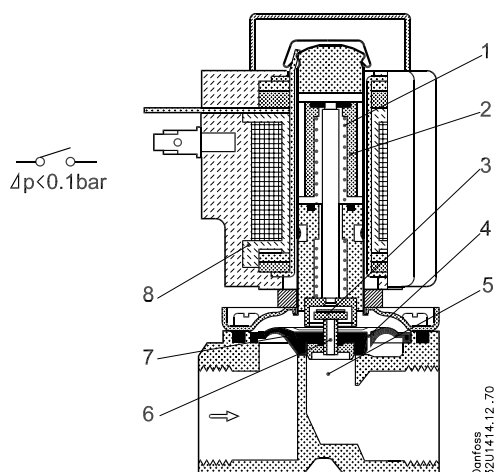


Function NO

1. Opening spring
2. Armature
3. Valve plate
4. Equalising orifice
5. Main orifice
6. Pilot orifice
7. Diaphragm
8. Coil



Coil voltage disconnected (open):

When the voltage to the coil (8) is disconnected, the pilot orifice (6) is open. As the pilot orifice is larger than the equalising orifice (4), the pressure across the diaphragm (7) drops and therefore it is lifted clear of the main orifice (5). The valve will be open for as long as the minimum differential pressure across the valve is maintained, and for as long as the voltage to the coil is disconnected.

Coil voltage connected (closed):

When voltage is applied to the coil, the valve plate (3) is pressed down against the pilot orifice (6). The pressure across the diaphragm (7) is built up via the equalising orifice (4). The diaphragm closes the main orifice (5) as soon as the pressure across the diaphragm is equivalent to the inlet pressure. The valve will be closed for as long as there is voltage to the coil.

Technical data NO

Type	EV220B 6B	EV220B 10B	EV220B 12B	EV220B 18B	EV220B 22B
Installation	Vertical solenoid system is recommended.				
Pressure range	0.1 to 10 bar				
Max.test pressure	50 bar	50 bar	16 bar	16 bar	16 bar
Time to open ¹⁾	40 ms	50ms	60ms	200ms	200ms
Time to close ¹⁾	250ms	300 ms	300 ms	500 ms	500 ms
Ambient temperature	40 to 80°C (depending on coil type, see data for the coil selected)				
Medium temperature	EPDM: -30 to +100°C. FKM: 0 to +100°C.				
Viscosity	max. 50 cSt				
Materials	Valve body: Brass.....,W.no. 2.0402 Armature: Stainless Steel,W.no. 1.4105/AISI 430FR Armature tube:Stainless Steel,W.no. 1.4306/AISI 304L Armature stop:Stainless Steel,W.no. 1.4105/AISI 430FR Springs: Stainless Steel,W.no. 1.4310/AISI 301 O-rings: EPDM or FKM Valve plate: EPDM or FKM Diaphragm: EPDM or FKM				

1) The times are indicative and apply to water. The exact times will depend on the pressure conditions.

Ordering NO

valve body

Conne- ction ISO 228/1	Seal material	k _v - value [m³/h]	Media temp.		Type designation		Permissible differential pressure (bar)/Coil type						Code no. without coil	
			Min. [°C]	Max. [°C]	Main type	Specifcation	Min.	Max.						
								BA		BB		BE		
								9 W ac	15 W dc	10 W ac	18 W dc	10 W ac		18 W dc
G 3/8	EPDM ¹⁾	0.7	-30	+100	EV220B 6B	G 38E NO000	0.1	10	10	10	10	10	10	032U1238
G 3/8	FKM ²⁾	0.7	0	+100	EV220B 6B	G 38F NO000	0.1	10	10	10	10	10	10	032U1239
G 1/2	FKM ²⁾	1.0	0	+100	EV220B 10B	G 12F NO000	0.1	10	10	10	10	10	10	032U1249

1)EPDM is suitable for water only.

2)FKM is suitable for oil and air. May also be used for water and neutral aqueous solutions if the water temperature does not exceed 60 °C.