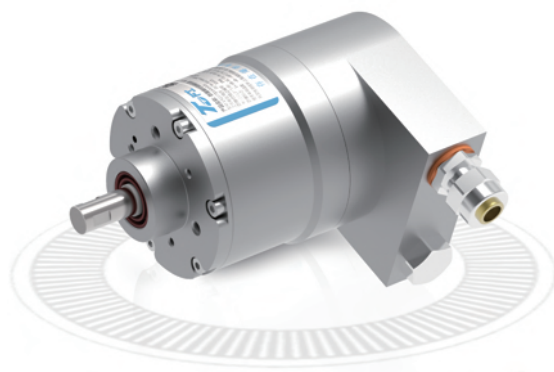




EXDJ78S Series

Explosion-proof absolute encoder

Equipment Type Class II (gas), Class III (dust)

Explosion-proof form: flame-proof type

NEPSI: Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db

ATEX: Ex II 2GD Ex db IIC T5/T6 Gb, Ex tb IIIC T95°C/T80°C Db

IECEx: Ex db IIC T5/T6 Gb, Ex tb IIIC 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: CANopen、CANopen+Incremental signal

Supply voltage 10-30VDC

Protection IP66

Mechanical characteristics

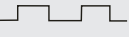
Shaft diameter (mm)	Solid shaft $\Phi 10$ 、 $\Phi 12\text{mm}$
Protection	IP66
Speed	3000rpm
Maximum shaft load	Max. 60N Axial; max. 80N Radial
Shock resistance	100g, 6ms
Vibration resistance	10g, 10...2000Hz
Materials	316L stainless steel
Spindle materials	Aluminum alloy anodizing/316L stainless steel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

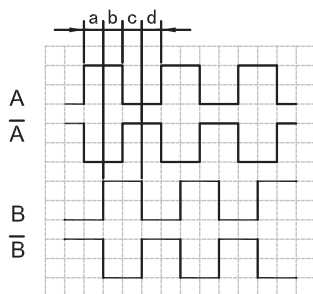
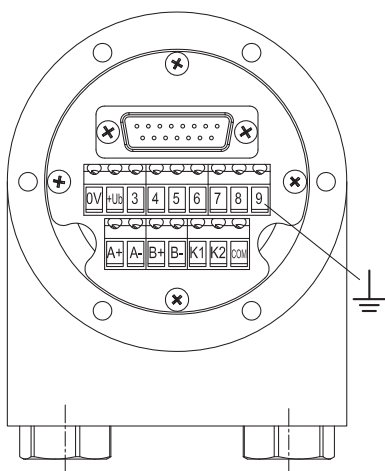
Electrical characteristics

Interface	CANopen、CANopen+Incremental signal
No-load current	< 100mA
Operating voltage	10...30VDC
Transmission rate	≤1M Bit/S
Code	Binary
Anti-interference	EN61000-6-2
Launch interference	EN61000-6-4
Circuit protection	Surge protection, Reverse polarity protection, ESD protection

Terminal assignment

CANopen+Incremental signal

Signal		GND	+Ub	CAN_0V	CAN_L	CAN_H	CAN_0V	CAN_L	CAN_H	A+	A-	B+	B-
Color		WH	BN	PUR	YE	GN	/	/	/	GY	PK	RD/BU	GY/PK
Terminal		0V	+Ub	3	4	5	6	7	8	A+	A-	B+	B-



⤵ Shaft turning clockwise,
top-view of shaft.
 $a, b, c, d = T/4 \pm T/10$

Ordering information

EXDJ	X	78	XX	S	12	B	12	13	XX	S90T	10-30	R	2
	①		②	③	④		⑤	⑥	⑦		⑧	⑨	⑩
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: Single-turn 12: 4096 14: 16384				⑥ Resolution ST 12: 4096 13: 8192 14: 16384 16: 65536				⑦ Incremental signal Null: no increment signal P1: 1024PPR, A+A- B+B- , Push-pull difference (HTL) P3: 2048PPR, A+A- B+B- , Push-pull difference (HTL)					
⑧ Supply voltage 10-30: 10-30VDC				⑨ Exit position R: Radial direction C: Axial direction				⑩ 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 reserved cable connector is suitable for cables with an outer diameter of 3 ~ 8 mm. For cables with outer diameter 8 ~ 11 mm, an N-type connector fitted with 8816B accessory may be selected.

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

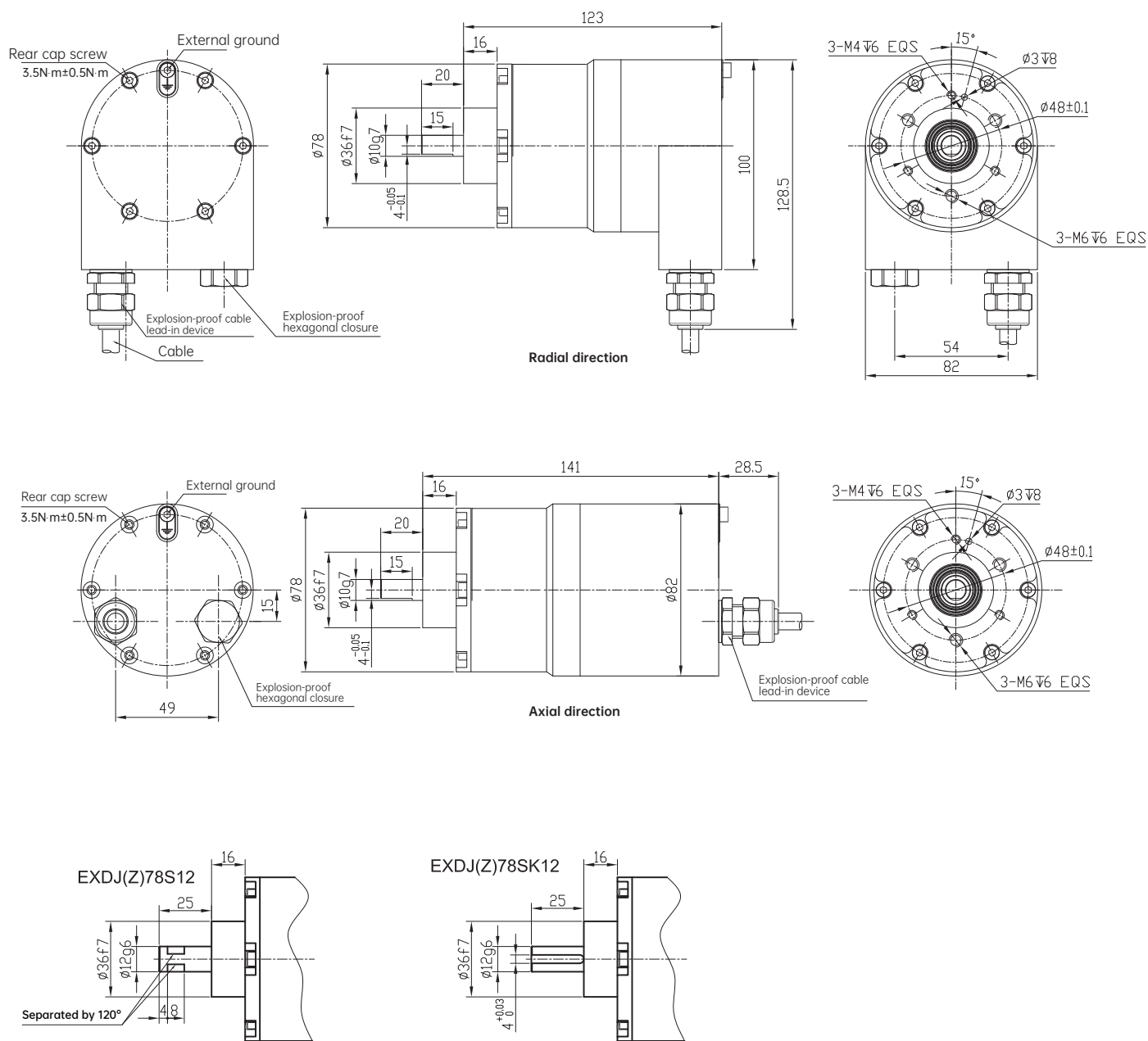
Ordering example: EXDJ78S12B1213S90T10-30R2, Counting direction of the factory is set to clockwise increasing.

Explanation: EXDJ78S Series, Solid shaft 12mm, Binary code, Multiturn resolution 4096, Singleturn resolution 8192, no Incremental signal, CANopen, Transmission rate 125K, 10-30VDC, Radial direction 2m.

Recommended model: EXDJ78S10B1212S90T10-30R1

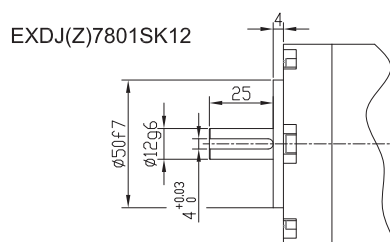
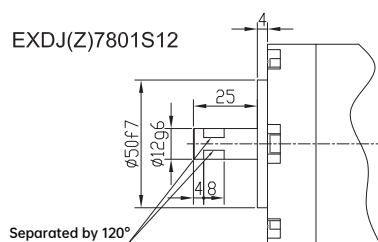
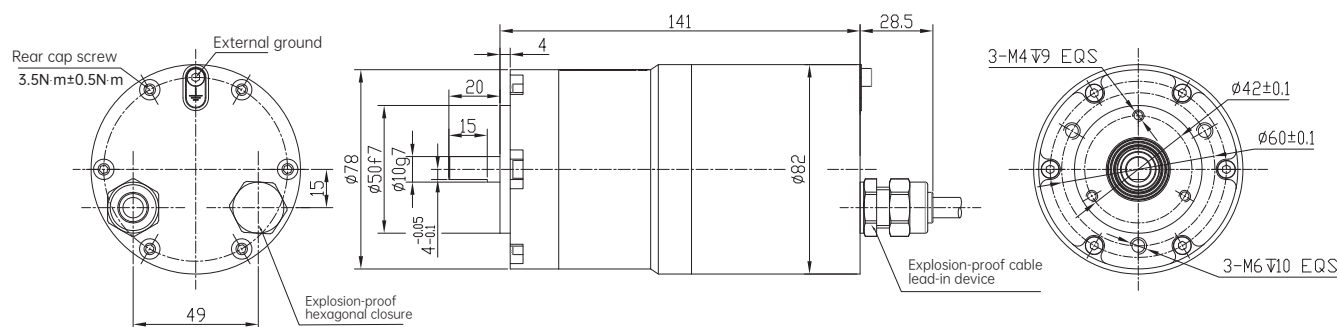
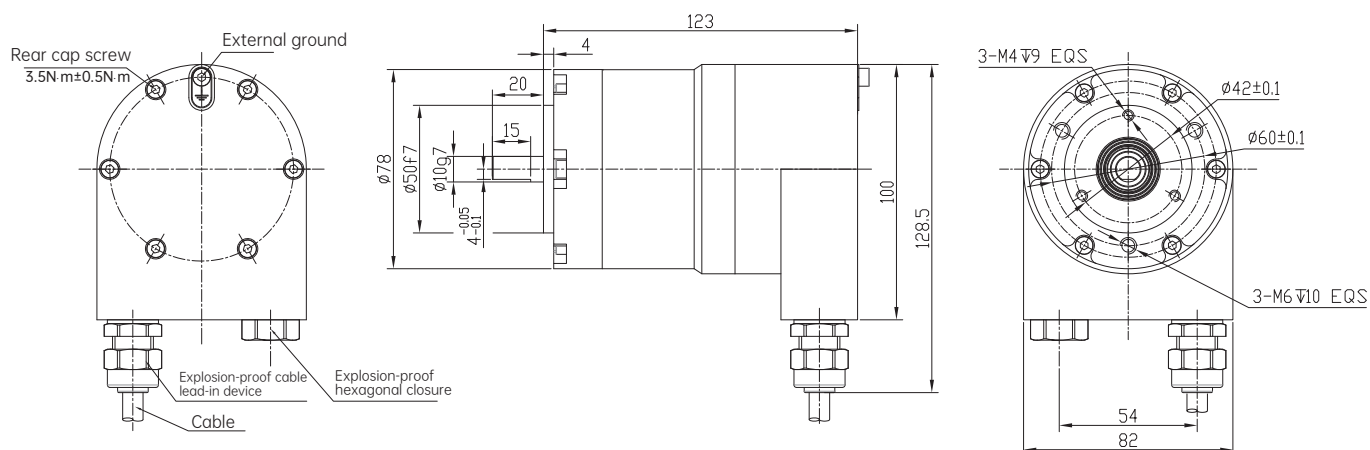
Dimensions

EXDJ(Z)78S



Dimensions

EXDJ(Z)7801S



Separated by 120°

