

LPH802 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 Velocity, Top Exit 2 Pin Connector



Regulatory Information

CSA 221421

CSA 26CA80263367X

CL I, DIV 1, GRP A, B, C and D

CL II, DIV 1, GRP E, F and G; CL III

Ex ia IIC T3-T4 Ga

Ex ib IIC T135°C...T147°C Db

CL I, ZN 0, AEx ia IIC T3-T4 Ga

ZN 21, AEx ib IIC 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

Sira 15ATEX2152X

IECEx SIR 15.0060X

Ex ia IIC T3/T4 Ga

Ex ib IIC 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

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

Connector Exit Entity Parameters:

Ui = 28 Vdc, li = 120 mA, Pi = 0.63W,

Ci = 0nF, Li = 0μH

Integral Cable Entity Parameters

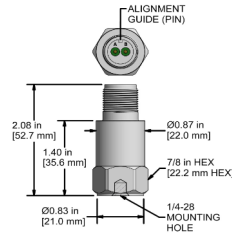
Ui = 28 Vdc, li = 120 mA, Pi = 0.63W,

Ci = 80.4nF, Li = 336μH

LPH802-XXX-1A

2 Pin Connector

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

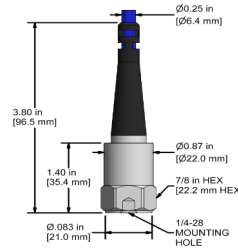


Built To Order

LPH802-XXX-2A

CB193 Integral Cable

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

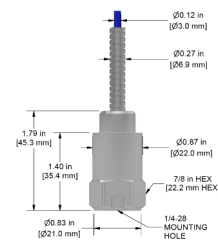


Built To Order

LPH802-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	Specifications	Standard	Metric
Part Number	LPH802	M/ or M8/LPH802	Physical		
Tolerance: 4 mA	(± 10%)		Sensing Element	PZT Ceramic	
Tolerance: 20 mA	(± 10%)		Sensing Structure	Shear Mode	
Electrical			Weight	2.9 oz	82 grams
Settling Time	<30 Seconds		Case Material	316L Stainless Steel	
Voltage Source	12 - 28 VDC		Mounting Thread	1/4-28 Blind Tapped Hole	
Case Isolation	>10 ⁸ ohm		Connector (Non-Integral)	2 Pin MIL-C-5015	
Environmental			Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Operating Temperature Range	-40 to 257 °F	-40 to 125 °C	Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
Electromagnetic Sensitivity	CE		Calibration Certificate	Current Output @ 100 Hz	
Sealing	Welded, Hermetic				
Submersible Depth	200 ft.	60 m			

Ordering Information

Stud Type	Measurement Range	Type	Frequency Range ±3dB	Style
Blank = 1/4-28 M = M6x1 M8 = M8x1.25	0 = 0-0.4 IPS (0-10 mm/sec) 1 = 0-0.5 IPS (0-12.7 mm/sec) 2 = 0-0.8 IPS (0-20 mm/sec) 3 = 0-1.0 IPS (0-25.4 mm/sec) 4 = 0-2.0 IPS (0-50.8 mm/sec) 6 = 0-5.0 IPS (0-127 mm/sec)	P = Peak R = RMS	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)	1A = 2 Pin MIL C-5015 2A = Integral Cable 3A = Armor Jacket

Integral Options	
Armor Length (Integral)	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	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	