

# 台灣區總代理

專利案號:109207280

TECSUN(PV) 1,5kV DC

## 太陽能電纜線

### H1Z2Z2-K

## UL TUV雙認證

經644天90°C沸水後加壓  
6.5KVac/5min不擊穿



### 一般電纜線

測試前



測試後



結果:有被啃食的痕跡

Prysmian Group

General Cable

PRYSMIAN  
Draka



### 防齧齒咬證明



適用

水面漂浮

直埋式

畜牧

地面型案場

### 防齧齒電纜線

測試前



測試後



結果:沒有被啃食的痕跡



防白蟻咬



防齧齒

## TECSUN(PV) H1Z2Z2-K 1/1kV AC (1,5/1,5kV DC) PV cables, rubber insulated, TÜV and VDE certified as per EN 50618



### Chemical parameters

Reaction to fire	<p><b>Acc. to EN 50618, Table 2:</b></p> <ul style="list-style-type: none"> <li>• Single Cable Flame Test per EN 60332-1-2;</li> <li>• Low Smoke Emission per EN 61034-2 (Light Transmittance &gt; 70%);</li> <li>• Halogen-free per EN 50525-1, Annex B.</li> </ul> <p><b>PRYSMIAN internal test:</b></p> <ul style="list-style-type: none"> <li>• Multiple Cable Flame Test per EN 50305-9;</li> <li>• Low Toxicity per EN 50305 (ITC &lt; 3).</li> </ul>
Resistance to oil	<p><b>PRYSMIAN internal test, on sheath:</b></p> <ul style="list-style-type: none"> <li>• 24h, 100°C (meets VDE 0473-811-404, EN 60811-404).</li> </ul>
Westher resistance	<p><b>Acc. to EN 50618, Annex E and Table 2:</b></p> <ul style="list-style-type: none"> <li>• UV Resistance on sheath: tensile strength and elongation at break after 720h (360 Cycles) of exposure to UV lights acc. to EN 50289-4-17, Method A;</li> <li>• Ozone resistance: per Test Type B (DIN EN 50396).</li> </ul> <p><b>PRYSMIAN internal test:</b></p> <ul style="list-style-type: none"> <li>• Water Absorption (Gravimetric) per DIN EN 60811-402.</li> </ul>
Acid and alkaline resistance	<p><b>Acc. to EN 50618, Annex B:</b></p> <ul style="list-style-type: none"> <li>• 7 days, 23°C (N-Oxalic Acid, N-Sodium Hydroxide) acc. to EN 60811-404.</li> </ul>
Ammonia Resistance	<p><b>PRYSMIAN internal Testing:</b></p> <ul style="list-style-type: none"> <li>• 30 days in Saturated Ammonia Atmosphere.</li> </ul>
Enviromentally Friendly	<p>TECSUN(PV) cables comply with the RoHS directive 2011/65/EU of the European Union.</p>

### Thermal parameters

Max. operating temperature of the conductor	<p>Max. 90°C at conductor (lifetime acc. to Arrhenius-Diagram TECSUN = 30 years). 20.000 hours of operation at conductor temperature of 120°C (and 90°C ambient temperature) are permitted.</p>
Max. short circuit temperature of the conductor	250°C (5 s.)
Ambient temperature (for fixed and flexible installation)	Installation and handling: -25°C up to 60°C In Operation: -40°C up to +90°C
Resistance to cold	<p>Acc. to EN 50618, Table 2:</p> <ul style="list-style-type: none"> <li>• Cold Bending Test at -40°C acc. to DIN EN 60811-504;</li> <li>• Cold Elongation Test at -40°C acc. to DIN EN 60811-505;</li> <li>• Cold Impact Test at -40°C acc. to DIN EN 60811-506 and EN 50618 Annex C.</li> </ul>
Damp-Heat Test	<p>Acc. to EN 50618, Table 2:</p> <ul style="list-style-type: none"> <li>• 1.000h at 90°C and 85% humidity (test acc. to EN 60068-2-78).</li> </ul>

### Mechanical parameters

Max. tensile load	15 N/mm <sup>2</sup> in operation, 50 N/mm <sup>2</sup> during installation
Min bending radius	Acc. to EN 50565-1
Abrasion resistance	<p><b>PRYSMIAN internal Testing:</b></p> <ul style="list-style-type: none"> <li>• Acc. to DIN ISO 4649 against abrasive paper;</li> <li>• Sheath against sheath;</li> <li>• Sheath against metal;</li> <li>• Sheath against plastics.</li> </ul>
Shrinkage Test	<p><b>Acc. to EN 50618, Table 2:</b></p> <ul style="list-style-type: none"> <li>• Maximum Shrinkage &lt;2% (test acc. to EN 60811-503).</li> </ul>
Pressure Test at High Temperature	<p><b>PRYSMIAN internal Testing:</b></p> <ul style="list-style-type: none"> <li>• &lt;50% acc. to EN 60811-508.</li> </ul>
Dynarnic Penetration Test	<p><b>Acc. to EN 50618, Annex D:</b></p> <ul style="list-style-type: none"> <li>• Meets requirements of EN 50618.</li> </ul>
Shore-Hardness	<p><b>PRYSMIAN internal Testing:</b></p> <ul style="list-style-type: none"> <li>• Type A: 85 acc. to DIN EN ISO 868</li> </ul>
Durability of Print	<p><b>Acc. to EN 50618:</b></p> <ul style="list-style-type: none"> <li>• Test acc. to EN 50396.</li> </ul>
Rodent resistance	Safety can be optimized by utilizing protective hoses, or protective element, such as a metallic screen braid.
Anti-Rodent and Anti-tennite resistance 防蟻酸、防鼠咬(復合物或帶銅絲編織)	

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