



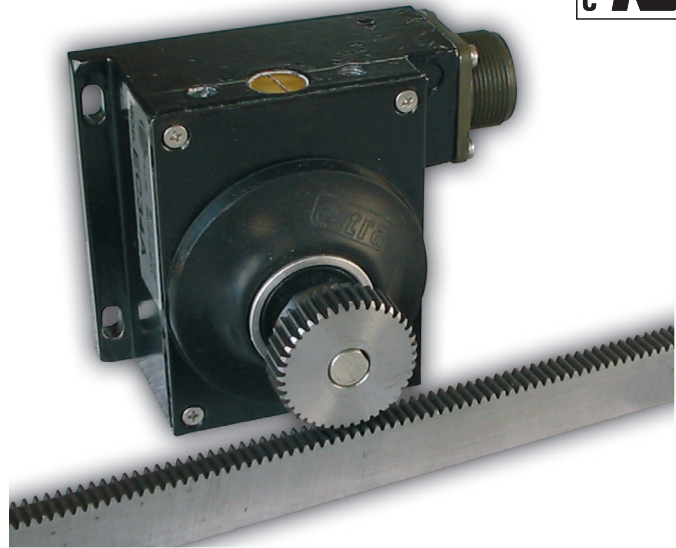
EC 34 ENCODER FOR RACKS



Encoder for racks

Rack encoders with automatic slack recovery. If compared to an incremental linear system, this type of encoder extremely simplifies linear measurements and overcomes measurement problems on long distance. Our models are sealed in a robust aluminium body and integrate a preload system allowing the automatic slack recovery between rack and pinion.

- Up to 2.000 ppr with zero
- Several output types available.
Up to 24 Vdc input voltage.
- Up to 300 kHz frequency response
- Output cable with connector.



SPECIAL PRODUCTS

Ordering code

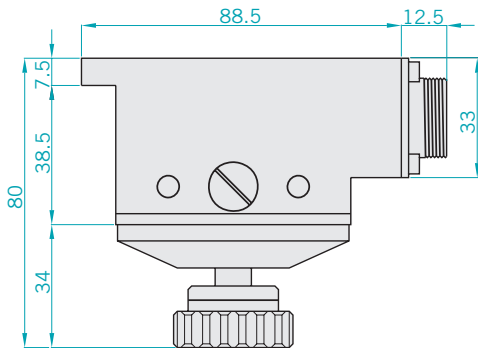
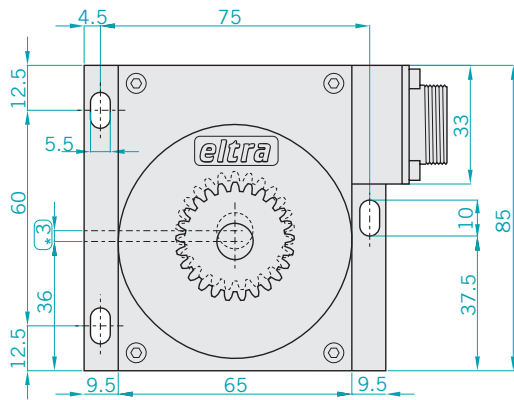
Full stop to separate special versions

<p>encoder for racks EC34</p> <p>Type of flanges mod. EC34A A</p> <p>Resolutions from 1 to 2000 PPR <i>Please, directly contact our offices for pulses availability</i></p> <p>Zero pulse without zero pulse S with zero pulse Z</p> <p>Input voltage 5 input voltage 8 ÷ 24</p>	<p>EC34 A 100 Z 5 N 10 M . XXX</p> <p>Special version code numbered from 001 to 999</p> <p>P Cable output standard length 1,5 m M connector MS3106S-1S or 18-1S J connector JMSP 1607 F or 1610 F</p> <p>Shaft diameter 10 ø 10 mm</p> <p>Output types N NPN C NPN OPEN COLLECTOR P PUSH PULL L LINE DRIVER <i>For optionals about output types please refer to incremental outputs section</i></p>
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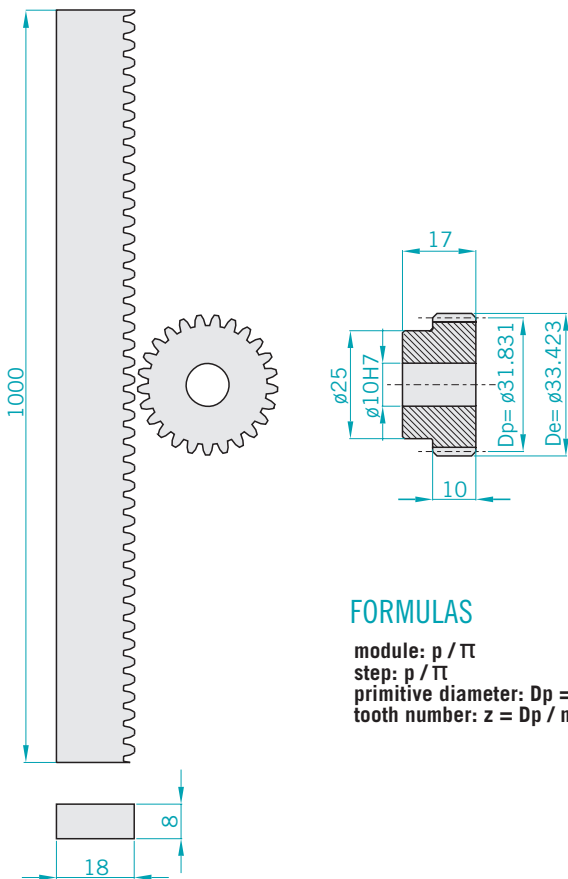
EC34

EC34A

*3mm total preload stroke



Rack and toothed wheel
 $p=2.5 / z=40 / m=0.796$



FORMULAS

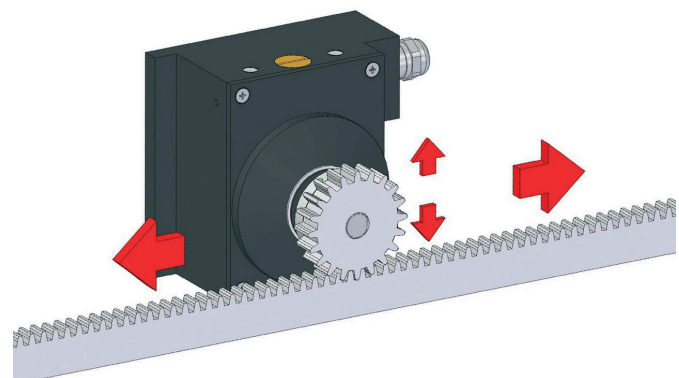
module: p / π
 step: p / π
 primitive diameter: $Dp = mz$
 tooth number: $z = Dp / m$

Electrical specifications

Resolution	from 1 to 2000 PPR
Input voltage	5Vdc / 8 ÷ 24 Vdc
Input current with no output load	100 mA MAX
Source and sink current	50 mA for channel 20 mA for channel with LINE DRIVER
Output types	NPN / NPN OPEN COLLECTOR / PUSH PULL / LINE DRIVER
Output frequency	100 KHz MAX
Frequency response	$F = \frac{RPM \times Resolution}{60}$

Mechanical specifications

Shaft diameter	∅10 mm g6
Enclosure rating	IP64 - standard
Shaft speed	3000 RPM
Allowed weights on the shaft	200 N (20 Kp) axial 200 N (20 Kp) radial
Shock	50 G for 11 msec
Vibrations	10G 10 ÷ 2000 Hz
Bearings life	10 ⁹ revolutions
Bearings	n°2 ball bearings
Shaft material	Steel AISI303
Housing material	Epidoxic oven-painted aluminium
Rack material	Steel
Operating temperature	0° ÷ +60°C
Storage temperature	-25° ÷ +70°C
Weight	700gr



SPECIAL PRODUCTS

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EC34

