

# Solenoid Valve, 0 – 16.0 bar for High Viscose and Aggressive Fluids



6041

2/2- or 3/2-Way; G<sup>3/8</sup>“; PN 0 – 16 bar

- ✓ Long service life, even at dry operation
- ✓ Flipper mechanism separated from medium
- ✓ Suitable for high viscose fluids
- ✓ Versatile usage as 2/2- and 3/2-way valve

ON/OFF Control

6041

Type 6041 is a direct acting 2/2- or 3/2-way flipper valve for pressures up to 16 bar. The flipper armature is connected to a tube which is shifted inline concentric from one to the other side by energizing the coil.

The switching mechanism is pressure relieved. Two gaskets hermetically isolate the actuator from the fluid. Depending on the fluid direction, the 3/2-way version can be used versatile, i.e. for opening, closing, dosing, distributing and "supplying with air".

## Specifications

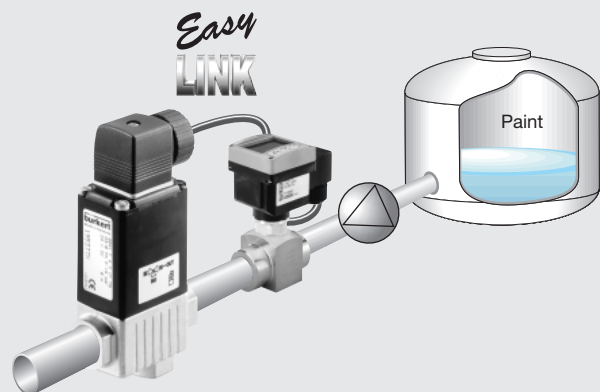
Pressure range	0 – 16 bar
Port connection	G 3/8"
Fluids	
NBR sealing	Neutral fluids, i.e. pressurized air, hydraulic oil, oils and fat without additives
FFKM sealing	Aggressive fluids (short time), i.e. ethers, esters and ketones, aromatic hydrocarbons (benzene, toluene, xylene)
Medium temperature	
NBR sealing	0° up to +70°C
FFKM sealing	0° up to +70°C
Ambient temperature	0° up to +55°C
Max. viscosity	37 mm <sup>2</sup> /s (higher viscosity at reduced pressure on request)
Operating voltages	24 V/DC 230 V/50 Hz
Voltages tolerance	±10 %

Power consumption	DC	AC
Inrush	8 W	40 VA
Hold	8 W	18 VA / 8 W

Duty cycle	100% continuously rated
Cycling rate	200/min (AC)
Electr. connection	Tag connectors upwards acc. to DIN 43650, Form A
Cable plugs	
Standard delivery	With type 2508, 0 – 250 V (others, please see accessories)
EaseOn technology	Type 2511 AS-i and 2512
Rating	IP65
Installation	As required, but preferably with solenoid system upright

**Pressure rate [bar]**  
Overpressure to atmospheric pressure

- Applications:**
- Chemical processing
  - Paint production and distribution
  - Pulp and paper industry
  - Machine industry



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Optimized point-to-point connection between Burkert Sensors and Valves

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## Operating Data (Valve) – Details

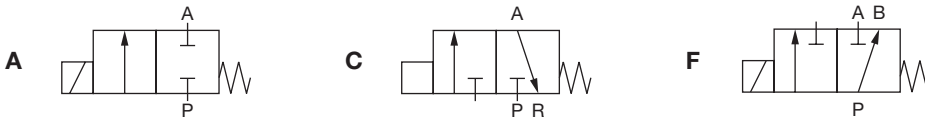
### Kv-Value

Circuit Function	Connection variants			With 230 V / 50 Hz - Coil Kv-Value water in → direction			With 24 V / DC - Coil Kv-Value water in → direction		
	NC	IN/OUT	NO	1 → 2	2 → 1	2 → 3	1 → 2	2 → 1	2 → 3
A	A 1	P 2	closed 3	–	0.60	–	–	0.40	–
C	P 1	A 2	R 3	0.60	–	0.42	0.4	–	0.35
F	A 1	P 2	B 3	–	0.60	0.42	–	0.40	0.35

### Flow rate: Kv value water [m<sup>3</sup>/h]

Measured at +20°C, 1 bar pressure at valve inlet port and open outlet port

### Possible Circuit Functions of Type 6041



A 2/2-way, normally closed

C 3/2-way, when de-energized, outlet A pressure relieved

F Distributor valve, when de-energized, P → B open, P → A closed

## Specifications - Ordering Chart (Other Versions on Request)

### With Standard Cable Plug Type 2508

Seal Material NBR, Temperature Range 0° up to +70°C, Pressure Range 0 up to 16 bar

Circuit Function	Orifice DN [mm]	Port Connection [inch]	Kv-Value [m <sup>3</sup> /h]	Response Times		Weight [kg]	Item-No. Voltage	
				Opening [ms]	Closing [ms]		24 V / DC	230 V / 50 Hz
A	6.0	G 3/8	see above chart	15 – 20	20 – 80	0.59	140 147 D	140 148 N
C	6.0	G 3/8		15 – 20	20 – 80	0.59	141 970 F	141 971 U
F	6.0	G 3/8		15 – 20	20 – 80	0.59	140 167 H	140 168 J

### With Standard Cable Plug Type 2508

Seal Material FFKM, Temperature Range 0° up to +70°C, Pressure Range 0 up to 16 bar

Circuit Function	Orifice DN [mm]	Port Connection [inch]	Kv-Value [m <sup>3</sup> /h]	Response Times		Weight [kg]	Item-No. Voltage	
				Opening [ms]	Closing [ms]		24 V / DC	230 V / 50 Hz
A	6.0	G 3/8	see above chart	15 – 20	20 – 80	0.59	140 149 P	140 150 L
C	6.0	G 3/8		15 – 20	20 – 80	0.59	141 972 V	141 973 W
F	6.0	G 3/8		15 – 20	20 – 80	0.59	140 169 K	140 170 Q

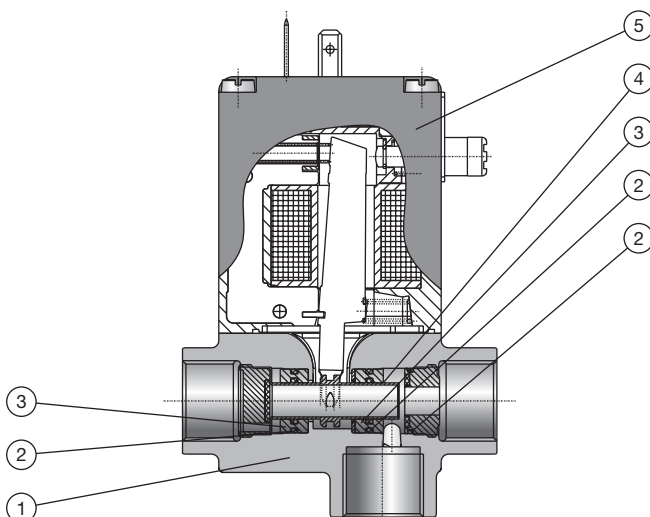
### Response times [ms]

Measured at +20°C, 6 bar pressure at outlet port

Opening pressure raise 0% to 90%

Closing pressure drop 100% to 10%

## Materials

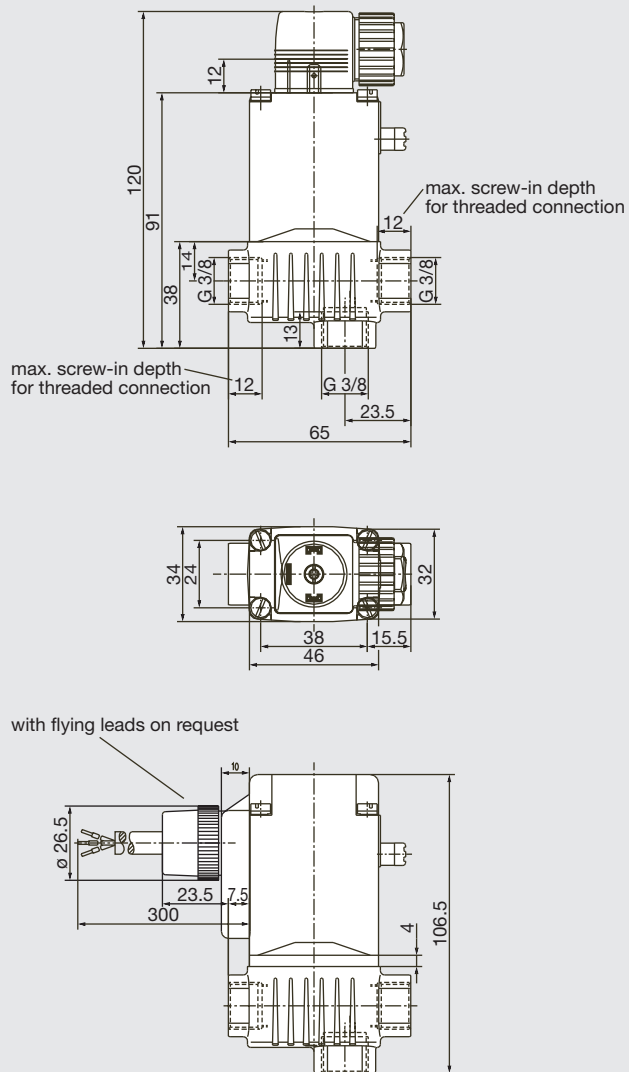


- |   |             |                                       |
|---|-------------|---------------------------------------|
| 1 | Valve body: | Brass<br>(other materials on request) |
| 2 | O-rings:    | NBR, FFKM (SIMRIZ)                    |
| 3 | Gasket:     | NBR, FFKM (SIMRIZ)                    |
| 4 | Tube:       | Brass                                 |
| 5 | Coil:       | Epoxy                                 |

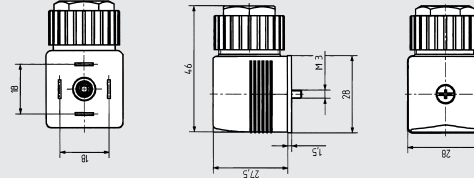
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## Dimensions [mm]

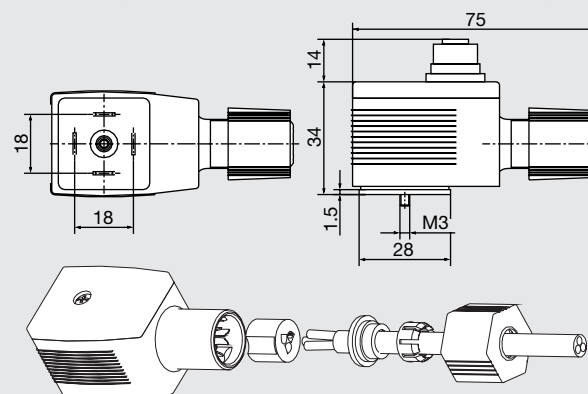
Type 6041 with Standard Cable Plug



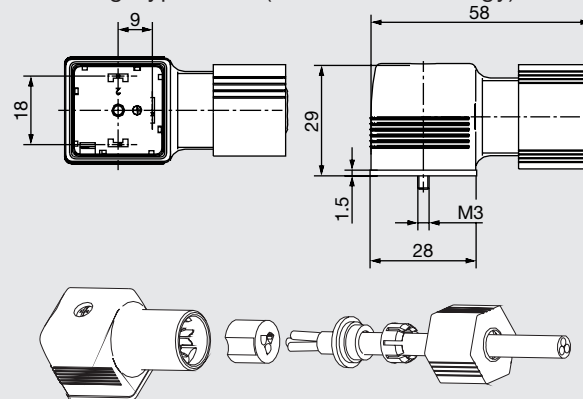
Cable Plug Type 2508



Cable Plug Type 2511 AS-i (EaseOn Technology)



Cable Plug Type 2512 (EaseOn Technology)



ON/OFF Control

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## Ordering Chart for Accessories

A wide selection of further cable plugs is available (see special data sheets type 2508, 2511 AS-i and 2512)

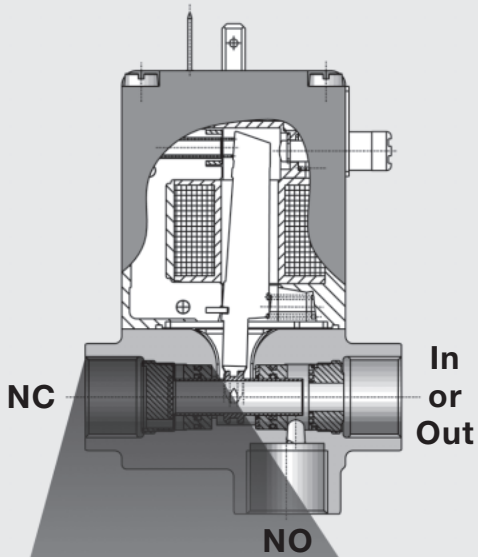
# Solenoid Valve, 0 – 16.0 bar for High Viscose and Aggressive Fluids

Function Principle Type 6041

ON/OFF Control

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"not actuated"



"actuated"

