

# 46 Series MAConnect®



# Specifications

## 46 Series Valve

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**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:**

Vacuum to 100 PSI

**Electrical:**

DC 12/24 Volt 1.3w to 5.4w

AC 24, 120VAC

Maximum Coil Amperage - 250mA

Maximum Voltage - 120VAC

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 MACConnect™ 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

# Specifications

## SM16 Manifold

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### Outputs:

Number: 16 Channels / Solenoids on manifold  
Voltage Current: 24 VDC at .225 per channel (5.4 Watts max.)

**Inputs:** Not available at this time

### Protocols:

DeviceNet

### Current Consumption:

Outputs - 4 A Max.  
Electronics - 200mA

### Voltage Ranges:

Operating with single supply: 24VDC  
Operating separate supply for valves : 24VDC

### Operating Temperature:

0-50° C (32-120°F)  
10-90% RH (Non-condensing)

### Operating Atmosphere:

No corrosive gases

### Enclosure:

Designed to meet NEMA 4

### Impact Resistance:

10G

# Specifications

## SM32 Manifold

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### Outputs:

Number: 16 Channels / Solenoids on manifold

Voltage Current: 24 VDC at .225 per channel (6.0 Watts max.)

### Inputs:

Number: 4

Type: 24 VDC NPN or PNP Logic

### Protocols:

DeviceNet

Allen Bradley Remote I/O\*

Profibus

Interbus-S

AS-I

### Current Consumption:

Outputs - 4 A Max.

Electronics and Inputs - 75mA

### Voltage Ranges:

Operating with single supply: 24VDC

Operating separate supply for valves : 24VDC

### Safe Operating Temperature Range:

0-50° C (32-120°F)

10-90% RH (Non-condensing)

### Enclosure:

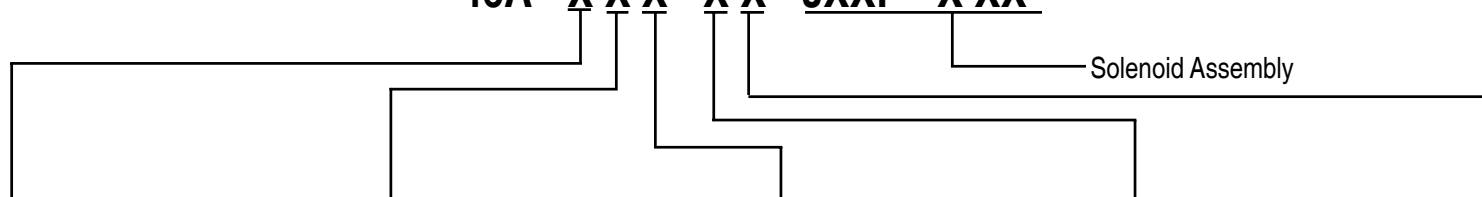
Designed to meet NEMA 4 and IP65

\* This product incorporates technology which is licensed by Allen-Bradley Company, Inc. Allen-Bradley has not technically approved, nor does it warrant or support this product. All warranty and support for this product and its application is provided solely by MAC Valves, Inc.

# How To Order

## 46 Series MAConnect™

46A - X X X - X X - JXXP - X XX



### Body Type

- 0 Base Only No Valve
- L Sgl. Sol. Base Mount Body
- M Sgl. Sol. Base Mount Body w/ Gage Port

### Commons

- 0 Valve Only
- M Positive Commons

### Port Size and Thread Type

- 0 Valve Only
- A 1/8" NPTF
- B 1/8" BSPPL
- C 1/8" BSPTR
- F 5/32" Pressed In Tube Receptacle

### Base Electrical

- 0 Valve Only
- A Sgl. Sol. Plug-In to Left
- E Sgl. Sol. Plug-In to Right

### Configuration

- 0 Valve Only
- C Side Cyls
- D Side Cyls w/ F.C.
- E Bot. Cyls w/ Reg. (Slotted Stem)
- F Bot. Cyls w/ Reg. (Slotted Stem) & F.C.
- G Bot. Cyls w/ Reg. (Locking Slotted Stem)
- H Bot. Cyls w/ Reg. (Locking Slotted Stem) & F.C.
- J Bot. Cyls w/ Reg. (Adjusting Knob)
- K Bot. Cyls w/ Reg. (Adjusting Knob) & F.C.
- L Bottom Cyls
- M Bottom Cyls w/ F.C.

### Parts

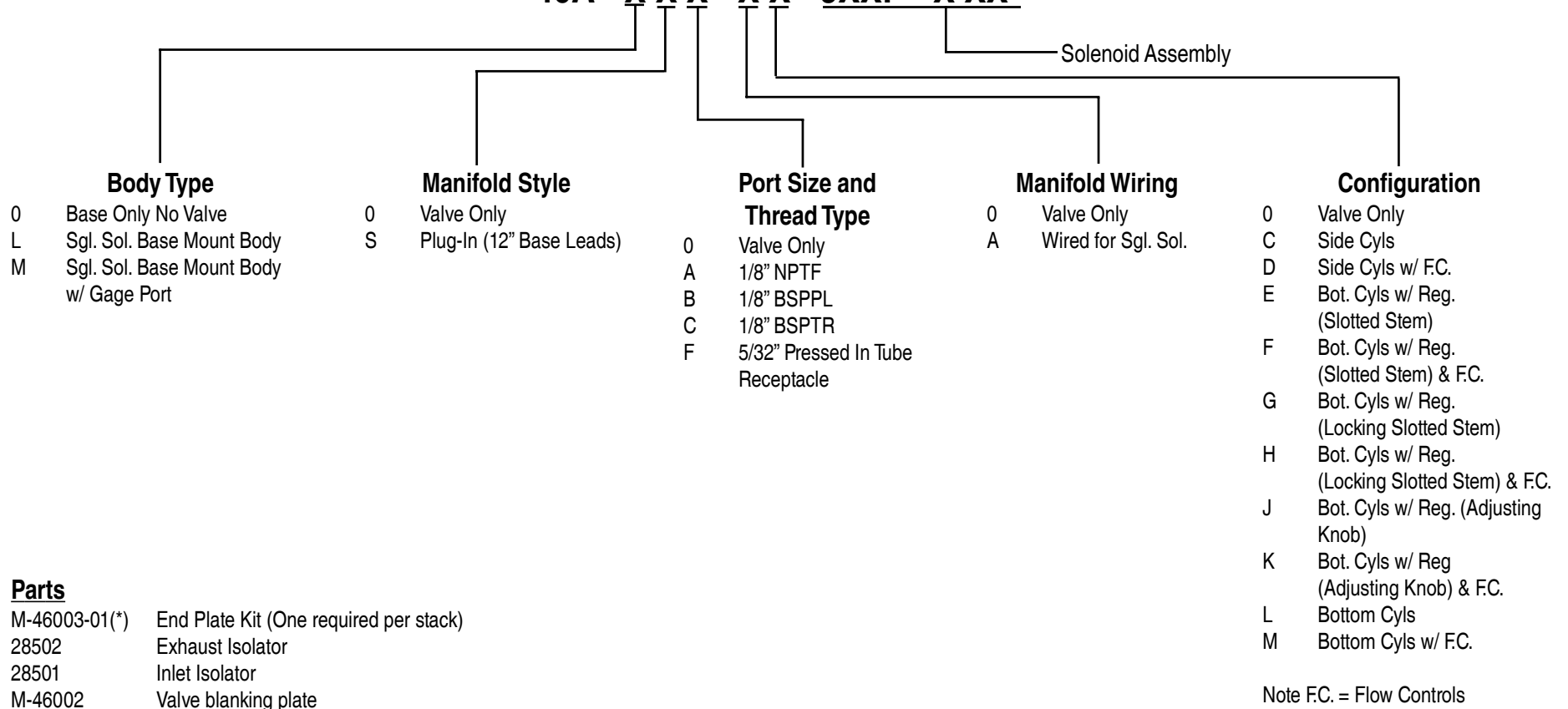
- 28502 Exhaust Isolator
- 28501 Inlet Isolator
- M-46002 Valve Blanking Plate

Note: F.C. = Flow Controls

# How To Order

## 46 Series Plug-In Manifold

46A - X X X - X X - JXXP - X XX



### Parts

M-46003-01(*)	End Plate Kit (One required per stack)
28502	Exhaust Isolator
28501	Inlet Isolator
M-46002	Valve blanking plate

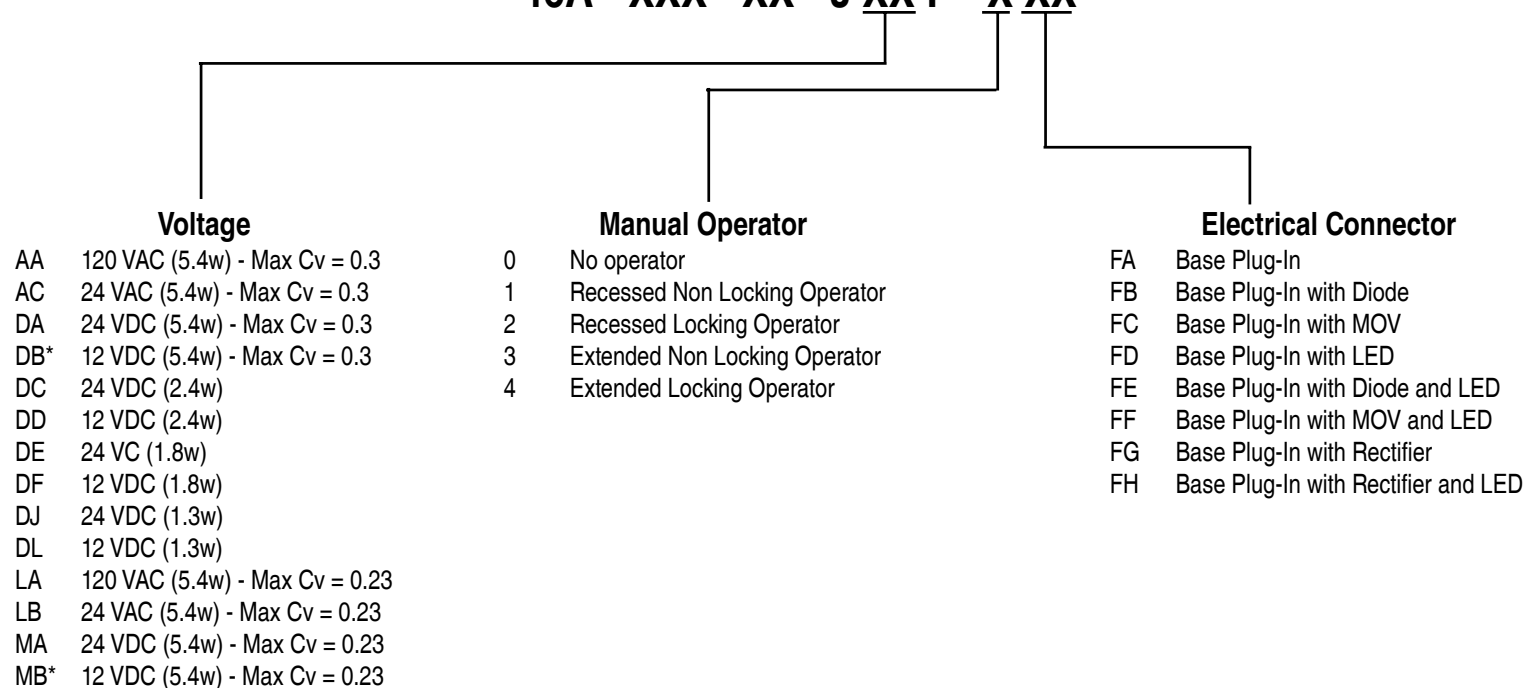
Note F.C. = Flow Controls

\* P = BSPPL, T = BSPTR, Blank = NPTF

# How To Order

## 46 Series Solenoid Assembly

46A - XXX - XX - J XX P - X XX



\* Not available for MACConnect®

Note: AC Voltage requires a connector with a rectifier

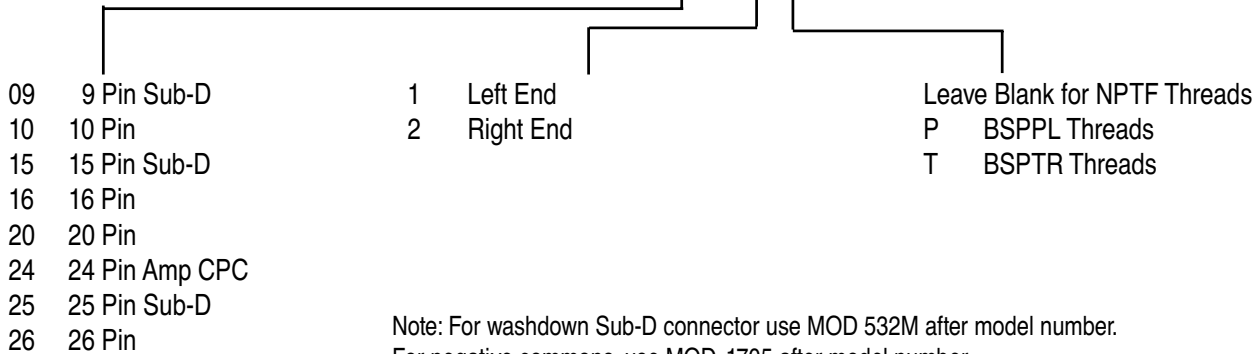
# 46 Series MAConnect™

## How to Order

### Adapters / End Plate Kit

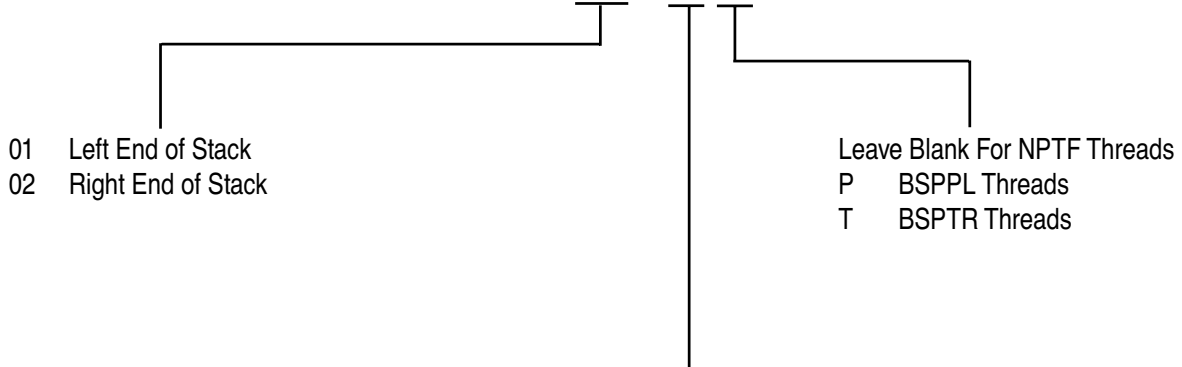
#### MAConnect™ Adapter Assembly

M-46005 - XX - X X



#### MAConnect™ Fastening End Plate Kit

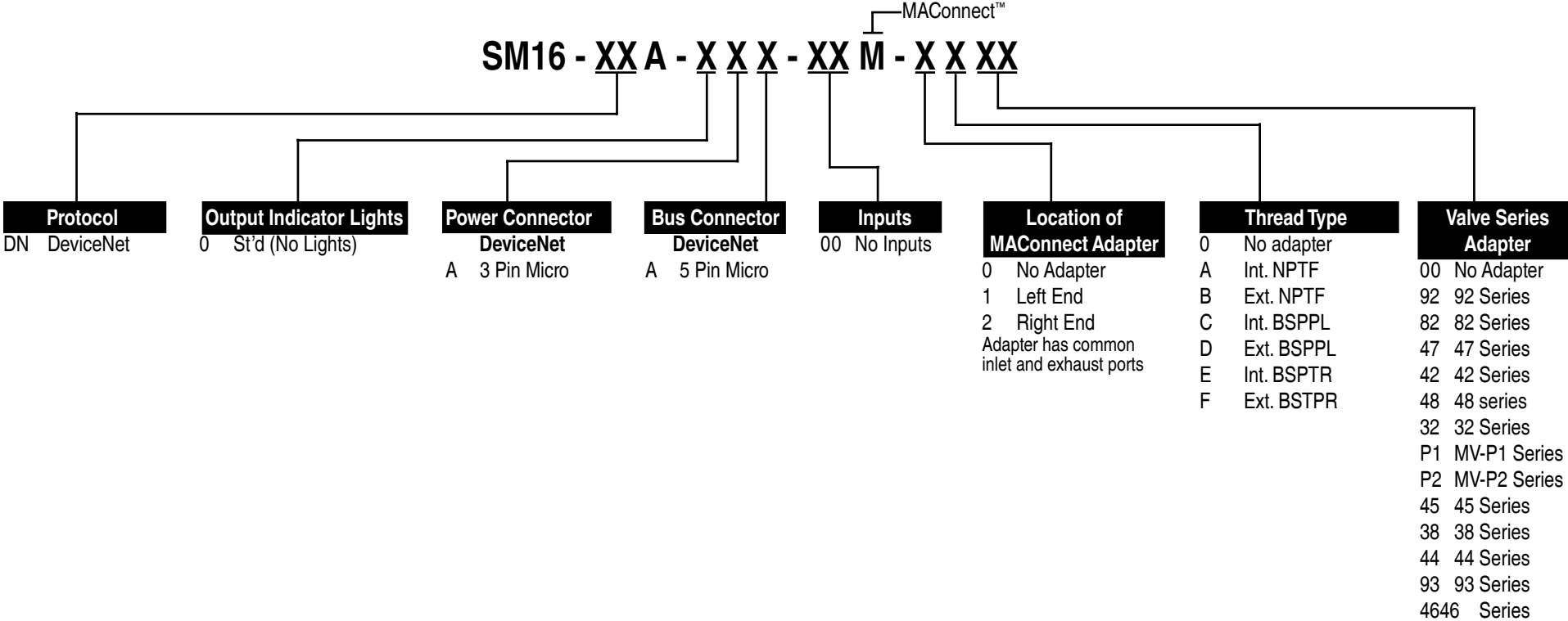
M-46006 - XX - 01 X



Note: "01" should be used only when the Fastening End Plate Kit is ordered separately. When the kit is ordered with an assembly this number will change to indicate the number of valves in the stack.



# How to Order SM16 for MAConnect™ Serial Manifold



# How to Order SM32 for MACConnect™ Serial Manifold

MACConnect™  
SM32 - XX A - X X X - X X M - X X XX -9

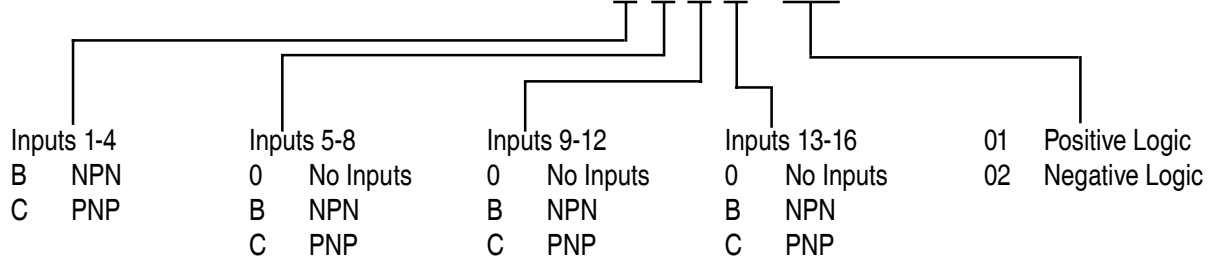
Protocol	Output Indicator Lights	Power Connector	Bus Connector	Inputs	Input Types	Location of MACConnect Adapter	Pilot and Thread Type	Valve Series Adapter
DN DeviceNet	<b>Monitoring Valve Signal</b>	<b>DeviceNet</b>	<b>DeviceNet</b>	A No Inputs	A No Inputs	0 No Adapter	0 No adapter	00 No Adapter
PB Profibus	A St'd (16)	A 3 Pin Mini	A 5 Pin Mini	B 1 Input	B NPN	1 Left End	A Int. NPTF	42 42 Series
IB Interbus-S	<b>Monitoring Bus Logic Signal</b>	B 4 Pin Mini	B 5 Pin Micro	C 2 Inputs	C PNP	2 Right End	B Ext. NPTF	47 47 Series
AB Allen Bradley Remote IO	B St'd (16)	C 3 Pin Micro	C 5 Pin Mini	D 3 Inputs			C Int. BSPPL	48 48 Series
AS AS-I	ASI Available Only w/ (B) Monitoring Signal	E 4 Pin Mini	End Mount	E 4 Inputs			D Ext. BSPPL	82 82 Series
		Side Mount	2 Conn.	F* Tethered			E Int. BSPTR	92 92 Series
				16 Inputs			F Ext. BSTPR	32 32 Series
				8 on AS-I			** N No Pilot Port	P1 MV-P1 Series
		<b>Profibus &amp; Interbus-S</b>	<b>Profibus</b>	**F* Option required for remote tethered box or MACConnect input modules. Choose option "A" for "Input Types"			** 82 Series Only	P2 MV-P2 Series
		F 3 Pin Mini	D 9 Pin Sub-D					45 45 Series
		H 4 Pin Mini	<b>Interbus-S</b>					38 38 Series
		<b>AB Remote IO</b>	E 9 Pin Sub-D					44 44 Series
		G 5 Pole Term.	Male &					93 93 Series
		B 4 Pin Mini	Female					4646 Series
		<b>AS-I</b>	<b>AB Remote IO</b>					
		D 4 Pin Micro	F 3 Pole Term.					
			G 4 Pin Micro					
			(2 4-Pin Connectors)					
			<b>AS-I</b>					
			G 4 Pin Micro					
			2 Conn.					
			H 4 Pin Micro					
			2 Conn. w/					
			2 Prog. Ports					

# How to Order

## Input and Output Modules

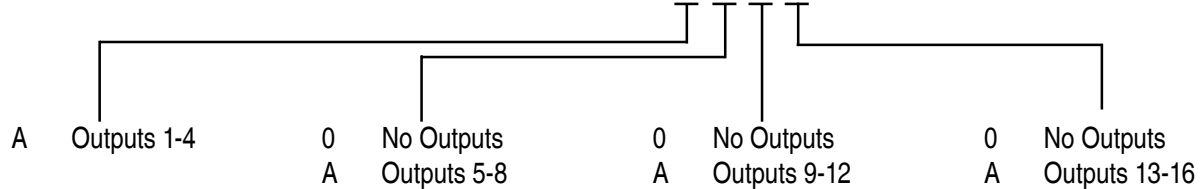
### Remote Tethered Input Module (For use with SM32 only)

**N-SM005 - X X X X - XX**



### Remote Tethered Output Module (For use with SM16 only)

**N-SM006 - X X X X**





PIN #	SOLENOID #
1	1
2	2
✓	✓
20	20
21	+ COMMON
22	+ COMMON
23	+ COMMON
24	+ COMMON
25	+ COMMON

25 PIN SUB-D



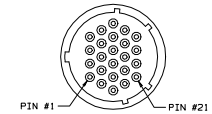
PIN #	SOLENOID #
1	1
2	2
✓	✓
13	13
14	+ COMMON
15	+ COMMON

15 PIN SUB-D



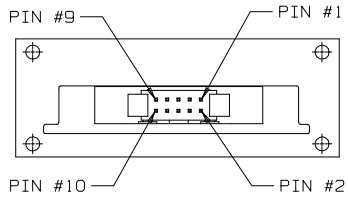
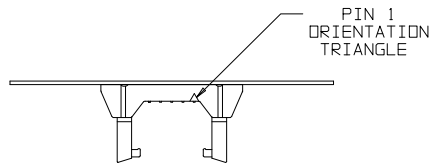
PIN #	SOLENOID #
1	1
2	2
✓	✓
8	8
9	+ COMMON

9 PIN SUB-D



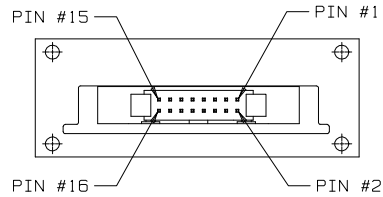
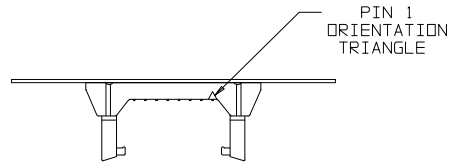
PIN #	SOLENOID #
1	1
2	2
✓	✓
20	20
21	+ COMMON
22	+ COMMON
23	+ COMMON
24	+ COMMON

24 PIN AMP CPC



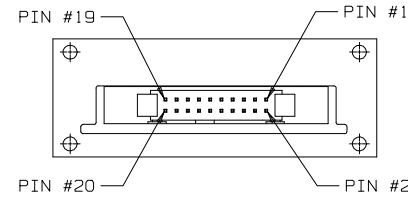
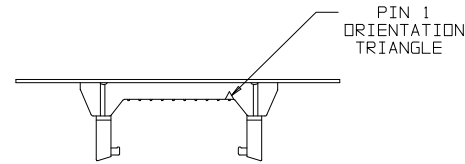
PIN #	SOLENOID #
1	1
2	2
✓	✓
8	8
9	+ COMMON
10	+ COMMON

10 PIN



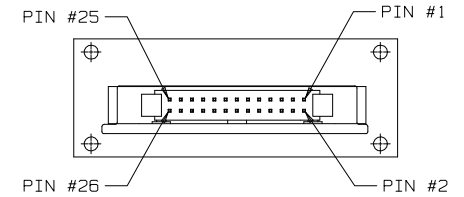
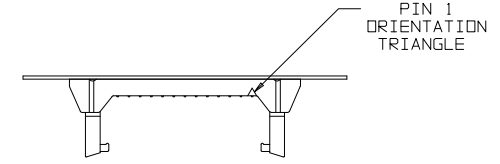
PIN #	SOLENOID #
1	1
2	2
✓	✓
12	12
13	+ COMMON
14	+ COMMON
15	+ COMMON
16	+ COMMON

16 PIN



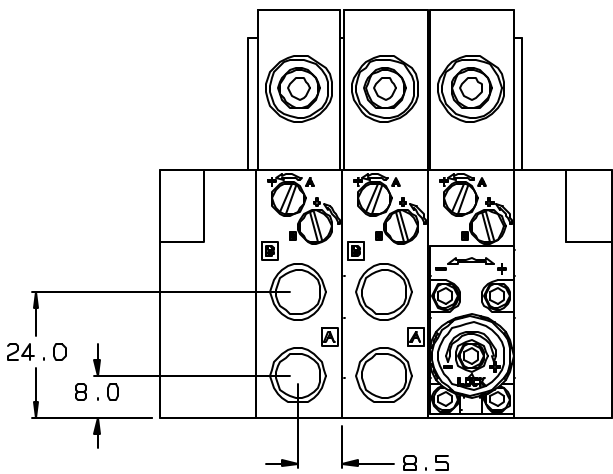
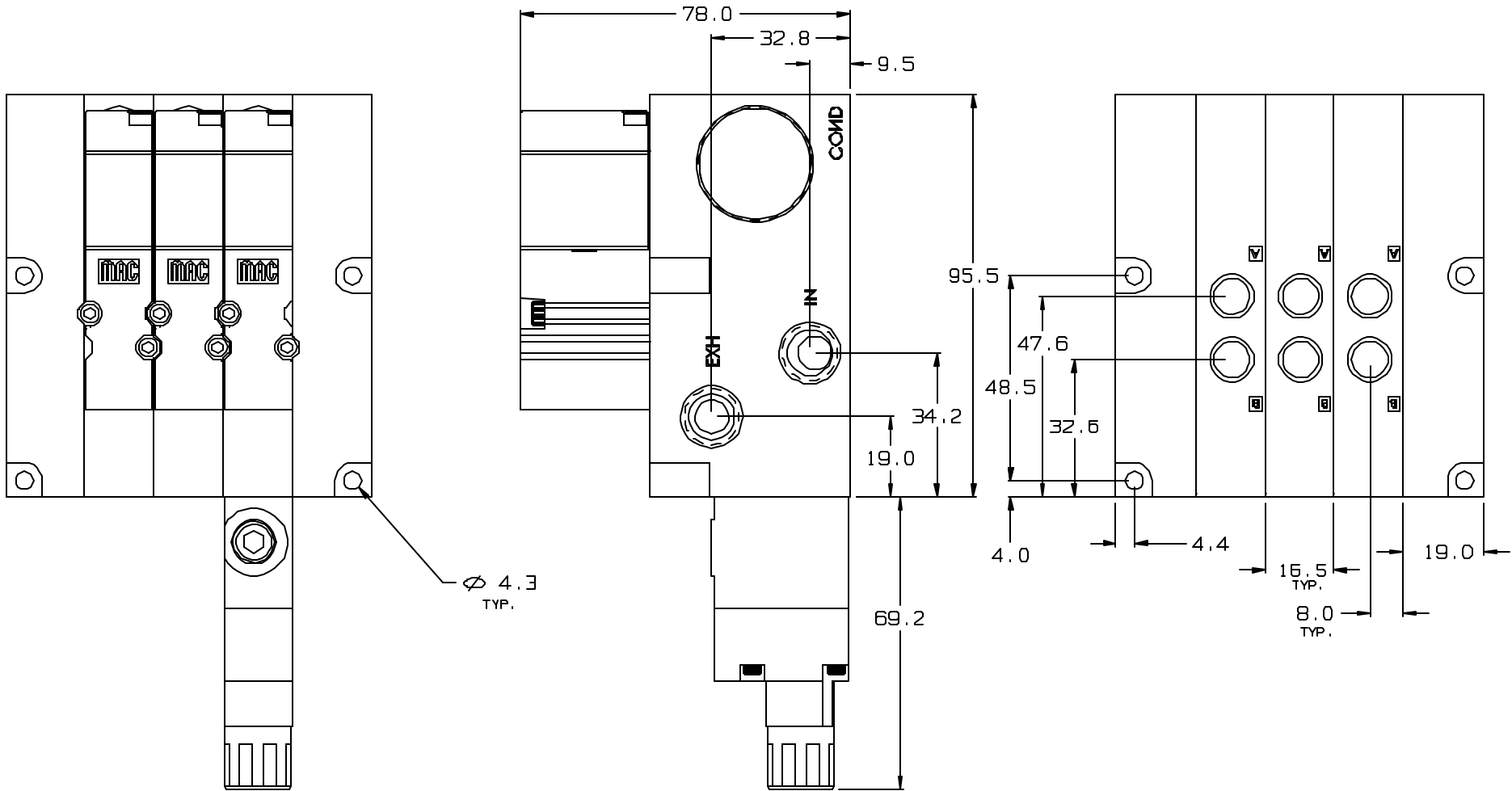
PIN #	SOLENOID #
1	1
2	2
✓	✓
16	16
17	+ COMMON
18	+ COMMON
19	+ COMMON
20	+ COMMON

20 PIN



PIN #	SOLENOID #
1	1
2	2
✓	✓
20	20
21	+ COMMON
22	+ COMMON
23	+ COMMON
24	+ COMMON
25	+ COMMON
26	+ COMMON

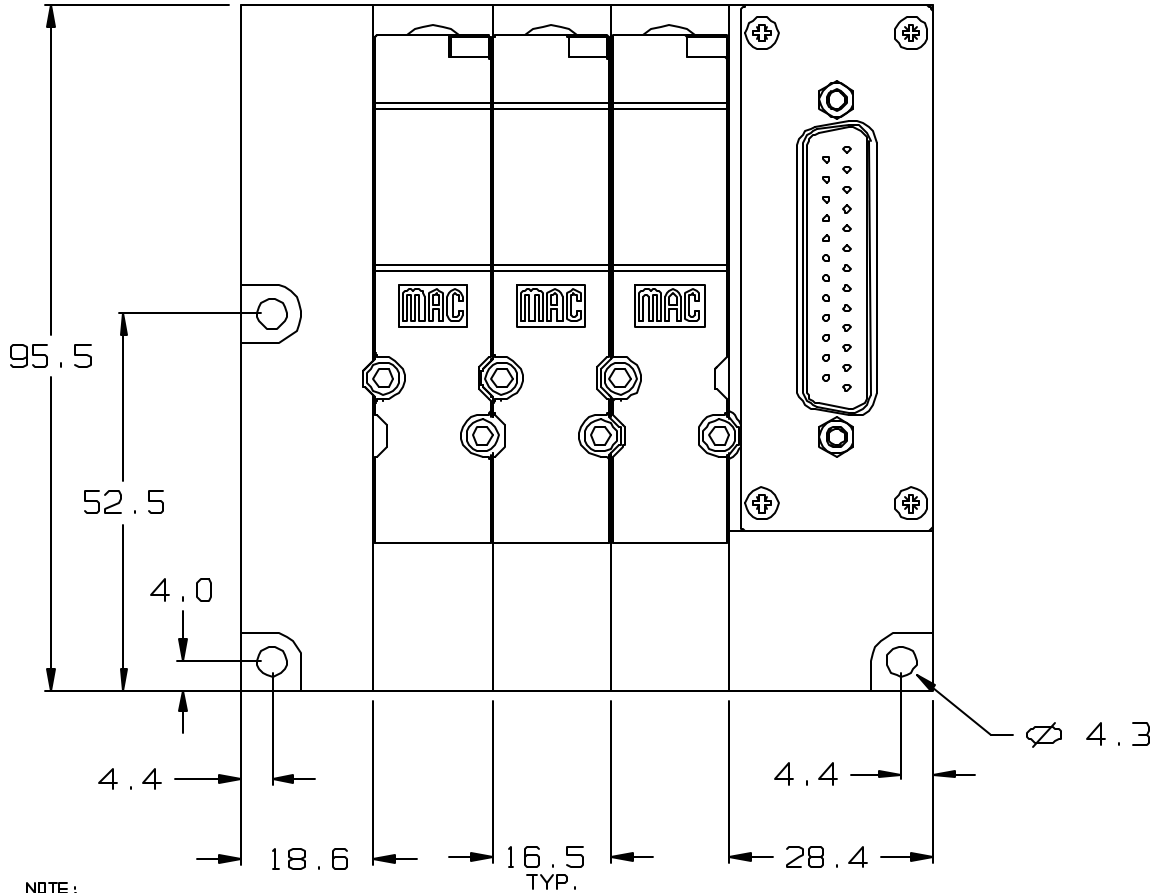
26 PIN



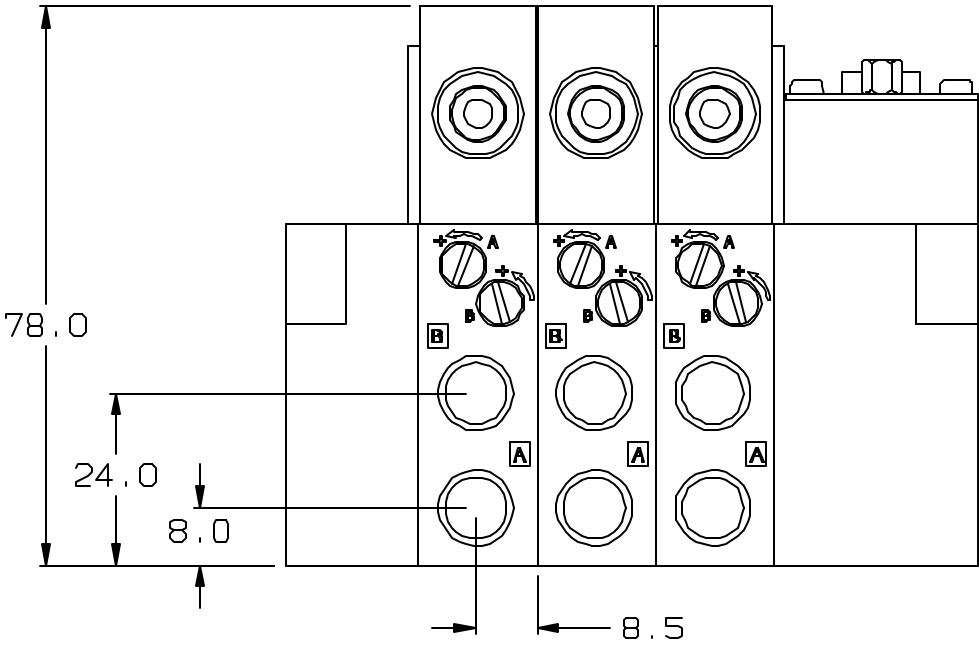
NOTE:  
 -ALL DIMENSIONS SHOWN  
 ARE IN MILLIMETERS  
 -TOLERANCES ON DIMENSIONS  $\pm 0.2$

## 46 SERIES WIRED MANIFOLD

# 46 SERIES MACONNECT WITH MULTI PIN



NOTE:  
 -ALL DIMENSIONS SHOWN  
 ARE IN MILLIMETERS  
 -TOLERANCES ON DIMENSIONS  $\pm 0.2$





# 46 SERIES MACONNECT WITH SM32

