

INSTALLATION GUIDELINES & LAYING INSTRUCTIONS

Reeling Cables

1. The delivery drum should be transported as close as possible to the installation site. Rolling the drum should be avoided wherever possible. If the delivery drum cannot be positioned at the installation site, the cable should be pulled off the drum using guide rollers. A pulling rope and cable pulling grip must be used for this purpose.
2. During unwinding, the cable must only be paid out from drums mounted on suitable rotating drum stands and must always be unwound from the top of the drum. The cable must be kept straight during unwinding and must not be deflected or pulled over edges.
3. Before installation, the cable must be laid out straight. If this is not possible, the distance between the delivery drum and the equipment drum should be kept as large as possible. When routing the cable onto the equipment drum, avoid forming an S-shaped curve or deflecting the cable into another plane.
4. The cable must be wound onto the equipment drum without introducing any twist. At the power supply connection point, the cable must be connected and secured using a cable pulling grip fitted with a 360° freely rotating eyelet without a stop.
5. **Please note:** Before installation, the lay direction of the cable must be verified by stripping the cable.

- 5.1. For a right-hand lay*, the cable must always be started on the equipment drum either from the left-hand flange, i.e. with the cable entering from below, or from the right-hand flange, i.e. with the cable entering from above.
- 5.2. For a left-hand lay*, the cable must always be started on the equipment drum either from the left-hand flange, i.e. with the cable entering from above, or from the right-hand flange, i.e. with the cable entering from below.

*Viewed in the direction of the observer.

6. If the cable feed-in point is driven over during operation, a compensation disc of suitable diameter with 1–2 turns of cable wound around it must be used.
 - 6.1. An entry funnel must be installed above the compensation disc if the feed line is located underground in the centre of the roadway.
 - 6.2. For securing the cable at the end of the travel path, wide-area clamps must be used (length $\geq 4 \times D$) to prevent crushing. The section of cable that is no longer reeled onto the drum before the fixing point must be at least $40 \times D$ in length. The use of a compensation disc is also recommended here.
7. When the cable is fully extended, at least two turns of cable must remain on the equipment drum.
8. The permissible bending radii and maximum permissible speed are specified in the relevant product data sheets.
9. The continuous static tensile load must not exceed 15 N/mm² of the total copper cross-sectional area. The dynamic peak tensile load must not exceed 25 N/mm².
10. The effective current-carrying capacity during continuous operation depends on:
 - the conductor cross-sectional area
 - the ambient temperature
 - the degree of cable winding on the drum
11. The cables comply with or are based on DIN VDE 0250. Deviating operating conditions may adversely affect the service life of the product.

