



PRODUCT CONFORMITY CERTIFICATE

This is to certify that the

Portable Sampler Liquiport 2010 CSP44

manufactured by:

Endress+Hauser Conducta GmbH

Dieselstrasse 24

D-70839

Gerlingen

Germany

has been assessed by Sira Certification Service
and for the conditions stated on this certificate complies with:

**MCERTS Performance Standards for Water Monitoring
Equipment Part 1, Version 2.1 dated November 2009**

Certification Ranges :

CSP44 Suction head 0 - 8m peristaltic

Project No:	16W22425
Certificate No:	Sira MC100177/01
Initial Certification:	09 November 2010
This Certificate Issued	15 February 2012
Renewal Date:	08 November 2015

Technical Director

MCERTS is operated on behalf of the Environment Agency by

Sira Certification Service

12 Acorn Industrial Park, Crayford Road, Crayford
Dartford, Kent, UK, DA1 4AL

Tel: 01322 520500 Fax: 01322 520501

This certificate may only be reproduced in its entirety and without change



Approved Site Application

The Liquiport 2010 CSP44 sampler is suitable for use on municipal and industrial applications to take and store liquid samples.

The product is designed for mainly indoor and outdoor sites where the ambient temperature is between 0°C and +40°C.

Any potential user should ensure, in consultation with the manufacturer, that the water monitoring system is suitable for the process on which it will be installed.

Basis of Certification

This certification is based on the following Test Report(s) and on Sira's assessment and ongoing surveillance of the product and the manufacturing process:

Sira Report Sira Report number 16W22425 dated 4/10/10

Product Certified

The Liquiport CSP44 measuring system consists of the following parts:

- Sample intake system peristaltic pump
- Distribution assembly

This certificate applies to all instruments fitted with software version V 01.01.00-0001, Software Version FMSY1 V1.00.00 and FMSY1 Projecting Version V.103 (serial number DA000105D00 onwards).

Certificate No: Sira MC100177/01
This Certificate Issued: 15 February 2012

This certificate may only be reproduced in its entirety and without change



Certified Performance

The instrument was evaluated for use under the following conditions:

Ambient Temperature Range: Without temperature control unit: 0°C to +40°C

Results are expressed as error % reading, unless otherwise stated

Test	Results	MCERTS specification
Sample Collection	Flow proportional, timed or quantity sampling available. Options available for single or multiple containers.	Clause 3.1.3
Sample interval <ul style="list-style-type: none"> Time proportional sampling Flow proportional sampling 	Possible range from 1 to 5,999 minutes. Increments of 1 minute. 4-20mA and pulse inputs available Number of pulses per sample adjustable	Clause 3.1.4 & 3.1.5
Sample failure	Fault indicated on display. The meaning of the error can be found in the diagnostic menu. Sample failures recorded.	Clause 3.1.6 & 3.1.7
Sample line diameter	Internal diameter 10mm	Clause 3.1.8 >9mm
Sample volume	Sample volume adjustable	Clause 3.1.9
Maximum volume of a discrete sample that can be set Total storage capacity both by numbers and volumes of individual bottles and in a composite container	Manual sampling: 10,000ml Composite: 20L <u>PE</u> 1L, 2L <u>Glass</u> 0.7L	Clause 3.2.1
Maximum sampling head	8m	Clause 3.2.2

Certificate No: Sira MC100177/01
This Certificate Issued: 15 February 2012

This certificate may only be reproduced in its entirety and without change



Test	Results		MCERTS specification
Sample volume error a) Time Proportional	U* 1m - 1.5% 3.5m - 1.1% 7m - 2.9%	X* 1m - -1.2% 3.5m - -2.5% 7m - -4.0%	Clause 6.2.1 <5%
Sample volume error b) CVVT	U* 1m - -4.0% 4m - 3.5% 7m - 3.6%	X* 1m - -4.1% 4m - 3.4% 7m - 3.4%	Clause 6.2.1 <5%
Sample volume error c) CTVV	U* Peristaltic 1m - 3.6% 3.5m - 3.1% 8m - 2.8%	X* Peristaltic 1m - -0.3% 3.5m - -1.3% 8m - 0.8%	Clause 6.2.1 <5%
Sample line velocity	Peristaltic 10mm	0.64m/s	Clause 6.2.2 >0.5 m/s
Sample integrity	No statistically significant difference was found in the analysis for BOD, COD, suspended solids, total nitrogen and total phosphorus. All F values < F _{crit}		Clause 6.2.3 Annex B3 (4.1.3)
Sample timing	Error was 5 seconds ±1 sec in 24 hours		Clause 6.2.4 < ±10 sec/24h
Sample Temperature Control a) Volume	U* 0°C 0.0% 40°C -0.8%	X* 0°C 1.4% 40°C 1.9%	Clause 6.2.5 <±5%

* X: Mean error

* U: Expanded uncertainty

Certificate No: Sira MC100177/01
This Certificate Issued: 15 February 2012

This certificate may only be reproduced in its entirety and without change



Description:

The Liquiport 2010 wastewater sampler is designed for indoor or outdoor use, to collect representative liquid water samples, to monitor influent and effluent waters from municipal and industrial facilities, monitor effluent waters from indirect industrial dischargers for compliance with pre-treatment regulations, and environmental monitoring. The sampler is suitable for the representative collection of toxic and conventional pollutants.

The sampler is available with a peristaltic pump for the sample intake. The method of sample detection is pressure. The intake air purge is made automatically before and after each sample. The duration automatically compensates for varying intake line lengths. The sample collection cycle is optionally repeated from one to three times if a sample is not obtained on the initial attempt. The intake line is optionally rinsed with source liquid prior to each sample from one to three times.

The sampling methods includes time, volume and flow proportion sampling, additionally includes event, single and multiple samples and use of the sampling table. The sampler comprises a 2 part modular housing with separately lockable bottle base and electronic compartment.

The individual samples can be collected from a wastewater channel, vessel or pipe, according to a predetermined programme. The samples are stored into various options of detachable sample collection vessels in polyethylene or glass (1x 20L, 1x 5L, 12x 2L, 12x 0,7L, 24x 1L). The user interface is self-prompting/menu driven program using four function keys, and navigator dial. The graphics display is 9 line high contrast backlit LCD making the measurements visible in direct sunlight. The sampler stores up to 100 sampling program entries while the main program can run up to 24 sub-programs at one time. The memory can store up to 8 data logbooks with each 150000 measured values and dates/times, the stored data can be visualized on the sampler display as graph or table. All other sampling activities are stored in program logbooks, and event logbooks.

The sampling pacing modes include composite and discrete multiple bottle time, multiple bottle flow, single bottle time, single bottle flow, flow with time over ride, variable interval, user start/stop, and external set point. Manual grab sample can be made to deliver a grab sample to a specific bottle location.

Certificate No: Sira MC100177/01
This Certificate Issued: 15 February 2012

This certificate may only be reproduced in its entirety and without change



General Notes

1. This certificate is based upon the equipment tested. The Manufacturer is responsible for ensuring that on-going production complies with the standard(s) and performance criteria defined in this Certificate. The Manufacturer is required to maintain an approved quality management system controlling the manufacture of the certified product. Both the product and the quality management system shall be subject to regular surveillance according to 'Regulations Applicable to the Holders of Sira Certificates'. The design of the product certified is defined in the Sira Design Schedule for certificate No. Sira MC 100177/01
2. If certified product is found not to comply, Sira Certification Service should be notified immediately at the address shown on this certificate.
3. The Certification Marks that can be applied to the product or used in publicity material are defined in 'Regulations Applicable to the Holders of Sira Certificates'.
4. This document remains the property of Sira and shall be returned when requested by the company.

Certificate No: Sira MC100177/01
This Certificate Issued: 15 February 2012

This certificate may only be reproduced in its entirety and without change