

PROXIS® A0 25
SUBSEA PROXIMITY
SENSOR
PRODUCT SHEETS

Proxis® A0 25: Subsea proximity sensor designed to withstand harsh operating conditions



SELECTION & OPTION LIST

For every Proxis® A0 25 the following configuration items must be determined:

- **Data output format.** The Proxis® A0 25 can be delivered with either current 4 – 20 mA or 0 – 10 V voltage output.

The sensor is standard delivered with a stainless steel 316L welding plate (please refer to the dimensions section for more information).

Furthermore, the following features are optional:

A Connector type

The sensor is standard supplied with a Subconn® Circular Male connector. Other connector types are available upon request.

B Cable assembly

The sensor can be supplied with custom-made cabling in a variety of lengths, allowable loads, and connector types.



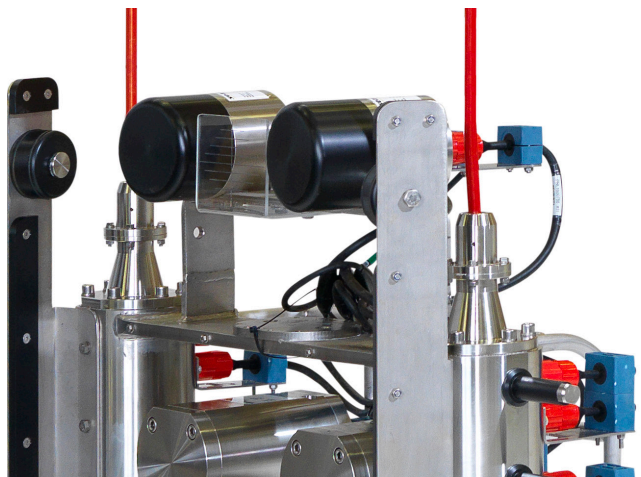
Subconn® Circular connector

TYPICAL APPLICATIONS

The Proxis® A0 25 is specifically designed for accurate metal object distance measurement in subsea environments. Typical applications include:

- Moonpool hatch position detection
- Subsea actuator end-position detection
- Survey frame position detection
- Lock gates position detection
- Monitoring and control systems

Proxis® A0 sensor installed on subsea monitoring system



PROXIS® A025 SUBSEA PROXIMITY SENSOR SPECIFICATIONS

GENERAL

	METRIC	IMPERIAL
Main dimensions	See detailed drawings	
Material housing	Stainless steel AISI 316L, PA6G	
Weight in air	1.5 kg	3.8 lbs
Maximum working depth	300 msw	984 ft
Operational temperature range	-20°C - +50 °C	-4 °F - +122 °F
Type of sensor	Inductive	
Sensing range ¹ (to steel FE360)	≥ 35 mm	≥ 1.38 inch
Flush / non-flush mounting	Non-flush	

¹ For sensing ranges other than steel FE360 material reduction factors below apply.

ELECTRICAL

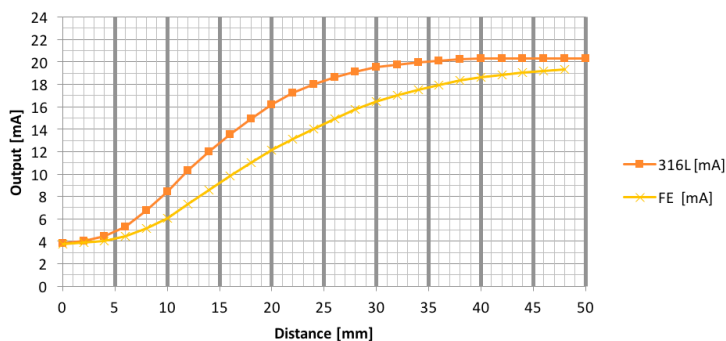
Supply voltage (Vs)	15 – 30 VDC
No-load supply current	≤ 12 mA
Maximum load resistance	400 Ω at 15V, 1000 Ω at 30V
Repeatability	0.6 mm at operational temperature: 23°C ± 5°C, Vs: 20 – 30 VDC
Resolution	≤ 10 μm
Output signal	4 – 20 mA (0 – 10 V output available upon request)
Output current at range 0 mm (FE360)	4 mA ± 0.8 mA
Output current at range 40 mm (FE360)	20 mA ± 0.8 mA

MATERIAL REDUCTION FACTORS

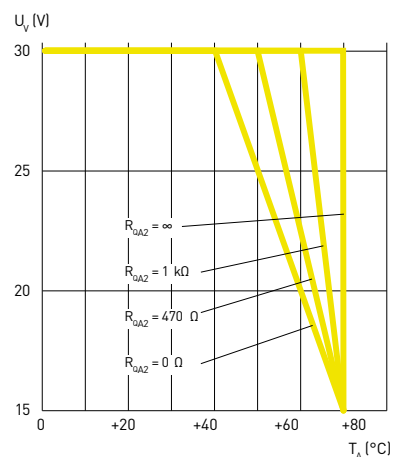
Steel (FE360)	1
Stainless steel (V2A)	Approx. 0.80
Aluminum (Al)	Approx. 0.40
Copper (Cn)	Approx. 0.40
Brass (Ms)	Approx. 0.50

² The provided curves are reference curves, which may vary per situation.

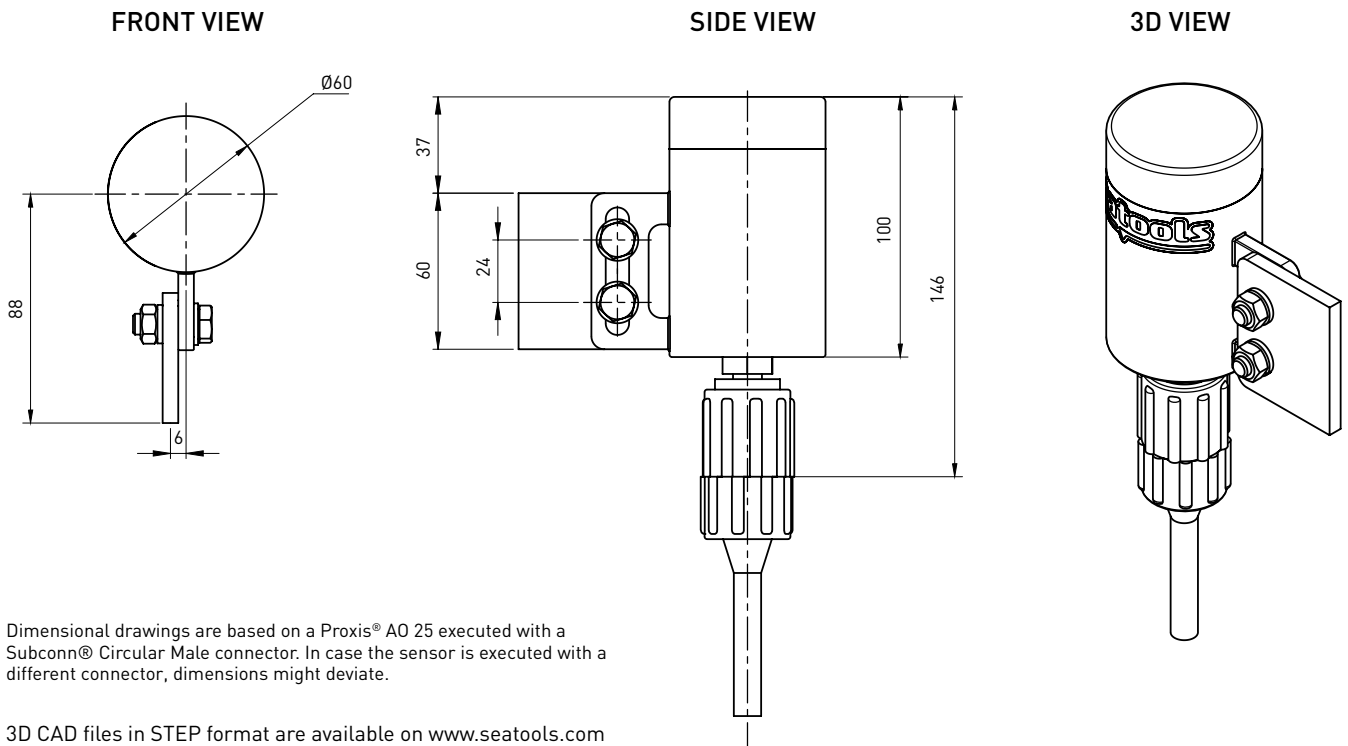
RESPONSE CURVE² (MEASURED VALUES)



TEMPERATURE DERATING²



DIMENSIONS



Dimensional drawings are based on a Proxis® AO 25 executed with a Subconn® Circular Male connector. In case the sensor is executed with a different connector, dimensions might deviate.

3D CAD files in STEP format are available on www.seatools.com

RELATED SERVICES

Client advisory

During the selection process, we consult clients to ensure they opt for the right proximity sensor. In our recommendation we take into consideration measurement range, required accuracy, system setup, data communication, mounting possibilities, vibrations, and other factors that are relevant to your case.

Custom-made versions

Next to our standardized series, Seatools offers custom-made subsea proximity sensors that are tailored to your specifications. Please contact our sales department to request a customized proximity sensor.

Subsea monitoring & control systems

Next to the delivery of stand-alone sensors, we can deliver full-fledged subsea monitoring systems, including all related systems such as mechanics, software, electronics, and controls.

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UNDERWATER SPECIALISTS

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