



SERIE 30

HIGH RESOLUTION INCREMENTAL SOLID SHAFT ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

- Resolution up to 50000 pulses per turn
- External diameter 90 mm
- Shaft Ø 12 mm
- Protection class IP67 according to DIN EN 60529
- Executions mechanical, electronic and special optics forms available on request
- Connection by cable or industrial connector (other cable lengths available)



Optical Encoder



Incremental Encoder



High shaft load capacity



Vibration and shock resistant



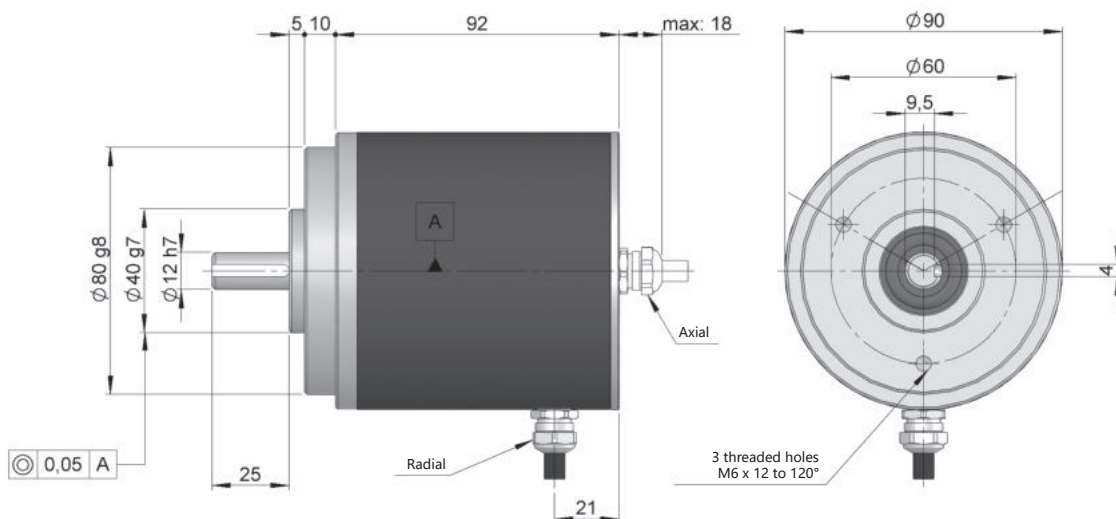
IP 67



Temperature range



Express Delivery



Drawing Encoder Serie 30, connection type 0/5

REFERENCE

Reference example: 30-4251-1024

Serie	Output signals	Connection	Power Supply / Electronic output	Pulses number	Special customer
30/30A -	☐ ☐	☐	☐ -	☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐
30. IP 65	30. A	0. Axial cable	0. 11...30 VDC / NPN Open collector 11...30 VDC	(*)	FT00. -40°C
30A. IP 67	40. AB	1. Axial DIN 43650 4p	6. 11...30 VDC / RS422 5 VDC (compatible TTL)		
(**)	42. ABZ	3. Axial Mil 7p CW	7. 5 VDC / RS422 5 VDC (compatible TTL)		
	43. AB, $\bar{Z}$	4. Axial M23 12p CW	9. 11...30 VDC / Line driver differential Push-Pull 11...30 VDC		
	35. AB, $\bar{AB}$	5. Radial cable			
	36. ABZ, $\bar{ABZ}$	9. Radial M23 12p CW			
		M. Axial Mil 10p CW			

Order your reference Step file 3D

info@encoderhohner.com
service available in 24 h

(*) 10000 to 50000 pulses with interpolation. Available 10000 direct optical pulses without interpolating upon request.

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



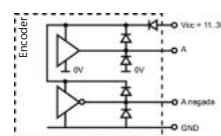
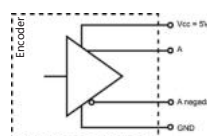
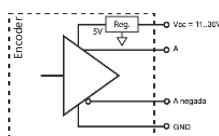
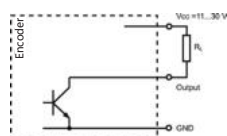
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MECHANICAL SPECIFICATIONS

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)	≤ 0.05 Nm
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 to +80°C - Standard -40°C to +80°C - Special Customer FT00
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	50000
Axial or radial connection	2 meters cable or industrial connector (other cable lengths available on order) Female connector not 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 VDC	11...30 VDC	5 VDC ±5%	11...30 VDC
Output voltage	11...30 VDC	5 VDC	5 VDC	11...30 VDC
Consumption	40 mA	Typical: 80 mA Max: 160 mA	Typical: 70 mA Max: 150 mA	Typical: 45 mA Max: 150 mA
Max. load capability / channel	40 mA	±20 mA	±20 mA	±30 mA
Length of cable allowed	50 m (24 VDC)	1200 m	1200 m	100 m
"Low" signal level	VOL < 0.4 VDC (24 VDC)	VOL < 0.5 VDC	VOL < 0.5 VDC	VOL < 2.5 VDC
"High" signal level	VOH > 22 VDC (24 VDC)	VOH > 2.5 VDC	VOH > 2.5 VDC	VOH > VCC - 3 VDC
Frequency	100 kHz	300 kHz	300 kHz	200 kHz
Short circuit protection	Not permanent	Yes	Yes	Yes
Protection polarity inversion	Yes	Yes	No	Yes

Channel B leads (90° electric) channel A, view from the shaft, shaft rotating clockwise.

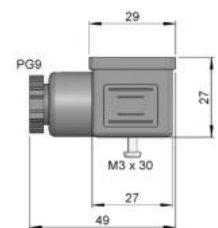
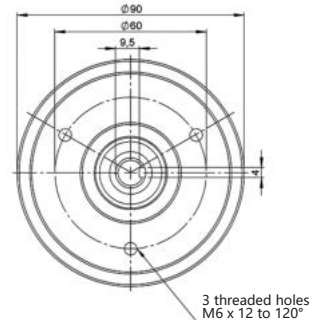
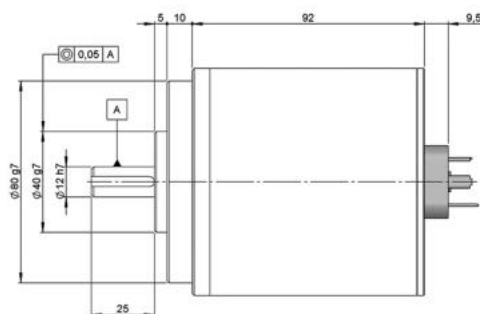
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(*) Cable 3x2x0.14+2x0.34 only for encoders with inverted signals.

Female connector not included

Axial
DIN 43650 4p
male panel



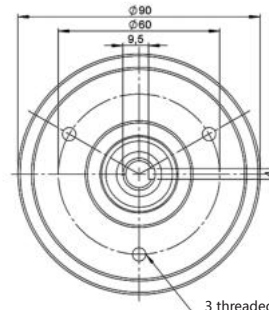
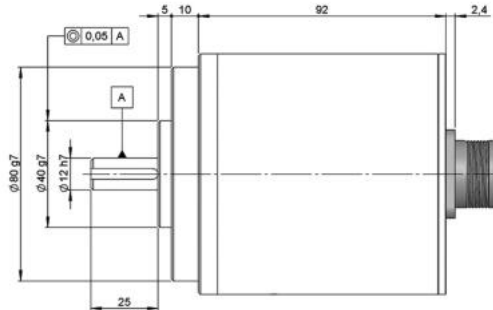
Pre-assembled cable
89.001.01.000.XX
Length in meters

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Connection 3

Axial
Mil 7p
male panel
clockwise



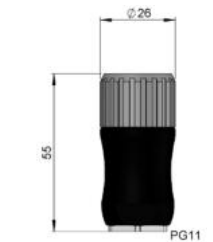
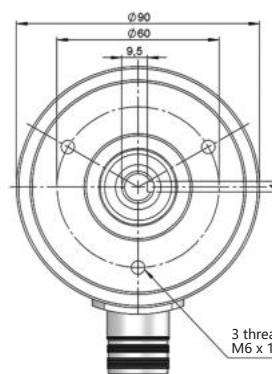
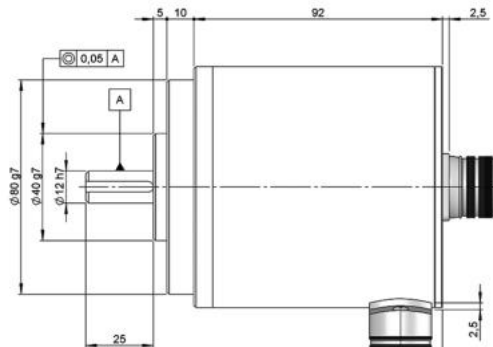
Female connector
90.9507H

Pre-assembled cable

Without inverted signals: 89.002.01.019.XX
With inverted signals: 89.002.02.000.XX
Length in meters

Connection 4

Axial
M23 12p
male panel
clockwise



Female connector
95.0007131

Pre-assembled cable

Without inverted signals: 89.005.01.019.XX
With inverted signals: 89.005.02.000.XX
Length in meters

Connection 9

Radial
M23 12p
male panel
clockwise

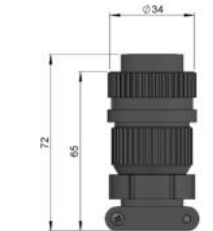
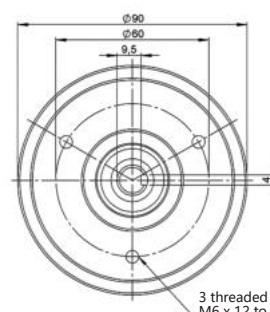
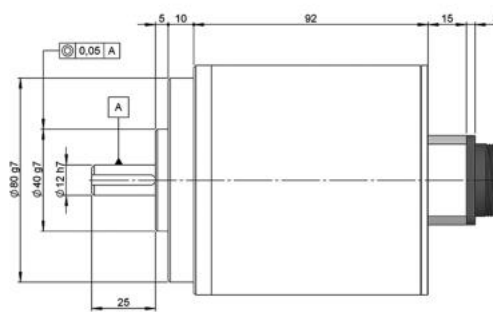


Pre-assembled cable

Without inverted signals: 89.005.01.019.XX
With inverted signals: 89.005.02.000.XX
Length in meters

Connection M

Axial
Mil 10p
male panel
clockwise



Female connector
90.9510H

Pre-assembled cable

Without inverted signals: 89.004.01.000.XX
With inverted signals: 89.004.02.000.XX
Length in meters