

Individual mounting

In-line	Sub-base non plug-in

Series

33

34

36

32

37

38

52

67

69

44

46

42

47

48P

48

400

92

93

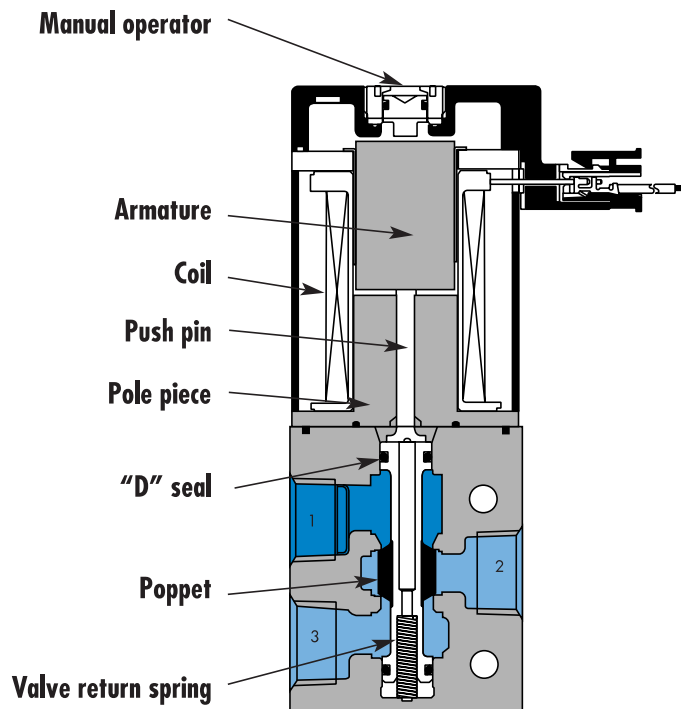
ISO 01

ISO 02

ISO 1

ISO 2

ISO 3



SERIES FEATURES

- Balanced poppet equals consistent high shifting forces.
- Valve shifting forces are consistent and independent of pressure fluctuations.
- High solenoid and return spring forces ensure high speed and precise repeatability.
- Built-in wear compensation - valve stroke is shorter than solenoid stroke.
- Constant high flow maintained throughout the pressure range.
- Exhaust contaminants are isolated from the solenoid.
- Full flow exhaust.
- Universal porting - 6 functions in one valve.



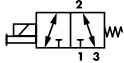
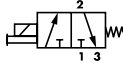
Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow (Max)	Individual mounting	Series
3/2 NO-NC	1/8" - 1/4"	0.5 C_v	Inline	

OPERATIONAL BENEFITS

- Balanced poppet equals consistent high shifting forces.
- Valve shifting forces are consistent and independent of pressure fluctuations.
- High solenoid and return spring forces ensure high speed and precise repeatability.
- Built-in wear compensation – valve stroke is shorter than solenoid stroke.
- Constant high flow maintained throughout the pressure range.
- Exhaust contaminants are isolated from the solenoid.
- Full flow exhaust.
- Universal porting – 6 functions in one valve.

HOW TO ORDER

Port size	Universal valve	NC only valve
		
1/8" NPTF	37A-AA0-H xxx-xxx	37A-BA0-H xxx-xxx
1/4" NPTF	37A-AB0-H xxx-xxx	37A-BB0-H xxx-xxx



- 33
- 34
- 36
- 32
- 37**
- 38
- 52
- 67
- 69
- 44
- 46
- 42
- 47
- 48P
- 48
- 400
- 92
- 93
- ISO 01
- ISO 02
- ISO 1
- ISO 2
- ISO 3

SOLENOID OPERATOR >

H **xxx-xxx***

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connection**
AA	120 VAC (6.7W)	A	18"	1	Non-locking recessed	MA	Plug-in wire assembly
DA	24 VDC (5.2W)	B	24"	2	Locking recessed	MC	Plug-in wire assembly with light
DB	24 VDC (2.4W)					BA	Flying leads
DC	24 VDC (1.8W)					BC	Flying leads with light
						MT	Plug-in wire assembly with rectifier & light

Note : AC voltage requires connector with rectifier.
 * Other options available, see page 315.



100%
OF
PRODUCTION
TESTED
100%

WARRANTY
18
MONTHS

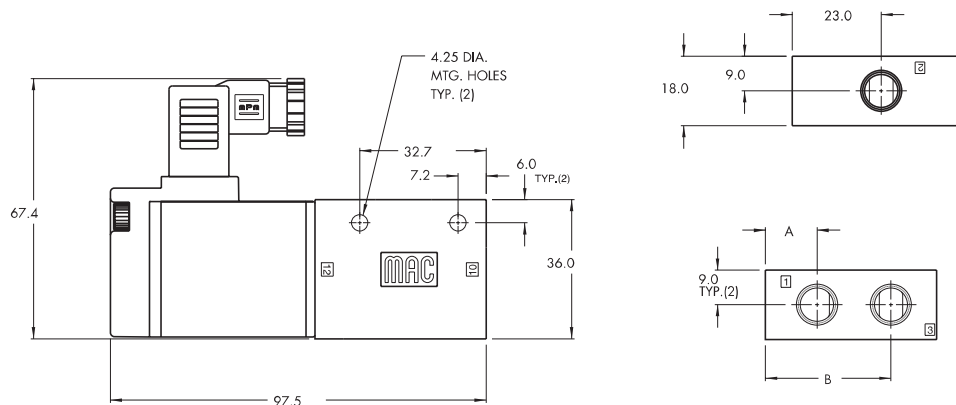
TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	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 :	5.2 W : (0.5 C _v) – 2.4 W : (0.35 C _v)
Coil :	Class A wire (#22 AWG x 18), continuous duty
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W – 2.4 W
Response times :	Energize : 16.9 ms
(with 5.2 W coil)	De-energize : 6.7 ms

Options : • BSPP ports

DIMENSIONS

Dimensions shown are metric (mm)



Shown with Mini Square Connector ("K" Type)

Dim	A	B
1/8"	13.3	32.45
1/4"	14.7	33.7



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow (Max)	Individual mounting	Series
3/2 NO-NC	1/8" - 1/4"	0.5 C_v	Sub-base non plug-in	

OPERATIONAL BENEFITS

- Balanced poppet equals consistent high shifting forces.
- Valve shifting forces are consistent and independent of pressure fluctuations.
- High solenoid and return spring forces ensure high speed and precise repeatability.
- Built-in wear compensation – valve stroke is shorter than solenoid stroke.
- Constant high flow maintained throughout the pressure range.
- Exhaust contaminants are isolated from the solenoid.
- Full flow exhaust.
- Universal porting – 6 functions in one valve.



33
34
36
32

37
38
52
67

69
44
46

42
47
48P

HOW TO ORDER

Port size	Universal valve	NC only valve
Valve less base	37A-C10-H xxx-xxx	37A-D10-H xxx-xxx
1/8" NPTF	37A-CAA-H xxx-xxx	37A-DAA-H xxx-xxx
1/4" NPTF	37A-CBA-H xxx-xxx	37A-DBA-H xxx-xxx

SOLENOID OPERATOR >

H **xxx-xxx***

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
AA 120 VAC (6.7W)	A 18"	1 Non-locking recessed	MA Plug-in wire assembly
DA 24 VDC (5.2W)	B 24"	2 Locking recessed	MC Plug-in wire assembly with light
DB 24 VDC (2.4W)			BA Flying leads
DC 24 VDC (1.8W)			BC Flying leads with light
			MT Plug-in wire assembly with rectifier & light

48
400

92
93

ISO 01
ISO 02
ISO 1
ISO 2
ISO 3

Note : AC voltage requires connector with rectifier.
* Other options available, see page 315.

OPTIONS

Base only :

37A-0AA (1/8")

37A-0BA (1/4")



100%
OF
PRODUCTION
TESTED
100%

WARRANTY
18
MONTHS

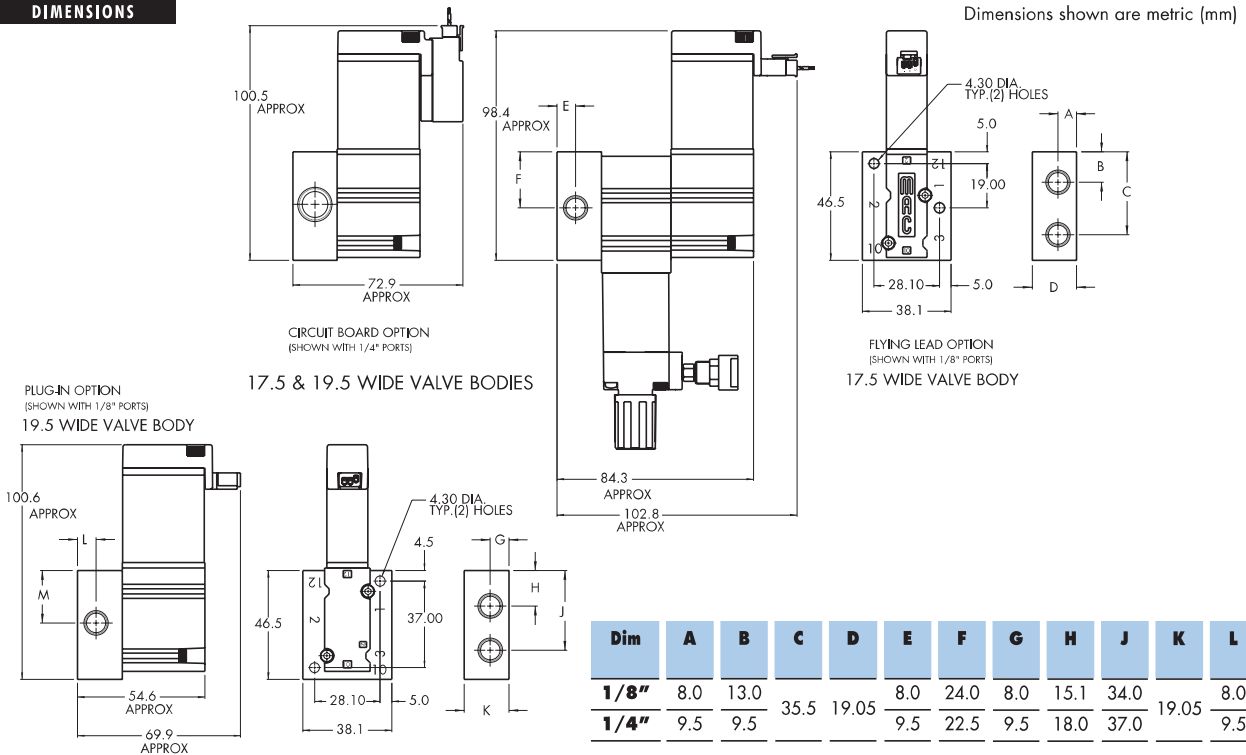
TECHNICAL DATA

Fluid :	Compressed air, vacuum, inert gases
Pressure range :	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 :	5.2 W : (0.5 C _v) – 2.4 W : (0.35 C _v)
Coil :	Class A wire (#22 AWG x 18), continuous duty
Voltage range :	-15% to +10% of nominal voltage
Power :	5.2 W – 2.4 W
Response times :	Energize : 16.9 ms
(with 5.2 W coil)	De-energize : 6.7 ms

Options : • BSPP ports • Sandwich regulator - see "Regulator" Section

DIMENSIONS

Dimensions shown are metric (mm)





Codification table for voltages / Manual operators / Electrical connections

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

OPTIONS AVAILABLE FOR

- Solenoid valves 37 & 47 Series

1. VOLTAGE		H-XX X-X XX	
H-XX X-X XX	VOLTAGE	BL	BA with full wave rectifier & ground wire
AA	120/50, 120/60 (6.7 W) (use connector with rectifier)	BT	BA with full wave rectifier plus light
AB	220/50, 220/60 (5.6 W) (use connector with rectifier)	BU	BA with full wave rectifier plus light & ground wire
AC	240/50, 240/60 (5.8 W) (use connector with rectifier)	H-XX X-X XX	PLUG-IN CONNECTOR
AD	24/50, 24/60 (7.8 W) (use connector with rectifier)	FA	Base plug-in
DA	24 VDC (5.2 W)	FB	FA with ground wire
DB	24 VDC (2.4 W)	FC	FA with light
DC	24 VDC (1.8 W)	FD	FA with light & ground wire
DD	24 VDC (1.0 W)	FE	FA with suppression diode
DF	12 VDC (5.2 W)	FF	FA with suppression diode & ground wire
DG	12 VDC (2.4 W)	FG	FA with suppression diode & light
DH	12 VDC (1.8 W)	FH	FA with suppression diode plus light & ground wire
DJ	12 VDC (1.0 W)	FK	FA with full wave rectifier
DL	120 VDC (6.3 W)	FL	FA with full wave rectifier & ground wire
		*FN	FA with suppression diode plus blocking diode
		*FP	FA with suppression diode plus blocking diode & ground wire
		*FR	FA with suppression diode plus blocking diode plus light
		*FS	FA with suppression diode plus blocking diode & light & ground wire
		FT	FA with full wave rectifier plus light
		FU	FA with full wave rectifier plus light & ground wire
		MA	Solenoid plug-in wire assembly
		MB	MA with ground wire
		MC	MA with light
		MD	MA with light & ground wire
		ME	MA with suppression diode
		MF	MA with suppression diode & ground wire
		MG	MA with suppression diode plus light
		MH	MA with suppression diode plus light & ground wire
		MK	MA with full wave rectifier
		ML	MA with full wave rectifier & ground wire
		*MN	MA with suppression diode plus blocking diode
		*MP	MA with suppression diode plus blocking diode & ground wire
		*MR	MA with suppression diode plus blocking diode & light
		*MS	MA with suppression diode plus blocking diode & light & ground wire
		MT	MA with full wave rectifier plus light
		MU	MA with full wave rectifier plus light & ground wire
		MJ	Plug-in housing without wire assembly ('MA' option without wire assembly)
		MM	Plug-in housing without wire assembly ('MB' option without wire assembly)
		KA	Mini square connector
		KB	KA with suppression diode
		KC	KA with M.O.V.
		KD	KA with light
		KE	KA with light & suppression diode
		KF	KA with light & M.O.V.
		KJ	Mini square connector – male only
		KK	KJ with suppression diode
		KL	KJ with M.O.V.
		KM	KA with full wave rectifier
		KN	KA with full wave rectifier & M.O.V.
		KP	KA with full wave rectifier & light
		KR	KA with full wave rectifier plus light & M.O.V.
		KS	KJ with full wave rectifier
		* Blocking diode is located in the lead wire	

2. WIRE LENGTH	
H-XX X-X XX	WIRE LENGTH
0	No lead wire (use with "MJ, MM & K Type connectors)
A	18"
B	24"
C	36"
D	48"
E	72"
F	96"
G	120"
H	144"

3. MANUAL OPERATOR	
H-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	
H-XX X-X XX	ELECTRICAL CONNECTION
BA	Flying leads
BB	BA with ground wire
BC	BA with light
BD	BA with light & ground wire
BE	BA with suppression diode
BF	BA with suppression diode & ground wire
BG	BA with suppression diode plus light
BH	BA with suppression diode plus light & ground wire
*BN	BA with suppression diode plus blocking diode
*BP	BA with suppression diode plus blocking diode & ground wire
*BR	BA with suppression diode plus blocking diode & light
*BS	BBA with suppression diode plus blocking diode & light & ground wire
BK	BA with full wave rectifier