

345 Carlingview Drive Toronto, Ontario CANADA M9W 6N9 Tel.: 416.734.3300

Fax.: 416.231.1626 Toll Free: 1.877.682.8772

www.tssa.org

May 04, 2017

SCOTT ISLIP ROUND ENGINEERING INC 10 SEGWUN RD WATERDOWN ON LOR 2H8 CA

Service Request Type.: BPV-National MB

Service Request No.: 2016042

Your Reference No.: R-0644 AVCO BALL VALVES

Registered to.: ALLOY VALVES & CONTROL INC - AVCO

Dear SCOTT ISLIP,

Please find enclosed the original response from MB, registered under the CRN No.: 0C19055.54.

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



#### **Inspection and Technical Services Manitoba**

508 - 401 York Avenue Winnipeg Manitoba R3C 0P8 **T (**204) 945-3373 **F (**204) 948-2309

www.firecomm.gov.mb.ca/codes steam pressure.html

April 10, 2017

TSSA 345 Carlingview Drive Toronto, ON M9W 6N9

Attn: Tanya Francis

#### REGISTRATION OF VALVES AND FITTINGS

Manufacturer: AVCO VALVES & CONTROL

The design(s) for the following Valves/Fittings has been received by us and has been examined and accepted for registration in the Province of Manitoba as follows.

DRAWING / CATALOGUE	CRN	FILE
AVCO BALL VALVES CATALOGUE		
SEE ATTACHED STAMPED "THIS IS PART OF	0C19055.54	37518
CRN" FOR SCOPE OF REGISTRATION 3 PAGES		

#### An invoice covering survey and registration fees is enclosed.

**NOTE:** CRN registered under reciprocal agreement & is conditional based on compliance with the notes set by the original issuing Jurisdiction: **TSSA**. This registration expires **January 5, 2027**.

This registration is valid until the indicated expiry date 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.

The registration of this design does not relieve the manufacturer, the owner or his agent of the responsibility for the design or construction of a fitting in accordance with the applicable Acts, Codes and Standards. Inspection and Technical Services assumes no responsibility by registering designs, examining plans and/or inspecting equipment or facility.

Regards

Ryan Orlesky, C.E.T.

Design Surveyor

Office of the Fire Commissioner

Inspection and Technical Services Manitoba

508 - 401 York Avenue

Winnipeg, Manitoba, R3C 0P8

Phone: 204-945-3373

Email: ryan.orlesky@gov.mb.ca



# TECHNICAL STANDARDS & SAFETY AUTHORITY

14th Floor, Centre Tower 3300 Bloor Street West Toronto, Ontario Canada M8X 2X4 Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below



STATUTORY DEC Registration of		
MARK WEINER, CEO	J	
(Name and Position, e.g. President, Plant Man	ager, Chief Engineer)	
of AVCO VALVES & CONTROL, INC.		
(Name of Manufacturer)		,
·	744 407 0077	744 407 0000
Located at 3210 S. SUSAN ST., SANTA ANA, CA, 92704  (Plant Address)	714-427-0877 (Telephone No.)	714-427-6392 (Fax No.)
do solemnly declare that the fittings listed hereunder, which are subject and Pressure Vessels Regulation, comply with all of the requirement ASME B16.34, ASME B31.3	ect to the <i>Technical Standar</i>	
(Title of recognized North American S which specifies the dimensions, materials of construction, pressure/tempera		ing the fittings and service;
or are not covered by the provisions of a recognized North American as supported by the attached da pressure/temperature ratings and the basis for such ratings, the marking	ata which identifies the dimensi	ions, material of construction,
I further declare that the manufacture of these fittings is controlled by a quality which has been verified by the following authority, ANAB	system meeting the requiren	nents of ISO:9001:2015
The items covered by this declaration, for which I seek registration, are category C	- VALVES	type fittings. In support of
this application, the following information and/or test data are attached as follows: SCOPE OF CRN REGISTRATION, DESIGN REPORTS, DRAWINGS, C.		<u>.</u>
(drawings, calculations, test repo	rts, etc.)	
Declared before me at in the _		of
the day ofAD 20		
Commissioner for Oaths:		
(Printed name)	mal Cide	
(Signature)	(Signature of	f Declarer)
FOR OFFICE USE O To the best of my knowledge and belief, the application meets the requirements Technical Standards and Safety/Act, Boilers and Pressure Vessels Regulatio CSA Standard B51 and is accepted for registration in Category  CRN:  DC19055554  Registered by:  April 10, 2017	of the Inspection & Technical Services Manitobe REGIST  C.R.N.: OC. I. Stoned: F. Stoned: F. C. Ston	TERED ]

## **CALIFORNIA JURAT**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA }			
COUNTY OF ORDAGE			
Subscribed and sworn to (or affirmed) before me on this _	17th day of	MAY	2016
by MARK WEINER	Dote	Month	Yeor
Nome of Signe	rs /		•
proved to me on the basis of satisfactory evidence to be the	ne person(s) who appea	red before me.	
	. /		
Signature of Notary Public	HMD1	HILLAL BARAI COMMISSION #21: Notary Public - Cali ORANGE COUN My Commission Ex NOVEMBER 4, 20	DEHI   29265   fornia   TY   ppires   poly
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attachment of this form to an unintended document.	m com deter oneration	of the occument	or probblem
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05-Jan-17

AVCO VALVES & CONTROL, INC. 3210 S. SUSAN ST. SANTA ANA, CALIFORNIA

USA, 92704



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## **SCOPE OF CRN REGISTRATION**

Product	AVCO	Design	Size Range	Body	End Connection	Material	MAWP	MDMT
Description	Series	Code	-	Class	(Note 1,2,3)	Specification (Note 4)	(psig) (Note 5)	(F)
Three Piece Ball	1100	ASME B16.34	1/4" thru 1-1/4"	600	FNPT, Socket Weld,	ASTM A216-WCB Carbon Steel	1480 psig at 100F	-20
Valve	1900				CL.150, CL.300,	ASTM A351-CF8M Stainless Steel	1440 psig at 100F	-20
	1				CL.600 Flanged,	ASTM A351-CF3M Stainless Steel	1440 psig at 100F	-20
					Buttweld	ASTM A351-CN7M Alloy 20	1200 psig at 100F	-20
						ASTM A494-M35-1 Monel 400	1200 psig at 100F	-20
				1		ASTM A494-CW12MW Hastelloy C	1200 psig at 100F	-20
Three Piece Ball	1100	ASME B16.34	1-1/2" thru 4"	300	FNPT, Socket Weld,	ASTM A216-WCB Carbon Steel	740 psig at 100F	-20
Valve	1900				CL.150, CL.300	ASTM A351-CF8M Stainless Steel	720 psig at 100F	-20
		1			Flanged, Buttweld	ASTM A351-CF3M Stainless Steel	720 psig at 100F	-20
						ASTM A351-CN7M Alloy 20	600 psig at 100F	-20 -20
				Ì		ASTM A494-M35-1 Monel 400	600 psig at 100F	-20
			]	1		ASTM A494-CW12MW Hastelloy C	600 psig at 100F	-20
Bottom Entry and	1700	ASME B16.34	1/4" thru 1-1/4"	600	FNPT, Socket Weld,	ASTM A216-WCB Carbon Steel	1480 psig at 100F	-20
Side Entry Diverter	1800			1	CL.150, CL.300,	ASTM A351-CF8M Stainless Steel	1440 psig at 100F	-20
Valve				ĺ	CL.600 Flanged,	ASTM A351-CF3M Stainless Steel	1440 psig at 100F	-20
					Buttweld	ASTM A351-CN7M Alloy 20	1200 psig at 100F	-20
						ASTM A494-M35-1 Monel 400	1200 psig at 100F	-20
		1				ASTM A494-CW12MW Hastelloy C	1200 psig at 100F	-20 -20 -20 -20 -20
Bottom Entry and	1700	ASME B16.34	1-1/2" thru 4"	300	FNPT, Socket Weld,	ASTM A216-WCB Carbon Steel	740 psig at 100F	-20
Side Entry Diverter	1800				CL.150, CL.300	ASTM A351-CF8M Stainless Steel	720 psig at 100F	-20
Valve					Flanged, Buttweld	ASTM A351-CF3M Stainless Steel	720 psig at 100F	-20
						ASTM A351-CN7M Alloy 20	600 psig at 100F	-20
	1					ASTM A494-M35-1 Monel 400	600 psig at 100F	-20
						ASTM A494-CW12MW Hastelloy C	600 psig at 100F	-20
Flanged Ball Valve	9100	ASME B16.34	1/2" thru 10"	150	CL.150 Flanged	ASTM A216-WCB Carbon Steel	285 psig at 100F	-20
	9900					ASTM A351-CF8M Stainless Steel	275 psig at 100F	-20
	1					ASTM A351-CN7M Alloy 20	230 psig at 100F	-20
						ASTM A494-M35-1 Monel 400	230 psig at 100F	-20
						ASTM A494-CW12MW Hastelloy C	230 psig at 100F	-20
Flanged Ball Valve	9100	ASME B16.34	1/2" thru 10"	300	CL.300 Flanged	ASTM A216-WCB Carbon Steel	740 psig at 100F	-20
	9900					ASTM A351-CF8M Stainless Steel	720 psig at 100F	-20
Inspection Technical		ffice of the Fire Commissioner				ASTM A351-CN7M Alloy 20	600 psig at 100F	-20 -20
Manitoba	30111000					ASTM A494-M35-1 Monel 400	600 psig at 100F	-20
Ma	uhitoba					ASTM A494-CW12MW Hastelloy C	600 psig at 100F	-20

THIS IS PART OF CRN

9C19055.54

15-Dec-16

## **AVCO VALVES & CONTROL, INC.**

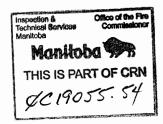
3210 S. SUSAN ST. SANTA ANA, CALIFORNIA USA, 92704



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### SCOPE OF CRN REGISTRATION CONTINUED

Product	AVCO	Design	Size Range	Body	End Connection	Material	MAWP	MDMT
Description	Series	Code		Class	(Note 1,2)	Specification	(psig)	(F)
ASME BPE Three	2100	ASME BPE,	1/2" thru 4"	N/A	ASME BPE Clamp	ASTM A351-CF8M Stainless Steel	Size 1/2" thru 2-1/2"	-20
Piece Ball Valve,	2700	ASME B31.3.		ļ	Ferrule (Note 6)	ASTM A351-CF3M Stainless Steel	200 psig at 100F	
Bottom Entry and	2800					ASTM A351-CN7M Alloy 20	165 psig at 250F	
Side Entry Diverter	2900					ASTM A494-M35-1 Monel 400	Size 3"	] .
Valve.				1		ASTM A494-CW12MW Hastelloy C	200 psig at 100F	
				1			150 psig at 250F	
							Size 4"	
		İ		1			200 psig at 100F	
							125 psig at 250F	
ASME BPE Three	2100	ASME BPE,	1/2" thru 4"	N/A		ASTM A351-CF8M Stainless Steel	Size 1/2" thru 1"	-20
Piece Ball Valve,	2700	ASME B31.3.		1	thru 3": 0.065" wall	ASTM A351-CF3M Stainless Steel	1500 psig at 100F	.l l
Bottom Entry and	2800				tube, Size 4": 0.085"		Size 1-1/2" and 2"	
Side Entry Diverter	2900				wall tube (Note 7)		1000 psig at 100F	_
Valve.							Size 2-1/2"	
							800 psig at 100F	
	1		ŀ				Size 3"	
							700 psig at 100F	_
	l						Size 4"	.
							650 psig at 100F	
ASME BPE Three	2100	ASME BPE,	1/2" thru 4"	N/A		ASTM A494-CW12MW Hastelloy C	Size 1/2" thru 1"	-20
Piece Ball Valve,	2700	ASME B31.3.			thru 3": 0.065" wall		1500 psig at 100F	4
Bottom Entry and	2800		,		tube, Size 4": 0.085"		Size 1-1/2" and 2"	
Side Entry Diverter	2900				wall tube (Note 7)		1000 psig at 100F	4
Valve.							Size 2-1/2"	
							850 psig at 100F	_
							Size 3"	
							700 psig at 100F	_
							Size 4"	
							700 psig at 100F	



15-Dec-16

## **AVCO VALVES & CONTROL, INC.**

3210 S. SUSAN ST. SANTA ANA, CALIFORNIA USA, 92704



PAGE 3 OF 3

#### SCOPE OF CRN REGISTRATION CONTINUED

Product	AVCO	Design	Size Range	Body	End Connection	Material	MAWP	MDMT
Description	Series	Code		Class	(Note 1,2)	Specification	(psig)	(F)
ASME BPE Three	2100	ASME BPE,	1/2" thru 4"	N/A	Tube End, Sizes 1/2"	ASTM A351-CN7M Alloy 20	Size 1/2" thru 1"	-20
Piece Ball Valve,	2700	ASME B31.3.			thru 3": 0.065" wall	ASTM A494-M35-1 Monel 400	1500 psig at 100F	
Bottom Entry and	2800				tube, Size 4": 0.085"		Size 1-1/2"	1
Side Entry Diverter	2900				wall tube (Note 7)		1000 psig at 100F	
Valve.							Size 2"	7 1
							850 psig at 100F	
İ							Size 2-1/2"	7
		ĺ					700 psig at 100F	
	1						Size 3"	7
							550 psig at 100F	1 .
							Size 4"	7
							550 psig at 100F	

- Note 1: In all cases the pressure-temperature ratings of the valves may be limited by the seat and seal materials. Consult AVCO literature.
- Note 2: In all cases the pressure-temperature ratings of a flanged valve are limited by the pressure-temperature ratings of the flange.
- Note 3: Consult factory for valve ratings with buttweld end connections below ASME B16.10M schedule 10.
- Note 4: For valve series 1100, 1700, 1800, 1900, 9100 and 9900 other ASME B16.34 materials may be supplied. When this is the case the pressure-temperature ratings of the valves are in accordance with the applicable ASME B16.34 Table 2 ratings.
- Note 5: For valve series 1100, 1700, 1800, 1900, 9100 and 9900 the pressure-temperature ratings above 100F are in accordance with the applicable ASME B16.34 Table 2 ratings.
- **Note 6**: The assembly clamp is not part of the CRN. Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly Consult Clamp Manufacturer for clamp Pressure-Temperature ratings.
- Note 7: Above 100F the pressure-temperature ratings of tube end valves are to be calculated in accordance with para. 304.1 of ASME B31.3.

