

# VALVE ACTUATION

## PRODUCT DESIGN DATA

Pressure	DN25mm – DN100mm
Temperature	API2000
Media	0.4 – 20bar
Construction	-10°C – 60°C
Material	Super duplex, Titanium, Stainless Steel, 6MO, Hastelloy, Monel, Inconel, Ali bronze
Drive Shaft	Carbon Steel
Finish	Two coat polyurethane
Rotation (Standard)	Counter-clockwise to open with port "A" pressurised Spring return Actuators air fail to close clockwise
Movement (Standard)	91.5°C from -0.5°C to 91° counter-clockwise
Lubrication	Factory lubricated for the normal life of Actuators
Life	500,000 operations minimum

## BENEFITS OF SUPPLYING WITH FACTORY FITTED ACTUATORS

- Significantly reduces cost
- Saves time
- Excellent lead times
- Factory tested, ready for immediate installation
- Full manufacturers warranty for valve and actuator system



## EL-O-MATIC/INTERVALVE ACTUATORS

Frenstar offer an extensive range of pneumatic, electric and hydraulic actuators with accessories:

- Single Acting Spring Return
- Double Acting
- Pneumatic Type
- Hydraulic Type
- Electric Type

Frenstar can supply Butterfly valves complete with factory fitted pneumatic EL-O-Matic/Intervalve actuators. EL-O-Matic Pneumatic actuators are powerful and compact double rack and pinion units for use with ball, butterfly and plug valves and any device requiring accurate and dependable quarter turn rotary motion.

EL-O-Matic's patented 3 point piston support provides a tough reliable unit for the automation of today's high performance industrial valves. Safety features include an anti-blow out spindle and a spring retaining system which ensures no spring tension on disassembly.

**'E' Series** actuators incorporate a body of cast aluminium and have pistons where the rack teeth are precision machined onto the aluminium casting. Spring return versions have a maximum of 6 springs, 3 in each end cap assembled as a concentric stack.

**'P' Series** actuators cover the large end of the torque range. These all incorporate a body of cast aluminium and have steel for the rack on pinion drive. Spring return versions have a maximum of 14 springs 7 in each end cap assembled within a hexagon pattern.

### Options:

- Double Acting Actuator
- Single Acting Actuator
- Actuator with carbon steel housing for offshore/arduous duties
- Actuator with 180° rotation
- Three position Actuator
- Limit stops in the end caps
- Limit stop with Limit stop plate
- Actuator with  $\pm 3^\circ$  extra travel
- Full system supply including switchboxes, solenoid valves, positioners etc.