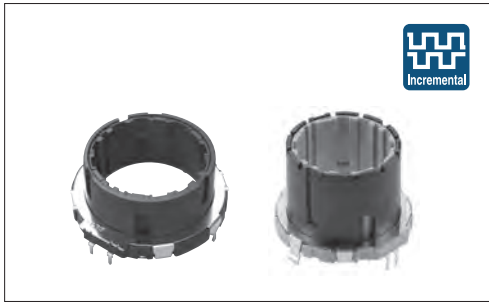




■ Typical Specifications



Items	Specifications
Output signal	Three phase of A, B and C
Rating	10mA 5V DC
Operating life	50,000 cycles
Operating temperature range	-40°C to +85°C (EC35AH) -40°C to +90°C (EC35CH)

■ Product Line

Mounting method	Actuator length (mm)	Detent torque (mN·m)	Number of detents	Number of pulse	Minimum order unit (pcs.)		Products No.	Drawing No.
					Japan	Export		
DIP	15	12±5	30	10	800	800	1	1
		18±7						
		30±15						
	25	12±5			350	700	2	2
		18±7						
		30±15						
Reflow	14.9	18±7	18	6	800	800	3	3
		22±11 (Initial) 18±7 (After reflow)						


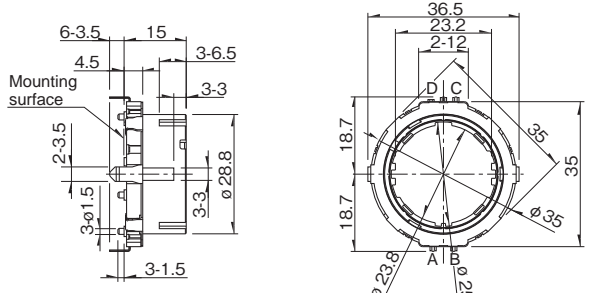
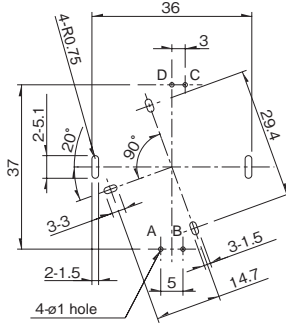

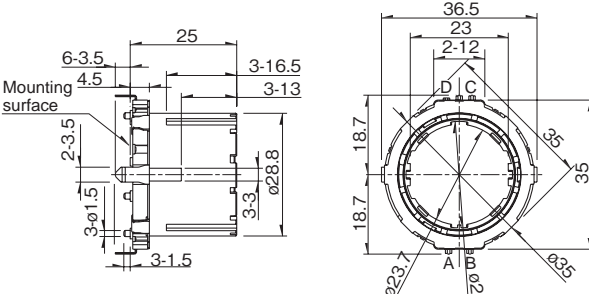
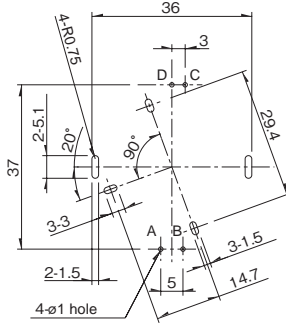

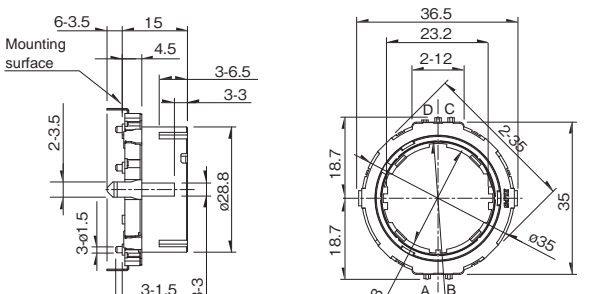
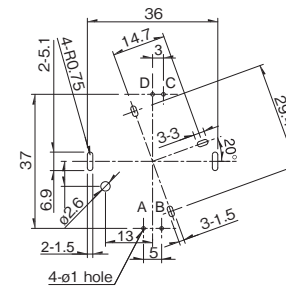

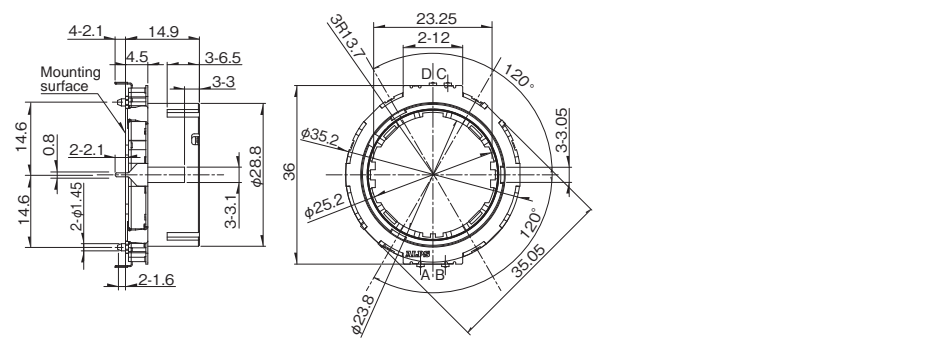
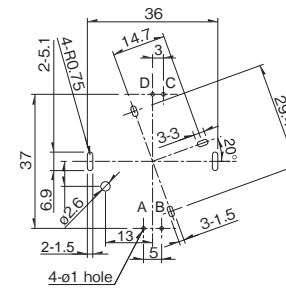
■ Packing Specifications

Tray

Products No.	Number of packages (pcs.)		Export package measurements (mm)
	1 case /Japan	1 case /export packing	
<b>EC35AH240403, EC35AH220403, EC35AH120401, EC35AH260403</b>	800	800	540×360×290
<b>EC35AH240502, EC35AH220502, EC35AH260502</b>	350	700	540×360×380
<b>EC35CH120401</b>	384	384	440×290×205

Dimensions

Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from mounting side)
1	<p><b>EC35AH</b> Actuator length 15mm 10 pulse/30 detent</p> 		
2	<p><b>EC35AH</b> Actuator length 25mm 10 pulse/30 detent</p> 		
3	<p><b>EC35AH</b> Actuator length 15mm 6 pulse/18 detent</p> 		
4	<p><b>EC35CH</b> Reflow type Actuator length 14.9mm 6 pulse/18 detent</p> 		

Encoders

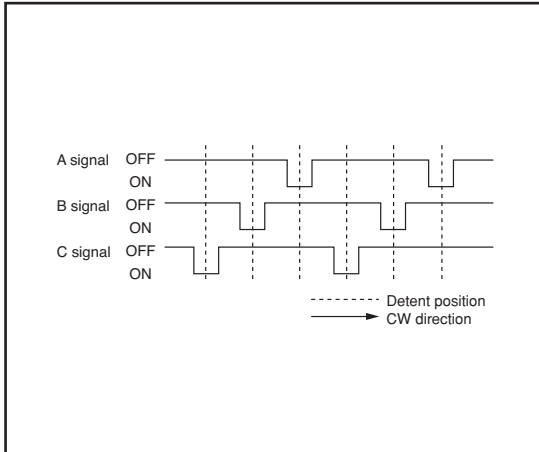
Metal Shaft

Insulated Shaft

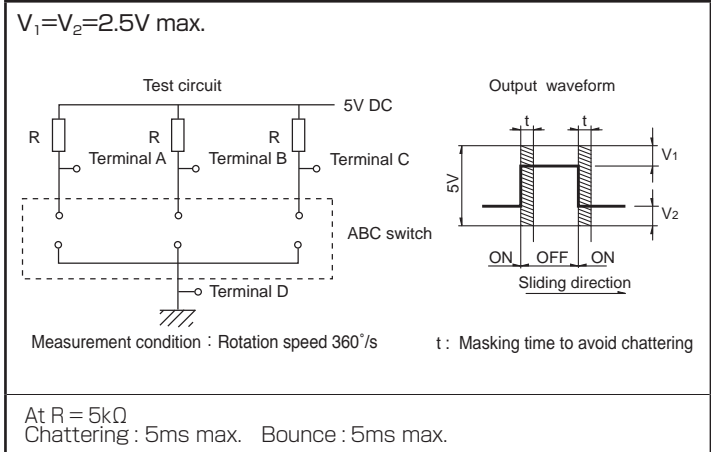
Through Shaft Type

Ring Type

Output Wave



Sliding Noise



Encoders

Metal Shaft











Insulated Shaft

Through Shaft Type

Ring Type

# Encoders

## List of Varieties

Type		Ring type				
		28mm size		35mm size		
Series		EC28A	EC28C	EC35A	EC35AH	EC35CH
Photo						
Output		Incremental (Two phase A and B)			Incremental (Three phase A, B and C)	
Shaft types		Ring type				
Number of pulse / Number of detent		15/30 18/18	15/30	9/18 15/30	6×ABC/18 10×ABC/30	6×ABC/18
Dimensions (mm)	W	28		35		35.2
	D	29	29.5			36
	H	4		4.5		
Operating temperature range		-40°C to +85°C	-40°C to +90°C	-40°C to +85°C		-40°C to +90°C
Operating life		50,000 cycles				
Automotive use		●	●	●	●	●
Life cycle (availability)						
Electrical performance	Rating	10mA 5V DC				
	Max./min. operating current (Resistive load)	10mA /1mA				
	Insulation resistance	100MΩ min. 250V DC				
	Voltage proof	300V AC for 1minute or 360V AC for 2s	300V AC for 1minute or 360V AC for 1s	300V AC for 1minute or 360V AC for 2s		300V AC for 1minute or 360V AC for 1s
Mechanical performance	Detent torque	7±5mN·m 12±7mN·m 20±10mN·m	22±11mN·m (Initial) 16±7mN·m (After reflow)	18±7mN·m 22±8mN·m 30±15mN·m	12±5mN·m 18±7mN·m 30±15mN·m	22±11mN·m (Initial) 18±7mN·m (After reflow)
	Push-pull strength	100N				
Shaft configuration		Ring type				
Terminal type		Insertion				
Switch Specifications	Switch type	—	—	—	—	—
	Contact arrangement	—	—	—	—	—
	Travel (mm)	—	—	—	—	—
	Operating force (N)	—	—	—	—	—
	Switch ON position	—	—	—	—	—
	Rotational torque	—	—	—	—	—
	Rating	—	—	—	—	—
	Contact resistance	—	—	—	—	—
	Operating life	—	—	—	—	—
Page		266		268	270	

Encoders Soldering Conditions	275
Encoders Cautions	276

### Notes

● Indicates applicability to all products in the series.