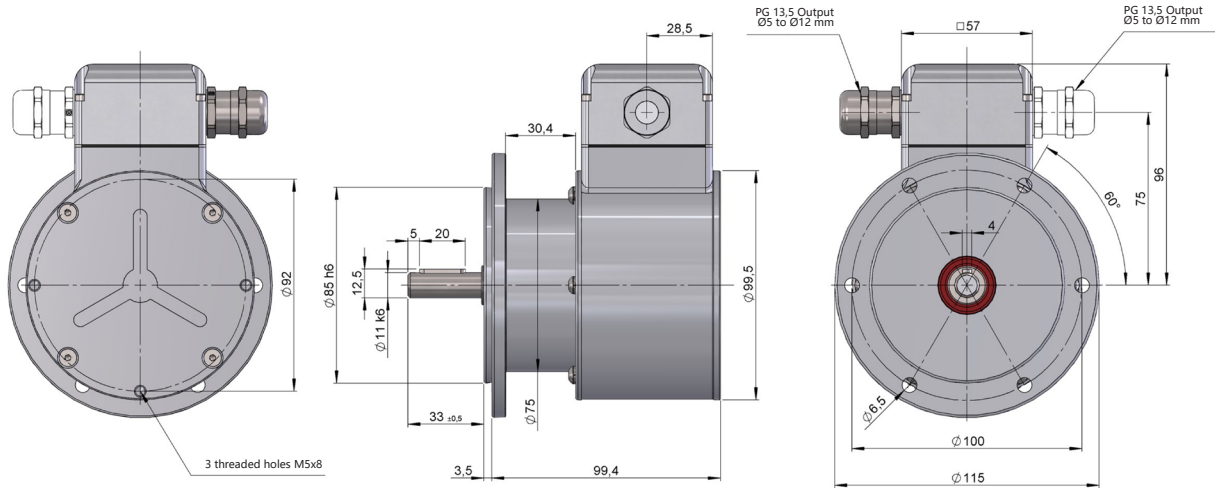




SERIE 100 / DUO

INCREMENTAL ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

- Resolution up to 5000 pulses per turn
- External diameter 100 mm
- Shaft Ø 11 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



Drawing shaft type 11, connection type 1

REFERENCE

Reference example: 100-11211-5000

Serie	Solid shaft	Output signals	Connection	Power Supply / Electronic output	Pulses number	Special customer
100/100DUO -	☐ ☐	☐	☐	☐ -	☐ ☐ ☐ ☐	☐ ☐ ☐ ☐
100. Single output 100DUO. Dual output (*)	11. Ø 11 mm	1. ABZ, $\overline{\text{ABZ}}$ 2. AB, $\overline{\text{AB}}$	1. Radial terminal box 2. Radial cable 2 m 3. Radial M23 12p CW 4. Radial M12 8p CW 5. Double-shielded radial cable 2 m 6. Double-shielded halogen-free radial cable 2 m	1. 9...30 VDC / Push-Pull differential line driver 9...30 VDC 2. 5 VDC / Differential line driver 5 VDC (RS422 compatible) 6. 9...30 VDC / Differential line driver 5 VDC (RS422 compatible)		YT00. -40°C YT01. +100°C

Order your reference
Step file 3D

info@encoderhohner.com
service available in 24 h

(*) Redundant encoder, with 2 galvanically isolated electronics.



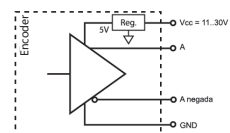
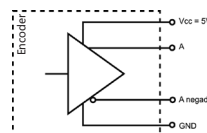
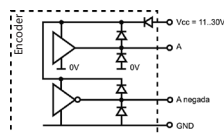
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INCREMENTAL ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

MECHANICAL SPECIFICATIONS

Materials	Housing: Anodized aluminium Shaft: Stainless Steel
Bearings	Dual set of hybrid bearings with ceramic balls
Bearings lifetime	1x10 ¹⁰ rev.
Flange	Euro flange B10
Shaft diameter	11 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	≈ 250 gcm ²
Starting torque at 20°C (68°F)	≈ 0.07 Nm
Maximum load permitted on axial shaft	350 N
Maximum load permitted on radial shaft	450 N
Weight aprox.	1.8 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	5000
Radial connection	Terminal box, cable or M12/M23 connector

OUTPUT SIGNALS



OUTPUT CIRCUIT	Push-Pull differential line driver	Differential line driver (RS422 compatible)	Differential line driver (RS422 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.

100DUO: Optionally, different output signal level for each encoder (factory configuration).

SERIE 100 / DUO

INCREMENTAL ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

CONNECTION



	Cable 3x2x0.14+2x0.34 standard 95.0008003	Cable 5x2x0.14+2x0.34 double-shielded 95.0008070	Cable 5x2x0.14+2x0.34 double-shielded halogen-free 95.0008082	Cable 6x2x0.14 up to 100°C 95.0008072	Connector M12 8p CCW	Connector M23 12p CW	Terminal
GND	Black (BK)	White (WH) (tp1)	White (WH) (tp1)	White (WH)	1	1	GND
+UB	Red (RD)	Brown (BN) (tp1)	Brown (BN) (tp1)	Brown (BN)	2	2	+UB
A	Yellow (YE)	Red (RD) (tp2)	Red (RD) (tp2)	Green (GN)	3	3	A+
B	Green (GN)	Black (BK) (tp3)	Black (BK) (tp3)	Blue (BU)	4	4	B+
$\bar{A}$	Brown (BN)	Light blue (LBU) (tp2)	Light blue (LBU) (tp2)	Yellow (YE)	5	5	A-
$\bar{B}$	Blue (BU)	Violet (VT) (tp3)	Violet (VT) (tp3)	Red (RD)	6	6	B-
Z	Grey (GY)	Grey (GY) (tp4)	Grey (GY) (tp4)	Grey (GY)-Pink (PK)	7	7	Z+
$\bar{Z}$	Orange (OG)	Pink (PK) (tp4)	Pink (PK) (tp4)	Red (RD)-Blue (BU)	8	8	Z-
Case	Shield	Shield	Shield	Shield	Case	Case	Shield

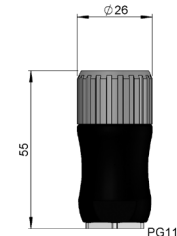
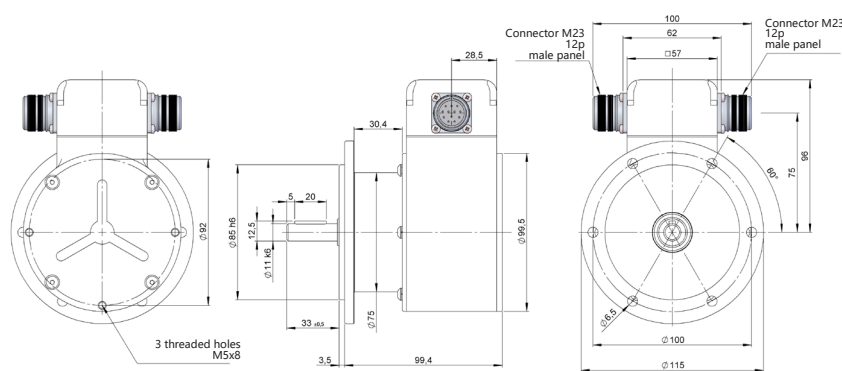
(tp1), (tp2), (tp3), (tp4) Twisted pair cables.

CONNECTION DIMENSIONS

Female connector not included

Connection 3

Radial
M23 12p
male panel
clockwise

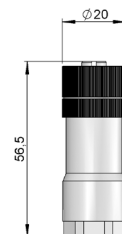
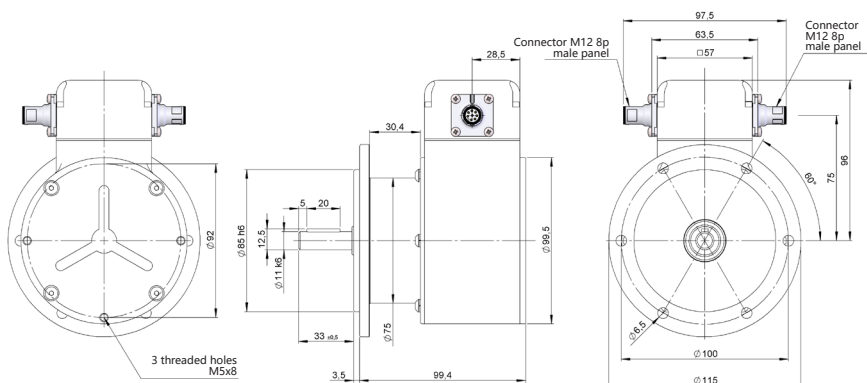


Female connector
95.0007131

Pre-assembled cable
89.005.02.000.XX
Length in meters

Connection 4

Radial
M12 8p
male panel
counter clockwise



Female connector
95.0007152

Pre-assembled cable
89.003.02.000.XX
Length in meters

SERIE 100 / DUO

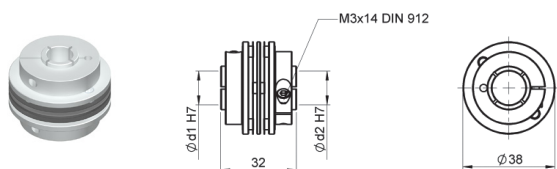
INCREMENTAL ENCODER FOR HEAVY DUTY INDUSTRIAL APPLICATIONS

ACCESSORIES EXAMPLES

(not included)

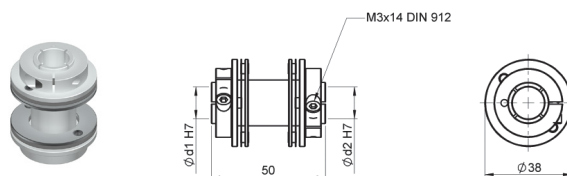
Coupling LFA 3832

LFA 3832 11/d2
d2: Ø 06..14



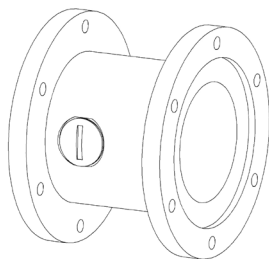
Coupling LFA 3850

LFA 3850 11/d2
d2: Ø 06..14



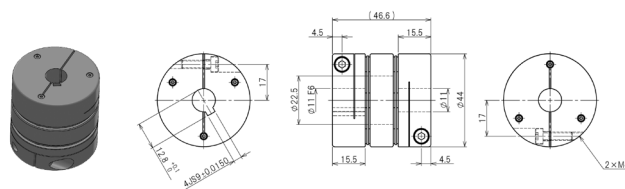
Coupling bell

Customized



Coupling LFA 4447

LFA 4447 11F6K/d2H8
d2: Ø 08..22



* Send us your 3D and we will design the bell for your application.