OIML Certificate

OIML Member State
The Netherlands

Number R129/2000-A-NL1-20.04 revision 2
Project number 3949194

Issuing authority	NMi Certin B.V. Person responsible: M.Ph.D. Schmidt
Applicant and Manufacturer	VITRONIC Machine Vision 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 VIPAC D BNVS Flex VIPAC D CNVS Flex VIPAC D TNVS Flex
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 129:2000

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
24 October 2025

Certification Board

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The conformity was established by the results of tests and examinations provided in the associated reports:

- No. NMi-2465064-01 dated 16 September 2020 that includes 32 pages;
- No. NMi-2465064-02 dated 16 September 2020 that includes 15 pages;
- No. NMi-2465064-03 dated 16 September 2020 that includes 44 pages;
- No. NMi-2592849-01 dated 13 July 2021 that includes 10 pages;
- No. NMi-2592849-02 dated 13 July 2021 that includes 18 pages;
- No. NMi-3949194-01 dated 24 October 2025 that includes 14 pages;
- No. NMi-3949194-02 dated 24 October 2025 that includes 15 pages.

Characteristics of the multi-dimensional measuring instrument

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 m/min ≤ v ≤ 180 m/min 0,5 m/s ≤ v ≤ 3,0 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
	humidity	non-condensing
	intended location	closed
Power supply voltage		100 – 240 V AC 50/60 Hz
Method of operation		automatic
Limitations of use		Rectangular objects only
Minimum spacing between successive objects		spacing ≥ 50 mm

Configuration VIPAC D BNVS and BNVS Flex		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	≤ 2700 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 and CNVS Flex		For crossbelt sorters or any sorter-like conveyor that has a flat surface Speed measurement is performed using SSMD device or RIO2 CBS			
		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 and TNVS Flex		For tray-equipped conveyors with entirely or partially visible and uniform trays of any shape Speed measurement is performed using SSMD device or RIO2 CBS 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 5.3.x			
Program module	Checksum (CRC)	Version	Optional
conveyoreventd	1091	2.5.4	no
FPGA IP-Core	-	2.3.0	no
libvipacdlibconveyorevent.so	89BB	2.6.2	no
libzynqboardvolumechd.so	4A97	3.2.0	no
pointd	E178	2.7.5	no
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
libvipacdlibconveyorevent.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
libvipacdlibconveyorevent.so	A996	2.2.9	no
libzynqboardvolumechd.so	5205	3.0.9	no
pointd	2269	2.4.2	no
Checksums with image 6.x			
Program module	Checksum (CRC)	Version	Optional
fpgaipcore	-	3.1.2	no
libViAutRestEngine.so	64F7	0.5.3	no
libViAutWebSocketEngineRIORest.so	0A14	1.0.5	no
libvipacdlibconevclient.so	101A	1.0.19	no
libvipacdlibconevserver.so	9D69	1.0.19	no
libvipacdlibconveyorevent.so	6D30	3.1.6	no
libzynqboardvolumechd.so	F910	4.0.1	no
pointd	4842	4.0.2	no
ViAutRestEngineMiniSrv	4751	0.5.3	no
ViAutRioCert	A3B9	1.0.4	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.

Revision History

This revision replaces the previous versions.

Revision	Date	Change(s)
Initial	2020-09-16	Initial issue
1	2021-07-13	Version with tray-equipped conveyor tested, software versions detailed, earlier test reports moved into the latest test report.
2	2025-10-24	Changing hardware setup to remove housing of controller PC and add RIO2 CBS for speed measurement. Adding additional sensor firmware checksums.