



AQUALINE POWER FLEX



LSHF



90°C max



Weather-res
istant



Longitudinal
y waterproof



Oil-resistant

AQUALine Power Flex is a reliable 3 kV power cable engineered for demanding marine environments. It is primarily used for power transmission from the mainland to archipelago areas and other subsea installations. The design is optimized for long-term operation in saltwater, where resistance to moisture and corrosion is essential.

The cable features both an inner and outer polyethylene sheath, providing effective protection against water ingress and external impact. Between the sheaths, a galvanized steel wire armour serves as strain relief and mechanical protection. This construction ensures durability in installations exposed to movement, mechanical stress and harsh environmental conditions.

AQUALine Power Flex is available with different conductor options: bare class 2 copper, or bare or tinned class 5 copper. This flexibility allows adaptation to specific installation and environmental requirements, resulting in a robust and long-lasting power cable for critical marine applications.

APPLICATION

Steel armoured power cable for installation in water and direct burial, combining power conductors with integrated fibre optics. Designed for high mechanical protection and reliable performance in wet environments.

STANDARDS

Conductor

IEC 60228 Class 5

Halogen free

IEC 60754-1

IEC 60754-2

Construction

IEC 60502-1

STANDARDS

Smoke density

IEC 61034-2

CONSTRUCTION

Armouring

1 layer Ø2mm galvanised mild steel wires

Bending radius - Extraction

15 xOD

Bending radius - Final mount fixed

10 xOD

Color

Black (Other colours on request)

Conductor

Bare flexible copper class 5 (class 2 conductor on request)

Fibre optic cable

SM G12

Fillers

Fillers, Water blocking Petroleum Jelly, Helical lapping tape

Inner sheath

Extruded PE

Insulation

XLPE

Water max depth

600 m

Outer sheath

Extruded PE

PROPERTIES

Max. continuous temperature

+90°C

Max temperature

70 °C

Min. temperature

-30 °C

AC Voltage rating U_0/U

1,8/3kV



Name	Outer diameter [mm]	Total weight [kg/km]	Installation Current in open air, ambient temperature 30°C [A]
AQUALine Power Flex 3x16	30.4	1791	100
AQUALine Power Flex 3X25	33.1	2210	127
AQUALine Power Flex 3X35	36.1	2692	158
AQUALine Power Flex 3X50	39.3	3302	192
AQUALine Power Flex 3X70	45.1	4261	246
AQUALine Power Flex 3X95	47.6	5097	298
AQUALine Power Flex 3X120	53.1	6192	346
AQUALine Power Flex 3X150	57	7308	399
AQUALine Power Flex 3X185	60.9	8580	456
AQUALine Power Flex 3X240	68.2	10674	538

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