

March 02, 2023

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

The design submission, Tracking Number 2023-00992, Web Portal Number 2023-S0584, originally received on February 16, 2023 was surveyed and accepted for registration as follows:

**CRN :** 0G08455.52 **Accepted on:** March 02, 2023

**Reg Type:** RENEWAL **Expiry Date:** April 22, 2033

**Drawing No. :** SCOPE OF CRN REGISTRATION

**Fitting type:** PRESSURE RELIEF VALVES

Design registered in the name of : ARI-ARMATUREN ALBERT RICHTER GMBH & CO KG

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

*\*\* The scope of this registration include renewal, with changes to the maximum inlet size for ARI Figures 52.901, 52.911, 55.901 and 55.911 from 4NPS to 6NPS*

*\*\* Design Report #: R-1748 Rev 0*

*\*\* See attached for a list of manufacturing locations*

*As indicated on AB-41 Statutory Declaration or AB-351 Declaration of Conformity form and submitted documentation, the code of construction is SECTION VIII, DIV. 1.*

*- 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 or AB-351 Declaration of Conformity 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 or AB-351 Declaration of Conformity 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, and maintains a valid Certification of Authorization Permit if required by the jurisdiction where manufacturing takes place, 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

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March 02, 2023

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



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, KEEFE FRENTZ, QUALITY MANAGER  
(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of ARI-ARMATUREN  
(Name of Manufacturer)

Located at SEE ATTACHED WORLDWIDE LOCATIONS APPENDIX  
(Plant Address) (Telephone No.) (Fax No.)

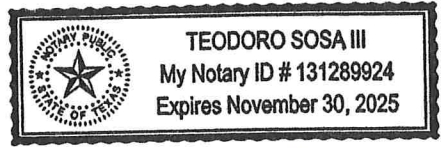
do solemnly declare that the fittings listed hereunder, which are subject to the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, comply with all of the requirements of ASME SECTION VIII-1  
(Title of recognized North American Standard)  
 which specifies the dimensions, 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 ASME UV which has been verified by the following authority, ASME.

The items covered by this declaration, for which I seek registration, are category G - SAFETY RELIEF VALVES type fittings. In support of this application, the following information and/or test data are attached as follows:  
SCOPE OF CRN REGISTRATION, CATALOG, REPORT  
(drawings, calculations, test reports, etc.)

Declared before me at Webster, Texas in the State of Texas  
 the 22 day of July AD 2022.



Commissioner for Oaths:  
Teodoro Sosa III  
(Printed name)  
[Signature]  
(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 'G'.

CRN: \_\_\_\_\_  
 Registered by: \_\_\_\_\_  
 Dated: 2023-03-02

**2023-00992**

**ABSA**

**SAFETY CODES ACT - PROVINCE OF ALBERTA**

**ACCEPTED: 0308455. 52**

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

Date: **2023-03-02** By: [Signature]  
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.

**NOTE: This registration expires on: 2033-04-22**

*\*Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request.*

PV 09553 (04/17) **\*\* The scope of this registration include renewal, with changes to the maximum inlet size for ARI Figures 52.901, 52.911, 55.901 and 55.911 from 4NPS to 6NPS. Design report #: R-1748 Rev 0.**



THIS IS PART OF CRN  
 0G8455.5R2  
 Technical Standards and Safety Authority  
 Boilers and Pressure Vessels Safety  
 Program

**SCOPE OF CRN REGISTRATION**

Product Description	Figure	Nominal Pressure	Material	Form	Process Connection	Pressure Range	NPS Min	NPS Max.	Certified Medium	Certificate Number NB	Drawing No. / Design Report
ARI-SAFE-SN ANSI Safety Valve	32.901	ANSI 150	ASME SA216-WCB	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	Drawing No. s050010007 / Design Report R-1748 Rev. 0
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	
ARI-SAFE-SN ANSI Safety Valve	32.902	ANSI 150	ASME SA216-WCB	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	
ARI-SAFE-SN ANSI Safety Valve	32.911	ANSI 150	ASME SA216-WCB	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	
ARI-SAFE-SN ANSI Safety Valve	32.912	ANSI 150	ASME SA216-WCB	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	
ARI-SAFE-SN ANSI Safety Valve	35.901	ANSI 300	ASME SA216-WCB	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	Drawing No. s050010006 / Design Report R-1748 Rev. 0
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	
ARI-SAFE-SN ANSI Safety Valve	35.902	ANSI 300	ASME SA216-WCB	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	
ARI-SAFE-SN ANSI Safety Valve	35.911	ANSI 300	ASME SA216-WCB	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	
ARI-SAFE-SN ANSI Safety Valve	35.912	ANSI 300	ASME SA216-WCB	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	
ARI-SAFE-SN ANSI Safety Valve	52.901	ANSI 150	ASME SA351-CF8M	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	Drawing No. s050010018 / Design Report R-1748 Rev. 0
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	
ARI-SAFE-SN ANSI Safety Valve	52.911	ANSI 150	ASME SA351-CF8M	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	

**ARI-ARMATUREN USA, LP**

125 MAGELLAN CIRCLE  
 WEBSTER, TX  
 77598, USA



THIS IS PART OF CRN  
 0G8455.5R2  
 Technical Standards and Safety Authority  
 Boilers and Pressure Vessels Safety  
 Program

20-Oct-22

PAGE 2 OF 2

**SCOPE OF CRN REGISTRATION CONTINUED**

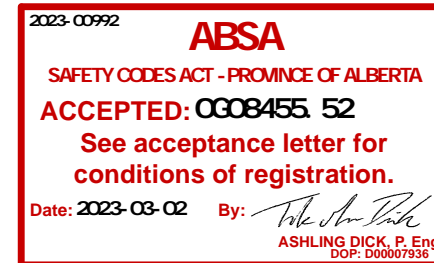
Product Description	Figure	Nominal Pressure	Material	Form	Process Connection	Pressure Range	NPS Min	NPS Max.	Certified Medium	Certificate Number NB	Drawing No.
ARI-SAFE-SN ANSI Safety Valve	55.901	ANSI 300	ASME SA351-CF8M	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	Drawing No. s050010019 / Design Report R-1748 Rev. 0
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	
ARI-SAFE-SN ANSI Safety Valve	55.911	ANSI 300	ASME SA351-CF8M	Angle Through	ASME B16.5 Flanged	>=15 psig	1"	1"	Water	08020	
						>=15 psig	1.5"	6"	Water	08019	
						15 psig - 30 psig	1"	6"	Steam & Air/Gas	08031	
						>=30 psig	1"	6"	Steam & Air/Gas	08008	

**Note 1:** For low temperature operation the products shall conform to the rules of the applicable codes under which they are used.

**Note 2:** Valves shall be marked with the ASME Certification mark and UV Designator along with the Canadian Registration Number (CRN).

**Note 3:** See attached Worldwide Locations Appendix.

**Note 4:** See attached copy of National Board Listings applicable to this Canadian Registration Number (CRN).



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.



**WORLDWIDE LOCATIONS APPENDIX – PAGE 1 OF 1**

**ARI-ARMATUREN LOCATIONS  
& CERTIFYING AUTHORITIES**

**(rev. July 20, 2022)**

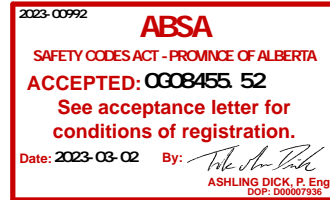
**ARI-Armaturen Albert Richter GmbH & Co. KG**

Mergelheide 56-60  
33758 Schlob Holte-Stukenbrock  
Germany  
**ASME UV expires 12/16/2024**



**ARI-Armaturen USA, LP**

125 Megellan Circle  
Webster, TX  
77598, USA  
**ASME UV expires 9/20/2024**



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.

**ARI - Armaturen USA, LP (TAR)**

Webster, TX 77598 United States

**This Company Manufactures or Assembles:**

Design Name: 901/902/911/912 NBCert # 08008

Manufacturer/Assembler	Designators	Expiration Date
Manufacturer	UV	11/21/2023

**Design Type**

[Safety Relief Valve] 901/902/911/912  
 Capacity Tests: Sec. UV at National Board Testing Lab on November 9, 2001  
 Method of Establishing Relieving Capacity: Flow Capacity, K  
 Certified Value: 0.817 Unitless  
 Media - Test: Air/Gas; Certified: Air, Gas, Steam  
 Set Pressure Definition: Initial Audible Discharge  
 Blowdown Characteristics: Fixed  
 Designed by: ARI-Armaturen Albert Richter GmbH & Co. KG {ARI}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
1 NPS	1.5, 2.0 NPS	0.617 in <sup>2</sup>	0.886 in	0.22 in	30-493 psi	Air	UV
1 NPS	1.5, 2.0 NPS	0.617 in <sup>2</sup>	0.886 in	0.22 in	30-493 psi	Steam	UV
1.25 NPS	2.0 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	30-493 psi	Air	UV
1.25 NPS	2.0 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	30-493 psi	Steam	UV
1.5 NPS	2, 2.5 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	30-493 psi	Air	UV
1.5 NPS	2, 2.5 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	30-493 psi	Steam	UV
1.5 NPS	2.5, 3.0 NPS	1.578 in <sup>2</sup>	1.417 in	0.37 in	30-493 psi	Air	UV
1.5 NPS	2.5, 3.0 NPS	1.578 in <sup>2</sup>	1.417 in	0.37 in	30-493 psi	Steam	UV
2 NPS	3 NPS	2.465 in <sup>2</sup>	1.772 in	0.45 in	30-493 psi	Air	UV
2 NPS	3 NPS	2.465 in <sup>2</sup>	1.772 in	0.45 in	30-493 psi	Steam	UV
2.5-3 NPS	4 NPS	4.166 in <sup>2</sup>	2.303 in	0.61 in	30-406 psi	Air	UV
2.5-3 NPS	4 NPS	4.166 in <sup>2</sup>	2.303 in	0.61 in	30-406 psi	Steam	UV
4 NPS	6 NPS	9.861 in <sup>2</sup>	3.543 in	0.98 in	30-276 psi	Air	UV
4 NPS	6 NPS	9.861 in <sup>2</sup>	3.543 in	0.98 in	30-276 psi	Steam	UV
5-6 NPS	8 NPS	13.678 in <sup>2</sup>	4.173 in	1.34 in	30-392 psi	Air	UV
5-6 NPS	8 NPS	13.678 in <sup>2</sup>	4.173 in	1.34 in	30-392 psi	Steam	UV
6 NPS	10 NPS	19.022 in <sup>2</sup>	4.921 in	1.46 in	30-305 psi	Air	UV
6 NPS	10 NPS	19.022 in <sup>2</sup>	4.921 in	1.46 in	30-305 psi	Steam	UV

Design Name: 901/902/911/912 (1" liquid) NBCert # 08020

Manufacturer/Assembler	Designators	Expiration Date
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Manufacturer UV 11/21/2023

**Design Type**

[Relief Valve] 901/902/911/912 (1" liquid)  
 Capacity Tests: Sec. UV at National Board Testing Lab on August 24, 2001  
 Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor  
 Certified Value: 14.410 GPM/SQ.RT. PSID  
 Media - Test: Water/Liquid; Certified: Liquid  
 Set Pressure Definition: Opening Pressure  
 Blowdown Characteristics: Fixed  
 Designed by: ARI-Armaturen Albert Richter GmbH & Co. KG {ARI}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
1 NPS	1.5, 2.0 NPS	0.617 in <sup>2</sup>	0.886 in	0.22 in	15-493 psi	Water	UV

Design Name: 901/902/911/912 (Liquids) NBCert # 08019

Manufacturer/Assembler	Designators	Expiration Date
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Manufacturer UV 03/29/2024

**Design Type**

[Relief Valve] 901/902/911/912 (Liquids)  
 Capacity Tests: Sec. UV at National Board Testing Lab on October 15, 2001  
 Method of Establishing Relieving Capacity: Flow Capacity, K  
 Certified Value: 0.545 Unitless  
 Media - Test: Water/Liquid; Certified: Liquid  
 Set Pressure Definition: Opening Pressure  
 Blowdown Characteristics: Fixed  
 Designed by: ARI-Armaturen Albert Richter GmbH & Co. KG {ARI}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
1.25 NPS	2 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-493 psi	Water	UV
1.5 NPS	2, 2.5 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-493 psi	Water	UV
1.5 NPS	2.5, 3 NPS	1.578 in <sup>2</sup>	1.417 in	0.37 in	15-493 psi	Water	UV
2 NPS	3 NPS	2.465 in <sup>2</sup>	1.772 in	0.45 in	15-493 psi	Water	UV
2.5-3 NPS	4 NPS	4.166 in <sup>2</sup>	2.303 in	0.61 in	15-406 psi	Water	UV
4 NPS	6 NPS	9.861 in <sup>2</sup>	3.543 in	0.98 in	15-276 psi	Water	UV
5-6 NPS	8 NPS	13.678 in <sup>2</sup>	4.173 in	1.34 in	15-392 psi	Water	UV
6 NPS	10 NPS	19.022 in <sup>2</sup>	4.921 in	1.46 in	15-305 psi	Water	UV

Design Name: 901/902/911/912 {15-30} NBCert # 08031

Manufacturer/Assembler	Designators	Expiration Date
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Manufacturer UV 11/21/2023



**Design Type**

[Safety Relief Valve] 901/902/911/912 {15-30}  
 Capacity Tests: Sec. UV at National Board Testing Lab on May 9, 2007  
 Method of Establishing Relieving Capacity: Flow Capacity, K  
 Certified Value: 0.769 Unitless  
 Media - Test: Air/Gas, Steam; Certified: Air, Gas, Steam  
 Set Pressure Definition: Initial Audible Discharge  
 Blowdown Characteristics: Fixed  
 Designed by: ARI-Armaturen Albert Richter GmbH & Co. KG {ARI}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
1 NPS	1.5, 2.0 NPS	0.394 in <sup>2</sup>	0.709 in	0.205 in	15-30 psi	Air	UV
1 NPS	1.5, 2.0 NPS	0.394 in <sup>2</sup>	0.709 in	0.205 in	15-30 psi	Steam	UV
1.25 NPS	2.0 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-30 psi	Air	UV
1.25 NPS	2.0 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-30 psi	Steam	UV
1.5 NPS	2, 2.5 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-30 psi	Air	UV
1.5 NPS	2, 2.5 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-30 psi	Steam	UV
1.5 NPS	2.5, 3.0 NPS	1.578 in <sup>2</sup>	1.417 in	0.37 in	15-30 psi	Air	UV
1.5 NPS	2.5, 3.0 NPS	1.578 in <sup>2</sup>	1.417 in	0.37 in	15-30 psi	Steam	UV
2 NPS	3 NPS	2.465 in <sup>2</sup>	1.772 in	0.45 in	15-30 psi	Air	UV
2 NPS	3 NPS	2.465 in <sup>2</sup>	1.772 in	0.45 in	15-30 psi	Steam	UV
2.5-3 NPS	4 NPS	4.166 in <sup>2</sup>	2.303 in	0.61 in	15-30 psi	Air	UV
2.5-3 NPS	4 NPS	4.166 in <sup>2</sup>	2.303 in	0.61 in	15-30 psi	Steam	UV
4 NPS	6 NPS	9.861 in <sup>2</sup>	3.543 in	0.98 in	15-30 psi	Air	UV
4 NPS	6 NPS	9.861 in <sup>2</sup>	3.543 in	0.98 in	15-30 psi	Steam	UV
5-6 NPS	8 NPS	13.678 in <sup>2</sup>	4.173 in	1.34 in	15-30 psi	Air	UV
5-6 NPS	8 NPS	13.678 in <sup>2</sup>	4.173 in	1.34 in	15-30 psi	Steam	UV
6 NPS	10 NPS	19.022 in <sup>2</sup>	4.921 in	1.46 in	15-30 psi	Air	UV
6 NPS	10 NPS	19.022 in <sup>2</sup>	4.921 in	1.46 in	15-30 psi	Steam	UV

Design Name: Reyco R, RB & RO (Fig. 971, 973, 974) NBCert # 73000

**Manufacturer/Assembler****Designators****Expiration Date**

Manufacturer

UV

01/19/2027

**Design Type**

[Safety Relief Valve] Reyco R, RB & RO (Fig. 971, 973, 974)  
 Capacity Tests: Sec. UV at National Board Testing Lab on March 19, 1997  
 Method of Establishing Relieving Capacity: Flow Capacity, K  
 Certified Value: 0.860 Unitless  
 Media - Test: Air/Gas, Steam; Certified: Air, Gas, Steam  
 Set Pressure Definition: Pop  
 Blowdown Characteristics: Adjustable (Single Ring)  
 Designed by: ARI - Armaturen USA, LP {TAR}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
1-1.5 NPS	2 - 3 NPS	0.122 in <sup>2</sup>	[D] 0.394 in	0.12 in	15-2900 psi	Steam	UV
1-1.5 NPS	2 - 3 NPS	0.122 in <sup>2</sup>	[D] 0.394 in	0.12 in	15-6250 psi	Air	UV
1-1.5 NPS	2 - 3 NPS	0.217 in <sup>2</sup>	[E] 0.526 in	0.16 in	15-2900 psi	Steam	UV
1-1.5 NPS	2 - 3 NPS	0.217 in <sup>2</sup>	[E] 0.526 in	0.16 in	15-6250 psi	Air	UV

**Design Type**

[Relief Valve] RL40, RLO40, RL41, RLO41 (0.547 in. orifice) (Liquid), Design Rev. A  
 Capacity Tests: Sec. UV at National Board Testing Lab on March 4, 2014  
 Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor  
 Certified Value: 5.635 GPM/SQ.RT. PSID  
 Media - Test: Water/Liquid; Certified: Liquid  
 Set Pressure Definition: First Steady Stream  
 Blowdown Characteristics: Fixed  
 Designed by: ARI - Armaturen USA, LP {TAR}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
1-1.5 NPS	1.5, 2 NPS	0.235 in <sup>2</sup>	0.547 in	0.137 in	15-3000 psi	Water	UV

Design Name: RL40, RLO40, RL41, RLO41 (0.547 in. orifice), Design Rev. A      NBCert #      73224

Manufacturer/Assembler	Designators	Expiration Date
Manufacturer	UV	09/29/2026

**Design Type**

[Safety Relief Valve] RL40, RLO40, RL41, RLO41 (0.547 in. orifice), Design Rev. A  
 Capacity Tests: Sec. UV at National Board Testing Lab on March 4, 2014  
 Method of Establishing Relieving Capacity: Flow Capacity, Slope  
 Certified Value: 3.760 SCFM/PSIA; (alternate medium): 10.560 PPH/PSIA  
 Media - Test: Air/Gas, Steam; Certified: Air, Gas, Steam  
 Set Pressure Definition: Pop  
 Blowdown Characteristics: Fixed  
 Designed by: ARI - Armaturen USA, LP {TAR}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
1-1.5 NPS	1.5, 2 NPS	0.235 in <sup>2</sup>	0.547 in	0.137 in	15-2900 psi	Steam	UV
1-1.5 NPS	1.5, 2 NPS	0.235 in <sup>2</sup>	0.547 in	0.137 in	15-3000 psi	Air	UV

**ARI-Armaturen Albert Richter GmbH & Co. KG (ARI)**

Nameplate Abbreviation: ARI

Schloss Holte-Stukenbrock, 33758Germany

**This Company Manufactures or Assembles:**

Design Name: 901/902/911/912      NBCert #      08008

Manufacturer/Assembler	Designators	Expiration Date
Manufacturer	UV	12/12/2023

**Design Type**

[Safety Relief Valve] 901/902/911/912  
 Capacity Tests: Sec. UV at National Board Testing Lab on November 9, 2001  
 Method of Establishing Relieving Capacity: Flow Capacity, K  
 Certified Value: 0.817 Unitless  
 Media - Test: Air/Gas; Certified: Air, Gas, Steam  
 Set Pressure Definition: Initial Audible Discharge  
 Blowdown Characteristics: Fixed  
 Designed by: ARI-Armaturen Albert Richter GmbH & Co. KG {ARI}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
1 NPS	1.5, 2.0 NPS	0.617 in <sup>2</sup>	0.886 in	0.22 in	30-493 psi	Air	UV

1 NPS	1.5, 2.0 NPS	0.617 in <sup>2</sup>	0.886 in	0.22 in	30-493 psi	Steam	UV
1.25 NPS	2.0 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	30-493 psi	Air	UV
1.25 NPS	2.0 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	30-493 psi	Steam	UV
1.5 NPS	2, 2.5 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	30-493 psi	Air	UV
1.5 NPS	2, 2.5 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	30-493 psi	Steam	UV
1.5 NPS	2.5, 3.0 NPS	1.578 in <sup>2</sup>	1.417 in	0.37 in	30-493 psi	Air	UV
1.5 NPS	2.5, 3.0 NPS	1.578 in <sup>2</sup>	1.417 in	0.37 in	30-493 psi	Steam	UV
2 NPS	3 NPS	2.465 in <sup>2</sup>	1.772 in	0.45 in	30-493 psi	Air	UV
2 NPS	3 NPS	2.465 in <sup>2</sup>	1.772 in	0.45 in	30-493 psi	Steam	UV
2.5-3 NPS	4 NPS	4.166 in <sup>2</sup>	2.303 in	0.61 in	30-406 psi	Air	UV
2.5-3 NPS	4 NPS	4.166 in <sup>2</sup>	2.303 in	0.61 in	30-406 psi	Steam	UV
4 NPS	6 NPS	9.861 in <sup>2</sup>	3.543 in	0.98 in	30-276 psi	Air	UV
4 NPS	6 NPS	9.861 in <sup>2</sup>	3.543 in	0.98 in	30-276 psi	Steam	UV
5-6 NPS	8 NPS	13.678 in <sup>2</sup>	4.173 in	1.34 in	30-392 psi	Air	UV
5-6 NPS	8 NPS	13.678 in <sup>2</sup>	4.173 in	1.34 in	30-392 psi	Steam	UV
6 NPS	10 NPS	19.022 in <sup>2</sup>	4.921 in	1.46 in	30-305 psi	Air	UV
6 NPS	10 NPS	19.022 in <sup>2</sup>	4.921 in	1.46 in	30-305 psi	Steam	UV

Design Name: 901/902/911/912 (1" liquid) NBCert # 08020

Manufacturer/Assembler	Designators	Expiration Date
Manufacturer	UV	11/12/2028

**Design Type**  
 [Relief Valve] 901/902/911/912 (1" liquid)  
 Capacity Tests: Sec. UV at National Board Testing Lab on August 24, 2001  
 Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor  
 Certified Value: 14.410 GPM/SQ.RT. PSID  
 Media - Test: Water/Liquid; Certified: Liquid  
 Set Pressure Definition: Opening Pressure  
 Blowdown Characteristics: Fixed  
 Designed by: ARI-Armaturen Albert Richter GmbH & Co. KG {ARI}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
1 NPS	1.5, 2.0 NPS	0.617 in <sup>2</sup>	0.886 in	0.22 in	15-493 psi	Water	UV

Design Name: 901/902/911/912 (Liquids) NBCert # 08019

Manufacturer/Assembler	Designators	Expiration Date
Manufacturer	UV	12/12/2023

**Design Type**  
 [Relief Valve] 901/902/911/912 (Liquids)  
 Capacity Tests: Sec. UV at National Board Testing Lab on October 15, 2001  
 Method of Establishing Relieving Capacity: Flow Capacity, K  
 Certified Value: 0.545 Unitless  
 Media - Test: Water/Liquid; Certified: Liquid  
 Set Pressure Definition: Opening Pressure  
 Blowdown Characteristics: Fixed  
 Designed by: ARI-Armaturen Albert Richter GmbH & Co. KG {ARI}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
1.25 NPS	2 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-493 psi	Water	UV
1.5 NPS	2, 2.5 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-493 psi	Water	UV
1.5 NPS	2.5, 3 NPS	1.578 in <sup>2</sup>	1.417 in	0.37 in	15-493 psi	Water	UV
2 NPS	3 NPS	2.465 in <sup>2</sup>	1.772 in	0.45 in	15-493 psi	Water	UV
2.5-3 NPS	4 NPS	4.166 in <sup>2</sup>	2.303 in	0.61 in	15-406 psi	Water	UV
4 NPS	6 NPS	9.861 in <sup>2</sup>	3.543 in	0.98 in	15-276 psi	Water	UV
5-6 NPS	8 NPS	13.678 in <sup>2</sup>	4.173 in	1.34 in	15-392 psi	Water	UV
6 NPS	10 NPS	19.022 in <sup>2</sup>	4.921 in	1.46 in	15-305 psi	Water	UV

Design Name: 901/902/911/912 {15-30} NBCert # 08031

Manufacturer/Assembler	Designators	Expiration Date
Manufacturer	UV	11/29/2023

**Design Type**

[Safety Relief Valve] 901/902/911/912 {15-30}  
Capacity Tests: Sec. UV at National Board Testing Lab on May 9, 2007  
Method of Establishing Relieving Capacity: Flow Capacity, K  
Certified Value: 0.769 Unitless  
Media - Test: Air/Gas, Steam; Certified: Air, Gas, Steam  
Set Pressure Definition: Initial Audible Discharge  
Blowdown Characteristics: Fixed  
Designed by: ARI-Armaturen Albert Richter GmbH & Co. KG {ARI}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Designator
1 NPS	1.5, 2.0 NPS	0.394 in <sup>2</sup>	0.709 in	0.205 in	15-30 psi	Air	UV
1 NPS	1.5, 2.0 NPS	0.394 in <sup>2</sup>	0.709 in	0.205 in	15-30 psi	Steam	UV
1.25 NPS	2.0 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-30 psi	Air	UV
1.25 NPS	2.0 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-30 psi	Steam	UV
1.5 NPS	2, 2.5 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-30 psi	Air	UV
1.5 NPS	2, 2.5 NPS	1.024 in <sup>2</sup>	1.142 in	0.29 in	15-30 psi	Steam	UV
1.5 NPS	2.5, 3.0 NPS	1.578 in <sup>2</sup>	1.417 in	0.37 in	15-30 psi	Air	UV
1.5 NPS	2.5, 3.0 NPS	1.578 in <sup>2</sup>	1.417 in	0.37 in	15-30 psi	Steam	UV
2 NPS	3 NPS	2.465 in <sup>2</sup>	1.772 in	0.45 in	15-30 psi	Air	UV
2 NPS	3 NPS	2.465 in <sup>2</sup>	1.772 in	0.45 in	15-30 psi	Steam	UV
2.5-3 NPS	4 NPS	4.166 in <sup>2</sup>	2.303 in	0.61 in	15-30 psi	Air	UV
2.5-3 NPS	4 NPS	4.166 in <sup>2</sup>	2.303 in	0.61 in	15-30 psi	Steam	UV
4 NPS	6 NPS	9.861 in <sup>2</sup>	3.543 in	0.98 in	15-30 psi	Air	UV
4 NPS	6 NPS	9.861 in <sup>2</sup>	3.543 in	0.98 in	15-30 psi	Steam	UV
5-6 NPS	8 NPS	13.678 in <sup>2</sup>	4.173 in	1.34 in	15-30 psi	Air	UV
5-6 NPS	8 NPS	13.678 in <sup>2</sup>	4.173 in	1.34 in	15-30 psi	Steam	UV
6 NPS	10 NPS	19.022 in <sup>2</sup>	4.921 in	1.46 in	15-30 psi	Air	UV
6 NPS	10 NPS	19.022 in <sup>2</sup>	4.921 in	1.46 in	15-30 psi	Steam	UV