

TYPE APPROVAL CERTIFICATE
No. MAC210203CS/3



This is to certify that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	MECHANICAL JOINTS FOR PIPES
<i>Type</i>	STRAUB GRIP - L and LU
<i>Applicant</i>	STRAUB WERKE AG CH 7323 WANGS SWITZERLAND SWITZERLAND
<i>Manufacturer</i>	STRAUB WERKE AG
<i>Place of manufacture</i>	CH 7323 WANGS SWITZERLAND SWITZERLAND
<i>Reference standards</i>	RINA RULES
<i>Reference documents</i>	RINA TYPE APPROVAL SYSTEM

Issued in **Genoa** on **February 16, 2006**. This Certificate is valid until **February 15, 2011**



Francesco Sciacca

This certificate consists of this page and 1 enclosure

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STRAUB GRIP - L

Reference documents

Straub data sheets PZ-E/165 120 A 00/01 AT (pages 1 & 2)

Materials/Components

Casing : Stainless Steel DIN 1.4571 (AISI 316 Ti)

Sealing gasket : Synthetic rubber EPDM or NBR

Technical characteristics

The maximum working pressure is according to the following table:

Outer pipe diameter (mm)	Maximum working pressure (N/mm ²)	Maximum working pressure (N/mm ²)
	L	LU
26.9	1.6	
30.0	1.6	
33.7	1.6	
38.0	1.6	
42.4	1.6	
44.5	1.6	
48.3	1.6	
57.0	1.6	
60.3	1.6	
73.0	1.6	
76.1	1.6	
88.9	1.6	
100.6	1.6	
101.6	1.6	
104.8	1.6	
108.0	1.6	
114.3	1.6	
127.0	1.6	
129.0	1.6	
130.2	1.6	
133.0	1.6	
139.7	1.6	
141.3	1.6	
159.0	1.3	
168.3	1.3	
219.1	1.0	
244.5		0.55
250.0		0.55
254.0		0.55
267.0		0.50



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STRAUB GRIP - L

Outer pipe diameter (mm)	Maximum working pressure (N/mm²)	Maximum working pressure (N/mm²)
	L	LU
273.0		0.40
304.0		0.40
323.9		0.30
355.6		0.25
406.4		0.20

Temperature range:

-20°C to +80 °C (EPDM)

-20°C to +80 °C (NBR)

Fields of application

The fields of application are shown in the Table 16 of Part C, Chapter 1, Sec 10 of RINA Rules 2006

The applications depending upon the class of piping are shown in the Table 17 of Part C, Chapter 1, Sec 10 of RINA Rules 2006

Acceptance conditions

The material used for the gaskets must be resistant to the fluid conveyed in the piping.

The acceptance of the above mentioned products on board ships and other units classed RINA is subject to the satisfactory outcome of testing as per RINA Rules

Remarks

This certificate annuls and replaces the previous one issued with No. MAC/133100/4/TO/00 dated 22.09.2000.

Genoa February 16, 2006

