

## TECHNICAL DATA SHEET

# High-tensile spiral rope net SPIDER® S3 - 130

SPIDER® high-performance net	
Mesh shape:	rhomboid
Diagonal:	$x \cdot y = 164 \cdot 270 \text{ mm (+/- 5\%)}$
Mesh width:	$D_i = 130 \text{ mm (+/- 5\%)}$
Angle of mesh:	$\varepsilon = 47^\circ$
No. of meshes longitudinal:	$m = 3.7 \text{ pcs/m}$
No. of meshes transversal:	$n = 6.1 \text{ pcs/m}$

Steel wire	
Wire diameter:	$D_w = 3.0 \text{ mm}$
Tensile strength steel wire:	$f_t \geq 1'770 \text{ N/mm}^2$
Material:	high-tensile steel wire
Tensile resistance of a wire:	$Z_w = 12.5 \text{ kN}$

Corrosion protection *)	
Corrosion protection:	GEOBRUGG SUPERCOATING®
Compound:	95% Zn / 5% Al
Coating:	min. 150 g/m <sup>2</sup>

Steel strand	
Strand diameter:	$D_L = 6.5 \text{ mm}$
Construction:	1 x 3

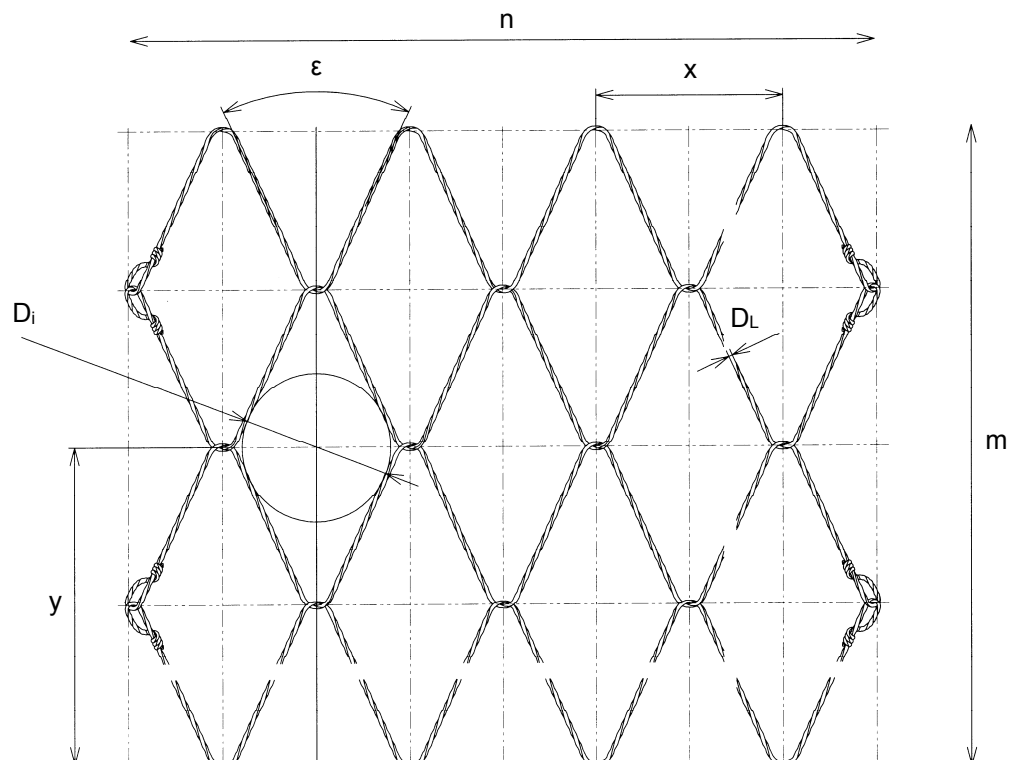
Bearing capacity (standard version)	
Tensile strength of net:	$Z_k \geq 220 \text{ kN/m **)$
Bearing resistance against puncturing:	$D_R \geq 230 \text{ kN} / 300 \text{ kN **)$
Bearing resistance against shearing-off:	$P_R \geq 115 \text{ kN} / 150 \text{ kN **)$
Bearing resistance against slope-parallel tensile stress:	$Z_R \geq 45 \text{ kN} / 70 \text{ kN **)$
Elongation in longitudinal tensile strength test:	$\delta < 10 \% **)$

Net roll dimensions	
Roll width:	$b_{\text{Roll}} = 3.5 \text{ m}$
Roll length:	$l_{\text{Roll}} = 20 \text{ m}$
Total surface per roll:	$A_{\text{Roll}} = 70 \text{ m}^2$
Weight per m <sup>2</sup> :	$g = 2.9 \text{ kg/m}^2$
Weight per roll:	$G_{\text{Roll}} = 203 \text{ kg}$
Net edges:	mesh ends knotted

\*) Next to the standard version with Zn/Al coating, the high-tensile spiral rope net is also available in stainless steel (INOX) in 1.4462 (AISI 318), sea water resistant.

\*\*) As in EAD 230025-00-0106 and referring to TÜV Rheinland LGA test report 01/2014 using spike plate P33 / P66

SPIDER® S3-130



Rockfall, slides, mudflows and avalanches are natural events and therefore cannot be calculated. This is why it is impossible to determine or guarantee absolute safety for persons and property with scientific methods. This means that to provide the protection we strive for, it is imperative to maintain and service protective systems regularly and appropriately. Moreover, the degree of protection can be diminished by events that exceed the absorption capacity of the system as calculated to good engineering practice, failure to use original parts or corrosion (i.e., from environmental pollution or other outside influences).