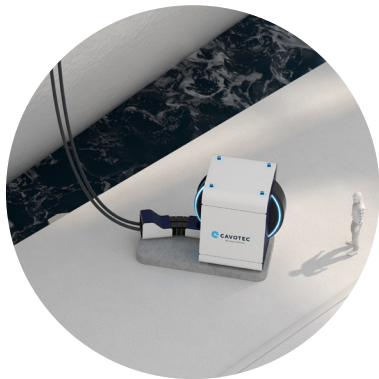
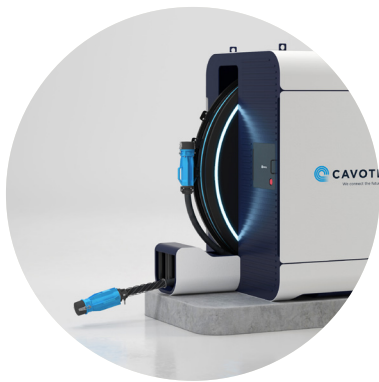
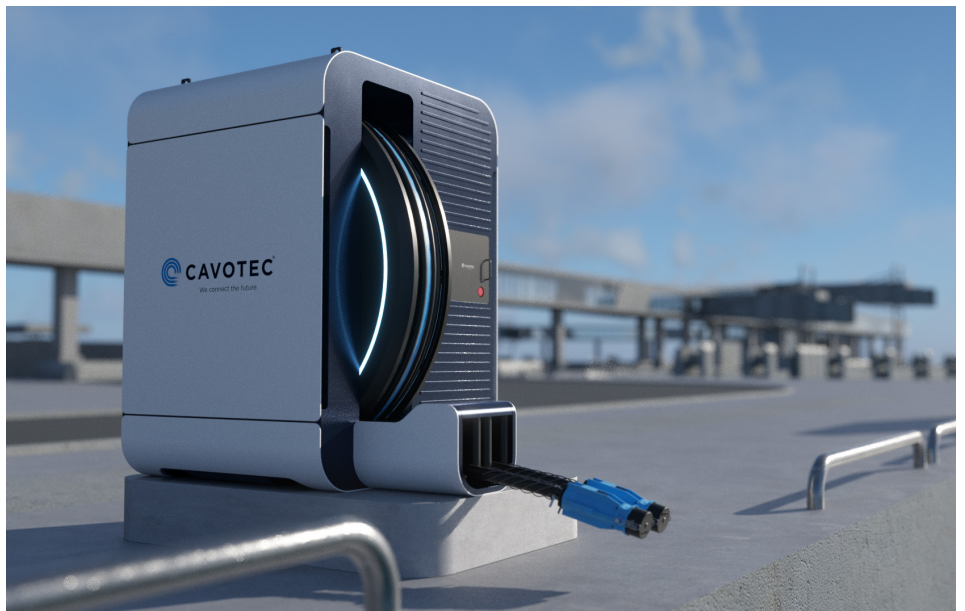


PowerRunNxG LV



Cavotec is a leading cleantech company that designs and delivers connection and electrification solutions to enable the decarbonization of ports and industrial applications.

Cavotec pioneered ShorePower technology in the 80s. We design, manufacture and deliver innovative turnkey ShorePower solutions that allow our customers to take charge of their own futures.

Overview

PowerRunNxG is a skid-mounted cable reeling system for LV connection that provides moored ships with electrical power.

PowerRunNxG is featured by an evolved, modern and innovative aesthetic that has been developed with public environments and urban contexts in mind.

The system makes it possible to pay out one or more multicore power and signal cables safely, lay them up on a ship and establish connection to the electrical grid with Cavotec Power Connector PC4, up to 250A, or PC5, up to 400A. PowerRunNxG's hydrodynamic technology maintains cable tension, preventing cables from slacking when vessels move due to displacement, waves and tidal motion.

The system includes a number of features to ensure safe operation:

- Audible and visual alarms activate when last two turns of cable are available on the drum; cam limit switch for sensing drum full/empty contacts
- Hydrodynamic slipping clutch integrated into gearbox; active CMS incorporating tide compensation function as defined by PAS/IEC 80005:3
- Cable guide with multi-rollers that allow for proper bending radius of cables
- Multi cable PowerRunNxG equipped with dedicated connector holders to reel-out only the cable needed by the specific vessel
- The system is operated by Cavotec Radio Remote Control (RRC) units, MC-2-3 or MC-2-5, which are robust, lightweight, compact, and highly ergonomic push-button RRCs
- Emergency stop

Benefits

- Rapid connection of cables to ships' electrical supply with Cavotec PC5 push-pull connectors that can also be integrated with fibre optics
- Separate pre-wired plugs to provide auxiliary power to PowerRun and for connecting all status monitoring shore side
- Alarm and signalling on PowerRun unit enable remote supervision, including reeling in and out, auto mode, emergency stop, last two turns of cable, last turn of cable
- Anti-corrosion coatings

Features

- PC4 or PC6 connector available for cable size out of standard
- LV cables supplied with cable grips
- Extended length of cables on shore side to avoid HV junction box on the PowerRunNxG
- RRC MC-2-3 for remote manoeuvrability, (multiple units available)
- Articulated cable guide for left and right cable deflection
- Corner block for temporary positioning
- Portable structure that allows the system to be lifted by crane or forklift
- Cavotec touch panel or remote control available
- Status LED lighting that illustrates machine status
- Insight in machine status by Cavotec Connect

Technical features

Electrical and mechanical features

Operating Voltage	Up to 690V, 50Hz/60Hz as per standard (Up to 1000 VAC on demand)
Current	Up to 350A per cable as per standard.
Cavotec power connector	PC5 connector, PAS/IEC 80005:3-compliant, 4 pilot pins
Cable	185sqmm phase PAS/IEC 80005:3-compliant, 4 pilot pins
Rotating collector (sliprings)	Multiple three-phases 1kV (separate ring for phase for each cable), earth ring, pilot rings
Heater systems	Anti-condensation heater system in reel control panel and in LV junction box
Structure	Galvanised and painted steel, basement for fixed or portable versions (included corner blocks)
Type of drum	Monospiral, up to 3 cables
Aux power required	8kW at 400V
Other size or design of cables may be evaluated on request	

Max Power* [MVA] and active cable length

Max Power* [MVA]	Active cable length
1 cable 0.42MVA	30 m + two dead lays
	45 m + two dead lays
	55 m + two dead lays
2 cables 0.84MVA	30 m + two dead lays
	45 m + two dead lays
	55 m + two dead lays
3 cables 1.25MVA	30 m + two dead lays
	45 m + two dead lays

*Note 1: Max Power on continuous duty and standard condition as limited by IEC PAS 80005-3 (690V & 350A per cables). Please consult us for other performances.

Note 2: For the portable structure, estimate an additional 300kg; and for the roof, estimate an additional 150kg. For different lengths, please contact Cavotec sales.

Approvals

PowerRunNxG complies with Cable Management System (CMS) requirements of IEC PAS 80005-3 Utility connections in port – Part 3: Low Voltage Shore Connection (LVSC) Systems – General requirements.

Please contact your local Cavotec Sales Office for further information at cavotec.com. Disclaimer: specifications are subject to change without notice.