**DESCRIPTION**

Designed as a direct replacement for AVG/Autotech Controls RL-210 transducers, these products are designed to ease installation change over and are compatible with both AVG/Autotech and AMCI control systems. The HTT-400-128's are absolute 128 turn transducers with the mechanical dimensions and bolt pattern of the AVG/Autotech RL210's. The HTT-400-128's can be ordered with a one inch conduit fitting or an MS3112E-14-19P military connector, and these terminations are interchangeable and field replaceable. In addition to termination flexibility, the HTT-400-128's can be ordered with a variety of resolvers to match your control system. See page 2 of this spec sheet for a complete part number breakdown.

For AMCI users, the HTT-400-128's offers the advantage of a multi-turn transducer with a conduit fitting. With proper installation, this completely eliminates the possibility of liquid contaminates entering the transducer cable. AMCI's standard bolt pattern is also on the front of the transducer so mounting brackets designed for our HTT-20 transducers may be used with the HTT-400-128's without modification. Many AMCI controllers can be configured to work with AVG/Autotech transducers. When ordering one of the HTT-400-128's for use with these controllers, the transducer should be ordered with AVG/Autotech compatible resolvers to ensure proper operation.

**DIMENSIONAL DRAWING**

( ) = Dimensions in millimeters
**SPECIFICATIONS**

**Mechanical**
- Shaft Loading: Radial: 100 lbs. max.
- Axial: 50 lbs. max.
- Bearing life rated at 2x10^6 revolutions minimum at specified shaft load.
- Starting Torque: 8 oz.in. @ 25°C
- Moment of Inertia: 8.75X10^-4 oz-in-sec^2 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: Anodized Aluminum Body
- 1070 Carbon Steel Shaft
- IP64 when conduit properly sealed.

**PART NUMBERING SYSTEM**

HTT - 400 - (Number of Turns) - (Termination)

- Base Part Number
- Number of Turns: 128
- Termination:
  - "C" = 1 inch Conduit
  - "S" = MS19 Side Connector
- Resolver Type:
  - "J" = AMCI Standard
  - "L" = AVG/Autotech and Gemco Standard
  - Other resolvers are available, consult factory for assistance.

A cable for the HTT-400-128 transducers with a preinstalled mating connector can be ordered from AMCI. All connections are 100% factory tested.

The AMCI part number is:
- CML-xxx/MS19, where 'xxx' is the length in feet.

Termination Adapters, which include the adapter, gasket, and four mounting screws, can be ordered separately under the following part numbers:
- **MS-TAC**: 1" Conduit Termination Adapter
- **MS-TA19**: MS-19 Termination Adapter

**CHANGING TERMINATION ADAPTERS**

When using the MS-TAC, start by removing the back plate of the HTT-400 transducer. Mount the MS-TAC on the transducer and feed your cable through the conduit fitting. Wire your cable to the transducer's terminal block and replace the back plate.

Wires on the MS-TA19 are labeled by pin number. Use the table below to wire the MS-TA19 to the HTT-400's terminal block.

<table>
<thead>
<tr>
<th>TB1</th>
<th>Pin</th>
<th>TB2</th>
<th>Pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>A</td>
<td>R1</td>
<td>A</td>
</tr>
<tr>
<td>R2</td>
<td>B</td>
<td>R2</td>
<td>B</td>
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<tr>
<td>FS1</td>
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<td>CS1</td>
<td>C</td>
</tr>
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</tr>
<tr>
<td>FS4</td>
<td>M</td>
<td>CS4</td>
<td>F</td>
</tr>
</tbody>
</table>

When using the MS-TA19, start by removing the back plate of the HTT-400 transducer. Mount the MS-TA19 on the transducer, feeding the wires of the MS25 connector into the transducer. Connect these wires to the transducer's terminal block and replace the back plate.

MS-TA19 Installation (Rear Cover Removed)

www.amci.com