BENCOR (Pty) Ltd.

Seated valves



2/2-way screw-in seated valves type EM

These 2/2-way ball seated directional valves are either directly or pilot actuated by a solenoid. With the directly actuated version the valve passage is opened or closed by a cone whereas with the piloted a piloting duct of a stepped piston is opened or closed generating a pressure difference at the opposing facial areas of the piston forcing it in the open or closed position.

The wet armature solenoid for the valve actuation is pressure resistant, where all moving internal parts are flushed by oil.

There is a wide range of connection blocks either for pipe connection or for banjo bolt mounting, which may feature optional elements such as

drain valve, by-pass throttle, pressure switch, 2-way flow control valve etc.



Basic types and general parameters

Operation mode		Basic type / size and flow pattern			Oper. pressure	Flow	Tapped ports
		Flow in arrow	ed direction	arbitrary flow direction	p _{max} (bar) ¹)	Q _{max} (I/min)	A and B 2)
Energized open	directly actuated	EM11 D EM11 D 0,8	A D B		450 100	1 2,5	G 1/4 G 1/4
	pilot	EM11 V EM21 V	A A B	EM12 V A	450 400	20 40	G 1/4, G 3/8 G 3/8, G 1/2
	actuated 3)	EM31 V EM4 V	-	EM32 V	350 315	60 120	G 1/2, G 3/4 G 3/4, G 1
Energized closed	directly actuated	EM11 DS EM11 DS 0,8	H D B		450 100	1 2,5	G 1/4 G 1/4
	pilot actuated ³)	EM11 S EM21 S EM31 S EM4 S	A B	EM12 S	450 400 350 315	20 40 60 120	G 1/4, G 3/8 G 3/8, G 1/2 G 1/2, G 3/4 G 3/4, G 1

¹⁾ Pressure above 300 bar only with manifolds made of steel, pay attention to the possibly reduced rigidity of the thread with other materials (e.g. iron, light alloy) 2) when combined with connection blocks for pipe connection

 $^{^{3}}$) free flow A \rightarrow B in idle position