Handhabungstechnik Motore & Getriebe Pneumatik Hydraulik Systemlösungen



Produktkatalog

MAC 3/2 Wegeventile

Serie 37 - 1/8" 1/4"





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.

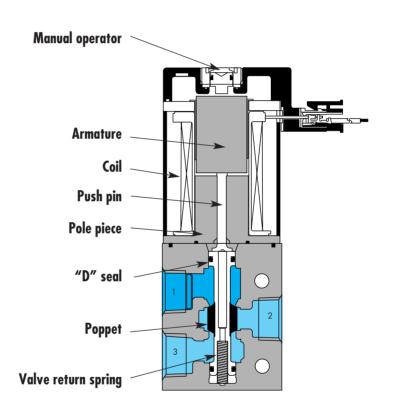






Direct solenoid and solenoid pilot operated valves

Individual mounting Series Subbase non plug-in



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.

31 33 34

36

32

67 68

69 41

43 44

23

24

46

42

47 48P

48

400

92

83

93



Direct solenoid and solenoid pilot operated valves

	Port size	FIUI	Max) u (Max)	Individual mounting		Series
/2 NO-NC	G1/8" -	• G1/4" 500 NI/min		Inline		
PERATIONAL BENEFITS						31
Balanced poppet equals shifting forces. Valve shifting forces are	consistent and	8. Universal porting –	6 functions in one valve.		•	33 34
independent of pressure High solenoid and return ensure high speed and p Built-in wear compensati	n spring forces precise repeatability.				1	36
shorter than solenoid str. Constant high flow main the pressure range.	oke.			-16		32 37
Exhaust contaminants ar solenoid.	re isolated from the			Di (8)		38
Full flow exhaust.					3	52 53
HOW TO ORDER						54
Port :	size	Uni	iversal valve	NC	only valve	67 68
		.0	2 1 1 W	. 17	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	69
			1 3		7/T/T 1 3 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1	41
G1/ G1/		37A-AC0-H xxx-xxx 37A-AD0-H xxx-xxx		37A-BC0-H xxx-xxx 37A-BD0-H xxx-xxx		43 44
XX Voltage		Wire length	X Manual o		Electrical connection	24
AA 120 V~/6,7W DA 24 V=/5,2W	<u>A</u>	45 cm 60 cm	1 Non-locking 2 Locking	MA MC	Mini connector Mini connector with light	46
		oo ciii		DA	El.: ll-	
DB 24 V=/2,4W DC 24 V=/1,8W		oo dii		BA BC MT	Flying leads Flying leads with light	42
		00 cm			Flying leads	42 47
DC 24 V=/1,8W		oo ciii		ВС	Flying leads Flying leads with light	
DC 24 V=/1,8W		oo ciii		ВС	Flying leads Flying leads with light	47
DC 24 V=/1,8W		ov ciii		ВС	Flying leads Flying leads with light	47 48P
DC 24 V=/1,8W		ov ciii		ВС	Flying leads Flying leads with light	47 48P 48
DC 24 V=/1,8W				ВС	Flying leads Flying leads with light	47 48P 48 400
DC 24 V=/1,8W				ВС	Flying leads Flying leads with light	47 48P 48 400 92
DC 24 V=/1,8W				ВС	Flying leads Flying leads with light	47 48P 48 400 92 83 93
				ВС	Flying leads Flying leads with light	47 48P 48 400 92 83 93 ISO 0
DC 24 V=/1,8W				ВС	Flying leads Flying leads with light	47 48P 48 400 92 83 93 ISO 0
DC 24 V=/1,8W				ВС	Flying leads Flying leads with light	47 48P 48 400 92 83 93 ISO 0







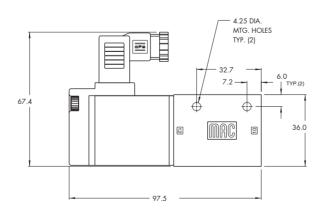
TECHNICAL DATA

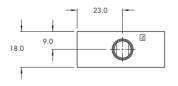
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration:	40 µ
Temperature range :	-18°C to +50°C
Orifice :	4,3 mm
Flow:	5,2 W : 500 Nl/min (Cv 0,5) – 2,4 W : 350 Nl/min (Cv 0,35)
Coil:	Epoxy encapsulated – 100% ED
Voltage range:	-15% to +10% of nominal voltage
Protection:	IP54 (electrical connection)
Power:	5,2 W – 2,4 W
Response times :	Energize: 16,9 ms
(with 5,2 W coil)	De-energize : 6,7 ms

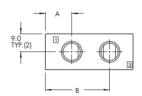
Options : • NPTF ports

DIMENSIONS

Dimensions shown are metric (mm)







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



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flou	и (Max)	Individual mounting	Series
3/2 NO-NC	G1/8" -	G1/4" 50	O NI/min	Sub-base non plug-in	
1. Balanced poppet equals coshifting forces. 2. Valve shifting forces are coindependent of pressure flus. 3. High solenoid and return spensure high speed and pre. 4. Built-in wear compensation shorter than solenoid stroke. 5. Constant high flow maintain the pressure range. 6. Exhaust contaminants are in solenoid. 7. Full flow exhaust. HOW TO ORDER	onsistent and octuations. pring forces cise repeatability. – valve stroke is e. ned throughout	8. Universal porting –	6 functions in one valve.		31 33 34 36 32 37 38 52 53
Port siz	e	Uni	iversal valve	NC only valve	54 67 68
Valve less G1/8" G1/4"	7	37A- 37A-	-C10-H XXX-XXX -CCA-H XXX-XXX -CDA-H XXX-XXX	37A-DDA-H xxx-xxx 37A-DDA-H xxx-xxx	69 41 43 44 23
SOLENOID OPERATOR >	-	H <u>)</u>	(XX-XXX ·		24
XX Voltage AA 120 V~/6,7W DA 24 V=/5,2W DB 24 V=/2,4W DC 24 V=/1,8W	X A B	Wire length 45 cm 60 cm	X Manual ope 1 Non-locking 2 Locking	MA Plug-in wire asser MC Plug-in wire asser with light BA Flying leads BC Flying leads with HA Plug-in wire asser	mbly 42
Note: AC voltage requires conn Other options available, see p OPTIONS Base only:	ector with rectifier. page 391.			rectifier & light	48
•					
37A-0CA (1/8")					92
37A-0CA (1/8") 37A-0DA (1/4")					92 83 93







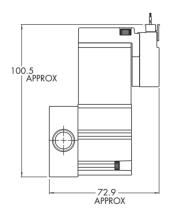
TECHNICAL DATA

Fluid : Compressed air, vacuum, inert gases Pressure range: 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: 4,3 mm Flow: 5,2 W: 500 Nl/min (Cv 0,5) - 2,4 W: 350 Nl/min (Cv 0,35) Coil: Epoxy encapsulated – 100% ED Voltage range: -15% to +10% of nominal voltage Protection: IP54 (electrical connection) 5,2 W - 2,4 W Power: Response times : Energize: 16,9 ms (with 5,2 W coil) De-energize : 6,7 ms

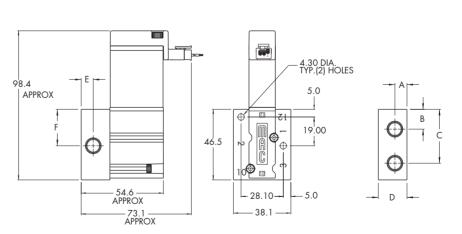
Options : • NPTF ports

DIMENSIONS

Dimensions shown are metric (mm)



RECTIFIER COVER OPTION (SHOWN WITH 1/4" PORTS)



FLYING LEAD OPTION (SHOWN WITH 1/8" PORTS)

Dim	A	В	C	D	E	F
1/8"	8.0	13.0	25.5	19.05	8.0	24.0
1/4"	9.5	9.5	35.5	19.05	9.5	22.5



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow (M	ax]	Individual mounting		Series
/2 NO-NC	1/8" - 1	/4" 0.5 C	v	Inline		
PERATIONAL BENEFITS						33
Balanced poppet equals forces.	s consistent high shifting					34
Valve shifting forces are of pressure fluctuations. High solenoid and return	n spring forces ensure hig				6	36
speed and precise repeat Built-in wear compensation than solenoid stroke. Constant high flow main	ion – valve stroke is short	er	:	-06		32
pressure range.	re isolated from the solen	oid		0		37
Full flow exhaust. Universal porting – 6 fur		oid.		400		38
HOW TO ORDER	nctions in one valve.					52 67
Port :	ciza	llniva	sal valve	NC	only valve	69
Foir	3126	Jiivei	our vuive	NC .	omy varve	44
			T	<u> </u>	T w	
1/8"	NPTF	37A-AA	1 3)-H <i>xxx-xxx</i>	37A-	1 3 BAO-H xxx-xxx	46
1/4"	NPTF	37A-AB0)-H xxx-xxx	37A-	BBO-H xxx-xxx	4.0
						42
OLENOID OPERATOI	R ➤	H <u>XX</u>	<u>x-xxx</u> *			47
			<u> </u>			48P
XX Voltage AA 120 VAC (6.7W)		Wire length 18"	X Manual op Non-locking red		Electrical connection** Plug-in wire assembly	
DA 24 VDC (5.2W) DB 24 VDC (2.4W)	B B	24"	2 Locking recesse			48
DC 24 VDC (2.44V)				BA BC	Flying leads Flying leads with light	
				MT	Plug-in wire assembly with rectifier & light	400
te : AC voltage requires co	onnector with rectifier.				Touring & Ingili	92
Other options available, se	215					
	ee page 313.					
	ee page 313.					93
	ee page 313.					93
	ee page 313.					ISO 0
	ee page 313.					ISO O
	ee page 313.					ISO 0 ISO 0 ISO 1
	ee page 313.					ISO 0







TECHNICAL DATA

Fluid: Compressed air, vacuum, inert gases

Pressure range: Vacuum to 120 PSI

Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)

Filtration:

Temperature range : $0^{\circ}\text{F to }120^{\circ}\text{F (-18}^{\circ}\text{C to }+50^{\circ}\text{C)}$

Flow: $5.2 \text{ W}: (0.5 \text{ C}_{\text{v}}) - 2.4 \text{ W}: (0.35 \text{ C}_{\text{v}})$

Coil: Class A wire (#22 AWG x 18), continuous duty

Voltage range: -15% to +10% of nominal voltage

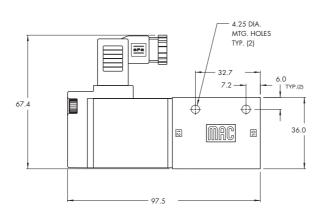
Power: 5.2 W – 2.4 W

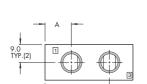
Response times: Energize: 16.9 ms (with **5.2 W coil**) De-energize: 6.7 ms

Options : • BSPP ports

DIMENSIONS

Dimensions shown are metric (mm)





18.0

Shown with Mini Square Connector ("K" Type)

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



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow (M	ax]		Individual mounting		Series
3/2 NO-NC	1/8" - 1	/4" 0.5 C	,		Sub-base non plug-in		
OPERATIONAL BENEFITS							33
 Balanced poppet equals Valve shifting forces are 							34
pressure fluctuations. 3. High solenoid and return speed and precise repeated and precise re	n spring forces ensure hig atability.	gh				4	36
 Built-in wear compensati solenoid stroke. Constant high flow main range. 						1	32
 Exhaust contaminants ar Full flow exhaust. 	e isolated from the solen	oid.			4		37
3. Universal porting – 6 fur	nctions in one valve.				- 48	0	38 52
HOW TO ORDER							67
Port :	size	Univer	sal valv	re e	NC	only valve	69
			2			2	44
			T Nw			T ₁ w	46
Valve le:		37A-C10			37A-D	010-H xxx-xxx	
1/8"		37A-CAA				AA-H xxx-xxx	40
1/4"	NPTF	37A-CBA	Н <i>ххх-х</i>	XX	37A-D	DBA-H XXX-XXX	42
SOLENOID OPERATOR	₹ >	H <u>xx</u>	<u>X-X</u> X	XX*			47 48P
			<u> </u>				
XX Voltage		Wire length	X	Manual op		Electrical connection	48
AA 120 VAC (6.7W) DA 24 VDC (5.2W)	<u>A</u> B	18" 24"	- <u>1</u>	Non-locking rec Locking recessed		Plug-in wire assembly Plug-in wire assembly	
DB 24 VDC (2.4W)				<u> </u>	BA	with light Flying leads	400
DC 24 VDc (1.8W)					ВС	Flying leads with light	400
					MT	Plug-in wire assembly with rectifier & light	92
Note : AC voltage requires co	onnector with rectifier.						72
Other options available, se	ee page 315.						0.0
OPTIONS							93
ase only :	_						ISO 01
37A-0AA (1/8")							ISO 02
37A-0BA (1/4")							ISO 1
							ISO 2

ISO 3







TECHNICAL DATA

Fluid: Compressed air, vacuum, inert gases

Pressure range: Vacuum to 120 PSI

Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)

Filtration: 40 µ

Temperature range : $0^{\circ}F$ to $120^{\circ}F$ (- $18^{\circ}C$ to $+50^{\circ}C$)

Flow: $5.2 \text{ W}: (0.5 \text{ C}_{\text{v}}) - 2.4 \text{ W}: (0.35 \text{ C}_{\text{v}})$

Class A wire (#22 AWG x 18), continuous duty

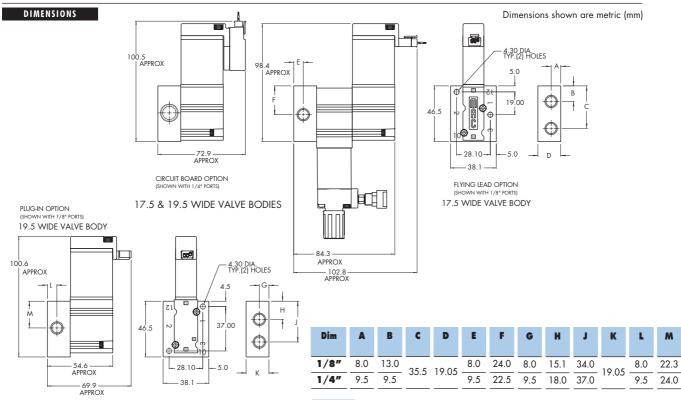
Voltage range: -15% to +10% of nominal voltage

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





Codification table for voltages / Manual operators / Electrical connections

OPTIONS AVAILABLE FOR

- Solenoid valves 37 & 47 Series

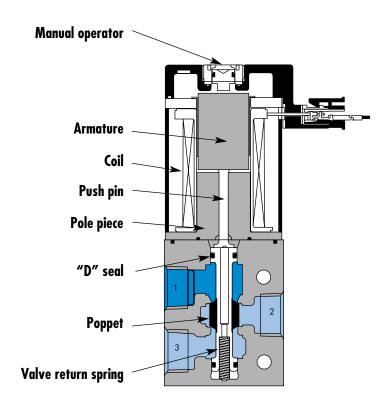


	1. VOLTAGE	H-XX X-X XX	
		BL	BA with full wave rectifier & ground wire
H-XX X-X XX	VOLTAGE	ВТ	BA with full wave rectifier plus light
AA	120/50, 120/60 (6.7 W) (use connector with rectifier)	BU	BA with full wave rectifier plus light & ground wire
AB	220/50, 220/60 (5.6 W)	H-XX X-X XX	PLUG-IN CONNECTOR
	(use connector with rectifier)	FA	Base plug-in
AC	240/50, 240/60 (5.8 W)	FB	FA with ground wire
	(use connector with rectifier)	FC	FA with light
AD	24/50, 24/60 (7.8 W) (use connector with rectifier)	FD	FA with light & ground wire
	·	FE	FA with suppression diode
DA	24 VDC (5.2 W)	FF	FA with suppression diode & ground wire
DB	24 VDC (2.4 W)	FG	FA with suppression diode & light
DC	24 VDC (1.8 W)	FH	FA with suppression diode plus light & ground wire
DD	24 VDC (1.0 W)	FK	FA with full wave rectifier
DF	12 VDC (5.2 W)	FL	FA with full wave rectifier & ground wire
DG	12 VDC (2.4 W)	*FN	FA with suppression diode plus blocking diode
DH	12 VDC (1.8 W)	*FP	FA with suppression diode plus blocking diode & ground wire
DJ	12 VDC (1.0 W)	*FR	FA with suppression diode plus blocking diode plus light
DL	120 VDC (6.3 W)	*FS	FA with suppression diode plus blocking diode & light & ground wire
	2. WIRE LENGTH	FT	FA with full wave rectifier plus light
		FU	FA with full wave rectifier plus light & ground wire
H-XX X-X XX	WIRE LENGTH	MA	Solenoid plug-in wire assembly
0	No lead wire (use with "MJ, MM & K Type connectors)	МВ	MA with ground wire
A	18"	MC	MA with light
В	24"	MD	MA with light & ground wire
С	36"	ME	MA with suppression diode
D	48"	MF	MA with suppression diode & ground wire
E	72"	MG	MA with suppression diode plus light
F	96"	МН	MA with suppression diode plus light & ground wire
G	120"	MK	MA with full wave rectifier
Н	144"	ML	MA with full wave rectifier & ground wire
		*MN	MA with suppression diode plus blocking diode
	3. MANUAL OPERATOR	*MP	MA with suppression diode plus blocking diode & ground wire
		*MR	MA with suppression diode plus blocking diode & light
H-XX X-X XX	MANUAL OPERATOR	*MS	MA with suppression diode plus blocking diode & light & ground wire
0	No operator		
1	Non-locking recessed	MT	MA with full wave rectifier plus light
2	Locking recessed	MU	MA with full wave rectifier plus light & ground wire
3	Non-locking extended	MJ	Plug-in housing without wire assembly ('MA' option
4	Locking extended		without wire assembly)
		MM	Plug-in housing without wire assembly ('MB' option
	4. ELECTRICAL CONNECTION		without wire assembly)
		KA	Mini square connector
H-XX X-X XX	ELECTRICAL CONNECTION	KB	KA with suppression diode
BA	Flying leads	KC	KA with M.O.V.
ВВ	BA with ground wire	KD	KA with light
ВС	BA with light	KE	KA with light & suppression diode
BD	BA with light & ground wire	KF	KA with light & M.O.V.
BE	BA with suppression diode	KJ	Mini square connector – male only
BF	BA with suppression diode & ground wire	KK	KJ with suppression diode
BG	BA with suppression diode plus light	KL	KJ with M.O.V.
ВН	BA with suppression diode plus light & ground wire	KM	KA with full wave rectifier
*BN	BA with suppression diode plus blocking diode	KN	KA with full wave rectifier & M.O.V.
*BP	BA with suppression diode plus blocking diode & ground wire	KP	KA with full wave rectifier & light
*BR	BA with suppression diode plus blocking diode & light	KR	KA with full wave rectifier plus light & M.O.V.
	BBA with suppression diode plus blocking diode & light &	KS	KJ with full wave rectifier
*BS	ground wire	* Blocking diode is loc	



Circuit bar mounting

non plug-in cylinder ports in valve	non plug-in cylinder ports in base	non plug-in cylinder ports in base with Pr. Reg.	non plug-in add-on style cylinder ports in base	non plug-in add-a-unit stations	plug-in	plug-in with Pr. Reg.	add-on style plug-in
add-on style plug in	plug-in add-a-unit	plug-in add-a-unit					
with Pr. Reg.	stations	stations with Pr. Reg.					



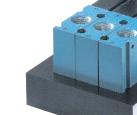
SERIES FEATURES

- 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.



Function	Port size (Inlet & Exhaust)	Flow (Max)	Circuit bar mounting	Profile
3/2 NO-NC	1/4" - 3/8"	0.5C _V	non plug-in cylinder ports in valve	26 mm 38 mm

- 1. Direct solenoid operated valve.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Manual operator standard on all valves.



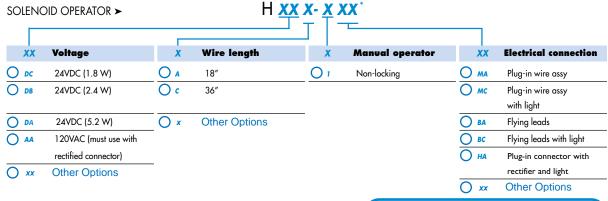
HOW TO ORDER

37A-xxx-Hxxx-xxx

Reset

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Valve port size	Universal valve	NC only valve
	Z , w	
1/8" NPTF	37A-EGO-HXXX-XXX	37A-FGO-H <i>xxx</i> -xxx
1/4" NPTF	37A-EHO-HXXX-XXX	37A-FHO-Hxxx-xxx



HOW TO ORDER CIRCUIT BAR (REGULATORS ORDERED SEPARATELY)**

EBM37A-xxxxx-xx

Port size COMMON INLET & EXHAUST	Without regulators (20mm)	With regulators (20mm)
26mm Profile 1/4" NPTF	EBM37A-01CAK-xx	-
38mm Profile 3/8" NPTF	-	EBM37A-01JAK-xx

Number of stations (03=3 stations)

Note: clic for valves mounted on base at the factory, add - 9 to the model number.

** Pressure Regulators :

PR37A-GOAx

- X=A (0 to 120 PSI)
- X=B (0 to 80 PSI) X=C (0 to 30 PSI)







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)

Orifice: 4.3 mm

Flow (at 6 bar, Δ P=1bar): 5.2 W: 0.50C_v, 2.4 W: 0.25C_v, 1.8 W: 0.15C_v

Coil: General purpose class A, continuous duty, encapsulated

Voltage range: -15% to +10% of nominal voltage

Power: 5.2 W - 2.4 W - 1.8 W - 1.0 W

Response times : 5.2 W - 2.4 W - 1.8 W - 1.0 W

(with 5.2 W coil) De-energize : 6.0 ms

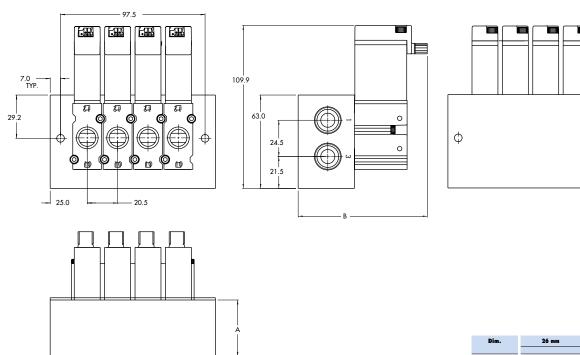
Note: • Valve and coil are not interchangeable.

Spare parts: • Seal between valve and bar: 16630. • Mounting screw (x2): 35043. • Blanking plate: M-37002.

• Regulator blanking plate : R-47003.

Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS



 Φ



Function	Port size	Flow (Max)	Circuit bar mounting	Profile
3/2 NO-NC	1/8" - 1/4" 6 mm tube receptacle	0.5C _v	non plug-in cylinder ports in base	26 mm

- 1. Direct solenoid operated valve.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Manual operator standard on all valves.



HOW TO ORDER

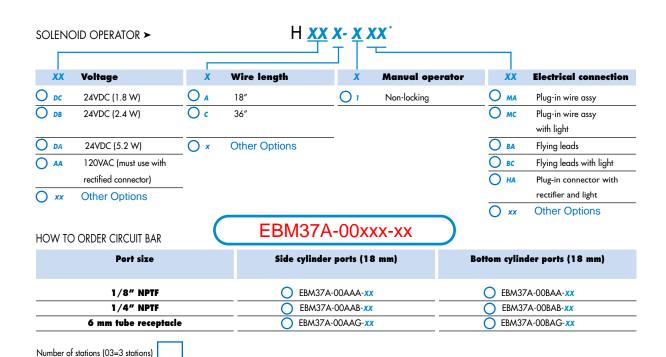
37A-xxx-Hxxx-xxx

Reset

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Note: clic for valves mounted on base at the factory, add - 9 to the model number.

Port size (see base)	Universal valve	NC only valve
	$rac{2}{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1$	$rac{2}{\sqrt{1-\frac{2}{1-1}}}$ W
Valve less base	37A-C10-Hxxx-xxx	37A-D10-Hxxx-xxx









TECHNICAL

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)

Orifice: 4.3 mm

Flow (at 6 bar, $\Delta P=1$ bar): 5.2 W: 0.50C_V, 2.4 W: 0.25C_V, 1.8 W: 0.15C_V

Coil: General purpose class A, continuous duty, encapsulated

Voltage range: -15% to +10% of nominal voltage

Power: 5.2 W - 2.4 W - 1.8 W - 1.0 W

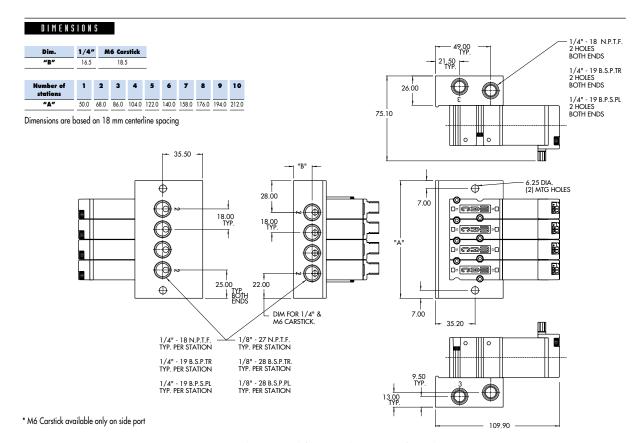
Response times : Energize : 17.0 ms

(with 5.2 W coil) De-energize : 6.0 ms

Note: • Valve and coil are not interchangeable.

Spare parts: • Seal between valve and bar: 16630. • Mounting screw (x2): 35043. • Blanking plate: M-37001.

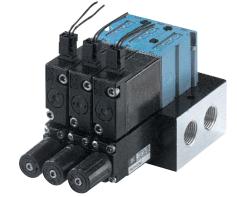
Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.





Function	Port size	Flow (Max)	Circuit bar mounting	Profile
3/2 NO-NC	1/8" - 1/4" 6 mm tube receptacle	0.5C _V	non plug-in cylinder ports in base with Pr. Rea.	38 mm

- 1. Direct solenoid operated valve.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Manual operator standard on all valves.



HOW TO ORDER

37A-xxx-Hxxx-xxx

Reset

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Universal valve	NC only valve
	\square $\uparrow_{T} \mid_{T} \downarrow_{N} W$	$rac{1}{\sqrt{1}} \frac{1}{\sqrt{1}} w$
Valve less base	37A-C1O-Hxxx-xxx	37A-D1O-Hxxx-xxx

SOLEN	OID OPERATOR ➤			H <u>xx x- x x</u>	(X *		
	w I.		nart I al				
	Voltage		Wire length		Manual operator		Electrical connection
O DC	24VDC (1.8 W)	O A	18"	O 1	Non-locking	O MA	Plug-in wire assy
O DB	24VDC (2.4 W)	<u>O c</u>	36"			Омс	Plug-in wire assy
							with light
O DA	24VDC (5.2 W)	O x	Other Option	IS		○ BA	Flying leads
O AA	120VAC (must use with	_				ОВС	Flying leads with light
	rectified connector)					Она	Plug-in connector with
O xx	Other Options						rectifier and light
						O xx	Other Options

HOW TO ORDER CIRCUIT BAR (REGULATORS ORDERED SEPARATELY)**

EBM37A-00xxx-xx

Port size	Side cylinder ports (18 mm)	Bottom cylinder ports (18 mm)	
1/8" NPTF	EBM37A-00FAA-xx	EBM37A-00GAA-xx	
1/4" NPTF	EBM37A-00FAB-xx	EBM37A-00GAB-xx	
6 mm tube receptacle	EBM37A-00FAG-xx	EBM37A-00GAG-XX	

Number of stations (03=3 stations)

Note: clic for valves mounted on base at the factory, add - 9 to the model number.

** Pressure Regulators :

PR37A-GOAx

- X=A (0 to 120 PSI)
- X=B (0 to 80 PSI)
- X=C (0 to 30 PSI)







TECHNICAL

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)

Orifice: 4.3 mm

Flow (at 6 bar, $\Delta P=1$ bar): 5.2 W: 0.50C_V, 2.4 W: 0.25C_V, 1.8 W: 0.15C_V

Coil: General purpose class A, continuous duty, encapsulated

Voltage range: -15% to +10% of nominal voltage

Power: 5.2 W - 2.4 W - 1.8 W - 1.0 W

Response times : 5.2 W - 2.4 W - 1.8 W - 1.0 W

Energize : 17.0 ms

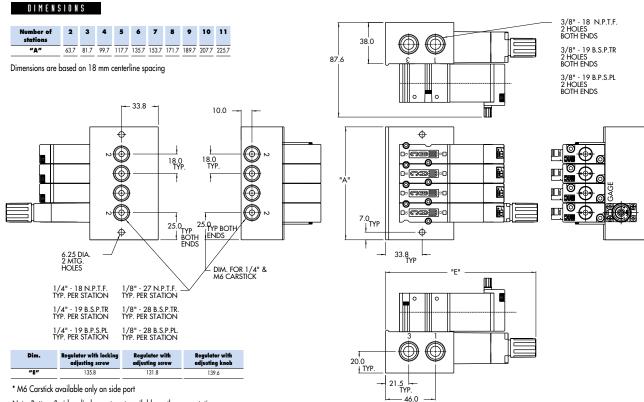
(with 5.2 W coil) De-energize : 6.0 ms

Note: • Valve and coil are not interchangeable.

Spare parts: • Seal between valve and bar: 16630. • Mounting screw (x2): 35043. • Blanking plate: M-37001.

• Regulator blanking plate : R-47003.

Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.



Note: Bottom & side cylinder ports not available on the same station



Function	Port size	Flow (Max)	Circuit bar mounting	Profile
3/2 NO-NC	1/8" - 1/4" 6 mm tube receptacle	0.5C _v	non plug-in add-on style cylinder ports in base	38 mm

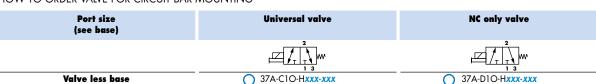
- 1. Direct solenoid operated valve.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Manual operator standard on all valves.

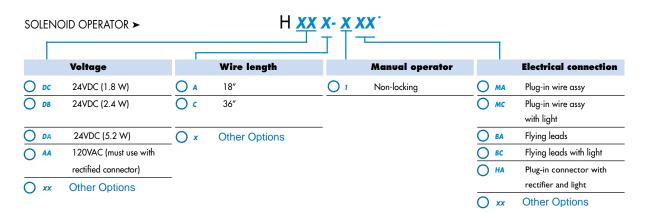




37A-xxx-Hxxx-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING





HOW TO ORDER CIRCUIT BAR

EBM37A-00xxx-xx

Port size	Side cylinder ports (18 mm)	Bottom cylinder ports (18 mm)		
1/8" NPTF	EBM37A-00DBA-xx	EBM37A-00EBA-xx		
1/4" NPTF	EBM37A-00DBB-xx	EBM37A-00EBB-xx		
6 mm tube receptacle	EBM37A-00DBG-xx	EBM37A-00EBG-xx		

Number of stations (03=3 stations)

Note: clic for valves mounted on base at the factory, add - 9 to the model number.

add-a-unit stations may be added to above bars. Clic here for model numbers.







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)

Orifice: 4.3 mm

Flow (at 6 bar, $\Delta P=1$ bar): 5.2 W: 0.50C_V, 2.4 W: 0.25C_V, 1.8 W: 0.15C_V

Coil: General purpose class A, continuous duty, encapsulated

Voltage range: -15% to +10% of nominal voltage

Power: 5.2 W - 2.4 W - 1.8 W - 1.0 W

Response times : 5.2 W - 2.4 W - 1.8 W - 1.0 W

 Response times :
 Energize : 17.0 ms

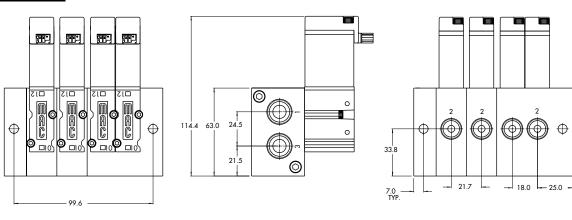
 (with 5.2 W coil)
 De-energize : 6.0 ms

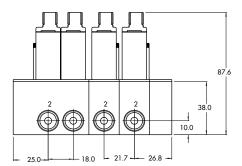
Note: • Valve and coil are not interchangeable.

Spare parts: • Seal between valve and bar: 16630. • Mounting screw (x2): 35043. • Blanking plate: M-37001. • End plate Kit: M-37005-0

Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS





Note: Bottom & side cylinder ports not available on the same station



Function	Port size	Flow (Max)	Circuit bar mounting	Profile
3/2 NO-NC	1/8" - 1/4" 6 mm tube receptacle	0.5C _v	non plug-in add-a-unit stations	38 mm

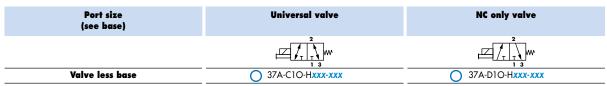
- 1. Direct solenoid operated valve.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Manual operator standard on all valves.

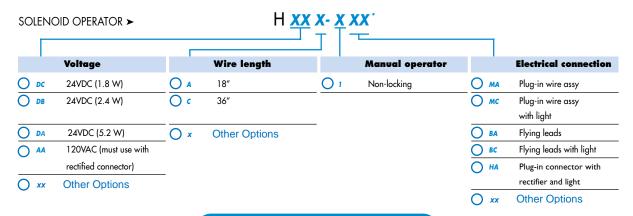






HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING





HOW TO ORDER CIRCUIT BAR

EBM37A-00xxx-xx

Port size	Side cylinder ports (18 mm)	Bottom cylinder ports (18 mm)		
1/8" NPTF	EBM37A-00DCA-xx	○ EBM37A-00ECA-xx		
1/4" NPTF	EBM37A-00DCB-xx	EBM37A-00ECB-xx		
6 mm tube receptacle	EBM37A-00DCG-xx	EBM37A-00ECG-xx		

Number of stations (01, 02, 03 or 04)

Note: clic for valves mounted on base at the factory, add - 9 to the model number.







TECHNICAL

Fluid: Compressed air, vacuum, inert gases

Vacuum to 120 PSI Pressure range:

Lubrication: Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)

Filtration:

Temperature range : 0°F to 120°F (-18°C to 50°C)

Orifice: 4.3 mm

Flow (at 6 bar, $\Delta P = 1 bar$): $5.2 \text{ W}: 0.50 \text{C}_{\text{V}}, \, 2.4 \text{ W}: 0.25 \text{C}_{\text{V}}, \, 1.8 \text{ W}: 0.15 \text{C}_{\text{V}}$

Coil: General purpose class A, continuous duty, encapsulated

-15% to +10% of nominal voltage Voltage range:

5.2 W - 2.4 W - 1.8 W - 1.0 W Power:

Response times: Energize: 17.0 ms

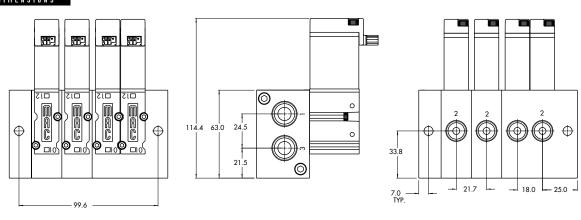
(with 5.2 W coil) De-energize : 6.0 ms

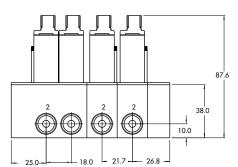
• Valve and coil are not interchangeable. Note:

• Seal between valve and bar : 16630. • Mounting screw (x2) : 35043. • Blanking plate : M-37001. • O-ring port seal (x2) : 17015-01. • Tie rod (x2) : 79007-01 (one station length) Spare parts :

Options: • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENSIONS





Note: Bottom & side cylinder ports not available on the same station



Function	Port size	Flow (Max)	Circuit bar mounting		Profile
3/2 NO-NC	1/8" - 1/4" 6 mm tube receptacle	0.5C _V	plug-in		32.5 mm

- 1. Direct solenoid operated valve.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Manual operator standard on all valves.



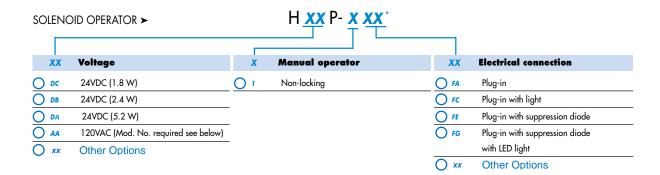
HOW TO ORDER

37A-xxx-HxxP-xxx

Reset

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Universal valve	NC only valve
	\square \uparrow \uparrow \downarrow \uparrow \downarrow \uparrow \downarrow	$rac{1}{\sqrt{1}} \int_{1}^{2} w$
Valve less base	○ 37A-C1O-HxxP-xxx	37A-D1O-HxxP-xxx



HOW TO ORDER "PLUG-IN" CIRCUIT BAR**

ECD37A-xxxxx-xxxx

Port size	Spacing mm	Side cylinder ports	Bottom cylinder ports
1/8" NPTF	18	CD37A-00AAA-A0xx	CD37A-00BAA-A0xx
1/4" NPTF	18	ECD37A-00AAB-A0xx	ECD37A-00BAB-A0xx
6 mm tube receptacle	18	CD37A-00AAG-A0xx	ECD37A-00BAG-A0xx
1/8" NPTF	30	ECD37A-01AAA-C0xx	ECD37A-01BAA-C0xx
1/4" NPTF	30	ECD37A-01AAB-C0xx	ECD37A-01BAB-C0xx
6 mm tube receptacle	30	ECD37A-01AAG-C0xx	ECD37A-01BAG-C0xx

Number of stations (03=3 stations)

Note: clic for valves mounted on base at the factory, add - 9 to the model number.

clic for multi-pin connector (9, 15 or 25).

for AC voltage use mod. FWR2 after circuit bar model number.

O A0 = without light O AA = with light (120V) O AB = with light (240V) O AD = with light (24V)

O C0 = terminal strip







T E C H N I C A L

Fluid: Compressed air, vacuum, inert gases Vacuum to 120 PSI

Pressure range:

Lubrication: Filtration:

Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)

40 μ

Temperature range :

0°F to 120°F (-18°C to 50°C) 4.3 mm

Orifice: Flow (at 6 bar, $\Delta P = 1 bar$):

5.2 W: 0.50C_v, 2.4 W: 0.25C_v, 1.8 W: 0.15C_v

Coil:

General purpose class A, continuous duty, encapsulated

Voltage range:

-15% to +10% of nominal voltage

Power:

5.2 W - 2.4 W - 1.8 W - 1.0 W

Response times:

(with 5.2 W coil)

Energize: 17.0 ms De-energize : 6.0 ms

Note:

• Valve and coil are not interchangeable.

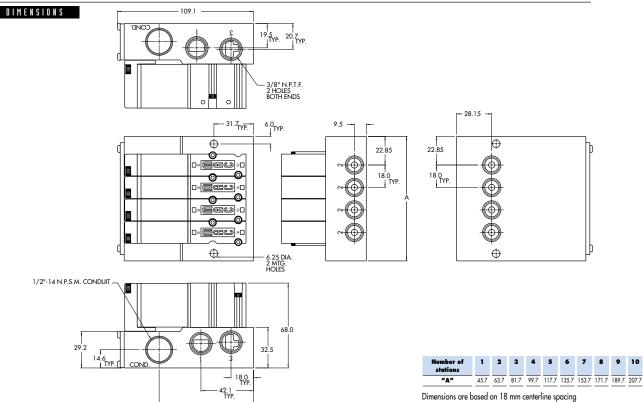
Spare parts :

• Seal between valve and bar: 16630. • Mounting screw (x2): 35043. • Blanking plate: M-37001.

• Base wire plug-in protector : 16520.

Options:

• Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.





Function	Port size	Flow (Max)	Circuit bar mounting	Profile
3/2 NO-NC	1/8" - 1/4"	0.5C _V	plug-in with Pr. Reg.	44 mm

- 1. Direct solenoid operated valve.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Manual operator standard on all valves.



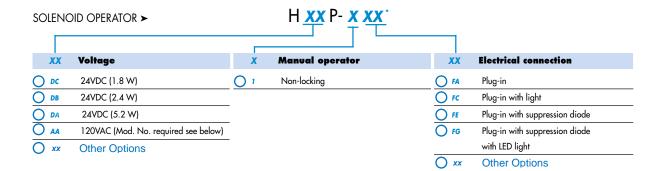
HOW TO ORDER

37A-xxx-HxxP-xxx

Reset

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Universal valve	NC only valve
	\square \uparrow \uparrow \downarrow \uparrow \downarrow \uparrow \downarrow	$rac{1}{\sqrt{1}} \int_{1}^{2} w$
Valve less base	○ 37A-C1O-HxxP-xxx	37A-D1O-HxxP-xxx



HOW TO ORDER "PLUG-IN" CIRCUIT BAR (REGULATORS ORDERED SEPARATELY) **

ECD37A-xxxxx-xxxx

Port size	Spacing mm	Bottom cylinder ports
1/8" NPTF	18	CD37A-00CDA-A0xx
1/4" NPTF	18	ECD37A-00CDB-A0xx
1/8" NPTF	30	ECD37A-01CDA-C0xx
1/4" NPTF	30	ECD37A-01CDB-C0xx

Number of stations (03=3 stations)

** Other options available, consult factory.

Note: clic for valves mounted on base at the factory, add - 9 to the model number. clic for multi-pin connector (9, 15 or 25).

for AC voltage use mod. FWR2 after circuit bar model number.

** Pressure Regulators :

PR37A-GOAx

X=A (0 to 120 PSI)

X=B (0 to 80 PSI) X=C (0 to 30 PSI)

- A0 = without light
- AA = with light (120V)
- AB = with light (240V)
- AD = with light (24V)
- C0 = terminal strip
- CA = terminal strip with light (120V) CB = terminal strip with light (240V)
- CB = terminal strip with light (240v)
 CD = terminal strip with light (24V)







TECHNICAL

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)

Orifice:

4.3 mm

Flow (at 6 bar, $\Delta P = 1 bar$):

5.2 W: 0.50C_v, 2.4 W: 0.25C_v, 1.8 W: 0.15C_v

Coil:

General purpose class A, continuous duty, encapsulated

Voltage range:

-15% to +10% of nominal voltage

Power:

5.2 W - 2.4 W - 1.8 W - 1.0 W

Response times :

Energize : 17.0 ms

(with 5.2 W coil)

De-energize : 6.0 ms

Note:

• Valve and coil are not interchangeable.

Spare parts:

188.8

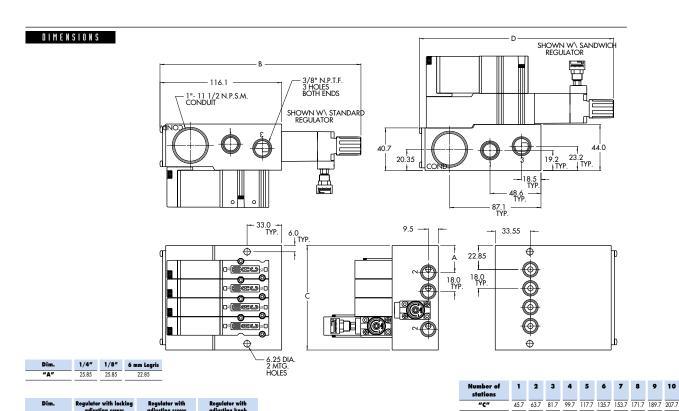
182.5

• Seal between valve and bar: 16630. • Mounting screw (x2): 35043. • Blanking plate: M-37001.

• Base wire plug-in protector : 16520. • Regulator blanking plate : R-47003.

Options :

• Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.





Function	Port size	Flow (Max)	Circuit bar mounting	Profile
3/2 NO-NC	1/8" - 1/4" 6 mm tube receptacle	0.5C _v	add-on style plug-in	44 mm

- 1. Direct solenoid operated valve.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Manual operator standard on all valves.



HOW TO ORDER

37A-xxx-HxxP-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Universal valve	NC only valve
	\square \uparrow \downarrow	$rac{1}{\sqrt{1}} \int_{1}^{2} w$
Valve less base	○ 37A-C1O-HxxP-xxx	37A-D1O-HxxP-xxx

H **xx** P- **x xx** SOLENOID OPERATOR ➤ Manual operator **Electrical connection** XX Voltage XX 24VDC (1.8 W) O DC Non-locking Plug-in O DB 24VDC (2.4 W) O FC Plug-in with light 24VDC (5.2 W) O FE Plug-in with suppression diode O DA 120VAC (Mod. No. required see below) FG O AA Plug-in with suppression diode with LED light O xx Other Options Other Options

HOW TO ORDER "PLUG-IN" CIRCUIT BAR*

ECD37A-xxxxx-xxxx

Port size	Spacing mm	Side cylinder ports	Bottom cylinder ports
1/8" NPTF	18	CD37A-00AEA-A0xx	○ ECD37A-00BEA-A0xx
1/4" NPTF	18	ECD37A-00AEB-A0xx	CD37A-00BEB-A0xx
6 mm tube receptacle	18	ECD37A-00AEG-A0xx	ECD37A-00BEG-A0xx
1/8" NPTF	30	ECD37A-01AEA-C0xx	ECD37A-01BEA-C0xx
1/4" NPTF	30	ECD37A-01AEB-C0xx	ECD37A-01BEB-C0xx
6 mm tube receptacle	30	ECD37A-01AEG-C0xx	ECD37A-01BEG-C0xx

Number of stations (03=3 stations) ** Other options available, consult factory.

Note: clic for valves mounted on base at the factory, add - 9 to the model number.

clic for multi-pin connector (9, 15 or 25).

for AC voltage use mod. FWR2 after circuit bar model number.

add-a-unit stations may be added to above bars. Clic here for model numbers.

A0 = without light

AA = with light (120V) O AB = with light (240V)

O AD = with light (24V)

O C0 = terminal strip

CA = terminal strip with light (120V)
CB = terminal strip with light (240V)

OCD = terminal strip with light (24V)







TECHNICAL

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)

Orifice: 4.3 mm

Flow (at 6 bar, Δ P=1bar): 5.2 W: 0.50C_V, 2.4 W: 0.25C_V, 1.8 W: 0.15C_V

Coil: General purpose class A, continuous duty, encapsulated

Voltage range: -15% to +10% of nominal voltage

Power: 5.2 W - 2.4 W - 1.8 W - 1.0 W

5.2 W - 2.4 W - 1.8 W - 1.0 W

 Response times :
 Energize : 17.0 ms

 (with 5.2 W coil)
 De-energize : 6.0 ms

Note: • Valve and coil are not interchangeable.

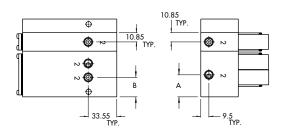
Spare parts: • Seal between valve and bar: 16630. • Mounting screw (x2): 35043. • Blanking plate: M-37001. • End plate kit: M-37003-01

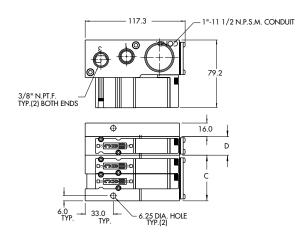
• Base wire plug-in protector : 16520. • Isolator disc between add-a-units : 28438.

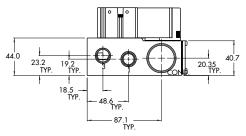
Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

DIMENS	1 O N	S								
Number of stations	1	2	3	4	5	6	7	8	9	10
"C" w/regulator	-	53.6	71.6	89.6	107.6	125.6	143.6	161.6	179.6	197.6
"C" w/o regulator	-	51.85	69.85	87.85	105.85	123.85	141.85	159.85	177.85	195.85
"D"	21.7	39.7	57.7	75.7	-	-	-	-	-	-

Dimensions are based on 18 mm centerline spacing
Note: Bottom & side cylinder ports not available on the same station







Dim.	1/8"	1/4"	6 mm Legris	1/8" w/regulator	1/4" w/regulator
"A"	22.65	24.20	22.85	-	-
"B"	22.85	22.85	25.85	21.20	22.60



Function	Port size	Flow (Max)	Circuit bar mounting	Profile
3/2 NO-NC	1/8" - 1/4"	0.5C _V	add-on style plug in with Pr. Reg.	44 mm

- 1. Direct solenoid operated valve.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Manual operator standard on all valves.

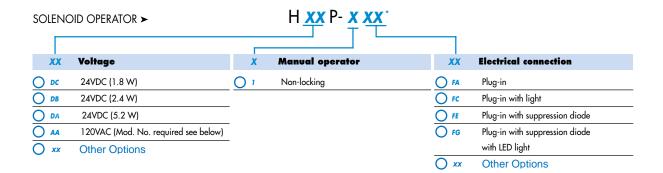


HOW TO ORDER

37A-xxx-HxxP-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Universal valve	NC only valve
	$\square \square $ $\searrow \square$ \square \square \square \square \square \square \square \square \square	\square
Valve less base	○ 37A-C1O-HxxP-xxx	37A-D1O-HxxP-xxx



HOW TO ORDER "PLUG-IN" CIRCUIT BAR (REGULATORS ORDERED SEPARATELY) **

ECD37A-xxxxx-xxxx

Port size	Spacing mm	Bottom cylinder ports
1/8" NPTF	18	CCD37A-00CEA-A0xx
1/4" NPTF	18	ECD37A-00CEB-A0xx
1/8" NPTF	30	ECD37A-01CEA-C0xx
1/4" NPTF	30	ECD37A-01CEB-C0xx

Number of stations (03=3 stations)

** Other options available, consult factory.

Note: clic for valves mounted on base at the factory, add - 9 to the model number. clic for multi-pin connector (9, 15 or 25).

for AC voltage use mod. FWR2 after circuit bar model number.

add-a-unit stations may be added to above bars. Clic here for model numbers. \bigcirc X=C [0 to 30 PSI]

** Pressure Regulators :

PR37A-GOAx

X=A (0 to 120 PSI) X=B (0 to 80 PSI)

- A0 = without light
 AA = with light (120V)
 AB = with light (240V)
 AD = with light (24V)
 C0 = terminal strip

- CA = terminal strip with light (120V)
 CB = terminal strip with light (240V)
 CD = terminal strip with light (24V)







TECHNICAL

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)

Orifice: 4.3 mm

Flow (at 6 bar, $\Delta P = 1$ bar): 5.2 W: 0.50C_V, 2.4 W: 0.25C_V, 1.8 W: 0.15C_V

Coil: General purpose class A, continuous duty, encapsulated

Voltage range: -15% to +10% of nominal voltage

Power: 5.2 W - 2.4 W - 1.8 W - 1.0 W

Response times : Energize : 17.0 ms

(with 5.2 W coil) De-energize : 6.0 ms

182.5

178.4

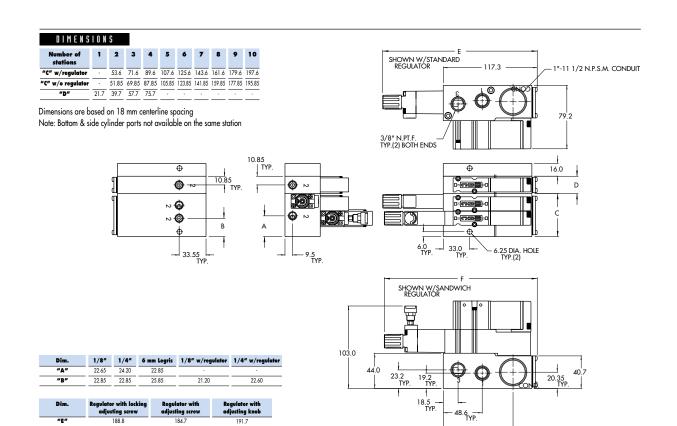
185.4

Note: • Valve and coil are not interchangeable.

Spare parts: • Seal between valve and bar: 16630. • Mounting screw (x2): 35043. • Blanking plate: M-37001. • End plate kit: M-37003-01

• Base wire plug-in protector: 16520. • Isolator disc between add-a-units: 28438.

Options : • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.





Function	Port size	Flow (Max)	Circuit bar mounting	Profile
3/2 NO-NC	1/8" - 1/4" 6 mm tube receptacle	0.5C _v	plug-in add-a-unit stations	44 mm

- 1. Direct solenoid operated valve.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Manual operator standard on all valves.



HOW TO ORDER

37A-xxx-HxxP-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Universal valve	NC only valve
	\square \uparrow \downarrow	$rac{1}{\sqrt{1}} \int_{1}^{2} w$
Valve less base	○ 37A-C1O-HxxP-xxx	37A-D1O-HxxP-xxx

SOLENC	DID OPERATOR ➤		H <u>XX</u> P- <u>X <u>XX</u> .</u>		
XX	Voltage	X	Manual operator	XX	Electrical connection
O DC	24VDC (1.8 W)	O 1	Non-locking	○ FA	Plug-in
O DB	24VDC (2.4 W)			O FC	Plug-in with light
O DA	24VDC (5.2 W)	•		○ FE	Plug-in with suppression diode
O AA	120VAC (Mod. No. required see below)	-		O FG	Plug-in with suppression diode
O xx	Other Options				with LED light
				O xx	Other Options

HOW TO ORDER "PLUG-IN" CIRCUIT BAR**

ECD37A-xxxxx-xxxx

Port size	Spacing mm	Side cylinder ports	Bottom cylinder ports
1/8" NPTF	18	CD37A-00AFA-A0xx	CD37A-00BFA-A0xx
1/4" NPTF	18	ECD37A-00AFB-A0xx	ECD37A-00BFB-A0xx
6 mm tube receptacle	18	ECD37A-00AFG-A0xx	ECD37A-00BFG-A0xx
1/8" NPTF	30	ECD37A-01AFA-C0xx	ECD37A-01BFA-C0xx
1/4" NPTF	30	ECD37A-01AFB-C0xx	ECD37A-01BFB-C0xx
6 mm tube receptacle	30	CD37A-01AFG-C0xx	ECD37A-01BFG-C0xx

Number of stations (03=3 stations) - maximum length is 4 stations.

** Other options available, consult factory.

Note: clic for valves mounted on base at the factory, add - 9 to the model number.

for AC voltage use mod. FWR2 after circuit bar model number.

when add-a-unit stations are added to bars with a multi-pin connector, mod SD03 should be included with add-a-unit model number.

- A0 = without light
 AA = with light (120V)
 AB = with light (240V)
 AD = with light (24V)
 C0 = terminal strip

- CA = terminal strip with light (120V)
 CB = terminal strip with light (240V)
 CD = terminal strip with light (24V)







TECHNICAL

Fluid: Compressed air, vacuum, inert gases

Vacuum to 120 PSI Pressure range:

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)

Orifice: 4.3 mm

Flow (at 6 bar, $\Delta P = 1 bar$): $5.2 \text{ W}: 0.50 \text{C}_{\text{V}}, \, 2.4 \text{ W}: 0.25 \text{C}_{\text{V}}, \, 1.8 \text{ W}: 0.15 \text{C}_{\text{V}}$

Coil: General purpose class A, continuous duty, encapsulated

Voltage range: -15% to +10% of nominal voltage

5.2 W - 2.4 W - 1.8 W - 1.0 W Power:

Response times: Energize: 17.0 ms

(with 5.2 W coil) De-energize : 6.0 ms

• Valve and coil are not interchangeable. Note:

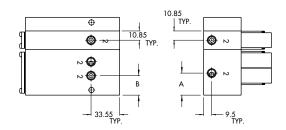
 $\bullet \ \, \text{Seal between valve and bar} : 16630. \, \bullet \ \, \text{Mounting screw (x2)} : 35043. \, \bullet \ \, \text{Blanking plate} : M-37001. \\ \bullet \ \, \text{O-ring port seal (x2)} : 17015-01 \, \bullet \, \text{Tie rod (x2)} : 79007-01 \, \, \text{(one station length)}.$ Spare parts:

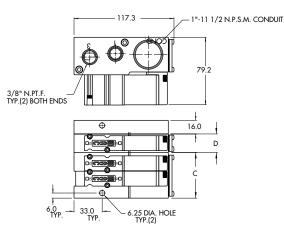
Options: • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.

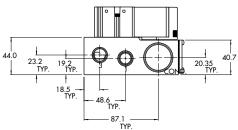
DIMENS										
Number of stations	1	2	3	4	5	6	7	8	9	10
"C" w/regulator	-	53.6	71.6	89.6	107.6	125.6	143.6	161.6	179.6	197.6
"C" w/o regulator	-	51.85	69.85	87.85	105.85	123.85	141.85	159.85	177.85	195.85
"D"	21.7	39.7	57.7	75.7	-	-	-	-	-	-

Dimensions are based on 18 mm centerline spacing

Note: Bottom & side cylinder ports not available on the same station







Dim.	1/8"	1/4"	6 mm Legris	1/8" w/regulator	1/4" w/regulator
"A"	22.65	24.20	22.85	-	-
"B"	22.85	22.85	25.85	21.20	22.60



Function	Port size	Flow (Max)	Circuit bar mounting	Profile
3/2 NO-NC	1/8" - 1/4"	0.5C _v	plug-in add-a-unit stations with Pr. Ren	44 mm

- 1. Direct solenoid operated valve.
- 2. Balanced poppet, immune to variations of pressure.
- 3. Short stroke with high flow.
- 4. The patented solenoid develops high shifting forces.
- 5. Powerful return spring.
- 6. Manual operator standard on all valves.

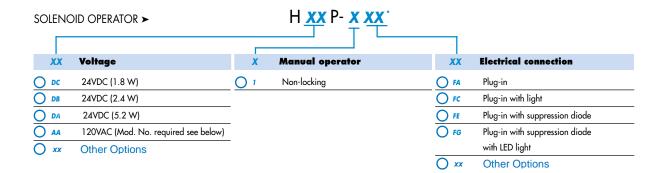


HOW TO ORDER

37A-xxx-HxxP-xxx

HOW TO ORDER VALVE FOR CIRCUIT BAR MOUNTING

Port size (see base)	Universal valve	NC only valve
	\square \uparrow \uparrow \downarrow \uparrow \downarrow \uparrow \downarrow	$rac{1}{\sqrt{1}} \int_{1}^{2} w$
Valve less base	○ 37A-C1O-HxxP-xxx	37A-D1O-HxxP-xxx



HOW TO ORDER "PLUG-IN" CIRCUIT BAR (REGULATORS ORDERED SEPARATELY) **

ECD37A-xxxxx-xxxx

Port size	Spacing mm	Bottom cylinder ports
1/8" NPTF	18	○ ECD37A-00CFA-A0 <i>xx</i>
1/4" NPTF	18	ECD37A-00CFB-A0xx
1/8" NPTF	30	ECD37A-01CFA-C0xx
1/4" NPTF	30	ECD37A-01CFB-C0xx

Number of stations (03=3 stations) - maximum length is 4 stations.

** Other options available, consult factory.

Note: clic for valves mounted on base at the factory, add - 9 to the model number. for AC voltage use mod. FWR2 after circuit bar model number. when add-a-unit stations are added to bars with a multi-pin connector, mod SD03 should be included with add-a-unit model number.

** Pressure Regulators :

PR37A-GOAx

- X=A (0 to 120 PSI) X=B (0 to 80 PSI) X=C (0 to 30 PSI)
- A0 = without light
 AA = with light (120V)
 AB = with light (240V)
 AD = with light (24V)
 C0 = terminal strip

- CA = terminal strip with light (120V)
 CB = terminal strip with light (240V)
- O CD = terminal strip with light (24V)







TECHNICAL

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:

Temperature range : 0°F to 120°F (-18°C to 50°C)

Orifice: 4.3 mm

Flow (at 6 bar, $\Delta P = 1 bar$): 5.2 W: 0.50C_v, 2.4 W: 0.25C_v, 1.8 W: 0.15C_v

Coil: General purpose class A, continuous duty, encapsulated

Voltage range: -15% to +10% of nominal voltage

5.2 W - 2.4 W - 1.8 W - 1.0 W Power:

Response times: Energize: 17.0 ms

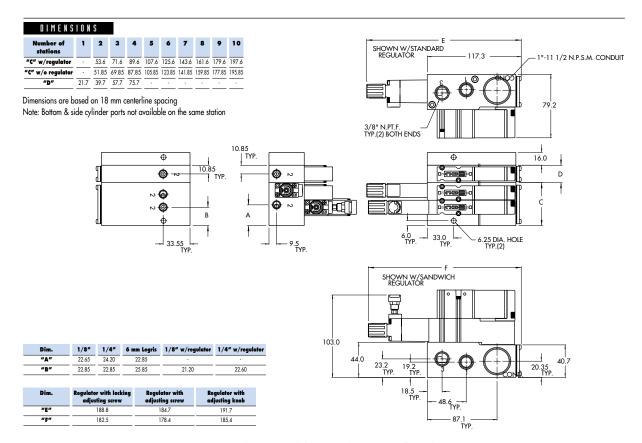
(with 5.2 W coil) De-energize : 6.0 ms

Note: • Valve and coil are not interchangeable.

Spare parts:

• Seal between valve and bar : 16630. • Mounting screw (x2) : 35043. • Blanking plate : M-37001. • O-ring port seal (x2) : 17015-01 • Tie rod (x2) : 79007-01 (one station length). • Regulator blanking plate : R-47003.

Options: • Isolation of inlet and/or exhaust. Special bar. Consult factory. • BSPP Threads.





Section 2 Options

Codification table for voltages / Wire length / Manual operators / Electrical connections

VALVE CODE > $-H\underbrace{XX}_{1}\underbrace{X}_{2}-\underbrace{X}_{3}\underbrace{XX}_{4}$

OPTIONS AVAILABLE FOR

- Solenoid valves 37 & 47 Series





	1. VOLTAGE
- H XX X - X XX	VOLTAGE
	DC Options
O DA	24 VDC (5.2 W)
○ DB	24 VDC (2.4 W)
O DC	24 VDC (1.8 W)
ODD	24 VDC (1.0 W)
O DF	12 VDC (5.2 W)
ODG	12 VDC (2.4 W)
O DH	12 VDC (1.8 W)
O DJ	12 VDC (1.0 W)
O DL	120 VDC (6.3 W)
	AC Options (50/60hz)
○ AA	120 VAC (6.7 W)
○ AB	220 VAC (5.6 W)
O AC	240 VAC (5.8 W)
○ AD	24 VAC (7.8 W)
Note : AC Voltages on	ly available with "H" & "F" type connectors. MOD FWR2 must be used with the "F" type connectors.

		2. WIRE LENGTH
- H XX	X - X XX	WIRE LENGTH
0	0	No lead wire
0	A	18"
0	В	24"
0	С	36"
0	D	48"
0	E	72"
0	F	96"
0	G	120"
0	Н	144"
0	P	Plug-in (used only with "F"type connector Opts.)
Use "O"	with MJ & MA	A Opts.

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



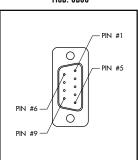


H XX X	- X XX	ELECTRICAL CONNECTION
)	BA	Flying leads
)	ВВ	Flying leads with ground wire
)	ВС	Flying leads with led light
)	BD	Flying leads with led light & ground wire
	BE	Flying leads with suppression diode
)	BF	Flying leads with suppression diode & ground wire
)	BG	Flying leads with suppression diode plus led light
)	ВН	Flying leads with suppression diode plus led light & ground wire
)	*BN	Flying leads with suppression diode plus blocking diode
<u> </u>	*BP	Flying leads with suppression diode plus blocking diode & ground wire
)	*BR	Flying leads with suppression diode plus blocking diode & led light
<u> </u>	*BS	Flying leads with suppression diode plus blocking diode & led light & ground wire
<u> </u>	FA	Plug-in
5	FB	Plug-in with ground wire
<u>5</u>	FC	Plug-in with led light
5	FD	Plug-in with led light & ground wire
	FE	Plug-in with suppression diode
5	FF	Plug-in with suppression diode & ground wire
5	FG	Plug-in with suppression diode plus led light
5	FH	Plug-in with suppression diode plus led light & ground wire
		Note : FA FH options for use with ECD type circuit bars
	НА	Circuit board plug-in with full wave rectifier & led light
5	НВ	Circuit board with full wave rectifier & led with ground wire
	НС	Same as "HA" without lead wires
\prec	HD	Same as "HB" without lead wires
\leq	HL	Circuit board plug-in with suppression diode plus blocking diode & led light
	HN	Same as "HL" without lead wires
)	MA	Plug-in wire assembly
)	МВ	Plug-in wire assembly with ground wire
)	МС	Plug-in wire assembly with led light
))	MD	Plug-in wire assembly led light & ground wire
<u>)</u>	ME	Plug-in wire assembly with suppression diode
<u>) </u>	MF	Plug-in wire assembly with suppression diode & ground wire
)	*MG	Plug-in wire assembly suppression diode plus led light
<u>)</u>	*MH	Plug-in wire assembly suppression diode plus led light & ground wire
<u>) </u>	*MN	Plug-in wire assembly with suppression diode plus blocking diode
<u>) </u>	*MP	Plug-in wire assembly with suppression diode plus blocking diode & ground wire
)	MR	Plug-in wire assembly with suppression diode plus blocking diode & led light
	MS	Plug-in wire assembly with suppression diode plus blocking diode & led light & ground wire
<u>ر</u>	MJ	Plug-in housing w/o wire assembly ("MA" option without wire assembly)
\supset	MM	Plug-in housing w/o wire assembly ("MB" option without wire assembly)









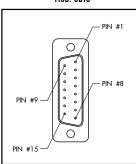
TECHNICAL DATA

- Type «SUB_D»
- Number of contacts : 9
- Number of contacts: 9
 Solder termination [Dia. 0.6 mm/0.14 mm²/26-22 AWG)
 Operating current 5 A/contact
 Rated voltage 125 V~
 Temp. range -40° to +125°C
 Insulation resistance ≥ 5.0° Ω
 Protection class IP40 (DIN 40050)
 Number of sclanside: 7 mm²

- Number of solenoids: 7 max.
 Max. 24 V=/5.4 W per solenoid
- 2 common wires

MOD. SD15





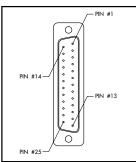
TECHNICAL DATA

- Type «SUB_D»
- Number of contacts: 15
 Solder termination (Dia. 0.6 mm/0.14 mm²/26-22 AWG)

- Solder termination (Did. 0.6 mm/0)
 Operating current 5 A/contact
 Rated voltage 125 V~
 Temp. range -40° to +125°C
 Insulation resistance ≥ 5.0° Ω
 Protection class IP40 (DIN 40050)
- Number of solenoids: 12 max.
- Max. 24 V=/5.4 W per solenoid
- 3 common wires

MOD. SD25





Note: Use desired MOD. number after circuit bar part number

TECHNICAL DATA

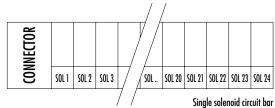
- Type «SUB_D»
- Number of contacts : 25
- Number of contacts: 25
 Solder termination (Dia. 0.6 mm/0.14 mm²/26-22 AWG)
 Operating current 5 A/contact
 Rated voltage 125 V~
 Temp. range -40° to +125°C
 Insulation resistance ≥ 5.0° Ω

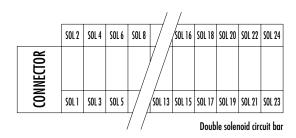
- Protection class IP40 (DIN 40050)
- Number of solenoids: 20 max.
- Max. 24 V=/5.4 W per solenoid
- 5 common wires

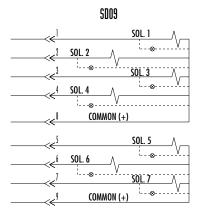


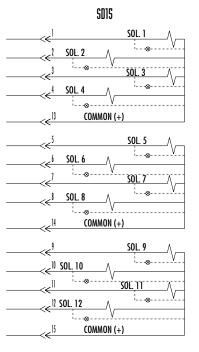
O p t i o n s

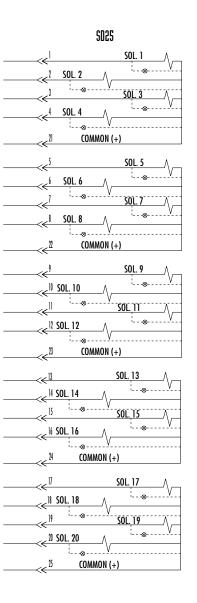
Connector termination details













PRECAUTIONS CONCERNING THE APPLICATION, INSTALLATION AND SERVICE OF MAC VALVES

The precautions below are important to be read and understood before designing into a system any MAC valve, and before installing or servicing any MAC valve. Improper use, installation or servicing of any MAC valve in some systems could create a hazard to personnel or equipment.

APPLICATION PRECAUTIONS:

INDUSTRIAL USF -

MAC valves are intended for use in industrial pneumatic and/or vacuum systems. They are not intended for consumer use or service. They are general purpose industrial valves with literally thousands of different applications in industrial systems. These products are not inherently dangerous, but they are only a component of an overall system. The system in which they are used must provide adequate safeguards to prevent injury or damage in the event failure occurs, whether it be failure of switches, regulators, cylinders, valves or any other component.

POWER PRESSES -

MAC valves are not designed nor intended to be used to operate and/or control the operation of clutch and/or brake systems on power presses. There are special products on the market for such use.

2-POSITION VALVES -

Some MAC valves are 2-position, 4-way valves. When air is supplied to the inlet port(s) of these valves, there will always be a flow path from the inlet to one of the outlets regardless of which of the two positions the valve is situated. Therefore, if pressurized air retained in the system would present a hazard in the application or servicing of the valve or system, a separate method in the system must be provided to remove the trapped air.

3- POSITION VALVES-

Some MAC valves are 3-position, 4-way valves. These valves are either double solenoid or double remote air operated.

If either of the two operators is in control, air supplied to the inlet port(s) will pass through the valve to one of the outlets as on 2-position, 4-way valves. However, if neither operator is in control, the valve moves to a center position. Listed below are the various center position functions:

A. CLOSED CENTER-

With this type valve, when in the center position all ports are blocked (inlets and exhausts) meaning the air at both outlet ports is trapped. If trapping the air in both outlet ports would present a hazard in the application or servicing, a separate method in the system must be provided to remove the trapped air or this type valve should not be used.

B. OPEN CENTER-

With this type valve, when in the center position, the inlet port(s) is blocked and the two outlet ports are open to the exhaust port(s) of the valve. If having no air in either outlet port would present a hazard in the application or servicing, this type valve should not have a

C. PRESSURE CENTER-

With this type valve, when in the center position, the inlet port(s) is connected to both outlet ports of the valve. If having pressurized air to either or both outlet ports would present a hazard in the application or servicing of the valve or system, a separate method in the system must be provided to remove the retained air.

OPERATING SPECIFICATIONS -

MAC valves are to be installed only on applications that meet all operating specifications described in the MAC catalog for the valve.

MANUAL OPERATORS-

Most MAC valves can be ordered with manual operators. Manual operators when depressed, are designed to shift the valve to the same position as would the corresponding solenoid or remote air pilot operator if it were activated. Care must be taken to order a type, if any, that will be safe for the physical location of the manual operator in the system. Accidental activation of a manual operator could create a dangerous situation. If intentional or accidental operation of a valve by a manual operator could create a dangerous situation then the "no operator" option should be used

REMOTE AIR OPERATED VALVES

Pilot valves supplying signal pressure to remote air operated valves should be 3-way valves with adequate supply and exhaust capacity to provide positive pressurizing and exhausting of the pilot supply line. Pilot lines should be open to exhaust when valves are deenergized.

INSTALLATION AND SERVICE PRECAUTIONS:

- A. Do not install or service MAC valves without first making sure both the air and electrical power to the machine are off and that all air has been completely bled from the system.
- B. MAC valves should only be installed and/or serviced by qualified, knowledgeable personnel who understand how the specific valve is to be pneumatically piped and electrically connected (where applicable). Flow paths through the valve are shown in the catalog and on the valve by use of ANSI or ISO type standard and graphic symbols. Do not install unless these symbols and the valve functions and operations are thoroughly understood.
- C. Before service, maintenance, repair or cleaning, consult local distributor or factory for Parts & Operation Sheet and information on proper cleaning and lubrication agents. Do not subject MAC valves' parts to any foreign substance including lubricants and cleaning agents not specifically recommended by MAC valves, Inc.
- D. MAC valves are never to be stepped on while working on a machine. Damage to the valve, or lines to the valve (either air or electrical lines) or accidental activating of a manual operator on the valve could result in a dangerous condition.

WARNING :

Under no circumstances are Mac valves to be used in any application where failure of the valve to operate as intended could jeopardize the safety of the operator or any

- Do not operate outside of pressure range listed on valve label or outside of designated temperature range.
 Air supply must be clean. Contamination of valve can affect proper operation.
- Air supply must be clean. Contamination of valve can affect proper operation.
 Before attempting to repair, adjust or clean valve, consult catalog, parts & operation sheet, or factory for proper maintenance procedures, lubrication, and cleaning agents.
 Never attempt to repair or perform other maintenance with air pressure to valve.
- If airline lubrication is used, consult catalog, parts & operation sheet, or factory for recommended lubricants.

LIMITATION OF GUARANTEE

This Guarantee is limited to the replacement or rebuilding of any valve which should fail to operate properly. Valves, under the MAC Guarantee, must be returned (with or without bases) transportation prepaid and received at our factory within the Guarantee period. They will be returned to the customer at the expense of MAC Valves, Inc., and will carry the same guarantee as provided under the Flat Rate Rebuild Program.

DISCLAIMER OF GUARANTEE

No claims for labor, material, time, damage, or transportation are allowable nor will any valve be replaced or rebuilt under this guarantee which has been damaged by the purchaser not in the normal course of its use and maintenance during the warranty period. The guarantee 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. shall in no event be liable for remote, special or consequential damages under the MAC Guarantee, nor under any implied warranties, including the implied warranty of merchantability.

The above Guarantee is our manner of extending the engineering and service resources of the MAC Valves, Inc. organization to assure our customer long, and continued satisfaction.

Series

Sandwich pressure regulator with manual adjust knob

OPERATIONAL BENEFITS

- Easy mounting: saves on installation costs in comparison with inline regulators.
- 2. Compact all-included units.
- 3. Large orifice provides high flow.
- 4. Various functions available.
- 5. Simple, reliable and solid design.



PR37A

PR42B

PR46A

PR47A

PR48B

PR92C

HOW TO ORDER

REGULATORS FOR "NON PLUG-IN" VALVES (CODED FOR KNOB ADJUSTMENT)

Gage	Single pressure	
No gage port	PR37A-FAAA	PR9
With gage Port (plugged)	PR37A-FABA	FRZ

Note: Regulating pressure range for above models is 0 to 120 PSI

For other ranges, see below.

OPTIONS

Adjustment :

PR37A-Fxxx

B for slotted stem

K for slotted stem with locknut

Pressure range :

PR37A-XXXA

B for 0 to 80 PSI
C for 0 to 30 PSI

PRAO1A

PRA02A

PRA1A

PRP1A

PRA2D

PRP2B

PRA3C

PRP3B







TECHNICAL DATA

Fluid: Compressed air, inert gases

Pressure range: 0 to 120 PSI

Regulating range: 0 to 120 PSI

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: 0.4 C_v

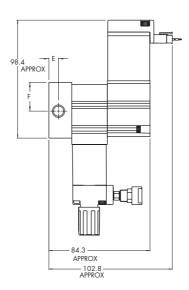
Spare parts: • Pressure regulator (less sandwich block): PR37A-GOAA (knob), PR37A-COAA (slotted stem), PR37A-LOAA (slotted stem with locknut)

• Gages: 24177-160 (0 to 160 PSI, 23 mm) 24177-100 (0 to 100 PSI, 23 mm)

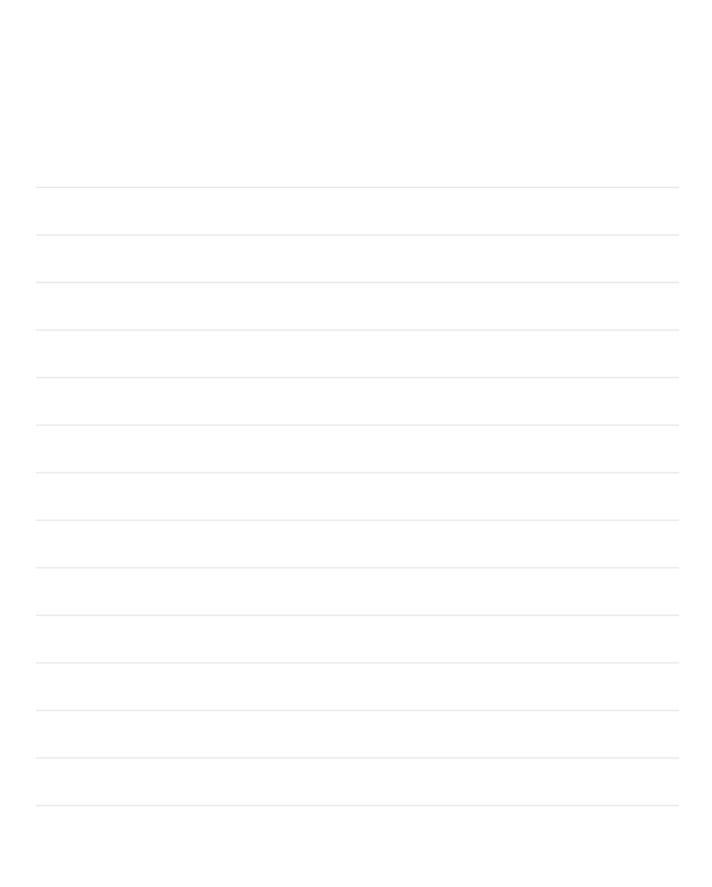
24177-060 (0 to 60 PSI, 23 mm)

DIMENSIONS

Dimensions shown are metric (mm)



Notizen





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