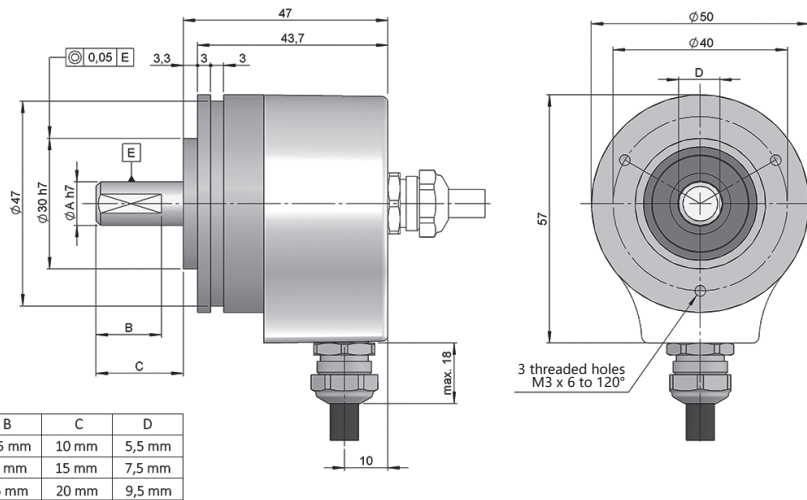
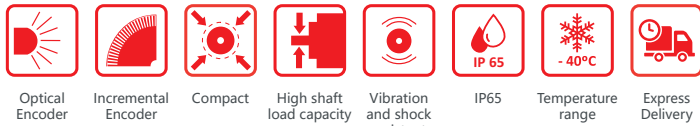


SERIE 50

COMPACT INCREMENTAL SOLID SHAFT ENCODER FOR INDUSTRIAL APPLICATIONS



- Resolution up to 5000 pulses per turn
- External diameter 50 mm
- Shaft Ø 6, 8 or 10 mm
- Protection class IP65 according to DIN EN 60529
- Connection by cable (other cable length available) or industrial connector M12 or M23



Drawing shaft type 3, connection type 1/4, without flange

REFERENCE

Reference example: 50-13641-1024

Serie	Solid shaft	Flange	Output signals	Connection	Power Supply / Electronic output	Pulses number	Special customer
50 -	<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"/>
	1. Ø 6x10 mm 2. Ø 8x15 mm 3. Ø 10x20 mm	1. None	1. A 2. AB 3. AB, \bar{Z} 5. AB, \overline{AB} 6. ABZ, \overline{ABZ} 9. ABZ	1. Axial cable 2. Axial M12 8p CCW 3. Axial M23 12p CW 4. Radial cable 5. Radial M12 8p CCW 6. Radial M23 12p CW	0. 11...30 VDC / NPN Open collector 11...30 VDC 1. 11...30 VDC / Line driver differential Push-Pull 11...30 VDC 2. 5 VDC / RS422 5 VDC (compatible TTL)		ET00. -40°C

Order your reference
Step file 3D

info@encoderhohner.com

service available in 24 h



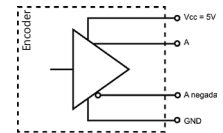
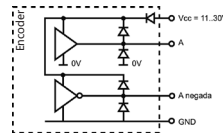
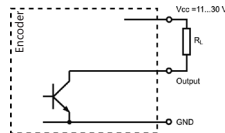
SERIE 50

COMPACT INCREMENTAL SOLID SHAFT ENCODER FOR INDUSTRIAL APPLICATIONS

MECHANICAL SPECIFICATIONS

Materials	Cover: Aluminium Housing: Aluminium Shaft: Stainless Steel
Bearings	Ballraces
Bearings lifetime	1x10 ¹⁰ rev.
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	80 N
Weight aprox.	0.5 Kg
Operating temperature range	-20°C to +80°C - Standard -40°C to +80°C - Special Customer ET00
Vibration according to DIN EN 60068-2-6	100 m/s ² (10Hz...2000Hz)
Shock according to DIN EN 60068-2-27	2500 m/s ² (6ms) [≤ 1024 ppr] 1000 m/s ² (6ms) [> 1024 ppr]
Maximum pulses per turn	5000
Axial or radial connection	2 meters cable or industrial connector M12 or M23 (other cable lengths available on order) Female connector not included

OUTPUT SIGNALS



OUTPUT CIRCUIT	NPN Open Collector	Push-Pull Differential	RS422 (TTL compatible)
Reference code	0	1	2
Power supply	11...30 VDC	11...30 VDC	5 VDC ±5%
Output voltage	11...30 VDC	11...30 VDC	5 VDC
Consumption	40 mA	Typical: 45 mA Max: 150 mA	Typical: 70 mA Max: 150 mA
Max. load capability / channel	40 mA	±30 mA	±20 mA
Length of cable allowed	50 m (24 VDC)	100 m	1200 m
“Low” signal level	VOL < 0.4 VDC (24 VDC)	VOL < 2.5 VDC	VOL < 0.5 VDC
“High” signal level	VOH > 2.2 VDC (24 VDC)	VOH > VCC – 3 VDC	VOH > 2.5 VDC
Frequency	100 kHz	200 kHz	300 kHz
Short circuit protection	Not permanent	Yes	Yes
Protection polarity inversion	Yes	Yes	No

Channel B leads (90° electric) channel A, view from the shaft, shaft rotating clockwise

SERIE 50

COMPACT INCREMENTAL SOLID SHAFT ENCODER FOR INDUSTRIAL APPLICATIONS

CONNECTION



	Cable 5x0.14 95.0008051 (*)	Cable 8x0.14 95.0008052 (*)	Connector M12 8p CCW	Connector M23 12p CW
GND	White (WH)	White (WH)	1	1
+UB	Brown (BN)	Brown (BN)	2	2
A	Green (GN)	Green (GN)	3	3
B	Yellow (YE)	Grey (GY)	4	4
\bar{A}	-	Yellow (YE)	5	5
\bar{B}	-	Pink (PK)	6	6
Z	Grey (GY)	Blue (BU)	7	7
\bar{Z}	Grey (GY)	Red (RD)	8	8
Case	Shield	Shield	Case	Case

(*) For lengths over 2 meters standard cable, we recommend the use of twisted pair cable 2x2x0.14+1x0.14 (95.0008002) or 3x2x0.14+2x0.34 (95.0008003). Request the final cable length required to avoid junctions.

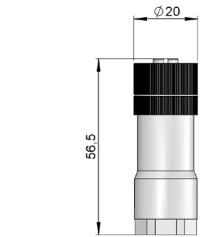
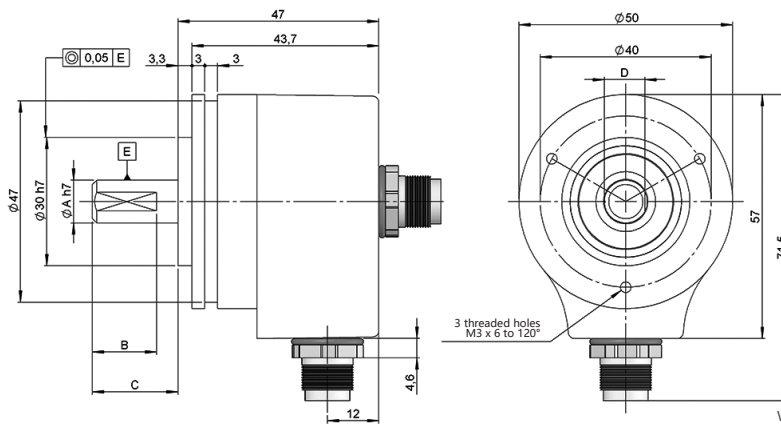
CONNECTION DIMENSIONS

Female connector not included

Connection 2
Axial

Connection 5
Radial

M12 8p
male panel
counter clockwise



Female connector
95.0007152



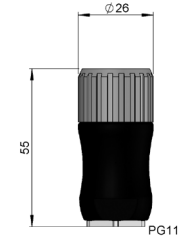
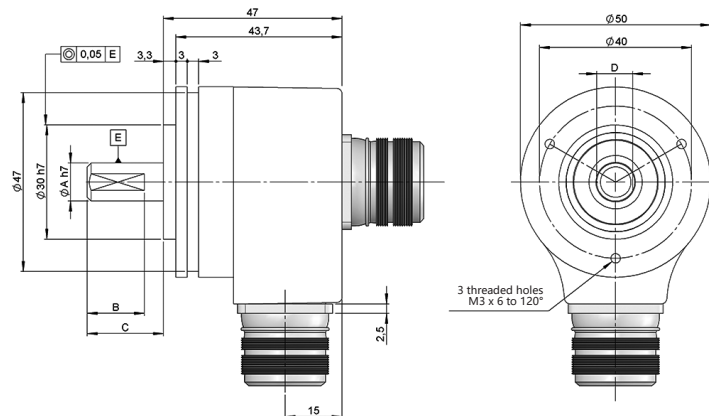
Pre-assembled cable

Without inverted signals: 89.003.01.000.XX
With inverted signals: 89.003.02.000.XX
Length in meters

Connection 3
Axial

Connection 6
Radial

M23 12p
male panel
clockwise



Female connector
95.0007131



Pre-assembled cable

Without inverted signals: 89.005.01.019.XX
With inverted signals: 89.005.02.000.XX
Length in meters