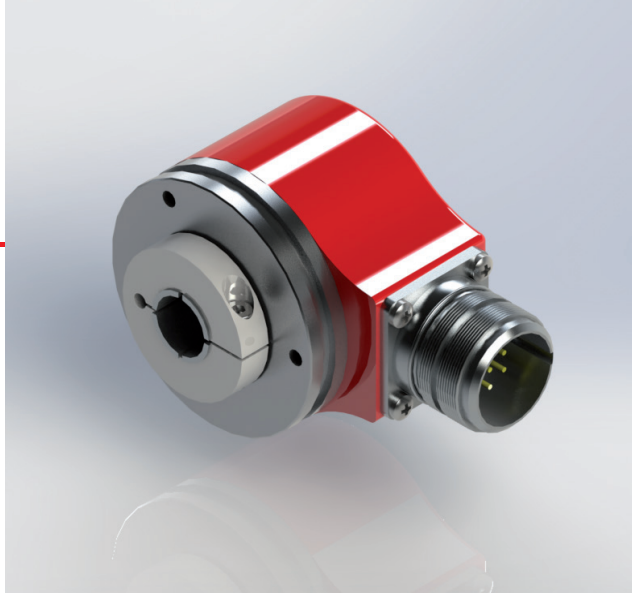
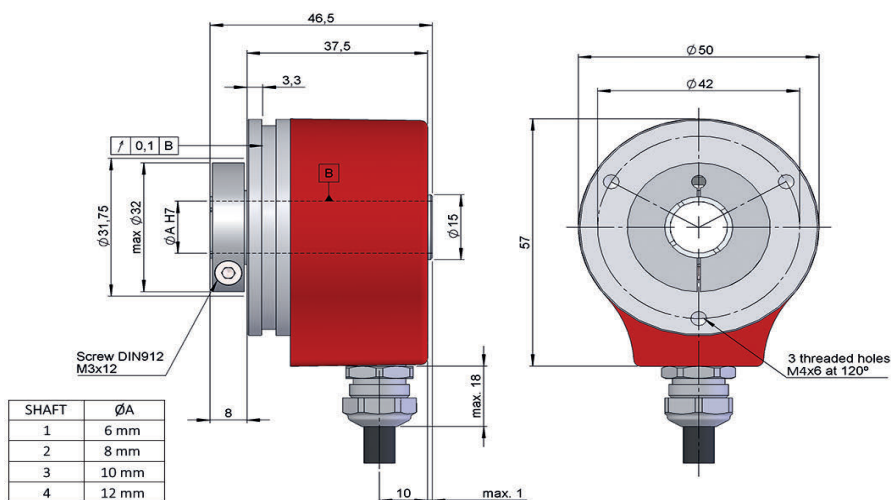
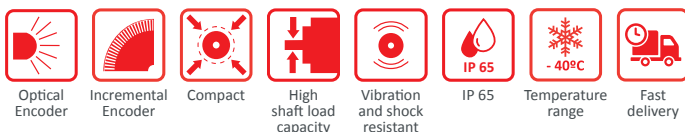




SERIE 50H

COMPACT INCREMENTAL HOLLOW SHAFT ENCODER FOR INDUSTRIAL APPLICATIONS

- Resolution up to 5.000 pulses per turn
- External diameter 50 mm
- Hollow shaft of 6, 8, 10 or 12 mm
- Protection class IP65 according to DIN EN 60529
- Anti-rotation system using elastic flange
- Connection by cable (any cable lenght available) or industrial connector M12 or M23
- Female connector included



Drawing hollow shaft type 4, connection type 1, with frontal clamp

REFERENCE

Reference example: 50H-11119-1024

Serie	Mechanical options	Hollow shaft	Output signals	Connection	Power Supply / Electronic outp.	Pulses number	Special customer
50H -	☐	☐	☐	☐	☐ -	☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐ ☐
	1. Frontal clamp for hollow shaft	1. Ø6mm 2. Ø8mm 3. Ø10mm 4. Ø12mm	1. AÃ+BB+00 2. AÃ+BB	1. Radial Cable 2. Radial 90.9508 3. 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

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



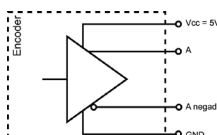
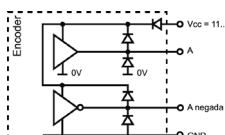
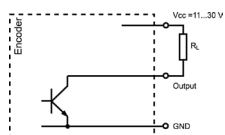
SERIE 50H

COMPACT INCREMENTAL HOLLOW SHAFT ENCODER FOR INDUSTRIAL APPLICATIONS

MECHANICAL SPECIFICATIONS

Materials	Cover: Aluminium Housing: Aluminium Shaft: Stainless Steel
Bearings	Ballraces
Bearings lifetime	1x10 ¹⁰ rev.
Housing fixation	Elastic flange
Shaft fixation	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)	Max. 2,0 Ncm
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	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
Length 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 50H

COMPACT INCREMENTAL HOLLOW 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

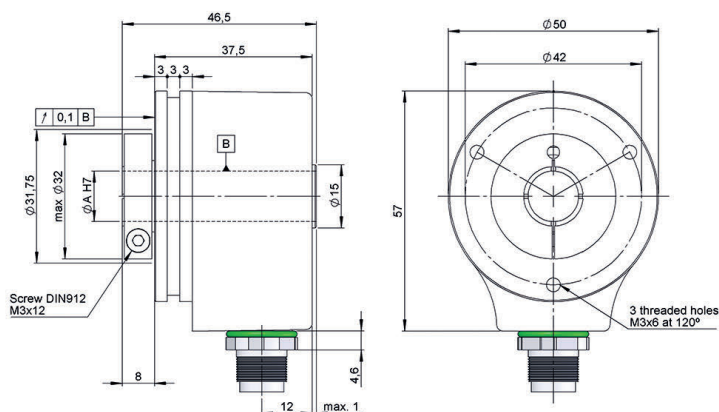
(*) For longer cable lengths, we recommend the use of twisted pair cable 2x2x0,14+1x0,14 (95.0008002) or 3x2x0,14+2x0,34 (95.0008003).

CONNECTION DIMENSIONS

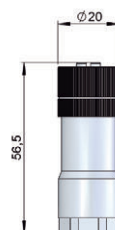
Included female connector

Connection 2 Radial 90.9508

90.9508
M12 8p
male panel
counterclockwise

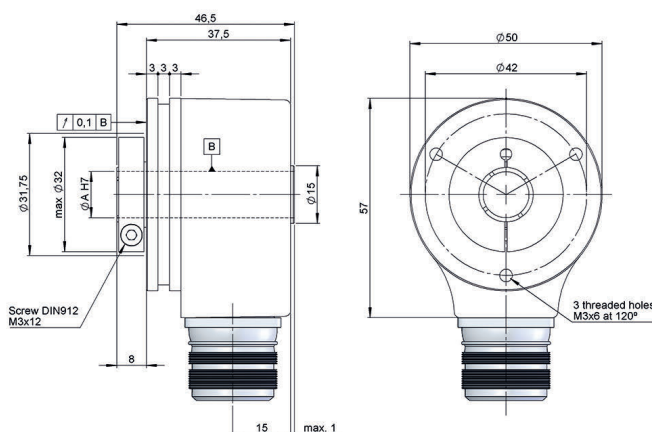


90.9508

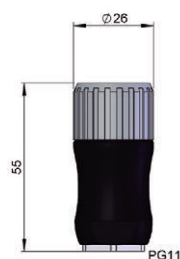


Connection 3 Radial 90.9512

90.9512
M23 12p
male panel
clockwise



90.9512

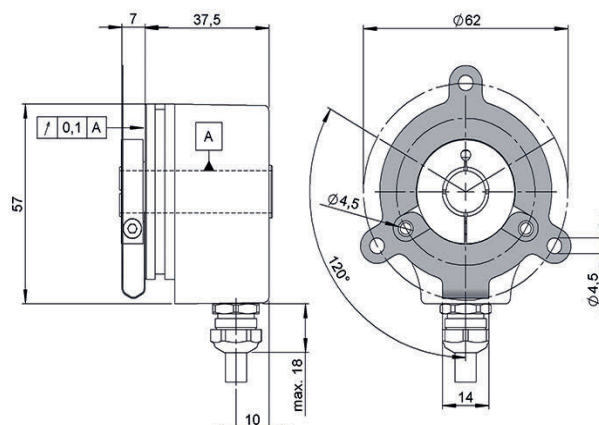


SERIE 50H

COMPACT INCREMENTAL HOLLOW SHAFT ENCODER FOR INDUSTRIAL APPLICATIONS

ANTI-ROTATION SYSTEMS DIMENSIONS

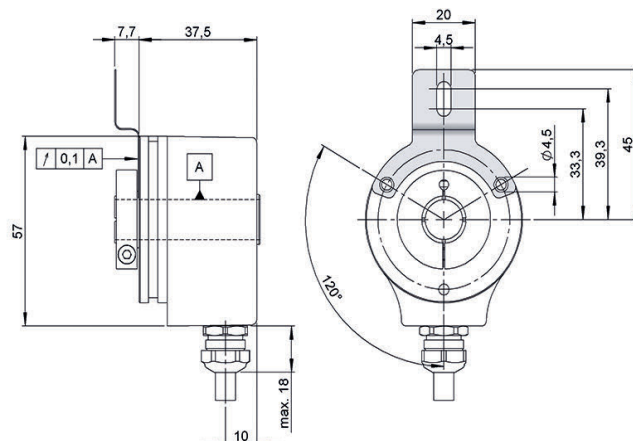
Flexible flange
90.1014



90.1014



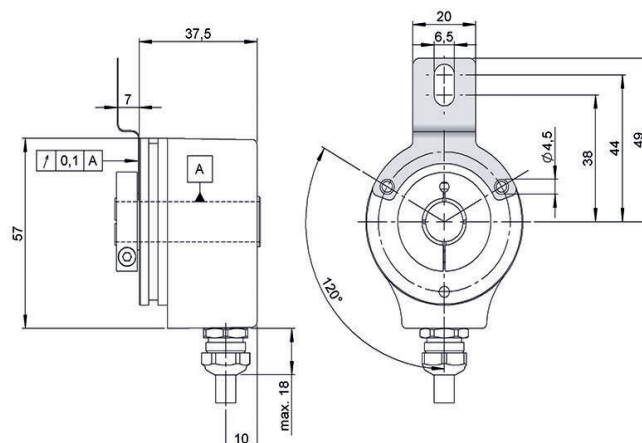
Flexible flange
90.1018



90.1018



Flexible flange
90.1020



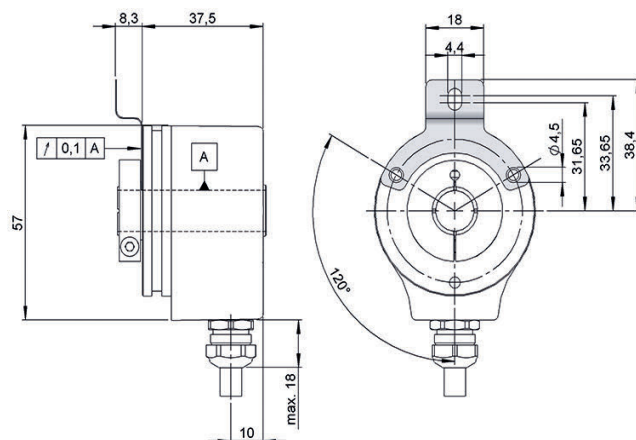
90.1020



SERIE 50H

COMPACT INCREMENTAL HOLLOW SHAFT ENCODER FOR INDUSTRIAL APPLICATIONS

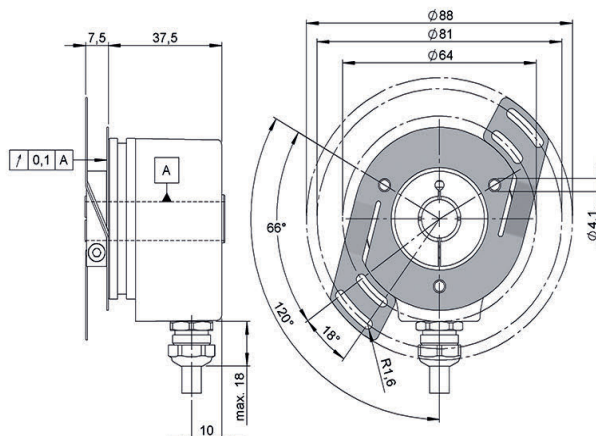
Flexible flange
90.1024



90.1024



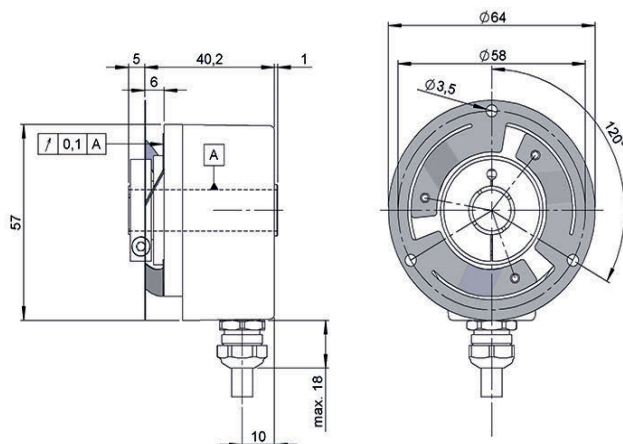
Flexible flange
90.1075



90.1075



Flexible flange
90.1110



90.1110

