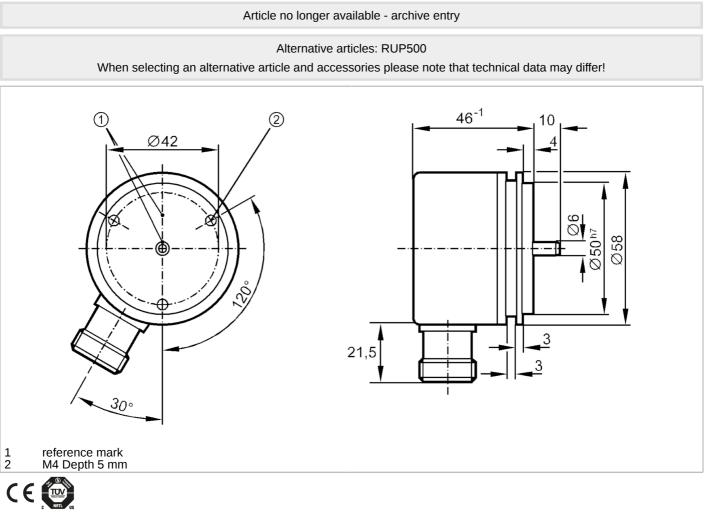
# RU1078

### Incremental encoder with solid shaft



RU-5000-105/K



Product characteristics		
Resolution		5000 resolution
Shaft design		solid shaft
Shaft diameter	[mm]	6
Application		
Function principle		incremental
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 und B	[°]	90
Measuring/setting range		
Resolution		5000 resolution

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Operating conditions		
Ambient temperature	[°C]	-30100
Storage temperature	[°C]	-30100
Max. relative air humidity	[%]	98
Protection		IP 64
Tests / approvals		
Shock resistance		100 g (6 ms)
Vibration resistance		15 g (552000 Hz)
Mechanical data		
Weight	[g]	420
Material		aluminum
Max. revolution, mechanical [U/min]		12000
Max. starting torque	[Nm]	1
Reference temperature torque	[°C]	20
Shaft design		solid shaft
Shaft diameter	[mm]	6
Shaft material		steel (1.4104)
Max. shaft load axial (at the shaft end)	[N]	10
Max. shaft load radial (at the shaft end)	[N]	20
Fixing flange		Synchro-flange

#### Electrical connection

Connector: 1 x M23 (ifm 1001.4), radial



1	B inverted	
2	L+ sensor	
3	0 index	
4	0 index inverted	
5	Α	
6	A inverted	
7	error inverted	
8	В	
9	n.c.	
10	0V	
11	0V sensor	
12	L+	
screen	housing	

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Diagrams and graphs

Pulse diagram

Direction of rotation clockwise (looking at the shaft)