

Handhabungstechnik
Motore & Getriebe
Pneumatik
Hydraulik
Systemlösungen

as-tec
Mechatronik GmbH

Produktkatalog

MAC 3/2 Wegeventile

Serie67 - 3/4" 1"



Über Uns

Die Firma **as-tec Mechatronik GmbH** ist ein herstellerunabhängiger Lieferant von Systemlösungen und Komponenten für pneumatische, hydraulische und elektrische Antriebs- und Steuerungstechnik.

Wir bieten unseren Kunden für ihre Projekte im Maschinen- und Anlagenbau, beziehungsweise für die Instandhaltung ihrer Fertigungseinrichtungen die am besten geeigneten Produkte aus unserem herstellerübergreifenden Produktportfolio.

In unserer Werkstätte produzieren wir kundenspezifische Lösungen wie zum Beispiel Ventileinheiten, Schaltschränke und Sonderzylinder. Weiters halten wir sowohl Standardkomponenten als auch speziell für Kunden bevorratete Produkte auf Lager.

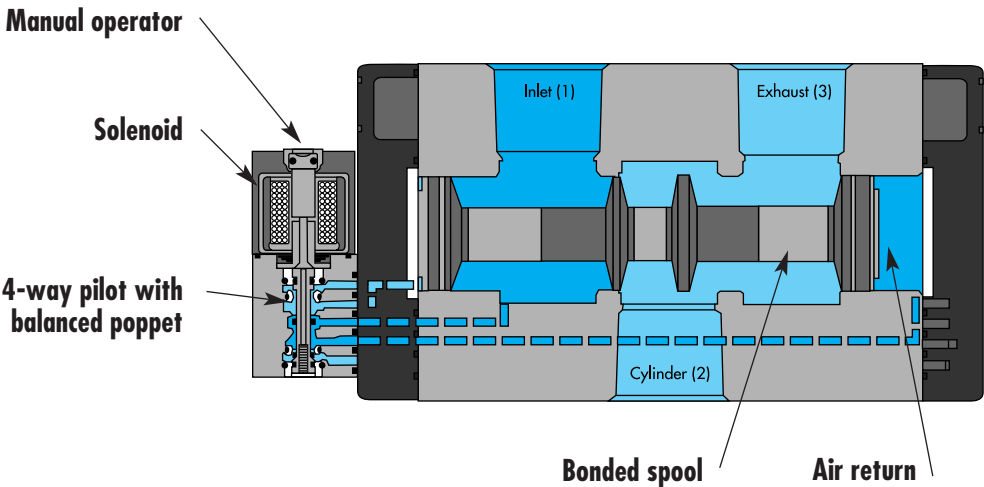


Individual mounting

Inline	
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Series

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48P
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ISO 01
ISO 02
ISO 1
ISO 2
ISO 3



SERIES FEATURES

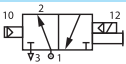
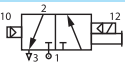
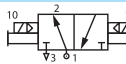
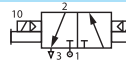
- Patented MACSOLENOID® for fastest possible response times and virtually burn-out proof AC solenoid operation.
- Optional low watt DC solenoids.
- Normally closed or normally open valve function.
- Optional universal spool.
- Internal or external pilot.
- Optional memory spring.
- Checked accumulator.
- Optional pilot exhaust to main valve exhaust.
- May be plugged for 2-way operation.

Function	Port size	Flow [Max]	Individual mounting	Series
3/2 NO-NC, 2/2 NO-NC	G3/4" - G1"	20000 NI/min	Inline	

OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting force both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.

HOW TO ORDER

Port size	Pilot air	Single Operator		Double Operator	
		NO Valve	NC Valve	NO Valve	NC Valve
					
G3/4"	Internal	67A-Cx-CAA-DM-Dxxx-xxx	67A-Ax-CAA-DM-Dxxx-xxx	67A-Dx-CAA-DM-Dxxx-xxx	67A-Bx-CAA-DM-Dxxx-xxx
G1"	Internal	67A-Cx-DAA-DM-Dxxx-xxx	67A-Ax-DAA-DM-Dxxx-xxx	67A-Dx-DAA-DM-Dxxx-xxx	67A-Bx-DAA-DM-Dxxx-xxx
G3/4"	External	67A-Cx-CAB-DM-Dxxx-xxx	67A-Ax-CAB-DM-Dxxx-xxx	67A-Dx-CAB-DM-Dxxx-xxx	67A-Bx-CAB-DM-Dxxx-xxx
G1"	External	67A-Cx-DAB-DM-Dxxx-xxx	67A-Ax-DAB-DM-Dxxx-xxx	67A-Dx-DAB-DM-Dxxx-xxx	67A-Bx-DAB-DM-Dxxx-xxx

SOLENOID OPERATOR ➤

DM-D **xxx-xxx***

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connection
JA	110 V~/50Hz	A	45 cm	1	Non-locking	KA	Square connector
JB	220 V~/50Hz	B	60 cm	2	Locking	KD	Square connector with light
JC	24 V~/50Hz	J	Connector			JB	Rectangular connector
FB	24 V=/1,8W					JD	Rectangular connector with light
DA	24 V=/5,4W					BA	Flying leads
DF	24 V=/12,7W						

* Other options available, see page 385.

OPTIONS

Spool type :

67A-XX-CAA-DM-Dxxx-yzz

- G Single operator universal spool
- H Double operator universal spool

Port configuration :

67A-XX-CXA-DM-Dxxx-xxx

- A Standard pilot exhaust
- B Pilot exhaust to main exhaust*
- C Pilot exhaust out adapter*

* Must use DU pilot

Mounting style :

67A-XX-XAX-DM-Dxxx-xxx

- G O-Ring mount

Spool return :

67A-CX-CAA-DM-Dxxx-yzz

- 1 Standard return
- 2 Standard return with memory spring

Pilot style :

67A-XX-CAA-DM-Dxxx-xxx

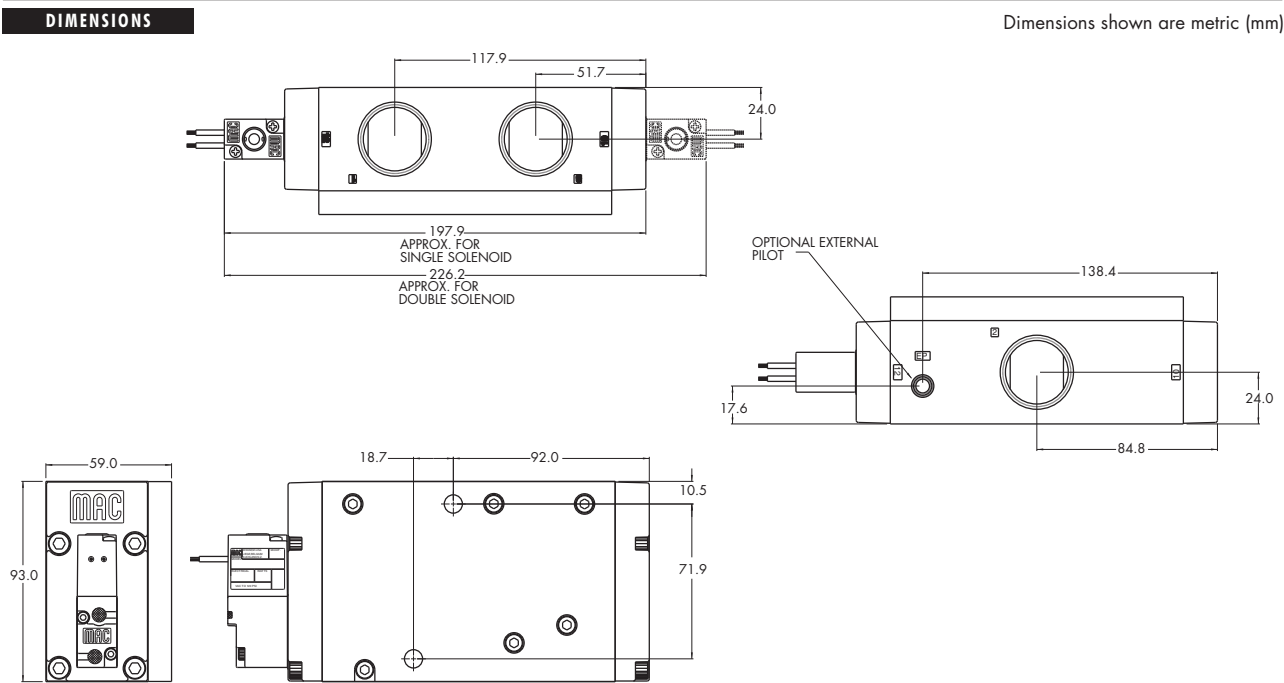
- M Pilot exhaust muffled
- R Pilot exhaust piped M5
- U Pilot exhaust to main exhaust



TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 1,3 to 8 bar External Pilot : Vacuum to 8 bar
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 :	26,8 mm
Flow (at 6 bar, ΔP=1bar) :	3/4" : 14500 NI/min (Cv 14,5) – 1" : 20000 (Cv 20,0)
Coil :	Epoxy encapsulated – 100% ED
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP65 (electrical connection)
Power :	~ Inrush : 7.6 VA Holding : 4.8 VA = 12.7 to 1.0 W
Response times : (with 5,4 W coil)	Energize : 29 ms De-energize :21 ms

Options :

- NPTF threads



Individual mounting

Inline

Series

33

34

36

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48P

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400

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ISO 01

ISO 02

ISO 1

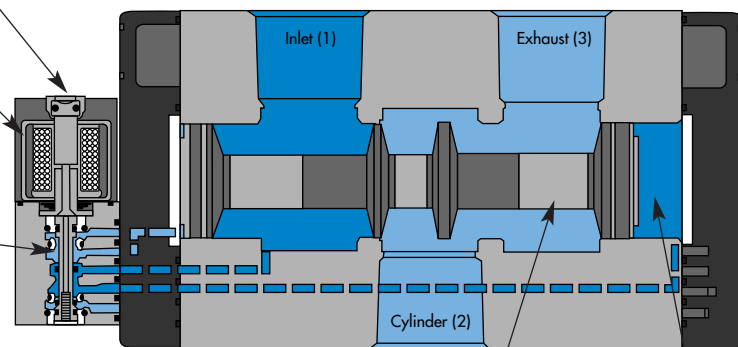
ISO 2

ISO 3

Manual operator

Solenoid

4-way pilot with
balanced poppet



Bonded spool

Air return

SERIES FEATURES

- Patented MACSOLENOID® for fastest possible response times and virtually burn-out proof AC solenoid operation.
- Optional low watt DC solenoids.
- Normally closed or normally open valve function.
- Optional universal spool.
- Internal or external pilot.
- Optional memory spring.
- Checked accumulator.
- Optional pilot exhaust to main valve exhaust.
- May be plugged for 2-way operation.

Function	Port size	Flow [Max]	Individual mounting	Series
3/2 NO-NC, 2/2 NO-NC	3/4" - 1"	20.0 C_v	Inline	

OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting force both ways.
2. Memory spring available.
3. Balanced spool, immune to variations of pressure, also provides high flow.
4. Short stroke with high flow.
5. Bonded spool with minimum friction, shifting in a glass-like finished bore.
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking.



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48P

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400

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93

ISO 01

ISO 02

ISO 1

ISO 2

ISO 3

HOW TO ORDER

Port size	Pilot air	Single Operator		Double Operator	
		NO Valve	NC Valve	NO Valve	NC Valve
3/4" NPTF	Internal	67A-Cx-AAA-DM-Dxxx-xxx	67A-Ax-AAA-DM-Dxxx-xxx	67A-Dx-AAA-DM-Dxxx-xxx	67A-Bx-AAA-DM-Dxxx-xxx
1" NPTF	Internal	67A-Cx-BAA-DM-Dxxx-xxx	67A-Ax-BAA-DM-Dxxx-xxx	67A-Dx-BAA-DM-Dxxx-xxx	67A-Bx-BAA-DM-Dxxx-xxx
3/4" NPTF	External	67A-Cx-AAB-DM-Dxxx-xxx	67A-Ax-AAB-DM-Dxxx-xxx	67A-Dx-AAB-DM-Dxxx-xxx	67A-Bx-AAB-DM-Dxxx-xxx
1" NPTF	External	67A-Cx-BAB-DM-Dxxx-xxx	67A-Ax-BAB-DM-Dxxx-xxx	67A-Dx-BAB-DM-Dxxx-xxx	67A-Bx-BAB-DM-Dxxx-xxx

SOLENOID OPERATOR ➤

DM-D **xxx-xxx***

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connection
JA	110/50, 120/60 (2.9W)	A	18"	1	Non-locking recessed	KA	Square connector
JB	220/50, 240/60 (2.9W)	B	24"	2	Locking recessed	KD	Square connector with light
JC	24/60 (2.9W)	J	Connector			JB	Rectangular connector
FB	24 VDC (1.8W)					JD	Rectangular connector with light
DA	24 VDC (5.4W)					BA	Flying leads
DF	24 VDC (12.7W)						

* Other options available, see page 309.

OPTIONS

Spool type :

67A-XX-AAA-DM-Dxxx-xxx

- G Single operator universal spool
- H Double operator universal spool

Port configuration :

67A-XX-AXA-DM-Dxxx-xxx

- A Standard pilot exhaust
- B Pilot exhaust to main exhaust*
- C Pilot exhaust out adapter*
- * Must use DU pilot. Replace DM with DU

Mounting style :

67A-XX-XAA-DM-Dxxx-xxx

- G O-Ring mount

Spool return :

67A-XX-AAA-DM-Dxxx-xxx

- 1 Standard return
- 2 Standard return with memory spring (for use with single operator only)

Pilot style :

67A-XX-AAA-DM-Dxxx-xxx

- M Pilot exhaust muffled
- P Pilot exhaust piped (#10-32)
- U Pilot exhaust to main exhaust

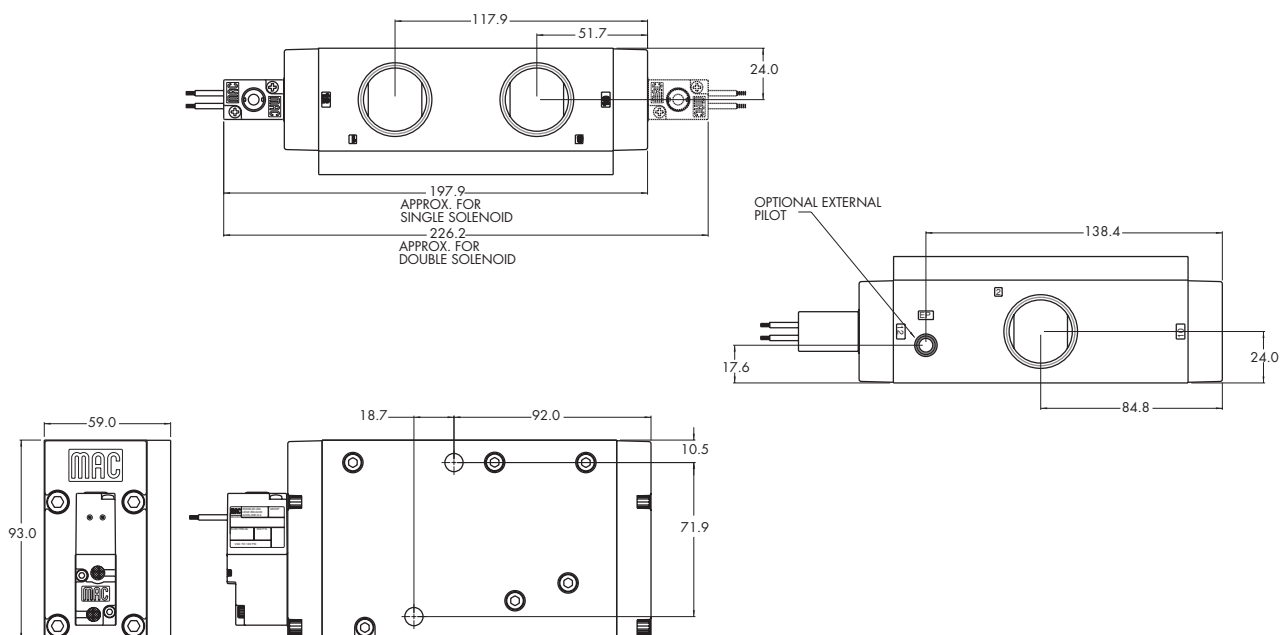
TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 20 to 120 PSI External Pilot : Vacuum 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 :	3/4" : (14.5 C _v) – 1" : (20.0 C _v)
Coil :	Class A continuous duty, #22 AWG x 18 lead wires
Voltage range :	-15% to +10% of nominal voltage
Protection :	Consult factory
Power :	~ Inrush : 7.6 VA Holding : 4.8 VA = 12.7 to 1.0 W
Response times : (with 5.4 W coil)	Energize : 29 ms De-energize : 21 ms

Options : • BSPP threads

DIMENSIONS

Dimensions shown are metric (mm)





Codification table for voltages / Manual operator / Electrical connection

VALVE CODE ➤ **-DM- D XX X-X XX**
1 2 3 4

OPTIONS AVAILABLE FOR

- Pilot operated valves 52, 67, 92, 93, 400, ISO1, ISO2, ISO3 Series

1. VOLTAGE

D-XX X-X XX	VOLTAGE
DA	24 VDC (5.4W)
DB	12 VDC (5.4W)
DC	12 VDC (7.5W)
DD	24 VDC (7.3W)
DE	12 VDC (12.7W)
DF	24 VDC (12.7W)
DK	110 VDC (4.7W)
DJ	28 VDC (5.2W)
DL	64 VDC (6.0W)
DM	36 VDC (5.3W)
DN	6 VDC (6.0W)
DR	90 VDC (6.6W)
DS	110 VDC (7.3W)
DT	75 VDC (5.6W)
DP	48 VDC (5.8W)
FA	12 VDC (1.8W)
FB	24 VDC (1.8W)
FE	12 VDC (2.4W)
FF	24 VDC (2.4W)
JA	120/60, 110/50 (2.9W)
JB	240/60, 220/50 (2.9W)
JC	24/60, 24/50 (3.7W)
JD	100/60, 100/50, 110/60 (3.9W)
JE	220/60 (3.4W)
JF	240/50 (2.8W)
JG	200/60, 200/50 (3.9W)

2. WIRE LENGTH

D-XX X-X XX	WIRE LENGTH
O	No wires
A	18"
B	24"
C	36"
D	48"
E	72"
F	96"

3. MANUAL OPERATOR

D-XX X-X XX	MANUAL OPERATOR
0	No operator
1	Non-locking recessed
2	Locking recessed
3	Non-locking extended
4	Locking extended

4. ELECTRICAL CONNECTION

D-XX X-X XX	ELECTRICAL CONNECTION
BA*	Flying leads (grommet)
BK*	BA with protection diode
BL*	BA with protection varistor
BM**	Flying leads (solenoid plug-in)
BN**	BM with protection diode
BP**	BM with protection varistor
BG**	BM with ground
BH**	BM with protection diode & ground
BJ**	BM with protection varistor & ground
CA*	1/2" NPS conduit with flying leads
CM*	1/2" NPS metal conduit with flying leads
CN*	1/2" NPS metal conduit with flying leads & ground
JB	Rectangular connector
JD	JB with light
JM	Rectangular connector (male only)
KA	Mini square connector
KB	KA with protection diode
KC	KA with protection varistor
KD	KA with light
KE	KA with light and protection diode
KF	KA with light and protection varistor
KG	KA with light & diode
KJ	Mini square connector (male only)
KK	KJ with protection diode (male only)
KL	KJ with protection varistor (male only)
TA	Dual tabs with receptacles
TB	TA with protection diode
TD	TA with light
TE	TA with light and protection diode
TJ	Dual tabs (male only)
TK	TJ with protection diode
TM	TJ with light
TN	TJ with light and protection diode

* From Lead wire length options choose A through F

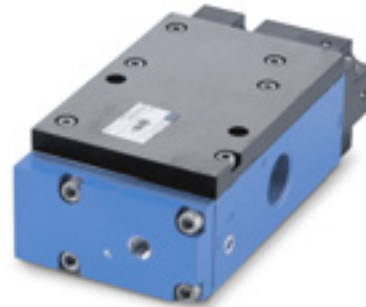
** From Lead wire length options choose 0 through F

Note: When coil is above 30 volts, a ground wire is required. Applies to options with flying leads.

Function	Port size	Flow [Max]	Individual mounting	Series
3/2	3/4" - 1"	20.0 C_v	Inline	

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure.
2. Powerful return forces thanks to the combination of mechanical and air springs.
3. Bonded spool with minimum friction, shifting in a glass like finished bore.
4. Wiping effect eliminates sticking.
5. Long service life.



400

67

69

ISO 2

ISO 3

HOW TO ORDER

Port size	Pilot air	Single Operator		Double Operator	
		NO Valve	NC Valve	NO Valve	NC Valve
3/4" NPTF	Internal	67A-C3-ARA-RA	67A-A3-ARA-RA	67A-D4-ARA-RA	67A-B4-ARA-RA
1" NPTF	Internal	67A-C3-BRA-RA	67A-A3-BRA-RA	67A-D4-BRA-RA	67A-B4-BRA-RA
3/4" NPTF	External	67A-C3-ARB-RE	67A-A3-ARB-RE	-	-
1" NPTF	External	67A-C3-BRB-RE	67A-A3-BRB-RE	-	-

Note : Designation 'RE' required on remote air models with main valve pressures of vacuum to 20 PSI.

'RE' provides an external pilot and should have a pressure range of 20 - 75 PSI. Since the external pilot supplies the air spring, it must not exceed the remote air pilot pressure.

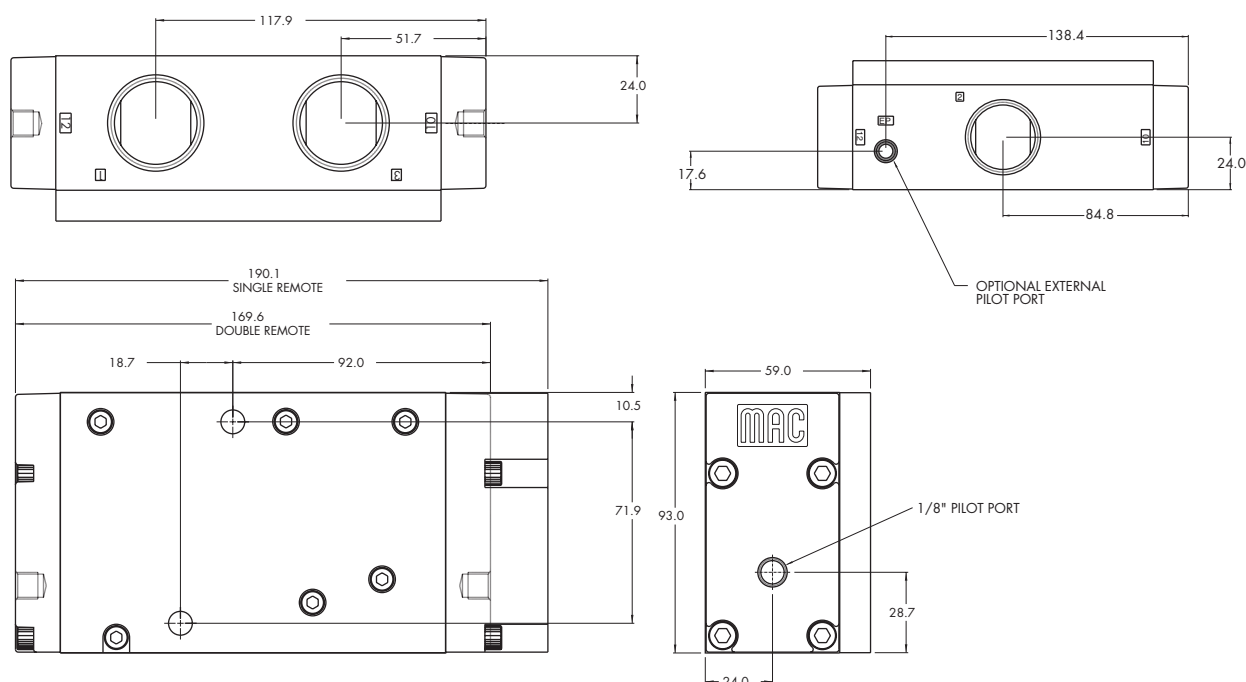
TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 150 PSI
Air signal pressure :	20 to 150 PSI (must be $\geq$ main valve pressure)
Lubrication :	Not required, if used select a medium aniline point lubricant (between 180°F to 210°F)
Filtration :	40 μ
Temperature range :	0°F to 120°F (-18°C to 50°C)
Flow :	3/4" : (14.5 C _v) - 1" : (20.0 C _v)

Options : • BSPP threads

DIMENSIONS

Dimensions shown are metric (mm)



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