

Standard Shaft Absolute Singleturn Encoder EAC58



Application

Standard absolute singleturn encoder EAC58 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. EAC58 series have RESET function with resolution up to 8192.

Characteristics

- Pre-screw hole, convenient for installation
- Waterproof seal promotes IP level
- Durable stainless steel shaft
- Metal housing for shock resistance
- Protection class IP65
- Reverse connection protection
- Short circuit protection

Mechanical Characteristics

Shaft diameter (mm)	Φ6/Φ8/Φ9/Φ10h8
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	1.8×10 ⁻⁶ kgm ²
Starting torque	<0.01Nm
Body material	AL-alloy
Housing material	AL-alloy
Operating temperature	-20°C~~+80°C
Storage temperature	-25°C~~+85°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)	≤200mA	≤200mA	≤200mA	≤200mA
Permissible load (channel)	±20mA	±20mA	±20mA	±20mA
Pulse frequency	Max1MHz	Max1MHz	Max40kHz	Max40kHz
Signal level high	Typ.3.8V	Typ.3.8V	MinUb-2.8V	Min3.4V
Signal level low	Max0.5V	Max0.5V	Max2.0V	Max0.5V
Rise timeTr	Max 100ns	Max 100ns	Max 0.2μs	Max 0.2μs
Fall timeTf	Max 100ns	Max 100ns	Max 0.2μs	Max 0.2μs

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Terminal Assignment

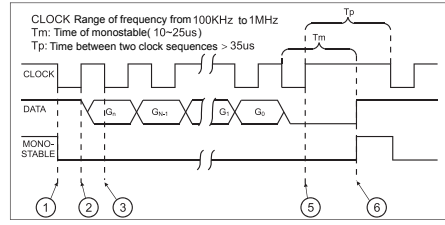
SSI

Signal	0V	+U _b	+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

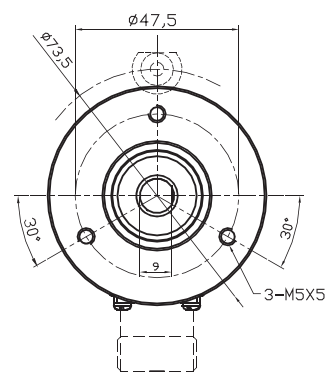
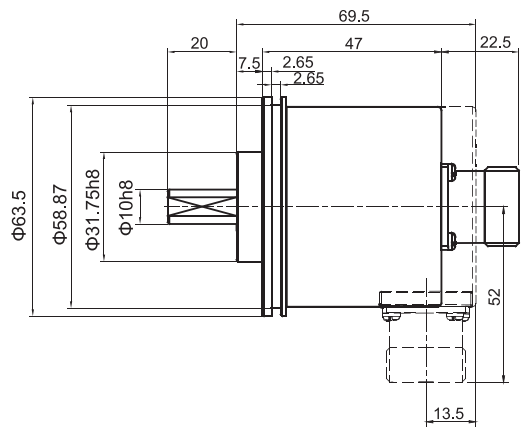
Signal	0V	+U _b	bit0	bit1	bit2	bit3	bit4	bit5	bit6	bit7	bit8	bit9	bit10	bit11	bit12	V/R *	ST *
Color	WH	BN	GN	YE	GY	PK	BU	RD	BK	VT	GY/PK	RD/BU	WH/GN	BN/GN	WH/YE	YE/BN	WH/GY
17-pin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Gray	/	/	1	2	3	4	5	6	7	8	9	10	11	12	13	/	/
Binary																	

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



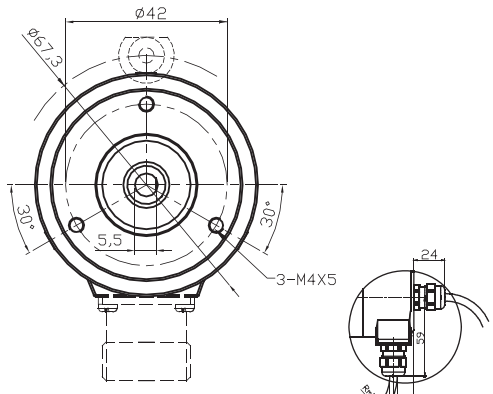
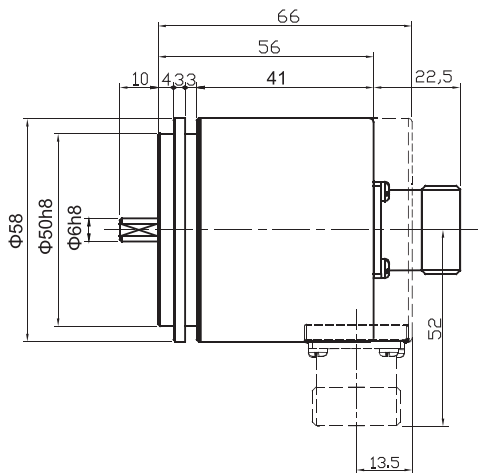
Dimensions

EAC58A



servo-restraint ring: 58PXL
 (see installation accessories for reference)

EAC58B

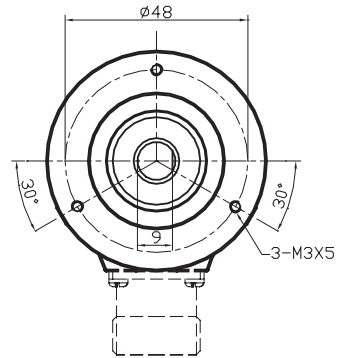
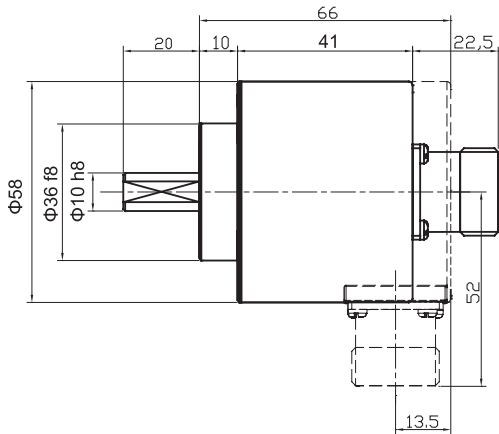


Rmin
 fixed: 55mm
 hauling: 70mm
 cable output

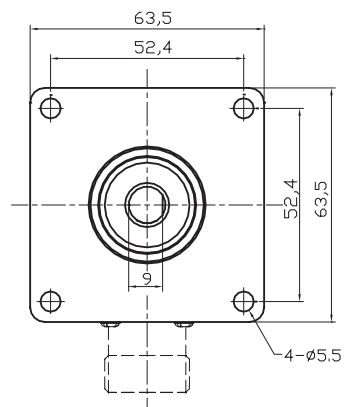
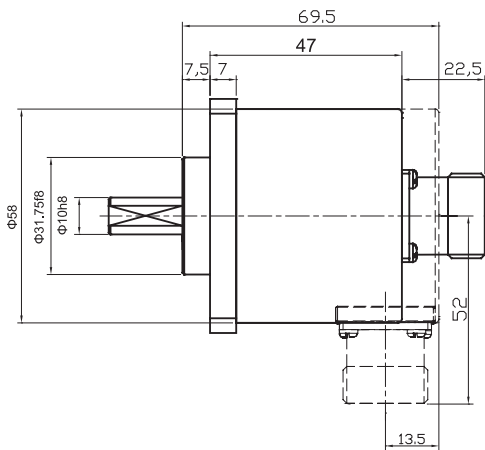
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Dimensions

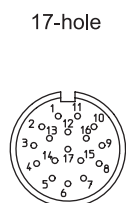
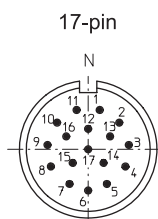
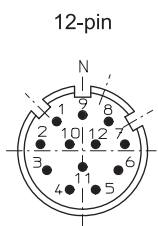
EAC58C



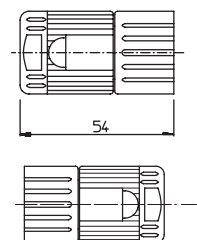
EAC58D



Note: Rigid hardwiring mustn't be used between driving shaft, flange and encoder to prevent shaft from overload.



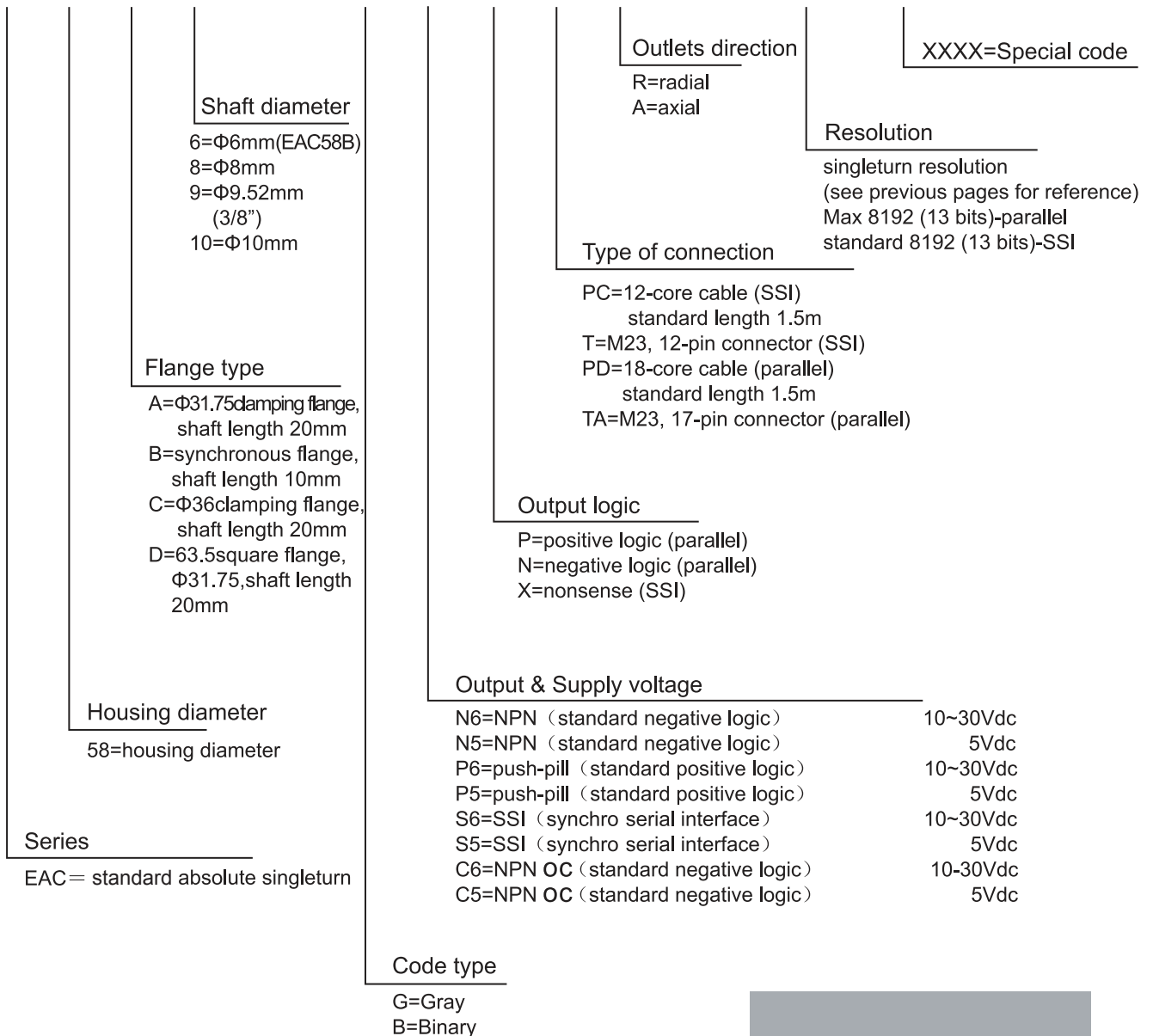
Size



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Order Code

EAC 58 C 10 - G S6 X PC R - 8192 .XXXX



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.