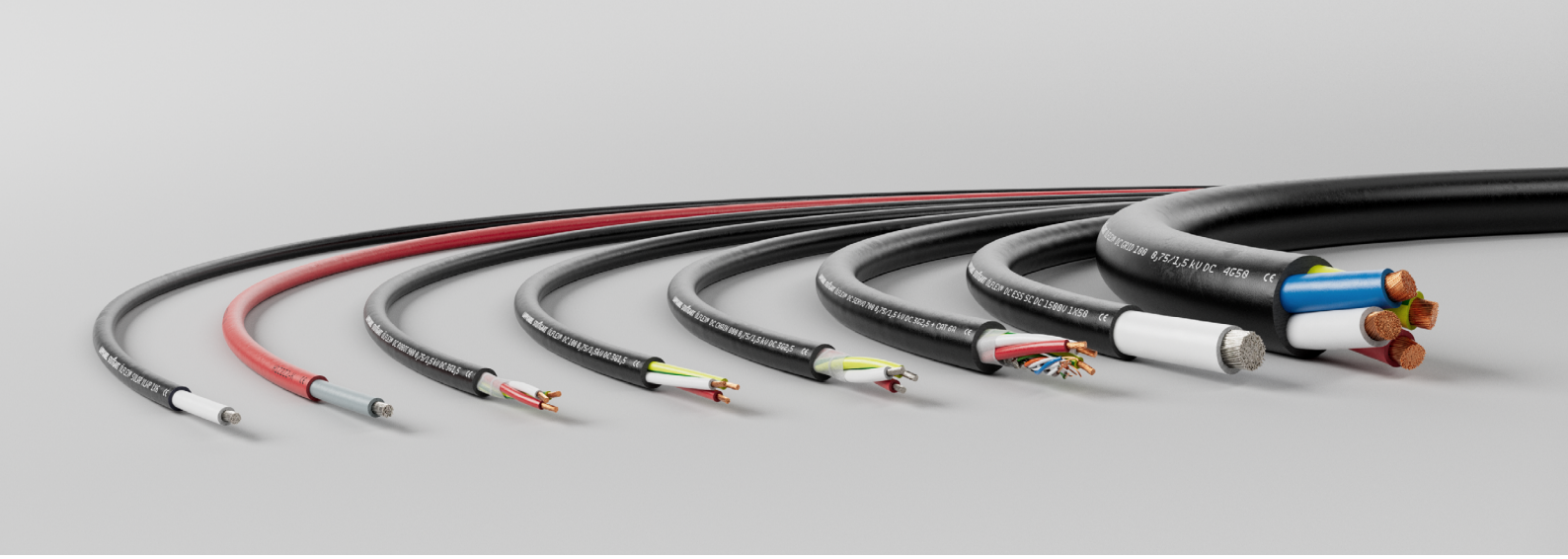


Industrial DC power supply for production plants

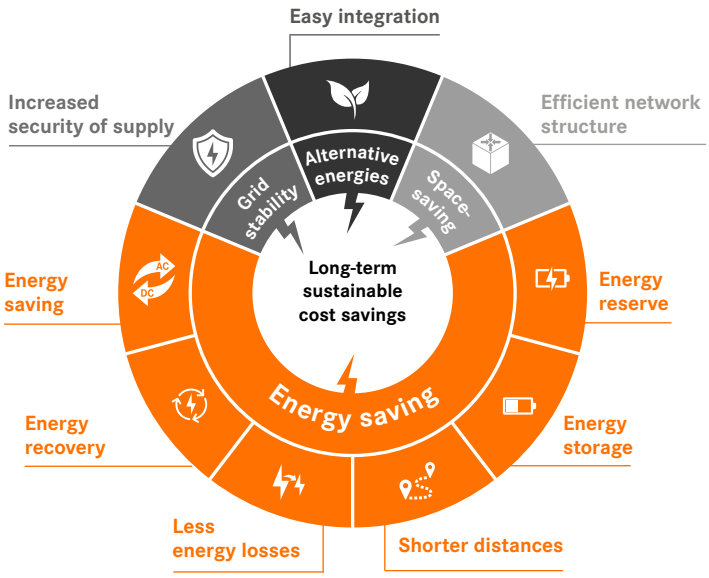
With the world's first DC cable portfolio from LAPP

Smartphones, LEDs, photovoltaics: more and more direct current is needed both in industry and in our everyday lives. With increasing demand for automation and the simultaneous goal of reducing the CO_2 emissions of companies, new energy supply concepts are needed sooner or later. Due to increasing energy costs, having your own photovoltaic system can reduce the need and cost for energy from the public grid.

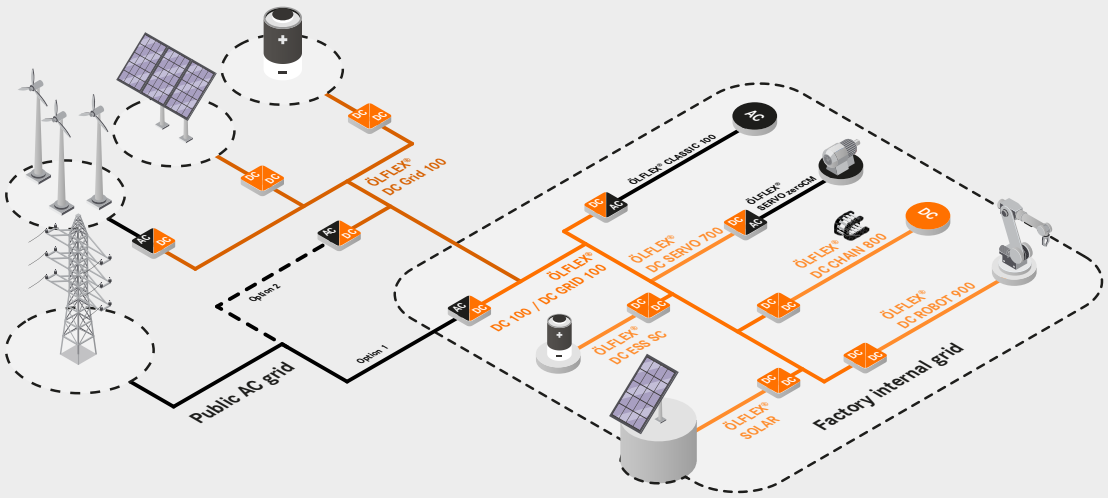
With its DC cable portfolio, LAPP paves the way for DC technology in industry and supplies the essential components for setting up a DC infrastructure for the low-voltage range. LAPP has been active for years in research projects on the topic of direct current in industry and in 2022 joined the newly formed ODCA (Open Direct Current Alliance) as a founding member, thus contributing to the technology and discussion on direct current grids and their importance for the energy transition.

Advantages compared to AC grids:

- Energy savings due to less reactive power and fewer energy conversion losses
- More efficient energy recovery and storage
- Easy integration of batteries, fuel cells or renewable energies
- Increased security of supply
- Cost savings due to high energy efficiency, lower material requirements and avoidance of downtime



Learn more about direct current
www.lapp.com/en/de/e/082211



ill.: Exemplary illustration of a production hall with direct current supply.

Direct current for every industrial application

The idea of converting industrial production facilities to direct current does not come about by chance, but results from successfully realised direct current projects in which industry and research are working to implement the energy turnaround in industrial production. Because: by eliminating the conversion losses that the use of alternating current (AC) entails, a considerable amount of energy can be saved. Compared to AC grids, DC grids also offer more flexibility with greater stability. Highly automated and digitally networked production environments in particular benefit from a decentralised and self-sufficient power supply and the associated permanently stable system availability. There is also saving potential within the required resources: electronic components such as converters, conversion stages are reduced and filter systems are no longer needed when using direct current with modern converter technology.

Our state-of-the-art, DC-focused product portfolio:

	Description	Colour code according to DIN EN 60445	Fixed Transfer	Occasional movement	Continuous movement	Matching connectors		
ÖLFLEX® DC 100	Flexible connection cable	✓	✓	✓	-	  **EPIC® Modular System MH/MC** up to 250 A up to 20 contacts	  **EPIC® Power H-K** up to 100 A up to 8 contacts  **EPIC® Power H-K** up to 40 A up to 4 contacts	 **EPIC® Powerlock** up to 660 A single-pole  **EPIC® M8 to M58 Round connectors** up to 150 A up to 17 contacts
ÖLFLEX® DC GRID 100	Buriable cable for power distribution	✓	✓	-	-			
ÖLFLEX® DC ESS SC	Wiring energy storage systems	-	✓	✓	-			
ÖLFLEX® DC SERVO 700	Connection cable for frequency converter	✓	✓	✓	-			
ÖLFLEX® DC CHAIN 800	Flexible connection cable for drag chains	✓	✓	✓	✓			
ÖLFLEX® DC ROBOT 900	Flexible connection cable for industrial robots, torsion-resistant	✓	✓	✓	✓			
ÖLFLEX® CLASSIC 128 H BK SC	Flexible single core	✓	✓	✓	-			

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To contact your local LAPP representative, please visit
www.lapp.com/en/global

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10/25