

Image with Expanding coupling 90.1100



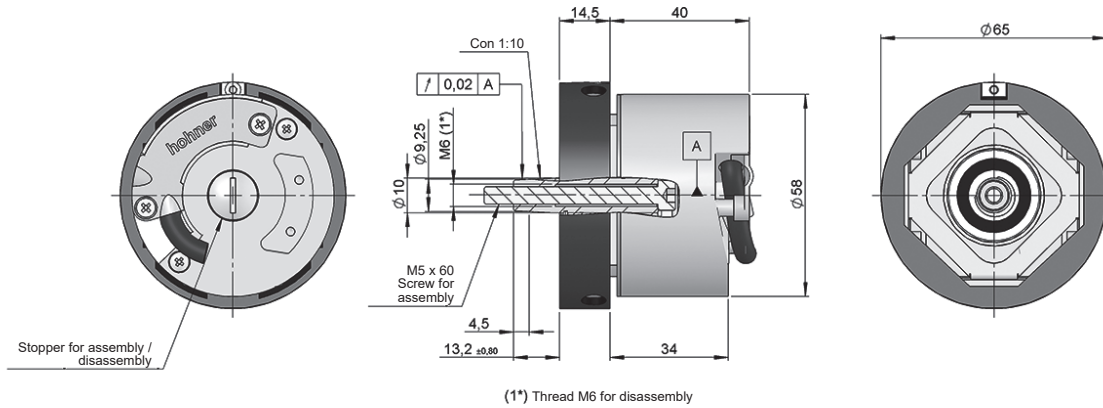
SERIE 64

CONIC SHAFT INCREMENTAL ENCODER FOR INDUSTRIAL APPLICATIONS

- Resolution up to 10.000 pulses per turn
- External diameter 58 mm
- Conic shaft 1:10
- Protection class IP54 according to DIN EN 60529
- Anti-rotation system through flexible flange, pin torque support or expanding coupling
- Connection by cable (other cable length available)

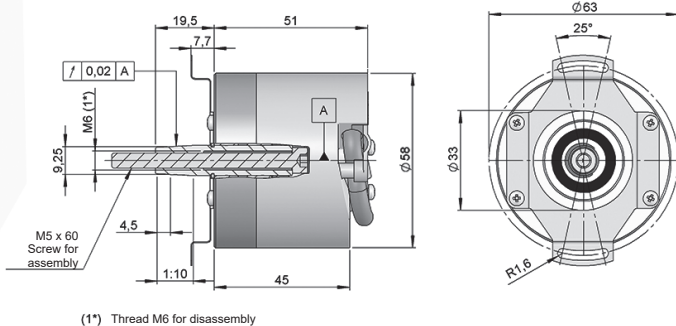


Expanding coupling (90.1100)



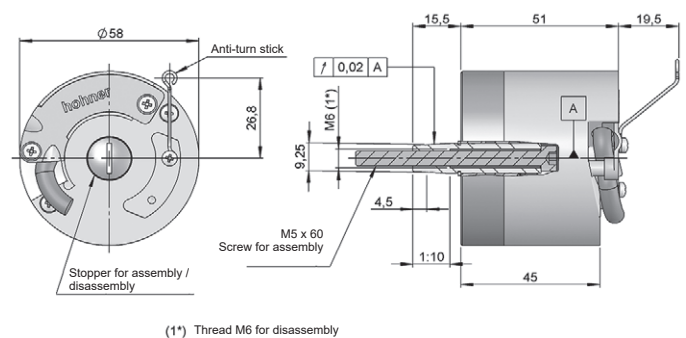
Drawing conic shaft 1:10, anti-rotation system type 0, connection type 1

Flexible flange (90.1027)



Drawing conic shaft 1:10, anti-rotation system type 1, connection type 1

Anti-turn stick (90.1041)



Drawing conic shaft 1:10, anti-rotation system type 2, connection type 1



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REFERENCE								Reference example: 64-11111-1024
Serie	Shaft	Anti-rotation system	Output signals	Connection	Power Supply / Electronic output	Pulses number	Special customer	
64 -	<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"/> <input type="checkbox"/> <input type="checkbox"/>	
	1. Conic 1:10	0. Expanding coupling 90.1100 1. Flexible flange 90.1027 2. Anti-turn stick 90.1041 3. None (*)	1. $\tilde{A}\tilde{A}+\tilde{B}\tilde{B}+0\tilde{O}$ 2. $\tilde{A}\tilde{A}+\tilde{B}\tilde{B}$	1. Helicoidal cable	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) 6. 11...30 VDC / RS422 5 VDC (compatible TTL)		VT00. -40°C	

Order your reference
Step file 3D

info@encoderhohner.com
service available in 24 h

(*) Anti-rotation systems type 0 (Expanding coupling 90.1100) and 1 (Flexible flange 90.1027) supplied assembled.
Anti-rotation system type 2 (Anti-turn stick 90.1041) supplied disassembled and includes the screws required for assembly.
Other required anti-rotation systems are not supplied assembled. All systems available in the sections "MOUNTING ACCESSORIES".

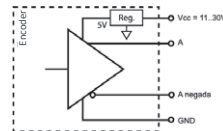
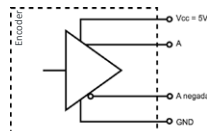
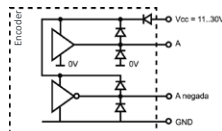
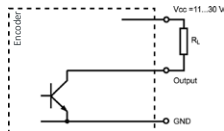
MECHANICAL SPECIFICATIONS

Materials	Cover: Aluminium Housing: Aluminium Shaft: Stainless Steel
Bearings	Ballraces
Bearings lifetime	1x10 ¹⁰ rev.
Housing fixing	Expanding coupling 90.1100 (assembled) Flexible flange 90.1027 (assembled) Anti-turn stick 90.1041 (self-assembly kit included)
Permitted misalignment	±0.5 mm axial, ±0.3 mm radial (90.1027, 90.1041)
Maximum number of revolutions permitted mechanically	6000 rpm
Protection against dust and splashes according to DIN EN 60529	IP54
Rotor inertia moment	≤ 3x10 ⁻⁶ Kg·m 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	60 N
Weight aprox.	0,5 Kg
Operating temperature range	-20°C to +80°C - Standard -40°C to +80°C - Special Customer VT00
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	10.000
Helicoidal connection	2 meters cable (other cable lengths available or connector mounted at the end of the cable, upon request)

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OUTPUT SIGNALS



OUTPUT CIRCUIT	NPN Open Collector	Push-Pull Differential	RS422 (TTL compatible)	RS422 (TTL compatible)
Reference code	0	1	2	6
Power supply	11...30 VDC	11...30 VDC	5 VDC ±10%	11...30 VDC
Output voltage	11...30 VDC	11...30 VDC	5 VDC	5 VDC
Consumption	40 mA	Typical: 45 mA Max: 150 mA	Typical: 70 mA Max: 150 mA	Typical: 80 mA Max: 160 mA
Max. load capability / channel	40 mA	±30 mA	±20 mA	±20 mA
Lenght of cable allowed	50 m (24 VDC)	100 m	1200 m	1200 m
"Low" signal level	VOL < 0,4 VDC (24 VDC)	VOL < 2.5 VDC	VOL < 0,5 VDC	VOL < 0,5 VDC
"High" signal level	VOH > 22 VDC (24 VDC)	VOH > VCC – 3 VDC	VOH > 2.5 VDC	VOH > 2.5 VDC
Frequency	100 kHz	200 kHz	300 kHz	300 kHz
Short circuit protection	Not permanent	Yes	Yes	Yes
Protection polarity inversion	Yes	Yes	Not permanent	Yes

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

CONNECTION



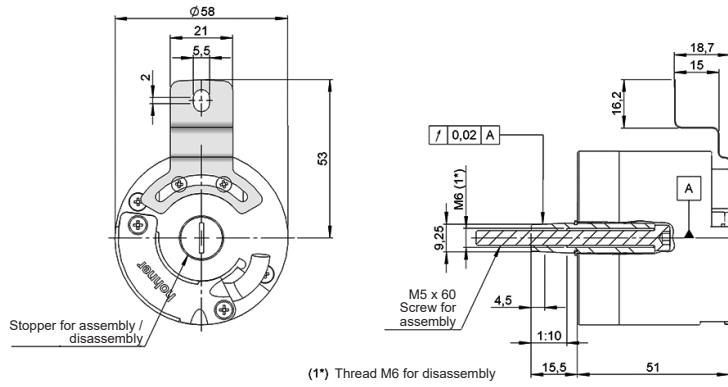
	95.0008003 Cable 3x2x0,14+2x0,34
GND	Black
VCC	Red
A	Yellow
B	Green
Ã	Brown
Ã	Blue
0 (reference)	Grey
0	Orange

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ANTI-ROTATION SYSTEMS DIMENSIONS

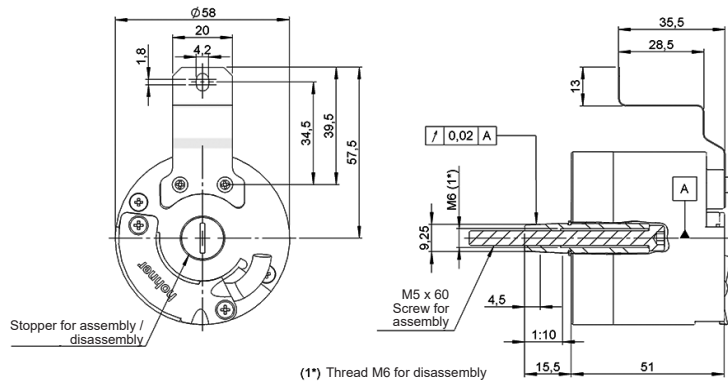
Flexible flange
90.1046



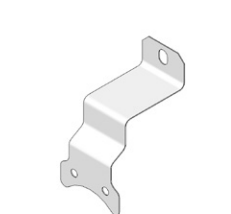
90.1046



Flexible flange
90.1082



90.1082

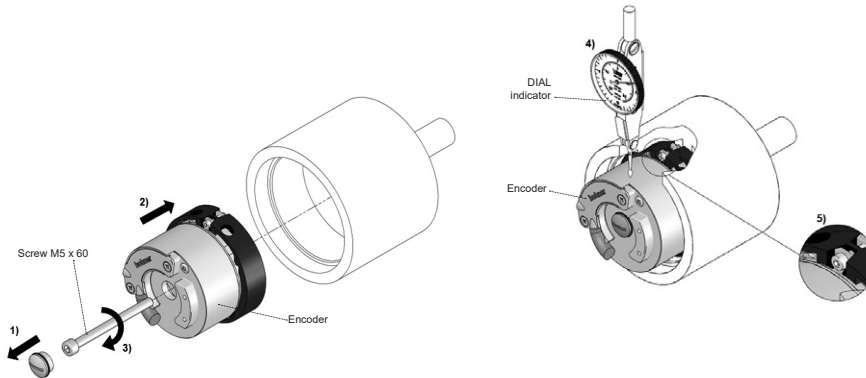


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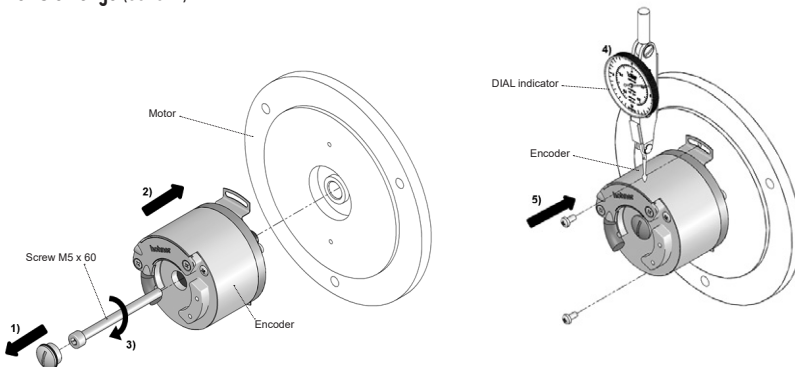
CONIC SHAFT INCREMENTAL ENCODER FOR INDUSTRIAL APPLICATIONS

ASSEMBLY INSTRUCTIONS

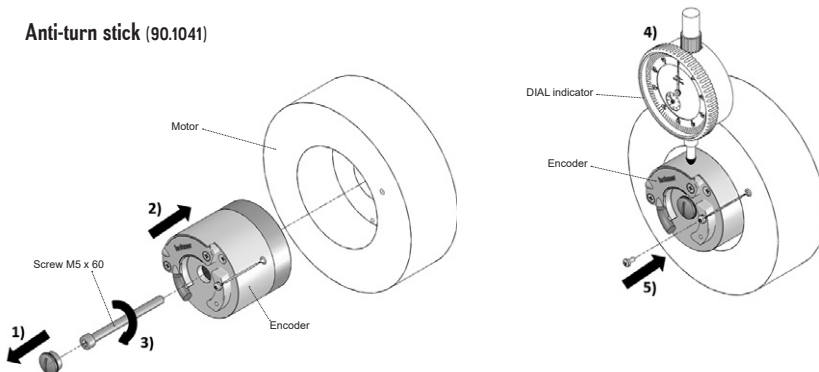
Expanding coupling (90.1100)



Flexible flange (90.1027)



Anti-turn stick (90.1041)



ASSEMBLY

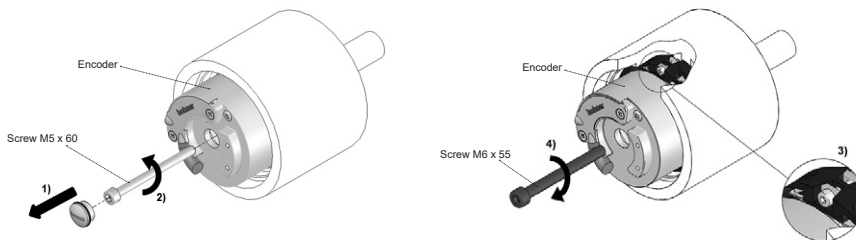
- 1) Extract stopper.
- 2) Put the encoder in the motor.
- 3) Thread M5 x 60 screw to fix the encoder shaft with the motor shaft (≤ 5 Nm).
- 4) Check maximum misalignment with a dial indicator ($\leq 0,2$ mm)
- 5) Thread screws for antirotation system
Check position of the antirotation system (not forced).

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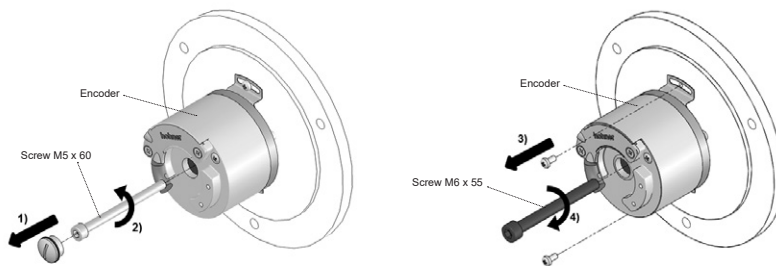
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DISSASSEMBLY INSTRUCTIONS

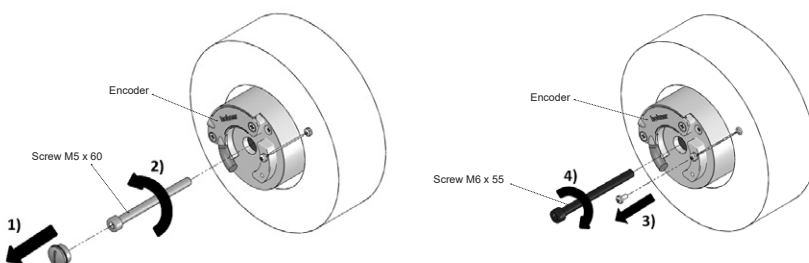
Expanding coupling (90.1100)



Flexible flange (90.1027)



Anti-turn stick (90.1041)



DISSASSEMBLY

- 1) Extract stopper.
- 2) Extract M5 x 60 screw.
- 3) Extract antirotation system.
- 4) Thread M6 screw for disassembly by pressure.