ReSatron®

Quality - made in Germany

RSF 58 C - CAN

Absolute multi-turn encoder

- **shockproof up to 200 g**
- **Parameterizable operating modes**
- **Parameterizable preset value**
- **Parameterizable scaling**
- **Singleturn resolution up to 18 Bit**
- **Multiturn resolution up to 31 Bit**

Technical data

Code	Binary

Max. resolution

Singleturn
10 Bit =   1.024 S/T
13 Bit =   8.192 S/T
Multiturn
26 Bit =   1.024 S/T x 65.536 T
29 Bit =   8.192 S/T x 65.536 T

Electrical data

Operating voltage	UB = 10...30 VDC
Current consumption	Max. 100 mA (w/o load), at 24 VDC
Code change frequency	800 kHz
Accuracy	0,025 ° with 400 kHz 0,05° with 800 kHz

Mechanical data

Speed (mechanical	≤ 10.000 min^{-1}
Speed (electrical)	$\leq$ 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	DIN EN 60068-2-6 ≤ 200 ms^{-2} (16...2000 Hz)
Shock	DIN EN 600068-2-27 ≤ 2.000 ms^2, 6 ms
Operating temperature	- 20...+ 85° C
Storage 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

CAN features

Bus protocol	CAN
Operating modes	Polling Mode (asynch) The encoder sends data on request by another subscriber. Cyclic Mode (asynch-cyclic) The encoder cyclically sends the current process actual value without a request by a master. The cycle time can be parameterized for values between 1 and 65'535 ms.
Preset value	With the „Preset" parameter the encoder can be set to a desired actual process value that corresponds to the defined axis position of the system. The offset value between the encoder zero point and the mechanical zero point of the system is saved in the encoder.
Rotating direction	With the operating parameter the rotating direction in which the output code is to increase or decrease can be parameterized.
Scaling	The steps per revolution and the total revoltion can be parameterized.
Diagnosis	The following is montored during operation:

- Consistency test of code
- Exceeding of the permissible signal frequency
- LED failure, aging
- Receiver failure
- Code disk, glass breakage
- Power supply of electronic gear unit

Default setting	10 kbit/s, node number 0

RSF 58 C 05/03 - 103 Subject to change
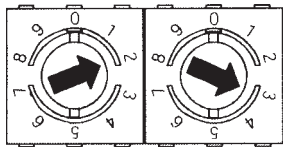
View inside bus cover
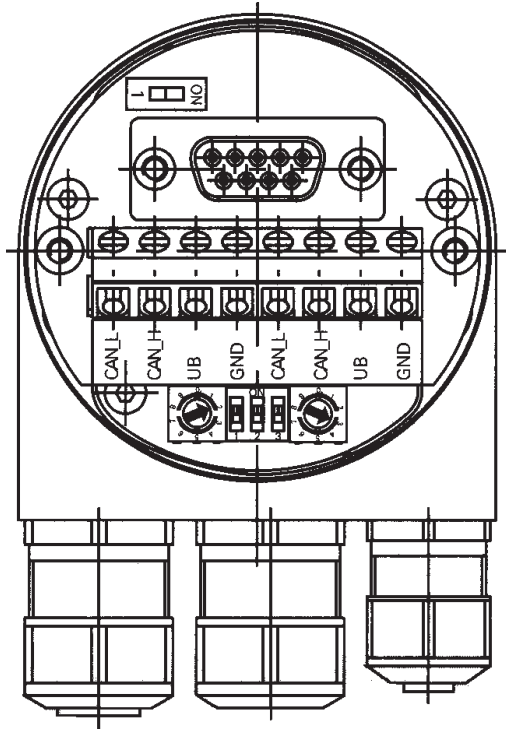
Contact Description

CAN_L	Negative serial data line, Pair 1 and Pair 2
CAN_H	Positive serial data line, Pair 1 and Pair 2
UB	Supply voltage10...30 VDC
GND	Ground contact for UB

(Terminals with the same designation are internally interconnected)

Option additional incremental tracks A + B, 5pol. plug, 10...30 VDC, 30 mA.

Settings of user address

Address can be set with rotary switch.
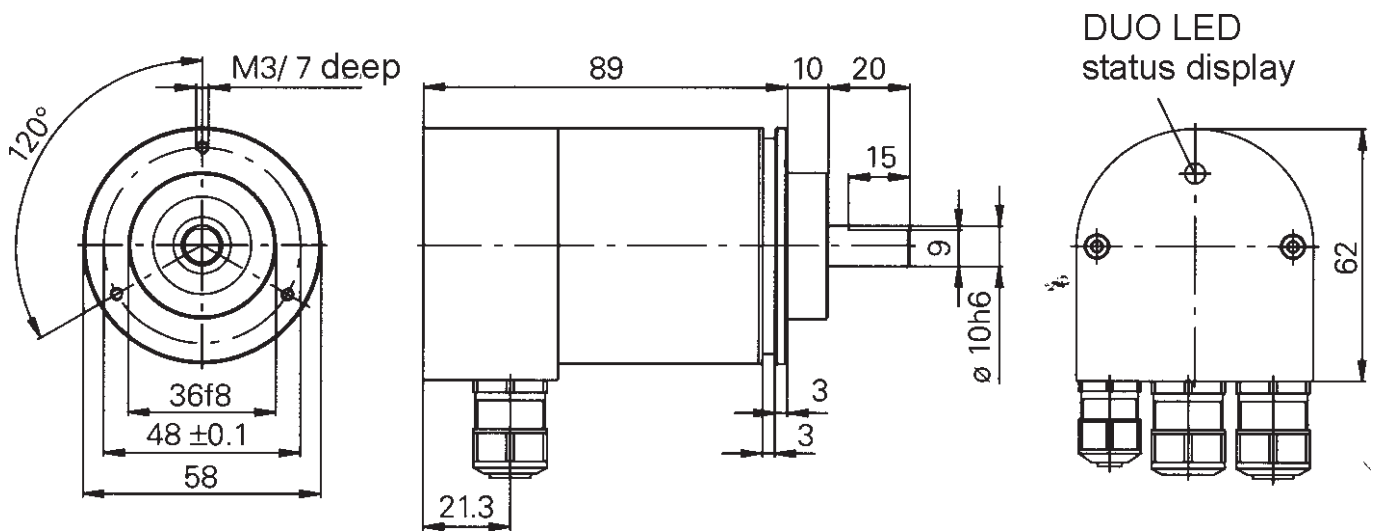Example: User address 23

Settings of terminating resistors

ON = Last user
OFF = UserX

Type key of Encoder

Encoder type	Steps / T - Turns	Voltage	Code	Flange	Output	Option
RSF 58 C	**10 =** 10 Bit 1.024 S/T x 1T	3 = 10 - 30 VDC	B = Binary	**W1** = 10 mm shaft clamping flange	DS = Bus cover sideways movement out	**F1** = 2 x 1.024 S/T incremental tracks
RSF 58 C	**26** = 26 Bit 1.024 S/T x 65.536 T			**V6** = 6 mm shaft servo flange		**F2** = 2 x 2.048 S/T incremental tracks
RSF 58 C	**13** = 13 Bit 8.192 S/T x 1 T					
RSF 58 C	**29** = 29 Bit 8.192 S/T x 65.536 T					
RSF 58 C	____	3	B	____	DS	____

Dimension and cutout RSF 58 C

10 mm shaft, clamping flange

M3/ 7 deep

120°

89   10   20

DUO LED
status display

15

9

⌀ 10h6

36f8

48 ±0.1

58

3

3

21.3

62

Optional: 6 mm shaft, servo flange

M4/ 7 deep

120°

4

10

93   6   20

9

⌀9.52h7

⌀31.75h7

8.76

5.5

⌀6f8

42 ±0.1

50h7

58

3

3

4

For your notes: