

April 10, 2022

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

The design submission, tracking number 2022-01569, originally received on March 22, 2022 was surveyed and accepted for registration as follows:

<b>CRN :</b> 0F12298.2	<b>Accepted on:</b> April 10, 2022
<b>Reg Type:</b> RENEWAL	<b>Expiry Date:</b> April 10, 2032
<b>Drawing No. :</b> HEDLAND FLOW METER CATALOGUE	
<b>Fitting type:</b> FLOW METER	
Design registered in the name of : BADGER METER INC	

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

*\*\* This is a 10-years renewal, there is no scope change, nor any design change*

*\*\* See attached for Scope of Registration*

*\*\* This registration excludes design conditions greater than 204 C. We have taken the liberty to correct the Hedland Flow Meter Catalogue and removed the Intermittent Temperature Range. Please update your documentation accordingly.*

*As indicated on AB-41 Statutory Declaration form and submitted documentation, the code of construction is ASME B31.3.*

- It is our understanding that the fitting(s), included as the scope of this submission, that is(are) subject to the Safety Codes Act shall comply with the requirements of the indicated Standard or Code of Construction on the AB-41 Statutory Declaration as supported by the attached data which identifies the dimensions, materials of construction, press./temp. ratings and the basis for such ratings, and the identification marking of the fittings.*
- 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.



the pressure equipment safety authority

9410 - 20 Ave N.W.  
Edmonton, Alberta, Canada T6N 0A4  
Tel: (780) 437-9100 / Fax: (780) 437-7787

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April 10, 2022

DOP Cert. No. D00007936

**STATUTORY DECLARATION**  
**Registration of Fittings**  
Single or Multiple Fitting Designs within one Fitting Category

I, Michael Wusterbarth, Director - Engineering Flow Instrumentation  
(name of applicant) (position title) (must be in a position of authority)  
of Badger Meter, Inc.  
(name of manufacturer)  
located at 8635 Washington Ave., Racine, WI 53406 USA  
(plant address)

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

**\*\* See attached**

do solemnly declare that the fittings listed hereunder, which are subject to the Safety Codes Act (select only 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 & NFPA T2.3.R1 as supported by the  
(title of code of construction or other applicable document)  
attached data which identifies the dimensions, materials of construction, pressure/temperature ratings  
and the basis for such ratings, and the identification marking of the fittings.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified as described in the below Table as being suitable for the manufacturing of these fittings to the stated standard, regulation, code, guideline or other applicable document. The fittings covered by the declaration for which I seek registration are as provided in the Supplementary Sheet(s) attached.

**Quality Program Verification and Manufacturing Sites**

A copy of the Quality Certificate from each manufacturing site must be included

Item #	Product Description, Model or Series	Quality Program	Scope of Certification	Expiry Date	Verifying Organization	Location(s) Plant Name and address
1.	Hedland Flow Meters	ISO9001: 2015	Quality Management System	2-14-22	BSI ASSURANCE	Bager Meter, Inc. Racine, WI plant
2.						

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

Calculation BP628/8H; Hedland Canadian Registration Flow Meter Catalog; Model assembly and detail parts drawings reference OF12298.2 & OF14982.5

*Todd A. Paul*  
(Signature of the Declarer)

12-13-21  
(Date)

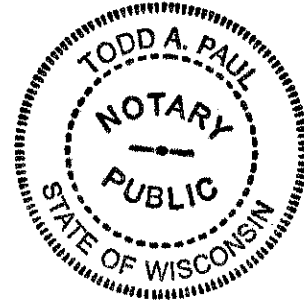
DECLARED before me at RACINE in the WISCONSIN of USA  
(city) (province, territory, or state)

this 13 day of DECEMBER, 2021  
(Month) (Year)

(print) TODD A. PAUL  
(a Commissioner of Oaths or Notary Public)

(sign) *Todd A. Paul*  
(a Commissioner of Oaths or Notary Public)

9-19-22  
(expiry date (mm/dd/yy))



Commissioner of Oaths / Notary Public in and for: WISCONSIN  
(province, territory, or state)

**For ABSA Office Use Only:**

NOTES: \*\* See attached Scope of Registration.

To the best of my knowledge and belief, the application meets the requirements of the Safety Codes Act and CSA Standard B51, Part 1, Clause 4.2, and is accepted for registration in Category \_\_\_\_\_

CRN: \_\_\_\_\_

Registered Date: \_\_\_\_\_

Expiry Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
(Signature of the Administrator/SCO)

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

2022-01569

**ABSA**

SAFETY CODES ACT - PROVINCE OF ALBERTA

**ACCEPTED: OF12298.2**

**See acceptance letter for conditions of registration.**

Date: 2022-04-10 By: *Ashling Dick*  
ASHLING DICK, P. Eng.  
DOP: D00007936

This stamp and signature have been affixed electronically to this registered design as required by Section 20(1) of the Pressure Equipment Safety Regulation, in accordance with the Electronic Transactions Act.



# Hedland®

Variable Area Flow Meters

**RACINE FEDERATED INC. - HEDLAND DIVISION****HEDLAND VARIABLE AREA FLOW METER HOUSINGS. SUMMARY OF ADDITIONAL PRESSURE TESTING****TESTED HOUSINGS WITH THIRD PARTY VERIFICATION**

	HOUSING BODY	HOUSING CAP	BURST WALL O.D.	BURST WALL I.D.	PORT TYPE	FAILURE MODE	BURST PRESSURE
H2-1-4HSG-NPT	HN100009	HN101314	0.808*	0.534*	¼ NPTF	O-RING SEAL	39,308 PSI
H6-1-2HSG-NPT	HN100021	HN101300	1.305	1.001	½ NPTF	LONG WALL BURST	22,503 PSI
H7-3-4HSG-NPT	HN100033	HN101296	1.688	1.378	¾ NPTF	LONG WALL BURST	17,224 PSI
H8-1-2HSG-NPT	HN100069	HN101355	2.871	2.378	1½ NPTF	LONG WALL BURST	14,665 PSI

\*BASED UPON THE OTHER SAMPLES THIS IS THE ASSUMED BURST WALL IF THE O-RING HAD SURVIVED

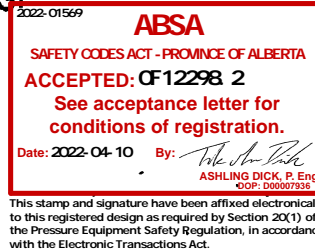
**SIMILAR HOUSINGS BURST RATED BY ANALOGY**

	HOUSING BODY	HOUSING CAP	BURST WALL O.D.	BURST WALL I.D.	PORT TYPE	ANALOGIZED FAILURE MODE	BURST RATING
H2-1-4HSG-SAE	HN100013	HN101317	0.808	0.534	#6 SAE	LONG WALL BURST	>39,308 PSI
H6-1-2HSG-SAE	HN100025	HN101303	1.305	1.001	#10 SAE	LONG WALL BURST	22,503 PSI
H6-1-4HSG-NPT	HN100272	HN100284	1.305	1.001	¼ NPTF	LONG WALL BURST	22,503 PSI
H6-1-4HSG-SAE	HN100276	HN100288	1.305	1.001	#6 SAE	LONG WALL BURST	22,503 PSI
H7-3-4HSG-SAE	HN100037	HN101297	1.688	1.378	#12 SAE	LONG WALL BURST	17,224 PSI
H7-1-0HSG-NPT	HN100045	HN101323	1.688	1.378	1 NPTF	LONG WALL BURST	17,224 PSI
H7-1-0HSG-SAE	HN100049	HN100080	1.688	1.378	#16 SAE	LONG WALL BURST	17,224 PSI
H8-1-4HSG-NPT	HN100057	HN101352	2.871	2.378	1¼ NPTF	LONG WALL BURST	14,665 PSI
H8-1-4HSG-SAE	HN100061	HN101353	2.871	2.378	#20 SAE	LONG WALL BURST	14,665 PSI
H8-1-2HSG-SAE	HN100073	HN101356	2.871	2.378	#24 SAE	LONG WALL BURST	14,665 PSI

**CONCLUSION:**

THE ANALOGIZED HOUSINGS ARE IDENTICAL TO THE TESTED HOUSINGS IN THE AREA OF THE FAILURE, THE DIFFERENCES ARE IN THE PORT TYPES.

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**THIS IS PART OF**  
**CRN 0F14981.5**  
 Technical Standards & Safety Authority  
 Boilers & Pressure Vessels  
 Safety Program