

NexGen RIM Tach 8500 NorthStar™ brand

Bearingless Encoder

Key Features

- New Sensor Provides up to 0.075" of Air Gap, Over 50% More Than Competitive Models
- Expanded Resolution up to 2400PPR
- Redesigned Circuitry for On-Board Diagnostics with LED and Alarm Output
- Wide -40° to +100°C Temperature Range
- Optimized Pulse Wheel for Greater Shaft Holding Force and Ease of Assembly



NEW For 2011!



SPECIFICATIONS

STANDARD OPERATING CHARACTERISTICS

Code: Incremental
Pulses per Revolution: 240 to 2400
Phasing Sense: A leads B for Counter-Clockwise rotation (CCW) viewing male C-face end
Quadrature Phasing: 90° ± 45°
Duty Cycle: 50% ± 15%

ELECTRICAL

Input Power Requirements: 5-24VDC, 95mA typical per sensor module, plus line driver load
Output Signals: Line Driver, 150mA source/sink
Frequency Response: 0 - 180kHz Data & Index
Electrical Immunity: 2kV ESD, Reverse Polarity, Short Circuit, Powered Short
Connector: 10 pin industrial duty latching, sealed NEMA 4 & 12, IP65. Optional MS3102 10 pin, Pigtail Cable, or Latching connector on cable extension

ELECTRICAL CONNECTIONS

Signal	Connector Pin	Pigtail Cable	MS 3102E18-IT#
Common	1	Black	A
B	2	Green	E
A	3	Blue	D
N/C	4	Violet	C
Alarm †	5	n/a	F
Vcc (5-24 VDC)	6	Red	B
B̄	7	Yellow	H
Ā	8	Gray	G
N/C	9	Orange	I
Shield	10	Braid	J

N/C= No connection

† Alarm not available with Pigtail cable. See Ordering Information

MECHANICAL

Shaft Speed: 7,000 RPM, max.
Mounting Configuration: 8.5" 180C face mount for NEMA MG1 standards
Housing Material: Cast Iron
Sensor Module Material: Stainless Steel
Acceleration Rate: 3600 rpm/sec max
Shaft Length Required: 2.5" min
Radial Air Gap:
1200PPR or lower:
 0.075", +0.015" / -0.070"
Above 1200PPR:
 0.050", +0.015" / -0.040"
Allowable Shaft End-Play: ±0.150"
Allowable Shaft Runout: 0.005" TIR

ENVIRONMENTAL

Operating Temperature Range: -40°C to +100°C
Storage Temperature Range: -40°C to +125°C
Humidity: 100% RH
Shock: 200 G's Min.
Vibration: 18 G's @ 5-2000 Hz spectrum

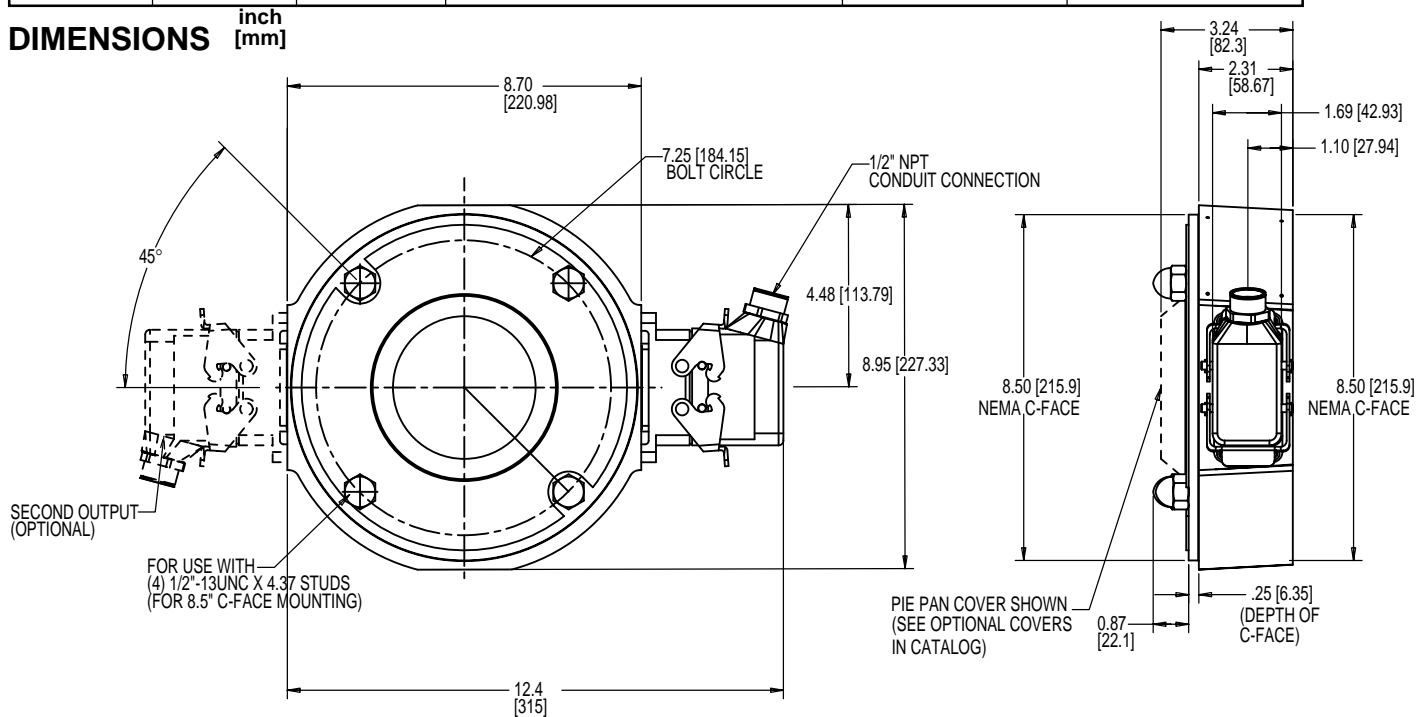
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Ordering Information

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

Code 1: Model	Code 2: PPR	Code 3: Index	Code 4: Wheel Bore	Code 5: Electrical Output	Code 6: Termination	
RT8	□□□□	□	□□□□	□	□	
Ordering Information						
RT8 RIMTach 8500 Heavy Duty Encoder	0060	0480	L No Index	V04 5/8"	1 5-26VDC in, 5-26VDC Line Driver out (IC-WE), Single output 2 5-26VDC in, 5-26VDC Line Driver out (IC-WE), Dual output	C Latching Industrial Connector with 1/2" NPT M 10 pin MS Connector P 18" Pigtail (Not available with Alarm output) Q Latching industrial connector on 18" cable
	0064	0512	Z With Index Signal Output	V05 7/8"		
	0075	0600		V06 1.00"		
	0120	0960		V07 1-1/8"		
	0128	1024		V09 1-3/8"		
	0150	1200		V10 1-1/2"		
	0240	1920		V11 1-5/8"		
	0256	2048		V12 1-3/4"		
	0300	2400		V13 1-7/8"		
				V14 2.00"		
				V15 2-1/8"		
				V16 2-1/4"		
				V17 2-3/8"		
				V18 2-1/2"		
				V19 2-7/8"		
				V20 2-5/8"		
				Additional shaft sizes available, consult factory		
				End Of Shaft		
				F01 1-1/8" EOS	F44 4400 Series Motors	
				F06 2-1/8" EOS	F47 4700 Series Motors	
				F08 2-3/8" EOS	F60 6000 Series Motors	
				F10 2-7/8" EOS	F68 6800 Series Motors	

DIMENSIONS inch [mm]



Worldwide Brands: NorthStar™ • Acuro™ • Dynapar™ • Hengstler™ • Harowe™

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