

5. INDUSTRIAL CABLES / 5.1 HALOGEN-FREE / Fotoflex



Cables for photovoltaic plants



Application:

Power cables of nominal voltage of 0,6/1 kV AC, resp. 0,9/1,5 kV DC dedicated to photovoltaic systems. Fotoflex cables are resistant against UV radiation, ozone and thermal environment effects. Insulation and sheathing materials resist to hydrolysis, ammonia and biogas, were tested in according to TÜV 2 PFG 1169 and UL 4703. They can be used in environment in according to STN 33 2000-3 in category AN1 and 2 (UV stability). Cables meet the requirement of flame spread resistance according to STN EN 61034-2 and with low fume density during the fire and low corrosivity of fire products. It is possible to use these cables in fire hazard conditions and to install them on flammable material.

Cable construction:

- **Cable cores:** Stranded CuSn (Cu) cores with nominal cross-section from 1,5 mm² to 25 mm²
- **Insulation:** Halogen-free, branched, heat-resistant, flexible mixture with reduced flammability
- **Sheath:** Halogen-free, heat resistant, flexible mixture with reduced flammability examined acc.to TÜV 2 PFG 1169 a UL 4703, colour (generally) red, blue or black.

Technical data:

- **Nominal voltage U₀/U (kV):** 0,6/1,5 AC; 0,9/1,5 DC
- **Operation temperature (fixed placing):** -50 to +90 °C (120 °C 3 000 h)
- **Min. bending radius:** 6 x cable diameter

Application table:

Type	Effective resistance of conductor	Outer diameter (appr.)
	Ω/km	mm
1x1,5 mm ²	13,7	4,5
1x2,5 mm ²	8,21	4,7
1x4 mm ²	5,09	5,3
1x6 mm ²	3,39	6,0
1x10 mm ²	1,95	7,0
1x16 mm ²	1,24	8,5
1x25 mm ²	0,795	10,0

5. INDUSTRIAL CABLES / 5.1 HALOGEN-FREE / Fotoflex Z



Cables for photovoltaic plants



Application:

Power cables of nominal voltage of 0,6/1 kV AC, resp. 0,9/1,5 kV DC dedicated to photovoltaic systems. Fotoflex cables are resistant against UV radiation, ozone and thermal environment effects. Insulation and covering materials resist to hydrolysis, ammonia and biogas, were tested in according to TÜV 2 PFG 1169 and UL 4703. They can be used in environment in according to STN 33 2000-3 in category AN1 and 2 (UV stability). Cables meet the requirement of flame spread resistance according to STN EN 61034-2 and with low fume density during the fire and low corrosivity of fire products. It is possible to use these cables in fire hazard conditions and to install them on flammable material. Special cable construction for FVE usage with maximized UV stability, ozone resistance, thermal and mechanical strain, flame retardant, with very high humidity resistance, intended for long-term water effects.

Cable construction:

- **Cable cores:** Stranded CuSn (Cu) cores with nominal cross-section from 1,5 mm² to 10 mm²
- **Insulation:** Halogen-free, branched, heat resistant, flexible mixture with reduced flammability. Halogen-free barrier against humidity.
- **Sheath:** Halogen-free, heat resistant, flexible mixture with reduced flammability examined acc.to TÜV 2 PFG 1169 a UL 4703, colour (generally) red, blue or black.

Technical data:

- **Nominal voltage U₀/U (kV):** 0,6/1,5 AC; 0,9/1,5 DC
- **Operation temperature (fixed placing):** -50 to +90 °C (120 °C 3 000 h)
- **Min. bending radius:** 6 x cable diameter

Application table:

Type	Effective resistance of conductor	Outer diameter (appr.)
	Ω/km	mm
1x1,5 mm ²	13,7	5,2
1x2,5 mm ²	8,21	5,6
1x4 mm ²	5,09	6,2
1x6mm ²	3,39	7,0
1x10 mm ²	1,95	8,0