

ROTAPULS

Incrementals Encoders

series

CK58 • CK59 • CK60



CK58-CK59-CK60

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms (acc. to MIL STD 202F)
Vibrations:	10 g, 5-2000 Hz (acc. to MIL STD 202F)
Operating temperature range:	-20°C+70°C (-4°F +158°F)
Storage temperature range:	-20°C+80°C (-4°F +176°F) (98% R.H.without condensation)
Protection:	IP64
Options:	<ul style="list-style-type: none"> • Operating temperature range: -40°C +100°C (-40°F +212°F) • IP65 Protection (3000 rpm max, torque 1 Ncm)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft hollow:	Ø 14, 15 mm
Shaft loading (axial and radial):	30 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque at 20°C:	≤ 1,5 Ncm (typical)
Moment of inertia:	~30 gcm ²
Bearings life:	10 ⁹ rev. min.
Weight:	~ 0,4 kg (14,1 oz)

ELECTRICAL SPECIFICATIONS

STD pulse rate (other PPR upon request):	2-4-5-6-10-12-15-16-18-20-24-25-30-35-36-39 40-45-50-60-64-70-80-90-100-120-122 125-127-142-150-180-200-216-236-240-250 254-256-267-270-300-314-360-375-400-410 433-435-471-500-512-600-625-628-635-720 750-784-800-875-900-946-1000-1024-1068 1099-1200-1250-1270-1440-1500-1800-2000 2048-2250-2400-2500-3000-3600-4000-4096 5000-6000-9000-10000
Power supply:	+5V±5%, +10V +30V,+5V +30V
Output circuits:	NPN o.c., PNP o.c., Push-Pull, Line Driver, PP/LD
Output current (per channel):	40 mA max.
Output frequency:	100 kHz max.
Input current:	70 mA max.
Protection:	against inversion of polarity (except +5V version) outputs are protected against short-circuit (except Line Driver version)
Optoelectronic life:	100.000 hrs min.
Option:	• Output frequency up to 300 kHz max.

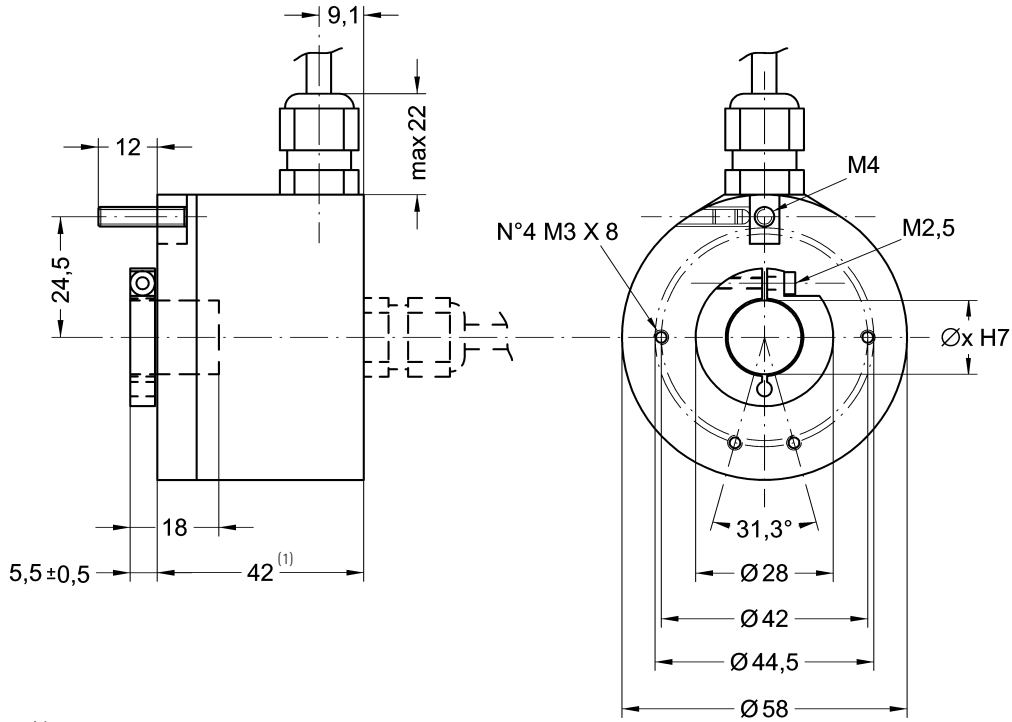
MATERIALS

Flange:	non corroding
Housing:	non corroding
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic
Light source:	GaAl diodes

ACCESSORIES

E7MLS:	7 pin MIL mating connector
E10MLS:	10 pin MIL mating connector
EDE9S:	9 pin DSub mating connector
BR1:	Reducing sleeves

Specifications subject to changes without prior notice



(1) Mechanical dimensions with connector output see on page 64

CK58

ORDERING CODE

ADDITIONAL CODE (indicate only if necessary)

XXXX - X - XXXX X

SERIES
 CK58 - CK59* - CK60*

* Dimensional drawing on page 75

OUTPUT CIRCUITS

NPN o.c.	N
PNP o.c.	P
Push-Pull	Y
Line Driver AD26LS31 or eqv.	L
PP/LD universal circuit	H

PULSE RATE (PPR)
 See electrical specifications

OUTPUT SIGNALS CONFIGURATION

Bidirectional	B
Bidirectional with index pulse	Z

X X X X

SHAFT DIAMETER

14	14 mm
15	15 mm

Reducing sleeves see on page 75

ELECTRICAL CONNECTIONS

N	Normal output	F	5 wires cable, 1m. (3.3 ft)
C	Complementary outputs	D	7 pin IP65 MIL connector
		U	8 wires cable, 1m. (3.3 ft)
		P	10 pin IP65 MIL connector

see on page 59-60

SUPPLY VOLTAGE VS OUTPUT CIRCUIT

+5V±5% (L output circuit)	1
+10V± +30V (N, P and Y output circuits)	2
+5V± +30V (PP/LD universal circuit)	4

X X X X X X

C Inline connector DSub 9 pin

Lx Cable length on request
 Ex.: L4 = 4 meters (13.2 ft)
 L7 = 7 meters (23.0 ft)

K Operating temperature range:
 -40°C + 100°C (-40°F +212°F)

W Output frequency up to 300 kHz

P IP65 Protection

R Side mount cable or connector