AL: Air-lock 101 Device

The Air-Lock pressure static device is composed of a TP Pneumatic pressure switch combined with 2 x 3 way valves ND 1/4” in a single body. The Air-Lock pressure static device is mounted on pneumatic actuators when they need to be isolated from control devices (for example: positioners or electro-pneumatic distributors) in the event air pressure falls below the pre-determined operating safety point. The Air-Lock device consists mainly of a pneumatic pressure switch with an adjustable set point. This device synchronously drives the 2 x 3 way valves. The switching device operates immediately, even in the case of a gradual air-pressure decrease to the set value. The device will automatically reset after a failure when the line pressure is 1 bar greater than set pressure, to avoid instability around the device set point.

Small and lightweight

Key features

> Suitable for:
  - Standard, offshore, sandstorm and copper-free ambient conditions.
  - Single and double acting actuators.
  - Low and high ambient temperature.

> Exclusive STI design for double 3 way valve in one body, to reduce assembly time, space and cost

Benefits

> Accurate pressure setting

> Set screw lockable with nut

> Insensitive to vibrations

> Reset hysteresis with established safety

> Synchronous drive for set pressure group + 2 x 3 way valve in one body

> Small dimension and light weight

Aluminium (left) Stainless steel 316 (right)

Technical specifications

Materials
Anodized aluminium
Stainless steel 316

Operating temperature*
-20ºC to 70ºC (-4ºF to 158ºF)
-40ºC to 70ºC (-40ºF to 158ºF)
-20ºC to 85ºC (-4ºF to 185ºF)

Feeding connections
1/4” NPT

Pilot signal connection
1/8” NPT

CV max
Inlet = 1
Outlet = 1

Operating pressure
Design = 10 bar
Operating = 7 bar
Minimum operating = 2 bar

Output connections
1/4” NPT

Weight
Aluminium = 1kg
Stainless steel 316 = 2.5kg

* Lower or higher temperature available on request

Dimensional drawing