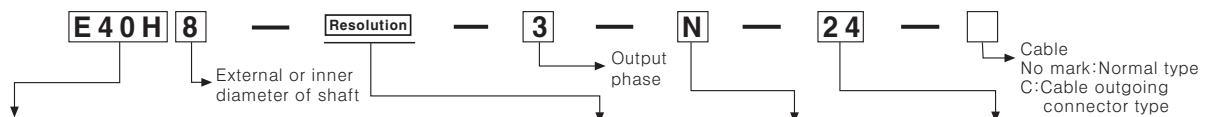


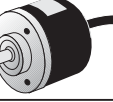


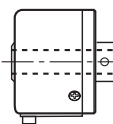

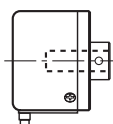

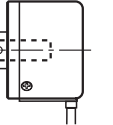


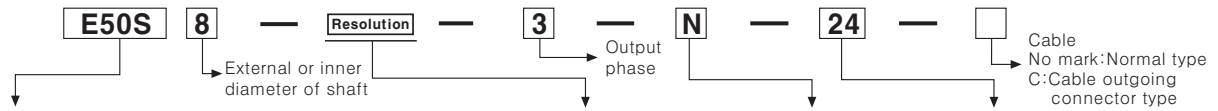
Product Overview(Incremental Type)

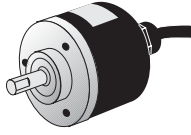







Appearances	Model	Resolution	Control output	Power supply	Page
φ 20mm shaft type 	E20S2 - Resolution - 3-T-5, 12 N *Cable R:Rear side outgoing cable type S:Side outgoing cable type V 6-L-5	100P/R 200P/R 360P/R	T (1) : Totem pole output	5 : 5VDC ±5% 12 : 12VDC ±5% (Ripple P-P : Max. 5%) (Note) The output of Line driver is only for 5VDC.	M-5~6 Page
φ 20mm Hollow shaft built-in type 	E20HB2 - Resolution - 3-T-5, 12 E20HB2.5 E20HB3 N V 6-L-5 *Cable R:Rear side outgoing cable type S:Side outgoing cable type	100P/R 1000P/R 200P/R 1024P/R 360P/R 3000P/R 500P/R		N (2) : NPN open collector output	
φ 30mm shaft type 	E30S4 - Resolution - 3-T-5, 24 N V 6-L-5	*1P/R 1000P/R *2P/R 1024P/R *5P/R 1200P/R 10P/R 1500P/R *12P/R 1800P/R 15P/R 2000P/R 20P/R 2048P/R 23P/R 2500P/R 25P/R 3000P/R 30P/R 3600P/R 35P/R 5000P/R 40P/R 45P/R 50P/R 60P/R 75P/R 100P/R 120P/R 125P/R 150P/R 192P/R 200P/R 240P/R 250P/R 256P/R 300P/R 360P/R 400P/R 500P/R 512P/R 600P/R 800P/R	V (3) : Voltage output		24 : 12-24VDC ±5% (Ripple P-P : Max. 5%) (Note) The output of Line driver is only for 5VDC.
φ 40mm shaft type 	E40S6 - Resolution - 2-T-5, 24 (Standard item) N E40S8 (Customizable) 3-T-5, 24 N V 4-L-5 6	L : Line driver output (Not included in CE certification)		5 : 5VDC ±5%	
φ 40mm Hollow shaft type  E40H 	E40H8 - Resolution - 2-T-5, 24 (Standard item) N E40H6 E40H10 E40H12 (Customizable) V 3-T-5, 24 N V 4-L-5 6		24 : 12-24VDC ±5% (Ripple P-P : Max. 5%) (Note) The output of Line driver is only for 5VDC.		5 : 5VDC ±5%
φ 40mm Hollow shaft built-in type  E40HB 	E40HB8 - Resolution - 2-T-5, 24 (Standard item) N E40HB6 E40HB10 E40HB12 (Customizable) V 3-T-5, 24 N V 4-L-5 6	24 : 12-24VDC ±5% (Ripple P-P : Max. 5%) (Note) The output of Line driver is only for 5VDC.		5 : 5VDC ±5%	
φ 40mm Hollow shaft built-in type  E40HB 	E40HB8P - Resolution - 2-T-5, 24 N V 3-T-5, 24 N V 4-L-5 6 *Plastic structure		*The number of () is former name.		5 : 5VDC ±5%

※The '*' marked pulse is only for A, B phase in resolution. (Line Driver output is for A, \bar{A} , B, \bar{B} phase.)
 ※Not indicated pulse in this chart is customizable.

Product Overview(Incremental Type)

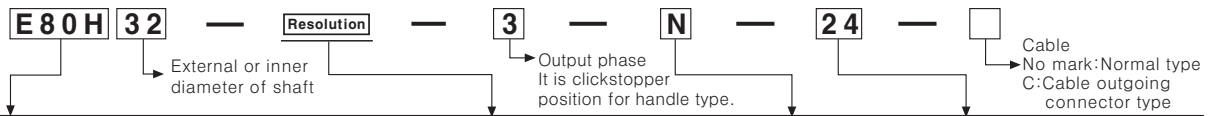


Appearances	Model	Resolution	Control output	Power supply	Page
φ 50mm shaft type 	E50S8 - [Resolution] - 2-T-5, 24 (Former name : ENB) N V 3-T-5, 24 N V 4-L-5 6	*1P/R 75P/R 600P/R *2P/R 100P/R 800P/R *5P/R 120P/R 1000P/R 10P/R 125P/R 1024P/R *12P/R 150P/R 1200P/R 15P/R 192P/R 1500P/R 20P/R 200P/R 1800P/R 23P/R 240P/R 2000P/R 25P/R 250P/R 2048P/R 30P/R 256P/R 2500P/R 35P/R 300P/R 3000P/R 40P/R 360P/R 3600P/R 45P/R 400P/R 5000P/R 50P/R 500P/R 6000P/R 60P/R 512P/R 8000P/R	T (1) : Totem pole output	5 : 5VDC ±5% 24 : 12-24VDC ±5% (Ripple P-P : Max. 5%) (Note) The output of Line driver is only for 5VDC.	M-15~17
φ 50mm shaft type 	E50S8P - [Resolution] - 2-T-5, 24 (Standard item) N V E50S6P (Customizable) 3-T-5, 24 N V 4-L-5 6 ※ Plastic structure	*1P/R 40P/R 200P/R *2P/R 45P/R 240P/R *5P/R 50P/R 250P/R 10P/R 60P/R 256P/R *12P/R 75P/R 300P/R 15P/R 100P/R 360P/R 20P/R 120P/R 400P/R 23P/R 125P/R 500P/R 25P/R 150P/R 512P/R 30P/R 192P/R 600P/R 35P/R			
φ 58mm shaft type 	E58SC10 - [Resolution] - 2-T-5, 24 (Shaft Clamping) N V E58SC6 (Shaft Synchro) 3-T-5, 24 N V 4-L-5 6	*1P/R 250P/R *2P/R 256P/R *5P/R 300P/R 10P/R 360P/R *12P/R 400P/R 15P/R 500P/R 20P/R 512P/R 23P/R 600P/R 25P/R 800P/R 30P/R 1000P/R 35P/R 1024P/R 40P/R 1200P/R 45P/R 1500P/R 50P/R 1800P/R 60P/R 2000P/R 75P/R 2048P/R 100P/R 2500P/R 120P/R 3000P/R 125P/R 3600P/R 150P/R 5000P/R 192P/R 6000P/R 200P/R 8000P/R 240P/R	N (2): NPN open collector output	(Note) The output of Line driver is only for 5VDC.	M-21~24
φ 58mm Hollow shaft type 	E58H12 - [Resolution] - 2-T-5, 24 N V 3-T-5, 24 N V 4-L-5 6	*1P/R 250P/R *2P/R 256P/R *5P/R 300P/R 10P/R 360P/R *12P/R 400P/R 15P/R 500P/R 20P/R 512P/R 23P/R 600P/R 25P/R 800P/R 30P/R 1000P/R 35P/R 1024P/R 40P/R 1200P/R 45P/R 1500P/R 50P/R 1800P/R 60P/R 2000P/R 75P/R 2048P/R 100P/R 2500P/R 120P/R 3000P/R 125P/R 3600P/R 150P/R 5000P/R 192P/R 6000P/R 200P/R 8000P/R 240P/R	V (3): Voltage output		
φ 58mm Hollow shaft built-in type 	E58HB12 - [Resolution] - 2-T-5, 24 N V 3-T-5, 24 N V 4-L-5 6	*1P/R 250P/R *2P/R 256P/R *5P/R 300P/R 10P/R 360P/R *12P/R 400P/R 15P/R 500P/R 20P/R 512P/R 23P/R 600P/R 25P/R 800P/R 30P/R 1000P/R 35P/R 1024P/R 40P/R 1200P/R 45P/R 1500P/R 50P/R 1800P/R 60P/R 2000P/R 75P/R 2048P/R 100P/R 2500P/R 120P/R 3000P/R 125P/R 3600P/R 150P/R 5000P/R 192P/R 6000P/R 200P/R 8000P/R 240P/R	L : Line driver output (Not included in CE certification)	(Note) The output of Line driver is only for 5VDC.	M-25~27
φ 60mm Hollow shaft type 	E60H20 - [Resolution] - 3-T-5, 24 N V 6-L-5	5000P/R 8192P/R	※ The number of () is former name.		

- (A) Counter
- (B) Timer
- (C) Temp. controller
- (D) Power controller
- (E) Panel meter
- (F) Tacho/Speed/Pulse meter
- (G) Display unit
- (H) Sensor controller
- (I) Switching power supply
- (J) Proximity sensor
- (K) Photo electric sensor
- (L) Pressure sensor
- (M) Rotary encoder
- (N) Stepping motor & Driver & Controller
- (O) Graphic panel
- (P) Field network device
- (Q) Production stoppage models & replacement

※ The '*' marked pulse is only for A, B phase in resolution. (Line Driver output is for A, \bar{A} , B, \bar{B} phase.)
 ※ Not indicated pulse in this chart is customizable.

Product Overview(Incremental Type)

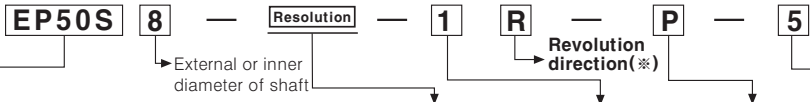


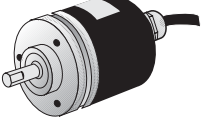


Appearances	Model	Resolution	Control output	Power supply	Page	
φ 68mm shaft type 	E68S15-1024-6-L-5	1024P/R ※ Not indicated pulse in this chart is available to customize.	T (1) : Totem pole output N (2) : NPN open collector output V (3) : Voltage output L : Line driver output (Not included in CE certification)	5 : 5VDC ±5% 24 : 12-24VDC ±5% (Ripple P-P : Max. 5%) (Note) The output of Line driver is only for 5VDC.	M-28~29	
φ 80mm Hollow shaft type CE	E80H30-Resolution-3-T-5, 24 (Standard item) N E80H32 V (Customizable) 6-L-5	60P/R 100P/R 360P/R 500P/R 512P/R 1024P/R 3200P/R			M-30~32	
φ 100mm Hollow shaft type CE	E100H35-Resolution-3-T-5, 24 N V 6-L-5	512P/R 1024P/R 10000P/R			M-33~35	
Side-mounting type CE	ENA-Resolution-2-T-5, 24 N V 3-T-5, 24 N V ※ Standard : Output the A, B phase ※ Customizable : Output the A, B, Z phase	*1P/R 60P/R 500P/R *2P/R 75P/R 512P/R *5P/R 100P/R 600P/R 10P/R 120P/R 800P/R *12P/R 125P/R 1000P/R 15P/R 150P/R 1024P/R 20P/R 192P/R 1200P/R 23P/R 200P/R 1500P/R 25P/R 240P/R 1800P/R 30P/R 250P/R 2000P/R 35P/R 256P/R 2048P/R 40P/R 300P/R 2500P/R 45P/R 360P/R 3000P/R 50P/R 400P/R 3600P/R 5000P/R			M-36~38	
Measuring wheel type CE	ENC-1-Measurement unit-T-5, 24 N V	1 : 1mm/1Pulse 2 : 1cm/1Pulse 3 : 1m/1Pulse 4 : 0.01yd/1Pulse 5 : 0.1yd/1Pulse 6 : 1yd/1Pulse			M-39~40	
Manual handle type 	ENH-Resolution-1-T-5, 24 2 1-V-5, 24 2 1-L-5 2	25P/R 100P/R			M-41~42	
Movable encoder with handle 	ENHP-Resolution-1-L-5 2	100P/R			※ The number of () is former name.	M-43~44

※ The '*' marked pulse is only for A, B phase in resolution. (Line Driver output is for A, \bar{A} , B, \bar{B} phase.)

※ Not indicated pulse in this chart is customizable.

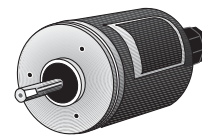
Product Overview(Absolute Type)



Appearances	Model	Resolution	Output code	Control output	Power supply	Page
 CE ø 50mm shaft type	EP50S8 -[Resolution]- 1R-N(P)-5, 24 2R 3R 1F 2F 3F	*6P/R 90P/R *8P/R 128P/R *12P/R 180P/R *16P/R 256P/R *24P/R 360P/R *32P/R 512P/R *40P/R 720P/R 45P/R 1024P/R 64P/R				M-45~48 Page
 CE ø 58mm shaft type NEW	EP58SC10 -[Resolution]- 1R-N(P)-5,24 (Shaft Clamping) 2R EP58SC6 (Shaft Synchro) 3R 1F 2F 3F	45P/R 64P/R 90P/R 128P/R 180P/R 256P/R 360P/R 512P/R 720P/R 1024P/R	1 : BCD 2 : BINARY 3 : GRAY (Customize)	P (1) : PNP open collector output N (2) : NPN open collector output	5 : 5VDC ±5% 24 : 12-24VDC ±5% (Ripple P-P : Max. 5%)	M-49~52 Page
 CE ø 58mm Hollow shaft built-in type NEW	EP58HB8 -[Resolution]- 1R-N(P)-5,24 2R 3R 1F 2F 3F					

*Not indicated number of division in this chart is customizable.
 The '' marked division is being developed.
 *Revolution direction **R** : CCW as viewed from the shaft, **F** : CW as viewed from the shaft
 *The number of () is former name in control output.



Appearances	Model	Output code	Power supply	Resolution	Control output	Page
 ø 60mm shaft type	ENP-111R -[Resolution]- P 111F ENP-101R -[Resolution]- N 101F ENP-110R -[360]- P 110F ENP-100R -[360]- N 100F	1 : BCD Code	1 : 12-24VDC ±5% (Ripple P-P : Max. 5%) 0 : 5-12VDC ±5% (Ripple P-P : Max. 5%)	6P/R 8P/R 12P/R 16P/R 24P/R 360P/R	P (1) : PNP open collector output N (2) : NPN open collector output P (1) : PNP open collector output N (2) : NPN open collector output	M-53~56 Page

*Output **0** : Negative logic, **1** : Positive logic
 *Revolution direction **R** : CCW as viewed from the shaft, **F** : CW as viewed from the shaft
 *The number of () is former name in control output.

- (A) Counter
- (B) Timer
- (C) Temp. controller
- (D) Power controller
- (E) Panel meter
- (F) Tacho/Speed/Pulse meter
- (G) Display unit
- (H) Sensor controller
- (I) Switching power supply
- (J) Proximity sensor
- (K) Photo electric sensor
- (L) Pressure sensor
- (M) Rotary encoder
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