

# SERIES RIM 6200

**NorthStar™ brand**

## Severe Duty Encoder

### Key Features

- Foot-Mount or 56-C Face Mount Ideal for “Flower Pot” or Belt Drive Applications
- Extra Heavy Duty Bearings for Long Life
- Stainless Steel and Ductile Cast Iron Construction
- Sensor Modules are Removable On-The-Fly and Provide up to 1200 PPR



## SPECIFICATIONS

### STANDARD OPERATING CHARACTERISTICS

**Code:** Incremental

**Pulses per Revolution:** 60-1200

**Phasing Sense:** A leads B for Counter-Clockwise rotation (CCW) viewing encoder-mounted end

**Quadrature Phasing:**  $90^\circ \pm 22^\circ$

**Symmetry:**  $180^\circ \pm 54^\circ$

**Index:**  $270^\circ$ , ungated (optional 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

### MECHANICAL

**Shaft Speed:** 7,000 RPM

**Mounting Configuration:** 4.5" [115mm] diameter, 56 C motor face or accessory flange to meet NEMA MG1-4 standards; foot mount with 4 slotted bolt holes

**Housing Material:** Cast Iron/Stainless Steel

**Acceleration Rate:** 3600 rpm/sec max

**Shaft :** 0.625" (16mm) diameter with standard key, single or double ended

**Shaft Material Options:** Hot Rolled Carbon Steel or Stainless steel

**Shaft Axial/Radial Loading:**

**Hot Rolled Steel:** 50 lbf axial, 50 lbf radial

**Stainless Steel:** 35 lbf axial, 35 lbf radial

### ENVIRONMENTAL

**Operating Temperature Range:**  $-40^\circ\text{C}$  to  $+70^\circ\text{C}$

**Storage Temperature Range:**  $-40^\circ\text{C}$  to  $+120^\circ\text{C}$

**Humidity:** to 98% RH (non-condensing)

**Shock (Sensor Module):** 1 meter drop test, 30 G's Min

**Vibration:** 18 G's @ 5-2000 Hz spectrum

### ELECTRICAL CONNECTIONS

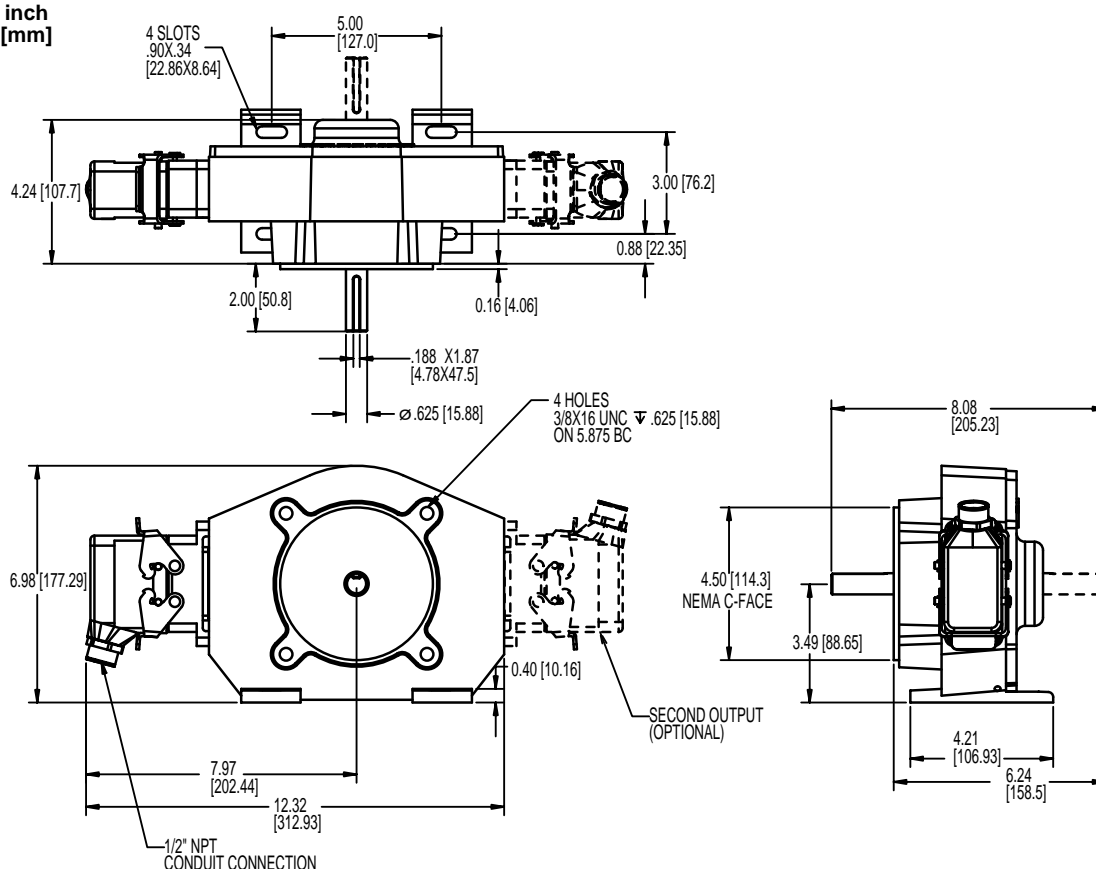
Signal	Connector Pin	Pigtail Cable	MS 3102E18-IT#
Common	1	Black	A
B	2	Green	E
A	3	Blue	D
Z *	4	Violet	C
No Connection	5	—	—
Vcc	6	Red	B
B	7	Yellow	H
A	8	Gray	G
Z *	9	Orange	I
Shield	10	Braid	J

\* Index (Z) optional. See Ordering Information

**Ordering Information**

To order, complete the model number with code numbers from the table below:

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

**Note:** See ACCESSORIES Section For Connectors, Spare Parts and Pulse Wheels**DIMENSIONS** inch  
[mm]

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