



345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel.: 416.734.3300
Fax: 416.231.1626
Toll Free: 1.877.682.8772

www.tssa.org

December 18, 2020

NATHALIE DUGO
ALBERTA BOILERS SAFETY ASSOCIATION
9410 20 AVE NW
EDMONTON AB T6N 0A4
CA

Service Request Type: BPV-Fitting Registration
Service Request No.: 2957066
Your Reference No.: PORTAL 2020-S0784, 2020-03788 - CRN#0C21055.2
Registered to: PARKER HANNIFIN - INSTRUMENTATION PRODUCTS DIVISION

Dear NATHALIE DUGO,

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

CRN No.: 0C21055.25
Main Design No.: 3/8" CB Series Check Valves per Catalog 4135-CV (PG.6-8) Rev April 2019
Expiry Date: 05-Nov-2030

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

A stamped copy of the approved registration and invoice for engineering services will be sent 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. We will be happy to assist you. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Zivko Gacevic P. Eng.
Mechanical Engineer, BPV
Tel.: 416-734-3429
Fax: 416-231-6183
Email: zgacevic@tssa.org

STATUTORY DECLARATION
Registration of Fittings
Single or Multiple Fitting Designs within one Fitting Category

I, Craig Beckwith, Division General Manager
(name of applicant) (position title) (must be in a position of authority)
of Parker Hannifin Corporation - Instrumentation Products Division
(name of manufacturer)
located at 1005 A Cleaner Way, Huntsville, AL, 35805, USA
(plant address)

In this space, show facsimile of manufacturer's logo or trademark as it will appear on the fitting.

P

do solemnly declare that the fittings listed hereunder, which are subject to the Safety Codes Act (select only one)

- ☐ comply with the requirements of _____ which specifies the dimensions,
(title of recognized North American Standard)
materials of construction, pressure/temperature ratings and identification marking of the fittings, or
- ☒ are not covered by the provisions of a recognized North American standard and are therefore
manufactured to comply with MSS-SP-105 as supported by the
(title of code of construction or other applicable document)
attached data which identifies the dimensions, materials of construction, pressure/temperature ratings and the basis for such ratings, and the identification marking of the fittings.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified as described in the below Table as being suitable for the manufacturing of these fittings to the stated standard, regulation, code, guideline or other applicable document. The fittings covered by the declaration for which I seek registration are as provided in the Supplementary Sheet(s) attached.

Quality Program Verification and Manufacturing Sites

A copy of the Quality Certificate from each manufacturing site must be included

Item #	Product Description, Model or Series	Quality Program	Scope of Certification	Expiry Date	Verifying Organization	Location(s) Plant Name and address
1.	CB Series Check Valves (Size 3/8" only - CB6)	ISO 9001:2015	Design, Manufacture, and Service of Instrumentation Products, Pressure and Temperature Systems, Pneumatic Pumps, Power Supplies, and Anhydrous	April 7, 2021	DNV-GL	2625 AL Hwy 21 N, Jacksonville, AL 36265, USA

Tracking #: _____

In support of this application, the following information, calculations and/or test data are attached:

Scope of Registration and Catalog 4135-CV April 2019


(Signature of the Declarer)

10/28/20

(Date)

DECLARED before me at Huntsville in the Madison County of Alabama
(city) (province, territory, or state)

this _____ day of _____, 2020
(Month) (Year)

(print) _____
(a Commissioner of Oaths or Notary Public)

(sign) _____
(a Commissioner of Oaths or Notary Public)

(expiry date (mm/dd/yy))

Commissioner of Oaths / Notary Public in and for: _____
(province, territory, or state)

For ABSA Office Use Only:

NOTES: _____

To the best of my knowledge and belief, the application meets the requirements of the Safety Codes Act and CSA Standard B51, Part 1, Clause 4.2, and is accepted for registration in Category 'C'

CRN: _____

Registered Date: _____

Expiry Date: Nov. 5, 2030

Signature: _____
(Signature of the Administrator/SCO)

The information you provide is necessary only for the administration of the programs as required by the Alberta Safety Codes Act and Regulations in the Pressure Equipment Discipline

Technical
Standards
and Safety
Authority

Boilers and
Pressure Vessels
Safety Program

REGISTERED

C.R.N.: 0C21055.25

Signed: 

Date: December 18, 2020.

Note: See attached documents for Scope of Registration

Tracking #: _____

Table 1 Scope of Fitting Designs**

Item #	Primary Pressure Bearing / Retaining Component	Material of Construction	Port Connections and Size Range	MDMT	Rated Pressure		Pressure Class(es) / Schedule(s)	Design Code(s) of Construction	Reference Catalogue (pages) or Drawing(s)
					At Ambient Temperature	At Maximum Temperature			
CB6 Series	Body	ASTM A276, Type 316	Refer to Catalogue	N/A	Refer to Scope of Registration	Refer to Scope of Registration	Refer to Scope of Registration	MSS-SP-105	4135-CV (6-8)
	Cap	ASTM A276, Type 316	Refer to Catalogue	N/A	Refer to Scope of Registration	Refer to Scope of Registration	Refer to Scope of Registration	MSS-SP-105	4135-CV (6-8)

Table 2 Additional Scope Information

List/Attach Additional Detail and References (Product Configurations, Options, Illustrations, etc.)
Example:
Series X Options
See attached scope of registration and catalog pages

** For additional alternatives of Table 1, refer to Form AB-41a, Guide for Completing Form AB-41

THIS IS PART OF CRN
0C21055.25
Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety Program



Registration Scope

Parker Hannifin
Instrumentation Products Division

Catalog 4135-CV, April 2019, Pages 6-8
CB Series Check Valves

Based on the following summary, we seek registration for the following scope.

Series/Model	Size	Shell Pressure Rating, CWP	Body Material	Cap material
CB6	3/8"	3000 psi	ASTM A 276, Type 316	ASTM A 276, Type 316

Summary

Table 1: Summary Table for the CB6 Series Check Valves

Main Pressure Bearing Component	Main Pressure Bearing Material (Standard)	Port Connections and Sizes	Maximum Rated Pressure (Shell Pressure Rating)	Design Code of Construction
Body	ASTM A276, Type 316	Refer to End Connection in Table 2 below	3,000 psi CWP	MSS-SP-105

Table 2 below shows the valve part number description from the catalog for the CB Series Check valves. For this valve the valve bodies are available only in one material (ASTM A276 Type 316). The application is for the 3/8" size, designated as 6 in the part number. The minimum wall thickness for all valves in this line is at the undercut of the thread on the valve body.

Table 2: Dimensions and End Connections

CB Series Filter Check Valve					
Basic Part Number	End Connections	Dimensions		Optional	
	Inlet & Outlet Port 1 & Port 2	A	B Hex	Crack Pressure	Seal Material
6A-CB6L-1-PC-SS	3/8" A-LOK®	2.72	1.00	5 psi	PF Parkerfill
6Z-CB6L-1-PC-SS	3/8" CPI™			10 psi	
6A6M-CB6L-1-PC-SS	3/8" A-LOK® x 3/8" Male NPT	2.88		25 psi	
6Z6M-CB6L-1-PC-SS	3/8" CPI™ x 3/8" Male NPT			50 psi	
8A-CB6L-1-PC-SS	1/2" A-LOK®	2.78		75 psi	
8Z-CB6L-1-PC-SS	1/2" CPI™			100 psi	
8A8M-CB6L-1-PC-SS	1/2" A-LOK® x 3/8" Male NPT	2.88		120 psi	
8Z8M-CB6L-1-PC-SS	1/2" CPI™ x 3/8" Male NPT				

THIS IS PART OF CRN

0C21055.25

Technical Standards and Safety Authority

Boilers and Pressure Vessels Safety Program



CB Series Check Valve

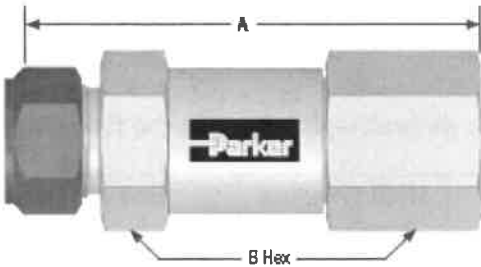
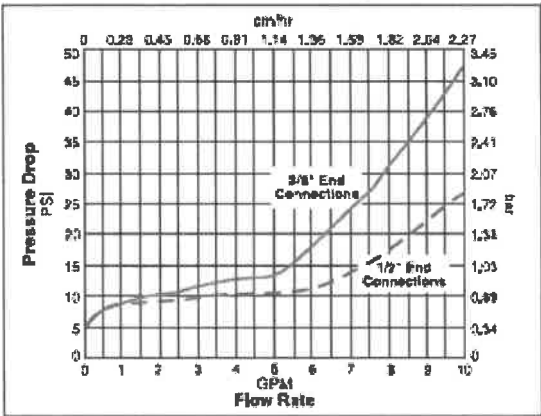


Exhibit 1: Pressure and Temperature Curve and Specifications

CB6 Check Valve

Flow Rate vs. Pressure Drop
CB-Series Check Valve – Size CB6
5 PSI Crack Pressure



Specifications

Shell Pressure Rating:
..... 3000 psi CWP

Standard Crack Pressures:
..... 1, 5, 10, 15, 50, 100, 120

Seat Materials, Back Pressure and Temperature Ratings:

- Parkerfill..... 1000 psi @ 100°F
- 300 psi @ 450°F
- Parker Carbon..... 2500 psi @ 100°F
- 1250 psi @ 450°F

Parkerfill is a PTFE copolymer reinforced with carbon and graphite.
Parker Carbon is a PTFE copolymer reinforced with carbon

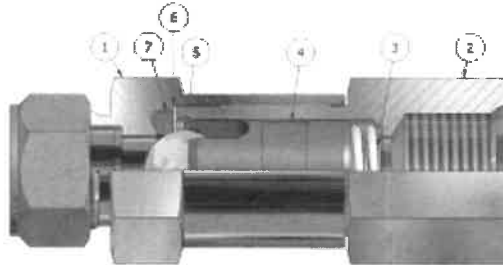
THIS IS PART OF CRN
0C21055.25
Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety
Program

The Cold Working Pressure (CWP) is established by burst testing in accordance with MSS SP-105.

Exhibit 2: Diagram of the Components and the Materials of Construction

Materials of Construction

CB Series Check Valve



Item #	Part	Stainless Valve
1	Body	ASTM A276, Type 316
2	Cap	ASTM A276, Type 316
3	Crack Spring	316 Stainless Steel
4	Ball Cage	ASTM A276, Type 316
5	Ball	440C Stainless Steel
6	Body Washer	316 SS PTFE Coated
7	Seat	Parkerfill, Parker Carbon

Quality System

Parker Hannifin Instrumentation Products Division's quality management system complies with the requirements of ISO 9001:2015. A copy of the current DNV-GL certificate is included in this submission.

THIS IS PART OF CRN
0C21055.25
Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety
Program