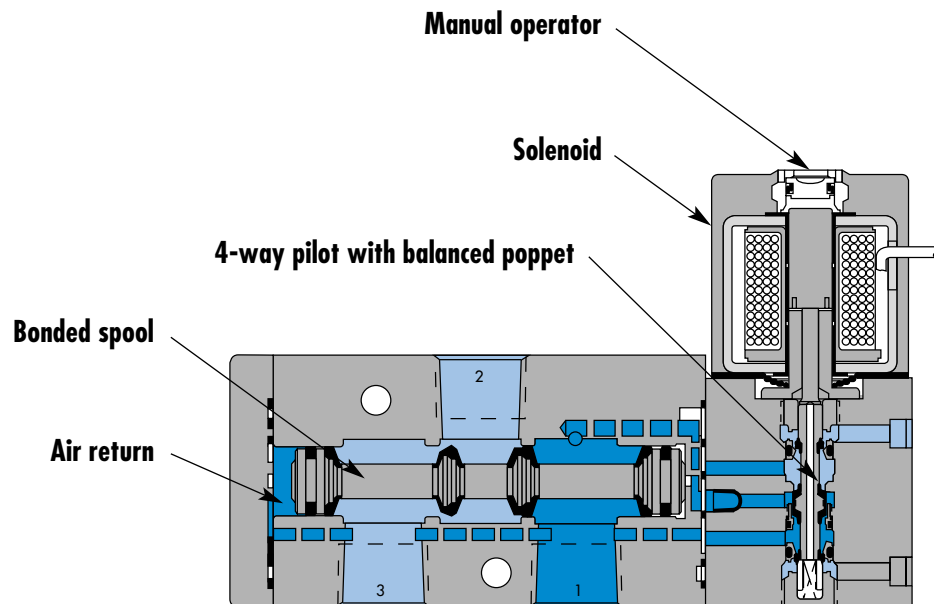


### Circuit bar mounting

cylinder ports in valve	add-on style cylinder ports in valve	cylinder ports in base	add-on style cylinder ports in base	add-a-unit stations for CBM052A bar	add-a-unit stations for CBP052A bar
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### SERIES FEATURES

- Patented MACSOLENOID<sup>®</sup> for fastest possible response times and virtually burn-out proof AC solenoid operation.
- Optional low watt DC solenoids.
- Various manual operators.
- Optional memory spring.
- Normally closed or normally open valve function.
- May be plugged for 2-way operation.
- Internal or external pilot.

<b>Function</b>	<b>Port size</b>	<b>Flow [Max]</b>	<b>Circuit bar mounting</b>
<b>3/2 NO-NC</b>	<b>1/8" - 1/4"</b>	<b>1.2C<sub>v</sub></b>	cylinder ports in valve

### OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting forces both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.
8. Long service life.



### HOW TO ORDER

**52A-xx-xxx-DM-Dxxx-xxx**

### SOLENOID OPERATOR

Port size	Pilot air	Single operator		Double operator	
		NO valve	NC valve	NO valve	NC valve
<b>1/8" NPTF</b>	Internal	<input type="radio"/> 52A-31-AOA-DM-Dxxx-xxx	<input type="radio"/> 52A-11-AOA-DM-Dxxx-xxx	<input type="radio"/> 52A-41-AOA-DM-Dxxx-xxx	<input type="radio"/> 52A-21-AOA-DM-Dxxx-xxx
<b>1/4" NPTF</b>		<input type="radio"/> 52A-31-BOA-DM-Dxxx-xxx	<input type="radio"/> 52A-11-BOA-DM-Dxxx-xxx	<input type="radio"/> 52A-41-BOA-DM-Dxxx-xxx	<input type="radio"/> 52A-21-BOA-DM-Dxxx-xxx
<b>1/8" NPTF</b>	External	<input type="radio"/> 52A-31-AOC-DM-Dxxx-xxx	<input type="radio"/> 52A-11-AOC-DM-Dxxx-xxx	<input type="radio"/> 52A-41-AOC-DM-Dxxx-xxx	<input type="radio"/> 52A-21-AOC-DM-Dxxx-xxx
<b>1/4" NPTF</b>		<input type="radio"/> 52A-31-BOC-DM-Dxxx-xxx	<input type="radio"/> 52A-11-BOC-DM-Dxxx-xxx	<input type="radio"/> 52A-41-BOC-DM-Dxxx-xxx	<input type="radio"/> 52A-21-BOC-DM-Dxxx-xxx

### SOLENOID OPERATOR >

D **XX X - X XX**\*

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connection
<input type="radio"/> JA	120/60, 110/50	<input type="radio"/> A	18" (Flying leads)	<input type="radio"/> 1	Non-locking	<input type="radio"/> KA	Square connector
<input type="radio"/> JB	240/60, 220/50	<input type="radio"/> J	Connector	<input type="radio"/> 2	Locking	<input type="radio"/> KD	Square connector with light
<input type="radio"/> JC	24/60, 24/50	<input type="radio"/> x	Other Options	<input type="radio"/> x	Other Options	<input type="radio"/> JB	Rectangular connector
<input type="radio"/> DA	24VDC (5.4 W)					<input type="radio"/> JD	Rectangular connector with light
<input type="radio"/> FB	24VDC (1.8 W)					<input type="radio"/> BA	Flying leads
<input type="radio"/> DF	24VDC (12.7 W)					<input type="radio"/> xx	Other Options
<input type="radio"/> xx	Other Options						

### HOW TO ORDER CIRCUIT BAR \*\*

**CBM052A-xxxxx-xx**

Port size	Pilot air	Spacing standard 19,5 mm	Spacing 26 mm (Rectangular connector)
<b>3/8" NPTF</b>	Internal	<input type="radio"/> CBM052A-00AAA-xx	<input type="radio"/> CBM052A-02AAA-xx
	External	<input type="radio"/> CBM052A-00CAA-xx	<input type="radio"/> CBM052A-02CAA-xx

Number of stations (03=3 stations)   
 \*\* Other options available. Consult factory.

### OPTIONS

52A-31-AOA-DM-Dxxx-xxx

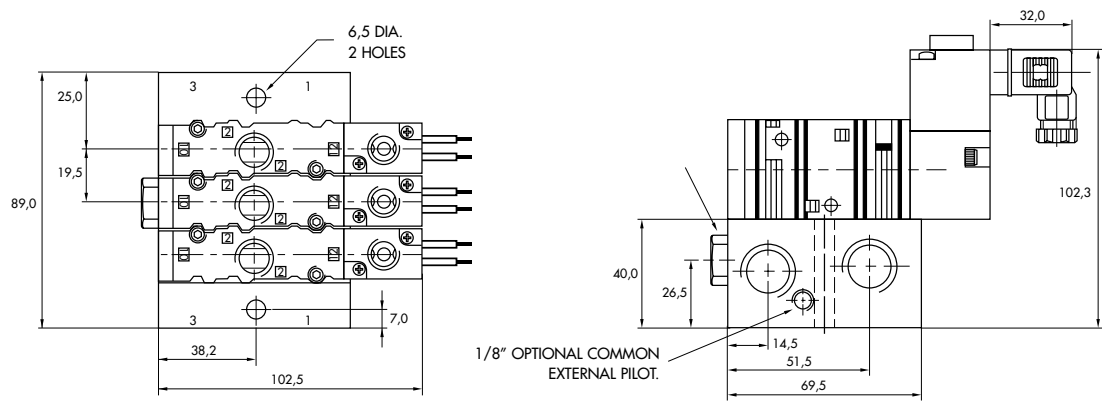
clic for memory spring (replace by 4).

**TECHNICAL  
DATA**

<b>Fluid :</b>	Compressed air, vacuum, inert gases
<b>Pressure range :</b>	Internal pilot : 20 - 150 PSI External pilot : vacuum to 150 PSI
<b>Pilot pressure :</b>	20 - 150 PSI
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)
<b>Filtration :</b>	40 µ
<b>Temperature range :</b>	0°F to 120°F (-18°C to +50°C)
<b>Orifice :</b>	7.3 mm
<b>Flow :</b>	1.2C <sub>v</sub>
<b>Coil :</b>	General purpose class A, continuous duty, encapsulated
<b>Voltage range :</b>	-15% to +10% of nominal voltage
<b>Protection :</b>	NEMA 4
<b>Power :</b>	~ Inrush : 10.9 VA      Holding : 7.7 VA = 1.8 to 12.7 W
<b>Response times :</b>	24 V= / 5.4 W      Energize : 7.3 ms      De-energize : 5.3ms 60Hz/6 W      Energize : 8-12 ms      De-energize : 7-11 ms

- Spare parts :      • Pilot valve : DMB-DXXX-XXX-1, including mounting screws 35043 and seal 16524.
- Accessories      • Blanking plate : M-04001. • Seal (x3) : 17015-01. • Mounting screw (x2) : 35043.
- Options :      • BSPP threads. • Isolation of inlet and/or exhaust.

**DIMENSIONS**



<b>Function</b>	<b>Port size</b>	<b>Flow [Max]</b>	<b>Circuit bar mounting</b>
<b>3/2 NO-NC</b>	<b>1/8" - 1/4"</b>	<b>1.2C<sub>v</sub></b>	add-on style cylinder ports in valve

### OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting forces both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.
8. Long service life.



### HOW TO ORDER

**52A-xx-xxx-DM-Dxxx-xxx**

### SOLENOID OPERATOR

Port size	Pilot air	Single operator		Double operator	
		NO valve	NC valve	NO valve	NC valve
<b>1/8" NPTF</b>	Internal	<input type="radio"/> 52A-31-AOA-DM-Dxxx-xxx	<input type="radio"/> 52A-11-AOA-DM-Dxxx-xxx	<input type="radio"/> 52A-41-AOA-DM-Dxxx-xxx	<input type="radio"/> 52A-21-AOA-DM-Dxxx-xxx
<b>1/4" NPTF</b>		<input type="radio"/> 52A-31-BOA-DM-Dxxx-xxx	<input type="radio"/> 52A-11-BOA-DM-Dxxx-xxx	<input type="radio"/> 52A-41-BOA-DM-Dxxx-xxx	<input type="radio"/> 52A-21-BOA-DM-Dxxx-xxx
<b>1/8" NPTF</b>	External	<input type="radio"/> 52A-31-AOC-DM-Dxxx-xxx	<input type="radio"/> 52A-11-AOC-DM-Dxxx-xxx	<input type="radio"/> 52A-41-AOC-DM-Dxxx-xxx	<input type="radio"/> 52A-21-AOC-DM-Dxxx-xxx
<b>1/4" NPTF</b>		<input type="radio"/> 52A-31-BOC-DM-Dxxx-xxx	<input type="radio"/> 52A-11-BOC-DM-Dxxx-xxx	<input type="radio"/> 52A-41-BOC-DM-Dxxx-xxx	<input type="radio"/> 52A-21-BOC-DM-Dxxx-xxx

### SOLENOID OPERATOR >

**D XX X - X XX\***

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connection
<input type="radio"/> JA	120/60, 110/50	<input type="radio"/> A	18" (Flying leads)	<input type="radio"/> 1	Non-locking	<input type="radio"/> KA	Square connector
<input type="radio"/> JB	240/60, 220/50	<input type="radio"/> J	Connector	<input type="radio"/> 2	Locking	<input type="radio"/> KD	Square connector with light
<input type="radio"/> JC	24/60, 24/50	<input type="radio"/> x	Other Options	<input type="radio"/> x	Other Options	<input type="radio"/> JB	Rectangular connector
<input type="radio"/> DA	24VDC (5.4 W)					<input type="radio"/> JD	Rectangular connector with light
<input type="radio"/> FB	24VDC (1.8 W)					<input type="radio"/> BA	Flying leads
<input type="radio"/> DF	24VDC (12.7 W)					<input type="radio"/> xx	Other Options
<input type="radio"/> xx	Other Options						

**CBM052A-xxxxx-xx**

### HOW TO ORDER CIRCUIT BAR \*\*

Port size	Pilot air	Spacing standard 19,5 mm	Spacing 26 mm (Rectangular connector)
<b>3/8" NPTF</b>	Internal	<input type="radio"/> CBM052A-00ABA-xx	<input type="radio"/> CBM052A-02ABA-xx
	External	<input type="radio"/> CBM052A-00CBA-xx	<input type="radio"/> CBM052A-02CBA-xx

Number of stations (03=3 stations)   
 \*\* Other options available. Consult factory.

Note : add-a-unit stations may be added to above bars. Click here for model numbers.

### OPTIONS

52A-31-AOA-DM-Dxxx-xxx

clic for memory spring (replace by 4).

**TECHNICAL  
DATA**

<b>Fluid :</b>	Compressed air, vacuum, inert gases		
<b>Pressure range :</b>	Internal pilot : 20 - 150 PSI External pilot : vacuum to 150 PSI		
<b>Pilot pressure :</b>	20 - 150 PSI		
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
<b>Filtration :</b>	40 µ		
<b>Temperature range :</b>	0°F to 120°F (-18°C to +50°C)		
<b>Orifice :</b>	7.3 mm		
<b>Flow :</b>	1.2C <sub>v</sub>		
<b>Coil :</b>	General purpose class A, continuous duty, encapsulated		
<b>Voltage range :</b>	-15% to +10% of nominal voltage		
<b>Protection :</b>	NEMA 4		
<b>Power :</b>	~ Inrush : 10.9 VA      Holding : 7.7 VA = 1.8 to 12.7 W		
<b>Response times :</b>	24 V= /5.4 W	Energize : 7.3 ms	De-energize : 5.3ms
	60Hz/6 W	Energize : 8-12 ms	De-energize : 7-11 ms

Spare parts :

- Pilot valve : DMB-DXXX-XXX-1, including mounting screws 35043 and seal 16524.

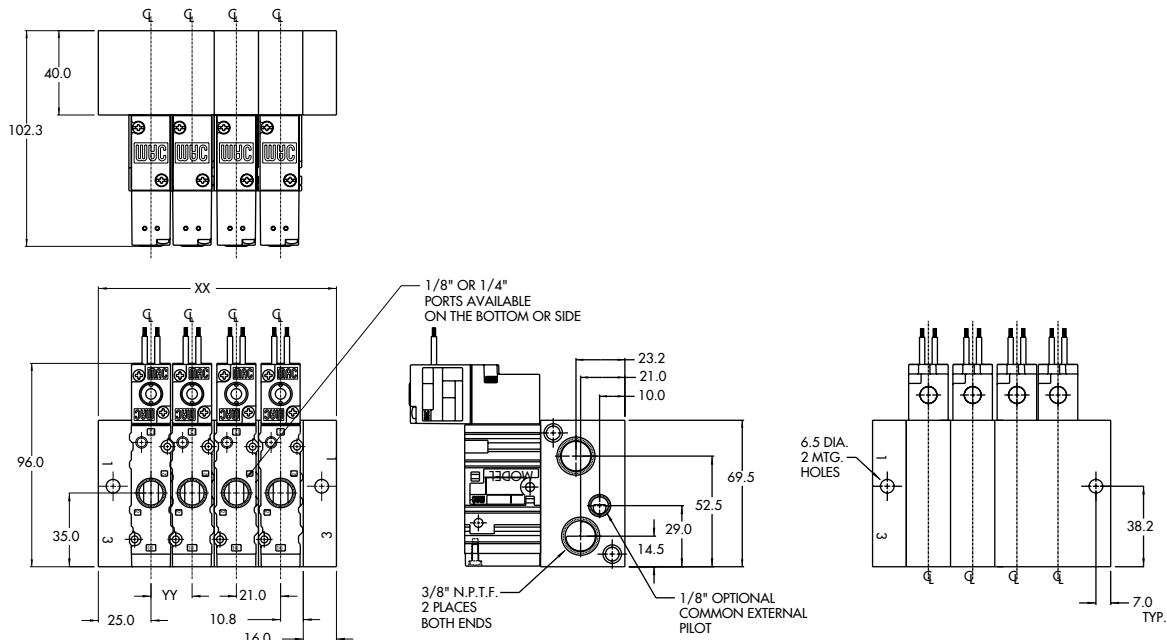
Accessories

- Blanking plate : M-04001. • Seal (x3) : 17015-01. • Mounting screw (x2) : 35043. • End plate kit (Internal) : M-52001-01.
- End plate kit (External) : M-52002-01.

Options :

- BSPP threads. • Isolation of inlet and/or exhaust.

**DIMENSIONS**



YY	XX
19.5	113
26	119.5

<b>Function</b>	<b>Port size</b>	<b>Flow [Max]</b>	<b>Individual mounting</b>
<b>3/2 NO-NC</b>	<b>1/8" - 1/4"</b>	<b>1.2C<sub>v</sub></b>	cylinder ports in base

### OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting forces both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.
8. Long service life.

**Reset**



### HOW TO ORDER

**52A-xx-xxx-DM-Dxxx-xxx**

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Pilot air	Single operator		Double operator	
	NO valve	NC valve	NO valve	NC valve
Internal				
External				

SOLENOID OPERATOR >

D **XX X - X XX**

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connection
<input type="radio"/> JA	120/60, 110/50	<input type="radio"/> A	18" (Flying leads)	<input type="radio"/> 1	Non-locking	<input type="radio"/> KA	Square connector
<input type="radio"/> JB	240/60, 220/50	<input type="radio"/> J	Connector	<input type="radio"/> 2	Locking	<input type="radio"/> KD	Square connector with light
<input type="radio"/> JC	24/60, 24/50	<input type="radio"/> x	Other Options	<input type="radio"/> x	Other Options	<input type="radio"/> JB	Rectangular connector
<input type="radio"/> DA	24VDC (5.4 W)					<input type="radio"/> JD	Rectangular connector with light
<input type="radio"/> FB	24VDC (1.8 W)					<input type="radio"/> BA	Flying leads
<input type="radio"/> DF	24VDC (12.7 W)					<input type="radio"/> xx	Other Options
<input type="radio"/> xx	Other Options						

**CBP052A-xxxxx-xx**

HOW TO ORDER CIRCUIT BAR \*\*

Port size (NPTF)	Pilot air	Spacing standard 19,5 mm	Spacing 26 mm (Rectangular connector)
<b>1/8" SIDE PORT</b>	Internal	<input type="radio"/> CBP052A-00AAA-xx	<input type="radio"/> CBP052A-02AAA-xx
<b>1/4" SIDE PORT</b>		<input type="radio"/> CBP052A-00AAD-xx	<input type="radio"/> CBP052A-02AAD-xx
<b>1/8" SIDE PORT</b>	External	<input type="radio"/> CBP052A-00EAA-xx	<input type="radio"/> CBP052A-02EAA-xx
<b>1/4" SIDE PORT</b>		<input type="radio"/> CBP052A-00EAD-xx	<input type="radio"/> CBP052A-02EAD-xx
<b>1/8" BOTTOM PORT</b>	Internal	<input type="radio"/> CBP052A-00BAA-xx	<input type="radio"/> CBP052A-02BAA-xx
<b>1/4" BOTTOM PORT</b>		<input type="radio"/> CBP052A-00BAD-xx	<input type="radio"/> CBP052A-02BAD-xx
<b>1/8" BOTTOM PORT</b>	External	<input type="radio"/> CBP052A-00FAA-xx	<input type="radio"/> CBP052A-02FAA-xx
<b>1/4" BOTTOM PORT</b>		<input type="radio"/> CBP052A-00FAD-xx	<input type="radio"/> CBP052A-02FAD-xx

Number of stations (03=3 stations)  \*\*

Other options available. Consult factory.

### OPTIONS

52A-33-OOA-DM-Dxxx-xxx

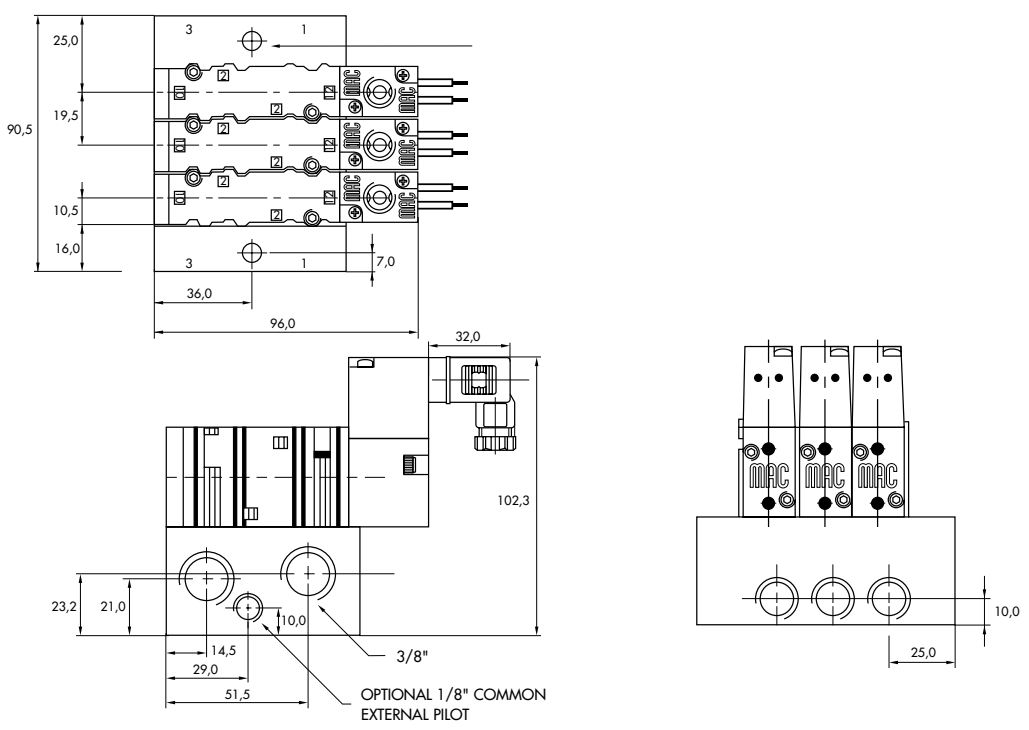
clic for memory spring (replace by 6).

**TECHNICAL  
DATA**

<b>Fluid :</b>	Compressed air, vacuum, inert gases
<b>Pressure range :</b>	Internal pilot : 20 - 150 PSI External pilot : vacuum to 150 PSI
<b>Pilot pressure :</b>	20 - 150 PSI
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)
<b>Filtration :</b>	40 µ
<b>Temperature range :</b>	0°F to 120°F (-18°C to +50°C)
<b>Orifice :</b>	7.3 mm
<b>Flow :</b>	1.2C <sub>v</sub>
<b>Coil :</b>	General purpose class A, continuous duty, encapsulated
<b>Voltage range :</b>	-15% to +10% of nominal voltage
<b>Protection :</b>	NEMA 4
<b>Power :</b>	~ Inrush : 10.9 VA      Holding : 7.7 VA = 1.8 to 12.7 W
<b>Response times :</b>	24 V= / 5.4 W      Energize : 7.3 ms      De-energize : 5.3ms 60Hz / 6 W      Energize : 8-12 ms      De-energize : 7-11 ms

- Spare parts :      • Pilot valve : DMB-DXXX-XXX-1, including mounting screws 35043 and seal 16524.
- Accessories      • Blanking plate : M-52003. • Seal (x3) : 17013-01. • Mounting screw (x2) : 35043.
- Options :      • BSPP threads. • Isolation of inlet and/or exhaust.

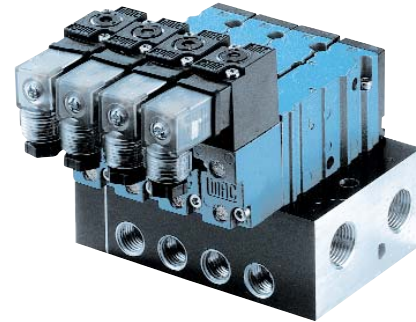
**DIMENSIONS**



<b>Function</b>	<b>Port size</b>	<b>Flow [Max]</b>	<b>Individual mounting</b>
<b>3/2 NO-NC</b>	<b>1/8" - 1/4"</b>	<b>1.2C<sub>v</sub></b>	add-on style cylinder ports in base

### OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting forces both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.
8. Long service life.



### HOW TO ORDER

**52A-xx-xxx-DM-Dxxx-xxx**

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Pilot air	Single operator		Double operator	
	NO valve	NC valve	NO valve	NC valve
Internal	52A-33-OOA-DM-Dxxx-xxx	52A-13-OOA-DM-Dxxx-xxx	52A-43-OOA-DM-Dxxx-xxx	52A-23-OOA-DM-Dxxx-xxx
External	52A-33-OOC-DM-Dxxx-xxx	52A-13-OOC-DM-Dxxx-xxx	52A-43-OOC-DM-Dxxx-xxx	52A-23-OOC-DM-Dxxx-xxx

### SOLENOID OPERATOR >

D **XX X - X XX**

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connection
<input type="radio"/> JA	120/60, 110/50	<input type="radio"/> A	18" (Flying leads)	<input type="radio"/> 1	Non-locking	<input type="radio"/> KA	Square connector
<input type="radio"/> JB	240/60, 220/50	<input type="radio"/> J	Connector	<input type="radio"/> 2	Locking	<input type="radio"/> KD	Square connector with light
<input type="radio"/> JC	24/60, 24/50	<input type="radio"/> x	Other Options	<input type="radio"/> x	Other Options	<input type="radio"/> JB	Rectangular connector
<input type="radio"/> DA	24VDC (5.4 W)					<input type="radio"/> JD	Rectangular connector with light
<input type="radio"/> FB	24VDC (1.8 W)					<input type="radio"/> BA	Flying leads
<input type="radio"/> DF	24VDC (12.7 W)					<input type="radio"/> xx	Other Options
<input type="radio"/> xx	Other Options						

**CBP052A-xxxxx-xx**

HOW TO ORDER CIRCUIT BAR \*\*

Port size (NPTF)	Pilot air	Spacing standard 19,5 mm	Spacing 26 mm (Rectangular connector)
<b>1/8" SIDE PORT</b>	Internal	<input type="radio"/> CBP052A-00ABA-xx	<input type="radio"/> CBP052A-02ABA-xx
<b>1/4" SIDE PORT</b>	Internal	<input type="radio"/> CBP052A-00ABD-xx	<input type="radio"/> CBP052A-02ABD-xx
<b>1/8" SIDE PORT</b>	External	<input type="radio"/> CBP052A-00EBA-xx	<input type="radio"/> CBP052A-02EBA-xx
<b>1/4" SIDE PORT</b>	External	<input type="radio"/> CBP052A-00EBD-xx	<input type="radio"/> CBP052A-02EBD-xx
<b>1/8" BOTTOM PORT</b>	Internal	<input type="radio"/> CBP052A-00BBA-xx	<input type="radio"/> CBP052A-02BBA-xx
<b>1/4" BOTTOM PORT</b>	Internal	<input type="radio"/> CBP052A-00BBD-xx	<input type="radio"/> CBP052A-02BBD-xx
<b>1/8" BOTTOM PORT</b>	External	<input type="radio"/> CBP052A-00FBA-xx	<input type="radio"/> CBP052A-02FBA-xx
<b>1/4" BOTTOM PORT</b>	External	<input type="radio"/> CBP052A-00FBD-xx	<input type="radio"/> CBP052A-02FBD-xx

Number of stations (03=3 stations)  \*\*

Other options available. Consult factory.

Note : add-a-unit stations may be added to above bars. Click here for model numbers.

### OPTIONS

52A-33-OOA-DM-Dxxx-xxx

clic for memory spring (replace by 6).

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

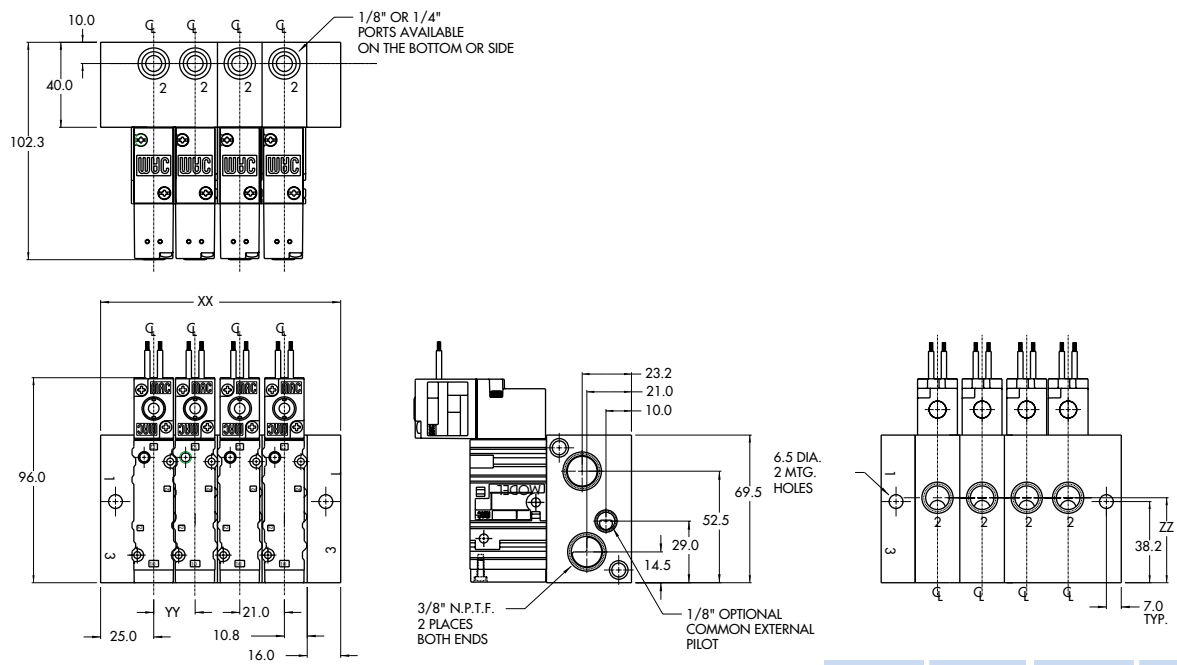


**TECHNICAL  
DATA**

<b>Fluid :</b>	Compressed air, vacuum, inert gases		
<b>Pressure range :</b>	Internal pilot : 20 - 150 PSI External pilot : vacuum to 150 PSI		
<b>Pilot pressure :</b>	20 - 150 PSI		
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
<b>Filtration :</b>	40 µ		
<b>Temperature range :</b>	0°F to 120°F (-18°C to +50°C)		
<b>Orifice :</b>	7.3 mm		
<b>Flow :</b>	1.2C <sub>v</sub>		
<b>Coil :</b>	General purpose class A, continuous duty, encapsulated		
<b>Voltage range :</b>	-15% to +10% of nominal voltage		
<b>Protection :</b>	NEMA 4		
<b>Power :</b>	~ Inrush : 10.9 VA      Holding : 7.7 VA = 1.8 to 12.7 W		
<b>Response times :</b>	24 V=/5.4 W	Energize : 7.3 ms	De-energize : 5.3ms
	60Hz/6 W	Energize : 8-12 ms	De-energize : 7-11 ms

- Spare parts : • Pilot valve : DMB-DXXX-XXX-1, including mounting screws 35043 and seal 16524.
- Accessories • Blanking plate : M-52003. • Seal (x3) : 17013-01. • Mounting screw (x2) : 35043. • End plate kit (Internal) : M-52001-01.  
• End plate kit (External) : M-52002-01.
- Options : • BSPP threads. • Isolation of inlet and/or exhaust.

**DIMENSIONS**



YY	XX	PORT	ZZ
19.5	113	1/8"	36.0
26	119.5	1/4"	40.0

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

Function	Port size	Flow [Max]	Circuit bar mounting
<b>3/2 NO-NC</b>	<b>1/8" - 1/4"</b>	<b>1.2C<sub>v</sub></b>	add-a-unit stations for CBM052A bar

### OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting forces both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.
8. Long service life.



### HOW TO ORDER

**52A-xx-xxx-DM-Dxxx-xxx**

### SOLENOID OPERATOR

Port size	Pilot air	Single operator		Double operator	
		NO valve	NC valve	NO valve	NC valve
<b>1/8" NPTF</b>	Internal	<input type="radio"/> 52A-31-AOA-DM-Dxxx-xxx	<input type="radio"/> 52A-11-AOA-DM-Dxxx-xxx	<input type="radio"/> 52A-41-AOA-DM-Dxxx-xxx	<input type="radio"/> 52A-21-AOA-DM-Dxxx-xxx
<b>1/4" NPTF</b>		<input type="radio"/> 52A-31-BOA-DM-Dxxx-xxx	<input type="radio"/> 52A-11-BOA-DM-Dxxx-xxx	<input type="radio"/> 52A-41-BOA-DM-Dxxx-xxx	<input type="radio"/> 52A-21-BOA-DM-Dxxx-xxx
<b>1/8" NPTF</b>	External	<input type="radio"/> 52A-31-AOC-DM-Dxxx-xxx	<input type="radio"/> 52A-11-AOC-DM-Dxxx-xxx	<input type="radio"/> 52A-41-AOC-DM-Dxxx-xxx	<input type="radio"/> 52A-21-AOC-DM-Dxxx-xxx
<b>1/4" NPTF</b>		<input type="radio"/> 52A-31-BOC-DM-Dxxx-xxx	<input type="radio"/> 52A-11-BOC-DM-Dxxx-xxx	<input type="radio"/> 52A-41-BOC-DM-Dxxx-xxx	<input type="radio"/> 52A-21-BOC-DM-Dxxx-xxx

### SOLENOID OPERATOR >

D **XX X - X XX**\*

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JA 120/60, 110/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> J Connector	<input type="radio"/> 2 Locking	<input type="radio"/> KD Square connector with light
<input type="radio"/> JC 24/60, 24/50	<input type="radio"/> x Other Options	<input type="radio"/> x Other Options	<input type="radio"/> JB Rectangular connector
<input type="radio"/> DA 24VDC (5.4 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> FB 24VDC (1.8 W)			<input type="radio"/> BA Flying leads
<input type="radio"/> DF 24VDC (12.7 W)			<input type="radio"/> xx Other Options
<input type="radio"/> xx Other Options			

### HOW TO ORDER CIRCUIT BAR \*\*

**CBM052A-xxxxx-xx**

Port size	Pilot air	Spacing standard 21 mm	Spacing 26 mm (Rectangular connector)
<b>3/8" NPTF</b>	Internal	<input type="radio"/> CBM052A-01AEA-xx	<input type="radio"/> CBM052A-02AEA-xx
	External	<input type="radio"/> CBM052A-01CEA-xx	<input type="radio"/> CBM052A-02CEA-xx

Number of stations (01=1 station)   
 \*\* Other options available. Consult factory.

Note : add-a-unit stations available in lengths up to 4 stations (01, 02, 03 or 04).

### OPTIONS

52A-31-AOA-DM-Dxxx-xxx

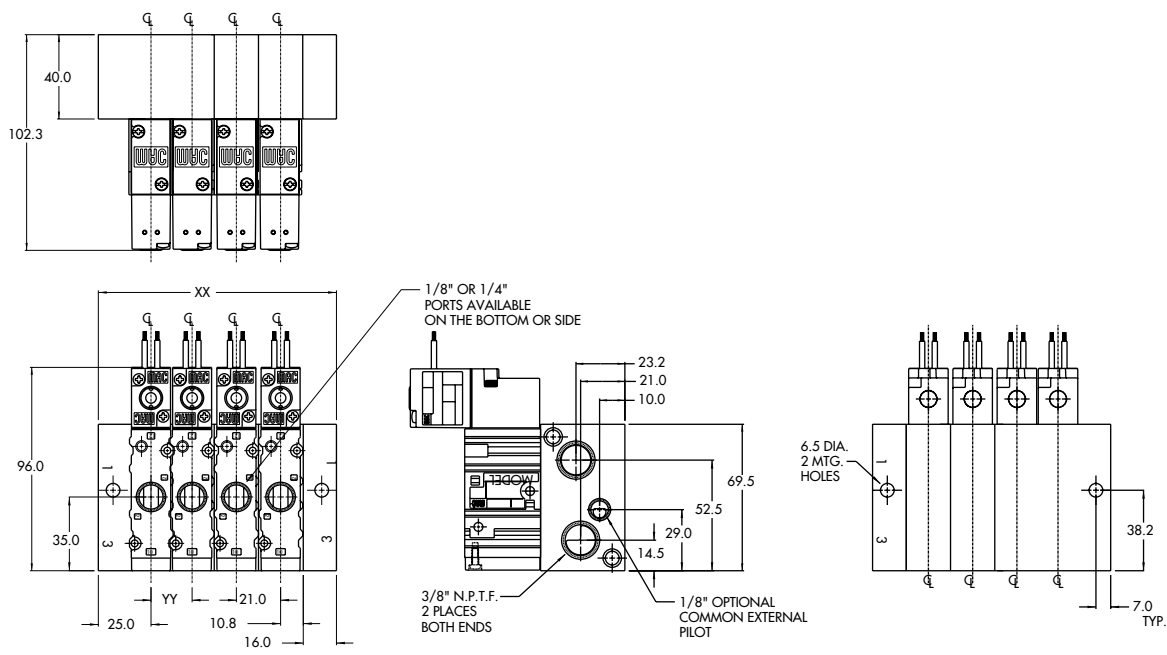
clic for memory spring (replace by 4).

**TECHNICAL  
DATA**

<b>Fluid :</b>	Compressed air, vacuum, inert gases		
<b>Pressure range :</b>	Internal pilot : 20 - 150 PSI External pilot : vacuum to 150 PSI		
<b>Pilot pressure :</b>	20 - 150 PSI		
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
<b>Filtration :</b>	40 µ		
<b>Temperature range :</b>	0°F to 120°F (-18°C to +50°C)		
<b>Orifice :</b>	7.3 mm		
<b>Flow :</b>	1.2C <sub>v</sub>		
<b>Coil :</b>	General purpose class A, continuous duty, encapsulated		
<b>Voltage range :</b>	-15% to +10% of nominal voltage		
<b>Protection :</b>	NEMA 4		
<b>Power :</b>	~ Inrush : 10.9 VA      Holding : 7.7 VA = 1.8 to 12.7 W		
<b>Response times :</b>	24 V=/5.4 W	Energize : 7.3 ms	De-energize : 5.3ms
	60Hz/6 W	Energize : 8-12 ms	De-energize : 7-11 ms

- Spare parts : • Pilot valve : DMB-DXXX-XXX-1, including mounting screws 35043 and seal 16524.
- Accessories • Blanking plate : M-04001. • Seal (x3) : 17015-01. • Mounting screw (x2) : 35043.
- Options : • BSPP threads. • Isolation of inlet and/or exhaust.

**DIMENSIONS**

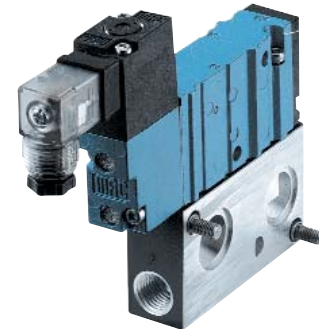


YY	XX
19.5	113
26	119.5

<b>Function</b>	<b>Port size</b>	<b>Flow [Max]</b>	<b>Individual mounting</b>
<b>3/2 NO-NC</b>	<b>1/8" - 1/4"</b>	<b>1.2C<sub>v</sub></b>	add-a-unit stations for CBP052A bar

### OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting forces both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.
8. Long service life.



### HOW TO ORDER

**52A-xx-xxx-DM-Dxxx-xxx**

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Pilot air	Single operator		Double operator	
	NO valve	NC valve	NO valve	NC valve
Internal	52A-33-OOA-DM-Dxxx-xxx	52A-13-OOA-DM-Dxxx-xxx	52A-43-OOA-DM-Dxxx-xxx	52A-23-OOA-DM-Dxxx-xxx
External	52A-33-OOC-DM-Dxxx-xxx	52A-13-OOC-DM-Dxxx-xxx	52A-43-OOC-DM-Dxxx-xxx	52A-23-OOC-DM-Dxxx-xxx

### SOLENOID OPERATOR >

D **XX X - X XX**

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connection
<input type="radio"/> JA	120/60, 110/50	<input type="radio"/> A	18" (Flying leads)	<input type="radio"/> 1	Non-locking	<input type="radio"/> KA	Square connector
<input type="radio"/> JB	240/60, 220/50	<input type="radio"/> J	Connector	<input type="radio"/> 2	Locking	<input type="radio"/> KD	Square connector with light
<input type="radio"/> JC	24/60, 24/50	<input type="radio"/> x	Other Options	<input type="radio"/> x	Other Options	<input type="radio"/> JB	Rectangular connector
<input type="radio"/> DA	24VDC (5.4 W)					<input type="radio"/> JD	Rectangular connector with light
<input type="radio"/> FB	24VDC (1.8 W)					<input type="radio"/> BA	Flying leads
<input type="radio"/> DF	24VDC (12.7 W)					<input type="radio"/> xx	Other Options
<input type="radio"/> xx	Other Options						

**CBP052A-xxxxx-xx**

HOW TO ORDER CIRCUIT BAR \*\*

Port size (NPTF)	Pilot air	Spacing standard 21 mm	Spacing 26 mm (Rectangular connector)
<b>1/8" SIDE PORT</b>	Internal	<input type="radio"/> CBP052A-01AEA-xx	<input type="radio"/> CBP052A-02AEA-xx
<b>1/4" SIDE PORT</b>		<input type="radio"/> CBP052A-01AED-xx	<input type="radio"/> CBP052A-02AED-xx
<b>1/8" SIDE PORT</b>	External	<input type="radio"/> CBP052A-01EEA-xx	<input type="radio"/> CBP052A-02EEA-xx
<b>1/4" SIDE PORT</b>		<input type="radio"/> CBP052A-01EED-xx	<input type="radio"/> CBP052A-02EED-xx
<b>1/8" BOTTOM PORT</b>	Internal	<input type="radio"/> CBP052A-01BEA-xx	<input type="radio"/> CBP052A-02BEA-xx
<b>1/4" BOTTOM PORT</b>		<input type="radio"/> CBP052A-01BED-xx	<input type="radio"/> CBP052A-02BED-xx
<b>1/8" BOTTOM PORT</b>	External	<input type="radio"/> CBP052A-01FEA-xx	<input type="radio"/> CBP052A-02FEA-xx
<b>1/4" BOTTOM PORT</b>		<input type="radio"/> CBP052A-01FED-xx	<input type="radio"/> CBP052A-02FED-xx

Number of stations (03=3 stations)  \*\*

Other options available. Consult factory.

Note : add-a-unit stations available in lengths up to 4 stations (01, 02, 03 or 04).

### OPTIONS

52A-33-OOA-DM-Dxxx-xxx

clic for memory spring (replace by 6).

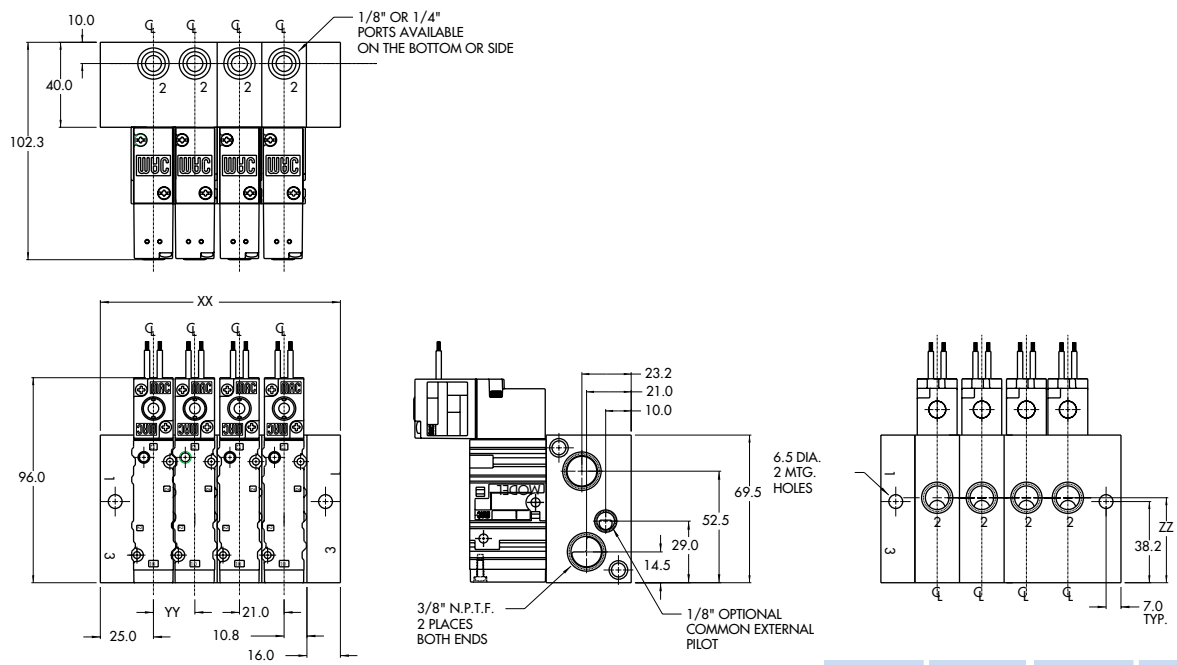
Consult "Precautions" before use, installation or service of MAC Valves.

**TECHNICAL  
DATA**

<b>Fluid :</b>	Compressed air, vacuum, inert gases		
<b>Pressure range :</b>	Internal pilot : 20 - 150 PSI External pilot : vacuum to 150 PSI		
<b>Pilot pressure :</b>	20 - 150 PSI		
<b>Lubrication :</b>	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
<b>Filtration :</b>	40 µ		
<b>Temperature range :</b>	0°F to 120°F (-18°C to +50°C)		
<b>Orifice :</b>	7.3 mm		
<b>Flow :</b>	1.2C <sub>v</sub>		
<b>Coil :</b>	General purpose class A, continuous duty, encapsulated		
<b>Voltage range :</b>	-15% to +10% of nominal voltage		
<b>Protection :</b>	NEMA 4		
<b>Power :</b>	~ Inrush : 10.9 VA      Holding : 7.7 VA = 1.8 to 12.7 W		
<b>Response times :</b>	24 V=/5.4 W	Energize : 7.3 ms	De-energize : 5.3ms
	60Hz/6 W	Energize : 8-12 ms	De-energize : 7-11 ms

- Spare parts : • Pilot valve : DMB-DXXX-XXX-1, including mounting screws 35043 and seal 16524.
- Accessories • Blanking plate : M-52003. • Seal (x3) : 17013-01. • Mounting screw (x2) : 35043.
- Options : • BSPP threads. • Isolation of inlet and/or exhaust.

**DIMENSIONS**



YY	XX	PORT	ZZ
19.5	113	1/8"	36.0
26	119.5	1/4"	40.0

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



## Section 2

## Options



0 p t i o n s

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**Codification table for voltages / Wire length / Manual operator / Electrical connection**

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VALVE CODE ➤

**DM-DXX X - X XX**  
**1 2 3 4**

**OPTIONS AVAILABLE FOR**

- pilot operated valves 400, 52 & 92 Series

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**1. VOLTAGE**

- D XX	X - X XX	VOLTAGE
<input type="radio"/>	<b>DB</b>	12 VDC (5.4 W)
<input type="radio"/>	<b>DC</b>	12 VDC (7.5 W)
<input type="radio"/>	<b>DD</b>	24 VDC (7.3 W)
<input type="radio"/>	<b>DE</b>	12 VDC (12.7 W)
<input type="radio"/>	<b>DK</b>	110 VDC (5.8 W)
<input type="radio"/>	<b>DJ</b>	28 VDC (5.7 W)
<input type="radio"/>	<b>DL</b>	64 VDC (6.0 W)
<input type="radio"/>	<b>DM</b>	36 VDC (5.8 W)
<input type="radio"/>	<b>DN</b>	6 VDC (6.0 W)
<input type="radio"/>	<b>DR</b>	90 VDC (6,6 W)
<input type="radio"/>	<b>DS</b>	110 VDC (7.3 W), 100 VDC (6.0 W)
<input type="radio"/>	<b>DT</b>	75 VDC (5.6 W)
<input type="radio"/>	<b>DP</b>	48 VDC (5.8 W)
<input type="radio"/>	<b>FA</b>	12 VDC (1.8 W)
<input type="radio"/>	<b>FE</b>	12 VDC (2.4 W)
<input type="radio"/>	<b>FF</b>	24 VDC (2.4 W)
<input type="radio"/>	<b>JD</b>	100/60, 100/50, 110/60

**2. WIRE LENGTH**

- D XX	X - X XX	WIRE LENGTH
<input type="radio"/>	<b>B</b>	24"
<input type="radio"/>	<b>C</b>	36"
<input type="radio"/>	<b>D</b>	48"
<input type="radio"/>	<b>E</b>	72"
<input type="radio"/>	<b>F</b>	96"





**3. MANUAL OPERATOR**

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

**4. ELECTRICAL CONNECTION**

- D XX X - X XX	ELECTRICAL CONNECTION
<input type="radio"/> BA	Flying leads
<input type="radio"/> BK	BA with protection diode
<input type="radio"/> BL	BA with protection varistor
<input type="radio"/> CA	1/2" NPS conduit
<input type="radio"/> JB	Rectangular connector
<input type="radio"/> JD	Rectangular connector with light
<input type="radio"/> JM	Rectangular connector, male only
<input type="radio"/> KA	Square connector
<input type="radio"/> KB	Square connector with protection diode
<input type="radio"/> KC	Square connector with protection varistor
<input type="radio"/> KD	Square connector with light
<input type="radio"/> KE	Square connector with light and protection diode
<input type="radio"/> KF	Square connector with light and protection varistor
<input type="radio"/> KJ	Square connector (male only)
<input type="radio"/> KK	Square connector with protection diode (male only)
<input type="radio"/> KL	Square connector with protection varistor (male only)
<input type="radio"/> TA	Dual tabs
<input type="radio"/> TB	TA with protection diode
<input type="radio"/> TD	TA with light
<input type="radio"/> TE	TA with light and protection diode
<input type="radio"/> TJ	Dual tabs (male only)
<input type="radio"/> TK	TJ with protection diode
<input type="radio"/> TM	TJ with light
<input type="radio"/> TN	TJ with light and protection diode
<input type="radio"/> *DN	Plug-in with diode
<input type="radio"/> *DP	Plug-in with M.O.V.
<input type="radio"/> *DH	Plug-in with diode & ground
<input type="radio"/> *DJ	Plug-in with M.O.V & ground

\* These options only apply to the 92 series. All others are for the 400 and 52 series.