

ITV1-AOxx Internal Valve

Liquip's 25mm ITV1-AOxx series of internal valves are typically used for Aviation applications. They are normally installed in the bottom of aviation tankers as the intermediate valve.

The ITV1-AO 25mm internal valve with integral elbow, has been designed for use on aircraft refueller tankers which have small sample or drain lines

Features and Benefits

- Normal fitting in the sump is a 25mm BSP socket.
- Flow is outwards only.
- The elbow incorporates a shear groove above the pipe attachment aperture to ensure a breakaway (in the event of damage) at that point.
- Valve poppet, spring and shaft are all attached above the shear point to ensure the continued containment of product in the tank.
- In the event of fire the air line will soften at 80°C and release any air in the systems and close the poppet.



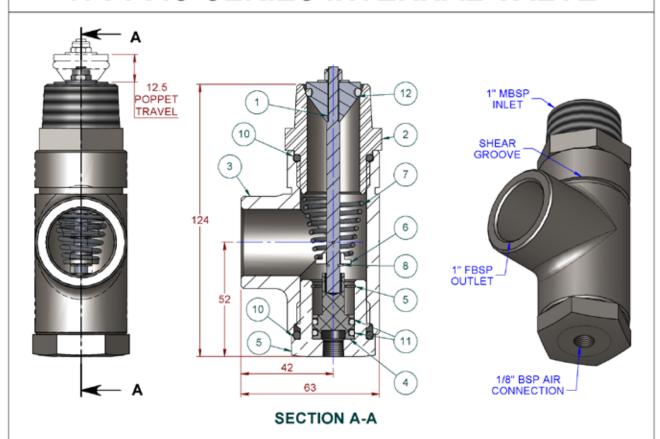
Technical Information

| Size | 25mm bore | | | | |
|-----------------------------|--|--|--|--|--|
| Seal Temp | seal options include Viton A or Viton GFLT (low temp) | | | | |
| Operation | The poppet is pushed upwards by a piston when air is supplied to the air inlet at the base of the valve. | | | | |
| Opening Air Pressure | A minimum of 350kPa of air pressure is required to open the valve fully. | | | | |
| Dismantle | Seals can be easily removed and replaced: Poppet seal: unscrewing the valve seat from the body Piston seal: unscrewing the cylinder end. | | | | |
| Mounting | Screw into 1" BSP socket. With 1" BSP outlet port and 1/8" BSP air inlet port. | | | | |
| Servicing | No routine maintenance required. | | | | |
| Materials | Aluminium poppet. Nickel plated body and valve seat Viton poppet and piston seals. Acetal piston. | | | | |
| Weight | 0.9Kg. | | | | |

Ordering Information

- ITV1-A0: 25mm Internal valve air operated (Viton A).
- ITV1-A0VG: 25mm Internal valve air operated (Viton GFLT).

ITV1-AO SERIES INTERNAL VALVE



- MAINTENANCE NOTES:

 1. PRIOR TO FITTING O-RINGS. ENSURE THAT SEALING FACES ARE FREE FROM BURRS AND SHARP EDGES.

 2. APPLY SMEAR OF MOLYKOTE (3452) GREASE TO ALL O-RINGS ON ASSEMBLY.

 3. CHECK THAT CLEARANCE EXISTS BETWEEN POPPET STEM & PISTON SO THAT POPPET O-RING SEATS FULLY.

| ITEM | PART No | DESCRIPTION | ITV1-AO | ITV1-AOVG | MATERIAL |
|------|---------|-----------------------|---------|-----------|------------|
| 1 | ITV1-1 | POPPET AND SHAFT ASSY | 1 | 1 | ALUMINIUM |
| 2 | ITV1-2 | SEAT VALVE 25mm ITV | 1 | 1 | N/P STEEL |
| 3 | ITV1-3 | BODY INTERNAL VALVE | 1 | 1 | N/P STEEL |
| 4 | ITV1-4 | PISTON AIR | 1 | 1 | ACETAL |
| 5 | ITV1-5 | CYLINDER AIR | 1 | 1 | N/P STEEL |
| 6 | ITV1-6 | SPRING RETAINER | 1 | 1 | ST STEEL |
| 7 | 4411 | SPRING COMPRESSION | 1 | 1 | ST STEEL |
| 8 | 4517 | E-CLIP METRIC | 1 | 1 | ST STEEL |
| 9 | 1143 | CIRCLIP INTERNAL | 1 | 1 | ST STEEL |
| 10 | 0171 | O-RING | 2 | 2 | NITRILE |
| 11 | 0288 | O-RING | 2 | - | VITON A |
| | 0288VG | O-RING | - | 2 | VITON GFLT |
| 12 | 0252 | O-RING | 1 | - | VITON A |
| | 0252VG | O-RING | - | 1 | VITON GFLT |
| 13 | 6426 | ITV1-AO INSTALLATION | 1 | 1 | PAPER |