



Slide valves

Types 4100/4105

Slide valves Type 4100 (normally closed) and 4105 (normally open) 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 as actuators, as quick dump valves. The valves are sealed to withstand external body pressure making them suitable for subsea applications. Manifold mounted versions are also available.

A major feature of the valve design is elimination of the continuous leakage which is characteristic of conventional lapped-face spool valves. The valve incorporates special high pressure seals which prevent leakage.

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.

The valve body has a fourth connection (port 2) for a pressure gauge. If this port is not used, it must be sealed with a 3/8" NPT plug (not supplied with the valve).

Construction 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).

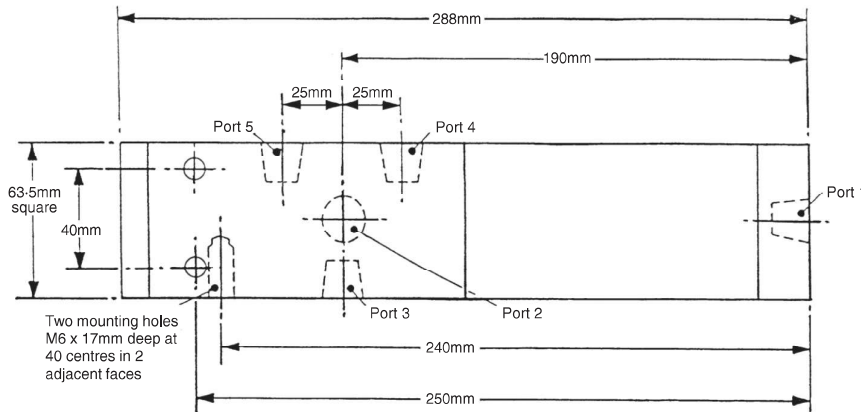
Operating parameters

Working pressure	517 bar (7,500 psi) max.
Pilot pressure	76.0 to 517 bar (1,100 to 7,500 psi).
Operating media – main slide	Mineral oils, water, water-glycol mixtures.
Operating media – pilot section	Mineral oils, water, water-glycol mixtures.
Recommended filtration	25 micron.
Connections	3/8" NPTE.
Connections – pilot	1/4" NPTE.
Flow rate, nominal	54 litres/min (12 imp galls/min).
Working temperature	-20°C to + 130°C.

These slide valves conform to Directive 94/9/EC relating to equipment intended for use in potentially explosive atmospheres and is ATEX (ATmosphere EXplosible) certified.



Marshalsea Hydraulics has been assessed by SGS Société Générale de Surveillance SA and certified as meeting the requirements of ISO 9001:2000 for the design, development, manufacture and servicing of hydraulic pumps, relief valves and intensifiers.



Drawing giving dimensions

Weight: 7.0kg

Port	Valve 4100	Valve 4105
Port 1	Pilot	Pilot
Port 2	Gauge	Gauge
Port 3	Service	Service
Port 4	Supply	Tank
Port 5	Tank	Supply

Port assignments



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