92 Series MAConnect™ with Sub D

- Maximum of 20 solenoids can be powered by a single multi-pin connector.
- Up to 40 solenoids can be powered by means of a second multi-pin connector station.
- Left or right end connector adapters available.
- Maximum allowable coil amperage is 250 milliamps.
- Standard AC and DC voltage options available up to 240 volts.
- Current connection types available are: 9, 15, and 25 pin Sub-D connectors. 10, 16, 20, and 26 pin ribbon type connectors. 24 pin AMP CPC connector.
- Wash-down Sub-D connectors available (9, 15 and 25 pin) - designed to meet NEMA4 and IP65 ratings.
- Grounding of the stations and adapter is standard for 30 volt coils and above, optional for 30 volts and lower.
- Dielectric strength to ground in excess of 2000 volts.
92 Series MAConnect™ Remote Manifolds

• Easy hookup.

• Remote stacks are compatible with Sub D and ribbon style connectors, SM32 and SM16 serial modules.

• Primary and remote stacks can operate 20 solenoids in any configuration with Sub D connectors.

• Primary and remote stacks can operate 16 solenoids in any configuration with SM32 or SM16 serial modules.
Specifications
92 Series Valve

**Fluids:**
Compressed Air or Inert Gases

**Lubrication:**
Not required. If used, select a medium aniline point lubricant (between 180°F and 210°F)

**Safe Operating Temperature Range:**
0°F to 120°F (-18°C to 50°C)

**Pressure Range:**
- 20 to 120 PSI (Internal Pilot)
- Vacuum to 120 PSI (External Pilot)
- 35 to 120 PSI (3 Position, Internal/External Pilot)

**Electrical:**
- AC 120/60
  - Inrush current 7.6 Volt-amps (.063 amps)
  - Holding Current 4.8 Volt-amps (.04 amps)
- Maximum Coil Amperage - 250mA
- Maximum Voltage - 240VAC
- Dielectric Strength in Excess of 2000 Volts.

**Recommended Mating Sub D Cable Specifications**
- 3 Amp Current Rating per Conductor
- 300 Volt RMS, 105°C Insulation

**Amp CPC Connector Specifications**

**Receptacle:** (Mounted in MAConnect™ adapter block)

- Series 1 Amp CPC Connector
- Shell size 23
- 24 Male pins (1.57mm diameter)
- Five key configuration

**Recommended Plug**

- Amp part number 206837-1
- 5 key configuration
- Recommended receptacle contacts are size 16 type III+ (Accepts pin dia. 1.57mm)

Additional information can be obtained from Amp Catalog 82021
How to Order
92 Series MAConnect™
92 B - X X X - X X X - XX - D XX P - X XX

Valve Function
- Base Only
- Sgl. Oper. Dual Press.
- Dbl. Oper. Dual Press.
- 3 Pos. Closed Center
- 3 Pos. Open Center
- 3 Pos. Sgl. Press. Press. Center

Body Type and Exhaust Options
- Base Only
- Plug-In Std. Exhaust
- Plug-In w/exh. to Main Exhaust
  * Must use “DU” Pilot Body

Body Electrical Options
- Base Only
- No Light in Top
- w/ Light
- w/ Supp., Blocking Diode, and Light
- w/ M.O.V. and Light

Port Size and Thread Type In. and Cyl.
- Base Only
- 1/4 NPTF
- 3/8 NPTF
- 1/4 BSPPL
- 3/8 BSPPL
- 1/4 BSPTR
- 3/8 BSPTR

Manifold Base Configurations
- Base Only
- Side Cyl. Ports (Middle)
- Bottom Cyl. Ports (Mid.)
- Side Cyl Ports Left End
- Bottom Cyl. Ports Left End
- Side Cyl. Ports Right End
- Bottom Cyl. Ports Right End

Note: Left and Right Determined by facing the “A” Solenoid

Pilot Valve Options
- XX - D XX P - X XX

Pilot Style
- DM Muffled Exhaust
- DP Piped Exhaust
- DU Universal Pilot
  - Pilot Exhaust out Main Exhaust

Voltage
- JA 120/60, 110/50 (2.9w)
- JB 240/60, 220/50 (2.9w)
- JD 100/50, 60/110/60 (3.9w)
- JE 220/60 (3.4w)
- JF 240/50 (2.8w)
- JG 200/60, 200/50 (3.9w)
- DA 24 VDC (5.4w)
- FA 12 VDC (1.8w)
- FB 24 VDC (1.8w)
- FE 12 VDC (2.4w)
- FF 24 VDC (2.4w)

Manual Operator
- No operator
- Recessed Non-Locking Oper.
- Recessed Locking Oper.
- Extended Non-Locking Oper.
- Extended Locking Oper.

Note: For Solenoids 30 volts or above, a ground wire is required

Electrical Connection
- DM Plug-In
- DN Plug-In w Diode
- DP Plug-In w M.O.V.
- DG Plug-In w Ground
- DH Plug-In w Diode and Ground
- DJ Plug-In w M.O.V. and Ground

Note: For Negative Commons (PNP) Use Mod 1705 After Model Number
How to Order
Adapters / Input Module

MAConnect™ Adapter Assembly (Positive Commons - NPN)
M-92010 - XX - X X

09 9 Pin Sub D  1 Internal Pilot Left End  Leave Blank for NPTF Threads
10 10 Pin  2 External Pilot Left End  P  BSPPL Threads
15 15 Pin Sub D  3 Internal Pilot Right End  T  BSPTL Threads
16 16 Pin  4 External Pilot Right End
20 20 Pin
24 24 Pin Amp CPC
25 25 Pin Sub D
26 26 Pin

Note: For Negative Commons (PNP) Use MOD 1705 after model number
Note: For washdown Sub-D connector use MOD 532M after model number.

MAConnect™ Adapter Assembly
(Required For Connecting To A Remote Stack)
M-92011 - XX - X X

09 9 Pin Sub D  1 Internal Pilot Left End  Leave Blank for NPTF Threads
10 10 Pin  2 External Pilot Left End  P  BSPPL Threads
15 15 Pin Sub D  3 Internal Pilot Right End  T  BSPTL Threads
16 16 Pin  4 External Pilot Right End
20 20 Pin
24 24 Pin Amp CPC
25 25 Pin Sub D
26 26 Pin

Note: For washdown Sub-D connector use MOD 532M after model number.
Examples for Ordering MAConnect™ Assemblies
Valve Descriptions are Configured Left to Right

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<th>Description</th>
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<td>M-92010-25-3</td>
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</tbody>
</table>
Note: All Dimensions Shown Are In Millimeters
Installation and Service Precautions:

A. Do not install or service MAC valves without first making sure both air and electrical power to the machine are off and that all air has been completely bled from the system.

B. MAC valves should only be installed and/or serviced by qualified knowledgable personnel who understand how the specific valve is to be pneumatically piped and electrically connected (where applicable). Flow paths through the valve are shown in the catalog and on the valve by use of ANSI or ISO type standard and graphic symbols. Do not install unless these symbols and the valve functions and operations are thoroughly understood.

C. Before service, maintenance, repair or cleaning, consult local distributor or factory for Parts and Operation Sheet and information on proper cleaning and lubrication agents. Do not subject MAC valves’ parts to any foreign substance including lubricants and cleaning agents not specifically recommended by MAC Valves, Inc.

D. MAC valves are never to be stepped on while working on a machine. Damage to the valve, or lines to the valve (either air or electrical lines) or accidental activating of a manual operator on the valve could result in a dangerous condition.

Warning:
Under no circumstances are MAC valves to be used in any application where failure of the valve to operate as intended could jeopardize the safety of the operator or any other person.

-Do not operate outside of the pressure range listed on valve label or outside of designated temperature range.
-Air supply must be clean. Contamination of valve can affect proper operation.
-Before attempting to repair, adjust or clean valve, consult catalog, parts and operation sheet, or factory for proper maintenance procedures, lubrication, and cleaning agents. Never attempt to repair or perform other maintenance with air pressure to valve.
-If airline lubrication is used, consult catalog, parts and operation sheet, or factory for recommended lubricants.