



## 2/2-way servo assisted Solenoid Valve for liquids

- Forced coupled diaphragm system
- Compact body from brass or stainless steel
- High flow rate ( $K_V$  value)
- Anti-waterhammer, low noise
- Diaphragm materials NBR, EPDM, FKM

Type 6213 can be combined with...



**Type 2508**

Cable plug

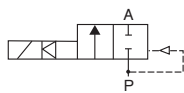


**Type 1078**

Timer unit

The Type 6213 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 1.4404
<b>Coil material</b>	Epoxy, Polyamide
<b>Coil insulation class</b>	H (Epoxy), B (Polyamide)
<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>Media</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>Media temperature</b>	
NBR	-10 to +80 °C
FKM	0 to +90 °C with polyamide coil/0 to 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, 024/UC (others on request)
<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 accessory)
<b>Protection class</b>	IP 65 with cable plug
<b>Installation</b>	As required, preferably with actuator upright
<b>Approval</b>	DIN EN 60730
<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 decay 100 to 10%

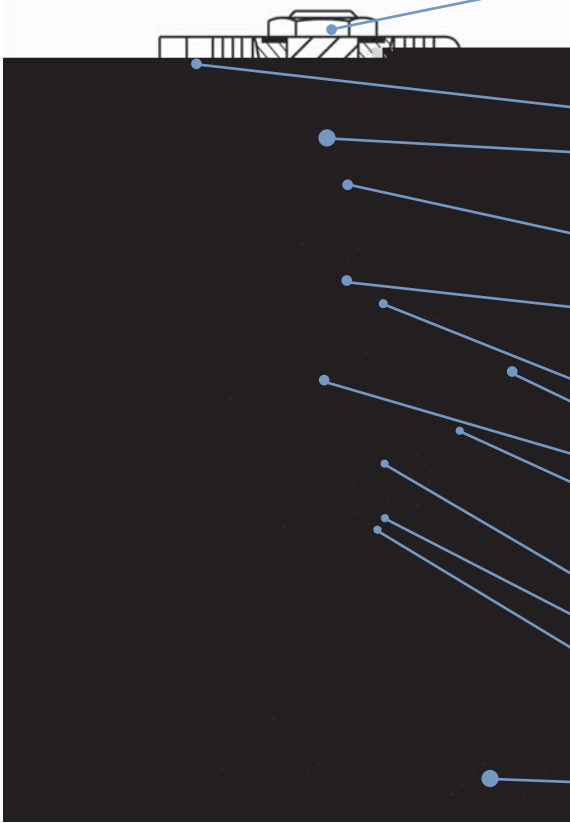
## Technical data

### Power consumption

Orifice DN	Coil size		Power consumption <sup>1)</sup>			Coil insulation class		Weight	
	AC	DC	Inrush AC [VA]	Hold (hot coil) AC [VA/W]	DC [W] (hot coil)	Seal EPDM	Seal NBR and FKM	brass [kg]	stainless steel [kg]
10	32	40	34	14/8	10 (11)	H	B	0.4	0.4
13	32	40	36	14/8	10 (11)	H	B	0.45	0.55
20	32	40	38	14/8	10 (11)	H	B	1.0	1.1
25	42	42	150	37/16	72/4	H	H	1.7	-
40	42	42	190	37/16	72/4	H	H	3.5	-

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

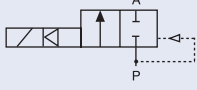
## Materials



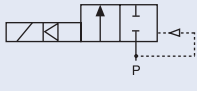
<b>Locknut:</b>	Brass version:	Steel (surface thick-film passivated acc. to Rohs)
	SS version:	1.4305 PTFE coated
<b>Coil Insulation material:</b>	Polyamide or Epoxy	
<b>Stopper:</b>	DN 10-13 mm:	1.4113
	DN 25-40 mm:	1.4105
<b>Shading ring:</b>	Cu (copper)	
	(only with AC voltage)	
<b>Plunger:</b>	DN 10-13 mm:	1.4113
	DN 25-40 mm:	1.4105
<b>O-rings:</b>	NBR, FKM, EPDM	
<b>Bonnet:</b>	Durethan BKV30H	
<b>Plunger seal:</b>	NBR, FKM, EPDM	
<b>Cover:</b>	DN 10-25 mm	1.4301
	DN 40	brass
<b>Spring:</b>	1.4310	
<b>Diaphragm:</b>	NBR, FKM, EPDM	
<b>Diaphragm support:</b>	PPSGF40	
<b>Valve body:</b>	Brass or stainless steel 1.4404	

## Ordering chart for valves (other versions on request)

Valves with brass or stainless steel body, without cable plug  
DN 10-20

Circuit function	Port connection	Orifice [mm]	Kv value water [m <sup>3</sup> /h] <sup>1)</sup>	Pressure range [bar] <sup>2)</sup>	Item no. per voltage/frequency [V/Hz]		
					024/DC	024/50	230/50
<b>A</b> 2/2-way valve NC 	<b>Brass body, NBR diaphragm</b> (Polyamide coil)						
	G 1/4	10	1.3	0 - 10	139 100	139 101	139 103
	G 3/8	10	1.9	0 - 10	125 653	125 654	125 656
	G 1/2	13	3.6	0 - 10	125 657	125 658	125 660
	G 3/4	20	8.3	0 - 10	126 284	126 285	126 287
	<b>Brass body, FKM diaphragm</b> (Polyamide coil)						
	G 1/4	10	1.3	0 - 10	139 104	139 105	139 107
	G 3/8	10	1.9	0 - 10	126 264	126 265	126 267
	G 1/2	13	3.6	0 - 10	126 276	126 277	126 279
	G 3/4	20	8.3	0 - 10	126 292	126 293	126 295
	<b>Brass body, EPDM diaphragm</b> (Epoxy coil)						
	G 1/4	10	1.3	0 - 10	139 096	139 097	139 099
	G 3/8	10	1.9	0 - 10	135 217	135 218	135 220
	G 1/2	13	3.6	0 - 10	135 226	135 227	135 229
	G 3/4	20	8.3	0 - 10	135 234	135 235	135 237
	<b>Stainless steel body, FKM diaphragm</b> (Polyamide coil)						
	G 1/4	10	1.3	0 - 10	141 187	141 188	141 190
	G 3/8	10	1.9	0 - 10	141 191	141 192	141 194
	G 1/2	13	3.6	0 - 10	141 215	141 216	141 218
	G 3/4	20	8.3	0 - 10	141 239	141 240	141 242
G 1	20	8.3	0 - 10	141 243	141 244	141 246	

## DN 25-40


Circuit function	Port connection	Orifice [mm]	Kv value water [m <sup>3</sup> /h] <sup>1)</sup>	Pressure range [bar] <sup>2)</sup>	Item no. per voltage/frequency [V/Hz]		
					024/UC*	024/50	230/50
<b>A</b> 2/2-way valve NC 	<b>Brass body, NBR diaphragm</b> (Epoxy coil)						
	G 1	25	11.0	0 - 10	178 921	178 920	178 923
	G 1 1/4	25	11.0	0 - 10	178 925	178 924	178 927
	G 1 1/2	40	30.0	0 - 10	178 947	178 946	178 950
	G 2	40	30.0	0 - 10	178 953	178 951	178 956
	<b>Brass body, FKM diaphragm</b> (Epoxy coil)						
	G 1	25	11.0	0 - 10	178 929	178 928	178 931
	G 1 1/4	25	11.0	0 - 10	178 933	178 932	178 935
	G 1 1/2	40	30.0	0 - 10	178 959	178 957	178 963
	G 2	40	30.0	0 - 10	178 967	178 965	178 970
	<b>Brass body, EPDM diaphragm</b> (Epoxy coil)						
	G 1	25	11.0	0 - 10	178 913	178 912	178 915
	G 1 1/4	25	11.0	0 - 10	178 917	178 916	178 919
	G 1 1/2	40	30.0	0 - 10	178 937	178 936	178 939
	G 2	40	30.0	0 - 10	178 941	178 940	178 945

<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.**Please note** that the cable plug has to be ordered separately, see Ordering chart for accessory and separate datasheet, Type 2508**\* For DN 25 and DN 40 with 24 V/UC, a cable plug with an integrated high-power electronics is provided as part of the delivery.****i** Further versions on request

 **Port connection**  
DN 10 G 1/2, 13 G 3/4, 20 G 1, NPT, Rc

 **Voltage**  
Non-standard voltages


 **Seal Material**  
EPDM with KTW/FDA approval

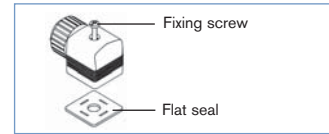
 **Temperature**  
FKM version up to +120°C with Epoxy coil  
EPD version up to +100°C with Epoxy coil

 **Approvals**  
UL, UR, CSA

## Ordering chart for accessory

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

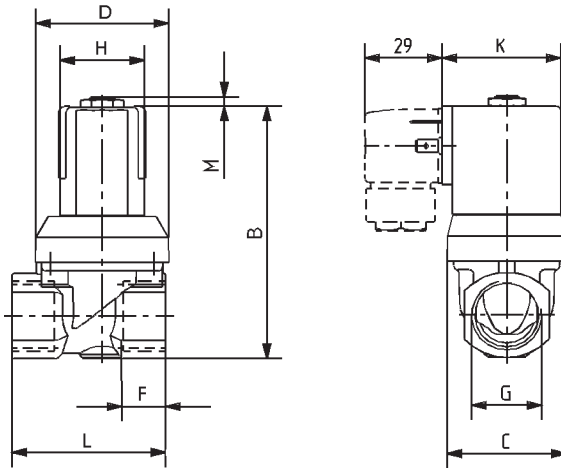
	Circuitry	Voltage / frequency	Item no.
	None (standard)	0 - 250 V AC/DC	008 376
further versions see datasheet Type 2508			



The delivery of a cable plug includes the flat seal and the fixing screw. For other cable plug versions acc. to DIN EN 175301-803 Form A (previously DIN 43650), see separate datasheet Type 2508.

## Dimensions [mm]

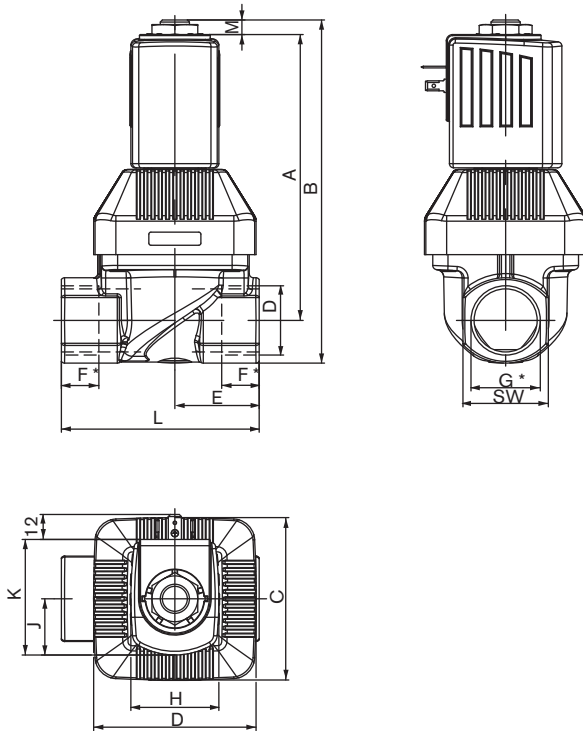
## DN 10 - 20



G Thread			AC coil			DC coil			DC and AC coil		
DN	G	F	B	H	K	B	H	K	C	L (Brass/St.st.)	M
10	G 1/4	12	82.0	32	45	82.5	40	51	37.5	50/55	3.5
	G 3/8	12									
	G 1/2	14									
13	G 1/2	14	95.5	32	45	96.0	40	51	45.0	58/65	3.5
	G 3/4	16									
20	G 3/4	16	115.5	32	45	116.0	40	51	66.0	80/100	3.5
	G 1	18									

Dimensions [mm]

DN 25 - 40



DN	A	B	C	D	E	* G		* NPT		* Rc		H	J	K	L	SW	M
						F1	G1	F2	G2	F3	G3						
25	137.5	165	78	78	40.5	18	G 1	16.8	NPT 1	16.8	Rc 1	43	27	55.5	95	41	7
		20				G1 1/4	17.3	NPT 1 1/4	19.1	Rc 1 1/4	95				50		
40	149	186	104.5	104.5	69	22	G1 1/2	17.3	NPT 1 1/2	19.1	Rc1 1/2	43	27	55.5	132	60	7
		24				G2	17.6	NPT 2	23.4	Rc 2	132				70		

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