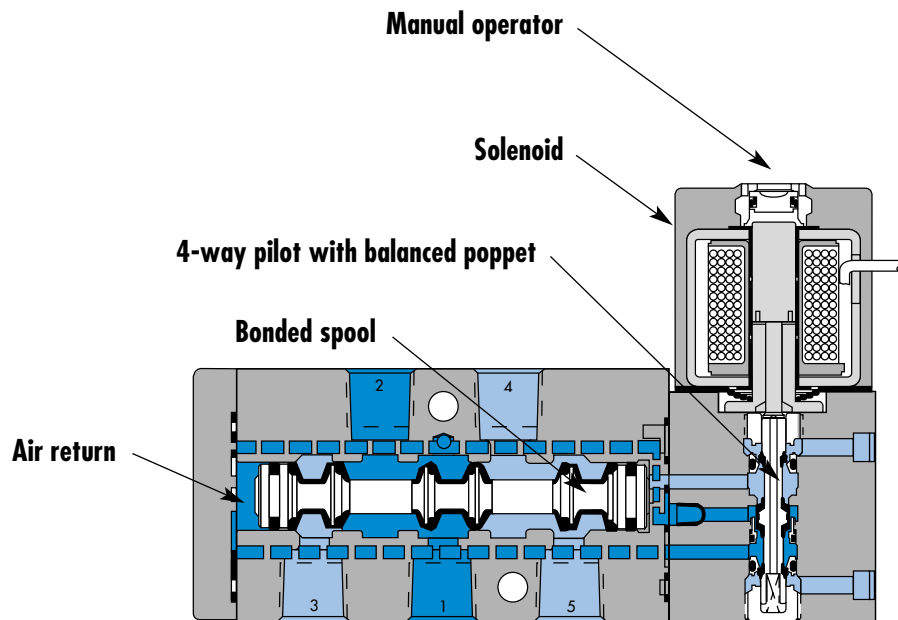


Circuit bar mounting

low profile cylinder ports in valve	low profile cylinder ports in base	mid profile cylinder ports in valve	mid profile - add on style cylinder ports in valve	add-a-unit stations for CBM403A bar	mid profile cylinder ports in base	mid profile - add on style cylinder ports in base	add-a-unit stations for CBM404A bar
	high profile cylinder ports in base	high profile - add on style cylinder ports in base					add-a-unit stations for CBM405A bar



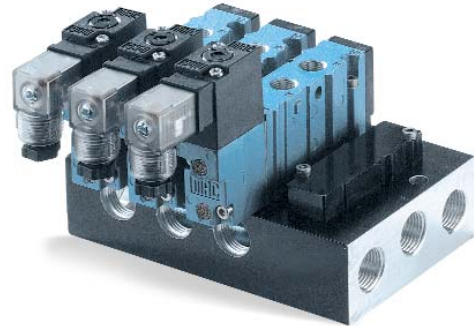
SERIES FEATURES

- Patented MACSOLENOID® for fastest possible response times and virtually burn-out proof AC solenoid operation.
- Optional low watt DC solenoids.
- Various manual operators.
- Optional memory spring.
- 2 position or 3 position valve configurations.
- Internal or external pilot.

Function	Port size (NPTF)	Flow (Max)	Circuit bar mounting
5/2 - 5/3	1/8" - 1/4"	1.0C_v	low profile 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

xxxx-xxx-DM-Dxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size	Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
1/8" NPT	Internal	<input type="radio"/> 411A-AOA-DM-Dxxx-xxx	<input type="radio"/> 421A-AOA-DM-Dxxx-xxx	<input type="radio"/> 451A-AOA-DM-Dxxx-xxx	<input type="radio"/> 461A-AOA-DM-Dxxx-xxx	<input type="radio"/> 471A-AOA-DM-Dxxx-xxx
1/4" NPT		<input type="radio"/> 411A-BOA-DM-Dxxx-xxx	<input type="radio"/> 421A-BOA-DM-Dxxx-xxx	<input type="radio"/> 451A-BOA-DM-Dxxx-xxx	<input type="radio"/> 461A-BOA-DM-Dxxx-xxx	<input type="radio"/> 471A-BOA-DM-Dxxx-xxx

SOLENOID OPERATOR >

D XX X- X XX*

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JA 120/60, 110/50	<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"/> FB 24VDC (1.8 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> DA 24VDC (5.4 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			

CBM401A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR **

Port size	Pilot air	Spacing standard 19,5 mm		Spacing 26 mm (Rectangular connector)	
		w/o flow controls	w/ flow controls	w/o flow controls	w/ flow controls
3/8" NPTF	Internal	<input type="radio"/> CBM401A-00AAA-xx	<input type="radio"/> CBM401A-00BAA-xx	<input type="radio"/> CBM401A-02AAA-xx	<input type="radio"/> CBM401A-02BAA-xx

Number of stations (03=3 stations)

** Other options available. Consult factory.

OPTIONS

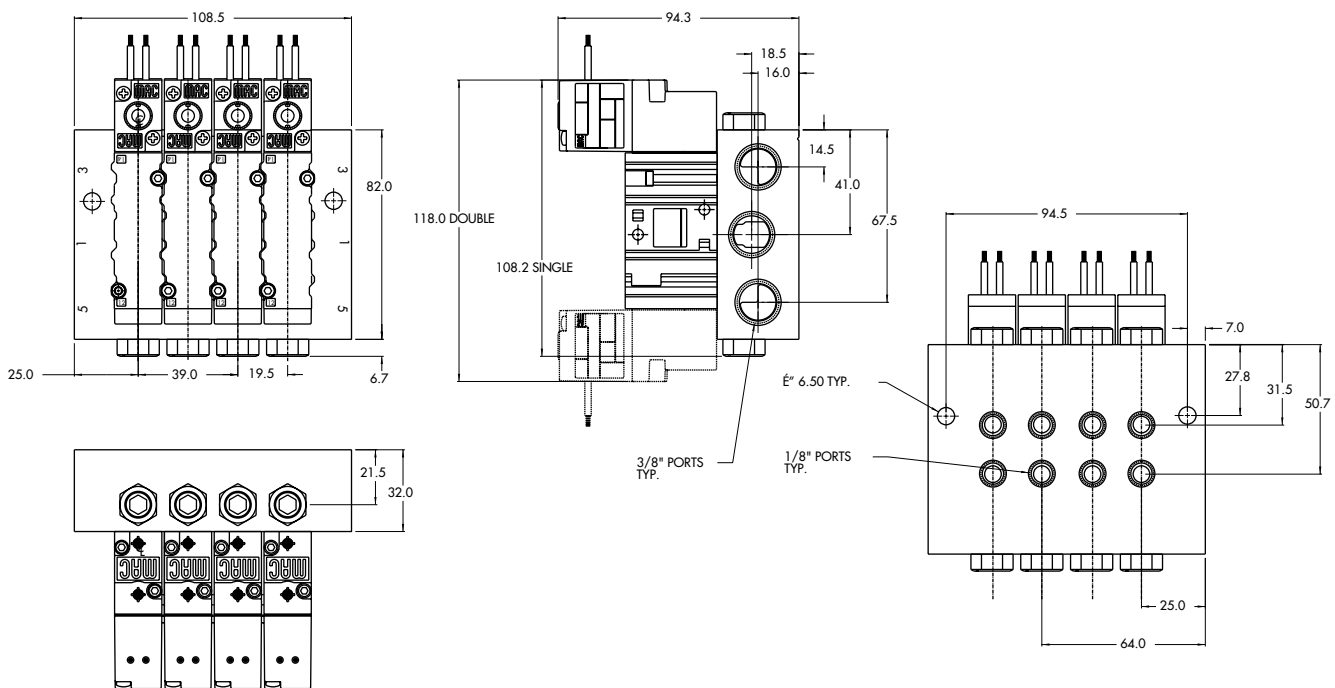
411A-AOA-DM-Dxxx-xxx
 clic with memory spring (replace by 4).

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	20 - 150 PSI		
Pilot pressure :	20 - 150 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to +50°C)		
Orifice :	6.2 mm		
Flow :	1.0C _v		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	NEMA 4		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	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 35069 and seal 16524.
- Accessories : • Blanking plate : M-04001. • Flow control (x2) : N-04001. • Seal (x2) : 17013-01, (x1) : 17015-01. • Mounting screw (x2) : 35043.
- Options : • BSPP threads. • Isolation of inlet and/or exhaust.

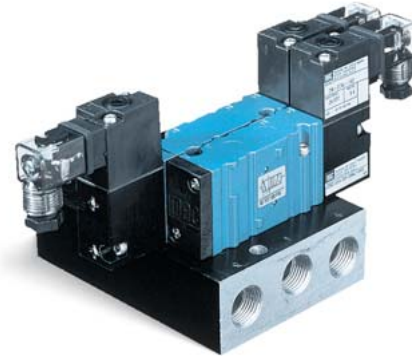
DIMENSIONS



Function	Port size (NPTF)	Flow (Max)	Circuit bar mounting
5/2 - 5/3	1/8"	1.0C_v	low profile 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

xxxx-xxx-DM-Dxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
Internal	<input type="radio"/> 413A-OOA-DM-Dxxx-xxx	<input type="radio"/> 423A-OOA-DM-Dxxx-xxx	<input type="radio"/> 453A-OOA-DM-Dxxx-xxx	<input type="radio"/> 463A-OOA-DM-Dxxx-xxx	<input type="radio"/> 473A-OOA-DM-Dxxx-xxx

SOLENOID OPERATOR >

D **XX X- X XX**

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JA 120/60, 110/50	<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"/> FB 24VDC (1.8 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> DA 24VDC (5.4 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			

CBM402A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR (BOTTOM CYLINDER PORTS) **

Port size	Pilot air	Spacing standard 19,5 mm		Spacing 26 mm (Rectangular connector)	
		w/o flow controls	w/ flow controls	w/o flow controls	w/ flow controls
1/8" NPTF	Internal	<input type="radio"/> CBM402A-00AAA-xx	<input type="radio"/> CBM402A-00BAA-xx	<input type="radio"/> CBM402A-02AAA-xx	<input type="radio"/> CBM402A-02BAA-xx

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

OPTIONS

413A-OOA-DM-Dxxx-xxx
 clic with memory spring (replace by 6).

**TECHNICAL
DATA**

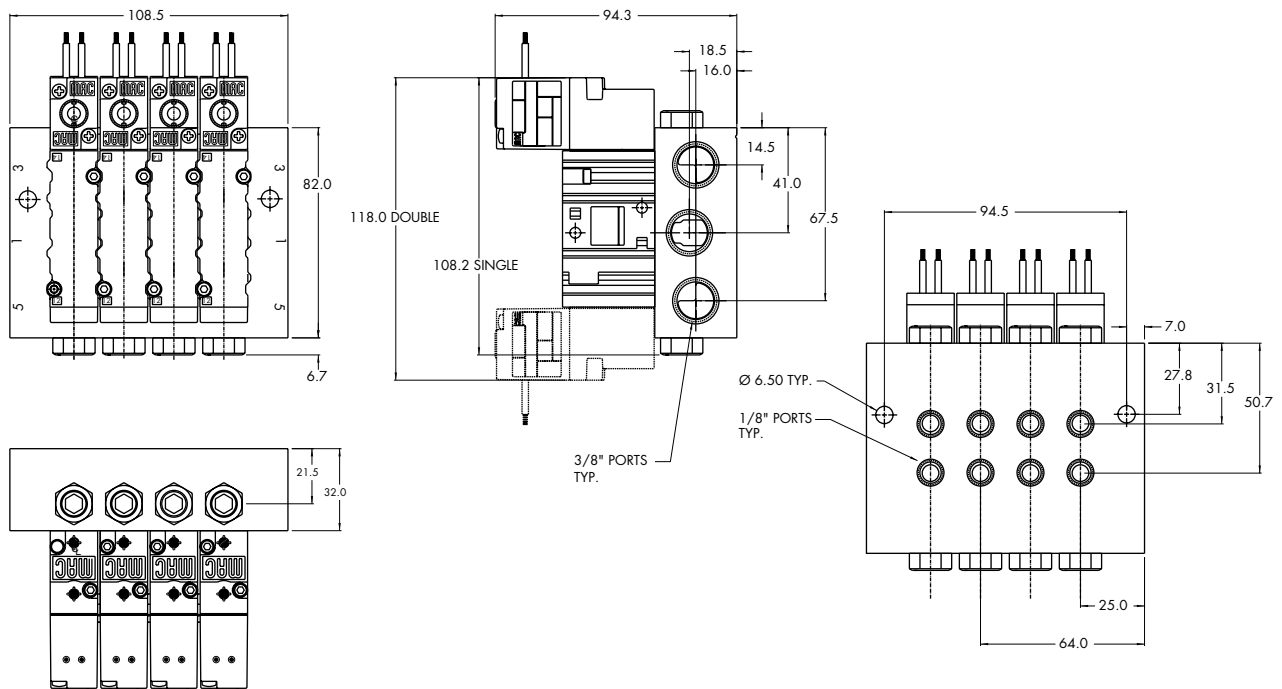
Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	20 - 150 PSI		
Pilot pressure :	20 - 150 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to +50°C)		
Orifice :	6.2 mm		
Flow :	1.0C _v		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	NEMA 4		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	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 35069 and seal 16524.

Accessories : • Blanking plate : M-04002. • Flow control (x2) : N-04001. • Seal : 16525.
• Mounting screw (x2) : 35043.

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

DIMENSIONS



Function	Port size (NPTF)	Flow [Max]	Circuit bar mounting
5/2 - 5/3	1/8" - 1/4"	1.0C_v	mid profile 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

xxxx-xxx-DM-Dxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size	Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
1/8" NPT	Internal	<input type="radio"/> 411A-AOA-DM-Dxxx-xxx	<input type="radio"/> 421A-AOA-DM-Dxxx-xxx	<input type="radio"/> 451A-AOA-DM-Dxxx-xxx	<input type="radio"/> 461A-AOA-DM-Dxxx-xxx	<input type="radio"/> 471A-AOA-DM-Dxxx-xxx
1/4" NPT	Internal	<input type="radio"/> 411A-BOA-DM-Dxxx-xxx	<input type="radio"/> 421A-BOA-DM-Dxxx-xxx	<input type="radio"/> 451A-BOA-DM-Dxxx-xxx	<input type="radio"/> 461A-BOA-DM-Dxxx-xxx	<input type="radio"/> 471A-BOA-DM-Dxxx-xxx
1/8" NPT	External	<input type="radio"/> 411A-AOD-DM-Dxxx-xxx	<input type="radio"/> 421A-AOD-DM-Dxxx-xxx	<input type="radio"/> 451A-AOD-DM-Dxxx-xxx	<input type="radio"/> 461A-AOD-DM-Dxxx-xxx	<input type="radio"/> 471A-AOD-DM-Dxxx-xxx
1/4" NPT	External	<input type="radio"/> 411A-BOD-DM-Dxxx-xxx	<input type="radio"/> 421A-BOD-DM-Dxxx-xxx	<input type="radio"/> 451A-BOD-DM-Dxxx-xxx	<input type="radio"/> 461A-BOD-DM-Dxxx-xxx	<input type="radio"/> 471A-BOD-DM-Dxxx-xxx

SOLENOID OPERATOR >

D **XX X-X XX***

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JA 120/60, 110/50	<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"/> FB 24VDC (1.8 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> DA 24VDC (5.4 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			

CBM403A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR **

Port size	Pilot air	Spacing standard 19,5 mm		Spacing 26 mm (Rectangular connector)	
		w/o flow controls	w/ flow controls	w/o flow controls	w/ flow controls
3/8" NPTF	Internal	<input type="radio"/> CBM403A-00AAA-xx	<input type="radio"/> CBM403A-00BAA-xx	<input type="radio"/> CBM403A-02AAA-xx	<input type="radio"/> CBM403A-02BAA-xx
	Common external	<input type="radio"/> CBM403A-00CAA-xx	<input type="radio"/> CBM403A-00DAA-xx	<input type="radio"/> CBM403A-02CAA-xx	<input type="radio"/> CBM403A-02DAA-xx

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

OPTIONS

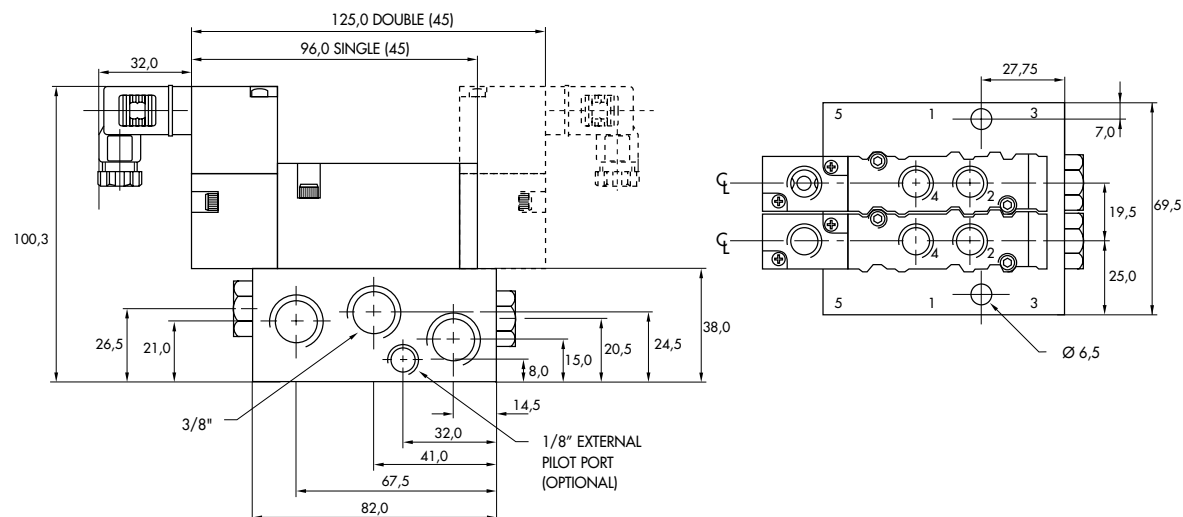
411A-AOA-DM-Dxxx-xxx
 clic with memory spring (replace by 4).

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal pilot : 20 - 150 PSI External pilot : vacuum - 150 PSI
Pilot pressure :	20 - 150 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)
Filtration :	40 µ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Orifice :	6.2 mm
Flow :	1.0C _v
Coil :	General purpose class A, continuous duty, encapsulated
Voltage range :	-15% to +10% of nominal voltage
Protection :	NEMA 4
Power :	~ Inrush : 10.9 VA Holding : 7.7 VA = 1.8 to 12.7 W
Response times :	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 35069 and seal 16524.
- Accessories : • Blanking plate : M-04001. • Flow control (x2) : N-04001. • Seal (x2) : 17013-01, (x1) : 17015-01.
• Mounting screw (x2) : 35043.
- Options : • BSPP threads. • Isolation of inlet and/or exhaust.

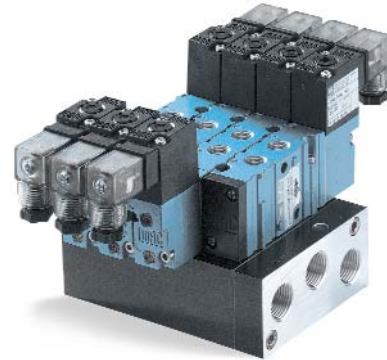
DIMENSIONS



Function	Port size (NPTF)	Flow [Max]	Circuit bar mounting
5/2 - 5/3	1/8" - 1/4"	1.0C_v	mid profile - 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

xxxx-xxx-DM-Dxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size	Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
1/8" NPT	Internal	<input type="radio"/> 411A-AOA-DM-Dxxx-xxx	<input type="radio"/> 421A-AOA-DM-Dxxx-xxx	<input type="radio"/> 451A-AOA-DM-Dxxx-xxx	<input type="radio"/> 461A-AOA-DM-Dxxx-xxx	<input type="radio"/> 471A-AOA-DM-Dxxx-xxx
1/4" NPT	Internal	<input type="radio"/> 411A-BOA-DM-Dxxx-xxx	<input type="radio"/> 421A-BOA-DM-Dxxx-xxx	<input type="radio"/> 451A-BOA-DM-Dxxx-xxx	<input type="radio"/> 461A-BOA-DM-Dxxx-xxx	<input type="radio"/> 471A-BOA-DM-Dxxx-xxx
1/8" NPT	External	<input type="radio"/> 411A-AOD-DM-Dxxx-xxx	<input type="radio"/> 421A-AOD-DM-Dxxx-xxx	<input type="radio"/> 451A-AOD-DM-Dxxx-xxx	<input type="radio"/> 461A-AOD-DM-Dxxx-xxx	<input type="radio"/> 471A-AOD-DM-Dxxx-xxx
1/4" NPT	External	<input type="radio"/> 411A-BOD-DM-Dxxx-xxx	<input type="radio"/> 421A-BOD-DM-Dxxx-xxx	<input type="radio"/> 451A-BOD-DM-Dxxx-xxx	<input type="radio"/> 461A-BOD-DM-Dxxx-xxx	<input type="radio"/> 471A-BOD-DM-Dxxx-xxx

SOLENOID OPERATOR >

D XX X- X XX*

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JA 120/60, 110/50	<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"/> FB 24VDC (1.8 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> DA 24VDC (5.4 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			

CBM403A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR **

Port size	Pilot air	Spacing standard 19,5 mm		Spacing 26 mm (Rectangular connector)	
		w/o flow controls	w/ flow controls	w/o flow controls	w/ flow controls
3/8" NPTF	Internal	<input type="radio"/> CBM403A-00ABA-xx	<input type="radio"/> CBM403A-00BBA-xx	<input type="radio"/> CBM403A-02ABA-xx	<input type="radio"/> CBM403A-02BBA-xx
	Common external	<input type="radio"/> CBM403A-00CBA-xx	<input type="radio"/> CBM403A-00DBA-xx	<input type="radio"/> CBM403A-02CBA-xx	<input type="radio"/> CBM403A-02DBA-xx

Number of stations (03=3 stations)
 ** Other options available. Consult factory.
 Note: add-a-unit stations may be added to above bars.

OPTIONS

411A-AOA-DM-Dxxx-xxx
 clic with memory spring (replace by 4).

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Internal pilot : 20 - 150 PSI External pilot : vacuum - 150 PSI		
Pilot pressure :	20 - 150 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to +50°C)		
Orifice :	6.2 mm		
Flow :	1.0C _v		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	NEMA 4		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	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 35069 and seal 16524.

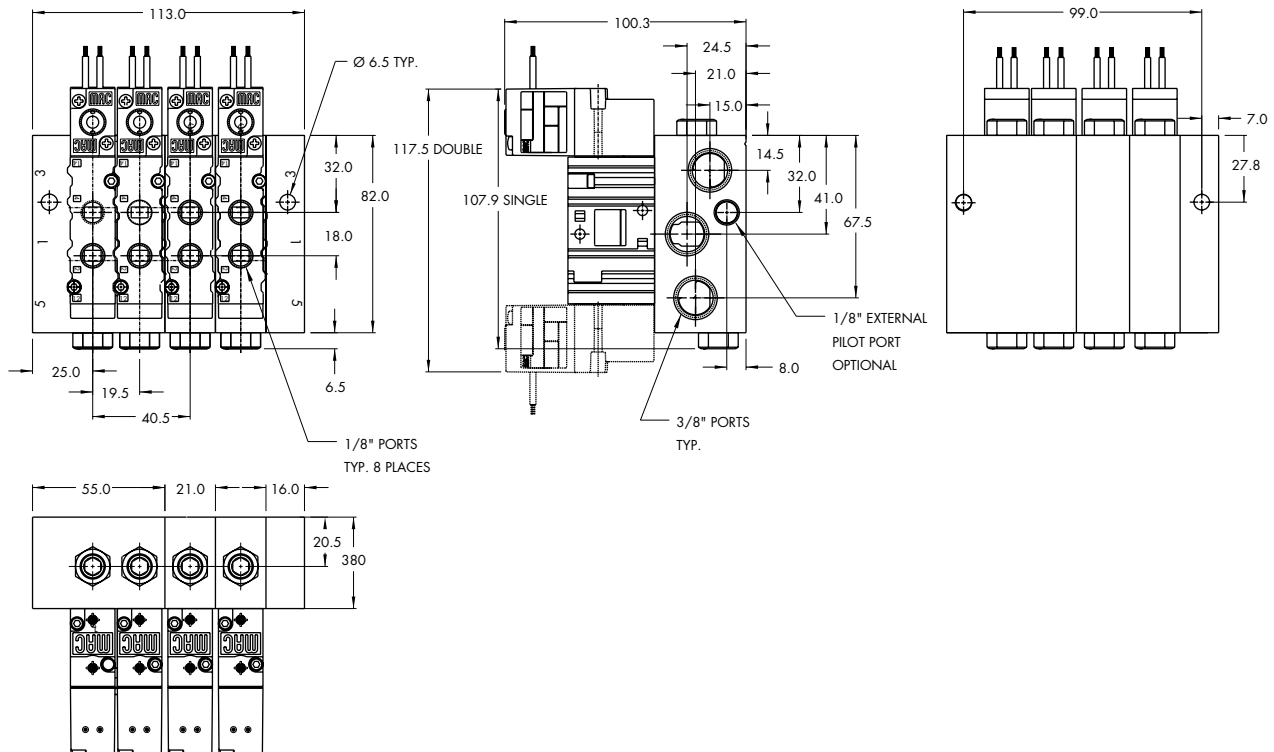
Accessories :

- Blanking plate : M-04001. • Flow control (x2) : N-04001. • Seal (x2) : 17013-01, (x1) : 17015-01.
- Mounting screw (x2) : 35043. • End plate kit : M-04003-01. • End plate kit for common external : M-04004-01.

Options :

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

DIMENSIONS



Function	Port size (NPTF)	Flow [Max]	Circuit bar mounting
5/2 - 5/3	1/8" - 1/4"	1.0C_v	add-a-unit stations for CBM403A 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

xxxx-xxx-DM-Dxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size	Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
1/8" NPT	Internal	<input type="radio"/> 411A-AOA-DM-Dxxx-xxx	<input type="radio"/> 421A-AOA-DM-Dxxx-xxx	<input type="radio"/> 451A-AOA-DM-Dxxx-xxx	<input type="radio"/> 461A-AOA-DM-Dxxx-xxx	<input type="radio"/> 471A-AOA-DM-Dxxx-xxx
1/4" NPT	Internal	<input type="radio"/> 411A-BOA-DM-Dxxx-xxx	<input type="radio"/> 421A-BOA-DM-Dxxx-xxx	<input type="radio"/> 451A-BOA-DM-Dxxx-xxx	<input type="radio"/> 461A-BOA-DM-Dxxx-xxx	<input type="radio"/> 471A-BOA-DM-Dxxx-xxx
1/8" NPT	External	<input type="radio"/> 411A-AOD-DM-Dxxx-xxx	<input type="radio"/> 421A-AOD-DM-Dxxx-xxx	<input type="radio"/> 451A-AOD-DM-Dxxx-xxx	<input type="radio"/> 461A-AOD-DM-Dxxx-xxx	<input type="radio"/> 471A-AOD-DM-Dxxx-xxx
1/4" NPT	External	<input type="radio"/> 411A-BOD-DM-Dxxx-xxx	<input type="radio"/> 421A-BOD-DM-Dxxx-xxx	<input type="radio"/> 451A-BOD-DM-Dxxx-xxx	<input type="radio"/> 461A-BOD-DM-Dxxx-xxx	<input type="radio"/> 471A-BOD-DM-Dxxx-xxx

SOLENOID OPERATOR >

D XX X- X XX*

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JA 120/60, 110/50	<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"/> FB 24VDC (1.8 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> DA 24VDC (5.4 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			

CBM403A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR **

Port size	Pilot air	Spacing 21 mm		Spacing 26 mm (Rectangular connector)	
		w/o flow controls	w/ flow controls	w/o flow controls	w/ flow controls
3/8" NPTF	Internal	<input type="radio"/> CBM403A-01AEA-xx	<input type="radio"/> CBM403A-01BEA-xx	<input type="radio"/> CBM403A-02AEA-xx	<input type="radio"/> CBM403A-02BEA-xx
	Common external	<input type="radio"/> CBM403A-01CEA-xx	<input type="radio"/> CBM403A-01DEA-xx	<input type="radio"/> CBM403A-02CEA-xx	<input type="radio"/> CBM403A-02DEA-xx

Number of stations (01, 02, 03, or 04)

** Other options available. Consult factory.

OPTIONS

411A-AOA-DM-Dxxx-xxx
 clic with memory spring (replace by 4).

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Internal pilot : 20 - 150 PSI External pilot : vacuum - 150 PSI		
Pilot pressure :	20 - 150 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to +50°C)		
Orifice :	6.2 mm		
Flow :	1.0C _v		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	NEMA 4		
Power :	~ Inrush : 10.9 VA Holding : 7.7 VA = 1.8 to 12.7 W		
Response times :	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 35069 and seal 16524.

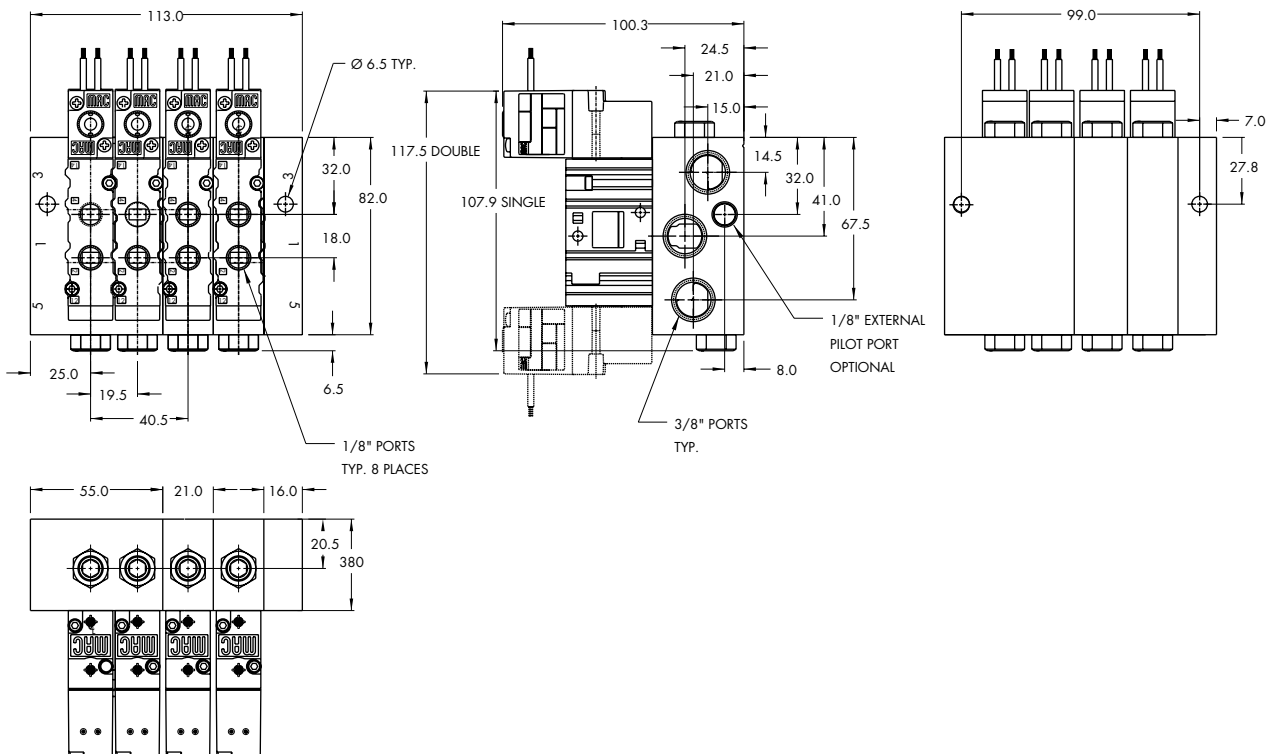
Accessories :

- Blanking plate : M-04001. • Flow control (x2) : N-04001. • Seal (x2) : 17013-01, (x1) : 17015-01.
- Mounting screw (x2) : 35043. • End plate kit : M-04003-01. • End plate kit for common external : M-04004-01.

Options :

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

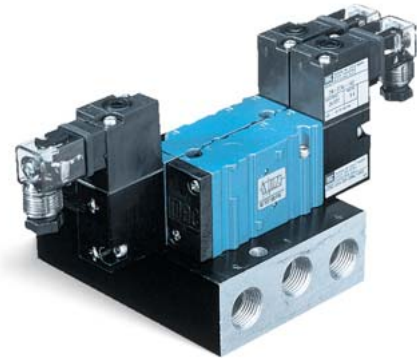
DIMENSIONS



Function	Port size (NPTF)	Flow [Max]	Circuit bar mounting
5/2 - 5/3	1/8" - 1/4"	1.0C_v	mid profile 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

xxxx-xxx-DM-Dxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
Internal	<input type="radio"/> 413A-OOA-DM-Dxxx-xxx	<input type="radio"/> 423A-OOA-DM-Dxxx-xxx	<input type="radio"/> 453A-OOA-DM-Dxxx-xxx	<input type="radio"/> 463A-OOA-DM-Dxxx-xxx	<input type="radio"/> 473A-OOA-DM-Dxxx-xxx

SOLENOID OPERATOR >

D **XX X- X XX**

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JA 120/60, 110/50	<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"/> FB 24VDC (1.8 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> DA 24VDC (5.4 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			

CBM404A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR (BOTTOM CYLINDER PORTS) **

Port size	Pilot air	Spacing standard 19,5 mm		Spacing 26 mm (Rectangular connector)	
		w/o flow controls	w/ flow controls	w/o flow controls	w/ flow controls
1/8" NPTF	Internal	<input type="radio"/> CBM404A-00AAA-xx	<input type="radio"/> CBM404A-00BAA-xx	<input type="radio"/> CBM404A-02AAA-xx	<input type="radio"/> CBM404A-02BAA-xx
1/4" NPTF	Internal	<input type="radio"/> CBM404A-00AAD-xx	<input type="radio"/> CBM404A-00BAD-xx	<input type="radio"/> CBM404A-02AAD-xx	<input type="radio"/> CBM404A-02BAD-xx

Number of stations (03=3 stations)

** Other options available. Consult factory.

OPTIONS

413A-OOA-DM-Dxxx-xxx
 clic with memory spring (replace by 6).

**TECHNICAL
DATA**

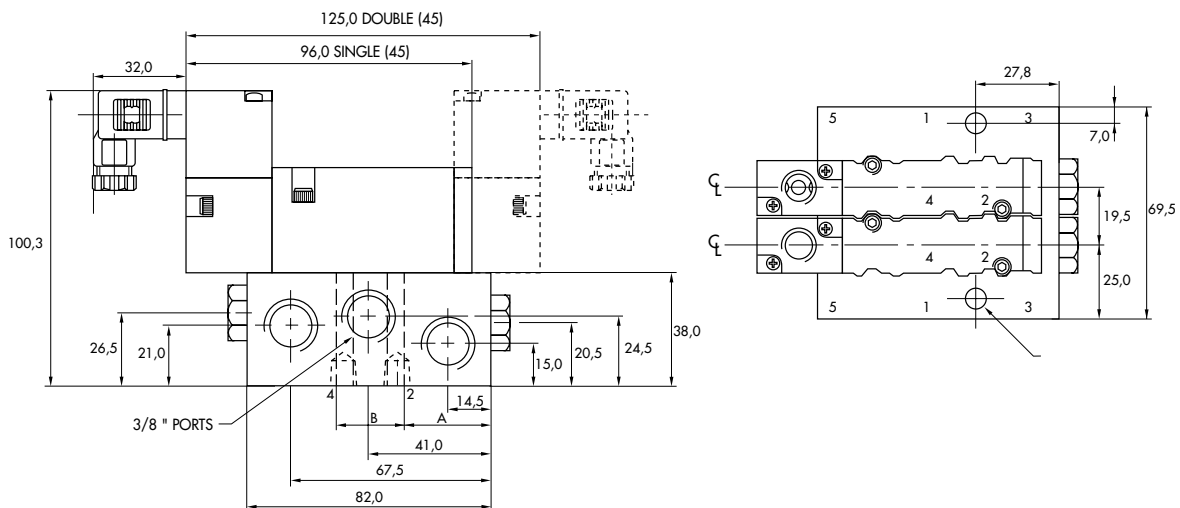
Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	20 - 150 PSI		
Pilot pressure :	20 - 150 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to +50°C)		
Orifice :	6.2 mm		
Flow :	1.0C _v		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	NEMA 4		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	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 35069 and seal 16524.

Accessories : • Blanking plate : M-04002. • Flow control (x2) : N-04001. • Seal : 16525.
• Mounting screw (x2) : 35043.

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

DIMENSIONS

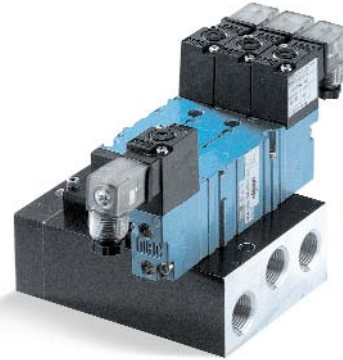


Port size	A	B
1/8"	31.5	19.0
1/4"	32.0	20.0

Function	Port size (NPTF)	Flow [Max]	Circuit bar mounting
5/2 - 5/3	1/8" - 1/4"	1.0C_v	mid profile - 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

xxxx-xxx-DM-Dxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
Internal	<input type="radio"/> 413A-OOA-DM-Dxxx-xxx	<input type="radio"/> 423A-OOA-DM-Dxxx-xxx	<input type="radio"/> 453A-OOA-DM-Dxxx-xxx	<input type="radio"/> 463A-OOA-DM-Dxxx-xxx	<input type="radio"/> 473A-OOA-DM-Dxxx-xxx

SOLENOID OPERATOR >

D XX X- X XX'

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JA 120/60, 110/50	<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"/> FB 24VDC (1.8 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> DA 24VDC (5.4 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			

CBM404A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR (BOTTOM CYLINDER PORTS) **

Port size	Pilot air	Spacing standard 19,5 mm		Spacing 26 mm (Rectangular connector)	
		w/o flow controls	w/ flow controls	w/o flow controls	w/ flow controls
1/8" NPTF	Internal	<input type="radio"/> CBM404A-00ABA-xx	<input type="radio"/> CBM404A-00BBA-xx	<input type="radio"/> CBM404A-02ABA-xx	<input type="radio"/> CBM404A-02BBA-xx
1/4" NPTF	Internal	<input type="radio"/> CBM404A-00ABD-xx	<input type="radio"/> CBM404A-00BBD-xx	<input type="radio"/> CBM404A-02ABD-xx	<input type="radio"/> CBM404A-02BBD-xx

Number of stations (03=3 stations)

** Other options available. Consult factory.

Note: add-a-unit stations may be added to above bars.

OPTIONS

413A-OOA-DM-Dxxx-xxx - clic with memory spring, replace by 6.

**TECHNICAL
DATA**

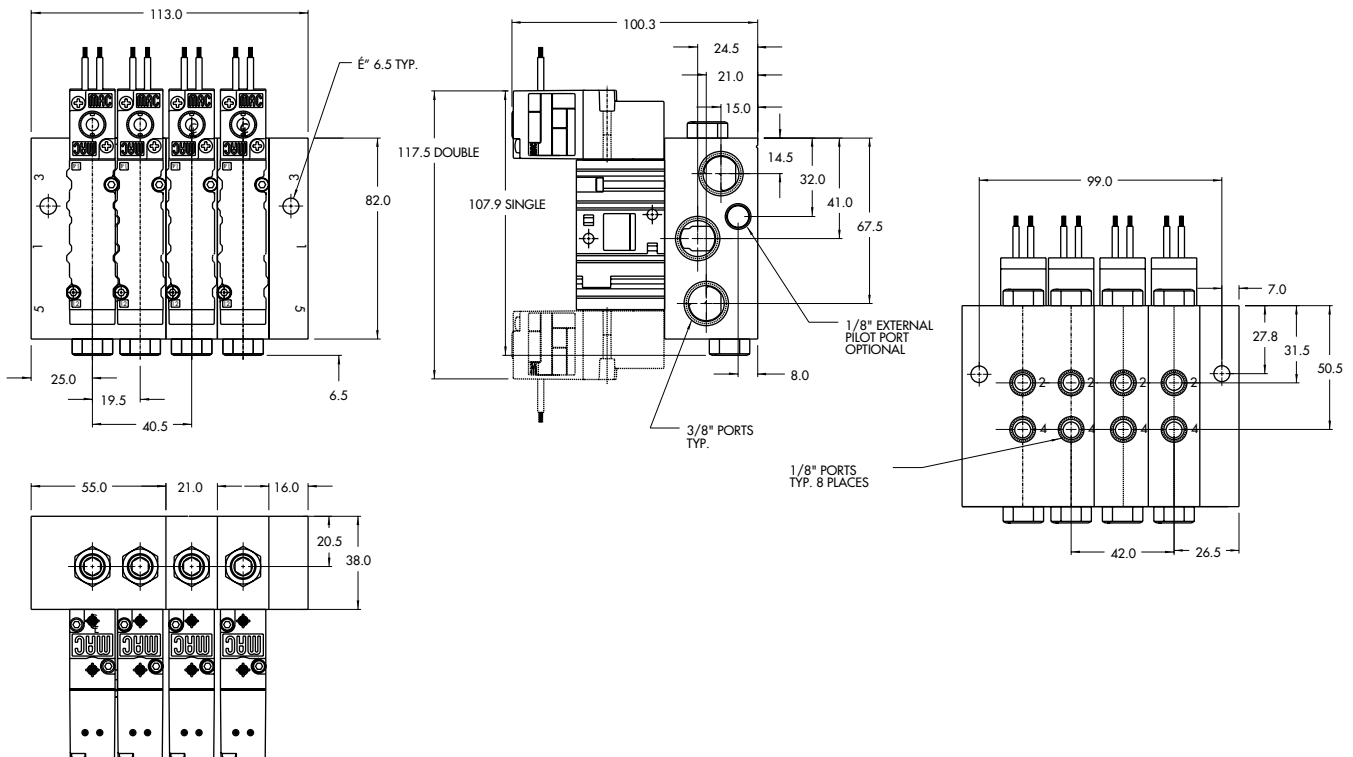
Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	20 - 150 PSI		
Pilot pressure :	20 - 150 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to +50°C)		
Orifice :	6.2 mm		
Flow :	1.0C _v		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	NEMA 4		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	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 35069 and seal 16524.

Accessories : • Blanking plate : M-04002. • Flow control (x2) : N-04001. • Seal : 16525.
• Mounting screw (x2) : 35043. • End plate kit : M-04003-01.

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

DIMENSIONS



Function	Port size (NPTF)	Flow (Max)	Circuit bar mounting
5/2 - 5/3	1/8" - 1/4"	1.0C_v	add-a-unit stations for CBM404A 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

xxxx-xxx-DM-Dxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
Internal	<input type="radio"/> 413A-OOA-DM-Dxxx-xxx	<input type="radio"/> 423A-OOA-DM-Dxxx-xxx	<input type="radio"/> 453A-OOA-DM-Dxxx-xxx	<input type="radio"/> 463A-OOA-DM-Dxxx-xxx	<input type="radio"/> 473A-OOA-DM-Dxxx-xxx

SOLENOID OPERATOR >

D XX X- X XX'

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JA 120/60, 110/50	<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"/> FB 24VDC (1.8 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> DA 24VDC (5.4 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			

CBM404A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR (BOTTOM CYLINDER PORTS) **

Port size	Pilot air	Spacing 21 mm		Spacing 26 mm (Rectangular connector)	
		w/o flow controls	w/ flow controls	w/o flow controls	w/ flow controls
1/8" NPTF	Internal	<input type="radio"/> CBM404A-01AEA-xx	<input type="radio"/> CBM404A-01BEA-xx	<input type="radio"/> CBM404A-02AEA-xx	<input type="radio"/> CBM404A-02BEA-xx
1/4" NPTF	Internal	<input type="radio"/> CBM404A-01AED-xx	<input type="radio"/> CBM404A-01BED-xx	<input type="radio"/> CBM404A-02AED-xx	<input type="radio"/> CBM404A-02BED-xx

Number of stations (01, 02, 03, or 04)

** Other options available. Consult factory.

OPTIONS

413A-OOA-DM-Dxxx-xxx - clic with memory spring (replace by 6).

**TECHNICAL
DATA**

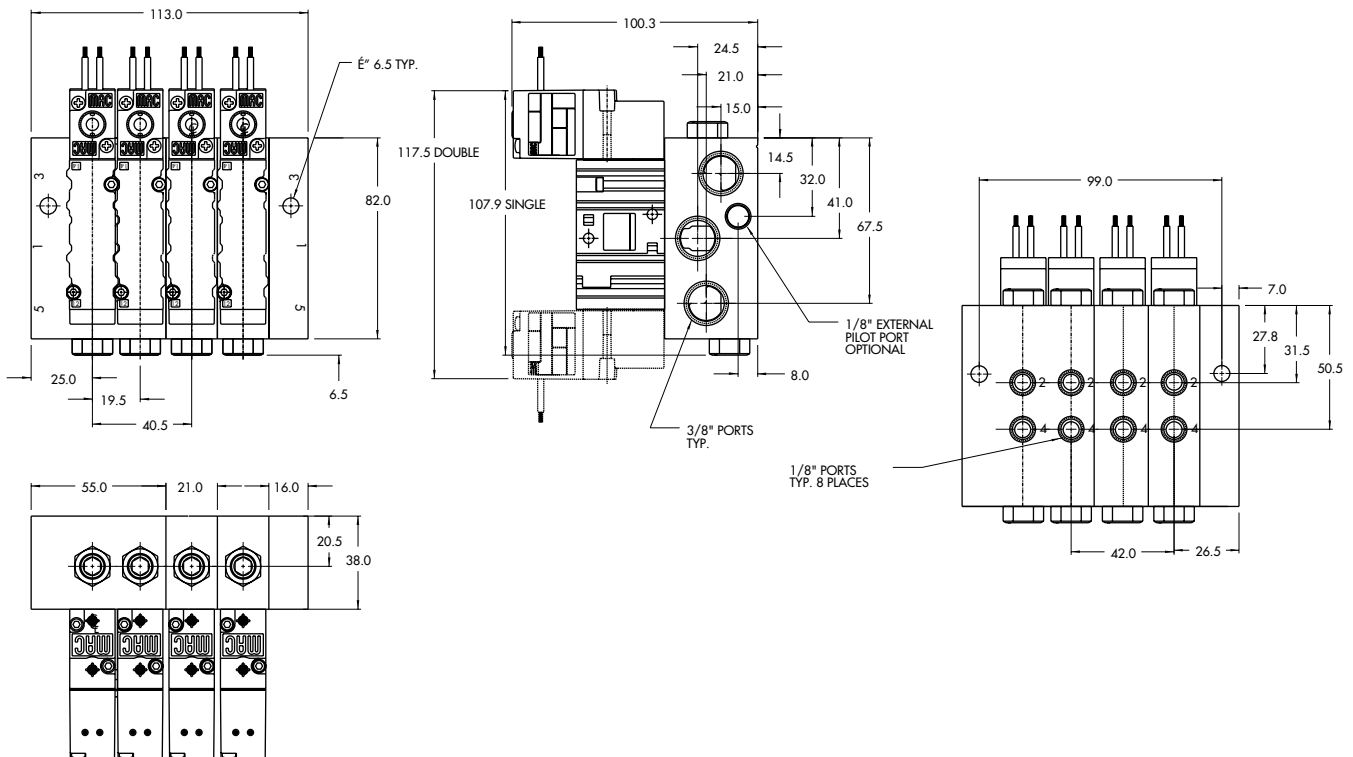
Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	20 - 150 PSI		
Pilot pressure :	20 - 150 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to +50°C)		
Orifice :	6.2 mm		
Flow :	1.0C _v		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	NEMA 4		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	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 35069 and seal 16524.

Accessories : • Blanking plate : M-04002. • Flow control (x2) : N-04001. • Seal : 16525.
• Mounting screw (x2) : 35043. • End plate kit : M-04003-01.

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

DIMENSIONS



Function	Port size (NPTF)	Flow (Max)	Circuit bar mounting
5/2 - 5/3	1/8" - 1/4"	1.0C_v	high profile 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

xxxx-xxx-DM-Dxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
Internal	<input type="radio"/> 413A-OOA-DM-Dxxx-xxx	<input type="radio"/> 423A-OOA-DM-Dxxx-xxx	<input type="radio"/> 453A-OOA-DM-Dxxx-xxx	<input type="radio"/> 463A-OOA-DM-Dxxx-xxx	<input type="radio"/> 473A-OOA-DM-Dxxx-xxx
External	<input type="radio"/> 413A-OOD-DM-Dxxx-xxx	<input type="radio"/> 423A-OOD-DM-Dxxx-xxx	<input type="radio"/> 453A-OOD-DM-Dxxx-xxx	<input type="radio"/> 463A-OOD-DM-Dxxx-xxx	<input type="radio"/> 473A-OOD-DM-Dxxx-xxx

SOLENOID OPERATOR >

D **XX X- X XX***

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JA 120/60, 110/50	<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"/> FB 24VDC (1.8 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> DA 24VDC (5.4 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			

CBM405A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR (SIDE CYLINDER PORTS) **

Port size	Pilot air	Spacing standard 19,5 mm	Spacing 26 mm (Rectangular connector)
1/8" NPTF	Internal	<input type="radio"/> CBM405A-00AAA-xx	<input type="radio"/> CBM405A-02AAA-xx
	Common external	<input type="radio"/> CBM405A-00BAA-xx	<input type="radio"/> CBM405A-02BAA-xx
1/4" NPTF	Internal	<input type="radio"/> CBM405A-00AAD-xx	<input type="radio"/> CBM405A-02AAD-xx
	Common external	<input type="radio"/> CBM405A-00BAD-xx	<input type="radio"/> CBM405A-02BAD-xx

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

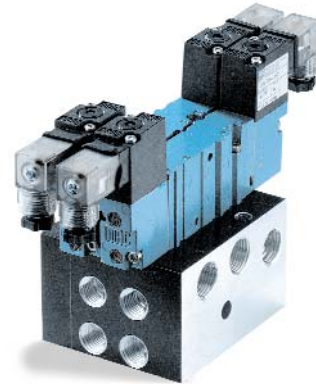
OPTIONS

413A-OOA-DM-Dxxx-xxx - clic with memory spring (replace by 6).

Function	Port size (NPTF)	Flow [Max]	Circuit bar mounting
5/2 - 5/3	1/8" - 1/4"	1.0C_v	high profile - 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

xxxx-xxx-DM-Dxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
Internal	<input type="radio"/> 413A-OOA-DM-Dxxx-xxx	<input type="radio"/> 423A-OOA-DM-Dxxx-xxx	<input type="radio"/> 453A-OOA-DM-Dxxx-xxx	<input type="radio"/> 463A-OOA-DM-Dxxx-xxx	<input type="radio"/> 473A-OOA-DM-Dxxx-xxx
External	<input type="radio"/> 413A-OOD-DM-Dxxx-xxx	<input type="radio"/> 423A-OOD-DM-Dxxx-xxx	<input type="radio"/> 453A-OOD-DM-Dxxx-xxx	<input type="radio"/> 463A-OOD-DM-Dxxx-xxx	<input type="radio"/> 473A-OOD-DM-Dxxx-xxx

SOLENOID OPERATOR >

D **XX X- X XX***

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JA 120/60, 110/50	<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"/> FB 24VDC (1.8 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> DA 24VDC (5.4 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			

CBM405A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR (SIDE CYLINDER PORTS) **

Port size	Pilot air	Spacing standard 19,5 mm	Spacing 26 mm (Rectangular connector)
1/8" NPTF	Internal	<input type="radio"/> CBM405A-00ABA-xx	<input type="radio"/> CBM405A-02ABA-xx
	Common external	<input type="radio"/> CBM405A-00BCA-xx	<input type="radio"/> CBM405A-02BCA-xx
1/4" NPTF	Internal	<input type="radio"/> CBM405A-00ABD-xx	<input type="radio"/> CBM405A-02ABD-xx
	Common external	<input type="radio"/> CBM405A-00BCD-xx	<input type="radio"/> CBM405A-02BCD-xx

Number of stations (03=3 stations)

** Other options available. Consult factory.

Note: add-a-unit stations may be added to above bars.

OPTIONS

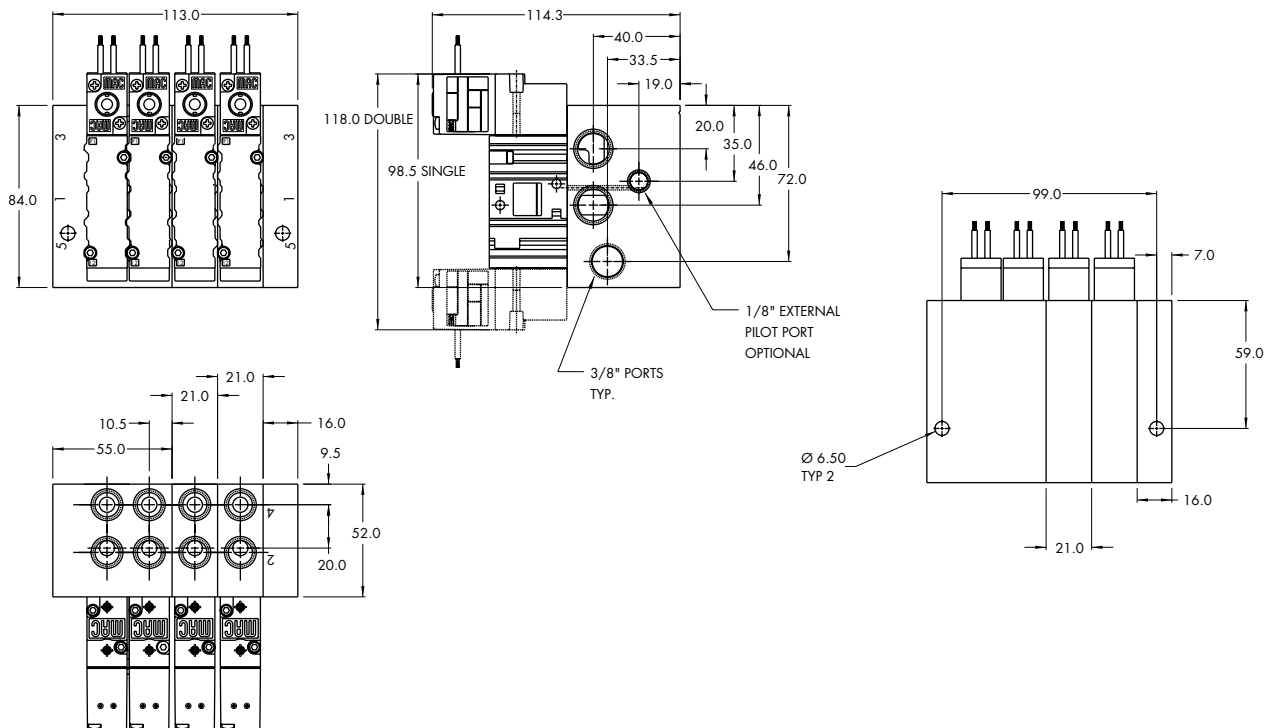
413A-OOA-DM-Dxxx-xxx
 clic with memory spring (replace by 6).

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Internal pilot : 20 - 150 PSI External pilot : vacuum - 150 PSI		
Pilot pressure :	20 - 150 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to +50°C)		
Orifice :	6.2 mm		
Flow :	1.0C _v		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	NEMA 4		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	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 35069 and seal 16524.
- Accessories : • Blanking plate : M-04002. • Seal : 16525. • Mounting screw (x2) : 35043.
• End plate kit : M-04005-01. • End plate kit for common external pilot : M-04006-01.
- Options : • BSPP threads. • Isolation of inlet and/or exhaust.

DIMENSIONS



Function	Port size (NPTF)	Flow [Max]	Circuit bar mounting
5/2 - 5/3	1/8" - 1/4"	1.0C_v	add-a-unit stations for CBM405A 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

xxxx-xxx-DM-Dxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Pilot air	5/2 Single operator	5/2 Double operator	5/3 Closed center	5/3 Open center	5/3 Pressure center
Internal	413A-OOA-DM-Dxxx-xxx	423A-OOA-DM-Dxxx-xxx	453A-OOA-DM-Dxxx-xxx	463A-OOA-DM-Dxxx-xxx	473A-OOA-DM-Dxxx-xxx
External	413A-OOD-DM-Dxxx-xxx	423A-OOD-DM-Dxxx-xxx	453A-OOD-DM-Dxxx-xxx	463A-OOD-DM-Dxxx-xxx	473A-OOD-DM-Dxxx-xxx

SOLENOID OPERATOR >

D XX X- X XX*

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
<input type="radio"/> JB 240/60, 220/50	<input type="radio"/> A 18" (Flying leads)	<input type="radio"/> 1 Non-locking	<input type="radio"/> KA Square connector
<input type="radio"/> JA 120/60, 110/50	<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"/> FB 24VDC (1.8 W)			<input type="radio"/> JD Rectangular connector with light
<input type="radio"/> DA 24VDC (5.4 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			

CBM405A-xxxxx-xx

HOW TO ORDER CIRCUIT BAR [SIDE CYLINDER PORTS] **

Port size	Pilot air	Spacing 21 mm	Spacing 26 mm (Rectangular connector)
1/8" NPTF	Internal	<input type="radio"/> CBM405A-01AEA-xx	<input type="radio"/> CBM405A-02AEA-xx
	Common external	<input type="radio"/> CBM405A-01BEA-xx	<input type="radio"/> CBM405A-02BEA-xx
1/4" NPTF	Internal	<input type="radio"/> CBM405A-01AED-xx	<input type="radio"/> CBM405A-02AED-xx
	Common external	<input type="radio"/> CBM405A-01BED-xx	<input type="radio"/> CBM405A-02BED-xx

Number of stations (01, 02, 03, or 04)

** Other options available. Consult factory.

OPTIONS

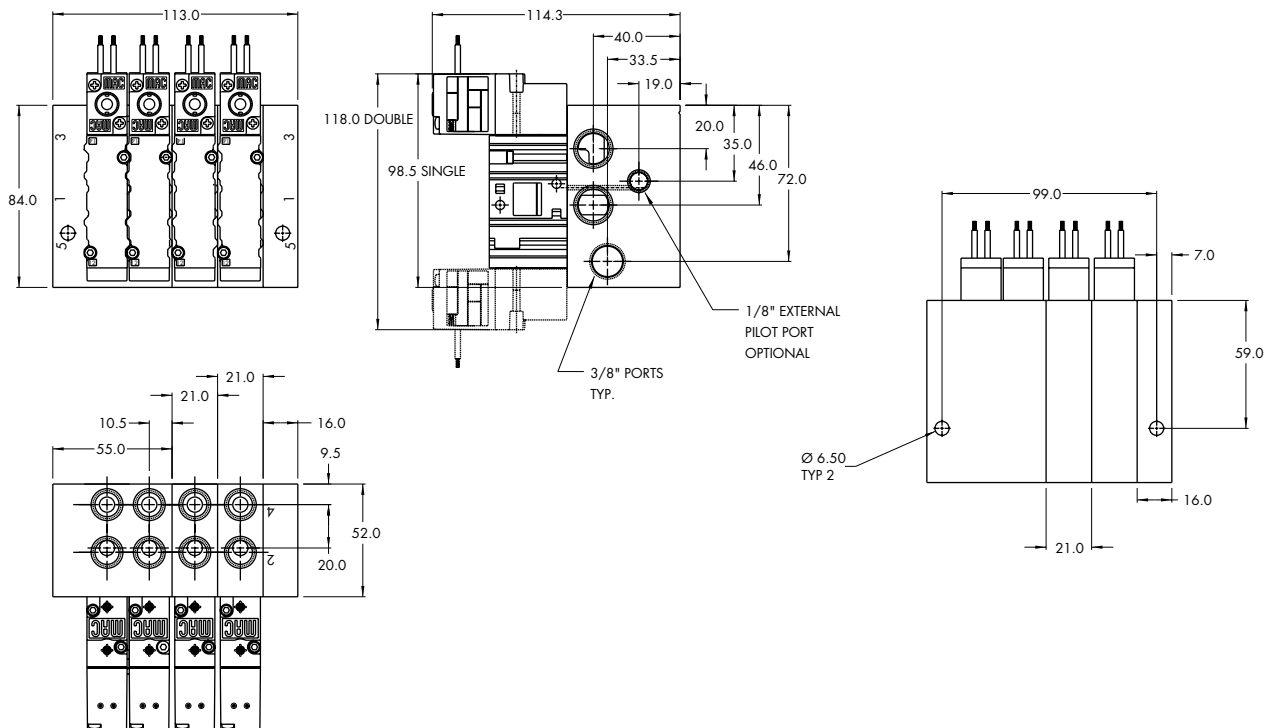
413A-OOA-DM-Dxxx-xxx
 clic with memory spring (replace by 6).

**TECHNICAL
DATA**

Fluid :	Compressed air, vacuum, inert gases		
Pressure range :	Internal pilot : 20 - 150 PSI External pilot : vacuum - 150 PSI		
Pilot pressure :	20 - 150 PSI		
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)		
Filtration :	40 µ		
Temperature range :	0°F to 120°F (-18°C to +50°C)		
Orifice :	6.2 mm		
Flow :	1.0C _v		
Coil :	General purpose class A, continuous duty, encapsulated		
Voltage range :	-15% to +10% of nominal voltage		
Protection :	NEMA 4		
Power :	~ Inrush : 10.9 VA	Holding : 7.7 VA	
	= 1.8 to 12.7 W		
Response times :	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 35069 and seal 16524.
- Accessories : • Blanking plate : M-04002. • Seal : 16525. • Mounting screw (x2) : 35043.
• End plate kit : M-04005-01. • End plate kit for common external pilot : M-04006-01.
- Options : • BSPP threads. • Isolation of inlet and/or exhaust.

DIMENSIONS





Section 2

Options



0 p t i o n s

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

VALVE CODE ➤

DM-DXX X - X XX
1 2 3 4

OPTIONS AVAILABLE FOR

- pilot operated valves 400, 52 & 92 Series

1. VOLTAGE

- D XX	X - X XX	VOLTAGE
<input type="radio"/>	DB	12 VDC (5.4 W)
<input type="radio"/>	DC	12 VDC (7.5 W)
<input type="radio"/>	DD	24 VDC (7.3 W)
<input type="radio"/>	DE	12 VDC (12.7 W)
<input type="radio"/>	DK	110 VDC (5.8 W)
<input type="radio"/>	DJ	28 VDC (5.7 W)
<input type="radio"/>	DL	64 VDC (6.0 W)
<input type="radio"/>	DM	36 VDC (5.8 W)
<input type="radio"/>	DN	6 VDC (6.0 W)
<input type="radio"/>	DR	90 VDC (6.6 W)
<input type="radio"/>	DS	110 VDC (7.3 W), 100 VDC (6.0 W)
<input type="radio"/>	DT	75 VDC (5.6 W)
<input type="radio"/>	DP	48 VDC (5.8 W)
<input type="radio"/>	FA	12 VDC (1.8 W)
<input type="radio"/>	FE	12 VDC (2.4 W)
<input type="radio"/>	FF	24 VDC (2.4 W)
<input type="radio"/>	JD	100/60, 100/50, 110/60

2. WIRE LENGTH

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



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.