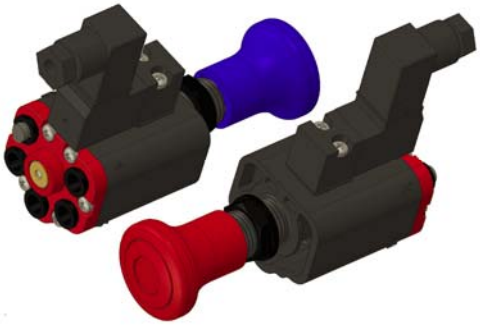
ACV1 Series Panel/Dash Manual Air Control Valves

Panel/dash mounted manually operated 4/2 directional control switch for the operation of single and double acting cylinders. These valves have 6mm or 1/4" Push-in Fitting ports and come as standard with a pneumatic or electric reset facility and control knob indicator as a visual notification that the valve has been operated..

The Manual Air Release (AR): The AR valves require the air signal to be removed/disengaged from the reset port before the valve may be operated. When the reset signal is restored the valve is returned to the closed position and the control knob locked, making it ideal for interlocking with hand-brake air systems for additional safety.
The valve may also be used as a 4/2 valve when no reset signal is required.

The Manual Air Applied (AP) :The AP valves require an equalisng pressure signal to be applied to the reset port before the valve may be operated. In the absence of this signal the valve remains closed and the knob locked. These valves are particularly suited for use in Fuel-tanker discharge systems as Master or Foot-valve controls.



The Electrical Release (SP): The SP valves require an electrical signal to the integral solenoid valve before the valve may be operated. In the absence of the electrical signal the valve remains closed and the control knob locked, making it ideal for interlocking with hand-brake electrical control circuits for additional safety.

Key Features

- Compact
- Non-corrosive
- Indicator Band
- Push-in Fittings
- Ergonomic Actuator
- Safety Interlock Port
- 6mm or 1/4" Tubing Versions

Typical Applications

Mobile

- PTO Actuation (Power Take Off)
- Bottom Loading Tanker Controls
- Construction Equipment
- Lift Gates
- Specialty Truck Equipment
  - Cement Mixers
  - Fire Trucks

Industrial

- Emergency Shut Down Systems
- Pneumatic Control Panels
- Air Compressor Controls
- Test Panels / Benches
- Agricultural Equipment
- Applications for manual operation

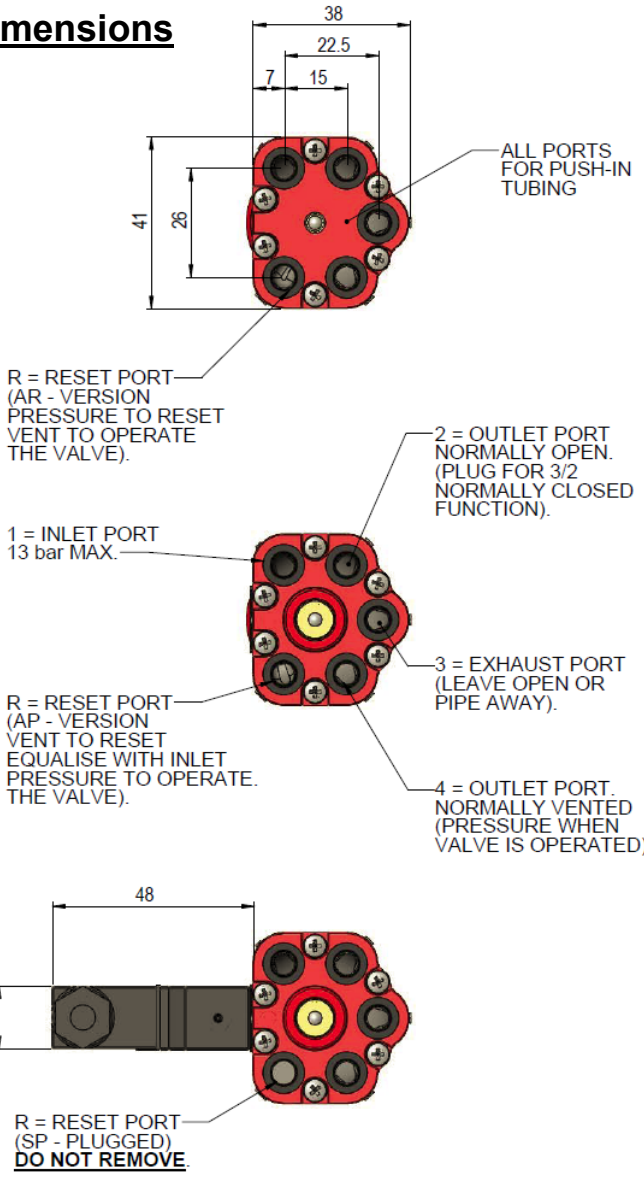
March 21

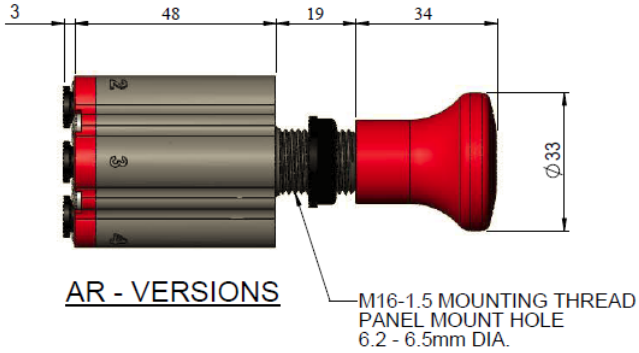
Mead Engineering Services Ltd.
Unit 9b, Parkland Business Centre, Chartwell Road, Lancing, West Sussex, United Kingdom, BN15 8UE
Tel: +44(0) 1903 854625 Fax: +44(0) 1903 851943 Email: sales@mead.co.uk

MEAD ENGINEERING SERVICES LTD

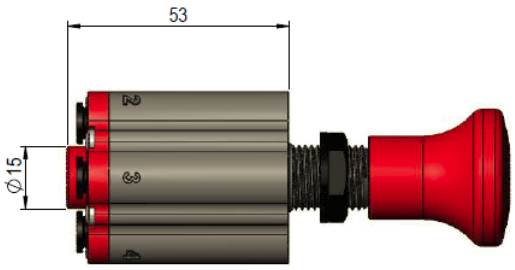
ACV1 Series Panel/Dash Manual Air Control Valves

Dimensions

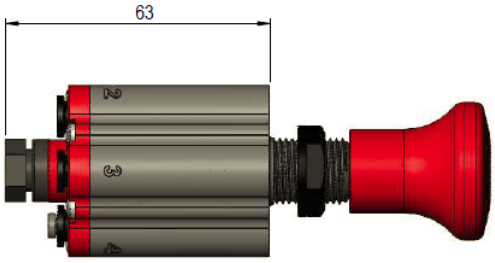




AR - VERSIONS



AP - VERSIONS



SP - VERSIONS

Model codes

ACV1-R 6M-AR

SERIES
ACV1

KNOB COLOUR
R: RED (STD.)
B: BLACK
G: GREEN
A: BLUE
Y: YELLOW

PORT SIZE
6M: 6mm PIF
25: 1/4" PIF
(PUSH-IN FITTING)

RESET PORT (TO OPERATE)
AR: AIR RELEASE (VENTED)
AP: AIR APPLIED (EQUAL P1 PRESS.)
SP-B: SOLENOID 24VDC
SP-A: SOLENOID 12VDC
(COILS NOT POLARITY SENSITIVE)

Kit OF PARTS
CAN BE MADE TO ORDER
ACCORING TO REQUIREMENTS

March 21

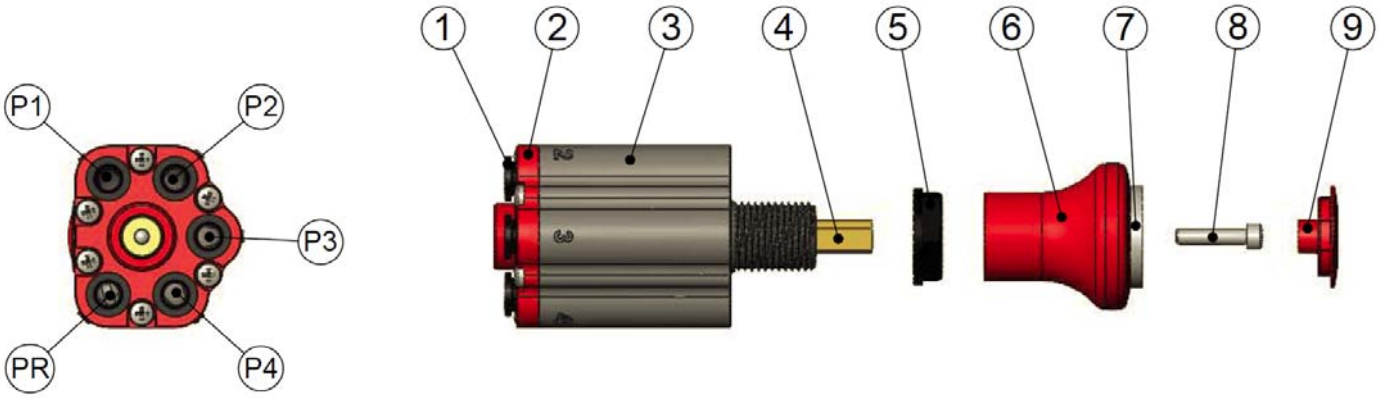
Mead Engineering Services Ltd.
Unit 9b, Parkland Business Centre, Chartwell Road, Lancing, West Sussex, United Kingdom, BN15 8UE

Tel: +44(0) 1903 854625 Fax: +44(0) 1903 851943 Email: sales@mead.co.uk

MEAD ENGINEERING SERVICES LTD

ACV1 Series Panel/Dash Manual Air Control Valves

Installation Information



Fitting Switch into Dashboard or Panel

1. Remove the Cap (9) from the Knob (6) using the edge slot in the Cap.
2. Undo the SHC Screw (8) using the supplied Allen Key.
3. Remove the Knob (6) and the hexagon Nut (5).
4. Fit into panel Hole (16.2 -16.5mm Dia.) and install the Nut (5).
5. Replace the Knob (6), aligning the 'D' slot with the Spool (4).
6. Tighten the SHC Screw (8) and replace the Cap (9).
7. Connect the air lines as follows (6mm or 1/4" Push-in Ports):-
Port 1= Dry Air Supply (13 bar Max).
Port 2 = Plug or connect to PTO cylinder disengage. This port is pressurised when the Knob is closed.
Port 3 = Exhaust. Leave open or piped away.
Port 4 = To PTO cylinder engage. This port is pressurised when the Knob is operated.
Port R = Air Reset (AR) requires pressure to close the Knob or leave open if **not** required.
Air Applied (AP) requires pressure at the P1 level to operate the Knob.
Solenoid Pilot (SP) is factory plugged and the plug should not be removed.
8. For ACV1-R6M-SP-B (A) versions connect the electrical connector pins 1 & 2 to a 24VDC (12VDC) signal to operate the Knob (not polarity sensitive). Removing the electrical signal closes the Knob

Technical Information

1. Media: Dry air to 13 bar (188psi) Max.
2. Min. Pressure to Reset Port: 3 bar (44psi).
3. Flow: 4.4 Kv / 0.3 Cv.
4. Neck Dia.: 16mm (5/8") M16-1.5 Thread
5. Body (3): Nylon PA12.
6. End Cap (2): Nylon 6
7. Spool (4): Brass.
8. Knob, Cap and Indicator (6,7,9): ABS.
9. Knob Spring and Screws: Stainless Steel.
10. Fittings: Push to Connect 6mm or 1/4".
11. Collets (1): Acetal Copolymer
12. Seals: Nitrile.
13. Temperature: -20° to 50°C (-4° to 122°F).
14. Coil Voltage: 24VDC (standard) & 12VDC
15. Coil Power Consumption: 2.5W
16. Retaining Nut (5): PA6

Mead Engineering Services Ltd.
Unit 9b, Parkland Business Centre, Chartwell Road, Lancing, West Sussex, United Kingdom, BN15 8UE
Tel: +44(0) 1903 854625 Fax: +44(0) 1903 851943 Email: sales@mead.co.uk

MEAD ENGINEERING SERVICES LTD