Series AWI 40

- Incremental rotary-encoder with a solid shaft diameter of 6 mm
- Housing diameter 40 mm, small design and high degree of protection
- Maximum 1024 pulses / revolution
- For simple industrial requirements
- Also available in stainless steel for aggressive Ambient conditions
- Accessories from page 78

Electrical specifications

- Max. pulse frequency: 25 kHz
- Perm. temperature range: -30°C...+70°C
- Power supply: 10 V...30 V DC
- Max. current consumption: 80 mA (without load)
- Max. output load: 30 mA (per channel)
- Residual ripple: max. ±5% Uo
- Power supply: 5 V DC ± 5%
- Max. current consumption: 40 mA
- Max. output load: 30 mA (per channel)

Mechanical specifications

- Flange/Housing: Aluminium
- Shaft: Stainless steel
- Shaft seal: Oil/salt-water resistant
- Bearing: Deep groove ball bearing
- Weight: Approx. 0.3 kg
- Protection type: IP 65
- Max. speed: 6,000 U/min
- Torque: Approx. 3 Ncm
- Max. shaft load: Axial 5 N, radial 5 N

Mechanical dimensions

Image of mechanical dimensions with dimensions labeled.
Series AWI 40

Incremental Rotary Encoder

Output circuits

Signal outputs

A Two square pulse trains offset by 90° el., with channel A lagging in clockwise rotation.
B Reference pulse 0 once per revolution, position and length optional.
C Design 0 pulse optional All channels can also be executed inversely.

Tolerances (at 25 kHz)

- Phase offset: 90° ± 20° el.
- Duty cycle: 180° : 180° ± 18° el.

Pin configuration

<table>
<thead>
<tr>
<th>Connection type 00 (Colour code according to DIN 47100)</th>
<th>GND</th>
<th>+ U_b</th>
<th>A</th>
<th>B</th>
<th>A</th>
<th>B</th>
<th>0</th>
<th>Ô</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, brown, green, yellow, gray, blue, red</td>
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<table>
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<th>+ U_b</th>
<th>A</th>
<th>B</th>
<th>A</th>
<th>B</th>
<th>0</th>
<th>Ô</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black, blue, brown, beige, yellow, green, pink, purple</td>
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<table>
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<th>GND</th>
<th>+ U_b</th>
<th>A</th>
<th>B</th>
<th>A</th>
<th>B</th>
<th>0</th>
<th>Ô</th>
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<tbody>
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<td>1 2 3 4 (5)</td>
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<th>+ U_b</th>
<th>A</th>
<th>B</th>
<th>A</th>
<th>B</th>
<th>0</th>
<th>Ô</th>
</tr>
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<tbody>
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Order reference

AWI 40 0 6 C

- Numbers of pulses 1... 1024

- With declaration of conformity

- Higher numbers of pulses on request

Housing, Shaft, Signal output, Connection position/Connection type, Output circuit

- Standard
- A = axial: 00, 01, 08, 09, 10, 11
- R = radial: 00, 01

- Stainless steel
- A = axial: 00, 01, 08, 09, 10, 11
- R = radial: 00, 01

- Push-pull 30 mA
- 3 = TTL

S = Standard 06 = 6 mm
E = Stainless steel