

HT-20K & HT-20L Specification Sheet

SHEET # 940-2T123

DESCRIPTION

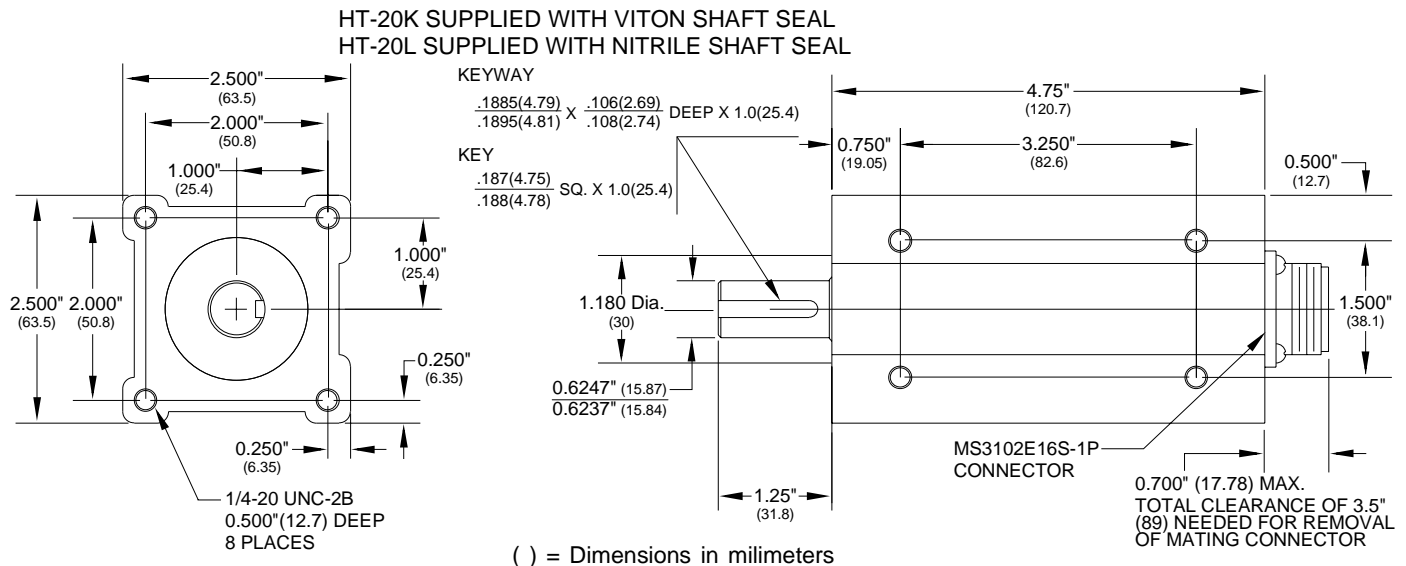
Mechanically connected to the shaft of the controlled machine, the transducer is subjected to severe conditions such as mechanical shock, vibration, and exposure to contaminants such as coolants and solvents. Reliable operation in this extreme environment was the chief consideration when designing the HT-20K and HT-20L Brushless Resolver Transducers. Both transducers have an environmental rating of IP67 and are suitable for use in corrosive environments due to their stainless steel shafts and hard coat anodized aluminum body.

Reliability continues with a 5/8" shaft and an oversized double row sealed bearing. The HT-20K has a Viton® shaft seal and is designed for most applications. The HT-20L has a Nitrile shaft seal and is designed for applications where Viton should not be used such as in the presence of animal oil based lubricants. The brushless resolver, noted for its ability to handle harsh environments, is decoupled from the input shaft by a flexible coupler. Outside connections to the resolver are made through an environmentally sealed MS connector. Finally, these components are encased in an indestructible aluminum housing.

Because the HT-20K and HT-20L are absolute sensors, they cannot "lose counts" as an incremental transducer can. If they appear 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.

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DIMENSIONAL DRAWING



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.

Shaft Seal: K version: Viton
 L version: Nitrile

Starting Torque: 8 oz.in. @ 25°C

Moment of Inertia: 6.25×10^{-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: -30 to 125°C (-22 to 257°F)

Enclosure: Anodized Aluminum Body

Stainless Steel Shaft

IP67 when mating connector

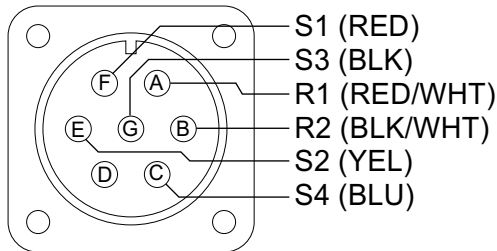
properly sealed.

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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 also given.

Military Equivalent: MS3102E16S-1P



COMPATIBLE CABLES

Cables for the HT-20K and HT-20L resolver transducers 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.

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

Use these three resources if you need more information on the HT-20K or HT-20L:

- * 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.