

# ROTAPULS

Incremental encoder

Series

**I58SK**



- Stainless steel encoder for the food industry
- IP67 washdown protection
- Clamp flange mounting
- Cable or M23 connector output
- HTL, TTL and sine/cosine output



I58SK

## ENVIRONMENTAL SPECIFICATIONS

Shock:	250 g, 6 ms acc. to CEI EN 60068-2-27
Vibrations:	10 g, 5-2000 Hz acc. to CEI EN 60068-2-6
Protection:	IP67
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-25°C +85°C (-13°F +185°F) (98% R.H. without condensation)
Options:	• Operating temperature range: -40°C +100°C (-40°F +212°F)

## MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft diameter:	Ø 6, 8, 9.52, 10, 12 mm
Shaft loading (axial, radial):	100 N max.
Shaft rotational speed:	6000 rpm
Starting torque at 20°C:	0,4 Ncm (typical)
Bearings life:	400 x 10 <sup>6</sup> rev. min. (10 <sup>9</sup> rev. min. with 20 N shaft loading max.)
Electrical connections:	M23 nichel plated plug or axial cable 1 m (3.3 ft)
Weight:	~ 500 g (17,6 oz)
Options:	• additional cable

## ELECTRICAL SPECIFICATIONS

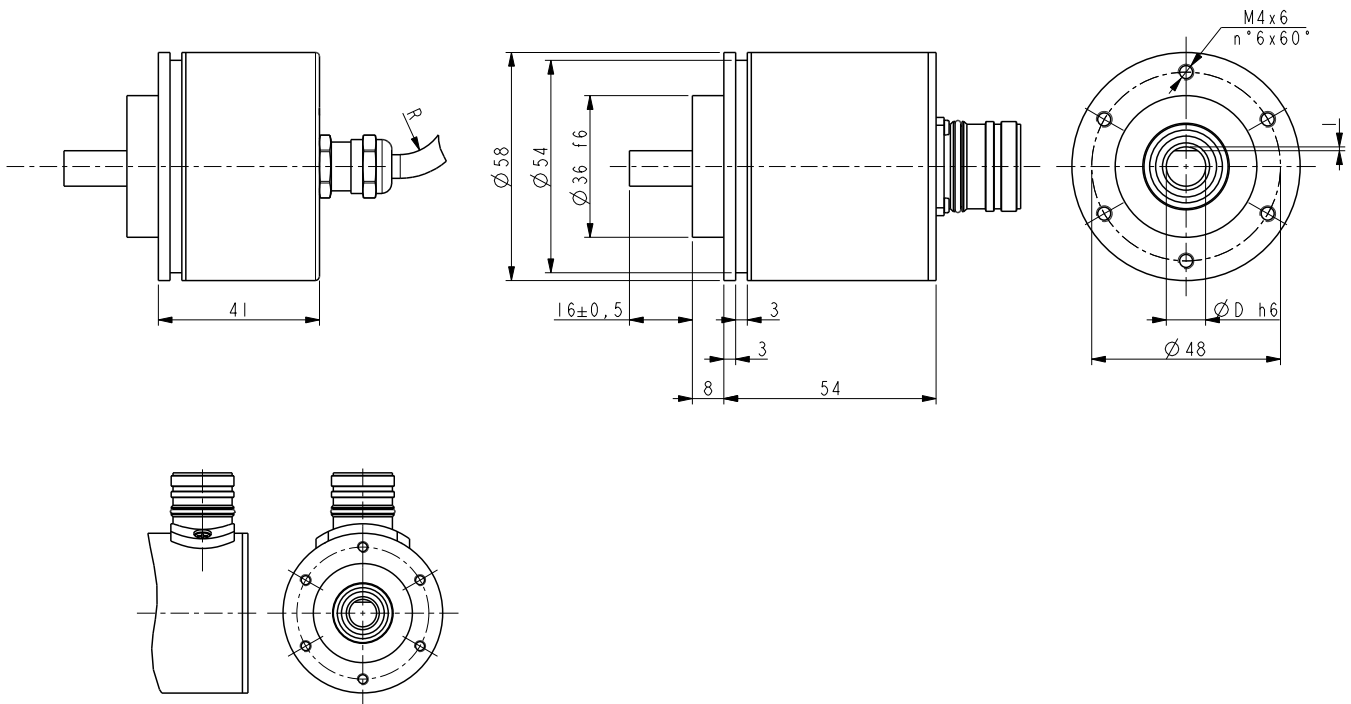
Standard resolution with magnetic sensing (PPR): <i>(output circuits N, P, Y, L, H)</i>	2-4-5-6-8-10-12-15-16-20-24-25-30-35-36-40-50-60-64-70 80-90-120-125-127-142-150-160-180-216-230-236-240-254 267-270-314-360-375-410-435-471-635-800-1068-1270 1400-2250 (other on request)
Standard resolution with unbreakable disk (PPR): <i>(output circuits N, P, Y, L, H)</i>	100-200-250-256-300-400-500-512-600-720-750-900-1000 1024-1200-1250-1440-1500-1800-2000-2048-2500-3000 3600-4000-4096-5000
High accuracy glass disk (PPR): <i>(output circuits N, P, Y, L, H)</i>	5K=5000, 6K=6000, 9K=9000, 10K=10000 4KB=4096, 8KB=8192
Resolution (PPR): <i>(only output circuit V)</i>	500-512-1000-1024-1250-2000-2048-2500
Counting frequency:	300 kHz max.
Output circuits:	NPN, PNP, Push-Pull, Line Driver, Universal circuit, Sine/cosine
Power supply:	+5V±5%, +10V +30V, +5V +30V (sine/cosine only +5V±5%)
Consumption:	70 mA (typical)
Output current (each channel):	40 mA max.
Protection:	against inversion of polarity and short-circuit (except L and V circuit)
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4
Optoelectronic life:	100.000 hrs min.
Options:	• Line Driver 24/5V

## MATERIALS

Flange:	AISI 303 stainless steel
Housing:	AISI 303 stainless steel
Bearings:	ABEC 5
Shaft:	AISI 303 stainless steel

## ACCESSORIES

EPFL 121:	12 pin M23 mating connector
EC-C12F-LK-l8-x:	cordset x meter with M23 connector
MWSS, MSTs:	stainless steel flexible couplings



I58SK

Order code

I58SK	-	X	-	XXXXX	XXX	X	XX	X	X	XX	/Sxxx
		(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)

<p><b>(a) OUTPUT CIRCUITS</b>                  N = NPN o.c.                  Y = Push Pull                  L = Line Driver (RS422)                  H = PP/LD universal circuit                  V = 1 Vpp (sine/cosine)</p> <p><b>(b) RESOLUTION (PPR)</b>                  See electrical specifications</p> <p><b>(c) OUTPUT SIGNALS / CONNECTIONS</b>                  ZCU = ABO /ABO, cable output                  ZCZ = ABO /ABO, M23 12 pin plug</p>	<p><b>(d) SUPPLY VOLTAGE</b>                  1 = +5V±5% (L, V output circuit)                  2 = +10V÷ +30V (N, P, Y output circuit)                  4 = +5V÷ +30V (H output circuit)</p> <p><b>(e) SHAFT DIAMETER</b>                  6 = 6 mm                  8 = 8 mm                  P9 = 9.52 mm - 3/8"                  10 = 10 mm                  12 = 12 mm</p>	<p><b>(f) CONNECTION POSITION</b>                  - = axial (standard)                  R = radial (only with M23 connector)</p> <p><b>(g) OPERATING TEMPERATURE</b>                  - = -25°C +85°C (-13°F +185°F) standard                  K = -40°C +100°C (-40°F +212°F)</p>	<p><b>(h) CABLE LENGTH (not with ZCZ)</b>                  L1 = cable output 1 m (standard)                  L2 = cable output 2 m                  Lx = cable output x m</p>
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(i) CUSTOM VERSION