

KWV

Kabelwerke Villingen GmbH



**DOUBLE INSULATED
SINGLE WIRES FOR
THE INTERCONNECTION
OF PV SYSTEMS:**

**SolarVill® XS
PV1-F**

TÜV R 60038725
TÜV 2 PFG 1169/08.2007



Applications:

SolarVill® XS is a low-cost variant of the PV1-F Photovoltaic wire used for the interconnections of the PV Modules, Panel-Strings and Inverters. The SolarVill® XS PV1-F is TÜV 2 PFG 1169/08.2007 certified.

- For use in fixed installation or steady movement in free motion (without tensile load)
- For outdoor use in wet and dry locations
- Highly resistant to solar radiation
- Not to be used as buried cable

Available sizes:

Cross section in mm ² (AWG)	Conductor construction (in mm)	Nominal outer diameter in mm (inches)	Copper weight kg/km (lbs/1000ft.)	Cable weight kg/km (lbs/1000ft.)
2.5 (14)	44 x 0.25	4.5 (0.18)	20.7 (13.91)	38 (25.53)
4.0 (12)	50 x 0.30	5.0 (0.20)	33.8 (22.71)	54 (36.29)
6.0 (10)	74 x 0.30	5.6 (0.22)	50.4 (33.87)	74 (49.73)
10.0 (8)	74 x 0.40	6.9 (0.26)	88.1 (59.20)	119 (79.96)
16.0 (6)	114 x 0.40	7.7 (0.30)	136.9 (91.99)	174 (116.92)
25.0 (4)	189 x 0.40	9.3 (0.34)	229.2 (154.01)	296 (198.90)
35.0 (2)	259 x 0.40	10.7 (0.42)	314.9 (211.60)	397 (266.77)

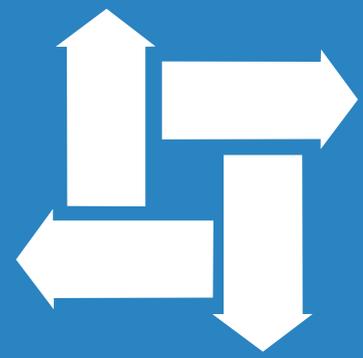
Colour available: black

Features:

- The cable is halogen-free and does not generate corrosive or toxic gases if burned
- The material used is highly flame-resistant and has low smoke emissions
- The material used for the cable's insulation and its jacket is highly resistant to atmospheric conditions such as UV radiation and abrasion
- A large temperature range allow the use under extreme weather conditions
- The cable has a superior flexibility for use in high mechanical load
- The insulation and the jacket cannot be separated – for a simplified manufacturing process
- Compliant with the RoHS Directive and REACH Regulation
- Longer life expectancy - guaranteed for 25 years



- BAUART GEPRÜFT
- TYPE APPROVED



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Technical properties:

According to PV1-F TÜV requirements:

- Flexible tinned conductor (class 5 - DIN EN 60228)
- Short-circuit strength: up to 200°C/5s
- Hot Set Test at 200°C
- Hot Pressure Test: up to 140°C
- Long-term behaviour Test: 20,000h at 120°C
- Voltage Test (online test): 10kV
- Nominal Voltage: [U₀/U] AC 0.6/1.0kV
- AC Voltage Test: 6.5kV
- Possible Voltage up to 1.8 kV (conductor/conductor, not grounded system, unloaded circuit)
- Highly resistant to acid, lye, ozone and UV
- Halogen free
- Temperature range: -40°C up to +90°C (fixed)
- Maximum temperature at the conductor +120°C

