



EN 12 195-2 STANDARD

The European Committee of Normalization (CEN) have agreed and decided that lashing devices shall be manufactured according to the European Standard for lashing EN-12195-2. This standard provides the user with all information as regards to the products itself and its follow up which is similar to the regulation applied to lifting equipment.

Features :

▶ **WLL or LC :** Working Load Limit (WLL) or Lashing Capacity (LC) = Maximum direct tensile strength which a lashing device can withstand when used.

▶ Safety factor :

- ▷ 2 times for the complete system,
- ▷ 2 times for fittings,
- ▷ 3 times for non woven webbing.

▶ **Test :** hooks and accessories including the lashing devices must not show any signs of deformation likely to affect their performance at a LC of 1,25 ; they must also withstand a safety factor of at least 2.

▶ **Elongation :** The webbing must not elongate more than 7% when subjected to the LC.

Product description and ordering :

The description of lashing systems must include all the following information :

- ▶ the type of lashing device represented with its reference :
 - ▷ One part system (endless),
 - ▷ Two parts (short part and long part),
- ▶ Reference of type, according to the manufacturer,
- ▶ Working Load Limit (WLL) in daN,
- ▶ Length of the short part in meters,
- ▶ Total length (L) in meters,
- ▶ Reference to this standard.

Marking :

End fittings, buckles, tensioning devices and load indicators must at least bear the name or the symbol of their manufacturer or supplier.

Each complete set of products or subset, in case components have to be separated, must bear the following information on a tag.

LASHING PRODUCT LABEL

REMINDER

S_{HF} = standardized manual force

This is the manual action force of 500 N (50 daN on the label) given in order to not overload the lashing webbing slings. Do not use any accessories such as bars, levers...

This regulation is specified in the EU standard 12195-2 (see enclosure).

S_{TF} = standardized capacity load

This is the residual force after loosening the handle of the ratchet and pawl, fixed to 10 % of the loading capacity, i.e 10 % of the loading capacity mentioned on the label.

This 10 % value is specified in the EU standard EN 12195-1 (see enclosed).



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LC : 2000 daN	← LC [daN]
Batch n° : 1234567890	← Manufacturer's number and code, follow up identification number
(MS) PES	← Supplier and raw material used
Date : 12 / 19	← Date of production
EN 12 195-2 03 / 2001	← Identification number of the standard
LC : 2000 daN 	← breaking strength of the webbing only
LC : 4000 daN 	← Lashing capacity
S _{HF} 50 daN / S _{TF} 375 daN Breaking strength of the webbing : 6000 daN / 6,0 t Elongation under LC <7%	← Standardized capacity load ← Maximum stretch of the webbing
Batch n° : 1234567890	← Identification number, serial number
(MS) PES	← traceability, material used and length
Length : 900 / 0,30 m	← Total length / Short part
Do not use for lifting	← Warning instruction
PMS Industrie	← Name of manufacturer or supplier, symbol, trademark, or any other precise identification information.
Date : 12 / 19	← Date of production
EN 12195-2 03/2001 DIN 60 060	← Identification number of the standard



LABEL COLOURS :

- Blue for polyester webbing slings
- Green for polyamide webbing slings
- Brown for polypropylene webbing slings

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Which load capacity (LC) for which lashing systems ?

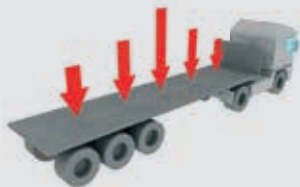
Direct tension (daN)	Webbing width (mm)	LC of the system (daN)	Doubled tension	Breaking strength of the webbing only (daN)	Standard length (m)
 LC 5 000 daN	75	5 000	 10 000	15 000	9,10
LC 3 500 daN	75	3 500	7 000	11 000	9, 10
LC 2 500 daN	50	2 500	5 000	7 500	8, 9, 10
LC 2 000 daN	50	2 000	4 000	6 000	8, 9, 10
LC 800 daN	45	800	1 600	3 000	4, 5, 6
LC 1000 daN	35	1000	2 000	3 200	6, 7
LC 400 daN	25	400	800	1 200	4, 5, 6

A lashing system is made of a webbing sewed and metallic parts. **A lashing strap refers only to the strap itself so not sewn.**

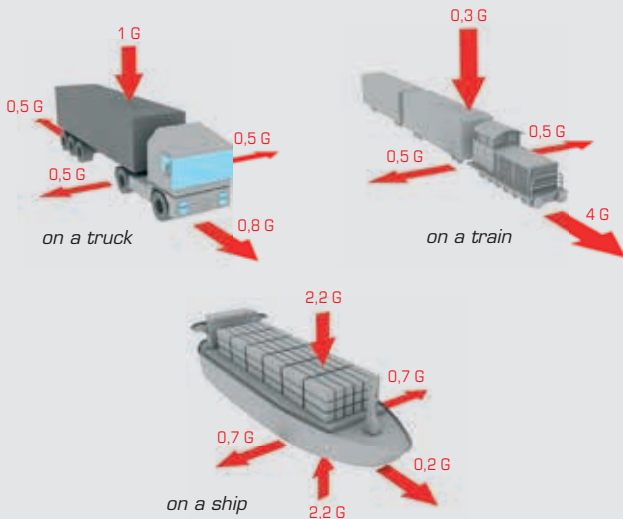
Lashing in complete safety

Basic rules for lashing

Distribution scheme of the load

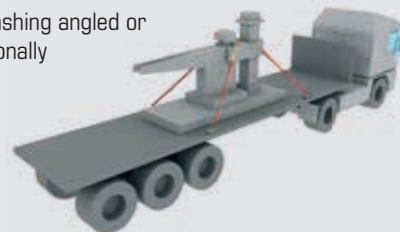


Load's behavior depending on the driving forces

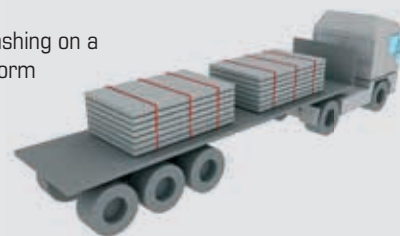


Blocking methods of the load

▶ Lashing angled or diagonally



▶ Lashing on a platform



▶ Circling

