

Heavy Duty Series

Solid shaft with EURO flange B10
1000...10000 pulses per revolution



FHD S115

with redundant option



Features

- Robust, compact housing
- Two bearings with large distance
- High shaft load up to 300 N
- Highest operating speed 10000 rpm
- Terminal box, M23 connector, Cable options

Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC ±5 %
Consumption w/o load	≤100 mA
Pulses per revolution	1000...10000
Phase shift	90° ±15°
Scan ratio	45...55 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤200 kHz
Output signals	A, B, Z + inverted
Output stages	push-pull TTL/RS422
Shaft insulation	By plastic coupling
Transmission length	≤400m at 100kHz
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approvals	CE

Technical data - mechanical design

Size (flange)	B10 flange//115 mm
Shaft type	Ø11mm solid shaft
Shaft loading	≤240 N axial ≤300 N radial
Protection DIN EN 60529	IP 66
Operating speed	≤10000 rpm (mechanical)
Operating torque	≤4 Ncm
Rotor moment of inertia	160 gcm ²
Materials	Housing: die-cast aluminium Shaft: stainless steel
Operating temperature	-40...+100 °C -40...+90 °C
Connection	Terminal box Flange connector M23, 12-pin Cable 1 m
Weight approx.	1.2 kg

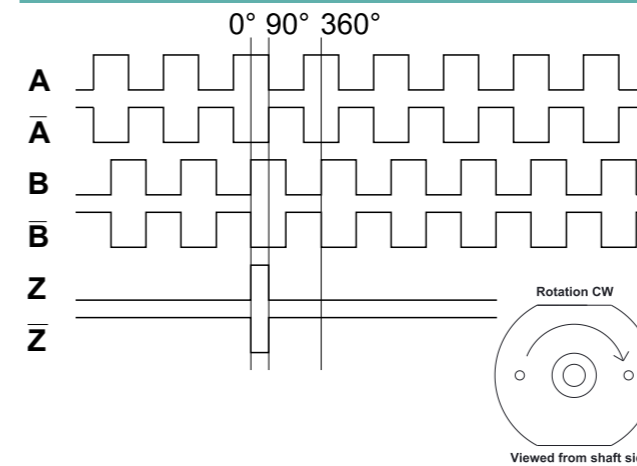
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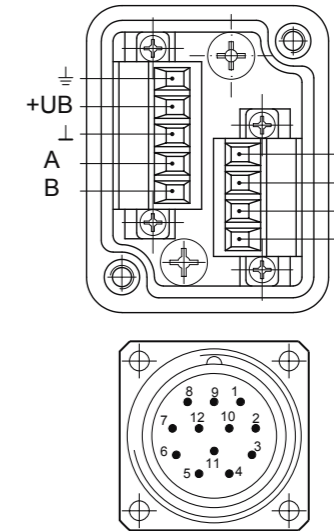
Output signals



Terminal assignment

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Connecting terminal terminal box

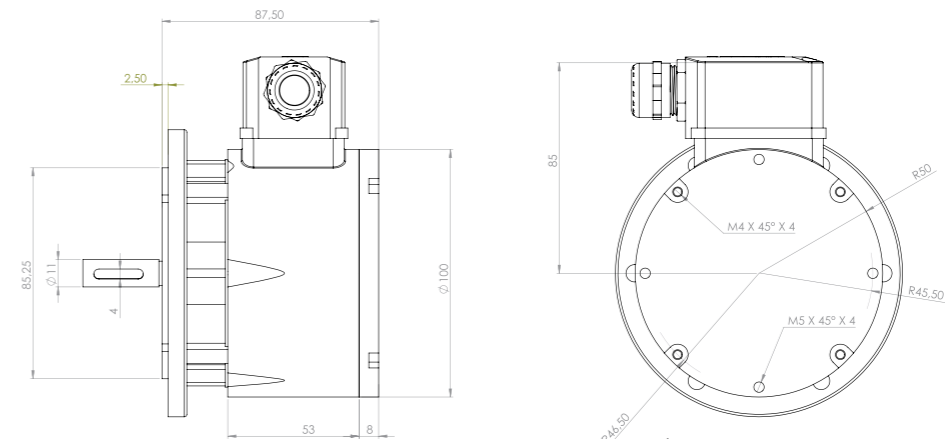


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Flange connector
M23, 12-pin

Pin	Assignment
1	B ⁻
2	nc
3	Z
4	Z ⁻
5	A
6	A ⁻
7	nc
8	B
9, 10	nc
11	GND
12	+UB

Mechanical Dimensions



Encoder Part Number

FHD S 115 11 DN 30V 1024 - T

S : Shaft

Flange : 115mm

Shaft Diameter
11 : 11mm shaft with keyway

DN: ABZ + Inverted

Electrical Connections:

T : Terminal box
M : M23 12L pin connector
C : Cable
R : Redundant Dsub Connection

PPR Options :

1000 - 1024 - 2000 - 2048 - 2500 - 4096 - 5000 - 8092 - 10000

Supply Voltage and output circuit :

5V : 5V in / out
245V : 5-30V in 5V out
30V : 5-30V in / out