

EF 36 K

BLIND HOLLOW SHAFT INCREMENTAL ENCODER



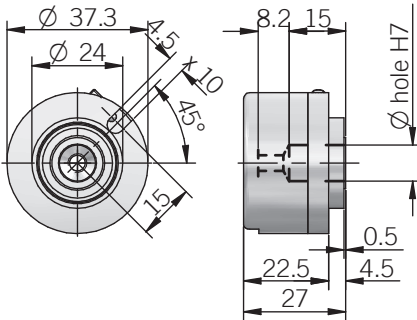
Specifications

ø 36 mm encoder series recommended in feedback control systems on AC servomotors, interchangeable with size 15 Resolver in the back of the motor.

- 6 channels encoder with optical generation of “Hall effect phases” (commutation signals)
- Signal transmission by bit parallel bus
- Easy mechanical mounting
- Small dimensions
- Wide range of resolutions available
- High temperature resistance

ORDERING CODE	EF	36K	4	L	512	S	5	L	8	X	6	PR	.XXX
SERIES incremental encoder with Hall phases EF													
MODEL blind hollow shaft with rear fixing 36K													
MOTOR POLES 4 poles 4 6 poles 6 8 poles 8													
ELECTRONIC INTERFACE FOR COMMUTATION SIGNALS NPN open collector C line driver RS-422 L													
RESOLUTION ppr from 500 to 1024 see table for pulses availability													
ZERO PULSE without zero pulse S with zero pulse Z													
POWER SUPPLY 5 V DC 5													
ELECTRONIC INTERFACE line driver RS-422 L													
BORE DIAMETER mm 8 9,52 mm (3/8") mm 9 mm 10													
ENCLOSURE RATING IP 40 X													
MAX ROTATION SPEED 6000 rpm 6													
OUTPUT TYPE radial cable (standard length 0,3 m) PR													
VARIANT custom version XXX													

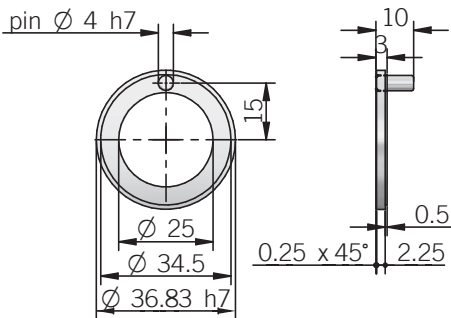
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dimensions in mm

ACCESSORIES

size 15 Resolver flange ordering code: **FLG004** (P/N 94010076)



for mounting instruction please refer to product installation notes

CONNECTIONS

Function	Cable output
+V DC	red
0 V	black
Ch. A	green
Ch. B	yellow
Ch. Z	blue
Ch. A-	brown
Ch. B-	orange or pink
Ch. Z-	white
Ch. U	grey
Ch. V	violet
Ch. W	grey-pink
Ch. U-	red-blue
Ch. V-	white-green
Ch. W-	brown-green
⏏	shield

ELECTRICAL SPECIFICATIONS

Incremental resolution	from 500 to 1024 ppr
Power supply	5 = 4,5 ... 5,5 V DC
Current consumption without load	150 mA max
Max load current	20 mA / channel (line driver RS-422) 30 mA / channel (NPN open collector)
Output type for incremental signals	line driver RS-422
Output type for Hall phases	NPN open collector (pull-up max +30V DC) line driver RS-422
Max output frequency	150 kHz
Counting direction	A leads B clockwise (shaft view)
Electromagnetic compatibility	IEC 61000-6-1 IEC 61000-6-3

MECHANICAL SPECIFICATIONS

Bore diameter	ø 8 / 9,52 (3/8") / 10 mm
Enclosure rating	IP 40 (IEC 60529)
Max rotation speed	6000 rpm
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	5 G, 10 ... 500 Hz (IEC 60068-2-6)
Moment of inertia	0,5 x 10 ⁻⁶ kgm ²
Starting torque (at +20°C / +68°F)	< 0,01 Nm
Body material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	EN-AW 2011 aluminum
Bearings	2 ball bearings
Bearings life	10 ⁹ revolutions
Operating temperature	-10° ... +85°C (+14° ... +185°F)
Storage temperature	-25° ... +85°C (-13° ... +185°F)
Fixing torque for shaft fixing	1,5 Nm max
Weight	150 g (5,29 oz)

RESOLUTIONS

500 4 / 6 poles
512 4 / 6 poles
1000 6 / 8 poles
1024 4 / 6 / 8 poles

please directly contact our offices for other pulses