

EV50P

ARTICLE PROPERTIES

TYPE	Topydic series incremental encoder
SIZE	Ø 50

TECHNICAL DATA

SHAFT DIAMETER	Ø 6 mm / Ø 8 mm / Ø 10 mm / Ø 12 mm / Ø 14 mm / Ø 15 mm / Ø 1/4" / Ø 3/8" / Ø 1/2" / Ø 5/8"	STARTING TORQUE	IP65: < 0.03 N·m IP67: < 0.08 N·m
SPEED	12000 rpm (without oil seal) 6000 rpm (with oil seal)	BODY MATERIAL	Aluminum
BEARING LIFE	10 ⁹ revolution	HOUSING MATERIAL	Aluminum
MOMENT OF INERTIA	6 x 10 ⁻⁶ kgm ²	WEIGHT	400 g

ENVIRONMENTAL CONDITIONS

PROTECTION CLASS	IP65 (without oil seal) IP67 (with oil seal)	OPERATING TEMPERATURE	-40 ... +85 °C
MAX LOAD CAPACITY OF THE SHAFT	40 N axial, 80 N radial	STORAGE TEMPERATURE	-45 ... +90 °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: 100, 200, 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

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

When the voltage supply within the limited range and only one signal channel is connected improperly at certain moment:
if U_B = 5 V, it's permitted to connect to signal channels, 0 V or U_B;
if U_B > 5 V, it's permitted to connect to signal channels or 0 V.

EV50P

STANDARDS AND DIRECTIVES

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

APPROVALS

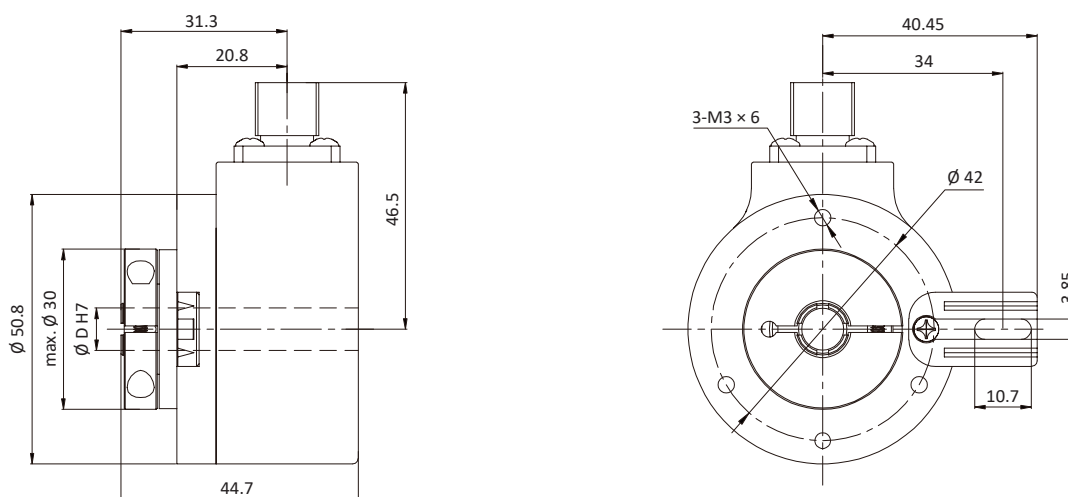


TERMINAL ASSIGNMENT

Signal	0 V	+U _B	A	\bar{A}	B	\bar{B}	Z	\bar{Z}	Shield
Color	WH	BN	GN	YE	GY	PK	BU	RD	\perp
Pin (12 pin)	10	12	5	6	8	1	3	4	PH
Pin (5 pin)	1	2	3	-	4	-	5	-	PH
Pin (8 pin)	1	2	3	4	5	6	7	8	PH

DIMENSIONS (mm)

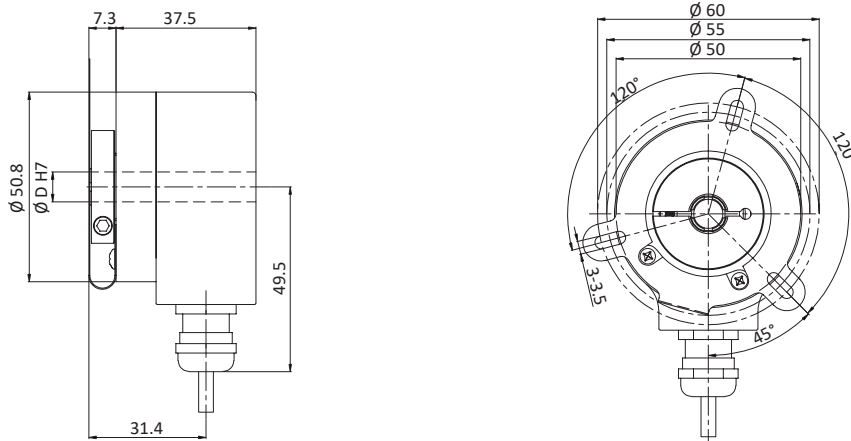
EV50K



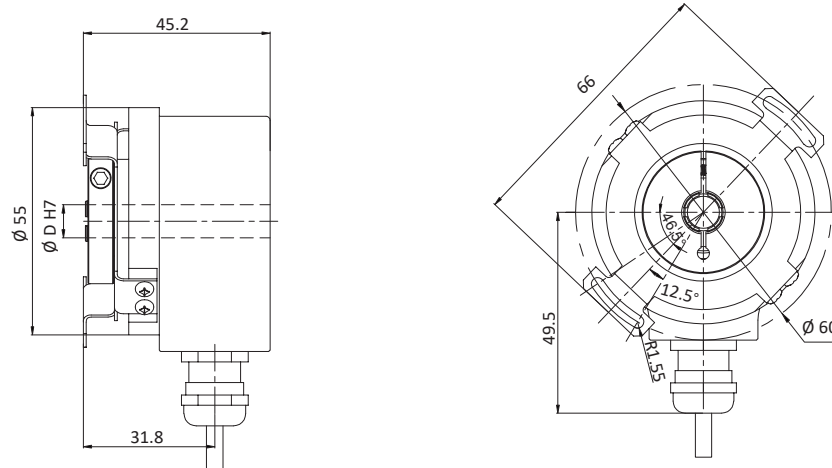
EV50P

DIMENSIONS (mm)

EV50S



EV50N

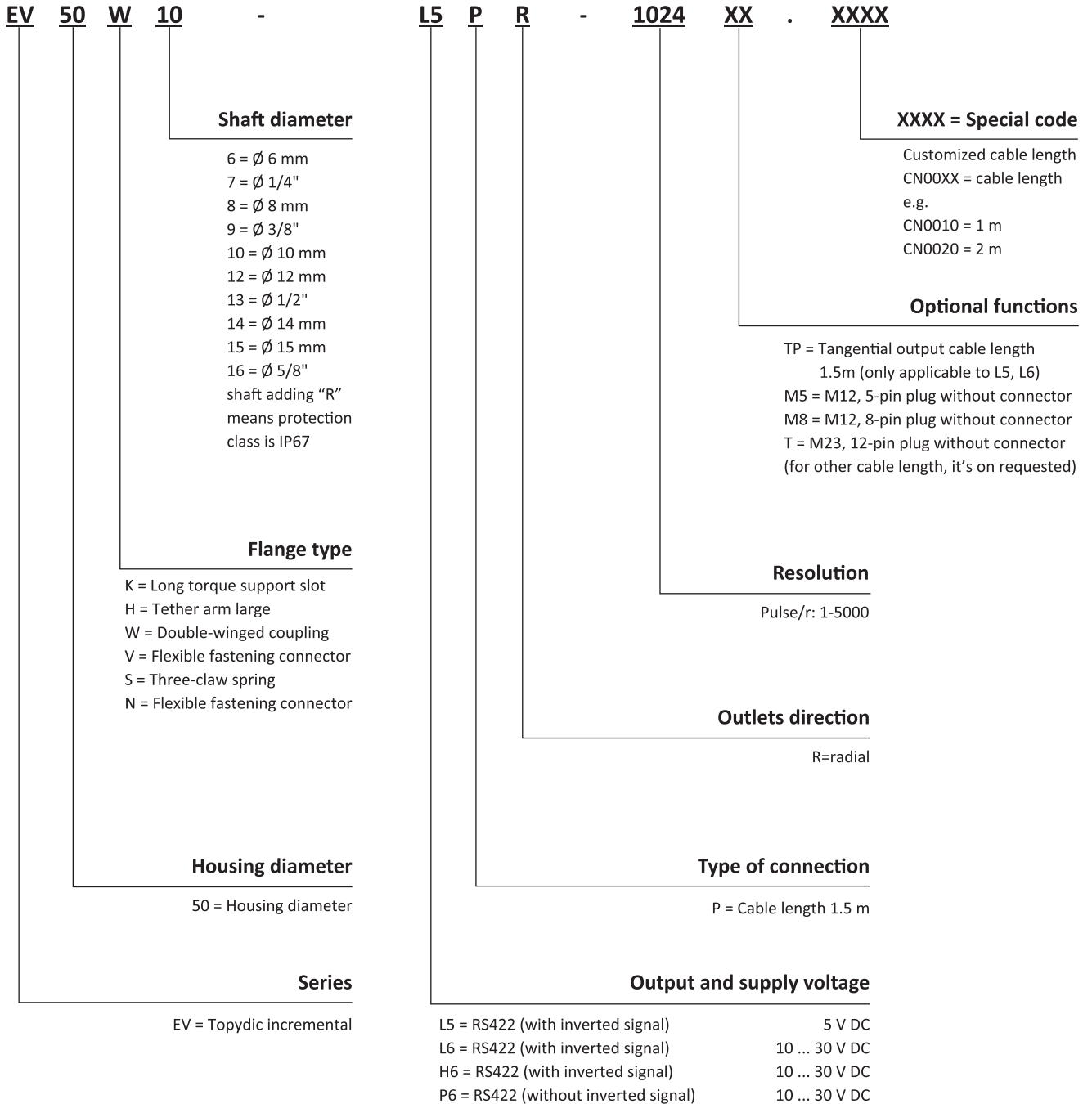


TOP VIEW OF PIN PLUG

Connector type	5 pin M12 connector	8 pin M12 connector	12 pin M23 connector	5 pin M12 connector	8 pin M12 connector
Pin plug					
Matched connector	M125PSF-0020-W 5-core pre-molded connector with 2 m PUR cable	M128PSF-0020-W 8-core pre-molded connector with 2 m PUR cable	TMSP1612F Fielc attachable connector	TMSP125PF Fielc attachable connector	TMSP128PF Fielc attachable connector

EV50P

ORDER CODE



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SALES AND SERVICE

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