

# RIM Tach 6200

- *Foot mounted or with accessory bracket it is ideal for close coupled, belt, or wheel driven setups*
- *Extra severe duty bearings for a longer encoder life*
- *Stainless steel and cast iron construction*
- *Resolutions up to 2048 PPR with optional index pulse*



## APPLICATION/INDUSTRY

The RIM Tach® 6200 is specifically designed to meet the needs of process industries, providing the most reliable, mechanical, electrical, and environmental features available in digital tachometers today.

## DESCRIPTION

Featuring rugged, Mill Duty Construction, the durable RIM Tach® 6200 was designed for hostile environments. The mill duty, cast iron construction of the 6200 accepts stainless steel sensor modules with patented magnetoresistive technology. The outputs are available as either single or dual outputs and are completely isolated from one another. The modular design features extra severe duty bearings (1.875" OD) to ensure longer life under heavy loads.

The patented Magnetoresistive technology of the Rim Tach® 6200 is incorporated into a heavy duty, one piece sensor module, with encapsulated surface mount electronics. These advanced modules are immune to common mill contaminants (water, oil, grease, dirt, shock, and vibration) and overall harsh environments. This state-of-the-art technology allows for much higher resolutions providing resolutions up to 2048 pulses per revolution. With the addition of a RIM Tach® Shaft Grounding Brush, induced shaft currents "drain" away, preventing premature material weakening of large AC and DC motor bearings, and their consequent failure.

Standard mill duty latching connectors provide ease of installation. These sealed connectors are simple to wire by inserting the stripped conductor in the plug and tightening the screw terminals. There is no need to field solder or to struggle with a crimp pin. The unit easily mounts on a standard NEMA 56 C face (4.5") and requires no gap adjustments. The sensor module is very easy to change, just remove four screws and slide the new sensor module in place.

## FEATURES AND BENEFITS

- Rugged Mill Duty Construction
- Easy Installation
- Reliable Magnetoresistive sensor unaffected by common contaminants
- Sensor modules for fast and easy field service

## SPECIFICATIONS

### STANDARD OPERATING CHARACTERISTICS

**Code:** Incremental  
**Pulses per Revolution:** 60-2048  
**Phasing Sense:** A leads B for Counter-Clockwise rotation (CCW) viewing encoder-mounted end  
**Quadrature Phasing:** 90° ± 22°  
**Symmetry:** 180° ± 54°  
**Index:** 270° gated to falling B edge

### ELECTRICAL

**Input Voltage Requirement:** 5-15 or 15-26 Volts DC  
**Current Requirement:**  
 With Electrical Option L: 45 mA typical per sensor module plus line driver load  
 With Electrical Option R: 65 mA typical per sensor module plus line driver load  
 With Electrical Option 5: 65 mA typical per sensor module plus line driver load  
**Output Signals:**  
 With Elec Option L: 5-15 V Line Driver, 150mA  
 With Elec Option R: 15 V Line Driver, 150mA  
 With Elec Option 5: 5V Line Driver, 150mA  
**Frequency Response:** 0 - 120kHz Data & Index  
**Electrical Immunity:** 2kV ESD, Reverse Polarity, Short Circuit  
**Connector:** 10 pin industrial duty latching, sealed NEMA 4 & 12, IP65

### ELECTRICAL CONNECTIONS

| Signal        | Connector Pin | Pigtail Cable | MS 3102E18-IT# |
|---------------|---------------|---------------|----------------|
| Common        | 1             | Black         | A              |
| B             | 2             | Green         | E              |
| A             | 3             | Blue          | D              |
| Z *           | 4             | Violet        | C              |
| No Connection | 5             | —             | —              |
| Vcc           | 6             | Red           | B              |
| B             | 7             | Yellow        | H              |
| A             | 8             | Gray          | G              |
| Z *           | 9             | Orange        | I              |
| Shield        | 10            | Braid         | J              |

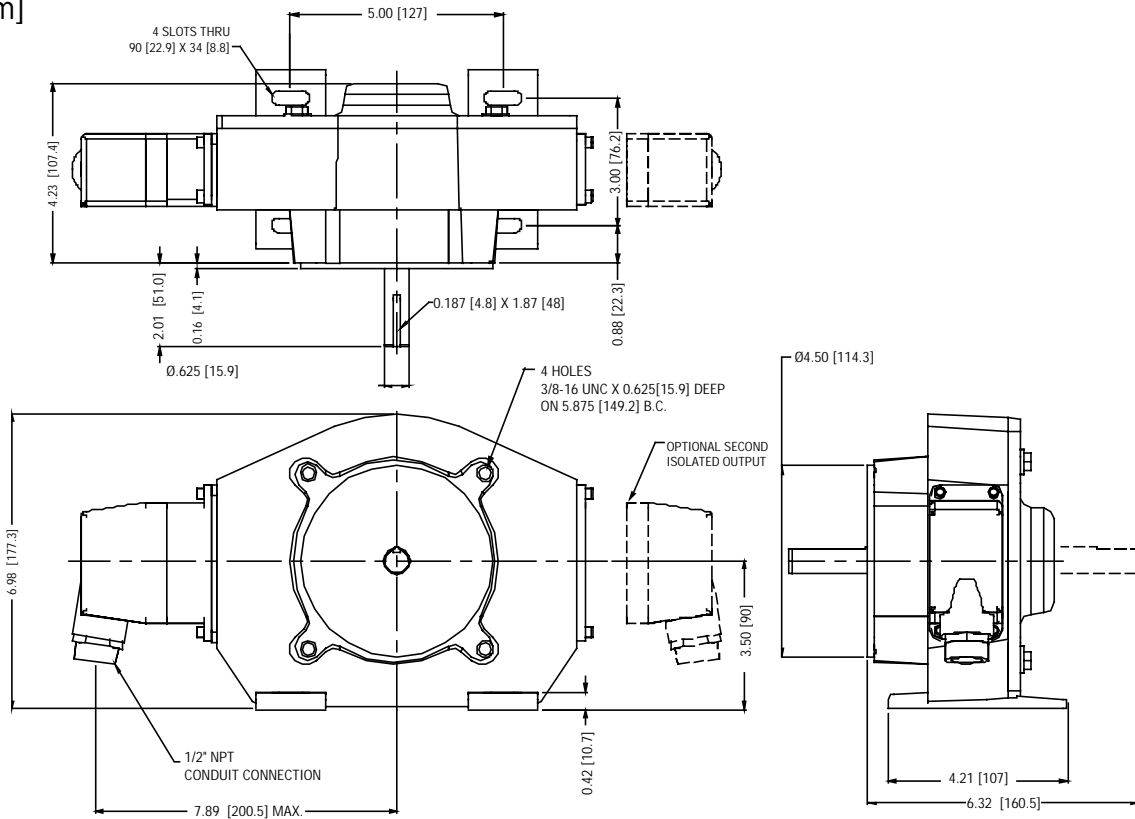
\* Index (Z) optional. See Ordering Information

Specifications are for base models with standard features only unless otherwise noted. Specifications subject to change without notice in accordance with our DBS policy of continuous improvement. All product and brand names are trademarks of their respective owners. All rights reserved.

NorthStar™ brand is a trademark of Dynapar. All rights reserved.

**DIMENSIONS**

inches [mm]



**ORDERING INFORMATION**

| Code 1: Model                         | Code 2: PPR  | Code 3: Index   | Code 4: Shaft  | Code 5: Output  | Code 6: Electrical   | Code 7: Termination   |
|---------------------------------------|--|---|--|---|--|---|
| <b>R6</b>                             | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>                          | <input type="checkbox"/>  | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>  |
| Ordering Information                  |  |   |  |   |  |   |
| <b>R6</b> Foot Mount or Close Coupled | 0060<br>0064<br>0075<br>0120<br>0128<br>0150<br>0240<br>0256<br>0300<br>0480<br>0512<br>0600<br>0960<br>1024<br>1200<br>2048 | L No Index<br><br>Available when Code 2 is 0480, 0512, 0600, 0960 1024, 1200 or 2048<br><br>Z Differential Index (Z, Z) | S Single<br>D Double   | 1 Single<br>2 Dual (Isolated)<br><br>Differential, bidirectional signals (A, A, B, B) | L 5-15V in, 5-15V Line Driver (4428) out<br><br>R 15-26V in, 15V Line Driver (4428) out<br><br>5 5-15V in, 5V Line Driver (4428) out | C Latching Industrial Connector with 1/2" NPT<br><br>M 10 pin MS Connector<br><br>P 18" Pigtail |

Spare sensor module Use "NS" followed by Code 1 (Model) & Code 2 (PPR) & Code 3 (Index) & Code 6 (Electrical) & Code 7 (Termination). Example: NSR60512ZLC  
 Spare Mating Connector: Use "NS" followed by Code 1 (Model) & Code 7 (Termination). Example: NSR6C  
 5 foot Interface Cable: RIMCABLEDB10005. Other Length: final 4 digits is length in 5 ft increments. Example RIMCABLEDB10065 is 65 feet.



**Gordy's Sensors**

5772 Smaller Rd, Johnstown, OH 43031 Phone: (740) 967-2283 Fax: (740) 967-2855  
 Website: [www.gordyssensors.com](http://www.gordyssensors.com) or Email: [sales@gordyssensors.com](mailto:sales@gordyssensors.com)