

Cable for microstructure measurements

General

To minimise the vibration of free sinking or rising microstructure profiler, special cable between profiler and ship must be used. ISW offers several cables with properties optimised for sinking and rising microstructure profiler. The cables are very flexible, robust, and reliable. All cables have polyurethane jacked and kevlar strength members. Due to a special surface structure and its high flexibility, the cables are running safely from the drum under low tension condition.

MSC4/190

The cable is specially designed for the MSS60 and MSS90 profiler (sinking measurements). Its sinking velocity in water is adjusted to the sinking velocity of the profiler. The cable can also be used to operate other light profilers.

MSC4/500

The cable can be used for the MSS90-D profilers, but also for profilers like, e.g., FLY or TurboMAP.

SMC4/100

Special cable for near surface rising measurements with the MSS Profiler.

Cable specifications

Parameter	MSC4/190	MSC4/500	SMC4/100
Electrical wires	4 x 0.25 mm ²	4 x 0.25 mm ²	4 x 0.14 mm ²
Diameter	approx. 4.7 mm	approx. 5.6 mm	approx. 7 mm
Breaking strength	approx. 190 kg	approx. 500 kg	> 100 kg
Weight in air	24.4 g/m	31.5 g/m	32.3 g/m
Weight in water	7 g/m	6.9 g/m	-6 g/m
Impedance	75 Ω/km ± 10%	75 Ω/km ± 10%	42 Ω/km ± 10%
Capacity between wires*			
neighbouring wires	45 pF/m ± 15%	45 pF/m ± 15%	28 pF/m ± 15%
opposite wires	35 pF/m ± 15%	35 pF/m ± 15%	26 pF/m ± 15%
Color**	orange	orange	orange

* The capacity between the wires increase under high pressure

** Other colors on request

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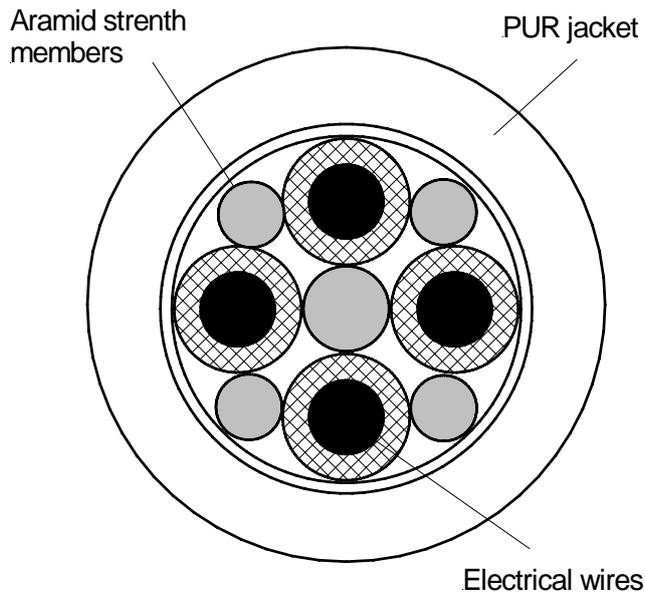


Figure 1: Construction of cables MSC4/190 and 4/500

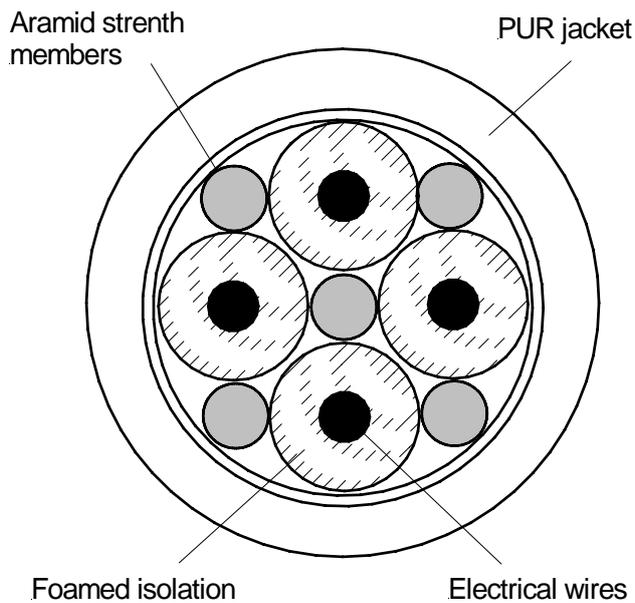


Figure 2: Construction of swimming cable SMC4/100

Technical specifications can be changed without notice!

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