PH 05

- Incremental rotary encoder with shaft
- Very robust design for highest mechanical requirements
- Accessories from page 70

**Mechanical specifications**

- Housing: Powder-coated sheet steel
- Flange: Aluminium
- Shaft: stainless steel
- Shaft seal: Oil/Salt-water resistant
- Bearing: Deep groove ball bearing
- Weight: approx. 1.2 kg
- Protection type: IP 65
- Max. speed: 6000 U/min
- Torque: axial 30 N
- Max. shaft load: radial 50 N

**Electrical specifications**

- max. pulse frequency: 100 kHz
- Perm. temperature range: -30°...+70° C
- Power supply: 10V...30V DC
- Max. current consumption: 80 mA (without load)
- Max. output load: 30 mA (per channel)
- Residual ripple: max. ± 5% Uₘ
- Power supply: 5V DC ± 5%
- Max. current consumption: 80 mA
  150 mA for Line Driver

**Mechanical dimensions**

- ø 90
- ø 40h7
- ø 80h7
- ø 12g6
- 23
- 30
- 123
- approx. 143
- Tongue-and-groove standard 4 mm
- 4NFE22176
- 6 x M6
- 60°
Output circuits

Signal outputs

A Two square pulse trains offset by 90° el,
B with channel A lagging in clockwise rotation.
0 Reference pulse 0 once per revolution,
position and length optional.

All channels can also be executed inversely.

Pin configuration

<table>
<thead>
<tr>
<th>Connection</th>
<th>GND</th>
<th>+ U_b</th>
<th>A</th>
<th>B</th>
<th>0</th>
<th>AN</th>
<th>BN</th>
<th>ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>3R / 3A</td>
<td>white</td>
<td>brown</td>
<td>green</td>
<td>yellow</td>
<td>blue</td>
<td>grey</td>
<td>pink</td>
<td>ret</td>
</tr>
<tr>
<td>6R / 6A</td>
<td>Pin 1</td>
<td>Pin 2</td>
<td>Pin 3</td>
<td>Pin 4</td>
<td>Pin 5</td>
<td>Pin 6</td>
<td>Pin 7</td>
<td>Pin 8</td>
</tr>
</tbody>
</table>

Order reference

PH 05

Output circuit | Signal output | Resolution class | Connection type/Connection position
---|---|---|---
3 = 88 C 30 | 5 = A, AN | 9 = 1 ... 1000 Pulses | 3R = Cable outlet radial (length 2 m)
5 = Push-pull | 6 = A, AN, D, ON | 0 = 1001 ... 2500 Pulses | 3A = Cable outlet axial (length 2 m)
| 7 = A, AN, B, BN | 3 = 2501 ... 3600 Pulses | 6R = Connector 12 radial |
| 9 = A, AN, B, BN, 0, ON | | 6A = Connector 12 axial |

Number of pulses 1 ... 5000