

Patents and Patents Pending

FOR CIRCUIT BAR® VERSION OF THIS SERIES, SEE SECTION E.

BODY OPTIONS
35A - X X X - (DXXX - XXX) - SOLENOID OPTIONS
 RA1X - REMOTE PILOT AIR OPERATOR (SEE T-4)
 SEE BELOW

BODY TYPE

- 0 - NO VALVE BODY
- **INLINE** -
- A - INDIVIDUAL INLINE
- C - INDIV. INLINE W/2 #10-32 PORTS IN BACK
- D - INDIV. INLINE W/2 MANIFOLD MOUNT PORTS
- **MANIFOLD** -
- B - MANIFOLD VALVE (UNIVERSAL POPPET)
- E - MANIFOLD VALVE (N.C. ONLY POPPET)
- F - MAN. VALVE W/GAGE PORT (UNIVERSAL POPPET)
- G - MAN. VALVE W/GAGE PORT (N.C. ONLY POPPET)
- H - NO BODY BLANK STATION
- **STACKING** -
- S - STACKING BODY
- T - STACKING BODY W/ BOTTOM INLET

PORT SIZE

- 0 - MANIFOLD BODY ONLY OR REGULATOR ONLY
- A - 1/8" NPT
- B - #10-32 UNF (STACKING & MANIFOLD)
- C - 1/8" BSPPL
- D - M5 (METRIC) (STACKING & MANIFOLD)
- E - 1/8" BSPTR

MANIFOLD WITH BOTTOM CYL. PORT

- F - 1/8" NPT
- G - #10-32 UNF
- H - 1/8" BSPPL
- J - M5 (METRIC)
- K - 1/8" BSPTR

VALVE FUNCTION/MANIFOLD TYPE

- 0 - NO MANIFOLD BASE
- A - UNIVERSAL 3-WAY INLINE
- B - 3 WAY N.C. ONLY INLINE/STACKING
- C - N.C. STACKING UNIVERSAL POPPET
- D - N.O. STACKING UNIVERSAL POPPET
- E - N.C. MANIFOLD
- F - N.O. MANIFOLD
- G - N.C. MANIFOLD W/ REGULATOR SLOTTED STEM
- H - N.O. MANIFOLD W/ REGULATOR SLOTTED STEM
- J - N.C. MANIFOLD W/ REGULATOR & ADJ-KNOB
- K - N.O. MANIFOLD W/ REGULATOR & ADJ-KNOB
- L - REGULATOR ONLY SLOTTED STEM
- M - REGULATOR ONLY W/ ADJ-KNOB
- N - N.C. MANIFOLD CASCADE TYPE
- P - N.C. MANIFOLD W/ REGULATOR CASCADE TYPE
- R - N.C. MANIFOLD W/ REGULATOR-ADJ/KNOB (CASCADE)
- S - N.C. MANIFOLD W/ REGULATOR LOCKING STEM
- T - N.O. MANIFOLD W/ REGULATOR LOCKING STEM
- U - REGULATOR ONLY W/LOCKING STEM

SOLENOID OPTIONS

D X X X - X X X

For regulator options & dimensions, see page C-28

COIL

AA	120/60, 110/50
AB	240/60, 220/50
AC	24/50-60
AF	240/50
DA	24VDC(5.4w)
DB	12VDC(5.4w)
DE	12VDC(12.7w)
DF	24VDC(12.7w)
FA	12VDC(1.8w)
FB	24VDC(1.8w)
FE	12VDC(2.4w)
FF	24VDC(2.4w)

LEAD LENGTH

A	18" Leads
B	24" Leads
C	36" Leads
D	48" Leads
E	72" Leads
J	External Plug-In

Other AC & DC Voltages & Wattages Available - Consult Factory

*NOTE: These wattages available as Mod. CLSF only

MANUAL OPERATOR

0	No Operator
1	Non-Locking Recessed
2	Locking Recessed
3	Non-Locking Extended
4	Locking Extended
5	No Operator w/Indicator Light (Stacking MA Cover)
6	Non-Locking Recessed w/Light on MA Cover
7	Locking Recessed w/Light on MA Cover
8	Non-Locking Extended w/Light on MA Cover
9	Locking Extended w/Light on MA Cover

† Available on individual valves and Circuit Bars® only.

ELECTRICAL CONNECTION

- BA - Grommet
- BK - Grommet w/Diode
- BL - Grommet w/M.O.V.
- †CA - Conduit 1/2" NPS
- †CM - Metal conduit 1/2" NPS
- †CN - Metal conduit w/grd. 1/2" NPS
- **EXTERNAL PLUG-IN VALVE** -
- FM - Plug-in (For ECD & ECE Bar)
- FN - Plug-in w/Diode (For ECD & ECE Bar)
- FP - Plug-in w/M.O.V. (For ECD & ECE Bar)
- †JB - Rectangular Plug-in (Inline Only)
- †JD - Rectangular Plug-in w/Light (Inline Only)
- †JM - Rectangular Male Only (Inline 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
- KJ - Mini Plug-in Male Only
- KK - Mini Plug-in Male Only w/Diode
- KL - Mini Plug-in Male Only w/M.O.V.
- TA - Dual Tabs (.110) w/Receptacles
- TB - Dual Tabs with Diode with Receptacles
- TD - Dual Tabs with Light with Receptacles
- TE - Dual Tabs with Light with Diode with Receptacles
- TJ - Dual Tabs (.110) Plain
- TK - Dual Tabs with Diode without Receptacles
- TM - Dual Tabs with Light without Receptacles
- TN - Dual Tabs with Light with Diode without Receptacles
- MA - Common Conduit (Stacking)

A10

CV - FLOW

35 SERIES	INLINE	STACKING	MANIFOLD BASE	CIRCUIT BAR™
Low watt DC 1.8 - 2.4 watts	0.08	0.12	0.09	0.08
Std. watt DC 5.4 watts	0.15	0.16	0.10	0.09
All Std. Ac & Hi-flow DC 5.4 - 7.2 watts	0.17	0.17	0.14	0.14
Hi-flow DC 7.3 - 9.2 watts MOD 1125	0.21	0.21	0.17	0.16
Hi-flow DC 9.3 - 24 watts & all AC MOD 1125	0.25	0.25	0.18	0.17

STACKING BODY ACCESSORIES

MANIFOLD END PLATE KIT - For each gang, one kit is required.

ISOLATORS-Sections of a gang may be isolated permitting different pressures to be fed to either end of the gang, or to optional bottom inlet port.

END PLATE KITS

Stacking Valves w/o common conduit	
M-35001-01	1/4" NPTF
M-35001-01P	1/4" BSPPL
Stacking Valves w/common conduit (MA)	
M-35002-01	1/4" NPTF
M-35002-01P	1/4" BSPPL
Manifold Valves	
M-35003-01	1/4" NPTF
M-35003-01P	1/4" BSPPL

ISOLATORS - When using isolators with common conduit, M-45004 spacer is required between conduit boxes

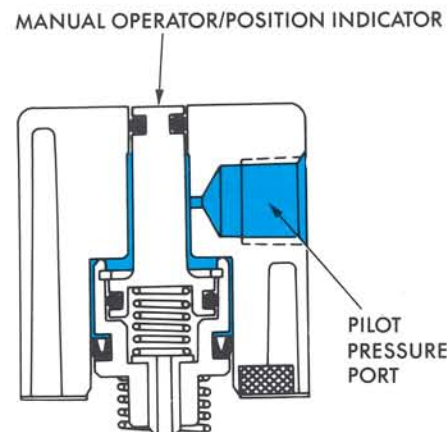
Stacking Valves	
N-35001	Inlet & Exhaust
N-35002	Inlet Only
N-35003	Exhaust Only
Manifold Valves	
N-35006	Inlet & Exhaust
N-35007	Inlet Only
N-35008	Exhaust Only

REMOTE AIR PILOT, PILOT OPERATED OPTIONS

A 100 type remote air pilot, pilot operator (shown on the right) is available on all valves using the 100 Series solenoid (All series in this catalog except 200, 57, 58, 59, or 1300). Any 100 Series solenoid can be replaced with this air pilot operator. When utilizing this operator the air pilot signal can be a minimum of 20 psig regardless of main valve pressures. The air pilot signal pressure shifts only the pilot valve poppet while internal (main valve) or external pilot pressure shifts the main valve spool. A manual operator and pilot spool position indicator is standard.

TO ORDER: Substitute the voltage, manual operator and enclosure options given in the catalog under each series with RA1X, X equaling the desired pilot port thread options shown on the right examples, 55B-12-PI-RA11, 56C-12-RA11, 711C-11-PI-RA11, 811C-PM-RA11-52, 911B-PM-RA11.
On 6000Series (6200-6300-6500) for both

single and double operated models use the Remote Air Pilot Model numbers given in the catalog and add 1X (X equaling desired port thread) after the RA e.g. 6212C-131-PM-RA11, 6312D-131-PM-RA11 or 6512B-131-PM-RA11. To order a solenoid operated valve with air pilot return, use the standard double solenoid valve model numbers and add MOD 410A to replace the "A" solenoid with the remote air pilot, pilot operator or MOD 410B to replace the "B" solenoid.



A similar remote air pilot is available for the 35, 45 & 82 Series. Use same code for pilot port options.

Examples: 35A-AAA-RA11
45A-AA1-RA11
82A-AB-BAA-TM-RA11

PILOT PORT OPTIONS	
1	1/8" NPTF
* 2	#10-32 UNF
* 3	M5 x 0.8
4	1/8" BSPP
5	1/8" BSPT

* Not available for the 35, 45 & 82 Series

PARTIAL LIST OF MODIFICATIONS

T4

MAC Valves is committed to designing and producing valves to our customers' specifications wherever practical and possible. Below is an abbreviated list of some of the more common modifications in general use. There are currently over 1,000 MOD numbers issued; if you do not find what you require in the list below, please consult the factory.

- DD01** - Replace standard coil with a coil containing a spike suppressing diode. For D.C. voltages only (polarity sensitive).
- MOV1** - Replace standard coil with a coil containing a spike suppressing M.O.V. For both AC & DC voltages (not polarity sensitive).
- DRA1** - Assemble single solenoid valves with a base or manifold wired to accommodate a double solenoid valve.
- CLSF** - Replace standard coil with a Class F rated coil.
- Lxxx** - Assemble valve or base assembly with special length lead wire (xxx = lead length in inches).
- T65C** - For ambient temperatures up to 150° F (65° C). Includes CLSF coil.
- TSA1** - Provide a terminal strip mounted on junction box cover plate.
- TSA2** - As TSA1 but with the base leads prewired to terminal strip.
- 0158** - Replace standard spring with heavy duty spring.
- 0233** - Assemble valve with solenoid operator on B end of valve instead of A end.
- 300B** - Install Brad Harrison 3 pin connector.
- 0300** - Install Brad Harrison 5 pin connector.
- 0389** - Rotate solenoid cover or mechanical operator 180 degrees from standard position.
- 408B** - Install filter screen in port 3 instead of port 1. (35, 100 or 200 series)
- 416Y** - DIN connectors prewired with 6 feet of SJO-3 yellow cord.
- 0446** - Replace standard spools and seals with viton spools and seals.
- 471L** - Coil wires to be 22 AWG.
- 0532** - Valves supplied with solenoid cover(s) and corrosion resistant parts for wash down applications.
- 0575** - Modify 55, 58 and 59 series for diverter application.
- 0650** - Grease all valve parts with FDA approved grease.
- 736A** - 100 series modified for higher flow, high speed 2 Way applications.
- 0819** - Extended meter in/out flow controls (45 series).
- 0850** - Lubricate valve with Dow Corning no.4 grease.

Consult "Precautions" on inside back cover before use, installation or service of MAC Valves.