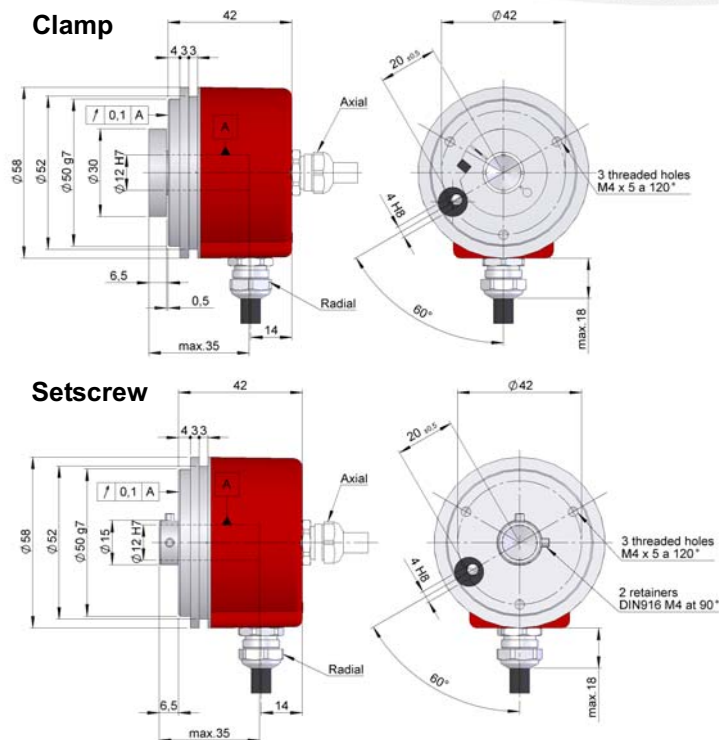
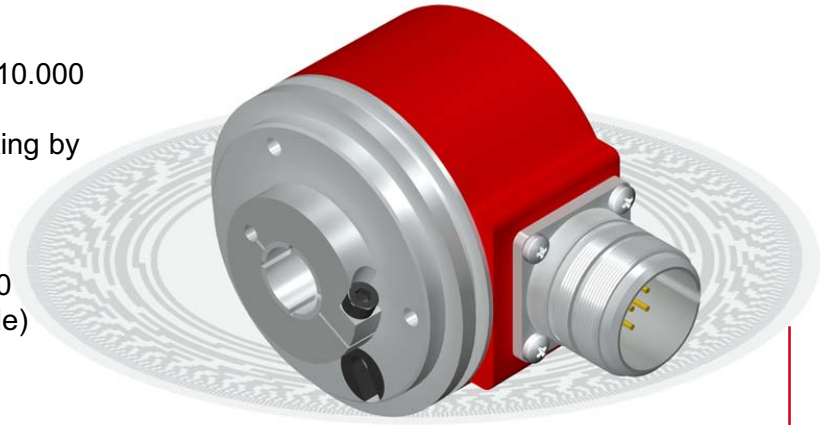


SERIE 19

BLIND HOLLOW SHAFT INCREMENTAL ENCODER FOR INDUSTRIAL APPLICATIONS

- Any number of pulses available from 1 to 10.000 pulses
- Easy to install, two mechanical options, fixing by setscrew or clamp
- External diameter 58 mm
- Blind hollow shaft up to 14 mm
- Protection class IP65 according DIN 40050
- Cable conection (any cable lenght available) or industrial connector.



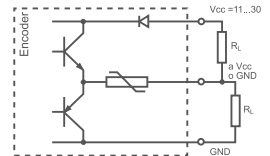
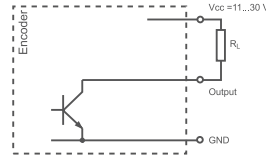
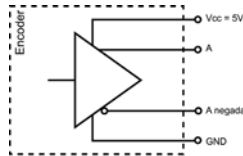
Previous mounting and installation of the encoder is recommended to read the section "TECHNICAL CONSIDERATIONS".

MECHANICAL SPECIFICATIONS

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 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).
Maximum pulses per turn	10.000
Axial or radial connection	Cable 2 metres or industrial connector (other cable lenghts available on order)

ELECTRICAL SPECIFICATIONS

OUTPUT SIGNALS



	RS422 (TTL compatible)	Push-Pull Differential	NPN Open Collector	Push-Pull without inverted
Power supply	5 V ±5%	11...30 V	11...30 V	11...30V
Consumption	Typical: 70 mA Max: 150 mA	Typical: 45 mA Max: 150 mA	40 mA	Typical: 45 mA Max: 150 mA
Max. load capability	±20 mA	±30 mA	40 mA	±30 mA
Length of cable allowed	1200 m	100 m	50 m (a 24 V)	50 m
"Low" signal level	VOL < 0,5 V	VOL < 2.5 V	VOL < 0,4 V (a 24 V)	VOL < 2.5 V
"High" signal level	VOH > 2.5 V	VOH > Vcc - 3 V	VOH > 2.2 V (a 24 V)	VOH > Vcc - 3 V
Frequency	300 kHz	200 kHz	100 kHz	200 kHz
Short circuit protection	Yes	Yes	Not permanent	Yes
Protection against polarity inversion	No	Yes	Yes	Yes
Channel B leads (90° electric) channel A				

CONNECTION



	Cable 5x0.14	Cable 3x2x0,14+2x0,34	90.9508 M12 8p	90.9512 M23 12p
GND	Yellow	Black	1	1
Vcc	White	Red	2	2
A	Brown	Yellow	3	3
B	Green	Green	4	4
A inverted		Brown	5	5
B inverted		Blue	6	6
0 (reference)	Grey	Grey	7	7
0 inverted	Grey	Orange	8	8

ORDERING CODE

SERIE	MECHANICAL OPTION	BLIND-HOLLOW SHAFT	OUTPUT SIGNALS	CONNECTION	ELECTRONIC OUTPUT	PULSES NUMBER	SPECIAL CUSTOMER
19	● 1- Clamp 2- Setscrew	● 1- Ø6 x 26 mm 3- Ø8 x 26 mm 4- Ø10 x 26 mm 5- Ø12 x 26 mm 7- Ø14 x 26 mm	● 1- A 2- A + B 3- A + B + 0̃ 5- AĀ + BĀ 6- AĀ + BB + 0̃ 9- A + B + 0	● 3- Radial cable 5- Radial 90.9512 L- Radial 90.9508	● ↓ 0- Open collector NPN 11..30V 1- Push-Pull 11..30V (without inverted) 7- Standard RS422. 5V. Compatible TTL 9- Differential line driver. Push-Pull 11..30V	●●●●●●●●	●●●●●●●●

ACCESSORIES



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