

TECHNICAL DATASHEET (preliminary)

EX Heavy Duty Absolute AX65 - CANopen



- Extreme Robust Explosionproof absolute MT Encoder
- ATEX certification for Mining, Gas and Dust
- 300 N axial and radial load
- Extreme shock and vibration resistant: 200 g shock; 20 g vibration
- Most compact design of its class: 70 mm mounting depth; 59 mm diameter
- Screw terminal with radial or axial cable output
- Easy and fast field installation: access to DIP switches
- Protection class up IP66 / IP67
- Extreme corrosion resistance: high grade stainless steel housing (1.4404)
- Applications: Winch, enamelling production line, petro chemistry, bottling machines, mixers, silo works, mills, cranes, drilling equipment

ACURO®-XRobust



ATEX

CANopen

The robust absolute shaft encoder line ACURO-XR is available in explosion proof design with explosion proof enclosure "Ex d" under AX 65. It has been assured with the Declaration of Conformity that the AX 65 meets the requirements of safety and health according to EN 60079-0:2009, EN 60079-1:2009 and EN 60079-31:2009.

Therefore it is approved in explosive areas,

Code

Gas: Ex II 2G Ex db II C T4

Dust: Ex II 2D Ex tb IIIC IP6X T135°C IP6X

Mining: Ex I M2 Ex db I

The AX 65 comes with a stainless steel housing. So its suitable for offshore applications, applications under tough environmental conditions and food industry.

EX-CLASSIFICATION

TECHNICAL DATA mechanical

Housing diameter	59 mm
Shaft diameter	10 mm (Solid shaft)
Flange (Mounting of housing)	Synchro clamping flange
Protection class shaft input (EN 60529)	IP66/ IP67
Protection class housing (EN 60529)	IP66/ IP67
Shaft load axial / radial	max.: 300 N / 300 N
Max. speed	max. 1000 rpm
Starting torque typ.	≤ 5 Ncm
Moment of inertia	approx. 25 gcm ²
Vibration resistance (DIN EN 60068-2-6)	200 m/s ²
Shock resistance (DIN EN 60068-2-27)	2000 m/s ² (6 ms)

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TECHNICAL DATA mechanical (continued)

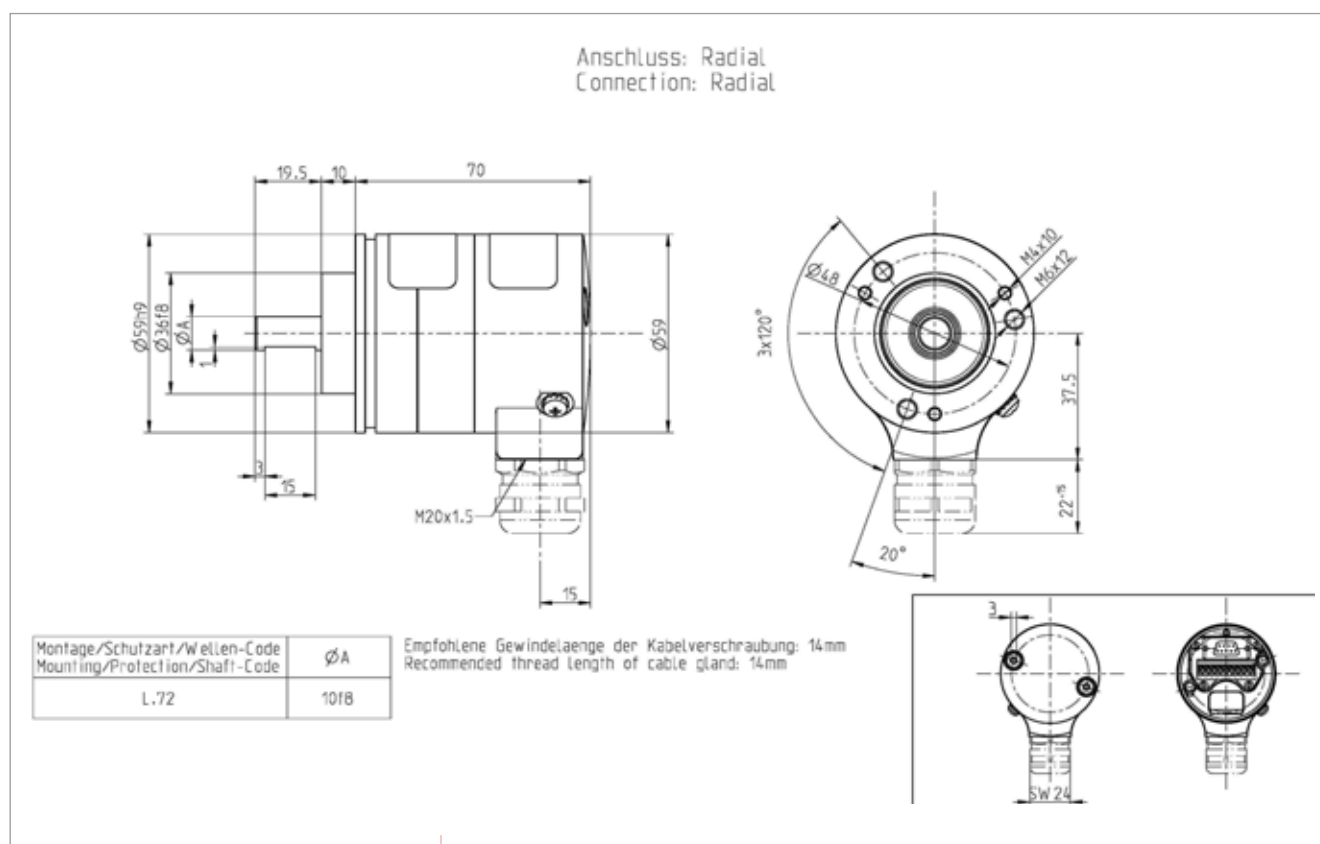
Ambient temperature	Gas: -40 °C ... +60 °C Dust: -20 °C ... +60 °C
Storage temperature	-25 °C ... +85 °C
Material shaft	Stainless Steel
Material housing	Stainless Steel
Weight	approx. 1.5 kg
Connection ¹	Cover with 1 x M20x1,5 screw thread, axial or radial Cover with 2 x M20x1,5 screw thread, radial

¹ without cable gland

TECHNICAL DATA electrical

Supply voltage	DC 10-30 V
Current w/o load typ.	100 mA
Resolution singleturn	12 Bit
Resolution multiturn	12 Bit, 16 Bit
Absolute accuracy	±1°
Repeatability	±0,2°
Parametrization	Resolution, Acceleration, Limit values, Operating time
Baud rate	set via DIP switches within 10 through 1000 Kbit/s
Updating of values	every millisecond (adjustable), on request
Basic identifier	set via DIP switches

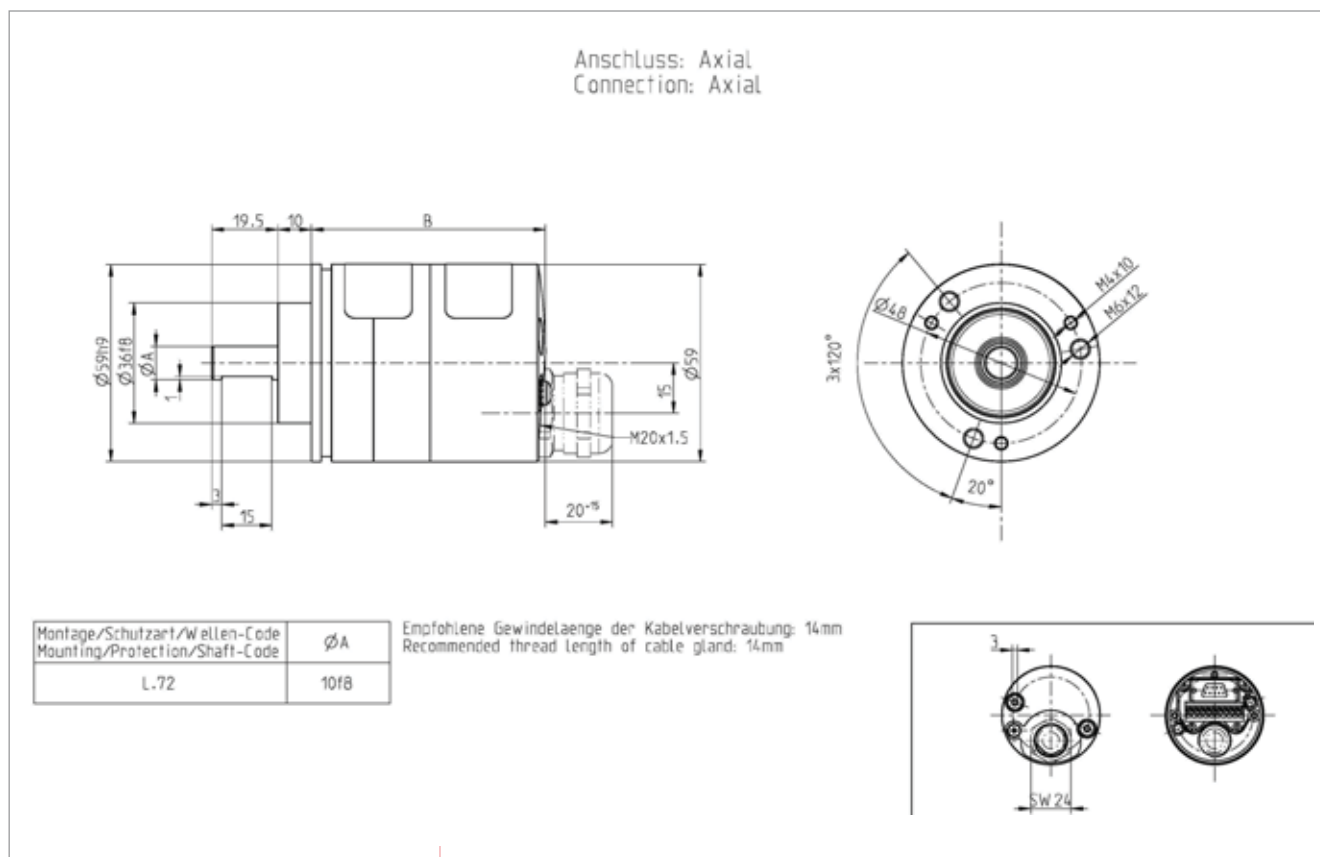
DIMENSIONED DRAWINGS



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DIMENSIONED DRAWINGS (continued)



ORDERING INFORMATION

Type	Resolution	Supply voltage	Flange, Protection, Shaft	Interface	Connection ¹
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AX65	0012 12 Bit ST 1212 12 Bit MT + 12 Bit ST 1612 16 Bit MT + 12 Bit ST	E DC 10 - 30 V	L.72 Synchro clamping, IP66/ 67, 10 mm	OL CANopen	0 1 x M20x1,5 screw thread, axial 1 1 x M20x1,5 screw thread, radial 2 2 x M20x1,5 screw thread, radial

¹ without cable gland