

2/2-Way; G $\frac{3}{8}$ " – 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

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

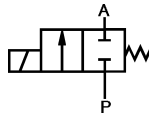
Type 6038

Technical Data Type 6038

Circuit function

Symbol

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



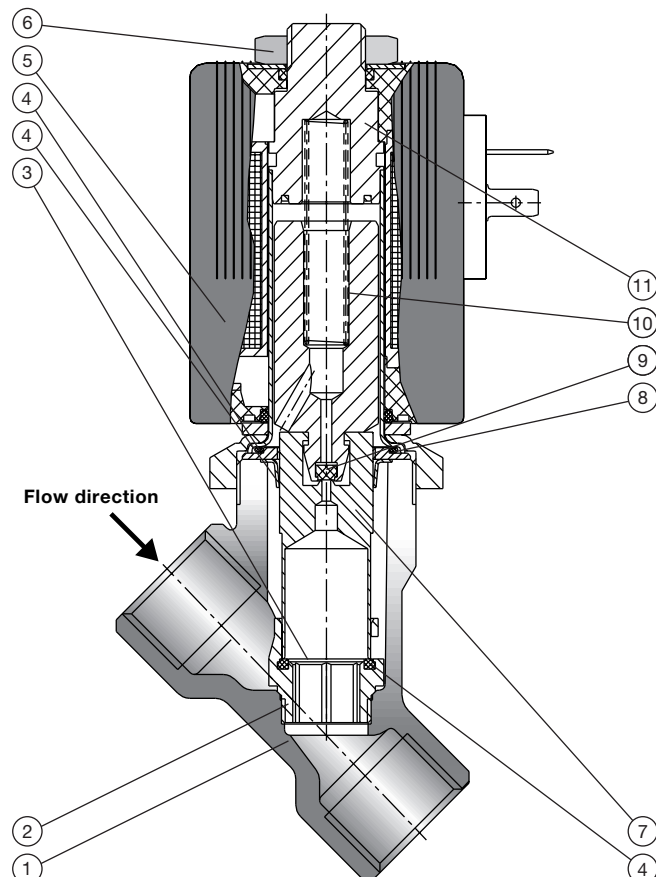
Operating Data (Valve)

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 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	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	30/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

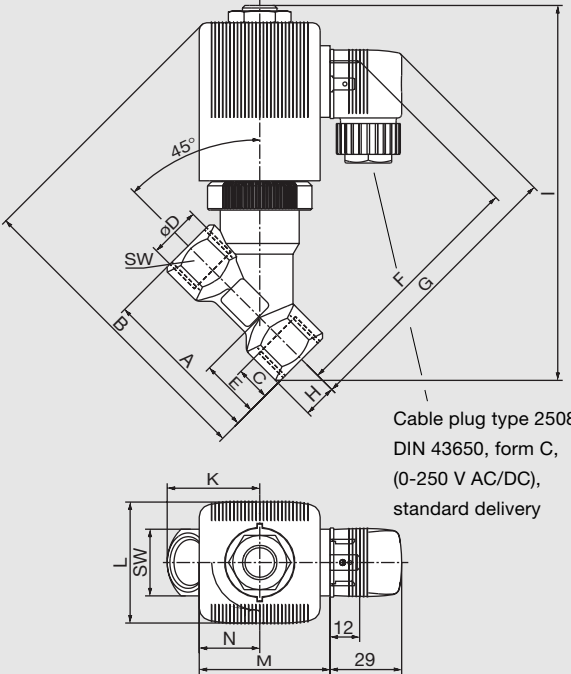
Circuit Function	Orifice DN [mm]	Port Connection [inch]	Kv-Value [m³/h]	Response Times		Weight [kg]	Item-No.		
				Opening [ms]	Closing [ms]		Voltage		
							24 V / 50-60 Hz	110 V / 50-60 Hz	230 V / 50-60 Hz
A	12	G 3/8	2.2	20	60	0.90	140 427 W	140 428 F	140 429 G
	12	G 1/2	2.2	20	60	0.90	140 430 D	140 431 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

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

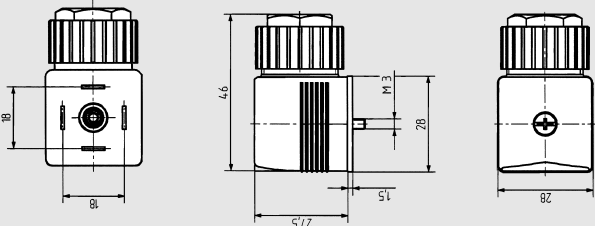
Type 6038

Dimensions [mm]

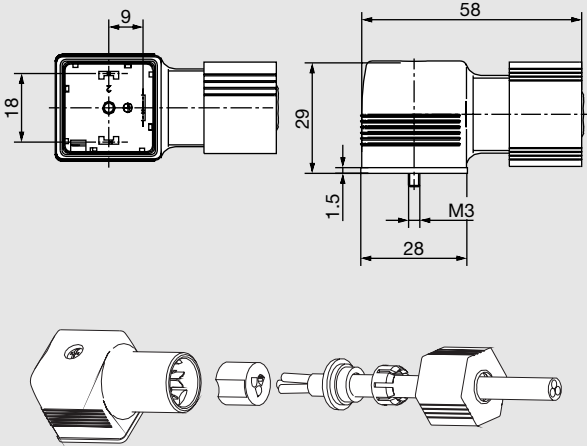
Type 6038 with Standard Cable Plug



Cable Plug Type 2508



Cable Plug Type 2512 (EaseOn Technology)



Orifice DN [mm]	ø D Port Conn. [inch]	Measurements												
		C Thread Depth	A	B	E	F	G	H	I	K	L	M	N	SW
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[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)

In case of special requirements
please consult for advice.

We reserve the right to make technical changes without notice.
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