



## TECHNICAL FILE: TR050002

## **EXPLOSION PROTECTION CLASS:**

The above part numbers are suitable for use with equipment that meets the Group II Category 2 requirements and are in accordance with the following explosion protection class:

## 🐼 || 2 GD c T'x'

Where 'x' is either 4 or 5 depending on the flexible element material of the part used as detailed in the 'Sleeve Ratings' table below. The following incorporation instructions are provided, in addition to the product Installation Instructions that are supplied with the product, in order to detail requirements and specifications that must be implemented prior to putting this equipment into service. This equipment must not be put into service before the machinery into which it is to be incorporated has been declared in conformity with the provisions of the Applicable Directives.

The EHSR's related to this equipment have been addressed; a Technical Construction File has been filed with DNV, N-1332 HOVIK, Norway who are a designated ATEX notified body (0575).

## **INCORPORATION INSTRUCTIONS:**

These instructions are provided as a supplement to the standard Installation Instructions provided with the Sure-Flex® product for ATEX certified product for use in certain explosive atmospheres. All aspects of the standard Installation Instructions not specifically covered here are to be adhered to. Rated application limits for the material and type of sleeve used are shown in the table below. The SureFlex® sleeve installed must be rated for the conditions of the application. All electrically conducting parts that are connected to the coupling must be grounded. Applications with vibratory torque conditions require a de-rated temperature class, (consult TB Wood's Engineering).

**Guards:** Guards are required for use with the SureFlex® coupling in an explosive environment as defined by the ATEX Directive. The guard must be of a Corrosion resistant construction, of a metallic material other than Aluminum or any light metal, and must be electrically grounded. If a ferrous material is used, then it must have sufficient coating/plating to resist corrosion.

**Alignment:** The coupling alignment must be within the misalignment limits for the sleeve material per the standard Installation and Maintenance Instructions included with the product.

**Fastener and Set Screw Tightening Torques:** All fasteners must be tightened per the standard Installation and Maintenance Instructions included with the product.

SureFlex <sup>®</sup> SLEEVE RATINGS							
SIZE:	SUREFLEX SLEEVE MATERIAL AND TYPE DESIGNATION:				RATED TORQUE: Nm (in-lbf)	AMBIENT TEMPERATURE LIMITS (1):	ATEX SURFACE TEMPERATURE RATING (1):
3	EPDM	JE, JES	NEOPRENE	JN, JNS	6.8 (60)	EPDM: -34 TO 125 °C (-30 TO 257 °F) NEOPRENE: -18 TO 90 °C (0 TO 194 °F)	
4		E, JE, JES		N, JN, JNS	13.6 (120)		
5		E, JE, JES		N, JN, JNS	27.1 (240)		
6		E, JE, JES		N, JN, JNS	50.9 (450)		
7		E, JE, JES		N, JN, JNS	81.9 (725)		EPDM: 135 °C / T4 NEOPRENE: 100 °C / T5
8		E, JE, JES		N, JN, JNS	128.3 (1135)		
9		E, JE, JES		N, JN, JNS	203.4 (1800)		
10		E, JE, JES		N, JN, JNS	324.9 (2875)		
11		E		N	511.9 (4530)		
12		E		N	813.7 (7200)		
13		E		N	1282.7 (11350)		
14		E		N	2034.2 (18000)		
16		E			5339.7 (47250)		
6				H, HS	203.4 (1800)		
7	HYTREL			H, HS	324.9 (2875)	HYTREL: -54 TO 121 °C	
8				H, HS	511.9 (4530)		HYTREL:
9				H, HS	813.7 (7200)	(-65 TO 250 °F) URETHANE: -62 TO 90 °C (-80 TO 194 °F)	135 °C / T4 URETHANE: 100 °C / T5
10	URETH- ANE	U	нүткег	H, HS	1282.7 (11350)		
11		U		H, HS	2034.2 (18000)		
12		U		H, HS	3559.8 (31500)		
13	HYTREL			HS	5341.8 (47268)		
14				HS	8191.0 (72480)		

**Inspection, Maintenance and Cleaning:** The following checks and maintenance items are to be used as a guideline for the safe operation of the coupling. Any unsafe condition should be corrected when discovered. The frequency of checks depends on the operating conditions. A maintenance schedule frequency should be chosen that is suitable to the conditions for the safe operation of the coupling. Clean the coupling only with a damp cloth.

**Sleeve Degradation:** The coupling flexible element sleeve should be checked regularly for cracks, wear, discoloration, distortion, & crazing. If the sleeve shows any signs of these types of wear, it needs to be replaced. Also, an examination of the application and environment should be conducted to determine the reason for the degradation and correct it. If the coupling does not display any of the above signs of degradation and the integrity or condition of the coupling sleeve is uncertain, it should be replaced once a year.

Dust: Wipe off any excess dust or residue on the coupling, including the teeth of both the sleeve and the flanges.

Authorized Signature:

zin Date: 6/22/05

Troy Lumpkin Product Engineer – Couplings



Important asafety information is contained in the installation, operation and service manuals; read and understand this information prior to installing or using this equipment