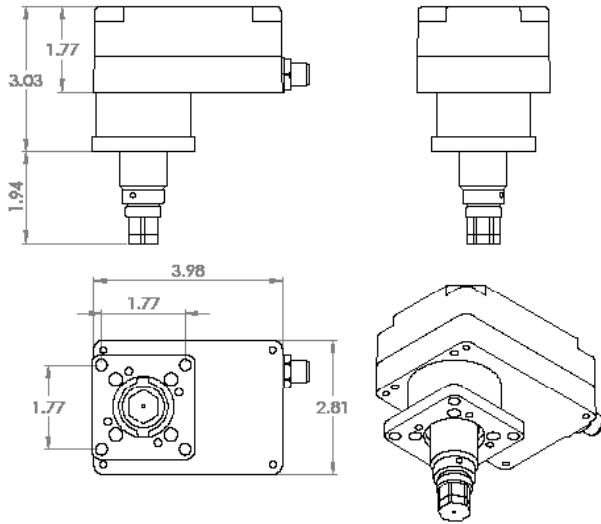
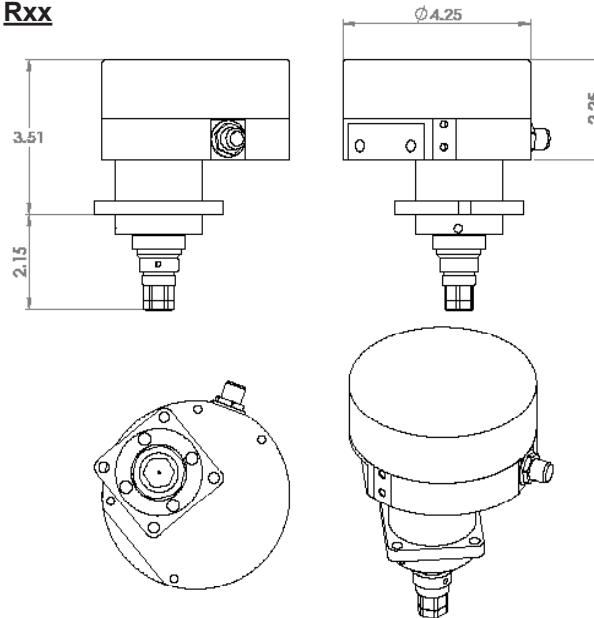


## Mxx



## Rxx




## Linear models

Model	Force range [lbs]	Speed range [time for 1 inch]
xCJ - L1 (16)	5 .. 46	26 .. 64*
xCL - L1 (16)	13 .. 138	26 .. 64
xCM - L1 (16)	35 .. 400	78 .. 192
xCJ - L2 (8)	12 .. 60	13 .. 32
xCL - L2 (8)	37 .. 180	13 .. 32
xCM - L2 (8)	110 .. 535	40 .. 96

\* De-rate the duty cycle to 25% for the highest torque values  
**Note:** speed and torque depend on settings by dip switch of actuator  
 Consult user manuals of individual units. Actuators are set for optimum speed.

## Description and Specifications:

<b>Enclosure:</b>	Aluminum die cast E-coating, stainless NEMA 4 / IP56  Class I, Div 1 Groups B, C, D/ T6 Class II Groups E, F, G/ T6(85 deg. cel)
<b>Temperature range:</b>	0 .. 65 deg C° internal (derate duty cycle at high temp.)
<b>Ext. temp. range:</b>	-40 .. 60 deg C° (option Heater)
<b>Stall protection:</b>	Electronic position and motion detection
<b>Feedback:</b>	TTL, 4 - 20mA
<b>Gears &amp; Bearings:</b>	Metal and bronze, oiled/greased for life
<b>External Fasteners:</b>	Stainless Steel
<b>Life Expectance:</b>	250,000 cycles in specified conditions
<b>Motor:</b>	Brushless DC motor, computer control
<b>Voltages/Current:</b>	12-24 VDC/Max3A @ 24VDC 110/220 VAC/Max1.5A @ 110/220VAC
<b>Positioning precision:</b>	+/- 0.001" (0.0025mm)

<b>Positioning detection:</b>	Hall detectors
<b>Range/ Speed setting:</b>	Dip switches inside enclosure
<b>Control options:</b>	Analog (4 - 20 mA, 1 - 5 V, 1 - 10 V), Modbus, TTL (on/off)
<b>End travel detection:</b>	For needle valve, by motion detection
<b>Power setting:</b>	Adjustable
<b>Mechanical shock:</b>	Repeated ≤ 130 g - force no effect, occasional ≤ 150 g - force no effect > 150 g - force not tolerated
<b>Mechanical vibration:</b>	Random SAE J1211, Chassis, Exterior
<b>Thermal Shock:</b>	-20 deg C° to + 70 deg C° 10 min
<b>Failsafe battery:</b>	LiPo rechargeable battery, will position the actuator to predetermined desired position (Rxx Series only)
<b>Weight:</b>	Mxx: 650 g Rxx: 980 g

## Other Specifications:

<b>Isolated Signals:</b>	Optical isolation 1000V min [AI and AF models only]
<b>Feedback 4..20mA:</b>	For sensing resistor of [AF model only] max. 250 ohms. Floats +6VDC / -2VDC from power Gnd
<b>Position power loss:</b>	Standard: "remembers" position before shut down, will reseat valve based on torque setting when the signal is between 3 and 4 mA
<b>Stroke length:</b>	Regular 1 " (25.4 mm) x-large 4 " (120 mm)

## Certifications:

**ICES-001 ISSUE 4 JUNE 2006**  
**FCC 47 CFR PART 15 SUBPART B**  
**EN 61362-1:2013** (GROUP 1, CLASS A; Industrial electromagnetic environment)  
**IP 66/67/68 (60529:2013) (Rxx Series only)**  
**CSA & IECEx Certified Enclosure (Rxx Series only)**