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ISO 9001

# spirax/sarco

TI-P358-09

CH Issue 2

## EL5650 Series Electric Actuators for DN125 to DN200 Valves

### Description

The EL5600 series electric actuators are reversible having linear output.

### Available types

The actuators are available with 3 supply variants, 230 Vac, 115 Vac and 24 Vac. The standard version is suitable for VMD (Valve Motor Drive) input power signal. If required the actuator can be fitted with a positioner input card that can accept (4 - 20 mA or 2 - 10 Vdc) control signals.

All the actuators are fitted as standard with 1 k $\Omega$  potentiometer. This can either be used in conjunction with the positioner for 2 - 10 V or 4 - 20 mA input signals, or as feedback for VMD. Also available are auxiliary limit switches and anti-condense heater. See TI-P358-06 for further details on the accessories.

These actuators can be used with the following valves, in conjunction with a mounting flange EL5973 and valve adaptor EL5946.

**2-port** DN125, DN150 and DN200 KE43 and KE73

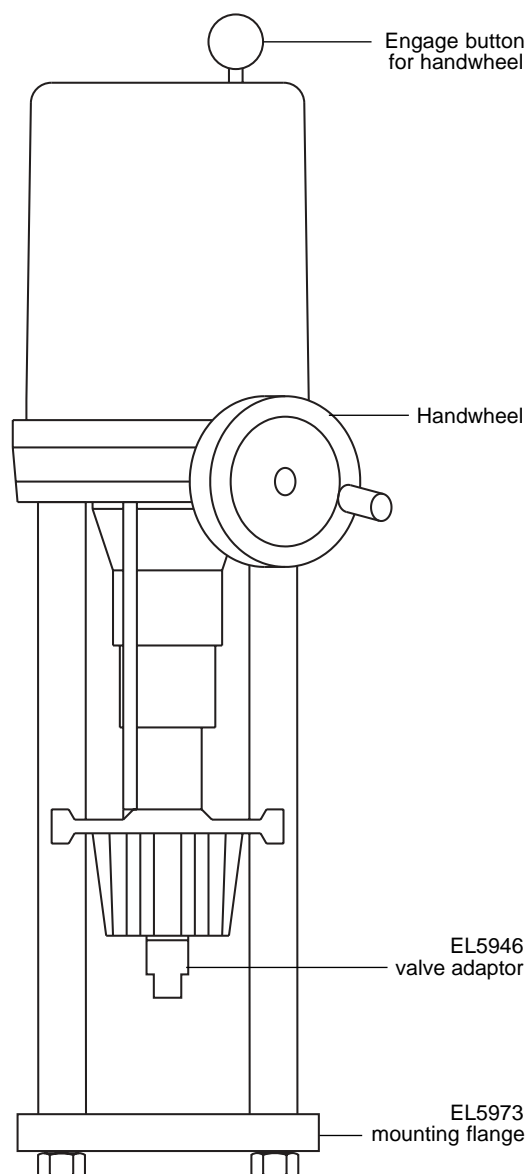
**3-port** DN125, DN150 and DN200 QL43 and QL73

### Technical data

Model	EL5651	EL5652	EL5653
Supply voltage	230 Vac	115 Vac	24 Vac
Supply frequency Hz	50 / 60 Hz		
Power consumption	142 VA		
Enclosure rating	IP65		
Actuator speed mm/s	1 mm/s		
Actuator thrust	25 kN		
Ambient limits	-20 to +60°C (-20 to +50°C with positioner card fitted)		
Motor	Asynchronous capacitor reversing motor		
Terminations	1.5 mm <sup>2</sup>		
Manual override	Handwheel		
Conduit entries	3 x PG16		
Positioner power consumption	1 VA		

### Approvals

This equipment is CE marked, and conforms to EN 50081-1 and EN 50082-2 (EMC), EN 61010-1/A2 (Safety), following the provisions of directives 89/336/EEC amended by 92/31/EEC and 93/68/EEC (EMC) and 72/73/EEC amended by 93/68/EEC (LVD).



## EL5650 actuator maximum differential pressures in bar KE / QL valves

Valve size	DN125				DN150				DN200			
Travel (mm)	50	30			50	30			50	30		
Valve seat sizes	Full K <sub>VS</sub>	Reduced K <sub>VS</sub>			Full K <sub>VS</sub>	Reduced K <sub>VS</sub>			Full K <sub>VS</sub>	Reduced K <sub>VS</sub>		
		No.1	No. 2	No. 3		No.1	No. 2	No. 3		No.1	No. 2	No. 3
Maximum $\Delta P$ in bar	16.2 (15.8)	24.6 (24.1)	38.0 (37.2)	40.0 (40)	11.1 (10.9)	16.2 (15.8)	24.6 (24.1)	38.0 (37.2)	6.2 (6.1)	11.1 (10.9)	16.2 (15.8)	24.6 (24.1)

**Note:** Differential pressures are shown in brackets for a valve with high temperature graphite stem sealing. Actuators should be sized against K<sub>VS</sub> rather than valve size.

### Selection example

Control valve	DN150 KE43 2-port valve
Maximum $\Delta P$	8 bar
Electrical supply	115 Vac
Control signal	4 - 20 mA
Actuator selected	EL5652
Positioner required	EL5962
Valve adaptor	EL5946
Mounting flange	EL5973

### Dimensions (approximate) in mm

Weight 20 kg

