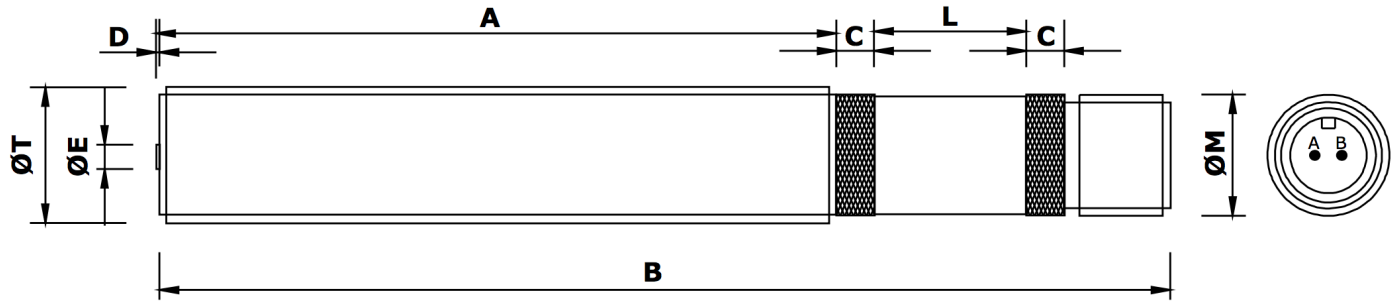
Intrinsically Safe

Plug and Socket Type
Speed Sensor

MPEX3889
Magnetic Pickup



Mechanical specification

dimensions in mm unless otherwise stated

Dimension		*Part number*
A	89	
B	133 nominal	
C	5 medium diamond knurl	
D	0.4 nominal	
L	20 plain area for affixing label	
ØE	3.17 pole piece	
ØM	$^{5}/_{8}$" x 24 tpi UNEF-2A (connector thread)	
ØT	$^{3}/_{4}$" x 16 tpi UNF-2A (body thread)	**MPEX3889-I**
or	M18 x 1.5 6g	**MPEX3889-M**
Main body material	Stainless Steel	
End Bobbin face	Polypropylene	
Locknut	1 off as standard	

Electrical specification

Resistance	450Ω nominal @ 20°C
Inductance	135mH nominal
Operating temperature range	-30°C to + 120°C [see note 2]
Voltage output	Clamped at 4V peak nominal, 4.97V maximum
Minimum speed	30 mm/second [see note 1]
Polarity	Pin A negative with respect to Pin B as target approaches
Termination	MS (screw) 10SL4P (2-pin integral plug)
Mating connector	MS (screw) 10SL4S (2-pin line socket)

Notes:

1. Minimum speed in mm/second to generate 100mV peak to peak typical output measured across a 10K load using a 60 tooth mild steel gear wheel of Ø6", rotating at 1000 rpm and with an air gap setting of 0.01”.

2. The permitted ambient temperature range is dependent on temperature class, refer to T_a.

3. Complies with the Dielectric Strength requirements of EN60079-11, Section 10.3.

Entity parameters

U_i (V)	I_i (mA)	P_i (W)	C_i (nF)	L_i (µH)
30	160	0.75	0	0

U, I and P for the selected barrier must not exceed the values above.

Ambient Temperature T_a

The equipment is certified for use in ambient temperatures in the range of –30°C to +120°C and should not be used outside this range. The range is restricted according to temperature class as follows:

T6	T5	T4	T3
-30ºC to +57ºC	-30ºC to +72ºC	-30ºC to +107ºC	-30ºC to +120ºC

Applicable Special Conditions

This equipment has an electrically isolated pole piece protruding from the centre of its coil, having capacitance of up to 17pF. The user must determine the suitability of the equipment for the specific application. Precaution must be taken to avoid the accumulation of electrostatic charge on this part.

Approval

Ex ia IIC T6…T3 Ga

ITS13ATEX27806X
IECEx ITS 13.0023X

MPEX36nn / 38nn Series

Logitech Electronics Limited
121 Trench Road
Trench, Telford
Shropshire, TF2 7DP
UK



Certificates and user guides are available to view and download from our website:
www.logitechelectronics.com/ex/download