Plastic Solenoid Valve, Servo-Assisted, 0.5 – 10.0 bar **Type 6228**

General Purpose

2/2-Way; G 3/8" – 1/2"; PN 0.5 – 10.0 bar



Advantages/Benefits

- **Low power consumption, no relay necessary when used on a PLC**
- **Medium is separated from the actuator system**
- **Compact size**
- **Low weight**
- **Radially interchangeable**
- **Easy Flow Control System Module**

Design/Function

Type 6228 is a servo-assisted 2/2-way plastic solenoid valve with a separating servo diaphragm.
It is based on a modular concept with push-over coil and standard cable plug.
The valve is normally closed by spring force. Energized, the solenoid opens the pilot valve first. Then the medium pressure opens the valve against the pressure drop above the diaphragm.
The valve is radially interchangeable.

Optimised point-to-point connection between Burkert-Sensors and Actuators

Ability of communication with conventional controlling or Fieldbus connections

Applications

Fluids

- Neutral fluids, which do not affect plastic material, e.g. pressurized air, water, hydraulic oils, oils or fat without additives

Applications

- General purpose applications
- Water and sewage treatment
- Irrigation systems
- Public hygiene
- Medical service

bürkert
Easy Fluid Control Systems

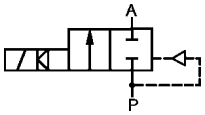
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General Purpose

Technical Data Type 6228

Circuit function **Symbol**

A 2/2-way, normally closed, with 2-way pilot control and coupled solenoid system



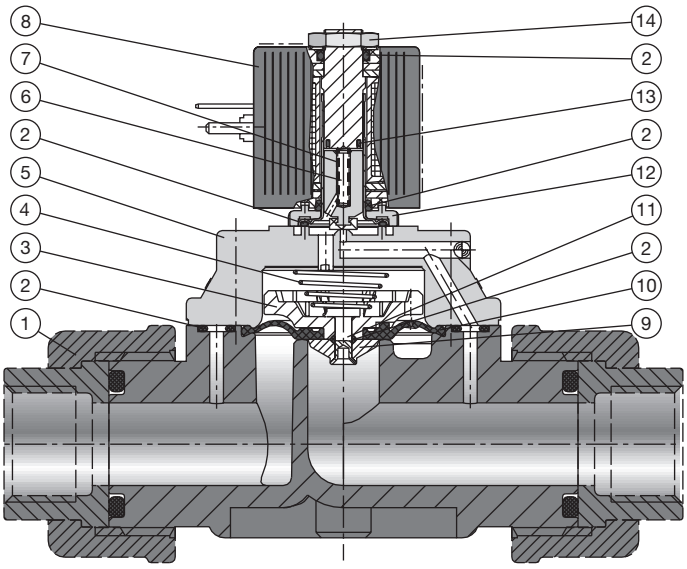
Operating Data (Valve)

Pressure range	0.5 – 10.0 bar
Port connection	G 3/8" - G 1/2"
Fluid	Neutral fluids, e.g. water, compressed air, town gas, natural gas, hydraulic and other oils
Medium temperature	
NBR sealing	0° up to +50°C
EPDM sealing	-10° up to +50°C
FPM sealing	0° up to +50°C
Max. ambient temperature	+50° C
Max. viscosity	21 mm^2/s
Flow rate (Kv value water) [m^3/h]	Measured at +20°C, 1 bar pressure at valve inlet port and open outlet port
Pressure rate [bar]	Overpressure to atmospheric pressure
Response times [ms]	Measured at +20°C, 6 bar pressure at outlet port
Opening pressure raise	0% to 90%
Closing pressure drop	100% to 10%
Installation	as required, but preferably with solenoid system upright

Operating Data (Actuator)

Operating voltages		
DC	24 V	
AC	24, 110, 230 V/50 Hz	
Voltages tolerance	±10 %	
Power consumption	DC	AC
Inrush	4 W	9 VA
Hold	4 W	6 VA
Duty cycle	100% continuously rated	
Cycling rate	up to 15 c.p.m.	
Electr. connection	Tag connectors sidewards acc. to DIN 43650, Form C	
Cable plugs		
Standard delivery	With type 2506, 0 – 250 V (others, please see accessories)	
EaseOn technology	Type 2510	

Materials



1	Valve body:	PPE/PA (Noryl)
2	O-rings:	NBR, FPM and EPDM
3	Diaphragm support:	PPS
4	Spring:	SS 1.4310
5	Cover:	PPE/PA (Noryl)
6	Plunger:	SS 1.4105
7	Spring	SS 1.4310
8	Coil:	PA
9	Diaphragm holder:	Brass
10	Diaphragm:	NBR, FPM and EPDM
11	Bolt	SS 1.4401
12	Flange:	Zn3glcC (surface)
13	Shading rings:	Cu
14	Locknut:	9SMnPb 28K (surface Zn5glcA)

Specifications - Ordering Chart (Other Versions on Request)

With Standard Cable Plug Type 2506 - without Connector Sets (see Accessories)

Seal Material NBR, Temperature Range 0° up to +50°C, Pressure Range 0.5 up to 10.0 bar

Circuit Function	Orifice DN [mm]	Port Connection	Kv-Value [m³/h]	Response Times Opening [ms]	Response Times Closing [ms]	Weight [kg]	Item-No. Voltage 24V/DC	24 V/50Hz	110 V/50Hz	230V/50Hz
A	10	see	1.8	30	150	0.13	142 220 G	142 221 V	142 222 W	142 223 X
	13	accessories	3.2	≤ 60	≤ 300	0.18	142 232 Y	142 233 Z	142 234 S	142 235 T

With Standard Cable Plug Type 2506 - without Connector Sets (see Accessories)

Seal Material FPM, Temperature Range 0° up to +50°C, Pressure Range 0.5 up to 10.0 bar

Circuit Function	Orifice DN [mm]	Port Connection	Kv-Value [m³/h]	Response Times Opening [ms]	Response Times Closing [ms]	Weight [kg]	Item-No. Voltage 24V/DC	24 V/50Hz	110 V/50Hz	230V/50Hz
A	10	see	1.8	30	150	0.13	142 228 C	142 229 D	142 230 A	142 231 X
	13	accessories	3.2	≤ 60	≤ 300	0.18	142 240 L	142 241 H	142 242 A	142 243 B

With Standard Cable Plug Type 2506 - without Connector Sets (see Accessories)

Seal Material EPDM, Temperature Range -10° up to +50°C, Pressure Range 0.5 up to 10.0 bar

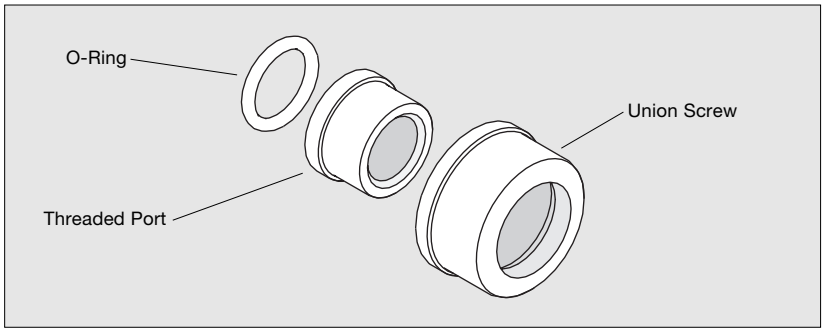
Circuit Function	Orifice DN [mm]	Port Connection	Kv-Value [m³/h]	Response Times Opening [ms]	Response Times Closing [ms]	Weight [kg]	Item-No. Voltage 24V/DC	24 V/50Hz	110 V/50Hz	230V/50Hz
A	10	see	1.8	30	150	0.13	142 224 Y	142 225 Z	142 226 S	142 227 T
	13	accessories	3.2	≤ 60	≤ 300	0.18	142 236 U	142 237 V	142 238 E	142 239 F

Accessories

Connector Set, Material PPE/PA (Noryl)

Three-Piece Connector Set, Material PPE/PA (Noryl)

Orifice DN [mm]	Port Connection [inch]	Seal Material O-Ring	Item-No. Voltage 24V/DC
10	G 3/8	NBR	142 425 J
		FPM	142 426 K
		EPDM	142 427 L
13	G 1/2	NBR	142 428 V
		FPM	142 429 W
		EPDM	142 430 T



IMPORTANT!

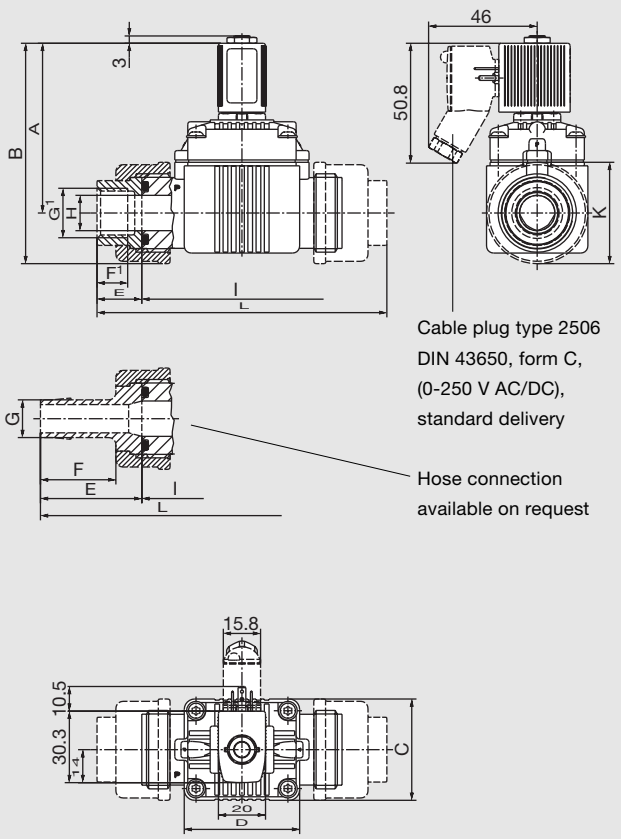
2 Connector Sets are necessary per valve.

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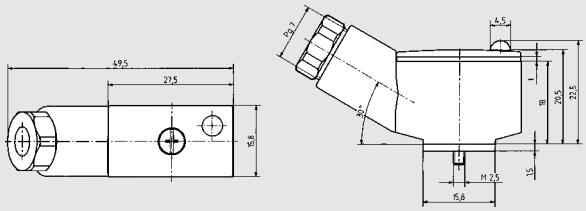
General Purpose

Dimensions [mm]

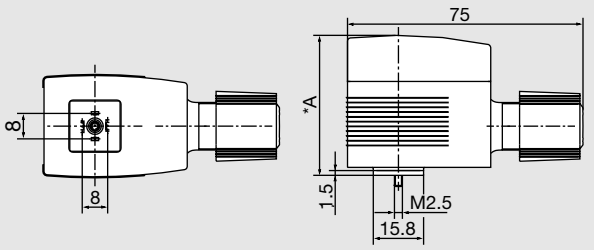
Type 6228 with Standard Cable Plug

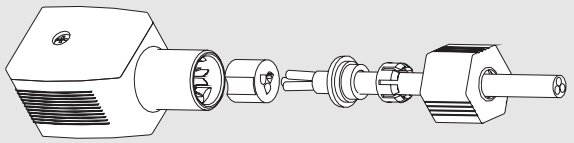


Cable Plug Type 2506



Cable Plug Type 2510 (EaseOn Technology)





Orifice DN [mm]	Measurements Threaded Conn. G¹ Port Conn. [inch]	E Thread Depth [mm]	F¹ [mm]	L [mm]	Measurements Hose Conn. E [mm]	F [mm]	G ø [mm]	L [mm]	Measurements A [mm]	B [mm]	C [mm]	D [mm]	H ø [mm]	K ø [mm]	I [mm]
10	G 3/8	17.0	13.0	107.0	42.0	32.0	14.0	157.0	65.5	83.0	32.0	32.0	10.0	35.0	73.0
13	G 1/2	19.0	13.0	123.0	43.0	32.0	16.0	171.0	72.0	93.5	43.0	49.0	15.0	43.0	85.0

Ordering Chart for Accessories

A wide selection of further cable plugs is available (see special data sheets type 2506 and 2510)