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2/2-way Solenoid Valve for liquids



- Universally applicable without differential pressure
- Short mounting length
- High flow rate
- Waterhammer free and low noise

Type 6213EV can be combined with...



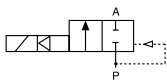
Type 2508
Cable plug



Type 1078
Timer unit

The Type 6213EV is a 2/2-way normally closed solenoid valve with a forced coupled diaphragm system. It switches from 0 bar and can be used universally for fluids. For complete opening, a differential pressure of at least 0.1 bar is necessary.

Circuit function A



Servo-assisted 2/2-way valve; normally closed, with 2-way pilot control

Technical data	
Orifice	DN 10 - 40 mm
Body material	Brass acc. to DIN EN 50930-6, stainless steel 1.4408 (316)
Inner part of valve	
Brass body	Brass, stainless steel and PPS
Stainless steel body	Stainless steel and PPS
Seal material	NBR, FKM, EPDM
Medium	
NBR	Neutral fluids, water, hydraulic oil, oil without additives
FKM	Per-solutions, hot oils with additives
EPDM	Oil and fat-free fluids
Ambient temperature	Max. +55 °C
Medium temperature	
NBR	-10 to +80 °C
FKM	0 to +90 °C with polyamide coil / 0 - 120 °C with epoxy coil
EPDM	-30 to +90 °C with polyamide coil -30 to +100 °C with epoxy coil
Voltages	024/DC, 024/50, 230/50
Voltage tolerance	± 10%
Duty cycle	100% continuous rating
Electrical connection	Tag connector acc. to DIN EN 175301-803 Form A (previously DIN 43650) for cable plug Type 2508 (see ordering chart for accessories, page 5)
Protection class	IP 65 with cable plug
Installation	As required, preferably with actuator upright
Response times¹⁾	0.1 - 4 seconds (depending on orifice and differential pressure)

¹⁾ Measured at valve outlet at 6 bar and +20°C
Opening: pressure build-up 0 to 90%
Closing: Pressure drop 100 to 10%

Technical data

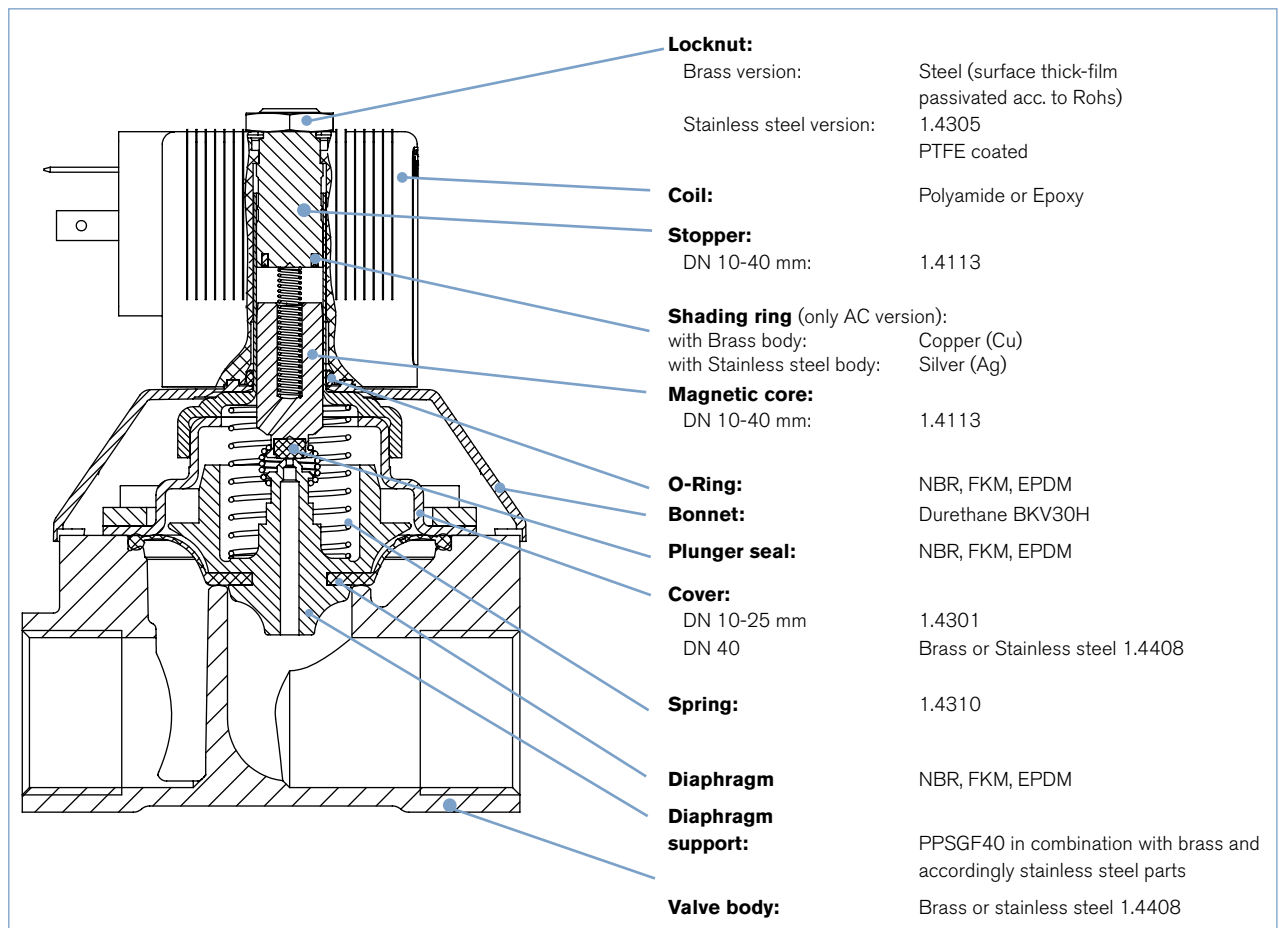
Power consumption

Orifice DN	Port connection	Coil size width [mm]		Power consumption ¹⁾			Insulation class coil ²⁾		Weight Brass [kg]	
		AC	DC	Inrush AC [VA]	Hold (hot coil) AC [VA/W]	DC [W]	Seal Material FKM	Seal material NBR and EPDM	Coil AC	Coil DC
10	G1/4, G3/8	32	40	34	14/8	10 (11)	H	B	0.33	0.41
10	G1/2	32	40	34	14/8	10 (11)	H	B	0.37	0.44
13	G1/2	32	40	36	14/8	10 (11)	H	B	0.46	0.54
13	G3/4	32	40	36	14/8	10 (11)	H	B	0.49	0.57
20	G3/4	32	40	38	14/8	10 (11)	H	B	0.74	0.82
20	G1	32	40	38	14/8	10 (11)	H	B	0.95	1.03
25	G1	42	65	150	37/16	28 (29)	H	H	1.6	2.2
25	G1 1/4	42	65	150	37/16	28 (29)	H	H	1.7	2.3
40	G1 1/2	42	65	190	37/16	28 (29)	H	H	3.2	3.7
40	G2	42	65	190	37/16	28 (29)	H	H	3.38	3.9

¹⁾ Values in brackets applies at coil temperature 20 °C

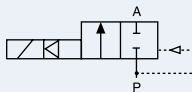
²⁾ H Epoxy coil, B Polyamide coil

Materials



Ordering chart for valves (other versions on request)

Valves with brass body,
DN 10-40 mm

Circuit function	Port connection	Orifice [mm]	Kv value water m ³ /h ¹⁾	Pressure range [bar] ²⁾	Weight [kg] (DC) ³⁾	Item no. per voltage/frequency [V/Hz]		
						024/DC ³⁾	024/50	230/50
A 2/2-way valve NC 	Brass-body, NBR Diaphragm, polyamide coil, medium temperature -10...+80°C							
	G 1/4	10	1.9	0 - 10	0.3 (0.5)	221 674	221 675	221 677
	G 3/8	10	1.9	0 - 10	0.3 (0.5)	221 598	221 599	221 601
	G 1/2	10	1.9	0 - 10	0.4 (0.5)	221 606	221 607	221 609
	G 1/2	13	3.6	0 - 10	0.4 (0.5)	221 602	221 603	221 605
	G 3/4	13	3.6	0 - 10	0.5 (0.6)	221 618	221 619	221 621
	G 3/4	20	8.3	0 - 10	0.7 (0.8)	221 630	221 631	221 633
	G 1	20	8.3	0 - 10	0.9 (1.0)	221 634	221 635	221 637
	Brass-body, NBR Diaphragm, epoxy coil, medium temperature -10...+80°C							
	G 1	25	11	0 - 10	1.6 (2.2)	227 533	221 725	221 728
	G 1 1/4	25	11	0 - 10	1.7 (2.3)	227 534	221 729	221 732
	G 1 1/2	40	30	0 - 10	3.2 (3.7)	227 539	221 750	221 753
	G 2	40	30	0 - 10	3.4 (3.9)	227 541	221 754	221 757
	Brass-body, FKM Diaphragm, epoxy coil, medium temperature 0...120°C							
	G 1/4	10	1.9	0 - 10	0.3 (0.5)	221 678	221 679	221 681
	G 3/8	10	1.9	0 - 10	0.3 (0.5)	221 610	221 611	221 613
	G 1/2	10	1.9	0 - 10	0.4 (0.5)	221 614	221 615	221 617
	G 1/2	13	3.6	0 - 10	0.4 (0.5)	221 622	221 623	221 625
	G 3/4	13	3.6	0 - 10	0.5 (0.6)	221 626	221 627	221 629
	G 3/4	20	8.3	0 - 10	0.7 (0.8)	221 638	221 639	221 641
	G 1	20	8.3	0 - 10	0.9 (1.0)	221 642	221 643	221 645
	G 1	25	11	0 - 10	1.6 (2.2)	227 537	221 733	221 736
	G 1 1/4	25	11	0 - 10	1.7 (2.3)	227 538	221 737	221 740
	G 1 1/2	40	30	0 - 10	3.2 (3.7)	227 544	227 724	227 726
	G 2	40	30	0 - 10	3.4 (3.9)	227 545	227 728	227 730
	Brass-body, EPDM Diaphragm, polyamide coil, medium temperature -30...+90°C							
	G 1/4	10	1.9	0 - 10	0.3 (0.4)	221 670	221 671	221 673
	G 3/8	10	1.9	0 - 10	0.3 (0.4)	221 646	221 647	221 649
	G 1/2	10	1.9	0 - 10	0.4 (0.5)	221 650	221 651	221 653
	G 1/2	13	3.6	0 - 10	0.4 (0.5)	221 654	221 655	221 657
	G 3/4	13	3.6	0 - 10	0.5 (0.6)	221 658	221 659	221 661
	G 3/4	20	8.3	0 - 10	0.7 (0.8)	221 662	221 663	221 665
	G 1	20	8.3	0 - 10	0.9 (1.0)	221 666	221 667	221 669
Brass-body, EPDM Diaphragm, epoxy coil, medium temperature -30...+100°C								
G 1	25	11	0 - 10	1.6 (2.2)	227 535	221 717	221 720	
G 1 1/4	25	11	0 - 10	1.7 (2.3)	227 536	221 721	221 724	
G 1 1/2	40	30	0 - 10	3.2 (3.7)	227 542	221 741	221 745	
G 2	40	30	0 - 10	3.4 (3.9)	227 543	221 746	221 749	

¹⁾ Measured at +20°C, 1 bar ²⁾ pressure at valve inlet and free outlet.²⁾ Pressure data [bar]: Overpressure with respect to atmospheric pressure.³⁾ The values in brackets regarding the weight apply to the DC version.**Please note** that the cable plug has to be ordered separately, see Ordering chart for accessory and separate datasheet, Type 2508

Ordering chart for valves (other versions on request)

Valves with stainless steel body,
DN 10-40 mm

Circuit function	Port connection	Orifice [mm]	Kv value water m ³ /h ¹⁾	Pressure range [bar] ²⁾	Weight [kg] (DC) ³⁾	Item no. per voltage/frequency [V/Hz]			
						024/DC ³⁾	024/50	230/50	
A 2/2-way valve NC 	Stainless steel-body, NBR Diaphragm, polyamide coil, medium temperature -10...80°C								
	G 3/8	10	1.9	0 - 10	0.3 (0.4)	222 150	222 151	222 152	
	G 1/2	13	3.6	0 - 10	0.4 (0.5)	222 156	222 157	222 158	
	G 3/4	20	8.3	0 - 10	0.7 (0.8)	222 168	222 169	222 170	
	G 1	20	8.3	0 - 10	0.9 (1.0)	222 171	222 172	222 173	
	Stainless steel body, NBR Diaphragm, epoxy coil, medium temperature -10...+80°C								
	G 1	25	11	0 - 10	1.6 (2.2)	227 546	228 429	222 193	
	G 1 1/4	25	11	0 - 10	1.7 (2.3)	227 547	228 432	222 197	
	G 1 1/2	40	30	0 - 10	3.2 (3.7)	227 552	228 435	222 201	
	G 2	40	30	0 - 10	3.4 (3.9)	227 554	228 438	222 205	
	Stainless steel body, FKM Diaphragm, epoxy coil, medium temperature 0...120°C								
	G 3/8	10	1.9	0 - 10	0.3 (0.4)	221 758	221 759	221 761	
	G 1/2	13	3.6	0 - 10	0.4 (0.5)	221 762	221 763	221 765	
	G 3/4	20	8.3	0 - 10	0.7 (0.8)	222 122	222 123	222 125	
	G 1	20	8.3	0 - 10	0.9 (1.0)	222 126	222 127	222 129	
	G 1	25	11	0 - 10	1.6 (2.2)	227 550	228 430	222 143	
	G 1 1/4	25	11	0 - 10	1.7 (2.3)	227 551	228 433	222 145	
	G 1 1/2	40	30	0 - 10	3.2 (3.7)	227 557	228 436	222 147	
	G 2	40	30	0 - 10	3.4 (3.9)	227 558	228 439	222 149	
	Stainless steel-body, EPDM Diaphragm, polyamide coil, medium temperature -30...90°C								
	G 3/8	10	1.9	0 - 10	0.3 (0.4)	222 153	222 154	222 155	
	G 1/2	13	3.6	0 - 10	0.4 (0.5)	222 159	222 160	222 161	
	G 3/4	20	8.3	0 - 10	0.7 (0.8)	222 174	222 175	222 176	
	G 1	20	8.3	0 - 10	0.9 (1.0)	222 177	222 178	222 179	
	Stainless steel-body, EPDM Diaphragm, epoxy coil, medium temperature -30...+100°C								
	G 1	25	11	0 - 10	1.6 (2.2)	227 548	228 431	222 195	
	G 1 1/4	25	11	0 - 10	1.7 (2.3)	227 549	228 434	222 199	
	G 1 1/2	40	30	0 - 10	3.2 (3.7)	227 555	228 437	222 203	
G 2	40	30	0 - 10	3.4 (3.9)	227 556	228 440	222 207		

¹⁾ Measured at +20°C, 1 bar ²⁾ pressure at valve inlet and free outlet.

²⁾ Pressure data [bar]: Overpressure with respect to atmospheric pressure.

³⁾ The values in brackets regarding the weight apply to the DC version.

i Further versions on request

Port connection
NPT, Rc

Voltage
Non-standard voltages available

Body material
Brass dezincification resistant

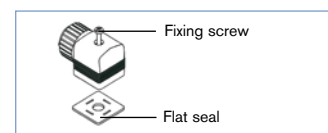
Temperature
EPDM version with Epoxy coil up to 100°C

Approvals
Drink water accessory acc. to KTW/W270

Ordering chart for accessories

Cable plug Type 2508 according to DIN EN 175301-803 Form A

	Circuitry	Voltage / frequency	Item no.
	None (standard)	0 - 250 V AC/DC	008 376
	further versions see datasheet Type 2508		



The delivery of a cable plug includes the flat seal and the fixing screw.
For further versions see datasheet Type 2508

Dimensions [mm]

DN 10 - 20

DN 25 - 40

Dimensions (AC-coil, 32mm)

DN	A	B	C	D	E	* G		* NPT		* Rc		H	J	K	L	SW	M
						F1	G1	F2	G2	F3	G3						
10	67.4	78.4	36	45.6	22	12	G 1/4	10	NPT 1/4	9.7	Rc 1/4	32	20.5	45	50	22	3.7
	67.4	78.4			22	12	G 3/8	10.3	NPT 3/8	10.1	Rc 3/8						
	69.4	82.9			24.5	14	G 1/2	13.7	NPT 1/2	13.2	Rc 1/2						
13	78.9	92.4	44.5	56	27.2	14	G 1/2	13.7	NPT 1/2	13.2	Rc 1/2	32	20.5	45	58	27	3.7
	80.9	96.9			28.5	16	G 3/4	14	NPT 3/4	14.5	Rc 3/4						
20	93.4	109.4	65	76	37	16	G 3/4	14	NPT 3/4	14.5	Rc 3/4	32	20.5	45	80	32	3.7
	95.9	116.4			37.5	18	G 1	16.8	NPT 1	16.8	Rc 1						

Dimensions (DC-coil, 40mm)

DN	A	B	C	D	E	* G		* NPT		* Rc		H	J	K	L	SW	M
						F1	G1	F2	G2	F3	G3						
10	67.8	78.8	36	45.6	22	12	G 1/4	10	NPT 1/4	9.7	Rc 1/4	40	23.5	51	50	22	3.7
	67.8	78.8			22	12	G 3/8	10.3	NPT 3/8	10.1	Rc 3/8						
	69.8	83.3			24.5	14	G 1/2	13.7	NPT 1/2	13.2	Rc 1/2						
13	79.3	92.8	44.5	56	27.2	14	G 1/2	13.7	NPT 1/2	13.2	Rc 1/2	40	23.5	51	58	27	3.7
	81.3	97.3			28.5	16	G 3/4	14	NPT 3/4	14.5	Rc 3/4						
20	93.8	109.8	65	76	37	16	G 3/4	14	NPT 3/4	14.5	Rc 3/4	40	23.5	51	80	32	3.7
	96.3	116.8			37.5	18	G 1	16.8	NPT 1	16.8	Rc 1						

Dimensions (AC-coil, 42mm / DC-coil 65mm)

DN	A	B	C	D	E	* G		* NPT		* Rc		L	SW
						F1	G1	F2	G2	F3	G3		
25	136.3	156.8	77	88	43	18	G 1	16.8	NPT 1	16.8	Rc 1	90	41
	141.3	166.3			45	20	G 1 1/4	17.3	NPT 1 1/4	19.1	Rc 1 1/4		
40	152.3	182.3	104.5	177	61	22	G 1 1/2	17.3	NPT 1 1/2	19.1	Rc 1 1/2	126	60
	158.3	193.3			64	24	G 2	17.6	NPT 2	23.4	Rc 2		

* For G-thread dimensions F1 and G1 applies.
 For NPT-thread dimensions F2 and G2 applies.
 For Rc-thread dimensions F3 and G3 applies.

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