

## MAIN FEATURES

Thanks to the magnetic technology, the EMI 58 series is suitable for harsh environment applications such as marble and glass working machines, washing systems, metal working machines and all the applications where high temperature resistance is required.

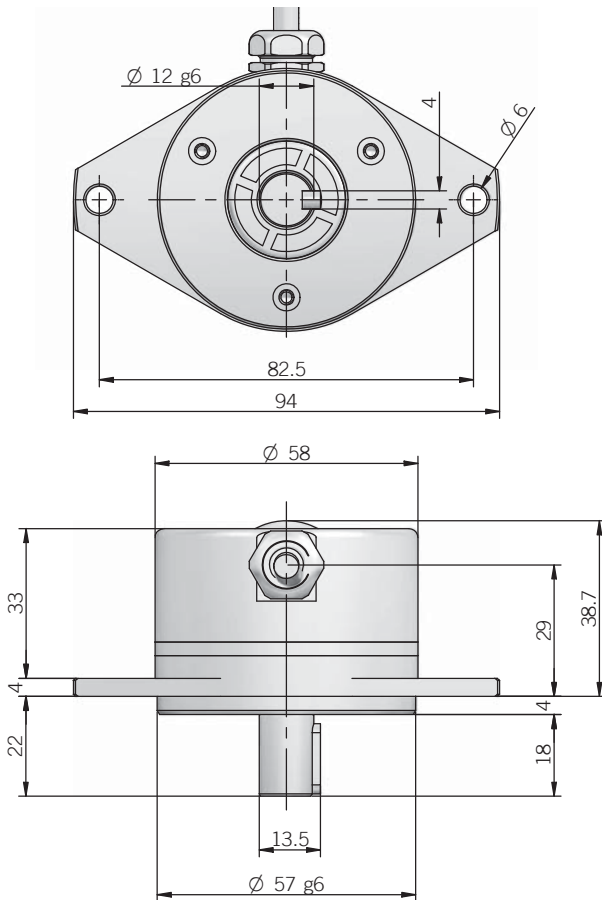


## ORDERING CODE

**EMI 58 RY 100 S 5/28 P K12 S 3 P R . XXX**

<b>SERIES</b> magnetic incremental encoder <b>EMI</b>	<b>SIZE</b> mm <b>58</b>	<b>TYPE BODY AND FLANGING</b> flange type R anodized aluminum <b>RY</b>	<b>RESOLUTION</b> (only powers of 2) ppr from <b>2</b> to <b>2048</b> ppr <b>10 / 20 / 25 / 40 / 50 / 80 / 100 / 125 / 200 / 250 / 400 / 500</b> <i>please directly contact our offices for pulses availability</i>	<b>ZERO PULSE</b> without zero pulse <b>S</b> with zero pulse <b>Z</b>	<b>POWER SUPPLY</b> <b>5 V DC 5</b> <b>8 ... 24 V DC 8/24</b> <b>5 ... 28 V DC 5/28</b> <i>line driver available only with 5 V DC or 8 ... 24 V DC power supply</i>	<b>VARIANT</b> <b>XXX</b> custom version	<b>OUTPUT DIRECTION</b> <b>R</b> radial	<b>OUTPUT TYPE</b> <b>P</b> cable output with SKINTOP® (standard length 1.5 m)	<b>MAX ROTATION SPEED</b> <b>3</b> 3000 rpm	<b>ENCLOSURE RATING</b> <b>S</b> IP 66	<b>BORE DIAMETER</b> <b>K12</b> mm with key	<b>ELECTRONIC INTERFACE</b> <b>P</b> push-pull <b>L</b> line driver
--	-----------------------------	--	--	--	---	---	--	---	--	---	--	---

## EMI 58



### Electrical specifications

<b>Resolution</b>	up to 2048 ppr
<b>Power supply</b>	5 V DC $\pm 10\%$ 8 ... 24 V DC / 5 ... 28 V DC $\pm 5\%$ <i>(line driver available only with 5 V DC or 8 ... 24 V DC)</i>
<b>Current consumption without load</b>	100 mA max
<b>Max load current</b>	15 mA for channel
<b>Signal pattern</b>	B follows A with clockwise rotation (magnet-carrier view)
<b>Electronic interface</b>	push-pull line driver HTL / RS422
<b>Max output frequency</b>	205 kHz
<b>Accuracy</b>	$\pm 0.35^\circ$ max
<b>Electromagnetic compatibility</b>	IEC 61000-6-2 IEC 61000-6-3

### Mechanical specifications

<b>Shaft diameter</b>	$\phi$ 12 mm with key
<b>Enclosure rating</b>	IP 66 (IEC 60529)
<b>Max rotation speed</b>	3000 rpm
<b>Shock</b>	50 G, 11 ms (IEC 60068-2-27)
<b>Vibration</b>	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
<b>Body material</b>	anodized aluminum
<b>Shaft material</b>	stainless steel UNI X10CrNiS1809
<b>Housing material</b>	aluminum UNI 9002/5
<b>Bearings</b>	2 ball bearings
<b>Bearing lifetime</b>	$10^9$ revolutions
<b>Operating temperature</b>	$-25^\circ \dots +100^\circ\text{C}$
<b>Storage temperature</b>	$-25^\circ \dots +85^\circ\text{C}$
<b>Weight</b>	250 g

### Connections and standard colours

Function	Wire colours
0 Volt	black
+ Vdc	red
Ch. A	green
Ch. B	yellow
Ch. Z	blue
Ch. A -	brown
Ch. B -	orange
Ch. Z -	white
$\perp$	shield