

26-G98-00

ITEM 21

STOK NO : 12A183397

MALZEME ADI : VULASTIK-L-COUPLING SERIES 280



Flexible Coupling

Description

The highly elastic **VULASTIK -L- Coupling** (Fig. 3-1) is a torsionally flexible rubber coupling, that compensates axial, angular and, to a certain degree, radial displacements of the connected machines. The flexible coupling connects the diesel engine and the generator together.

The main parts of the **VULASTIK -L- Coupling** (Fig. 3-1) are the hub and flanged casing, between which, the disc-shaped element is arranged.

This disc element is connected by vulcanization at its inner radius and the outer radius has tooth-shaped edges that fit into the flanged casing. These teeth provide the axial "plug-in" feature and compensates for shaft displacements.

Linear dynamic torsional stiffness, i.e. constant own frequency independent of load.

Torque transmission is guaranteed by the torque action on ring formed rubber elements.

The **VULASTIK -L- Coupling**, Series 2800 is available in three different variants, in this case the Coupling Series A is used.

The **VULASTIK -L- Coupling**, Series 2800 is, due to the "plug-in" design particularly suitable for installation in generator bellhousings.

The Series 2800 is for connection of a SAE-flywheel J620 to a shaft.

The coupling is maintenance-free providing that the specified limits are not exceeded during operation.

The coupling must be protected against the continuous effects of oil or heat.

The **VULASTIK -L- Element** (Fig. 3-1/2) is designed for an ambient temperature of -45°C to $+90^{\circ}\text{C}$.

In the interests of long life, the need for sufficient ventilation must be observed. This is particularly important in the case of enclosed installation (bellhousing).

The mating faces of the coupling and the drill holes are preserved with Tectyl. Before installation of the coupling these faces must be cleaned with conventional solvent. The clean, dry faces must be lightly greased.

In order to change an element, the connected equipment must be shifted apart.

3.1.1 Assembly of the Coupling

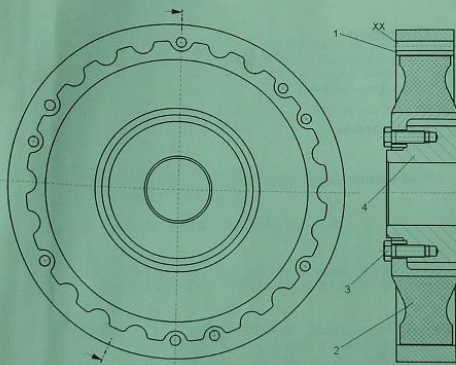
The **VULASTIK -L- Coupling** is shipped completely assembled and must not be disassembled before installation.

Before installation of the coupling, the casing or flange casing (Fig. 3-1/1) withdrawn from the **VULASTIK -L- Element** (Fig. 3-1/2) and screwed to the flywheel.

With the Series 2800 washers must be installed under the flywheel fixing bolts as follows:

Hexagon Bolts (Fig. 3-1/3) - Washers DIN 125
Cylinder Bolts - Washers DIN 988

The hub (Fig. 3-1/4) complete with attached parts is in accordance with the present day, technological procedure to be pressed onto the shaft end of the respective machine.



- 1 Casing (Flange Casing)
- 2 VULASTIK -L- Element
- 3 Hexagonal Bolts (Fixing Bolts)
- 4 Hub

Fig. 3-1 VULASTIK -L- Coupling

3.3 Maintenance

Note: In order to guarantee the correct functioning of the highly flexible **VULASTIK -L- Coupling** (Fig. 3-1) the installation procedures must be strictly observed. Each screwed connection must be tightened using a torque wrench. The torque settings given by the manufacturer must not be exceeded.

3.3.1 Maintenance, Inspection and Replacement of the VULASTIK -L- Element

Inspection of the VULASTIK -L- Element

The **VULASTIK -L- Element** must be inspected after the first 100 hours of operation and then at 2000 operational hours intervals or every 6 months.

Note: During the visual inspection of the **VULASTIK -L- Element** (Fig. 3-1/2), if cracks are seen in base of the teeth or in the flexible part, then the element must be replaced.



The **VULASTIK -L- Element** must be replaced after approximately 15000 operating hours or after 10 years.



3.3.2 Replacement of the VULASTIK -L- Element

Disassembly of the VULASTIK -L- Element Series 2800

After the casing (Fig. 3-1/1) has been loosened on the engine side and the VULASTIK -L- Element (Fig. 3-1/2) is accessible, after removal of the bolts (Fig. 3-1/3) the VULASTIK -L- Element can be removed from the hub (Fig. 3-1/4).

The VULASTIK -L- Element (Fig. 3-1/2) can be removed radially by sliding the casing (Fig. 3-1/1) and pressing the element off the hub (Fig. 3-1/4).

Should it be necessary to disassemble the hub (Fig. 3-1/4) the hub must be heated evenly to 100°C. This also applies for assembly.

WARNING!

In such a case, the VULASTIK -L- Element (Fig. 3-1/2) may not be screwed to the hub.

The assembly procedures are the reverse of the disassembly procedures for the VULASTIK -L- Element.

The torque setting for the attachment bolts (Fig. 3-1/3) is 175.0 [±]20 Nm.



Parts Lists

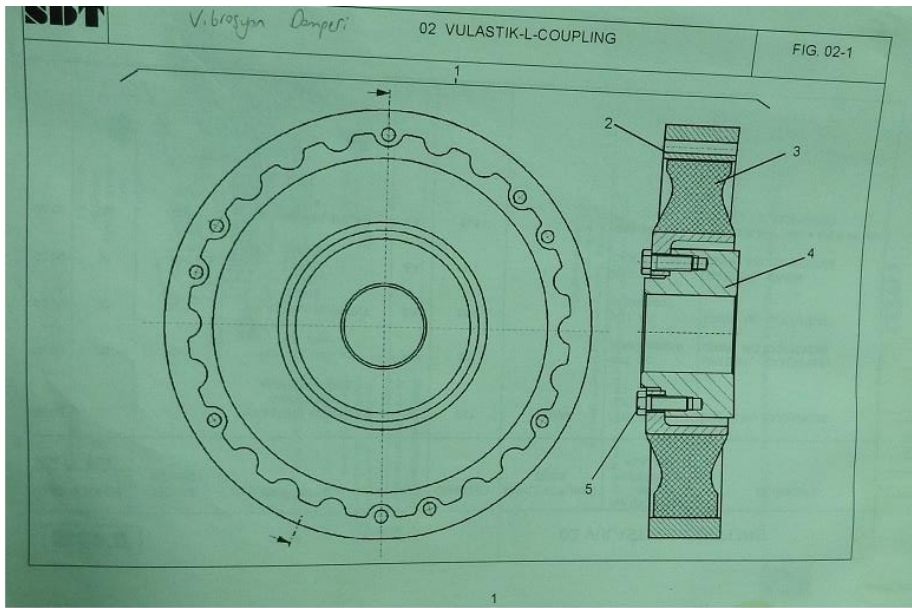
LEGEND

1	FGC	The Functional Group Code The Functional Group Code is the basis for the breakdown of cataloged parts. Manufacturer Drawings and parts lists are converted into Functional Group Codes according to functional aspects in order to simplify identification of assemblies and parts of complex equipment.
2	POS	The FGC structures the project/equipment into system, assemblies and sub-assemblies. Position number in the drawing.
3	PART NUMBER	This number is combined from FGC and POS columns
4	FIG.NO.	Identifies Drawing Number.
4	DESCRIPTION	Description of the Part Number
5	UNIT	Units of quantity. EA means each.
	QUANTITY	Quantity of parts required.
6	MNFR.-CODE	NATO-Manufacturer Code
7	NATO-STOCK-NO. REFERENCE NO.	NATO Stock Number or Reference Number.
8	COMMENTS	Standards (DIN), Material-specifications dimensions, drawings or important notes.



CONTENT

FGC	DESCRIPTION	FIG.NO.	PAGE
02	VULASTIK-L-COUPLING		
02	VULASTIK-L-COUPLING	02-1	1



SDT 02 VULASTIK-L-COUPLING

PART NUMBER		FIGURE NUMBER	DESCRIPTION	UNIT	QUANTITY	MANUFACTURER CODE	NATO-STOCK NO / REFERENCE NUMBER	COMMENTS
FGC	POS. NO.							
02 00	01	02-1	VULASTIK-L-COUPLING SERIES 2800 ASSEMBLY 3010	EA	001	D9090	FERT.-ART. 1x30131CA0	DRWG. NO. 1X30101CA0
02 00	02	02-1	FLANGE CASING FM 466x	EA	001		ART. NO. 3x3000000M-B	MATERIAL : GKALS10MG DRWG. NO. 1X30101CA0
02 00	03	02-1	VULASTIK-L-ELEMENT 3013	EA	001		ART. NO. 2x3013A003	DRWG. NO. 1X30101CA0
02 00	04	02-1	HUB FM 220x	EA	001		ART. NO. 3x3005000M	MATERIAL : CK45N DRWG. NO. 1X30101CA0
02 00	05	02-1	HEXAGONAL BOLT M16	EA	016		ART. NO. 7001016045	TORQUE SETTING = 175.0 ⁺²⁰ Nm DRWG. NO. 1X30101CA0

2



KILIC II - E-Diesel Aggregate BA 220

3.1.2 Technical Data

Type: VULASTIK -L
 Series: 2800 Design A
 Assembly: 3010
 Production Series: L - 3013
 Weight: ca. 140 kg
 Hole Pattern 1 : Item 4: 85 JS6, 22 P9 x 5.4 + 0.2



KILIC II - E-Diesel Aggregate BA 220

After installation of the hub, the casing or flange casing is pushed over the teeth of the **VULASTIK -L- Elements**.

Note: Torque Settings (Fig. 3-1/3) = 175.0 ^{±0.2} Nm

Bolts or nuts to be lightly oiled.

($\mu_G = \mu_K = 0.12$)

Measurement of centering and hole circle is only possible in the fully assembled condition.

XX: Ø 26 x 4 washers are to be used with grade 10.9 bolts.

The more accurately the system is aligned, the greater the reserve of the coupling for compensation of displacement during operation.

The recommended alignment tolerances are as follows::

Assembly	Radial Alignment Tolerance +/- a	Axial Alignment Tolerance +/- b	Angular Alignment Tolerance +/- c 1)
3010-30D0	0,2 mm	2 mm	0,5°

1) An angular deviation of less than 0,2° must be achieved.

KILIC II - E-Diesel Aggregate BA 220



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