



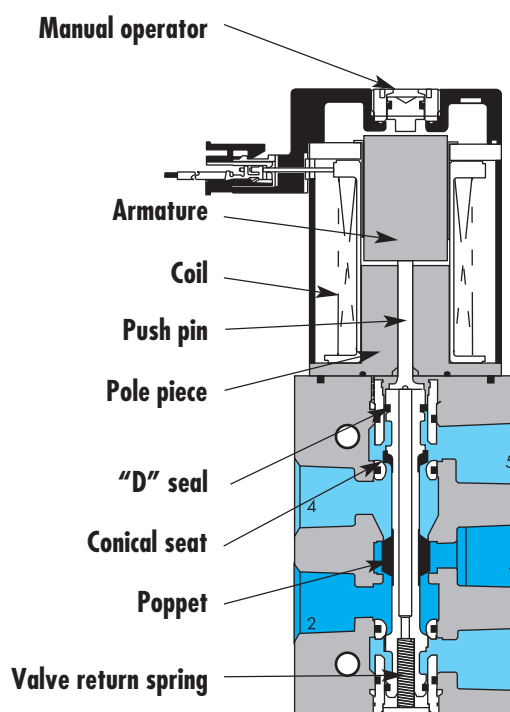
Direct solenoid and solenoid pilot operated valves

Individual mounting

Inline	Sub-base non "plug-in"
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Manifold mounting

Stacking	Manifold base "plug-in"
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SERIES FEATURES

- Short stroke solenoid produces high energization shifting force.
- High force return spring due to high force solenoid maximizes both energization and de-energization shifting forces.
- Built-in wear compensation - valve stroke is shorter than solenoid stroke.
- Four (4) bonded balanced poppets on a one-piece valve stem.
- End poppets seal first on conical seats and cushion inlet poppet, eliminating cutting.
- Exhaust seals are not under inlet pressure thus reducing friction.
- Short stroking balanced poppet allows for direct solenoid operation with high shifting forces, minimized friction, fast response and high flow in a small package.



Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow (Max)	Individual Mounting
5/2	G1/8" - G1/4"	500 NI/min	Inline

OPERATIONAL BENEFITS

1. Short stroke solenoid produces high energization shifting force.
2. High force return spring due to high force solenoid maximizes both energization and de-energization shifting forces.
3. Built-in wear compensation – valve stroke is shorter than solenoid stroke.
4. Four bonded balanced poppets on a one-piece valve stem.
5. End poppets seal first on conical seats and cushion inlet poppet, eliminating cutting.
6. Exhaust seals are not under inlet pressure thus reducing friction.
7. Integral non-rising flow controls available on inline models.
8. Short stroking balanced poppet allows for direct solenoid operation with high shifting forces, minimized friction, fast response and high flow in a small package.



HOW TO ORDER

Port size	Without flow controls	With flow controls
G1/8"	47A-AC0-H xxx-xxx	47A-BC0-H xxx-xxx
G1/4"	47A-AD0-H xxx-xxx	47A-BD0-H xxx-xxx

SOLENOID OPERATOR ►

H **xxx-xxx***

XX Voltage	X Lead Wire length	X Manual operator	XX Electrical connection
DA 24V=/5,2W	A 45 cm	1 Non-locking	MA Plug-in wire assembly
DB 24V=/2,4W	B 60 cm	2 Locking	MC Plug-in wire assembly with light
DC 24V=/1,8W	C 90 cm		BA Flying leads
DD 24V=/1,0W			BC Flying leads with light
AA 120V~/6,7W			MT Plug-in wire assembly with rectifier & light

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

Options :
Mani Mount Option (w/o flow controls)

47A-CX0-Hxxx-xxx

C 1/8" BSPPL
D 1/4" BSPPL

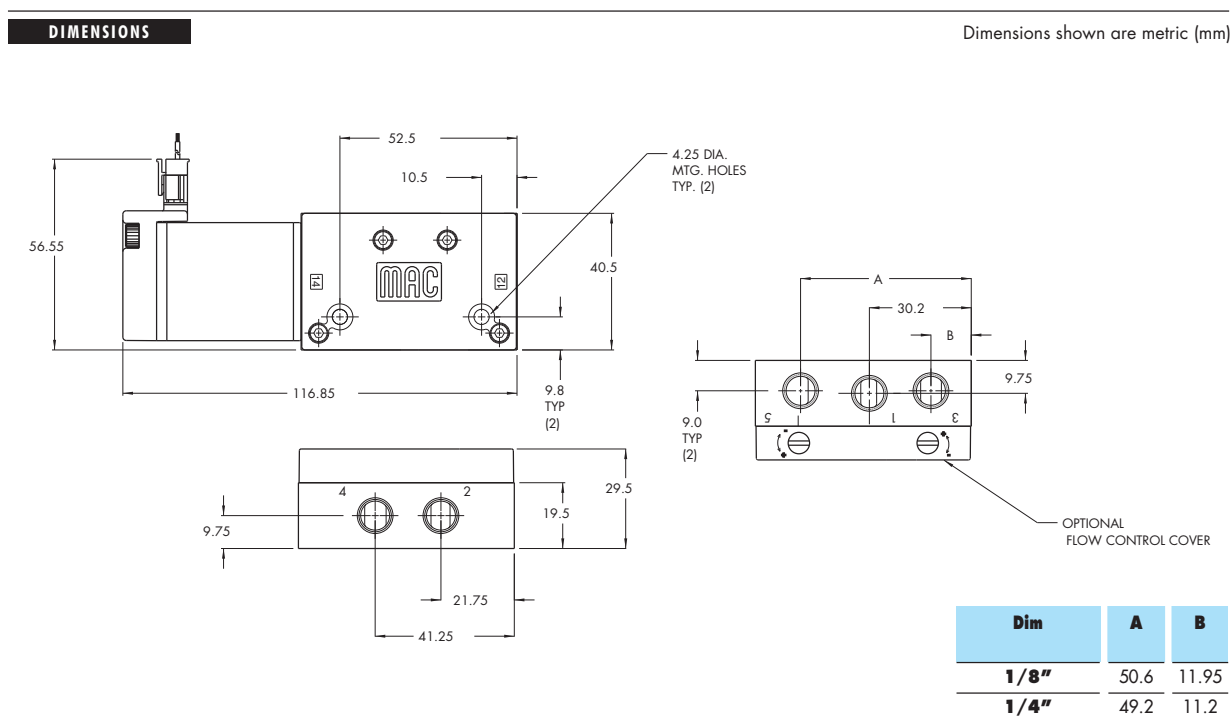


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WARRANTY
18
MONTHS

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 (at 6 bar, ΔP=1bar) :	5,2W : 500 NI/min (Cv 0,50) – 2,4W : 350NI/min (Cv 0,35) – 1,0W : 300 NI/min (Cv 0,30)
Coil :	Epoxy encapsulated – 100% ED
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	5,2W – 2,4W – 1,0W
Response times :	Energize : 17,4 ms
(with 5,2 W coil)	De-energise : 3,8 ms

- Options :
- NPTF threads
- Spare parts :
- Flow control assembly : N-47004



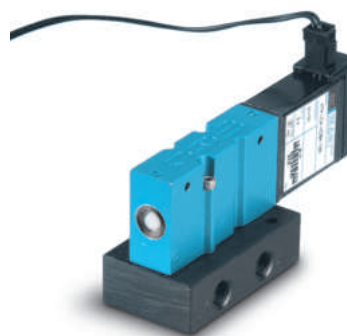


Direct solenoid and solenoid pilot operated valves

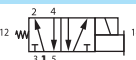
Function	Port size	Flow [Max]	Individual Mounting
5/2	G1/8" - G1/4"	500 NI/min	Subbase non "plug-in"

OPERATIONAL BENEFITS

1. Short stroke solenoid produces high energization shifting force.
2. High force return spring due to high force solenoid maximizes both energization and de-energization shifting forces.
3. Built-in wear compensation – valve stroke is shorter than solenoid stroke.
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6. Exhaust seals are not under inlet pressure thus reducing friction.
7. Integral non-rising flow controls available on inline models.
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HOW TO ORDER

Port size	Without flow controls	With flow controls
		
Valve less base	47A-L10-H XXX-XXX	47A-L10-H XXX-XXX
G1/8"	47A-LCA-H XXX-XXX	47A-LCB-H XXX-XXX
G1/4"	47A-LDA-H XXX-XXX	47A-LDB-H XXX-XXX

SOLENOID OPERATOR ➤

H XXX-XXX *

XX Voltage	X Wire length	X Manual operator	XX Electrical connection
DA 24V=/5,2W	A 45 cm	1 Non-locking	MA Plug-in wire assembly
DB 24V=/2,4W	B 60 cm	2 Locking	MC Plug-in wire assembly with light
DC 24V=/1,8W	C 90 cm		BA Flying leads
DD 24V=/1,0W			BC Flying leads with light
AA 120V~/6,7W			MT Plug-in wire assembly with rectifier & light

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



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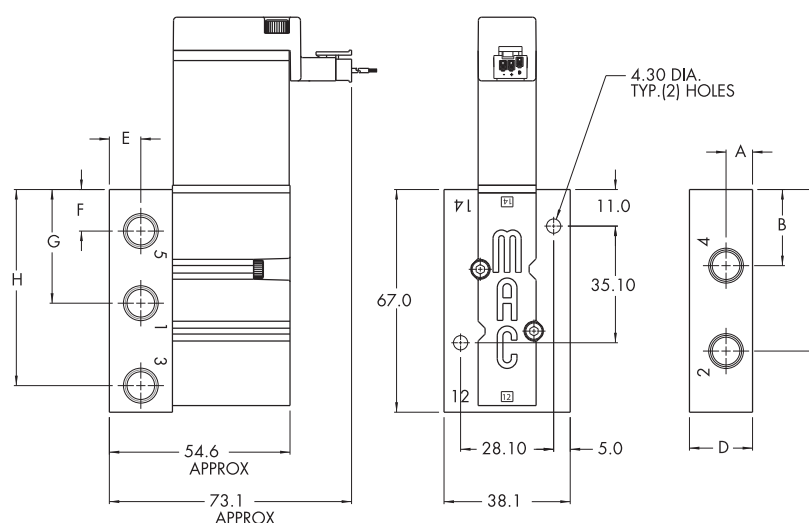
WARRANTY
18
MONTHS

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 (at 6 bar, ΔP=1bar) :	5,2W : 500 NI/min (Cv 0,50) – 2,4W : 350NI/min (Cv 0,35) – 1,0W : 300 NI/min (Cv 0,30)
Coil :	Epoxy encapsulated – 100% ED
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	5,2W – 2,4W – 1,0W
Response times : (with 5,2 W coil)	Energize : 17,4 ms De-energise : 3,8 ms

- Options :
- NPTF threads
- Spare parts :
- Pressure seal body to base: 16628 • Mounting screw (x2): 35043
 - Flow control assembly (x2): N-04001

DIMENSIONS

Dimensions shown are metric (mm)





Direct solenoid and solenoid pilot operated valves

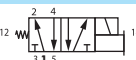
Function	Port size	Flow (Max)	Manifold Mounting
5/2	G1/8" - G1/4"	500 NI/min	Stacking

OPERATIONAL BENEFITS

1. Short stroke solenoid produces high energization shifting force.
2. High force return spring due to high force solenoid maximizes both energization and de-energization shifting forces.
3. Built-in wear compensation – valve stroke is shorter than solenoid stroke.
4. Four bonded balanced poppets on a one-piece valve stem.
5. End poppets seal first on conical seats and cushion inlet poppet, eliminating cutting.
6. Exhaust seals are not under inlet pressure thus reducing friction.
7. Integral non-rising flow controls available on inline models.
8. Short stroking balanced poppet allows for direct solenoid operation with high shifting forces, minimized friction, fast response and high flow in a small package.



HOW TO ORDER

Port size	Without flow controls	With flow controls
		
G1/8"	47A-SC0-H xxx-xxx	47A-TC0-H xxx-xxx
G1/4"	47A-SD0-H xxx-xxx	47A-TD0-H xxx-xxx

SOLENOID OPERATOR ►

H **xxx-xxx***

XX	Voltage	X	Wire length	X	Manual operator	XX	Electrical connection
DA	24V=/5,2W	A	45 cm	1	Non-locking	MA	Plug-in wire assembly
DB	24V=/2,4W	B	60 cm	2	Locking	MC	Plug-in wire assembly with light
DC	24V=/1,8W	C	90 cm			BA	Flying leads
DD	24V=/1,0W					BC	Flying leads with light
AA	120V~/6,7W					MT	Plug-in wire assembly with rectifier & light

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

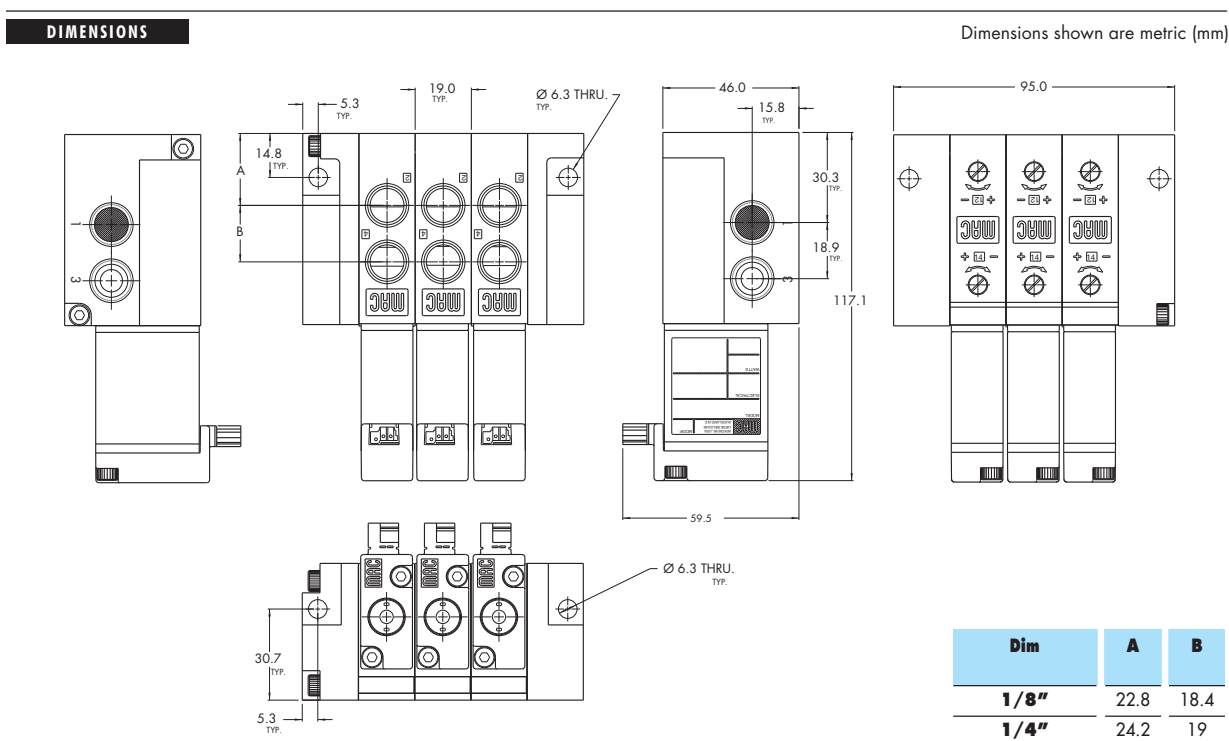


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WARRANTY
18
MONTHS

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 (at 6 bar, ΔP=1bar) :	5,2W : 500 NI/min (Cv 0,50) – 2,4W : 350NI/min (Cv 0,35) – 1,0W : 300 NI/min (Cv 0,30)
Coil :	Epoxy encapsulated – 100% ED
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	5,2W – 2,4W – 1,0W
Response times :	Energize : 17,4 ms
(with 5,2 W coil)	De-energise : 3,8 ms

- Options : • NPTF threads
- Spare parts : • Inlet isolator: 28451 • Exhaust isolator: N-47009 • Tie Rod (x2): 79057



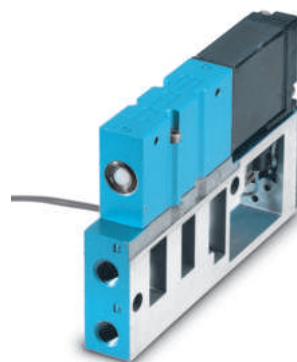


Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow [Max]	Manifold Mounting
5/2	G1/8" - G1/4"	500 NI/min	Manifold base "plug-in"

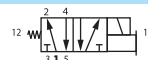
OPERATIONAL BENEFITS

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HOW TO ORDER

Port size	Model number
Valve less base	
G1/8"	47A-L10-H xxP-xxx
G1/4"	47A-LCJ-H xxP-xxx
	47A-LDJ-H xxP-xxx



SOLENOID OPERATOR >

H **xx** P-**xxx***

XX Voltage	X Manual operator	XX Electrical connection
DA 24 V~/5,2W	1 Non-locking	FA Base plug-in
DB 24 V~/2,4W	2 Locking	FB Base plug-in w/ ground
DC 24 V~/1,8W		FC Base plug-in w/ LED light
DD 24 V~/1,0W		FD Base plug-in w/ LED light w/ ground
AA 120 V~/6,7W		FT Base plug-in w/ rectifier and light

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

OPTIONS

47A-**xxJ**-H**xxxx-xxx**

- J** Manifold base, side cylinders (middle station)
- K** Manifold base, bottom cylinders (middle station)
- L** Right end manifold base, side cylinders
- M** Right end manifold base, bottom cylinders
- N** Left end manifold base, side cylinders
- P** Left end manifold base, bottom cylinders

Fastening kit required: N-47005-01.
Note: Manifold assemblies consist of (1) left end manifold, (1) right end manifold, and middle station manifolds.

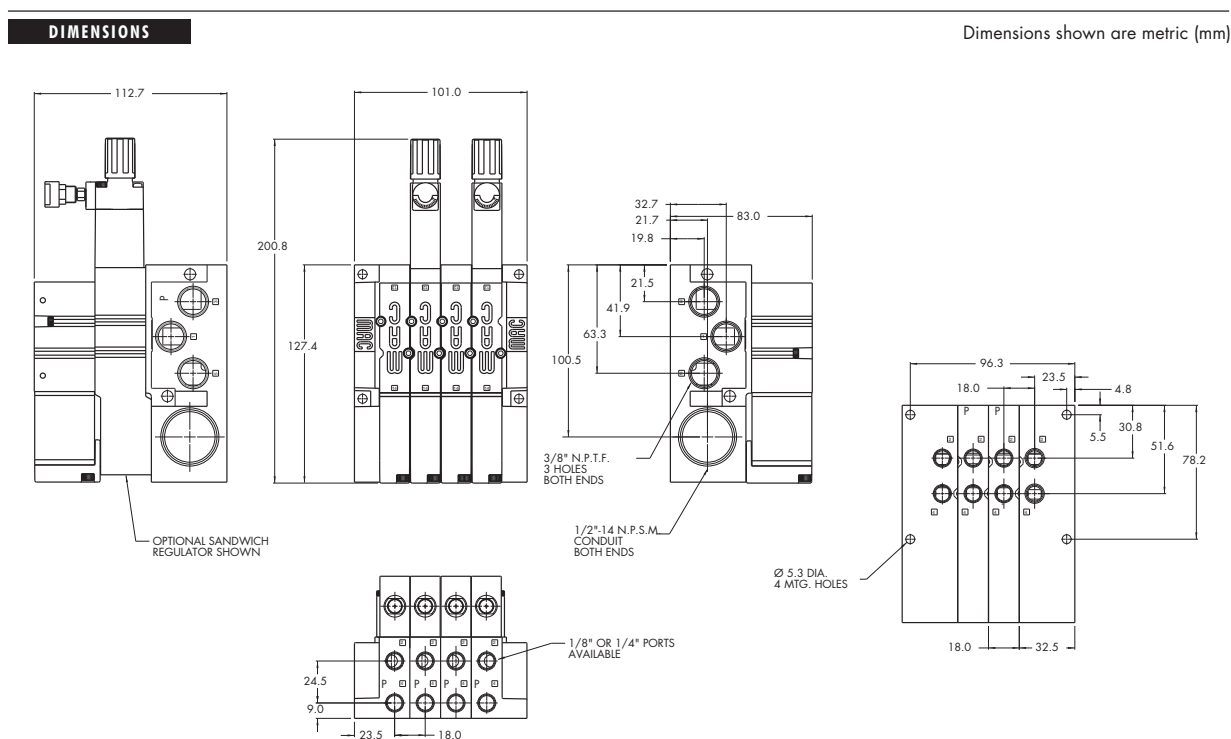


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18
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TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Vacuum to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	4,3 mm
Flow (at 6 bar, ΔP=1bar) :	5,2W : 500 NI/min (Cv 0,50) – 2,4W : 350NI/min (Cv 0,35) – 1,0W : 300 NI/min (Cv 0,30)
Coil :	Epoxy encapsulated – 100% ED
Voltage range :	-15% to +10% of nominal voltage
Protection :	IP54 (electrical connection)
Power :	5,2W – 2,4W – 1,0W
Response times :	Energize : 17,4 ms
(with 5,2 W coil)	De-energise : 3,8 ms

- Options : • NPTF threads • Sandwich flow control: FC47A-AA
- Spare parts : • Inlet/exhaust isolator: 28447 • Valve cover plate: M-47001





P r e s s u r e r e g u l a t o r s

Sandwich pressure regulator with manual adjust knob

OPERATIONAL BENEFITS

1. 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.



HOW TO ORDER

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

Gauge	Single pressure
No gauge port	PR47A-EAAA
With gauge Port	PR47A-EABA

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

Gauge	Single pressure
No Gauge port	PR47A-FAAA
With Gauge Port	PR47A-FABA

OPTIONS

Pressure range :

PR47A-xxx**A**

- A** 0 to 8 bar
- B** 0 to 5,3 bar
- C** 0 to 2 bar

Adjustment for : Plug-in regulator

PR47A-**E**xxx

- E** Knob
- A** Screwdriver slot
- J** Screwdriver slot with locknut

Non plug-in regulator

PR47A-**F**xxx

- F** Knob
- B** Screwdriver slot
- K** Screwdriver slot with locknut

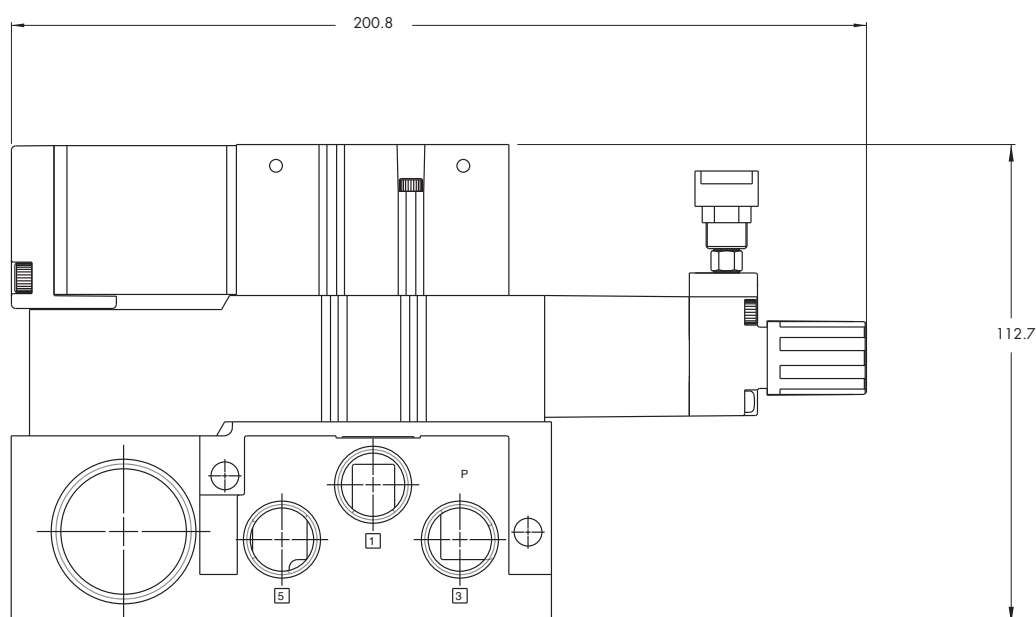


TECHNICAL DATA	
Fluid :	Compressed air, inert gases
Pressure range :	0 to 8 bar
Regulating range :	0 to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Flow (at 6 bar, ΔP=1bar):	400 Nl/min (Cv 0.4)

- Spare parts :
- Pressure regulator (less sandwich block) : PR47A-G0xx (knob), PR47A-C0xx (screwdriver slot), PR47A-L0xx (screwdriver slot with locknut)
 - Gauge: 24177-160 (0 to 10,7 bar, 23 mm)
24177-100 (0 to 6,7 bar, 23 mm)
24177-060 (0 to 4 bar, 23 mm)

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

1. VOLTAGE		H-XX X-X XX	ELECTRICAL CONNECTION
H-XX X-X XX	VOLTAGE	BL	BA with full wave rectifier & ground wire
AA	120 V~/ 50Hz, 120 V~/ 60Hz (6,7 W) (use connector with rectifier)	BT	BA with full wave rectifier plus light
AB	220 V~/ 50Hz, 220 V~/ 60Hz (5,6 W) (use connector with rectifier)	BU	BA with full wave rectifier plus light & ground wire
AC	240 V~/ 50Hz, 240 V~/ 60Hz (5,8 W) (use connector with rectifier)	PLUG-IN CONNECTOR	
AD	24 V~/ 50Hz, 24 V~/ 60Hz (7,8 W) (use connector with rectifier)	FA	Base plug-in
DA	24 V=/5,2 W	FB	FA with ground wire
DB	24 V=/2,4 W	FC	FA with light
DC	24 V=/1,8 W	FD	FA with light & ground wire
DD	24 V=/1,0 W	FE	FA with suppression diode
DF	12 V=/5,2 W	FF	FA with suppression diode & ground wire
DG	12 V=/2,4 W	FG	FA with suppression diode & light
DH	12 V=/1,8 W	FH	FA with suppression diode plus light & ground wire
DJ	12 V=/1,0 W	FK	FA with full wave rectifier
DL	120 V=/6,3 W	FL	FA with full wave rectifier & ground wire
2. WIRE LENGTH		*FN	FA with suppression diode plus blocking diode
H-XX X-X XX	WIRE LENGTH	*FP	FA with suppression diode plus blocking diode & ground wire
0	No lead wire (use with "MJ", "MM" & "K" style connectors)	*FR	FA with suppression diode plus blocking diode plus light
A	45 cm = 18"	*FS	FA with suppression diode plus blocking diode & light & ground wire
B	60 cm = 24"	FT	FA with full wave rectifier plus light
C	90 cm = 36"	FU	FA with full wave rectifier plus light & ground wire
D	120 cm = 48"	MA	Solenoid plug-in wire assembly
E	180 cm = 72"	MB	MA with ground wire
F	240 cm = 96"	MC	MA with light
G	305 cm = 120"	MD	MA with light & ground wire
H	366 cm = 144"	ME	MA with suppression diode
3. MANUAL OPERATOR		MF	MA with suppression diode & ground wire
H-XX X-X XX	MANUAL OPERATOR	MG	MA with suppression diode plus light
0	No operator	MH	MA with suppression diode plus light & ground wire
1	Non-locking recessed	MK	MA with full wave rectifier
2	Locking recessed	ML	MA with full wave rectifier & ground wire
3	Non-locking extended	*MN	MA with suppression diode plus blocking diode
4	Locking extended	*MP	MA with suppression diode plus blocking diode & ground wire
4. ELECTRICAL CONNECTION		*MR	MA with suppression diode plus blocking diode & light
H-XX X-X XX	ELECTRICAL CONNECTION	*MS	MA with suppression diode plus blocking diode & light & ground wire
BA	Flying leads	MT	MA with full wave rectifier plus light
BB	BA with ground wire	MU	MA with full wave rectifier plus light & ground wire
BC	BA with light	MJ	Plug-in housing without wire assembly ('MA' option without wire assembly)
BD	BA with light & ground wire	MM	Plug-in housing without wire assembly ('MB' option without wire assembly)
BE	BA with suppression diode	KA	Mini square connector
BF	BA with suppression diode & ground wire	KB	KA with suppression diode
BG	BA with suppression diode plus light	KC	KA with M.O.V.
BH	BA with suppression diode plus light & ground wire	KD	KA with light
*BN	BA with suppression diode plus blocking diode	KE	KA with light & suppression diode
*BP	BA with suppression diode plus blocking diode & ground wire	KF	KA with light & M.O.V.
*BR	BA with suppression diode plus blocking diode & light	KJ	Mini square connector – male only
*BS	BA with suppression diode plus blocking diode & light & ground wire	KK	KJ with suppression diode
BK	BA with full wave rectifier	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	

Note: Blocking diode is located in the lead wire