SP5 S

Fixed site sampler in stainless steel housing with thermostatic control for automatic sample extraction according to the vacuum or peristaltic pump principle. Mains operation 230V/50Hz.

Type	Fixed site sampler
Housing	Double-walled stainless steel (material 1.4301/ SS304) / PS / PC (GF10) with 40 mm insulation. Housing separated in sample compartment and control compartment, each with lockable door. Upper door with plexiglass window. Protective top made of Styrosun which can be opened for connection and maintenance works. Option: material 1.4571/ SS316Ti; SS304 EPOXY-coated;
Thermostatic control	Self-contained, controlled cooling / heating with 4 settings, no-frost. independent of the programmable controller, Temperature in sample compartment: 5°C, +/- 2°[1] (adjustable 0,0-9,9°C)
Control	Microprocessor control, Sleep-Mode (<5mA), power supply 8-16 V foil keyboard (with keys 0-9, ESC, ENT, cursor), graphical display (128*64 Pixel), back lit
Data logger	3000 entries, non-volatile data memory; storage of sampling and malfunction data like sample extractions, bottle changes, messages, external signals. optional with WEB-board 100 MB (2 Year ring memory-FIFO at 1 min interval)
Programming	12 freely programmable user programs, with function to link programs.
Program start options	- IMMEDIATELY; - DATE/TIME - WEEKDAY/TIME; - BY AN EXTERNAL SIGNAL
Program End/Stop options	End of sampling program - AFTER 1 RUN - AFTER X RUNS - CONTINUOUS OPERATION - DATE/TIME
Pause mode	Interruption of program run at any time
Overfilling protection	Adjustable from 1–999 samples/bottle
Interval setting	1 min. to 99 h 59 min. in steps of 1 minute
Pulse setting	1 to 9999 pulses/sample
Manual sample extraction	Possible at any time without interrupting the current program run
Program protection	Up to 5 years after voltage loss
Interface	Mini-USB, optional: Ethernet RJ45, SDI-12 Optional: **Modbus, Profibus DP Connection**
Communication	**1. Connection via USB and PC (as standard)** • maxxwareConnect® **has to be** installed on the PC • Connection to the sampler via USB/Mini USB cable • remote control of the sampler • visualization of downloaded data • download and saving of data as PDF, CSV or XLS, or ODT, TXT Format • print-out of data directly as PDF Format • backup of all preprogramed programs from the sampler • setting and saving of programs in offline mode. Upload in online mode • Read out, changing, saving or upload of all sampler programs (1-12) • recovery of saved programs.

1 Related to the European norm EN16479

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	or **optional:** **2. Web Modul LTE-Router / LAN RJ45** • Linux OS • TCP/IP (RJ45) • recording of all CPU Data (like data of sampling cycle, bottle report, error log, temperature etc.) • visualization via Web interface • Data-export (PDF, CSV, XLS, ODT, TXT) • E-Mail messaging • FTP-Push • Modbus TCP • Upgrade Sampler-Firmware or **optional:** Profibus DP
Languages	Multi-language, selectable
Signal inputs	• 2 x analog: 0/4-20 mA, • 8 x digital (flow, event, 1 input can be programmed freely) **option**: expandable with 4x digital, 3 inputs can be programmed freely, - Impulselength 50ms - working resistance 500 Ohm (analog signal)
Signal outputs / status messages	• 8 digital outputs, 1x of them as collective malfunction message (Relay optional) **option**: expandable with 8 digitals, 5 are freely programmable (in total 6 messages)
Sampling method	-Vacuum system plastic dosing unit 15 - 320 ml Option: vacuum system glass dosing unit 20 - 350 ml Option: vacuum system glass dosing unit 20-500 ml Option: vacuum VAR flow-proportional system 5-250 ml Option: bypass system glass 20-250 ml Option: peristaltic pump 10-10.000 ml (flow-proportional)
volume accuracy	Vacuum system: < 2,5 % or +/- 3 ml Peristaltic pump: +- 5 % at 250 ml average in a set of 10 samples
Suction height	**Vacuum system:** max. 7,5 m (at 1013h Pa), optional 8,5 m or 15 m (Power Booster) **Peristaltic pump:** max. 8 m (at 1013h Pa)
Pumping speed	>0,5 m/s (average velocity) at suction height up to 7,8 m (at 1013h Pa);
Suction hose	PVC, L=5 m, ID=12 mm. Max. hose length 30 m
Sampling modes	-**Time**-related, • Constant Time, Constant Volume (**CT, CV**) - **Flow**-dependent, • Variable Time, Constant Volume (**VT, CV**) option for Vacuum • Constant Time, Variable Volume (**CT, VV**) (Flow modes are controlled by an external flowmeter signal) - **Event**-related and - **Manual** sample extraction.
Bottle variants	Plastic 1 x 25 L, 1 x 50 L, 2 x 10 L 4 x 6,0 L, 4 x 10 L, 4 x 14 L, 12 x 2,9 L, 24 x 1,0 L 24 x 2,9 L (special version in bigger housing- by request) Glass 12 x 2,0 L 24 x 1,0 L

Overall dimensions	Standard (hxwxd): 24x2,9-Housing 1.290 (1.890*) x 690 x 645 mm 1.400 x 830 x 740 mm As measuring station: 1.470 (2.070*) x 690 x 645 mm *) with opened top
Weight	Approx. 100 kg with composite container, higher weight when using several bottles and/or glass bottles
Power supply	230 V / 115 V /AC
Power requirement	Approx. 350VA (with cooling)
Ambient temperature	-20 – 43°C
Sample temperature	0 – 40°C
Standards	CE Sampling according to ISO 5667-10, EN16479
Wetted materials	PC, PVC, Silicone, PS, PE, EPDM (optional: metering vessel glass Duran50, sinker weight SS304)

Make: **MAXX**

Type: **SP5 S**

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Subject to technical changes. *) Patent No. DE 19726550A1, DE 19726549A1 and VAR unit DE 10008623.3