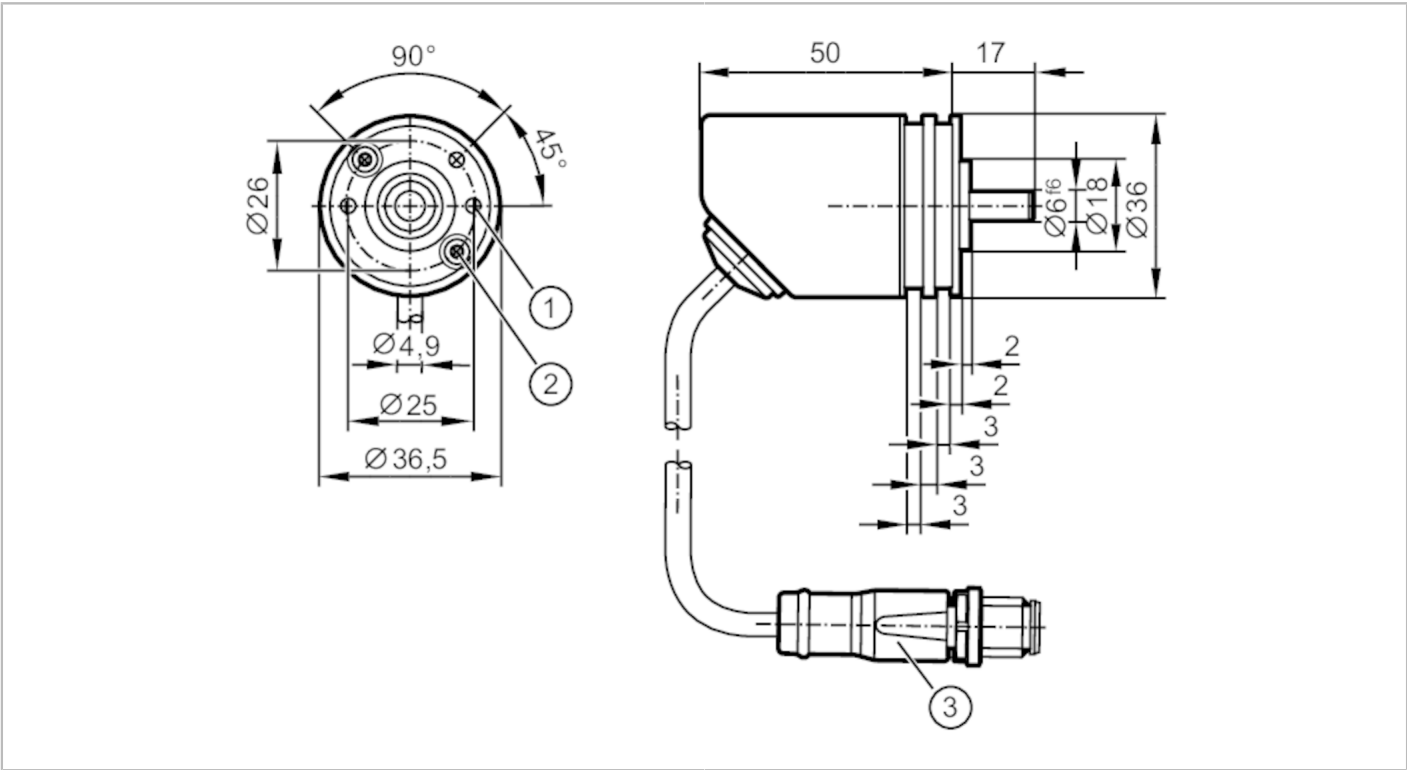


RB3560



Incremental encoder with solid shaft

RNB06SPU800250IOI



Product characteristics

Resolution	1...10000; (programmable; Factory setting: 250, HTL, CW) resolution
Communication interface	IO-Link
Shaft design	solid shaft
Shaft diameter [mm]	6

Application

Special feature	Screened cable
Function principle	incremental
Detection system	magnetic

Electrical data

Operating voltage [V]	4.75...30 DC
Current consumption [mA]	< 150
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	0.5
Max. revolution electrical [U/min]	12000

Outputs

Electrical design	HTL/TTL
Max. current load per output [mA]	50
Switching frequency [kHz]	1000
Short-circuit protection	yes
Phase difference A and B [°]	90

Measuring/setting range

Resolution	1...10000; (programmable; Factory setting: 250, HTL, CW) resolution
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Incremental encoder with solid shaft

RNB06SPU800250IOI

Accuracy / deviations		
Accuracy	[°]	0.1
Software / programming		
Parameter setting options	Resolution; direction of rotation; HTL; TTL	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
	Function	Device diagnosis
SIO mode	yes	
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	499
Operating conditions		
Ambient temperature	[°C]	-40...80
Note on ambient temperature	for flexibly laid cable: -25 °C	
Storage temperature	[°C]	-40...80
Max. relative air humidity	[%]	95; (condensation not permissible)
Protection	IP 65; IP 66; (on the housing: IP 67; on the shaft: IP 65)	
Tests / approvals		
Shock resistance		200 g
Vibration resistance		30 g
MTTF	[years]	292
Mechanical data		
Weight	[g]	251.5
Housing	cylindrical	
Dimensions	[mm]	Ø 36.5 / L = 65
Materials	flange: aluminium; housing: stainless steel (444/1.4521); cable plug: PA	
Max. revolution, mechanical	[U/min]	12000
Max. starting torque	[Nm]	0.01
Reference temperature torque	[°C]	20
Shaft design	solid shaft	
Shaft diameter	[mm]	6
Shaft material	stainless steel	
Max. shaft load axial (at the shaft end)	[N]	40
Max. shaft load radial (at the shaft end)	[N]	60
Fixing flange	Ø 36.5 mm	
Remarks		
Pack quantity	1 pcs.	



Incremental encoder with solid shaft

RNB06SPU800250IOI

Electrical connection

IO-Link

1 L-
2 L+
3 not to be used
4 not to be used
5 not to be used
6 IO-Link
7 not to be used
8 not to be used
Screen housing
plug

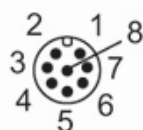
encoder

1 L-
2 L+
3 A
4 not to be used
5 not to be used
6 Z/0-pulses (90 deg)
7 B
8 not to be used
Screen housing
plug

Electrical connection - plug

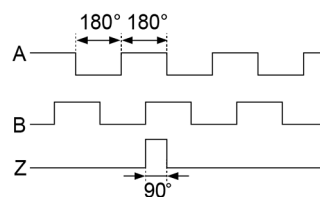
Cable: 0.15 m; Maximum cable length: 100 m

Connector: 1 x M12, straight; coding: A; Moulded body: PUR



Diagrams and graphs

Pulse diagram



direction of rotation clockwise (looking at the shaft)