



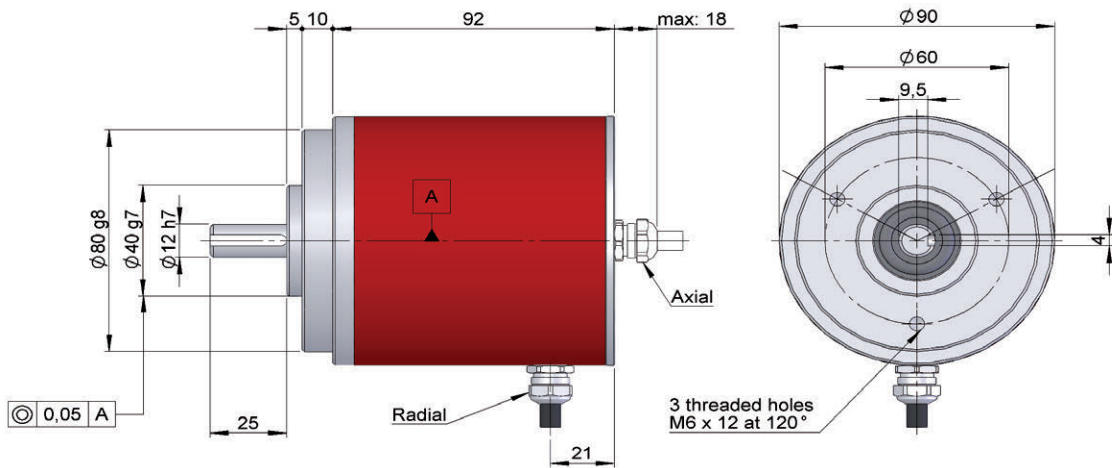
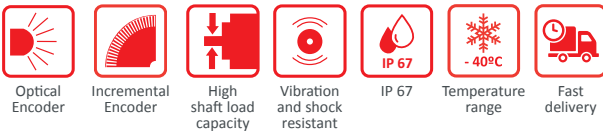
Image with flange 90.1008



SERIE 30

HIGH RESOLUTION INCREMENTAL SOLID SHAFT ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

- Any number of pulses available from 1 to 50.000 pulses
- External diameter 90 mm
- Shaft 12 mm
- Protection class IP67 according to DIN EN 60529
- Executions mechanical, electronic and special optics available on request
- Connection by cable (any cable length available) or industrial connector
- Female connector included



Drawing encoder S30, connection type 0/5

REFERENCE

Reference example: 30-4251-1024

Serie	Output signals	Connection	Power Supply / Electronic output	Pulses number	Special customer
30/30A -	<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"/>
30A. IP 67 (**)	30. A 40. A+B 42. A+B+0 43. A+B+0̃ 35. AÃ+BÃ 36. AÃ+BÃ+0̃	0. Axial cable 1. Axial 90.9504 3. Axial 90.9507 4. Axial 90.9512 5. Radial cable 9. Radial 90.9512 M. Axial 90.9510	0. 11...30V / NPN Open collector 11...30V 6. 11...30V / RS422 5V (compatible TTL) 7. 5V / RS422 5V (compatible TTL) 9. 11...30V / Line driver differential Push-Pull 11...30V	(*)	FT00. -40°C

(*) 10.000 to 50.000 pulses with interpolation. Available 10.000 direct optical pulses without interpolating upon request.

(**) The option 30A is only available with cable connection output (0/5).



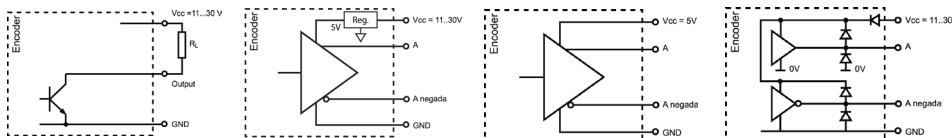
SERIE 30

HIGH RESOLUTION INCREMENTAL SOLID SHAFT ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

MECHANICAL SPECIFICATIONS

Materials	Cover: Aluminium 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 EN 60529	IP65 - Standard IP67 - Option 30A
Rotor inertia moment	270 gcm ²
Starting torque at 20°C (68°F)	Max. 5,0 Ncm
Maximum load permitted on axial shaft	80 N
Maximum load permitted on radial shaft	100 N
Weight aprox.	1,2 Kg
Operating temperature range	-20°C a +80°C - Standard -40°C a +80°C - Special Customer FT
Vibration	100 m/s ² (10Hz...2000Hz)
Shock	1000 m/s ² (6ms)
Maximum pulses per turn	50.000
Axial or radial connection	Cable 2 metres or industrial connector (other cable lenghts available on order) Female connector included

OUTPUT SIGNALS



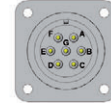
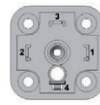
OUTPUT CIRCUIT	NPN Open Collector	RS422 (TTL compatible)	RS422 (TTL compatible)	Push-Pull Differential
Reference code	0	6	7	9
Power supply	11...30 V	11...30 V	5 V ±5%	11...30 V
Output voltage	11...30 V	5 V	5 V	11...30 V
Consumption	40 mA	Typical: 80 mA Max: 160 mA	Typical: 70 mA Max: 150 mA	Typical: 45 mA Max: 150 mA
Max. load capability	40 mA	±20 mA	±20 mA	±30 mA
Lenght of cable allowed	50 m (a 24 V)	1200 m	1200 m	100 m
"Low" signal level	VOL < 0,4 V (a 24 V)	VOL < 0,5 V	VOL < 0,5 V	VOL < 2.5 V
"High" signal level	VOH > 22 V (a 24 V)	VOH > 2.5 V	VOH > 2.5 V	VOH > Vcc - 3 V
Frequency	100 kHz	300 kHz	300 kHz	200 kHz
Short circuit protection	Not permanent	Yes	Yes	Yes
Protection against polarity inversion	Yes	Yes	No	Yes

Channel B leads (90° electric) channel A

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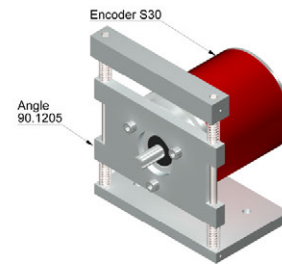
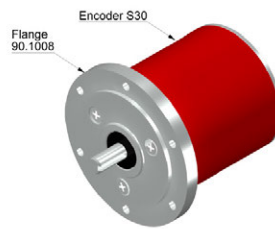
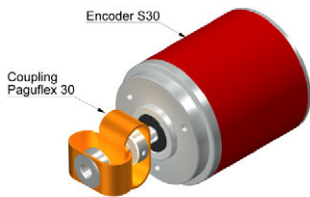
CONNECTION



	Cable 2x2x0,14+1x0,14	(*) Cable 3x2x0,14+2x0,34	90.9504 DIN 43650 4p	90.9507 Mil 7p cw	90.9510 Mil 10p cw	90.9512 M23 12p cw
GND	Yellow	Black	1	A	A	1
Vcc	White	Red	2	B	B	2
A	Brown	Yellow	3	C	C	3
B	Green	Green	4	D	D	4
A inverted		Brown		E	E	5
B inverted		Blue		F	F	6
0 (reference)	Grey	Grey		G	G	7
0 inverted	Grey	Orange		G	H	8

(*) Cable 3x2x0,14+2x0,34 only for encoders with inverted signals.

ACCESSORIES EXAMPLES

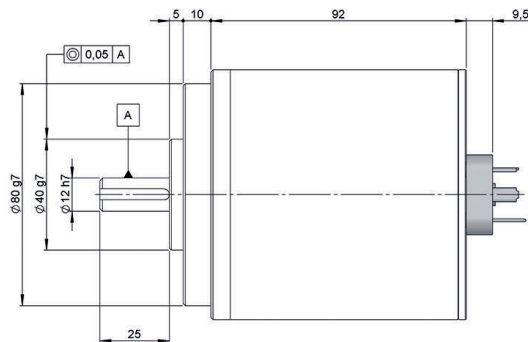


All the accessories available in the sections "ELECTRONIC MODULES AND COUNTERS" and "MOUNTING ACCESSORIES".

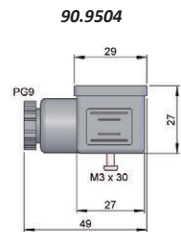
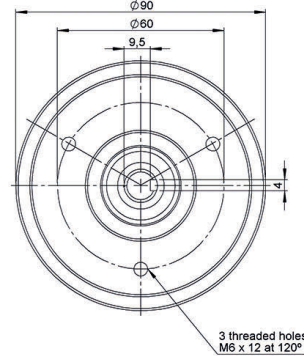
CONNECTION DIMENSIONS

Female connector included

Connection 1
Axial 90.9504



90.9504
DIN 43650 4p
male panel

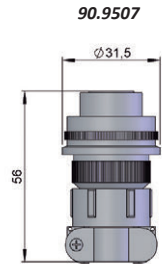
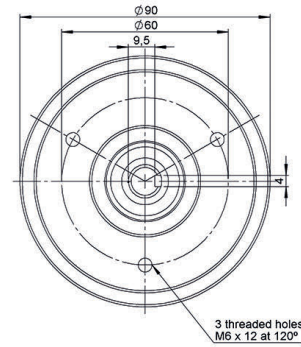
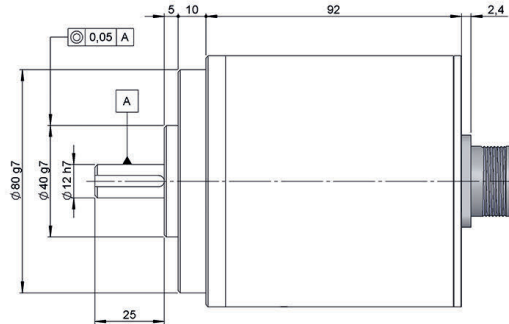


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Connection 3
Axial 90.9507

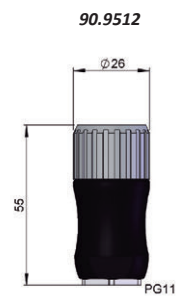
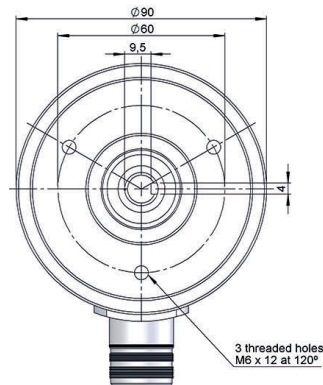
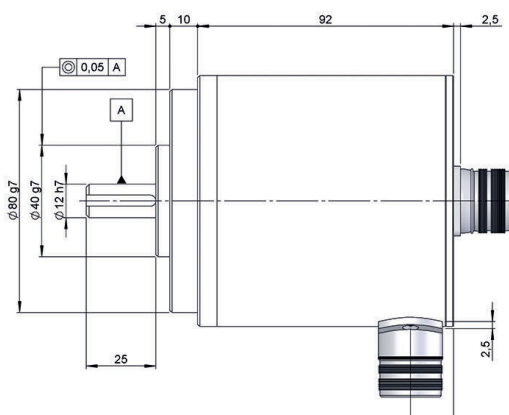
90.9507
Mil 7p
male panel
clockwise



Connection 4
Axial 90.9512

Connection 9
Radial 90.9512

90.9512
M23 12p
male panel
clockwise



Connection M
Axial 90.9510

90.9510
Mil 10p
male panel
clockwise

