



SERIE 66

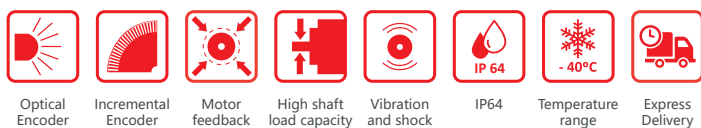
THREAD SHAFT INCREMENTAL ENCODER FOR INDUSTRIAL APPLICATIONS

Equivalent for SIEMENS 1XP8001-1 / 1XP8001-2

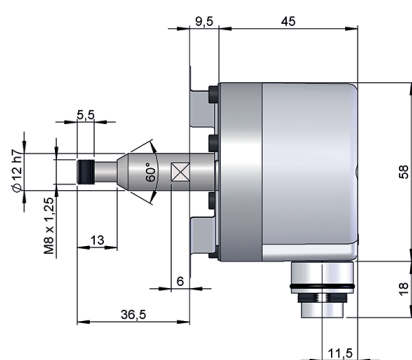
100% interchangeable (mechanically - electronically - pin out)

✓ 66-14121-1024.UC00 / 66-14122-1024.UC00

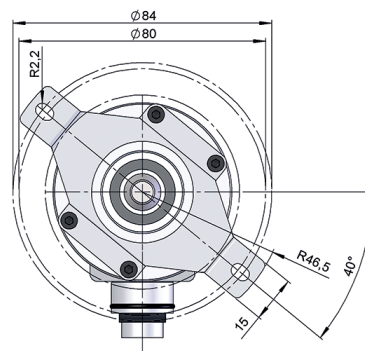
- Resolution up to 10000 pulses per turn
- External diameter 58 mm
- Thread shaft M8
- Protection class IP64 according to DIN EN 60529
- Anti-rotation system through flexible flange or anti-turn stick
- Connection by cable (other cable length available) or industrial connector M16



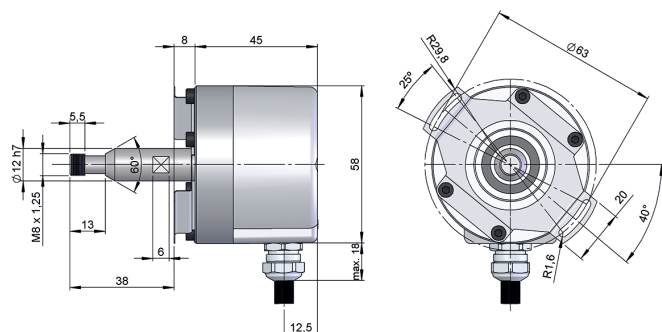
✓ Flexible flange (90.1045)



Drawing shaft type 1, anti-rotation system type 4, connection type 2

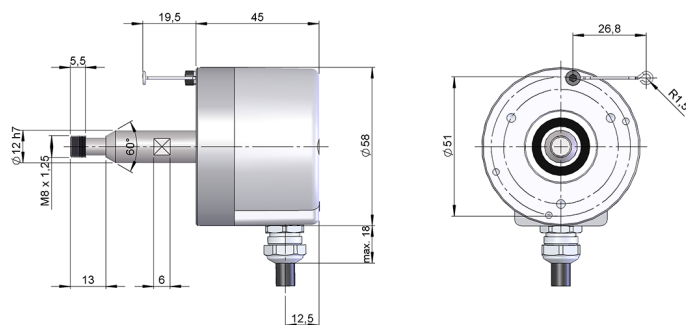


Flexible flange (90.1027)



Drawing shaft type 1, anti-rotation system type 1, connection type 1

Anti-turn stick (90.1041)



Drawing shaft type 1, anti-rotation system type 2, connection type 1



THREAD SHAFT INCREMENTAL ENCODER FOR INDUSTRIAL APPLICATIONS

REFERENCE						Reference example: 66-14121-1024	
Serie	Thread shaft	Anti-rotation system	Output signals	Connection	Power Supply / Electronic output	Pulses number	Special customer
66 -	☐	☐	☐	☐	☐ -	☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐ ☐
☒ 1. Thread M8		1. Option A Flexible flange 90.1027 2. Option B Anti-turn stick ☒ 90.1041 4. Option C Flexible flange 90.1045 3. None (*)	☒ 1. ABZ, $\overline{\text{ABZ}}$ 2. AB, $\overline{\text{AB}}$	☒ 1. Radial cable ☒ 2. Radial M16 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) 6. 11...30 VDC / RS422 5 VDC (compatible TTL)	UT00. -40°C ☒ UC00	Order your reference Step file 3D info@encoderhohner.com service available in 24 h

(*) Anti-rotation system type 1 (Flexible flange 90.1027) and 4 (Flexible flange 90.1045) supplied assembled.

Anti-rotation system type 2 (Anti-turn stick 90.1041) is 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".

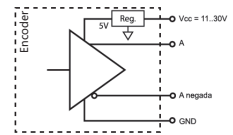
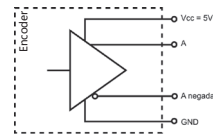
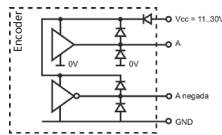
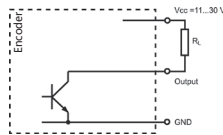
MECHANICAL SPECIFICATIONS

Materials	Cover: Zamac Housing: Aluminium Shaft: Stainless Steel
Bearings	Ballraces
Bearings lifetime	1x10 ¹⁰ rev.
Housing fixing	Flexible flange 90.1027 (assembled) Flexible flange 90.1045 (assembled) Anti-turn stick 90.1041 (self-assembly kit included)
Permitted misalignment	±0.5 mm axial, ±0.3 mm radial (90.1027, 90.1045, 90.1041)
Maximum number of revolutions permitted mechanically	6000 rpm
Protection against dust and splashes according to DIN EN 60529	IP64
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	60 N
Weight aprox.	0.5 Kg
Operating temperature range	-20°C to +80°C - Standard -40°C to +80°C - Special Customer UT00
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	10000
Radial cable	2 meters cable or industrial connector M16 (other cable lengths available on order) Female connector not included

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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
Length 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

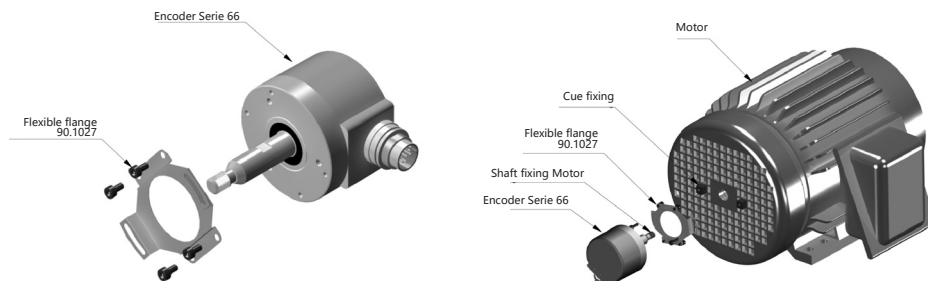


	Cable 3x2x0.14+2x0.34 95.0008003	Connector ☒ M16 12p CW
GND	Black (BK)	K - L
+UB	Red (RD)	B - M
A	Yellow (YE)	E
B	Green (GN)	H
$\bar{A}$	Brown (BN)	F
$\bar{B}$	Blue (BU)	A
Z	Grey (GY)	C
$\bar{Z}$	Orange (OG)	D
Case	Shield	Case

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ACCESSORIES EXAMPLES



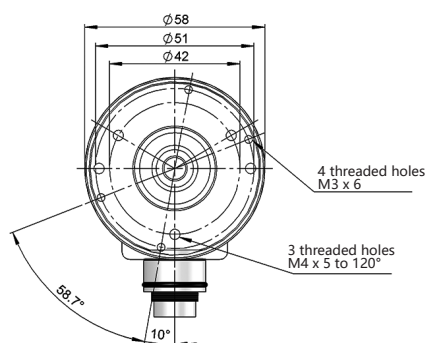
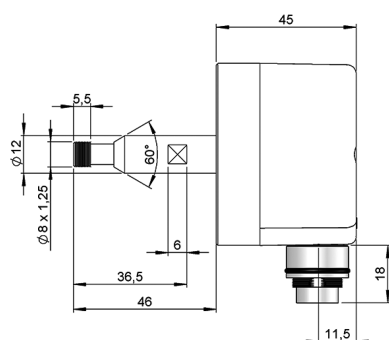
All the accessories available in the section "MOUNTING ACCESSORIES".

CONNECTION DIMENSIONS

Female connector not included

Connection 2

Radial
M16 12p
male panel
clockwise



Female connector
95.0007149



Pre-assembled cable
89.036.010.051.XX
Length in meters