

Model 351 High Frequency Pulse Generator

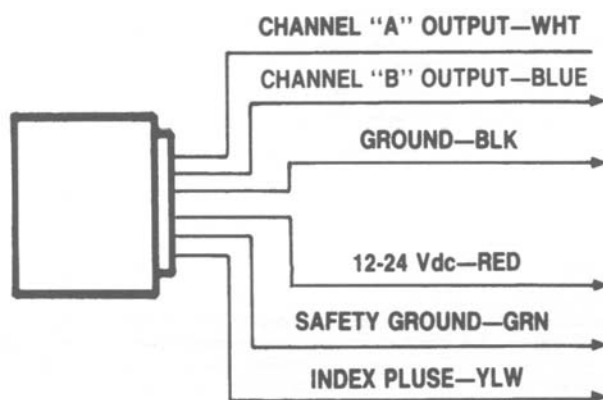
Description

The Single or Dual Output High Frequency Pulse Generator is a photo electric device used to provide two output signals proportional to unit volume while maintaining a mechanical meter-to-register link. Signal outputs are electrically 90° out-of-phase and are used primarily for pulse security. Although designed for use in meter proving, the Dual Phase Generator can be used on any application requiring a high resolution signal indicating throughput or rate of flow.

Design Features

- Converts mechanical rotation into electrical pulses.
- Adapts to most meters.
- Self-contained, optical encoder module.
- Explosion-proof and weather tight (1/2" conduit).
- No calibration adjustment required.
- Maintenance-free.
- Temperature: -40°F to 185°F (-40°C to 85°C).
- Long distance operation.
- Low output impedance.
- Low torque and low speed.
- Open collector indexing output provides one pulse per revolution.

Wiring



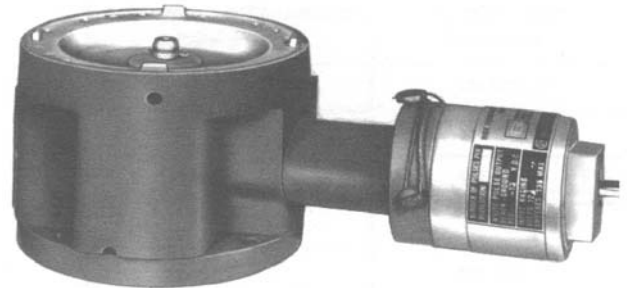
Temperature Range

-40°F to 185°F (-40°C to 85°C)

Shipping Weight and Volume (Approximate)

8 lbs @ .122 CU. Feet

3.6 kg @ .003 Cu. Meters



WARNING

Do NOT operate this instrument in excess of the specifications listed. Failure to heed this warning could result in serious injury and/or damage to the equipment.

Signals

Pulse A&B: Dual Output 90 Electrically Out-of-Phase Phase Error: 15 Maximum

Amplitude: 0 to V + (500 ohm Internal Pull-up, No Load); 0-5 Vdc ±0.2 Vdc (249 ohm Internal Pull-up, No Load)

Index: Open collector, 1 pulse per revolution 25 Vdc maximum 100 mA maximum

Pulse Duration: 90 ±10% of shaft rotation

Power Requirements

12 to 24 Vdc ±10%

88 to 140 mA (Depending on Input voltage/Output configuration).

Connections

1/2" Conduit, or quick connect

Enclosure

Explosion-Proof (Class I, Groups C & D, Division 1 CSA, U/L) and dIIBT4 (China) and weatherproof with 1/2" Conduit Connections.

Load Impedance: 5 k ohms

Maximum rpm

Pulser Shaft: 1000 rpm maximum Gear Changer: 250 rpm maximum

Recommended Cable Lengths

The recommended cable lengths are based on 18 gauge tinned copper shielded cable with a load impedance of 5 k ohm (recommended minimum) and cable capacitance of 27pf/ft. When other type cables are used the factory must be consulted to determine permissible cable lengths.

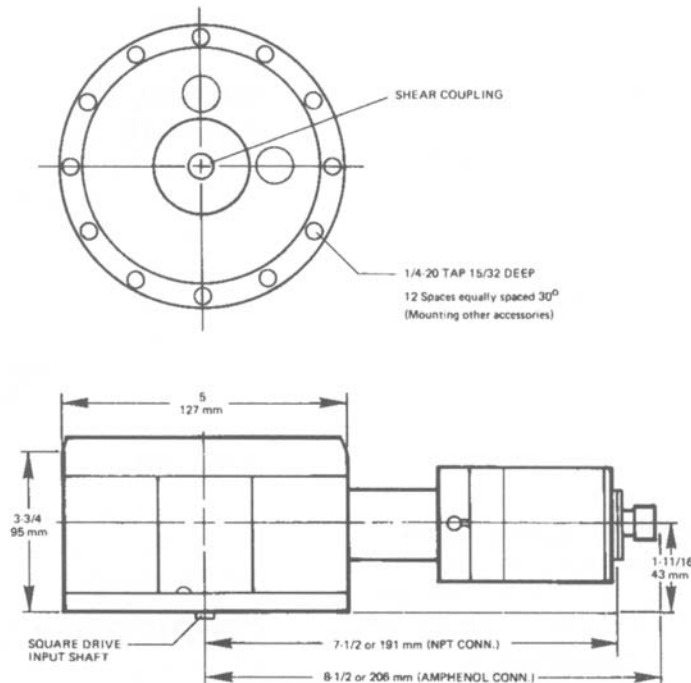
Pulse Output Frequency	Maximum Recommended Cable Lengths
1,000 Hz	3,700 ft.
2,000 Hz	1,850 ft.
3,000 Hz	1,185 ft.
4,000 Hz	925 ft.
5,000 Hz	740 ft.

Standard Pulse Rates

Typical Accessory Block Gear Ratios	Pulses per Revolution
1:1:1	100 or 256
1:2:1	200 or 512
1:4:1	400 or 1024

Note: Actual K-factor (pulses per gallon) is dependent upon meter output.

Dimensions (For Certified Dimensional Prints - Consult Factory)



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