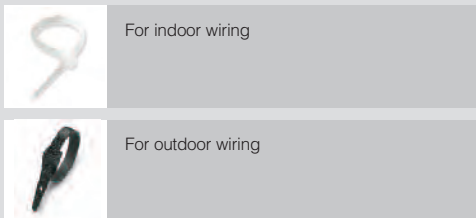


TIES Series

■ CABLE TIES



■ VERSIONS



■ TECHNICAL CHARACTERISTICS

Operating ambient temperature:	-40°C +85°C for indoor wiring -45°C +85°C for outdoor wiring
Installation ambient temperature:	-10°C +60°C for indoor wiring -30°C +60°C for outdoor wiring
Glow Wire test:	650°C
Material:	PA 6.6 (Indoor wiring) Engineering plastic (outdoor wiring)
Colour:	Black Natural
IK degree at 20°C:	IK08-IK10

■ BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Not Resistant	Not Resistant	Limited Resistance	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant

■ DIMENSIONS

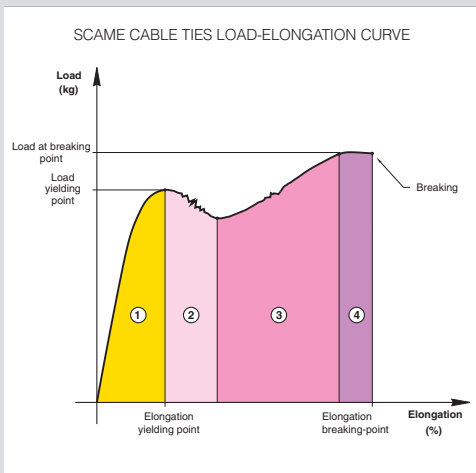
Cable ties for indoor wiring

Dimensions (mm)	Grip capacity MIN ÷ MAX Ø (mm)	Tensile strenght (kg)
2.2x75	1.5 ÷ 15	6
2.5x98	1.5 ÷ 18	8
2.5x135	1.5 ÷ 30	8
2.5x160	1.5 ÷ 40	8
2.5x200	1.5 ÷ 50	8
3.6x140	1.5 ÷ 35	13
3.6x200	1.5 ÷ 50	13
3.6x290	1.5 ÷ 80	13
3.6x365	1.5 ÷ 100	13
4.8x180	1.5 ÷ 45	22
4.8x200	1.5 ÷ 45	22
4.8x250	1.5 ÷ 60	22
4.8x290	1.5 ÷ 75	22
4.8x360	1.5 ÷ 100	22
4.8x130	1.5 ÷ 110	22
7.6x180	4.5 ÷ 45	55
7.6x300	4.5 ÷ 80	55
7.6x365	4.5 ÷ 100	55
9x780	4.5 ÷ 230	55

Cable ties for outdoor wiring

Dimensions (mm)	Grip capacity MIN ÷ MAX Ø (mm)	Tensile strenght (kg)
6x115	4 ÷ 25	25
6x175	10 ÷ 45	28
9x120	4 ÷ 22	48
9x180	10 ÷ 42	48
9x265	30 ÷ 60	51
9x360	30 ÷ 93	51

■ LOADING DIAGRAM



Four areas with different characteristics can be clearly identified:

- 1) Elastic elongation (utilization area).
The cable tie subject to traction strength undergoes elastic elongation. Once the strength stops, it goes back to the initial state without altering its physical characteristics.
- 2) Stretching of molecular bonds.
The cable tie is subject to a load such as to undergo inter-molecular breaks. The elasticity characteristics are altered.
- 3) Permanent deformation.
The cable tie undergoes the breaking of all intermolecular bonds.
- 4) Elongation to rupture.
Range within which the cable tie breaks.

■ APPLICATION EXAMPLES

