

Quality - made in Germany



RSI 58 - Interbus-S

Absolute multi-turn encoder with Interbus-S

- Shockproof up to 200 g
- Resolution up to 25 bit
- Opto-decoupled (galvanic disconnected)
- ENCOM Profile K3

Technical data

Code	Binary
Max. resolution	25 Bit
Steps/Turn	8192
Turns	4096

Electrical data

Operating voltage	UB = 10...30 VDC
Current consumption	Max. 60 mA (w/o load), at 24 VDC

Code change frequency of scanning	800 kHz
Measuring step deviation of scanning	± 0,025 ° with 400 kHz ± 0,05° with 800 kHz

Mechanical data

Speed (mechanical)	≤ 10.000 min ⁻¹
Speed (electrical)	≤ 6.000 min ⁻¹
Start-up torque	< 0,015 Nm
Shaft loading	< 40 N radial, < 20 N axial
Moment of inertia	2 x 10 ⁻⁶ kgm ²

Material

Housing	Steel
Flange	Aluminium
Bus cover	Aluminium
Weight	approx. 600 g

Ambient conditions

Vibration	IEC 68 Teil 2 - 6 ≤ 200 ms ⁻² (16...2000 Hz)
Shock	DIN EN 600068-2-27 ≤ 2.000 ms ² (6 ms)
Operating temperature	- 20...+ 85° C
Humidity	Max. relative humidity 95 % no-condensing
Protection type	IP 65
Interference resistance	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4

Interbus-Features

Profile conformity	Encoder Profile 71
Connection	
IB user type	2-conductor remote bus
IB bus width	4 bytes
PCP length	no parameter channel
ID Code	55

Interface

Typ A1	2-conductor remote bus galvanic disconnected
Typ W1	2-conductor remote bus

Parameter transfer for:

- Resolution of steps and revolution
- Rotating direction and code type
- Preset value
- Zero point offset
- Offset value
- Measuring range
- Resetting encoder

The electrical connection must not put on or removed under voltage.

Contact description for C plug

D01, D01 Incoming remote bus (A1) electrically
 DI1, DI1 isolated from remaining encoder electr.

GND I Electrically isolated reference ground for incoming remote bus(A1). By type without galvanic separation with GND connected.

UB Contacts for encoder power supply (A1)

GND B Encoder supply, UB = 10...30 VDC
 max. current load 700 mA

D02, D02 Relaying remote bus (W1)
 DI2, DI2

GND Reference ground for relaying remote bus (W1)

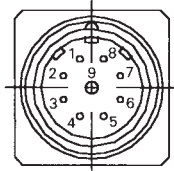
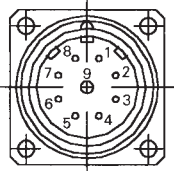
UB Contacts for encoder power supply integrated in bus (W1), or over PG7 input power supply, UB = 10...30 VDC.

GND B Internal connected to UB/GND B from A1

PE Shield contact, connected to encoder housing

RBST Detection of additional bus users
 Contact open: Last user
 Contact to GND: user X

Contact assignment for C plug



Incoming interface (pin)

Outgoing interface (socket)

Pin	Contact
1	<u>D01</u>
2	D01
3	<u>DI1</u>
4	DI1
5	GND I
6	PE
7	UB
8	GND B
9	-

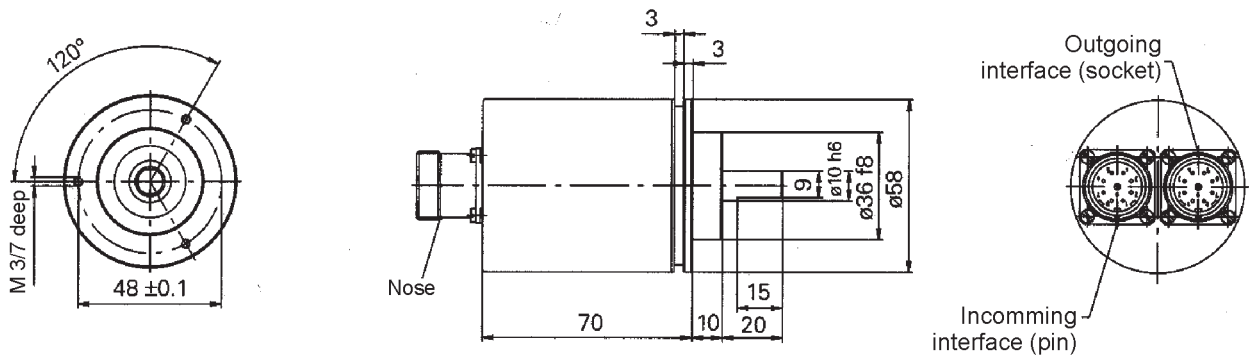
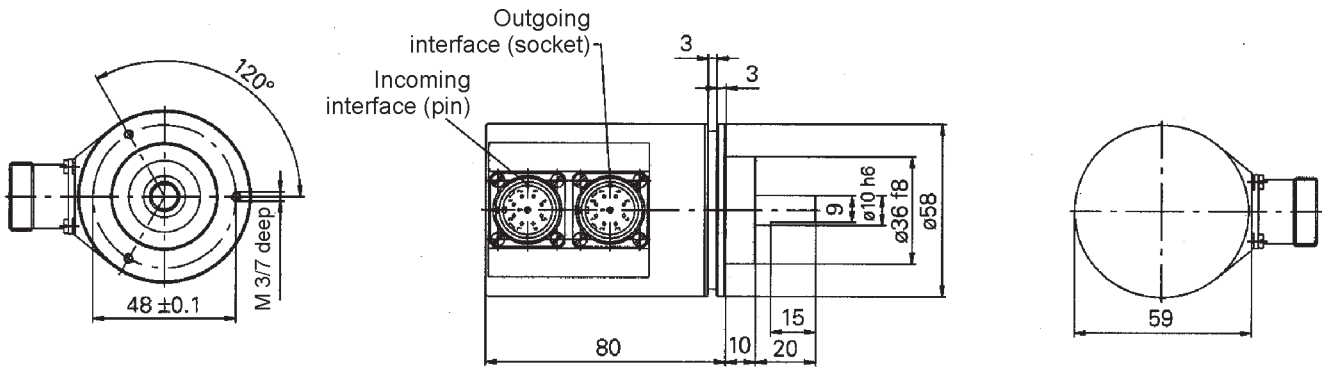
Pin	Contact
1	<u>D02</u>
2	D02
3	<u>DI2</u>
4	DI2
5	GND
6	PE
7	UB
8	<u>GND B</u>
9	RBST

Type key of encoder

Encoder type	Bit / Turn	Turns	Voltage	Flange	Output
RSI 58	13 = 8192	12 = 4096	30 = 10 - 30 VDC with galvanic separation	W1 = 10 mm shaft clamping flange	
RSI 58			40 = 10 - 30 VDC without galvanic separation	V1 = 10 mm shaft servo flange	C = 2-C plug radial
RSI 58				V6 = 6 mm shaft servo flange	D = 2-C plug axial
RSI 58	13	12	_____	_____	_____

Dimension and cutout RSI 58 Interbus-S

10 mm shaft, clamping flange



optional: 6 mm shaft servo flange

