

Differential converter for charge sensor



Features

- Differential signal convertor
- Built in high/low pass filter
- Easy plug and play
- Low noise signal
- Interface with PE sensor
- Gain option available
- Light weight
- Low source resistance compatible

Electrical

Supply voltage	12~20 Vdc
Power requirement	<30 mA
Bias voltage.....	0 Vdc
Gain option(mV/pC).....	1/10
Frequency response(±5%).....	1~15KHz
Upper cutoff frequency(-3dB).....	30KHz
Source resistance.....	>50KΩ
Source capacitance.....	<10nF
Output resistance.....	<50Ω
Load capacitance.....	<100pF
Output Max. 25°C.....	±10V
Gain accuracy.....	±3%
Gain stability.....	±1%
Noise refer to output.....	1mV

Environmental

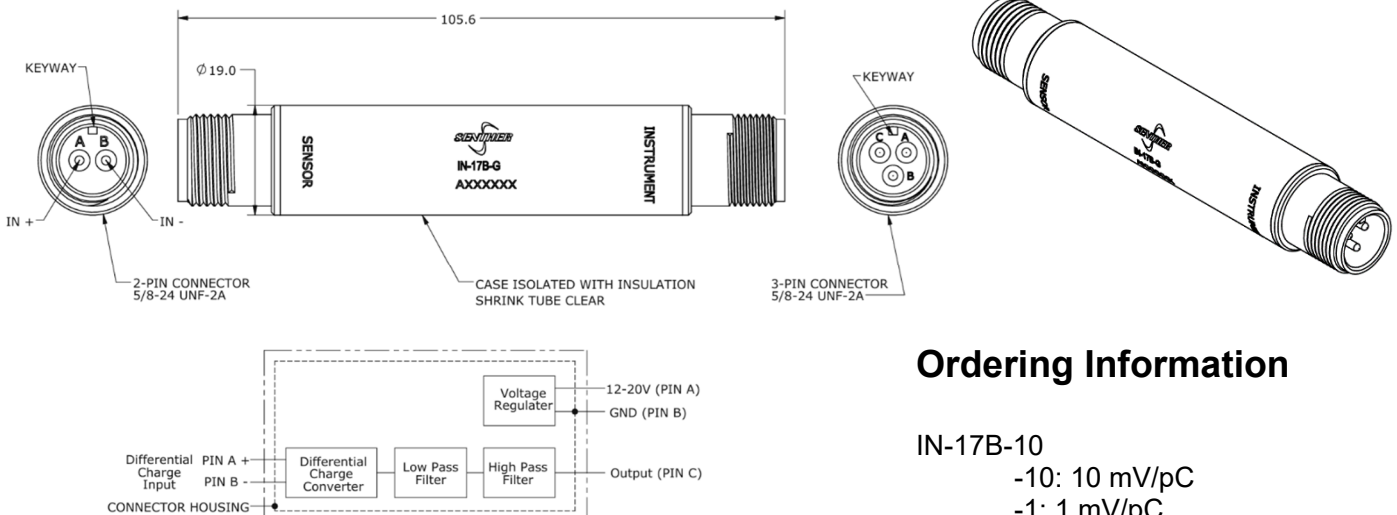
Temperature range.....	-40 to 85°C
Warm up time.....	<20s
Shock limit.....	100g peak
Vibration limit.....	20g peak
Case.....	Stainless steel
Sealing	Hermetically sealed

Physical

Weight.....	<70grams
Input connector.....	2 Pins
Output connector.....	3 Pins

Note:

Gain accuracy at 1nF source capacitance and 100Hz ref frequency
 Gain stability referred to 25 °C at 100Hz from -40°C to 85°C
 Noise refer to input(pC): $0.002 \times ((2.5 + C_i)^2 + 1.2/R_i)^{0.5}$
 C_i =Input capacitance(pF)
 R_i =Input resistance(MΩ)



Ordering Information

IN-17B-10
 -10: 10 mV/pC
 -1: 1 mV/pC