

Absolute encoders – multiturn

Large hollow shaft	AX	Hollow shaft ø 16 mm ... 45 mm
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The absolute encoder AX can be mounted on shafts from ø 16 mm up to max. ø 45 mm. It can be combined with the proven Kübler Sendix encoders with absolute interface.



Robust

- Decoupling of hollow shaft and encoder.
- Solid housing.
- Prove torque stop.

Flexible

- Can be combined with all ø 58 mm solid shaft encoders.
- Various variants for clamping ring attachment.
- Three different torque stop lengths.

Order code

8 . A X X X . X X X X . X X X X

a Clamping ring

- 1 = on the encoder side
- 2 = on the torque stop side

b Torque stop

- 2 = with fastening arm 70 mm [2.76"]
- 4 = with fastening arm 100 mm [3.93"]
- 6 = with fastening arm 150 mm [5.91"]

c Through hollow shaft

- 9 = ø 5/8"
- 1 = ø 16 mm [0.63"]
- 2 = ø 20 mm [0.79"]
- 4 = ø 24 mm [0.94"]
- 5 = ø 25 mm [0.98"]
- 6 = ø 1"
- 7 = ø 28 mm [1.10"]
- 8 = ø 30 mm [1.18"]
- A = ø 38 mm [1.50"]
- D = ø 42 mm [1.65"]
- C = ø 45 mm [1.77"]

d Encoder used

- M1 = Sendix M5861
- F3 = Sendix F5863
- F8 = Sendix F5868
- 68 = Sendix 5868

e Output circuit

depends on the encoder used *)

i Type of connection

depends on the encoder used *)

g Others

depends on the encoder used *)

*) Standard variants see below.
Further variants see encoder data sheets.

Recommended standard variants (with absolute encoder)

Order no.	Mounted encoder	Interface	Power supply	Type of connection	Resolution / Protocol	Option
8.Axxx.M134.3412	Sendix M5861 (8.M5861.3534.3412)	Analog, 4 ... 20 mA	10 ... 30 V DC	1 x radial M12 connector	12 bit / 4 ... 20 mA	scalable without limit switch function
8.Axxx.M144.4412	Sendix M5861 (8.M5861.3544.4412)	Analog, 0 ... 10 V	15 ... 30 V DC	1 x radial M12 connector	12 bit / 0 ... 10 V	scalable without limit switch function
8.Axxx.F324.G323	Sendix F5863 (8.F5863.1224.G323)	SSI	10 ... 30 V DC	1 x radial M12 connector	13 bit ST + 12 bit MT/SSI-Gray-Code	SET button + status LED
8.Axxx.F8AN.A222	Sendix F5868 (8.F5868.12AN.A222)	Ethernet/IP	10 ... 30 V DC	3 x axial M12 connector	Ethernet/IP	-
8.Axxx.F82F.2123	Sendix F5868 (8.F5868.122F.2123)	CANopen	10 ... 30 V DC	2 x radial M12 connector	CANopen encoder profile DS406 V3.2	SET button
8.Axxx.F86E.6112	Sendix F5868 (8.F5868.126E.6112)	Modbus	10 ... 30 V DC	1 x radial M12 connector	Modbus RTU application protocol V1.1b3	-
8.Axxx.6832.3113	Sendix 5868 (8.5868.1232.3113)	Profibus	10 ... 30 V DC	3 x radial M12 connector	PROFIBUS DP V0 encoder profile Class 2	SET button
8.Axxx.68B2.B212	Sendix 5868 (8.5868.12B2.B212)	EtherCAT	10 ... 30 V DC	3 x radial M12 connector	EtherCAT mit CoE 3.2.10	-
8.Axxx.68C2.C212	Sendix 5868 (8.5868.12C2.C212)	PROFINET IO	10 ... 30 V DC	3 x radial M12 connector	PROFINET encoder profile version 4.1	-

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Technical data

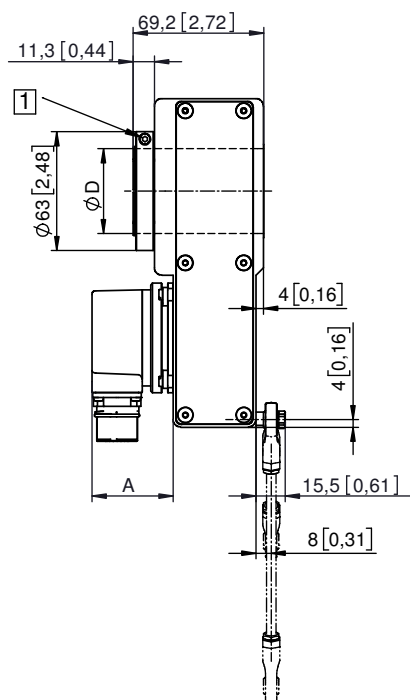
Mechanical characteristics			Electrical characteristics / Terminal assignment	
Maximum speed (continuous operation)	25°C [77°F]	2500 min ⁻¹	The electrical characteristics and the connection can be found in the data sheets of the relevant encoder.	
	40°C [104°F]	1750 min ⁻¹		
	55°C [131°F]	1000 min ⁻¹		
	70°C [158°F]	250 min ⁻¹		
Maximum speed (short-term operation) ¹⁾	25°C [77°F]	4500 min ⁻¹		
	40°C [104°F]	3250 min ⁻¹		
	55°C [131°F]	2000 min ⁻¹		
	70°C [158°F]	750 min ⁻¹		
Starting torque at 23°C [73.4°F]		max. 15 Nm		
Weight		approx. 3.5 kg [105.8 oz]		
Protection acc. to EN 60529/DIN 40050-9		IP64		
Material	housing	Aluminum		
	shaft	stainless steel		

Dimensions

Dimensions in mm [inch]

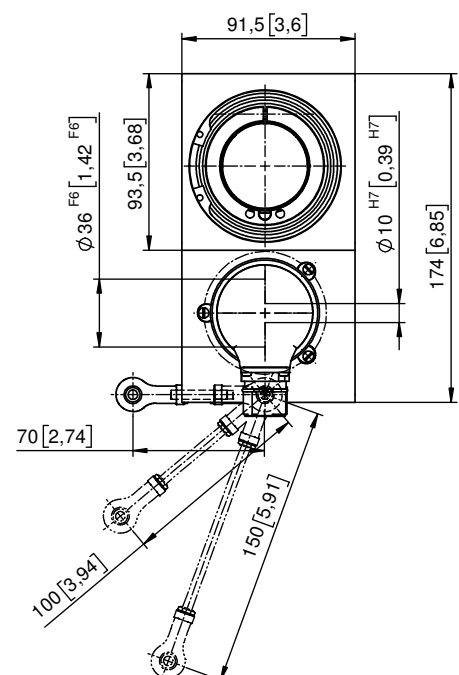
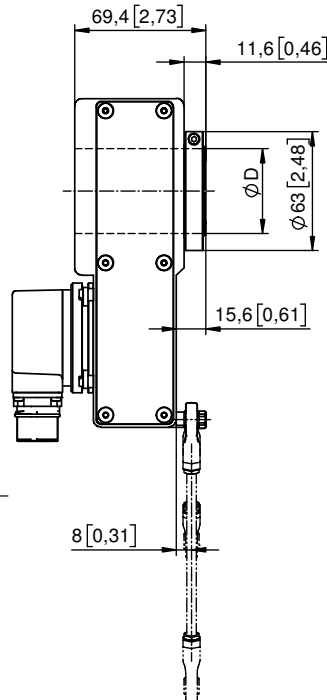
Version 8.A1

Clamping ring on the encoder side



Version 8.A2

Clamping ring on the torque stop side
(fastening arm)



- 1) Recommended torque for
clamping ring with M3 (1,0 Nm) with hollow shaft ≥ ø 38 mm
clamping ring with M4 (2,0 Nm) with hollow shaft ≤ ø 30 mm

A Dimension A depends on the encoder used

D	Fit
5/8"	H7
16 [0.63]	H7
20 [0.79]	H7
24 [0.94]	H7
25 [0.98]	H7
1"	H7
28 [1.10]	H7
30 [1.18]	H7
38 [1.50]	H7
42 [1.65]	H7
45 [1.77]	H7

1) 50% duty cycle, switch-on time max. 5 min.