

## ■ HARMONIZED IDENTIFICATION

The harmonized identifications for cables and wires come to an agreement with the CENELEC-structure (HAR-agreement) are determined by the certification institute. These identifications conform the harmonized standards. The harmonized identification must be visible on the core or the sheath in form of an imprint or embossing, or contained with a three-coloured black-red-yellow protected identification thread of different colour lengths (dimension in cm).

Harmonized identification				Country	Certification institute	
Kind of imprint or embossing	Colour of identification thread black red yellow (dimension in cm)				Name	Designation
CEBEC <HAR>	1	3	1	Belgium	Comité Electrotechnique Belge	CEBEC
<VDE> <HAR>	3	1	1	Germany	Verband Deutscher Elektrotechniker e.V. VDE Prüf- und Zertifizierungsinstitut	VDE
USE <HAR>	3	3	1	France	Union Technique de l'Electricité	UTE
IEMMEQU <HAR>	1	3	5	Italy	Istituto Italiano de Marchio Qualità	IMQ
BASEC <HAR>	1	1	3	Great Britain and North Ireland	British Approvals Service for Cables	BASEC
KEMA-KEUR <HAR>	1	3	3	Netherlands	N.V. tot Keuring van Elektrotechnische Materialen	KEMA
SEMKO <HAR>	1	1	5	Sweden	Svenska Elektriska Materielkontrollanstalten	SEMKO
<ÖVE> <HAR>	3	1	5	Austria	Österreichischer Verband für Elektrotechnik	ÖVE
<DEMKO> <HAR>	3	1	3	Denmark	Danmarks Elektriske Materialkontroll	DEMKO
<NSAI> <HAR> <IIRS> <HAR>	3	3	5	Ireland	National Standards Authority of Ireland old: Institute for Industrial Research and Standards	NSAI (IIRS)
NEMKO <HAR>	1	1	7	Norway	Norges Elektriske Materiellkontroll	NEMKO
<UNE> <HAR> ((<UNE>))	3	1	7	Spain	up to 31. 12. 1992: Asociación Electrotécnica y Electrónica Española	AEE
AENOR <HAR>	3	1	9		from 01.01.1993: Asociación Española de Normalización y Certificación	AENOR
ELOT <HAR>	3	3	7	Greece	Hellenic Organization for Standardization	ELOT
<IPQ> <HAR>	1	1	9	Portugal	Instituto Português da Qualidade	IPQ
SEV <HAR>	1	3	9	Switzerland	Schweizerischer Elektrotechnischer Verein	SEV
FIMKO	1	3	7	Finnland	FIMKO LTD	FIMKO
MEEI <HAR>	3	3	9	Hungarian	Magyar Elektrotechnikai Ellenörző Intézet	MEEI

# ■ DESIGNATION CODE FOR HARMONIZED CABLES

Construction reference

H	05	V		V5		–	F		25	G	0,75
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## Identifications of designation

- A** authorised national standards  
**H** harmonized standards

## Nominal voltage U

- 01** 100 V  
**03** 300/300 V  
**05** 300/500 V  
**07** 450/750 V

## Insulation material

- B** (EPR) Ethylene-propylene-rubber  
**G** (EVA) Ethylene-Vinylacetat-Copolymer  
**N2** (CR) Chloroprene rubber for welding cables  
**R** (EPR) Ethylene propylene rubber  
**S** (SiR) Silicone rubber  
**V** (PVC) Polyvinyl chloride  
**V2** (PVC) Polyvinyl chloride heat-resistant  
**V3** (PVC) Polyvinyl chloride low-temperature  
**V4** (PVC) Polyvinyl chloride cross-linked  
**Z** (PE) Polyethylene cross-linked

## Structural elements

- C4** Cooper-Screen braiding over laid-up cores  
**Q4** (PA) Additional polyimide core jacket  
**T** Additional textile braiding over laid-up cores  
**T6** Additional textile braiding over individual cores

## Sheath/jacket material

- B** (EPR) Ethylene-propylene rubber  
**J** Glass fibre braid  
**N** (CR) Chloroprene rubber  
**N2** (CR) Chloroprene rubber for welding cables  
**N4** (CR) Chloroprene rubber heat-resistant  
**Q** (PUR) Polyurethane  
**R** (NR a./o. SR) Natural- a./o. synthetic rubber  
**T** Textile braid  
**T2** Textile braid with flame retardant compound  
**V** (PVC) Polyvinyl chloride  
**V2** (PVC) Polyvinyl chloride heat-resistant  
**V3** (PVC) Polyvinyl chloride low-temperature  
**V4** (PVC) Polyvinyl chloride cross-linked  
**V5** (PVC) Polyvinyl chloride oil resistant

## Special structural features

- D3** Stress-relieving elements (support wire)  
**D5** Centre core (no supporting element)  
**FM** Telecommunications cores integrated in power cables  
**H** Flat, separable cable (twin cable)  
**H2** Flat, non-separable cable (two-core sheathed cable)  
**H6** Flat, non-separable cable (multi- and multiple sheathed cable)  
**H7** Two-layer insulating jacket  
**H8** Spiral cables

## Conductor type

- D** Finely stranded, for welding cables  
**E** (very) finely stranded, for welding cables  
**F** Finely stranded, for cables for flexible installation  
**H** (Very) finely stranded, for flexible cables  
**K** Finely stranded, for cables for fixed installation  
**R** Multiple-wire, round, class 2  
**U** Single-wire, round, class 1  
**Y** Tinsel wire, DIN 47104

## Number of cores

## Earth core

- G** With earth core  
**X** Without earth core

## Conductor nominal cross section in mm<sup>2</sup>

### Examples:

#### H07V-U 2,5 black

Harmonized PVC-insulated single-core sheathed cable, 2,5 mm<sup>2</sup> single-core, nominal voltage 750 V

#### H07RN-F 3G 1,5

Harmonized rubber-sheathed-cable for medium tensile loads, three-core 1,5 mm<sup>2</sup>, finely stranded, green-yellow earth core, nominal voltage 750 V

# ■ CODE-DESIGNATION FOR HARMONIZED CABLES AND FLEXIBLE CORDS

## Kind of Standards

### Code- designation Classified to Standards

**H** cables and wires to harmonized documents  
**A** authorised national standards

### Conductor material

without  
designation

Copper  
**- A** Aluminium  
**- Z** Conductor of special material and/or  
special shape

### Type and shape of conductor

**- D** fine wire stranded conductor for welding cables  
**- E** extra fine wire stranded conductor for welding cables  
**- F** fine wire stranded conductor for flexible  
cables according to DIN VDE 0295, class 5  
**- H** extra fine wire stranded conductor for flexible  
cables according to DIN VDE 0295, class 6  
**- K** fine wire stranded conductor for fixed  
installation (if not specified, equivalent to  
DIN VDE 0295, classe 5)  
**- M** Milliken conductor  
**- R** conductor of multistranded wires  
**- S** sector-shaped conductor of multistranded wires  
**- U** round conductor of single wire  
**- W** sector-shaped conductor of single wire  
**- Y** tinsel conductor  
**- Z** conductor of special material and/or special shape

### Core numbers and cross-section of conductor

**Number** number of cores n  
**X** Multiplication sign without green-yellow core  
**G** Multiplication sign for green-yellow core  
**Y** tinsel conductor, whereby the cross-section is  
not specified

### Insulation and sheath materials

**B** Ethylene-propylene-rubber for Temp. of +90°C  
**B2** Ethylene-propylene rubber, hardend  
**B3** Butyl rubber (isobutylene-isoprene rubber)  
**E** Polyethelene  
**E2** Polyethelene, high density  
**E4** Polytetrafluorethylene  
**E5** Perfluor (Ethylene-propylene – copolymers)  
**E6** Ethylene-tetrafluorethylene – copolymers  
**E7** Polypropylene

## Insulation and sheath materials

### Code- designation Materials

**G** Ethylene-vinylacetate – copolymers  
**J** braiding of glass fibre  
**J2** wrapping of glass fibre  
**M** mineral insulation  
**N** chloroprene-rubber (or equivalent material)  
**N2** special compound of chloroprene-rubber  
**N4** Sulfonated chlor or chlorinated polyethelene  
**N5** Nitril-rubber  
**N6** Florinated rubber  
**N7** PVC-Nitril-rubber compound  
**N8** Special-polychloroprene-rubber, water resistant  
**P** Cables with impregnated paper insulation for  
multicore belted cable  
**Q** Polyurethane  
**Q2** Polyethyleneterephthalate  
**Q3** Polystyrole  
**Q4** Polyamide  
**Q5** Polyimide  
**Q6** Polyvinylidene fluoride  
**R** Ethylene-propylene rubber or equivalent  
synthetic elastomer for +60°C temperature of  
+60°C, for permanent temperature of +60°C  
**S** Silicon-rubber  
**T** textile braiding over twisted cores,  
impregnated/unimpregnated  
**T2** textile braiding with flamme retardant  
impregnated composition  
**T3** layer of textile as core wrapping or tape  
**T4** layer of textile as core wrapping or tape with  
flame retardant impregnated composition  
corrosion protection  
**T5** textile braiding over individual core or multicore  
cable, impregnated/unimpregnated  
**T6** PVC soft  
**V** PVC soft, resistant to increased temperature, +90°C  
**V2** PVC soft, for low temperatures  
**V3** PVC soft, cross-linked  
**V4** PVC soft, oil resistant  
**V5** cross-linked polyethylene  
**X** cross-linked compound to a basis of polyolefine, for  
low corrosiv gas and low smoke emission in  
case of fire  
**Z** Thermoplastic compound to a basis of  
polyole-fine, for low corrosiv gas and low smoke  
emission in case of fire  
**Z1**

# ■ CODE-DESIGNATION FOR HARMONIZED CABLES AND FLEXIBLE CORDS

## Metal sheath, concentric conductor and screens

### Code-

### designation Metal sheath

<b>A2</b>	Aluminium sheath, pressed or welded, smooth
<b>A3</b>	Aluminium sheath, pressed or welded, corrugated
<b>A4</b>	Aluminium sheath over individual core
<b>A5</b>	Aluminium sheath of Band
<b>C2</b>	Copper sheath
<b>C3</b>	Copper sheath, corrugated
<b>F</b>	Steel sheath
<b>F3</b>	Steel sheath, corrugated
<b>K</b>	Zinc sheath
<b>L</b>	Alloyed lead sheath for general use
<b>L2</b>	non-alloyed lead sheath, normal pure lead
<b>L4</b>	alloyed lead sheath over individual core
<b>L5</b>	non-alloyed lead sheath over individual core
<b>L6</b>	alloyed lead sheath, but other composition than above

### Concentric conductors

<b>A</b>	concentric aluminium conductor
<b>A6</b>	concentric aluminium conductor, meander-shaped
<b>C</b>	concentric copper-conductor
<b>C6</b>	concentric copper-conductor, meander-shaped
<b>C9</b>	divided concentric copper conductor

### Screens

<b>A7</b>	Aluminium screen
<b>A8</b>	Aluminium screen of individual core
<b>C4</b>	Copper screen as braid over the stranded cores
<b>C5</b>	Copper screen braiding over individual core
<b>C7</b>	Copper screen of tape, round or profile-wires over twisted cores
<b>C8</b>	Copper screen as C7, over individual core
<b>D</b>	screen of one or more thin steel tapes, laying direkt over twisted cores, in contact with a stranded plain conductor

## Armouring

### Code-

### designation Armouring

<b>Z2</b>	Armouring of round steel wires, galvanized/ ungalvanized
<b>Z3</b>	Armouring of flat steel wires, galvanized/ ungalvanized
<b>Z4</b>	Armouring of steel tape, galvanized/ ungalvanized
<b>Z5</b>	Braiding of steel wires, galvanized, ungalvanized
<b>Z6</b>	Supporting braid of steel wires
<b>Z7</b>	Armouring of sectional steel wires
<b>Y2</b>	Armouring of round aluminium wires
<b>Y3</b>	Armouring of flat aluminium wires
<b>Y5</b>	Armouring of special materials
<b>Y6</b>	Armouring of steel wires and/or steel tape and copper wires

### Special constructive supporting elements

<b>D2</b>	Supporting elements of textile or steel wires over cable core
<b>D3</b>	Textil supporting elements of one or more elements, stranded in the core of circular cable or placed in a flat cable
<b>D4</b>	self-supporting cables and wires, where the conductor permits the strain-relieving function
<b>D5</b>	central core element (not as supporting element), used for lift cable
<b>D7</b>	as D3, the supporting element however is connected externally
<b>D8</b>	as D7, however a section horizontal to the axis of the cable forming the number "8"

### Special versions

#### without

<b>designation</b>	round cable construction
<b>H</b>	flat type as seperable cables with or without sheath
<b>H2</b>	flat type of cables unseperable
<b>H3</b>	building cable, flat webbed
<b>H4</b>	multicore flat cable with one plain conductor
<b>H5</b>	two or more single core stranded, non-sheathed cables
<b>H6</b>	flat cables according to HD 359 or EN 50214 with 3 or more cores
<b>H7</b>	Cable with two-sheathed extruded insulation
<b>H8</b>	Coiled conductor

# ■ COMPARISON OF HARMONIZED CABLES WITH IEC AND DIN VDE

## PVC-insulated powercables according to DIN VDE 0285-525 in comparison with IEC

Designation	according to VDE	short designation new	short designation old VDE 0250	nominal cross-section (mm <sup>2</sup> )	nominal voltage U <sub>0</sub> /U (V)	comparative design to IEC
PVC-wiring cables single wire fine wires	0285-525-2-31	H05V-U H05V-K	NYFA, NYA NYFAF, NYAF	0,5 to 1	300/500	227 IEC 05 227 IEC 06
PVC-insulated cables single wire multi-stranded wires fine wires	0285-525-2-31	H07V-U H07V-R H07V-K	NYA NYA NYAF	1,5 to 10 1,5 to 400 1,5 to 240	450/750	227 IEC 01 227 IEC 01 227 IEC 02
PVC-sheathed cables 03VV round flat	0285-525-2-11	H03VV-F H03VVH2-F	NYLHY round NYLHY flat	0,5+0,75 0,5+0,75	300/300	227 IEC 43 227 IEC 43
PVC-sheathed cables 05VV round flat	0285-525-2-11	H05VV-F H05VVH2-F	NYMHY round NYMHY flat	0,75 to 2,5 0,75	300/500	227 IEC 53 227 IEC 53
PVC-control cable	0285-525-2-51	H05VV5-F H05VVC4V5-K	NYSLYÖ NYSLYCYÖ	0,5 to 2,5 0,5 to 2,5	300/500	227 IEC 75 227 IEC 74
PVC-Flat-cable 05VVH6 PVC-Flat-cable 07VVH6	0283-2	H05VVH6-F H07VVH6-F	NYFLY NYFLY	0,75 to 1 1,5 to 25	300/500 450/750	- -

## Rubber-insulated power cables according to DIN VDE 0285-525 in comparison with IEC

Designation	according to VDE	short designation new	short designation old VDE 0250	nominal cross-section (mm <sup>2</sup> )	nominal voltage U <sub>0</sub> /U (V)	comparative design to IEC
Heat-resistant rubberinsulated cable	0285-525-2-42	H07G-U H07G-K	N4GA N4GAF	1,5+2,5 0,5 to 95	450/750	- -
Heat-resistant siliconrubber cable	0285-525-2-41	H05SJ-K	N2GAFU	0,5 to 95	300/500	245 IEC 03
Rubber sheathed flexible cord 05RR	0285-525-2-21	H05RR-F	NLH, NMH	0,75 to 2,5	300/500	245 IEC 53
Rubber sheathed flexible cord 05RN	0285-525-2-21	H05RN-F	NYMHöu	0,75+1	300/500	245 IEC 57
Rubber sheathed flexible cord 07RN	0285-525-2-21	H07RN-F	NMHöu NSHöu	1 to 400	450/750	245 IEC 65 245 IEC 66

### IEC-definition

IEC 227: Polyvinylchloride insulated flexible cables and cords with circular conductors and a rated voltage not exceeding 750 V

IEC 245: Rubber insulated flexible cables and cords with circular conductors and a rated voltage not exceeding 750 V

# ■ DESIGNATION CODE FOR POWER CABLES

Construction reference

## Identifications of designation

**N** DIN VDE standard  
**(N)** similar to DIN VDE standard

## Conductor material

**A** aluminium conductor  
**-** copper conductor

## Insulating materials

**Y** PVC  
**2X** cross-linked PE (XLPE)  
**-** impregnated paper

## Concentric conductor (screen)

**C** concentric conductor of copper  
**CW** concentric conductor of copper in waveconal formation  
**CE** concentric conductor of copper over each individual core  
**S** screen of copper wires  
**SE** screen of copper wires over each individual core  
**H** conductive layers  
**(F)** longitudinally water-proof screen

## Armouring

**B** steel tape armouring  
**F** armour of galvanized flat steel wires  
**G** counter helix of galvanized steel tape  
**R** armour of galvanized round steel wires

## Sheath Material

**A** oversheath made of fibrous material  
**K** lead sheath  
**KL** aluminium sheath  
**Y** PVC  
**2Y** PE

## Protective Conductor

**I** with protective conductor  
**O** without protective conductor

## Number of cores

## Conductor cross section in mm<sup>2</sup>

## Conductor type

**r ...** circular conductor  
**s ...** sector conductor  
**o ...** oval conductor  
**e ...** circular, solid conductor  
**..m** stranded conductor  
**..h** hollow circular conductor  
**/V** compact conductor

## Rating Voltage

0,6/1 kV  
 3,6/6 kV  
 6,0/10 kV  
 12/20 kV  
 18/30 kV

## Examples

### NA2XS2Y 1x 35 RM/16 6/10 kV

Single core XLPE-insulated cable with PE-sheath according to standard, circular, stranded aluminium conductor with nominal crosssection 35 mm<sup>2</sup>, covered with copper-screen 16 mm<sup>2</sup> and rating voltage (U<sub>0</sub> /U) 6/10 kV

### NY-Y-J 12x 1,5 RE 0,6/1 kV

Cable according to standard, PVC-insulated, sheath PVC, with green-yellow marked core, 12 cores with nominal cross-section 1,5 mm<sup>2</sup>, circular conductor, solid, rating voltage 0,6/1 kV



# ■ DESIGNATION CODE FOR TELEPHONE CABLES, JUMPER WIRES AND STRANDED HOOK-UP WIRES

Construction reference

## Basic cable type with additional information

<b>A</b>	outdoor cable	<b>IE</b>	installation cable for industrial electronic
<b>AB</b>	outdoor cable with lightning protection requirements	<b>IE-H</b>	installation cable for industrial electronic, halogen-free
<b>AJ</b>	outdoor cable with induction protection requirements	<b>S</b>	switchboard cable
<b>G</b>	mining cable	<b>T</b>	distribution cable
<b>I</b>	installation cable	<b>YV/Li...</b>	jumper wires/hook-up wires

## Insulation

<b>P</b>	dry paper	<b>3Y</b>	Styroflex
<b>Y</b>	PVC (Polyvinylchloride)	<b>5Y</b>	PTFE
<b>2Y</b>	PE (Polyethylene)	<b>6Y</b>	FEP
<b>02Y</b>	foamed PE (cellular)	<b>7Y</b>	ETFE
<b>02YS</b>	foam-skin insulation		

## Screening

<b>C</b>	screen of braided copper wires	<b>(ms)</b>	magnetic screen steel tape
<b>D</b>	copper screen, helically stranded	<b>(St)</b>	screen of plastic coated metallic foil
<b>F</b>	filling of cable core with petrol-jelly	<b>(Z)</b>	high tensile steel wire braiding
<b>(K)</b>	screen of copper tape with PE-inner sheath		
<b>(L)</b>	aluminium tape		

## Sheath Material

<b>L</b>	smooth aluminium sheath	<b>M</b>	lead sheath
<b>(L)2Y</b>	copolymer coated aluminium	<b>Mz</b>	lead alloy sheath
	moisture barrier sheath	<b>W</b>	corrugated steel sheath
<b>LD</b>	corrugated aluminium sheath		

## Protective coating

<b>Y</b>	PVC sheath	<b>2Y</b>	PE sheath
<b>Yv</b>	reinforced protective sheath of PVC	<b>2Yv</b>	reinforced protective PE sheath
<b>Yw</b>	PVC sheath heat-resistant	<b>E</b>	compound with embedded plastic tape
<b>Yu</b>	PVC flame resistant (non-flammable)	<b>C</b>	protective covering of jute and compound

## Number of stranding elements

<b>.. x1x</b>	single core	<b>.. x4x</b>	quad
<b>.. x2x</b>	pair (double cores)	<b>.. x5x</b>	five-core
<b>.. x3x</b>	triple		

## Conductor diameter in mm

## Type of stranding components

<b>F</b>	star quad with phantom circuit in railway cables	<b>St V</b>	star quad for transmission of $f = 550$ kHz
<b>S</b>	signal core in railway signal cable	<b>St VI</b>	star quad for transmission of $f = 17$ MHz
<b>StO</b>	star quad general	<b>DM</b>	Dieselhorst-Martin quad
<b>St</b>	star quad with phantom circuit for long distance	<b>TF</b>	carrier frequency star quad
<b>St I</b>	star quad without phantom circuit	<b>P</b>	twisted pair
<b>St II</b>	star quad like St III, but with increased capacitance unbalances	<b>PiMF</b>	pair in metal foil
<b>St III</b>	star quad in local (Subscriber) cable	<b>ViMF</b>	quad in metal foil
<b>St IV</b>	star quad for transmission of $f = 120$ kHz	<b>BdiMF</b>	unit in metal foil
		<b>Kx</b>	coaxial cable

## Stranding layout

<b>Lg</b>	layer stranding concentric
<b>Bd</b>	unit stranding

## Armouring wire

<b>A</b>	layer of Al-wires for inductive protection	<b>2B 0,5</b>	2 layers steel tape, thickness 0,5 mm
<b>b</b>	armouring	<b>D</b>	layer of copper wires for inductive protection
<b>B</b>	armouring of steel band for inductive protection	<b>(T)</b>	strain bearing of steel wires for aerial cable
<b>1B 0,3</b>	1 layer steel tape, thickness 0,3 mm		

# CODE-DESIGNATION-EXPLANATIONS FOR CABLES AND INSULATED WIRE

A-	Outdoor cable	-OZ	cable without green-yellow earth core and cores with imprinted numbers
A	approved national design	ö	oil-resistant
AB	Outdoor cable with lighting protection	02Y	Foam-PE, insulation (cellular PE)
AD	Outdoor cable with differential protection	Q	Steel wire braiding
AJ-	Outdoor cable with induction protection	(R...)	round wire, diameter in mm
ASLH	self-supporting communication cables for high voltage overhead lines	RAGL-	Compensating cable for thermocoupling
B	armouring	RD-	Rhenomatic cable
B	spinning of textile yarn	RE	Computer cable
b	armouring	RG-	Coaxial cable according MIL specification
(1B...)	one layer of steel tape... thickness of the steel tape in mm	re	round, single wire
(2B...)	two layers of steel tape... thickness of the steel tape in mm	rm	round, multiwire
BD	unit-type stranding	RS-	computer switchboard cable
BLK	bare copper-conductor without insulation	S	silk whipping
BZ	bronze conductor	S	signal cables for railways
C	screen of copper wire braiding	S(...)	nominal value of mutual capacitance (nF /km)
C	screen of copper wire spinning	-S	signal cable for German Railway
C	outer protection of jute and viscous compound	S-	Switchboard cable
Cu	copper wire	SL	flexible sheathed cable
(-Cu)	total cross-section of copper screens (mm <sup>2</sup> )	2S	two layers of silk whipping
D	screen of copper wires	St	star quad for phantom circuits
(D)	screen of helically applied copper wires	St I	star quad in telephone cables for larger distance
DM	Dieselhorst-Martin quad	St III	star quad in local cables
Dreier	three cores in triple stranded	(St)	static screen
E	copper drain wire	Staku	copper clad steel wire
E(e)	protective covering of viscous compound with embedded layer of plastic tape	Staku-Li	copper clad steel stranded wires
e	single wire, solid	...t	termite protection
F	cable cores assembly with petrol-jelly	T	supporting element for overhead cable
F	foil wrapping	T-	fan out cable
F	flat cable	TF	carrier frequency of pairs or quads triple
F	star quad for railway cable	TiC	triple in copper wire braid
F	star quad for phantom circuits	TiMF	triple in metal foil
(F...)	flat wire armouring... thickness in mm	U	braiding of textile fibres
OF	jelly filled cable core, filling compound of hard substances	VGD	gold-plated
FR	flame retardant	VN	nickel-plated;
f	flexible, fine wire stranding	VZK	galvanized;
ff	extra fine wire stranding	W	corrugated steel sheath
G	insulation or sheath material of rubber (NR) or (SBR)	W	high heat resistant
G-	Mining cable	W	corrugated steel sheath
GJ	Mining cable with induction protection	X	cross-linked polyvinylchlorid (X-PVC) or other materials
GS	glass fibre whipping or braiding	XPE	cross-linked polyethylene (X-PE)
2G	insulation or jacket of silicone rubber, (SIR)	2X	cross-linked polyethylene
3G	insulation or jacket of ethylene propylene rubber, (EPR)	7X	cross-linked Ethylentetrafluorethylen (X-ETFE)
4G	insulation or jacket of ethylene vinylacetate rubber (EVA)	10X	cross-linked Polyvinylidenfluorid (X-PVDF)
5G	insulation or jacket of chloroprene rubber (CR)	Y	PVC, polyvinylchloride
6G	insulation or jacket of chlorosulphonated polyethylene (CSM), Hypalon	Yu	PVC, polyvinylchloride, non-flammable, flame-retardant
7G	insulation or jacket of Fluoroelastomer (FKM)	Yv	PVC, polyvinylchloride, with reinforced sheath
8G	insulation or jacket of Nitrile rubber (NBR)	YV	Equipment wires with tinned conductor
9G	PE-C rubber (CM)	Yw	PVC, polyvinylchlorid, heat resistant upto 90°C
53G	CM, chlorinated Polyethylene	2Y	Polyethylene (PE)
H	insulation or jacket of halogen-free compound	2Yv	Polyethylene, reinforced sheath
H	Harmonized Documents	02Y	Cellular polyethylene
(H...)	maximal value of mutual capacitance (nF /km)	02YS	insulation of cellular polyethylene with outer PE-skin
(HS)	semi-conducting tape of layer	2YHO	insulation of air-spaced polyethylene
HX	cross-linked, halogen-free polymer compound	3Y	insulation polystyrene (PS), Styroflex
...IMF	individual stranding element (pairs or single cores etc.) in metal foil and drain wire	4Y	insulation or jacket of polyamide (PA)
IMF	several stranding elements in metalfoil and drain wire	5Y	insulation or jacket of polytetrafluorethylen (PTFE), HELUFLO <sup>®</sup>
-J	cable with green-yellow earth core	5YX	Perfluoralkoxy (PFA)
-JZ	cable with green-yellow earth core and cores with imprinted numbers	6Y	Perfluoroethylene-propylene (FEP), HELUFLO <sup>®</sup>
K	copper-tape	7Y	insulation or jacket of ethylentetrafluorethylen (ETFE)
(K)	inner sheath and longitudinally folded copper tape	8Y	insulation of polyimid (PI), Kapton <sup>®</sup>
LA	tinsel conductor (flat copper wire stranded over the thread of synthetic fibres)	9Y	polypropylen (PP)
LD	corrugated aluminium sheath	10Y	PVDF, Polyvinylidene fluoride
Lg	in layers stranding	11Y	polyurethan (PUR)
Li	stranded wires conductor	12Y	TPE-E, TPE
(L)Y	laminated sheath Al-tape and PVC-jacket	13Y	TPE-EE, TPE on base of Polyester-Ester
(L)2Y	laminated sheath Al-tape and PE-jacket	31Y	TPE-S, TPE on base of Polystyrol
2L	double enamel coating as insulation	41Y	TPE-A, TPE on base of Polyamide
M	plastic-sheath cable	51Y	PFA, Perfluor-Alkoxylalkane
M	lead sheath	71Y	ECTFE, Monochlorotrifluorethylen
Mz	alloyed lead sheath	91Y	TPE-O, TPE on base of Polyester-Ester
(mS)	magnetic shield	-Z	core imprinted with numbers
N	VDE standard	Z	twin cable
(N)	in adapted to VDE standard	(Z)	high-tensile braid of steel wires
NC	non-corrosiv, smoke-gase	(ZG)	high-tensile element of glass fibre yarn
NF	natural colour	(ZN)	high-tensile of non-metallic elements
-O	cable without green-yellow earth core		