LPH902 Series

Nonincendive, Intrinsically Safe, CSA North America Class 1, Division 1 and IECEx/ATEX Zone 0,1 Approved Loop Power Sensor, 4-20 mA Output Proportional to Vibration in Acceleration, Top Exit 2 Pin Connector

ASSET MONITORING PRODUCTS



Regulatory Information

CSA 221421
CSA 26CA80263367X
CLI, DIV 1, GRP A, B, C and D
CLII, DIV 1, GRP E, F and G; CLIII
Ex ia IIC T3-T4 Ga
Ex ib IIIC T135°C...T147°C Db
CLI, ZN 0, AEx ia IIC T3-T4 Ga
ZN 21, AEx ib IIIC T135°C...T147°C Db
T3: Ta = −40°C to +121°C
T4: Ta = −40°C to +80°C
T147°C: Ta = – 40°C to +121°C
T135°C: Ta = – 40°C to +80°C

1600 ft (488 m) Maximum Allowable Integral Cable Length
Approved Cabling: CB102, CB103*, CB111, CB190*, CB193*, CB296 (*Approved for Use in T4 Applications Only)
Requires one IS111-1B Intrinsic Safety Barrier

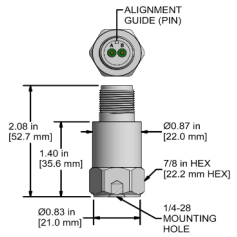
Sira 15ATEX2152X
IECEx SIR 15.0060X
Ex ia IIC T3/T4 Ga
Ex ib IIIC T135°C...T147°C Db
Ex ia I Ma
T3: Ta = −40°C to +121°C
T4: Ta = −40°C to +80°C
Mining Group I: Ta @-40°C to +121°C
T147°C:-40°C to 121°C
T135°C: -40°C to +80°C

Connector Exit Entity Parameters: Ui = 28 Vdc, Ii = 120 mA, Pi = 0.63W, Ci = 0nF, Li = 0µH

Integral Cable Entity Parameters Ui = 28 Vdc, Ii = 120 mA, Pi = 0.63W, Ci = 80.4nF, Li = 336µH

LPH902-XXX-1A
2 Pin Connector

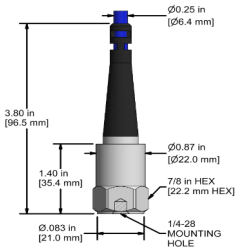
Connector Pin	Polarity
A	(+) Loop Power
B	(-) Loop Power Return



Built To Order

LPH902-XXX-2A
CB193 Integral Cable

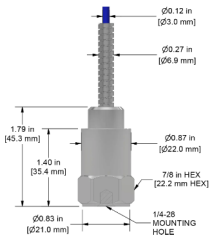
Conductor	Polarity
Red	(+) Loop Power
Black	(-) Loop Power Return
Shield	Cable Drain Wire



Built To Order

LPH902-XXX-3A
CB296 Armored Integral Cable

Conductor	Polarity
Red	(+) Loop Power
Black	(-) Loop Power Return
Shield	Cable Drain Wire



Built To Order

Specifications	Standard	Metric
Part Number	LPH902	M/ or M8/LPH902
Tolerance: 4 mA	(± 10%)	
Tolerance: 20 mA	(± 10%)	
Electrical		
Settling Time	<30 Seconds	
Voltage Source	12 - 28 VDC	
Case Isolation	>10^8 ohm	
Environmental		
Operating Temperature Range	-40 to 257 °F	-40 to 125 °C
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Submersible Depth	200 ft.	60 m

Specifications	Standard	Metric
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	3.0 oz	86 grams
Case Material	316L Stainless Steel	
Mounting Thread	1/4-28 Blind Tapped Hole	
Connector (Non-Integral)	2 Pin MIL-C-5015	
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
Calibration Certificate	Current Output @ 100 Hz	

Ordering Information

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Stud Type
Blank = ¼-28
M = M6x1
M8 = M8x1.25

Measurement Range
0 = 0-0.25 g
1 = 0-0.5 g
2 = 0-1 g
3 = 0-2 g
4 = 0-5 g
5 = 0-10 g
6 = 0-20 g

Type
P = Peak
R = RMS

Frequency Range ±3dB
1 = 600-60000 CPM (10-1000 Hz)
2 = 120-150000 CPM (2-2500 Hz)
3 = 120-60000 CPM (2-1000 Hz)
4 = 120-300000 CPM (2-5000 Hz)
5 = 120-600000 CPM (2-10000 Hz)

Style
1A = 2 Pin MIL C-5015
2A = Integral Cable
3A = Armor Jacket

Integral Options

Armor Length (Integral)
010 = 10 ft/3 m
020 = 20 ft/6 m
030 = 30 ft/9 m
050 = 50 ft/15 m
100 = 100 ft/30 m

Cable Length (Integral)
010 = 10 ft/3 m
020 = 20 ft/6 m
030 = 30 ft/9 m
050 = 50 ft/15 m
100 = 100 ft/30 m

*Custom Lengths Available Upon Request