

Individual mounting

Sub-base non "plug-in"	Sub-base "plug-in"	Sub-base/manifold base non "plug-in" with latching solenoid	Sub-base/manifold base "plug-in" with latching solenoid
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Manifold mounting

Manifold base non "plug-in"	Manifold base "plug-in"	Sub-base/manifold base non "plug-in" with latching solenoid	Sub-base/manifold base "plug-in" with latching solenoid
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Series

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48P

48

400

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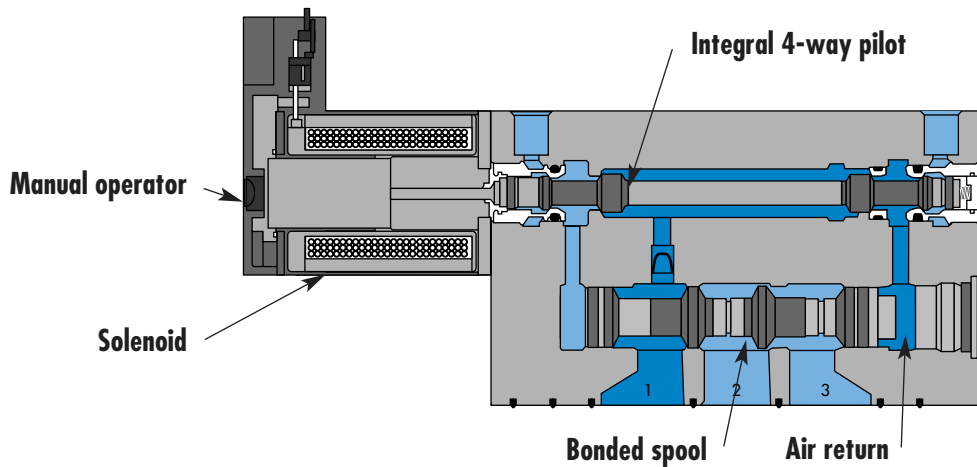
ISO 01

ISO 02

ISO 1

ISO 2

ISO 3



SERIES FEATURES

- High force MACSOLENOID®.
- Integral 4-way pilot design.
- Internal or external pilot.
- Normally open or normally closed function.
- Universal function (external pilot).
- Rectified AC voltage.
- Latching solenoid technology.



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Individual mounting	Series
3/2 NO-NC	1/8"	0.4 C_v	Sub-base non "plug-in"	

OPERATIONAL BENEFITS

1. 3-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10.5 mm centers).
3. High flow (up to 0.4 C_v).
4. Fast, repeatable response times.
5. Maximum shifting forces in both directions.



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- 34
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- 32**
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- 48P

HOW TO ORDER

Port size	Pilot air	NO valve	NC valve	Universal valve
Valve less base	Internal	32B-BMA-000-G XXX-XXX	32B-AMA-000-G XXX-XXX	32B-GMB-000-G XXX-XXX
	External	32B-BMB-000-G XXX-XXX	32B-AMB-000-G XXX-XXX	
1/8" NPTF	Internal	32B-BMA-CAL-G XXX-XXX	32B-AMA-CAL-G XXX-XXX	32B-GMB-CAM-G XXX-XXX
	External	32B-BMB-CAM-G XXX-XXX	32B-AMB-CAM-G XXX-XXX	

Note : Above codes are for side port.

STANDARD SOLENOID OPERATOR >

G **XXX-XXX***

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
AA 120 VAC (2.5W)	A 18"	1 Non-locking recessed	BA Flying leads
DA 24 VDC (1.0W)	B 24"	2 Locking recessed	BT Flying leads with light
DC 24 VDC (1.8W)	C 36"		GA MAC JAC Solenoid plug-in
DD 24 VDC (2.5W)			GB MAC JAC Solenoid plug-in w/Diode
DF 24 VDC (4.0W)			GC MAC JAC Solenoid plug-in w/MOV
			GD MAC JAC Solenoid plug-in w/LED
			GE MAC JAC Solenoid plug-in w/Diode & LED
			GF MAC JAC Solenoid plug-in w/MOV & LED
			GG MAC JAC Solenoid plug-in w/Rectifier
			GH MAC JAC Solenoid plug-in w/Rectifier & LED
			KA Plug-in wire assy.
			KT Plug-in wire assy. with light
			KD Plug-in wire assy. with rectifier & light & ground

Note : AC voltage requires connector with rectifier.

* Other options available, see page 311.

Latching solenoid also available, see page 41.

With MAC JAC electrical connector washdown capability is possible.

Consult factory for modification number.

OPTIONS

Pilot/Base Configuration :

32B-**M**-**x**-**A**-G**XXX-XXX**

- A** Individual base – Side port
- B** Individual base – Bottom port
- M** Pilot exhaust muffled
- P** Pilot exhaust piped (# 10-32)
- U** Pilot exhaust to main exhaust (not available with external pilot)

- 48
- 400
- 92
- 93
- ISO 01
- ISO 02
- ISO 1
- ISO 2
- ISO 3

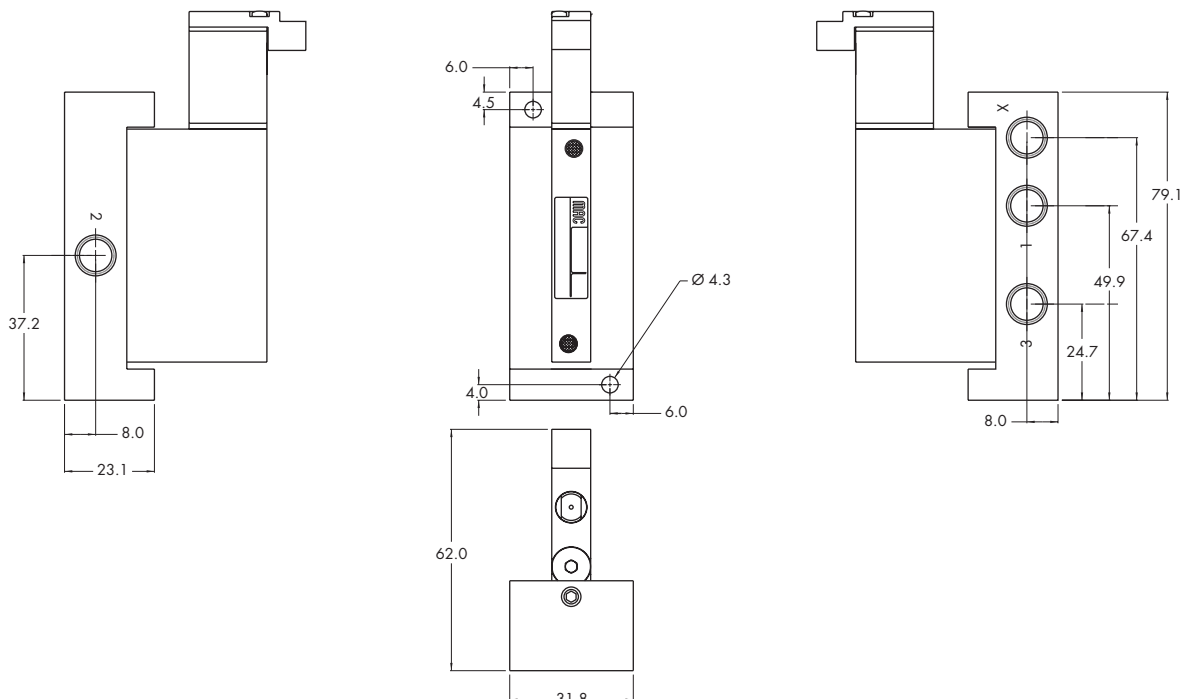
TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 20 to 120 PSI External Pilot : Vacuum to 120 PSI
Pilot pressure :	20 to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 μ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Flow :	1/8" : (0.40 C _v)
Coil :	Class A wire (#22 AWG x 18), continuous duty
Voltage range :	-15% to +10% of nominal voltage
Power :	1.0 to 4.0 W
Response times : (with 4 W coil)	Energize : 5 ms De-energize : 5 ms

Options : • BSPP threads

DIMENSIONS

Dimensions shown are metric (mm)



Function	Port size	Flow [Max]	Individual mounting	Series
3/2 NO-NC	# 10-32 - 1/4" O.D. tube receptacle	0.4 C_v	Sub-base "plug-in"	

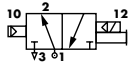
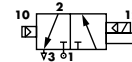
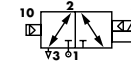
OPERATIONAL BENEFITS

1. 3-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10.5 mm centers).
3. High flow (up to 0.4 C_v).
4. Fast, repeatable response times.
5. Maximum shifting forces in both directions.



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HOW TO ORDER

Port size	Pilot air	NO valve	NC valve	Universal valve
				
Valve less base	Internal	32B-BMA-000-G XX P- XXX	32B-AMA-000-G XX P- XXX	
	External	32B-BMB-000-G XX P- XXX	32B-AMB-000-G XX P- XXX	32B-GMB-000-G XX P- XXX
# 10-32	Internal	32B-BMA-AAA-G XX P- XXX	32B-AMA-AAA-G XX P- XXX	
	External	32B-BMB-AAB-G XX P- XXX	32B-AMB-AAB-G XX P- XXX	32B-GMB-AAB-G XX P- XXX
1/4" O.D. Tube receptacle	Internal	32B-BMA-EAA-G XX P- XXX	32B-AMA-EAA-G XX P- XXX	
	External	32B-BMB-EAB-G XX P- XXX	32B-AMB-EAB-G XX P- XXX	32B-GMB-EAB-G XX P- XXX

Note : Above codes are for side port.

STANDARD SOLENOID OPERATOR >

G **XX** P-**XXX***

XX Voltage	X Manual operator	XX Electrical connection
AA 120 VAC (2.5W)	1 Non-locking recessed	SA Base plug-in
DA 24 VDC (1.0W)	2 Locking recessed	SJ Base plug-in with light
DC 24 VDC (1.8W)		SS Base plug-in with rectifier & light & ground
DD 24 VDC (2.5W)		
DF 24 VDC (4.0W)		

Note : AC voltage requires connector with rectifier.

* Other options available, see page 311.

Latching solenoid also available, see page 43.

Washdown capability is possible, consult factory for modification number.

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ISO 01
ISO 02
ISO 1
ISO 2
ISO 3

OPTIONS

Pilot/Base Configuration :

32B-**xMx-xAx-GXX**P-**XXX**

- A** Individual base – Side port
- B** Individual base – Bottom port
- M** Pilot exhaust muffled
- P** Pilot exhaust piped (# 10-32)
- U** Pilot exhaust to main exhaust (not available with external pilot)

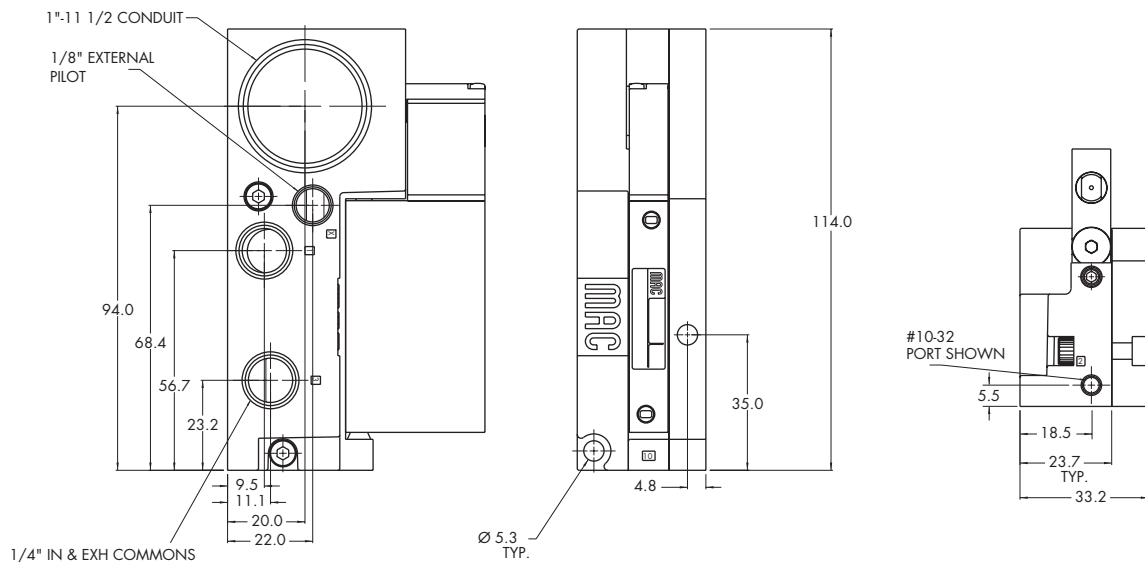
TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 20 to 120 PSI External Pilot : Vacuum to 120 PSI
Pilot pressure :	20 to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 μ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Flow :	# 10-32 : (0.35 C _v) - 1/4 tube receptacle : (0.40 C _v)
Coil :	Class A continuous duty, #22 AWG x 12 base leads
Voltage range :	-15% to +10% of nominal voltage
Power :	1.0 to 4.0 W
Response times : (with 4 W coil)	Energize : 5 ms De-energize : 5 ms

Options : • M5 port • M7 port • 6 mm O.D. tube receptacle

DIMENSIONS

Dimensions shown are metric (mm)



Function	Port size	Flow [Max]	Individual mounting	Series
3/2 NO-NC	# 10-32 - 1/4" O.D. tube receptacle	0.4 C_v	Manifold base non "plug-in"	

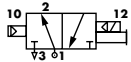
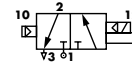
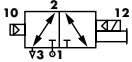
OPERATIONAL BENEFITS

1. 3-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10.5 mm centers).
3. High flow (up to 0.4 C_v).
4. Fast, repeatable response times.
5. Maximum shifting forces in both directions.



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HOW TO ORDER

Port size	Pilot air	NO valve	NC valve	Universal valve
				
Valve less base	Internal	32B-BMA-000-G XXX-XXX	32B-AMA-000-G XXX-XXX	
	External	32B-BMB-000-G XXX-XXX	32B-AMB-000-G XXX-XXX	32B-GMB-000-G XXX-XXX
# 10-32	Internal	32B-BMA-AJL-G XXX-XXX	32B-AMA-AJL-G XXX-XXX	
	External	32B-BMB-AJM-G XXX-XXX	32B-AMB-AJM-G XXX-XXX	32B-GMB-AJM-G XXX-XXX
1/4" O.D. Tube receptacle	Internal	32B-BMA-EJL-G XXX-XXX	32B-AMA-EJL-G XXX-XXX	
	External	32B-BMB-EJM-G XXX-XXX	32B-AMB-EJM-G XXX-XXX	32B-FMB-EJM-G XXX-XXX

Note : Above codes are for side port.

STANDARD SOLENOID OPERATOR >

G **XXX-XXX***

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
AA 120 VAC (2.5W)	A 18"	1 Non-locking recessed	BA Flying leads
DA 24 VDC (1.0W)	B 24"	2 Locking recessed	BT Flying leads with light
DC 24 VDC (1.8W)	C 36"		GA MAC JAC Solenoid plug-in
DD 24 VDC (2.5W)			GB MAC JAC Solenoid plug-in w/Diode
DF 24 VDC (4.0W)			GC MAC JAC Solenoid plug-in w/MOV
			GD MAC JAC Solenoid plug-in w/LED
			GE MAC JAC Solenoid plug-in w/Diode & LED
			GF MAC JAC Solenoid plug-in w/MOV & LED
			GG MAC JAC Solenoid plug-in w/Rectifier
			GH MAC JAC Solenoid plug-in w/Rectifier & LED
			KA Plug-in wire assy.
			KT Plug-in wire assy. with light
			KD Plug-in wire assy. with rectifier & light & ground

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ISO 01
ISO 02
ISO 1
ISO 2
ISO 3

Note : AC voltage requires connector with rectifier.

* Other options available, see page 311.

Latching solenoid also available, see page 41.

With MAC JAC electrical connector washdown capability is possible. Consult factory for modification number.

OPTIONS

Base only :

32B-000-**XXX**
(i.e. 32B-000-AJL)

Base/Pilot Configuration :

32B-**XMx-JX-GXXX-XXX**

- J** Manifold base – Side port
- K** Manifold base – Bottom port
- M** Pilot exhaust muffled
- P** Pilot exhaust piped (# 10-32)
- U** Pilot exhaust to main exhaust (not available with external pilot)

Note : Manifold assemblies require an end plate kit :
M-32003-01-01 (Internal pilot)
M-32003-02-01 (External pilot)

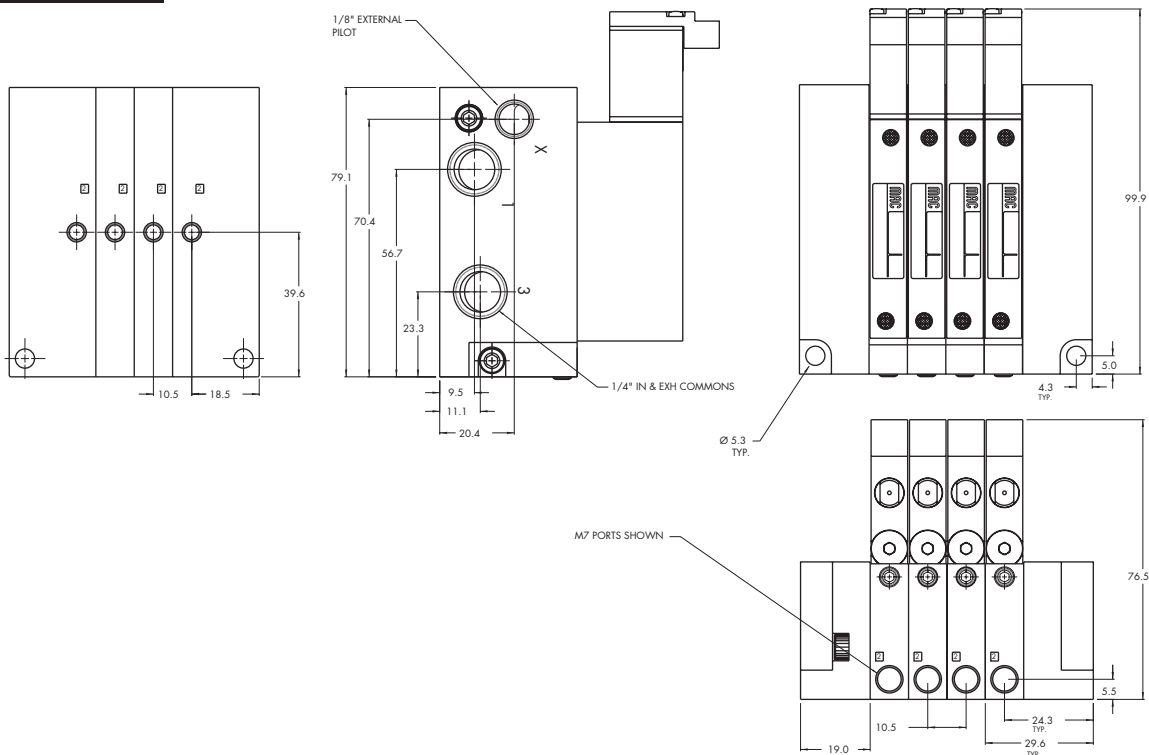
TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 20 to 120 PSI External Pilot : Vacuum to 120 PSI
Pilot pressure :	20 to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 μ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Flow :	# 10-32 : (0.35 C _v) - 1/4 tube receptacle : (0.40 C _v)
Coil :	Class A wire (#22 AWG x 18), continuous duty
Voltage range :	-15% to +10% of nominal voltage
Power :	1.0 to 4.0 W
Response times : (with 4 W coil)	Energize : 5 ms De-energize : 5 ms

- Options :
- M5 port • M7 port • 6 mm O.D. tube receptacle
 - Inlet/Exhaust Isolator : 28454

DIMENSIONS

Dimensions shown are metric (mm)





Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Individual mounting	Series
3/2 NO-NC	# 10-32 - 1/4" O.D. tube receptacle	0.4 C_v	Manifold base "plug-in"	

OPERATIONAL BENEFITS

1. 3-way valve with 4-way integral pilot.
2. 10 mm valve (stacks on 10.5 mm centers).
3. High flow (up to 0.4 C_v).
4. Fast, repeatable response times.
5. Maximum shifting forces in both directions.



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- 32**
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- 52
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- 69
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- 42
- 47
- 48P

HOW TO ORDER

Port size	Pilot air	NO valve	NC valve	Universal valve
Valve less base	Internal	32B-BMA-000-G XX P- XXX	32B-AMA-000-G XX P- XXX	
	External	32B-BMB-000-G XX P- XXX	32B-AMB-000-G XX P- XXX	32B-GMB-000-G XX P- XXX
# 10-32	Internal	32B-BMA-AJA-G XX P- XXX	32B-AMA-AJA-G XX P- XXX	
	External	32B-BMB-AJB-G XX P- XXX	32B-AMB-AJB-G XX P- XXX	32B-GMB-AJB-G XX P- XXX
1/4" O.D. Tube receptacle	Internal	32B-BMA-EJA-G XX P- XXX	32B-AMA-EJA-G XX P- XXX	
	External	32B-BMB-EJB-G XX P- XXX	32B-AMB-EJB-G XX P- XXX	32B-GMB-EJB-G XX P- XXX

Note : Above codes are for side port.

STANDARD SOLENOID OPERATOR >

G **XX** P-**XXX***

XX Voltage	X Manual operator	XX Electrical connection
AA 120 VAC (2.5W)	1 Non-locking recessed	SA Base plug-in
DA 24 VDC (1.0W)	2 Locking recessed	SJ Base plug-in with light
DC 24 VDC (1.8W)		SS Base plug-in with rectifier & light & ground
DD 24 VDC (2.5W)		
DF 24 VDC (4.0W)		

Note : AC voltage requires connector with rectifier.

* Other options available, see page 311.

Latching solenoid also available, see page 43.

Washdown capability is possible, consult factory for modification number.

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- 92

OPTIONS

Base only :

32B-000-**XXX**
(i.e. 32B-000-AJA)

Base Configuration :

32B-**XXX-XJ**X-G**XX**P-**XXX**

- J** Manifold base – Side port
- K** Manifold base – Bottom port
- L** Left end manifold base – Side port
- M** Left end manifold base – Bottom port
- N** Right end manifold base – Side port
- P** Right end manifold base – Bottom port

Note : Manifold assemblies consist of (1) left end manifold, (1) right end manifold and middle station manifolds (options "J" or "K").

- 93
- ISO 01
- ISO 02
- ISO 1
- ISO 2
- ISO 3

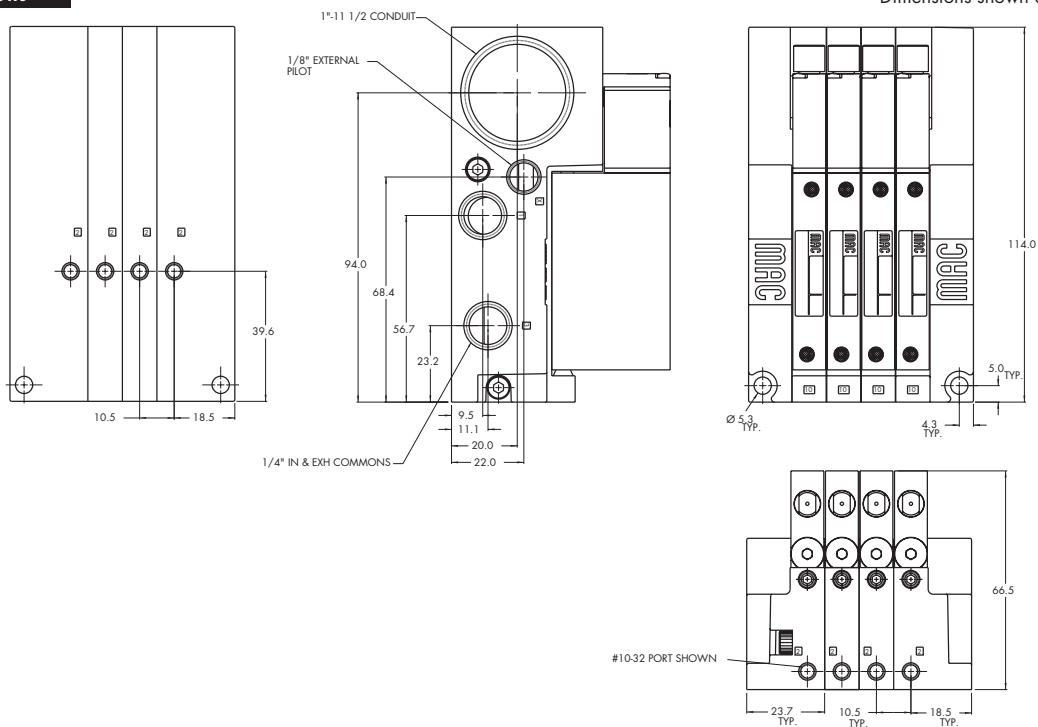
TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 20 to 120 PSI External Pilot : Vacuum to 120 PSI
Pilot pressure :	20 to 120 PSI
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration :	40 μ
Temperature range :	0°F to 120°F (-18°C to +50°C)
Flow :	# 10-32 : (0.35 C _v) - 1/4 tube receptacle : (0.40 C _v)
Coil :	Class A continuous duty, #22 AWG x 12 base leads
Voltage range :	-15% to +10% of nominal voltage
Power :	1.0 to 4.0 W
Response times : (with 4 W coil)	Energize : 5 ms De-energize : 5 ms

- Options :
- M5 port • M7 port • 6 mm O.D. tube receptacle
 - Inlet/Exhaust Isolator : 28454

DIMENSIONS

Dimensions shown are metric (mm)



Codification table for voltages / Manual operator / Electrical connection

VALVE CODE > **G XX X-X XX**
1 2 3 4

OPTIONS AVAILABLE FOR

- Solenoid valves 32, 34, 38, 42, 44 & 48 Series

1. VOLTAGE

G-XX X-X XX	VOLTAGE	
AA	120 VAC (2.5W)	Requires electrical connector with rectifier
AC	24 VAC (4.0W)	Requires electrical connector with rectifier
DA	24 VDC (1.0W)	
DC	24 VDC (1.8W)	
DD	24 VDC (2.5W)	
DE	24 VDC (3.0W)	
DF	24 VDC (4.0W)	
DG	12 VDC (1.0W)	
DJ	12 VDC (1.8W)	
DK	12 VDC (2.5W)	
DM	12 VDC (3.0W)	
DN	12 VDC (4.0W)	
DR	6 VDC (1.8W)	
DS	6 VDC (3.0W)	
EB	48 VDC (1.8W)	
EC	48 VDC (3.0W)	
ED	120 VDC (2.5W)	
GD	12 VDC (0.5W)	34 series only
GE	24 VDC (0.5W)	34 series only

2. WIRE LENGTH

G-XX X-X XX	WIRE LENGTH	
0	No lead wires	(used only with "KJ" & "KM" connectors)
A	18" coil leads	
B	24" coil leads	
C	36" coil leads	
D	48" coil leads	
E	72" coil leads	
F	96" coil leads	
G	120" coil leads	
H	144" coil leads	
I	18" base leads	
2	24" base leads	
3	36" base leads	
4	48" base leads	
5	72" base leads	
6	96" base leads	
7	120" base leads	

3. MANUAL OPERATOR

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

4. ELECTRICAL CONNECTION

G-XX X-X XX	ELECTRICAL CONNECTION
BA	Flying leads
BB	BA with ground wire
BC	BA with light
BD	BA with light and ground wire
BE	BA with suppression diode
BF	BA with suppression diode and ground wire
BG	BA with suppression diode and light
BH	BA with suppression diode, light and ground wire
BN	BA with suppression diode and blocking diode
BP	BA with suppression diode, blocking diode and ground wire
BR	BA with suppression diode, blocking diode and light
BS	BA with suppression diode, blocking diode, light and ground wire
GA	MAC JAC Solenoid plug-in
GB	MAC JAC Solenoid plug-in w/Diode
GC	MAC JAC Solenoid plug-in w/MOV
GD	MAC JAC Solenoid plug-in w/LED
GE	MAC JAC Solenoid plug-in w/Diode & LED
GF	MAC JAC Solenoid plug-in w/MOV & LED
GG	MAC JAC Solenoid plug-in w/Rectifier
GH	MAC JAC Solenoid plug-in w/Rectifier & LED
KA	Solenoid plug-in wire assembly
KB	KA with ground
KC	KA with rectifier and light
KD	KA with rectifier, light and ground
KE	KA with suppression diode
KF	KA with suppression diode and ground
KJ	Solenoid plug-in housing without wire assembly
KM	Solenoid plug-in housing with ground pin without wire assembly
KN	KA with suppression diode and blocking diode
KP	KA with suppression diode, blocking diode and ground
KT	KA with light
KU	KA with light and ground
KV	KA with suppression diode and light
KW	KA with suppression diode, light and ground
KX	KA with suppression diode, blocking diode and light
KY	KA with suppression diode, blocking diode, light & ground

ELECTRICAL CONNECTION FOR PLUG-IN VALVES

G-XX X-X XX	PLUG-IN OPTIONS
SB	Base plug-in with ground
SC	Base plug-in with suppression and blocking diode
SD	Base plug-in with suppression and blocking diode and ground
SE	Base plug-in with MOV
SF	Base plug-in with MOV and ground
SG	Base plug-in with rectifier
SH	Base plug-in with rectifier and ground
SK	Base plug-in with light and ground
SL	Base plug-in with suppression and blocking diode and light
SM	Base plug-in with suppression and blocking diode with light and ground
SN	Base plug-in with MOV and light
SP	Base plug-in with MOV and light with ground
SR	Base plug-in with rectifier and light