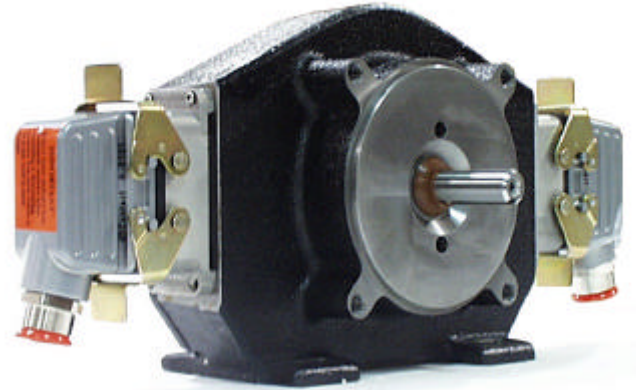


RIM Tach[®] 6200

Features

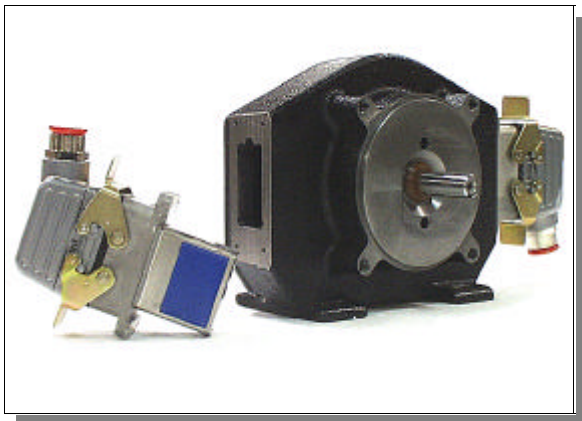
- The stand alone, foot mounted or accessory bracket design is ideal for close coupled, belt, or wheel driven setups
- Modular design incorporates extra severe duty bearings for a longer encoder life
- Stainless steel and cast iron construction
- Magneto-resistive sensor technology is unaffected by grease, salt water, dust, or other common mill contaminants
- Interchangeable magneto-resistive sensor modules for fast and easy field service
- Resolutions up to 2048 PPR with optional index pulse
- Optional RIM Tach[®] Shaft Grounding Brush



The ©NorthStar RIM Tach[®] 6200 has been specifically designed to directly address the needs of the process industry. The heavy duty digital tachometer is constructed to be used as either a stand alone, foot mounted solution, or assembled to an accessory bracket as a 56 C face for common mill applications such as close coupled, belt, or wheel driven setups. The 6200 provides an easy solution for reduction of downtime of maintenance, and fast installation. Providing the most reliable, mechanical, electrical, and environmental features available in digital tachometers today.

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 magneto-resistive 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.



Reliable Magneto-resistive Technology

The patented technology of the Rim Tach[®] 6200 is incorporated into a heavy duty, one piece sensor module, with encapsulated surface mount electronics. The advanced magneto-resistive sensor modules are immune to common mill contaminants (water, oil, grease, dirt, shock, and vibrations) 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.

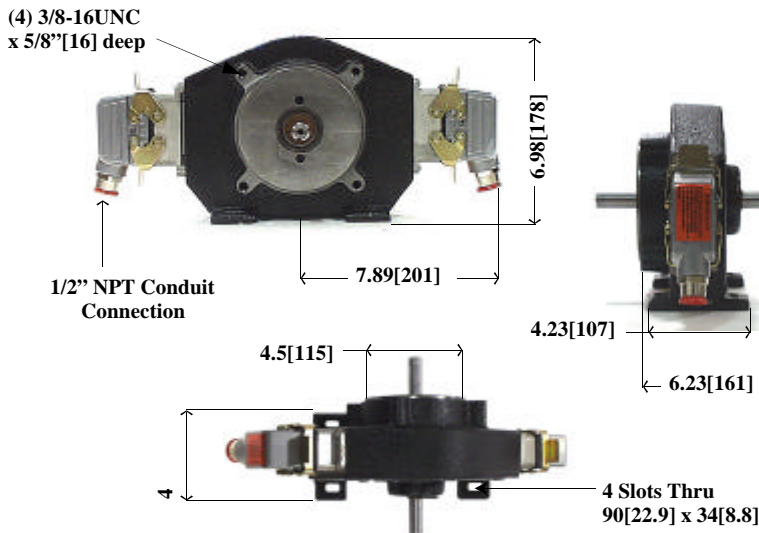
Easy Installation

The mill duty latching connectors are standard. 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 pulse count output is very easy to change, just remove four screws and slide the desired pulse count sensor module in place.

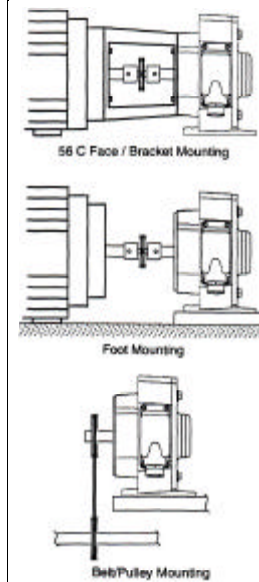
Electrical Specifications	
Frequency Response	0 - 120 KHz
Pulse Code	A, B, Z (Index) and complements (A, B, Z)
Output Phases	A phase, B phase @ quadrature 90°, Z phase; once per rev. (gated)
Pulse Duty Cycle	50 ± 15% (within defined mechanical specifications)
Quadrature Accuracy	90 ± 22° (within defined mechanical specifications)
Output Type	High speed, differential line driver
Rise and Fall Time	Less than 1 μs @ 10, 000 pf typical load
Current Consumption	45 mA typical plus line driver load
Output Current	150 mA maximum continuous
ESD Protection	2KV
Mechanical Specifications	
Enclosure Configurations	4.5" [115mm] diameter, 56 C motor face or accessory flange to meet NEMA MG1-4 standards; foot mount with 4 slotted bolt holes
Material	Ductile cast iron enclosure, stainless steel probe module
Shaft Interfacing	0.625" [16mm] diameter x 1.87" [48mm] long, 3/16" [5mm] square-parallel key, optional double ended shaft, optional 14 mm shaft with metric key
Maximum Operational Speed	7,000 RPM (120KHz)
Axial, Radial Load	50 lbf axial, 50 lbf radial
Slew Rate	3600 RPM/sec
Box Weight/ Box Dimensions	28 lbs. (12.7 kg) / 21" [534mm] x 10" [254mm] x 10" [254mm]
Environmental Specifications	
Operating Temperature	-40°C to +80°C
Operational Humidity Range	Maximum of 90%
Chemical Resistance	Salt spray, most solvents, mild acids and bases
Vibration	Minimum 18 g's RMS, 5-200 Hz shock spectrum
Shock (Sensor Module)	1 meter drop tested, minimum 30 g's
Interface Specifications	
Power	+5.0 to +15.0 VDC
Output	Differential output swinging between Vcc -0.6V and ground
Connector	10 pin industrial latching connector w/ 1/2" NPT fitting, IP-65 NEMA 4, 12 rated

*Specifications subject to change without notification.

Dimensions inches[mm]



Mounting Options



Ordering Information

Tachometer Type

RIM620 RIM620

Pulse Count

60, 64, 75, 120, 150, 180, 225, 240, 256, 300, 360, 450, 480, 480Z, 512, 512Z, 600, 600Z, 720, 900, 960, 960Z, 1024, 1024Z, 1200, 1200Z, 1440, 1440Z, 1800, 1800Z, 2048, 2048Z

Shaft Options

Single-ended shaft S
Double-ended shaft D
Shaft grounding brush XSGB

Number of Sensor Modules

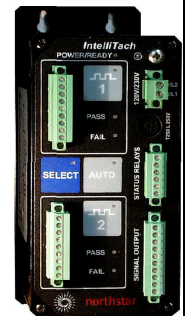
Single module 1
Second isolated module 2

Example:

RIM620 1024 S 1 LD

Also From ©NorthStar

Intellitach™ feedback monitoring system eliminates downtime from encoder failure. Continuously analyzes encoder signals and automatically switches to a back-up encoder. Accepts input from any line driver, incremental encoder, or digital tachometer. High power line driver outputs.



RIM Tach® Shaft Grounding Brush provides a low resistance electrical contact to the motor shaft to reduce or eliminate induced shaft currents in AC or DC motors. Induced shaft currents are a major cause or premature bearing failure. An optional accessory for both the RIM Tach® 6200 and 8500 thru-shaft and end-of-shaft digital tachometers, the addition of a NorthStar Shaft Grounding Brush drains shaft currents, thereby protecting the vulnerable and expensive motor bearings and preventing costly downtime.