Cable Symbols of Different Standards

<table>
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<tr>
<th>Harmonized cables acc. to VDE 0281/0282</th>
<th>Telecommunication cables acc. to VDE 0815/16</th>
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<td>1. Relationship to Standards</td>
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<td>H Harmonized type (HAR)</td>
<td>A outdoor cable</td>
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<td>A authorised national standards</td>
<td>G mining cable</td>
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<td>2. Nominal voltage</td>
<td>J installation cable</td>
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<tr>
<td>01 100 V</td>
<td>L equipment wire</td>
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<tr>
<td>03 300/300 V</td>
<td>S switch cable</td>
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<tr>
<td>05 300/500 V</td>
<td>Li equipment wire with fine stranded conductor</td>
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<tr>
<td>07 450/750 V</td>
<td>RD rhenomatic-cable</td>
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<td>3. Insulating materials</td>
<td>RE instrumentation cable</td>
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<tr>
<td>V PVC</td>
<td></td>
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<tr>
<td>V2 PVC (90 oC)</td>
<td></td>
</tr>
<tr>
<td>V3 PVC cold-resistant</td>
<td></td>
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<tr>
<td>B EPR-rubber (90 °C)</td>
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<tr>
<td>G EVA</td>
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<tr>
<td>E PE</td>
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<tr>
<td>R Natural or synthetic rubber</td>
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<tr>
<td>S Silicon rubber</td>
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<tr>
<td>X XLPE</td>
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<td>Z LSOH -compound</td>
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<td>4. Sheathing materials</td>
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<td>V PVC</td>
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<tr>
<td>V3 PVC cold-resistant</td>
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<tr>
<td>V4 PVC cross-linked</td>
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<tr>
<td>V5 PVC oil-resistant</td>
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<tr>
<td>R natural or synthetic rubber</td>
<td></td>
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<tr>
<td>N chloroprene rubber</td>
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<tr>
<td>N2 chloroprene rubber for welding cables</td>
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<tr>
<td>2. Additional specifications</td>
<td></td>
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<tr>
<td>B lightning protection</td>
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<td>J Indukction protection</td>
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<tr>
<td>E Industry-electronics</td>
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<td>3. Insulating materials</td>
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<tr>
<td>Y PVC</td>
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<tr>
<td>2Y PE</td>
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<td>02Y cell-PE</td>
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<td>02YS foam-Skin</td>
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<tr>
<td>5Y PTFE (teflon)</td>
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<td>6Y FEP (teflon)</td>
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<td>7Y ETFE (teflon)</td>
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<td>P paper</td>
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<td>4. Special construction</td>
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<tr>
<td>F petrol jelly filler</td>
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<tr>
<td>L aluminium sheath</td>
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<tr>
<td>LD corrugated Al.-sheath</td>
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<tr>
<td>(L) laminated aluminium sheath</td>
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<tr>
<td>C copper braided screen</td>
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</tbody>
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Caledonian Addison
Industrial Cables

German Standard (VDE)

N4 chloroprene rubber heat-resistant
N8 chloroprene rubber (water-resistant)
J glass fibre braid
T textile braid
T6 textile over each core
Q polyurethan (PUR)
Q4 polyamide
Z LSOH -compound

5. Special constructions
C concentric copper conductor
C4 copper braided screen
H flat, divisible cords
H2 flat, non divisible cords
H6 flat, non divisible cords for elevators
H7 two-layer insulating jacket
H8 helical cord

6. Conductor form
U round, solid
R round, stranded
K fine stranded,
(fixed installation)
F fine stranded (flexibel cords)
H fine stranded (highly flexible)
Y tensil conductor
D fine stranded for welding
cables
E fine stranded for welding
cables (highly flexible)

7. Protective conductor
X without green/yellow core
G with green/yellow core

(St) screen of plastic coated Al-foil
(K) copper tape screen
(B) amouring
(Z) steel wire amouring
(Zg) strain-bearing element with glass yarn
bundles
(ZN) strain-bearing element non metallic
W corrugated steel sheath
M lead sheath
Mz special lead sheath
b amouring
c jute jacket+ bituminous compund
E compund with embedded tape

5. Sheathing materials
see 3.insulation materials

6. Stranding elements
1 single core
2 pair
4 quat

7. Typ of stranding
F star quad (railway)
St star quad with phantom circuit (long distance)
St I star quad (long distance)
St III star quad (subscriber line)
TF star quad for carrier frequency
PiMF pair in metal foil
DIMF triple in metal foil
ViMF quad in metal foil

8. Stranding layout
Lg stranding in layer
Bd stranding in unit
### Power cables acc. to VDE 0250

1. **Relationship to Standards**
   - N according to VDE
   - (N)/X with reference to VDE

2. **Insulating materials**
   - Y PVC
   - 4Y polyamide
   - 5Y PTFE (teflon)
   - 6Y FEP (teflon)
   - 9Y polypropylene
   - 11Y polyurethan (PUR)
   - 2X XLPE
   - G elastomer
   - 2G silicon
   - 3G EPR-rubber
   - 4G EVA
   - 5G polychloroprene
   - HX LSOH

3. **Cable description**
   - A single-core
   - D solid wire
   - AF single-core, fine stranded
   - F flexible wire for fittings
   - L fluorescent tube cable
   - LH connecting cable for light mechanical load
   - MH connecting cable for middle mechanical load
   - SH connecting cable for heavy mechanical load
   - SSH connecting cable for special mechanical load
   - SL control/welding cable
   - S control cable

### Power cables acc. to VDE 0276

1. **Relationship to Standards**
   - N according to VDE
   - (N) with reference to VDE

2. **Conductor**
   - - copper
   - A aluminium

3. **Insulating materials**
   - Y PVC
   - 2Y PE
   - 2X XLPE
   - H LSOH compound

4. **Concentric conductor**
   - C Concentric copper conductor
   - CW Concentric copper conductor reversing lay up

5. **Screen**
   - S common copper shield
   - SE individually screened cores

6. **Metal sheath**
   - K lead

7. **Inner protection or plastic sheath**
   - see 3.insulation materials

8. **Armouring**
   - F flat steel wire
   - R round steel wire
   - G steel tape

9. **Outer sheath**
   - see 3.insulation materials

10. **Protective conductor**
    - -J with green/yellow core
### LS light control cable
### FL flat cable
### Si silicon cable
### Z twin cable
### GL glass fibre
### Li stranded wires acc to. VDE 812
### LiF fine stranded wires acc. to VDE 812

#### 4. Special constructions
- **T** strength member
- **ö** oil-resistant
- **u** flame resistant
- **w** heat-/weather resistant
- **FE** fire resistant
- **C** screen
- **S** steel wire armouring

#### 5. Sheathing materials
see 2. insulation materials
- **P** Polyurethane

#### 6. Protective conductor
- **-J** with green/yellow core
- **-O** without green/yellow core

#### 11. Conductor form
- **RE** round, solid
- **RM** round, stranded
- **SE** sector shaped, solid
- **SM** sector shaped, stranded