

## Standard Hollow Shaft Absolute Singleturn Encoder EAC58P

### Application

Standard absolute singleturn encoder EAC58P series are widely used in various industrial environments, with a good performance against mechanical damage, and withstanding higher axial and radial load. Various flanges and connections are available for option. EAC58P series have RESET function with resolution up to 8192.

### Characteristics

- Hollow shaft installation saves space, "C" ring lock
- $\Phi 8/10/12$  hollow shaft
- Waterproof seal promotes IP level
- Metal housing, withstanding higher axial and radial load
- Protection class IP65
- Output cable or connector available for easy maintenance



### Mechanical Characteristics

Hollow shaft diameter (mm)	$\Phi 8/\Phi 10/\Phi 12H7$
Protection acc. to EN 60529	IP65
Speed (r/m)	6000
Max load capacity of the shaft	
Axial load capacity	60N
Radial load capacity	120N
Shock resistance	50G/11ms
Vibration resistance	10G 10~2000Hz
Bearing life	$10^9$ revolution
Rotor moment of inertia	$1.8 \times 10^{-6} \text{kgm}^2$
Starting torque	$<0.01 \text{Nm}$
Body material	AL-alloy
Housing material	AL-alloy
Operating temperature	$-20^\circ \text{C} \sim +80^\circ \text{C}$
Storage temperature	$-25^\circ \text{C} \sim +85^\circ \text{C}$
Weight	360g

Resolution

SSI: 1024, 2048, 4096, 8192

Parallel: 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096, 8192

### Electrical Characteristics

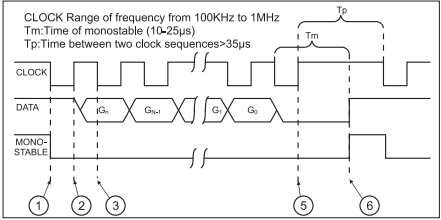
Output circuit	SSI	SSI	Parallel	Parallel
Output driver	RS422	RS422	Push-pull/NPN/NPN OC	
Resolution	13 Bits	13 Bits	13 Bits	13 Bits
Supply voltage (Vdc)	10-30V	5V	10-30V	5V
Power consumption (no load)	$\leq 200 \text{mA}$	$\leq 200 \text{mA}$	$\leq 200 \text{mA}$	$\leq 200 \text{mA}$
Permissible load (channel)	$\pm 20 \text{mA}$	$\pm 20 \text{mA}$	$\pm 20 \text{mA}$	$\pm 20 \text{mA}$
Pulse frequency	Max1MHz	Max1MHz	Max40kHz	Max40kHz
Signal level high	Typ.3.8V	Typ.3.8V	Typ.Ub-2.8V	Typ.3.4V
Signal level low	Max0.5V	Max0.5V	Max2.0V	Max0.5V
Rise timeTr	Max 100ns	Max 100ns	Max 0.2 $\mu\text{s}$	Max 0.2 $\mu\text{s}$
Fall timeTf	Max 100ns	Max 100ns	Max 0.2 $\mu\text{s}$	Max 0.2 $\mu\text{s}$

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## Terminal Assignment

### SSI

Signal	0V	+U <sub>b</sub>	+C	-C	+D	-D	ST *	V/R *	Shield
Color	WH	BN	GN	YE	GY	PK	BU	RD	⊥
12-pin	1	2	3	4	5	6	7	8	PH



### Parallel

Signal	0V	+U <sub>b</sub>	bit0	bit1	bit2	bit3	bit4	bit5	bit6	bit7	bit8	bit9	bit10	bit11	bit12	V/R *	ST *
Color	WH	BN	GN	YE	GY	PK	BU	RD	BK	VT	GY/PK	RD/BU	WH/GN	BN/GN	WH/YE	YE/BN	WH/GY
17-pin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Gray	/	/	1	2	3	4	5	6	7	8	9	10	11	12	13	/	/
Binary																	

Attention  
 Bite definition of parallel interface for absolute encoder: bit0=MSB, bit1=MSB-1, bit2=MSB-2, .....

## Dimensions

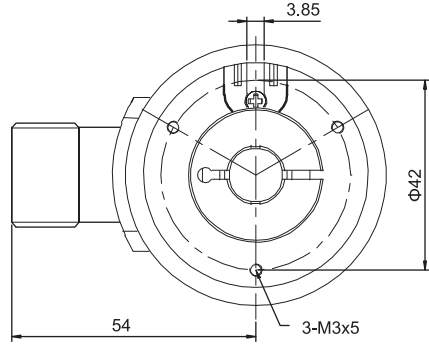
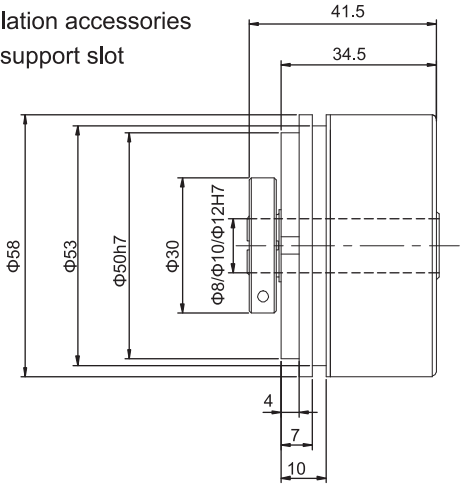
### EAC58P(Q)

P without installation accessories

Q short torque support slot

Accessories:

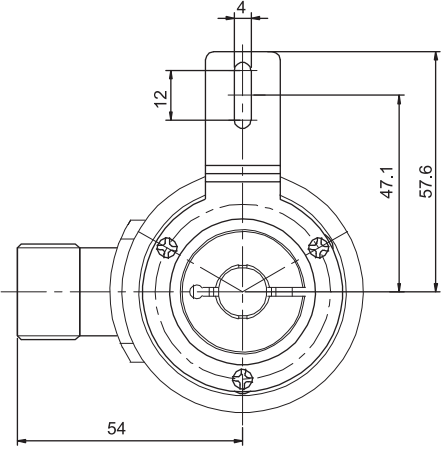
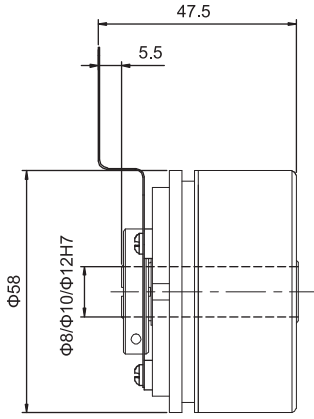
E23230010A/0



### EAC58H

Accessories:

E41350050A/0

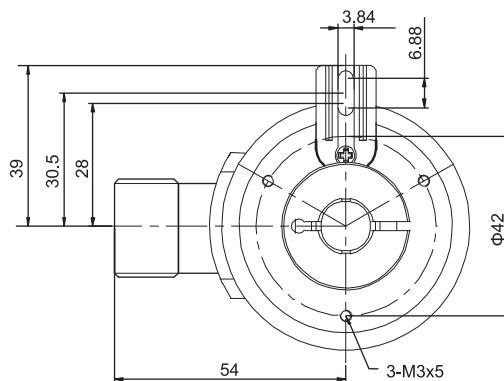
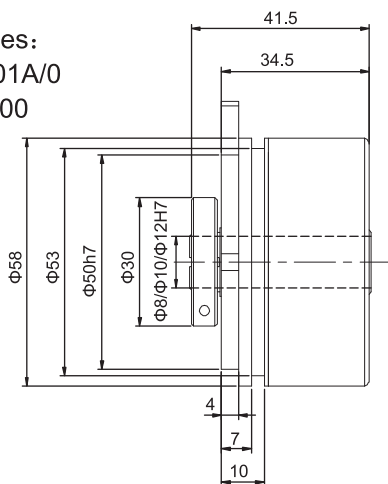


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## Dimensions

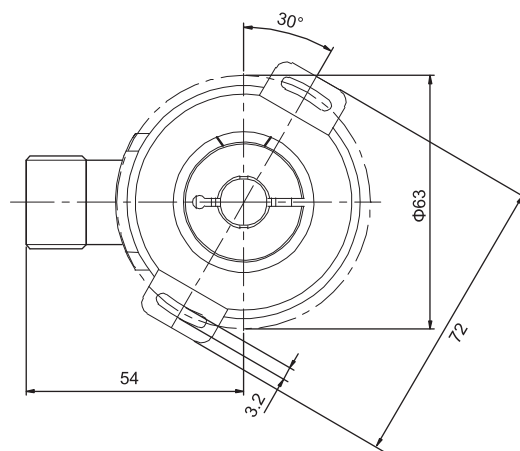
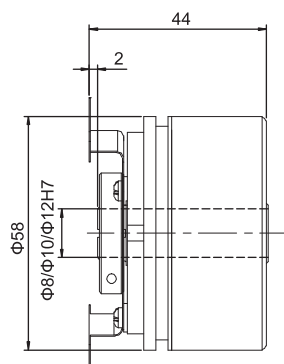
EAC58K

Accessories:  
E41220001A/0  
E4700 0000



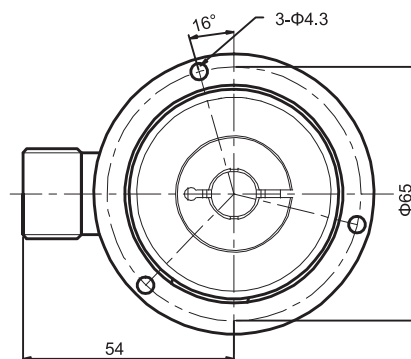
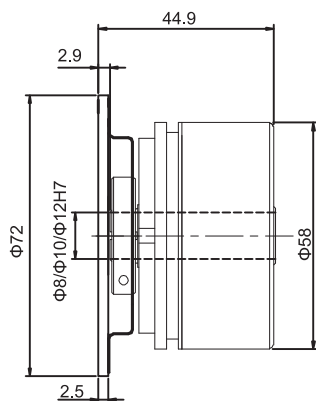
EAC58W

Accessories:  
E41350042A/1



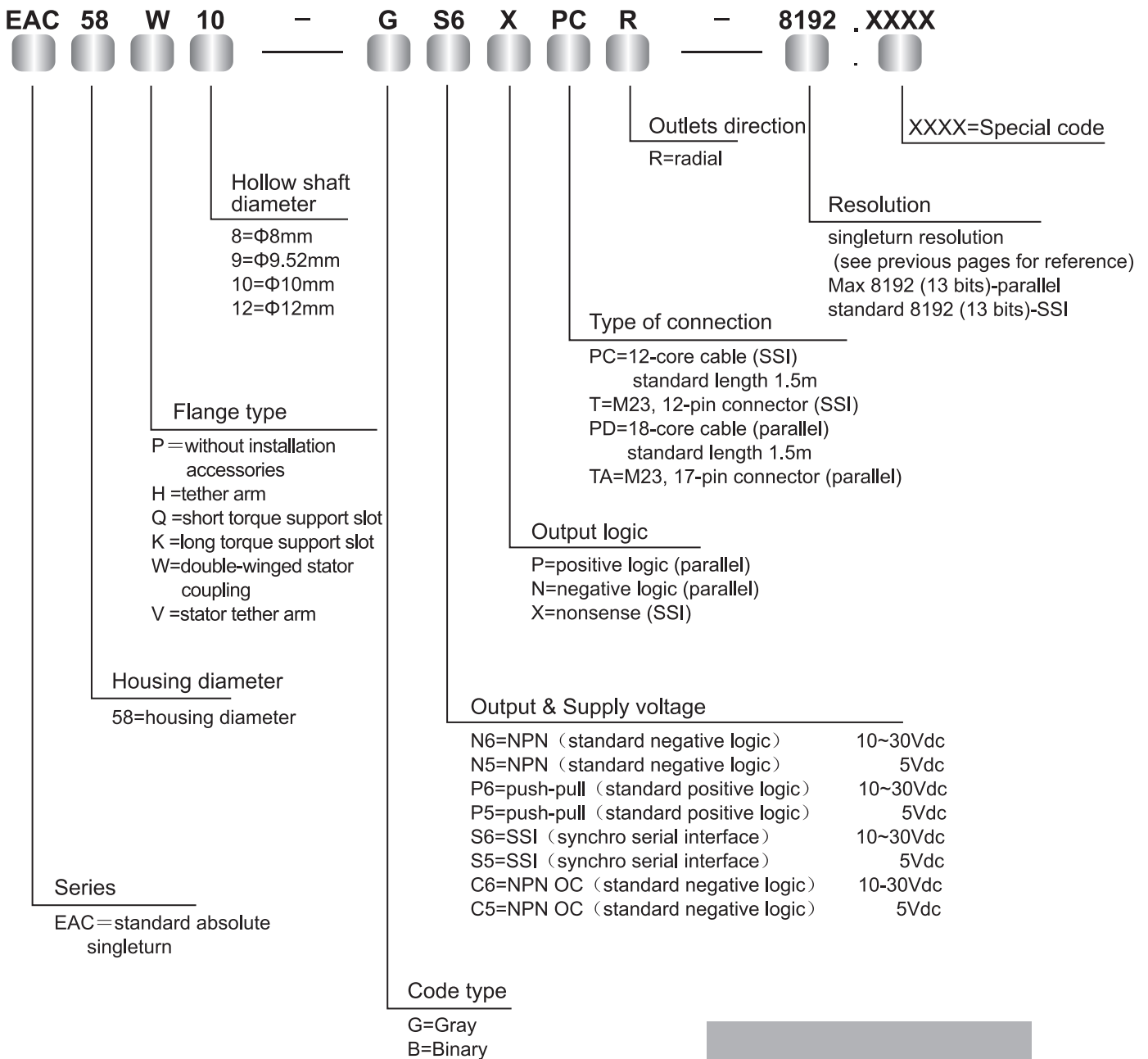
EAC58V

Accessories:  
E41350089A/0



# Standard Hollow Shaft Absolute Singleturn Encoder EAC58P

## Order Code



Connection accessories:  
 Connectors matching with "T" wiring  
 Ordering code: TMSP1612F  
 Connectors matching with "TA" wiring  
 Ordering code: TMSP1617F

This sample is for reference only, take products as the standard. Please contact ELCO for other function requirements.