

ROTAPULS

Incremental encoders

series

I105



I105

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:	• Operating temperature range: -40°C +100°C (-40°F +212°F) • IP65 protection

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft:	Ø 10 mm
Shaft loading (axial and radial):	40 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque at 20°C:	≤ 1 Ncm (typical)
Moment of inertia:	~25 gcm ²
Bearings life:	10 ⁹ rev. min.
Weight:	~ 0,9 kg (31,7 oz)

ELECTRICAL SPECIFICATIONS

STD pulse rate: (other PPR upon request)	16384-18000
Power supply:	+5V±5%, +10V +30V,+5V +30V
Output circuits:	Push-Pull, Line Driver, PP/LD
Output current (per channel):	40 mA max.
Output frequency:	100 kHz max.
Input current:	100 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.

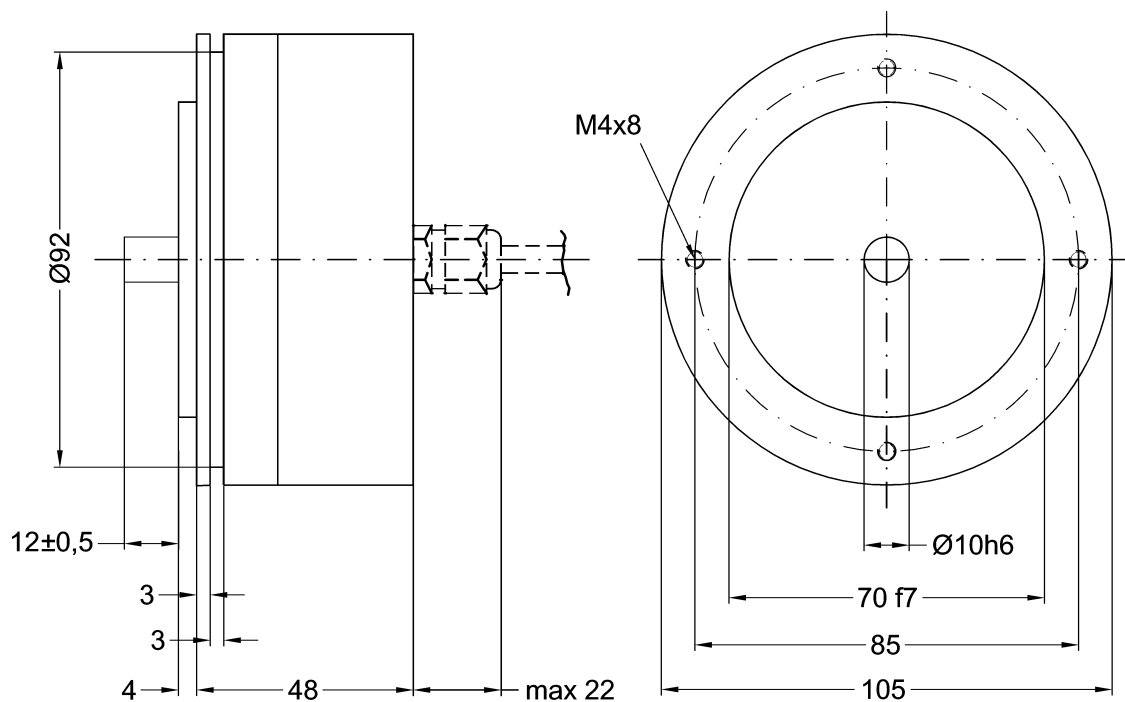
MATERIALS

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

ACCESSORIES

EPFL 121:	12 pin CONNEL mating connector
PAN/PGF:	flexible couplings
LKM-386:	fixing clamps

Specifications subject to changes without prior notice



I105

ORDERING CODE

XXXX	-	X	-	XXXXX	X	X	X	X	X
SERIES					SHAFT DIAMETER				
I105					10 10 mm				
OUTPUT CIRCUITS					ELECTRICAL CONNECTIONS				
Push-Pull Y Line Driver AD26LS31 or eqv. L PP/LD universal circuit H					C Complementary outputs U 8 wires cable, 1 m. (3.3 ft) Z 12 pin CONNEI connector				
PULSE RATE (PPR)					see on page 59-60				
See electrical specifications									
OUTPUT SIGNALS CONFIGURATION					SUPPLY VOLTAGE VS OUTPUT CIRCUIT				
Bidirectional B Bidirectional with index pulse Z					+5V $\pm$ 5% (L output circuit) 1 +10V $\div$ +30V (Y output circuit) 2 +5V $\div$ +30V (PP/LD universal circuit) 4				

ADDITIONAL CODE (indicate only if necessary)

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