

Vantaa

December 31, 2018

Canadian registration numbers (CRN) for K-Patents refractometers PR-23-GP, PR-23-SD, PR-23-W

Scope of registration:

Sensor model: PR-23-GP

MAWP: 149 Psig@302 °F (150°C)

Design temperature: -40°F - 302°F (-40°C - 150°C) Material: AISI316L, Alloy 20 or Hastelloy C276

Sensor model: PR-23-SD

MAWP: 257 psig @ 356°F (180°C)

Material: SAF2205

Sensor model: PR-23-W

MAWP: 135 psig @ 302°F (150°C) Material: AISI316L with PTFE lining

Registration numbers:

ntario

0F12610.51 British Columbia

0F12610.52 Alberta 0F12610.54 Manitoba

0F12610.50R2 Newfoundland & Labrador

CSA-0F12610.56R2 Quebec (by CSA)

CSA-0F12610.56R2 Saskatchewan (by CSA)

0F12610.57R2 New Brunswick 0F12610.58R2 Nova Scotia

0F12610.59R2 Prince Edward Island

0F12610.5YR2 Yukon

0F12610.5TR2 Northwest Territories

0F12610.5NR2 Nunavut

The registration number **0F12610.5C** shall be attached to the sensors to be delivered to Canada.

Veikko Kähkönen Approvals Engineer





345 Carlingview Drive Toronto, Ontario M9W 6N9 Tel : 416 734.3300 Fax: 416 231.1626 Toll Free: 1.877 682 8772

www.tssa.org

July 23, 2018

VEIKKO KAHKONEN K-PATENTS OY ELANNONTIE 5 VANTAA 01510 FI

Service Request Type: BPV-Fitting Registration

Service Request No.: 2325610

Your Reference No.: PR-23-GP, PR-23-SD, PR-23-W

Registered to: K-PATENTS OY

Dear VEIKKO KAHKONEN,

Technical Standards and Safety Authority (TSSA) is pleased to inform you that your submission has been reviewed and registered as follows:

CRN: 0F12610.5R2

Main Design No.: DIM421, MTG 434/D, DIM462, DIM450

Expiry Date: 23-Jul-2028

Please be advised that a valid quality control system must be maintained for the fitting registration to remain valid until the expiry date.

See one sheet of attachment to Statutory Declaration for Scope of registration. Material Alloy 20 (UNS N08020) and Hastelloy C276 (UNS N10276) and 316L.

A stamped copy of the approved registration and invoice for engineering services will be mailed to you shortly. Should you have any questions or require further assistance, however, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail customerservices@tssa.org. We will be happy to assist you. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Kaivan Kia P. Eng., PMP Mechanical Engineer, BPV

Tel.: 416-734-3457 Fax: 416-231-6183 Email: kkia@tssa.org

Putting Public Safety First



Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below



STATUTORY DECLARATION Registration of Fittings		
,Arto Hämäläinen, Director Production & Supply Chain		
(Name and Position, e.g. President, Plant Manager, Chief Engineer)		
of K-Patents Oy		
(Name of Manufacturer)		
Located at Elannontie 5, FI-01510 Vantaa, Finland	+358 207 291 570	
(Plent Address)	(Telephone No.) (Fax No.)	
do solemnly declare that the fittings listed hereunder, which are subject to the <i>Technical Standards and Safety Act</i> , Boilers and Pressure Vessels Regulation, comply with all of the requirements of		
(Title of recognized North American Standard) which specifies the dimensions, materials of construction, pressure/temperature rating	gs, identification marking the fittings and service;	
or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with ASME Sec VIII, Div. 1 2015 as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.		
I further declare that the manufacture of these fittings is controlled by a quality system r which has been verified by the following authority, DNV GL Business		
The items covered by this declaration, for which I seek registration, are category	F type fittings. In support of	
this application, the following information and/or test data are attached as follows:		
Drawings DIM421, MTG434, DIM462, DIM450; Pressure proof test reports (3)		
(drawings, calculations, test reports, etc.)		
Declared before me at Helsinki Finland in the		
the day of AD 20_18 LOCAL F	REGISTER GULLOS CE DU Mastraall ALBERTINICATU 25 0180 HELSINKUFINILAND TEL. +358 2 956 502721 3	
henkikirjoittaja, julkinen notaari häradsskrivare, notarius publicus District Ragistrar, Notary public Magistra		
(Signature)	(Signature of Declarer)	
FOR OFFICE USE ONLY To the best of my knowledge and belief, the application meets the requirements of the Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category	Landarda Boilers and Pressure Vessels Safety Program	
CRN: $OF126/0.5R2$	REGISTERED	
Registered by: KK	CRN: 0F12610,5R2	
Dated:	Date: July 23/18	
NOTE: This registration expires on: July 25/2028	Date: July & 2710	
PV 09553 (06/16) See notes on registration letter	for Scope & notes. KK	
	753/18	



Vantaa

May 8, 2018

Re: Renewal of CRN Registrations for K-Patents Process Refractometers PR-23-GP, PR-23-SD, PR-23-W

SCOPE OF REGISTRATION

- a) Refractometer PR-23-GP
 - Sensor model: PR-23-GP
 - MAWP: 149 psig @ 302 °F (150°C)
 - Design temperature: -40°F...+302°F (-40°C...+150°C)
 - Material specification: AISI316L, Alloy 20 or Hastelloy C276
- b) Refractometer PR-23-SD
 - Sensor model: PR-23-SD
 - MAWP: 257 psig @ 356 °F
 - Design temperature: -4°F...+356°F (-20°C...+180°C)
 - Material specification: SAF2205
- c) Refractometer PR-23-W
 - Sensor model: PR-23-W
 - MAWP: 135 psig @ 302 °F
 - <u>Design temperature:</u> -4°F...+302°F (-20°C...+150°C)
 - Material specification: AISI316L with PTFE lining

d) Applicable specifications

31.3 2016, lek

- Refractometer: ASME BPVC Sec. VIII Div.1 Ed. 2015

Veikko Kähkönen

Approvals Engineer

THIS IS PART OF CRN 0F12610.5R2 Technical Standards & Safety Authority Boilers & Pressure Vessels Safety Program

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