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AQLT38N38KFC



AQLT Series Shaftless Waterproof Linear Position Transducer, 304,8 mm [38.0 in] Electrical Travel, Item Number 9812206

Actual product appearance may vary.

Features

3/8 inch (AQMLT) and 1/2 inch (AQLT) body diameter - Fit in tight spaces and clamps easily to cylinders
Multiple finger wiper design - Improves shock and vibration performance
Extruded wiper block guides - Smooth quiet motion; extends operating life
MystR[®] plastic element - tested up to one billion operations
Anodized extruded aluminum housing - Tolerates clamping loads
Sealed construction - Full performance in hostile environments
Precious metal contact - Low noise level over entire life
Absolute continuous measurement - Accurate position at power up

Potential Applications

In-tank level sensing
Robotic motion control
Woodworking guides
Seismology
Packaging and processing equipment
Animated characters
Marine steering systems
Off-road vehicles
Semiconductor Process Equipment
Medical Equipment

Description

The AQ Series are shaftless waterproof linear potentiometers designed to operate in wet/washdown and in -tank environments.

The AQ series features an external actuator magnetically coupled to a position feedback element. The magnetic actuator replaces the shaft found in traditional linear transducers, which eliminates the need for additional stroke length mounting space and improves shock and vibration performance.

Precious metal dual wipers, MystR[®] proprietary conductive plastic, and anodized aluminum housings assure long life and reliable operation in numerous applications. Intrinsically safe for Class I, II and III Division I, Groups A, B, C, D, E, F and G for hazardous (indoor/outdoor) NEMA 4 locations. V max.=30 V, I max.=100 mA, Ci=0, Li,=0mH.

Supporting Documentation

Dimensions

Circuitry

Actuator Dimensions

Product Specifications	
Supply Voltage	30 Vdc max.
Measurement Type	Linear
Housing Size	1020,06 mm [40.16 in]
Total Mechanical Travel	967,74 mm [38.1 in]
Electrical Travel	965,2 mm [38.0 in]
Starting Force (max.)	56,7 g max. [2.0 oz max.]
Linearity	± 1.0 %
Type of Element	MystR [®] conductive plastic film
Housing Style	Anodized Aluminum
Termination	28 awg, 3 cond. - 3,048 m [10 ft] cable
Wiper Current	<1 µ A
Resolution	Infinite
Operating Temperature Range	-40 °C to 80 °C [-40 °F to 176 °F]
Vibration	20 g / 0,75 mm (rms) 5 hz to 2 khz
Shock	50 g 11 ms half sine
Operating Life	one billion dither operations
Total Resistance	38,000 Ohms
Resistance Tolerance	± 20 %
Insulation Resistance	500 MOhm @ 500 Vdc
Dielectric Strength	250 V rms
Sealing	Sealed Construction IP68
UNSPSC Code	41111945
UNSPSC Commodity	41111945 Linear position sensors
Availability	Global
Series Name	AQLT

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