



EH/EF 80C/P/K INCREMENTAL ENCODER



Motor's line Incremental encoders

Ø80 encoder series used to feedback systems on AC servomotor. They integrate a traditional incremental encoder and the optic generation of "Hall effect phases".
Main characteristics are:

- Contained dimensions
- Wide resolution range available
- High temperature resistance
- Easy mounting

EH series

Basic version with incremental outputs
Several output types available

EF series

Optic engendering of the "commutation phases" integrated to the basic version
Signals transmission by parallel connection



Electrical specifications

Resolution	from 200 to 2048 not electronically multiplied
Source and sink current	15 mA for channel with LINE DRIVER 15 mA for channel with other electronics
Frequency response	300 KHz Max $F = \frac{\text{RPM} \times \text{Resolution}}{60}$

EH series electrical specifications

Input voltage	5 / 8 ÷ 24 Vdc
Output types	NPN / NPNOPEN COLLECTOR/ PUSH PULL / LINE DRIVER
Input current with no output load	100 mA Max

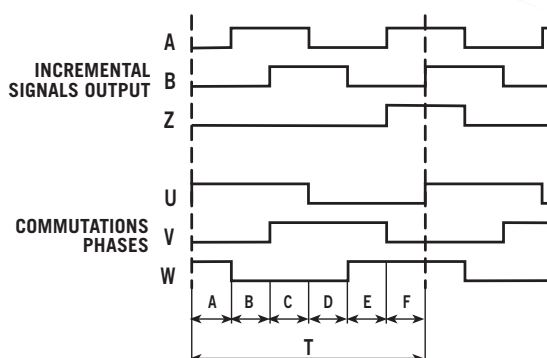
EF series electrical specifications

Input voltage	5 Vdc ± 5%
Output types for incremental phases	LINE DRIVER
Output types for Hall phases	NPN / NPNOPEN COLLECTOR/ PUSH PULL / LINE DRIVER
Input current with no output load	200 mA Max

Mechanical specifications

Through hole diameter EH / EF 80P (mm)	ø8 / ø10 / ø14 / 15 mm H7
Blind hole diameter EH / EF 80C (mm)	ø8FG6 / ø10G6 ø14 / ø15
Enclosure rating	IP54 standard
Shaft speed	3000 RPM
Vibrations	10G 10 ÷ 2000 Hz
Bearings life	10 ⁹ revolutions
Bearings	n° 2 ball bearings
Shaft material	Aluminium
Housing material	PA 66 reinforced with fiber glass
Operating temperature	-10° ÷ +85°C
Storage temperature	-25° ÷ +85°C
Weight	250 g

Signal configuration

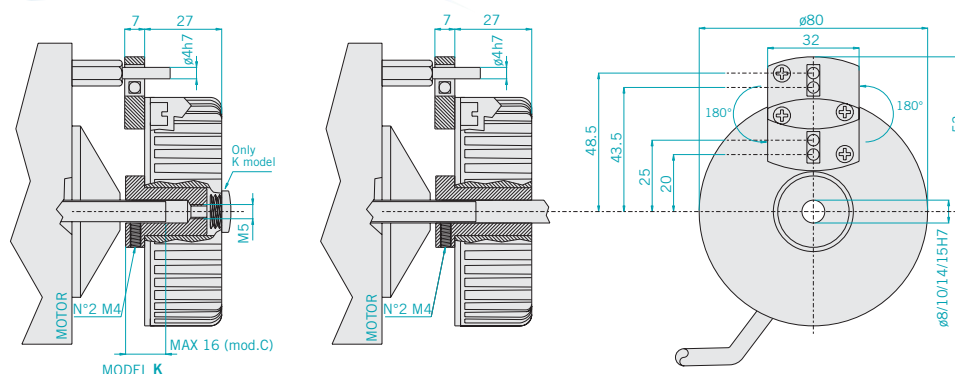


POLES	A/B/C/D/E	T
4	30° ± 1.5°	180°
6	20° ± 1.5°	120°
8	15° ± 1.5°	90°

Wire colours

COLOUR	SIGNAL	EH	EF
Red	+ Vdc	•	•
Black	0 Volt	•	•
Green	A	•	•
Yellow	B	•	•
Blue	Z	•	•
Brown	Ā	•	•
Orange	B̄	•	•
White	Z̄	•	•
Gray	U		•
Violet	V		•
Gray/Pink	W		•
Red / Blue	Ū		•
White/Green	V̄		•
Brown / Green	W̄		•

EH-EF 80C-P-K



HOW TO MOUNT IT



- 1) Fix the P antirotation pin
- 2) Insert the encoder on the motor shaft with misalignment recuperation system corresponding to the P pin.
- 3) Fix the D metal ring (NOT in case of Zero phasing)
- 4) Couple the encoder shaft with the motor shaft
- 5) Fix with the two M4 grains the encoder shaft
- 6) For Zero phasing turn the encoder (22° Max), then screw the D metal ring.

Ordering code

Full stop to separate special versions.

	EF	80	P	6	L	2000	Z	5	L	8	X	3	P	R	.	XXX	
Incremental encoder series	EH																Special version code numbered from 001 to 999
Incremental encoder series	EF																
Body dimension		80															
blind hole			C														
hollow shaft			P														
blind hole back fixing			K														
N° poles of the motor																	