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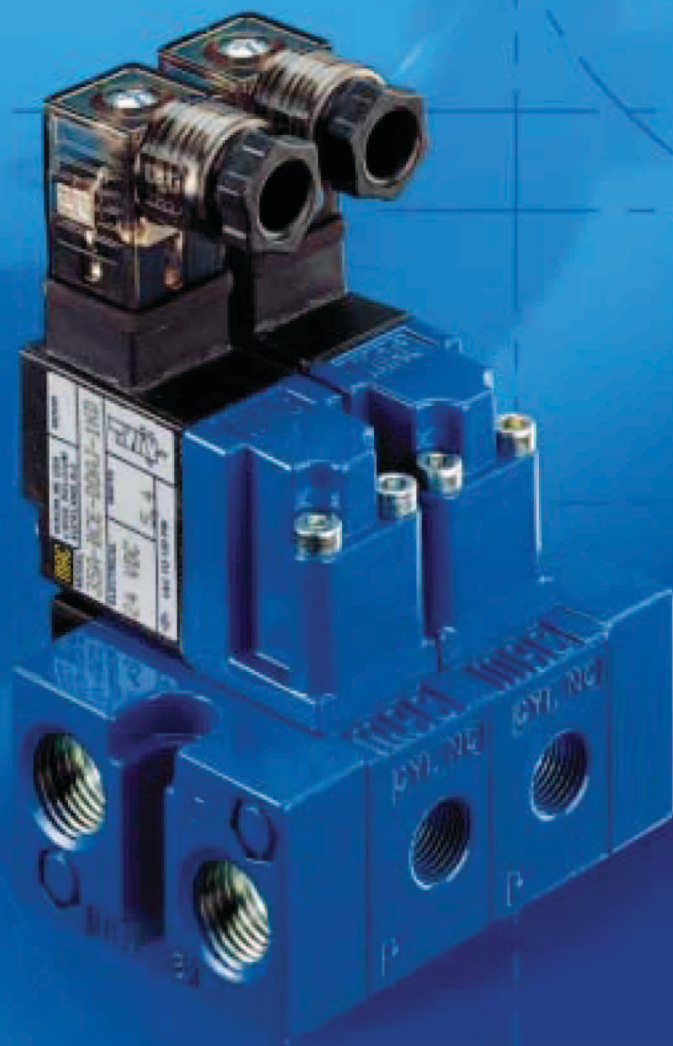
MAC

V A L V E S



LDA

Solutions for Life



A i r V a l v e s

Direct solenoid and solenoid pilot operated valves 10 mm valve

Function	Port size	Flow [Max] / [Cv / NI/min]	Individual mounting
5/2, 5/3	M5, #10-32	0.25 / 250	Inline

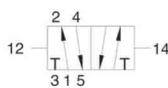
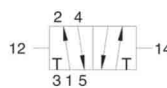
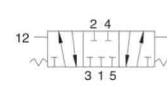
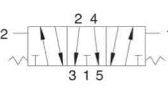
OPERATIONAL BENEFITS

1. 10 mm valve – solenoid pilot operated.
2. Balanced spool, immune to variations of pressure.
3. Bonded spool with minimal friction.
4. Wiping effect, eliminates sticking.
5. Pilot valve with balanced poppet, high flow, short and consistent response times

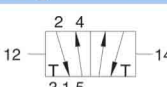
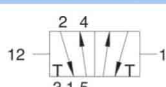
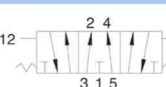


HOW TO ORDER

SINGLE PRESSURE MODELS

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed Center	5/3 Open Center
					
#10-32	Internal	24A-A1-A00-Exx-Rxxx-xxx	24A-B1-A00-Exx-Rxxx-xxx	24A-E1-A00-Exx-Rxxx-xxx	24A-F1-A00-Exx-Rxxx-xxx
	External	24A-A4-A00-Exx-Rxxx-xxx	24A-B4-A00-Exx-Rxxx-xxx	24A-E4-A00-Exx-Rxxx-xxx	24A-F4-A00-Exx-Rxxx-xxx
M5	Internal	24A-A1-B00-Exx-Rxxx-xxx	24A-B1-B00-Exx-Rxxx-xxx	24A-E1-B00-Exx-Rxxx-xxx	24A-F1-B00-Exx-Rxxx-xxx
	External	24A-A4-B00-Exx-Rxxx-xxx	24A-B4-B00-Exx-Rxxx-xxx	24A-E4-B00-Exx-Rxxx-xxx	24A-F4-B00-Exx-Rxxx-xxx

DUAL PRESSURE MODELS (Internal pilot only)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure Center
				
#10-32	Internal from port #3	24A-C2-A00-Exx-Rxxx-xxx	24A-D2-A00-Exx-Rxxx-xxx	24A-G2-A00-Exx-Rxxx-xxx
	Internal from port #5	24A-C3-A00-Exx-Rxxx-xxx	24A-D3-A00-Exx-Rxxx-xxx	24A-G3-A00-Exx-Rxxx-xxx
M5	Internal from port #3	24A-C2-B00-Exx-Rxxx-xxx	24A-D2-B00-Exx-Rxxx-xxx	24A-G2-B00-Exx-Rxxx-xxx
	Internal from port #5	24A-C3-B00-Exx-Rxxx-xxx	24A-D3-B00-Exx-Rxxx-xxx	24A-G3-B00-Exx-Rxxx-xxx

SOLENOID OPERATOR ▶

E XX - R XX X - X XX

XX Pilot type	XX Voltage	X Lead wire length	X Manual operator	XX Electrical connector
M2 Muffled exhaust	DB 24VDC (1.0W)	O* No lead wire	0 No manual operator	BA Flying leads
P2 Piped exhaust (M3)	DC 24VDC (1.8W)	A 18" / 45 cm	1 Recessed non locking	BB Flying leads w/ LED
	DD 24VDC (2.5W)	B 24" / 60 cm	3 Extended non locking	RA Mini JAC solenoid plug-in
	DF 24VDC (4.0W)	C 36" / 90 cm		RB Mini JAC sol. plug-in w/ LED
	DH 12VDC (1.0W)	* Not available for flying lead connectors		TA JST solenoid plug-in
	DJ 12VDC (1.8W)			TB JST sol. plug-in w/ LED
	DK 12VDC (2.5W)			
	DM 12VDC (4.0W)			

MAC

Series 24

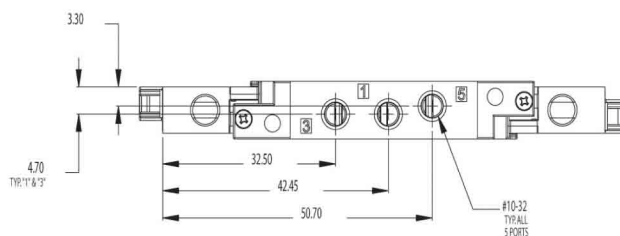
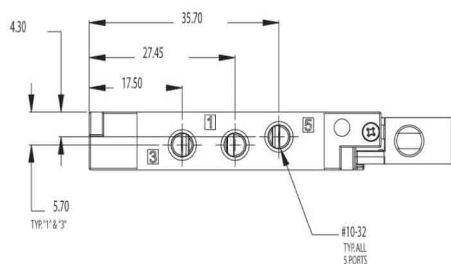
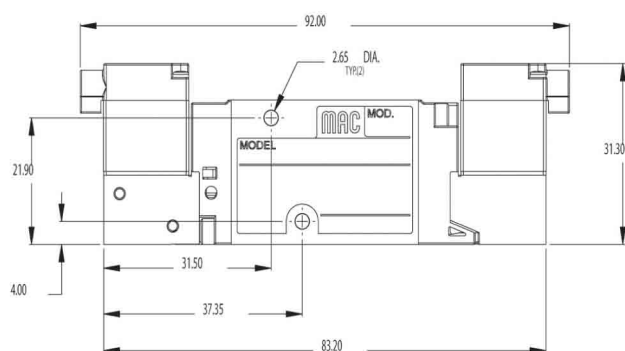
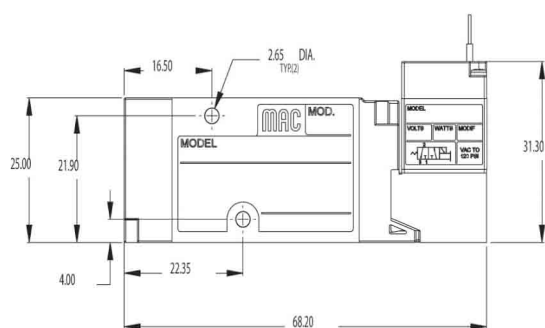
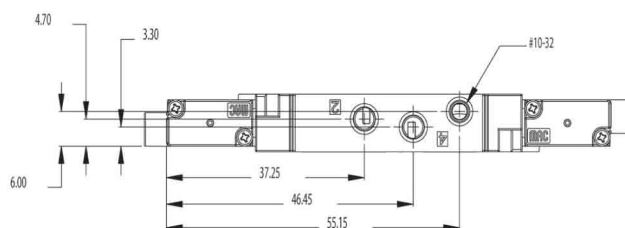
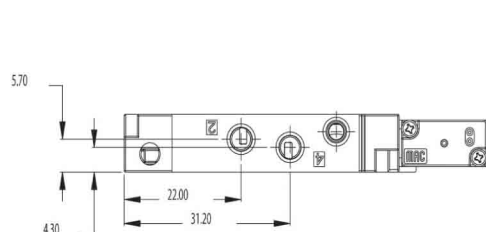
TECHNICAL DATA

Direct solenoid and solenoid pilot operated valves 10 mm valve

Fluids:	Compressed air, vacuum, inert gases
Pressure range:	2 position internal pilot: Single solenoid: 30 to 120 psi / 2 to 8 bar Double solenoid: 20 to 120 psi / 1.3 to 8 bar 2/3 position external pilot: vacuum to 120 psi / 8 bar 3 position internal pilot: 40 to 120 psi / 2.7 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C and 100°C)
Filtration:	40µ
Flow:	0.25 Cv / 250 NI/min
Coil:	Class A (#26 AWG x 18), continuous duty
Voltage range:	-15% to +10% of nominal voltage
Power	4.0W, 3.0W, 2.5W, 1.8W, 1.0W

DIMENSIONS

Dimensions shown are metric



Direct solenoid and solenoid pilot operated valves

10 mm valve

Function
5/2, 5/3
Port size
M5, #10-32, M7
Flow [Max]/[Cv / l/min]
0.37 / 370
Individual mounting
Sub-base non plug-in

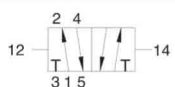
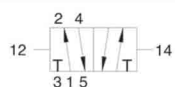
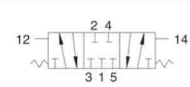
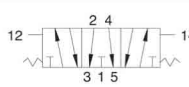
OPERATIONAL BENEFITS

1. 10 mm valve – solenoid pilot operated.
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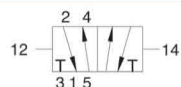
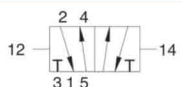
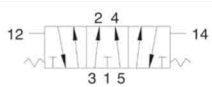


HOW TO ORDER

SINGLE PRESSURE MODELS (Side ports)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed Center	5/3 Open Center
					
Valve only	Internal	24A-AD-000-Exx-Rxxx-xxx	24A-BD-000-Exx-Rxxx-xxx	24A-ED-000-Exx-Rxxx-xxx	24A-FD-000-Exx-Rxxx-xxx
	External	24A-AE-000-Exx-Rxxx-xxx	24A-BE-000-Exx-Rxxx-xxx	24A-EE-000-Exx-Rxxx-xxx	24A-FE-000-Exx-Rxxx-xxx
#10-32	Internal	24A-AD-A1B-Exx-Rxxx-xxx	24A-BD-A1B-Exx-Rxxx-xxx	24A-ED-A1B-Exx-Rxxx-xxx	24A-FD-A1B-Exx-Rxxx-xxx
	External	24A-AE-A1B-Exx-Rxxx-xxx	24A-BE-A1B-Exx-Rxxx-xxx	24A-EE-A1B-Exx-Rxxx-xxx	24A-FE-A1B-Exx-Rxxx-xxx
M5	Internal	24A-AD-B1B-Exx-Rxxx-xxx	24A-BD-B1B-Exx-Rxxx-xxx	24A-ED-B1B-Exx-Rxxx-xxx	24A-FD-B1B-Exx-Rxxx-xxx
	External	24A-AE-B1B-Exx-Rxxx-xxx	24A-BE-B1B-Exx-Rxxx-xxx	24A-EE-B1B-Exx-Rxxx-xxx	24A-FE-B1B-Exx-Rxxx-xxx
M7	Internal	24A-AD-C1B-Exx-Rxxx-xxx	24A-BD-C1B-Exx-Rxxx-xxx	24A-ED-C1B-Exx-Rxxx-xxx	24A-FD-C1B-Exx-Rxxx-xxx
	External	24A-AE-C1B-Exx-Rxxx-xxx	24A-BE-C1B-Exx-Rxxx-xxx	24A-EE-C1B-Exx-Rxxx-xxx	24A-FE-C1B-Exx-Rxxx-xxx

DUAL PRESSURE MODELS (Internal pilot only – Side ports)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure Center
				
Valve only	Internal from port #3	24A-CJ-000-Exx-Rxxx-xxx	24A-DJ-000-Exx-Rxxx-xxx	24A-GJ-000-Exx-Rxxx-xxx
	Internal from port #5	24A-CK-000-Exx-Rxxx-xxx	24A-DK-000-Exx-Rxxx-xxx	24A-GK-000-Exx-Rxxx-xxx
#10-32	Internal from port #3	24A-CJ-A1B-Exx-Rxxx-xxx	24A-DJ-A1B-Exx-Rxxx-xxx	24A-GJ-A1B-Exx-Rxxx-xxx
	Internal from port #5	24A-CK-A1B-Exx-Rxxx-xxx	24A-DK-A1B-Exx-Rxxx-xxx	24A-GK-A1B-Exx-Rxxx-xxx
M5	Internal from port #3	24A-CJ-B1B-Exx-Rxxx-xxx	24A-DJ-B1B-Exx-Rxxx-xxx	24A-GJ-B1B-Exx-Rxxx-xxx
	Internal from port #5	24A-CK-B1B-Exx-Rxxx-xxx	24A-DK-B1B-Exx-Rxxx-xxx	24A-GK-B1B-Exx-Rxxx-xxx
M7	Internal from port #3	24A-CJ-C1B-Exx-Rxxx-xxx	24A-DJ-C1B-Exx-Rxxx-xxx	24A-GJ-C1B-Exx-Rxxx-xxx
	Internal from port #5	24A-CK-C1B-Exx-Rxxx-xxx	24A-DK-C1B-Exx-Rxxx-xxx	24A-GK-C1B-Exx-Rxxx-xxx

SOLENOID OPERATOR
E XX - R XX X - X XX

XX Pilot type	XX Voltage	X Lead wire length	X Manual operator	XX Electrical connector
M2 Muffled exhaust	DB 24VDC (1.0W)	O* No lead wire	0 No manual operator	BA Flying leads
P2 Piped exhaust (M3)	DC 24VDC (1.8W)	A 18" / 45 cm	1 Recessed non locking	BB Flying leads w/ LED
	DD 24VDC (2.5W)	B 24" / 60 cm	3 Extended non locking	RA Mini JAC solenoid plug-in
	DF 24VDC (4.0W)	C 36" / 90 cm		RB Mini JAC sol. plug-in w/ LED
	DH 12VDC (1.0W)	* Not available for flying lead connectors		TA JST solenoid plug-in
	DJ 12VDC (1.8W)			TB JST sol. plug-in w/ LED
	DK 12VDC (2.5W)			
	DM 12VDC (4.0W)			

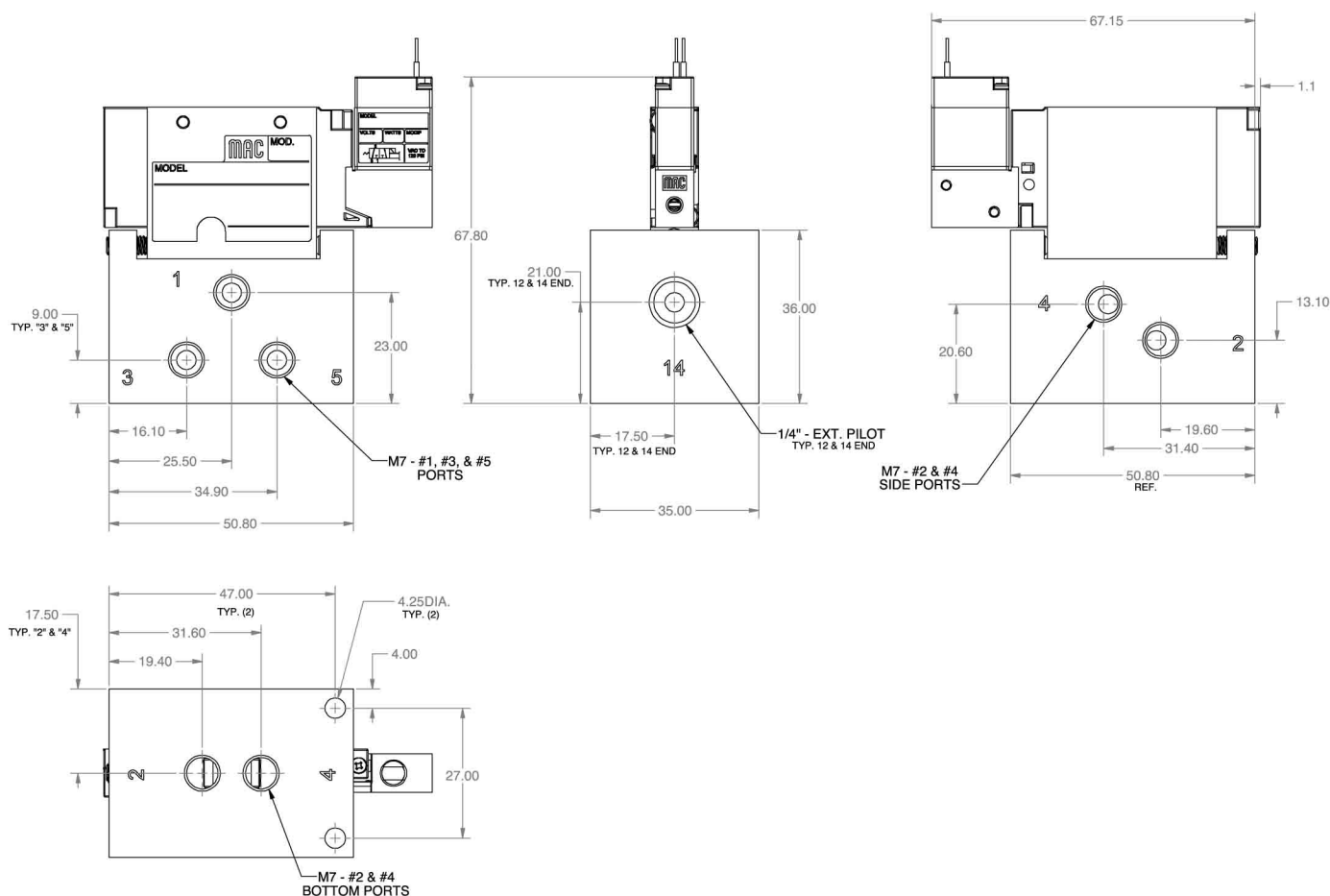
Direct solenoid and solenoid pilot operated valves 10 mm valve

TECHNICAL DATA

Fluids:	Compressed air, vacuum, inert gases
Pressure range:	2 position internal pilot: Single solenoid: 30 to 120 psi / 2 to 8 bar Double solenoid: 20 to 120 psi / 1,3 to 8 bar 2/3 position external pilot: vacuum to 120 psi / 8 bar 3 position internal pilot: 40 to 120 psi / 2,7 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C to 100°C)
Filtration:	40μ
Flow:	0.37 Cv / 370 NL/min
Coil:	Class A (#26 AWG x 18), continuous duty
Voltage range:	-15% to +10% of nominal voltage
Power	4.0W, 3.0W, 2.5W, 1.8W, 1.0W

DIMENSIONS

Dimensions shown are metric



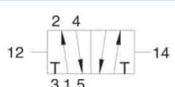
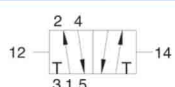
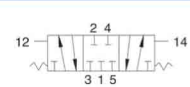
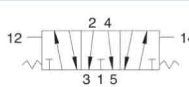
Direct solenoid and solenoid pilot operated valves

10 mm valve

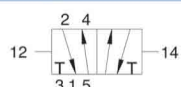
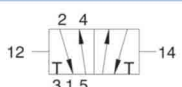
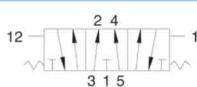
Function
Port size
Flow [Max] / [Cv / NI/min]
Individual mounting
5/2, 5/3
M5, #10-32, M7
0.37 / 370
Sub-base plug-in
OPERATIONAL BENEFITS

1. 10 mm valve – solenoid pilot operated.
2. Balanced spool, immune to variations of pressure.
3. Bonded spool with minimal friction.
4. Wiping effect, eliminates sticking.
5. Pilot valve with balanced poppet, high flow, short and consistent response times


HOW TO ORDER
SINGLE PRESSURE MODELS (Side ports)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed Center	5/3 Open Center
					
Valve only	Internal	24A-AA-000-Exx-RxxP-xxx	24A-BA-000-Exx-RxxP-xxx	24A-EA-000-Exx-RxxP-xxx	24A-FA-000-Exx-RxxP-xxx
	External	24A-AB-000-Exx-RxxP-xxx	24A-BB-000-Exx-RxxP-xxx	24A-EB-000-Exx-RxxP-xxx	24A-FB-000-Exx-RxxP-xxx
#10-32	Internal	24A-AA-A1A-Exx-RxxP-xxx	24A-BA-A1A-Exx-RxxP-xxx	24A-EA-A1A-Exx-RxxP-xxx	24A-FA-A1A-Exx-RxxP-xxx
	External	24A-AB-A1A-Exx-RxxP-xxx	24A-BB-A1A-Exx-RxxP-xxx	24A-EB-A1A-Exx-RxxP-xxx	24A-FB-A1A-Exx-RxxP-xxx
M5	Internal	24A-AA-B1A-Exx-RxxP-xxx	24A-BA-B1A-Exx-RxxP-xxx	24A-EA-B1A-Exx-RxxP-xxx	24A-FA-B1A-Exx-RxxP-xxx
	External	24A-AB-B1A-Exx-RxxP-xxx	24A-BB-B1A-Exx-RxxP-xxx	24A-EB-B1A-Exx-RxxP-xxx	24A-FB-B1A-Exx-RxxP-xxx
M7	Internal	24A-AA-C1A-Exx-RxxP-xxx	24A-BA-C1A-Exx-RxxP-xxx	24A-EA-C1A-Exx-RxxP-xxx	24A-FA-C1A-Exx-RxxP-xxx
	External	24A-AB-C1A-Exx-RxxP-xxx	24A-BB-C1A-Exx-RxxP-xxx	24A-EB-C1A-Exx-RxxP-xxx	24A-FB-C1A-Exx-RxxP-xxx

DUAL PRESSURE MODELS (Internal pilot only – Side ports)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure Center
				
Valve only	Internal from port #3	24A-CG-000-Exx-RxxP-xxx	24A-DG-000-Exx-RxxP-xxx	24A-GG-000-Exx-RxxP-xxx
	Internal from port #5	24A-CH-000-Exx-RxxP-xxx	24A-DH-000-Exx-RxxP-xxx	24A-GH-000-Exx-RxxP-xxx
#10-32	Internal from port #3	24A-CG-A1A-Exx-RxxP-xxx	24A-DG-A1A-Exx-RxxP-xxx	24A-GG-A1A-Exx-RxxP-xxx
	Internal from port #5	24A-CH-A1A-Exx-RxxP-xxx	24A-DH-A1A-Exx-RxxP-xxx	24A-GH-A1A-Exx-RxxP-xxx
M5	Internal from port #3	24A-CG-B1A-Exx-RxxP-xxx	24A-DG-B1A-Exx-RxxP-xxx	24A-GG-B1A-Exx-RxxP-xxx
	Internal from port #5	24A-CH-B1A-Exx-RxxP-xxx	24A-DH-B1A-Exx-RxxP-xxx	24A-GH-B1A-Exx-RxxP-xxx
M7	Internal from port #3	24A-CG-C1A-Exx-RxxP-xxx	24A-DG-C1A-Exx-RxxP-xxx	24A-GG-C1A-Exx-RxxP-xxx
	Internal from port #5	24A-CH-C1A-Exx-RxxP-xxx	24A-DH-C1A-Exx-RxxP-xxx	24A-GH-C1A-Exx-RxxP-xxx

SOLENOID OPERATOR
E XX - R XX X - X XX

XX Pilot type	XX Voltage	X Lead wire length	X Manual operator	XX Electrical connector
M2 Muffled exhaust	DB 24VDC (1.0W)	P Base plug-in	0 No manual operator	FA Base plug-in
P2 Piped exhaust (M3)	DC 24VDC (1.8W)		1 Recessed non locking	FB Base plug-in w/ LED
	DD 24VDC (2.5W)		3 Extended non locking	FC Base plug-in w/MOV
	DF 24VDC (4.0W)			FD Base plug-in w/MOV and LED
	DH 12VDC (1.0W)			
	DJ 12VDC (1.8W)			
	DK 12VDC (2.5W)			
	DM 12VDC (4.0W)			

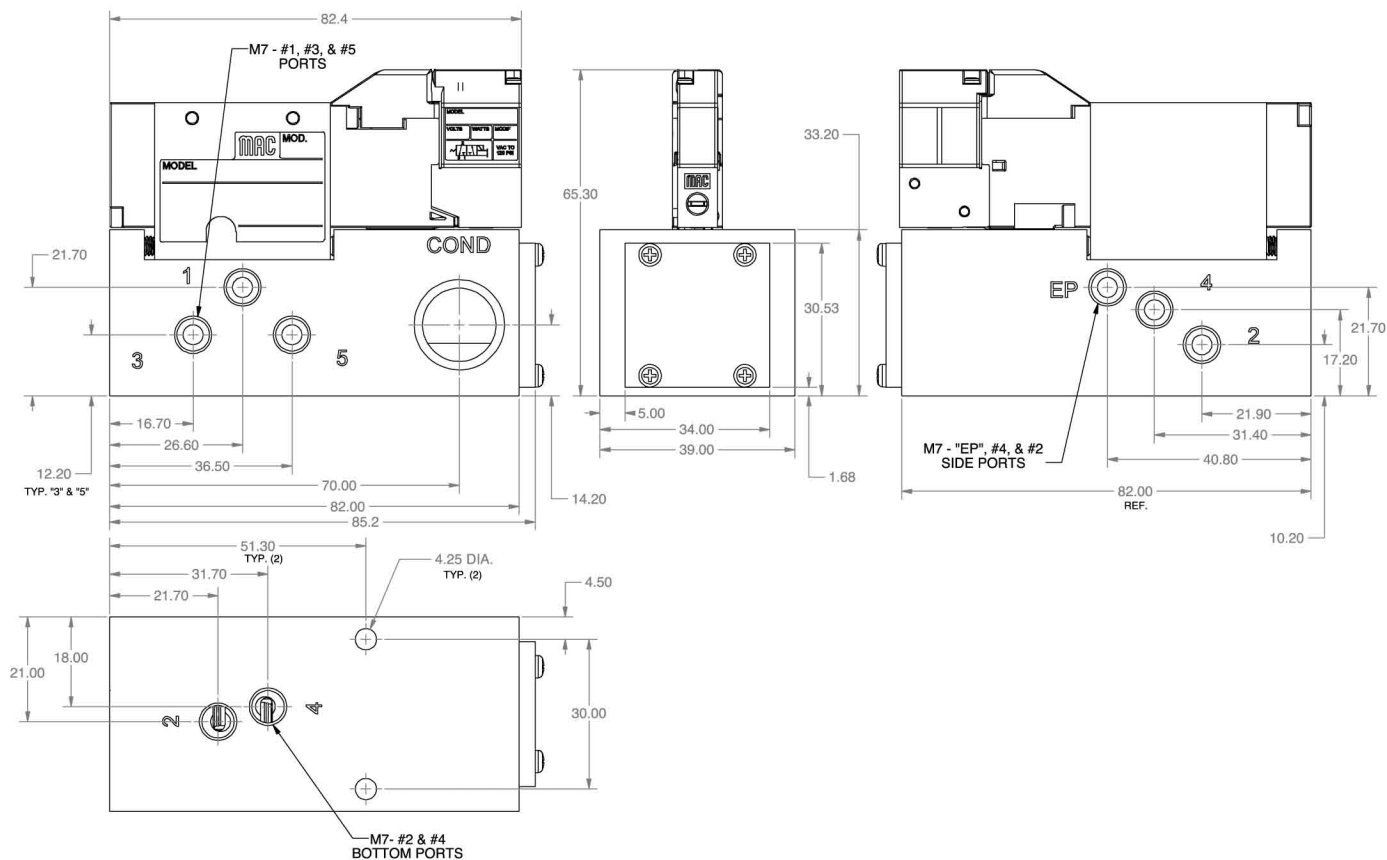
Direct solenoid and solenoid pilot operated valves

TECHNICAL DATA

Fluids:	Compressed air, vacuum, inert gases
Pressure range:	2 position internal pilot: Single solenoid: 30 to 120 psi / 2 to 8 bar Double solenoid: 20 to 120 psi / 1,3 to 8 bar 2/3 position external pilot: vacuum to 120 psi / 8 bar 3 position internal pilot: 40 to 120 psi / 2,7 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C to 100°C)
Filtration:	40µ
Flow:	0.37 Cv / 370 NI/min
Coil:	Class A (#26 AWG x 18), continuous duty
Voltage range:	-15% to +10% of nominal voltage
Power	4.0W, 3.0W, 2.5W, 1.8W, 1.0W

DIMENSIONS

Dimensions shown are metric



Direct solenoid and solenoid pilot operated valves 10 mm valve

Function

5/2, 5/3

Port size

M5, #10-32, M7

Flow [Max]/[Cv / l/min]

0.4 / 400

Manifold mounting

Manifold base non plug-in

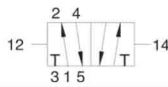
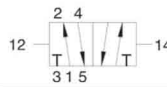
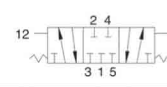
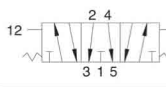
OPERATIONAL BENEFITS

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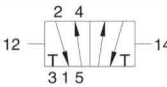
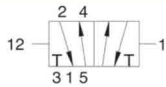
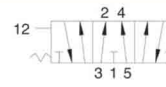


HOW TO ORDER

SINGLE PRESSURE MODELS (Side ports)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed Center	5/3 Open Center
					
Valve only	Internal	24A-AD-000-Exx-Rxxx-xxx	24A-BD-000-Exx-Rxxx-xxx	24A-ED-000-Exx-Rxxx-xxx	24A-FD-000-Exx-Rxxx-xxx
	External	24A-AE-000-Exx-Rxxx-xxx	24A-BE-000-Exx-Rxxx-xxx	24A-EE-000-Exx-Rxxx-xxx	24A-FE-000-Exx-Rxxx-xxx
#10-32	Internal	24A-AD-AAB-Exx-Rxxx-xxx	24A-BD-AAB-Exx-Rxxx-xxx	24A-ED-AAB-Exx-Rxxx-xxx	24A-FD-AAB-Exx-Rxxx-xxx
	External	24A-AE-AAB-Exx-Rxxx-xxx	24A-BE-AAB-Exx-Rxxx-xxx	24A-EE-AAB-Exx-Rxxx-xxx	24A-FE-AAB-Exx-Rxxx-xxx
M5	Internal	24A-AD-BAB-Exx-Rxxx-xxx	24A-BD-BAB-Exx-Rxxx-xxx	24A-ED-BAB-Exx-Rxxx-xxx	24A-FD-BAB-Exx-Rxxx-xxx
	External	24A-AE-BAB-Exx-Rxxx-xxx	24A-BE-BAB-Exx-Rxxx-xxx	24A-EE-BAB-Exx-Rxxx-xxx	24A-FE-BAB-Exx-Rxxx-xxx
M7	Internal	24A-AD-CAB-Exx-Rxxx-xxx	24A-BD-CAB-Exx-Rxxx-xxx	24A-ED-CAB-Exx-Rxxx-xxx	24A-FD-CAB-Exx-Rxxx-xxx
	External	24A-AE-CAB-Exx-Rxxx-xxx	24A-BE-CAB-Exx-Rxxx-xxx	24A-EE-CAB-Exx-Rxxx-xxx	24A-FE-CAB-Exx-Rxxx-xxx

DUAL PRESSURE MODELS (Internal pilot only – Side ports)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure Center
				
Valve only	Internal from port #3	24A-CJ-000-Exx-Rxxx-xxx	24A-DJ-000-Exx-Rxxx-xxx	24A-GJ-000-Exx-Rxxx-xxx
	Internal from port #5	24A-CK-000-Exx-Rxxx-xxx	24A-DK-000-Exx-Rxxx-xxx	24A-GK-000-Exx-Rxxx-xxx
#10-32	Internal from port #3	24A-CJ-AAB-Exx-Rxxx-xxx	24A-DJ-AAB-Exx-Rxxx-xxx	24A-GJ-AAB-Exx-Rxxx-xxx
	Internal from port #5	24A-CK-AAB-Exx-Rxxx-xxx	24A-DK-AAB-Exx-Rxxx-xxx	24A-GK-AAB-Exx-Rxxx-xxx
M5	Internal from port #3	24A-CJ-BAB-Exx-Rxxx-xxx	24A-DJ-BAB-Exx-Rxxx-xxx	24A-GJ-BAB-Exx-Rxxx-xxx
	Internal from port #5	24A-CK-BAB-Exx-Rxxx-xxx	24A-DK-BAB-Exx-Rxxx-xxx	24A-GK-BAB-Exx-Rxxx-xxx
M7	Internal from port #3	24A-CJ-CAB-Exx-Rxxx-xxx	24A-DJ-CAB-Exx-Rxxx-xxx	24A-GJ-CAB-Exx-Rxxx-xxx
	Internal from port #5	24A-CK-CAB-Exx-Rxxx-xxx	24A-DK-CAB-Exx-Rxxx-xxx	24A-GK-CAB-Exx-Rxxx-xxx

SOLENOID OPERATOR ▶

E XX - R XX X - X XX

XX Pilot type	XX Voltage	X Lead wire length	X Manual operator	XX Electrical connector
M2 Muffled exhaust	DB 24VDC (1.0W)	O* No lead wire	0 No manual operator	BA Flying leads
P2 Piped exhaust (M3)	DC 24VDC (1.8W)	A 18" / 45 cm	1 Recessed non locking	BB Flying leadsw/LED
	DD 24VDC (2.5W)	B 24" / 60 cm	3 Extended non locking	RA Mini JAC solenoid plug-in
	DF 24VDC (4.0W)	C 36" / 60 cm		RB Mini JAC sol. plug-in w/ LED
	DH 12VDC (1.0W)			TA JST solenoid plug-in
	DJ 12VDC (1.8W)			TB JST sol. plug-in w/ LED
	DK 12VDC (2.5W)			
	DM 12VDC (4.0W)			

End plate kit required (Port size 1/4"): M-24002-01-01 (internal pilot) – M-24002-02-01 (external pilot)

Direct solenoid and solenoid pilot operated valves 10 mm valve

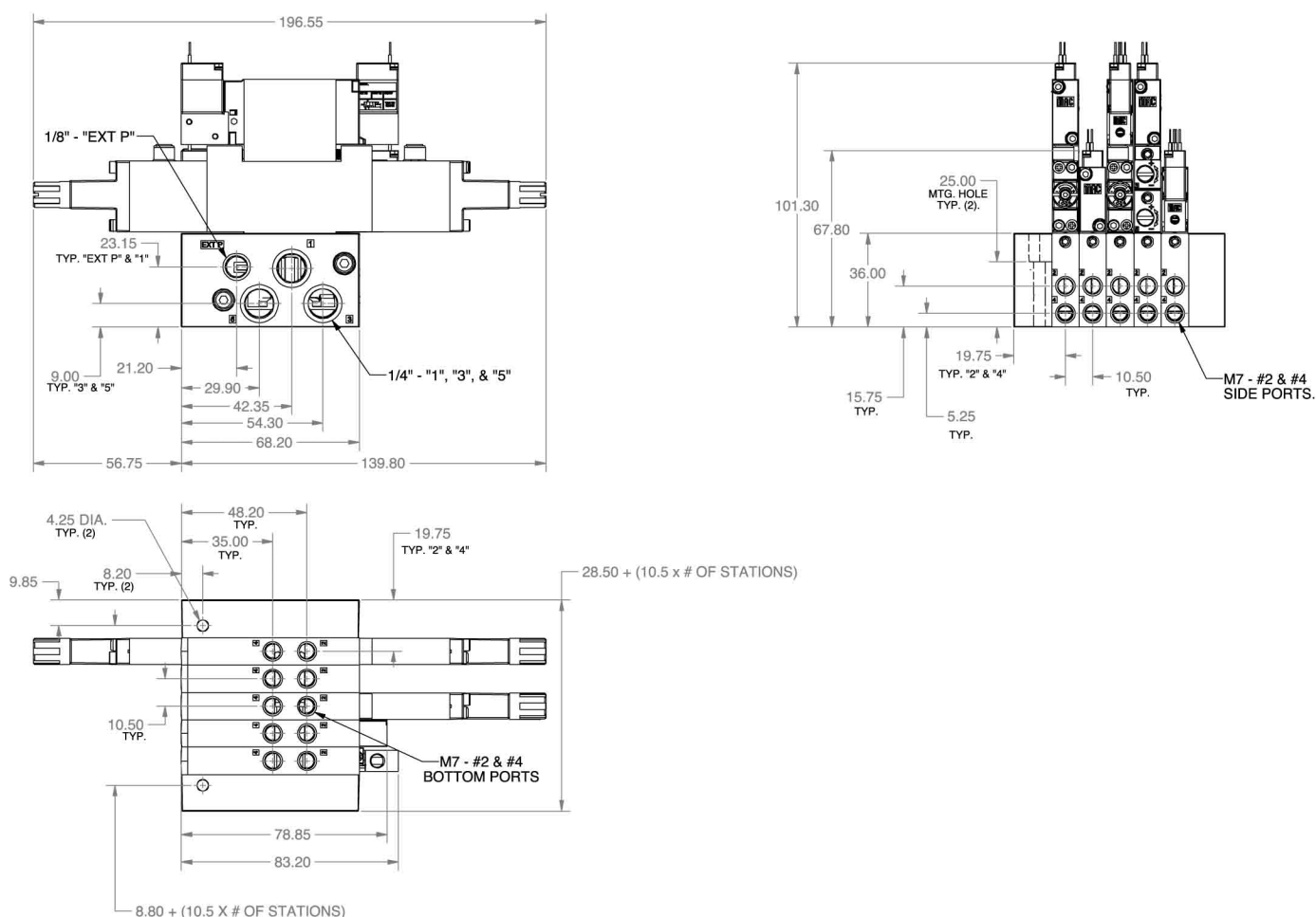
TECHNICAL DATA

Fluids:	Compressed air, vacuum, inert gases
Pressure range:	2 position internal pilot: Single solenoid: 30 to 120 psi / 2 to 8 bar Double solenoid: 20 to 120 psi / 1,3 to 8 bar 2/3 position external pilot: vacuum to 120 psi / 8bar 3 position internal pilot: 40 to 120 psi / 2,7 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C to 100°C)
Filtration:	40µ
Flow:	0.4 Cv / 400 NI/min
Coil:	Class A (#26 AWG x 18), continuous duty
Voltage range:	-15% to +10% of nominal voltage
Power	4.0W, 3.0W, 2.5W, 1.8W, 1.0W

Spare parts: • Blank station cover plate: M-24004 • Inlet isolator: 28568
• Exhaust isolator (Port #5): 28569 • Exhaust isolator (Port #3): 28570

DIMENSIONS

Dimensions shown are metric



Direct solenoid and solenoid pilot operated valves

10 mm valve

Function
5/2, 5/3
Port size
M5, #10-32, M7
Flow [Max] / [Cv / l/min]
0.4 / 400
Manifold mounting
Manifold base plug-in

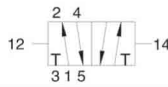
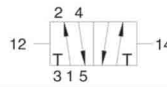
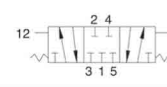
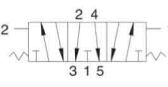
OPERATIONAL BENEFITS

1. 10 mm valve – solenoid pilot operated.
2. Balanced spool, immune to variations of pressure.
3. Bonded spool with minimal friction.
4. Wiping effect, eliminates sticking.
5. Pilot valve with balanced poppet, high flow, short and consistent response times

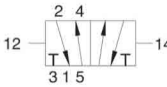
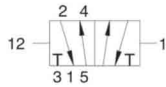
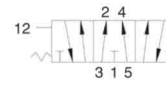


HOW TO ORDER

SINGLE PRESSURE MODELS (Side ports)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed Center	5/3 Open Center
					
Valve only	Internal	24A-AA-000-Exx-RxxP-xxx	24A-BA-000-Exx-RxxP-xxx	24A-EA-000-Exx-RxxP-xxx	24A-FA-000-Exx-RxxP-xxx
	External	24A-AB-000-Exx-RxxP-xxx	24A-BB-000-Exx-RxxP-xxx	24A-EB-000-Exx-RxxP-xxx	24A-FB-000-Exx-RxxP-xxx
#10-32	Internal	24A-AA-AAA-Exx-RxxP-xxx	24A-BA-AAA-Exx-RxxP-xxx	24A-EA-AAA-Exx-RxxP-xxx	24A-FA-AAA-Exx-RxxP-xxx
	External	24A-AB-AAA-Exx-RxxP-xxx	24A-BB-AAA-Exx-RxxP-xxx	24A-EB-AAA-Exx-RxxP-xxx	24A-FB-AAA-Exx-RxxP-xxx
M5	Internal	24A-AA-BAA-Exx-RxxP-xxx	24A-BA-BAA-Exx-RxxP-xxx	24A-EA-BAA-Exx-RxxP-xxx	24A-FA-BAA-Exx-RxxP-xxx
	External	24A-AB-BAA-Exx-RxxP-xxx	24A-BB-BAA-Exx-RxxP-xxx	24A-EB-BAA-Exx-RxxP-xxx	24A-FB-BAA-Exx-RxxP-xxx
M7	Internal	24A-AA-CAA-Exx-RxxP-xxx	24A-BA-CAA-Exx-RxxP-xxx	24A-EA-CAA-Exx-RxxP-xxx	24A-FA-CAA-Exx-RxxP-xxx
	External	24A-AB-CAA-Exx-RxxP-xxx	24A-BB-CAA-Exx-RxxP-xxx	24A-EB-CAA-Exx-RxxP-xxx	24A-FB-CAA-Exx-RxxP-xxx

DUAL PRESSURE MODELS (Internal pilot only – Side ports)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure Center
				
Valve only	Internal from port #3	24A-CG-000-Exx-RxxP-xxx	24A-DG-000-Exx-RxxP-xxx	24A-GG-000-Exx-RxxP-xxx
	Internal from port #5	24A-CH-000-Exx-RxxP-xxx	24A-DH-000-Exx-RxxP-xxx	24A-GH-000-Exx-RxxP-xxx
#10-32	Internal from port #3	24A-CG-AAA-Exx-RxxP-xxx	24A-DG-AAA-Exx-RxxP-xxx	24A-GG-AAA-Exx-RxxP-xxx
	Internal from port #5	24A-CH-AAA-Exx-RxxP-xxx	24A-DH-AAA-Exx-RxxP-xxx	24A-GH-AAA-Exx-RxxP-xxx
M5	Internal from port #3	24A-CG-BAA-Exx-RxxP-xxx	24A-DG-BAA-Exx-RxxP-xxx	24A-GG-BAA-Exx-RxxP-xxx
	Internal from port #5	24A-CH-BAA-Exx-RxxP-xxx	24A-DH-BAA-Exx-RxxP-xxx	24A-GH-BAA-Exx-RxxP-xxx
M7	Internal from port #3	24A-CG-CAA-Exx-RxxP-xxx	24A-DG-CAA-Exx-RxxP-xxx	24A-GG-CAA-Exx-RxxP-xxx
	Internal from port #5	24A-CH-CAA-Exx-RxxP-xxx	24A-DH-CAA-Exx-RxxP-xxx	24A-GH-CAA-Exx-RxxP-xxx

SOLENOID OPERATOR ▶

E XX - R XX X - X XX

XX Pilot type	XX Voltage	X Lead wire length	X Manual operator	XX Electrical connector
M2 Muffled exhaust	DB 24VDC (1.0W)	P Base plug-in	0 No manual operator	FA Base plug-in
P2 Piped exhaust (M3)	DC 24VDC (1.8W)		1 Recessed non locking	FB Base plug-in w/ LED
	DD 24VDC (2.5W)		3 Extended non locking	FC Base plug-in w/MOV
	DF 24VDC (4.0W)			FD Base plug-in w/MOV and LED
	DH 12VDC (1.0W)			
	DJ 12VDC (1.8W)			
	DK 12VDC (2.5W)			
	DM 12VDC (4.0W)			

End plate kit required (Port size 1/4"): M-24005-01-01 (internal pilot) – M-24005-02-01 (external pilot)

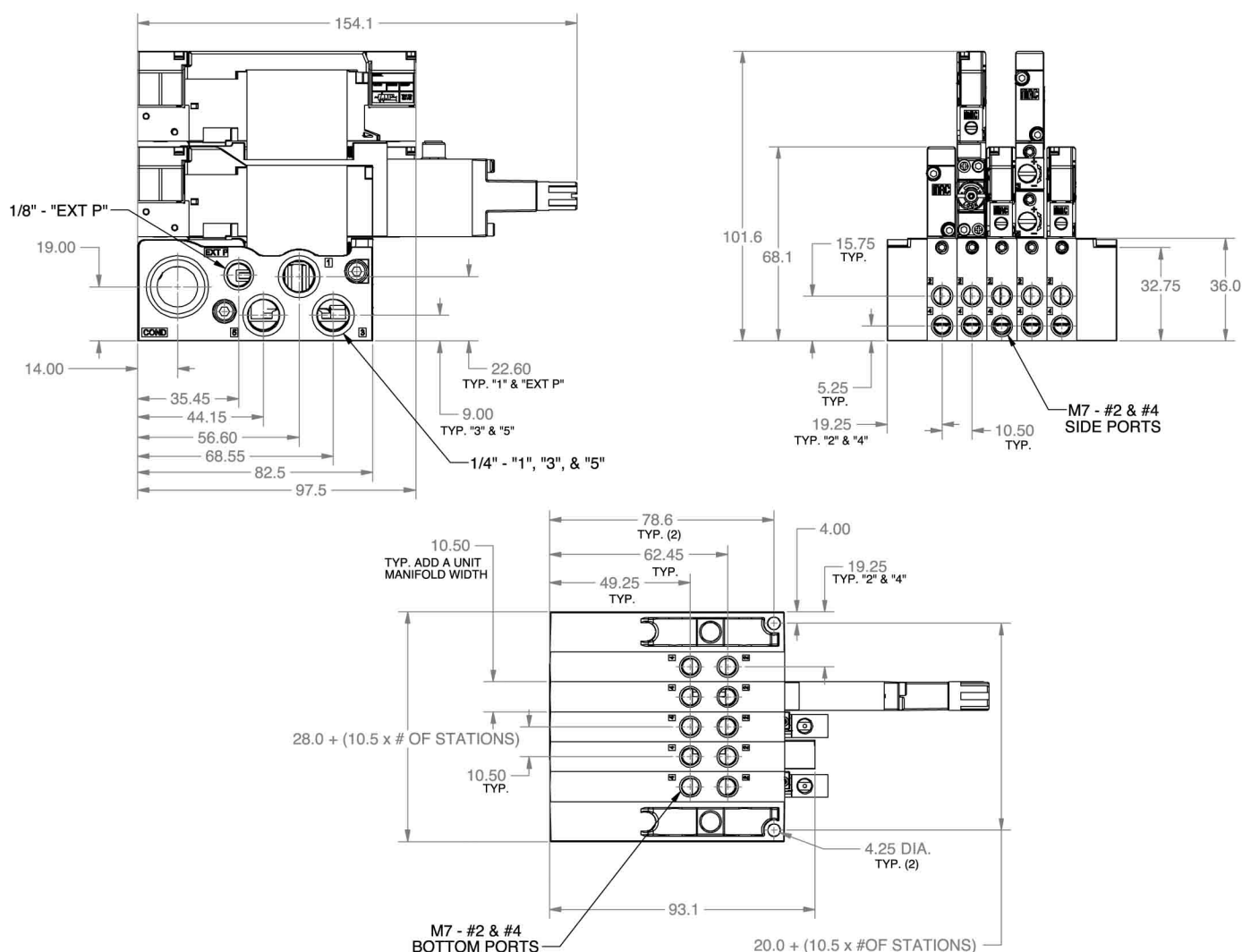
Direct solenoid and solenoid pilot operated valves 10 mm valve

Fluids:	Compressed air, vacuum, inert gases
Pressure range:	2 position internal pilot: Single solenoid: 30 to 120 psi / 2 to 8 bar Double solenoid: 20 to 120 psi / 1.3 to 8 bar 2/3 position external pilot: vacuum to 120 psi / 8 bar 3 position internal pilot: 40 to 120 psi / 2.7 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C to 100°C)
Filtration:	40µ
Flow:	0.4 Cv / 400 NI/min
Coil:	Class A (#26 AWG x 18), continuous duty
Voltage range:	-15% to +10% of nominal voltage
Power	4.0W, 3.0W, 2.5W, 1.8W, 1.0W

Spare parts: • Blank station cover plate: M-24004 • Inlet isolator: 28568
• Exhaust isolator (Port #5): 28569 • Exhaust isolator (Port #3): 28570

DIMENSIONS

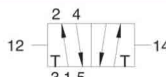
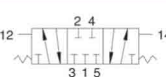
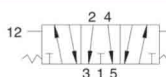
Dimensions shown are metric



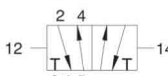
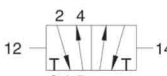
Function
5/2 - 5/3
Port size
#10-32 -M5 -M7
Flow [Max]/[Cv / NI/min]
0.40 / 400
Circuit bar mounting
Non plug-in
OPERATIONAL BENEFITS

1. 10 mm valve – solenoid pilot operated.
2. Balanced spool, immune to variations of pressure.
3. Bonded spool with minimal friction.
4. Wiping effect, eliminates sticking.
5. Pilot valve with balanced poppet, high flow, short and consistent response times


HOW TO ORDER
HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING
SINGLE PRESSURE MODELS

Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed Center	5/3 Open Center
				
Internal	24A-AD-000-Exx-Rxxx-xxx	24A-BD-000-Exx-Rxxx-xxx	24A-ED-000-Exx-Rxxx-xxx	24A-FD-000-Exx-Rxxx-xxx
External	24A-AE-000-Exx-Rxxx-xxx	24A-BE-000-Exx-Rxxx-xxx	24A-EE-000-Exx-Rxxx-xxx	24A-FE-000-Exx-Rxxx-xxx

DUAL PRESSURE MODELS (Internal pilot only)

Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure Center
			
Internal from port #3	24A-CJ-000-Exx-Rxxx-xxx	24A-DJ-000-Exx-Rxxx-xxx	24A-GJ-000-Exx-Rxxx-xxx
Internal from port #5	24A-CK-000-Exx-Rxxx-xxx	24A-DK-000-Exx-Rxxx-xxx	24A-GK-000-Exx-Rxxx-xxx

SOLENOID OPERATOR
E XX - R XX X - X XX

XX Pilot type	XX Voltage	X Lead wire length	X Manual operator	XX Electrical connector
M2 Muffled exhaust P2 Piped exhaust (M3)	DB 24VDC (1.0W) DC 24VDC (1.8W) DD 24VDC (2.5W) DF 24VDC (4.0W) DH 12VDC (1.0W) DJ 12VDC (1.8W) DK 12VDC (2.5W) DM 12VDC (4.0W)	O* No lead wire A 18" / 45 cm B 24" / 60 cm C 36" / 90 cm	O No manual operator 1 Recessed non locking 3 Extended non locking	BA Flying leads BB Flying leads w/LED RA Mini JAC solenoid plug-in RB Mini JAC sol. plug-in w/LED TA JST solenoid plug-in TB JST sol. plug-in w/LED

* Not available for flying lead connectors

HOW TO ORDER CIRCUIT BAR

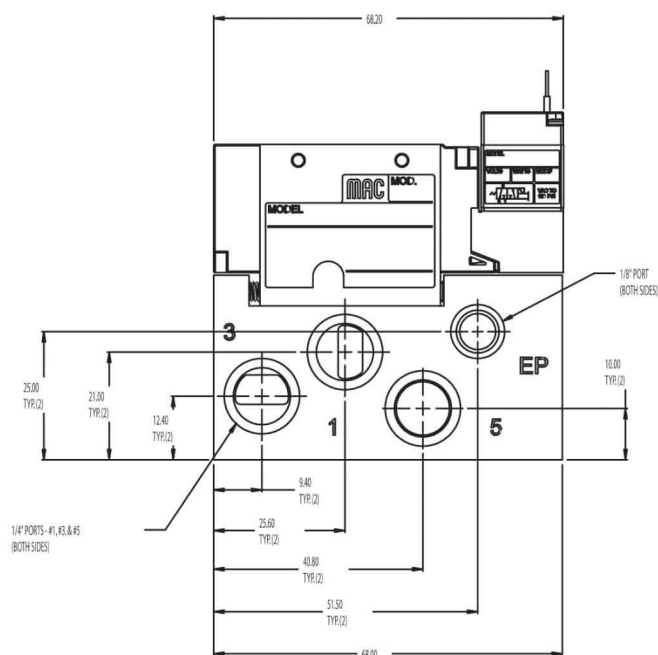
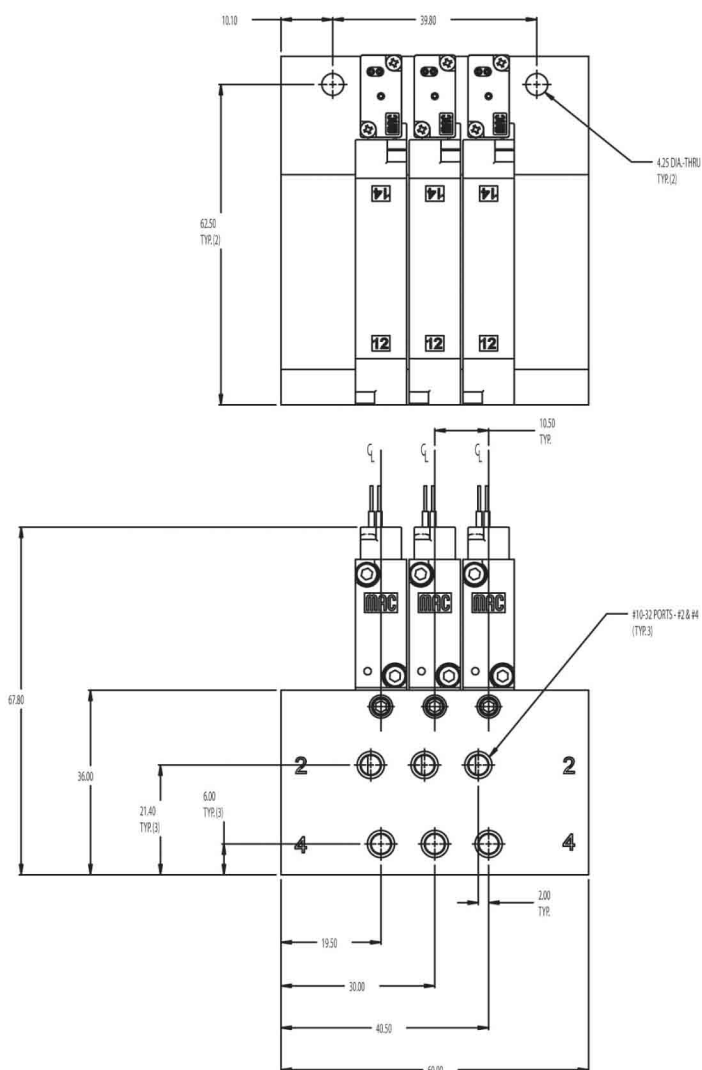
Pilot type	Pilot air	Side cylinder ports	Bottom cylinder ports
#10-32 UNF	Internal	EBM24A-00AAA-XX	EBM24A-00BAA-XX
	External	EBM24A-00ADA-XX	EBM24A-00BDA-XX
M5	Internal	EBM24A-00AAB-XX	EBM24A-00BAB-XX
	External	EBM24A-00ADB-XX	EBM24A-00BDB-XX
M7	Internal	EBM24A-00AAC-XX	EBM24A-00BAC-XX
	External	EBM24A-00ADC-XX	EBM24A-00BDC-XX

Direct solenoid and solenoid pilot operated valves

Fluids:	Compressed air, vacuum, inert gases
Pressure range:	2 position internal pilot: Single solenoid: 30 to 120 psi / 2 to 8 bar (air return), 35 to 120 psi / 2,3 to 8 bar (spring return) Double solenoid: 20 to 120 psi / 1,3 to 8 bar 2/3 position external pilot: vacuum to 120 psi / 8 bar 3 position internal pilot: 40 to 120 psi / 2,7 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C and 100°C)
Filtration:	40µ
Flow:	Up to 0.40 Cv / 400 NI/min
Coil:	Class A (#26 AWG x 18), continuous duty
Voltage range:	-15% to +10% of nominal voltage
Power	4.0W, 3.0W, 2.5W, 1.8W, 1.0W

DIMENSIONS

Dimensions shown are metric



Function

Port size

Flow [Max]/[Cv/NI/min]

Circuit bar mounting

5/2 - 5/3

#10-32 -M5 -M7

0.40 / 400

Plug-in - Low profile

OPERATIONAL BENEFITS

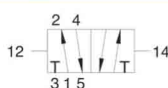
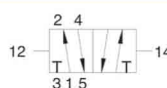
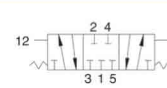
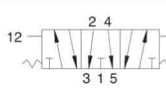
1. 10 mm valve – solenoid pilot operated.
2. Balanced spool, immune to variations of pressure.
3. Bonded spool with minimal friction.
4. Wiping effect, eliminates sticking.
5. Pilot valve with balanced poppet, high flow, short and consistent response times



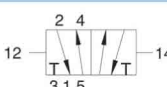
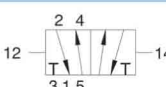
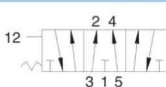
HOW TO ORDER

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

SINGLE PRESSURE MODELS

Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed Center	5/3 Open Center
				
Internal	24A-AA-000-Exx-RxxP-xxx	24A-BA-000-Exx-RxxP-xxx	24A-EA-000-Exx-RxxP-xxx	24A-FA-000-Exx-RxxP-xxx

DUAL PRESSURE MODELS (Internal pilot only)

Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure Center
			
Internal from port #3	24A-CG-000-Exx-RxxP-xxx	24A-DG-000-Exx-RxxP-xxx	24A-GG-000-Exx-RxxP-xxx
Internal from port #5	24A-CH-000-Exx-RxxP-xxx	24A-DH-000-Exx-RxxP-xxx	24A-GH-000-Exx-RxxP-xxx

SOLENOID OPERATOR ▶

E XX - R XX X - X XX

XX Pilot type	XX Voltage	X Lead wire length	X Manual operator	XX Electrical connector
M2 Muffled exhaust P2 Piped exhaust (M3)	DB 24VDC (1.0W) DC 24VDC (1.8W) DD 24VDC (2.5W) DF 24VDC (4.0W) DH 12VDC (1.0W) DJ 12VDC (1.8W) DK 12VDC (2.5W) DM 12VDC (4.0W)	P Base plug-in	0 No manual operator 1 Recessed non locking 3 Extended non locking	FA Base plug-in FB Base plug-in w/LED FC Base plug-in w/MOV FD Base plug-in w/LED and MOV

HOW TO ORDER CIRCUIT BAR (internal pilot only)

Pilot size	Base Electrical	Side cylinder ports	Bottom cylinder ports
#10-32 UNF	Single solenoid	ECD24A-00AAA-A0XX	ECD24A-00BAA-A0XX
	Double solenoid	ECD24A-00AAA-B0XX	ECD24A-00BAA-B0XX
M5	Single solenoid	ECD24A-00AAB-A0XX	ECD24A-00BAB-A0XX
	Double solenoid	ECD24A-00AAB-B0XX	ECD24A-00BAB-B0XX
M7	Single solenoid	ECD24A-00AAC-A0XX	ECD24A-00BAC-A0XX
	Double solenoid	ECD24A-00AAC-B0XX	ECD24A-00BAC-B0XX

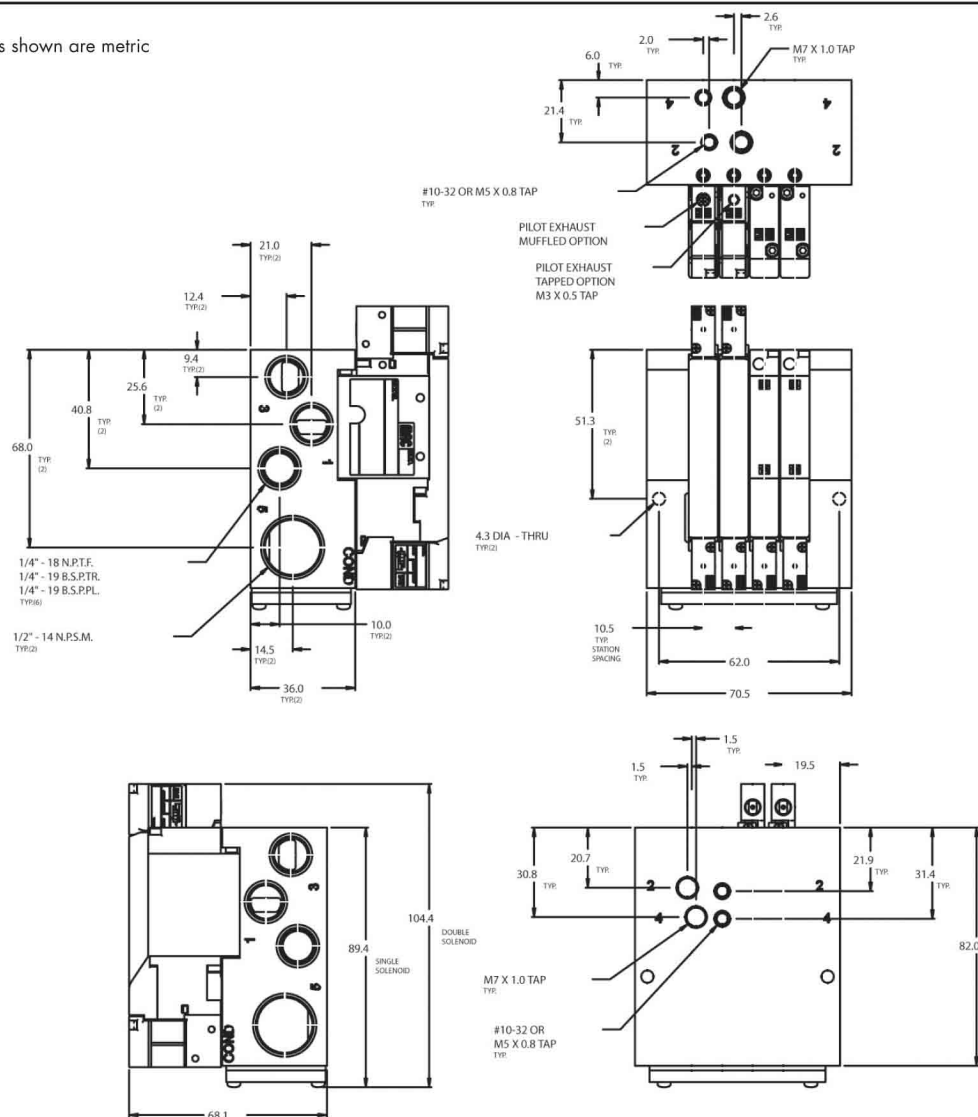
TECHNICAL DATA

Fluids:	Compressed air, vacuum, inert gases
Pressure range:	2 position internal pilot: Single solenoid: 30 to 120 psi / 2 to 8 bar (air return), 35 to 120 psi / 2,3 to 8 bar (spring return) Double solenoid: 20 to 120 psi / 1,3 to 8 bar 2/3 position external pilot: vacuum to 120 psi / 8 bar 3 position internal pilot: 40 to 120 psi / 2,7 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C to 100°C)
Filtration:	40µ
Flow:	Up to 0.40 Cv / 400 NL/min
Coil:	Class A (#26 AWG x 18), continuous duty
Voltage range:	-15% to +10% of nominal voltage
Power	4.0W, 3.0W, 2.5W, 1.8W, 1.0W

Spare parts : • Blank station cover plate : M-24004 • Base wire plug-in protector : 16942-01

DIMENSIONS

Dimensions shown are metric



Function
5/2 - 5/3
Port size
#10-32 -M5 -M7
Flow [Max]/[Cv/WI/min]
0.40 / 400
Circuit bar mounting
Plug-in - Mid profile

OPERATIONAL BENEFITS

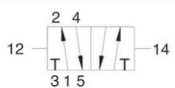
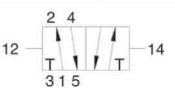
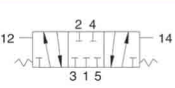
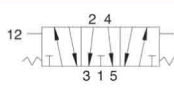
1. 10 mm valve – solenoid pilot operated.
2. Balanced spool, immune to variations of pressure.
3. Bonded spool with minimal friction.
4. Wiping effect, eliminates sticking.
5. Pilot valve with balanced poppet, high flow, short and consistent response times



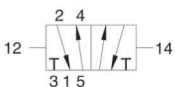
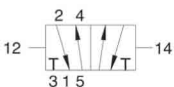
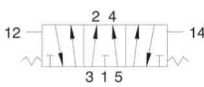
HOW TO ORDER

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

SINGLE PRESSURE MODELS

Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed Center	5/3 Open Center
				
Internal	24A-AA-000-Exx-RxxP-xxx	24A-BA-000-Exx-RxxP-xxx	24A-EA-000-Exx-RxxP-xxx	24A-FA-000-Exx-RxxP-xxx
External	24A-AB-000-Exx-RxxP-xxx	24A-BB-000-Exx-RxxP-xxx	24A-EB-000-Exx-RxxP-xxx	24A-FB-000-Exx-RxxP-xxx

DUAL PRESSURE MODELS (Internal pilot only)

Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure Center
			
Internal from port #3	24A-CG-000-Exx-RxxP-xxx	24A-DG-000-Exx-RxxP-xxx	24A-GG-000-Exx-RxxP-xxx
Internal from port #5	24A-CH-000-Exx-RxxP-xxx	24A-DH-000-Exx-RxxP-xxx	24A-GH-000-Exx-RxxP-xxx

SOLENOID OPERATOR

E XX - R XX X - X XX

XX Pilot type	XX Voltage	X Lead wire length	X Manual operator	XX Electrical connector
M2 Muffled exhaust P2 Piped exhaust (M3)	DB 24VDC (1.0W) DC 24VDC (1.8W) DD 24VDC (2.5W) DF 24VDC (4.0W) DH 12VDC (1.0W) DJ 12VDC (1.8W) DK 12VDC (2.5W) DM 12VDC (4.0W)	P Base plug-in	0 No manual operator 1 Recessed non locking 3 Extended non locking	FA Base plug-in FB Base plug-in w/LED FC Base plug-in w/MOV FD Base plug-in w/LED and MOV

HOW TO ORDER CIRCUIT BAR

Pilot size	Pilot	Base Electrical	Side cylinder ports	Bottom cylinder ports
#10-32 UNF	Internal	Single solenoid	ECD24A-00DAA-A0XX	ECD24A-00EAA-A0XX
		Double solenoid	ECD24A-00DAA-B0XX	ECD24A-00EAA-B0XX
	External	Single solenoid	ECD24A-00DDA-A0XX	ECD24A-00EDA-A0XX
		Double solenoid	ECD24A-00DDA-B0XX	ECD24A-00EDA-B0XX
M5	Internal	Single solenoid	ECD24A-00DAB-A0XX	ECD24A-00EAB-A0XX
		Double solenoid	ECD24A-00DAB-B0XX	ECD24A-00EAB-B0XX
	External	Single solenoid	ECD24A-00ddb-A0XX	ECD24A-00EDB-A0XX
		Double solenoid	ECD24A-00ddb-B0XX	ECD24A-00EDB-B0XX
M7	Internal	Single solenoid	ECD24A-00DAC-A0XX	ECD24A-00EAC-A0XX
		Double solenoid	ECD24A-00DAC-B0XX	ECD24A-00EAC-B0XX
	External	Single solenoid	ECD24A-00DDC-A0XX	ECD24A-00EDC-A0XX
		Double solenoid	ECD24A-00DDC-B0XX	ECD24A-00EDC-B0XX

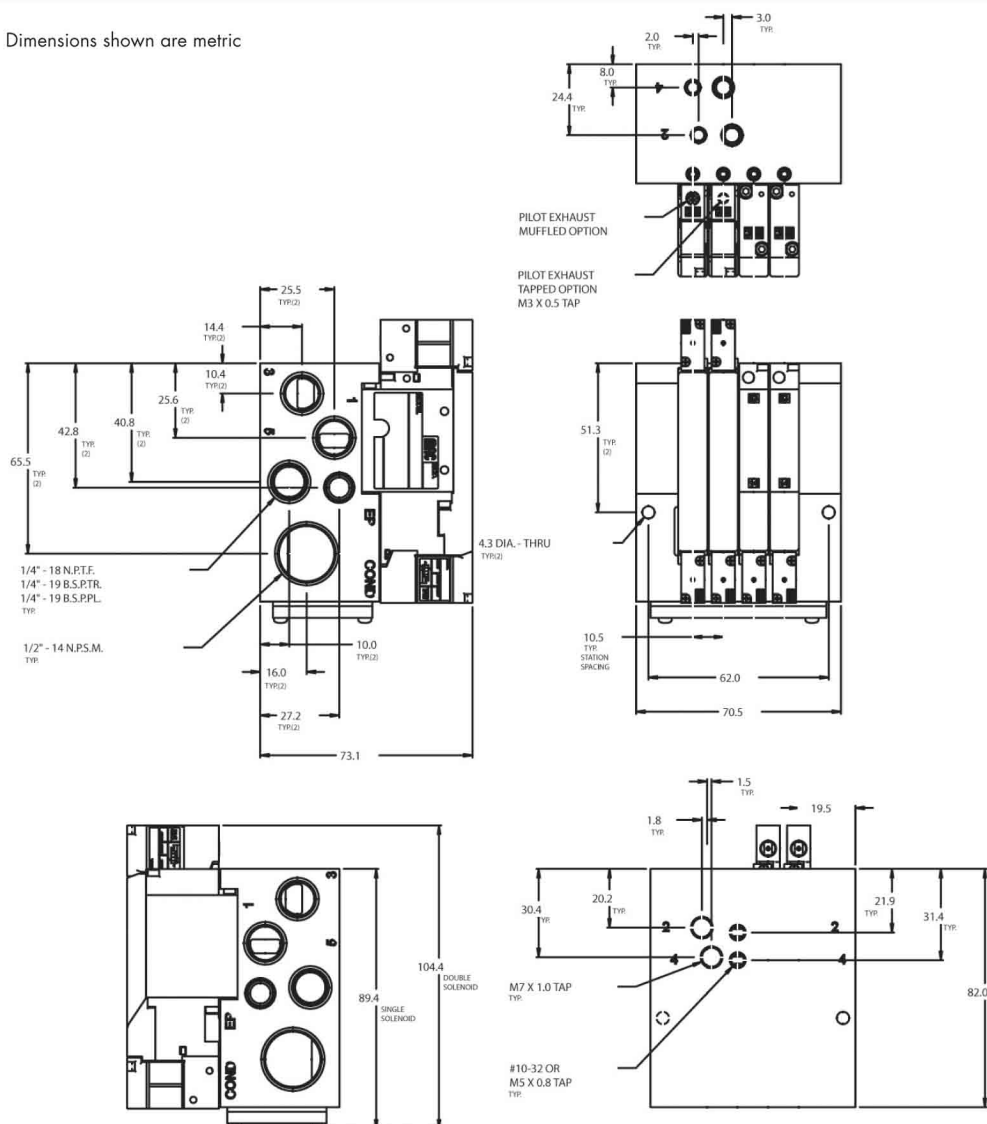
Direct solenoid and solenoid pilot operated valves

Fluids:	Compressed air, vacuum, inert gases
Pressure range:	2 position internal pilot: Single solenoid: 30 to 120 psi / 2 to 8 bar (air return), 35 to 120 psi / 2,3 to 8 bar (spring return) Double solenoid: 20 to 120 psi / 1,3 to 8 bar 2/3 position external pilot: vacuum to 120 psi / 8 bar 3 position internal pilot: 40 to 120 psi / 2,7 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C to 100°C)
Filtration:	40µ
Flow:	Up to 0.40 Cv / 400 NI/min
Coil:	Class A (#26 AWG x 18), continuous duty
Voltage range:	-15% to +10% of nominal voltage
Power	4.0W, 3.0W, 2.5W, 1.8W, 1.0W

Spare parts : • Blank station cover plate : M-24004 • Base wire plug-in protector : 16942-01

DIMENSIONS

Dimensions shown are metric



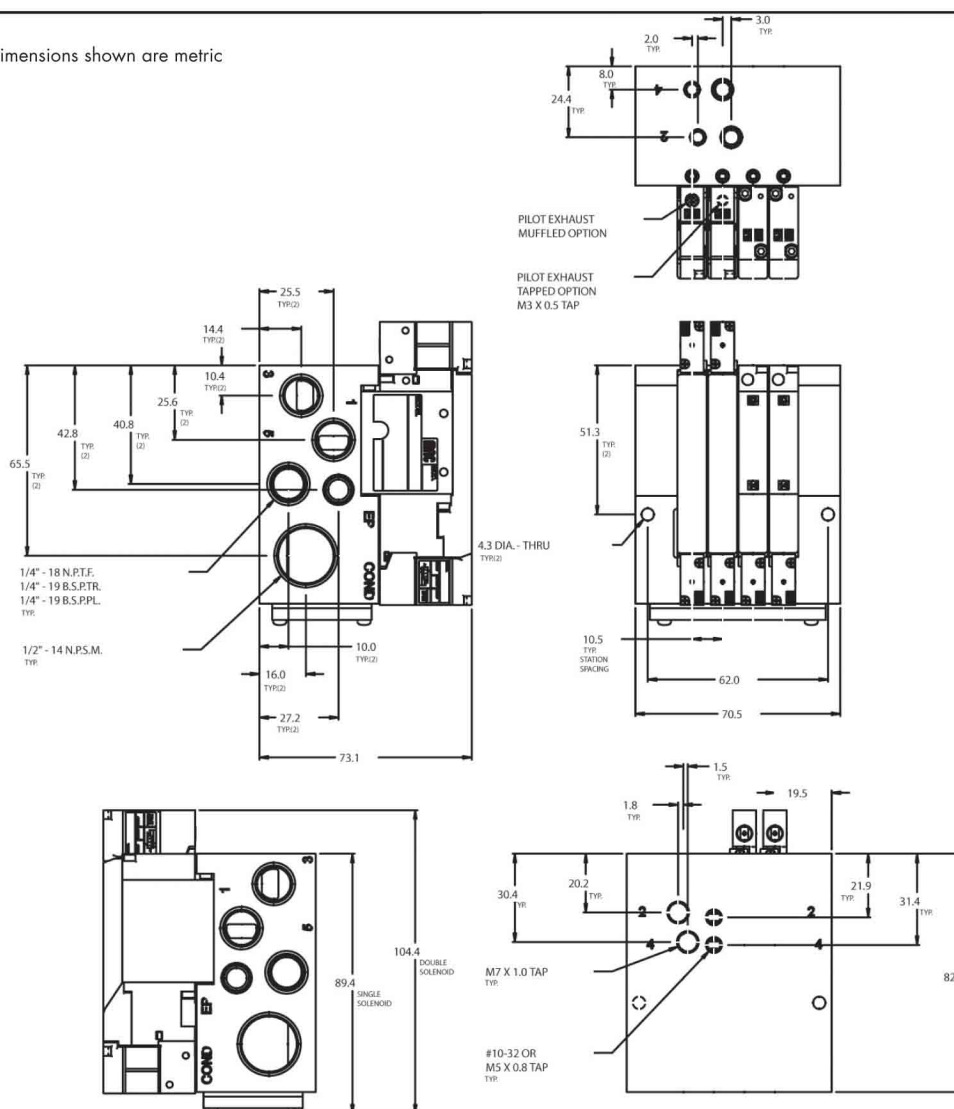
Direct solenoid and solenoid pilot operated valves

Fluids:	Compressed air, vacuum, inert gases
Pressure range:	2 position internal pilot: Single solenoid: 30 to 120 psi / 2 to 8 bar (air return), 35 to 120 psi / 2,3 to 8 bar (spring return) Double solenoid: 20 to 120 psi / 1,3 to 8 bar 2/3 position external pilot: vacuum to 120 psi / 8 bar 3 position internal pilot: 40 to 120 psi / 2,7 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C to 100°C)
Filtration:	40μ
Flow:	Up to 0.40 Cv / 400 NI/min
Coil:	Class A (#26 AWG x 18), continuous duty
Voltage range:	-1.5% to +10% of nominal voltage
Power	4.0W, 3.0W, 2.5W, 1.8W, 1.0W

Spare parts : • Blank station cover plate : M-24004 • Base wire plug-in protector : 16942-01

DIMENSIONS

Dimensions shown are metric



Function

5/2 - 5/3

Port size

#10-32 -M5 -M7

Flow [Max]/[Cv/NI/min]

0.40 / 400

Circuit bar mounting

Plug-in - High profile

OPERATIONAL BENEFITS

1. 10 mm valve – solenoid pilot operated.
2. Balanced spool, immune to variations of pressure.
3. Bonded spool with minimal friction.
4. Wiping effect, eliminates sticking.
5. Pilot valve with balanced poppet, high flow, short and consistent response times



HOW TO ORDER

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

SINGLE PRESSURE MODELS

Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed Center	5/3 Open Center
Internal	24A-AA-000-Exx-RxxP-xxx	24A-BA-000-Exx-RxxP-xxx	24A-EA-000-Exx-RxxP-xxx	24A-FA-000-Exx-RxxP-xxx
External	24A-AB-000-Exx-RxxP-xxx	24A-BB-000-Exx-RxxP-xxx	24A-EB-000-Exx-RxxP-xxx	24A-FB-000-Exx-RxxP-xxx

DUAL PRESSURE MODELS (Internal pilot only)

Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure Center
Internal from port #3	24A-CG-000-Exx-RxxP-xxx	24A-DG-000-Exx-RxxP-xxx	24A-GG-000-Exx-RxxP-xxx
Internal from port #5	24A-CH-000-Exx-RxxP-xxx	24A-DH-000-Exx-RxxP-xxx	24A-GH-000-Exx-RxxP-xxx

SOLENOID OPERATOR

E XX - R XX X - X XX

XX Pilot type	XX Voltage	X Lead wire length	X Manual operator	XX Electrical connector
M2 Muffled exhaust P2 Piped exhaust (M3)	DB 24VDC (1.0W) DC 24VDC (1.8W) DD 24VDC (2.5W) DF 24VDC (4.0W) DH 12VDC (1.0W) DJ 12VDC (1.8W) DK 12VDC (2.5W) DM 12VDC (4.0W)	P Base plug-in	0 No manual operator 1 Recessed non locking 3 Extended non locking	FA Base plug-in FB Base plug-in w/LED FC Base plug-in w/MOV FD Base plug-in w/LED and MOV

Note : Flow controls are integral, regulator must be ordered separately (see next page)

HOW TO ORDER CIRCUIT BAR

Pilot size	Pilot	Base Electrical	Bottom cylinder Ports w/side regulator	Bottom cylinder ports w/side flow controls
#10-32 UNF	Internal	Single solenoid	ECD24A-00GAA-A0XX	ECD24A-00HAA-A0XX
		Double solenoid	ECD24A-00GAA-B0XX	ECD24A-00HAA-B0XX
	External	Single solenoid	ECD24A-00GDA-A0XX	ECD24A-00HDA-A0XX
		Double solenoid	ECD24A-00GDA-B0XX	ECD24A-00HDA-B0XX
M5	Internal	Single solenoid	ECD24A-00GAB-A0XX	ECD24A-00HAB-A0XX
		Double solenoid	ECD24A-00GAB-B0XX	ECD24A-00HAB-B0XX
	External	Single solenoid	ECD24A-00GDB-A0XX	ECD24A-00HDB-A0XX
		Double solenoid	ECD24A-00GDB-B0XX	ECD24A-00HDB-B0XX
M7	Internal	Single solenoid	ECD24A-00GAC-A0XX	ECD24A-00HAC-A0XX
		Double solenoid	ECD24A-00GAC-B0XX	ECD24A-00HAC-B0XX
	External	Single solenoid	ECD24A-00GDC-A0XX	ECD24A-00HDC-A0XX
		Double solenoid	ECD24A-00GDC-B0XX	ECD24A-00HDC-B0XX

TECHNICAL DATA

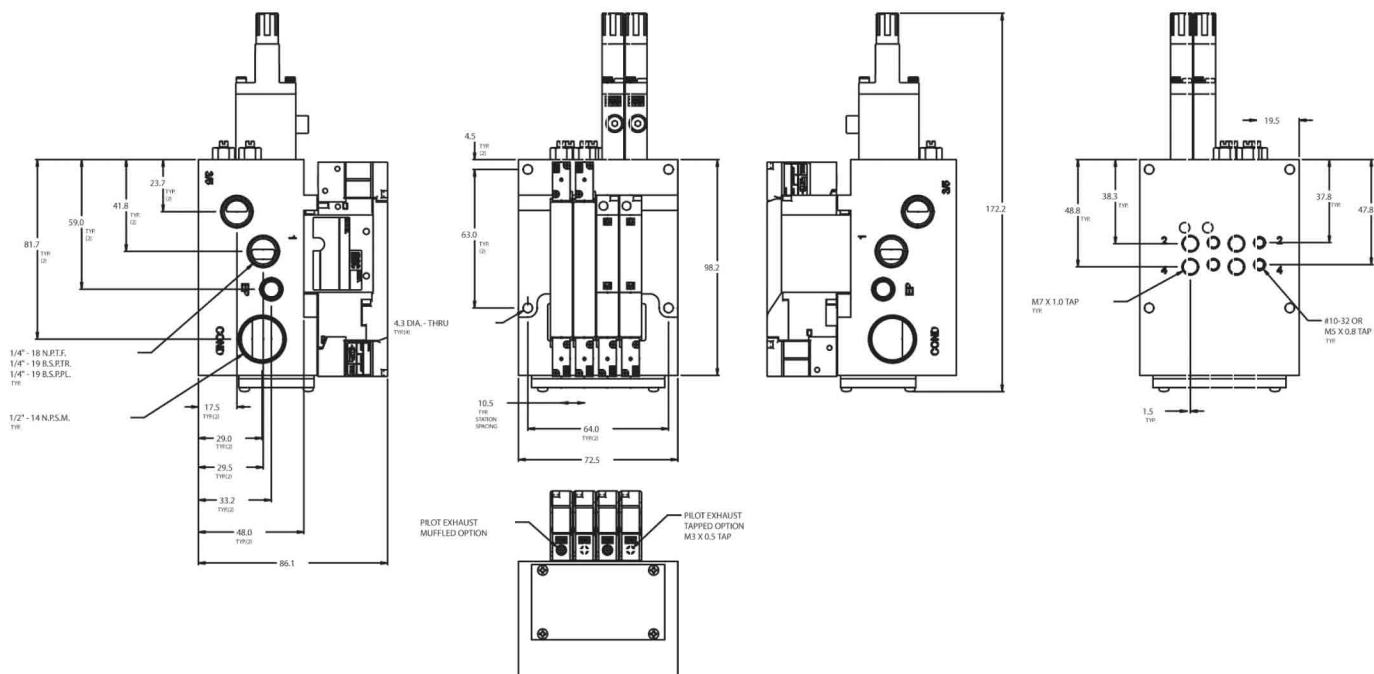
Fluids:	Compressed air, vacuum, inert gases
Pressure range:	2 position internal pilot: Single solenoid: 30 to 120 psi / 2 to 8 bar (air return), 35 to 120 psi / 2,3 to 8 bar (spring return) Double solenoid: 20 to 120 psi / 1,3 to 8 bar 2/3 position external pilot: vacuum to 120 psi / 8 bar 3 position internal pilot: 40 to 120 psi / 2,7 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C to 100°C)
Filtration:	40µ
Flow:	Up to 0.40 Cv / 400 NI/min
Coil:	Class A (#26 AWG x 18), continuous duty
Voltage range:	-15% to +10% of nominal voltage
Power	4.0W, 3.0W, 2.5W, 1.8W, 1.0W

Spare parts :

- Regulator : PR24A-COAX
 - A 0 to 120 psi / 8 bar
 - B 0 to 80 psi / 5,3 bar
 - C 0 to 40 psi / 2,7 bar
- Gage kit : N-42004-01 • Blank station cover plate : M-24004
- Base wire plug-in protector : 16942-01

DIMENSIONS

Dimensions shown are metric

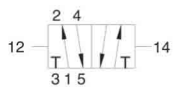
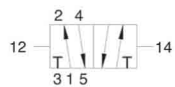
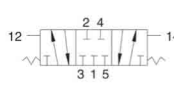
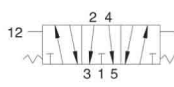


Function	Port size	Flow [Max]/[Cv/NI/min]	Manifold mounting
5/2 - 5/3	#10-32 - H5 - H7	0.40 / 400	MAConnect®

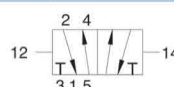
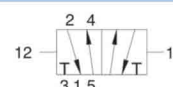
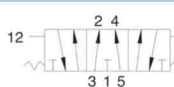
OPERATIONAL BENEFITS

1. 10 mm valve – solenoid pilot operated
2. Balanced spool, immune to variations of pressure.
3. Bonded spool with minimal friction.
4. Wiping effect, eliminates sticking.
5. Pilot valve with balanced poppet, high flow, short and consistent response times
6. Maximum of 16 solenoids powered by a single multi-pin connector.


HOW TO ORDER
SINGLE PRESSURE MODELS (Side Ports)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Closed Center	5/3 Open Center
					
Valve less base	Internal	24A-AA-000-Exx-RxxP-xxx	24A-BA-000-Exx-RxxP-xxx	24A-EA-000-Exx-RxxP-xxx	24A-FA-000-Exx-RxxP-xxx
	External	24A-AB-000-Exx-RxxP-xxx	24A-BB-000-Exx-RxxP-xxx	24A-EB-000-Exx-RxxP-xxx	24A-FB-000-Exx-RxxP-xxx
#10-32	Internal	24A-AA-AA1-Exx-RxxP-xxx	24A-BA-AA2-Exx-RxxP-xxx	24A-EA-AA2-Exx-RxxP-xxx	24A-FA-AA2-Exx-RxxP-xxx
	External	24A-AB-AA1-Exx-RxxP-xxx	24A-BB-AA2-Exx-RxxP-xxx	24A-EB-AA2-Exx-RxxP-xxx	24A-FB-AA2-Exx-RxxP-xxx
M5	Internal	24A-AA-BA1-Exx-RxxP-xxx	24A-BA-BA2-Exx-RxxP-xxx	24A-EA-BA2-Exx-RxxP-xxx	24A-FA-BA2-Exx-RxxP-xxx
	External	24A-AB-BA1-Exx-RxxP-xxx	24A-BB-BA2-Exx-RxxP-xxx	24A-EB-BA2-Exx-RxxP-xxx	24A-FB-BA2-Exx-RxxP-xxx
M7	Internal	24A-AA-CA1-Exx-RxxP-xxx	24A-BA-CA2-Exx-RxxP-xxx	24A-EA-CA2-Exx-RxxP-xxx	24A-FA-CA2-Exx-RxxP-xxx
	External	24A-AB-CA1-Exx-RxxP-xxx	24A-BB-CA2-Exx-RxxP-xxx	24A-EB-CA2-Exx-RxxP-xxx	24A-FB-CA2-Exx-RxxP-xxx

DUAL PRESSURE MODELS (Side ports)

Port size	Pilot air	5/2 Single solenoid	5/2 Double solenoid	5/3 Pressure Center
				
Valve only	Internal from port #3	24A-CG-000-Exx-RxxP-xxx	24A-DG-000-Exx-RxxP-xxx	24A-GG-000-Exx-RxxP-xxx
less base	Internal from port #5	24A-CH-000-Exx-RxxP-xxx	24A-DH-000-Exx-RxxP-xxx	24A-GH-000-Exx-RxxP-xxx
#10-32	Internal from port #3	24A-CG-AA1-Exx-RxxP-xxx	24A-DG-AA2-Exx-RxxP-xxx	24A-GG-AA2-Exx-RxxP-xxx
	Internal from port #5	24A-CH-AA1-Exx-RxxP-xxx	24A-DH-AA2-Exx-RxxP-xxx	24A-GH-AA2-Exx-RxxP-xxx
M5	Internal from port #3	24A-CG-BA1-Exx-RxxP-xxx	24A-DG-BA2-Exx-RxxP-xxx	24A-GG-BA2-Exx-RxxP-xxx
	Internal from port #5	24A-CH-BA1-Exx-RxxP-xxx	24A-DH-BA2-Exx-RxxP-xxx	24A-GH-BA2-Exx-RxxP-xxx
M7	Internal from port #3	24A-CG-CA1-Exx-RxxP-xxx	24A-DG-CA2-Exx-RxxP-xxx	24A-GG-CA2-Exx-RxxP-xxx
	Internal from port #5	24A-CH-CA1-Exx-RxxP-xxx	24A-DH-CA2-Exx-RxxP-xxx	24A-GH-CA2-Exx-RxxP-xxx

SOLENOID OPERATOR
E XX - R XX X - X XX

XX Pilot type	XX Voltage	X Lead wire length	X Manual operator	XX Electrical connector
M2 Muffled exhaust	DB 24VDC (1.0W)	P Base plug-in	0 No manual operator	FA Base plug-in
P2 Piped exhaust (M3)	DC 24VDC (1.8W)		1 Recessed non locking	FB Base plug-in w/ LED
	DD 24VDC (2.5W)		3 Extended non locking	FC Base plug-in w/MOV
	DF 24VDC (4.0W)			FD Base plug-in w/MOV and LED
	DH 12VDC (1.0W)			
	DJ 12VDC (1.8W)			
	DK 12VDC (2.5W)			

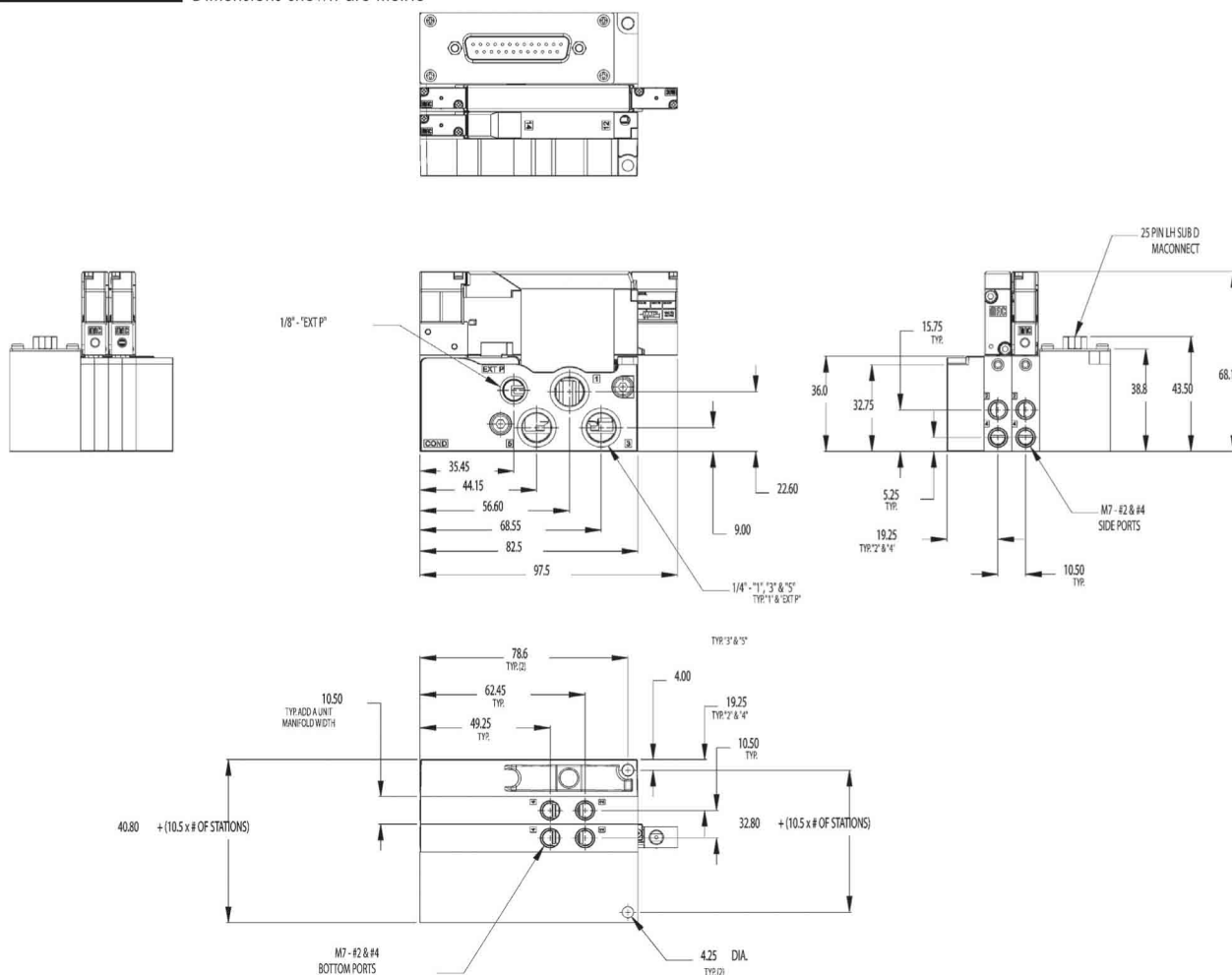
Fluid:	Compressed air, vacuum, inert gases
Pressure range:	2 position internal pilot: Single solenoid: 30 to 120 psi / 2 to 8 bar Double solenoid: 20 to 120 psi / 1,3 to 8 bar 2/3 position external pilot: vacuum to 120 psi / 8 bar 3 position internal pilot: 40 to 120 psi / 2,7 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C to 100°C)
Filtration:	40µ
Flow:	Up to 0.40 Cv / 400 NI/min
Coil:	Class A (#26 AWG x 18), continuous duty
Voltage range:	-15% to +10% of nominal voltage
Power	4.0W, 3.0W, 2.5W, 1.8W, 1.0W

Spare parts :

- Blank station cover plate: M-24004 • Inlet isolator: 28568
- Exhaust isolator (Port #5): 28569 • Exhaust isolator (Port #3): 28570

DIMENSIONS

Dimensions shown are metric



MAConnect® adapter Assembly

M-24007-XX-X

09 9 Pin Sub-D
10 10 Pin
15 15 Pin Sub-D
16 16 Pin
20 20 Pin
24 24 Pin Amp CPC
25 25 Pin Sub-D
26 26 Pin

1 Left End
3 Right End

Note: For negative commons, use MOD 7536 after model number

MAConnect® Fastening End Plate Kit

M-24006-XX-01X

01 Left End of Stack – Internal pilot
02 Left End of Stack – External Pilot
03 Right End of Stack – Internal Pilot
04 Right End of Stack – External Pilot

Leave Blank for NPTF Threads
P BSPPL Threads
T BSPTR TThreads

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

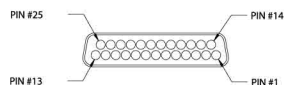
How to order MAConnect® Stack

1. Determine the desired MAConnect® adapter assembly. The left end adapter is considered the first station in the stack and the right end adapter is considered the last station in the stack.
2. Choose the desired valves, make sure the valves are "plugging in" toward the adapter (i.e. adapter is located on the left end then valves must "plug-in" to the left).
3. Choose the appropriate fastening end plate kit. This end plate kit is located on the opposite end of the adapter (i.e. if adapter is located on the left end choose kit for right end of the stack).
4. Make sure the number of solenoids does not exceed 16.

Example:

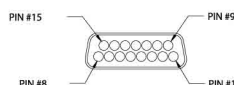
Quantity	Part number
1	M-24007-25-1 (left end adapter)
5	24A-AA-AA1-EM2-RDCP-1FA (Single solenoid plug-in to the left)
4	24A-BA-AA2-EM2-RDCP-1FA (Double solenoid plug-in to the left)
1	M-24006-03-09 (end plate kit on right end of stack)

Note: total number of solenoids is 13.



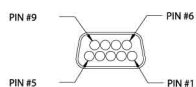
PIN #	SOLENOID #
1	1
2	2
...	...
16	16
21	+ COMMON
22	+ COMMON
23	+ COMMON
24	+ COMMON
25	+ COMMON

25 PIN SUB-D



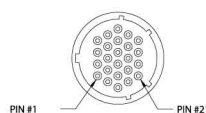
PIN #	SOLENOID #
1	1
2	2
...	...
13	13
14	+ COMMON
15	+ COMMON

15 PIN SUB-D



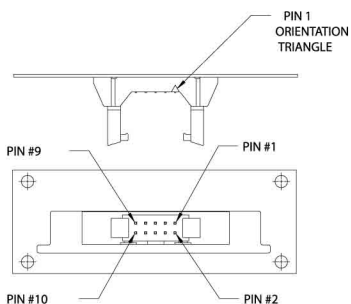
PIN #	SOLENOID #
1	1
2	2
...	...
8	8
9	+ COMMON

9 PIN SUB-D



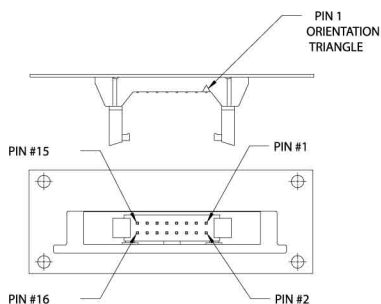
PIN #	SOLENOID #
1	1
2	2
...	...
20	20
21	+ COMMON
22	+ COMMON
23	+ COMMON
24	+ COMMON

24 PIN AMP CPC



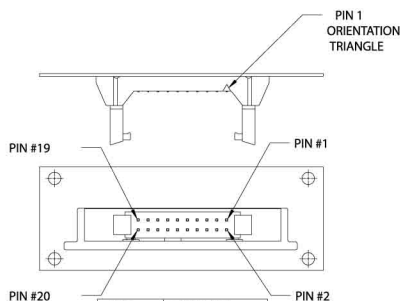
PIN #	SOLENOID #
1	1
2	2
...	...
8	8
9	+ COMMON
10	+ COMMON

10 PIN



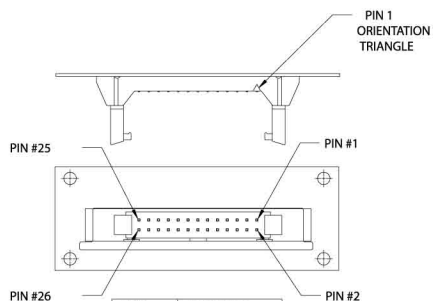
PIN #	SOLENOID #
1	1
2	2
...	...
12	12
13	+ COMMON
14	+ COMMON
15	+ COMMON
16	+ COMMON

16 PIN



PIN #	SOLENOID #
1	1
2	2
...	...
16	16
17	+ COMMON
18	+ COMMON
19	+ COMMON
20	+ COMMON

20 PIN



PIN #	SOLENOID #
1	1
2	2
...	...
16	16
21	+ COMMON
22	+ COMMON
23	+ COMMON
24	+ COMMON
25	+ COMMON
26	+ COMMON

26 PIN

Sandwich pressure regulators with manual adjust knob

OPERATIONAL BENEFITS

1. Easy mounting: saves on installation costs in comparison with inline regulators
2. Compact all-included units.
3. Large orifice provides high flow
4. Various functions available
5. Simple, reliable and solid design



HOW TO ORDER

NON PLUG-IN SANDWICH REGULATORS (with gage port)

Pilot air	Single pressure Regulator "12" end	Dual pressure * Regulator both ends
Internal	PR24A-BAAA	PR24A-BCAA
External	PR24A-BBAA	PR24A-BDAA

PLUG-IN SANDWICH REGULATORS (with gage port)

Single pressure Regulator "12" end Internal pilot	Single pressure Regulator "12" end External pilot
PR24A-AAAA	PR24A-ABAA

* For use with dual pressure valves.

OPTIONS

Pressure range:

PR24A-xxx X

- A 0 to 120 PSI / 8 bar
- B 0 to 80 PSI / 5,3 bar
- C 0 to 40 PSI / 2,7 bar

Notes:

- External pilot regulator required only when supply pressure (primary) to the valve is below the minimum operating pressure of the 24 series valve.
 - When an internal pilot regulator is used with the 24 series valve, the valve should be ordered as external pilot. This ensures that the pilot supply is not regulated.
- If an internal pilot valve is used with an internal pilot regulator, the pilot supply is regulated.

Fluids:	Compressed air, vacuum, inert gases
Pressure range:	0 to 120 PSI / 8 bar
Regulating range:	0 to 120 PSI / 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F / 80°C to 100°C)
Filtration:	40µ
Coil:	Class A (#26 AWG x 18), continuous duty
Temperature range:	0°F to 120°F / -18°C to +50°C

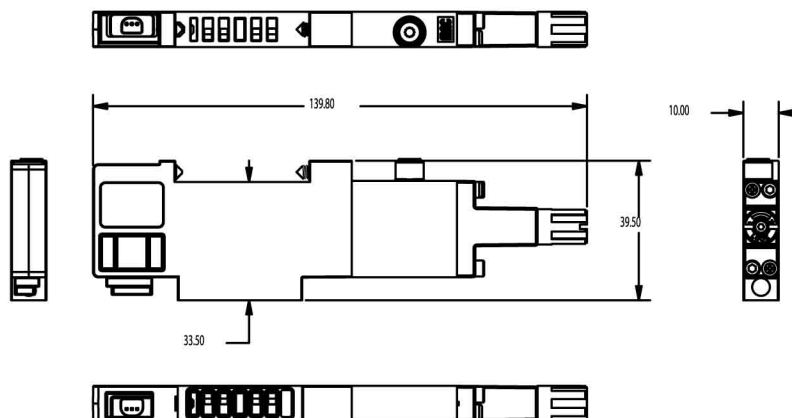
Spare parts:

- Gage Kit No coupling: N-42004-01
With short coupling: N-42004-02 (required with double solenoid valve)
With long coupling: N-42004-03 (required with double solenoid valve)
- Sandwich flow control Plug-in with flow control on same end: FC24A-AB
Non plug-in with flow control on same end: FC24A-BB
Non plug-in with flow control on each end: FC24A-CA

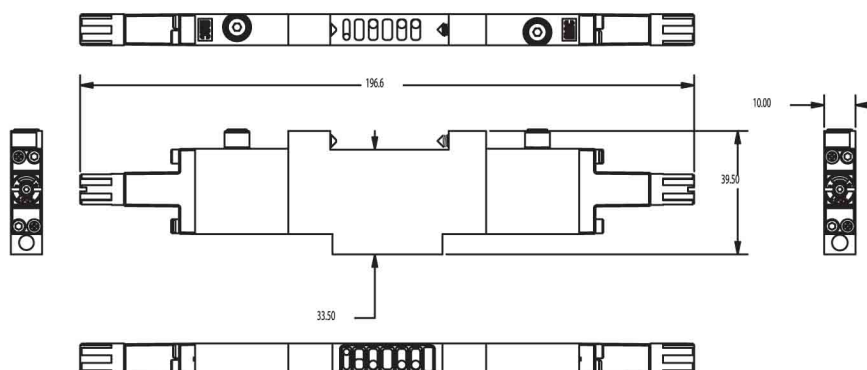
DIMENSIONS

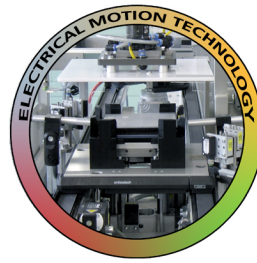
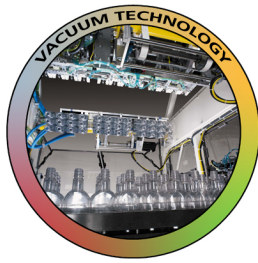
Dimensions shown are metric

Single regulator



Double regulator





We look forward to your application.

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