



## ACURO<sup>®</sup>-XR

Resistant to harsh environments. Highly durable.

**HENGSTLER**



- Single-turn 12bit resolution
- Shock resistance 200 g
- Vibration resistance 20 g
- Immersible, suitable for high-pressure wash down applications
- Protection class IP69k
- Operating temperature: -40...+100°C
- Compact design with an installed depth of 32 mm
- Optional stainless-steel enclosure

## **ACURO®-XR Robust**

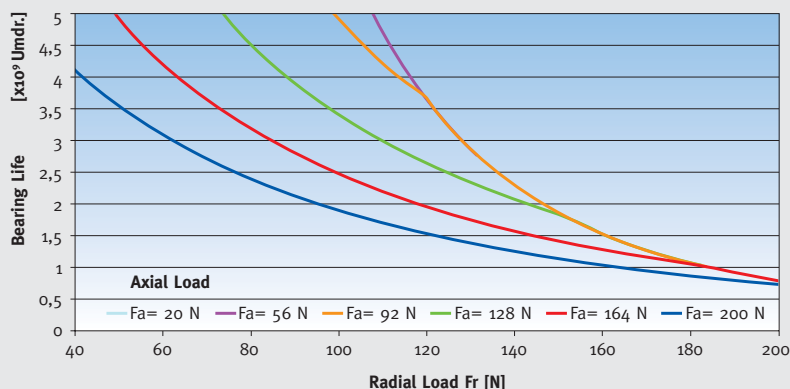
### **ABSOLUTELY DURABLE**

Ball bearings and how they are installed are factors that significantly affect the useful life of an encoder. ACURO-XR has been designed for operation at maximum load and achieves three times the useful life at three times the radial and axial shaft loads compared to conventional designs.

Rough seas and an extremely harsh operating environment: this is what encoders are faced with when used in an automatic docking terminal for oil rig supply vessels. The basic requirements in the Food & Beverage and Packaging industries are for a high resistance to fast changes in temperature, combined with resistance to high-pressure vapor and compliance with the relevant hygienic guidelines. Our stainless-steel version is the best choice for both applications.

The special features of the new ACURO-XR series not only comprise its particularly rugged enclosure, but also generously dimensioned,

ACURO-XR Bearing - Life



# The absolutely robust encoder

## ABSOLUTELY RELIABLE

If encoders are used in applications under extreme environmental conditions, their true quality will become obvious very soon: high mechanical loads, distinct temperature fluctuations, contaminations and corrosive atmospheres or liquids affect conventional rotary sensors and increasingly lead to failures.

The newly designed ACURO-XR makes a difference. It easily withstands highest accelerations, extreme climatic fluctuations and even underwater operation. In this way, our rugged absolute encoder is ideally suitable for applications in wind mills, marine or utility vehicle applications, as well as for use in presses or wood and stone processing machinery: applications where high resistance to harsh environments and maximum reliability are required at the same time.

## Fields of application that clearly unfold the benefits of ACURO XR:

- Construction machinery
- Utility vehicles / trucks
- Gantry cranes
- Marine equipment
- Offshore plants
- Wind power plants
- Commercial solar plants
- Food & Beverage Industry
- Filling plants
- Presses
- Your individual application

rigid ball-bearings. Capable of withstanding even high axial and radial loads on its shaft axis, this encoder type easily achieves a mechanical life of  $10^9$  rotations at a permanent radial load of 200 N and simultaneously, an axial load of 200 N.

## ABSOLUTELY WATERPROOF

Multi-stage seals keep ACURO-XR dry even when completely immersed in water or treated with a highpressure water blaster. In addition, its internal electronics is immersion-painted and absolutely nonsusceptible to humidity. The shaft inlet is

provided with multiple seals; the magnetic sensor unit is resistant to thawing, which may occur during fast changes in temperature.

## ABSOLUTELY COMPACT AND ELECTRICALLY FLEXIBLE

With an installed depth of only 32 mm, this encoder is the most compact type in its class. It will save you valuable space to the benefit of your overall machinery design. ACURO-XR connects to the control system via the interfaces: CANopen, BiSS, SSI, analog 0...10 V or 4...20 mA.



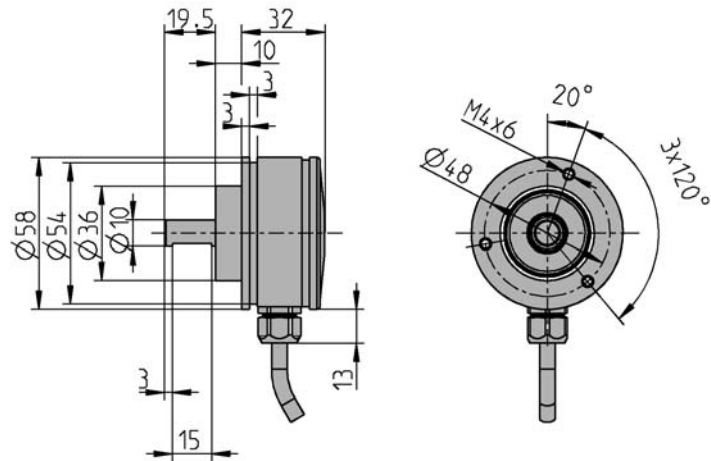
**TECHNISCAL DATA  
ELECTRICAL**

<b>Supply voltage</b>	DC 10...30 V
<b>Max. current w/o load</b>	CANopen 220 mA BiSS / SSI 50 mA Analog 50 mA
<b>Interface</b>	CANopen, BiSS, SSI, 0...10 V, 4...20 mA
<b>Resolution</b>	12 Bit
<b>CANopen specific data:</b>	
<b>Programmable</b>	Resolution, Offset, Direction of code
<b>Other functions</b>	2 pairs of limit values for end positions Output of speed and acceleration
For further variant-specific data, please see detailed data sheets AR62/63	

**TECHNICAL DATA  
MECHANICAL**

<b>Housing diameter</b>	58 mm
<b>Shaft diameter</b>	10 oder 12 mm
<b>Flange</b>	Synchro - Clamping flange
<b>Max. Speed</b>	5.000 1/Min (IP67)
<b>Vibration resistance</b>	20 g
<b>Schock resistance</b>	200 g
<b>Operating temperature</b>	-40 ... +100 °C
<b>Protection class</b>	IP67 oder IP69K
<b>Shaft Material</b>	Stainless steel
<b>Housing Material</b>	Aluminum (AR62), Stainless steel (AR63)

**DIMENSIONAL DRAWING**



Type	Resolution	Supply voltage	Flange, Protection class, Shaft	Interface	Connection
<b>AR62</b> Aluminium	<b>0012</b> 12 Bit	<b>E</b> DC 10-30 V	<b>L.72</b> Synchro Clamping, IP67, 10 mm	<b>SG</b> SSI Gray	<b>B</b> Cable radial
<b>AR63</b> Stainless			<b>L.92</b> Synchro Clamping, IP69K, 10 mm	<b>OL</b> CANopen	
			<b>L.77</b> Synchro Clamping, IP67, 12 mm	<b>BI</b> BiSS	
			<b>L.97</b> Synchro Clamping, IP69K, 12 mm	<b>AV</b> Analog 0...10 V	
				<b>A4</b> Analog 4...20 mA	

# HENGSTLER

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