

Type 5012

5012 CHARGE AMPLIFIER

Type 5012 is a single range amplifier that accepts a charge signal from a high impedance pressure or force transducer and converts it into a voltage. The design of the 5012 is specifically tailored for use with charge type sensors for measuring cavity pressure on injection molding machines. The unit has two output voltage levels, $\pm 10V$ for connection to recorders and other instruments accepting

10V signals and ± 20 mV for connection to the input of controllers that require a 20 mV signal level. Sensitivity (range) is factory adjusted for with a specified sensor. If a slide type force sensor is to be used, both the sensor and the pin diameter should be specified when ordering.

- Rugged cast aluminum case
- Dual output signal levels
- Adapts piezoelectric force or pressure sensor to a strain gage controller



Technical Data	Units	5012
Measurement Range	pC	100 ... 10 ⁵
Frequency Response	KHz	≈ 0 ... 40
Non-linearity	%	0.1
Time Constant	s	1000 ... 100000
Noise max	μV_{rms}	200
Max Drift @25 °C (77 °F)	pC/s	0.25
 @50 °C (122°F)	pC/s	2
Output		
Voltage	V	± 10
	mV	± 20
Impedance	Ω	100
Connectors		
Input	type	BNC neg.
Output	type	KPT 02E-8-4P
Pin Allocation		
A-Low F.S	mV	± 20
B-High F.S	V	± 10
C-Common		
D-Operate/Reset		
Power	V	115/ 230
	Hz	50 ... 400
	VA	1.5
Weight	lb	1.25
Case	type	cast/aluminum

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Principles of Operation

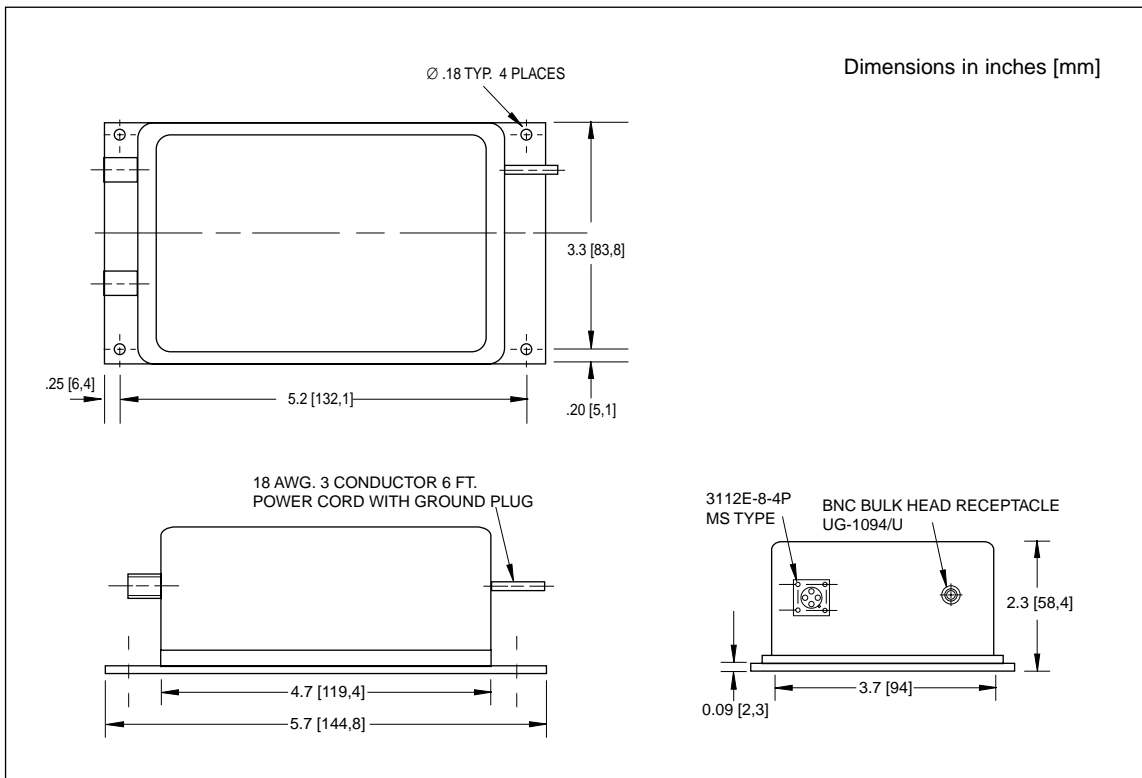
In actual application, the operational state of the 5012 is in a stand-by (reset) mode and it is placed into an operating mode just prior to performing the measurement. The Operate/Reset function is controlled by a built-in relay. To place the amplifier into an operate mode, the reset pin located in the four pin connector must be connected to the common (ground). Because of the drift of the amplifier, measuring errors may occur if the amplifier is left in the operate function for a length of time. Prior to each measuring cycle, the operate/reset connection to the common should be opened to reset the amplifier.

Ordering Information

5012 charge amplifier, specify full scale range = 10V

Supplied Accessory

440-0510-001 output mating connector



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