### ALLIANCE SENSORS GROUP A DIVISION OF H.G. SCHAEVITZ LLC

## LZE13 LVIT Inductive Linear Position Sensors





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

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

LZE13 LVIT Inductive Linear Position Sensor Specifications					
Analog I/Os	0-10 VDC output; 12-30V input, 35mA max				
Measuring Ranges	2.5 to 200 mm [0.1 to 8 in]				
Linearity Error	± 0.15% of Full Scale Output (FSO) typical, ±0.25% FSO max				
Resolution	0.025% of FSO				
Bandwidth	300Hz nominal				
Operating Temperature	-20 to +105°C [-40 to +221°F]				
Temperature Coefficient	≤ 0.015% of FSO/K				
Vibration	5-20 Hz, 0.5 in peak-to-peak; 20-2000 Hz, 4.2 g peak-to-peak				
Shock	1000g, 11ms				
Terminations	IEC IP-67				
Humidity	95% RH, non-condensing				
Connection	1m [3.2 ft] cable, 316L stainless steel 28 AWG				
Mounting	M4 x 0.7 [mount for target rod]				
Agency Approval *	CE				

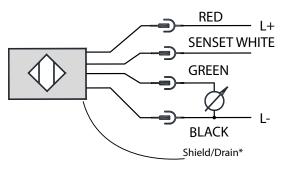
<sup>\*</sup>To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

www.automationdirect.com



# **LZE13 LVIT Inductive Linear Position Sensors**

### Wiring Diagram



\*Shield not connected internally

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

\*Shield not connected internally

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