

HTT-20-(x) Specification Sheet

SHEET # 940-2T152

INSTALLATION NOTES

A HTT-20-(x) is a dual resolver transducer that encodes a multi-turn position. The first resolver, called the fine resolver, determines the position within the turn. The second, called the coarse resolver, determines the number of turns traveled. Therefore, the number of turns encoded does not affect the single turn resolution. These transducers require an AMCI multi-turn module or controller.

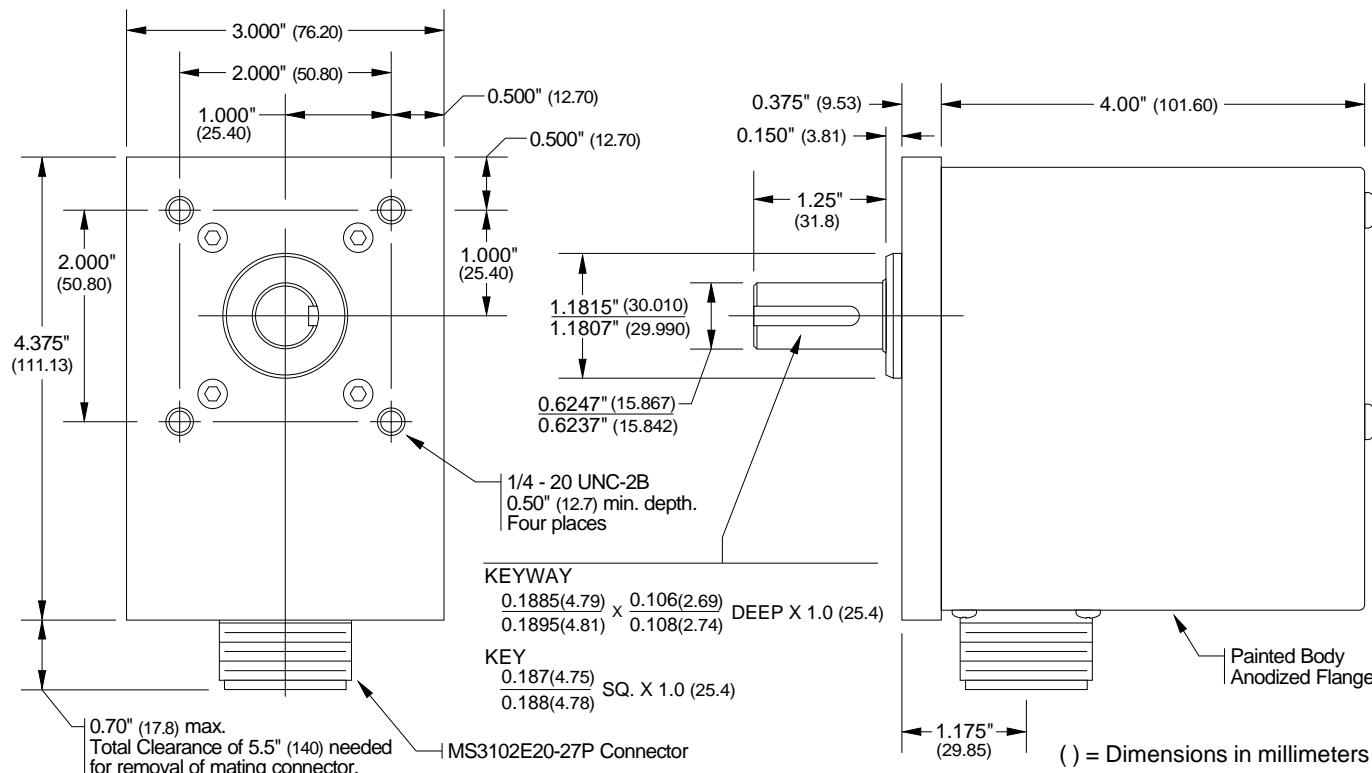
The NEMA 4 rating of the HTT-20-(x) means that it will survive most industrial applications including washdowns. The HTT-20-(x) is not recommended for corrosive environments. AMCI manufactures the NEMA 4X HTT425 transducers for these applications.

Because of the large shaft bearings used in the HTT-20-(x), 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 bearing if the two shafts are directly coupled.

When mounting the HTT-20-(x), the pilot hole for the shaft should be at least 1.19" in diameter so that the bearing can pass through the hole. If your pilot hole is smaller than 1.1815", standoffs that are at least 0.175" long must be used. *DO NOT* compress the front of the bearing when mounting the transducer.

Because the HTT-20-(x) is an absolute sensor, it cannot "lose counts" as an incremental transducer can. If the HTT-20-(x) 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



Available Gear Ratios

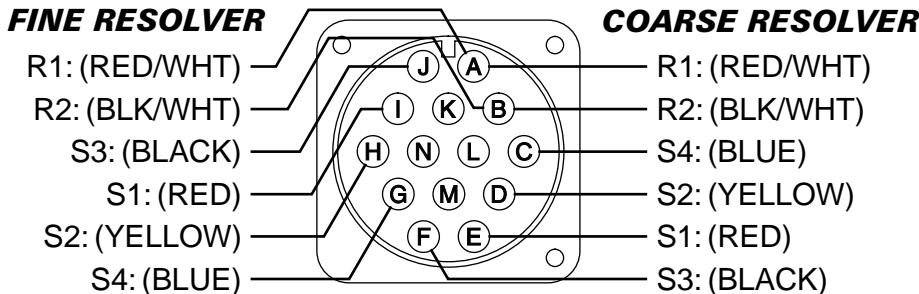
100:1 180:1 1,000:1 1,800:1

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CONNECTOR PINOUT

The figure below shows the connector pinout to industry standard designations and wire colors. The Fine and Coarse resolvers are linked with a vernier gear arrangement with the Fine resolver encoding the single turn position.

BENDIX CONNECTOR: MS3102E20-27P



Female Mating Connector AMCI Part #

MS3106A20-27S STRAIGHT MS-20

MS3108A20-27S RT. ANGLE MS-22

MS3106F20-27S WATERTIGHT MS-201

SPECIFICATIONS

MECHANICAL

Shaft Loading: Radial: 400 lbs. max.
100 lbs. max. working
Axial: 200 lbs. max.
50 lbs. max. working
Starting Torque: 8 oz.in. @ 25°C
Moment of Inertia: 8.75×10^{-4} oz-in-sec² max.
Weight: 4 lbs

ENVIRONMENTAL

Shock: 50 g's for 11 mSec
Vibration: 15 g's to 2000 Hz
Operating Temp: -20 to 125°C
Enclosure: NEMA 4
Anodized Aluminum Body
1070 Carbon Steel Shaft

FOR MORE INFORMATION

If you need more information on the HTT-20-(x), use these four resources:

- ★ Check the manual that came with the AMCI module or controller you're using. If the HTT-20-(x) is compatible with the unit, its manual will contain transducer cable wiring diagrams and complete information on all of the AMCI transducers that are compatible with the unit.
- ★ 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.