

EV58A

ARTICLE PROPERTIES

TYPE	Topydic series shaft incremental encoder
SIZE	Ø 58

TECHNICAL DATA

SHAFT DIAMETER	Ø 6g6 mm / Ø 8g6 mm / Ø 10g6 mm	STARTING TORQUE	≤ 0.01 N·m
SPEED	6000 rpm	BODY MATERIAL	Aluminum
BEARING LIFE	10 ⁹ revolution	HOUSING MATERIAL	Aluminum
MOMENT OF INERTIA	1.9 x 10 ⁻⁶ kgm ²	WEIGHT	300 g

ENVIRONMENTAL CONDITIONS

PROTECTION CLASS	IP65	OPERATING TEMPERATURE	-20 ... +90 °C
MAX LOAD CAPACITY OF THE SHAFT	60 N axial, 120 N radial	STORAGE TEMPERATURE	-40 ... +100 °C
SHOCK RESISTANCE (EN 60068-2-27)	50 g, 11 ms	RELATIVE HUMIDITY / CONDENSATION	90%, condensation not permitted
VIBRATION RESISTANCE (EN 60068-2-6)	10 g, 10 ... 2000 Hz		

Regular resolution: 360, 400, 500, 512, 600, 800, 1000, 1024, 2000, 2500, 4000, 2048, 4096, 5000

Attention: the products with above resolutions are available from stock, others on request.

ELECTRICAL PARAMETERS

OUTPUT CIRCUIT	RS422	PUSH-PULL
RESOLUTION	Max. 5000 ppr	Max. 5000 ppr
SUPPLY VOLTAGE	5±0.25 or 10 ... 30 V DC	10 ... 30 V DC
POWER CONSUMPTION (NO LOAD)	≤ 80 mA	≤ 100 mA
PERMISSIBLE LOAD (CHANNEL)	±50 mA	±30 mA
PULSE FREQUENCY	Max. 800 kHz	Max. 800 kHz
SIGNAL LEVEL HIGH	Min. 3.4 V	Min. Ub-1.8
SIGNAL LEVEL LOW	Max. 0.4 V	Max. 2.0 V
RISE TIME TR	Max. 200 ns	Max. 1 µs
FALL TIME TF	Max. 200 ns	Max. 1 µs

STANDARDS AND DIRECTIVES

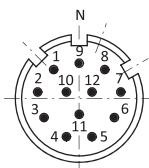
LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR	EN IEC 61000-6-2 EN IEC 61000-6-4
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EV58A

APPROVALS



TERMINAL ASSIGNMENT

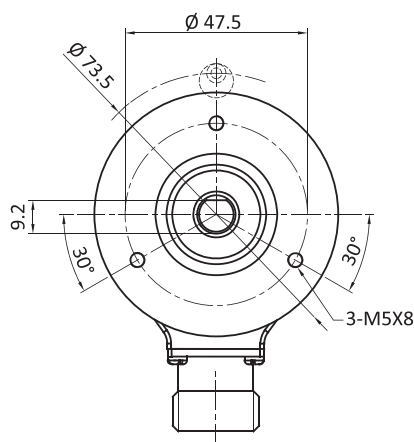
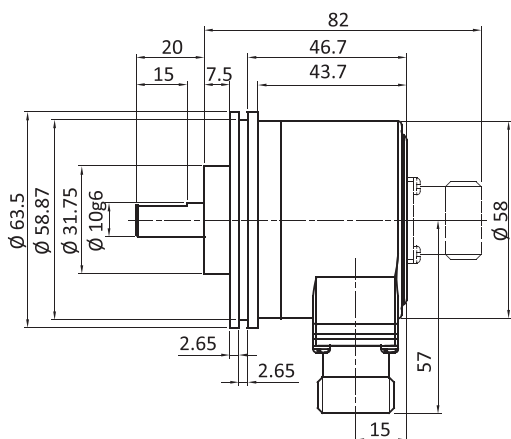


M23 12pin layout (Male)

Signal	0 V	+U _B	A	\bar{A}	B	\bar{B}	Z	\bar{Z}	Shield
Color	WH	BN	GN	YE	GY	PK	BU	RD	$\frac{1}{2}$
Pin	10	12	5	6	8	1	3	4	PH

DIMENSIONS (mm)

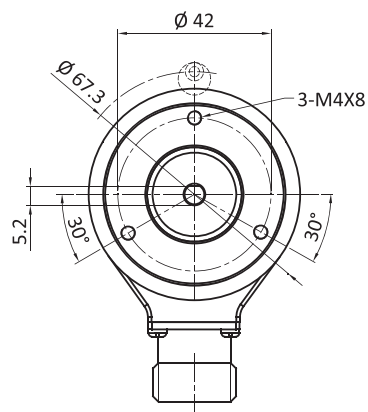
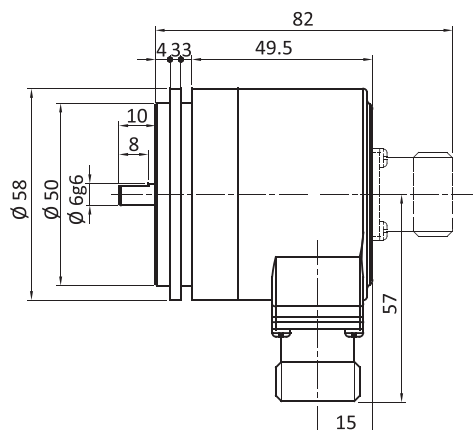
EV58A M23



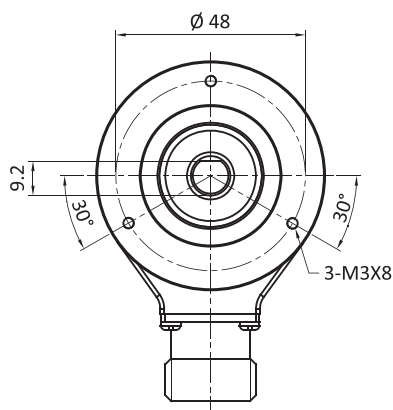
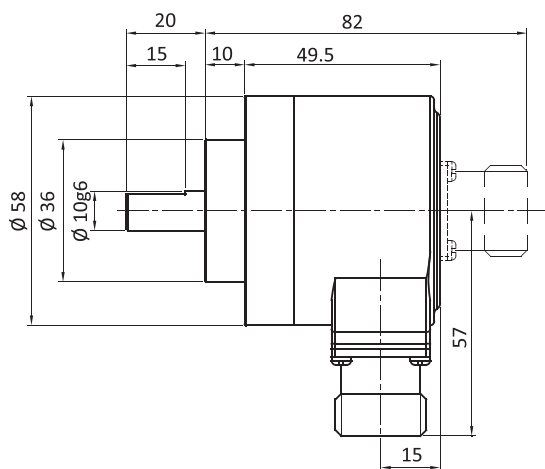
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DIMENSIONS (mm)

EV58B M23



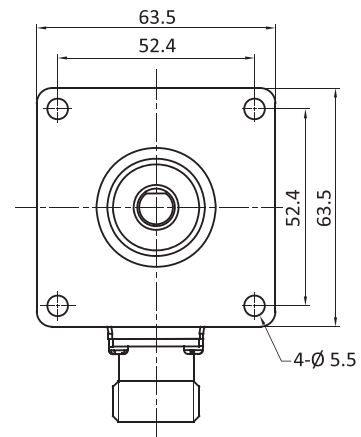
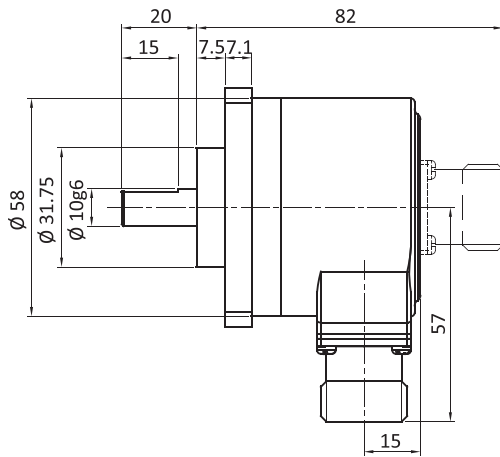
EV58C M23



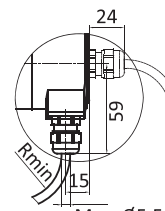
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DIMENSIONS (mm)

EV58D M23



Cable output



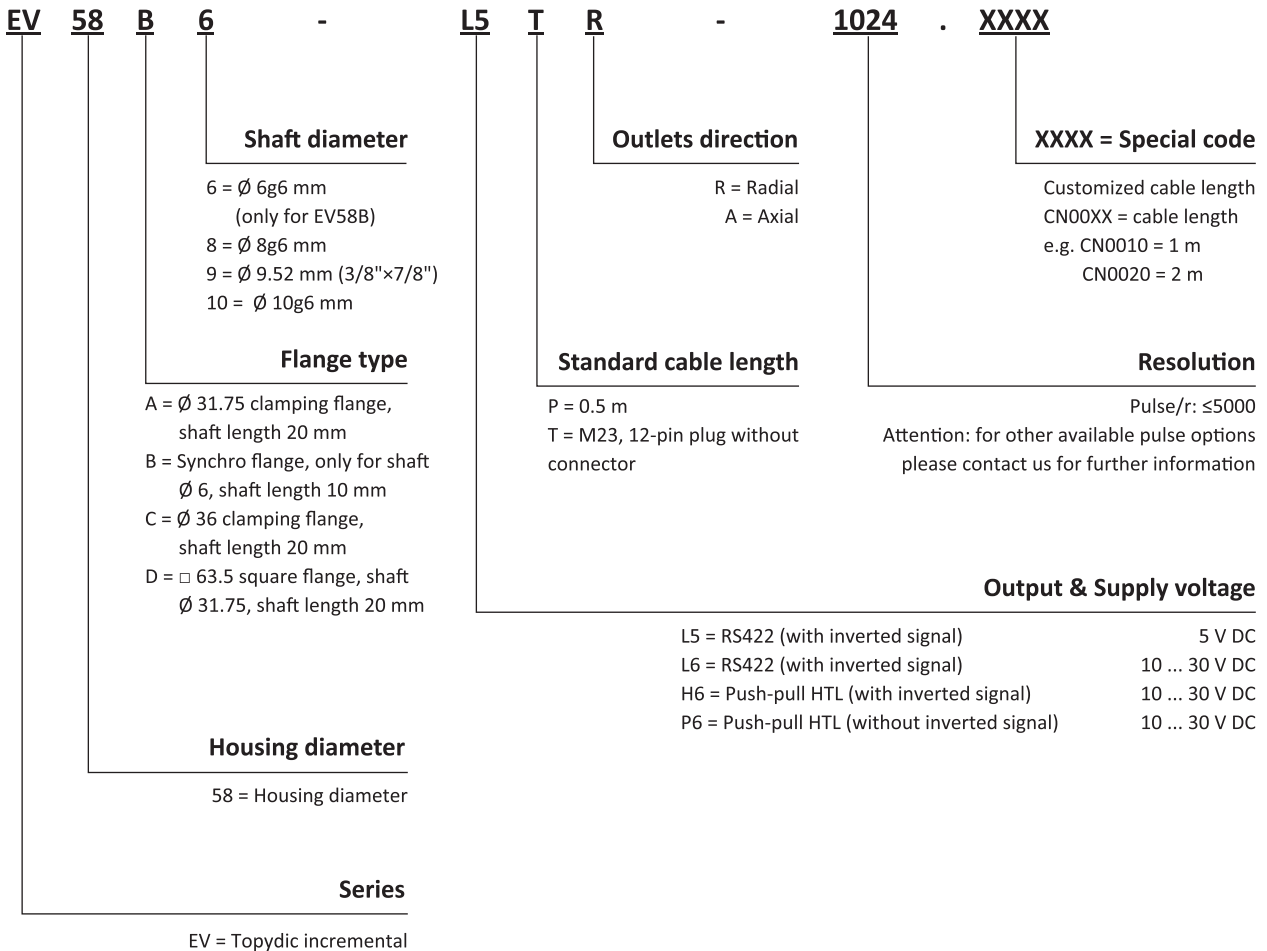
Rmin

Fixed installation: 55 mm

Max. Ø5.5 Drag installation: 70 mm

EV58A

ORDER CODE



When the voltage supply within the limited range and only one signal channel is connected improperly at certain moment:
 If $U_b = 5\text{ V}$, it's permitted to connect to signal channels, 0V or U_b ;
 If $U_b > 5\text{ V}$, it's permitted to connect to signal channels or 0V.

Matched connector: For connection type "T": TMSP1612F

EV58A

SALES AND SERVICE

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