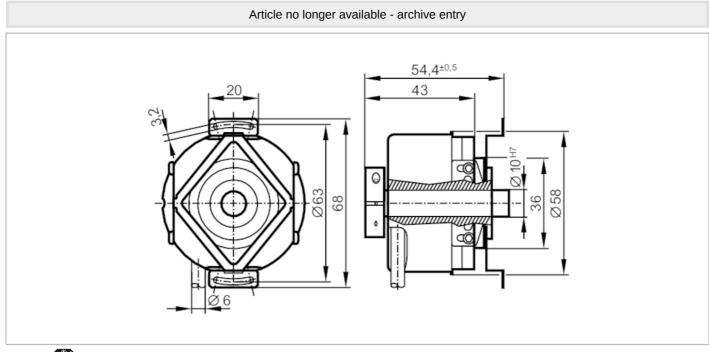
## RO1337

#### Incremental encoder with hollow shaft



RO-2048-I05/N11



# 

Product characteristics		
Resolution		2048 resolution
Shaft design		continuous hollow shaft
Shaft diameter	[mm]	10
Electrical data		
Operating voltage tolerance	[%]	10
Operating voltage	[V]	5 DC
Current consumption	[mA]	< 150
Outputs		
Electrical design		TTL
Max. current load per output	[mA]	20
Switching frequency	[kHz]	300
Phase difference A and B	[°]	90
Measuring/setting range		
Resolution		2048 resolution
Operating conditions		
Ambient temperature	[°C]	-30100
Max. relative air humidity	[%]	98
Protection		IP 64; (on the housing: IP 66; on the shaft: IP 64)
Tests / approvals		
Shock resistance		200 g
Vibration resistance		30 g
Mechanical data		
Weight	[g]	460

## RO1337

#### Incremental encoder with hollow shaft



RO-2048-I05/N11

Dimensions	[mm	Ø 58 / L = 54.4
Materials		aluminium
Max. revolution, mechanical [U/min]		12000; (when using both shaft clamping rings)
Max. starting to	rque [Nm	2.5
Reference temp torque	perature [°C	20
Shaft design		continuous hollow shaft
Shaft diameter	[mm	10
Shaft fit		H7
Shaft material		stainless steel
Installation depth of shaft [mm]		10
Max. axial shaft misalignment [mm]		1; (max. radial shaft alignment: ± 0,05 mm)
Electrical conn	nection	
Cable: 1 m, PUF	R; radial, can also be	e used axially
brown	А	
green	A inverted	
grey B		
pink B inverted		
red 0 index		
black 0 index inverted		
blue L+ sensor		
white 0V sensor		
brown/green L+ (Up)		
white/green OV (Un)		
lilac failure inverted		
screen	housing	

### Diagrams and graphs

Pulse diagram

direction of rotation clockwise (looking at the shaft)