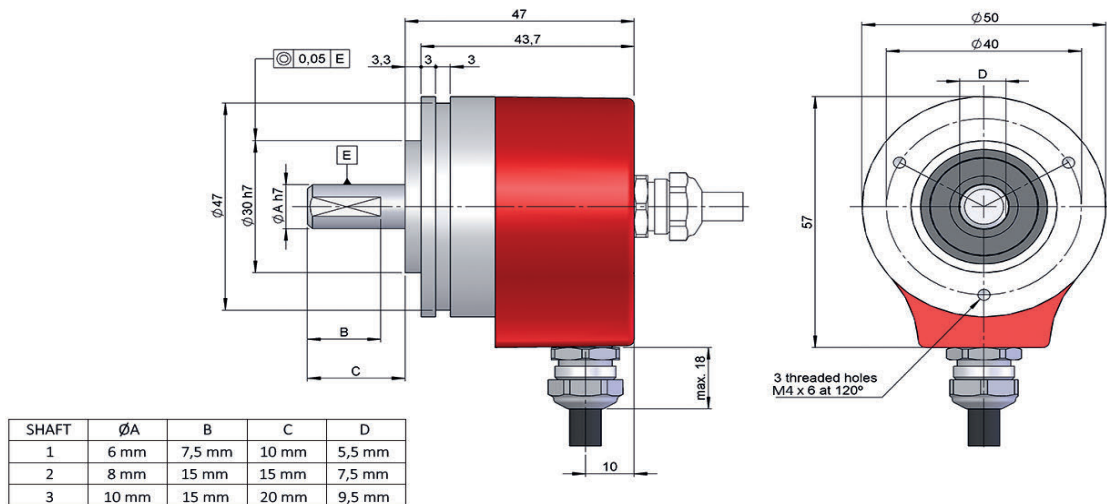
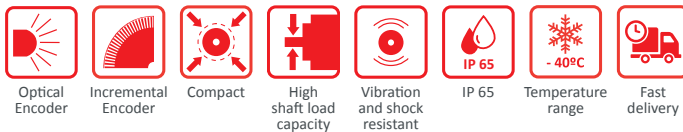




SERIE 50

COMPACT INCREMENTAL SOLID SHAFT ENCODER FOR INDUSTRIAL APPLICATIONS

- Resolution up to 5.000 pulses per turn
- External diameter 50 mm
- Shaft of 6, 8 or 10 mm
- Protection class IP65 according to DIN EN 60529
- Connection by cable (any cable lenght available) or industrial connector M12 or M23
- Female connector included



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

REFERENCE

Reference example: 50-13649-1024

Serie	Shaft	Flange	Output signals	Connection	Power Supply / Electronic outp.	Pulses number	Special customer
50 -	☐	☐	☐	☐	☐ -	☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐ ☐
	1. Ø6x10mm 2. Ø8x15mm 3. Ø10x20mm	1. None	1. A 2. A+B 3. A+B+0 5. A+B+0 6. A+B+0	1. Axial cable 2. Axial 90.9508 3. Axial 90.9512 4. Radial cable 5. Radial 90.9508 6. Radial 90.9512	0. 11...30V / NPN Open collector 11...30V 1. 11...30V / Line driver differential Push-Pull 11...30 V 2. 5V / RS422 5V (compatible TTL)		ET00. -40°C

Order your reference
Step file 3D

info@encoderhohner.com
service available in 24 h



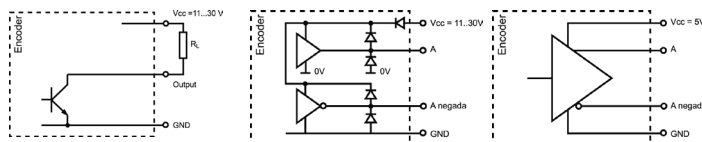
SERIE 50

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)	Max. 2,0 Ncm
Maximum load permitted on axial shaft	40 N
Maximum load permitted on radial shaft	80 N
Weight approx.	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	1000 m/s ² (6ms)
Maximum pulses per turn	5.000
Axial or radial connection	2 meters cable or industrial connector M12 or M23 (other cable lengths available on order) Female connector included

OUTPUT SIGNALS



OUTPUT CIRCUIT	NPN Open Collector	Push-Pull Differential	RS422 (TTL compatible)
Reference code	0	1	2
Power supply	11...30 V	11...30 V	5 V ±5%
Output voltage	11...30 V	11...30 V	5 V
Consumption	40 mA	Typical: 45 mA Max: 150 mA	Typical: 70 mA Max: 150 mA
Max. load capability	40 mA	±30 mA	±20 mA
Lenght of cable allowed	50 m (a 24 V)	100 m	1200 m
"Low" signal level	VOL < 0,4 V (a 24 V)	VOL < 2.5 V	VOL < 0,5 V
"High" signal level	VOH > 22 V (a 24 V)	VOH > Vcc - 3 V	VOH > 2.5 V
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



	95.0008051 (*) Cable 5x0,14	95.0008052 (*) Cable 8x0,14	90.9508 M12 8p counterclockwise	90.9512 M23 12p clockwise
GND	White	White	1	1
Vcc	Brown	Brown	2	2
A	Green	Green	3	3
B	Yellow	Grey	4	4
A inverted		Yellow	5	5
B inverted		Pink	6	6
0 (reference)	Grey	Blue	7	7
0 inverted	Grey	Red	8	8

(*) For longer cable lengths, we recommend the use of twisted pair cable 2x2x0,14+1x0,14 (95.0008002) or 3x2x0,14+2x0,34 (95.0008003).

CONNECTION DIMENSIONS

Included female connector

Connection 2

Axial 90.9508

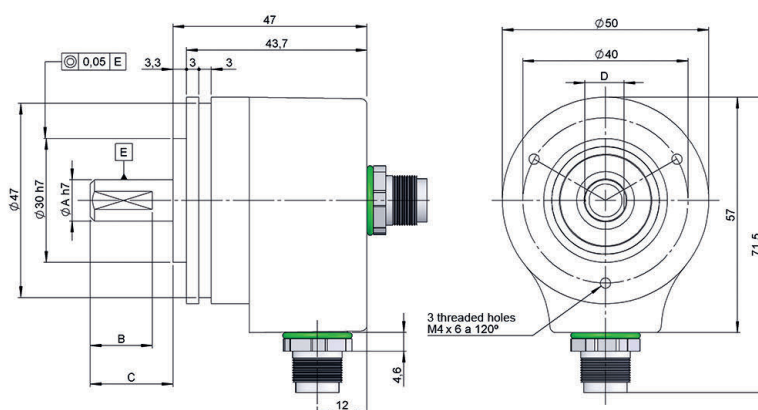
Connection 5

Radial 90.9508

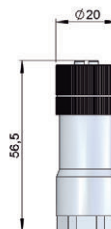
90.9508

M12 8p

male panel
counterclockwise



90.9508



Connection 3

Axial 90.9512

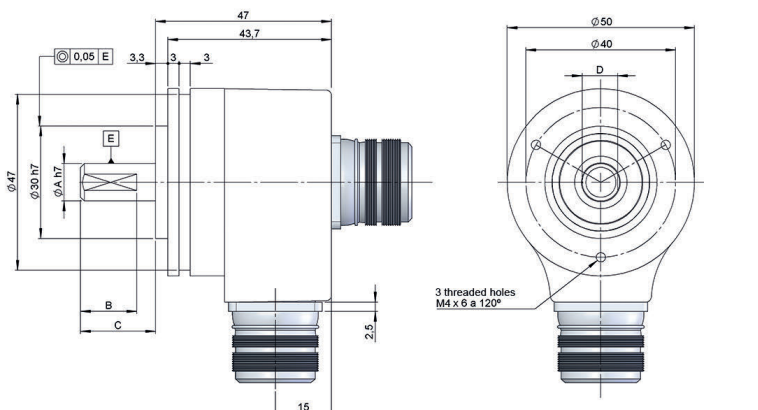
Connection 6

Radial 90.9512

90.9512

M23 12p

male panel
clockwise



90.9512

