



- Economical
- Sturdy model to industry standard, Ø58 mm housing
- Short-circuit proof outputs
- Many variations, also customized versions
- High mechanical protection
- Push-pull output (10-30 V supply voltage)

Mechanical characteristics:

Speed:	max. 6000 min ⁻¹
Rotor moment of inertia:	appr. 0.6 x 10 ⁻⁶ kgm ²
Starting torque:	< 0.01 Nm
Radial load capacity of shaft*:	40 N
Axial load capacity of shaft*:	20 N
Weight:	appr. 0.4 kg
Protection acc. to EN 60 529:	IP 64
Working temperature:	0° C up to +50 °C
Operating temperature:	0° C up to +60 °C
Shaft:	stainless steel
Shock resistance acc. to DIN-IEC 68-2-27:	1000 m/s ² , 6 ms
Vibration resistance acc. to DIN-IEC 68-2-6:	100 m/s ² , 10...2000 Hz

Pulse rates available at short notice:

1, 2, 3, 4, 5, 6, 10, 15, 20, 25, 30, 35, 36, 40, 50, 57, 60, 63, 70, 80, 86, 87, 90, 96, 100, 120, 125, 127, 140, 142, 150, 160, 180, 183, 200, 216, 220, 240, 250, 254, 256, 280, 300, 314, 360, 377, 393, 400, 420, 450, 500, 512

Other pulse rates on request

Electrical characteristics:

Output circuit:	push-pull
Supply voltage:	10 - 30 VDC
Power consumption (no load) without inverted signals:	max. 80 mA
Permissible load/channel:	max. ±30 mA
Pulse frequency:	max. 20 kHz
Signal level high:	min. U _B -2.5 V
Signal level low:	max. 1.5 V
Rise time t _r :	max. 1 µs
Fall time t _f :	max. 1 µs
Short-circuit proof outputs ¹⁾ :	yes
Reverse connection protection at U _B :	yes
Conforms to CE requirements acc. to EN 50082-2, EN 50081-2 and EN 55011, Class B	

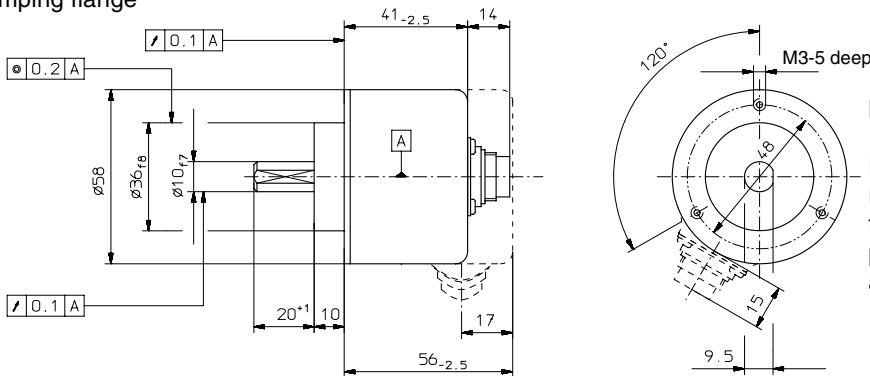
¹⁾When supply voltage correctly applied

Incremental shaft encoder

Low cost Type series 5810

Dimensions:

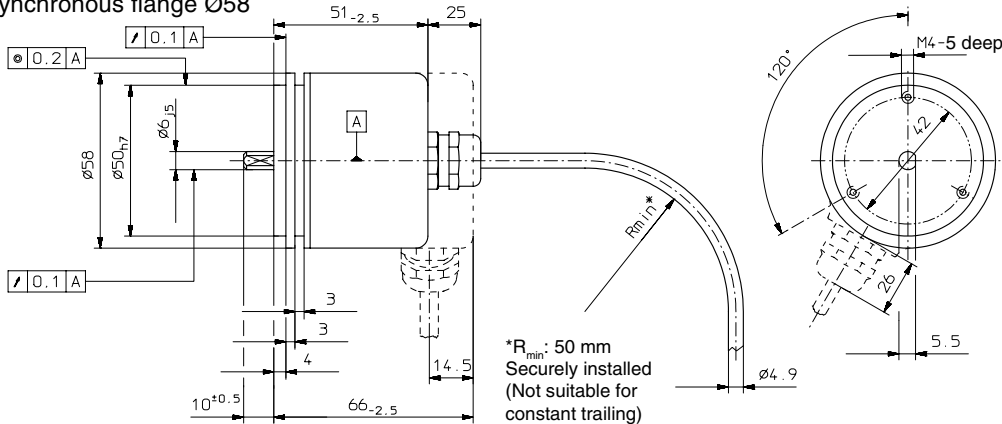
Clamping flange



Mounting advice:

Do not connect encoder and drive rigidly to one another at shafts and flanges! Always use couplings to prevent shaft overload (see accessories chapter).

Synchronous flange Ø58



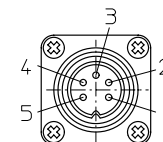
Terminal assignment:

Signal:	0V	+U _B	A	B	0 or 0̄	Shield
5-pin plug						
Pin:	1	2	3	4	5	PH ¹⁾
Colour:	WH	BN	GN	YE	GY	

¹⁾PH = Shield is attached to connector housing
 Insulate unused outputs before initial startup.

Top view of mating side, male contact base:

5-pin plug



Order code:

8.5810.XXXX.XXXX

Range

Pulse rate

(e.g. 250 pulses => 0250)

Flange

- 1 = Clamping flange
- 2 = Synchronous flange

Type of connection

- 1 = axial cable (1 m PVC-cable)
- 2 = radial cable (1 m PVC-cable)
- 3 = axial 5 pin plug without mating connector
- 5 = radial 5 pin plug without mating connector

Shaft (Ø x L)

- 1 = Ø6 x 10 mm
- 2 = Ø10 x 20 mm

Output circuit

- 1 = Push-pull, channel A
- 2 = Push-pull, channels A+0
- 3 = Push-pull, channels A+B
- 4 = Push-pull, channels A+B+0
- 5 = Push-pull, channels A+0̄
- 6 = Push-pull, channels A+B+0̄

Accessories

Corresponding mating connector to connection type 3 and 5
 Art.No 8.0000.5022.0000

Further accessories see accessories chapter