APPLICATIONS
VULKAN COUPLINGS

SHIPS & BOATS
- CARGO VESSELS
- PASSENGER SHIPS
- WORK BOATS
- SPECIAL VESSELS

GENERATOR DRIVES
- PLEASURE BOATS
- POWER GENERATORS
PORTFOLIO / PRODUCT RANGE

VULKAN COUPLINGS

RATO S
RATO S+
RATO R
RATO DS
RATO DG
RATO S+
VULKARDAN E
VULKARDAN G

VULKAN COUPLINGS
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PORTFOLIO / PRODUCT RANGE
VULKAN COUPLINGS

VULASTIK L
INTEGRAL SHAFT SUPPORT
VULKARDAN L+P
TORFLEX
COMPOSITE SHAFTING
METAFLEx
RESILIENT MOUNTS
RATO S

Torque range – 12.5 kNm to 800.0 kNm

Applications – Flexibly mounted engines, rigidly mounted engines

The highly-flexible RATO S coupling is a torsionally flexible rubber coupling that compensates radial, axial and angular shaft displacements of the connected machinery. The torque is transmitted by elements loaded in shear. The different torsional stiffnesses and damping factors available provide the possibility to satisfactorily tune the torsional vibration behaviour of the drive system.
RATO S+

Torque range – 180.0 kNm to 360.0 kNm

Applications – Flexibly mounted engines, rigidly mounted engines

The highly-flexible RATO S coupling is a torsionally flexible rubber coupling that compensates radial, axial and angular shaft displacements of the connected machinery. The torque is transmitted by elements loaded in shear. The different torsional stiffnesses and damping factors available provide the possibility to satisfactorily tune the torsional vibration behaviour of the drive system. The newly developed ACOTEC series products are characterized by improved performance in the essential technical data.
RATO R

**Torque range** – 12.5 kNm to 270.0 kNm

**Applications** – Flexibly mounted engines, rigidly mounted engines

Complementary to the all-round RATO S coupling the highly flexible RATO R coupling has been specially designed for use in installations requiring a high level of torsional flexibility and misalignment capacity. Inherent features of the design include the high dynamic load capacity and good rotational dynamic properties due to the low rotating inertias. The area of application is primarily in high-speed main/PTO systems driven by a Diesel engine or electric motor.
RATO DS

Torque range – 6.3 kNm to 160.0 kNm
Applications – Rigidly mounted engines

The highly flexible RATO DS coupling has been specially designed for use in installations requiring a high level of torsional flexibility and medium level of misalignment capacity. Supplementing the all-round RATO S. The RATO DS has been developed to offer an application-orientated coupling design. Specially for rigidly mounted ship’s main propulsion. The 3 available stiffnesses enable a good tuning of the system with respect to both the transient and steady-state torsional vibration response.
RATO DG

Torque range – 8.0 kNm to 160.0 kNm

Applications – Flexibly mounted engines, rigidly mounted engines

Supplementing the all-round RATO S coupling the flexible RATO DG coupling has been specially designed for use in installations requiring a medium level of torsional flexibility and misalignment capacity. The application areas are drivelines using diesel/ gas-engines and electric motors in the general field of mechanical engineering, in mining, co-generation, in the building and construction industry, telecommunications and marine industry.
MESLU

**Torque range** – 8.0 kNm to 315.0 kNm

**Applications** – Specific data on request only

**Technical Data MESLU** – The VULKAN MESLU clutch is a pneumatically operated double-cone friction clutch for dry running. It is backlash-free, possesses no rubbing surfaces in its internal construction that could be subject to wear and tear, and thanks to the external friction sheaths, features high maximum shifting and good heat radiating capacity. The clutch produces no axial load, either when engaged or disengaged. Through the arrangement of the double-cone an automatic adjustment is afforded during gradual wear of the friction linings.
VULKARDAN E

**Torque range** – 0.16 kNm to 20.0 kNm

**Applications** – Freestanding engines, flexibly mounted engines, bellhousing installation

The VULKARDAN-E coupling is a highly-flexible rubber coupling with a linear stiffness characteristic. Four rubber qualities are available in order to tune the coupling to the various system requirements. As an alternative elements in silicone with a progressive stiffness characteristic are available.
**VULKARDAN G**

**Torque range** – 5.0 kNm to 25.0 kNm  
**Applications** – Gensets

The VULKARDAN G coupling has been especially designed for modern auxiliary and main generator applications with SAE flywheels. The torque range for this coupling is between 5 and 25 kNm, which suits engines up to 4300 kW. The design also compliments the requirements of free standing propulsion systems and allows efficient and time-saving assembly and disassembly of the elastomer. In addition, VULKAN Couplings offers VULKARDAN G product types for bell housing applications as well.
VULASTIK L

**Torque range** – 0.4 kNm to 40.0 kNm

**Applications** – Bellhousing installation, rigid mounted engines

The VULASTIK L coupling is a torsionally flexible rubber coupling, that compensates axial, angular and, to a certain degree, radial displacement of the connected machines. Four rubber qualities and silicone are available in order to tune the coupling to the various system requirements. VULASTIK L couplings are available with one elastic element in standard design or with two elements acting in parallel in Dual design. The main parts of the VULASTIK L coupling are hub and flanged casing, between these, the disc-shaped element is arranged.
INTEGRAL SHAFT SUPPORT

**Torque range** – 0.63 kNm to 20.0 kNm

**Applications** – Cardan Shaft drives, flexibly mounted engines

In addition to the cardan shaft series coupling program VULKAN has developed a bellhousing with an integral bearing. This design fits in installations where the cardan shaft has a large angle of inclination. The resulting lateral and axial reaction forces from the cardan shaft are supported by the bell-housing so reducing the engine crankshaft loading.
VULKARDAN L+P

**Torque range** – 0.16 kNm to 12.5 kNm

**Applications** – Flexibly mounted engines

When the driven machine is not in line with the prime mover or when long distances have to be bridged, cardan shafts are used. With a diesel engine as the prime mover, a highly flexible coupling will be required for shifting resonances and damping of torsional vibration. This coupling protects the cardan shaft and the driven machinery from inadmissible vibratory loads. The highly flexible VULKARDAN L+P couplings have been specifically developed for application in conjunction with cardan shafts.
TORFLEX

Torque range – 0.25 kNm to 1.6 kNm
Applications – Bell-housing installation

Increased demands on drive systems require special concepts in highly flexible couplings. This demands include low idle-running speeds and silent operation of gearboxes in lower speed ranges. To meet this need, VULKAN has developed a multi-stage coupling with progressive stiffness characteristics. The TORFLEX coupling is exclusively intended for installation in bellhousings and can be used where the gearbox input shaft has an external spline or oilpressfit.
COMPOSITE SHAFTING

Torque range – 5.0 kNm to 800.0 kNm
Applications – Specific data on request only

The VULKAN Composite Shafting (CS-System) consist of the composite shafting, combined certain steel adapters, intermediate-shaftings, bearings, bulkhead seals and as an option flexible links, membrane couplings, highly flexible couplings or other driveline components. VULKAN Composite Shaftings in filament wound carbon or glass fiber structure are available in a torque range from 5 to 800 kNm, diameters from 170 to 810mm and different length configurations.
METAFLEx

Torque range – 5.0 kNm to 120.0 kNm
Applications – Wind turbines, coupling between engine and gear, industrial applications

The METAFLEx coupling is a torsionally stiff link style coupling. Due to the all-metal design the coupling is widely dirt and temperature resistant. The bending flexible link element of the coupling consists of layered rings which are made from stainless steel. The coupling is maintenance free. It is based on a modular system with a small number of individual components resulting in easy assembly and disassembly.
RESILIENT MOUNTS

Load capacity – 5.0 kN to 175.0 kN

Applications – Propulsive units, power generating sets and also the suspension of exhaust piping

Thanks to the special vulcanized rubber compound, with an optimal combination of shear and compression modes, they make the ideal suspension of mostly all kind of machineries: propulsive units, power generating sets and also the suspension of exhaust piping! The high performance conical mounts of the T series are specially designed for an excellent vibration isolation, easy installation and complete with safety “fail-free device”.
THANK YOU FOR YOUR ATTENTION

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