Maritime: ScrubberMonitor Solution

ScrubberMonitor SM700

Service Protected

Your reputation is our reputation. The ScrubberMonitor you can trust.

Taking care of water is our legacy

Hach® knows water. We have dedicated nearly a century to helping our customers find the best water analysis solutions for their needs. Our exhaust gas cleaning washwater monitoring systems build on that foundation to provide solutions for the maritime industry and environment. We understand the importance of compliance and our instrumentation helps you meet ever-changing IMO regulatory requirements, ensuring maximum uptime.

Proven technology gives you a whole solution

Our ScrubberMonitor is built to be user-friendly, and flexible for tight ship spaces. With an IP54 rating, our fiberglass cabinet provides great protection and eliminates the possibility of corrosion. Numerous configurations are available, with or without a pump and de-bubbler, so you can be confident that Hach has a solution for your specific need. You can rest assured that you will receive high-quality products as all instruments are built by Hach. Our integrated supply chain ensures parts are globally available, eliminating costly downtime.

We will be there

We are your water partner in maritime. With decades of global service experience, you can count on Hach to be there when you need support. We offer easy instrument exchanges in Asia, Europe, and North America and can provide commissioning assistance. Inquiries ranging from technical support (live, chat and online knowledge base*), global parts supply ordering and bench service with exchanges will be managed in a quick, efficient manner. Hach offers unparalleled service anywhere, anytime.

Type Approvals

We understand the complexities and requirements of a global maritime business; that's why we take pride in receiving class approval certifications from the following organizations: DNV-GL, ABS, ClassNK, Japanese Government, and Korean Register. (Certifications may be pending final reviews and certifications with certain Maritime Societies.)

Hach Support Online (HSO) combines more than 80 years of water analysis knowledge into a powerful online global community. Continuously updated content ensures you have real time support, 24/7. Learn more at support.hach.com
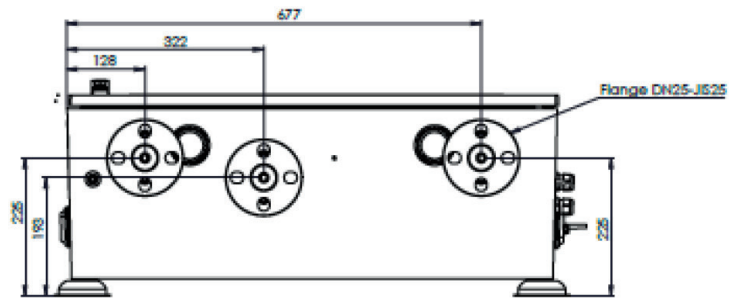
HACH®

Be Right™

Technical Data*

Model	SM100	SM200	SM300	SM400	SM500	SM600	SM700	SM800
Parameter	pH, Conductivity	Turbidity	pH, Conductivity Turbidity	Turbidity, PAH	pH, Conductivity, Turbidity, PAH	pH, Turbidity	pH, Turbidity, PAH	pH
Instrument	SC1000, pHD sc, Inductive Conductivity	SC1000, Ultraturb sc	SC1000, pHD sc, Inductive Conductivity, Ultraturb sc	SC1000, Ultraturb sc, PAH500	SC1000, pHD sc, Inductive Conductivity, Ultraturb sc, PAH	SC1000, pHD sc, Ultraturb sc	SC1000, pHD sc, Ultraturb sc, PAH500	SC1000, pHD sc
Range	pH: 0 - 14 Cond.: 200 µS/cm - 2000 mS/cm	Turb.: 0.0001 - 1000 FNU	pH: 0 - 14 Cond.: 200 µS/cm - 2000 mS/cm Turb.: 0.0001 - 1000 FNU	Turb.: 0.0001 - 1000 FNU PAH: 0 - 900 ppb (PHE)	pH: 0 - 14 Cond.: 200 µS/cm - 2000 mS/cm Turb.: 0.0001 - 1000 FNU PAH: 0 - 900 ppb (PHE)	pH: 0 - 14 Turb.: 0.0001 - 1000 FNU	pH: 0 - 14 Turb.: 0.0001 - 1000 FNU PAH: 0 - 900 ppb (PHE)	pH: 0 - 14
Dimensions	W x H x D: 800 × 1000 x 300 mm (31.5" × 39.4" × 11.8") Overall dimensions, including flanges, shock absorbers and lifting bolds; W x H x D: 810 x 1135 x 310 mm (31.9" × 44.7" × 12.2")							
Weight	± 55 kg (176 lb)							
Housing Material	Fiberglass-reinforced unsaturated polyester], with door, including viewing window Ingress protection IP56 (corresponds to NEMA 4)							
Power	100-240 VAC ±10%, 50/60 Hz, 460 VA							
Earth Connection	Dry and clean grounding pole with low impedance (< 1 Ω) with an earth cable of > 2.5 mm² (13 AWG)							
Installation Category	Maritime - [Machinery spaces, control rooms, accommodation, bridge] DNV GL-CG-0339 Class A, except Class B for damp heat exposed by vibrations from surroundings max. 1 mm/speak conform Class A							
Ambient Temperature	0 - 50 °C (32 - 122 °F); ≤ 95% relative humidity, non-condensing, non-corrosive							
Storage Conditions	0 - 50 °C (32 - 122 °F); ≤ 95% relative humidity, non-condensing, non-corrosive							
Analog Outputs	4 - 20 mA** – temperature corrected pH (2.5 - 11 pH) 4 - 20 mA** – temperature corrected Conductivity (0 - 2,000,000 µS/cm) 4 - 20 mA** - turbidity (0 - 400 FNU) **Active / maximum load: 500 Ω / galvanically isolated							
Sample Requirements	Seawater/Polluted seawater/Fresh water with NaOH/Residue particles of HFO combustion / Salts (Na_2SO_4 etc.) Pressure: 0 - 6 bar (0 - 87 PSI) Temperature: 0 - 50 °C (32 - 122 °F) Density: 1020 kg/m³							
Alarm	Low Sample Flow Alarm (Flow < 2 L/min = Alarm)*** ***Potential Freed Contact (Contact Open = Alarm)							

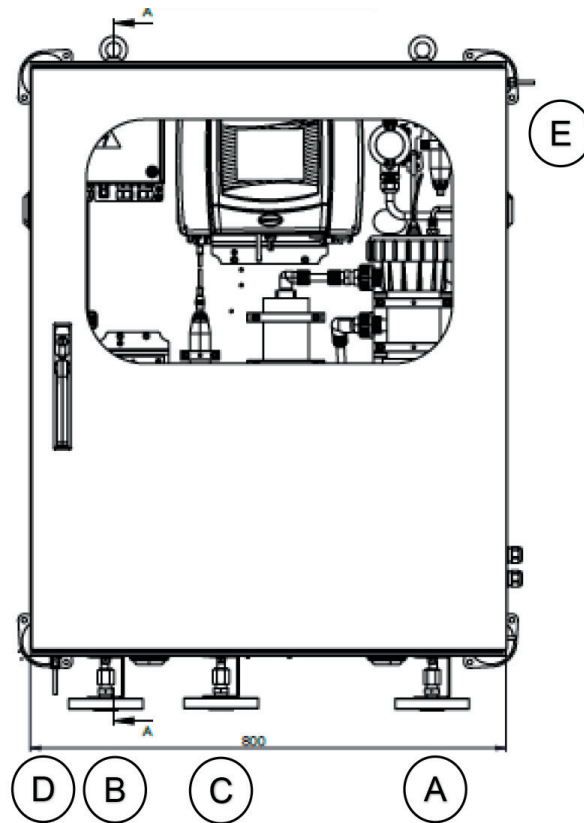*Subject to change without notice.*

Dimensions

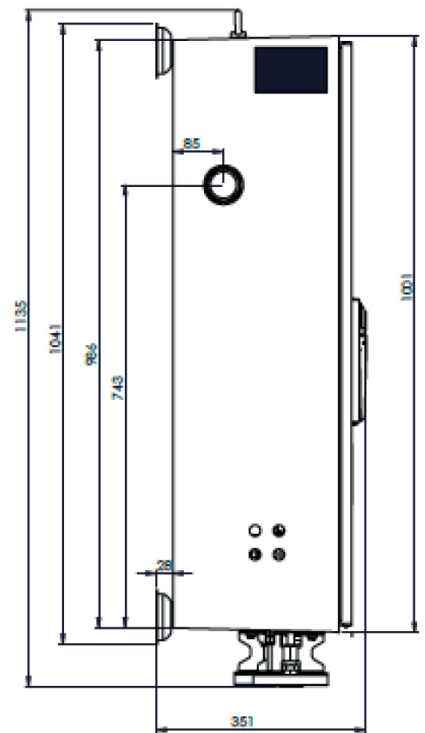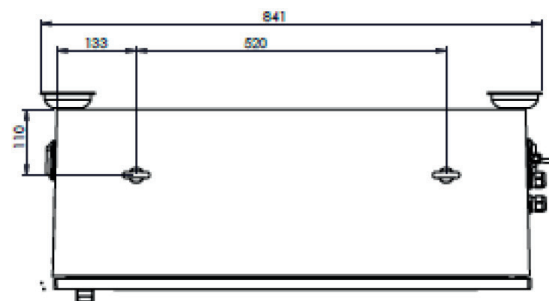[In millimeters]

Bottom View

Flange DN25-JIS25

677
322
128
225
173
225

Right Side View

82
24
40
130
120   40

Front View

E

800

D B   C   A

Left Side View

1135
1041
986
743
85
28
351

Top View

841
133   520
110

A - Sample Inlet

B - Sample Outlet

C - Drain

D - Manual Sample

E - Vent

Order Information

Analyzers

LZH409.99.00100	ScrubberMonitor SM100: pH, Conductivity
LZH409.99.00200	ScrubberMonitor SM200: Turbidity
LZH409.99.00300	ScrubberMonitor SM300: pH, Conductivity,Turbidity
LZH409.99.00400	ScrubberMonitor SM400: Turbidity, PAH
LZH409.99.00500	ScrubberMonitor SM500: pH, Conductivity, Turbidity, PAH
LZH409.99.00600	ScrubberMonitor SM600: pH, Turbidity
LZH409.99.00700	ScrubberMonitor SM700: pH, Turbidity, PAH
LZH409.99.00800	ScrubberMonitor SM800: pH

Parts and Accessories

APPS10011887	Pump including flexi hose and flanges for ScrubberMonitor cabinets
APPS10011888	De-bubbler including tubing and pressure relief valves for ScrubberMonitor cabinets
YAB019	SC1000/SC1500 Internal 0/4-20 mA Analog Output Card
YAP013	Processor board Solitax sc
APPS10011156	Sparepart Kit Q7 Flowswitch
APPS10011157	Sparepart Kit Overflow Vessel

Reagents and Consumables

LZV275	Set of 4 wiper blades
LZX304	Desiccant 2, Ultraturb plus sc
LZC541	PAH500 Sensor Calibration Kit
2749320	Disposable Pipettes, pk/20
9775100	Cleaning Swab, 3/8" Foam Tip, L=155 mm, 10/pk
25M1A1001-115	Standard Cell Solution, Concentrated pH 7.0 Buffer (equi-transferrant), 500 mL. For replenishing standard cell chamber while replacing salt bridges for for Regenerateable Encapsulated LCP or Ryton Differential pH and ORP Sensors–1-1/2 inch
2283449	pH Buffer Solution, pH 4.01 (500 mL)
2283549	pH Buffer Solution, pH 7.00 (500 mL)
2283649	pH Buffer Solution, pH 10.01 (500 mL)
SB-P1SV	PEEK Salt Bridge, Kynar (PVDF) outer junction

Maritime Service

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