# 5.4 Values of wear

The wear control of the flexible spider must be effected after 3000 hours of work for the first time and than after 6 months starting from the utilize. If you note an unconsiderable or no wear at the spider after this first inspection, the further inspection can be effected, in case of the same operating parameters, respectively after 6000 operating hours or after 18 months at the leatest.

If you note a considerable wear during the first inspection, we recommend you to change the spider with another ATEX spider, and please find out the causes according to the "Breakdowns" and eliminate it as far as possible

If the torsional backlash is greatest of  ${}^{\circ}G_{max}$ , the sleeve must be exchanged with another ATEX sleeve

If you do not respect this indications, the coupling is considered intentionally damaged.



# 5.5 Starting

Before putting the coupling into operation, please check:

The tightness of the setscrews

The alignement

The right distance between hubs

All screw connection regarding the stipulated tightening torques dependent on the type of coupling

Guarantee the grounding

# Fender for couplings in hazardous area

The couplings for hazardous area, must be provided with firm coverings (if possible, made from stainless steel) protecting the couplings against falling objects.

There can be regular openings in the coverings which may not exceed the following dimensions: side parts max 8 mm, top surface max 4 mm. The distance between the cover and the rotating parts must be at least 5 mm (up down) (right left)

The cover must be electrically conductive and be included in the admitted values of regulations.

The covers made in aluminium and NBR can be used between pump and electro motor if the magnesium part is below 7.5%.

The cover may be removed only after stopped the unit.

During operation, please pay attention to:

Strange running noises

Occurring vibrations.

# 5.6 Conformity Declaration

# CONFORMITY DECLARATION

Corresponding to EG Standard 94/9/CE dated 23 March 1994 And to legal regulations

The manufacturer SIT S.p.A: Via G. Watt n°15 20143 Milano States that the :

# SITEX-NYLEX coupling

Describe d in these mounting instructions are in accord of Standard 94/9/EGThey correspond of Standard EN 13463-1-5.

The couplings are certified by Conformity Declaration n°:

# TÜV 03 ATEX 2372X- II 2 GD c

The production was certify by Enclosure IV from:

TÜV NORD CERT GmbH & Co KG Am TÜV 1 30519 Hannover Milan 15.01.04

Mr. Antonio Bonizzoni Research & Development Ing. Riccardo Scaglia Legal Administrator

Dutio Barne



# COUPLINGS NYLEX ATEX

MOUNTING INSTRUCTION





Sit S.p.A.

Via G. Watt, 15 – 20143 Milano

Tel. 02.891441 – Fax 02.89122337 **WWW.SITSPA.IT** 

info@sitspa.it

NYLEX couplings are able to compensate axial, radial and angular displacements. Removing all the forces on the shafts, and it was projected for light applications.

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#### 1.1 Description

Nylex couplings are fully made in polyamide.

# 1.3 Execution

Couplings fully made of polyammide.

Two executions are available:

- in 2 parts (1 hub and one sleeve including the hub);
- in 3 parts (2 hubs and one sleeve).

# 2.1. General Hints

Please read through these mounting instruction carefully before you set the coupling into operation. Please pay special attention to the safety instructions.

The NYLEX coupling is approved for the use in hazardous areas . When using the coupling in hazardous areas please observe the special hints and instructions regarding safety in enclosure **ATEX** point 5.

The mounting instructions are part of your product, Please keep them carefully and close to the coupling.

The copyright for these mounting instruction remains with SIT SPA. Engage temperature  $-20^{\circ}\text{C} + 80^{\circ}\text{C}$ 

# 2.2. Proper use

Unauthorized modifications on the coupling design are not admissible. SIT do not take any warranty for resulting damages.

To further develop the product we reserve the right for technical modifications.

The SITEX described in here corresponds to the technical status at the time of printing of these mounting instructions.

# 2.3 Performance

Tkn = Nominal Torque (Nm) / (Tkmax = 2 x Tkn)

SIZE	14	19	24
TKn	10	16	21
Rpm	14000	11800	10500

## 3. Storage

The coupling hubs are supplied in preserved condition and can be stored at a dry and roofed place.

It is very **IMPORTANT** that the storage rooms may not include any ozone-generating devices, like e.g. fluorescent light sources, mercury-vapour lamps or electrical high-voltage appliances.

The best relative air humidity is under 65%.

In case of favourable stock conditions, the coupling sleeve remain unchanged for up to 5 years.

### 4. Assembly

Basically the coupling is supplied in individual parts. Before assembly the coupling has to be controlled for completeness.

# 4.1 Components

The standard NYLEX coupling is compounded: TWO PARTS NYLEX

1 hubs.1 sleeve and 2 set screws.

# THREE PARTS NYLEX

2 hubs,1 sleeve and 2 set screws.

# 4.2 Assembly of the hub

Assemble the hubs on the shafts.

Move the coupling in axial direction since reaching of B dimension. Fasten the hubs by thigtening the setscrews indicated.

# 5. Enclosure ATEX

Hints and instructions regarding the use in hazardous areas.

# **5.1 Control** and maintenance for utilize in hazardous areas GROUP II 2GD c

# 5.2 Marking of coupling for the hazardous areas

Couplings for the use in hazardous areas are marked for the respectively permissible condition of use, as following indicated:

SIT S.p.A. 20143 MILANO ITA SITEX 28/38 TÜV 03 ATEX 2372X CE0032 -20°C<Ta<+80°C A4

# 5.3 Checking of torsional backlash

#### "A" HUB

Turn the "A" hub in opposite direction to the direction of drive, pay attention to not generate an axial motion

Mark sleeve and hub position

Turn the hub "A" in the direction of drive and measure the backlash  ${}^{\circ}G_{max}$ 

When reaching the max backlash the sleeve must be changed with another ATEX sleeve

# B" HUB

Turn the "B" hub  $\,$  in the direction of drive , pay attention do not generate an axial motion

Mark sleeve and hub

Turn the "B" hub in opposite direction of drive and measure the I backlash ?Gmax (mm)

When reaching the max backlash the sleeve must be changed with another ATEX sleeve