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Certificate No: LR23336944TA Issue Date: 21/12/2022 Expiry Date: 20/12/2027 Reference: RTS-TA-

PRJ11100406263/RV

# LLOYD'S REGISTER TYPE APPROVAL - DESIGN APPRAISAL DOCUMENT

Issued by: Rotterdam TECHNICAL SUPPORT OFFICE

Issued to: VAF Instruments B.V.

For: LoFlow and MidFlow, Types J5015PT2, J5023PT2, J5015E, J5023E, J5025PT2, J5040PT2, J5050PT2, J5025E, J5040E, J5050E

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (September 2020) and this Design Appraisal Document forms part of the Certificate.

### **APPROVAL DOCUMENTATION**

Document No.	Rev., date	Title
0801-3302	A, 2013-09-06	J5015E_E-counter dimensional drawing
0801-3304	A, 2013-09-06	J5023E_E-counter dimensional drawing
0801-3306	A, 2013-07-19	J5023E_E-counter dimensional drawing
0801-3308	A, 2013-07-19	J5040E_E-counter dimensional drawing
0801-3310	A, 2013-07-19	J5050E_E-counter dimensional drawing
0801-3227	В, 2014-07-03	J5015PT2 dimensional drawing
0801-3228	В, 2013-10-12	J5023PT2 dimensional drawing
0801-3229	, 2014-03-07	J5050PT2 dimensional drawing with F1050 filter
0801-3202	E, 2011-06-21	J5025PT2 / J5040PT2 dimensional drawing (hall-switch)
0900-0104	J, 2015-04-02	Cast specifications
0900-0229	C, 2015-04-21	Cast specifications

#### **TEST REPORTS**

13C00863RPT01	Dare!! – EMC Test Report E-counterdated 2013-08-06	
16C00664RPT01	Dare!! – EMC Test Report Radiated Immunity E-counter, s.n. 615682dated 2016-06-15	
17C01021RPT01	Dare!! – EMC Test Report E-counter, dry heat & cold testdated 2017-10-02	
M17.001-P17.001	Siebert – Vibration Test report	
20230274RPT01	Kiwa EMC Partial Test report	
	VAF – Functional test report, witnessed by LRdated 2017-08-14	

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#### **SUPPORTING DOCUMENTS**

TIB-144-GB-0517 MidFlow, 144 Technical Manual TIB-145-GB-0517 ProFlow, 145 Technical Manual

PB-135-GB-0414 LoFlow MidFlow vane meters, model PT, 135 Product Bulletin

PB-142-GB-0414 ProFlow vane meters, 142 Product Bulletin

**PRODUCT DETAILS** 

Types : LOFLOW® J5015PT2 / J5023PT2 / J5015E / J5023E

MIDFLOW® J5025PT2 / J5040PT2 / J5050PT2 / J5025E / J5040E / J5050E

Materials: Ductile iron as per VAF drawings, vanes carbon, O-rings viton A

Diameters : DN15 to DN50

Pressure, maximum: 25 Bar

Temperature liquid: E-type -10° to +125° Celsius, PT2-type -10° to +150° Celsius

Flow, continuous : 37.5 – 375 litres/min

Pulse output : 160 – 5 pulses/ltr, Hall switch

E-type readout : 7 digits, 0.001 ltr

Accuracy : < 0.3 %Temperature ambient:  $60^{\circ}$  Celsius

Enclosure: IP65

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## **Supplementary Type Approval Terms and Conditions**

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Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

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