UNI EN ISO 9001

EL30E / H / I
INCREMENTAL ENCODERS

Incremental encoders

Series of miniaturized encoders ø30 for application where the minimum size is required still maintainig excellent performance.
- Resolutions up to 1000 imp/turn with zero
- Different electronic configurations available with power supply up to 24 Vdc
- Max. output frequency up to100 Khz
- Output cable, eventual connector applied to the end of the cable
- Different flanges available
- Speed rotation up to 3000 rpm
- Protection up to IP54

Ordering codes

EL 30 E 50 Z 5 N 4 X 3 P A . XXX

In case of particular Customer variant seperate with a full stop

EL = incremental encoder

30 = body dimension

E = mod.EL30E
H = mod.EL30H
I = mod.EL30I
Type of flanges

from **1** to **1000** imp./turn **Resolutions**
N.B.: For impulse availability contact directly our offices

S = without zero impulse
Z = with zero impulse
Zero impulse

5
8 ÷ 24
Encoder power supply (Vdc)

N = NPN
C = NPN OPEN COLLECTOR
P = PUSH PULL
L = LINE DRIVER
Electronic output configuration

N.B.: For the optionals on the output configurations see the output incremental connections card

4 = ø4g6 EL30E
6 = ø6g6 EL30H / 30I
Shaft diameter

X = IP54 **Protection**

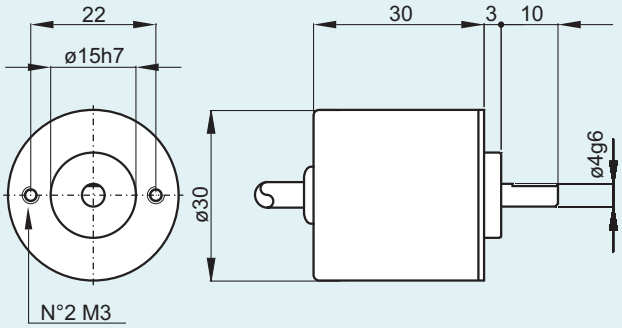
3 = 3000 max **R.P.M.**

P = output cable (standard length 0.5 m)

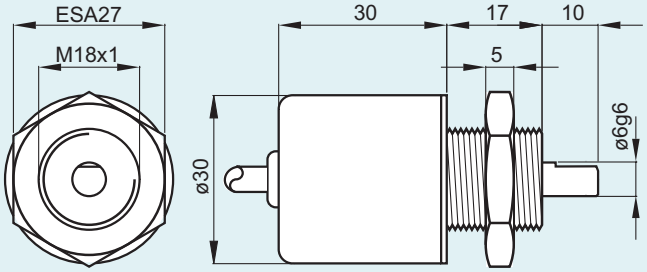
A = axial

XXX = Particular Customer variants indicated by a progressive number from 001 to 999

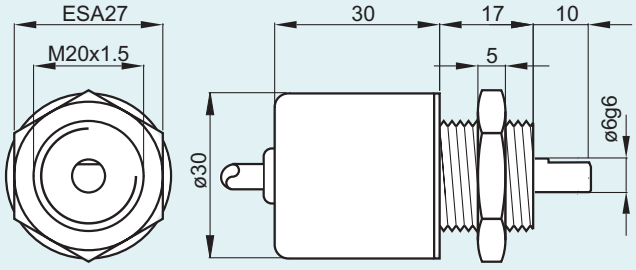
EL30E



EL30H



EL30I



Electronic Characteristics

Resolution	From 1 to 1000 impulses / turn
Power supply	5 Vdc / 8 ÷ 24 Vdc
Current consumption without load	MAX 80 mA
Max commutable current	50 mA per channel 20 mA per channel LINE DRIVER
Electronic output configuration	NPN / NPN OPEN COLLECTOR / PUSH PULL / LINE DRIVER
Max output frequency	Max 100 KHz
Frequency calculation	$F = \frac{\text{RPM x Resolution}}{60}$

Mechanical characteristics

Shaft diameter (mm)	ø4 g6 EL30E ø6 g6 EL30H / I
Protection	IP54 - Standard
R.P.M. Max	3000 continuous
Max shaft load	5N (0.5 Kp) axial 5N (0.5 Kp) radial
Shock	50 G per 11 msec
Vibrations	10G 10 ÷ 2000 Hz
Bearings life	10^9 revolutions
Bearings	n°2 bearings
Shaft material	Stainless steel AISI303
Body material	Aluminium D11S - UNI 9002/5
Container Material	Special plastic reinforced with glass fibre
Operating Temperature	0° ÷ +60°C
Storage Temperature	-25° ÷ +70°C
Weight	50 g

IN010GB2 - 2000 edition

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