

ROTAMAG

The low-cost heavy duty solution

Series

SGSM • SGSD



- Magnetic ring encoder
- Sealed housing, IP68
- Contactless sensing
- Up to 50 mm hollow shaft
- Outdoor & mobile equipment applications

SGSM →  single sensor

SGSD →  redundant sensor



SGSM • SGSD

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range:	-40°C ÷ +85°C (-40°F +185°F)
Storage temperature range:	-40°C ÷ +100°C (-40°F +212°F)
Protection:	IP68

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Hollow shaft diameter:	Ø 30, 50 mm
Shaft rotational speed:	10000 rpm max. (mechanical)
Gap sensor-ring:	0,1 ÷ 1,5 mm
Electrical connections:	M12 8 pin inline plug or Lika Hi-flex cable 2,0 m (6.56 ft)
Weight:	~ 200 g (7 oz)
Option:	• additional cable

ELECTRICAL SPECIFICATIONS

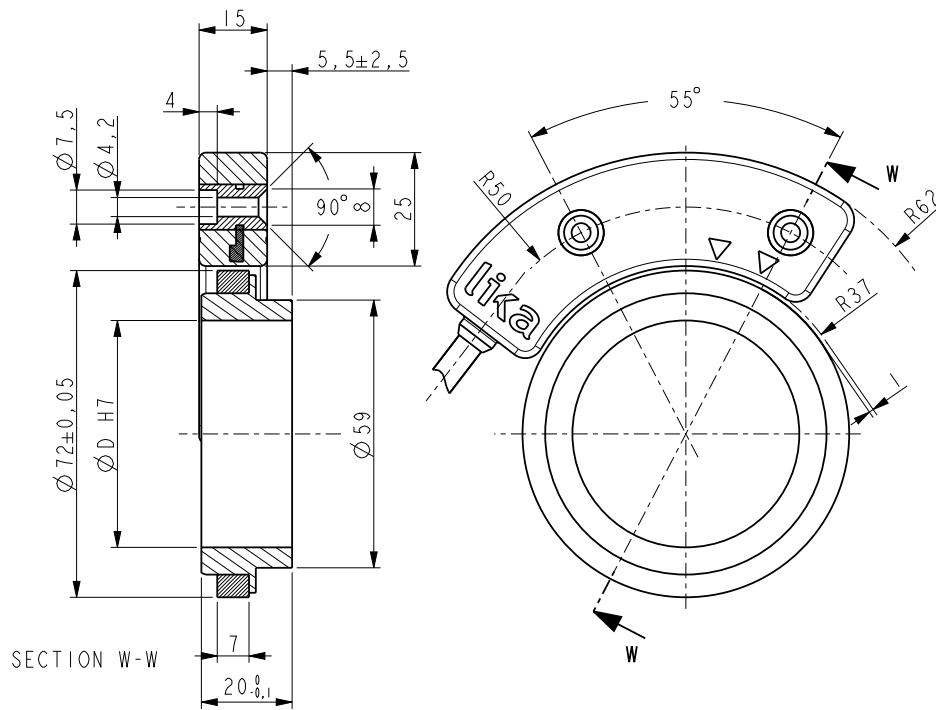
Resolution (PPR):	256, 512, 1024
Accuracy:	± 0,05°
Counting frequency:	100 kHz max.
Output circuits:	SGSM: 1 x Line Driver, Push-Pull SGSD: 2 x Line Driver, Push-Pull
Power supply:	+5Vdc ±5%, +10Vdc ÷ +30Vdc
Consumption:	70 mA max. (each sensor)
Output signals:	AB, /AB
Output current (per channel):	40 mA max.
Protection:	against inversion of polarity and short-circuit (except L circuit)
EMC:	electro-magnetic immunity, EN 61000-4-2 EN 61000-4-4

MATERIALS

Housing:	Macromelt OM 646-EN
Hub:	Anticorodal, UNI EN AW-6082
Ring:	Plastoferrite

ACCESSORIES

EM12F8:	M12 8 pin mating connector
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SGSM • SGSD

Order code - Sensor

SGSM	-	X	-	X	-	XX	-	X	-	XX	/Sxxx
SGSD		Ⓐ		Ⓑ		Ⓒ		Ⓓ		Ⓔ	Ⓕ

<p>Ⓐ OUTPUT CIRCUITS</p> <p>Y = Push Pull (AB, /AB)</p> <p>L = Line Driver (AB, /AB)</p>	<p>Ⓑ SUPPLY VOLTAGE VS OUTPUT CIRCUIT</p> <p>1 = +5V±5% (L output circuit)</p> <p>2 = +10V÷ +30V (Y output circuit)</p>	<p>Ⓒ RESOLUTION</p> <p>16 = 256 PPR</p> <p>32 = 512 PPR</p> <p>64 = 1024 PPR</p>	<p>Ⓓ INDEX</p> <p>N = without Index</p>	<p>Ⓔ CONNECTIONS</p> <p>1 = cable output 1 m</p> <p>x = cable output x m</p> <p>M2 = 2 m cable + M12 8 pin inline plug (only SGSM)</p>	<p>Ⓕ CUSTOM VERSION</p>
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Order code - Magnetic ring

MRI	/	XX	-	XX-X	-	XX	/Sxxx
		Ⓐ		Ⓑ		Ⓒ	Ⓓ

<p>Ⓐ RING TYPE</p> <p>72 = size 72 with grub screw fixing</p>	<p>Ⓑ MAGNETIC CODING</p> <p>64-3 = 64 poles</p>	<p>Ⓒ SHAFT DIAMETER</p> <p>30 = 30 mm</p> <p>50 = 50 mm</p>	<p>Ⓓ CUSTOM VERSION</p>
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