

- **Compact, 22mm miniature solenoid valves**
- **Normally open and normally closed models**
- **Manifold mounting option**
- **Memory-type manual override as standard**
- other options available



Technical Data

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Poppet Valve, directly actuated with spring return

Mounting:

Through-holes with thread in sub-base

Port Size:

M5, G¹/₈

Operating Pressure:

0 to 10 bar.

Orifice Sizes:

See overleaf for details.

Flow Characteristics:

	C	b	A	Cv	l/min
M/48, M/49 1mm	.126	.483	.603	.035	36.25
M/148, M/149 1mm	.173	.543	.881	.063	47.29
M/48, M/49 1.6mm	.327	.354	1.4	.082	89.21
M/148, M/149 1.6mm	.35	.202	1.349	.092	81.56

Operating Temperature:

-30°C* to +90°C supply air

+5°C to +50°C ambient

* Consult our Technical Service for use below +2°C.

Materials:

Encapsulated coil, moulded co-polymer and epoxy resin base, stainless iron armature, tube and springs, aluminium sub-base, nitrile rubber seals

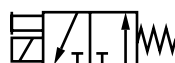
Ordering Information

To order, quote model number followed by voltage code shown in the tables overleaf, e.g.

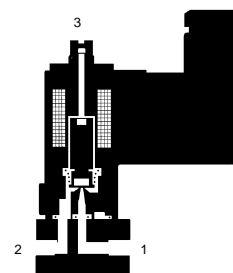
M/48/MAZ220VAC for a normally closed low power model suitable for a 220V 50Hz electrical supply.



Normally Closed



Normally Open





General Information

Symbol	Model	Number of Valves on Manifold	Port size	Inlet Orifice Size mm	Operating Pressure (bar)	Weight (kg)	Spares Kit Ref.
	M/48/MAZ*	-	M5	1.0 (1.6 - 7.5W models)	0 - 10	0,13	QM/48/00
	DM/48/MAZ*/T2	2	M5	1.0 (1.6 - 7.5W models)	0 - 10	0,31	QM/48/T2/00
	DM/48/MAZ*/T3	3	M5	1.0 (1.6 - 7.5W models)	0 - 10	0,45	QM/48/T3/00
	DM/48/MAZ*/T4	4	M5	1.0 (1.6 - 7.5W models)	0 - 10	0,60	QM/48/T4/00
	DM/48/MAZ*/T5	4	M5	1.0 (1.6 - 7.5W models)	0 - 10	0,75	QM/48/T5/00
	DM/48/MAZ*/T6	4	M5	1.0 (1.6 - 7.5W models)	0 - 10	0,90	QM/48/T6/00
	M/49	-	G1/8	1.0 (1.6 - 7.5W models)	0 - 10	0,14	QM/48/00
	DM/49/MAZ*/T2	2	G1/8	1.0 (1.6 - 7.5W models)	0 - 10	0,31	QM/48/T2/00
	DM/49/MAZ*/T3	3	G1/8	1.0 (1.6 - 7.5W models)	0 - 10	0,45	QM/48/T3/00
	DM/49/MAZ*/T4	4	G1/8	1.0 (1.6 - 7.5W models)	0 - 10	0,60	QM/48/T4/00
	DM/49/MAZ*/T5	5	G1/8	1.0 (1.6 - 7.5W models)	0 - 10	0,75	QM/48/T5/00
	DM/49/MAZ*/T6	5	G1/8	1.0 (1.6 - 7.5W models)	0 - 10	0,90	QM/48/T6/00
	M/148/MAZ*	-	M5	1.0 (1.6 - 7.5W models)	0 - 7	0,13	QM/48/00
	M/149/MAZ*	-	G1/8	1.0 (1.6 - 7.5W models)	0 - 7	0,14	QM/48/00

* Insert Votage Code from table below.
For 1.6mm inlet orifice 7.5W models change letter A to D in model number ie. M/48/MDZ*

Model Codes

DM/48/ ★ ★ ★

Plugs	Substitute
No plug	Z
Standard plug	A
Plug with indicator	W
Plug with protector	X
Plug with indicator and protector	Y

Solenoid Power	Substitute
2W	A
7.5W	D

Manual Override	Substitute
Memory Type	M
Push button	N
Push button proud	G

Technical Details for Solenoid Valves

Power Identification:	A	D
Voltage Tolerance:	±10%	±10%
Related Power:	2W	7.5W
In-rush/Hold:	8.5/4VA	15/8VA
Inlet Orifice:	1,0 mm	1,6 mm
Operating Pressure	0 - 10 bar	
Plug:	A variety of plugs are available, see Section 7.7.001	
Cable Entry:	Pg 9	
Manual Override:	Standard, turn 180° anti-clockwise to operate, turn clockwise to release	
Protection Class:	IP 65 (DIN 40050)	
Typical Response Times:	10 ms on, 10ms off	

Voltage Codes and Spare Coils

Voltage	Codes	Coil Part Number (A)	Coil Part Number (D)
6V d.c.	6V =	QM/48/A6V/21	QM/48/D6V/21
12V d.c.	12V =	QM/48/A12V/21	QM/48/D12V/21
24V d.c.	24V =	QM/48/A24V/21	QM/48/D24V/21
42 - 48V d.c.	42V =	QM/48/A42V/21	QM/48/D42V/21
110 - 120V d.c.	110V =	QM/48/A110V/21	QM/48/D110V/21
12V 50Hz	12V50	QM/48/A12V/21	QM/48/D12V/21
24V 50Hz	24V50	QM/48/A24V/21	QM/48/D24V/21
42 - 48V 50/60Hz	42VAC	QM/48/A42V/21	QM/48/D42V/21
110 - 120V 50/60Hz	110VAC	QM/48/A110V/21	QM/48/D110V/21
220 - 240V 50/60Hz	220VAC	QM/48/A220V/21	QM/48/D220V/21

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.

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.

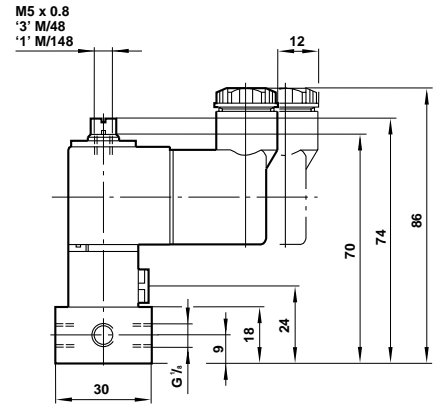
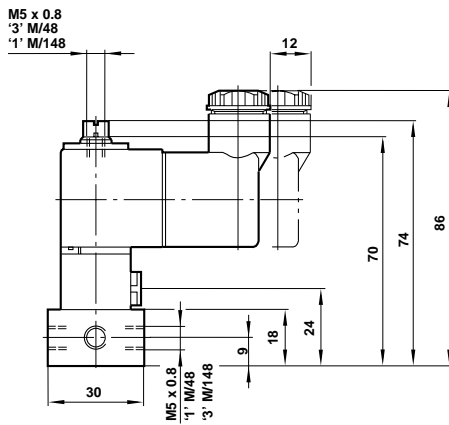
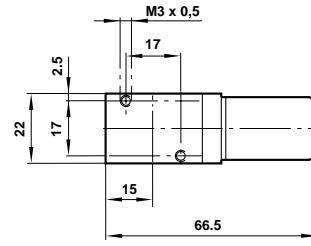
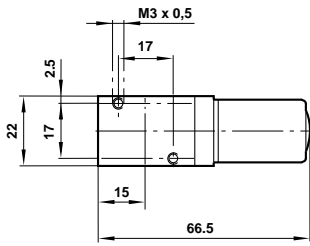
System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products where applicable.



M/48 and M/148 Models

Manifold Mounted Valves



DM/48 and DM/49 Models

Manifold Mounted Valve Assemblies

Maximum 6 stations

