

4.3 Storage of the coupling

4.3.1 Storage of the coupling parts

Unless otherwise expressly agreed, the coupling is delivered in a preserved condition and can be stored in a covered, dry place for up to 3 months. If the coupling is to be stored for a protracted period, it should be treated with a long-term preservative agent (FLENDER must be consulted).

Caution!

Before cleaning the coupling parts and applying the long-term preservative agent, the rubber part of the rubber disk element (5; 6) must be covered. The rubber part of the rubber disk element must not come into contact with oil or solvents.

4.3.2 Storage of the rubber disk elements

4.3.2.1 General

Correctly stored rubber disk elements (5; 6) retain their properties unchanged for up to five years. Unfavourable storage conditions and improper treatment will negatively affect the physical properties of the rubber disk elements (5; 6). Such negative effects may be caused by e.g. the action of ozone, extreme temperatures, light, moisture, or solvents.

4.3.2.2 Storage area

The storage area must be dry and free from dust. The rubber disk elements (5; 6) must not be stored with chemicals, solvents, motor fuels, acids, etc. Furthermore, they should be protected against light, in particular direct sunlight and bright artificial light with a high ultraviolet content.

Caution!

The storage areas must not contain any ozone-generating equipment, e.g. fluorescent light sources, mercury vapour lamps, high-voltage electrical equipment. Damp storage areas are unsuitable. Ensure that no condensation occurs. The most favourable atmospheric humidity is below 65 %.

5. Technical description

5.1 General description

The ELPEX-S coupling is a highly flexible rubber disk element.

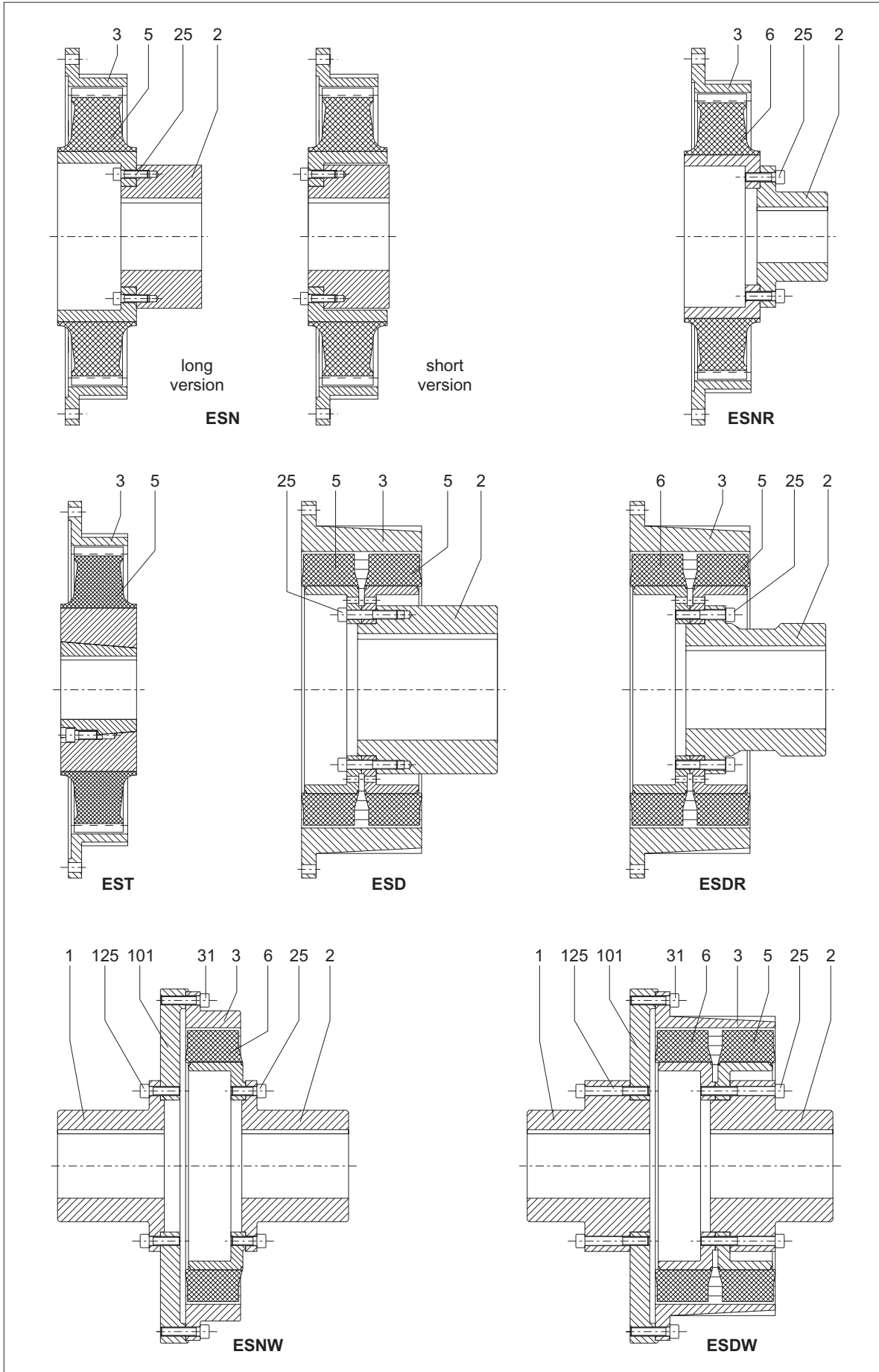
The rubber disk element (5; 6) is vulcanised by its inside radius onto a flange to receive a TAPER bush or a hub bored to customer requirements.

On its outside diameter the rubber disk element (5; 6) has a set of cams which engage in an outer flange (3).

During assembly the rubber disk element (5; 6) is inserted into the outer flange (3). The connection is positive and virtually free of play.

The rubber disk element (5; 6) consists of a natural/synthetic rubber mixture or silicon rubber and is available from stock in a number of rubber disk element hardnesses.

In the case of types ESNR, ESDR, ESNW and ESDW the rubber disk element (5; 6) can be fitted or demounted without having to move the coupled machines.



5.2 Marking the coupling parts for explosion protection

Note: Couplings which are intended for use in potentially explosive areas must bear the following markings on part 3:

FLENDER AG	CE	Ex	II 2 G T3 D160 °C X
D 46393 Bocholt	CE	Ex	II 2 G T4 D120 °C X
ELPEX-S coupling - year of construction	– 40 °C ≤ T _a ≤ 80 °C		

5.3 Service conditions

With reduced fatigue torque load the coupling is suited for service conditions in accordance with Guideline 94/9/EC.

Equipment group II (use above ground) of category 2 and 3 for areas where there are explosive gas, vapour, mist, air mixtures as well as for areas where dust can form explosive atmospheres.



For use in potentially explosive environments reduced fatigue torques must be adhered to.

To determine the fatigue torque load, a torsional vibration calculation, for which the subassembly manufacturer is responsible, may be necessary.



ELPEX-S types with TAPER clamping bush are not suitable for use in explosive environments.

5.3.1 Operation with low fatigue load



The fatigue torque T_{KW} in item 1.7 must be reduced by 70 %. In the case of these special operating conditions the coupling satisfies the requirements of temperature class T4 D120 °C.

5.3.2 Operation with medium fatigue load



The fatigue torque T_{KW} in item 1.7 must be reduced by 50 %. In the case of these special operating conditions the coupling satisfies the requirements of temperature class T3 D160 °C.

6. Mounting

At the customer's request FLENDER also delivers unbored or prebored coupling parts.

The necessary refinishing must be carried out in strict compliance with the following specifications and with particular care!

Caution!

Responsibility for carrying out the refinishing is borne by the orderer. FLENDER can accept no guarantee claims arising from unsatisfactory refinishing!



Couplings with CE marking for use in potentially explosive areas are delivered exclusively as finish-bored units.

6.1 Instructions for machining the finished bore, parallel keyway, axial retaining means, set screws and balancing