



THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

VLC V Stamp Certificate No: 59060
 Expiration Date: 06-16-2030
 Two diferent inlets/outlets configuration "RF Flange 4" and BW, Bore Diameter 2.130"

Design Name: Z***-21*****-*****-***	NBCert # 59060	
Manufacturer/Assembler	Designators	Expiration Date
Manufacturer	V	06/16/2030

Design Type

[Power Actuated Relief Valve] Z***-21*****-*****-***
 Capacity Tests: Sec. V at National Board Testing Lab on June 16, 1992
 Method of Establishing Relieving Capacity: Flow Capacity, Slope
 Certified Value:143.20 PPH/PSIA
 Media - Test: Steam; Certified: Steam
 Set Pressure Definition: Power Actuated
 Blowdown Characteristics: Fixed
 Flow Area Configuration: Nozzle/Full Lift
 Designed by: ValvTechnologies, LLC {VLC}
 Comments: Previous designations: EOL-1-SV-FP and E*9121

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
2.5-4 NPS	4 NPS	3.547 in ²	2.125 in		15-5000 psi	Steam	V

✓ Z***-21*****-*****-***	59060	Manufacturer	V	06/16/2030				
Specifications:								
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> Z***-51C***E**Z-*****-V**	59138	Manufacturer	V	09/24/2027				



**THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS**

February 14, 2024

ValvTechnologies, LLC
5904 Bingle Road
Houston, Texas 77092
United States

Dear Jesus Velazquez,

We have reviewed the application for renewal of capacity certification of the subject valve type. Since the flow path is unchanged and functional testing is not required for power operated pressure relief valves, all requirements for recertification have been met. The drawings submitted will be retained for our records.

ValvTechnologies, LLC is hereby granted Capacity Certification and authorization to apply the "NB" mark and ASME Certification mark with the applicable designator to the valve type listed below. This authorization is only valid for the above location and only while the organization is fully implementing its quality control system as accepted by the National Board.

SCOPE OF CERTIFICATION

Capacity Certification Number: 59060

Valve Type: Z*-21*****_*****_*****

ASME Code Designator(s): V

Media: Steam

Organization Type: Manufacturer

Manufacturer: ValvTechnologies, LLC

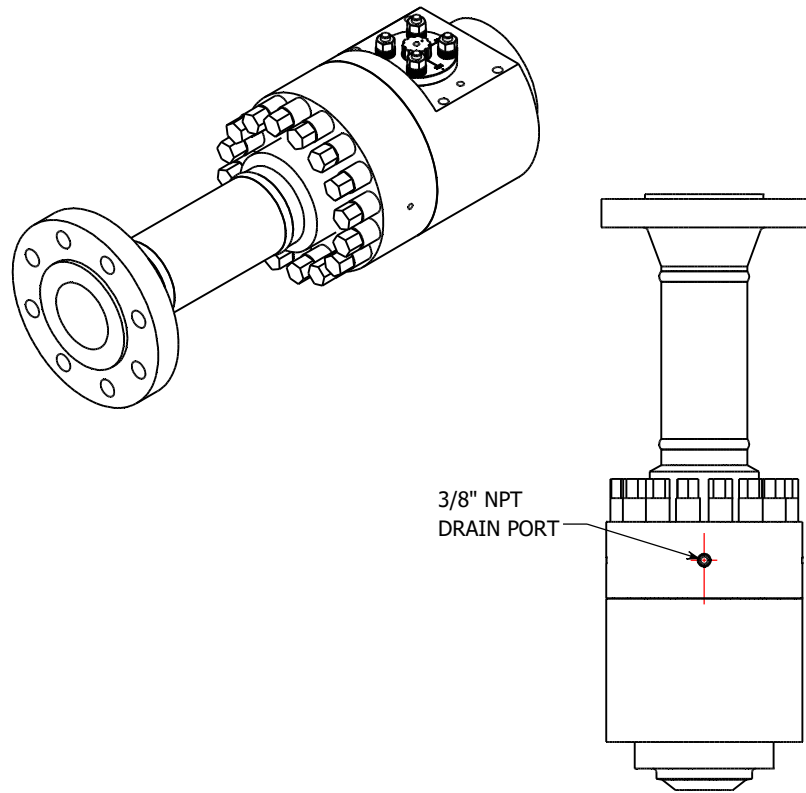
Certified Rating Value/Sizes/Pressure Range: As listed in the NB-18, <https://www.nationalboard.org/Index>

Expiration Date: June 16, 2030

Please feel free to contact us with any questions.

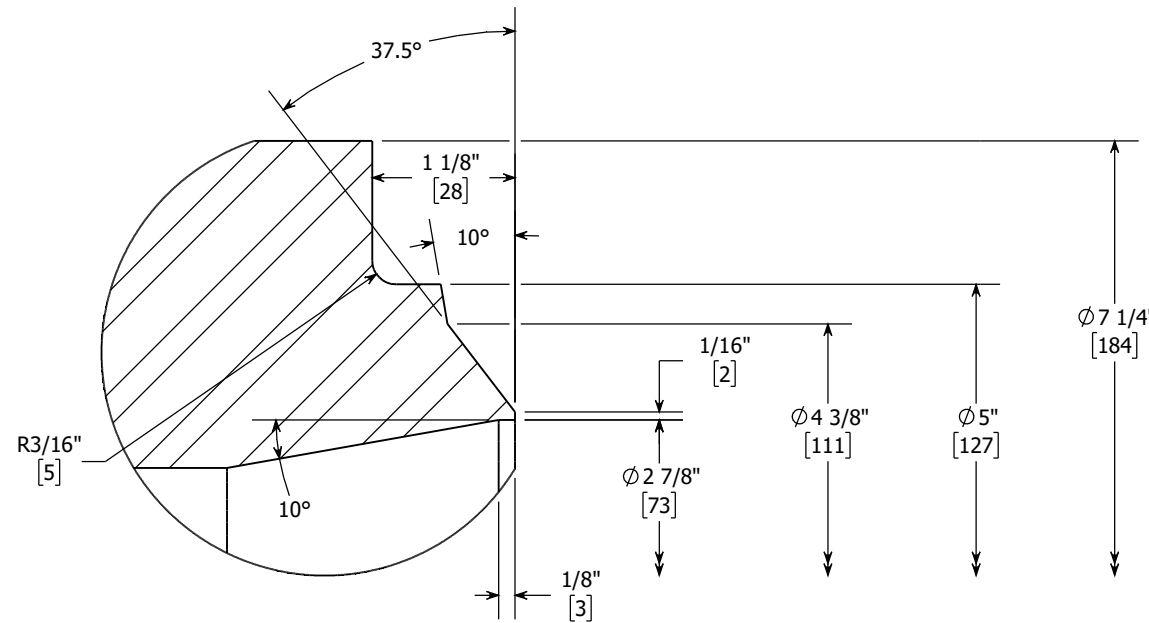
Sincerely,

Amy Zehendner
Technical Department - Pressure Relief Laboratory
The National Board of Boiler and Pressure Vessel Inspectors
National Board Testing Laboratory
7437 Pingue Drive
Worthington, Ohio 43085
PRL Email: prd@nbbi.org
Test Lab Email: lab@nbbi.org
Phone: 614.888.8320
www.nbbi.org/

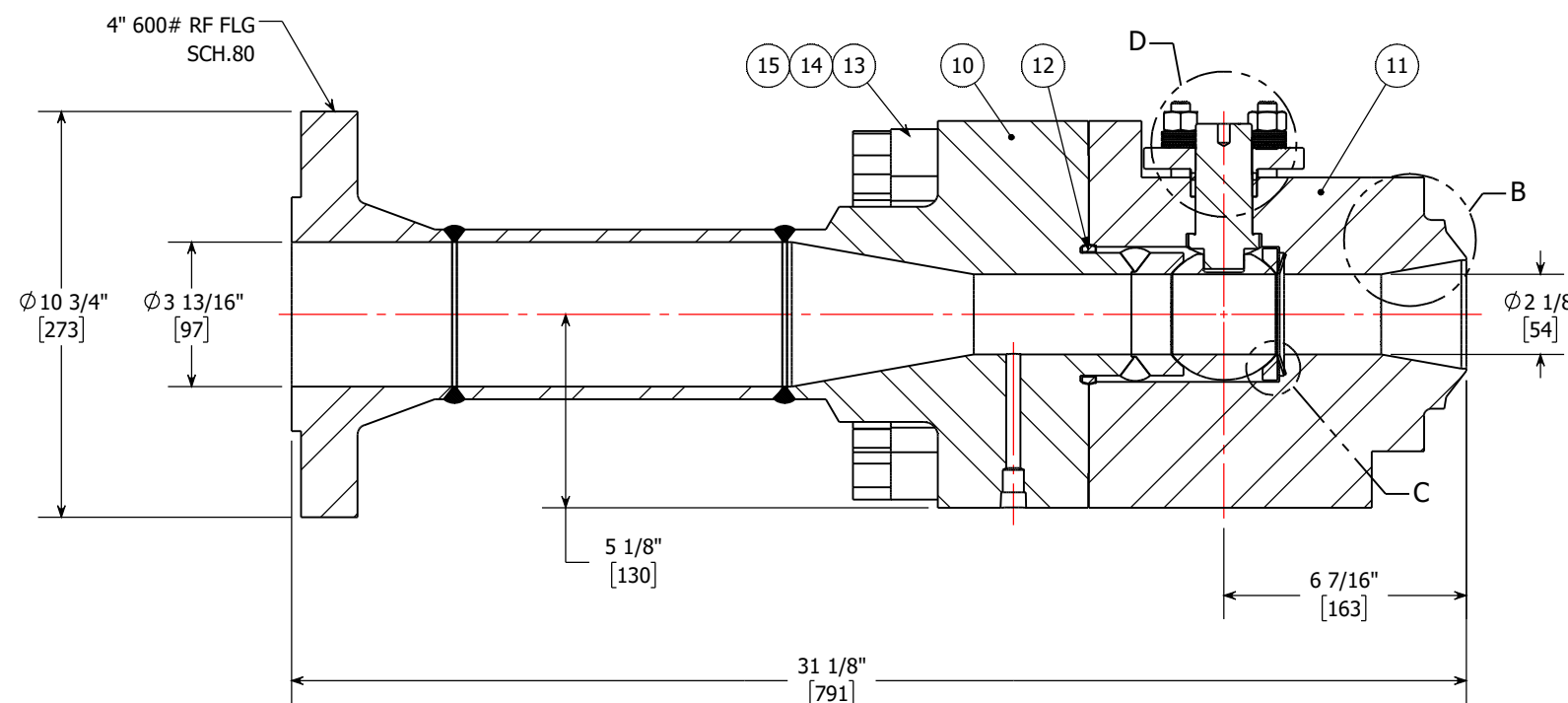
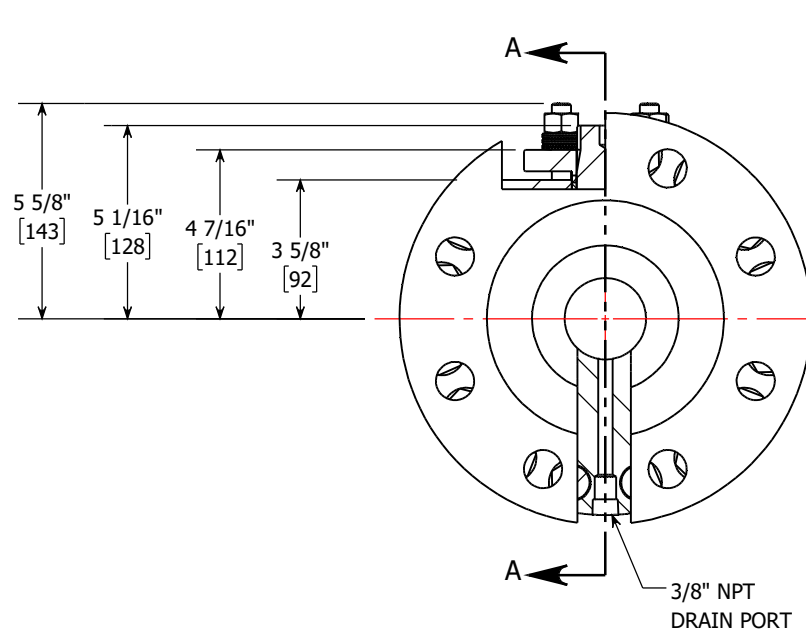


VALVTECHNOLOGIES LLC.		HOUSTON TX 77092 U.S.A.	
SIZE NPS	4 X 4	MODEL #	ZBL7-21AB2RA6B1-001AA-V01
MAT.	SA-F22	ANSI CLASS	4500#
CAPACITY LBS/HR	551,800	AT TEMP °F	944
US PAT.:		YEAR	2024
		SET PRESSURE PSI	3865

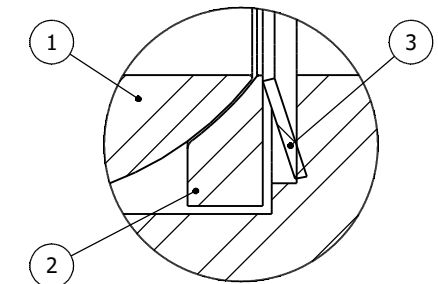
ITEM NO.	DESCRIPTION	MATERIAL	QTY.
1	BALL	UNS N07718 / R31	1
2	UPSTREAM SEAT	SA-182 F22 / QPQ	1
3	BELLEVILLE SPRING	UNS N07718	1
4	STEM	SA-638 660 TYP1 / QPQ	1
5	GLAND	SA-182 F316 / QPQ	1
6	GLAND PACKING	316/GRAFOIL	1
7	GLAND SPRING	UNS N07718	24
8	GLAND STUD	SA-193 GR B8M CL1	4
9	GLAND NUT	SA-194 GR 8M	4
10	END CAP	SA-182 F22 / R31	1
11	BODY	SA-182 F22	1
12	BODY SEAL	SA-564 TYPE 630 H1150D / PT24	1
13	BODY STUD	SA-193 GR B8M CL1	16
14	BODY NUT	SA-194 GR 8M	16
15	SLEEVE	STAINLESS STEEL	4



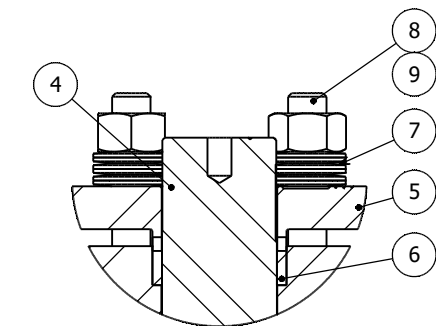
DETAIL B



SECTION A-A



DETAIL C



DETAIL D

CUSTOMER NAME: PORTERSVILLE PRD LLC
CUSTOMER PO: 47728

OPERATIONAL PARAMETERS:
DESIGN PRESSURE: 4,020 PSI
DESIGN TEMPERATURE: 944 °F
SET PRESSURE: 3,865 PSI
SET TEMPERATURE: 944 °F
CERTIFIED CAPACITY: 551,800 LBS/HR

<p>THIRD ANGLE PROJECTION</p> <p>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.</p>	<p>QUOTATION DRAWINGS ARE FOR GENERAL REFERENCE ONLY. PRODUCT CONFIGURATION TO BE FINALIZED UPON RECEIPT OF ORDER.</p> <p>ACTUATOR ORIENTATION IS FOR ILLUSTRATION PURPOSES ONLY. ACCESSORIES MAY NOT BE INCLUDED IN DRAWING.</p>			
	<p>REFERENCE DIMENSIONS ARE DEPICTED BY () SYMBOL</p>	<p>GENERAL ASSEMBLY</p> <p>WEIGHT 336 LBS</p> <p>SCALE 1:5</p> <p>SIZE B</p> <p>SHEET 1 OF 1</p> <p>5904 BINGLE ROAD, HOUSTON TEXAS 77092 WWW.VALV.COM</p>	<p>TITLE ZBL7-21AB2RA6B1-001AA-V01</p> <p>4", BW, 4500# X 4", RF, 600#, 2.13" BORE ERV, BARE STEM</p>	
<p>REVISED BY</p>	<p>DRAWN BY N.NGUYEN</p> <p>4/8/2024</p>	<p>APPROVED BY S.STREANGO</p> <p>04/18/2024</p>	<p>240351-002</p>	<p>REV. 0</p>

REV.	DATE	DESCRIPTION	ECN

