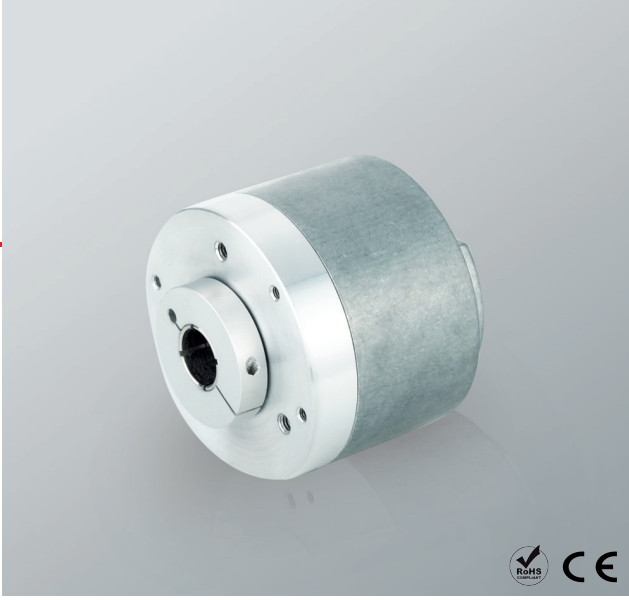


SERIE SMRS 59S

SINGLETURN ABSOLUTE AND INCREMENTAL HOLLOW SHAFT ENCODER



 SIN/COS + SIN/COS

- Absolute resolution 1 SIN/COS per turn
- Incremental resolution 2048 SIN/COS per turn
- External diameter 58 mm
- Hollow shaft \varnothing 12 or 14 mm
- Protection class IP65 according to DIN EN 60529
- Anti-rotation system through flexible flange
- Connection by cable (other cable length available)



Optical Encoder



Absolute and incremental encoder



SIN/COS



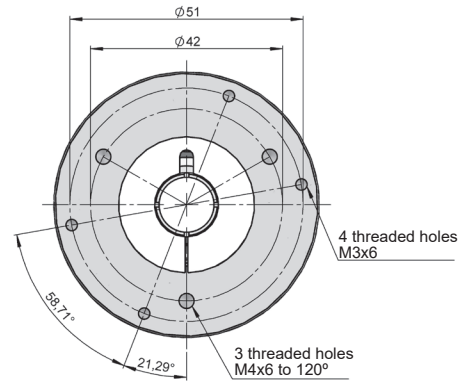
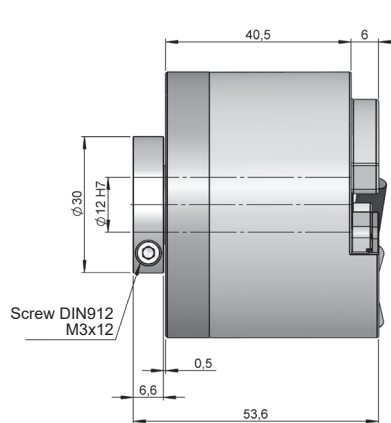
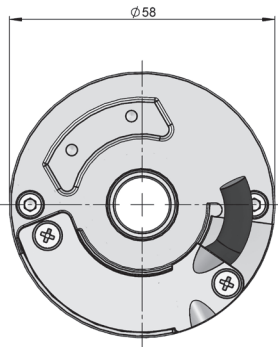
Vibration and shock resistant



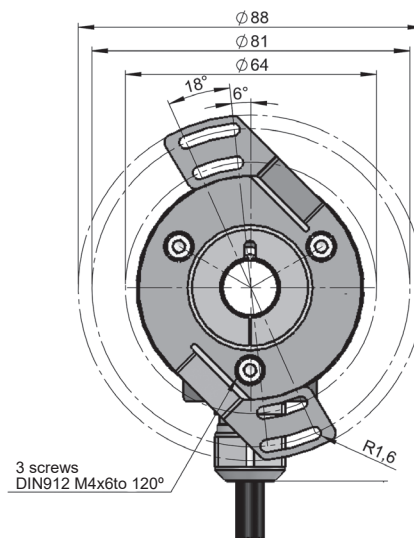
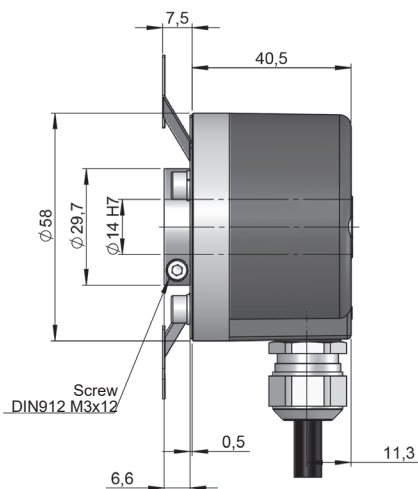
IP 65



Express Delivery



Drawing anti-rotation system type 0, hollow shaft type 12 mm, connection type 10



Drawing anti-rotation system type 0, hollow shaft type 14 mm, connection type 12



SERIE SMRS 59S

SINGLETURN ABSOLUTE AND INCREMENTAL HOLLOW SHAFT ENCODER

SIN/COS + SIN/COS

REFERENCE

Reference example: SMRS59S-10106012-2048

Serie	Hollow shaft	Anti-rotation system	Connection	Interface	IP	Power supply	Pulses number	Special customer
SMRS59S -	<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"/> <input type="checkbox"/>
	1. Ø 12 mm 2. Ø 14 mm	0. None 1. Flexible flange 90.1027 2. Flexible flange 90.1075 (*)	10. Helicoidal cable 12. Radial cable 20. 30 cm cable + connector D-Sub 15p	60. Absolute 1 SIN/COS in 360° and incremental 2048 SIN/COS	1. IP65 (**)	2. 5 VDC		KD. Halogen-free cable

Order your reference
Step file 3D

info@encoderhohner.com

service available in 24 h

(*) Anti-rotation system type 1 (Flexible flange 90.1027) and 2 (Flexible flange 90.1075) supplied assembled.

(**) For helicoidal cable IP54.

Other extension cable options available with specific connectors mounted at the end of the cable for different market drives, on request.

All systems and required assembly and disassembly screws available in the section "ACCESSORIES".

TECHNICAL SPECIFICATIONS

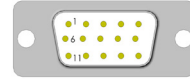
Materials	Housing: Aluminium Flange: Aluminium Shaft: Stainless Steel
Bearings	Ballraces
Bearings lifetime	1x10 ¹⁰ rev.
Housing fixing	Flexible flange 90.1027 Flexible flange 90.1075
Permitted misalignment	±0.5 mm axial, ±0.3 mm radial (90.1027) ±0.5 mm axial, ±0.2 mm radial (90.1075)
Maximum number of revolutions permitted mechanically	6000 rpm
Protection against dust and splashes according to DIN EN 60529	IP65 - Standard IP54 - Helicoidal connection
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	80 N
Weight aprox.	0,4 Kg
Operating temperature range	-20°C to +80°C - Standard KD
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)
Consumption	≤ 90 mA
Power supply	5 VDC ±10%
Electronic incremental output	SIN/COS, 1 Vpp ±20%
Incremental resolution	2048 SIN/COS
Electronic absolute output	SIN/COS, 1 Vpp ±20%
Absolute resolution	1 SIN/COS in 360°
Frequency (-3 dB)	≤ 200 kHz
Signal offset	2,5 VDC
Helicoidal cable	2 meters cable (other cable lengths available or connector mounted at the end of the cable, upon request) or 30 cm cable + connector D-Sub 15p
Radial connection	2 meters cable (other cable lengths available or connector mounted at the end of the cable, upon request)

SERIE SMRS 59S

SINGLETURN ABSOLUTE AND INCREMENTAL HOLLOW SHAFT ENCODER

SIN/COS + SIN/COS

CONNECTION



	Cable 6x2x0,14 mm ² (**) up to 100°C 95.0008072	Cable 6x2x0,14 mm ² (**) Halogen-free cable up to 90°C 95.0008073	D-Sub 15p HD
POWER SUPPLY			
GND	White	White	7
VCC	Brown	Brown	9
INCREMENTAL SIGNALS			
A+	Green	Green	5
A-	Yellow	Yellow	6
B+	Blue	Blue	8
B-	Red	Red	1
Z+	Grey-Pink	Grey-Pink	3
Z-	Red-Blue	Red-Blue	4
ABSOLUTE SIGNALS			
C+	Grey	Grey	11
C-	Pink	Pink	10
D+	Black	Black	12
D-	Violet	Violet	13
Shield*	Shield	Shield	Housing

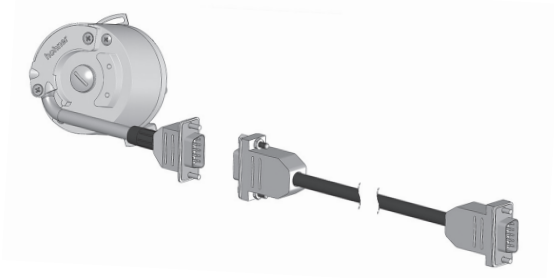
(*) Shield connected to the encoder housing. It is recommended to connect the end of the wire shield to the ground of the equipment where the encoder is connected.

(**) The recommended maximum cable length is 10 meters.

For longer lengths use connection option type 20 connection with extension accessories.

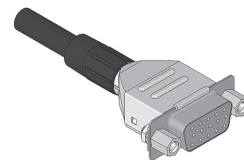
ACCESSORIES

Extension cable connection



Other extension cable options available with specific connectors mounted at the end of the cable for different market drives, on request.

Female connector (not included)



90.9546H
(D-Sub 15p)

The female connector is supplied disassembled, with the assembly instruction manual.

SERIE SMRS 59S

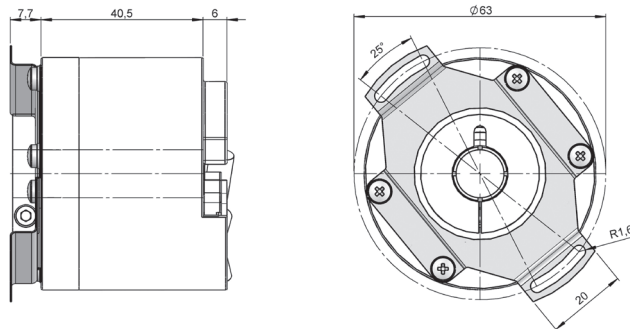
SINGLETURN ABSOLUTE AND INCREMENTAL CONIC SHAFT ENCODER

SIN/COS + SIN/COS

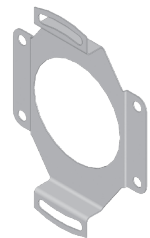
ANTI-ROTATION SYSTEMS DIMENSIONS

Anti-rotation system 1

Flexible flange 90.1027

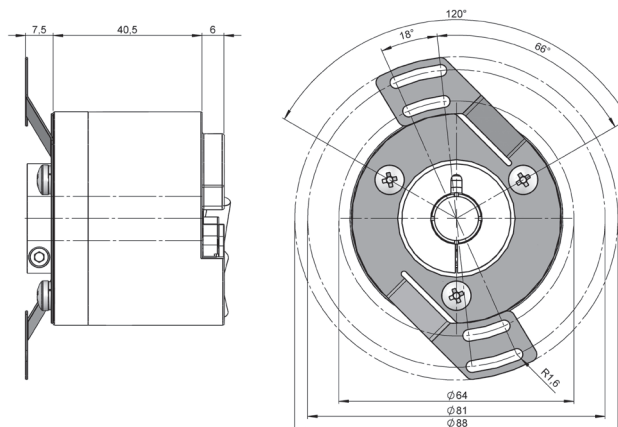


90.1027



Anti-rotation system 2

Flexible flange 90.1075



90.1075

