

Wire Rope

Diameter x Diameter (in mm) x 8 = WLL in Kilo Grams

NOTE:

Attachments (such as shackles etc.) to wire rope slings with soft eyes can never have a diameter smaller than the wire rope.

If an attachment to a wire rope sling does not have a diameter that is two times the diameter of the wire rope than the WLL must be reduced by 50%

INSPECTION FORMULA

Eight x the diameter = length of rope to be inspected. In that length or on a single strand not more than 10% of the wires can be damaged or broken.

The amount of wires is calculated using the rope construction. For example 6x19 construction means that rope has six strands of nineteen wires. So the formula for inspection is as follows.

For Example:

25mm Diameter of 6x19 construction would be calculated like this.

$$25 \times 8 = 200 \text{ mm length}$$

$$\text{Total wires} = 6 \times 19 = 114 \text{ wires}$$

$$10\% \text{ of } 114 = 11.4$$

Maximum number of broken wires in a length of 200mm or on the same strand = 11

The smallest rope diameter allowed for lifting with wire rope is 5mm

Wire rope should not be used where temperatures exceed 95 degrees celsius