



Solenoid Valves

for Pneumatics
2 and 3-way mini series

Product Code 91-A

AVS

146-369

DESCRIPTION

3-way, normally-closed, direct-acting solenoid valve for direct control of small single-acting pneumatic devices or for pilot control of larger items such as spool valves etc

The available types are:-

Type A331 Valve with G 1/8" ports (M5 exhaust)

Type AA31 Valve for manifold assembly, complete with O-ring and fixing screws. Inlet G 1/8", outlet and exhaust M5. Manual override fitted.

Type A131 Sub-base valve for use as a direct replacement for 32mm valves used as spool valve actuators.



Parrell Fitting

Type A331



Type AA31

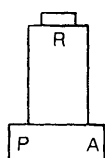


Type A131

TECHNICAL DATA

Valve functions:	3-way, normally-closed, energised to open
Orifice size:	1.5mm (exhaust 1.8mm)
Ports:	G 1/8" or M5 (see description above)
Ambient temp:	-10° to +50°C
Fluid temperature:	Max 50°C
Fluid:	Air only
Pressure rating:	0 to 10 Bar
Standard voltages:	220v, 110v, 24v/50Hz, 24, 12v/DC
Voltage tolerance:	AC : +10% - 15% of nominal DC : +10% - 5% of nominal
Consumption:	AC : 8.5VA/6.5VA DC : 5W
Body:	Brass
Seals:	NBR
Plunger and spring:	Stainless steel
Tube:	Brass
Coil:	Encapsulated in epoxy resin
Duty cycle:	100%, continuous rating
Protection class:	IP 65 (with suitable connector, e.g. mPm 122)

CONFIGURATION

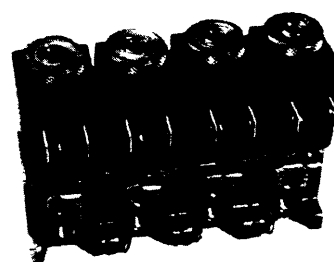


3-way normally closed
P = inlet
A = outlet
R = exhaust

3-way normally open
R = inlet
A = outlet
P = exhaust

HOW TO ORDER

Simply state valve type and voltage/frequency, code, e.g. AA31 - A73 (see overleaf for details). Electrical DIN connectors supplied separately, e.g. mPm 122-09-N



Assembly

DIMENSIONS & SELECTION CHART
See overleaf



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2 & 3-WAY VALVES

SELECTION CHART (22mm Coil)

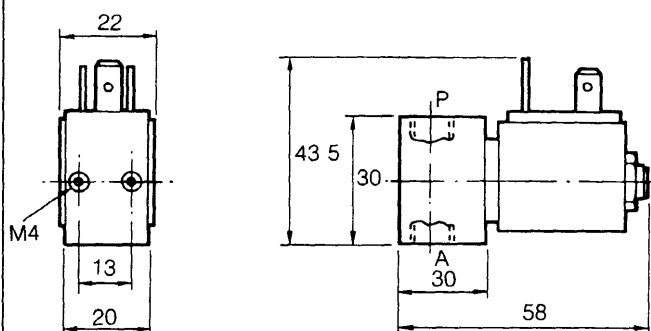
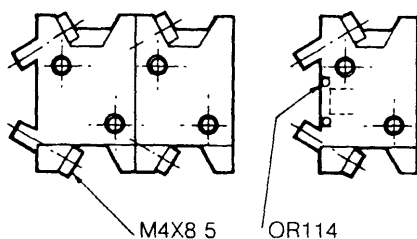
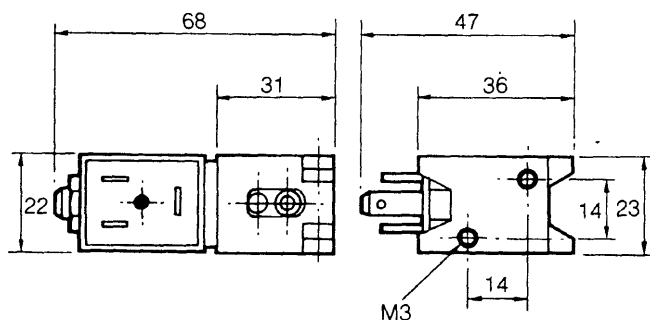
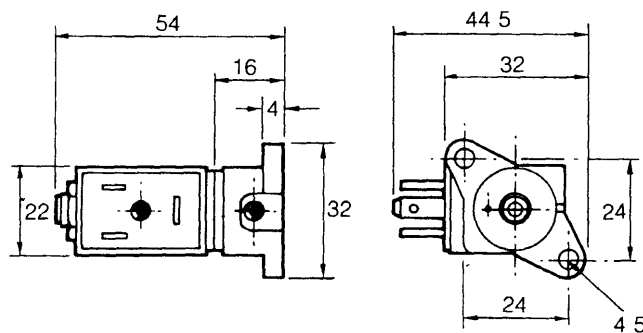
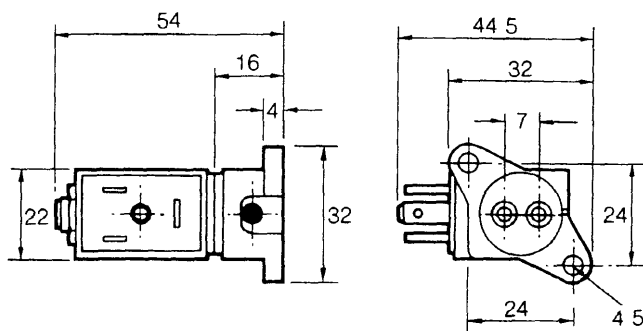
TypeRef	Body Type	Ports	Function	Orifice (mm)	Bar at 80°C
A321-OC2-A70	Ported	M5	2 way NC	1.5	20
A321-1C2-A70	Ported	1/8"	2 way NC	1.5	20
A321-1D2-A70	Ported	1/8"	2 way NC	2	15
A321-1E2-A70	Ported	1/8"	2 way NC	2.5	9
A322-OC2-A70	Ported	M5	2 way NO	1.6	10
A322-1C2-A70	Ported	1/8"	2 way NO	1.6	10
A331-OC2-A70	Ported	M5	3 way NC	1.5	10
A331-1C2-A70	Ported	1/8"	3 way NC	1.5	10
A332-OC2-A70	Ported	M5	3 way NO	1.5	8
A332-1C2-A70	Ported	1/8"	3 way NO	1.5	8
AA31-OC2-A70	Manifold	M5	3 way NC	1.5	10
AA31-CC2-A70	Manifold	4mm	3 way NC	1.5	10
A231-BC2-A70	Sub-base	"B"	3 way NC	1.5	10
A131-AC2-A70	Sub-base	"A"	3 way NC	1.5	10

COIL VOLTAGE CODE

The last three digits of the valve part number refer to the coil assembly, "A7" denoting the standard 22mm coil. The final digit "0" is the general reference and must be replaced by a specific voltage code from the following table:

Voltage	Code
6VDC	1
12VDC	2
24VDC	3

Voltage	Code
24V 50 Hz	B
48V 50 Hz	C
110V 50Hz	D
220V 50 Hz	E
240V 50 Hz	M


A331

AA31

A131

A231



Solenoid Valves

for Pneumatics
3-way G $\frac{1}{8}$ "

AVS

DESCRIPTION

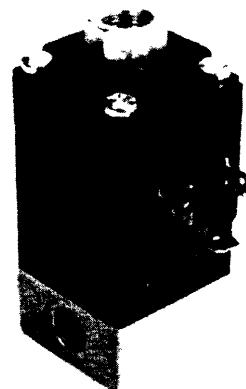
3-way, normally-closed, direct-acting solenoid valve for direct control of small single-acting pneumatic devices, or for pilot control of larger items such as spool valves etc. Our basic versions are available:

Type 638-150-A60 Valve with G $\frac{1}{8}$ " ports

Type 600-450-A60 Sub-base valve with concentric port configuration (e.g. for use with AVS spool valves)

Type 600-457-A60 Sub-base valve with symmetrical ports

Types 638M-101-A60 $\frac{1}{8}$ " Sub-base valve to form manifold
63CM-101-A60 4mm assemblies (outlets: 638M $\frac{1}{8}$ " port, 63CM = 4mm push)



Type 638-150-A60

TECHNICAL DATA

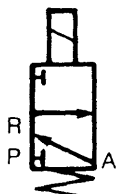
Valve function:	3-way normally closed, energised to open
Orifice size:	2mm
Ports:	G $\frac{1}{8}$ " or sub-base
Ambient temp:	-20°C to +50°C
Fluid temperature:	Max 50°C
Pressure rating:	0 to 10 Bar
Flow rate (air):	200 NL/min
Standard voltages:	220v, 110v, 24v/50Hz, 24, 12v/DC
Voltage tolerances:	AC: +10% - 15% of nominal DC: +10% - 5% of nominal
Consumption:	12 VA, 8W
Materials:	Body: brass Seals: NBR Coil: encapsulated in epoxy resin Other parts: stainless steel
Duty cycle:	100%, continuous rating
Protection class:	IP 65 (with suitable connector), e.g. mPm 182



Type 600-457-A60
& 600-450-A60

CETOP SYMBOL

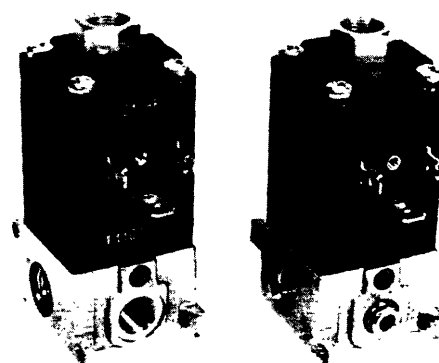
3-way
normally
closed



P = inlet
A = outlet
R = exhaust

DIMENSIONS

See overleaf



Type 638M-101-A60 $\frac{1}{8}$ "
with 63CM-101-A60 4mm

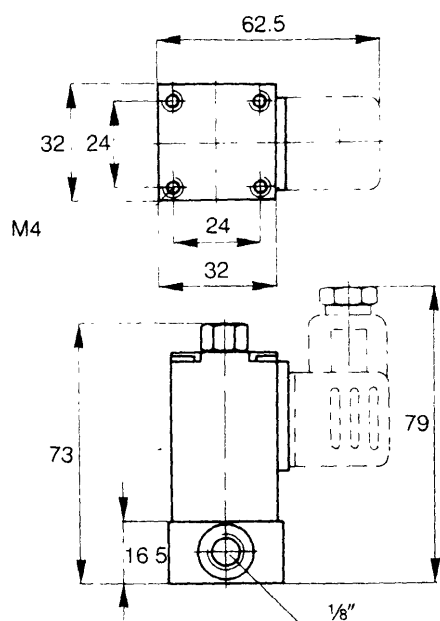
HOW TO ORDER

Simply state valve type and voltage/frequency,
e.g. 638-150-A60-110/50
Electrical DIN connector supplied separately,
e.g. mPm 182-09-N

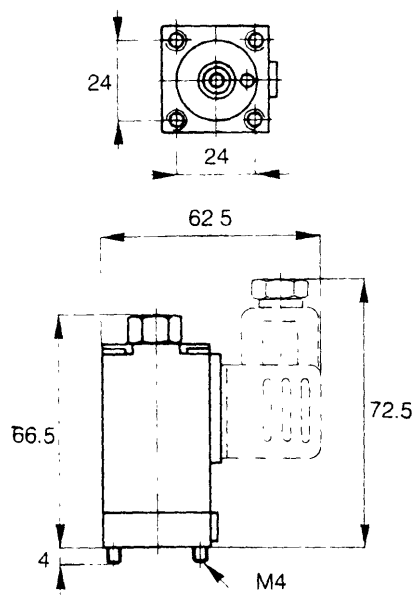


Solenoid Valves

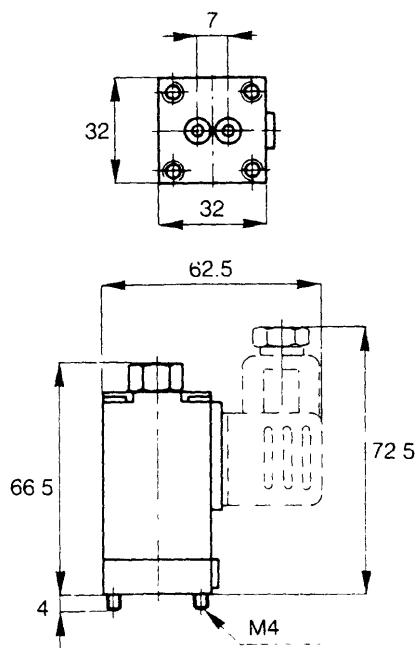
for Pneumatics
3-way / G $\frac{1}{8}$ "

AVS


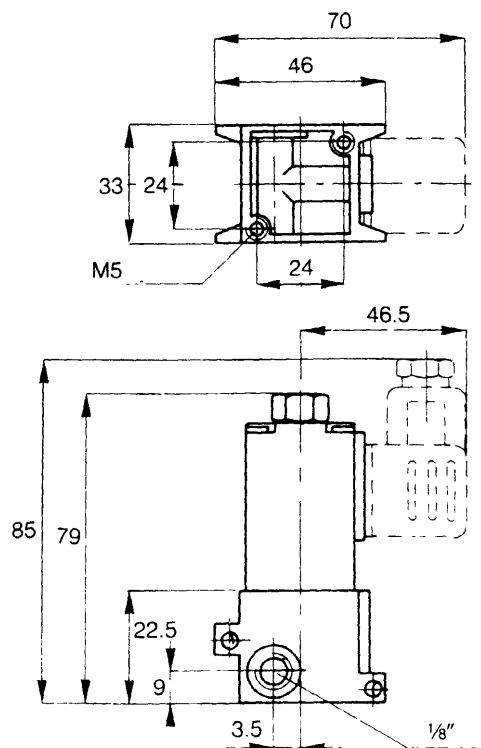
638-150-A60



600-450-A60



600-457-A60

638M-101-A60 $\frac{1}{8}$ " 63CM-101-A60(4mm)