



TECHNICAL STANDARDS & SAFETY AUTHORITY
14TH FLOOR CENTRE TOWER-3300 BLOOR STREE
TORONTO ON M8X 2X4

Date: October 9, 2009
Account #: 35231
Journal #: 47786
Our File #: 4122432

Attn: TANYA FRANCIS

Re: Application for Design Registration

The design, as detailed in your, TSSA Service Request No: 175144, for a Fitting is accepted for registration as follows:

Registered To: ASHCROFT INC **CRN:** 0F12994.51(ADD1)

Drawing #: SEE ATTACHMENTS

Drawing Revision: -

Conditions Of Registration:

1.CRN updated to include Diaphragm Seals 105 & 205. See attachments for scope of this CRN.

	<u>Amount</u>	<u>GST</u>	<u>Total</u>
Fee for reviewing your design:	\$216.00	\$10.80	\$226.80
Total:	\$216.00	\$10.80	\$226.80
Less amount received with submission:			\$0.00
An invoice for \$226.80 will follow.			\$226.80

Contact me if you have any questions.

ROMEO TUAZON
(778) 396-2031
Romeo.Tuazon@safetyauthority.ca
Design Engineer

cc:



250 East Main Street, Stratford, CT, USA 06614. Tel 203.378.8281. Fax 203.385.0408.

MAWP-02

Ashcroft Diaphragm Seal Type	Size (in) (1)	Diaphragm Material (4)	Bottom Housing Material (4)	MAWP at ambient (psi or ASME B16.5 class #) (3)			Maximum Design Temperature T (°F)	MAWP at Maximum Design Temperature (psi or ASME B16.5 class #) (3)			Codes of Construction
				Seal A	Seal B	Seal C		Seal A	Seal B	Seal C	
100, 101, 104, 107, 105	1/4, 1/2, 3/4, 1, 1.5, 3, 4	Metallic	Metallic	1250			750	730			ASME B31.1
			PVC or Kynar	200			74, 125, 150	200, 125, 80 (2)			
Metallic	150#				750	150#					
Teflon	290				150	270					
102, 103	1/2, 3/4, 1, 1.5, 2, 3	Metallic	PVC or Kynar	75			100	75			
	1, 1.5, 2										
200, 201, 204, 207, 205	1/4, 1/2, 3/4, 1, 1.5, 3, 4	Metallic	Metallic			1250	750		730	ASME B31.3	
		Teflon				1250	400		875		
		Viton				500	350		365		
		Kalrez			500	212		425			
		Metallic	PVC or Kynar			200	74, 125, 150		200, 125, 80 (2)		
		Nonmetallic				200	74, 125, 150		200, 125, 80 (2)		
202, 203	1/2, 3/4, 1, 1.5, 2, 3	Metallic	Metallic			150#, 300#, 600#	750		150#, 300#, 600#	ASME B16.5	
		Teflon					400				
		Viton				150#	350		150#		
		Kalrez					212				
	1, 1.5, 2	Metallic	Teflon			290	150		270	ASME Boiler & Pressure Vessel Code	
		Nonmetallic				290			270		
		Metallic	PVC or Kynar			200	74, 125, 150		200, 125, 80 (2)		
		Nonmetallic				75	100		75		
300, 301, 304	1/4, 1/2, 3/4, 1, 1.5	Teflon	Metallic			1250	400		875		CSA C22.2 61010-1 ANNEX G
		Viton				500	350		365		
		Kalrez				500	212		425		
		Nonmetallic	PVC or Kynar			200	74, 125, 150		200, 125, 80 (2)		
302, 303	1/2, 3/4, 1, 1.5, 2, 3	Teflon	Metallic				400			ASME B16.5	
		Viton				150#	350		150#		
		Kalrez					212				
	1.5, 2	Nonmetallic	Teflon			290	150		270		
		Nonmetallic		PVC or Kynar			75	100			75
500, 501	1/4, 1/2, 3/4, 1	Metallic	Metallic			500		290	CSA C22.2 61010-1 ANNEX G		
400, 401						4400		2580			
402, 403	1/2, 3/4, 1, 1.5, 2, 3					150#, 300#, 600#				150#, 300#, 600#	

Notes:

- (1) Types 104, 204, and 304 not available in 1.5". Types 107 and 207 also available in 2". (consult factory). Only Type 105, 205 available in 3" and 4"
- (2) Maximum Allowable Working Pressure (MAWP) at respective Maximum Design Temperature. (consult factory)
- (3) Seal A - Threaded capsule diaphragm; Seal B - Welded and clamped or welded only diaphragm; Seal C - Bonded/Welded and Clamped or Clamped only diaphragm (consult factory)
- (4) Nickel constructions excluded. Metallic materials UNS S31603 equivalent or stronger are qualified under this CRN registration. (consult factory)

ASHCROFT INC
250 MAIN STREET E
STRATFORD CT 6614
USA

Date: January 30, 2015

Account #: 59005

Journal #: 61544

Our File #: 5526727

Attn: JEREMY PAYNE

Re: Application for Design Registration

The design, as detailed in your, Diaphragm Seals as per scope of reg, for a Fitting is accepted for registration as follows:

Registered To: ASHCROFT INSTRUMENTS GMBH **CRN:** 0F12994.51

Drawing #: Product Bulletin, Scope of Reg

Drawing Revision: 0

Conditions Of Registration:

Registration of Diaphragm Seals as per scope of registraton sheets (2 pages).

This design was registered based on a technical review performed by the province of initial registration in accordance with the Association of Chief Inspectors policy on reciprocal recognition of design review.

Reviewer's Notes:

As required by CSA B51 4.2.1, this registration expires on May 01, 2019. This CRN is valid until the expiry date as long as the Manufacturer maintains a valid quality control program verified by an acceptable third-party agency until that date. Should the certification of the quality control program lapse before the expiry date, this registration shall become void.

Contact me if you have any questions. The invoice for registration will be forwarded under separate cover.

SHARON PETERS

boiler.designregistration@safetyauthority.ca
Design Administration

cc:



250 Main Street, Stratford, CT 06614-5145, USA

Scope of Registration Summary – Diaphragm Seals

Product	Type	Process Connection Size (in) [1]	Design Pressure (psi) [2]	Design Temp. (°F) [2]	Weakest Housing & Diaphragm Material [4, 5]	Code of Construction
310	All welded	1/8, 1/4, 3/8, 1/2, 3/4, 1 male	2500	-70 to 750	316L UNS S31603	ASME B31.3
315		1/4, 3/8, 1/2 female				
311		1/4, 1/2, 3/4, 1 male or female	1000			
312		1/4, 1/2 female				
510		1/2 male	1500 or 5000			
511						
702	Flanged	1/2, 3/4, 1, 1 1/2, 2, 3	ASME B16.5 150# to 600#			
703						
740	Threaded	1/4, 1/2, 3/4, 1	750			
741						
DF	Welded flanged	2, 3, 4	ASME B16.5 150# to 2500#	Diaphragm & Flange: 316L UNS S31603		
DFE	Welded flanged with internal diaphragm	1, 1 1/2	ASME B16.5 150# to 300#	Hub: 316Ti UNS S31635		

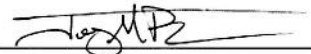
NOTES

- [1] Except for flanged models, connections are NPT type per ASME B1.20.1.
- [2] Design pressure given at 100°F, for de-ratings see B16.5. Minimum design temperature limited by fill fluid.
- [3] Models 315, 312, 511, 703, 741 supplied with flushing connection.

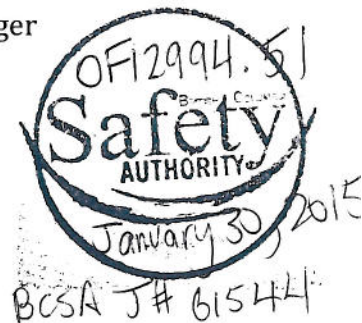
The undersigned hereby declares that that above is accurate and representative,

Name: Jeremy M. Payne

Title: Materials and Testing Eng. Manager

Signature: 

Date: December 4th, 2014





250 Main Street, Stratford, CT 06614-5145, USA

Scope of Registration Summary - Diaphragm Seals

Product	Type	Process Connection Size (in) [1]	Design Pressure (psi) [2]	Design Temp. (°F) [2]	Weakest Housing & Diaphragm Material [4, 5]	Code of Construction
310	All welded	1/8, 1/4, 3/8, 1/2, 3/4, 1 male	2500	-70 to 750	316L	ASME B31.3
315		1/4, 3/8, 1/2 female				
311		1/4, 1/2, 3/4, 1 male or female	1000			
312		1/4, 1/2 female				
510		1/2 male	1500 or 5000			
511						
702	Flanged	1/2, 3/4, 1, 1 1/2, 2, 3	ASME B16.5 150# to 600#			
703						
740	Threaded	1/4, 1/2, 3/4, 1	750			
741						
DF	Welded flanged	2, 3, 4	ASME B16.5 150# to 2500#		Diaphragm & Flange: 316L UNS S31603	
DFE	Welded flanged with internal diaphragm	1, 1 1/2	ASME B16.5 150# to 300#			


NOTES

- [1] Except for flanged models, connections are NPT type per ASME B1.20.1.
- [2] Design pressure given at 100°F, for de-ratings see B16.5. Minimum design temperature limited by fill fluid.
- [3] Models 315, 312, 511, 703, 741 supplied with flushing connection.

The undersigned hereby declares that that above is accurate and representative,

Name: Jeremy M. Payne

Title: Materials and Testing Eng. Manager

Signature: 

Date: December 4th, 2014

