



When a sling is rigged as a basket, the diameter of the bend where the sling contacts the load can affect the sling's lifting capacity. How much the lifting capacity is affected can be calculated by dividing the diameter of the bend where the rope contacts the load (represented by "D") by the diameter of the rope or the component rope diameter in a multipart sling (represented by "d").

For example, if the diameter of the bend ("D") is 10 and the component rope diameter ("d") is 1/2, the D/d ratio is  $10 \div 1/2$  or 20.

When using D/d ratios that are smaller than those shown in the table below, the rated capacity of the sling must be decreased.

## Standard D/d ratios are applied to determine efficiency of various sling constructions

| Mechanically spliced, single-part slings | 25 times rope diameter           |
|--|----------------------------------|
| Hand-spliced, single-part slings         | 15 times rope diameter           |
| Braided multi-part slings of 3 parts     | 10 times component rope diameter |
| Braided multi-part slings of 6 parts     | 25 times component rope diameter |
| Braided multi-part slings of 8 parts     | 25 times component rope diameter |
| Braided multi-part slings of 9 parts     | 20 times component rope diameter |
| Mechanically spliced grommets            | 5 times sling body diameter      |

## REDUCTION IN EFFICIENCY of wire rope when bent over pins of various sizes

