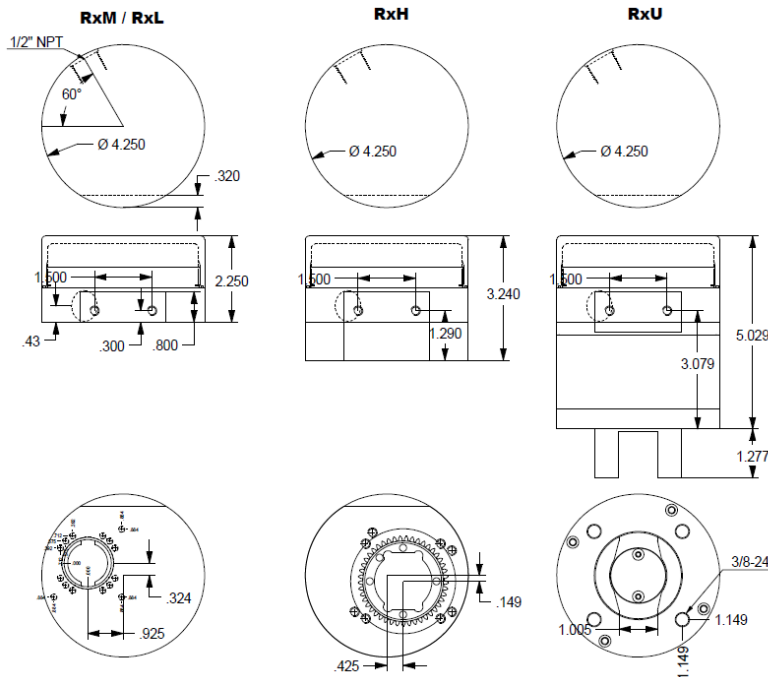


Main Dimensions



General Description:

Type Rxx electric / electronic actuator are used to precisely position small valves and devices

Gears: Rxx actuators use sintered, greased for life metal gearing only

Housing: all housing parts are aluminum die cast and are protected by an electrophoresis paint

Bearings: oiled for life porous bronze bearings

External Fasteners: Stainless Steel

Manual Override: optional, mounted directly on the output shaft

Rxx actuators offer a full range of control options:
 - Multiturn Analog, Partial Turn Analog
 - ¼ - ½ turn TTL

External Gear Stages: Metal Gears for additional reduction:

RxH 3.75 additional gear ratio
 RxU 15 additional gear ratio

General Specifications:

Enclosure: NEMA 6 / IP67
 IP68 40PSI / 40 deg cel

Enclosure Rex Model: Class I, Div 1 Groups B, C, D / T6
 Class II Groups E, F, G / T6 (85 deg cel.)

Temperature range: 0 .. 70 deg Cel (derate duty cycle at high temp.)

Extended temp. range: -40 .. 85 deg Cel [w. Heater option on cold side]

Finish: Anodized white, Stainless

Stall protection: by electronic position and motion detection

Feedback: TTL, 4.20mA

Life Expectance: 250,000 cycles or equivalent under specified conditions

Motor: BLDC brushless DC motor.

Voltages: 12-24 VDC

Stall protection: by electronic position and motion detection

Positioning precision: +/- 3 deg for 1/4 – ½ turn models
 +/- 0.25 deg for multi turn

Positioning resolution: +/- 0.15 deg max. adjusting to electronic signal resolution of 12 bit additional signal filters available

Range setting: dip switches inside enclosure

Speed setting: dip switches inside enclosure

End of travel detection: for needle valve closing, by motion detection

Power setting: adjustable to protect delicate needle valves on closing operation

Position detection: Hall detectors

Motor control: Electronic, full computer control

Mechanical shock: 1 m drop test no damage to function Random SAE J1211, Chassis, Exterior

Mechanical vibration: Random SAE J1211, Chassis, Exterior

Thermal Shock: -20 deg cel to + 70 deg cel 10 min

Performance: Rxx Multi-turn models:

Model	Torque Range [in-lbs]	Speed range [time for 1 turn]
RCL	2 .. 32	1 .. 5 sec
RCM	6 .. 90	3 .. 9 sec
RCH	22 .. 300	15 .. 60 sec
RCU	110 .. 1200	75 .. 300 sec

Performance: Rxx ¼ and ½ turn models:

Model	Torque Range [in-lbs]	Speed range [time for ¼ turn]
RDM	6 .. 90	0.75 .. 2.5 sec
RDH	22 .. 300	3 .. 9 sec
RDU	110 .. 1200	11 .. 38 sec

Note: the speed and torque depend on the settings by dip switch of the actuator, selectable by user. Consult user manuals of individual units.

* De-rate the duty cycle to 25% for the highest torque values

Other Specifications Multi-turn Models:

Isolated Signals: optical isolation 1000V min.
 [AI and AF models only]

Feedback 4..20mA: for sensing resistor of max. 250 ohms. Floats +6VDC / -2VDC from power Gnd
 [AF model only]

Position on power loss:
 - Standard, "remembers" the position it was in before shut down.
 - will reseat the valve based on torque setting when the signal is between 3 and 4 mA

Other Specifications ¼ and ½ turn Models:

TTL Signals in: internal pull up, <1mA required to pull down

TTL signals out (Feedback): will drive max 2.5mA

