

# Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Individ	ual mounting
5/2	1/8" - 1/4"	1.0 Cv	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**

#### SINGLE PRESSURE MODELS

SINGLE FRESSORE MODE	LO						
Port size	Pilot	5/2					
		Single pressure					
		12 2 4 14					
1/8" NPTF	Internal	27A-11-A0A-XX-Xxxx-xxx					
	External	27A-11-A0B-XX-Xxxx-xxx					
1/4" NPTF*	Internal	27A-11-B0A-XX-Xxxx-xxx					
	External	27A-11-B0B-XX-Xxxx-xxx					

#### DUAL PRESSURE MODELS (INTERNAL PILOT - PILOT PRESSURE SUPPLY FROM #5 PORT)

DUAL FRESSURE MODELS	( IN LEKNAL FILOT	- FILOT FRESSORE SUFFLI FROM #3 FORT)
Port size	Pilot	5/2
		Dual pressure
		$ \begin{array}{c c} 12 & 4 & 14 \\ \hline 14 & 7 & 37 \\ \hline 315 & 37 \end{array} $
1/8" NPTF	Internal	27A-31-A0A-XX-Xxxx-xxx
	External	27A-31-A0B-XX-Xxxx-xxx
1/4" NPTF*	Internal	27A-31-B0A-XX-Xxxx-xxx
	External	27A-31-B0B-XX-Xxxx-xxx

<sup>\*</sup> Inline body ports #3 and #5 are always 1/8"

#### SOLENOID OPERATOR

# DM - D xxx-xxx

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connector
JA	110/50, 120/60 (2.9W)	Α	18" (Flying leads)	1	Non locking	KA	Square connector
JB	220/50, 240/60 (2.9W)	В	24" (Flying leads)	2	Locking	KD	Square connector with light
JC	24/60 (2.9W)	J	Connector			JB	Rectangular connector
FB	24 VDC (1.8W)					JD	Rectangular connector with
DA	24 VDC (5.4W)	•					light
DF	24 VDC (12.7W)	•				BA	Flying leads

#### SOLENOID OPERATOR

#### GM-G XXX-XXX

XX Voltage	X Wire length	X Manual operator	XX Electrical connector
DC 24 VDC (1.8W)	A 18"	<ol> <li>Non locking</li> </ol>	BA Flying leads
DD 24 VDC (2.5W)	<b>B</b> 24"	2 Locking	BT Flying leads with light
<b>DF</b> 24 VDC (4.0W)	C 36"		KA Plug-in wire assy.
			KT Plug-in wire assy. with light

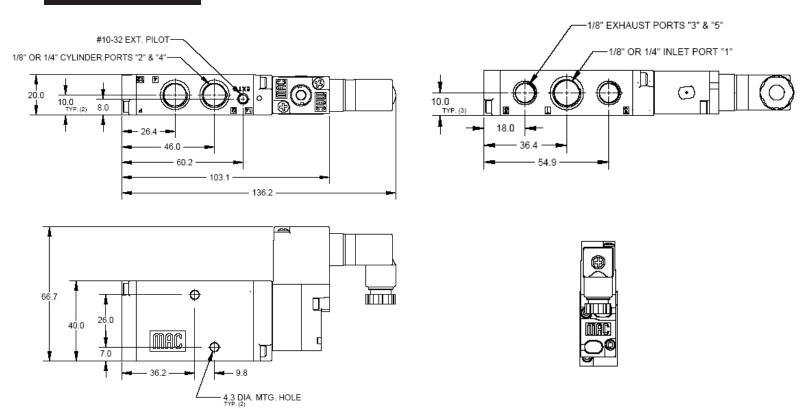


TECHNICAL DATA	
Fluid:	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI (External pilot)
	30 to 120 PSI (Internal pilot)
Pilot pressure :	30 to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration:	40 µ
Temperature range :	0°F to 120°F
Flow (at 6 bar, $\Delta$ P=1bar):	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 1.0w to 5.4w (Higher wattages available)
	AC 24, 120, 220, 240 VAC
Options:	• BSPP threads

—Dual pressure models, replace by **C** for pilot supply from #3 port

## DIMENSIONS

• 27A-31-A0**A**-XX-XXXX-XXX





# Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Individu	ual mounting
5/2	1/8" - 1/4"	1.0 Cv	Sub-base	

#### **OPERATIONAL BENEFITS**

- 1. The 4-way pilot develops maximum shifting force both ways.
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- 5. Wiping effect eliminates sticking.
- 6. Extremely repeatable response.

#### **HOW TO ORDER**

Port size	Pilot	5/2 Single pressure
		12 2 4 14 3 3 15 3 15 3 15
Valve less base	Internal	27A-13-00D-XX-Xxxx-xxx
	External	27A-13-00G-XX-Xxxx-xxx
1/8" NPTF	Internal	27A-13-A1D-XX-Xxxx-xxxx
	External	27A-13-A1G-XX-Xxxx-xxx
1/4" NPTF	Internal	27A-13-B1D-XX-Xxxx-xxx
	External	27A-13-B1G-XX-Xxxx-xxx

#### DUAL PRESSURE MODELS (INTERNAL PILOT - PILOT PRESSURE SUPPLY FROM #5 PORT)

Port size	Pilot 5/2 Dual pressure			
		$\begin{array}{c c} 12 & 2 & 4 & 14 \\ \hline 1/D & 1/D & 4 & 7 & 4/ \end{array}$		
Valve less base	Internal from port #5	27A-33-00D-XX-Xxxx-xxx		
	from port #3	27A-33-00E-XX-Xxxx-xxx		
	External	27A-33-00G-XX-Xxxx-xxx		
1/8" NPTF	Internal from port #5	27A-33-A1D-XX-Xxxx-xxx		
	from port #3	27A-33-A1E-XX-Xxxx-xxx		
	External	27A-33-A1G-XX-XXXX-XXXX		
1/4" NPTF	Internal from port #5	27A-33-B1D-XX-Xxxx-xxx		
	from port #3	27A-33-B1E-XX-Xxxx-xxx		
	External	27A-33-B1G-XX-Xxxx-xxx		

Note: Above models are side ported



XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connector
JA	110/50, 120/60 (2.9W)	Α	18" (Flying leads)	1	Non locking	KA	Square connector
JB	220/50, 240/60 (2.9W)	В	24" (Flying leads)	2	Locking	KD	Square connector with light
JC	24/60 (2.9W)	J	Connector			JB	Rectangular connector
FB	24 VDC (1.8W)			_		JD	Rectangular connector with
DA	24 VDC (5.4W)						light
DF	24 VDC (12.7W)					BA	Flying leads

#### SOLENOID OPERATOR

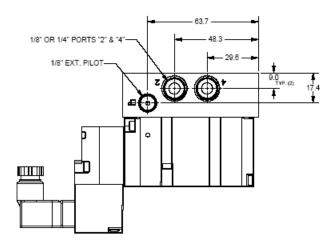
# GM-G xxx-xxx

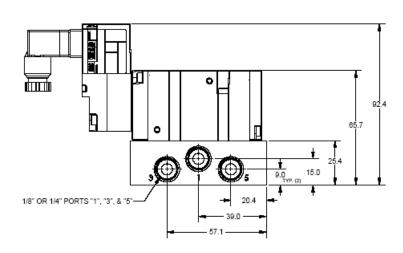
XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connector
DC	24 VDC (1.8W)	Α	18"	1	Non locking	BA	Flying leads
DD	24 VDC (2.5W)	В	24"	2	Locking	BT	Flying leads with light
DF	24 VDC (4.0W)	С	36"			KA	Plug-in wire assy.
						KT	Plug-in wire assy. with light

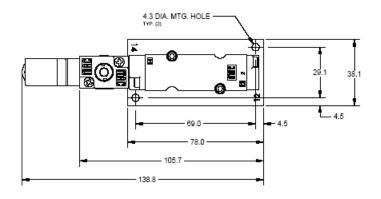


TECHNICAL DATA	
Fluid:	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI (External pilot)
	30 to 120 PSI (Internal pilot)
Pilot pressure :	30 to 120 PSI
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration:	40 μ
Temperature range :	0°F to 120°F
Flow (at 6 bar, ∆P=1bar) :	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 1.0w to 5.4w (Higher wattages available)
	AC 24, 120, 220, 240 VAC
Options:	BSPP threads     27A-13-A1D-XX-XXXX-XXX      For bottom cylinder ports, replace by 2      For side ports with flow controls, replace by 3 (single pressure only)

## DIMENSIONS











## Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Circuit bar mounting	
5/2	1/8" - 1/4"	1.0 Cv	Non plug-in	

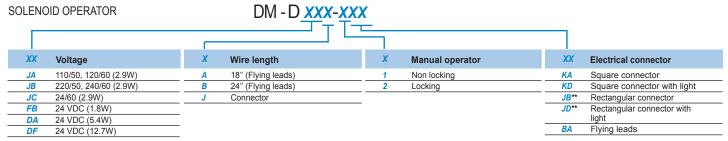
#### **OPERATIONAL BENEFITS**

- 1. The 4-way pilot develops maximum shifting force both ways.
- 2. Patented conical seats for long life.
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#### **HOW TO ORDER**

#### HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size	Pilot	5/2 Single pressure				
		12 2 4 37 37 37 37 37 37 37 37 37 37 37 37 37				
Valve less base	Internal	27A-13-00D-XX-Xxxx-xxx				
	External "12" end	27A-13-00G-XX-Xxxx-xxx				
	External "14" end	27A-13-00J-XX-Xxxx-xxx				



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

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connector
DC	24 VDC (1.8W)	Α	18"	1	Non locking	BA	Flying leads
DD	24 VDC (2.5W)	В	24"	2	Locking	BT	Flying leads with light
DF	24 VDC (4.0W)	С	36"			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. Ports	Bottom Cyl. Ports	Bottom cyl. ports w/ flow controls
1/8" NPTF	Internal	CBM27A-00AAA- <b>xx</b>	CBM27A-00BAA- <b>xx</b>	CBM27A-00CAA-xx
	External from 12 end*	CBM27A-00ABA-xx	CBM27A-00BBA- <b>xx</b>	CBM27A-00CBA-xx
	External from 14 end*	CBM27A-00ACA-xx	CBM27A-00BCA-xx	CBM27A-00CCA-xx
1/4" NPTF	Internal	CBM27A-00AAD-xx	CBM27A-00BAD-xx	CBM27A-00CAD-xx
	External from 12 end*	CBM27A-00ABD-xx	CBM27A-00BBD-xx	CBM27A-00CBD-xx
	External from 14 end*	CBM27A-00ACD-xx	CBM27A-00BCD-xx	CBM27A-00CCD-xx

xx = number of stations (03 = 3 stations)

#### Notes:

- For valves mounted on base at the factory, add -9 to the model number.
- Common through ports are 3/8"

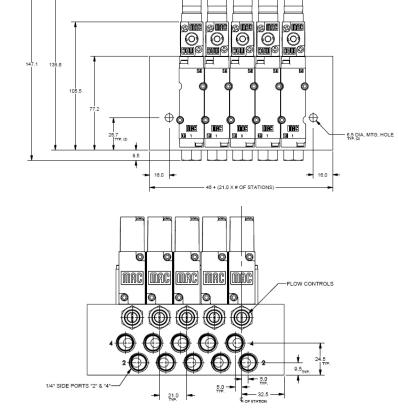
<sup>\*</sup>Common external pilot 1/8"



#### **TECHNICAL DATA** Fluid: Compressed air, vacuum, inert gases Vacuum to 120 PSI (External pilot) Pressure range: 30 to 120 PSI (Internal pilot) 30 to 120 PSI Pilot pressure : Lubrication : Not required, if used select a medium aniline point lubricant (between 180°F and 210°F) Filtration: 40 μ 0°F to 120°F Temperature range : 1.0 Cv Flow (at 6 bar, $\Delta$ P=1bar): Coil: Class A continuous duty, #22 AWG x 18 lead wires Voltage range: -15% to +10% of nominal voltage Protection: Consult factory DC 12/24 Volt 1.0w to 5.4w (Higher wattages available) Power: AC 24, 120, 220, 240 VAC

#### **DIMENSIONS**

Options:



· BSPP threads

