HT-20S Specification Sheet

INSTALLATION NOTES

The HT-20S is one of AMCI's heavy duty, single turn transducers. It is very similar to our most popular transducer, the HT-20. The only difference between the two models is that the mating connector is on the side of the HT-20S, instead of the end.

The HT-20S is IP67 rated and will survive most industrial applications including washdowns. The HT-20S is not recommended for corrosive environments. AMCI manufactures the HT-20K and HT-20L transducers with stainless steel shafts for these applications. The HT-20C with stainless steel shaft and body is also available.

Because of the large shaft bearings used in the HT-20S, gears or pulleys can be directly mounted onto the shaft. However, use a flexible coupler when attaching the transducer to a machine shaft. Even a small misalignment or movement in the machine shaft can cause very large radial and axial loads on the transducer bearings if the two shafts are directly coupled.

When face mounting the HT-20S, the pilot hole for the shaft should be at least 1.19" in diameter so that the bearing can pass through the hole.

Because the HT-20S is an absolute sensor, it cannot "lose counts" as an incremental transducer can. If the HT-20S appears to be losing counts when operating, the usual cause is a shaft slipping in a loose coupler. Check all mechanical couplings and use shaft keys whenever possible.

DIMENSIONAL DRAWING

SPECIFICATIONS

Mechanical
- Shaft Loading: Radial: 100 lbs. max.
- Axial: 50 lbs. max.
- Bearing life rated at 2X10^9 revolutions minimum at specified shaft load.
- Starting Torque: 8 oz.in. @ 25°C
- Weight: 4.0 lbs

Environmental
- Shock: 50 g's for 11 milliseconds
- Vibration: 15 g's to 2000 Hz
- Operating Temp: -40 to 125°C (-40 to 257°F)
- Enclosure: Anodized Aluminum Body
- 1070 Carbon Steel Shaft
- IP67 when mating connector properly sealed.
**CONNECTOR PINOUT**

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

*Military Equivalent: MS3102E16S-1P*

![Connector Diagram]

**COMPATIBLE CABLES**

Cables for the HT-20S resolver transducer can be ordered from AMCI. The mating connector is preinstalled and connections are factory tested.

As shown in the table below, three different versions are available, with the difference being the installed mating connector. For all part numbers, "x" specifies the length of the cable in feet.

<table>
<thead>
<tr>
<th>Cable #</th>
<th>AMCI Connector #</th>
<th>Military Equ. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTL-x</td>
<td>MS-16 (Straight)</td>
<td>MS3106A16S-1S</td>
</tr>
<tr>
<td>CTL-x/MS18</td>
<td>MS-18 (Rt. Angle)</td>
<td>MS3108A16S-1S</td>
</tr>
<tr>
<td>CTL-x/MS161</td>
<td>MS-161 (Watertight)</td>
<td>MS3106F16S-1S</td>
</tr>
</tbody>
</table>

**FOR MORE INFORMATION**

If you need more information on the HT-20S use these three resources:

🌟 If you have internet access, 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.