

Direct solenoid and solenoid pilot operated valves

Function Port size Flow [Max] Individual mounting

3/2 NC, 2/2 NC

G1/8" - G1/4"

1000 NI/min

Inline

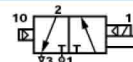
OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting force both ways.
2. Patented conical seats for long life.
3. Short stroke with high flow.
4. Bonded poppet with minimal friction.
5. Wiping effect eliminates sticking.
6. Extremely repeatable response.



HOW TO ORDER

Port size	Pilot	Single operator NC Valve
G1/8"	Internal	77A-11-C0A-XX-Xxxx-xxx
	External	77A-11-C0B-XX-Xxxx-xxx
G1/4"	Internal	77A-11-D0A-XX-Xxxx-xxx
	External	77A-11-D0B-XX-Xxxx-xxx



SOLENOID OPERATOR

DM - D xxx-xxx

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connector
JA	110 V~/50 Hz	A	45 cm (Flying leads)	1	Non locking	KA	Square connector
JB	220 V~/50 Hz	B	60 cm (Flying leads)	2	Locking	KD	Square connector with light
JC	24 V~/60 Hz	J	Connector			JB	Rectangular connector
FB	24 V~/1.8 W					JD	Rectangular connector with light
DA	24 V~/5.4 W					BA	Flying leads
DF	24 V~/12.7 W						

SOLENOID OPERATOR

GM - G xxx-xxx

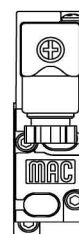
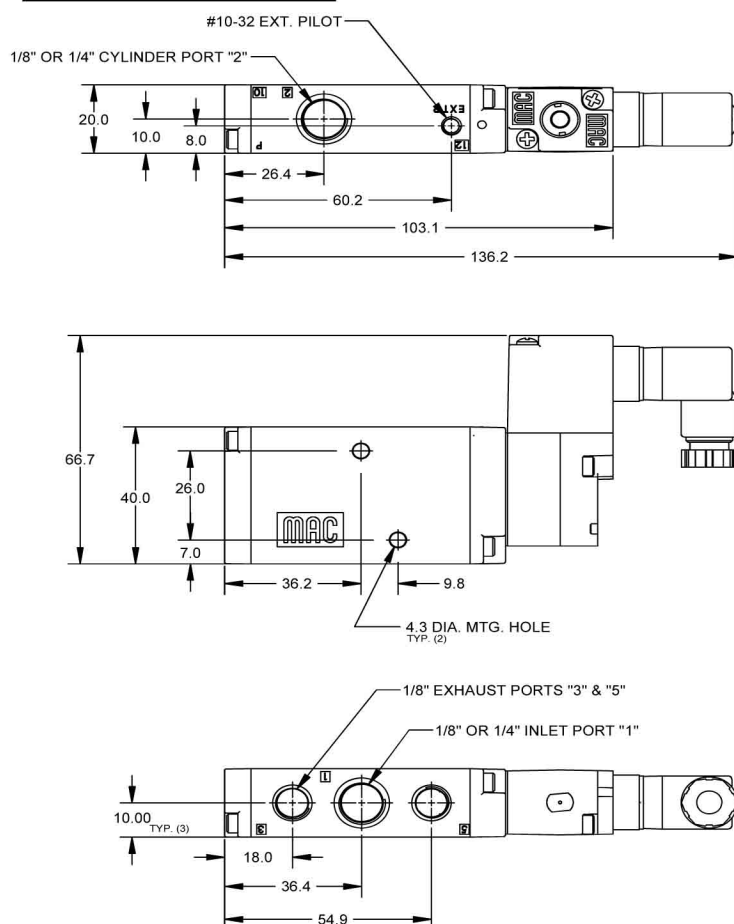
XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connector
DC	24 V~/1.8 W	A	45 cm	1	Non locking	BA	Flying leads
DD	24 V~/2.5 W	B	60 cm	2	Locking	BT	Flying leads with light
DF	24 V~/4.0 W	C	90 cm			KA	Plug-in wire assy.
						KT	Plug-in wire assy. with light

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 8 bar (External pilot) 2 to 8 bar (Internal pilot)
Pilot pressure :	2 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Flow (at 6 bar, $\Delta P=1\text{bar}$) :	1000 NI/min (1.0 Cv)
Coil :	Class A continuous duty, #22 AWG x 18 lead wires
Voltage range:	-15% to +10% of nominal voltage
Protection :	Consult factory
Power:	DC 12/24 Volt 1.0 W to 5.4 W (higher wattages available) AC 24, 120, 220, 240 VAC

Options: • NPTF threads

DIMENSIONS



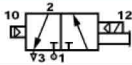
Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Individual mounting
3/2 NC, 2/2 NC	G1/8" - G1/4"	1000 NI/min	Sub-base

OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting force both ways.
2. Patented conical seats for long life.
3. Short stroke with high flow.
4. Bonded poppet with minimal friction.
5. Wiping effect eliminates sticking.
6. Extremely repeatable response.

HOW TO ORDER

Port size	Pilot	Single Operator NC Valve
		
Valve less base	Internal	77A-13-00C-XX-Xxxx-xxx
	External	77A-13-00E-XX-Xxxx-xxx
G1/8"	Internal	77A-13-C1C-XX-Xxxx-xxx
	External	77A-13-C1E-XX-Xxxx-xxx
G1/4"	Internal	77A-13-D1C-XX-Xxxx-xxx
	External	77A-13-D1E-XX-Xxxx-xxx

Note: Above models are side ported

SOLENOID OPERATOR

DM - D XXX-XXX

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connector
JA	110 V~/50 Hz	A	45 cm (Flying leads)	1	Non locking	KA	Square connector
JB	220 V~/50 Hz	B	60 cm (Flying leads)	2	Locking	KD	Square connector with light
JC	24 V~/60 Hz	J	Connector			JB	Rectangular connector
FB	24 V~/1.8 W					JD	Rectangular connector with light
DA	24 V~/5.4 W					BA	Flying leads
DF	24 V~/12.7 W						

SOLENOID OPERATOR

GM - G XXX-XXX

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connector
DC	24 V~/1.8 W	A	45 cm	1	Non locking	BA	Flying leads
DD	24 V~/2.5 W	B	60 cm	2	Locking	BT	Flying leads with light
DF	24 V~/4.0 W	C	90 cm			KA	Plug-in wire assy.
						KT	Plug-in wire assy. with light

OPTIONS

77A-13-00 C -XX-Xxxx-xxx

- C Internal pilot
- D* Internal pilot with pilot exhaust out main exhaust
- E External pilot 10 end
- F* External pilot 10 end with pilot exhaust out main exhaust
- G External pilot 12 end
- H* External pilot 12 end with pilot exhaust out main exhaust

77A-13-C 1 C -XX-Xxxx-xxx

For bottom cylinder port, replace by 2

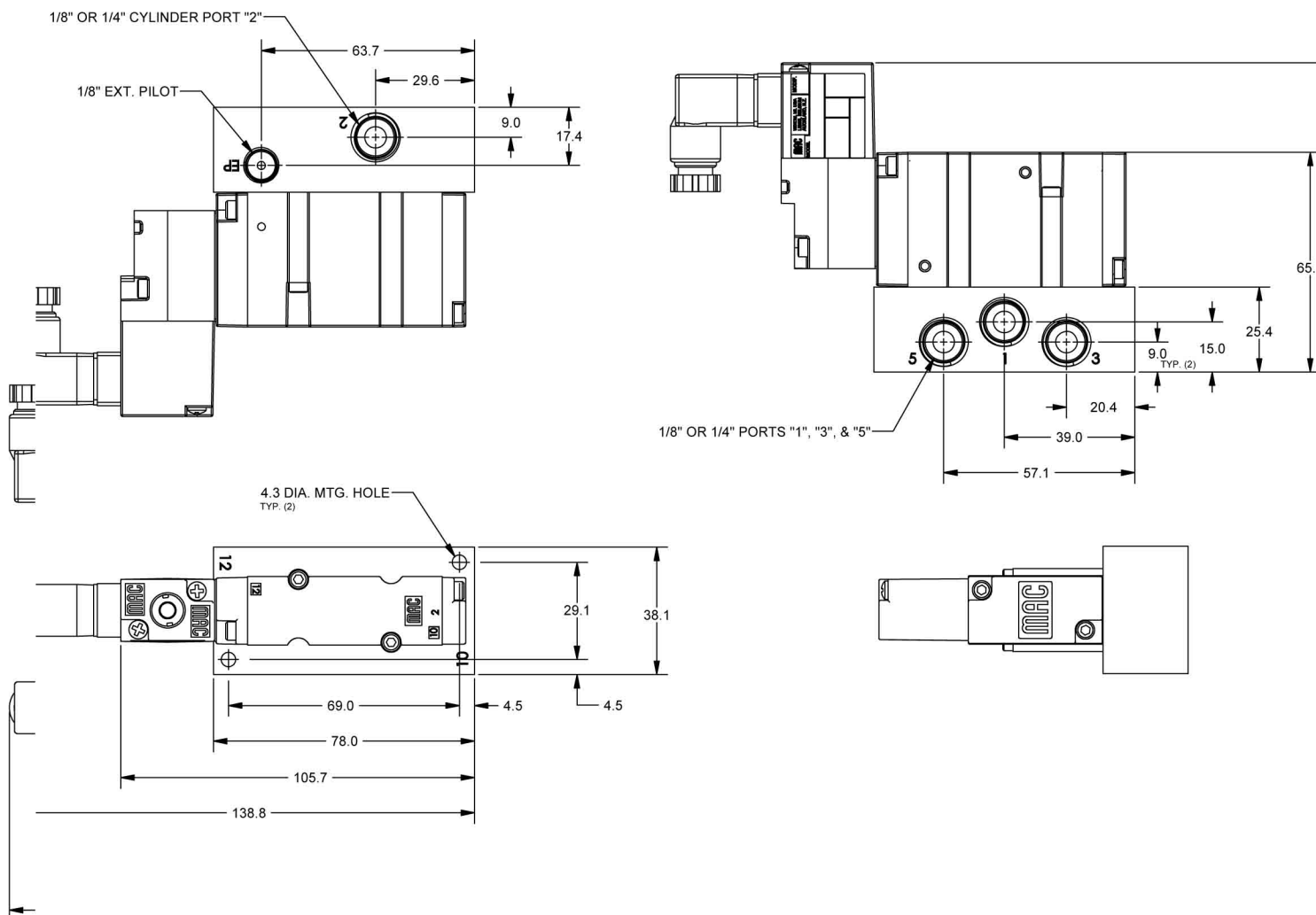
* Must use DU pilot body. Main exhaust cannot be restricted (i.e. 77A-13-00D-DU-DJAJ-1KA).

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 8 bar (External pilot) 2 to 8 bar (Internal pilot)
Pilot pressure :	2 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Flow (at 6 bar, $\Delta P=1$ bar) :	1000 NI/min (1.0 Cv)
Coil :	Class A continuous duty, #22 AWG x 18 lead wires
Voltage range:	-15% to +10% of nominal voltage
Protection :	Consult factory
Power:	DC 12/24 Volt 1.0 W to 5.4 W (higher wattages available) AC 24, 120, 220, 240 VAC

Options: • NPTF threads

DIMENSIONS



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Circuit bar mounting
3/2 NC, 2/2 NC	G1/8" - G1/4"	1000 NI/min	Non plug-in

OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting force both ways.
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HOW TO ORDER

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size	Pilot	Single Operator NC Valve
		
Valve less base	Internal	77A-13-00C-XX-Xxxx-xxx
	External "10" end	77A-13-00E-XX-Xxxx-xxx
	External "12" end	77A-13-00G-XX-Xxxx-xxx

SOLENOID OPERATOR

DM - D XXX-XXX

XX Voltage	X Wire length	X Manual operator	XX Electrical connector
JA 110 V~/50 Hz	A 45 cm (Flying leads)	1 Non locking	KA Square connector
JB 220 V~/50 Hz	B 60 cm (Flying leads)	2 Locking	KD Square connector with light
JC 24 V~/60 Hz	J Connector		JB** Rectangular connector
FB 24 V~/1.8W			JD** Rectangular connector with light
DA 24 V~/5.4W			BA Flying leads
DF 24 V~/12.7W			

** These connector options require 26mm spacing - consult factory

SOLENOID OPERATOR

GM - G XXX-XXX

XX Voltage	X Wire length	X Manual operator	XX Electrical connector
DC 24 V~/1.8W	A 45 cm	1 Non locking	BA Flying leads
DD 24 V~/2.5W	B 60 cm	2 Locking	BT Flying leads with light
DF 24 V~/4.0W	C 90 cm		KA Plug-in wire assy.
			KT Plug-in wire assy. with light

HOW TO ORDER CIRCUIT BAR (21mm spacing)

Port size	Pilot air	Side Cyl. Port	Bottom Cyl. Port
G1/8"	Internal	CBM77A-00AAB-xx	CBM77A-00BAB-xx
	External from 10 end*	CBM77A-00ABB-xx	CBM77A-00BBB-xx
	External from 12 end*	CBM77A-00ACB-xx	CBM77A-00BCB-xx
G1/4"	Internal	CBM77A-00AAE-xx	CBM77A-00BAE-xx
	External from 10 end*	CBM77A-00ABE-xx	CBM77A-00BBE-xx
	External from 12 end*	CBM77A-00ACE-xx	CBM77A-00BCE-xx

xx = number of stations (03 = 3 stations)

Note:

- For valves mounted on base at the factory, add -9 to the model number.

- Common through ports are 3/8"

*Common external pilot 1/8"

TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 8 bar (External pilot) 2 to 8 bar (Internal pilot)
Pilot pressure :	2 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to 50°C
Flow (at 6 bar, $\Delta P=1\text{bar}$) :	1000 NI/min (1.0 Cv)
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DIMENSIONS

