



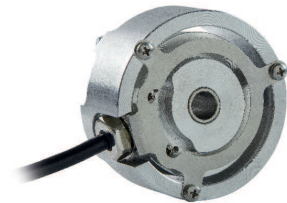
EH 50 FA / FP

THROUGH HOLLOW SHAFT INCREMENTAL ENCODER

MAIN FEATURES

∅ 50 mm encoder recommended for motor feedback. Suitable for small size motors due to its reduced dimensions.

- 3 channel encoder (A / B / Z) up to 1024 ppr
- Highly integrated optical ASIC
- Wide power supply up to +30 VDC
- Through hollow shaft up to 10 mm diameter
- Mounting by coupling flange or stator coupling (front or rear fixing)
- IP 65 as protection grade
- Wide temperature range -40 ... + 100°C



ORDERING CODE

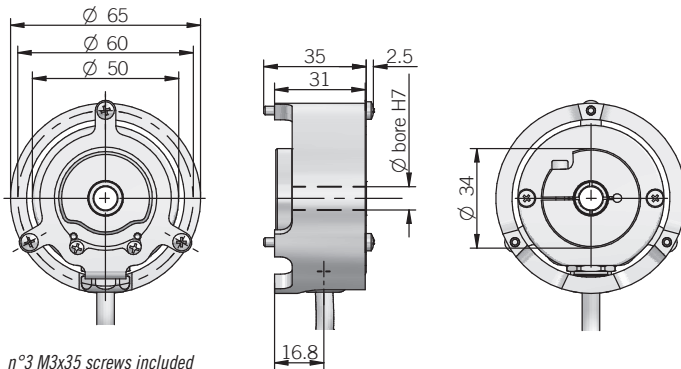
EH 50FP 1024 S 5/30 P 6 X 6 PR .XXX

SERIES incremental encoder series EH																					
MODEL through hollow shaft with front fixing 50FA through hollow shaft with rear fixing 50FP																					
RESOLUTION ppr from 100 to 1024 <i>see table for pulses availability</i>																					
ZERO PULSE without zero pulse S with zero pulse Z																					
POWER SUPPLY 5 ... 30 V DC 5/30																					
ELECTRONIC INTERFACE push-pull P universal line driver TTL/HTL L power supply 5/30V - output RS-422 RS																					
BORE DIAMETER mm 6 mm 8 9,52 mm (3/8") 9 10 mm 10																					
ENCLOSURE RATING IP 65 X																					
MAX ROTATION SPEED 6000 rpm 6																					
OUTPUT TYPE cable radial (standard length 0,5 m) PR																					
VARIANT custom version XXX																					



OPTICAL HOLLOW SHAFT INCREMENTAL ENCODERS | EH 50 FA / FP

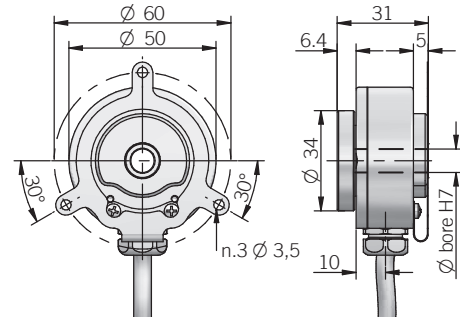
EH 50 FA



n°3 M3x35 screws included

dimensions in mm

EH 50 FP



ELECTRICAL SPECIFICATIONS

Resolution	from 100 to 1024 ppr
Power supply	4,5 ... 30 V DC (with reverse polarity protection)
Power draw without load	600 mW
Max load current	20 mA / channel
Output type*	push-pull / line driver
Max output frequency	105 kHz
Counting direction	A leads B clockwise (shaft view)
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-4

*output levels according to power supply, for further details please see under Technical basics section

CONNECTIONS

Function	Cable output Line driver	Cable output Push-pull
+V DC	red	red
0 V	black	black
Ch. A	green	green
Ch. A-	grey or brown	/
Ch. B	yellow	yellow
Ch. B-	orange	/
Ch. Z	blue	blue
Ch. Z-	white	/
⊕	shield	shield

RESOLUTIONS

100 - 200 - 256 - **360** - 400 - 500 - **1000** - **1024** ppr

please directly contact our offices for other pulses, preferred resolutions in bold

MECHANICAL SPECIFICATIONS

Bore diameter	∅ 6 / 8 / 9,52 (3/8") / 10 mm
Enclosure rating	IP 65 (IEC 60529)
Max rotation speed	6000 rpm
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10 ... 2000 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
Fixing torque for collar clamping	1 Nm recommended
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	-40° ... +100 °C (-40° ... +212°F)
Storage temperature	-40° ... +100 °C (-40° ... +212°F)
Weight	150 g (5,29 oz) mod.FP 200 g (7,05 oz) mod.FA

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