UD: Derivative Unit

The Derivative Unit (model UD) is a specific device to amplify the exhaust. The regulating system is specifically designed for modulation and allows an accurate calibration (tuning) to maximize speed without compromising the stability of the actuator. Designed to be used with precision and easy tuning in control systems (amplification of exhaust positioner flow) and also for on/off systems.

Aluminium manifold mounting

Key features

Exclusive manifold mounting system. It is a special STI application to connect our accessories. Fittings or nipples are not necessary as the connection is achieved using machined connection faces with sealing 'o' ring. This system saves time for assembly, reduces cost on items such as fittings, reducing inventory and the shortened dimensions save space.

- Standard, offshore, sandstorm, copper free ambient condition
- Single and double acting actuators
- Low and high ambient temperature

Benefits

- High sensitivity
- The specific design allows for accurate regulation of activation on modulating systems
- Activation system available in 2 versions for pilot
- CV flow between 0.1 and 0.8 and for pilot CV flow between 0.8 and 2.5
- High exhaust CV
- Collectable exhaust ND 3/4" NPT
- Regulation system available to modulate exhaust CV between 0 and 3.8
- Adjustable every 90° actuator connection design
- Full tight zero leakage
- Regulation screw cannot be ejected by internal air pressure

Stainless steel 316 manifold mounting

Technical specifications

Housing 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)

Exhaust connections
3/4" NPT

Pilot signal connection
1/2" NPT

CV max
Exhaust = 3.8

Operating pressure
P min = 3 bar
P max = 7 bar
Design pressure = 10 bar

Actuator connections
Manifold mounting
1/2" NPT

Weight
Aluminium = 1kg
Stainless steel 316 = 2.7kg

* Lower or higher temperature available on request

Dimensional drawing