

LR 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 LR Type Approval System.

This certificate is issued to:

Producer

GEORG FISCHER WAGA N.V.

Lange Veenteweg 19

P.O. Box 290 8160 AG Epe Nederland

Place of Production

Gewerbepark Gerbershausen

Hohengänder Straße D- 37318 Gerbershausen Federal Republic of Germany

Description

Locking joint coupling for metal pipes consisting of a stainless steel housing, two-lip sealing of either EPDM or NBR, st. st. conical grip ring with teeth and inlay and heavy duty locking

trunnions.

Types

WAGA 507 and WAGA 507 E

Certificate No.

98/20063

Issue Date

20 September 1998

Expiry Date

30 June 2002

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Lloyd's Register of Shipping 71 Fenchurch Street, London EC3M 4BS Lloyd's Register

W. R. Jacobs





Continuation

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Application

As pipe couplings, which have always to be accessible, on ships and offshore installations classed or intended for Classification with Lloyd's Register in the following systems:

- 1. Sea and Fresh Water Service
- 2. Ballast Lines
- Bilge Lines
- 4. Deck Wash Lines
- 5. Sanitary Service (see also point 11)
- 6. Cargo Oil Filling and Transfer Lines
- 7. Fuel Oil Transfer
- 8. Compressed Air Lines (not starting air)
- 9. Fire Main and Foam Lines
- 10. Water Spray and Sprinkler Systems
- 11. Sanitary Scupper, Drain and Supply
- 12. Air Conditioning System Service
- 13. Tank Filling and Sounding Pipes
- 14. Inert Gas Systems
- 15. Sea and Fresh Water Cooling Lines
- 16. Air Pipes from Tanks
- 17. Steam Return and Exhaust Gas Lines
- 18. Fuel Oil Transfer on open Deck

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Application continued

19. Hydraulic driven Cargo Pump Systems

20. Lub Oil Systems

 Ballast and Bilge Lines in Double Bottoms, provided the Couplings are always accessible.

22. Fire Fighting Mains and Distributing

23. Fuel Lines in Engine Room

Ratings

Type : WAGA 507

Sizes o. D. : 30 mm to 219,1 mm

Nom. Pressure: PN 16 bar

Temp. Range : -20°C to +80°C (EPDM; NBR)

Material combination	W2		W4		W5	
	DIN	AISI	DIN	AISI	DIN	AISI
housing	1.4301	304	1.4301	304	1.4435	316 L
bolts	1.7220	4140 H	1.4404	316 L	1.4404	316 L
bars	1.0737	12 L 14	1.4301	304	1.4401	316
grip ring	1.4310	301	1.4310	301	1.4568	316
steel band inlay	1.4435	316 L	1.4435	316 L	1,4435	316 L

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Ratings continued

Type : WAGA 507 E

Sizes o. D. : 30 mm to 219,1 mm

Nom. Pressure: PN 10 bar

O.D. - MAWP: 273,0 mm - 5,5 bar

323,9 mm - 3,0 bar 355,6 mm - 2,7 bar 406,4 mm - 2,5 bar

Temp. Range: -20°C to +80°C (EPDM; NBR)

Material : W4 and W5

Combination

Specified DIN 86128

Standards Lloyd's Register Rules and Regulations for the Classification of

Ships, 1997.

Other Conditions

For materials combinations for the corresponding media the producer's recommendations and instructions to be sought.

Marking of the products to show:

Producer's name or trade mark, type designation, material combination, size, gasket material, torque and max. working

pressure or press. class.

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