

MAIN FEATURES

∅ 50 encoder series recommended as motor feedback.

- Several ways to fix it
- Easy mechanical mounting
- Small dimensions
- Up to 2048 ppr with zero signal
- Several output types available
- Up to 205 kHz output frequency
- Up to 6000 RPM rotation speed

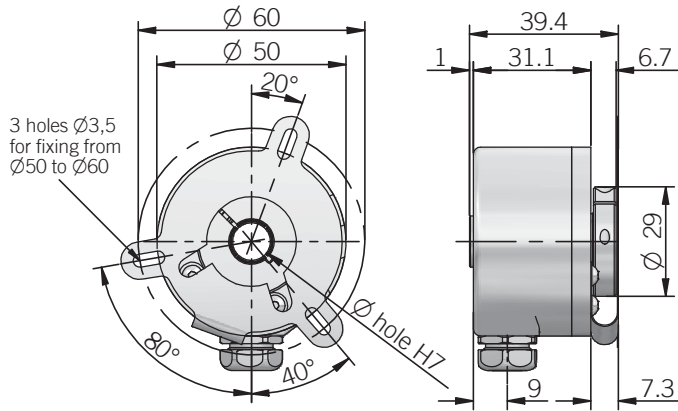


ORDERING CODE

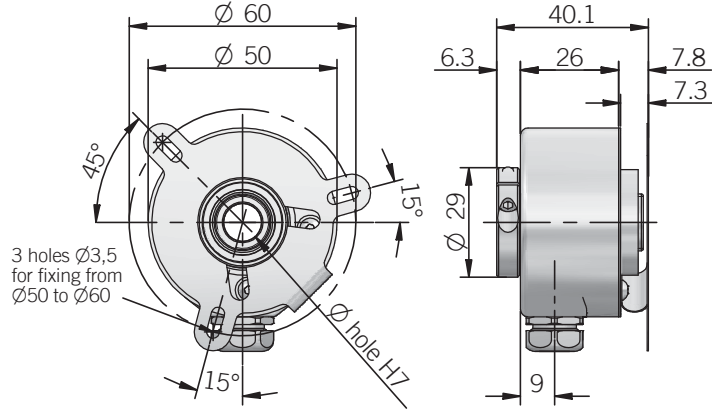
EF	50	G	P	6	L	2000	Z	5	L	8	X	6	PR	.	XXX
SERIES incremental encoder with Hall phases	SIZE mm	TYPE fixing with spring fixing with pin	FIXING through hollow shaft with front fixing through hollow shaft with rear fixing	POLES OF THE MOTOR 4 poles 6 poles 8 poles	OUTPUT TYPE FOR HALL PHASES NPN open collector line driver	RESOLUTION ppr from 1 to 2048	ZERO PULSE without zero pulse with zero pulse	OUTPUT TYPE FOR INCREMENTAL SIGNALS line driver	POWER SUPPLY 5 V DC	ENCLOSURE RATING IP 40	SHAFT DIAMETER 6 mm 8 mm 9 mm ∅ 9,52 (3/8") 10 mm	MAX ROTATION SPEED 6 000 rpm	OUTPUT TYPE radial cable output with cable gland (standard length 0.5 m)	VARIANT custom version	

N.B.: please directly contact our offices for pulses availability

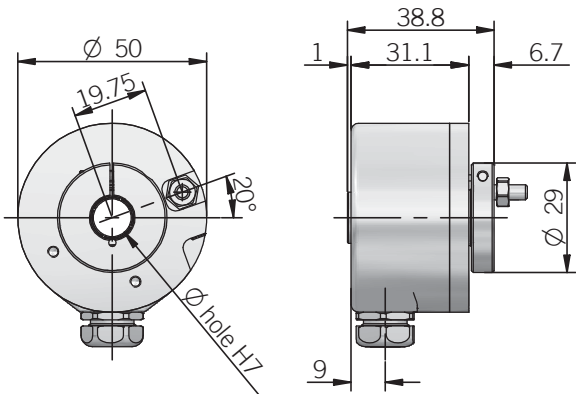
EF 50 FA



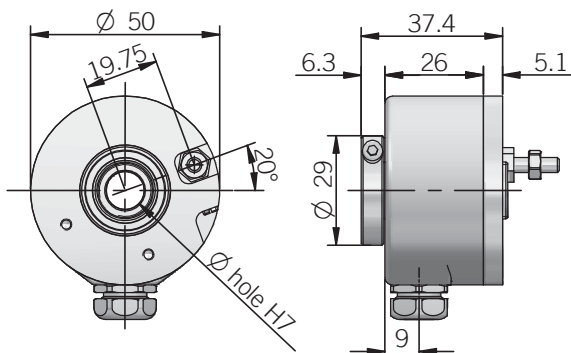
EF 50 FP



EF 50 GA



EF 50 GP



Electrical specifications

Resolution	from 1 to 2048 ppr
Power supply	5 V DC ± 10%
Current consumption without load	150 mA max
Max load current	15 mA for channel (line driver) 30 mA for channel
Output type for incremental signals	line driver
Output type for Hall phases	NPN open collector line driver
Max output frequency	205 kHz
Counting direction	A leads B clockwise (shaft view)
Electromagnetic compatibility	IEC 61000-6-1 IEC 61000-6-3

Mechanical specifications

Shaft diameter	6 / 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)
Bearings	2 ball bearings
Bearings life	10 ⁹ revolutions
Body material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	EN-AW 2011 aluminum
Operating temperature	-10° ... +70 °C -10° ... +85 °C on request
Storage temperature	-25° ... +70 °C
Weight	150 g

Connections and standard colours

Function	14 core wire
+V DC	red
0 V	black
Ch. A	green
Ch. B	yellow
Ch. Z	blue
Ch. A-	brown
Ch. B-	orange
Ch. Z-	white
Ch. U	gray
Ch. V	violet
Ch. W	gray-pink
Ch. U-	red-blue
Ch. V-	white-green
Ch. W-	brown-green
⊕	shield

HOW TO MOUNT IT

- Couple encoder shaft with motor shaft.
- Fix the spring to the motor flange without tightening it.
- Fix encoder shaft by the metal ring.
- Turn for phasing.
- Block the spring.

