

HT-20-(x) Specification Sheet

SHEET # 940-2T163

INSTALLATION NOTES

A HT-20-(x) transducer is a single resolver transducer with a (x):1 internal gear ratio. The resolver makes one rotation for each (x) rotations of the shaft. Therefore, these transducers can be used with our 'single turn' modules and controllers in multi-turn applications.

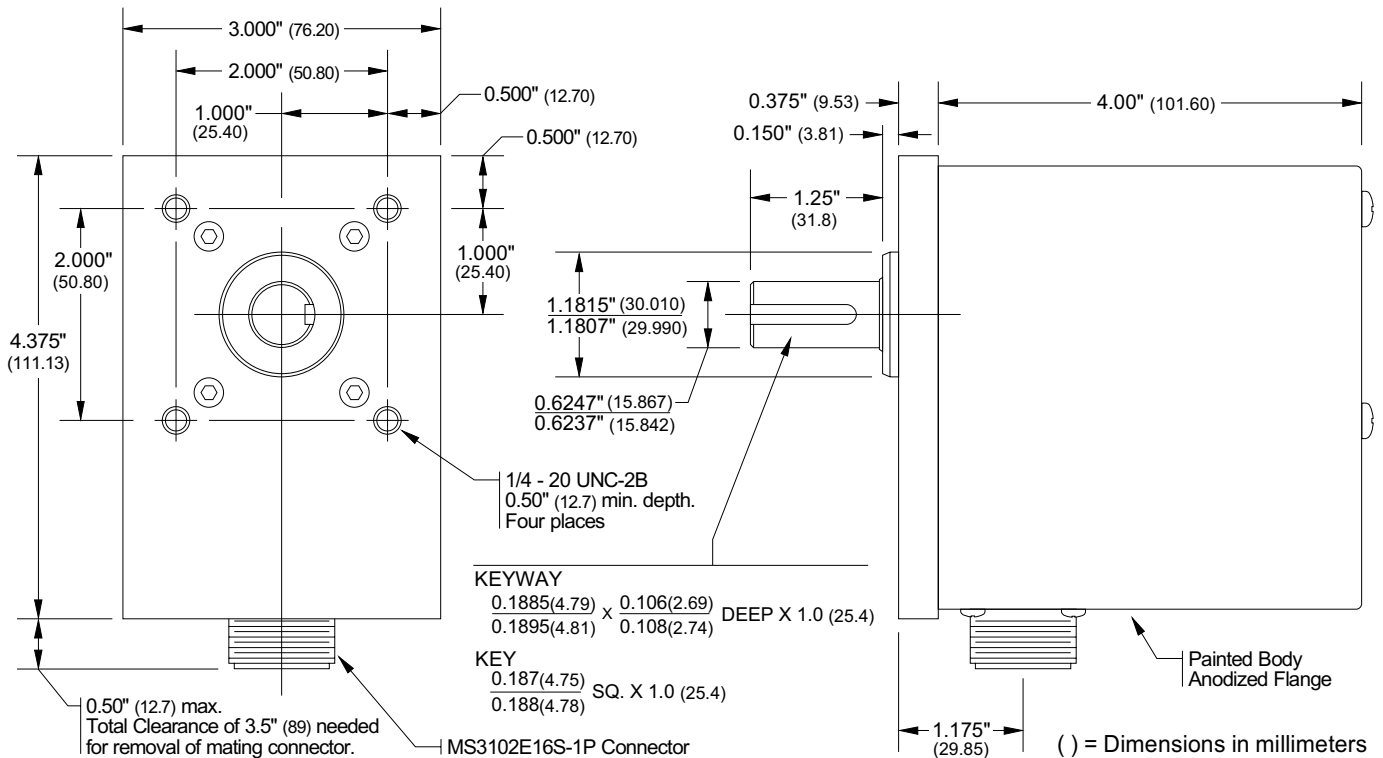
The IP64 rating of the HT-20-(x) means that it will survive most industrial applications including washdowns. The HT-20-(x) is not recommended for corrosive environments. AMCI manufactures the HT-425 transducers for these applications.

Because of the large shaft bearings used in the HT-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 mis-alignment 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 face mounting the HT-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.

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

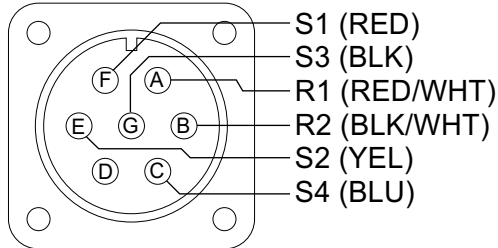
2:1	2.5:1	2.77:1	3:1	4:1	4.8:1	5:1	6:1	7:1	8:1	9:1	10:1	12:1	13:1	15:1
16:1	18:1	20:1	24:1	36:1	40:1	50:1	60:1	64:1	100:1	105:1	150:1	180:1	250:1	256:1

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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.

Military Equivalent: MS3102E16S-1P



COMPATIBLE CABLES

Cables for the HT-20-(x) multi-turn resolver transducer can be ordered from AMCI. The mating connector is preinstalled and all connections are 100% 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.

Cable #	AMCI Connector #	Military Equ. #
CTL-x	MS-16 (Straight)	MS3106A16S-1S
CTL-x/MS18	MS-18 (Rt. Angle)	MS3108A16S-1S
CTL-x/MS161	MS-161 (Watertight)	MS3106F16S-1S

SPECIFICATIONS

Mechanical

Shaft Loading: Radial: 100 lbs. max.

Axial: 50 lbs. max.

Bearing life rated at 2×10^9 revolutions minimum at specified shaft load.

Starting Torque: 8 oz.in. @ 25°C

Moment of Inertia: 8.75×10^{-4} oz-in-sec² max.

Weight: 4.0 lbs

Environmental

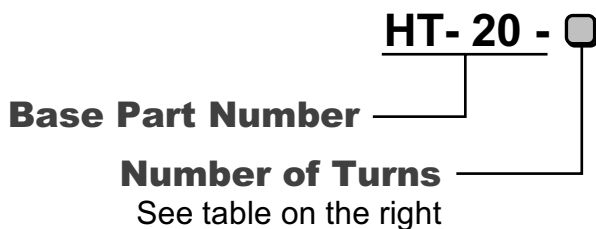
Shock: 50 g's for 11 milliseconds

Vibration: 15 g's to 2000 Hz

Operating Temp: -40 to 125°C (-40 to 257°F)

Enclosure: Powder Coat Aluminum Body
Anodized Aluminum Flange
1070 Carbon Steel Shaft
IP64 when mating connector properly sealed.

PART NUMBERING SYSTEM



Available Number of Turns				
2	2.5	2.77	3	4
4.8	5	6	7	8
9	10	12	13	15
16	18	20	24	36
40	50	60	64	100
105	150	180	250	256

If you need assistance with specifying the right transducer for your application, contact the factory Monday through Friday 8AM to 5 PM Eastern at (860) 585-1254 or e-mail us at sales@amci.com.