TENSIOMETRIC LOAD LIMITERS WITH INTRINSIC SAFETY

DANFOS GUARANTEES ITS LIMITERS FOR A PERIOD OF 5 YEARS
from the delivery date

MADE IN ITALY

DANFOS
SAFETY LIFTING EQUIPMENT

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SAFETY LIFTING EQUIPMENT

We stop risk by lifting safely!

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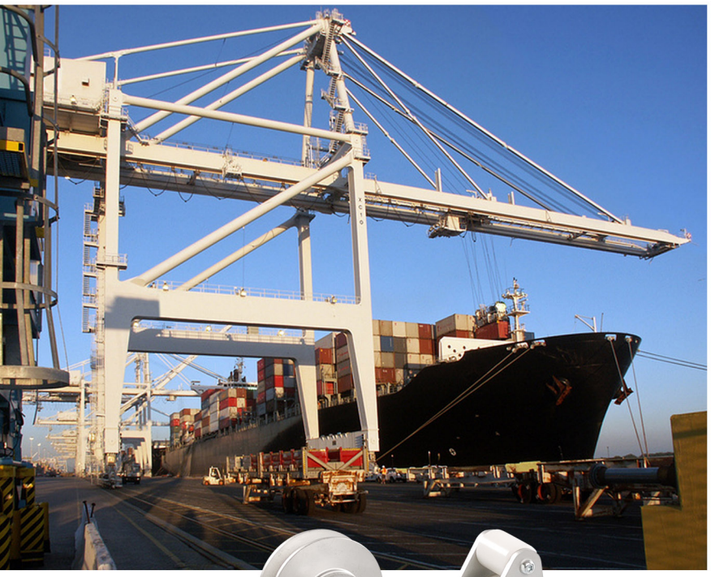
SAFETY DEVICES

Safety Systems for controlling the loads of rope lifting systems.
Better protection for their operators, lifting means and system structure.



GENERAL TECHNICAL CHARACTERISTICS

When a rope tears while lifting a load, it is deviated between the two pulleys and a central clamp that is anchored by a contrast spring.
The rope tends to move linearly, determining variations in the rope angle according to the extent of the tear (acceleration) and the load being lifted.
The width of the rope angle is mechanically identified and as soon as it passes the threshold that is set in the calibration premises, and the micro switch-commutator sends an electric signal that blocks lifting.
Development of the "Safety component for rope lifting systems" (1980) project gave our load limiters intrinsic safety.
Intrinsic safety is a special electromechanical device complementary to the electric circuit of the load limiter that mechanically guarantees that the electric circuit opens when the micro switch breaks, which blocks the lifting function.
If the load limiter is not working perfectly, crane operation is blocked, therefore the safety of your lifting system is always guaranteed and controlled.

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INTRINSIC SAFETY

The majority of load limiters on the market do not have a safety blocking device. Should the micro switch break, the operator would not realise it and would continue working without having the support of the limiter; this could cause the pulley load limit to be exceeded, which would bring about all the related negative consequences.
This does not occur with DANFOS limiters because of our patented intrinsic safety device that permanently controls the limiter.

GENERAL CALIBRATION

The calibration of the majority of limiters on the market is entrusted to the accuracy of the installer and calibration certification is released only for specific ranges.
The choice made by DANFOS to guarantee calibration within 1% and to render in unmodifiable later on is much more rigorous and protects the user from any type of manipulation.

ASSEMBLY AND MAINTENANCE

The load limiter is mounted near the anchorage of the lifting rope using a suitable clamp (mod. LC), or supported by a hanging cord if mounted on a mobile rope winch (mod. LCM).
When assembled, the load calibration to the hook does not need to be checked; just carry out a functional test. Our limiters do not require routine maintenance but users must periodically make sure that they are operating correctly.
During special maintenance, make sure the calibration point is checked, an operation that must only be carried out in our laboratory.

GENERAL GUARANTEE

DANFOS guarantees its limiters for a period of 5 years from the delivery date, covering any repairs or replacement of those parts which, after being carefully examined, are held to be faulty.
The guarantee does not cover parts that are subject to wear.
The guarantee is nullified if limiters are tampered with, or repaired outside out laboratory.
Danfos limiters comply with the current 2006/42/EC Machinery Directive and are supplied with an EC declaration of conformity.

TECHNICAL CHARACTERISTICS

- Electromechanical operation with intrinsic safety
- Electric signals identified by microswitches
- 2 electric signals
- Intervention sensitivity on a ±1% calibration value
- Steel and AISI 304 stainless steel structure
- Dacromet 320, galvanising and nickeling protection treatments
- DU-type dry shaft sliding bearing
- OR-type sealing gasket
- DIN 40050 IP65 insulation
- Compatible environmental temperature -20° + 80°C
- Mechanical life: 2x106 operation cycles
- Max. permitted electric load: 15A 250V
- Supplied electric power cable: 3X1.5 - 6X1.5 m. 2

MODEL	LC1	LC2	LC4	LC7	LC12	LCM2	LCM5
FORCE KG	50 - 1200	60 - 2500	120 - 4500	400 - 8000	800 - 15000	100 - 2500	200 - 5000
Ø WIRE ROPE	6 - 9	10 - 15	16 - 18	19 - 24	25 - 30	10 - 13	14 - 18
WEIGHT KG	5	6	7	8	9	13	17