



MARINE DIVISION

Certificate number: 02965/G0 BV

File number: ACM 103/270/002

Product code: 06201

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**KTR KUPPLUNGSTECHNIK GmbH**  
Rheine - GERMANY

*for the type of product*

**FLEXIBLE SHAFT COUPLINGS WITH RUBBER ELEMENTS**

COUPLING SERIES: ROTEX

**Requirements:**

BUREAU VERITAS Rules for the Classification of Steel Ships.

*This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

*This certificate is a renewal of certificate N° 02965/F0 BV, which expires on 09/02/2014*

**This certificate will expire on: 19 Mar 2019**

For BUREAU VERITAS,

At BV HAMBURG, on 19 Mar 2014,

Adama Diene



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site [www.veristar.com](http://www.veristar.com). Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

## THE SCHEDULE OF APPROVAL

### **1. PRODUCT DESCRIPTION :**

**Coupling series: ROTEX**

**Designs :** No.001, GS, DKM No.018, ZS-DKM No. 078, AFN No.002, BFN No.004, CF No.005, DF No.006, ZWN No.017, ZR No. 037, SD No. 015, BTAN No. 011, SBAN No. 013.

Identification and Technical Data:

Spider in	polyurethane 64 Shore D-F	Spider in	polyurethane 92 Shore A	Spider in to size 55: from size 65 :	polyurethane 98 Shore A 95 Shore A
SIZE	Nominal Torque (Nm)	SIZE	Nominal Torque (Nm)	SIZE	Nominal Torque (Nm)
14	16	14	7.5	14	12.5
19	21	19	10	19	17
24	75	24	35	24	60
28	200	28	95	28	160
38	405	38	190	38	325
42	560	42	265	42	450
48	655	48	310	48	525
55	825	55	410	55	685
65	1175	65	625	65	940
75	2400	75	1280	75	1920
90	4500	90	2400	90	3600
100	6185	100	3300	100	4950
110	9000	110	4800	110	7200
125	12500	125	6650	125	10000
140	16000	140	8550	140	12800
160	24000	160	12800	160	19200
180	35000	180	18650	180	28000

### **2. DOCUMENTS AND DRAWINGS :**

According to catalogue: K.08-01-GB and Company catalogue 2013

### **3. TEST REPORTS :**

Not applicable.

### **4. APPLICATION / LIMITATION :**

- 4.1 These types of couplings will be admitted for the propulsive plant, only if arrangements are made to deal with the propeller thrust.
- 4.2 On board installation and maintenance requirements have to be in accordance with the Society's Rules Requirements and the Manufacturer's Recommendations.

- 4.3 Coupling connections to external shafts, flanges or flywheels have to comply with the applicable requirements of BUREAU VERITAS.

#### **5. PRODUCTION SURVEY REQUIREMENTS :**

- 5.1 The couplings are to be supplied by the manufacturer in compliance with the type and the requirements described in this certificate.
- 5.2 This type of product is within the category IBV of BUREAU VERITAS Rule Note NR320.
- 5.3 BUREAU VERITAS product certificate is required.
- 5.4 Arrangements shall be made for a Society's Surveyor to attend the tests and examinations at manufacturer's works or to perform the relevant audits when an alternative survey scheme, BV Mode I, has been arranged, in order to issue the BUREAU VERITAS certificate for the units to be fitted on board ships classed with BUREAU VERITAS.
- 5.5 **KTR KUPPLUNGSTECHNIK GmbH** has declared to BUREAU VERITAS that the products detailed in this certificate are manufactured at the production site stated on the front page of this certificate.
- 5.6 The inspection made at the manufacturer premises does not prejudice of any additional equipment, which may be required for some specific applications, in order to comply with the related Rules of the Society.
- 5.7 If required by the Rules, each attached piece of equipment is to be individually inspected at workshops by Society Surveyors.

#### **6. MARKING OF PRODUCT :**

Each coupling should be marked with:

- Manufacturer's name or trademark
- Size
- Serial number
- Nominal torque
- Maximum allowable speed
- BUREAU VERITAS' marks

#### **7. OTHERS :**

- 7.1 This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that **KTR KUPPLUNGSTECHNIK GmbH, Rheine / GERMANY** will accept full responsibility for informing shipbuilders, ship owners or their subcontractors of the proper methods of use and general maintenance of the units and the conditions of this approval.
- 7.2 This Certificate supersedes the Type Approval Certificate N° 02965/F0 BV issued on 09 Feb 2009 by the Society.

\*\*\* END OF CERTIFICATE \*\*\*