



Servo-assisted 2/2 way diaphragm valve

- Servo-assisted diaphragm with diameter of up to DN40
- Spring coupled diaphragm opens without differential pressure
- Damped design for quiet closing
- Compact construction with high flow rate
- Energy-saving double coil technology with kick and drop design



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

Can be combined with

	Type 2518 Cable Plug DIN EN 175301 - 803 - Form A	▶
	Type 2513 Cable plug acc. to DIN EN 175301 - 803 Form A	▶
	Type 1087 Timer	▶

Type description

The 6213 EV valve is a servo-assisted solenoid valve of the S.EV series. The spring coupling of the diaphragm supports the opening process of the valve. In its standard version, the valve is suitable for use in liquids. A minimum differential pressure is required for complete opening. A special version (HP00) which opens the valve without differential pressure is available for gas and vacuum applications. Various diaphragm material combinations are available depending on the application. The standard brass housing satisfies all European drinking water requirements. Dezincification-resistant brass is available for other markets. The housing offering is rounded off with a stainless steel version. To reduce power consumption in operation, coils with "Kick and Drop" (KD) electronics (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 – in combination with a stainless steel housing NEMA 4X.

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1. General technical data

Product properties	
Materials	
Body	Brass acc. to DIN EN 50930-6 Stainless steel 1.4408 Gunmetal (external thread) DN10...DN20
Coil	Polyamide, epoxy (insulation class H)
Seal	NBR, FKM, EPDM
Inner part of valve	Brass body: Brass, stainless steel and PPS Stainless steel body: Stainless steel and PPS Gunmetal body: Stainless steel and PPS (external thread) DN10...DN20
Orifice	Standard: DN10...DN40 HP00: DN13...DN20
Electrical data	
Voltage tolerance	± 10 %
Voltages	Standard: 024/DC, 024/50, 230/50, 110/50, 120/60 HP00: 24 V (50...60 Hz), 230 V (50...60 Hz)
Performance data	
Duty cycle	100 % continuous rating; KD coil; max. rating 6 circuit switches/minute
Response times^{1.)} AC / DC	
DN10...DN13	Opening: 10...100 ms Closing: 100...200 ms
DN20	Opening: 200...300 ms Closing: 400...700 ms
DN25...DN40	Opening: 300...400 ms Closing: 800...1400 ms
Power consumption	Depending on orifice and coil size For detailed information, see "5. Performance specifications" on page 9
Medium data	
Medium	
NBR	Neutral fluids, water, hydraulic oil, oil without additives
FKM	Per-solutions, hot oils with additives
EPDM	Oil and fat-free fluids and gases
Medium temperature	
NBR	- 10 °C... +80 °C
FKM	0 °C... +90 °C with polyamide coil 0 °C... +120 °C with epoxy coil
EPDM	-30 °C... +90 °C with polyamide coil -30 °C... +100 °C with epoxy coil
Viscosity	Max. 21 mm ² /s
Approvals and certificates	
Protection class	IP65 with cable plug and cable connection IP65 with terminal box (further versions on request)
Product connections	
Electrical connection	Tag connector acc. to DIN EN 175 301 - 803 Form A (see "6.4. Ordering chart accessories" on page 14)
Environment and installation	
Installation	As required, preferably with actuator upright
Ambient temperature	Max. +55 °C

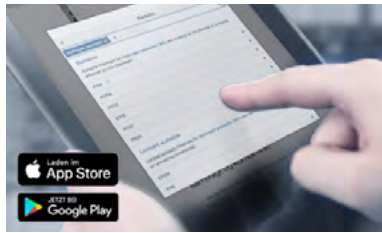
1.) Measurement with water at valve outlet 6 bar and +20 °C. Opening: Pressure build-up 0 to 90 %, Closing: Pressure drop 100 to 10

2. Circuit functions

Circuit functions	Description
	Type: A, solenoid valve 2/2 way Servo-controlled Normally closed

3. Materials

3.1. Chemical Resistance Chart – Bürkert resistApp



Bürkert resistApp – Chemical Resistance Chart

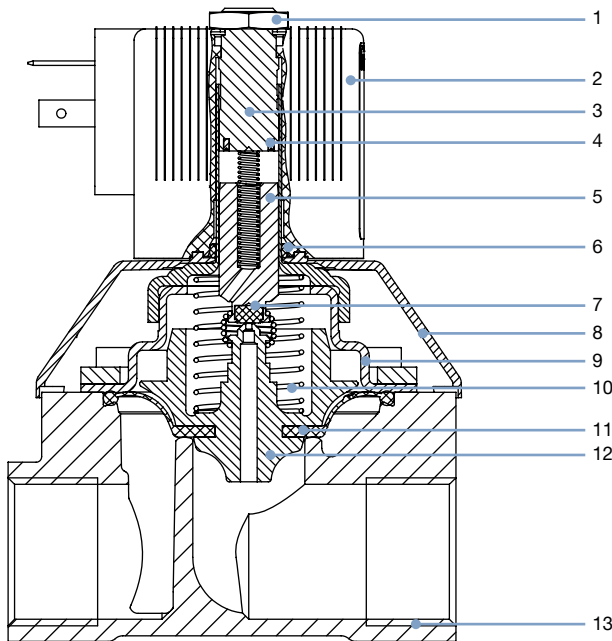
You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start Chemical Resistance Check](#)

3.2. Material specifications

Note:

The sectional view shown corresponds to the standard version. For other versions and nominal diameters, the sectional view varies.



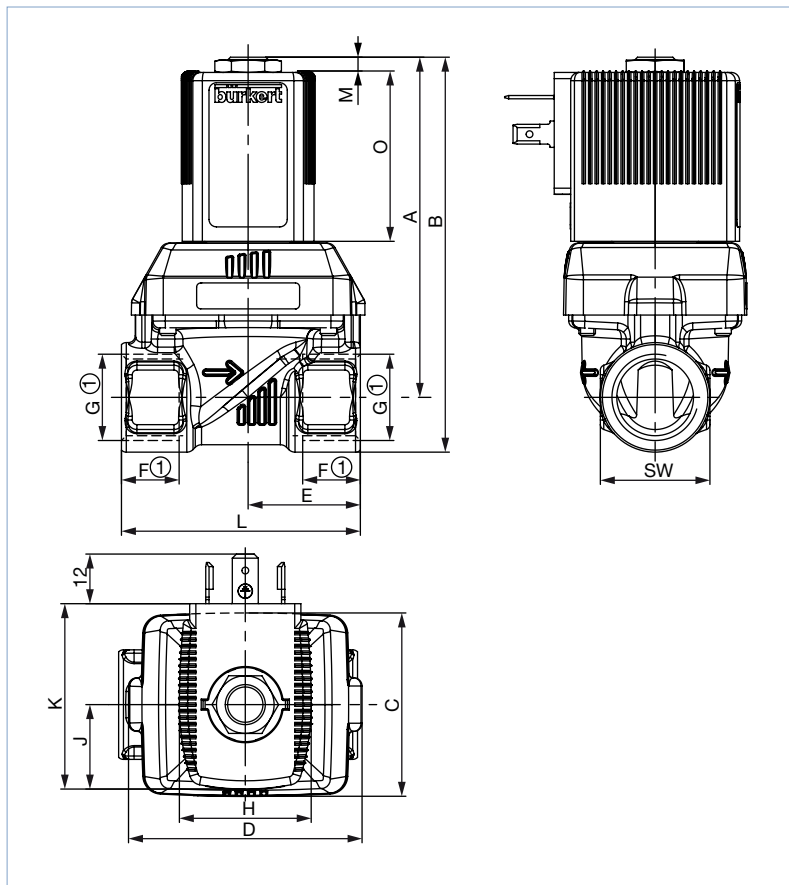
No.	Element	Material
1	Locknut	Steel (surface thick-film passivated acc. to RoHS) Stainless steel 1.4305, PTFE coated
2	Coil	Polyamide or Epoxy
3	Stopper	Stainless steel 1.4113
4	Shading ring (only AC version)	with Brass body: Copper (Cu) with Stainless steel body: Silver (Ag)
5	Magnetic core	Stainless steel 1.4113
6	O-Ring	FKM
7	Plunger seal	NBR, FKM, EPDM
8	Bonnet	PA6
9	Cover	DN10...DN25: Stainless steel 1.4301 DN40: Brass, stainless steel 1.4408
10	Spring	Stainless steel 1.4310
11	Diaphragm	NBR, FKM, EPDM
12	Diaphragm support	PPSGF40 in combination with brass and accordingly stainless steel parts
13	Valve body	Brass, stainless steel 1.4408 Gunmetal with external thread

4. Dimensions

4.1. Standard version in brass and stainless steel

Note:

- Dimensions in mm
- The dimensions F1 and G 1 apply to G-threads
- The dimensions F2 and G 2 apply to NPT-threads
- The dimensions F3 and G 3 apply to RC-threads



DN	A	B	C	D	E (MS/VA)	G		NPT		Rc		L (MS/VA)	SW	Coil size
						F1	G 1	F2	G 2	F3	G 3			
10	71.1	82.1	36	46	22	12	G ¼	10.0	NPT ¼	-	-	50	22	5 and 6
					24.5	14	G ⅜	10.3	NPT ⅜	10.1	Rc ⅜		27	
10 ¹⁾	73.1	86.6					G ½	13.7	NPT ½	13.2	Rc ½	50		
10 ²⁾												55		
13 ¹⁾	82.6	95.9	44.5	56.7	27.25	14	G ½	13.7	NPT ½	13.2	Rc ½	58	27	5 and 6
13 ²⁾					32.5								65	
13	84.6	100.6			32.5	16	G ¾	14	NPT ¾	14.5	Rc ¾	65	32	
20	97.1	113.1	65	76.6	37	16	G ¾	14	NPT ¾	14.5	Rc ¾	80	32	5 and 6
20	99.6	120.1			37.5	18	G 1	16.8	NPT 1	16.8	Rc 1	80	41	
13 ¹⁾	109.3	122.8	44.5	56	27.25	14	G ½	13.7	NPT ½	13.2	Rc ½	58	27	K and L
13 ²⁾					32.5								65	
13	111.3	127.3			32.5	16	G ¾	14	NPT ¾	14.5	Rc ¾	65	32	
20	123.9	139.9	65	76.6	37	16	G ¾	14	NPT ¾	14.5	Rc ¾	80	32	K and L
20	126.4	146.9			37.5	18	G 1	16.8	NPT 1	16.8	Rc 1	80	41	
25	143.4	163.4	77	88	46	18	G 1	16.8	NPT 1	16.8	Rc 1	95	41	K and L
25	148.3	173.3			46	20	G 1¼	17.3	NPT 1¼	19.1	Rc 1¼	95	50	

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DN	A	B	C	D	E (MS/VA)	G		NPT		Rc		L (MS/VA)	SW	Coil size
						F1	G 1	F2	G 2	F3	G 3			
40 ^{1.)}	153.9	178.9	104.5	117	61	20	G 1¼	17.3	NPT 1¼	19.1	Rc 1¼	126	50	K and L
40	159.4	189.4			61	22	G 1½	17.3	NPT 1½	19.1	Rc 1½	126	60	
40	165.4	200.4			64	24	G 2	17.6	NPT 2	23.4	Rc 2	132	70	

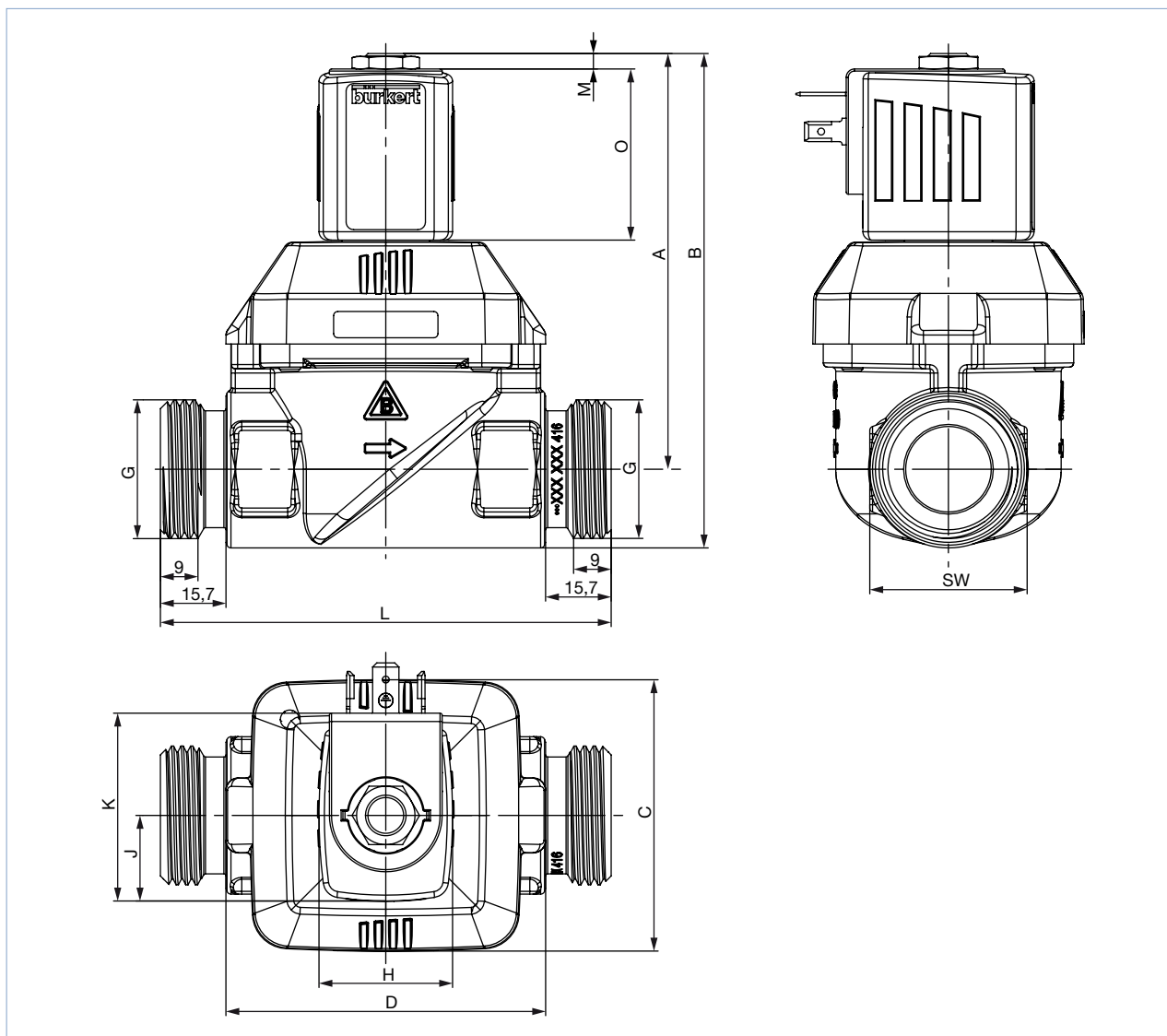
1.) only as brass thread port version

2.) only as stainless steel thread port version

4.2. Gunmetal version with external thread

Note:

Dimensions in mm

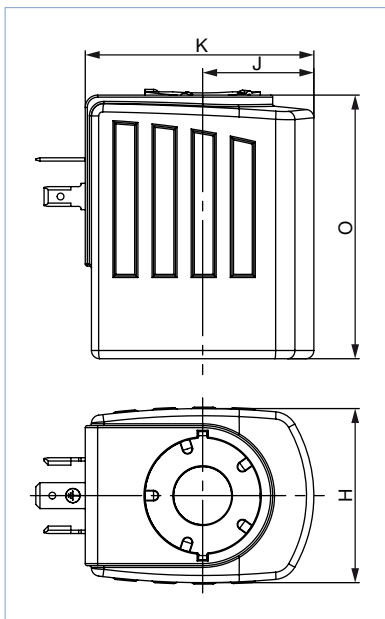


DN	A	B	C	D	G	L	SW	Coil size
10	73.1	86.1	36	46	G ½	80	26	5 and 6
13	84.6	100.6	44.5	56.7	G ¾	89	32	5 and 6
20	99.6	118.5	65	76.6	G 1	108	37.7	5 and 6
13	104.3	120.3	44.5	56.7	G ¾	89	32	K and L
20	119.3	139.8	36	76.6	G 1	108	37.7	K and L

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4.3. Coil dimension

Note:
Dimensions in mm

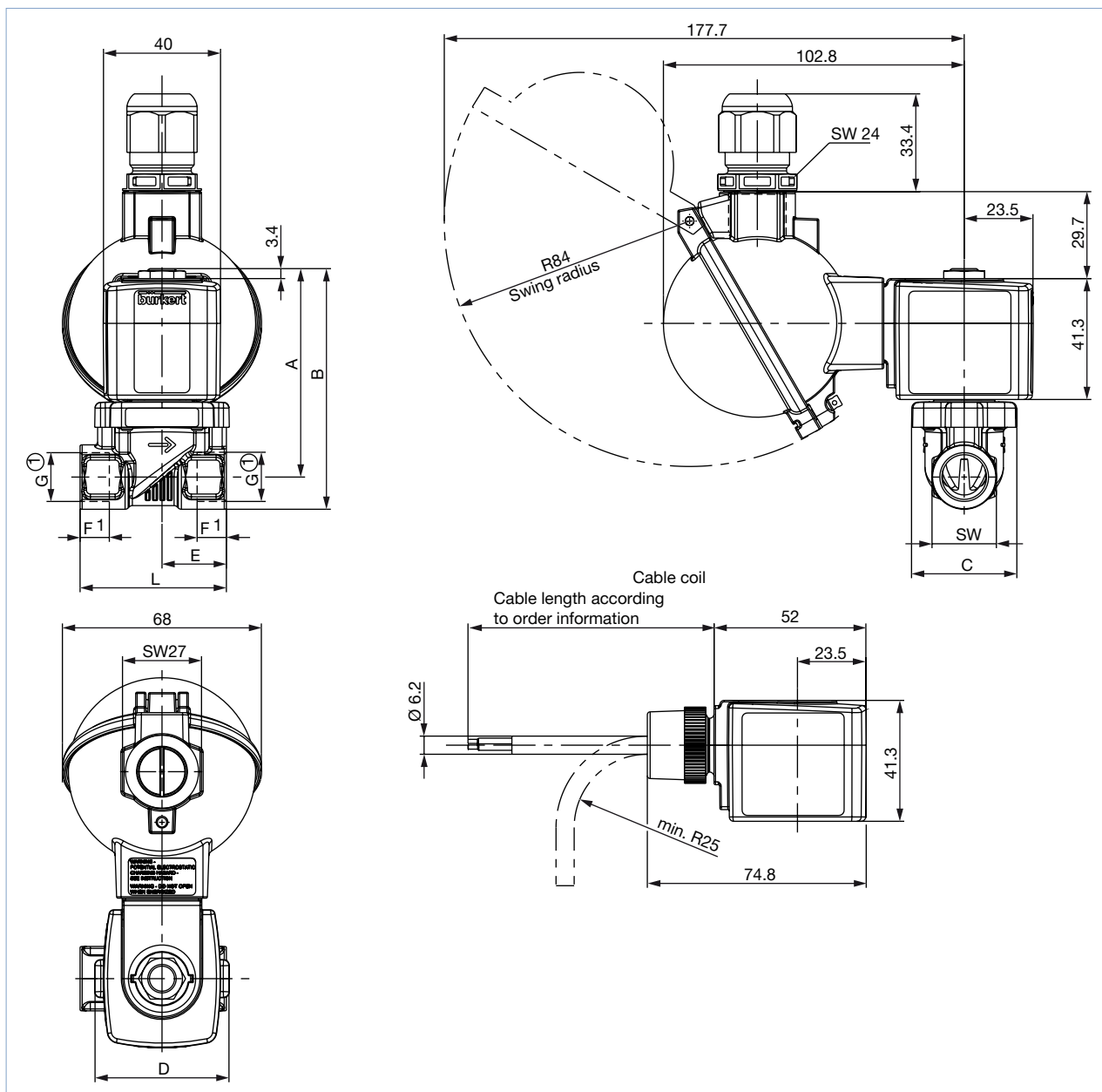


Coil size	H	J	K	O	M
5	32	20.5	45	41	3.4
6	40	23.5	51	41	3.4
K	42	27	55.5	64	7
L	65	37.5	72	64	7

4.4. Explosion-proof version ATEX + IECEx

Note:

Coil with terminal box and cable gland or coil with cable connection on request.



DN	A	B	C	D	E	G		NPT		Rc		L	SW
						F1	G 1	F2	G 2	F3	G 3		
10	71.2	82.2	36	45.6	22	12	G ¼	10	NPT ¼	-	-	50	22
	73.2	86.7			24.5	14	G ½	13.7	NPT ½	13.2	Rc ½		27
13	82.7	96	44.5	56.7	27.25	14	G ½	13.7	NPT ½	13.2	Rc ½	55	27
	32.5	65											
	84.7	100.7			16	G ¾	14	NPT ¾	14.5	Rc ¾	32		
20	97.2	113.2	65	76.6	37	16	G ½	14	NPT ¾	14.5	Rc ¾	80	41
	99.7	120.2			37.5								

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5. Performance specifications

5.1. Power consumption

Nominal size	Coil size		AC			DC		KD coil AC/DC ²⁾		
			Inrush	Hold		Cooling capacity	Heat performance	AC	DC	AC/DC
[mm]	[mm]	SG	[VA]	[VA]	[W]	[W]	[W]	Cooling capacity ¹⁾ Inrush (500 ms)	Cooling capacity ¹⁾ Hold	Heat performance Hold
			[VA]	[VA]	[W]	[W]	[W]	[W] [VA]	[W]	[W]
10	32	5	34	14	8	–	–	–	–	–
10	40	6	–	–	10	11	10	–	–	–
13	32	5	36	14	8	–	–	–	–	–
13	40	6	–	–	10	11	10	–	–	–
13	42	K	125	37	16	21	16	44	6.5	5.5
20	32	5	38	14	8	–	–	–	–	–
20	40	6	–	–	10	11	10	–	–	–
20	42	K	140	37	16	21	16	44	6.5	5.5
25	42	K	150	37	16	–	–	85	8.5	7
25	65	L	–	–	–	28	21	–	–	–
40	42	K	190	37	16	–	–	85	8.5	7
40	65	L	–	–	–	28	21	–	–	–

1.) Cooling capacity at coil temperature 20 °C

2.) "Kick and Drop" coil (KD coil): Coil with energy-saving "Kick and Drop" electronics in double coil technology

6. Ordering information

6.1. Bürkert eShop – Easy ordering and quick delivery



Bürkert eShop – Easy ordering and fast 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.

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6.2. Bürkert product filter



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