Draw Wire Potentiometer (0.5m)

In complex mechanical systems, it is often very difficult to accurately measure the movement of a single part, particularly if it has several degrees of freedom. The draw wire potentiometer is a versatile solution to this very problem; it can be attached to a part using an M5 screw or fastened to the end with a zip tie, and the potentiometer itself has a pair of M5 screw threads on the back for easy installation.

When the wire is pulled out, the sensor produces a voltage to describe the length of wire exposed. The reel is spring loaded, so it will retract when there is no tension in the wire. Multiple draw wire sensors could be used to track the position in more than one dimension.

Product Specifications

Sensor Properties	
Sensor Type	Distance (Draw Wire)
Wire Pull Length	500 mm
Potentiometer Impedance	5 k?©
Repeatability Error Max	2 %
Electrical Properties	
Supply Voltage Min	5 V DC
Supply Voltage Max	24 V DC
Physical Properties	
IP Rating	IP54

Wire Load Maximum	16 kg
Wire Pull Speed Max	600 mm/s
Lifespan	200000 actuations
Weight	340 g
Operating Temperature Min	-10 ?°C
Operating Temperature Max	70 ?°C
Screw Thread Size	M5