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

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Part Number	Price	Drawing Link	Stroke mm [inch]	Body Length mm [inch]	Output	Connection m [ft]	Housing Material
LZE13-2.5A-00-10S	$05auq:	PDF	2.5 [0.10]	35.8 [1.41]	0 - 10 VDC	1 [3.2]	Stainless steel
LZE13-6.4A-00-10S	$05aus:	PDF	6.4 [0.25]	35.8 [1.41]	0 - 10 VDC	1 [3.2]	Stainless steel
LZE13-12.7A-00-10S	$;05aut:	PDF	12.7 [0.50]	35.8 [1.41]	0 - 10 VDC	1 [3.2]	Stainless steel
LZE13-025A-00-10S	$05auu:	PDF	25 [1.0]	35.8 [1.41]	0 - 10 VDC	1 [3.2]	Stainless steel
LZE13-050A-00-10S	$05auv:	PDF	50 [2.0]	61.2 [2.41]	0 - 10 VDC	1 [3.2]	Stainless steel
LZE13-100A-00-10S	$05aux:	PDF	100 [4.0]	112.0 [4.41]	0 - 10 VDC	1 [3.2]	Stainless steel
LZE13-150A-00-10S	$05auy:	PDF	150 [6.0]	165.1 [6.50]	0 - 10 VDC	1 [3.2]	Stainless steel
LZE13-200A-00-10S	$05auz:	PDF	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

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

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

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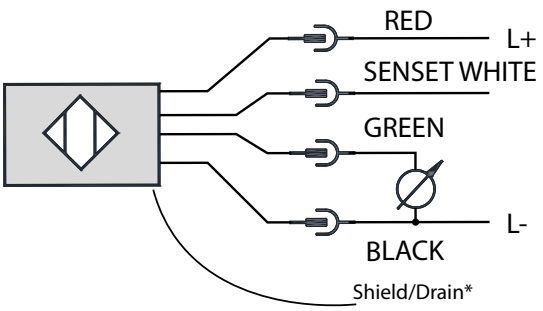
Wiring Diagram



*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**