



Lloyd's
Register

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.

(This certificate supersedes certificate number 00/20005 (E3) issued on 30.12.2011 which is hereby cancelled.)

This certificate is issued to:

PRODUCER	Eifeler Maschinenbau GmbH Kolumbusstraße 54 53881 Euskirchen Germany
PLACE OF PRODUCTION	Eifeler Maschinenbau GmbH Escher Heide 4 53902 Bad Münstereifel Germany
DESCRIPTION	General purpose steel pipe fittings with EMB cutting ring with or without elastomer-type seal on the pipe side. Shapes of fittings as per catalogue, Chapters II, III and IV (document 1.001.D/GB/F.1012)
TYPE	DS-Ring, Series L and S DSW-Ring, Series L and S
APPLICATION	General use in marine, offshore and industrial piping systems classed or intended for Classification with Lloyd's Register
STANDARD	Lloyd's Register Rules and Regulations for the Classification of Ships, January 2016 and IACS P2.11 including wet fire endurance test for couplings with seals sensitive to heat.
Certificate No.	00/20005 (E4)
Issue Date	10 May 2016
Expiry Date	26 March 2020
Sheet	1 of 2

Johannes Wiegel
Hamburg Technical Support Office



Lloyd's Register EMEA

LR031.1.2013.12

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RATINGS

	Pipe O.D. (mm)	Nom. press. (bar)
L (light)	6-10	500
	12-18	400
	22-42	250
S (heavy)	6-10	800
	12-16	630
	20-38	400

Temperature range for:

Steel fittings:	-40°C to +120°C
Sealing material: NBR	-35°C to +100°C
Sealing material: FPM	-25°C to +200°C
Sealing material: PTFE	-60°C to +200°C

LIMITATIONS

Reductions of pressures for higher and lower temperatures than specified to be as per producer's catalogue, instructions and recommendations.

DSW-Ring, Series L and S couplings are not acceptable in the following locations :-

1. Starting/control air and CO₂ systems.
2. Inside machinery spaces of category A or accommodation spaces for main lines of inert gas systems.
3. Fire main, water spray and sprinkler systems or similar which are not always filled with water.

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HPC/HMD 2657-00/TA issue 5 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 00/20005 (E4)
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