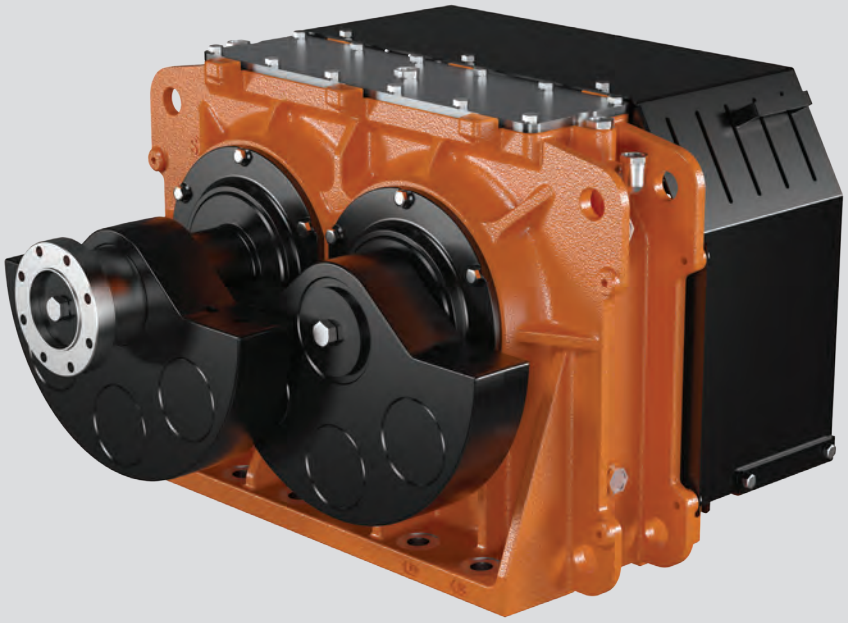
VU



Technical features

Functioning
VU linear motion exciters are composed of a casing (central body) that, by means of 4 bearings supports two shafts, synchronized by two helicoidal ground gears. The eccentric weights are mounted at the end of both shafts, rotating synchronized in opposite sense, determining a resulting unidirectional centrifugal force perpendicular to the mounting surface of the exciter.

Conformity with Standards and Regulations
In the application field of the Machinery Directive 2006/42/EC, the VU linear motion exciters can be considered as “partly completed machinery”.

Static moment
From 3140 to 119525 kgmm. The static moment of eccentric weights can be adjusted by means of the additional weights.

Centrifugal Force
Up to 453 kN.

Ambient temperature
From -40°C to +70°C.

Exciter mounting position
VU exciters can be mounted in all positions, always with the shafts in horizontal position.

Lubrication
Gears and bearings are oil splash / spray lubricated.

Driving system
The movement is transmitted by an external driving system coupled with the driving shaft by means of a joint, generally a Cardan joint (recommended). The external driving system can be an electric motor, a hydraulic motor or other motor type, directly coupled or by belts and pulleys.

Casing
In spheroidal cast iron.

Bearings
Spherical roller bearings, highest quality, long rated lifetime in conditions of maximum load.

Shafts
In treated steel alloy (Isothermic hardening) resistant to stress.

Eccentric weights / additional weights
Eccentric weights in steel, additional weights in steel and/or lead.

Weight covers
All exciters are equipped with two weight covers for protection from rotating parts.

Painting
Electrostatic surface treatment based on polymerised epoxy polyester powder in oven at +200°C. Tested in salt spray for 500 hours.

Other features
The VU Italvibras exciters are supplied with:
- coupling flange according to DIN standard on the driving shaft (on request a second flange on the opposite side);
- additional weights, based on the requested weights setting;
- oil level dipstick, magnetic plugs and breather plug with valve;
- technical handbook for use and maintenance.