

## EV58P

## ARTICLE PROPERTIES

<b>TYPE</b>	Topydic series hollow shaft incremental encoder
<b>SIZE</b>	Ø 58

## TECHNICAL DATA

<b>SHAFT DIAMETER</b>	Ø 8H7 mm / Ø 10H7 mm / Ø 12H7 mm / Ø 14H7 mm / Ø 15H7 mm	<b>STARTING TORQUE</b>	≤ 0.03 N·m
<b>SPEED</b>	6000 rpm	<b>BODY MATERIAL</b>	Aluminum
<b>BEARING LIFE</b>	10 <sup>9</sup> revolution	<b>HOUSING MATERIAL</b>	Aluminum
<b>MOMENT OF INERTIA</b>	6 x 10 <sup>-6</sup> kgm <sup>2</sup>	<b>WEIGHT</b>	400 g

## ENVIRONMENTAL CONDITIONS

<b>PROTECTION CLASS</b>	IP65	<b>OPERATING TEMPERATURE</b>	-20 ... +80 °C
<b>MAX LOAD CAPACITY OF THE SHAFT</b>	40 N axial, 80 N radial	<b>STORAGE TEMPERATURE</b>	-40 ... +95 °C
<b>SHOCK RESISTANCE (EN 60068-2-27)</b>	50 g, 11 ms	<b>RELATIVE HUMIDITY / CONDENSATION</b>	90%, condensation not permitted
<b>VIBRATION RESISTANCE (EN 60068-2-6)</b>	10 g, 10 ... 2000 Hz		

Regular resolution: 256, 300, 360, 400, 500, 512, 600, 800, 1000, 1024, 1200, 1250, 2000, 2048, 2500, 3600, 4096, 5000.  
Attention: the products with above resolutions are available from stock, others on request.

## ELECTRICAL PARAMETERS

<b>OUTPUT CIRCUIT</b>	RS422	PUSH-PULL
<b>SUPPLY VOLTAGE</b>	5±0.25 or 10 ... 30 V DC	10 ... 30 V DC
<b>POWER CONSUMPTION (NO LOAD)</b>	Typ. 40 mA, max. 90 mA	Typ. 50 mA, max. 100 mA
<b>PERMISSIBLE LOAD (CHANNEL)</b>	Max. ±20 mA	Max. ±30 mA
<b>PULSE FREQUENCY</b>	Max. 300 kHz	Max. 300 kHz
<b>SIGNAL LEVEL HIGH</b>	Min. 2.5 V	Min. U <sub>b</sub> -1 V
<b>SIGNAL LEVEL LOW</b>	Max. 0.5 V	Max. 0.5 V
<b>RISE TIME TR</b>	Max. 200 ns	Max. 1 µs
<b>FALL TIME TF</b>	Max. 200 ns	Max. 1 µs

## STANDARDS AND DIRECTIVES

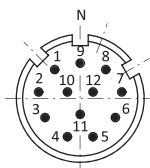
<b>LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR</b>	EN IEC 61000-6-2 EN IEC 61000-6-4
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APPROVALS



TERMINAL ASSIGNMENT

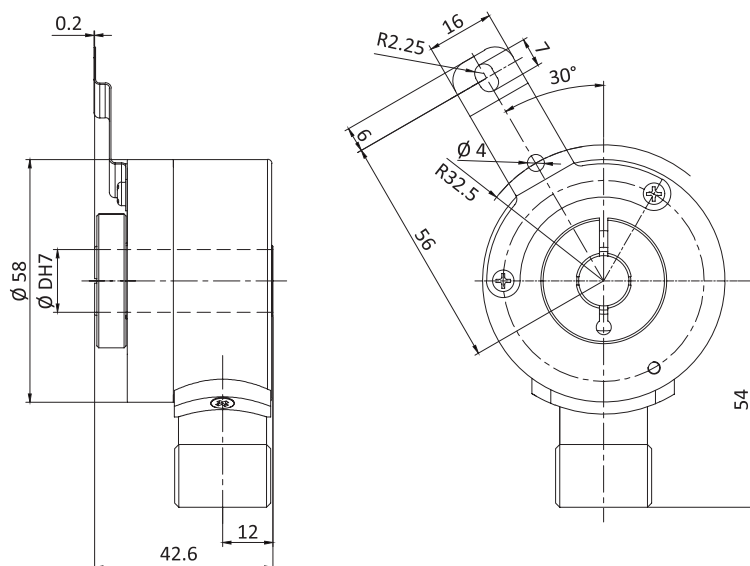


M23 12pin layout (Male)

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

DIMENSIONS (mm)

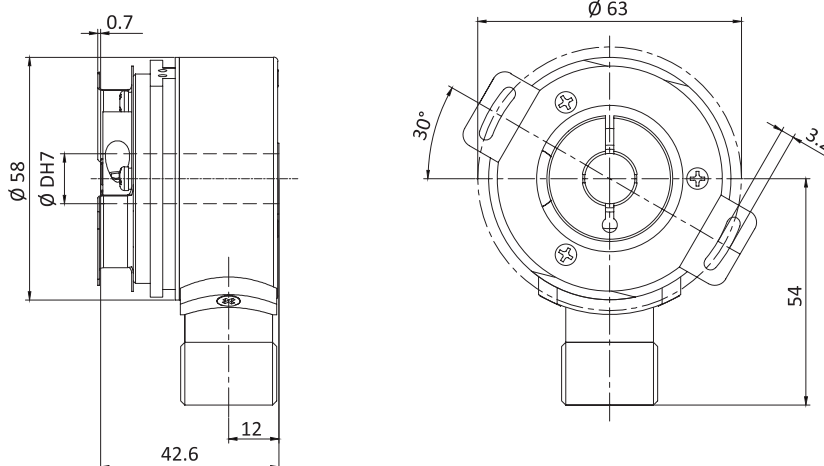
EV58P M23



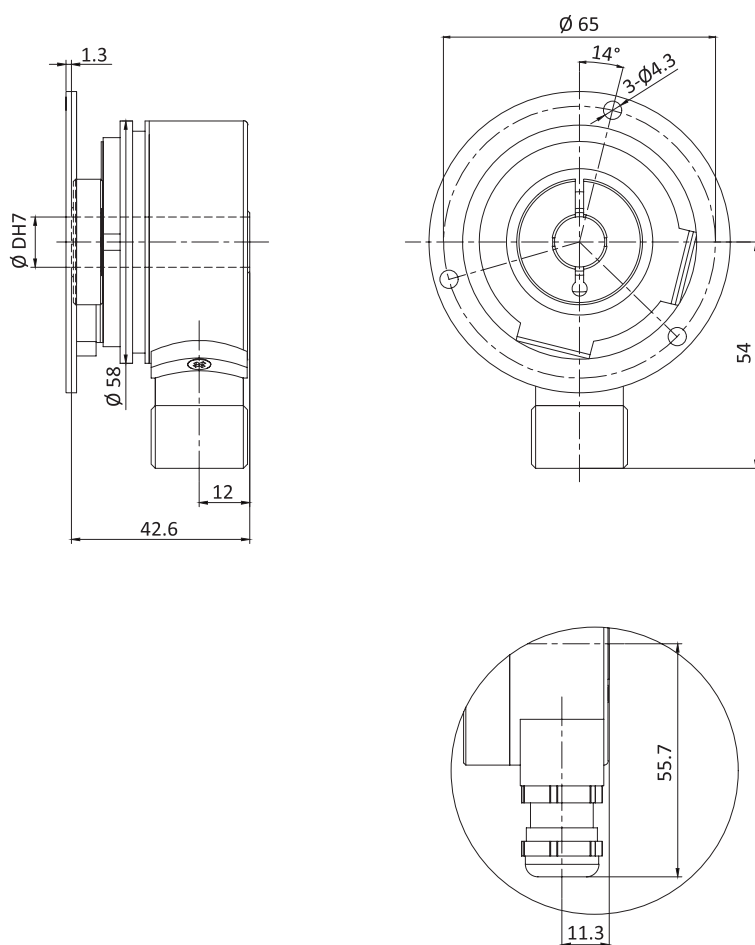
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DIMENSIONS (mm)

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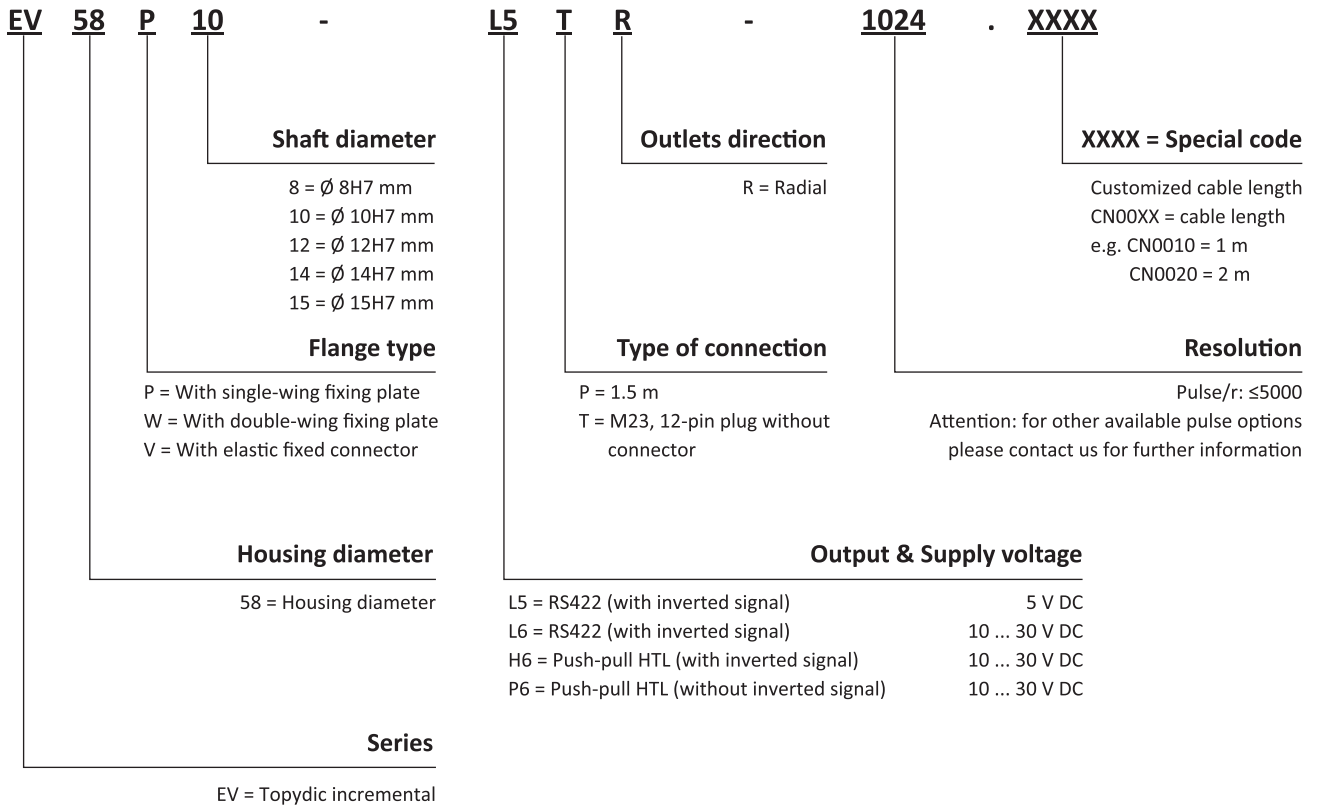


EV58V M23



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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

## EV58P

## SALES AND SERVICE

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