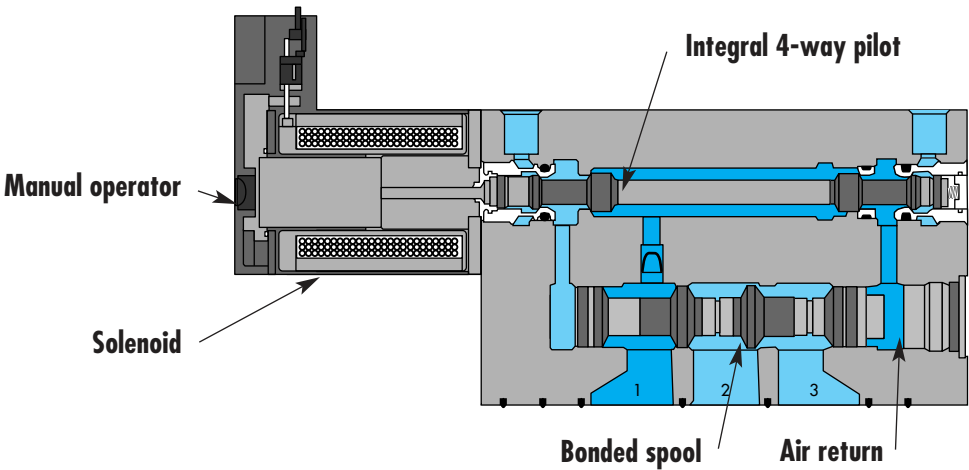


Individual mounting

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 "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 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.

Series

31

33

34

36

32

37

38

52

53

54

67

68

69

41

43

44

23

24

46

42

47

48P

48

400

92

83

93

ISO 01

ISO 02

ISO 1

ISO 2

ISO 3



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Individual mounting	Series
3/2 NO-NC	G1/8"	1200 NI/min	Sub-base non "plug-in"	

OPERATIONAL BENEFITS

- 1. 3-way valve with 4-way integral pilot.
- 2. 10 mm valve (stacks on 16.5 mm centers).
- 3. High flow (up to 1200 NI/min).
- 4. Fast, repeatable response times.
- 5. Maximum shifting forces in both directions.



HOW TO ORDER

Port size	Pilot air	NO valve	NC valve	Universal valve
Valve less base	Internal	38B-BMA-000-Gxxx-xxx	38B-AMA-000-Gxxx-xxx	
	External	38B-BMB-000-Gxxx-xxx	38B-AMB-000-Gxxx-xxx	38B-GMB-000-Gxxx-xxx
G1/8"	Internal	38B-BMA-BAL-Gxxx-xxx	38B-AMA-BAL-Gxxx-xxx	
	External	38B-BMB-BAM-Gxxx-xxx	38B-AMB-BAM-Gxxx-xxx	38B-GMB-BAM-Gxxx-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 V~/2,5W	A 45 cm	1 Non-locking	BA Flying leads
DA 24 V~/1,0W	B 60 cm	2 Locking	BT Flying leads with light
DC 24 V~/1,8W	C 90 cm		GA MAC JAC Solenoid plug-in
DD 24 V~/2,5W			GB MAC JAC Solenoid plug-in with diode
DF 24 V~/4,0W			GC MAC JAC Solenoid plug-in with MOV

Note : AC voltage requires connector with rectifier.

* Other options available, see page 387.

Washdown capability is possible for the "G" type electrical connector. Consult factory for ordering information.

Latching solenoid also available, see page 63.

OPTIONS

Pilot/Base Configuration :

38B-xMx-xAx-Gxxx-xxx

- A Individual base – Side port
- B Individual base – Bottom port
- M Pilot exhaust muffled
- R Pilot exhaust piped M5
- U Pilot exhaust to main exhaust

BD	MAC JAC Solenoid plug-in with diode and LED
BE	MAC JAC Solenoid plug-in with diode and LED
BF	MAC JAC Solenoid plug-in with MOV and LED
BG	MAC JAC Solenoid plug-in with rectifier
BH	MAC JAC Solenoid plug-in with rectifier and LED
KA	Mini connector
KD	Mini connector with rectifier light and ground
KT	Mini connector with light

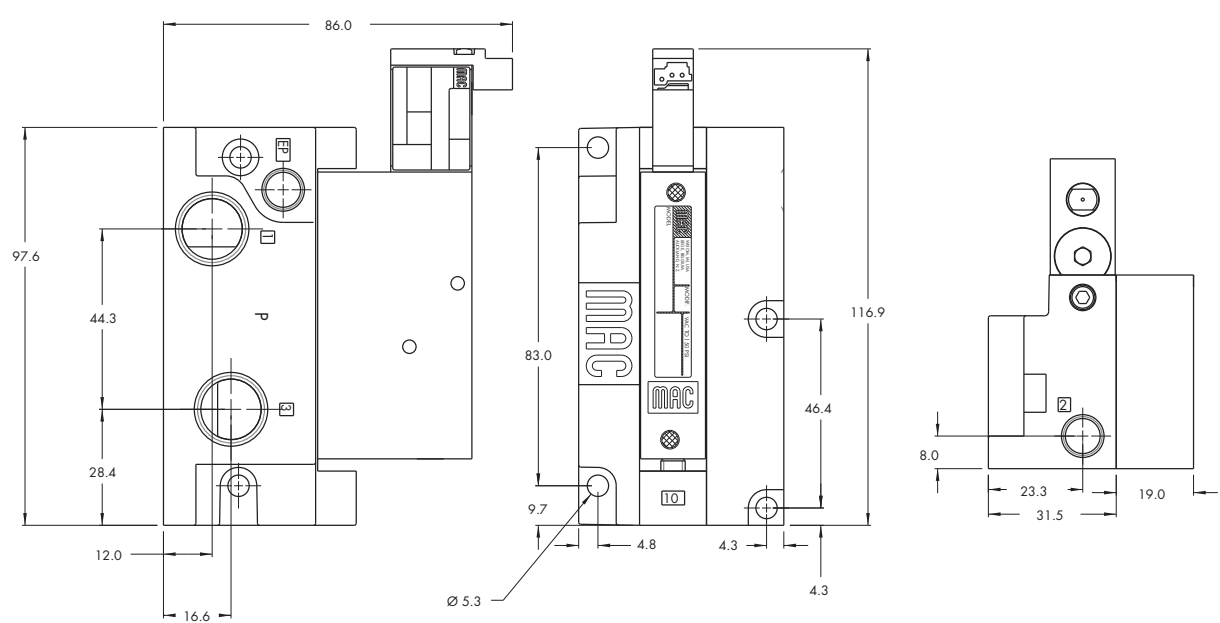
TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 1,3 to 8 bar External Pilot : Vacuum to 8 bar
Pilot pressure :	1,3 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	6,0 mm
Flow (at 6 bar, ΔP=1 bar) :	G1/8" bottom port: 1200 Nl/min (Cv 1,2) - G1/8" side port: 1000 Nl/min (Cv 1,0)
Coil :	Epoxy encapsulated – 100% ED – Class A wire
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	1.0 to 4.0 W
Response times : (with 4 W coil)	Energize : 6 ms De-energize : 6 ms

Options :

- NPTF threads

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	G1/8"	1200 NI/min	Sub-base "plug-in"	

OPERATIONAL BENEFITS

- 1. 3-way valve with 4-way integral pilot.
- 2. 10 mm valve (stacks on 16.5 mm centers).
- 3. High flow (up to 1200 NI/min).
- 4. Fast, repeatable response times.
- 5. Maximum shifting forces in both directions.



HOW TO ORDER

Port size	Pilot air	NO valve	NC valve	Universal valve
Valve less base	Internal	38B-BMA-000-GxxP-xxx	38B-AMA-000-GxxP-xxx	
	External	38B-BMB-000-GxxP-xxx	38B-AMB-000-GxxP-xxx	38B-GMB-000-GxxP-xxx
G1/8"	Internal	38B-BMA-BAA-GxxP-xxx	38B-AMA-BAA-GxxP-xxx	
	External	38B-BMB-BAB-GxxP-xxx	38B-AMB-BAB-GxxP-xxx	38B-GMB-BAB-GxxP-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 V~/2,5W	1	Non-locking	SA	Base plug-in
DA	24 V~/1,0W	2	Locking	SJ	Base plug-in with light
DC	24 V=/1,8W			SS	Base plug-in with rectifier & light & ground
DD	24 V=/2,5W				
DF	24 V=/4,0W				

Note : AC voltage requires connector with rectifier.

* Other options available, see page 387.

Washdown capability is possible for the "G" type electrical connector. Consult factory for ordering information.

Latching solenoid also available, see page 65.

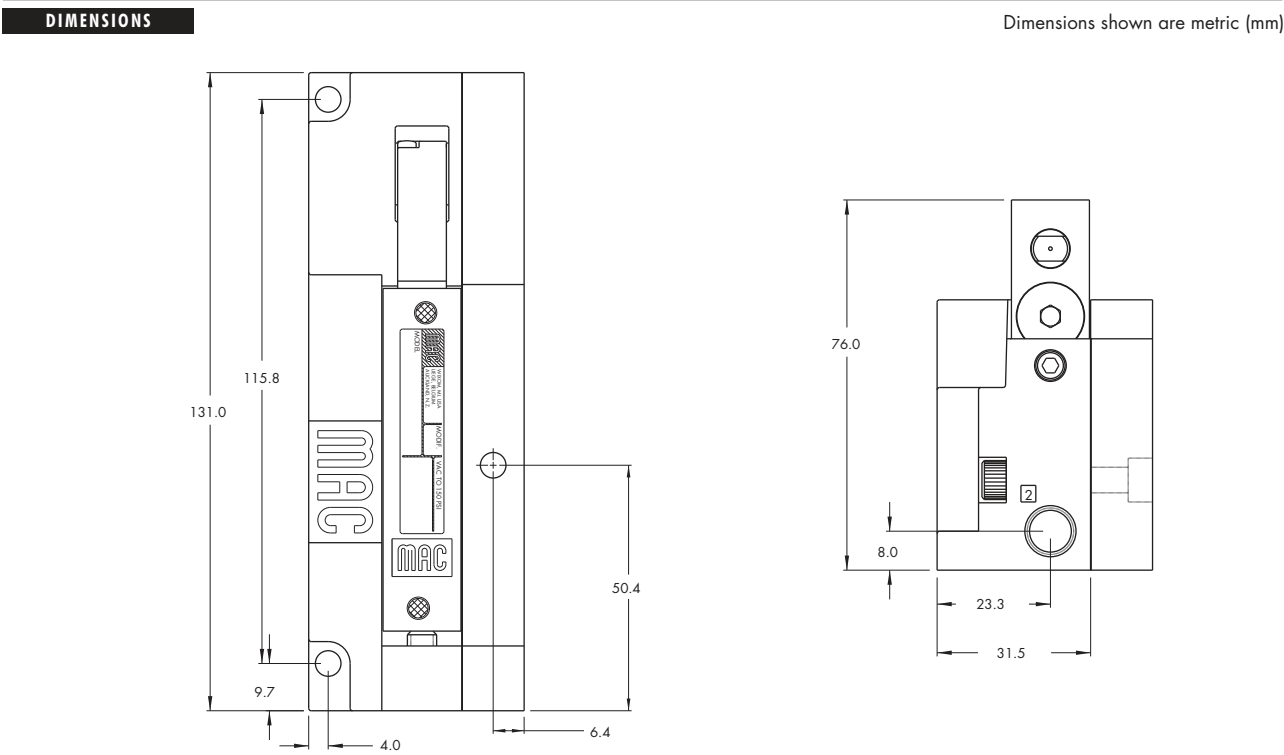
OPTIONS

Pilot/Base Configuration :

38B-**xMx-xAx-GxxP-xxx**

- A Individual base – Side port
- B Individual base – Bottom port
- M Pilot exhaust muffled
- R Pilot exhaust piped M5
- U Pilot exhaust to main exhaust

TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 1,3 to 8 bar External Pilot : Vacuum to 8 bar
Pilot pressure :	1,3 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	6,0 mm
Flow (at 6 bar, ΔP=1bar) :	G1/8" bottom port: 1200 NI/min (Cv 1,2) - G1/8" side port : 1000 NI/min (Cv 1,0)
Coil :	Epoxy encapsulated – 100% ED – Class A wire
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	1.0 to 4.0 W
Response times : (with 4 W coil)	Energize : 6 ms De-energize : 6 ms
Options :	NPTF threads



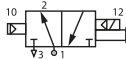
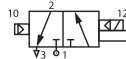
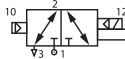
Function	Port size	Flow [Max]	Manifold mounting	Series
3/2 NO-NC	G1/8"	1200 NI/min	Manifold base "plug-in"	

OPERATIONAL BENEFITS

1. 3-way valve with 4-way integral pilot.
 2. 10 mm valve (stacks on 16.5 mm centers).
 3. High flow (up to 1200 NI/min).
 4. Fast, repeatable response times.
 5. Maximum shifting forces in both directions.



HOW TO ORDER

Port size	Pilot air	NO valve	NC valve	Universal valve
				
Valve less base	Internal	38B-BMA-000-GxxP-xxx	38B-AMA-000-GxxP-xxx	
	External	38B-BMB-000-GxxP-xxx	38B-AMB-000-GxxP-xxx	38B-GMB-000-GxxP-xxx
G1/8"	Internal	38B-BMA-BJA-GxxP-xxx	38B-AMA-BJA-GxxP-xxx	
	External	38B-BMB-BJB-GxxP-xxx	38B-AMB-BJB-GxxP-xxx	38B-GMB-BJB-GxxP-xxx

Note : Above codes are for side port.

STANDARD SOLENOID OPERATOR ➤

G xx P- xxx *		
Voltage	Manual operator	Electrical connection
AA 120 V~/2,5W	1 Non-locking	SA Base plug-in
DA 24 V~/1,0W	2 Locking	SJ Base plug-in with light
DC 24 V~/1,8W		SS Base plug-in with rectifier & light & ground
DD 24 V~/2,5W		
DF 24 V~/4,0W		

Note : AC voltage requires connector with rectifier.

* Other options available, see page 387.

Washdown capability is possible for the "G" type electrical connector. Consult factory for ordering information.

Latching solenoid also available, see page 65.

OPTIONS

Base only :

38B-000-xxx (i.e. 38A-000-BJA)

Base Configuration :

38B-xxx-Jx-Gxx P-xxx

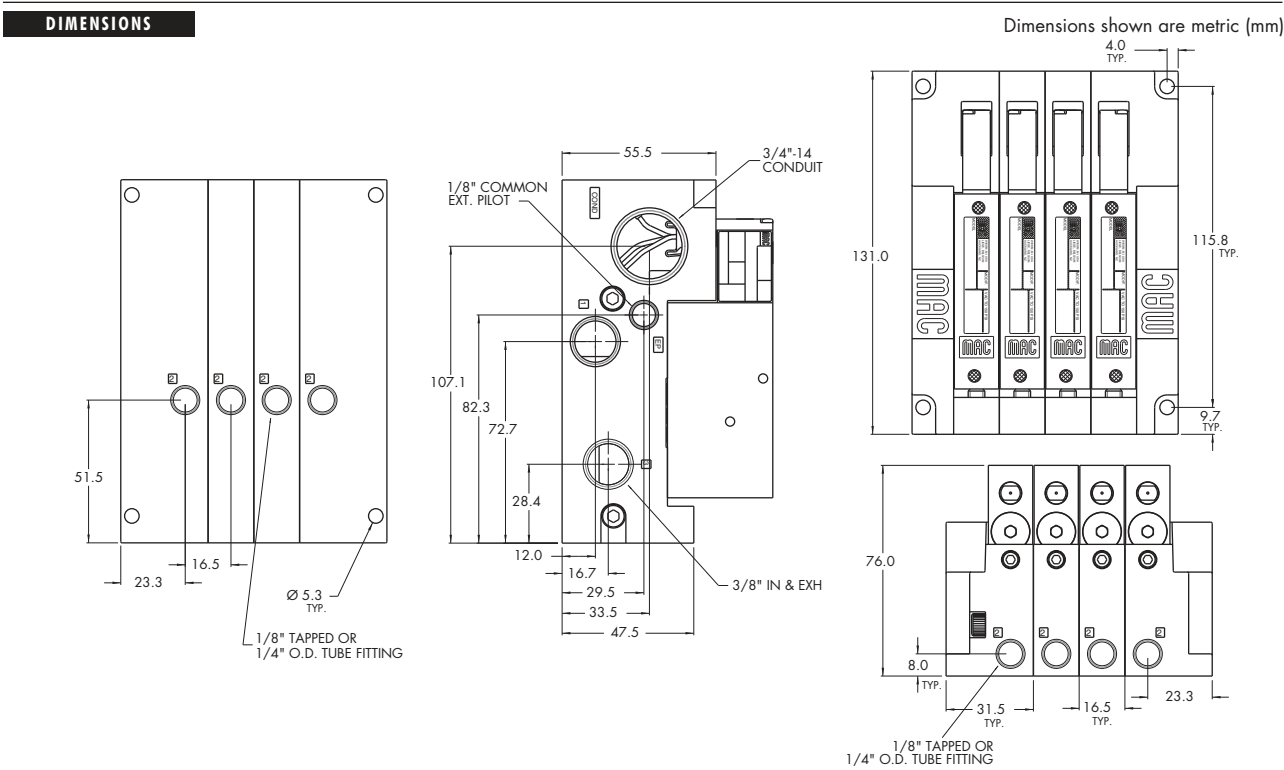
- J Manifold base – Side port
 - K Manifold base – Bottom port
 - L Left end manifold base - Side port
 - M Left end manifold base - Bottom port
 - N Right end manifold base - Side port
 - P Right end manifold base - Bottom port

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

TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 1,3 to 8 bar External Pilot : Vacuum to 8 bar
Pilot pressure :	1,3 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	6,0 mm
Flow [at 6 bar, ΔP=1 bar] :	G1/8" bottom port: 1200 Nl/min (Cv 1,2) - G1/8" side port : 1000 Nl/min (Cv 1,0)
Coil :	Epoxy encapsulated – 100% ED – Class A wire
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	1.0 to 4.0 W
Response times : (with 4 W coil)	Energize : 6 ms De-energize : 6 ms

Options :

- NPTF threads



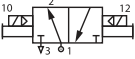
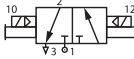
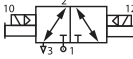
Function	Port size	Flow [Max]	Individual/Manifold mounting	Series
3/2 NO-NC	G1/8"	1200 NI/min	Subbase/ manifold base non "plug-in" with latching solenoid	

OPERATIONAL BENEFITS

1. 3-way valve with 4-way integral pilot.
 2. 10 mm valve (stacks on 16.5 mm centers).
 3. High flow (up to 1200 NI/min).
 4. Fast, repeatable response times.
 5. Maximum shifting forces in both directions.



HOW TO ORDER

Port size	Pilot air	NO valve	NC valve	Universal valve
				
Valve less base	Internal	38B-BMA-000-Lxxx-xxx	38B-AMA-000-Lxxx-xxx	
	External	38B-BMB-000-Lxxx-xxx	38B-AMB-000-Lxxx-xxx	38B-GMB-000-Lxxx-xxx
G1/8"	Internal	38B-BMA-BAL-Lxxx-xxx	38B-AMA-BAL-Lxxx-xxx	
	External	38B-BMB-BAM-Lxxx-xxx	38B-AMB-BAM-Lxxx-xxx	38B-GMB-BAM-Lxxx-xxx

Note : Above codes are for individual base and side port.

LATCHING SOLENOID OPERATOR ➤

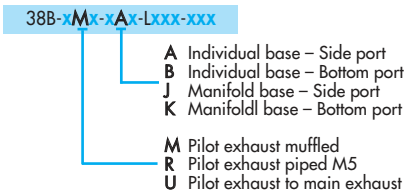
XX Voltage		X Wire length		X Manual operator		XX Electrical connection**	
DF	24 V= /4,0W	A	45 cm	0	No operator	BA	2 Wire Flying leads
HA	24 V= /1,95W	B	60 cm			BJ	4 Wire Flying leads
		C	90 cm			KA	2 Wire Plug-in Assembly
						KE	4 Wire Plug-in Assembly
						LA	3 Wire plug-in assembly (Polarity Switching Cover)

* Other options available, see page 395.

** Latching 38 series with non plug-in base configuration must use "B", "K" or "L" type electrical connector.

OPTIONS

Pilot/Base Configuration :

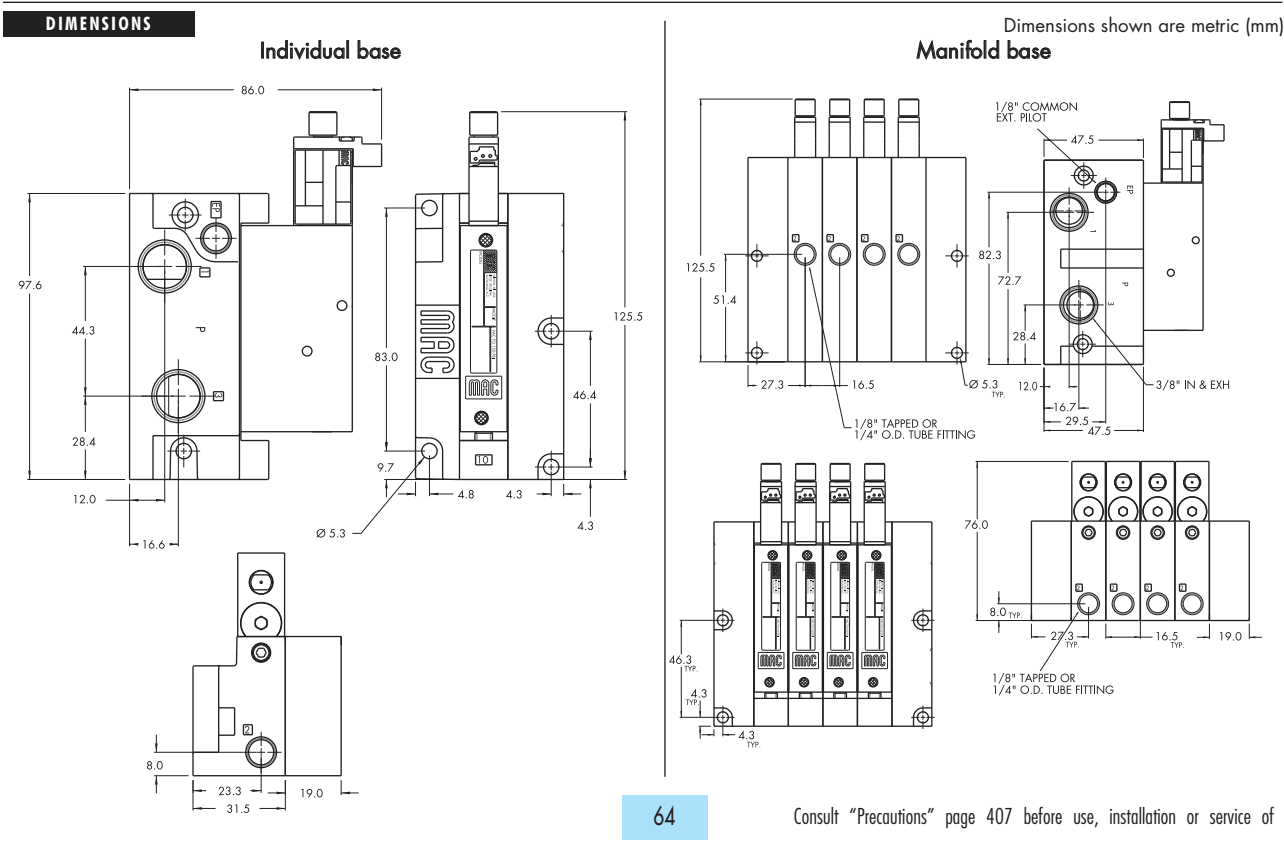


Note : Manifold assemblies require an end plate kit :
M-38003-01-01P (internal pilot)
M-38003-02-01P (external pilot)

TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 1,3 to 8 bar External Pilot : Vacuum to 8 bar
Pilot pressure :	1,3 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	6,0 mm
Flow (at 6 bar, ΔP=1 bar) :	G1/8" bottom port: 1200 Nl/min (Cv 1,2) - G1/8" side port : 1000 Nl/min (Cv 1,0)
Coil :	Epoxy encapsulated – 100% ED – Class A wire
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	1.95 to 4.0 W
Response times :	Energize : 6 ms
(with 4 W coil)	De-energize : 6 ms

Options :

• NPTF threads





Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Individual/Manifold mounting	Series
3/2 NO-NC	G1/8"	1200 NI/min	Sub-base/ manifold base "plug-in" with latching solenoid	

OPERATIONAL BENEFITS

- 1. 3-way valve with 4-way integral pilot.
- 2. 10 mm valve (stacks on 16.5 mm centers).
- 3. High flow (up to 1200 NI/min).
- 4. Fast, repeatable response times.
- 5. Maximum shifting forces in both directions.



HOW TO ORDER

Port size	Pilot air	NO valve	NC valve	Universal valve
Valve less base	Internal	38B-BMA-000-LxxP-xxx	38B-AMA-000-LxxP-xxx	
	External	38B-BMB-000-LxxP-xxx	38B-AMB-000-LxxP-xxx	38B-GMB-000-LxxP-xxx
G1/8"	Internal	38B-BMA-BAA-LxxP-xxx	38B-AMA-BAA-LxxP-xxx	
	External	38B-BMB-BAB-LxxP-xxx	38B-AMB-BAB-LxxP-xxx	38B-GMB-BAB-LxxP-xxx

Note : Above codes are for individual base and side port.

LATCHING SOLENOID OPERATOR >

L XX P-xxx *		
XX Voltage	X Manual operator	XX Electrical connection**
DF 24 V=/4,0W	0 No operator	DA Base/Manifold Plug-in
HA 24 V=/1,95W		DB Base/Manifold Plug-in w/Ground
		DC Base/Manifold Plug-in w/ Led
		DD Base/Manifold Plug-in w/ Led and Ground
		EA Base/Manifold Plug-in 3 Pin (Polarity Switching Cover)

* Other options available, see page 395.
** 2 and 4 wire bases must use "D" type electrical connector.
3 wire bases must use "EA" type electrical connector.

OPTIONS

Manifold/Base Configuration :

38B-xxx-xAx-LxxP-xxx	A Individual base – Side port B Individual base – Bottom port 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
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Manifold/Base Int./Ext. Pilot : (Wire options)

38B-xxx-xxA-LxxP-xxx	A Plug-In Int. Pilot (2 Wire)** B Plug-In Ext. Pilot (2 Wire)** C Plug-In Int. Pilot (3 Wire)** D Plug-In Ext. Pilot (3 Wire)** E Plug-In Int. Pilot (4 Wire)** F Plug-In Ext. Pilot (4 Wire)**
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Note : Manifold assemblies consist of (1) left end manifold, (1) right end manifold, and middle station manifolds (option J or K).

TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 1,3 to 8 bar External Pilot : Vacuum to 8 bar
Pilot pressure :	1,3 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	6,0 mm
Flow (at 6 bar, ΔP=1 bar) :	G1/8" bottom port: 1200 Nl/min (Cv 1,2) - G1/8" side port: 1000 Nl/min (Cv 1,0)
Coil :	Epoxy encapsulated – 100% ED – Class A wire
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	1.95 to 4.0 W
Response times :	Energize : 6 ms
(with 4 W coil)	De-energize : 6 ms

Options :

- NPTF threads

