Draw Wire Encoder (1m)

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 encoder 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 encoder itself has a pair of M5 screw threads on the back for easy installation.

When the wire is pulled out, the sensor produces a quadrature signal 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

Encoder Properties	
Output Circuit Type	Push-Pull
Wire Resolution	80 ?¼m/cyc
Wire Pull Length	1 m
Electrical Properties	
Supply Voltage Min	5 V DC
Supply Voltage Max	26 V DC
Current Consumption Max	60 mA
Physical Properties	
IP Rating	IP54

Wire Load Maximum	16 kg
Wire Pull Speed Max	1 m/s
Weight	305 g
Operating Temperature Min	-20 ?°C
Operating Temperature Max	80 ?°C
Screw Thread Size	M5