Ballhead hydraulic servo actuator

TYPE 2231

DATA SHEET

Description

Work output 8, 15, 25, 34 or 40 ft lbf (11, 20, 34, 46 or 55 Nm)

The REGULATEURS EUROPA 2231 actuator is a proportional actuator in which the output shaft position is proportional to the electric input signal. Included within the same unit is a conventional ballhead hydraulic governor providing engine speed control in the case of an electronics failure.

The essential part of the 2231 actuator is the high response electric servo-mechanism, which overrides the ballhead pilot valve.

In the event of a power failure or controller fault, the governor system will fail to the ballhead mode.

Ballhead actuators have backup speed setting options of:
1. Lever hand operated
2. Lever morse cable operated
3. Synchronous motor 115/230 VAC or stepper motor
4. Hand wheel control
5. Stepper motor with programmable controller with the facility for the mechanical governor to track the electronic governor speed

A booster unit can be supplied for applications where minimal start air consumption is required.

Specification

Actuator input signal

0-1 amp (normal operating range 250 mA - 750 mA).

Open loop positional accuracy approximately ± 1.5 % FSD.

Features

- True proportional actuator
- Self contained oil supply
- Based on the popular 1100 series governor
- One module with 5 different work outputs all within the same frame size
- Designed for use with the Viking range of digital electronic governors and engine management systems
- Ballhead back-up with various options for speed setting
- Booster available to minimise start air consumption
- Electric start fuel limit option
- Standard adaptors available to replace other manufacturer’s governors / actuators
- Can be used with other manufacturer’s electronic governors
Actuator drive speed
Normal operating speed range 300 – 1500 r/min (maximum 1200 r/min for 40 ft lbf).

Speed range
For ballhead governing the maximum governor speed should be between 900 - 1500 r/min (unless otherwise agreed).
Output shaft movement.
50° max. with 30° or greater to be used from full load to no load.

Oil supply
Self contained 0.3 imp galls (1.4 litres).

Power to drive actuator
0.37 hp (0.28kW)(1500 r/min actuator drive speed).

Output shaft dimensions
5/8 in nominal diameter, 36 SAE serrations.

Drive shaft dimensions
Standard 3/4 in nominal diameter, 48 SAE serrations or 25 mm nom. diameter keyed.
Other drive shafts are available to suit application.
All drive shafts are fitted with mechanical face seals to prevent oil contamination.

Rotation
Either clockwise or counter clockwise.

Weight
52 lb (24kg)

NOTE:
1. Signal conversion units are available if actuator is to be driven by non Regulateurs Europa controllers.
2. Base plate adaptors are available to convert actuator to other manufacturer’s base designs.