

# ROTACOD

Heavy-duty Fieldbus encoder

Series

XAC80 • XAC81



- Heavy-duty fieldbus encoder
- Single and multiturn version
- Velocity output, roundloop function
- For harsh environment such as steel mills, mobile equipment, construction machinery
- Stainless steel housing available on request



XAC80 • XAC81

ETHERNET POWERLINK **EtherNet/IP™**

PROFINET® **EtherCAT®**  **Modbus**

PROFIBUS® **CANopen**  **DeviceNet™**

## ENVIRONMENTAL SPECIFICATIONS

Shock:	250 g, 6 ms acc. to CEI EN 60068-2-27
Vibrations:	10 g, 5-2000 Hz acc. to CEI EN 60068-2-6
Protection:	IP66 (with connection cap assembled), IP65 shaft side
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-40°C +100°C (-40°F +212°F) (98% R.H.without condensation)
Option:	• Operating temperature range: -40°C +100°C (-40°F +212°F)

## MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft diameter:	Ø 14 mm
Shaft loading (axial, radial):	150 N max.
Shaft rotational speed:	6000 rpm max.
Bearing life:	400x10 <sup>6</sup> rev. min. (10 <sup>9</sup> rev. min. with shaft loading of 20 N max.)
Electrical connections:	connection cap with terminal block or M12 connectors
Weight:	~1,3 kg (45,8 oz)

## ELECTRICAL SPECIFICATIONS

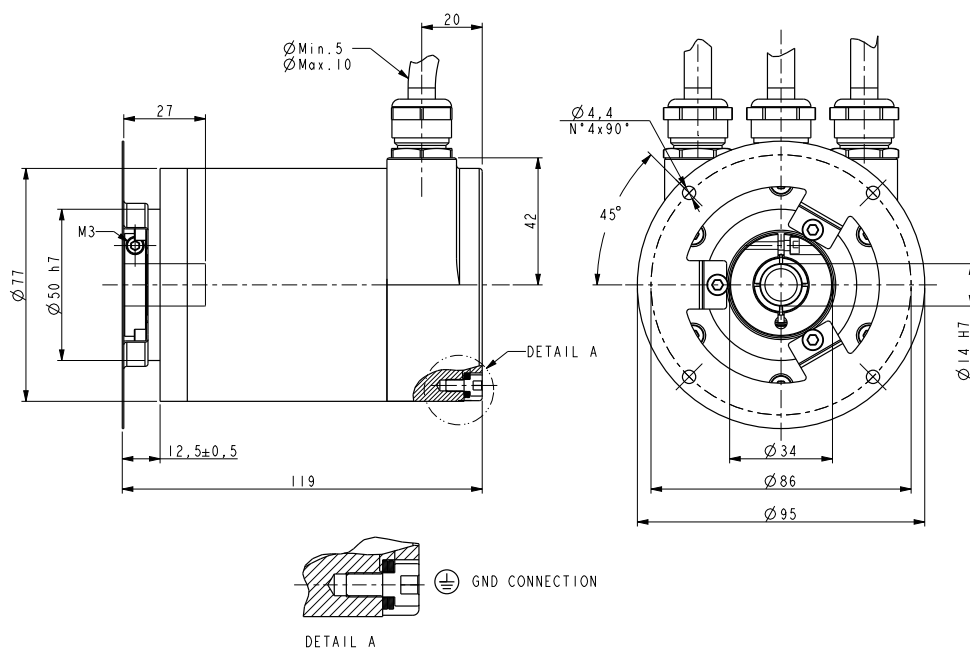
Resolution:	262144 cpr or 65536 cpr x 16384 turns
Accuracy:	13 bit version: ± 0,7° others: ± 0,007°
Counting frequency:	150 kHz max.
Power supply:	+10V +30V
Power consumption:	2,2 W
Programmable parameters:	see user manual for each interface
Baudrate:	programmable by Dip-switches (only Profibus, CANopen, Devicenet)
Device address:	programmable by Dip-switches (only Profibus, CANopen, Devicenet)
Interface:	Profibus-DP V0, CANopen® DS301 DS406, DeviceNet, Profinet, EtherCAT, Modbus/TCP, Powerlink, Ethernet/IP
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4

## MATERIALS

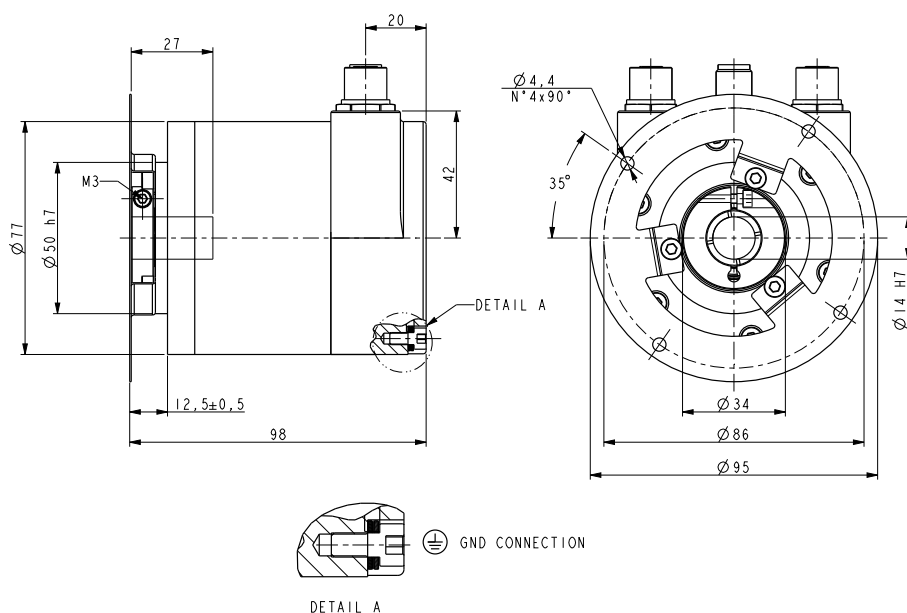
Flange:	anticorodal, UNI EN AW-6082
Housing:	anticorodal, UNI EN AW-6082
Bearings:	ABEC 5
Shaft:	stainless steel, non magnetic, UNI EN 1.4305
Option:	stainless steel housing, AISI 303 (UNI EN 1.4305)

## ACCESSORIES

LKM-1758:	Ø 10 mm shaft extension
-----------	-------------------------



XAC80



XAC81

Order code

XAC80	XX/XXXXX a	XX b	-	XX c	X d	X e	/Sxxx f
-------	---------------	---------	---	---------	--------	--------	------------

<p>Ⓐ RESOLUTION</p> <p>18/1 = 262144 cpr</p> <p>13/16384 = 8192 cpr x 16384 turns</p> <p>16/16384 = 65536 cpr x 16384 turns</p>	<p>Ⓑ INTERFACE</p> <p>PB = Profibus-DP</p> <p>CB = CANopen</p> <p>FD = DeviceNet</p>	<p>Ⓒ SHAFT DIAMETER</p> <p>14 = 14 mm</p>	<p>Ⓓ OPERATING TEMP. RANGE</p> <p>- = -25°C +85°C (-13°F +185°F)</p> <p>K = -40°C +100°C (-40°F +212°F)</p>	<p>Ⓔ HOUSING MATERIAL</p> <p>- = Standard housing</p> <p>X = Stainless steel housing</p>	<p>Ⓕ CUSTOM VERSION</p>
---	--	---	---	--	-------------------------

Order code

XAC81	XX/XXXXX a	XX b	-	XX c	X d	X e	/Sxxx f
-------	---------------	---------	---	---------	--------	--------	------------

<p>Ⓐ RESOLUTION</p> <p>18/1 = 262144 cpr</p> <p>13/16384 = 8192 cpr x 16384 turns</p> <p>16/16384 = 65536 cpr x 16384 turns</p>	<p>Ⓑ INTERFACE</p> <p>PT = Profinet</p> <p>EC = EtherCAT</p> <p>MT = Modbus/TCP</p> <p>PL = Powerlink</p> <p>EP = Ethernet/IP</p>	<p>Ⓒ SHAFT DIAMETER</p> <p>14 = 14 mm</p>	<p>Ⓓ OPERATING TEMP. RANGE</p> <p>- = -25°C +85°C (-13°F +185°F)</p> <p>K = -40°C +100°C (-40°F +212°F)</p>	<p>Ⓔ HOUSING MATERIAL</p> <p>- = Standard housing</p> <p>X = Stainless steel housing</p>	<p>Ⓕ CUSTOM VERSION</p>
---	---	---	---	--	-------------------------