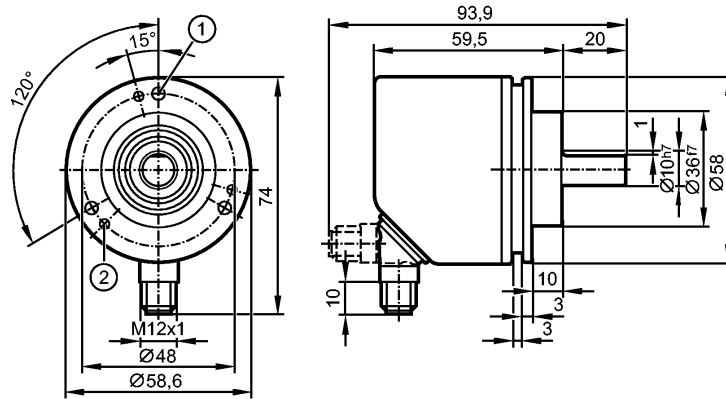


RV3100

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

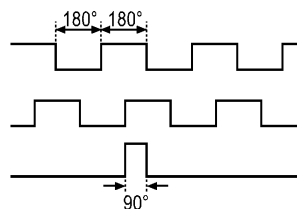
Magnetic detection system

Resolution 1...9999

Electrical data

Operating voltage [V]	4.5...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
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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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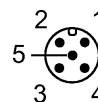
Electrical connection

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/0-Pulse (90 deg)
- 5: B
- screen: plug

Remarks

Pack quantity	[piece] 1
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