SHIMPO

Magnetic Pickup Model 3030AN

Instruction Manual

General

Model 3030AN pickup provides a sine wave output whenever there is an abrupt change from non-magnetic to magnetic material moving past the sensor pole. The output voltage is directly proportional to the change in magnetic flux intensity over the change in time.

Mounting

The unit is designed to mount in a 5/8" – 18 threaded hole and is provided with a jam nut for securing the sensor.

Adjustment

The pickup should be adjusted for a typical clearance of .01" between the sensor and gear. This adjustment will provide excellent sensitivity and resolution.

Temperature Range

-100°F to +225°F (-73°C to +107°C)

Connections

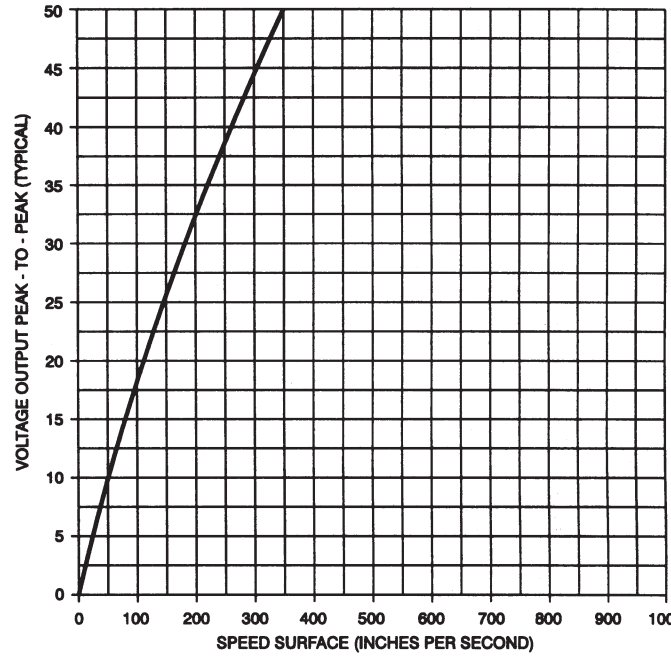
All connections refer to cable and mating connectors which must be purchased separately.

Braid: Sensor cable shield

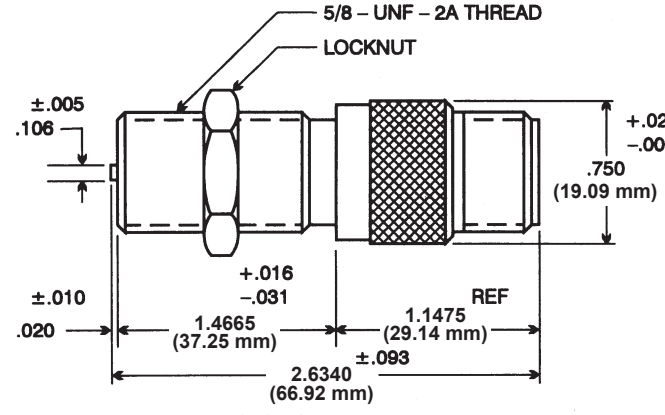
White: Signal output lead

Black: Sensor common

Note: When ferrous metal is introduced sensor magnetic field, pin B (Black) will be positive with respect to pin A (White).



Shows peak-to-peak voltage output vs. surface speed of a 20-pitch, 30 tooth ferromagnetic gear at 0.005 inch clearance. Load = 100,000 ohms.



Dimensions in inches

SHIMPO'S 3070-XP12010

TOLERANCES UNLESS OTHERWISE SPECIFIED:
FRACTIONS DEC. ANGLES ±1/16 ±.010 ±1 DEG.

DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED:

Model 3070-XP12010 Specification

PARAMEATER	SPECIFICATION	REF	TEST PROC.	% TEST
Output Voltage	60 VPP MIN.		See Note "A"	100
Coil Resistance	170-210 OHM@			100
Output Inductance	80 mH TYP.		Test @ 10Khz	100
Dielectric	500V RMS @ 60 Hz		See Note "B"	100
Leakage Resistance	100 MEGAOHMS MIN.		@ 500 VDC	100
Temp Spec.	- 65 to +200 Deg. F	x		

NOTES

A) Tested with 8 pitch gear, 100 K Ohm LOAD, 1000 IPS, .005 GAP.

B) Apply Test Voltage at not more the 100 Volts per Second.

C) Polarity: White Lead is Positive with Respect to Black lead upon Approach of Ferrous Metal.

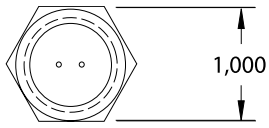
D) Housing Material: Stainless Steel. POTTING: EPOXY RESIN.

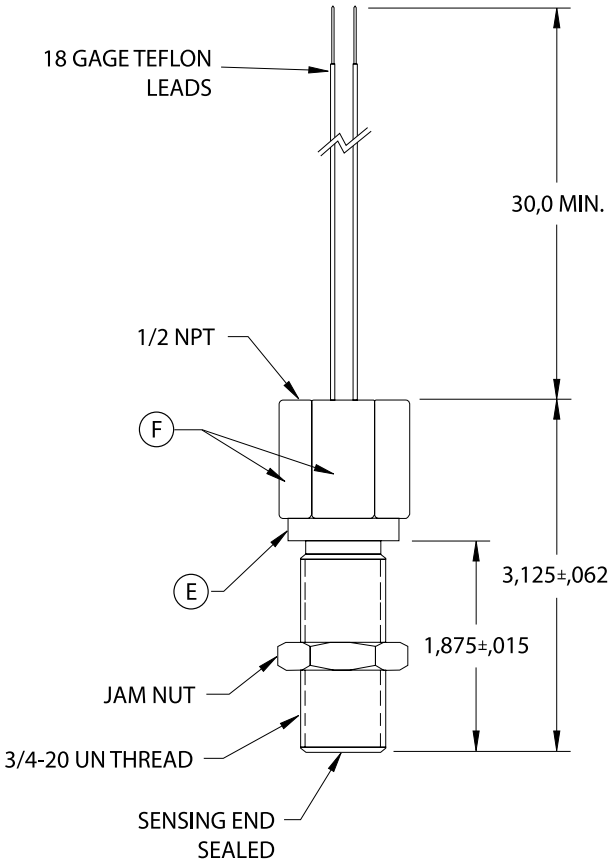
E) Permanent Marking: XP12010 Year/QC LOT # (E.G. 2005/xxx).

F) Marking SSI USA 28712
II 2 GEExm II T3
0539
03ATEX 135029X

G) Teflon Jacketed Leads.

H) Pressure Not to Exceed 3000PSI.





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Magnetic Pickup Model MP-10

Instruction Manual

Description

Model MP-10 pickup provides a sine wave output whenever there is an abrupt change from non-magnetic to magnetic material moving past the sensor pole. The output voltage is directly proportional to the change in magnetic flux intensity over the change in time.

Mounting

Unit will mount in a 5/8" threaded hole and is provided with 2 jam nuts to secure the sensor.

Adjustment

Pickup should be adjusted for a typical clearance of .01" between sensor and gear. This adjustment will provide excellent sensitivity and resolution.

Temperature Range

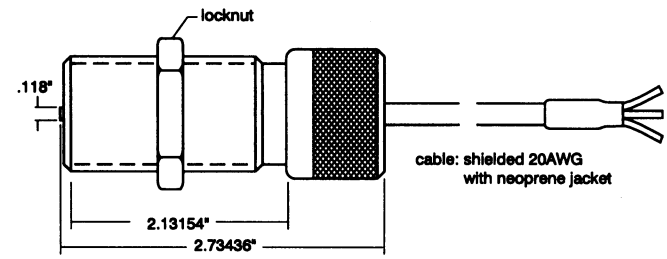
-40° F to 221° F

Connections

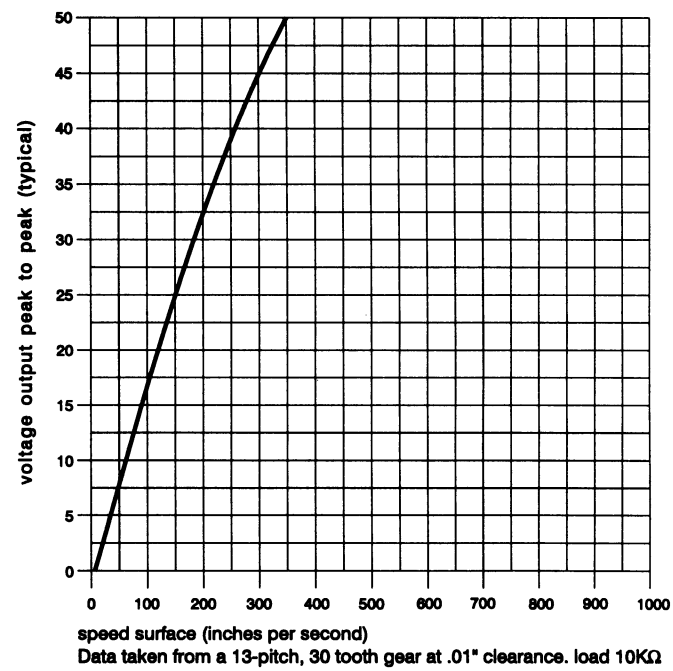
LEAD WIRE	SHIELD	WHITE	BLACK
TACHOMETER TERMINAL	E	SIG	0V

Bare: Sensor cable shield
White: Signal output lead
Black: sensor common

Dimensions



Speed vs. Voltage



Data taken from a 13-pitch, 30 tooth gear at .01" clearance. load 10KΩ