

HTT-400-1 Specification Sheet

SHEET # 940-2T264

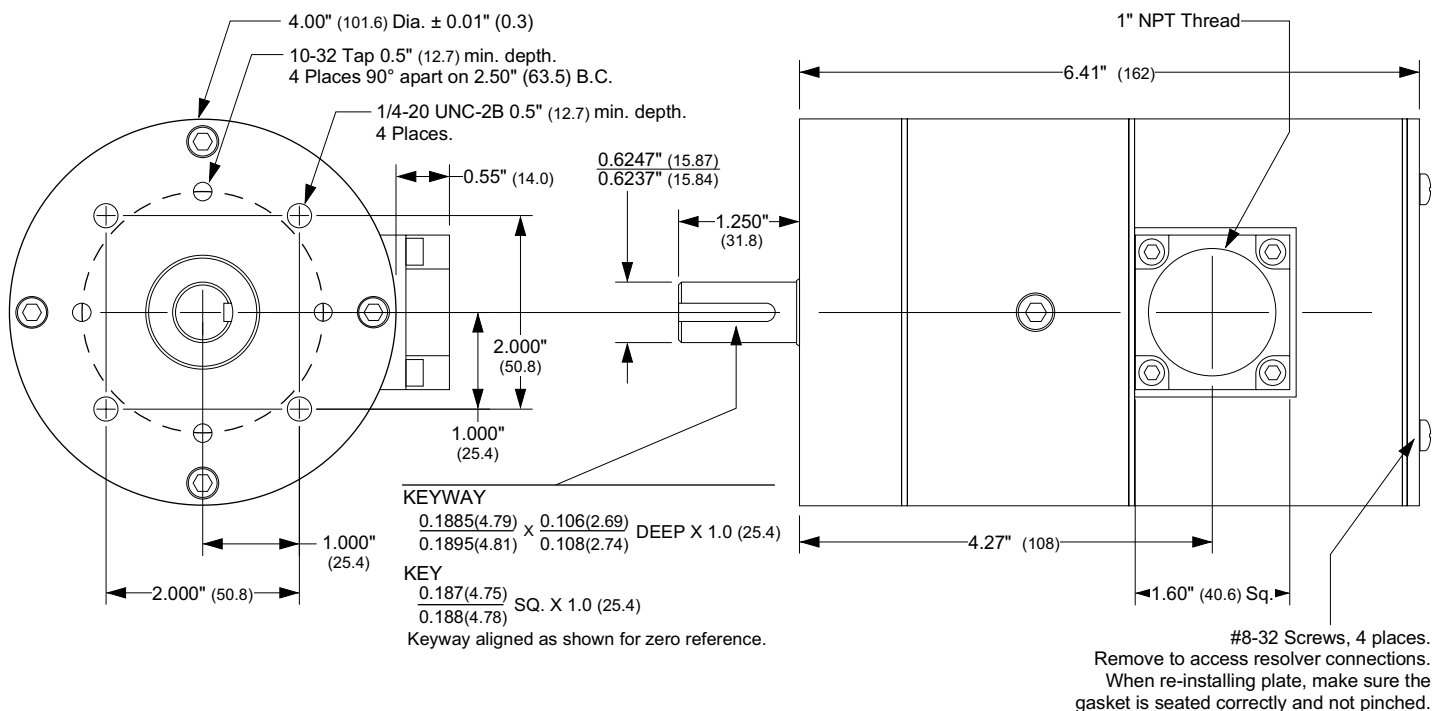
DESCRIPTION

The HTT-400-1 is an absolute, single turn, brushless resolver based transducer that has two independent resolvers for monitoring position and is primarily used in applications that require redundant control systems. The two independent resolvers of the HTT-400-1 are geared 1:1 to the input shaft and are encased in an IP64 rated anodized enclosure. Using anti-backlash gearing to insure accuracy and repeatability, the electrical zero points of the two resolvers are aligned at the factory. Furthermore, the key of the input shaft is aligned to the approximate position of the resolver's zero as shown in the dimensional drawings.

The HTT-400-1 transducer is an industry standard 4 inch diameter package that is available with three different termination options. The first is a conduit version, and the other two offer separate military equivalent connectors for each resolver. One connector option is AMCI's standard and the other option is AVG/Autotech's standard. Mounting the HTT-400-1 is accomplished by using one of the two bolt patterns on its face. The 1/4"-20 bolt pattern is AMCI's standard, while the #10-32 pattern matches AVG/Autotech's standard. Mounting brackets designed for AMCI's HTT-20 transducers or AVG/Autotech's RL210's can be used without modification.

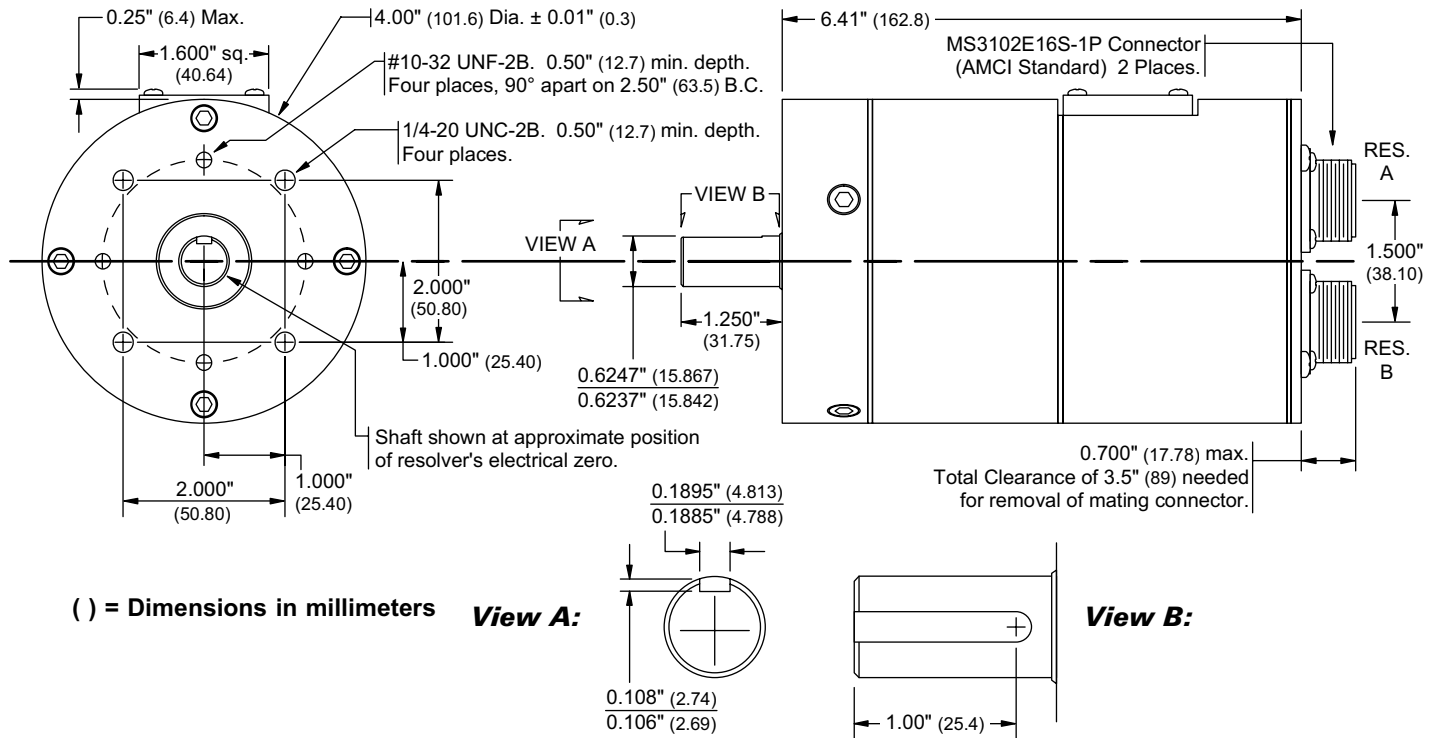
The other area of application for the HTT-400-1 transducer is when you must run two resolver based systems that require different resolvers from a single shaft. AMCI can install any of our size 11 resolvers into the HTT-400-1, making it compatible with resolver based systems from any major manufacturer in the industry.

DIMENSIONAL DRAWING HTT-400-1C Version

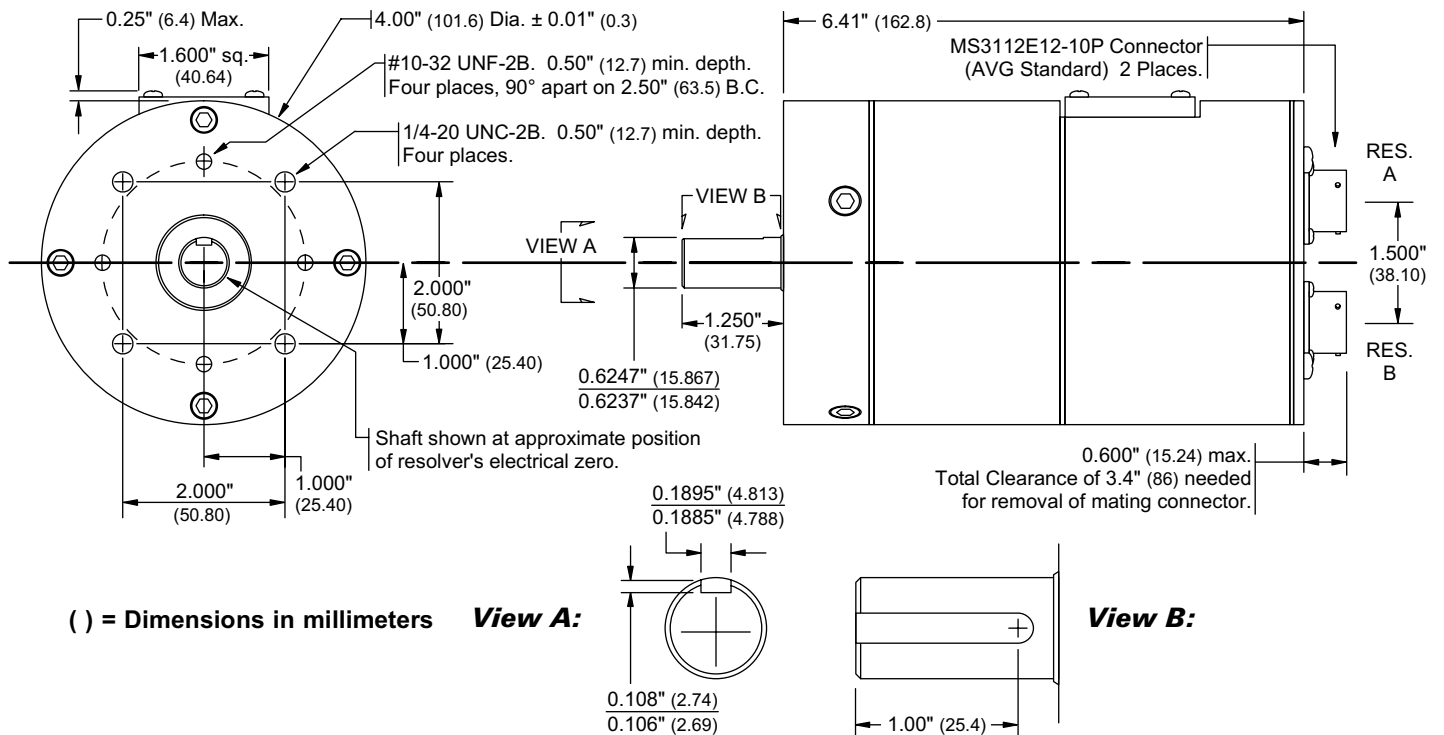


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DIMENSIONAL DRAWING HTT-400-1A Version



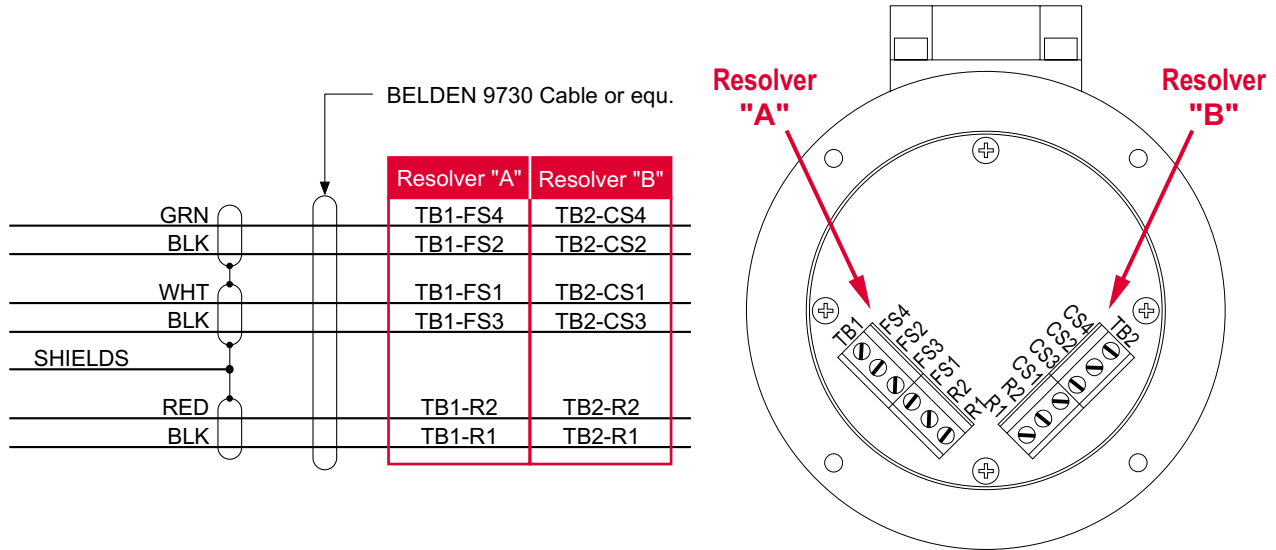
DIMENSIONAL DRAWING HTT-400-1S Version



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WIRING DIAGRAM HTT-400-1C Version

The figure below shows how to wire the HTT-400-1C to AMCI's standard single Turn transducer cable, the Belden 9730 or exact equivalent. Wiring to AMCI interface products then follow diagrams given in the manual for each product. Note: If your total cable length is less than 100 feet, then you can substitute Belden 9873 or exact equivalent for the Belden 9730.

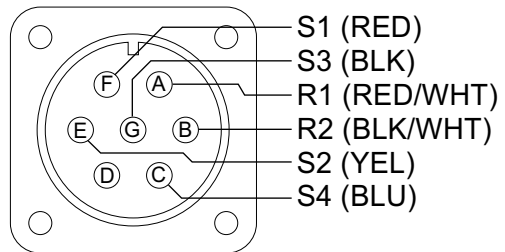


NOTE The shields of the transducer cable are terminated at the controller *Only!* Do not connect the cable shields to the HTT-400-1C housing. Cut off the foil shields and drain wires inside the cable jacket at the transducer end of the cable.

CONNECTOR PINOUT HTT-400-1A Version

The figure to the right shows the connector pin out to industry standard resolver designations. Cabling from the HTT-400-1A to an AMCI controller follows AMCI's published cable prints.

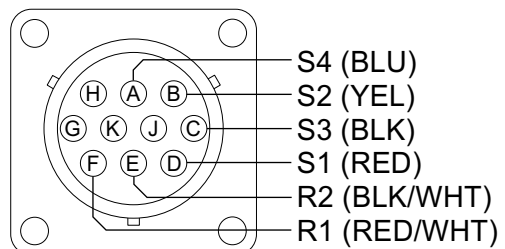
Military Equivalent Connector: MS3102E16S-1P



CONNECTOR PINOUT HTT-400-1S Version

The figure to the right shows the connector pin out to industry standard resolver designations. If using an AMCI CTL-(x)/MS25 cable, wiring from the HTT-400-1S to an AMCI controller follows AMCI's published cable prints.

Military Equivalent Connector: MS3112F12-10P



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SPECIFICATIONS

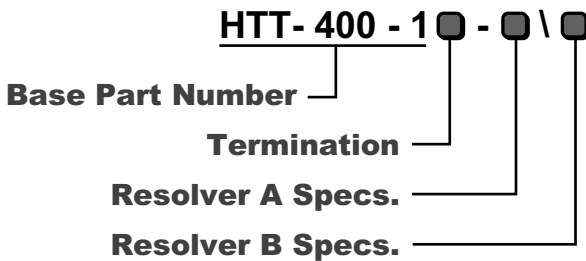
Mechanical

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 oz-in-sec² max.
 Weight: 5.25 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: IP64
 1070 Carbon Steel Shaft
 Anodized Aluminum Body

PART NUMBERING SYSTEM



Termination:

“C” = 1" Conduit Fitting
 “A” = AMCI Standard Connector
 “S” = AVG Autotech Standard Connector

Resolver Specs:

AMCI can install any of our size 11 resolvers in the HTT-400-1 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-400-1 redundant resolver transducer can be ordered from AMCI.
 For the HTT-400-1C Conduit version, Belden 9730 cable or exact equivalent should be used. In order to keep the system completely redundant, metal conduit should be attached to the HTT-400-1C and separate cables should be brought to the internal terminal blocks.

For the HTT-400-1A version, AMCI has three different cable versions available, with the difference being the installed mating connector. The mating connector is preinstalled and connections are factory tested. 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 the HTT-400-1S version, AMCI has one cable version. The mating connector is preinstalled and connections are factory tested. In the part number below, "x" specifies the length of the cable in feet.

Cable #	AMCI Connector #	Military Equ. #
CTL-x/MS25	MS-25 (Straight)	MS3116F12-10S