



# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

**CERTIFICATE NO. M-11260**

This Certificate consists of 2 pages

*This is to certify that the*

**Toothed Coupling**

*with type designations*

**BOWEX type M/I, AS, Spec.-I, SG, SSR, SD, M...C, FLE-PA,  
FLE-PAC.**

*Manufactured by*

**KTR Kupplungstechnik GmbH**  
RHEINE, Germany

*is found to comply with*

Det Norske Veritas' Rules for Classification of Ships/High Speed and Light Craft

### *Application*

The approval is valid for auxiliary duty with ratings and applications according to general company catalogue 01/2005 chapter Bowex - Curved-tooth gear couplings (page 65 to 87) and branch catalogue FLE-PA (page 11).

Type

BOWEX type M/I, AS, Spec.-I, SG, SSR,  
SD, M...C, FLE-PA, FLE-PAC.

Nominal torque

see KTR Catalogue 2009, page 72 and  
branch catalogue FLE-PA page 11.

*Place and date*

Høvik, 2009-08-06

for DET NORSKE VERITAS AS

Tomas Heber Tronstad  
*Head of Section*



*Local Office*  
DNV Essen

*This Certificate is valid until*

2013-06-30

Hans-Kristian Eriksen  
*Surveyor*

**Notice: This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.**

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.





Cert. No.: M-11260  
File No.: 714.70  
Case No.: 262.1-007890

### **Product description**

Curved-tooth gear coupling

### **Application/Limitation**

The approval is valid for auxiliary duty with ratings and applications according to KTR General Company Catalogue 2009 and branch catalogue FLE-PAC (page 11).

### **Type Approval documentation**

KTR Catalogue 2009, chapter Bowex Curved-tooth couplings (page 69 to 91)  
KTR Branch catalogue FLE-PA (page 11).

### **Marking of product**

The product to be marked with manufacturer's name or trademark and type number identification.

### **Certificate retention survey**

For retention of the Type Approval, a DNV surveyor shall perform survey every second year and before expiry date of this certificate to verify that the conditions of the type approval is complied with.

### **Other conditions**

DNV product certificate is not required for power ratings up to 500 kW or rated torque less than 5 kNm for auxiliary duty where torsional vibration calculations is not required.

The type approval does not cover connection to external shaft.

END OF CERTIFICATE