

# Type Approval Certificate



Germanischer Lloyd

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

Certificate No. 64 187 - 92 HH  
Company Straub Werke AG  
Rohrverbindungen  
Straubstrasse 13  
7323 Wangs, SWITZERLAND  
Product Description STRAUB PIPE COUPLINGS  
Type • GRIP L, LU, GRIP L Flamstop •  
• GRIP L.dot, LU.dot •  
Environmental Category • None  
Technical Data / Range of Application TECHNICAL DATA (see page 2)

#### RANGE OF APPLICATION

The above mentioned couplings may be used considering the GL Rules Part 1- Seagoing Ships, Chapter 2, Section 11.D.2.6 as follows:  
Bilge and ballast lines, fuel and oil lines, seawater lines, fresh and seawater cooling lines, fire fighting and deckwash lines, cargo oil lines, vent pipes, fill and sounding pipes, drinking water lines, sanitary discharge lines, inert gas lines on free deck, discharge lines from inert gas washers and deck water seals.

#### LIMITATIONS

The pipe couplings may not be used in bilge lines inside ballast and fuel tanks, seawater and ballast lines including air and overflow pipes inside cargo holds and fuel tanks, fuel and oil lines including air and overflow pipes inside machinery spaces, cargo holds and ballast tanks, dry pipe water spraying systems.

Test Standard • IACS P2.11 (Nov. 2001 / Rev.1 May 2006 / Rev.2 Nov. 2006 / Corr.1 April 2007 ) and ISO 19921, First edition 2005-10-01

Documents • Test Reports  
• Data sheets: D/165531A02/03 AT, D/165120H01/01AT

Remarks • None

Valid until 2012-12-16

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File No. II.C.06

Hamburg, 2008-01-08

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## TECHNICAL DATA

Type: GRIP L, GRIP L.dot and GRIP L Flamstop (Material combination W5)  
Size Range: 26.9 [mm] to 219.1 [mm] pipe O.D.  
M.A.W.P.: 10 [bar] to 16 [bar] {depending on size}

Type: GRIP LU and GRIP LU.dot (Material combination W2 or W5)  
Size: 180.0 [mm] to 406.4 [mm] pipe O.D.  
M.A.W.P.: 2.0 [bar] to 5.5 [bar] {depending on size}

Temp. Range: -20 [°C] to 80 [°C]  
Sleeve Material: NBR and EPDM

## MATERIALS

Material Combination	W2		W5	
	DIN	AISI	DIN	AISI
Casing	1.4571	316Ti	1.4571	316Ti
Screws	1.7220	4135	1.4404 / 1.4435	316L
Bolts	1.0737 galv.	12L14 galv.	1.4404 / 1.4435	316L
Strip insert (option)	1.4435	316L	1.4435	316L
Anchorage ring	1.4310	301	1.4310	301

• The selection of the pipe couplings for the corresponding application and the right installation are to be in accordance with the instructions of the manufacturer.

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