

SERIE 20

LOW COST SOLID SHAFT INCREMENTAL ENCODER FOR SIMPLE INDUSTRIAL APPLICATIONS

- Any number of pulses available from 1 to 1024 pulses
- External diameter 58 mm
- Shaft 6 mm
- Protection class IP54 according to DIN EN 60529
- Different flanges available
- Connection by cable (any cable length available) or industrial connector
- Female connector included



Optical Encoder



Incremental Encoder



Vibration and shock resistant

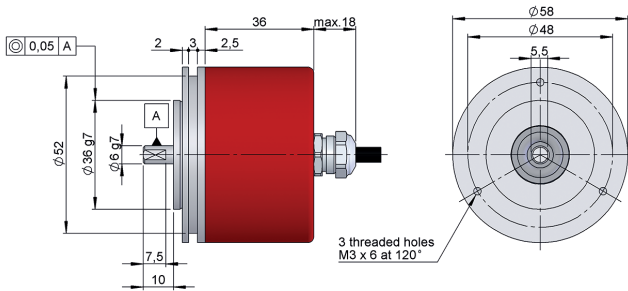


IP 54



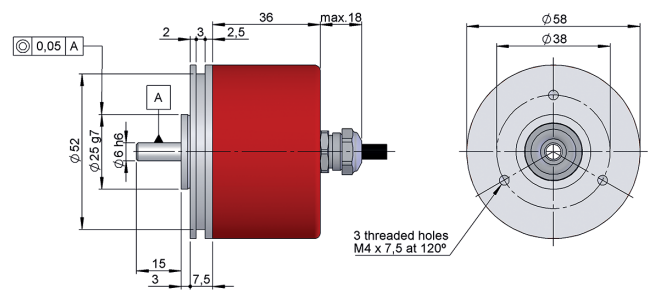
Fast delivery

Option A:



Drawing mechanical option type 1, connection type 2, without flange

Option B:



Drawing mechanical option type 2, connection type 2, without flange

REFERENCE

Reference example: 20-11621-1024

Serie	Mechanical option	Flange	Output signals	Connection	Power Supply / Electronic outp.	Pulses number	Special customer
20 -	<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. Option A Ø6x10 mm	1. None 2. 90.1002	1. A 2. A+B	1. Axial 90.9505 2. Axial cable	0. 11...30V / NPN Open collector 11...30V 1. 11...30V / Push-Pull 11...30V 2. 5 V / Line driver differential (TTL compatible) 5V		
	2. Option B Ø6x15 mm	3. 90.1004 4. 90.1005 (*)	3. A+B+0̃ 5. AÃ+BB̃ 6. AÃ+BB̃+0̃ 9. A+B+0				

Order your reference
Step file 3D

info@encoderhohner.com
service available in 24 h

(*) Flange options 90.1002, 90.1004, 90.1005 (2/3/4) only available for the Mechanical Option A Ø6x10 mm (1)
Flange mounting included in delivery of the encoder.

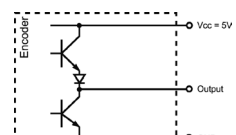
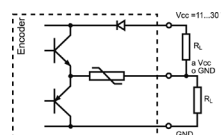
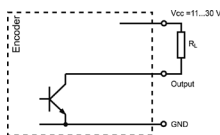
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MECHANICAL SPECIFICATIONS

Materials	Cover: Plastic 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	IP54
Rotor inertia moment	10 gcm ²
Starting torque at 20°C (68°F)	Max. 0,5 Ncm
Maximum load permitted on axial shaft	20 N
Maximum load permitted on radial shaft	30 N
Weight approx.	0,3 Kg
Operating temperature range	-20°C a +60°C
Vibration	100 m/s ² (10Hz...2000Hz)
Shock	1000 m/s ² (6ms)
Maximum pulses per turn	1.024
Axial connection	Cable 2 meters or industrial connector (other cable lengths available on order) Female connector included

OUTPUT SIGNALS



OUTPUT CIRCUIT	NPN Open Collector	Push-Pull	Line Driver (TTL compatible)
Reference code	0	1	2
Power supply	11...30 V	11...30 V	5 V
Output voltage	11...30 V	11...30 V	5 V
Consumption	40 mA	Typical: 45 mA Max: 150 mA	Typical: 120 mA Max: 150 mA
Max. load capability	40 mA	±30 mA	±40 mA
Length of cable allowed	50 m (a 24 V)	50 m	100 m
"Low" signal level	VOL < 0,4 V (a 24 V)	VOL < 2.5 V	VOL < 0.2 V
"High" signal level	VOH > 22 V (a 24 V)	VOH > Vcc - 3 V	VOH > 2.4 V
Frequency	100 kHz	200 kHz	100 kHz
Short circuit protection	Not permanent	Yes	Yes
Protection polarity inversion	Yes	Yes	No

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

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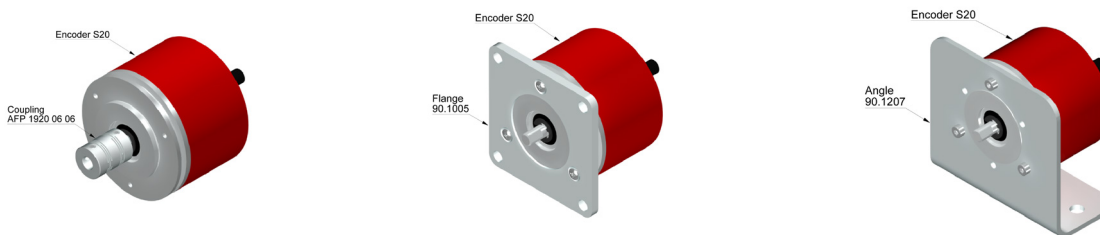
CONNECTION



	95.0008002 Cable 2x2x0,14+1x0,14	95.0008003 (*) Cable 3x2x0,14+2x0,34	90.9505 DIN-45322 5p counterclockwise
GND	Yellow	Black	1
Vcc	White	Red	2
A	Brown	Yellow	3
B	Green	Green	4
A inverted		Brown	
B inverted		Blue	
0 (reference)	Grey	Grey	5
0 inverted	Grey	Orange	5

(*) Cable 3x2x0,14+2x0,34 only for encoders with inverted signals.

ACCESSORIES EXAMPLES

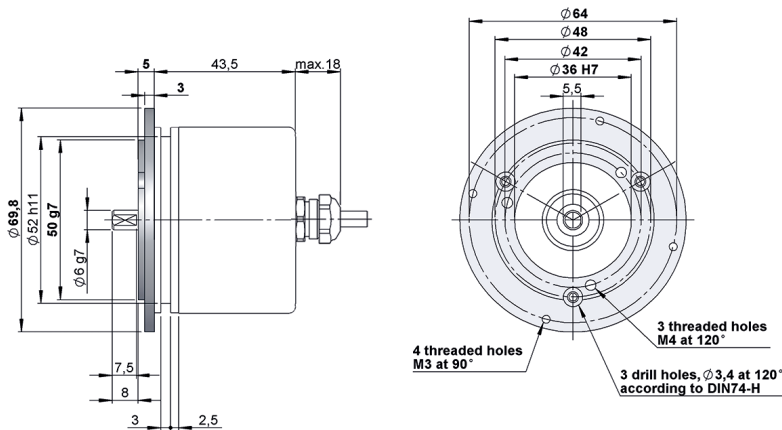


All the accessories available in the sections "ELECTRONIC MODULES AND COUNTERS" and "MOUNTING ACCESSORIES".

FLANGE DIMENSIONS

Flange mounting included

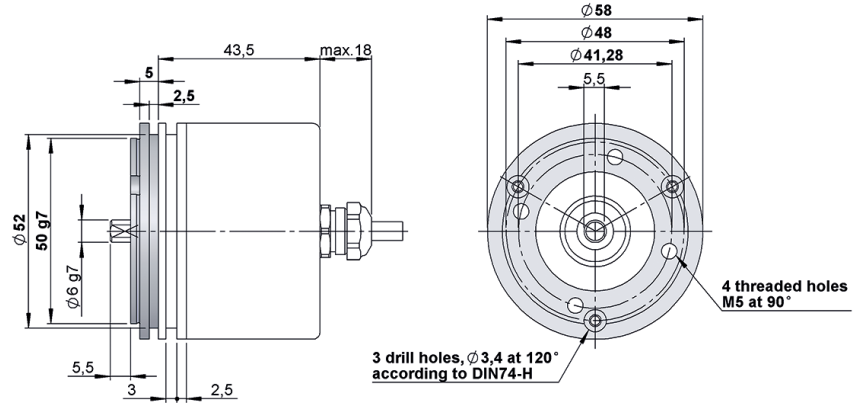
Flange 2
90.1002



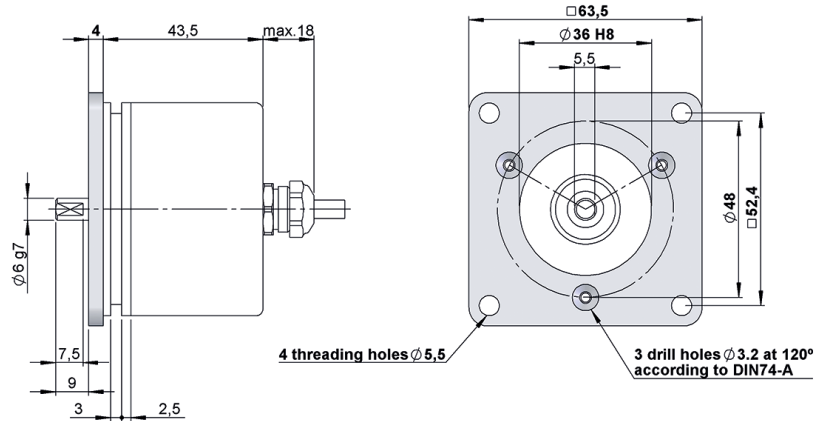
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Flange 3
90.1004



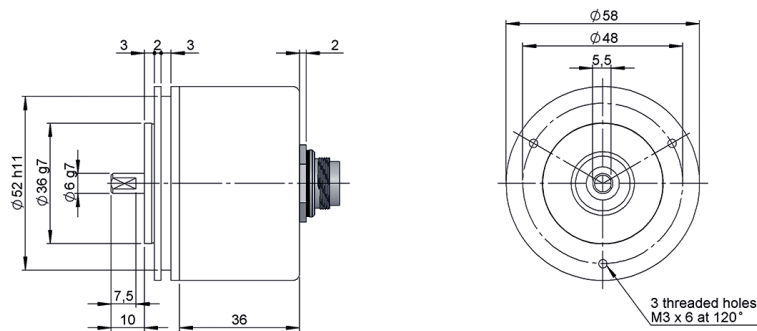
Flange 4
90.1005



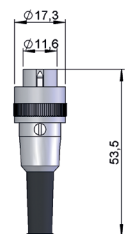
CONNECTION DIMENSIONS

Female connector included

Connection 1
Axial 90.9505



90.9505



90.9505
DIN-45322 5p
male panel
counterclockwise