

Type Approval Certificate



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. 17 496 - 01 HH
Company Belman Production A/S
Oddesundvej 18
6710 Esbjerg N, DENMARK

Product Description Metallic Expansion Bellows

Type AX, AN, LA, UN

Environmental Category None

Technical Data / TECHNICAL DATA

Range of Application Bellow materials: 1.4301, 1.4306, 1.4541, 1.4401, 1.4404 and 1.4571
Pressure range: PN 16 / 25 PN 40 PN 2,5
Size range: DN 125 to DN 400 DN 40 to DN 100 up to DN 1500
Temperature range: - 55°C to + 550°C

RANGE OF APPLICATION

The bellows of type AX, AN, LA and UN are type approved for compensators arranged in fuel, lubricating oil, hydraulic oil, bilge, fresh water cooling, compressed air, exhaust gas and auxiliary steam systems.

REMARKS

For the use in ballast and sea water cooling systems bellows made of stainless steel containing molybdenum are to be used. For the use at operating temperatures above 120°C the appropriate movement / pressure reduction factors specified by the manufacturer are to be observed.

Test Standard Regulations for the Performance of Type Tests, Part 6 - Test Requirements for Mechanical Components and Equipment:1998. EJMA 7th/8th Edition

Documents -Test report : 23505 KOH, dated 2001-01-08
- Drawings
- Design calculation acc. to EJMA 7th/8th Edition
- Product catalogue

Remarks For application on diesel engines natural frequencies calculation acc. to EJMA and additional requirements of the engine manufacturer, if any, are to be observed.

Valid until 2011-02-01

Page 1 of 1

Type Approval Symbol



File No. II.D.09

Hamburg, 2009-10-26

Germanischer Lloyd

Hanspeter Raschle
Hanspeter Raschle

Hagen Markus
Hagen Markus

This certificate is issued on the basis of "Guidelines for the Performance of Type Approvals Part 1, Procedure".