



Cable Symbols of Different Standards

Harmonized cables acc. to VDE 0281/0282

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

3. Insulating materials

V	PVC
V2	PVC (90 °C)
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 °C)
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

Telecommunication cables acc. to VDE 0815/16

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



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. 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 compound
E	compound 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 circiut (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 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

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	Polyurethan
---	-------------

6. Protective conductor

-J	with green/yellow core
-O	without 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