



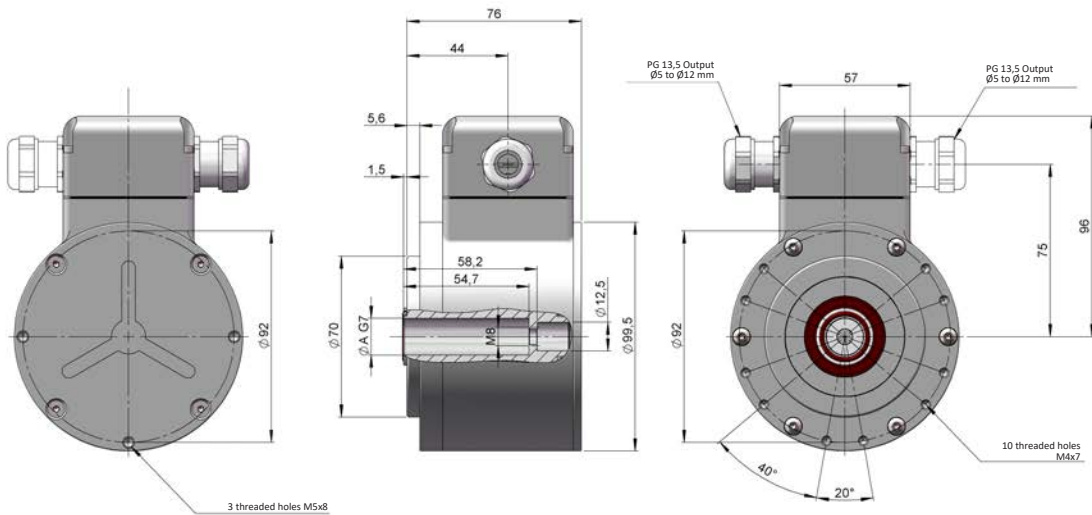
SERIE 100 H / DUO

INCREMENTAL ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

- Resolution up to 5.000 pulses per turn
- External diameter 100 mm
- Blind hollow shaft from \varnothing 12 to 16 mm
- Hybrid bearings for extended lifetime
- Shaft insulation up to 2,5 kV
- Protection class IP66 according to DIN EN 60529
- Connection by terminal box with plug-in spring terminal connectors, rotatable through 360°
- Dual output available



Heavy Duty Encoder Incremental Encoder High shaft load capacity Vibration and shock resistant IP66 2,5 kV bearing isolation Express Delivery



Drawing blind hollow shaft type 12, connection type 1

REFERENCE

Reference example: 100H-12111-5000

Serie	Shaft	Output signals	Connection	Power Supply / Electronic output	Pulses number	Special customer
100H/100HDUO -	<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"/>
100H. Single output 100HDUO. Dual output	12. Blind-Hollow shaft \varnothing 12 mm 16. Blind-Hollow shaft \varnothing 16 mm	1. $\tilde{A}\tilde{A} + \tilde{B}\tilde{B} + 0\tilde{D}$ 2. $\tilde{A}\tilde{A} + \tilde{B}\tilde{B}$	1. Radial terminal box 2. Radial cable 2 m 3. Radial M23 12p CW 4. Radial M12 8p CW	1. 9...30 VDC / Line driver differential Push-Pull 9...30 VDC 2. 5 VDC / RS422 5 VDC (compatible TTL) 6. 9...30 VDC / RS422 5 VDC (compatible TTL)		YT00. -40° YT01. +100°

Order your reference
Step file 3D

info@encoderhohner.com
service available in 24 h

The required anti-rotation system is not included in the reference (order separately). Anti-rotation system is supplied disassembled and includes the screws required for assembly to the encoder. All systems available in the sections "MOUNTING ACCESSORIES".



Assembly and disassembly instruction manual available in:
www.encoderhohner.com/product/serie-100h/



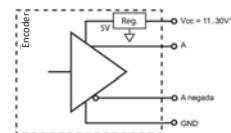
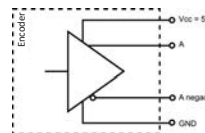
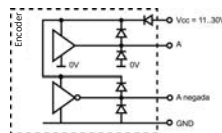
SERIE 100H / DUO

INCREMENTAL ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

MECHANICAL SPECIFICATIONS

Materials	Housing: Anodized aluminium Shaft: Stainless Steel
Bearings	Dual set of hybrid bearings with ceramic balls
Bearings lifetime	1x10 ¹⁰ rev.
Housing fixing	Torque arm M6
Permitted misalignment	±0,05 mm radial
Shaft fixing	Screw M5 or M6
Hollow shaft diameter	12, 16 mm
Shaft insulation	2,5 kV
Maximum number of revolutions permitted mechanically	6000 rpm
Protection against dust and splashes according to DIN EN 60529	IP66
Rotor inertia moment	≈ 500 gcm ²
Starting torque at 20°C (68°F)	≈ 0,07 Nm
Maximum load permitted on axial shaft	400 N
Maximum load permitted on radial shaft	500 N
Weight approx.	1,7 Kg
Operating temperature range	-20°C to +80°C - Standard -40°C to +80°C - Special Customer YT00 -20°C to +100°C - Special Customer YT01
Vibration according to DIN EN 60068-2-6	300 m/s ² (10Hz...2000Hz)
Shock according to DIN EN 60068-2-27	2500 m/s ² (6ms)
Maximum pulses per turn	5.000
Radial connection	Terminal box, cable or M12/M23 connector

OUTPUT SIGNALS



OUTPUT CIRCUIT	Push-Pull Differential	RS422 (TTL compatible)	RS422 (TTL compatible)
Reference code	1	2	6
Power supply	9...30 VDC	5 VDC ±5%	9...30 VDC
Output voltage	9...30 VDC	5 VDC	5 VDC
Consumption	Typical: 45 mA Max: 200 mA	Typical: 70 mA Max: 200 mA	Typical: 80 mA Max: 200 mA
Max. load capability / channel	±30 mA	±20 mA	±20 mA
Length of cable allowed	100 m	1200 m	1200 m
"Low" signal level	VOL < 2.5 VDC	VOL < 0.5 VDC	VOL < 0.5 VDC
"High" signal level	VOH > VCC - 3 VDC	VOH > 2.5 VDC	VOH > 2.5 VDC
Frequency	200 kHz	300 kHz	300 kHz
Short circuit protection	Yes	Yes	Yes
Protection polarity inversion	Yes	Yes	Yes

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

SERIE 100H / DUO

INCREMENTAL ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

CONNECTION



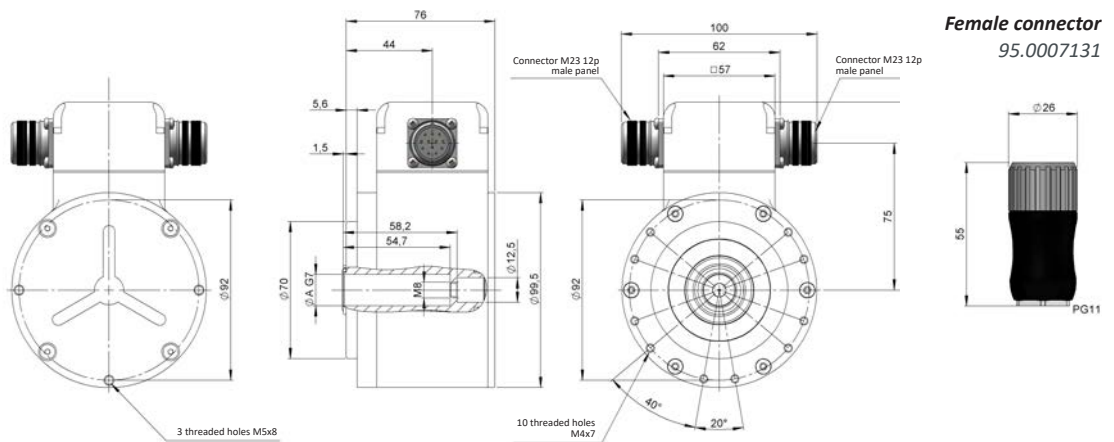
	Cable	Connector	Connector	Terminal
	3x2x0,14+2x0,34 95.0008003	M12 8p CCW	M23 12p CW	
GND	Black	1	1	GND
VCC	Red	2	2	+UB
A	Yellow	3	3	A+
B	Green	4	4	B+
\tilde{A}	Brown	5	5	A-
\tilde{B}	Blue	6	6	B-
0 (reference)	Grey	7	7	Z+
$\tilde{0}$	Orange	8	8	Z-
Shield	Shield	Housing	Housing	Shield

CONNECTION DIMENSIONS

Female connector included

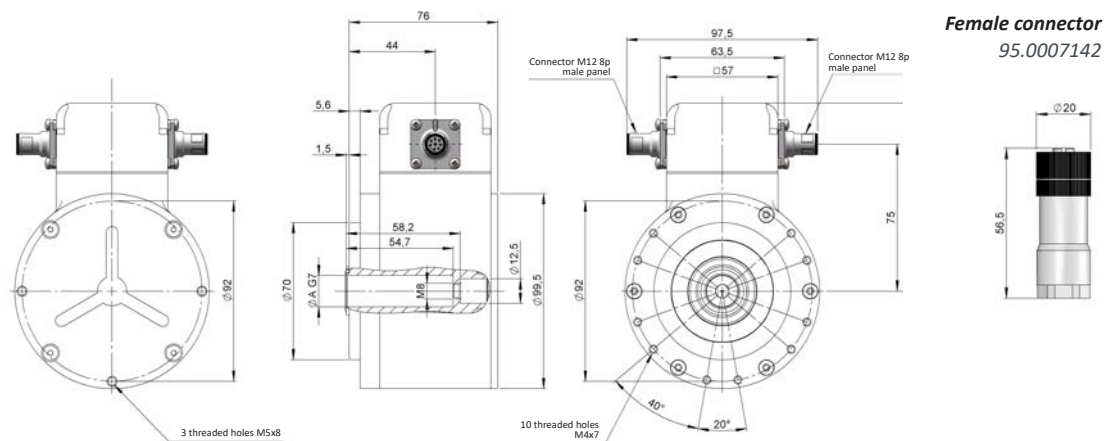
Connection 2

Radial
M23 12p
male panel
clockwise



Connection 3

Radial
M12 8p
male panel
counter clockwise



SERIE 100H / DUO

INCREMENTAL ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

ACCESSORIES

(not included)

Torque arm M6

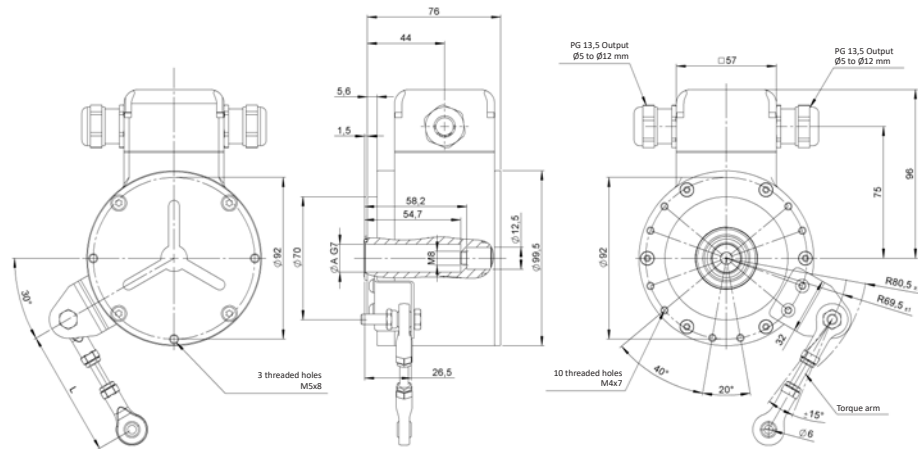
90.1130.70
L= 70 mm

90.1130.100
L= 100 mm

other length
available on order

Mounting kit
00.0003008

Support plate
00.0003007



To ensure proper use and assembly of the accessory, refer to the manual.

Earthing strap

00.0003006
200 mm

