

# Bending cycles of high flexing cables

## LÜTZE SUPERFLEX® - longevity, reliability, flexibility

The high mechanical requirements in a drag chain require the use of special cables, which are designed for the usage in continuous motion application. The life span of cable in drag chains is strongly influenced by mechanical parameters of the application, as well as the carefulness of the installation.

Type of cable	Traveling distance in m	Bending radius = Factor x Cable-Ø (mm)	Velocity m/s	Acceleration m/s <sup>2</sup>	Cycles mio.
<b>LÜTZE SUPERFLEX® PLUS</b>					
Unshielded cable with special TPE or HGI insulation, PUR or TPE jacket	≤ 5 ≤ 20 ≤ 100	≥ 10 Ø ≥ 7,5 Ø ≥ 7,5 Ø	≤ 3 ≤ 5 ≤ 5	≤ 5 ≤ 10 ≤ 10	≥ 20 ≥ 10 ≥ 2
<b>LÜTZE SUPERFLEX® PLUS (C)</b>					
Shielded cable with special TPE or HGI insulation, PUR or TPE jacket	≤ 5 ≤ 20 ≤ 100	≥ 12 Ø ≥ 10 Ø ≥ 10 Ø	≤ 3 ≤ 5 ≤ 5	≤ 5 ≤ 10 ≤ 10	≥ 20 ≥ 10 ≥ 2
<b>LÜTZE SUPERFLEX®</b>					
Unshielded cable	≤ 5 ≤ 15	≥ 12 Ø ≥ 10 Ø	≤ 3 ≤ 5	≤ 5 ≤ 10	≥ 10 ≥ 5
<b>LÜTZE SUPERFLEX® (C)</b>					
Shielded cable	≤ 5 ≤ 15	≥ 15 Ø ≥ 12 Ø	≤ 3 ≤ 5	≤ 5 ≤ 10	≥ 10 ≥ 5

The values of this table show application-parameter and actual performed cycles in independent tests. The cycle count can only be compared, if every value is taken in consideration with each other. A valuation as "Million Operating Cycles" is insignificant, if traveling distance, velocity and bending radius is unknown.

## LÜTZE SUPERFLEX® PLUS M (C) PUR UL Servo 0,6 / 1 kV according to SIEMENS\* Standard Similar to SIEMENS MOTION-CONNECT 800PLUS

	Traveling distance in m	Bending radius = Factor x Cable-Ø (mm)	Velocity m/s	Acceleration m/s <sup>2</sup>	Cycles mio.
<b>LÜTZE SUPERFLEX® PLUS M (C) PUR UL Servo 0,6 / 1 kV</b>					
	≤ 3	≥ 10 Ø	≤ 5	≤ 50	≥ 10
	≤ 5	≥ 10 Ø	≤ 5	≤ 30	≥ 10
	≤ 10	≥ 10 Ø	≤ 5	≤ 15	≥ 10
	≤ 15	≥ 10 Ø	≤ 5	≤ 10	≥ 10
	≤ 50	≥ 10 Ø	≤ 5	≤ 5	≥ 10