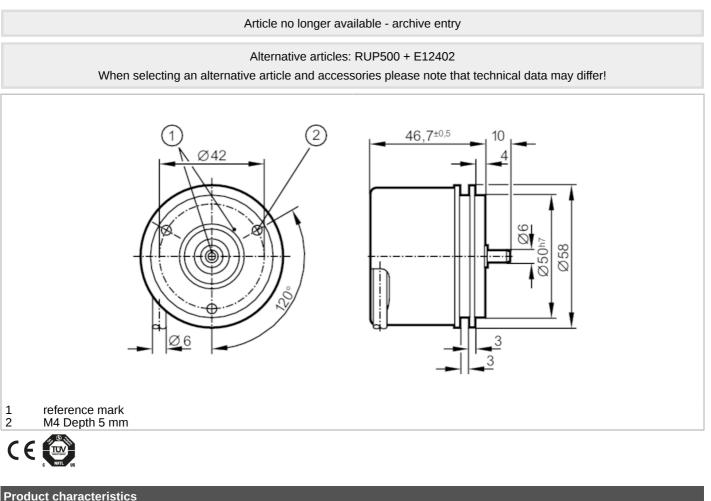
RU6003

Incremental encoder with solid shaft

RU-0100-I24/L2





Product characteristics		
Resolution		100 resolution
Shaft design		solid shaft
Shaft diameter	[mm]	6
Application		
Function principle		incremental
Electrical data		
Operating voltage	[V]	1030 DC
Current consumption	[mA]	< 150
Outputs		
Electrical design		HTL
Max. current load per output	[mA]	50
Switching frequency	[kHz]	300
Type of short-circuit protection		< 60 s
Phase difference A and B	[°]	90
Measuring/setting range		
Resolution		100 resolution
Operating conditions		
Ambient temperature	[°C]	-40100
Note on ambient temperature		for firmly laid cable: -40 °C

ifm electronic gmbh • Friedrichstraße 1 • 45128 Essen — We reserve the right to make technical alterations without prior notice. — EN-GB — RU6003-03 — 01.09.2010 — 🗵

RU6003

Incremental encoder with solid shaft



RU-0100-I24/L2

Max. relative air humidity	[%]	98	
Protection		IP 64; (on the housing: IP 67; on the shaft: IP 64)	
Tests / approvals			
Shock resistance		200 g	
Vibration resistance		30 g	
Mechanical data			
Weight	[g]	487.8	
Dimensions	[mm]	Ø 58 / L = 46.7	
Materials		aluminium	
Max. revolution, mechanical	[U/min]	16000	
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			
Cable: 2 m, PUR; Maximum cable length: 300 m; radial, can also be used axially			
brown A			
green A invertee	d		
grey B			
pink B inverted			
red 0 index black 0 index inverted			
blue L+ sensor			
white OV sensor			
brown/green L+ (Up)			
white/green 0V (Un)			
lilac failure inv	verted		
screen housing			
Diagrams and graphs			
Pulse diagram		1001 1003	
		direction of rotation clockwise (looking at the shaft)	