**DESCRIPTION**

The H25C-FE 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. This IP67 rated transducer is made from stainless steel and will withstand operating temperatures up to 125°C (257°F). The corrosion resistant construction of the H25C-FE along with its extreme temperature rating allows it to be used in environments where most sensors will not survive.

The outline drawing below details our standard unit with a 3/8” shaft that has a flat milled into the shaft. Because the H25C-FE is an absolute sensor, it cannot "lose counts" as an incremental transducer can. If the H25C-FE appears to be losing counts when operating, the usual cause is a shaft slipping in a loose coupler.

**DIMENSIONAL DRAWING**

(() = Dimensions in millimeters

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.032” (26.21)</td>
<td>typ.</td>
</tr>
<tr>
<td>1.250” (31.75)</td>
<td></td>
</tr>
<tr>
<td>1.249” (31.72)</td>
<td></td>
</tr>
<tr>
<td>2.65” (67.3)</td>
<td></td>
</tr>
<tr>
<td>2.50” (63.5)</td>
<td>dia.</td>
</tr>
<tr>
<td>0.218” (5.54)</td>
<td>dia.</td>
</tr>
</tbody>
</table>

**H25C-FE Flange Mount End Connector Flat on Shaft**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.50” (63.5) Dia.</td>
<td>Connector</td>
</tr>
</tbody>
</table>
| 0.70” (17.8) max.  | Total clearance of 3.5” (89) needed for removal of mating connector.

**LEADERS IN ADVANCED CONTROL PRODUCTS**
**H25C-FE Specification Sheet**

**SPECIFICATIONS**

**ELECTRICAL**
- Input Voltage: 7.0 VRMS
- Input Freq: 5000 Hz
- Primary: Rotor
- Input Current: 20.0 mARMS Max.
- Output Voltage: 6.65 VRMS Nom.
- Trans. Ratio (TR): 0.95 ± 5%
- Accuracy: ± 12 min. (max error)

**MECHANICAL**
- Shaft Loading: Radial: 40 lbs. max↑.
  - Axial: 20 lbs. max↑.
- Starting Torque: 2.0 oz.in. @ 25°C
- Moment of Inertia: 6.00X10^-4 oz-in-sec² max.
- Weight: 3.5 lbs.
- † Bearing life rated at 2X10⁶ revolutions min.
  - at maximum shaft load.

**ENVIRONMENTAL**
- Shock: 50 g's for 11 mSec
- Vibration: 15 g's to 2000 Hz
- Operating Temp: -40 to 125°C (-40 to 257°F)
- Enclosure: IP 67
  - 304 Stainless Steel Body
  - 303 Stainless Steel Shaft
  - Viton Shaft Seal

**FOR MORE INFORMATION**

If you need more information on the H25C-FE use these three resources:

- Check our website at http://www.amci.com. We've worked hard to make our site the repository of information you need to specify and use AMCI products. New product news, product specifications, compatibility tables, application notes, and PDF manuals are all available 24 hours a day.

- 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.

- Finally, you can e-mail us at sales@amci.com or techsupport@amci.com.

**CONNECTOR PINOUT**

The figure below shows the connector pinout to industry standard designations and wire colors.

**Military Equivalent #: MS3102E16S-1P**

![Connector Pinout Diagram]

**Mating Connector . . . . . . . . . . . AMCI Part #**
- MS3106A16S-1P STRAIGHT . . . . . . . MS-16
- MS3108A16S-1P RT. ANGLE . . . . . . . MS-18
- MS3106F16S-1P WATERTIGHT . . . . . . . MS-161