

2/2- or 3/2-Way; G 3/8"; PN 0 – 16 bar



## Design/Function

Type 6041 is a direct acting 2/2- or 3/2-way flipper valve for higher pressure. 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".



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



**Ability of communication with conventional  
controlling or Fieldbus connections**

## Advantages/Benefits



- ▶ 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

## Applications

### Fluids

- Neutral fluids, i.e. pressurized air, hydraulic oil, oils and fat without additives
- High viscose fluids, i.e. paint / ink
- Aggressive fluids (short time), i.e. ether, ester, ketone, aromatic compounds

### Applications

- Chemical processing
- Paint production and distribution
- General purpose applications
- Machine industry

**bürkert**  
Easy Fluid Control Systems

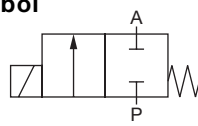
# Inline Solenoid Valve, 0 – 16.0 bar for High Viscose and Aggressive Fluids

## Type 6041

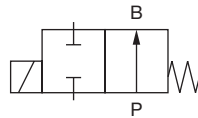
### Technical Data Type 6041

#### Circuit function

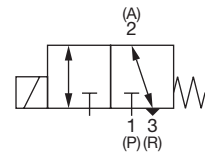
**A** 2/2-way, normally closed



**B** 2/2-way, normally open



**T** 3/2-way, universal function,  
any flow direction



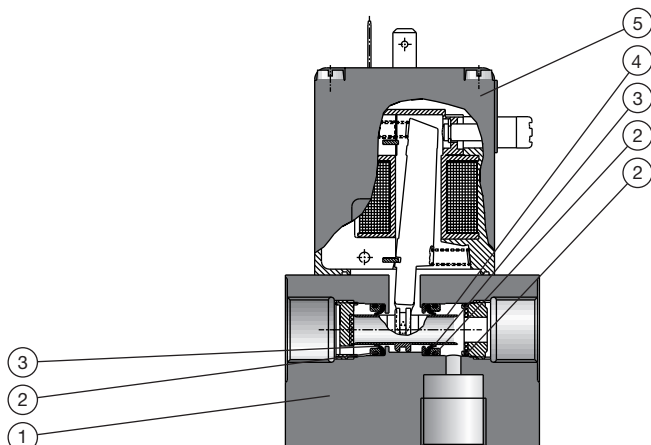
#### Operating Data (Valve)

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. ether, ester and ketone, aromatic hydrocarbons (benzol, toluol, xylene)
Medium temperature	
NBR sealing	0° up to +70°C
FFKM sealing	0° up to +70°C
Max. ambient temperature	+55° C
Max. viscosity	37 mm <sup>2</sup> /s (higher viscosity at reduced pressure on request)
Flow rate (K <sub>v</sub> value water) [m <sup>3</sup> /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 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	

#### Materials



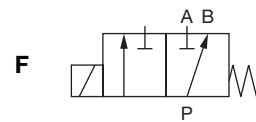
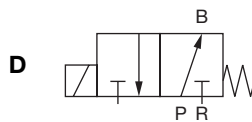
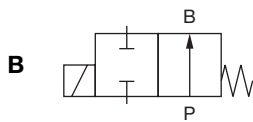
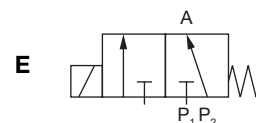
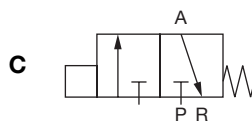
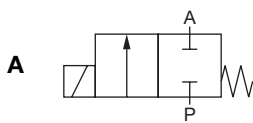
1	Valve body:	Brass (other materials on request)
2	O-rings:	NBR, FFKM (Simriz)
3	Gasket:	NBR, FFKM (Simriz)
4	Tube:	Brass
5	Coil:	Epoxy

**Operating Data (Valve) – Details**

**Kv-Value**

Circuit Function	Connection variants			With 230 V / 50 Hz - Coil				With 24 V / DC - Coil			
	NC	IN/OUT	NO	Kv-Value water in → direction				Kv-Value water in → direction			
	1	2	3	1 → 2	2 → 1	2 → 3	3 → 2	1 → 2	2 → 1	2 → 3	3 → 2
A	P	A	closed	0.70	–	–	–	0.58	–	–	–
A	A	P	closed	–	0.60	–	–	–	0.50	–	–
B	closed	P	B	–	–	0.42	–	–	–	0.35	–
B	closed	B	P	–	–	–	0.45	–	–	–	0.38
C (T)	P	A	R	0.70	–	0.42	–	0.58	–	0.35	–
D (T)	R	B	P	–	0.60	–	0.45	–	0.50	–	0.38
E (T)	P <sub>1</sub>	A	P <sub>2</sub>	0.70	–	–	0.45	0.58	–	–	0.38
F (T)	A	P	B	–	0.60	0.42	–	–	0.50	0.35	–

**Possible Circuit Functions of Type 6041**



Circuit functions C, D, E and F – All functions are direct acting.

**A** 2/2-way, normally closed

**B** 2/2-way, normally open

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

**D** 3/2-way, when de-energized, outlet B pressure relieved

**E** Mixer valve, when de-energized,  
P<sub>2</sub> → A open  
P<sub>1</sub> → A closed

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

# Inline Solenoid Valve, 0 – 16.0 bar

for High Viscose and Aggressive Fluids

# Type 6041

## 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 [m³/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 chart on previous page	15 – 20	20 – 80	0.91	140 147 D	140 148 N
B	6.0	G 3/8		15 – 20	20 – 80	0.91	140 151 H	140 152 A
T	6.0	G 3/8		15 – 20	20 – 80	0.91	140 155 D	140 156 E

**With Standard Cable Plug Type 2508**

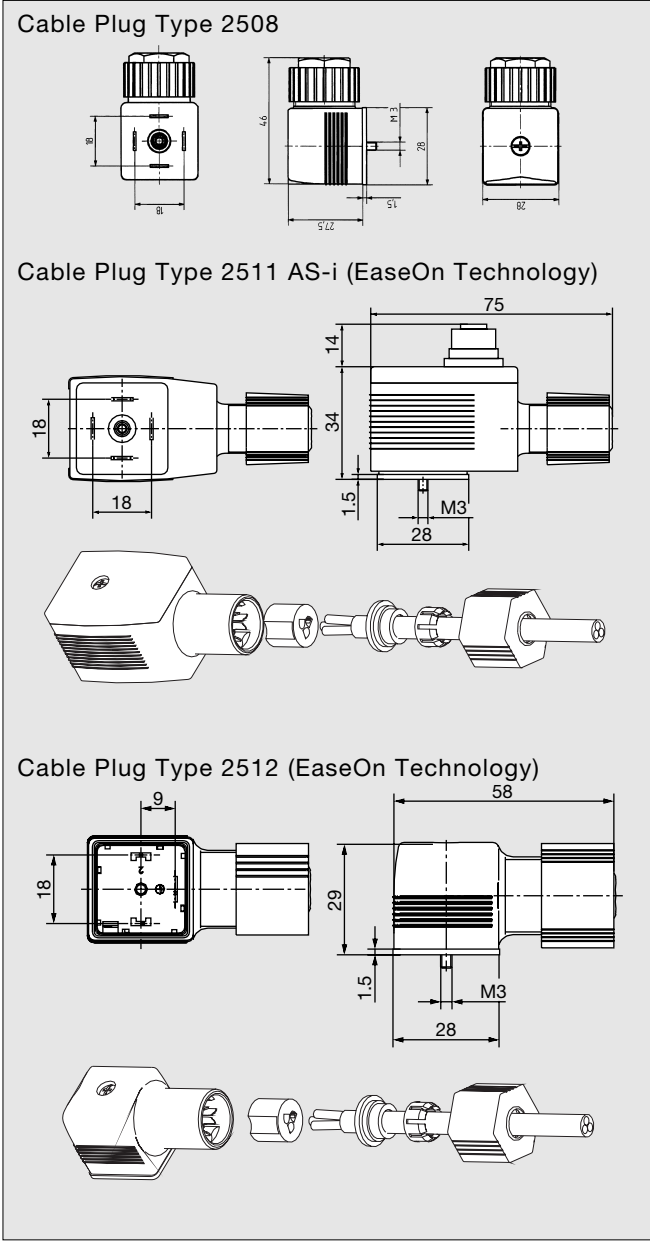
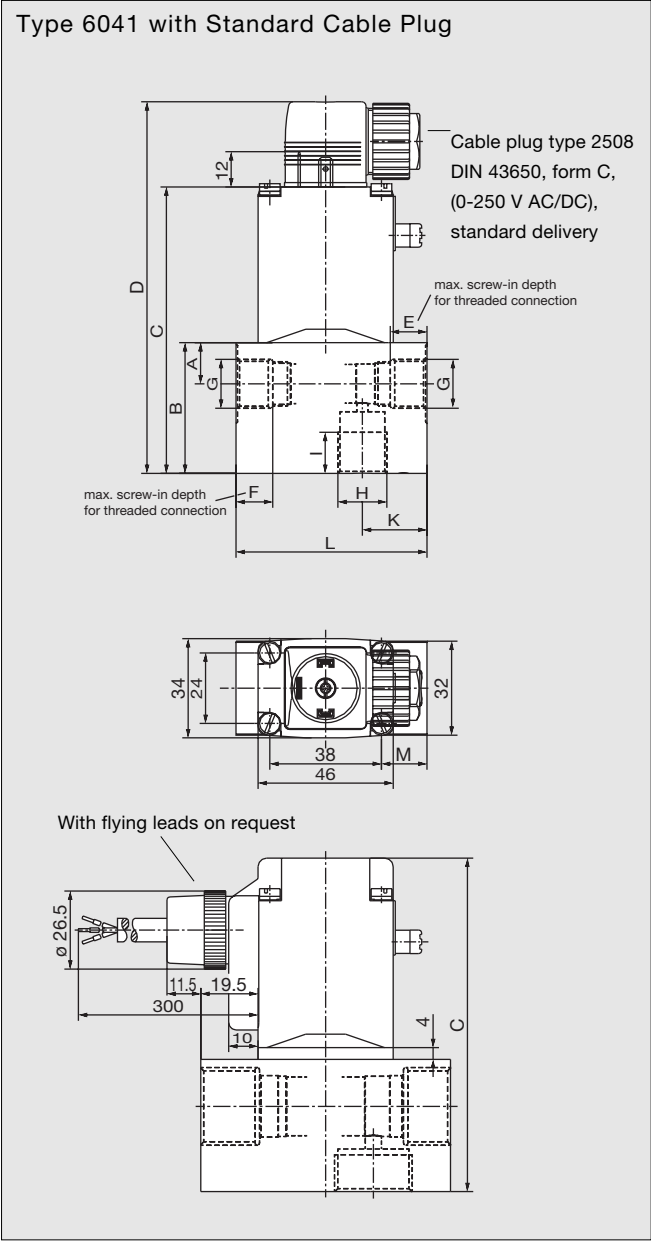
**Seal Material FFKM, Temperature Range 0° up to +70°C, Pressure Range 0 up to 16 bar**

Circuit Function	Orifice DN [mm]	Port Connection [inch]	Kv-Value [m³/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 chart on previous page	15 – 20	20 – 80	0.91	140 149 P	140 150 L
B	6.0	G 3/8		15 – 20	20 – 80	0.91	140 153 B	140 154 C
T	6.0	G 3/8		15 – 20	20 – 80	0.91	140 157 F	140 158 Q

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

**Type 6041**

Dimensions [mm]



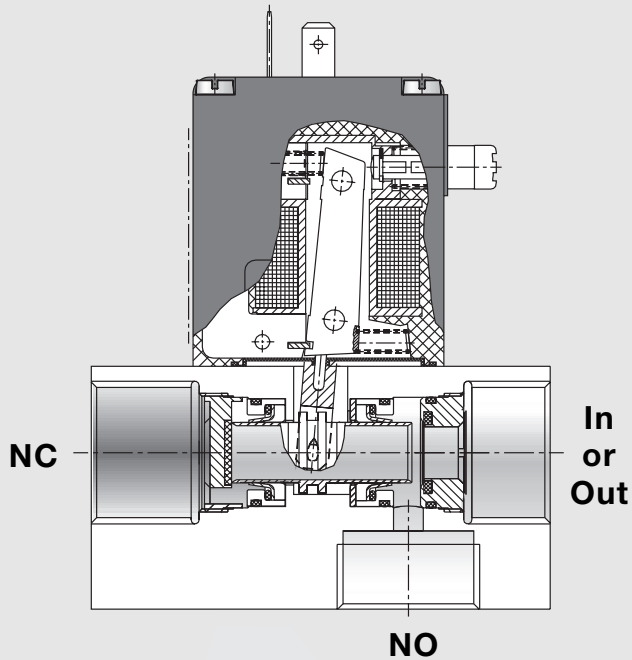
Orifice DN [mm]	Function	G Port Conn. [inch]	H Port Conn. [inch]	Measurements									
				A	B	C	D	E	F	I	K	L	M
				[mm]	[mm]	[mm]	[mm]	Thread Depth [mm]	Thread Depth [mm]	Thread Depth [mm]	[mm]	[mm]	[mm]
6.0	2/2-way	G 3/8	–	14.0	31.0	84.0	113.0	12.0	12.0	–	–	65.0	15.5
6.0	3/2-way	G 3/8	G 3/8	14.0	44.5	97.5	126.5	12.0	12.0	14.0	22.0	65.0	15.5

Ordering Chart for Accessories

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

Function Principle Type 6041

"not actuated"



"actuated"

