

ROTAMAG

High speed gear sensor

Series

SMG



- High speed gear and tooth sensor
- Position & speed feedback
- Compact design with IP68 protection
- Easy & precise alignment thanks to keyway
- Available for module 0,3 and 0,5 & 1, 2, 3 mm tooth structures



SMG

ENVIRONMENTAL SPECIFICATIONS

Protection:	IP68
Operating temperature range:	-25°C ÷ +85°C (-13°F +185°F)
Storage temperature range:	-40°C ÷ +100°C (-40°F +212°F)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Electrical connection:	Lika Hi-flex cable M8 0,3 m or M12 8 pin inline plug
Gap between sensor/target:	SMG03: max. 0,19 mm (module M0,3) SMG05: max. 0,31 mm (module M0,5)
Option:	• additional cable

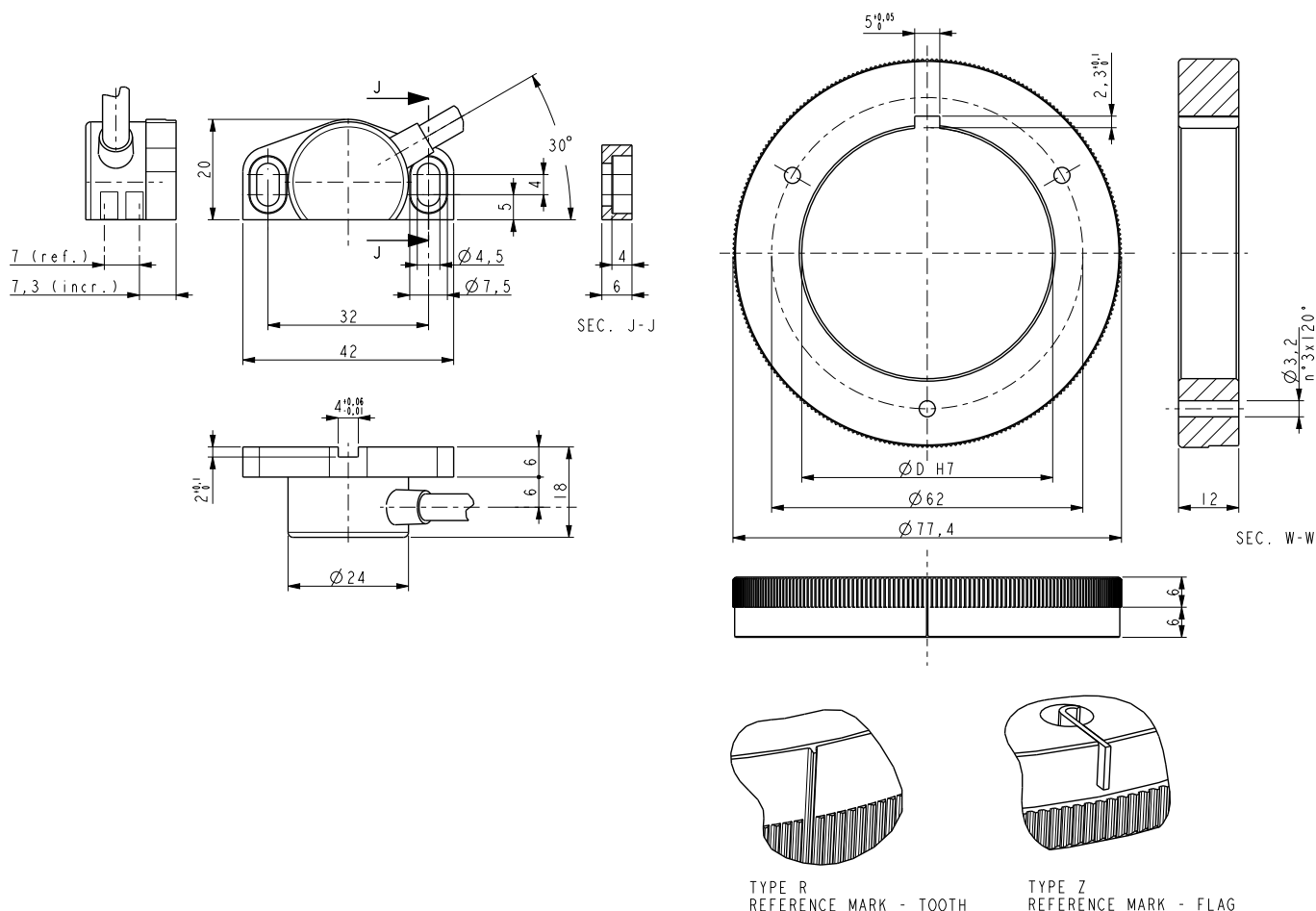
ELECTRICAL SPECIFICATIONS

Interpolation factor:	up to 100 (only digital output)
Sensor accuracy:	typ. ±0,05° max. ±0,1°
Repeat accuracy:	max. 1% of period length
Counting frequency:	max. 200 kHz
Output circuits:	Line Driver, Push-Pull, 1Vpp sine/cosine
Power supply:	+5Vdc ±5%
Consumption:	typically 25 mA, 50 mA max.
Output signals:	AB /AB, ABO /ABO
Output current (each channel):	40 mA max.
Protection:	against short circuit
EMC:	acc. to EN 61000-6-2 level 3

MATERIALS

Housing material:	Anticorodal, UNI EN AW-6082
Material of target wheel/rack:	Ferromagnetic steel
Width of target:	min. 4 mm

Specifications subject to changes without prior notice



SMG

Order code

SMG03 SMG05	-	X a	-	X b	-	XXX c	-	XX d	-	XXX e	/Sxxx g
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<p>a) OUTPUT CIRCUIT Y = Push-Pull (AB) L = Line Driver (AB /AB) V = 1 Vpp sine/cosine (AB /AB)</p> <p>b) POWER SUPPLY 1 = +5Vdc ±5%</p>	<p>c) INTERPOLATION 1 = 1 pulse/tooth 8 = 8 pulses/tooth 16 = 16 pulses/tooth 32 = 32 pulses/tooth 100 = 100 pulses/tooth</p> <p><i>*with output V only interpolation "1"</i></p>	<p>d) INDEX N = without R = with reference type R (1Vpp level) Z = with reference type Z (1Vpp level)</p> <p>e) CONNECTIONS 0,3 = cable output 0,3 m Lx = cable output x m M0,5 = 0,5 m cable + M12 8 pin inline connector</p>
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g) CUSTOM VERSION