

# rotork®

## MIDLAND

The all new *SMART-LOC™* is a high integrity modular pneumatic actuator control assembly in 316L stainless steel, used for the control and sequencing of process valve actuators on oil and gas platforms / pipelines.

Whether it be a standard shut off circuit or an intricate control system, the new *SMART-LOC* can be tailored to meet the requirements of your project.

### Features and Benefits

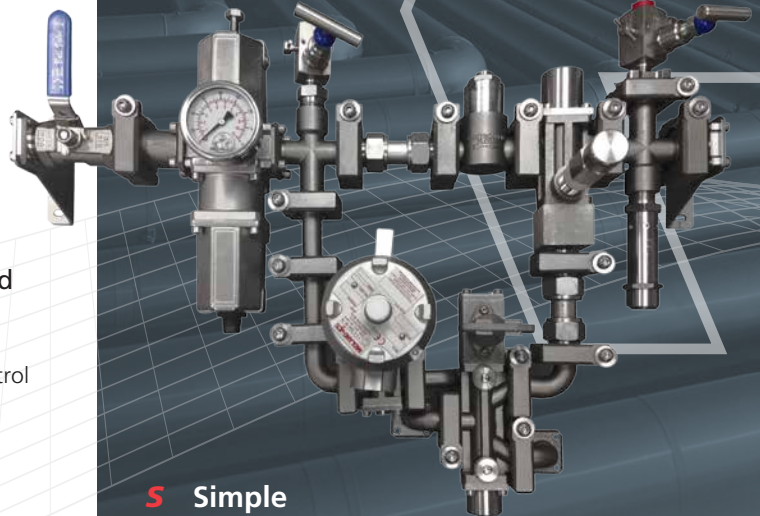
- Lower installed cost
- Lighter overall package
- More compact configurations
- Best in class flow capacities
- Easier maintenance clamp system
- Easier installation
- Broader configuration range
- Higher integrity from static o-ring seals
- No pipes and fittings
- Simpler auxilliary removal - tanks, gauges etc.

### Simpler Design

Lighter, stronger and more compact than panel mounting and existing manifold products and incorporating the simple new clamping method, *SMART-LOC* provides a significant reduction in total installed cost in both OPEX and CAPEX over panel mounted assemblies.

### Simpler Maintenance

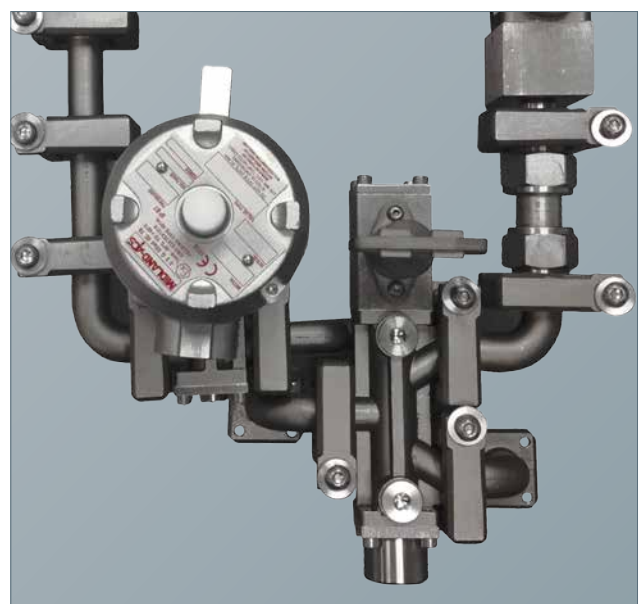
Field maintenance is simple with the new *SMART-LOC* clamping method. Individual components can be quickly unclamped and replaced in the field for years of easy service.



**S** Simple  
**M** Modular  
**A** Actuator  
**R** Ready  
**T** Technology

# SMART-LOC™

Modular Pneumatic  
Actuator Control Assembly



*Innovative clamping mechanism means quicker and simpler assembly and maintenance*

## Redefining Flow Control

# rotork<sup>®</sup>

## MIDLAND

### SMART-LOC<sup>™</sup>

#### Tighter Sealing Capability

The all new SMART-LOC incorporates o-ring sealed faces for higher integrity sealing surfaces and interfaces. This new system means that SMART-LOC will not leak, even under the harshest field conditions.

#### Broader Configuration Range

New SMART-LOC dedicated components and proven valves (spool, poppet or direct acting), combine with our market leading filter regulators to allow Rotork Midland to offer both standard and the most complex of circuits. Incorporating standard length components, the manifold can be designed to suit the actuator.

#### Lower Installed Cost

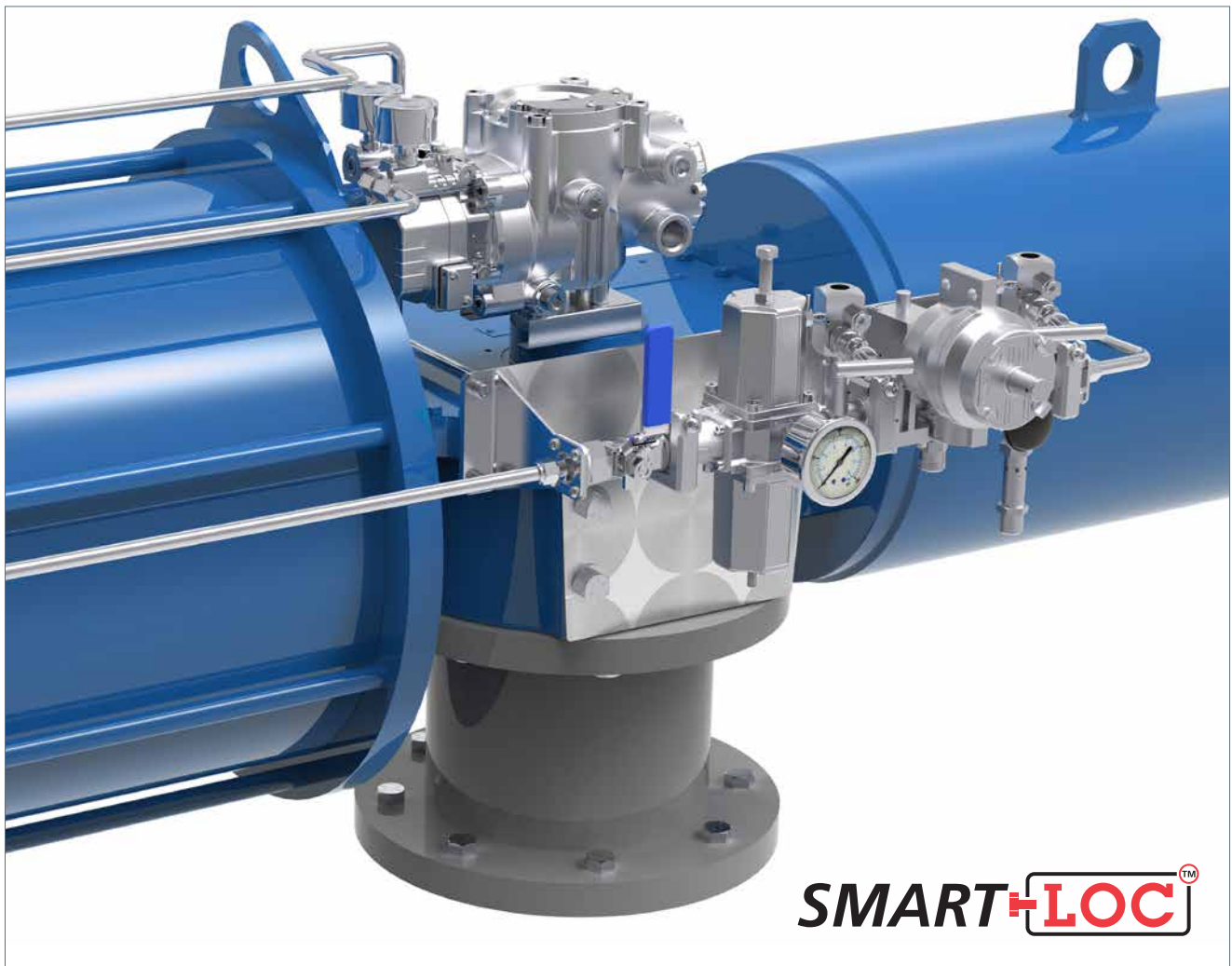
With its smaller footprint, the SMART-LOC modular system does away with complex labour intensive arrangements using panels, piping and additional fittings.

#### Easier Installation

Each unit is supplied assembled and tested, ready to fit and operate. No design work is required from the contractor and all components are kept in stock resulting in very short lead times. SMART-LOC components are ideal for both hazardous areas and industrial use, with all relevant regional approvals. Units will interface with all global pneumatic actuators.

#### The Market Leader

Rotork Midland has over fifty years experience in stainless steel and pneumatic component manufacturing which has resulted in a market leading range of field proven, specialist products, renowned for their performance and reliability.



Redefining Flow Control

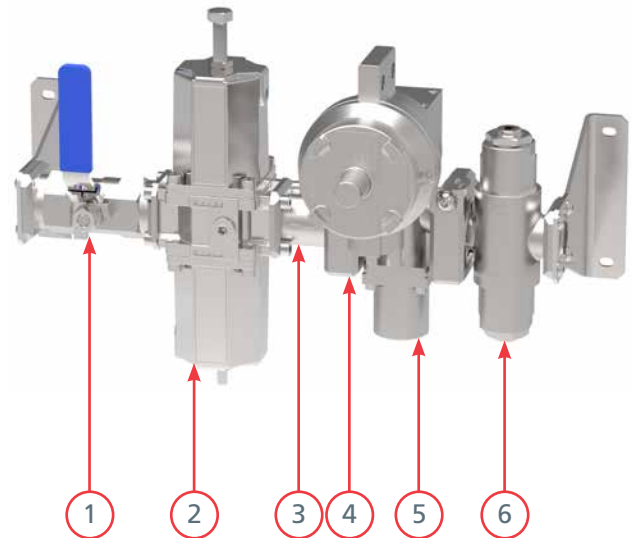
### SMART-LOC Typical Manifold Configurations

#### SMART-LOC SM4 Style

Integrated components of the manifold include:

- 1 Isolation ball valve
- 2 Manual drain filter regulator
- 3 Non-return valve
- 4 SMART-LOC speed clamping system
- 5 Solenoid pilot operated 3/2 spool valve (spring-return)
- 6 Bi-directional speed regulator

The SMART-LOC SM4 supplies filtered regulated air to a single acting actuator. A solenoid valve controls application of the air to the actuator (supply of pressure or vent to exhaust), and the speed regulator allows adjustment of forward and exhaust air flow rates to achieve required open / closing speeds.

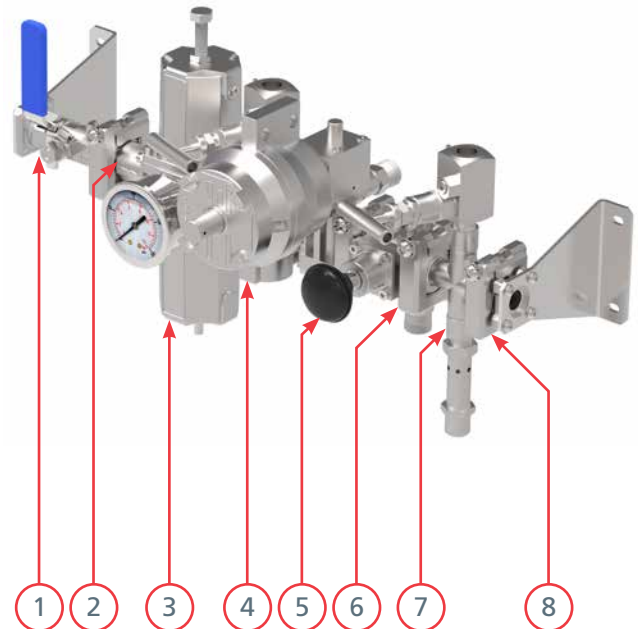


#### SMART-LOC SM7 Style

Integrated components of the manifold include:

- 1 Isolation ball valve
- 2 Double non-return valve
- 3 Manual drain filter regulator with gauge
- 4 Instrument take off with block & bleed
- 5 Solenoid pilot operated 3/2 spool valve (spring-return) with adjustable exhaust flow regulator
- 6 Pad operated 3/2 spool valve with detent (padlockable) with adjustable exhaust flow regulator
- 7 Instrument take off with block & bleed, relief valve
- 8 SMART-LOC speed clamping system

The SMART-LOC SM7 supplies filtered regulated air to a single acting actuator; the solenoid valve controls application of air to the actuator (supply of pressure or vent to exhaust), the pad valve provides an override for exhaust/isolation function. Exhaust flow regulators allow independent adjustment of closing speed of actuator when commanded by solenoid valve or pad valve.



**rotork**<sup>®</sup>  
**MIDLAND**

**SMART-LOC**<sup>™</sup>

Modular Pneumatic Actuator Control Assembly

A full listing of the Rotork sales and service network is available on our website.

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