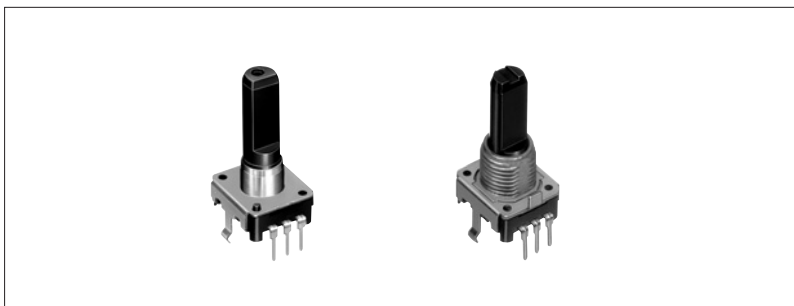


12mm Size Insulated Shaft Type Encoder Variety

EC12E Series

Insulated shaft type with a push-on switch and other features has a wide variety of applications.

Power
Push
Slide
Rotary
Encoders



Lead Free

Jog Shuttle
Telephone-hook
Detector
Vibration/Tilt Sensors
Dual-in-line Package Type
Multi Control Devices
TACT

Features

- A 12mm sized unit achieved high resolution, 12-pulse / 12-detent and 24-pulse / 24-detent.
- Used a new structure for the shaft and bushing, and achieved a high precision, responsive system.
- Also available with a 0.5mm push switch.
- Incremental type.

Applications

- Controls for image and sound devices, including DVD players, mini component stereos, CD players, portable audio players and monitors.
- Controls for audio mixers and electronic instruments.

Typical Specifications

Items	Specifications	
Rating (max.) (Resistive load)	5mA 5V DC	
Operating life	Without detent	15,000 cycles
	Other	30,000 cycles

Products Line

With High Collar Type

Length of operating section (mm)	Detent torque	Number of detent	Resolution	Operating direction	Push-on switch	Travel of push-on switch (mm)	Minimum packing unit (pcs.)	Products No.	Drawing No.
15	Standard 3 to 20 mN·m	12	12	Vertical	Without	—	1,200	EC12E1220407	2
20								EC12E1220406	1
25								EC12E1220405	
8.5 (Hollow shaft)	Lightest (jog) 3±2 mN·m	12	12					EC12E1220301	3
20								EC12E1240405	1
25								EC12E1240406	
8.5 (Hollow shaft)	Standard 3 to 20 mN·m	24	24					EC12E1240301	3
15								EC12E24204A2	2
20								EC12E24204A8	1
25	EC12E24204A9								
8.5 (Hollow shaft)	Lightest (jog) 3±2 mN·m	24	24					EC12E2420301	3
20								EC12E24404A8	1
25				EC12E24404A6					
8.5 (Hollow shaft)	Standard 25±15 mN·m	Without	24	EC12E2440301	3				
20				EC12E2430404	1				
25				EC12E2430401					

Incremental Type
Absolute Type

Products Line

With Bushing Type

Length of operating section (mm)	Detent torque	Number of detent	Resolution	Operating direction	Push-on switch	Travel of push-on switch (mm)	Minimum packing unit (pcs.)	Products No.	Drawing No.
20	Standard 3 to 20 mN·m	12	12	Vertical	Without	—	950	EC12E1220801	4
25		24						EC12E2420802	
20	Standard 25±15 mN·m	Without	24					EC12E2420801	
25								EC12E2430804	
								EC12E2430803	

With Switch Type


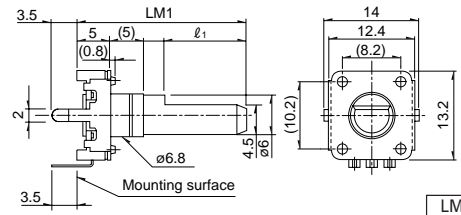
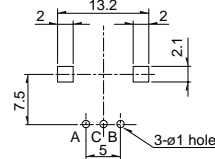

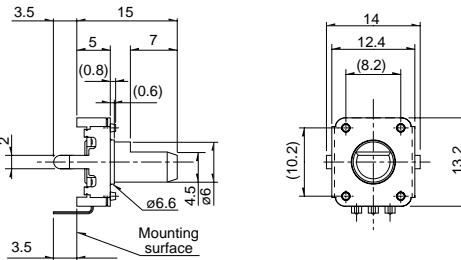
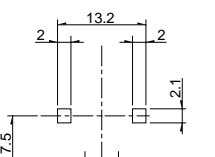
Length of operating section (mm)	Detent torque	Number of detent	Resolution	Operating direction	Push-on switch	Travel of push-on switch (mm)	Minimum packing unit (pcs.)	Products No.	Drawing No.
20	Standard 3 to 20 mN·m	12	12	Vertical	With	0.5	1,200	EC12E12244A3	5
25								EC12E12244A4	
20	Lightest (jog) 3±2 mN·m	24	24					EC12E1244401	
25								EC12E1244403	
20	Standard 3 to 20 mN·m	24	24	EC12E2424407					
25				EC12E2424404					
20	Lightest (jog) 3±2 mN·m	24	24	EC12E2444400					
25				EC12E24444A3					

Note

No nuts or washers attached. If necessary, contact us.

Dimensions

Unit : mm

No.	Model	Style	PC board mounting hole dimensions (Viewed from mounting face)						
1		 <table border="1" data-bbox="973 1388 1093 1456"> <tr> <td>LM1</td> <td>l₁</td> </tr> <tr> <td>20</td> <td>7</td> </tr> <tr> <td>25</td> <td>12</td> </tr> </table>	LM1	l ₁	20	7	25	12	
LM1	l ₁								
20	7								
25	12								
2	Short shaft 								

Power

Push

Slide

Rotary

Encoders

Jog Shuttle

Telephone-hook

Detector

Vibration/Tilt Sensors

Dual-in-line Package Type

Multi Control Devices


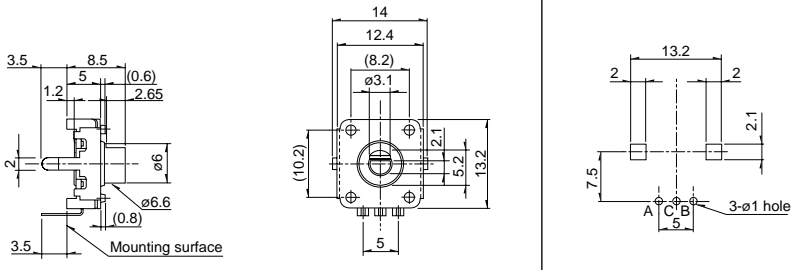
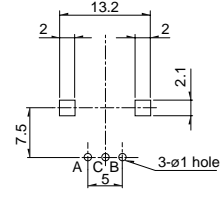

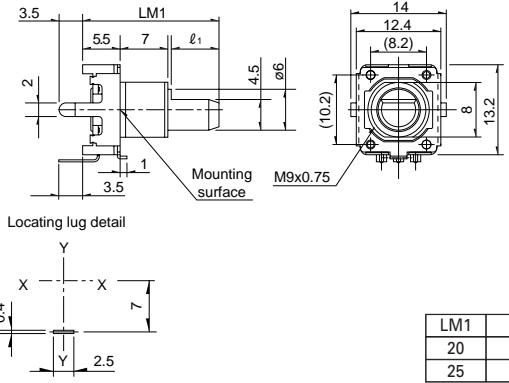
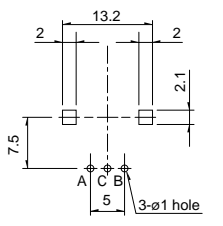

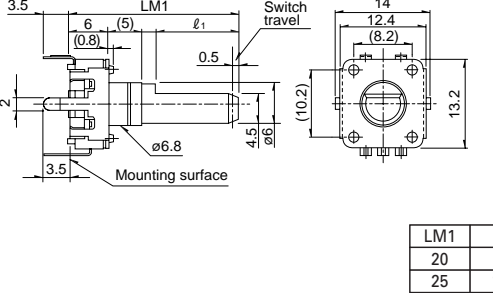
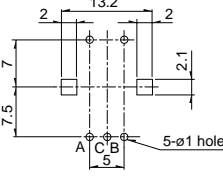
TACT

Incremental Type

Absolute Type

Dimensions

Unit : mm

No.	Model	Style	PC board mounting hole dimensions (Viewed from mounting face)						
3	Hollow shaft 								
4	With bushing 	 <table border="1" data-bbox="973 1064 1093 1131"> <tr> <td>LM1</td> <td>l₁</td> </tr> <tr> <td>20</td> <td>7</td> </tr> <tr> <td>25</td> <td>12</td> </tr> </table>	LM1	l ₁	20	7	25	12	
LM1	l ₁								
20	7								
25	12								
5	With push-on switch 	 <table border="1" data-bbox="973 1467 1093 1534"> <tr> <td>LM1</td> <td>l₁</td> </tr> <tr> <td>20</td> <td>7</td> </tr> <tr> <td>25</td> <td>12</td> </tr> </table>	LM1	l ₁	20	7	25	12	
LM1	l ₁								
20	7								
25	12								

- Power
- Push
- Slide
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- Encoders**
- Jog Shuttle
- Telephone-hook
- Detector
- Vibration/Tilt Sensors
- Dual-in-line Package Type
- Multi Control Devices
- TACT
- Incremental Type
- Absolute Type

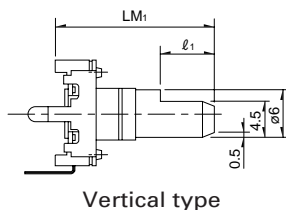
Variety

Shaft Dimensions

Flat Type

Unit : mm

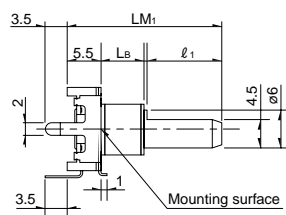
With high collar type



Detail dimensions

LM ₁	l ₁
17.5	5
20	7
22.5	7
25	12
30	12

With bushing type



Detail dimensions

LM ₁	L _B	l ₁
20	7	7
25	7	12
30	12	12
35	12	12

Except 12 detent.

Power

Push

Slide

Rotary

Encoders

Jog Shuttle

Telephone-hook

Detector

Vibration/Tilt Sensors

Dual-in-line Package Type

Multi Control Devices

TACT

Incremental Type

Absolute Type