

2/2-Way; G 3/8" – 1"; PN 0 – 10 bar



## Advantages/Benefits



- ▶ Zero pressure type
- ▶ Actuation system pressure relieved
- ▶ Long service life
- ▶ Compact design
- ▶ Ideal steam, pressure and temperature Control System Module (Easy System)

## Design/Function

Type 6038 is a 2/2-way angle seat solenoid valve with direct acting switching mode. The plunger is coupled with the seat tube. By attracting the plunger, a bore is opened by this pre-stroke. This causes a pressure relief in the valve inside, so that the valve can be opened fully by the magnetic power. De-energized, the valve is hold closed by a spring force. The medium pressure on top of the plunger supports the closing force of the spring.



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



Ability of communication with conventional controlling or Fieldbus connections

## Applications

### Fluids

- Steam

### Applications

- General purpose applications
- High temperature applications in chemical industry
- Food industry
- Cooling circuitry
- Heat exchangers

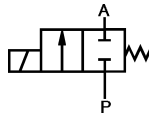
**bürkert**  
Easy Fluid Control Systems

## Technical Data Type 6038

### Circuit function

### Symbol

**A** 2/2-way, normally closed, direct acting switching mode, pressure relieved



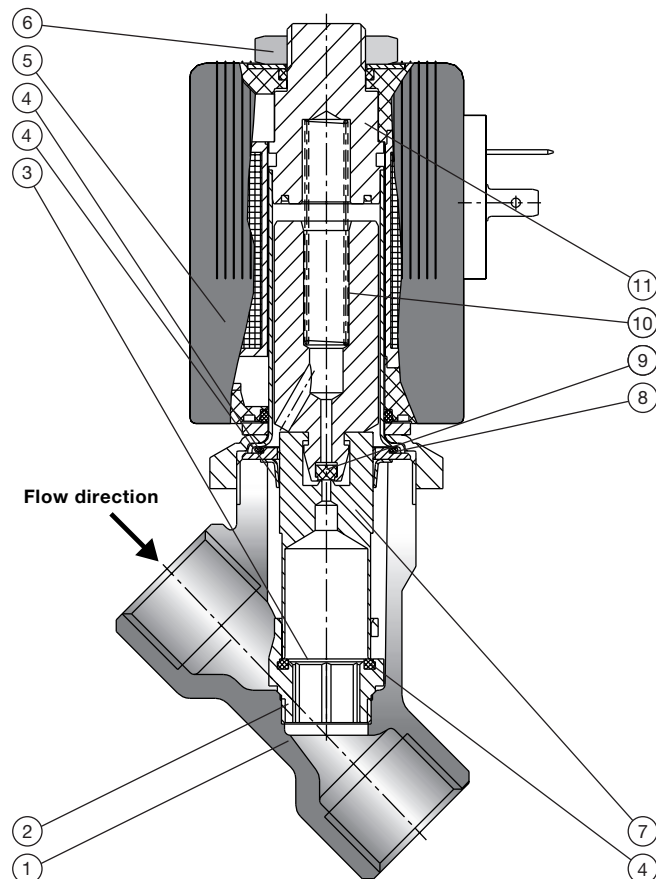
### Operating Data (Valve)

Pressure range	0 – 10 bar
Port connection	G 3/8" - G 1"
Fluids	Steam
Medium temperature	0° up to +180°C
Max. ambient temperature	+55°C
Max. viscosity	21 mm <sup>2</sup> /s
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	AC 24, 110, 230 V/50-60 Hz
Voltages tolerance	±10 %
Power consumption	
Inrush	106 VA
Hold	38 VA / 18 W
Duty cycle	100% continuously rated
Cycling rate	100/min
Electr. connection	Tag connectors sideways acc. to DIN 43650, Form A
Cable plugs	
Standard delivery	With type 2508, 0 – 250 V (others, please see accessories)
EaseOn technology	Type 2512
Rating	IP65

### Materials



1	Valve body:	Gun Metal
2	Seat ring:	Brass
3	Seat:	SS (1.4571)
4	Seat seal:	PTFE
5	Coil:	Epoxy
6	Locknut:	Surface Zn5glcA
7	Piston:	SS (1.4021)
8	O-rings:	FPM
9	Plunger seal:	FPM
10	Spring:	SS (1.4310)
11	Stopper:	SS (1.4105)

# Angle-Seat Solenoid Valve, 0 – 10.0 bar for Steam Applications

## Type 6038

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

With Standard Cable Plug Type 2508

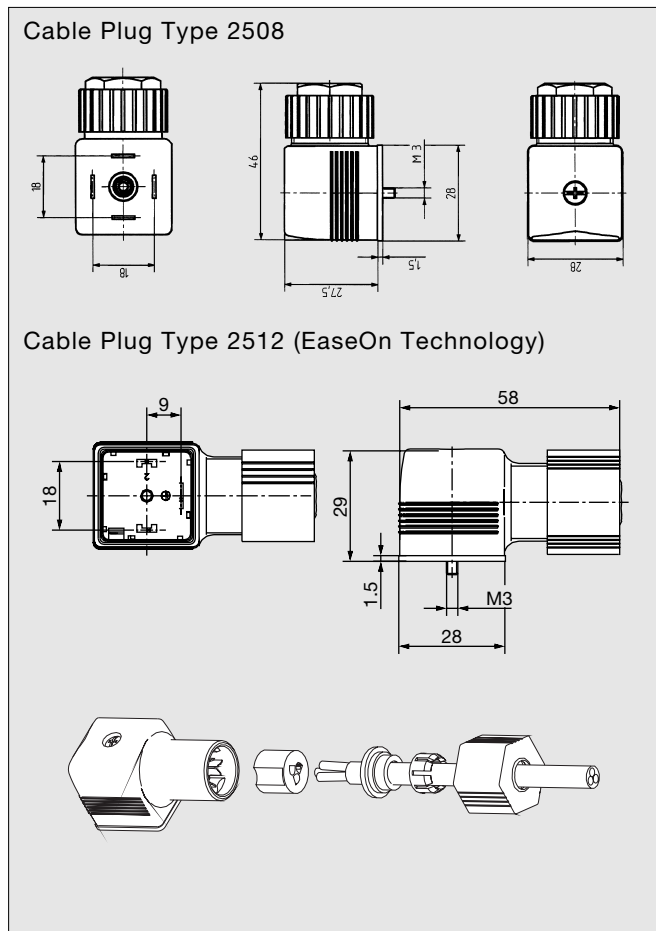
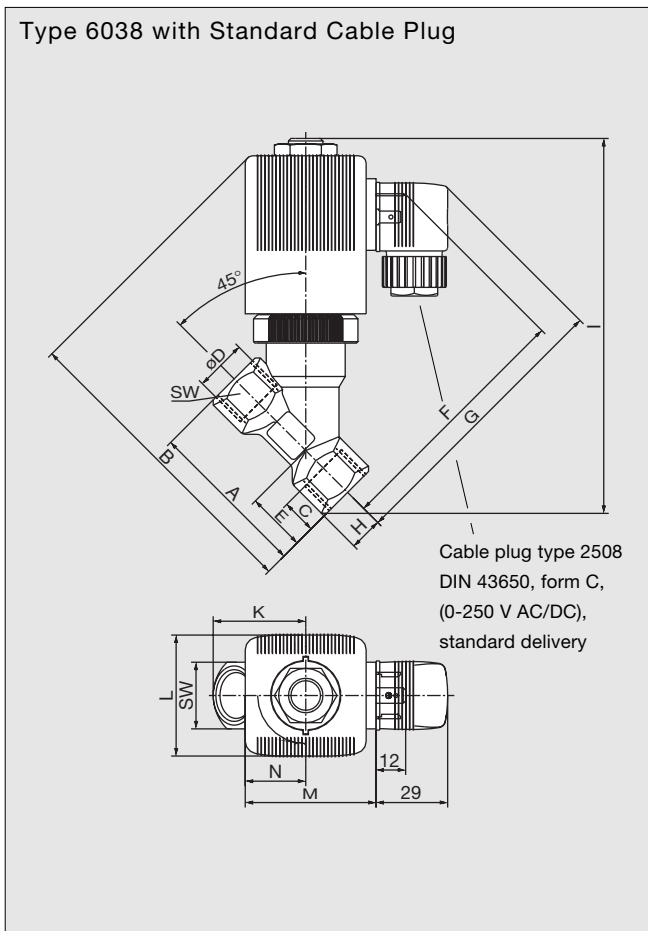
Seal Material PTFE, Temperature Range 0° up to +180°C, Pressure Range 0 up to 10 bar

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 / 50-60 Hz	110 V / 50-60 Hz	230 V / 50-60 Hz
A	12	G 3/8	2.2	20	60	0.90	140 427 W	140 428 F	140 429 G
	12	G 1/2	2.2	20	60	0.90	140 430 D	140 431 S	140 432 T
	16	G 1/2	2.8	30	50	1.10	140 439 A	140 440 P	140 441 C
	16	G 3/4	2.8	30	50	1.10	140 445 G	140 446 H	140 447 A
	16	G 1	2.8	30	50	1.30	140 451 E	140 452 F	140 453 G

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### Dimensions [mm]



Orifice DN [mm]	ø D Port Conn. [inch]	C Thread Depth [mm]	Measurements												
			A [mm]	B [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	K [mm]	L [mm]	M [mm]	N [mm]	SW [mm]	
12.0	G 3/8	12.0	65.0	124.5	24.0	102.0	116.0	13.5	152.0	37.5	49.0	53.0	24.5	27.0	
12.0	G 1/2	14.0	65.0	124.5	24.0	102.0	116.0	13.5	152.0	37.5	49.0	53.0	24.5	27.0	
16.0	G 1/2	14.0	75.0	132.5	27.0	107.0	121.5	16.0	163.0	45.0	49.0	53.0	24.5	32.0	
16.0	G 3/4	16.0	75.0	132.5	27.0	107.0	121.5	16.0	163.0	45.0	49.0	53.0	24.5	32.0	
16.0	G 1	18.0	95.0	146.5	31.0	117.0	131.0	20.5	183.0	60.0	49.0	53.0	24.5	41.0	

### Ordering Chart for Accessories

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