O I M L   C e r t i f i c a t e

Issuing authority	NMi Certin B.V. Person responsible: M.Ph.D. Schmidt
Applicant and Manufacturer	VITRONIC Dr. -Ing. Stein Bildverarbeitungssysteme GmbH Hasengartenstraße 14 65189 Wiesbaden Germany

Identification of the certified type	A **Multi-Dimensional Measuring instrument**
	Type : VIPAC D BNVS
	                                    VIPAC D CNVS
	                                    VIPAC D TNVS

Characteristics	See next page

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified Type (represented by the sample(s) identified in the OIML Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML R 129 - Edition 2000

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation above-identified.
This Certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate was issued, partial quotation of the Certificate and of the associated OIML Test Report(s) is not permitted, although either may be reproduced in full.

Issuing Authority	**NMi Certin B.V., OIML Issuing Authority NL1** 13 July 2021 Certification Board

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The conformity was established by the results of tests and examinations provided in the associated OIML Type Evaluation Report:
- No. NMi-2592849-01 dated 13 July 2021 that includes 10 pages.

Characteristics of the multi-dimensional measuring instrument

The VIPAC D xNVS uses two VOLUMEC HD 3.x sensor heads to record the dimension of objects. Measurement of objects on a conveyor band may be done dynamically or statically in a start-stop scenario.

Principle of operation	reflection of light
Measuring ranges	Single interval Multi-interval
Maximum number of partial measuring ranges	2 (for height measurement only)
Speed range	$30 \text{ m/min} \leq v \leq 180 \text{ m/min}$ $0,5 \text{ m/s} \leq v \leq 3,0 \text{ m/s}$
Electromagnetic environment class	E2
Mechanical environment class	M2 M3 for modules directly mounted on the conveyor (SSMD)
Climatic environment — temperature range	-10 °C / +55 °C
Climatic environment — humidity	non-condensing
Climatic environment — intended location	closed
Power supply voltage	100 – 240 V AC 50/60 Hz
Method of operation	automatic
Limitations of use	Rectangular or irregular shaped objects with opaque regular surfaces
Minimum spacing between successive objects	spacing ≥ 50 mm

Configuration VIPAC D BNVS	- For belt conveyors and any conveyor that has a flat surface - Speed measurement is performed using a shaft encoder			
	Length	Width	Height	
Maximum dimension max	≤ 2500 mm	≤ 1000 mm	≤ 50 mm	≥ 50 mm ≤ 1000 mm
Minimum dimension min	≥ 50 mm	≥ 50 mm	≥ 20 mm	
Scale interval d d	≥ 5 mm	≥ 5 mm	≥ 2 mm	≥ 5 mm

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Configuration VIPAC D CNVS	- For crossbelt sorters or any sorter-like conveyor that has a flat surface - Speed measurement is performed using SSMD device			
	Length	Width	Height	
Maximum dimension max	≤ 1600 mm	≤ 1500 mm	≤ 50 mm	≥ 50 mm ≤ 800 mm
Minimum dimension min	≥ 50 mm	≥ 50 mm	≥ 20 mm	
Scale interval d d	≥ 5 mm	≥ 5 mm	≥ 2 mm	≥ 5 mm

Configuration VIPAC D TNVS	- For tray-equipped conveyors with entirely or partially visible and uniform trays of any shape - Speed measurement is performed using SSMD device - Objects may extend across multiple trays (if configured)			
	Length	Width	Height	
Maximum dimension max	≤ 1600 mm	≤ 1000 mm	≤ 50 mm	≥ 50 mm ≤ 1000 mm
Minimum dimension min	≥ 50 mm	≥ 50 mm	≥ 20 mm	
Scale interval d d	≥ 5 mm	≥ 5 mm	≥ 2 mm	≥ 5 mm

Software identification for VOLUMEC HD 3.x sensor heads:

Checksums with image 4.13.x			
Program module	Checksum (CRC)	Version	Optional
conveyoreventd	E6D0	2.5.0	no
FPGA IP-Core	-	2.1.0	no
libvipacdconveyorevent.so	F0EE	2.4.0	no
libzynqboardvolumechd.so	5205	3.0.9	no
pointd	1AB3	2.6.1	no
Checksums with image 4.10.x			
Program module	Checksum (CRC)	Version	Optional
conveyoreventd	F9C3	2.2.1	no
FPGA IP-Core	-	2.1.0	no
libvipacdconveyorevent.so	A996	2.2.9	no
libzynqboardvolumechd.so	5205	3.0.9	no
pointd	2269	2.4.2	no

The software will show the software identification on the terminal by the ViLogger software (see 2.2.1) after selecting:
- Press "Menu";
- Press "Info";
- The software identifications are shown in the drop-down menu of the VolumecHD sensors.

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Revision History

This revision replaces the previous version.

Revision	Date	Change(s)
Initial	16 September 2020	Initial issue
1	13 July 2021	Version with tray-equipped conveyor tested, software versions detailed, earlier test reports moved into the latest test report.