



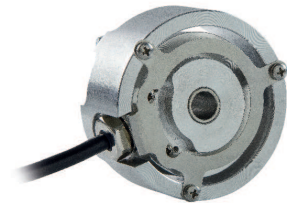
EH 50 FA / FP

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 VDCC
- 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

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 through hollow shaft with rear fixing		50FA 50FP									
RESOLUTION ppr from see table for pulses availability			100 to 1024								
ZERO PULSE without zero pulse with zero pulse				S Z							
POWER SUPPLY 5 ... 30 V DC					5/30						
ELECTRONIC INTERFACE push-pull universal line driver power supply 5/30V - output RS-422						P L RS					
BORE DIAMETER mm mm 9,52 mm (3/8") 10 mm							6 8 9 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



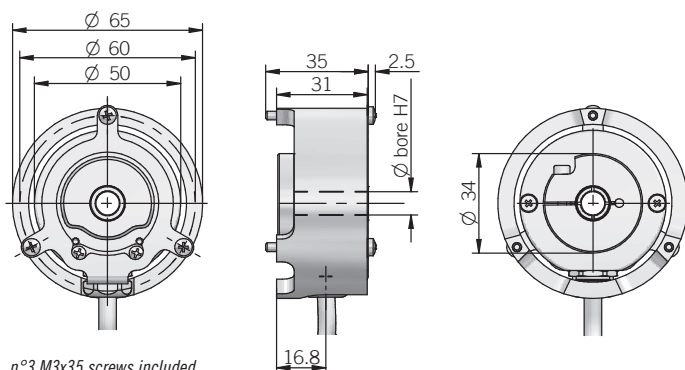
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OPTICAL HOLLOW SHAFT INCREMENTAL ENCODERS | EH 50 FA / FP

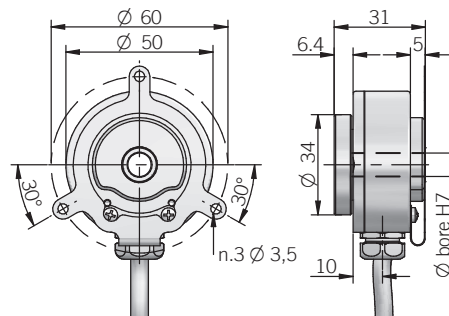
EH 50 FA



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	ø 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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