

The MAC 83 series is a 4-way balanced spool valve piloted by a small direct operated 4-way solenoid pilot - a one-off in air valve manufacturing. The 4-way pilot means a low minimum operating pressure - no pistons or springs - and minimal resistance to shifting. The balanced design in the pilot means shifting forces are constantly high and response times are repeatable regardless of inlet pressure fluctuations. For more information regarding certifications (such as UL, CSA, RoHS and CE) please ask our team at Mac Valves Pacific.

Stock Part Number: 83A-AAD-DM-DDAJ-1JD

Function	Port size	Flow (Max)	Pressure Range	Individual Mounting
4/2, 4/3	1/4" - 3/8"	1.5 Cv	Vac. to 120PSI	Sub Base 'Plug-In'/'Non Plug-In'



83 SERIES

OPERATIONAL BENEFITS

- Balanced spool, immune to variations of pressure.
- Short stroke with high flow.
- The piston (booster) provides maximum shifting forces.
- 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.

83 SERIES VALVE & BODY OPTIONS

83A - $\begin{matrix} X & X & X \\ T & T & T \\ 1 & 2 & 3 \end{matrix}$ - XX - $\begin{matrix} R \\ D \end{matrix}$ XX X - X XX

1 - Spool Type

- 0 Base Only
- A Single Operator Single Pressure
- B Double Operator Single Pressure
- C Single Operator Dual Pressure
- D Double Operator Dual Pressure
- E 3 Position Closed Center
- F 3 Position Open Center
- G 3 Position Dual Pressure, Pressure Center
- M Single Operator Single Pressure w/ Memory Spring
- N Single Operator Dual Pressure w/ Memory Spring

2 - Internal/External Pilot

- A Internal Pilot
- B Internal Pilot Dual Pressure (supply from #5 port)
- D External Pilot from #14 End
- E External Pilot from #12 End

3 - Port Size And Thread Type

- 0 Valve Only
- C 1/4" BSPPL
- D 3/8" BSPPL

4 - Pilot Body

- DM Muffled Pilot Exhaust
- TM Muffled Pilot Exhaust

83 SERIES: DM SOLENOID PILOT OPTIONS

D $\begin{matrix} XX & X & - & X & XX \\ T & T & T & T \\ 1 & 2 & 3 & 4 \end{matrix}$

5 - Voltage

- | | |
|--------------------|--------------------|
| JA 120/60, 110/50 | JF 240/50 |
| JC 24/60, 24/50 | DA 24 VDC (54W) |
| DB 12 VDC (54W) | DE 12 VDC (12.7W)* |
| DF 24 VDC (12.7W)* | FE 12 VDC (24W) |
| FF 24 VDC (24W) | |

* MOD CLSF Only

6 - Lead Wire Length - Longer Options Available

- A 18" Coil leads
- J External plug-in lead

7 - Manual Operator

- | | |
|------------------------|----------------------------|
| 0 No operator | 1 Non-locking manual op. |
| 2 Locking manual op. | 3 Non-locking extended op. |
| 4 Locking extended op. | |

8 - Electrical Connector

- | | |
|--------------------------------------|---------------------------------|
| BA Grommet | BK Grommet with diode |
| BL Grommet with M.O.V. | CA Conduit 1/2" |
| JB Rectangular plug-in - No Light | JD Rectangular plug-in w/light |
| JM Rectangular male only | KA Mini plug-in |
| KB Mini plug-in w/ diode | KC Mini plug-in w/ M.O.V. |
| KD Mini plug-in w/ light | KE Mini plug-in w/light & diode |
| KF Mini plug-in w/ light & M.O.V. | |
| KG Mini plug-in w/ LED light & diode | |

Complete Pilot Valve

- DMB-DXXX-XXX-1 Pilot Valve



83 SERIES - SINGLE REMOTE AIR

83A - $\begin{matrix} \text{X} & \text{X} & \text{X} & \text{DM} & \text{RA1} & \text{X} \\ \text{1} & \text{2} & \text{3} & \text{4} & \text{5} & \text{6} \end{matrix}$

1 - Spool Type

- 0 Base Only
- A Single Operator Single Pressure
- C Single Operator Dual Pressure
- M Single Operator Single Pressure with Memory Spring
- N Single Operator Dual Pressure with Memory Spring

2 - Internal/External Pilot

- A Internal Pilot
- B Internal Pilot Dual Pressure (supply from #5 port)
- D External Pilot from "14" End
- E External Pilot from "12" End

3 - Cylinder Port Size And Thread Type

- 0 Valve Only
- C 1/4" BSPPL
- D 3/8" BSPPL

4 - Pilot Body

- DM Muffled Exhaust

5 - Remote Pilot Operator

- RA1 Pilot Operator

6 - Pilot Port Size and Thread Type

- 4 1/8" BSPPL

83 SERIES - DOUBLE REMOTE AIR

83A - $\begin{matrix} \text{X} & \text{X} & \text{X} & \text{RA} \\ \text{1} & \text{2} & \text{3} & \end{matrix}$

1 - Spool Type

- 0 Base Only
- B Double Op. Sgls. Prs.
- D Double Op. Dual Prs.
- E 3 Position Closed Center
- F 3 Position Open Center
- G Dual Pressure Pressure Center

2 - External Pilot

- F Remote Air

3 - Port Size & Thread Type

- 0 Valve Only
- C 1/4" BSPPL
- D 3/8" BSPPL

83 SERIES - CIRCUIT BAR (EBM)

EBM83A - $\begin{matrix} \text{XX} & \text{X} & \text{X} & \text{X} & \text{X} & \text{XX} & \text{9} \\ \text{1} & \text{2} & \text{3} & \text{4} & \text{5} & & \end{matrix}$

1 - Spacing

- 00 254mm Spacing

2 - Configuration

- A Side Port
- B Bottom Port
- C Regulator w/Bottom Ports

3 - Style

- A Standard Bar Internal Pilot
- B Standard Bar External Pilot

4 - Port Size & Thread Type

- D 1/8" BSPPL
- E 1/4" BSPPL

5 - Stations

- Number of Stations (02, 03, 04, etc.)

Note: Regulators priced separately