

## Power cables

### I Building wires and cables

Solid and stranded cables and wires :	H05V-U.....	6
	H07V-U.....	7
	FR-N05VV-U.....	8
	FR-N05VV-R.....	9
	(N)YIFY .....	10
Flexible cables and wires :	H05V-K.....	11
	H07V-K.....	12
	H05VV-F.....	13
	H03VV-F.....	15

### II Power network cables

Low voltage underground cables:	U1000R2V & AR2V-(N)2XY.....	17
	NYY& NAYY.....	21
	NYY Control.....	25

Arial cables:	Twisted cables.....	26
---------------	---------------------	----

### III Industrial Cables

Low voltage underground armoured cables:	U1000 RVFV &ARVFV.....	29
--	------------------------	----

Flexible control cables:	YSLY.....	33
--------------------------	-----------	----

	HSLH.....	35
--	-----------	----

Low voltage screened cable:	NYCY.....	37
-----------------------------	-----------	----

# I Building wires and cables

## Low Voltage building wires and cables:

.....	
<b>Solid and stranded cables and wires :</b>	
H05V-U.....	6
H07V-U.....	7
FR-N05VV-U.....	8
FR-N05VV-R.....	9
(N)YIFY .....	10
<b>Flexible cables and wires :</b>	
H05V-K.....	11
H07V-K.....	12
H05VV-F.....	13
H03VV-F.....	15

Solid and stranded wires  
Copper PVC insulated

H05V-U, H07V-U & H07V-R

#### APPLICATIONS

They are used for indoor fixed installations in dry locations, in switchboards and distributors. The cables could be installed in surface mounted or conduits.

They should not be buried nor drowned in concrete.

#### CONDUCTOR CONSTRUCTION

- Solid copper class 1 for H07/H-05VU.
- Stranded copper class 2 for H-07VR.

#### CORE IDENTIFICATION

By colours.

#### TECHNICAL DATA

Nominal Voltage:

H05-VU 300/500V cc.

H07-VU & H07-VR 450/750V cc.

Maximum Operating temperature: +70°C

Maximum short circuit temperature: +160°C.

#### DESCRIPTION

**CORE**  
Copper

**INSULATION**  
PVC

H07V-U



H07V-R



**H05V-U, H07V-U & H07V-R**

Type	Overall Diameter mm	net Weight Kg/Km	Electrical resistance at 20°C ( Ω/km)	Current carrying Capacity (A)	Voltage drop $\cos\phi=0,8$ (V/A/km)
<b>H05V-U</b>					
0,5	2,0	8,3	36	8,7	-
0,75	2,2	11,1	24,5	11,2	-
1	2,3	13,6	18,1	13,5	-
<b>H07V-U</b>					
1,5	2,8	20	12,1	17,5	23
2,5	3,4	32	7,41	24	14,2
4	3,9	47	4,61	32	8,9
6	4,4	66	3,08	41	6,04
<b>H07V-R</b>					
1,5	3,1	22	12,1	17,5	23
2,5	3,7	34	7,41	24	14,2
4	4,3	50	4,61	32	8,9
6	4,7	70	3,08	41	6,04
10	6,1	116	1,83	57	3,68
16	7,1	176	1,15	76	2,40
25	8,8	275	0,727	96	1,59
35	9,9	375	0,524	119	1,21
50	11,5	518	0,387	144	0,95
70	12,8	707	0,268	184	0,72
95	14,6	957	0,193	223	0,58
120	16,2	1193	0,153	259	0,50
150	17,9	1488	0,124	299	0,45
185	20,2	1838	0,0991	341	0,40
240	22,7	2372	0,0754	403	0,36
300	25,5	2962	0,0601	464	0,33
400	28,6	3917	0,0470	556	0,30

(1) Maximum intensities valid for: conductors set on a single pipe on a visible assembly, or embedded into a wall, or void space, or chute or plinth at an ambient temperature of the air of 30° C.



Solid CABLES  
PVC/PVC INSULATED COPPER 500 V

FR-N05VV-U/FR-N05VV-R

#### APPLICATIONS

They are used in common household installations indoors. The two or three-conductor cables are used in single-phase current while the four or five-conductor cables are used in three-phase current. They should be installed in pipes, plinth or in visible installations. They should be neither buried nor drawn in concrete.

#### CONDUCTOR CONSTRUCTION

- For sections  $\leq 6 \text{ mm}^2$ : class 1 (FR-N05VV-U)
- For Section  $> 6 \text{ mm}^2$ : class 2 (FR-N05VV-R)

#### CONDUCTOR IDENTIFICATION

Number of conductors	Option A	Option B
2		Black, Blue
3	Green / Yellow, Black, Blue	Black, Blue, Brown
4	Green / Yellow, Black, Blue, Brown	Blue, Brown, Black, Grey
5	Green / Yellow, Black, Blue, Brown, Black	Black, Blue, Brown, Black, Black

Cables of option A are described with a letter G.

#### TECHNICAL DATA

Nominal Voltage: 300/500V<sub>cc</sub>.

Maximum Operating temperature: +70° C

Maximum short circuit temperature: +160° C.

#### DESCRIPTION

##### CORE

Copper

##### INSULATION

PVC

##### FILLER

PVC

##### OUTER SHEATH

Grey PVC



FR-N05VV-U/FR-N05VV-R

Type	Overall Diameter mm	net Weight Kg/Km	Electrical resistance at 20°C (Ω/km)	Current carrying Capacity (A)	Voltage drop (1) between phase $\cos\phi=0,8$ (V/A/km)
<b>FR-N05VV-U</b>					
2x1,5	9,0	119	12,10	22,0	23,10
2x2,5	10,0	161	7,41	30,0	14,20
2x4	11,0	209	4,61	40,0	8,95
2x6	12,0	268	3,08	51,0	6,06
3x1,5	9,0	137	12,10	22,0	23,10
3x2,5	11,0	192	7,41	30,0	14,20
3x4	12,0	253	4,61	40,0	8,95
3x6	13,0	342	3,08	51,0	6,06
4x1,5	10,0	162	12,10	18,5	20,00
4x2,5	11,0	231	7,41	25,0	12,30
4x4	13,0	318	4,61	34,0	7,75
4x6	15,0	434	3,08	43,0	5,24
5x1,5	11,0	190	12,10	18,5	20,00
5x2,5	12,0	270	7,41	25,0	12,30
5x4	14,0	392	4,61	34,0	7,75
5x6	16,0	515	3,08	43,0	5,24
<b>FRN05VV-R</b>					
2x10	16,0	478	1,83	70,0	3,60
2x16	18,0	661	1,15	94,0	2,30
2x25	22,0	994	0,727	119,0	1,50
2x35	25,0	1329	0,524	147,0	1,10
3x10	17,0	585	1,83	70,0	3,60
3x16	20,0	845	1,15	94,0	2,30
3x25	24,0	1267	0,727	119,0	1,50
3x35	27,0	1674	0,524	147,0	1,10
4x10	19,0	716	1,83	60,0	3,10
4x16	22,0	1042	1,15	80,0	2,00
4x25	26,0	1599	0,727	101,0	1,30
4x35	29,0	2082	0,524	126,0	0,90
5x10	20,3	854	1,83	60,0	3,10
5x16	24,0	1271	1,15	80,0	2,00
5x25	29,0	1917	0,727	101,0	1,30
5x35	29,05	2496	0,524	126,0	0,90

(1) Maximum intensities valid for cables set up on a shelf at a temperature of 30°C. Intensities and voltage drops of the two or three-conductor cables correspond to a single-phase current and those of the four or five-conductor cables to a three-phase current.

Solid and stranded wires  
Copper PVC insulated  
VDE 0250

(N)YIFY

**APPLICATIONS**

For power supply networks for light mechanical stress and it is suitable to nail with is PVC bridge between cores

**CONDUCTOR CONSTRUCTION**

Solid or stranded copper

**TECHNICAL DATA:**

Maximum operating temperature : 70 °C  
short circuit temperature : 160°C

**DESCRIPTION**

**CORE**  
Copper

**INSULATION**  
PVC

**OUTER SHEATH**  
PVC



Solid and stranded wires  
Copper PVC insulated  
VDE 0250

(N)YIFY

Type	Nominal thickness (mm)		Nominal external dimensions (mm)	Nominal weight (Kg/Km)	DC resistance at 20 °C ( Ω/Km)	Admissible current (A)
	insulation	sheath				
2 × 1,5	0,4	0,8	3,9 × 10,9	53	12,1	19
2 × 2,5	0,5	0,9	4,7 × 12,5	81	7,41	25
2 × 4	0,6	0,9	5,5 × 14,6	115	4,61	34
3 × 1,5	0,4	0,8	3,9 × 18,2	80	12,1	19
3 × 2,5	0,5	0,9	4,7 × 20,3	122	7,41	25
3 × 4	0,6	0,9	5,5 × 23,9	172	4,61	34



**FLEXIBLE WIRES  
PVC INSULATED COPPER  
NFC32-201; HD21.3; NT88.05**

**H05V-K / H07V-K**

**APPLICATIONS**

The H07V-K cables may be used in equipment wiring, switching and distribution installations in conduits on or under plaster in a dry location.

**CONDUCTOR CONSTRUCTION**

- Stranded copper class 5.

**CORE IDENTIFICATION**

By colours.

**TECHNICAL DATA**

Nominal Voltage : H05V-K 300/500V<sub>cc</sub>.  
H07V-K 450/750V<sub>cc</sub>.  
Maximum Operating temperature : +70°C  
Maximum short circuit temperature: +160°C.

**DESCRIPTION**

**CORE**  
Copper

**INSULATION**  
PVC



**H05V-K/H07VK**

Type	Overall Diameter mm	net Weight Kg/Km	Electrical resistance at 20°C ( Ω/km)	Current carrying Capacity (A)	Voltage drop $\cos\phi=0,8$ (V/A/km)
<b>H05V-K</b>					
0,5	2,1	8,5	39	8	-
0,75	2,3	11,3	26	11	-
1	2,5	14	19,5	13,5	-
<b>H07V-K</b>					
1,5	2,9	20	13,3	17,5	26
2,5	3,5	31	7,98	24	15
4	4,1	47	4,95	32	9,5
6	4,7	65	3,30	41	6,3
10	6,0	109	1,91	57	3,7
16	7,0	162	1,21	76	2,3
25	8,7	254	0,780	96	1,5
35	9,8	345	0,554	119	1,1
50	11,7	482	0,386	144	0,74
70	13,4	680	0,272	184	0,52
95	15,4	904	0,206	223	0,40
120	17,0	1141	0,161	259	0,31
150	19,0	1422	0,129	299	0,25
185	21,0	1734	0,106	341	0,20
240	24,0	2275	0,0801	403	0,15

(1) Maximum intensities valid for: conductors set on a single conduit on an apparent installation, or embedded into a wall, or under plinth at an ambient temperature of the air of 30°C.

COPPER FLEXIBLE CONDUCTORS  
PVC/PVC INSULATED 500 V  
HD 21-5

H05VV-F

#### APPLICATIONS

They are used

- In households, kitchens, offices including humid locations.
- To supply household machines subjected to low mechanical stresses (such as washing machines, refrigerators etc.)

These cables are not appropriate for outdoor use, in industrial or agricultural workshops, nor for commercial electric tools.

#### CONDUCTOR CONSTRUCTION

- Stranded copper class 5.

#### CORES IDENTIFICATION

Number of conductors	Option A	Option B
2		Blue, Brown
3	Green / Yellow, Blue, Brown	Black, Grey, Brown
4	Green / Yellow, Brown, Black, Grey	Black, grey, Blue, Brown
5	Green / Yellow, Blue, Brown, Grey, Black	Black, Grey, Black, Blue, Brown

Cables of option A are described with a letter G.  
Example H05VV-F 5G2,5 mm<sup>2</sup>

#### TECHNICAL DATA

Nominal Voltage: 300/500V<sub>cc</sub>.

Maximum Operating temperature : +70°C

Maximum short circuit temperature : +160°C.

#### DESCRIPTION

##### CORE

Copper

##### INSULATION

PVC

##### OUTER SHEATH

PVC



Type	Overall Diameter mm	net Weight Kg/Km	Electrical resistance at 20°C ( Ω/km)	Current carrying Capacity (A)	Voltage drop $\cos\phi=0,8$ (V/A/km)
<b>H05VV-F</b>					
2x0,75	6,2	55	26	14	49,8
2x1	6,6	64	19,5	17	37,3
2x1,5	7,6	87	13,3	22	25,5
2x2,5	9,2	133	7,98	30	15,3
3x0,75	6,6	65	26	14	49,8
3x1	7	77	19,5	17	37,3
3x1,5	8,3	110	13,3	22	25,5
3x2,5	10,0	167	7,98	30	15,3
4x0,75	7,1	78	26	12	43,1
4x1	7,8	96	19,5	14	32,3
4x1,5	9,2	137	13,3	18,5	22,1
4x2,5	10,9	205	7,98	25	13,2
5x0,75	8,0	97	26	12	43,1
5x1	8,6	114	19,5	14	32,3
5x1,5	10,3	168	3,3	18,5	22,1
5x2,5	12,1	248	7,98	25	13,2

(1) Maximum intensities valid for a single cable fastened by a clamp and separated from the wall or set on conduits protected from the sun at a temperature of 30° C. Intensities and voltage drops for cables having 2 or 3 conductors used in a single phase circuit and for those with 4 or 5 conductors in a three-phase circuit.



FLAT FLEXIBLE CABLES  
PVC INSULATED 300 V  
HD 21-5

H03VH-H

### APPLICATIONS

They are used

- In households, kitchens, offices.
- To supply household machines subjected to very low mechanical stresses.

Cables with conductors 0,5 mm<sup>2</sup> shall not be used with lengths over 2m.

### CONDUCTOR CONSTRUCTION

- Stranded copper class 5.

### TECHNICAL DATA

Nominal Voltage: 300/500V<sub>cc</sub>.

Maximum Operating temperature : +70°C

Maximum short circuit temperature : +150°C

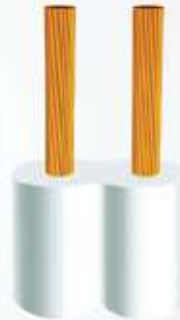
### DESCRIPTION

#### CORE

Copper

#### INSULATION

PVC



FLAT FLEXIBLE CABLES  
PVC INSULATED 300 V  
HD 21-5

H03VH-H

Type	Exterior Diameter Approximate mm	Approximate Weight Kg/km	Maximum linear electric resistance at 20°C Ω /km	Current carrying Capacity (A) (1)
<b>H03VH-H</b>				
2x0,05	2,70x5,4	23,7	39,0	10,0
2x0,57	2,70x5,4	27,1	26,0	13,5
2x1	3x6,1	35,2	19,5	16
2x1,5	3,25x6,5	45,6	13,3	22
2x2,0	3,4x6,9	56,9	9,5	32
2x2,5	3,5x7,1	65,8	7,98	38

(1) Maximum intensities valid for a single cable fastened by a clamp and separated from the wall or set on conduits protected from the sun at a temperature of 30° C.

## II Power network cables

Low voltage underground cables:	U1000R2V & AR2V-(N)2XY.....	17
	NYY& NAYY.....	21
	NYY Control.....	25
Arial cables:	Twisted cables.....	26

**SOLID and Stranded  
COPPER / ALUMINIUM CABLES  
XLPE INSULATION  
NFC32-321, NT 88.199**

**U1000R02V&U1000AR02V  
(N)2XY**

**APPLICATIONS**

These cables are suitable for fixed installations, preferably in cable ducts, indoors, outdoors, in water or underground if no mechanical damages are to be expected.

**CONDUCTOR CONSTRUCTION**

**U1000R02V**

- Copper: Class 1 or 2 for Sections  $\leq 6\text{mm}^2$   
Class 2 for Sections  $> 6\text{mm}^2$

**U1000AR02V**

- Aluminum: Class 2

**TECHNICAL DATA**

Nominal Voltage: 0,6/1 KV.

Maximum Operating temperature: +90°C

Maximum short circuit temperature: +250°C

**CORES IDENTIFICATION**

Number of conductors	G (Protective Conductor)	X (without Protective Conductor)
2		Blue, brown
3 <sup>(1)</sup>	Green / Yellow Blue, Brown	Black, Blue, Brown
3 <sup>(2)</sup>	Green / Yellow Blue, Brown	Brown, Black, Grey
4	Green / Yellow Brown, Black, Grey	Blue, Brown, Black, Grey
5	Green / Yellow, Blue Brown, Black, Grey	Blue, Brown, Black, Grey, Black
> 5	Numbers or Colours	
Cables Marking	G	X

(1) Only for sections of 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup>  
(2) For sections higher or equal to 4 mm<sup>2</sup>

**DESCRIPTION**

**CORE**

Copper or Aluminium

**INSULATION**

XLPE

**FILLER**

PVC

**OUTER SHEATH**

Black PVC





**U1000R2V&U1000AR2V  
(N)2XY**

Type	Overall Diameter Approximate mm	Approximate weight Kg/Km		Current carrying Capacity (A)				Voltage drop (1) between phase cos φ = 0.8 V/A/Km	
		R2V	AR2V	Buried cable		open air		R2V	AR2V
				R 2V	AR2V	R2V	AR2V		
1x1,5	5,4	41		31		24		20,21	
1x2,5	5,8	54		41		33		12,17	
1x4	6,3	71		53		45		7,66	
1x6	6,8	97		66		58		5,21	
1x10	8,1	142		87		80		3,13	
1x16	9,1	206	106	113	87	107	84	2,01	3,40
1x25	10,8	305	149	144	111	138	101	1,40	2,23
1x35	11,9	408	189	174	134	169	126	1,00	1,64
1x50	13,3	553	240	206	160	207	154	0,78	1,23
1x70	14,5	747	309	254	197	268	198	0,56	0,88
1x95	16,4	996	402	301	234	328	241	0,43	0,66
1x120	18,2	1242	492	343	266	382	280	0,36	0,54
1x150	19,9	1538	600	387	300	441	324	0,31	0,45
1x185	22,2	1887	730	434	337	506	371	0,26	0,38
1x240	25,0	2427	925	501	388	599	439	0,22	0,31
1x300	27,5	3016	1140	565	440	693	508	0,19	0,26
1x400	30,4	3975	1472	662	515	825	663	0,17	0,22
1x500	38,5	4880	-	749	-	946	-	0,15	-
2X1,5	9,6	130		37		26		24,82	
2x2,5	10,4	164		48		36		15,24	
2x4	11,3	212		63		49		9,52	
2x6	12,8	290		80		63		6,38	
2x10	15,3	431		104		86		3,82	
2x16	17,4	606	402	136	104	115	91	2,44	3,90
2x25	20,8	898	578	173	133	149	108	1,57	2,50
2x35	23,4	1194	747	208	160	185	135	1,16	1,80
3x1,5	10,0	148		31		23		21,50	
3x2,5	10,9	192		41		31		13,20	
3x4	11,9	252		53		42		8,25	
3x6	13,5	350		66		54		5,50	
3x10	16,2	527		87		75		3,30	
3x16	18,4	756	450	113	87	100	77	2,10	3,40
3x25	22,1	1127	648	144	111	127	97	1,36	2,20
3x35	24,9	1515	844	174	134	158	120	1,00	1,62
3x50	27,9	2033	1075	206	160	192	146	0,76	1,22
3x70	30,7	2707	1367	254	197	246	187	0,55	0,86
3x95	34,6	3577	1758	301	234	298	227	0,42	0,64
3x120	39,1	4522	2225	343	266	346	263	0,35	0,53
3x150	43,1	5609	2738	387	300	395	304	0,30	0,44
3x185	48,7	6973	3432	434	337	450	347	0,25	0,37
3x240	54,5	8904	4310	501	388	538	409	0,21	0,30
3x300	59,9	10996	5253	565	440	621	471	0,18	0,25

(1) Maximum intensities valid for: 3 cables with single cores set up in triangle/layers or 1 cable with 3, 4, 5 cores used for three-phase circuit or 1 cable with two conductors used in a single-phase circuit and for cables set up in underground conduits at 20° C or set up on cable shelves in the open air at 30° C. The voltage drops are valid for a temperature on the core of 90° C.



U1000R2V&U1000AR2V  
(N)2XY

Type	Overall Diameter Approximate mm	Approximate weight Kg/Km		Current carrying Capacity (A)				Voltage drop (1) between phase $\cos \phi = 0.8$ V/A/Km	
		R2V	AR2V	Buried cable		open air		R2V	AR2V
				R 2V	AR2V	R2V	AR2V		
3x16+10	19.8	902		113		100		2,10	
3x25+16	23.5	1350	775	144	111	127	97	1,36	2,20
3x35+16	25.5	1731	966	174	134	158	120	1,00	1,62
3x50+25	29.1	2346	1240	206	160	192	146	0,76	1,22
3x50+35	29.7	2422	1253	206	160	192	146	0,76	1,22
3x70+35	32.3	3141	1593	254	197	246	187	0,55	0,86
3x70+50	33.2	3250	1607	254	197	246	187	0,55	0,86
3x95+50	36.4	4165	2048	301	234	298	227	0,42	0,64
3x120+70	41.0	5331	2614	343	266	346	263	0,35	0,53
3x150+70	44.3	6459	3174	387	300	395	304	0,30	0,44
3x185+70	49.2	7938	3990	434	337	450	347	0,25	0,37
3x185+95	50.3	8128	4022	434	337	450	347	0,25	0,37
3x240+95	54.6	10116	4968	501	388	538	409	0,21	0,30
3x240+120	55.9	10324	5077	501	388	538	409	0,21	0,30
3x300+150	61.6	12770	6137	565	440	621	471	0,18	0,25
4x1,5	10,8	172		31		23		21,50	
4x2,5	11,7	227		41		31		13,20	
4x4	12,9	302		53		42		8,25	
4x6	14,6	424		66		54		5,50	
4x10	17,6	644		87		75		3,30	
4x16	20,1	933	524	113	87	100	77	2,10	3,40
4x25	24,2	1402	764	144	111	127	97	1,36	2,20
4x35	27,3	1889	996	174	134	158	120	1,00	1,62
4x50	30,9	2565	1288	206	160	192	146	0,76	1,22
4x70	34,0	3436	1649	254	197	246	187	0,55	0,86
4x95	38,3	4547	2122	301	234	298	227	0,42	0,64
4x120	43,5	5765	2702	343	266	346	263	0,35	0,53
4x150	47,8	7133	3305	387	300	395	304	0,30	0,44
4x185	53,9	8851	4129	434	337	450	347	0,25	0,37
4x240	59,9	11825	5700	501	388	538	409	0,21	0,30
5x1,5	11,6	204		31		23	21,50		
5x2,5	12,6	271		41		31	13,20		
5x4	13,9	365		53		42	8,25		
5x6	16,6	496		66		54	5,50		
5x10	19,1	788		87		75	3,30		
5x16	22,0	1148	637	113	87	100	77	2,10	3,40
5x25	26,5	1732	934	144	111	127	97	1,36	2,20
5x35	29,9	2338	1221	174	134	158	120	1,00	1,62

(1) Maximum intensities valid for: 3 single-core cables set up in triangle/layers or 1 cable with 3, 4, 5 three-phase current or 1 cable with two conductors used in a single-phase current and for cables set up in underground pipes at 20° C or set up on cable shelves in the open air at 30° C. The voltage drops are valid for a temperature on the core of 90° C.

U1000R2V

Type	Overall Diameter Approximate mm	Approximate weight Kg/Km	Current carrying Capacity (A)		Voltage drop (1) between phase cos $\phi$ = 0.8 V/A/Km
			Buried cable	open air	
7x1,5	12,4	244	22	15	24,80
10x1,5	15,2	327	18,5	13	24,80
12x1,5	15,6	368	18	12,5	24,80
14x1,5	16,3	413	17	12	24,80
19x1,5	18,0	521	15	10,5	24,80
24x1,5	20,8	641	14	10	24,80
27x1,5	21,2	702	13,5	9,5	24,80
30x1,5	21,9	764	12,5	9	24,80
37x1,5	23,6	910	12	8	24,80
7x2,5	13,6	330	28	20,5	15,20
10x2,5	16,8	448	24,5	18	15,20
12x2,5	17,3	509	24	17	15,20
14x2,5	18,1	576	22	16	15,20
19x2,5	20,0	738	19,5	14,5	15,20
24x2,5	23,2	912	18	13	15,20
27x2,5	23,9	1004	17	12,5	15,20
30x2,5	24,5	1097	16,5	12	15,20
37x2,5	26,4	1315	15,5	11	15,20

(1) Maximum intensities valid for: 3 single-core cables set up in triangle/layers or 1 cable with 3, 4, 5 cores three-phase current or 1 cable with two conductors used in a single-phase current and for cables set up in underground pipes at 20° C or set up on cable shelves in the open air at 30° C. The voltage drops are valid for a temperature on the core of 90° C.



**SOLID and Stranded COPPER CABLES**  
**PVC INSULATION**  
**NFC32-321, NT 88.199, VDE HD603**

**NYY / NAYY**

**APPLICATIONS**

These cables are suitable for fixed installations, preferably in cable ducts, indoors, outdoors, in water or underground if no mechanical damages are to be expected.

**CONDUCTOR CONSTRUCTION**

- Copper: Class 1 or 2 for Sections  $\leq 6\text{mm}^2$   
 Class 2 for Sections  $> 6\text{mm}^2$   
 Circular or sector - shaped for sections  $\geq 50\text{mm}^2$

**TECHNICAL DATA**

Nominal Voltage: 0,6/1 KV  
 Test voltage: 4KV.  
 Maximum conductor temperature in service: +70°C  
 Maximum short circuit temperature : +160°C sections  $\leq 300\text{ mm}^2$   
 : +140°C sections  $> 300\text{ mm}^2$

**CORES IDENTIFICATION**

Number of conductors	J ( Protective Conductor )	O ( without Protective Conductor )
2		Blue, brown
3	Green / Yellow Blue, Brown	Brown, Black, Grey
4	Green / Yellow Brown, Black, Grey	Blue, Brown, Black, Grey
5	Green / Yellow, Blue Brown, Black, Grey	Blue, Brown, Black, Grey, Black
> 5	Numbers or Colours	
Cables Marking	-J	-O

**DESCRIPTION**

**CORE**  
Copper

**INSULATION**  
PVC

**Filler**  
PVC

**OUTER SHEATH**  
Black or grey PVC





**NYY / NAYY**

Type	Overall Diameter mm	weight Kg/Km		Current carrying Capacity				Voltage drop cosφ = 0.8	
		CUI	ALU	Buried cable		Open air		CUI	ALU
				CUI	ALU	CUI	ALU		
1x16 RM	9,9	243	147	108	85	85	66	1,9	3,2
1x25 RM	11,6	357	203	135	105	118	92	1,3	2,1
1x35 RM	12,7	469	240	165	130	140	110	0,94	1,5
1x50 RM	14,3	632	305	195	155	175	135	0,73	1,2
1x70 RM	15,4	837	385	240	190	220	175	0,53	0,83
1x95 RM	17,6	1120	495	290	225	275	215	0,4	0,62
1x120 RM	19,4	1388	590	330	260	325	255	0,33	0,51
1x150 RM	21,1	1710	700	370	290	370	290	0,29	0,42
1x185 RM	23,6	2104	865	420	330	430	335	0,25	0,36
1x240 RM	26,3	2696	1080	480	375	520	405	0,21	0,29
1x300 RM	29,3	3350	1330	540	420	600	470	0,18	0,24
1x400 RM	33,6	4080	1670	635	495	725	565	0,16	0,21
1x500 RM	42,5	5080	2200	725	565	845	660	0,14	0,19
2x1,5 RE	11,2	188		32		22		23,2	
2x1,5 RM	11,2	188		32		22		23,2	
2x2,5 RE	12	228		42		30		14,2	
2x2,5 RM	12	228		42		30		14,2	
2x4 RE	13,7	311		54		40		8,9	
2x4 RM	13,7	311		54		40		8,9	
2x6 RE	14,7	380		67		51		6,0	
2x6 RM	14,7	380		67		51		6,0	
2x10 RM	17,3	557		90		70		3,6	
2x16 RM	19,4	756	440	116	95	94	68	2,3	3,6
2x25 RM	23,2	1118	650	148	113	119	91	1,5	2,3
2x35 RM	25,4	1424	780	178	136	147	115	1,1	1,7
3x1,5 RE	11,7	211		26		18,5		20,2	
3x1,5 RM	11,7	211		26		18,5		20,2	
3x2,5 RE	12,5	263		34		25		12,4	
3x2,5 RM	12,5	263		34		25		12,4	
3x4 RE	14,4	364		44		34		7,7	
3x4 RM	14,4	364		44		34		7,7	
3x6 RE	15,5	454		56		43		5,2	
3x6 RM	15,5	454		56		43		5,2	
3x10 RM	18,3	672		74		60		3,1	
3x16 RM	20,9	953	490	96	77	80	63	2,0	3,2
3x25 RM	24,6	1387	720	123	105	101	80	1,3	2,1
3x35 RM	27	1788	875	147	120	126	100	0,94	1,5
3x50 RM	30,8	2278	1135	174	140	153	120	0,72	1,1
3x50 SM	26,6	1750		174		153		0,72	
3x70 RM	34,4	3060	1475	216	175	196	155	0,52	0,81
3x70 SM	30	2400		216		196		0,52	
3x95 RM	38,5	4041	1980	256	210	238	185	0,39	0,6
3x95 SM	33,9	3250		256		238		0,39	
3x120 RM	41,2	4925	2400	290	240	276	220	0,33	0,5
3x120 SM	36,7	4020		290		276		0,33	



NYY / NAYY

Type	Overall Diameter mm	weight Kg/Km		Current carrying Capacity				Voltage drop $\cos\phi = 0.8$	
				Buried cable		Open air			
		CUI	ALU	CUI	ALU	CUI	ALU	CUI	ALU
3x150 RM	44,9	6110	2900	328	270	319	250	0,28	0,41
3x150 SM	40,7	4930		238		319		0,28	
3x185 RM	48,6	7439	3720	367	305	364	280	0,24	0,35
3x185 SM	44,9	6150		367		364		0,24	
3x240 RM	54,2	9542	4700	424	355	430	330	0,2	0,28
3x240 SM	50	7920		424		430		0,2	
3x10+6 RM	17,9	709	550	74		60		3,1	
3x16+10 RM	20,5	1015	785	96	77	80	63	2,0	3,2
3x25+16 RM	24,7	1543	935	123	105	101	82	1,3	2,1
3x35+16 RM	26,7	1962	1250	147	120	126	100	0,94	1,5
3x50+25 RM	29,2	2520		174	140	153	120	0,72	1,1
3x50+25 SM	26,8	2100	1615	174		153		0,72	
3x70+35 RM	33	3363		216	175	196	155	0,52	0,81
3x70+35 SM	31,6	2750	2165	216		196		0,52	
3x95+50 RM	38,4	4548		256	210	238	185	0,39	0,6
3x95+50 SM	36,3	3750	2650	256		238		0,39	
3x120+70 RM	41,8	5633		290	240	276	220	0,33	0,5
3x120+70 SM	39,3	4740	3140	290		276		0,33	
3x150+70 RM	46,2	6818		328	270	319	250	0,28	0,41
3x150+70 SM	43,3	5635	4030	328		319		0,28	
3x185+95 RM	51,6	8486		367	305	364	280	0,24	0,35
3x185+95 SM	47,7	7100	5075	367		3164		0,24	
3x240+120 RM	57,8	10822		424	355	430	330	0,2	0,28
3x240+120 SM	53,6	9160		424		430		0,2	
4x1,5 RE	12,4	244		26		18,5		20,2	
4x1,5 RM	12,4	244		26		25		20,2	
4x2,5 RE	13,4	308		34		25		12,4	
4x2,5 RM	13,4	308		34		34		12,4	
4x4 RE	15,5	432		44		34		7,7	
4x4 RM	15,5	432		44		43		7,7	
4x6 RE	16,7	544		56		43		5,2	
4x6 RM	16,7	544		56		60		5,2	
4x10 RM	19,8	815		74		60		3,1	
4x16 RM	22,7	1168	575	96	77	80	63	2,0	3,2
4x25 RM	26,8	1708	850	123	105	101	80	1,3	2,1
4x35 RM	29,7	2233	1035	147	120	126	100	0,94	1,5
4x35 SM	25,6	1670		147		126		0,94	
4x50 RM	30,3	2816	1365	174	140	153	120	0,72	1,1
4x50 SM	29	2225		174		153		0,72	
4x70 RM	33,6	3799	1795	216	175	196	155	0,52	0,81
4x70 SM	32,8	3115		216		196		0,52	
4x95 RM	38	5067	2390	256	210	238	185	0,39	0,39
4x95 SM	37,3	4240		256		238		0,39	
4x120 RM	41,4	6217	2900	290	240	276	220	0,33	0,6
4x120 SM	40,7	5270		290		276		0,33	
4x150 RM	45,6	6595	3530	328	270	319	250	0,28	0,41
4x150 SM	44,7	6450		328		319		0,28	
4x185 RM	50,2	9477	4500	367	305	364	280	0,24	0,35

NYY / NAYY

Type	Overall Diameter mm	weight Kg/Km		Current carrying Capacity				Voltage drop $\cos\phi = 0.8$	
				Buried cable		Open air			
		CUI	ALU	CUI	ALU	CUI	ALU	CUI	ALU
4x185 SM	49,3	8030		367		364		0,24	
4x240 RM	56,5	12179	5695	424	355	430	330	0,2	0,28
4x240 SM	55,2	10400		424		430		0,2	
5x1,5 RE	13,3	280		26		18,5		20,2	
5x1,5 RM	13,3	280		26		18,5		20,2	
5x2,5 RE	14,4	356		34		25		12,4	
5x2,5 RM	14,4	356		34		25		12,4	
5x4 RE	16,7	505		44		34		7,7	
5x4 RM	16,7	505		44		34		7,7	
5x6 RE	18,1	640		56		43		5,2	
5x6 RM	18,1	640		56		43		5,2	
5x10 RM	21,9	992		74		60		3,1	
5x16 RM	24,8	1391	705	95	77	80	63	1,98	3,2
5x25 RM	29,6	2063	1050	123	105	101	80	1,28	2,1
5x35 RM	29,7	2635	1300	147	120	126	100	0,94	1,5

(1) Maximum intensities valid for: 3 single-core cables set up in triangle/layers or 1 cable with 3, 4, 5 three-phase current or 1 cable with two conductors used in a single-phase current and for cables set up in underground pipes at 20° C or set up on cable shelves in the open air at 30° C. The voltage drops are valid for a temperature on the core of 70° C.



Type	Overall Diameter Approximate mm	Approximate mass Kg/Km	Current carrying Capacity (A)		Inter-phase voltage drop cos φ =0.8 V/A/Km
			Buried cable	open air	
7x1,5	14,2	340	19	12	23,20
10x1,5	17,2	452	16,5	10,5	23,20
12x1,5	17,7	505	16	10	23,20
14x1,5	18,4	565	15,5	9,5	23,20
19x1,5	20,2	708	14	8,5	23,20
24x1,5	23,2	867	13	8	23,20
27x1,5	23,2	941	13,5	7,5	23,20
30x1,5	24,4	1027	12	7	23,20
37x1,5	26,2	1235	10,5	6,5	23,20
7x2,5	15,4	439	26	17	14,30
10x2,5	18,8	592	21,5	14,5	14,30
12x2,5	19,3	668	21	14	14,30
14x2,5	20,2	752	20	13,5	14,30
19x2,5	22,2	954	18	12	14,30
24x2,5	25,6	1176	16,5	11	14,30
27x2,5	25,6	1283	15,5	10,5	14,30
30x2,5	27,0	1404	15	10	14,30
37x2,5	29,2	1714	14	9,5	14,30

(1) Maximum intensities valid for: 3 single-core cables set up in triangle/layers or 1 cable with 3, 4, 5 three-phase current or 1 cable with two conductors used in a single-phase current and for cables set up in underground pipes at 20° C or set up on cable shelves in the open air at 30° C. The voltage drops are valid for a temperature on the core of 70° C.

Low Voltage Aerial Bundled Cables  
Aluminium / Copper Cables  
XLPE INSULATION  
NFC 33 209, NT 88.35

Aluminium/Copper  
Aerial twisted Cables

**APPLICATIONS**

Used for overhead distribution.  
Cables with neutral messenger are designed for rural and urban areas.

These cables are not suitable for underground installation

**CONDUCTOR CONSTRUCTION**

Aluminium or copper, Class 2

For the messenger: AGS aluminium alloy.

**TECHNICAL DATA**

Nominal Voltage: 0,6/1 KV  
Test voltage: 4KV.  
Maximum conductor temperature in service: +90°C  
Maximum short circuit temperature: +250°C  
Neutral breaking load min.: 1660 daN

**IDENTIFICATION OF THE CONDUCTORS****- Cables for distribution:**

The neutral messenger is printed with white ink or embossed with the standard number or the name of the manufacturer.

**- Cables for connexion:**

Conductors are numbered in white ink or embossed.

**DESCRIPTION****CORE**

Aluminium or copper for phases.  
AGS aluminium Alloy for the neutral

**INSULATION**

Black XLPE



Aluminium/Copper  
 Aerial twisted Cables

Type	Overall Diameter mm	approx. Weight Kg/Km	Current Carrying Capacity Amperes	Drop voltage V/A/Km
<b>ALUMINIUM</b>				
2×16	15	142	83	3,98
2×25	18	216	111	2,54
4×16	18	283	75	3,44
1×35+54,6	26	363	117	1,65
1×50+54,6	25	416	143	1,27
1×70+54,6	27	479	180	0,87
3×35+54,6	33	661	138	1,65
3×50+54,6	36	819	168	1,27
3×70+54,6	38	1009	213	0,87
3×35+54,6+16	33	731	138	1,65
3×50+54,6+16	36	890	168	1,27
3×70+54,6+16	38	1080	213	0,87
3×35+54,6+2×16	33	802	138	1,65
3×50+54,6+2×16	36	960	168	1,27
3×70+54,6+2×16	38	1151	213	0,87
3×70+1×70	32	1525	213	1,65
3×70+1×70+16	32	1600	213	1,27
3×70+1×70+2×16	32	1670	213	0,87
3×95+50+16	40	1170	247	0,67
3×120+70+16	42	1420	299	0,55
3×150+1×70	47	1325	344	0,46
3×150+1×70+16	47	1360	344	0,46
3×150+1×70+2×16	47	1400	344	0,46
<b>COPPER</b>				
2×6	12	150	53	-
2×10	13	235	72	-
2×16	15	360	95	-
2×25	18	526	-	-
4×6	14	300	53	-
4×10	16	470	72	-
4×16	19	710	95	-
4×25	22	1052	-	-

Maximum intensities valid for cables installed on facade in the open air at 30° C; Air connection bundled cables strung between poles in the open air at 30° C; For distribution bundled cables with neutral messenger.

The voltage drops are valid for cores at a temperature of 90° C.

Copper bundled cables are manufactured according the old standard UTE 33 209



### III Industrial Cables

Low voltage underground armoured cables: U1000 RVFV &ARVFV..... 29

Flexible control cables: YSLY..... 33

HSLH.....35

Low voltage screened cable: NYCY..... 37

**SOLID and Stranded  
COPPER/ALUMINIUM ARMoured CABLES  
XLPE INSULATION  
NFC32-322**

**U1000RVFV&U1000ARFV**

**APPLICATIONS**

These cables are suitable for fixed installations, directly buried, in cable ducts, indoors, outdoors, or in water. They are specially used in an environment where mechanical damages could be expected.

**CONDUCTOR CONSTRUCTION**

**U1000RVFV**

- Copper: Class 1 or 2 for Sections  $\leq 6\text{mm}^2$   
Class 2 for Sections  $> 6\text{mm}^2$

**U1000ARFV**

- Aluminum: Class 2

**TECHNICAL DATA**

Nominal Voltage: 0,6/1 KV.

Maximum Operating temperature : +90° C

Maximum short circuit temperature : +250° C

**CORES IDENTIFICATION**

Number of conductors	G ( With protective conductor )	X ( Without protective conductor )
2		Blue, brown
3 <sup>(1)</sup>	Green / Yellow Blue, Brown	Black, Blue, Brown
3 <sup>(2)</sup>	Green / Yellow Blue, Brown	Brown, Black, Grey
4	Green / Yellow Brown, Black, Grey	Blue, Brown, Black, Grey
5	Green / Yellow, Blue Brown, Black, Grey	Blue, Brown, Black, Grey, Black
> 5	Numbers or Colours	
Cables Marking	G	X

(1) Only for sections of 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup>  
(2) For sections higher or equal to 4 mm<sup>2</sup>

**DESCRIPTION**

**CORE**

Copper or Aluminium

**INSULATION**

XLPE

**FILLER**

PVC

**INNER SHEATH**

PVC

**ARMOUR**

Steel tape or steel wire

**OUTER SHEATH**

PVC



**U1000RVFV&U1000ARVFN**

Type	External Diameter Approximate mm	Approximate Weight Kg/Km		Current carrying Capacity (A)				Voltage drop (1) between phase $\cos\phi = 0.8$ V/A/KM	
		RVFV	ARVFN	Buried cable		Open air		RVFV	ARVFN
				RVFVN	AR2V	RVFV	AR2VFN		
2x1,5	10,8	201		37		26		24,84	
2x2,5	12	256		48		36		15,26	
2x4	13,2	319		63		49		9,54	
2x6	15,2	430		80		63		6,4	
2x10	17,2	578		104		86		3,84	
2x16	19,4	779	575	136	104	115	91	2,46	3,90
2x25	22,8	1105	785	173	133	149	108	1,59	2,50
2x35	25,6	1440	993	208	160	185	135	1,17	1,89
3x1,5	11,6	235		31		23		21,51	
3x2,5	12,5	288		41		31		13,21	
3x4	13,8	367		53		42		8,26	
3x6	15,9	496		66		54		5,54	
3x10	18,3	692		87		75		3,32	
3x16	20,4	938	632	113	87	100	77	2,13	3,40
3x25	24,1	1348	869	144	111	127	97	1,37	2,20
3x35	27,1	1777	1106	174	134	158	120	1,02	1,63
3x50	30,3	2340	1382	206	160	192	146	0,77	1,22
3x70	33,3	3061	1721	254	197	246	187	0,56	0,87
3x95	38,8	4397	2578	301	234	298	227	0,43	0,66
3x120	43,5	5465	3168	343	266	346	263	0,36	0,54
3x150	47,7	6670	3799	387	300	395	304	0,31	0,45
3x185	53,3	8168	4627	434	337	450	347	0,27	0,38
3x240	58,5	10179	5582	501	388	538	409	0,22	0,31
3x300	64,9	12527	6785	565	440	621	471	0,20	0,27
3x50+35	32,3	2765	1596	206	160	192	146	0,77	1,22
3x70+35	35,3	3544	1996	254	197	246	187	0,56	0,87
3x70+50	36,2	3667	2024	254	197	246	187	0,56	0,87
3x95+50	40,6	5022	2905	301	234	298	227	0,43	0,66
3x120+70	45,2	6296	3579	343	266	346	263	0,36	0,54
3x150+70	49,1	7571	4286	387	300	395	304	0,31	0,45
3x185+70	53,6	9116	5168	434	337	450	347	0,27	0,38
3x240+95	59,6	11510	6361	501	388	538	409	0,22	0,31
3x240+120	60,7	11721	6414	501	388	538	409	0,22	0,31
3x300+150	66,8	14371	7738	565	440	621	471	0,20	0,27



**U1000RVFV&U1000ARVFV**

Type	External Diameter Approximate mm	Approximate Weight Kg/Km		Current carrying Capacity (A)				Voltage drop (1) between phase $\cos\phi = 0.8$ V/A/KM	
				Burried cable		Open air		RVFV	ARVFV
				RVFV	AR2V	RVFV	AR2VFV		
4x1,5	12,4	268		31		23		21,51	
4x2,5	13,5	336		41		31		13,21	
4x4	14,8	428		53		42		8,26	
4x6	17,1	585		66		54		5,54	
4x10	19,7	823		87		75		3,32	
4x16	22,1	1134	725	113	87	100	77	2,13	3,40
4x25	26,4	1655	1017	144	111	127	97	1,37	2,20
4x35	29,7	2190	1296	174	134	158	120	1,02	1,63
4x50	33,3	2905	1628	206	160	192	146	0,77	1,22
4x70	38,2	4241	2454	254	197	246	187	0,56	0,87
4x95	42,7	5470	3045	301	234	298	227	0,43	0,66
4x120	48,1	6835	3772	343	266	346	263	0,36	0,54
4x150	52,4	8305	4477	387	300	395	304	0,31	0,45
4x185	58,5	10170	5448	434	337	450	347	0,27	0,38
4x240	64,7	12789	6664	501	388	538	409	0,22	0,31
5x1,5	13,4	312		31		23		21,51	
5x2,5	14,4	389		41		31		13,21	
5x4	15,8	500		53		42		8,26	
5x6	18,6	698		66		54		5,54	
5x10	21,3	982		87		75		3,32	
5x16	24,0	1365	854	113	87	100	77	2,13	3,40
5x25	28,9	2019	1221	144	111	127	97	1,37	2,20

(1) Maximum intensities valid for: 3 cables with single cores set up in triangle/layers or 1 cable with 3, 4,5 used for three-phase circuit or 1 cable with two conductors used in a single-phase circuit and for cables set up in underground conduits at 20° C or set up on cable shelves in the open air at 30° C. The voltage drops are valid for a temperature on the core of 90° C.

U1000RVFV

Type	Approximate External Diameter mm	Approximate weight Kg/Km	Current carrying capacity (A)		Voltage drop (1) between phase $\cos\phi = 0.8$ V/A/KM
			Buried cable	Open air	
7x1,5	14,2	361	22	15	21,51
10x1,5	17,0	473	18,5	13	21,51
12x1,5	17,6	523	18	12,5	21,51
14x1,5	18,3	577	17	12	21,51
19x1,5	20,0	704	15	10,5	21,51
24x1,5	22,8	852	14	10	21,51
30x1,5	24,1	999	12,5	9	21,51
37x1,5	25,8	1163	12	8	21,51
7x2,5	15,4	460	28	20,5	13,21
10x2,5	18,8	617	24,5	18	13,21
12x2,5	19,3	684	24	17	13,21
14x2,5	20,1	759	22	16	13,21
19x2,5	22,0	941	19,5	14,5	13,21
24x2,5	25,4	1161	18	13	13,21
30x2,5	26,9	1374	16,5	12	13,21
37x2,5	28,8	1614	15,5	11	13,21

(1) Maximum intensities valid for: 3 single-core cables set up in triangle/layers or 1 cable with 3, 4, 5 three-phase current or 1 cable with two conductors used in a single-phase current and for cables set up in underground pipes at 20° C or set up on cable shelves in the open air at 30° C. The voltage drops are valid for a temperature on the core of 90° C.

**FLEXIBLE CONTROL CABLE****YSLY-JZ/YSLY-JB****APPLICATIONS**

Flexible power, process control and instrumentation cable for industry and mechanical engineering.

**CONDUCTOR CONSTRUCTION**

Copper fine stranded class 5

**TECHNICAL DATA**

Nominal voltage  $U_0$  : 300 V

Nominal voltage  $U$  : 500 V

Test voltage : 2KV , 5 min

Insulation resistance : Min 20 Mohm x km

**OTHER CHARACTERISTICS**

Max permissible temperature at conductor :

In operation : +70° C

In short circuit : +150° C

Max operating temperature, fixed : -40 - +70° C

Temperature, moved, during installation : -5 - +70° C

Bending radius, fixed installation : 6Xd

Bending radius, moved application : 20Xd

**CORE IDENTIFICATION**

Numbers and green/yellow for YSLY - JZ cables

Colours acc. VDE 0293 for YSLY - JB cables

**DESCRIPTION****CORE**

Copper

**INSULATION**

PVC

**OUTER SHEATH**

PVC





YSLY - JZ / YSLY - JB

Type	Sheath Nom Diameter mm	Cable weight Kg/Km	Type	Sheath Nom Diameter mm	Cable weight Kg/Km	Type	Sheath Nom Diameter mm	Cable weight Kg/Km
2x0,5	4,8	32	5x10	17,8	666	19x0,75	11,9	228
2x0,75	5,2	40	5x16	20,9	981	19x1	12,7	275
2x1	5,5	46	5x25	25,7	1500	19x1,5	14,1	368
2x1,5	6,2	61	5x35	30,2	2096	19x2,5	17,3	582
2x2,5	7,6	96	5x50	35,7	2969	21x0,5	11,1	187
2x4	8,8	137	7x0,5	6,7	67	21x0,75	12,4	248
2x6	10,8	203	7x0,75	7,3	86	21x1	13,4	306
2x10	13,6	334	7x1	8,0	107	21x1,5	14,9	409
2x16	15,6	473	7x1,5	8,9	144	21x2,5	18,4	654
2x25	19,0	712	7x2,5	10,9	226	25x0,5	12,6	225
3x0,5	5,1	38	7x4	12,8	337	25x0,75	14,0	298
3x0,75	5,5	48	7x6	15,9	503	25x1	15,1	367
3x1	5,8	57	7x10	19,6	819	25x1,5	16,8	489
3x1,5	6,6	76	7x16	23,0	1215	25x2,5	21,0	790
3x2,5	8,1	119	10x0,5	8,8	101	30x0,5	13,5	268
3x4	9,3	172	10x0,75	9,6	128	30x0,75	15,0	354
3x6	11,7	261	10x1	10,2	154	30x1	16,1	436
3x10	14,5	422	10x1,5	11,2	200	30x1,5	17,9	580
3x16	16,8	614	10x2,5	14,4	336	30x2,5	22,4	936
3x25	20,7	936	12x0,5	8,9	111	34x0,5	14,0	297
3x35	24,3	1311	12x0,75	9,9	147	34,75	15,7	400
3x50	28,4	1834	12x1	10,5	178	34x1	16,9	492
3x70	32,9	2537	12x1,5	11,9	243	34x1,5	18,8	655
4x0,5	5,5	46	12x2,5	14,8	389	34x2,5	23,4	1055
4x0,75	6,2	61	14x0,5	9,5	130	41x0,5	16,4	363
4x1	6,5	72	14x0,75	10,4	167	41x0,75	18,4	488
4x1,5	7,1	93	14x1	11,2	207	41x1	19,8	599
4x2,5	9,0	150	14x1,5	12,5	277	41x1,5	22,0	796
4x4	10,4	218	14x2,5	15,6	445	41x2,5	27,6	1292
4x6	12,8	323	15x0,5	10,0	139	42x0,5	16,6	371
4x10	16,0	534	15x0,75	11,1	184	42x0,75	18,6	498
4x16	18,6	779	15x1	12,0	227	42x1	20,0	611
4x25	23,0	1196	15x1,5	13,4	302	42x1,5	22,2	813
4x35	27,1	1672	15x2,5	16,6	483	42x2,5	27,9	1320
4x50	32,0	2370	15x0,5	10,0	145	50x0,5	17,5	442
4x70	38,3	3375	15x0,75	11,1	193	50x0,75	19,3	582
4x95	43,1	4368	15x1	12,0	238	50x1	20,8	715
4x120	47,0	5397	15x1,5	13,4	318	50x1,5	23,3	963
5x0,5	6,2	58	15x2,5	16,6	508	50x2,5	29,1	1557
5x0,75	6,7	74	18x0,5	10,7	166	61x0,5	18,5	521
5x1	7,1	88	18x0,75	11,9	219	61x0,75	20,7	698
5x1,5	8,0	117	18x1	12,7	264	61x1	22,1	848
5x2,5	9,8	184	18x1,5	14,1	353	61x1,5	24,9	1156
5x4	11,6	273	18x2,5	17,7	573	61x2,5	31,1	1869
5x6	14,2	405	19x0,5	10,5	167			

**FLEXIBLE CONTROL CABLE****HSLH - JZ****APPLICATIONS**

Low smoke free halogen flexible power, process control and instrumentation cable for industry and mechanical engineering

**CONDUCTOR CONSTRUCTION**

Copper fine stranded class 5

**TECHNICAL DATA**

Nominal voltage  $U_0$  : 300 V

Nominal voltage  $U$  : 500 V

Test voltage : 2KV, 5 min

Insulation resistance : Min 20 Mohm x km

**OTHER CHARACTERISTICS**

Max permissible temperature at conductor :

In operation : +70° C

In short circuit: +150° C

Max operating temperature, fixed : -40 - +70° C

Temperature, moved, during installation: -5 - +70° C

Bending radius, fixed installation : 6Xd

Bending radius, moved application : 20Xd

**CORES IDENTIFICATION**

For YSLCY-JZ: Numbers and green yellow for the protective conductor

**FIRE PROPERTIES**

Flame retardant : IEC 60332-3-24 CAT C

Combustion gases: EN 50267

Acidity of gases : IEC 60754

**CORE**

Copper

**INSULATION**

Flame retardant non corrosive  
Compound HI2

**OUTER SHEATH**

Flame retardant non corrosive  
Compound HM2





HSLH

Type	Sheath Nom Diameter mm	Cable weight Kg/Km	Type	Sheath Nom Diameter mm	Cable weight Kg/Km	Type	Sheath Nom Diameter mm	Cable weight Kg/Km
2x0,5	5,4	41	5x16	21,9	1050	19x0,5	12,4	221
2x0,75	6,2	55	5x25	27,9	1662	19x0,75	14,7	315
2x1	6,5	62	5x35	31,3	2209	19x1	15,5	371
2x1,5	7,0	76	5x50	36,8	3109	19x1,5	17,0	481
2x2,5	8,2	110	6x0,5	7,7	85	19x2,5	19,5	702
2x4	10,2	173	6x0,75	8,9	115	21x0,5	13,8	259
2x6	12,6	260	6x1	9,6	139	21x0,75	16,4	370
2x10	14,6	378	6x1,5	10,3	174	21x1	17,3	436
2x16	16,8	532	7x2,5	11,7	249	21x1,5	19,0	566
2x25	20,6	807	6x4	14,6	391	21x2,5	21,8	827
3x0,5	5,7	47	6x6	18,1	584	25x0,5	14,8	308
3x0,75	6,6	64	6x10	20,8	872	25x0,75	17,5	439
3x1	6,9	74	6x16	24,0	1267	25x1	18,5	519
3x1,5	7,6	96	7x0,5	9,6	116	25x1,5	20,3	673
3x2,5	8,9	138	7x0,75	11,2	159	25x2,5	23,1	971
3x4	11,0	217	7x1	12,0	192	30x0,5	15,3	341
3x6	13,4	318	7x1,5	13,0	242	30x0,75	18,2	488
3x10	15,6	471	7x2,5	14,8	347	30x1	19,2	577
3x16	17,9	672	10x0,5	10,1	137	30x1,5	21,1	750
3x25	22,4	1043	10x0,75	11,7	189	30x2,5	24,0	1085
3x35	25,2	1386	10x1	12,6	227	34x0,5	18,0	417
3x50	29,3	1926	10x1,5	13,6	287	34x0,75	21,2	585
3x70	32,9	2578	10x2,5	15,5	411	34x1	22,8	715
4x0,5	6,2	56	10x0,5	10,6	155	34x1,5	25,0	925
4x0,75	7,1	77	10x0,75	12,5	220	34x2,5	28,8	1359
4x1	7,7	93	10x1	13,2	258	41x0,5	18,2	426
4x1,5	8,5	120	10x1,5	14,5	333	41x0,75	21,4	598
4x2,5	9,7	169	10x2,5	16,5	478	41x1	23,0	730
4x4	12,0	266	14x0,5	11,1	165	41x1,5	25,3	945
4x6	14,7	391	14x0,75	13,2	235	41x2,5	29,1	1389
4x10	17,1	584	14x1	13,9	275	42x0,5	19,1	508
4x16	19,7	839	14x1,5	15,3	356	42x0,75	22,7	723
4x25	25,0	1324	14x2,5	17,4	511	42x1	24,0	855
4x35	28,0	1761	15x0,5	11,1	172	42x1,5	26,5	1120
4x50	33,0	2481	15x0,75	13,2	246	42x2,5	30,0	1612
4x70	38,3	3429	15x1	13,9	289	50x0,5	20,3	598
4x95	43,1	4435	15x1,5	15,3	374	50x0,75	24,1	855
4x120	47,0	5473	15x2,5	17,4	538	50x1	25,5	1014
5x0,5	6,7	68	16x0,5	11,9	196	50x1,5	28,1	1331
5x0,75	8,0	98	16x0,75	13,9	272	50x2,5	31,9	1925
5x1	8,4	113	16x1	14,7	320			
5x1,5	9,5	150	16x1,5	16,1	415			
5x2,5	10,8	211	16x2,5	18,3	597			
5x4	13,4	332	18x0,5	11,9	203			
5x6	16,6	498	18x0,75	13,9	283			
5x10	19,0	731	18x1	14,7	333			
			18x1,5	16,1	433			
			18x2,5	18,3	624			



SOLID and Stranded  
COPPER CABLES  
PVC INSULATION AND SCREENED  
VDE 0276-627, IEC 60502, NT 88-22

**APPLICATIONS**

These cables are used for fixed installation in buildings,  
in free air, in ground, in dry or humid locations.

**CONDUCTOR CONSTRUCTION**

Copper: Class 1

**TECHNICAL DATA**

Nominal Voltage: 0,6/1 KV.

Maximum Operating temperature : +90° C

Maximum short circuit temperature : +160° C

**CORE IDENTIFICATION**

Colours according to VDE 0293 (HD308)

For more than 5 cores: numbers

**DESCRIPTION****CORE**

Copper

**INSULATION**

PVC

**FILLER**

PVC

**CORE COVERING**

Concentric conductors of copper  
wires and copper tape.

**OUTER SHEATH**

Black PVC



Type	Conduct. shape	Overall diam. mm	approx. Weight Kg/km	Rated current carrying capacity (A)	
				Buried 20°C	Free air 30°C
NYCY 2x1.5/1,5	RE	12,4	241	32	22
NYCY 2x2.5/2,5	RE	13,3	290	42	30
NYCY 2x4/4	RE	15,2	396	54	40
NYCY 2x6 /6	RE	16,4	489	67	51
NYCY 2x10 /10	RE	18,4	670	90	70
NYCY 2x16/16	RM	21,2	941	116	94
NYCY 3x1.5/1,5	RE	12,8	264	26	18,5
NYCY 3x2.5/2,5	RE	13,8	323	34	25
NYCY 3x4/4	RE	15,9	446	44	34
NYCY 3x6 /6	RE	17,1	559	56	43
NYCY 3x10 /10	RE	19,2	779	74	60
NYCY 3x16/16	RM	22,3	1104	96	80
NYCY 4x1.5/1,5	RE	13,6	299	26	18,5
NYCY 4x2.5/2,5	RE	14,6	370	34	25
NYCY 4x4/4	RE	17	516	44	34
NYCY 4x6 /6	RE	18,4	651	56	43
NYCY 4x10 /10	RE	20,7	1308	74	60
NYCY 4x16/16	RM	24,0	916	96	80
NYCY 5x1.5/1,5	RE	14,4	343	26	18,5
NYCY 5x2.5/2,5	RE	15,6	428	34	25
NYCY 5x4/4	RE	18,2	604	44	34
NYCY 5x6 /6	RE	19,7	766	56	43
NYCY 5x10 /10	RE	22,3	1085	74	60
NYCY 5x16/16	RM	26,0	1556	96	80
NYCY 7x1.5/2,5	RE	15,3	407	26	18,5
NYCY 7x2.5/2,5	RE	16,6	504	34	25,0
NYCY 8x1.5/2,5	RE	15,8	434	26	18,5
NYCY 8x2.5/4	RE	17,1	560	34	25,0
NYCY 10x1.5/2,5	RE	18,4	539	26	18,5
NYCY 10x2.5/4	RE	20,4	600	34	25,0
NYCY 12x1.5/2,5	RE	18,9	594	26	18,5
NYCY 12x2.5/4	RE	20,6	772	34	25,0
NYCY 14x1.5/2,5	RE	19,6	652	26	18,5
NYCY 14x2.5/6	RE	21,7	873	34	25,0

Type	Conduct. shape	Overall diam. mm	approx. Weight Kg/km	Rated current carrying capacity (A)	
				Buried 20°C	Free air 30°C
NYCY 16×1.5/4	RE	20,7	728	26	18,5
NYCY 16×2.5/6	RE	22,6	955	34	25,0
NYCY 19×1.5/4	RE	21,6	811	26	18,5
NYCY 19×2.5/4	RE	23,6	1072	34	25,0
NYCY 21×1.5/6	RE	23,5	906	26	18,5
NYCY 21×2.5/10	RE	26,0	1213	34	25,0
NYCY 24×1.5/6	RE	24,7	994	26	18,5
NYCY 24×2.5/10	RE	27,3	1334	34	25,0
NYCY 30×1.5/6	RE	25,9	1151	26	18,5
NYCY 30×2.5/10	RE	28,6	1557	34	25,0
NYCY 40×1.5/10	RE	30,9	1499	26	18,5
NYCY 40×2.5/10	RE	33,9	1976	34	25,0
NYCY 52×1.5/10	RE	32,1	1795	26	18,5
NYCY 52×2.5/10	RE	35,3	2399	34	25,0
NYCY 61×1.5/10	RE	33,9	2030	26	18,5
NYCY 61×2.5/10	RE	37,2	2730	34	25,0

(1) Maximum intensities valid for: 1 cable with 3, 4, 5 used for three-phase circuit or 1 cable with two conductors used in a single-phase circuit and for cables set up in underground conduits at 20° C or set up on cable shelves in the open air at 30° C.