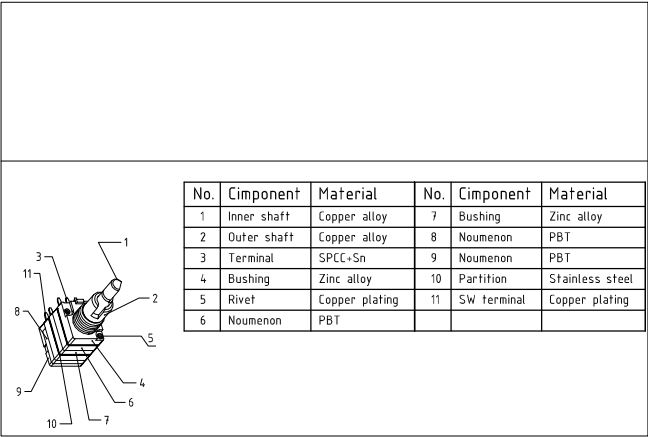


9/10mm Rotary encoder

9/10mm metal shaft sealed encoder

Photo/Structure



No.	Component	Material	No.	Component	Material
1	Inner shaft	Copper alloy	7	Bushing	Zinc alloy
2	Outer shaft	Copper alloy	8	Noumenon	PBT
3	Terminal	SPCC+Sn	9	Noumenon	PBT
4	Bushing	Zinc alloy	10	Partition	Stainless steel
5	Rivet	Copper plating	11	SW terminal	Copper plating
6	Noumenon	PBT			

Features

- RoHS compliant
- Seal type
- Small volume
- Structural diversification
- High Quality

Use

	Player	✓		Instrument equipment	✓
	Sound	✓		Meter	✓
	Sound console	✓		Navigation/Auto AV	✓
	Walkie-talkie	✓		White goods	×
	Medical equipment	✓		Auto	✓

How to order

RE	9	1	1	0	M	-	KQ	15	A	6.0	-	P	10	-	2	00
A	B	C	D	E	F		G	H	I	J		K	L		M	N

A:Rotary encoders

B:9mm Product series

C:Controlled code

D:Product fixed type

E:Product installation type(Pin change)

F:Switch type

Code	O	M	L
Type	None	Push:0.5mm travel	Push:1.5mm travel

G:Shaft type(see shaft specifications)

H:Shaft installation length(see dimensions L size)

I: Shaft materials

Code	A	C	D	G
Materials	Aluminium alloy	Copper alloy	Zinc alloy	Stainless steel

J:Shaft of operation size length (Dimensions A size)

K:Phase difference code(Internal company controlled)

P:Incremental type positive encoders
C:Absolute type reverse encoders

L:Decomposition ability(Internal company controlled)

M:Detent code

Code	0	1	2
Detents No.	None	Detents=Pulser	Detents=Pulser x 2

N:Special marks company controlld

Packing Specifications

Products No.	Manner of packing	Export package measurements (mm)	Number of packages (pcs.)
RE9□ □ □ □ *****	Tray	430*305*140	2,000

Switch characteristics

Switch contact resistance	100mΩ max.
Switch ratings power	Rotary SW:16V DC 3A Push SW:5V DC 0.1A
Switch working algle	Rotary SW:50° Push SW:0.5mm/15mm
Switch working torque	Rotary SW:150-450gf.cm Push SW:200-1000gf.cm
Switch circuit	Rotaty SW:S.P.S.T Push SW:S.P.D.T

Notes

- Please with minimum packing unit(integer)times the N on orders.
- Order has to be marked special requirements.
- Shipping mark:RE91*****.

Mechanical characteristics

Total rotation alngle	Incremental:360° Logic:300°±5°
Rotation torque	150~350gf.cm
Rotation stopper strength	3Kgf. min.
Shaft push-pull strength	8Kgf. max.
Shaft wobble	0.6*L/20mm p-p max.

Electrical characteristics

Retings power	0.025W
Insulation resistance	100m Ω min.250V DC.
Voltage proof	300V AC for 1 minute

Durability

Operating life without load	20,000cycles 100mΩ max.
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Environmental performance

Cold	-40℃±2℃ for 96h
Dry heat	85℃±2℃ for 96h
Damp heat	40±2℃, 90 to 95%RH for 96h

Welding heat resistance

Reference for Hand Soldering	350±10℃/3+1/0s
Reference for Dip Soldering	260±5℃/10±1s
Reflow Soldering Condition	Temperature distribution

Temperature distribution:

A	B	C	D	E	F	G	H	No.of reflows
260℃	230℃	180℃	150℃	2 min.	3s	40s	4 min.	2 time max