

### Sine wave output Type 5804



- Sturdy model to industry standard, Ø58 mm housing
- Many variations, also customized versions
- IP 65
- Temperature and ageing compensation
- Short-circuit proof outputs
- Reverse connection protection (at  $U_B = 10 \dots 30 \text{ V DC}$ )
- Resolution up to 5000 ppr
- Voltage sine wave outputs (1Vpp)

- available as explosion proof zone 2 and 22

#### Mechanical characteristics:

Speed:	max. 12000 min <sup>-1</sup>
Rotor moment of inertia:	appr. $1,8 \times 10^{-6} \text{ kgm}^2$
Starting torque:	< 0,01 Nm
Radial load capacity of shaft*:	80 N
Axial load capacity of shaft*:	40 N
Weight:	appr. 0,4 kg
Protection acc. to EN 60 529:	IP 65
Working temperature:	-20 °C ... +85 °C <sup>1)</sup>
Operating temperature:	-20 °C ... +90 °C <sup>1)</sup>
Shaft:	stainless steel
Shock resistance acc. to DIN-IEC 68-2-27	1000 m/s <sup>2</sup> , 6 ms
Vibration resistance acc. to DIN-IEC 68-2-6:	100 m/s <sup>2</sup> , 10 ... 2000 Hz

\*View also diagrams on page 25

<sup>1)</sup>Constant trailing: -20 ... +70 °C

#### Pulse rates available at short notice:

500, 512, 600, 625, 720, 745, 750, 762, 800, 900, 927, 1000, **1024**, 1250, 1270, 1400, 1500, 1800, 2000, **2048**, 2250, 2400, 2500, 3000, 3600, 4000, **4096**, 5000

Other pulse rates on request

#### Electrical characteristics:

Output circuit:	Sine wave	Sine wave
	U = 1 Vpp	U = 1 Vpp
Supply voltage:	5 V (±5%)	10 ... 30 V DC
Current consumption (no load) with inverted signals:	typ. 65 mA /	typ. 65 mA /
	max. 110 mA	max. 110 mA
-3 dB frequency:	≥ 180 kHz	≥ 180 kHz
Signal level channels A/B:	1 Vpp (±20%)	1 Vpp (±20%)
Signal level channel 0:	0,1 ... 1,2 V	0,1 ... 1,2 V
Short circuit proof outputs: <sup>1)</sup>	yes	yes
Reverse connection protection at UB:	no	yes
Conforms to CE requirements acc. to EN 61000-6-1, EN 61000-6-4 and EN 61000-6-3		

<sup>1)</sup>When supply voltage correctly applied

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#### Terminal assignment voltage sine wave output:

Signal:	0 V	0 V Sensor <sup>2)</sup>	+U <sub>B</sub>	+U <sub>B</sub> Sensor <sup>2)</sup>	A	$\bar{A}$	B	$\bar{B}$	0	$\bar{0}$	Shield
12 pin plug, Pin:	10	11	12	2	5	6	8	1	3	4	PH <sup>1)</sup>
Cable colour:	WH 0,5 mm <sup>2</sup>	WH	BN 0,5 mm <sup>2</sup>	BN	GN	YE	GY	PK	BU	RD	

<sup>1)</sup>PH = Shield is attached to connector housing

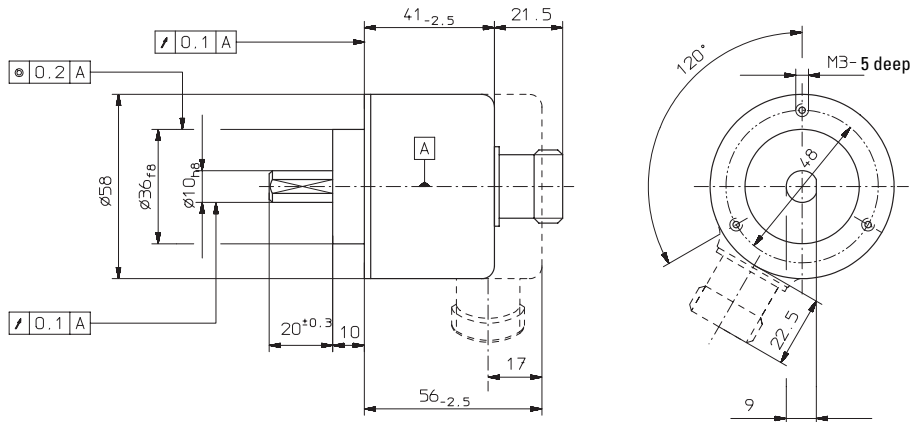
<sup>2)</sup>The sensor cables are connected to the supply voltage internally if long feeder cables are involved they can be used to adjust or controll the voltage at the encoder

- If the sensor cables are not in use, they have to be insulated or 0 V<sub>Sensor</sub> has to be connected to 0 V and U<sub>B</sub>Sensor has to be connected to U<sub>B</sub>

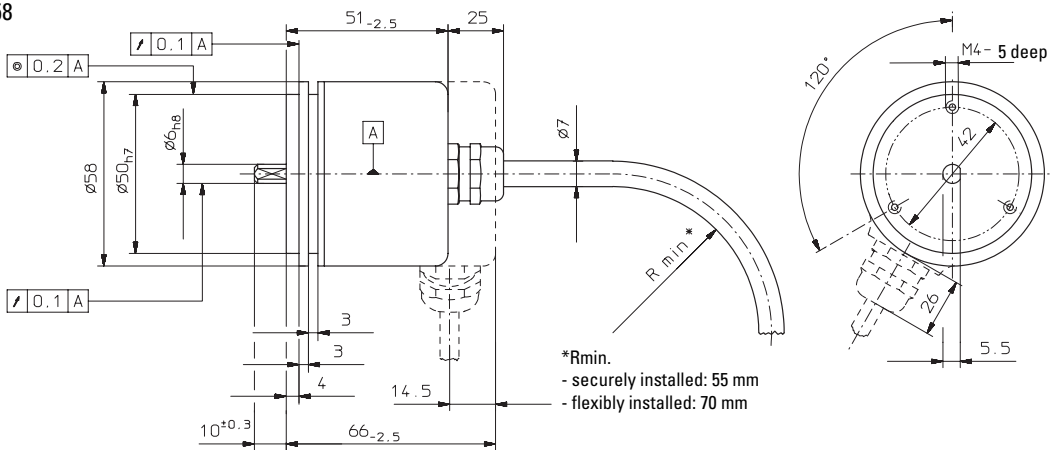
**Insulate unused outputs before initial startup.**

### Dimensions

#### Clamping flange $\varnothing 58$



#### Synchronous flange $\varnothing 58$



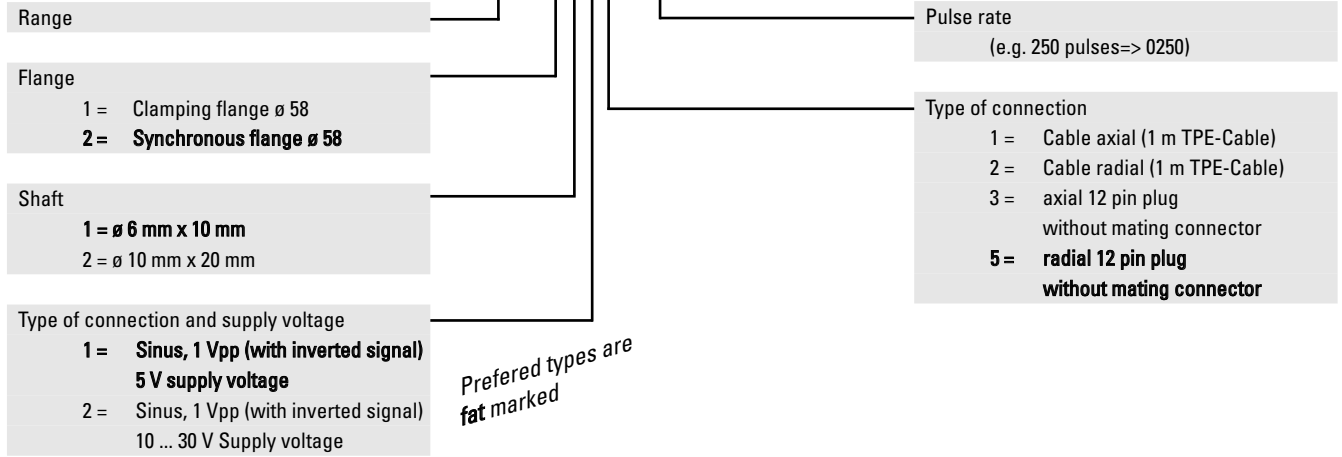
#### Mounting advice:

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

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Order code:

8.5804.XXXX.XXXX



### Accessories

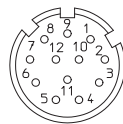
Corresponding mating connector to Type of connection 3 or 5, 12 pin: Art.-No.. 8.0000.5012.0000 pin assignment cw

Corresponding mating connector with cable pre-assembled: Art.- No. 8.0000.6101.XXXX (XXXX = length [m])

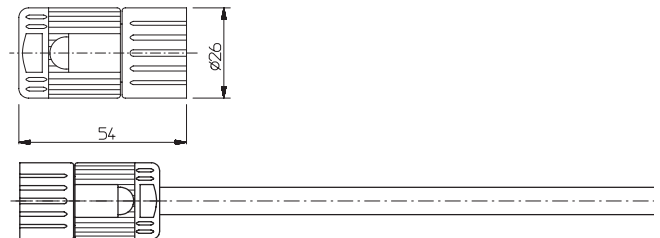
Set includes

Connector typ 8.0000.5012.0000 and cable typ 8.0000.6100.XXXX (Cable PUR 10 x 0,14 mm<sup>2</sup> + 2 x 0,5 mm<sup>2</sup>)

PIN allocation:

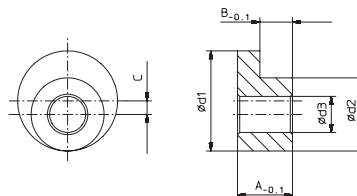


Dimensions:



### Fastening eccentrics for shaft encoders with synchronous flange

Use at least three fastening eccentrics to mount the encoder.



Dimensions table

d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	A	B	C	for encoder type	Ord.-No.
8,9	6,5	3,2	5,6	2,9	1,2	8.58XX.2XXX.XXXX	8.0010.4100.0000

Scope of delivery: Set with 3 screws and 3 eccentrics

Example

