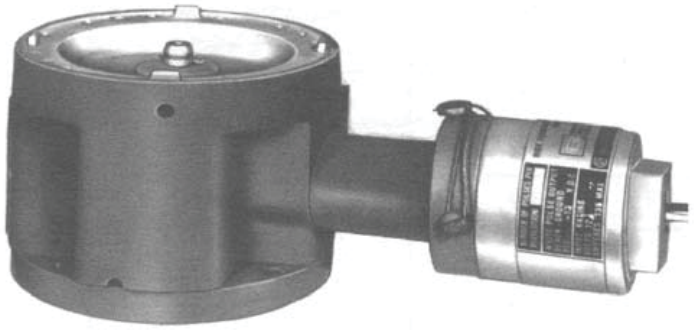
Technical Data

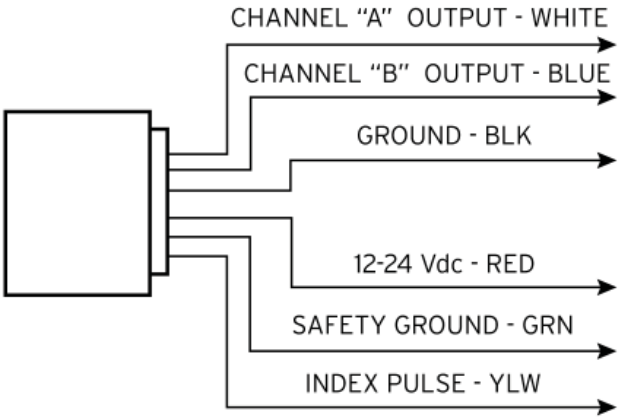
High Frequency Pulse Generator

Model 351



General
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 degree 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.

Wiring



Temperature Range
-40°F to 185°F (-40°C to 85°C)

Shipping Wieght and Volume (Approximate)
8 lbs @ 0.122 CU. Feet
3.6kg @ 0.003 Cu. Meters

Maximum RPM
Pulser Shaft: 1000 rpm maximum gear changer: 250 rpm maximum

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

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

Power Requirements
12 to 24 Vdc +/- 10%
88 to 140 mA (Depending on Input voltage/Output configuration).
Load Impedance: 5 k ohms

Connections
1/2" Conduit, or quick connect

Environmental:
NEMA 4
IP66

Hazardous area approvals:
Explosion-proof
UL: Class I, Groups C and D
CSA: Class I, Groups C and D
NEPSI (China) Ex d IIB T4 Gb

Recommended Cable Length

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.

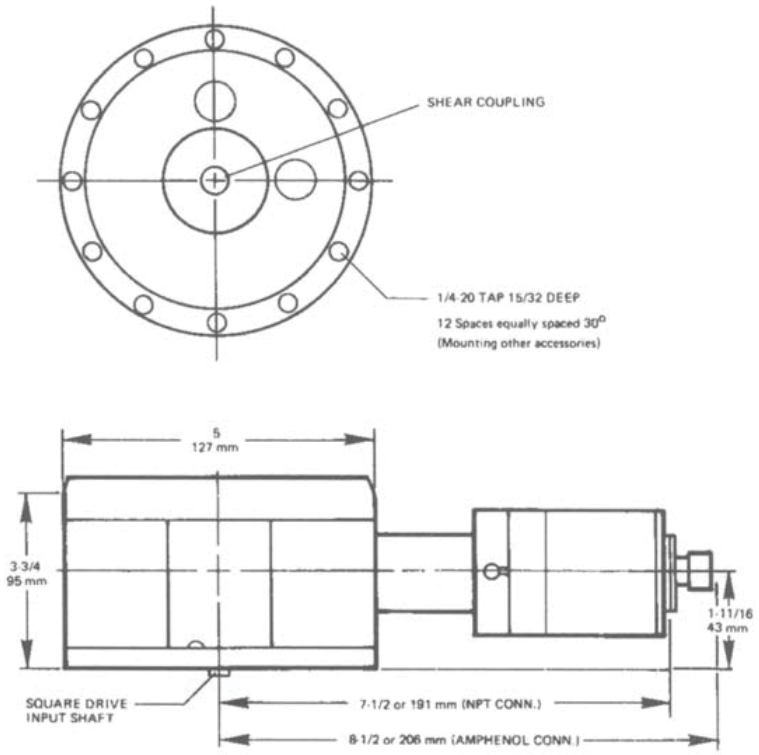
Pulse Output Frequency	Maximum Cable lengths
1,000 Hz	3,700 ft.
2,000 Hz	1,850 ft.
3,000 Hz	1,185 ft.
4,000 Hz	925 ft.
5,000 Hz	740 ft.

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 (Pulse per gallon) is dependent upon meter output

Dimensions (For Certified Dimensional Prints - Consult Factory)



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.

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