

2/2- 3/2-way; G 1/4, Universal function



### Advantages / Benefits

- ▶ Universal function
- ▶ Separating diaphragm isolates solenoid system from operating fluid
- ▶ Long service life, even in non-lube conditions
- ▶ Insensitive to contaminated fluids
- ▶ Specific clean and testing available
- ▶ Lockable manual override standard
- ▶ With electrical feedback signaller (optional)
- ▶ On request:  
Ex-proof-, impulse-, vacuum- or low power versions

### Design

The direct-acting 2 way and 3-way solenoid valve has a flipper as the switching method. This unique valve design hermetically isolates the actuator from the fluid. Making it less sensitive to contaminated fluids than a plunger-type system and provides a long service life, even in unlubricated applications.

The valve is available with several circuit functions. When the valve is energized the armature is pulled against a spring.

The solenoid epoxy encapsulation efficiently dissipates the heat generated by the fluid.

- Direct-acting
- Body materials:  
stainless steel
- Fast-acting
- Insensitive to abrasive,  
slightly contaminated fluids

### Applications

Neutral gases and liquids  
Aggressive fluids  
Demineralised water  
Vacuum  
Unlubricated compressed air  
Water and gas analysis  
Dryer systems  
Pharmaceutical industry  
Food processing  
Steam traps  
Pilot valve for process valves

**bürkert**  
Easy Fluid Control Systems

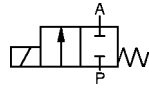
# Flipper Solenoid Valve with Isolating Diaphragm for Analytical Applications

## Type 330

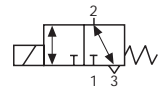
### Technical Data

#### Circuit Function

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



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



#### Operating Data (Valve)

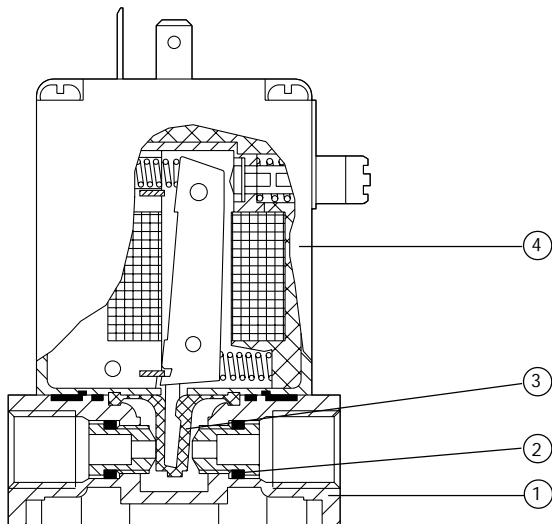
Pressure range max.	0 - 16 bar (see specifications)
Port connection	Threaded port G1/4
Orifice	DN 2.0 - 4.0 mm Sub-base (on request)
Body material	Stainless steel 1.4401
Seal material	FPM, EPDM
Fluids	EPDM: Alkalis, acids up to a medium concentration, alkaline washing and bleaching lyes. FPM: Oxydizing acids, salt solutions, exhaust gas
Fluid temperature	-30 to +90 °C (EPDM) -10 to +80 °C (FPM)
Ambient temperature	max. +55 °C
Max. viscosity	approx. 37 mm <sup>2</sup> /s
Response Times	

Circuit Function	Opening [ms]		Closing [ms]	
	AC	DC	AC	DC
A and T	8 - 15	10 - 20	8 - 15	10 - 20

#### Operating Data (Actuator)

Operating voltages	AC: 110, 230 V/50 Hz, DC: 24 V
Voltage tolerance	±10 %
Power consumption	AC 30 VA (inrush) 15 VA / 8 W (hold) DC 8 W 5 W (on request)
Duty cycle	100 % continuous rated
Cycling rate	approx 1000 c.p.m.
Protection class	IP65 with cable plug type 2508
Electrical connection	cable plug type 2508 (DIN 43650, form A) for 7 mm ø cable (supplied as standard)
Installation	as required

### Materials

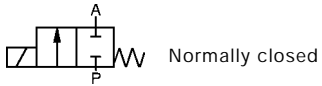


- |                        |                        |
|------------------------|------------------------|
| 1 Valve body:          | 1.4401 Stainless steel |
| 2 O-Rings:             | FPM (Viton), EPDM      |
| 3 Isolating diaphragm: | FPM (Viton), EPDM      |
| 4 Coil:                | Epoxy                  |

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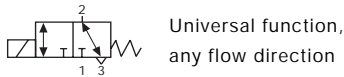
# Type 330

## Ordering Chart (Other Versions on Request)



### Stainless steel valve body

Port connection	Orifice [mm]	Kv-Value (water) [m³/h]	Q <sub>Nn</sub> -Value (air) [l/min]	Pressure range [bar]	Seal material	Weight [kg]	ITEM - No.		
							Voltage / Frequency [V/Hz]		
							24/DC	110/50	230/50
G 1/4	2.0	0.11	120	0-16	EPDM	0.4	136 523 E	136 524 F	136 525 G
G 1/4	2.0	0.11	120	0-12	FPM	0.4	136 520 P	136 521 C	136 522 D
G 1/4	3.0	0.23	250	0-10	EPDM	0.4	136 529 L	136 530 R	125 953 J
G 1/4	3.0	0.23	250	0-10	FPM	0.4	136 526 H	136 527 A	136 528 K
G 1/4	4.0	0.28	325	0- 5	EPDM	0.4	136 533 G	136 534 H	140 529 C
G 1/4	4.0	0.28	325	0- 5	FPM	0.4	135 912 B	136 531 E	136 532 F



### Stainless steel valve body

Port connection	Orifice [mm]	Kv-Value (water) [m³/h]	Q <sub>Nn</sub> -Value (air) [l/min]	Pressure range [bar]	Seal material	Weight [kg]	ITEM - No.		
							Voltage / Frequency [V/Hz]		
							24/DC	110/50	230/50
G 1/4	2.0	0.11	120	0-12	EPDM	0.4	136 538 M	136 539 N	136 540 T
G 1/4	2.0	0.11	120	0-12	FPM	0.4	136 535 A	136 536 B	136 537 C
G 1/4	3.0	0.16	175	0- 8	EPDM	0.4	136 544 K	136 545 L	136 546 M
G 1/4	3.0	0.16	175	0- 8	FPM	0.4	136 541 Q	136 542 R	136 543 J

## Options

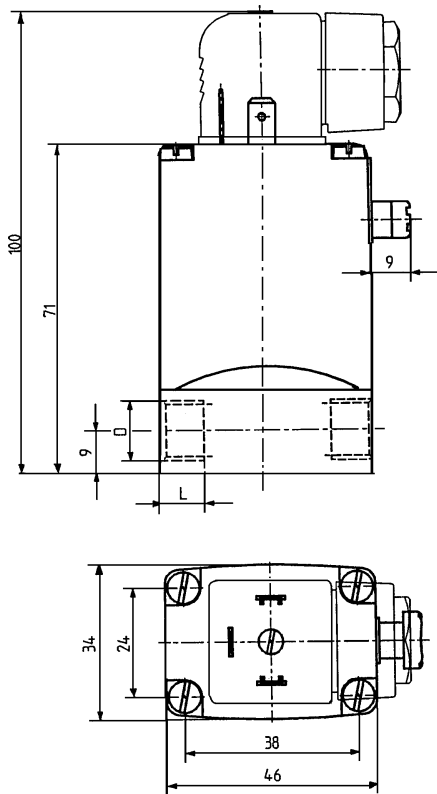
- Diagnosis: Electrical feedback signaller
- Impulse coil
- Specific clean and testing
- Vacuum version
- Brass valve body
- Sub-base version type 331
- Ex-proof version

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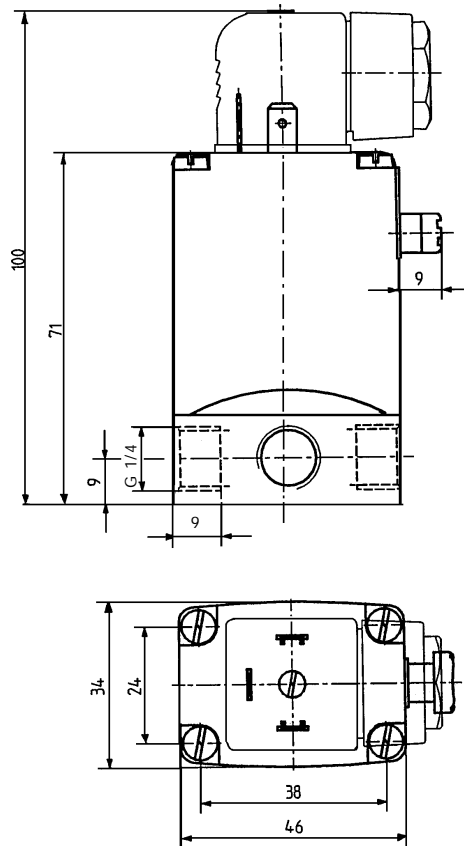
Dimensions [mm] 2/2-Way

Standard version

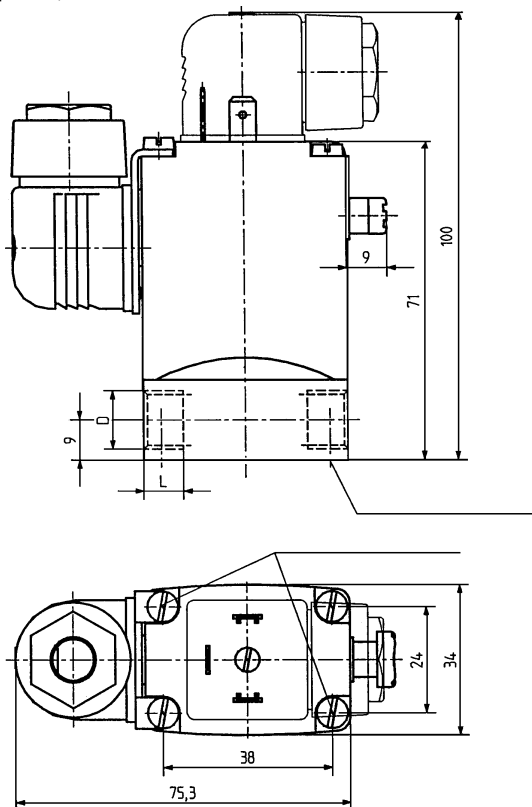


Dimensions [mm] 3/2-Way

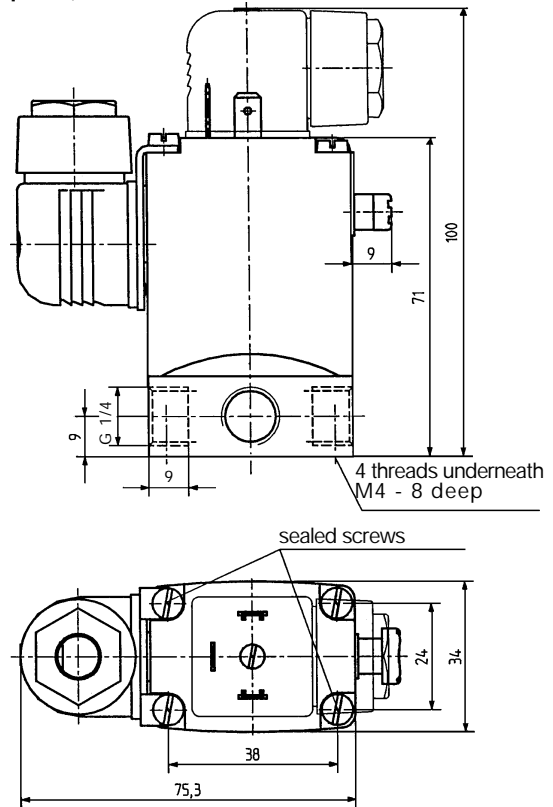
Standard version



Valve with electrical feedback signaller Type 1060  
(on request)



Valve with electrical feedback signaller Type 1060  
(on request)



In case of special requirements,  
please consult for advice.

We reserve the right to make technical changes without notice.  
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