

Handhabungstechnik
Motore & Getriebe
Pneumatik
Hydraulik
Systemlösungen

as-tec
Mechatronik GmbH

Produktkatalog

MAC 5/2 Wegeventile **Serie 44 - M5**



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

Inline

Series

31

33

34

36

32

37

38

52

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54

67

68

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41

43

44

23

24

46

42

47

48P

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400

92

83

93

ISO 01

ISO 02

ISO 1

ISO 2

ISO 3

Manual operator

Armature

Coil

Push Pin

"D" seal

Valve spring

4-way balanced poppet

SERIES FEATURES

- High force MACSOLENOID®.
- 10mm direct operated.
- # 10-32 or M5 ports.
- Rated for lubricated or non-lubricated service.

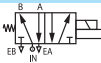
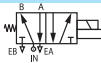
Function	Port size	Flow [Max]	Individual Mounting	Series
5/2	M5	100 NI/min	Inline	

OPERATIONAL BENEFITS

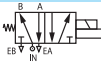
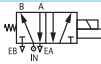
1. 10 mm valve, direct solenoid operated.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.



HOW TO ORDER

Port size	Model number	Model number For use with external flow controls
		
M5	44C-ABA-G xxx-xxx	44C-BBA-G xxx-xxx

LATCHING SOLENOID

Port size	Model number	Model number For use with external flow controls
		
M5	44B-ABA-L xxx-xxx	44B-BBA-L xxx-xxx

SOLENOID OPERATOR ➤

G xxx-xxx *			
XX Voltage	X Wire length	X Manual operator	XX Electrical connection
DA 24 V= /1W	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			GA MAC JAC Solenoid plug-in
DF 24 V= /4,0W			KA Mini connector
			KT Mini connector with light

* Other options available, see page 387.

LATCHING SOLENOID ➤

L xxx-xxx *			
XX Voltage	X Wire length	X Manual operator	XX Electrical connection
DF 24 V= /4,0W	A 45 cm	0 No operator	BA 2 Wire flying leads
HA 24 V= /1,95W	B 60 cm		BJ 4 Wire flying leads
	C 90 cm		KA 2 Wire plug-in assembly
			KE 4 Wire plug-in assembly
			LA 3 Wire plug-in assembly (Polarity switching cover)

* Other options available, see page 395.

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ISO 01

ISO 02

ISO 1

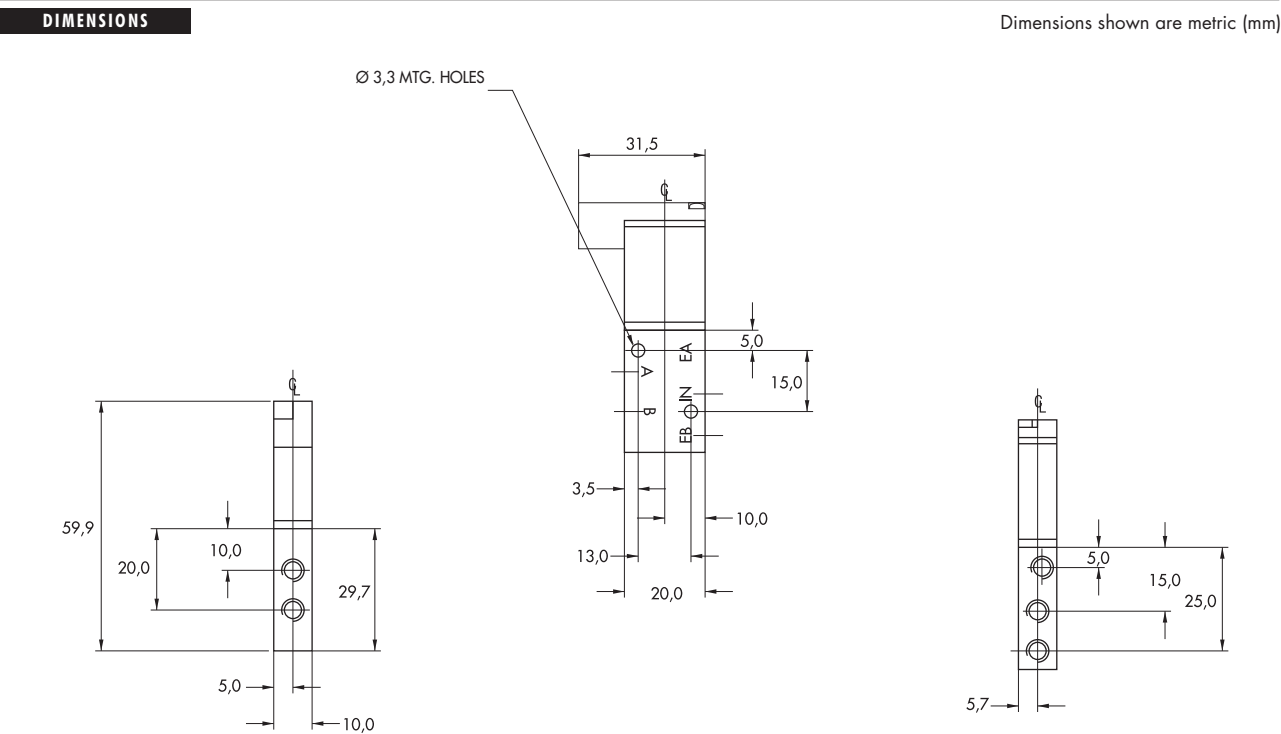
ISO 2

ISO 3

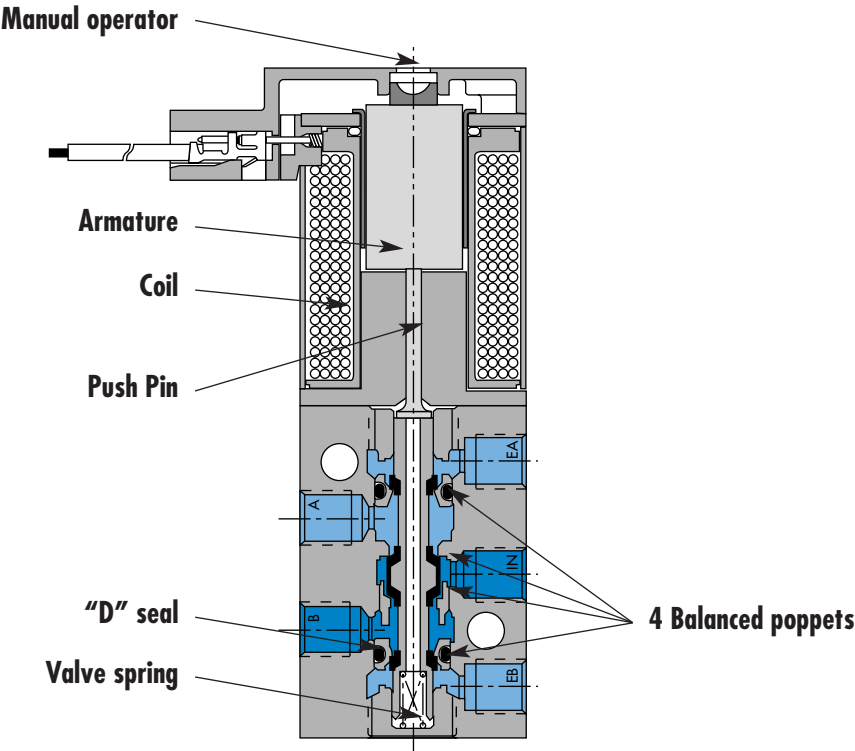
TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	1,8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 100 Nl/min (Cv 0,10) – 2,5 W : 80 Nl/min (Cv 0,08) – 1,8 W : 60 Nl/min (Cv 0,06) – 1,0W : 50 Nl/min (Cv 0,05)
Coil :	Epoxy encapsulated – Class A wires – 100% ED
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	4 W – 2,5 W – 1,8 W – 1,0 W
Response times : (with 4 W coil)	Energize :3,4 ms De-energize : 1,5 ms

Note :

- Valve and coil are not interchangeable.



Individual mounting		Series
Inline		
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		69
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		42
		47
		48P
		48
		400
		92
		93
		ISO 01
		ISO 02
		ISO 1
		ISO 2
		ISO 3



SERIES FEATURES

- High force MACSOLENOID®.
- 10mm direct operated.
- # 10-32 or M5 ports.
- Rated for lubricated or non-lubricated service.

Function	Port size	Flow [Max]	Individual Mounting	Series
5/2	M5, # 10-32	0.1 C_v	Inline	



OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.



HOW TO ORDER

SOLENOID OPERATOR

Port size	Universal valve	For use with external flow controls
		
M5	44C-ABA-G xxx-xxx	44C-BBA-G xxx-xxx
# 10-32	44C-AAA-G xxx-xxx	44C-BAA-G xxx-xxx

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)			GA MAC JAC Solenoid Plug-in
DF 24 VDC (4.0W)			KA Plug-in wire assembly.
			KC Plug-in wire assembly with rectifier & light
			KT Plug-in wire assembly with light

* Other options available, see page 311.
Note : AC voltage requires connector with rectifier

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ISO 01

ISO 02

ISO 1

ISO 2

ISO 3

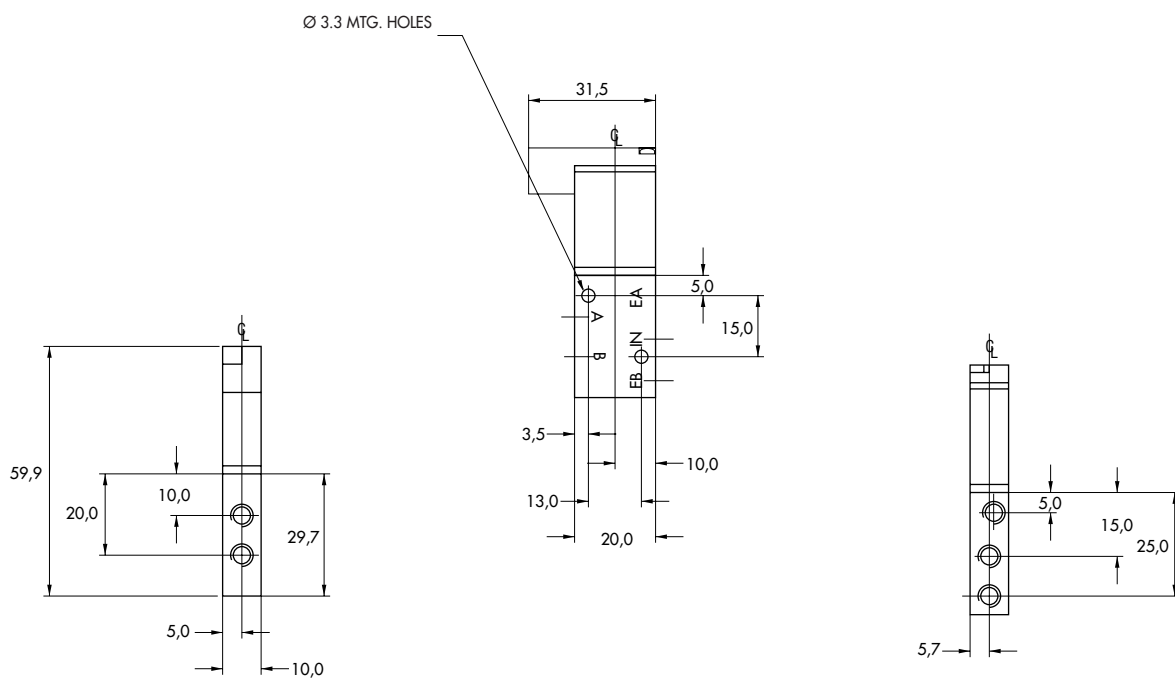
TECHNICAL DATA

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)
Flow :	4 W : (0.10 C _v) – 2.5 W : (0.08 C _v) – 1.8 W : (0.06 C _v) – 1.0 W : (0.05 C _v)
Coil :	Class A wire (#22 AWG x 18), continuous duty
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W – 2.5 W – 1.8 W – 1.0 W
Response times : (with 4 W coil)	Energize : 3.4 ms De-energize : 1.5 ms

Note : • Valve and coil are not interchangeable.

DIMENSIONS

Dimensions shown are metric (mm)





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

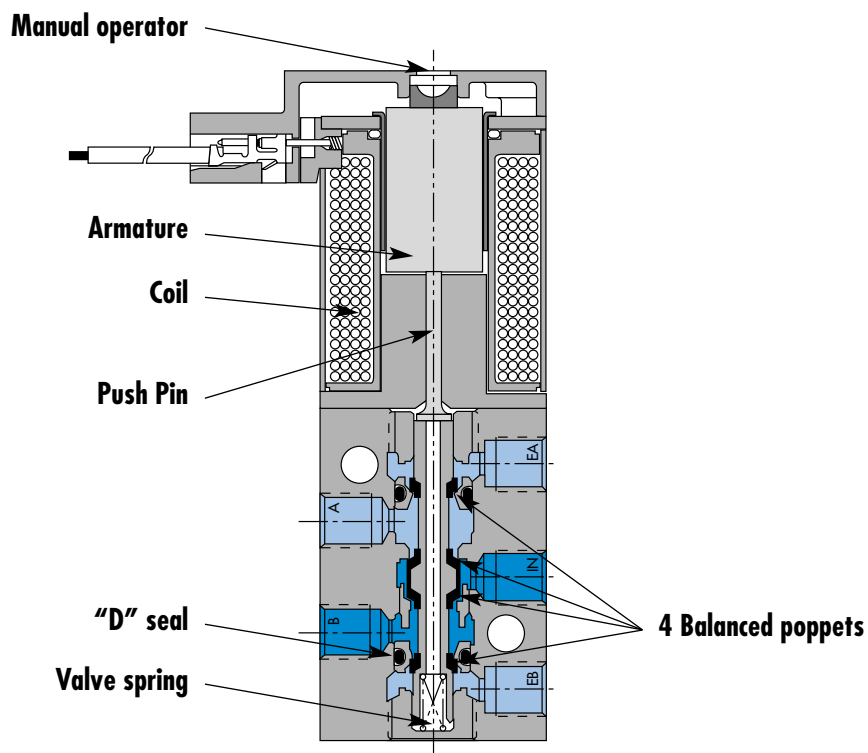
G-XX X-X XX	PLUG-IN OPTIONS
SB	Base plug-in with ground
SC	Base plug-in with suppression and blocking diode
SD	Base plug-in with suppression and blocking diode and ground
SE	Base plug-in with MOV
SF	Base plug-in with MOV and ground
SG	Base plug-in with rectifier
SH	Base plug-in with rectifier and ground
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

Circuit bar mounting

non plug-in cylinder ports in base	non plug-in cylinder ports in valve	plug-in	plug-in with F. C.	plug-in with Pr. Reg.	plug-in with Pr. Reg. and F. C.	add-on style plug-in	add-on style plug-in with F. C.
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add-on style plug-in with Pr. Reg.	add-on style plug-in with Pr. Reg. and F. C.	plug-in add-a-unit stations	plug-in add-a-unit stations with F. C.	plug-in add-a-unit stations with Pr. Reg.	plug-in add-a-unit stations with F. C. and Pr. Reg.	plug-in with pre-wired connector	plug-in with F. C. and pre-wired connector
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plug-in with Pr. Reg. and pre-wired connector	din rail, plug-in with pre-wired connector
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SERIES FEATURES

- High force MACSOLENOID[®].
- 10mm direct operated.
- # 10-32 or M5 ports.
- Rated for lubricated or non-lubricated service.
- Cylinder ports in valve or in circuit bar.

Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.093C_v	non plug-in cylinder ports in base

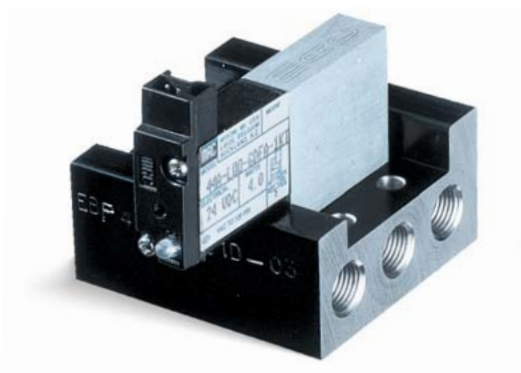
OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

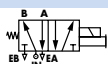

Reset

HOW TO ORDER

44B-xxx-Gxxx-xxx



HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Valve	Valve for use with external flow controls
		
Valve less base	<input type="radio"/> 44B-LOO-Gxxx-xxx	<input type="radio"/> 44B-MOO-Gxxx-xxx

SOLENOID OPERATOR ➤

G **XX X- X XX***

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> A 18"	<input type="radio"/> 1 Non-locking	<input type="radio"/> BA Flying leads
<input type="radio"/> DC 24VDC (1.8 W)	<input type="radio"/> C 36"		<input type="radio"/> BT Flying leads with light
<input type="radio"/> DD 24VDC (2.5 W)	<input type="radio"/> x Other Options		<input type="radio"/> KA Mini connector
<input type="radio"/> DF 24VDC (4.0 W)			<input type="radio"/> KT Mini connector with light
<input type="radio"/> xx Other Options			<input type="radio"/> xx Other Options

EBP44B-xxxx-xx

HOW TO ORDER CIRCUIT BAR

Port size	Side cylinder ports	Bottom cylinder ports
M5	<input type="radio"/> EBP44B-001D-xx	<input type="radio"/> EBP44B-002D-xx
# 10-32	<input type="radio"/> EBP44B-001B-xx	<input type="radio"/> EBP44B-002B-xx

Number of stations (03=3 stations)

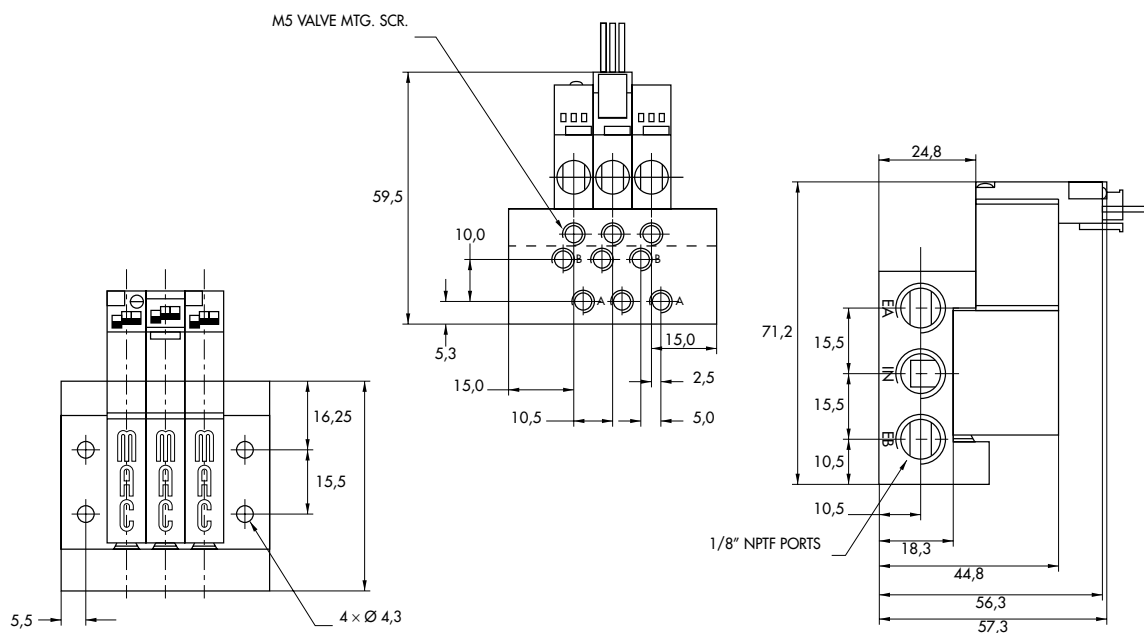
Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).

**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 :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.093 C _v , 2.5 W : 0.077 C _v , 1.8 W : 0.057 C _v , 1.0 W : 0.048 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 3.4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Valve mounting kit : N-44001-03. • Blanking plate : M-44003.
- Options : • Isolation of inlet and/or exhaust. Special bar. Consult Factory.

DIMENSIONS



Function	Port size (Inlet & Exhaust)	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	# 10-32 - 1/8"	0.093C_v	non plug-in cylinder ports in valve

OPERATIONAL BENEFITS

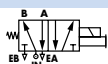

1. 10 mm valve, direct solenoid operated.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-Gxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Valve port size	Valve	Valve for use with external flow controls
		
M5	<input type="radio"/> 44B-ABA-Gxxx-xxx	<input type="radio"/> 44B-BBA-Gxxx-xxx
# 10-32	<input type="radio"/> 44B-AAA-Gxxx-xxx	<input type="radio"/> 44B-BAA-Gxxx-xxx

SOLENOID OPERATOR ➤

G XX X- X XX			
XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> A 18"	<input type="radio"/> I Non-locking	<input type="radio"/> BA Flying leads
<input type="radio"/> DC 24VDC (1.8 W)	<input type="radio"/> c 36"		<input type="radio"/> BT Flying leads with light
<input type="radio"/> DD 24VDC (2.5 W)	<input type="radio"/> x Other Options		<input type="radio"/> KA Mini connector
<input type="radio"/> DF 24VDC (4.0 W)			<input type="radio"/> KT Mini connector with light
<input type="radio"/> xx Other Options			<input type="radio"/> xx Other Options

HOW TO ORDER CIRCUIT BAR

EBM44A-xxxx-xx

Port size COMMON INLET & EXHAUST	
# 10-32	<input type="radio"/> EBM44A-001B-xx
1/8" NPTF	<input type="radio"/> EBM44A-002A-xx

Number of stations (03=3 stations)

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

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

Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.09C_v	plug-in

OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-LOO-GxxO-xxx

SOLENOID OPERATOR ➤

G **XX** O- **X XX***

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR

Port size	Side cylinder ports (10.5 mm)	Bottom cylinder ports (10.5 mm)
M5	<input type="radio"/> ECD044B-001AD-AOxx	<input type="radio"/> ECD044B-002AD-AOxx
# 10-32	<input type="radio"/> ECD044B-001AB-AOxx	<input type="radio"/> ECD044B-002AB-AOxx

Number of stations (03=3 stations)

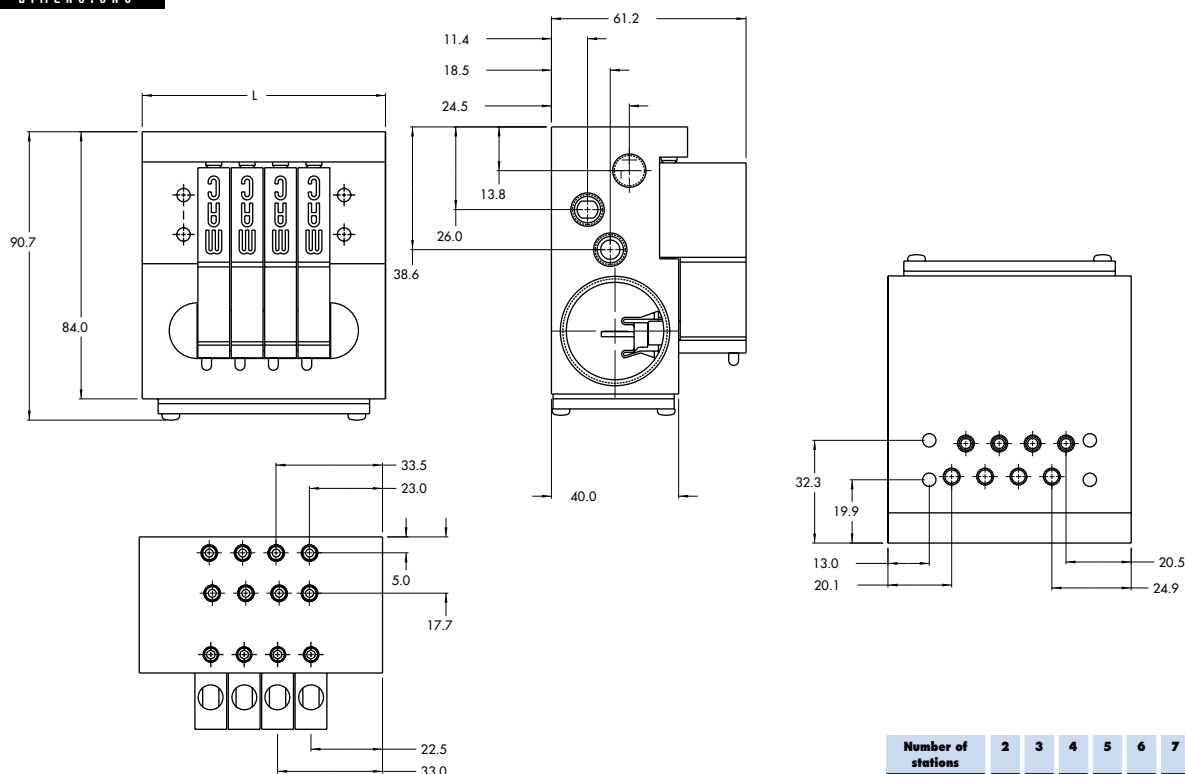
Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).
☐ clic for multi-pin connector option (9, 15 or 25).

**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 :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.09 C _v , 2.5 W : 0.08 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Valve mounting kit : N-44001-03. • Blanking plate : M-44003.
- Options : • Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.08C_v	plug-in with F. C.

OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-MOO-GxxO-xxx

SOLENOID OPERATOR ➤

G **XX** O- **X XX***

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR WITH FLOW CONTROLS

Port size	Side cylinder ports (10.5 mm)	Bottom cylinder ports (10.5 mm)
M5	<input type="radio"/> ECD044B-005AD-AOxx	<input type="radio"/> ECD044B-006AD-AOxx
# 10-32	<input type="radio"/> ECD044B-005AB-AOxx	<input type="radio"/> ECD044B-006AB-AOxx

Number of stations (03=3 stations)

Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).
☐ clic for multi-pin connector option (9, 15 or 25).

**TECHNICAL
DATA**

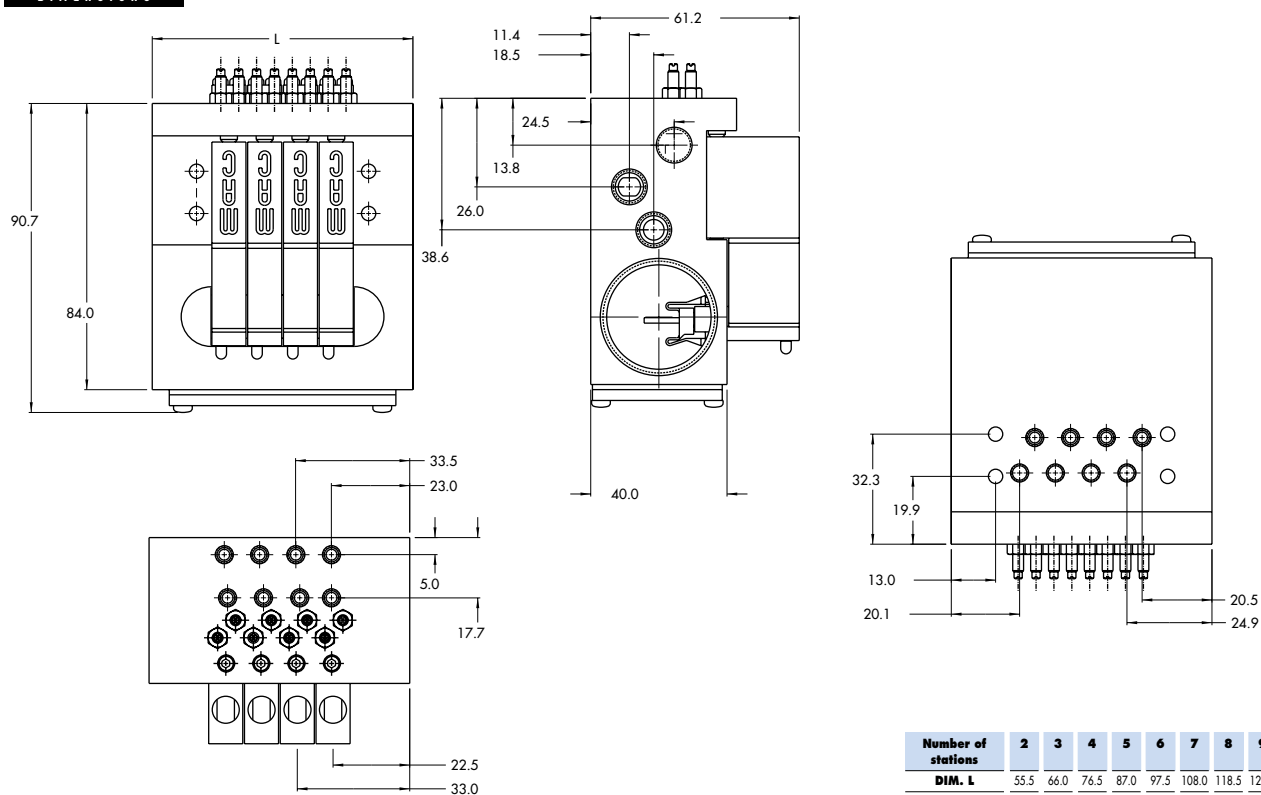
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Orifice :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.09 C _v , 2.5 W : 0.08 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

Note : • Valve and coil are not interchangeable.

Spare parts : • Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Flow control needle (x2): N-44002.
• Base wire Plug-in protector : 24180.

Options : • Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



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

Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.08C_v	plug-in with Pr. Reg.

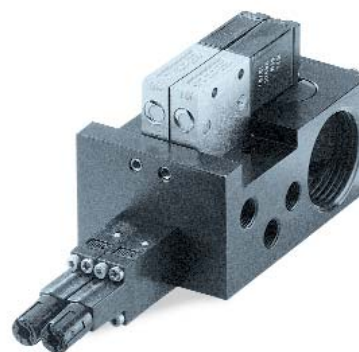
OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.


Reset

HOW TO ORDER

44B-xxx-GxxO-xxx



HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-LOO-GxxO-xxx

SOLENOID OPERATOR ➤

G **XX** O- **X XX***

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR FOR PRESSURE REGULATORS** (to be ordered separately)

Port size	Bottom cylinder ports (10,5 mm)
M5	<input type="radio"/> ECD044B-004AD-AO-xx
# 10-32	<input type="radio"/> ECD044B-004AB-AO-xx

Number of stations (03=3 stations)

Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).
☐ clic for multi-pin connector option (9, 15 or 25).

** Pressure Regulators :

PR44A-AOxx

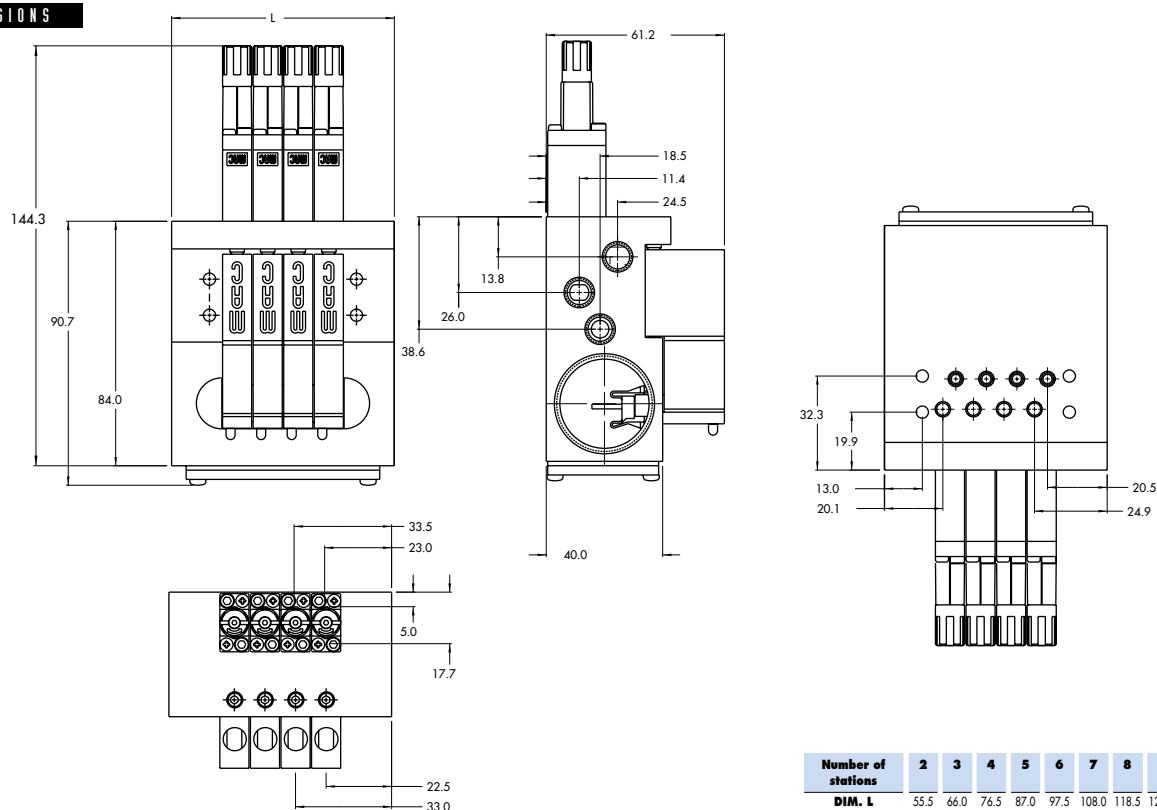
- ☐ Y=A (no gage port)
- ☐ Y=B (with gage port)
- ☐ X=A (0 to 100 PSI)
- ☐ X=B (0 to 60 PSI)
- ☐ X=C (0 to 40 PSI)
- ☐ X=D (0 to 15 PSI)

**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 :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.09 C _v , 2.5 W : 0.08 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note :
- Valve and coil are not interchangeable.
 - Pressure range regulators : (0-100 PSI).
- Spare parts :
- Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Blanking plate regulator: N-44003.
 - Base wire Plug-in protector : 24180.
- Options :
- Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



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

Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.07C_v	plug-in with Pr. Reg. and F. C.

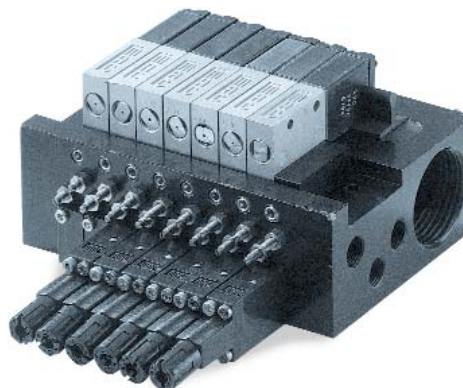
OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx



HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-MOO-GxxO-xxx

SOLENOID OPERATOR ➤

G **XX** O- **X XX***

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR WITH FLOW CONTROLS AND PRESSURE REGULATORS** (pressure regulators to be ordered separately)

Port size	Bottom cylinder ports (10,5 mm)
M5	<input type="radio"/> ECD044B-007AD-AO-xx
# 10-32	<input type="radio"/> ECD044B-007AB-AO-xx

Number of stations (03=3 stations)

Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).
☐ clic for multi-pin connector option (9, 15 or 25).

** Pressure Regulators :

PR44A-AOxx

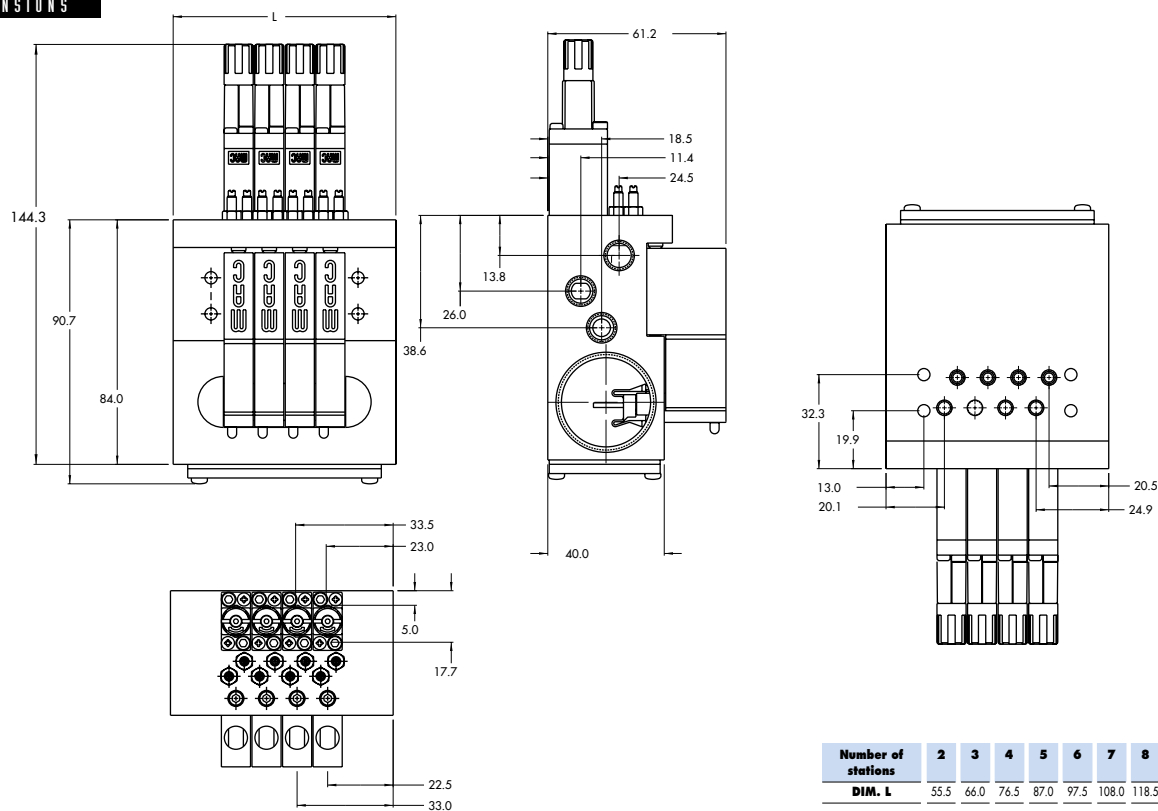
- ☐ Y=A (no gage port)
- ☐ Y=B (with gage port)
- ☐ X=A (0 to 100 PSI)
- ☐ X=B (0 to 60 PSI)
- ☐ X=C (0 to 40 PSI)
- ☐ X=D (0 to 15 PSI)

**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 :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.07 C _V , 2.5 W : 0.06 C _V , 1.8 W : 0.06 C _V , 1.0 W : 0.05 C _V
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note :
- Valve and coil are not interchangeable.
 - Pressure range regulators : (0-100 PSI).
- Spare parts :
- Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Blanking plate regulator: N-44003.
 - Base wire Plug-in protector : 24180.
- Options :
- Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



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

Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.09C_v	add-on style plug-in

OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset



HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-LOO-GxxO-xxx

SOLENOID OPERATOR ➤

G **XX** O- **X XX***

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR

Port size	Side cylinder ports (10.5 mm)	Bottom cylinder ports (10.5 mm)
M5	<input type="radio"/> ECD044B-001BD-AOxx	<input type="radio"/> ECD044B-002BD-AOxx
# 10-32	<input type="radio"/> ECD044B-001BB-AOxx	<input type="radio"/> ECD044B-002BB-AOxx

Number of stations (03=3 stations)

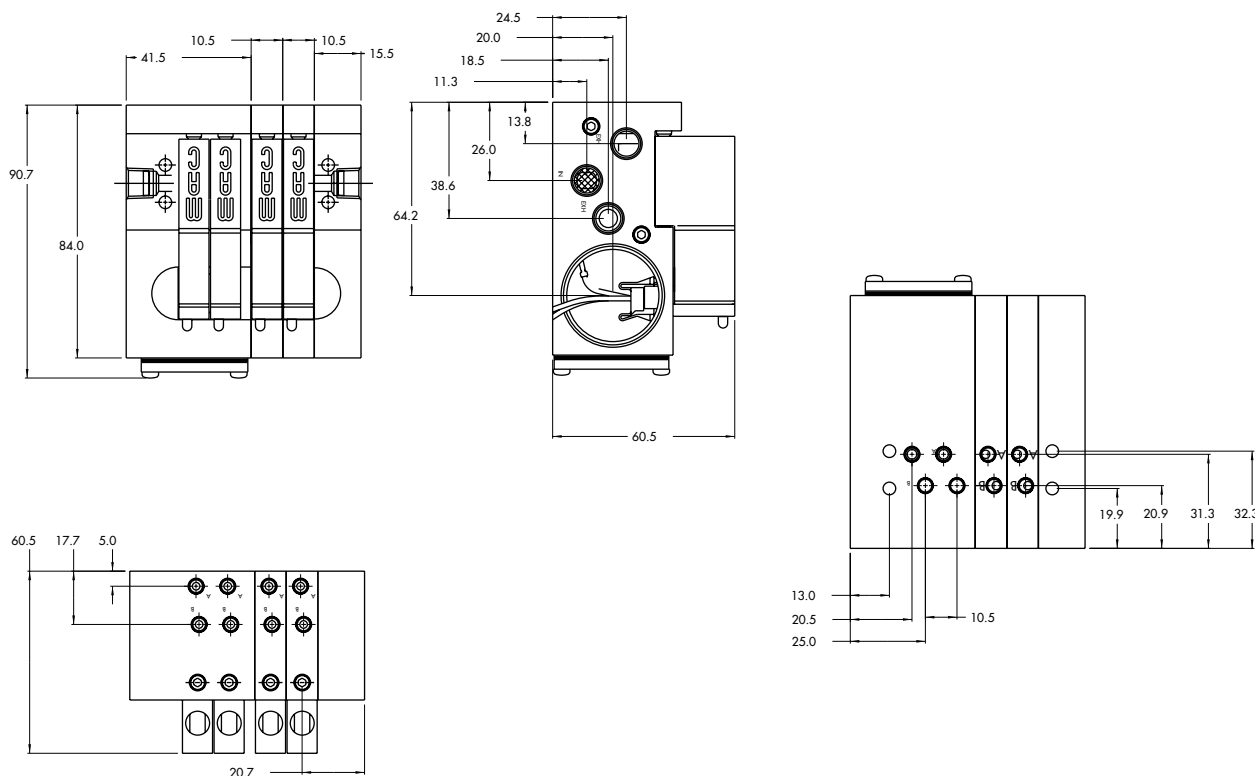
Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).
☐ clic for multi-pin connector option (9, 15 or 25).
 add-a-unit stations may be added to above bars.

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 :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.09 C _v , 2.5 W : 0.08 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note :
- Valve and coil are not interchangeable.
- Spare parts :
- Valve mounting kit : N-44001-03. • Blanking plate : M-44003.
- Options :
- Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.08C_v	add-on style plug-in with F. C.

OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-MOO-GxxO-xxx

SOLENOID OPERATOR ➤

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR WITH FLOW CONTROLS

Port size	Side cylinder ports (10.5 mm)	Bottom cylinder ports (10.5 mm)
M5	<input type="radio"/> ECD044B-005BD-AOxx	<input type="radio"/> ECD044B-006BD-AOxx
# 10-32	<input type="radio"/> ECD044B-005BB-AOxx	<input type="radio"/> ECD044B-006BB-AOxx

Number of stations (03=3 stations)

Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).
☐ clic for multi-pin connector option (9, 15 or 25).
 add-a-unit stations may be added to above bars.

**TECHNICAL
DATA**

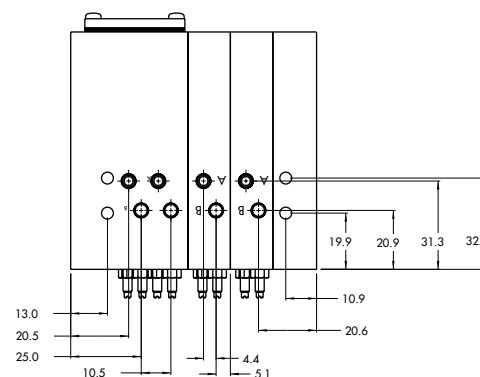
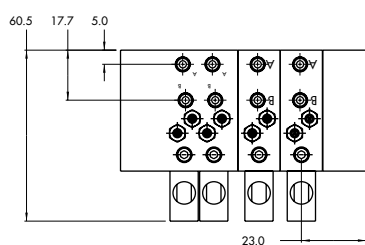
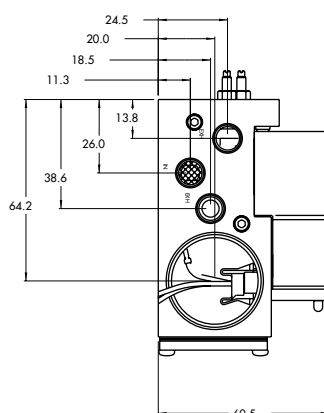
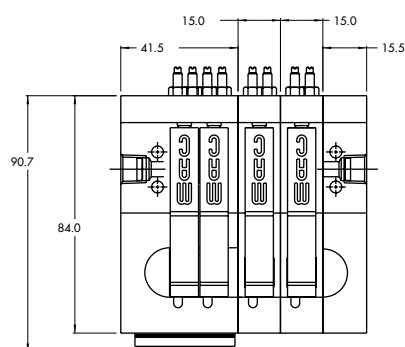
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Orifice :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.09 C _v , 2.5 W : 0.08 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

Note : • Valve and coil are not interchangeable.

Spare parts : • Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Flow control needle (x2): N-44002.
• Base wire Plug-in protector : 24180.

Options : • Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.08C_v	add-on style plug-in with Pr. Reg.

OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-LOO-GxxO-xxx

SOLENOID OPERATOR ➤

G **XX** O- **X XX***

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR FOR PRESSURE REGULATORS** (to be ordered separately)

Port size	Bottom cylinder ports (10,5 mm)
M5	<input type="radio"/> ECD044B-004BD-AO-xx
# 10-32	<input type="radio"/> ECD044B-004BB-AO-xx

Number of stations (03=3 stations)

Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).
☐ clic for multi-pin connector option (9, 15 or 25).
 add-a-unit stations may be added to above bars.

** Pressure Regulators :

PR44A-AOxx

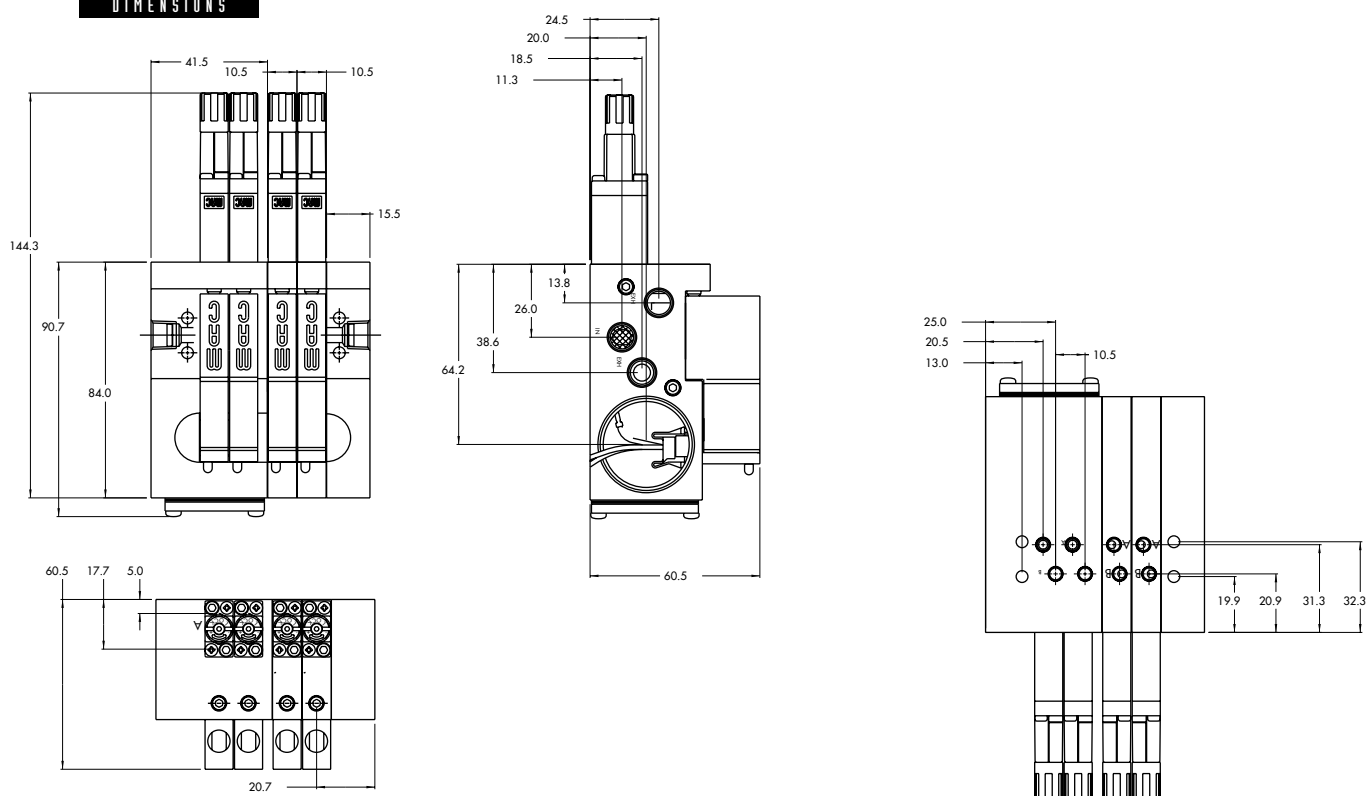
- ☐ Y=A (no gage port)
- ☐ Y=B (with gage port)
- ☐ X=A (0 to 100 PSI)
- ☐ X=B (0 to 60 PSI)
- ☐ X=C (0 to 40 PSI)
- ☐ X=D (0 to 15 PSI)

**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 :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.09 C _v , 2.5 W : 0.08 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note :
- Valve and coil are not interchangeable.
 - Pressure range regulators : (0-100 PSI).
- Spare parts :
- Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Blanking plate regulator: N-44003.
 - Base wire Plug-in protector : 24180.
- Options :
- Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.07C_v	add-on style plug-in with Pr. Reg. and F. C.

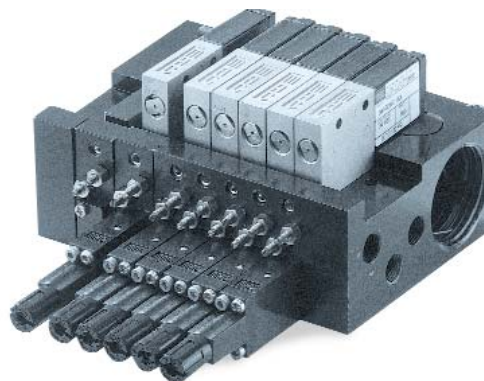
OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx



HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-MOO-GxxO-xxx

SOLENOID OPERATOR ➤

G **XX** O- **X XX***

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR WITH FLOW CONTROLS AND PRESSURE REGULATORS** (pressure regulators to be ordered separately)

Port size	Bottom cylinder ports (10,5 mm)
M5	<input type="radio"/> ECD044B-007BD-AO-xx
# 10-32	<input type="radio"/> ECD044B-007BB-AO-xx

Number of stations (03=3 stations)

Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).
☐ clic for multi-pin connector option (9, 15 or 25).
 add-a-unit stations may be added to above bars.

** Pressure Regulators :

PR44A-AOxx

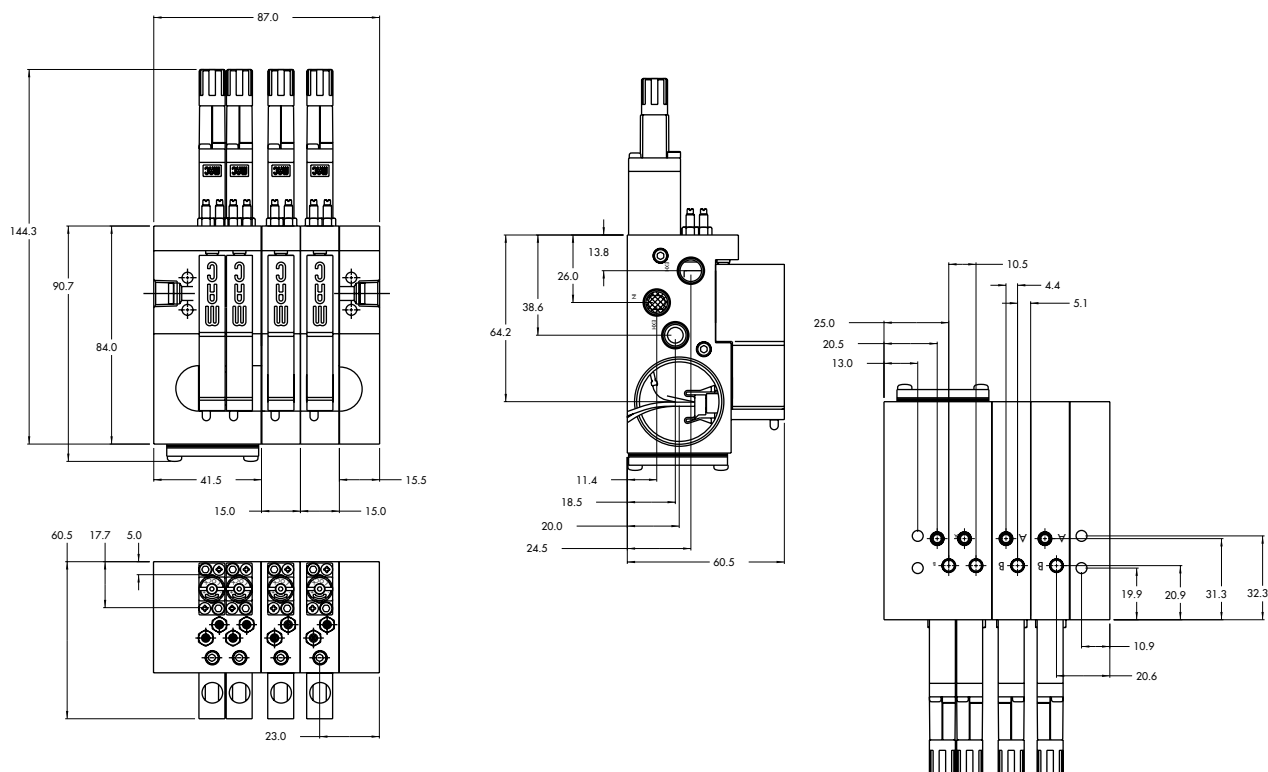
- ☐ Y=A (no gage port)
- ☐ Y=B (with gage port)
- ☐ X=A (0 to 100 PSI)
- ☐ X=B (0 to 60 PSI)
- ☐ X=C (0 to 40 PSI)
- ☐ X=D (0 to 15 PSI)

**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 :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.07 C _v , 2.5 W : 0.06 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note :
- Valve and coil are not interchangeable.
 - Pressure range regulators : (0-100 PSI).
- Spare parts :
- Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Blanking plate regulator: N-44003.
 - Base wire Plug-in protector : 24180.
- Options :
- Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2	M5 - #10-32	0.09C_v	plug-in add-a-unit stations

OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-LOO-GxxO-xxx

SOLENOID OPERATOR ➤

G **XX** O- **X XX***

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR

Port size	Side cylinder ports	Bottom cylinder ports
M5	<input type="radio"/> ECD044B-001CD-AOxx	<input type="radio"/> ECD044B-002CD-AOxx
# 10-32	<input type="radio"/> ECD044B-001CB-AOxx	<input type="radio"/> ECD044B-002CB-AOxx

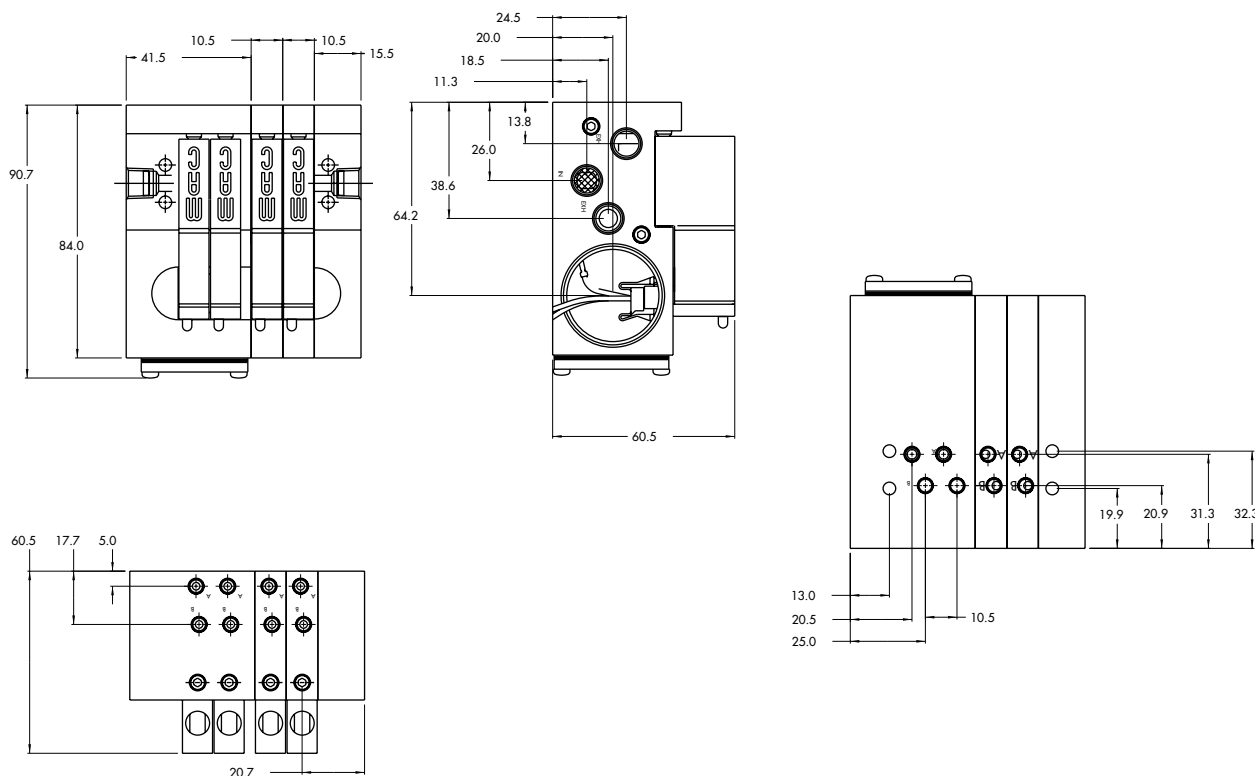
Number of stations (03=3 stations) - Maximum length is 4 stations
 Note : ☐ clic for valves mounted on base at the factory (add - 9 to the model number).
 when add-a-unit stations are added to bars with a multi-pin connector,
 MOD. SD03 should be included with add-a-unit model number.

**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 :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.09 C _v , 2.5 W : 0.08 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Valve mounting kit : N-44001-03. • Blanking plate : M-44003.
- Options : • Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2	M5 - #10-32	0.08C_v	plug-in add-a-unit stations with F. C.

OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-MOO-G xx O- xxx

SOLENOID OPERATOR ➤

G **xx** O- **x** **xx** *

xx Voltage	x Manual operator	xx Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR WITH FLOW CONTROLS

Port size	Side cylinder ports	Bottom cylinder ports
M5	<input type="radio"/> ECD044B-005CD-AO xx	<input type="radio"/> ECD044B-006CD-AO xx
# 10-32	<input type="radio"/> ECD044B-005CB-AO xx	<input type="radio"/> ECD044B-006CB-AO xx

Number of stations (03=3 stations) - 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.

TECHNICAL DATA

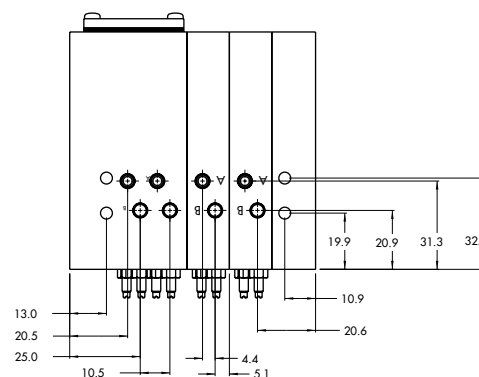
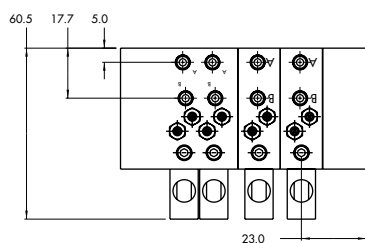
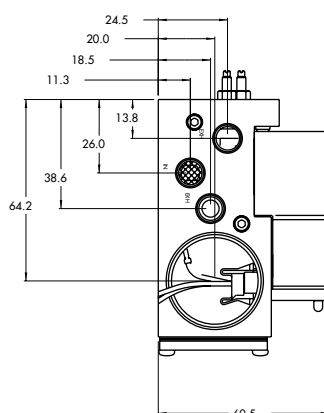
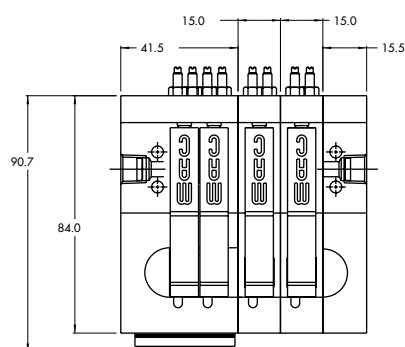
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 μ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Orifice :	1.8 mm
Flow (at 6 bar, $\Delta P=1\text{bar}$) :	4 W : 0.09 C_v , 2.5 W : 0.08 C_v , 1.8 W : 0.06 C_v , 1.0 W : 0.05 C_v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

Note : • Valve and coil are not interchangeable.

Spare parts : • Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Flow control needle (x2): N-44002.
• Base wire Plug-in protector : 24180.

Options : • Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2	M5 - #10-32	0.08C_v	plug-in add-a-unit stations with Pr. Reg.

OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-LOO-GxxO-xxx

SOLENOID OPERATOR ➤

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR FOR PRESSURE REGULATORS ** (to be ordered separately)

Port size	Bottom cylinder ports (10,5 mm)
M5	<input type="radio"/> ECD044B-004CD-AOxx
# 10-32	<input type="radio"/> ECD044B-004CB-AOxx

Number of stations (03=3 stations) - 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.

** Regulator ordered separately-see below :

PR44A-AOxx

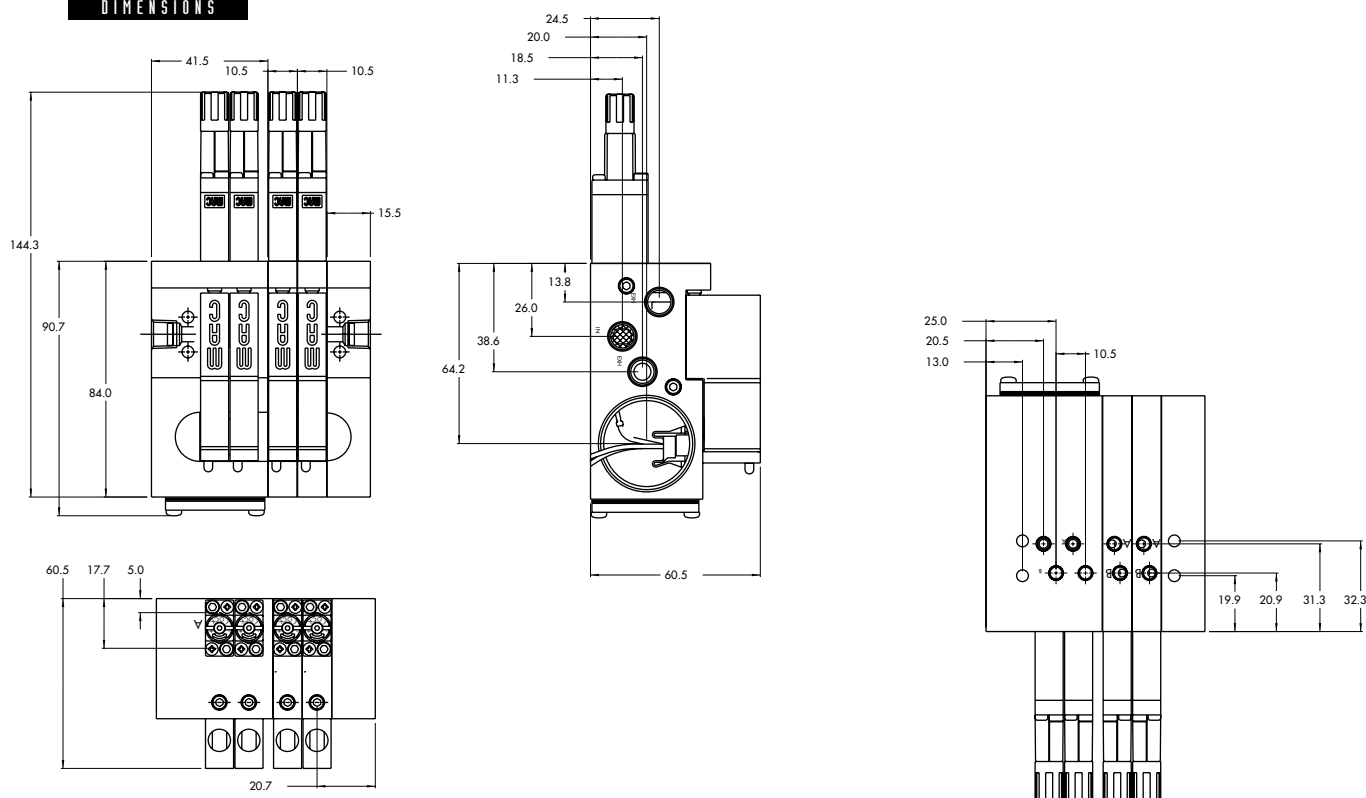
- ☐ Y=A (no gage port)
- ☐ Y=B (with gage port)
- ☐ X=A (0 to 100 PSI)
- ☐ X=B (0 to 60 PSI)
- ☐ X=C (0 to 40 PSI)
- ☐ X=D (0 to 15 PSI)

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 :	1.8 mm
Flow (at 6 bar, $\Delta P=1$ bar) :	4 W : 0.09 C_v , 2.5 W : 0.08 C_v , 1.8 W : 0.06 C_v , 1.0 W : 0.05 C_v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note :
- Valve and coil are not interchangeable.
 - Pressure range regulators : (0-100 PSI).
- Spare parts :
- Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Blanking plate regulator: N-44003.
 - Base wire Plug-in protector : 24180.
- Options :
- Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2	M5 - #10-32	0.07C_v	plug-in add-a-unit stations with F. C. and Pr. Reg.

OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx



HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-MOO-GxxO-xxx

SOLENOID OPERATOR ➤

G **XX** O- **X** **XX**

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECD044B-00xxx-AOxx

HOW TO ORDER CIRCUIT BAR WITH FLOW CONTROLS AND PRESSURE REGULATORS ** (pressure regulators to be ordered separately)

Port size	Bottom cylinder ports (10,5 mm)
M5	<input type="radio"/> ECD044B-007CD-AOxx
# 10-32	<input type="radio"/> ECD044B-007CB-AOxx

Number of stations (03=3 stations) - 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.

** Regulator ordered separately-see below :

PR44A-AOxx

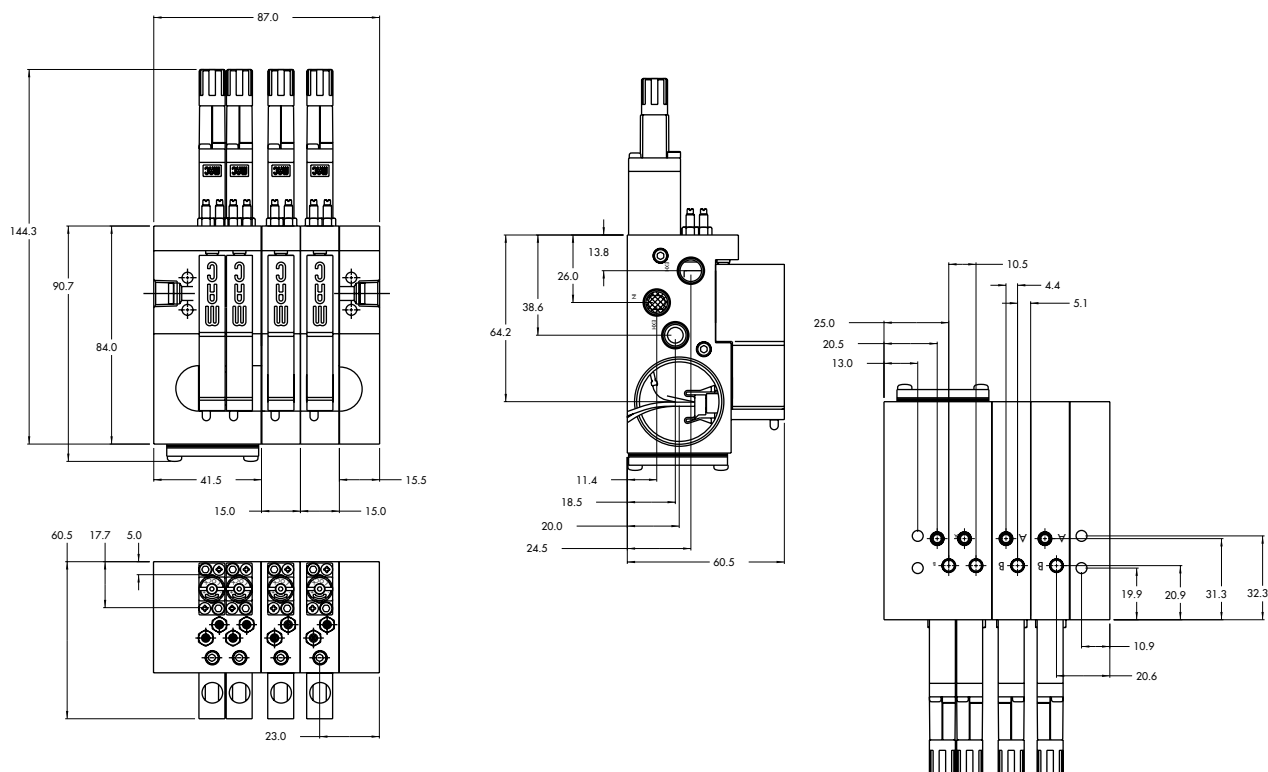
- ☐ Y=A (no gage port)
- ☐ Y=B (with gage port)
- ☐ X=A (0 to 100 PSI)
- ☐ X=B (0 to 60 PSI)
- ☐ X=C (0 to 40 PSI)
- ☐ X=D (0 to 15 PSI)

**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 :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.07 C _v , 2.5 W : 0.06 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note :
- Valve and coil are not interchangeable.
 - Pressure range regulators : (0-100 PSI).
- Spare parts :
- Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Blanking plate regulator: N-44003.
 - Base wire Plug-in protector : 24180.
- Options :
- Isolation of inlet and/or exhaust. • BSPP Threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32, 4 mm tube receptacle	0.10C_v	plug-in with pre-wired connector

OPERATIONAL BENEFITS

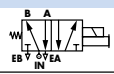
1. 10 mm valve, direct solenoid operated.
2. Balanced poppet, immune to variations of pressure.
3. Short stroke with high flow.
4. The patented solenoid develops high shifting forces.
5. Powerful return spring.
6. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-LOO-GxxxO-xxx

SOLENOID OPERATOR ➤

G **XX** O- **X** **XX***

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECF44B-00xxx-xxxx

HOW TO ORDER CIRCUIT BAR **

Port size	Side cylinder ports (10.5 mm)	Bottom cylinder ports (10.5 mm)
M5	<input type="radio"/> ECF44B-00BDA- zzxx	<input type="radio"/> ECF44B-00CDA- zzxx
# 10-32	<input type="radio"/> ECF44B-00BBA- zzxx	<input type="radio"/> ECF44B-00CBA- zzxx
4 mm tube receptacle	<input type="radio"/> ECF44B-00BEA- zzxx	-----

Number of stations (03=3 stations)

** Other options available Consult factory.

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

L=Left Side; R=Right Side

ZZ	Connector	ZZ	Connector
<input type="radio"/> LA	9 Pin Sub D*	<input type="radio"/> RA	9 Pin Sub D*
<input type="radio"/> LB	15 Pin Sub D*	<input type="radio"/> RB	15 Pin Sub D*
<input type="radio"/> LC	25 Pin Sub D*	<input type="radio"/> RC	25 Pin Sub D*
<input type="radio"/> LD	10 Pin Ribbon Cable**	<input type="radio"/> RD	10 Pin Ribbon Cable**
<input type="radio"/> LE	16 Pin Ribbon Cable**	<input type="radio"/> RE	16 Pin Ribbon Cable**
<input type="radio"/> LF	20 Pin Ribbon Cable**	<input type="radio"/> RF	20 Pin Ribbon Cable**
<input type="radio"/> LG	26 Pin Ribbon Cable**	<input type="radio"/> RG	26 Pin Ribbon Cable**
<input type="radio"/> LH	3/8" NPSM Conduit Port Standard Base Wires	<input type="radio"/> RH	3/8" NPSM Conduit Port Standard Base Wires

* MIL. Spec; MIL-C-24308

** MIL. Spec; MIL-C-83503

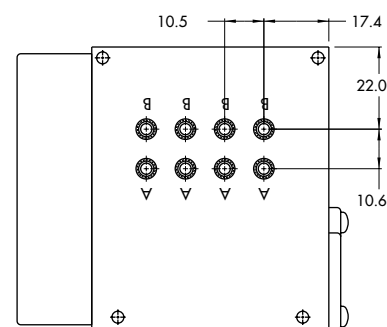
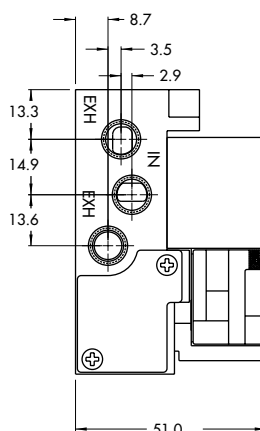
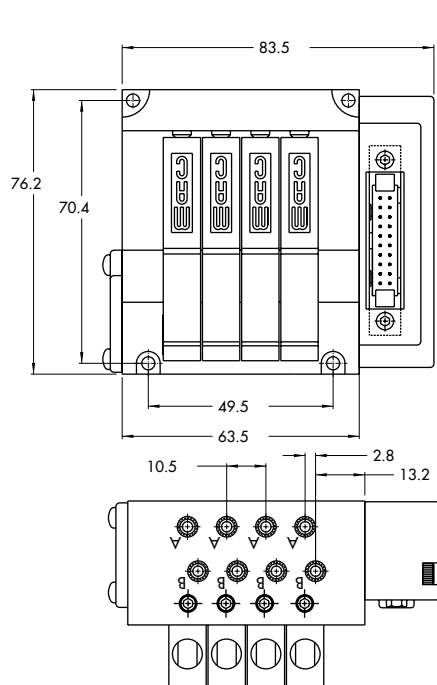
Note: Left and right end is determined by facing conduit passage.

**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 :	1.8 mm
Flow (at 6 bar, $\Delta P=1$ bar) :	4 W : 0.10 C _v , 2.5 W : 0.08 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note : • Valve and coil are not interchangeable.
- Spare parts : • Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Base wire Plug-in protector : 24180.
- Options : • Isolation of inlet and/or exhaust. • BSPP threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.09C_v	plug-in with F. C. and pre-wired connector

OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-MOO-GxxO-xxx

SOLENOID OPERATOR ►

G **XX** O- **X** **XX***

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

HOW TO ORDER CIRCUIT BAR WITH FLOW CONTROLS **

ECF44B-00xxx-xxxx

Port size	Bottom cylinder ports (10.5 mm)
M5	<input type="radio"/> ECF44B-00EDA- zzxx
# 10-32	<input type="radio"/> ECF44B-00EBA- zzxx

Number of stations (03=3 stations)

** Other options available Consult factory.

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

L=Left Side; R=Right Side

ZZ	Connector	ZZ	Connector
<input type="radio"/> LA	9 Pin Sub D*	<input type="radio"/> RA	9 Pin Sub D*
<input type="radio"/> LB	15 Pin Sub D*	<input type="radio"/> RB	15 Pin Sub D*
<input type="radio"/> LC	25 Pin Sub D*	<input type="radio"/> RC	25 Pin Sub D*
<input type="radio"/> LD	10 Pin Ribbon Cable**	<input type="radio"/> RD	10 Pin Ribbon Cable**
<input type="radio"/> LE	16 Pin Ribbon Cable**	<input type="radio"/> RE	16 Pin Ribbon Cable**
<input type="radio"/> LF	20 Pin Ribbon Cable**	<input type="radio"/> RF	20 Pin Ribbon Cable**
<input type="radio"/> LG	26 Pin Ribbon Cable**	<input type="radio"/> RG	26 Pin Ribbon Cable**
<input type="radio"/> LH	3/8" NPSM Conduit Port Standard Base Wires	<input type="radio"/> RH	3/8" NPSM Conduit Port Standard Base Wires

* MIL. Spec; MIL-C-24308

** MIL. Spec; MIL-C-83503

Note: Left and right end is determined by facing conduit passage.

**TECHNICAL
DATA**

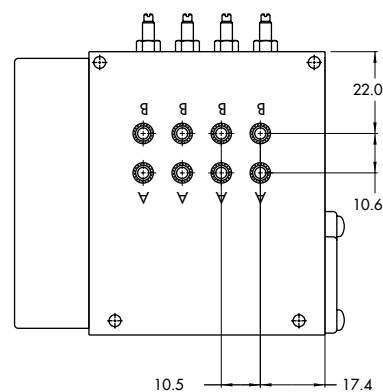
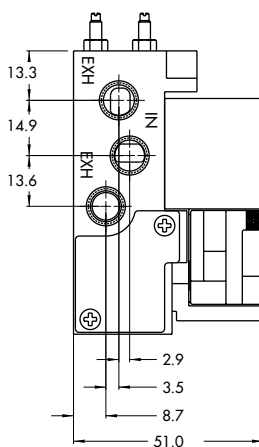
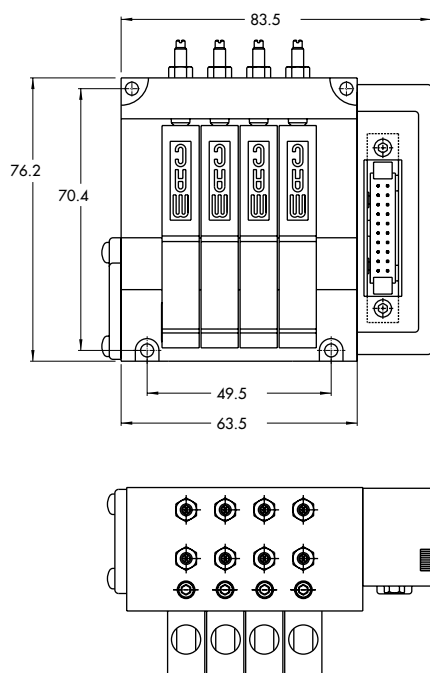
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Orifice :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.09 C _v , 2.5 W : 0.08 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

Note : • Valve and coil are not interchangeable.

Spare parts : • Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Flow control needle (x2): N-44002.
• Base wire Plug-in protector : 24180.

Options : • Isolation of inlet and/or exhaust. • BSPP threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.09C_v	plug-in with Pr. Reg. and pre-wired connector

OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-LOO-GxxO-xxx

SOLENOID OPERATOR ➤

G **xx** O- **x** **xx***

xx Voltage	x Manual operator	xx Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

HOW TO ORDER CIRCUIT BAR FOR PRESSURE REGULATORS ** (to be ordered separately)

ECF44B-00xxx-xxxx

Port size	Bottom cylinder ports (10.5 mm)
M5 # 10-32	<input type="radio"/> ECF44B-00GDA- zzxx <input type="radio"/> ECF44B-00GBA- zzxx

Number of stations (03=3 stations)

** Other options available Consult factory.

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

** Pressure Regulators :

PR44A-AOxx

- ☐ Y=A (no gage port)
- ☐ Y=B (with gage port)
- ☐ X=A (0 to 100 PSI)
- ☐ X=B (0 to 60 PSI)
- ☐ X=C (0 to 40 PSI)
- ☐ X=D (0 to 15 PSI)

L=Left Side; R=Right Side			
ZZ	Connector	ZZ	Connector
<input type="radio"/> LA	9 Pin Sub D*	<input type="radio"/> RA	9 Pin Sub D*
<input type="radio"/> LB	15 Pin Sub D*	<input type="radio"/> RB	15 Pin Sub D*
<input type="radio"/> LC	25 Pin Sub D*	<input type="radio"/> RC	25 Pin Sub D*
<input type="radio"/> LD	10 Pin Ribbon Cable**	<input type="radio"/> RD	10 Pin Ribbon Cable**
<input type="radio"/> LE	16 Pin Ribbon Cable**	<input type="radio"/> RE	16 Pin Ribbon Cable**
<input type="radio"/> LF	20 Pin Ribbon Cable**	<input type="radio"/> RF	20 Pin Ribbon Cable**
<input type="radio"/> LG	26 Pin Ribbon Cable**	<input type="radio"/> RG	26 Pin Ribbon Cable**
<input type="radio"/> LH	3/8" NPSM Conduit Port Standard Base Wires	<input type="radio"/> RH	3/8" NPSM Conduit Port Standard Base Wires

* MIL. Spec; MIL-C-24308

** MIL. Spec; MIL-C-83503

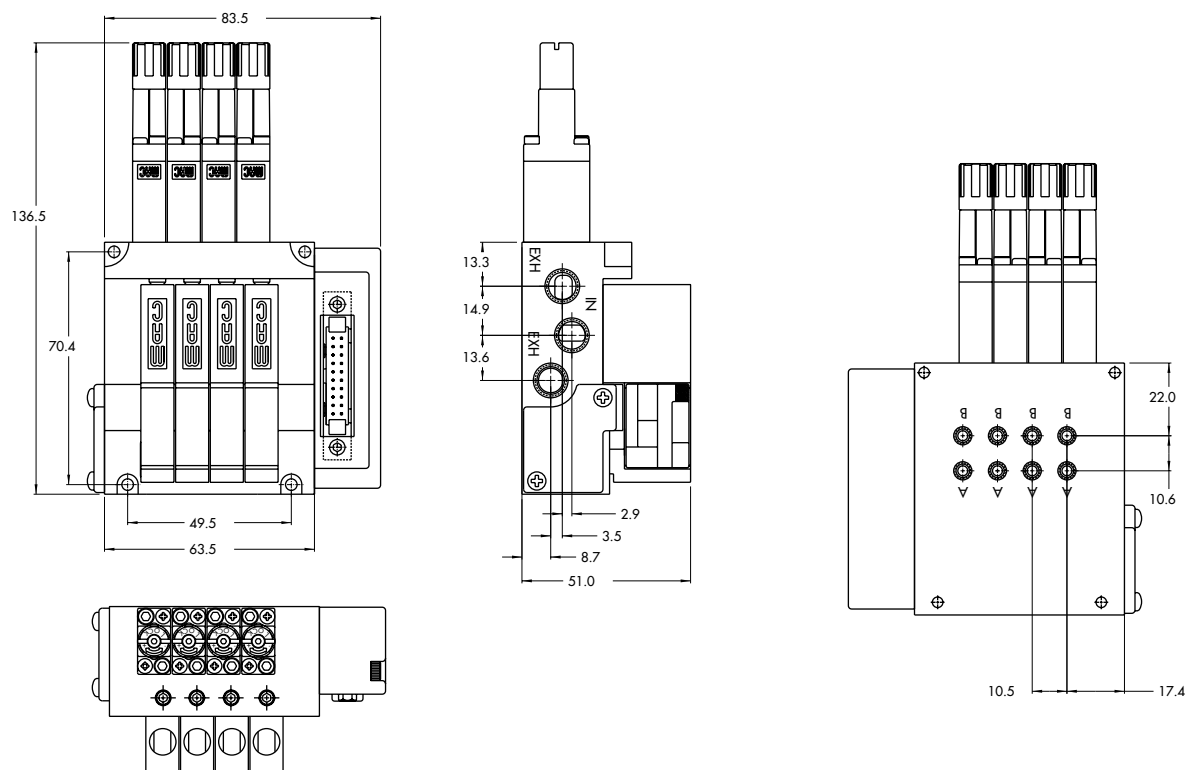
Note: Left and right end is determined by facing conduit passage.

**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 :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.09 C _v , 2.5 W : 0.08 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note :
- Valve and coil are not interchangeable.
 - Pressure range regulator (0-100 PSI)
- Spare parts :
- Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Blanking plate regulator : N-44003.
 - Base wire Plug-in protector : 24180.
- Options :
- Isolation of inlet and/or exhaust. • BSPP threads.

DIMENSIONS



Function	Port size	Flow [Max]	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32, 4 mm tube receptacle	0.10C_v	din rail, plug-in with pre-wired connector

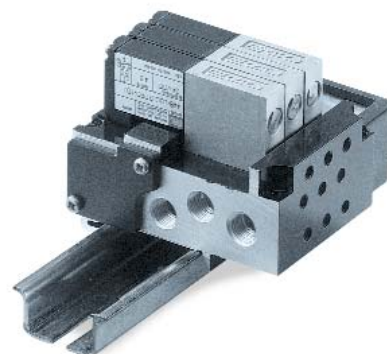
OPERATIONAL BENEFITS

1. 10 mm valve, direct solenoid operated.
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. Flow is specifically adjusted on each valve.
7. Manual operator standard on all valves.

Reset

HOW TO ORDER

44B-xxx-GxxO-xxx



HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
Valve less base	 <input type="radio"/> 44B-LOO-GxxO-xxx

SOLENOID OPERATOR ➤

G **XX** O- **X** **XX***

XX Voltage	X Manual operator	XX Electrical connection
<input type="radio"/> DA 24VDC (1.0 W)	<input type="radio"/> 1 Non-locking	<input type="radio"/> DJ Plug-in
<input type="radio"/> DC 24VDC (1.8 W)		<input type="radio"/> DT Plug-in with light
<input type="radio"/> DD 24VDC (2.5 W)		<input type="radio"/> DE Plug-in with suppression diode
<input type="radio"/> DF 24VDC (4.0 W)		<input type="radio"/> DV Plug-in with light and suppression diode
<input type="radio"/> xx Other Options		<input type="radio"/> xx Other Options

ECF44B-00xxx-xxxx

HOW TO ORDER CIRCUIT BAR

Port size	Side cylinder ports (10.5 mm)
M5	<input type="radio"/> ECF44B-00BDB- zzxx
# 10-32	<input type="radio"/> ECF44B-00BBB- zzxx
4 mm tube receptacle	<input type="radio"/> ECF44B-00BEB- zzxx

Number of stations (03=3 stations)

Din rail spec. (EN50 022)

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

L=Left Side; R=Right Side

ZZ	Connector	ZZ	Connector
<input type="radio"/> LA	9 Pin Sub D*	<input type="radio"/> RA	9 Pin Sub D*
<input type="radio"/> LB	15 Pin Sub D*	<input type="radio"/> RB	15 Pin Sub D*
<input type="radio"/> LC	25 Pin Sub D*	<input type="radio"/> RC	25 Pin Sub D*
<input type="radio"/> LD	10 Pin Ribbon Cable**	<input type="radio"/> RD	10 Pin Ribbon Cable**
<input type="radio"/> LE	16 Pin Ribbon Cable**	<input type="radio"/> RE	16 Pin Ribbon Cable**
<input type="radio"/> LF	20 Pin Ribbon Cable**	<input type="radio"/> RF	20 Pin Ribbon Cable**
<input type="radio"/> LG	26 Pin Ribbon Cable**	<input type="radio"/> RG	26 Pin Ribbon Cable**
<input type="radio"/> LH	3/8" NPSM Conduit Port Standard Base Wires	<input type="radio"/> RH	3/8" NPSM Conduit Port Standard Base Wires

* MIL. Spec; MIL-C-24308

** MIL. Spec; MIL-C-83503

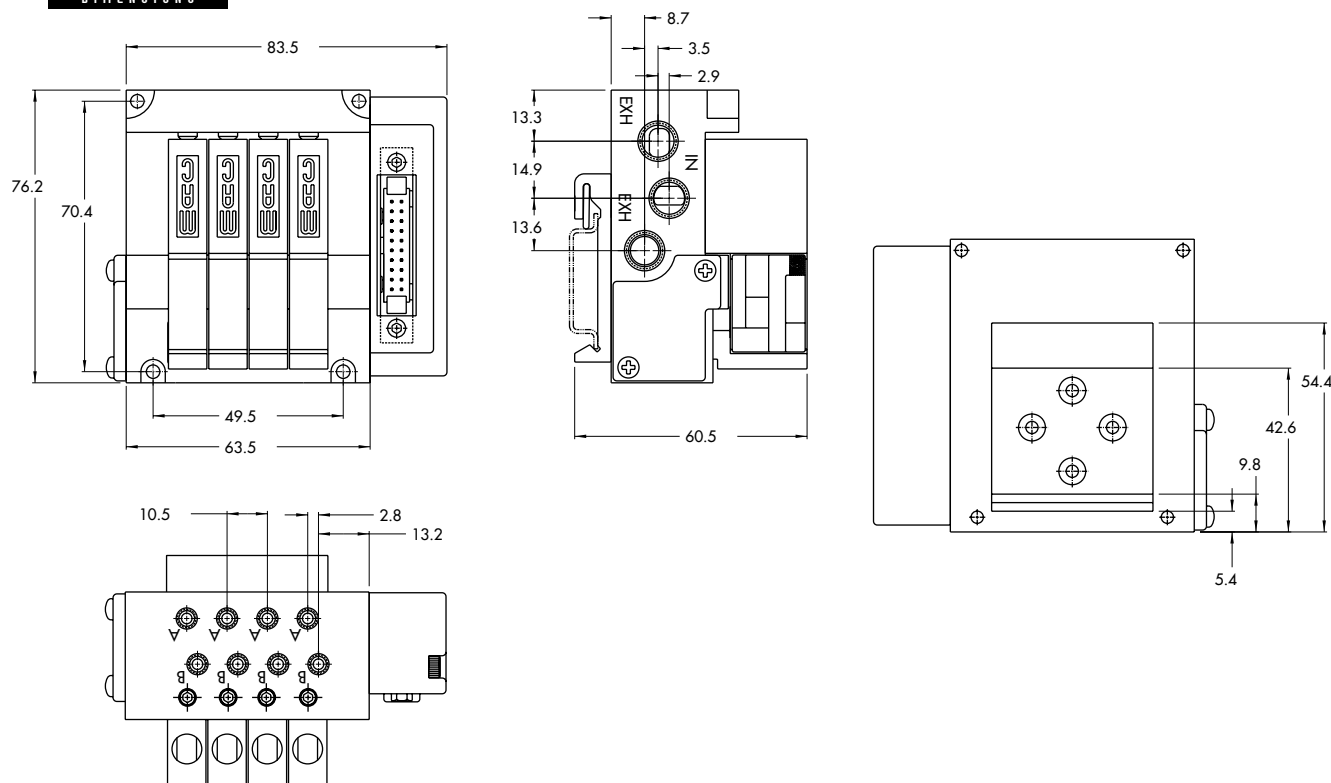
Note: Left and right end is determined by facing conduit passage.

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 :	1.8 mm
Flow (at 6 bar, ΔP=1bar) :	4 W : 0.10 C _v , 2.5 W : 0.08 C _v , 1.8 W : 0.06 C _v , 1.0 W : 0.05 C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Power :	4 W - 2.5 W - 1.8 W - 1.0 W
Response times :	Energize : 4 ms
(with 4 W coil)	De-energize : 1.5 ms

- Note :
- Valve and coil are not interchangeable.
- Spare parts :
- Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Base wire Plug-in protector : 24180.
- Options :
- Isolation of inlet and/or exhaust. • BSPP threads.

DIMENSIONS





Section 2

Options



0 p t i o n s

Codification table for voltages / Manual operator / Electrical connection

VALVE CODE ➤

-G XX X - X XX
1 2 3 4

OPTIONS AVAILABLE FOR

- solenoid valves 34 & 44 Series

1. VOLTAGE (type 34 Series)		1. VOLTAGE (type 44 Series)	
-G XX X - X XX	VOLTAGE	-G XX X - X XX	VOLTAGE
DC	24 VDC (1,8 W)	<input type="radio"/> DA	24 VDC (1,0 W)
DD	24 VDC (2,5 W)	<input type="radio"/> DC	24 VDC (1,8 W)
DE	24 VDC (3,0 W)	<input type="radio"/> DD	24 VDC (2,5 W)
DF	24 VDC (4,0 W)	<input type="radio"/> DF	24 VDC (4,0 W)
DJ	12 VDC (1,8 W)	<input type="radio"/> DG	12 VDC (1,0 W)
DK	12 VDC (2,5 W)	<input type="radio"/> DJ	12 VDC (1,8 W)
DM	12 VDC (3,0 W)	<input checked="" type="radio"/> DK	12 VDC (2,5 W)
DN	12 VDC (4,0 W)	<input type="radio"/> DN	12 VDC (4,0 W)

2. WIRE LENGTH (Common options for 34 & 44 Series)	
-G XX X - X XX	WIRE LENGTH
<input type="radio"/> A	18"
<input type="radio"/> B	24"
<input type="radio"/> C	36"
<input checked="" type="radio"/> D	48"
<input type="radio"/> E	72"
<input type="radio"/> F	96"
<input type="radio"/> G	120"
<input type="radio"/> H	144"

3. MANUAL OPERATOR (COMMON OPTIONS FOR 34 & 44 SERIES)

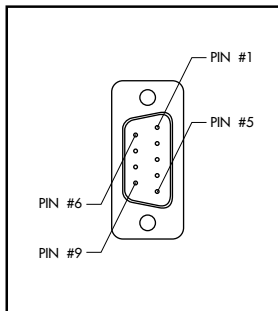
-G XX X - X XX	MANUAL OPERATOR
1	Non-locking recessed
3	Non-locking extended

4. ELECTRICAL CONNECTION (COMMON OPTIONS FOR 34 & 44 SERIES)

-G XX X - X XX	NO CONNECTOR
<input type="radio"/> BA	Flying leads
<input type="radio"/> BB	BA with ground wire
<input type="radio"/> BC	BA with light
<input type="radio"/> BD	BA with light and ground wire
<input type="radio"/> BE	BA with suppression diode
<input type="radio"/> BF	BA with suppression diode and ground wire
<input type="radio"/> BG	BA with suppression diode and light
<input type="radio"/> BH	BA with suppression diode, light and ground wire
<input type="radio"/> BN	BA with suppression diode and blocking diode
<input checked="" type="radio"/> BP	BA with suppression diode, blocking diode and ground wire
<input type="radio"/> BR	BA with suppression diode, blocking diode and light
<input type="radio"/> BS	BA with suppression diode, blocking diode, light and ground wire
<input type="radio"/> BT	BA with light
<input type="radio"/> BU	BA with light and ground wire
<input type="radio"/> BV	BA with suppression diode and light
<input type="radio"/> BW	BA with suppression diode, light and ground wire
<input type="radio"/> BX	BA with suppression diode, blocking diode and light
<input type="radio"/> BY	BA with suppression diode, blocking diode, light and ground wire

-G XX X - X XX	PLUG-IN CONNECTOR
<input type="radio"/> KA	Mini connector with flying leads
<input type="radio"/> KB	KA with ground wire
<input type="radio"/> KE	KA with suppression diode
<input type="radio"/> KF	KA with suppression diode and ground wire
<input type="radio"/> KJ	Mini connector for KA option
<input type="radio"/> KM	Mini connector for KB option
<input type="radio"/> KN	KA with suppression diode and blocking diode
<input type="radio"/> KP	KA with suppression diode, blocking diode and ground wire
<input type="radio"/> KT	KA with light
<input type="radio"/> KU	KA with light and ground wire
<input type="radio"/> KV	KA with suppression diode and light
<input type="radio"/> KW	KA with suppression diode, light and ground wire
<input type="radio"/> KX	KA with suppression diode, blocking diode and light
<input type="radio"/> KY	KA with suppression diode, blocking diode, light and ground wire

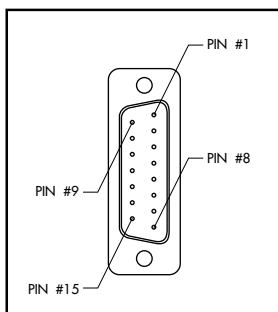
MOD. S009



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 $\geq 5.0^9 \Omega$
- Protection class IP40 (DIN 40050)
- Number of solenoids : 7 max.
- Max. 24 V=/5.4 W per solenoid
- 2 common wires

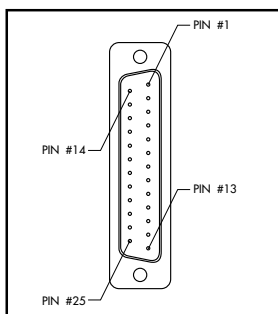
MOD. S015



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 $\geq 5.0^9 \Omega$
- Protection class IP40 (DIN 40050)
- Number of solenoids : 12 max.
- Max. 24 V=/5.4 W per solenoid
- 3 common wires

MOD. S025

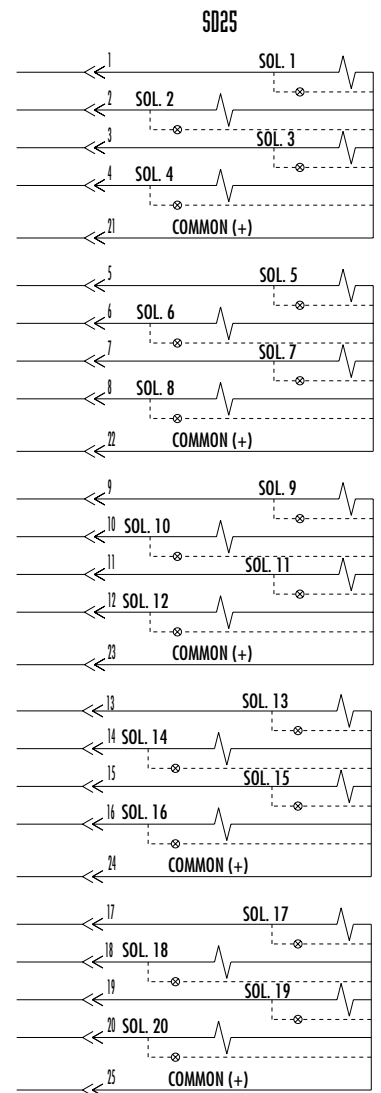
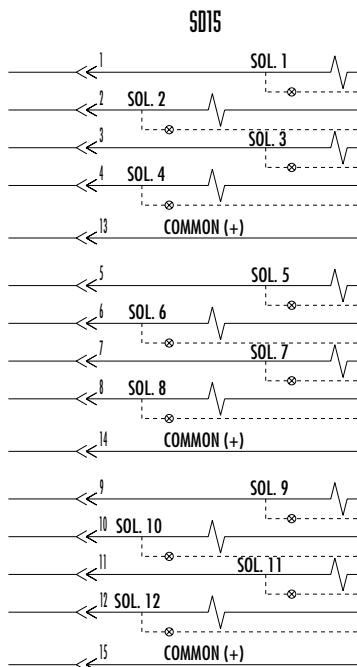
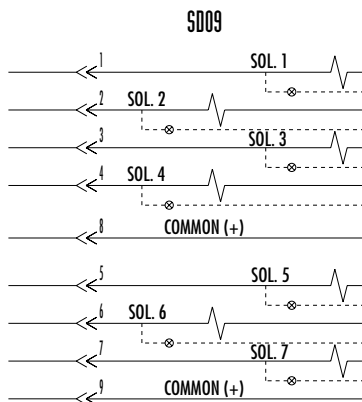
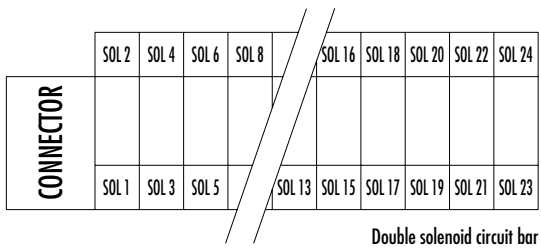
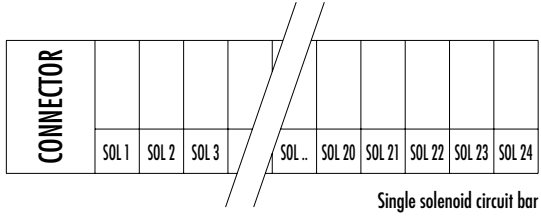


TECHNICAL DATA

- 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 $\geq 5.0^9 \Omega$
- 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





PRECAUTIONS CONCERNING THE APPLICATION, INSTALLATION AND SERVICE OF MAC VALVES

The precautions below are important to be read and understood before designing into a system any MAC valve, and before installing or servicing any MAC valve. Improper use, installation or servicing of any MAC valve in some systems could create a hazard to personnel or equipment.

APPLICATION PRECAUTIONS :

INDUSTRIAL USE -

MAC valves are intended for use in industrial pneumatic and/or vacuum systems. They are not intended for consumer use or service. They are general purpose industrial valves with literally thousands of different applications in industrial systems. These products are not inherently dangerous, but they are only a component of an overall system. The system in which they are used must provide adequate safeguards to prevent injury or damage in the event failure occurs, whether it be failure of switches, regulators, cylinders, valves or any other component.

POWER PRESSES -

MAC valves are not designed nor intended to be used to operate and/or control the operation of clutch and/or brake systems on power presses. There are special products on the market for such use.

2-POSITION VALVES -

Some MAC valves are 2-position, 4-way valves. When air is supplied to the inlet port(s) of these valves, there will always be a flow path from the inlet to one of the outlets regardless of which of the two positions the valve is situated. Therefore, if pressurized air retained in the system would present a hazard in the application or servicing of the valve or system, a separate method in the system must be provided to remove the trapped air.

3- POSITION VALVES-

Some MAC valves are 3-position, 4-way valves. These valves are either double solenoid or double remote air operated.

If either of the two operators is in control, air supplied to the inlet port(s) will pass through the valve to one of the outlets as on 2-position, 4-way valves. However, if neither operator is in control, the valve moves to a center position. Listed below are the various center position functions :

A. CLOSED CENTER-

With this type valve, when in the center position all ports are blocked (inlets and exhausts) meaning the air at both outlet ports is trapped. If trapping the air in both outlet ports would present a hazard in the application or servicing, a separate method in the system must be provided to remove the trapped air or this type valve should not be used.

B. OPEN CENTER-

With this type valve, when in the center position, the inlet port(s) is blocked and the two outlet ports are open to the exhaust port(s) of the valve. If having no air in either outlet port would present a hazard in the application or servicing, this type valve should not be used.

C. PRESSURE CENTER-

With this type valve, when in the center position, the inlet port(s) is connected to both outlet ports of the valve. If having pressurized air to either or both outlet ports would present a hazard in the application or servicing of the valve or system, a separate method in the system must be provided to remove the retained air.

OPERATING SPECIFICATIONS -

MAC valves are to be installed only on applications that meet all operating specifications described in the MAC catalog for the valve.

MANUAL OPERATORS-

Most MAC valves can be ordered with manual operators. Manual operators when depressed, are designed to shift the valve to the same position as would the corresponding solenoid or remote air pilot operator if it were activated. Care must be taken to order a type, if any, that will be safe for the physical location of the manual operator in the system. Accidental activation of a manual operator could create a dangerous situation. If intentional or accidental operation of a valve by a manual operator could create a dangerous situation then the "no operator" option should be used.

REMOTE AIR OPERATED VALVES

Pilot valves supplying signal pressure to remote air operated valves should be 3-way valves with adequate supply and exhaust capacity to provide positive pressurizing and exhausting of the pilot supply line. Pilot lines should be open to exhaust when valves are deenergized.

INSTALLATION AND SERVICE PRECAUTIONS :

- A. Do not install or service MAC valves without first making sure both the air and electrical power to the machine are off and that all air has been completely bled from the system.
- B. MAC valves should only be installed and/or serviced by qualified, knowledgeable personnel who understand how the specific valve is to be pneumatically piped and electrically connected (where applicable). Flow paths through the valve are shown in the catalog and on the valve by use of ANSI or ISO type standard and graphic symbols. Do not install unless these symbols and the valve functions and operations are thoroughly understood.
- C. Before service, maintenance, repair or cleaning, consult local distributor or factory for Parts & Operation Sheet and information on proper cleaning and lubrication agents. Do not subject MAC valves' parts to any foreign substance including lubricants and cleaning agents not specifically recommended by MAC valves, Inc.
- D. MAC valves are never to be stepped on while working on a machine. Damage to the valve, or lines to the valve (either air or electrical lines) or accidental activating of a manual operator on the valve could result in a dangerous condition.

WARNING :

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

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

LIMITATION OF GUARANTEE

This Guarantee is limited to the replacement or rebuilding of any valve which should fail to operate properly. Valves, under the MAC Guarantee, must be returned (with or without bases) transportation prepaid and received at our factory within the Guarantee period. They will be returned to the customer at the expense of MAC Valves, Inc., and will carry the same guarantee as provided under the Flat Rate Rebuild Program.

DISCLAIMER OF GUARANTEE

No claims for labor, material, time, damage, or transportation are allowable nor will any valve be replaced or rebuilt under this guarantee which has been damaged by the purchaser not in the normal course of its use and maintenance during the warranty period. The guarantee does not apply to loss or damage caused by fire, theft, riot, explosion, labor dispute, act of God, or other causes beyond the control of MAC Valves, Inc. MAC Valves, Inc. shall in no event be liable for remote, special or consequential damages under the MAC Guarantee, nor under any implied warranties, including the implied warranty of merchantability.

The above Guarantee is our manner of extending the engineering and service resources of the MAC Valves, Inc. organization to assure our customer long, and continued satisfaction.

How To Order

44 Series MAConnect™

44B - X X X - X X - LXXP - X XX
 GXXP- X XX

Solenoid Assembly

Body Type

0 Base Only No Valve
 L Base Mount Body
 M Base Mount Body
 w/ End Seals

Commons

0 Valve Only
 M Positive Commons
 N Negative Commons

Port Size and Thread Type

0 Valve Only
 A #10-32
 B M5
 D 6mm O.D. Tube
 Receptacle
 E 1/4" O.D. Tube
 Receptacle
 F M7

Base Electrical

0 Valve Only
 B Plug-In to Left
 C Plug-In to Right

Configuration

0 Valve Only
 C Side Cyls
 D Bottom Cyls
 E Side Cyls w/ F.C.
 F Bottom Cyls w/ F.C.
 G Bot. Cyls w/ Regulator
 H Bot. Cyls w/ Reg and F.C.

Note: Regulator must be ordered
 separately

Parts

28487 Exhaust Isolator
 28486 Inlet Isolator

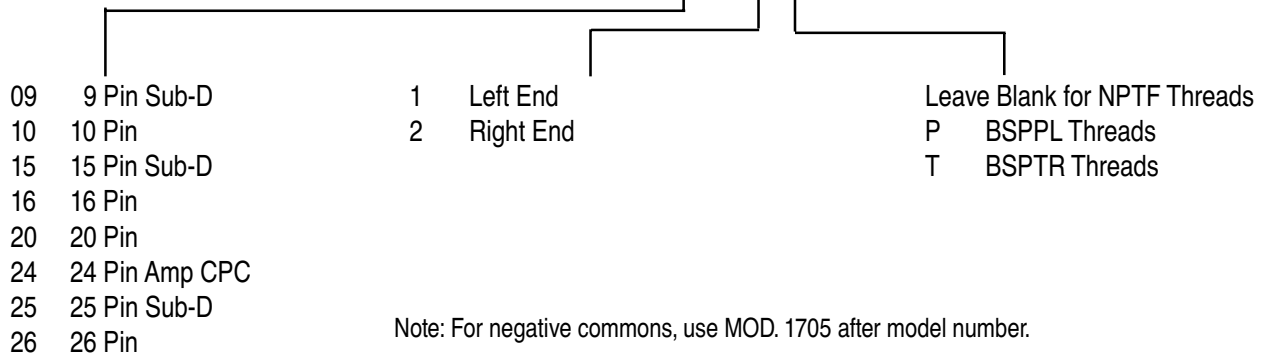
44 Series MAConnect™

How to Order

Adapters / End Plate Kit

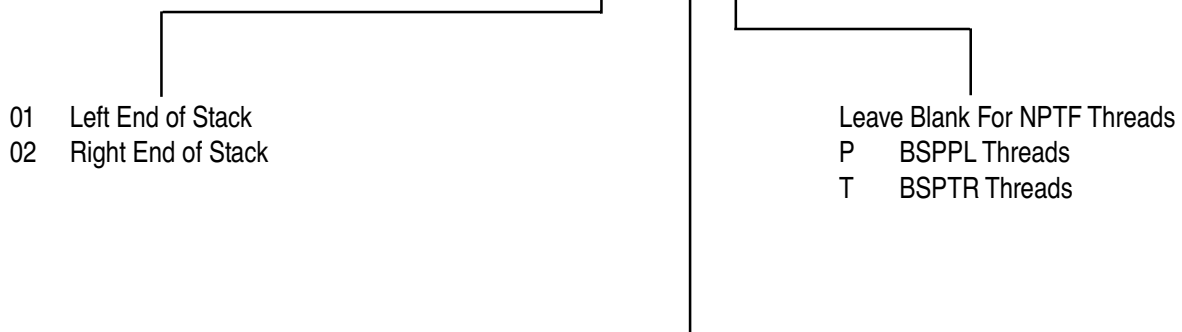
MAConnect™ Adapter Assembly

M-44005- XX - X X



MAConnect™ Fastening End Plate Kit

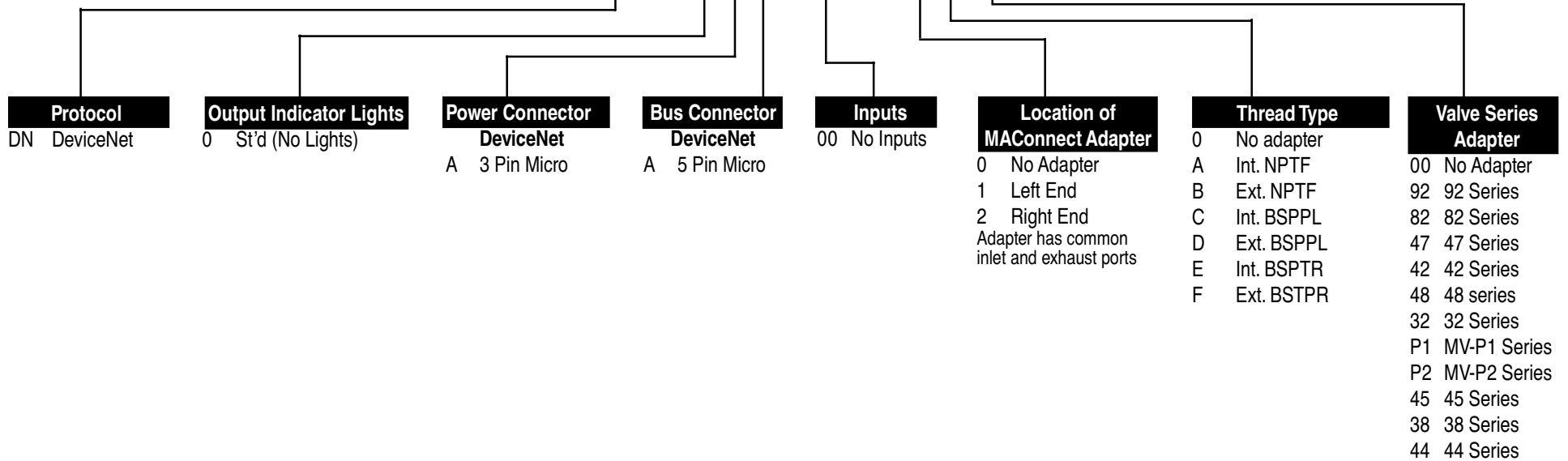
M-44007- XX - 01 X



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

How to Order SM16 for MACConnect™ Serial Manifold

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



How to Order SM32 for MACConnect™ Serial Manifold

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

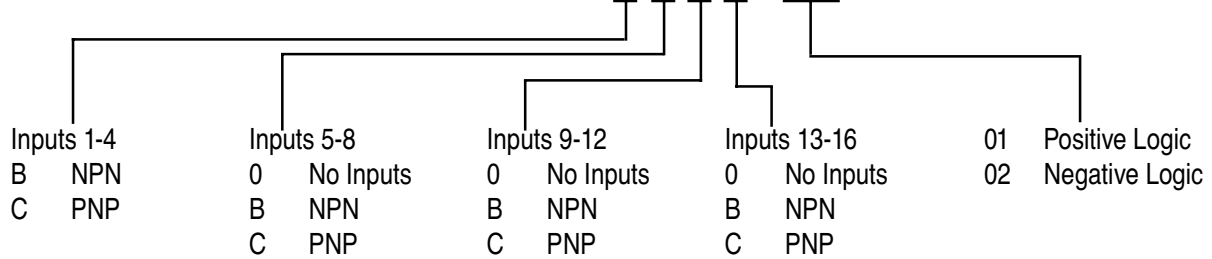
Protocol		Output Indicator Lights		Power Connector		Bus Connector		Inputs		Input Types		Location of MACConnect Adapter		Pilot and Thread Type		Valve Series Adapter		
DN	DeviceNet	Monitoring Valve Signal		DeviceNet		DeviceNet		A	No Inputs	A	No Inputs	0	No Adapter	A	Int. NPTF	00	No Adapter	
PB	Profibus	A	St'd (16)	A	3 Pin Mini	A	5 Pin Mini	B	1 Input	B	NPN	1	Left End	B	Ext. NPTF	42	42 Series	
IB	Interbus-S			B	4 Pin Mini	B	5 Pin Micro	C	2 Inputs	C	PNP	2	Right End	C	Int. BSPPL	47	47 Series	
AB	Allen Bradley Remote IO			C	3 Pin Micro	C	5 Pin Mini	D	3 Inputs						D	Ext. BSPPL	48	48 Series
AS	AS-I	B	St'd (16)	E	4 Pin Mini		End Mount	E	4 Inputs					E	Int. BSPPL	82	82 Series	
					Side Mount		2 Conn.	F	Tethered						F	Ext. BSTPR	92	92 Series
											16 Inputs					** N	No Pilot Port	32
									8 on AS-I					** 82 Series Only			P1	MV-P1 Series
																	P2	MV-P2 Series
																	45	45 Series
																	38	38 Series
																	44	44 Series

How to Order

Input and Output Modules

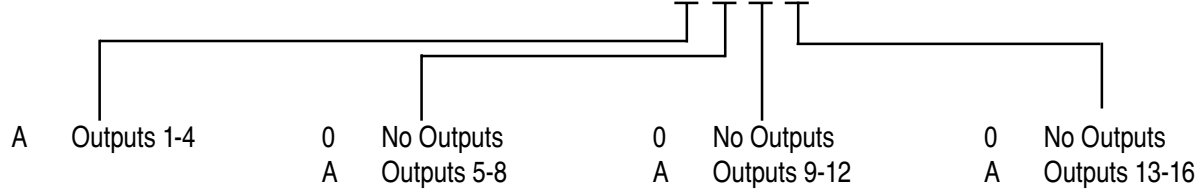
Remote Tethered Input Module (For use with SM32 only)

N-SM005 - X X X X - XX

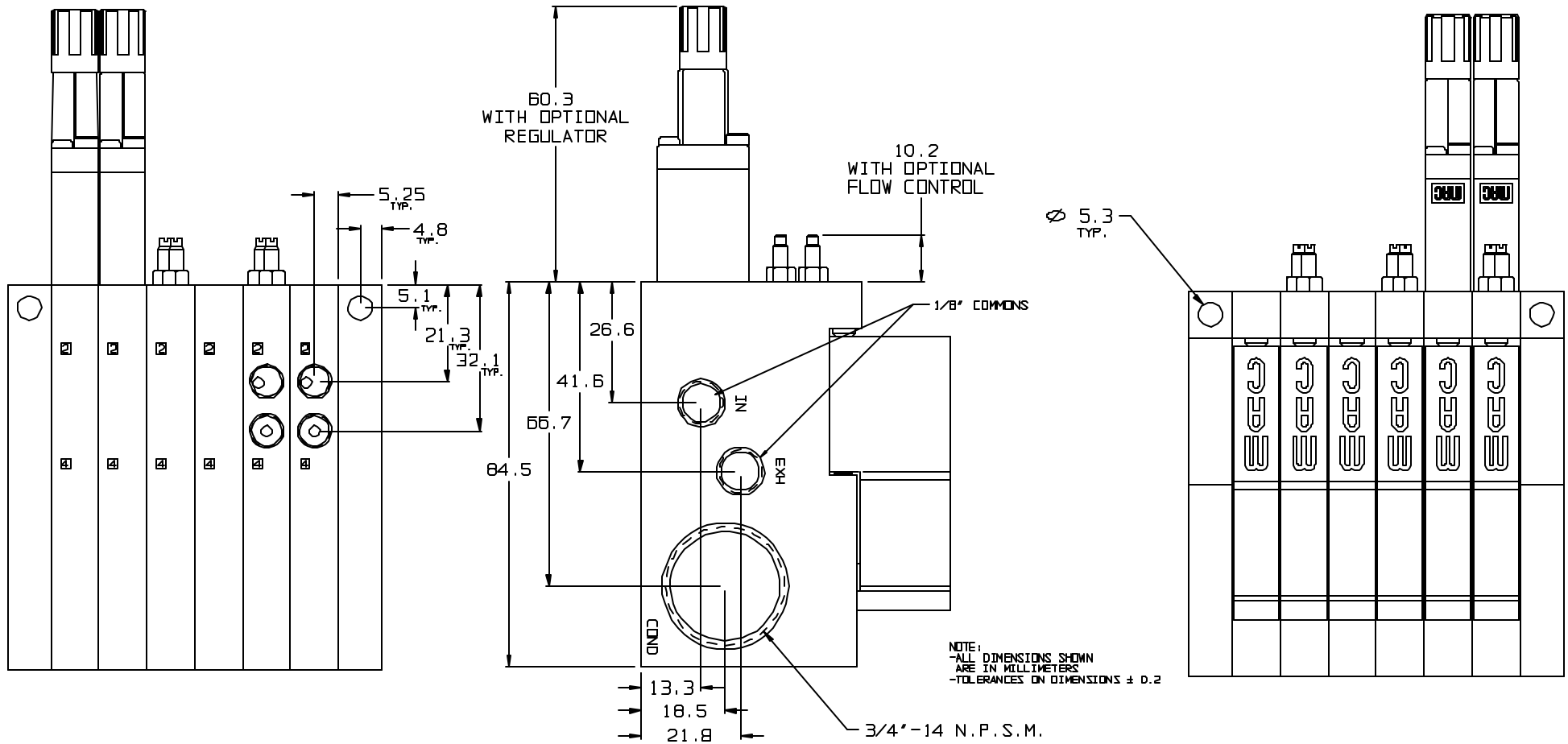
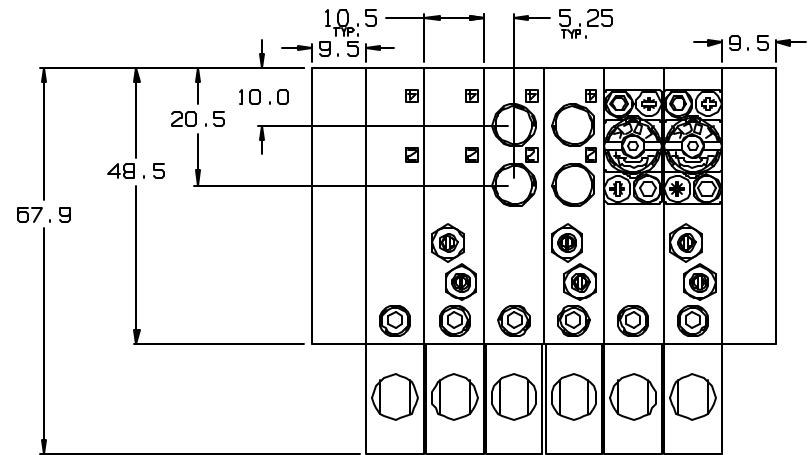


Remote Tethered Output Module (For use with SM32 only)

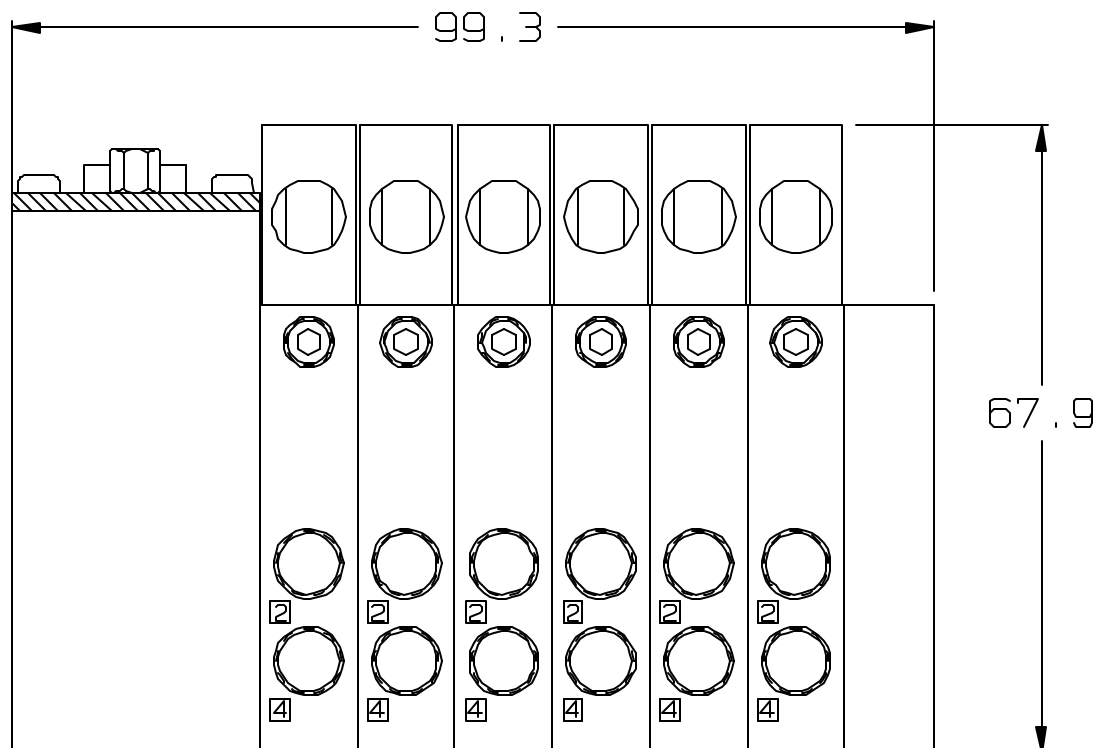
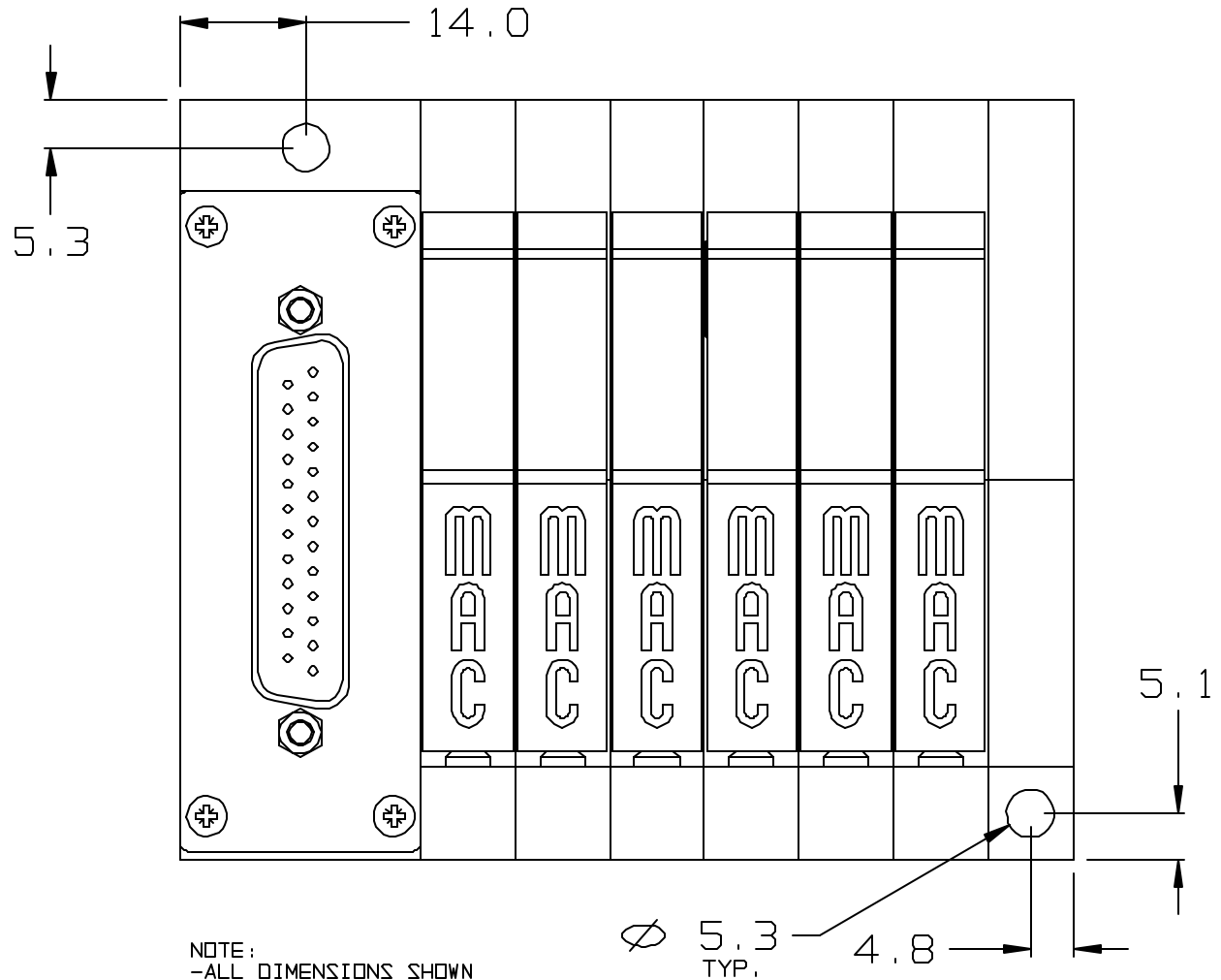
N-SM006 - X X X X



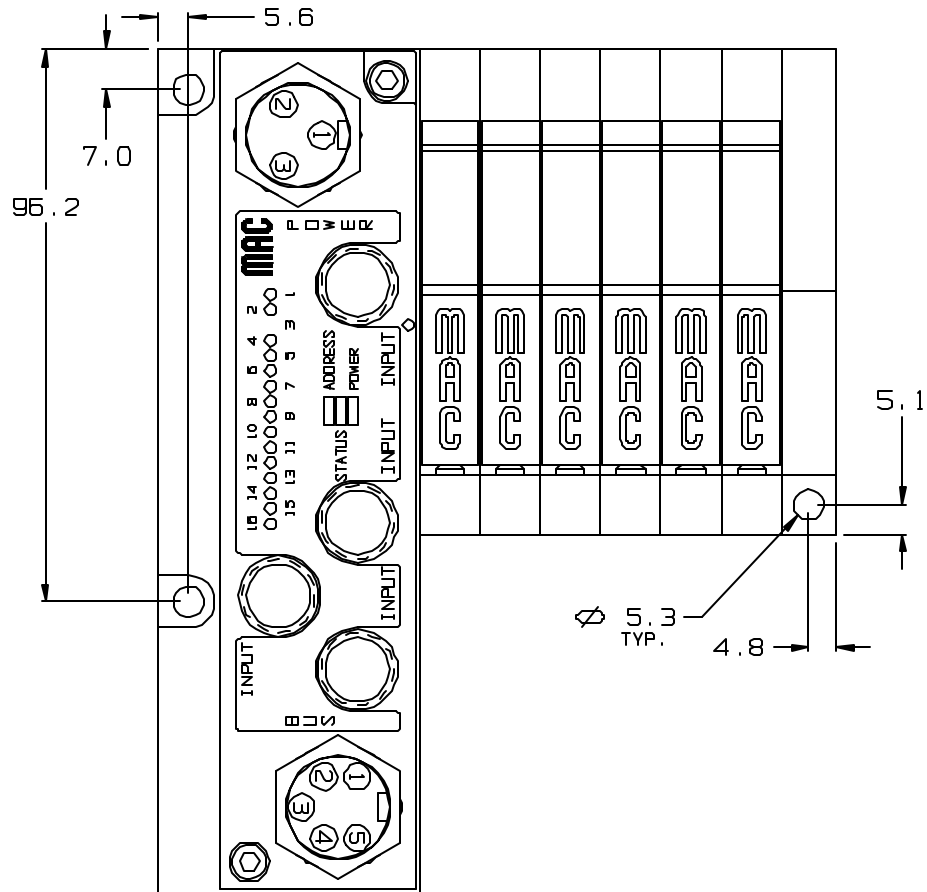
44 SERIES PLUG-IN MANIFOLD



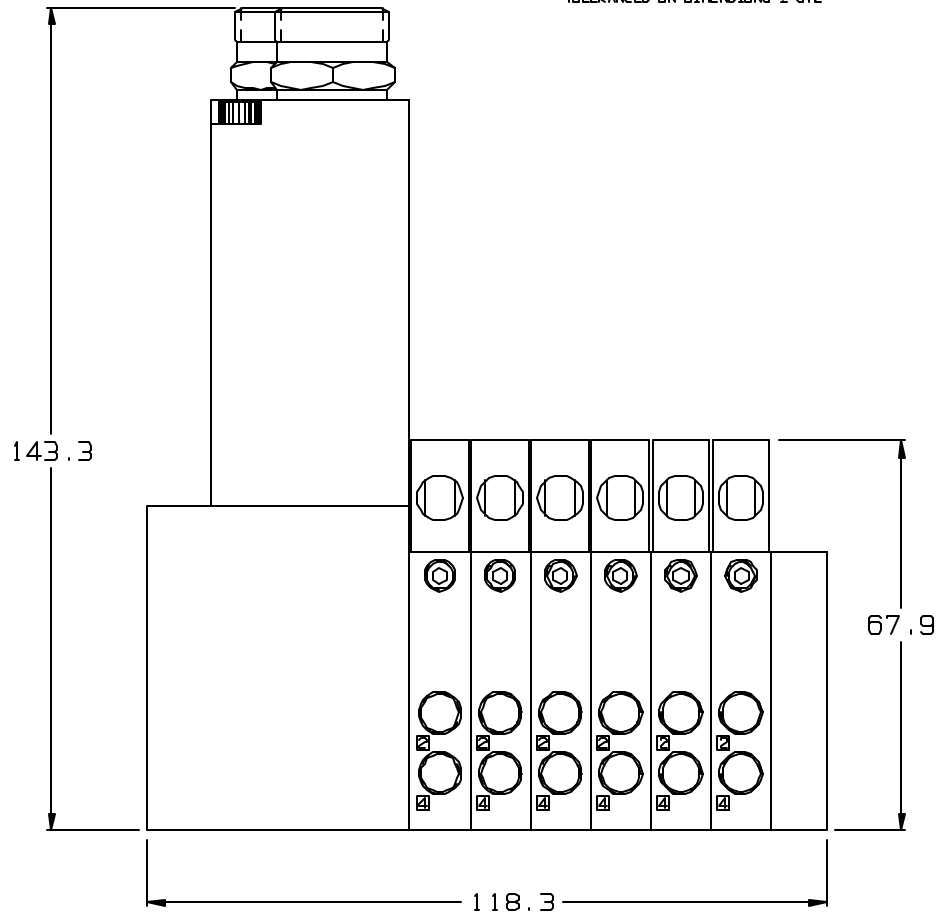
44 SERIES MACONNECT WITH MULTI PIN



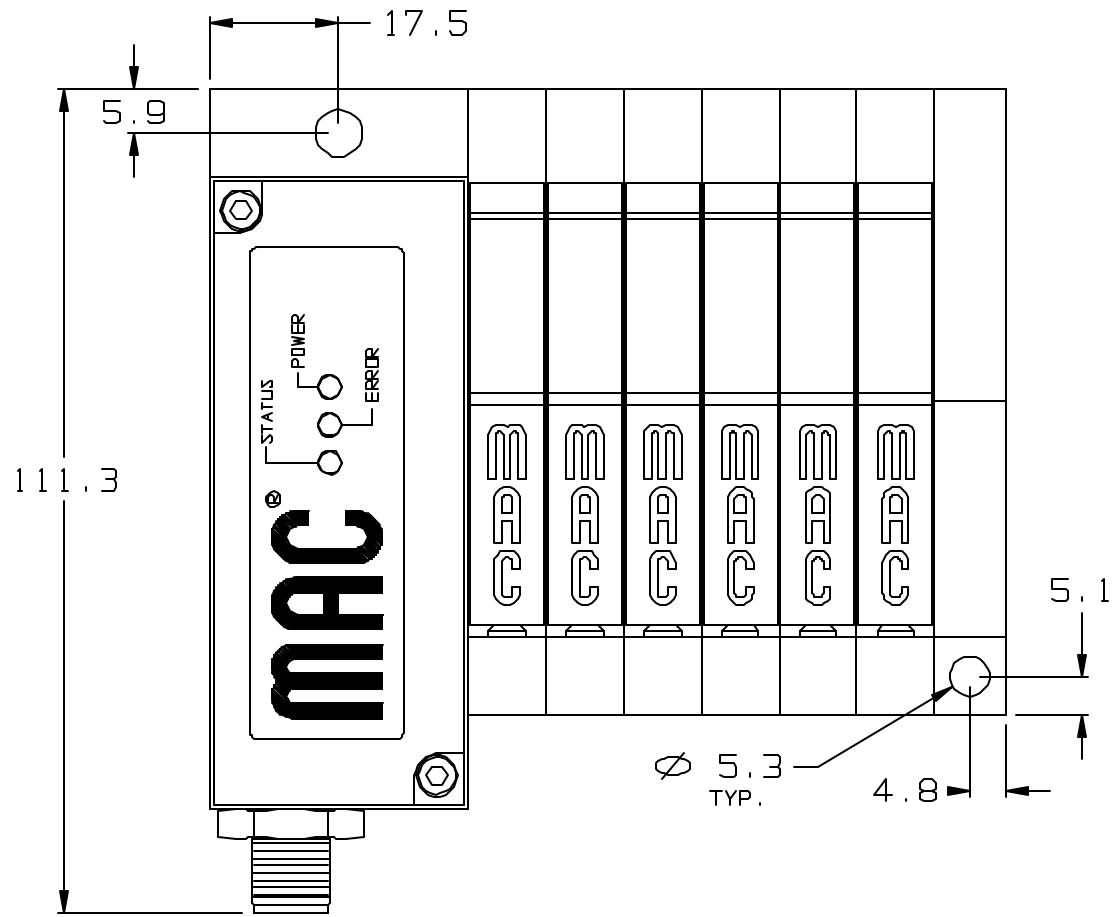
44 SERIES MACONNECT WITH SM32



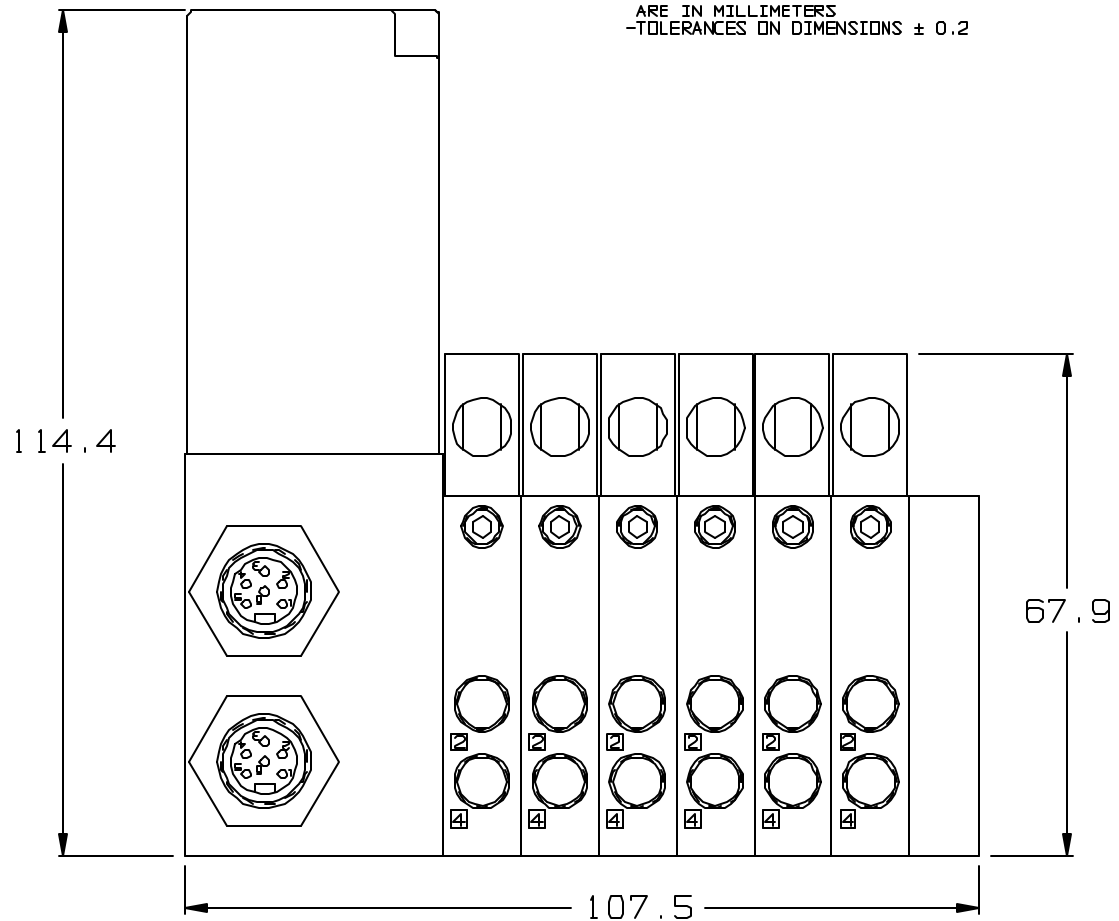
NOTE:
-ALL DIMENSIONS SHOWN
ARE IN MILLIMETERS
-TOLERANCES ON DIMENSIONS ± 0.2



44 SERIES MACONNECT WITH SM16



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



Notizen

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