

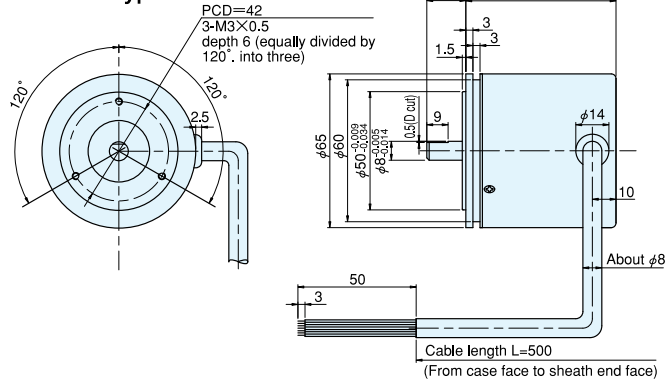
MXS-series

[High-resolution Multiple-rotation
(64 rotations max) Absolute Type Encoder]

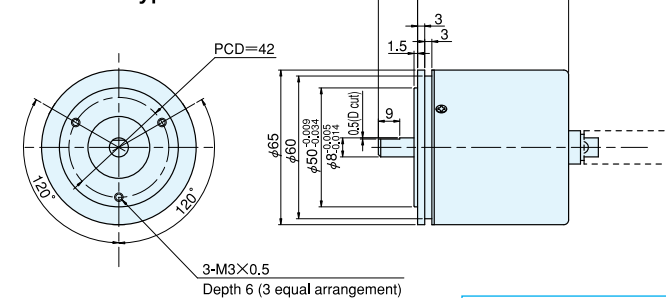
- High-reliability operation without internal battery is possible. (Batteryless)
- Permitting a total count of 2^{18} max. high-resolution
- O.D. $\phi 65 \times 63.5$
- Multiple-rotation (64 rotations max.) absolute output
- Selection of gray code output without reading error or pure binary code
- Selection of side-cable, rear-cable, or connector type
- IP64 drip-proof option possible (rear-cable type)

Outside dimensions

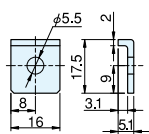
Standard type



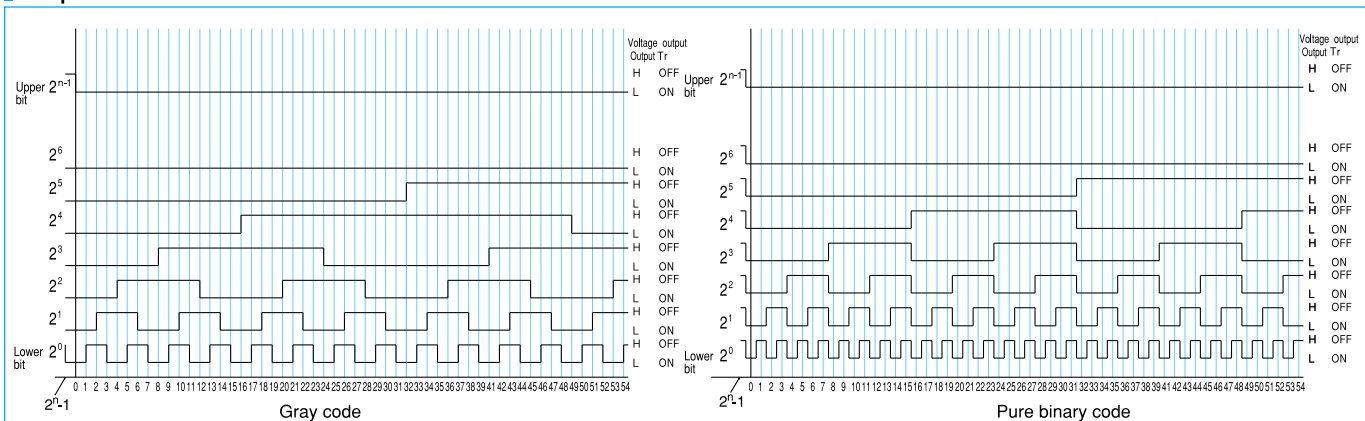
Connector type



Detailed servo mount clamp



Output code



Specifications

Type name	MXS	□	○	△	□	□	□	◇
	Drip-proof (W)	Rotation	One rotation resolution	Output signal code	Output method	No mark: voltage output		
			● G=gray code	● N=pure binary code	C: open collector output			
Item								
Supply voltage	Voltage output: DC5V-5%~12V+10% Open collector output: C DC5V-5%~24V+15%							
Current consumption	Voltage output: 400mA or less Open collector output: C 200mA or less							
Output code	G: gray code N: pure binary code							
Output logic	No mark: positive logic; N: negative logic							
Output pulse number (Standard)	128 1,024 256 2,048							
[Pulse number/rotation]	512 4,096							
Rotation number	2·4·8·16·32·64·100(N only)							
Maximum response frequency	40kbit/s							
Starting torque	2mN·m (typ) Drip-proof 9.8mN·m (typ)							
Shaft allowable load (electrical)	Radial 49N (5kgf) Thrust 29.4N (3kgf)							
Working temperature/humidity	-10°C~70°C/RH95%以下 (no dewing)							
Storage temperature	-20°C~80°C							
Vibration resistance	Durability 0-500Hz, double amplitude 1.52mm 2 hours each in X, Y, and Z directions							
Impact resistance	Durability 11msec (about 50G) 3 times each in X, Y, and Z directions							

Connection

a) Cable

Cable color	Output signal	Cable color	Output signal
Brown	2 ⁰	Brown/White	2 ¹⁰
Red	2 ¹	Red/White	2 ¹¹
Orange	2 ²	Orange/White	2 ¹²
Yellow	2 ³	Yellow/White	2 ¹³
Green	2 ⁴	Green/White	2 ¹⁴
Blue	2 ⁵	Blue/White	2 ¹⁵
Purple	2 ⁶	Purple/White	2 ¹⁶
Gray	2 ⁷	Gray/White	2 ¹⁷
White	2 ⁸	Yellow/Black	Vcc
Black	2 ⁹	White/Black	COMMON
		Shield	Cable shield

b) Connector

Pin No.	Output signal	Pin No.	Output signal
1	2 ⁰	13	2 ¹²
2	2 ¹	14	2 ¹³
3	2 ²	15	2 ¹⁴
4	2 ³	16	2 ¹⁵
5	2 ⁴	17	2 ¹⁶
6	2 ⁵	18	2 ¹⁷
7	2 ⁶	19	Vcc
8	2 ⁷	20	Vcc
9	2 ⁸	21	COMMON
10	2 ⁹	22	COMMON
11	2 ¹⁰	23	NC
12	2 ¹¹	24	Frame ground
		25	NC

Note:

- shielding cable is non-connected in encoder.
- Those cable which are unnecessary for signals are to be cut.
- The form below indicate 64 muly-turn and 4096P/R. When resolution is not enough, it becomes NC.

Description

SE series

ME series

MGH series

MA series

MXS series

MLS series

MLA series

REH series

MT series

DC series

Setting Option/
Coupling

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