

MAC

34 Series

2/2-way & 3/2-way direct solenoid operated

Available configurations:	Individual inline, individual base mounted and manifold base mounted
Port sizes:	M5, 10-32 UNC ports
Flow:	Up to 120 NI/min (0.12 Cv)
Pressure range:	Vacuum to 8 bar
Function:	3/2 normally closed, 3/2 universal
Operation:	Electrical



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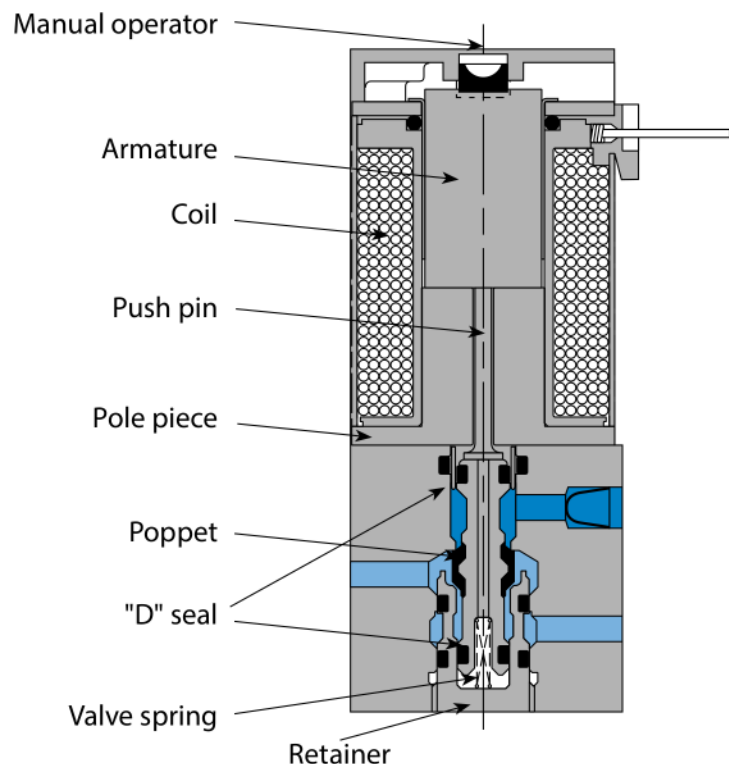
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MAC 34 Series - Inline valve

3-way, 2 position, poppet

Flow up to 120 NI/min (0.12 Cv)

- ◇ Short stroke with high flow
- ◇ Balanced poppet, immune to variations of pressure allowing pressure and vacuum operation
- ◇ Bonded poppet with minimum friction, shifting in a glass-like finished bore
- ◇ Wiping effect, valve immune to contamination
- ◇ Long service life
- ◇ Direct operated valve
- ◇ 2/2-way function available
- ◇ Short stroke for high energization shifting force
- ◇ Strong return spring for high de-energization shifting force
- ◇ Universal poppet allowing normally closed & normally open operation



MAC 34 Series - Inline valve

Technical data

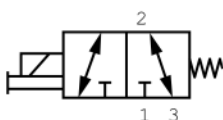
Fluid:	Compressed air, vacuum, inert gases
Pressure range:	Vacuum to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration:	40 µ
Temperature range:	-18°C to 50°C
Flow (at 6 bar, ΔP=1bar):	120 NI/min (0.12 Cv)
Coil:	Epoxy encapsulated - Class H wires
Voltage range:	-15% to +10% of nominal voltage
Power:	1.0 to 4.0 W
Response times:	24 V= /4 W Energize: 4.5 ms De-energize: 1.5 ms

Solenoid direct operated valve

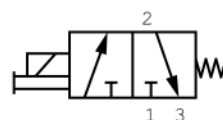
Single pressure models

3/2

Universal valve



Normally closed only valve



Notes:

CHANGING FROM NORMALLY CLOSED TO NORMALLY OPEN

Individual inline valve can be changed from normally closed to normally open by connecting the inlet to port 3 instead of port 1 (universal only).

NORMALLY CLOSED ONLY MODELS

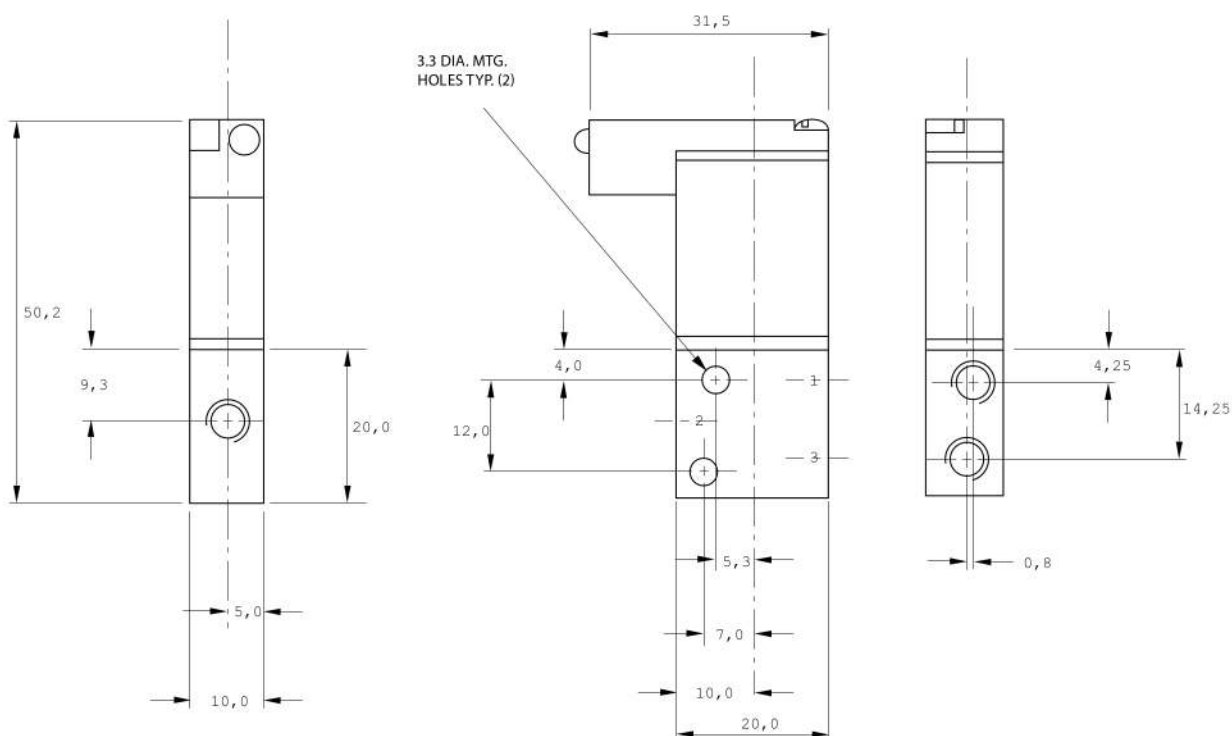
A single purpose normally closed only model is available for those applications where a greater tolerance for heavy concentrations of water, compressor products and other air line contaminants is desired.

MAC 34 Series - Inline valve

Dimensions



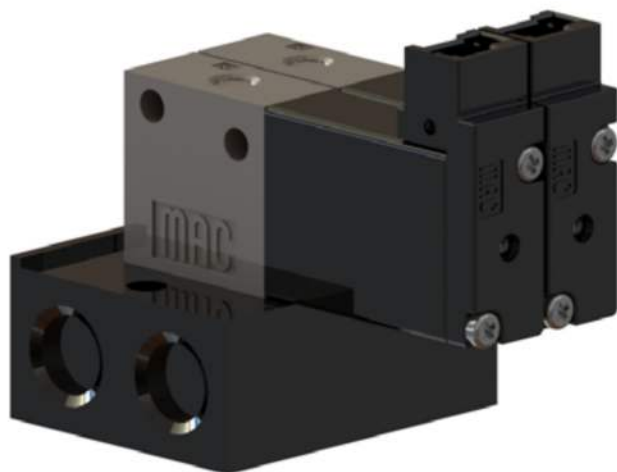
All dimensions are in mm



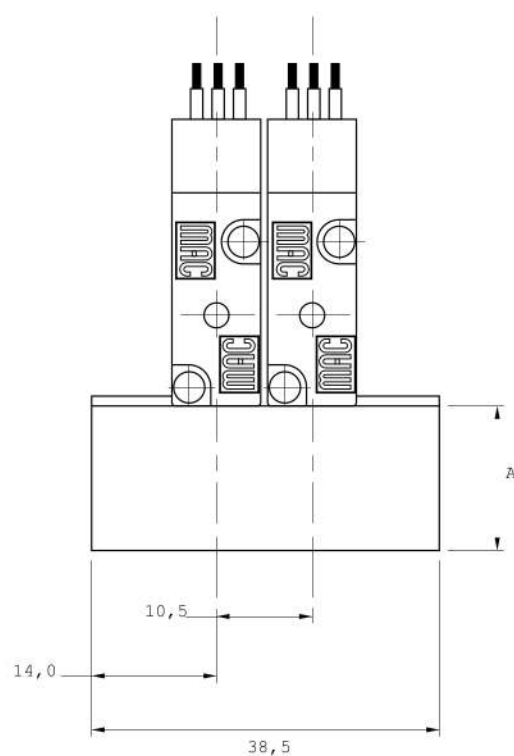
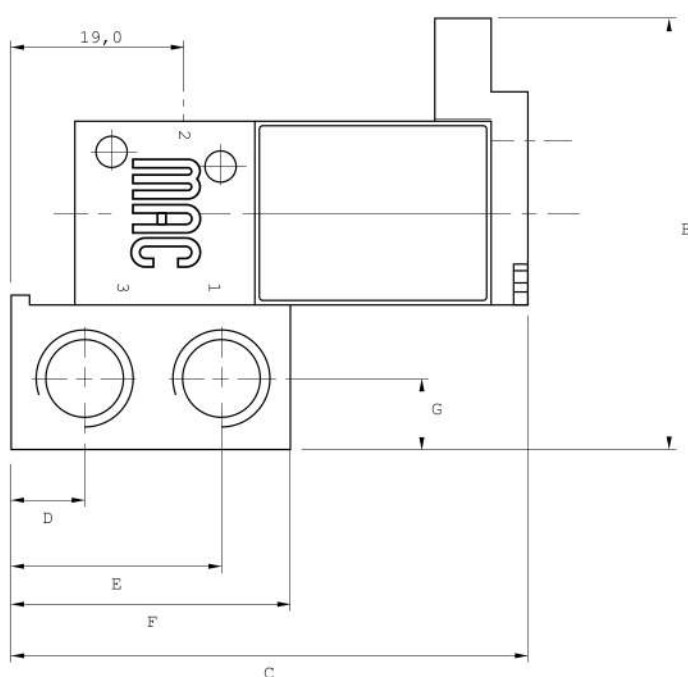
MAC 34 Series - Inline valve

Options

Cylinder ports in valve / manifold inline valve



All dimensions are in mm

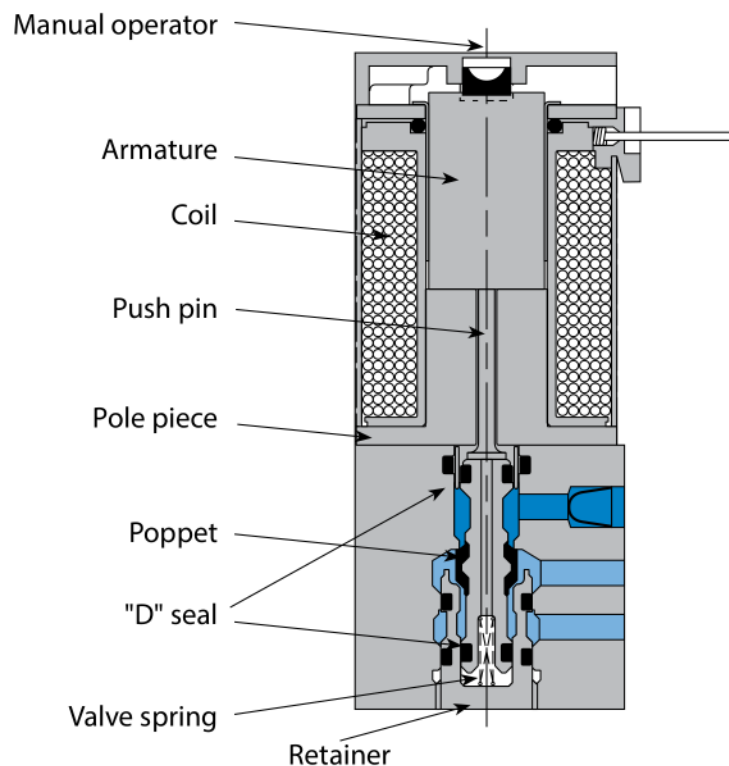
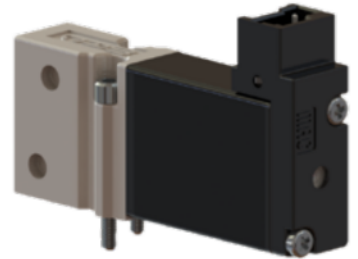


MAC 34 Series - Manifold non plug-in valve

3-way, 2 position, poppet

Flow up to 120 NI/min (0.12 Cv)

- ◇ Short stroke with high flow
- ◇ Balanced poppet, immune to variations of pressure allowing pressure and vacuum operation
- ◇ Bonded poppet with minimum friction, shifting in a glass-like finished bore
- ◇ Wiping effect, valve immune to contamination
- ◇ Long service life
- ◇ Direct operated valve
- ◇ 2/2-way function available
- ◇ Short stroke for high energization shifting force
- ◇ Strong return spring for high de-energization shifting force
- ◇ Universal poppet allowing normally closed & normally open operation



MAC 34 Series - Manifold non plug-in valve

Technical data

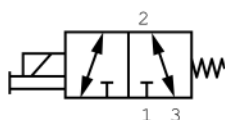
Fluid:	Compressed air, vacuum, inert gases
Pressure range:	Vacuum to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration:	40 µ
Temperature range:	-18°C to 50°C
Flow (at 6 bar, ΔP=1bar):	120 NI/min (0.12 Cv)
Coil:	Epoxy encapsulated - Class H wires
Voltage range:	-15% to +10% of nominal voltage
Power:	1.0 to 4.0 W
Response times:	24 V= / 4 W Energize: 4.5 ms De-energize: 1.5 ms

Solenoid direct operated valve

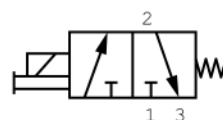
Single pressure models

3/2

Universal valve



Normally closed only valve



Notes:

CHANGING FROM NORMALLY CLOSED TO NORMALLY OPEN

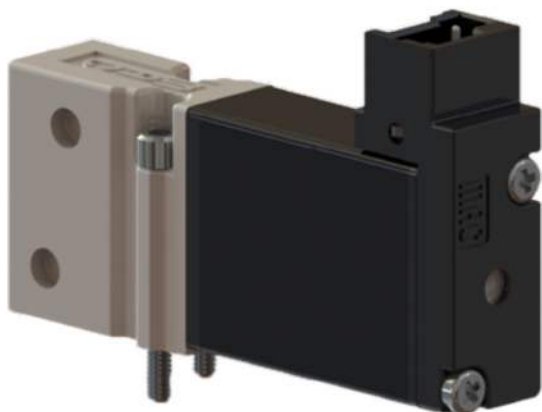
Manifold valve can be changed from normally closed to normally open by connecting the inlet to port 3 instead of port 1 (universal only).

NORMALLY CLOSED ONLY MODELS

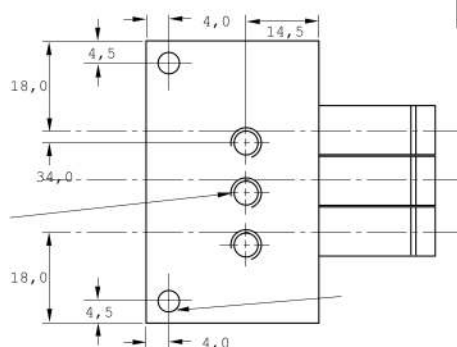
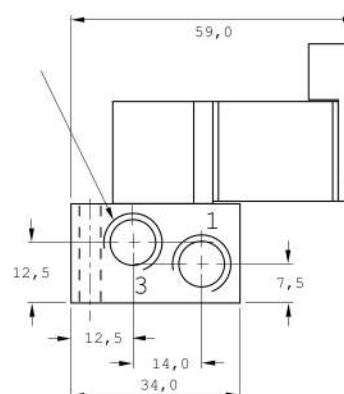
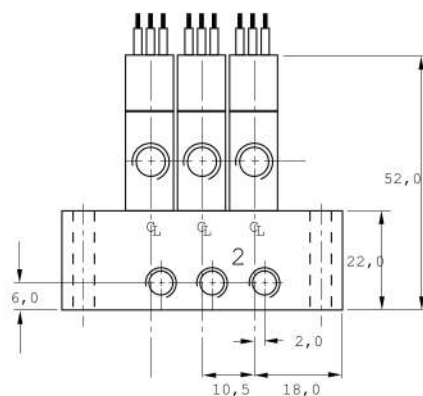
A single purpose normally closed only model is available for those applications where a greater tolerance for heavy concentrations of water, compressor products and other air line contaminants is desired.

MAC 34 Series - Manifold non plug-in valve

Dimensions



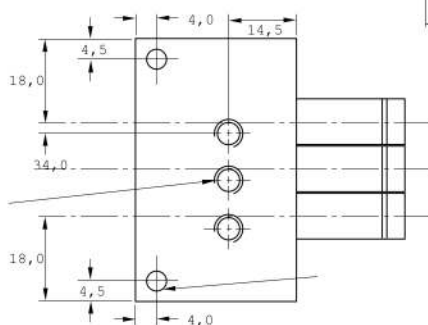
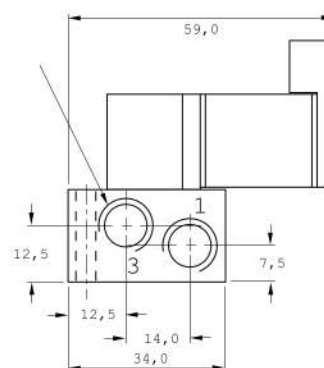
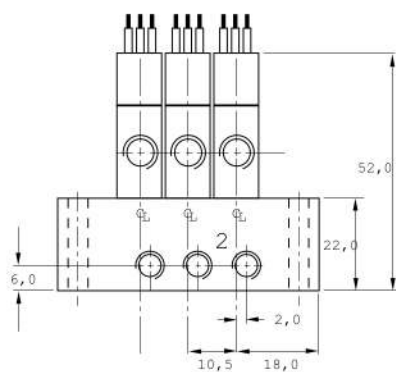
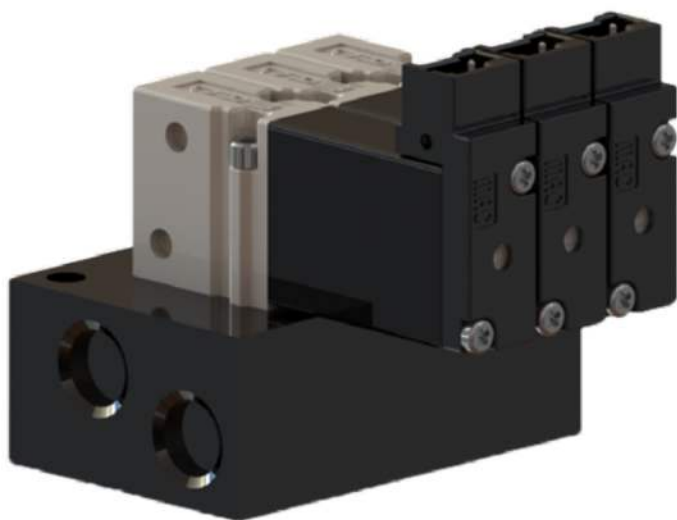
All dimensions are in mm



MAC 34 Series - Manifold non plug-in valve

Options

Cylinder ports in base / manifold non plug-in valve



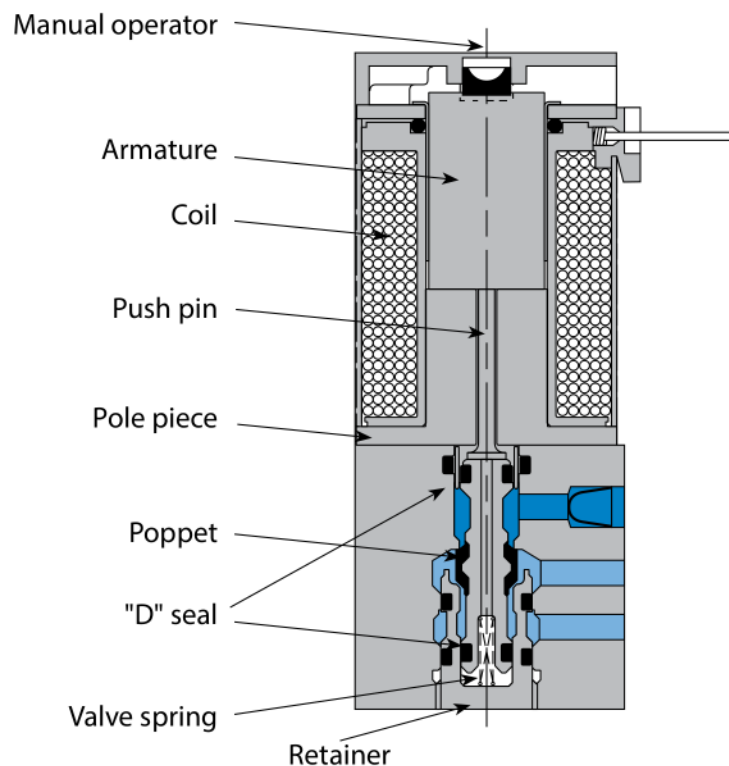
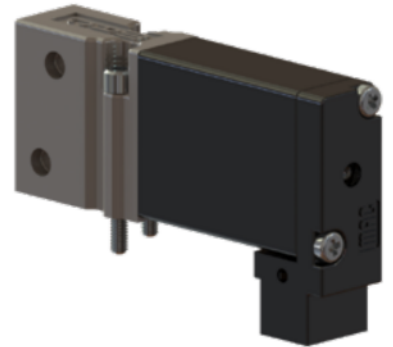
All dimensions are in mm

MAC 34 Series - Manifold plug-in valve

3-way, 2 position, poppet

Flow up to 120 NI/min (0.12 Cv)

- ◇ Short stroke with high flow
- ◇ Balanced poppet, immune to variations of pressure allowing pressure and vacuum operation
- ◇ Bonded poppet with minimum friction, shifting in a glass-like finished bore
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- ◇ Direct operated valve
- ◇ 2/2-way function available
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- ◇ Universal poppet allowing normally closed & normally open operation



MAC 34 Series - Manifold plug-in valve

Technical data

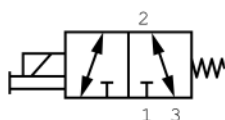
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Lubrication:	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration:	40 µ
Temperature range:	-18°C to 50°C
Flow (at 6 bar, ΔP=1bar):	120 NI/min (0.12 Cv)
Coil:	Epoxy encapsulated - Class H wires
Voltage range:	-15% to +10% of nominal voltage
Power:	1.0 to 4.0 W
Response times:	24 V= / 4 W Energize: 4.5 ms De-energize: 1.5 ms

Solenoid direct operated valve

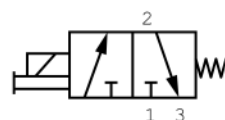
Single pressure models

3/2

Universal valve



Normally closed only valve



Notes:

CHANGING FROM NORMALLY CLOSED TO NORMALLY OPEN

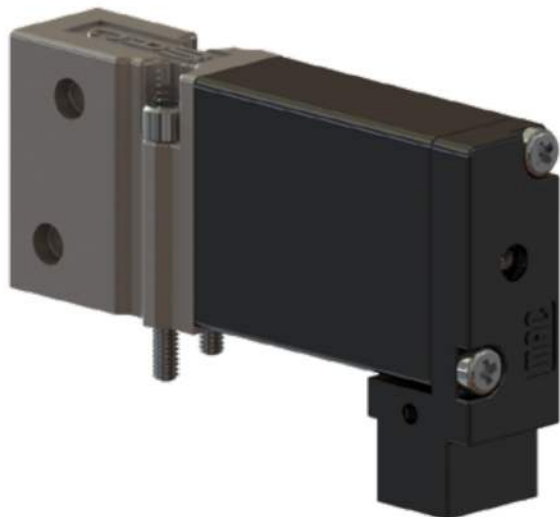
Manifold valve can be changed from normally closed to normally open by connecting the inlet to port 3 instead of port 1 (universal only).

NORMALLY CLOSED ONLY MODELS

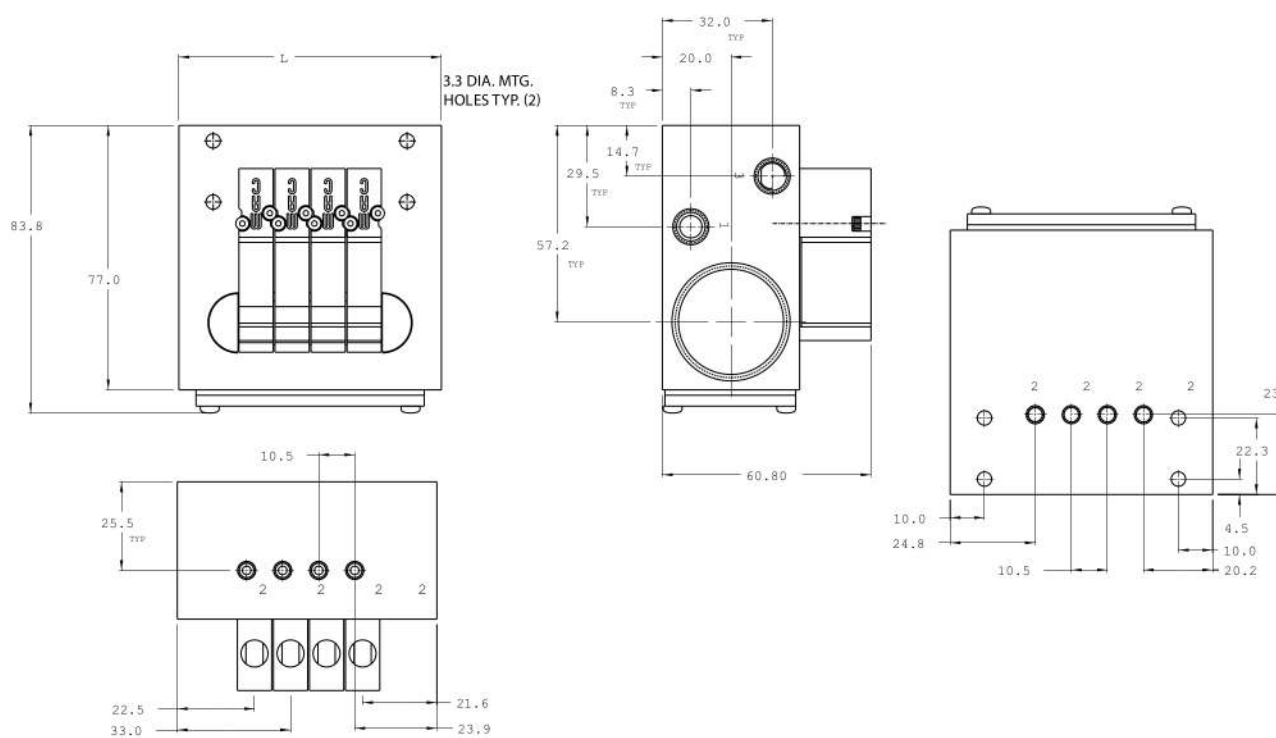
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MAC 34 Series - Manifold plug-in valve

Dimensions



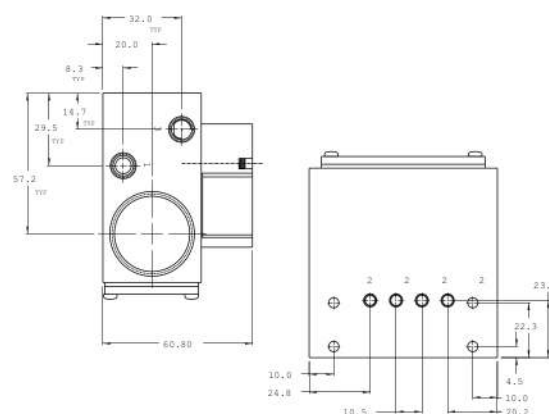
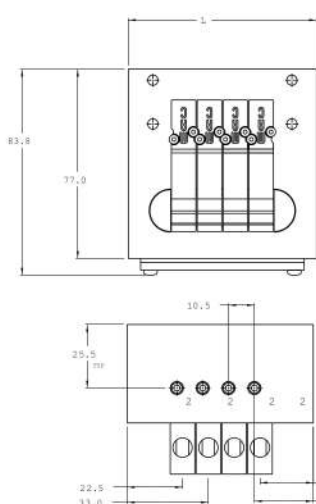
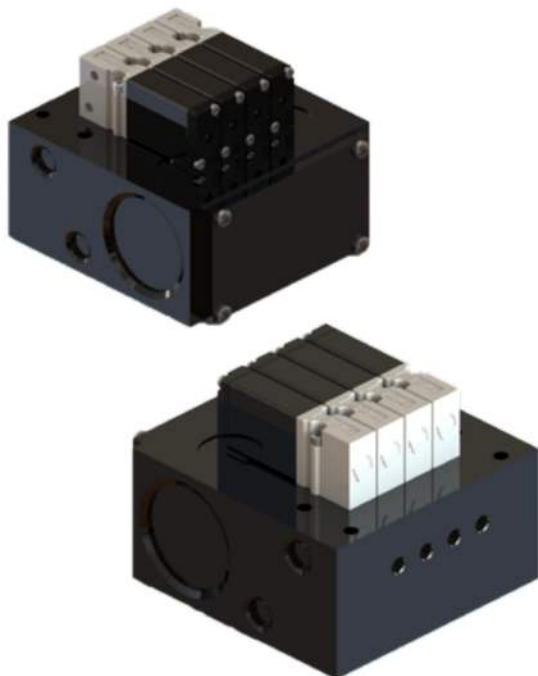
All dimensions are in mm



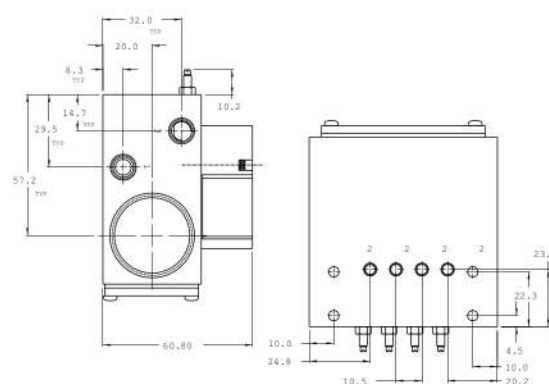
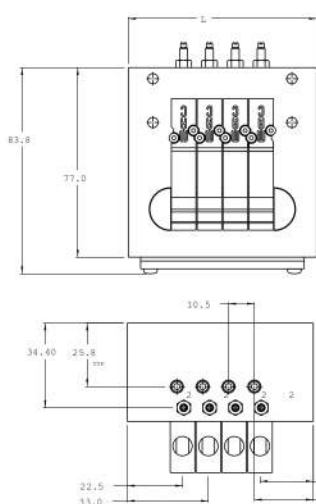
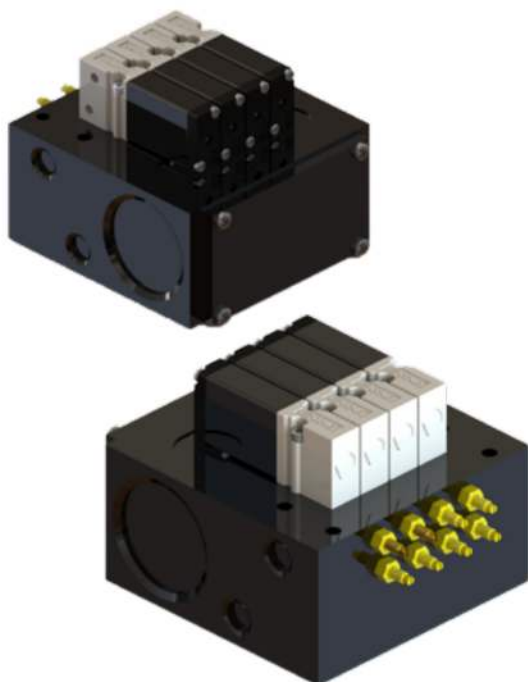
MAC 34 Series - Manifold plug-in valve

Options

Manifold without flow control and pressure regulator



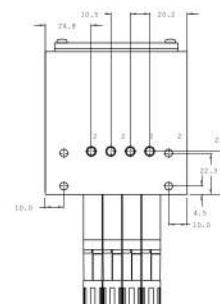
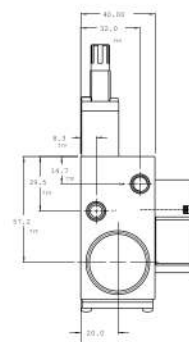
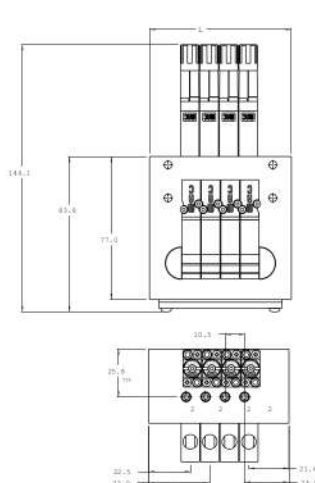
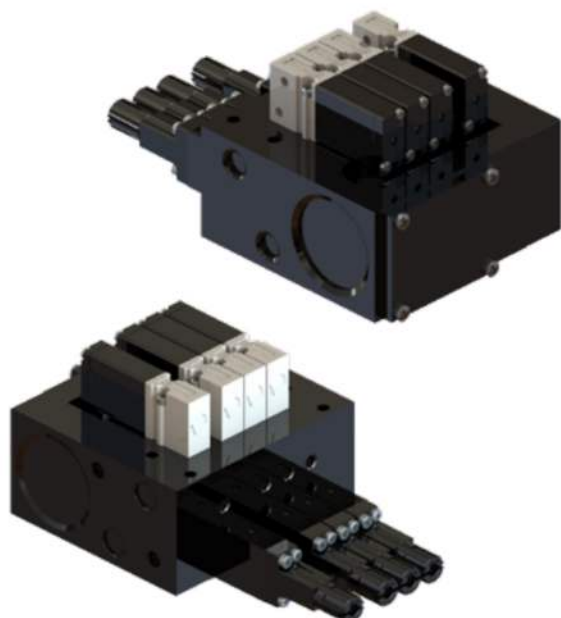
Manifold with flow control



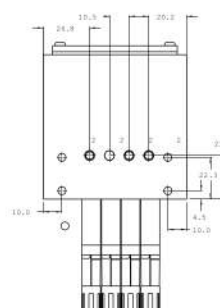
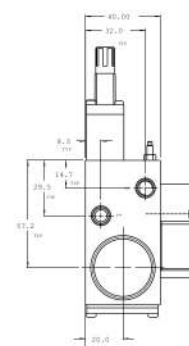
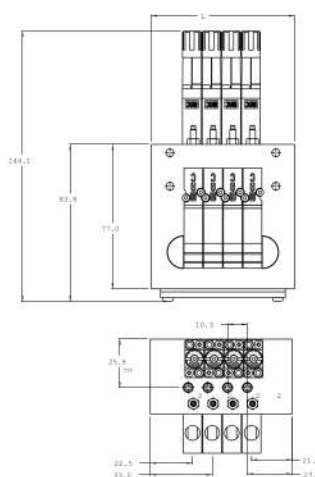
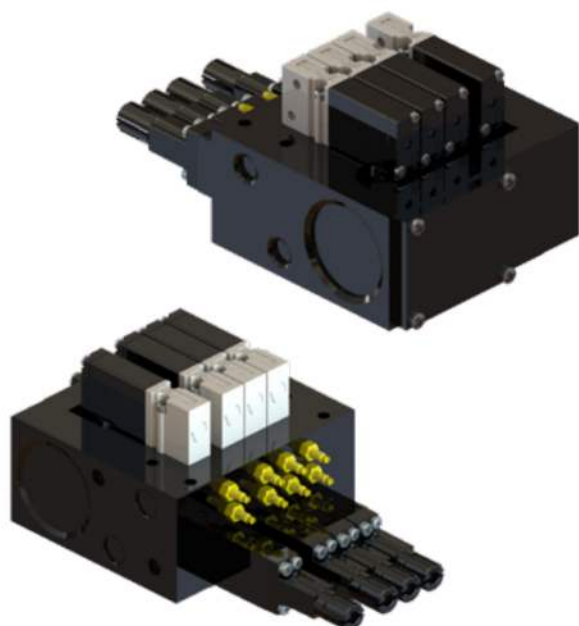
MAC 34 Series - Manifold plug-in valve

Options

Manifold with pressure regulator



Manifold with flow control and pressure regulator



MAC 34 Series - Universal 3/2 & 2/2

APPLICATION CONVERSION PROCEDURE:

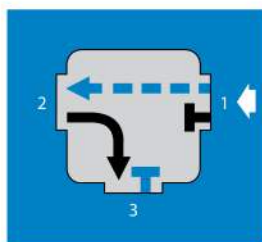
UNIVERSAL MODELS

The balanced poppet design facilitates using the same valve for 6 functions with any port being connected to vacuum, pressure or plugged. Piping is shown in the chart below.

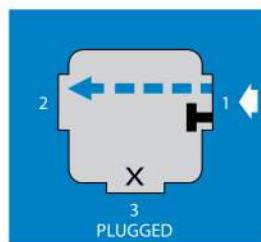
N.C. ONLY MODELS

A single purpose Normally Closed Only model is available for those applications where a greater tolerance for heavy concentrations of water, compressor products and other air line contaminants is desired.

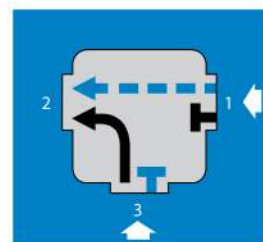
PIPING CHART FOR UNIVERSAL MODELS



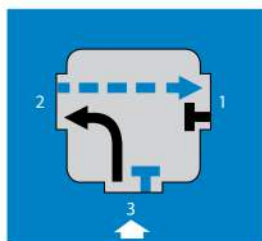
3-Way Normally Closed



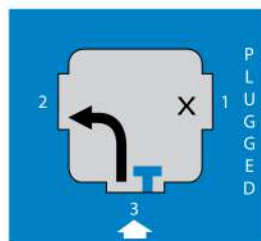
2-Way Normally Closed



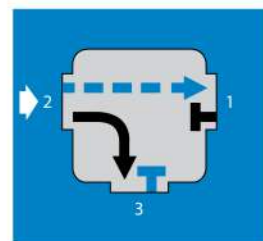
Selector



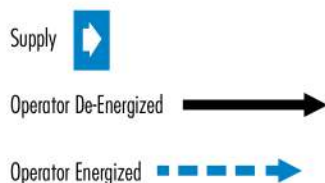
3-Way Normally Open



2-Way Normally Open



Divertor



MAC 34 Series - How to order

Valve assembly

Inline valve

34B-XXX - G XX X - X XX

BODY TYPE (STYLE)	PORT SIZE	FUNCTION TYPE	VOLTAGE VDC	LEAD WIRE LENGTH	MANUAL OPERATOR	SOLENOID OPTIONS
A Individual inline	A #10-32 UNF B M5 (Metric)	A Universal 3-way inline B 3-way normally closed only inline	DC 24 =/ 1.8W DD 24 =/ 2.5W DE 24 =/ 3.0W DF 24 =/ 4.0W DJ 12 =/ 1.8W DK 12 =/ 2.5W DM 12 =/ 3.0W DN 12 =/ 4.0W	O No lead wire A 18" / 45 cm B 24" / 60 cm C 36" / 90 cm D 48" / 120 cm E 72" / 180 cm F 96" / 240 cm G 120" / 305 cm H 144" / 366 cm	1 Recessed non locking operator 3 Non locking extended	BA Flying leads BT Flying leads with light KA Plug-in wire assembly KC Plug-in wire assembly with rectifier and light KT Plug-in wire assembly with light

* Connectors available with AC voltages require modification

*Other options: see page 20

Circuit bar®

EBM34A - XX X X - XX

SPACING	CONFIGURATION	PORT SIZE & THREAD TYPE	NUMBER OF STATIONS
00 10.5mm	1 Common inlet & exhaust (12mm profile) Use with B & D port options 2 Common inlet & exhaust (16mm profile) Use with A, C & E port options	A 1/8" NPTF B #10-32 UNF C 1/8" BSPPL D M5 Metric E 1/8" BSPTR	02 Two stations 03 Three stations Etc. ...

* Connectors available with AC voltages require modification

MAC 34 Series - How to order

Valve assembly

Manifold non plug-in valve

34B - X XX - G XX X - X XX

BODY TYPE (STYLE)	PORT SIZE	VOLTAGE VDC	LEAD WIRE LENGTH	MANUAL OPERATOR	SOLENOID OPTIONS
L Base mount body	00 Base mount body only	DC 24 =/ 1.8W	O No lead wire	1 Recessed non locking operator	BA Flying leads
N Base mount body normally closed only		DD 24 =/ 2.5W	A 18" / 45 cm		BT Flying leads with light
		DE 24 =/ 3.0W	B 24" / 60 cm	3 Non locking extended	KA Plug-in wire assembly
		DF 24 =/ 4.0W	C 36" / 90 cm		KC Plug-in wire assembly with rectifier and light
		DJ 12 =/ 1.8W	D 48" / 120 cm		KT Plug-in wire assembly with light
		DK 12 =/ 2.5W	E 72" / 180 cm		
		DM 12 =/ 3.0W	F 96" / 240 cm		
		DN 12 =/ 4.0W	G 120" / 305 cm		
			H 144" / 366 cm		

* Connectors available with AC voltages require modification

*Other options: see page 20

Circuit bar®

EBP34B - XX X X - XX

SPACING	CONFIGURATION	PORT SIZE & THREAD TYPE	NUMBER OF STATIONS
00 10.5mm	1 Side cylinder	B #10-32 UNF	02 Two stations
	2 Bottom cylinder	D M5 Metric	03 Three stations
		F 1/8" O.D. tube fitting	Etc. ...
		G 3/32" O.D. tube fitting	

* Connectors available with AC voltages require modification

MAC 34 Series - How to order

Valve assembly

Manifold plug-in valve

34B - X XX - G XX X - X XX - 9

BODY TYPE (STYLE)	PORT SIZE	VOLTAGE VDC	LEAD WIRE LENGTH	MANUAL OPERATOR	SOLENOID OPTIONS
L Base mount body N Base mount body normally closed only	00 Base mount body only	DC 24 =/ 1.8W DD 24 =/ 2.5W DE 24 =/ 3.0W DF 24 =/ 4.0W DJ 12 =/ 1.8W DK 12 =/ 2.5W DM 12 =/ 3.0W DN 12 =/ 4.0W	0 No lead wire	1 Recessed non locking operator 3 Non locking extended	DC* Base/Manifold plug-in with rectifier & LED DD* Base/Manifold plug-in with rectifier & LED with ground DE* Plug-in with suppression diode DF* Plug-in with suppression diode with ground pin DJ* Plug-in DM* Plug-in with ground pin DT* Plug-in with LED light DU* Plug-in with LED light with ground pin DV* Plug-in with suppression diode with LED light DW* Plug-in with suppression diode with LED light with ground pin

* Connectors available with AC voltages require modification

Circuit bar®

ECD034B - XX X X X - XX XX

SPACING	CONFIGURATION	STYLE	CYLINDER PORT SIZE	BASE ELECTRICAL	NUMBER OF STATIONS
00 10.5mm * Standard spacing is 10.5mm except for single station add-a-units which are 15mm wide	1 Side cylinder 2 Bottom cylinder 3 Side cylinder with regulator* 4 Bottom cylinder with regulator* 5 Side cylinder with flow control 6 Bottom cylinder port with flow control 7 Bottom cylinder with regulator and flow control* 8 Side cylinder with regulator and flow control*	A Standard bar B Add-on-style bar ¹ C Add-a-unit station ² ¹ Right-hand end plate kit included with bar assembly on "B" add-on style bar ² Add-a-units available in 1, 2, 3 & 4 stations lengths	B #10-32 UNF D M5 Metric	A0 Standard (no light)	02 Two stations 03 Three stations Etc. ...

*Regulator to be ordered separately

Replacement parts & accessories

M-34004-01(*)	Right hand end plate kit	19412-01	Tie rod (10.5mm)
M-34005	Blank station cover plate kit	28415	Isolator disc, inlet & exhaust, installed between add-a-unit stations
N-44002	Flow control needle assembly	24180	Base wire plug-in protector
N44003	Regulator blank plate kit	35048	End plate mounting screw
17012-01-1	O-ring port seal		

Regulator

PR44A - X X X X - 9 (Assembled to bar)

ADJUSTMENT METHOD	CONFIGURATION	GAGE PORT OPTIONS	PRESSURE RANGE
A Manual adjust with knob	0 Regulator	A Standard (no gage port) B Gage port (plugged)* * Option not available with flow controls on circuit bar (gage port not accessible)	A 0 to 6.7 bar B 0 to 4 bar C 0 to 2.7 bar D 0 to 1 bar

MAC 34 Series - Solenoid options

Codification table for voltages / Manual override / Electrical connection

VALVE CODE ☒

G XX X-X XX
1 2 3 4

1. VOLTAGE

G-XX X-X XX	VOLTAGE
AA	120V~/2,5W (requires electrical connector with rectifier)
AC	24V~/4,0W (requires electrical connector with rectifier)
DA	24V=/1,0W
DC	24V=/1,8W
DD	24V=/2,5W
DE	24V=/3,0W
DF	24V=/4,0W
DG	12V=/1,0W
DJ	12V=/1,8W
DK	12V=/2,5W
DM	12V=/3,0W
DN	12V=/4,0W
DR	6V=/1,8W
DS	6V=/3,0W
EB	48V=/1,8W
EC	48V=/3,0W
ED	120V=/2,5W
GD	12V=/0,5W
GE	24V=/0,5W

2. WIRE LENGTH

G-XX X-X XX	WIRE LENGTH
0	No lead wires
A	18" coil leads - 45 cm
B	24" coil leads - 60 cm
C	36" coil leads - 90 cm
D	48" coil leads - 120 cm
E	72" coil leads - 180 cm
F	96" coil leads - 240 cm
G	120" coil leads - 305 cm
H	144" coil leads - 366 cm
1	18" base leads - 45 cm
2	24" base leads - 60 cm
3	36" base leads - 90 cm
4	48" base leads - 120 cm
5	72" base leads - 180 cm
6	96" base leads - 240 cm
7	120" base leads - 305 cm

3. MANUAL OPERATOR

G-XX X-X XX	MANUAL OPERATOR
1	Encastrée – non verrouillable
2	Encastrée – verrouillable
3	Saillante – non verrouillable
4	Saillante – verrouillable

4. ELECTRICAL CONNECTOR FOR INLINE AND NON PLUG-IN VALVES

G-XX X-X XX	ELECTRICAL CONNECTION FOR INLINE AND NON PLUG-IN VALVES
BA	Flying leads
BB	Flying leads with ground wire
BC	Flying leads with light
BD	Flying leads with light and ground wire
BE	Flying leads with suppression diode
BF	Flying leads with suppression diode and ground wire
BG	Flying leads with suppression diode and light
BH	Flying leads with suppression diode, light and ground wire
BN	Flying leads with suppression diode and blocking diode
BP	Flying leads with suppr. diode, blocking diode and ground wire
BR	Flying leads with suppression diode, blocking diode and light
BS	Flying leads w/ suppr. diode, blocking diode, light and ground wire
BT	Flying leads w/ LED light on top
BU	Flying leads w/ LED light on top & ground wire
BV	Flying leads w/ suppression diode plus LED light on top
BW	Flying leads w/ suppr. diode plus LED light on top & ground wire
BX	Flying leads w/ suppr. diode plus blocking diode LED light on top
BY	Flying leads w/ suppr. diode plus blocking diode LED light on top & ground wire
HA	Circuit board plug-in with full wave rectifier & LED (with ground wire)
HD	Circuit board plug-in with full wave rectifier & LED without lead wire assembly (with ground wire)
KA	Solenoid plug-in wire assembly
KB	Solenoid plug-in wire assembly with ground
KC	Solenoid plug-in wire assembly with rectifier and light
KD	Solenoid plug-in wire assembly with rectifier, light and ground
KE	Solenoid plug-in wire assembly with suppression diode
KF	Solenoid plug-in wire assembly with suppr. diode and ground
KJ	Solenoid plug-in housing without wire assembly
KM	Solenoid plug-in housing with ground pin without wire assembly
KN	Sol. plug-in wire assembly with suppr. diode and blocking diode
KP	Sol. plug-in wire assy w/ suppr. diode, blocking diode and ground
KT	Solenoid plug-in wire assembly with light
KU	Solenoid plug-in wire assembly with light and ground
KV	Solenoid plug-in wire assembly with suppression diode and light
KW	Sol. plug-in wire assembly with suppr. diode, light and ground
KX	Sol. plug-in wire assy with suppr. diode, blocking diode and light
KY	Solenoid plug-in wire assembly with suppression diode, blocking diode, light and ground
PA	Pico
TJ	Dual Tabs - Mini Plug-in

4. ELECTRICAL CONNECTOR FOR PLUG-IN VALVES

G-XX X-X XX	ELECTRICAL CONNECTION FOR PLUG-IN (PLUG-IN OPTIONS)
DC*	Base/Manifold plug-in with rectifier & LED
DD*	Base/Manifold plug-in with rectifier & LED with ground
DE*	Plug-in with suppression diode
DF*	Plug-in with suppression diode with ground pin
DJ*	Plug-in
DM*	Plug-in with ground pin
DT*	Plug-in with LED light
DU*	Plug-in with LED light with ground pin
DV*	Plug-in with suppression diode with LED light
DW*	Plug-in with suppression diode with LED light with ground pin

MAC 34 Series - Codification of valve connectors



BA	Flying leads
BB	Flying leads with ground wire
BC	Flying leads with light
BD	Flying leads with light and ground wire
BE	Flying leads with suppression diode
BF	Flying leads with suppression diode and ground wire
BG	Flying leads with suppression diode and light
BH	Flying leads with suppression diode, light and ground wire
BN	Flying leads with suppression diode and blocking diode
BP	Flying leads with suppr. diode, blocking diode and ground wire
BR	Flying leads with suppression diode, blocking diode and light
BS	Flying leads w/ suppr. diode, blocking diode, light and ground wire
BT	Flying leads w/ LED light on top
BU	Flying leads w/ LED light on top & ground wire
BV	Flying leads w/ suppression diode plus LED light on top
BW	Flying leads w/ suppr. diode plus LED light on top & ground wire
BX	Flying leads w/ suppr. diode plus blocking diode LED light on top
BY	Flying leads w/ suppr. diode plus blocking diode LED light on top & ground wire



KA	Solenoid plug-in wire assembly
KB	Solenoid plug-in wire assembly with ground
KC	Solenoid plug-in wire assembly with rectifier and light
KD	Solenoid plug-in wire assembly with rectifier, light and ground
KE	Solenoid plug-in wire assembly with suppression diode
KF	Solenoid plug-in wire assembly with suppr. diode and ground
KJ	Solenoid plug-in housing without wire assembly
KM	Solenoid plug-in housing with ground pin without wire assembly
KN	Solenoid plug-in wire assembly with suppr. diode and blocking diode
KP	Solenoid plug-in wire assembly w/ suppr. diode, blocking diode and ground
KT	Solenoid plug-in wire assembly with light
KU	Solenoid plug-in wire assembly with light and ground
KV	Solenoid plug-in wire assembly with suppression diode and light
KW	Solenoid plug-in wire assembly with suppr. diode, light and ground
KX	Solenoid plug-in wire assembly with suppr. diode, blocking diode and light

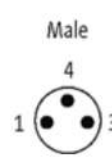


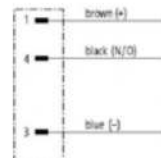
DC*	Base/Manifold plug-in with rectifier & LED
DD*	Base/Manifold plug-in with rectifier & LED with ground
DE*	Plug-in with suppression diode
DF*	Plug-in with suppression diode with ground pin
DJ*	Plug-in
DM*	Plug-in with ground pin
DT*	Plug-in with LED light
DU*	Plug-in with LED light with ground pin
DV*	Plug-in with suppression diode with LED light
DW*	Plug-in with suppression diode with LED light with ground pin



PA	Pico
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Male





Connect Female connector to pins 1 and 4.
Use brown and black wires

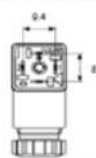


HA	Circuit board plug-in with full wave rectifier & LED (with ground wire)
HD	Circuit board plug-in with full wave rectifier & LED without lead wire assembly (with ground wire)



TJ	Dual Tabs - Mini Plug-in
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MICRO DIN 43650-Industrial Standard C
9.4mm Pin Spacing



MAC 34 Series - Warranty

MAC VALVES WARRANTY, WARRANTY LIMITATIONS, FLAT RATE REBUILD PROGRAM

The MAC Valves organization has established a reputation over many years for fulfilling the needs and requirements of the users of its products. All MAC Valves are quality products specifically designed and built for long and rugged service. For this reason, MAC Valves is able to provide the Buyer a limited warranty.

WARRANTY: MAC Valves, Inc. hereby warrants to Buyer that, for a period of 18 months from the original date of shipment of each valve from our factory ("Warranty Period"), such valve will be free from significant defects in material and workmanship and will conform to all specifications agreed to by MAC Valves, Inc.. In addition, MAC Valves, Inc. warrants that the electrical coils on such valves will be free from significant defects in material and workmanship for their normal useful life. EXCEPT FOR THESE LIMITED WARRANTIES, MAC VALVES, INC. EXPRESSLY DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES OF ANY KIND (WHETHER EXPRESS, IMPLIED OR ARISING BY OPERATION OF LAW) WITH RESPECT TO THE VALVES, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR REPRESENTATIONS AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER MATTER. THIS SECTION SURVIVES THE EXPIRATION, TERMINATION OR CANCELLATION OF ANY AGREEMENTS BETWEEN THE PARTIES RELATING TO THE PURCHASE OF THE VALVES.

WARRANTY LIMITATIONS: This Warranty does not apply where the valves have been (i) subjected to abuse, misuse, damage, neglect, negligence, accident, improper testing, improper installation, improper storage, improper handling, abnormal physical stress, abnormal environmental condition, or use contrary to any instructions issued by MAC Valves, Inc.; (ii) modified, reconstructed, repaired, or altered by persons other than MAC Valves, Inc. or its authorized representative; or (iii) used with any third-party product, hardware, software or other product that has not been previously approved in writing by MAC Valves, Inc. Additionally, this Warranty does not cover claims for labor, material, time or transportation, and does not apply to loss or damage caused by fire, theft, riot, explosion, labor dispute, act of God, or other causes beyond the control of MAC Valves, Inc.

EXCLUSIVE REMEDY: The Buyer's sole remedy under this Warranty is limited to the replacement or rebuilding of any valve which does not conform to the warranties provided herein or, in MAC Valves, Inc.'s sole discretion, refund of the purchase price for the non-conforming valve. Buyer's remedy is conditioned on Buyer's compliance with its obligations under this Warranty. Valves that Buyer believes do not conform to this Warranty must be returned (with or without bases) transportation prepaid and received at our factory within the Warranty Period. If MAC Valves, Inc. determines that the valve is non-conforming and is otherwise covered by this Warranty, the rebuilt or replaced valve will be returned to the customer at the expense of MAC Valves, Inc., and will carry the same warranties as provided under the Flat Rate Rebuild Program described below. MAC VALVES, INC. WILL NOT BE RESPONSIBLE FOR ANY INCIDENTAL, SPECIAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION DIRECT AND INDIRECT LOST PROFITS, REGARDLESS OF WHETHER THOSE DAMAGES WERE FORESEEABLE.

The Flat Rate Rebuild Program: Valves no longer covered by the MAC Warranty may be eligible for a one-time rebuild under the MAC Valves, Inc. Flat Rate Rebuild Program. Our constant research and testing program is dedicated to extending the life of our valves and maximizing their reliability under the most adverse conditions. Valves returned under this limited program are completely disassembled, inspected, rebuilt to current operating standards whenever possible, tested and returned within a few weeks for a nominal flat rate charge. All rebuilt valves carry the same warranty described (in our MAC Warranty) for new valves for a warranty period of 90 days from the date of shipment from our factory.



Valves that have gone through the one-time rebuild will have been marked with a letter "R" as part of the date (This is an example of a rebuild date stamp from this month E(May)17(Year)Tester Symbol R(Indicates Rebuild)).

Please note that any valves sent back for subsequent rebuild that have already been through the program previously (indicated by the "R") will not be eligible for additional rebuild.