

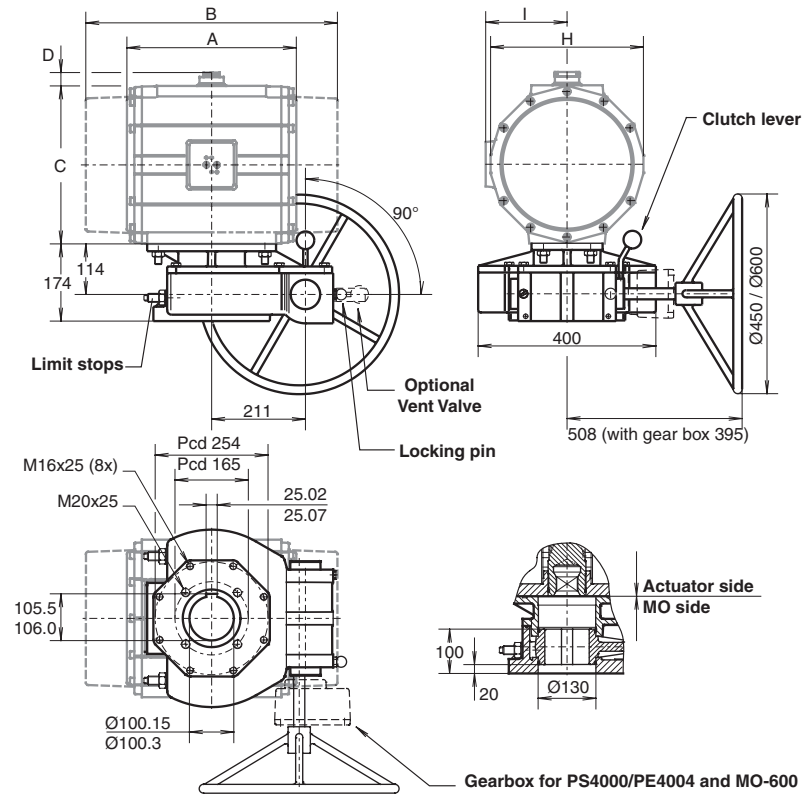
# Data sheet

Sheet No.: 3.402.4 Rev. B

Date: July 2017

## EL-O-MATIC ACTUATOR WITH MANUAL OVERRIDE

## MO-520/600



### Description

The El-O-Matic MO Series declutchable gear operators offer simple and reliable manual positioning of valves, dampers and other quarter-turn devices when overriding, existing pneumatic or hydraulic rotary actuators. All El-O-Matic MO-units are suitable for indoor and outdoor use and combine rugged construction, light weight and modular design to provide the most efficient and cost effective solution to a full range of manual override requirements. The self-locking bronze on high-grade aluminium worm gear design means safe and easy operation, positive manual positioning and extremely long life. The El-O-Matic override can be adapted to any quarter-turn actuator and may even be installed in the field on existing valves.

### Operation

To engage manual operation, first pull the spring loaded locking pin, then rotate the clutch lever clockwise until the clutch lever re-engages. Anticlockwise lever movement disengages manual operation and returns the system to automatic operation.

**Note:** When under manual control, the valve remains locked in the last set position.

### Stroke adjustment

The MO gearbox is equipped with two stroke adjustment bolts. These must be set for accurate valve positioning and to avoid damage to the actuator or valve spindle during manual operation. The limit stops on actuators are redundant in combination with MO-gearboxes. For stroke angle less than 80° please consult our engineering department.

### Identification

For basic override : MO-520 and indication of actuator size, e.g.: MO-520 for P2500 or MO-600 for PS4000  
 For complete assemblies : P2500+MO-520 or PS4000+MO-600

### Assembly codes

A - Standard.  
 B - Reversed operation : handwheel on the other side (factory option).

### Specification

Body : Cast aluminium  
 Drive sleeve / gear quadrant : Cast iron \ bronze  
 Worm : Steel  
 Shaft : Stainless steel (AISI 430F)  
 Temperature : -20°C to +80°C  
 Stroke adjustment : +5° and -5° from each end  
 Movement : 0° - 90°  
 Finish : Two part polyurethane coating  
 Fasteners : Stainless steel

### Input / Output

		MO-520	MO-600
At rim	No. of turns	22	48
	Max. input force	400 N	180 N
At output shaft	Max. output torque	5200 Nm	6000 Nm
	Weight	36 kg	38 kg

### Optional

Electric position indication and vent valves (see data sheet 3.403)

Dim. in mm.	MO-520			MO-600
	ED1600	PD2500	PD4000	PS4000
	ES1600	PS2500		
<b>A ED</b>	520	378	502	-
<b>B ES</b>	641	570	-	834
<b>C</b>	297	356	380	380
<b>D</b>	30	30	30	30
<b>H</b>	265	350	380	380
<b>I</b>	142	185	200	200
<b>Handwheel dia.</b>	450	450	600	450

# EL-O-MATIC™