

Handhabungstechnik
Motore & Getriebe
Pneumatik
Hydraulik
Systemlösungen

as-tec
Mechatronik GmbH

Produktkatalog

MAC 5/2 Wegeventile Serie 42 - M5 M7



Über Uns

Die Firma **as-tec Mechatronik GmbH** ist ein herstellerunabhängiger Lieferant von Systemlösungen und Komponenten für pneumatische, hydraulische und elektrische Antriebs- und Steuerungstechnik.

Wir bieten unseren Kunden für ihre Projekte im Maschinen- und Anlagenbau, beziehungsweise für die Instandhaltung ihrer Fertigungseinrichtungen die am besten geeigneten Produkte aus unserem herstellerübergreifenden Produktportfolio.

In unserer Werkstätte produzieren wir kundenspezifische Lösungen wie zum Beispiel Ventileinheiten, Schaltschränke und Sonderzylinder. Weiters halten wir sowohl Standardkomponenten als auch speziell für Kunden bevorratete Produkte auf Lager.

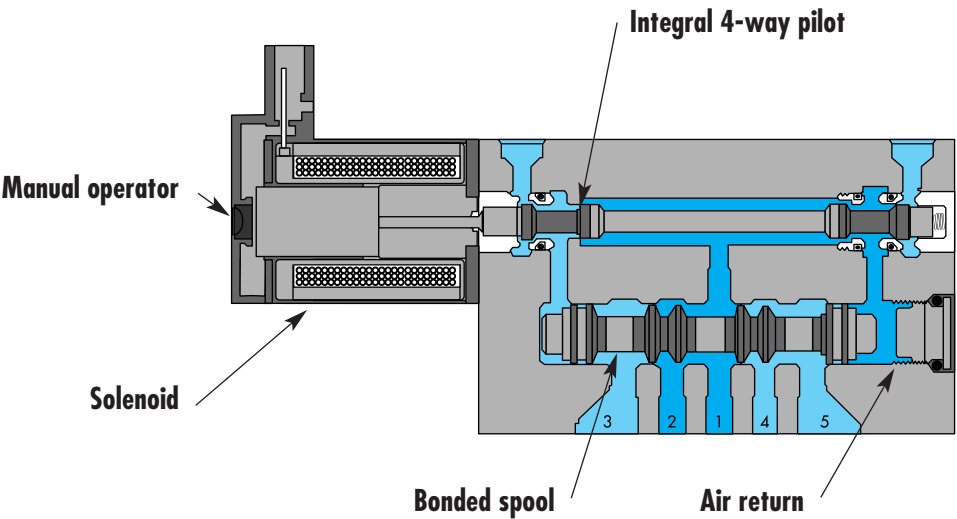


Individual mounting

Sub-base non "plug-in"	Sub-base "plug-in"	Sub-base/ manifold base non "plug-in" with latching solenoid	Sub-base/ manifold base "plug-in" with latching solenoid
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Manifold mounting

Manifold base non "plug-in"	Manifold base "plug-in"	Sub-base/ manifold base non "plug-in" with latching solenoid	Sub-base/ manifold base "plug-in" with latching solenoid
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SERIES FEATURES

- High force MACSOLENOID®.
- Integral 4-way pilot design.
- Single or dual pressure.
- Internal or external pilot.
- Single or double solenoid.
- 2 or 3 position.
- Rectified AC voltage.
- Latching solenoid technology.

Series

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400

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ISO 01

ISO 02

ISO 1

ISO 2

ISO 3

Function	Port size	Flow [Max]	Individual mounting	Series
5/2, 5/3	M5, M7	400 NI/min	Sub-base non "plug-in"	

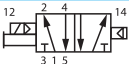
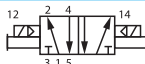
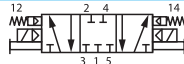
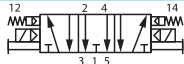
OPERATIONAL BENEFITS

1. 4-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10,5 mm centres).
3. High flow (up to 400 NI/min).
4. Fast repeatable response times.
5. Maximum shifting forces in both directions.
6. Long life.

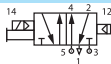
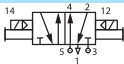


HOW TO ORDER

SINGLE PRESSURE MODELS

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed centre	5/3 Open centre
					
Valve less base	Internal	42B-AMA-000-Gxxx-xxx	42B-BMA-000-Gxxx-xxx	42B-EMA-000-Gxxx-xxx	42B-FMA-000-Gxxx-xxx
	External	42B-AMD-000-Gxxx-xxx	42B-BMD-000-Gxxx-xxx	42B-EMD-000-Gxxx-xxx	42B-FMD-000-Gxxx-xxx
M5	Internal	42B-AMA-GAL-Gxxx-xxx	42B-BMA-GAL-Gxxx-xxx	42B-EMA-GAL-Gxxx-xxx	42B-FMA-GAL-Gxxx-xxx
	External	42B-AMD-GAM-Gxxx-xxx	42B-BMD-GAM-Gxxx-xxx	42B-EMD-GAM-Gxxx-xxx	42B-FMD-GAM-Gxxx-xxx
M7	Internal	42B-AMA-LAL-Gxxx-xxx	42B-BMA-LAL-Gxxx-xxx	42B-EMA-LAL-Gxxx-xxx	42B-FMA-LAL-Gxxx-xxx
	External	42B-AMD-LAM-Gxxx-xxx	42B-BMD-LAM-Gxxx-xxx	42B-EMD-LAM-Gxxx-xxx	42B-FMD-LAM-Gxxx-xxx

DUAL PRESSURE MODELS

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure centre
				
Valve less base	Internal	Supply #3 port	42B-CMB-000-Gxxx-xxx	42B-DMB-000-Gxxx-xxx
		Supply #5 port	42B-CMC-000-Gxxx-xxx	42B-DMC-000-Gxxx-xxx
	External		42B-CMD-000-Gxxx-xxx	42B-DMD-000-Gxxx-xxx
M5	Internal	Supply #3 port	42B-CMB-GAL-Gxxx-xxx	42B-DMB-GAL-Gxxx-xxx
		Supply #5 port	42B-CMC-GAL-Gxxx-xxx	42B-DMC-GAL-Gxxx-xxx
	External		42B-CMD-GAM-Gxxx-xxx	42B-DMD-GAM-Gxxx-xxx
M7	Internal	Supply #3 port	42B-CMB-LAL-Gxxx-xxx	42B-DMB-LAL-Gxxx-xxx
		Supply #5 port	42B-CMC-LAL-Gxxx-xxx	42B-DMC-LAL-Gxxx-xxx
	External		42B-CMD-LAM-Gxxx-xxx	42B-DMD-LAM-Gxxx-xxx

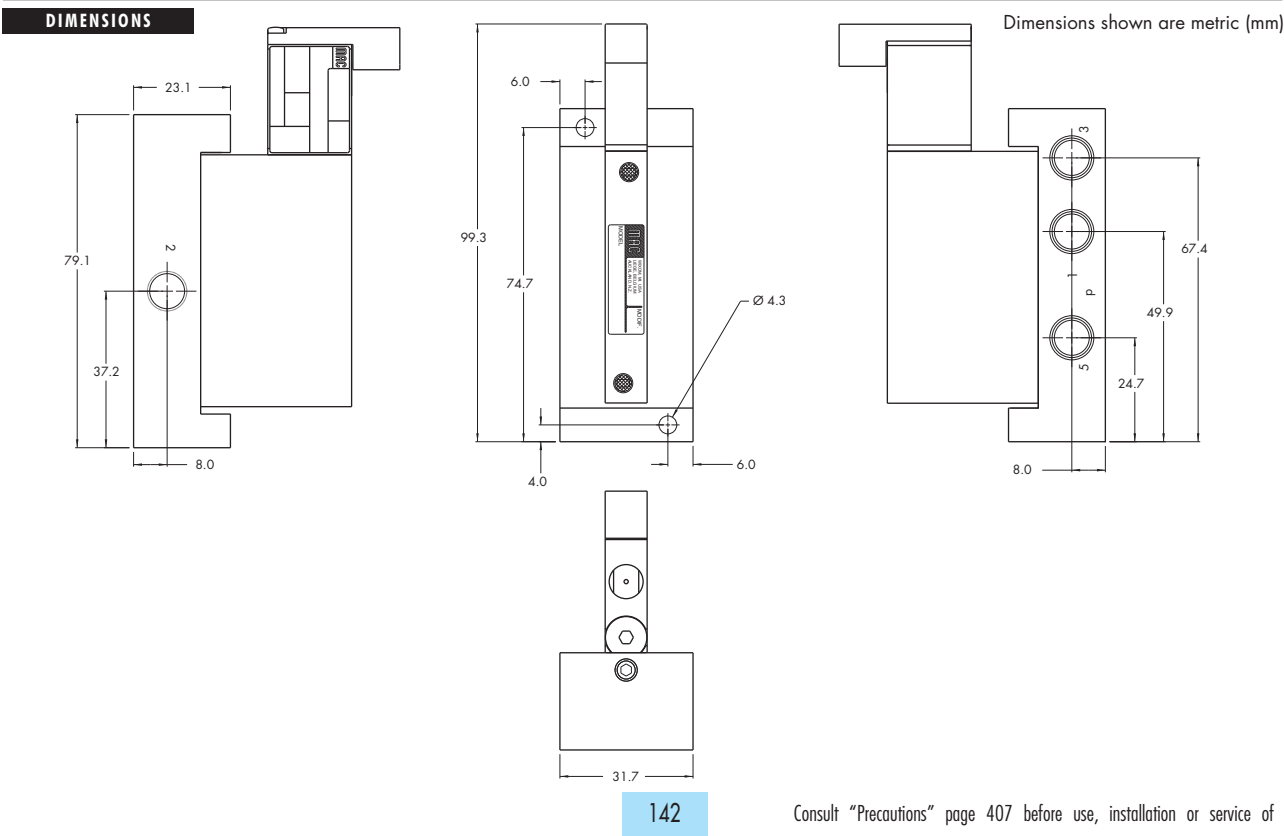
STANDARD SOLENOID OPERATOR >

G XXX-XXX *			
XX Voltage	X Wire length	X Manual operator	Electrical connection
AA 120 V~/2,5W	A 45 cm	1 Non-locking	BA Flying leads
DC 24 V=/1,8W	B 60 cm	2 Locking	BT Flying leads with light
DD 24 V=/2,5W	C 90 cm		GA MAC JAC Solenoid plug-in
DF 24 V=/4,0W			KA Mini connector
			KT Mini connector with light
			KD Mini connector with rectifier & light & ground

Note : AC voltage requires connector with rectifier.
 * Other options available, see page 387.
 Latching solenoid available for 5/2 valves.
 Other options available for the 42 series valves, see page 153.

TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot - 2 pos. : 1,3 to 8 bar 3 pos. : 2,3 to 8 bar External Pilot : vacuum to 8 bar
Pilot pressure :	2 position : 1,3 to 8 bar 3 position : 2,3 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	3,8 mm
Flow (at 6 bar, ΔP=1bar) :	M7: 400 Nl/min (Cv 0,4) – M5: 350 Nl/min (Cv 0,35)
Coil :	Epoxy encapsulated – 100% ED – Class A wire
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	1.0 to 4.0 W
Response times :	Energize : 5 ms
(with 24V 4 W coil)	De-energize : 5 ms

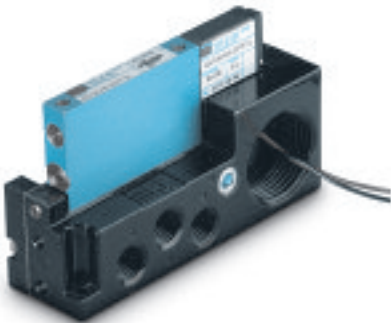
- Options :
- NPTF threads
 - Sandwich flow controls : FC42B-BB
 - Sandwich regulator : see ‘Regulator’ section



Function	Port size	Flow [Max]	Individual mounting	Series
5/2, 5/3	M5, M7	400 NI/min	Subbase "plug-in"	

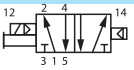
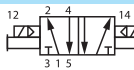
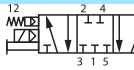
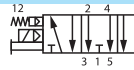
OPERATIONAL BENEFITS

1. 4-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10,5 mm centres).
3. High flow (up to 400 NI/min).
4. Fast repeatable response times.
5. Maximum shifting forces in both directions.
6. Long life.

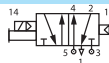
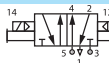
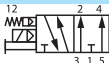


HOW TO ORDER

SINGLE PRESSURE MODELS (LED STANDARD EXCEPT FOR SINGLE SOLENOIDS)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed centre	5/3 Open centre
					
Valve less base	Internal	42B-AMA-000-GxxP-xxx	42B-BME-000-GxxP-xST	42B-EME-000-GxxP-xST	42B-FME-000-GxxP-xST
	External	42B-AMD-000-GxxP-xxx	42B-BMH-000-GxxP-xST	42B-EMH-000-GxxP-xST	42B-FMH-000-GxxP-xST
M5	Internal	42B-AMA-GAA-GxxP-xxx	42B-BME-GAC-GxxP-xST	42B-EME-GAC-GxxP-xST	42B-FME-GAC-GxxP-xST
	External	42B-AMD-GAB-GxxP-xxx	42B-BMH-GAD-GxxP-xST	42B-EMH-GAD-GxxP-xST	42B-FMH-GAD-GxxP-xST
M7	Internal	42B-AMA-LAA-GxxP-xxx	42B-BME-LAC-GxxP-xST	42B-EME-LAC-GxxP-xST	42B-FME-LAC-GxxP-xST
	External	42B-AMD-LAB-GxxP-xxx	42B-BMH-LAD-GxxP-xST	42B-EMH-LAD-GxxP-xST	42B-FMH-LAD-GxxP-xST

DUAL PRESSURE MODELS (LED STANDARD EXCEPT FOR SINGLE SOLENOIDS)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure centre
				
Valve less base	Internal	Supply #3 port	42B-CMB-000-GxxP-xxx	42B-DMF-000-GxxP-xST
	Supply #5 port		42B-CMC-000-GxxP-xxx	42B-DMG-000-GxxP-xST
M5	External		42B-CMD-000-GxxP-xxx	42B-DMH-000-GxxP-xST
	Internal	Supply #3 port	42B-CMB-GAA-GxxP-xxx	42B-DMF-GAC-GxxP-xST
	Supply #5 port		42B-CMC-GAA-GxxP-xxx	42B-DMG-GAC-GxxP-xST
	External		42B-CMD-GAB-GxxP-xxx	42B-DMH-GAD-GxxP-xST
M7	Internal	Supply #3 port	42B-CMB-LAA-GxxP-xxx	42B-DMF-LAC-GxxP-xST
	Supply #5 port		42B-CMC-LAA-GxxP-xxx	42B-DMG-LAC-GxxP-xST
	External		42B-CMD-LAB-GxxP-xxx	42B-DMH-LAD-GxxP-xST
				42B-HMH-LAD-GxxP-xST

STANDARD SOLENOID OPERATOR ►

G xx P- xxx *		
xx Voltage	x Manual operator	xx Electrical connection
AA 120 V~/2,5W	1 Non-locking	Double solenoid & 3 position models
DC 24 V=/1,8W	2 Locking	ST Base plug-in
DD 24 V~/2,5W		Single solenoid models
DF 24 V=/4,0W		SA Base plug-in
		SJ Base plug-in with light
		SS Base plug-in with rectifier & light & ground

Note : AC voltage requires connector with rectifier (for double solenoid consult factory).
 * Other options available, see page 387.
 Other options available for the 42 series valves, see page 154.

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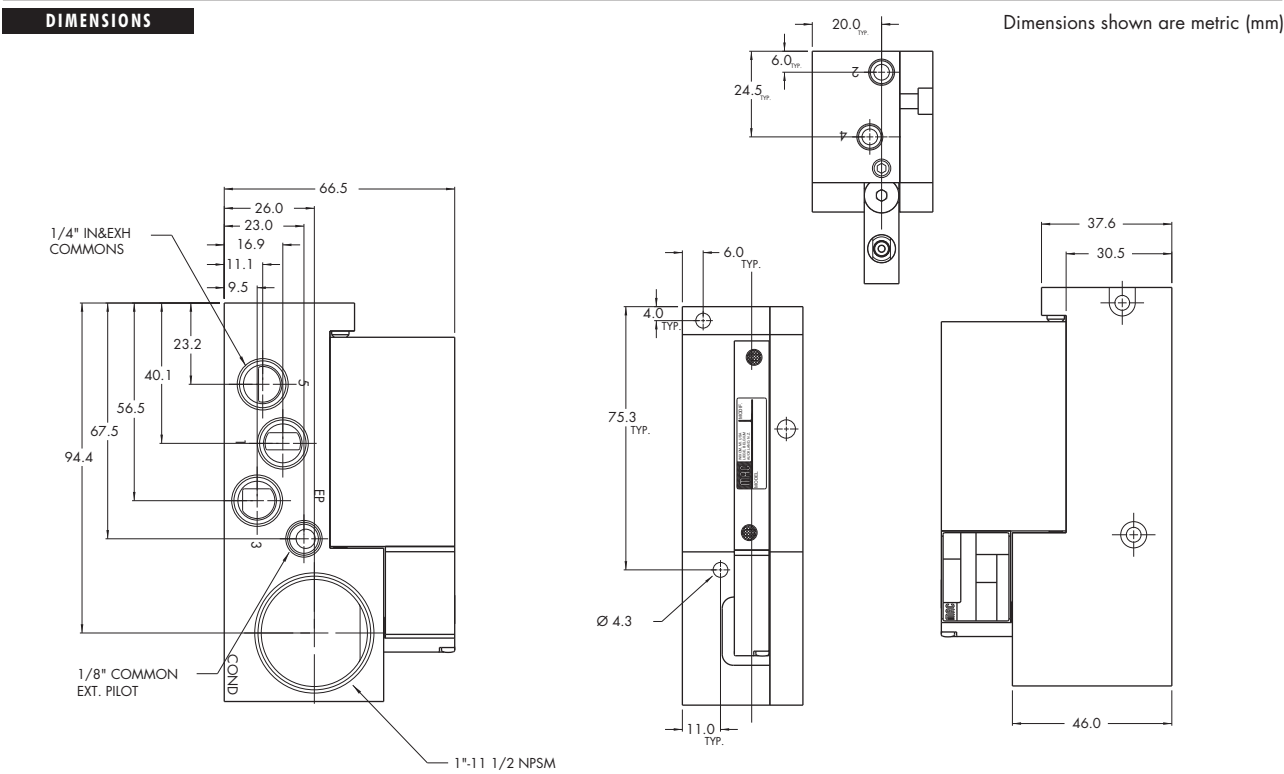
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 ISO 01
 ISO 02

 ISO 1
 ISO 2
 ISO 3

TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot - 2 pos. : 1,3 to 8 bar 3 pos. : 2,3 to 8 bar External Pilot : vacuum to 8 bar
Pilot pressure :	2 position : 1,3 to 8 bar 3 position : 2,3 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	3,8 mm
Flow (at 6 bar, ΔP=1bar) :	M7: 400 NI/min (Cv 0,4) – M5: 350 NI/min (Cv 0,35)
Coil :	Epoxy encapsulated – 100% ED – Class A wire
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	1.0 to 4.0 W
Response times :	Energize : 5 ms
(with 24V 4 W coil)	De-energize : 5 ms

- Options :
- NPTF ports
 - Sandwich flow controls : FC42B-AB
 - Sandwich regulator : see ‘Regulator’ section



Function	Port size	Flow [Max]	Manifold mounting	Series
5/2, 5/3	M5, M7	400 NI/min	Manifold base non "plug-in"	

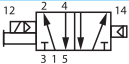
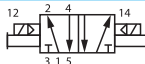
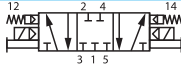
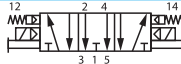
OPERATIONAL BENEFITS

1. 4-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10,5 mm centres).
3. High flow (up to 400 NI/min).
4. Fast repeatable response times.
5. Maximum shifting forces in both directions.
6. Long life.

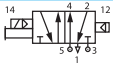
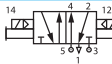


HOW TO ORDER

SINGLE PRESSURE MODELS (MIDDLE STATION MANIFOLDS WITH SIDE PORTS)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed centre	5/3 Open centre
					
Valve less base	Internal	42B-AMA-000-Gxxx-xxx	42B-BMA-000-Gxxx-xxx	42B-EMA-000-Gxxx-xxx	42B-FMA-000-Gxxx-xxx
	External	42B-AMD-000-Gxxx-xxx	42B-BMD-000-Gxxx-xxx	42B-EMD-000-Gxxx-xxx	42B-FMD-000-Gxxx-xxx
M5	Internal	42B-AMA-GJL-Gxxx-xxx	42B-BMA-GJL-Gxxx-xxx	42B-EMA-GJL-Gxxx-xxx	42B-FMA-GJL-Gxxx-xxx
	External	42B-AMD-GJM-Gxxx-xxx	42B-BMD-GJM-Gxxx-xxx	42B-EMD-GJM-Gxxx-xxx	42B-FMD-GJM-Gxxx-xxx
M7	Internal	42B-AMA-LJL-Gxxx-xxx	42B-BMA-LJL-Gxxx-xxx	42B-EMA-LJL-Gxxx-xxx	42B-FMA-LJL-Gxxx-xxx
	External	42B-AMD-LJM-Gxxx-xxx	42B-BMD-LJM-Gxxx-xxx	42B-EMD-LJM-Gxxx-xxx	42B-FMD-LJM-Gxxx-xxx

DUAL PRESSURE MODELS (MIDDLE STATION MANIFOLDS WITH SIDE PORTS)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure centre
				
Valve less base	Internal	Supply #3 port	42B-CMB-000-Gxxx-xxx	42B-HMB-000-Gxxx-xxx
		Supply #5 port	42B-CMC-000-Gxxx-xxx	42B-HMC-000-Gxxx-xxx
	External		42B-CMD-000-Gxxx-xxx	42B-HMD-000-Gxxx-xxx
M5	Internal	Supply #3 port	42B-CMB-GJL-Gxxx-xxx	42B-HMB-GJL-Gxxx-xxx
		Supply #5 port	42B-CMC-GJL-Gxxx-xxx	42B-HMC-GJL-Gxxx-xxx
	External		42B-CMD-GJM-Gxxx-xxx	42B-HMD-GJM-Gxxx-xxx
M7	Internal	Supply #3 port	42B-CMB-LJL-Gxxx-xxx	42B-HMB-LJL-Gxxx-xxx
		Supply #5 port	42B-CMC-LJL-Gxxx-xxx	42B-HMC-LJL-Gxxx-xxx
	External		42B-CMD-LJM-Gxxx-xxx	42B-HMD-LJM-Gxxx-xxx

STANDARD SOLENOID OPERATOR ➤

G XXX-XXX *			
XX Voltage	X Wire length	X Manual operator	XX Electrical connection
AA 120 V~/2,5W	A 45 cm	1 Non-locking	BA Flying leads
DC 24 V~/1,8W	B 60 cm	2 Locking	BT Flying leads with light
DD 24 V~/2,5W	C 90 cm		GA MAC JAC Solenoid plug-in
DF 24 V~/4,0W			KA Mini connector
			KT Mini connector with light
			KD Mini connector with rectifier & light & ground

Note : - AC voltage requires connector with rectifier.
 * Other options available, see page 387.
 Latching solenoid available for 5/2 valves.
 Manifold assemblies consist of (1) left end manifold, (1) right end manifold, and middle station manifolds (options "J" or "K").
 Other options available for the 42 series valves, see page 153.

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ISO 01

ISO 02

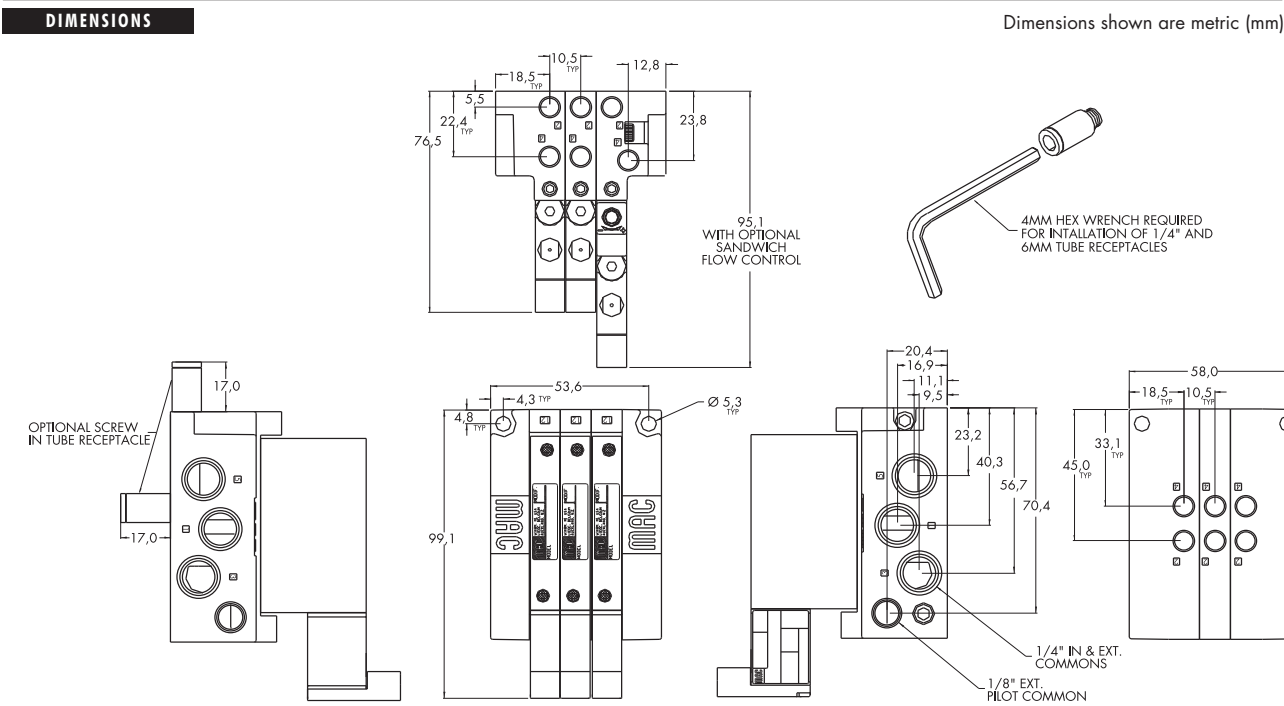
ISO 1

ISO 2

ISO 3

TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot - 2 pos. : 1,3 to 8 bar 3 pos. : 2,3 to 8 bar External Pilot : vacuum to 8 bar
Pilot pressure :	2 position : 1,3 to 8 bar 3 position : 2,3 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	3,8 mm
Flow (at 6 bar, ΔP=1bar) :	M7: 400 Nl/min (Cv 0,4) – M5: 350 Nl/min (Cv 0,35)
Coil :	Epoxy encapsulated – 100% ED – Class A wire
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	1.0 to 4.0 W
Response times :	Energize : 5 ms
(with 24V 4 W coil)	De-energize : 5 ms

- Options :
- NPTF threads • Sandwich flow controls : FC42B-BB
 - Sandwich regulator : see "regulators" section • Isolator disk for inlet and exhaust: 28454
 - Valve blanking plate : M-42004



Function	Port size	Flow [Max]	Manifold mounting	Series
5/2, 5/3	M5, M7	400 NI/min	Manifold base "plug-in"	

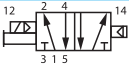
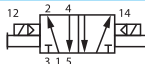
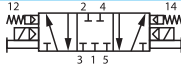
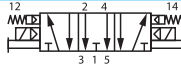
OPERATIONAL BENEFITS

1. 4-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10,5 mm centres).
3. High flow (up to 400 NI/min).
4. Fast repeatable response times.
5. Maximum shifting forces in both directions.
6. Long life.

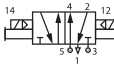


HOW TO ORDER

SINGLE PRESSURE MODELS (LED STANDARD EXCEPT FOR SINGLE SOLENOIDS)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed centre	5/3 Open centre
					
Valve less base	Internal	42B-AMA-000-GxxP-xxx	42B-BME-000-GxxP-xST	42B-EME-000-GxxP-xST	42B-FME-000-GxxP-xST
	External	42B-AMD-000-GxxP-xxx	42B-BMH-000-GxxP-xST	42B-EMH-000-GxxP-xST	42B-FMH-000-GxxP-xST
M5	Internal	42B-AMA-GJA-GxxP-xxx	42B-BME-GJC-GxxP-xST	42B-EME-GJC-GxxP-xST	42B-FME-GJC-GxxP-xST
	External	42B-AMD-GJB-GxxP-xxx	42B-BMH-GJD-GxxP-xST	42B-EMH-GJD-GxxP-xST	42B-FMH-GJD-GxxP-xST
M7	Internal	42B-AMA-LJA-GxxP-xxx	42B-BME-LJC-GxxP-xST	42B-EME-LJC-GxxP-xST	42B-FME-LJC-GxxP-xST
	External	42B-AMD-LJB-GxxP-xxx	42B-BMH-LJD-GxxP-xST	42B-EMH-LJD-GxxP-xST	42B-FMH-LJD-GxxP-xST

DUAL PRESSURE MODELS (LED STANDARD EXCEPT FOR SINGLE SOLENOIDS)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure centre
				
Valve less base	Internal	Supply #3 port	42B-CMB-000-GxxP-xxx	42B-DMF-000-GxxP-xST
		Supply #5 port	42B-CMC-000-GxxP-xxx	42B-DMG-000-GxxP-xST
	External		42B-CMD-000-GxxP-xxx	42B-DMH-000-GxxP-xST
M5	Internal	Supply #3 port	42B-CMB-GJA-GxxP-xxx	42B-DMF-GJC-GxxP-xST
		Supply #5 port	42B-CMC-GJA-GxxP-xxx	42B-DMG-GJC-GxxP-xST
	External		42B-CMD-GJB-GxxP-xxx	42B-DMH-GJD-GxxP-xST
M7	Internal	Supply #3 port	42B-CMB-LJA-GxxP-xxx	42B-DMF-LJC-GxxP-xST
		Supply #5 port	42B-CMC-LJA-GxxP-xxx	42B-DMG-LJC-GxxP-xST
	External		42B-CMD-LJB-GxxP-xxx	42B-DMH-LJD-GxxP-xST

STANDARD SOLENOID OPERATOR ►

G XX P- xxx *		
XX Voltage	X Manual operator	XX Electrical connection
AA 120 V~/2,5W	1 Non-locking	Double solenoid & 3 position models
DC 24 V~/1,8W	2 Locking	ST Base plug-in
DD 24 V~/2,5W		Single solenoid models
DF 24 V~/4,0W		SA Base plug-in
		SJ Base plug-in with light
		SS Base plug-in with rectifier & light & ground

Other options available, see page 387.

** Latching solenoid available for 5/2 valves.

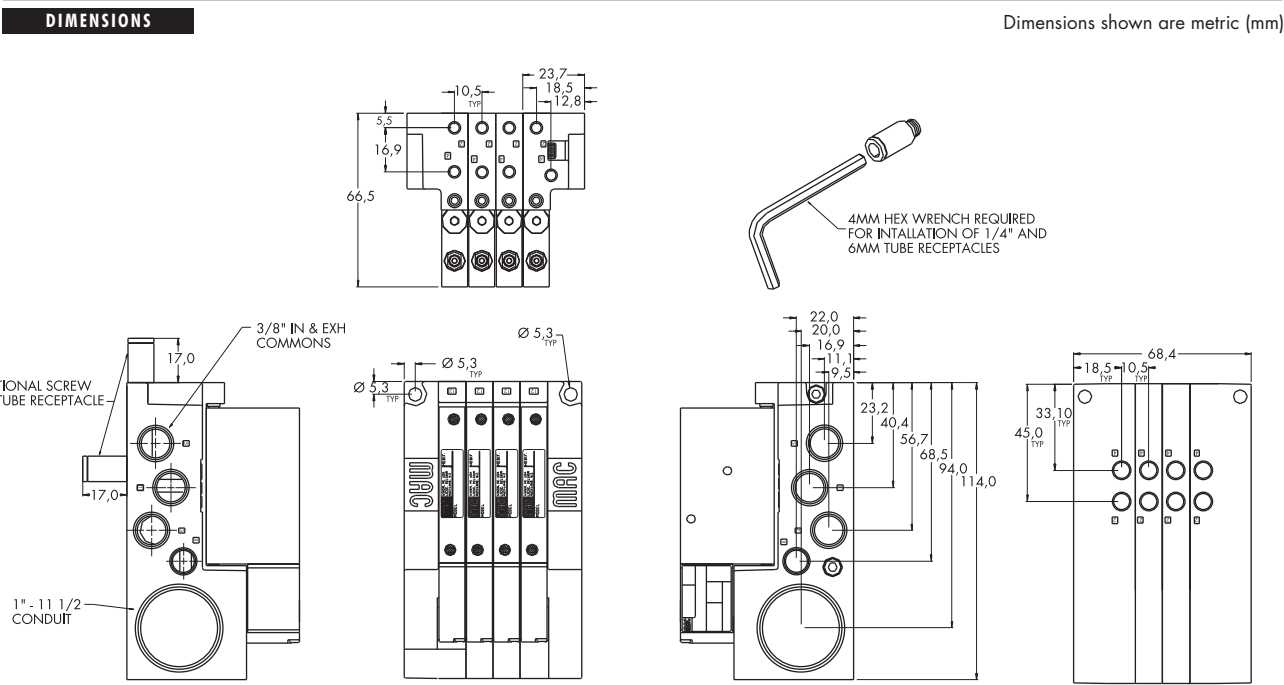
Note : - AC voltage requires connector with rectifier (for double solenoid consult factory).

- Manifold assemblies consist of (1) left end manifold, (1) right end manifold, and middle station manifolds (options "J" or "K").

Other options available for the 42 series valves, see page 154.

TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot - 2 pos. : 1,3 to 8 bar 3 pos. : 2,3 to 8 bar External Pilot : vacuum to 8 bar
Pilot pressure :	2 position : 1,3 to 8 bar 3 position : 2,3 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	3,8 mm
Flow (at 6 bar, ΔP=1bar) :	M7: 400 Nl/min (Cv 0,4) – M5: 350 Nl/min (Cv 0,35)
Coil :	Epoxy encapsulated – 100% ED – Class A wire
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	1.0 to 4.0 W
Response times :	Energize : 5 ms
(with 24V 4 W coil)	De-energize : 5 ms

- Options :
- NPTF threads • Sandwich flow controls : FC42B-AB
 - Sandwich regulator : see "regulators" section • Isolator disk for inlet and exhaust: 28454
 - Valve blanking plate : M-42004 • Plug-in wire protector : 24180



Function	Port size	Flow [Max]	Individual/Manifold mounting	Series
5/2	M5, M7	400 NI/min	Sub-base/ manifold base non "plug-in" with latching solenoid	

OPERATIONAL BENEFITS

1. 4-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10,5 mm centres).
3. High flow (up to 400 NI/min).
4. Fast repeatable response times.
5. Maximum shifting forces in both directions.
6. Long life.



HOW TO ORDER

SINGLE PRESSURE MODELS

Port size	Pilot air	5/2 Single pressure	
Valve less base	Internal	42B-AMA-000-Lxxx-xxx	
	External	42B-AMD-000-Lxxx-xxx	
M5	Internal	42B-AMA-GAL-Lxxx-xxx	
	External	42B-AMD-GAM-Lxxx-xxx	
M7	Internal	42B-AMA-LAL-Lxxx-xxx	
	External	42B-AMD-LAM-Lxxx-xxx	

DUAL PRESSURE MODELS

Port size	Pilot air		5/2 Dual pressure
			
Valve less base	Internal	Supply #3 port	42B-CMB-000-Lxxx-xxx
		Supply #5 port	42B-CMC-000-Lxxx-xxx
	External		42B-CMD-000-Lxxx-xxx
M5	Internal	Supply #3 port	42B-CMB-GAL-Lxxx-xxx
		Supply #5 port	42B-CMC-GAL-Lxxx-xxx
	External		42B-CMD-GAM-Lxxx-xxx
M7	Internal	Supply #3 port	42B-CMB-LAL-Lxxx-xxx
		Supply #5 port	42B-CMC-LAL-Lxxx-xxx
	External		42B-CMD-LAM-Lxxx-xxx

LATCHING SOLENOID OPERATOR ➤

LATCHING SOLENOID OPERATOR ➤

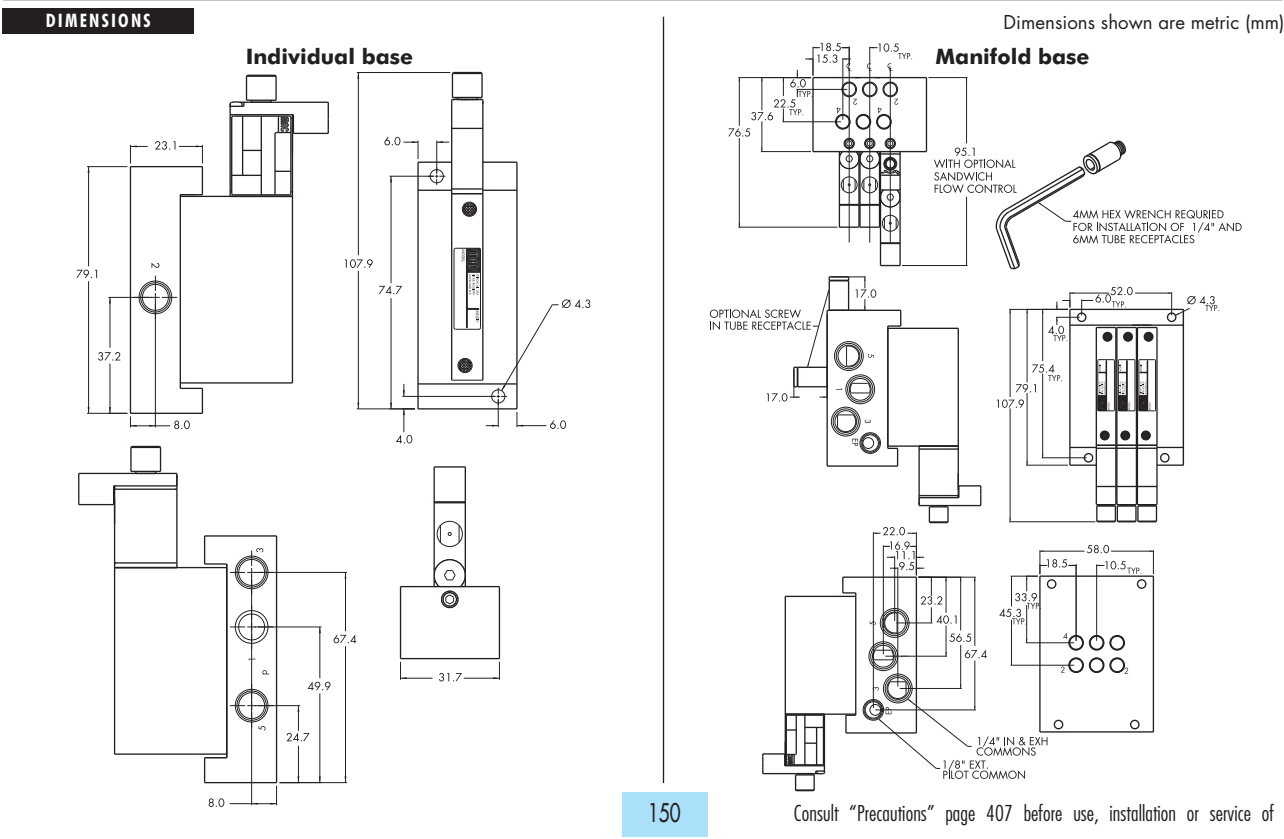
L **XXX-XXX***

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connection
DF	24 VDC (4,0 W)	A	45 cm	0	No operator	BA	2 Wire Flying leads
HA	24 VDC (1,95 W)	B	60 cm			KA	2 Wire Plug-in Assembly
		C	90 cm			LA	3 wire plug-in assembly (polarity switching cover)
						KE	4-wire plug-in assembly

* Other options available, see page 395.
 Note : Manifold assemblies consist of (1) left end manifold, (1) right end manifold, and middle station manifolds (options "J" or "K").
 Other options available for the 42 series valves, see page 153.

TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot - 2 pos. : 1,3 to 8 bar 3 pos. : 2,3 to 8 bar External Pilot : vacuum to 8 bar
Pilot pressure :	2 position : 1,3 to 8 bar 3 position : 2,3 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	3,8 mm
Flow (at 6 bar, ΔP=1bar) :	M7: 400 Nl/min (Cv 0,4) – M5: 350 Nl/min (Cv 0,35)
Coil :	Epoxy encapsulated – 100% ED – Class A wire
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	1.95 to 4.0 W
Response times :	Energize : 5 ms
(with 24V 4 W coil)	De-energize : 5 ms

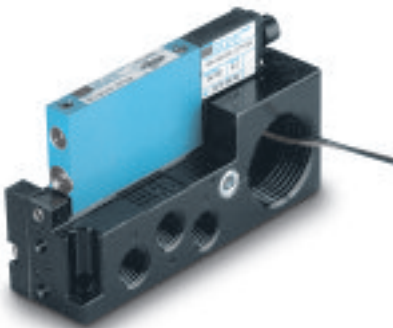
- Options :
- NPTF threads • Sandwich flow controls : FC42B-BB
 - Sandwich regulator : see "regulators" section • Isolator disk for inlet and exhaust: 28454
 - Valve blanking plate : M-42004



Function	Port size	Flow (Max)	Individual/Manifold mounting	Series
5/2	M5, M7	400 NI/min	Subbase/ manifold base "plug-in" with latching solenoid	

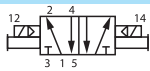
OPERATIONAL BENEFITS

1. 4-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10,5 mm centres).
3. High flow (up to 400 NI/min).
4. Fast repeatable response times.
5. Maximum shifting forces in both directions.
6. Long life.

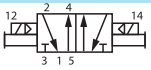


HOW TO ORDER

SINGLE PRESSURE MODELS

Port size	Pilot air	5/2 Single pressure
		
Valve less base	Internal	42B-AMA-000-LxxP-xxx
	External	42B-AMD-000-LxxP-xxx
M5	Internal	42B-AMA-GAA-LxxP-xxx
	External	42B-AMD-GAB-LxxP-xxx
M7	Internal	42B-AMA-LAA-LxxP-xxx
	External	42B-AMD-LAB-LxxP-xxx

DUAL PRESSURE MODELS

Port size	Pilot air	5/2 Dual pressure
		
Valve less base	Internal Supply #3 port	42B-CMB-000-LxxP-xxx
	Supply #5 port	42B-CMC-000-LxxP-xxx
	External	42B-CMD-000-LxxP-xxx
M5	Internal Supply #3 port	42B-CMB-GAA-LxxP-xxx
	Supply #5 port	42B-CMC-GAA-LxxP-xxx
	External	42B-CMD-GAB-LxxP-xxx
M7	Internal Supply #3 port	42B-CMB-LAA-LxxP-xxx
	Supply #5 port	42B-CMC-LAA-LxxP-xxx
	External	42B-CMD-LAB-LxxP-xxx

LATCHING SOLENOID OPERATOR >

L XX P- xxx *		
XX Voltage	X Manual operator	XX Electrical connection**
DF 24 VDC/4,0W	0 No operator	DA Plug-in
HA 24 VDC/1,95W		EA Plug-in 3 pin (polarity switching cover)

* Other options available, see page 395.
 ** For latching solenoid 2 and 4 wire, use electrical connector DA, DB, DC or DD. For 3 wire latching, use the "EA" connector.
 Other options available for the 42 series valves, see page 154.

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ISO 01

ISO 02

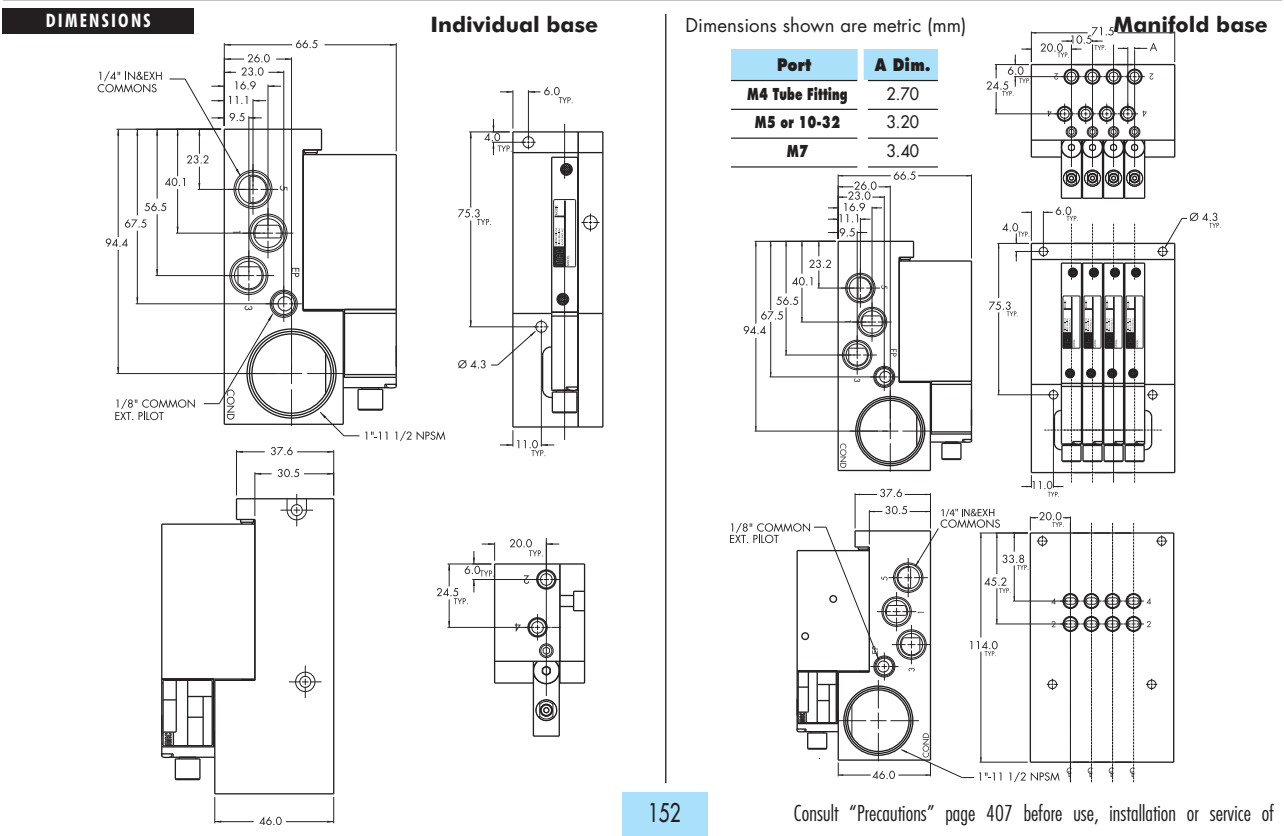
ISO 1

ISO 2

ISO 3

TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot - 2 pos. : 1,3 to 8 bar 3 pos. : 2,3 to 8 bar External Pilot : vacuum to 8 bar
Pilot pressure :	2 position : 1,3 to 8 bar 3 position : 2,3 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	3,8 mm
Flow (at 6 bar, ΔP=1bar) :	M7: 400 Nl/min (Cv 0,4) – M5: 350 Nl/min (Cv 0,35)
Coil :	Epoxy encapsulated – 100% ED – Class A wire
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	1.95 to 4.0 W
Response times :	Energize : 5 ms
(with 24V 4 W coil)	De-energize : 5 ms

- Options :
- NPTF threads • Sandwich flow controls : FC42B-AB
 - Sandwich regulator : see "regulators" section • Isolator disk for inlet and exhaust: 28454
 - Valve blanking plate : M-42004 • Plug-in wire protector : 24180





Direct solenoid and solenoid pilot operated valves

OPTIONS FOR NON
PLUG-IN VALVES

Base type :
Individual base

42B-XXX-XAX-Gxxx-xxx

- A Individual base – Side port
- B Individual base – Bottom port

Universal spool

42B-RXX-XXX-Gxxx-xxx

- R 2 position single solenoid universal spool
- S 2 position double solenoid universal spool

Base only :

42B-000-XXX (i.e. 42B-000-GAL) - Individual base

Manifold base

42B-XXX-XJX-Gxxx-xxx

- J Manifold base – Side ports
- K Manifold base – Bottom ports
- L Left end manifold base – Side ports
- M Left end manifold base – Bottom ports
- N Right end manifold base – Side ports
- P Right end manifold base – Bottom ports

Pilot style :

42B-XXM-XXX-Gxxx-xxx

- M Pilot exhaust muffled
- R Pilot exhaust piped (M5)
- U Pilot exhaust to main exhaust

Base/Manifold configurations for LATCHING SOLENOID VALVES :

42A-xxx-xAx-Lxxx-xxx

- A Individual base – Side port
- B Individual base – Bottom port
- J Manifold base – Side ports
- K Manifold base – Bottom ports
- L Left end manifold base - Side ports
- M Left end manifold base - Bottom ports
- N Right end manifold base - Side ports
- P Right end manifold base - Bottom ports

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ISO 01

ISO 02

ISO 1

ISO 2

ISO 3

OPTIONS FOR PLUG-IN VALVES

Base type :
Individual base

42B-XXX-XAX-GxxP-xxx

- A Individual base – Side port
- B Individual base – Bottom port

Manifold base

42B-XXX-XJX-GxxP-xxx

- J Manifold base – Side ports
- K Manifold base – Bottom ports
- L Left end manifold base – Side ports
- M Left end manifold base – Bottom ports
- N Right end manifold base – Side ports
- P Right end manifold base – Bottom ports

Universal spool

42B-RXX-XXX-GxxP-xxx

- R 2 position single solenoid universal spool
- S 2 position double solenoid universal spool

Base only :

42B-000-XXX (i.e. 42B-000-GAC)

- Individual base wired for a double solenoid

42B-000-XXX (i.e. 42B-000-GJC)

- Manifold base wired for a single solenoid

For LED with diode (2 & 3 position double solenoid valves)

42B-XXJ-XXX-GxxP-xGA

- J Internal pilot single pressure
- K Internal pilot dual pressure supply from #3 port
- L Internal pilot dual pressure supply from #5 port
- M External pilot

Pilot style :

42B-XXM-XXX-GxxP-xxx

- M Pilot exhaust muffled
- R Pilot exhaust piped (M5)
- U Pilot exhaust to main exhaust

Base/Manifold configurations for LATCHING SOLENOID VALVES :

42A-xxx-xAx-LxxP-xxx

- A Individual base – Side port
- B Individual base – Bottom port
- J Manifold base – Side ports
- K Manifold base – Bottom ports
- L Left end manifold base – Side ports
- M Left end manifold base – Bottom ports
- N Right end manifold base – Side ports
- P Right end manifold base – Bottom ports

Base/Manifold options for int./ext. pilot for LATCHING SOLENOID VALVES :

42A-xxx-xxA-LxxP-xxx

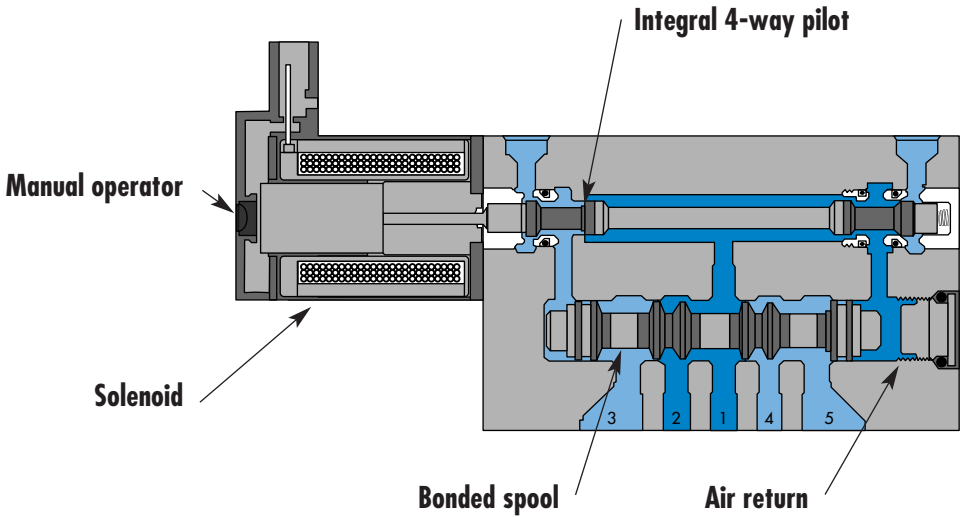
- A Plug-in Int. Pilot – 2 Wire Latching
- B Plug-in Ext. Pilot – 2 Wire Latching
- C Plug-in Int. Pilot – 3 Wire Latching
- D Plug-in Ext. Pilot – 3 Wire Latching
- E Plug-in Int. Pilot – 4 Wire Latching
- F Plug-in Ext. Pilot – 4 Wire Latching

Individual mounting

Sub-base non "plug-in"	Sub-base "plug-in"	Sub-base/ manifold base non "plug-in" with latching solenoid	Sub-base/ manifold base "plug-in" with latching solenoid
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Manifold mounting

Manifold base non "plug-in"	Manifold base "plug-in"	Sub-base/ manifold base non "plug-in" with latching solenoid	Sub-base/ manifold base "plug-in" with latching solenoid
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SERIES FEATURES

- High force MACSOLENOID®.
- Integral 4-way pilot design.
- Single or dual pressure.
- Internal or external pilot.
- Single or double solenoid.
- 2 or 3 position.
- Rectified AC voltage.
- Latching solenoid technology.

Series

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ISO 01

ISO 02

ISO 1

ISO 2

ISO 3

Function	Port size	Flow [Max]	Individual mounting	Series
5/2, 5/3	# 10-32 - 1/4" O.D. tube receptacle	0.4 C_v	Sub-base non "plug-in"	

OPERATIONAL BENEFITS

1. 4-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10.5 mm centers).
3. High flow (up to 0.4 C_v).
4. Fast repeatable response times.
5. Maximum shifting forces in both directions.
6. Long life.



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ISO 01

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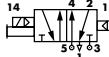
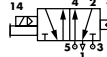
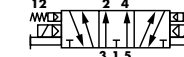
ISO 3

HOW TO ORDER

SINGLE PRESSURE MODELS (VALVE WITH BASE CODED FOR SIDE PORTS)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed center	5/3 Open center
Valve less base	Internal	42B-AMA-000-Gxxx-xxx	42B-BMA-000-Gxxx-xxx	42B-EMA-000-Gxxx-xxx	42B-FMA-000-Gxxx-xxx
	External	42B-AMD-000-Gxxx-xxx	42B-BMD-000-Gxxx-xxx	42B-EMD-000-Gxxx-xxx	42B-FMD-000-Gxxx-xxx
# 10-32	Internal	42B-AMA-AAL-Gxxx-xxx	42B-BMA-AAL-Gxxx-xxx	42B-EMA-AAL-Gxxx-xxx	42B-FMA-AAL-Gxxx-xxx
	External	42B-AMD-AAM-Gxxx-xxx	42B-BMD-AAM-Gxxx-xxx	42B-EMD-AAM-Gxxx-xxx	42B-FMD-AAM-Gxxx-xxx
1/4" O.D. tube receptacles	Internal	42B-AMA-EAL-Gxxx-xxx	42B-BMA-EAL-Gxxx-xxx	42B-EMA-EAL-Gxxx-xxx	42B-FMA-EAL-Gxxx-xxx
	External	42B-AMD-EAM-Gxxx-xxx	42B-BMD-EAM-Gxxx-xxx	42B-EMD-EAM-Gxxx-xxx	42B-FMD-EAM-Gxxx-xxx

DUAL PRESSURE MODELS (VALVE WITH BASE CODED FOR SIDE PORTS)

Port size	Pilot air		5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure center
					
Valve less base	Internal	Supply #3 port	42B-CMB-000-G xxx-xxx	42B-DMB-000-G xxx-xxx	42B-HMB-000-G xxx-xxx
		Supply #5 port	42B-CMC-000-G xxx-xxx	42B-DMC-000-G xxx-xxx	42B-HMC-000-G xxx-xxx
External			42B-CMD-000-G xxx-xxx	42B-DMD-000-G xxx-xxx	42B-HMD-000-G xxx-xxx
	Internal	Supply #3 port	42B-CMB-AAL-G xxx-xxx	42B-DMB-AAL-G xxx-xxx	42B-HMB-AAL-G xxx-xxx
# 10-32		Supply #5 port	42B-CMC-AAL-G xxx-xxx	42B-DMC-AAL-G xxx-xxx	42B-HMC-AAL-G xxx-xxx
	External		42B-CMD-AAM-G xxx-xxx	42B-DMD-AAM-G xxx-xxx	42B-HMD-AAM-G xxx-xxx
1/4" O.D.	Internal	Supply #3 port	42B-CMB-EAL-G xxx-xxx	42B-DMB-EAL-G xxx-xxx	42B-HMB-EAL-G xxx-xxx
		Supply #5 port	42B-CMC-EAL-G xxx-xxx	42B-DMC-EAL-G xxx-xxx	42B-HMC-EAL-G xxx-xxx
tube receptacles	External		42B-CMD-EAM-G xxx-xxx	42B-DMD-EAM-G xxx-xxx	42B-HMD-EAM-G xxx-xxx

STANDARD SOLENOID OPERATOR ►

G **xxx-xxx***

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
AA 120 VAC (2.5W)	A 18"	1 Non-locking recessed	BA Flying leads
DC 24 VDC (1.8W)	B 24"	2 Locking recessed	BT Flying leads with light
DD 24 VDC (2.5W)	C 36"		GA MAC JAC solenoid Plug-in
DF 24 VDC (4.0W)			KA Plug-in wire assy.
			KT Plug-in wire assy. with light
			KD Plug-in wire assy. with rectifier & light & ground

Note : AC voltage requires connector with rectifier.

* Other options available, see page 311.

Latching solenoid available for 5/2 valves.

Other options available for the 42 series valves, see page 107.

Function	Port size	Flow [Max]	Individual mounting	Series
5/2, 5/3	# 10-32 - 1/4" O.D. tube receptacle	0.4 C_v	Sub-base "plug-in"	

OPERATIONAL BENEFITS

1. 4-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10.5 mm centers).
3. High flow (up to 0.4 C_v).
4. Fast repeatable response times.
5. Maximum shifting forces in both directions.
6. Long life.



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ISO 01

ISO 02

ISO 1

ISO 2

ISO 3

HOW TO ORDER

SINGLE PRESSURE MODELS (LED STANDARD EXCEPT FOR SINGLE SOLENOIDS) - MODELS CODED FOR SIDE PORTS

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed center	5/3 Open center
Valve less base	Internal	42B-AMA-000-GxxP-xxx	42B-BME-000-GxxP-xST	42B-EME-000-GxxP-xST	42B-FME-000-GxxP-xST
	External	42B-AMD-000-GxxP-xxx	42B-BMH-000-GxxP-xST	42B-EMH-000-GxxP-xST	42B-FMH-000-GxxP-xST
# 10-32	Internal	42B-AMA-AAA-GxxP-xxx	42B-BME-AAC-GxxP-xST	42B-EME-AAC-GxxP-xST	42B-FME-AAC-GxxP-xST
	External	42B-AMD-AAB-GxxP-xxx	42B-BMH-AAD-GxxP-xST	42B-EMH-AAD-GxxP-xST	42B-FMH-AAD-GxxP-xST
1/4" O.D.	Internal	42B-AMA-EAA-GxxP-xxx	42B-BME-EAC-GxxP-xST	42B-EME-EAC-GxxP-xST	42B-FME-EAC-GxxP-xST
tube receptacles	External	42B-AMD-EAB-GxxP-xxx	42B-BMH-EAD-GxxP-xST	42B-EMH-EAD-GxxP-xST	42B-FMH-EAD-GxxP-xST

DUAL PRESSURE MODELS (LED STANDARD EXCEPT FOR SINGLE SOLENOIDS) - MODELS CODED FOR SIDE PORTS

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure center
Valve less base	Internal	Supply #3 port 42B-CMB-000-GxxP-xxx	42B-DMF-000-GxxP-xST	42B-HMF-000-GxxP-xST
		Supply #5 port 42B-CMC-000-GxxP-xxx	42B-DMG-000-GxxP-xST	42B-HMG-000-GxxP-xST
	External	42B-CMD-000-GxxP-xxx	42B-DMH-000-GxxP-xST	42B-HMH-000-GxxP-xST
# 10-32	Internal	Supply #3 port 42B-CMB-AAA-GxxP-xxx	42B-DMF-AAC-GxxP-xST	42B-HMF-AAC-GxxP-xST
		Supply #5 port 42B-CMC-AAA-GxxP-xxx	42B-DMG-AAC-GxxP-xST	42B-HMG-AAC-GxxP-xST
	External	42B-CMD-AAB-GxxP-xxx	42B-DMH-AAD-GxxP-xST	42B-HMH-AAD-GxxP-xST
1/4" O.D.	Internal	Supply #3 port 42B-CMB-EAA-GxxP-xxx	42B-DMF-EAC-GxxP-xST	42B-HMF-EAC-GxxP-xST
tube receptacles		Supply #5 port 42B-CMC-EAA-GxxP-xxx	42B-DMG-EAC-GxxP-xST	42B-HMG-EAC-GxxP-xST
	External	42B-CMD-EAB-GxxP-xxx	42B-DMH-EAD-GxxP-xST	42B-HMH-EAD-GxxP-xST

STANDARD SOLENOID OPERATOR ►

G **xx** P-**xxx***

XX Voltage	X Manual operator	XX Electrical connection
AA 120 VAC (2.5W)	1 Non-locking recessed	Double solenoid & 3 position models
DC 24 VDC (1.8W)	2 Locking recessed	ST Base plug-in
DD 24 VDC (2.5W)		Single solenoid models
DF 24 VDC (4.0W)		SA Base plug-in
		SJ Base plug-in with light
		SS Base plug-in with rectifier & light & ground

Note : AC voltage requires connector with rectifier (for double solenoid consult factory).

* Other options available, see page 311.

Other options available for the 42 series valves, see page 108.

TECHNICAL DATA

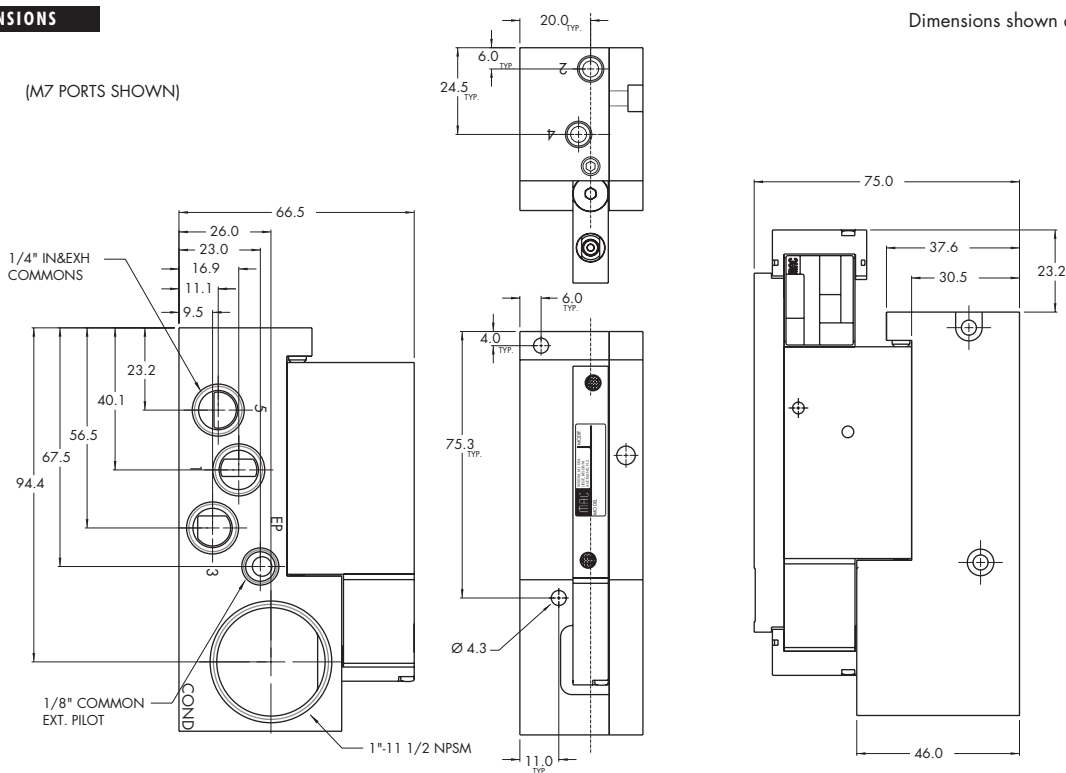
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot - 2 pos. : 20 to 120 PSI 3 pos. : 40 to 120 PSI External Pilot : vacuum to 120 PSI
Pilot pressure :	2 position : 20 to 120 PSI 3 position : 40 to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Flow :	# 10-32 : (0.35 C _v) – 1/4" O.D. tube receptacle : (0.4 C _v)
Coil :	Class A continuous duty, #22 AWG x 12 base leads
Voltage range :	-15% to +10% of nominal voltage
Power :	1.0 to 4.0 W
Response times : (with 24V 4 W coil)	Energize : 5 ms De-energize : 5 ms

Options :

- M5 ports, M7 ports, 6 mm O.D. tube receptacles
- Sandwich flow controls : FC42B-AB
- Sandwich regulator : see 'Regulator' section

DIMENSIONS

Dimensions shown are metric (mm)



Function	Port size	Flow [Max]	Manifold mounting	Series
5/2, 5/3	# 10-32 - 1/4" O.D. tube receptacle	0.4 C_v	Manifold base non "plug-in"	

OPERATIONAL BENEFITS

1. 4-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10.5 mm centers).
3. High flow (up to 0.4 C_v).
4. Fast repeatable response times.
5. Maximum shifting forces in both directions.
6. Long life.



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48P

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ISO 01

ISO 02

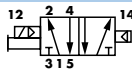
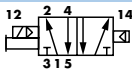
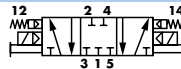
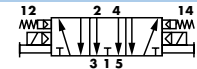
ISO 1

ISO 2

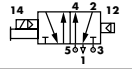
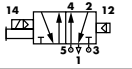
ISO 3

HOW TO ORDER

SINGLE PRESSURE MODELS (MIDDLE STATION MANIFOLDS WITH SIDE PORTS)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed center	5/3 Open center
					
Valve less base	Internal	42B-AMA-000-Gxxx-xxx	42B-BMA-000-Gxxx-xxx	42B-EMA-000-Gxxx-xxx	42B-FMA-000-Gxxx-xxx
	External	42B-AMD-000-Gxxx-xxx	42B-BMD-000-Gxxx-xxx	42B-EMD-000-Gxxx-xxx	42B-FMD-000-Gxxx-xxx
# 10-32	Internal	42B-AMA-AJL-Gxxx-xxx	42B-BMA-AJL-Gxxx-xxx	42B-EMA-AJL-Gxxx-xxx	42B-FMA-AJL-Gxxx-xxx
	External	42B-AMD-AJM-Gxxx-xxx	42B-BMD-AJM-Gxxx-xxx	42B-EMD-AJM-Gxxx-xxx	42B-FMD-AJM-Gxxx-xxx
1/4" O.D. tube receptacles	Internal	42B-AMA-EJL-Gxxx-xxx	42B-BMA-EJL-Gxxx-xxx	42B-EMA-EJL-Gxxx-xxx	42B-FMA-EJL-Gxxx-xxx
	External	42B-AMD-EJM-Gxxx-xxx	42B-BMD-EJM-Gxxx-xxx	42B-EMD-EJM-Gxxx-xxx	42B-FMD-EJM-Gxxx-xxx

DUAL PRESSURE MODELS (MIDDLE STATION MANIFOLDS WITH SIDE PORTS)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure center
				
Valve less base	Internal Supply #3 port	42B-CMB-000-Gxxx-xxx	42B-DMB-000-Gxxx-xxx	42B-HMB-000-Gxxx-xxx
	Internal Supply #5 port	42B-CMC-000-Gxxx-xxx	42B-DMC-000-Gxxx-xxx	42B-HMC-000-Gxxx-xxx
# 10-32	External Supply #3 port	42B-CMD-000-Gxxx-xxx	42B-DMD-000-Gxxx-xxx	42B-HMD-000-Gxxx-xxx
	External Supply #5 port	42B-CMC-AJL-Gxxx-xxx	42B-DMC-AJL-Gxxx-xxx	42B-HMC-AJL-Gxxx-xxx
1/4" O.D. tube receptacles	External Supply #3 port	42B-CMD-AJM-Gxxx-xxx	42B-DMD-AJM-Gxxx-xxx	42B-HMD-AJM-Gxxx-xxx
	External Supply #5 port	42B-CMC-EJL-Gxxx-xxx	42B-DMC-EJL-Gxxx-xxx	42B-HMC-EJL-Gxxx-xxx
	External	42B-CMD-EJM-Gxxx-xxx	42B-DMD-EJM-Gxxx-xxx	42B-HMD-EJM-Gxxx-xxx

STANDARD SOLENOID OPERATOR ➤

G **xxx-xxx***

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
AA 120 VAC (2.5W)	A 18"	1 Non-locking recessed	BA Flying leads
DC 24 VDC (1.8W)	B 24"	2 Locking recessed	BT Flying leads with light
DD 24 VDC (2.5W)	C 36"		GA MAC JAC solenoid plug-in
DF 24 VDC (4.0W)			KA Plug-in wire assy.
			KT Plug-in wire assy. with light
			KD Plug-in wire assy. with rectifier & light & ground

Note : - AC voltage requires connector with rectifier.

* Other options available, see page 311.

Latching solenoid available for 5/2 valves.

Manifold assemblies consist of (1) left end manifold, (1) right end manifold, and middle station manifolds (options "J" or "K").

Other options available for the 42 series valves, see page 107.

TECHNICAL DATA

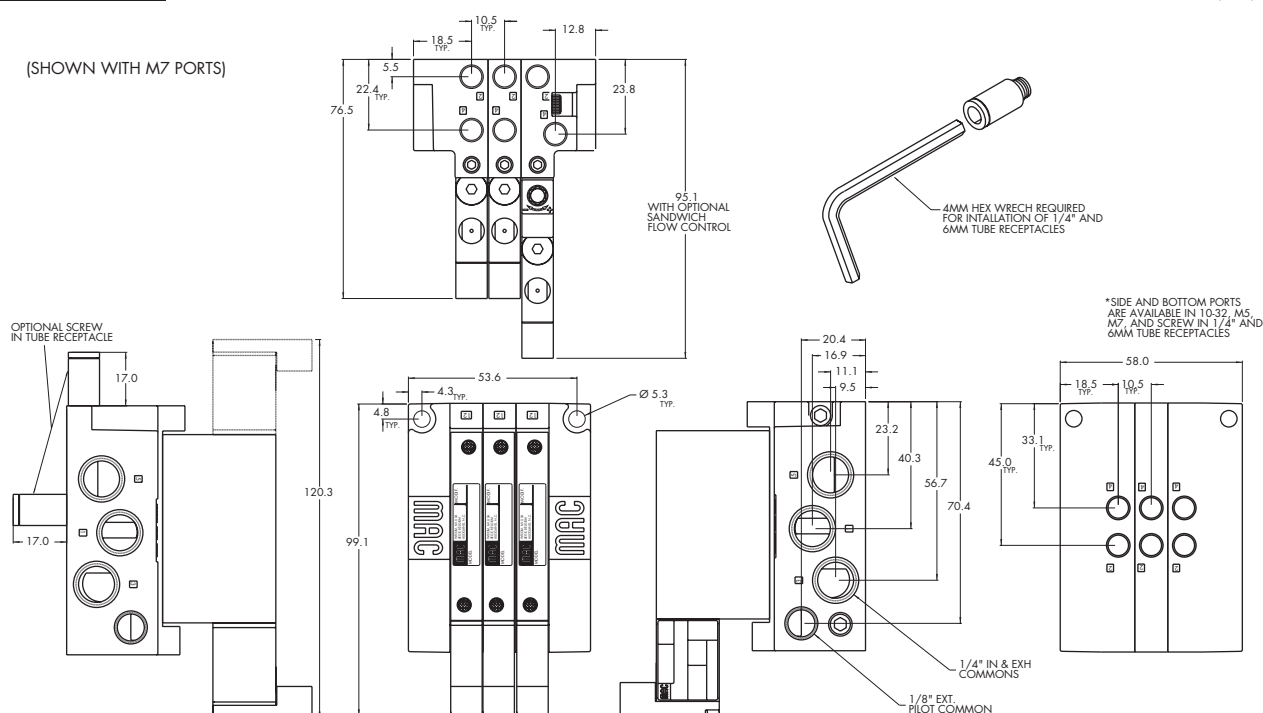
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot - 2 pos. : 20 to 120 PSI 3 pos. : 40 to 120 PSI External Pilot : vacuum to 120 PSI
Pilot pressure :	2 position : 20 to 120 PSI 3 position : 40 to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Flow :	# 10-32 : (0.35 C _v) – 1/4" O.D. tube receptacle : (0.4 C _v)
Coil :	Class A wire (#22 AWG x 18), continuous duty
Voltage range :	-15% to +10% of nominal voltage
Power :	1.0 to 4.0 W
Response times :	Energize : 5 ms (with 24V 4 W coil) De-energize : 5 ms

Options :

- M5 ports, M7 ports, 6 mm O.D. tube receptacles
- Sandwich flow controls : FC42B-BB
- Sandwich regulator : see "regulators" section
- Isolator disk for inlet or exhaust: 28454
- Valve blanking plate : M-42004

DIMENSIONS

Dimensions shown are metric (mm)



Function	Port size	Flow [Max]	Manifold mounting	Series
5/2, 5/3	# 10-32 - 1/4" O.D. tube receptacle	0.4 C_v	Manifold base "plug-in"	

OPERATIONAL BENEFITS

1. 4-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10.5 mm centers).
3. High flow (up to 0.4 C_v).
4. Fast repeatable response times.
5. Maximum shifting forces in both directions.
6. Long life.



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400

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ISO 01

ISO 02

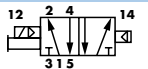
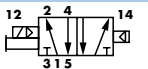
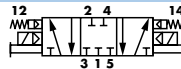
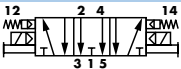
ISO 1

ISO 2

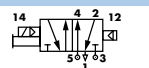
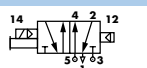
ISO 3

HOW TO ORDER

SINGLE PRESSURE MODELS (LED STANDARD EXCEPT FOR SINGLE SOLENOIDS)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed center	5/3 Open center
					
Valve less base	Internal	42B-AMA-000-GxxP-xxx	42B-BME-000-GxxP-xST	42B-EME-000-GxxP-xST	42B-FME-000-GxxP-xST
	External	42B-AMD-000-GxxP-xxx	42B-BMH-000-GxxP-xST	42B-EMH-000-GxxP-xST	42B-FMH-000-GxxP-xST
# 10-32	Internal	42B-AMA-AJA-GxxP-xxx	42B-BME-AJC-GxxP-xST	42B-EME-AJC-GxxP-xST	42B-FME-AJC-GxxP-xST
	External	42B-AMD-AJB-GxxP-xxx	42B-BMH-AJD-GxxP-xST	42B-EMH-AJD-GxxP-xST	42B-FMH-AJD-GxxP-xST
1/4" O.D. tube receptacles	Internal	42B-AMA-EJA-GxxP-xxx	42B-BME-EJC-GxxP-xST	42B-EME-EJC-GxxP-xST	42B-FME-EJC-GxxP-xST
	External	42B-AMD-EJB-GxxP-xxx	42B-BMH-EJD-GxxP-xST	42B-EMH-EJD-GxxP-xST	42B-FMH-EJD-GxxP-xST

DUAL PRESSURE MODELS (LED STANDARD EXCEPT FOR SINGLE SOLENOIDS)

Port size	Pilot air		5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure center
					
Valve less base	Internal	Supply #3 port	42B-CMB-000-GxxP-xxx	42B-DMF-000-GxxP-xST	42B-HMF-000-GxxP-xST
		Supply #5 port	42B-CMC-000-GxxP-xxx	42B-DMG-000-GxxP-xST	42B-HMG-000-GxxP-xST
	External		42B-CMD-000-GxxP-xxx	42B-DMH-000-GxxP-xST	42B-HMH-000-GxxP-xST
# 10-32	Internal	Supply #3 port	42B-CMB-AJA-GxxP-xxx	42B-DMF-AJC-GxxP-xST	42B-HMF-AJC-GxxP-xST
		Supply #5 port	42B-CMC-AJA-GxxP-xxx	42B-DMG-AJC-GxxP-xST	42B-HMG-AJC-GxxP-xST
	External		42B-CMD-AJB-GxxP-xxx	42B-DMH-AJD-GxxP-xST	42B-HMH-AJD-GxxP-xST
1/4" O.D. tube receptacles	Internal	Supply #3 port	42B-CMB-EJA-GxxP-xxx	42B-DMF-EJC-GxxP-xST	42B-HMF-EJC-GxxP-xST
		Supply #5 port	42B-CMC-EJA-GxxP-xxx	42B-DMG-EJC-GxxP-xST	42B-HMG-EJC-GxxP-xST
	External		42B-CMD-EJB-GxxP-xxx	42B-DMH-EJD-GxxP-xST	42B-HMH-EJD-GxxP-xST

STANDARD SOLENOID OPERATOR ➤

G **XX** P-**XXX***

Above numbers are middle station manifolds with side ports

XX Voltage	X Manual operator	XX Electrical connection
AA 120 VAC (2.5W)	1 Non-locking recessed	ST Base plug-in <i>Double solenoid & 3 position models</i>
DC 24 VDC (1.8W)	2 Locking recessed	<i>Single solenoid models</i>
DD 24 VDC (2.5W)		SA Base plug-in
DF 24 VDC (4.0W)		SJ Base plug-in with light
		SS Base plug-in with rectifier & light & ground

* Other options available, see page 311.

** Latching solenoid available for 5/2 valves.

Note : - AC voltage requires connector with rectifier (for double solenoid consult factory).

- Manifold assemblies consist of (1) left end manifold, (1) right end manifold, and middle station manifolds (options "J" or "K").

Other options available for the 42 series valves, see page 108.

TECHNICAL DATA

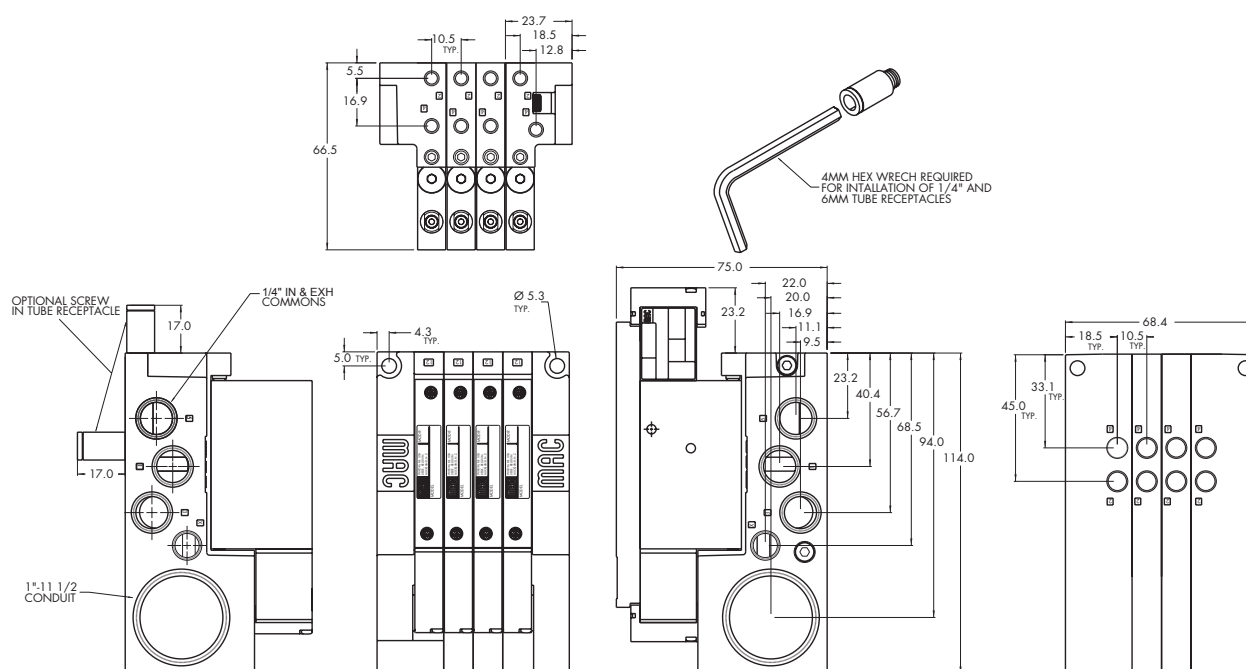
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot - 2 pos. : 20 to 120 PSI 3 pos. : 40 to 120 PSI External Pilot : vacuum to 120 PSI
Pilot pressure :	2 position : 20 to 120 PSI 3 position : 40 to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Flow :	# 10-32 : (0.35 C _v) – 1/4" O.D. tube receptacle : (0.4 C _v)
Coil :	Class A continuous duty, #22 AWG x 12 base leads
Voltage range :	-15% to +10% of nominal voltage
Power :	1.0 to 4.0 W
Response times :	Energize : 5 ms (with 24V 4 W coil) De-energize : 5 ms

Options :

- M5 ports, M7 ports, 6 mm O.D. tube receptacles • Sandwich flow controls : FC42B-AB
- Sandwich regulator : see "regulators" section • Isolator disk for inlet or exhaust: 28454
- Valve blanking plate : M-42004 • Plug-in wire protector : 24180

DIMENSIONS

Dimensions shown are metric (mm)



OPTIONS FOR NON PLUG-IN VALVES	33
Base type :	34
Individual base	36
42B-XXX-X A X-Gxxx-xxx	
A Individual base – Side ports	
B Individual base – Bottom ports	
Manifold base	
42B-XXX-X J X-Gxxx-xxx	
J Manifold base – Side ports	
K Manifold base – Bottom ports	
L Left end manifold base – Side ports	32
M Left end manifold base – Bottom ports	37
N Right end manifold base – Side ports	38
P Right end manifold base – Bottom ports	52
Universal spool	67
42B-RXX-XXX-Gxxx-xxx	69
R 2 position single solenoid universal spool	44
S 2 position double solenoid universal spool	46
Base only :	
42B-000-XXX (i.e. 42B-000-AAL) - Individual base	
42B-000-XXX (i.e. 42B-000-AJL) - Manifold base	
Pilot style :	42
42B-X M X-XXX-Gxxx-xxx	47
M Pilot exhaust muffled	48P
P Pilot exhaust piped (# 10-32)	
U Pilot exhaust to main exhaust	
	48
	400
	92
	93
	ISO 01
	ISO 02
	ISO 1
	ISO 2
	ISO 3

OPTIONS FOR PLUG-IN VALVES

Base type :

Individual base

42B-XXX-**AX**-G**xxP**-xxx

- A** Individual base – Side ports
- B** Individual base – Bottom ports

Manifold base

42B-XXX-**JX**-G**xxP**-xxx

- J** Manifold base – Side ports
- K** Manifold base – Bottom ports
- L** Left end manifold base – Side ports
- M** Left end manifold base – Bottom ports
- N** Right end manifold base – Side ports
- P** Right end manifold base – Bottom ports

Universal spool

42B-**RXX**-XXX-G**xxP**-xxx

- R** 2 position single solenoid universal spool
- S** 2 position double solenoid universal spool

Base only :

42B-000-XXX (i.e. 42B-000-AAC)

- Individual base wired for a double solenoid

42B-000-XXX (i.e. 42B-000-AJA)

- Manifold base wired for a single solenoid

For LED with diode (2 & 3 position double solenoid valves)

42B-XX**J**-XXX-G**xxP**-xST

- J** Internal pilot single pressure
- K** Internal pilot dual pressure supply from #3 port
- L** Internal pilot dual pressure supply from #5 port
- M** External pilot

Pilot style :

42B-X**MX**-XXX-G**xxP**-xxx

- M** Pilot exhaust muffled
- P** Pilot exhaust piped (# 10-32)
- U** Pilot exhaust to main exhaust



Codification table for voltages / Manual operator / Electrical connection

VALVE CODE ➤ **G XX X-X XX**
1 2 3 4

OPTIONS AVAILABLE FOR

- Solenoid valves 32, 34, 38, 42, 44 & 48 Series

1. VOLTAGE

G-XX X-X XX	VOLTAGE
AA	120 VAC (2.5W) Requires electrical connector with rectifier
AC	24 VAC (4.0W) Requires electrical connector with rectifier
DA	24 VDC (1.0W)
DC	24 VDC (1.8W)
DD	24 VDC (2.5W)
DE	24 VDC (3.0W)
DF	24 VDC (4.0W)
DG	12 VDC (1.0W)
DJ	12 VDC (1.8W)
DK	12 VDC (2.5W)
DM	12 VDC (3.0W)
DN	12 VDC (4.0W)
DR	6 VDC (1.8W)
DS	6 VDC (3.0W)
EB	48 VDC (1.8W)
EC	48 VDC (3.0W)
ED	120 VDC (2.5W)
GD	12 VDC (0.5W) 34 series only
GE	24 VDC (0.5W) 34 series only

2. WIRE LENGTH

G-XX X-X XX	WIRE LENGTH
0	No lead wires (used only with "KJ" & "KM" connectors)
A	18" coil leads
B	24" coil leads
C	36" coil leads
D	48" coil leads
E	72" coil leads
F	96" coil leads
G	120" coil leads
H	144" coil leads
1	18" base leads
2	24" base leads
3	36" base leads
4	48" base leads
5	72" base leads
6	96" base leads
7	120" base leads

3. MANUAL OPERATOR

G-XX X-X XX	MANUAL OPERATOR
1	Non-locking recessed
2	Locking recessed
3	Non-locking extended
4	Locking extended

4. ELECTRICAL CONNECTION

G-XX X-X XX	ELECTRICAL CONNECTION
BA	Flying leads
BB	BA with ground wire
BC	BA with light
BD	BA with light and ground wire
BE	BA with suppression diode
BF	BA with suppression diode and ground wire
BG	BA with suppression diode and light
BH	BA with suppression diode, light and ground wire
BN	BA with suppression diode and blocking diode
BP	BA with suppression diode, blocking diode and ground wire
BR	BA with suppression diode, blocking diode and light
BS	BA with suppression diode, blocking diode, light and ground wire
GA	MAC JAC Solenoid plug-in
GB	MAC JAC Solenoid plug-in w/Diode
GC	MAC JAC Solenoid plug-in w/MOV
GD	MAC JAC Solenoid plug-in w/LED
GE	MAC JAC Solenoid plug-in w/Diode & LED
GF	MAC JAC Solenoid plug-in w/MOV & LED
GG	MAC JAC Solenoid plug-in w/Rectifier
GH	MAC JAC Solenoid plug-in w/Rectifier & LED
KA	Solenoid plug-in wire assembly
KB	KA with ground
KC	KA with rectifier and light
KD	KA with rectifier, light and ground
KE	KA with suppression diode
KF	KA with suppression diode and ground
KJ	Solenoid plug-in housing without wire assembly
KM	Solenoid plug-in housing with ground pin without wire assembly
KN	KA with suppression diode and blocking diode
KP	KA with suppression diode, blocking diode and ground
KT	KA with light
KU	KA with light and ground
KV	KA with suppression diode and light
KW	KA with suppression diode, light and ground
KX	KA with suppression diode, blocking diode and light
KY	KA with suppression diode, blocking diode, light & ground

ELECTRICAL CONNECTION FOR PLUG-IN VALVES

G-XX X-X XX	PLUG-IN OPTIONS
SB	Base plug-in with ground
SC	Base plug-in with suppression and blocking diode
SD	Base plug-in with suppression and blocking diode and ground
SE	Base plug-in with MOV
SF	Base plug-in with MOV and ground
SG	Base plug-in with rectifier
SH	Base plug-in with rectifier and ground
SK	Base plug-in with light and ground
SL	Base plug-in with suppression and blocking diode and light
SM	Base plug-in with suppression and blocking diode with light and ground
SN	Base plug-in with MOV and light
SP	Base plug-in with MOV and light with ground
SR	Base plug-in with rectifier and light

How to Order Non Plug-In Circuit Bar For 42 Series

EBM42A - XX X X X - XX - 9

Valves, Blank Station Cover Plates Assembled to Bar

Number of Stations

Spacing

00 10.5 mm

Configuration

30.5 mm Profile Bar

- A Side Cyl. Ports
- B Bottom Cyl. Ports

45.0 mm Profile Bar

- C Side Ports W / Flow Controls
- D Bottom Cyl. Ports W / Flow Controls
- * E Side Ports W / Reg.
- * F Bottom Cyl. Ports W / Reg.
- * G Side Ports, Flow Controls & Regulator
- * H Bottom Cyl. Ports, Flow Controls & Regulator.

* Regulator Must Be
Ordered Separately
i.e. PR42A-COAA

Style and Pilot

Internal Pilot

- A Standard
- B Add-On Style

External Pilot

- D Standard
- E Add-On Style

End Plate Kit Included
With Options "B" & "E"

Cyl. Port Size & thread Type

With NPTF Common Ports

- A 10-32
- B M5
- C M7
- D 5/32 Tube Receptacle (Pressed In)
- E 6 mm Tube Receptacle**
- F 1/4" Tube Receptacle**

With BSPPL Common Ports

- G M5
- H M7
- J 5/32 Tube Receptacle (Pressed In)
- K 6 mm Tube Receptacle**
- L 1/4" Tube Receptacle**

With BSPTR Common Ports

- M M5
- N M7
- P 5/32 Tube Receptacle (Pressed In)
- R 6 mm Tube Receptacle**
- S 1/4" Tube Receptacle**

** Threaded Fitting

End Plates & Miscellaneous Parts

- M-42001-01(*) Right Hand End Plate Kit 30.5 mm Profile Int. Pilot
- M-42001-02(*) Right Hand End Plate Kit 30.5 mm Profile Ext. Pilot
- M-42004 Blank Station Cover Plate Kit
- 28454 Isolator Disc (Inlet and Exhaust)
- 28455 Isolator Disc Pilot Supply Ports
- 32625 6mm Tube Receptacle
- 32627 1/4" Tube Receptacle

(*) P= BSPPL T= BSPTR Blank= St'd NPTF

Note: The Add-A-Unit for an Add-On style bar is
the non plug-in die cast Add-A-Unit manifold base.
Option only for the 30.5mm profile.

How to Order Plug-In Circuit Bar For 42 Series

ECD42A - X X X X X - X X X X - 9

Number of Stations
Valves, Cover Plates Assembled to Manifold

Spacing

Configuration

Style and Pilot

Cyl. Port Size & Thread Type

Base Electrical

00 10.5 mm

30.5 mm Low Profile Bar

- A Side Cyl. Ports
- B Bottom Cyl. Ports
- * C Bottom Cyl's. w / Reg
- D Bottom Cyl's. w / F.C.

43.75 mm Mid Profile Bar

- E Side Cyl. Ports w / Flow Controls

55.7 mm High Profile Bar

- † * J Bottom Cyl. Ports w / Flow Controls & Regulator On Same End

* Regulator Must Be Ordered Separately I.E. PR42A-COAA

† Reg. Must Be Ordered w / o Gage Port Option

Internal Pilot

- A Standard
- B Add-On Style

External Pilot

- D Standard
- E Add-On Style

Right-Hand End Plate Kit Included w / Bar For Options "B" & "E"

The Die Cast Manifold Base To Be Used As The Add-A-Unit For The Add-On Style Bars. Available For 30.5 mm Profile Bars, Options "A" & "B" Only

With NPTF Common Ports

- A 10-32
- B M5
- C M7
- D 5/32 Tube Receptacle (Pressed In)
- E 6 mm Tube Receptacle**
- F 1/4" Tube Receptacle**

With BSPPL Common Ports

- G M5
- H M7
- J 5/32 Tube Receptacle (Pressed In)
- K 6 mm Tube Receptacle**
- L 1/4" Tube Receptacle**

With BSPTR Common Ports

- M M5
- N M7
- P 5/32 Tube Receptacle (Pressed In)
- R 6 mm Tube Receptacle**
- S 1/4" Tube Receptacle**

** Screw-In Fitting

With NPTF Common Ports

- AO Plug-In, 2 Wires
- BO Plug-In, 2 Wires W / Ground
- CO Plug-In, 4 Wires (Latching)
- DO Plug-In, 4 Wires W / Ground (Latching)
- EO Plug-In, 3 Wires (Dbl. Sol. & Latching)

Note: "AO" Option Is Used For Both Standard and Latching Solenoids

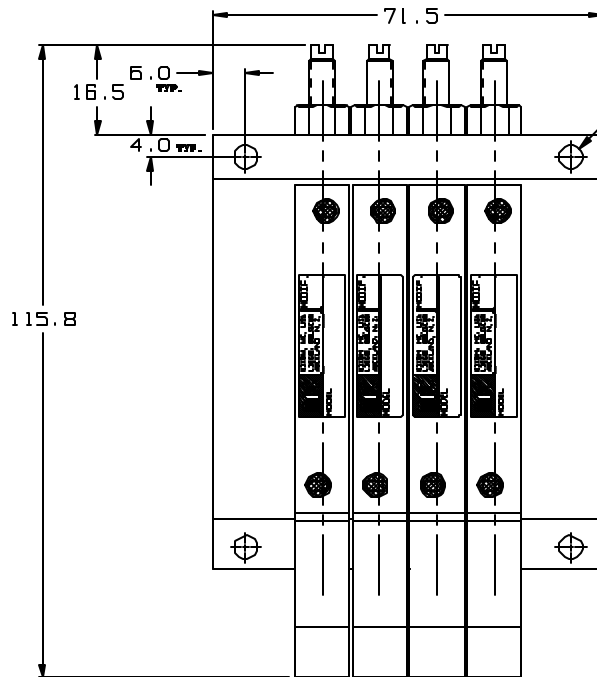
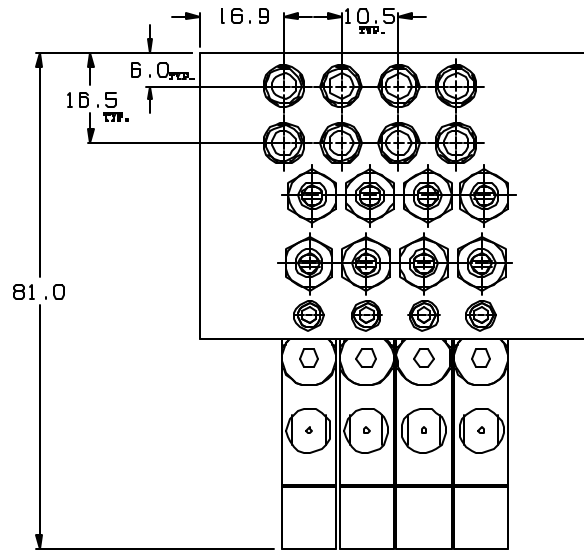
Replacement Parts & Accessories:

- M-42009-01(*) End Plate Kit - Add-On Bar Int. Pilot
- M-42009-02(*) End Plate Kit - Add-On Bar Ext. Pilot
- M-42004 Blank Station Cover Plate
- 28454 Isolator Disc, Inlet & Exhaust, Installed Between Add-A-Unit Stations
- 24180 Base Wire Plug-In Protector

(*) P= BSPPL, T= BSPTR
Blank= ST'D NPTF

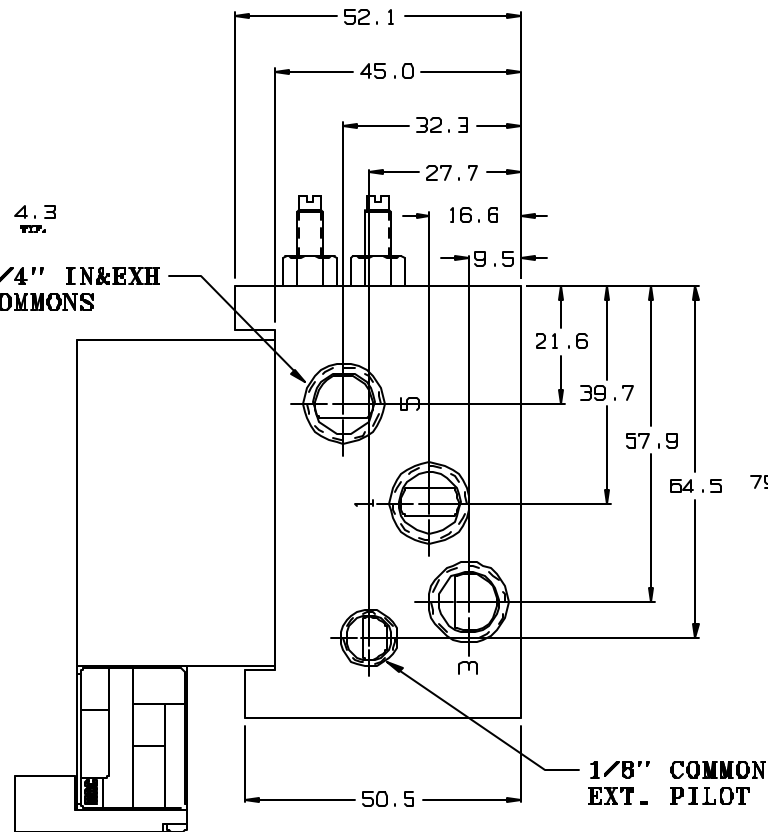
42 SERIES NON PLUG-IN BAR W/ FLOW CONTROLS

(M7 PORTS SHOWN)

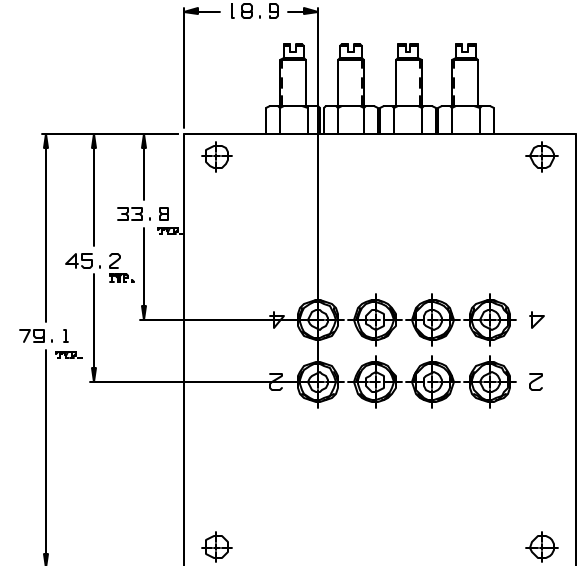


Ø 4.3
TYP.

1/4" IN&EXH
COMMONS



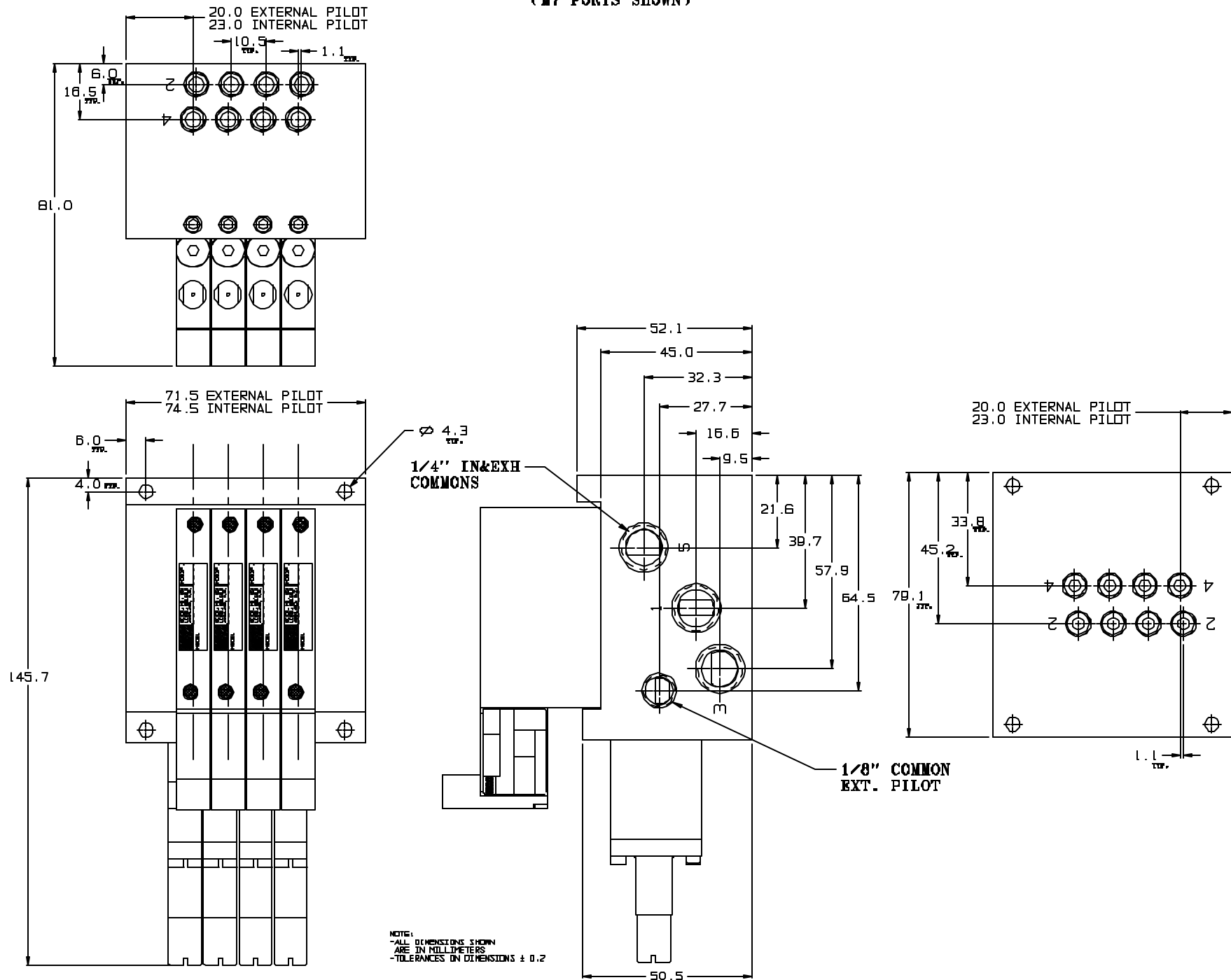
1/8" COMMON
EXT. PILOT



NOTE:
-ALL DIMENSIONS SHOWN
ARE IN MILLIMETERS
-TOLERANCES ON DIMENSIONS ± 0.2

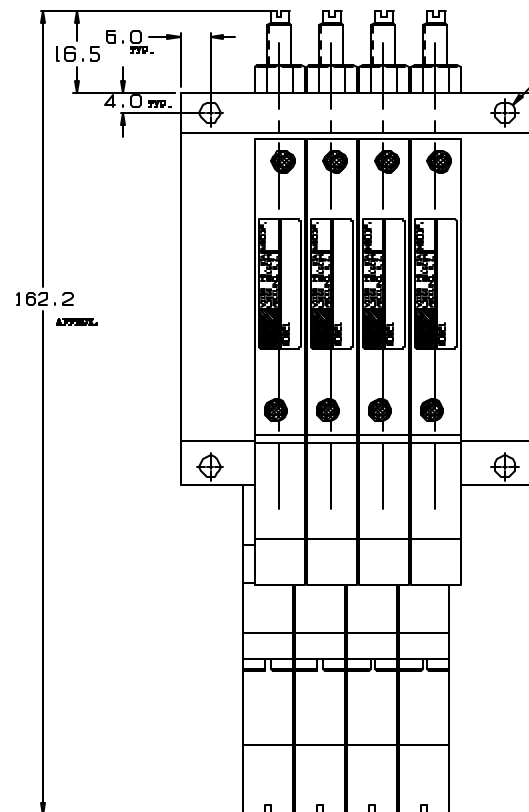
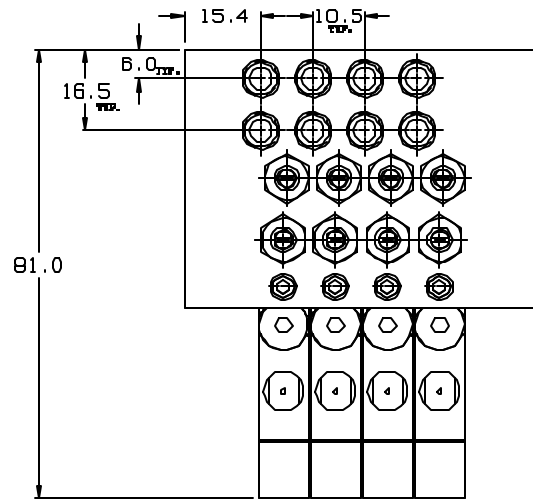
42 SERIES NON PLUG-IN BAR W/REGULATOR

(M7 PORTS SHOWN)



42 SERIES NON PLUG-IN BAR W/ FLOW CONTROLS AND REGULATOR

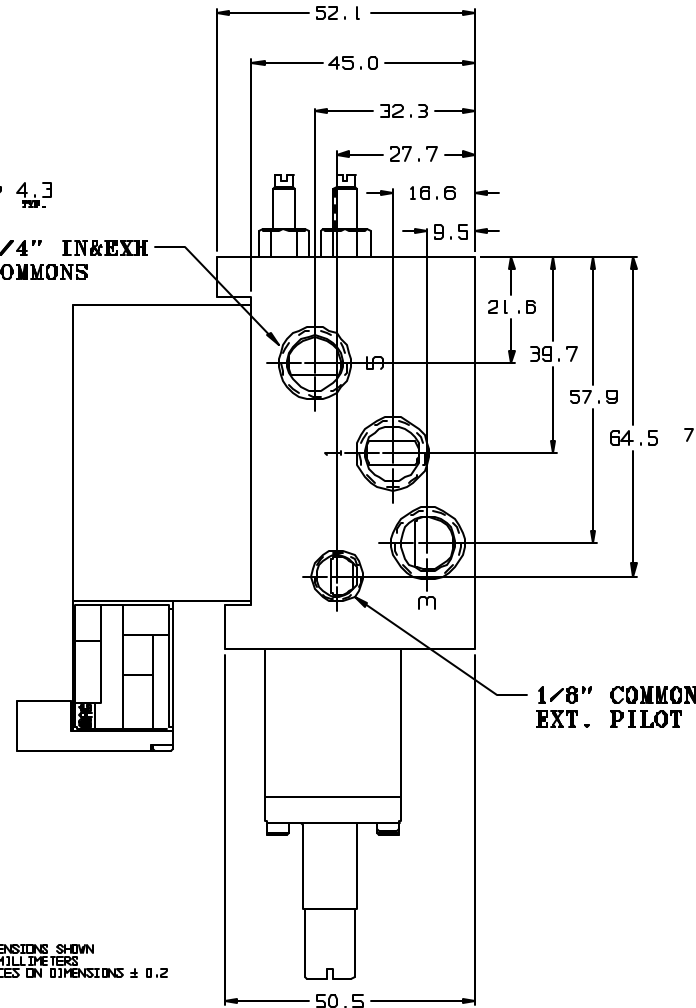
(M7 PORTS SHOWN)



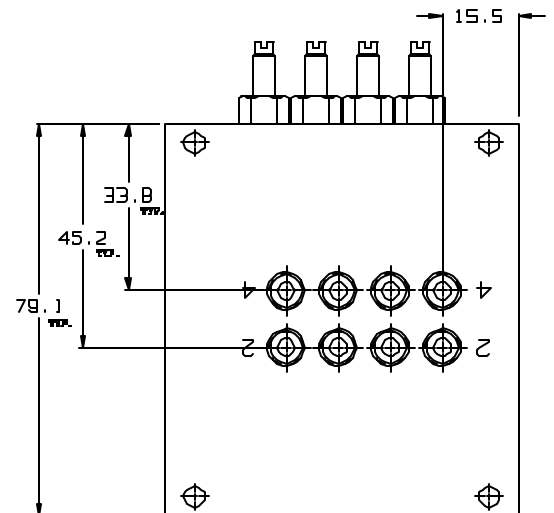
Ø 4.3

1/4" IN&EXH
COMMONS

NOTE:
-ALL DIMENSIONS SHOWN
ARE IN MILLIMETERS
-TOLERANCES ON DIMENSIONS ± 0.2



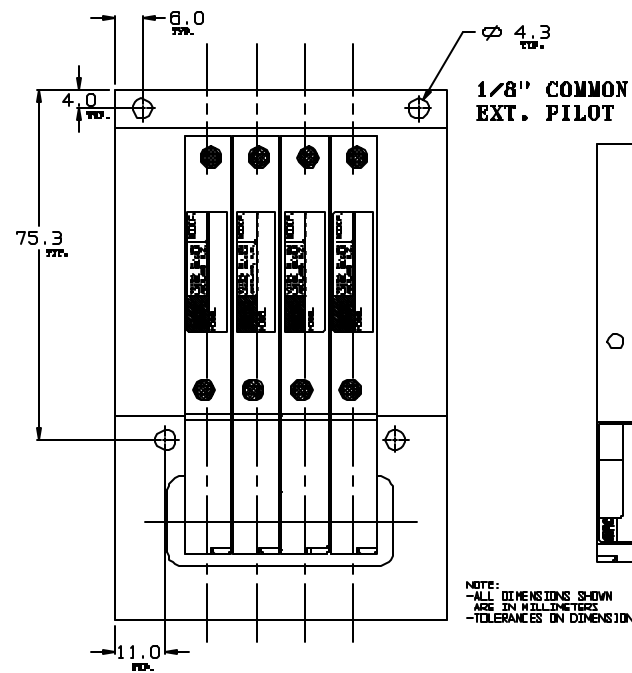
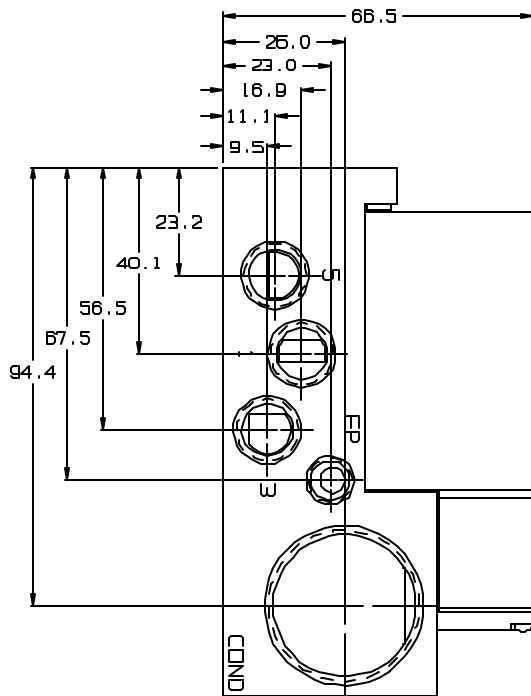
1/8" COMMON
EXT. PILOT



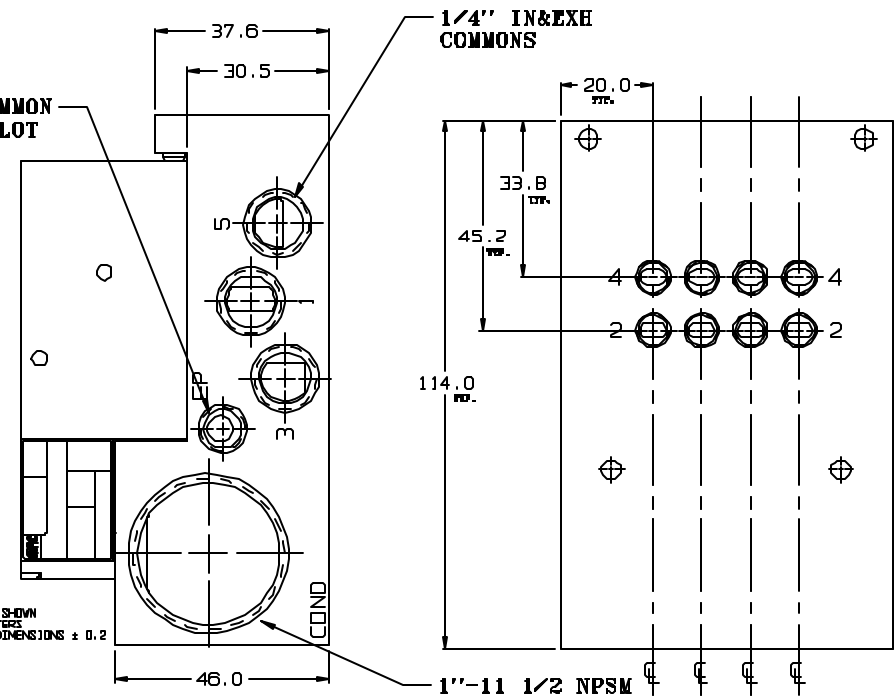
Technical drawing of a mechanical part, likely a bracket or support, showing dimensions and labels. The drawing includes a top view and a side view. Key dimensions and labels are:

- Overall width: 71.5
- Distance from left edge to center of first hole: 20.0
- Distance between centers of first and second holes: 19.5
- Distance from center of second hole to right edge: 19.5
- Distance from center of second hole to center of third hole: 19.5
- Distance from center of third hole to center of fourth hole: 19.5
- Distance from center of fourth hole to right edge: 19.5
- Overall height: 24.5
- Distance from top edge to center of first hole: 6.0
- Distance from center of first hole to center of second hole: 19.5
- Distance from center of second hole to center of third hole: 19.5
- Distance from center of third hole to center of fourth hole: 19.5
- Distance from center of fourth hole to right edge: 19.5
- Labels: 2, 4, A

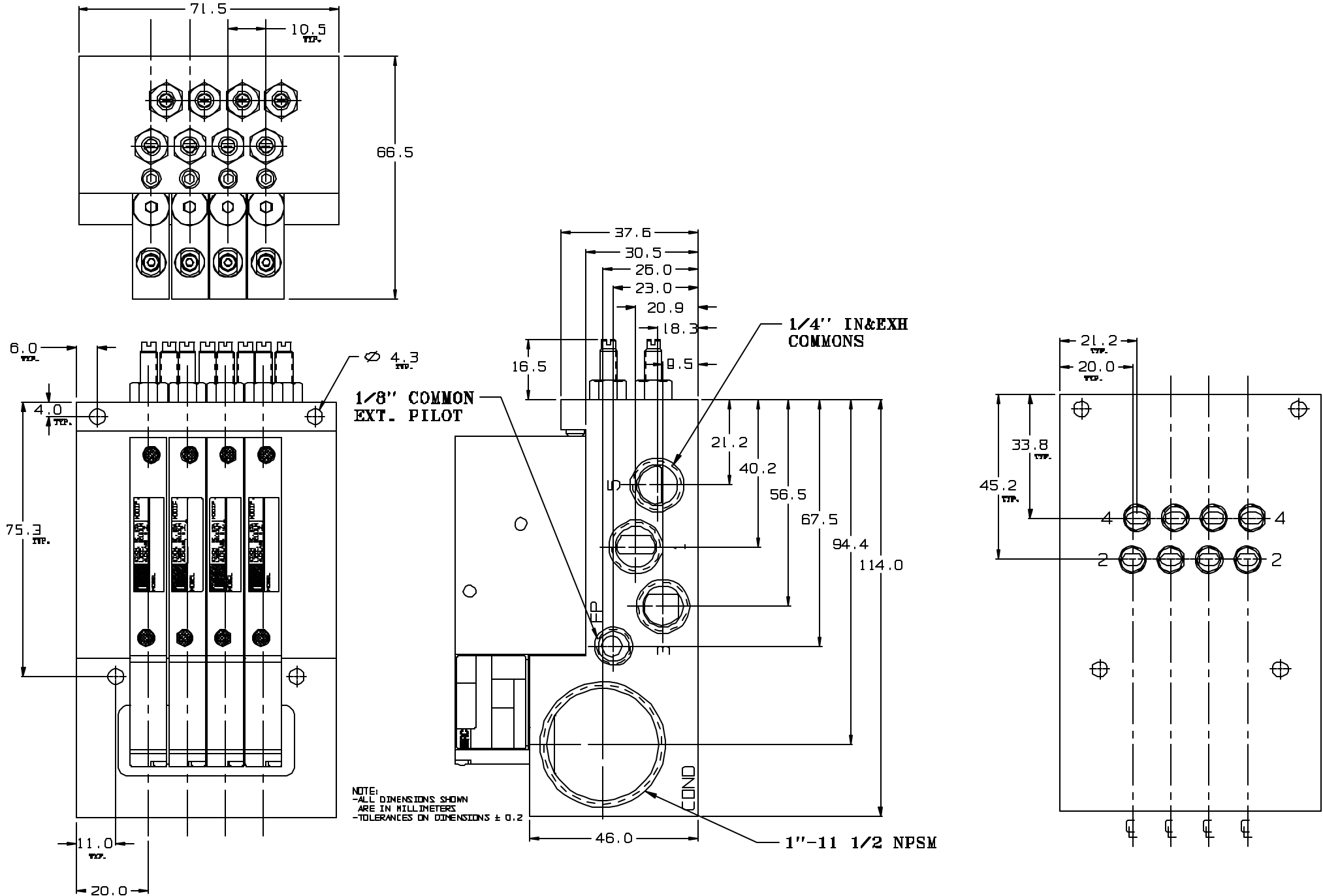
PORT	A DII
M4 TUBE FITTING	2.70
M5 OR 10-32	3.50
WT	3.40



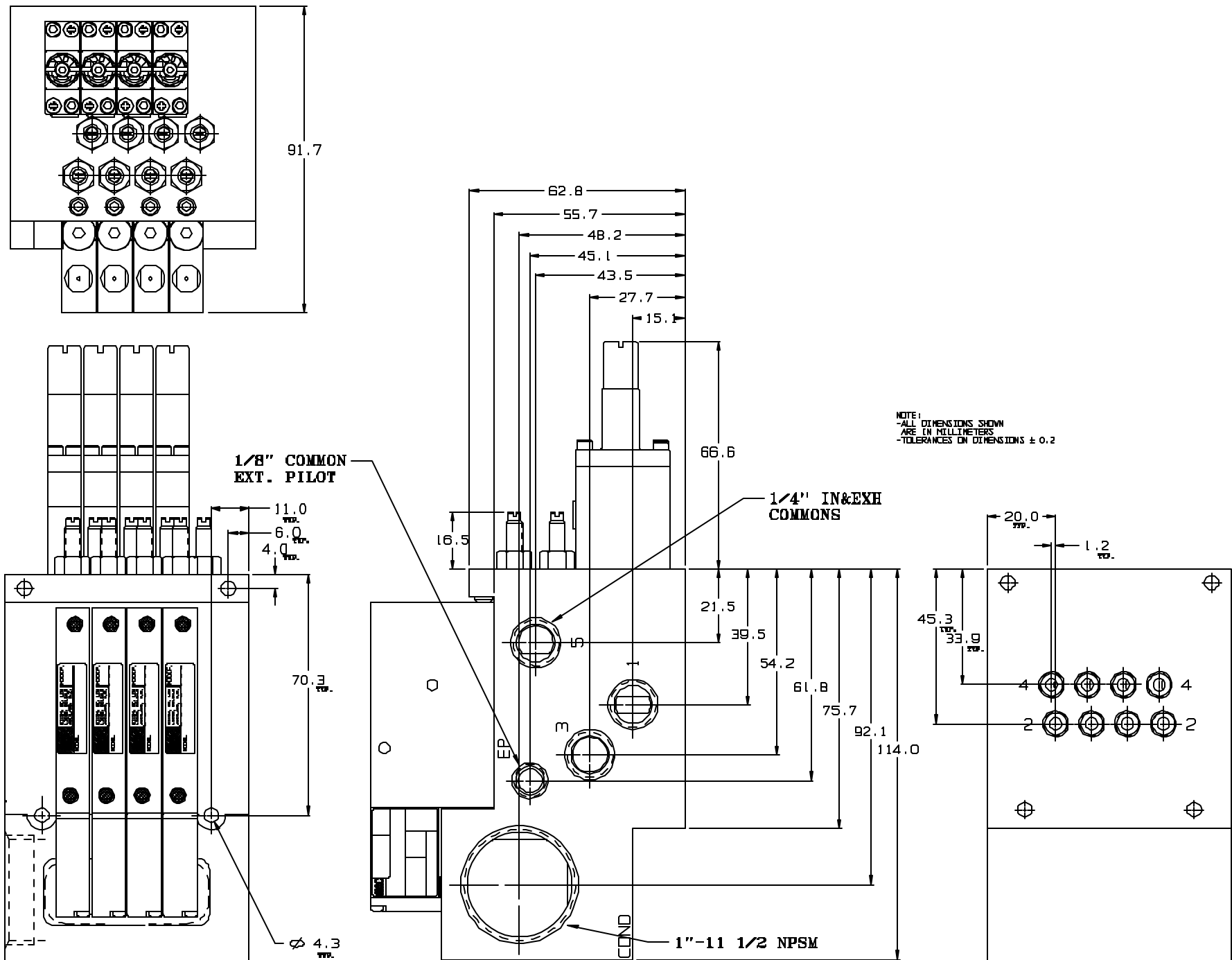
NOTE:
-ALL DIMENSIONS SHOWN
ARE IN MILLIMETERS
-TOLERANCES ON DIMENSIONS ± 0.2



42 SERIES PLUG-IN BAR W/ FLOW CONTROLS AND BOTTOM PORTS



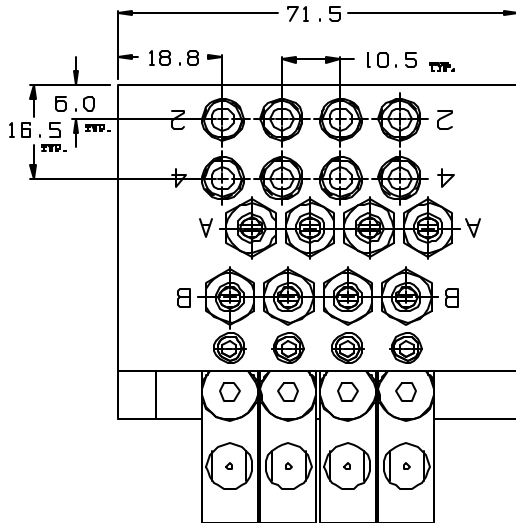
42 SERIES PLUG-IN BAR W/FLOW CONTROLS AND REGULATOR WITH BOTTOM PORTS



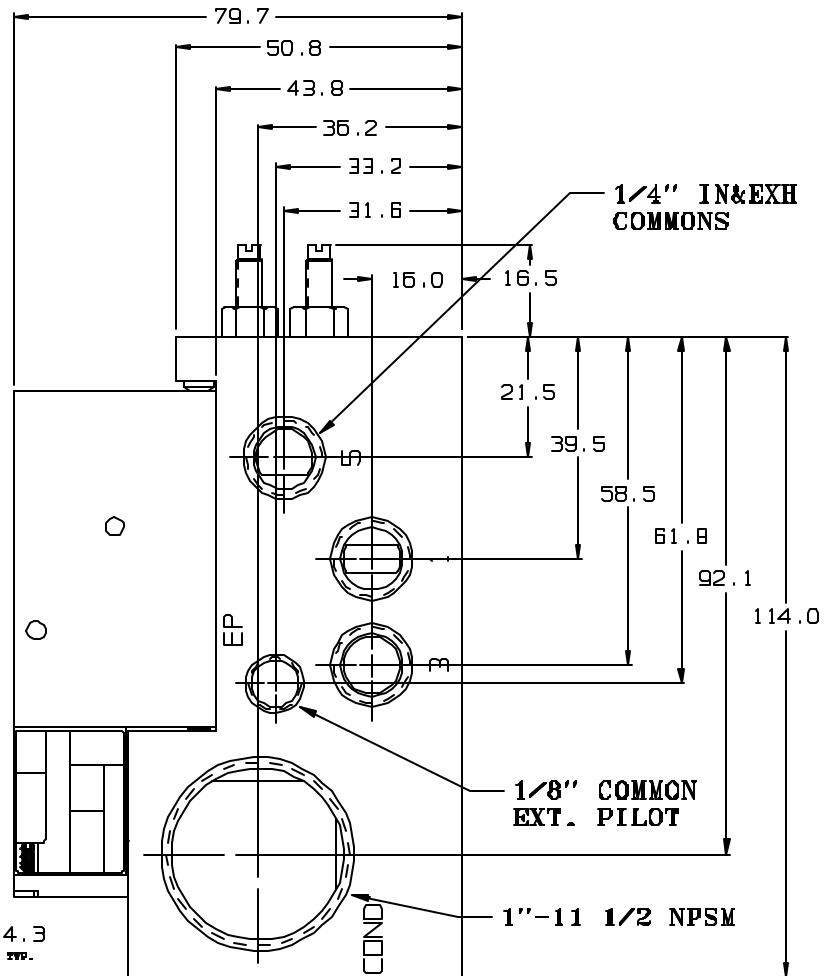
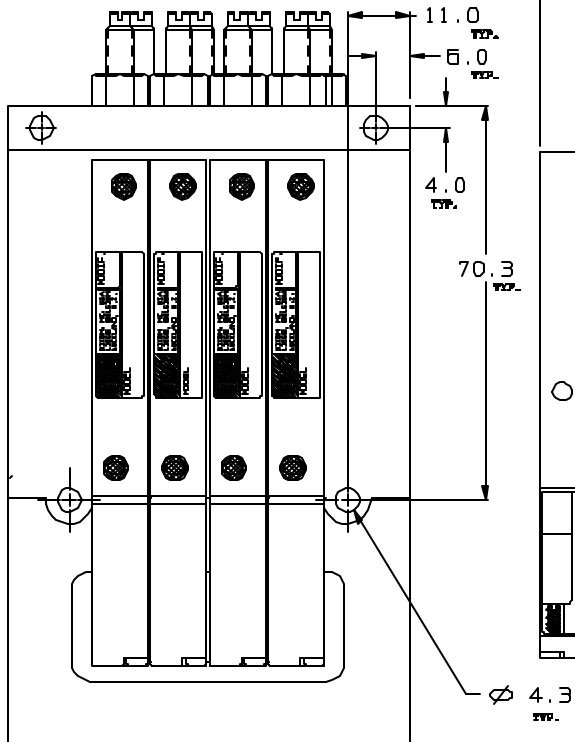
42 SERIES PLUG-IN BAR

W/FLOW CONTROLS AND SIDE PORTS

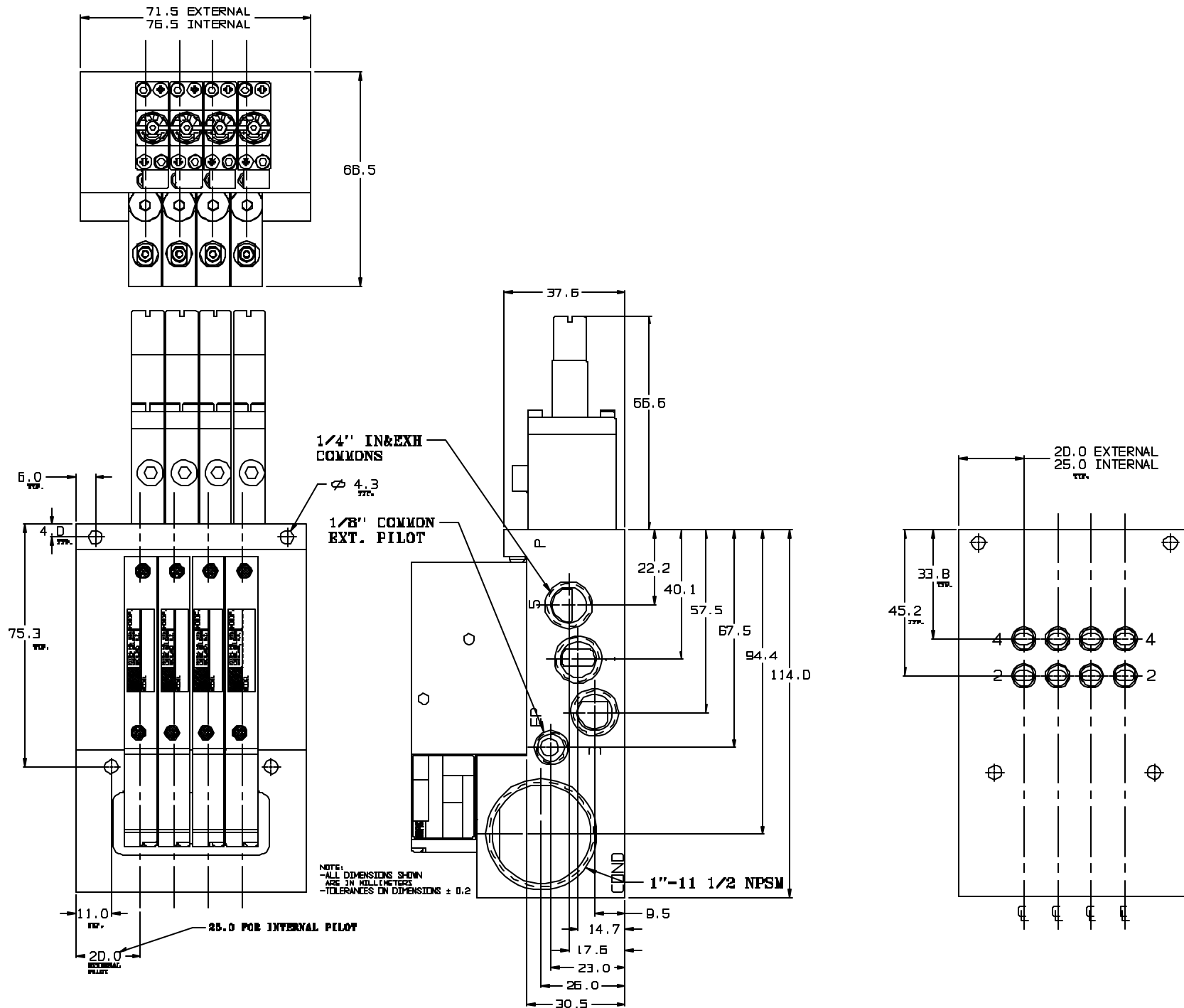
(M7 PORTS SHOWN)



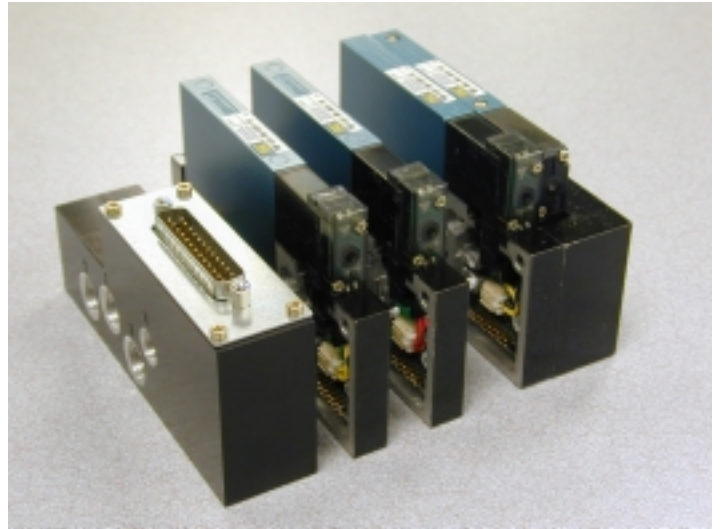
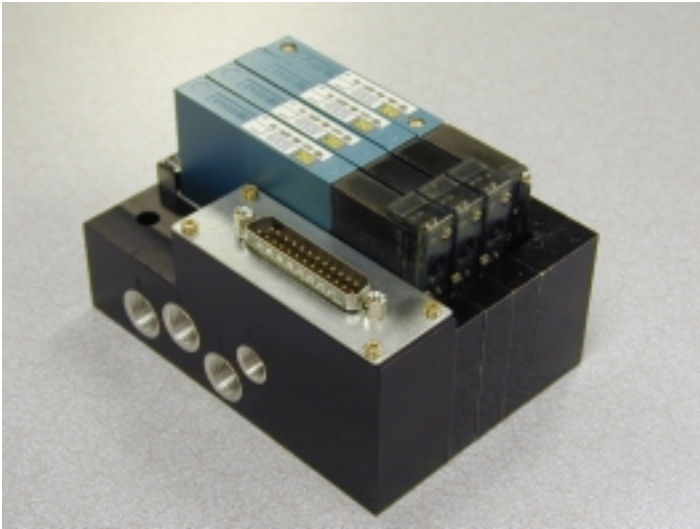
NOTE:
-ALL DIMENSIONS SHOWN
ARE IN MILLIMETERS
-TOLERANCES ON DIMENSIONS ± 0.2



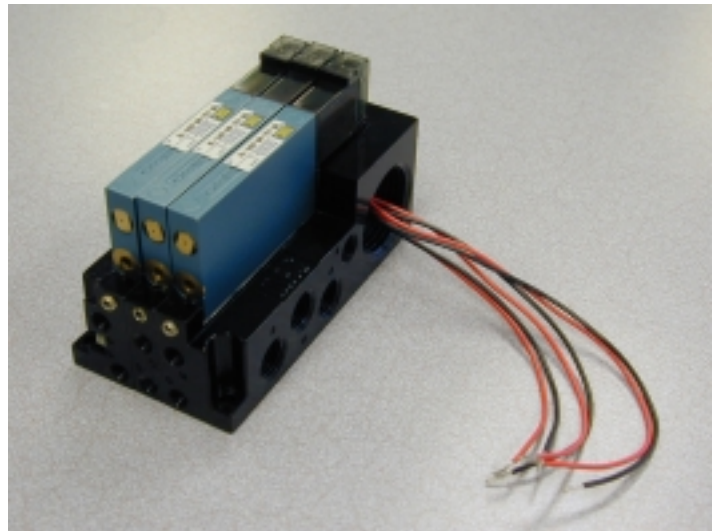
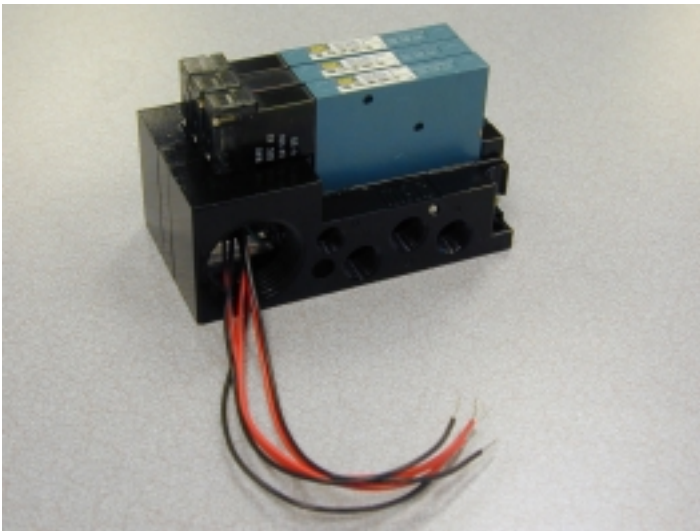
42 SERIES PLUG-IN BAR W/ REGULATOR AND BOTTOM PORTS



42 Series MAConnect™



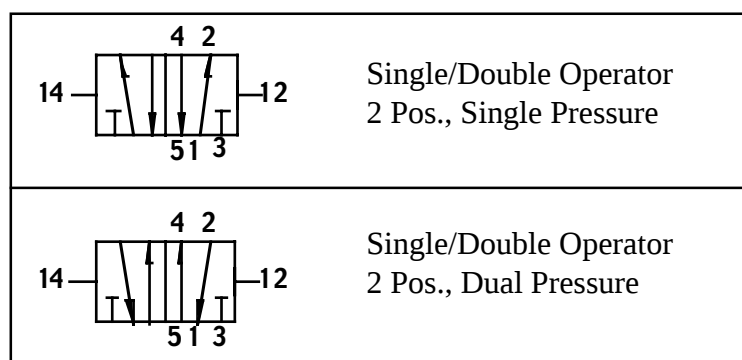
42 Series Plug-In Manifold



Specifications 42 Series Valve

Operating Data

Fluids:	Air or Inert Gas
Lubrication:	Not Required. But if used, a medium aniline range oil is recommended.
Safe Operating Temperature Range:	0° to 120°F (-18° to 50°C)
Pressure Range:	Vacuum to 120 PSI (Ext. pilot supply provided for vacuum and low pressure) 20 PSI minimum operating pressure on internal pilot.
Electrical:	12V and 24V: DC Voltage (1.0 to 4.0 Watts) Max. Coil Amperage - 250mA Max. Voltage - 48 VDC 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



Pressure Range (PSI)

Description		Main Valve	Pilot
Single	Internal Pilot Models	20-120	N/A
Double		20-120	N/A
Single	External Pilot Models	VAC 120	20-120
Double		VAC 120	20-120

FLows (Cv)

	M7 Side Ports 6mm or 1/4" T.R.	M7 Bottom Ports 6mm or 1/4" T.R.	10-32 / M5 Side Ports	10-32 / M5 Bottom Ports	5/32 T.R. Side Ports	5/32 T.R. Bottom Ports
Manifold Base	.35	.40	.30	.35	N/A	N/A

Note: Valve Function - 2 Position

T.R. = Tube Receptacle

Vacuum Applications

Use external pilot models only and connect the vacuum source to ports “3” and “5” and leave Port “1” open to atmosphere on single pressure models. On dual pressure models, reverse the single pressure piping.

Selector Applications (Without Regulators)

Connect the higher pressure to Port “1” and the lower pressure to either Port “3” or “5”. If both pressures are below the minimum operating pressure, use an external pilot.

Internal Pilot

Utilized for main valve pressures equal to or greater than minimum pilot pressure requirements. Pilot supply is fed from the inlet to the pilot.

External Pilot

Required for all solenoid pilot operated models when main valve pressures are below 20 PSI on single solenoid and double solenoid 2 Position 4 Way pilots. The external pilot source is to be connected to the external pilot port in the valve base. External pilot when ordered on manifolds is common, therefore only one external pilot connection is required regardless of the number of valves ganged in a stack.

Specifications

SM16 Manifold

Outputs:

Number: 16 Channels / Solenoids on manifold

Voltage Current: 24 VDC at 0.225 per channel (6.0 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

Safe Operating Temperature Range:

0-50° C (32-120°F)

10-90% RH (Non-condensing)

Operating Atmosphere:

No corrosive gases

Enclosure:

Designed to meet NEMA 4 and IP65

Specifications

SM32 Manifold

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

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)

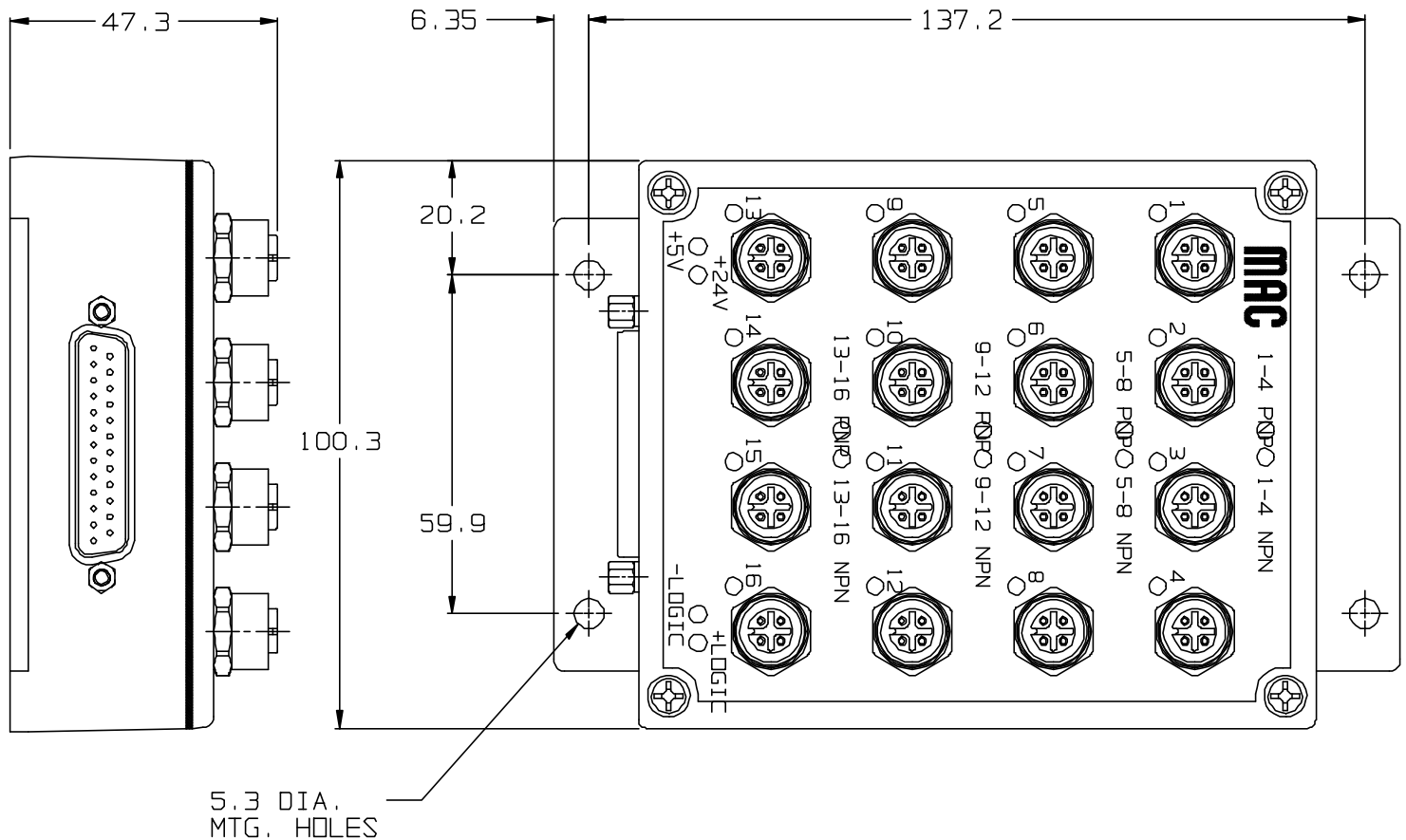
10-90% RH (Non-condensing)

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.

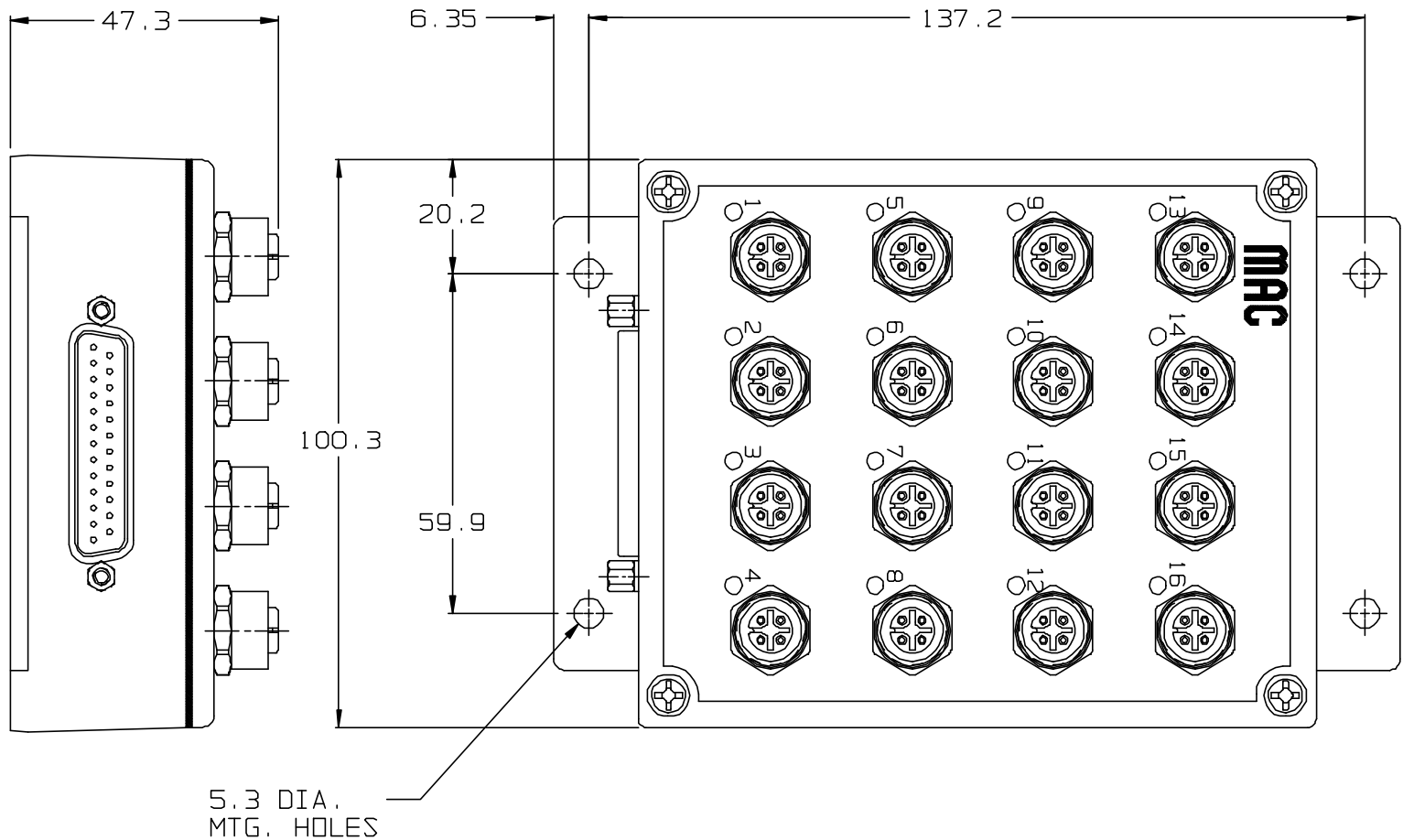
TETHERED INPUT MODULE



SPECIFICATIONS

NUMBER OF INPUTS:	4, 8, 12, 16
CONFIGURATION:	EACH BANK OF FOUR INPUTS CONFIGURABLE FOR NPN OR PNP INPUT TYPES. COMPLETE UNIT CONFIGURABLE FOR POSITIVE OR NEGATIVE LOGIC
ELECTRICAL:	24 VDC TYPE INPUTS ACCEPTED
PRODUCTION:	DESIGNED TO MEET NEMA 4 AND IP65
WEIGHT:	APPROXIMATELY 500 GRAMS
ENVIRONMENT:	0 - 50° C 10 - 90% RH (NON-CONDENSING)
CONNECTOR:	25 PIN SUB-D TETHERED BETWEEN SM8 ADAPTER BLOCK AND INPUT MODULE. 4 PIN SINGLE KEY MICRO STYLE FOR INPUTS, ONE CHANNEL PER CONNECTOR

TETHERED OUTPUT MODULE

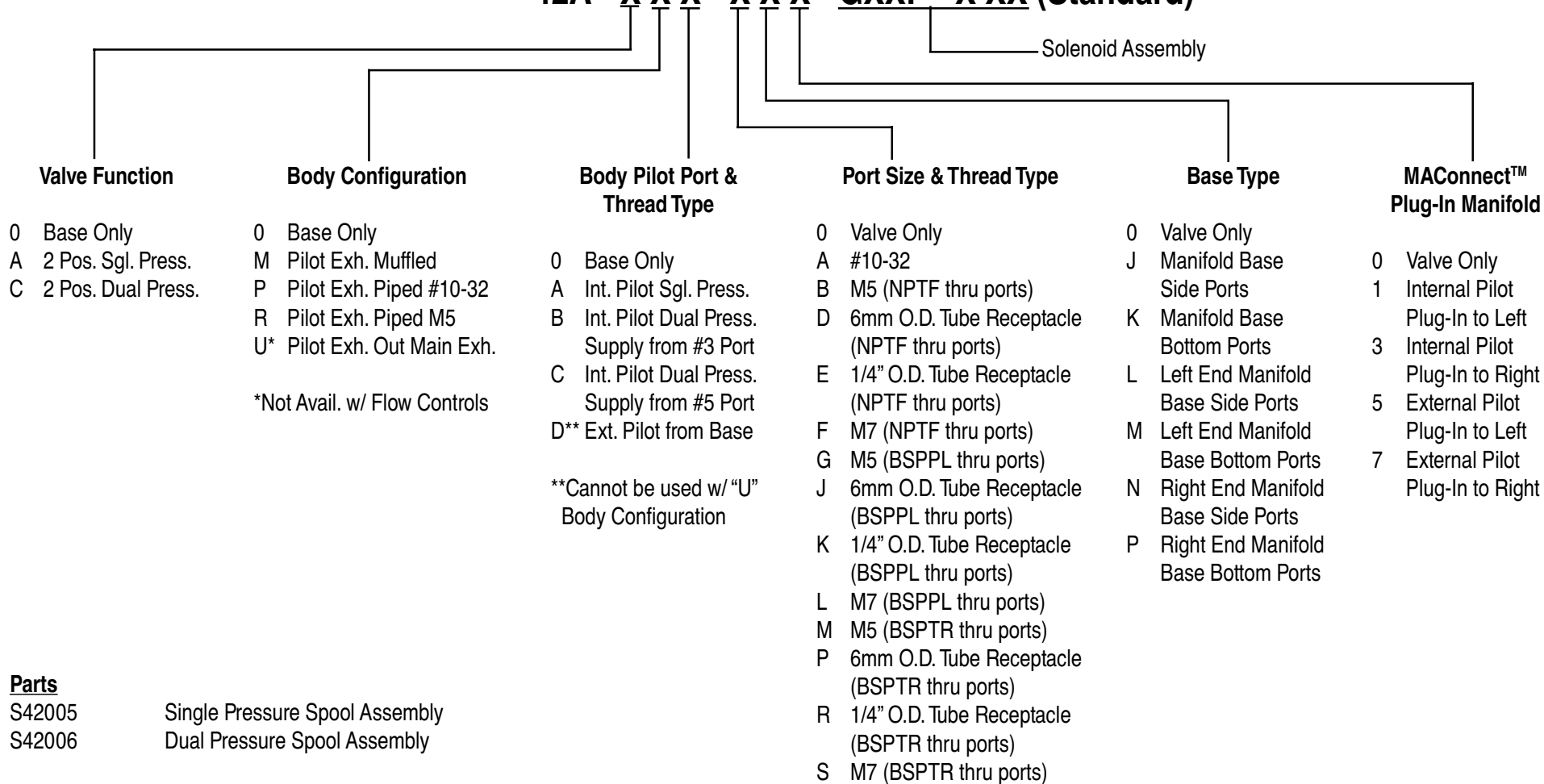


SPECIFICATIONS

NUMBER OF OUTPUTS:	4, 8, 12, 16
ELECTRICAL:	24 VDC TYPE OUTPUTS ACCEPTED
PRODUCTION:	DESIGNED TO MEET NEMA 4 AND IP65
WEIGHT:	APPROXIMATELY 500 GRAMS
ENVIRONMENT:	0 - 50° C 10 - 90% RH (NON-CONDENSING)
CONNECTOR:	25 PIN SUB-D TETHERED BETWEEN SM8 ADAPTER BLOCK AND OUTPUT MODULE. 4 PIN SINGLE KEY MICRO STYLE FOR OUTPUTS, ONE CHANNEL PER CONNECTOR

How to Order 42 Series MAConnect™

42A - X X X - X X X - GXXP - X XX (Standard)



Parts

S42005 Single Pressure Spool Assembly
S42006 Dual Pressure Spool Assembly

Modifications

MOD 1727 Nickel Plated Body and/or Base

Notes: •Thru ports are 1/4"
•If latching solenoid is chosen, the "EA" connector option must be used (see latching solenoid options).

How to Order 42 Series (Plug-In Manifold)

42A - X X X - X X X - GXXP - X XX (Standard)

Solenoid Assembly

Valve Function	Body Configuration	Body Pilot Port & Thread Type	Port Size & Thread Type	Base Type	Base Options Int. or Ext. Pilot
0 Base Only	0 Base Only	0 Base Only	0 Valve Only	0 Valve Only	0 Valve Only
A 2 Pos. Sgl. Press.	M Pilot Exh. Muffled	A Int. Pilot Sgl. Press.	A #10-32	J Manifold Base	* A Plug-In Int. Pilot
C 2 Pos. Dual Press.	P Pilot Exh. Piped #10-32	B Int. Pilot Dual Press.	B M5 (NPTF thru ports)	K Manifold Base	* B Plug-In Ext. Pilot
	R Pilot Exh. Piped M5	Supply from #3 Port	D 6mm O.D. Tube Receptacle (NPTF thru ports)	Bottom Ports	C Plug-In Int. Pilot
	U* Pilot Exh. Out Main Exh.	C Int. Pilot Dual Press.	E 1/4" O.D. Tube Receptacle (NPTF thru ports)	L Left End Manifold	3 Wire Latching
	*Not Avail. w/ Flow Controls	Supply from #5 Port	F M7 (NPTF thru ports)	Base Side Ports	D Plug-In Ext. Pilot
		D** Ext. Pilot from Base	G M5 (BSPPL thru ports)	M Left End Manifold	3 Wire Latching
		**Cannot be used w/ "U" Body Configuration	J 6mm O.D. Tube Receptacle (BSPPL thru ports)	Base Bottom Ports	* E Plug-In Int. Pilot
			K 1/4" O.D. Tube Receptacle (BSPPL thru ports)	N Right End Manifold	4 Wire Latching
			L M7 (BSPPL thru ports)	Base Side Ports	* F Plug-In Ext. Pilot
			M M5 (BSPTR thru ports)	P Right End Manifold	4 Wire Latching
			P 6mm O.D. Tube Receptacle (BSPTR thru ports)	Base Bottom Ports	
			R 1/4" O.D. Tube Receptacle (BSPTR thru ports)		
			S M7 (BSPTR thru ports)		

* For latching solenoid, use electrical connector DA, DB, DC, or DD with these options. For options "C" or "D" the "EA" connector option must be used (see latching solenoid options)

Parts

S42005	Single Pressure Spool Assembly
S42006	Dual Pressure Spool Assembly

Modifications

MOD 1727	Nickel Plated Body and/or Base
----------	--------------------------------

Note: Thru ports are 1/4"

Standard Solenoid Options

GXX P - X XX

Voltage		Manual Operator		Electrical Connector	
DA	24 VDC (1.0W)	1	Recessed Non	DE	Plug-In w/ Supression Diode
DC	24 VDC (1.8W)		Locking Operator	DF	Plug-In w/ Suppression Diode w/ Ground Pin
DD	24 VDC (2.5W)	3	Extended Non	DJ	Plug-In
DE	24 VDC (3.0W)		Locking Operator	DM	Plug-In w/ Ground Pin
DF	24 VDC (4.0W)			DT	Plug-In w/ LED Light
DG	12 VDC (1.0W)			DU	Plug-In w/ LED Light W/ Ground Pin
DJ	12 VDC (1.8W)			DV	Plug-In w/ Suppression Diode w/ LED Light
DK	12 VDC (2.5W)			DW	Plug-In w/ Suppression Diode w/ LED Light w/ Ground Pin
DM	12 VDC (3.0W)				
DR	6 VDC (1.8W)				
DS	6 VDC (3.0W)				

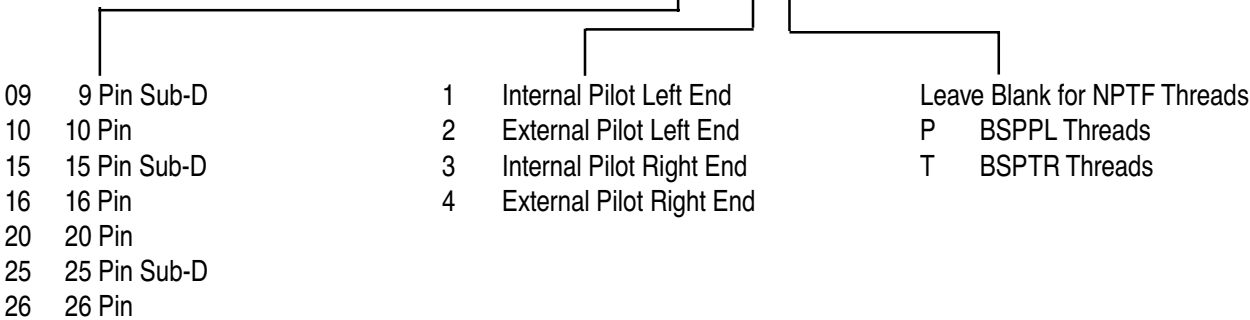
How to Order

Adapter Kits

MAConnect™ Adapter Assembly

(Positive/Negative Commons)

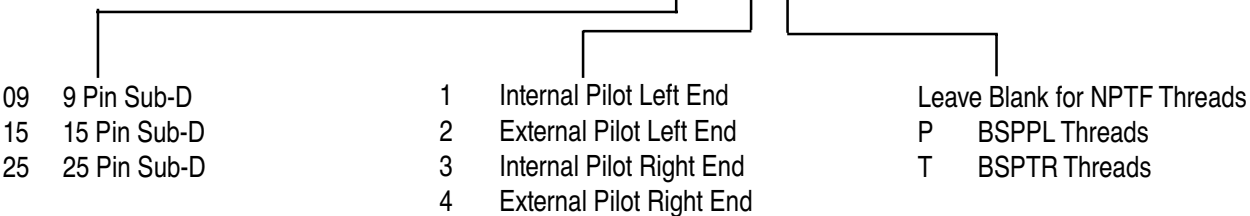
M-42005 - XX - X X



MAConnect™ Adapter Assembly

(Required For Connecting To A Remote Stack)

M-42006 - XX - X X



How to Order SM16 for MACConnect™ Serial Manifold

SM16 - XX A - X X X - XX M - X X XX

Protocol
DN DeviceNet

Output Indicator Lights
0 St'd (No Lights)

Power Connector
DeviceNet
A 3 Pin Micro

Bus Connector
DeviceNet
A 5 Pin Micro

Inputs
00 No Inputs

**Location of
MACConnect Adapter**
0 No Adapter
1 Left End
2 Right End
Adapter has common
inlet and exhaust ports

Thread Type
0 No Adapter
A Int. NPTF
B Ext. NPTF
C Int. BSPPL
D Ext. BSPPL
E Int. BSPTR
F Ext. BSTPR

**Valve Series
Adapter**
00 No Adapter
92 92 Series
82 82 Series
47 47 Series
42 42 Series

How to Order SM32 for MACConnect™ Serial Manifold

SM32 - XX A - X X X - X X M - X X XX

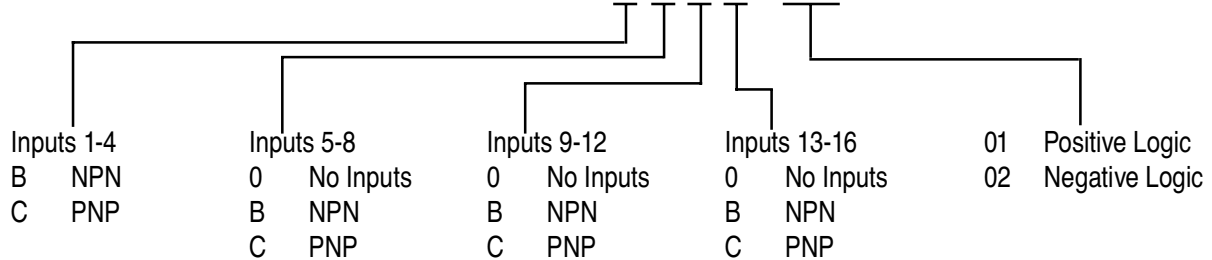
Protocol		Output Indicator Lights		Power Connector		Bus Connector		Inputs		Input Types		Location of MACconnect Adapter		Pilot and Thread Type		Valve Series Adapter					
DN	DeviceNet	Monitoring Valve Signal		DeviceNet		DeviceNet		A	No Inputs	A	No Inputs	0	No Adapter	0	No adapter	00	No Adapter				
PB	Profibus	A	St'd (16)	B	3 Pin Mini	B	5 Pin Mini	B	1 Input	B	NPN	1	Left End	A	Int. NPTF	92	92 Series				
IB	Interbus-S			C	4 Pin Mini	B	5 Pin Micro	C	2 Inputs	C	PNP	2	Right End	B	Ext. NPTF	82	82 Series				
AB	Allen Bradley Remote IO			Monitoring Bus Logic Signal			Profibus		D	3 Inputs	F	Tethered 16 Remote Inputs			C	Int. BSPPL	47	47 Series			
				D	4 Pin Micro	Interbus-S		E	4 Inputs	D					Ext. BSPPL	42	42 Series				
E				4 Pin Mini Side Mount	Male and Female		F	Tethered 16 Remote Inputs	E	Int. BSPTR											
				Profibus and Interbus		AB Remote IO															
				F	5 Pin Mini	E	9 Pin Sub-D														
				H	5 Pin Micro	AB Remote IO															
				G	5 Pole Term.	F	3 Pole Term.														
				B	4 Pin Mini	G	4 Pin Micro (2 4-Pin Connectors)														

How to Order

Input and Output Modules

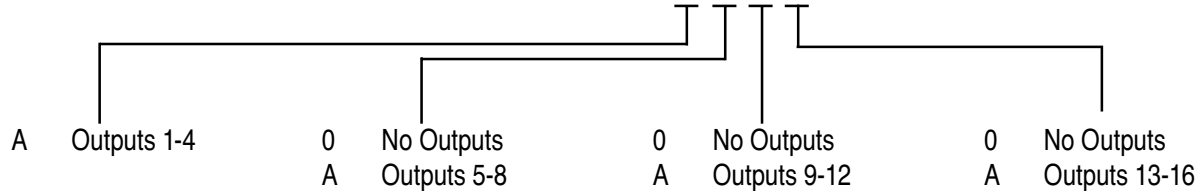
Remote Tethered Input Module (For use with SM32 only)

N-SM005 - X X X X - XX



Remote Tethered Output Module (For use with SM16 only)

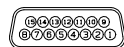
N-SM006 - X X X X





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

25 PIN SUB-D



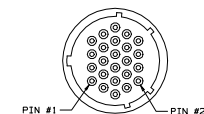
PIN #	SOLENOID #
1	1
2	2
✓	✓
13	13
14	+ COMMON
15	+ COMMON

15 PIN SUB-D



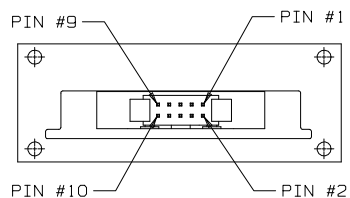
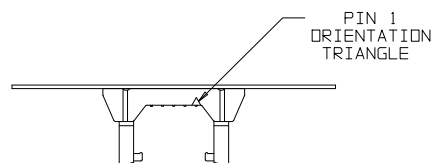
PIN #	SOLENOID #
1	1
2	2
✓	✓
8	8
9	+ COMMON

9 PIN SUB-D



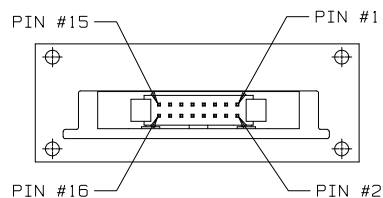
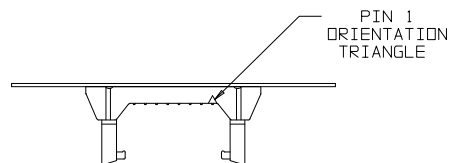
PIN #	SOLENOID #
1	1
2	2
✓	✓
20	20
21	+ COMMON
22	+ COMMON
23	+ COMMON
24	+ COMMON

24 PIN AMP CPC



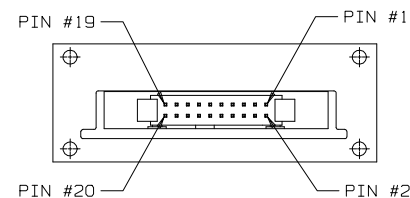
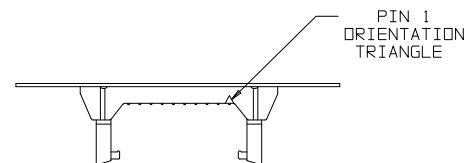
PIN #	SOLENOID #
1	1
2	2
✓	✓
8	8
9	+ COMMON
10	+ COMMON

10 PIN



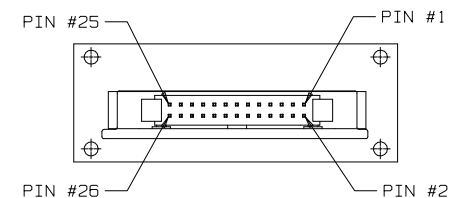
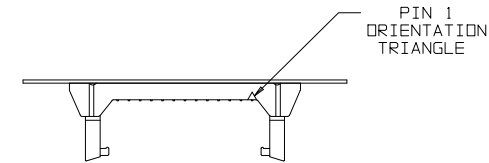
PIN #	SOLENOID #
1	1
2	2
✓	✓
12	12
13	+ COMMON
14	+ COMMON
15	+ COMMON
16	+ COMMON

16 PIN



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

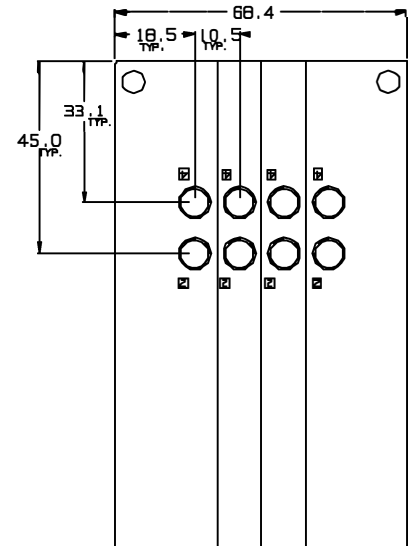
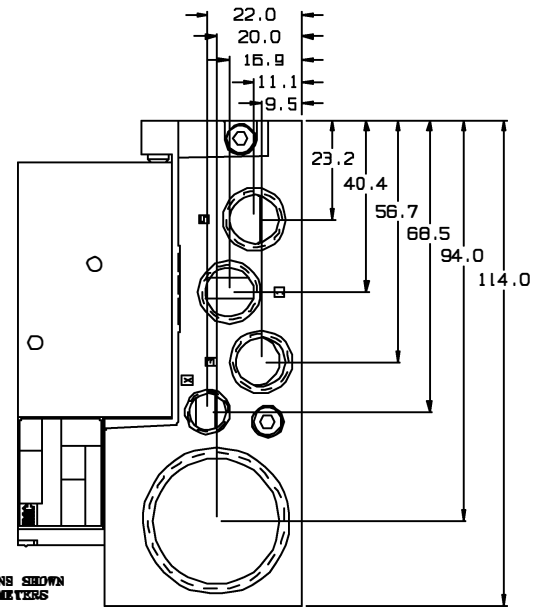
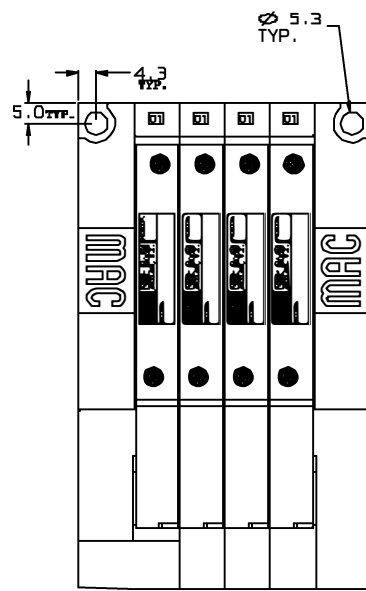
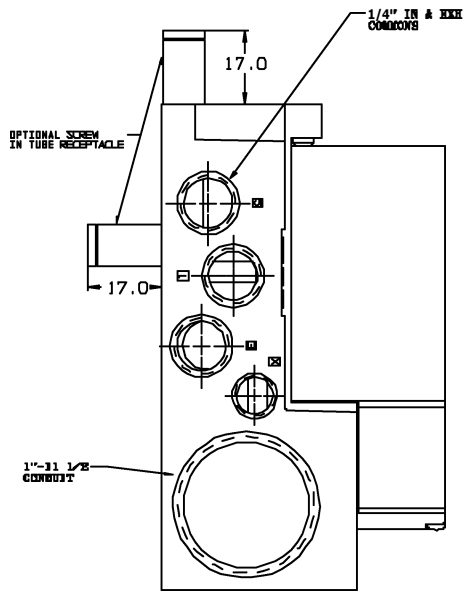
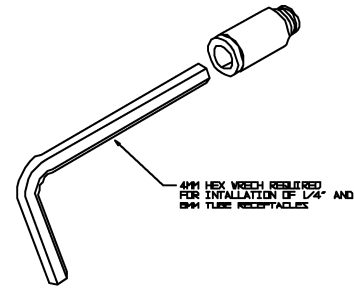
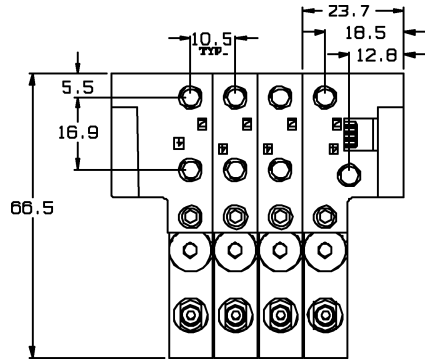
20 PIN



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

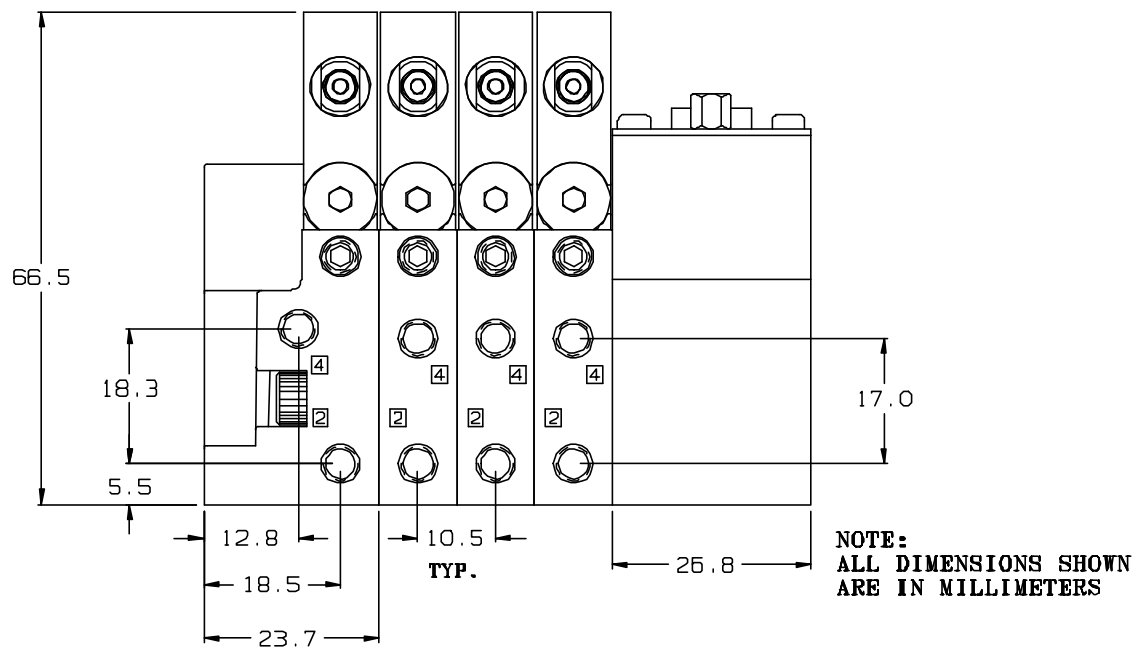
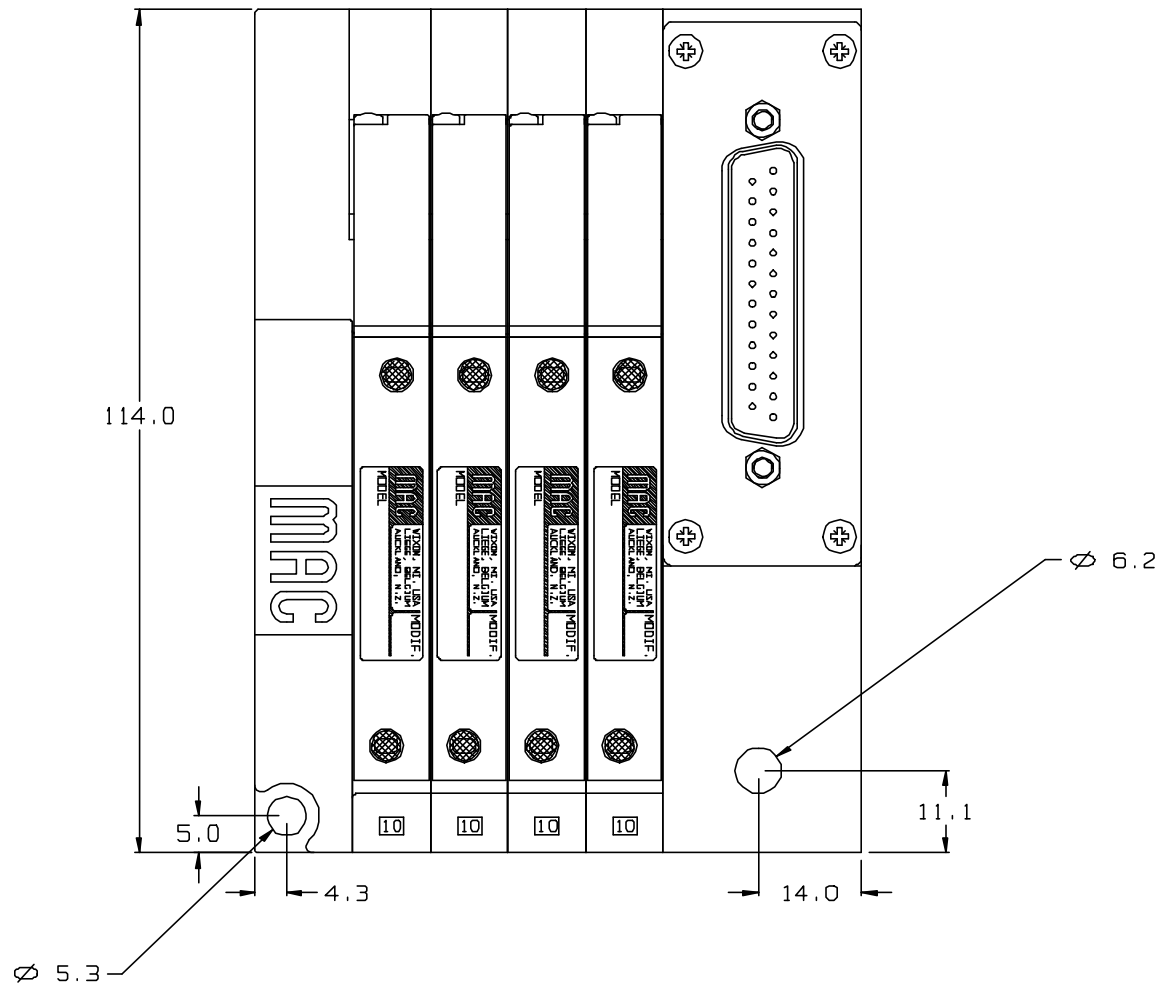
26 PIN

42 SERIES ADD-A-UNIT MANIFOLD BASE

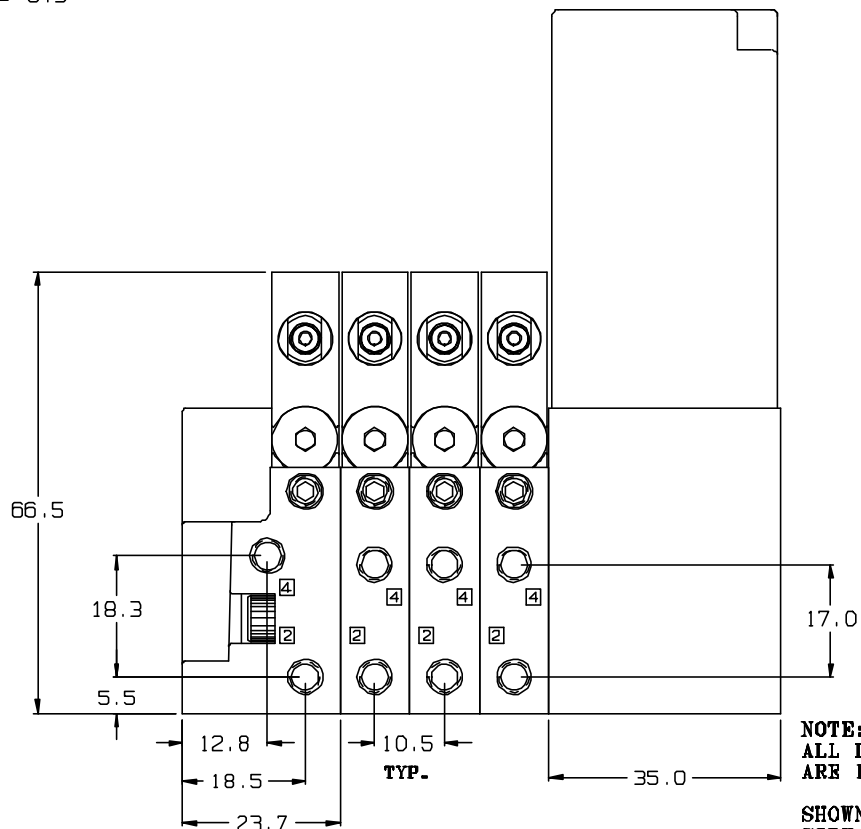
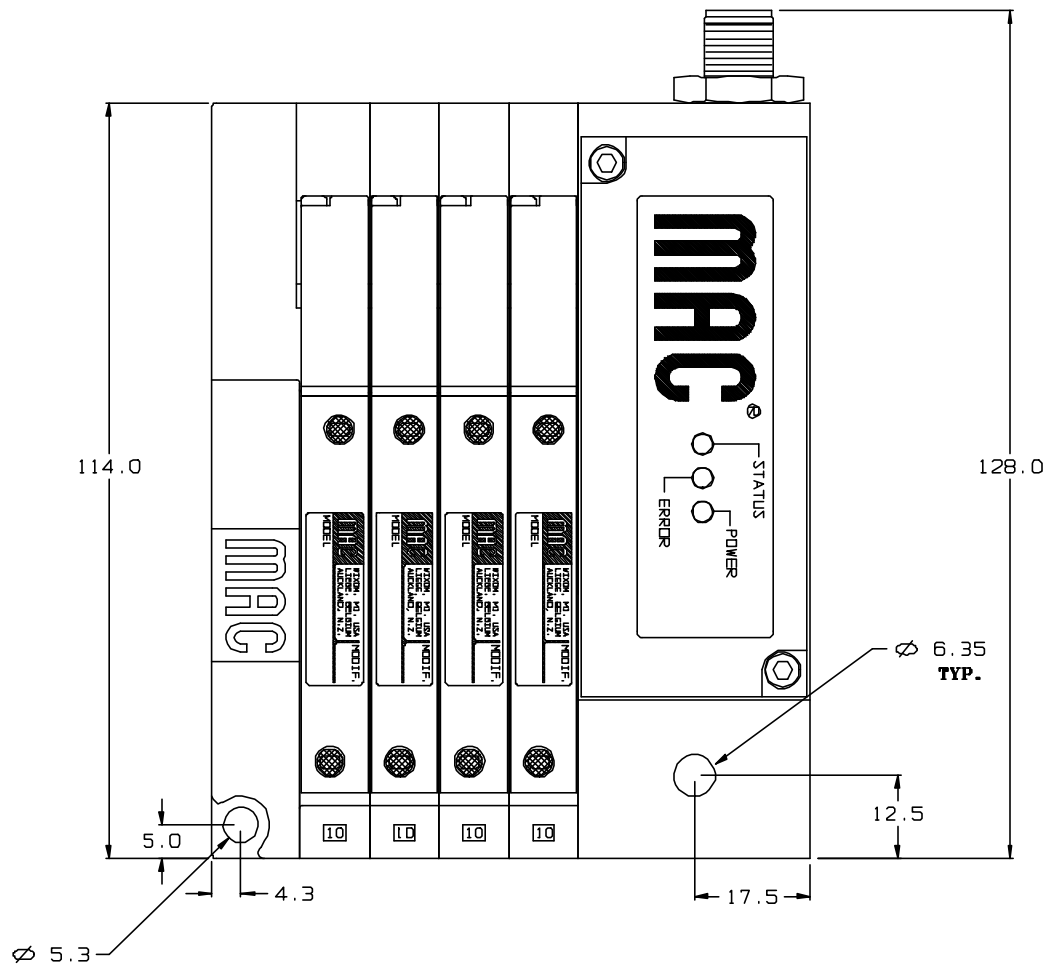


NOTE:
ALL DIMENSIONS SHOWN
ARE IN MILLIMETERS

42 SERIES MACONNECT SHOWN WITH MULTI PIN



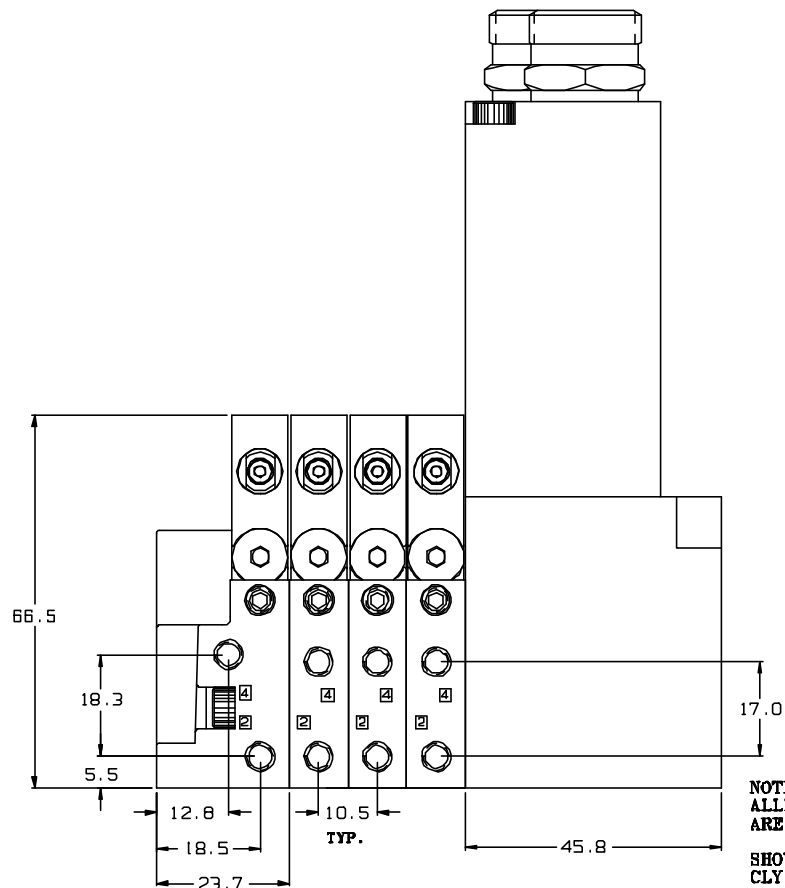
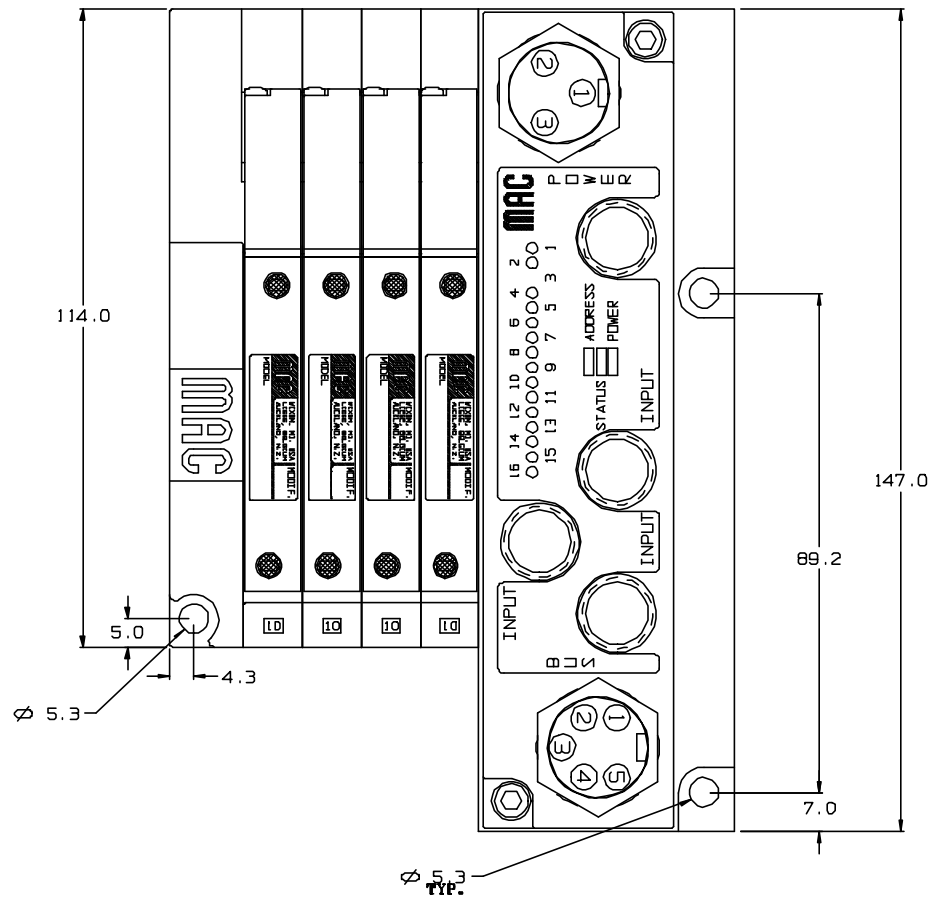
42 SERIES MACONNECT SHOWN WITH SM16



NOTE:
ALL DIMENSIONS SHOWN
ARE IN MILLIMETERS

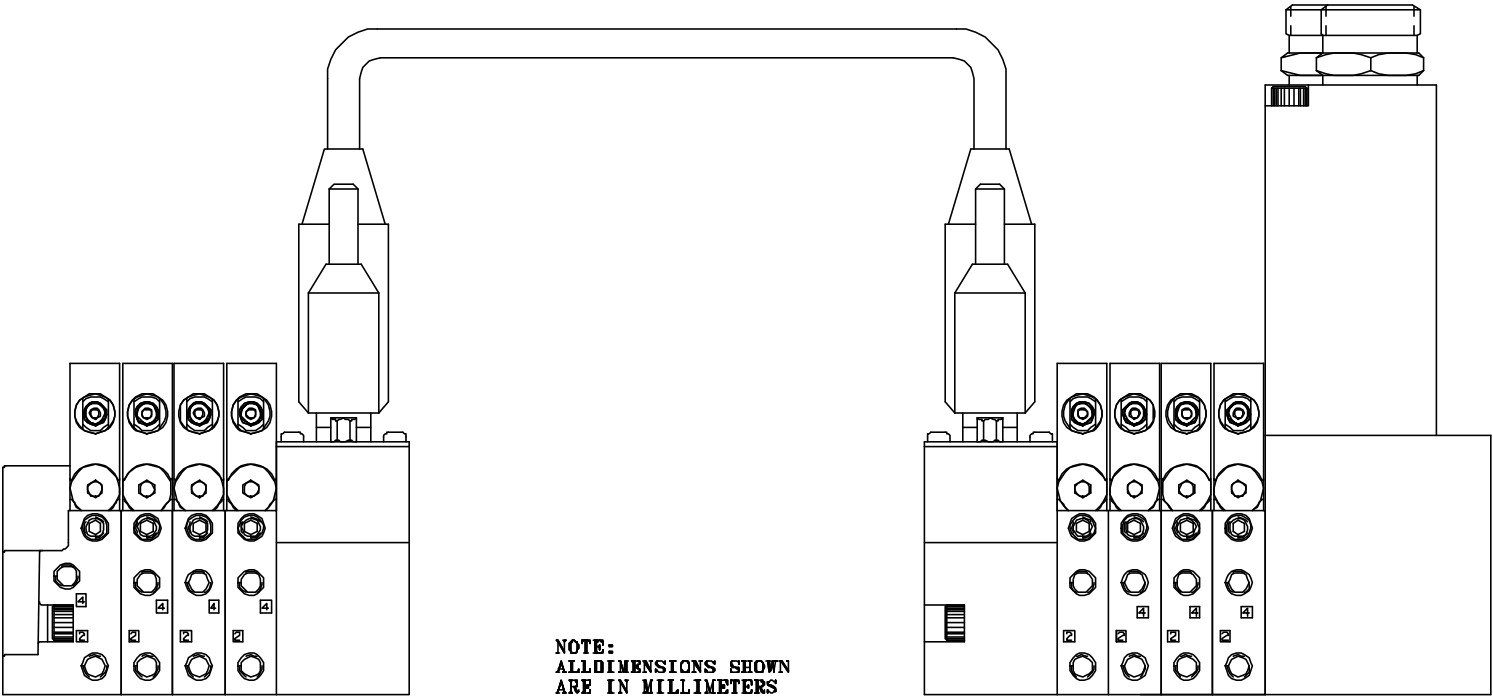
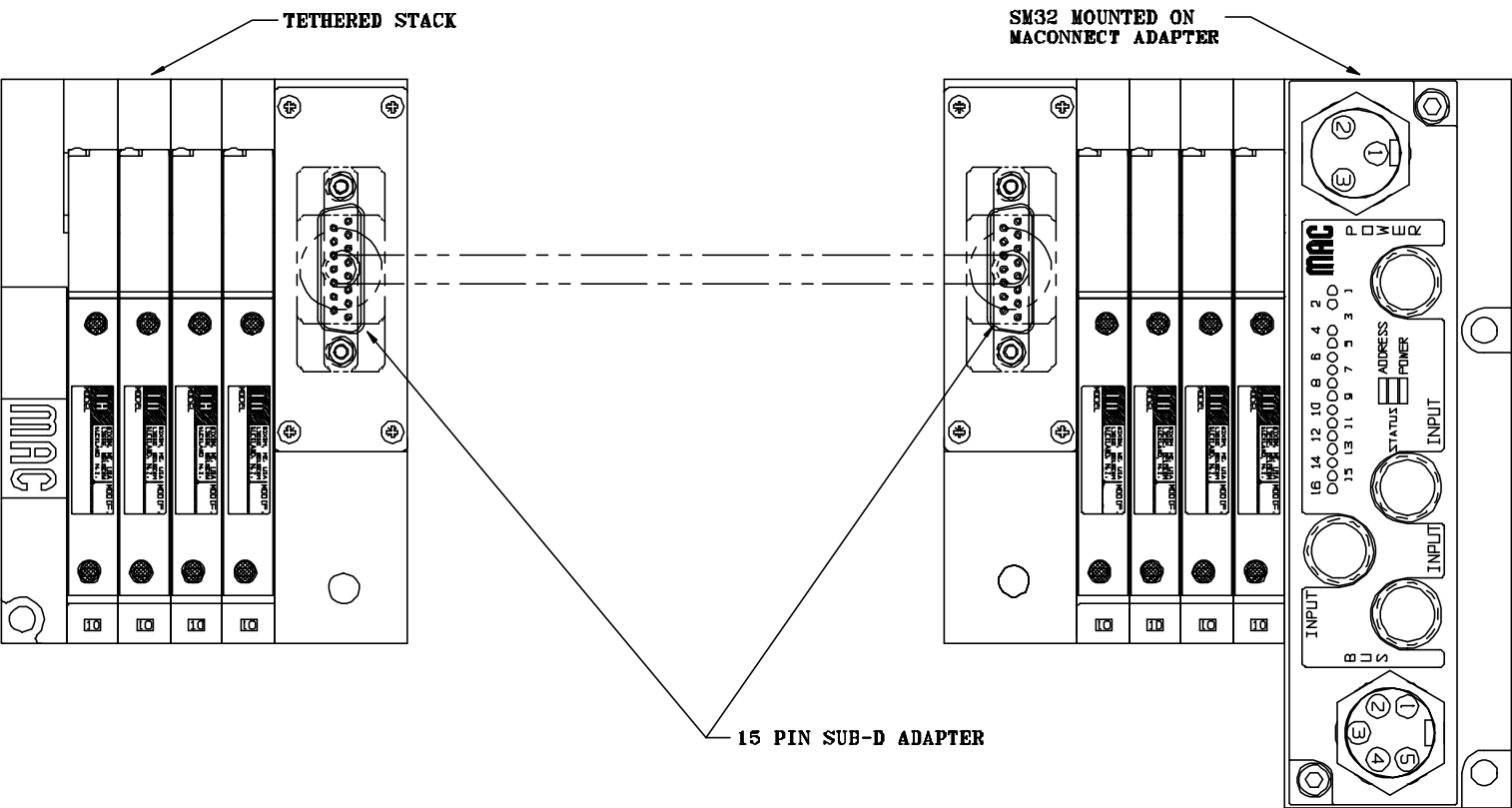
SHOWN WITH #10-32
SIDE CYL. PORTS

42 SERIES MACONNECT SHOWN WITH SM32



NOTE:
ALL DIMENSIONS SHOWN
ARE IN MILLIMETERS
SHOWN WITH #10-32 SIDE
CLY. PORTS

42 SERIES MACONNECT TETHERED TO A 42 SERIES MACONNECT STACK



NOTE:
ALL DIMENSIONS SHOWN
ARE IN MILLIMETERS

Sandwich pressure regulator with manual adjust knob

OPERATIONAL BENEFITS

1. Easy mounting: saves on installation costs in comparison with inline regulators.
2. Compact all-included units.
3. Large orifice provides high flow.
4. Various functions available.
5. Simple, reliable and solid design.



PR37A

PR42B

PR46A

PR47A

PR48B

PR92C

PR93A

PRA01A

PRA02A

PRA1A

PRP1A

PRA2D

PRP2B

PRA3C

PRP3B

HOW TO ORDER

NON PLUG-IN SANDWICH REGULATORS

Gage	Regulator "12" end Internal pilot	Regulator "12" end External pilot
No gage port	PR42B-BAAA	PR42B-BBAA
With gage Port	PR42B-BABA	PR42B-BBBA

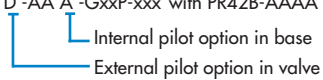
PLUG-IN SANDWICH REGULATORS

Gage	Regulator "12" end Internal pilot	Regulator "12" end External pilot
No gage port	PR42B-AAAA	PR42B-ABAA
With gage Port	PR42B-AABA	PR42B-ABBA

Notes:

- External pilot regulator required only when supply pressure (primary) to the valve is below the minimum operating pressure of the 42 series valve.
- When an internal pilot regulator is used with the 42 series valve, the valve should be ordered as external pilot and the base should be ordered as internal pilot. This ensures that the pilot supply is not regulated. If an internal pilot valve and base are used with an internal pilot regulator, the pilot supply is regulated.

Example: Valve 42B-AM D-AA A -GxxP-xxx with PR42B-AAAA



OPTIONS

Pressure range :

PR42B-AAAA

- A** 0 to 120 PSI
- B** 0 to 80 PSI
- C** 0 to 40 PSI

TECHNICAL DATA

Fluid :	Compressed air, inert gases
Pressure range :	0 to 120 PSI
Regulating range :	0 to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Flow :	0.25 C _v

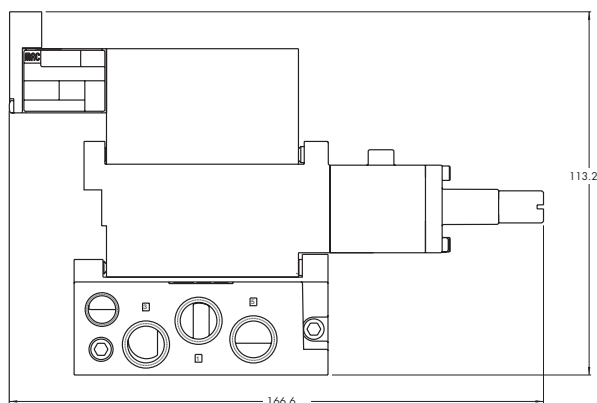
Spare parts :

- Pressure regulator (less sandwich block) : PR42B-C0xx • Gage port plug: N-PE003
- #10 -32 to 1/8" adapter : N-35005 • Gage: 24177-160 (0 to 160 PSI, 23 mm)
24177-100 (0 to 100 PSI, 23 mm)
24177-060 (0 to 60 PSI, 23 mm)

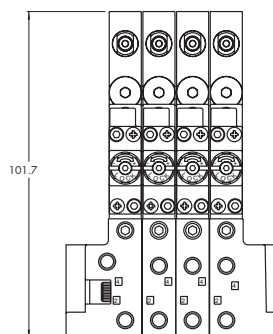
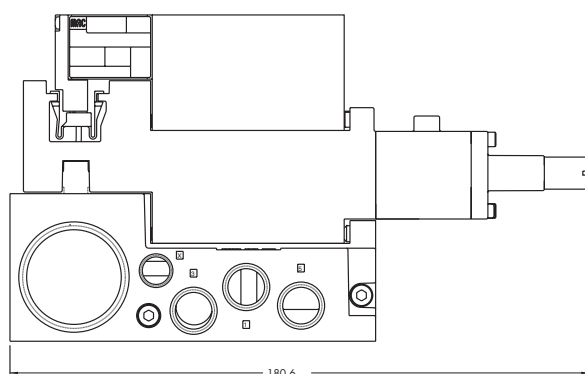
DIMENSIONS

Dimensions shown are metric (mm)

NON PLUG-IN



PLUG-IN



Notizen

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