



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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For use in:
Packaging Equipment
Automation Systems
Assembly Machinery
Hydraulic Cylinders

LZ-19 Series

LVIT Linear Position Sensor

Through-bore LVIT Linear Position Sensor for applications needing superior stroke-to-body-length

The LZ-19 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 hydraulic cylinders to sense rod position. The LVIT is offered in nominal full scale ranges from 2.5 to 750 mm (0.100 to 30 inches) with an excellent stroke-to-length ratio. The sensor has a 19.0 mm (3/4 inch) outside diameter aluminum or optional stainless steel body with a 1m axial cable for I/O connections. The 7.5 mm (0.295 inch) diameter through-bore of an LZ-19 provides clearance for its 6.00 mm (0.236 inch) diameter 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.

Technical datasheets and additional information can be found at www.alliancesensors.com

Features:

- Contactless operation prevents internal wearout from dithering or rapid cycling
- LVIT Technology™ (Linear Variable Inductance Transducer)
- Through-bore design eliminates mechanical over stroking
- Full Scale ranges from 2.5 to 750 mm (0.100 to 30 inches)
- Proprietary SenSet™ field adjustable range scaling
- DC in / DC out operation with built-in electronics
- Excellent stroke-to-body-length ratio

Specifications:

| | |
|------------------|---|
| Analog I/Os | 0 – 5 V or 0.5 – 4.5 V DC output; 8 – 30 V input, 35 mA max, 0 – 10 V DC output; 12 – 30 V input, 35 mA max 4 – 20 mA (3-wire) output; 18 – 30 V input, 60 mA max. (75 C max) |
| Measuring Ranges | 12.5 to 900 mm (1/2 to 36 inches) full scale |
| Linearity Error | ≤±0.15% of Full Scale Output (FSO) typical, ±0.25% max |
| Resolution | 0.025% of FS |
| Update Rate | 300 Hz nominal |
| Terminations | IEC IP-67 |

ALLIANCE SENSORS GROUP
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LZ-19 Series

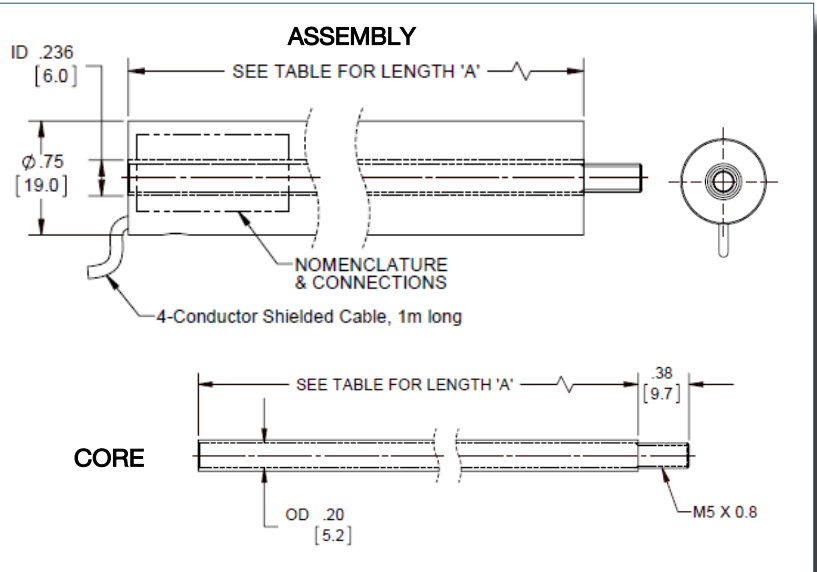
Specifications Con't:

| | |
|-------------------------|--|
| Operating Temperature | -20 to 85 C (-40 to 105 C Extended Range) |
| Temperature Coefficient | ≤±0.015% of FS/C |
| Humidity | 95% RH, non-condensing |
| Shock | 1000 gs, 11 msec. |
| Vibration | 5-20 Hz 0.5 inch p-p; 20-2000 Hz 4.2 g p-p |

| LZ-19 Range Table | | |
|-------------------|------|---------------|
| Nominal Range | | Length "A" |
| Inches | mm | Inches (mm) |
| 0.10 | 2.5 | 1.38 (35.0) |
| 0.20 | 5.0 | 1.38 (35.0) |
| 0.30 | 7.5 | 1.38 (35.0) |
| 0.40 | 10 | 1.38 (35.0) |
| 0.50 | 12.5 | 1.38 (35.0) |
| 0.60 | 15 | 1.38 (35.0) |
| 0.80 | 20 | 1.38 (35.0) |
| 1.00 | 25 | 1.38 (35.0) |
| 1.20 | 30 | 1.63 (41.3) |
| 2.00 | 50 | 2.38 (60.5) |
| 3.00 | 75 | 3.38 (85.9) |
| 4.00 | 100 | 4.38 (111.1) |
| 6.00 | 150 | 6.50 (165.1) |
| 8.00 | 200 | 8.50 (215.9) |
| 10.00 | 250 | 10.50 (266.7) |
| 12.00 | 300 | 12.50 (317.5) |
| 15.00 | 375 | 15.75 (400.0) |
| 18.00 | 450 | 18.75 (476.2) |
| 24.00 | 600 | 25.00 (635.0) |
| 30.00 | 750 | 31.00 (787.4) |

| LZ-19 Connection Table | |
|------------------------|--------|
| I/O Function | Color |
| +Power Input | Red |
| Ground | Black |
| Analog output | Green |
| SenSet™ | White |
| Shield/ drain* | Shield |

***Shield unconnected internally**



Ordering Information:

| Series | Output | Housing Diameter | Range (mm) | Electrical Termination | | Output | Housing/Rod Material |
|-----------|--------------------|-------------------|--------------------|------------------------|-----------------------|--------------------------|--------------------------|
| | | | | Axial | Termination | | |
| LZ | X- | XX- | XXX- | X- | XX- | XX- | X- |
| | E - Voltage | 19 - 19 mm | 2.5 - 15mm | A - Axial | 00 - 1 m cable | 05 - 0.5 to 4.5 V | A - Aluminium |
| | I - Current | | (2.5mm increments) | | | 06 - 4.5 to 0.5 V | S - 300 Series SS |
| | | | 15 - 30mm | | | 10 - 0 to 10.0 V | |
| | | | (5mm increments) | | | 11 - 10.0 to 0 V | |
| | | | 050 - 300 | | | 20 - 4 to 20 mA | |
| | | | (50mm increments) | | | 21 - 20 to 4 mA | |
| | | | 300 - 450 | | | 50 - 0 to 5 V | |
| | | | (75mm increments) | | | 51 - 5 to 0 V | |
| | | | 450 - 750 | | | | |
| | | | (150mm increments) | | | | |