

ULTRALONG LIFETIME SERIES **COMPENSATOR 50 L** PRODUCT SHEETS

Designed for long-life operation, proven in industrial subsea applications worldwide.



OPTION LIST

A Mounting brackets

The compensator is available with a choice of two standardized mounting bracket solutions: clamp mounting brackets or straight mounting brackets.

B Pressure relief valve

The compensator can be equipped with a safety valve for protection against internal pressure peaks.

C Precise oil level measurement

Precise level measurement for highly accurate oil level measurement.

D Empty detection

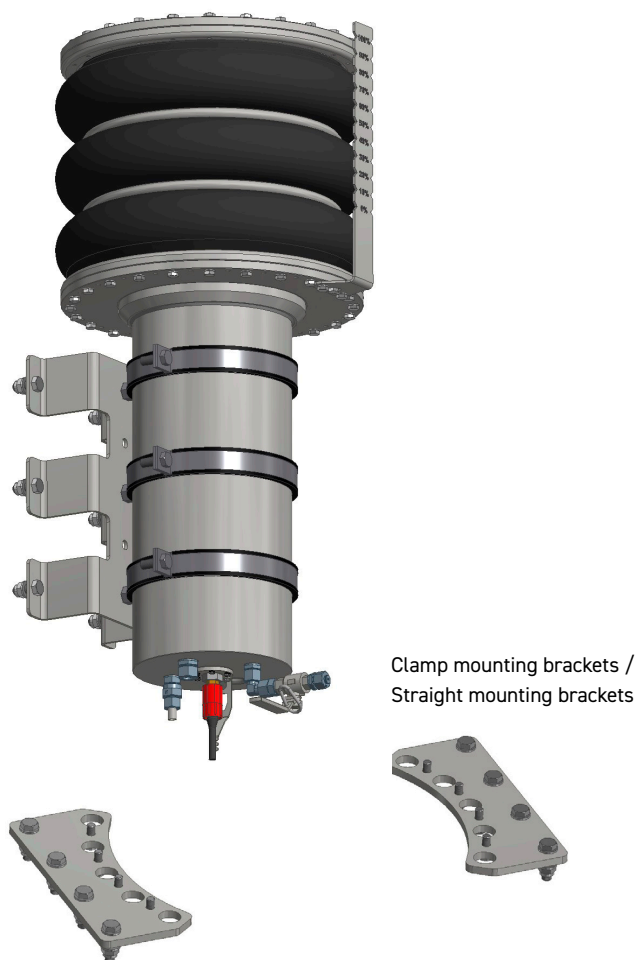
Signals that the compensator is (close to) empty. Cost effective alternative for the precise oil level measurement option.

E Level indicator

As an alternative or addition to the precise oil level measurement and the empty detection, the compensator can be delivered with a level indicator.

F Strain relief

Protects the connectors of the level measurement / empty detection sensors from mechanical strain on the cable.



TYPICAL APPLICATIONS

This compensator is specifically designed for pressure compensation of high-performance subsea and submerged equipment, including:

- Subsea mining vehicles
- Subsea HPUs
- Underwater instrumentation
- Suction tube pump motors



COMPENSATOR 50 LITRES SPECIFICATIONS

GENERAL

	METRIC	IMPERIAL
Compensation volume ¹	50 liters	13.21 US gallons
Main dimensions ²	See detailed drawings	
Stroke	300 mm	11.8 inch
Weight in air excl. oil (approx.)	160 kg	353 lbs
Housing material	Stainless steel 316	
Design lifetime	20 years	
CE compliant	Yes	

¹ The ultralong lifetime compensator range is also available in 0.7, 5, 10, 100, 250, and 350 liters versions.

² Please note these dimensions deviate in case an end-switch or level measurement is mounted.

OPERATIONAL

	METRIC	IMPERIAL
Maximum operating depth	5000 m	16404 feet
Operating temperature range (water)	-10°C – +50°C	14°F – 122°F
Operating temperature range of medium	-20°C – +80°C	4°F – 176°F
Storage temperature range (air)	-25°C – +60 °C	-13°F – 140°F
Pre pressure (min. stroke)	0.25 bar (± 0.05 bar)	3.62 psi (± 0.72 psi)
Pre pressure (max. stroke)	0.75 bar (± 0.10 bar)	10.88 psi (± 1.45 psi)
Maximum safety valve setting	2 bar	29 psi
Polymers in contact with hydraulic fluid ³	Viton, NBR, POM	

³ Please consult our sales engineers in case the applied fluid demands for the usage of other polymers.

HYDRAULIC

Hydraulic connections fill, drain, hydraulic system ⁴ , safety valve	2 x (internal) G ½" + 1 x (internal) G ¾" + 1 x (internal) G 1"
Hydraulic connections for air bleed	2 x (internal) G ¼"

⁴ On request, the hydraulic system connections can also be supplied with SEA connections.

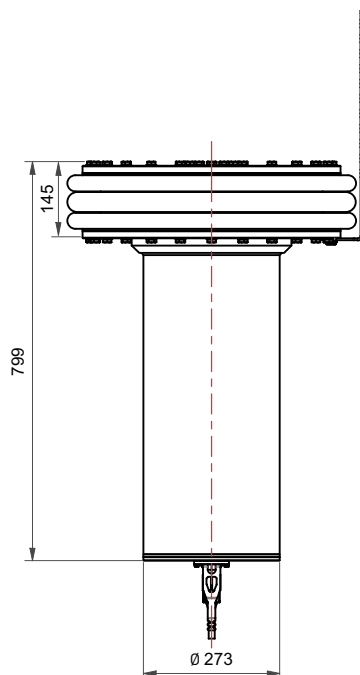
ELECTRICAL – OIL LEVEL SENSORS

Industrial grade level sensor (option C)	Operating voltage	+11 Volt DC ...	+ 28 Volt DC
	Output signal ⁵ :	3 wires mode, analog 4 – 20 mA	3 pin Subconn connector or more

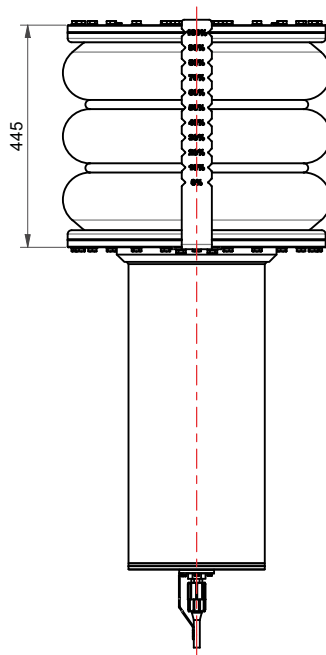
⁵ Please contact our sales engineers if you require alternative output signals such as CANbus, SSI, Profibus, or others.

DIMENSIONS

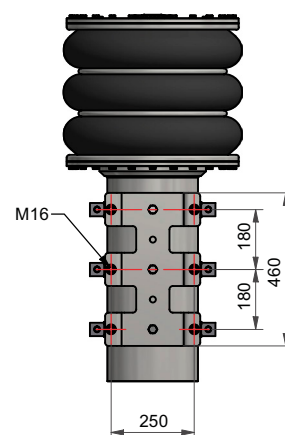
FRONT VIEW (EMPTY)



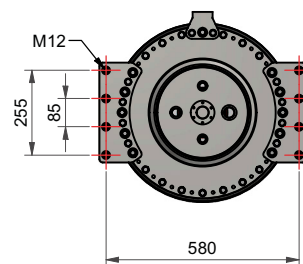
FRONT VIEW (FULL)



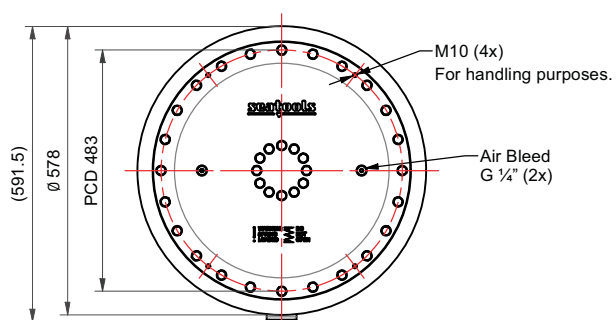
CLAMP MOUNTING
BRACKETS INTERFACE



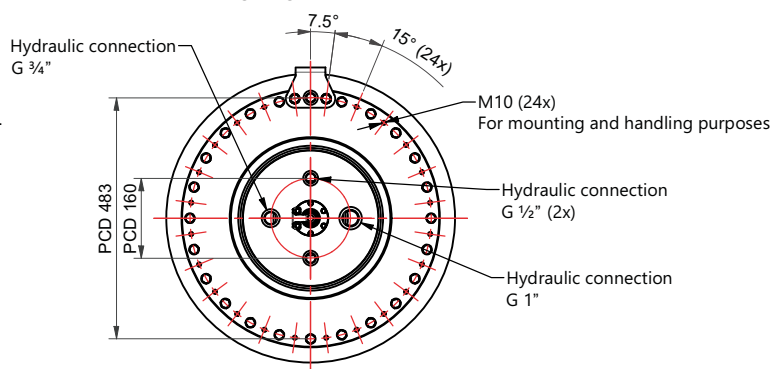
STRAIGHT MOUNTING
BRACKETS INTERFACE



TOP VIEW



BOTTOM VIEW



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

seatools

Edisonstraat 67
3281 NC Numansdorp
The Netherlands
Tel. +31 (0) 186 68 00 00
www.seatools.com
info@seatools.com

UNDERWATER SPECIALISTS

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