

## 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...



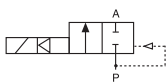
**Type 2508**  
Cable plug



**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 0.5 bar is necessary.

### Circuit function A



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

Technical data	
<b>Orifice</b>	DN 10 - 40 mm
<b>Body material</b>	Brass acc. to DIN EN 50930-6, stainless steel 1.4408 (316)
<b>Inner part of valve</b>	
Brass body	Brass, stainless steel and PPS
Stainless steel body	Stainless steel and PPS
<b>Seal material</b>	NBR, FKM, EPDM
<b>Medium</b>	
NBR	Neutral fluids, water, hydraulic oil, oil without additives
FKM	Per-solutions, hot oils with additives
EPDM	Oil and fat-free fluids
<b>Ambient temperature</b>	Max. +55 °C
<b>Medium temperature</b>	
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
<b>Voltages</b>	024/DC, 024/50, 230/50
<b>Voltage tolerance</b>	±10%
<b>Duty cycle</b>	100% continuous rating
<b>Electrical connection</b>	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)
<b>Protection class</b>	IP 65 with cable plug
<b>Installation</b>	As required, preferably with actuator upright
<b>Response times<sup>1)</sup></b>	0.1 - 4 seconds (depending on orifice and differential pressure)

<sup>1)</sup> 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

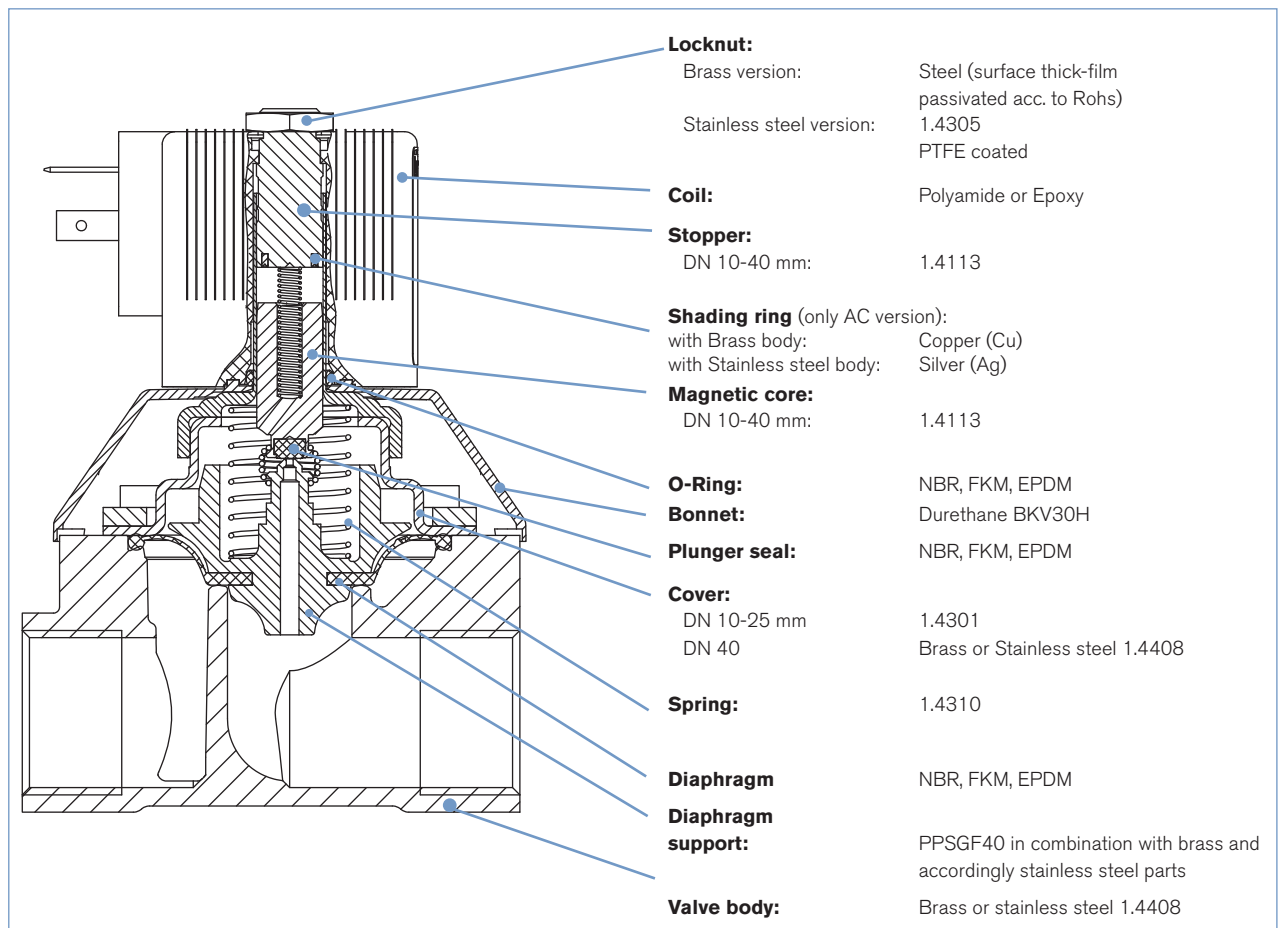
### Power consumption

Orifice DN	Port connection	Coil size width [mm]		Power consumption <sup>1)</sup>			Insulation class coil <sup>2)</sup>		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

<sup>1)</sup> Values in brackets applies at coil temperature 20 °C

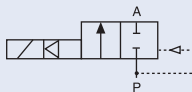
<sup>2)</sup> H Epoxy coil, B Polyamide coil

## 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 <sup>3</sup> /h <sup>1)</sup>	Pressure range [bar] <sup>2)</sup>	Weight [kg] (DC) <sup>3)</sup>	Item no. per voltage/frequency [V/Hz]			
						024/DC <sup>3)</sup>	024/50	230/50	
<b>A 2/2-way valve NC</b> 	<b>Brass-body, NBR Diaphragm, polyamide coil, medium temperature -10...+80°C</b>								
	G 1/4	10	1.3	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	
	<b>Brass-body, NBR Diaphragm, epoxy coil, medium temperature -10...+80°C</b>								
	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	
	<b>Brass-body, FKM Diaphragm, epoxy coil, medium temperature 0...120°C</b>								
	G 1/4	10	1.3	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	
	<b>Brass-body, EPDM Diaphragm, polyamide coil, medium temperature -30...+90°C</b>								
	G 1/4	10	1.3	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	
	<b>Brass-body, EPDM Diaphragm, epoxy coil, medium temperature -30...+100°C</b>								
	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		

<sup>1)</sup> Measured at +20°C, 1 bar <sup>2)</sup> pressure at valve inlet and free outlet.<sup>2)</sup> Pressure data [bar]: Overpressure with respect to atmospheric pressure.<sup>3)</sup> 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 <sup>3</sup> /h <sup>1)</sup>	Pressure range [bar] <sup>2)</sup>	Weight [kg] (DC) <sup>3)</sup>	Item no. per voltage/frequency [V/Hz]			
						024/DC <sup>3)</sup>	024/50	230/50	
<b>A 2/2-way valve NC</b> 	<b>Stainless steel-body, NBR Diaphragm, polyamide coil, medium temperature -10...80°C</b>								
	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	
	<b>Stainless steel body, NBR Diaphragm, epoxy coil, medium temperature -10...+80°C</b>								
	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	
	<b>Stainless steel body, FKM Diaphragm, epoxy coil, medium temperature 0...120°C</b>								
	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	
	<b>Stainless steel-body, EPDM Diaphragm, polyamide coil, medium temperature -30...90°C</b>								
	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	
<b>Stainless steel-body, EPDM Diaphragm, epoxy coil, medium temperature -30...+100°C</b>									
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		

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

<sup>2)</sup> Pressure data [bar]: Overpressure with respect to atmospheric pressure.

<sup>3)</sup> 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  
FKM version with Epoxy coil up to 120°C

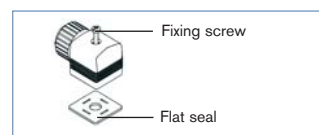


**Approvals**  
Drink water accessory  
acc. to KTW/W270

### 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							55	27
	69.4	82.9			24.5	14	G 1/2	13.7	NPT 1/2	13.2	Rc 1/2							58	27
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	60	32	3.7		
	80.9	96.9			28.5	16	G 3/4	14	NPT 3/4	14.5	Rc 3/4							80	32
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							80	41

**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							55	27
	69.8	83.3			24.5	14	G 1/2	13.7	NPT 1/2	13.2	Rc 1/2							58	27
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	60	32	3.7		
	81.3	97.3			28.5	16	G 3/4	14	NPT 3/4	14.5	Rc 3/4							80	32
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							80	41

**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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