**DESCRIPTION**

Designed as a dual resolver transducer, this package has a 5/8" stainless steel shaft and an oversized double row sealed bearing. This transducer is an absolute position sensor that encodes 100 turns. Outside connections to the transducer are made through a watertight MS connector. The transducer connects to AMCI equipment using our standard CML cables. The transducer is IP67 rated and is suitable for outdoor or washdown applications.

Because of the large shaft bearings used in the HTT-425-T1S-100, gears or pulleys can be directly mounted onto the shaft. The HTT-425-T1S-100 is an absolute sensor it cannot "lose counts" when rotating as an incremental transducer can. If the transducer appears to be losing counts when operating, the usual cause is a shaft slipping in a loose coupler. If you are losing counts, check all mechanical couplings and use shaft keys whenever possible.

**DIMENSIONAL DRAWING**

![Dimensional Drawing]

**FINE RESOLVER**

- R1: (RED/WHIT)
- R2: (BLK/WHT)
- S3: (BLACK)
- S1: (RED)
- S2: (YELLOW)
- S4: (BLUE)

**COARSE RESOLVER**

- R1: (RED/WHIT)
- R2: (BLK/WHT)
- S4: (BLUE)
- S2: (YELLOW)
- S1: (RED)
- S3: (BLACK)

**Female Mating Connector**

- MS3106A20-27S STRAIGHT ... MS-20
- MS3108A20-27S RT. ANGLE ... MS-22
- MS3106F20-27S WATERTIGHT ... MS-201

**Keyway Specification**

- 0.188(4.79) x 0.106(2.69)
- 0.189(4.81) x 0.108(2.74)

**Key Dimensions**

- 0.178(4.52) SQ. X 1.0(25.4)
- 0.178(4.52) SQ. X 1.0(25.4)

( ) = Dimensions in millimeters

LEADERS IN ADVANCED CONTROL PRODUCTS
# HTT-425-T1S-100 Specification Sheet

## SPECIFICATIONS

### MECHANICAL
- Shaft Loading: Radial: 100 lbs. max.
- Axial: 50 lbs. max.
- Bearing life rated at 2X10⁸ revolutions minimum at specified shaft load.
- Starting Torque: 8 oz.in. @ 25°C
- Moment of Inertia: 20 oz-in-sec² max.
- Weight: 5.0 lbs

### ELECTRICAL
- Input Voltage: 7.0 V
- Input Freq: 5000 Hz
- Primary: Rotor
- Input Current: 20.0 mA Max.
- Trans. Ratio (TR): 0.95 ± 5%
- Accuracy: ± 5 min. (max error)

### ENVIRONMENTAL
- Shock: 50 g's for 11 mSec
- Vibration: 15 g's to 2000 Hz
- Operating Temp: -30 to 125°C
- Enclosure: IP67 / NEMA 4X
  - Hard Coat Anodized Body
  - 303 Stainless Steel Shaft

The HTT425-T1S-100 contains two resolvers, called Fine and Coarse, that have the electrical specifications listed above. The Fine resolver is coupled directly to the input shaft. The two resolvers geared together in a vernier ratio of 99:100. This arrangement allows the HTT425-T1S-100 to encoded 100 turns of absolute position data.

## FOR MORE INFORMATION

If you need more information on the HTT-425-T1S-100 use these three resources:

- 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.