



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



LZE19/LZI19 LVIT Inductive Linear Position Sensors

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	\$,05au]:	PDF	2.5 [0.10]	35.0 [1.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-6.4A-00-10S	\$,05au]:	PDF	6.4 [0.25]	35.0 [1.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-12.7A-00-10S	\$05au.:	PDF	12.7 [0.50]	35.0 [1.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-025A-00-10S	\$05au#:	PDF	25 [1.0]	35.0 [1.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-050A-00-10S	\$,05au!:	PDF	50 [2.0]	60.5 [2.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-100A-00-10S	\$05au?:	PDF	100 [4.0]	111.1 [4.38]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-150A-00-10S	\$,05au.:	PDF	150 [6.0]	165.1 [6.50]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-200A-00-10S	\$05av0:	PDF	200 [8.0]	215.9 [8.50]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-250A-00-10S	\$05av1:	PDF	250 [10.0]	266.7 [10.50]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-300A-00-10S	\$05av2:	PDF	300 [12.0]	317.5 [12.50]	0-10 VDC	1 [3.2]	Stainless steel
LZE19-375A-00-10S	\$05av3:	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	\$05av4:	PDF	2.5 [0.10]	35.0 [1.38]	4-20 mA	1 [3.2]	Stainless steel
LZI19-6.4A-00-20S	\$05av5:	PDF	6.4 [0.25]	35.0 [1.38]	4-20 mA	1 [3.2]	Stainless steel
LZI19-12.7A-00-20S	\$05av6:	PDF	12.7 [0.50]	35.0 [1.38]	4-20 mA	1 [3.2]	Stainless steel
LZI19-025A-00-20S	\$05av7:	PDF	25 [1.0]	35.0 [1.38]	4-20 mA	1 [3.2]	Stainless steel
LZI19-050A-00-20S	\$05av8:	PDF	50 [2.0]	60.5 [2.38]	4-20 mA	1 [3.2]	Stainless steel
LZI19-100A-00-20S	\$05av9:	PDF	100 [4.0]	111.1 [4.38]	4-20 mA	1 [3.2]	Stainless steel
LZI19-150A-00-20S	\$05ava:	PDF	150 [6.0]	165.1 [6.50]	4-20 mA	1 [3.2]	Stainless steel
LZI19-200A-00-20S	\$05avb:	PDF	200 [8.0]	215.9 [8.50]	4-20 mA	1 [3.2]	Stainless steel
LZI19-250A-00-20S	\$05avc:	PDF	250 [10.0]	266.7 [10.50]	4-20 mA	1 [3.2]	Stainless steel
LZI19-300A-00-20S	\$05avd:	PDF	300 [12.0]	317.5 [12.50]	4-20 mA	1 [3.2]	Stainless steel
LZI19-375A-00-20S	\$05ave:	PDF	375 [15.0]	400.0 [15.75]	4-20 mA	1 [3.2]	Stainless steel

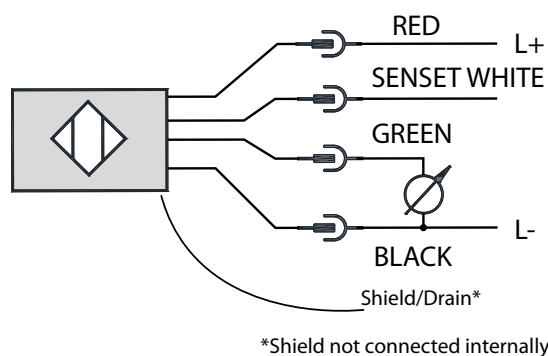
LZE19/LZI19 LVIT Inductive Linear Position Sensors

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	$\leq \pm 0.15\%$ of Full Scale Output (FSO) typical, $\pm 0.25\%$ 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	$\leq \pm 0.015\%$ 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



Wiring Table

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

*Shield not connected internally