



EXDJ78B Series
 Explosion-proof absolute encoder
 Equipment Type Class II (gas), Class III (dust)
 Explosion-proof form: flame-proof type
 Ex-mark: Ex db II C T5/T6 Gb Ex tb III C T95°C/T80°C Db
 Applicable danger Zone 1 (gas) / 21 (dust)
 Induction principle: Magnetic
 Function Principle: multiple turn
 Multi-turn technology: mechanical gear sets without batteries
 Housing size $\Phi 78\text{mm}$
 Blind hollow shaft $\Phi 12$ 、 $\Phi 14$ 、 $\Phi 16$ 、 $\Phi 25.4\text{mm}$
 Number of steps 65536 /16Bit
 Turns 16384 /14Bit
 Interface: PROFINET
 Supply voltage 10-30VDC
 Protection IP66

Mechanical characteristics

Shaft diameter (mm)	Blind hollow shaft $\Phi 12$ 、 $\Phi 14$ 、 $\Phi 16$ 、 $\Phi 25.4\text{mm}$
Protection	IP66
Speed	3000rpm
Maximum shaft load	Max. 60N Axial; max. 80N Radial
Shock resistance	100g, 6ms
Vibration resistance	10g, 10...2000Hz
Materials	316L stainless steel
Spindle materials	Aluminum alloy anodizing/316L stainless steel
The shell material	Aluminum alloy anodizing/316L stainless steel
Working temperature	-40°C...+85°C
Storage temperature	-40°C...+85°C
Weight	≈1600g (Aluminium alloy shell) ≈3900g (316L stainless steel)
Exit position	Radial direction Axial direction

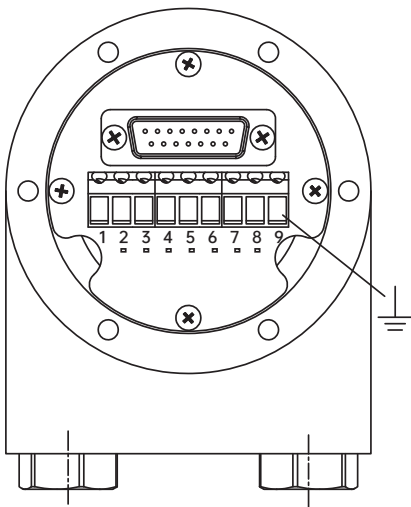
Electrical characteristics

Interface	PROFINET IO
Equipment communication	RT
Operating voltage	10...30VDC
Power consumption	≤2.5W
Transmission rate	100M Bit/S
Code	Binary
Programming function	Resolution, Default setting, Precast counting direction, IP address
Anti-interference	EN61000-6-2
Launch interference	EN61000-6-4
Circuit protection	Surge protection, Reverse polarity protection, ESD protection

Terminal assignment

PROFINET IO

Signal		GND	+Ub	-	-	Rx-	Tx-	Rx+	Tx+
Terminal		1	2	3	4	5	6	7	8



Ordering information

EXDJ X 78 B 16 B 12 13 S11T 10-30 R 2

① Shell material
Null: Aluminium alloy
Z: 316L stainless steel

② Shaft type
B: Blind hollow shaft

③ Shaft diameter
12: Φ 12mm
14: Φ 14mm
16: Φ 16mm
25.4: Φ 25.4mm

④ Resolution MT
00: 1 (Resolution ST)
12: 4096
14: 16384

⑤ Resolution ST
12: 4096
13: 8192
14: 16384
16: 65536

⑥ Supply voltage
10-30: 10-30VDC

⑦ Exit position
R: Radial direction
C: Axial direction

⑧ Connection type
Figure: Cable length(m)
D¹: Reserve two cable connectors
K: Cable connector 1 pc, Cable Gland Plug 1 pc
N: terminal box, Reserve two M16 x 1.5mm threaded holes for cable connectors

Note: Printed in bold=standard items

Notes: 1、Corner mark¹: The cable used in the reserved cable joint is 3-8mm in diameter.

2、Lease contact us for further electrical parameter Settings and requirements.

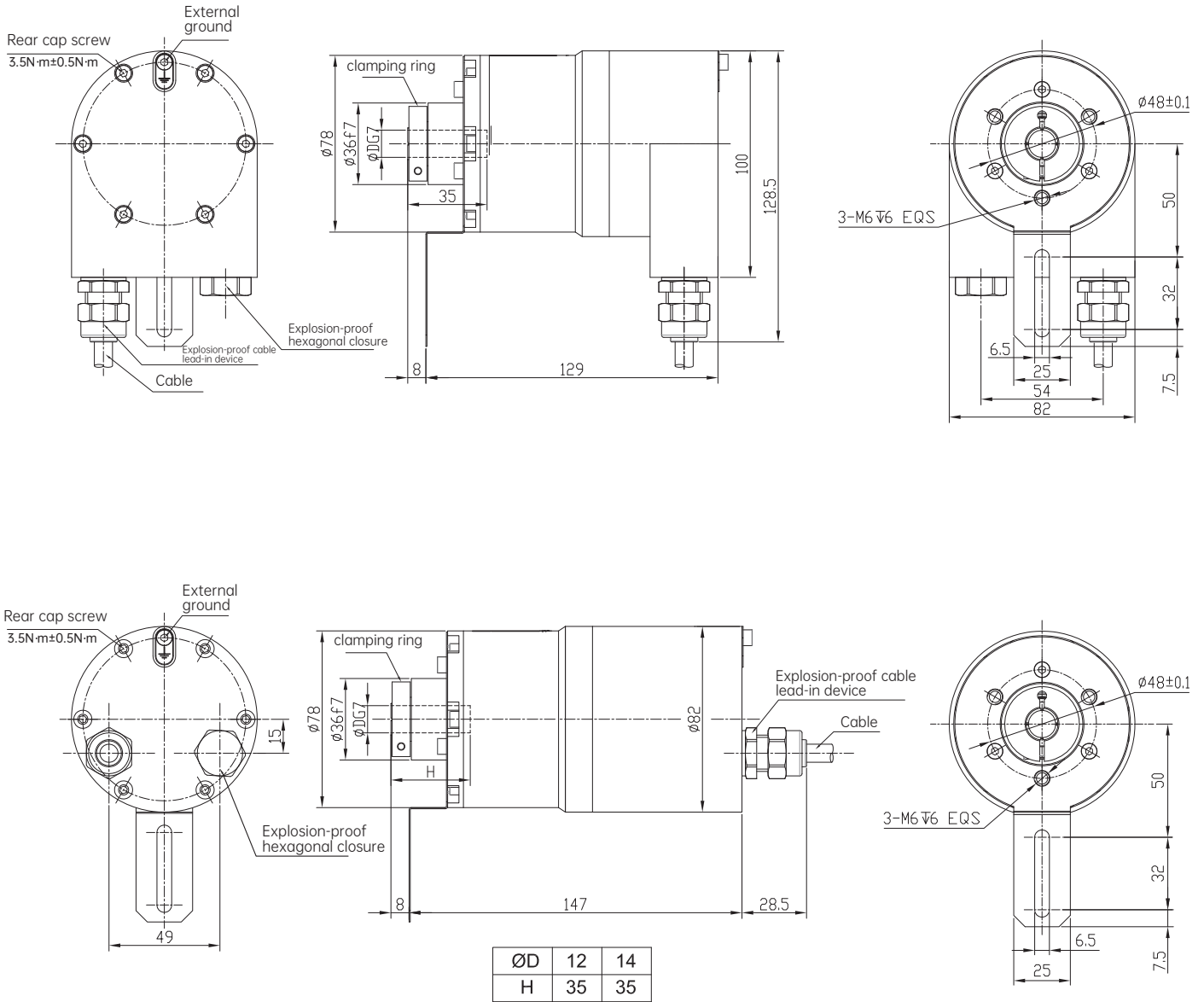
Ordering example: EXDJ78B16B1213S11T10-30RN, Counting direction of the factory is set to clockwise increasing.

Explanation: EXDJ78B Series, Blind hollow shaft 16mm, Binary code, Multiturn resolution 4096, Singleturn resolution 8192, PROFINET-RT, Baud rate 19200, Even check, 10-30VDC, Radial direction 2m.

Recommended model: EXDJ78B16B1213S11T10-30R1

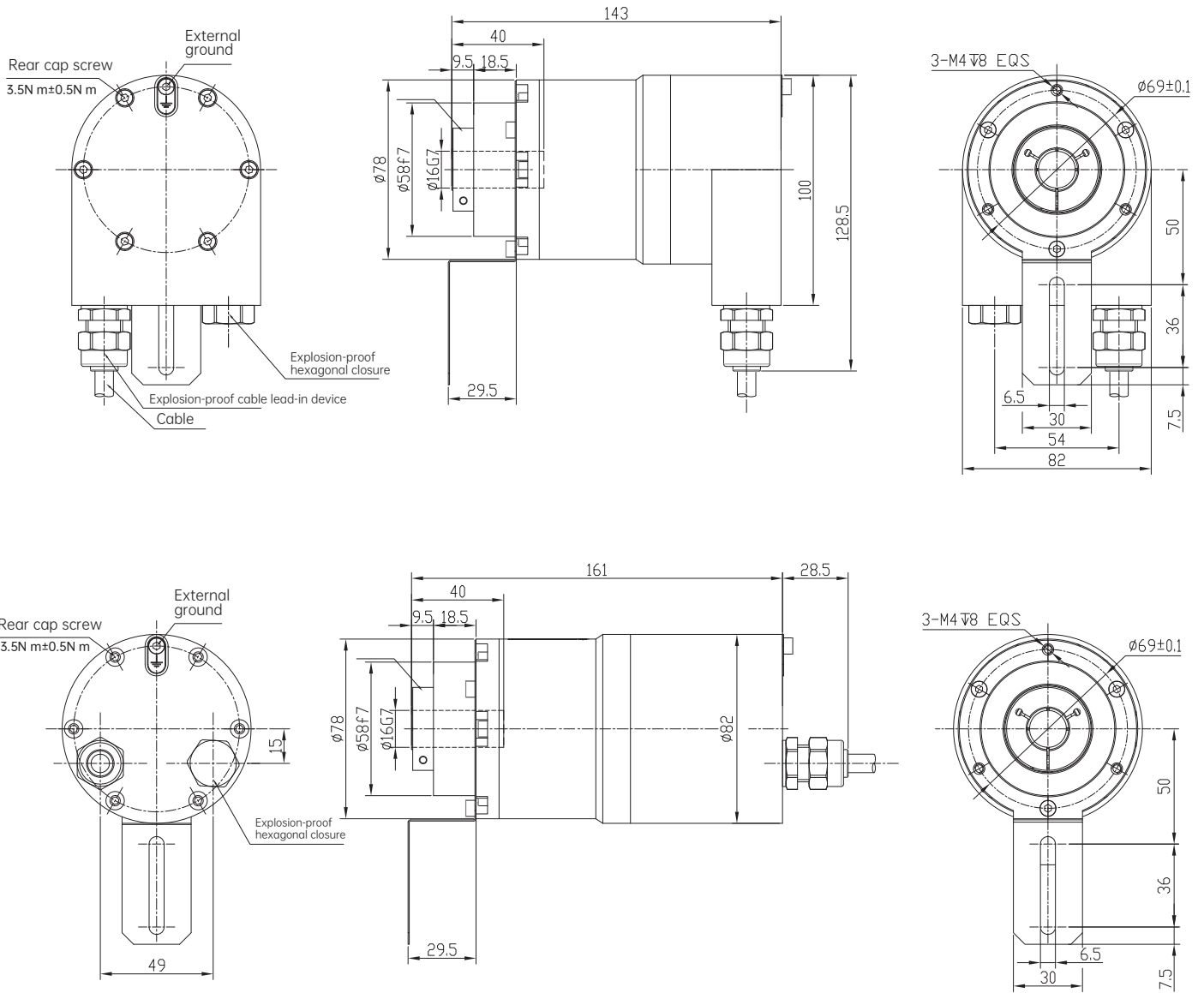
Dimensions

EXDJ(Z)78B12/14



Dimensions

EXDJ(Z)78B16



Dimensions

EXDJ(Z)78B25.4

