

Quality - made in Germany



RSHF 58 P - Profibus DP

Absolute multi-turn encoder

- Shockproof up to 200 g
- Parameterizable operating modes
- Parameterizable preset value
- Parameterizable scaling
- Singleturn resolution up to 13 Bit
- Multiturn resolution 16 Bit
- Max. resolution 29 Bit

Technical data

Code	Binary
Max. total count	Singleturn
	10 Bit = 1.024 S/T
	13 Bit = 8.192 S/T
	Multiturn
	26 Bit = 1.024 S/U x 65.536 U
	29 Bit = 8.192 S/U x 65.536 U

Electrical data

OperatingSupply	
Current consumption	Max. 100 mA (w/o load), at 24 VDC
Code change frequency	800 kHz
Absolute accuracy	0,025 ° with 400 kHz 0,05° with 800 kHz

Mechanical data RSHF 58 P

Operating speed	≤ 6.000 min ⁻¹ (mechanical)
Operating speed	≤ 6.000 min ⁻¹ (electrical)
Starting torque	< 0,015 Nm
Admitted shaft load	< 40 N radial, < 20 N axial
Rotor moment of inertia	2 x 10 ⁻⁶ kgm ²
Weight	Approx. 600 g

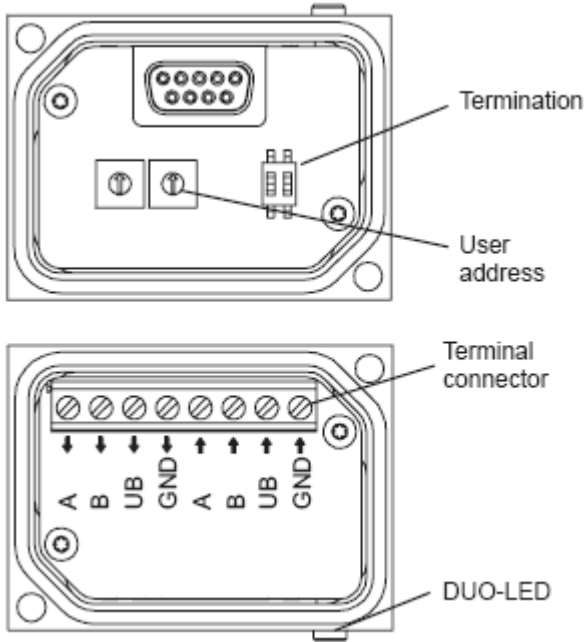
Material

Housing	Aluminium
Flange	Aluminium
Bus cover	Aluminium

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	- 25...+ 85° C
Storage temperature	- 25...+ 85° C
Humidity	Max. relative humidity 95 % non-condensing
Protection type	IP 54
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4

View inside bus cover



Profibus-DP features

Bus protocol	Profibus DPV0
Profibus-Features	Device Class 1 und 2
Data exch. functions	Input: Position value Output: Preset value
Preset value	Parameter for setting the encoder to a requested position value assigned to a defined shaft position of the system.
Parameter functions	Rotating direction Parameter for setting the encoder to rotating direction in which there have to be ascending or descending position values.
Scaling	The steps per revolution and the total revolution can be parameterized.
Step	output of speed in T/min
Diagnosis	The following is monitored during operation: <ul style="list-style-type: none"> - 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	User address 00
Rotating direction	CW means ascending output data with clockwise shaft rotation when looking at flange.

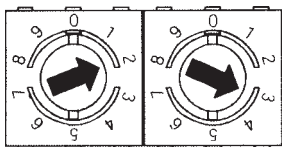
Contact description Profibus-DP

A	Negative serial data line, Pair 1 and Pair 2
B	Positive serial data line, Pair 1 and Pair 2
UB	Supply voltage 10...30 VDC
GND	Ground connection for UB

(Terminals of the same significance are internally connected)

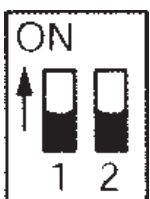
Option additional incremental tracks A + B, 5pol. plug 10...30 VDC, 30 mA.

Settings of user address



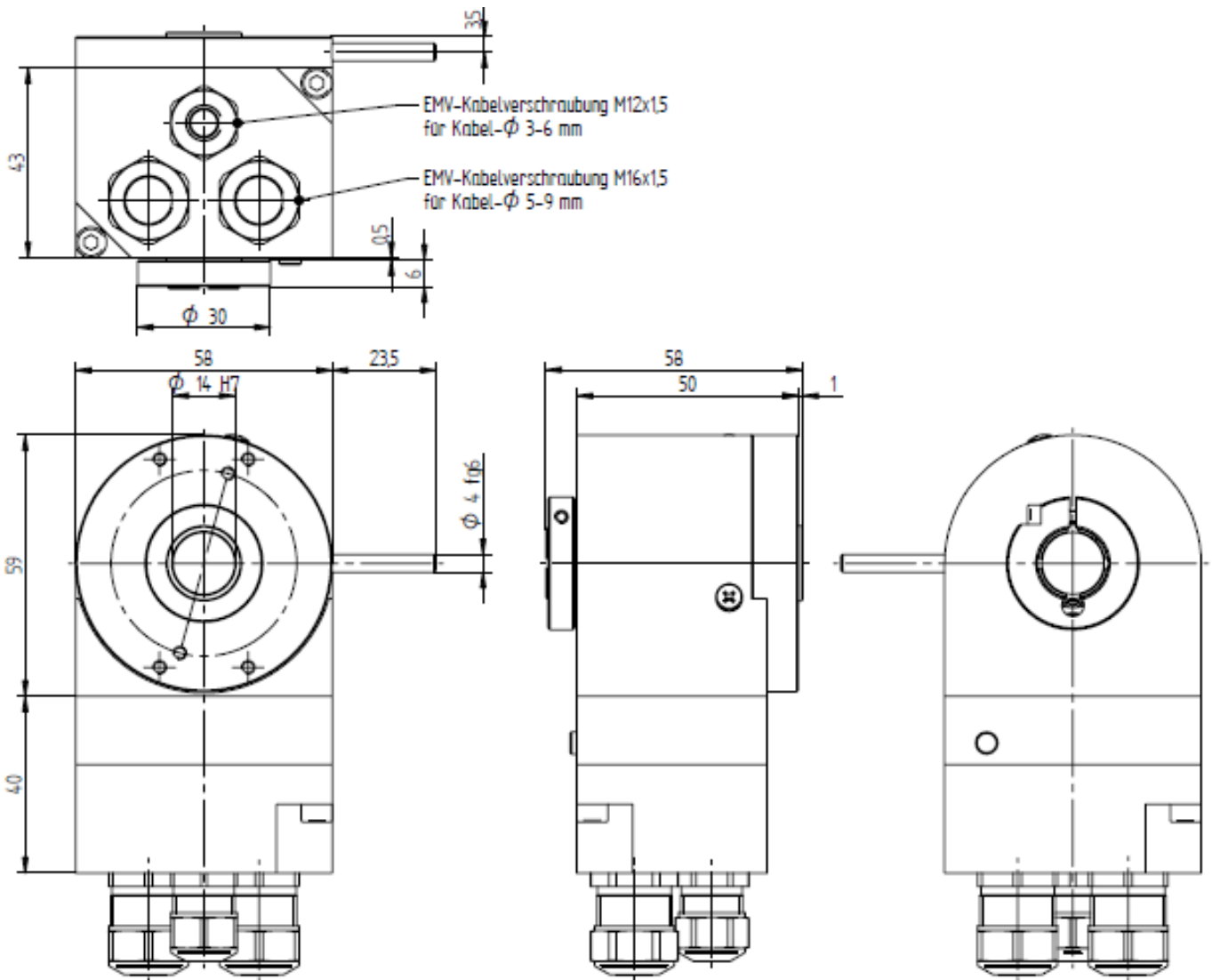
Address can be set with rotary switch.
Example: User address 23

Settings of terminating resistors



ON = Final user
OFF = User X

Dimension and cutout size RSHF 58 Profibus



Type key of Encoder

Encoder Type	Bit/Turnings	Code	Voltage	Flange	Output
RSHF 58 P	10 = 10 Bit 1.024 S/T	B = Binary	3 = 10 - 30 VDC	1 = ϕ 12 mm, without pin	DS = Bus cover sideways movement out
RSHF 58 P	26 = 26 Bit 1.024 S/T x 65.536			2 = ϕ 12 mm, with pin 15 mm	
RSHF 58 P	13 = 13 Bit 8.192 S/T			3 = ϕ 12 mm, with pin 9,5 mm	
RSHF 58 P	29 = 29 Bit 8.192 S/T x 65.536			4 = ϕ 14 mm, without pin	
RSHF 58 P				5 = ϕ 14 mm with pin 15 mm	
RSHF 58 P				6 = ϕ 14 mm with pin 9,5 mm	
RSHF 58 P	_____	B	3	_____	DS

