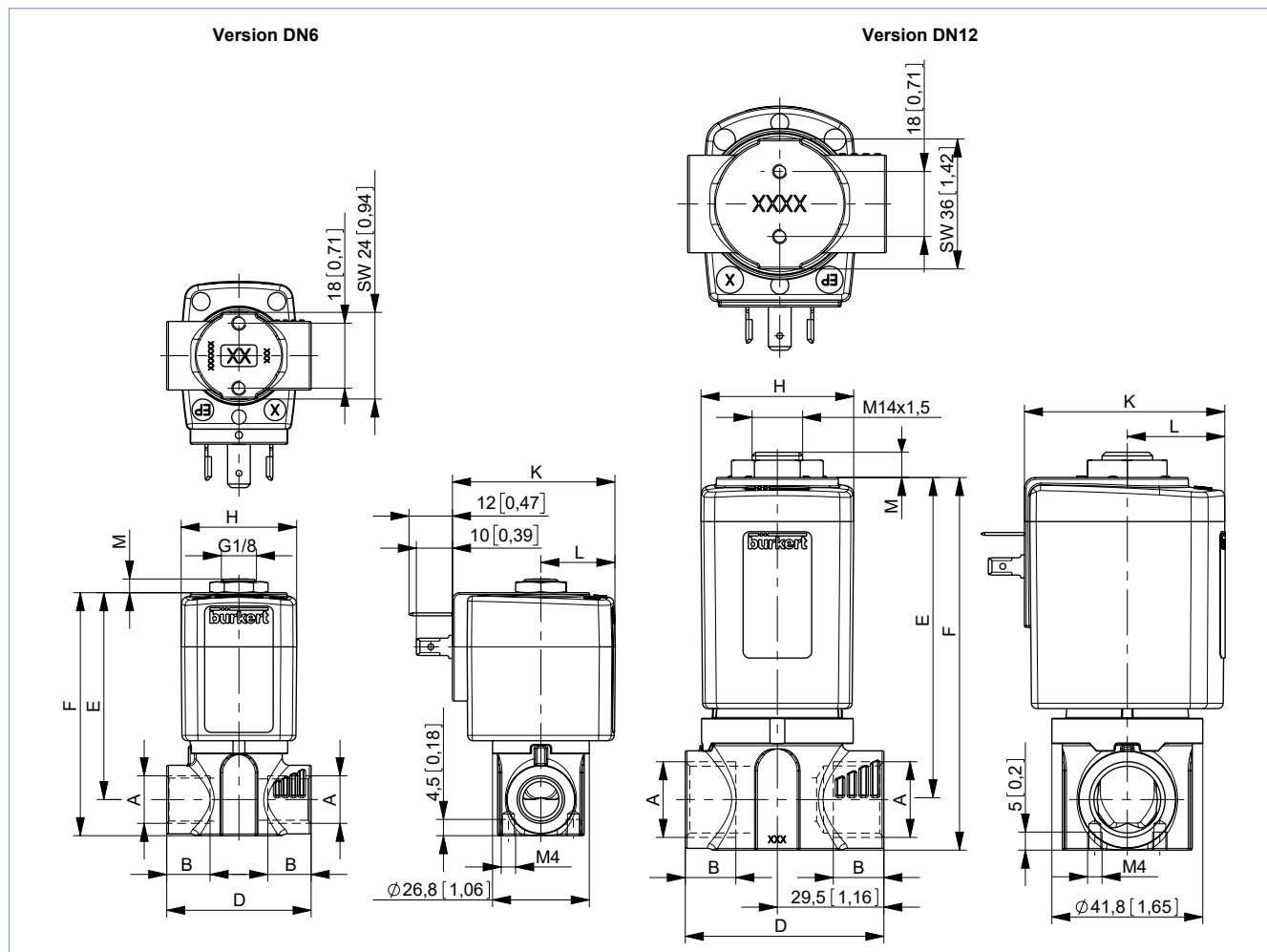
1.) Material designation according to AISI

5. Dimensions

5.1. Standard variant

Note:

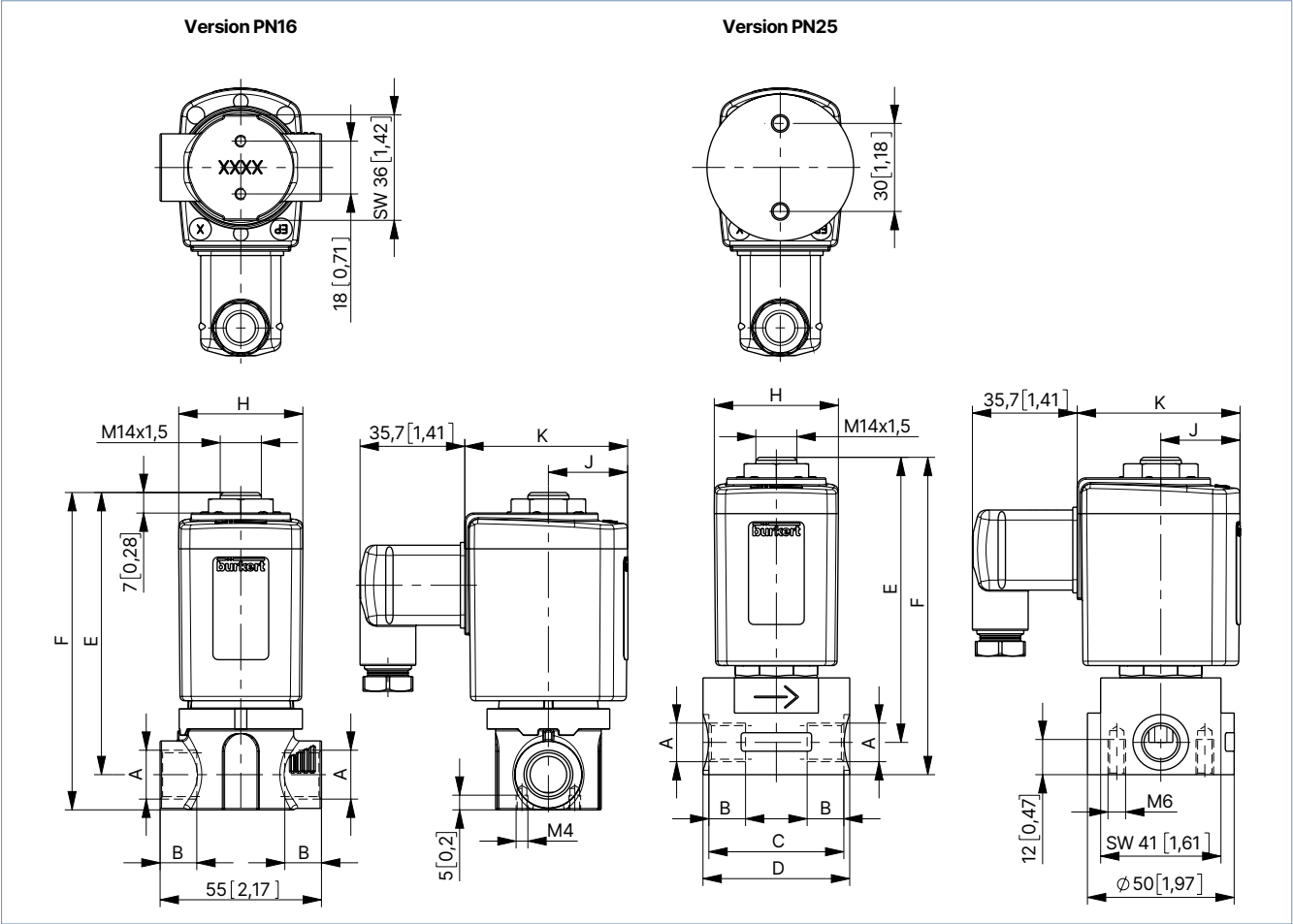
Dimensions in mm [inch]



A (body connection)	B	D	E	F	H	K	L	M
[Zoll]	[mm] [in]	[mm] [in]	[mm] [in]	[mm] [in]	[mm] [in]	[mm] [in]	[mm] [in]	[mm] [in]
DN 6								
G 1/4	12 0.47	40 1.57	57.3 2.26	67.3 2.65	32 1.26	45 1.77	20.5 0.81	3.7 0.15
NPT 1/4	10 0.39							
RC 1/4	9.7 0.38							
G 3/8	12 0.47	50 1.97	58.3 2.30	70.3 2.77				
NPT 3/8	10.3 0.41							
RC 3/8	10.1 0.40							
G 1/2	12 0.47	40 1.57	57.3 2.26	67.3 2.65	40 1.57	51 2.01	23.5 0.93	3.7 0.15
NPT 1/2	10 0.39							
RC 1/2	9.7 0.38							
G 3/4	12 0.47	50 1.97	58.3 2.30	70.3 2.77				
NPT 3/4	10.3 0.41							
RC 3/4	10.1 0.40							
DN 12								
G 1/2	14 0.55	55 2.17	89 3.50	103 4.06	42 1.65	55.5 2.19	27 1.06	7 0.28
NPT 1/2	13.7 0.54							
RC 1/2	13.2 0.52							

5.2. High pressure variant up to 3626 psi or 2321 psi – DN 6

Note:
Dimensions in mm [inch]



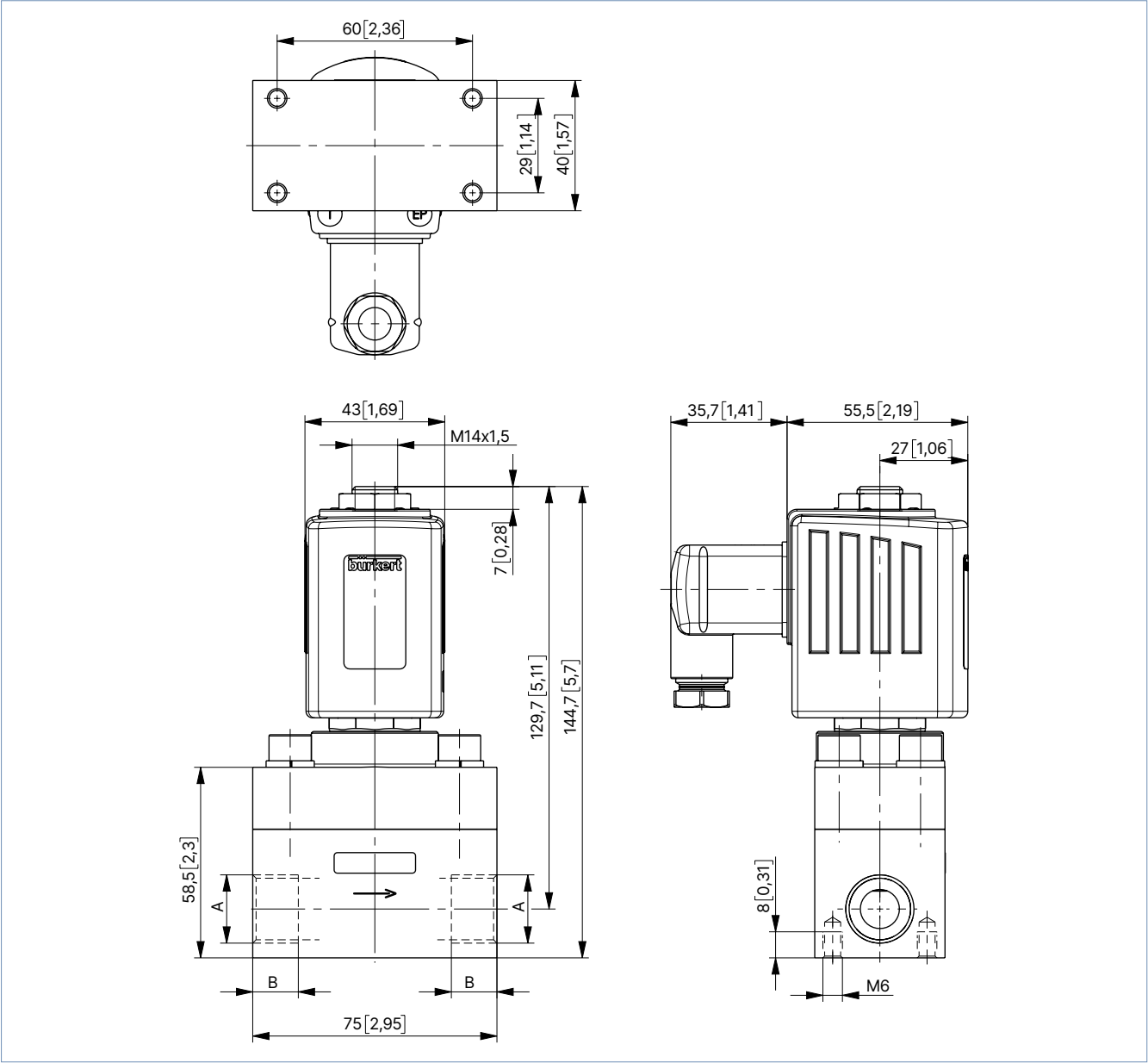
Coil size	H		J		K	
	[mm]	[in]	[mm]	[in]	[mm]	[in]
K	42	1.65	27	1.06	55.5	2.19
L	65	2.56	37.5	1.48	72	2.83

Variant 2321 psi						
A (body connection)	B		E		F	
[Zoll]	[mm]	[in]	[mm]	[in]	[mm]	[in]
G 1/4	13	0.51	95.2	3.75	105.2	4.14
NPT 1/4	10	0.39				
G 3/8	12	0.47	96.2	3.79	108.2	4.26
NPT 3/8	10.3	0.41				

Variant 3626 psi										
A (body connection)	B		C		D		E		F	
[Zoll]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
G ¼	13	0.51	46	1.81	Ø 50	Ø 1.97	97.2	3.83	108.2	4.26
NPT ¼	10	0.39								
G ⅜	12.5	0.49	44	1.73	44.4	1.75	98.7	3.89	111.2	4.38
NPT ⅜	10.3	0.41								

5.3. High pressure variant up to 3626 psi – DN 12

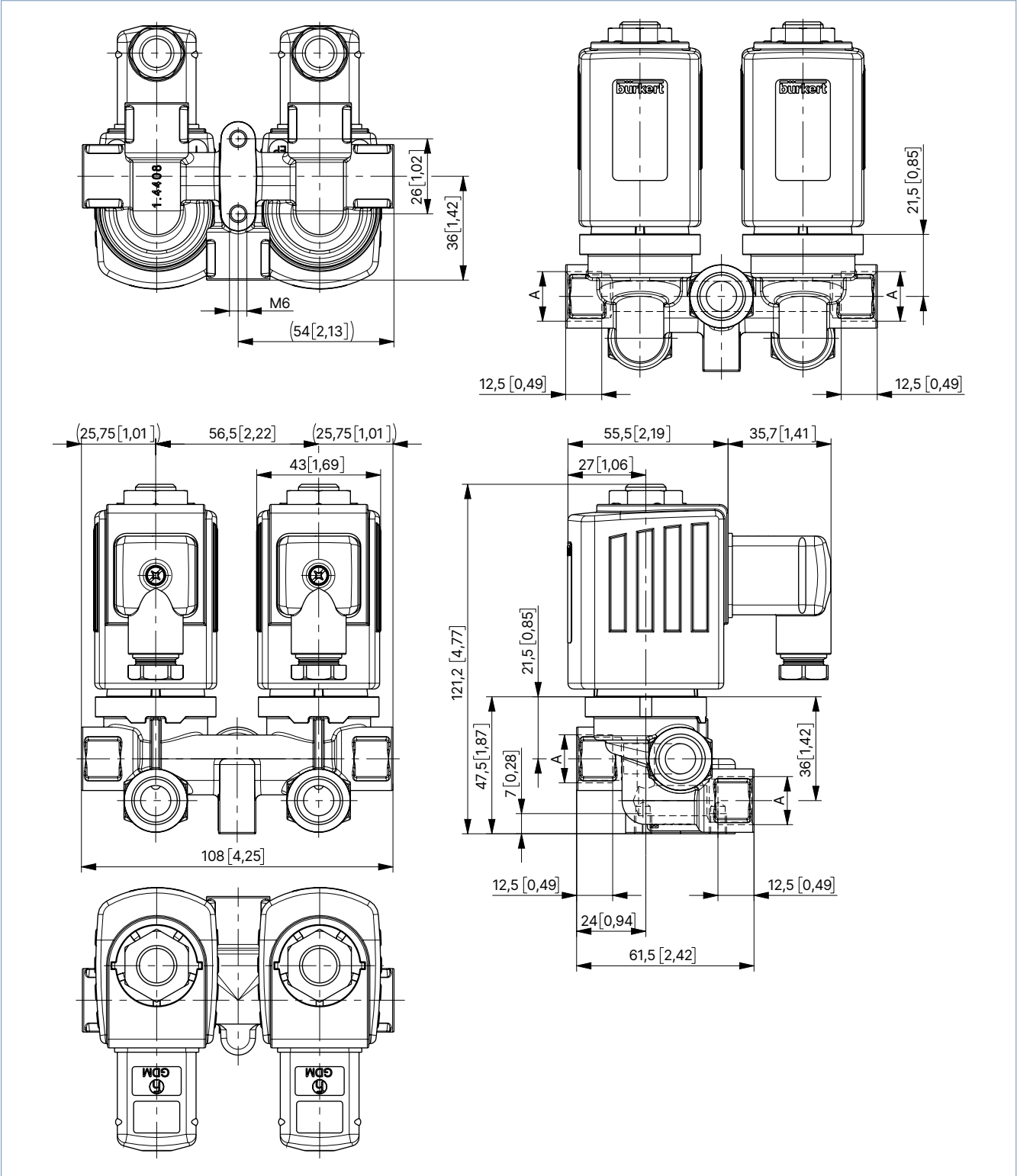
Note:
Dimensions in mm [inch]



A (body connection) [Zoll]	B	
	[mm]	[in]
G ½	14	0.55
NPT ½	13.7	0.54

5.4. Variant for self-service car wash up to 2321 psi – Type 8820 - 6240

Note:
Dimensions in mm [inch]

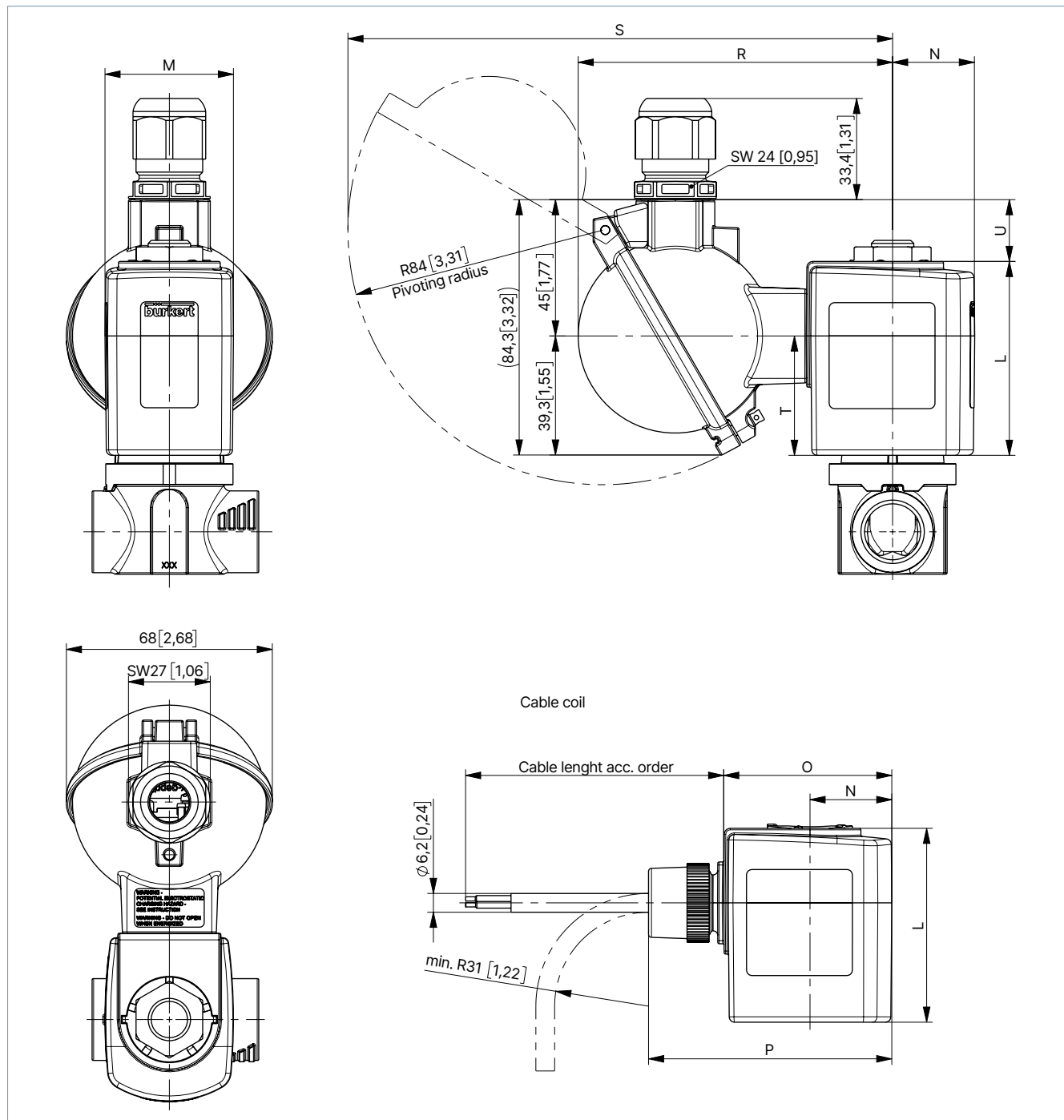


Variant	A [Zoll]
AH40	G ¼
AH37	G ⅜

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

Note:

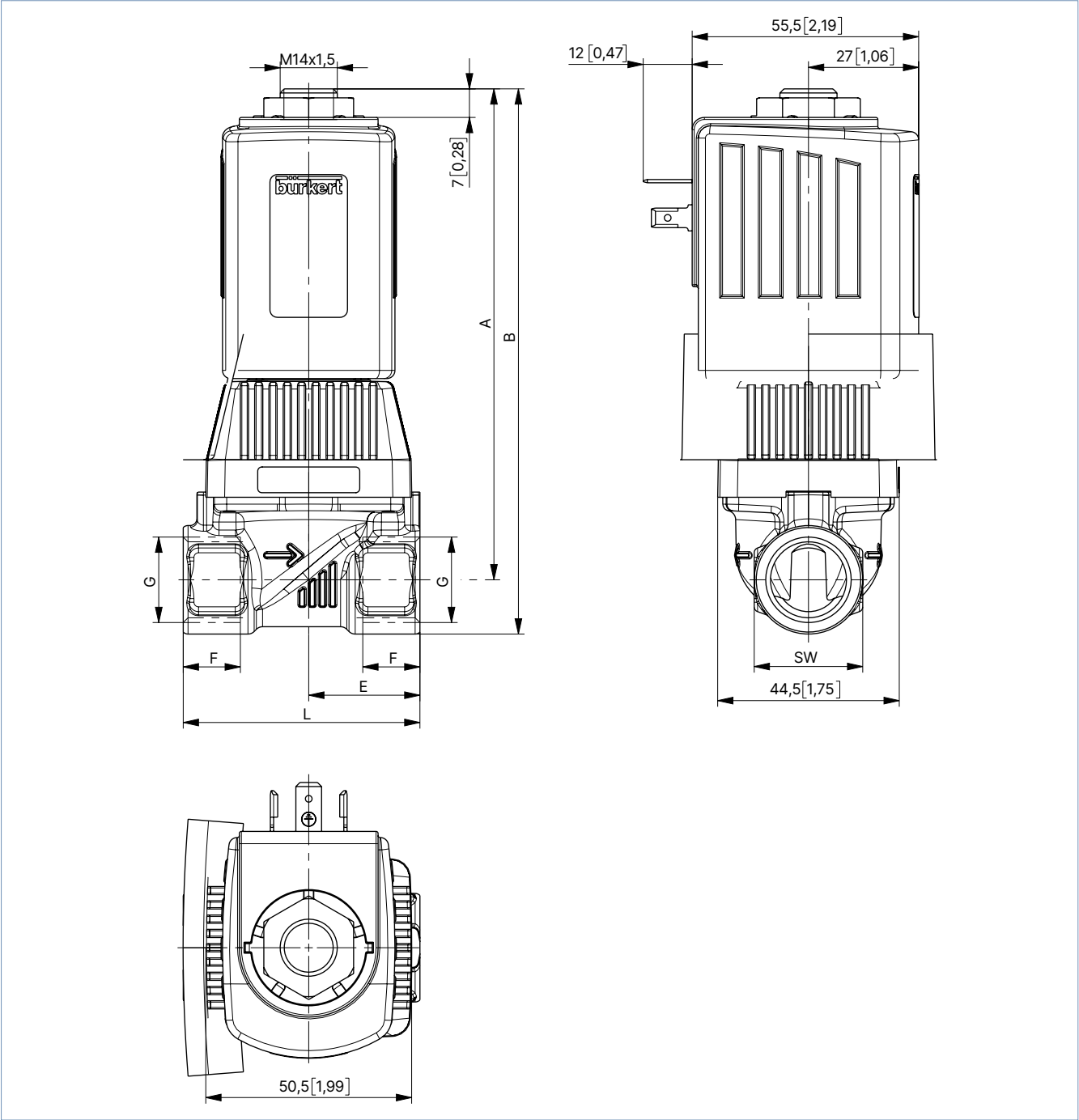
Dimensions in mm [inch] apply exclusively to Ex variant of the solenoid coil. For other dimensions see previous variants.


Coil dimensions

Var. Code	Coil size	M		N		O		P		L		R		S		T		U	
		[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
PX58	6	40	1.57	23.5	0.93	52	2.05	74.8	2.94	41.3	1.63	102.8	4.05	177.5	6.99	26	1.02	29.7	1.17
PX38	K	42	1.65	27	1.06	55.5	2.19	80.3	3.16	64	2.52	104.8	4.13	179.8	7.08	39.4	1.55	20.4	0.80

5.6. DN 13 variant

Note:
Dimensions in mm [inch]



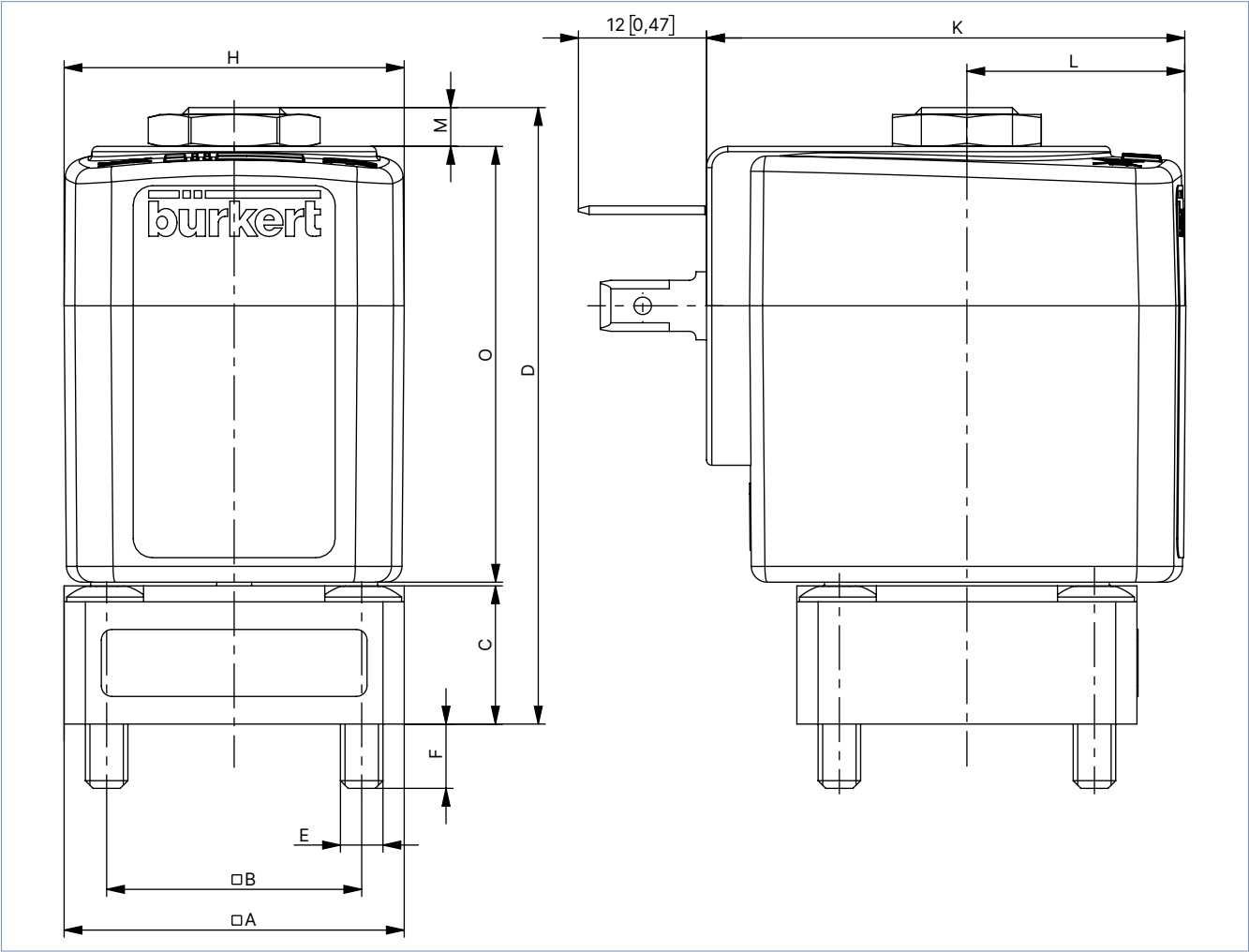
G (body connection) [Zoll]	Material	A		B		E		F		L		SW	
		[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
G ½	Brass	120.35	4.74	133.85	5.27	27.25	1.07	14	0.55	58	2.28	27	1.06
NPT ½								13.7	0.54				
Rc ½								13.2	0.52				
G ½	Stainless steel	120.35	4.74	133.85	5.27	32.5	1.28	14	0.55	65	2.56	27	1.06
NPT ½								13.7	0.54				
Rc ½								13.2	0.52				

G (body connection) [Zoll]	Material	A		B		E		F		L		SW	
		[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
G ¾	Brass and Stainless steel	122.35	4.82	138.35	5.45	32.5	1.28	16	0.63	65	2.56	32	1.26
NPT ¾								14	0.55				
Rc ¾								14.5	0.57				

5.7. Flange variant (FK01 and FK13)

Complete valve

Note:
Dimensions in mm [inch]

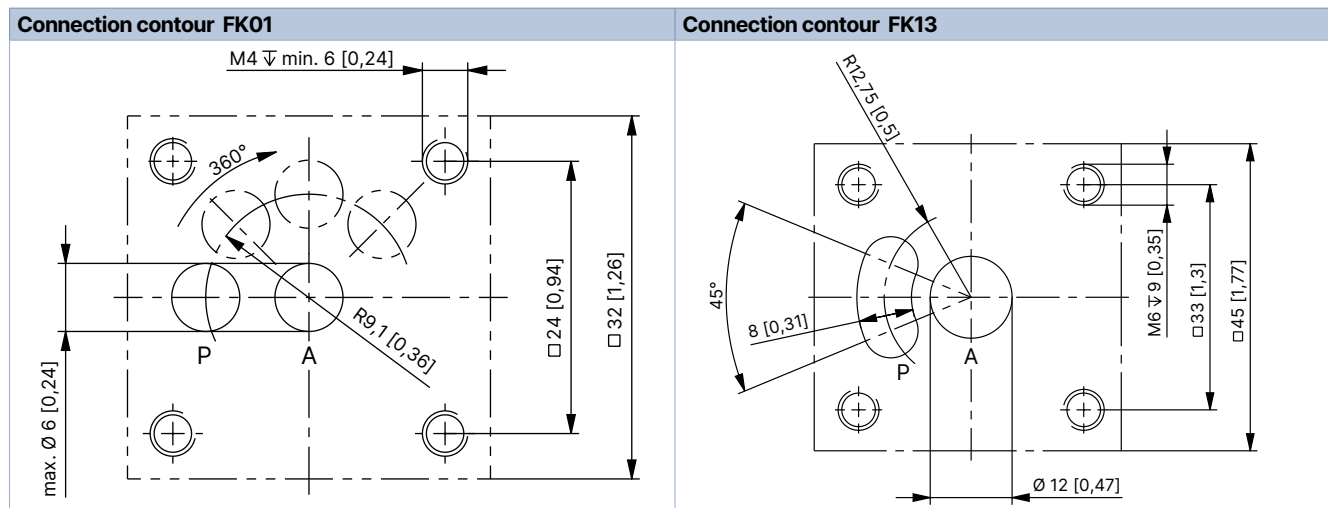


DN	Port connection	A		B		C		D		E		F	
		[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
6	FK01	32	1,26	24	0,95	13	0,51	58	2,28	M4	0,16	6	0,24
12	FK13	45	1,77	33	1,3	21	0,83	96.2	3,79	M6	0,24	6.7	0,26

Coil size	H		J		K		O		M	
	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
5	32	1.26	20.5	0.81	45	1.77	41	1.61	3.7	0.14
6	40	1.57	23.5	0.93	51	2.01				
K	42	1.65	27	1.06	55.5	2.19	64	2.52	7	0.28

Note:

- Dimensions in mm [inch]
- P = Inlet, A = Outlet
- The flow openings (P) of the valve body and connection block must be arranged one above the other in order to achieve the K_v value specified in the data sheet. If this is not the case, minor restrictions in the K_v value may occur.
- The specified thread depths of the drilled holes are intended exclusively for connection blocks made of brass and stainless steel. When using other materials, such as aluminium or plastic, the thread depths and screws must be adapted accordingly to suit the respective material.



6.1. Power consumption

Note:

The Kick and Drop coil (AC/DC) features integrated electronics for short-term power increase and decrease in double coil technology.

Coil size	AC			DC		Kick and Drop coil (AC/DC)		
	Inrush	Hold		Cold	Warm	Cold power Inrush power	Cold power Holding power	Warm power Holding power
[mm]	[VA]	[VA]	[W]	[W]	[W]	[W] 500 ms	[W]	[W]
32 (5)	32	18	8	12	10	–	–	–
40 (6)	40	23	10	14	12	20	2	2
40 (6) ATEX	–	–	–	9	7.5	–	–	–
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	–	–	–

6.2. Ambient temperatures with Kick and Drop coils

Coil type	Coil size	Maximum ambient temperatures ^{1.)} depending on the switching cycles per minute		
	[mm]	Performance	30 switching cycles/min.	1 switching cycle/min.
AC10	40 (6)	20 W / 2 W	Max. + 158 °F	Max. + 185 °F
		65 W / 7 W	Max. + 131 °F	Max. + 158 °F

Coil type	Coil size	Maximum ambient temperatures ^{1.)} depending on the switching cycles per minute		
	[mm]	Performance	10 switching cycles/min.	1 switching cycle/min.
AC19	42 (K)	44 W / 6.5 W	Max. + 149 °F	Max. + 158 °F
	42 (K) ATEX	44 W / 6.5 W	Max. + 149 °F	Max. + 158 °F
	42 (K)	85 W / 8.5 W	Max. + 131 °F	Max. + 140 °F

1.) The temperature specifications correspond to the specified switchable differential pressures. Higher temperatures are possible on request, depending on the differential pressure, duty cycle and number of switching operations

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 26 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

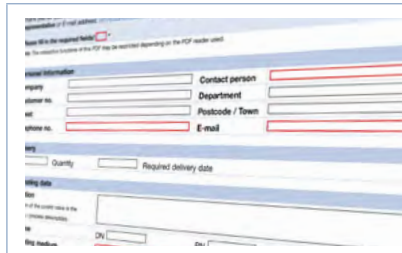


Bürkert product filter – Get quickly to the right product

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



The form includes fields for: Company name, Contact person, Department, Postcode / Town, E-mail, Quantity, Required delivery date, and a section for the enquiry details.

Bürkert Product Enquiry Form – Your enquiry quickly and compactly

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

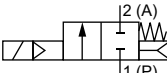
[Fill out the form now](#)

8.4. Ordering chart standard variant elastomer sealing up to 232 psi

UL Recognized

Note:

- Please note that the cable plug **Type 2518** ▶ is included. Further variants are available on request. For more information on the cable plug, see [“Cable plug Type 2518, form A according to DIN EN 175301-803” on page 26](#).
- Further variants with alternative voltages, G or RC internal thread, seal material EPDM/EPDM available on request.

Circuit function	Port connection	Orifice	C _v value water	Pressure range (MAWP ^{1.)})	Coil size	Article no.			
						024/DC	024/60	120/60	240/60
		[mm]	[gal/min]	[psi]	[mm/inch]	[V/Hz]	[V/Hz]	[V/Hz]	[V/Hz]
NPT internal thread, seal material FKM/FKM									
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Brass body								
	NPT ¼	6.0	0.7	0...232	32 / 1.26	312949 ☞	o. r.	312950 ☞	312951 ☞
	NPT ⅜	6.0	0.7	0...232	32 / 1.26	312952 ☞	o. r.	312953 ☞	312954 ☞
	Stainless steel body								
	NPT ¼	6.0	0.7	0...232	32 / 1.26	312955 ☞	o. r.	312956 ☞	312957 ☞
	NPT ½	12.0	2.5	0...232	42 / 1.65	312958 ☞	—	—	—

o. r. = on request

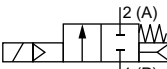
– = not available

1.) Maximum allowable working pressure

UL Listed

Note:

- Please note that the cable plug **Type 2509** ▶ is included. For more information on the cable plug, see [“Cable plug Type 2509, form A according to DIN EN 175301-803” on page 26](#).
- Further variants with alternative voltages, G or RC internal thread, seal material EPDM/EPDM available on request.

Circuit function	Port connection	Orifice	C _v value water	Pressure range (MAWP ^{1.)})	Coil size	Article no.			
						024/DC	024/60	120/60	240/60
		[mm]	[gal/min]	[psi]	[mm/inch]	[V/Hz]	[V/Hz]	[V/Hz]	[V/Hz]
NPT internal thread, seal material FKM/FKM									
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Brass body								
	NPT ¼	6.0	0.7	0...232	32 / 1.26	312939 ☞	o. r.	312940 ☞	312941 ☞
	NPT ⅜	6.0	0.7	0...232	32 / 1.26	312942 ☞	o. r.	312943 ☞	312944 ☞
	Stainless steel body								
	NPT ¼	6.0	0.7	0...232	32 / 1.26	312945 ☞	o. r.	312946 ☞	312947 ☞
	NPT ½	12.0	2.5	0...232	42 / 1.65	312948 ☞	—	—	—

o. r. = on request

– = not available

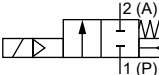
1.) Maximum allowable working pressure

8.5. Ordering chart standard variant up to 363 psi

UL Recognized

Note:

- Please note that the cable plug **Type 2518** ▶ is included. Further variants are available on request. For more information on the cable plug, see ["Cable plug Type 2518, form A according to DIN EN 175301-803" on page 26](#).
- Further variants with alternative voltages, G or RC internal thread, seal material PTFE/EPDM available on request.

Circuit function	Port connection	Orifice	C _v value water	Pressure range (MAWP ¹⁾)		Coil size	Article no.			
				Liquids	Gases		024/DC	024/60	120/60	240/60
		[mm]	[gal/min]	[psi]	[psi]	[mm/inch]	[V/Hz]	[V/Hz]	[V/Hz]	[V/Hz]
NPT internal thread, seal material PTFE/FKM										
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Brass body									
	NPT ¼	6.0	0.7	0...363	0...363	40 / 1.57	312960 ☞	o. r.	312961 ☞	312962 ☞
	NPT ⅜	6.0	0.7	0...363	0...363	40 / 1.57	312963 ☞	o. r.	312964 ☞	312965 ☞
	Stainless steel body									
	NPT ¼	6.0	0.7	0...363	0...363	40 / 1.57	o. r.	o. r.	o. r.	o. r.
	NPT ⅜	6.0	0.7	0...363	0...363	40 / 1.57	o. r.	o. r.	o. r.	o. r.
	NPT ½	12.0	2.5	0...363	0...363	42 / 1.65	468776 ☞	–	–	–

o. r. = on request

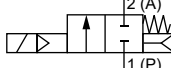
— = not available

1.) Maximum allowable working pressure

UL Listed

Note:

- Please note that the cable plug **Type 2509** ▶ is included. For more information on the cable plug, see ["Cable plug Type 2509, form A according to DIN EN 175301-803" on page 26](#).
- Further variants with alternative voltages, G or RC internal thread, seal material PTFE/EPDM available on request.

Circuit function	Port connection	Orifice	C _v value water	Pressure range (MAWP ¹⁾)		Coil size	Article no.			
				Liquids	Gases		024/DC	024/60	120/60	240/60
		[mm]	[gal/min]	[psi]	[psi]	[mm/inch]	[V/Hz]	[V/Hz]	[V/Hz]	[V/Hz]
NPT internal thread, seal material PTFE/FKM										
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Brass body									
	NPT ¼	6.0	0.7	0...363	0...363	40 / 1.57	o. r.	o. r.	o. r.	o. r.
	NPT ⅜	6.0	0.7	0...363	0...363	40 / 1.57	o. r.	o. r.	o. r.	o. r.
	Stainless steel body									
	NPT ¼	6.0	0.7	0...363	0...363	40 / 1.57	297185 	o. r.	o. r.	o. r.
	NPT ⅜	6.0	0.7	0...363	0...363	40 / 1.57	20016846 	o. r.	o. r.	o. r.
	NPT ½	12.0	2.5	0...232	0...232	42 / 1.65	o. r.	–	–	–

o. r. = on request

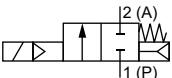
— = not available

1.) Maximum allowable working pressure

8.6. Ordering chart high pressure variant DN 6 – pressure ranges up to 2321 psi with coil UL Recognized (cURus)

Note:

- The Kick and Drop coil (AC/DC) features integrated electronics for short-term power increase and decrease in double coil technology.
- Please note that only the electrical component as in the solenoid coil is UL Recognized.
- Further variants with alternative voltages, G or RC internal thread, seal materials are available on request.
- For the following table applies: Orifice 6.0 and C_v value water [gal/min] 0.87.
- Due to the wear-resistant PCTFE seat seals, a seat tightness of $< 2 \text{ cm}^3/\text{min}$ (air + 68 °F) is guaranteed from a differential pressure of 290 psi or higher.

Circuit function	Port connection	Pressure range (MAWP ¹⁾)			Coil size	Article no.		
		Water	Oil	Air		024/DC	024/60	120/60
		[psi]	[psi]	[psi]	[mm/inch]	[V/Hz]	[V/Hz]	[V/Hz]
NPT internal thread, stainless steel body, seal material PCTFE/FKM, cable plug with integrated rectifier for AC included in delivery								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	NPT ¼	14...1450	14...1160	14...1450	42 / 1.65	o. r.	o. r.	o. r.
	NPT ⅜	14...1450	14...1160	14...1450	42 / 1.65	o. r.	o. r.	o. r.

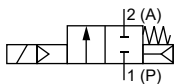
o. r. = on request

1.) Maximum allowable working pressure

8.7. Ordering chart high pressure variant DN 6 – pressure ranges up to 3626 psi with coil UL Recognized (cURus)

Note:

- The Kick and Drop coil (AC/DC) features integrated electronics for short-term power increase and decrease in double coil technology.
- Please note that only the electrical component as in the solenoid coil is UL Recognized.
- Further variants with alternative voltages, G or RC internal thread, seal materials are available on request.
- For the following table applies: Orifice 6.0 and C_v value water [gal/min] 0.87.
- Due to the wear-resistant PCTFE seat seals, a seat tightness of $< 2 \text{ cm}^3/\text{min}$ (air + 68 °F) is guaranteed from a differential pressure of 290 psi or higher.

Circuit function	Port connection	Pressure range (MAWP ¹⁾)			Coil size	Article no.		
		Water	Oil	Air		024/DC	024/AC/DC	120 /AC
		[psi]	[psi]	[psi]		[mm/inch]	[V/Hz]	[V/Hz]
NPT internal thread, stainless steel body, seal material PCTFE/FKM								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	NPT ¼	14...3336	14...2900	14...3626	65 / 2.56	o. r.	–	–
		14...3626	14...3626	14...3626	42 / 1.65	–	o. r.	o. r.
	NPT ⅜	14...3336	14...2900	14...3626	65 / 2.56	o. r.	–	–
		14...3626	14...3626	14...3626	42 / 1.65	–	o. r.	o. r.

o. r. = on request

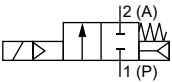
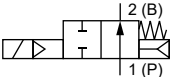
– = not available

1.) Maximum allowable working pressure

8.8. Ordering chart high pressure variant DN 12 – pressure range up to 3626 psi with coil UL Recognized (cURus)

Note:

- The Kick and Drop coil (AC/DC) features integrated electronics for short-term power increase and decrease in double coil technology.
- Further variants with alternative voltages, G or RC internal thread, seal materials are available on request.
- Please note that only the electrical component as in the solenoid coil is UL Recognized.
- For the following table applies: Orifice 12.0 and C_v value water [gal/min] 2.54.
- Due to the wear-resistant PCTFE seat seals, a seat tightness of $< 2 \text{ cm}^3/\text{min}$ (air + 68 °F) is guaranteed from a differential pressure of 290 psi or higher.

Circuit function	Port connection	Pressure range (MAWP ^{1.)} Standard			Article no.		Pressure range (MAWP ^{1.)} Kick and Drop			Article no.	
		Water	Oil	Air	024/DC	120/60	Water	Oil	Air	024/AC/DC	120/AC
		[psi]	[psi]	[psi]	[V/Hz]	[V/Hz]	[psi]	[psi]	[psi]	[V/Hz]	[V/Hz]
NPT internal thread, stainless steel body, seal material PCTFE/FKM, cable plug with integrated rectifier for AC included in delivery											
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	NPT ½	14... 3626	14... 3626	14... 3626	o. r.	–	14... 3626	14... 3626	14... 3626	o. r.	o. r.
		14... 3626	14... 2900	14... 3626	–	o. r.					
CF B 2/2-way solenoid valve Servo-controlled Normally open 	NPT ½	14... 2900	14... 2176	14... 3626	o. r.	o. r.	14... 2900	14... 2176	14... 3626	o. r.	o. r.

o. r. = on request

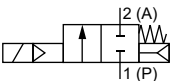
– = not available

1.) Maximum allowable working pressure

8.9. Ordering chart variant self-service car wash 1740 psi – Type 8820 - 6240 with coil UL Recognized (cURus)

Note:

- Further variants with alternative voltages, G or RC internal thread available on request.
- Due to the wear-resistant PCTFE seat seals, a seat tightness of $< 2 \text{ cm}^3/\text{min}$ (air + 68 °F) is guaranteed from a differential pressure of 290 psi or higher.

Circuit function	Port connection	Orifice single valve	C _v value water single valve	Pressure range (MAWP ¹⁾)	Coil size	Article no.	
		[mm]	[gal/min]	[psi]	[mm/inch]	024/DC [V/Hz]	120/60 [V/Hz]
Seal material PCTFE/FKM, cable plug with integrated rectifier for AC included in delivery							
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Stainless steel body						
	NPT ¼	6.0	0.87	14...1740	42 / 1.65	o. r.	o. r.
	NPT ⅜	6.0	0.87	14...1740	42 / 1.65	o. r.	o. r.

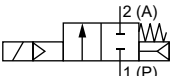
o. r. = on request

1.) Maximum allowable working pressure

8.10. Ordering chart steam variant DN 13 with coil UL Recognized (cURus)

Note:

Further variants with alternative voltages, G or RC internal thread available on request.

Circuit function	Port connection	Orifice	C _v value water	Pressure range steam (MAWP ^{1.)})	Coil size	Article no. Kick and Drop coil	
						024/60	120/60
		[mm]	[gal/min]	[psi]	[mm/inch]	[V/Hz]	[V/Hz]
Seal material FKM/FKM							
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Brass body						
	NPT ½	13.0	3.82	0...58	42 / 1.65	o. r.	o. r.
	NPT ¾	13.0	3.82	0...58	42 / 1.65	o. r.	o. r.
	Stainless steel body						
	NPT ½	13.0	3.82	0...58	42 / 1.65	o. r.	o. r.
	NPT ¾	13.0	3.82	0...58	42 / 1.65	o. r.	o. r.

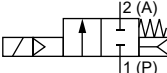
o. r. = on request

1.) Maximum allowable working pressure

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

Standard variant with cable coil
Note:

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

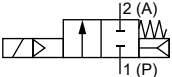
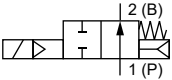
Circuit function	Port connection	Orifice	C _v value water	Pressure range (MAWP ^{1.)})	Coil size	Article no.	
		[mm]	[gal/min]	[psi]	[mm/inch]	024 / AC/DC [V/Hz]	120/AC [V/Hz]
NPT internal thread, seal material FKM/FKM							
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Brass body						
	NPT ¼	6.0	0.7	0...232	40 / 1.57	o. r.	o. r.
	NPT ⅜	6.0	0.7	0...232	40 / 1.57	o. r.	20030584 
	Stainless steel body						
	NPT ¼	6.0	0.7	0...232	40 / 1.57	20019107 	o. r.
	NPT ⅜	6.0	0.7	0...232	40 / 1.57	o. r.	20030802 
	NPT ½	12.0	2.5	0...145	42 / 1.65	o. r.	o. r.
	NPT ½	12.0	2.5	0...363	42 / 1.65 (Kick and Drop)	o. r.	o. r.

o. r. = on request

1.) Maximum allowable working pressure

High pressure variant up to 3626 psi or 2321 psi with cable coil
Note:

- The Kick and Drop coil (AC/DC) features integrated electronics for short-term power increase and decrease in double coil technology.
- Further variants with alternative voltages, G or RC internal thread, seal material EPDM/EPDM available on request.
- With 3 m/9'10" cable as standard. Other lengths or variant with terminal box on request.
- Due to the wear-resistant PCTFE seat seals, a seat tightness of < 2 cm³/min (air + 68 °F) is guaranteed from a differential pressure of 290 psi or higher.

Circuit function	Port connection	Orifice	C _v value water	Pressure range (MAWP ^{1.)}			Coil size	Article no.	
				Water	Oil	Air		024 / AC/DC	120/AC
		[mm]	[gal/min]	[psi]	[psi]	[psi]	[mm/inch]	[V/Hz]	[V/Hz]
NPT internal thread, stainless steel body, seal material PCTFE/FKM or PCTFE/PEEK									
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Pressure rating up to 2321 psi								
	NPT ¼	6.0	0.7	14...2321	14...1740	14...2321	42 / 1.65 (Kick and Drop)	20040448 	o. r.
	NPT ⅜	6.0	0.7	14...2321	14...1740	14...2321	42 / 1.65 (Kick and Drop)	o. r.	o. r.
	Pressure rating up to 3626 psi								
	NPT ½	12.0	2.5	14...2900	14...2176	14...3626	42	o. r.	o. r.
CF B 2/2-way solenoid valve Servo-controlled Normally open 	NPT ½	12.0	2.5	14...3626	14...3626	14...3626	42 (Kick and Drop)	20005146 	o. r.
	NPT ½	12.0	2.5	14...2900	14...2176	14...3626	42 (Kick and Drop)	20024491 	o. r.

o. r. = on request

1.) Maximum allowable working pressure

Further variants on request

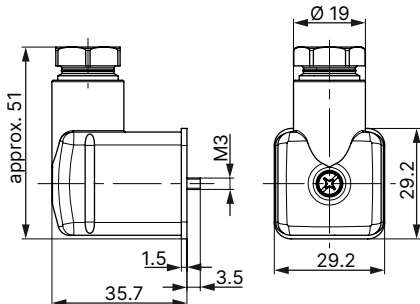
 Approval Further information can be found in chapter "3. Approvals and conformities" on page 5.	 Material Seal: EPDM
 Process connection • Flange • Cartridge • Manifold	 Voltage 042/50, further voltages on request

8.12. Ordering chart accessories

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

Note:

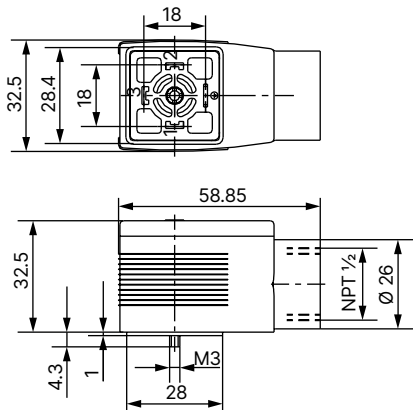
- Dimensions in mm
- For further variants see data sheet **Type 2518** ►

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

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

Note:

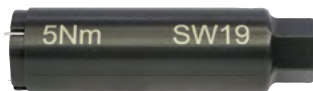
- Dimensions in mm
- Without wiring (standard)
- The cable plug Type 2509 meets the requirements of UL hazloc Div. 2.
- The cable plug Type 2509 meets the requirements of UL Listed (UL 429) in assembly with a Bürkert solenoid valve.
- Refer to data sheet **Type 2509** ► for more information about the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

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

Special tool to turn the terminal box

Note:

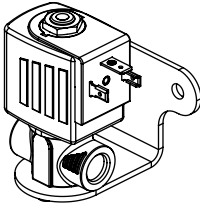
This special tool is not supplied with the valve.

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

Mounting bracket

Note:

- The mounting bracket, 2 cheese head screws M4×8 and 2 spring lock washers are included in the scope of delivery.
- The mounting bracket can be used for all standard and high-pressure variants DN 6 up to 2321 psi including HazLoc option.
- The mounting bracket cannot be used for the DN 13 variant and high-pressure variants up to to 3626 psi as well as various special bodies made of solid material.

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