AWI 58

- Incremental rotary encoder with shaft and high degree of protection
- Compact design for highest industrial requirements
- International standard
- Also available in stainless steel for aggressive environmental conditions
- Accessories from page 70

**Mechanical specifications**

- Flange: Aluminium
- Housing: Zinc die-casting
- Shaft: stainless steel
- Shaft seal: Oil/Salt-water resistant
- Bearing: Deep groove ball bearing
- Power supply: 10V...30V DC
- Max. current consumption: 80 mA (without load)
- Max. output load: 30 mA (per channel)
- Residual ripple: max. ± 5% UB
- Power supply: 5V DC ± 5%
- Max. current consumption: 80 mA
- Max. output load: 30 mA (per channel)
- Weight: approx. 0.4 kg
- Protection type: IP 65
- Max. speed: 6000 U/min
- Torque: approx. 3 Ncm
- Max. shaft load: axial 15 N/radial 30 N

**Electrical specifications**

- Max. pulse frequency: 100 kHz
- Perm. temperature range: -30°...+70° C
- Power supply: 10V...30V DC
- Max. current consumption: 80 mA
- Max. output load: 30 mA (per channel)
- Residual ripple: max. ± 5% UB
- Power supply: 5V DC ± 5%
- Max. current consumption: 80 mA
- Max. output load: 30 mA (per channel)

**Mechanical dimensions**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 mm</td>
<td>10 mm</td>
<td>9.5 mm</td>
</tr>
<tr>
<td>6.35 mm</td>
<td>10 mm</td>
<td>9.5 mm</td>
</tr>
<tr>
<td>8 mm</td>
<td>20 mm</td>
<td>15 mm</td>
</tr>
<tr>
<td>9.52 mm</td>
<td>20 mm</td>
<td>15 mm</td>
</tr>
<tr>
<td>10 mm</td>
<td>20 mm</td>
<td>15 mm</td>
</tr>
<tr>
<td>12 mm</td>
<td>25 mm</td>
<td>20 mm</td>
</tr>
</tbody>
</table>

* Tolerance = fg 6
**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, linked for RS 422.

All channels can also be executed inversely.

### Pin configuration

| Connection type | GND | + U_B | A | B | Â | Ê | 0 | Ô |
|-----------------|-----|-------|---|---|----|    |---|---|
| 00 (Colour code according to DIN 47100) | white | brown | green | yellow | | grey |
| 00 (Colour code according to DIN 47100) | white | brown | green | yellow | grey | pink | blue | red |
| 01 | black | blue | brown | beige | yellow | |
| 01 | black | blue | brown | beige | yellow | green | pink | purple |
| 05 | | | | | | | | |
| 08, 09 | 1 | 2 | 3 | 4 |
| 10, 11 | 1 | 2 | 3 | 4 | (5) | (6) | 5 | 6 |
| 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 52 | A | B | C | D | E | F | G |

### Order reference

- **AWI 58**

- **Housing**
  - S = Standard: 06 = 6 mm
  - E = Stainless steel: 08 = 8 mm, 10 = 10 mm, 12 = 12 mm (IP 54), 56 = 6,35 mm, 59 = 9,52 mm

- **Shaft**
  - 06 = 6 mm
  - 08 = 8 mm
  - 10 = 10 mm
  - 12 = 12 mm (IP 54)
  - 56 = 6,35 mm
  - 59 = 9,52 mm

- **Signal output**
  - Number of pulses 1 ... 5000
  - (higher pulse numbers on request)

- **Connection position/Connection type**
  - Standard: 06, 08, 09, 10, 11, 12, 52
  - A = axial: 01, 00, 05, 08, 09, 10, 11, 12, 52
  - Stainless steel: 06, 08, 09, 10, 11

- **Output circuit**
  - 1 = Push-pull 30mA
  - 2 = TTL Line Driver 75114 o.Â.
  - 3 = TTL
  - 6 = RS 422
  - 7 = U, 24V DC-Ausg. 5V TTL
  - 8 = Push-pull 100mA
  - 9 = U, 24V DC-out. RS 422