

Technical Bulletin 13: Fiber Stretch

The amount of stretch a sling can have at its rated capacity is an important factor in the performance of your lift. When looking at the different types of fiber slings, you can see as much as 10% stretch at rated capacity. This would equate to 5ft of added length for a 50ft sling. See Table 1.

	Twin-Path	Polyester Roundsling	Nylon Web Sling	Polyester Web Sling	Polyester Braided Sling
Elongation at WLL	<1%	3%	6-10%	3-4%	9%

Table 1 – Elongation comparison

Stretch under load can lead to movement, sling slippage and abrasion damage to the sling during adjustment. It can also make it difficult to factor headroom and load angles. Additionally, many types of fiber slings can have creep, or permanent length elongation. K-Spec® Core Yarn stretches less than 1% at rated capacity and achieves negligible creep.

Twin-Path® slings, in combination with tight manufacturing tolerances, and low stretch can achieve conformance to even the strictest of engineered lifts.