

3/2-way; Sub-base Version, Universal function



Advantages / Benefits

- ▶ Universal function
- ▶ Separating diaphragm isolates solenoid system from operating fluid
- ▶ Low inventory levels
- ▶ Operational reliability
- ▶ Long service life, even in non-lube conditions
- ▶ Insensitive to contaminated fluids
- ▶ Lockable manual override standard
- ▶ With electrical feedback signaller (optional)

Design

The direct-acting 3-way solenoid valve has a pivoted armature 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 solenoid epoxy encapsulation efficiently dissipates the heat generated by the fluid.

- Direct-acting
- Body materials: brass or stainless steel
- Fast-acting
- Insensitive to abrasive, slightly contaminated fluids
- Sub-base connection for manifold mounting

Applications

Neutral gases and liquids
 Aggressive fluids
 Demineralised water
 Vacuum
 Unlubricated compressed air
 Water and gas analysis
 Dryer systems
 Pharmaceutical industry
 Food processing

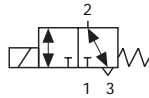
bürkert
Easy Fluid Control Systems

Solenoid Valve with Isolating Diaphragm

Technical Data

Circuit Function

T 3/2-way valve,
Universal function



Body Material

Body and seat brass or stainless steel 1.4401

Specifications

Orifice DN	Kv-Value ¹⁾ Water	QnN-Value ¹⁾ Air ²⁾	Pressure Range	Pressure Range Vacuum Version E	Weight
[mm]	[m ³ /h]	[l/min]	[bar]	[bar]	[kg]
2	0,10	108	0-12		0,40
3	0,12	130	0- 8		0,40
4	0,22	240	0- 4	0- 3	0,40

¹⁾ Flow rate reduced by 20 % with direct current operation, ²⁾ Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve at + 20 °C.

All pressures quoted are gauge pressures with respect to the prevailing atmospheric pressure.

Operating Data (Valve)

Seal Materials / Fluids Handled / Temp.-Range

NBR	Neutral fluids, e.g. compressed air, town gas, water, hydraulic oil, oils and fats without additives	0 to +90 °C
EPDM	Oils and fat-free fluids, e.g. hot water alkaline washing and bleaching lyes	-30 to +90 °C
FPM	Hot air, oxygen, per-solutions, hot oils with additives	-10 to +90 °C

For more detailed information please refer to resistance chart (Leaflet-No. 1896009).

Max. ambient temperature	+55 °C
Max. viscosity	37 mm ² /s
Response times opening	AC: 8-15 ms, DC: 10-20 ms
closing	AC: 8-15 ms, DC: 10-20 ms

Times measured at outlet A, from switching on until pressure rise to 90 % / pressure drops to 10 % at a max. working pressure of 6 bar.

Operating Data (Actuator)

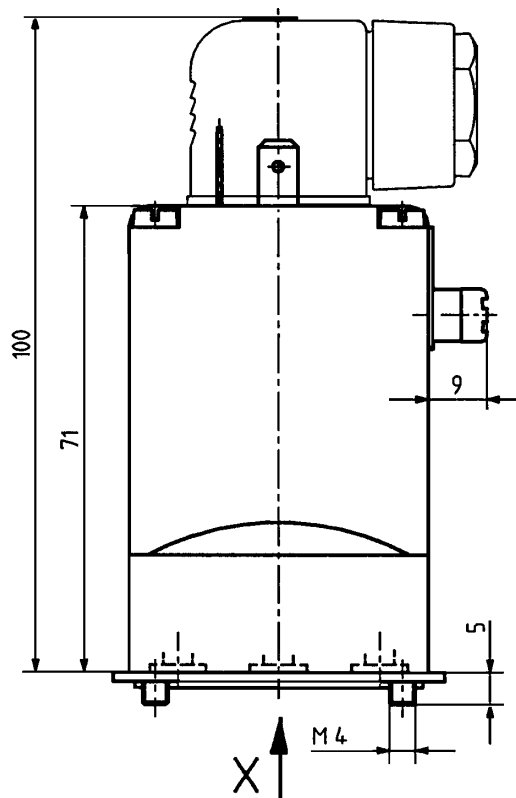
Operating voltages	24, 110, 220, 240 V/50 Hz, 24 V/= (other voltages on request)
Voltage tolerance	±10 %
Power consumption	AC 30 VA (inrush), 5 VA/8 W (hold) DC 8 W
Duty cycle	100% continuously rated. Use reduced switch-on time for manifold installation, depending on operating conditions.
Cycling rate	approx. 1000 c.p.m.
Rating with cable plug	IP 65

Installation / Accessories

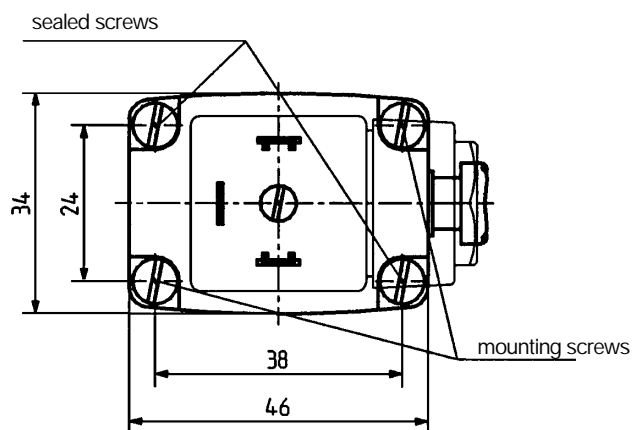
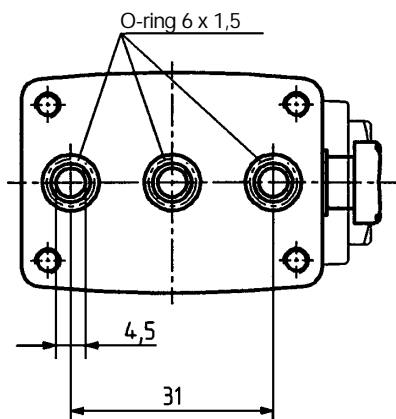
Installation	as required, but preferably with solenoid system upright
Electr. connection	cable plug for 7 mm ø (supplied as standard)

Dimensions in mm

Standard version



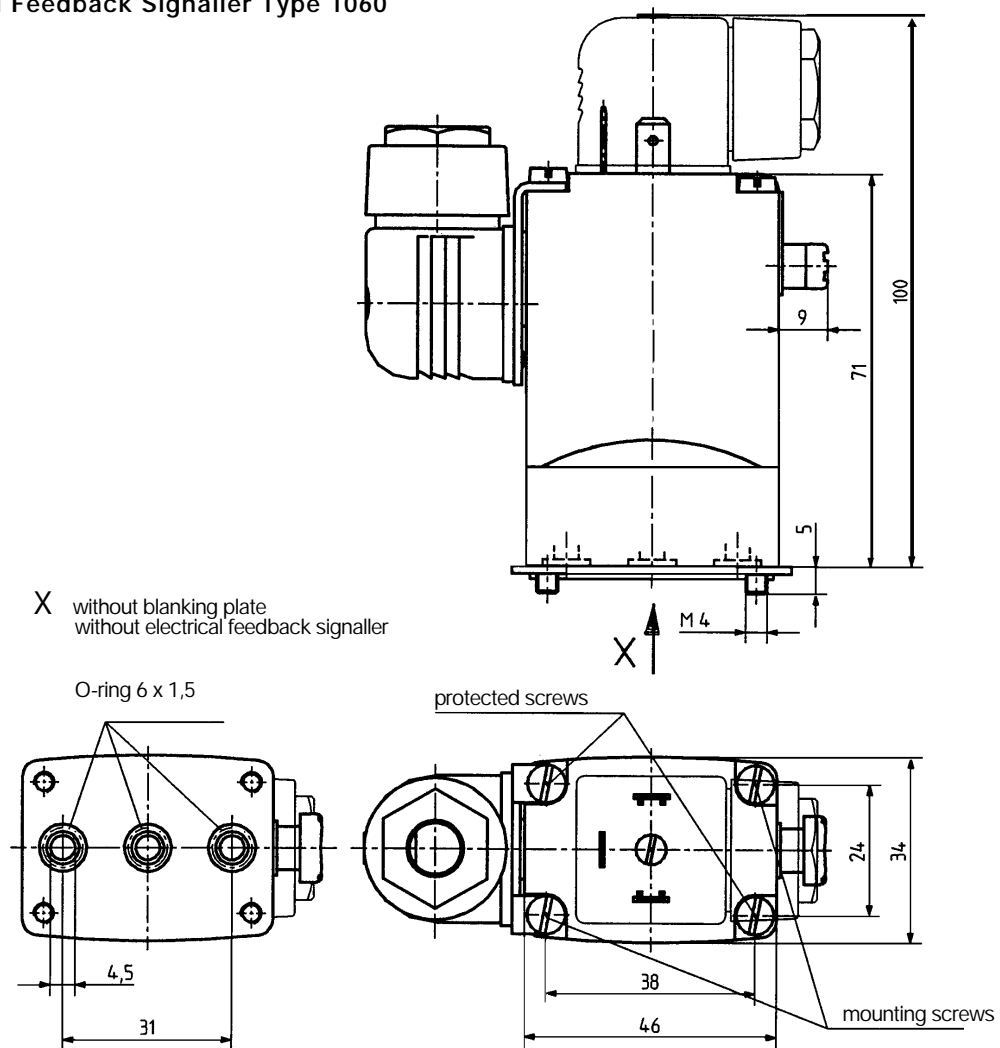
X without blanking plate



Solenoid Valve with Isolating Diaphragm

Dimensions in mm

Valve with Electrical Feedback Signaller Type 1060

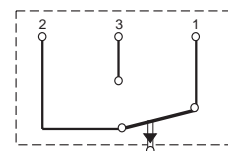


Technical Data Electrical Feedback Signaller Type 1060

Microswitch	1 changeover contact
Switching load	250 V /≈ non-inductive or induct. load max. 5A incandescent filament load 0.5A
	250 V/= non-inductive load 0.25A induct. load 0.02A incandescent filament load 0.02A

Wiring diagram

- 1 Common terminal
- 2 Normally closed terminal
- 3 Normally open terminal

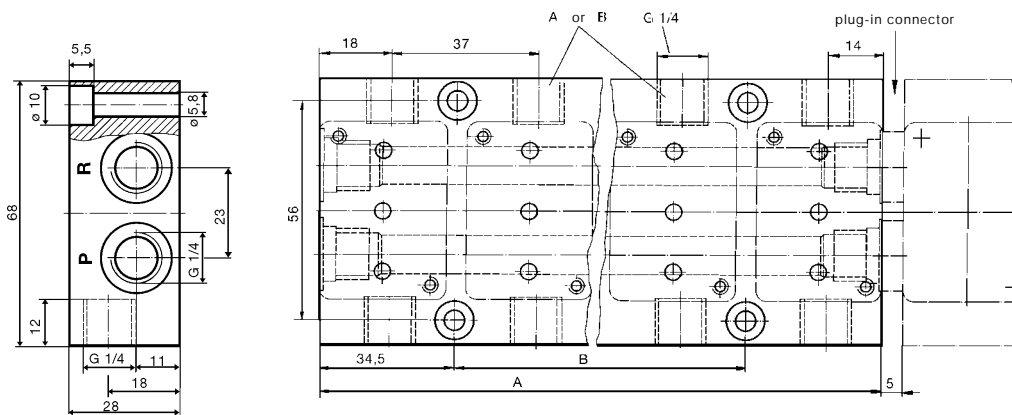


Rating IP 65

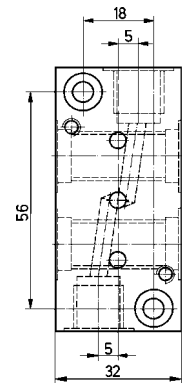
Connection solder connections, cable entry sealed by gland with cable grip to suit cable \varnothing 5-9 mm

Dimensions in mm

Multiple Manifold



Single Manifold



Manifold for	2valves	3valves	4valves	5valves	6valves	7valves	8valves
Overall length A	69	106	143	180	217	254	291
Hole spacing B	-	37	74	111	148	185	222

Ordering Code for Manifolds and Accessories

Ordering Code for multiple Light Alloy Manifolds

Manifolds	Order-No.
1valve	005 043 Z
2valves	005 045 T
3valves	005 366 H
4valves	005 294 S
5valves	005 295 T
6valves	005 296 U
7valves	005 403 Y
8valves	006 074 Z

Accessories

Specification	Order-No.
O-ring connector nipple	005 049 F
O-ring connector nipple without drill hole	006 049 G
Blanking plug with seal G 1/4	005 050 C
Lock for manual override, through	013 372 W
Blanking plate	005 625 V

Ordering Chart (Other Versions on Request)

Circuit Function	Orifice DN [mm]	Flow Rate		Port Connection	Pressure Range [bar]	Body Material	Seal Material	Weight [kg]	Voltage/ Frequency [V/Hz]	Order-No.
		Water Kv-Value [m³/h]	Air ¹⁾ QNn [l/min]							
T	2,0	0,08	86	Sub-base	0-10	Brass	FPM	0,40	024/=	124 953 R
		0,10	108	Sub-base	0-12	Brass	FPM	0,40	24/50	124 954 J
		0,10	108	Sub-base	0-12	Brass	FPM	0,40	110/50	124 955 K
		0,10	108	Sub-base	0-12	Brass	FPM	0,40	230/50	124 956 L
		0,10	108	Sub-base	0-12	Brass	FPM	0,40	240/50	124 957 M
		0,08	86	Sub-base	0-12	Stainless	FPM	0,40	24/=	124 968 Y
		0,10	108	Sub-base	0-12	Stainless	FPM	0,40	24/50	124 969 Z
		0,10	108	Sub-base	0-12	Stainless	FPM	0,40	110/50	124 970 W
		0,10	108	Sub-base	0-12	Stainless	FPM	0,40	230/50	124 971 K
		0,10	108	Sub-base	0-12	Stainless	FPM	0,40	240/50	124 972 L
		0,1	108	Sub-base	0- 8	Brass	FPM	0,40	24/=	124 958 W
		0,12	130	Sub-base	0- 8	Brass	FPM	0,40	24/50	124 959 X
		0,12	130	Sub-base	0- 8	Brass	FPM	0,40	110/50	124 960 U
0,12	130	Sub-base	0- 8	Brass	FPM	0,40	230/50	124 961 R		
0,12	130	Sub-base	0- 8	Brass	FPM	0,40	240/50	124 962 J		
0,1	108	Sub-base	0- 8	Brass	EPDM	0,40	24/=	124 963 K		
0,12	165	Sub-base	0- 8	Brass	EPDM	0,40	24/50	124 964 L		
0,12	130	Sub-base	0- 8	Brass	EPDM	0,40	110/50	124 965 M		
0,12	130	Sub-base	0- 8	Brass	EPDM	0,40	230/50	124 966 N		
0,12	130	Sub-base	0- 8	Brass	EPDM	0,40	240/50	124 967 P		
0,1	108	Sub-base	0- 8	Stainless	FPM	0,40	24/=	124 973 M		
0,12	130	Sub-base	0- 8	Stainless	FPM	0,40	24/50	124 974 N		
0,12	130	Sub-base	0- 8	Stainless	FPM	0,40	110/50	124 975 P		
0,12	130	Sub-base	0- 8	Stainless	FPM	0,40	230/50	124 976 Q		
0,12	130	Sub-base	0- 8	Stainless	FPM	0,40	240/50	124 977 R		

Vacuum Version

T	2,0	0,17	185	Sub-base	0- 3	Brass	NBR	0,40	24/=	124 978 S
		0,22	240	Sub-base	0- 3	Brass	NBR	0,40	24/50	124 979 T
		0,22	240	Sub-base	0- 3	Brass	NBR	0,40	110/50	124 980 R
		0,22	240	Sub-base	0- 3	Brass	NBR	0,40	230/50	124 981 E
		0,22	240	Sub-base	0- 3	Brass	NBR	0,40	240/50	124 982 F

Version with Electrical Feedback Signaller

T	2,0	0,08	86	Sub-base	0-12	Brass	FPM	0,40	24/=	124 983 G
		0,10	108	Sub-base	0-12	Brass	FPM	0,40	24/50	124 984 H
		0,10	108	Sub-base	0-12	Brass	FPM	0,40	110/50	124 985 A
		0,10	108	Sub-base	0-12	Brass	FPM	0,40	230/50	124 986 B
		0,10	108	Sub-base	0-12	Brass	FPM	0,40	240/50	124 987 C
		0,08	86	Sub-base	0-12	Brass	EPDM	0,40	24/=	124 988 M
		0,10	108	Sub-base	0-12	Brass	EPDM	0,40	24/50	124 989 N
		0,10	108	Sub-base	0-12	Brass	EPDM	0,40	110/50	124 990 K
		0,10	108	Sub-base	0-12	Brass	EPDM	0,40	230/50	124 991 G
		0,10	108	Sub-base	0-12	Brass	EPDM	0,40	240/50	124 992 H