

## MAIN FEATURES

Thanks to the stainless steel enclosure, this encoder is suitable for food and beverage machinery, cranes and winches for ships, offshore applications, washing systems and for all those environments where high corrosion resistance is required.

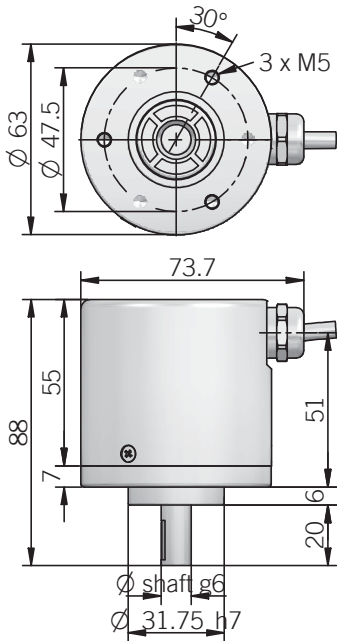
- Up to 24000 ppr.
- Several output types available
- Up to 28 V DC power supply.
- Up to IP 66 sealing



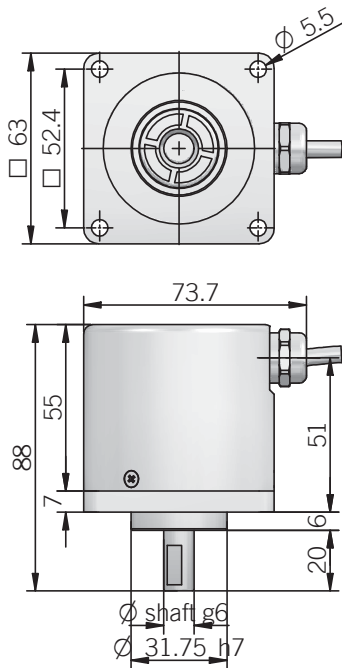
## ORDERING CODE

<b>ER 63 AX 1024 Z 5/28 N 10 S 3 P R . XXX</b>	
<b>SERIES</b> incremental encoder series <b>EL</b> incremental encoder series <b>ER</b>	<b>VARIANT</b> <b>XXX</b> custom version
<b>SIZE</b> mm <b>63</b>	<b>DIRECTION TYPE</b> <b>R</b> radial
<b>TYPE</b> synchronous flange $\varnothing$ 31.75 mm <b>AX</b> centering square flange $\varnothing$ 31.75 mm <b>DX</b>	<b>OUTPUT TYPE</b> <b>P</b> cable output with cable gland (standard length 1.5 m)
<b>RESOLUTION</b> ppr from <b>1</b> to <b>24000</b> <i>N.B.: please see resolution table or directly contact our offices for pulses availability</i>	<b>MAX ROTATION SPEED</b> <b>3</b> 3000 rpm
<b>ZERO PULSE</b> without zero pulse <b>S</b> with zero pulse <b>Z</b>	<b>ENCLOSURE RATING</b> <b>S</b> IP 66
<b>POWER SUPPLY</b> (available only with L electronic output) 5 V DC <b>5</b> (available only with L or PC electronic output) 8 ... 24 V DC <b>8/24</b> 5 ... 28 V DC <b>5/28</b>	<b>SHAFT DIAMETER</b> <b>6</b> $\varnothing$ 6 mm <b>8</b> $\varnothing$ 8 mm <b>9</b> $\varnothing$ 9.52 mm (3/8") <b>10</b> $\varnothing$ 10 mm
	<b>ELECTRONIC INTERFACE</b> <b>N</b> NPN <b>C</b> NPN open collector <b>P</b> push-pull <b>PC</b> protected push-pull (AEIC-7272) <b>L</b> line driver

**EL - ER 63 AX**



**EL - ER 63 DX**



**ER series resolutions**

100 - 120 - 128 - 150 - 200 - 240 - 250 - 256 - 300 - 360 - 400 - 480 - 500 - 512 - 600 - 625 - 720 - 750 - 800 - 900 - 1000 - 1024 - 1200 - 1250 - 1440 - 1500 - 1600 - 1800 - 2000 - 2048 - 2500

**EL series resolutions**

1 - 2 - 4 - 5 - 10 - 15 - 16 - 20 - 25 - 30 - 32 - 40 - 50 - 60 - 70 - 80 - 90 - 160 - 180 - 350 - 450 - 660 - 700 - 3000 - 3600 - 4000 - 4096 - 5000 - 6000 - 7200 - 8000 - 8192 - 9000 - 10000 - 10240 - 12000 - 14400 - 16000 - 16384 - 18000 - 20000 - 20480 - 24000

**Electrical specifications**

<b>Resolution</b>	from 1 to 24000 ppr
<b>Power supply</b>	5 V DC ± 10% 5 ... 28 V DC ± 5% 8 ... 24 V DC ± 5% (reverse polarity protection)
<b>Current consumption without load</b>	100 mA max
<b>Max load current</b>	50 mA for channel 20 mA for channel (line driver)
<b>Output type</b>	NPN NPN open collector push-pull line driver
<b>Max output frequency</b>	300 kHz
<b>Counting direction</b>	A leads B clockwise (shaft view)
<b>Electromagnetic compatibility</b>	IEC 61000-6-2 IEC 61000-6-4

**Mechanical specifications**

<b>Shaft diameter</b>	∅ 6 / 8 / 9,52 (3/8") / 10 mm
<b>Enclosure rating</b>	IP 66 (IEC 60529)
<b>Max rotation speed</b>	3000 rpm
<b>Max shaft load</b>	200 N (20 kgf)
<b>Shock</b>	50 G, 11 ms up to 2500 ppr (IEC 60068-2-27) 20 G, 11 ms from 3000 ppr (IEC 60068-2-27)
<b>Vibration</b>	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
<b>Body material</b>	1.4305 / AISI 303 stainless steel
<b>Shaft material</b>	1.4305 / AISI 303 stainless steel
<b>Housing material</b>	1.4305 / AISI 303 stainless steel
<b>Bearings</b>	2 ball bearings
<b>Bearings life</b>	10 <sup>9</sup> revolutions
<b>Operating temperature</b>	-10° ... +60°C EL series -20° ... +70°C ER series
<b>Storage temperature</b>	-25° ... +70°C
<b>Weight</b>	650 g

**Connections and standard colours**

Function	Push pull / Npn / Npn open collector	Line driver
+V DC	red	red
0 V	black	black
Ch. A	green	green
Ch. A-	/	brown
Ch. B	yellow	yellow
Ch. B-	/	orange
Ch. Z	blue	blue
Ch. Z-	/	white
≡	shield	shield