



SERIE 30

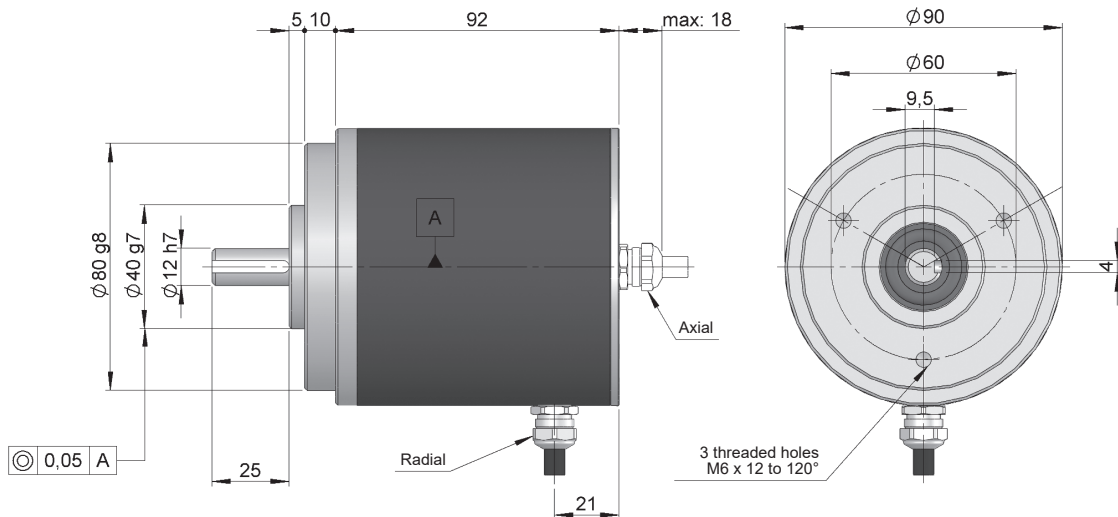
HIGH RESOLUTION INCREMENTAL SOLID SHAFT ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

- Resolution up to 50.000 pulses per turn
- External diameter 90 mm
- Shaft \varnothing 12 mm
- Protection class IP67 according to DIN EN 60529
- Executions mechanical, electronic and special optics forms available on request
- Connection by cable (other cable length available) or industrial connector

Image with flange 90.1008



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 -	<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"/>
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. A+B	1. Axial DIN 43650 4p	6. 11...30 VDC / RS422 5 VDC (compatible TTL)		
(**)	42. A+B+0	3. Axial Mil 7p CW	7. 5 VDC / RS422 5 VDC (compatible TTL)		
	43. A+B+0̄	4. Axial M23 12p CW	9. 11...30 VDC / Line driver differential Push-Pull		
	35. ĀA+B̄B	5. Radial cable	11...30 VDC		
	36. ĀA+B̄B+0̄	9. Radial M23 12p CW			
		M. Axial Mil 10p CW			

Order your reference
Step file 3D

info@encoderhohner.com

service available in 24 h

(*) 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).



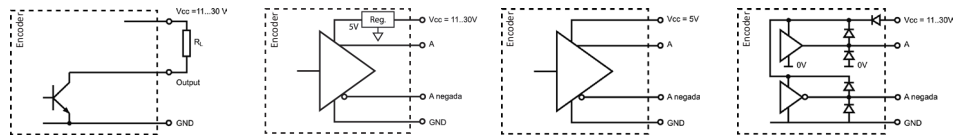
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HIGH RESOLUTION INCREMENTAL SOLID SHAFT ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

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)	≤ 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	50.000
Axial or radial connection	2 meters cable or industrial connector (other cable lengths available on order) Female connector not included

OUTPUT SIGNALS



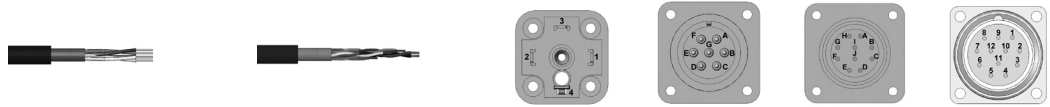
OUTPUT CIRCUIT	NPN Open Collector	RS422 (TTL compatible)	RS422 (TTL compatible)	Push-Pull Differential
Reference code	0	6	7	9
Power supply	11...30 VDC	11...30 VDC	5 VDC ±5%	11...30 VDC
Output voltage	11...30 VDC	5 VDC	5 VDC	11...30 VDC
Consumption	40 mA	Typical: 80 mA Max: 160 mA	Typical: 70 mA Max: 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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HIGH RESOLUTION INCREMENTAL SOLID SHAFT ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

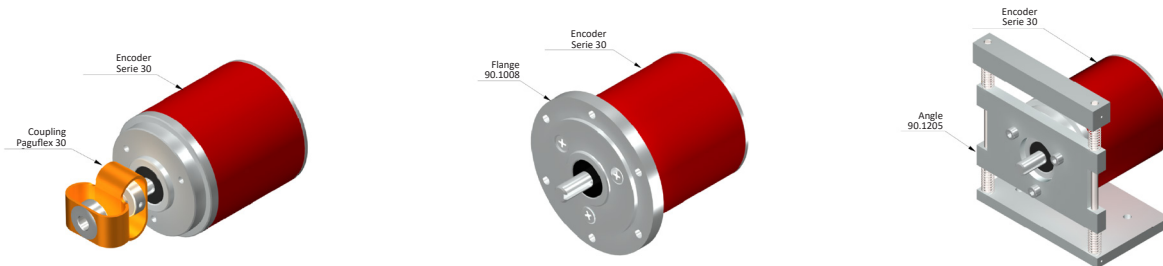
CONNECTION



	Cable 2x2x0,14+1x0,14 95.0008002	Cable 3x2x0,14+2x0,34 95.0008003(*)	Connector DIN 43650 4p	Connector Mil 7p CW	Connector Mil 10p CW	Connector 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
\tilde{A}		Brown		E	E	5
\tilde{B}		Blue		F	F	6
0 (reference)	Grey	Grey		G	G	7
$\tilde{0}$	Grey	Orange		G	H	8

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

ACCESSORIES EXAMPLES



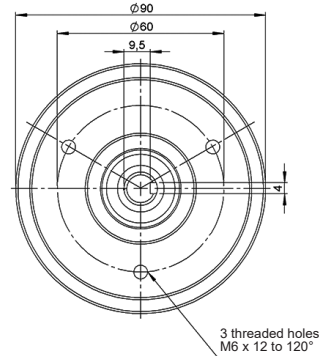
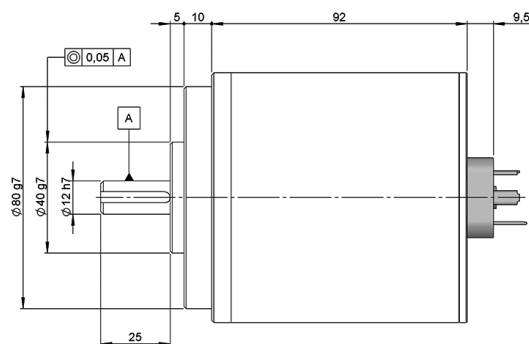
All the accessories available in the section "MOUNTING ACCESSORIES".

CONNECTION DIMENSIONS

Female connector not included

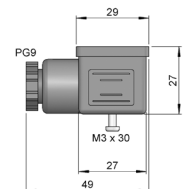
Connection 1

Axial
DIN 43650 4p
male panel



Female connector

95.0007011

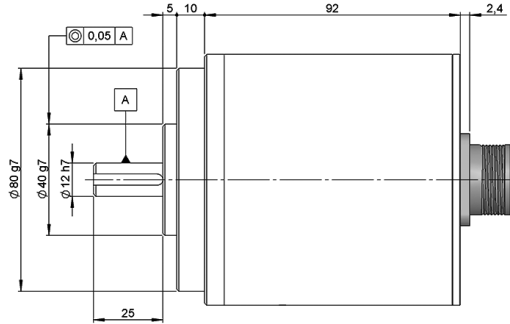


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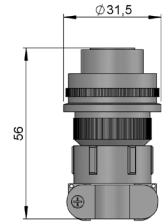
HIGH RESOLUTION INCREMENTAL SOLID SHAFT ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

Connection 3

Axial
Mil 7p
male panel
clockwise

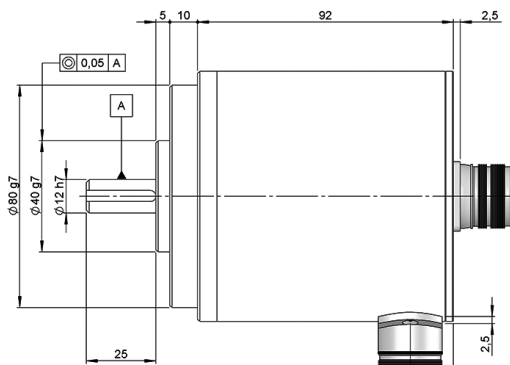


Female connector 90.9507H

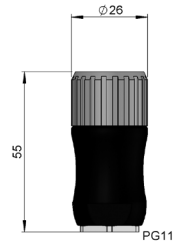


Connection 4

Axial
M23 12p
male panel
clockwise

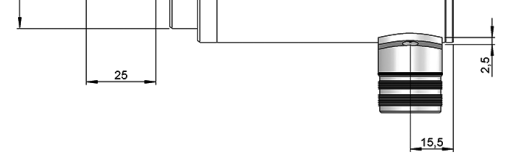


Female connector 95.0007131



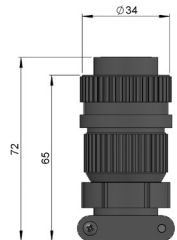
Connection 9

Radial
M23 12p
male panel
clockwise



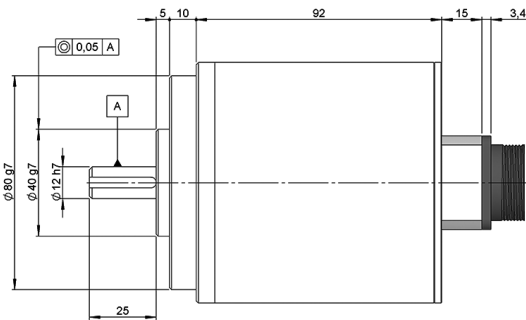
3 threaded holes
M6 x 12 to 120°

Female connector 90.9510H



Connection M

Axial
Mil 10p
male panel
clockwise



3 threaded holes
M6 x 12 to 120°