



LCZ260



Single hall-effect zero speed sensor

Actual product appearance may vary.

Features

- Low cost
- Omni-directional sensor to target orientation
- Digital output
- Small size
- Low power consumption

Potential Applications

- Industrial process control
- Factory automation
- Rotary applications, such as pumps, rollers, mixers, fan speed measurement, transmission, spindles, gear reducer RPM and process speed

Description

The LCZ Series Hall-effect Zero Speed Sensors provide a durable, cost-effective solution in most harsh environments. The sensor is available in 9,5 mm [3/8 in/0.375 in] and 15,9 mm [5/8 in/0.625 in] diameters, in both 50,8 mm [2.00 in] and 76,2 mm [3.00 in] lengths. The stainless steel package is simple to install and adjust and does not require rotational orientation.

Product Specifications	
Sensing Type	Single hall-effect zero speed
Housing Diameter	9,5 mm [3/8 in]
Barrel Length	50,8 mm [2.0 in]
Vdc Supply	4.5 Vdc to 26 Vdc
Operating Frequency Range	0 Hz to 15 kHz
Operating Temperature	-40 °C to 125 °C [-40 °F to 257 °F]
Connections	1750 mm [69 in] leads
Availability	Global
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Series Name	LCZ

LCZ Series

Hall-effect Zero Speed Sensors



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FEATURES

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POTENTIAL APPLICATIONS

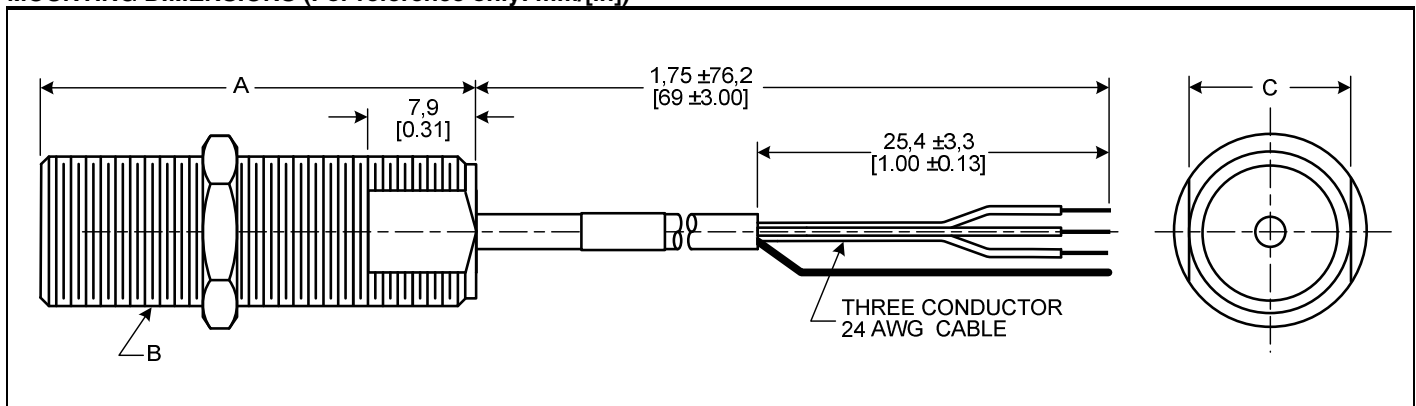
- Industrial process control
- Factory automation
- Rotary applications, such as:
 - Pumps
 - Rollers
 - Mixers
 - Fan speed measurement
 - Transmission
 - Spindles
 - Gear reducer RPM
 - Process speed
 - Synchronization
 - Generator set
 - Compressor speed
 - Dyno testing

LCZ Series

SENSOR SPECIFICATIONS

Characteristic	Minimum	Maximum	Unit	Condition
Supply voltage	4.5	26	Vdc	–
Supply current	–	20	mA	load = infinity, Vcc = 26
Reverse polarity	30	–	Vdc	–
Output sinking	–	20	mA	0.4 V max. short circuit protected
Voltage low	–	0.4	V	at 30 mA max. sink
Voltage high	–	30	Vdc	–
Duty cycle	20	80	%	within operating gap
Operating frequency	0	15 k	Hz	no orientation required
Output signal rise/fall time	–	4.0	μs	880 Ohm, 20 pF
Dielectric strength	200	–	Vac	<2 mA leakage
Operation gap	–	–	–	at gaps below curve (see Air Gap Performance Curve)
Output impedance	4.7	5.3	kOhm	–
Operating temperature range	-40 [-40]	125 [257]	°C [°F]	–
Storage temperature	–	125 [257]	°C [°F]	–
Sealing	IP68			
Shock	50 Gs, 11 ms			–
Vibration	15 Gs, 10 Hz to 2000 Hz			–
Housing material	stainless steel			–
Weight	see Mounting Dimensions			–

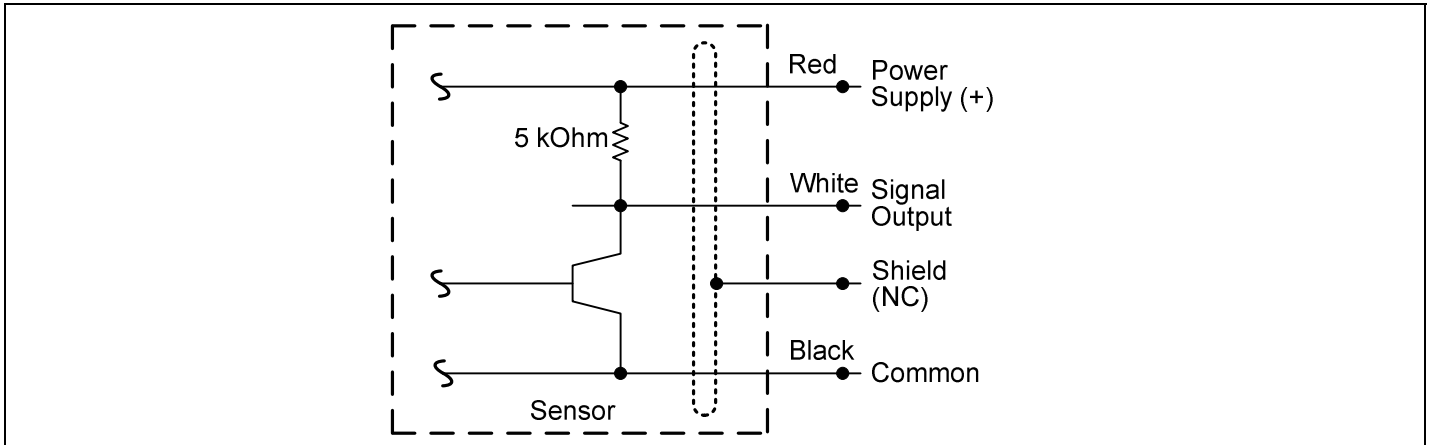
MOUNTING DIMENSIONS (For reference only: mm/[in])



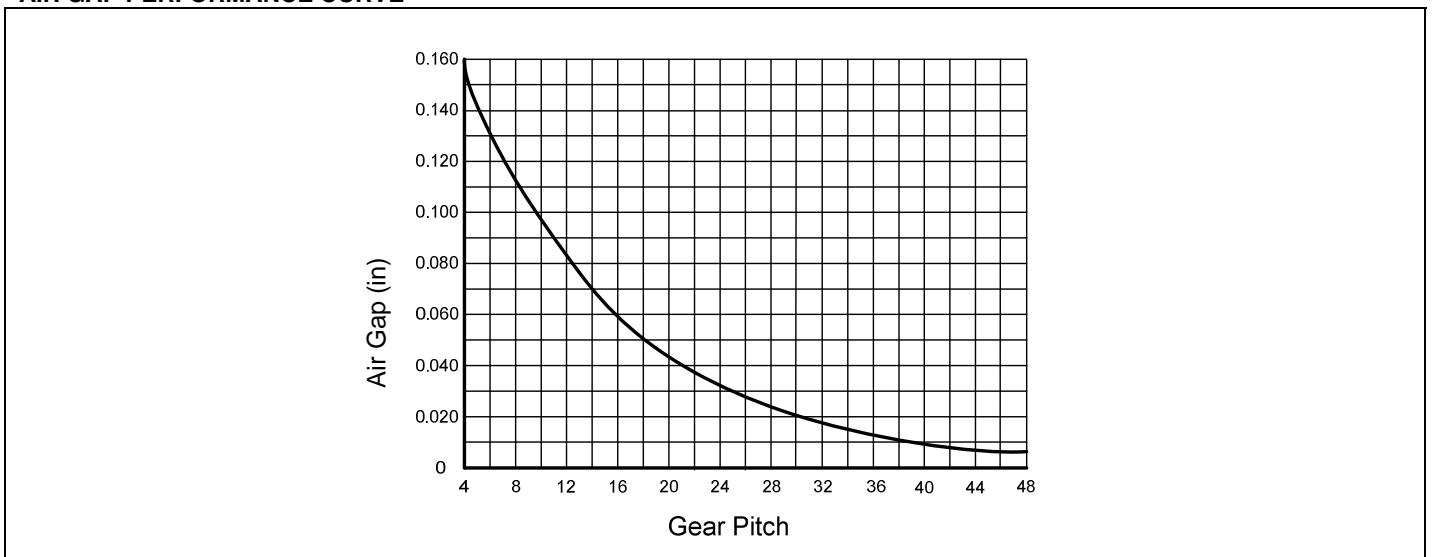
Catalog Listing	Thread Length (A)	Thread Type (B)	Flats (C)	Max. Mounting Torque	Weight
LCZ260	50,8 mm [2.00 in]	3/8-24UNF-2A	7,9 mm [0.312 in]	4,1 [36 in lb]	59,5 g [2.1 oz]
LCZ260-30	76,2 mm [3.00 in]	3/8-24UNF-2A	7,9 mm [0.312 in]	4,1 [36 in lb]	68,0 g [2.4 oz]
LCZ460	50,8 mm [2.00 in]	5/8-18UNF-2A	14,3 mm [0.562 in]	27,1 N m [240 in lb]	104,9 [3.7 oz]
LCZ460-30	76,2 mm [3.00 in]	5/8-18UNF-2A	14,3 mm [0.562 in]	27,1 N m [240 in lb]	136,1 g [4.8 oz]

Hall Effect Zero Speed Sensor

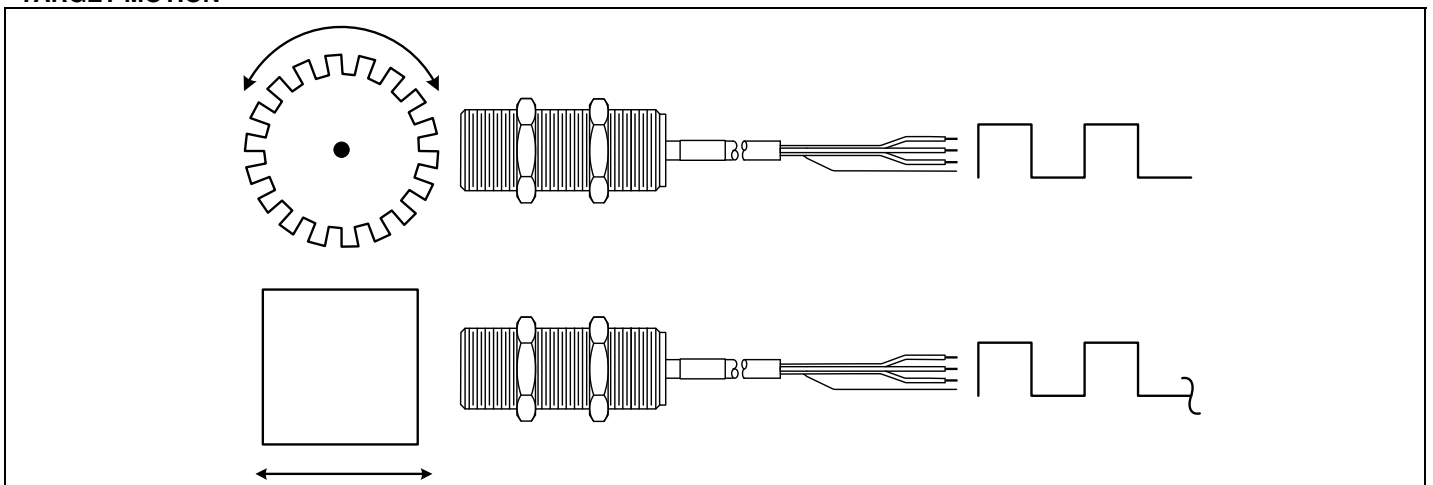
EQUIVALENT ELECTRICAL SCHEMATIC



AIR GAP PERFORMANCE CURVE



TARGET MOTION



ORDER GUIDE

Catalog Listing	Description
LCZ260	Hall-effect speed sensor, 3/8-24UNF-2A thread, 50,8 mm [2.00 in] length
LCZ260-30	Hall-effect speed sensor, 3/8-24UNF-2A thread, 76,2 mm [3.00 in] length
LCZ460	Hall-effect speed sensor, 5/8-18UNF-2A thread, 50,8 mm [2.00 in] length
LCZ460-30	Hall-effect speed sensor, 5/8-18UNF-2A thread, 76,2 mm [3.00 in] length