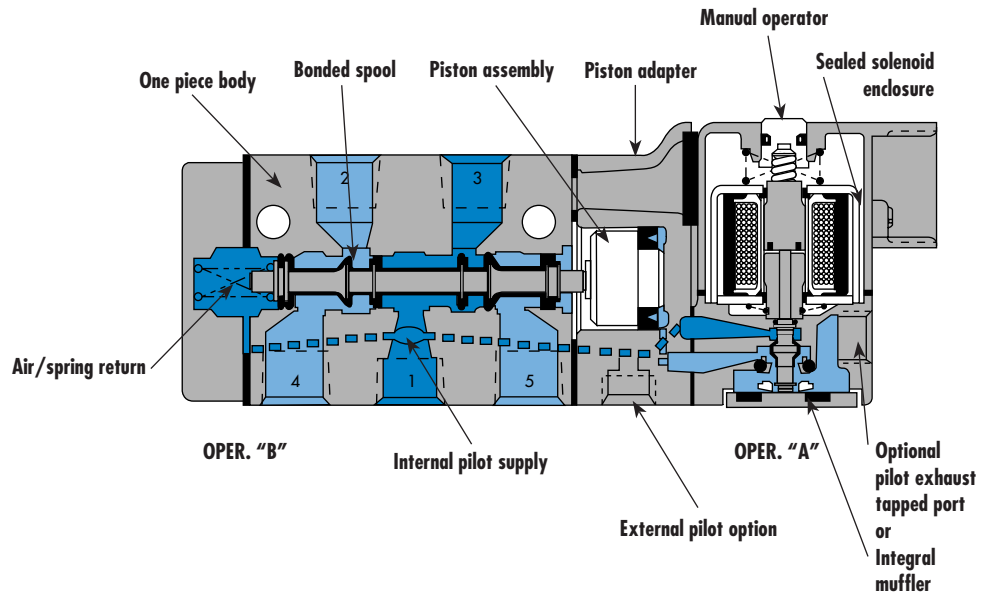


Individual mounting

inline
--------

Manifold mounting

stacking body with 1 common port (inlet)	stacking body with 3 common ports (inlet & exhausts)	stacking body with 3 common ports and integral F.C.	stacking body with 3 common ports with common conduit	stacking body with 3 common ports with C. C. & integral exh. F. C.
--	--	---	---	--



**SERIES FEATURES**

- The patented MACSOLENOID® with its non-burn out feature on AC service.
- Air/spring return on single solenoid valves.
- Use for lube or non-lube service.
- Optional common conduit stacking valve with integral wiring space and indicator lights
- Optional integral individual exhaust flow controls.
- Optional low wattage DC solenoids down to 1 watt.
- Various types of manual operators and solenoid enclosures.

Series

35

100

200

55

56

57

58

59

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700

900

82

6300

6500

6600

1300

**800**

ISO 1

ISO 2

ISO 3

MAC 125A

MAC 250A

MAC 500A

**SPECIAL APPLICATIONS :**

On all single pressure models, energizing the operator closest to port #5 supplies pressure to cylinder port "2" and energizing the operator closest to port #4 supplies pressure to cylinder port "3". For the following special applications, additional piping considerations are required.

**EXTERNAL PILOT APPLICATIONS :**

An External Pilot is only required when the main valve pressure is less than 20 PSIG on single solenoid or 10 PSIG on double solenoid valves in 2-position models, or less than 20 PSIG on 3-position double solenoid models. Also an External Pilot is required when main valve pressure is in excess of 150 PSIG.

**INDIVIDUAL VALVES:** The External Pilot supply is connected to the External Pilot port in the piston adapter. The valve must be an External Pilot model.

**STACKING VALVES:** The External Pilot supply is connected to the External Pilot ports in the end plates. The valve is the same valve for either Internal or External Pilot. The end plate must be the external pilot type.

**DUAL PRESSURE (TWO INLET) APPLICATIONS :**

When two pressures are required within a valve, a Dual Pressure (Inlet) model must be used. Additionally the following must be adhered to:

**INDIVIDUAL VALVES:** If both pressures are below the minimum, use an External Pilot supply as described above for Individual valves and connect the two pressures to ports #4 and #5. Otherwise, use an Internal Pilot model and connect the higher pressure to port #5 and the lower pressure to port #4.

**STACKING VALVES:** Use an External Pilot Manifold End Plate Kit, as described above for Stacking Valves and connect the two pressures to the Exhaust ports in the end plate.

**MULTIPLE PRESSURES TO A STACK :**

By isolating, different pressures can be supplied to each end of a stack to provide two pressures. If more than two pressures are required, a Dual Inlet Pressure Block can be installed providing 2 more inlet pressures to a stack. With the use of 1 or more of these Pressure Blocks, a stack can have virtually unlimited inlet pressures.

**VACUUM APPLICATIONS :**

Use an External Pilot model as described under "External Pilot Applications", (Individual valve or Stacking).

For single pressure, dual exhaust type valve ports #4 & #5 (Exhausts) should be connected to the vacuum supply and port #1 (Inlet) to atmosphere.

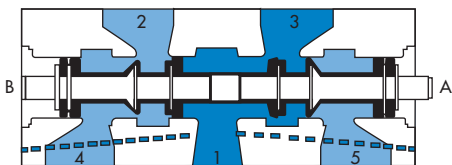
For dual pressure, single exhaust type valves, vacuum should be connected to port #1 (Inlet) and ports #4 & #5 (Exhausts) to atmosphere.

**SELECTOR APPLICATIONS :**

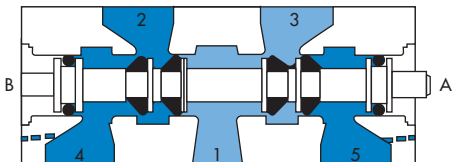
Use an External Pilot model as described above, if both pressures are below the minimum pilot pressure; otherwise use an Internal Pilot model. In either case, use a single pressure model and connect the higher pressure to port #1 (Inlet) and the lower pressure to port #4 (Exhaust) if using cylinder port #2 or to port #5 (Exhaust) if using cylinder port #3.

**SPOOL CONFIGURATIONS**

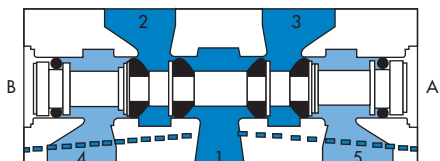
2-POSITION SGL. PRESSURE (SPOOL #12184)  
B ACTUATED SHOWN



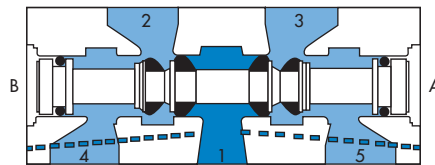
2-POSITION DUAL PRESSURE (SPOOL ASSY.#10266) B ACTUATED SHOWN



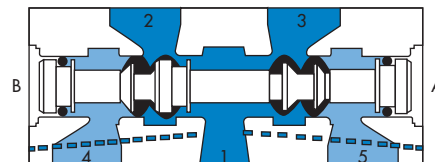
3-POSITION SGL. PRESS. CLOSED CENTER (SPOOL ASSY. #S-00004) CENTER POSITION SHOWN



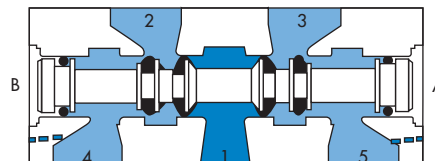
3-POSITION SGL. PRESS. OPEN CENTER (SPOOL ASSY.#S-00003) CENTER POSITION SHOWN



3-POSITION SGL. PRESS. PRESSURE CENTER (SPOOL ASSY. #S-08003) CENTER POSITION SHOWN



3-POSITION DUAL PRESS. PRESSURE CENTER (SPOOL ASSY. #S-08002) CENTER POSITION SHOWN



Function	Port size	Flow [Max]	Individual mounting	Series
<b>5/2 - 5/3</b>	<b>1/4"</b>	<b>1.4 C<sub>v</sub></b>	inline	

### OPERATIONAL BENEFITS

- Balanced spool, immune to variations of pressure.
- Short stroke with high flow.
- The piston (booster) provides maximum shifting forces.
- Powerful return force thanks to the combination of mechanical and air springs.
- Bonded spool with minimum friction, shifting in a glass-like finished bore.
- Wiping effect eliminates sticking.
- Pilot valve with balanced poppet, high flow, short and consistent response times.
- Long service life.



35  
100  
200  
55  
56  
57  
58  
59

### HOW TO ORDER

Port size	Pilot air	5/2	5/2	5/3	5/3	5/3
		Single operator	Double operator	Closed center	Open center	Pressure center
1/4" NPTF	Internal	811C-PM- <b>XXYZZ</b> -152	821C-PM- <b>XXYZZ</b> -152	825C-PM- <b>XXYZZ</b> -552	825C-PM- <b>XXYZZ</b> -652	825C-PM- <b>XXYZZ</b> -852
	External	812C-PM- <b>XXYZZ</b> -112	822C-PM- <b>XXYZZ</b> -112	826C-PM- <b>XXYZZ</b> -512	826C-PM- <b>XXYZZ</b> -612	826C-PM- <b>XXYZZ</b> -812

45

### SOLENOID OPERATOR ▶

**XX Y ZZ\***

XX Voltage	Y Manual operator	ZZ Electrical connection
<b>11</b> 120/60, 110/50	<b>1</b> Non-locking	<b>JB</b> Rectangular connector
<b>12</b> 240/60, 220/50	<b>2</b> Locking	<b>JD</b> Rectangular connector with light
<b>22</b> 24/60, 24/50		<b>JA</b> Square connector
<b>59</b> 24 VDC (2.5 W)		<b>JC</b> Square connector with light
<b>87</b> 24 VDC (17.1 W)		<b>BA</b> Flying leads (18")
<b>61</b> 24 VDC (8.5 W)		<b>CA</b> Conduit 1/2" NPS

700

900

82

\* Other options available, see page 357.

**MODIFICATIONS - N° 0358** - 3/8" inlet and cylinder ports, exhaust ports 1/4"

**MODIFICATIONS - N° 1080** - NAMUR interface.

Add mod. N° after valve part n°. - **EXAMPLE** : 811C-PM-111CA-152 Mod. 0358.

6300

6500

6600

1300

800

ISO 1

ISO 2

ISO 3

MAC 125A

MAC 250A

MAC 500A

### OPTIONS

811C-PM-111CA-152	- For 2 position dual pressure : replace by 2.
825C-PM-111CA-852	- For 3 position dual pressure, pressure center : replace by 7.

### TECHNICAL DATA

<b>Fluid :</b>	Compressed air, vacuum, inert gases	
<b>Pressure range :</b>	Internal pilot : single operator and 3 positions : 20-150 PSI	double operator : 10-150 PSI
	External pilot : vacuum to 200 PSI	
<b>Pilot pressure :</b>	Single operator and 3 positions : 20-150 PSI Double operator : 10-150 PSI	
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)	
<b>Filtration :</b>	40 μ	
<b>Temperature range :</b>	0°F to 120°F (-18°C to 50°C)	
<b>Flow (at 6 bar, ΔP=1bar) :</b>	1/4" : (1.4 C <sub>v</sub> )	
<b>Coil :</b>	General purpose - class A wires - Continuous duty - Encapsulated	
<b>Voltage range :</b>	-15% to +10% of nominal voltage	
<b>Protection :</b>	Consult factory	
<b>Power :</b>	~ Inrush : 14.8 VA Holding : 10.9 VA = 1 to 17.1 W	
<b>Response times :</b>	24 VDC (8.5 W)	Energize : 8 ms De-energize : 10 ms
	120/60	Energize : 5-11 ms De-energize : 9-16 ms

Spare parts : 

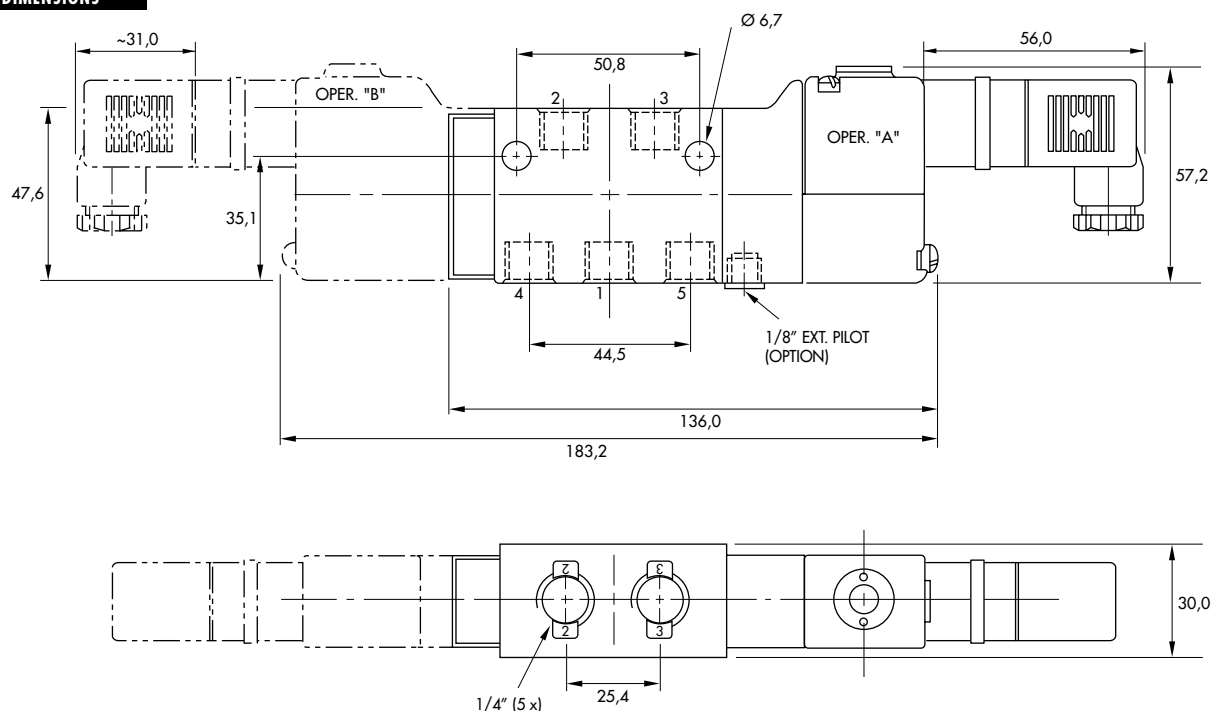
- Solenoid operator (power ≥ 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XXYZZ, including seal 16337. • Mounting screw kit for pilot : N-08003.

Options : 

- BSPP threads. • NAMUR interface. • Explosion-proof model. • Flow control/muffler (1/4") : 10951

### DIMENSIONS

Dimensions shown are metric (mm)



Function	Port size	Flow (Max)	Manifold Mounting	Series
<b>5/2 - 5/3</b>	<b>1/4"</b>	<b>1.4 C<sub>v</sub></b>	stacking body with 1 common port (inlet)	

### OPERATIONAL BENEFITS

- Balanced spool, immune to variations of pressure.
- Short stroke with high flow.
- The piston (booster) provides maximum shifting forces.
- Powerful return force thanks to the combination of mechanical and air springs.
- Bonded spool with minimum friction, shifting in a glass-like finished bore.
- Wiping effect eliminates sticking.
- Pilot valve with balanced poppet, high flow, short and consistent response times.
- Long service life.



35  
100  
200  
55  
56  
57  
58  
59

### HOW TO ORDER

Port size	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
<b>1/4" NPTF</b>	811C-PM- <b>XXYYZ</b> -132	821C-PM- <b>XXYYZ</b> -132	825C-PM- <b>XXYYZ</b> -532	825C-PM- <b>XXYYZ</b> -632	825C-PM- <b>XXYYZ</b> -832

45

### SOLENOID OPERATOR ▶

**XX Y ZZ\***

XX Voltage	Y Manual operator	ZZ Electrical connection
<b>11</b> 120/60, 110/50	<b>1</b> Non-locking	<b>JB</b> Rectangular connector
<b>12</b> 240/60, 220/50	<b>2</b> Locking	<b>JD</b> Rectangular connector with light
<b>22</b> 24/60, 24/50		<b>RA</b> Conduit 3/8" NPS
<b>59</b> 24 VDC (2.5 W)		<b>BA</b> Flying leads (18")
<b>87</b> 24 VDC (17.1 W)		
<b>61</b> 24 VDC (8.5 W)		

700

900

\* Other options available, see page 357.

82

### MANIFOLD END PLATE KITS (NPTF)\*

INT. PILOT - PART N°.	EXT. PILOT - PART N°.	MODELS USED WITH
M-08001-01-01	M-08001-02-01	3 com. port or 1 com. port models, stacks of 1 thru 16 valves
M-00005-01-01	M-00005-02-01	3 com. port or 1 com. port models, stacks of 17 or more valves

6300

6500

\* Add letter **P** at end of part N°. for BSPP threads; **EXAMPLE** : M-08001-01-01**P**

Note : (1) end plate kit required per stack.

6600

### OPTIONS

811C-PM-111BA-132

- For 2 position dual pressure : replace by 2.

825C-PM-111BA-832

- For 3 position dual pressure, pressure center : replace by 7.

1300

800

ISO 1

ISO 2

ISO 3

MAC 125A

MAC 250A

MAC 500A

### TECHNICAL DATA

<b>Fluid :</b>	Compressed air, vacuum, inert gases		
<b>Pressure range :</b>	Internal pilot : single operator and 3 positions : 20-150 PSI	double operator : 10-150 PSI	
	External pilot : vacuum to 200 PSI		
<b>Pilot pressure :</b>	Single operator and 3 positions : 20-150 PSI Double operator : 10-150 PSI		
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
<b>Filtration :</b>	40 µ		
<b>Temperature range :</b>	0°F to 120°F (-18°C to 50°C)		
<b>Flow (at 6 bar, ΔP=1bar) :</b>	1/4" : (1.4 C <sub>v</sub> )		
<b>Coil :</b>	General purpose - class A wires - Continuous duty - Encapsulated		
<b>Voltage range :</b>	-15% to +10% of nominal voltage		
<b>Protection :</b>	Consult factory		
<b>Power :</b>	~ Inrush : 14.8 VA	Holding : 10.9 VA	
	= 1 to 17.1 W		
<b>Response times :</b>	24 VDC (8.5 W)	Energize : 8 ms	De-energize : 10 ms
	120/60	Energize : 5-11 ms	De-energize : 9-16 ms

#### Spare parts :

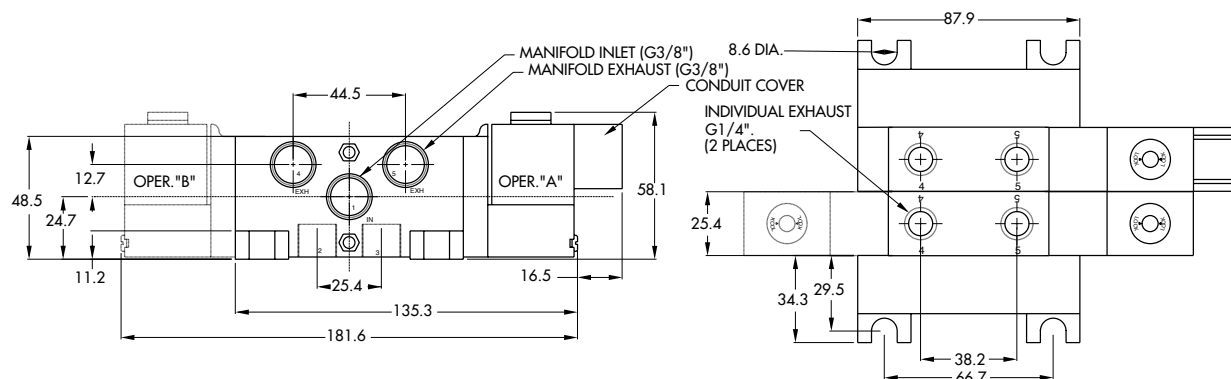
- Solenoid operator (power ≥ 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XYZZ, including seal 16337. • Mounting screw kit for pilot : N-08003.
- Inlet isolator : N-08001 • Exhaust isolator (x2) : N-08002

#### Options :

- BSPP threads. • Dual inlet block: M-08003 • Flow control/muffler (1/4") : 10951

### DIMENSIONS

Dimensions shown are metric (mm)



Function	Port size	Flow (Max)	Manifold mounting	Series
<b>5/2 - 5/3</b>	<b>1/4" - 3/8"</b>	<b>1.4 C<sub>v</sub></b>	stacking body with 3 common ports (inlet & exhausts)	

### OPERATIONAL BENEFITS

- Balanced spool, immune to variations of pressure.
- Short stroke with high flow.
- The piston (booster) provides maximum shifting forces.
- Powerful return force thanks to the combination of mechanical and air springs.
- Bonded spool with minimum friction, shifting in a glass-like finished bore.
- Wiping effect eliminates sticking.
- Pilot valve with balanced poppet, high flow, short and consistent response times.
- Long service life.



35  
100  
200  
55  
56  
57  
58  
59

### HOW TO ORDER

Port size	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
<b>1/4" NPTF</b>	811C-PM- <b>XXYZZ</b> -122	821C-PM- <b>XXYZZ</b> -122	825C-PM- <b>XXYZZ</b> -522	825C-PM- <b>XXYZZ</b> -622	825C-PM- <b>XXYZZ</b> -822
<b>3/8" NPTF</b>	811C-PM- <b>XXYZZ</b> -123	821C-PM- <b>XXYZZ</b> -123	825C-PM- <b>XXYZZ</b> -523	825C-PM- <b>XXYZZ</b> -623	825C-PM- <b>XXYZZ</b> -823

45

### SOLENOID OPERATOR ▶

**XX Y ZZ\***

XX Voltage	Y Manual operator	ZZ Electrical connection
<b>11</b> 120/60, 110/50	<b>1</b> Non-locking	<b>JB</b> Rectangular connector
<b>12</b> 240/60, 220/50	<b>2</b> Locking	<b>JD</b> Rectangular connector with light
<b>22</b> 24/60, 24/50		<b>RA</b> Conduit 3/8" NPS
<b>59</b> 24 VDC (2.5 W)		<b>BA</b> Flying leads (18")
<b>87</b> 24 VDC (17.1 W)		
<b>61</b> 24 VDC (8.5 W)		

700

\* Other options available, see page 357.

MANIFOLD END PLATE KITS (NPTF)*		
INT. PILOT - PART N°.	EXT. PILOT - PART N°.	MODELS USED WITH
M-08001-01-01	M-08001-02-01	3 com. port or 1 com. port models, stacks of 1 thru 16 valves
M-00005-01-01	M-00005-02-01	3 com. port or 1 com. port models, stacks of 17 or more valves

6300

6500

\* Add letter **P** at end of part N°. for BSPP threads; **EXAMPLE** : M-08001-01-01**P**

Note : (1) end plate kit required per stack.

6600

### OPTIONS

- 811C-PM-111RA-122 - For 2 position dual pressure : replace by 2.
- 825C-PM-111RA-822 - For 3 position dual pressure, pressure center: replace by 7.

1300

800

ISO 1  
ISO 2  
ISO 3  
MAC 125A  
MAC 250A  
MAC 500A

**TECHNICAL DATA**

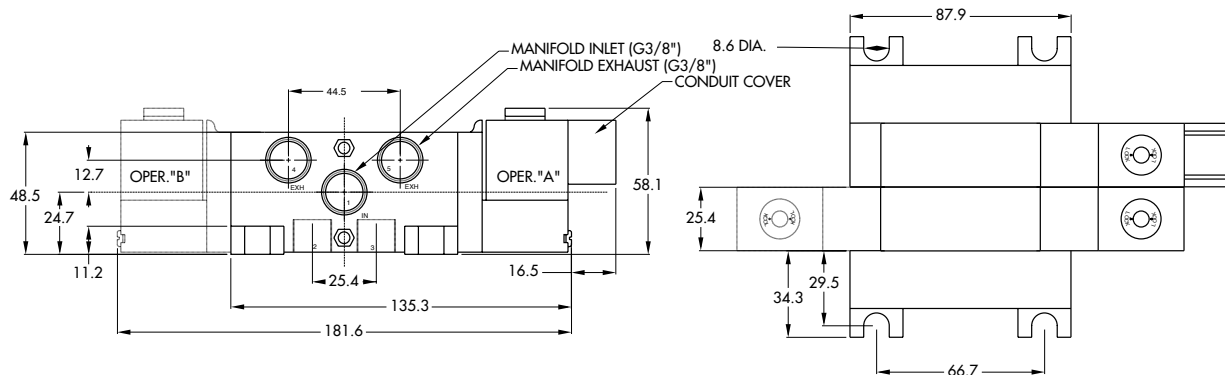
<b>Fluid :</b>	Compressed air, vacuum, inert gases		
<b>Pressure range :</b>	Internal pilot : single operator and 3 positions : 20-150 PSI	double operator : 10-150 PSI	
	External pilot : vacuum to 200 PSI		
<b>Pilot pressure :</b>	Single operator and 3 positions : 20-150 PSI Double operator : 10-150 PSI		
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
<b>Filtration :</b>	40 µ		
<b>Temperature range :</b>	0°F to 120°F (-18°C to 50°C)		
<b>Flow (at 6 bar, ΔP=1bar) :</b>	1/4" : (1.4 C <sub>v</sub> ), 3/8" : (1.4 C <sub>v</sub> )		
<b>Coil :</b>	General purpose - class A wires - Continuous duty - Encapsulated		
<b>Voltage range :</b>	-15% to +10% of nominal voltage		
<b>Protection :</b>	Consult factory		
<b>Power :</b>	~ Inrush : 14.8 VA	Holding : 10.9 VA	
	= 1 to 17.1 W		
<b>Response times :</b>	24 VDC (8.5 W)	Energize : 8 ms	De-energize : 10 ms
	120/60	Energize : 5-11 ms	De-energize : 9-16 ms

- Spare parts :
- Solenoid operator (power ≥ 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
  - Pilot valve : PME-XXYZZ, including seal 16337. • Mounting screw kit for pilot : N-08003.
  - Inlet isolator : N-08001 • Exhaust isolator (x2) : N-08002.

- Options :
- BSPP threads. • Dual inlet block: M-08003.

**DIMENSIONS**

Dimensions shown are metric (mm)

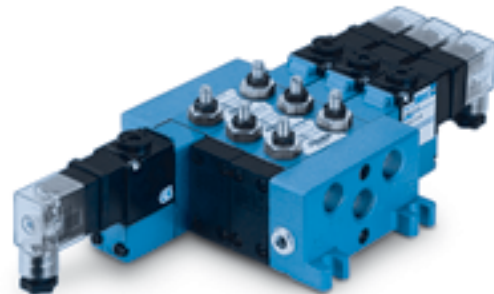




Function	Port size	Flow (Max)	Manifold mounting	Series
<b>5/2 - 5/3</b>	<b>1/4" - 3/8"</b>	<b>1.4 C<sub>v</sub></b>	stacking body with 3 common ports and integral F.C.	

### OPERATIONAL BENEFITS

- Balanced spool, immune to variations of pressure.
- Short stroke with high flow.
- The piston (booster) provides maximum shifting forces.
- Powerful return force thanks to the combination of mechanical and air springs.
- Bonded spool with minimum friction, shifting in a glass-like finished bore.
- Wiping effect eliminates sticking.
- Pilot valve with balanced poppet, high flow, short and consistent response times.
- Long service life.



35  
100  
200  
55  
56  
57  
58  
59

### HOW TO ORDER

Port size	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
<b>1/4" NPTF</b>	811C-PM- <b>XXYZZ</b> -192	821C-PM- <b>XXYZZ</b> -192	825C-PM- <b>XXYZZ</b> -592	825C-PM- <b>XXYZZ</b> -692	825C-PM- <b>XXYZZ</b> -892
<b>3/8" NPTF</b>	811C-PM- <b>XXYZZ</b> -193	821C-PM- <b>XXYZZ</b> -193	825C-PM- <b>XXYZZ</b> -593	825C-PM- <b>XXYZZ</b> -693	825C-PM- <b>XXYZZ</b> -893

45

### SOLENOID OPERATOR ▶

**XX Y ZZ\***

XX Voltage	Y Manual operator	ZZ Electrical connection
<b>11</b> 120/60, 110/50	<b>1</b> Non-locking	<b>JB</b> Rectangular connector
<b>12</b> 240/60, 220/50	<b>2</b> Locking	<b>JD</b> Rectangular connector with light
<b>22</b> 24/60, 24/50		<b>RA</b> Conduit 3/8" NPS
<b>59</b> 24 VDC (2.5 W)		<b>BA</b> Flying leads (18")
<b>87</b> 24 VDC (17.1 W)		
<b>61</b> 24 VDC (8.5 W)		

700

\* Other options available, see page 357.

900

82

### MANIFOLD END PLATE KITS (NPTF)\*

INT. PILOT - PART N°.	EXT. PILOT - PART N°.	MODELS USED WITH
M-08001-01-01	M-08001-02-01	3 com. port or 1 com. port models, stacks of 1 thru 16 valves
M-00005-01-01	M-00005-02-01	3 com. port or 1 com. port models, stacks of 17 or more valves

6300

6500

6600

\* Add letter **P** at end of part N°. for BSPP threads; **EXAMPLE** : M-08001-01-01P

Note : (1) end plate kit required per stack.

1300

### OPTIONS

- 811C-PM-111RA-192 - For 2 position dual pressure : replace by 2.
- 825C-PM-111RA-892 - For 3 position dual pressure, pressure center: replace by 7.

800

ISO 1  
ISO 2  
ISO 3  
MAC 125A  
MAC 250A  
MAC 500A

**TECHNICAL DATA**

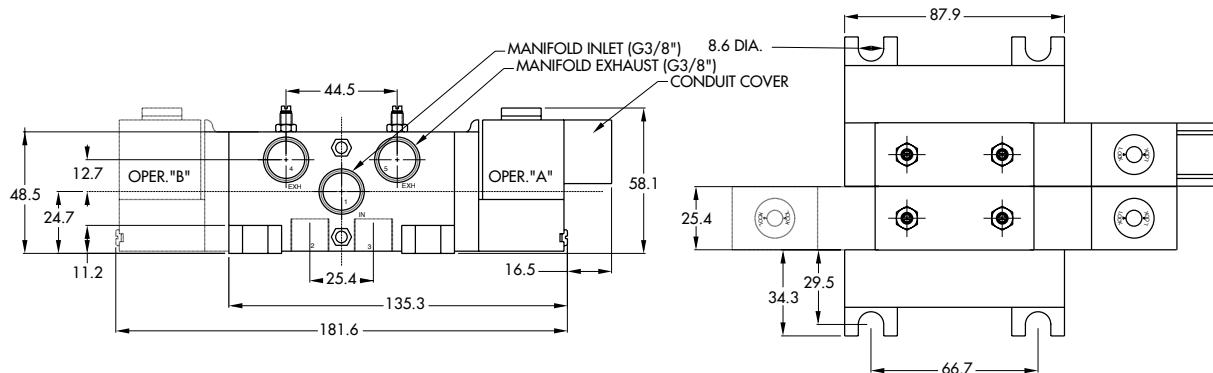
<b>Fluid :</b>	Compressed air, vacuum, inert gases		
<b>Pressure range :</b>	Internal pilot : single operator and 3 positions : 20-150 PSI	double operator : 10-150 PSI	
	External pilot : vacuum to 200 PSI		
<b>Pilot pressure :</b>	Single operator and 3 positions : 20-150 PSI Double operator : 10-150 PSI		
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
<b>Filtration :</b>	40 µ		
<b>Temperature range :</b>	0°F to 120°F (-18°C to 50°C)		
<b>Flow (at 6 bar, ΔP=1bar) :</b>	1/4" : (1.4 Cv), 3/8" : (1.4 Cv)		
<b>Coil :</b>	General purpose - class A wires - Continuous duty - Encapsulated		
<b>Voltage range :</b>	-15% to +10% of nominal voltage		
<b>Protection :</b>	Consult factory		
<b>Power :</b>	~ Inrush : 14.8 VA	Holding : 10.9 VA	
	= 1 to 17.1 W		
<b>Response times :</b>	24 VDC (8.5 W)	Energize : 8 ms	De-energize : 10 ms
	120/60	Energize : 5-11 ms	De-energize : 9-16 ms

- Spare parts :
- Solenoid operator (power ≥ 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
  - Pilot valve : PME-XYZZ, including seal 16337. • Mounting screw kit for pilot : N-08003.
  - Inlet isolator : N-08001 • Exhaust isolator (x2) : N-08002.

- Options :
- BSPP threads. • Dual inlet block: M-08003.

**DIMENSIONS**

Dimensions shown are metric (mm)



Function	Port size	Flow (Max)	Manifold mounting	Series
<b>5/2 - 5/3</b>	<b>1/4" - 3/8"</b>	<b>1.4 C<sub>v</sub></b>	stacking body with 3 common ports with common conduit	

### OPERATIONAL BENEFITS

- Balanced spool, immune to variations of pressure.
- Short stroke with high flow.
- The piston (booster) provides maximum shifting forces.
- Powerful return force thanks to the combination of mechanical and air springs.
- Bonded spool with minimum friction, shifting in a glass-like finished bore.
- Wiping effect eliminates sticking.
- Pilot valve with balanced poppet, high flow, short and consistent response times.
- Long service life.



35  
100  
200  
55  
56  
57  
58  
59

### HOW TO ORDER

Port size	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
<b>1/4" NPTF</b>	811C-PM- <b>XXYYZZ</b> -142	821C-PM- <b>XXYYZZ</b> -142	825C-PM- <b>XXYYZZ</b> -542	825C-PM- <b>XXYYZZ</b> -642	825C-PM- <b>XXYYZZ</b> -842
<b>3/8" NPTF</b>	811C-PM- <b>XXYYZZ</b> -143	821C-PM- <b>XXYYZZ</b> -143	825C-PM- <b>XXYYZZ</b> -543	825C-PM- <b>XXYYZZ</b> -643	825C-PM- <b>XXYYZZ</b> -843

45

### SOLENOID OPERATOR ▶

**XX Y ZZ\***

XX Voltage	Y Manual operator	ZZ Electrical connection
<b>11</b> 120/60, 110/50	<b>1</b> Non-locking	<b>DA</b> Common conduit
<b>12</b> 240/60, 220/50	<b>2</b> Locking	
<b>22</b> 24/60, 24/50		
<b>59</b> 24 VDC (2.5 W)		
<b>87</b> 24 VDC (17.1 W)		
<b>61</b> 24 VDC (8.5 W)		

700  
900  
82

\* Other options available, see page 357.

MODIFICATIONS		
MOD. N°	DESCRIPTION	MODEL AVAILABILITY
<b>0387</b>	Indicator light 24 VDC	
<b>0295</b>	Indicator light 120 V/60/50	Single & double solenoid
<b>0296</b>	Indicator light 240 V/60/50	

6300  
6500  
6600

**TO ORDER** - Add the appropriate modification number after the valve number; **EXAMPLE** : 811C-PM-111DA-142 **MOD 0295**

MANIFOLD END PLATE KITS (NPTF)*		
INT. PILOT - PART N°.	EXT. PILOT - PART N°.	MODELS USED WITH
M-08002-01-01	M-08002-02-01	Com. conduit models, stacks of 1 thru 16 valves
M-00007-01-01	M-00007-02-01	Com. conduit models, stacks of 17 or more valves

1300  
800

\* Add letter **P** at end of part N°. for BSPP threads; **EXAMPLE** : M-08002-01-01**P**

Note : (1) end plate kit required per stack.

### OPTIONS

811C-PM-111DA-142  
- For 2 position dual pressure : replace by 2.

825C-PM-111DA-842  
- For 3 position dual pressure, pressure center : replace by 7.

ISO 1  
ISO 2  
ISO 3  
MAC 125A  
MAC 250A  
MAC 500A

### TECHNICAL DATA

<b>Fluid :</b>	Compressed air, vacuum, inert gases		
<b>Pressure range :</b>	Internal pilot : single operator and 3 positions : 20-150 PSI	double operator : 10-150 PSI	
	External pilot : vacuum to 200 PSI		
<b>Pilot pressure :</b>	Single operator and 3 positions : 20-150 PSI Double operator : 10-150 PSI		
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
<b>Filtration :</b>	40 μ		
<b>Temperature range :</b>	0°F to 120°F (-18°C to 50°C)		
<b>Flow (at 6 bar, ΔP=1bar) :</b>	1/4" : (1.4 C <sub>v</sub> ), 3/8" : (1.4 C <sub>v</sub> )		
<b>Coil :</b>	General purpose - class A wires - Continuous duty - Encapsulated		
<b>Voltage range :</b>	-15% to +10% of nominal voltage		
<b>Protection :</b>	Consult factory		
<b>Power :</b>	~ Inrush : 14.8 VA	Holding : 10.9 VA	
	= 1 to 17.1 W		
<b>Response times :</b>	24 VDC (8.5 W)	Energize : 8 ms	De-energize : 10 ms
	120/60	Energize : 5-11 ms	De-energize : 9-16 ms

#### Spare parts :

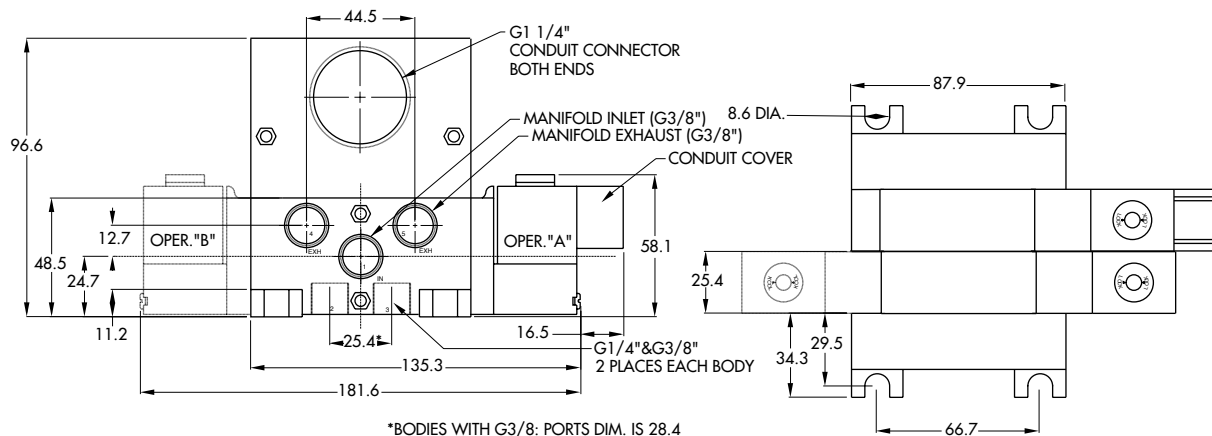
- Solenoid operator (power ≥ 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XXYZZ, including seal 16337. • Mounting screw kit for pilot : N-08003.
- Inlet isolator : N-08001 • Exhaust isolator (x2) : N-08002.

#### Options :

- BSPP threads. • Dual inlet block: M-00014.

### DIMENSIONS

Dimensions shown are metric (mm)



Function	Port size	Flow (Max)	Manifold mounting	Series
5/2 - 5/3	1/4" - 3/8"	1.4 C <sub>v</sub>	stacking body with 3 common ports with C. C. & integral exh. F. C.	

**OPERATIONAL BENEFITS**

- Balanced spool, immune to variations of pressure.
- Short stroke with high flow.
- The piston (booster) provides maximum shifting forces.
- Powerful return force thanks to the combination of mechanical and air springs.
- Bonded spool with minimum friction, shifting in a glass-like finished bore.
- Wiping effect eliminates sticking.
- Pilot valve with balanced poppet, high flow, short and consistent response times.
- Long service life.



35  
100  
200  
55  
56  
57  
58  
59

**HOW TO ORDER**

Port size	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
1/4" NPTF	811C-PM- <b>XXYZZ</b> -162	821C-PM- <b>XXYZZ</b> -162	825C-PM- <b>XXYZZ</b> -562	825C-PM- <b>XXYZZ</b> -662	825C-PM- <b>XXYZZ</b> -862
3/8" NPTF	811C-PM- <b>XXYZZ</b> -163	821C-PM- <b>XXYZZ</b> -163	825C-PM- <b>XXYZZ</b> -563	825C-PM- <b>XXYZZ</b> -663	825C-PM- <b>XXYZZ</b> -863

45

SOLENOID OPERATOR ➤

**XX Y ZZ\***

XX Voltage	Y Manual operator	ZZ Electrical connection
11 120/60, 110/50	1 Non-locking	DA Common conduit
12 240/60, 220/50	2 Locking	
22 24/60, 24/50		
59 24 VDC (2.5 W)		
87 24 VDC (17.1 W)		
61 24 VDC (8.5 W)		

700  
900  
82

\* Other options available, see page 357.

MODIFICATIONS		
MOD. N°	DESCRIPTION	MODEL AVAILABILITY
0387	Indicator light 24 VDC	Single & double solenoid
0295	Indicator light 120 V/60/50	
0296	Indicator light 240 V/60/50	

6300  
6500  
6600

**TO ORDER** - Add the appropriate modification number after the valve number; **EXAMPLE** : 811C-PM-111DA-162 **MOD 0295**

MANIFOLD END PLATE KITS (NPTF)*		
INT. PILOT - PART N°.	EXT. PILOT - PART N°.	MODELS USED WITH
M-08002-01-01	M-08002-02-01	Com. conduit models, stacks of 1 thru 16 valves
M-00007-01-01	M-00007-02-01	Com. conduit models, stacks of 17 or more valves

1300  
800

\* Add letter **P** at end of part N°. for BSPP threads; **EXAMPLE** : M-08002-01-01**P**  
Note : (1) end plate kit required per stack.

**OPTIONS**

811C-PM-111DA-162

- For 2 position dual pressure : replace by 2.

825C-PM-111DA-862

- For 3 position dual pressure, pressure center : replace by 7.

ISO 1  
ISO 2  
ISO 3  
MAC 125A  
MAC 250A  
MAC 500A

### TECHNICAL DATA

<b>Fluid :</b>	Compressed air, vacuum, inert gases		
<b>Pressure range :</b>	Internal pilot : single operator and 3 positions : 20-150 PSI	double operator : 10-150 PSI	
	External pilot : vacuum to 200 PSI		
<b>Pilot pressure :</b>	Single operator and 3 positions : 20-150 PSI Double operator : 10-150 PSI		
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
<b>Filtration :</b>	40 µ		
<b>Temperature range :</b>	0°F to 120°F (-18°C to 50°C)		
<b>Flow (at 6 bar, ΔP=1bar) :</b>	1/4" : (1.4 C <sub>v</sub> ), 3/8" : (1.4 C <sub>v</sub> )		
<b>Coil :</b>	General purpose - class A wires - Continuous duty - Encapsulated		
<b>Voltage range :</b>	-15% to +10% of nominal voltage		
<b>Protection :</b>	Consult factory		
<b>Power :</b>	~ Inrush : 14.8 VA	Holding : 10.9 VA	
	= 1 to 17.1 W		
<b>Response times :</b>	24 VDC (8.5 W)	Energize : 8 ms	De-energize : 10 ms
	120/60	Energize : 5-11 ms	De-energize : 9-16 ms

#### Spare parts :

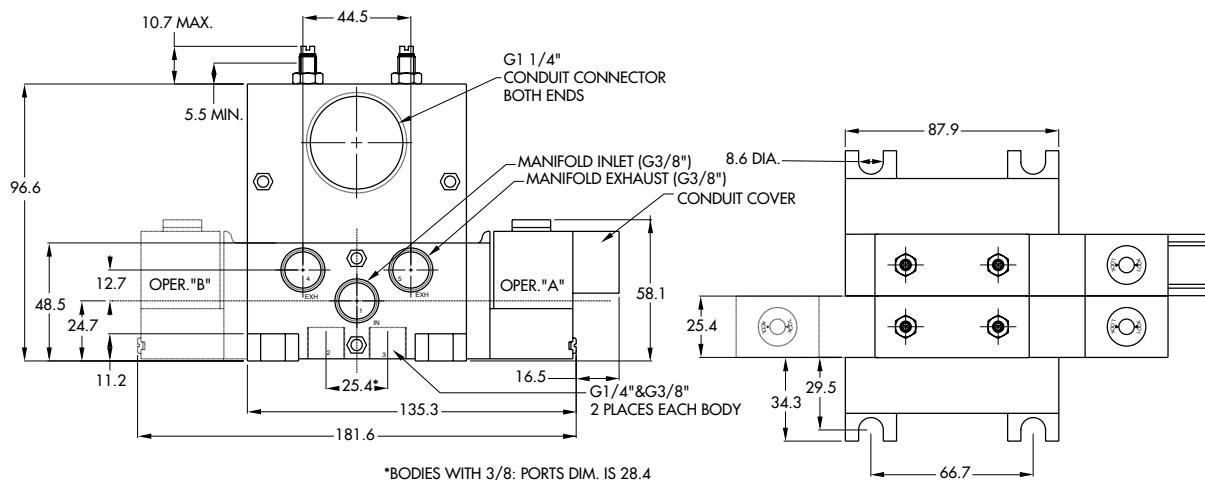
- Solenoid operator (power ≥ 4 W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XXYZZ, including seal 16337. • Mounting screw kit for pilot : N-08003.
- Inlet isolator : N-08001 • Exhaust isolator (x2) : N-08002.

#### Options :

- BSPP threads. • Dual inlet block: M-00014.

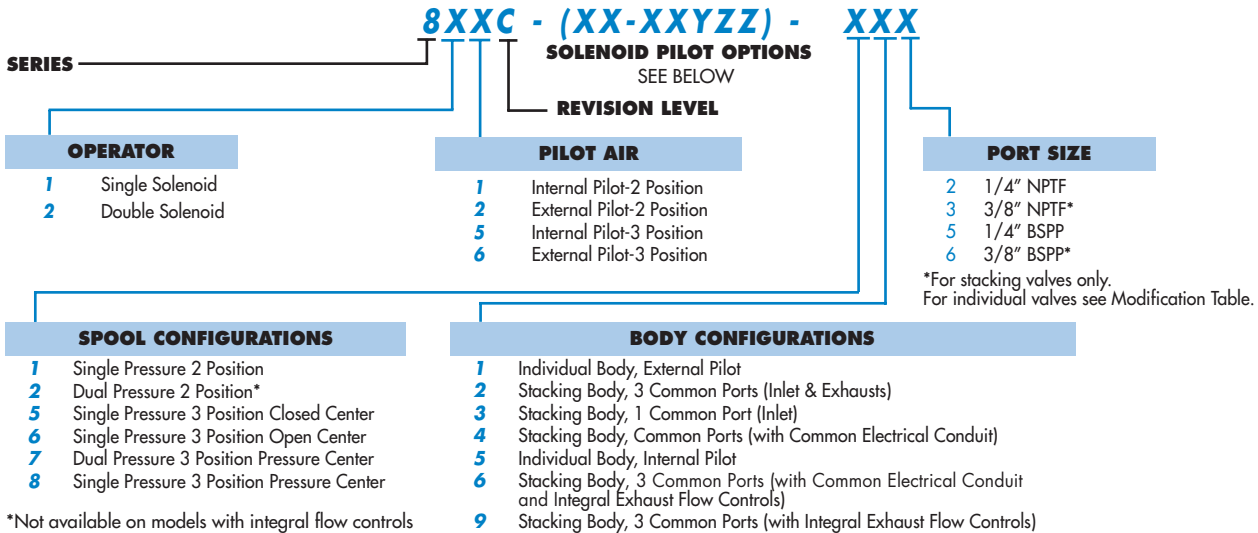
### DIMENSIONS

Dimensions shown are metric (mm)

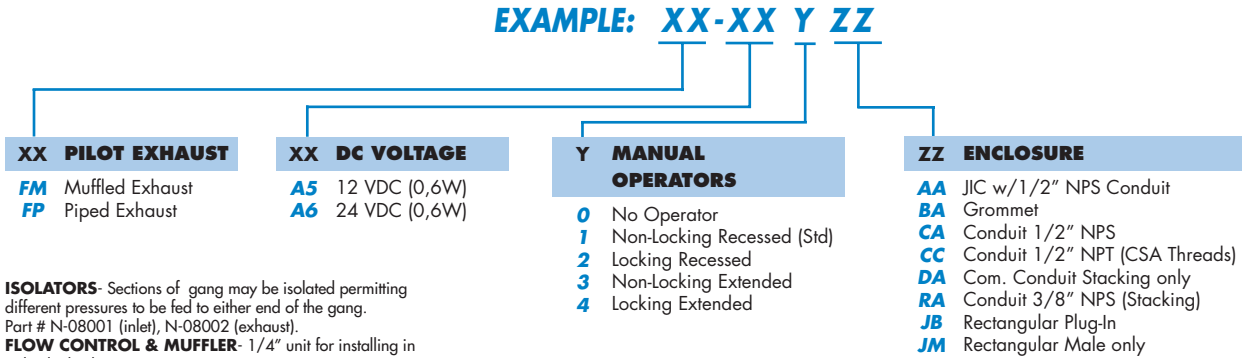


**HOW TO ORDER**

**BODY OPTIONS**



**SOLENOID PILOT OPTIONS**



**ISOLATORS**- Sections of gang may be isolated permitting different pressures to be fed to either end of the gang. Part # N-08001 (inlet), N-08002 (exhaust).

**FLOW CONTROL & MUFFLER**- 1/4" unit for installing in individual exhaust ports. Part #10951.

**DUAL INLET PRESSURE BLOCK**- For 3 common ports or 1 common port stacking valves. Provides 2 additional inlet pressure ports to a stack. Part #M-08003. For Common Conduit Valves. Part #M-00014.

**ACCESSORIES**

MANIFOLD END PLATE KITS (NPTF)*		
INT. PILOT PART NO.	EXT. PILOT PART NO.	MODELS USED WITH
M-08001-01-01	M-08001-02-01	3 com. port or 1 com. port models, stacks of 1 thru 16 valves.
M-08002-01-01	M-08002-02-01	Com. conduit models, stacks of 1 thru 16 valves.
M-00005-01-01	M-00005-02-01	3 com. port or 1 com. port models, stacks of 17 or more valves.
M-00007-01-01	M-00007-02-01	Com. conduit models, stacks of 17 or more valves.

\*Add letter P at end of part number for BSPP threads;  
EXAMPLE: M-08001-01-01P

**MODIFICATIONS**

MOD. NO.	DESCRIPTION	MODEL AVAILABILITY
0358	3/8" Inlet & Cylinder Ports	Individual Valves

**Codification table for voltages / Manual operator / Electrical connection / Wire length**

VALVE CODE ► **- XX Y ZZ (-VV)**  
**1 2 3 4**

OPTIONS AVAILABLE FOR	OPTIONS AVAILABLE FOR
<ul style="list-style-type: none"> <li>- valves type 100 Series</li> <li>- pilot valves "CNOMO"</li> </ul>	<ul style="list-style-type: none"> <li>- valves type 200 Series</li> </ul>
<ul style="list-style-type: none"> <li>- Pilot operated valves with pilots type 100 Series</li> <li>Series : 55 - 56 - 700 - 800 - 900</li> <li style="padding-left: 20px;">- 6300 - 6500 - 6600 - 1300</li> <li style="padding-left: 20px;">- ISO 1 - ISO 2 - ISO 3.</li> <li style="padding-left: 20px;">- MAC 125 - MAC 250 - MAC 500</li> </ul>	<ul style="list-style-type: none"> <li>- pilot operated valves with pilots type 200 Series</li> <li>Series : 200 - 57 - 58 - 59.</li> </ul>
<ul style="list-style-type: none"> <li>- Pilot operated valves with pilots "CNOMO"</li> <li>Series : ISO1 - ISO2 - ISO3</li> </ul>	



Used on valve series: 100, 55, 56, 700, 800, 900, 6300, 6500, 6600, 1300, MVA1C, MVA2B, MVA3B, MAC125, MAC250, MAC500.

Used on valve series: 200, 57, 58, 59.

1. VOLTAGE (100 Serie type coil)		1. VOLTAGE (200 Serie type coil)	
- XX Y ZZ	VOLTAGE	- XX Y ZZ	VOLTAGE
11	120/60, 110/50	11	120/60, 110/50, 24 VDC (6 W)
12	240/60, 220/50	12	240/60, 220/50
13	100/60, 100/50	13	100/60, 100/50
15	200/60, 200 /50	14	200/60, 200/50
16	10/60	20	6/60
20	6/60	21	12/60
21	12/50, 12/60	22	24/60, 24/50
22	24/60, 24/50	23	32/60, 32/50
23	32/60, 32/50	24	48/60, 42/50
24	48/60, 42/50	25	240/50
26*	380/50, 440/50, 440/60, 480/60	26	480/60, 440/50
29	220/60	27	127/60
34	127/50, 120/50	28	415/50
35	48/50	29	220/60
36	16/60	30	380/50
B1	24/50	31	550/60, 550/50
50	24 VDC (6 W)	32	120/60, 110/50
51	24 VDC (4 W)	33	600/60
54	12 VDC (4 W)	34	127/50
55	12 VDC (6 W)	35	48/50
57	12 VDC (2.5 W)	50	24 VDC (6 W)
59	24 VDC (2.5 W)	51	24 VDC (4.5 W)
60	12 VDC (8.5 W)	52	24 VDC (2.5 W)
61	24 VDC (8.5 W)	53	24 VDC (1.0 W)
64	6 VDC (6 W)	55	12 VDC (6 W)
65	32 VDC (7 W)	57	12 VDC (2.5 W)
66	48 VDC (5.8 W)	58	48 VDC (2.5 W)
67	64 VDC (7.5 W)	60	12 VDC (9.5 W)
68	120 VDC (6.4 W)	61	24 VDC (8.5 W)
69*	220 VDC (8.7 W), 250 VDC (11.2 W)	64	6 VDC (8.5 W)
75	90 VDC (8.8 W)	65	32 VDC (10 W)
76*	100 VDC (6.9 W)	66	48 VDC (11.5 W)
84*	125 VDC (10.9 W)	67	64 VDC (10.5 W)
87*	24 VDC (17.1 W)	68	120 VDC (12.3 W)
88*	12 VDC (17.4 W)	69	250 VDC (9.2 W)
89*	36 VDC (18.8 W)	71	8 VDC (8.2 W)
90	28 VDC (8.2 W)	72	24 VDC (12 W)
91*	6 VDC (10.6 W)	73	198 VDC (10 W)
92	190 VDC (6.5 W)	74	72 VDC (11.3 W)
94	3 VDC (7 W)	75	90 VDC (11.3 W)
95	38 VDC (6.4 W)	76	100 VDC (9 W)
A1	24 VDC (1 W)	77	220 VDC (10 W), 230 VDC (11.6 W)
A2	12 VDC (1 W)	78*	24 VDC (24 W)
A3	9 VDC (1 W)	80	55 VDC (10.6 W)
		82	170 VDC (11.1 W)
		83	15 VDC (8.1 W)
		84	125 VDC (10 W)
		86	36 VDC (11 W)
		93*	12 VDC (24 W)

MOD. DD01 : Protection diode (DC) - MAX. 8.5W

MOD. MOV1 : Protection varistor (AC) - MAX. 8.5W

\* Voltages are CLSF only

**2. MANUAL OPERATOR (Common options for 100 & 200 Series type coils)**

- XX Y ZZ	MANUAL OPERATOR
<b>0</b>	No operator
<b>1</b>	Non-locking recessed
<b>2</b>	Locking recessed
<b>3</b>	Non-locking extended
<b>4</b>	Locking extended

<b>5*</b>	No Operator with Light
<b>6*</b>	Non-Locking Recessed with Light
<b>7*</b>	Locking Recessed with Light
<b>8*</b>	Non-Locking Extended with Light
<b>9*</b>	Locking Extended with Light

\* Lights used with "AA" electrical connection

**3. ELECTRICAL CONNECTION (100 Serie type coil)**

- XX Y ZZ	ELECTRICAL CONNECTION
<b>AA</b>	Wiring box with 1/2" NPS conduit
<b>BA</b>	Flying leads
<b>CA</b>	1/2" NPS conduit
<b>CC</b>	1/2" NPT conduit
<b>FA</b>	Military type 2 PIN
<b>GA</b>	Military type 3 PIN
<b>HA</b>	AA with ground wire
<b>JA*</b>	Square connector
<b>JB</b>	Rectangular connector
<b>JC*</b>	Square connector with light
<b>JD</b>	Rectangular connector with light
<b>JE</b>	Square connector on top (ISO2, ISO3)
<b>JF</b>	Rectangular connector on top (ISO1, ISO2, ISO3)
<b>JG</b>	JE with light
<b>JH</b>	JF with light
<b>JJ*</b>	Square connector, male only
<b>JM</b>	Rectangular connector, male only
<b>MA</b>	Electrical common conduit (100 Series-Manifold/900 Series)
<b>MB</b>	Electrical common conduit (100 Series-Stacking/700 Series)
<b>NA</b>	CA with ground wire
<b>NC</b>	CC with ground wire
<b>RA</b>	3/8" NPS conduit

\* Not to be used with 100, 800 and 900 Series manifold mounting

**3. ELECTRICAL CONNECTION (200 Serie type coil)**

- XX Y ZZ	ELECTRICAL CONNECTION
<b>AA</b>	Wiring box with 1/2" NPS conduit
<b>BA</b>	Flying leads
<b>CA</b>	1/2" NPS conduit
<b>CC</b>	1/2" NPT conduit
<b>EA</b>	Explosion proof (200 Series)
<b>EA</b>	Explosion proof (57, 58 & 59 Series)
<b>FA</b>	Military type 2 PIN
<b>GA</b>	Military type 3 PIN
<b>HA</b>	AA with ground wire
<b>JA*</b>	Square connector
<b>JC</b>	Square connector with light
<b>JJ</b>	Square connector, male only
<b>NA</b>	CA with ground wire
<b>NC</b>	CC with ground wire

**4. COIL WIRE LENGTH (Common options for 100 & 200 Serie type coils)**

<b>- XX Y ZZ (-VV)</b>	<b>WIRE LENGTH</b>
<b>AA</b>	18"
<b>AB</b>	24"
<b>AD</b>	36"
<b>AE</b>	48"
<b>AF</b>	72"
<b>AG</b>	6"
<b>AR</b>	12"
<b>AU</b>	120"
<b>BA</b>	60"
<b>BB</b>	144"
Series 6000 : wire length, from the base	
<b>MOD L024</b>	24"
<b>MOD L036</b>	36"
<b>MOD L048</b>	48"
<b>MOD L060</b>	60"
<b>MOD L072</b>	72"
<b>MOD L120</b>	120"