

MACconnect™



92 Series

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)

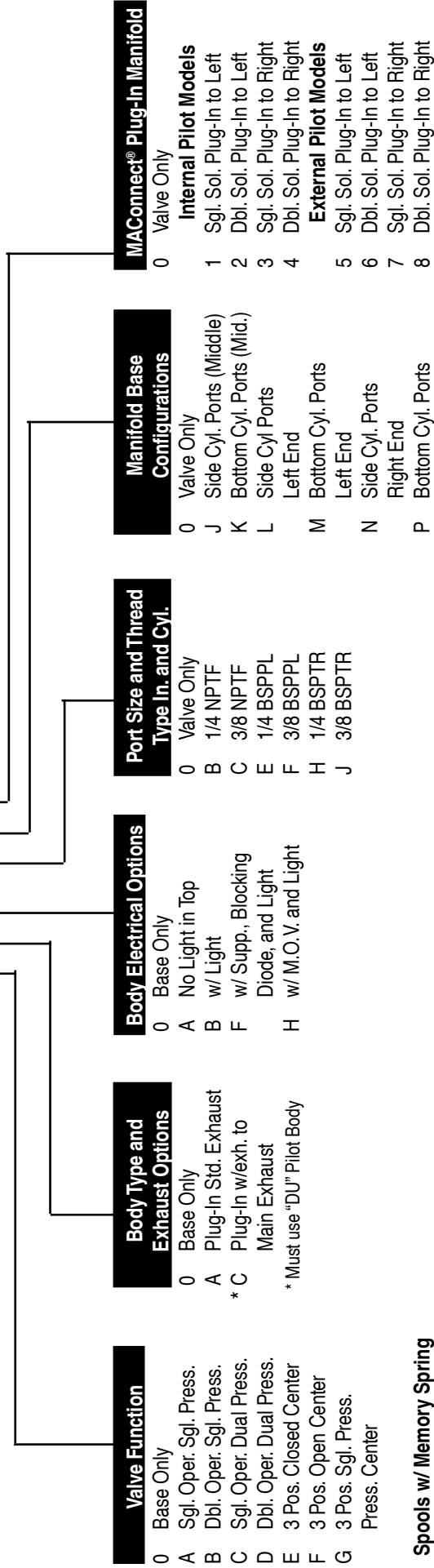
Additional information can be obtained from Amp Catalog 82021

How to Order

92 Series MACConnect™

92 B - X X X - X X X - XX - D XX P - X XX

Pilot Valve Options (see below)



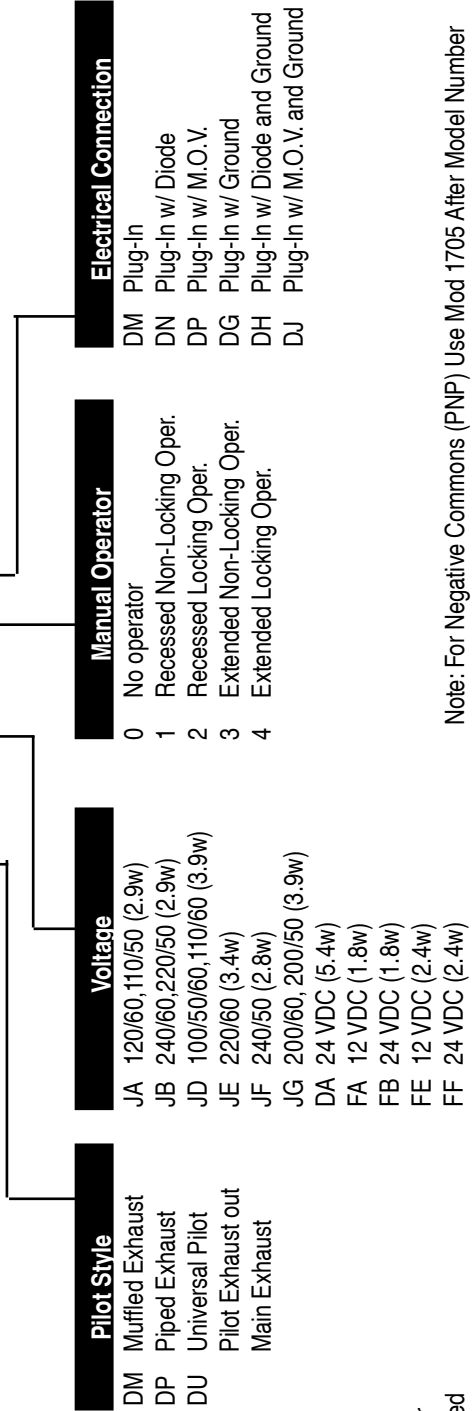
Spools w/ Memory Spring

- L Sgl. Oper. Sgl. Press.
- N Sgl. Oper. Dual Press.

Pilot Valve Options

XX - D XX P - X XX

Note: Left and Right Determined by facing the "A" Solenoid



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

Note: For Negative Commons (PNP) Use Mod 1705 After Model Number

How to Order Adapters / Input Module

MACConnect™ 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 BSPTTR 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.

MACConnect™ 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 BSPTTR 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



<u>Qty</u>	<u>Description</u>
1	92B-BAB-BL4-DM-DDAP-1DM
2	92B-BAB-BJ4-DM-DDAP-1DM
2	92B-AAB-BJ3-DM-DDAP-1DM
1	M-92010-25-3



<u>Qty</u>	<u>Description</u>
1	92B-BAB-BL4-DM-DDAP-1DM



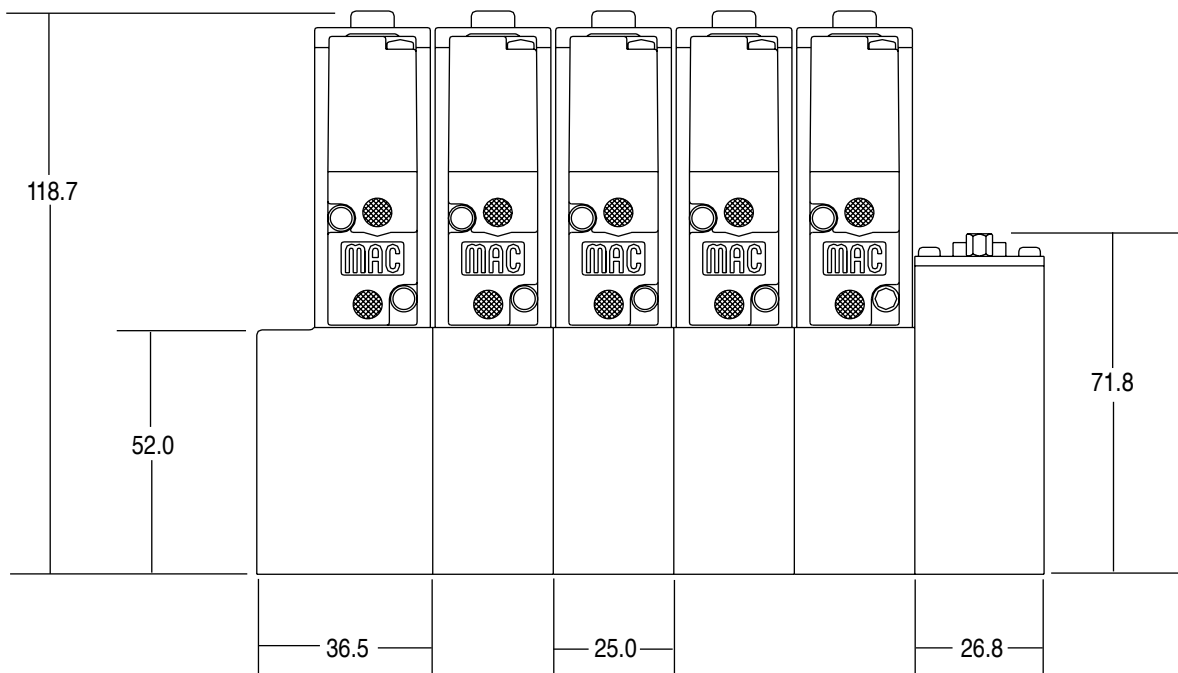
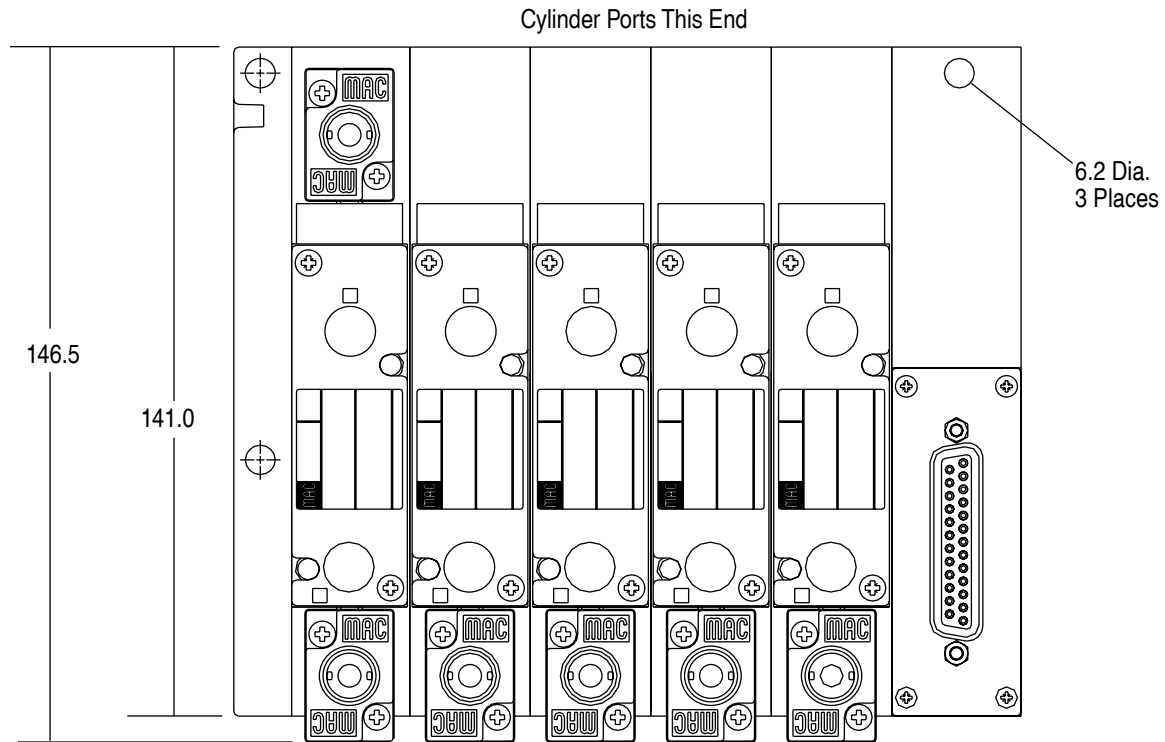
Primary Stack

<u>Qty</u>	<u>Description</u>
1	M-92011-25-1
2	92B-BAB-BJ4-DM-DDAP-1DM
2	92B-AAB-BJ3-DM-DDAP-1DM

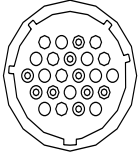
Remote Stack

<u>Qty</u>	<u>Description</u>
1	92B-BAB-BL4-DM-DDAP-1DM
2	92B-BAB-BJ4-DM-DDAP-1DM
1	92B-AAB-BJ3-DM-DDAP-1DM
1	M-92010-25-3

92 Series MACconnect™ With Multi-Pin Connector On Right End

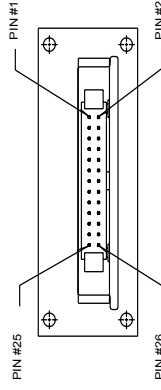
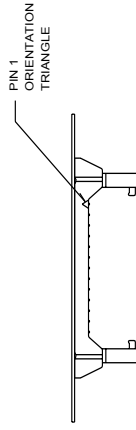


Note: All Dimensions Shown Are In Millimeters



PIN #	Solenoid #
1	1
2	2
~	~
20	+ COMMON
21	+ COMMON
22	+ COMMON
23	+ COMMON
24	+ COMMON

24 PIN AMP CPC

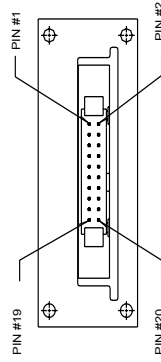
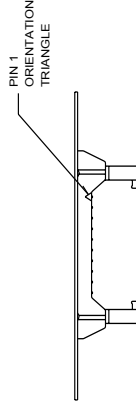


PIN #	Solenoid #
1	1
2	2
~	~
21	+ COMMON
22	+ COMMON
23	+ COMMON
24	+ COMMON
25	+ COMMON
26	+ COMMON

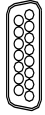


PIN #	Solenoid #
1	1
2	2
~	~
8	+ COMMON
9	+ COMMON

9 PIN SUB-D

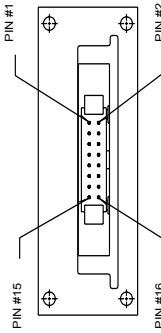
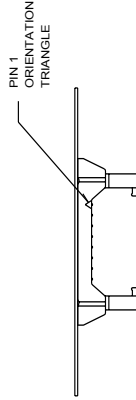


PIN #	Solenoid #
1	1
2	2
~	~
16	+ COMMON
17	+ COMMON
18	+ COMMON
19	+ COMMON
20	+ COMMON

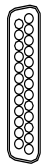


PIN #	Solenoid #
1	1
2	2
~	~
13	+ COMMON
14	+ COMMON
15	+ COMMON

15 PIN SUB-D

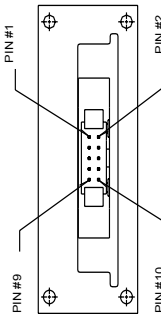
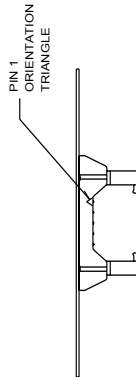


PIN #	Solenoid #
1	1
2	2
~	~
13	+ COMMON
14	+ COMMON
15	+ COMMON
16	+ COMMON



PIN #	Solenoid #
1	1
2	2
~	~
20	+ COMMON
21	+ COMMON
22	+ COMMON
23	+ COMMON
24	+ COMMON
25	+ COMMON

25 PIN SUB-D



PIN #	Solenoid #
1	1
2	2
~	~
8	+ COMMON
9	+ COMMON
10	+ COMMON



MAC Valves, Inc.
Wixom, Michigan, U.S.A.



MAC Valves Europe
Liege, Belgium



MAC Valves Pacific
Auckland, New Zealand



MAC Valves, Inc.
Dundee, Michigan, U.S.A.

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 knowledgeable 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.