



EXDJ78S 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 $\Phi 78\text{mm}$
 Solid shaft $\Phi 10$ 、 $\Phi 12\text{mm}$
 Number of steps 65536 /16Bit
 Turns 16384 /14Bit
 Interface: PROFINET
 Supply voltage 10-30VDC
 Protection IP66

Mechanical characteristics

Shaft diameter (mm)	Solid shaft $\Phi 10$ 、 $\Phi 12\text{mm}$
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

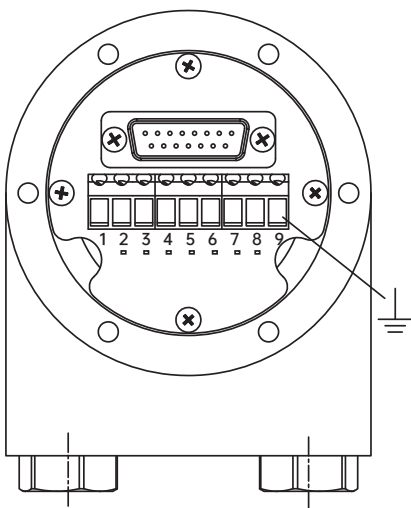
Electrical characteristics

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 XX S 12 B 12 13 S11T 10-30 R 2

① Shell material

Null: Aluminium alloy

Z: 316L stainless steel

② Flange

Null: Clamp flange

01: Synchronous flange

③ Shaft type

S: Solid shaft

SK¹: Solid keyway shaft

④ Shaft type

S: Solid shaft

10: Φ10mm

12: Φ12mm

SK: Solid keyway shaft

12: Φ12mm

⑤ Resolution MT

00: 1 (Resolution ST)

12: 4096

14: 16384

⑥ Resolution ST

12: 4096

13: 8192

14: 16384

16: 65536

⑦ Supply voltage

10-30: 10-30VDC

⑧ Exit position

R: Radial direction

C: Axial direction

⑨ Connection type

Figure: Cable length(m)

D²: 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 solid keyway shaft can be selected from Φ12mm.

2、Corner mark²: The cable used in the reserved cable joint is 3-8mm in diameter.

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

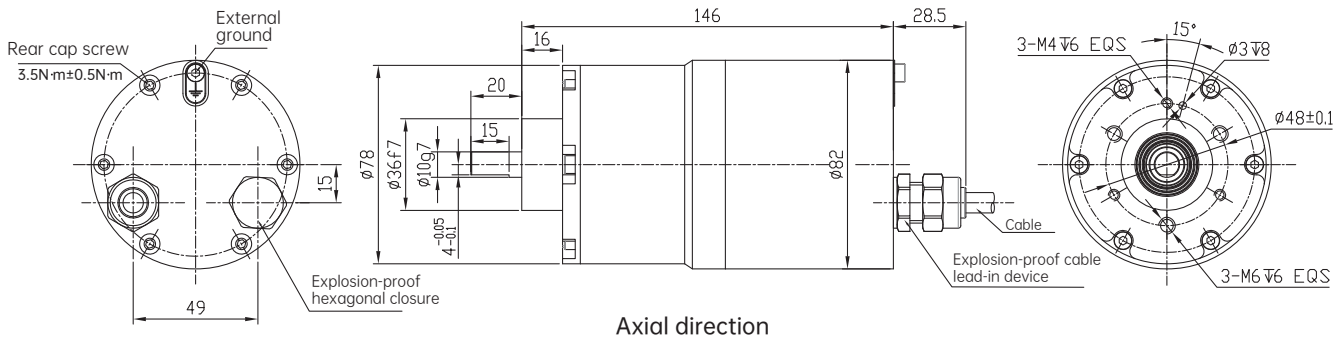
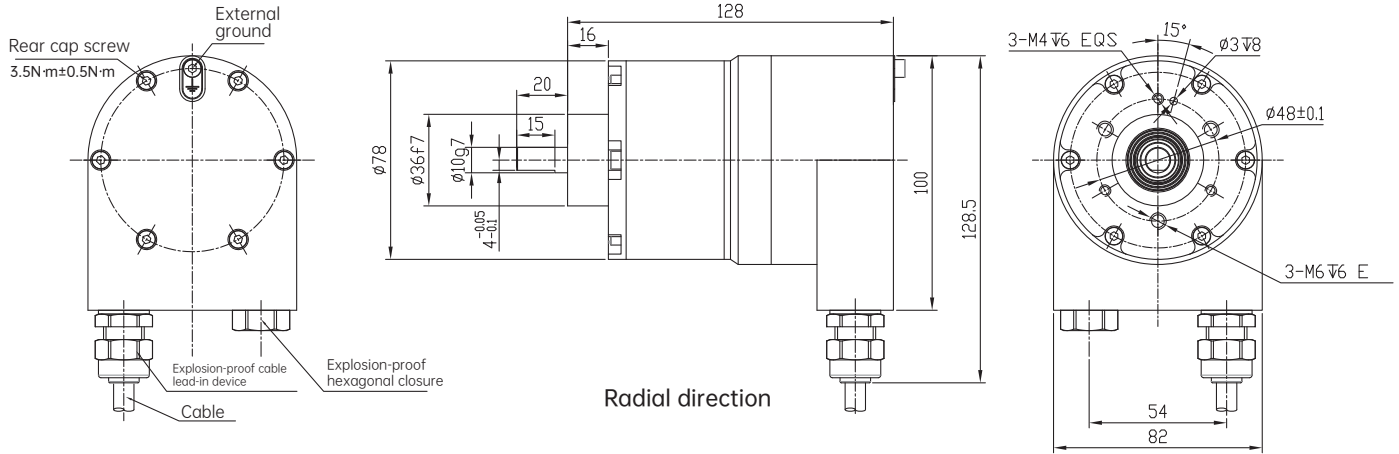
Ordering example: EXDJ78S12B1213S11T10-30RN, Counting direction of the factory is set to clockwise increasing.

Explanation: EXDJ78S Series, Solid shaft 12mm, Binary code, Multiturn resolution 4096, Singleturn resolution 8192, no Incremental signal, PROFINET-RT, T10-30VDC, Radial direction 2m.

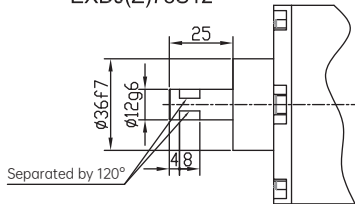
Recommended model: EXDJ78S10B1213S11T10-30R1

Dimensions

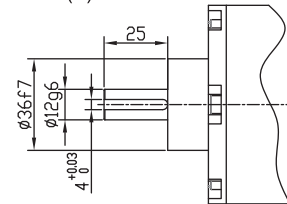
EXDJ(Z)78S



EXDJ(Z)78S12

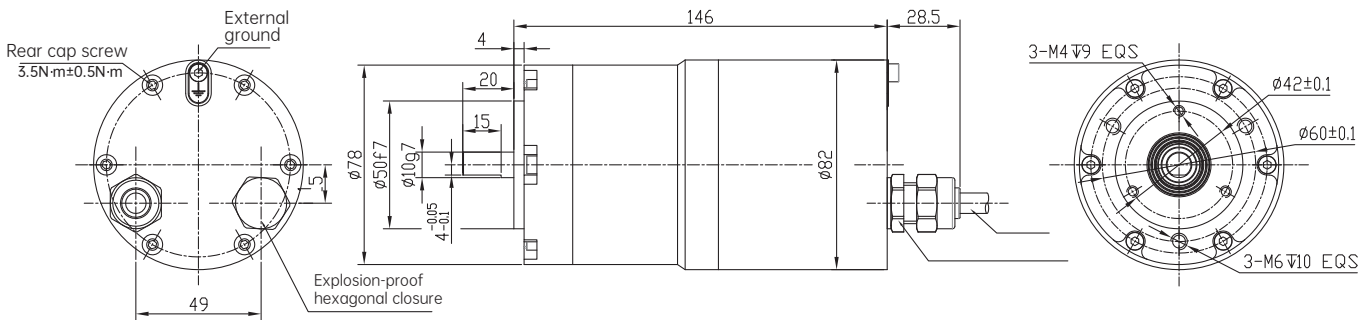
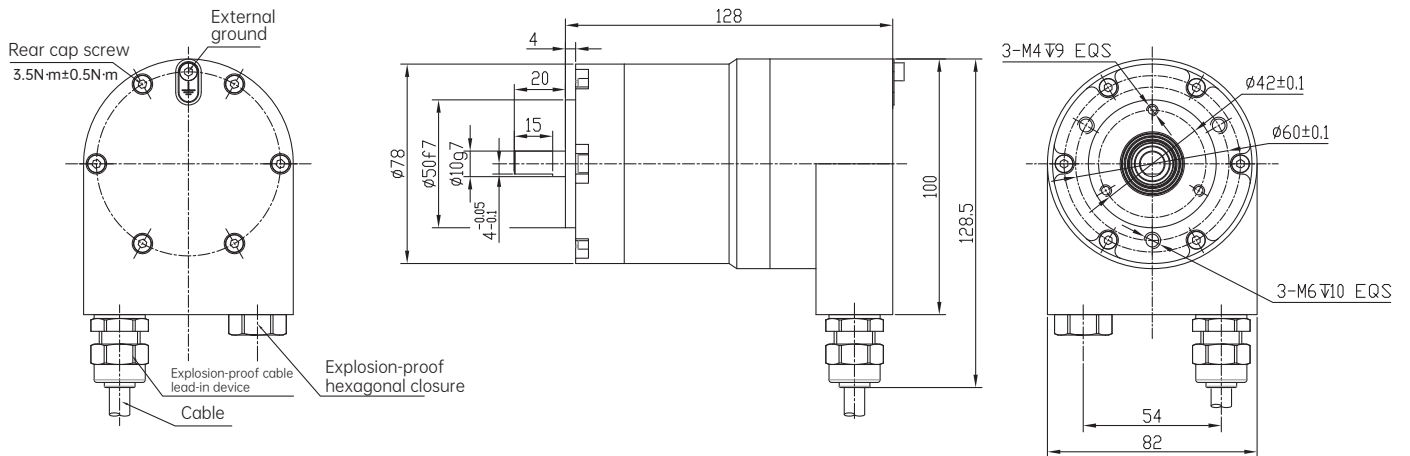


EXDJ(Z)78SK12

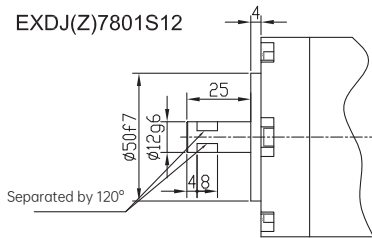


Dimensions

EXDJ(Z)7801S



EXDJ(Z)7801S12



EXDJ(Z)7801SK12

