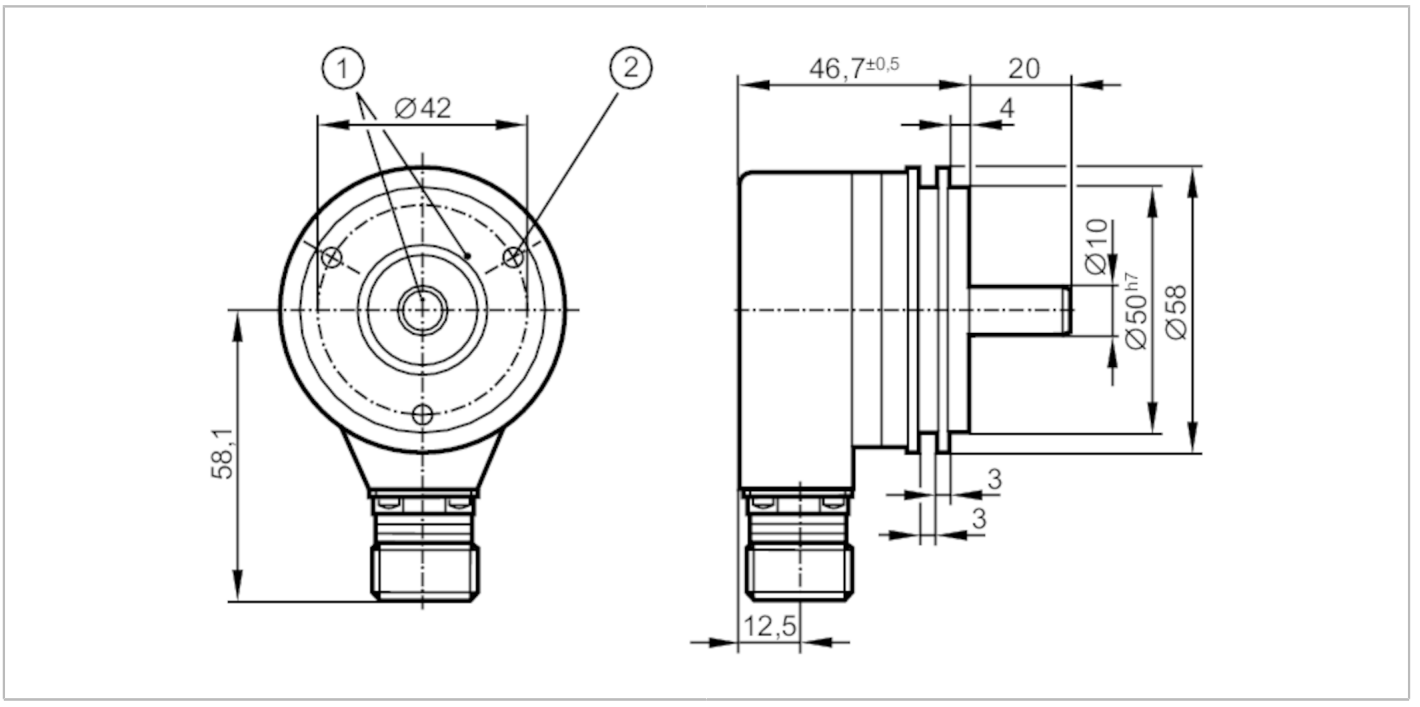
RN6057

Absolute singleturn encoder with solid shaft

RN-4096-S24/K B

Article no longer available - archive entry



Product characteristics		
Resolution		4096 resolution; 4096 steps; 12 bit
Communication interface		SSI data interface
Shaft design		solid shaft
Shaft diameter	[mm]	10
Application		
Function principle		absolute
Revolution type		singleturn
Electrical data		
Operating voltage	[V]	4.75...30 DC
Current consumption	[mA]	< 160
Outputs		
Code		Gray code; (increasing code values when turned clockwise (seen on the shaft))
Code signal		Clock input; TTL-compatible signals; clock and clock (inv.) from drivers to RS 485; data output; synchronous serial; TTL-compatible signal data and data (inv.); incremental signals; 2 sinusoidal incremental signals (A and B) ; phase shifted by 90°; 1 Vss 512 signal periods per revolution
Measuring/setting range		
Resolution		4096 resolution; 4096 steps; 12 bit
Interfaces		
Communication interface		SSI data interface
Operating conditions		
Ambient temperature	[°C]	-40...85

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Max. relative air humidity	[%]	75; (briefly: 95 %)
Protection		IP 64

Tests / approvals

Shock resistance		100 g (6 ms)
Vibration resistance		30 g (55...2000 Hz)

Mechanical data

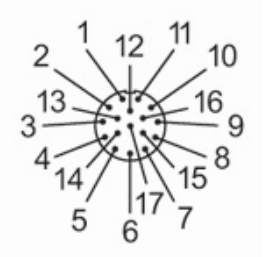
Weight	[g]	441.8
Dimensions	[mm]	Ø 58 / L = 66.7
Material		aluminum
Max. revolution, mechanical	[U/min]	12000
Max. starting torque	[Nm]	1
Reference temperature torque	[°C]	20
Shaft design		solid shaft
Shaft diameter	[mm]	10
Shaft material		steel (1.4104)
Max. shaft load axial (at the shaft end)	[N]	10
Max. shaft load radial (at the shaft end)	[N]	20

Remarks

Remarks	Wires/pins not connected (n.c.) must not be used.

Electrical connection

Connector: 1 x M23 (ifm 1001.11), radial; Maximum cable length: 100 m



1	n.c.
2	n.c.
3	n.c.
4	n.c.
5	n.c.
6	n.c.
7	L+ Up
8	clock
9	clock inverted
10	0v Un
11	housing
12	B (+)
13	B (-)
14	data
15	A (+)
16	A (-)
17	data inverted

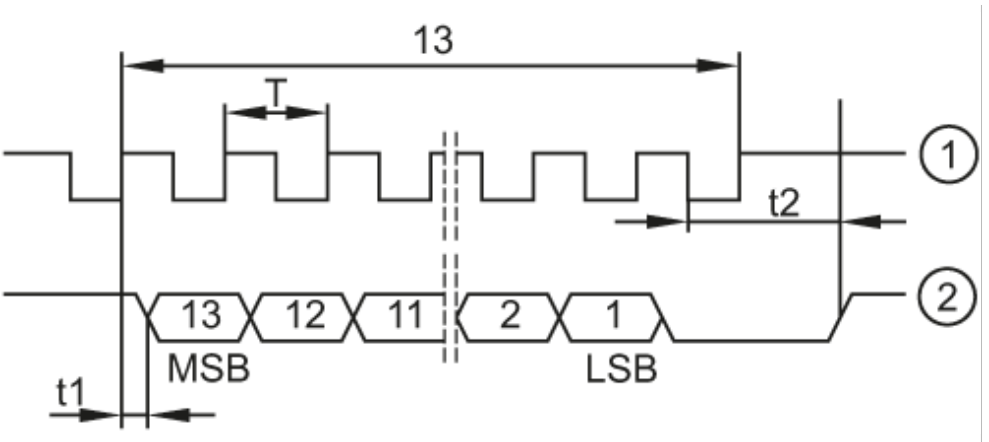
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Diagrams and graphs

Pulse diagram



1 clock

2 data