

Temano® Shock Absorber is an elastomer-based system designed to absorb shocks, reduce line tension, and extend the lifespan of equipment.

Made from high-performance **natural rubber**, it features a Dyneema® textile core that provides passive safety even in the event of partial failure. An optional UV-resistant textile sleeve is available for added protection.

With an elongation capacity of up to 300%, it effectively dissipates energy caused by waves, wind, or currents, while preventing tension peaks.

A simple, robust, and corrosion-resistant design that makes it ideal for challenging marine environments.

Technical description

Lenght	from 50 cm to +10 m
Outer diameter	60 mm
Inner diameter	20 mm
Weight	2,5 kg/m (without inserts)
Elongation	Up to 300% (4× its original length)
Absorbed energy	Up to 20 kJ/m
Rubber hardness	45 Shore A / 50 Shore A / 60 Shore A



Reference

Reference example: **100cm** shock absorber with **45 Shore A** hardness, protective **sleeve**, and **4m safety line** (4× shock absorber length).

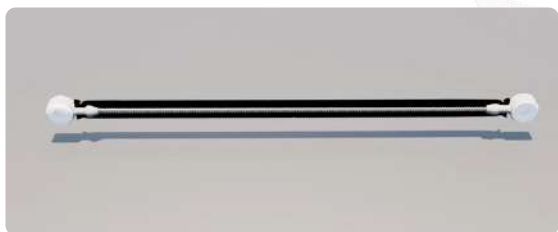
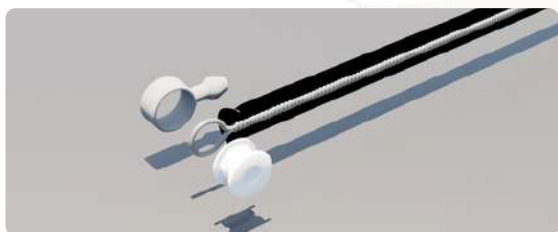
Format

AM-[L]-[D]-[G]-[S]

AM-100-45A-G-S1

Key to reference

Element	Signification	Example
AM	Temano® shock absorber	-
[L]	Lenght (cm)	50, 100, 200...
[D]	Shore A hardness	45 A, 50 A, 60 A
[G]	Type of protective sleeve	G= full sleeve
[S]	Safety line	S1 = with safety line S0 = without safety line



Temano[®] shock absorber

Temano[®] shock absorber components

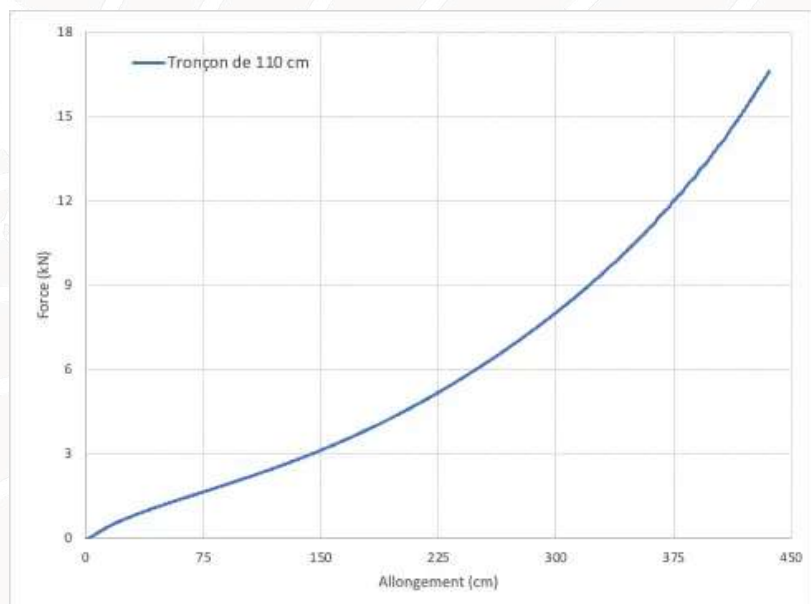
Natural rubber

At TEMANO, we control various rubber hardness levels to precisely tailor our solutions to each need and the specific constraints of their marine environment.

Different characteristics and resistance capacities depending on the rubber hardness:

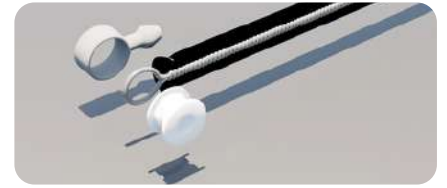
Elongation	Initial lenght	100 %	200 %	300 %
Rubber 45 Shore A*	0 kg	90 kg	280 kg	470 kg
Rubber 50 Shore A*	0 kg	100 kg	300 kg	560 kg
Rubber 60 Shore A*	0 kg	150 kg	430 kg	1350 kg

*Shore A : measures the hardness of soft materials such as rubbers



Temano® shock absorber

Temano® shock absorber components



Textile insert

Temano® shock absorbers are equipped with two **Dyneema® textile inserts**, which are lighter, more durable, and easier to handle than traditional stainless steel inserts.

Combined with a **HDPE ring** replacing the thimble, they reduce shear zones, enhance compatibility with textile components, and minimize wear and corrosion.

Technical description

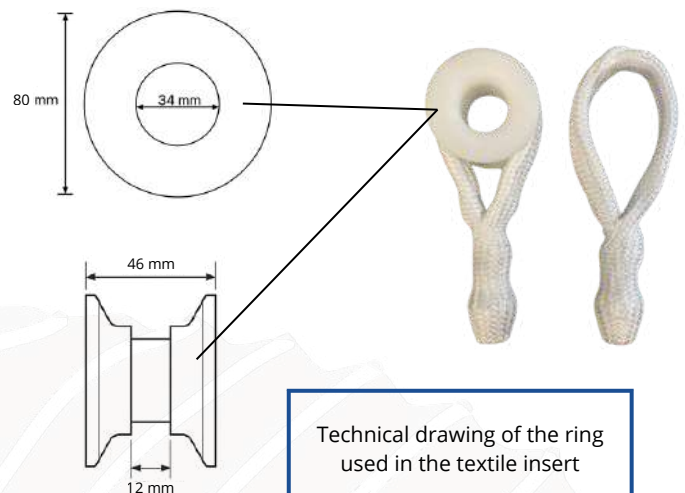
High strength

Lightweight and easy to handle

No corrosion

HDPE ring

The ring size can be customized according to your needs



Technical drawing of the ring used in the textile insert

Safety line

The **Dyneema® safety line** is located inside each Temano® shock absorber, fully protected from the outside.

The safety line is shielded against UV and abrasion and does not interfere during handling. This internal positioning notably prevents any entanglement with the rest of the line, unlike existing solutions.

Dyneema® is known for its exceptional tensile strength, light weight, long lifespan, and resistance to seawater. It is a discreet yet essential component, ensuring the overall reliability of the mooring system.



Technical description

Material	Dyneema®
Lenght	4x shock absorber lenght (ex: 4m of safety line for 1m shock absorber)
Breaking load	5 to 10 T

Temano® shock absorber

Temano® shock absorber components

Protective sleeve

To **improve the durability** of shock absorbers and ensure the protection of sensitive components, TEMANO offers protective sleeves specially designed to withstand the demands of the marine environment

Made from high-strength polyester and treated for **UV protection**, these sleeves extend the service life of the shock absorber.



Temano® shock absorber
without protective sleeve



Temano® shock absorber
with protective sleeve