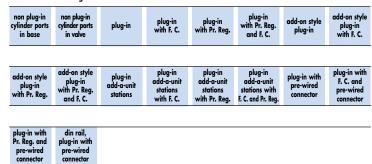
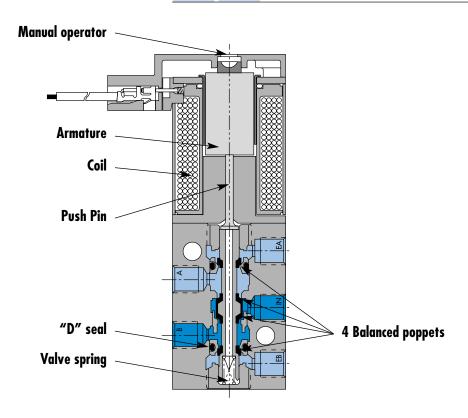


### Circuit bar mounting





## **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.



Port size Circuit bar mounting **Function** Flow (Max) 5/2, 3/2 NO-NC M5 - #10-32 0.093C<sub>w</sub>

### OPERATIONAL BENEFITS

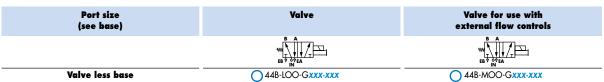
- 1. 10 mm valve, direct solenoid operated.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Flow is specifically adjusted on each valve.7. Manual operator standard on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

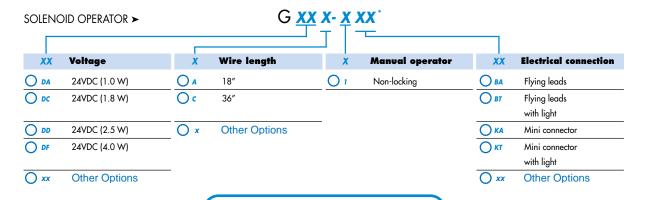




44B-xxx-Gxxx-xxx







### HOW TO ORDER CIRCUIT BAR

Port size	Side cylinder ports	Bottom cylinder ports
M5 # 10-32	○ EBP44B-001D- <i>xx</i> ○ EBP44B-001B- <i>xx</i>	○ EBP44B-002D-xx ○ EBP44B-002B-xx

EBP44B-xxxx-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 :  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

Orifice: 1.8 mm

Flow (at 6 bar,  $\Delta P=1$ bar): 4 W: 0.093 C<sub>v</sub>, 2.5 W: 0.077 C<sub>v</sub>, 1,8 W: 0.057 C<sub>v</sub>, 1.0 W: 0.048 C<sub>v</sub>

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

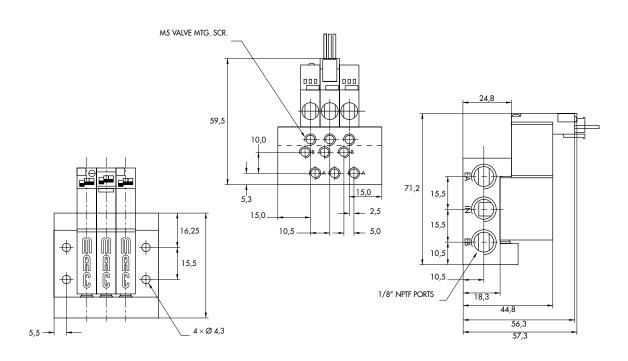
Response times : Energize : 3.4 ms

(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.





**Function** Port size (Inlet & Exhaust) Flow (Max) Circuit bar mounting 5/2, 3/2 NO-NC # 10-32 - 1/8" 0.093C<sub>w</sub>

### 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.



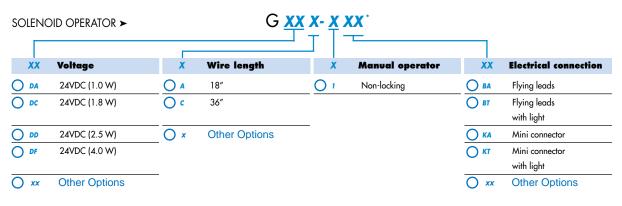
HOW TO ORDER

# 44B-xxx-Gxxx-xxx

Reset

### HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Valve port size	Valve	Valve for use with external flow controls
	B A VI T OF A VI	B A VI TO THE STATE OF THE STAT
M5	44B-ABA-Gxxx-xxx	44B-BBA-Gxxx-xxx
# 10-32	44B-AAA-Gxxx-xxx	44B-BAA-Gxxx-xxx



EBM44A-xxxx-xx HOW TO ORDER CIRCUIT BAR

Port size COMMON INLET & EXHAUST	
# 10-32	○ EBM44A-001B-xx
1/8" NPTF	○ 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).







# TECHNICAL

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:  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

Orifice: 1.8 mm

Flow (at 6 bar,  $\Delta P=1$ bar): 4 W: 0.093 C<sub>v</sub>, 2.5 W: 0.077 C<sub>v</sub>, 1,8 W: 0.057 C<sub>v</sub>, 1.0 W: 0.048 C<sub>v</sub>

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

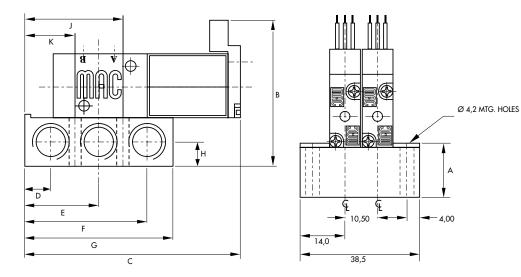
Response times: Energize: 3.5 ms

(with 4 W coil) De-energize: 1.5 ms

Note: • Valve and coil are not interchangeable.

Spare parts: • Valve mounting kit (M5): M-44001-21. • Valve mounting kit (1/8"): M-44001-01. • Blanking plate: 30426-A.

Options : • Isolation of inlet and/or exhaust. Special bar. Consult Factory.



Port size	A	В	C	D	E	F	G	Н	J	K
1/8"	16.0	47.5	69.2	8.5	24.0	39.5	48.0	8.0	31.85	16.15
M5	12.0	43.5	63.2	5.0	17.0	29.0	34.0	6.0	23.00	11.00



Function	Port size	Flow (Max)	Circuit bar	mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.09C <sub>V</sub>	plug-in	

- 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.



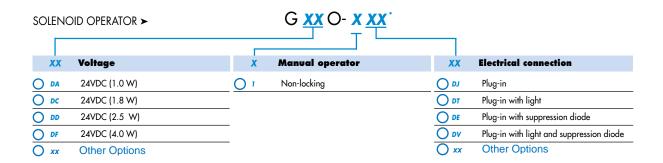


HOW TO ORDER

44B-xxx-GxxO-xxx

### HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
	S O NO EA
Valve less base	44B-LOO-GxxO-xxx



# ECD044B-00xxx-AOxx

### HOW TO ORDER CIRCUIT BAR

Port size	Side cylinder ports (10.5 mm)	Bottom cylinder ports (10.5 mm)
M5 # 10-32	ECD044B-001AD-AOxx  ECD044B-001AB-AOxx	ECD044B-002AD-AOXX  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).







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 :  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

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

-15% to +10% of nominal voltage Voltage range:

Power:

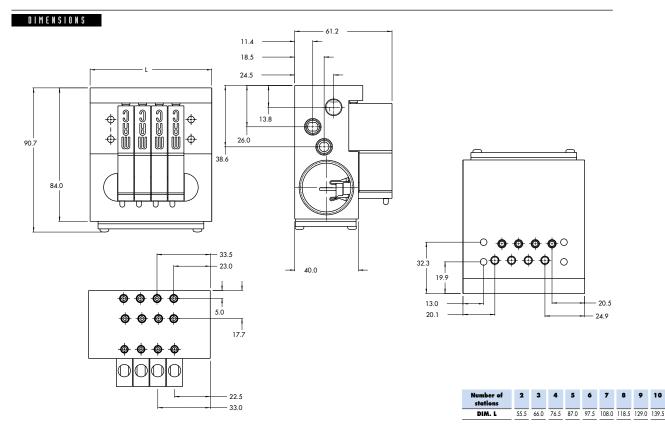
4 W - 2.5 W - 1.8 W - 1.0 W Response times:

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.

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





Function	Port size	Flow (Max)	Circuit bar	mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.08C <sub>V</sub>	plug-in with F. C.	

- 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.



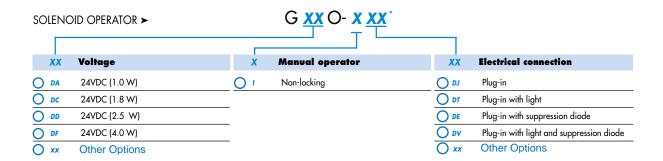


### 44B-xxx-GxxO-xxx

Reset

### HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
	ES V NO EA
Valve less base	44B-MOO-GxxO-xxx



### HOW TO ORDER CIRCUIT BAR WITH FLOW CONTROLS

### ECD044B-00xxx-AOxx

Port size	Side cylinder ports (10.5 mm)	Bottom cylinder ports (10.5 mm)
M5 # 10-32	<ul><li>ECD044B-005AD-AOxx</li><li>ECD044B-005AB-AOxx</li></ul>	<ul><li>ECD044B-006AD-AOxx</li><li>ECD044B-006AB-AOxx</li></ul>

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 :**  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

Orifice: 1.8 mm

Flow (at 6 bar,  $\Delta P=1$ bar): 4 W: 0.09 C<sub>v</sub>, 2.5 W: 0.08 C<sub>v</sub>, 1,8 W: 0.06 C<sub>v</sub>, 1.0 W: 0.05 C<sub>v</sub>

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

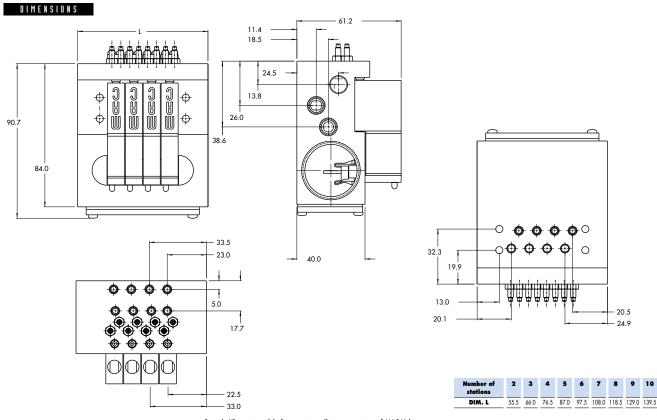
(with 4 W coil) De-energize: 1.5 ms

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.





Function	Port size	Flow (Max)	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.08C <sub>V</sub>	plug-in with Pr. Reg.

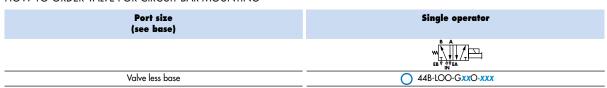
- 1. 10 mm valve, direct solenoid operated.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Flow is specifically adjusted on each valve.
  7. Manual operator standard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

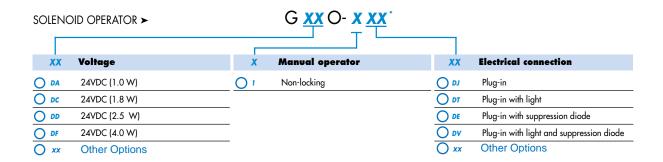




### 44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING





## ECD044B-00xxx-AOxx

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

•	1 77
Port size	Bottom cylinder ports (10,5 mm)
M5	CD044B-004AD-A0-xx
# 10-32	○ ECD044B-004AB-A0-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)







# T E C H N I C A L

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 :  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

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

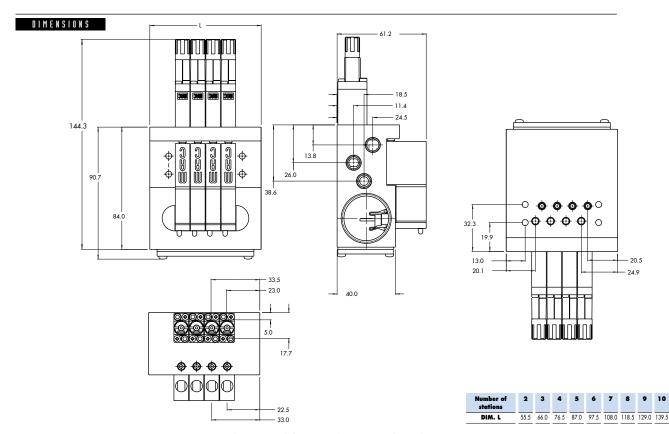
• Valve and coil are not interchangeable. Note:

• 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.

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





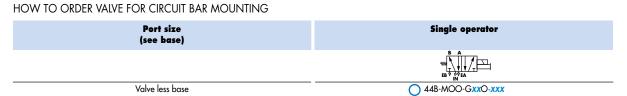
Port size Flow (Max) Circuit bar mounting **Function** 5/2, 3/2 NO-NC M5 - #10-32 0.07C<sub>w</sub> OPERATIONAL BENEFITS 1. 10 mm valve, direct solenoid operated. 2. Balanced poppet, immune to variations of pressure. 3. Short stroke with high flow. 4. The patented solenoid develops high shifting forces. 5. Powerful return spring.

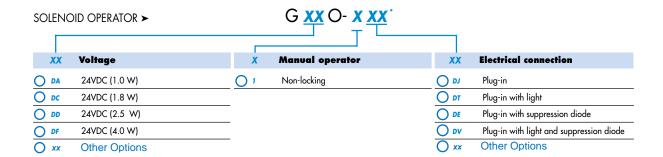
- 6. Flow is specifically adjusted on each valve.
  7. Manual operator standard on all valves.



HOW TO ORDER

44B-xxx-GxxO-xxx





# 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 # 10-32	ECD044B-007AD-A0-xx  ECD044B-007AB-A0-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)







# T E C H N I C A L

Fluid: Compressed air, vacuum, inert gases

Vacuum to 120 PSI Pressure range:

Lubrication: Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)

Filtration: 40 μ

Temperature range :  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

Orifice: 1.8 mm

Flow (at 6 bar,  $\Delta P = 1 bar$ ):  $4 W: 0.07 C_{v}, 2.5 W: 0.06 C_{v}, 1,8 W: 0.06 C_{v}, 1.0 W: 0.05 C_{v}$ 

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:

(with 4 W coil) De-energize: 1.5 ms

• Valve and coil are not interchangeable. Note:

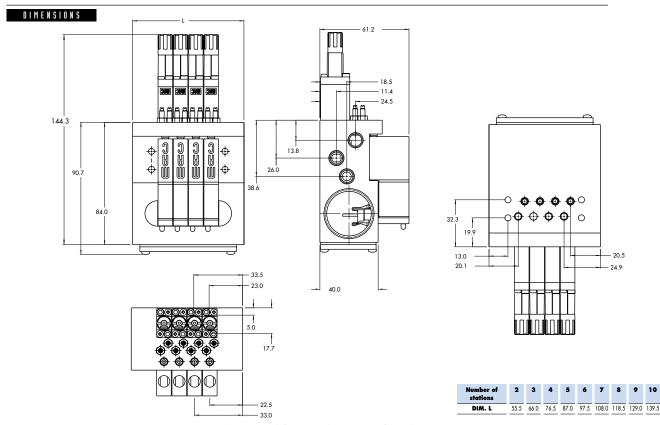
Energize: 4 ms

• 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.

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





Function	Port size	Flow (Max)	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.09C <sub>V</sub>	add-on style plug-in

- 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.

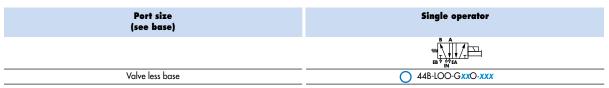


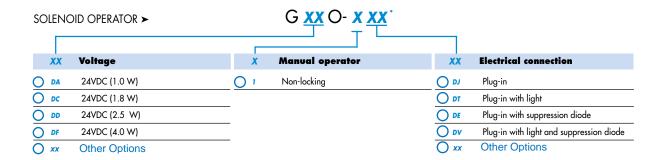




44B-xxx-GxxO-xxx

### HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING





# ECD044B-00xxx-AOxx

### HOW TO ORDER CIRCUIT BAR

Port size	Side cylinder ports (10.5 mm)	Bottom cylinder ports (10.5 mm)
M5 # 10-32	ECD044B-001BD-AOxx  ECD044B-001BB-AOxx	ECD044B-002BD-AOxx  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.







# T E C H N I C A L

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

0°F to 120°F (-18°C to +50°C) Temperature range :

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

-15% to +10% of nominal voltage Voltage range:

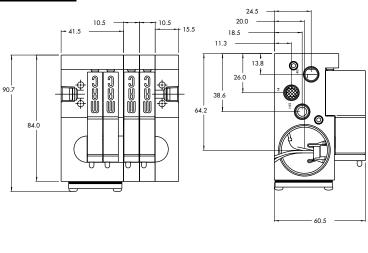
4 W - 2.5 W - 1.8 W - 1.0 W Power:

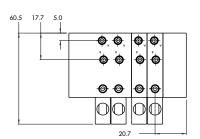
Response times: Energize: 4 ms (with 4 W coil) De-energize: 1.5 ms

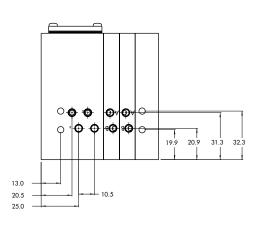
Note: • Valve and coil are not interchangeable.

• Valve mounting kit: N-44001-03. • Blanking plate: M-44003. Spare parts :

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









Function	Port size	Flow (Max)	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.08C <sub>V</sub>	add-on style plug-in with F. C.

- 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.

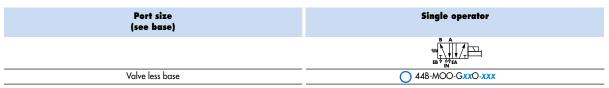


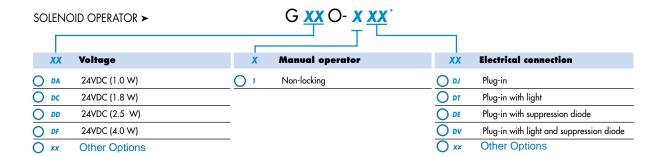




### 44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING





# 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 # 10-32	ECD044B-005BD-AOxx  ECD044B-005BB-AOxx	ECD044B-006BD-AOxx  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.

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







# TECHNICAL

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 :**  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

Orifice: 1.8 mm

Flow (at 6 bar,  $\Delta$ P=1bar): 4 W: 0.09 C<sub>v</sub>, 2.5 W: 0.08 C<sub>v</sub>, 1,8 W: 0.06 C<sub>v</sub>, 1.0 W: 0.05 C<sub>v</sub>

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

 Power:
 4 W - 2.5 W - 1.8 W - 1.0 W

 Response times:
 Energize: 4 ms

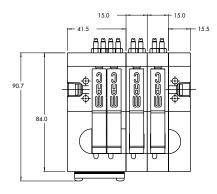
(with 4 W coil) De-energize : 1.5 ms

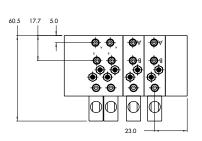
Note: • Valve and coil are not interchangeable.

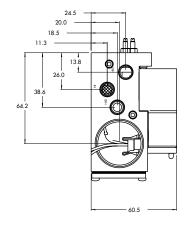
Spare parts: • Valve mounting kit: N-44001-03. • Blanking plate: M-44003. • Flow control needle (x2): N-44002.

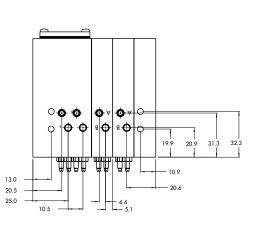
• Base wire Plug-in protector : 24180.

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











Port size Circuit bar mounting **Function** Flow (Max) add-on style plug-in with Pr. Reg. 5/2, 3/2 NO-NC M5 - #10-32 0.08C<sub>w</sub>

### 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.

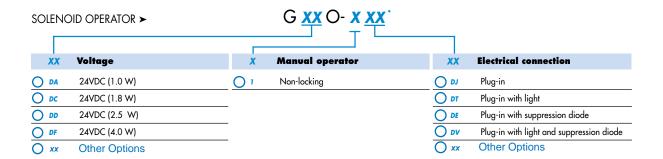


HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
	ES VOYEA
Valve less base	44B-LOO-GXXO-XXX



ECD044B-00xxx-AOxx

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

•	• • •
Port size	Bottom cylinder ports (10,5 mm)
M5 # 10-32	ECD044B-004BD-A0-xx  ECD044B-004BB-A0-xx
Number of stations (03=3 stations)  Note: dic 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.	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)







# T E C H N I C A L

Fluid: Compressed air, vacuum, inert gases

Vacuum to 120 PSI Pressure range:

Lubrication: Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)

Filtration: 40 μ

Temperature range :  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

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

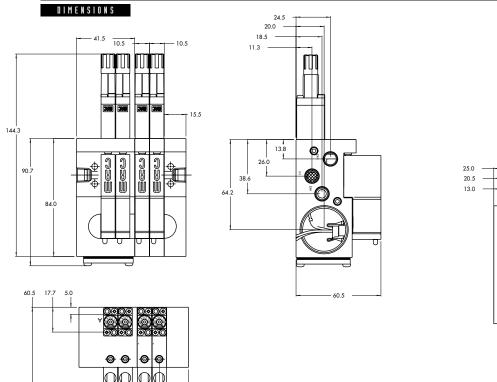
Note: • Valve and coil are not interchangeable.

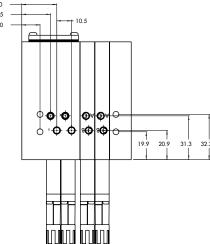
• Pressure range regulators : (0-100 PSI).

Spare parts : • Valve mounting kit: N-44001-03. • Blanking plate: M-44003. • Blanking plate regulator: N-44003.

• Base wire Plug-in protector : 24180.

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







Function	Port size	Flow (Max)	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.07C <sub>v</sub>	add-on style plug-in with Pr. Reg. and F. C.

- 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.

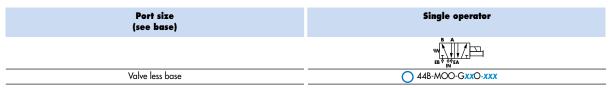


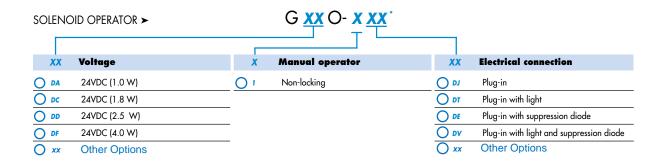


### 44B-xxx-GxxO-xxx

Reset

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING





# 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 # 10-32	<ul><li>○ ECD044B-007BD-A0-xx</li><li>○ ECD044B-007BB-A0-xx</li></ul>
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.	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)







# T E C H N I C A L

Fluid: Compressed air, vacuum, inert gases

Vacuum to 120 PSI Pressure range:

Lubrication: Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)

Filtration: 40 μ

Temperature range :  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

Orifice: 1.8 mm

Flow (at 6 bar,  $\Delta P = 1 bar$ ):  $4 W: 0.07 C_{v}, 2.5 W: 0.06 C_{v}, 1,8 W: 0.06 C_{v}, 1.0 W: 0.05 C_{v}$ 

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

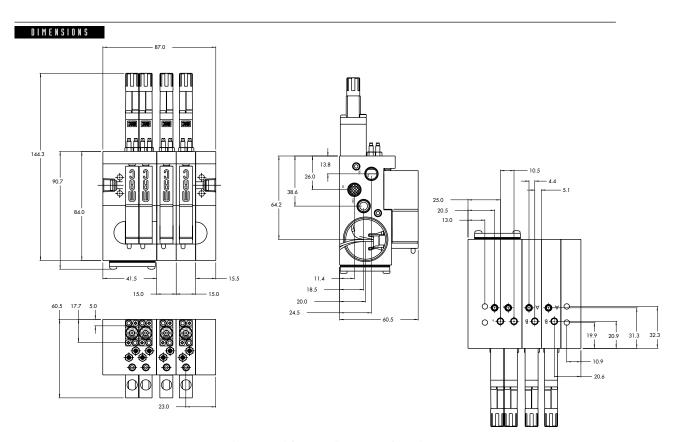
Note: • Valve and coil are not interchangeable.

• 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.

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





Port size Circuit bar mounting **Function** Flow (Max) plug-in add-a-unit 5/2 M5 - #10-32 0.09C<sub>w</sub>

### 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.

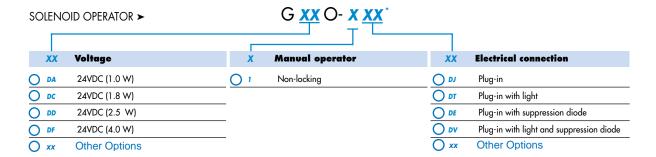


HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
	EB V RYEA
Valve less base	44B-LOO-GxxO-xxx



# ECD044B-00xxx-AOxx

### HOW TO ORDER CIRCUIT BAR

Port size	Side cylinder ports	Bottom cylinder ports
M5	CD044B-001CD-AOXX	CD044B-002CD-AOXX
# 10-32	ECD044B-001CB-AOxx	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.







# T E C H N I C A L

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

0°F to 120°F (-18°C to +50°C) Temperature range :

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

-15% to +10% of nominal voltage Voltage range:

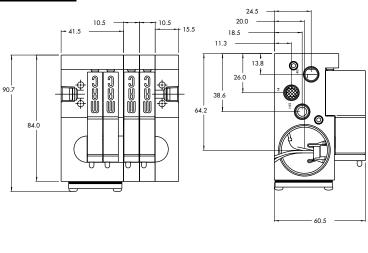
4 W - 2.5 W - 1.8 W - 1.0 W Power:

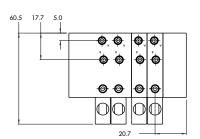
Response times: Energize: 4 ms (with 4 W coil) De-energize: 1.5 ms

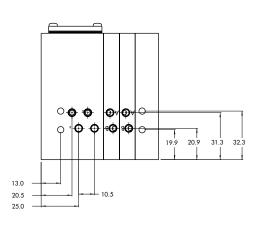
Note: • Valve and coil are not interchangeable.

• Valve mounting kit: N-44001-03. • Blanking plate: M-44003. Spare parts :

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









Function	Port size	Flow (Max)	Circuit bar mounting
5/2	M5 - #10-32	0.08C <sub>V</sub>	plug-in add-a-unit stations with F. C.

- 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.

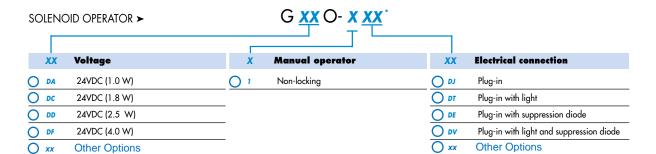


HOW TO ORDER

44B-xxx-GxxO-xxx

### HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
	B A A A A A A A A A A A A A A A A A A A
Valve less base	44B-MOO-GxxO-xxx



# ECD044B-00xxx-AOxx

### HOW TO ORDER CIRCUIT BAR WITH FLOW CONTROLS

Port size	Side cylinder ports	Bottom cylinder ports
M.5	CD044B-005CD-AOXX	CD044B-006CD-AOXX
# 10-32	CD044B-005CB-AOXX	ECD044B-006CB-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

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 :**  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

Orifice: 1.8 mm

Flow (at 6 bar,  $\Delta$ P=1bar): 4 W: 0.09 C<sub>v</sub>, 2.5 W: 0.08 C<sub>v</sub>, 1,8 W: 0.06 C<sub>v</sub>, 1.0 W: 0.05 C<sub>v</sub>

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

 Power:
 4 W - 2.5 W - 1.8 W - 1.0 W

 Response times:
 Energize: 4 ms

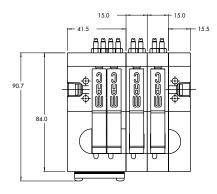
(with 4 W coil) De-energize : 1.5 ms

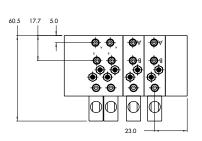
Note: • Valve and coil are not interchangeable.

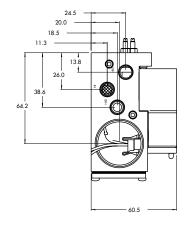
Spare parts: • Valve mounting kit: N-44001-03. • Blanking plate: M-44003. • Flow control needle (x2): N-44002.

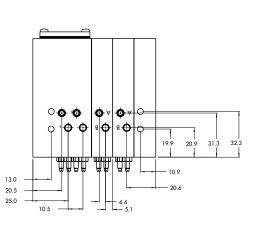
• Base wire Plug-in protector : 24180.

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











Function	Port size	Flow (Max)	Circuit bar mounting	
5/2	M5 - #10-32	0.08C <sub>V</sub>	plug-in add-a-unit stations with Pr. Rea.	

- 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.

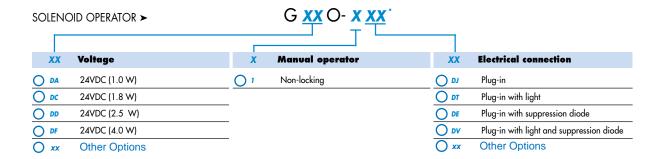


HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
	B A V I
Valve less base	44B-LOO-GXXO-XXX



ECD044B-00xxx-AOxx

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

(10 to 5 states of the second			
Port size	Bottom cylinder ports (10,5 mm)		
# 10-32  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.	ECD044B-004CD-AOxx  ECD044B-004CB-AOxx  *** 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)		







# T E C H N I C A L

Fluid: Compressed air, vacuum, inert gases

Vacuum to 120 PSI Pressure range:

Lubrication: Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)

Filtration: 40 μ

Temperature range :  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

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

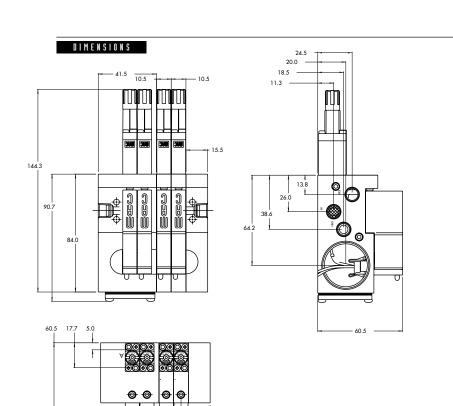
Note: • Valve and coil are not interchangeable.

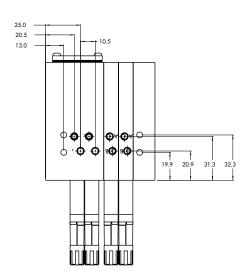
• Pressure range regulators : (0-100 PSI).

Spare parts : • Valve mounting kit: N-44001-03. • Blanking plate: M-44003. • Blanking plate regulator: N-44003.

• Base wire Plug-in protector : 24180.

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







Function	Port size	Flow (Max)	Circuit bar mounting
5/2	M5 - #10-32	0.07C <sub>V</sub>	plug-in add-a-unit stations with E. C. and Pr. Rec.

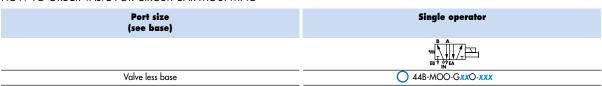
- 1. 10 mm valve, direct solenoid operated.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Flow is specifically adjusted on each valve.
  7. Manual operator standard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

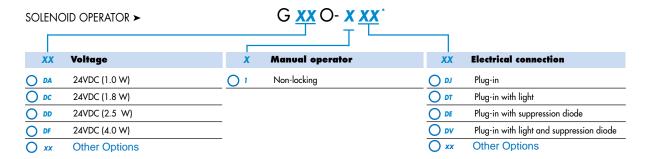




### 44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING





### ECD044B-00xxx-AOxx

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

TIOTY TO ORDER CIRCOII BAR TITITIEOTY COTTINGED AID TRESSORE	(LOOLATORO [pressure regulators to be ordered separately)
Port size	Bottom cylinder ports (10,5 mm)
M5 # 10-32	CD044B-007CD-AOxx CD044B-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)







# T E C H N I C A L

Fluid: Compressed air, vacuum, inert gases

Vacuum to 120 PSI Pressure range:

Lubrication: Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)

Filtration: 40 μ

Temperature range :  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

Orifice: 1.8 mm

Flow (at 6 bar,  $\Delta P = 1 bar$ ):  $4 W: 0.07 C_{v}, 2.5 W: 0.06 C_{v}, 1,8 W: 0.06 C_{v}, 1.0 W: 0.05 C_{v}$ 

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

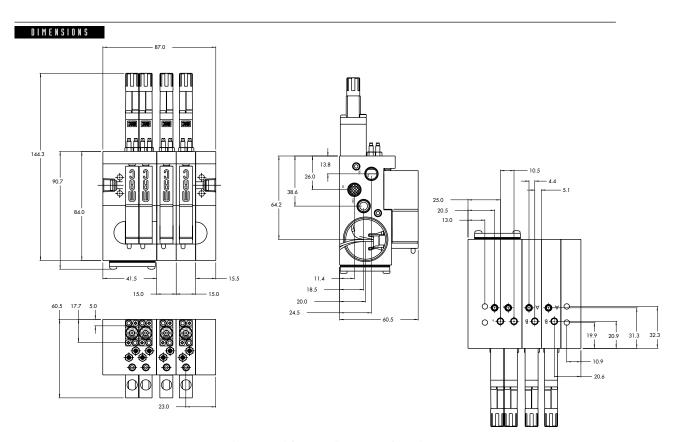
Note: • Valve and coil are not interchangeable.

• 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.

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





Function	Port size	Flow (Max)	Circuit bar mounting	
5/2, 3/2 NO-NC	M5 - #10-32, 4 mm tube receptacle	0.10C <sub>V</sub>	plug-in with pre-wired connector	

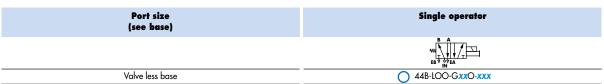
- 1. 10 mm valve, direct solenoid operated.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Flow is specifically adjusted on each valve.
- 7. Manual operator standard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

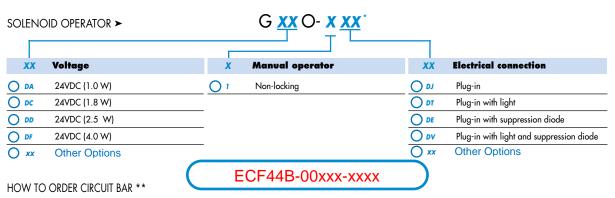




### 44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING





Port size	Side cylinder ports (10.5 mm)	Bottom cylinder ports (10.5 mm)
M.5	○ ECF44B-00BDA-zzxx	CF44B-00CDA-zzxx
# 10-32	ECF44B-00BBA-zzxx	ECF44B-00CBA-zzxx
4 mm tube receptacle	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
00000000	LE LF	15 Pin Sub D* 25 Pin Sub D* 10 Pin Ribbon Cable** 20 Pin Ribbon Cable** 20 Pin Ribbon Cable**	RB RC RD RE RF RG	9 Pin Sub D* 15 Pin Sub D* 25 Pin Sub D* 10 Pin Ribbon Cable** 16 Pin Ribbon Cable** 20 Pin Ribbon Cable** 26 Pin Ribbon Cable** 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<sub>V</sub>, 2.5 W: 0.08 C<sub>V</sub>, 1,8 W: 0.06 C<sub>V</sub>, 1.0 W: 0.05 C<sub>V</sub>

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:

Response times:

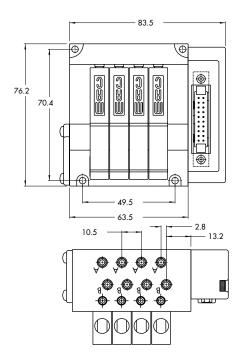
Energize: 4 ms

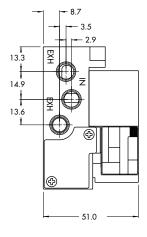
(with 4 W coil) De-energize : 1.5 ms

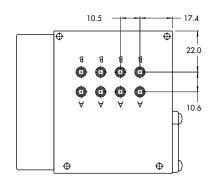
Note: • Valve and coil are not interchangeable.

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.









Function	Port size	Flow (Max)	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.09C <sub>V</sub>	plug-in with F. C. and pre-wired connector

- 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.

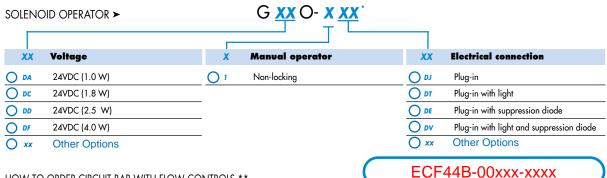


HOW TO ORDER

44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Single operator
	ES O NO EA
Valve less base	44B-MOO-GXXO-XXX



HOW TO ORDER CIRCUIT BAR WITH FLOW CONTROLS \*\*

Port size **Bottom cylinder ports** (10.5 mm) CF44B-00EDA-ZZXX M5 # 10-32 CF44B-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	
00000000	LE LF	9 Pin Sub D* 15 Pin Sub D* 25 Pin Sub D* 10 Pin Ribbon Cable** 20 Pin Ribbon Cable** 20 Pin Ribbon Cable** 26 Pin Ribbon Cable** 3/8" NPSM Conduit Port O Standard Base Wires	RB RC RD RE RF RG	9 Pin Sub D* 15 Pin Sub D* 25 Pin Sub D* 10 Pin Ribbon Cable** 16 Pin Ribbon Cable** 20 Pin Ribbon Cable** 26 Pin Ribbon Cable** 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 :  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

Orifice: 1.8 mm

Flow (at 6 bar,  $\Delta$ P=1bar): 4 W : 0.09 C<sub>v</sub>, 2.5 W : 0.08 C<sub>v</sub>, 1,8 W : 0.06 C<sub>v</sub>, 1.0 W : 0.05 C<sub>v</sub>

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:
 4 W - 2.5 W - 1.8 W - 1.0 W

 Energize: 4 ms

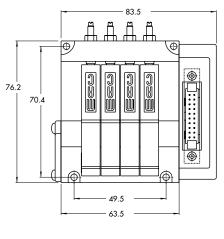
(with 4 W coil) De-energize : 1.5 ms

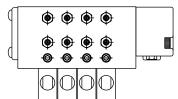
Note: • Valve and coil are not interchangeable.

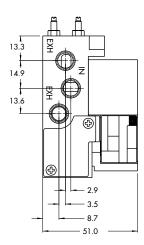
Spare parts: • Valve mounting kit: N-44001-03. • Blanking plate: M-44003. • Flow control needle (x2): N-44002.

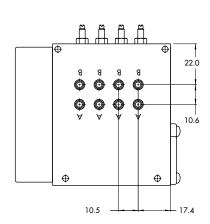
Base wire Plug-in protector : 24180.

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











Function	Port size	Floш (Max)	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32	0.09C <sub>V</sub>	plug-in with Pr. Reg. and pre-wired connector

- 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.

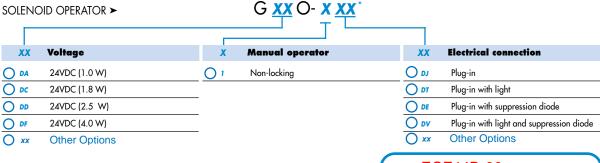




### 44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING





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

### ECF44B-00xxx-xxxx

Port size	Bottom cylinder ports (10.5 mm)
M5	CF44B-00GDA-ZZXX
# 10-32	○ 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)
- O X=D (0 to 15 PSI)

- ZZ Connector Connector LA 9 Pin Sub D\*

  LB 15 Pin Sub D\*

  LC 25 Pin Sub D\*

  LD 10 Pin Ribbon Cable\*\*

  LE 16 Pin Ribbon Cable\*\*

  LF 20 Pin Ribbon Cable\*\*

  LG 26 Pin Ribbon Cable\*\*

  LG 26 Pin Ribbon Cable\*\*

  LG 3/8" NPSM Conduit Por O RA 9 Pin Sub D\* O RB 15 Pin Sub D\* RC 25 Pin Sub D\*
  - RC 25 Pin Sub D\*

    RD 10 Pin Ribbon Cable\*\*

    RE 16 Pin Ribbon Cable\*\*

    RF 20 Pin Ribbon Cable\*\*

    RG 26 Pin Ribbon Cable\*\* LG 26 Pin Ribbon Cable\*\* 3/8" NPSM Conduit Port O RH 3/8" NPSM Conduit Port Standard Base Wires Standard Base Wires

L=Left Side; R=Right Side

- 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:  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

Orifice: 1.8 mm

Flow (at 6 bar,  $\Delta$ P=1bar): 4 W: 0.09 C<sub>v</sub>, 2.5 W: 0.08 C<sub>v</sub>, 1,8 W: 0.06 C<sub>v</sub>, 1.0 W: 0.05 C<sub>v</sub>

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

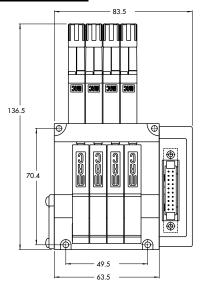
Note: • Valve and coil are not interchangeable.

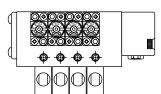
Pressure range regulator (0-100 PSI)

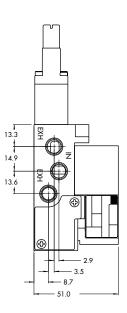
Spare parts : • Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Blanking plate regulator : N-44003.

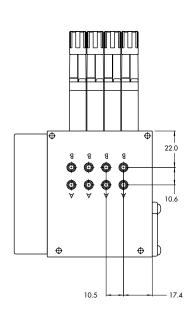
Base wire Plug-in protector : 24180.

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











Function	Port size	Flow (Max)	Circuit bar mounting
5/2, 3/2 NO-NC	M5 - #10-32, 4 mm tube receptacle	0.10C <sub>V</sub>	din rail, plug-in with pre-wired connector

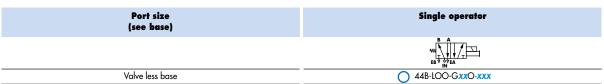
- 1. 10 mm valve, direct solenoid operated.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Flow is specifically adjusted on each valve.
- 7. Manual operator standard on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

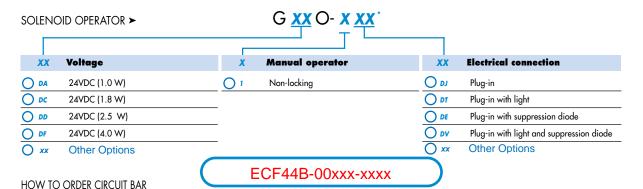




44B-xxx-GxxO-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING





Port size	Side cylinder ports (10.5 mm)
M5	CF44B-00BDB-ZZXX
# 10-32	CF44B-00BBB-zzxx
4 mm tube receptacle	CF44B-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	=Rig	ht Side
ZZ	Connector	ZZ	Connector
IA IB IC ID IE IF IG IH	15 Pin Sub D* 25 Pin Sub D* 10 Pin Ribbon Cable** 16 Pin Ribbon Cable** 20 Pin Ribbon Cable**	RB RC RD RE RF RG	16 Pin Ribbon Cable** 20 Pin Ribbon Cable** 26 Pin Ribbon Cable**

- \* 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:  $0^{\circ}F$  to  $120^{\circ}F$  (- $18^{\circ}C$  to  $+50^{\circ}C$ )

Orifice: 1.8 mm

Flow (at 6 bar, ΔP=1bar): 4 W: 0.10 C<sub>V</sub>, 2.5 W: 0.08 C<sub>V</sub>, 1,8 W: 0.06 C<sub>V</sub>, 1.0 W: 0.05 C<sub>V</sub>

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 : 4 W - 2.5 W - 1.8 W - 1.0 W
Energize : 4 ms

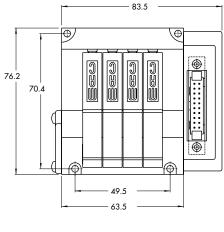
 Response times:
 Energize: 4 ms

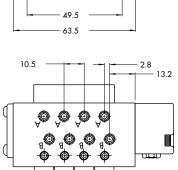
 (with 4 W coil)
 De-energize: 1.5 ms

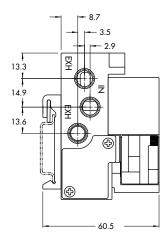
Note: • Valve and coil are not interchangeable.

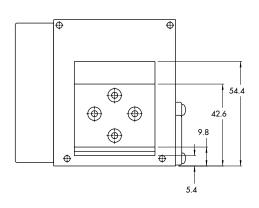
Spare parts : • Valve mounting kit : N-44001-03. • Blanking plate : M-44003. • Base wire Plug-in protector : 24180.

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











# Section 2 Options

### Codification table for voltages / Manual operator / Electrical connection

VALVE CODE >  $-G \underbrace{XX}_{1} \underbrace{X}_{2} - \underbrace{X}_{3} \underbrace{XX}_{4}$ 

### **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)	○ DA	24 VDC (1,0 W)	
DD	24 VDC (2,5 W)	ODC	24 VDC (1,8 W)	
DE	24 VDC (3,0 W)	ODD	24 VDC (2,5 W)	
DF	24 VDC (4,0 W)	○ DF	24 VDC (4,0 W)	
DJ	12 VDC (1,8 W)	ODG	12 VDC (1,0 W)	
DK	12 VDC (2,5 W)	מם 🔾	12 VDC (1,8 W)	
DM	12 VDC (3,0 W)	<b>⊙</b> DK	12 VDC (2,5 W)	
DN	12 VDC (4,0 W)	ODN	12 VDC (4,0 W)	

		2. WIRE LENGTH (Common options for 34 & 44 Series)
-G XX X - X XX WIRE LENGTH		
O A	18"	
<b>○</b> B	24"	
O c	36"	
D	48"	
○ E	72"	
○ F	96″	
O G	120″	
Он	144"	

S





	3. MANUAL OPERATOR (COMMON OPTIONS FOR 34 & 44 SERIES)	
-G XX X - X XX	MANUAL OPERATOR	
1	Non-locking recessed	
3	Non-locking extended	

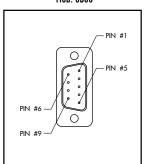
		4. ELECTRICAL CONNECTION (COMMON OPTIONS FOR 34 & 44 SERIES)
-G XX X	- X XX	NO CONNECTOR
0	BA	Flying leads
0	BB	BA with ground wire
0	BC	BA with light
O	BD	BA with light and ground wire
0	BE	BA with suppression diode
0	BF	BA with suppression diode and ground wire
O	BG	BA with suppression diode and light
0	ВН	BA with suppression diode, light and ground wire
<u>O</u>	BN	BA with suppression diode and blocking diode
<u>•</u>	BP	BA with suppression diode, blocking diode and ground wire
O	BR	BA with suppression diode, blocking diode and light
0	BS	BA with suppression diode, blocking diode, light and ground wire
0	BT	BA with light
0	BU	BA with light and ground wire
0	BV	BA with suppression diode and light
0	BW	BA with suppression diode, light and ground wire
0	BX	BA with suppression diode, blocking diode and light
0	BY	BA with suppression diode, blocking diode, light and ground wire

-G XX	X - X XX	PLUG-IN CONNECTOR
0	KA	Mini connector with flying leads
0	KB	KA with ground wire
0	KE	KA with suppression diode
0	KF	KA with suppression diode and ground wire
0	KJ	Mini connector for KA option
0	KM	Mini connector for KB option
O	KN	KA with suppression diode and blocking diode
O	KP	KA with suppression diode, blocking diode and ground wire
O	KT	KA with light
0	KU	KA with light and ground wire
0	KV	KA with suppression diode and light
O	KW	KA with suppression diode, light and ground wire
0	KX	KA with suppression diode, blocking diode and light
0	KY	KA with suppression diode, blocking diode, light and ground wire









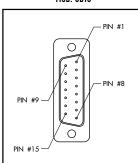
### TECHNICAL DATA

- Type «SUB\_D»
- Number of contacts : 9
- 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 ≥ 5.0° Ω
   Protection class IP40 (DIN 40050)
   Number of sclapside: 7 mm²

- Number of solenoids: 7 max.
  Max. 24 V=/5.4 W per solenoid
- 2 common wires

MOD. SD15





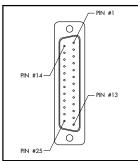
### TECHNICAL DATA

- Type «SUB\_D»
- Number of contacts: 15
  Solder termination (Dia. 0.6 mm/0.14 mm<sup>2</sup>/26-22 AWG)

- Solder termination (Did. 0.6 mm/0)
   Operating current 5 A/contact
   Rated voltage 125 V~
   Temp. range -40° to +125°C
   Insulation resistance ≥ 5.0° Ω
   Protection class IP40 (DIN 40050)
- Number of solenoids: 12 max.
- Max. 24 V=/5.4 W per solenoid
- 3 common wires

MOD. SD25





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

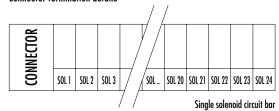
### TECHNICAL DATA

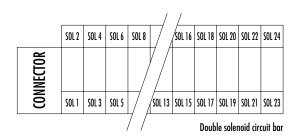
- Type «SUB\_D»
- Number of contacts : 25
- Number of contacts: 25
   Solder termination (Dia. 0.6 mm/0.14 mm²/26-22 AWG)
   Operating current 5 A/contact
   Rated voltage 125 V~
   Temp. range -40° to +125°C
   Insulation resistance ≥ 5.0° Ω

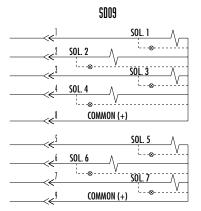
- Protection class IP40 (DIN 40050)
- Number of solenoids : 20 max.
- Max. 24 V=/5.4 W per solenoid
- 5 common wires

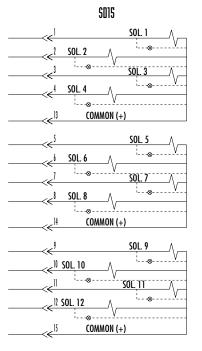


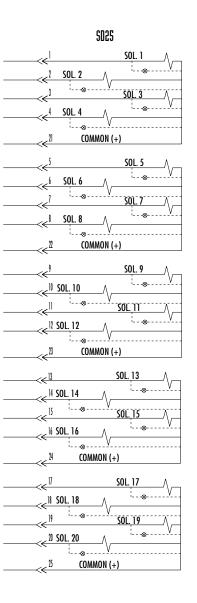
### Connector termination details













# 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 USF -

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 have a

### 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.
- 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. 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.