

# ROTACOD

Bearingless magnetic ring encoder

Series

SMRA • MRA



- Absolute contactless sensing
- Hollow shaft up to 110 mm (others on request)
- SSI & BiSS output with alarm bits
- Self-fixing ring (no fixing holes required)
- IP68 protection



SMRA • MRA

## ENVIRONMENTAL SPECIFICATIONS

Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-25°C +85°C (-13°F +185°F)
Protection:	IP68

## MECHANICAL SPECIFICATIONS

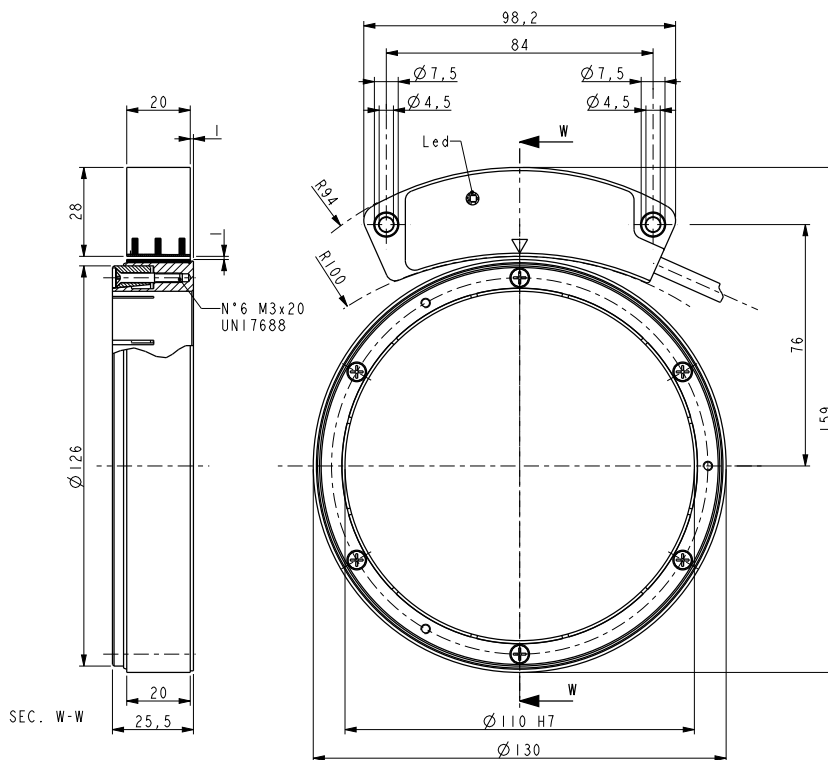
Dimensions:	see drawing
Hollow shaft diameter:	110 mm
Shaft rotational speed:	15000 rpm max. (mechanical)
Moment of inertia:	$2,18 \times 10^{-3} \text{ kg m}^2$
Gap sensor-ring:	$1 \pm 0,2 \text{ mm}$
Electrical connections:	M12 8 pin inline plug or Lika Hi-flex cable 1,0 m
Option:	• additional cable

## ELECTRICAL SPECIFICATIONS

Resolution:	4096, 8192, 16384 cpr
Accuracy:	$\pm 0,3^\circ$ typ. ( $\pm 0,4^\circ$ max.)
Repeatability:	$\pm 1$ count
Output circuits:	BiSS-C, clock rate 10MHz max. SSI, MSB aligned, clock rate max 2MHz Position refresh up to 7000 rpm
Output code:	Gray, Binary
Power supply:	+5Vdc $\pm 5\%$ , +10Vdc $\div$ +30Vdc
Protection:	against inversion of polarity (except 5V version) and short-circuit
EMC:	electro-magnetic immunity, EN 61000-4-2 EN 61000-4-4
Functions:	• Counting direction • Zero setting /Preset

## MATERIALS

Sensor housing:	anticorodal, UNI EN AW-6082
Hub:	C40 steel nichel plated
Ring:	plastoferrite



SMRA • MRA

Order code - Sensor

SMRA	-	XXX ⓐ	-	XX ⓑ	-	XXX ⓒ	-	/Sxxx ⓓ
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<p>ⓐ OUTPUT CIRCUITS</p> <p>GG1 = SSI, Gray MSB aligned, +5Vdc ±5%</p> <p>GG2 = SSI, Gray MSB aligned, +10Vdc +30Vdc</p> <p>BG1 = SSI, Binary MSB aligned, +5Vdc ±5%</p> <p>BG2 = SSI, Binary MSB aligned, +10Vdc +30Vdc</p> <p>SC1 = BiSS-C mode, +5Vdc ± 5%</p> <p>SC2 = BiSS-C mode, +10Vdc +30Vdc</p>	<p>ⓑ RESOLUTION</p> <p>06 = 4096 cpr</p> <p>07 = 8192 cpr</p> <p>08 = 16384 cpr</p>	<p>ⓒ CONNECTIONS</p> <p>L1 = cable output 1 m</p> <p>M0,5 = cable output x m</p> <p>M2 = 2 m cable + M12 8 pin inline plug</p>	<p>ⓓ CUSTOM VERSION</p>
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Order code - Magnetic ring

MRA/130	-	XXX ⓐ	-	XXX ⓑ	/Sxxx ⓒ
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<p>ⓐ MAGNETIC CODING</p> <p>64N = 64 poles</p>	<p>ⓑ INSIDE DIAMETER</p> <p>110 = 110 mm</p>	<p>ⓒ CUSTOM VERSION</p>
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