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July 10, 2018

SURESH BALACHANDRAN
VALVTECHNOLOGIES INC
5904 BINGLE
HOUSTON TX 77092
US

Service Request Type.: BPV-National AB
Service Request No.: 2317416
Your Reference No.:
Registered to.: VALVTECHNOLOGIES INC

Dear SURESH BALACHANDRAN,

Please find enclosed the original response from AB, registered under the CRN No.: 0C11555.52.

As all jurisdictional fees are handled by the Technical Standards and Safety Authority (TSSA), you do not pay any jurisdictions directly.

Should you have any questions or require further assistance, I will be happy to assist you.
For general enquiries, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail customerservices@tssa.org. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Joanna Karpinski
Tel: 416-734-3377
Fax: 416-231-6183
Email: jkarpinski@tssa.org



the pressure equipment safety authority

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

June 07, 2018

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

Email: JKarpinski@tssa.org

The design submission, tracking number 2018-03575, originally received on June 04, 2018 was surveyed and accepted for registration as follows:

CRN : 0C11555.52 **Accepted on:** June 07, 2018
Reg Type: NEW DESIGN **Expiry Date:** May 16, 2028
Drawing No. : SEE ATTACHED SCOPE OF REGISTRATION
Fitting type: BALL VALVES: V1-1, V1-2, V1-3, V1-4
Design registered in the name of : VALVTECHNOLOGIES INC

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

*** This registration covers those valves that are in strict accordance with ASME B16.34, in regards to materials, dimensions, marking, pressure and temperature ratings etc.

*** The Scope of this Registration include:

- model V1-1: 1/2" to 4"
- model V1-2: 1" to 36"
- model V1-3: 1/2" to 2"
- model V1-4: 4" to 30"

As indicated on AB-41 Statutory Declaration form and submitted documentation, the code of construction is B16.34.

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,



the pressure equipment safety authority

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

June 07, 2018

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



**STATUTORY DECLARATION
Registration of Fittings**

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



I, Suresh Balachandran,

Sr. QAE Manager

(company title, e.g. vice president, plant manager, chief engineer) (must be in a position of authority)

of ValvTechnologies, Inc.

(name of manufacturer)

located at 5904 Bingle Road, Houston, TX 77092, USA

(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 ASME B16.34 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 _____ 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 manufacture of these fittings is controlled by a quality control program which has been verified by the following authority, DNV GL 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 Mod- V1-1, V1-2 & V1-3

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

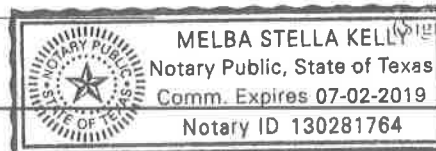
Wall thickness table, scope of registration, sample GA drawings, Product brochures.

*

DECLARED before me at ValvTechnologies, in the Houston, Texas of USA

this 16th day of March, 2018
(Month) (Year)

(print) Melba Stella Kelly
(sign) Melba Stella Kelly
A Commissioner for Oaths



(Signature of Applicant)

For Office Use Only

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 'C'

Registration Number: 0 C 1 1 5 5 5 . 5 2

Date Registered: JUN 07 2018

T.M. (ASHLING) DICK
(For the Administrator Chief Inspector of Alberta)

Expiry Date: May 16, 2028.

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 Border Discipline

* See scope of registration, model - V1-1, V1-2, V1-3, V1-4 AD.

V1-1 Forged High Pressure Ball Valve NPS 1/2" – 4"

Min. wall thickness.

Purpose of this chart is to tabulate Min. wall thickness for CRN certification requirements

Valve Size	Port Designation	Pressure Class																				
		900# ⁽¹⁾			1500# ⁽¹⁾			2250# ⁽²⁾			2500# ⁽¹⁾			3100# ⁽²⁾			4000# ⁽²⁾			4500# ⁽¹⁾		
		Bore	t _{min}	t _{actual}	Bore	t _{min}	t _{actual}	Bore	t _{min}	t _{actual}	Bore	t _{min}	t _{actual}	Bore	t _{min}	t _{actual}	Bore	t _{min}	t _{actual}	Bore	t _{min}	t _{actual}
0.50	FP	0.63	0.18	0.59	0.63	0.21	0.59	0.63	0.29	0.59	0.63	0.31	0.59	0.63	0.39	0.59	0.63	0.52	0.59	0.63	0.59	0.59
0.50	RP	0.38	0.15	0.29	0.38	0.17	0.29	0.38	0.22	0.29	0.38	0.23	0.29	0.38	0.28	0.29	0.38	0.35	0.43	0.38	0.39	0.43
0.50	STD	0.38	0.15	0.29	0.38	0.17	0.29	0.38	0.22	0.29	0.38	0.23	0.29	0.38	0.28	0.29	0.38	0.35	0.43	0.38	0.39	0.43
0.75	FP	0.63	0.18	0.59	0.63	0.21	0.59	0.63	0.29	0.59	0.63	0.31	0.59	0.63	0.39	0.59	0.63	0.52	0.59	0.63	0.59	0.59
0.75	RP	0.38	0.15	0.29	0.38	0.17	0.29	0.38	0.22	0.29	0.38	0.23	0.29	0.38	0.28	0.29	0.38	0.35	0.43	0.38	0.39	0.43
0.75	STD	0.38	0.15	0.29	0.38	0.17	0.29	0.38	0.22	0.29	0.38	0.23	0.29	0.38	0.28	0.29	0.38	0.35	0.43	0.38	0.39	0.43
1.00	FP	0.63	0.18	0.59	0.63	0.21	0.59	0.63	0.29	0.59	0.63	0.31	0.59	0.63	0.39	0.59	0.63	0.52	0.59	0.63	0.59	0.59
1.00	RP	0.63	0.18	0.59	0.63	0.21	0.59	0.63	0.29	0.59	0.63	0.31	0.59	0.63	0.39	0.59	0.38	0.35	0.43	0.38	0.39	0.43
1.00	STD	0.63	0.18	0.59	0.63	0.21	0.59	0.63	0.29	0.59	0.63	0.31	0.59	0.63	0.39	0.59	0.38	0.35	0.43	0.38	0.39	0.43
1.50	FP	1.06	0.25	0.52	1.06	0.28	0.52	1.06	0.40	0.52	1.06	0.44	0.52	1.06	0.57	0.94	1.06	0.77	0.94	1.06	0.88	0.94
1.50	RP	0.63	0.18	0.59	0.63	0.21	0.59	0.63	0.29	0.59	0.63	0.31	0.59	0.63	0.39	0.59	0.63	0.52	0.59	0.63	0.59	0.59
1.50	STD	0.63	0.18	0.59	0.63	0.21	0.59	0.63	0.29	0.59	0.63	0.31	0.59	0.63	0.39	0.59	0.63	0.52	0.59	0.63	0.59	0.59
2.00	FP	1.50	0.28	1.00	1.50	0.38	1.00	1.50	0.55	1.00	1.50	0.61	1.00	1.50	0.81	1.00	1.50	1.11	1.50	1.50	1.28	1.50
2.00	RP	1.06	0.25	0.52	1.06	0.28	0.94	1.06	0.40	0.94	1.06	0.44	0.94	1.06	0.57	0.94	1.06	0.77	0.94	1.06	0.88	0.94
2.00	STD	1.06	0.25	0.52	1.06	0.28	0.94	1.06	0.40	0.94	1.06	0.44	0.94	1.06	0.57	0.94	0.63	0.52	0.59	0.63	0.59	0.59
2.50	FP	1.50	0.28	1.00	1.50	0.38	1.00	1.50	0.55	1.00	1.50	0.61	1.00	1.50	0.81	1.00	1.50	1.11	1.50	1.50	1.28	1.50
2.50	RP	1.06	0.25	0.52	1.06	0.28	0.94	1.06	0.40	0.94	1.06	0.44	0.94	1.06	0.57	0.94	1.06	0.77	0.94	1.06	0.88	0.94
2.50	STD	1.06	0.25	0.52	1.06	0.28	0.94	1.06	0.40	0.94	1.06	0.44	0.94	1.06	0.57	0.94	0.63	0.52	0.59	0.63	0.59	0.59
3.00	FP	2.12	0.33	0.84	2.12	0.49	0.84	2.12	0.74	0.84	2.12	0.83	0.84	2.12	1.11	1.77	2.12	1.53	1.77	2.12	1.77	1.77
3.00	RP	1.50	0.28	1.00	1.50	0.38	1.00	1.50	0.55	1.00	1.50	0.61	1.00	1.50	0.81	1.00	1.50	1.11	1.50	1.50	1.28	1.50
3.00	STD	1.50	0.28	1.00	1.50	0.38	1.00	1.50	0.55	1.00	1.50	0.61	1.00	1.50	0.81	1.00	1.06	0.77	0.94	1.06	0.88	0.94
4.00	FP	3.50	0.47	1.56	3.50	0.75	1.56	3.50	1.16	1.56	3.50	1.29	1.56	2.12	1.11	1.77	2.12	1.53	1.77	2.12	1.77	1.77
4.00	RP	2.12	0.33	0.84	2.12	0.49	0.84	2.12	0.74	0.84	2.12	0.83	0.84	2.12	1.11	1.77	1.50	1.11	1.50	1.50	1.28	1.50
4.00	STD	1.50	0.28	1.00	1.50	0.38	1.00	1.50	0.55	1.00	1.50	0.61	1.00	1.50	0.81	1.00	1.06	0.77	0.94	1.06	0.88	0.94

Notes: (1) Standard Class V1-1 B16.34 2017 Minimum Wall Thickness

(2) Intermediate rating per B16.34 paragraph 6.1.4

ABSA

SAFETY CODES ACT - PROVINCE OF ALBERTA

REGISTRATION OF FITTINGS

REGISTRATION NO. **0C11555.52**

DWG. NO. or CAT. NO. *See Sign of Registration*

TYPE OF FITTINGS *Ball valves: V1-1, V1-2, V1-3, V1-4*

JUN 07 2018 INITIALS *TMD*

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

JUN 07 2018

V1-2 Cast Flanged Ball Valve NPS 1"-36"

Min. wall thickness.

Purpose of this chart is to tabulate Min. wall thickness for CRN certification requirements

Valve Size	Port Designation	Pressure Class								
		150#			300#			600#		
		Bore [in]	t _{min}	t _{actual}	Bore [in]	t _{min}	t _{actual}	Bore [in]	t _{min}	t _{actual}
1"	FP	1.06	0.16	0.20	1.06	0.17	0.39	1.06	0.19	0.39
	RP	0.63	0.13	0.14	0.63	0.14	0.14	0.63	0.15	0.15
1.5"	FP	1.50	0.19	0.33	1.50	0.21	0.25	1.50	0.22	0.32
	RP	1.06	0.16	0.39	1.06	0.17	0.39	1.06	0.19	0.39
2"	FP	2.13	0.22	0.32	2.13	0.24	0.34	2.13	0.25	0.34
	RP	1.50	0.19	0.33	1.50	0.21	0.25	1.50	0.22	0.32
3"	FP	3.06	0.24	0.40	3.06	0.28	0.31	3.06	0.31	0.31
	RP	2.13	0.22	0.32	2.13	0.24	0.34	2.13	0.25	0.34
4"	FP	4.06	0.28	0.38	4.06	0.31	0.63	4.06	0.38	0.46
	RP	3.06	0.24	0.40	3.06	0.28	0.31	3.06	0.31	0.31
6"	FP	6.06	0.28	0.40	6.06	0.38	0.41	6.06	0.52	0.55
	RP	4.06	0.26	0.34	4.06	0.31	0.63	4.06	0.38	0.46
8"	FP	8.06	0.32	0.45	8.06	0.44	0.67	8.06	0.65	0.65
	RP	5.13	0.27	0.40	6.06	0.38	0.41	6.06	0.52	0.55
10"	FP	10.06	0.35	0.37	10.06	0.51	0.53	10.06	0.79	0.79
	RP	7.13	0.30	0.45	8.06	0.44	0.67	8.06	0.65	0.65
12"	FP	12.06	0.38	0.50	12.06	0.58	0.75	12.06	0.92	1.00
	RP	8.06	0.32	0.50	10.06	0.51	0.53	10.06	0.79	0.79
14"	FP	12.06	0.38	0.50	12.06	0.58	0.75	12.06	0.92	1.00
	RP	10.06	0.35	0.70	10.06	0.51	0.53	10.06	0.79	0.79
16"	FP	15.25	0.43	0.68	15.25	0.68	0.97	12.25	0.94	1.25
	RP	10.06	0.35	0.70	12.06	0.58	0.75	13.06	0.99	1.00
18"	FP	17.25	0.47	0.75	15.25	0.68	0.94	15.25	1.14	1.63
	RP	13.25	0.40	0.75	13.25	0.62	0.75	13.25	1.00	-
20"	FP	19.25	0.50	1.33	17.25	0.75	0.95	17.25	1.27	1.38
	RP	15.25	0.43	0.94	15.25	0.68	0.94	15.25	1.14	1.63
22"	FP	21.25	0.53	-	19.25	0.82	1.33	19.25	1.41	-
	RP	15.25	0.43	0.94	15.25	0.68	0.94	17.25	1.27	1.38
24"	FP	23.25	0.56	1.18	21.25	0.88	-	21.25	1.57	-
	RP	17.25	0.47	0.75	17.25	0.75	0.95	17.25	1.27	1.38
26"	FP	25.25	0.59	-	23.25	0.95	1.15	23.25	1.68	-
	RP	19.25	0.50	1.33	19.25	0.82	1.33	19.25	1.41	-
28"	FP	27.25	0.62	1.44	25.25	1.01	2.13	25.25	1.81	-
	RP	21.25	0.53	-	21.25	0.88	-	21.25	1.57	-
30"	FP	29.25	0.65	-	27.25	1.08	1.44	27.25	1.95	-
	RP	23.25	0.56	1.18	23.25	0.95	1.15	23.25	1.68	-
32"	FP	31.25	0.68	1.52	29.25	1.15	-	29.25	2.08	-
	RP	-	-	-	-	-	-	-	-	-
34"	FP	33.25	0.71	-	31.25	1.21	1.52	31.25	2.21	-
	RP	-	-	-	-	-	-	-	-	-
36"	FP	35.25	0.75	-	33.25	1.28	-	33.25	2.35	-
	RP	-	-	-	-	-	-	-	-	-

- Notes: 1. t_{min} = wall thickness (inches) per Table 3 of ASME B16.34 2017
 2. t_{actual} = design wall thickness at the thinnest point



JUN 07 2018

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V1-3 Investment Cast ball Valve (Class 150, 300, 600) Min. wall thickness.

Purpose of this chart is to tabulate Min. wall thickness for CRN certification requirements

Wall thickness	NPS 1/2"			NPS 3/4"			NPS 1"			NPS 1-1/2"			NPS 2"		
	Port Designation			Port Designation			Port Designation			Port Designation			Port Designation		
	STD	RP	FP	STD	RP	FP	STD	RP	FP	STD	RP	FP	STD	RP	FP
Port	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	1.06	0.63	1.06	1.50	1.06	1.50	2.13
Body $t_{min.}$	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.19	0.15	0.19	0.22	0.19	0.22	0.25
Body t_{actual}	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.40	0.15	0.40	0.34	0.40	0.34	0.26
End cap $t_{min.}$	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.19	0.15	0.19	0.22	0.19	0.22	0.25
End cap t_{actual}	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.40	0.15	0.40	0.34	0.40	0.34	0.26

Notes:

1. This applies to SW, BW and NPT end valves only
2. $t_{min.}$ = wall thickness (inches) per Table 3 of ASME B16.34
3. t_{actual} = design wall thickness at the thinnest point

JUN 07 2018

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V1-4 Cast Flanged Ball Valve NPS 4"-36"

Min. wall thickness.

Purpose of this chart is to tabulate Min. wall thickness for CRN certification requirements

Valve Size	Port Designation	Pressure Class											
		900#			1500#			2500#			4500#		
		Bore (in)	t _{min}	t _{actual}	Bore (in)	t _{min}	t _{actual}	Bore (in)	t _{min}	t _{actual}	Bore (in)	t _{min}	t _{actual}
4"	FP	3.50	0.47	1.38	3.50	0.75	1.44	3.50	1.29	1.38	2.13	1.77	1.84
	RP	2.13	0.32	1.12	2.13	0.48	0.67	2.13	0.82	1.21	1.50	1.28	2.25
6"	FP	5.13	0.63	1.97	5.13	1.02	1.94	3.50	1.29	1.53	3.50	2.85	2.79
	RP	3.50	0.47	1.53	3.50	0.75	1.53	2.13	0.82	1.21	2.13	1.77	1.84
8"	FP	7.13	0.84	2.31	6.06	1.22	2.14	5.13	1.82	1.93	5.13	4.11	-
	RP	5.13	0.63	2.24	5.13	1.03	3.19	3.50	1.29	1.53	3.50	2.85	-
10"	FP	8.06	0.95	3.08	8.06	1.60	2.61	7.13	2.53	3.81	6.06	4.86	-
	RP	7.13	0.84	3.68	7.13	1.41	3.69	6.06	2.23	2.52	5.13	4.11	-
12"	FP	10.06	1.15	2.03	10.06	1.95	1.95	8.06	2.85	4.26	7.13	5.69	-
	RP	8.06	0.95	3.29	8.06	1.60	-	7.13	2.63	4.06	6.06	4.86	-
14"	FP	12.06	1.38	2.23	10.06	1.95	2.63	8.06	2.85	4.24	8.06	6.42	-
	RP	8.06	0.95	-	8.06	1.60	-	7.13	2.53	-	7.13	5.69	-
16"	FP	13.25	1.48	3.19	12.06	2.34	4.85	10.06	3.53	3.69	10.06	8.03	-
	RP	10.06	1.15	3.94	10.06	1.95	-	8.06	2.85	-	8.06	6.42	-
18"	FP	15.25	1.69	-	13.25	2.54	-	12.06	4.21	-	10.06	8.20	-
	RP	12.06	1.36	-	12.06	2.34	-	10.06	3.53	-	8.06	6.42	-
20"	FP	17.25	1.90	-	15.25	2.91	-	13.25	4.62	-	12.06	9.61	-
	RP	13.25	1.48	-	12.06	2.34	-	10.06	3.53	-	10.06	8.20	-
22"	FP	19.25	2.11	-	17.25	3.28	-	13.25	4.62	-	13.25	10.50	-
	RP	15.25	1.69	-	13.25	2.54	-	12.06	4.21	-	12.06	9.61	-
24"	FP	19.25	2.11	-	19.25	3.65	4.57	15.25	5.30	-	15.25	12.07	-
	RP	17.25	1.90	-	15.25	2.91	-	13.25	4.62	-	13.25	10.50	-
26"	FP	21.25	2.32	-	19.25	3.65	-	17.25	5.98	-	15.25	12.07	-
	RP	19.25	2.11	-	17.25	3.28	-	13.25	4.62	-	13.25	10.50	-
28"	FP	23.25	2.53	-	21.25	4.02	-	17.25	5.98	-	17.25	13.64	-
	RP	19.25	2.11	-	19.25	3.65	-	15.25	5.30	-	15.25	12.07	-
30"	FP	25.25	2.74	3.46	23.25	4.39	-	19.25	6.66	-	19.25	15.21	-
	RP	21.25	2.32	-	19.25	3.65	-	15.25	5.30	-	15.25	12.07	-

Notes: 1. t_{min} = wall thickness (inches) per Table 3 of ASME B16.34 2017
2. t_{actual} = design wall thickness at the thinnest point

Valve Model	Series/ Type	ANSI Pressure Class	Size	ASME/ ASTM Material	Maximum Design Temp (C)	Minimum Design Temp (C)
V7TT-UU-VV-B005-WWWXX-YYY	V1-1	900	0.50	ASTM A105	538 °C	-29 °C
V7TT-UU-VV-B007-WWWXX-YYY	V1-1	900	0.75	ASTM A182 F22	650 °C	-29 °C
V7TT-UU-VV-B010-WWWXX-YYY	V1-1	900	1.00	ASTM A182 F91	650 °C	-29 °C
V7TT-UU-VV-B012-WWWXX-YYY	V1-1	900	1.25	ASTM A376 316H	816 °C	-29 °C
V7TT-UU-VV-B015-WWWXX-YYY	V1-1	900	1.50	Above are examples		
V7TT-UU-VV-B020-WWWXX-YYY	V1-1	900	2.00	Any B16.34 Material		
V7TT-UU-VV-B030-WWWXX-YYY	V1-1	900	3.00	Wrought or Forged		
V7TT-UU-VV-B040-WWWXX-YYY	V1-1	900	4.00			
V8TT-UU-VV-B005-WWWXX-YYY	V1-1	1500	0.50			
V8TT-UU-VV-B007-WWWXX-YYY	V1-1	1500	0.75			
V8TT-UU-VV-B010-WWWXX-YYY	V1-1	1500	1.00			
V8TT-UU-VV-B012-WWWXX-YYY	V1-1	1500	1.25			
V8TT-UU-VV-B015-WWWXX-YYY	V1-1	1500	1.50			
V8TT-UU-VV-B020-WWWXX-YYY	V1-1	1500	2.00			
V8TT-UU-VV-B030-WWWXX-YYY	V1-1	1500	3.00			
V8TT-UU-VV-B040-WWWXX-YYY	V1-1	1500	4.00			
V0TT-UU-VV-B005-WWWXX-YYY	V1-1	2500	0.50			
V0TT-UU-VV-B007-WWWXX-YYY	V1-1	2500	0.75			
V0TT-UU-VV-B010-WWWXX-YYY	V1-1	2500	1.00			
V0TT-UU-VV-B012-WWWXX-YYY	V1-1	2500	1.25			
V0TT-UU-VV-B015-WWWXX-YYY	V1-1	2500	1.50			
V0TT-UU-VV-B020-WWWXX-YYY	V1-1	2500	2.00			
V0TT-UU-VV-B030-WWWXX-YYY	V1-1	2500	3.00			
V0TT-UU-VV-B040-WWWXX-YYY	V1-1	2500	4.00			
V8TT-UU-VV-B005-WWWXX-YYY	V1-1	4500	0.50			
V8TT-UU-VV-B007-WWWXX-YYY	V1-1	4500	0.75			
V8TT-UU-VV-B010-WWWXX-YYY	V1-1	4500	1.00			
V8TT-UU-VV-B012-WWWXX-YYY	V1-1	4500	1.25			
V8TT-UU-VV-B015-WWWXX-YYY	V1-1	4500	1.50			
V8TT-UU-VV-B020-WWWXX-YYY	V1-1	4500	2.00			
V8TT-UU-VV-B030-WWWXX-YYY	V1-1	4500	3.00			
V8TT-UU-VV-B040-WWWXX-YYY	V1-1	4500	4.00			
TTWWWW - defines the materials						
UU - defines the end connection						
VV - defines the port						
XX - defines quality aspects						
YYY - differentiates on on categorized options						
Other Pressure Classes are available, including:						
3100 (same as 2500)						
3500 (same as 4500)						

MATERIALS MAY BE USED ON ALL VALVE MODELS

Design Basis:

ASME B16.34 2017

PED

10CFR50 App B

ASME III, Class 1, 2 and 3

End Connections

Socket Weld

Butt Weld

Ports:

Full Port

Reduced Port

Standard Port

Manufacturing location(s)

Houston, TX USA

JUN 07 2018

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Valve Model	Series/ Type	ANSI Pressure Class	Size	ASME/ ASTM Material	Maximum Design Temp (C)	Minimum Design Temp (C)
V3TT-UU-VV-B005-WWWXX-YYY	V1-2	150	0.50	ASTM A216 WCB	538 °C	-29 °C
V3TT-UU-VV-B007-WWWXX-YYY	V1-2	150	0.75	ASTM A351 CF8M	816 °C	-29 °C
V3TT-UU-VV-B010-WWWXX-YYY	V1-2	150	1.00	Above are examples		
V3TT-UU-VV-B012-WWWXX-YYY	V1-2	150	1.25	Any B16.34 Material		
V3TT-UU-VV-B015-WWWXX-YYY	V1-2	150	1.50	Cast		
V3TT-UU-VV-B020-WWWXX-YYY	V1-2	150	2.00			
V3TT-UU-VV-B025-WWWXX-YYY	V1-2	150	2.50			
V3TT-UU-VV-B030-WWWXX-YYY	V1-2	150	3.00			
V3TT-UU-VV-B040-WWWXX-YYY	V1-2	150	4.00			
V3TT-UU-VV-B050-WWWXX-YYY	V1-2	150	5.00			
V3TT-UU-VV-B060-WWWXX-YYY	V1-2	150	6.00			
V3TT-UU-VV-B080-WWWXX-YYY	V1-2	150	8.00			
V3TT-UU-VV-B100-WWWXX-YYY	V1-2	150	10.00			
V3TT-UU-VV-B120-WWWXX-YYY	V1-2	150	12.00			
V3TT-UU-VV-B140-WWWXX-YYY	V1-2	150	14.00			
V3TT-UU-VV-B160-WWWXX-YYY	V1-2	150	16.00			
V3TT-UU-VV-B180-WWWXX-YYY	V1-2	150	18.00			
V3TT-UU-VV-B200-WWWXX-YYY	V1-2	150	20.00			
V3TT-UU-VV-B220-WWWXX-YYY	V1-2	150	22.00			
V3TT-UU-VV-B240-WWWXX-YYY	V1-2	150	24.00			
V3TT-UU-VV-B260-WWWXX-YYY	V1-2	150	26.00			
V3TT-UU-VV-B280-WWWXX-YYY	V1-2	150	28.00			
V3TT-UU-VV-B300-WWWXX-YYY	V1-2	150	30.00			
V3TT-UU-VV-B320-WWWXX-YYY	V1-2	150	32.00			
V3TT-UU-VV-B340-WWWXX-YYY	V1-2	150	34.00			
V3TT-UU-VV-B360-WWWXX-YYY	V1-2	150	36.00			
TTWWWW - defines the materials						
UU - defines the end connection						
VV - defined the port						
XX - defines quality aspects						
YYY - differentiates on categorized options						
Other Pressure Classes are available, including 300 (V5 in PN), 600 (V6 in PN)						

MATERIALS MAY BE USED ON ALL VALVE MODELS

Design Basis:

ASME B16.34 2017

PED

10CFR50 App B

ASME III, Class 1, 2 and 3

End Connections

Raised Face

Ports:

Full Port

Reduced Port

Standard Port

Manufacturing location(s)

Houston, TX USA

Design Basis:	ASME B16.34 2017 PED 10CFR50 App B ASME III, Class 1, 2 and 3
End Connections	Socket Weld Butt Weld Raised Face
Ports:	Full Port Reduced Port Standard Port
Manufacturing location(s)	Houston, TX USA

JUN 07 2018

Valve Model		Series/ Type	ANSI Pressure Class	Size
V3TT-UU-VV-B005-WWWWXX-YYY	V1-3	150	0.50	
V3TT-UU-VV-B007-WWWWXX-YYY	V1-3	150	0.75	
V3TT-UU-VV-B010-WWWWXX-YYY	V1-3	150	1.00	
V3TT-UU-VV-B012-WWWWXX-YYY	V1-3	150	1.25	
V3TT-UU-VV-B015-WWWWXX-YYY	V1-3	150	1.50	
V3TT-UU-VV-B020-WWWWXX-YYY	V1-3	150	2.00	
V5TT-UU-VV-B005-WWWWXX-YYY	V1-3	300	0.50	
V5TT-UU-VV-B007-WWWWXX-YYY	V1-3	300	0.75	
V5TT-UU-VV-B010-WWWWXX-YYY	V1-3	300	1.00	
V5TT-UU-VV-B012-WWWWXX-YYY	V1-3	300	1.25	
V5TT-UU-VV-B015-WWWWXX-YYY	V1-3	300	1.50	
V5TT-UU-VV-B020-WWWWXX-YYY	V1-3	300	2.00	
V6TT-UU-VV-B005-WWWWXX-YYY	V1-3	600	0.50	
V6TT-UU-VV-B007-WWWWXX-YYY	V1-3	600	0.75	
V6TT-UU-VV-B010-WWWWXX-YYY	V1-3	600	1.00	
V6TT-UU-VV-B012-WWWWXX-YYY	V1-3	600	1.25	
V6TT-UU-VV-B015-WWWWXX-YYY	V1-3	600	1.50	
V6TT-UU-VV-B020-WWWWXX-YYY	V1-3	600	2.00	
TTWWWW - defines the materials				
UU - defines the end connection				
VV - defined the port				
XX - defines quality aspects				
YYY - differentiates on on categorized options				

