

March 03, 2020

Attention: Tanya Francis
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO, ON M9W 6N9

The design submission, tracking number 2020-01152, originally received on February 26, 2020 was surveyed and accepted for registration as follows:

CRN : 0F21849.52 **Accepted on:** March 03, 2020
Reg Type: NEW DESIGN **Expiry Date:** October 08, 2029
Drawing No. : COMPANY NAME CHANGE & MERGING CRNS
Fitting type: REFRACTOMETER SENSORS
Design registered in the name of : VAISALA OYJ

The registration is conditional on your compliance with the following notes:

**** The Scope of this Registration include only:*

- company name and address change from K-Patents Oy to Vaisala Oyj
- merging the three CRN (0F12610.52, 0F16276.52, 0F19024.52) into a single CRN (0F21849.52), there is no design or scope changes

As indicated on AB-41 Statutory Declaration form and submitted documentation, the code of construction is SECTION VIII, DIV. 1.

- This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration form.
- This registration is valid only until the indicated expiry date and only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date.
- Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

If you have any question don't hesitate to contact me by phone at (780) 433-0281 ext 3337 or fax (780) 437-7787 or e-mail Dick@absa.ca.

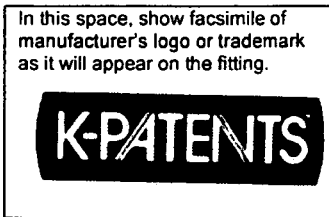
Sincerely,



DICK, ASHLING, P. Eng.
DOP Cert. No. D00007936

**STATUTORY DECLARATION
Registration of Fittings**

I, KAISA SADE, HEAD OF MANUFACTURING
(name of applicant) (position title) (must be in a position of authority)
of VAISALA OYJ
(name of manufacturer)
located at VANHA NURMIJÄRVENTIE 21, 01670 VANTAA, FINLAND
(plant address)



do solemnly declare that the fittings listed hereunder, which are subject to the Safety Codes Act (check one)

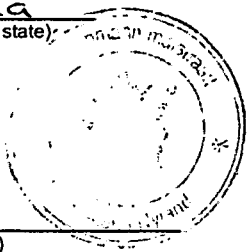
- comply with the requirements of _____ which specifies the dimensions, (title of recognized North American Standard) materials of construction, pressure/temperature ratings and identification marking of the fittings, or
- are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with ASME Sec VIII, Div. I as supported by the attached (title of code of construction or other applicable document) data which identifies the dimensions, materials of construction, pressure/temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified by the following authority, DNV GL BUSINESS ASSURANCE as being suitable for the manufacture of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are

PR-23-AC, PR-23-AP, PR-23-CP, PR-23-RP, PR-23-SD, PR-23-W, PR-33-AC, PR-43-AC, PR-43-AP,
(brief description of fittings) CROSS FLOW CELL

In support of this application, the following information, calculations and/or test data are attached:
CALCULATIONS FEM1210027, 1304010, 1304009; DRAWINGS 462, 516, 1219, 2277, 2278, 2294, 2295, 2487, 2520, 2762, 3041, 3936, 3937, 3957, 3958, 3960, 3966, 3969, DIM412, DIM413, DIM421, DIM450, MTC-265, MTC434, MTC442; 3 TEST REPORTS

DECLARED before me at Espoo in the Local Register Office of Uusimaa
(city) (province or state)
this 14 day of June, 2019
(Month) (Year)
(print) Annastina Vanharen
(a Commissioner of Oaths or Notary Public)
(sign) Aust Val (a Commissioner of Oaths or Notary Public)
[Signature] (signature of applicant)



For ABSA Office Use Only:

NOTES: _____
To the best of my knowledge and belief, the application meets the requirements of the Safety Codes Act and CSA Standard B51, Clause 4.2, and is accepted for registration in Category 'E'
Registration Number: OF 21849.52 [Signature] (Signature of the Administrator/SCO)
Date Registered: MAR 03 2020 Expiry Date: Oct 8, 2029

The information you provide is necessary only for the administration of the programs as required by the Alberta Safety Codes Act and Regulations in the Pressure Equipment Discipline.

"See Acceptance Letter for the comments and/or conditions of registration"



the pressure equipment safety authority

DESIGN SCOPE FOR REGISTRATION OF FITTINGS

(Supplementary to Form AB-41)

AB-257 2016-01

This form may be used to document the Design Scope for fittings that require registration in accordance with the PESR s14 and s17. In each column, provide the information required or list the document number where the information can be found. If the column is not applicable to the fitting design, then indicate N/A.

Note: This form shall be completed and submitted with Form AB-41 Statutory Declaration Registration of Fittings.

Product Description	Primary Pressure Bearing/ Retaining Component	Material of Construction	End Connections and Size Range	Design Condition		MDMT	Pressure Class or Schedule	Design Code of Construction or Standard	Catalog page or Drawing numbers
				MAWT	MAWP				
Refractometer PR-23-AC, PR-33-AC, PR-43-AC w/ sensor head H25-P15, Sanitary clamp PR-9201 and Installation ferrule PR-9205	PR Head	ASTM A 479/ A 479M Grade AISI316L/AISI304	According to ISO2852	150°C	15bar	-40°C	N/A	ASME BPVC Sec VIII, Div. 1 Ed. 2015	c SB:PR-23-A/4 October 2014 SB:PR-33-AC/3 SB: PR-43-A-5 February 2018, Drawings # DIM3041, 510, 412, 2487, 3960, MTG-265, DIM413, 1219, MTG-442, DIM3937, MTG-3936, DIM3957, MTG-3958, DIM3966, MTG-3969
Refractometer PR-23/43-AP w/ sensor heads H25-P15-L170, H25-P15-L140, H25-P15-L42, H25-P15-L14, Sanitary clamp PR-9201 and Installation ferrule PR-9205	PR Head	ASTM A 479/ A 479M Grade AISI316L/AISI304	According to ISO2852	150°C	15bar	-40°C	N/A	ASME BPVC Sec VIII, Div. 1 Ed. 2015	K-Patents catalogues: SB:PR-23-A/4 October 2014 SB: PR-43-A-5 February 2018, Drawings # DIM3041, 510, 412, 2487, 3960, MTG-265, DIM413, 1219, MTG-442, DIM3937, MTG-3936, DIM3957, MTG-3958, DIM3966, MTG-3969

ABSA

SAFETY CODES ACT - PROVINCE OF ALBERTA
REGISTRATION OF FITTINGS

REGISTRATION NO. **0F 21849.52**

DWG. NO. or CAT. NO. *Company name change, merging CK15*

TYPE OF FITTINGS *Refractometer Sensors*

MAR 03 2020

INITIALS *TM*

See Acceptance Letter for the comments and/or conditions of registration

Date

T. M. (ASHLING) DICK, P.ENG
DESIGN SURVEY ENGINEER

Refractometer PR-23-GP	Sensor head	ASTM A 479/ A 479M Grade AISI316L/ Alloy 20/ Hastelloy C276	ANSI B16.5	150°C	10.3bar	N/A	N/A	ASME BPVC Sec VIII, Div. 1 Ed. 2015	K-Patents catalogues: SB:PR-23-A/4 October 2014, Drawings # DIM421, MTG434, DIM450, DIM462
Refractometer PR-23-RP	PR head	ASTM A 479/ A 479M SA-240 316L, SA-479 316L, SB-463, SB- 473, SB-575, SB-574	ANSI B16.5	150°C	25bar	N/A	N/A	ASME BPVC Sec VIII, Div. 1 Ed. 2015	K-Patents catalog SB:PR-23-A/4 October 2014, DWG#2762 REV A, 2295 REV C, 2294 REV C, 2520 REV C, 2271 REV I, 2278 REV F
Refractometer PR-23-SD	PR head	ASTM A 479/ A 479M SAF2205	ANSI B16.5	180°C	17.7bar	N/A	N/A	ASME BPVC Sec VIII, Div. 1 Ed. 2015	K-Patents catalog: SB:PR-23-A/4 October 2014, Drawings # DIM421, MTG434, DIM450, DIM462
Refractometer PR-23-W	PR head	ASTM A 479/ A 479M AISI316L with PTFE lining	ANSI B16.5	150°C	9.3bar	N/A	N/A	ASME BPVC Sec VIII, Div. 1 Ed. 2015	K-Patents catalog: SB:PR-23-A/4 October 2014, Drawings # DIM421, MTG434, DIM450, DIM462
Cross flow cell models: CFC-RP-M20-HA-M10-NC, CFC-RP-M20-HC-M10-NC, CFC-RP-M20-SS-M10-NC, CFC-RP-M20-HA-M20-NC, CFC-RP-M20-HC-M20-NC, CFC-RP-M20-SS-M20-NC, CFC-RP-M20-HA-M30-NC, CFC-RP-M20-HC-M30-NC, CFC-RP-M20-SS-M30-NC	Cell body	SA-249 TP316L, SB-464, SB-619	ANSI B16.5	150°C	25bar	N/A	N/A	ASME Sec. VIII Div. I Ed. 2010 + Addenda 2011	K-Patents catalog, DWG#2762 REV A, 2295 REV C, 2294 REV C, 2520 REV C, 2271 REV I, 2278 REV F

FOR ABSA USE ONLY:

Reference Tracking No. 2020-01152

OF 21849.52

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