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[www.tssa.org](http://www.tssa.org)

July 10, 2019

SCOTT ISLIP  
ROUND ENGINEERING INC  
10 SEGWUN RD  
WATERDOWN ON L8B 0K6  
CA

**Service Request Type:** BPV-Fitting Registration  
**Service Request No.:** 2595050  
**Your Reference No.:** R-0952  
**Registered to:** ARI-ARMATUREN USA LP

Dear SCOTT ISLIP,

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

**CRN :** 0G13705.5R2  
**Main Design No.:** ARI-ARMATUREN SAFETY RELIEF VALVES  
**Expiry Date:** 10-Jul-2029

Please be advised that a valid quality control system must be maintained for the fitting registration to remain valid until the expiry date.

**See one sheet of attachment to Statutory Declaration for Scope of registration.**

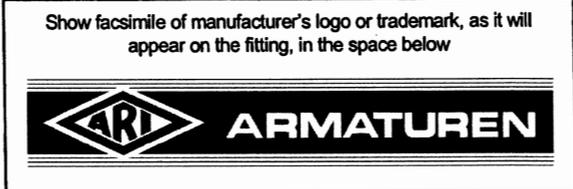
A stamped copy of the approved registration and invoice for engineering services will be mailed to you shortly. Should you have any questions or require further assistance, however, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail [customerservices@tssa.org](mailto:customerservices@tssa.org). We will be happy to assist you. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Kaivan Kia P. Eng., PMP  
Mechanical Engineer, BPV  
Tel. : 416-734-3457  
Fax : 416-231-6183  
Email : [kkia@tssa.org](mailto:kkia@tssa.org)



TECHNICAL STANDARDS &  
SAFETY AUTHORITY  
14th Floor, Centre Tower  
3300 Bloor Street West  
Toronto, Ontario  
Canada M8X 2X4



## STATUTORY DECLARATION Registration of Fittings

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

of ARI-ARMATUREN USA, LP  
(Name of Manufacturer)

Located at 125 MAGELLAN CIRCLE, WEBSTER, TX, 77598 713-845-1500  
(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 DIV.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 ISO 9001:2015 which has been verified by the following authority, TUV

The items covered by this declaration, for which I seek registration, are category \_\_\_\_\_ type fittings. In support of this application, the following information and/or test data are attached as follows:  
SCOPE OF CRN, REPORTS, CATALOGS, NATIONAL BOARD LISTING

(drawings, calculations, test reports, etc.)

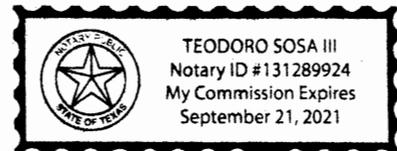
Declared before me at the city of Webster in the State of Texas

the 23<sup>rd</sup> day of April AD 2019.

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: 0G13705.SR2

Registered by: K. Keefe

Dated: July 10/19

NOTE: This registration expires on July 10/2029

Boilers and Pressure Vessels Safety Program

REGISTERED

CRN: 0G13705.SR2

Signed: K. Keefe

Date: July 10/19

PV 09553 (06/04) See 1 sheet of attachment for scope. We 7/10/19

**ARI-ARMATURE USA, LP**

125 MAGELLAN CIRCLE  
 WEBSTER, TX  
 77598, USA

15-May-19



PAGE 1 OF 1

**SCOPE OF CRN REGISTRATION**

Product Description	Models	Design Code	Code Stamp	Size Range	End Connection	Standard Body and Bonnet Material (Note 1)	Nominal Pressures (Note 1,2,3,4)
Full-Nozzle Safety Relief Valves	R, RB, RO, RBO, (Fig. 971, 973, 974)	ASME Section VIII Division 1	ASME UV	NPS 1" thru NPS 10"	ASME B16.5 Flanged	Carbon Steel ASME SA216-WCC	ANSI 150, 300, 600 900, 1500, 2500 Limited by the Set Pressure.
Full-Nozzle Safety Relief Valves	RL14, RLO14, RL40, RLO40, RL41, RLO41 (Fig. 966, 968, 969)	ASME Section VIII Division 1	ASME UV	NPS 1/2" thru NPS 2"	Female NPT, Male NPT, Socket Weld, Butt weld, ASME B16.5 Flanged	Carbon Steel ASME SA216-WCC	ANSI 150, 300, 600 900, 1500, 2500 Limited by the Set Pressure.

**Note 1:** The following other ASME Section II materials may be supplied. In all cases the maximum pressure-temperature ratings are to be limited to the National Board Listing set pressures.

- ASME SA217-WC6
- ASME SA351-CF8M
- ASME SA352-LCC
- ASME SA494 M-35-2
- ASME SA217-C12
- ASME SA351-CN7M
- ASME SA494 CW-12MW ← NO welding or Brazing permitted. kk
- ASME SA995-4A CD3MN

**Note 2:** In all cases the pressure-temperature ratings of the valves may be limited by the seat and seal materials. Consult ARI-Armature.

**Note 3:** For temperatures below -20F products shall conform to the rules of the applicable codes under which they are used.

**Note 4:** See attached copy of National Board Listing.



ARI - Armaturen USA, LP (TAR)

NB#: 73000

location: 125 Magellan Circle, Webster, TX 77598 United States

ARI - Armaturen USA, LP (TAR)

location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73000** Design Series or catalog number: **Reyco R, RB & RO (Fig. 971, 973, 974)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 19, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.86 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 - 3 NPS	0.122 sq in	[D] 0.394 in	0.12 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6250 psi	Air	VIII Div. 1
		0.217 sq in	[E] 0.526 in	0.16 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6250 psi	Air	VIII Div. 1
1.5 NPS	2 - 3 NPS	0.34 sq in	[F] 0.658 in	0.2 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6250 psi	Air	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.558 sq in	[G] 0.843 in	0.26 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 4905 psi	Air	VIII Div. 1
	3 NPS	0.869 sq in	[H] 1.052 in	0.32 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3300 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.427 sq in	[J] 1.348 in	0.41 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3300 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.036 sq in	[K] 1.61 in	0.49 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3300 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.16 sq in	[L] 2.006 in	0.61 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	3.987 sq in	[M] 2.253 in	0.69 in	15 - 1600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4.807 sq in	[N] 2.474 in	0.75 in	15 - 1600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	12.24 sq in	[Q] 3.948 in	1.2 in	15 - 925 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		17.72 sq in	[R] 4.75 in	1.45 in	15 - 350 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	29.75 sq in	[T] 6.155 in	1.84 in	15 - 325 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

ARI - Armaturen USA, LP (TAR)

NB#: 73011

Location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73011** Design Series or catalog number: **Reyco R, RB, RO, RBO (Fig. 971, 973, 974) (liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 27, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.724 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2, 2.5, 3 NPS	0.122 sq in	[D] 0.394 in	0.12 in	15 - 6250 psi	Water	VIII Div. 1
		0.217 sq in	[E] 0.526 in	0.16 in	15 - 6250 psi	Water	VIII Div. 1
1.5 NPS	2 - 3 NPS	0.34 sq in	[F] 0.658 in	0.2 in	15 - 6250 psi	Water	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.558 sq in	[G] 0.843 in	0.26 in	15 - 4905 psi	Water	VIII Div. 1
	3 NPS	0.869 sq in	[H] 1.052 in	0.32 in	15 - 3300 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.427 sq in	[J] 1.348 in	0.41 in	15 - 3300 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.036 sq in	[K] 1.61 in	0.49 in	15 - 3300 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.16 sq in	[L] 2.006 in	0.61 in	15 - 2900 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.987 sq in	[M] 2.253 in	0.69 in	15 - 1600 psi	Water	VIII Div. 1
		4.807 sq in	[N] 2.474 in	0.75 in	15 - 1600 psi	Water	VIII Div. 1
		7.07 sq in	[P] 3 in	0.92 in	15 - 1600 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.24 sq in	[Q] 3.948 in	1.2 in	15 - 925 psi	Water	VIII Div. 1
	8, 10 NPS	17.72 sq in	[R] 4.75 in	1.45 in	15 - 350 psi	Water	VIII Div. 1
8 NPS	10 NPS	29.75 sq in	[T] 6.155 in	1.84 in	15 - 325 psi	Water	VIII Div. 1

Certification Number: **73044** Design Series or catalog number: **RL-14 & RLO-14**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 08, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.23 SCFM/PSIA**Certified Value (alternate medium): **3.46 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.078 sq in	0.315 in	0.078 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

ARI - Armaturen USA, LP (TAR)

NB#: 73055

location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73055** Design Series or catalog number: **RL-14 & RLO-14 (Liquids)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 04, 2010**

Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**

Certified Value: **1.88 GPM/SQ.RT. PSID**

Test Medium: **Water**

Certified Medium: **Liquid**

Special Service: **None**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.078 sq in	0.315 in	0.078 in	15 - 5000 psi	Water	VIII Div. 1

Certification Number: **73145** Design Series or catalog number: **RL40, RLO40, RL41, RLO41**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 10, 2010**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **1.86 SCFM/PSIA**

Certified Value (alternate medium): **5.23 PPH/PSIA**

Test Medium: **Steam & Air/Gas**

Certified Medium: **Steam & Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 - 1 NPS	1-2 NPS	0.152 sq in	0.44 in	0.365 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

Certification Number: **73156** Design Series or catalog number: **RL40, RLO40, RL41, RLO41 (Liquids)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 26, 2010**

Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**

Certified Value: **2.684 GPM/SQ.RT. PSID**

Test Medium: **Water**

Certified Medium: **Liquid**

Special Service: **None**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 - 1 NPS	1-2 NPS	0.152 sq in	0.44 in		15 - 5000 psi	Water	VIII Div. 1

ARI - Armaturen USA, LP (TAR)

NB#: 73167

location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73167** Design Series or catalog number: **RL40, RL040 (0.847 in. orif.)**

Type Classification: **Safety Relief Valve**  
 Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 03, 2010**  
 Method of Establishing Relieving Capacity: **Flow Capacity, Slope**  
 Certified Value: **8.86 SCFM/PSIA**  
 Certified Value (alternate medium): **24.89 PPH/PSIA**  
 Test Medium: **Air**  
 Certified Medium: **Steam & Air/Gas**  
 Special Service: **None**  
 Set Pressure Definition: **Pop**  
 Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 - 2 NPS	2 NPS	0.563 sq in	0.847 in		15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **73178** Design Series or catalog number: **RL40, RL040 (0.847 in. orif.)(liquid)**

Type Classification: **Safety Relief Valve**  
 Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 03, 2010**  
 Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**  
 Certified Value: **13.05 GPM/SQ.RT. PSID**  
 Test Medium: **Water**  
 Certified Medium: **Liquid**  
 Special Service: **None**  
 Set Pressure Definition: **First Steady Stream**  
 Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 - 2 NPS	2 NPS	0.563 sq in	0.847 in		15 - 1500 psi	Water	VIII Div. 1

Certification Number: **73202** Design Series or catalog number: **RL14 & RLO14 (0.394 in.)**

Type Classification: **Safety Relief Valve**  
 Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 30, 2014**  
 Method of Establishing Relieving Capacity: **Flow Capacity, Slope**  
 Certified Value: **1.637 SCFM/PSIA**  
 Certified Value (alternate medium): **4.60 PPH/PSIA**  
 Test Medium: **Steam & Air/Gas**  
 Certified Medium: **Steam & Air/Gas**  
 Set Pressure Definition: **Pop**  
 Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.122 sq in	0.394 in	0.0985 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

ARI - Armaturen USA, LP (TAR)

NB#: 73213

Location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73213** Design Series or catalog number: **RL14 & RLO14 (0.394 in.) (Liquid)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on September 30, 2014

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 3.021 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.122 sq in	0.394 in	0.0985 in	15 - 5000 psi	Water	VIII Div. 1

Certification Number: **73224** Design Series or catalog number: **RL40, RLO40, RL41, RLO41 (0.547 in orifice), Design Rev. A**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on March 04, 2014

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 3.76 SCFM/PSIA

Certified Value (alternate medium): 10.53 PPH/PSIA

Test Medium: Steam &amp; Air/Gas

Certified Medium: Steam &amp; Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	1-2 NPS	0.235 sq in	0.547 in	0.137 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1

Certification Number: **73235** Design Series or catalog number: **RL40, RLO40, RL41, RLO41 (0.547 in. orifice) (Liquid), Design Rev. A**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on March 04, 2014

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 5.635 GPM/SQ.RT. PSID

Test Medium: Liquid

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	1-2 NPS	0.235 sq in	0.547 in	0.137 in	15 - 3000 psi	Water	VIII Div. 1