



## Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

<b>Manufacturer</b>	<b>Parker Hannifin Manufacturing Germany GmbH &amp; Co. KG</b>
<b>Address</b>	Am Metallwerk 9, Bielefeld, 33659, Germany
<b>Type</b>	Compression Fittings
<b>Description</b>	Steel, stainless steel or brass EO-DPR and PSR progressive ring, EO-2 soft seal and EO2-Form tube fittings and accessories according to Catalogue 4100-Online/UK, Chapters I and N EO2-Form tube fittings are fire tested, soft sealing piping systems, consisting of body, Viton and NBR seal and unit.
<b>Trade Name</b>	EO-DPR, PSR, EO-2 and EO2-Form
<b>Application</b>	General use for Pipe Classes I, II and III in marine, offshore and industrial piping systems classed or intended for Classification with Lloyd's Register. Fire tested EO2-Form tube fittings are suitable for inert gas systems. Restriction: Separable joints of ND 25 mm or less are not to be used for applications with rotary flexure loads.
<b>Specified Standard</b>	Lloyd's Register Rules and Regulations for the Classification of Ships, 2022; ISO 8434-1, IACS P2.11

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### Other Conditions

Maximum working pressures depend on pipe material and thickness. Pressure reductions depending on design temperature are to be observed according to performance data of catalogue 4100-Online/UK, C2. Selection and installation to be in accordance with the producer's instructions and recommendations. Tube preparation and final installation must be conducted by personal which is trained and currently certified by Parker. All assemblies must be made with machines that are approved by Parker.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

**Previous Version:** 00/20014(E6)

The Design Appraisal Document HMD 3087-00, Issue No. 8 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

## Appendix

### RATINGS

For type "PSR" (carbon steel in accordance with DIN 3859-1, table 2 or higher grades):

Sizes [mm]	Series	PN [bar]
06 - 10	L	500
12 - 18	L	400
22 -42	L	250
06 -10	S	800
12 -16	S	630
20 - 38	S	420

For type "DPR" (stainless steel in accordance with DIN 3859-1, table 2 or higher grades):

Sizes [mm]	Series	PN [bar]
06 - 18	L	315
22 -42	L	160
06 -14	S	630
16 -30	S	400
38	S	315

For type "EO-2" (carbon steel in accordance with DIN 3859-1, table 2 or higher grades):

Sizes [mm]	Series	PN [bar]
06 - 10	L	500
12 - 18	L	400
22 -42	L	250
06 -10	S	800
12 -16	S	630
20 - 38	S	420

# **RATINGS, cont.**

For type "EO-2" (stainless steel in accordance with DIN 3859-1, table 2 or higher grades):

Sizes [mm]	Series	PN [bar]
06 - 18	L	315
22 -42	L	160
06 -14	S	630
16 -30	S	400
38	S	315

For type "EO2-Form" (carbon steel in accordance with DIN 3859-1, table 2 or higher grades):

Sizes [mm]	Series	PN [bar]
06 - 10	L	500
12 - 18	L	400
22 -42	L	250
06 -10	S	800
12 -16	S	630
20 - 38	S	420

For type "EO2-Form" (stainless steel in accordance with DIN 3859-1, table 2 or higher grades):

Sizes [mm]	Series	PN [bar]
06 - 10	L	500
12 - 18	L	400
22 -42	L	250
06 -10	S	630
14 -16	S	530
20 - 38	S	420

Material	Operating Temperature [°C]
Steel	-40 to +200
Stainless steel	-60 to +400
Brass	-60 to +175
NBR seals	-35 to +100
FPM seals	-25 to +200

## **PLACE OF PRODUCTION**

Parker Hannifin Manufacturing Germany GmbH & Co.KG  
 Am Metallwerk 9  
 33659 Bielefeld  
 Germany

Parker Hannifin Manufacturing Poland Sp.z.o.o.  
 UL.E. Kwiatkowskiego 16  
 50-011 Siechnice  
 Poland