

# 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

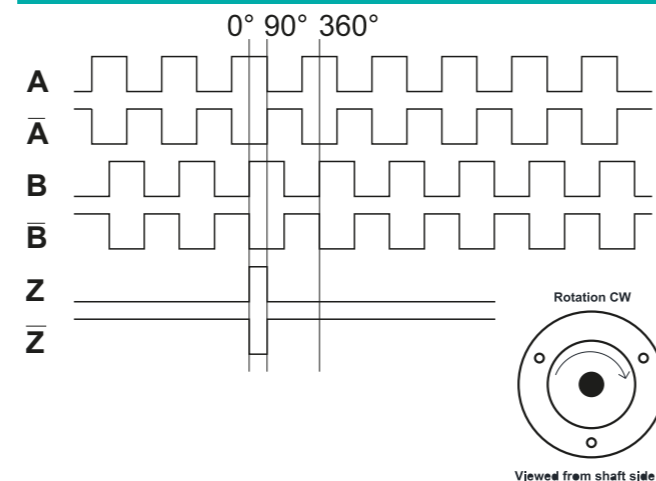
### Technical data - electrical ratings

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 <sup>2</sup>
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

### Output signals

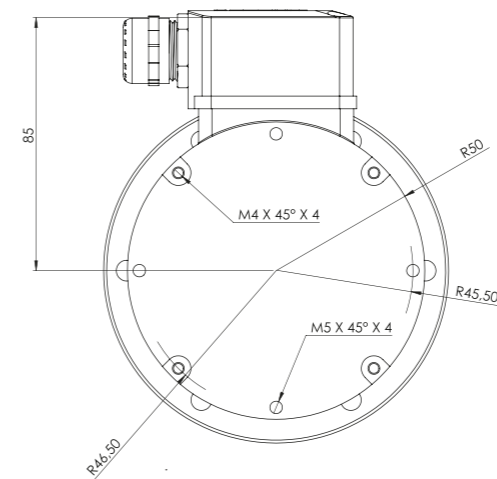
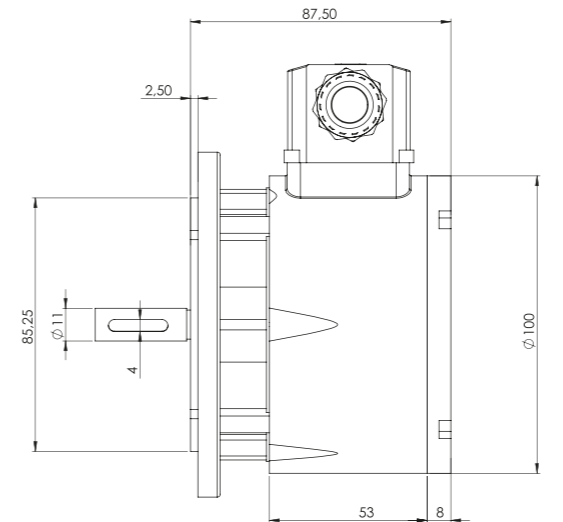


# Heavy Duty Series

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

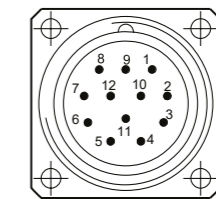
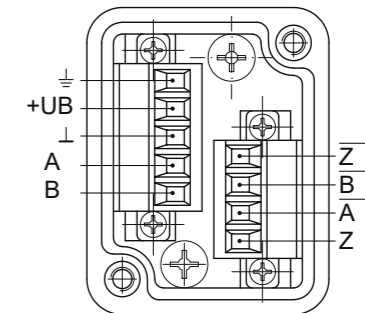
## FHD S115

### Mechanical Dimensions



### Terminal assignment

FHD S115  
Connecting terminal terminal box



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

### Encoder Part Number

