

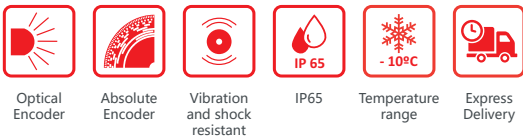


SERIE HS10

SINGLETURN ABSOLUTE ENCODER

PARALLEL

- Parallel
- Singleturn resolution up to 13 bits
- External diameter 58 mm
- Blind hollow shaft \varnothing 10 or 12 mm
- Protection class IP65 according to DIN EN 60529
- Connection by cable (other cable length available) or industrial connector



Optical Encoder

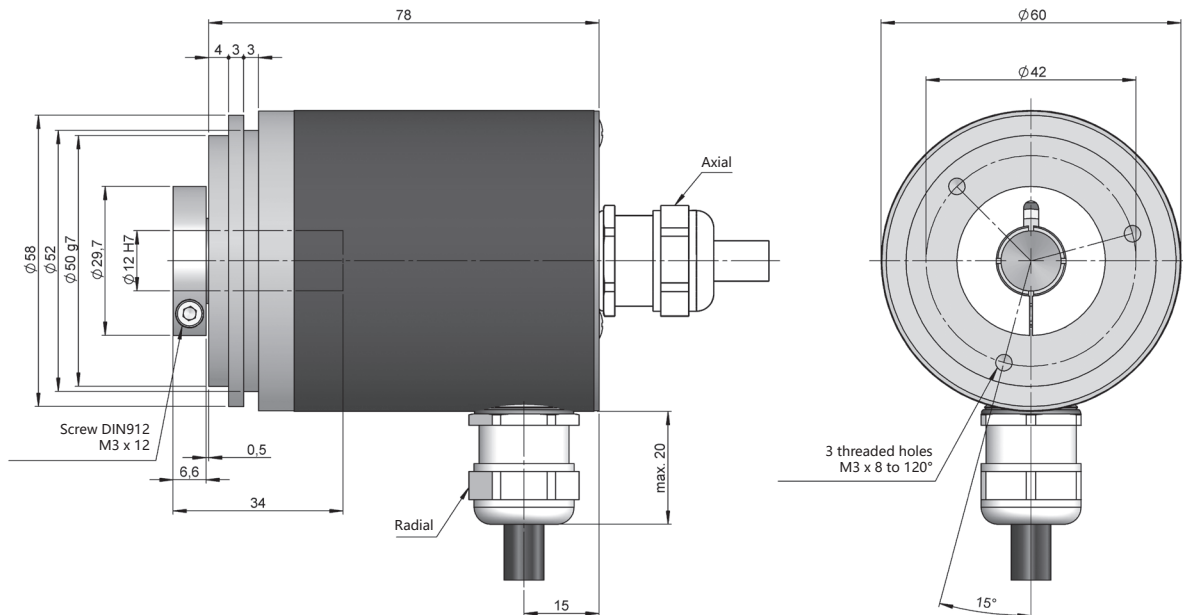
Absolute Encoder

Vibration and shock resistant

IP65

Temperature range

Express Delivery



Drawing shaft type 3, connection type 11/12, without flange

REFERENCE

Reference example: HS10-31110212S-1024

| Serie | Blind-Hollow shaft | Anti-rotation system | Connection | Interface | Code | IP | Power Supply / Electronic output | Parameters config. | Singleturn resolution | Special customer |
|--------|--|--------------------------|--|--------------------------|--|--------------------------|---|-----------------------------|--|---|
| HS10 - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> <input type="checkbox"/> |
| | 3. \varnothing 12 mm 4. \varnothing 10 mm | 1. None | 11. Axial cable 12. Radial cable 31. Axial M23 12p 32. Radial M23 12p 41. Axial M23 16p 42. Radial M23 16p 51. Axial M27 21p 52. Radial M27 21p | 0. Parallel | 1. Binary CW 2. Binary CCW 3. Gray CW 4. Gray CCW 5. Gray excess CW 6. Gray excess CCW 7. BCD CW 8. BCD CCW | 1. IP65 | 2. 10...30 VDC / NPN 3. 10...30 VDC / Push-Pull 4. 10...30 VDC / NPN OC | Blank. None 5. Direction | | |

Order your reference Step file 3D

info@encoderhohner.com
service available in 24 h



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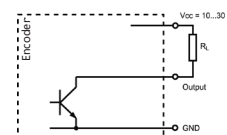
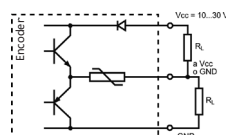
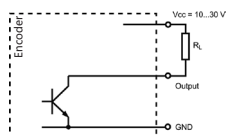
SINGLETURN ABSOLUTE ENCODER

PARALLEL

MECHANICAL SPECIFICATIONS

| | |
|--|--|
| Materials | Cover: Steel Housing: Aluminium Shaft: Stainless Steel |
| Bearings | Ballraces |
| Bearings lifetime | 1x10 ¹⁰ rev. |
| Housing fixing | Flexible flange |
| Shaft fixing | Clamp |
| Permitted misalignment | ± 0.5 mm axial, ±0.3 mm radial |
| Blind hollow shaft diameter | 10 or 12 mm |
| Maximum number of revolutions permitted mechanically | 6000 rpm |
| Protection against dust and splashes according to DIN EN 60529 | IP65 |
| Rotor inertia moment | 30 gcm ² |
| Starting torque at 20°C (68°F) | ≤ 0.02 Nm |
| Maximum load permitted on axial shaft | 40 N |
| Maximum load permitted on radial shaft | 60 N |
| Weight aprox. | 0.4 Kg |
| Operating temperature range | -10°C to +70°C |
| Vibration | 100 m/s ² (10Hz...2000Hz) |
| Shock | 1000 m/s ² (6ms) |
| Axial or radial connection | 2 meters cable or industrial connector (other cable lengths available on order) Female connector not included |

OUTPUT SIGNALS



| OUTPUT CIRCUIT | NPN | Push-Pull | NPN Open Collector |
|--------------------------------|----------------|----------------|--------------------|
| Reference code | 2 | 3 | 4 |
| Power supply | 10...30 VDC | 10...30 VDC | 10...30 VDC |
| Consumption max. | 100 mA | 100 mA | 100 mA |
| Max. load capability / channel | 40 mA | ±30 mA | 40 mA |
| “Low” signal level | VOL < 2.5 VDC | VOL < 2.5 VDC | VOL < 2.5 VDC |
| “High” signal level | VOH > VCC - 3V | VOH > VCC - 3V | VOH > VCC - 3V |
| Frequency | 200 kHz | 200 kHz | 200 kHz |

SERIE HS10

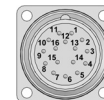
SINGLETURN ABSOLUTE ENCODER

PARALLEL

ELECTRICAL SPECIFICATIONS

| | |
|-----------------------|--------------------------------------|
| Interface | Parallel |
| Inputs | Opto-coupled |
| Code | Binary Gray BCD |
| Singleturn resolution | up to 8192 points per turn (13 bits) |
| Linearity | ±1/2 LSB |
| Parameters config. | Direction |

CONNECTION



| | Cable 15x0.14 mm ² 95.0008031 | Cable 25x0.14 mm ² 95.0008030 | Connector M23 12p CW | Connector M23 16p CW | Connector M27 21p CW |
|---------|--|--|----------------------------|----------------------------|----------------------------|
| GND | Black (BK) | Black (BK) | 1 | 1 | 1 |
| +UB | Red (RD) | Red (RD) | 2 | 2 | 2 |
| Bit 0 | Brown (BN) | Brown (BN) | 3 | 3 | 3 |
| Bit 1 | White (WH) | White (WH) | 4 | 4 | 4 |
| Bit 2 | Yellow (YE) | Yellow (YE) | 5 | 5 | 5 |
| Bit 3 | Green (GN) | Green (GN) | 6 | 6 | 6 |
| Bit 4 | Orange (OG) | Pink (PK) | 7 | 7 | 7 |
| Bit 5 | Violet (VT) | Orange (OG) | 8 | 8 | 8 |
| Bit 6 | Grey (GY) | Grey (GY) | 9 | 9 | 9 |
| Bit 7 | Blue (BU) | Blue (BU) | 10 | 10 | 10 |
| Bit 8 | White (WH) - Black (BK) | Yellow (YE) - Black (BK) | 11 | 11 | 11 |
| Bit 9 | White (WH) - Red (RD) | Yellow (YE) - Red (RD) | 12 | 12 | 12 |
| Bit 10 | White (WH) - Brown (BN) | Yellow (YE) - Brown (BN) | - | 13 | 13 |
| Bit 11 | White (WH) - Yellow (YE) | Yellow (YE) - Green (GN) | - | 14 | 14 |
| Bit 12 | White (WH) - Blue (BU) | Yellow (YE) - Grey (GY) | - | 15 | 15 |
| Bit 13 | - | Yellow (YE) - Blue (BU) | - | 16 | 16 |
| Bit 14 | - | White (WH) - Black (BK) | - | - | 17 |
| Bit 15 | - | White (WH) - Red (RD) | - | - | 18 |
| DIR (*) | White (WH) - Yellow (YE) | Yellow (YE) - Pink (PK) | 11 | 15 | 20 |

(*) To invert the code sense connect permanently the pin DIR to GND (ground).

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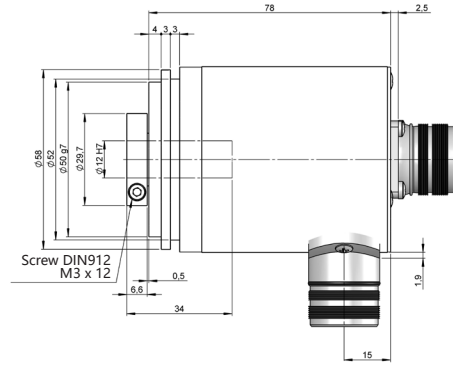
PARALLEL

CONNECTION DIMENSIONS

Female connector not included

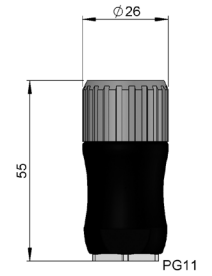
Connection 31

Axial
M23 12p
male panel
clockwise



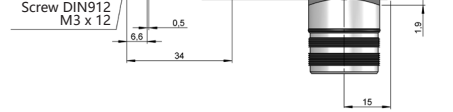
Female connector

95.0007131



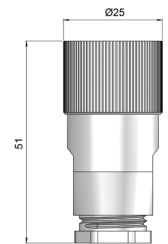
Connection 32

Radial
M23 12p
male panel
clockwise



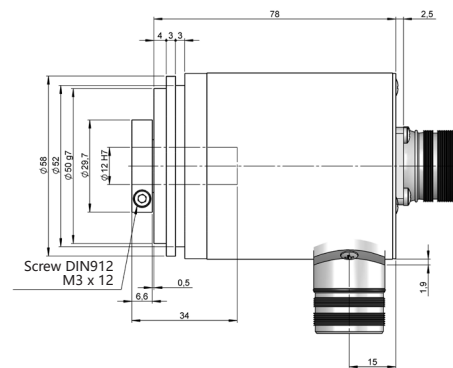
Female connector

95.0007006



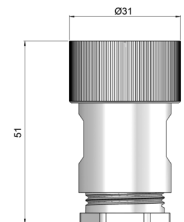
Connection 41

Axial
M23 16p
male panel
clockwise



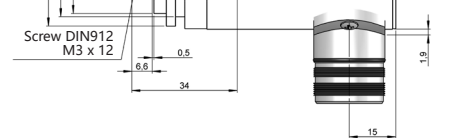
Female connector

95.0007062



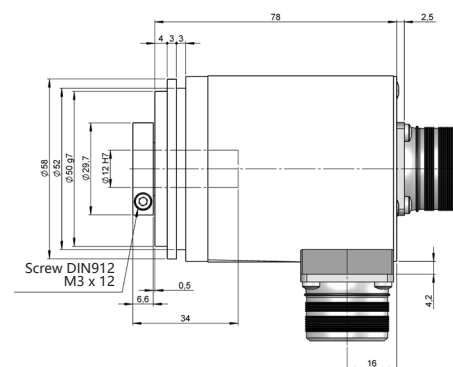
Connection 42

Radial
M23 16p
male panel
clockwise



Connection 51

Axial
M27 24p
male panel
clockwise



Connection 52

Radial
M27 24p
male panel
clockwise

