

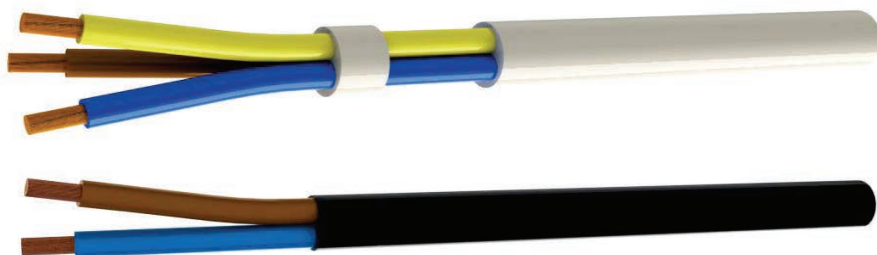


H03VV-F, H03VVH2-F

Ordinary PVC insulated and sheathed flexible cable

Rated Voltage: U₀/U - 300/300 V

Standard: DIN VDE 0281-5; HD 21.5.S3



Application

The cables are suitable for connection of light small duty appliances, i. e. desk-instructions of the lamps, fairy-lamps, house vacuum cleaners, radio sets etc. as far as this is allowed in the instructions of the electrical appliances. The cables with cross-section 0.5 and 0.75 mm² are not suitable for use in industrial electrical equipment, in agriculture and in open spaces.

Technical Data:	
Conductor resistance at 20°C:	according to VDE 0295 and IEC 60228 class 5
Core temperature, max:	70°C in operation
Max. short circuit temperature:	160°C, not more than 5 sec
Working voltage - U ₀ /U:	300/300 V
Max. permissible operating voltage:	
in three-phases AC system	U ₀ /U = 330/330V
in DC system	U ₀ /U = 495/495V
Test voltage:	AC - 2 kV; 50 Hz
Temperature Range	
Fixed installation:	-40°C to +70°C
Flexible Installation:	-5°C to +70°C
Bending radius, min.	6xD _{cab}
Specific insulation resistance at 70°C:	min, 10 ¹⁰ Ω x cm

Cable Structure:

Conductor:	Bare copper, fine wire conductor, bunch stranded as per VDE 0295 cl.5 (HD 383)
Insulation:	PVC core insulation YI2 as per VDE 0207 part 4 (HD 21.1 TI2)
Color code:	Cores colour coded to DIN VDE 0293 . (HD 27)
Core arrangement:	Cores layed up by H03VV-F, and laid parallel by H03VVH2-F
Outer jacket:	PVC outer jacket YM2 as per DIN VDE 0207/5(HD21.1 TM2), available in black, white or as per requirement

Packing

Standard packing length on cable coils: [50 m; 100 m];

Constructive and electrical data for H03VV-F; H03VVH2-F U₀/U - 300/300V

Num. of Cores and Nominal Cross Section	Number of Wires and Diameter	Nominal Thickness of Insulation	Nominal Thickness of Sheath	Overall Diameter (Approx.)	Conductor DC Resistance at 20°C	Copper weight (Approx.)	Total Weight (Approx.)	Max. Current Carrying Capacity at 30 C°
No x mm ²	No x mm	mm	mm	max.mm	Ω/km	kg/km	kg/km	A
H03VV-F								
2 x 0.5	15x0.2	0.5	0.6	5.04	39	9.6	40	3
2 x 0.75	22x0.2	0.5	0.6	5.5	26	14.4	48	6
3 x 0.5	15x0.2	0.5	0.6	5.4	39	14.4	47	3
3 x 0.75	22x0.2	0.5	0.6	5.8	26	21.6	57.8	6
4 x 0.5	15x0.2	0.5	0.6	6.0	39	19.2	56	3
4 x 0.75	22x0.2	0.5	0.6	6.5	26	29	70	6
H03VVH2-F								
2 x 0.5	15x0.2	0.5	0.6	5.1x3.1	39	9.6	28	3
2 x 0.75	22x0.2	0.5	0.6	5.5x3.4	26	14.4	35	6

* other dimensions available on request.

On Request:

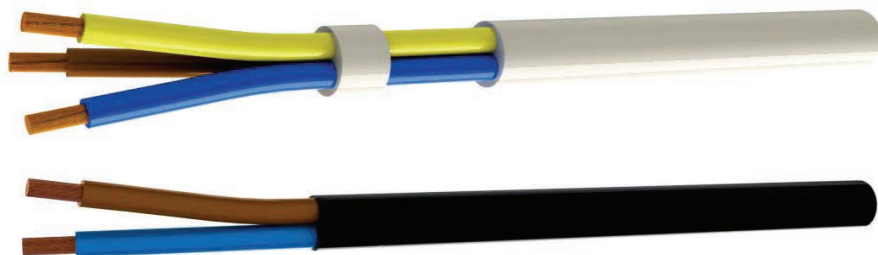
- Fire propagation acc. IEC 60332-1 cat. A, B, C
- Hydrocarbon resistant outer sheath (RH).
- Termite and rodents protected outer sheath
- Oil resistant outer sheath.

H05VV-F, H05VVH2-F

Ordinary PVC insulated and sheathed flexible cable

Rated Voltage: U₀/U - 300/500 V

Standard: DIN VDE 0281-5; HD 21.5.S3






Application

H05VV-F, H05VVH2-F cable types are especially suited to use for the appliances with medium mechanical stress in households, kitchens end offices also for household appliances in damp and wet areas , e.g. refrigerators, washing machines, spin - driver, etc. As far as this cable is admitted to the relevant specifications of the equipment.

These cable are suited to be use for cooking and heating apparatus under the condition that cable does not come in direct contact with hot parts of the apparatus and no other influences of heat. The cable are suitable for fixed installation in furniture, partition walls, decoration covering and in hollow spaces of prefabricated building parts.

Technical Data:		Cable Structure:	
Conductor resistance at 20°C:	according to VDE 0295 and IEC 60228	Conductor:	Bare copper, fine wire conductor, bunch stranded as per VDE 0295 cl.5 (HD 383)
Core temperature, max:	70°C in operation	Insulation:	PVC core insulation YI2 as per VDE 0207 part 4 (HD 21.1 TI2)
Max. short circuit temperature:	160 °C , not more than 5 sec	Color code:	Cores colour coded to DIN VDE 0293 . (HD 27)
Working voltage - U ₀ /U:	300/500 V	Core arrangement:	Cores layed up by H05VV-F, and laid parallel by H05VVH2-F
Max. permissible operating voltage:		Outer jacket :	PVC outer jacket YM2 as per VDE 0207 part 5 (HD21.1 TM2), available in black, white or as per requirement
in three-phases AC system	U ₀ /U = 330/550V		
in DC system	U ₀ /U = 495/825V		
Test voltage:	AC - 2 kV; 50 Hz		
Temperature Range			
Fixed installation:	-40°C to +70°C		
Flexible Installation:	-5°C to +70°C		
Bending radius, min.	6xDcable		
Specific insulation resistance at 70°C:	min, 10 ¹⁰ Ω x cm		

On Request:

-  Fire propagation acc. IEC 60332-1 cat. A, B, C
-  Hydrocarbon resistant outer sheath
-  Termite and rodents protected outer sheath

Construction data H05VV-F U ₀ /U - 300/500V					
Num. of Cores and Nominal Cross Section	Shape	Overall Diameter (Approx.)	Copper weight (Approx.)	Total Weight (Approx.)	Packing: Cable coil or Drum
No x mm ²		max.mm	kg/km	kg/km	m or N ^o /m
2 x 0.75	RF	6,5	14,4	65	100
3 G 0.75	RF	6,7	21,6	75	100
4 G 0,75	RF	7,2	29	89	100
5 G 0.75	RF	8	36	103	100
2 x 1	RF	7	19	75	100
3 G 1	RF	7,3	29	87	100
4 G 1	RF	8	38	109	100
5 G 1	RF	8,6	48	128	100
2 x 1.5	RF	7,5	29	96	100
3 G 1.5	RF	8,3	43	118	100
Construction data H05VV-F U ₀ /U - 300/500V					
Num. of Cores and Nominal Cross Section	Shape	Overall Diameter (Approx.)	Copper weight (Approx.)	Total Weight (Approx.)	Packing: Cable coil or Drum
No x mm ²		max.mm	kg/km	kg/km	m or N ^o /m
4 G 1.5	RF	9	58	148	100
5 G 1.5	RF	10	72	178	100
2 x 2.5	RF	9,5	48	149	100
3 G 2.5	RF	10	72	183	100
4 G 2.5	RF	11	96	220	100
5 G 2.5	RF	12	120	266	100
2 x 4	RF	11	76	207	100
3 G 4	RF	11,5	115	257	100
4 G 4	RF	12,5	154	312	100
5 G 4	RF	13,8	192	370	100
H05VVH2-F					
2 x 0.75	RF	6,3x4,0	14,4	43	100
2 x 1	RF	6,6x4,2	19	50	100

*other dimensions available on request

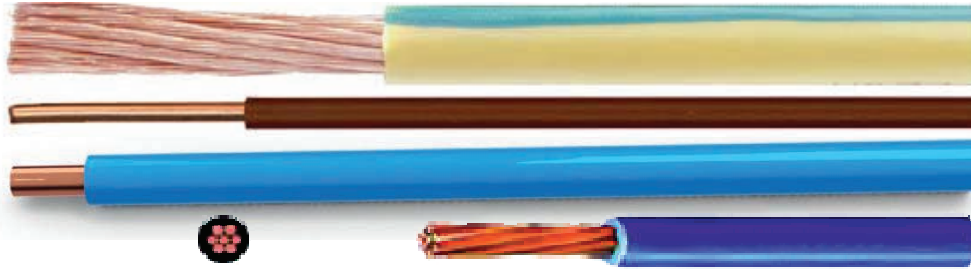
 RF - fine wire stranded conductor (class 5)

H05V-U-K, H07V-U/-R/-K

Single core, Non Sheathed PVC cable

Rated Voltage: U₀/U - 450/750 V

Standard: DIN VDE: 0281-3 (HD 21.3)



Application

H07V-U/-R/-K PVC-insulated single-core cable according to VDE 0281 part 3, HD 21.3 S3 and IEC 227-3. These PVC-insulated single-core cables are used for the internal wiring of equipment switching systems and distributors as well as for the protected installation in and to lighting fixtures with a rated voltage up to 1000 V alternating current or a direct voltage up to 750 V, earthed. These cables are suitable for installation in dry rooms, switching and distribution systems, in conduit, on, in and under plaster as well as in closed installation ducts.

Note (for H07V): These single-core cables may not be used for direct installation on flatbed bodies, ducts or tanks.

Approved for use as potential-compensating cable directly on, in and underneath plaster as well as on flatbed bodies or similar.






Technical Data:		Cable Structure:	
Conductor resistance at 20°C:	according to VDE 0295 and IEC 60228	Conductor:	The conductor is made of copper wires as follows: bare copper at H07V-U, class 1
Core temperature, max:	70°C in operation		wire stranded at H07V-R, class 2
Max. short circuit temperature:	160 °C, not more than 5 sec		fine wire stranded at H07V-K, class 5, according to VDE 0295 (IEC 60228)
Working voltage - U₀/U:		Insulation:	PVC, compound Type YI1 according to VDE 0207 part 4
for H05V up to 1mm²	U ₀ /U = 300/500V		black, red, blue, pink, gray, yellow, green, brown, white, violet, orange or on request.
for H07V from 1.5mm² and above	U ₀ /U = 450/750V	Color of insulaion:	Two-color combinations are not permitted except for green/yellow.
Test voltage:	AC - 2.5 kV; 50 Hz		
Temperature Range			
Fixed installation:	-40°C to +70°C		
Flexible Installation:	-5°C to +70°C		
Bending radius, min.	from 12.5 to 15xD cable		
Radiation resistance:	up to 80 x 10 ⁶ cJ/kg (up to 80 Mrad)		
Specific insulation resistance at 70°C:	min, 10 MΩ x km		

Packing



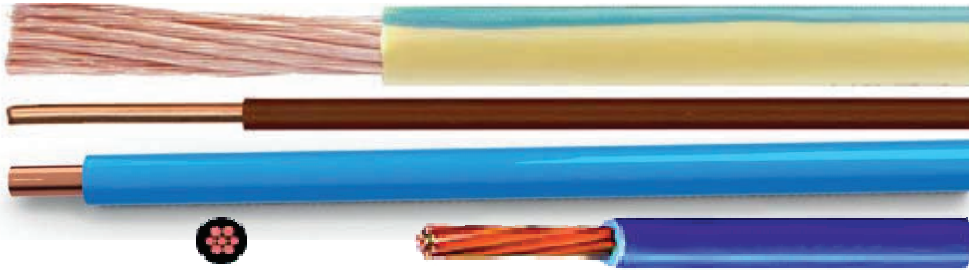
Up to 35sq.mm standard packing length in cable coils: (50m; 100m)
From 50sq.mm and above standard packing length on cable drums:(500m; 1000m)

On Request:

-  Fire propagation acc. IEC 60332-1 cat. A, B, C
-  Hydrocarbon resistant outer sheath (RH)
-  Termite and rodents protected outer sheath
-  Oil resistant outer sheath.
-  Protected against direct sun irradiation

H05V-U-K, H07V-U/-R/-K




Single core, Non Sheathed PVC cable
 Rated Voltage: U0/U - 450/750 V
 Standard: DIN VDE: 0281-3 (HD 21.3)



Construction data H07V-U/R/K U0/U - 450/750V

Nominal Cross Section	Shape	Overall Diameter (Approx.)	Copper weight (Approx.)	Total Weight (Approx.)	Packing: Cable coil or Drum
No x mm ²		max. mm	kg/km	kg/km	m or N°/m
H07V-U					
1,5	RE	2,75	14,4	20	100
2,5	RE	3,35	24	31	100
4	RE	3,8	38,0	46,0	100
6	RE	4,3	58,0	65,2	100
10	RE	5,5	96,0	107,0	100
H07V-K					
1,5	RF	3,0	14,4	20,07	100
2,5	RF	3,6	24,0	32,0	100
4	RF	4,2	38,0	48,5	100
6	RF	5,3	58,0	68,0	100
10	RF	7,0	96,0	118,5	100
16	RF	8,1	154,0	172,8	100
25	RF	10,0	240,0	270,6	100
35	RF	11,4	336,0	375,8	9/1000
50	RF	13,6	480,0	524,3	9/1000
70	RF	15,7	672,0	714,8	9/500
95	RF	18,0	912,0	984,5	9/500
120	RF	19,8	1152,0	1203,0	10/500
150	RF	22,5	1440,0	1514,6	12/500
185	RF	24,7	1776,0	1877,0	12/500
240	RF	28,1	2304,0	2409,4	12/500
H07V-R					
1,5	RM	3,0	14,4	22,0	100
2,5	RM	3,7	24,0	35,0	100
4	RM	4,2	38,0	51,1	100
6	RM	4,8	58,0	72,0	100
10	RM	6,1	96,0	118,0	100
16	RM	7,2	145,0	178,2	100
25	RM	9,0	240,0	282,0	100
35	RM	10,0	336,0	369,6	8/1000
50	RM	11,6	480,0	560,0	9/1000
70	RM	13,7	672,0	723,0	10/1000
95	RM	16,0	912,0	974,0	9/500
120	RM	18,0	1152,0	1272,0	9/500
150	RM	19,5	1440,0	1483,0	10/500
185	RM	21,6	1776,0	1873,0	14/1000
240	RM	24,6	2304,0	2430,6	12/500

*other construction, sizes and packing length are available on request.

-  RM - multiwire round shaped conductor
-  RE - solid round conductor (class 1)
-  RF - fine wire stranded conductor

NYM-J, NYM-O

Single core, Non Sheathed PVC cable

Rated Voltage: U₀/U - 450/750 V

Standard: DIN VDE: 0281-3 (HD 21.3)



Application

NYM is used as power and control cable in static installations for indoor installations, on, in and under plaster and in the air where mechanical damage is not anticipated.

Technical Data:		Cable Structure:	
Conductor resistance at 20°C:	according to VDE 0295 and IEC 60228	Conductor:	solid or multi-strand Cu wires class 1, 2 or 5 acc. VDE 0295(IEC 60228)
Core temperature, max:	70°C in operation	Insulation:	PVC type YI1 acc. DIN VDE 0207/4
Max. short circuit temperature:	160 °C , not more than 5 sec	Core identification:	according to DIN VDE 0293, construction with 7 or more cores are numbered coded (for J-type one of them is yellow-green)
Rated voltage - U₀/U:	300/500 V	Cores assembly:	cores stranded concentrically (cores stranded in concentric layers, for signal)
Test voltage:	AC - 2 kV; 50 Hz	Inner sheath:	rubber mass or PVC
Temperature Range:	-20°C to +70°C	Sheath:	PVC type YM1 acc. DIN VDE 0207/5
Bending radius, min:	6xDcable		
Specific insulation resistance at 70°C:	min, 10 ¹⁰ Ω x cm		
Max. permissible tensile stress with cable grip:	For Cu conductor = 50 N/mm ²		

Packing



Standard packing length on wooden drums: (500m; 1000m)

Length Tolerance per drum ± 5%

Standard packing length on cable coils: (50m; 100m)

On Request:



Fire propagation acc. IEC 60332-1 cat. A, B, C



Hydrocarbon resistant outer sheath (RH)



Termite and rodents protected outer sheath



Oil resistant outer sheath.



Protected against direct sun irradiation



RF - fine wire stranded conductor (class 5)

Construction data NYM-J/O U ₀ /U - 300/500V					
Num. of Cores and Nominal Cross Section	Shape	Overall Diameter (Approx.)	Copper weight (Approx.)	Total Weight (Approx.)	Packing: Cable coil or Drum
No x mm ²		max.mm	kg/km	kg/km	m or N ^o /m
1 x 1.5	RE	5.4	14.4	77.4	100
1 x 2.5	RE	6.0	24	61	100
1 x 4	RE	6.7	38	82.4	100
1 x 6	RE	7.2	58	105	100
1 x 10	RE	8.4	96	158.5	100
1 x 16	RM	10.0	154	242	100
2 x 1.5	RE	8.8	29	123	100
2 x 2.5	RE	10	48	166	100
2 x 4	RE	11.5	76	225	50
2 x 6	RE	12.5	116	284	50
2 x 10	RE	15.5	192	470	50
2 x 16	RM	18.5	308	712	9/500
2 x 25	RM	22.2	480	1085	10/500

Construction data NYM-J/O U ₀ /U - 300/500V					
Num. of Cores and Nominal Cross Section	Shape	Overall Diameter (Approx.)	Copper weight (Approx.)	Total Weight (Approx.)	Packing: Cable coil or Drum
No x mm ²		max.mm	kg/km	kg/km	m or N ^o /m
2 x 35	RM	25	647	1400	14/1000
3 x 1.5	RE	9.2	43	142.2	100
3 x 2.5	RE	10.5	72	195.5	100
3 x 4	RE	12	115	270.5	50
3 x 6	RE	13	173	359	50
3 x 10	RE	16.5	290	573	9/500
3 x 16	RM	19.5	462	903	12/1000
3 x 25	RM	24	720	1372.5	14/1000
3 x 35	RM	26.4	975	1750	14/1000
4 x 1.5	RE	9.8	58	167.5	100
4 x 2.5	RE	11.2	96	233	100
4 x 4	RE	13.3	154	338	50
4 x 6	RE	15.2	230	453	50



*other dimensions and packing length are available on request



Application

NYY, NAYY is used in power plants industrial and switching installations, in secondary distribution networks and other. These cables are preferentially used in outdoor applications, for indoor installations, in the open air, underground and in water where mechanical damage is not anticipated.





Technical Data:		Cable Structure:	
Conductor resistance at 20°C:	according to VDE 0295 and IEC 60228	Conductor:	solid or multi-strand Cu or Al wires class 1, 2 or 5 acc. VDE 0295(IEC 60228)
Core temperature, max:	70°C in operation	Insulation:	PVC type DIV4 acc. VDE0207
Max. short circuit temperature:	160 °C , not more than 5 sec	Core identification:	according to VDE 0293
Rated voltage - U₀/U (U_{max}):	0.6/1(1.2) kV	Signal-command copper core:	Additional, cross section 2,5mm ² , red coloured (black coloured 1,5mm ² on request)
Test voltage:	AC - 4 kV; 50 Hz	Cores assembly:	cores stranded concentrically (cores stranded in concentric layers, for signal)
Temperature Range:		Inner sheath:	rubber filling compound or tape
Fixed installation:	-30°C to +70°C	Sheath:	PVC type DMV5 acc. VDE 0207
Flexible Installation:	-5°C to +50°C	Color of sheath:	black
Bending radius, min.			
single core:	15xD _{cable}		
multi core:	12xD _{cable}		
Specific insulation resistance at 70°C:	min, 10 ¹⁰ Ω x cm		
Max. permissible tensile stress with cable grip:	For Cu conductor = 50 N/mm ² For Al conductor = 30 N/mm ²		

	RM - mutliwire round shaped
	Copper: Aluminium:
	1.5mm ² - 630mm ² 50mm ² - 630mm ²
	SM - mutliwire sector shaped
	Copper: Aluminium:
	35mm ² - 300mm ² 50mm ² - 240mm ²
	RE - solid round conductor

Additional information and technical data

Available conductor sizes for power distribution:			
	Number of cores	size of Cu conductors	size of Al conductors
	1 core:	4mm ² - 630mm ²	25mm ² - 630mm ²
	2 cores:	1.5mm ² - 120mm ²	25mm ² - 120mm ²
	3 cores:	1.5mm ² - 300mm ²	25mm ² - 240mm ²
	4 cores:	1.5mm ² - 300mm ²	25mm ² - 240mm ²
	3 cores+1 earth core:	25mm ² - 300mm ² / + 16mm ² - 150mm ²	25mm ² - 240mm ² / + 25mm ² - 120mm ²
	5 cores:	1.5mm ² - 300mm ²	25mm ² - 300mm ²
Available conductor sizes for signalling and control			
	Number of cores	size of Cu conductors	size of Al conductors
	over 7 cores (class 5)	(1.5 - 2.5)mm ²	/
	7 - 19 cores:	(1.5 - 4) RE; RM	/
	over 19 cores	(1.5 - 2.5) RE; RM	/

On request:

-  Fire propagation acc. IEC 60332-3 cat. A, B, C
-  Hydrocarbon resistant outer sheath (RH).
-  Termite and rodents protected outer sheath.
-  Oil resistant outer sheath.

Packing



Standard packing length on wooden drums: (500m; 1000m)
 Length Tolerance per drum ± 5%

*other dimensions available on request.

Construction data: NAYY U ₀ /U - 0.6/1kV						
Number of cores x Nominal Cross Section	Shape	Overall Diameter (Approx.)	Al. weight (Approx.)	Total Weight (Approx.)	Packing: Cable coil or Drum	
No x mm ²		max.mm	kg/km	kg/km	m or N ² /m	
4x25+1.5	RM+RE	27,5	290,0	1081,0	12	500
4x35+1.5	RM+RE	30,0	406,0	1293,5	14	500
4x50+1.5	SM+RE	31,0	580,0	1340,0	14	500
4x70+1.5	SM+RE	35,0	812,0	1755,0	16	500
4x95+1.5	SM+RE	40,0	1102,0	2262,0	16	500
4x120+1.5	SM+RE	43,0	1392,0	2702,0	16	500
4x150+1.5	SM+RE	48,0	1740,0	3370,5	18	500
4x185+1.5	SM+RE	53,0	2146,0	4086,5	20	500
4x240+1.5	SM+RE	59,0	2784,0	5142,0	22	500

NYY, NAYY

Power cable with PVC insulation and PVC sheath

Rated Voltage: U0/U - 0.6/1 kV

Standard: DIN VDE 0276/HD603 type 3G-2-power; DIN VDE 0276/HD627 type 4H1 - signal



Construction data: NYY U0/U - 0.6/1kV					
Number of cores x Nominal Cross Section	Shape	Overall Diameter (Approx.)	Copper weight (Approx.)	Total Weight (Approx.)	Packing: Cable coil or Drum
No x mm ²		max.mm	kg/km	kg/km	m or N ² /m
1x4	RE	8,0	38,0	104,0	100
1x6	RE	9,0	58,0	128,0	100
1x10	RE	10,0	96,0	176,0	100
1x16	RE	11,0	154,0	239,0	9/1000
1x25	RM	13,0	240,0	380,0	9/1000
1x35	RM	14,0	336,0	477,0	10/1000
1x50	RM	15,0	480,0	650,0	10/1000
1x70	RM	17,0	672,0	864,0	12/1000
1x95	RM	19,0	912,0	1132,0	12/1000
1x120	RM	21,0	1150,0	1405,0	14/1000
1x150	RM	22,0	1440,0	1710,0	14/1000
1x185	RM	24,0	1776,0	2086,0	14/1000
1x240	RM	27,0	2304,0	2669,0	16/1000
1x300	RM	30,0	2880,0	3305,0	16/1000
1x400	RM	34,0	3840,0	4337,0	18/1000
3x1.5	RE	12,0	43,0	223,0	9/1000
3x2.5	RE	13,0	72,0	272,0	9/1000
3x4	RE	15,0	115,0	373,0	10/1000
3x6	RE	16,0	173,0	466,0	12/1000
3x10	RE	18,0	288,0	629,0	12/1000
3x16	RE	20,0	461,0	850,0	12/1000
3x25/16	RM/RM	25,0	874,0	1595,0	14/1000
3x35/16	SM/RM	27,0	1162,0	1718,0	16/1000
3x50/25	SM/RM	30,5	1680,0	2383,0	14/500
3x70/35	SM/SM	33,0	2352,0	3196,0	14/500
3x95/50	SM/SM	38,0	3216,0	4271,0	16/500
3x120/70	SM/SM	41,0	4128,0	5281,0	16/500
3x150/70	SM/SM	45,5	4992,0	6408,0	18/500
3x185/95	SM/SM	50,0	6240,0	7909,0	20/500
3x240/120	SM/SM	57,0	8064,0	10162,0	22/500
4x1.5	RE	13,0	58,0	256,0	9/1000
4x2.5	RE	14,0	96,0	316,0	10/1000
4x4	RE	15,0	154,0	439,0	10/1000
4x6	RE	17,0	230,0	547,0	12/1000
4x10	RE	19,0	384,0	743,0	12/1000
4x16	RE	22,0	614,0	1039,0	14/1000
4x25	RM	26,5	960,0	1620,0	16/1000
4x35	SM	27,0	1344,0	1916,0	16/1000
4x50	SM	31,0	1920,0	2639,0	14/500
4x70	SM	35,0	2688,0	3576,0	14/500
4x95	SM	40,0	3648,0	4746,0	16/500
4x120	SM	43,0	4608,0	5813,0	16/500
4x150	SM	48,0	5760,0	7263,0	18/500
4x185	SM	53,0	7104,0	8905,0	20/500
4x240	SM	60,0	9210,0	11430,0	24/500
5x1.5	RE	14,0	72,0	292,0	10/1000
5x2.5	RE	15,0	120,0	363,0	10/1000
5x4	RE	17,0	192,0	510,0	12/1000
5x6	RE	18,5	288,0	640,0	12/1000
5x10	RE	21,0	480,0	899,0	14/1000
5x16	RE	23,0	768,0	1240,0	14/1000
5x25	RM	30,0	1200,0	1957,0	16/1000
7x1.5	RE	15,0	101,0	350,0	10/1000
10x1.5	RE	17,5	144,0	476,0	12/1000
12x1.5	RE	18,0	173,0	523,0	12/1000
14x1.5	RE	18,7	202,0	578,0	12/1000
19x1.5	RE	20,5	274,0	716,0	14/1000
24x1.5	RE	23,5	346,0	885,0	14/1000
30x1.5	RE	25,0	432,0	1045,0	14/1000
40x1.5	RE	27,0	576,0	1310,0	16/1000
7x2.5	RE	16,0	168,0	445,0	12/1000
10x2.5	RE	19,0	240,0	610,0	12/1000
12x2.5	RE	19,5	288,0	680,0	12/1000
14x2.5	RE	20,5	336,0	755,0	14/1000
19x2.5	RE	22,5	456,0	950,0	14/1000
24x2.5	RE	26,0	576,0	1173,0	16/1000
30x2.5	RE	27,2	720,0	1398,0	16/1000
40x2.5	RE	30,0	960,0	1778,0	16/1000

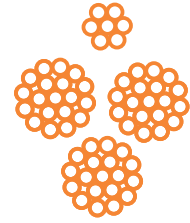
*other dimensions and packing length are available on request.

N2XY, NA2XY, N2X2Y, NA2X2Y

Power cable with XLPE insulation and PVC or PE sheath

Rated Voltage: U₀/U - 0.6/1 kV

Standard: VDE 0276/HD603 tip 5G-2; IEC 60502-1



Application

The power cables with insulation of cross-linked polyethylene (XLPE) are designed for distribution and supply of consumers with nominal voltage 0.6/1 kV and frequency 50 Hz in industrial installations and urban networks. They are suitable for fixed indoor assembly in cable ducts and conduits, over shelves and grilles, directly underground in ditch and outdoor under shelters providing the conditions determined for the type of cable.

Technical Data:		Cable Structure:	
Conductor resistance at 20°C:	according to VDE 0295 and IEC 60228	Conductor:	solid or multi-strand Cu or Al wires class 1, 2 or (5) acc. VDE 0295 (IEC 60228)
Core temperature, max:	90°C in operation	Insulation:	XLPE type DIX3 acc. to VDE 0276-603/5G
Max. short circuit temperature:	250 °C, not more than 5 sec	Core identification:	according to VDE 0293 (HD 308)
Rated voltage U ₀ / U(U _{max}):	0.6/1(1.2) kV	Signal-command copper core:	Additional, cross section 2,5mm ² , red coloured (black coloured 1,5mm ² on request)
Test voltage:	AC - 4 kV (3,5kV by IEC); 50 Hz	Cores assembly:	cores stranded concentrically (cores stranded in concentric layers, for signal)
Temperature range:		Wrapping:	paper tape
flexing:	-5°C to +50°C	Inner covering:	rubber filling compound
stationary:	-30°C to +90°C	Sheath:	PVC type DMV6 acc. to VDE 0276-603/sec.1 or PE HDPE mass, type DMP2 acc. DIN VDE 0276/HD603
Bending radius, min.		Color of sheath:	black
for single-core:	15xD _{cable}		
for multi-core:	12xD _{cable}		
Specific insulation resistance at 90°C:	min, 10 ¹⁴ Ω x cm		
Max. permissible tensile stress with cable grip:	For Cu conductor = 50 N/mm ² For Al conductor = 30 N/mm ²		

Additional information and technical data

Available conductor sizes for power distribution:

Number of cores	size of Cu conductors	size of Al conductors
1 core:	4mm ² - 630mm ²	25mm ² - 630mm ²
2 cores:	1.5mm ² - 120mm ²	25mm ² - 120mm ²
3 cores:	1.5mm ² - 300mm ²	25mm ² - 240mm ²
4 cores:	1.5mm ² - 300mm ²	25mm ² - 240mm ²
3 cores + 1 earth core:	25mm ² - 300mm ² / + 16mm ² - 150mm ²	25mm ² - 240mm ² / + 16mm ² - 120mm ²
5 cores:	1.5mm ² - 300mm ²	25mm ² - 300mm ²

Available conductor sizes for signaling and control

Number of cores	size of Cu conductors	size of Al conductors
over 7 cores (class 5)	(1.5 - 2.5) mm ²	/
7 -19 cores:	(1.5 - 4) RE; RM	/
over 19 cores	(1.5 - 2.5) RE; RM	/

*other dimensions and packing length are available on request.

Packing



Standard packing length on wooden drums: (500m; 1000m)



RM - mutliwire round shaped

Copper: Aluminium:
1.5mm² - 630mm² 50mm² - 630mm²



SM - mutliwire sector shaped

Copper: Aluminium:
35mm² - 300mm² 50mm² - 240mm²

RE - solid round conductor

On request:



- Fire propagation acc. IEC 60332-3



- Hydrocarbon resistant outer sheath (RH).



- Termite and rodents protected outer sheath.



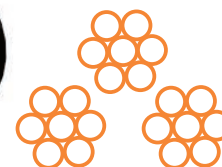
- Oil resistant outer sheath.

SVT, SAVT

Al conductors, XLPE insulation, twisted cable

Rated Voltage: U0/U - 0.6/1 kV

Standard: HD 626/part 4F



Construction data: SAVT U0/U - 0.6/1kV					
Number of cores x Nominal Cross Section	Shape	Overall Diameter (Approx.)	Al weight (Approx.)	Total Weight (Approx.)	Packing: Cable coil or Drum
No x mm ²		max.mm	kg/km	kg/km	m or N°/m
1x4	RE	8,0	12,0	78,0	100
1x6	RE	8,5	17,0	91,0	100
1x10	RE	9,3	28,0	115,0	100
1x16	RM	10,8	45,0	150,0	100
1x25	RM	11,9	68,0	187,0	9/1000
1x35	RM	13,0	95,0	225,0	9/1000
1x50	RM	14,2	127,0	265,0	10/1000
1x70	RM	16,7	190,0	360,0	12/1000
1x95	RM	18,4	260,0	465,0	12/1000
1x120	RM	19,9	325,0	550,0	12/1000
1x150	RM	21,9	405,0	680,0	14/1000
1x185	RM	24,3	510,0	830,0	14/1000
1x240	RM	27,2	665,0	1065,0	16/1000
1x300	RM	30,3	830,0	1305,0	16/1000
1x400	RM	33,8	1060,0	1595,0	18/1000
1x500	RM	37,9	1410,0	2070,0	20/1000
2x2.5	RE	10,6	14,0	120,0	100
2x4.0	RE	12,1	23,0	160,0	100
2x6.0	RE	13,2	34,0	185,0	100
2x10	RE	15,2	56,0	245,0	100
2x16	RM	17,8	90,0	340,0	12/1000
2x25	RM	21,5	137,0	470,0	14/1000
3x2.5	RE	11,0	21,0	130,0	100,0
3x4.0	RE	12,8	36,0	185,0	100,0
3x6.0	RE	14,0	51,0	225,0	10/1000
3x10	RE	16,0	85,0	290,0	12/1000
3x16	RE	18,9	135,0	380,0	12/1000
3x25	RM	22,8	210,0	610,0	14/1000
3x35	RM	25,3	290,0	740,0	14/1000
3x50	RM	28,9	385,0	950,0	16/1000
3x70	SM	28,8	585,0	1090,0	14/500
3x95	SM	33,1	810,0	1490,0	14/500
3x120	SM	35,9	1020,0	1710,0	16/500
3x150	SM	39,3	1255,0	2060,0	16/500
3x185	SM	43,4	1560,0	2610,0	16/500
3x240	SM	48,9	2035,0	3320,0	20/500
3x4.0+2.5	RE/RE	13,4	42,0	205,0	9/1000
3x6.0+4.0	RE/RE	14,4	63,0	240,0	10/1000
3x10+6.0	RE/RE	16,7	101,0	320,0	12/1000
3x16+10	RE/RE	19,5	165,0	475,0	12/1000
3x25+16	RM/RE	24,4	255,0	630,0	14/1000
3x35+16	RM/RE	27,1	340,0	825,0	16/1000
3x50+25	RM/RM	30,8	480,0	1025,0	14/500
3x70+35	SM/RM	31,8	670,0	1250,0	14/500
3x95+50	SM/SM	36,8	910,0	1680,0	16/500
3x120+70	SM/SM	40,1	1180,0	2010,0	16/500
3x150+70	SM/SM	44,3	1405,0	2415,0	18/500
3x185+95	SM/SM	49,3	1780,0	2975,0	20/500
3x240+120	SM/SM	55,4	2310,0	3805,0	22/500

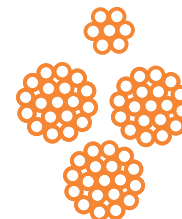
* Other dimensions and packing length are available on request.

N2XY, NA2XY, N2X2Y, NA2X2Y

Power cable with XLPE insulation and PVC or PE sheath

Rated Voltage: U0/U - 0.6/1 kV

Standard: VDE 0276/HD603 tip 5G-2; IEC 60502-1



Low Voltage Power Cables

Construction data: N2XY U0/U - 0.6/1kV					
Number of cores x Nominal Cross Section	Shape	Overall Diameter (Approx.)	Copper (or Al) weight (Approx.)	Total Weight (Approx.)	Packing: Cable coil or Drum
No x mm ²		max. mm	kg/km	kg/km	m or N°/m
1x4	RE	6,5	38,0	74,0	100
1x6	RE	7,0	58,0	96,0	100
1x10	RE	8,0	96,0	142,0	100
1x16	RE	9,0	154,0	205,0	8/1000
1x25	RM	11,0	240,0	302,0	9/1000
1x35	RM	12,0	336,0	400	9/1000
1x50	RM	13,0	480,0	526,0	9/1000
1x70	RM	16,0	672,0	750,0	12/1000
1x95	RM	17,0	912,0	1000,0	12/1000
1x120	RM	18,5	1150,0	1240,0	12/1000
1x150	RM	21,0	1440,0	1550,0	14/1000
1x185	RM	23,0	1776,0	1890,0	14/1000
1x240	RM	26,0	2304,0	2430,0	16/1000
1x300	RM	28,0	2880,0	3015,0	16/1000
3x1.5	RE	10,0	43,0	142,0	8/1000
3x2.5	RE	11,0	72,0	183,0	9/1000
3x4	RE	12,0	115,0	242,0	9/1000
3x6	RE	13,0	173,0	320,0	9/1000
3x10	RE	15,0	288,0	480,0	10/1000
3x16	RE	17,0	461,0	700,0	12/1000
3x25/16	RM/RM	21,0	874,0	1230,0	14/1000
3x35/16	SM/RM	26,0	1162,0	1450,0	16/1000
3x50/25	SM/RM	29	1680,0	1955,0	14/500
3x70/35	SM/SM	31,0	2352,0	2720,0	14/500
3x95/50	SM/SM	37,0	3216,0	3756,0	16/500
4x1.5	RE	11,0	58,0	165,0	9/1000
4x2.5	RE	12,0	96,0	216,0	9/1000
4x4	RE	13,0	154,0	290,0	9/1000
4x6	RE	14,0	230,0	385,0	10/1000
4x10	RE	16,0	384,0	590,0	12/1000
4x16	RE	19,0	614,0	864,0	12/1000
4x25	RM	22	960,0	1293,0	14/1000
4x35	SM	27,0	1344,0	1750,0	16/1000
4x50	SM	30,0	1920,0	2300,0	14/500
4x70	SM	34,0	2688,0	3280,0	14/500
4x95	SM	38,0	3648,0	4300,0	16/500
4x120	SM	43,0	4608,0	5416,0	16/500
4x150	SM	47,0	5760,0	6700,0	18/500
4x185	SM	52,0	7104,0	8200,0	20/500
4x240	SM	58,0	9210,0	10560,0	22/500
5x1.5	RE	12,0	72,0	193,0	9/1000
5x2.5	RE	12,5	120,0	252,0	9/1000
5x4	RE	14,0	192,0	340,0	10/1000
5x6	RE	15,0	288,0	460,0	10/1000
5x10	RE	18,0	480,0	840,0	12/1000
5x16	RE	21,0	768,0	1040,0	14/1000
5x25	RM	25,0	1200,0	1560,0	14/1000
Construction data: NA2XY U0/U - 0.6/1kV					
4x16+1.5	RE+RE	21,0	186,0	596,0	14/1000
4x25+1.5	RM+RE	24	290,0	820,0	14/1000
4x35+1.5	RM+RE	27,0	406,0	1033,0	16/1000
4x50+1.5	SM+RE	30,0	580,0	1137,0	14/500
4x70+1.5	SM+RE	35,0	812,0	1568,0	16/500
4x95+1.5	SM+RE	39,0	1102,0	1946,0	16/500
4x120+1.5	SM+RE	43,0	1392,0	2436,0	16/500
4x150+1.5	SM+RE	47,0	1740,0	2973,0	18/500
4x185+1.5	SM+RE	52,0	2146,0	3592,0	20/500
4x240+1.5	SM+RE	58,0	2784,0	4573,0	22/500
4x16	RE	21,0	186,0	570,0	14/1000
4x25	RM	24	290,0	794,0	14/1000
4x35	SM	27,0	406,0	874,0	16/1000
4x50	SM	30,0	580,0	1110,0	14/500
4x70	SM	35,0	812,0	1540,0	16/500
4x95	SM	39,0	1102,0	1920,0	16/500
4x120	SM	43,0	1392,0	2410,0	16/500
4x150	SM	47,0	1740,0	2946,0	18/500
4x185	SM	52,0	2146,0	3565,0	20/500
4x240	SM	58,0	2784,0	4545,0	22/500

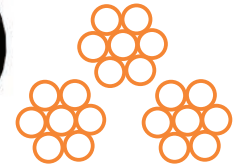
*other dimensions and packing length are available on request.

SVT, SAVT

Power cable with PVC insulation and PVC sheath

Rated Voltage: U0/U - 0.6/1 kV

Standard: BDS 16291-85



Construction data: SAVT U0/U - 0.6/1kV					
Number of cores x Nominal Cross Section	Shape	Overall Diameter (Approx.)	Al weight (Approx.)	Total Weight (Approx.)	Packing: Cable coil or Drum
No x mm ²		max.mm	kg/km	kg/km	m or N°/m
4x2.5	RE	11,9	28,0	152,0	9/1000
4x4.0	RE	13,6	46,0	216,0	10/1000
4x6.0	RE	14,4	68,0	260,0	10/1000
4x10	RE	16,8	112,0	340,0	12/1000
4x16	RE	19,2	180,0	460,0	12/1000
4x25	RM	25,2	270,0	670,0	14/1000
4x35	RM	28,0	390,0	905,0	16/1000
4x50	RM	32,0	520,0	1180,0	14/500
4x70	SM	33,0	760,0	1390,0	14/500
4x95	SM	37,3	1060,0	1860,0	16/500
4x120	SM	41,2	1340,0	2210,0	16/500
4x150	SM	45,2	1650,0	2710,0	18/500
4x185	SM	49,5	2100,0	3320,0	20/500
4x240	SM	56,4	2720,0	4110,0	22/500
5x2.5	RE	12,8	35,0	180,0	9/1000
5x4.0	RE	15,5	58,0	270,0	10/1000
5x6.0	RE	16,8	85,0	320,0	12/1000
5x10	RE	19,2	140,0	430,0	12/1000
5x16	RE	23,2	225,0	580,0	14/1000
5x25	RM	27,9	345,0	855,0	16/1000
5x35	RM	32,4	480,0	1210,0	18/1000
5x50	RM	36,9	650,0	1470,0	16/500
5x70	RM	42,0	965,0	1955,0	16/500

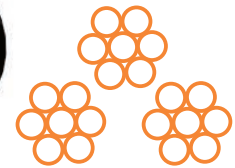
* Other dimensions and packing length are available on request.

SVT, SAVT

Power cable with PVC insulation and PVC sheath

Rated Voltage: U₀/U - 0.6/1 kV

Standard: BDS 16291-85



Application

Used for transferring and distribution of electrical power for switching installations and outdoor installation or for interior installation in rooms, in canals, tunnels, shafts or pits, at rated voltage U₀/U to 0,6/1 kV with frequency 50 Hz.

Technical Data:		Cable Structure:	
Conductor resistance at 20°C:	According to BDS 904-84	Conductor:	solid or twisted copper or Al wires, class 1 or 2 according to BDS 904-84 (IEC 60228).
Core temperature, max:	70°C in operation	Insulation:	PVC compaund
Max. short circuit temperature:	160 °C, not more than 5 sec	Core identification:	according to BDS 16291
Rated voltage - U ₀ /U (U _{max}):	0.6/1(1.2) kV	Cores assembly:	cores stranded concentricly (cores stranded in concentric layers, for signal)
Test voltage:	AC - 4 kV; 50 Hz	Sheath:	PVC compaund
Temperature Range		Color of sheath:	Gray or black
Fixed installation:	-30°C to +70°C		
Flexible Installation:	-5°C to +50°C		
Min. tempaure of laying:	-5°C		
Bending radius, min.	10xDcable		
Specific insulation resistance at 70°C:	min, 10 ¹⁰ Ω x cm		
Max. permissible tensile stress with cable grip:	For Cu conductor = 50 N/mm ² For Al conductor = 30 N/mm ²		
Flame test:	acc. to IEC 60332-1		

Standard shapes and size of conductors:

- RM - mutliwire round shaped conductor
 Copper: Aluminium:
 1.5mm² - 630mm² 50mm² - 630mm²
- SM - mutliwire sector shaped conductor
 Copper: Aluminium:
 35mm² - 300mm² 50mm² - 240mm²
- RE - solid round conductor

On Request:

- Fire propagation acc. IEC 60332-3 cat. A, B, C (SVT-FR)
- Hydrocarbon resistant outer sheath (RH).
- Termite and rodents protected outer sheath.
- Protected against direct sun irradiation (SVT_c)
- Oil resistant outer sheath.

Additional information and technical data:

Available conductor sizes for power distribution:			
	Number of cores	size of Cu conductors	size of Al conductors
	1 core:	4mm ² - 630mm ²	25mm ² - 630mm ²
	2 cores:	1.5mm ² - 120mm ²	25mm ² - 120mm ²
	3 cores:	1.5mm ² - 300mm ²	25mm ² - 240mm ²
	4 cores:	1.5mm ² - 240mm ²	25mm ² - 240mm ²
	3 cores+1 earth core:	25mm ² - 300mm ² + 16mm ² - 150mm ²	25mm ² - 240mm ² + 25mm ² - 120mm ²
	5 cores:	1.5mm ² - 240mm ²	25mm ² - 240mm ²
Available conductor sizes for signaling and control			
	Number of cores	size of Cu conductors	size of Al conductors
	7 -19 cores:	(1.5 - 10) RE	/
	over 19 cores	(1.5 - 2.5) RE	/

* Other dimensions available on request.

Packing

- Standard Packing length on wooden drums: [500 m; 1000 m];
Length Tolerance per drum ± 5%

N1XD9-AR, X00/O-A, AL/R

XLPE insulated cable bunch with supporting neutral conductor

Rated Voltage: U0/U - 0.6/1 kV

Standard: HD 626/part 6E; N.C5.250; N.C5.251; NF C 33-209



Application

The power cables with XLPE insulation for overhead lines - self-supporting type are designed for transfer, distribution and supply with electrical power in networks low voltage U₀/U-0.6/1 kV. In constructions for distribution networks these cable permit suspension on fasades and trees. They allow crossing of forest areas without cutting and maintenance of openings in the wood. The suspension and support of the whole bundle is carried out by a supporting insulated neutral wire of aluminium steel conductor or of aluminium alloy.

Cable Structure:		Technical Data:	
Phases Conductors:	compacted round shaped aluminium rope	Operating temperature:	90°C
Neutral conductor-Self Supporting:	compacted round shaped rope of aluminium alloy AlMgSi of 95mm ² , 70mm ² or 54.6mm ² nominal cross-section, or aluminium alloy AlMg 1 (1% magnesium) of 71.5mm ² nominal cross-section, or Al/Fe core of 50/8mm ² or 61/10mm ²	Short-circuit temp. on phase cores:	250°C (5 s. maximum duration)
Public lighting, optional:	compacted round shaped aluminium rope, 16 and 25mm ²	Short-circuit temp. on neutral core:	130°C (5 s. maximum duration)
Pilot cores, optional:	copper solid wire, 1.5 mm ²	Nominal voltage AC:	0,6/1 kV
Insulation:	XLPE for all elements of cable	Highest system voltage, AC:	1.2 kV
Color:	black	Test voltage AC - 50 Hz:	4 kV (3 kV acc. To N.C5.250)
Cable lay up:	Phase core and cores for street lighting twisted in a bunch around supporting neutral core.	Temperature of using:	-20°C to +90°C
Standard identification of cores:	Phase cores are identified by numbers: 1,2,3 Cores for street lighting are identified by letters: R1 and R2 Neutral core is identified by longitudinal convexity an insulation.	Temperature of laying, min:	-20°C
		Bending radius, min:	for cable -14xD _{core} for one core - 6xD _{core}
		Specific volume resistance at 90°C:	min, 10 ¹⁴ Ω x cm

Packing



Standard Packing length on wooden drums: [500 m; 1000 m];

Type	X00/O-A; N1XD9-AR; AL/R U0/U - 0.6/1 kV							X00/O-A; N1XD9-AR; AL/R U0/U - 0.6/1 kV				
	Nominal Cross Section mm ²	Min. number of wires	Max. electrical resistance Ω/km	Diameter od conductors min. (mm) max. (mm)		Breaking Force, min kN	Insulation thickness mm	Outside diameter min. (mm) max. (mm)		Num. of Cores and Nominal Cross Section	Max. continuous current-carrying capacity in phase conductors and in Public lighting conductor at temp. 90°C: in Air at 30°C stretched between poles in air at 30°C	
Phase conductor	16	7	1,91	4,6	5,1	/	1,2	7	7,8	3x25+54.6(TP)	112	/
	25	7	1,2	5,8	6,3	/	1,4	8,6	9,4	3x35+Kx16+54.6(TP)	138	83
	35	7	0,868	6,8	7,3	/	1,6	10	10,9	3x50+Kx16+54.6(TP)	168	83
	50	7	0,641	7,9	8,4	/	1,6	11,1	12	3x70+Kx16+54.6(TP)	213	83
	70	12	0,443	9,7	10,2	/	1,8	13,3	14,2	3x70+Kx25+54.6(TP)	213	111
	95	19	0,32	11	12	/	1,8	14,6	15,7	3x70+Kx16+70(TP)	213	83
	120	19	0,253	12	13,1	/	1,8	15,6	16,7	3x95+Kx16+70(TP)	258	83
Neutral conductor	150	19	0,206	13,7	15	/	1,8	17,3	18,6	3x120+Kx16+70(TP)	300	83
	54.6	7	0,63	9,2	9,6	16,6	1,6	12,3	13	3x120+Kx16+95(TP)	300	83
	70	7	0,5	10	10,2	20,5	1,5	12,9	13,6	3x150+Kx16+70(TP)	344	83
	95	19	0,343	12,2	12,9	27,5	1,6	15,3	16,3	3x150+Kx16+95(TP)	344	83
	71.5	7	0,47	9,8	10,6	15,5	1,8	14,2	14,6	3x70+71.5(TP)	213	/
	50/8	6+1	0,59	9,2	9,7	17	1,5(1,6)	12,7	12,9	3x70+Kx16+71.5(TP)	213	83
	61/10	6+1	0,51	10,5	/	17	1,8	14	15	3x70+Kx16+50/8(TP)	213	83
Pilot core	1,5	1	/	1,5	/	/	1,2	3,7	4,2	3x70+Kx16+61/10(TP)	213	83

*Natural conductors: 71.5 mm²; 61/10; 50/8 - only for type X00/O-A (TP) - Three-Phase



Application

For installation in dry environments only, both in and beneath plaster. The cables must be covered by plaster along their entire length. Installation in cavities of concrete, stone or non-flammable building materials is allowed. Installations notes:

- The cables cannot be installed on flammable building materials, immediately next to or under wire mesh or similar materials. For mounting, only materials and procedure shall be used which preclude a deformation or damage of the insulation, e. g. gypsum plaster, adhesives, nails with insulating washers.
- Flat house wire cables may only be installed beneath gypsum board if these are subsequently fixed using gypsum plaster. The cables may not be bundled together. Bunching flat webbed building wires to insertion points for electrical equipments is not considered as bunching.

Technical Data:	
Conductor resistance at 20°C:	according to BDS 904-84 class 1
Core temperature, max:	70°C in operation
Max. short circuit temperature:	160 °C , not more than 5 sec
Rated voltage - U₀ / U:	220/380 V
Test voltage:	AC - 2 kV; 50 Hz
Temperature Range:	-20°C to +70°C
Bending radius, min.	6xD _{cab}
Specific insulation resistance at 70°C:	min, 10 ¹⁰ Ω x cm

Cable Structure:	
Conductor:	copper wires according to BDS 904-84, class 1 (IEC 60228)
Insulation:	PVC compound, type I-2 according to BDS 5792-84
Core identification:	according to DIN VDE 0293
Cores assembly:	Insulated cores are parallel in between in a unified sheath
Sheath:	PVS compound, type P-1 according to BDS 5792-84
Color of sheath:	white, gray, black

Color coding:		
number of cores	With yellow/green	Without yellow/green
2 core	-	Blue, brown
3 core	yellow/green , blue , brown	brown, black, gray
4 core	yellow/green , brown ,black , gray	blue, brown, black, gray
5 core	yellow/green , blue , brown , black, gray	black , blue , brown , black , gray

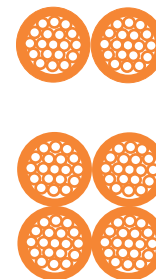
Construction data PVV-MB1 U0/U - 220/380V					
Num. of Cores and Nominal Cross Section	Shape	Overall Diameter (Approx.)	Copper weight (Approx.)	Total Weight (Approx.)	Packing: Cable coil or Drum
No x mm ²		max.mm	kg/km	kg/km	m or N°/m
2 x 1.5	RE	3.8x11.2	29	65	100
2 x 2.5	RE	4,6x12.8	48	95	100
2 x 4	RE	5.2x14.4	76	135	100
3 x 1.5	RE	3.8x18.7	43	100	100
3 x 2.5	RE	4.5x21	72	145	100
3 x 4	RE	5.2x23.7	115	206	100
4 x 1.5	RE	3.8x32.8	58	135	100
4 x 2.5	RE	4.5x29	96	196	100
5 x 1.5	RE	3.8x32.8	72	170	100
5 x 2.5	RE	4.5x36.7	120	246	100

NFA2X

Al conductors, XLPE insulation, twisted cable

Rated Voltage: U0/U - 0.6/1 kV

Standard: HD 626/part 4F



Application

The power cables with XLPE insulation for overhead lines - self-supporting type are designed for transfer, distribution and supply with electrical power in networks with or without Public Lighting (between Pole to Pole) for low voltage U₀/U-0.6/1 kV. In constructions for distribution networks these cable permit suspension on facades and trees. They allow crossing of forest areas without cutting and maintenance of openings in the wood. The suspension and support of the whole bundle is carried out by the phase (basic) insulated current-conductive.

Technical Data:		Cable Structure:	
Operating temperature:	80°C	Phases Conductors: (M):	compacted round shaped aluminium rope
Short-circuit temperature:	130°C	Neural conductor: (N):	compacted round shaped aluminium rope
Nominal voltage AC:	0,6/1 kV	Conductors for lighting: (R) :	compacted round shaped aluminium rope
Highest system voltage AC, not more than:	1.2 kV	Insulation:	XLPE with min. 2% carbon blackcontent type TIX-2
Test voltage AC - 5 min:	4 kV	Color:	black
Max. operating temperature, fixed:	20°C to 80°C		constructions twisted into a bundle include:
Temperature of laying:	no less than - 10° C, recommended 15° C	phase cores (M)	
Bending radius:	18xDcable	neutral (N)	
Conductor resistance at 20° C:	16 - 1.91 Ω/km; 50 - 0.641Ω/km	Cable lay up (cable constructions):	
	25 - 1.20 Ω/km; 70 - 0.443 Ω/km	one, two, or three additional	
	35 - 0.868Ω/km; 95 - 0.320Ω/km	reduced insulated cores for lighting (R)	
Breaking force min.:	16 - 2.84 kN; 50 - 8.45 kN	Cores identification:	with color printing or with longitudinal ribs acc. To HD 626 S1
	25 -4.17 kN; 70 -11.32 kN		
	35 - 5.78 kN; 95 - 15.68 kN		

Packing



Standard Packing length on wooden drums: [500 m; 1000 m];

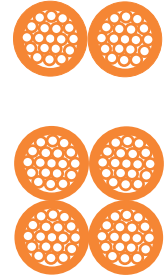
Standard constructions and currents:	
One core:	1x(16 - 95)mm ²
Two cores:	2x(16 - 95)mm ²
Four cores:	4x(16 - 95)mm ²
Four cores with one lighting conductor:	4x(16 - 95)mm ² +1x(16 - 35)mm ²
Four cores with two lighting conductors:	4x(16 - 95)mm ² +2x(16 - 35)mm ²
nominal cross section:	Allowed current in power supply networks
16mm ²	81 A
25mm ²	107 A
35mm ²	132 A
50mm ²	162 A
70mm ²	205 A
95mm ²	245 A

N1XD4-AR, X00-A, AL/R

XLPE insulated cable bunch without supporting neutral conductor

Rated voltage: U₀/U - 0,6/1 kV

Standard: HD 626/part 4E; N.C5.250; NF C 33-209



Application

The power cables with XLPE insulation for overhead lines - self-supporting type are designed for transfer, distribution and supply with electrical power in networks with or without Public Lighting (between Pole to Pole) for low voltage U₀/U-0.6/1 kV. In constructions for distribution networks these cable permit suspension on facades and trees. They allow crossing of forest areas without cutting and maintenance of openings in the wood. The suspension and support of the whole bundle is carried out by the phase (basic) insulated current-conductive.

Technical Data:		Cable Structure:	
Operating temperature:	90°C	Phases Conductors:	Compacted round shaped aluminium rope
Short-circuit temperature:	250°C (5 s. maximum duration)	Neutral conductor:	Compacted round shaped aluminium rope
Nominal voltage AC:	0,6/1 kV	Pilot cores (optional):	Copper solid wires
Highest system voltage AC, not more than:	1,2 kV	Insulation:	XLPE
Test voltage AC - 50 Hz:	4 kV (3 kV acc. To N.C5.250)	Color:	Black
Temperature of using:	-20°C to +90°C	Cable lay up:	Cores twisted into a bundle include:
Temperature of laying, min:	-20°C		Phase cores
Bending radius, min:	for cable - 14xD _{cab} for one core - 6xD _{core}	Neutral core	Two additional pilot cores
Conductor resistance at 20° C:	16mm ² - 1.91 Ω/km	Phase cores are identified by numbers:	
	25mm ² - 1.20 Ω/km	Cores for street lighting are identified by letters: R1 and R2	
	1,5mm ² - 12.1 Ω/km (pilot core)	Neutral core is identified by longitudinal convexity an insulation.	
Breaking force min.	16mm ² - 1,9kN		
	25mm ² - 3,0kN		

Packing

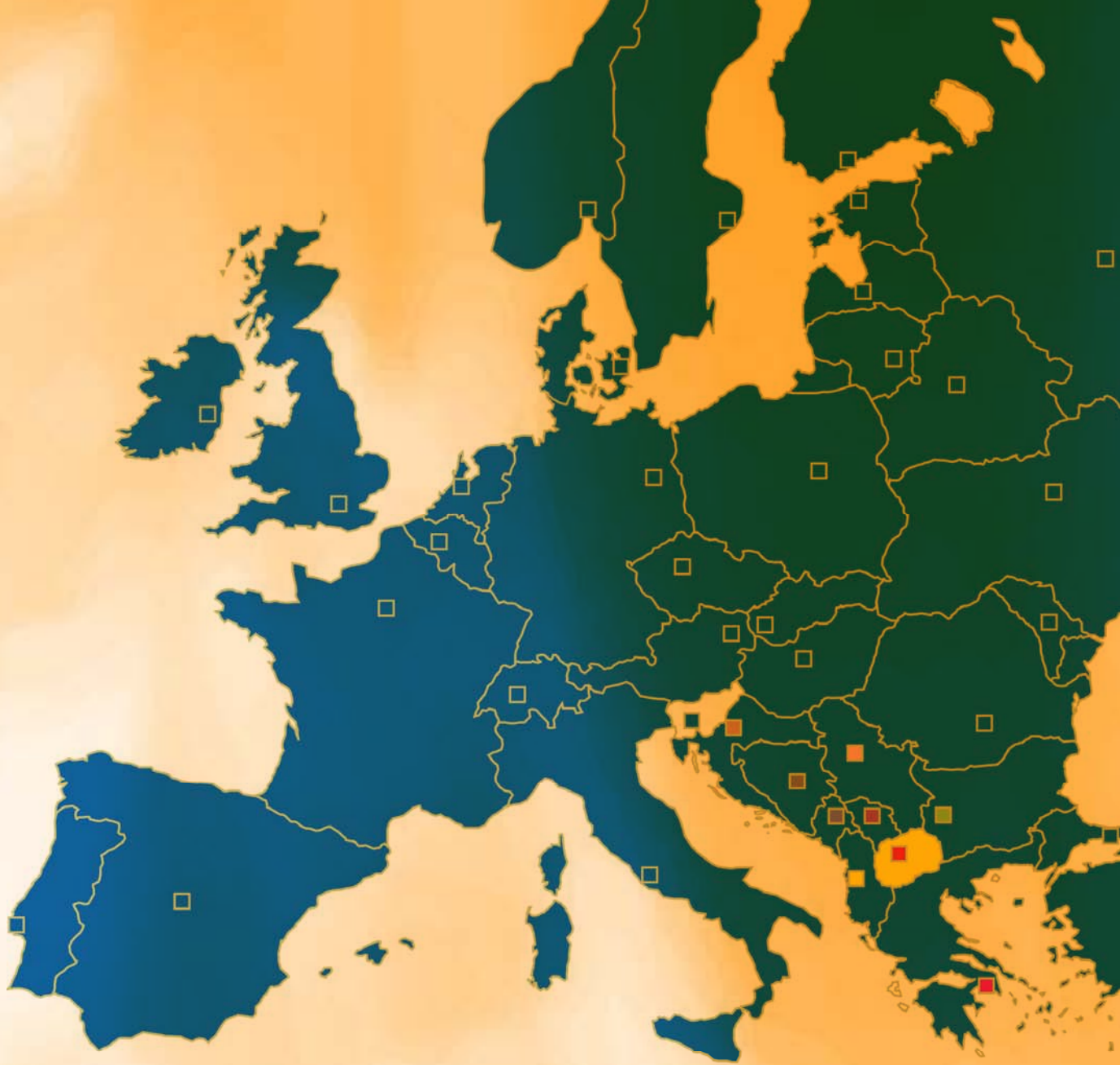


Standard Packing length on wooden drums: [500 m; 1000 m];

X00-A; N1XD4-AR; AL/R U ₀ /U - 0.6/1 kV								
Num. of Cores and Nominal Cross Section	Average tickness of insulating sheath	Approx. external diameter	Approx. Total Weight	Max. continuous current-carrying capacity in phases conductors. Conductors temperature: 90°C (A)			Voltage drop with cos=0.8 (V/A/km)	Packing on wooden drum
				In duct through walls	In Air at 30°C	Along house fronts		
No x mm ²	mm	mm	kg/km				Phase conductor	N° x m
2 x 16 (SP)	1,2	15	140	72	93	83	3,98	1000
2 x 25 (SP)	1,4	18	213	95	122	109	2,54	1000
4 x 16 (TP)	1,2	18	280	63	83	74	3,44	1000
4 x 25 (TP)	1,4	22	426	83	111	100	2,2	1000
2 x 16 + 2 x 1,5 (SP)	1,2/1,2	16	191	72	93	83	3,98	1000
2 x 25 + 2 x 1,5 (SP)	1,4/1,2	19,5	270	95	122	110	2,54	1000
4 x 16 + 2 x 1,5 (TP)	1,2/1,2	20	330	63	83	74	3,44	1000
4 x 25 + 2 x 1,5 (TP)	1,4/1,2	24	476	83	111	100	2,2	1000

(SP) - Single-Phase System

(TP) - Three-Phase System



Cable Factory Bla Kabli | North Macedonia