



Servo-assisted 2/2 way valve diaphragm valve

- Servo-assisted diaphragm valve with diameter of up to DN65
- Separating diaphragm for aggressive and contaminated media
- Closing and opening times can be individually adjusted
- Explosion proof version (Cat.2)
- Service-friendly manual override

The 5282 valve is a servo-assisted diaphragm valve. A minimum differential pressure is required for the valve to function. Various diaphragm material combinations and methods of operation are available depending on the application. The standard brass housing satisfies all European drinking water requirements. The housing offering is completed with stainless steel and grey cast iron versions.

The 3/2 way pilot valve can be easily converted from NC to NO functioning principle by rotating it on the armature. The solenoid coils are moulded with a chemically resistant epoxy. The 5282 is equipped with manual override for commissioning and testing. In combination with a plug in accordance with DIN EN 175301-803 Form A and stainless steel housing the valves satisfy protection class NEMA 4X.

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Explosion proof version

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Technical data	
Orifice	DN13 – 65 mm
Body material	
Threaded port	Brass acc. to DIN EN 50930-6, stainless steel 1.4581
Flange	Stainless steel 1.4541, cast iron
Coil encapsulation material	Epoxy
Coil insulation class	H
Seal material	NBR, EPDM, FKM
Medium	
NBR	Neutral fluid, such as compressed air, water, hydraulic oil,
EPDM	Oil and fat-free fluid, e.g. alkaline solutions, hot water
FKM	Hot air, peracetic acid, hot oil
Medium temperature	
NBR	0° to +80 °C
EPDM	-25 to +90 °C
FKM	0 to +90 °C
Ambient temperature	Max. +55 °C
Voltage tolerance	± 10 %
Duty cycle	100 % continuous rating
Electrical connection	
Standard	Cable plug acc. DIN EN 175301-803 Form A (previously DIN 43650)
EX	With moulded-in cable 3 m long, 3 × 0.75 mm ² With terminal box
Protection class	IP65 with cable plug acc. to DIN EN 175301-803 Form A NEMA 4X units with stainless steel housing IP65 with cable or terminal box
Type of protection (ATEX and IECEx version)	
With cable	II 2G Ex mb IIC Gb II 2D Ex mb IIIC T130 °C Db II 2G Ex eb mb IIC T4 Gb
With terminal box	II 2D Ex mb tb IIIC T130 °C Db
Installation	as required, preferably connected upright

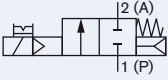
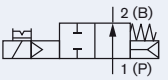
Technical data, continued

Version	Orifice [mm]	Power consumption			Response times ¹⁾	
		Inrush AC [VA]	Hold AC [VA/W]	DC cold/warm [W]	Opening [s]	Closing [s]
Standard	13–65	24	14/8	11/8	0.1–0.8	1.0–4.0
EX	13–65	40	3	40 Inrush / 3 Hold	0.1–0.8	1.0–4.0

¹⁾ Measured at valve outlet at 6 bar and +20 °C. Opening: pressure build-up 0...90 %, Closing: pressure relief 100...10%
The response times can be changed by turning the restrictor screws (in the body cover).

Ordering chart for valves (other versions on request)

Brass body, threaded port, with manual override, without cable plug

Circuit function	Port connection	Orifice [mm]	K _v value water ²⁾ [m ³ /h]	Nominal pressure [bar] ³⁾	Weight [kg]	Article no. per voltage/frequency [V/Hz]		
						024/DC	024/50–60	230/50–60
A 2/2 way servo-controlled solenoid valve, normally closed, with manual override 	Brass body, threaded port, seal material NBR							
	G ½	13.0	4.0	0.2–10	0.95	134430	134431	134433
	G ¾	20.0	6.5	0.2–10	1.40	134434	134435	134437
	G 1	25.0	10.0	0.2–10	1.85	134438	134439	134441
	G 1¼	32.0	20.0	0.2–10	2.60	134442	134443	134445
	G 1½	40.0	20.0	0.2–10	3.05	134446	134447	134449
	G 2	50.0	40.0	0.2–10	5.15	134450	134451	134453
G 2½	65.0	40.0	0.2–10	5.90	134454	134455	134457	
or by turning the pilot drive through 180° B 2/2 way servo-controlled solenoid valve, normally open, with manual override 	Brass body, threaded port, seal material EPDM							
	G ½	13.0	4.0	0.2–10	0.95	134458	134459	134461
	G ¾	20.0	6.5	0.2–10	1.40	134462	134463	134465
	G 1	25.0	10.0	0.2–10	1.85	134466	134467	134469
	G 1¼	32.0	20.0	0.2–10	2.60	134470	134471	134473
	G 1½	40.0	20.0	0.2–10	3.05	134474	134475	134477
	G 2	50.0	40.0	0.2–10	5.15	134478	134479	134481
G 2½	65.0	40.0	0.2–10	5.90	134482	134483	134485	
Brass body, threaded port, seal material FKM								
G ½	13.0	4.0	0.2–10	0.95	134486	134487	134489	
G ¾	20.0	6.5	0.2–10	1.40	134490	134491	134493	
G 1	25.0	10.0	0.2–10	1.85	134494	134495	134497	
G 1¼	32.0	20.0	0.2–10	2.60	134498	134499	134501	
G 1½	40.0	20.0	0.2–10	3.05	134502	134503	134505	
G 2	50.0	40.0	0.2–10	5.15	134506	134507	134509	
G 2½	65.0	40.0	0.2–10	5.90	134510	134511	134513	

²⁾ measured at +20 °C, 1 bar pressure at valve inlet and free outlet, a differential pressure of 0.5 bar is required to open the full orifice.

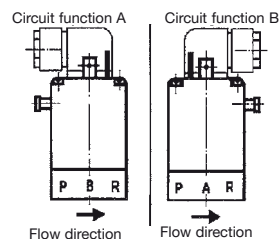
³⁾ Pressure values [bar]: Overpressure to the atmospheric pressure

Please note that the cable plug has to be ordered separately, see ordering chart for accessories, see datasheet for Type 2508 or 2518.

Delivered as circuit function A. Change to circuit function B by turning the pilot drive by 180° (only for 10 bar version).

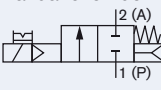
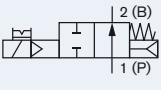
Mounting instructions:

Arrangement of the pilot control



Ordering chart for valves (other versions on request), continued

Stainless steel body, threaded port or flange, with manual override, without cable plug

Circuit function	Port connection	Orifice [mm]	K _v value water ¹⁾ [m ³ /h]	Nominal pressure ²⁾ [bar]	Weight [kg]	Article no. per voltage/frequency [V/Hz]			
						024/DC	024/50 - 60	230/50 - 60	
A 2/2 way servo-controlled solenoid valve, normally closed, with manual override 	Stainless steel, threaded port, seal material NBR								
	G ½	13.0	4.0	0.2 - 10	0.91	281976	281979	281981	
	G ¾	20.0	6.5	0.2 - 10	1.40	137142	137143	137145	
	G 1	25.0	10.0	0.2 - 10	1.80	137146	137147	137149	
	G 1¼	32.0	20.0	0.2 - 10	2.25	137150	137151	137153	
	G 1½	40.0	20.0	0.2 - 10	2.70	137154	137155	137157	
	G 2	50.0	40.0	0.2 - 10	4.80	137158	137159	137161	
	Stainless steel, threaded port, seal material FKM								
	G ½	13.0	4.0	0.2 - 10	0.91	220291	220292	220294	
	G ¾	20.0	6.5	0.2 - 10	1.40	134518	134519	134521	
	G 1	25.0	10.0	0.2 - 10	1.80	134522	134523	134525	
	G 1¼	32.0	20.0	0.2 - 10	2.25	134526	134527	134529	
G 1½	40.0	20.0	0.2 - 10	2.70	134530	134531	134533		
G 2	50.0	40.0	0.2 - 10	4.80	134534	134535	134537		
B 2/2 way servo-controlled solenoid valve, normally open, with manual override 	Stainless steel, threaded port, seal material EPDM								
	G ½	13.0	4.0	0.2 - 10	0.91	220297	220298	220300	
	G ¾	20.0	6.5	0.2 - 10	1.40	145709	on request	141714	
	G 1	25.0	10.0	0.2 - 10	1.80	141078	93909807	146160	
	G 1¼	32.0	20.0	0.2 - 10	2.25	438559	on request	147803	
	G 1½	40.0	20.0	0.2 - 10	2.70	141667	on request	139823	
	G 2	50.0	40.0	0.2 - 10	4.80	141075	on request	146530	
	Stainless steel flange acc. DIN EN 1092-1 with FKM								
	Flange	25.0	10.0	0.2 - 10	3.65	134554	134555	134557	
	Flange	32.0	20.0	0.2 - 10	6.45	134558	134559	134561	
	Flange	40.0	20.0	0.2 - 10	7.05	134562	134563	134565	
	Flange	50.0	40.0	0.2 - 10	10.50	134566	134567	134569	
Stainless steel flange acc. DIN EN 1092-1 with EPDM									
Flange	25.0	10.0	0.2 - 10	3.65	134570	134571	134573		
Flange	32.0	20.0	0.2 - 10	6.45	134574	134575	134577		
Flange	40.0	20.0	0.2 - 10	7.05	134578	134579	134581		
Flange	50.0	40.0	0.2 - 10	10.50	134582	134583	134585		

¹⁾ measured at +20 °C, 1 bar pressure at valve inlet and free outlet, a differential pressure of 0.5 bar is required to open the full orifice.

²⁾ Pressure values [bar]: Overpressure to the atmospheric pressure

Please note that the cable plug has to be ordered separately, see ordering chart for accessories, see datasheet for Type 2508 or 2518.

Delivered as circuit function A. Change to circuit function B by turning the pilot drive by 180° (only for 10 bar version).

i Weitere Ausführungen auf Anfrage

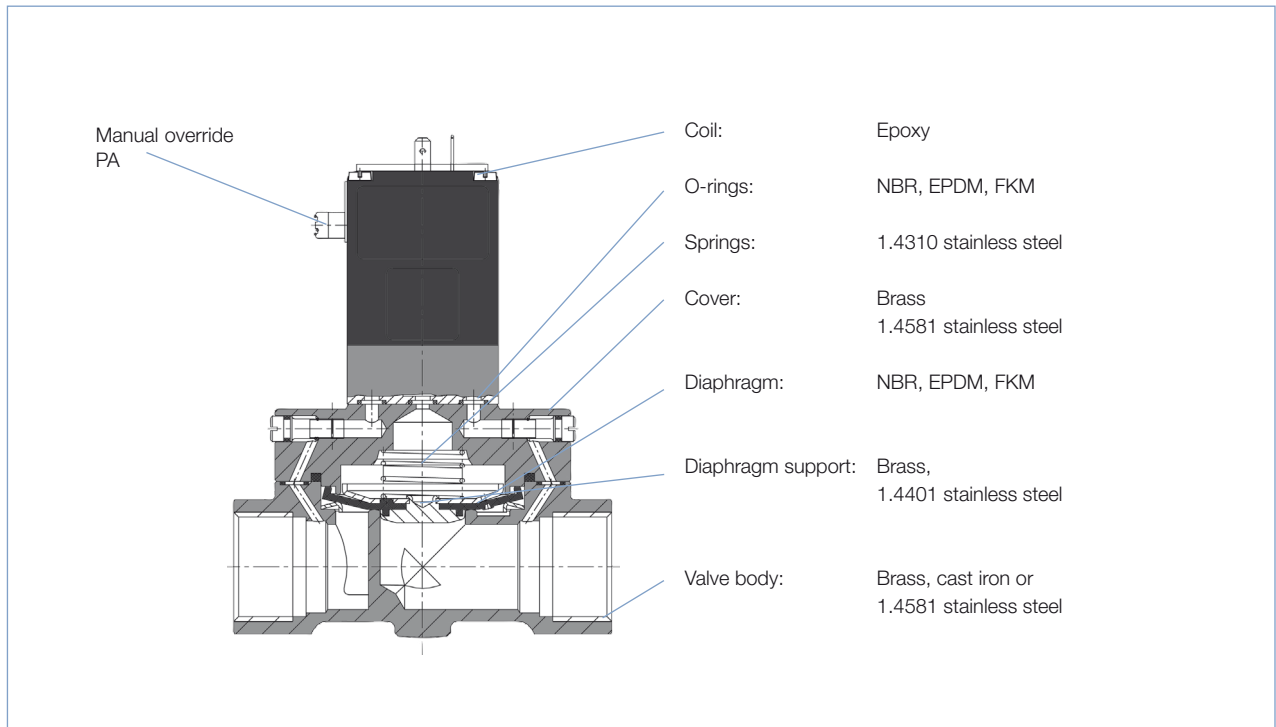
⚡ Voltages

🔍 Approvals
UL, UR, CSA, Hazardous Locations Expl. proof, Ex, KOSHA, NEPSI, CGA/AGA, FM Ex Div. 1 or 2, Drinking water acc. to KTW/W270, pulse version

➔ Additional
With optical position indicator or electrical feedback as potential-free contact or NAMUR signal

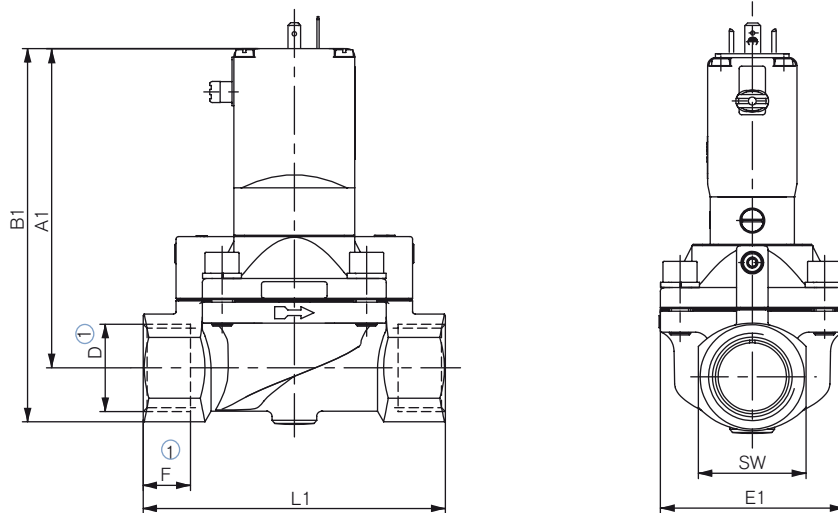
📏 Druck
Pressure range up to 16 bar

Materials



Dimensions [mm]

Threaded port



① For port connection G thread F1 and G 1 applies,
port connection NPT thread F2 and G 2,
port connection Rc thread F3 and G 3.

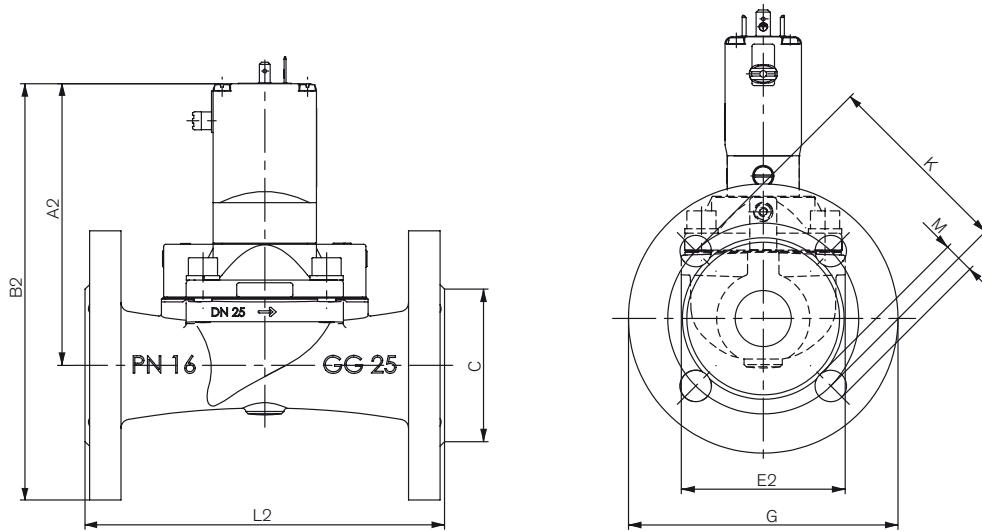
② only as stainless steel - thread port version

③ only as brass - thread port version

Threaded port											
DN	D1	A1	B1	F1	D2	F2	D3	F3	E1	L1	SW
③ 13		109.0	123.0				Rc 3/8	10.1	40	65	27
③ 13	G 1/2	109.0	123.0	14	NPT 1/2	13.7	Rc 1/2	13.2	40	65	27
② 13	G 1/2	108.0	124.0	14	NPT 1/2	13.7	Rc 1/2	13.2	40	65	32
② 13	G 3/4	108.0	124.0	16	NPT 3/4	14.0	Rc 3/4	14.5	40	65	32
② 20	G 1/2	115.0	131.0	14	NPT 1/2	13.7	Rc 1/2	13.2	60	100	32
20	G 3/4	115.0	131.0	16	NPT 3/4	14.0	Rc 3/4	14.5	60	100	32
25	G 1	121.5	142.0	18	NPT 1	16.8	Rc 1	16.8	70	115	41
32	G 1 1/4	122.0	147.0	20	NPT 1 1/4	17.3	Rc 1 1/4	19.1	85	126	50
40	G 1 1/2	126.0	156.0	22	NPT 1 1/2	17.3	Rc 1 1/2	19.1	85	126	60
50	G 2	142.5	177.5	24	NPT 2	17.6	Rc 2	23.4	115	164	70
65	G 2 1/2	142.5	185.0	27	NPT 2 1/2	23.6	Rc		115	180	85

Dimensions [mm], continued

Flange version acc. to DIN EN 1092-1

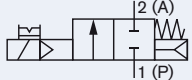
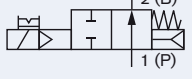


Flange version in stainless steel and cast iron

DN	A2	B2	C	E2	G	L2	M	K
25	125.5	185.5	68	73	120	160	14	85
32	122.0	192.0	78	85	140	180	18	100
40	126.0	201.0	88	85	150	200	18	110
50	142.5	225.0	102	115	165	230	18	125



Ordering chart for valves (other versions on request)

Circuit function	Port connection	Orifice [mm]	K _v value ¹⁾ water [m ³ /h]	Pressure range ²⁾ [bar]	Article no. per Voltage [V/Hz] Seal	
					024/ UC	230/ UC
Version with manual override, FKM seal and terminal box (without safety fuse)						
A 2/2 way servo-controlled solenoid valve, normally closed, with manual override  or by turning the pilot drive through 180°	Brass - Threaded body, seal material FKM					
	G ½	13	4.0	0.5–10	308686	308714
	G ¾	20	6.5	0.5–10	308704	308731
	G 1	25	10.0	0.5–10	308705	308710
	G 1¼	32	20.0	0.5–10	on request	on request
	G 1½	40	20.0	0.5–10	314375	308702
	G 2	50	40.0	0.5–10	on request	on request
	Stainless steel - Threaded body, seal material FKM					
	G ½	13	4.0	0.5–10	308716	308738
	G ½	20	5.0	0.5–10	308677	308708
G ¾	20	6.5	0.5–10	308706	308709	
G 1	25	10.0	0.5–10	308688	308733	
G 1¼	32	20.0	0.5–10	on request	315307	
G 1½	40	20.0	0.5–10	313855	313857	
G 2	50	40.0	0.5–10	on request	312632	
Version with manual override, NBR seal and moulded-in cable, 3 m						
B 2/2 way servo-controlled solenoid valve, normally open, with manual override  or by turning the pilot drive through 180°	Brass - Threaded body, seal material NBR					
	G ½	13	4.0	0.5–10	307168	307171
	G ¾	20	6.5	0.5–10	307188	307192
	G 1	25	10.0	0.5–10	307204	307212
	G 1¼	32	20.0	0.5–10	307224	307226
	G 1½	40	20.0	0.5–10	307236	307237
	G 2	50	40.0	0.5–10	307243	307245
	G 2½	65	40.0	0.5–10	on request	307250

¹⁾ measured at +20 °C, 1 bar pressure at valve inlet and free outlet, a differential pressure of 0.5 bar is required to open the full orifice.

²⁾ Pressure values [bar]: Overpressure to the atmospheric pressure



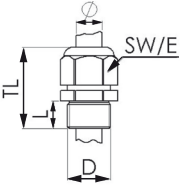


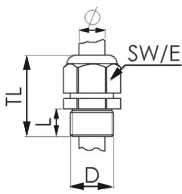
Delivered as circuit function A. Change to circuit function B by turning the pilot drive by 180° (only for 10 bar version).



Ordering chart for accessories



Ex-Cable glands

(polyamide version included in delivery / surcharge applied for brass nickel plated version)

	Description	Ex Approvals		Article no.	Drawing										
		Certification	Identification												
	Brass nickel-plated, 6 – 13 mm ¹⁾	IECEX PTB 13.0027X, PTB 04 ATEX 1112 X	II 2 D Ex tb IIIC Db IP68, II 2 G Ex e IIC Gb	773278 	 <table border="1"> <tr><td>TL</td><td>29 – 37 mm</td></tr> <tr><td>L</td><td>6 mm</td></tr> <tr><td>D</td><td>20</td></tr> <tr><td>SW</td><td>24 mm</td></tr> <tr><td>E</td><td>27 mm</td></tr> </table>	TL	29 – 37 mm	L	6 mm	D	20	SW	24 mm	E	27 mm
TL	29 – 37 mm														
L	6 mm														
D	20														
SW	24 mm														
E	27 mm														
	Polyamide, 7 – 13 mm ¹⁾	PTB 13 ATEX 1015 X, IECEX PTB 13.0034X	II 2 G Ex e IIC Gb, II 2 D Ex tb IIIC Db IP68	773277 	 <table border="1"> <tr><td>TL</td><td>36 – 45 mm</td></tr> <tr><td>L</td><td>10 mm</td></tr> <tr><td>D</td><td>20</td></tr> <tr><td>SW</td><td>24 mm</td></tr> <tr><td>E</td><td>28 mm</td></tr> </table>	TL	36 – 45 mm	L	10 mm	D	20	SW	24 mm	E	28 mm
TL	36 – 45 mm														
L	10 mm														
D	20														
SW	24 mm														
E	28 mm														

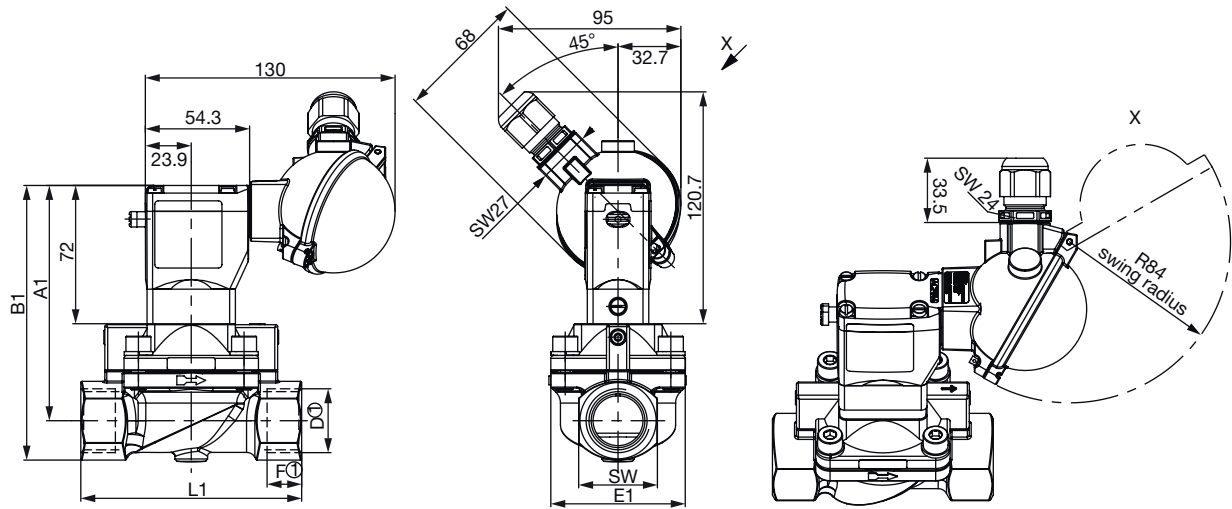
¹⁾ cable diameter

Special tool to turn the junction box (not included in delivery)

	Description	Article no.
	Set SC02-AC10 Special wrench Service Manual	293488 

Dimensions [mm]

Threaded version



① For port connection G thread F1 and G 1 applies,
port connection NPT thread F2 and G 2,
port connection Rc thread F3 and G 3.

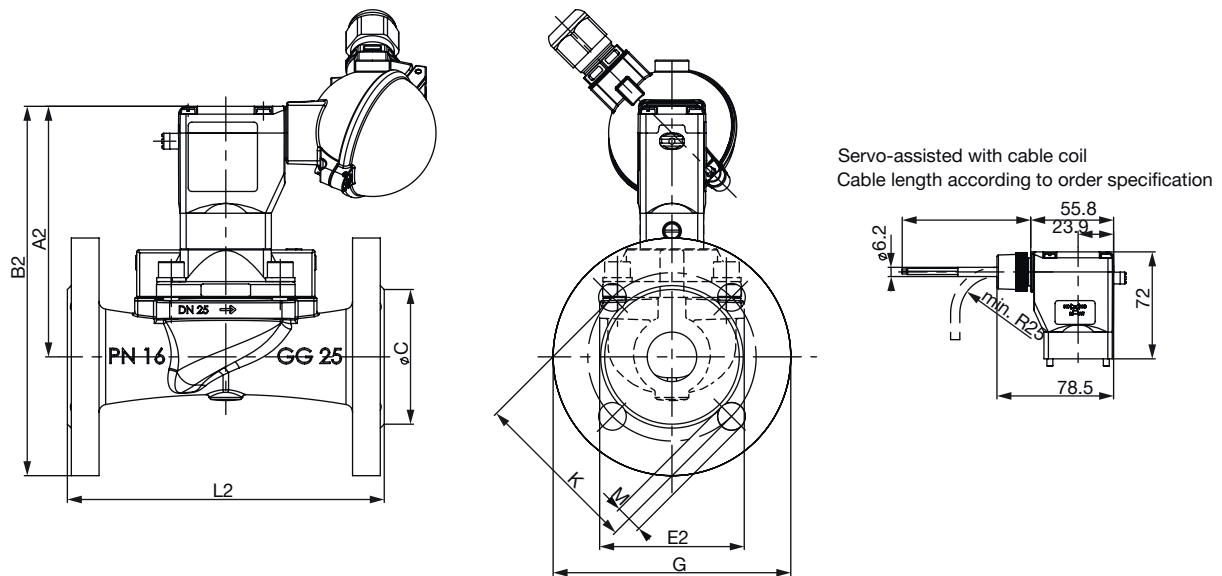
② only as stainless steel - thread port version

③ only as brass - thread port version

Threaded version											
DN	D1	A1	B1	F1	D2	F2	D3	F3	E1	L1	SW
③ 13		110.0	124.0				Rc 3/8	10.1	40	65	27
③ 13	G 1/2	110.0	124.0	14	NPT 1/2	13.7	Rc 1/2	13.2	40	65	27
② 13	G 1/2	109.0	125.0	14	NPT 1/2	13.7	Rc 1/2	13.2	40	65	32
② 13	G 3/4	109.0	125.0	16	NPT 3/4	14.0	Rc 3/4	14.5	40	65	32
② 20	G 1/2	116.0	132.0	14	NPT 1/2	13.7	Rc 1/2	13.2	60	100	32
20	G 3/4	116.0	132.0	16	NPT 3/4	14.0	Rc 3/4	14.5	60	100	32
25	G 1	122.5	143.0	18	NPT 1	16.8	Rc 1	16.8	70	115	41
32	G 1 1/4	123.0	148.0	20	NPT 1 1/4	17.3	Rc 1 1/4	19.1	85	126	50
40	G 1 1/2	127.0	157.0	22	NPT 1 1/2	17.3	Rc 1 1/2	19.1	85	126	60
50	G 2	143.8	178.8	24	NPT 2	17.6	Rc 2	23.4	115	164	70
65	G 2 1/2	143.5	186.0	27	NPT 2 1/2	23.6			115	180	85

Dimensions [mm]

Flange version acc. to DIN EN 1092-1



DN	GG		VA		Flange version					
	A2	B2	A2	B2	C	E2	G	L2	M	K
25	126.5	179.0	121.5	179.0	68	73	115	160	14	85
32	123.0	193.0	123.0	193.0	78	85	140	180	18	100
40	127.0	202.0	127.0	202.0	88	85	150	200	18	110
50	143.5	226.0	143.8	226.3	102	115	165	230	18	125

DTS 1000011015 EN Version: L Status: RL (released | freigegeben | valide) printed: 12.04.2018

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In case of special application conditions, please consult for advice.

Subject to alteration.
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