





The MAC 125 series is designed to interface with the Ford/Chrysler standard base. This series is available in the following configurations:

- single or double solenoid
- 2 or 3 position
- single or dual pressure
- with or without indicator lights
- various electrical connections and manual operations

Valves and bases must be ordered separately. These may be assembled prior to shipping by adding the suffix -9 after the valve code.

**EXAMPLE**: MAC 125A-V1B1-PM-111DA-9 MAC 125A-B21A-9

### **SPECIAL APPLICATION INSTRUCTIONS**

The 'A' cylinder port is normally open. On a spring return valve, the spring is the 'A' operator, the solenoid the 'B' operator. Energizing the 'B' operator pressurizes the 'B' port; energizing the 'A' operator pressurizes the 'A' port.

### **EXTERNAL PILOT APPLICATIONS**

An external pilot supply is only required when the main valve pressure is less than 25 psi on single solenoid or 3 position valves and less than 10 psi on double solenoid 2 position valves. Pipe the external pilot supply to the External Pilot Port supplied in the valve base or manifold.

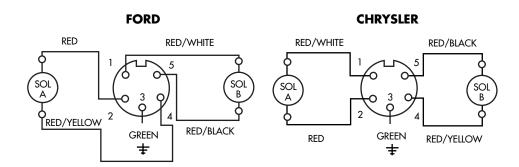
### **VACUUM APPLICATIONS**

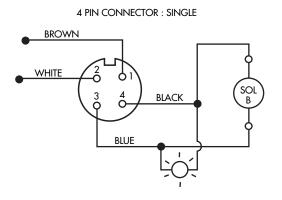
(2-Pos. Valves Only) - Use an External Pilot model as described above and also connect the vacuum source to the Exhaust Port and leave the Inlet Port open to atmosphere.

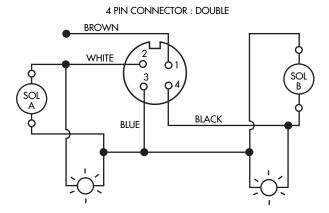
The Inlet port may be connected to a pressure source to provide a selector application (vacuum/pressure).

#### **SELECTOR APPLICATIONS**

Use an External Pilot Model as described above if both pressures are below the minimum, otherwise use an Internal Pilot Model and connect the higher pressure to the Inlet Port and the lower to Port EA or EB depending on which cylinder port is to be active.









Function	Port size	Flow (Max)	Individual mounting & Manifold mounting	Series
5/2 - 5/3	1/4" - 3/8"	2.5 C <sub>V</sub>	valve only	

### OPERATIONAL BENEFITS

- 1. Balanced spool, immune to variations of pressure.
- 2. Short stroke with high flow.
- 3. High shifting forces.
- 4. Checked accumulator guarantees maximum pilot
- 5. Powerful return force thanks to the combination of mechanical and air springs.
- 6. Bonded spool with minimum friction, shifting in a glass-like finished bore.
- 7. Wiping effect eliminates sticking.
- 8. Pilot valve with balanced poppet, high flow, short and consistent response times.



35

100

200

55

56 **57** 

58

59

45

700

900

82

6300

6500

6600

1300

800

**ISO** 1 **ISO 2** 

## HOW TO ORDER

SINGLE PRESSURE VALVES (WITH LIGHTS)

Electrical connector	Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center
		B A A EBPEA	B A A EBPEA	B A A A A A A A A A A A A A A A A A A A	B A A A A A A A A A A A A A A A A A A A
5 PIN	Internal	MAC125A-V1A2-PM-xxy-DA	MAC125A-V2A2-PM-xxy-DA	MAC125A-V5A2-PM-xxy-DA	MAC125A-V6A2-PM- <b>xxy</b> -DA
(Ford wired)	External	MAC125A-V1A4-PM-xxy-DA	MAC125A-V2A4-PM-xxy-DA	MAC125A-V5A4-PM-xxy-DA	MAC125A-V6A4-PM-xxy-DA
5 PIN	Internal	MAC125A-V1B2-PM-xxy-DA	MAC125A-V2B2-PM-XXY-DA	MAC125A-V5B2-PM-xxy-DA	MAC125A-V6B2-PM-xxy-DA
(Chrysler wired)	External	MAC125A-V1B4-PM-xxy-DA	MAC125A-V2B4-PM-xxy-DA	MAC125A-V5B4-PM-xxy-DA	MAC125A-V6B4-PM-xxy-DA
4 PIN	Internal	MAC125A-V1G2-PM-xxy-DA	MAC125A-V2G2-PM-xxy-DA	MAC125A-V5G2-PM-xxy-DA	MAC125A-V6G2-PM-xxy-DA
MICRO	External	MAC125A-V1G4-PM-XXY-DA	MAC125A-V2G4-PM-xxy-DA	MAC125A-V5G4-PM-xxy-DA	MAC125A-V6G4-PM-xxy-DA
3 PIN	Internal	MAC125A-V1E2-PM-xxy-DA	MAC125A-V2E2-PM-XXY-DA	MAC125A-V5E2-PM-xxy-DA	MAC125A-V6E2-PM-xxy-DA
(Ford wired)	External	MAC125A-V1E4-PM-xxy-DA	MAC125A-V2E4-PM-XXY-DA	MAC125A-V5E4-PM-xxy-DA	MAC125A-V6E4-PM-xxy-DA
5 PIN MICRO	Internal	MAC125A-V1F2-PM-xxy-DA	MAC125A-V2F2-PM-xxy-DA	MAC125A-V5F2-PM-xxy-DA	MAC125A-V6F2-PM-xxy-DA
(Chrysler wired)	External	MAC125A-V1F4-PM- <b>xxy</b> -DA	MAC125A-V2F4-PM-XXY-DA	MAC125A-V5F4-PM- <b>xxy</b> -DA	MAC125A-V6F4-PM-XXY-DA

# **DUAL PRESSURE VALVES (WITH LIGHTS)**

Electrical connector	Pilot air	5/2 Single operator	5/2 Double operator	5/3 Pressure center
		B A		B A A A A A A A A A A A A A A A A A A A
5 PIN (Ford wired)	External	MAC125A-V3A4-PM-xxy-DA	MAC125A-V4A4-PM- <b>xxy</b> -DA	MAC125A-V7A4-PM-xxy-DA
5 PIN (Chrysler wired)	External	MAC125A-V3B4-PM- <b>xxy</b> -DA	MAC125A-V4B4-PM-xxx-DA	MAC125A-V7B4-PM-xxy-DA
4 PIN MICRO	External	MAC125A-V3G4-PM-xxy-DA	MAC125A-V4G4-PM- <b>xxy</b> -DA	MAC125A-V7G4-PM-xxy-DA
3 PIN (Ford wired)	External	MAC125A-V3E4-PM-XXY-DA	MAC125A-V4E4-PM-xxy-DA	MAC125A-V7E4-PM-xxy-DA
5 PIN MICRO (Chrysler wired)	External	MAC125A-V3F4-PM-xxy-DA	MAC125A-V4F4-PM-xxy-DA	MAC125A-V7F4-PM-xxy-DA

XX Y DA \*

XX	Voltage		
11	120/60, 110/50		
12	240/60, 220/50		
22	24/60, 24/50		
59	24 VDC (2.5 W)		
87	24 VDC (17.1 W)		
61	24 VDC (8.5 W)		
* 0.1	e 4.11	257	

Other options available, see page 35/.	
Note: Valves are supplied without base. For base code see page 291.	

**Manual operator** 

Non-locking Locking

**MAC 250A MAC 500A** 







## TECHNICAL DATA

Fluid: Compressed air, vacuum, inert gases Internal pilot: single operator and 3 positions: 25-150 PSI double operator: 10-150 PSI Pressure range: External pilot: vacuum to 150 PSI Pilot pressure: Single operator and 3 positions: 25-150 PSI Double operator: 10-150 PSI **Lubrication:** Not required, if used select a medium aniline point lubricant (between 180°F to 210°F) Filtration: Temperature range: 0°F to 120°F (-18°C to 50°C) Flow (at 6 bar,  $\Delta P = 1 bar$ ): 1/4": (2.2 C<sub>v</sub>), 3/8": (2.5 C<sub>v</sub>) Coil: Epoxy encapsulated - class A wires - Continuous duty -15% to +10% of nominal voltage Voltage range: Protection: Consult factory Power: ~ Inrush : 14.8 VA Holding: 10.9 VA = 1 to 17.1 W

Spare parts:

- $\bullet$  Solenoid operator (power  $\geq 4$  W) : D1-XXAA, cover mounting screws 35206 and seal 16234.
- Pilot valve : PME-XXYZZ, including seal 16337. Pressure seal between valve and base : 16485
- Mounting screw valve to base (x3): 32296.

DIMENSIONS

Dimensions shown are metric (mm)

