Colour Abbreviations according to VDE and IEC

It is planned to use in future an uniform common colour abbreviations according to IEC 60757 (identical to CENELEC-harmonized document HD 457).

The following table shows the comparison of German and IEC colour abbreviations:

<table>
<thead>
<tr>
<th>colour</th>
<th>new</th>
<th>old</th>
<th>Abbreviation according to IEC 60757</th>
</tr>
</thead>
<tbody>
<tr>
<td>black</td>
<td>SW</td>
<td>sw</td>
<td>BK</td>
</tr>
<tr>
<td>brown</td>
<td>BR</td>
<td>br</td>
<td>BN</td>
</tr>
<tr>
<td>red</td>
<td>RT</td>
<td>rt</td>
<td>RD</td>
</tr>
<tr>
<td>orange</td>
<td>OR</td>
<td>or</td>
<td>OG</td>
</tr>
<tr>
<td>yellow</td>
<td>GE</td>
<td>ge</td>
<td>YE</td>
</tr>
<tr>
<td>green</td>
<td>GN</td>
<td>gn</td>
<td>GN</td>
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<td>blue</td>
<td>BL</td>
<td>bl</td>
<td>BU</td>
</tr>
<tr>
<td>violet</td>
<td>VI</td>
<td>vi</td>
<td>VT</td>
</tr>
<tr>
<td>grey</td>
<td>GR</td>
<td>gr</td>
<td>GY</td>
</tr>
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<td>white</td>
<td>WS</td>
<td>ws</td>
<td>WH</td>
</tr>
<tr>
<td>pink</td>
<td>RS</td>
<td>rs</td>
<td>PK</td>
</tr>
<tr>
<td>turquoise</td>
<td>TK</td>
<td>tk</td>
<td>TO</td>
</tr>
</tbody>
</table>

IEC = International Electrotechnical Commission

Identification of the core according to DIN VDE 0293 and core colour to DIN 47002 and IEC 60304

- Wiring cable with a nominal voltage U0/U 300/500 V
  - The following colours have been recommended: black, white, blue, grey, brown, red, orange, turquoise, violet and pink.
  - Exceptions are green and yellow which are only admitted to be used, if the safety regulations permit.
  - The colour green is allowed to use for illuminations and light decorations.
  - All two-colour combinations of the above single colours are allowed to be used.

- Single core cables with a nominal voltage U0/U 450/750 V
  - The following single colours have been recommended (only of one colour)
    - black, white, blue, grey, brown, red, orange, turquoise, violet and pink.
  - Two-colour combinations are not allowed to be used, with the exception of green-yellow.

- Single core cables and single core sheathed cables
  - The colour is black or green-yellow.
  - The exception is for illumination and light decorations where the core colour brown is permitted.

Identification of the cores through colours

are allowed:   
  a) through colouring the whole insulation compound or
  b) through colouring the outer surface or
  c) through coloured tapes, so far it is specified in the standards

By identification through colouring only on outer surface (item b) but not allowed to have any colour additives beneath the insulation with an exception by double colour coding.

By core identification with green-yellow, one of the colours have to cover not less than 30% and the other not more than 70% of the surface.

Identification through number coding

The printing of numberings on cores consists of repeating codes (with number and dashes), printed longitudinally on core (for coordination and dimensions see DIN VDE 0293)

Note

The following core identifications are valid for power cables with nominal voltage up to 1000 V. Scopes for valid DIN VDE prescription:

- DIN VDE 0250 – Insulated power cables
- DIN VDE 0255 – Cables with paper-insulation and metal sheath
- DIN VDE 0265 – Cables with PVC-insulation and lead sheath
- DIN VDE 0266 – Halogen-free cable with improved characteristics in case of fire
- DIN VDE 0271 – Cable with PVC-insulation and PVC outer jacket 0,6/1 kV
- DIN VDE 0272 – XLPE-insulated cable
- DIN VDE 0281 – PVC-insulated power cable
- DIN VDE 0282 – Rubber-insulated power cable