Series HWI 40

- Incremental miniature rotary-encoder with a hollow shaft diameter of 6mm
- Housing diameter 40 mm, small design and standard degree of protection
- Maximum 100 pulses / revolution
- For simple industrial requirements
- Direct assembly onto existing shafts
- Accessories from page 78

**Mechanical specifications**

- Flange: Aluminium
- Housing: Aluminium
- Shaft: stainless steel
- Bearing: Deep groove ball bearing
- Weight: approx 0.1 kg
- Protection type: IP 54
- Max. speed: 6.000 U/min
- Torque: approx 1 Ncm

**Electrical specifications**

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

**Mechanical dimensions**

All specification in millimeters
Output circuits

Order ref.: 1 3 6

Signal outputs

A

B

0

Two square pulse trains offset by 90° el, with channel A lagging in clockwise rotation.

Reference pulse 0 once per revolution, position and length optional.

All channels can also be executed inversely.

Pin configuration

<table>
<thead>
<tr>
<th>Connection type 00</th>
<th>Connection type 00</th>
<th>Connection type 01</th>
<th>Connection type 01</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Colour code according to DIN 47100)</td>
<td>(Colour code according to DIN 47100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GND</td>
<td>+ U B</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>white</td>
<td>brown</td>
<td>green</td>
<td>yellow</td>
</tr>
<tr>
<td>white</td>
<td>brown</td>
<td>green</td>
<td>yellow</td>
</tr>
<tr>
<td>black</td>
<td>blue</td>
<td>brown</td>
<td>beige</td>
</tr>
<tr>
<td>black</td>
<td>blue</td>
<td>brown</td>
<td>beige</td>
</tr>
</tbody>
</table>

Order reference

HWI 40 S 0 6 1 R

Number of pulses 1 ... 100

(Higher numbers of pulses on request)

S = Standard

06 = 6 mm

1 = A

2 = A, B

3 = A, B, 0

4 = Å

5 = A, B / Å, B

6 = A, B, 0 / Å, Œ

7 = Å, 0

8 = Å, 0 / Å, Œ

9 = Å, B, 0

1 = A

2 = A, B

3 = A, B, 0

4 = Å

5 = A, B / Å, B

6 = A, B, 0 / Å, Œ

7 = Å, 0

8 = Å, 0 / Å, Œ

9 = Å, B, 0

1 = Push-pull 30 mA

2 = A, B

3 = A, B, 0

4 = Å

5 = A, B / Å, B

6 = A, B, 0 / Å, Œ

7 = Å, 0

8 = Å, 0 / Å, Œ

9 = Å, B, 0

1 = TTL

2 = A, B

3 = A, B, 0

4 = Å

5 = A, B / Å, B

6 = A, B, 0 / Å, Œ

7 = Å, 0

8 = Å, 0 / Å, Œ

9 = Å, B, 0

1 = RS 422