20 GEAR DRIVE, PLYMOUTH INDUSTRIAL PARK, TERRYVILLE, CT 06786
TEL: (860) 585-1254 FAX: (860) 584-1973 www.amci.com

## HTT-20-1 Specification Sheet

## DESCRIPTION

The HTT-20-1 is an absolute, single turn, brushless resolver based transducer that has two independent resolvers for monitoring position and is primarily used in press applications that require redundant control systems. The two independent resolvers of the HTT-20-1 are geared 1:1 to the input shaft and are encased in an IP64 rated enclosure. Using anti-backlash gearing to insure accuracy and repeatability, the electrical zero points of the two resolvers are aligned at the factory.

In addition to redundant control applications, the HTT-20-1 can be used when you must run two resolver based systems from a single shaft that require different resolvers. AMCI can install any of our size 11 resolvers into the HTT-20-1, making it compatible with resolver based systems from any major manufacturer in the industry.

The HTT-20-1 transducer is dimensionally the same as AMCl's standard multi-resolver package and uses the same MS3102E20-27P connector. However, the connector wiring is different to keep the resolvers electrically isolated. The correct cable to use with the HTT-20-1 is the C1TR-x cable, not the CML-x cable used by the other HTT-20 transducers.
Because the HTT-20-1 is an absolute sensor, it cannot "lose counts" as an incremental transducer can. If the HTT-20-1 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<br>Shaft Loading: Radial: 100 lbs . max. Axial: 50 lbs max.<br>Bearing life rated at $2 \times 10^{9}$ revolutions minimum at specified shaft load.<br>Starting Torque: 8 oz.in. @ $25^{\circ} \mathrm{C}$<br>Moment of Inertia: $8.75 \mathrm{oz}-\mathrm{in}-\mathrm{sec}^{2}$ max. Weight: 4 lbs

## Environmental

Shock: 50 g's for 11 milliseconds
Vibration: 15 g 's to 2000 Hz
Operating Temp: -20 to $125^{\circ} \mathrm{C}$
Enclosure: IP64
Anodized Aluminum Flange
Powder Coated Aluminum Body
1070 Carbon Steel Shaft

## CONNECTOR PINOUT

The figure below shows the connector pinout to industry standard designations and wire colors.
BENDIX CONNECTOR: MS3102E20-27P


## PART NUMBERING SYSTEM



Resolver A Specs.
Resolver B Specs.
AMCI can install any of our size 11 resolvers in the HTT-20-1 transducer. Commonly used resolvers are designated by the letters below:
"J" = AMCI Standard Resolver
"L" = AVG Autotech/Gemco Compatible Resolver
"C" = ElectroCam/Namco C\&A Compatible Resolver
For a complete list of available resolvers available from AMCI , see the size 11 resolver page on www.amci.com.

If you need assistance with specifying the resolvers you need 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.

## COMPATIBLE CABLES

Cables for the HTT-20-1 redundant 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.

| Cable \# | AMCI <br> Connector \# | Military <br> Equ. \# |
| :---: | :---: | :---: |
| C1TR-x | MS-20 (Straight) | MS3106A20-27S |
| C1TR-x/MS22 | MS-22 (Rt. Angle) | MS3108A20-27S |
| C1TR-x/MS201 | MS-201 (Watertight) | MS3106F20-27S |

