

Scotch yoke actuator PH & Compact series



We have extensive experience in the design and manufacturing all types of scotch yoke actuators for on/off or emergency shut down and blowdown services. The scotch yoke design provides peak torque at the break and end point of the stroke, ensuring maximum reliability and is available in both symmetric and canted designs to meet specific application requirements.

The scotch yoke mechanism is fully contained within housing which is designed and tested against full differential pressure. To minimize cost and weight, actuators have a modular construction. The hydraulic/pneumatic cylinder and the spring cartridge can be connected to the left or to the right side of the housing to fit with the specific fail-safe action.

Velan ABV has a dedicated line of heavy-duty single-acting compact actuators containing a cylinder assembly and spring for high performance.

Specifications

Design	As per API 6DX, EN15714 As per ASME VIII
Mode	On/off Fast shutdown and blowdown
Temperature range	Standard: -20 to 212°F (-29 to 100°C)
Design pressure	Pneumatic cylinder: Up to 12 barg Hydraulic cylinder: Up to 210 barg
Torque range	Compact size: up to 2500 Nm Standard size: up to 650000 Nm
Supply media	Instrument air Nitrogen Sweet gas
Types available	Pneumatic single and double acting Hydraulic single and double acting

Application

- Offshore
- Process
- Pipelines

Testing & certification

- IP66 per EN60529 (IP68 on request)
- Compliance with PED 97/23/EC
- Compliance with ATEX
- SIL Certification