

# 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.

## 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.

- > Suitable for:
  - Standard, offshore, sandstorm and copper-free ambient conditions
  - Single and double acting actuators
  - Low and high ambient temperature
- > Collectable exhaust ND 3/4" NPT



Aluminium manifold mounting

## 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
- > 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\*

-20°C to 70°C  
-40°C to 70°C available on request  
-20°C to 85°C available on request

### 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

