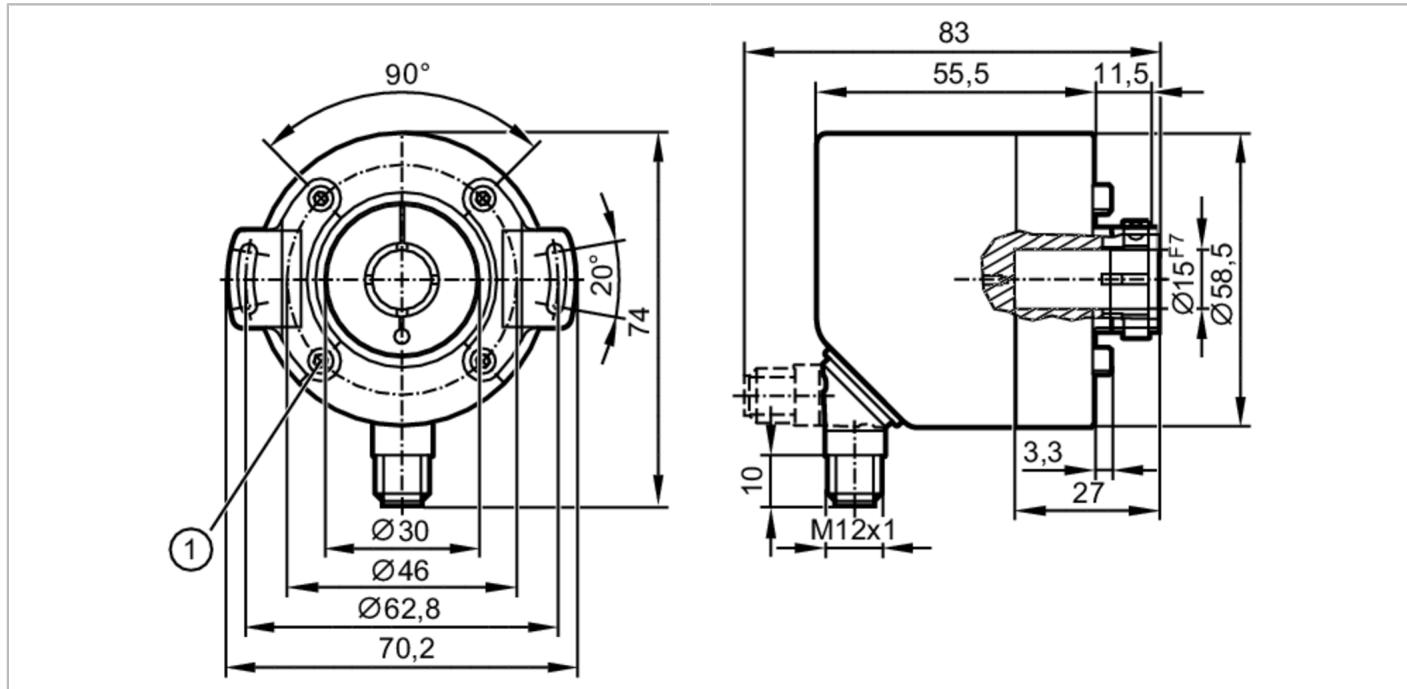


RMO300



Absolute multiturn encoder with hollow shaft

MULTITURN ENCODER STANDARD LINE



Product characteristics

Resolution	65536 steps; 32768 revolutions; 31 bit
Communication interface	IO-Link
Shaft design	hollow shaft open to one side
Shaft diameter [mm]	15

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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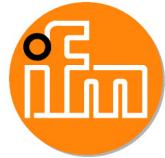
Software / programming

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										
Function class	Description									
0x4000	Identification and Diagnosis									
0x8001	Switching Signal Channel									
0x800B	Measurement Data Channel (high resolution)									
SIO mode		no								
Required master port class		A								
Min. process cycle time [ms]		2.3								
IO-Link process data (cyclical)		<table border="1"> <thead> <tr> <th>Function</th><th>bit length</th></tr> </thead> <tbody> <tr> <td>process value</td><td>96</td></tr> <tr> <td>device status</td><td>4</td></tr> <tr> <td>binary switching information</td><td>5</td></tr> </tbody> </table> application specific tag; operating hours counter; internal temperature; switching cycles counter	Function	bit length	process value	96	device status	4	binary switching information	5
Function	bit length									
process value	96									
device status	4									
binary switching information	5									
IO-Link functions (acyclical)										
Supported DeviceIDs	Type of operation	DeviceID								
Note	default	1064								
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: IP 67; on the shaft: IP 64)								
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								
UL approval	voltage supply	Class 2								
Mechanical data										
Weight [g]		417.2								
Dimensions [mm]		Ø 58 / L = 69								
Material		flange: aluminum; housing: stainless steel (1.4521 / 444)								
Max. starting torque [Nm]		1								
Reference temperature torque [°C]		20								
Shaft design		hollow shaft open to one side								
Shaft diameter [mm]		15								

RMO300



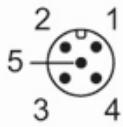
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Shaft material	stainless steel
Max. shaft load axial (at the shaft end) [N]	40
Max. shaft load radial (at the shaft end) [N]	110
Installation depth/shaft [mm]	28
Max. axial shaft misalignment [mm]	0,5
Fixing flange	Clamping flange

Electrical connection - plug

Connector: 1 x M12; coding: A; Moulded body: stainless steel (1.4401 / 316)



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