## LCZ Series

# Hall Effect Zero Speed Sensors



#### **APPLICATIONS**

Industrial process control Factory automation Meter Pump Roller Mixer Fan speed Transmission Gear reducer RPM Process speed Synchronization Spindle Generator set Compressor speed Dyno testing R&D testing RPM

#### **FEATURES**

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

Environmentally sealed

The LCZ Series Hall Effect Speed Sensors address a variety of industrial control, factory automation and rotary equipment applications requiring a long-life, cost effective solution in manufacturing or where durability is a factor in harsh environments. Assembled in a stainless steel, easily adjustable package, the LCZ Series is suitable for a wide range of speed applications. Versatile and simple to install, this Hall Effect speed sensor does not require rotational orientation.



### LCZ Series

# Hall Effect Zero Speed Sensor

### **SPECIFICATIONS**

MECHANICAL	
Housing:	Stainless Steel 3/8, 1/2, 5/8, 15/32 with one hex nut, blind (sealed) front end
Interconnect:	69" TPE 24 AWG 3-conductor shielded cable
ELECTRICAL	
Supply Voltage:	4.5 to 26 VDC @ 20 mA maximum
Operating Frequency: Output Signal:	0 to 15 kHz Open drain MOSFET, sinking configuration
Voltage Low:	short circuit protected .4V maximum @ 30 mA maximum sink 30 VDC maximum
Duty Cycle: Dielectric: Air Gap	40% to 60% 200 VDC
Performance:	See graph
	<b>FAI</b>
ENVIKONMENTAL	
Sealing:	Hermetically sealed sensing face IP67 rated cable exit area
Sealing: Low Temperature Operation: High	Hermetically sealed sensing face IP67 rated cable exit area -40° C
Sealing: Low Temperature Operation: High Temperature Operation: Storage	Hermetically sealed sensing face IP67 rated cable exit area -40° C 125° C
Sealing: Low Temperature Operation: High Temperature Operation: Storage Temperature: Shock: Vibration:	Hermetically sealed sensing face IP67 rated cable exit area -40° C 125° C 125° C maximum 50 Gs, 11ms 15Gs, 10 to 2000 Hz
Sealing: Low Temperature Operation: High Temperature Operation: Storage Temperature: Shock: Vibration: MODEL NUMB	Hermetically sealed sensing face IP67 rated cable exit area -40° C 125° C 125° C maximum 50 Gs, 11ms 15Gs, 10 to 2000 Hz ER CONFIGURATION
Sealing: Low Temperature Operation: High Temperature Operation: Storage Temperature: Shock: Vibration: MODEL NUMB	Hermetically sealed sensing face IP67 rated cable exit area -40° C 125° C 125° C maximum 50 Gs, 11ms 15Gs, 10 to 2000 Hz ER CONFIGURATION
Sealing: Low Temperature Operation: High Temperature Operation: Storage Temperature: Shock: Vibration: MODEL NUMB	Hermetically sealed sensing face IP67 rated cable exit area -40° C 125° C 125° C maximum 50 Gs, 11ms 15Gs, 10 to 2000 Hz ER CONFIGURATION THREAD FLATS 3/8-24 .312
Sealing: Low Temperature Operation: High Temperature Operation: Storage Temperature: Shock: Vibration: MODEL NUMB LCZ260: LCZ260: LCZ260:	Hermetically sealed sensing face IP67 rated cable exit area -40° C 125° C 125° C maximum 50 Gs, 11ms 15Gs, 10 to 2000 Hz ER CONFIGURATION THREAD FLATS 3/8-24 .312 1/2-20 .438 5/8-18 .52
Sealing: Low Temperature Operation: High Temperature Operation: Storage Temperature: Shock: Vibration: MODEL NUMB LCZ260: LCZ360: LCZ460: LCZ460: LCZ560: 1	Hermetically sealed sensing face IP67 rated cable exit area -40° C 125° C 125° C maximum 50 Gs, 11ms 15Gs, 10 to 2000 Hz ER CONFIGURATION THREAD FLATS 3/8-24 .312 1/2-20 .438 5/8-18 .562 5/32-32 .438
Sealing: Low Temperature Operation: High Temperature Operation: Storage Temperature: Shock: Vibration: MODEL NUMB MODEL NUMB LCZ260: LCZ360: LCZ40: LCZ40: LCZ	Hermetically sealed sensing face IP67 rated cable exit area -40° C 125° C 125° C maximum 50 Gs, 11ms 15Gs, 10 to 2000 Hz ER CONFIGURATION THREAD FLATS 3/8-24 .312 1/2-20 .438 5/8-18 .562 5/32-32 .438 at length, add -30 to model #.
Sealing: Low Temperature Operation: High Temperature Operation: Storage Temperature: Shock: Vibration: MODEL NUMB CZ260: LCZ260: LCZ360: LCZ460: LCZ460: LCZ460: LCZ560: 1 Note: For 3" three	Hermetically sealed sensing face IP67 rated cable exit area -40° C 125° C 125° C maximum 50 Gs, 11ms 15Gs, 10 to 2000 Hz ER CONFIGURATION THREAD FLATS 3/8-24 .312 1/2-20 .438 5/8-18 .562 5/32-32 .438 ad length, add -30 to model #.
Sealing: Low Temperature Operation: High Temperature Operation: Storage Temperature: Shock: Vibration: MODEL NUMB CZ260: LCZ260: LCZ460: LCZ460: LCZ560: 1 Note: For 3" three	Hermetically sealed sensing face IP67 rated cable exit area -40° C 125° C 125° C maximum 50 Gs, 11ms 15Gs, 10 to 2000 Hz ER CONFIGURATION THREAD FLATS 3/8-24 .312 1/2-20 .438 5/8-18 .562 5/32-32 .438 ad length, add -30 to model #.

Note: Contact Factory for custom OEM applications

#### DIMENSIONS



#### EQUIVALENT ELECTRICAL SCHEMATIC



### **AIR GAP PERFORMANCE**

#### MAX. OPERATION GAP VS. GEAR PITCH



### TARGET MOTION



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