

Power cables
1 up to 30 kV

Building Wires

Flexible Cables

Telecommunication
Cables and Cords

Control and
Electronic Cable

Cable with
circuit integrity

LAN cables

Conductor ropes

Technical Appendix

**Power cables
acc. to VDE 0250**

□ □ □ □ □ □ □ □ X □ □
1 2 3 4 5 6 7 8

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 polypropylen
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
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 I
see 2.insulation materials
P Polyurethan

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

7. Number of cores

8. Cross-section of conductor

**Harmonized cables
acc. to VDE 0281/0282**

□ □ □ □ □ □ □ □ □ □
1 2 3 4 - 5 6 7 8 9

1. Relationship to Standards
H Harmonized type [HAR]
A authorised national standards

2. Nominal voltage
01 100 V
03 300/300 V
05 300/500 V
07 450/750 V
11 600/1000 V

3. Insulating materials
V PVC
V2 PVC (90 oC)
V3 PVC cold-resistant
B EPR-rubber (90 °C)
G EVA
E PE
R natural or synthetic rubber
S silicon rubber
X XLPE
Z LSOH -compound

4. Sheathing materials
V PVC
V2 PVC (90 oC)
V3 PVC cold-resistant
V4 PVC cross-linked
V5 PVC oil-resistant
R natural or synthetic rubber
N chloroprene rubber
N2 chloroprene rubber for welding cables
N4 chloroprene rubber heat-resistant
N8 chloroprene rubber (water-resistant)
J glass fibre braid
T textil braid
T6 textil 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. Number of cores

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

9. Cross-section of conductor

**Telecommunication cables
acc. to VDE 0815/16**

□ □ - □ □ □ □ X □ X □ □ □ □
1 2 3 4 5 6 7 8 9 10

1. Relationship to Standards
A outdoor cable
G mining cable
J installation cable
L equipment wire
S switch cable
Li equipment wire with fine stranded conductor
RD rhenomatic-cable
RE instrumentation cable

2. Additional specifications
B lightning protection
J Induktion protection
E Industry-electronics

3. Insulating materials
Y PVC
2Y PE
02Y cell-PE
02YS foam-Skin
5Y PTFE (teflon)
6Y FEP (teflon)
7Y ETFE (teflon)
P paper

4. Special construction
F petrol jelly filler
L aluminium sheath
LD corrugated Al.-sheath
(L) laminated aluminium sheath
C copper braided screen
(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 compound
E compound with embedded tape

5. Sheathing materials
see 3.insulation materials

6. Number of elements
number of stranding elements

7. Stranding elements
1 single core
2 pair
4 quat

8. Conductor diameter

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

10. Stranding layout
Lg stranding in layer
Bd stranding in unit

**Power cables
acc. to VDE 0276**

□ □ □ □ □ □ □ □ □ □ X □ □
1 2 3 4 5 6 7 8 9 10 11 12

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
-O without green/yellow core

11. Number of cores

12. Conductor form
RE round, solid
RM round, stranded
SE sector shaped, solid
SM sector shaped, stranded