



345 Carlingview Drive
Toronto, Ontario M9W 6N9
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Toll Free: 1.877.682.8772

www.tssa.org

May 13, 2021

VALVTECHNOLOGIES INC
5904 BINGLE
HOUSTON TX 77092

Workorder Type: Registration - Fitting(Conventional)
Workorder No: 8013973
Your Reference No.: GA DRAWINGS 201424-001
Registered to: VALVTECHNOLOGIES INC

Dear JASON WOH,

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

CRN : 0C23257.5
Main Design No.: 201424-001 Rev 2
Expiry Date: May 13, 2031

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,

Alan Wu P. Eng.
Mechanical Engineer, BPV
Tel. : 416-734-3443
Fax : 416-231-6183
Email : awu@tssa.org

NOTE: You cannot save the DATA you entered on this form, you must print a copy and FAX it or MAIL it!



Technical Standards and Safety Authority
345 Carlingview Drive
Toronto, Ontario M9W 6N9
www.tssa.org

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



STATUTORY DECLARATION

Registration of Fittings

I, Jonathan Jones, Director of Engineering

(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of ValvTechnologies Inc.,

(Name of Manufacturer)

Located at 5904 Bingle Road, Houston, TX, 77092

(Plant Address)

1-713-860-0463

(Telephone No.)

(Fax No.)



do solemnly declare that the fittings listed hereunder, which are subject to the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, comply with all of the requirements of ASME B16.34

(Title of recognized North American Standard)

which specifies the dimensions, materials of construction, pressure/temperature ratings, 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 _____ 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 meeting the requirements of ISO 9001:2015 which has been verified by the following authority, DNV GL

The items covered by this declaration, for which I seek registration, are category ASME B16.34 type fittings. In support of this application, the following information and/or test data are attached as follows:

GA of 150# IsoTech Valve & IsoTech Product Brochure. This is to add 150# IsoTech valve to existing 0C02804.25ADD2

(drawings, calculations, test reports, etc.)

Declared before me at 5904 Bingle Road in the State of Texas
the 8th day of January AD 20 21

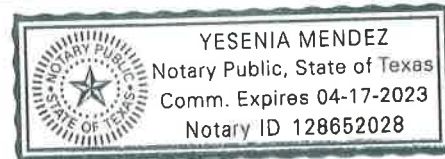
Commissioner for Oaths:

Yesenia Mendez

(Printed name)

Yesenia Mendez

(Signature)



[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 _____

CRN: _____

Registered by: _____

Dated: _____

NOTE: This registration expires on: May 13, 2031

Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety Program

REGISTERED

C.R.N.: 0C23257.5

Signed: [Signature]

Date: May 13, 2021.

*Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request. See drawing 201424-001 Rev 2

CUSTOMER: BRUCE POWER
CUSTOMER REF.: QUO-10384-D8V5J3 REV 3
CUSTOMER PO.: 316304

NOTES:

1. MANUFACTURED IN ACCORDANCE WITH ASME B16.34
2. VALVE TYPE: 16" ANSI 150#, SPECIAL PORT 11.75" BORE, METAL SEATED PARALLEL SLIDE GATE VALVE.
3. END CONNECTION: 16" RAISED FACE FLANGE, SCH STD
4. OPERATOR: SAMBO V35-15M WITH HAND WHEEL AND OPTIONAL DRIVE NUT
5. APPROX. VALVE WEIGHT: 1787 LBS
6. APPROX. ACTUATOR WEIGHT: 198 LBS
7. APPROX. TOTAL WEIGHT: 1985 LBS
8. TAG NUMBERS : CAT ID 0000728768
9. CRN: V-SERIES - CRN 0C02804.25R1
ISOTECH - CRN 0C23257.5

10. DESIGN PRESSURE: 120 PSI
11. DESIGN TEMPERATURE: 100° F
12. MAX CV: 7,650

13. AT DESIGN CONDITIONS:

| FLOW (GPM) | DELTA P (PSI) |
|------------|---------------|
| 10,000 | 1.7 |
| 12,000 | 2.4 |

14. BP SPECIFICATION: B-SPEC-04940-00008 REV 000
15. CSA CLASS: 6, ASME B31.1, 2007
16. SEISMIC CATEGORY: DBE A
17. END USES:

- BB-71310-V535, V536 - (CHAIN WHEEL OPERATOR ON RIGHT HAND SIDE WHEN LOOKING AT VALVE INLET, AS CURRENTLY SHOWN)
BB-71310-V537, V538 - (CHAIN WHEEL OPERATOR ON LEFT HAND SIDE WHEN LOOKING AT VALVE INLET, GEAR ROTATED 180° FROM AS SHOWN)

18. GEARBOX LUBRICANT SHOULD BE CHECKED EVERY 18 MONTHS.

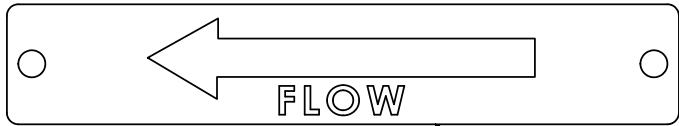
19. VALVE OPERATING REQUIRED TORQUE: 880 FT-LBS, THRUST: 20875 LBS

20. BOLTING TORQUES:

| BOLT | TORQUE |
|------------------------------|------------------|
| BONNET 1"-8UNC | 795 - 955 FT-LBS |
| GLAND 1/2"-13UNC | 204 - 225 IN-LBS |
| MTG PLATE TO GEAR 5/8"-11UNC | 185 - 225 FT-LBS |

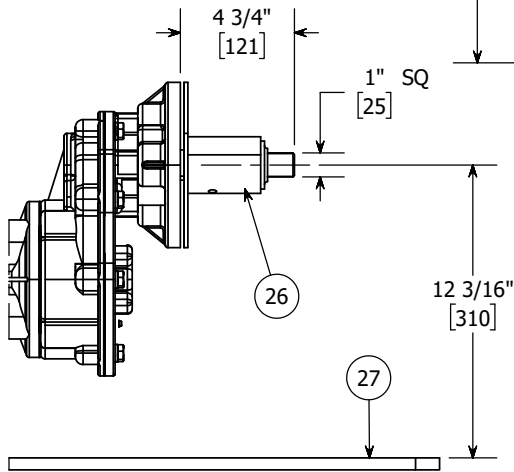
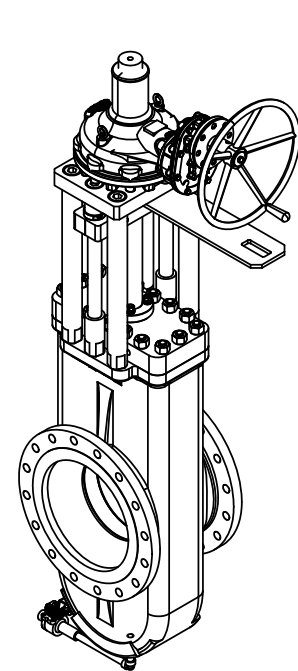
21. REACTION PLATE DESIGNED FOR USE WITH CLECO 64TTS75D4 NUT RUNNER.
22. ISOTECH MIN WALL THICKNESS: 0.41 INCH
23. V-SERIES MIN WALL THICKNESS: 0.14 INCH
24. DRAIN PIPE: 1/2" SCH 40.

| VALVTECHNOLOGIES, INC. HOUSTON TX 77092 U.S.A. | | | | | |
|--|-----|------|-------|------|-------|
| P3C1-RF-XX-B160-004CN-P01 | | | | | |
| BODY | WCB | SIZE | 16" | TRIM | C1004 |
| ASME B16.34 | | | CLASS | 150# | |

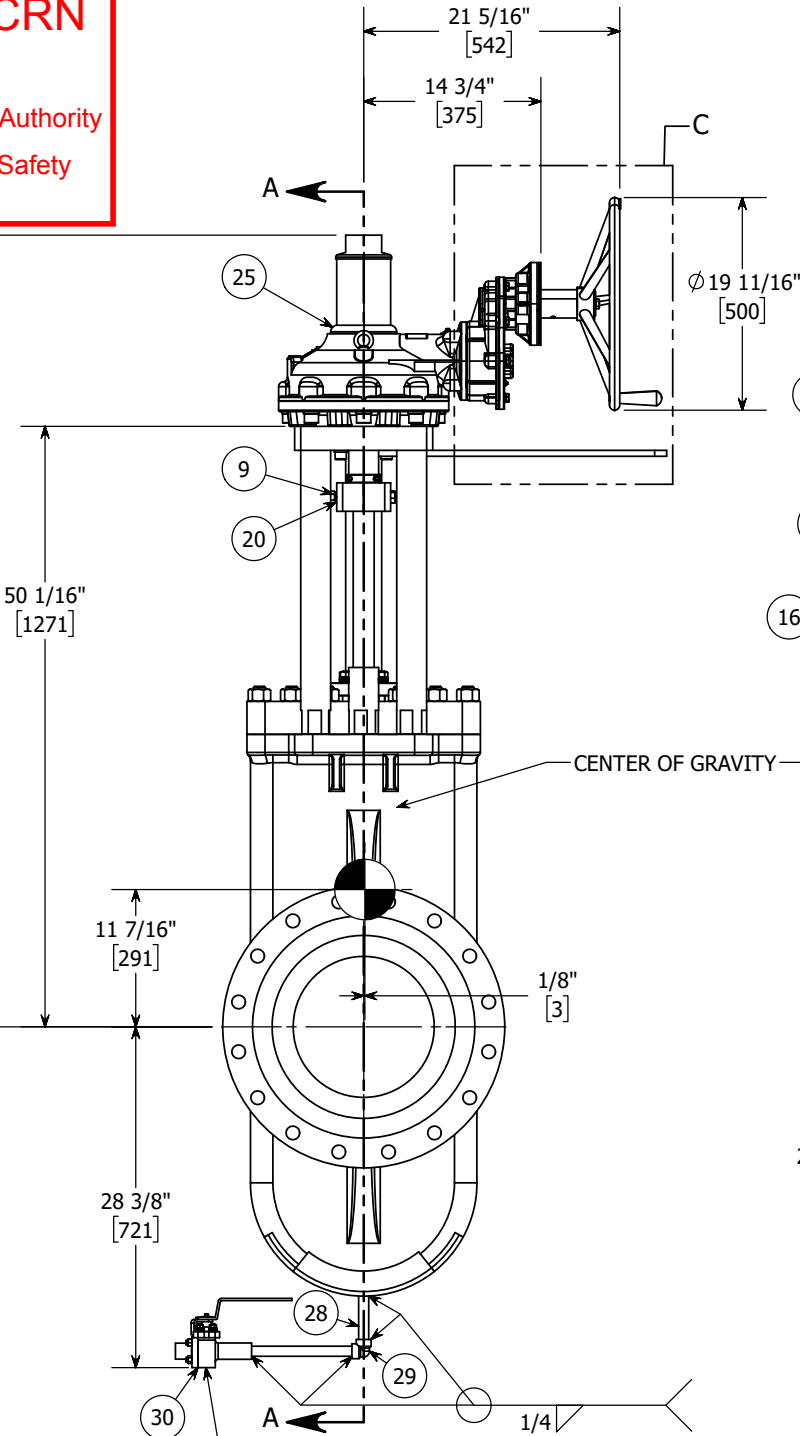


THIS IS PART OF CRN
0C23257.5

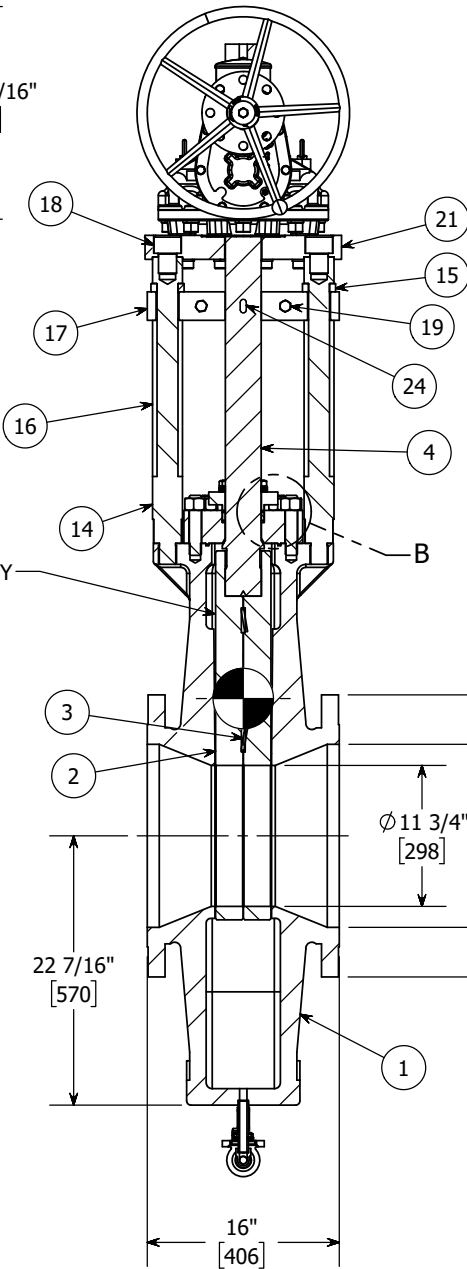
Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety
Program



DETAIL C

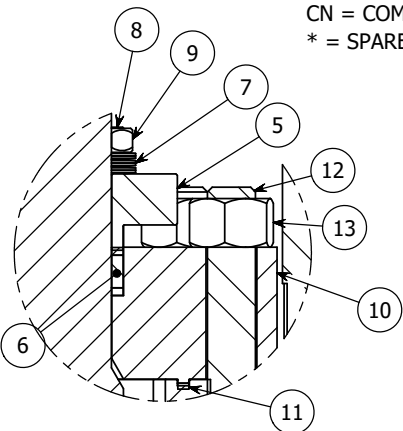


DRAIN VALVE
1/2" SW .63 BORE
WITH LEVER



SECTION A-A

| ITEM NO. | DESCRIPTION | MATERIAL | | CODE |
|----------|----------------------|------------------------------|----|------|
| 1 | BODY | SA-216 WCB / R31 | 1 | CN |
| 2 | DISC | SA-182 F6A / R31 | 2 | CN |
| 3 | BELLEVILLE SPRING | SA-564 TYPE 630 H1150D | 1 | CN* |
| 4 | STEM | SA-564 TYPE 630 H1150D / QPQ | 1 | CN |
| 5 | GLAND | SA-182 F316H / QPQ | 1 | CN |
| 6 | GLAND PACKING | 316 / GRAFOIL | 1 | CN* |
| 7 | GLAND SPRING | AISI GR 302 | 24 | CN |
| 8 | GLAND STUD | SA-193 GR B8M | 4 | CN |
| 9 | GLAND AND BRIDGE NUT | SA-194 GR 8M | 6 | CN |
| 10 | BONNET | SA-182 F22 / R31 | 1 | CN |
| 11 | BONNET SEAL | GRAFOIL | 1 | CN* |
| 12 | BONNET STUD | SA-193 GR B7 | 16 | CN |
| 13 | BONNET NUT | SA-194 GR 2H | 16 | CN |
| 14 | YOKE POST | SA-29 GR 1018 / QPQ | 2 | CN |
| 15 | COLLAR | AISI 1215 | 2 | CN |
| 16 | YOKE POST | SA-29 GR 1018 / QPQ | 4 | CN |
| 17 | BRIDGE | SA-29 4130 / QPQ | 1 | CN |
| 18 | CAP SCREW | SA-574 | 6 | CN |
| 19 | BRIDGE BOLT | STAINLESS STEEL | 2 | CN |
| 20 | LOCK WASHER | STAINLESS STEEL | 2 | CN |
| 21 | MOUNTING PLATE | SA-36 | 1 | CN |
| 22 | CAP SCREW | SA-574 | 8 | CN |
| 23 | LOCK WASHER | SAE GR CS | 8 | CN |
| 24 | KEY | SA-29 GR 1018 | 1 | CN |
| 25 | ACTUATOR | SAMBO V35-15M | 1 | CN |
| 26 | DRIVE NUT | SA-29 GR 4130 | 1 | CN |
| 27 | REACTION PLATE | SA-36 | 1 | CN |
| 28 | PIPE | SA-106 GR B | 2 | CN |
| 29 | ELBOW | SA-105 | 1 | CN |
| 30 | DRAIN VALVE | SA-216 WCB | 1 | CN |
| 31 | STANDARD TAG | STAINLESS STEEL | 1 | CN |
| 32 | FLOW TAG | STAINLESS STEEL | 1 | CN |



DETAIL B

CODE:
CN = COMMERCIAL
* = SPARE PARTS

| | | | |
|------|-----------|--|-----|
| 2 | 2/8/2021 | ADDED CRN NUMBER, "*" FOR SPARES, ADDED DRIVE NUT AND REACTION PLATE, REMOVED CHAINWHEEL | - |
| 1 | 1/29/2021 | ADDED NOTES 14 THRU 20 PER CUSTOMER MARKUPS, UPDATED MATERIALS | - |
| REV. | DATE | DESCRIPTION | ECN |

| | | | |
|--|---|-------------------------|------------|
| THIS DRAWING AND THE INFORMATION CONTAINED WITHIN IS CONSIDERED TO BE CONFIDENTIAL AND THE SOLE PROPERTY OF VALVTECHNOLOGIES. THE CONTENTS OF THIS DRAWING MAY NOT BE REPRODUCED OR DISCLOSED VERBALLY OR OTHERWISE OUTSIDE THE HOLDERS OFFICE WITHOUT THE WRITTEN APPROVAL OF VALVTECHNOLOGIES. | | | |
| QUOTATION DRAWINGS ARE FOR GENERAL REFERENCE ONLY. PRODUCT CONFIGURATION TO BE FINALIZED UPON RECEIPT OF ORDER. | ACTUATOR ORIENTATION IS FOR ILLUSTRATION PURPOSES ONLY. ACCESSORIES MAY NOT BE INCLUDED IN DRAWING. | REVISED BY B.SCHMIDT | 04/09/2021 |
| APPROVED BY C.FALDYN | 05/13/2021 | DRAWN BY B.SCHMIDT | 12/16/2020 |
| APPROVED BY C.FALDYN | 05/13/2021 | APPROVED BY C.FALDYN | 12/21/2020 |

| WEIGHT | SIZE | SHEET |
|---|------|--------|
| 1985 LBS | B | 1 OF 1 |
| GENERAL ASSEMBLY | | |
| DIMENSIONS ARE IN INCH (MM) UNLESS OTHERWISE SPECIFIED. | | |
| REFERENCE DIMENSIONS ARE DEPICTED BY () SYMBOL | | |

| | |
|--|-----------|
| VALVTECHNOLOGIES | |
| 5904 BINGLE ROAD, HOUSTON TEXAS 77092 WWW.VALV.COM | |
| TITLE P3C1-RF-XX-B160-004CN-P01 16" 150# RF SCH STD 11.75" BORE W/ SAMBO V35-15M-HW | |
| 201424-001 | REV. 2 |