



Standard

EX version

Servo-assisted 2/2 way valve diaphragm valve

- Servo-assisted diaphragm valve with diameter of up to DN 65
- 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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Standard version

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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 x 0.75 mm ² With terminal box
Protection class	IP 65 with cable plug acc. to DIN EN 175 301-803 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
With terminal box	II 2G Ex eb mb IIC T4 Gb II 2D Ex mb tb IIIC T130°C Db
Installation	as required, preferably connected upright

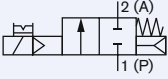
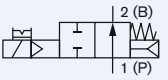
Technical data, continued

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]	Item 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  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 NBR								
	G ½	13.0	4.0	0.2–10	0.95	134 430	134 431	134 433	
	G ¾	20.0	6.5	0.2–10	1.40	134 434	134 435	134 437	
	G 1	25.0	10.0	0.2–10	1.85	134 438	134 439	134 441	
	G 1 ¼	32.0	20.0	0.2–10	2.60	134 442	134 443	134 445	
	G 1 ½	40.0	20.0	0.2–10	3.05	134 446	134 447	134 449	
	G 2	50.0	40.0	0.2–10	5.15	134 450	134 451	134 453	
	G 2 ½	65.0	40.0	0.2–10	5.90	134 454	134 455	134 457	
	Brass body, threaded port, seal material EPDM								
	G ½	13.0	4.0	0.2–10	0.95	134 458	134 459	134 461	
	G ¾	20.0	6.5	0.2–10	1.40	134 462	134 463	134 465	
	G 1	25.0	10.0	0.2–10	1.85	134 466	134 467	134 469	
	G 1 ¼	32.0	20.0	0.2–10	2.60	134 470	134 471	134 473	
	G 1 ½	40.0	20.0	0.2–10	3.05	134 474	134 475	134 477	
G 2	50.0	40.0	0.2–10	5.15	134 478	134 479	134 481		
G 2 ½	65.0	40.0	0.2–10	5.90	134 482	134 483	134 485		
Brass body, threaded port, seal material FKM									
G ½	13.0	4.0	0.2–10	0.95	134 486	134 487	134 489		
G ¾	20.0	6.5	0.2–10	1.40	134 490	134 491	134 493		
G 1	25.0	10.0	0.2–10	1.85	134 494	134 495	134 497		
G 1 ¼	32.0	20.0	0.2–10	2.60	134 498	134 499	134 501		
G 1 ½	40.0	20.0	0.2–10	3.05	134 502	134 503	134 505		
G 2	50.0	40.0	0.2–10	5.15	134 506	134 507	134 509		
G 2 ½	65.0	40.0	0.2–10	5.90	134 510	134 511	134 513		

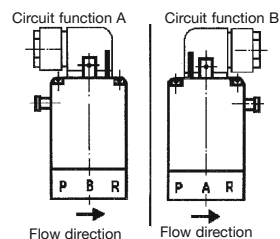
²⁾ measured at +20°C, 1 bar pressure at valve inlet and free outlet, a differential pressure of 0.5 bar is required to open the full orifice.

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).

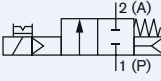
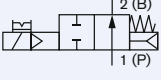
Mounting instructions:

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]	Item 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  or by turning the pilot drive through 180° B 2/2 way servo-controlled solenoid valve, normally open, with manual override 	Stainless steel, threaded port, seal material NBR								
	G ½	13.0	4.0	0.2 – 10	0.91	281 976	281 979	281 981	
	G ¾	20.0	6.5	0.2 – 10	1.40	137 142	137 143	137 145	
	G 1	25.0	10.0	0.2 – 10	1.80	137 146	137 147	137 149	
	G 1 ¼	32.0	20.0	0.2 – 10	2.25	137 150	137 151	137 153	
	G 1 ½	40.0	20.0	0.2 – 10	2.70	137 154	137 155	137 157	
	G 2	50.0	40.0	0.2 – 10	4.80	137 158	137 159	137 161	
	Stainless steel, threaded port, seal material FKM								
	G ½	13.0	4.0	0.2 – 10	0.91	220 291	220 292	220 294	
	G ¾	20.0	6.5	0.2 – 10	1.40	134 518	134 519	134 521	
	G 1	25.0	10.0	0.2 – 10	1.80	134 522	134 523	134 525	
	G 1 ¼	32.0	20.0	0.2 – 10	2.25	134 526	134 527	134 529	
	G 1 ½	40.0	20.0	0.2 – 10	2.70	134 530	134 531	134 533	
	G 2	50.0	40.0	0.2 – 10	4.80	134 534	134 535	134 537	
	Stainless steel, threaded port, seal material EPDM								
	G ½	13.0	4.0	0.2 – 10	0.91	220 297	220 298	220 300	
	G ¾	20.0	6.5	0.2 – 10	1.40	145 709	on request	141 714	
	G 1	25.0	10.0	0.2 – 10	1.80	141 078	9390 9807	146 160	
G 1 ¼	32.0	20.0	0.2 – 10	2.25	438 559	on request	147 803		
G 1 ½	40.0	20.0	0.2 – 10	2.70	141 667	on request	139 823		
G 2	50.0	40.0	0.2 – 10	4.80	141 075	on request	146 530		
Stainless steel flange acc. DIN EN 1092-1 with FKM									
Flange	25.0	10.0	0.2 – 10	3.65	134 554	134 555	134 557		
Flange	32.0	20.0	0.2 – 10	6.45	134 558	134 559	134 561		
Flange	40.0	20.0	0.2 – 10	7.05	134 562	134 563	134 565		
Flange	50.0	40.0	0.2 – 10	10.50	134 566	134 567	134 569		
Stainless steel flange acc. DIN EN 1092-1 with EPDM									
Flange	25.0	10.0	0.2 – 10	3.65	134 570	134 571	134 573		
Flange	32.0	20.0	0.2 – 10	6.45	134 574	134 575	134 577		
Flange	40.0	20.0	0.2 – 10	7.05	134 578	134 579	134 581		
Flange	50.0	40.0	0.2 – 10	10.50	134 582	134 583	134 585		

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

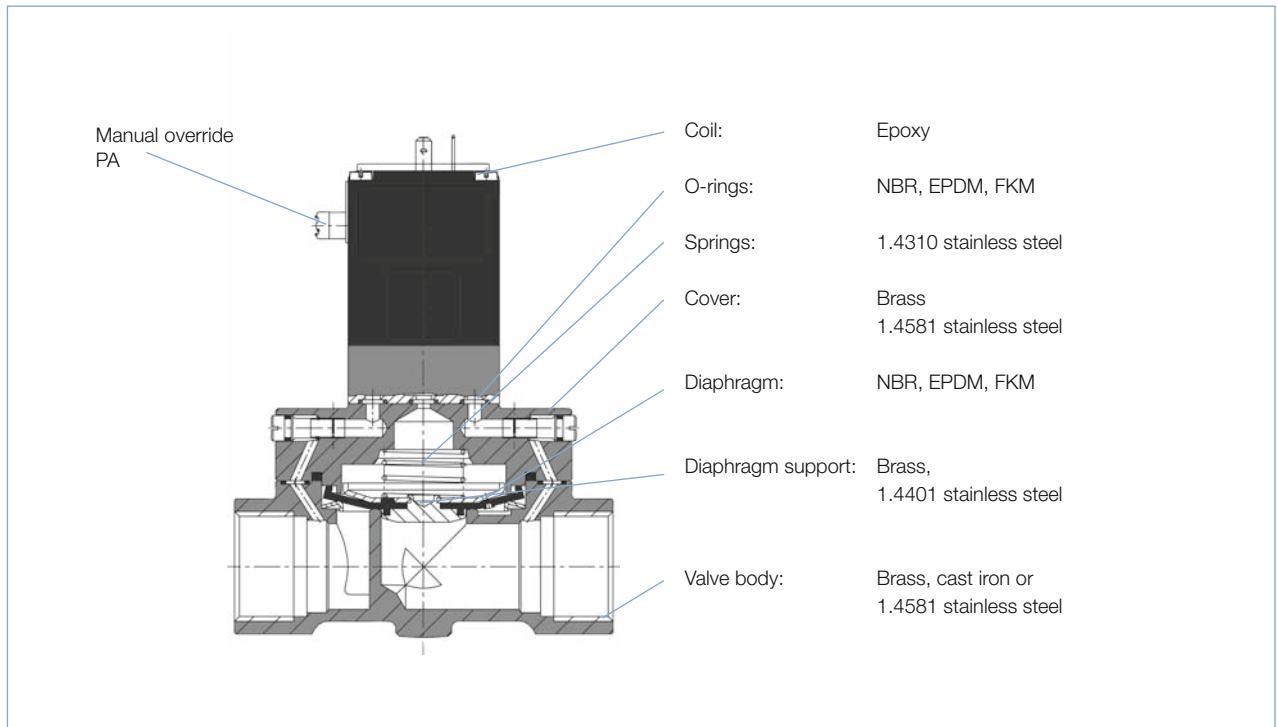
⚡ Voltages

🔍 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

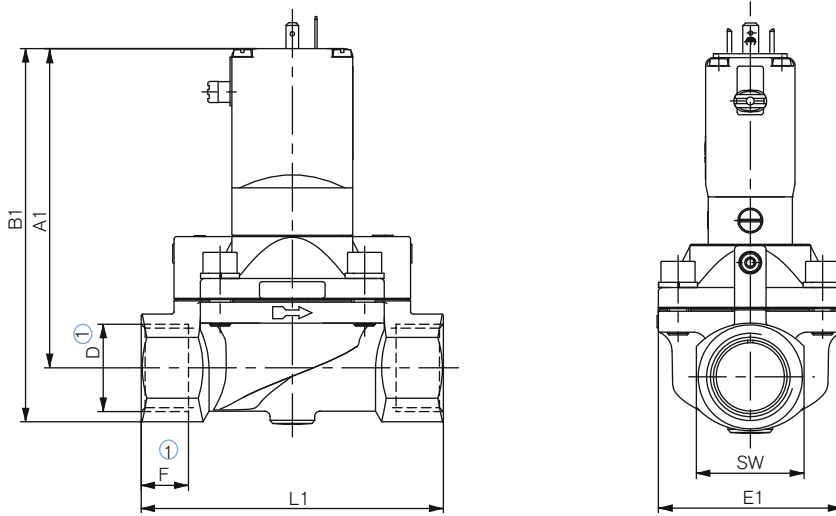
📏 Druck
Pressure range up to 16 bar

Materials



Dimensions [mm]

Threaded port



① For port connection G thread F1 and G1 applies,
port connection NPT thread F2 and G2,
port connection Rc thread F3 and G3.

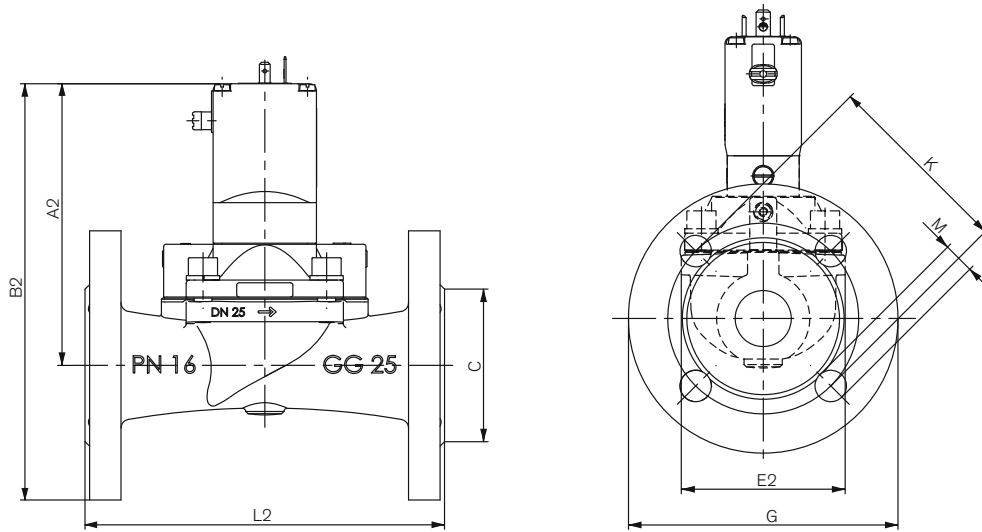
② only as stainless steel - thread port version

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

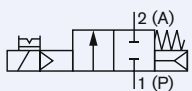
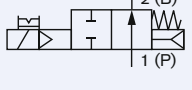


Flange version in stainless steel and cast iron

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]	Item 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	308 689	308 714
	G ¾	20	6.5	0.5–10	308 704	308 731
	G 1	25	10.0	0.5–10	308 705	308 710
	G 1 ¼	32	20.0	0.5–10	on request	on request
	G 1 ½	40	20.0	0.5–10	314 375	308 702
	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	308 716	308 738
	G ½	20	5.0	0.5–10	308 677	308 708
G ¾	20	6.5	0.5–10	308 706	308 709	
G 1	25	10.0	0.5–10	308 688	308 733	
G 1 ¼	32	20.0	0.5–10	on request	315 307	
G 1 ½	40	20.0	0.5–10	313 855	313 857	
G 2	50	40.0	0.5–10	on request	312 632	
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	307 168	307 171
	G ¾	20	6.5	0.5–10	307 188	307 192
	G 1	25	10.0	0.5–10	307 204	307 212
	G 1 ¼	32	20.0	0.5–10	307 224	307 226
	G 1 ½	40	20.0	0.5–10	307 236	307 237
	G 2	50	40.0	0.5–10	307 243	307 245
	G 2 ½	65	40.0	0.5–10	on request	307 250

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


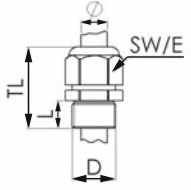

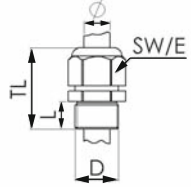
Delivered as circuit function A. Change to circuit function B by turning the pilot drive by 180° (only for 10 bar version).



Ordering chart for accessories


Ex-Cable glands

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

	Description	Ex Approvals		Item 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	773 278	 <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	773 277	 <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														

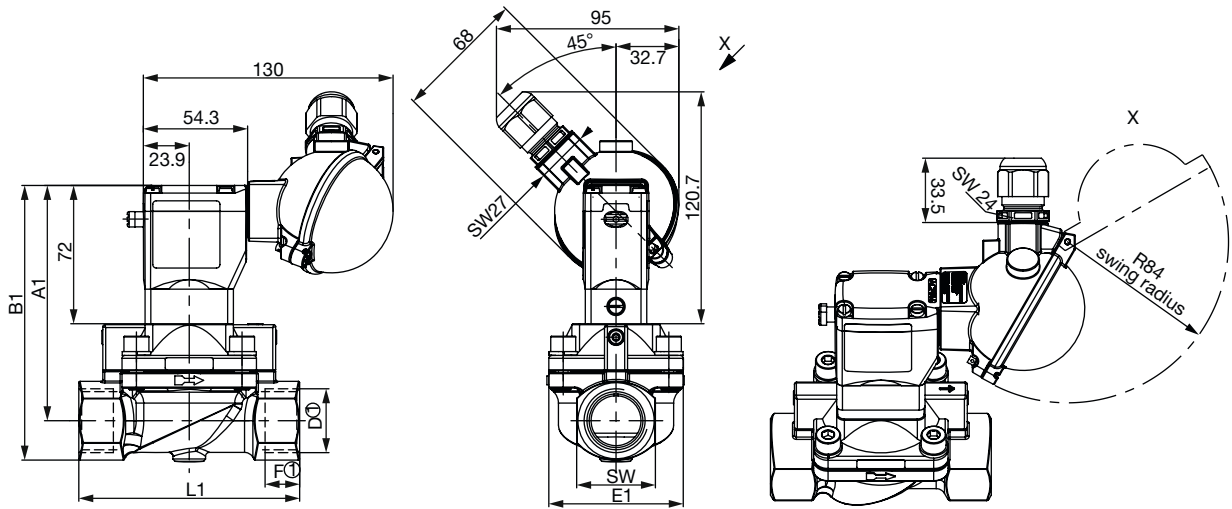
¹⁾ cable diameter

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

	Description	Item no.
	Set SC02-AC10 Special wrench Service Manual	293 488

Dimensions [mm]

Threaded version



① For port connection G thread F1 and G1 applies,
port connection NPT thread F2 and G2,
port connection Rc thread F3 and G3.

② only as stainless steel - thread port version

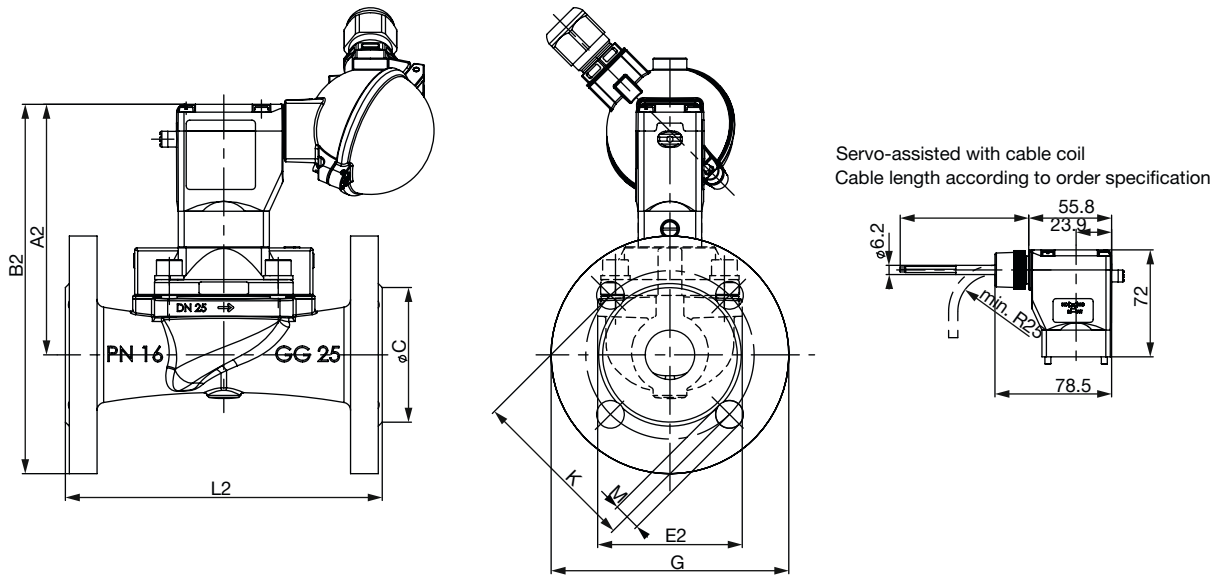
③ only as brass - thread port version

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: J Status: RL (released | freigegeben | valide) printed: 22.09.2017

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

Subject to alteration.
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