**EH 80 PU**

**THROUGH HOLLOW SHAFT INCREMENTAL ENCODER**

Sturdy, incremental encoder series recommended in feedback control systems on medium size AC servomotor.

- 3 channel encoder (A / B / Z) up to 2048 ppr
- Universal electronic
- Adaptable to the diameter of the motor shaft
- Extremely versatile
- Compact size
- Through hollow shaft diameter up to 15 mm with collar clamping

### Specifications

<table>
<thead>
<tr>
<th>ORDERING CODE</th>
<th>EH</th>
<th>80PU</th>
<th>1024</th>
<th>Z</th>
<th>5/30</th>
<th>L</th>
<th>15</th>
<th>X</th>
<th>3</th>
<th>PR</th>
<th>XXX</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIES</td>
<td>incremental encoder series EH</td>
<td>MODEL</td>
<td>through hollow shaft with collar clamping 80PU</td>
<td>RESOLUTION</td>
<td>ppr 1000 / 1024 / 2000 / 2048</td>
<td>please directly contact our offices for other pulses</td>
<td>ZERO PULSE</td>
<td>with zero pulse Z</td>
<td>POWER SUPPLY</td>
<td>5 ... 30 V DC 5/30</td>
<td>ELECTRONIC INTERFACE</td>
</tr>
<tr>
<td>BORE DIAMETER</td>
<td>mm 14</td>
<td>mm 15</td>
<td>ENCLOSURE RATING</td>
<td>IP 54 X</td>
<td>MAX ROTATION SPEED</td>
<td>3000 rpm 3</td>
<td>OUTPUT TYPE</td>
<td>radial cable output (standard length 0,3 m) PR</td>
<td>VARIANT</td>
<td>custom version XXX</td>
<td></td>
</tr>
</tbody>
</table>

For 12 mm or 10 mm shaft see accessories.

www.eltra-encoder.eu
tel: +421 552 601 099
e-mail: info@eltra-trade.com
**ELECTRICAL SPECIFICATIONS**

- **Resolution**: from 1000 to 2048 ppr
- **Power supply**: 4.5 ... 30 V DC (with reverse polarity protection)
- **Power draw without load**: 800 mW
- **Max load current**: 20 mA / channel
- **Output type***: line driver TTL/HTL with +5 Vdc power supply output is compatible with RS-422 levels
- **Max output frequency**: 105 kHz
- **Counting direction**: A leads B clockwise (shaft view)
- **Electromagnetic compatibility**: IEC 61000-6-2, IEC 61000-6-4

*output levels according to power supply, for further details please see under Technical basics section

**MECHANICAL SPECIFICATIONS**

- **Bore diameter**: ø 14 / 15 mm (10 / 12 mm with shaft adapter)
- **Enclosure rating**: IP 54 (IEC 60529)
- **Max rotation speed**: 3000 rpm
- **Shock**: 50 G, 11 ms (IEC 60068-2-27)
- **Vibration**: 20 G, 10 ... 2000 Hz (IEC 60068-2-6)
- **Moment of inertia**: 4 x 10^-6 kgm^2
- **Starting torque** (at +20°C / +68°F): < 0.04 Nm
- **Body material**: PA66 glass fiber reinforced
- **Shaft material**: 1.4305 / AISI 303 stainless steel
- **Housing material**: PA66 glass fiber reinforced
- **Bearings**: 2 ball bearings
- **Bearings life**: 10^9 revolutions
- **Operating temperature**: -20° ... +85°C (-4° ... +185°F)
- **Storage temperature**: -25° ... +85°C (-13° ... +185°F)
- **Fixing torque for collar clamping**: 1 Nm recommended
- **Weight**: 250 g (8.82 oz)

**ACCESSORIES**

- **Shaft adapter**
  - Description: Shaft adapter 15/10
  - P/N: 41890366
  - ID (mm): 10
  - OD (mm): 15
  - Description: Shaft adapter 15/12
  - P/N: 41890367
  - ID (mm): 12
  - OD (mm): 15
  - Description: Shaft adapter 14/10
  - P/N: 41890371
  - ID (mm): 10
  - OD (mm): 15
  - Description: Shaft adapter 14/12
  - P/N: 41890372
  - ID (mm): 12
  - OD (mm): 14

  Antirotation pin diameters please directly contact our offices

**CONNECTIONS**

- **Function**
  - +V DC
  - 0 V
  - Ch. A
  - Ch. A-
  - Ch. B
  - Ch. B-
  - Ch. Z
  - Ch. Z-

- **Cable output**
  - Line driver
  - red
  - black
  - green
  - gray or brown
  - yellow
  - orange
  - blue
  - white
  - shield