NA5600sc Online Sodium Analyser

Applications

- Industrial water
- Power





Ensure uptime with accurate, low-level sodium measurements and predictive diagnostics.

Be confident in your steam cycle water with proprietary predictive diagnostic tools, automatic electrode reactivation to avoid downtime, less maintenance with 90-day reagent replacement, and a convenient small footprint for easy integration with the new Hach[®] NA5600sc Sodium Analyser.

Optimise Operation and Response Time with Automatic Electrode Reactivation

To maintain optimum response time and accuracy, the NA5600sc analyser provides automatic electrode reactivation. Reactivation uses non-hazardous chemicals and eliminates the need for manual reactivation or electrode etching.

Space-Saving Design

Smaller instrument footprint with streamlined layout to allow for easy integration into existing or new sites.

Low Maintenance

Maintenance of the NA5600sc Sodium Analyser requires reagent replenishment only every 90 days and annual replacement of reagent tubing and the sodium electrode. Clear step-by-step instructions are provided to simplify maintenance operations.

Avoid Downtime

Predictive diagnostic tools, including Hach's proprietary Prognosys technology, warning LEDs, and high visibility notification screens let you avoid unplanned downtime.



Technical Data*

Measuring range Analysers without cationic pump:

0.01 ppb - 10,000 ppb

Analysers with cationic pump:

0.01 ppb - 200 ppm

< 0.02 ppb or 1.5% reading Repeatability

(whichever is greater) within

± 10 °C variation

Detection limit dag 10.0

Response time From 0.1 ppb to 10 ppb:

 $T90 \le 3$ minutes, $T95 \le 4$ minutes

From < 1 ppb to 100 ppb:

T90 < 2 minutes, T95 < 3 minutes

(about 150 s)

Calibration method Automatic with known addition

Manual: 1 or 2 points

Sample conditioner For non-cationic applications:

Di-isopropylamine (DIPA)

(1 L/90 days) at 25 °C for a sample

pH target of 10.5

For cationic applications: DIPA (1 L/month) at 25 °C for a sample pH target of 10.5

Number of channels 1, 2 or 4 with programmable

sequence

Max. concentration of suspended solids in

sample

< 2 NTU, no oil, no grease

For boiler sample type install approx.

100 µm filter

< 50 ppm, non-cationic application **Acidity**

< 250 ppm, cationic application

5 - 45 °C Sample temperature **Ambient temperature** 5 - 50 °C 0.2 - 6 bar

Sample pressure

Flow rate 100 - 150 mL/min (6 - 9 L/h)

Inlet

Sample line and sample bypass drain:

6 mm O.D. push-to-connect fitting for

plastic tubing

Chemical and case drains: 7/16 inch I.D. slip-on fitting for soft plastic

tubing

Power requirements

(Voltage)

Power requirements

(Hz)

100 - 240 V AC

50/60 Hz

Protection rating Analyser with enclosure:

NEMA 4/IP65

Analyser without enclosure:

IP65, PCBA housing

Display Coloured 5.7" LCD

6 isolated, 0 - 20 mA or 4 - 20 mA: **Analogue outputs**

load impedance: 600 Ohm maximum

Connection: 0.644 - 1.29 mm²

(24 - 16 AWG) wire;

0.644 - 0.812 mm² (24 - 20 AWG)

recommended, twisted pair

shielded wire

Relay output 6; type: not powered SPDT relays,

each rated at 5 A resistive, 240 VAC

maximum

Connection: 1.0 - 1.29 mm² (18 - 16 AWG) wire; 1.0 mm² (18 AWG) stranded recommended,

5 - 8 mm O.D. cable

Digital inputs 6; non programmable, isolated TTL

type digital input or as a relay

Open - collector type input

0.644 - 1.29 mm² (24 - 16 AWG) wire; 0.644 - 0.812 mm² (24 - 20 AWG)

stranded recommended

Material Polyol case, PC door, PC hinges and

latches, 304/316 SST hardware

Dimensions Analyser with enclosure:

681 mm x 452 mm x 335 mm

 $(H \times W \times D)$

Analyser without enclosure:

681 mm x 452 mm x 254 mm

 $(H \times W \times D)$

Weight Analyser with enclosure:

20 kg with empty bottles

Analyser without enclosure: 14 kg with empty bottles

Maintenance interval Every 90 days: refill electrolyte,

reactivation, conditioning, and

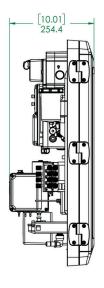
calibration solution

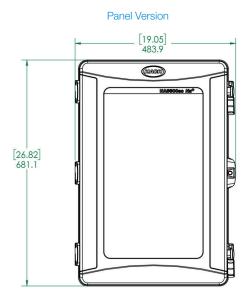
*Subject to change without notice.

Principle of Operation

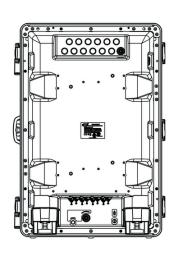
The Hach NA5600sc Sodium Analyser uses an ion-selective electrode measurement after pH conditioning. Sample pH conditioning is essential for limiting the interference of temperature or other ions on sodium measurement. Constant, temperature-compensated buffering is assured using regulated reagent addition across sample pH and temperature changes. In case of a multichannel version the "smart" rinsing sequence between channels ensures a minimum cycle time of 10 minutes and no carry-over effect.

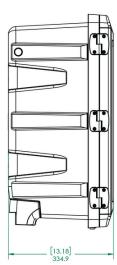
Dimensions











Enclosure Version





DOC053.52.35149.Nov18

Order Information

Analysers

Unit with Enclosure	Panel Mount Unit	
LXV526.98.1011A	LXV526.98.2011A	NA5600sc Online Sodium Analyser, 1-channel
LXV526.98.1012A	LXV526.98.2012A	NA5600sc Online Sodium Analyser, 2-channel
LXV526.98.1014A	LXV526.98.2014A	NA5600sc Online Sodium Analyser, 4-channel
LXV526.98.1111A	LXV526.98.2111A	NA5600sc Online Sodium Analyser, 1-channel, with Autocalibration
LXV526.98.1112A	LXV526.98.2112A	NA5600sc Online Sodium Analyser, 2-channel, with Autocalibration
LXV526.98.1114A	LXV526.98.2114A	NA5600sc Online Sodium Analyser, 4-channel, with Autocalibration
LXV526.98.1211A	LXV526.98.2211A	NA5600sc Online Sodium Analyser, 1-channel, with Cation Kit
LXV526.98.1212A	LXV526.98.2212A	NA5600sc Online Sodium Analyser, 2-channel, with Cation Kit
LXV526.98.1214A	LXV526.98.2214A	NA5600sc Online Sodium Analyser, 4-channel, with Cation Kit
LXV526.98.1311A	LXV526.98.2311A	NA5600sc Online Sodium Analyser, 1-channel, with Cation Kit & Autocalibration
LXV526.98.1312A	LXV526.98.2312A	NA5600sc Online Sodium Analyser, 2-channel, with Cation Kit & Autocalibration
LXV526.98.1314A	LXV526.98.2314A	NA5600sc Online Sodium Analyser, 4-channel, with Cation Kit & Autocalibration

Upgrade Options

 8371200
 Kit, K-pump NA5600sc

 9013205
 Modbus RS232/485 Module

 9173900
 Profibus DP Module (SC200)

8425800 Hart Module

8428000 Prognosys NA5600sc License Kit

Accessories

595=010=000Sample Filter, 100 micron, metric fittings**595=010=005**Sample Filter; 100 micron, imperial fittings**8368900**Kit, Heater Exchange, NA5600sc

Consumables and Spare Parts

9660500NA5600sc one year spare parts kit595=010=906Replacement Filter Cartridges, pk/6Z363140,00500Reference Electrolyte, KCl, 3 M, 500 mL

 2834453
 Diisopropylamine, 99%, 1 L

 2835153
 Sodium Standard, 10 ppm, 1 L

 2834253
 Sodium Standard, 100 ppm, 1 L

 2507149
 Sodium Nitrate, 0.5M, 500 mL

Be confident with Hach Service

Start-Up/Commissioning: Our service technicians visit your site and setup instrumentation, provide basic end-user training on operations and maintenance, and validate settings and performance to get you started.

Service Agreement: Hach provides on-site and in-factory repair, preventive maintenance, and calibration programs for your instruments to ensure reliability and instrument up-time. We have services to fit your specific needs.

