avrora-arm.ru
+7 (495) 956-62-18

bürkert
FLUID CONTROL SYSTEMS

Type 0780 can be combined with...

Type 5282Ex

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

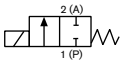
- With lockable manual override
- For liquid, gaseous and aggressive media
- For contaminated mediums
- Long service life, even in non-lube conditions
- AC/DC current

The Type 780 is a direct-acting 2/2 or 3/2-way pivoted armature solenoid valve with EX-ApprovalsIt 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.

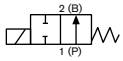
Type 780 is supplied with diferent circuit functions, is very versatile and can be used for opening, locking, feeding, aerating, mixing and distribution.It is suitable for neutral abrasive and slightly contaminated mediumswith stainless steel housing for aggressive media.

Circuit function

A 2/2-way valve, normally closed by spring force

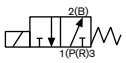


B 2/2-way valve, direct acting, normally open

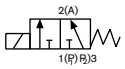


C 3/2-way valve normally closed, outlet A relieved

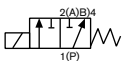
D 3/2-way valve, direct acting outlet B normally pressurized



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 for FKM all materials	 Neutral mediums like compressed air, town gas, water, hydraulic oil, oils and fats without additives hot air, oxygen, hot oils with additives, per-solution technical vacuum
Viscosity	max. 37 mm2/s
Medium temperature for NBR for FKM	 0 to +80 °C 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 cabel 3 meter long, 3 x 0.75mm² 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

DTS 1000010947 EN Version: E Status: RL (released | freigegeben | validé) printed: 20.01.2015

Technical data (continued)

Orifice [mm]	Circuit function	Kv-value water [1] [m³/h]	Pressure range [2] [bar]	Power consumption Inrush UC [W]	Power consumption Hold UC [W]	Response times[3] Opening [ms]	Response times[3] Closed [ms]	Weight [kg]
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%

DTS 1000010947 EN Version: E Status: RL (released | freigegeben | validé) printed: 20.01.2015

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 [m3/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
							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
							Ter. box	230/UC	137 083
C	03.0	G 1/4	0.23	0 - 10	NBR	Brass	cable	24/UC	077 495
							Ter. box	24/UC	124 495
							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
							Ter. box	230/UC	137 075
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
						St. st.	cable	24/UC	137 084
							Ter. box	24/UC	137 085
							cable	230/UC	137 086
							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					
WW	A	B	C	D	E	F	A	B	C	D	E	F
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

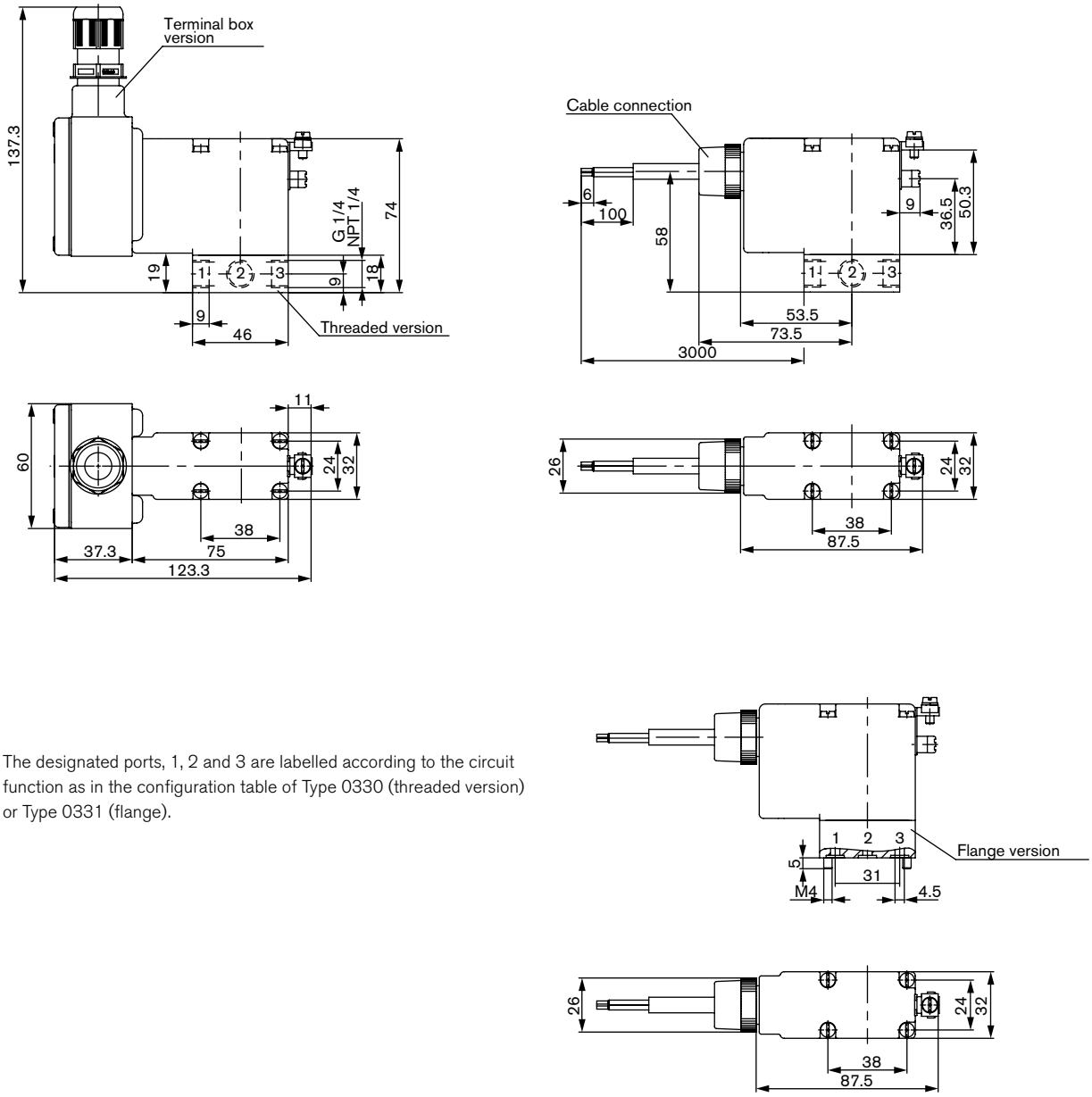
Ordering chart for safety device

Voltage [V]	Max. current [A]	Item no.
24	2	153 740
230	0.315	153 733
110 bzw 120	0.5	153 735

DTS 1000010947 EN Version: E Status: RL (released | freigegeben | validé) printed: 20.01.2015

avrora-arm.ru
+7 (495) 956-62-18

Dimensions [mm]



The designated ports, 1, 2 and 3 are labelled according to the circuit function as in the configuration table of Type 0330 (threaded version) or Type 0331 (flange).

In case of special application conditions, please consult for advice.
Subject to alteration.
© Christian Bürkert GmbH & Co. KG