



2/2- or 3/2-way Solenoid Valve, direct-acting with separating diaphragm; 0 to 10 bar DN 3 and 4 mm

- With lockable manual override
- For liquid, gaseous and aggressive media
- For contaminated mediums
- Long service life, even in non-lube conditions
- AC/DC current

Type 0780 can be combined with...

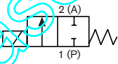
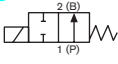
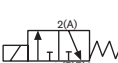
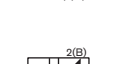




Type 5282Ex

The Type 780 is a direct-acting 2/2 or 3/2-way pivoted armature solenoid valve with EX-Approvals. It has a long lifespan, also for non-lubricated conditions. The magnetic system and the media chamber are separated from one another by a separating diaphragm system.

Type 780 is supplied with different circuit functions, is very versatile and can be used for opening, locking, feeding, aerating, mixing and distribution. It is suitable for neutral abrasive and slightly contaminated mediums with stainless steel housing for aggressive media.

Circuit function

- A** 2/2-way valve, normally closed by spring force 
- B** 2/2-way valve, direct acting, normally open 
- C** 3/2-way valve normally closed, outlet A relieved 
- D** 3/2-way valve, direct acting outlet B normally pressurized 
- E** mixer valve, direct acting, currentless P2 acc. to A open, P1 closed 
- F** distribution valve, direct acting, currentless P acc. to B open, output A closed 

Technical data	
Body material	Brass Stainless steel 1.4401
Seal material	NBR, FKM (EPDM und FFKM on request)
Medium for NBR	Neutral mediums like compressed air, town gas, water, hydraulic oil, oils and fats without additives
for FKM all materials	hot air, oxygen, hot oils with additives, per-solution technical vacuum
Viscosity	max. 37 mm ² /s
Medium temperature for NBR	0 to +80 °C
for FKM	0 to +90 °C
Ambient temperature	max. +55 °C
Operating voltages	24/230 V UC
Other Voltages	on request
Voltage tolerance	±10%
Cycle rate 1 for medium temperature and for ambient temperature	max 20/min Up to +70 °C Up to +40 °C
Cycle rate 2 for medium temperature and for ambient temperature	max 5/min Up to +90 °C Up to +40 °C
Duty cycle	100 % ED (continuous operation)
Electr. Connection	Moulded-in cable 3 meter long, 3 x 0.75mm ² Terminal box without safety fuse
Protection	Fuse according to starting current
Protection class	IP 65
Type of protection	Ex d e IIC T4 bzw. T5 Ex d e IIC T4 bzw. T5 Ex tD A21 IP65 T135°C bzw. T100°C
Port connection	G 1/4
Installation	As required, preferably with actuator upright

Technical data (continued)

Orifice [mm]	Circuit function	Kv-value water ¹⁾ [m ³ /h]	Pressure range ²⁾ [bar]	Power consumption		Response times ³⁾		Weight [kg]
				Inrush UC [W]	Hold UC [W]	Opening [ms]	Closed [ms]	
3	A, B, C, D, F	0.23	0-10	40	3	30	40	0.7
	E		0-6					
4	A, B, C, D, F	0.29	0-5	40	3	30	40	0.7
	E		0-3					

¹⁾ **Flow rate: Kv value water [m³/h]**

Measured at +20°C, 1 bar pressure at valve inlet and free outlet

²⁾ **Pressure values [bar]**

Overpressure with respect to atmospheric pressure

³⁾ **Response time [ms]**

Measured at valve outlet at 6 bar and +20 °C

Opening: Pressure rise 0 to 90%,

Closing: Pressure drop 100 to 10%

Ordering chart (other versions on request)

All valves with manual override, ignition protection EEx ed IIC T5, body material brass or stainless steel

Circuit function	Orifice	Port connection	Kv value water [m ³ /h]	Pressure range [bar]	Seal material	Body material ¹⁾	Electrical connection ²⁾	Voltage/Frequency	Item no.		
A	03.0	G 1/4	0.23	0 - 10	NBR	Brass	cable	24/UC	137 076		
							Ter. box	24/UC	137 077		
						FKM	St. st.	cable	230/UC	137 078	
								Ter. box	230/UC	137 079	
					FKM	St. st.	cable	24/UC	137 080		
							Ter. box	24/UC	137 081		
							cable	230/UC	137 082		
C	03.0	G 1/4	0.23	0 - 10	NBR	Brass	cable	24/UC	077 495		
							Ter. box	24/UC	124 619		
						FKM	St. st.	cable	230/UC	088 175	
								Ter. box	230/UC	125 567	
					FKM	St. st.	cable	24/UC	137 073		
							Ter. box	24/UC	135 080		
							cable	230/UC	137 074		
E	03.0	G 1/4	0.23	0 - 6	NBR	Brass	cable	24/UC	136 971		
							Ter. box	24/UC	136 576		
						FKM	Brass	Ter. box	230/UC	135 623	
								FKM	St. st.	cable	24/UC
					Ter. box	24/UC	137 085				
					cable	230/UC	137 086				
					FKM	St. st.	Ter. box	230/UC	135 624		
F	03.0	G 1/4	0.23	0 - 10			FKM	St. st.	cable	24/UC	137 087
									cable	230/UC	137 088
					Ter. box	230/UC			137 089		
F	04.0	G 1/4	0.29	0 - 5	FKM	St. st.	Ter. box	24/UC	133 712		

¹⁾ For circuit function A and B, valve body has straight through flow

²⁾ Cable = moulded-in cable 3meter long, 3 x 0.75mm²

Ter. box = terminal box without safety fuse

Other circuit functions

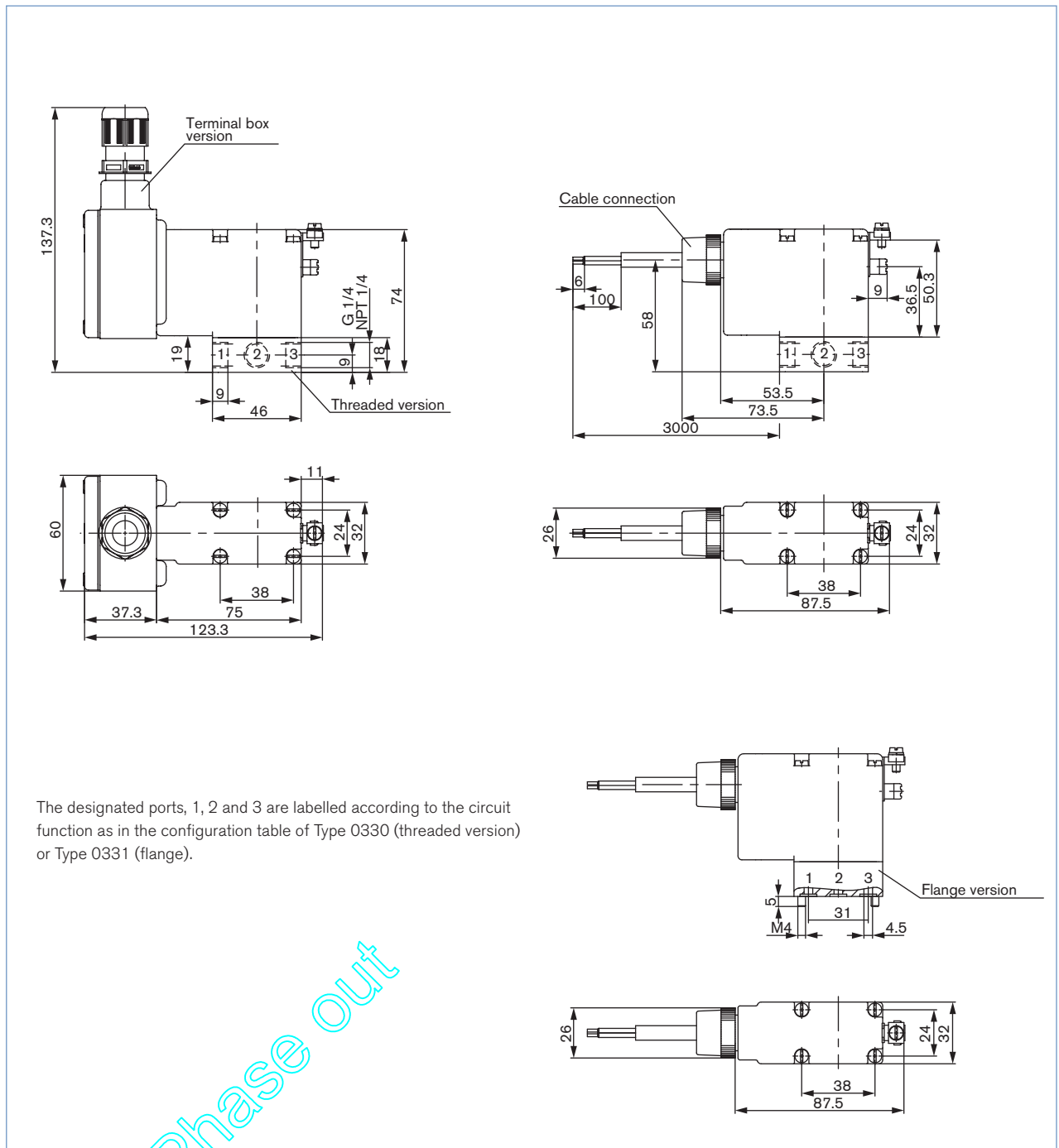
The valves are fitted with different springs. When used in other circuit functions, the permissible operating pressure changes according to the following table.

Circuit function	Max. operating pressure [bar] when using the valve in a new circuit function											
	Orifice 3						Orifice 4					
	A	B	C	D	E	F	A	B	C	D	E	F
WW												
C	10	1	10	1	1	10	5	0.8	5	0.8	0.8	5
E	6	6	6	6	6	6	3	3	3	3	3	3
F	6	1	6	1	1	10	4	1	4	1	1	5

Ordering chart for safety device

Voltage [V]	Max. current [A]	Item no.
24	2	153 740
230	0.5	153 733
110 bzw 120	0.8	153 735

Dimensions [mm]



Phase out

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In case of special application conditions, please consult for advice.

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