

Heavy Duty Series

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



**Two Redundant
&
Independent Outputs**

FHDR S115 Series



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

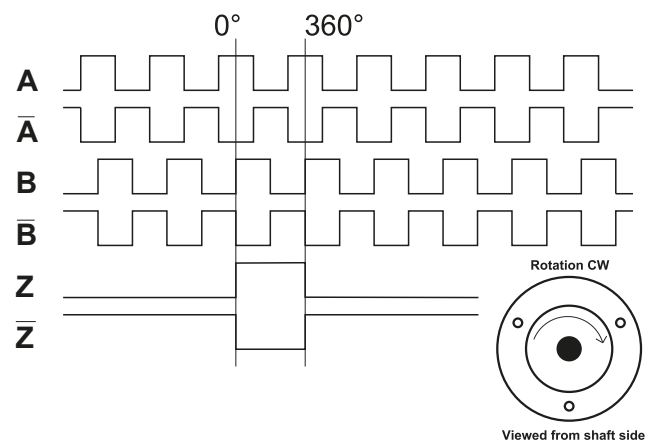
Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC $\pm 5\%$
Consumption w/o load	≤ 100 mA
Pulses per revolution	1000...10000
Phase shift	$90^\circ \pm 15^\circ$
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	≤ 400 m at 100kHz
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approvals	CE

Technical data - mechanical design

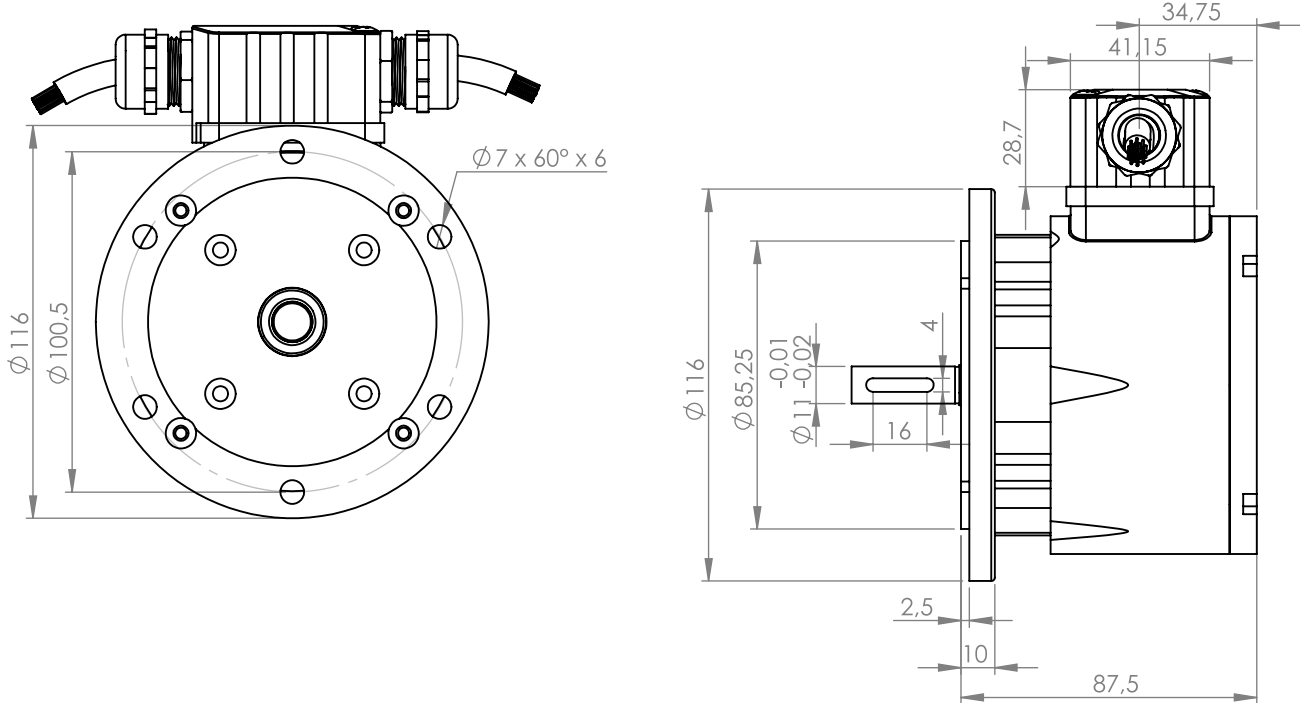
Size (flange)	B10 flange//115 mm
Shaft type	$\varnothing 11$ mm solid shaft
Shaft loading	≤ 240 N axial ≤ 300 N radial
Protection DIN EN 60529	IP 66
Operating speed	≤ 10000 rpm (mechanical)
Operating torque	≤ 4 Ncm
Rotor moment of inertia	160 gcm ²
Materials	Housing: die-cast aluminium Shaft: stainless 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

Output signals



FHDR S115 Series

Mechanical Dimensions



Encoder Part Number

FHDR S 115 11 6 30V 1024 - RSO

FHDR : Heavy Duty Redundant

S : Shaft redundant

Flange : 115 mm

Shaft Diameter
11 : 11 mm

Output Channels
1 : A
2 : AB
3 : ABZ
4 : AB+A' B'
6 : ABZ+A' B' Z'

Electrical Connections:

RSO : Redundant Single Out Terminal Version
RDO : Redundant Double Out Terminal Version

PPR Options :

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

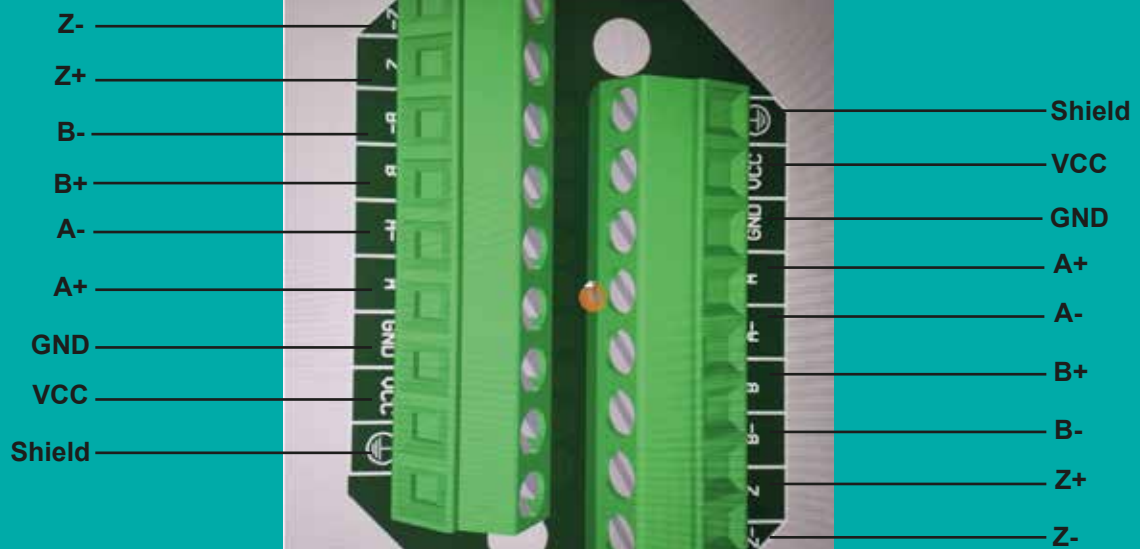
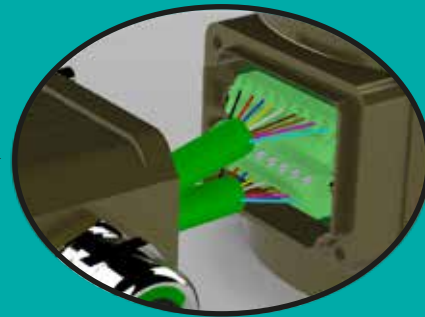
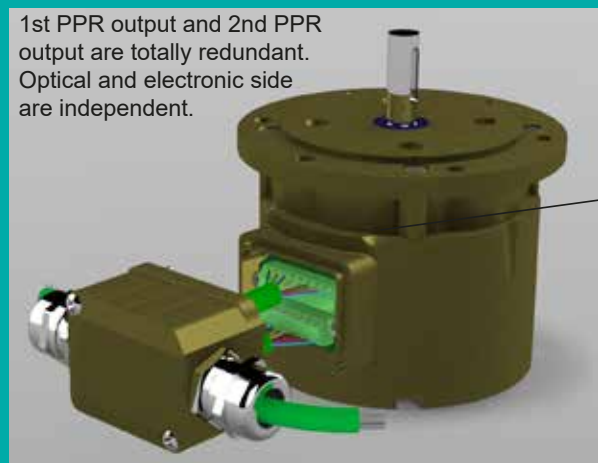
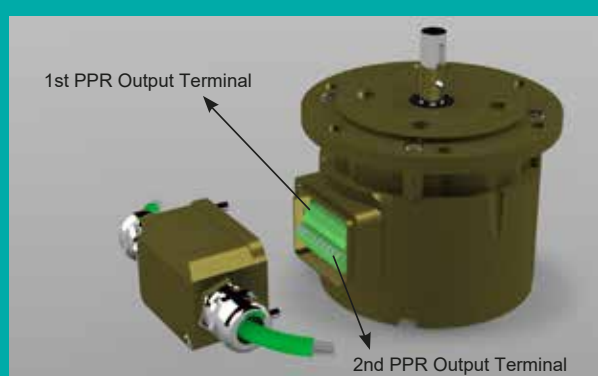
Supply Voltage and output circuit :

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

FHDR S115 Series

RDO

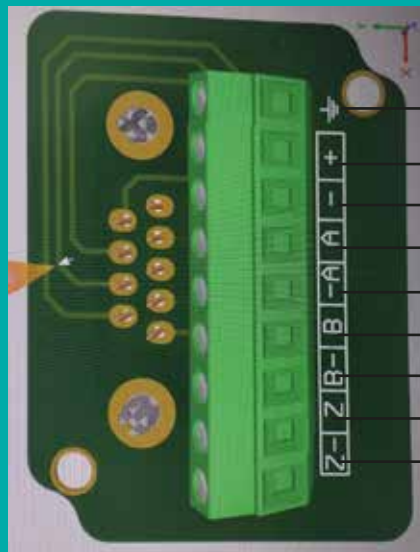
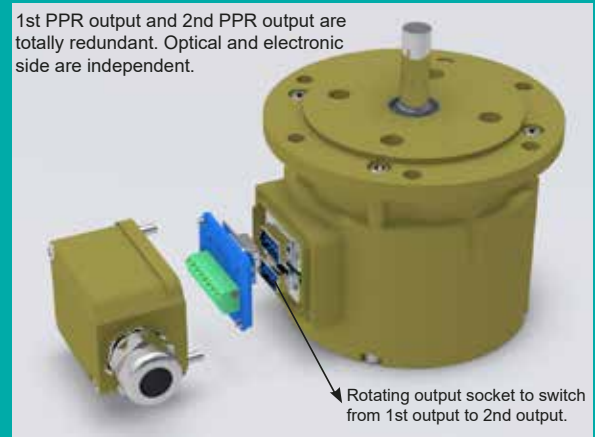
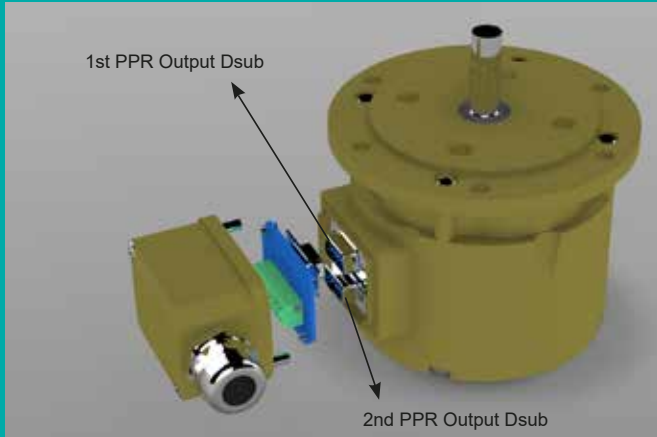
RDO : Redundant Double Out Terminal Version



RSO

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RSO : Redundant Double Out Terminal Version



- Shield
- VCC
- GND
- A+
- A-
- B+
- B-
- Z+
- Z-