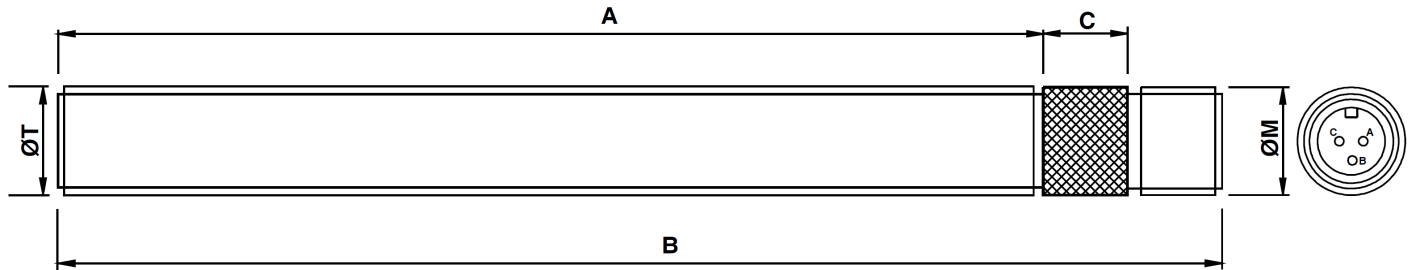


Zero Velocity  
 Gear Tooth Sensor  
 Internal Bias Magnet  
 For Detection of Ferrous Targets

# HES36146NV

## Hall Effect Sensor



### Mechanical specification

dimensions in mm unless otherwise stated

| <i>Dimension</i>          |   | <i>Part Number</i>  |
|---------------------------|---|---------------------|
| <b>A</b>                  | 146   |                     |
| <b>B</b>                  | 173   |                     |
| <b>C</b>                  | 12 medium diamond knurl with alignment groove |                     |
| <b>ØT</b>                 | 5/8" x 18 tpi UNF-2A (body thread)            | <b>HES36146NV-I</b> |
| <b>or</b>                 | M16 x 1.5 6g                                  | <b>HES36146NV-M</b> |
| <b>Main body material</b> | Stainless Steel                               |                     |
| <b>End face</b>           | Epoxy sealed sensing face                     |                     |
| <b>Locknut</b>            | 1 off supplied as standard                    |                     |

# Electrical specification

**Supply Voltage ( $V_S$ )** 5V DC — 30V DC

**Protection** Reverse polarity, overvoltage and momentary transient surge, short circuit (output to ground)

**Supply Current** < 20mA + output source current

**High Output Voltage (O/C)** >  $V_S - 1V$

**Low Output Voltage (O/C)** < 0.35V

**High Output Voltage ( $I_{out} = 10mA$ )** >  $V_S - 2.5V$

**Low Output Voltage ( $I_{out} = 10mA$ )** < 1V

**Output Current Limit** 25mA source, 35mA sink

**Operating Temperature Range** -40°C to +120°C

**Operating Frequency Range** 0Hz – 20kHz

**Operating Air Gap (AG)** 0 – 3.0mm

**Output Polarity** The groove must be aligned with the direction of rotation of the tooth as it passes the face of the sensor. The polarity may be reversed by rotating the sensor through 180°.

**Termination** MS screw 10SL3P (3-pin integral plug)

**Mating Connector** MS screw 10SL3S (3-pin line socket, not supplied)

**Connections**  
Pin A = 0V / Ground  
Pin B = Output  
Pin C =  $V_S$

MADE IN THE UK

*Reliability, Guaranteed*



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