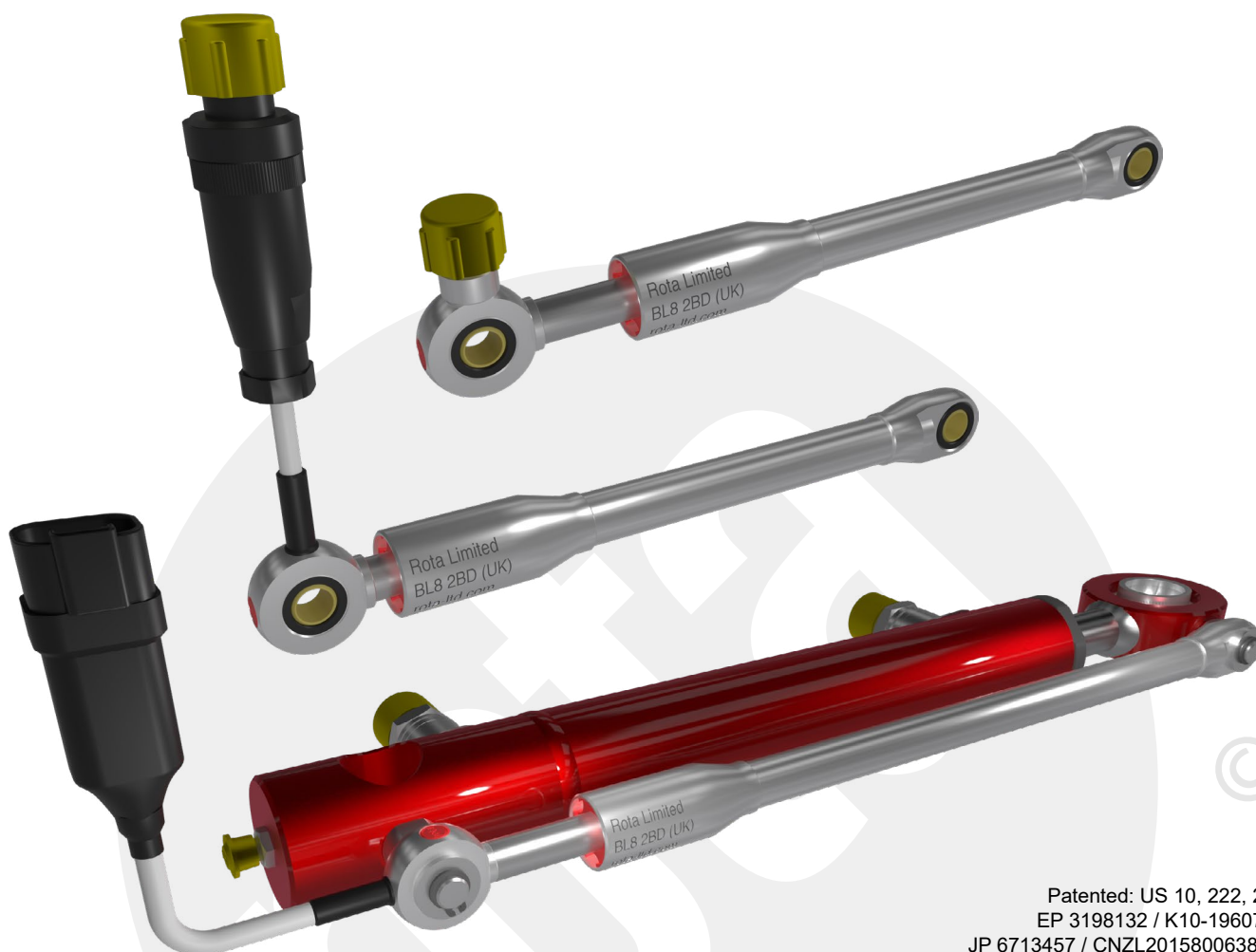




LL LINEAR TRANSDUCER DATA SHEET

Light-Duty Pin-Mounted Transducer



Patented: US 10, 222, 238 /
EP 3198132 / K10-1960719 /
JP 6713457 / CNZL201580063891.8

BENEFITS

- Very compact design
- Maintains existing cylinder pin-to-pin dimension
- Ideal for high-volume, low-cost OEM applications
- Highly customisable

PERFORMANCE

- Absolute signal output
- 0.3 mm signal resolution
- Very robust, high vibration ratings
- UN ECE R10 Automotive EMC specification
- Operating Temperature -40 to +80°C
- IP69K sensor enclosure with IP69K connector options

ENCLOSURE

- Aluminium 13 mm O/D outer assembly
- Aluminium or 304 stainless steel glide tube

OUTPUTS

- Analogue Voltage/Current/PWM options
- CANbus SAE J1939, CANopen and ISOBUS
- SSI (asynchronous mode) option

TERMINATION

- AMP, Deutsch DT & DTM connectors with Rota un-mated IP68/IP69K pins
- Integrated or cable-mounted M12



RELIABLE OPERATION TOUGH APPLICATION

Rota Limited, Manchester UK

www.rota-ltd.com

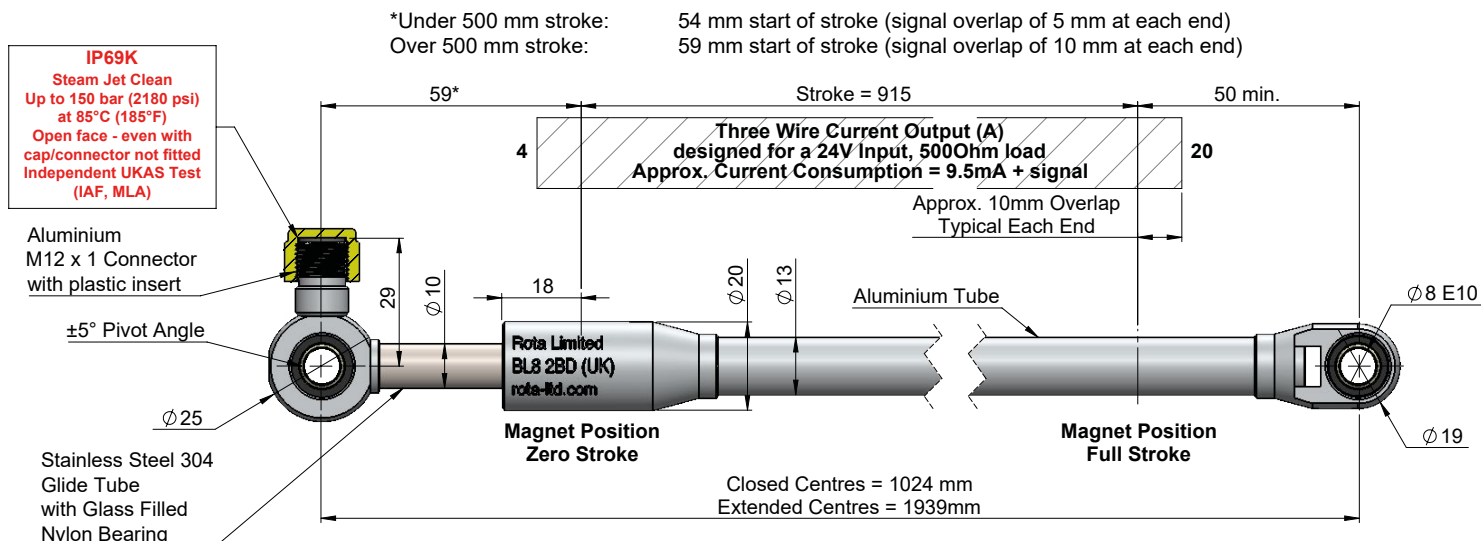
LLDS V1.01.07



EXAMPLE DRAWING AND ORDERING CODE

IEC 60068-2-64 (Vibration, Broadband Random & Guidance) at 7g 10-2000Hz (RMS) in all 3 axes
IEC 60068-2-27 (Shock) Total of 3 shocks at 30g (18 ms) over all 3 axes

Operating Temperature: -40 to +80°C



LL B - 0915 CR 0.3 A - - 9J - - - 1234

LL Series
Light-Duty
Pin-Mounted
Linear Transducer

Glide tube material
A = Aluminium
B = 304 Stainless Steel

Optional
C = Clamp-mounted outer tube

Stroke (mm)

Magnet

Signal Resolution
0.3 mm

Output Signal

A	= Current 4 to 20 mA (3 Wire)	(13 to 32 V Input)
B	= Current 4 to 20 mA (3 Wire)	(10 to 18 V Input)
BU	= Current 4 to 20 mA & Voltage 1.0 to 5.0 V	(10 to 30 V Input)
C	= Voltage 0.5 to 3.5 V	(4 to 10 V Input)
F	= Voltage 0.25 to 4.75 V	(9 to 32 V Input)
G	= Voltage 0.5 to 4.5 V	(9 to 32 V Input)
H	= Voltage 0.5 to 10.0 V	(13 to 32 V Input)
J	= CANbus SAE J1939	(9 to 32 V Input)
L	= Voltage 0.5 to 4.5 V	(5 to 10 V Input)
O	= CANopen	(9 to 32 V Input)
P	= P.W.M 500 Hz	(9 to 32 V Input)
R	= Voltage 0.5 to 4.75 V	(9 to 32 V Input)
Q	= SSI Asynchronous	(9 to 28 V Input)
T	= Current 4 to 20 mA (2 Wire)	(11 to 28 V Input)
V	= Voltage 0.5 to 5.0 V	(9 to 32 V Input)
Z	= ISOBUS	(9 to 32 V Input)

Optional

R = Reversible signal

**Unique
Transducer
Calibration
Number**

Cable Length (m)
Standard lengths:
0.15, 0.3, 0.5, 1.0, 1.5, 2.0

Cable Type
N = PVC Cable
U = PUR Cable

Cable Orientation
9 = 90° (right angle)
F = Flat (in line with sensor rod)

Optional Connectors

9J = Integrated 90° M12 Connector (no cable)
2RT = Deutsch DT04-2P with Rota contacts
3RT = Deutsch DT04-3P with Rota contacts
4RT = Deutsch DT04-4P with Rota contacts
6RT = Deutsch DT04-6P with Rota contacts
2RM = Deutsch DTM04-2P with Rota contacts
3RM = Deutsch DTM04-3P with Rota contacts
4RM = Deutsch DTM04-4P with Rota contacts
6RM = Deutsch DTM04-6P with Rota contacts
2RP = AMP 282104-1 with Rota contacts
3RP = AMP 282105-1 with Rota contacts
4RP = AMP 282106-1 with Rota contacts
5RP = AMP 282107-1 with Rota contacts
6RP = AMP 282108-1 with Rota contacts
4BH = M12 Connector (Moulded) - 4 pin*
5BH = M12 Connector (Moulded) - 5 pin*
4B9 = 90° M12 Connector (Moulded) - 4 pin*
5B9 = 90° M12 Connector (Moulded) - 5 pin*
*PUR cable only

Optional

L = 'End of stroke' signal positions factory set at Rota
Q = Quick calibration



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LLDS V1.02.09