## H25-FE-05 Specification Sheet

## DESCRIPTION

The H25-FE-05 is an AMCI size 25, flange mount, single turn transducer with an end connector that is a bolt-in replacement for most flange mount optical encoders. Its IP 67 rating means it will survive most industrial applications including washdowns. Because this transducer is a resolver instead of an optical encoder, it can be used in harsh applications where an optical encoder cannot even be considered.

This transducer is designed primarily for applications using pulleys and gears mounted under tension. These applications often require a higher radial load rating to prevent slippage. The transducer's $5 / 8$ " shaft is rated for 2 billion rotations at a maximum radial load of 100 pounds and a maximum axial load of 50 pounds.

The transducer is mounted with $1 / 4$ "-20 bolts to accommodate these larger shaft load ratings. In addition to the four bolt holes on the front of the unit that uses standard optical encoder spacing, the transducer has two holes on the bottom of the flange. Because the H25-FE-05 is an absolute sensor, it cannot "lose counts" as an incremental transducer can. If the H25-FE-05 appears to be losing counts when operating, the usual cause is a shaft slipping in a loose coupler.

## DIMENSIONAL DRAWING

## ( ) = Dimensions in millimeters



1) 1/4-20 UNC-2B 0.50" (12.7) minimum depth. Six Places.
2) Integral Shaft Seal.
3) Total clearance of 3.5" (89) needed for removal of mating connector.

KEYWAY SPECIFICATIONS


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## CONNECTOR PINOUT

The figure below shows the connector pinout to industry standard designations and wire colors. Mating connectors available from AMCI are also given.

BENDIX CONNECTOR: MS3102E16S-1P


## SPECIFICATIONS

ELECTRICAL Input Voltage: 7.0 V

Input Freq: 5000 Hz
Primary: Rotor
Input Current: 20.0 mA Max.
Output Voltage: 6.65 V Nom.
Trans. Ratio (TR): $0.95 \pm 5 \%$
Accuracy: $\pm 12 \mathrm{~min}$ ( max error)
MECHANICAL
Shaft Loading: Radial: 100 lbs. max $^{\dagger}$.
Axial: 50 lbs. max ${ }^{\dagger}$.
Starting Torque: 6.0 oz.in. @ $25^{\circ} \mathrm{C}$
Moment of Inertia: $8.50 \times 10^{-4} \mathrm{oz}-\mathrm{in}-\mathrm{sec}^{2}$ max. Weight: 1.8 lb .
$\dagger$ Bearing life rated at $2 \times 10^{9}$ revolutions min. at maximum shaft load.

## ENVIRONMENTAL

Shock: 50 g's for 11 mSec
Vibration: 15 g 's to 2000 Hz
Operating Temp: -20 to $125^{\circ} \mathrm{C}$
Enclosure: IP 67
Power Coated
Aluminum Body
303 Stainless Steel Shaft
Nitrile Shaft Seal

## FOR MORE INFORMATION

If you need more information on the H25-FE-05 use these three resources:
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If you have internet access, check our website at http://www.amci.com. We've worked hard to make our site the respository of information you need to specify and use AMCI products. New product news, product specifications, compatibality tables, application notes, and PDF manuals are all available 24 hours a day.
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You can also call AMCI for sales or technical support at (860) 585-1254 from 8AM to 5PM EST, Monday through Friday. An applications engineer will be available to assist you.
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Finally, you can e-mail us at sales@amci.com or techsupport@amci.com.

