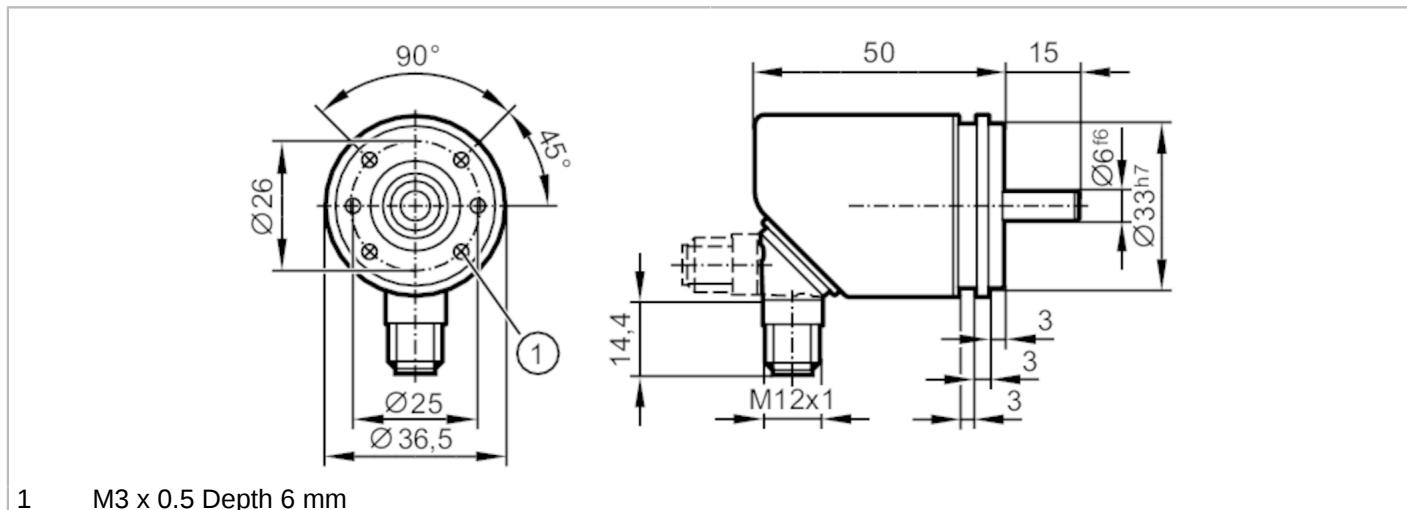


# RMB300



## Absolute multiturn encoder with solid shaft

MULTITURN ENCODER STANDARD LINE



1 M3 x 0.5 Depth 6 mm

CE IO-Link

### Product characteristics

Resolution	65536 steps; 32768 revolutions; 31 bit
Communication interface	IO-Link
Shaft design	solid shaft
Shaft diameter [mm]	6

### Application

Function principle	absolute
Revolution type	multiturn

### Electrical data

Operating voltage [V]	18...30 DC; (to PELV)
Rated insulation voltage [V]	30
Current consumption [mA]	< 75
Protection class	III
Reverse polarity protection	yes
Max. power-on delay time [ms]	1000
Max. revolution electrical [U/min]	12000

### Outputs

Short-circuit protection	yes
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### Measuring/setting range

Resolution	65536 steps; 32768 revolutions; 31 bit
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### Accuracy / deviations

Accuracy [°]	0.1
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### Software / programming

Parameter setting options	preset; zero point; direction of rotation; rotational speed
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Interfaces		
Communication interface		IO-Link
Transmission type		COM3 (230,4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9 CDV
Profiles		Identification and Diagnosis; Switching Signal Channel; Measurement Data Channel (high resolution)
SIO mode		no
Required master port type		A
Min. process cycle time [ms]		2.3
IO-Link functions (cyclical)	function	bit length
	process value	96
	device status	4
	binary switching information	5
IO-Link functions (acyclical)	application specific tag; operating hours counter; internal temperature; switching cycles counter	
	Type of operation	IO-Link device ID
Supported DeviceIDs	Default	1064 d / 0x000428 h
Note	For further information please see the IODD PDF file at "Downloads"	
Operating conditions		
Ambient temperature [°C]		-40...85
Storage temperature [°C]		-40...85
Max. relative air humidity [%]		98; (condensation not permissible)
Protection	IP 65; (on the housing: IP67; on the shaft: IP64)	
Tests / approvals		
EMC	DIN EN 61000-4-2 ESD	4 kV CD
	DIN EN 61000-4-3 HF radiated	10 V/m
	DIN EN 61000-4-4 Burst	2 kV
	DIN EN 61000-4-6 HF conducted	10 V
Vibration resistance	DIN EN 60068-2-6	10 g / 10...1000 Hz half-sine
Shock resistance	DIN EN 60068-2-27	100 g / 6 ms
Continuous shock resistance	DIN EN 60068-2-29	10 g / 16 ms half-sine
Vibration resistance		30 g (10...1000 Hz)
MTTF [years]		283

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### Mechanical data

Weight	[g]	227.2
Dimensions	[mm]	Ø 36 / L = 65
Materials		flange: aluminium; housing: stainless steel (1.4521 / 444); plug: stainless steel (1.4401 / 316)
Max. starting torque	[Nm]	1
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]	110
Fixing flange		servo flange

### Electrical connection - plug

1	UB
2	SSC1.2 / IN
3	GND
4	IO-Link
5	n. c.

Connector: 1 x M12

