

# MODEL PL70-115 SPEED MONITOR



**Model PL70-115**



The **Model PL70-115 Speed Monitor** is used for accurate sensing of Under Speed, Over Speed and Zero Speed conditions on rotating shafts, pulleys or other rotating equipment within your plant. This system will protect your valuable machinery from costly downtime, inform you of current operating conditions and provide you with an alarm if there is any variation from your user supplied operating parameters. It will help you increase production reduce downtime and provide you with vital information to the operation of your plant.

## **Microprocessor Based Control Features:**

- Start-up Delay: 1-99 Seconds
- Alarm Set-Points: 0-160% of programmed speed
- Alarm Delay: 0-99 Seconds from receipt of pulses or power on.
- Reset Mode: Power on or remote relay input.
- Begin Start-up Delay: From receipt of pulses or power on.
- Alarm Reset: Manual or automatic reset.
- Qty. (2), 4-20mA proportional to speed: standard
- Inputs: NPN (Up to 3Khz)

The **Model PL70-115 Speed Monitor** reliably monitors any speed condition from most rotating pieces of equipment in your plant. It incorporates either a direct coupled or proximity type speed pickup that receive their speed pulses from the moving piece of equipment you wish to monitor. These speed pick-ups wire directly into the PL70-115 Microprocessor based control which continuously monitors your equipment based upon your user defined parameters.

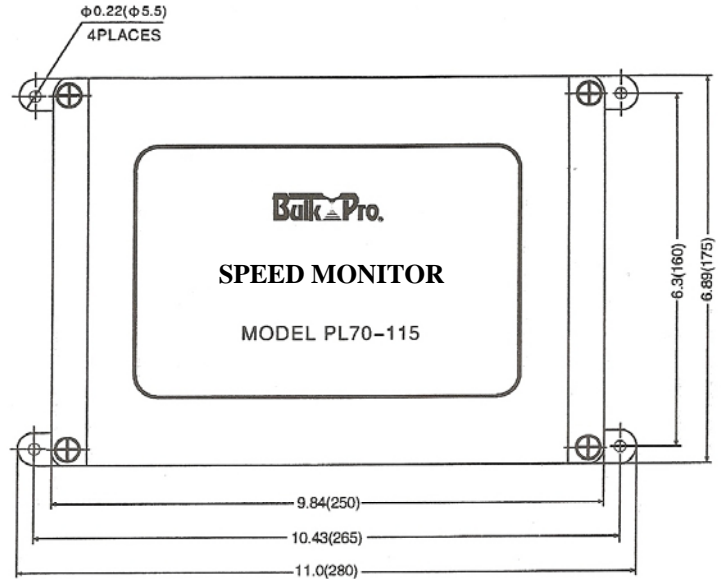
The PL70-115 Speed Monitor is housed in a sturdy IP67 enclosure which can be mounted over 1000' (sometimes further) from either type of speed pick-up. The powerful electronics package is microprocessor based which eliminates additional programming at the PLC or DCS system that competitive under speed switches require. Using the four digit, seven segment display you can quickly program and troubleshoot the unit.

The PL70-115 Speed Monitor is designed to provide one SPDT alarm output when a rotating piece of equipment goes either over, under or zero speed. The user programs the control simply by pressing one button once the equipment is brought up to it's normal operating speed. Then an alarm set-point is programmed in 1% increments of this reference speed. Once the speed diminishes below or above this set-point the alarm relay is tripped and the equipment is shut down or the user defined interface is notified of the alarm condition via this relay contact. This powerful switch will allow you protect your valuable equipment, increase production and eliminate downtime giving you peace of mind.

# SPECIFICATIONS

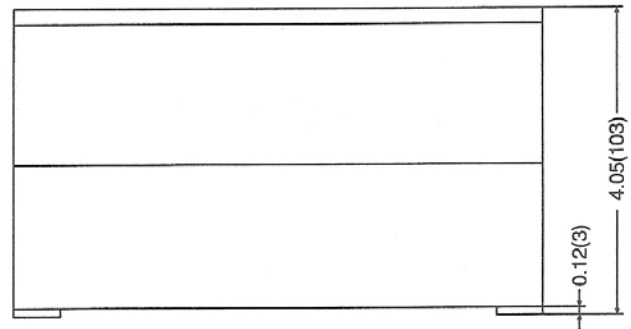
## Model PL70-115 Speed Monitor:

- Enclosure: Polycarbonate, IP-67
- Input Voltage: 85-250 VAC, 50/60 Hz, 1 phase
- Outputs:
  - One (1) SPDT 230 VAC / 5A Relay, Non-Inductive, NC/NO Selectable. An additional SPDT can be added.
  - Two (2) 0-20mA/4-20mA Output Option, 800 Ohms Maximum Load, Tracks 0-100% or 0-199%, Software Selectable.
- Sensor Inputs: NPN or PNP (Up to 3KHz), External Capacitor Should Be Connected to Eliminate Contact Chatter.
- +12 VDC Output: (Sensor Operation) +12 VDC @ 75mA (Not Fused)
- Conduit Holes: Two (2) 3/4"-14 NPT
- Temperature Rating:
  - Electronics: -4° to 158° F (-20° to 70°C)
  - Standard Metal Sensors: -13° to 158° F (-25° to 70°C)



## Model NI15-M30-AN6X Proximity Switch

- Power Supply from PL70: 10-30 VDC
- Class II Source
- Operating Current:  $\leq 200$  mA
- Sensing Distance: 15mm
- Enclosure: IP-67
- Approvals: UL, FM, CSA, CE and Others



## Model \_\_\_\_ Direct Coupled Speed Sensor

- Available soon.

## Typical Applications:

- Bucket Elevator Shafts
- Rotary Valve Shafts
- Screw Conveyor Shafts
- Conveyor Belt Pulleys
- Belt Feeders
- Drag Chain Conveyors
- Idlers
- Gear Teeth

