

5/2 and 5/3 Piston valves

Sub-base mounted, pilot operated

Port size: $\frac{1}{2}$ " B.S.P.

Operating pressure: 2–10 bar.
(Unless otherwise stated)

Cv. factor: 3.6

Operating temperature: $-20\text{ }^{\circ}\text{C}^*$ to $+80\text{ }^{\circ}\text{C}$
(for types -/123, -/152 and -/6123 $+5\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$)
***Important:** Refer to leaflet F1

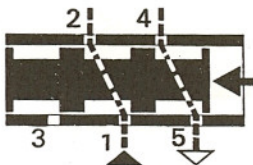
These ranges of valves have been specially designed with long operating life and easy servicing in mind. They are ideally suited for the direct operation of larger cylinders.

The ranges are built up around a common body onto which can be attached the various operating mechanisms and sub-bases available, see details opposite. The body is fitted with a bush within which the piston and its 'O' rings are moved by air pressure on each end of the piston. On the M/1704 and M/1764 types the piston is fitted with six 'O' rings and when in the mid-position available with some operating mechanisms all the ports are isolated and sealed.

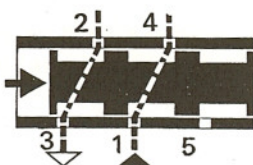
The M/1714 and M/1774 types have a piston fitted with only four 'O' rings so that when in the mid-position only the inlet port is sealed, the two cylinder ports being connected to exhaust. All the sub-bases available have five port connections but the valves can be used as 3/2 and 3/3 valves by plugging the unused cylinder port, leaving its associated exhaust port unplugged. All the valves on this page are pilot actuated, either electrically or by using small pilot valves such as the S/666 and S/667 ranges.

The M/1764 and M/1774 models feature a new 22 mm pilot solenoid. This solenoid features a snap-lock retainer for simple solenoid coil removal.

When mounting, the main piston must be kept in a horizontal plane, in the case of all types except the versions having a spring mechanism, -/40, -/63 and -/6123.



When the piston is in this position, the supply air is taken to the inlet port '1' and connected to the cylinder port '2'. The exhausting air passes from cylinder port '4' to exhaust port '5'.



When the valve is operated, the piston moves to the other end of the valve, the supply air is connected to port '4', and the exhausting air passes from port '2' to port '3'.

M/1704, M/1714, M/1764, M/1774



Type	Description
M/1704/2	Pressure actuated, air return.
M/1704/3	Pressure set-reset.
M/1704/33	Pressure priority set, pressure reset.
M/1704/40	Pressure actuated, spring return.
M/1704/63	Spring centralised pressure actuated.
M/1714/63	Spring centralised pressure actuated.
M/1764/123	Solenoid pilot set-reset.
M/1764/152	Solenoid pilot actuated, air return.
M/1764/6123	Spring centralised solenoid pilot actuated.
M/1774/6123	Spring centralised solenoid pilot actuated.

(For lever operated versions see page 3.2.275-11)

Sub-bases

The following sub-bases are available for these ranges of valves.

M/1704 This sub-base has the ports located on the sides.

BM/1704 This sub-base has the ports located on the bottom.

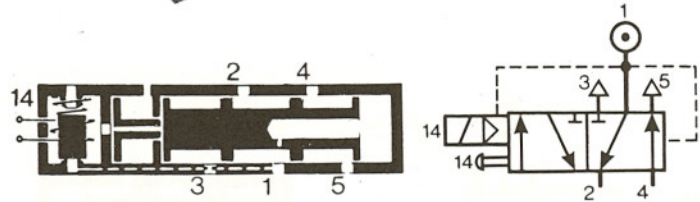
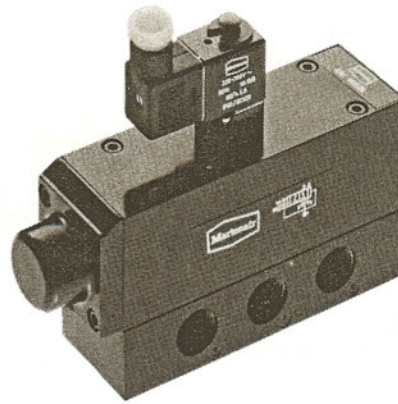
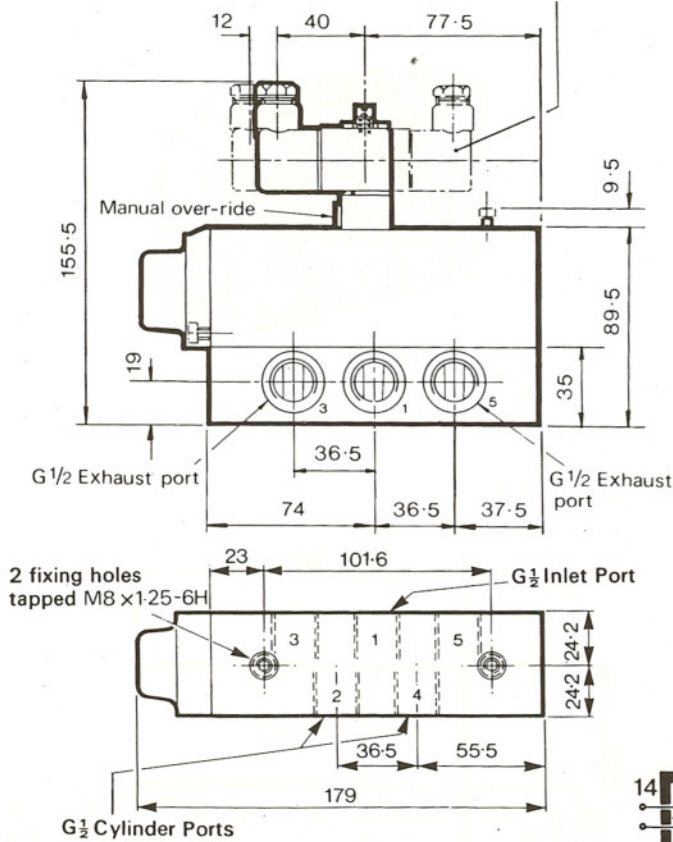
CM/1704 This sub-base has the outlet exhaust and signal ports on the bottom. The inlet port is larger and is situated on the side and drilled through as the sub-base is specifically intended for manifold mounting.

Further details of these sub-bases are shown on page 3.2.275-6.

Accessories

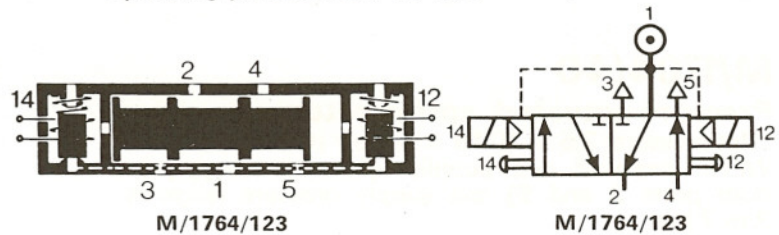
Details of the accessories available which can be supplied for these valves can be found over-leaf.

Solenoid assembly may be rotated through 360° at 90° intervals.



M/1764/152

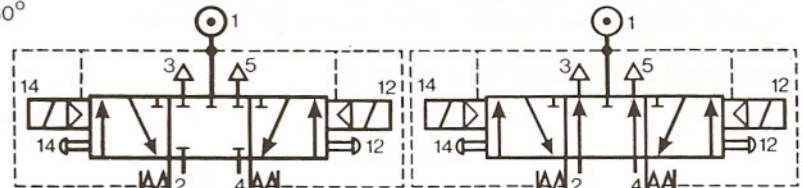
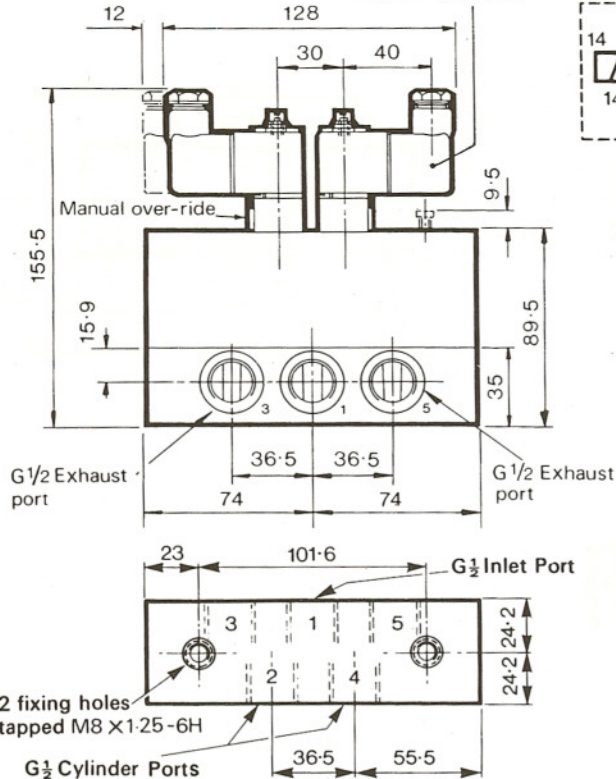
Solenoid pilot actuated, air return
Operating pressure: 2-7-10 bar.



M/1764/123

M/1764/123

Solenoid assembly may be rotated through 180° at 90° intervals.



M/1764/6123

M/1774/6123

M/1764/123

Solenoid pilot set-reset
Operating pressure: 2-10 bar.

M/1764/6123

Spring centralised solenoid pilot actuated
Fully sealed in mid-position.
Supply pressure: 2-7-10 bar.

M/1774/6123

Spring centralised solenoid pilot actuated
Supply sealed mid-position.
Supply pressure: 2-7-10 bar.

Manual over-ride

A manual over-ride is fitted as standard to each solenoid unit to enable the valve to be operated in the event of a power failure. To operate the manual over-ride, insert a screwdriver into the slot. Twist anti-clockwise to operate.