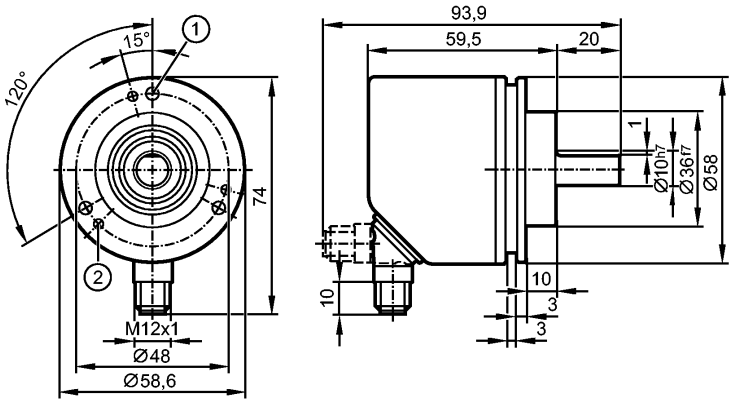


RV3100

INCREMENTAL ENCODER BASIC LINE

Encoders



- 1: M4 x 0.7 6 mm deep
- 2: M3 x 0.5 6 mm deep

CE IO-Link

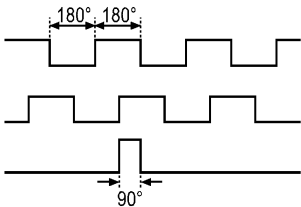
Product characteristics

Solid shaft encoder	
HTL, TTL 50 mA	
Connector	
Clamping flange	
Magnetic detection system	
Resolution 1...10000	

Electrical data

Operating voltage [V]	4.75...30 DC
Current consumption [mA]	< 150
Max. permissible rpm / elec. [1/min]	12000
Phase difference A und B [°]	90
Switching frequency [kHz]	1000
Reverse polarity protection	yes
Short-circuit protection	yes
Protection class	III

Pulse diagram



Direction of rotation clockwise (looking at the shaft)

Outputs

Output function	HTL, TTL 50 mA
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Measuring / setting range

Encoders	
Resolution	programmable, factory setting 1024

Accuracy / deviations

Accuracy	< 0.1°
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Reaction times

RV3100

INCREMENTAL ENCODER BASIC LINE

Encoders

Power-on delay time	[s]	0.5
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Software / programming

Programming options	Resolution, rotational direction, HTL, TTL
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Interfaces

IO-Link device	
Transfer type	COM 2
IO-Link revision	V1.1
SIO mode	yes
Min. process cycle time	[ms] 2.3

Mechanical data

Max. permissible rpm / mech. [1/min]	12000
Starting torque [Ncm]	< 1 (20 °C)
Max. shaft load (at the shaft end) [N]	axial 40; radial 60
Shaft, material [mm]	Ø 10, stainless steel
Vibration resistance	30 g
Shock resistance	200 g
Housing materials	flange: aluminium; housing: stainless steel 444/1.4521; connector: stainless steel 316/1.4401
Weight [kg]	0.363

Environment

Max. relative air humidity [%]	95, Condensation not permissible
Ambient temperature [°C]	-40...85
Storage temperature [°C]	-40...85
Protection	IP 65 / IP 66; IP 67 (housing); IP 64 (shaft)

Tests / approvals

MTTF [Years]	292.2
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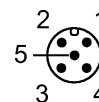
Electrical connection

Connection	M12 connector; radial, can also be used axially; 5-pole
Max. cable length [m]	100

Wiring

IO-Link:

1: L+
 2: not to be used
 3: L-
 4: IO-Link
 5: not to be used
 screen: plug



encoder:

1: UB
 2: A
 3: GND
 4: Z/O-Pulse (90 deg)
 5: B
 screen: plug

Remarks

Pack quantity [piece]	1
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