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

LZE19/LZI19 LVIT Inductive Linear Position Sensors

LZE19-100A-00-10S

The LZ19 Series of LVIT (Linear Variable Inductance Transducer) position sensors are contactless devices designed for use in factory automation or assembly machinery applications where space is a premium, as well as for external mounting on pneumatic cylinders to sense rod position. The LVIT is offered in nominal full scale ranges from 2.5 to 375 mm [0.10 to 15 in] with an excellent stroke to-body-length ratio The sensor has a 19mm [3/4 in] outside diameter stainless steel body with a 1m [3.2 ft] axial cable for I/O connections. The 6mm [0.236 in] diameter through-bore of an LZ-19 provides clearance for its 5.2 mm [0.200 in]) diameter, PVDF-sheathed moving rod, 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 375 mm [0.10 to 15 in]
- Through-bore design eliminates mechanical overstroking
- DC in / DC out operation with built in electronics
- For applications requiring superior stroke-to-body-length ratio
- Proprietary SenSet™ field adjustable range scaling

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Part Number	**Price**	**Drawing Link**	**Stroke mm [in]**	**Body Length mm [in]**	**Output**	**Connection m [ft]**	**Housing Material**
0-10 VDC models							
LZE19-2.5A-00-10S	$296.00	PDF	2.5 [0.10]	35.0 [1.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-6.4A-00-10S	$301.00	PDF	6.4 [0.25]	35.0 [1.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-12.7A-00-10S	$306.00	PDF	12.7 [0.50]	35.0 [1.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-025A-00-10S	$317.00	PDF	25 [1.0]	35.0 [1.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-050A-00-10S	$337.00	PDF	50 [2.0]	60.5 [2.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-100A-00-10S	$362.00	PDF	100 [4.0]	111.1 [4.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-150A-00-10S	$388.00	PDF	150 [6.0]	165.1 [6.50]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-200A-00-10S	$413.00	PDF	200 [8.0]	215.9 [8.50]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-250A-00-10S	$439.00	PDF	250 [10.0]	266.7 [10.50]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-300A-00-10S	$464.00	PDF	300 [12.0]	317.5 [12.50]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-375A-00-10S	$515.00	PDF	375 [15.0]	400.0 [15.75]	0-10 VDC	1 [3.2]	Stainless steel
4-20 mA models							
LZI19-2.5A-00-20S	$296.00	PDF	2.5 [0.10]	35.0 [1.38]	4-20 mA	1 [3.2]	Stainless steel
LZI19-6.4A-00-20S	$301.00	PDF	6.4 [0.25]	35.0 [1.38]	4-20 mA	1 [3.2]	Stainless steel
LZI19-12.7A-00-20S	$306.00	PDF	12.7 [0.50]	35.0 [1.38]	4-20 mA	1 [3.2]	Stainless steel
LZI19-025A-00-20S	$317.00	PDF	25 [1.0]	35.0 [1.38]	4-20 mA	1 [3.2]	Stainless steel
LZI19-050A-00-20S	$337.00	PDF	50 [2.0]	60.5 [2.38]	4-20 mA	1 [3.2]	Stainless steel
LZI19-100A-00-20S	$362.00	PDF	100 [4.0]	111.1 [4.38]	4-20 mA	1 [3.2]	Stainless steel
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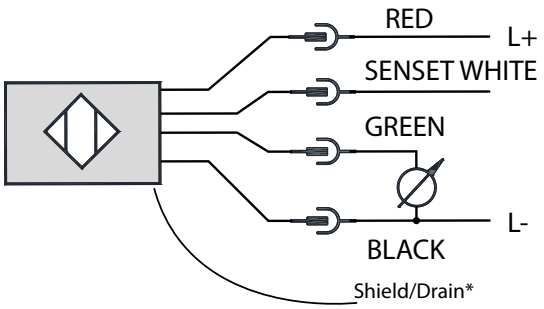
LZE19/LZI19 LVIT Inductive Linear Position Sensor Specifications	
Analog I/Os	0–10 VDC output; 12–30V input, 35 mA max 4 – 20 mA (3-wire) output; 18–30V input, 60 mA max. [75° C max]
Measuring Ranges	2.5 to 750 mm [0.100 to 30 in] full scale
Linearity Error	≤ ± 0.15% of Full Scale Output (FSO) typical, ±0.25% max
Resolution	0.025% of FS
Update Rate	300Hz nominal
Operating Temperature	Current output: -20 to +85°C; [-40 to +185°F]; Voltage output: -40 to 105°C [-40 to 221°F]
Temperature Coefficient	≤ ± 0.015% of FS/C
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, PUR, 28AWG
Mounting	M5 x 0.8 [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.**

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**