

1310010	DATA SHEET	
valid from: 2024-10-18	ÖLFLEX® AQUA 510 P	

Application

ÖLFLEX® AQUA 510 P cables are water-resistant power cables with an insulation of PP and an outer sheath Polyurethane for flexible use and fixed installation under increased mechanical load conditions. The outer sheath is particularly notch and tear resistant and also microbe resistant. They are also suitable for use in dry, damp or wet areas. They are suitable for outdoor use if the indicated temperature range is observed. They are suitable for constant use in fresh or saltwater as well as ammonia water to a depth of 10 m and at a maximum water temperature of 40°C acc. to EN 50565-2. They are suitable for occasional, non-automated movements. The maximum tensile load is 15 N/mm² of conductor cross-section during installation and operation. Compulsory guidance is not permitted. They are increased resistant to oils and at room temperature largely resistant to acids and alkalis. The outer sheath withstands high mechanical stresses, in particular abrasion and dragging. It is also cut proof and resists microbes and hydrolysis as well as mussels adhesion. All materials used are halogen-free.

Application range: Water mills, aerators and feeders for aquacultures, outdoors and submerged in water.

Design

Design	based on standard EN 50525-2-21 EN 50525-2-51
Conductor	fine wire strands of tinned copper acc. to IEC 60228 resp. EN 60228, Class 5
Insulation	modified PP-compound
Core identification code	coloured acc. VDE 0293-308 resp. HD 308 S2 with GN/YE ground conductor acc. to EN 50334
Outer sheath	polyurethane compound TMPU acc. to EN 50363-10-2 colour: black, similar RAL 9005

Electrical properties at 20 °C

Nominal voltage	U ₀ /U: 450/750 V
Test voltage	core/core: 3500 V AC

Mechanical and thermal properties

Minimum bending radius	occasional flexing: 10 x outer diameter fixed installation: 4 x outer diameter
Temperature range	occasional flexing: -40 °C up to +90 °C max. conductor temperature fixed installation: -50 °C up to +90 °C max. conductor temperature
Flammability	not flame retardant
Halogen free	acc. to IEC 60754-1 and EN 60754-1 acc. to IEC 60754-3 and EN 60754-3
Weather and UV resistance	acc. to EN 50618 acc. to EN 50620 acc. to EN ISO 4892-2-2013, method A (change of colour allowed)
Oil resistance	acc. to EN 50363-10-2
MUD resistance	acc. to IEC 60092-360 Annex C and D
Water-resistance	acc. to EN 50525-2-21 salt water resistance acc. to UL 1309 ammonia water resistance acc. to internal test: 21 days storage in 10 % ammonia solution

Tests

acc. to IEC 60811 resp. EN 60811, EN 50395, EN 50396

General requirements

These cables conform to the EU-Directive 2014/35/EU (Low Voltage Directive)

Environmental information

These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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