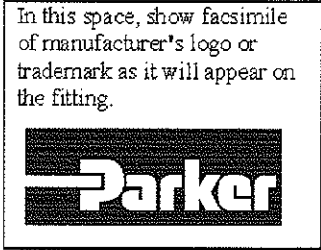




**STATUTORY DECLARATION
Registration of Fittings**



I, Kevin Ballard,
Core Engineering Manager

(company title, e.g. vice president, plant manager, chief engineer) (must be in a position of authority)

of Parker Hannifin, IPDE
(name of manufacturer)

located at Riverside Road, Barnstaple, Devon, EX31 1NP
(plant address)

do solemnly declare that the fittings listed hereunder, which are subject to the Safety Codes Act (check 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 ASME II, VIII, ANSI B16.5 as supported by the attached data which identifies the dimensions, materials of construction, pressure/temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified by the following authority, DNV Management Systems as being suitable for the manufacture of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are See attached drawing

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

Catalog 4190-FP-ACC FCB CRN Report (Sheets 1 & 2)

N.B: CRN OA6793.5 also exists with respect to a portion of this design

DECLARED before me at Barnstaple in the County of Devon

this 20th day of April, 2011
(Month) (Year)

(print) KEVIN BALLARD

Kevin Ballard
(Signature of Applicant)

(sign) Michael T. Outh
(A Commissioner for Oaths)

Notary Public MICHAEL THOMAS OERTON

For Office Use Only

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

Registration Number: 0 B 1 1 7 6 7 . 2

WILLAGRYNCHUK
(For the Administrator/Chief Inspector of Alberta)

Date Registered: OCT 13 2011

Expiry Date: 2010-10-13

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 Boiler Discipline.

THE FITTINGS are registered to ASME B31.3. See the acceptance letter and the scope of registration attached. d.n.

1/4" CWP (PSI) @			3/8" CWP (PSI) @			
Class	Flange Rating		Flange Rating		A-LOK Rating	
	100°F	Max Temp (1000°F)	100°F	Max Temp (1000°F)	100°F	Max Temp (1000°F)
2500	6000	2915	6000	2915	6600	5082
1500	3600	1750	3600	1750	6600	5082
900	2160	1050	2160	1050	6600	5082
600	1440	700	1440	700	6600	5082
300	720	350	720	350	6600	5082
150	275	20	275	20	6600	5082

1/2" CWP (PSI) @			3/4" CWP (PSI) @			
Class	Flange Rating		Flange Rating		A-LOK Rating	
	100°F	Max Temp (1000°F)	100°F	Max Temp (1000°F)	100°F	Max Temp (1000°F)
2500	6000	2915	6000	2915	5800	4466
1500	3600	1750	3600	1750	5800	4466
900	2160	1050	2160	1050	5800	4466
600	1440	700	1440	700	5800	4466
300	720	350	720	350	5800	4466
150	275	20	275	20	5800	4466

1" CWP (PSI) @		
Class	Flange Rating	
	100°F	Max Temp (1000°F)
2500	6000	2915
1500	3600	1750
900	2160	1050
600	1440	700
300	720	350
150	275	20

X = Products no to be submitted

Minimum Design Metal Temperature: -425°F

-325°F *du*

OB11767.2

FOR MATERIAL AND PROCESS SPECIFICATIONS REFER TO GENERIC PROCESS CONTROL SHEET

FOR PART MARKING DETAILS REFER TO PART MARKING SPECIFICATION

THIS DRAWING CONTAINS INFORMATION THAT IS CONFIDENTIAL AND PROPRIETARY TO PARKER HANIFIN PLC. THIS DRAWING IS FURNISHED ON THE UNDERSTANDING THAT IT IS NOT TO BE REPRODUCED OR DISCLOSED TO OTHERS EXCEPT WITH THE WRITTEN CONSENT OF PARKER HANIFIN. IT WILL NOT BE USED TO THE DETRIMENT OF PARKER HANIFIN, AND WILL BE RETURNED UPON REQUEST BY PARKER HANIFIN.

ISSUE NO. 1
E.C.N. NO. N/A
DATE 13/04/2011

DESCRIPTION OF REVISION
New Release

DRAWN BY: ZN
DATE: 22/06/2011
Appr. using electronic: PDM (ACR) FLOW (GSP0525)

DRAWING TITLE:
FLANGE TO COMPRESSION CONNECTOR
FLANGE HUB WALL THICKNESS CALCULATIONS

REMOVE ALL SHARP EDGES AND BURRS UNLESS STATED

INCH	METRIC	ANGULAR
±.005	±.13mm	±1/2°
±.010	±.25mm	±1/4°
±.015	±.38mm	±1/2°

GENERAL W.C. FINISH 63µm CL. / 1.6µm RA
GEOMETRICAL TOL'S TO BS 308 PART 3
ALL THREAD TOLERANCES ARE TO BE IN ACCORDANCE WITH PARKER JPD ESST01.

PART SIMILAR TO

DO NOT SCALE IF IN DOUBT ASK

Parker
Parker Hannifin Ltd
Instruments Division
Barnsley
Doncaster
144 (0) 271 313131

1/4" CWP (PSI) @		3/8" CWP (PSI) @	
Flange Rating		Flange Rating	
Class	100°F	100°F	100°F
2500	3960	5000	3960
1500	2375	3000	2375
900	1435	1800	1435
600	950	1200	950
300	475	900	475
150	110	230	110
A-LOK Rating		A-LOK Rating	
	Max Temp (700°F)		Max Temp (700°F)
	9800	5000	6100
	9800	3000	6100
	9800	1800	6100
	9800	1200	6100
	9800	900	6100
	9800	230	6100

1/2" CWP (PSI) @		3/4" CWP (PSI) @	
Flange Rating		Flange Rating	
Class	100°F	100°F	100°F
2500	3960	5000	3960
1500	2375	3000	2375
900	1435	1800	1435
600	950	1200	950
300	475	900	475
150	110	230	110
A-LOK Rating		A-LOK Rating	
	Max Temp (700°F)		Max Temp (700°F)
	6200	5000	5400
	6200	3000	5400
	6200	1800	5400
	6200	1200	5400
	6200	900	5400
	6200	230	5400

1" CWP (PSI) @	
Flange Rating	
Class	100°F
2500	3960
1500	2375
900	1435
600	950
300	475
150	110
A-LOK Rating	
	Max Temp (700°F)
	4300
	4300
	4300
	4300
	4300

X = Products no to be submitted

OB 11767 . 2

*** = Max working temperature rated in standard class is 900° F. Ref Page66 ASME B16.34 1996

Minimum Design Metal Temperature: - 325 ° F

FOR MATERIAL AND PROCESS SPECIFICATIONS REFER TO GENERIC PROCESS CONTROL SHEET

FOR PART MARKING DETAILS REFER TO PART MARKING SPECIFICATION

THIS DRAWING CONTAINS INFORMATION THAT IS CONFIDENTIAL AND PROPERTY OF PARKER HANNIFIN P.O. THIS DRAWING IS FURNISHED ON THE UNDERSTANDING THAT THE DRAWING AND THE INFORMATION CONTAINED HEREIN WILL NOT BE COPIED OR DISCLOSED TO OTHERS EXCEPT WITH THE WRITTEN CONSENT OF PARKER HANNIFIN. WILL NOT BE USED TO THE DETRIMENT OF PARKER HANNIFIN, AND WILL BE RETURNED UPON REQUEST BY PARKER HANNIFIN.

ISSUE NO. 1
DESCRIPTION OF REVISION
New Release

E.C.N NO. N/A
DATE 13/04/2011

DRAWN BY: ZN
DATE: 22/06/2011
Approve using electronic PDM WORKFLOW (ASPP625)

DRAWING TITLE:
FLANGE TO COMPRESSION CONNECTOR
FLANGE HUB WALL THICKNESS CALCULATIONS

REMOVE ALL SHARP EDGES AND BURRS
UNLESS STATED
3RD ANGLE
PROJECTION

INCH
(001) ± .015"
(0002) ± .005"

METRIC
100mm ± .3mm
(00mm) ± 0.05mm

ANGULAR
± 10"
± 30"

Parker
Parker Hannifin Ltd
Incorporation Products Division Europe
Ramsdale Road
Devon
EX31 1NP
+44 (0)1271 313131

PART SIMILAR TO
DO NOT SCALE
IF IN DOUBT ASK

pg 2 of 3

		1/4" CWP (PSI) @		3/8" CWP (PSI) @		A-LOK Rating	
Class	100°F	Flange Rating		Flange Rating		A-LOK Rating	
		Max Temp (1000°F)	100°F	Max Temp (1000°F)	100°F	Max Temp (1000°F)	Max Temp (1000°F)
2500	6250	3030	6800	6250	8700	3030	6351
1500	3750	1820	6800	3750	8700	1820	6351
900	2250	1090	6800	2250	8700	1090	6351
600	1500	725	6800	1500	8700	725	6351
300	750	365	6800	750	8700	365	6351
150	290	20	6800	290	8700	20	6351

		1/2" CWP (PSI) @		3/4" CWP (PSI) @		A-LOK Rating	
Class	100°F	Flange Rating		Flange Rating		A-LOK Rating	
		Max Temp (1000°F)	100°F	Max Temp (1000°F)	100°F	Max Temp (1000°F)	Max Temp (1000°F)
2500	6250	3030	6800	6250	4400	3030	3212
1500	3750	1820	6800	3750	4400	1820	3212
900	2250	1090	6800	2250	4400	1090	3212
600	1500	725	6800	1500	4400	725	3212
300	750	365	6800	750	4400	365	3212
150	290	20	6800	290	4400	20	3212

REGISTRATION OF FITTINGS

REGISTRATION NO. 1811767-2

DWG. NO. or CAT. NO. George

DATE OF FITTINGS 2011

INITIALS MLG

DATE OCT 13 2011

MILLA GRYNCHUK, P. ENG.
 DESIGN SURVEY ENGINEER

SAFETY CODES ACT - PROVINCE OF ALBERTA

Minimum Design Metal Temperature: -20 °F

X = Products no to be submitted

FOR MATERIAL AND PROCESS SPECIFICATIONS REFER TO GENRIG PROCESS CONTROL SHEET

FOR PART MARKING DETAILS REFER TO PART MARKING SPECIFICATION

THIS DRAWING CONTAINS INFORMATION THAT IS CONFIDENTIAL AND PROPRIETARY TO PARKER HANNIFIN P.L.C. THIS DRAWING IS FURNISHED ON THE UNDERSTANDING THAT THE DRAWING AND THE INFORMATION IT CONTAINS WILL NOT BE COPIED OR DISCLOSED TO OTHERS EXCEPT WITH THE WRITTEN CONSENT OF PARKER HANNIFIN. WILL NOT BE USED TO THE DETRIMENT OF PARKER HANNIFIN, AND WILL BE RETURNED UPON REQUEST BY PARKER HANNIFIN.

ISSUE NO. 1 DESCRIPTION OF REVISION
 New Release

E.C.N. NO. N/A

DATE 13/04/2011

DRAWN BY: ZN
 DRAWN DATE: 22/06/2011
 Approvals using electronic PDM WORKFLOW (GSP06/25)

ALL DIMENSIONS IN UNLESS OTHERWISE STATED

DRAWING TITLE:
FLANGE TO COMPRESSION CONNECTOR
FLANGE HUB WALL THICKNESS CALCULATIONS

REMOVE ALL SHARP EDGES AND BURRS

INCH	METRIC	ANGULAR	UNLESS STATED
1.00" ± 0.01"	25.40mm ± 0.25mm	1.0° ± 0.1°	3rd ANGLE PROJECTION
0.001" ± 0.002"	0.0254mm ± 0.0508mm	0.05° ± 0.10°	

GENERAL MIC FINISH 63micro CLA/ 1.6mm RA

GEOMETRICAL TOL'S TO BS.308 PART 2.

ALL THREAD TOLERANCES ARE TO BE IN ACCORDANCE WITH PARKER IPD ES101.

PART SIMILAR TO

DO NOT SCALE IF IN DOUBT ASK

Parker
 Parker Hannifin Ltd
 Instrumentation Products Division Europe
 Riverside Road
 Barnstable
 Devon
 EX31 1NP
 +44 (0)1271 313131

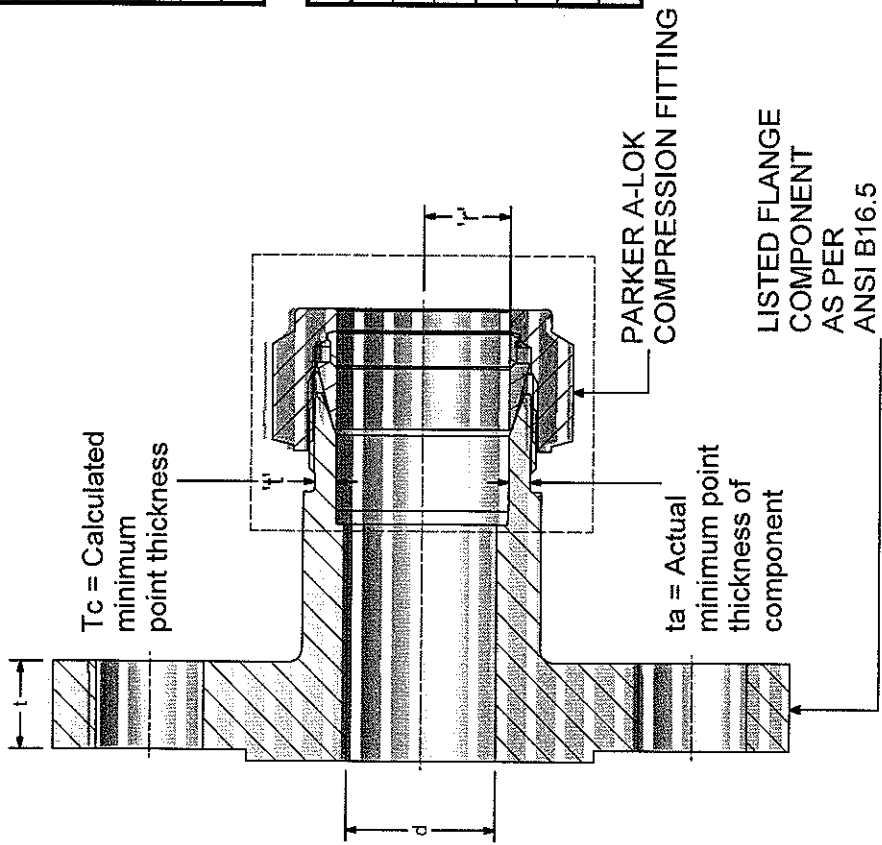
P 3 of 3

11 12 13 14 15 16 17 18 19 110

Flange Rating:
ref B16.5 Class 1500 in BOM

1" Flange Spec	
Material:	A182 F316
t =	1.125" / hub thickness = 1.32"
d =	1"
MAWP =	3600psi @ 100°F; 1750psi @ 1000°F
Hydrotest =	7059psi
MDMT =	-325°F

1" A-LOK Spec	
Material:	A182 F316
ID =	1.4515" ± 0.0055"
OD =	1.730" ± 0.005"
Thread Engagement =	0.2238"
Thread size =	1 1/2" 20UN
A-LOK CRN =	OA6793.5
t =	0.23" / r = 0.504"



0 B 1 1 7 6 7 . 2

FOR MATERIAL AND PROCESS SPECIFICATIONS REFER TO GENERIC PROCESS CONTROL SHEET		ALL DIMENSIONS IN UNLESS OTHERWISE STATED		REMOVE ALL SHARP EDGES AND BURRS	
FOR PART MARKING DETAILS REFER TO PART MARKING SPECIFICATION		DRAWING TITLE:		UNLESS STATED	
THIS DRAWING CONTAINS INFORMATION THAT IS CONFIDENTIAL AND PROPERTY TO PARKER HANNIFIN PLC. THIS DRAWING IS FORNISHED ON THE UNDERSTANDING THAT THE DRAWING AND THE INFORMATION IT CONTAINS WILL NOT BE COPIED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF PARKER HANNIFIN. WILL NOT BE USED TO THE DETRIMENT OF PARKER HANNIFIN, AND WILL BE RETURNED UPON REQUEST BY PARKER HANNIFIN.		FLANGE TO COMPRESSION CONNECTOR FLANGE HUB WALL THICKNESS CALCULATIONS		3RD ANGLE PROJECTION	
ISSUE NO.	1	DESCRIPTION OF REVISION		GENERAL MFG FINISH (min CLAS 1.0mm RA)	
E.C.N NO.	N/A	New Release		±.12" ±.30"	
DATE	13/04/2011	DRAWN BY: ZN		ALL THREAD TOLERANCES ARE TO BE IN ACCORDANCE WITH PARKER IPD ESST01.	
		DRAWN DATE: 22/06/2011		PART SIMILAR TO	
		Approved using eDrawings FROM WORKFLEET (SPP026)		DO NOT SCALE IF IN DOUBT ASK	
			Parker		FCB CRN Report Revision 2
			Parker Hannifin Ltd Instrumentation Products Division Europe Riverside Road Bensaleg EX31 1NP +44 (0)1271 313131		

October 13, 2011

Attention: Susan Turner
PARKER HANNIFIN CANADA IPD
4635 DURHAM RD S
GRIMSBY, ON

The design submission, tracking number 2011-02791, originally received on May 04, 2011 was surveyed and accepted for registration as follows:

CRN : 0B11767.2

Accepted on: October 13, 2011

Reg Type: New Design

Expiry Date: October 13, 2020

Drawing No. : SCOPE OF REGISTRATION 3 PAGES As Noted

Fitting type: FLANGED CONNECTORS, 1/4" THRU 1" ##150 THRU 2500

Design registered in the name of : PARKER HANNIFIN IPDE

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

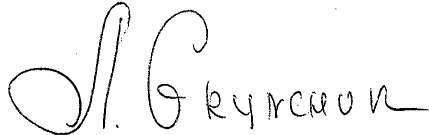
This registration is valid if the A-loks CRN 0A6793.52 that is part of the registration will be renewed after December 3, 2011.

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.

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 3330 or fax (780) 437-7787 or e-mail grynchuk@absa.ca.

Sincerely,



GRYNCHUK, MILLA