OBSOLETE DOCUMENT
Technical Reference Only

5/2 and 5/3 Spool Valves Pressure Actuated G¼

- **Rugged, well proven range of valves**
- **Side ported, bottom ported and manifold sub-bases available**
- **Simple to service**
- **Ideal for very many applications**

Technical Data

Medium:
Compressed air, filtered, lubricated and non-lubricated

Operation:
Spool valve, directly actuated

Mounting:
Through holes in sub-base, threaded

Port Size:
G¼

Operating Pressure:
2 - 10 bar

Flow (to CETOP RP50P):
'C' - Conductance dm³/s/bar 5,63
'b' - Critical pressure ratio 0,23
Cv 1,31

Operating Temperature:
–20°C* to +80°C
*Consult our Technical Service for use below +2°C

Materials

Pressure diecast zinc alloy body and sub-base, aluminium spool, plastic sleeve, steel and plastic centring mechanism, nitrile rubber seals

Ordering Information

To order, quote model number from table overleaf, e.g. M/1702/3 for a Pressure Set-reset model.
For manifold models, add number of valves required in manifold after 'T' suffix, e.g. CM/1702/3/T4 for four of the above models ready to be bolted together by means of tie rods supplied.
Spare valve bodies can also be supplied to assist servicing and reduce downtime by adding prefix 'Q' to the basic, side ported, valve number and '/07' suffix, e.g. QM/1702/3/07.

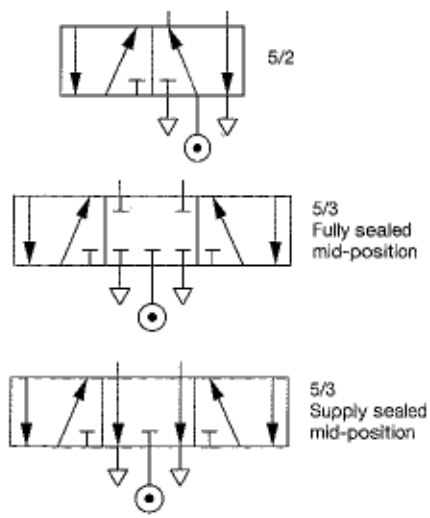
Alternative Models

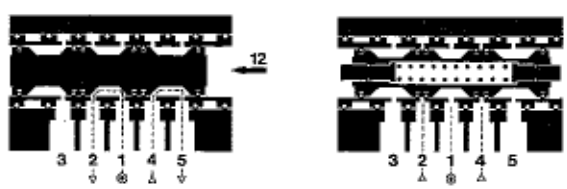
Other operator types for the M/1702 and M/1712 range are also available:

Section 5.4. - Solenoid actuated models (M/1762, M/1772, M/1742, M/1752)

Section 5.5. - Pressure actuated models (M/1787)

Section 5.7. - Manually operated models (M/1702, M/1712)



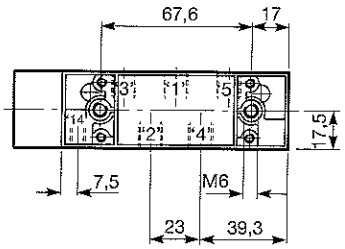


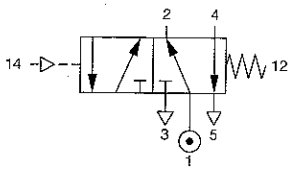
General Information

Model	Sub-base	Operator	Mid-position	Return	Weight (kg)	Spares kit
M/1702/40	Side ported	Pressure	–	Spring	1,00	QM/1702/00
M/1702/2	Side ported	Pressure	–	Air	0,95	QM/1702/00
M/1702/3	Side ported	Pressure	–	Pressure	0,84	QM/1702/00
M/1702/33	Side ported	Pressure Priority	–	Pressure	0,99	QM/1702/00
M/1702/63	Side ported	Pressure	Spring	Pressure	0,85	QM/1702/00
M/1712/63	Side ported	Pressure	Spring	Pressure	0,85	QM/1702/00
BM/1702/40	Bottom ported	Pressure	–	Spring	1,13	QM/1702/00
BM/1702/2	Bottom ported	Pressure	–	Air	1,08	QM/1702/00
BM/1702/3	Bottom ported	Pressure	–	Pressure	0,96	QM/1702/00
BM/1702/33	Bottom ported	Pressure Priority	–	Pressure	1,11	QM/1702/00
BM/1702/63	Bottom ported	Pressure	Spring	Pressure	0,98	QM/1702/00
BM/1712/63	Bottom ported	Pressure	Spring	Pressure	0,98	QM/1702/00
CM/1702/40/T	Manifold	Pressure	–	Spring	1,43*	QM/1702/00
CM/1702/2/T	Manifold	Pressure	–	Air	1,38*	QM/1702/00
CM/1702/3/T	Manifold	Pressure	–	Pressure	1,27*	QM/1702/00
CM/1702/33/T	Manifold	Pressure Priority	–	Pressure	1,42*	QM/1702/00
CM/1702/63/T	Manifold	Pressure	Spring	Pressure	1,28*	QM/1702/00
CM/1712/63/T	Manifold	Pressure	Spring	Pressure	1,28*	QM/1702/00

*Excludes end plate, tie rods and nuts.

Pressure Actuated, Spring Return





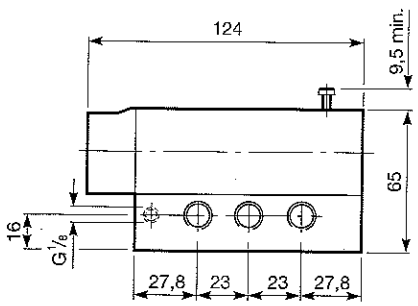
Model Number: **M/1702/40**

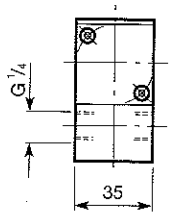
Type: 5/2

Pilot Pressure: 2,5 + (0,05 x supply pressure) bar

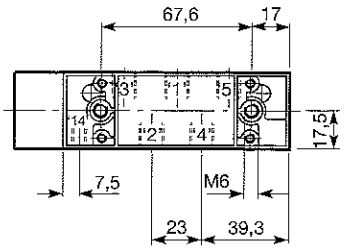
When used with dual supplies (i.e. mains supply to both ports '3' and '5') the supply pressure range is 3 - 7 bar.

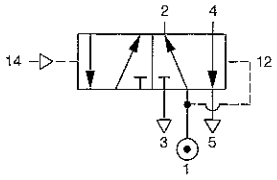
This valve is not intended to be held in the operated condition for more than 24 hours. Where the operation involves delay in excess of 24 hours, please consult our Technical Service.





Pressure Actuated, Air Return

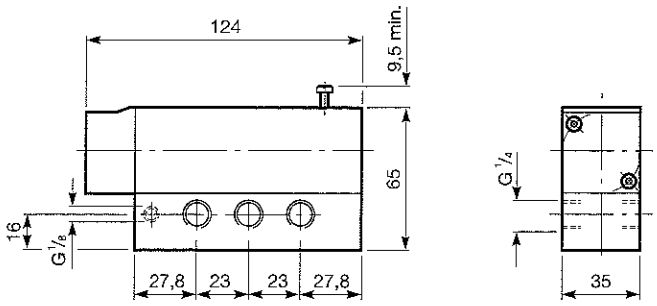




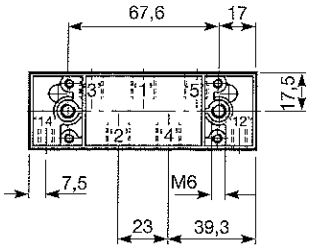
Model Number: **M/1702/2**

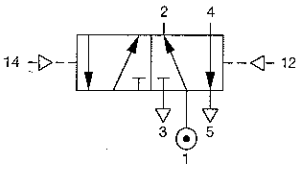
Type: 5/2

Pilot Pressure: 0,7 + (0,75 x supply pressure) bar



Pressure Set-reset



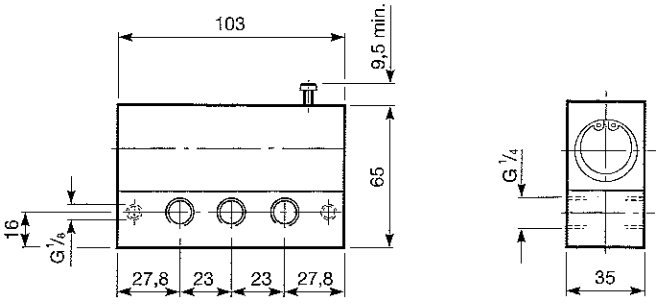


Model Number: **M/1702/3**

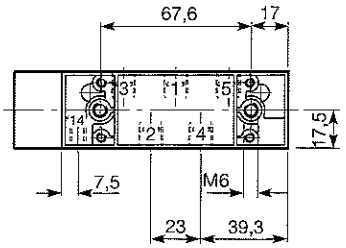
Type: 5/2

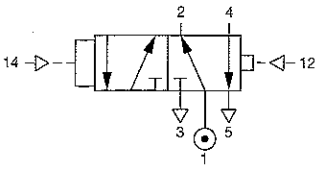
Pilot Pressure: 1,2 + (0,20 x supply pressure) bar

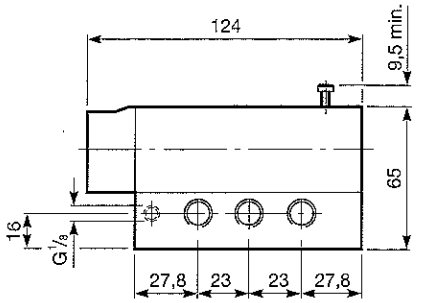
Valve should be mounted with the axis of the spool horizontal

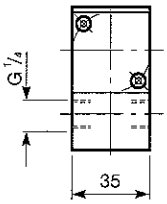


Pressure Priority Set, Pressure Reset









Model Number: **M/1702/33**

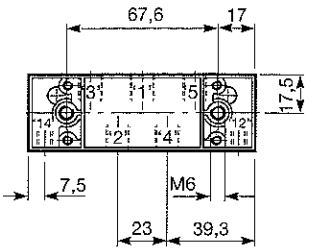
Type: 5/2

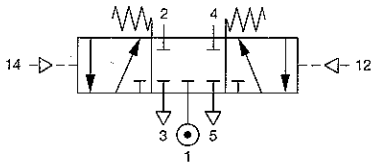
Pilot Pressure: Large end '14' 0,8 + (0,08 x supply pressure) bar, '12' at zero
Small end '12' 1,2 + (0,2 x supply pressure) bar, '14' at zero

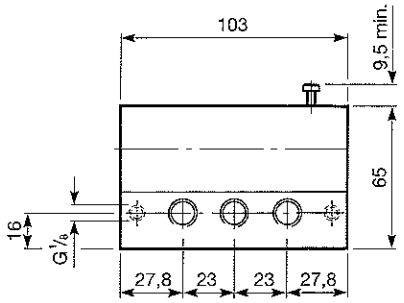
If air is permanently applied to '12' the pilot pressure to '14' is 0,7 + (0,75 x supply pressure) bar when '12' = supply

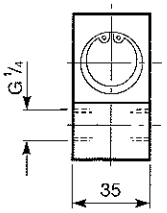
Valve should be mounted with the axis of the spool horizontal

Spring Centralised, Pressure Actuated





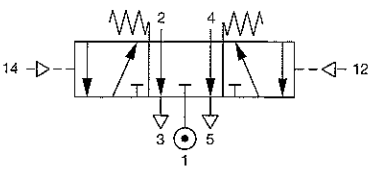




Model Number: **M/1702/63**

Type: 5/3 Fully sealed mid-position

Pilot Pressure: 2,2 + (0,25 x supply pressure) bar

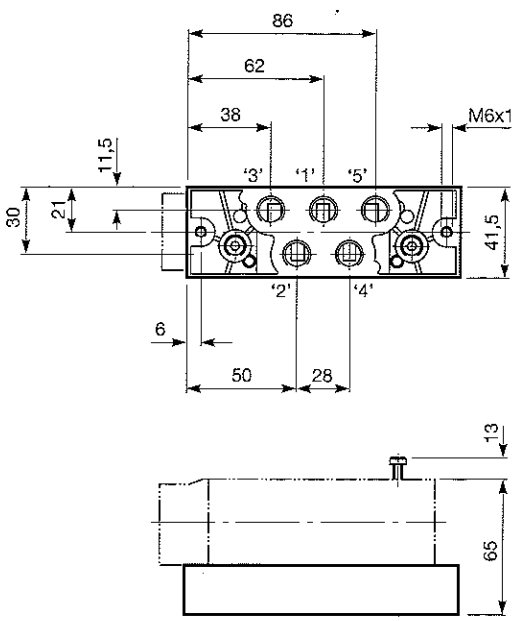


Model Number: **M/1712/63**

Type: 5/3 Supply sealed mid-position

Pilot Pressure: 2,2 + (0,25 x supply pressure) bar

Sub-bases for M/1702 and M/1712 valves

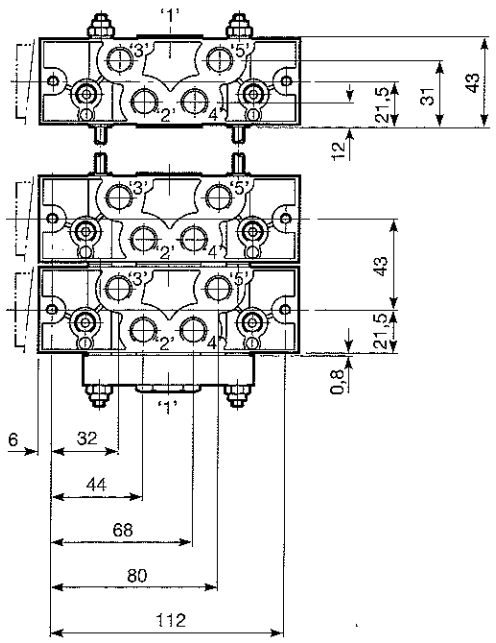


Bottom Ported Sub-base Models

Model Numbers: **BM/1702/40**
BM/1702/2
BM/1702/3
BM/1702/33
BM/1702/63
BM/1712/63

Type: Single sub-base with all ports on the bottom

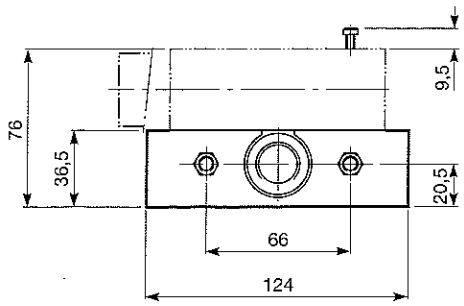
Manifold Sub-base Models

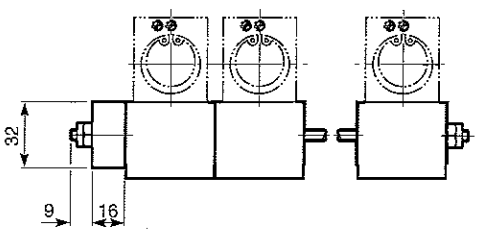


Model Numbers: **CM/1702/40/T***
CM/1702/2/T*
CM/1702/3/T*
CM/1702/33/T*
CM/1702/63/T*
CM/1712/63/T*

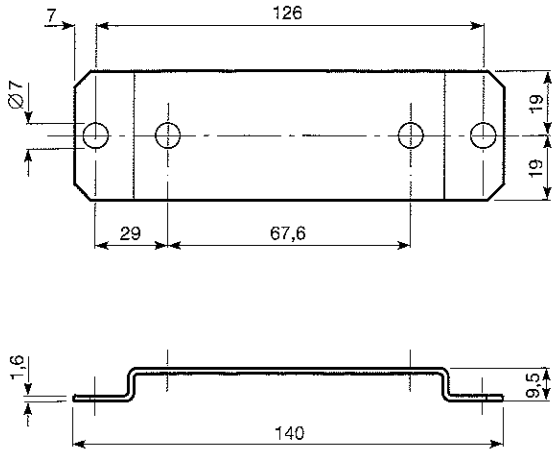
Type: Manifold sub-base with outlet and exhaust ports on the bottom and inlet port on the side for up to six valves.

*Insert number of valves required in manifold. Different models may be assembled in the same manifold. Plug for port '1' may be inserted at either end.





Accessories



Steel fixing plate, including screws and washers, is available for the side ported models, reference QM/1392.

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where *pressures* and *temperatures* can exceed those listed under **'Technical Data'**.
Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN MARTONAIR.
Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.
System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.
System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.