

- Non-contacting inductive technology to eliminate wear
- Up to 600mm stroke
- Travel set to customer's requirement
- Compact 19 mm diameter body,
- High accuracy and stability
- Sealing to IP67



Our P137 is an affordable, durable, high-accuracy position sensor designed for industrial and scientific feedback applications. It is particularly suitable for OEMs seeking good sensor performance for arduous applications such as industrial machinery where cost is important. Performance, repeatability and stability are outstanding over a wide temperature range.

The unit is very compact and space-efficient with a small 19mm diameter body. The sensor is very robust, the body and push rod being made of stainless steel.

The sensor is easy to install with mounting options including M5 male stud and M5 rod eye bearing. The push rod can be supplied free or captive, with male M5 thread, M5 rod eye or magnetic tip. 1/4" rod eye option available.

Like all Positek® sensors, the P137 provides a linear output proportional to travel. Each unit is supplied with the output calibrated to the travel required by the customer, this can be any stroke length up to 600mm. The P137 offers a range of mechanical and electrical options, environmental sealing is IP67.

Specifications

Dimensions

Body diameter	19 mm
Body Length (Axial version) (Radial version)	calibrated travel + 144.2 mm calibrated travel + 153mm

Independent Linearity

$\leq \pm 0.25\%$ FSO @ 20°C
$\leq \pm 0.1\%$ FSO @ 20°C* available upon request.

Temperature Coefficients

$< \pm 0.01\%$ /°C Gain &
$< \pm 0.01\%$ FS/°C Offset

Frequency Response

> 10 kHz (-3dB)

Resolution

Infinite

Noise

$< 0.02\%$ FSO

Environmental Temperature Limits

Operating	-40°C to +125°C standard -20°C to +85°C buffered
Storage	-40°C to +125°C

Sealing

IP67

EMC Performance

EN 61000-6-2, EN 61000-6-3

Vibration

IEC 68-2-6: 10 g

Shock

IEC 68-2-29: 40 g

MTBF

350,000 hrs 40°C Gf

Table of options

Calibrated travel

Factory set to any length from 0-350mm to 0-600mm (e.g. 476 mm).

Electrical interface options

Output Signal	Supply Input	Output Load
Standard:		
0.5-4.5V dc ratiometric	+5V dc nom. $\pm 0.5V$.	5k Ω min.
Buffered:		
0.5-4.5V dc	+24V dc nom. + 9-28V.	5k Ω min.
0.5-9.5V dc	+24V dc nom. + 13-28V.	5k Ω min.
4-20mA	+24V dc nom. + 13-28V.	300R Max.
Supply Current	10mA typical, 20mA max. plus O/P current	

Connector/Cable options

Connector - Hirschmann ELWIK A 4102 Axial or Radial, IP67

Cable with Pg 9 gland Axial, IP67

Cable length > 50 cm – please specify length in cm

Mounting options

M5 rod eye bearing or M5x0.8 male thread (radial versions), Body Tube Clamp/s (axial or radial versions). 1/4" rod eye option available.

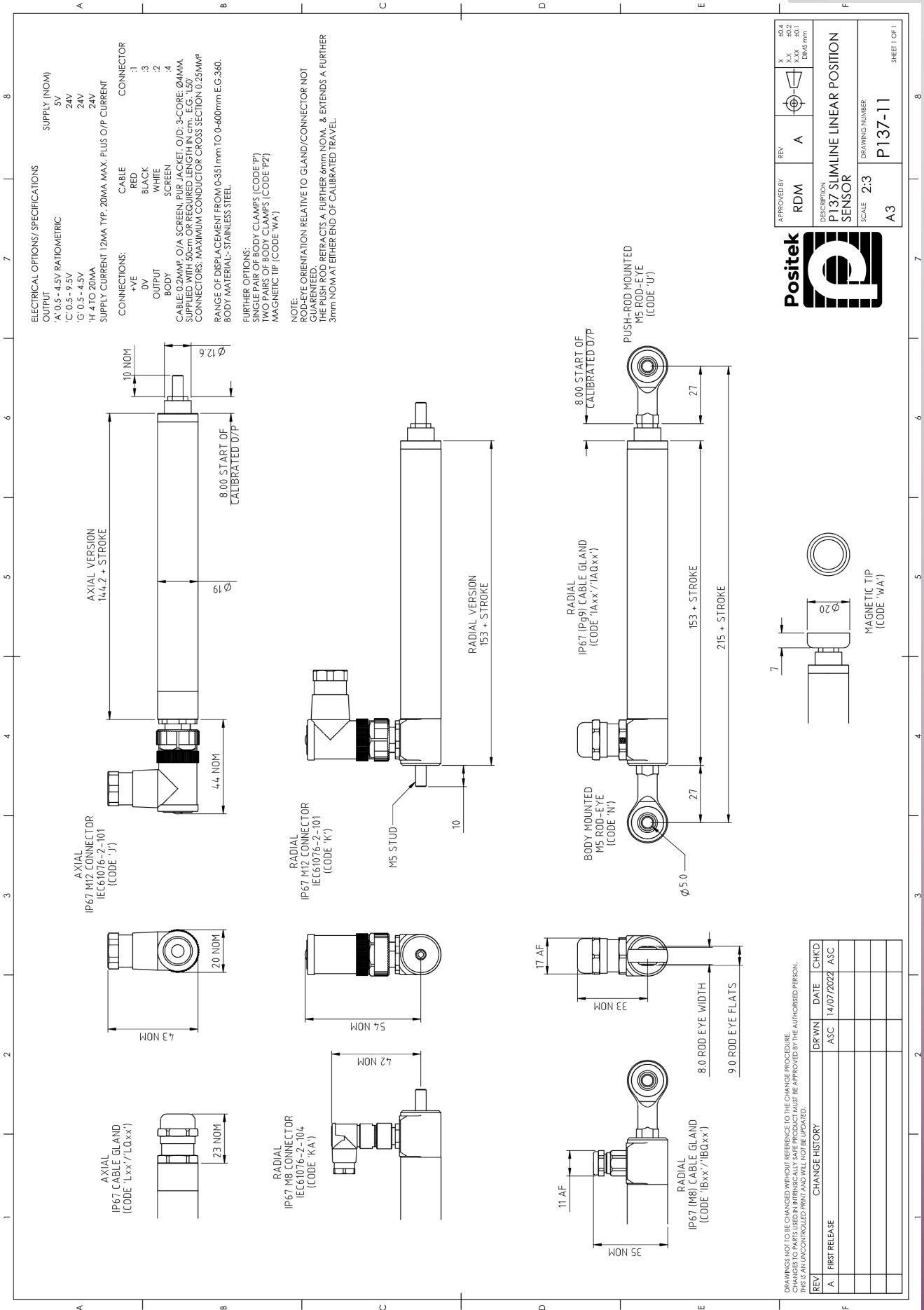
Push rod options

Retained* or Free with M5x0.8 male thread, M5 rod eye bearing or Magnetic tip.

* standard, retained with male thread.

Do you need a position sensor made to order to suit a particular installation requirement or specification?

We'll be happy to modify any of our designs to suit your needs - please contact us with your requirements.



APPROVED BY
RDM

REV
A

DESCRIPTION
P137 SLIMLINE LINEAR POSITION SENSOR

SCALE
2:3

DRAWING NUMBER
P137-11

REV
X
X.X
X.XX
X.XXX

30.4
50.2
70.0
90.8 mm

SHEET 1 OF 1



REV	CHANGE HISTORY	DRWN	DATE	CHKD
A	FIRST RELEASE	ASC	14/07/2022	ASC