Standard 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. EAC58 series with “RESET” functions, resolution up to 8192.

Characteristics

- Various flanges available
- Water-proof seal
- stainless steel
- Metal housing
- Protection class IP64
- Short-circuit protection
  Reverse connection protection

Mechanical Characteristics

Shaft diameter（mm）	Φ6/Φ8/Φ9/Φ10h8
Protection acc. to EN 60 529	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	$1.8\times10^{-6}kgm^2$
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 resolution：1024，2048，4096，8192

Parallel resolution：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/NPNopen collector/PNP/PNP open collector	
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	Max 1MHz	Max 1MHz	Max 40kHz	Max 40kHz
Signal level high	Typ.3.8V	Typ.3.8V	Min 3.4V	Min Ub-2.8V
Signal level low	Max 0.5V	Max 0.5V	Max 0.5V	Max 2.0V
Rise time Tr	Max 100ns	Max 100ns	Max 0.2μs	Max 0.2μs
Fall time Tf	Max 100ns	Max 100ns	Max 0.2μs	Max 0.2μs

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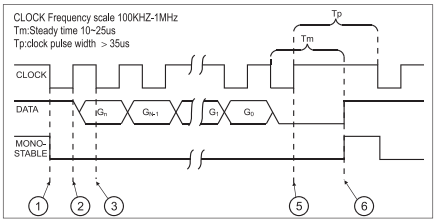
Terminal Assignment

SSI

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



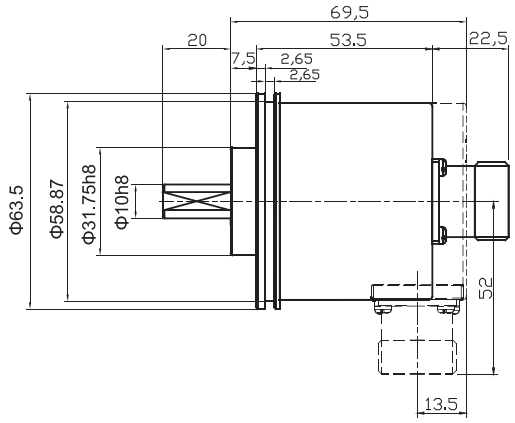
Parallel

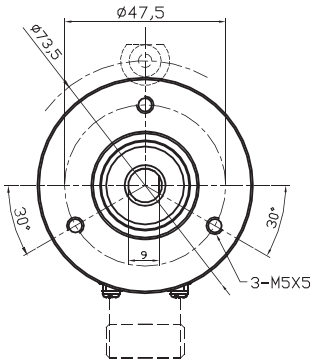
Signal	0V	+U_b	bit0	bit1	bit2	bit3	bit4	bit5	bit6	bit7	bit8	bit9	bit10	bit11	bit12	V/R *	ST *
Color	WH	BN	GN	YE	GY	PK	BU	RD	BL	PL	GY/PK	RD/BU	WH/GN	BN/GN	WH/YE	YE/BN	WH/GY
17pin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Gray	/	/	1	2	3	4	5	6	7	8	9	10	11	12	13	/	/
Binary																	

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

Dimension

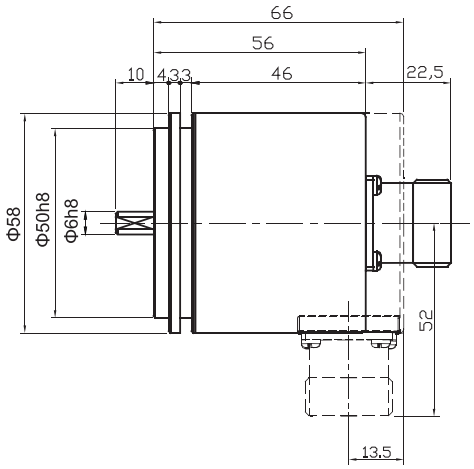
EAC58A

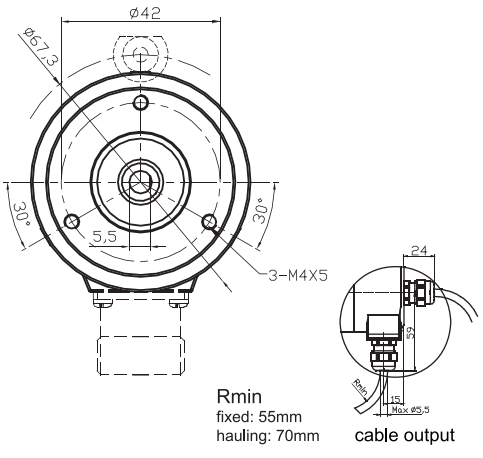




servo-restraint ring: 58PXL(see installation accessories for reference)

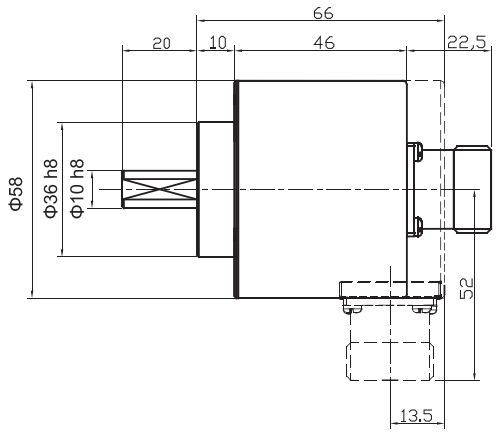
EAC58B

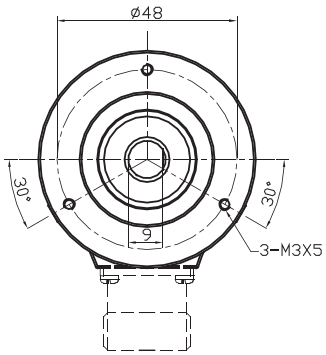




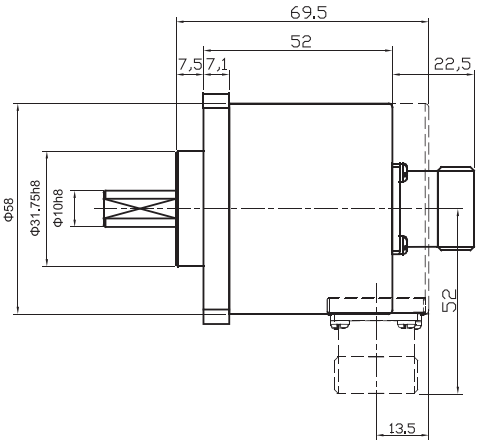
Dimension

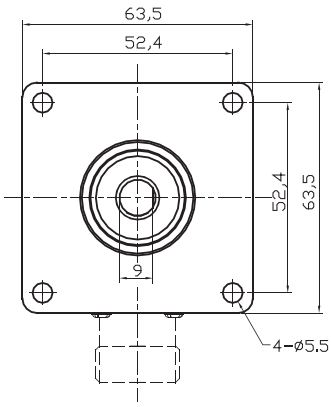
EAC58C





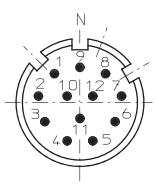
EAC58D



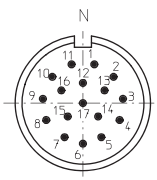


Note: Rigid hardwired mustn't be used between driving shaft, flange and encoder to prevent shaft from overload.

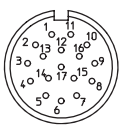
12-pin



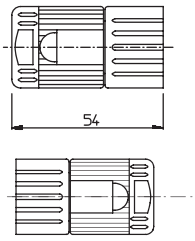
17-pin



17-hole



Size



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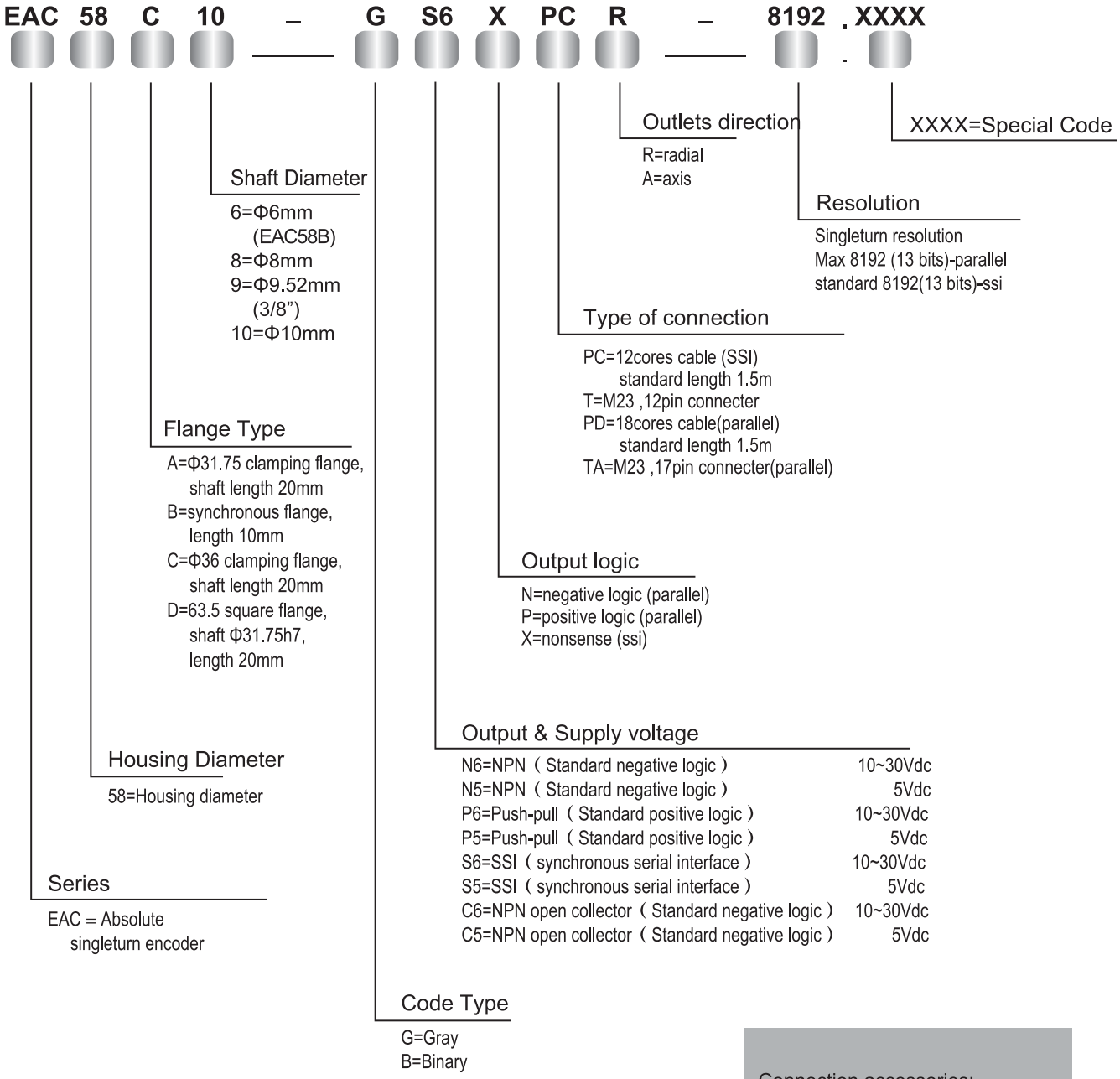
Order Code:



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.