

ONE SOLAR

Prysmian's ONE solution
for everything solar



TOGETHER,
WE CAN NAVIGATE
THE WAY FORWARD

CONNECTING PEOPLE AND BUSINESSES EVERYWHERE



150

Years of Experience



+50

Countries



33k

Employees



+17B

Sales in Euros

Sustainability-driven innovation to lead the energy transition and digital transformation

With a legacy spanning over 150 years, Prysmian is a global leader in energy and telecom cable solutions, driving innovation and sustainability. In 2024, we achieved over €17 billion in sales, supported by our 33,000 employees, 106 manufacturing plants, and operations in more than 50 countries worldwide.

We offer the broadest range of cutting-edge products, services, and technologies tailored to meet the evolving needs of our customers. From enabling the energy transition with our pioneering E-Path sustainable cable solution, to supporting critical telecom infrastructure, Prysmian plays a pivotal role in building resilient and efficient systems across the globe.

Our commitment to work closely with our customers ensures that we deliver solutions to help them expand energy and telecom networks, achieving sustainable, profitable growth while addressing the challenges of a rapidly changing world. Together, we're shaping the future of connectivity and electrification.



Let sunlight be your superpower

OUR WORLD-LEADING CABLE SOLUTIONS





Transmission

- Submarine power and telecom systems
- Marine installation through inhouse fleet
- Underground interconnectors up to 525kV DC
- Complete solutions provider:
 - Turn-key execution approach
 - Continuous monitoring
 - Post-installation maintenance





Power Grid

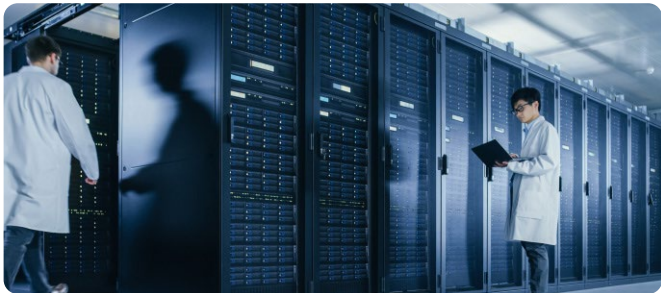
- HV/EHV AC systems supply and installation
- MV and HV/EHV Network Components (NWC) up to 500kV
- Power Distribution cables' solutions from LV to MV (and up to 69kV)
- Data-driven permanent monitoring systems for power networks





Electrification

- Renewables
- Specialties & OEM
 - (Railway, Marine, Crane, Mining, Nuclear, Rolling Stock, Defence, Electro medical, other infrastructure)
- Data Centres
- Energy Storage Systems
- OGP Onshore/Offshore & SURF
- Elevators
- Residential, Hospitals & Commercial constructions
- Other Industrial





Digital Solutions

- Commercial Buildings
 - Passive Optical Cabling
 - Structured Cabling System
 - Building Management
- Data Centre
- Mission Critical and Harsh Environment
- Broadcast and Studio

E PATH: SUSTAINABLE BY DESIGN



E Path

Low impact cable solutions

A first in the cable industry, E Path uses measurable and known assessment criteria to summarize the contribution that cables can provide, in terms of climate change effect, paving the way for the cable industry to be included into low impact labelling systems.

We aim to share the same eco language as our customers, bringing to their supply chains products that meet measurable and recognized criteria, in a perfect fit with a circular economy.

With sustainability rooted in our DNA, each cable family has to pass a rating process based on the following criteria:



CARBON FOOTPRINT



SUBSTANCES OF VERY HIGH CONCERN



RECYCLABILITY/CIRCULARITY



RECYCLING INPUT RATE



ENVIRONMENTAL BENEFITS



CABLE TRANSMISSION EFFICIENCY

NETWORK COMPONENTS

Empowering Reliable Grids with Comprehensive Network Components

Prysmian offers a comprehensive portfolio of network components—including joints, terminations, connectors, glands, and cleats—designed for seamless integration across low, medium, and high voltage applications. Engineered to the highest standards, our accessories ensure long-term reliability, safety, and performance in both new installations and grid upgrades. Innovations such as pre-expanded and cold-shrink technologies enable faster, more efficient installations, reducing downtime. Backed by Prysmian's global expertise and local support, we deliver tailored solutions to meet the evolving demands of modern power networks.



ASSET MONITORING & SYSTEMS



Advanced Sensing Solutions for Proactive Asset Management

Prysmian's Electronic and Optical Sensing Solutions (EOSS) provide advanced, real-time monitoring to safeguard critical infrastructure. Integrating technologies like Partial Discharge (PD) detection, Distributed Temperature Sensing (DTS), and Distributed Acoustic Sensing (DAS), EOSS enables continuous assessment of system health. Developed for Medium and High Voltage systems, our PRY-CAM portfolio offers both portable and permanent solutions, facilitating early fault detection and enhancing operational reliability. With scalable, user-friendly designs, EOSS empowers proactive maintenance strategies, reducing downtime and extending asset lifespan.



DIGITALIZING INVENTORY & INSTALLATION MANAGEMENT



Smart Cable Management with Alesea

Alesea is Prysmian's IoT-based solution that turns cable drums into smart assets. It provides real-time data on location, usage, and inventory to improve logistics, reduce waste, and enhance project efficiency. Proven across global deployments, it helps teams optimize cable usage and reduce CO₂ emissions. With built-in sensors and connectivity, Alesea requires no on-site setup and scales easily across operations—streamlining workflows, supporting sustainability, and transforming traditional cable management into a connected, intelligent system.



PRYSMIAN IN THE REGION



Prysmian operates extensively across the Asia Pacific region, supported by a robust infrastructure that includes 13 manufacturing plants across China, Malaysia, Indonesia, the Philippines, and Thailand. Our regional distribution center in Singapore serves as a strategic hub, ensuring seamless delivery of cutting-edge cable solutions for the energy, infrastructure, and telecom markets.

In Asia Pacific, Prysmian is proud to be a part of landmark projects that showcase our expertise and commitment to innovation. These include addressing the complex cable requirements of iconic developments like Marina Bay Sands in Singapore and supporting the ambitious South Vietnam submarine cable projects,

which strengthen regional connectivity. Additionally, Prysmian's advanced solutions have contributed to offshore wind farm developments, highlighting our pivotal role in accelerating the region's transition to renewable energy.

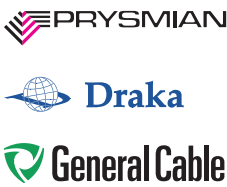
With a clear focus on sustainability and a strong local presence, Prysmian is well-positioned to meet the demands of Asia Pacific's rapidly growing markets. We remain dedicated to delivering innovative technologies that empower our partners and drive the region's progress towards a more connected and sustainable future

OUR CORPORATE BRAND

Prysmian embraces a multi-brand approach, designed to reflect the strength and diversity of its global presence. The corporate brand, Prysmian, unifies the Group's identity and communicates its purpose, values, and strategic vision across all markets.



Alongside it, the Group operates under three highly recognized global commercial brands—Prysmian, Draka, and General Cable—each with a strong heritage and established market trust. Complementing these are a wide range of product brands that address specific industries, technologies, and customer needs, ensuring flexibility, focus, and relevance in every market we serve.



SOLAR PHOTOVOLTAIC CABLES

To meet an ever-growing need for power, the world is increasingly turning to renewable and sustainably sourced solar energy. Prysmian's cables are helping businesses in the renewable industry around the globe to convert this opportunity into reality. Our technologies – which cover cables used in photovoltaic plants – support the operations of contractors and developers, grid operators, transmission and distribution system operators and panel makers. Always aware of our responsibility to the planet, we are constantly driving innovation in our industry, aiming to help renewable industry partners deliver projects with benefits for the future of both our world and their businesses.

The choice of components is critical in any PV system. Good quality and properly sized cables provide optimized safety and longer-lasting systems.

Solar PV cables are often exposed to harsh environmental conditions: UV radiation, moisture, temperature fluctuations as well as wind, snow and rain. Inadequate or low-quality cables can deteriorate quickly, thus reducing a system's power generation capacity and, therefore, its revenues. Every

KW lost in generation due to poor quality cables is a loss in terms of return on investment.

Cables are one of the first components of a system to show failures, causing power generation disruptions and implying high replacement costs related not only to the replacement of cables, but also mostly, to the works required and the possible collateral damages to panels or other components.

WHAT WE OFFER

Prysmian offers complete cable solutions to enable the production and supply of solar photovoltaic power. In addition to the Solar PV cables, our cable portfolio includes low, medium and high voltage cables according to the most known standards of each region, as well as special cables for communication and control. In addition to cables, Prysmian offers electrical asset management solutions with PRY-CAM, the revolutionary technology for on-line, accurate and reliable partial discharge measurements, diagnosis and defect localization.

GLOBAL GROUP, LOCAL FORCE

Prysmian is world leader in the energy and telecommunications cable systems industry. No matter how large, we are always present to serve both our global and our local customers and business partners. In order to offer bespoke and tailor-made solutions, we appreciate the importance of understanding local pre-conditions and special needs. This is why we believe that it is crucial to be present within local geographies, while being backed-up by the capacity that only a truly global group possesses.



COMPLETE SOLUTIONS

① SOLAR ARRAY CABLE RANGE (DC 1.5kV)

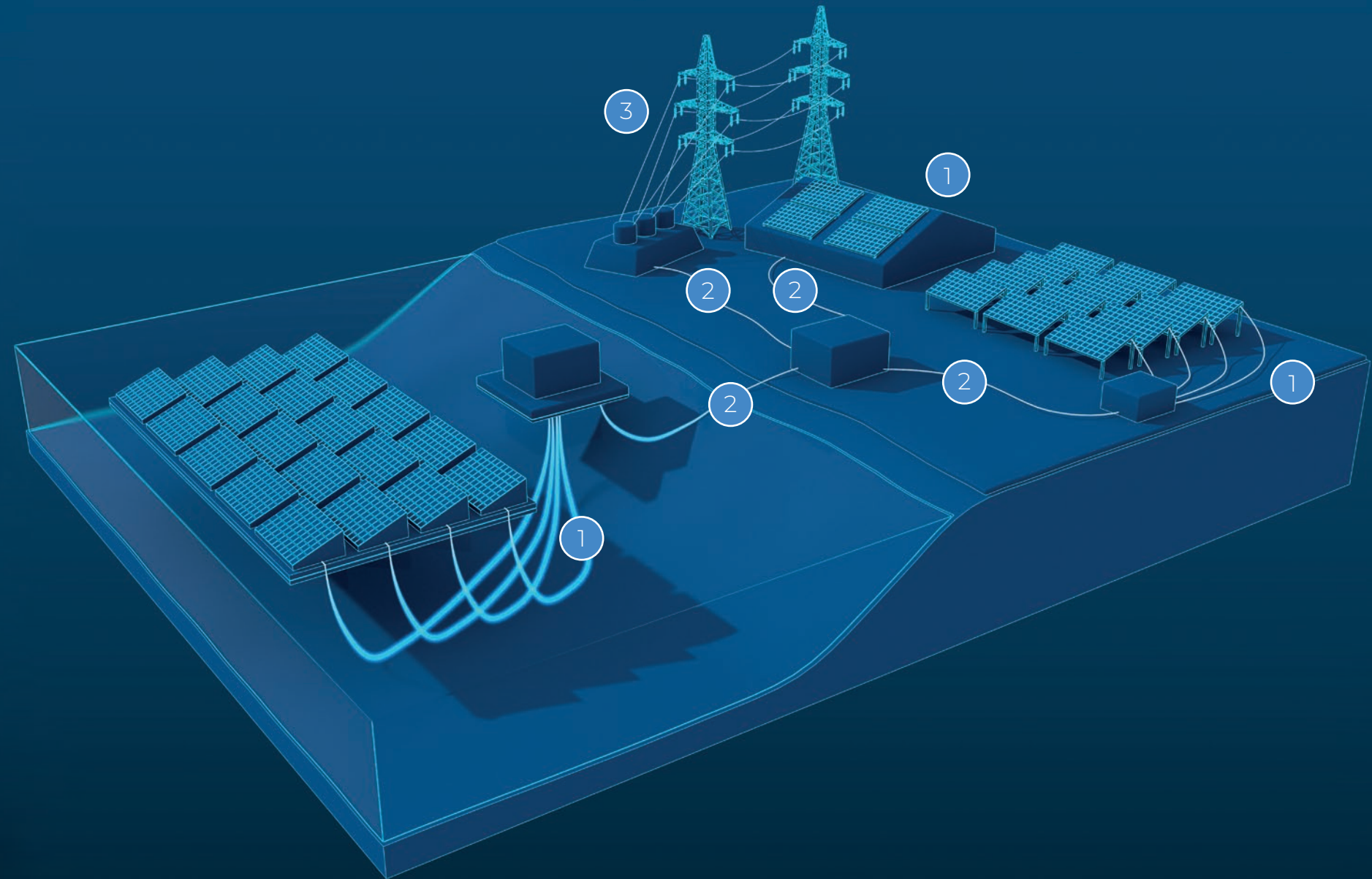
- PRYSUN (PV) H1Z2Z2-K
- Solar Cable with Anti-Termite Solution
- TECSUN (PV) H1Z2Z2-K
- PRYSUN FR-XPRT H1Z2Z2-K
- PRYSUN FR-SPCL H1Z2Z2-K

② ENERGY AND COMMUNICATION CABLE RANGE (SUB ARRAY AND DC/AC INVERTER TO SUBSTATION)

- Prysmian - S11XV-R
- Prysmian - ALU S11XV-R
- Hydrofirm (T) S1BB-F 0.6/1kV
- N2XSEYRY
- N2XSEYBY
- NA2XSEYRY
- NA2XSEYBY
- PROTON (ST) NTSCGEWOU
- Elapsed Coldshrink Joints up to 35kV

③ SUBSTATION AND GRID CONNECTION

- Overhead lines
- High Voltage underground
- Extra High Voltage
- Accessories and Components



SOLAR ARRAY CABLE RANGE



PRYSUN

Solar Photovoltaic Cables

Prysun cable range is designed and tested to EN50618 and IEC62930, are intended for use in Photovoltaic systems at nominal voltage rating of 1.5 kV DC Indoor and/or outdoor.



PRYSUN Single Core Solar Cable



PRYSUN Twin Core Solar Cable

Application

PRYSUN™ solar PV cables are designed for the interconnection of various elements in photovoltaic systems, including panel interconnection, between panels and string boxes or from string boxes to the inverter. They are suitable for applications in/at equipment with protective insulation (Protecting Class II) and may be installed as fixed or freely suspended or free movable, indoor or outdoor. Installation is also possible in ducts and pipes. Suitable for floating solar application. AD8 water resistance. *Available also with enhanced flame retardant properties to IEC 60332-3-24 (Category C)*

TECHNICAL DATA

Standards	EN 50618 EC 62930
Rated Voltage	1.5/1.5 kV DC 1.0/1.0 kV AC
Maximum permissible operating voltage	1.8 kV DC 1.2 kV AC
Test Voltage (5 min.)	15 kV DC 6.5 kV AC
Maximum conductor operating temperature	90°C (120°C for 20,000 hrs)
Maximum short circuit temperature of the conductor	250°C (5s)
Operating temperature	-40°C to +90°C
Fire behavior	Flame retardant per EN IEC 60332-1-2 Annex A Low smoke emission per EN IEC 61034-2 Halogen free per EN 50525-1 and IEC 62821-1 Annex B Available on request: Enhanced flame retardant IEC 60332-3-24 (Cat.C)

DESIGN & CONSTRUCTION

1

CONDUCTOR
Flexible tinned copper conductor Class 5 according to IEC 60228

2

INSULATION
Halogen free cross-linked compound

3

OUTER SHEATH
Halogen free cross-linked compound. Available in black (red, blue and other colors available upon request)

OPTIONAL FEATURES

Anti-rodent

Anti-termite

Technical Characteristics

Chemical Parameters

Reaction to Fire	Fire Performance	- Vertical flame propagation on complete cable per IEC 60332-1-2, EN 60332-1-2 - Bunched vertical flame propagation as per IEC 60332-3-24 (Category C) (Available on request) - Halogen-free per IEC 62821-1 Annex B , EN 50525-1 Annex B - Low Smoke Emission per IEC 61034-2, EN 61034-2 (Light Transmittance > 60%)
	Construction Product Regulation (CPR)	Upon request or where applicable, CPR reaction to fire acc. to EN 50575. Euroclass: Eca
Weather Resistance	Weather Resistance	- Ozone resistance per IEC 62930 Tab.3 per IEC 60811-403, EN 50618 Tab.2 per EN 50396 Test Type B - Weathering/UV resistance on sheath per IEC 62930 Annex E and EN 50618 Annex E
Chemical Resistance	Acid and Alkaline Solution Resistance	Acc. IEC 62930 Annex B, EN 50618 Annex B : 7 days, 23°C (N-Oxalic Acid, N-Sodium Hydroxide) per IEC 60811-404, EN 60811-404
DC Stability	Long Term Resistance of Insulation to DC	Acc. IEC 62821-2, EN 50395-9 (240h/85°C water/ 1.8kV DC)
Environment	Environmentally Friendly	PRYSUN cables comply with the RoHS Directive 2011/65/EU of the European Union

Mechanical and Thermal Parameters

Operating Temperature	Maximum Operating Temperature of the Conductor	Acc. IEC 62930 and EN 50618: the cables are designed to operate at a normal continuous maximum conductor temperature of 90 °C. 20,000 h in operation at maximum conductor temperature of 120°C are permitted.
Resistance to Cold Environment	Resistance to Cold	- Bending and Elongation at -40°C temperature acc. IEC 62930 Tab.2 per IEC 60811-504 and -505, acc. EN 50618 Tab2 per EN 60811-1-4 and EN 60811-504 and -505. - Cold Impact Test at -40°C temperature acc. IEC 62930 Annex C per IEC 60811-506, acc. EN 50618 Annex C per EN 60811-506
Damp Heat	Damp-Heat Test	Meets IEC 62930 Tab.2 and EN 50618 Tab.21.000 h at 90°C and 85% humidity per IEC 60068-2-78, EN 60068-2-78
Mechanical and Printing	Shrinkage Test on Sheath	Acc. IEC 62930 Tab. 2 per IEC 60811-503 and EN 50618 Tab. 2 per EN 60811-503 (Max Shrinkage 2%)
	Dynamic Penetration Test	Acc. IEC 62930 Annex D and EN 50618 Annex D
	Durability of Print	Acc. IEC 62930 and EN 50396.

Suitable for Wet Environment and Floating Solar Application

ADB Water Resistance	Increase in Mass	Acc. EN 50525-2-21 Annex E (100days immersion at 50°C)
	Mechanical Test	Acc. EN 50525-2-21 Annex E (100days immersion at 50°C) with tensile strength > 8N/mm² and elongation at break > 125% (EN 50618 values)

Technical Characteristics

Product Technical Data

(Voltage drop calculator tool: asean.prysmian.com/prysmian-pv-cable-calculator)

Number of Cores x Cross Section *	Outer Diameter Range	Approx. Cable Weight	Min. Bending Radius	Min. Insulation Resistance at 20°C	Max. Conductor Resistance at 20°C	DC Current Carrying Capacity**			Voltage drop
						Single cable free in air	Single cable on a surface	Two loaded cables touching, on a surface	
mm²	mm	kg/km		MΩ.km	Ω/km	A	A	A	mV/A/m
1 x 1.5	4.4 – 5.2	35	6D	860	13.7	31	30	24	38.167
1 x 2.5	4.9 – 5.7	47	6D	690	8.21	42	40	33	22.871
1 x 4	5.4 – 6.2	61	6D	580	5.09	57	54	45	14.180
1 x 6	5.9 – 6.4	81	6D	500	3.39	72	69	58	9.444
1 x 10	6.8 – 7.8	123	6D	420	1.95	98	96	80	5.433
1 x 16	8.2 – 9.8	189	6D	340	1.24	132	130	107	3.455
1 x 25	9.9 – 11.5	288	6D	340	0.795	183	174	138	2.215
1 x 35	11.2 – 12.8	379	6D	290	0.565	227	215	171	1.574
1 x 50	13.4 – 15.0	535	6D	270	0.393	287	273	209	1.095
1 x 70	15.4 – 17.0	745	6D	250	0.277	361	344	269	0.772
1 x 95	17.4 – 19.0	965	6D	220	0.210	433	411	328	0.585
1 x 120	18.6 – 20.4	1211	6D	210	0.164	508	483	382	0.457
1 x 150	21.0 – 22.8	1481	6D	210	0.132	590	560	441	0.368
1 x 185	23.7 – 25.5	1822	6D	200	0.108	671	638	506	0.301
1 x 240	26.7 – 28.5	2353	6D	200	0.0817	808	767	599	0.228
1 x 300	28.6 – 32.6	2912	6D	200	0.0654	913	866	693	0.155

* Other sections may be available upon request.
** Ambient Temperature: 30°C. Max. conductor Temperature: 120°C
Values are subject to manufacturing tolerances.

PRYSUN HIZ2Z2-K TWIN DC1.5kv (Twin)					
Spec	Conductor diameter	Insulation Thickness	Sheath Thickness	Overall Diameter (±10%)	Max. DC resistance at 20°C
mm2	mm	mm	mm	mm	Ω/km
2X4	2.43	0.7	0.8	5.7*11.5	5.09
2X6	2.98	0.7	0.8	6.3*12.6	3.39

Conversion factors for different ambient temperatures

Ambient Temperatures (°C)	Conversion Factors
0	1.22
10	1.15
20	1.08
30	1.00
40	0.91
50	0.82
60	0.71
70	0.58

PV string connector selection table

Number of Cores x Cross Section (mm²)	Outer Diameter Range (mm)	Tecplug connector (MC4 equivalent)
1 x 2.5	4.9 – 5.7	PMC-4-M PMC-4-F
1 x 4	5.4 – 6.2	PMC-4-M PMC-4-F
1 x 6	5.9 – 6.4	PMC-4-M PMC-4-F
1 x 10	6.8 – 7.8	PMC-8-M PMC-8-F



PRYSUN Solar PV Cable with Anti-Termite Solution

PRYSUN™ solar PV cables are intended for use in photovoltaic systems at nominal voltage rating of 1.5 kV DC.



Application

PRYSUN™ solar PV cables are designed for the interconnection of various elements in photovoltaic systems, including panel interconnection, between panels and string boxes or from string boxes to the inverter. They are suitable for applications in/at equipment with protective insulation (Protecting Class II) and may be installed as fixed or freely suspended or free movable, indoor or outdoor. Installation is also possible in ducts and pipes. Suitable for floating solar application. AD8 water resistance. *Available also with enhanced flame retardant properties to IEC 60332-3-24 (Category C)*

TECHNICAL DATA

Standards	EN 50618 EC 62930
Rated Voltage	1.5/1.5 kV DC 1.0/1.0 kV AC
Maximum permissible operating voltage	1.8 kV DC 1.2 kV AC
Test Voltage (5 min.)	15 kV DC 6.5 kV AC
Maximum conductor operating temperature	90°C (120°C for 20,000 hrs)
Maximum short circuit temperature of the conductor	250°C (5s)
Operating temperature	-40°C to +90°C
Fire behavior	Flame retardant per EN IEC 60332-1-2 Annex A Low smoke emission per EN IEC 61034-2 Halogen free per EN 50525-1 and IEC 62821-1 Annex B Available on request: Enhanced flame retardant IEC 60332-3-24 (Cat.C)



TCU(R)/XLPO/NJ/XLPO – Single Core						
Spec	Conductor Diameter	Insulation Thickness	Nylon Polyamide 12 Diameter Approximate	Insulation Thickness	Overall Diameter (±10%)	DC resistance at 20°C
mm²	mm	mm	mm	mm	mm	max.Ω/km
1X4	2.43	0.7	4.7	0.8	6.4	5.09
1X6	2.98	0.7	5.3	0.8	6.9	3.39
1X10	3.94	0.7	6.2	0.8	7.8	1.95
1X16	5.2	0.7	7.4	0.9	9.3	1.24

TCU(R)/XLPO/NJ/XLPO – Twin						
Spec	Conductor Diameter	Insulation Thickness	Nylon Polyamide 12 Diameter Approximate	Insulation Thickness	Overall Diameter (±10%)	DC resistance at 20°C
mm²	mm	mm	mm	mm	mm	max.Ω/km
2X6	2.98	0.7	5.3	0.8	7.1*14.2	3.39
2x10	3.94	0.7	6.4	0.8	8.2*16.3	1.95

TECSUN (PV) H1Z2Z2-K 1/1 kV AC (1.5/1.5 kV DC)

PV cables, rubber insulated, VDE and TÜV certified as per EN 50618



Application

PRYSMIAN Solar cables TECSUN (PV) H1Z2Z2-K acc. to EN 50618, are intended for use in Photo-voltaic Power Supply Systems at nominal volta-ge rate of 1.5/1.5 kV DC. They are suitable for ap-plications indoor and/or outdoor, in industrial and agriculture areas, in/at equipment with pro-protective insulation (Protecting Class II), in explosi-on hazard areas (PRYSMIAN Internal Testing). They may be installed fixed, freely suspended or free movable, in cable trays, conduits, on and in walls.

Prysmian's additional internal tests are carried out at regular intervals – including the type tests according to EN 50618 – in our own test labora-tories and confirm the outstanding properties of the TECSUN (PV) H1Z2Z2-K.

In addition, we guarantee consistent quality for 20 years with the world's only VDE-certified solar cable.

TECSUN (PV) H1Z2Z2-K cables are suitable for di-rect burial (PRYSMIAN Internal Testing and suc-cessful installation in PV plants worldwide), whe-re the corresponding guidelines for direct burial shall be considered.

TECSUN (PV) H1Z2Z2-K	
Brand	TECSUN (PV)
Type designation	H1Z2Z2-K
Standard	EN 50618 IEC 62930
Certifications / Approvals	VDE Approval Mark (<VDE>) TÜV-Rheinland Certificate no. 60103637
Construction product regulation (CPR)	CPR acc. to DIN EN 50575, class and DoP-Code: see data table. DoP: see www.prysmian.com/cpr
Electrical tests, PRYSMIAN internal test	AD8 (acc. to UL44 sec. 5.4 (>92 weeks)) Dielectric strength Insulation resistance at 120°C in air
Weather resistance, PRYSMIAN internal test	Water Absorption (Gravime- tric) per EN 60811-402. AD8 (acc. to EN 50525-2-21 appendix E)
Abrasion resistance, PRYSMIAN internal testing	Acc. to DIN ISO 4649 against abrasive paper Sheath against sheath Sheath against metal Sheath against plastics
Rodent resistance	Safety can be optimized by utilizing protective hoses, or protective element, such as a metallic screen braid.

TECSUN (PV) H1Z2Z2-K													
Number of cores x cross section	Colour	Part number	Conductor diameter max. mm	Outer diameter mm		Bending radius fixed min. mm	Weight (approx.) kg/km	Permissible tensile force max. N	Conductor resistance at 20°C max. Ω/km	Current carrying capacity for single cable*1 A		Short circuit current*2 kA	CPR fire class
				min.	max.					free in air	on surface		
1x4	black	20149014	2.4	5.3	5.9	18	61	60	5.09	55	52	0.57	D _{ca} -s2,d2
1x6	black	20149015	2.9	5.8	6.5	20	80	90	3.39	70	67	0.86	D _{ca} -s2,d2

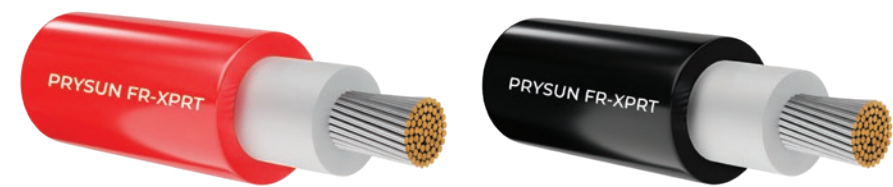
*1 60 °C ambient temp. *2 1 s. from 90 °C to 250 °C.
Standard delivery length is 500 m. Other lengths are available on request. All cross sections are also available in red and blue colours.
Note: If required, TECSUN (PV) H1Z2Z2-K cables are also available in other cross sections and also with customized surface marking.



PRYSUN FR-XPRT

H1Z2Z2-K DC1.5kV

Designed and tested refer to EN50618 and IEC 62930, PRYSMIAN Solar cables PRYSUN FR-XPRT H1Z2Z2-K are intended for use in Photovoltaic Power Supply Systems: Indoor and/or outdoor, in industrial and agriculture fields. They are suitable for applications in/at equipment with protective insulation (Protecting Class II), and may be installed as fixed or freely suspended or free movable. Installation in cable trays, conduits, on and in walls is permissible



Design & Construction

STANDARD
Generally refer to EN50618:2014 and IEC 62930:2017

CONDUCTOR
Class 5 Tinned copper conductor

INSULATION
Halogen free cross-linked elastomer White

OUTER SHEATH
Halogen free cross-linked elastomer Black or Red

CORE IDENTIFICATION
Insulation : White
Sheath : Black or Red

SHEATH MARKING EXAMPLE

PRYSMIAN CN PRYSUN FR-XPRT H1Z2Z2-K DC1.5kV 1X6 YEAR **** M

TECHNICAL DATA

Nominal DC Voltage	1.5 kV
Max. permissible operating DC Voltage	1.8 kV
Test Voltage	6.5/5 kV/min (AC) 15/5 kV/min (DC)
Max. tensile load of cable	15 N/mm ²
Min. bending radius	6D
Low Smoke Emission	EN 61034-2/ IEC 61034-2
Halogen-free per	EN 50525-1/IEC62821-1, Annex B
Sheath resistance against acid and alkaline solution	On sheath:7x24h, 23°C EN 60811-404/ IEC 60811-404
Weather/UV resistance	EN 50618/IEC 62930, Annex E
Environmentally friendly	RoHS 2011/65/EU
Ozone resistance	EN 50396/IEC 60811-403
Max. operating temperature of the conductor	90(120°C for 20,000 hours)
Max. short circuit temperature of the conductor	250°C
Ambient temperature (for fixed and flexible installation)	Installation: -25°C up to 60°C Operating: -40°C up to +90°C
Flame-spread test on bunched cables standard	IEC60332-3-25 Category D

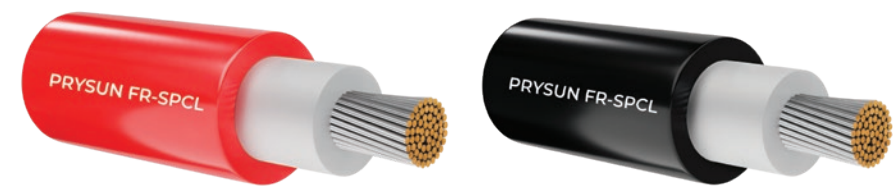
Product Technical Data

Spec	Conductor Diameter	Insulation Thickness	Sheath Thickness	Overall Diameter	Approx. Cable Weight	Min. Insulation Resistance At 20°C	Min. Insulation Resistance At 90°C	DC resistance at 20°C
mm ²	mm	mm	mm	mm	kg/km	MΩ*km	MΩ*km	max. Ω/km
1X4	2.49	0.7	0.8	5.4-6.2	64	580	0.58	5.09
1X6	2.95	0.7	0.8	5.9-6.4	83	500	0.50	3.39
1X10	3.90	0.7	0.8	6.8-7.8	131	420	0.42	1.95

PRYSUN FR-SPCL

H1Z2Z2-K DC1.5kV

Designed and tested refer to EN50618 and IEC 62930, PRYSMIAN Solar cables PRYSUN FR-SPCL H1Z2Z2-K are intended for use in Photovoltaic Power Supply Systems: Indoor and/or outdoor, in industrial and agriculture fields. They are suitable for applications in/at equipment with protective insulation (Protecting Class II), and may be installed as fixed or freely suspended or free movable. Installation in cable trays, conduits, on and in walls is permissible.



Design & Construction

STANDARD
Generally refer to EN50618:2014 and IEC 62930:2017

CONDUCTOR
Class 5 Tinned copper conductor

INSULATION
Halogen free cross-linked elastomer White

OUTER SHEATH
Halogen free cross-linked elastomer Black or Red

CORE IDENTIFICATION
Insulation : White
Sheath : Black or Red

SHEATH MARKING EXAMPLE

PRYSMIAN CN PRYSUN FR-SPCL H1Z2Z2-K DC1.5kV 1X6 YEAR **** M

TECHNICAL DATA

Nominal DC Voltage	1.5 kV
Max. permissible operating DC Voltage	1.8 kV
Test Voltage	6.5/5 kV/min (AC) 15/5 kV/min (DC)
Max. tensile load of cable	15 N/mm ²
Min. bending radius	6D
Low Smoke Emission	EN 61034-2/ IEC 61034-2
Halogen-free per	EN 50525-1/IEC62821-1, Annex B
Sheath resistance against acid and alkaline solution	On sheath:7x24h, 23°C EN 60811-404/ IEC 60811-404
Weather/UV resistance	EN 50618/IEC 62930, Annex E
Environmentally friendly	RoHS 2011/65/EU
Ozone resistance	EN 50396/IEC 60811-403
Max. operating temperature of the conductor	90(120°C for 20,000 hours)
Max. short circuit temperature of the conductor	250°C
Ambient temperature (for fixed and flexible installation)	Installation: -25°C up to 60°C Operating: -40°C up to +90°C
Flame-spread test on bunched cables standard	IEC60332-3-25 Category D
Construction Product Regulation (CPR)	Upon request where applicable, CPR reaction to fire acc. to EN 50575. Euroclass: Cca

Product Technical Data

Spec	Conductor Diameter	Insulation Thickness	Sheath Thickness	Overall Diameter	Approx. Cable Weight	Min. Insulation Resistance At 20°C	Min. Insulation Resistance At 90°C	DC resistance at 20°C
mm ²	mm	mm	mm	mm	kg/km	MΩ*km	MΩ*km	max. Ω/km
1X4	2.4	0.7	0.8	5.4-6.2	64	580	0.58	5.09
1X6	3.0	0.7	0.8	5.9-6.4	83	500	0.50	3.39
1X10	3.9	0.7	0.8	6.8-7.8	131	420	0.42	1.95

ENERGY & COMMUNICATION CABLE RANGE



S11XV-R

Solar Main DC / AC Cables

Cables are intended for use in photovoltaic systems interconnection between DC / AC inverter to transformer



Application

Solar Main DC / AC cables are designed for the interconnection between DC / AC inverter to the transformer. They are suitable for applications in/at equipment with protective insulation (Protecting Class II). Fixed installation for indoor or outdoor. Installation is also possible in ducts and pipes.

Design & Construction

CONDUCTOR

Stranded copper conductor Class 2 according to IEC 60228

INSULATION

Cross-linked polyethylene compound

OUTER SHEATH

Polyvinyl chloride compound with UV- stabilizer. Color: Black (Other colors and/or other sheath material available upon request)

TECSUN (PV) H1Z2Z2-K	
Standard	Based on IEC 60502-1
Rated Voltage	1,5 kV DC 1,1/1,1 kV AC
Max. Permissible operating voltage	1,8 kV DC 1,2 kV AC
Test Voltage (5 min)	6,5 kV AC
Max. Conductor Operating Temperature	90°C
Max. short circuit temperature of the conductor	250°C (5s)
Operation temperature	-20°C to +90°C
Fire behaviour	Flame retardant per IEC 60332-1-2 (For LSHF, PVC sheath)
	Low smoke emission per IEC 61034-2 (For LSHF sheath)
Fire behaviour	Halogen free per IEC 60754-1 and IEC 60754-2 (For PE, LSHF sheath)

Technical Characteristics

Product Technical Data

(Voltage drop calculator tool: asean.prysmian.com/prysmian-pv-cable-calculator)

Number of Cores x Cross Section *	Outer Diameter Range	Approx. Cable Weight	Min. Bending Radius	Min. Insulation Resistance at 20°C	Max. Conductor Resistance at 20°C	Current Carrying Capacity**	
						In ground	In air
mm²	mm	kg/km		MΩ.km	Ω/km	A	A
1 x 35	10.0 – 12.0	373	6D	2000	0.524	200	173
1 x 50	11.2 – 13.2	491	6D	2000	0.387	238	213
1 x 70	13.2 – 15.2	690	6D	2000	0.268	292	271
1 x 95	15.1 – 17.1	927	6D	2000	0.193	348	335
1 x 120	16.7 – 18.7	1170	6D	2000	0.153	395	392
1 x 150	18.8 – 20.8	1444	6D	2000	0.124	444	451
1 x 185	20.4 – 23.4	1793	6D	2000	0.0991	501	526
1 x 240	23.8 – 26.8	2309	6D	2000	0.0754	581	630
1 x 300	25.6 – 28.6	2874	6D	2000	0.0601	653	728
1 x 400	28.8 – 31.8	3639	6D	2000	0.047	739	848
1 x 500	32.0 – 36.0	4649	6D	2000	0.0366	834	985
1 x 630	36.6 – 40.6	6001	6D	2000	0.0283	935	1141

Number of Cores x Cross Section *	Outer Diameter Range	Approx. Cable Weight	Min. Bending Radius	Min. Insulation Resistance at 20°C	Max. Conductor Resistance at 20°C	Current Carrying Capacity**	
						In ground	In air
mm²	mm	kg/km		MΩ.km	Ω/km	A	A
3 x 35	20.7 – 23.7	1145	6D	2000	0.524	18	162
3 x 50	23.3 – 26.3	1547	6D	2000	0.387	221	200
3 x 70	27.8 – 30.8	2160	6D	2000	0.268	271	252
3 x 95	31.4 – 35.4	2918	6D	2000	0.193	325	309
3 x 120	34.9 – 38.9	3680	6D	2000	0.153	370	359
3 x 150	38.9 – 43.9	4583	6D	2000	0.124	413	411
3 x 185	43.6 – 48.6	5707	6D	2000	0.0991	469	475
3 x 240	50.4 – 56.4	7340	6D	2000	0.0754	542	562
3 x 300	54.2 – 60.2	9239	6D	2000	0.0601	601	631
3 x 400	61.4 – 67.4	11617	6D	2000	0.047	642	742

* Other sections may be available upon request.
** Ambient Temperature: 30°C. Max. conductor Temperature: 120°C
Values are subject to manufacturing tolerances.

ALU ST1XV-R

Solar Main DC / AC Cables

Cables are intended for use in photovoltaic systems interconnection between DC / AC inverter to transformer



Application

Solar Main DC / AC cables are designed for the interconnection between DC / AC inverter to the transformer. They are suitable for applications in/at equipment with protective insulation (Protecting Class II). Fixed installation for indoor or outdoor. Installation is also possible in ducts and pipes.

Design & Construction

CONDUCTOR

Stranded aluminium conductor Class 2 according to IEC 60228

INSULATION

Cross-linked polyethylene compound

OUTER SHEATH

Polyvinyl chloride compound with UV- stabilizer. Color: Black (Other colors and/or other sheath material available upon request)

TECSUN (PV) H1Z2Z2-K	
Standard	Based on IEC 60502-1
Rated Voltage	1,5 kV DC 1,1/1,1 kV AC
Max. Permissible operating voltage	1,8 kV DC 1,2 kV AC
Test Voltage (5 min)	6,5 kV AC
Max. Conductor Operating Temperature	90°C
Max. short circuit temperature of the conductor	250°C (5s)
Operation temperature	-20°C to +90°C
Fire behaviour	Flame retardant per IEC 60332-1-2 (For LSHF, PVC sheath)
	Low smoke emission per IEC 61034-2 (For LSHF sheath)
	Halogen free per IEC 60754-1 and IEC 60754-2 (For PE, LSHF sheath)

Technical Characteristics

Product Technical Data

(Voltage drop calculator tool: asean.prysmian.com/prysmian-pv-cable-calculator)

Number of Cores x Cross Section *	Outer Diameter Range	Approx. Cable Weight	Min. Bending Radius	Min. Insulation Resistance at 20°C	Max. Conductor Resistance at 20°C	Current Carrying Capacity**	
						In ground	In air
mm²	mm	kg/km		MΩ.km	Ω/km	A	A
1 x 50	12.0 – 14.0	225	6D	2869	0.641	174	162
1 x 70	14.0 – 16.0	295	6D	2650	0.443	214	206
1 x 95	15.5 – 17.5	383	6D	2300	0.320	256	255
1 x 120	17.0 – 19.0	469	6D	2250	0.253	292	297
1 x 150	19.0 – 21.0	557	6D	2450	0.206	326	339
1 x 185	20.5 – 23.5	677	6D	2500	0.164	370	396
1 x 240	23.0 – 26.0	875	6D	2350	0.125	430	474
1 x 300	26.0 – 29.0	1095	6D	2225	0.100	486	548
1 x 400	29.0 – 32.0	1365	6D	2220	0.0778	558	649
1 x 500	32.5 – 36.5	1734	6D	2140	0.0605	638	764
1 x 630	37.0 – 41.0	2275	6D	2050	0.0469	725	895

Number of Cores x Cross Section *	Outer Diameter Range	Approx. Cable Weight	Min. Bending Radius	Min. Insulation Resistance at 20°C	Max. Conductor Resistance at 20°C	Current Carrying Capacity**	
						In ground	In air
mm²	mm	kg/km		MΩ.km	Ω/km	A	A
3 x 70	28.5 – 31.5	962	6D	2650	0.443	200	192
3 x 95	32.0 – 36.0	1310	6D	2300	0.320	238	237
3 x 120	36.0 – 40.0	1637	6D	2250	0.253	273	276
3 x 150	39.5 – 44.5	2000	6D	2450	0.206	304	313
3 x 185	46.5 – 51.5	2470	6D	2500	0.164	345	364
3 x 240	50.0 – 56.0	3150	6D	2350	0.125	402	433
3 x 300	55.5 – 61.5	3950	6D	2225	0.100	453	497
3 x 400	61.5 – 69.5	4960	6D	2220	0.0778	518	581

* Other sections may be available upon request.

** Ambient Temperature: 30°C. Max. conductor Temperature: 120°C
Values are subject to manufacturing tolerances.

HYDROFIRM(T) S1BB-F 0.6/1 kV

These cables are suitable for connections of electrical equipment, submerged in water under medium mechanical stress.



Application

Likewise for indoor, outdoor, industrial and agricultural applications, e.g. Floating PV docks. For protected fixed installation in pipes, equipment, as rotor connections to motors or in well systems.

Suitable for use in drinking, sewage, salt and brackish water at depths of up to 2000 m.

These cables are designed to meet the requirements of the AD8 classification.

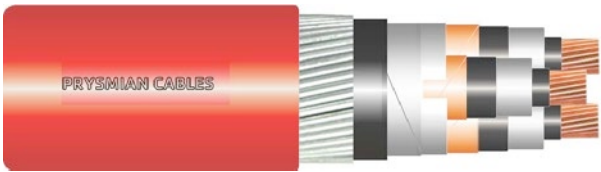
HYDROFIRM(T) S1BB-F	
Brand	HYDROFIRM(T)
Type designation	S1BB-F
Standard	Based on DIN EN 50525-2-21
Maximum submerged depth	2000 meters
Conductor	Bare copper, finely stranded (class 5)
Insulation	HEPR rubber, special compound
Outer sheath	Special synthetic elastomer rubber
Outer sheath colour	Blue
Max. operating temperature of the conductor	90 °C
Ambient temperature for fixed installation	-50 °C
Water resistance	AD8 classification



N2XSEYRY Copper Cable

Armoured XLPE Insulation

3.6/6(7.2) - 18/30(36) kV - 3C CU/XLPE/CTS/PVC/SWA/PVC



Application

Three-core medium voltage energy cables with stranded copper conductors, XLPE insulation, special inner and outer semi-conductive layers on conductors and insulation, copper tape screen on each core, armour of galvanized round steel wires over PVC outer sheath.

These cables have very low electrical loss compare to the similars and they are used in cable ducts, outdoor and indoor installations, underground where the short circuit levels are high such as urban and industrial areas fed by electrical energy. They are also used under normal and salty water if specially produced.

Applicable Standards

SNI IEC 60502-2, IEC 60502-2	Design and Test Guidelines
IEC 60228	Conductor
IEC 60332-1	Flame Retardant
IEC 60332-3-22	Flame Retardant Cat. A
IEC 60332-3-23	Flame Retardant Cat. B
IEC 60332-3-24	Flame Retardant Cat. C

Special features upon request:

EPR Insulation	Anti-rodent
Flame Retardant Cat. A, B, C	Oil Resistance
Flame Retardant Non Category	UV Resistance
Anti-termite	Low Smoke Zero Halogen

Identifications

Core	Brown, Black, Grey
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Other colours available upon request



IEC 60332-1
IEC 60332-3-22
IEC 60332-3-23
IEC 60332-3-24



Standard



Excellent



0°C



14 D



Pb



90°C



250°C

Normal Operation Temperature

Short Circuit Temperature

Dimension and Electrical Data

Cross Section	Tension U ₀ /U	Conductor Diameter	Insulation Diameter	Sep. Sheath Diameter	Metalic Screen Diameter	Outer Sheet Diameter	Cable Weight	Packaging	Max DC Resistance at 20°C	Current Rating in air at 20°C	Current Rating in ground at 20°C	Short Circuit Current for 1s
mm ²	kV	mm	mm	mm	mm	mm	kg/km	m	Ω/km	A	A	kA
3x50	3.6/6	8.2	16.2	41	46	52	4797	500	0.387	205	181	7.2
3x70	3.6/6	9.8	16.8	43	48	53	5424	500	0.268	253	220	10.0
3x95	3.6/6	11.3	18.3	46	51	57	6626	500	0.193	307	263	13.6
3x120	3.6/6	12.8	20.3	50	55	61	7628	500	0.153	352	298	17.2
3x150	3.6/6	14.2	21.6	53	58	65	8745	250	0.124	397	332	21.5
3x185	3.6/6	15.7	22.7	55	60	67	9888	500	0.0991	453	374	26.5
3x240	3.6/6	18.1	25.1	61	67	74	12666	250	0.0754	529	431	34.3
3x300	3.6/6	20.2	27.2	66	72	79	14875	250	0.0601	599	482	42.9
3x50	6/10	8.2	16.6	42	47	53	4985	1000	0.387	205	181	7.2
3x70	6/10	9.8	17.6	45	50	56	5739	500	0.268	253	220	10.0
3x95	6/10	11.3	19.2	48	53	59	6810	500	0.193	307	263	13.6
3x120	6/10	12.8	20.7	51	56	62	7777	500	0.153	352	298	17.2
3x150	6/10	14.2	22.0	54	59	66	8828	500	0.124	397	332	21.5
3x185	6/10	15.7	23.6	58	63	69	10170	500	0.0991	453	374	26.5
3x240	6/10	18.1	26.0	63	69	76	13147	250	0.0754	529	431	34.3
3x300	6/10	20.2	28.1	68	74	81	15357	250	0.0601	599	482	42.9
3x50	8.7/15	8.2	18.7	47	52	58	5491	500	0.387	205	181	7.2
3x70	8.7/15	9.8	19.8	49	54	60	6330	500	0.268	253	220	10.0
3x95	8.7/15	11.3	21.4	53	58	64	7468	500	0.193	307	263	13.6
3x120	8.7/15	12.8	22.8	56	61	68	8566	250	0.153	352	298	17.2
3x150	8.7/15	14.2	23.7	58	64	71	10186	250	0.124	397	332	21.5
3x185	8.7/15	15.7	25.2	61	67	75	11675	250	0.0991	453	374	26.5
3x240	8.7/15	18.1	27.6	67	73	81	13919	250	0.0754	529	431	34.3
3x300	8.7/15	20.2	29.8	71	78	86	16182	250	0.0601	599	482	42.9

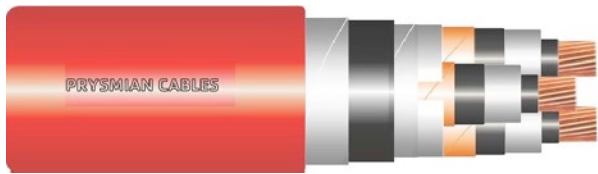
Dimension and Electrical Data (cont'd)

Cross Section	Tension Uo/U	Conductor Diameter	Insulation Diameter	Sep. Sheath Diameter	Metalic Screen Diameter	Outer Sheet Diameter	Cable Weight	Packaging	Max DC Resistance at 20°C	Current Rating in air at 20°C	Current Rating in ground at 20°C	Short Circuit Current for 1s
mm²	kV	mm	mm	mm	mm	mm	kg/km	m	Ω/km	A	A	kA
3x50	12/20	8.2	20.6	51	56	62	6093	500	0.387	205	181	7.2
3x70	12/20	9.8	21.2	52	57	65	7015	500	0.268	253	220	10.0
3x95	12/20	11.3	22.8	56	61	68	7894	500	0.193	307	263	13.6
3x120	12/20	12.8	24.8	60	67	74	10087	250	0.153	352	298	17.2
3x150	12/20	14.2	26.1	63	70	77	11251	250	0.124	397	332	21.5
3x185	12/20	15.7	27.6	67	73	81	12533	250	0.0991	453	374	26.5
3x240	12/20	18.1	30.1	72	78	86	15007	250	0.0754	529	431	34.3
3x300	12/20	20.2	31.7	76	82	90	17071	250	0.0601	599	482	42.9
3x50	18/30	8.2	25.5	62	68	75	8449	500	0.387	205	181	7.2
3x70	18/30	9.8	26.1	63	70	77	9390	250	0.268	253	220	10.0
3x95	18/30	11.3	28.2	68	74	82	10612	250	0.193	307	263	13.6
3x120	18/30	12.8	29.1	70	76	84	11495	250	0.153	352	298	17.2
3x150	18/30	14.2	30.5	75	81	90	13172	250	0.124	397	332	21.5
3x185	18/30	15.7	32.5	78	84	92	14458	250	0.0991	453	374	26.5
3x240	18/30	18.1	34.9	83	89	98	16955	250	0.0754	529	431	34.3
3x300	18/30	20.2	37.0	88	94	103	19023	250	0.0601	599	482	42.9

N2XSEYBY Copper Cable

Armoured XLPE Insulation

3.6/6(7.2) - 18/30(36) kV - 3C CU/XLPE/CTS/PVC/DSTA/PVC



Application

Three-core medium voltage energy cables with stranded copper conductors, XLPE insulation, special inner and outer semi-conductive layers on conductors and insulation, copper tape screen on each core, armour of galvanized steel tape over PVC outer sheath.

These cables have very low electrical loss compare to the similars and they are used in cable ducts, outdoor and indoor installations, underground where the short circuit levels are high such as urban and industrial areas fed by electrical energy. They are also used under normal and salty water if specially produced.

Applicable Standards

SNI IEC 60502-2, IEC 60502-2	Design and Test Guidelines
IEC 60228	Conductor
IEC 60332-1	Flame Retardant
IEC 60332-3-22	Flame Retardant Cat. A
IEC 60332-3-23	Flame Retardant Cat. B
IEC 60332-3-24	Flame Retardant Cat. C

Special features upon request:

EPR Insulation	Anti-rodent
Flame Retardant Cat. A, B, C	Oil Resistance
Flame Retardant Non Category	UV Resistance
Anti-termite	Low Smoke Zero Halogen

Identifications

Core	Brown, Black, Grey
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Other colours available upon request



IEC 60332-1
IEC 60332-3-22
IEC 60332-3-23
IEC 60332-3-24



Standard



Excellent



0°C



14 D



Pb



90°C



250°C

Normal Operation Temperature

Short Circuit Temperature

Dimension and Electrical Data

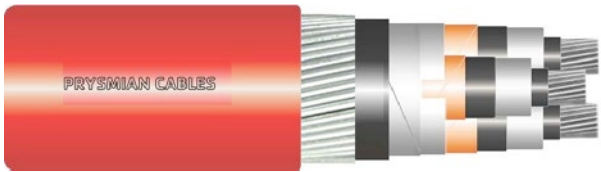
Cross Section	Tension Uo/U	Conductor Diameter	Insulation Diameter	Sep. Sheath Diameter	Metalic Screen Diameter	Outer Sheet Diameter	Cable Weight	Packaging	Max DC Resistance at 20°C	Current Rating in air at 20°C	Current Rating in ground at 20°C	Short Circuit Current for 1s
mm²	kV	mm	mm	mm	mm	mm	kg/km	m	Ω/km	A	A	kA
3x50	3.6/6	8.2	16.2	42	44	48	3592	1000	0.387	205	181	7.2
3x70	3.6/6	9.8	16.8	43	45	50	4167	1000	0.268	253	220	10.0
3x95	3.6/6	11.3	18.3	46	49	53	5167	1000	0.193	307	263	13.6
3x120	3.6/6	12.8	19.8	49	52	57	6057	500	0.153	352	298	17.2
3x150	3.6/6	14.2	21.6	53	56	62	7667	500	0.124	397	332	21.5
3x185	3.6/6	15.7	23.2	57	59	65	8427	500	0.0991	453	374	26.5
3x240	3.6/6	18.1	25.6	62	64	71	10554	250	0.0754	529	431	34.3
3x300	3.6/6	20.2	27.2	66	68	75	12330	250	0.0601	599	482	42.9
3x50	6/10	8.2	16.6	42	45	49	3692	1000	0.387	205	181	7.2
3x70	6/10	9.8	17.2	43	46	51	4317	1000	0.268	253	220	10.0
3x95	6/10	11.3	18.7	47	49	55	5151	500	0.193	307	263	13.6
3x120	6/10	12.8	20.2	50	52	58	6208	500	0.153	352	298	17.2
3x150	6/10	14.2	21.6	53	55	62	7240	500	0.124	397	332	21.5
3x185	6/10	15.7	23.1	56	59	65	8343	500	0.0991	453	374	26.5
3x240	6/10	18.1	26.0	63	65	72	10656	250	0.0754	529	431	34.3
3x300	6/10	20.2	27.6	67	69	76	12496	250	0.0601	599	482	42.9
3x50	8.7/15	8.2	17.7	44	47	52	3907	500	0.387	205	181	7.2
3x70	8.7/15	9.8	19.3	48	51	57	4912	500	0.268	253	220	10.0
3x95	8.7/15	11.3	20.9	0	54	60	6707	500	0.193	307	263	13.6
3x120	8.7/15	12.8	20.7	51	54	59	6438	500	0.153	352	298	17.2
3x150	8.7/15	14.2	23.7	58	60	66	7673	500	0.124	397	332	21.5
3x185	8.7/15	15.7	23.6	58	60	66	8636	500	0.0991	453	374	26.5
3x240	8.7/15	18.1	27.6	66	69	76	11018	250	0.0754	529	431	34.3
3x300	8.7/15	20.2	28.1	68	70	77	12759	250	0.0601	599	482	42.9

Dimension and Electrical Data (cont'd)

Cross Section	Tension Uo/U	Conductor Diameter	Insulation Diameter	Sep. Sheath Diameter	Metalic Screen Diameter	Outer Sheet Diameter	Cable Weight	Packaging	Max DC Resistance at 20°C	Current Rating in air at 20°C	Current Rating in ground at 20°C	Short Circuit Current for 1s
mm²	kV	mm	mm	mm	mm	mm	kg/km	m	Ω/km	A	A	kA
3x50	12/20	8.2	20.6	51	53	59	4662	1000	0.387	205	181	7.2
3x70	12/20	9.8	21.7	54	56	62	5442	500	0.268	253	220	10.0
3x95	12/20	11.3	23.3	57	59	65	6440	500	0.193	307	263	13.6
3x120	12/20	12.8	24.8	60	63	69	7419	250	0.153	352	298	17.2
3x150	12/20	14.2	26.1	63	66	72	8450	250	0.124	397	332	21.5
3x185	12/20	15.7	27.6	67	69	76	9794	250	0.0991	453	374	26.5
3x240	12/20	18.1	30.1	72	76	83	12704	250	0.0754	529	431	34.3
3x300	12/20	20.2	32.2	77	81	88	14820	250	0.0601	599	482	42.9
3x50	18/30	8.2	25.0	61	63	69	5894	250	0.387	205	181	7.2
3x70	18/30	9.8	26.1	63	66	72	6560	500	0.268	253	220	10.0
3x95	18/30	11.3	27.7	67	69	76	7630	500	0.193	307	263	13.6
3x120	18/30	12.8	34.7	82	86	94	11327	250	0.153	352	298	17.2
3x150	18/30	14.2	36.0	86	90	98	12523	250	0.124	397	332	21.5
3x185	18/30	15.7	32.5	78	82	89	12271	250	0.0991	453	374	26.5
3x240	18/30	18.1	34.9	83	87	95	14542	250	0.0754	529	431	34.3
3x300	18/30	20.2	37.0	88	92	100	16758	250	0.0601	599	482	42.9

NA2XSEYRY Aluminium Cable Armoured XLPE Insulation

3.6/6(7.2) - 18/30(36) kV - 3C AL/XLPE/CTS/PVC/SWA/PVC



Application

Three-core medium voltage energy cables with stranded aluminium conductors, XLPE insulation, special inner and outer semi-conductive layers on conductors and insulation, copper tape screen on each core, armour of galvanized steel tape over PVC outer sheath.

These cables have very low electrical loss compared to the similars and they are used in cable ducts, outdoor and indoor installations, underground where the short circuit levels are high such as urban and industrial areas fed by electrical energy. They are also used under normal and salty water if specially produced.

Applicable Standards

SNI IEC 60502-2, IEC 60502-2	Design and Test Guidelines
IEC 60228	Conductor
IEC 60332-1	Flame Retardant
IEC 60332-3-22	Flame Retardant Cat. A
IEC 60332-3-23	Flame Retardant Cat. B
IEC 60332-3-24	Flame Retardant Cat. C

Special features upon request:

EPR Insulation	Anti-rodent
Flame Retardant Cat. A, B, C	Oil Resistance
Flame Retardant Non Category	UV Resistance
Anti-termite	Low Smoke Zero Halogen

Identifications

Core	Brown, Black, Grey
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Other colours available upon request



IEC 60332-1
IEC 60332-3-22
IEC 60332-3-23
IEC 60332-3-24



Standard



Excellent



0°C



14 D



Normal
Operation
Temperature



Short
Circuit
Temperature

Dimension and Electrical Data

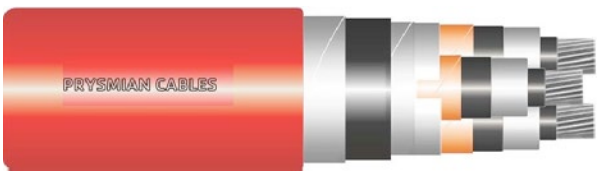
Cross Section	Tension Uo/U	Conductor Diameter	Insulation Diameter	Sep. Sheath Diameter	Metalic Screen Diameter	Outer Sheet Diameter	Cable Weight	Packaging	Max DC Resistance at 20°C	Current Rating in air at 20°C	Current Rating in ground at 20°C	Short Circuit Current for 1s
mm²	kV	mm	mm	mm	mm	mm	kg/km	m	Ω/km	A	A	kA
3x50	3.6/6	8.2	16	42	47	52	4290	1000	0.6410	159	140	4.7
3x70	3.6/6	9.8	17	45	50	54	4672	1000	0.4430	196	171	6.6
3x95	3.6/6	11.4	19	48	53	58	5323	500	0.3200	238	204	9.0
3x120	3.6/6	13.1	21	52	57	62	5960	500	0.2530	274	232	11.3
3x150	3.6/6	14.1	22	54	59	65	6407	500	0.2060	309	259	14.2
3x185	3.6/6	15.9	23	58	63	69	7118	500	0.1640	354	293	17.5
3x240	3.6/6	18.2	26	63	69	75	9048	500	0.1250	415	338	22.7
3x300	3.6/6	20.5	28	68	74	81	10254	250	0.1000	472	380	28.3
3x50	6/10	8.2	17	43	48	53	4459	1000	0.6410	159	140	4.7
3x70	6/10	9.8	18	45	50	56	4847	1000	0.4430	196	171	6.6
3x95	6/10	11.4	19	49	54	59	5474	500	0.3200	238	204	9.0
3x120	6/10	13.1	21	53	58	63	6117	500	0.2530	274	232	11.3
3x150	6/10	14.1	22	55	60	66	6569	500	0.2060	309	259	14.2
3x185	6/10	15.9	24	59	64	70	7286	500	0.1640	354	293	17.5
3x240	6/10	18.2	26	64	70	77	9293	500	0.1250	415	338	22.7
3x300	6/10	20.5	28	68	75	82	10463	250	0.1000	472	380	28.3
3x50	8.7/15	8.2	19	48	53	58	5061	500	0.6410	159	140	4.7
3x70	8.7/15	9.8	20	50	55	61	5467	500	0.4430	196	171	6.6
3x95	8.7/15	11.4	22	54	59	65	6155	500	0.3200	238	204	9.0
3x120	8.7/15	13.1	23	57	62	68	6827	500	0.2530	274	232	11.3
3x150	8.7/15	14.1	24	59	66	72	8065	500	0.2060	309	259	14.2
3x185	8.7/15	15.9	26	63	70	76	8885	500	0.1640	354	293	17.5
3x240	8.7/15	18.2	28	68	75	82	10103	250	0.1250	415	338	22.7
3x300	8.7/15	20.5	31	73	79	87	11356	250	0.1000	472	380	28.3

Dimension and Electrical Data (cont'd)

Cross Section	Tension Uo/U	Conductor Diameter	Insulation Diameter	Sep. Sheath Diameter	Metalic Screen Diameter	Outer Sheet Diameter	Cable Weight	Packaging	Max DC Resistance at 20°C	Current Rating in air at 20°C	Current Rating in ground at 20°C	Short Circuit Current for 1s
mm²	kV	mm	mm	mm	mm	mm	kg/km	m	Ω/km	A	A	kA
3x50	12/20	8.2	21	52	57	63	5651	500	0.6410	159	140	4.7
3x70	12/20	9.8	22	54	59	65	6115	500	0.4430	196	171	6.6
3x95	12/20	11.4	24	58	63	69	6793	500	0.3200	238	204	9.0
3x120	12/20	13.1	25	62	68	74	8306	500	0.2530	274	232	11.3
3x150	12/20	14.1	26	64	70	77	8840	500	0.2060	309	259	14.2
3x185	12/20	15.9	28	67	74	81	9644	500	0.1640	354	293	17.5
3x240	12/20	18.2	30	72	79	86	10880	250	0.1250	415	338	22.7
3x300	12/20	20.5	33	77	84	91	12118	250	0.1000	472	380	28.3
3x50	18/30	8.2	26	63	69	75	8111	500	0.6410	159	140	4.7
3x70	18/30	9.8	27	65	71	78	8626	500	0.4430	196	171	6.6
3x95	18/30	11.4	28	68	75	82	9442	500	0.3200	238	204	9.0
3x120	18/30	13.1	30	72	78	86	10235	250	0.2530	274	232	11.3
3x150	18/30	14.1	31	74	81	88	10810	250	0.2060	309	259	14.2
3x185	18/30	15.9	33	78	84	92	11677	250	0.1640	354	293	17.5
3x240	18/30	18.2	35	83	89	98	13007	250	0.1250	415	338	22.7
3x300	18/30	20.5	38	88	94	103	14447	250	0.1000	472	380	28.3

NA2XSEYBY Aluminium Cable Armoured XLPE Insulation

3.6/6(7.2) - 18/30(36) kV - 3C AL/XLPE/CTS/PVC/DSTA/PVC



Application

Three-core medium voltage energy cables with stranded aluminium conductors, XLPE insulation, special inner and outer semi-conductive layers on conductors and insulation, copper tape screen on each core, armour of galvanized steel tape over PVC outer sheath.

These cables have very low electrical loss compare to the similars and they are used in cable ducts, outdoor and indoor installations, underground where the short circuit levels are high such as urban and industrial areas fed by electrical energy. They are also used under normal and salty water if specially produced.

Applicable Standards

SNI IEC 60502-2, IEC 60502-2	Design and Test Guidelines
IEC 60228	Conductor
IEC 60332-1	Flame Retardant
IEC 60332-3-22	Flame Retardant Cat. A
IEC 60332-3-23	Flame Retardant Cat. B
IEC 60332-3-24	Flame Retardant Cat. C

Special features upon request:

EPR Insulation	Anti-rodent
Flame Retardant Cat. A, B, C	Oil Resistance
Flame Retardant Non Category	UV Resistance
Anti-termite	Low Smoke Zero Halogen

Identifications

Core	Brown, Black, Grey
------	--------------------

Other colours available upon request



IEC 60332-1
IEC 60332-3-22
IEC 60332-3-23
IEC 60332-3-24



Standard



Excellent



0°C



14 D



Normal
Operation
Temperature



Short
Circuit
Temperature

Dimension and Electrical Data

Cross Section	Tension U ₀ /U	Conductor Diameter	Insulation Diameter	Sep. Sheath Diameter	Metalic Screen Diameter	Outer Sheet Diameter	Cable Weight	Packaging	Max DC Resistance at 20°C	Current Rating in air at 20°C	Current Rating in ground at 20°C	Short Circuit Current for 1s
mm ²	kV	mm	mm	mm	mm	mm	kg/km	m	Ω/km	A	A	kA
3x50	3.6/6	8.2	16.3	42	44	49	2845	1000	0.387	205	181	7.2
3x70	3.6/6	9.8	17.4	44	47	51	3172	1000	0.268	253	220	10.0
3x95	3.6/6	11.3	19.0	48	50	55	3669	1000	0.193	307	263	13.6
3x120	3.6/6	12.8	20.7	51	54	59	4211	1000	0.153	352	298	17.2
3x150	3.6/6	14.2	21.7	54	56	62	4598	1000	0.124	397	332	21.5
3x185	3.6/6	15.7	23.4	57	60	65	5188	500	0.0991	453	374	26.5
3x240	3.6/6	18.1	25.8	62	65	71	6127	500	0.0754	529	431	34.3
3x300	3.6/6	20.2	28.0	67	70	76	7118	500	0.0601	599	482	42.9
3x50	6/10	8.2	16.7	43	45	so	2970	1000	0.387	205	181	7.2
3x70	6/10	9.8	17.8	45	48	53	3302	1000	0.268	253	220	10.0
3x95	6/10	11.3	19.4	49	51	56	3807	1000	0.193	307	263	13.6
3x120	6/10	12.8	21.1	52	55	60	4330	1000	0.153	352	298	17.2
3x150	6/10	14.2	22.1	54	57	63	4721	1000	0.124	397	332	21.5
3x185	6/10	15.7	23.8	58	61	67	5317	500	0.0991	453	374	26.5
3x240	6/10	18.1	26.2	63	66	72	6265	500	0.0754	529	431	34.3
3x300	6/10	20.2	28.4	68	71	77	7263	500	0.0601	599	482	42.9
3x50	8.7/15	8.2	18.8	47	50	55	3425	1000	0.387	205	181	7.2
3x70	8.7/15	9.8	19.9	50	52	58	3774	1000	0.268	253	220	10.0
3x95	8.7/15	11.3	21.6	53	56	61	4332	1000	0.193	307	263	13.6
3x120	8.7/15	12.8	23.3	57	59	65	4883	1000	0.153	352	298	17.2
3x150	8.7/15	14.2	24.3	59	62	68	5291	500	0.124	397	332	21.5
3x185	8.7/15	15.7	26.0	63	65	72	5914	500	0.0991	453	374	26.5
3x240	8.7/15	18.1	28.4	68	70	77	6902	500	0.0754	529	431	34.3
3x300	8.7/15	20.2	30.6	73	77	84	8687	500	0.0601	599	482	42.9

Dimension and Electrical Data (cont'd)

Cross Section	Tension Uo/U	Conductor Diameter	Insulation Diameter	Sep. Sheath Diameter	Metalic Screen Diameter	Outer Sheet Diameter	Cable Weight	Packaging	Max DC Resistance at 20°C	Current Rating in air at 20°C	Current Rating in ground at 20°C	Short Circuit Current for 1s
mm²	kV	mm	mm	mm	mm	mm	kg/km	m	Ω/km	A	A	kA
3x50	12/20	8.2	20.8	52	54	60	3895	1000	0.387	205	181	7.2
3x70	12/20	9.8	21.9	54	57	62	4261	1000	0.268	253	220	10.0
3x95	12/20	11.3	23.5	58	60	66	4816	1000	0.193	307	263	13.6
3x120	12/20	12.8	25.2	61	64	70	5389	500	0.153	352	298	17.2
3x150	12/20	14.2	26.2	63	66	72	5812	500	0.124	397	332	21.5
3x185	12/20	15.7	28.0	67	70	76	6494	500	0.0991	453	374	26.5
3x240	12/20	18.1	30.3	72	76	83	8262	500	0.0754	529	431	34.3
3x300	12/20	20.2	32.6	77	81	88	9339	500	0.0601	599	482	42.9
3x50	18/30	8.2	25.7	62	65	71	5174	500	0.387	205	181	7.2
3x70	18/30	9.8	26.8	65	67	74	5582	500	0.268	253	220	10.0
3x95	18/30	11.3	28.4	68	71	77	6196	500	0.193	307	263	13.6
3x120	18/30	12.8	30.1	72	76	83	7608	500	0.153	352	298	17.2
3x150	18/30	14.2	31.1	74	78	85	8092	500	0.124	397	332	21.5
3x185	18/30	15.7	32.9	78	82	89	8839	500	0.0991	453	374	26.5
3x240	18/30	18.1	35.2	83	87	95	10003	250	0.0754	529	431	34.3
3x300	18/30	20.2	37.5	88	92	100	11159	250	0.0601	599	482	42.9

PROTOLON (ST)

NTSCGEWOEU 3,6/6KV

Medium voltage flexible cables for use in water



Application

Power supply cable for use in water, e.g. for connection to dredgers, floating docks, pumps, etc., in applications where high mechanical stresses are to be expected. Also suitable for use in sewage, salt water and brackish water at water depths of up to 500 m.

Design & Construction

Conductor	Finely stranded copper, tinned, class 5 PE: Split into 3 in the outer interstices.
Inner semi-conducting layer	Yes Semi-conductive EPR
Core insulation material	EPR rubber Special compound 3GI3
Outer semi-conducting layer	Yes Semi-conductive EPR
Core arrangement	Three main conductor laid-up with protective-earth conductor split into 3 in the outer interstices
Material inner sheath	Rubber Special EPR compound waterproof
Material outer sheath	Chlorinated polyethylene (CM/CPE) Special compound 5GM3 waterproof

Applicable Standards

DIN VDE 0298-4	Electrical parameters
DIN VDE 0250-813	General
MSHA P-189-4	Certifications / Approvals
DIN EN 60811-404 / IEC 60811-404	Chemical behaviour
DIN EN 50525-2-21	Chemical behaviour
GOST -R/-K/-B Fire Certificate of Russian Federation	Certifications / Approvals
DIN EN 60332-1-2 / IEC 60332-1-2	Fire performance

Electrical Parameters

Rated voltage U0/U (Um)	3.6/6 (7.2) kV
Test voltage [kV]	11
Nominal voltage U [V]	6,000

Thermal Parameters

Max. conductor temperature	90 °C
Max. conductor temperature at short circuit	250 °C
Ambient temperature fix installation (min)	-40 °C
Ambient temperature fix installation (max)	80 °C
Ambient temperature flexible installation (min)	-25 °C
Ambient temperature flexible installation (max)	60 °C

Chemical Parameters

Flame retardant	In accordance with EN/IEC 60332-1-2
Oil resistant	Yes
Ozone resistant	Yes
Resistant to UV	Yes
Sea water resistance	Excellent
Max. water depth	500m

Mechanical Parameters

Torsional stress +/- [°/m]	100
Permanent tensile strength (rule)	15 N/mm²
Bending radius (rule)	Acc. to VDE 0298-3: 6 X D fixed installation 10 X D flexible operation

Cable Properties

Basic construction	SAP code	External code	Diameter conductor (mm)	Min. cable diameter (mm)	Max. Cable diameter (mm)	Cable weight (kg/km)
3x16+3x16/3E	20004508	5DK3779	5.7	37.5	40.5	2,250
3x25+3x25/3	20004485	5DK3201	6.4	40.1	43.1	2,620
3x25+3x25/3E	20233752	5DK3***	6.4	42.4	45.4	2,800
3x35+3x25/3	20040326	5DK3202	7.6	42.6	45.6	3,200
3x35+3x16/3E	20004509	5DK3782	7.6	43.9	46.9	3,310
3x50+3x25/3	20004486	5DK3203	9	45.6	48.6	3,690
3x35+3x25/3E	20004510	5DK3783	7.6	44.3	47.3	3,420
3x70+3x35/3	20141683	5DK3204	10.9	52.2	56.2	5,180
3x50+3x25/3E	20004511	5DK3784	9	48.1	51.1	4,160
3x95+3x50/3	20037272	5DK3511	12.6	58.4	62.4	6,600
3x120+3x70/3	20058135	5DK3212	14.2	59.1	63.1	7,320
3x70+3x35/3E	20004512	5DK3786	10.9	54.3	58.3	5,440
3x150+3x70/3	ST_6KV_001	5DK3***	16	65.6	69.6	8,470
3x95+3x50/3E	20165442	5DK3787	12.6	63.8	67.8	6,610
3x185+3x95/3	20266828	5DK3***	17.8	69.4	73.4	9,850
3x120+3x70/3E	20061120	5DK3785	14.1	64	68	8,240
3x150+3x70/3E	20160411	5DK3778	16	69.9	73.9	9,520
3x240+3x120/3	20270201	5DK3***	20.4	76.7	80.7	11,500

Cable Properties Electric / Mechanical

Basic construction	SAP code	External code	Max. tensile strength [N]	Nominal operation capacitance [nF/km]	Operation self inductance [mH/km]	Conductor resistance at 20° C [Ohm/km]	Current carrying capacity [A]
3x16+3x16/3E	20004508	5DK3779	720	240	0.35	1.24	99
3x25+3x25/3	20004485	5DK3201	1,125	260	0.35	0.795	131
3x25+3x25/3E	20233752	5DK3***	1,125	260	0.35	0.795	131
3x35+3x25/3	20040326	5DK3202	1,575	290	0.33	0.565	162
3x35+3x16/3E	20004509	5DK3782	1,575	290	0.33	0.565	162
3x50+3x25/3	20004486	5DK3203	2,250	330	0.32	0.393	202
3x35+3x25/3E	20004510	5DK3783	1,575	290	0.33	0.565	162
3x70+3x35/3	20141683	5DK3204	3,150	380	0.3	0.277	250
3x50+3x25/3E	20004511	5DK3784	2,250	330	0.32	0.393	202
3x95+3x50/3	20037272	5DK3511	4,275	430	0.29	0.21	301
3x120+3x70/3	20058135	5DK3212	5,400	470	0.28	0.164	352
3x70+3x35/3E	20004512	5DK3786	3,150	380	0.3	0.277	250
3x150+3x70/3	ST_6KV_001	5DK3***	6,750	520	0.27	0.132	404
3x95+3x50/3E	20165442	5DK3787	4,275	430	0.29	0.21	301
3x185+3x95/3	20266828	5DK3***	8,325	560	0.26	0.108	461
3x120+3x70/3E	20061120	5DK3785	5,400	470	0.28	0.164	352
3x150+3x70/3E	20160411	5DK3778	6,750	520	0.27	0.132	404
3x240+3x120/3	20270201	5DK3***	10,800	630	0.25	0.0817	540

ACCESSORIES & COMPONENTS



Solar Connector - TECPLUG

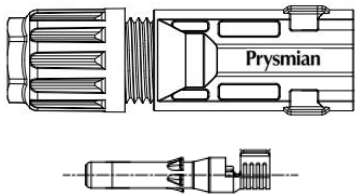
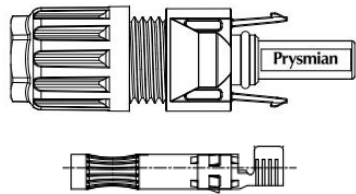


P/N	Conductor Size	Cable OD
PMC-4-M	AWG14 (2.5mm²)	ø4.5-8.5mm
	AWG12 (4.0mm²)	
	AWG10 (6.0mm²)	

PMC-8-M	AWG18 (10.0mm²)	ø4.5-8.5mm
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P/N	Conductor Size	Cable OD
PMC-4-F	AWG14 (2.5mm²)	ø4.5-8.5mm
	AWG12 (4.0mm²)	
	AWG10 (6.0mm²)	

PMC-8-F	AWG18 (10.0mm²)	ø4.5-8.5mm
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Product main characteristics

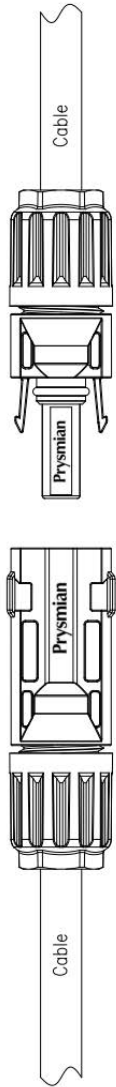
- Reliable operation and durability
- High-quality material
- Easy to handle and quick to install
- Simple on-site processing
- Accommodates PV cable with different insulation diameters
- Mating safety provided by keyed housings
- Multiple plugging and unplugging cycles
- Identification batch no. and complete product traceability
- High current carrying capacity
- TÜV certified

TECHNICAL DATA

APPLICABLE STANDARD	
International Standard	IEC-62852 (ed.1) EN62852:2015
ELECTRICAL PERFORMANCE	
Rated Voltage	1500V DC
Rated Current	40/70A depends on cable section
Impulse Voltage	16 kV
R.M.S. withstand voltage	8 kV - 50Hz 1 min
DEGREE OF PROTECTION	
Mated	IP68
Unmated	IP2X
MATERIAL	
Insulation Material	PPE
Contact Material	Copper, Tin Plated
OTHERS	
Safety Class	II
Flame Class	UL94-V0
INSTALLATION/OPERATION CONDITIONS	
Connecting System	Crimping Connection
Ambient Temperature Range	Min. -40°C / Max. +85°C

Installation Tools

PMC-4/PMC-8 connector installation can be performed with standard plier and crimping tools, on request Prysmian can supply its own installation kit



Sales & marketing offices

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