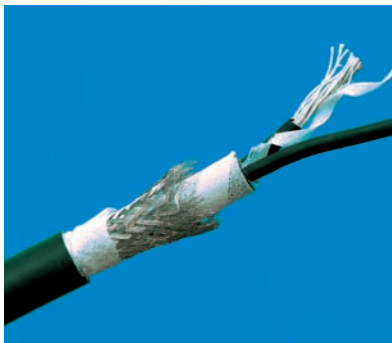


Business Unit **Special Conductors**

Water blocking strands using swellable yarn fillers

The complete, long lasting alternative to silicon filled, water blocked strands and ropes



Potential Applications

- Shipwiring – both commercial and military
- Sub-sea cables and umbilicals
- Automotive cables
- Computer keyboards
- Car wash machinery
- Power and energy cables
- Control cables
- ...

Advantages

- Silicon-free (of particular interest to the automotive industry)
- Clean to use and process
- Reduced weight
- Environmentally friendly

We are able to manufacture water blocking strands with no impact on the overall dimensions of the original strand. Our precise production methods also allow us to manufacture small cross sections. Please call us to discuss your requirements.

The founding principle of swellable yarns is based on Super Absorbing Polymers (SAP) that swell immediately on water ingress, instantly sealing any voids and preventing any further penetration of the water along the length of the cable, thereby limiting any damage to a single area.

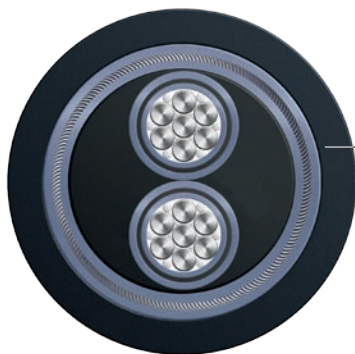
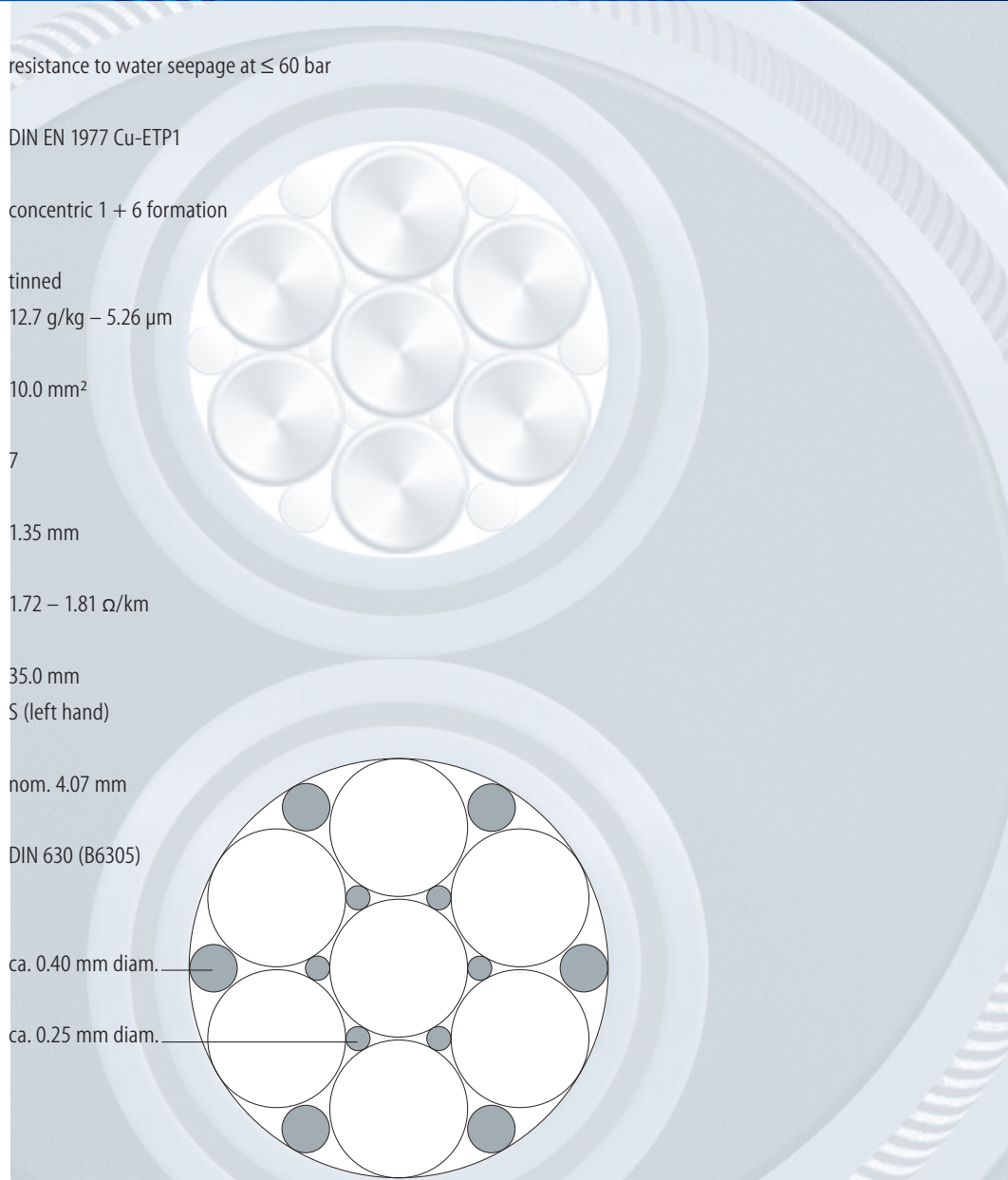
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Water blocking strands using swellable yarn fillers

Sample construction CU-LWD-LI SN W 10 7 x 1.35 + water swellable yarn fillers

Technical Data Sheet

Critical Parameter	resistance to water seepage at ≤ 60 bar
Material	DIN EN 1977 Cu-ETP1
Construction	concentric 1 + 6 formation
Surface	tinned
Tin coating (calculated)	12.7 g/kg – 5.26 μm
Conductor cross section (nominal)	10.0 mm ²
Number of wires	7
Single wire diameter (nominal)	1.35 mm
DC Resistance at 20°C	1.72 – 1.81 Ω/km
Lay Length (nominal)	35.0 mm
Lay Direction	S (left hand)
Diameter/Tolerance	nom. 4.07 mm
Reel size	DIN 630 (B6305)
Water swellable yarn fillers	ca. 0.40 mm diam.
Water swellable yarn fillers	ca. 0.25 mm diam.



Example of typical application

Other sizes and constructions available on request.

LEONI Draht GmbH · Treuchtlinger Straße 20 · D-91781 Weißenburg

Phone +49 (0)9941-404-27 · E-Mail special-conductors@leoni.com · www.leoni-special-conductors.com