



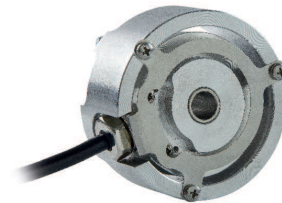
EH 50 FA / FP

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

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 see table for pulses availability													
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													



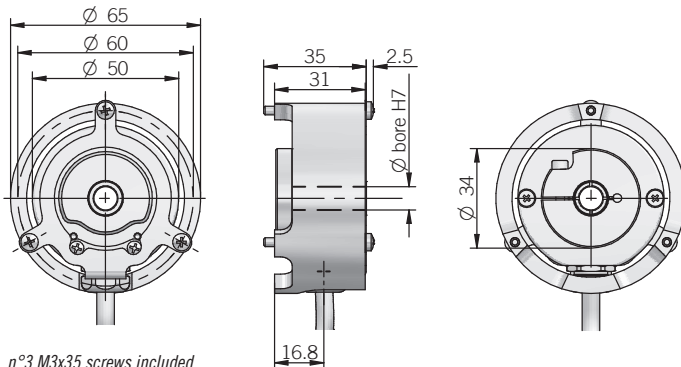
© Copyright 2016 Eltra S.p.a. Unipersonale. All rights reserved. All informations in this catalog are subject to change without notice. Eltra takes no responsibility for typographic errors. For the terms of sales please check the website. REV. 160607

56

1985 - 2015
eltra@eltra.it | www.eltra.it

OPTICAL HOLLOW SHAFT INCREMENTAL ENCODERS | EH 50 FA / FP

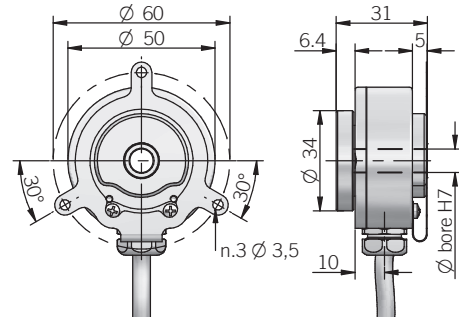
EH 50 FA



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



© Copyright 2016 Eltra S.p.a. Unipersonale. All rights reserved. All informations in this catalog are subject to change without notice. Eltra takes no responsibility for typographic errors. For the terms of sales please check the website. REV. 160607

57

30 1985 - 2015
eltra@eltra.it | www.eltra.it

Headquarter Switzerland:
Pewatron AG
Thurgauerstrasse 66
CH-8052 Zurich
Phone +41 44 877 35 00
info@pewatron.com

Office Germany:
Pewatron AG
Edisonstraße 16
D-85716 Unterschleißheim
Phone +49 89 260 38 47
infode@pewatron.com



PEWATRON
SENSORS · POWER SUPPLIES

We are here for you. Addresses and Contacts.

Sales Switzerland & Liechtenstein

Postcode 3000 – 9999

Basil Frei
Pewatron AG
Thurgauerstrasse 66
CH-8052 Zurich

Phone +41 44 877 35 18
Mobile +41 76 279 37 26

basil.frei@pewatron.com

Postcode 1000 – 2999

Eric Letsch
Pewatron AG
Thurgauerstrasse 66
CH-8052 Zurich

Phone +41 44 877 35 14
Mobile +41 76 491 66 70

eric.letsch@pewatron.com

Sales International Key Accounts

Peter Felder
Pewatron AG
Thurgauerstrasse 66
CH-8052 Zurich

Phone +41 44 877 35 05
Mobile +41 79 406 49 83

peter.felder@pewatron.com

Sales Germany

Postcode 00000 – 31999
Postcode 38000 – 39999
Postcode 80000 – 99999

Kurt Stritzelberger
Pewatron AG
Edisonstraße 16
D-85716 Unterschleißheim

Phone +49 89 260 52 80
Mobile +49 171 803 41 35

kurt.stritzelberger@pewatron.com

Postcode 32000 – 37999
Postcode 40000 – 79999

Gerhard Vetter
Pewatron AG
Fürstenbergstraße 12
D-55422 Bacharach-Medenscheid

Phone +49 674 394 75 75
Mobile +49 163 762 74 30

gerhard.vetter@pewatron.com

Sales Austria

Kurt Stritzelberger
Pewatron AG
Edisonstraße 16
D-85716 Unterschleißheim

Phone +49 89 260 52 80
Mobile +49 171 803 41 35

kurt.stritzelberger@pewatron.com

Sales Other Countries / Product Management

Pressure Sensors

Philipp Kistler
Phone +41 44 877 35 03
philipp.kistler@pewatron.com

Accelerometers

Eric Letsch
Phone +41 44 877 35 14
eric.letsch@pewatron.com

Drive technology

CH Postcode 5000 – 9999 / DE

Roman Homa
Mobile +41 79 444 00 86
roman.homa@pewatron.com

Gas sensors / Gas sensor modules Load cells

Thomas Clausen
Phone +41 44 877 35 13
thomas.clausen@pewatron.com

Power supplies

Sebastiano Leggio
Phone +41 44 877 35 06
sebastiano.leggio@pewatron.com

Drive technology

CH Postcode 1000 – 4999 / AT / IT / FR

Christian Mohrenstecher
Mobile +41 76 444 57 93
christian.mohrenstecher@pewatron.com

Linear position sensors Angle sensors

Eric Letsch
Phone +41 44 877 35 14
eric.letsch@pewatron.com

Current sensors

Sebastiano Leggio
Phone +41 44 877 35 06
sebastiano.leggio@pewatron.com