



**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](http://www.firecomm.gov.mb.ca/codes_steam_pressure.html)

December 27, 2017

TSSA  
345 Carlingview Drive  
Toronto, ON  
M9W 6N9

Attn: Tanya Francis

### REGISTRATION OF VALVES AND FITTINGS

**Manufacturer:** DEZURIK / APCO

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
APCO SERIES 200 & 200A AIR RELEASE VALVES	0C19655.54	38359

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

#### NOTES:

- 1. CRN registered under reciprocal agreement & is conditional based on compliance with the notes set by the original issuing Jurisdiction: TSSA. This registration expires **September 20, 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](mailto:ryan.orlesky@gov.mb.ca)



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

**APCO**

**STATUTORY DECLARATION  
 Registration of Fittings**

I, Albert W Libke, P. E. Engineering Director  
 (Name and Position, e.g. President, Plant Manager, Chief Engineer)

of DeZURIK / APCO  
 (Name of Manufacturer)

Located at 1420 Wright Boulevard, Schaumburg, IL 60193-4599 (847) 524-9000 (847) 524-9007  
 (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 Boiler and Pressure Vessel code

(Title of recognized North American Standard)

which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;

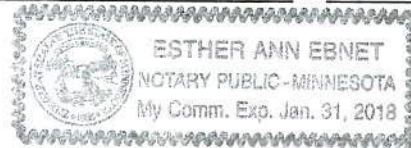
or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with \_\_\_\_\_ as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of 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 9001:2008 which has been verified by the following authority, QUASAR

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

Engineering Report ER1602, Drawings of pressure boundary bodies and covers  
 (drawings, calculations, test reports, etc.)

Declared before me at SARTELL in the STATE of MINNESOTA  
 the 19 day of October AD 2016



Commissioner for Oaths:

Esther Ann Ebnet  
 (Printed name)  
Esther Ann Ebnet  
 (Signature)

Albert W Libke  
 (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 C

CRN: \_\_\_\_\_

Registered by: \_\_\_\_\_

Dated: \_\_\_\_\_



NOTE: This registration expires on: SEPT 20, 2027



  
**CERTIFIED  
TRUE COPY**  
Date: *27/Sep/17*  
Signature: *C. Gorbacz*


**Cecylia Gorbacz, a Commissioner, etc.  
City of Toronto, for the Technical  
Standards & Safety Authority  
Expires June 17, 2020**

## DeZURIK, Inc.

### APCO ARV Series 200 and 200A Air Valves – Design Summary

The ARV Series 200 and 200A air release valves are manufactured in the APCO / DeZURIK factory in Schaumburg Illinois. Standard body and cover materials are cast ductile iron and cast stainless steel. Several pressure rating options are available dependent on outlet orifice size.

#### DESIGN SUMMARY:

SIZES	BODY and COVER MATERIALS	DESIGN CODES	PRESSURE/ TEMPERATURE RATING	NOTES
<p>Series 200: 2" (50 mm) inlet pipe size</p> <p>Series 200A: 1" (25 mm) and 2" (50 mm) inlet pipe size.</p>	<p>Ductile Iron: ASTM A536 Grade 65-45-12</p> <p>Stainless Steel: ASTM A351 – Grade CF8M</p> 	<p>ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 (2015) for cast stainless steel.</p> <p>ASME B31.3 <i>Process Piping</i> (2016) for cast stainless steel and cast ductile iron. Ductile iron meets the requirements of Code Case 196</p>	<p>Series 200 Ductile iron and stainless steel: 150 and 300 psi</p> <p>Series 200A, Ductile iron and stainless steel: 150 psi and 300, psi</p> <p>Temperature range is 0 F (-18C) to +250 F (121C)</p>	<p>Pressure rating of each air valve series is dependent on the outlet orifice size.</p> <p>See DeZURIK APCO Engineering Reports ER1709F and ER1714 for verification that pressure boundary parts meet or exceed the maximum allowable stress requirements of Section VIII and ASME Process Piping Code B31.3</p> <p>Wall thickness of ductile iron valves exceed the requirements of ASME B16.42</p> <p>All APCO air valves are hydrostatic tested at 1.5 times the pressure rating</p>