

SERIES RF25

NorthStar™ brand

Heavy Duty Resolver

Key Features

- Flange Mount Rugged Housing Immune to Oil, Salt, Water & Dust
- Spaced Bearings for up to 10x the Life of Traditional Duplex Bearings
- Withstands 200g Shock and 40g Vibration
- Shaft Seal Standard



SPECIFICATIONS

STANDARD OPERATING CHARACTERISTICS

MECHANICAL

Bearing Life: 2x10⁸ Revs at rated shaft load
Shaft Size: 3/8"
Shaft Material: 416 SS
Max Radial Shaft Load: 60 lbs.
Max Axial Shaft Load: 40 lbs.
Max Continuous Speed: 20,000 RPM
Moment of Inertia: .004 oz-in-sec²
Mounting Type: Square Flange
Connector: 10pin MS3112E-18-11P
Weight: 1.6 lbs.

ELECTRICAL

Sensing Method: Resolver, Sine/Cosine;
 1X speed
Excitation: 26VAC rms, 2.4kHz
Input Current: 22ma max.
Null Voltage: 25mv max.
Electrical Error: 10 Arc min. spread
Transformation Ratio: 0.454 ±5%
Phase Shift: 6 degrees nominal
Dielectric Strength: 500VAC to case,
 250VAC phase-to-phase
Mating Connector: 10 pin MS3116F-18-11S

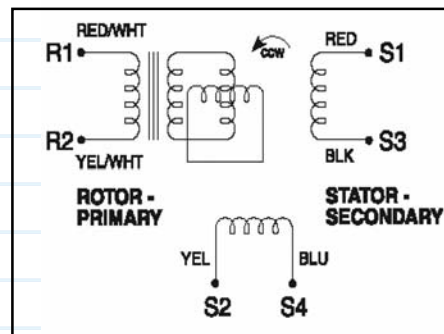
ELECTRICAL CONNECTIONS

Signal	Pin	Color
R1 – Rotor Hi	A	Red w/White
R2 – Rotor Hi	B	Yellow w/White
S1 – Cos Hi	D	Red
S3 – Cos Lo	F	Black
S2 – Sin Lo	G	Blue
S4 – Sin Hi	E	Yellow

ENVIRONMENTAL

Operating Temperature: -55 to +125°C
Storage Temperature: -55 to +125°C
Shock: 200G at 11 milliseconds time duration.
 Half sine waveform per Mil-S-81963
Vibration: 40G at .06 inch double amplitude at
 10-2000 Hz per Mil-S-81963
Humidity: to 98% without condensation
Enclosure: Immune to oil, salt, water and dust

SCHEMATIC



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Ordering Information

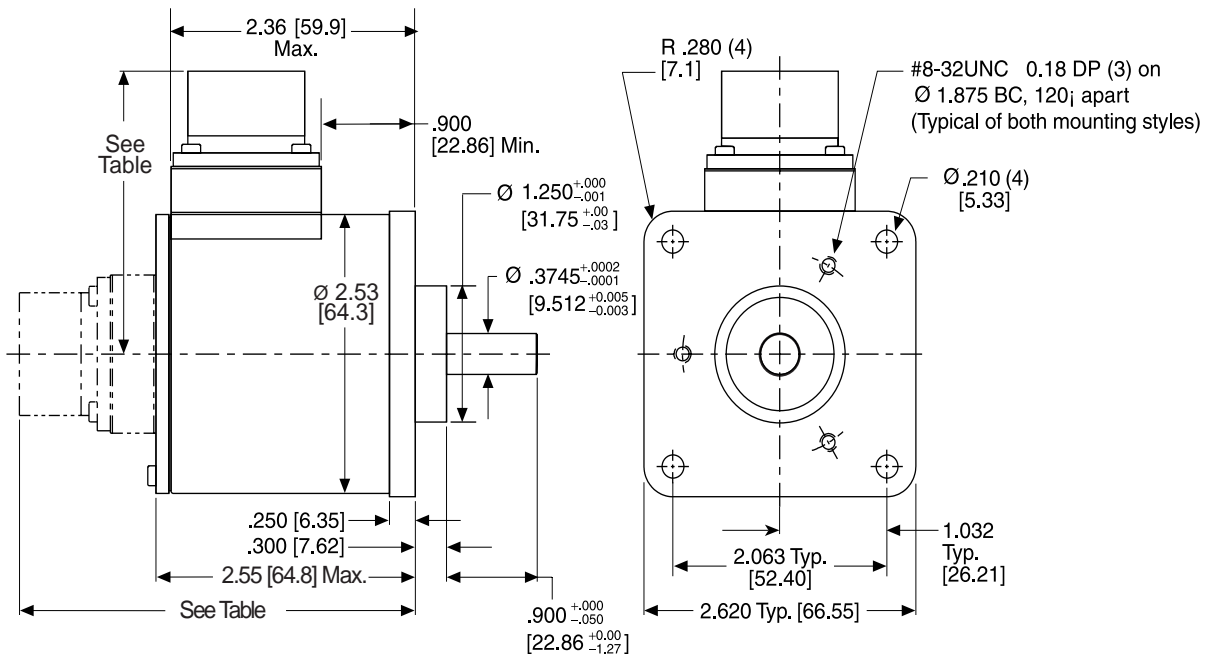
To order, complete the model number with code numbers from the table below:

Code 1: Model	Code 2: Resolver Speed	Code 3: Shaft	Code 4: Termination	Code 5: Connector Exit
RF25	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ordering Information				
RF25 Heavy Duty Flange Mount Resolver	1	R Round F Round with Flat W Round with Two Flats @ 90 Degrees	B MS3202E-16S-1P C MS3202E-18-1P F Flying Leads G MS3112E-10-6P L MS3112-18-11P P PT02E-14-19P	R Rear Exit S Side Exit

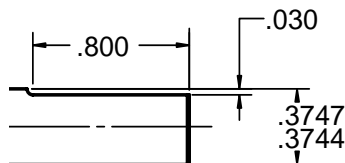
DIMENSIONS inches [mm]

CONNECTOR LOCATION

Connector Code	Connector Type	Side Location	Rear Location
B	7 Pin Screw Type	2.51 inch	3.74 inch
C	10 Pin Screw Type	2.90 inch	4.12 inch
G	6 Pin Twist & Lock	2.32 inch	3.54 inch
L	11 Pin Twist & Lock	2.29 inch	3.55 inch
P	19 Pin Twist & Lock	2.40 inch	3.62 inch



SHAFT WITH FLAT



SHAFT WITH 2 FLATS

