



rackLITE

The rackLITE is specifically designed to safely lift loads in intralogistics without the need for lubrication or maintenance. It offers innovative rope technology, particularly for use in storage and retrieval systems (S/R systems). Thanks to its laid rope core made from high-strength polymer fibers, it achieves a service life several times longer than that of a comparable steel wire rope (up to 1,500,000 bending cycles at maximum load in accordance with EN 528). This reduces the number of replacement intervals required or renders them obsolete. The low rope weight considerably simplifies the rope changing procedure, and it is possible to implement significantly smaller approach distances/drive trains in warehouses.

The rackLITE combines high breaking force with low weight and was specifically developed for storage and retrieval systems. It provides the same breaking force as a steel wire rope, but with a significantly lighter dead weight. This reduces the time needed for a rope changing procedure in a high-bay warehouse to one working hour, thereby increasing the efficiency of storage and retrieval processes

Specifications

- Diameter: 11-20 mm
- Lengths: variable, made to customer requirements
- Material: optionally PES, UHMWPE, or to customer requirements
- Rope end termination: to EN 528, EN 14492-2, or EN 13411, or individually adapted to your system. We are happy to assist you in the selection process.

Segments



Applications

The rackLITE was developed for use in high-bay warehouses requiring not only high breaking forces, but also high bending fatigue strength and zero maintenance.

- Specifically developed for storage and retrieval systems (S/R systems)
- Suitable for the lifting of guided loads (non-rotation resistant 1x7 construction)

Advantages

- ✓ **Maintenance-free:** The rackLITE was developed specifically for the safe lifting of loads in intralogistics without the need for lubrication and maintenance. This reduces the number of replacement intervals required or renders them obsolete. The low rope weight considerably simplifies the rope changing procedure, and it is possible to implement significantly smaller approach distances/drive trains in warehouses.
- ✓ **Long service life:** The rackLITE offers innovative rope technology, particularly for use in storage and retrieval systems (S/R systems). Thanks to its laid rope core made from high-strength polymer fibers, it achieves a service life several times longer than that of a comparable steel wire rope (up to 1,500,000 bending cycles at maximum load in accordance with EN 528).
- ✓ **Optimum adaptability to existing and new equipment:** Existing equipment can be easily converted as the rackLITE fits on standard S/R systems (drums and pulleys) and requires only minimal preparatory work. This means that you will get the same breaking strength as with steel wire ropes, while also benefiting from a virtually infinite service life and easier and faster rope changing procedures.

Technical specifications

Nominal Ø mm	MBF kN
10	99
11	115
12	135
13	155
14	175
15	215
16	234
17	254
18	292
20	354

Diameter tolerance 2.5 % matching the winch pitch, other rope diameters are available upon request.
The values are provided for guidance only. The metric figures shall prevail. Subject to further developments which may lead to changes in technical specifications.
Subject to changes and errors.

“ We at Teufelberger assist you with the risk assessment of your entire equipment according to the Machinery Regulation (EU) 2023/ 1230 to ensure the safety and conformity of your systems.”

New equipment benefits from a smaller drive train that reduces the upper dead space in the warehouse and thus helps save space. Due to their low dead weight, even smaller-diameter ropes are suited for use in storage and retrieval systems.