

## HT-20 Specification Sheet

SHEET # 940-2T074

### INSTALLATION NOTES

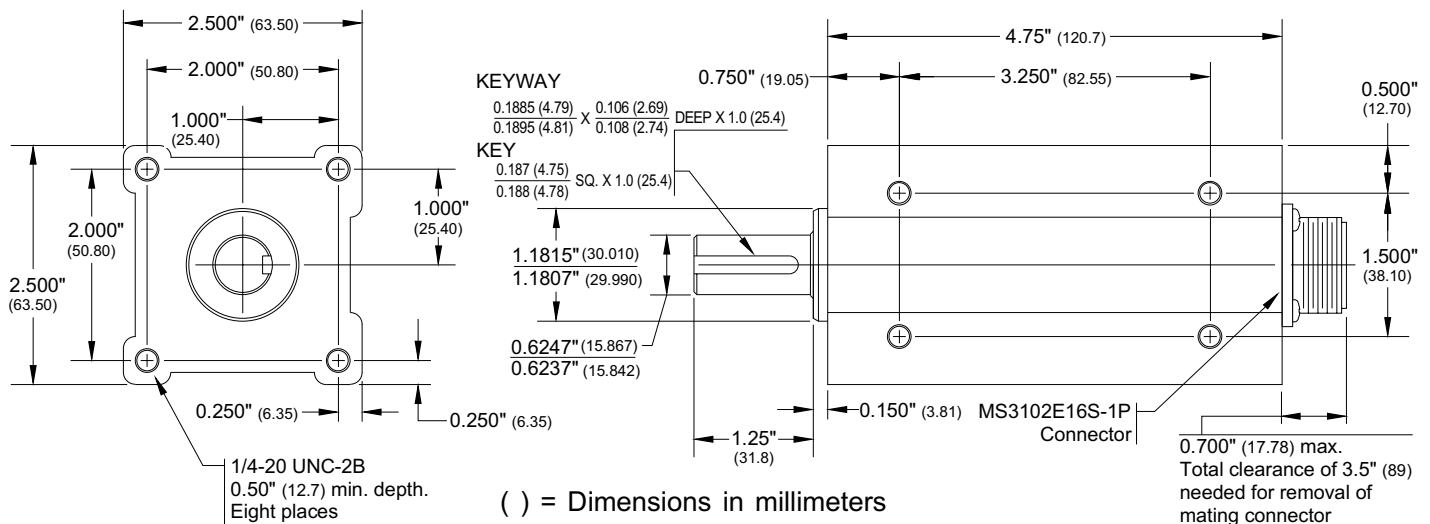
The HT-20 is AMCI's most popular heavy duty, single turn transducer. The HT-20 is IP67 rated and will survive most industrial applications including washdowns. The HT-20 is not recommended for corrosive environments. AMCI manufactures the HT-20K and HT-20L transducers with stainless steel shafts for these applications. The HT-20C with stainless steel shaft and body is also available.

Because of the large shaft bearings used in the HT-20, 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 bearings if the two shafts are directly coupled.

When face mounting the HT-20, 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 is an absolute sensor, it cannot "lose counts" as an incremental transducer can. If the HT-20 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 wherever possible.

### DIMENSIONAL DRAWING



### SPECIFICATIONS

#### Mechanical

Shaft Loading: Radial: 100 lbs. max.  
Axial: 50 lbs. max.  
Bearing life rated at  $2 \times 10^9$  revolutions  
minimum at specified shaft load.  
Starting Torque: 8 oz.in. @ 25°C  
Moment of Inertia:  $6.25 \times 10^{-4}$  oz-in-sec<sup>2</sup> max.  
Weight: 4.0 lbs

#### Environmental

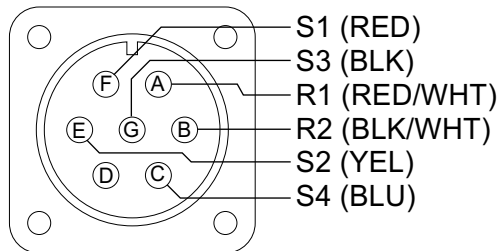
Shock: 50 g's for 11 milliseconds  
Vibration: 15 g's to 2000 Hz  
Operating Temp: -40 to 125°C (-40 to 257°F)  
Enclosure: Anodized Aluminum Body  
1070 Carbon Steel Shaft  
IP67 when mating connector  
properly sealed.

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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 given in the table on the right.

Military Equivalent: MS3102E16S-1P



## COMPATIBLE CABLES

Cables for the HT-20 single 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

## FOR MORE INFORMATION