

Rotary Measuring Technology

Incremental shaft encoder



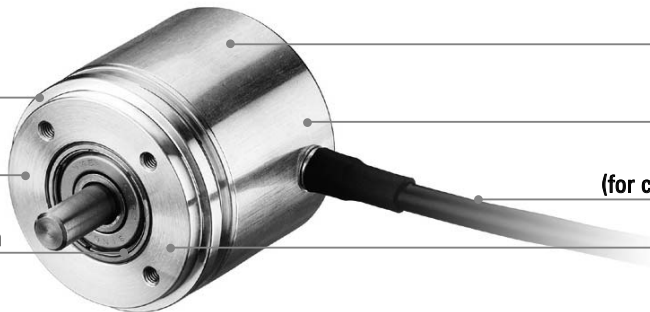
Shaft version, Type 3610

- High performance - economic and compact
- Housing is resistant against environmental influences due to chromium plated surface.
- Universal use in machine building, automotive industry, handling technology and Lift industry.

Wide temperature range
(-30 ... +90 °C)

Low power consumption despite
high scanning rate

Alterungs- und Temperature compensation



IP 65

Robust cable outlet

High flexible cable
(for cable chains at 0 °C ... 70 °C)

Short circuit proof

Mechanical characteristics:

Speed:	max. 12000 min ⁻¹
Rotors moment of inertia:	ca. 0,2 x 10 ⁻⁶ kgm ²
Starting torque:	< 0,05 Nm
Radial load capacity of the shaft:	40 N
Axial load capacity of the shaft:	20 N
Weight:	ca. 0,08 kg
Protection acc. to EN 60 529:	IP 65, housing side
Working temperature:	-30° C ... +85 °C
Operating temperature:	-30 °C ... +90 °C
Materials:	Shaft: stainless steel; Housing: Alu Cable: PVC
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 , 55 ... 2000 Hz

Pulse rates available at short notice:

25, 200, 500, 1000, 1024, 1500,
2000, 2048, 3600

Other pulse rates available on request

Electrical characteristics:

Output circuit:	Push-pull	Push-pull
Supply voltage:	5 ... 18 V DC	8 ... 30 V DC
Power consumption (no load) with inverted signal:	< 40 mA	< 40 mA
Permissible load/channel:	max. ±50 mA	max. ±50 mA
Pulse frequency:	max. 200 kHz	max. 200 kHz
Signal level high:	min. U_B - 2,5 V	min. U_B - 3 V
Signal level low:	max. 0,5 V	max. 2,5 V
Rise time t _r	max. 1 µs	max. 1 µs
Fall time t _f	max. 1 µs	max. 1 µs
Short circuit proof outputs ¹⁾ :	yes ¹⁾	yes ¹⁾
Reverse connection protection at U _B :	yes	yes
Conforms to CE requirements acc. to EN 50082-2, EN 50081-2 and EN 55011 Class B		

¹⁾When supply voltage correctly applied

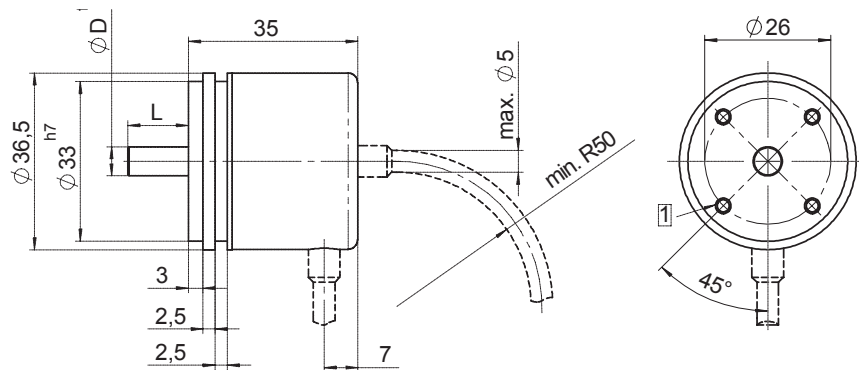
Shaft version, Typ 3610

Terminal assignment:

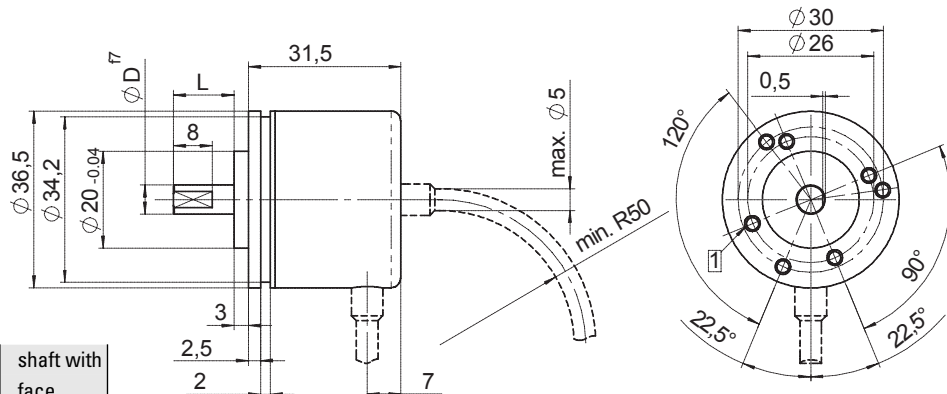
Signal:	0 V	+U _B	A	\bar{A}	B	\bar{B}	0	$\bar{0}$	Shield
Colour	WH	BN	GN	YE	GY	PK	BU	RD	

Insulate unused outputs before initial startup.

Dimension: Synchronous flange



Clamping flange

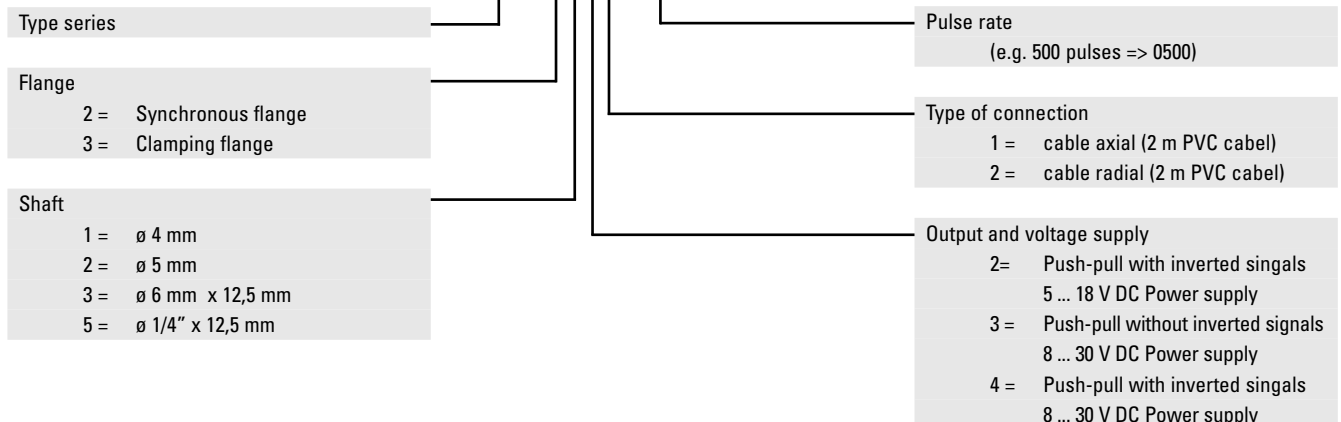


Order code	D	L	shaft with face
1	$\phi 4$	10	no
2	$\phi 5$	10	no
3	$\phi 6$	12,5	yes
5	$\phi 1/4''$	12,5	yes

1 M3, 5 deep

Order code

8.3610.XXXX.XXXX



Rotary Measuring Technology

Incremental hollow shaft encoder



Hollow shaft version, Type 3620

- High performance - economic and compact
- Hollow shaft for rapid and cost effective installation: direct mounting on the drive shaft without couplings - saves up to 30% installation costs and up to 60% installation time and room.
- Universal use in machine building, automotive industry, handling technology and Lift industry as well as for drives.

Wide temperature range
(-30 ... +90 °C)

IP 65

Temperature compensation

Hollow shaft up to 8 mm

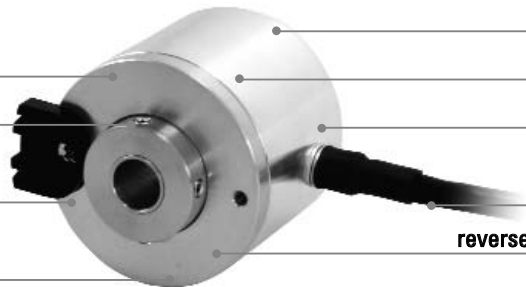
Robust cable outlet

Low power consumption despite
high scanning rate

High flexible cable
(for cable chains at 0 °C ... 70 °C)

Broad input voltage range
(5 ... 18 V or 8 ... 30 V)

reverse connection protected and short circuit proof



Mechanical characteristics:

Speed:*	max. 12000 min ⁻¹
Rotor moment of inertia:	ca. 0,2 x 10 ⁻⁶ kgm ²
Starting torque:	< 0,05Nm
Weight:	ca. 0,08 kg
Protection acc. to EN 60 529:	IP 65 housing side
Operating temperature:	-40° C ... +85 °C
Working temperature:	-30 °C bis +90 °C
Material	Shaft: brass; Housing: MS Cable: PVC
Shock resistance acc. to DIN-IEC 68-2-27:	1000 m/s ² , 6 ms
Vibration resistance acc. to IEC 68-2-6:	500 m/s ² , 10...2000 Hz

Pulse rates available at short notice:

25, 200, 500, 1000, 1024, 1500,
2000, 2048, 3600

Other pulse rates on request

Electrical characteristics:

	Push-pull	Push-pull
Output circuit:	Push-pull	Push-pull
Supply voltage:	5 ... 18 V DC	8 ... 30 V DC
Power consumption (no load) with inverted signal:	< 40 mA	< 40 mA
Permissible load/channel:	max. ±50 mA	max. ±50 mA
Pulse frequency:	max. 200 kHz	max. 200 kHz
Signal level high:	min. U_B - 2,5 V	min. U_B - 3 V
Signal level low:	max. 0,5 V	max. 2,5 V
Rise time t _r	max. 1 µs	max. 1 µs
Fall time t _f	max. 1 µs	max. 1 µs
Short circuit proof outputs ¹⁾ :	yes ¹⁾	yes ¹⁾
Reverse connection protection at U _B :	yes	yes
Conforms to CE requirements acc. to EN 50082-2, EN 50081-2 and EN 55011 Class B		

¹⁾When supply voltage correctly applied

Rotary Measuring Technology

Incremental hollow shaft encoder

Hollow shaft version, Typ 3620

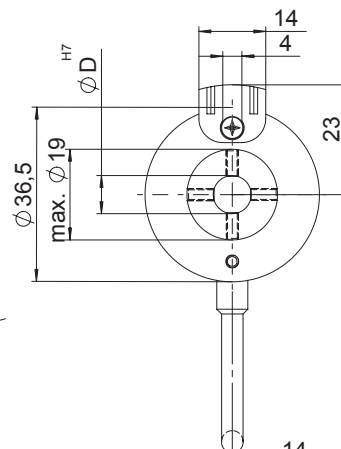
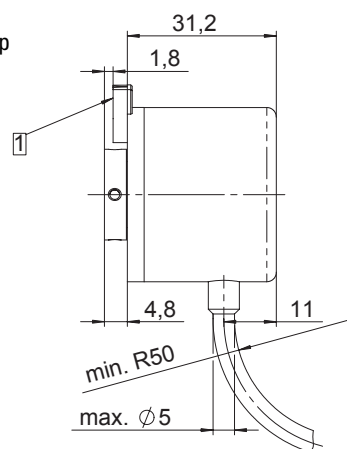
Terminal assignment:

Signal:	0 V	+U _B	A	\bar{A}	B	\bar{B}	0	$\bar{0}$	Shield
Colour:	WH	BN	GN	YE	GY	PK	BU	RD	

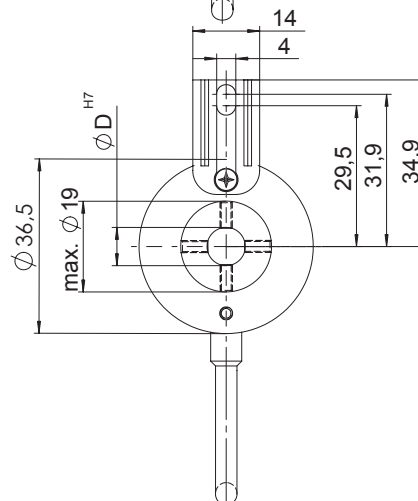
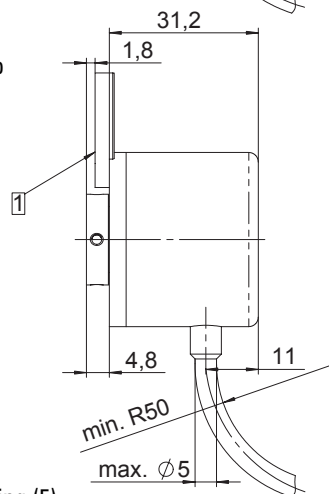
Insulate unused outputs before initial startup.

Dimensions

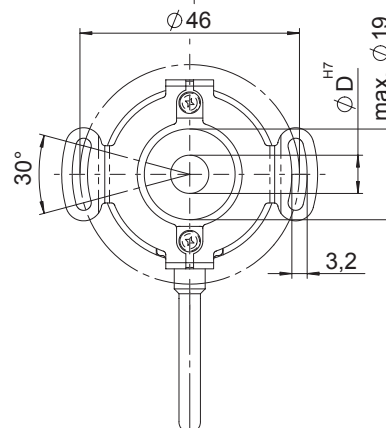
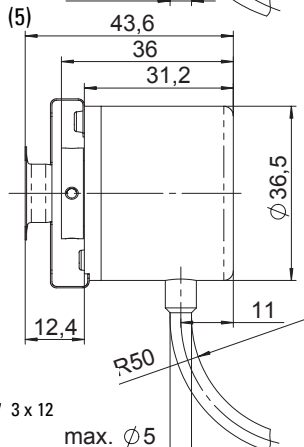
Flange with torque stop short (1)



Flange with torque stop long (2)



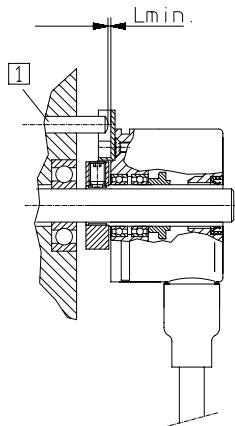
Flange with stator coupling (5)



1 Slot for torque stop, recommendation: Pin DIN 7 3 x 12

Hollow shaft version, Typ 3620

Mounting advice



1 Pin to DIN 7 3 x 12

Mounting advice:

- 1) Do not connect encoder and drive rigidly to one another at shafts and flanges!
- 2) To mount a hollow shaft encoder, we recommend to use a torque stop pin that fits into the torque stop slot or a stator coupling.
- 3) When mounting the encoder ensure that L_{min} is larger than the axial play of the drive.

Order code

8.3620.XXXX.XXXX

Type series

Flange

- 1 = Hollow shaft with short torque stop
- 2 = Hollow shaft with long torque stop
- 5 = Hollow shaft with stator coupling

Hollow shaft

- 2 = \varnothing 6 mm
- 3 = \varnothing 6,35 mm
- 4 = \varnothing 8 mm

Pulse rate

(z.B. 500 pulses => 0500)

Type of connection

E = Cabel radial (2 m PVC cabel)

Output circuit and voltage display

- 2 = Push-pull with inverted signal
Power supply 5 ... 18 V DC
- 3 = Push-pull without inverted signals
8 ... 30 V DC Power supply
- 4 = Push-pull with inverted signal
Power supply 8 ... 30 V DC