# **RA1051**

## Incremental encoder with hollow shaft

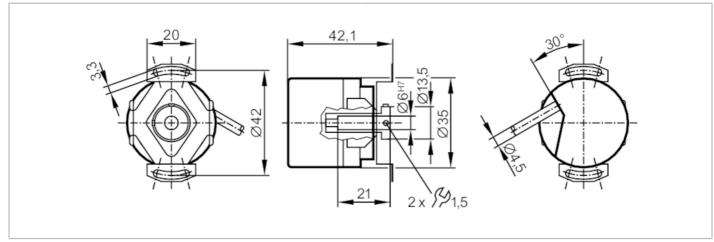
RA-0500-I05/N5



### Article no longer available - archive entry

### Alternative articles: RA3101 + EVC546

When selecting an alternative article and accessories please note that technical data may differ!





Product characteristics		
Resolution		500 resolution
Shaft design		hollow shaft open to one side
Shaft diameter	[mm]	6
Application		
Function principle		incremental
Electrical data		
Operating voltage tolerance	[%]	10
Operating voltage	[V]	5 DC
Current consumption	[mA]	120
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		500 resolution
Operating conditions		
Ambient temperature	[°C]	-30100
Max. relative air humidity	[%]	75; (briefly: 95 %)
Protection		IP 64
Tests / approvals		
Shock resistance		100 g (6 ms)
Vibration resistance		10 g (552000 Hz)

# **RA1051**

### Incremental encoder with hollow shaft





Mechanical data				
Weight	[g]	358		
Dimensions	[mm]	Ø 35 / L = 42.1		
Materials		aluminium		
Max. revolution, mechanical [U	J/min]	10000		
Max. starting torque	[Nm]	2.5		
Reference temperature torque	[°C]	20		
Shaft design		hollow shaft open to one side		
Shaft diameter	[mm]	6		
Shaft fit		H7		
Shaft material		steel (1.4104)		
Installation depth of shaft	[mm]	621		
Max. axial shaft misalignment	[mm]	0,5		

### **Electrical connection**

Cable: 5 m, PUR; radial, can also be used axially

brown A

green A inverted

grey B

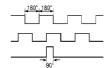
pink B inverted red 0 index

black 0 index inverted

brown/green L+ (Up)
white/green L- 0V (Un)
blue L+ sensor
white L- 0 V sensor
lilac failure inverted
screen housing

### Diagrams and graphs

Pulse diagram



direction of rotation clockwise (looking at the shaft)