

## HT-20C-303 & HT-20C-304 Spec. Sheet

SHEET # 940-2T132

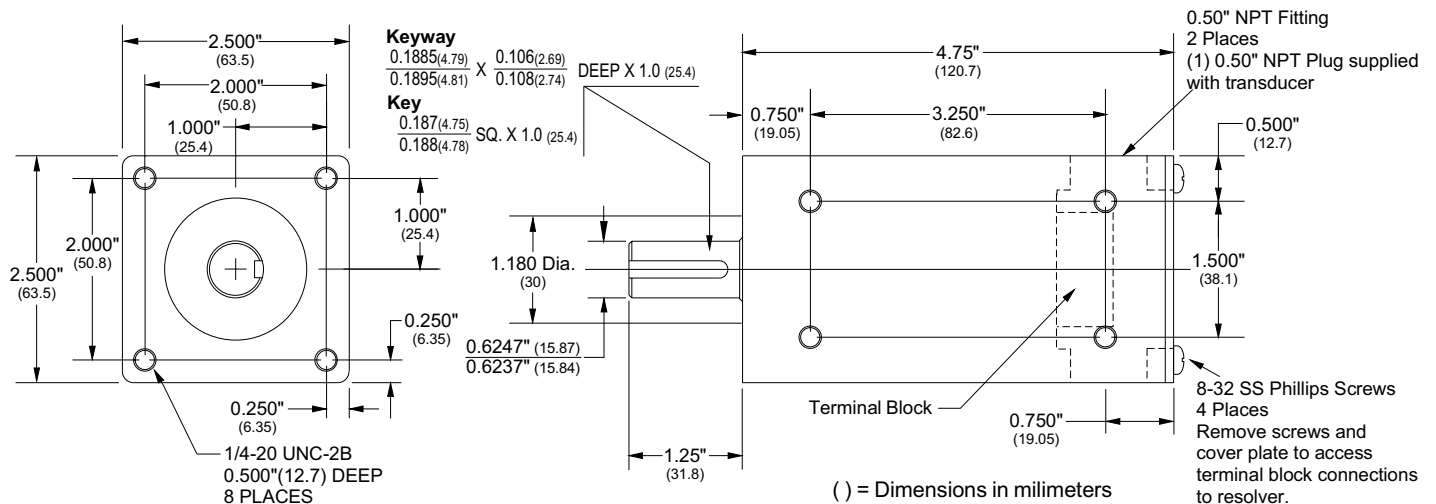
### DESCRIPTION

Mechanically connected to the shaft of the controlled machine, a 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-20C Series Brushless Resolver Transducers.

Reliability begins with a 5/8" stainless steel shaft and an oversized double row sealed bearing. The rotor of the brushless resolver is built on the input shaft, minimizing component count to maximize reliability. Connections to the resolver are made through a standard .50" NPT fitting to a plug-in connector. Finally, these components are encased in an indestructible stainless steel housing. The body of the HT-20C-303 is manufactured from 303 stainless steel while the body of the HT-20C-304 is manufactured from 304 stainless steel. The IP67 rating of these transducers means they will survive washdowns and corrosive environments.

The HT-20C series resolver transducers do not contain components that will degrade in performance or fail when exposed to sudden changes in environmental conditions. Also, with the resolver being a ratiometric device, any absolute variations in the output of the HT-20C transducers due to aging or changing in voltage, frequency or temperature are ignored. Coupled with the fact that these transducers easily interface to AMCI controllers with an inexpensive six wire cable, the HT-20C series transducers should be your first choice as accurate and reliable position transducers.

### 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.

Shaft Seal: Nitrile

Starting Torque: 8 oz.in. @ 25°C

Moment of Inertia:  $8.75 \times 10^{-4}$  oz-in-sec<sup>2</sup> max.

Weight: 7.0 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: Stainless Steel Body

Stainless Steel Shaft

0.5" NPT fittings (2 places)

IP67 when properly sealed.

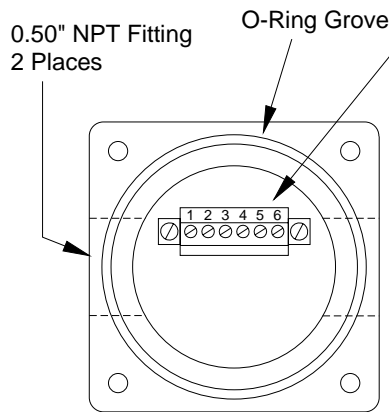
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## CONNECTOR PINOUT

The figure below shows the connector pinout to industry standard designations and AMCI standard cable colors.

REAR VIEW (COVER REMOVED)



**Plug-in Resolver Connector**  
Supplied with HT-20C Transducer  
Phoenix Part# MC 1.5/6-ST-3.81

Pin #	Resolver Designation	Belden 9730 Cable Wire Color
1	R1	Blk/Red
2	R2	Red
3	S1	White
4	S3	Blk/Wht
5	S2	Blk/Grn
6	S4	Green

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## FOR MORE INFORMATION

Use these three resources if you need more information on the HT-20C-303 or HT-20C-304:

- \* 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 Eastern, Monday through Friday. An applications engineer will be available to assist you.
- \* Finally, you can e-mail us at [sales@amci.com](mailto:sales@amci.com) or [techsupport@amci.com](mailto:techsupport@amci.com).