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**ENERGYFLEX BE-FAST™**  
**split and plug:**  
**it's time to make PV wiring faster**



## Productive solar power investment requires time-saving installations

The holy grail of any cost-effective photovoltaic investment is “grid parity,” which is the point at which alternative means of generating electricity are as cheap as commercially available grid power based on coal, natural gas, or nuclear energy.

Grid parity for PV is subject to solar availability and type of installation: residential, commercial or ground-based power plant.

Grid parity is also influenced by the going price of electricity, subsidies, feed-in tariffs, and overall installation costs which are typically: 50% for modules, 10% for inverters and 40% for Balance of System (BOS).

BOS includes components, services, foundations, civil works, mounting of structures, labor, engineering, combiner boxes and especially, highly efficient and easy-to-install cables.

With module prices continuing to decline, it is now evident that BOS costs will soon account for +50% of a PV project’s total cost. For connecting a photovoltaic installation, only innovative cabling

solutions can meet this investment challenge. This requires a new generation of PV energy cables which are easier and faster to install, safer to handle, flexible for easy unreeling, less bulky, and quickly identifiable for rapid DC connections.

In addition, cables must be fire-safe and resistant to UV and ozone, durable for the system’s entire lifetime, fully certified in Europe and beyond, and especially adapted to commercial and PV power plants.

### What investors, project developers and installers expect

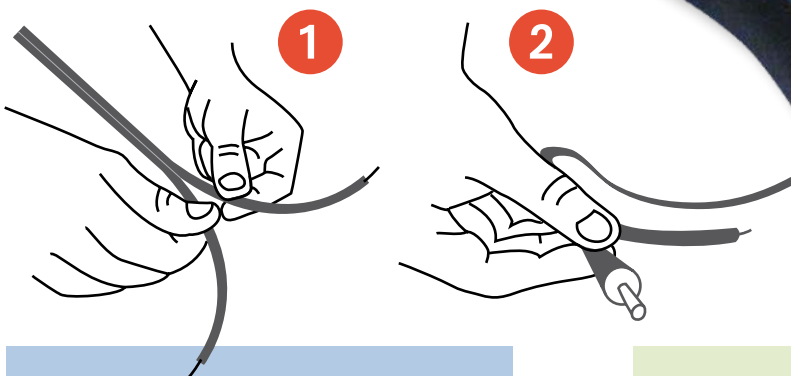
- Quicker, easier installations mobilizing fewer people
- Far less cable encumbrance and fewer spools on site
- Safer installation practices for both people and equipment
- Short lead times and quick on-site deliveries
- Enhanced system reliability through robust cables and components
- Full conformity with existing national and future European standards
- A high rate of return on their long-term power investment
- Significant savings in solar PV Balance of System costs

**By reducing spools, repeated operations, and dangerous separation of coextruded cables, ENERGYFLEX BE-FAST™ saves precious time to reduce Balance of System (BOS) costs and protect your long-term investment.**

ENERGYFLEX BE-FAST™ photovoltaic cables are innovative 1kV cross-linked cables offering exceptional performance, easy installation and long-term reliability for short DC connections linking PV panels or connecting them to the array box or to the inverter.

Besides being easier to split and connect, ENERGYFLEX BE-FAST™ cables are resistant to extreme temperatures (-40°C to 120°C), ozone and UV and are zero-halogen for enhanced fire safety. They are ideally adapted for commercial buildings, factories and agricultural roofs and large grounded PV power plants.

A soft adhesive binds two separate positive and negative DC conductors together for easy handling and installation since they can be quickly and easily separated with the bare fingers, without sharp edged tools or risk to the insulation. The + conductor is marked with a red stripe for immediate identification.



### Split & plug saves time!

Previously, PV cables have either been two uniaxial cables on separate spools, or coextruded twin cables which must be separated with a cutter, often resulting in wounds to installers and scratches and deep cuts to the cables, which can cause system failure and deteriorating seals.

ENERGYFLEX BE-FAST™ binds two flexible rubber PV cables temporarily together so that they can be handled as one cable that can be pulled apart using the fingers alone. The cable will not accidentally separate in the middle, but only at the ends with an effortless pull, like a smooth-running zipper.

### Benefits of ENERGYFLEX BE-FAST™ cables

- Reduced Balance of System and labor costs
- Fingers-only separation means at least 30% time-savings over two separate cables, and plus 50% over twin cables
- No cutting of jackets with sharp tools means lower risk to workers
- No scratches/cuts to conductors for system reliability and secure connector seals
- Easy handling due to flexible rubber insulation, rather than stiff PVC and XLPE
- Fewer reels for transport, storage and on-site manipulation
- Limitation of electromagnetic fields in line with UTE requirements
- Excellent UV performance assessed in an accelerated weathering center
- Exceptional longevity (>30 years) demonstrated by thermal endurance tests
- Quick identification of +/- conductors for easy and secure connections
- Conformity with TÜV, LCIE and IMQ as two integral certified uniaxial cables