

# LZE13 LVIT Inductive Linear Position Sensors



LZE13-100A-00-10S

The LZE13 series of LVIT (Linear Variable Inductance Transducer) miniature position sensors are inductive, contactless devices designed for use in factory automation or assembly machinery applications where space is a premium. The LVIT is offered in nominal full-scale ranges from 2.5 to 200mm [0.1 to 8 in] with an excellent stroke-to-body-length ratio. The sensor has 12.7 mm [1/2 in] outside diameter stainless steel body with a 1m [3.2 ft] cable for I/O connections. The 4.78 mm [0.188 in] diameter through-bore of an LZE13 provides clearance for its 4mm [0.157 in] diameter moving target rod with M4 thread and hex nut, which is made of the same material as its housing. This through-bore feature also means that the sensor is not subject to damage from typical mechanical overstroking.



## Features

- LVIT Technology™ (Linear Variable Inductance Transducer)
- Contactless operation prevents internal wearout from dithering or rapid cycling
- Full-scale ranges from 2.5 to 200 mm [0.10 to 8.0 in]
- Through-bore design eliminates mechanical overstroking
- DC in / DC out operation with built in electronics
- For applications where size is a constraint and superior stroke-to-body-length ratio is required
- Proprietary SenSet™ field adjustable range scaling



## LZE13 LVIT Inductive Linear Position Sensors

Part Number	Price	Drawing Link	Stroke mm [inch]	Body Length mm [inch]	Output	Connection m [ft]	Housing Material
<a href="#">LZE13-2.5A-00-10S</a>	\$331.00	<a href="#">PDF</a>	2.5 [0.10]	35.8 [1.41]	0 - 10 VDC	1 [3.2]	Stainless steel
<a href="#">LZE13-6.4A-00-10S</a>	\$336.00	<a href="#">PDF</a>	6.4 [0.25]	35.8 [1.41]	0 - 10 VDC	1 [3.2]	Stainless steel
<a href="#">LZE13-12.7A-00-10S</a>	\$341.00	<a href="#">PDF</a>	12.7 [0.50]	35.8 [1.41]	0 - 10 VDC	1 [3.2]	Stainless steel
<a href="#">LZE13-025A-00-10S</a>	\$351.00	<a href="#">PDF</a>	25 [1.0]	35.8 [1.41]	0 - 10 VDC	1 [3.2]	Stainless steel
<a href="#">LZE13-050A-00-10S</a>	\$371.00	<a href="#">PDF</a>	50 [2.0]	61.2 [2.41]	0 - 10 VDC	1 [3.2]	Stainless steel
<a href="#">LZE13-100A-00-10S</a>	\$386.00	<a href="#">PDF</a>	100 [4.0]	112.0 [4.41]	0 - 10 VDC	1 [3.2]	Stainless steel
<a href="#">LZE13-150A-00-10S</a>	\$402.00	<a href="#">PDF</a>	150 [6.0]	165.1 [6.50]	0 - 10 VDC	1 [3.2]	Stainless steel
<a href="#">LZE13-200A-00-10S</a>	\$427.00	<a href="#">PDF</a>	200 [8.0]	215.9 [8.50]	0 - 10 VDC	1 [3.2]	Stainless steel

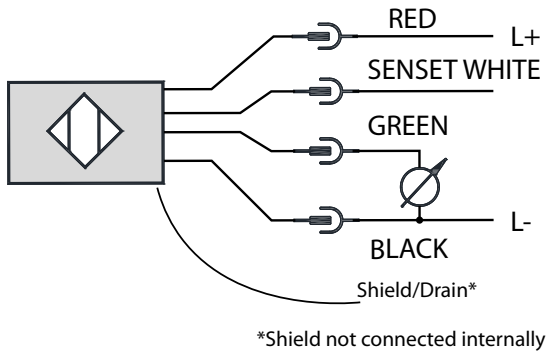
## LZE13 LVIT Inductive Linear Position Sensor Specifications

<b>Analog I/Os</b>	0-10 VDC output; 12-30V input, 35mA max
<b>Measuring Ranges</b>	2.5 to 200 mm [0.1 to 8 in]
<b>Linearity Error</b>	± 0.15% of Full Scale Output (FSO) typical, ±0.25% FSO max
<b>Resolution</b>	0.025% of FSO
<b>Bandwidth</b>	300Hz nominal
<b>Operating Temperature</b>	-20 to +105°C [-40 to +221°F]
<b>Temperature Coefficient</b>	≤ 0.015% of FSO/K
<b>Vibration</b>	5-20 Hz, 0.5 in peak-to-peak; 20-2000 Hz, 4.2 g peak-to-peak
<b>Shock</b>	1000g, 11ms
<b>Terminations</b>	IEC IP-67
<b>Humidity</b>	95% RH, non-condensing
<b>Connection</b>	1m [3.2 ft] cable, PUR, 28 AWG
<b>Mounting</b>	M4 x 0.7 [mount for target rod]
<b>Agency Approval *</b>	CE

\*To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

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## Wiring Diagram



Wiring Table	
I/O Function	Cable Color
+ Power Input	Red
Ground	Black
Analog Output	Green
SenSet™	White
Shield/Drain *	Shield

\*Shield not connected internally