

OIML Member State
The Netherlands

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Project number 2492378
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Issuing authority NMi Certin B.V.
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Applicant and Manufacturer Brodie Meter Company, LLC
19267 US Highway 301N
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United States of America

Identification of the certified type **A measurement transducer**
Type: SB25x, B27x, B28x, B29x, B30x, B31x, B32x or B38x^[1]

Characteristics See page 2 and further

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 Type Evaluation Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R 117-1:2007 "Dynamic measuring systems for liquids other than water"
Accuracy class 0.3; 0.5

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation identified above. 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 Type Evaluation Report(s) is not permitted, although either may be reproduced in full.

^[1] With x being a code for the pressure rating

Issuing Authority **NMi Certin B.V., OIML Issuing Authority NL1**
25 June 2020

Certification Board

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

- CPC-9200527-1 dated 22 February 2010 that includes 45 pages
- CPC-10200257-1 dated 19 April 2011 that includes 11 pages
- NMI-1900551-01 dated 28 February 2017 that includes 14 pages
- NMI-2402597-01 dated 14 February 2020 that includes 11 pages

Characteristics of the measuring instrument

In Table 1 the general characteristics of the measuring instrument are presented.

Table 2 gives an overview of the general characteristics of the family of instruments.

The construction of the measurement transducer is recorded in documentation folder number TC7295-6.

Table 1 General characteristics

Environmental classes	M2 / E2 / H3
Ambient temperature range	-25 ... +55 °C; condensing humidity
Temperature range liquid	-10 ... +50 °C
Maximum pressure drop	1,37 bar (20 PSI)
Bearings	Stainless steel; ceramic
Intended for the measurement of	Oil and oil products, alcohol, chemical products, and potable liquids

Table 2 General characteristics of the family of instruments

Meter size	SB25x			B27x	B28x
Qmin, accuracy class 0.5 [L/min]	30	20 (B) 30 (C)	57	114	166
Qmin, accuracy class 0.3 [L/min]	-	57		215	166
Qmax [L/min]	570			2081	3406
Minimum Measured Quantity [L]	10			100	200
Diameter in- and outlet [mm]	50 (2")			80 (3")	100 (4")
Cyclic volume ^(D) [L]	0,129			0,937	1,9
K-factor ^(D) [pulses / L]	252			42	25
Maximum pressure [Bar(g)]	51 (E)			102 (E)	
Viscosity range [mPa·s]	0,4 ... 0,8	0,8 ... 2	2 ... 5	0,4 ... 1000	

Meter size	B29x	B3zx ^(A)	B38x		
Qmin, accuracy class 0.5 [m ³ /h]	10	34	200		
Qmin, accuracy class 0.3 [m ³ /h]	10	34	200		
Qmax [m ³ /h]	256	750	2100		
Minimum Measured Quantity [L]	200	500	5000		
Diameter in- and outlet [mm]	150 (6")	200 (8")	400 (16")		
Cyclic volume ^(D) [L]	1,9	8,3	68,9		
K-factor ^(D) [pulses / L]	25	10,5	2,157		
Maximum pressure [Bar(g)]	102 (E)				
Viscosity range [mPa·s]	0,4 ... 1000				

Notes:

- The B28x and B29x meters can be used for different liquids without adjustment. All other types need adjustment when used for a different liquid.
- The SB25x meter is constructed as a single case housing. All other types are constructed as a double case housing.

(A) With z indicating the flange size: 0 = 6", 1 = 8" and 2 = 10" flanges

(B) Serial number up to 1207-XXXXU-X-X

(C) Serial numbers 1208-XXXXU-X-X or higher

(D) Nominal value

(E) Depending on the pressure rating, up to the stated maximum pressure.