



Type Approval Certificate

[Flange Couplings]

Initial Approval 23rd April, 2013

Applicant Parker Hannifin Manufacturing Germany GmbH & Co. KG
Am Metallwerk 9, D-33659 Bielefeld, Germany

Product Description Parflange F37 Flare Flange connection and Parflange Retaining Ring connection (Material : steel and stainless steel)

“ See Appendix 1 ”



Approval Condition “ See Appendix 1 ”

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt.5, Ch.6, Sec.1 of the Rules for Classification of Steel Ships and IACS UR P2.11 and DIN ISO 6162-1, 6162-2, ISO 6164

This Certificate is valid until 22nd September, 2026
Issued at Busan, Korea on 23rd September, 2021



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME21023770590) and certificate No.(HMB30942-PE001).



KOREAN REGISTER

*General Manager of
Marine & Ocean Equipment Team*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
 2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
 3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
 4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Product Description and/or Approval Condition

Date of Issue : 23rd September, 2021

A. Product Description

1. Product Specification

Parflange F37 Flare Flange and Retaining Ring connection

TYPE	Code	Size [inch]	Design Pressure (bar)
SAE 1000 system	R-124	1 1/2"	70
	R-132	2"	70
	R-140	2 1/2"	70
	R-148	3"	70
	R-156	3 1/2"	70
	R-164	4"	70
	R-180	5"	70
	R-196	6"	70
	R-1128	8"	50
	R-1160	10"	50
	F37-124	1 1/2"	70
	F37-132	2"	70
	F37-140	2 1/2"	70
	F37-148	3"	70
	F37-156	3 1/2"	70
F37-164	4"	70	
F37-180	5"	50	
F37-196	6"	50	
F37-1128	8"	50	
F37-1160	10"	50	
SAE 3000 system	R-308	1/2"	350
	R-312	3/4"	350
	R-316	1"	350
	R-320	1 1/4"	280
	R-324	1 1/2"	280
	R-332	2"	280
	R-340	2 1/2"	210
	R-348	3"	210
	F37-308	1/2"	350
	F37-312	3/4"	350
	F37-316	1"	350
	F37-320	1 1/4"	280
	F37-324	1 1/2"	280
	F37-332	2"	280
	F37-340	2 1/2"	210
F37-348	3"	210	
SAE 6000 system	R-608	1/2"	420
	R-612	3/4"	420
	R-616	1"	420
	R-620	1 1/4"	420
	R-624	1 1/2"	420
	R-632	2"	420
	R-640	2 1/2"	420
	R-648	3"	420
	F37-608	1/2"	420
	F37-612	3/4"	420
	F37-616	1"	420
	F37-620	1 1/4"	420
	F37-624	1 1/2"	420
	F37-632	2"	420

Product Description and/or Approval Condition

Date of Issue : 23rd September, 2021

TYPE	Code	Size [inch]	Design Pressure (bar)
ISO 6164 system	R-432	2"	400
	R-440	2 1/2"	400
	R-448	3"	400
	R-464	4"	400
	R-872	4 1/2"	350
	R-880	5"	350
	R-896	6"	350
	R-8128	8"	250
	R-8160	10"	250
		F37-432	2"
	F37-440	2 1/2"	400
	F37-448	3"	400

2. Approved Drawings and Documents

- 1) Drawing, Technical data sheet was approved on 16 January 2013.

3. Test Reports, etc.

- 1) Impulse pressure test (report No. 2A2006-0634) was dated on 14 November 2006.
- 2) Impulse pressure test (report No. 2A2006-0768) was dated on 14 December 2006.
- 3) Pull-out test (report No. C139/07) was dated on 2 October 2007.
- 4) Vacuum test and fire endurance test (report No. C51.1/06) was dated on March 2006.
- 5) Vibration test (report No. C51.2/06) dated on June 2006.
- 6) Pressure pulsation test (report No. C51.3/06) was dated on October-December 2006.
- 7) Vibration test (report No. C67/07) dated on April-July 2007.
- 8) Tightness and burst pressure test.
- 9) Flame resistance test (IBB480, IBB482, IBB484, IBB486, IBB488, IBB490) dated on 21 October 2009.

B. Approval Condition

1. Application & Limitation

- 1) Pipe penetrations through watertight bulkheads and fire bulkheads are not covered by the approval.
- 2) The pipes are to be installed in accordance with manufacturer's instruction.

2. Individual Product Cert. and Drawing Approval Requirement

- 1) Individual Product Certification is required in case where the flange couplings are used for Class I or II piping systems.

3. Marking

- 1) The product is to be marked with manufacturer's name and type, size designation on a suitable position.

4. Others

- 1) Nil

< End of Certificate >