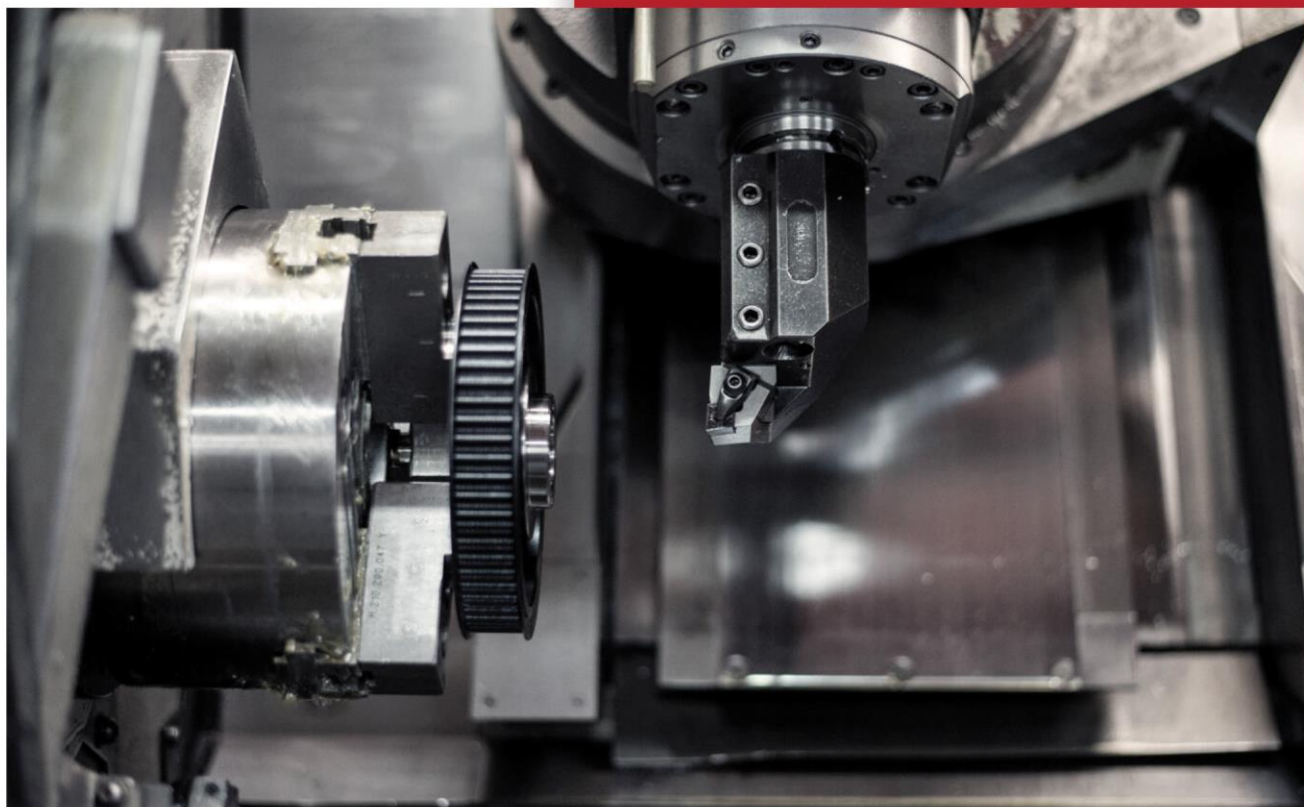


MOTION CONTROL TECHNOLOGIES



Piazzalunga
MOTION CONTROL TECHNOLOGIES

WHAT WE DO



Quality is when
the customers
come back,
not the product

- Tim Robertson

Since 1960 we have been manufacturing power transmission components such as variable speed pulleys, gear couplings, torque limiters and slide motor bases.

Innovation allow us to be leader in the field of standard and special variation technologies we study and develop with all the clients requiring customized supplies.

Our availability to produce even a small number of pieces enable us to be a flexible and reliable partner especially for machinery and special systems manufacturers.

We believe in the “total quality philosophy” and we apply it to our products, services, technical and sales assistance. It is a global approach which goes beyond the respect of the standards during the production process and includes the customers’ satisfaction and the cooperation with our suppliers.

Our quality system certified **UNI EN ISO 9001:2015** ensures our activity.



THE IMPORTANCE OF THE TRANSMISSIONS

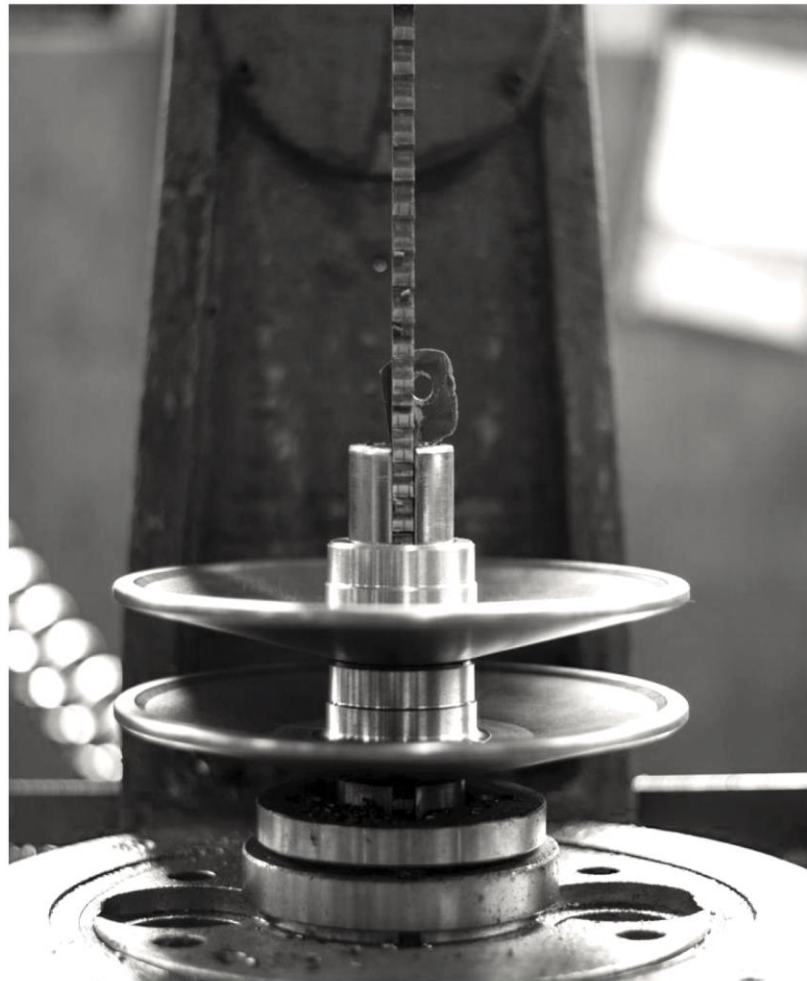
Reliability, durability and energy saving of an automatic machine mainly depend on the **components** which allow the transmission of the power.

It's a unique system in which all the components must be manufactured according to **high quality standards**. A weak link can undermine many working hours.

WHY CHOOSING US

Every component is the result of an **accurate planning** and productive process, from the choice of the raw materials, to the test during the whole **production cycle**.

This allows us to offer the best solutions to your designing and servicing need.



STANDARD PRODUCTS



VARIABLE SPEED PULLEYS

Variable speed pulleys are the power transmission components which allow the setting of the axle speed in an easy, quick, continuous and cheap way.

We can supply a wide selection of variable speed pulleys of different kinds, giving you the chance of choosing the right one for your need.



COUPLINGS

Couplings are devices whose aim is to join two coaxial shafts.

Their task consists also in transferring motion and in balancing possible misalignments, due to dimensional tolerance of the components or caused by external agents (for ex: outer temperature).



TORQUE LIMITERS

Torque limiters (or safety couplings) are components which have to be installed where an efficient protection of mechanical devices is needed in order to safeguard the engine and the related transmission.



SLIDE MOTOR BASES

Slide motor bases allow the wheelbase variation for those transmissions using double expanding pulleys. Furthermore they are conceived and used for belt tensioning in transmissions with standard V groove/timing pulleys.

VARIABLE SPEED PULLEYS

EDT SERIES

Variable speed pulley series EDT is the most popular and it represents a benchmark if you require a continuous, precise and maintenance-free speed variation.

- ◆ Variation ratio: 1: 3
- ◆ Transmissible power: 0.75 - 18.5 Kw
- ◆ Maintenance free
- ◆ Double expansion





100 SERIES

Double expanding pulleys series 100 are conceived especially for customers who need products interchangeable with those of our competitors, thus keeping a good price/quality ratio.

- ◆ **Variation ratio: 1: 3**
- ◆ **Transmissible power: 0.37 - 4 Kw**
- ◆ **Maintenance free**
- ◆ **Double expansion**



MINI SERIES

Mono expanding pulleys MINI series are subset of ES/RV series.

The small sizes allow the use of "normal" belts section Z, A, B.

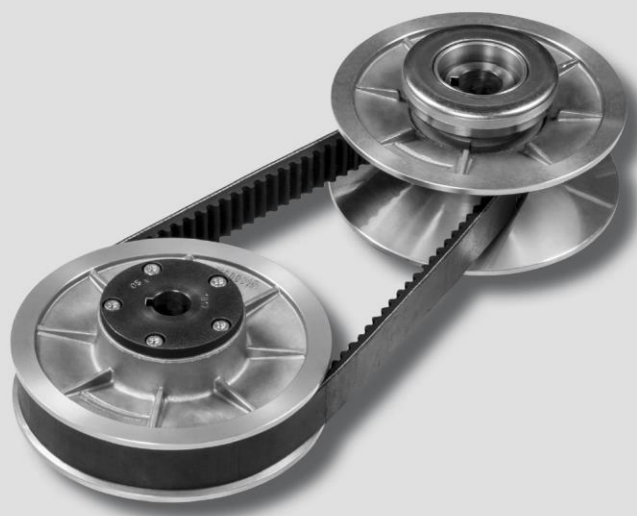
- ◆ **Variation ratio: 1: 6**
- ◆ **Transmissible power: 0.25 - 0.75 Kw**
- ◆ **Compact size**
- ◆ **Simple expansion**



ES/RV SERIES

The ES-RV variator takes advantage of the working principle based on the use of 2 mono expanding pulleys placed on fixed wheelbase machinery.

- ◆ **Variation ratio: 1: 9**
- ◆ **Transmissible power: 0.25 - 18.5 Kw**
- ◆ **Fixed wheelbase**
- ◆ **Simple expansion**



BES SERIES

BES variators take advantage of the same working principle as ES/RV ones. They differ only in size and they are interchangeable with our competitor's products. The flanges are made in high resistance aluminium alloy.

- ◆ **Variation ratio: 1: 9**
- ◆ **Transmissible power: 0.37 - 30 Kw**
- ◆ **Fixed wheelbase**
- ◆ **Simple expansion**

| COUPLINGS

GSTR SERIES

ELASTOMER COUPLINGS

Jaw couplings series GSTR are composed by 2 hubs and an elastic element (spider) which allow the use in hard working conditions.

We can supply standard or customized products with standard or small hubs, flange or hub suitable for locking assembly.

GSTR couplings are made of carbon steel; on request they can be made of aluminium or cast iron.

- ◆ Compensation of axial, angular and lateral misalignment
- ◆ Shock and vibration damping
- ◆ Electrical insulation
- ◆ Executions according to drawing

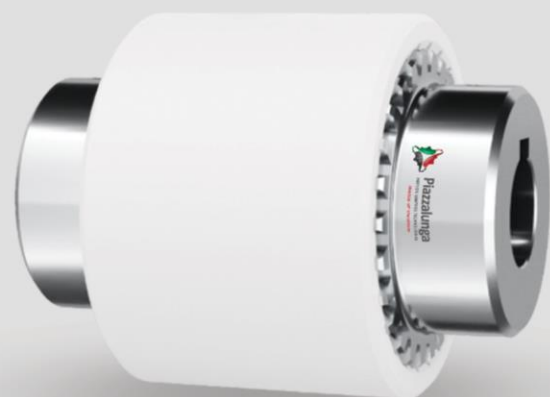




GD SERIES

The most important feature of gear coupling GD series is the transmission of the highest torque with minimal amount of space.

- ◆ Gear couplings
- ◆ 600 - 90.000 Nm



GD.P SERIES

The phosphated steel rounded gear hubs and the resin chain sprocket ensure a high resistance to corrosion and atmospheric agents.

- ◆ Flexible gear couplings
- ◆ 11,5 - 840 Nm



GD.S SERIES

They are open on one side and specially suited for gearboxes and pumps.

The parts, rounded gear hubs with chain sprocket, are in phosphated steel in order to ensure high resistance performances.

- ◆ Gear couplings with integrated crown
- ◆ 600 - 28.500 Nm

TORQUE LIMITERS

LSG SERIES

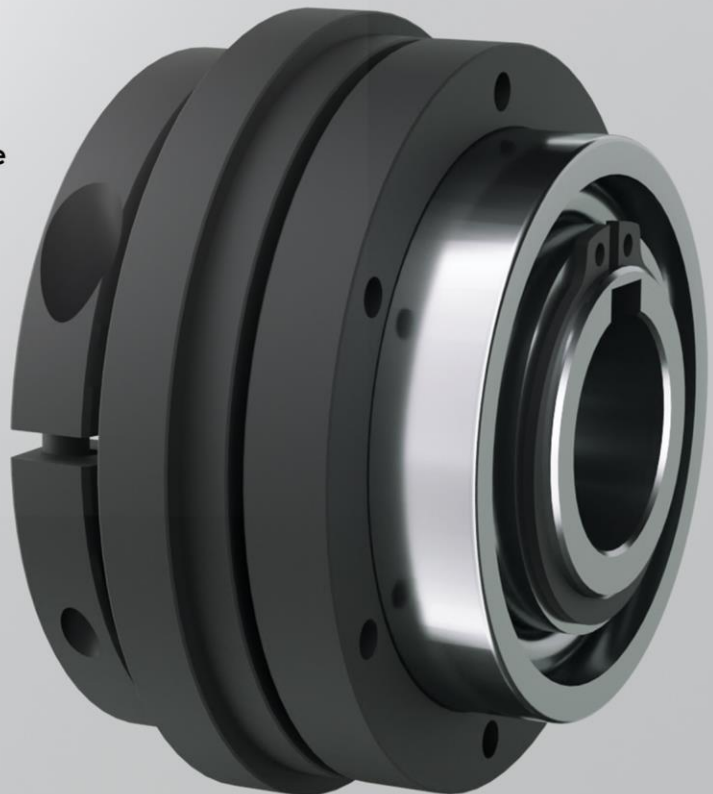
PRECISION SAFETY COUPLINGS

Torque limiters in which the torque is transmitted by balls. The torque limit value is regulated by adjusting the pressure exerted by the springs.

The executive features allow this type of limiter to eliminate the angular backlash with consequent benefits for applications that require precise re-engagement.

The transmission unit is supported by a ball bearing.

- ◆ **Overloads from 2 to 750 Nm**
- ◆ **High sensitivity of reaction**
- ◆ **Angular backlash free**
- ◆ **Standard version with 360 ° in-phase re-engagement**



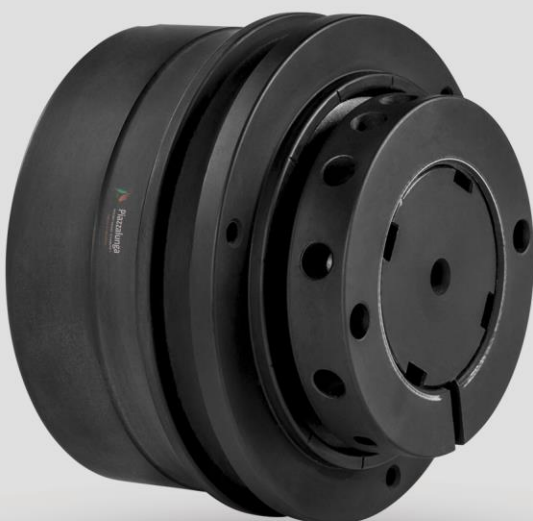


LSE SERIES

COMPACT BALLS LIMITERS

Torque limiters with a working principle based on the joint action of the balls and the pressure exerted by the springs. The construction features make this type of limiter compact: the crown/flange is placed on the body of the limiter and the torsional backlash is low

- ◆ Overloads from 7.5 to 1450 Nm
- ◆ Maximum bore: 55 mm
- ◆ Precise torque adjustment system by means of adjustable ring nut



LS-LR SERIES

BALLS/ROLLERS TORQUE LIMITERS

Torque limiters in which the torque is transmitted by the balls/rollers. The torque limit value is regulated by adjusting the pressure exerted by the springs.

Once the torque limit value is reached, the moving part of the limiter rotates causing the leak of the balls/rollers connecting the fixed part to the moving one.

- ◆ Intervention torque: 2.5 - 12.000 Nm
- ◆ Maximum hole: 20 - 120 mm
- ◆ Maintenance-free for long lasting high reliability



LF SERIES

FRICTION TORQUE LIMITERS

Torque limiters with a working principle based on the joint action of friction rings and the pressure exercised by the springs. It is particularly suitable in dusty environments, it engages silently and without vibrations and both directions of rotation are protected.

- ◆ Overloads from 2 to 23000 Nm
- ◆ Maximum bore: 140 mm



LF/GC SERIES

LIMITERS WITH CHAIN COUPLING

Limiters with two steel sprockets, machined and connected by a double chain. Compact solution for coaxial connections. Automatic re-engagement.

- ◆ Overloads from 1 to 23,000 Nm
- ◆ Maximum bore: 140 mm
- ◆ High temperature resistance

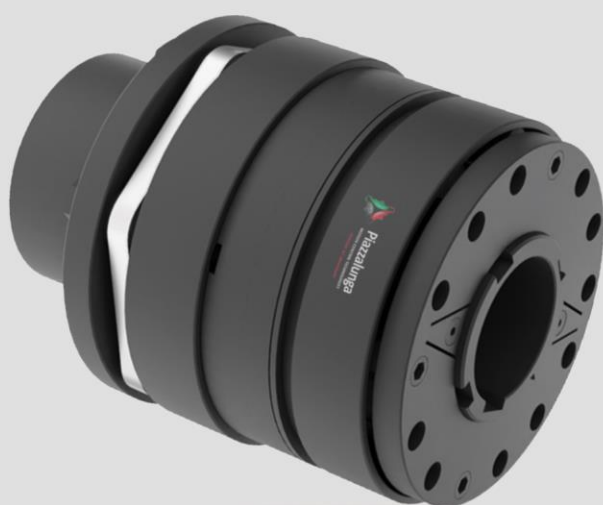


GS SERIES

LIMITERS WITH ELASTIC COUPLING

Backlash-free torque limiters with elastomer coupling. The construction features allow this type of limiters to zero the backlash with consequent advantages for applications that require precision re-engagement. The LSG / GS SERIES allows coaxial mounting and compensates for any axial misalignments

- ◆ **Intervention torque: 17 - 1.050 Nm**
- ◆ **Suitable for high axial misalignments**
- ◆ **Coaxial assembly**



GT SERIES

TORQUE LIMITERS WITH DISC COUPLING

The torque is transmitted by the balls / rollers. The intervention torque is adjusted by acting on the pressure exerted by the springs.

Designed to suit applications where high speed and power are required.

- ◆ **Intervention torque: 60 - 5,200 Nm**
- ◆ **Maximum bore: 90 mm**

SLIDE MOTOR BASES

SX SERIES

GALVANIZED SHEET SLIDE

Designed for an easy belt tensioning without modifying the alignment of the transmission elements.

The executive features offer an effective solution to all applications requiring lightness, compactness and easy assembly.

The galvanized sheet components ensure a long lasting production efficiency in any working conditions.

- ◆ **Motor size: 56-180**
- ◆ **Assembly aligned to assure maximum sliding and avoid deformations.**
- ◆ **Completely drilled model for quick installation and motor assembly.**





SL SERIES

CAST IRON SLIDE

The phosphated cast iron body ensure long lasting production efficiency in any working conditions

The slotted fixing holes make the assembly easier, thus letting them be used in various industrial fields.

- ◆ **Motor size: 71 - 132**
- ◆ **Equipped with a handwheel for easy adjustment.**
- ◆ **Double sliding plate model already drilled ready for motor assembly**



SC SERIES

RAIL SLIDE

The SC series rail slides are designed for mounting medium to large size motors that cannot be mounted on the SX and SL series compact slides. The simple and functional construction allows quick adjustments of the belt tension without changing the alignment of the transmission elements.

- ◆ **Motor size: 71 - 350**
- ◆ **Made in galvanized sheet or welded steel**



CUSTOM MADE

DO YOU WANT CUSTOMIZED PRODUCTS?

Keep pace with innovation, involve us in your projects and put to the test our ability in realizing customized products.

DO YOU NEED LOW-SERIES PRODUCTS?

High specialization, know how in manufacturing power transmission components and availability in producing low-series products allow us to be a flexible and reliable supplier.

DO YOU NEED VARIATIONS ON BASIC MODELS?

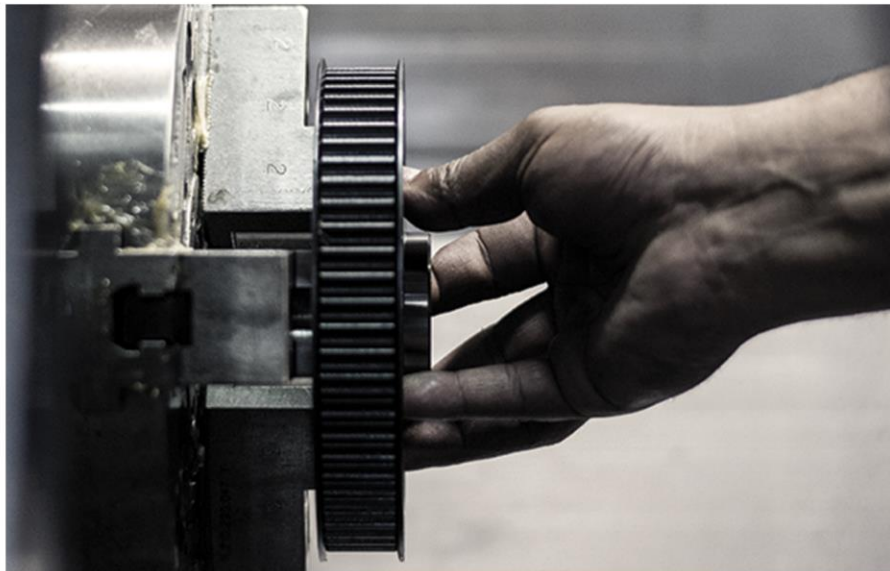
Internal design and production guarantee wide flexibility in product customizing in order to offer you tailor-made solutions with maximum efficiency, speed and profitability.

DO YOU NEED AN OUTSOURCING PARTNER?

We are in constant movement and evolution. Every component is studied and customized to improve the performance of your machinery.

Our production department is equipped with **lathes, milling, broaching and grinding machinery**.

Our technical department is provided with avantgarde software and instruments.







Piazzalunga
MOTION CONTROL TECHNOLOGIES



Piazzalunga Snc di Marco e Mauro Piazzalunga

Sede legale ed operativa



Via Pozze, 7
24010 - Bracca (BG) - Italy
P.IVA 01633630163



info@piazzalunga.com



piazzalunga.com



(+39) 0345 247357