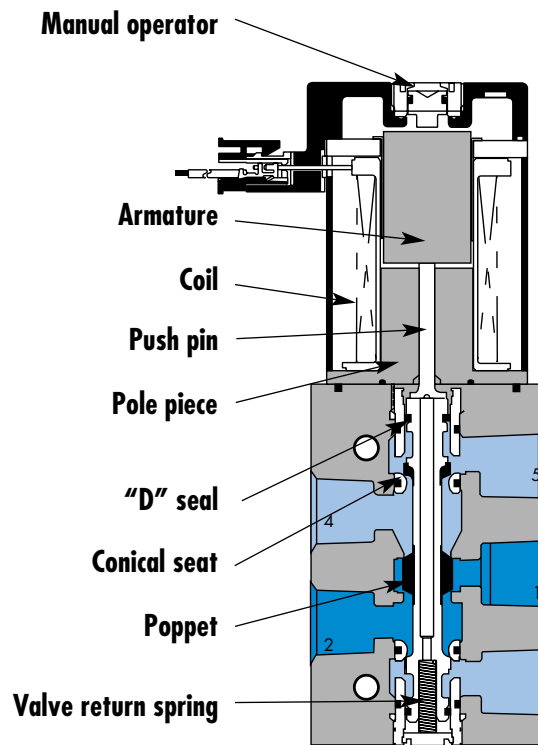


Circuit bar mounting

non plug-in cyl. ports in valve with opt. F. C.	non plug-in cyl. ports in base with opt. F. C.	add-on style non plug-in cyl. ports in valve with opt. F. C.	add-on style non plug-in cyl. ports in base with opt. F. C.	non plug-in cyl. ports in valve with opt. Pr. Reg.	non plug-in cyl. ports in base	non plug-in cyl. ports in base with Pr. Reg.	add-on style non plug-in cyl. ports in base
add-on style non plug-in cyl. ports in base with Pr. Reg.	plug-in	plug-in with Pr. Reg.	add-on style plug-in	add-on style plug-in with Pr. Reg.	plug-in add-a-unit stations	plug-in add-a-unit stations with Pr. Reg.	



SERIES FEATURES

- Short stroke solenoid produces high energization shifting force.
- High force return spring due to high force solenoid maximizes both energization and de-energization shifting forces.
- Built-in wear compensation - valve stroke is shorter than solenoid stroke.
- Four (4) bonded balanced poppets on a one-piece valve stem.
- End poppets seal first on conical seats and cushion inlet poppet, eliminating cutting.
- Exhaust seals are not under inlet pressure thus reducing friction.
- Short stroking balanced poppet allows for direct solenoid operation with high shifting forces, minimized friction, fast response and high flow in a small package.

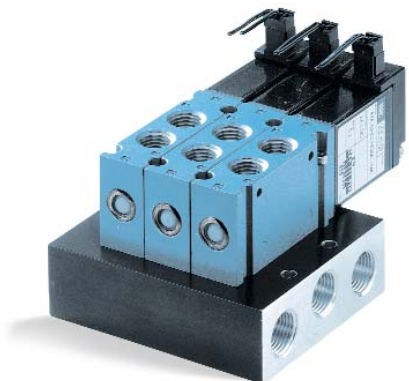


Direct solenoid and solenoid pilot operated valves

Function	Port size (Inlet & Exhaust)	Flow (Max)	Circuit bar mounting	Profile
5/2	3/8"	0.5C_v	non plug-in cyl. ports in valve with opt. F. C.	29 mm

OPERATIONAL BENEFITS

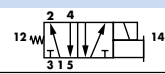
1. Direct solenoid operated valve.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Manual operator standard on all valves.



HOW TO ORDER

47A-xxx-Hxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Valve port size	Valve less base
1/8" NPTF	 <input type="radio"/> 47A-MG0-Hxxx-xxx
1/4" NPTF	<input type="radio"/> 47A-MH0-Hxxx-xxx

SOLENOID OPERATOR >

H **XX X- X XX'**

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> A 18"	<input type="radio"/> 1 Non-locking	<input type="radio"/> BA Flying leads
<input type="radio"/> DB 24VDC (2.4 W)	<input type="radio"/> C 36"		<input type="radio"/> BC Flying leads with light
<input type="radio"/> DC 24VDC (1.8 W)	<input type="radio"/> x Other Options		<input type="radio"/> MA Plug-in wire assy
<input type="radio"/> DD 24VDC (1.0 W)			<input type="radio"/> MC Plug-in wire assy with light
<input type="radio"/> AA 120VAC (must use with rectified connector)			<input type="radio"/> HA Plug-in connector with rectifier and light
<input type="radio"/> xx Other Options			<input type="radio"/> xx Other Options

EBM47A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR

Port size COMMON INLET & EXHAUST	Without flow controls (20 mm)	With flow controls (20 mm)
3/8" NPTF	<input type="radio"/> EBM47A-01CAK-xx	<input type="radio"/> EBM47A-01DAK-xx

Number of stations (03=3 stations)

Note: clic for valves mounted on base at the factory (add - 9 to the model number).

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum 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)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

Note :

- Valve and coil are not interchangeable.

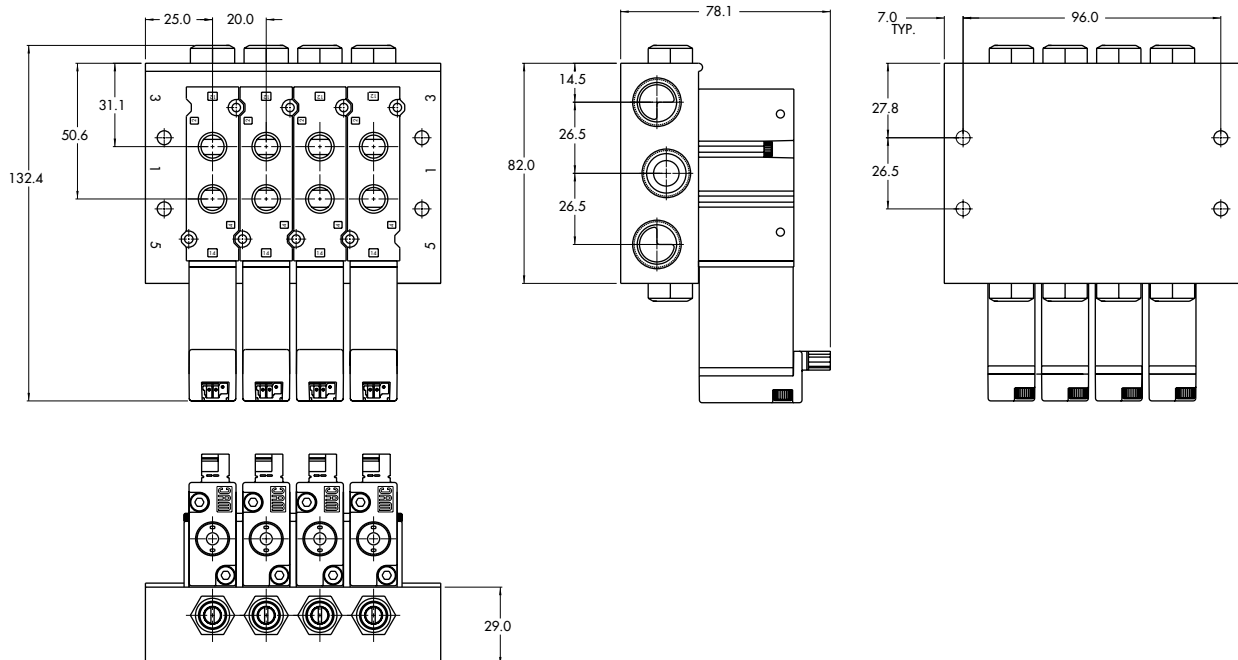
Spare parts :

- Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47002.
- Flow control kit (x2) : N-37001.

Options :

- Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS

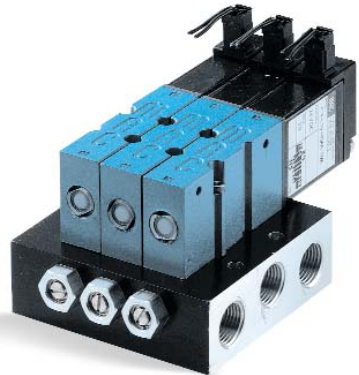


Function	Port size	Flow [Max]	Circuit bar mounting	Profile
5/2	1/8" - 1/4" 6 mm tube receptacle	0.5C_v	non plug-in cyl. ports in base with opt. F. C.	29 mm

OPERATIONAL BENEFITS

1. Direct solenoid operated valve.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Manual operator standard on all valves.

Reset



HOW TO ORDER

47A-xxx-Hxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Valve
Valve less base	 <input type="radio"/> 47A-LI0-Hxxx-xxx

SOLENOID OPERATOR >

H **XX X- X XX'**

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> A 18"	<input type="radio"/> I Non-locking	<input type="radio"/> BA Flying leads
<input type="radio"/> DB 24VDC (2.4 W)	<input type="radio"/> C 36"		<input type="radio"/> BC Flying leads with light
<input type="radio"/> DC 24VDC (1.8 W)	<input type="radio"/> x Other Options		<input type="radio"/> MA Plug-in wire assy
<input type="radio"/> DD 24VDC (1.0 W)			<input type="radio"/> MC Plug-in wire assy with light
<input type="radio"/> AA 120VAC (must use with rectified connector)			<input type="radio"/> HA Plug-in connector with rectifier and light
<input type="radio"/> xx Other Options			<input type="radio"/> xx Other Options

EBM47A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR

Port size	Bottom cylinder ports (18 mm)	Bottom cylinder ports with flow controls (18 mm)
1/8" NPTF	<input type="radio"/> EBM47A-00AAA-xx	<input type="radio"/> EBM47A-00BAA-xx
1/4" NPTF	<input type="radio"/> EBM47A-00AAB-xx	<input type="radio"/> EBM47A-00BAB-xx
6 mm tube receptacle	<input type="radio"/> EBM47A-00AAG-xx	<input type="radio"/> EBM47A-00BAG-xx

Number of stations (03=3 stations)

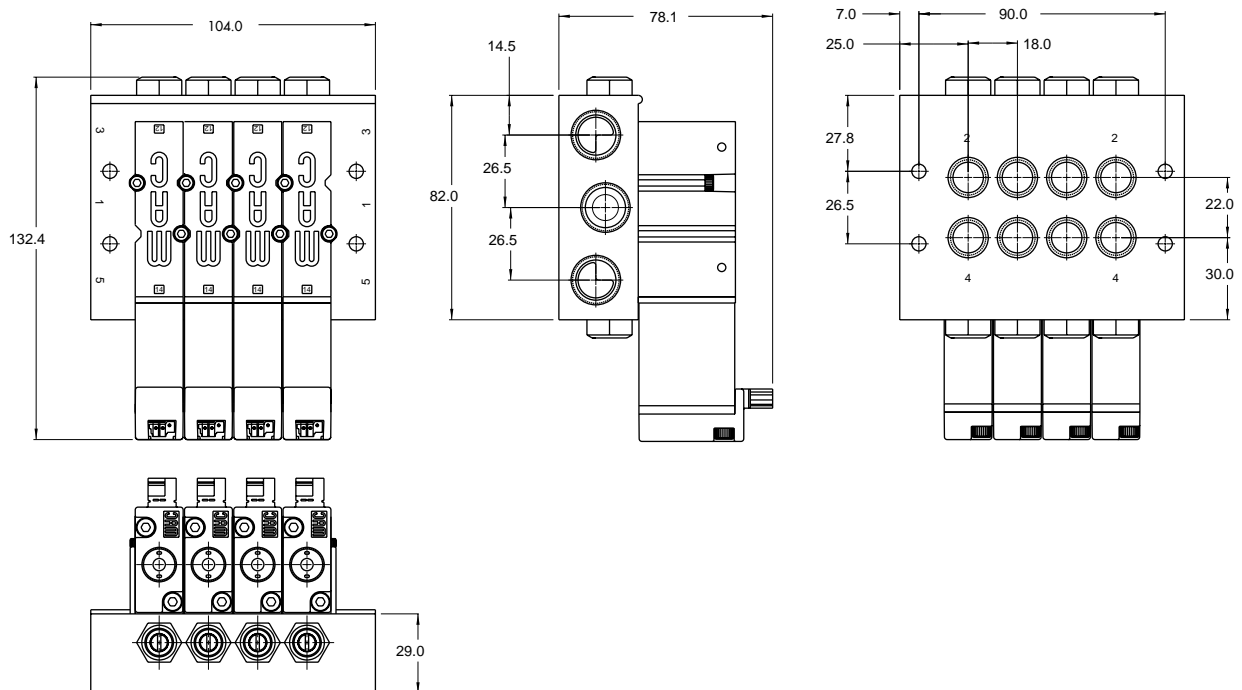
Note: clic for valves mounted on base at the factory (add - 9 to the model number).

**TECHNICAL
D A T A**

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum 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)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001.
• Flow control kit (x2) : N-37001.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS





Direct solenoid and solenoid pilot operated valves

Function	Port size (Inlet & Exhaust)	Flow (Max)	Circuit bar mounting	Profile
5/2	3/8"	0.5C_v	add-on style non plug-in cyl. ports in valve with opt. F. C.	35 mm

OPERATIONAL BENEFITS

1. Direct solenoid operated valve.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Manual operator standard on all valves.

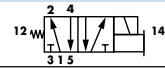


HOW TO ORDER

47A-xxx-Hxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Valve port size	Valve
1/8" NPTF	<input type="radio"/> 47A-MG0-Hxxx-xxx
1/4" NPTF	<input type="radio"/> 47A-MH0-Hxxx-xxx



SOLENOID OPERATOR >

H **XX** X- X **XX**'

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> A 18"	<input type="radio"/> l Non-locking	<input type="radio"/> BA Flying leads
<input type="radio"/> DB 24VDC (2.4 W)	<input type="radio"/> c 36"		<input type="radio"/> BC Flying leads with light
<input type="radio"/> DC 24VDC (1.8 W)	<input type="radio"/> x Other Options		<input type="radio"/> MA Plug-in wire assy
<input type="radio"/> DD 24VDC (1.0 W)			<input type="radio"/> MC Plug-in wire assy with light
<input type="radio"/> AA 120VAC (must use with rectified connector)			<input type="radio"/> HA Plug-in connector with rectifier and light
<input type="radio"/> xx Other Options			<input type="radio"/> xx Other Options

EBM47A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR

Port size COMMON INLET & EXHAUST	Without flow controls (20 mm)	With flow controls (20 mm)
3/8" NPTF	<input type="radio"/> EBM47A-01GBK-xx	<input type="radio"/> EBM47A-01HBK-xx

Number of stations (03=3 stations)

Note: clic for valves mounted on base of the factory (add - 9 to the model number).
add-a-unit stations may be added to above bars.
Maximum length for add-a-unit is 4 stations.

OPTIONS

EBM47A-01GBK-xx

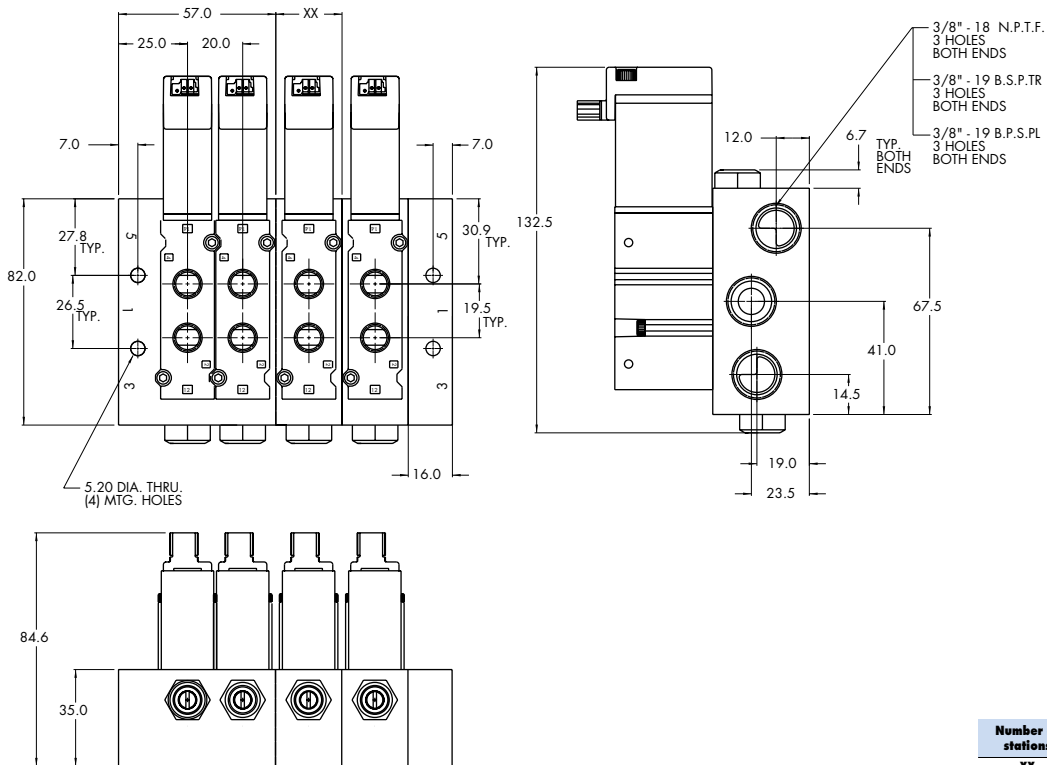
- clic replace with "C" for add-a-unit.

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum 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)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47002.
• Flow control kit (x2) : N-37001. End plate kit : M-47004-01.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting	Profile
5/2	1/8" - 1/4" 6 mm tube receptacle	0.5C_v	add-on style non plug-in cyl. ports in base with opt. F. C.	35 mm

OPERATIONAL BENEFITS

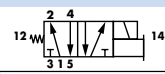
1. Direct solenoid operated valve.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Manual operator standard on all valves.

Reset

HOW TO ORDER

47A-xxx-Hxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Valve
Valve less base	 <input type="radio"/> 47A-LI0-Hxxx-xxx

SOLENOID OPERATOR >

H		XX X- X XX'	
XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> A 18"	<input type="radio"/> I Non-locking	<input type="radio"/> BA Flying leads
<input type="radio"/> DB 24VDC (2.4 W)	<input type="radio"/> C 36"		<input type="radio"/> BC Flying leads with light
<input type="radio"/> DC 24VDC (1.8 W)	<input type="radio"/> x Other Options		<input type="radio"/> MA Plug-in wire assy
<input type="radio"/> DD 24VDC (1.0 W)			<input type="radio"/> MC Plug-in wire assy with light
<input type="radio"/> AA 120VAC (must use with rectified connector)			<input type="radio"/> HA Plug-in connector with rectifier and light
<input type="radio"/> xx Other Options			<input type="radio"/> xx Other Options

EBM47A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR

Port size	Bottom cylinder ports (18 mm)	Bottom cylinder ports with flow controls (18 mm)
1/8" NPTF	<input type="radio"/> EBM47A-00EBA-xx	<input type="radio"/> EBM47A-00FBA-xx
1/4" NPTF	<input type="radio"/> EBM47A-00EBB-xx	<input type="radio"/> EBM47A-00FBB-xx
6 mm tube receptacle	<input type="radio"/> EBM47A-00EBG-xx	<input type="radio"/> EBM47A-00FBG-xx

Number of stations (03=3 stations)
 Note: clic for valves mounted on base at the factory (add - 9 to the model number).
 add-a-unit stations may be added to above bars. Maximum length for add-a-unit is 4 stations.

OPTIONS

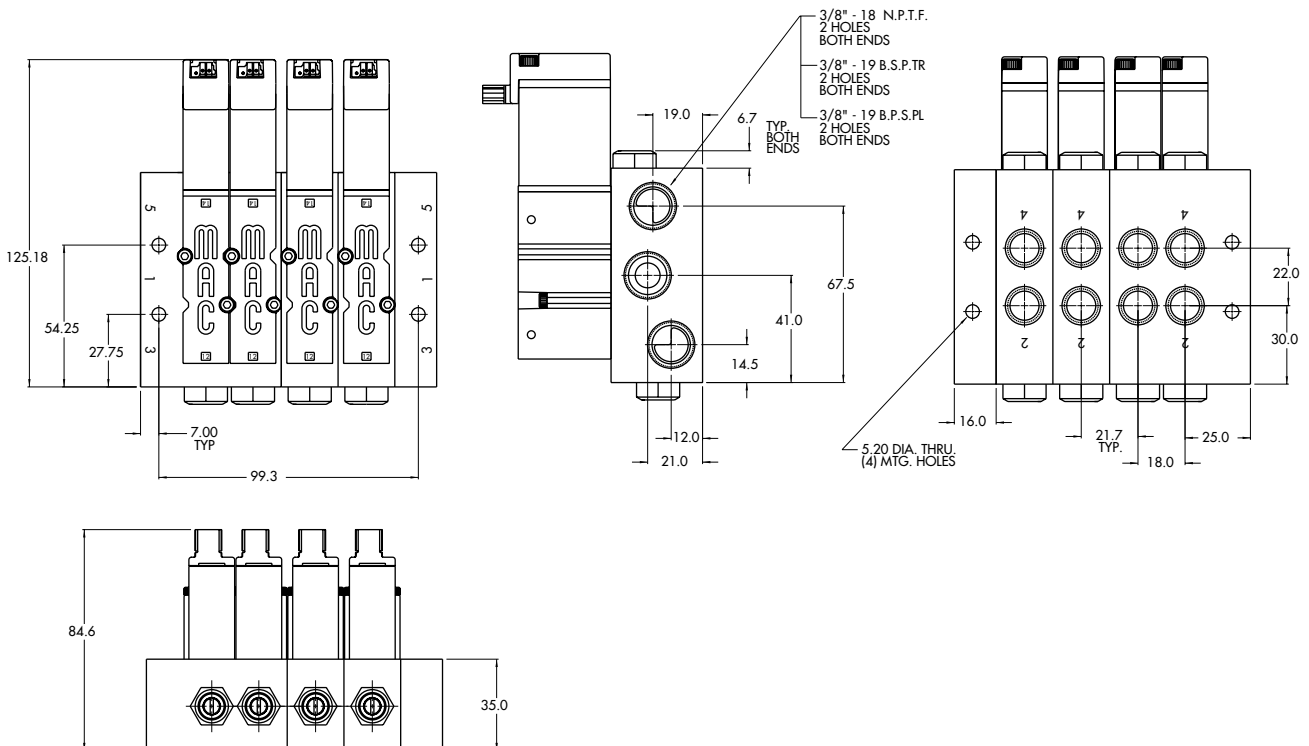
EBM47A-00EBA-xx
 - clic replace with "C" for add-a-unit.

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum 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)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001.
• Flow control kit (x2) : N-37001. End plate kit : M-47004-01.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS





Direct solenoid and solenoid pilot operated valves

Function	Port size (Inlet & Exhaust)	Flow (Max)	Circuit bar mounting	Profile
5/2	3/8"	0.5C_v	non plug-in cyl. ports in valve with opt. Pr. Reg.	44 mm

OPERATIONAL BENEFITS

1. Direct solenoid operated valve.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Manual operator standard on all valves.

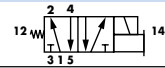


HOW TO ORDER

47A-xxx-Hxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Valve port size	Valve
1/8" NPTF	<input type="radio"/> 47A-MG0-Hxxx-xxx
1/4" NPTF	<input type="radio"/> 47A-MH0-Hxxx-xxx



SOLENOID OPERATOR >

H **XX X- X XX'**

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> A 18"	<input type="radio"/> I Non-locking	<input type="radio"/> BA Flying leads
<input type="radio"/> DB 24VDC (2.4 W)	<input type="radio"/> C 36"		<input type="radio"/> BC Flying leads with light
<input type="radio"/> DC 24VDC (1.8 W)	<input type="radio"/> x Other Options		<input type="radio"/> MA Plug-in wire assy
<input type="radio"/> DD 24VDC (1.0 W)			<input type="radio"/> MC Plug-in wire assy with light
<input type="radio"/> AA 120VAC (must use with rectified connector)			<input type="radio"/> HA Plug-in connector with rectifier and light
<input type="radio"/> xx Other Options			<input type="radio"/> xx Other Options

EBM47A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR (REGULATOR ORDERED SEPARATELY)**

Port size COMMON INLET & EXHAUST	Without regulator (20 mm)	With regulator (20 mm)
3/8" NPTF	<input type="radio"/> EBM47A-01NAK-xx	<input type="radio"/> EBM47A-01PAK-xx

Number of stations (03=3 stations)

Note: clic for valves mounted on base at the factory (add - 9 to the model number).

** Pressure Regulators :

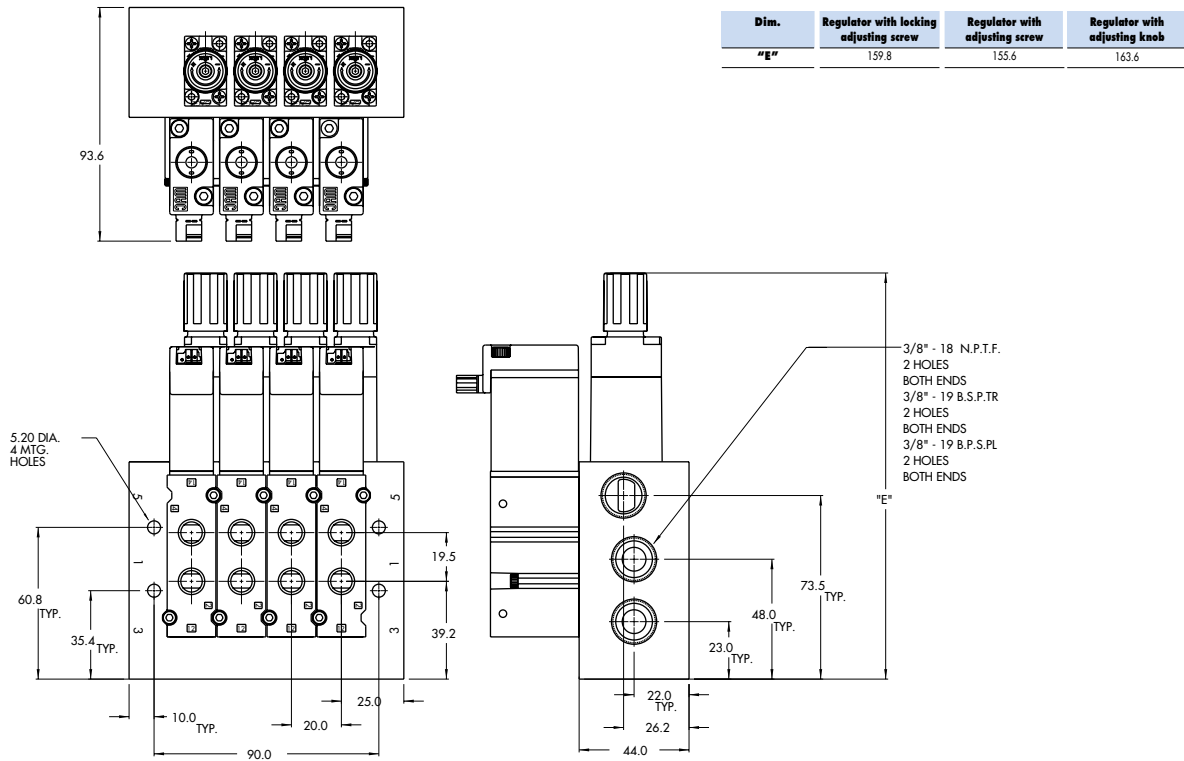
- PR47A-GOAx**
- X=A (0 to 120 PSI)
 - X=B (0 to 80 PSI)
 - X=C (0 to 30 PSI)

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum 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)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47002.
• Regulator blanking plate : R-47003.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS





Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Circuit bar mounting	Profile
5/2	1/8" - 1/4" 6 mm tube receptacle	0.5C_v	non plug-in cyl. ports in base	44 mm

OPERATIONAL BENEFITS

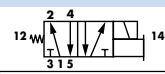
1. Direct solenoid operated valve.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Manual operator standard on all valves.

Reset

HOW TO ORDER

47A-xxx-Hxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Valve
Valve less base	 <input type="radio"/> 47A-LI0-Hxxx-xxx

SOLENOID OPERATOR >

H **XX X- X XX'**

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> A 18"	<input type="radio"/> I Non-locking	<input type="radio"/> BA Flying leads
<input type="radio"/> DB 24VDC (2.4 W)	<input type="radio"/> C 36"		<input type="radio"/> BC Flying leads with light
<input type="radio"/> DC 24VDC (1.8 W)	<input type="radio"/> x Other Options		<input type="radio"/> MA Plug-in wire assy
<input type="radio"/> DD 24VDC (1.0 W)			<input type="radio"/> MC Plug-in wire assy with light
<input type="radio"/> AA 120VAC (must use with rectified connector)			<input type="radio"/> HA Plug-in connector with rectifier and light
<input type="radio"/> xx Other Options			<input type="radio"/> xx Other Options

EBM47A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR

Port size	Side cylinder ports (18 mm)	Bottom cylinder ports (18 mm)
1/8" NPTF	<input type="radio"/> EBM47A-00JAA-xx	<input type="radio"/> EBM47A-00LAA-xx
1/4" NPTF	<input type="radio"/> EBM47A-00JAB-xx	<input type="radio"/> EBM47A-00LAB-xx
6 mm tube receptacle	<input type="radio"/> EBM47A-00JAG-xx	<input type="radio"/> EBM47A-00LAG-xx

Number of stations (03=3 stations)

Note: clic for valves mounted on base at the factory (add - 9 to the model number).

**TECHNICAL
DATA**

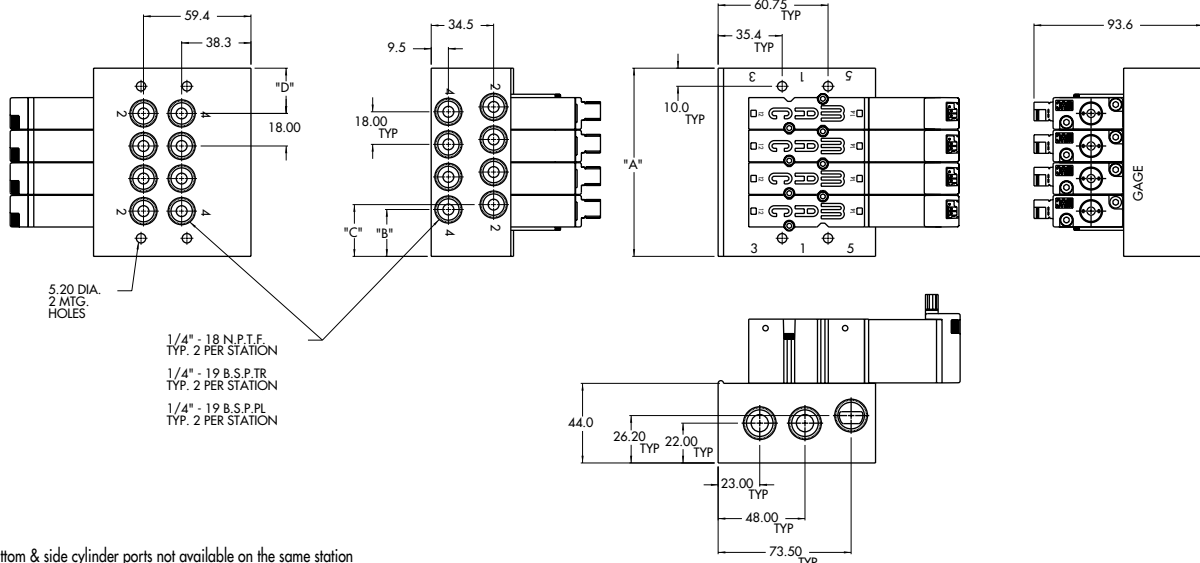
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 μ
Temperature range :	0°F to 120°F (-18°C to 50°C)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS

Number of stations	1	2	3	4	5	6	7	8	9	10
"A"	-	68.0	86.0	104.0	122.0	140.0	158.0	178.0	194.0	212.0
"B"	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90
"C"	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60
"D"	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
1/4" Port	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
M6 Carstick port					N/A					

Dimensions are based on 18 mm centerline spacing



Note: Bottom & side cylinder ports not available on the same station

Consult "Precautions" before use, installation or service of MAC Valves.

Function	Port size	Flow [Max]	Circuit bar mounting	Profile
5/2	1/8" - 1/4" 6 mm tube receptacle	0.5C_v	non plug-in cyl. ports in base with Pr. Reg.	44 mm

OPERATIONAL BENEFITS

1. Direct solenoid operated valve.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Manual operator standard on all valves.

Reset

HOW TO ORDER

47A-xxx-Hxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Valve
Valve less base	 <input type="radio"/> 47A-LI0-Hxxx-xxx

SOLENOID OPERATOR >

H **XX X- X XX'**

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> A 18"	<input type="radio"/> I Non-locking	<input type="radio"/> BA Flying leads
<input type="radio"/> DB 24VDC (2.4 W)	<input type="radio"/> c 36"		<input type="radio"/> BC Flying leads with light
<input type="radio"/> DC 24VDC (1.8 W)	<input type="radio"/> x Other Options		<input type="radio"/> MA Plug-in wire assy
<input type="radio"/> DD 24VDC (1.0 W)			<input type="radio"/> MC Plug-in wire assy with light
<input type="radio"/> AA 120VAC (must use with rectified connector)			<input type="radio"/> HA Plug-in connector with rectifier and light
<input type="radio"/> xx Other Options			<input type="radio"/> xx Other Options

EBM47A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR (REGULATOR ORDERED SEPARATELY)**

Port size	Side cylinder ports (18 mm)	Bottom cylinder ports (18 mm)
1/8" NPTF	<input type="radio"/> EBM47A-00KAA-xx	<input type="radio"/> EBM47A-00MAA-xx
1/4" NPTF	<input type="radio"/> EBM47A-00KAB-xx	<input type="radio"/> EBM47A-00MAB-xx
6 mm tube receptacle	<input type="radio"/> EBM47A-00KAG-xx	<input type="radio"/> EBM47A-00MAG-xx

Number of stations (03=3 stations)
 Note: clic for valves mounted on base at the factory (add - 9 to the model number).

** Pressure Regulators :

- PR47A-GOAx**
- X=A (0 to 120 PSI)
 - X=B (0 to 80 PSI)
 - X=C (0 to 30 PSI)

**TECHNICAL
DATA**

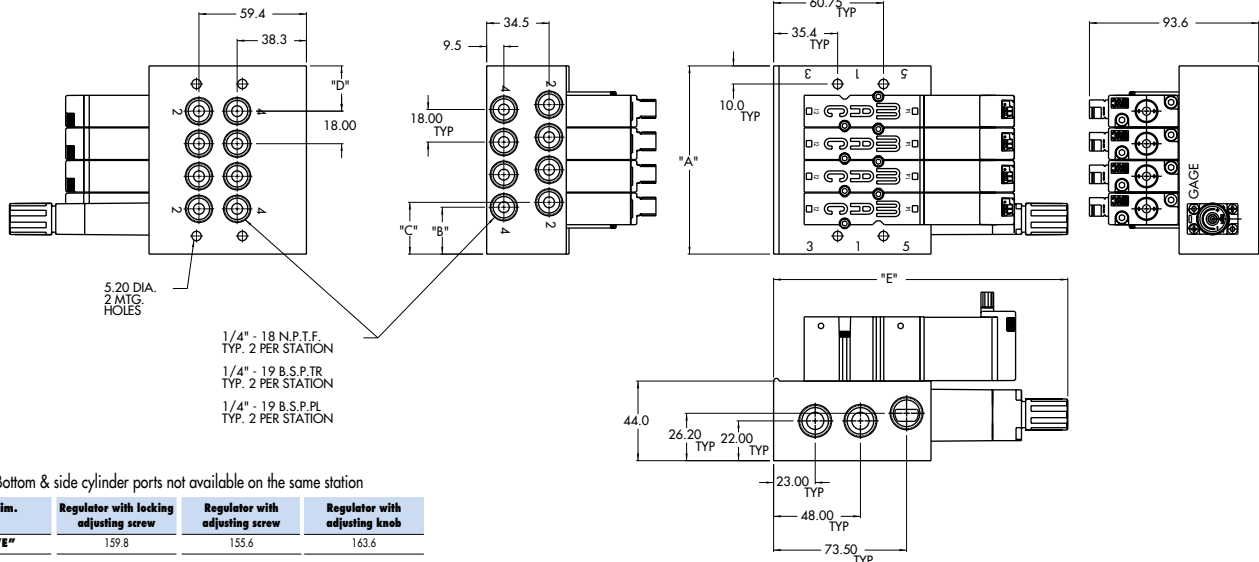
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to 50°C)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001. • Regulator blanking plate : R-47003.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS

Number of stations	1	2	3	4	5	6	7	8	9	10
"A"	-	68.0	86.0	104.0	122.0	140.0	158.0	178.0	194.0	212.0
"B"	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90	25.90
"C"	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60	28.60
"D"	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
1/4" Port	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
M6 Carstick port					N/A					

Dimensions are based on 18 mm centerline spacing

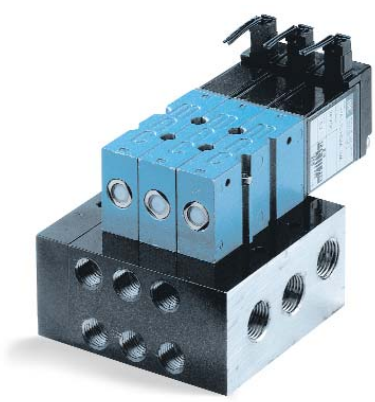


Function	Port size	Flow [Max]	Circuit bar mounting	Profile
5/2	1/8" - 1/4" 6 mm tube receptacle	0.5C_v	add-on style non plug-in cyl. ports in base	44 mm

OPERATIONAL BENEFITS

1. Direct solenoid operated valve.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Manual operator standard on all valves.

Reset



HOW TO ORDER

47A-xxx-Hxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Valve
Valve less base	 <input type="radio"/> 47A-LI0-Hxxx-xxx

SOLENOID OPERATOR >

H **XX X- X XX'**

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> A 18"	<input type="radio"/> I Non-locking	<input type="radio"/> BA Flying leads
<input type="radio"/> DB 24VDC (2.4 W)	<input type="radio"/> C 36"		<input type="radio"/> BC Flying leads with light
<input type="radio"/> DC 24VDC (1.8 W)	<input type="radio"/> x Other Options		<input type="radio"/> MA Plug-in wire assy
<input type="radio"/> DD 24VDC (1.0 W)			<input type="radio"/> MC Plug-in wire assy with light
<input type="radio"/> AA 120VAC (must use with rectified connector)			<input type="radio"/> HA Plug-in connector with rectifier and light
<input type="radio"/> xx Other Options			<input type="radio"/> xx Other Options

EBM47A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR

Port size	Side cylinder ports (18 mm)	Bottom cylinder ports (18 mm)
1/8" NPTF	<input type="radio"/> EBM47A-00JBA-xx	<input type="radio"/> EBM47A-00LBA-xx
1/4" NPTF	<input type="radio"/> EBM47A-00JBB-xx	<input type="radio"/> EBM47A-00LBB-xx
6 mm tube receptacle	<input type="radio"/> EBM47A-00JBG-xx	<input type="radio"/> EBM47A-00LBG-xx

Number of stations (03=3 stations)
 Note: clic for valves mounted on base at the factory (add - 9 to the model number).
 add-a-unit stations may be added to above bars. Maximum length for add-a-unit is 4 stations.

OPTIONS

EBM47A-00JBA-xx
 clic replace with "C" for add-a-unit.

**TECHNICAL
DATA**

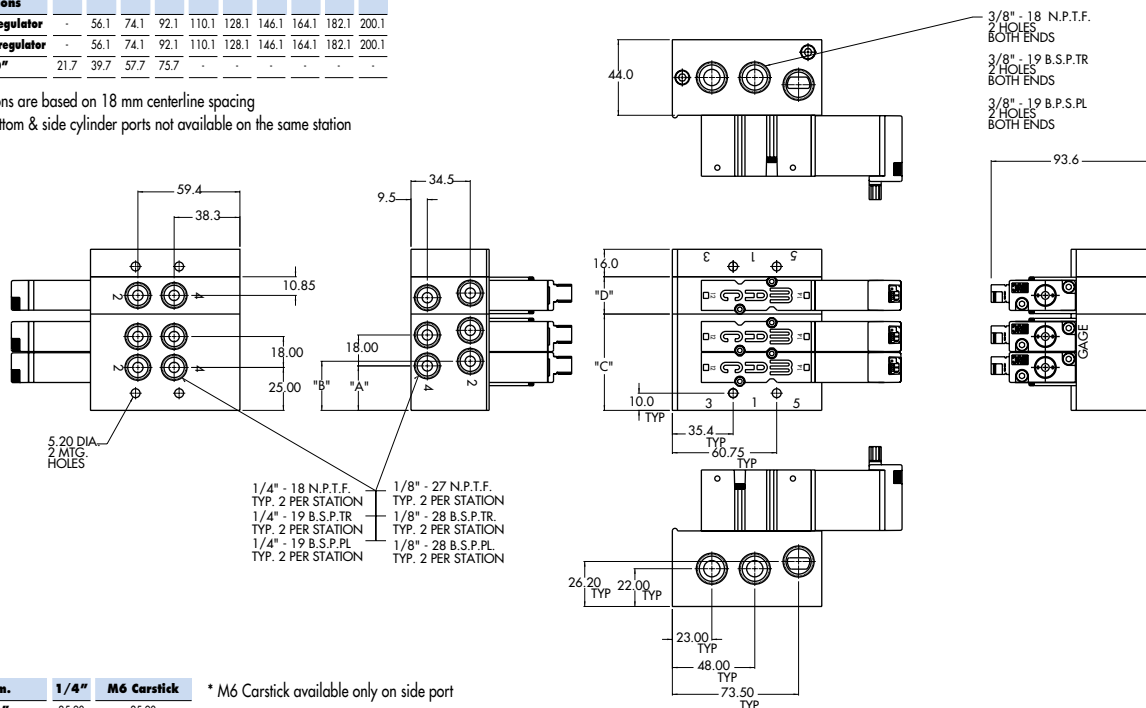
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to 50°C)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001. • End plate kit : M-47005-01.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS

Number of stations	1	2	3	4	5	6	7	8	9	10
"C" w/regulator	-	56.1	74.1	92.1	110.1	128.1	146.1	164.1	182.1	200.1
"C" w/o regulator	-	56.1	74.1	92.1	110.1	128.1	146.1	164.1	182.1	200.1
"D"	21.7	39.7	57.7	75.7	-	-	-	-	-	-

Dimensions are based on 18 mm centerline spacing
 Note: Bottom & side cylinder ports not available on the same station



Dim.	1/4"	M6 Carstick
"A"	25.90	25.90
"B"	28.60	28.60

* M6 Carstick available only on side port

Function	Port size	Flow [Max]	Circuit bar mounting	Profile
5/2	1/8" - 1/4" 6 mm tube receptacle	0.5C_v	add-on style non plug-in cyl. ports in base with Pr. Reg.	44 mm

OPERATIONAL BENEFITS

1. Direct solenoid operated valve.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Manual operator standard on all valves.



HOW TO ORDER

47A-xxx-Hxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Valve
Valve less base	 <input type="radio"/> 47A-LI0-Hxxx-xxx

SOLENOID OPERATOR >

H **XX X- X XX***

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> A 18"	<input type="radio"/> I Non-locking	<input type="radio"/> BA Flying leads
<input type="radio"/> DB 24VDC (2.4 W)	<input type="radio"/> c 36"		<input type="radio"/> BC Flying leads with light
<input type="radio"/> DC 24VDC (1.8 W)	<input type="radio"/> x Other Options		<input type="radio"/> MA Plug-in wire assy
<input type="radio"/> DD 24VDC (1.0 W)			<input type="radio"/> MC Plug-in wire assy with light
<input type="radio"/> AA 120VAC (must use with rectified connector)			<input type="radio"/> HA Plug-in connector with rectifier and light
<input type="radio"/> xx Other Options			<input type="radio"/> xx Other Options

EBM47A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR (REGULATOR ORDERED SEPARATELY)**

Port size	Side cylinder ports (18 mm)	Bottom cylinder ports (18 mm)
1/8" NPTF	<input type="radio"/> EBM47A-00KBA-xx	<input type="radio"/> EBM47A-00MBA-xx
1/4" NPTF	<input type="radio"/> EBM47A-00KBB-xx	<input type="radio"/> EBM47A-00MBB-xx
6 mm tube receptacle	<input type="radio"/> EBM47A-00KBG-xx	<input type="radio"/> EBM47A-00MBG-xx

Number of stations (03=3 stations)
 Note : clic for valves mounted on base at the factory (add - 9 to the model number).
 add-a-unit stations may be added to above bars. Maximum length for add-a-unit is 4 stations.

OPTIONS

EBM47A-00KBA-xx

- clic replace with "C" for add-a-unit.

** Pressure Regulators :

- PR47A-GOAx**
- X=A (0 to 120 PSI)
 - X=B (0 to 80 PSI)
 - X=C (0 to 30 PSI)

**TECHNICAL
DATA**

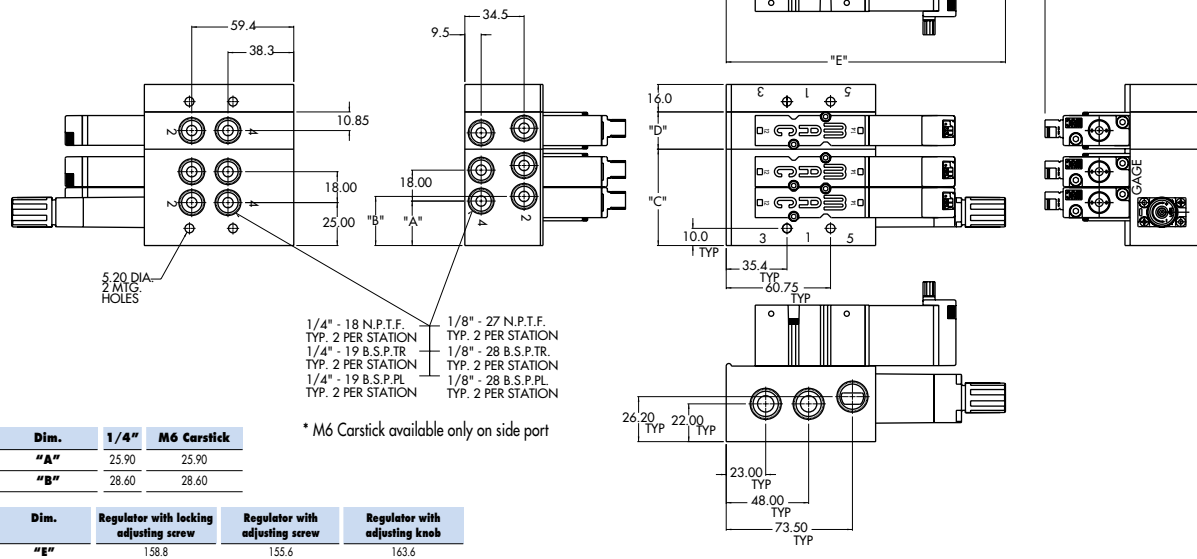
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 μ
Temperature range :	0°F to 120°F (-18°C to 50°C)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001. • End plate kit : M-47005-01. • Regulator blanking plate : R-47003.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS

Number of stations	1	2	3	4	5	6	7	8	9	10
"C" w/regulator	-	56.1	74.1	92.1	110.1	128.1	146.1	164.1	182.1	200.1
"C" w/o regulator	-	56.1	74.1	92.1	110.1	128.1	146.1	164.1	182.1	200.1
"D"	21.7	39.7	57.7	75.7	-	-	-	-	-	-

Dimensions are based on 18 mm centerline spacing
Note: Bottom & side cylinder ports not available on the same station



Function	Port size	Flow [Max]	Circuit bar mounting
5/2	1/8" - 1/4" 6 mm tube receptacle	0.5C_v	plug-in

OPERATIONAL BENEFITS

1. Balanced poppet, immune to variations of pressure.
2. Short stroke with high flow.
3. The patented solenoid develops high shifting forces.
4. Powerful return spring.
5. Manual operator standard on all valves.
6. Direct solenoid operated.

Reset

HOW TO ORDER

47A-xxx-HxxP-xxx

HOW TO ORDER VALVE FOR "PLUG-IN" CIRCUIT BAR

Valve less base	Valve
	
	<input type="radio"/> 47A-LI0-HxxP-xxx

SOLENOID OPERATOR >

H **XX** P- **X** **XX**

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> FA Plug-in
<input type="radio"/> DB 24VDC (2.4 W)		<input type="radio"/> FC Plug-in with light
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> FE Plug-in with suppression diode
<input type="radio"/> DD 24VDC (1.0 W)		<input type="radio"/> FG Plug-in with suppression diode with LED light
<input type="radio"/> AA 120VAC (Mod. No. required see below)		<input type="radio"/> xx Other Options
<input type="radio"/> xx Other Options		

HOW TO ORDER "PLUG-IN" CIRCUIT BAR

ECD47A-xxxxx-xxxx

Port size	Spacing mm	Side cylinder ports	Bottom cylinder ports
1/8" NPTF	18	<input type="radio"/> ECD47A-00AAA-A0xx	<input type="radio"/> ECD47A-00BAA-A0xx
1/4" NPTF	18	<input type="radio"/> ECD47A-00AAB-A0xx	<input type="radio"/> ECD47A-00BAB-A0xx
6 mm tube receptacle	18	<input type="radio"/> ECD47A-00AAG-A0xx	<input type="radio"/> ECD47A-00BAG-A0xx
1/8" NPTF	30	<input type="radio"/> ECD47A-01AAA-C0xx	<input type="radio"/> ECD47A-01BAA-C0xx
1/4" NPTF	30	<input type="radio"/> ECD47A-01AAB-C0xx	<input type="radio"/> ECD47A-01BAB-C0xx
6 mm tube receptacle	30	<input type="radio"/> ECD47A-01AAG-C0xx	<input type="radio"/> ECD47A-01BAG-C0xx

Number of stations (03=3 stations)

Note: clic for valves mounted on base at the factory (add - 9 to the model number).
for AC voltage use mod. FWR2 after circuit bar model number.
for multi-pin connector (9, 15 or 25).

- A0 = without light
- AA = with light (120V)
- AB = with light (240V)
- AD = with light (24V)
- C0 = terminal strip
- CA = terminal strip with light (120V)
- CB = terminal strip with light (240V)
- CD = terminal strip with light (24V)

**TECHNICAL
DATA**

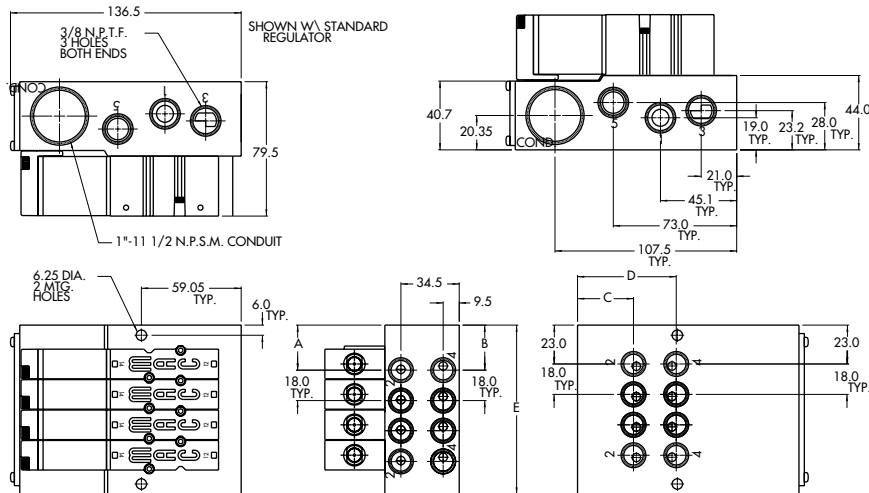
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to 50°C)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001.
• Base wire plug-in protector : 16520.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS

Number of stations	1	2	3	4	5	6	7	8	9	10
"E"	46.0	64.0	82.0	100.0	118.0	136.0	154.0	172.0	190.0	208.0

Dimensions are based on 18 mm centerline spacing
Note: Bottom & side cylinder ports not available on the same station

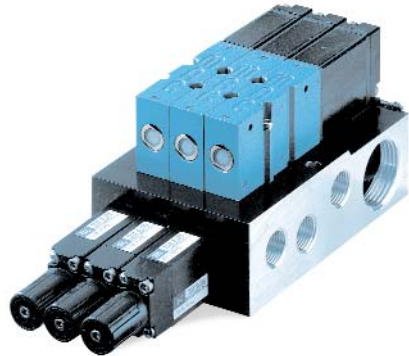


Dim.	1/4"	1/8"	6 mm Legris
"A"	26.65	26.15	25.65
"B"	26.65	24.2	25.65
"C"	33.1	34.8	34.8
"D"	58.4	55.9	55.9

Function	Port size	Flow [Max]	Circuit bar mounting
5/2	1/8" - 1/4"	0.5C_v	plug-in with Pr. Reg.

OPERATIONAL BENEFITS

1. Balanced poppet, immune to variations of pressure.
2. Short stroke with high flow.
3. The patented solenoid develops high shifting forces.
4. Powerful return spring.
5. Manual operator standard on all valves.
6. Direct solenoid operated.



HOW TO ORDER

47A-xxx-HxxP-xxx

HOW TO ORDER VALVE FOR "PLUG-IN" CIRCUIT BAR

	Valve
Valve less base	<input type="radio"/> 47A-LI0-HxxP-xxx

SOLENOID OPERATOR >

H **XX** P- **X** **XX**'

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> FA Plug-in
<input type="radio"/> DB 24VDC (2.4 W)		<input type="radio"/> FC Plug-in with light
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> FE Plug-in with suppression diode
<input type="radio"/> DD 24VDC (1.0 W)		<input type="radio"/> FG Plug-in with suppression diode with LED light
<input type="radio"/> AA 120VAC (Mod. No. required see below)		<input type="radio"/> xx Other Options
<input type="radio"/> xx Other Options		

HOW TO ORDER "PLUG-IN" CIRCUIT BAR (REGULATORS ORDERED SEPARATELY)**

ECD47A-xxxxx-xxxx

Port size	Spacing mm	Bottom cylinder ports
1/8" NPTF	18	<input type="radio"/> ECD47A-00CAA-A0xx
1/4" NPTF	18	<input type="radio"/> ECD47A-00CAB-A0xx
1/8" NPTF	30	<input type="radio"/> ECD47A-01CAA-C0xx
1/4" NPTF	30	<input type="radio"/> ECD47A-01CAB-C0xx

Number of stations (03=3 stations)
 Note : clic for valves mounted on base at the factory (add - 9 to the model number).
 for AC voltage use mod. FWR2 after circuit bar model number.
 for multi-pin connector (9, 15 or 25).

- ** Pressure Regulators :
- PR47A-GOAx**
- X=A (0 to 120 PSI)
 - X=B (0 to 80 PSI)
 - X=C (0 to 30 PSI)
 - A0 = without light
 - AA = with light (120V)
 - AB = with light (240V)
 - AD = with light (24V)
 - C0 = terminal strip
 - CA = terminal strip with light (120V)
 - CB = terminal strip with light (240V)
 - CD = terminal strip with light (24V)

**TECHNICAL
DATA**

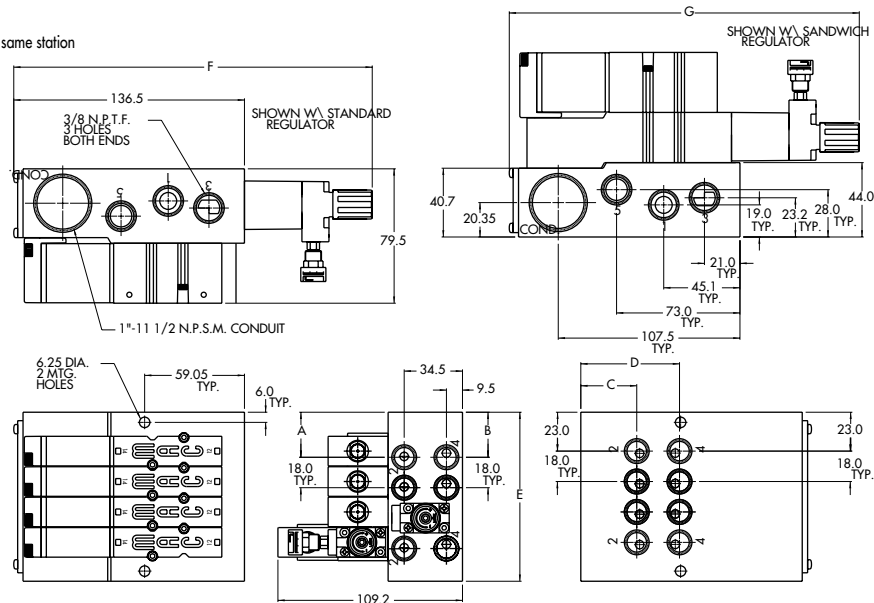
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to 50°C)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001.
• Base wire plug-in protector : 16520. • Regulator blanking plate : R-47003.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS

Number of stations	1	2	3	4	5	6	7	8	9	10
"E"	46.0	64.0	82.0	100.0	118.0	136.0	154.0	172.0	190.0	208.0

Dimensions are based on 18 mm centerline spacing
Note: Bottom & side cylinder ports not available on the same station



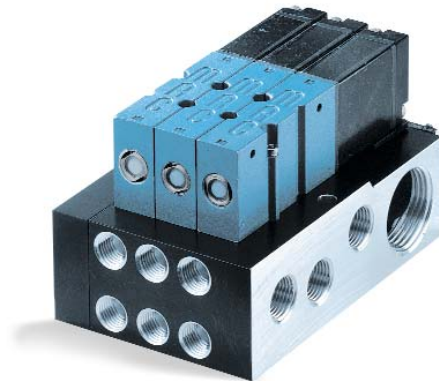
Dim.	1/4"	1/8"	6 mm Legris
"A"	26.65	26.15	25.65
"B"	26.65	24.2	25.65
"C"	33.1	34.8	34.8
"D"	58.4	55.9	55.9

Dim.	Regulator with locking adjusting screw	Regulator with adjusting screw	Regulator with adjusting knob
"F"	209.3	205.1	212.1
"G"	204.3	200.1	207.1

Function	Port size	Flow (Max)	Circuit bar mounting
5/2	1/8" - 1/4" 6 mm tube receptacle	0.5C_v	add-on style plug-in

OPERATIONAL BENEFITS

1. Balanced poppet, immune to variations of pressure.
2. Short stroke with high flow.
3. The patented solenoid develops high shifting forces.
4. Powerful return spring.
5. Manual operator standard on all valves.
6. Direct solenoid operated.



HOW TO ORDER

47A-xxx-HxxP-xxx

HOW TO ORDER VALVE FOR "PLUG-IN" CIRCUIT BAR

	Valve
Valve less base	<input type="radio"/> 47A-LI0-HxxP-xxx

SOLENOID OPERATOR >

H XX P- X XX*

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> FA Plug-in
<input type="radio"/> DB 24VDC (2.4 W)		<input type="radio"/> FC Plug-in with light
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> FE Plug-in with suppression diode
<input type="radio"/> DD 24VDC (1.0 W)		<input type="radio"/> FG Plug-in with suppression diode with LED light
<input type="radio"/> AA 120VAC (Mod. No. required see below)		<input type="radio"/> xx Other Options
<input type="radio"/> xx Other Options		

HOW TO ORDER "PLUG-IN" CIRCUIT BAR

ECD47A-xxxxx-xxxx

Port size	Spacing mm	Side cylinder ports	Bottom cylinder ports
1/8" NPTF	18	<input type="radio"/> ECD47A-00ABA-A0xx	<input type="radio"/> ECD47A-00BBA-A0xx
1/4" NPTF	18	<input type="radio"/> ECD47A-00ABB-A0xx	<input type="radio"/> ECD47A-00BBB-A0xx
6 mm tube receptacle	18	<input type="radio"/> ECD47A-00ABG-A0xx	<input type="radio"/> ECD47A-00BBG-A0xx
1/8" NPTF	30	<input type="radio"/> ECD47A-01ABA-C0xx	<input type="radio"/> ECD47A-01BBA-C0xx
1/4" NPTF	30	<input type="radio"/> ECD47A-01ABB-C0xx	<input type="radio"/> ECD47A-01BBB-C0xx
6 mm tube receptacle	30	<input type="radio"/> ECD47A-01ABG-C0xx	<input type="radio"/> ECD47A-01BBG-C0xx

Number of stations (03=3 stations)

Note: clic for valves mounted on base at the factory (add - 9 to the model number).
for AC voltage use mod. FWR2 after circuit bar model number.
for multi-pin connector (9, 15 or 25).
add-a-units may be added to above bars.

- A0 = without light
- AA = with light (120V)
- AB = with light (240V)
- AD = with light (24V)
- C0 = terminal strip
- CA = terminal strip with light (120V)
- CB = terminal strip with light (240V)
- CD = terminal strip with light (24V)

**TECHNICAL
DATA**

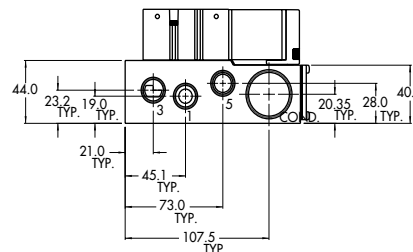
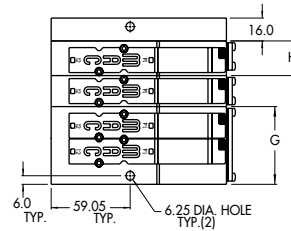
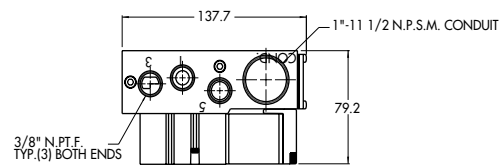
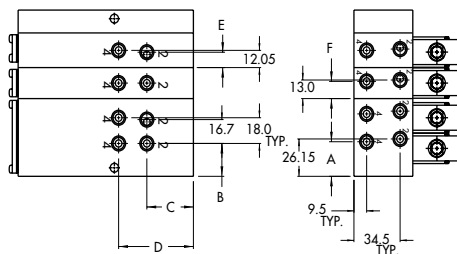
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to 50°C)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001.
• Base wire plug-in protector : 16520. • Isolator disc between add-a-units : 28438.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS

Number of stations	1	2	3	4	5	6	7	8	9	10
"G"	-	51.85	69.85	87.85	105.85	123.85	141.85	159.85	177.85	195.85
"H"	21.70	39.70	57.70	75.70	-	-	-	-	-	-

Dimensions are based on 18 mm centerline spacing
Note: Bottom & side cylinder ports not available on the same station



Dim.	1/8"	1/4"	6 mm Legris
"A"	24.20	24.20	25.65
"B"	23.00	23.00	23.00
"C"	34.80	33.10	34.80
"D"	55.90	58.40	55.90
"E"	-	-	-
"F"	12.05	12.00	14.00

Function	Port size	Flow [Max]	Circuit bar mounting
5/2	1/8" - 1/4"	0.5C_v	add-on style plug-in with Pr. Reg.

OPERATIONAL BENEFITS

1. Balanced poppet, immune to variations of pressure.
2. Short stroke with high flow.
3. The patented solenoid develops high shifting forces.
4. Powerful return spring.
5. Manual operator standard on all valves.
6. Direct solenoid operated.



HOW TO ORDER

47A-xxx-HxxP-xxx

HOW TO ORDER VALVE FOR "PLUG-IN" CIRCUIT BAR

Valve less base	Valve
	<input type="radio"/> 47A-LI0-HxxP-xxx

SOLENOID OPERATOR >

H XX P- X XX		
XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> FA Plug-in
<input type="radio"/> DB 24VDC (2.4 W)		<input type="radio"/> FC Plug-in with light
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> FE Plug-in with suppression diode
<input type="radio"/> DD 24VDC (1.0 W)		<input type="radio"/> FG Plug-in with suppression diode with LED light
<input type="radio"/> AA 120VAC (Mod. No. required see below)		<input type="radio"/> xx Other Options
<input type="radio"/> xx Other Options		

HOW TO ORDER "PLUG-IN" CIRCUIT BAR (REGULATORS ORDERED SEPARATELY)**

ECD47A-xxxxx-xxxx

Port size	Spacing mm	Bottom cylinder ports
1/8" NPTF	18	<input type="radio"/> ECD47A-00CBA-A0xx
1/4" NPTF	18	<input type="radio"/> ECD47A-00CBB-A0xx
1/8" NPTF	30	<input type="radio"/> ECD47A-01CBA-C0xx
1/4" NPTF	30	<input type="radio"/> ECD47A-01CBB-C0xx

Number of stations (03=3 stations)
 Note: clic for valves mounted on base at the factory (add - 9 to the model number).
 for AC voltage use mod. FWR2 after circuit bar model number.
 for multi-pin connector (9, 15 or 25).
 add-a-units may be added to above bars.

** Pressure Regulators :

PR47A-GOAx

- X=A (0 to 120 PSI)
- X=B (0 to 80 PSI)
- X=C (0 to 30 PSI)
- A0 = without light
- AA = with light (120V)
- AB = with light (240V)
- AD = with light (24V)
- C0 = terminal strip
- CA = terminal strip with light (120V)
- CB = terminal strip with light (240V)
- CD = terminal strip with light (24V)

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum 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)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

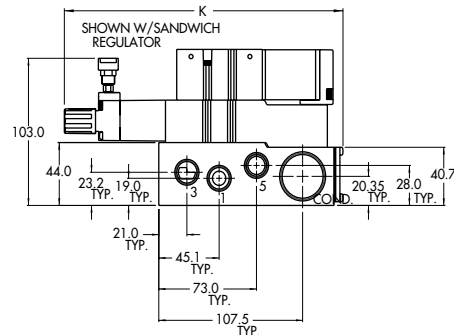
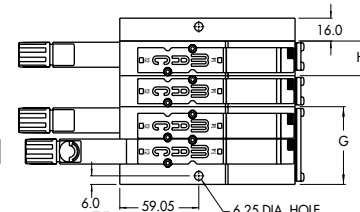
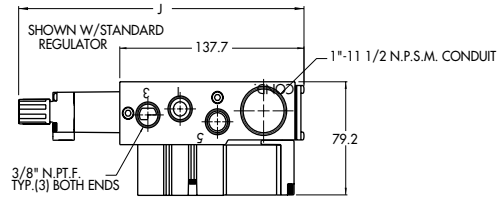
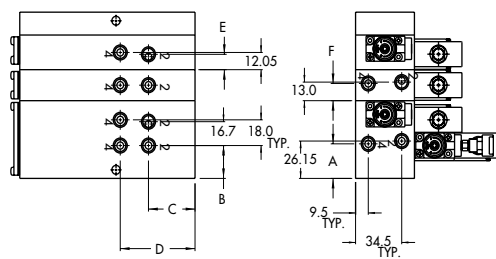
- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001.
• Base wire plug-in protector : 16520. • Regulator blanking plate : R-47003. • Isolator disc between add-a-units : 28438.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS

Number of stations	1	2	3	4	5	6	7	8	9	10
"G" w/regulator	54.40	72.40	90.40	108.40	126.40	144.40	162.40	180.40	199.40	
"G" w/o regulator	51.85	69.85	87.85	105.85	123.85	141.85	159.85	177.85	195.85	
"H" w/regulator	24.25	42.25	60.25	78.25	-	-	-	-	-	-
"H" w/o regulator	21.70	39.70	57.70	75.70	-	-	-	-	-	-

Dimensions are based on 18 mm centerline spacing

Note: Bottom & side cylinder ports not available on the same station



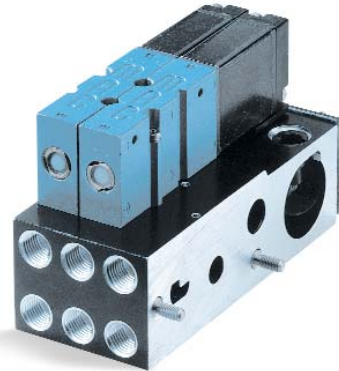
Dim.	1/8"	1/4"	6 mm Legris	1/8" w/regulator	1/4" w/regulator
"A"	24.20	24.20	25.65	-	-
"B"	23.00	23.00	23.00	-	23.00
"C"	34.80	33.10	34.80	34.80	33.10
"D"	55.90	58.40	55.90	55.90	58.40
"E"	-	-	-	10.75	10.85
"F"	12.05	12.00	14.00	-	-

Dim.	Regulator with locking adjusting screw	Regulator with adjusting screw	Regulator with adjusting knob
"J"	209.3	205.1	212.1
"K"	204.3	200.1	207.1

Function	Port size	Flow (Max)	Circuit bar mounting
5/2	1/8" - 1/4" 6 mm tube receptacle	0.5C_v	plug-in add-a-unit stations

OPERATIONAL BENEFITS

- Balanced poppet, immune to variations of pressure.
- Short stroke with high flow.
- The patented solenoid develops high shifting forces.
- Powerful return spring.
- Manual operator standard on all valves.
- Direct solenoid operated.



HOW TO ORDER

47A-xxx-HxxP-xxx

HOW TO ORDER VALVE FOR "PLUG-IN" CIRCUIT BAR

Valve less base	Valve
	
	<input type="radio"/> 47A-LI0-HxxP-xxx

SOLENOID OPERATOR >

H XX P- X XX*

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> FA Plug-in
<input type="radio"/> DB 24VDC (2.4 W)		<input type="radio"/> FC Plug-in with light
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> FE Plug-in with suppression diode
<input type="radio"/> DD 24VDC (1.0 W)		<input type="radio"/> FG Plug-in with suppression diode with LED light
<input type="radio"/> AA 120VAC (Mod. No. required see below)		<input type="radio"/> xx Other Options
<input type="radio"/> xx Other Options		

HOW TO ORDER "PLUG-IN" CIRCUIT BAR

ECD47A-xxxxx-xxxx

Port size	Spacing mm	Side cylinder ports	Bottom cylinder ports
1/8" NPTF	18	<input type="radio"/> ECD47A-00ACA-A0xx	<input type="radio"/> ECD47A-00BCA-A0xx
1/4" NPTF	18	<input type="radio"/> ECD47A-00ACB-A0xx	<input type="radio"/> ECD47A-00BCB-A0xx
6 mm tube receptacle	18	<input type="radio"/> ECD47A-00ACG-A0xx	<input type="radio"/> ECD47A-00BCG-A0xx
1/8" NPTF	30	<input type="radio"/> ECD47A-01ACA-C0xx	<input type="radio"/> ECD47A-01BCA-C0xx
1/4" NPTF	30	<input type="radio"/> ECD47A-01ACB-C0xx	<input type="radio"/> ECD47A-01BCB-C0xx
6 mm tube receptacle	30	<input type="radio"/> ECD47A-01ACG-C0xx	<input type="radio"/> ECD47A-01BCG-C0xx

Number of stations (01=1 station). Maximum length is 4 stations
 Note: clic for valves mounted on base at the factory (add - 9 to the model number).
 when add-a-unit stations are added to bars with a multi-pin connector,
 MOD SD03 should be included with add-a-unit model number.
 for AC voltage use mod. FWR2 after circuit bar model number.

- A0 = without light
- AA = with light (120V)
- AB = with light (240V)
- AD = with light (24V)
- C0 = terminal strip
- CA = terminal strip with light (120V)
- CB = terminal strip with light (240V)
- CD = terminal strip with light (24V)

**TECHNICAL
DATA**

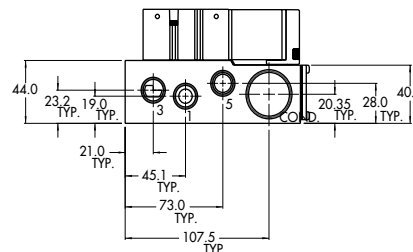
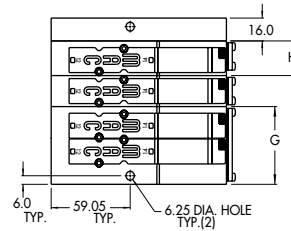
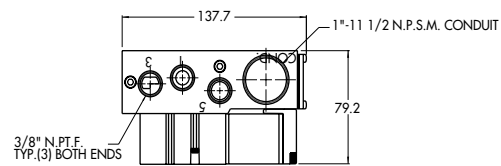
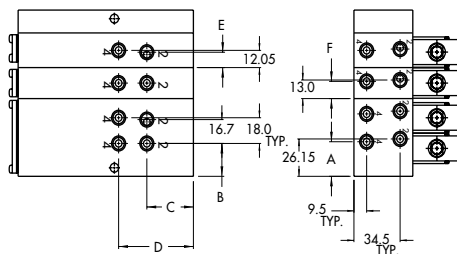
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to 50°C)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001.
• O-ring port seal (x3) : 17015-01 • Tie rod (x2) : 79007-01 (one station length).
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS

Number of stations	1	2	3	4	5	6	7	8	9	10
"G"	-	51.85	69.85	87.85	105.85	123.85	141.85	159.85	177.85	195.85
"H"	21.70	39.70	57.70	75.70	-	-	-	-	-	-

Dimensions are based on 18 mm centerline spacing
Note: Bottom & side cylinder ports not available on the same station



Dim.	1/8"	1/4"	6 mm Legris
"A"	24.20	24.20	25.65
"B"	23.00	23.00	23.00
"C"	34.80	33.10	34.80
"D"	55.90	58.40	55.90
"E"	-	-	-
"F"	12.05	12.00	14.00

Function	Port size	Flow [Max]	Circuit bar mounting
5/2	1/8" - 1/4"	0.5C _v	plug-in add-a-unit stations with Pr. Reg.

OPERATIONAL BENEFITS

- Balanced poppet, immune to variations of pressure.
- Short stroke with high flow.
- The patented solenoid develops high shifting forces.
- Powerful return spring.
- Manual operator standard on all valves.
- Direct solenoid operated.



HOW TO ORDER

47A-xxx-HxxP-xxx

HOW TO ORDER VALVE FOR "PLUG-IN" CIRCUIT BAR

Valve less base	Valve
	<input type="radio"/> 47A-LI0-HxxP-xxx

SOLENOID OPERATOR >

H XX P- X XX'		
XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (5.2 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> FA Plug-in
<input type="radio"/> DB 24VDC (2.4 W)		<input type="radio"/> FC Plug-in with light
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> FE Plug-in with suppression diode
<input type="radio"/> DD 24VDC (1.0 W)		<input type="radio"/> FG Plug-in with suppression diode with LED light
<input type="radio"/> AA 120VAC (Mod. No. required see below)		<input type="radio"/> xx Other Options
<input type="radio"/> xx Other Options		

HOW TO ORDER "PLUG-IN" CIRCUIT BAR (REGULATORS ORDERED SEPARATELY)**

ECD47A-xxxxx-xxxx

Port size	Spacing mm	Bottom cylinder ports
1/8" NPTF	18	<input type="radio"/> ECD47A-00CCA-A0xx
1/4" NPTF	18	<input type="radio"/> ECD47A-00CCB-A0xx
1/8" NPTF	30	<input type="radio"/> ECD47A-01CCA-C0xx
1/4" NPTF	30	<input type="radio"/> ECD47A-01CCB-C0xx

Number of stations (01=1 station). Maximum length is 4 stations .
 Note : clic for valves mounted on base at the factory (add - 9 to the model number), when add-a-unit stations are added to bars with a multi-pin connector, MOD SD03 should be included with add-a-unit model number. for AC voltage use mod. FWR2 after circuit bar model number.

** Pressure Regulators :

PR47A-GOAx

- X=A (0 to 120 PSI)
- X=B (0 to 80 PSI)
- X=C (0 to 30 PSI)
- A0 = without light
- AA = with light (120V)
- AB = with light (240V)
- AD = with light (24V)
- C0 = terminal strip
- CA = terminal strip with light (120V)
- CB = terminal strip with light (240V)
- CD = terminal strip with light (24V)

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum 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)
Orifice :	4.3 mm
Flow (at 6 bar, ΔP=1bar) :	5.2 W : 0.50C _v , 2.4 W : 0.30C _v , 1.8 W : 0.25C _v , 1.0 W : 0.25C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W - 2.4 W - 1.8 W - 1.0 W
Response times :	Energize : 14.0 ms
(with 5.2 W coil)	De-energize : 5.0 ms

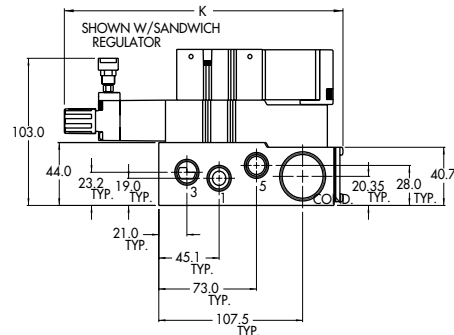
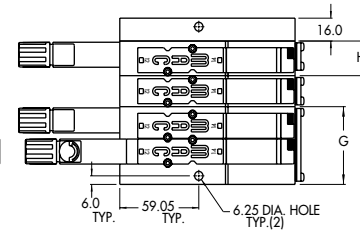
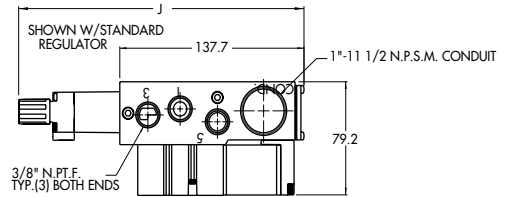
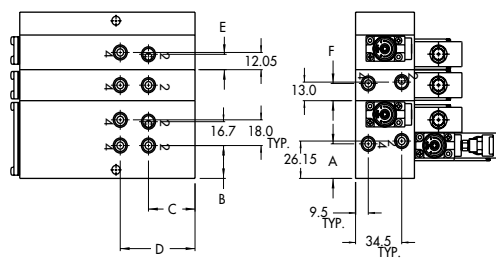
- Note : • Valve and coil are not interchangeable.
- Spare parts : • Seal between valve and bar : 16629. • Mounting screw (x2) : 35043. • Valve blanking plate : M-47001.
• O-ring port seal (x3) : 17015-01 • Tie rod (x2) : 79007-01 (one station length). • Regulator blanking plate : R-47003.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS

Number of stations	1	2	3	4	5	6	7	8	9	10
"G" w/regulator	54.40	72.40	90.40	108.40	126.40	144.40	162.40	180.40	199.40	
"G" w/o regulator	51.85	69.85	87.85	105.85	123.85	141.85	159.85	177.85	195.85	
"H" w/regulator	24.25	42.25	60.25	78.25	-	-	-	-	-	-
"H" w/o regulator	21.70	39.70	57.70	75.70	-	-	-	-	-	-

Dimensions are based on 18 mm centerline spacing

Note: Bottom & side cylinder ports not available on the same station



Dim.	1/8"	1/4"	6 mm Legris	1/8" w/regulator	1/4" w/regulator
"A"	24.20	24.20	25.65	-	-
"B"	23.00	23.00	23.00	-	23.00
"C"	34.80	33.10	34.80	34.80	33.10
"D"	55.90	58.40	55.90	55.90	58.40
"E"	-	-	-	10.75	10.85
"F"	12.05	12.00	14.00	-	-

Dim.	Regulator with locking adjusting screw	Regulator with adjusting screw	Regulator with adjusting knob
"J"	209.3	205.1	212.1
"K"	204.3	200.1	207.1



Section 2

Options



Codification table for voltages / Wire length / Manual operators / Electrical connections

VALVE CODE ► **-HXX X - X XX**
1 2 3 4

OPTIONS AVAILABLE FOR

- Solenoid valves 37 & 47 Series

1. VOLTAGE

- H XX	X - X XX	VOLTAGE
		DC Options
<input type="radio"/>	DA	24 VDC (5.2 W)
<input type="radio"/>	DB	24 VDC (2.4 W)
<input type="radio"/>	DC	24 VDC (1.8 W)
<input type="radio"/>	DD	24 VDC (1.0 W)
<input type="radio"/>	DF	12 VDC (5.2 W)
<input type="radio"/>	DG	12 VDC (2.4 W)
<input type="radio"/>	DH	12 VDC (1.8 W)
<input type="radio"/>	DJ	12 VDC (1.0 W)
<input type="radio"/>	DL	120 VDC (6.3 W)
		AC Options (50/60hz)
<input type="radio"/>	AA	120 VAC (6.7 W)
<input type="radio"/>	AB	220 VAC (5.6 W)
<input type="radio"/>	AC	240 VAC (5.8 W)
<input type="radio"/>	AD	24 VAC (7.8 W)

Note : AC Voltages only available with "H" & "F" type connectors. MOD FWR2 must be used with the "F" type connectors.

2. WIRE LENGTH

- H XX	X - X XX	WIRE LENGTH
<input type="radio"/>	O	No lead wire
<input type="radio"/>	A	18"
<input type="radio"/>	B	24"
<input type="radio"/>	C	36"
<input type="radio"/>	D	48"
<input type="radio"/>	E	72"
<input type="radio"/>	F	96"
<input type="radio"/>	G	120"
<input type="radio"/>	H	144"
<input type="radio"/>	P	Plug-in (used only with "F" type connector Opts.)

Use "O" with MJ & MM Opts.

3. MANUAL OPERATOR

- H XX	X - X XX	MANUAL OPERATOR
<input type="radio"/>	0	No operator
<input type="radio"/>	1	Non-locking recessed
<input type="radio"/>	2	Locking recessed
<input type="radio"/>	3	Non-locking extended
<input type="radio"/>	4	Locking extended

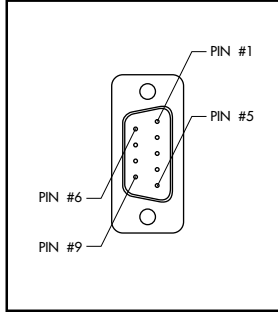


4. ELECTRICAL CONNECTION

- H XX	X - X XX	ELECTRICAL CONNECTION
<input type="radio"/>	BA	Flying leads
<input type="radio"/>	BB	Flying leads with ground wire
<input type="radio"/>	BC	Flying leads with led light
<input type="radio"/>	BD	Flying leads with led light & ground wire
<input type="radio"/>	BE	Flying leads with suppression diode
<input type="radio"/>	BF	Flying leads with suppression diode & ground wire
<input type="radio"/>	BG	Flying leads with suppression diode plus led light
<input type="radio"/>	BH	Flying leads with suppression diode plus led light & ground wire
<input type="radio"/>	*BN	Flying leads with suppression diode plus blocking diode
<input type="radio"/>	*BP	Flying leads with suppression diode plus blocking diode & ground wire
<input type="radio"/>	*BR	Flying leads with suppression diode plus blocking diode & led light
<input type="radio"/>	*BS	Flying leads with suppression diode plus blocking diode & led light & ground wire
<input type="radio"/>	FA	Plug-in
<input type="radio"/>	FB	Plug-in with ground wire
<input type="radio"/>	FC	Plug-in with led light
<input type="radio"/>	FD	Plug-in with led light & ground wire
<input type="radio"/>	FE	Plug-in with suppression diode
<input type="radio"/>	FF	Plug-in with suppression diode & ground wire
<input type="radio"/>	FG	Plug-in with suppression diode plus led light
<input type="radio"/>	FH	Plug-in with suppression diode plus led light & ground wire
		Note : FA ---- FH options for use with ECD type circuit bars
<input type="radio"/>	HA	Circuit board plug-in with full wave rectifier & led light
<input type="radio"/>	HB	Circuit board with full wave rectifier & led with ground wire
<input type="radio"/>	HC	Same as "HA" without lead wires
<input type="radio"/>	HD	Same as "HB" without lead wires
<input type="radio"/>	HL	Circuit board plug-in with suppression diode plus blocking diode & led light
<input type="radio"/>	HN	Same as "HL" without lead wires
<input type="radio"/>	MA	Plug-in wire assembly
<input type="radio"/>	MB	Plug-in wire assembly with ground wire
<input type="radio"/>	MC	Plug-in wire assembly with led light
<input type="radio"/>	MD	Plug-in wire assembly led light & ground wire
<input type="radio"/>	ME	Plug-in wire assembly with suppression diode
<input type="radio"/>	MF	Plug-in wire assembly with suppression diode & ground wire
<input type="radio"/>	*MG	Plug-in wire assembly suppression diode plus led light
<input type="radio"/>	*MH	Plug-in wire assembly suppression diode plus led light & ground wire
<input type="radio"/>	*MN	Plug-in wire assembly with suppression diode plus blocking diode
<input type="radio"/>	*MP	Plug-in wire assembly with suppression diode plus blocking diode & ground wire
<input type="radio"/>	MR	Plug-in wire assembly with suppression diode plus blocking diode & led light
<input type="radio"/>	MS	Plug-in wire assembly with suppression diode plus blocking diode & led light & ground wire
<input type="radio"/>	MJ	Plug-in housing w/o wire assembly ("MA" option without wire assembly)
<input type="radio"/>	MM	Plug-in housing w/o wire assembly ("MB" option without wire assembly)

* Blocking diode is in lead wire.

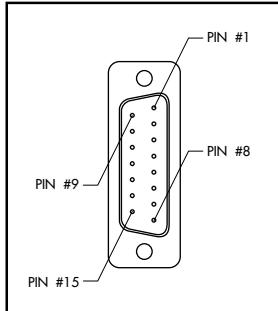
MOD. S009



TECHNICAL DATA

- Type «SUB_D»
- Number of contacts : 9
- Solder termination (Dia. 0.6 mm/0.14 mm²/26-22 AWG)
- Operating current 5 A/contact
- Rated voltage 125 V~
- Temp. range -40° to +125°C
- Insulation resistance ≥ 5.0⁹ Ω
- Protection class IP40 (DIN 40050)
- Number of solenoids : 7 max.
- Max. 24 V=/5.4 W per solenoid
- 2 common wires

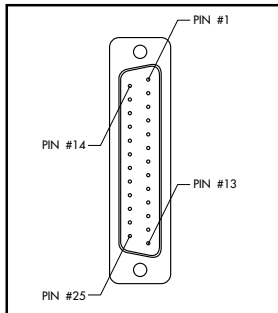
MOD. S015



TECHNICAL DATA

- Type «SUB_D»
- Number of contacts : 15
- Solder termination (Dia. 0.6 mm/0.14 mm²/26-22 AWG)
- Operating current 5 A/contact
- Rated voltage 125 V~
- Temp. range -40° to +125°C
- Insulation resistance ≥ 5.0⁹ Ω
- Protection class IP40 (DIN 40050)
- Number of solenoids : 12 max.
- Max. 24 V=/5.4 W per solenoid
- 3 common wires

MOD. S025



TECHNICAL DATA

- Type «SUB_D»
- Number of contacts : 25
- Solder termination (Dia. 0.6 mm/0.14 mm²/26-22 AWG)
- Operating current 5 A/contact
- Rated voltage 125 V~
- Temp. range -40° to +125°C
- Insulation resistance ≥ 5.0⁹ Ω
- Protection class IP40 (DIN 40050)
- Number of solenoids : 20 max.
- Max. 24 V=/5.4 W per solenoid
- 5 common wires

Note : Use desired MOD. number after circuit bar part number

Connector termination details

