

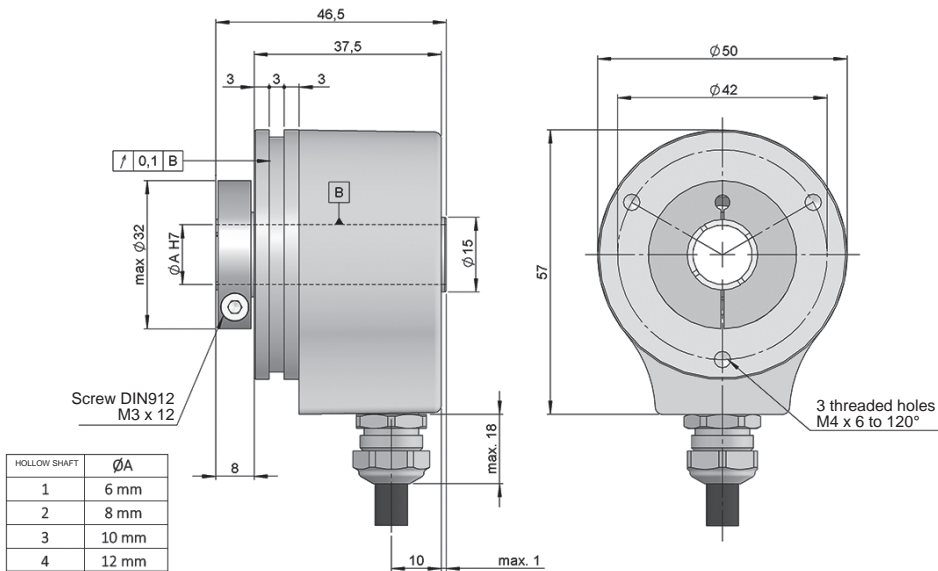


SERIE 50H

COMPACT INCREMENTAL HOLLOW SHAFT ENCODER FOR INDUSTRIAL APPLICATIONS

- Resolution up to 5.000 pulses per turn
- External diameter 50 mm
- Hollow shaft \varnothing 6, 8, 10 or 12 mm
- Protection class IP65 according to DIN EN 60529
- Anti-rotation system through flexible flange
- Connection by cable (other cable length available) or industrial connector M12 or M23
- Female connector included

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



Drawing mechanical option type 1, hollow shaft type 4, connection type 1

REFERENCE

Reference example: 50H-14111-1024

Serie	Mechanical option	Hollow shaft	Output signals	Connection	Power Supply / Electronic output	Pulses number	Special customer
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	1. Frontal clamp for hollow shaft	1. \varnothing 6 mm 2. \varnothing 8 mm 3. \varnothing 10 mm 4. \varnothing 12 mm	1. A \tilde{A} +B \tilde{B} +0 \tilde{O} 2. A \tilde{A} +B \tilde{B}	1. Radial cable 2. Radial M12 8p CCW 3. 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

The required anti-rotation system is not included in the reference. All systems available in the sections "MOUNTING ACCESSORIES".



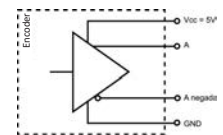
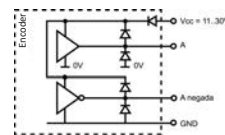
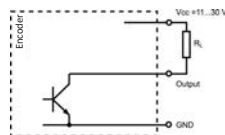
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MECHANICAL SPECIFICATIONS

Materials	Cover: Aluminium Housing: Aluminium Shaft: Stainless Steel
Bearings	Ballraces
Bearings lifetime	1x10 ¹⁰ rev.
Housing fixing	Flexible flange
Shaft fixing	Clamp
Hollow shaft diameter	6, 8, 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	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
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
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 > 22 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



(B adelanta A)	Cable (*) 5x0,14 95.0008051	Cable (*) 8x0,14 95.0008052	Connector M12 8p CCW	Connector 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

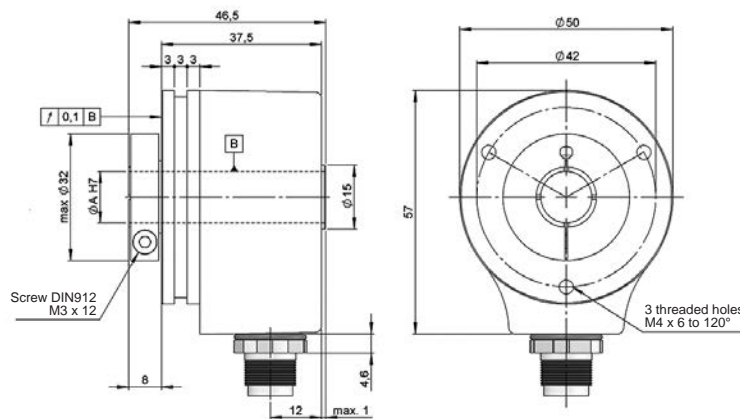
(*) For lengths over 2 meters standard cable, we recommend the use of twisted pair cable 2x2x0,14+1x0,14 (95.0008002) or 3x2x0,14+2x0,34 (95.0008003). Request the final cable length required to avoid junctions.

CONNECTION DIMENSIONS

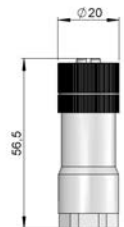
Female connector included

Connection 2 Radial

M12 8p
male panel
counter clockwise

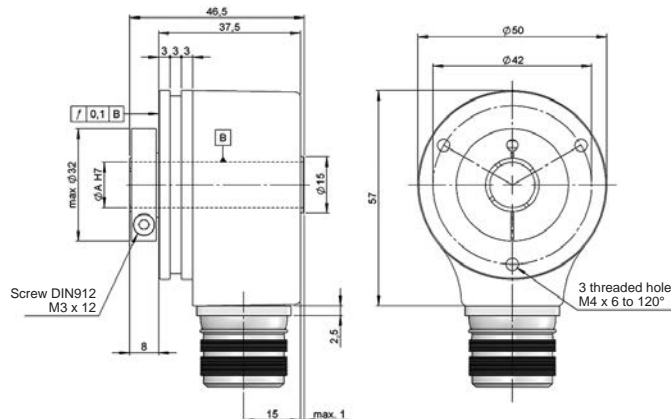


Female connector 95.0007152

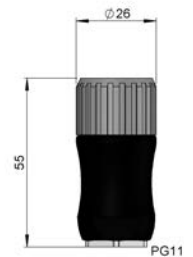


Connection 3 Radial

M23 12p
male panel
clockwise



Female connector 95.0007131

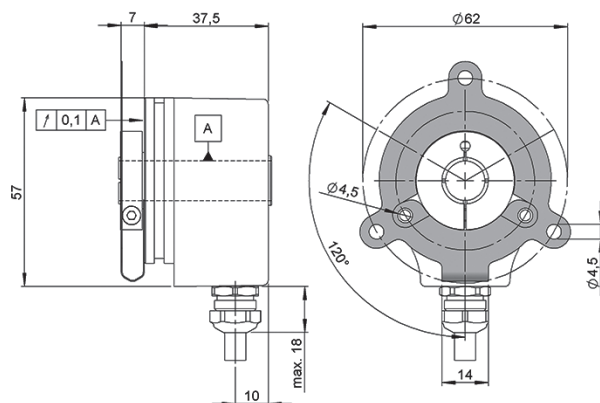


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ANTI-ROTATION SYSTEMS DIMENSIONS

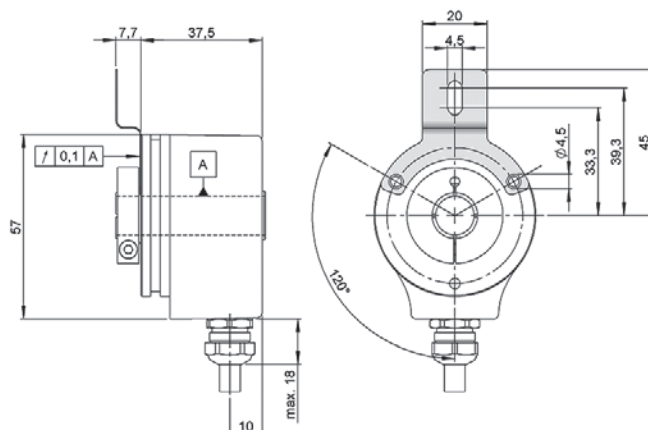
Flexible flange
90.1014



90.1014



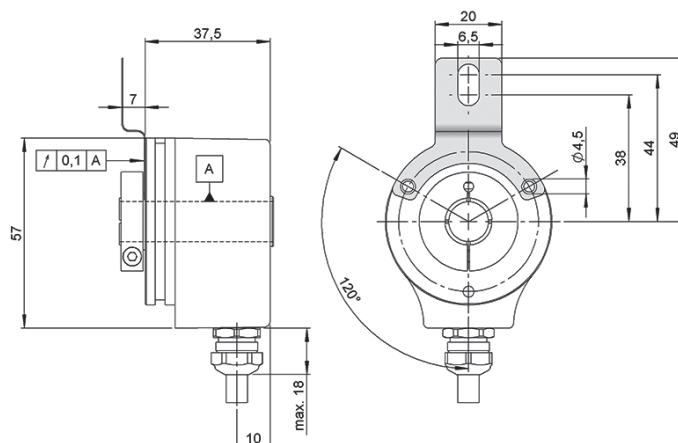
Flexible flange
90.1018



90.1018



Flexible flange
90.1020



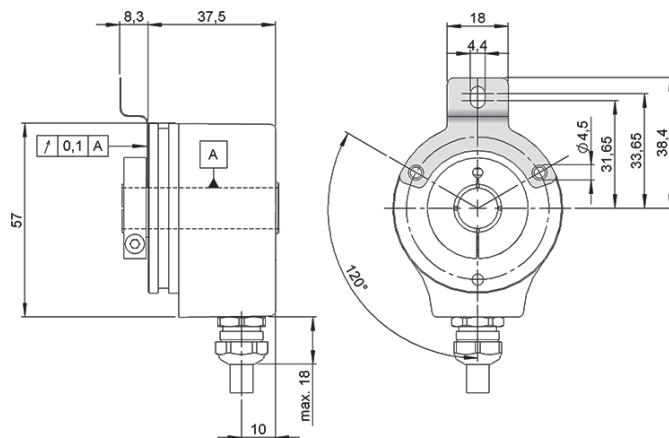
90.1020



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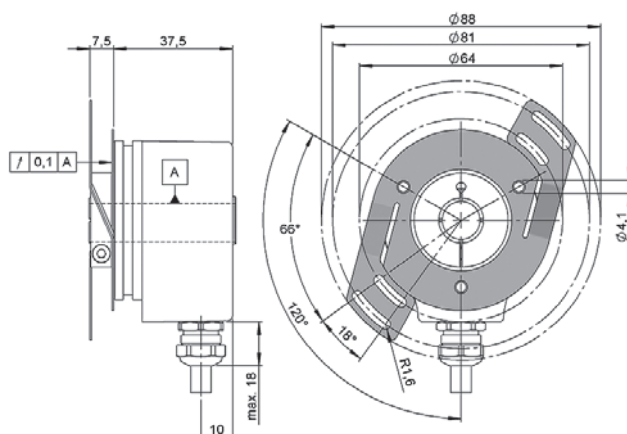
Flexible flange
90.1024



90.1024



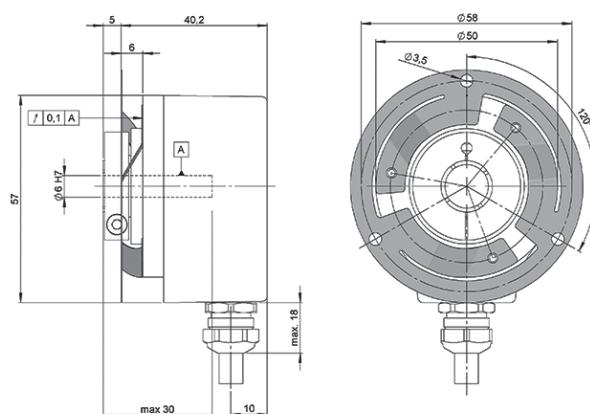
Flexible flange
90.1075



90.1075



Flexible flange
90.1110



90.1110



