



# Speedswitch

## Underspeed Motion Monitor

Monitors Rotating Machinery for Dangerous Underspeed Conditions



APPROVED



Optional Tachometer



- ▶ **Totally sealed:** To IP67 with simple "magnetic calibration"
- ▶ **Low cost, maintenance free:** Unit is solid state with no moving parts for virtually limitless life.
- ▶ **Dual Set Points:** Ten and twenty percent underspeed.
- ▶ **"Non-contact"** Sensor requires no contact with monitored machinery.
- ▶ **Outputs:** Tachometer and relay contacts
- ▶ **Applications:** Conveyors, elevators, mixers, fans, pumps, grinders and all mechanical handling systems.



Your Material Handling Specialists!

4B COMPONENTS LIMITED

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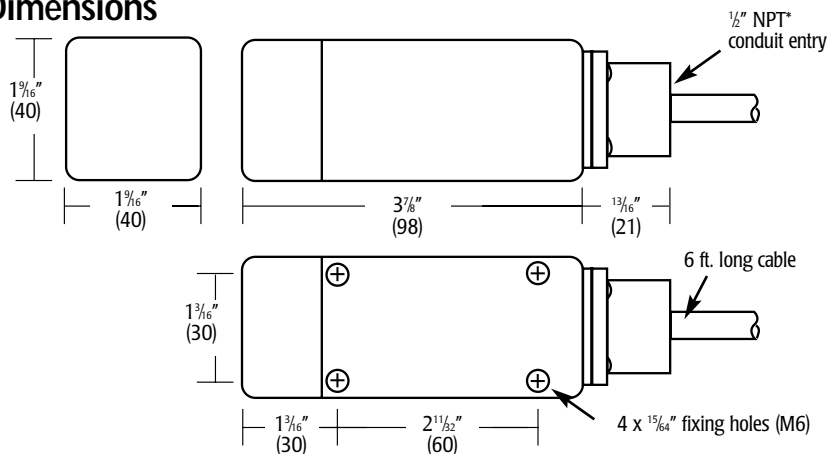


# Speedswitch Underspeed Motion Monitor

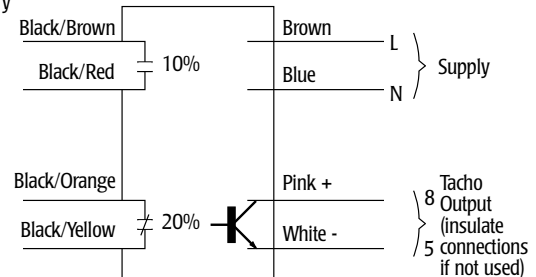
## Operation

An inductive sensing device located in the nose of the M800 enclosure will detect a metal target. This target can be an existing bolt head or device attached to a shaft. Ideally the target should be ferrous metal but non-ferrous metal will be detected at a shorter range. A signal is generated by this target on each revolution of the shaft. The M800 is then set to the normal machine RPM by calibrating with the magnet provided. If the shaft speed falls to 10% or 20% below normal RPM, the M800 provides output signals via relays for control purposes such as alarm and/or shutdown. An opto-isolated output is provided for tachometers, PLCs and speed displays.

## Dimensions



## Connections



## Technical Specifications

<b>Supply:</b>	220VAC 50/60 Hz 110VAC 50/60 Hz 24VDC	} Specify when ordering
<b>Supply Tolerance</b>	-15% to +7.5%	
<b>Consumption:</b>	6VA	
<b>Fuse:</b>	Supply to be fused at 5A Max.	
<b>Speed Range:</b>	10-3600 PPM (pulses per minute)	
<b>Outputs:</b>	1. Normally open contact closing when speed falls by 10%	
<b>(powered up)</b>	2. Normally closed contact opening when speed falls by 20%	
	3. Tacho output opto-isolated 30v, 100mA	
<b>Contact Rating:</b>	3A 240VAC non-inductive	
<b>Start-up Delay:</b>	User selectable 0-30 seconds	
<b>Sensing Range:</b>	1 1/32" (9mm) max. ferrous 7/32" (6mm) max. non-ferrous	
<b>Calibration</b>	By "magnetic swipe"	
<b>Enclosure:</b>	Molded enclosure PC/ABS	
<b>Protection:</b>	FM and CSA approved. Hazardous conditions. Class II Div 1 Groups E,F,G IP67 dust and watertight.	
<b>Weight:</b>	1.5 lbs (0.525 kg)	
<b>Accessories:</b>	MTG4 Target Disk* H350120 "Vibratone" Alarm Horn TACH1V5 Tachometer Display WGI-4B "Whirligig" target, mounting bracket and guard.	

\* Exposed rotating targets must be protected with an approved guard.



"Whirligig"



Optional Tachometer

Brochure information subject to change or correction. January 2000



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