

Slide valve Types 3101-3104 (normally closed) and 3106-3109 (normally open)



- Pilot-operated, three port, two position slide valve with a spring-return action
- Can be used locally as quick dump valves
- Suitable for subsea applications
- Special high pressure seals prevent leakage
- NACE Standard MR-01-75 compliance

Slide valves Type 3101/2 (normally closed) and 3106/7 (normally open) are manifold mounted with integral pilot connection; the 3103/4 (normally closed) and 3108/9 (normally open) are manifold mounted with remote pilot connection. All types are pilot-operated, three port, two position valves with a spring-return action. The pilot operator of each valve is capable of withstanding high pressures equal to the main line pressure. This enables the valves to be used locally to actuators, as quick dump valves. The valves are sealed to withstand external body pressure making them suitable for subsea applications.

A major feature of the valve design is elimination of the continuous internal leakage which is characteristic of conventional lapped-face spool valves. The valves each incorporate special high pressure seals which prevent leakage and so render the valves suitable for use with many fluid media.

The valve slide (which can be supplied either normally closed or normally open) has a 'block before bleed' action. In a normally closed valve, for example, this means that the tank port is isolated before pressure and service ports are interconnected.

Materials

Predominantly 316 stainless steel and CA104 aluminium bronze with seals of fluoroelastomers and PTFE materials, ensure high corrosion resistance and comply with NACE Standard MR-01-75 (latest revision as applicable).

Operating parameters

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|-----------------------------------|--|
| Working pressure | 690 bar (10,000 psi) max. |
| Pilot pressure – Types 3101/3/6/8 | 103 to 690 bar (1,500 to 10,000 psi) |
| Pilot pressure – Types 3102/4/7/8 | 69 to 207 bar (1,000 to 3,000 psi) |
| Operating media | Mineral oils, water, water-glycol based hydraulic fluid. Other media available on request. |
| Recommended filtration | 25 micron |
| Connections | 1/4"NPT F all ports |
| Flow rate, nominal | 27 litres/min (6 imp galls/min) |
| Working temperature – standard | -20°C to + 130°C |
| Working temperature – arctic | Available on request |
| Weight | 3Kg |

Port assignments

| Port | Valves 3101/2/3/4 | Valves 3106/7/8/9 |
|-----------|-------------------------|-------------------------|
| Port 1(A) | 3101/2 – integral pilot | 3106/7 – integral pilot |
| Port 1(B) | 3103/4 – remote pilot | 3108/9 – remote pilot |
| Port 3 | Service | Service |
| Port 4 | Supply | Tank |
| Port 5 | Tank | Supply |