

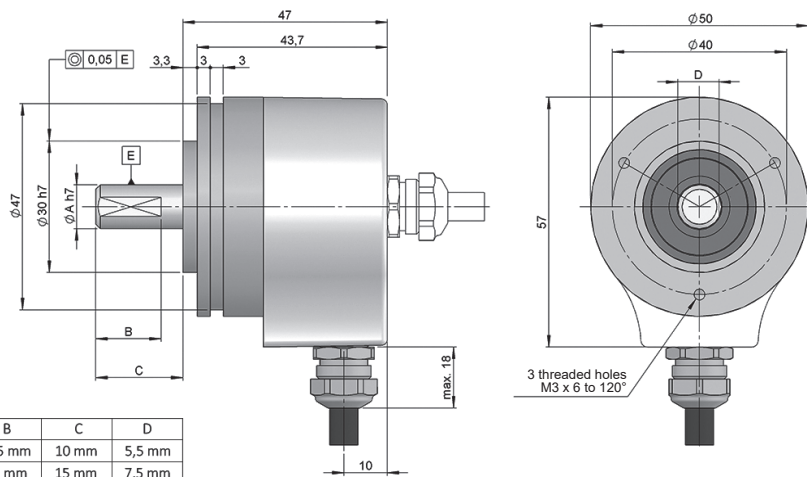


SERIE 50

COMPACT INCREMENTAL SOLID SHAFT ENCODER FOR INDUSTRIAL APPLICATIONS

- Resolution up to 5.000 pulses per turn
- External diameter 50 mm
- Shaft \varnothing 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
- Female connector included

Optical Encoder	Incremental Encoder	Compact	High shaft load capacity	Vibration and shock resistant	IP65	Temperature range	Express Delivery



SHAFT	ØA	B	C	D
1	6 mm	7,5 mm	10 mm	5,5 mm
2	8 mm	15 mm	15 mm	7,5 mm
3	10 mm	15 mm	20 mm	9,5 mm

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

REFERENCE

Reference example: 50-13641-1024

Serie	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"/>
	1. \varnothing 6x10 mm 2. \varnothing 8x15 mm 3. \varnothing 10x20 mm	1. None	1. A 2. A+B 3. A+B+ $\tilde{0}$ 5. $\tilde{A}\tilde{A}+\tilde{B}\tilde{B}$ 6. $\tilde{A}\tilde{A}+\tilde{B}\tilde{B}+\tilde{0}\tilde{0}$ 9. 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...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



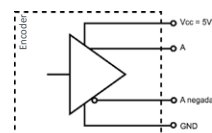
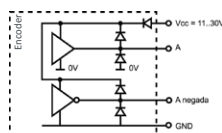
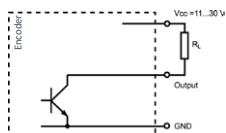
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MECHANICAL SPECIFICATIONS

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) [≤ 1.024 ppr] 1000 m/s ² (6ms) [> 1.024 ppr]
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 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
Lenght 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

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CONNECTION



	95.0008051 (* Cable 5x0,14)	95.0008052 (* Cable 8x0,14)	90.9508 M12 8p CCW	90.9512 M23 12p CW
GND	White	White	1	1
VCC	Brown	Brown	2	2
A	Green	Green	3	3
B	Yellow	Grey	4	4
\tilde{A}		Yellow	5	5
\tilde{B}		Pink	6	6
0 (reference)	Grey	Blue	7	7
$\tilde{0}$	Grey	Red	8	8

(*) 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 included

Connection 2

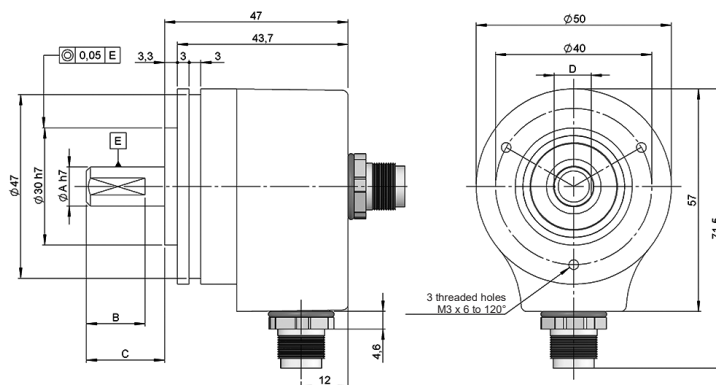
Axial 90.9508

Connection 5

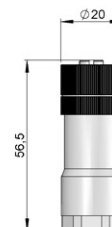
Radial 90.9508

90.9508

M12 8p
male panel
counter clockwise



90.9508



Connection 3

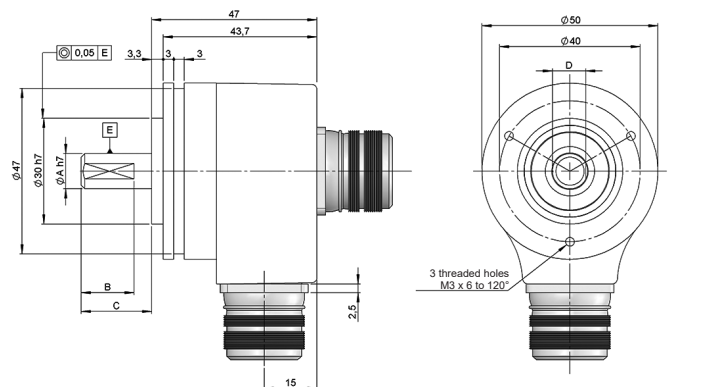
Axial 90.9512

Connection 6

Radial 90.9512

90.9512

M23 12p
male panel
clockwise



90.9512

