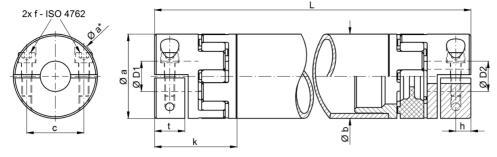
# **Operating instructions distance couplings**



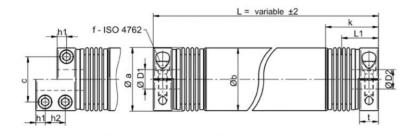
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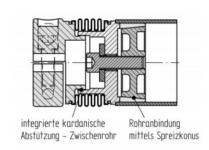
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# 1. Assembly drawings:

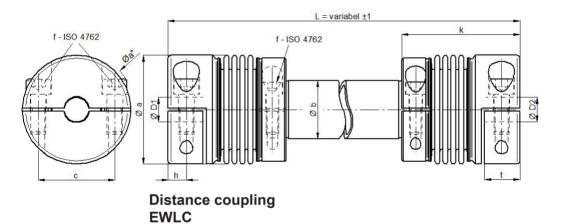


Distance coupling EWLH





Distance coupling EWLM



# 2. Constructive:

# 2.1 Structure:

The distance coupling consists of two main components:

# 2.1.1 Elastomer variant:

Two jaw couplings with spiders made of polyurethane and clamping hubs, connected through an high-tensile intermediate pipe made of aluminium, steel or CFK.

#### 2.1.2 Metal bellows variant:

Two metal bellows couplings with half-shell hubs, connected by a high-tensile aluminium pipe.

An exception represents the variant EWLC, it is entirely made of stainless steel.

#### 2.2 Function:

The task of the coupling is to transmit the rotational movement between two widely spaced shafts on the same axis while absorbing possible misalignments. This can only be achieved by proper use.

# 3. Dimensioning of the coupling:

#### 3.1 Dimensioning of the torque:

$$T_{K} (Nm) = \frac{9550 \times P \times K (kW)}{n (min^{-1})}$$

# **Explanations:**

P = engine power

n = engine speed

K = coefficient of impact

 $T_{\kappa}$  = moment of the coupling

# 3.2 Dimensioning of the bore diameters (ØD1 und ØD2):

The hub-to-shaft fitting should be designed as a transitional fit, whereupon the bore of the hub has an H7 fitting.

# 3.3 Formula for length measurement of the coupling:

$$L = A + t1 + t2$$
 [mm]

A = centre distance ± 1 t = plug-in depth ± 1

(s. data-sheets)

#### 4. Preventive measures:

Before installation, make sure that the characteristics and specifications of the coupling are adequate and suitable for the intended use. There has to be enough space for installation and future maintenance. Make sure that the device can not cause dangerous situations for people and / or property and always work under the current safety regulations.

With reference to the current Machinery Directive, our products are not a machine. Operation is therefore subject to compliance with all requirements of the machine in which the device is installed. Failure to do so will relieve ENEMAC of all liability.

For questions which can not be answered by this manual, or details on special applications, please always contact ENEMAC GmbH.

#### **WARNING!**

It is dangerous to:

- use the device other than the intented way
- use the product for higher requirements than intended
- manipulate or change the product on your own
- implement non-original spare-parts to the product

# 4.1 Note to intermediate pipe:

The intermediate pipe can be supplied in different materials as well as in directed and balanced quality. At high operating speeds above 2000 rpm and at the same time large installation lengths L> 2 m, a check should be carried out by our technicians due to the permissible bending-critical speeds. Optionally, application-specific optimized CFK-intermediate pipes can be used.

# 5. Usage and mounting:

# 5.1 Preparations for mounting:

The size of the coupling hast to be chosen correctly, due to the technical informations on the belonging datasheet.

In case of any modification or adaptation not performed by ENEMAC on the coupling, the warranty obligation of ENEMAC shall pass to the customer.

The customer has to ensure that tolerances and material of hub and keyway are according to the respective application.

# 5.2 Mounting:

The split half-shell hub and the pluggable clamping hub ensure through a simple, radial operation a backlash-free, non-positive clamping connection. To facilitate assembly, the fixed hub halves can be placed on the shaft journals and afterwards the loose half-shell pieces get screwed. In the EWLH series, plug-in mounting is carried out by means of a sliding seat on the tube-side clamping hub. This generally allows a one-man installation. Even with large lengths and when servicing the time-consuming disassembly of output or driven units can be omitted.

#### 6. Maintenance:

The couplings are maintenance-free. However, it is recommended to check the alignment and tightening torque of the bolts and nuts after the first hours of operation and at regular intervals thereafter.

# 7. Supplements:

# 7.1 Warranty:

The warranty is 12 months from the date of delivery; when used as intended in 1-shift operation. The warranty claim expires if damage is caused by improper operation. The cancellation of any warranty claims will be the result of repairs or interventions by unauthorized persons and the use of accessories and spare parts to which our distance couplings are not adapted.

### 7.2 Safety regulations:

Regardless of the instructions in this operating manual, the statutory safety and accident prevention regulations apply. Every person commissioned by the operator to operate, maintain and repair the distance couplings must have read and understood the operating instructions prior to commissioning. Repairers of the distance couplings are basically responsible for occupational safety. Compliance with all applicable safety regulations and legal requirements is a prerequisite to avoid damage to persons and the product during maintenance and repair work. Proper repair of ENEMAC products requires suitably trained specialist personnel. The duty of the training lies with the operator or repairer. He has to ensure that the operators and future repairers are properly trained for the product.

# 7.3 Copy right:

This operating instructions manual is copyrighted property of ENEMAC. It is only delivered to our customers and users of our products and is supplied with the distance coupling. Without our explicit approval these documents mustn't be reproduced nor made available to third persons in particular competitive companies.

# 7.4 Spare parts:

Only spare parts, which correspond to the requirements specified by ENEMAC or supplier are allowed. This is always guaranteed with original spare parts. Improper repairs, as well as incorrect spare parts lead to the exclusion of product liability or warranty. When ordering spare parts it is essential to specify type, size and the identification number of the distance coupling to avoid incorrect deliveries.

### 7.5 Provisio:

We reserve the right for technical changes. Changes, errors and misprints shall not justify any titles of indemnity.

enclosure: data-sheet

sales@enemac.de