

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



- Used universally
- Short fitting length
- Brass and stainless steel version

Type 6203EV can be combined with...



**Type 2508**  
Cable plug



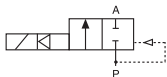
**Type 1078**  
Timer unit



**Type 2511**  
ASI  
Cable plug

The Type 6203EV is a 2/2-way normally closed solenoid valve with a servo diaphragm system. It switches from 0.5 bar and can be used universally for fluids and gases. For complete opening, a differential pressure of at least 1 bar is necessary.

### Circuit function A



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

Electrical Power consumption		
Inrush	Hold (hot coil)	
AC [VA]	AC [VA/W]	DC [W]
Circuit function A		
24 - 36	14/8	8 (9,5) <sup>1)</sup>

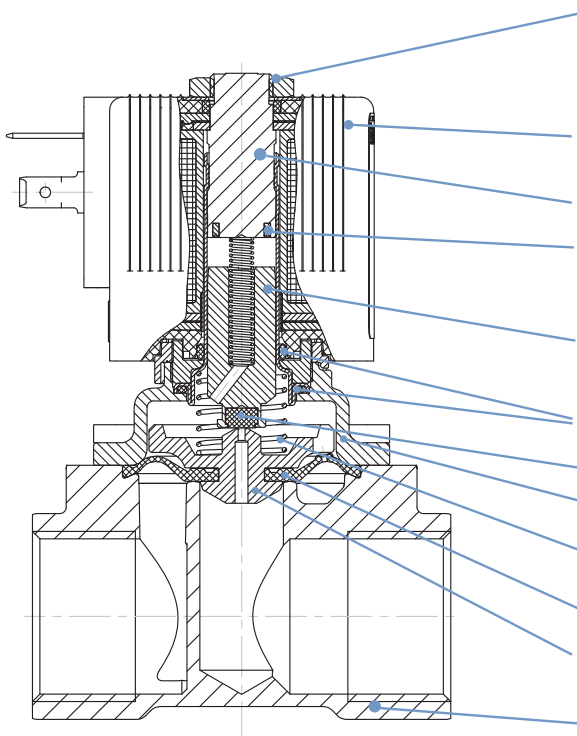
<sup>1)</sup> Value in bracket for colder coils.

Technical data	
<b>Orifice</b>	G 3/8 - G 2
<b>Body material</b>	Brass acc. to DIN EN 50930-6, stainless steel 1.4408 (316)
<b>Inner part of valve</b>	Brass body Stainless steel body
<b>Seal material</b>	NBR, FKM, EPDM (with KTW-W270 approval)
<b>Media</b>	NBR FKM EPDM
	Neutral fluids, water, hydraulic oil, oil without additives Per-solutions, hot oils with additives and hot air Oil and fat-free fluids - drinking water (KTW-W270 approval up to 60° C )
<b>Ambient temperature</b>	Max. +55 °C
<b>Media temperature</b>	NBR FKM EPDM
	-10 to +80 °C 0 to +90 °C with polyamide coil/0 to +120 °C with epoxy coil -30 to +90 °C with polyamide coil/-30 to +100 °C with epoxy coil
<b>Voltages</b>	024/DC, 230/50-60
<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, page 4)
<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 decay 100 to 10%

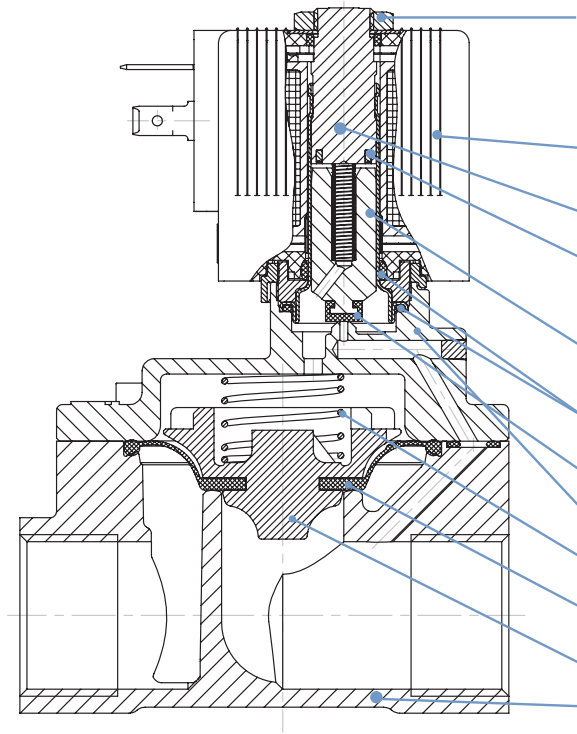
Materials

G 3/8 - G 3/4



<b>Locknut:</b>	Brass version:	Steel (surface thick-film passivated acc. to Rohs)
	Stainless steel version:	1.4305 PTFE coated
<b>Coil:</b>		Polyamide (EPDM, NBR) Epoxy (FKM)
<b>Stopper:</b>		1.4113
<b>Shading ring:</b>	Brass version:	Copper (Cu)
	Stainless steel version:	Silver (Ag)
<b>Magnetic core:</b>		1.4113
<b>O-rings:</b>		NBR, FKM, EPDM (KTM/W270)
<b>Armature seal:</b>		NBR, FKM, EPDM (KTM/W270)
<b>Lid:</b>		Brass or Stainless steel 1.4408
<b>Spring:</b>		1.4310
<b>Diaphragm:</b>		NBR, FKM, EPDM (KTM/W270)
<b>Diaphragm support:</b>		PPSGF40, Brass, Stainless steel
<b>Valve body:</b>		Brass or Stainless steel 1.4408

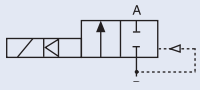
G 1 - G 2



<b>Locknut:</b>	Brass version:	Steel (surface thick-film passivated acc. to Rohs)
	Stainless steel version:	1.4305 PTFE coated
<b>Coil:</b>		Polyamide (EPDM, NBR) Epoxy (FKM)
<b>Stopper:</b>		1.4113
<b>Shading ring:</b>	Brass version:	Copper (Cu)
	Stainless steel version:	Silver (Ag)
<b>Magnetic core:</b>		1.4113
<b>O-rings:</b>		NBR, FKM, EPDM (KTM/W270)
<b>Armature seal:</b>		NBR, FKM, EPDM (KTM/W270)
<b>Lid:</b>		Brass or Stainless steel 1.4408
<b>Spring:</b>		1.4310
<b>Diaphragm:</b>		NBR, FKM, EPDM (KTM/W270)
<b>Diaphragm support:</b>		PPSGF40, Brass, Stainless steel
<b>Valve body:</b>		Brass or Stainless steel 1.4408

## Ordering chart for valve

## Brass versions, G3/8 - G2

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]	Item no. per voltage/ frequency [V/Hz]	
						024/DC	230/50
<b>A</b> 2/2-way valve NC 	<b>Brass body, NBR Diaphragm, polyamid coil, medium temperature -10...+80°C</b>						
	G 3/8	10	1.9	0.5 - 10	0.40	228 976	228 984
	G 1/2	10	1.9	0.5 - 10	0.45	228 977	228 985
	G 3/4	13	3.6	0.5 - 10	0.50	228 978	228 986
	G 1	20	8.5	0.5 - 10	1.00	228 979	228 988
	G 1 1/4	25	13	0.5 - 10	1.50	228 981	228 989
	G 1 1/2	40	31	0.5 - 10	3.00	228 982	228 990
	G 2	40	31	0.5 - 10	3.20	228 983	228 991
	<b>Brass body, FKM Diaphragm, polyamid coil, medium temperature 0...+90°C</b>						
	G 3/8	10	1.9	0.5 - 10	0.40	228 992	229 001
	G 1/2	10	1.9	0.5 - 10	0.45	228 993	229 002
	G 3/4	13	3.6	0.5 - 10	0.50	228 995	229 003
	G 1	20	8.5	0.5 - 10	1.00	228 996	229 004
	G 1 1/4	25	13	0.5 - 10	1.50	228 997	229 005
	G 1 1/2	40	31	0.5 - 10	3.00	228 998	229 006
	G 2	40	31	0.5 - 10	3.20	228 999	229 007
	<b>Brass body, EPDM Diaphragm, polyamid coil, medium temperature -30...+90°C</b>						
	G 3/8	10	1.9	0.5 - 10	0.40	229 008	229 015
	G 1/2	10	1.9	0.5 - 10	0.45	229 009	229 017
	G 3/4	13	3.6	0.5 - 10	0.50	229 010	229 018
	G 1	20	8.5	0.5 - 10	1.00	229 011	229 019
	G 1 1/4	25	13	0.5 - 10	1.50	229 012	229 020
	G 1 1/2	40	31	0.5 - 10	3.00	229 013	229 021
	G 2	40	31	0.5 - 10	3.20	229 014	229 022

<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

### Ordering chart for valves

Stainless steel versions, G3/8 - G1

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]	Item no. per voltage/frequency [V/Hz]	
						024/DC	230/50
<b>A 2/2-way valve NC</b> 	<b>Stainless steel body, NBR Diaphragm, polyamid coil, medium temperature -10...+80°C</b>						
	G 3/8	10	1.9	0.5 - 10	0.40	229 023	229 027
	G 1/2	10	1.9	0.5 - 10	0.45	229 024	229 028
	G 3/4	13	3.6	0.5 - 10	0.50	229 025	229 029
	G 1	20	8.5	0.5 - 10	1.00	229 026	229 030
	<b>Stainless steel body, FKM Diaphragm, polyamid coil, medium temperature 0...+90°C</b>						
	G 3/8	10	1.9	0.5 - 10	0.40	229 031	229 035
	G 1/2	10	1.9	0.5 - 10	0.45	229 032	229 036
	G 3/4	13	3.6	0.5 - 10	0.50	229 033	229 037
	G 1	20	8.5	0.5 - 10	1.00	229 034	229 038
	<b>Stainless steel body, EPDM Diaphragm, polyamid coil, medium temperature -30...+90°C</b>						
	G 3/8	10	1.9	0.5 - 10	0.40	229 039	229 044
	G 1/2	10	1.9	0.5 - 10	0.45	229 041	229 045
	G 3/4	13	3.6	0.5 - 10	0.50	229 042	229 046
	G 1	20	8.5	0.5 - 10	1.00	229 043	229 047

<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.

### Further versions on request



**Port connection**  
NPT



**Voltage**  
Further voltages



**Material**  
Brass dezincification resistant



**Temperature**  
EPDM version up to 100°C with epoxy coil  
FKM version up to 120°C with epoxy coil

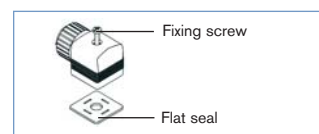


**Approvals**  
VDE DIN EN 60730-2-8 (DN 10 - 13) with epoxy coil, UL / UR / CSA

### 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		

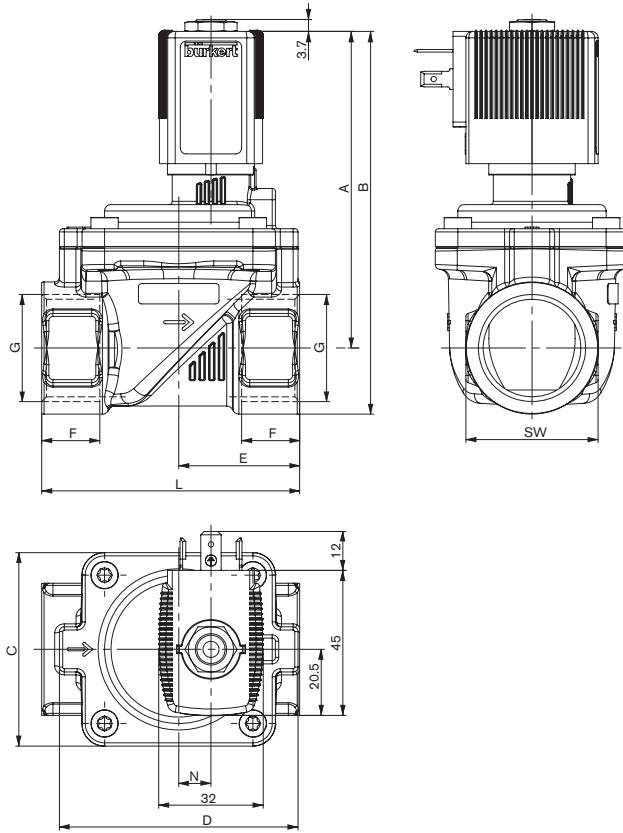


The delivery of a cable plug includes the flat seal and the fixing screw.

For other cable plug see separate datasheet Type 2508.

Dimensions [mm]

2/2-way servo assisted solenoid valve, Port connection G3/8 - G2



G	A	B	C	D	E	F	L	N	SW
G 3/8	71.1	82.1	36	45.6	22	12	50	-	22
G 1/2	73.1	86.6			24.5	14	50 <sup>①</sup>	-	27
					55 <sup>②</sup>				
G 3/4	84.4	100.4	40	46	32.5	16	65	-	32
G 1	101.9	122.4	60	74	37.5	18	80	10	41
G 1 1/4	111.4	136.4	70	85	46	20	95	15	50
G 1 1/2	125.4	155.4	99	114	61	22	126	23	60
G 2	131.4	166.4			64	24	132		70

- ① only MS Threaded port version
- ② only VA Threaded port version

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