








Servo-assisted 2/2-way piston valve

- Safety shut-off valve in fuel cell systems and other hydrogen applications
- Very compact solenoid valve with reliably high tightness and service life
- Available for up to orifice 12 mm and pressure range 40 bar
- Available as flange or cartridge variant for quick system integration
- Degree of protection IP65 or IP6K9K with automotive plug

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 6020 Direct-acting 2-way proportional valve	▶
	Type 6030 Direct-acting 2/2-way plunger valve	▶

Type description

The valve 6440 is a servo-assisted piston valve. The stopper and the core guide tube are welded together to increase pressure resistance and leak-tightness. The coils are moulded with highly chemically resistant epoxy. Sliding rings increase the service life for dry gases. Cartridge and flange connections, and solenoids with automotive plugs (IP6K9K), are available for optimised use in fuel cells.

DTS 1000588801 EN Version: - Status: RL (released | freigegeben | validé) printed: 28.09.2023

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1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "5. Dimensions" on page 7.
Material	
Seal	EPDM
Housing	Stainless steel 1.4404 / 316L
Coil	Epoxy
Tightness	10 ⁻⁴ atm cc/s
Pressure	
Pressure level	PN 580 psi
Burst pressure	3625 psi for flange and threaded body 1813 psi for cartridge body DN 6, DN 8 1595 psi for cartridge body DN 12
Differential pressure	Further information can be found in chapter "8. Ordering information" on page 17.
Orifice	DN 6, DN 8, DN 12
Thermal insulation class of solenoid	Class H
Performance data	
Nominal operating mode	Continuous operation Power must be reduced to 50 % of the nominal power (holding phase) with the aid of current control or PWM signal after max. 500 ms (switch-on pulse) for mobile applications with increased ambient temperature.
Switching time ¹⁾	
DN 6, DN 8	Opening: 10...20 ms Closing: 40...50 ms
DN 12	Opening: 20...40 ms Closing: 80...100 ms
Electrical data	
Power consumption	Further information can be found in chapter "6. Performance specifications" on page 17.
Voltage tolerance	
Mobile applications	12 V: 9 V...16 V 24 V: 18 V...32 V
Stationary applications	±10 %
Medium data	
Operating medium	Neutral gases and liquids such as compressed air, water, nitrogen Optimized for hydrogen
Medium temperature	-40 °F...+248 °F
Viscosity	Max. 21 cSt
Approvals and conformities	
Degree of protection	Standard: IP65 with cable plug Type 2518 ▶, NEMA 4X with cable plug Type 2509 ▶ for stainless steel versions UL HazLoc Class I, Div 2 with terminal box or cable version (other versions on request) Automotive Coil: IP6K acc. to ISO 20653:2013 IPX7 acc. to ISO 20653:2013 (submersion test acc. to ISO 16750-4:2010) IPX9K acc. to ISO 20653:2013 This degree of protection can only be guaranteed as long as the coil is not removed from the valve.
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 21. Automotive plugs for IP6K9K coil variants: Plug KOSTAL MLK1.2, 2 pin, coding A (male) Plug TE MCON 1.2, 2 pin, coding A (male) Other plug shapes on request
Port connection	Cartridge, flange, G ¼, G ⅜, G ½, NPT ¼, NPT ⅜, NPT ½

Environment and installation

Installation position	As required, preferably with actuator upright
Ambient temperature	-40 °F...+131 °F/+167 °F for stationary applications depending on performance level -40 °F...+185 °F for mobile applications ^{2,1}

1.) Measurement at +68 °F, 87 psi at the valve outlet, opening: pressure build-up 0...90 %, closing: pressure reduction 100...10 %
2.) Power must be reduced to 50 % of the nominal power (holding phase) with the aid of current control or PWM signal after max. 500 ms (switch-on pulse).

2. Circuit functions

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

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.

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3.4. Explosion protection

Approval	Description						
 	<p>Optional: Explosion protection</p> <p>Ex marking of the components according to the following table:</p>						
	<table border="1"> <thead> <tr> <th>Coil type AC10</th> <th>Coil type AC19</th> </tr> </thead> <tbody> <tr> <td> <p>Coil with cable outlet</p> <p>ATEX: EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db</p> <p>IECEX: IECEX EPS 18.0110 X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db</p> </td> <td> <p>ATEX: EPS 16 ATEX 1 072 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db</p> <p>IECEX: IECEX EPS 16.0030 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db</p> </td> </tr> <tr> <td> <p>Coil with terminal box</p> <p>ATEX: EPS 18 ATEX 1232 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db</p> <p>IECEX: IECEX EPS 18.0110 X Ex eb mb IIC T4 Gb Ex mb tb IIIC T130 °C Db</p> </td> <td> <p>ATEX: EPS 16 ATEX 1 072 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db</p> <p>IECEX: IECEX EPS 16.0030 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db</p> </td> </tr> </tbody> </table>	Coil type AC10	Coil type AC19	<p>Coil with cable outlet</p> <p>ATEX: EPS 18 ATEX 1232 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db</p> <p>IECEX: IECEX EPS 18.0110 X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db</p>	<p>ATEX: EPS 16 ATEX 1 072 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db</p> <p>IECEX: IECEX EPS 16.0030 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db</p>	<p>Coil with terminal box</p> <p>ATEX: EPS 18 ATEX 1232 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db</p> <p>IECEX: IECEX EPS 18.0110 X Ex eb mb IIC T4 Gb Ex mb tb IIIC T130 °C Db</p>	<p>ATEX: EPS 16 ATEX 1 072 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db</p> <p>IECEX: IECEX EPS 16.0030 X II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130 °C Db</p>
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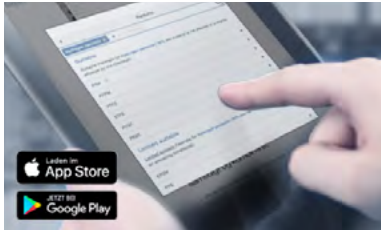
3.5. North America (USA/Canada)

Approval	Description
	<p>Valid for coils: UL Recognized for the USA and Canada</p> <p>The coils are UL Recognized for the USA and Canada according to:</p> <ul style="list-style-type: none"> • UL 429 (electrically operated valves) • CAN/CSA-C22.2 No. 139
	<p>Valid for coils: UL Hazardous Locations – Explosion Protection</p> <p>UL Listed for Hazardous Locations for USA and Canada</p> <p>Class I, Zone 1 Class I, Division 2, Group A, B, C and D Class II + III, Division 2, Group F and G</p>

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4. Materials

4.1. Bürkert resistApp

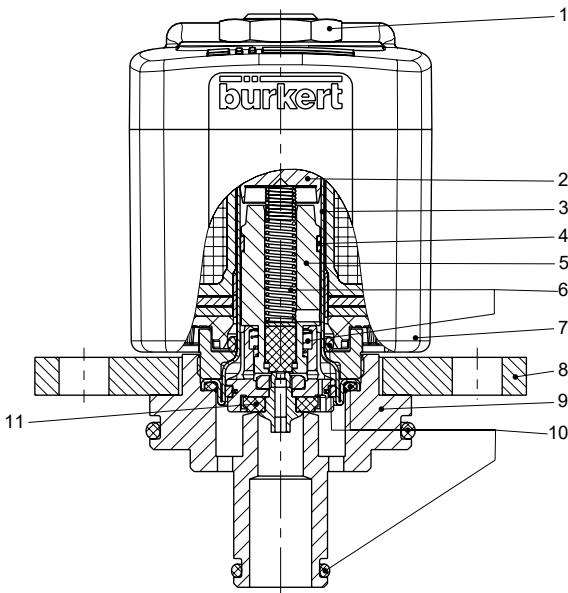


Bürkert resistApp – Chemical resistance chart

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

[Start chemical resistance check](#)

4.2. Material specifications



No.	Element	Material
1	Nut	Stainless steel 1.4305/303 ^{1.)} , PTFE-coated
2	Stopper	1.4113/434 ^{1.)}
3	Core guide tube	1.4303/305 ^{1.)} /308 ^{1.)}
4	Guide ring	PTFE carbon-filled
5	Core	1.4113/434 ^{1.)}
6	Springs	1.4310/301 ^{1.)}
7	Coil	Epoxide
8	Retaining plate	Stainless steel 1.4301/304 ^{1.)}
9	Body	Stainless steel 1.4404/1.4571/316L ^{1.)} /316Ti ^{1.)}
10	External seal	EPDM
11	Whole piston	Stainless steel 1.4305/303 ^{1.)} PPS PTFE carbon-filled EPDM

1.) Material designation according to AISI

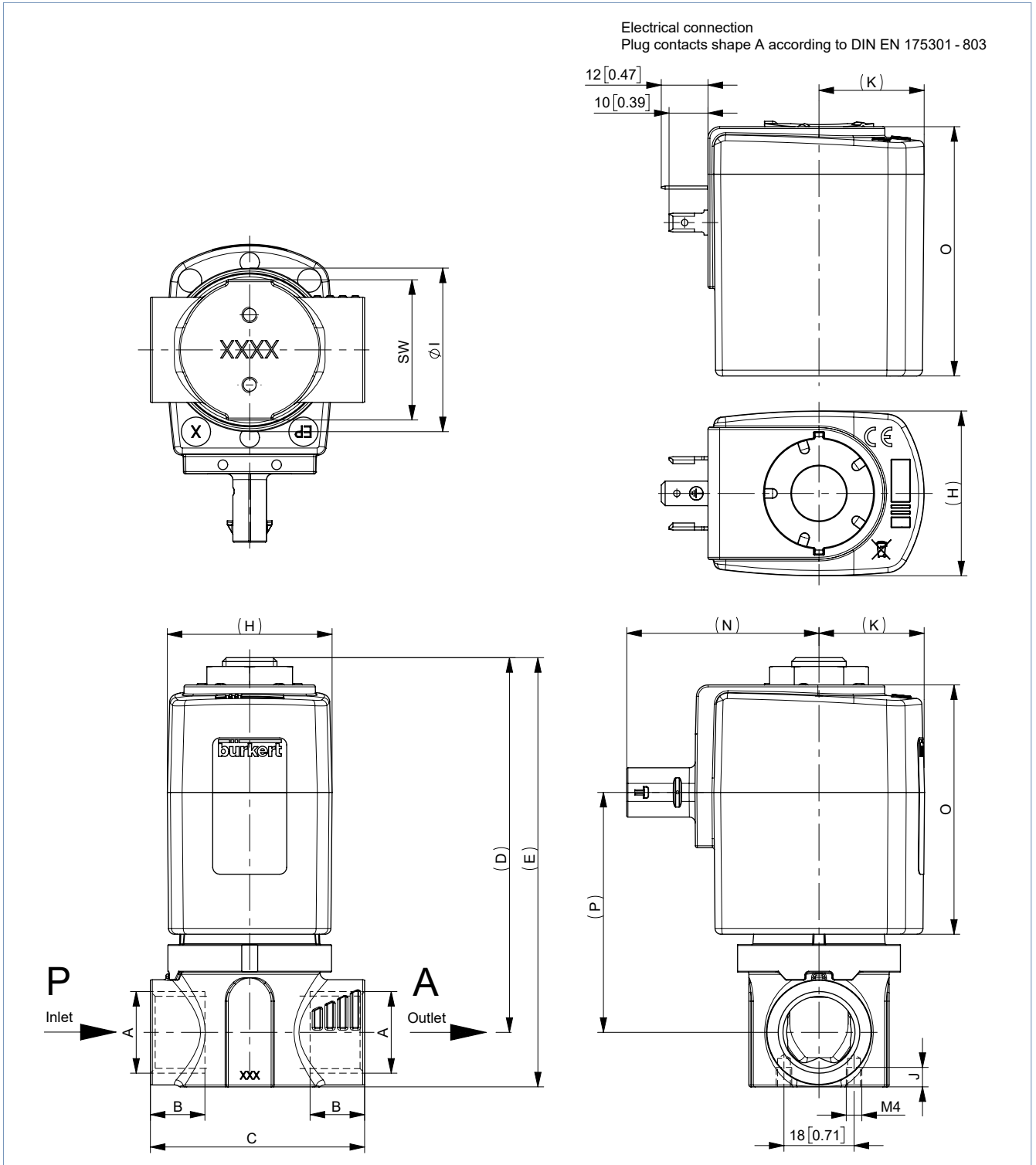
5. Dimensions

5.1. Threaded version

Complete valve

Note:

- Dimensions in mm [inch]
- The corresponding dimensions of the solenoid coil can be found in chapter **“Solenoid coil dimensions”** on page 8.



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DN	A (port connection)	B		C		(D)		(E)		I		J		(P)		SW	
	[Zoll]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
6/8	G ¼	12	0.47	40	1.57	61	2.40	71	2.80	27	1.06	4.5	0.18	41.5	1.63	24	0.94
	NPT ¼	10	0.39														
	RC ¼	9.7	0.38														
	G ⅜	12	0.47	50	1.97	62	2.44	74	2.91	42	1.65	5	0.20	62	2.44	36	1.42
	NPT ⅜	10.3	0.41														
	RC ⅜	10.1	0.40														
12	G ½	14	0.55	55	2.17	96	3.78	110	4.33	42	1.65	5	0.20	62	2.44	36	1.42
	NPT ½	13.7	0.54														
	RC ½	13.2	0.52														

Solenoid coil dimensions

Note:

The corresponding dimensions to the letters mentioned can be found in chapter [“Complete valve” on page 7](#).

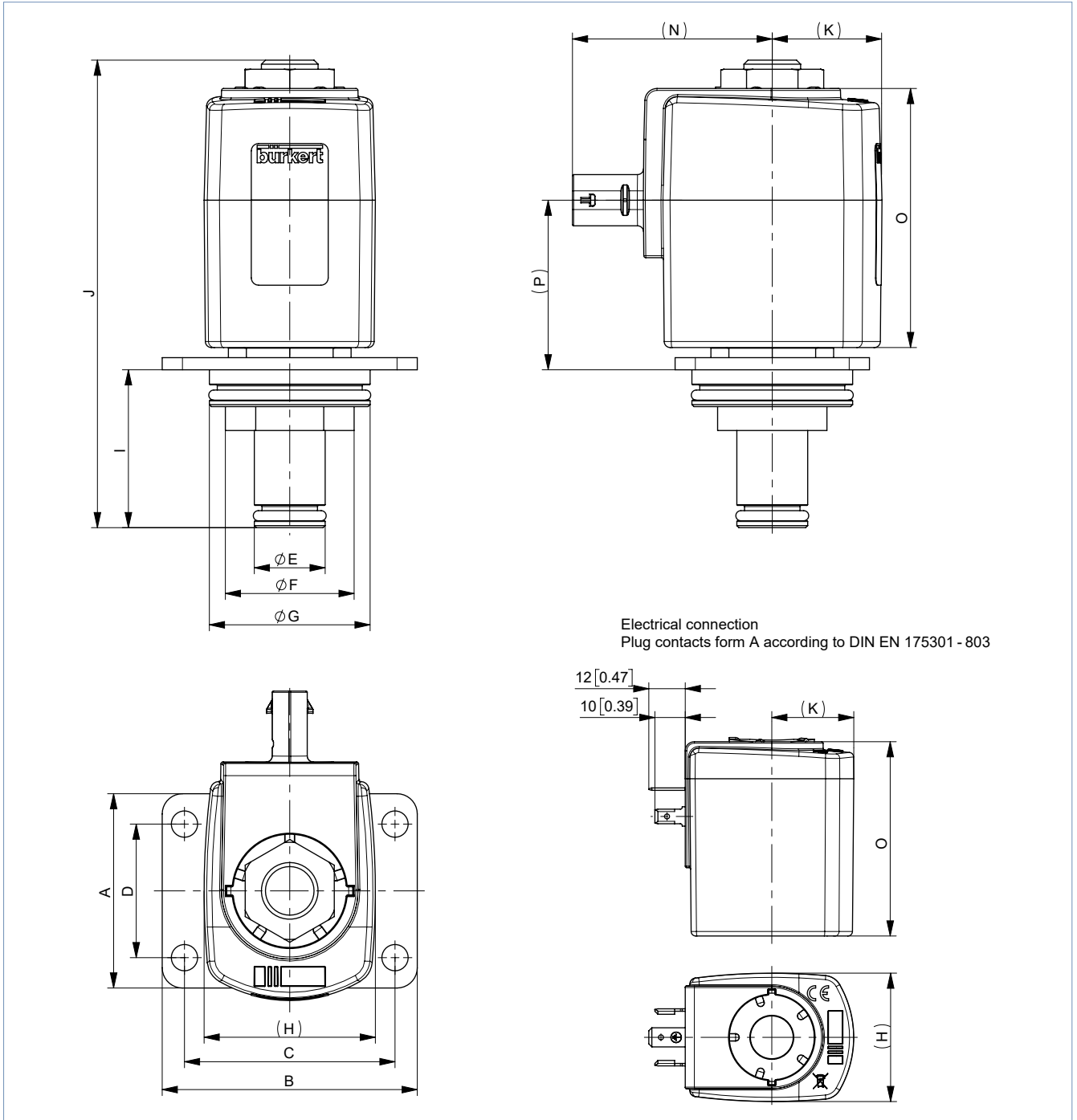
DN	Electrical connection	Coil size	(H)		(K)		(N)		O	
			[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
6/8	Form A according to DIN EN 175301 - 803	5	32	1.26	21	0.83	–	–	41	1.61
		6	40	1.57	24	0.94	–	–		
	Plug KOSTAL MLK1.2 / TE MCON 1.2, 2 pin, coding A (male)						48	1.89		
12	Form A according to DIN EN 175301 - 803	K	42	1.65	27	1.06	–	–	64	2.52
							49	1.93		

5.2. Cartridge version

Complete valve

Note:

- Dimensions in mm [inch]
- The corresponding dimensions of the solenoid coil can be found in chapter **"Solenoid coil dimensions"** on page 10.



DN	Port conn.	A		B		C		D		Ø E		Ø F		Ø G		I		(J)		(P)	
		[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
6/8	FC16	55	2.17	55	2.17	52	2.05	-	-	12.4	0.49	23.9	0.94	34.1	1.34	25.4	1.00	76	2.99	31	1.22
12	FC17	48	1.89	63	2.48	52	2.05	33	1.30	17.5	0.69	31.8	1.25	39.7	1.56	39	1.54	113	4.45	42	1.65

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Solenoid coil dimensions

Note:

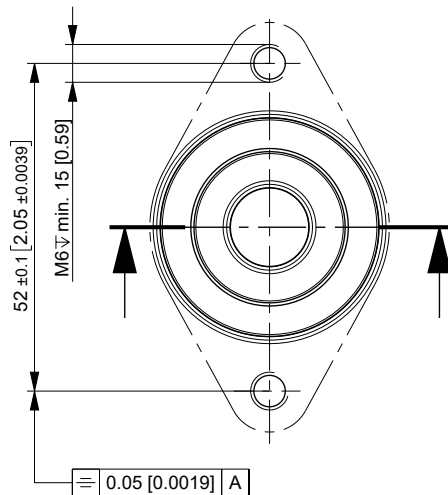
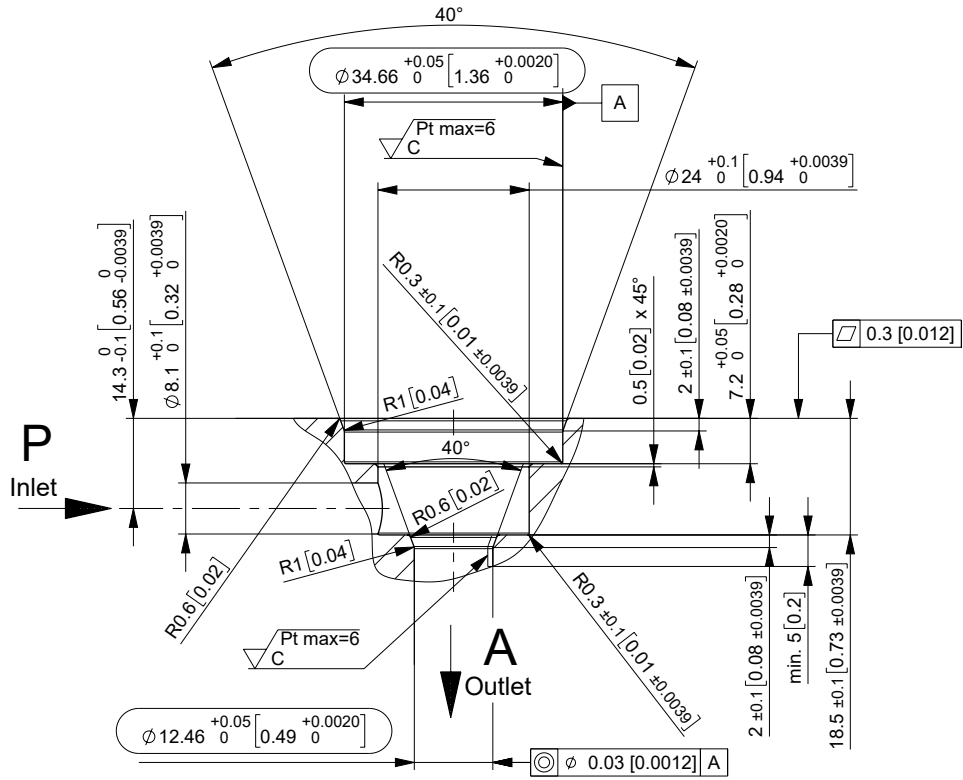
The corresponding dimensions to the letters mentioned can be found in chapter [“Complete valve”](#) on page 9.

DN	Electrical connection	Coil size	(H)		(K)		(N)		O	
			[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
6/8	Form A according to DIN EN 175301 - 803	5	32	1.26	21	0.83	–	–	41	1.61
	Plug KOSTAL MLK1.2 / TE MCON 1.2, 2 pin, coding A (male)	6	40	1.57	24	0.94	–	–		
12	Form A according to DIN EN 175301 - 803	K	42	1.65	27	1.06	–	–	64	2.52
	Plug KOSTAL MLK1.2 / TE MCON 1.2, 2 pin, coding A (male)						48	1.89		
							49	1.93		

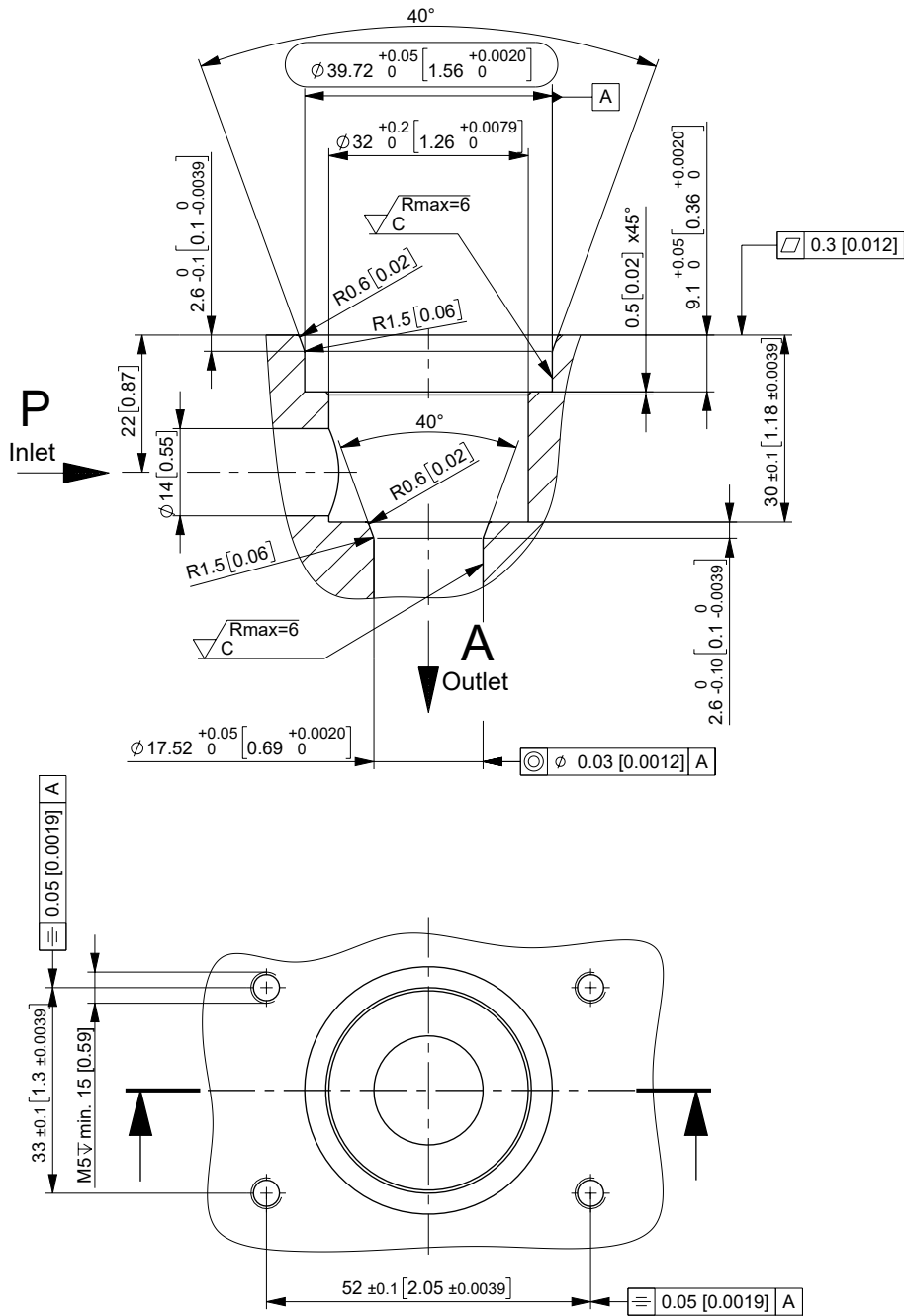
Cartridge connection diagram

Note:
Dimensions in mm [inch]

Connection contour FC16



Connection contour FC17



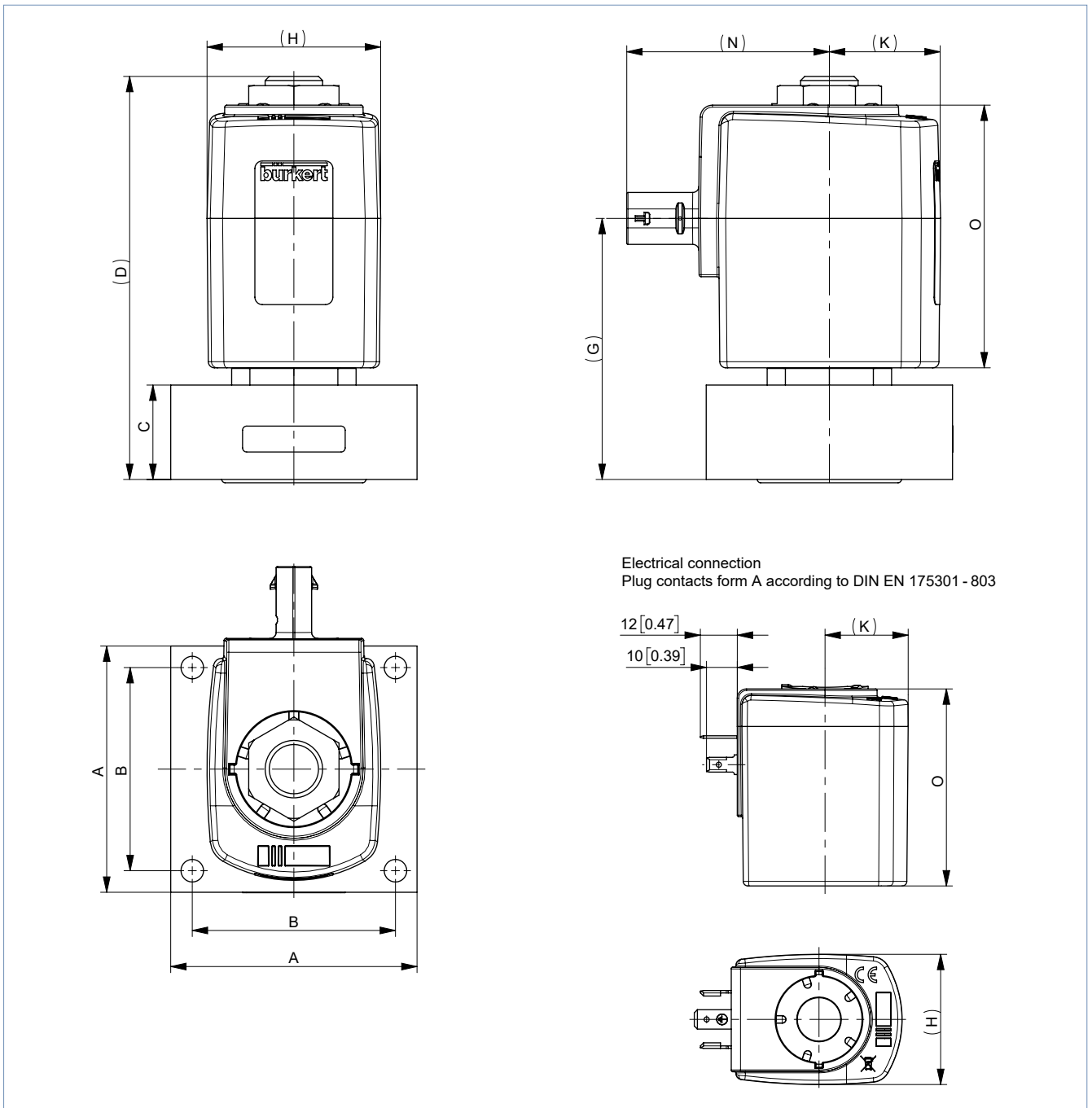
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5.3. Flange version

Complete valve

Note:

- Dimensions in mm [inch]
- The flow openings (P) of the valve body and connection block must be arranged one above the other in order to be able to achieve the Kv value specified in the data sheet. If this is not the case, there may be minor restrictions in the Kv value.
- The corresponding dimensions of the solenoid coil can be found in chapter **“Solenoid coil dimensions” on page 14.**



DN	Port connection	A		B		C		(D)		(G)	
		[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
6/8	FK14	55	2.17	46	1.81	13	0.51	58	2.28	38.5	1.52
12	FK17	60	2.36	49.5	1.95	23	0.91	98	3.86	64	2.52

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Solenoid coil dimensions

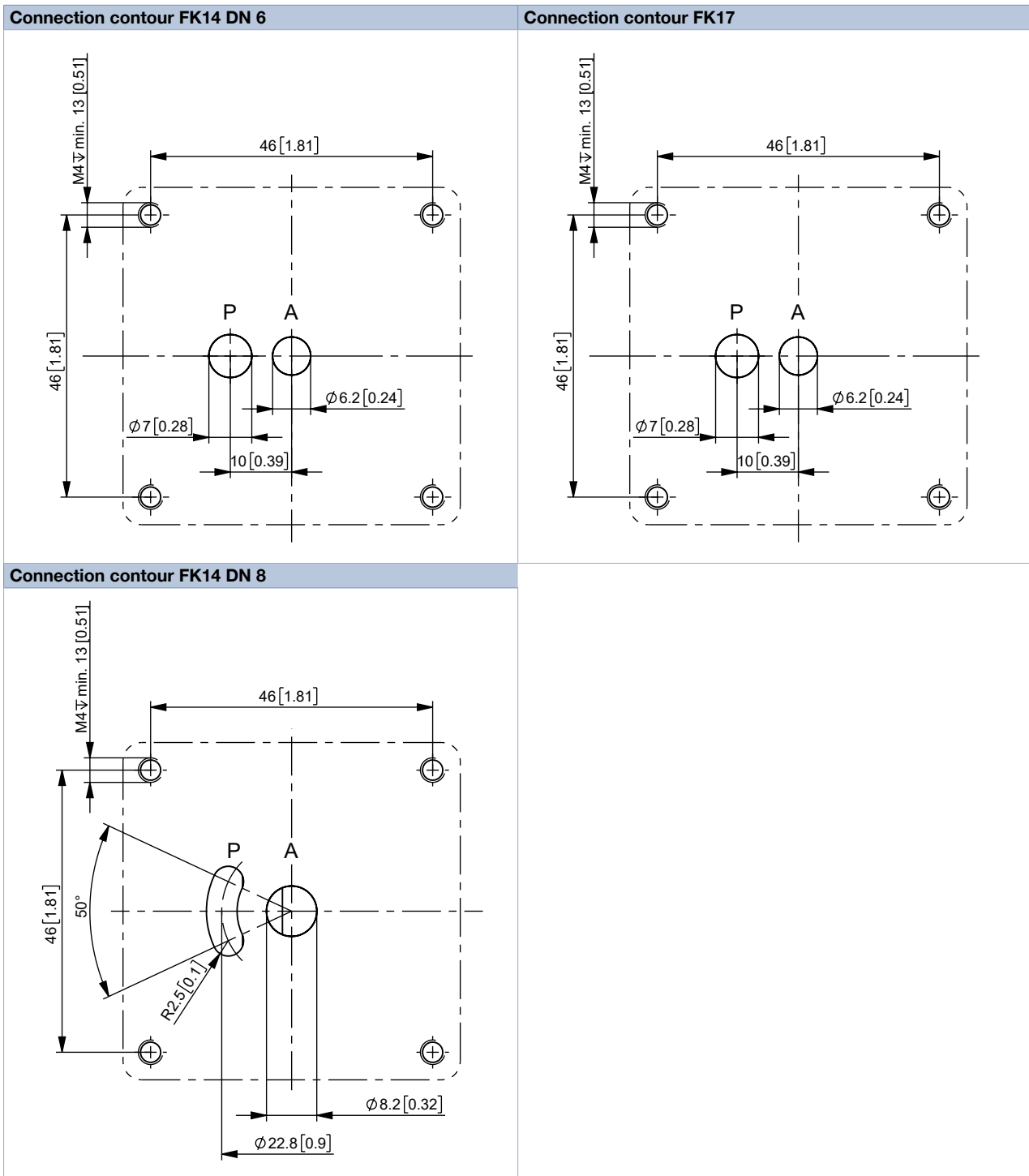
Note:

The corresponding dimensions to the letters mentioned can be found in chapter [“Complete valve” on page 13](#).

DN	Electrical connection	Coil size	(H)		(K)		(N)		O	
			[mm]	[in]	[mm]	[in]	[mm]	[in]	[mm]	[in]
6/8	Form A according to DIN EN 175301 - 803	5	32	1.26	21	0.83	–	–	41	1.61
	Plug KOSTAL MLK1.2 / TE MCON 1.2, 2 pin, coding A (male)	6	40	1.57	24	0.94	–	–		
12	Form A according to DIN EN 175301 - 803	K	42	1.65	27	1.06	–	–	64	2.52
	Plug KOSTAL MLK1.2 / TE MCON 1.2, 2 pin, coding A (male)						48	1.89		
							49	1.93		

Flange connection diagram**Note:**

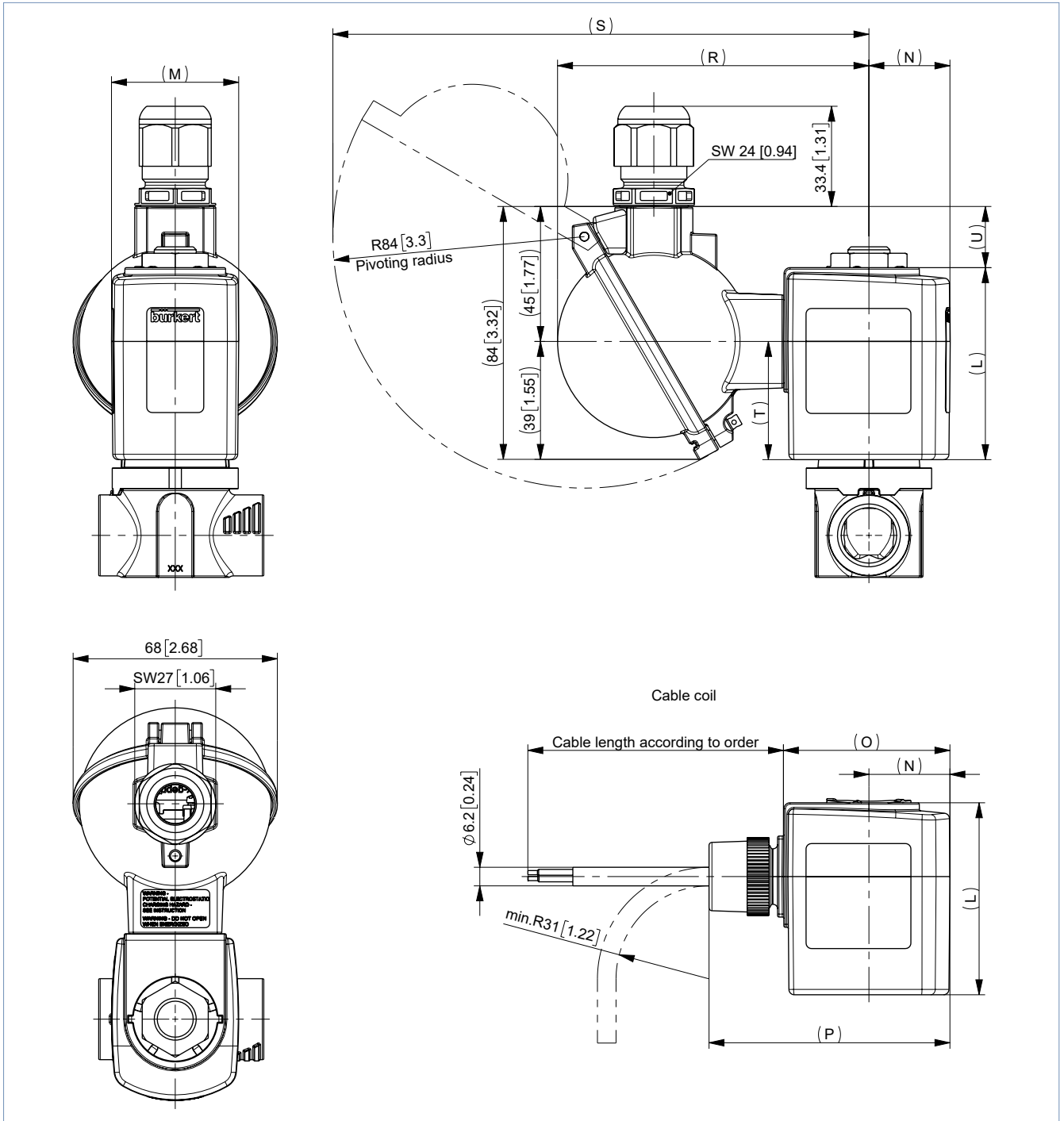
- Dimensions in mm [inch]
- P = Inlet, A = Outlet
- The flow openings (P) of the valve body and connection block must be arranged one above the other in order to achieve the Kv value specified in the data sheet. If this is not the case, minor restrictions in the Kv value may occur.



5.4. UL Listed coil for hazardous locations, Class I, Division 2

Note:

Dimensions in mm [inch]



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	24	0.94	52	2.05	75	2.95	41	1.61	103	4.06	178	7.01	26	1.02	30	1.18
PX38	K	42	1.65	27	1.06	56	2.20	80	3.15	64	2.52	105	4.13	180	7.09	40	1.57	20	0.79

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6. Performance specifications

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.

Orifice	Coil size	DC		Kick and Drop coil AC/DC		
		Cold power	Warm power	Cold power inrush	Cold power hold	Warm power hold
DN	[mm]	[W]	[W]	[W] 500 ms	[W]	[W]
6/8	32 (5)	12	10	-	-	-
	40 (6)	14	12	-	-	-
		16	14	-	-	-
		-	-	20	2	2
40 (6) EX	9	7.5	-	-	-	
12	42 (K)	21	16	-	-	-
		30	20	-	-	-
		-	-	44	6.5	5.5
	42 (K) EX	15	12	44	6.5	5.5

7. Product accessories

7.1. Special tool to turn the terminal box


Note:

This special tool is not included in the scope of delivery of the valve, see [“Cable glands for ATEX/IECEX terminal box” on page 22.](#)

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

8. Ordering information

8.1. Bürkert eShop




Bürkert eShop – Easy ordering and quick delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

[Order online now](#)

8.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

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

[Try out our product filter](#)

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8.3. Bürkert Product Enquiry Form

Bürkert Product Enquiry Form – Your enquiry quickly and compactly

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

Fill out the form now

8.4. Ordering chart for stationary applications, cable plug form A according to DIN EN 175301 - 803 (IP65 coil)

Standard version with coil UL recognized (cURus)

Note:

- Please note that the cable plug **Type 2518** ▶ is included, for details see [“Cable plug Type 2518, form A according to DIN EN 175301 - 803” on page 21.](#)
- Further variants with alternative voltages, G or RC internal threads are available on request.

Circuit function	Port connection	Orifice [mm/inch]	C _v value water [gal/min]	Coil power [W]	Pressure range (MAWP ¹⁾)		Coil size [mm/inch]	Article no.					
					Ambient temperature 167 °F [psi]	Ambient temperature 131 °F [psi]		024/DC [V/Hz]					
Stainless steel body, seal material EPDM/EPDM													
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Threaded connection with G internal thread												
	NPT ¼	6.0/0.24	0.70	12	–	0...290	32/1.26	o. r.					
					0...232	–		o. r.					
					14	–		0...507	40/1.57	o. r.			
					–	0...435		–	o. r.				
					16	–		0...580	–	o. r.			
					–	0...507		–	o. r.				
	NPT ⅜	6.0/0.24	0.70	12	–	0...290	32/1.26	o. r.					
					0...232	–		o. r.					
					14	–		0...507	40/1.57	o. r.			
					–	0...435		–	o. r.				
					16	–		0...580	–	o. r.			
					–	0...507		–	o. r.				
	NPT ½	12.0/0.47	2.56	21	–	0...290	42/1.65	o. r.					
					0...232	–		o. r.					
					–	0...580		–	o. r.				
					30	–		0...580	–	o. r.			
					Cartridge body								
					FC16	6.0/0.24		0.80	12	–	0...290	32/1.26	o. r.
	0...232	–	o. r.										
	14	–	0...507	40/1.57			o. r.						
	–	0...435	–	o. r.									
	16	–	0...507	–			o. r.						
	–	0...507	–	o. r.									
8.0/0.31	1.28	12	–	0...290		32/1.26	o. r.						
			0...232	–			o. r.						
			14	–			0...507	40/1.57	o. r.				
			–	0...435			–	o. r.					
			16	–			0...507	–	o. r.				
			–	0...507			–	o. r.					
FC17	12.0/0.47	2.65	21	–	0...290	42/1.65	o. r.						
				0...232	–		o. r.						
				–	0...362		–	o. r.					
				30	–		0...362	–	o. r.				

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Circuit function	Port connection	Orifice [mm/inch]	C _v value water [gal/min]	Coil power [W]	Pressure range (MAWP ^{1.)})		Coil size [mm/inch]	Article no.	
					Ambient temperature 167 °F	Ambient temperature 131 °F		024/DC	
					[psi]	[psi]		[V/Hz]	
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Flange body	FK14	6.0/0.24	0.70	12	–	0...290	32/1.26	o. r.
						0...232	–		o. r.
					14	–	0...507	40/1.57	o. r.
						0...435	–		o. r.
					16	–	0...580		o. r.
						0...507	–		o. r.
		FK17	8.0/0.31	0.92	12	–	0...290	32/1.26	o. r.
						0...232	–		o. r.
					14	–	0...507	40/1.57	o. r.
						0...435	–		o. r.
					16	–	0...580		o. r.
						0...507	–		o. r.
FK17	12.0/0.47	2.77	21	–	0...290	42/1.65	o. r.		
				0...232	–		o. r.		
			30	–	0...580		o. r.		

o. r. = on request
 1.) Maximum allowable working pressure

Version with Kick and Drop coil with coil UL recognized (cURus)

Note:

- Please note that the cable plug **Type 2518** is included, for details see [“Cable plug Type 2518, form A according to DIN EN 175301-803” on page 21.](#)
- 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 threads are available on request.

Circuit function	Port connection	Orifice [mm/inch]	C _v value water [gal/min]	Coil power		Pressure range (MAWP ^{1.)}) Ambient temperature 167 °F [psi]	Coil size [mm/inch]	Article no.								
				Starting power [W]	Holding power [W]			024/DC								
				[W]	[W]			[V/Hz]								
Stainless steel body, seal material EPDM/EPDM																
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Threaded connection with G internal thread															
	NPT ¼	6.0/0.24	0.70	20	2	0...580	40/1.57	o. r.								
									NPT ⅜	6.0/0.24	0.70	20	2	0...580	40/1.57	o. r.
	Cartridge body															
	FC16	6.0/0.24	0.80	20	2	0...507	40/1.57	o. r.								
									FC16	8.0/0.31	1.28	20	2	0...507	40/1.57	o. r.
	Flange body															
	FK14	6.0/0.24	0.70	20	2	0...580	40/1.57	o. r.								
									FK14	8.0/0.31	0.92	20	2	0...580	40/1.57	o. r.

o. r. = on request
 1.) Maximum allowable working pressure

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ATEX/IECEX-cable version with coil UL-listed (cULus) for hazardous locations, Class I, Division 2

Note:

- The Kick and Drop coil (AC/DC) features integrated electronics for short-term power increase and decrease in double coil technology.
- In the standard version, the cable length is 3 m. Other lengths are available on request.
- Further variants with alternative voltages, G or RC internal threads are available on request.
- ATEX/IECEX versions with terminal box are available on request.

Circuit function	Port connection	Orifice	C _v value water	Coil power		Pressure range (MAWP ^{1.)})	Coil size	Article no.
				Starting power	Holding power	Ambient temperature 167 °F		024/DC
				[W]	[W]	[psi]		[V/Hz]
Stainless steel body, seal material EPDM/EPDM								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Threaded connection with G internal thread							
	NPT ¼	6.0/0.24	0.70	9	–	0...232	40/1.57	o. r.
	NPT ⅜	6.0/0.24	0.70	9	–	0...232	40/1.57	o. r.
	NPT ½	12.0/0.47	2.56	15	–	0...145	42/1.65	o. r.
				44	6.5	0...580	42/1.65	o. r.
	Cartridge body							
	FC16	6.0/0.24	0.80	9	–	0...232	40/1.57	o. r.
	FC16	8.0	1.28	9	–	0...232	40/1.57	o. r.
	FC17	12.0/0.47	2.65	15	–	0...145	42/1.65	o. r.
					6.5	0...362	42/1.65	o. r.
	Flange body							
	FK14	6.0/0.24	0.70	9	–	0...232	40/1.57	o. r.
		8.0/0.31	0.92	9	–	0...232	40/1.57	o. r.
	FK17	12.0/0.47	2.77	15	–	0...145	42/1.65	o. r.
				6.5	0...580	42/1.65	o. r.	

o. r. = on request

1.) Maximum allowable working pressure

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8.5. Ordering chart of mobile applications with automotive plug (IP6K9K coil)

Note:

- Power must be reduced to 50 % of the nominal power (holding phase) with the aid of current control or PWM signal after max. 500 ms (switch-on pulse).
- Further variants with alternative voltages, NPT or RC internal threads are available on request.

Circuit function	Port connection	Orifice	C _v value water	Coil power ^{1.)}	Pressure range (MAWP ^{2.)})	Coil size	Article no.	
							Ambient temperature 185°F ^{3.)}	012/DC
					[mm/inch]	[gal/min]	[W]	[psi]
Stainless steel body, seal material EPDM/EPDM								
CF A 2/2-way solenoid valve Servo-controlled Normally closed 	Threaded connection with G internal thread							
	NPT 1/4	6.0/0.24	0.70	14	0...435	40/1.57	o. r.	o. r.
	NPT 1/4	6.0/0.24	0.70	16	0...507	40/1.57	o. r.	o. r.
	NPT 3/8	6.0/0.24	0.70	14	0...435	40/1.57	o. r.	o. r.
	NPT 3/8	6.0/0.24	0.70	16	0...507	40/1.57	o. r.	o. r.
	NPT 1/2	12.0/0.47	2.56	30	0...507	42/1.65	o. r.	o. r.
	Cartridge body							
	FC16	6.0/0.24	0.70	14	0...435	40/1.57	o. r.	o. r.
		6.0/0.24	0.70	16	0...507	40/1.57	o. r.	o. r.
		8.0/0.31	1.27	14	0...435	40/1.57	o. r.	o. r.
		8.0/0.31	1.27	16	0...507	40/1.57	o. r.	o. r.
	FC17	12.0/0.47	2.65	30	0...435	42/1.65	o. r.	o. r.
	Flange body							
	FK14	6.0/0.24	0.70	14	0...435	40/1.57	o. r.	o. r.
		6.0/0.24	0.70	16	0...507	40/1.57	o. r.	o. r.
		8.0/0.31	0.92	14	0...435	40/1.57	o. r.	o. r.
		8.0/0.31	0.92	16	0...507	40/1.57	o. r.	o. r.
	FK17	12.0/0.47	2.65	30	0...507	42/1.65	o. r.	o. r.

o. r. = on request

1.) The stated power represents the required power of the pick-up phase. Power must be reduced by min. 50% by means of current control or PWM signal after max. 500 ms (switch-on pulse) (holding phase).

2.) Maximum allowable working pressure

3.) Use at this ambient temperature is only guaranteed if power is reduced to 50% of the nominal power by means of current control or PWM signal after max. 500 ms (switch-on pulse).

8.6. Ordering chart accessories

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

Note:

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


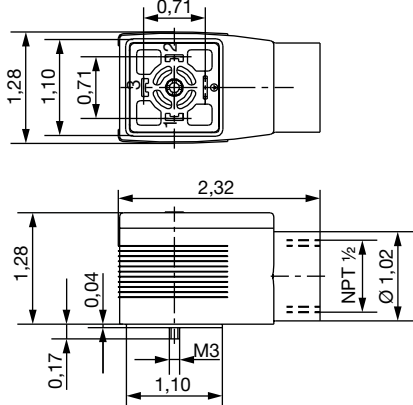
Cable plug	Dimensions	Version	Voltage	Article no.
		Without circuitry (AC/DC)	0...250 V AC/DC	314802
		With LED (AC/DC)	12...24 V AC/DC	314812
		With LED and varistor (AC/DC)	12...24 V AC/DC	314820
		With rectifier, LED and varistor	12...24 V AC/DC	314816
		Without circuitry (AC/DC) with silicone seal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

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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)
- Refer to data sheet **Type 2509** ▶ for more information about the cable plug.

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

Cable glands for ATEX/IECEX terminal box

Note:

- A cable gland in polyamide version is included in the delivery. A nickel-plated brass version can be ordered at surcharge.
- Refer to **"7.1. Special tool to turn the terminal box"** on page 17 for more information about special wrench.

Description	Article no.
Set SC02-AC10: special wrench ²⁾ incl. service manual	293488 𐀀

1.) Cable diameter

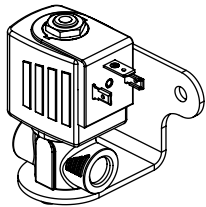
2.) Not included in the scope of delivery of the valve

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 6027/6240/6440	282304 𐀀



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