Water resistant Cables
Water resistant Cables

For constant use in water for general use, waste water and drinking water*, up to a depth of immersion of 500 m to connect electrical operating materials such as submersible motor pumps, for medium mechanical stresses.

*on request
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<td>16</td>
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</table>
**Tauchflex-R 750V, blue, submersible-pump cable**

**Technical data**
- Special cables corresponding to DIN VDE 0250 and 0282 part 810
- **Temperature range**
  - -40 °C to +80 °C (max. temperature for the outer surface)
- **Permissible operating temperature** at conductor +90°C
- **Nominal voltage** U0/U 450/750 V
- **Operating voltage** for alternating and three-phase currents (UL 413/825 V), for direct currents U0/U 619/1238 V
- **Current rating** to DIN 57100 part 523/ VDE 0100 part 523
- **Test voltage** 1,500 V
- **Minimal weight gain under water**
- **Operating temperature**
  - up to 8 mm cond. φ: min. 3x cond. φ above 8 mm to 12 mm cond. φ: min. 4x cond. φ above 12 mm cond. φ: min. 5x cond. φ up to 12 mm cond. φ: min. 3x cond. φ above 12 mm cond. φ: min. 4x cond. φ
- **Maximum bending radius**
  - in water: max. +40 °C, max. +60 °C with limited duration of life in air: flexible -50 °C to +80 °C stationary -30 °C to +80 °C

**Cables for use in drinking water with BAM-certificate on request (BAM Bundesanstalt für Materialprüfung/Federal Institute for Materials Testing).**

**Installation adaptability for machinery material of protection class II**
- As rotor-connection cable for motors up to 1000 V with protected fixed installation in tubes.

**Properties**
- **Good insulation properties when submerged in water**
- Minimal weight gain under water
- The mechanical stability of the insulation materials remains constant even when submerged
- **Not suitable for drinking water.**
- **Cables for use in drinking water with BAM-certificate on request (BAM Bundesanstalt für Materialprüfung/Federal Institute for Materials Testing).**

**Note**
- G = with green-yellow earth core;
- x = without green-yellow earth core.
- **AWG sizes are approximate equivalent values. The actual cross-section is in mm².**
- Please note: halogen-free types available on request.

**Application**
Tauchflex-R is a special cable for use as a connecting and control cable for submersible motor pumps, underwater floodlights, floating switch and has proven its worth for constant use in waste water or water for general use up to the depth of immersion of 500 m 60 bar and under temperatures up to 70 °C. Tauchflex-R can also be installed for use in dry, damp and humid areas as well as in the open air. Not suitable for the installation in hazardous areas.

**Caution**: The product is conform with the EC Low-Voltage Directive 2006/95/EC.

### Part no. 1

<table>
<thead>
<tr>
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Dimensions and specifications may be changed without prior notice. (RI01)
**Technical data**
- Special cables corresponding to DIN VDE 0250 and 0282 part 810
- **Temperature range**
  - -40 °C to +60 °C (max. temperature for the outer surface)
  - Permissible operating temperature at conductor +90°C
- **Nominal voltage**
  - U0/U 450/750 V
- **Operating voltage**
  - For alternating and three-phase currents U0/U 413/825 V, for direct currents U0/U 619/1238 V
- **Current rating**
  - up to 12 mm cond. ø min. 3x cond. ø
  - above 12 mm cond. ø min. 5x cond. ø
  - above 8 mm to 12 mm cond. ø min. 4x cond. ø
  - up to 8 mm cond. ø min. 3x cond. ø
- **Minimum bending radius**
  - up to 8 mm cond. ø min. 3x cond. ø above 8 mm to 12 mm cond. ø min. 4x cond. ø above 12 mm cond. ø min. 5x cond. ø fixed installation
  - up to 12 mm cond. ø min. 3x cond. ø above 12 mm cond. ø min. 4x cond. ø
- **Temperature limit**
  - in water: max. +40 °C, max. +60 °C with limited duration of life
  - in air: flexible -50 °C to +80 °C stationary -30 °C to +80 °C
- **Rotational stability**
  - up to 1000 V with protected fixed installation
- **Application**
  - Tauchflex-FL is a special cable for use as a connecting and control cable for submersible motor pumps, underwater floodlights, floating switches and has proven its worth for constant use in waste water or water for general use up to the depth of immersion of 500 m (50 bar) and under temperatures of up to 70 °C. Tauchflex-FL can also be installed for use in dry, damp and humid areas as well as in the open air. Not suitable for the installation in hazardous areas.
- **Shipping Information**
  - Tauchflex-FL is supplied in a coil and in reel form. Lengths from 10 to 600 metres.

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**Cable structure**
- Bare copper, fine wire conductors, bunched stranded to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Filled as separator
- EPR core insulation, compound type 3G13 adapted to DIN VDE 0207 part 21
- EPR outer sheath, blue, compound type 5G13 adapted to DIN VDE 0207 part 21
- Foil as separator
- Core layed parallel

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**Properties**
- Good insulation properties when submerged in water
- Minimal weight gain under water
- Flexible operating temperature of -40 °C to +80 °C (max. temperature for the outer surface)
- The mechanical stability of the insulation materials remains constant even when submerged
- **Not suitable for drinking water.**
- Installation adaptability for machinery material of protection class II
- As rotor-connection cable for motors up to 1000 V with protected fixed installation in tubes.

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**Note**
- G = with green-yellow earth core;
- x = without green-yellow earth core.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- **Please note:** halogen-free types available on request.

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**Part no.**
- **No.cores x cross-sec. mm²**
- **Outer Ø - max. mm**
- **Cop. weight kg / km**
- **Weight approx. kg / km**
- **AWG-No.**

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**Dimensions and specifications may be changed without prior notice. (R0D)
Technical data
- Water resistant heavy hose pipe to DIN VDE 0282 part 16, HD 22.16 S1
- Temperature range
  - in use -25 °C
  - fixed installation -40 °C
- Permissible operating temperature at conductor +60 °C
- Nominal voltage
  - for protected and fixed installation: Uo/U 450/750 V
  - for unprotected installation: Uo/U 600/1000 V
- Test voltage
  - 2500 V
- Permanent tensile load
  - max. 15 N/mm²
- Minimum bending radius
  - 6 x cable Ø
  - fixed installation 4x cable Ø

Cable structure
- Copper conductor fine wire stranded, bare to DIN VDE 0295 cl. 5, BS 6360 cl. 5
- Rubber core insulation I4 to DIN VDE 0282 part 1
- Core identification to DIN VDE 0295-308 and HD 186
- Core colours
  - up to 6 cores one-coloured
  - 6 and more cores, black with numbering 3 and above, with green-yellow earth core
- Cores stranded in layers with optimal lay-length
- Special polychloroprene rubber outer jacket
- Outer jacket black

Properties
- Resistant to Ozone
- Weather
- Oil resistant

Test according to EN 60811-2-1

Test according to DIN VDE 0482

Application
Water resistant heavy hose pipe for connection of submersible pumps and similar applications, at a recommended water depth to 10 m and a maximum water temperature of +40 °C. Can be used in dry, damp and wet areas as well as in open air.

Part no. | No. cores x cross.-sec. | Ø outer ± max. | Weight approx. | AWG-No.
--- | --- | --- | --- | ---
57347 | 1 x 1,5 | 6.7 - 7.1 | 54.4 | 16
57348 | 1 x 2,5 | 6.5 - 7.9 | 24.0 | 14
57349 | 1 x 4 | 7.2 - 9.5 | 80.0 | 10
57350 | 1 x 6 | 7.9 - 9.8 | 58.0 | 10
57351 | 1 x 10 | 9.5 - 11.9 | 96.0 | 8
57352 | 1 x 16 | 10.8 - 15.4 | 154.0 | 6
57353 | 1 x 25 | 12.7 - 17.5 | 240.0 | 4
57354 | 1 x 35 | 14.5 - 19.7 | 355.0 | 3
57355 | 1 x 50 | 16.5 - 20.6 | 480.0 | 1
57356 | 1 x 70 | 18.6 - 23.5 | 672.0 | 0.6
57357 | 1 x 95 | 20.8 - 26.6 | 972.0 | 0.4
57358 | 1 x 120 | 22.8 - 28.6 | 1152.0 | 0.4
57359 | 1 x 150 | 25.2 - 31.4 | 1440.0 | 0.4
57360 | 1 x 185 | 27.6 - 34.4 | 1776.0 | 0.4
57361 | 1 x 240 | 30.5 - 38.5 | 2544.0 | 0.4
57362 | 1 x 300 | 35.5 - 41.9 | 2880.0 | 0.4
57363 | 1 x 400 | 37.4 - 46.8 | 3840.0 | 0.4
57364 | 1 x 500 | 41.5 - 52.0 | 4800.0 | 0.4
57365 | 2 x 1 | 7.7 - 10.0 | 18.0 | 0.7
57366 | 2 x 1,5 | 8.5 - 11.0 | 28.0 | 0.6
57367 | 2 x 2,5 | 10.2 - 13.1 | 48.0 | 0.6
57368 | 2 x 4 | 11.8 - 15.1 | 77.0 | 0.6
57369 | 2 x 6 | 13.1 - 16.8 | 110.0 | 0.6
57370 | 2 x 10 | 17.7 - 22.6 | 192.0 | 0.6
57371 | 2 x 16 | 20.2 - 25.5 | 307.0 | 0.4
57372 | 2 x 25 | 24.5 - 30.7 | 480.0 | 0.4
57373 | 3 x 1 | 8.3 - 10.7 | 29.0 | 0.7
57374 | 3 x 1,5 | 9.2 - 11.8 | 48.0 | 0.6

Note
- G = with green-yellow earth core
- x = without green-yellow earth core
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
HELUKABEL Products are available from MARYLAND METRICS P.O. Box 261 Owings Mills, MD 21117 USA web: http://mdmetric.com ph: (410)358-3130 (800)638-1830 fx: (410)358-3142 (800)872-9329 email: sales@mdmetric.com RFQ form: http://mdmetric.com/RFQ.htm How to order: Please preface each HELUKABEL part number with ‘R955K-’ Example (using the part number): R955K-14078

H07 RN8-F waterproof rubber-sheathed cable, harmonized type

<table>
<thead>
<tr>
<th>Part no.</th>
<th>No.cores x cross-sec. mm²</th>
<th>Outer Ø min. - max. mm</th>
<th>Cop. weight kg / km</th>
<th>Weight approx. kg / km</th>
<th>AWC-No.</th>
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Dimensions and specifications may be changed without prior notice. (RI01)

Cable Glands

**Cable glands for standard applications**
- Plastic Glands
- Cable Glands of Brass
- Accessories

**Cable glands for special application conditions**
- for electromagnetic compatibility (EMC)
- for rugged applications and special chemical resistance
- for high temperature use
- for explosive areas
- for special mounting conditions
- for special pressure conditions

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