

REGISTRATION OF A PRESSURE FITTING DESIGN

January 19, 2026

6870830 Canada Inc o/a Titan Research Group
1920 Yonge Street
Suite 200
Toronto, ON
Canada
M4S 3E2

Attention: Rob McGregor

File Number: 103972

Re: Manufacturer: VEGA Grieshaber KG
Item: Measurement Devices
Catalog or Drawing: SOR-VF Rev. 3

TSASK Codes and Standards Compliance has registered the design listed above in accordance with The Boiler and Pressure Vessel Act and Regulations and CSA B51. The Canadian Registration Number (CRN) is:

0F1226.03

Expiry Date: 2034-04-05

Please note that every fitting shall be constructed in strict accordance with the registered design.

Fitting registrations are required to be resubmitted for validation after ten (10) years from the registration date in accordance with CSA B51, Clause 4.2.1.

Should you require anything further, please do not hesitate to contact the Codes and Standards Compliance Office at your convenience.

Yours truly,



Liting (Frank) Huang, P.Eng.

Codes and Standards Compliance

Remarks:

A valid quality control program must be maintained at the production facility for the fitting registration to remain valid until the expiry date.

Statutory Declaration (Registration of Fittings)

TSK-1008

I. Declaration Information

I, Holger Sack
Head of Product Compliance & Safety
(company title, e.g. vice president, plant manager, chief engineer)
 (must be in a position of authority in the manufacturing plant where the fitting is produced)
 of: VEGA Grieshaber KG
(name of manufacturer)

In this space, show facsimile of manufacturer's logo or trademark as it will appear on the fitting.



located at: Am Hohenstein 113 Schiltach, Germany 77761
(Plant Address – Apt/Street) (City,Prov) (Postal Code)

do solemnly declare that the fittings listed hereinunder, which are subject to the **Saskatchewan Boiler and Pressure Vessel 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 B31.3 - 2022 as supported by the attached 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 manufacturer of these fittings is controlled by a quality control program which has been verified by the following authority, DEKRA as being suitable for the manufacturer of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are Category F measurement devices

In support of this application, the following information, calculations and / or test data are attached:

Scope of Registration "SOR-VF-REV2": VEGAFLEX 81 _____ / 82
 _____ / 83 (_____ / 86 (_____

II. Declaration

DECLARED before me at Mason In the State of Ohio

this 9 day of May

Donald R Jackson
(print name)

Donald R Jackson
(Signature of Commissioner of Oaths)



DONALD R JACKSON
 Notary Public
 My Comm. Expires
 May 9, 2029

H. Sack
(Signature)

III. Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the **Boiler and Pressure Vessel Act** and CSA B51, Clause 4.2, and is accepted for registration in Category _____

(Registration Number)

(Date Registered – MM DD YYYY)
 (For the Chief Inspector)

(Expiry Date – MM DD YYYY)



Technical Safety Authority of Saskatchewan
 Registration No. DF1226.03
 File No. 103972
 Registered
 Date: January 19, 2026
 Expiry Date: April 05, 2034
 Codes & Standards Compliance Office


Statutory Declaration (Registration of Fittings)

TSK-1008

I. Declaration Information

I, Gretchen Lisi
Quality Manager
(company title, e.g. vice president, plant manager, chief engineer)
 (must be in a position of authority in the manufacturing plant where the fitting is produced)
 of: VEGA Americas Inc.
(name of manufacturer)

In this space, show facsimile of manufacturer's logo or trademark as it will appear on the fitting.



located at: 3877 Mason Research Pkwy Mason, OH 45036
(Plant Address - Apt/Street) (City,Prov) (Postal Code)

do solemnly declare that the fittings listed hereinunder, which are subject to the **Saskatchewan Boiler and Pressure Vessel 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 B31.3 - 2022 as supported by the attached 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 manufacturer of these fittings is controlled by a quality control program which has been verified by the following authority, EAGLE as being suitable for the manufacturer of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are Category F measurement devices

In support of this application, the following information, calculations and / or test data are attached:
 Scope of Registration "SOR-VF-REV2": VEGAFLEX 81 ([redacted] / 82 [redacted] / 83 [redacted] / 86 [redacted])

II. Declaration

DECLARED before me at Mason In the State of Ohio
 this 14 day of April, 2024
Donald R. Jackson (print name) [Signature] (Signature)
[Signature of Commissioner of Oaths] (Signature of Commissioner of Oaths)
 Donald R. Jacks
 My Commission Expires 5/9/2024

III. Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the **Boiler and Pressure Vessel Act** and CSA B51, Clause 4.2, and is accepted for registration in Category _____

(Registration Number) _____ (Date Registered – MM DD YYYY) _____ (Expiry Date – MM DD YYYY) _____
 (For the Chief Inspector)



Technical Safety Authority of Saskatchewan
 Registration No. 0F1226.03
 File No. 103972
 Registered
 Date: January 19, 2024
 Expiry Date: April 05, 2034
 Codes & Standards Compliance Office



SOR-VF, Rev.3- Scope of Registration Summary:

VEGAFLEX 81

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Product Assembly Type	Fitting Design	Fitting Description	Materials of °Construction [2E]	Maximum Design Pressure (bar) and Temperature (°C) [1]
VEGAFLEX 81	ASME B1.20.1 NPT Thread	Male NPT: ¾", 1, 1-½", 2", 3", 4"	UNS 531603, SA-479 (316L, 1.4404, 1.4435) UNS 530403, SA-479 (304L, 1.4307) UNS N06022, SB-574 (C22, 2.4602) UNS N04400, SB-564, (Monel 400, 2.4360)	Standard Version Up to 40 bar Maximum -40 °C up to 200 °C
	DIN 3852-A, G-Thread (Whitworth BSP)	Male G ¾, 1, 1-½, 2		
	ASME B1.20.1 NPT Thread	Male NPT: ¾", 1, 1-½"	UNS 531603, SA-479 (316L, 1.4404, 1.4435)	Cryogenic Version De-rated to 100 bar maximum -60 °C up to 150 °C
	DIN 3852-A, G-Thread (Whitworth BSP)	Male G ¾, 1, 1-½, 2		
Cable Probe: ø 2 mm, ø 4 mm	ASME B16.5	NPS 1", 1-½", 2", 2-½", 3", 3-1/2", 4", 6", 8" and 10" Type: RF, FF, RJF (Cryogenic Version)	Group 2.3, UNS 530403, SA-182 (F304L, 1.4307) Group 2.3, UNS 531603, SA-182 (F316L, 1.4404) Group 2.2, UNS 531600, SA-182 (F316, 1.4401) Group 3.8, UNS N06022, SB-462, (C22, 2.4602)	By Flange °Class (150 thru 2500) and Material De-rated to 100 bar Maximum -60 °C up to 150 °C
		NPS 1", 1-½", 2", 2-½", 3", 3-1/2", 4", 6", 8" and 10" Type: RF, FF, RJF (Standard Version)		By Flange °Class (150 thru 2500) and Material De-rated to 40 bar maximum -40 °C up to 200 °C
Rod Probe: ø 8 mm ø 12mm	ASME B16.5	NPS 1", 1-½", 2", 2-½", 3", 3-1/2", 4", 6", 8" and 10" Type: RF, FF, RJF (Standard Version)	Group 3.8, UNS N10276, SB-462, (C276, 2.4819) Group 3.4, UNS N04400, SB-564 (Monel 400, 2.4360)	Up to 40 Bar maximum -60C up to 150 °C
		Masoneilan (Proprietary Flange)		Masoneilan Type 1200 (Cryogenic Version)
Coax Probe: ø 21.3 mm, ø 42.2 mm	Masonellan (Proprietary Flange)	Masonellan Type 1200 (Standard Version)	Group 3.4, UNS N04400, SB-564 (Monel 400, 2.4360)	Up to 40 bar maximum -40 °C to 200 °C
	Fisher (Proprietary Flange)	Fisher 249C (Cryogenic Version)		Up to 40 bar maximum -60 °C up to 150 °C

SOR-VF, Rev.3- Scope of Registration Summary:


VEGAFLEX 81

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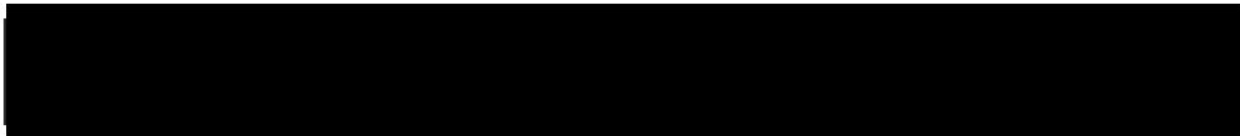



Product Assembly Type	Fitting Design	Fitting Description	Materials of °Construction [2E]	Maximum Design Pressure (bar) and Temperature (°C) [1]
VEGAFLEX 81  Cable Probe: ø 2 mm, ø 4 mm Rod Probe: ø 8 mm ø 12mm Coax Probe: ø 21.3 mm, ø 42.2 mm	Fisher (Proprietary Flange)	Fisher 249C (Standard Version)	Group 2.3, UNS S30403, SA-182 (F304L, 1.4307) Group 2.3, UNS S31603, SA-182 (F316L, 1.4404) Group 2.2, UNS S31600, SA-182 (F316, 1.4401) Group 3.8, UNS N06022, SB-462, (C22, 2.4602) Group 3.8, UNS N10276, SB-462, (C276, 2.4819) Group 3.4, UNS N04400, SB-564 (Monel 400, 2.4360)	Up to 40 bar maximum -40 °C up to 200 °C
		Fisher 249B/259B (Cryogenic Version)		Up to 40 bar maximum -20 °C to 200 °C
		Fisher 249B/259B (Standard Version)		Up to 40 bar maximum -20 °C to 200 °C

[1] NOTE: For ASME B16.5 flanges, maximum pressure of VEGAFLEX 81 is limited by flange Class and material, and shall not exceed 40 bar at any time for the standard version and shall not exceed 100 bar at any time for the Cryogenic Version.

[2] NOTE:

- A. Flange standards according to ASME B16.5 and proprietary flange styles Fisher 249B/259B, Fisher 249C, Fisher Special Return and Masoneilan Type 1200.
- B. ASME flange faces styles RF, FF and RJF.
- C. ASME flange sizes: 1" thru 10".
- D. ASME flange Classes: 150# thru 2500#.
- E. Materials for °Chemical Compatibility and pressure: 304L (1.4307), 316 (1.4401), 316L (1.4404 and 1.4435), Hastelloy C276 (2.4819), Hastelloy C-22 (2.4602) and Monel 400 (2.4360).




Product Assembly Type	Fitting Design	Fitting Description	Materials of °Construction [2E]	Maximum Design Pressure (bar) and Temperature (°C) [1]
VEGAFLEX 82  Cable Probe: ø 4mm, ø 6mm Rod Probe: ø 16mm	ASME B1.20.1 NPT Thread	Male NPT: ¾", 1", 1-½", 2"	UNS S31603, SA-479 (316L, 1.4404, 1.4435) UNS S30403, SA-479 (304L, 1.4307) UNS N06022, SB-574 (C22, 2.4602) UNS N04400, SB-564, (Monel 400, 2.4360)	Up to 40 bar maximum -40 °C up to 200 °C
	DIN 3852-A, G-Thread (Whitworth BSP)	Male G: ¾, 1, 1-½, 2		
	ASME B16.5	NPS 1", 1-½", 2", 2-½", 3", 3-1/2", 4", 6", 8" and 10" Type: RF, FF, RJF	Group 2.3, UNS S30403, SA-182 (F304L, 1.4307) Group 2.3, UNS S31603, SA-182 (F316L, 1.4404) Group 2.2, UNS S31600, SA-182 (F316, 1.4401) Group 3.8, UNS N06022, SB-462, (C22, 2.4602) Group 3.8, UNS N10276, SB-462, (C276, 2.4819) Group 3.4, UNS N04400, SB-564 (Monel 400, 2.4360)	By Flange °Class (150 thru 300) and Material De-rated to 40 bar maximum -40 °C up to 200 °C
	Masoneilan	Masoneilan Type 1200		
	Fisher (Proprietary Flange)	Fisher 249C		
Fisher 249B/259B				

SOR-VF, Rev.3- Scope of Registration Summary:

VEGAFLEX 81  / 82  / 83  /

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Product Assembly Type	Fitting Design	Fitting Description	Materials of °Construction [2E]	Maximum Design Pressure (bar) and Temperature (°C) [1]
VEGAFLEX 83  Cable Probe: ø 4mm Rod Probe: ø 8 mm ø 10 mm	ASME B16.5	NPS 1", 1-½", 2", 2-½", 3", 3-½", 4", 6", 8" and 10" Type:RF, FF	Group 2.3, UNS 530403, SA-182 (F304L, 1.4307) Group 2.3, UNS 531603, SA-182 (F316L, 1.4404) Group 2.2, UNS 531600, SA-182 (F316, 1.4401)	By Flange °Class (150 thru 300) and Material De-rated to 16 bar maximum -40°C up to 150 °C
	Masoneilan (Proprietary Flange)	1/2", 4", 6", 8" and 10"	Group 3.8, UNS N06022, SB-462, (C22, 2.4602) Group 3.8, UNS N10276, SB-462, (C276, 2.4819) Group 3.4, UNS N04400, SB-564 (Monel 400, 2.4360)	Up to 16 bar maximum -40°C up to 150 °C
	ASME BPE	Type:RF, FF	UNS 531603, SA-182 (F316L, 1.4404) UNS 531603, SA-240 (316L, 1.4435)	By Flange °Class (150 thru 300) and Material De-rated to 40 bar maximum -40 °C up to 200 °C

[1] NOTE: For ASME B16.5 flanges, maximum pressure of VEGAFLEX 83 is limited by flange Class and material, and shall not exceed 16 bar at any time.


[2] NOTE:

- A. Flange standards according to ASME B16.5 and proprietary flange style Masoneilan Type 1200.
- B. ASME flange faces styles RF and FF.
- C. ASME flange sizes from 1 thru 10 inch
- D. ASME flange Classes: 150# thru 300#.
- E. Materials for Chemical °Compatibility and pressure: 304L (1.4307), 316 (1.4401), 316L (1.4404 and 1.4435), Hastelloy °C276 (2.4819), Hastelloy C-22 (2.4602) and Monel 400 (2.4360).



Product Assembly Type	Fitting Design	Fitting Description	Materials of °Construction [2E]	Maximum Design Pressure (bar) and Temperature (°C) [1]
VEGAFLEX 86   Cable Probe: ø 2 mm ø 4 mm Rod Probe: ø 16 mm Coax Probe: ø 42.2 mm	ASME B1.20.1 NPT Thread	Male NPT: 1½"	UNS S31603, SA-479 (316L, 1.4404, 1.4435) UNS S30403, SA-479 (304L, 1.4307) UNS N06022, SB-574 (C22, 2.4602) UNS N04400, SB-564, (Monel 400, 2.4360)	400 bar maximum Standard Version -196...280 °C Hi-Temp Version -196...450 °C
	DIN 3852-A, G-Thread (Whitworth BSP)	Male G: 1½"		
	ASME B16.5	NPS 1", 1-½", 2", 2-½", 3", 3-1/2", 4", 6", 8" and 10" Type: RF, FF, RJF	Group 2.3, UNS S30403, SA-182 (F304L, 1.4307) Group 2.3, UNS S31603, SA-182 (F316L, 1.4404) Group 2.2, UNS S31600, SA-182 (F316, 1.4401)	By Flange °Class (150 thru 2500) and Material De-rated to 400 bar maximum Standard Version -196...280 °C Hi-Temp Version -196...450 °C
	Masoneilan (Proprietary Flange)	Masoneilan Type 1200	Group 3.8, UNS N06022, SB-462, (C22, 2.4602) Group 3.8, UNS N10276, SB-462, (C276, 2.4819) Group 3.4, UNS N04400, SB-564 (Monel 400, 2.4360)	De-rated to 40 bar maximum Standard Version -196...280 °C Hi-Temp Version -196...450 °C



Product Assembly Type	Fitting Design	Fitting Description	Materials of °Construction [2E]	Maximum Design Pressure (bar) and Temperature (°C) [1]
VEGAFLEX 86  Cable Probe: ø 2 mm ø 4 mm Rod Probe: ø 16 mm Coax Probe: ø 42.2 mm	Fisher (Proprietary Flange)	Fisher Type 249C	Group 2.3, UNS S30403, SA-182 (F304L, 1.4307) Group 2.3, UNS S31603, SA-182 (F316L, 1.4404)	De-rated to 40 bar maximum, Standard Version -196...280 °C Hi-Temp Version -196...450 °C
		Fisher Type 249B/259B	Group 2.2, UNS S31600, SA-182 (F316, 1.4401) Group 3.8, UNS N06022, SB-462, (C22, 2.4602)	De-rated to 40 bar maximum, Standard Version -196...280 °C Hi-Temp Version -196...450 °C
		Fisher Special Return (GE3218)	Group 3.8, UNS NI0276, SB-462, (C276, 2.4819) Group 3.4, UNS N04400, SB-564 (Monel 400, 2.4360)	De-rated to 16 bar maximum Standard Version -196...280 °C Hi-Temp Version -196...450 °C

[1] NOTE: For ASME B16.5 flanges, maximum pressure of VEGAFLEX 86 is limited by flange Class and material, and shall not exceed 400 bar at any time.

[2] NOTE:

- A. Flange standards according to ASME B16.5 and proprietary flange styles Fisher 249B/259B, Fisher 249C, Fisher Special Return and Masoneilan.
- B. ASME flange faces styles RF, FF and RJF.
- C. ASME flange sizes from 1 thru 10 inch
- D. ASME flange Classes: 150# thru 2500#.
- E. Materials for Chemical Compatibility and pressure: 304L (1.4307), 316 (1.4401), 316L (1.4404 and 1.4435), Hastelloy C276 (2.4819), Hastelloy C-22 (2.4602) and Monel 400 (2.4360)

Approved by: **Matthias Kunz**

Signed:

Title: **Product Safety Engineer**

Date approved: **April 26, 2024**