

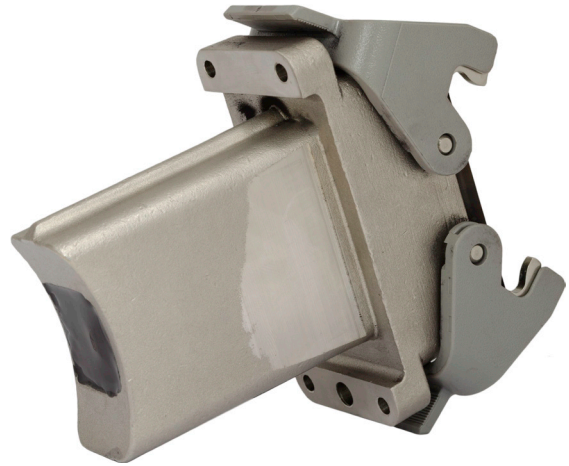
# NEX GEN RIM TACH SENSORS

**NorthStar™ brand**

## Replacement Sensor Modules For All NexGen RIM Tach Models

### Key Features

- Replaceable Stainless Steel Sensor Modules
- Largest Non-Contact Sensing Gap Available On The Market
- Encapsulated Surface Mount Electronics
- Utilizes DC Power From +5 to +26V
- Provides Transient and Noise Suppression
- Reverse Polarity Protection
- Active LED Indicator with Diagnostics



## SPECIFICATIONS

### STANDARD OPERATING CHARACTERISTICS

**Code:** Incremental, Magnetic  
**Pulses per Revolution:** 60 to 2400 PPR  
**Phasing Sense:** A leads B for Counter-Clockwise rotation (CCW) viewing mail C-face end  
**Quadrature Phasing:** 90° ± 45°  
**Symmetry:** 50% ± 15°

### ELECTRICAL

**Input Power Requirements:** 5-26VDC, 95mA typical per sensor module, plus line driver load  
**Output Signals:** IC-WE Differential Line Driver: 150mA, sink or source  
**Frequency Response:** 0 - 180kHz Data & Index  
**Noise Immunity:** Tested to EN61326-1  
**Electrical Immunity:** Reverse polarity and short circuit protected  
**Connector:** 10 pin industrial duty latching, sealed NEMA 4 & 12, IP65. Optional MS3102 10 pin, Pigtail Cable, or Latching connector on cable extension

### MECHANICAL

**Radial Air Gap (RT8 and RT1 Models Only):**  
**1200 PPR or lower:**  
 0.075", +0.015" / -0.070"  
**Above 1200 PPR:**  
 0.050", +0.015" / -0.040"  
**Sensor Module Material:** Stainless Steel

### ENVIRONMENTAL

**RT8 and RT1 Models:**  
**Operating Temperature Range:**  
**Standard:** -40°C to +100°C  
**Storage Temperature Range:** -40°C to +125°C  
**Shock:** 200 G's Min.  
**Vibration:** 18 G's @ 5-2000 Hz spectrum  
**Humidity:** Up to 98% (non-condensing)

**RT6 Models:**  
**Operating Temperature Range:**  
**Standard:** -40°C to +100°C  
**Storage Temperature Range:** -40°C to +120°C  
**Shock:** 30 G's Min.  
**Vibration:** 18 G's @ 5-2000 Hz spectrum  
**Humidity:** Up to 98% (non-condensing)

### 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
B̄	7	Yellow	H
Ā	8	Gray	G
Z*	9	Orange	I
Shield	10	Braid	J

\* Index (Z) optional. See Ordering Information

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## Ordering Information

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

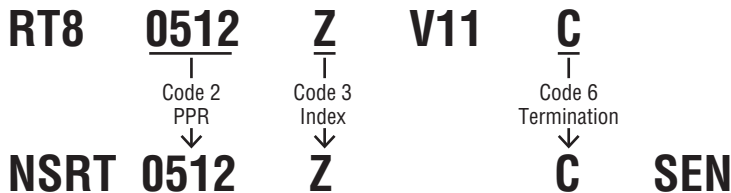
Code 1: Model	Code 2: PPR Resolution	Code 3: Index	Code 4: Termination	Code 5: Part Description
<b>NSRT</b>	□ □ □ □	□	□	□
Ordering Information				
<b>NSRT</b> Northstar NexGen Spare Sensor	<b>0060</b> <b>0480</b> <b>0064</b> <b>0512</b> <b>0075</b> <b>0600</b> <b>0120</b> <b>0960</b> <b>0128</b> <b>1024</b> <b>0150</b> <b>1200</b> <b>0240</b> <b>1920</b> <b>0256</b> <b>2048</b> <b>0300</b> <b>2400</b>	<b>L</b> No Index signal <b>Z</b> Index Signal Output	<b>C</b> Latching Industrial Connector <b>M</b> 10 pin MS Connector <b>P</b> 18" Long Pigtail Cable <b>Q</b> Latching Industrial Connector On 18" Cable	<b>SEN</b> Standard Sensor  Only available when code 2 is 0064, 0128, 0256, 0512, 1024, or 2048 and Bore Size is >2.875" and ≤5.0"  <b>LBS</b> Large Bore Sensor

### HOW TO CONFIGURE

When configuring a RIM Tach Series Sensor (Part numbers starting with RT8, RT6 or RT1), please review the appropriate family data sheet and use the following methodology: Use "NSRT" followed by Code 2 (PPR) & Code 3 (Index) & Code 5 (Electrical) & Code 6 (Termination).

#### CONFIGURATION EXAMPLE 1

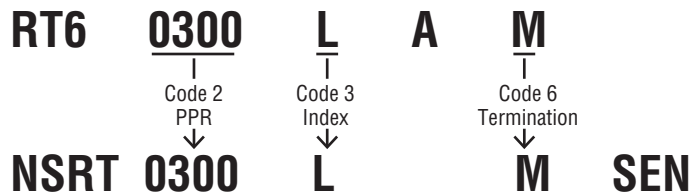
NexGen RIMTach RT8 Part Number: RT80512ZV111C



Replacement Sensor Part Number: NSRT0512ZCSEN

#### CONFIGURATION EXAMPLE 2

NexGen RIMTach RT6 Part Number: RT60300LA1M



Replacement Sensor Part Number: NSRT0300LMSEN



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