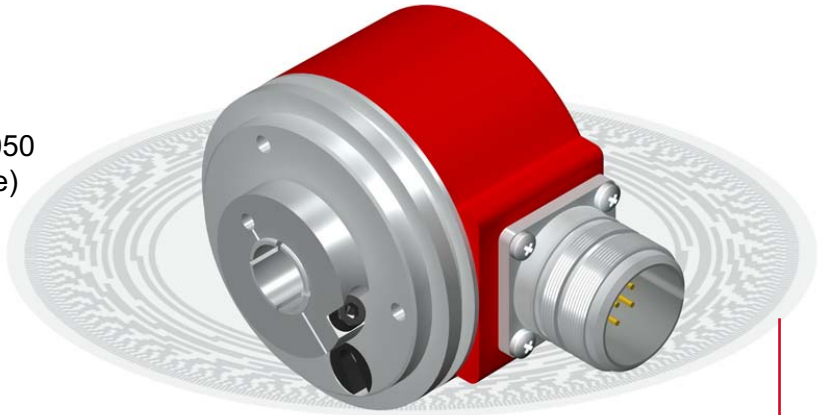


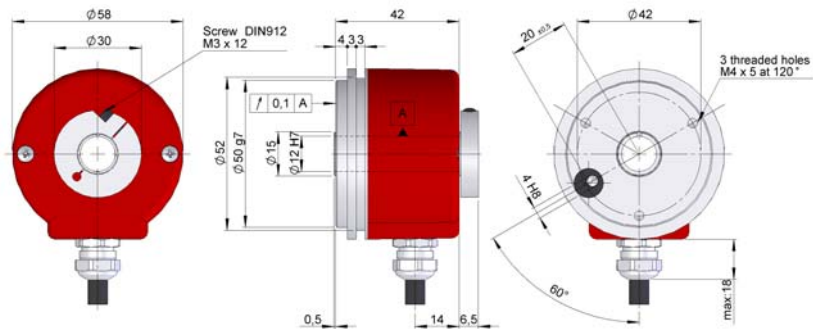
SERIE 59 SIN/COS

HOLLOW SHAFT INCREMENTAL ENCODER FOR INDUSTRIAL APPLICATIONS

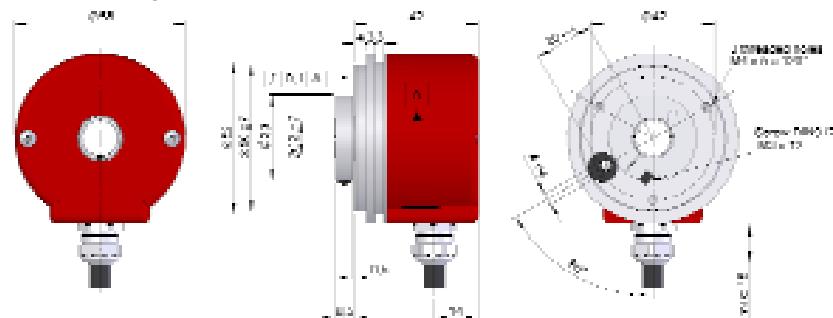
- Resolution 1024 and 2048 pulses per turn
- External diameter 58 mm
- Hollow shaft 10, 12 or 14 mm
- Protection class IP65 according to DIN 40050
- Cable connection (any cable length available) or industrial connector.
- Fixed to shaft with front or rear clamp.
- Anti-rotation system using elastic flange or centre pin.



Rear clamp



Front clamp



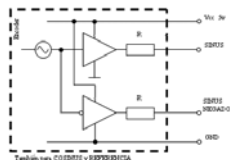
Previous mounting and installation of the encoder is recommended to read the section "TECHNICAL CONSIDERATIONS".

MECHANICAL SPECIFICATIONS

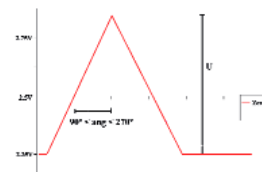
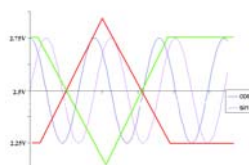
Housing	Aluminium.
Shaft	Treated aluminium/Stainless Steel.
Bearings	Ballraces.
Bearings lifetime	1x10 ¹⁰ rev.
Housing fixation	Elastic flange.
Shaft fixation	Front or Rear clamp.
Hollow shaft diameter	10, 12 or 14 mm.
Maximum number of revolutions permitted mechanically	6000 rpm.
Protection against dust and splashes according to DIN 40050	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	60 N.
Permitted misalignment : Flexible clamp 90.1014/90.1024	± 0,5mm axial, ± 0,3mm radial.
Weight aprox.	0,5 Kg.
Operating temperature range	-20°C to +80°C.
Vibration	100 m/s ² (10Hz...2000Hz).
Shock	1000 m/s ² (6ms).
Pulses per turn	1024 and 2048.
Axial or radial connection	Cable 2 metres or industrial connector (other cable lengths available on order).

ELECTRICAL SPECIFICATIONS

OUTPUT SIGNALS



	Sine-Wave
Power supply	5 V ±5%
Consumption	Typical: 80 mA Max: 150 mA
Max. signal delay	90° Electrics
Length of cable allowed	50 m
Signal type	Sin/Cos
Output signal level	0.6 a 1.2 Vpp
Reference	0.2 a 1 V
Frequency	200 kHz
Protection against polarity inversion	No



CONNECTION



Cable 3x2x0,14+2x0,34

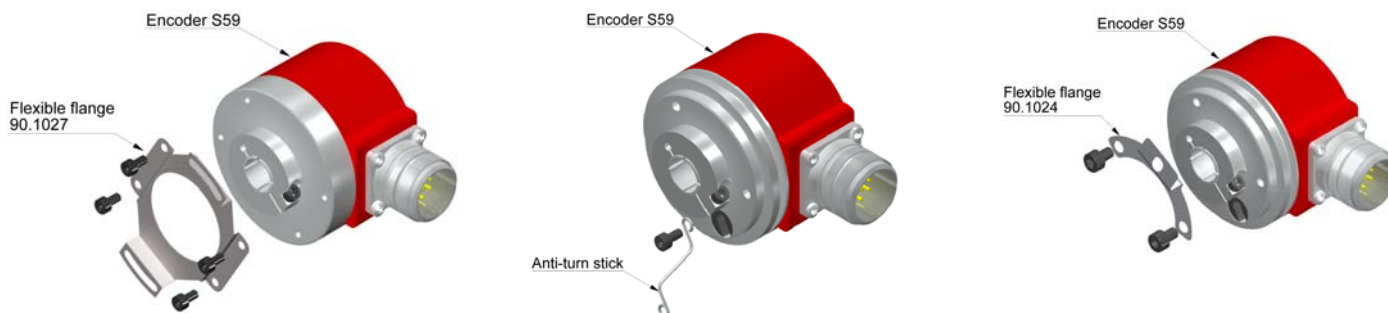
90.9512
M23 12p

GND	Black	1
Vcc	Red	2
A	Yellow	3
B	Green	4
A inverted	Brown	5
B inverted	Blue	6
0 (reference)	Grey	7
0 inverted	Orange	8

ORDERING CODE

SERIE	FIXATION	HOLLOW SHAFT	OUTPUT SIGNALS	CONNECTION	ELECTRONIC OUTPUT	PULSES NUMBER	SPECIAL CUSTOMER
59S	● ↓ 1- Rear clamp 2- Front clamp	● 1- Ø10 mm 2- Ø12 mm 3- Ø14 mm	● 1- A \tilde{A} + B \tilde{B} + 0 $\tilde{0}$ 2- A \tilde{A} + B \tilde{B}	● 1- Radial cable 2- Radial 90.9512	● ↓ 7- SIN/COS 1Vpp 5V	● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ●

ACCESSORIES



All the accessories available in the sections "SIGNAL CONDITIONERS" and "MOUNTING ACCESSORIES".