

## TYPE 2222

### DATA SHEET

#### Description

The REGULATEURS EUROPA 2222 actuator is a proportional actuator in which the output shaft position is proportional to the electric input signal.

The actuator has many parts in common with our 1800 series hydraulic servo governor and like the 1800 hydraulic servo governor, it has a two stage high stiffness, backlash free hydraulic servo mechanism, enabling the best possible control to be obtained on engines having fuel control systems with large stiction forces.

A booster unit can be supplied for application where minimal starting air consumption is required.



#### Specification

##### Actuator drive speed

Speed range at rated engine speed - 900 to 1200 rev./min.

Output shaft movement 40° (maximum) with 24° or greater to be used from no load to full load.

##### Stalled work capacity

60 ft lbf (81 Nm)

80 ft lbf (108 Nm)

##### Output torque

90 ft lbf (122Nm)

120 ft lbf (163 Nm)

#### Features

60 or 80 ft lbf (81 or 108 Nm) work output within the same external dimensions, plus other common design features, give maximum application flexibility to suit all prime mover duties

Drive speed, drive shaft, base mounting, common to both models

Base adaptors and drive shafts available to suit mountings engineered for other manufacturers governors, these factors contribute to lower engine design and production costs

### Servo oil pressure

200 lbf/in<sup>2</sup> (13.8 bar)

265 lbf/in<sup>2</sup> (18.3 bar)

Output is proportional to an input signal of 0 to 1 amp (nominal).

250 mA at position 2 (recommended full speed no-load position).

750 mA at position 8 (recommended full speed full-load position).

Open loop positional tolerance approximately  $\pm 1.5\%$  FSD.

#### NOTE:

*The load on the actuator should not exceed 60 % of the above stalled torque and work capacity figures to cover conditions when one or more fuel pumps are seized.*

### Oil supply

Self contained 4.25 litres

### Output shaft dimensions

7/8 in nominal diameter, 48 SAE serrations, both sides of actuator.

### Drive shaft dimensions

1/8 in nominal diameter, 48 SAE serrations, standard.

Alternatively 5/8 in nominal diameter with 3/16 in x 3/16 in key.

### Rotation

Either clockwise or counter-clockwise.

### Weight

114 lb (52 kg)

### Oil cooler

An oil cooler may be required when operating in an ambient temperature in excess of 40 °C.

#### NOTE:

*Oil cooler to be mounted on governor. Cooling media can be fresh or salt water or engine oil providing latter does not exceed 50 °C.*

Flow rate approximately 5 litres/min water, 10 litres/min oil.

Power to drive actuator (at 1000 r/min actuator drive speed).

60 lbf ft work output -0.50 hp (0.37 kW).

Input torque 2.62 lbf ft (3.54 Nm).

80 lbf ft work output -0.75 hp (0.56 kW).

Input torque 3.5 lbf ft (4.74 Nm).

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