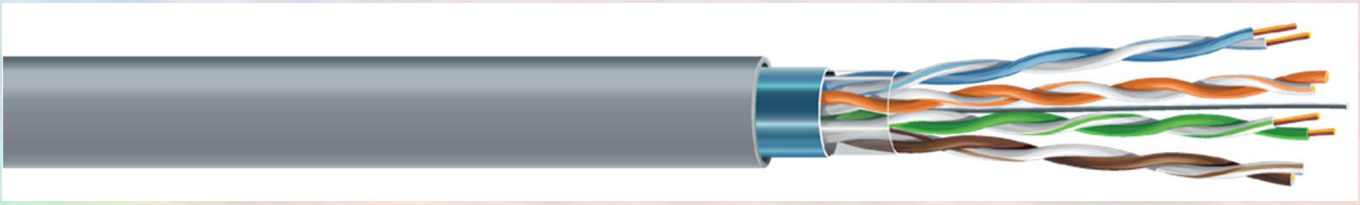
Network cables

SOLID TEAM
Cable Technology

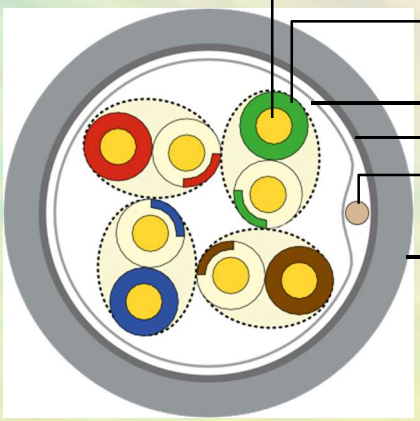
Cat.5e F/UTP PVC, LSZH, PE 4x2x0,48

Scope of application

Multi-core and symmetrical double-twisted cable for digital communication:
• brand Cat 5e F/UTP 4x2x0.48 is intended for structured cable networks with individual laying in the middle of buildings, structures, equipment when operating at frequencies up to 100 MHz in conditions of increased electromagnetic influences;
• brand Cat 5e F/UTP 4x2x0.48 LSZH is intended for structured cable networks for single laying and laying in bundles in the middle of buildings, structures, equipment when operating at frequencies up to 100 MHz in conditions of increased electromagnetic influences and in conditions where low smoke emission
• brand Cat 5e F/UTP 4x2x0.48 PE is intended for structured cable networks for external laying along the walls of buildings, structures, in mines and collectors when operating at frequencies up to 100 MHz in conditions of increased electromagnetic influences.



Construction



Current conductor: soft copper wire 0.48 mm
Insulation: polyethylene HDPE, color marking of the insulation
PET tape
Screen: aluminum polymer tape.
Tinned copper contact wire
Ø 26 AWG
Outer shell:
PVC - polyvinyl chloride plastic RAL 7001 gray, TM51 70 °C
LSZH – halogen-free compound RAL 2003 orange, 70 °C
PE – light-stabilized polyethylene RAL 9011 black, 80 °C

Compliance with requirements

TU U 27.3-36911851-025:2020
DSTU IEC 61156-5
ISO/IEC 11801-1, IEC 61156-5
EN 50288-2-1
ANSI EIA/TIA 568.2-D

Operating characteristics:

Cable operating temperature:	
with stationary (immobile) laying	from -20° C to +60° C
during laying, installation and operational bends	from 0° C to + 50° C
Minimum bending radius:	
with stationary (immobile) laying	4 cable diameters
during laying, installation and operational bends	8 cable diameters

Technical characteristics:

Tensile force max	max 85 N
Conductor resistance	max 96 Ω/km
Ohmic asymmetry of wires in a pair	max 2%
Insulation resistance.	min 5000 MΩ x м.
Working capacity	max 56 pF/m
Capacitive asymmetry of pairs with respect to the ground	max 1600 pF/km
Nominal signal propagation speed	67-69%
Signal propagation delay	max 537 ns/100 m
Test voltage by direct current between cores, cores and shield 1 minute	1000 V
Operating voltage (direct current)	max 72 V

Frequency [MHz]	Attenuation [dB/100 m]	NEXT [dB]	PS-NEXT [dB]	ACR [dB/100 m]	PS-ACR [dB/100 m]	ACR-F [dB/100 m]	PS-ACR-F [dB/100 m]	RL [dB]
	max.	min.	min.	min.	min.	min.	min.	min.
1	2,4	65,3	62,3	62,9	59,9	64,0	61,0	20,0
4	4,5	56,3	53,3	51,8	48,8	52,0	49,0	23,0
10	7,2	50,3	47,3	43,1	40,1	44,0	41,0	25,0
16	9,1	47,2	44,2	38,1	35,1	39,9	36,9	25,0
20	10,2	45,8	42,8	35,6	32,1	38,0	35,0	25,0
31.25	12,9	42,9	39,9	30,0	27,0	34,1	31,1	23,6
62.50	18,6	38,4	35,4	19,8	16,8	28,1	25,1	21,5
100	24,0	35,3	32,3	11,3	8,3	24,0	21,0	20,1

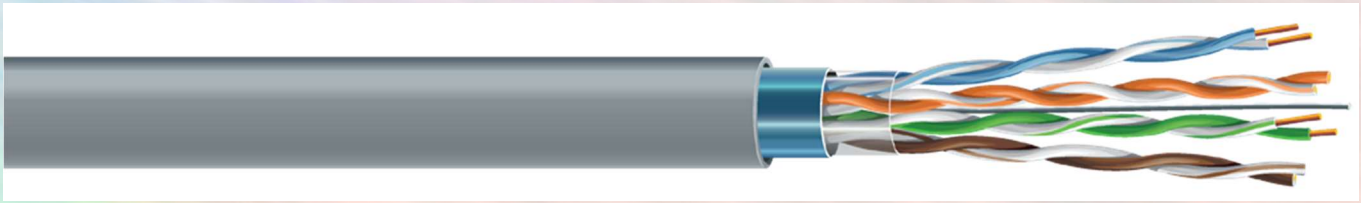
Cable brand	Diameter, mm nom.	Cable weight, kg/km, calc.	Shell color	Packaging, m
Cat.5e F/UTP 4x2x0,48	5,5	37	Gray	305/500/1000
Cat.5e F/UTP 4x2x0,48 LSZH	5,5	38	Orange	305/500/1000
Cat.5e F/UTP 4x2x0,48 PE	5,5	32	Black	305/500/1000

SOLID TEAM
Cable Technology

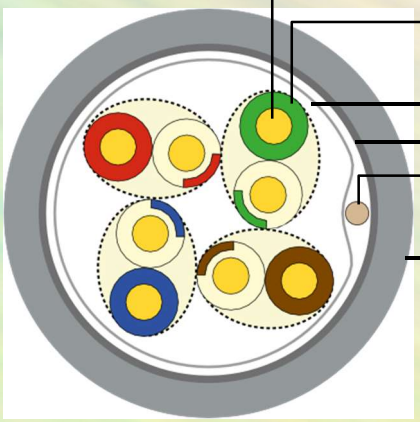
Cat.5e F/UTP PVC, LSZH, PE 4x2x24 AWG

Scope of application

Multi-core and symmetrical double-twisted cable for digital communication:
• Cat brands. 5e F/UTP 4x2x24AWG is intended for structured cable networks with single laying in the middle of buildings, structures, equipment when operating at frequencies up to 100 MHz in conditions of increased electromagnetic influences;
• Cat brands. 5e F/UTP 4x2x24AWG LSZH is intended for structured cable networks for single laying and laying in bundles in the middle of buildings, structures, equipment when operating at frequencies up to 100 MHz in conditions of increased electromagnetic influences and in conditions where low smoke emission is required.
• Cat brands. 5e F/UTP 4x2x24AWG PE is intended for structured cable networks for external laying along the walls of buildings, structures, in mines and collectors when operating at frequencies up to 100 MHz in conditions of increased electromagnetic influences



Construction



Conductor: 24 AWG soft copper wire

Insulation: polyethylene HDPE, color marking of the insulation

PET tape

Screen: aluminum polymer tape.

Copper tinned contact wire Ø 26 AWG

Outer shell:
PVC – polyvinyl chloride plastic RAL 7001 gray, TM51 70 °C
LSZH – halogen-free compound RAL 2003 orange, 70 °C
PE – light-stabilized polyethylene RAL 9011 black, 80 °C

https:**dialan.ua**
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Dialan

Compliance with requirements

TU U 27.3-36911851-025:2020
DSTU IEC 61156-5
ISO/IEC 11801-1, IEC 61156-5
EN 50288-2-1
ANSI EIA/TIA 568.2-D

Operating characteristics:

Cable operating temperature:
with a stationary (immobile) gasket ..... from -20° C to +60° C
during laying, installation and operational bends ..... from 0° C to + 50° C
Minimum bending radius:
with a stationary (immobile) gasket ..... 4 cable diameters
during laying, installation and operational bends ..... 8 cable diameters

Technical characteristics:

Tensile force ..... max 85 N
Conductor resistance ..... max 95 Ω/km
Ohmic asymmetry of wires in a pair ..... max 2%
Insulation resistance ..... min 5000 MΩ x m.
Working capacity ..... max 56 pF/m
Capacitive asymmetry of pairs with respect to the ground ..... max 1600 pF/km
Nominal signal propagation speed 67-69%
Signal propagation delay ..... max 537 ns/100 m
Test voltage by direct current between cores,
cores and shield for 1 min ..... 1000 V
Operating voltage (direct current) ..... max 72 V

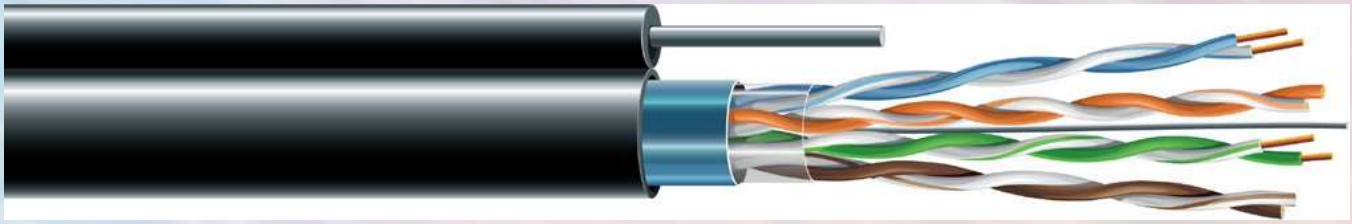
Frequency [MHz]	Attenuation [dB/100 m]	NEXT [dB]	PS-NEXT [dB]	ACR [dB/100 m]	PS-ACR [dB/100 m]	ACR-F [dB/100 m]	PS-ACR-F [dB/100 m]	RL [dB]
	max.	min.	min.	min.	min.	min.	min.	min.
1	2,1	65,3	62,3	63,2	60,2	64,0	61,0	20,0
4	4,1	56,3	53,3	52,2	49,2	52,0	49,0	23,0
10	6,5	50,3	47,3	43,8	40,8	44,0	41,0	25,0
16	8,3	47,2	44,2	39,0	36,0	39,9	36,9	25,0
20	9,3	45,8	42,8	36,5	33,5	38,0	35,0	25,0
31.25	11,7	42,9	39,9	31,1	28,1	34,1	31,1	23,6
62.50	17,0	38,4	35,4	21,4	18,4	28,1	25,1	21,5
100	22,0	35,3	32,3	13,3	10,3	24,0	21,0	20,1

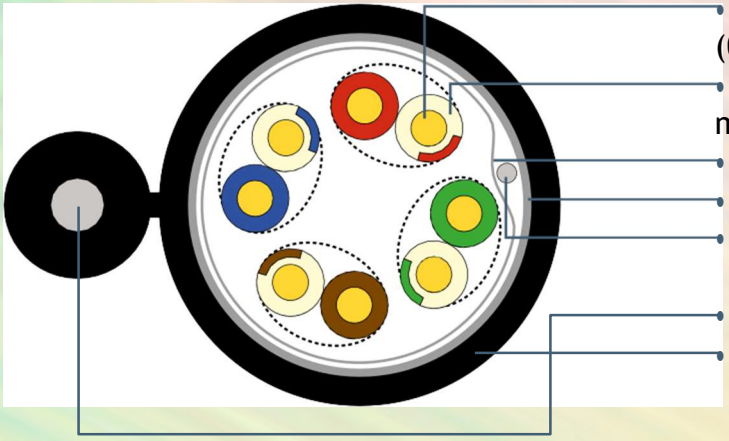
Cable brand	Diameter, mm nom.	Cable weight, kg/km, calc.	Shell color	Packaging, m	CPR
Cat.5e F/UTP 4x2x24 AWG	5,9	40	Gray	305/500/1000	ECA
Cat.5e F/UTP 4x2x24 AWG LSZH	5,9	43	Orange	305/500/1000	DCA
Cat.5e F/UTP 4x2x24 AWG PE	5,9	35	Black	305/500/1000	FCA

Cat.5e F/UTP PE 4x2x24 AWG with steel wire

Scope of application

The cable is multi-core and symmetrically twisted pair for digital communication of the Cat brand. 5e F/UTP 4x2x24AWG PE with wire is intended for structured cable networks at frequencies up to 100 MHz for external laying on overhead communication lines in conditions of increased electromagnetic influences.





Construction

- **Conductive wire:** soft copper wire 24 AWG (0.51 mm ± 0.005 mm)
- **Insulation:** polyethylene HDPE, insulation marking is colored
- **PET tape**
- **Screen:** aluminum polymer tape.
- Copper tinned contact wire Ø 26 AWG
- **Steel wire** 1,2 mm
- **Outer shell:**

PE – light-stabilized polyethylene RAL 9011 black

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Compliance with requirements

TU U 27.3-36911851-025:2020
DSTU IEC 61156-5

Operating characteristics

Cable operating temperature:
with a stationary (immobile) gasket ..... from -20° C to +60° C
during laying, installation and operational bends ..... from 0° C to + 50° C
Minimum bending radius:
with a stationary (immobile) gasket ..... 4 cable diameters
during laying, installation and operational bends ..... 8 cable diameters

Technical characteristics

Conductor resistance ..... max 95 Ω/km
Ohmic asymmetry of wires in a pair ..... max 2%
Insulation resistance. ..... min 5000 MΩ x m.
Working capacity ..... max 56 pF/m
Capacitive asymmetry of pairs with respect to the ground ..... max 1600 pF/km
Nominal signal propagation speed 67-69%
Signal propagation delay ..... max 537 ns/100 m
Delay offset at 100 MHz 45 ns/100m
Test voltage by direct current between cores,
cores and shield for 1 min..... 1000 V
Operating voltage (direct current)..... max 72 V

Frequency [MHz]	Attenuation [dB/100 m]	NEXT [dB]	PS-NEXT [dB]	ACR [dB/100 m]	PS-ACR [dB/100 m]	ACR-F [dB/100 m]	PS-ACR-F [dB/100 m]	RL [dB]
	max.	min.	min.	min.	min.	min.	min.	min.
1*	2,1	65,3	62,3	63,2	60,2	64,0	61,0	20
4	4,1	56,3	53,3	52,2	49,2	52,0	49,0	23
10	6,5	50,3	47,3	43,8	40,8	44,0	41,0	25
16	8,3	47,2	44,2	39,0	36,0	39,9	36,9	25
31.25	11,7	42,9	39,9	31,1	28,1	34,1	31,1	23,6
62.50	17,0	38,4	35,4	21,4	18,4	28,1	25,1	21,5
100	22,0	35,3	32,3	13,3	10,3	24.0	21,0	20,1

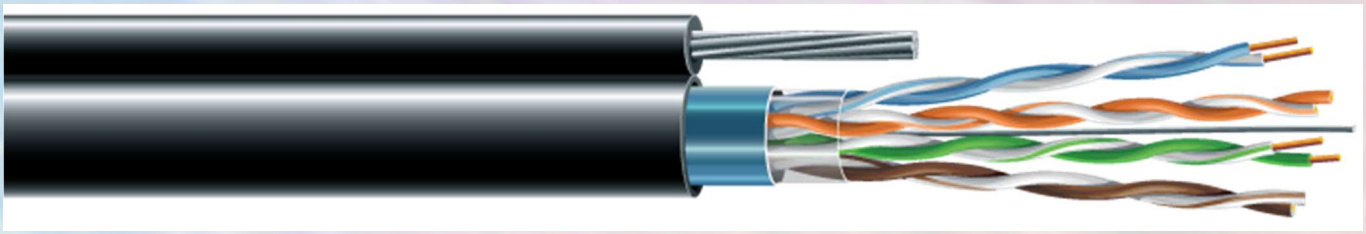
Cable brand	Diameter, mm nom.	Cable weight, kg/km, calc.	Shell color	Packaging, m
Cat. 5e F/UTP 4x2x24AWG PE with steel wire	10,6x6,0	53	Black	305/500/1000

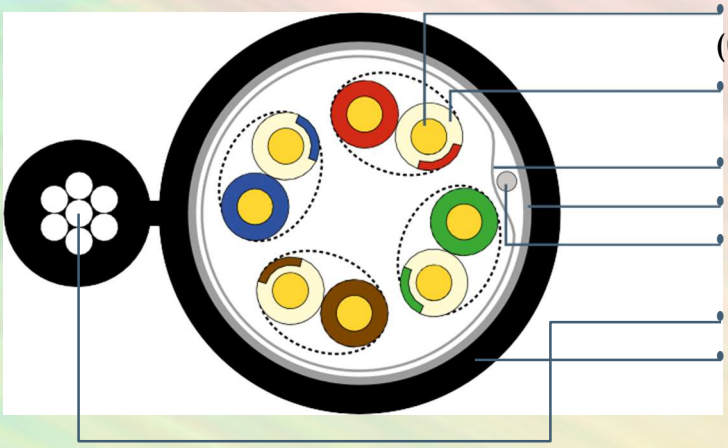
SOLID TEAM
Cable Technology

Cat.5e F/UTP PE 4x2x24 AWG with steel cable

Scope of application

The cable is multi-core and symmetrically twisted pair for digital communication of the Cat brand. 5e F/UTP 4x2x24AWG PE with cable is intended for structured cable networks at frequencies up to 100 MHz for external laying on overhead communication lines in conditions of increased electromagnetic influences.





Construction

- **Conductive wire:** soft copper wire 24 AWG (0.51 mm ± 0.005 mm)
- **Insulation:** polyethylene HDPE, insulation marking is colored
- PET tape
- **Screen:** aluminum polymer tape.
- Copper tinned contact wire Ø 26 AWG

- **Steel cable: 7x0.5 mm**
- **Outer shell:**
  PE - light-stabilized polyethylene RAL 9011 black

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DSTU IEC 61156-5
ISO/IEC 11801-1,
IEC 61156-5
EN 50288-2-1
ANSI EIA/TIA 568.2-D

Operating characteristics

Cable operating temperature:
with stationary (immobile) laying..... from -20° C to +60° C
during laying, installation and operational bends ..... from 0° C to + 50° C
Minimum bending radius:
with stationary (immobile) laying..... 4 cable diameters
during laying, installation and operational bends ..... 8 cable diameters

Technical characteristics

Tensile force ..... max 1200 N
Conductor resistance ..... max 95 Ω/km
Ohmic asymmetry of wires in a pair ..... max 2%
Insulation resistance ..... min 5000 MΩ x m
Working capacity ..... max 56 pF/m
Capacitive asymmetry of pairs with respect to the ground ..... max 1600 pF/km
Nominal signal propagation speed 67-69%
Signal propagation delay ..... max 537 ns/100m
Delay offset at 100 MHz 45 ns/100m
Test voltage by direct current between cores,
cores and shield for 1 min..... 1000 V
Operating voltage (direct current)..... max 72 V

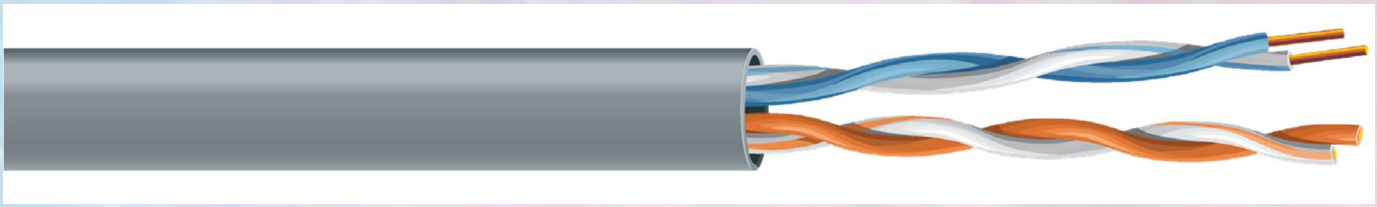
Fre-quency, MHz	Attenuation [dB/100 m]		NEXT [dB]		PS-NEXT [dB]		ACR [dB/100 m]		PS-ACR [dB/100 m]		ACR-F [dB/100 m]		PS-ACR-F [dB/100 m]		RL [dB]	
	typ	max.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.
1*	1,9	2,1	71	65,3	68	62,3	69	63,2	66	60,2	82	64,0	79	61,0	23	20
4	3,6	4,1	62	56,3	59	53,3	58	52,2	55	49,2	70	52,0	67	49,0	33	23
10	5,5	6,5	56	50,3	53	47,3	51	43,8	48	40,8	55	44,0	52	41,0	31	25
16	7,7	8,3	54	47,2	51	44,2	46	39,0	43	36,0	48	39,9	45	36,9	32	25
31.25	11,3	11,7	50	42,9	47	39,9	39	31,1	36	28,1	40	34,1	37	31,1	32	23,6
62.50	16,2	17,0	45	38,4	42	35,4	29	21,4	26	18,4	37	28,1	34	25,1	29	21,5
100	21	22,0	42	35,3	39	32,3	21	13,3	18	10,3	30	24.0	27	21,0	27	20,1

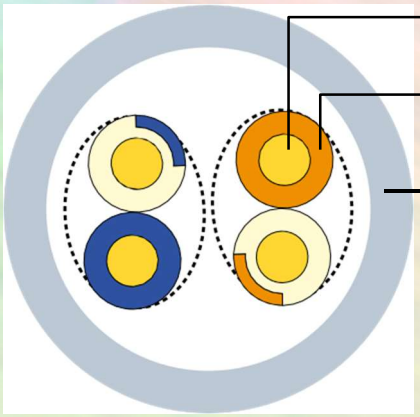
Cable brand	Diameter, mm nom.	Cable weight, kg/km, calc.	Shell color	Packaging, m	CPR
Cat. 5e F/UTP 4x2x24AWG PE with wire	10,3x6,0	53	Black	305/500/1000	FCA

Cat.5 U/UTP PVC, LSZH, PE 2x2x24 AWG

Scope of application

The cable is multi-core and symmetrically twisted pair for digital communication of the Cat brand. 5 U/UTP 2x2x24AWG is intended for structured cable networks with single laying in the middle of buildings, structures, equipment when operating at frequencies up to 100 MHz.





Construction

Conductive wire: 24 AWG soft copper wire

Insulation: polyethylene HDPE, color marking of the insulation

Outer shell:
PVC - polyvinyl chloride plastic RAL 7001 gray, TM51 70 °C
LSZH – halogen-free compound RAL 2003 orange, 70 °C
PE – light-stabilized polyethylene RAL 9011 black, 80 °C

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Dialan

Compliance with requirements

TU U 27.3-36911851-025:2020
DSTU IEC 61156-2
ISO/IEC 11801-1
IEC 61156-2

Operating characteristics

Cable operating temperature:	
with stationary (immobile) laying	from -20° C to +60° C
during laying, installation and operational bends	from 0° C to + 50° C
Minimum bending radius:	
with stationary (immovable) laying	4 cable diameters
during laying, installation and operational bends	8 cable diameters

Technical characteristics

Tensile force	max 85 N
Conductor resistance	max 95 Ω/km
Ohmic asymmetry of wires in a pair	max 2%
Insulation resistance	min 5000 MΩ x m
Working capacity	max 56 pF/m
Capacitive asymmetry of pairs with respect to the ground	max 3400 pF/km
Nominal signal propagation speed	67-69%
Signal propagation delay	max 567 ns/100m
Test voltage by direct current between cores,	
cores and shield for 1 min	1000 V
Operating voltage (direct current)	max 72 V

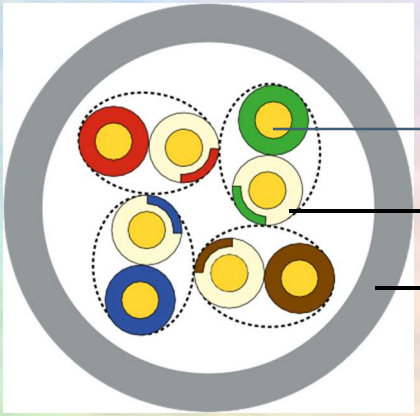
Frequency [MHz]	Attenuation [dB/100 m]	NEXT [dB]	PS-NEXT [dB]	ACR [dB/100 m]	PS-ACR [dB/100 m]	ACR-F [dB/100 m]	PS-ACR-F [dB/100 m]	RL [dB]
	max.	min.	min.	min.	min.	min.	min.	min.
1	2,0	62,0	-	-	-	57,4	-	23,0
4	4,1	53,0	-	-	-	45,4	-	23,0
10	6,5	47,0	-	-	-	37,4	-	23,0
16	8,3	43,9	-	-	-	33,3	-	23,0
20	9,3	42,5	-	-	-	31,4	-	23,0
31.25	11,7	39,6	-	-	-	27,5	-	21,1
62.50	17,0	35,1	-	-	-	21,5	-	18,1
100	22,0	32,0	-	-	-	17,4	-	16,0

Cable brand	Diameter, mm nom.	Cable weight, kg/km, calc.	Shell color	Packaging, m
Cat.5e U/UTP 2x2x24 AWG	4,9	22	Gray	305/500/1000
Cat.5e U/UTP 2x2x24 AWG LSZH	4,9	23	Orange	305/500/1000
Cat.5e U/UTP 2x2x24 AWG PE	4,9	18	Black	305/500/1000

Cat.5e U/UTP 4x2x0.46

Scope of application

The cable is multi-core and symmetrically twisted pair for digital communication of the Cat brand. 5e U/UTP 4x2x0.46 is intended for structured cable networks with individual laying in the middle of buildings, structures, equipment when operating at frequencies up to 100 MHz.



Construction

Conductive wire: copper soft wire 0.46 mm

Insulation: polyethylene HDPE, color marking of the insulation

Outer shell:
PVC - polyvinyl chloride plastic RAL 7001 gray, TM51 70 °C

Compliance with requirements

TU U 27.3-36911851-025:2020

Operating characteristics

Cable operating temperature:

with stationary (immobile) laying..... from -20° C to +60° C

during laying, installation and operational bends ..... from 0° C to + 50° C

Minimum bending radius:

with stationary (immobile) laying..... 4 cable diameters

during laying, installation and operational bends ..... 8 cable diameters

Technical characteristics

Tensile force ..... max 85 N

Conductor resistance ..... max 110 Ω/km

Ohmic asymmetry of wires in a pair ..... max 2%

Insulation resistance ..... min 5000 MΩ x m

Working capacity ..... max 56 pF/m

Capacitive asymmetry of pairs with respect to the ground ..... max 1600 pF/km

Nominal signal propagation speed 67-69%

Signal propagation delay ..... max 537 ns/100m

Test voltage by direct current between cores,

cores and shield for 1 min..... 1000 V

Operating voltage (direct current)..... max 72 V

Frequency [MHz]	Attenuation [dB/100 m]	NEXT [dB]	PS-NEXT [dB]	ACR [dB/100 m]	PS-ACR [dB/100 m]	ACR-F [dB/100 m]	PS-ACR-F [dB/100 m]	RL [dB]
	max.	min.	min.	min.	min.	min.	min.	min.
1	2,4	65,3	62,3	62,9	59,9	64,0	61,0	20,0
4	4,8	56,3	53,3	51,5	48,5	52,0	49,0	23,0
10	7,7	50,3	47,3	42,6	39,6	44,0	41,0	25,0
16	9,9	47,2	44,2	37,3	34,3	39,9	36,9	25,0
20	11,2	45,8	42,8	34,6	31,6	38,0	35,0	25,0
31.25	14,0	42,9	39,9	28,9	25,9	34,1	31,1	23,6
62.50	20,1	38,4	35,4	18,3	15,3	28,1	25,1	21,5
100	26,0	35,3	32,3	9,3	6,3	24,0	21,0	20,1

Cable brand	Diameter, mm nom.	Cable weight, kg/km, calc.	Shell color	Packaging, m
Cat.5e U/UTP 4x2x0.46	4,7	27	Gray	305/500/1000

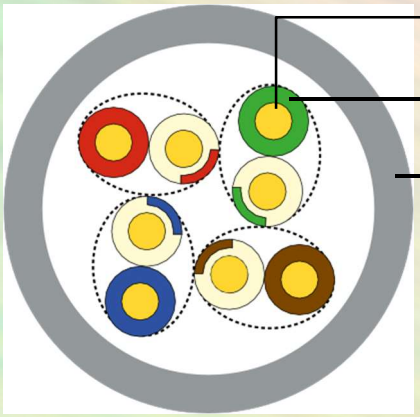
SOLID TEAM
Cable Technology

Cat.5e U/UTP PVC, LSZH, PE 4x2x0.48

Scope of application

Multi-core and symmetrical double-twisted cable for digital communication:
• Cat brands. 5e U/UTP 4x2x0.48 is intended for structured cable networks with single laying in the middle of buildings, structures, equipment when operating at frequencies up to 100 MHz;
• Cat brands. 5e U/UTP 4x2x0.48 LSZH is intended for structured cable networks with single laying and laying in bundles in the middle of buildings, structures, equipment when operating at frequencies up to 100 MHz in conditions where low smoke emission is required;
• Cat brands. 5e U/UTP 4x2x0.48 PE is intended for structured cable networks during external laying along the walls of buildings, structures, in mines and collectors when operating at frequencies up to 100 MHz.

Construction



Conductive wire: copper soft wire 0.48 mm

Insulation: polyethylene HDPE, color marking of the insulation

Outer shell:
PVC - polyvinyl chloride plastic RAL 7001 gray, TM51 70 °C
LSZH – halogen-free compound RAL 2003 orange, 70 °C
PE – light-stabilized polyethylene RAL 9011 black, 80 °C

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Dialan

Compliance with requirements

TU U 27.3-36911851-025:2020
DSTU IEC 61156-5
ISO/IEC 11801-1, IEC 61156-5
EN 50288-3-1
ANSI EIA/TIA 568.2-D

Operating characteristics

Cable operating temperature:	
with stationary (immobile) laying	from -20° C to +60° C
during laying, installation and operational bends	from 0° C to + 50° C
Minimum bending radius:	
with stationary (immovable) laying	4 cable diameters
during laying, installation and operational bends	8 cable diameters

Technical characteristics

Tensile force	max 85 N
Conductor resistance	max 95 Ω/km
Ohmic asymmetry of wires in a pair	max 2%
Insulation resistance	min 5000 MΩ x m
Working capacity	max 56 pF/m
Capacitive asymmetry of pairs with respect to the earth	max 1600 pF/km
Nominal signal propagation speed	67-69%
Signal propagation delay	max 537 ns/100m
Test voltage by direct current between cores, cores and shield for 1 min	1000 V
Operating voltage (direct current)	max 72 V

SOLID TEAM
Cable Technology

Frequency [MHz]	Attenuation [dB/100 m]	NEXT [dB]	PS-NEXT [dB]	ACR [dB/100 m]	PS-ACR [dB/100 m]	ACR-F [dB/100 m]	PS-ACR-F [dB/100 m]	RL [dB]
	max.	min.	min.	min.	min.	min.	min.	min.
1	2,4	65,3	62,3	63,2	60,2	64,0	61,0	20,0
4	4,5	56,3	53,3	52,2	49,2	52,0	49,0	23,0
10	7,2	50,3	47,3	43,8	40,8	44,0	41,0	25,0
16	9,1	47,2	44,2	39,0	36,0	39,9	36,9	25,0
20	10,2	45,8	42,8	36,5	33,5	38,0	35,0	25,0
31.25	12,9	42,9	39,9	31,1	28,1	34,1	31,1	23,6
62.50	18,6	38,4	35,4	21,4	18,4	28,1	25,1	21,5
100	24,0	35,3	32,3	13,3	10,3	24,0	21,0	20,1

Cable brand	Diameter, mm nom.	Cable weight, kg/km, calc.	Shell color	Packaging, m
Cat.5e U/UTP 4x2x0.48	4,8	28	Gray	305/500/1000
Cat.5e U/UTP 4x2x0.48 LSZH	4,8	30	Orange	305/500/1000
Cat.5e U/UTP 4x2x0.48 PE	4,8	25	Black	305/500/1000

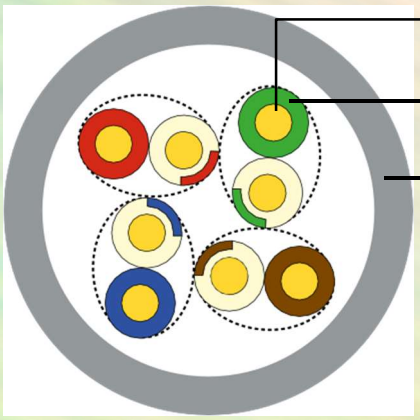
SOLID TEAM
Cable Technology

Cat.5e U/UTP PVC, LSZH, PE 4x2x24 AWG

Scope of application

Multi-core and symmetrical double-twisted cable for digital communication:
• Cat brands. 5e U/UTP 4x2x24AWG is intended for structured cable networks with single laying in the middle of buildings, structures, equipment when operating at frequencies up to 100 MHz;
• Cat brands. 5e U/UTP 4x2x24AWG LSZH is intended for structured cable networks with single laying and laying in bundles in the middle of buildings, structures, equipment when operating at frequencies up to 100 MHz in conditions where low smoke emission is required;
• Cat brands. 5e U/UTP 4x2x24AWG PE is intended for structured cable networks during external laying along the walls of buildings, structures, in mines and collectors when operating at frequencies up to 100 MHz.

Construction



Conductive wire: 24 AWG soft copper wire

Insulation: polyethylene HDPE, color marking of the insulation

Outer shell:
PVC - polyvinyl chloride plastic RAL 7001 gray, TM51 70 °C
LSZH – halogen-free compound RAL 2003 orange, 70 °C
PE – light-stabilized polyethylene RAL 9011 black, 80 °C

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Dialan

Compliance with requirements

TU U 27.3-36911851-025:2020
DSTU IEC 61156-5
ISO/IEC 11801-1, IEC 61156-5
EN 50288-3-1
ANSI EIA/TIA 568.2-D

Operating characteristics

Cable operating temperature:	
with stationary (immobile) laying	from -20° C to +60° C
during laying, installation and operational bends	from 0° C to + 50° C
Minimum bending radius:	
with stationary (immobile) laying	4 cable diameters
during laying, installation and operational bends	8 cable diameters

Technical characteristics

Tensile force	max 85 N
Conductor resistance	max 95 Ω/km
Ohmic asymmetry of wires in a pair	max 2%
Insulation resistance	min 5000 MΩ x m
Working capacity	max 56 pF/m
Capacitive asymmetry of pairs with respect to the ground	max 1600 pF/km
Nominal signal propagation speed	67-69%
Signal propagation delay	max 537ns /100m
Test voltage by direct current between cores,	
cores and shield for 1 min	1000 V
Operating voltage (direct current)	max 72 V

SOLID TEAM
Cable Technology

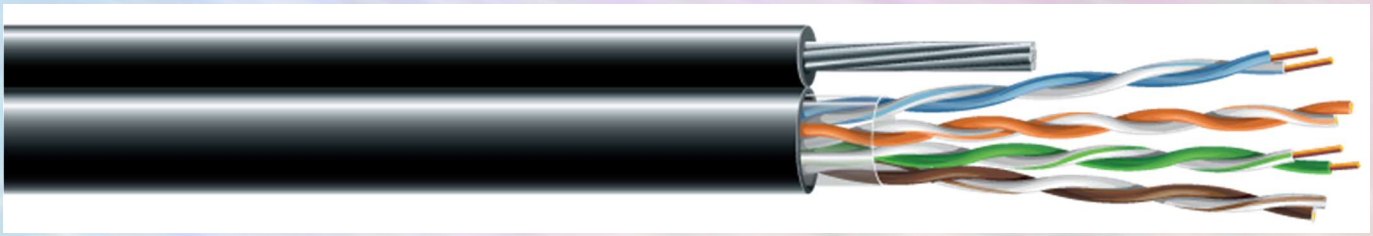
Frequency [MHz]	Attenuation [dB/100 m]	NEXT [dB]	PS-NEXT [dB]	ACR [dB/100 m]	PS-ACR [dB/100 m]	ACR-F [dB/100 m]	PS-ACR-F [dB/100 m]	RL [dB]
	max.	min.	min.	min.	min.	min.	min.	min.
1	2,1	65,3	62,3	63,2	60,2	64,0	61,0	20,0
4	4,1	56,3	53,3	52,2	49,2	52,0	49,0	23,0
10	6,5	50,3	47,3	43,8	40,8	44,0	41,0	25,0
16	8,3	47,2	44,2	39,0	36,0	39,9	36,9	25,0
20	9,3	45,8	42,8	36,5	33,5	38,0	35,0	25,0
31.25	11,7	42,9	39,9	31,1	28,1	34,1	31,1	23,6
62.50	17,0	38,4	35,4	21,4	18,4	28,1	25,1	21,5
100	22,0	35,3	32,3	13,3	10,3	24,0	21,0	20,1

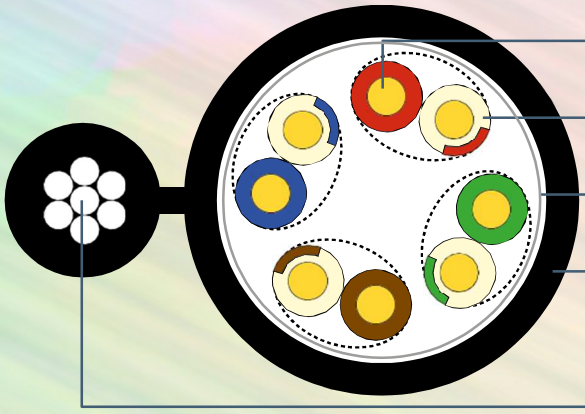
Cable brand	Diameter, mm nom.	Cable weight, kg/km, calc.	Shell color	Packaging, m	CPR
Cat.5e U/UTP 4x2x24 AWG	5,1	31	Gray	305/500/1000	ECA
Cat.5e U/UTP 4x2x24 AWG LSZH	5,1	33	Orange	305/500/1000	DCA
Cat.5e U/UTP 4x2x24 AWG PE	5,1	27	Black	305/500/1000	FCA

Cat.5e U/UTP PE 4x2x24 AWG with steel wire

Scope of application

The cable is multi-core and symmetrically twisted pair for digital communication of the Cat brand. 5e U/UTP 4x2x24AWG PE with cable is designed for structured cable networks at frequencies up to 100 MHz for outdoor laying on overhead communication lines.





Construction

- **Conductive wire**: 24 AWG soft copper wire
- **Insulation**: polyethylene HDPE, color marking of the insulation
- **PET tape**

PE - light-stabilized polyethylene RAL 9011 black, 80 °C

Compliance with requirements

TU U 27.3-36911851-025:2020
DSTU IEC 61156-5
ISO/IEC 11801-1,
IEC 61156-5
EN 50288-3-1
ANSI EIA/TIA 568.2-D

Operating characteristics

Cable operating temperature:	
with stationary (immobile) laying	from -20° C to +60° C
during laying, installation and operational bends	from 0° C to + 50° C
Minimum bending radius:	
with stationary (immobile) laying	4 cable diameters
during laying, installation and operational bends	8 cable diameters

Technical characteristics

Tensile force	max 1200 N
Conductor resistance	max 95 Ω/km
Ohmic asymmetry of wires in a pair	max 2%
Insulation resistance	min 5000 MΩ x m
Working capacity	max 56 pF/m
Capacitive asymmetry of pairs with respect to the ground	max 1600 pF/km
Nominal signal propagation speed	67-69%
Signal propagation delay	max 537ns /100m
Delay offset at 100 MHz	45ns /100m
Test voltage by direct current between cores,	
cores and shield for 1 min	1000 V
Operating voltage (direct current)	max 72 V

Fre-quency, MHz	Attenuation [dB/100 m]		NEXT [dB]		PS-NEXT [dB]		ACR [dB/100 m]		PS-ACR [dB/100 m]		ACR-F [dB/100 m]		PS-ACR-F [dB/100 m]		RL [dB]	
	typ	max.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.
1*	1,9	2,1	71	65,3	68	62,3	69	63,2	66	60,2	82	64,0	79	61,0	23	20
4	3,6	4,1	62	56,3	59	53,3	58	52,2	55	49,2	70	52,0	67	49,0	33	23
10	5,5	6,5	56	50,3	53	47,3	51	43,8	48	40,8	55	44,0	52	41,0	31	25
16	7,7	8,3	54	47,2	51	44,2	46	39,0	43	36,0	48	39,9	45	36,9	32	25
31.25	11,3	11,7	50	42,9	47	39,9	39	31,1	36	28,1	40	34,1	37	31,1	32	23,6
62.50	16,2	17,0	45	38,4	42	35,4	29	21,4	26	18,4	37	28,1	34	25,1	29	21,5
100	21	22,0	42	35,3	39	32,3	21	13,3	18	10,3	30	24.0	27	21,0	27	20,1

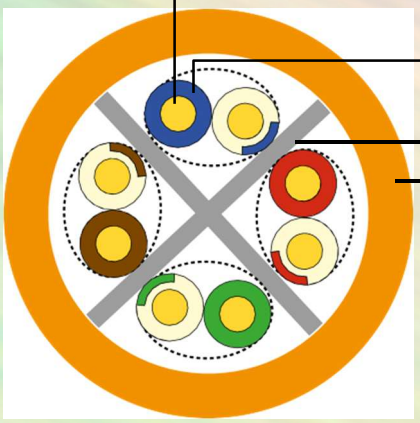
Cable brand	Diameter, mm nom.	Cable weight, kg/km, calc.	Shell color	Packaging, m	CPR
Cat. 5e U/UTP 4x2x24AWG PE with wire	9,7x5,1	47	Black	305/500/1000	FCA

SOLID TEAM
Cable Technology

Cat.6 U/UTP PVC, LSZH, PE 4x2x23 AWG

Scope of application

Multi-core and symmetrical double-twisted cable for digital communication:
• Cat brands. 6 U/UTP 4x2x23 AWG is intended for structured cable networks with single laying in the middle of buildings, structures, equipment, when operating at frequencies up to 250 MHz;
• Cat brands. 6 U/UTP 4x2x23 AWG LSZH is intended for structured cable networks with single laying and laying in bundles in the middle of buildings, structures, equipment, when operating at frequencies up to 250 MHz, in conditions where low smoke emission is required;
• Cat brands. 6 U/UTP 4x2x23AWG PE is intended for structured cable networks when laying outside on the walls of buildings, structures, in mines and collectors when operating at frequencies up to 250 MHz.



Construction

Conductive wire: 23 AWG soft copper wire
Insulation: polyethylene HDPE, color marking of the insulation
Cross divider
Outer shield:
PVC - polyvinyl chloride plastic RAL 7001 gray, TM51 70 °C
LSZH – halogen-free compound RAL 2003 orange, 70 °C
PE – light-stabilized polyethylene RAL 9011 black, 80 °C

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Dialan

Compliance with requirements

TU U 27.3-36911851-025:2020
DSTU IEC 61156-5
ISO/IEC 11801-1,
IEC 61156-5 EN 50288-6-1 ANSI EIA/TIA 568.2-D

Operating characteristics

Cable operating temperature:
with stationary (immobile) laying..... form -20° C to +60° C
during laying, installation and operational bends ..... from 0° C to + 50° C
Minimum bending radius:
with stationary (immobile) laying..... 4 cable diameters
during laying, installation and operational bends ..... 8 cable diameters

Technical characteristics

Tensile force ..... max 100 N
Conductor resistance ..... max 85 Ω/km
Ohmic asymmetry of wires in a pair ..... max 2%
Insulation resistance. ..... min 5000 MΩ x m
Working capacity ..... max 56 pF/m
Capacitive asymmetry of pairs with respect to the ground ..... max 1600 pF/km
Nominal signal propagation speed 67-69%
Signal propagation delay ..... max 537 ns/100 m
Test voltage by direct current between cores,
cores and shield for 1 min..... 1000 V
Operating voltage (direct current)..... max 72 V

Fre-quency, MHz	Attenuation [dB/100 m]		NEXT [dB]		PS-NEXT [dB]		ACR [dB/100 m]		PS-ACR [dB/100 m]		ACR-F [dB/100 m]		PS-ACR-F [dB/100 m]		RL [dB]	
	typ	max.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.
1*	1.9	2.1	82	75,3	79	72,3	80	73,2	77	70,2	85	68	82	65	26	20
4	3.8	3,8	76	66,3	73	63,3	72	62,4	69	59,4	77	56	74	53	31	23
10	5.9	6.0	70	60,3	67	57,3	64	54,3	61	51,3	68	48	64	45	32	25
16	7.4	7,6	65	57,2	62	54,2	58	49,6	55	46,6	63	43,9	60	40,9	34	25
31.25	10,5	10,7	60	52,9	57	49,9	49	42,1	46	39,1	51	38,1	48	35,1	36	23,6
62.50	15,1	15.5	58	48,4	55	45,4	43	32,9	40	29,9	44	32,1	41	29,1	32	21,5
100	19,0	19,9	52	45,3	49	42,3	33	25,4	30	22,4	35	28	32	25	32	20,1
250	31,0	33,0	48	39,3	45	36,3	17	6,3	14	3,3	19	20	16	17	30	17,3

Cable brand	Diameter, mm nom.	Cable weight, kg/km, calc.	Shell color	Packaging, m	CPR
Cat. 6 U/UTP 4x2x23 AWG	6,8	43	Gray	305/500/1000	ECA
Cat. 6 U/UTP 4x2x23 AWG LSZH	6,8	46	Orange	305/500/1000	DCA
Cat. 6 U/UTP 4x2x23 AWG PE	6,8	39	Black	305/500/1000	FCA

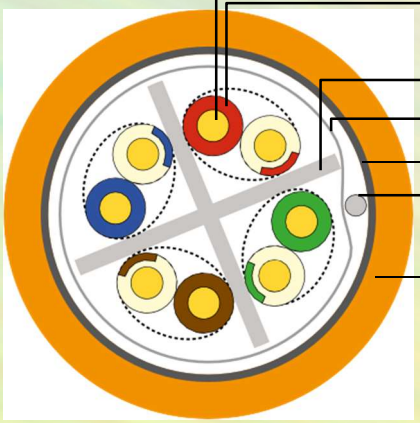
SOLID TEAM
Cable Technology

Cat.6 F/UTP PVC, LSZH, PE 4x2x23 AWG

Scope of application

Multi-core and symmetrical double-twisted cable for digital communication:
• brand Cat 6 F/UTP 4x2x23AWG is intended for structured cable networks with single laying in the middle of buildings, structures, equipment, when operating at frequencies up to 250 MHz, in conditions of increased electromagnetic influences;
• brand Cat 6 F/UTP 4x2x23AWG LSZH is intended for structured cable networks with single laying and laying in bundles in the middle of buildings, structures, equipment, when operating at frequencies up to 250 MHz, in conditions of increased electromagnetic influences and in conditions where low smoke emission
• brand Cat 6 F/UTP 4x2x23AWG PE is intended for structured cable networks when laying outside on the walls of buildings, structures, in mines and collectors when operating at frequencies up to 250 MHz, in conditions of increased electromagnetic influences.• Cat brands. 6 F/UTP 4x2x23AWG PE is intended for structured cable networks when laying outside on the walls of buildings, structures, in mines and collectors when operating at frequencies up to 250 MHz, in conditions of increased electromagnetic influences.

Construction



Conductive wire: 23 AWG soft copper wire
Insulation: polyethylene HDPE, color marking of the insulation
Cross divider
PET tape
Screen: aluminum polymer tape
Copper tinned contact wire Ø 26 AWG
Outer shell:
PVC - polyvinyl chloride plastic RAL 7001 gray, TM51 70 °C
LSZH – halogen-free compound RAL 2003 orange, 70 °C
PE – light-stabilized polyethylene RAL 9011 black, 80 °C

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Dialan

Compliance with requirements

TU U 27.3-36911851-025:2020
DSTU IEC 61156-5
ISO/IEC 11801-1, IEC 61156-5
EN 50288-5-1
ANSI EIA/TIA 568.2-D

Operating characteristics

Cable operating temperature:
with stationary (immobile) laying..... from -20° C to +60° C
during laying, installation and operational bends ..... from 0° C to + 50° C
Minimum bending radius:
with stationary (immobile) laying..... 4 cable diameters
during laying, installation and operational bends ..... 8 cable diameters

Technical characteristics

Tensile force ..... max 100 N
Conductor resistance ..... max85 Ω/km
Ohmic asymmetry of wires in a pair ..... max 2%
Insulation resistance ..... min 5000 MΩ x m
Working capacity ..... max 56 pF/m
Capacitive asymmetry of pairs with respect to the ground ..... max 1600 pF/km
Nominal signal propagation speed 67-69%
Signal propagation delay ..... max 537ns /100m
Test voltage by direct current between cores,
cores and shield for 1 min..... 1000 V
Operating voltage (direct current)..... max 72 V

SOLID TEAM
Cable Technology

Fre-quency, MHz	Attenuation [dB/100 m]		NEXT [dB]		PS-NEXT [dB]		ACR [dB/100 m]		PS-ACR [dB/100 m]		ACR-F [dB/100 m]		PS-ACR-F [dB/100 m]		RL [dB]	
	typ	max.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.
1*	1.9	2.1	82	75,3	79	72,3	80	73,2	77	70,2	85	68	82	65	26	20
4	3.8	3,8	76	66,3	73	63,3	72	62,4	69	59,4	77	56	74	53	31	23
10	5.9	6.0	70	60,3	67	57,3	64	54,3	61	51,3	68	48	64	45	32	25
16	7.4	7,6	65	57,2	62	54,2	58	49,6	55	46,6	63	43,9	60	40,9	34	25
31.25	10,5	10,7	60	52,9	57	49,9	49	42,1	46	39,1	51	38,1	48	35,1	36	23,6
62.50	15,1	15.5	58	48,4	55	45,4	43	32,9	40	29,9	44	32,1	41	29,1	32	21,5
100	19,0	19,9	52	45,3	49	42,3	33	25,4	30	22,4	35	28	32	25	32	20,1
250	31,0	33,0	48	39,3	45	36,3	17	6,3	14	3,3	19	20	16	17	30	17,3

** значення до 4 МГц наведені для інформації*

Cable brand	Diameter, mm nom.	Cable weight, kg/km, calc.	Shell color	Packaging, m	CPR
Cat. 6 F/UTP 4x2x23 AWG	7,5	53	Gray	305/500/1000	ECA
Cat. 6 F/UTP 4x2x23 AWG LSZH	7,5	56	Orange	305/500/1000	DCA
Cat. 6 F/UTP 4x2x23 AWG PE	7,5	46	Black	305/500/1000	FCA

Power cables

SOLID TEAM
Cable Technology

H07V-U • H07V-U nf • H07V-U nfls

Copper wires for electrical installations

Purpose

Wires are intended for electrical installations during stationary laying in power networks, as well as for the installation of electrical equipment, machines, mechanisms and machines. Wires with a core cross-section of 0.5-1 mm2 are intended for internal installation at a nominal cross-section of 300/500 V, wires with a cross-section of 1.5-400 mm2 are for general purpose at a nominal voltage of up to 450/750 V with a frequency of up to 400 Hz or a constant voltage of up to 1000 IN.

Wires belong to the class resistant to the spread of flame, provided that they are laid individually according to DSTU 4809.

Wires of the H07V-U nf, H07V-U nfls brands belong to the class resistant to the spread of flame when laid in bundles according to category A according to DSTU 4809.

Construction

Current-conducting single-wire core made of soft copper wire - 1-2 class of flexibility. Wire insulation:

H07V-U - polyvinyl chloride plastic;

H07V-U nf - low-flammability polyvinyl chloride plastic;

H07V-U nfls is a composition of reduced fire hazard.

Wires are made with different colors of insulation, the color is coordinated when ordering.

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Technical and operational characteristics

The operating temperature of the cable ..... from -50 °C to +50 °C

Relative air humidity..... up to 100% at +35 °C

Permissible heating temperature lasted

cores of cables during operation ..... +70 °C

The minimum bending radius when laying..... 10 outer diameters

The construction length of the cables..... subject to agreement

The term of service ..... not less than 15 years

Warranty period of operation..... 2 years

Installation of the cable should be carried out at a temperature..... not lower than -5 °C

Cables with an outer diameter of up to 12 mm are supplied in bays or on wooden drums, cables with a diameter of more than 12 mm are supplied on wooden drums

Regulatory documentation

DSTU EN 50525-2-31:2015
TU U 31.3-31549003-011:2007

H07V-U	Conductor		The nominal diameter of the cable (wire) is calculated, mm	Net weight, calculated, kg/km	Max current load		The construction of the main core	
Number of conductors and intersections	Resistance of the main core at 20 °C, no more, Ohm/km	The nominal diameter of the conductor, mm			Air A	Underground A	Number of wires, pcs	Nominal diameter of wires, mm
1x1	18,1	1,14	2,34	13,3	17	16	1	1,14
1x1,5	12,1	1,35	2,75	18,6	23	19	1	1,35
1x2,5	7,41	1,73	3,33	29,1	30	27	1	1,73
1x4	4,61	2,2	3,8	43,4	41	38	1	2,2
1x6	3,08	2,7	4,3	62,0	50	46	1	2,7
1x10	1,83	3,5	5,5	103,4	80	70	1	3,5
1x16	1,15	5,01	7,01	164,5	100	85	7	1,67
1x25	0,727	6,27	8,67	255,5	140	115	7	2,09
1x35	0,524	7,41	9,81	346,6	170	135	7	2,47
1x50	0,387	8,6	11,4	469,9	215	185	7	2,89
1x70	0,268	10,2	13	660,5	270	225	19	2,12
1x95	0,193	12	15,2	901,7	330	275	19	2,48
1x120	0,153	13,5	16,7	1118,3	385	315	37	2
1x150	0,124	15	18,6	1381,6	440	360	37	2,21
1x185	0,0991	16,8	20,8	1692,9	510	-	37	2,46
1x240	0,0754	19,2	23,6	2213,7	605	-	37	2,82

The actual overall dimensions and weight of the cable may differ from the calculated ones. The number and diameter of the wires in the core may differ, provided that the core's electrical resistance requirements are met. The maximum current loads are specified for the cables in normal operation and at 100% load factor of the cables. The maximum current loads are determined for laying in conditions where the ambient temperature when laying cables in the air is +25 °C.

SOLID TEAM
Cable Technology

H07V-K • H07V-K nf • H07V-K nfls

Copper wires for electrical installations

Purpose

Wires are intended for electrical installations during stationary laying in power networks, as well as for the installation of electrical equipment, machines, mechanisms and machines. Wires with a core cross-section of 0.5-1 mm2 are intended for internal installation at a nominal cross-section of 300/500 V, wires with a cross-section of 1.5-400 mm2 are for general purpose

for a nominal voltage of up to 450/750 V with a frequency of up to 400 Hz or a constant voltage of up to 1000 V. Wires of the H07V-K brand are intended for the installation of sections of electric circuits where it is possible

left wire bends.

Wires belong to the class resistant to the spread of flame under the condition of single laying according to DSTU 4809. Wires of the brands H07V-K nf, H07V-K nflsbelong to the class resistant to the spread of flame when laid in bundles according to category A according to DSTU 4809.

Construction

Current-conducting single-wire core made of soft copper wire - 1-2 class of flexibility. Wire insulation:

H07V-K - polyvinyl chloride plastic;

H07V-K nf - low-flammability polyvinyl chloride plastic;

H07V-K nfls is a composition of reduced fire hazard.

Wires are made with different colors of insulation, the color is coordinated when ordering.

https:**dialan.ua**
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Dialan

Regulatory documentation

DSTU EN 50525-2-31:2015
TU U 31.3-31549003-011:2007

Technical and operational characteristics

The operating temperature of the cable	from -50 °C to +50 °C
Relative air humidity	up to 100% at +35 °C
Permissible heating temperature lasted cores of cables during operation	+70 °C
The minimum bending radius when laying	5 outer diameters
The construction length of the cables	subject to agreement
The term of service	not less than 15 years
Warranty period of operation	2 years
Installation of the cable should be carried out at a temperature	not lower than -5 °C

Cables with an outer diameter of up to 12 mm are supplied in bays or on wooden drums, cables with a diameter of more than 12 mm are supplied on wooden drums

H07V-K	Conductor		The nominal diameter of the cable (wire) is calculated, mm	Net weight, calculated, kg/km	Max current load		The construction of the main core	
Number of conductors and intersections	Resistance of the main core at 20 °C, no more, Ohm/km	The nominal diameter of the conductor, mm			Air A	Number of conductors and intersections	Resistance of the main core at 20 °C, no more, Ohm/km	The nominal diameter of the conductor, mm
1x0,5	39,6	0,9	2,1	8,0	11	-	10	0,238
1x0,75	25,5	1,15	2,35	11,1	15	-	10	0,3
1x1	21,8	1,2	2,4	12,3	17	16	12	0,3
1x1,5	14	1,5	2,9	18,1	23	19	18	0,3
1x2,5	8,05	2,21	3,81	30,6	30	27	31	0,3
1x4	6,25	2,5	4,1	44,4	41	38	29	0,4
1x6	3,11	3	4,6	66,2	50	46	46	0,4
1x10	1,99	4	6	103,7	80	70	46	0,5
1x16	1,21	5	7	159,0	100	85	75	0,5
1x25	0,809	7	9,4	241,6	140	115	112	0,5
1x35	0,551	9,2	11,6	351,8	170	135	168	0,5
1x50	0,394	9,5	12,3	482,9	215	185	238	0,5
1x70	0,277	11,3	14,1	664,2	270	225	336	0,5
1x95	0,203	13,5	16,7	909,3	330	275	456	0,5
1x120	0,158	15,1	18,3	1120,3	385	315	570	0,5
1x150	0,13	17,5	21,1	1403,1	440	360	710	0,5
1x85	0,105	18,8	22,8	1680,6	510	-	851	0,5
1x240	0,0798	22,3	26,7	2255,0	605	-	1147	0,5

The actual overall dimensions and weight of the cable may differ from the calculated ones. The number and diameter of the wires in the core may differ, provided that the core's electrical resistance requirements are met. The maximum current loads are specified for the cables in normal operation and at 100% load factor of the cables. The maximum current loads are determined for laying in conditions where the ambient temperature when laying cables in the air is +25 °C.

SOLID TEAM
Cable Technology

H05V-K • H05V-K nf • H05V-K nfls (H05V-K)

Copper wires for electrical installations

Purpose

Wires are intended for electrical installations during stationary laying in power networks, as well as for the installation of electrical equipment, machines, mechanisms and machines. Wires with a core cross-section of 0.5-1 mm2 are intended for internal installation at a nominal cross-section of 300/500 V, wires with a cross-section of 1.5-400 mm2 are for general purpose

for a nominal voltage of up to 450/750 V with a frequency of up to 400 Hz or a constant voltage of up to 1000 V. Wires of the H05V brand are intended for the installation of sections of electric circuits where it is possible

left frequent bends of the wire.

Wires belong to the class resistant to the spread of flame under the condition of single laying according to DSTU 4809. Wires of the brands H05V-K nf, H05V-K nfls belong to the class resistant to the spread of flame when laid in bundles according to category A according to DSTU 4809.

Construction

Current-conducting single-wire core made of soft copper wire - 1-2 class of flexibility. Wire insulation:

H05V-K - polyvinyl chloride plastic;

H05V-K nf - low-flammability polyvinyl chloride plastic;

H05V-K nfls is a composition of reduced fire hazard.

Wires are made with different colors of insulation, the color is coordinated when ordering.

https:**dialan.ua**
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Dialan

Regulatory documentation

DSTU EN 50525-2-31:2015
TU U 31.3-31549003-011:2007

Technical and operational characteristics

The operating temperature of the cable	from -50 °C to +50 °C
Relative air humidity	up to 100% at +35 °C
Permissible heating temperature lasted cores of cables during operation	+70 °C
The minimum bending radius when laying	5 outer diameters
The construction length of the cables	subject to agreement
The term of service	not less than 15 years
Warranty period of operation	2 years
Installation of the cable should be carried out at a temperature	not lower than -5 °C

Cables with an outer diameter of up to 12 mm are supplied in bays or on wooden drums, cables with a diameter of more than 12 mm are supplied on wooden drums.

H05V-K	Conductor		The nominal diameter of the cable (wire) is calculated, mm	Net weight, calculated, kg/km	Max current load		The construction of the main core	
Number of conductors and intersections	Resistance of the main core at 20 °C, no more, Ohm/km	The nominal diameter of the conductor, mm			Air A	Ground A	Resistance of the main core at 20 °C, no more, Ohm/km	The nominal diameter of the conductor, mm
1x0,5	39,6	0,9	2,1	8,0	11	-	10	0,238
1x0,75	25,5	1,15	2,35	11,1	15	-	10	0,3
1x1	21,8	1,2	2,4	12,3	17	16	12	0,3
1x1,5	14	1,5	2,9	18,1	23	19	18	0,3
1x2,5	8,05	2,21	3,81	30,6	30	27	31	0,3
1x4	6,25	2,5	4,1	44,4	41	38	29	0,4
1x6	3,11	3	4,6	66,2	50	46	46	0,4
1x10	1,99	4	6	103,7	80	70	46	0,5
1x16	1,21	5	7	159,0	100	85	75	0,5
1x25	0,809	7	9,4	241,6	140	115	112	0,5
1x35	0,551	9,2	11,6	351,8	170	135	168	0,5
1x50	0,394	9,5	12,3	482,9	215	185	238	0,5
1x70	0,277	11,3	14,1	664,2	270	225	336	0,5
1x95	0,203	13,5	16,7	909,3	330	275	456	0,5
1x120	0,158	15,1	18,3	1120,3	385	315	570	0,5
1x150	0,13	17,5	21,1	1403,1	440	360	710	0,5
1x85	0,105	18,8	22,8	1680,6	510	-	851	0,5
1x240	0,0798	22,3	26,7	2255,0	605	-	1147	0,5

The actual overall dimensions and weight of the cable may differ from the calculated ones. The number and diameter of the wires in the core may differ, provided that the core's electrical resistance requirements are met. The maximum current loads are specified for the cables in normal operation and at 100% load factor of the cables. The maximum current loads are determined for laying in conditions where the ambient temperature when laying cables in the air is +25 °C.

H05VV-F • H05VV-F nf • H05VV-F nfls
Copper wires

Purpose

The wires are intended for connecting electric machines and devices of household and similar use to the electrical network with a nominal alternating voltage of 300/500 V.

The wires can be used for 380/660 V electrical systems.

Wires belong to the class resistant to the spread of flame under the condition of single laying according to DSTU 4809. Wires of the H05VV-F brands belong to the class resistant to the spread of flame when laid in bundles according to category A according to DSTU 4809.

Construction

Conductive copper core of the 5th class of flexibility.
Insulation of wires of H05VV-F, H05VV-F nf brands - polyvinyl chloride plastic; wires of H05VV-F nfls brands - a composition of reduced fire hazard. The marking of the wires is colored, one of the wires is a green-yellow grounding wire. The insulated wires are twisted into a core.
The sheath of PVC brand wires is polyvinyl chloride plastic; wires of H05VV-F nf brands - low-flammability polyvinyl chloride plastic; wires of H05VV-F nfls brands - a composition of reduced fire hazard. Wires are made in different sheath colors.

Regulatory documentation

DSTU EN 50525-2-11:2015
TU U 31.3-31549003-015:2007

Technical and operational characteristics

The operating temperature of the cable ..... from -40 °C to +40 °C

Permissible heating temperature lasted

cores of cables during operation ..... +70 °C

The construction length of the cables..... subject to agreement

Service life for the wires used

in stationary electrical appliances..... 10 years

The service life for other wires ..... 6 years

Warranty period of operation..... 2 years

The temperature of laying the cable ..... not lower than -5 °C

Cables with an outer diameter of up to 12 mm are supplied in bays or on wooden drums, cables with a diameter of more than 12 mm are supplied on wooden drums.

H05VV-F	Conductor		The nominal diameter of the cable (wire) is calculated, mm	Net weight, calculated, kg/km	Max current load		The construction of the main core	
Number of conductors and intersections	Resistance of the main core at 20 °C, no more, Ohm/km	The nominal diameter of the conductor, mm			Air A	Ground A	Resistance of the main core at 20 °C, no more, Ohm/km	The nominal diameter of the conductor, mm
2x0,75	26	1,12	6,0	49	15	-	23	0.198
2x1	19,5	1,23	6,3	55	17	15	30	0.198
2x1,5	13,3	1,53	7,3	75	23	18	30	0,238
2x2,5	7,98	2,00	9,0	119	30	25	50	0,238
2x4	4,95	2,60	10,4	166	41	32	50	0,3
2x6	3,3	3,05	11,5	217	50	40	74	0,3
2x10	1,91	4,00	15,0	384	80	55	74	0,4
3x0,75	26	1,12	6,4	59	15	-	23	0,198
3x1	19,5	1,23	6,6	67	17	14	30	0,198
3x1,5	13,3	1,53	7,9	95	23	15	30	0,238
3x2,5	7,98	2,00	9,8	150	30	21	50	0,238
3x4	4,95	2,60	11,3	210	41	27	50	0,3
3x6	3,3	3,05	12.8	288	50	34	74	0,3
3x10	1,91	4,00	15,9	484	80	50	74	0,4
4x0,75	26	1,12	7,0	72	15	-	23	0,198
4x1	19,5	1,23	7,4	86	17	-	30	0,198
4x1,5	13,3	1,53	8,8	122	23	-	30	0,238
4x2,5	7,98	2,00	10,7	186	30	-	50	0,238
4x4	4,95	2,60	12,3	262	41	-	50	0,3
4x6	3,3	3,05	13,4	342	50	-	74	0,3
4x10	1,91	4,00	17,5	610	80	-	74	0,4
4x16	1,21	5,15	20,3	877	100	-	119	0,4
5x0,75	26	1,12	8,2	98	15	-	23	0,198
5x1	19,5	1,23	8,6	112	17	-	30	0,198
5x1,5	13,3	1,53	10,4	163	23	-	30	0,238
5x2,5	7,98	2,00	12,6	249	30	-	50	0,238
5x4	4,95	2,60	14,9	362	41	-	50	0,3
5x6	3,3	3,05	16,3	469	50	-	74	0,3
5x10	1,91	4,00	20,4	800	80	-	74	0,4
5x16	1,21	5,15	23,7	1152	100	-	119	0,4

SOLID TEAM
Cable Technology

H07Z1-K

Power cable with cross-linked polyethylene insulation

Purpose

The cable is intended for the transmission and distribution of electrical energy in stationary installations at an alternating voltage of 0.6/1 kV with a frequency of 50 Hz.

The cable is designed for laying in dry and wet production premises, on overpasses, in blocks, as well as for laying in the open air.

The cable is intended for laying in conditions where it is necessary to prevent the spread of burning of the cable in bundles.

Construction

Current-conducting copper wire: cross-section 10 mm2 - single-wire round, flexibility class 1; other cross-sections are multi-wire circular of the 2nd class of flexibility.

Cross-linked polyethylene insulation. Core insulation marking - for single-core cables, the color of the core insulation is natural, for multi-core cables - colored with a striped color. The insulated wires are twisted into a core.

Shell made of non-flammable plastic. The color of the shell is black.

Characteristics of fire safety

Cables belong to the class resistant to the spread of flame under the condition of single laying according to DSTU 4809.

Cables belong to the class resistant to the spread of flame, provided they are laid in bundles according to category A according to DSTU 4809.

https:**dialan.ua**
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Dialan

Regulatory documentation

TU U 31.3-31549003-007:2006
DSTU IEC 60502-1:2009

Technical and operational characteristics

The operating temperature of the cable ..... from -50° C to + 50° C
Relative air humidity..... up to 98% at + 35° C
The minimum bending radius during laying:
for single-core cables ..... 15 cable diameters
for multi-core cables..... 12 cable diameters
Permissible heating temperature of the cable cores lasted
during operation ..... +90°C
The temperature of laying the cable ..... not lower than - 5°C
The construction length of the cables is subject to agreement.
The term of service ..... 30 years
The warranty period of operation ..... 5 years
The cable is delivered on wooden drums.

H07Z1-K Number and wire crossing cable, mm²	Nominal insulation thickness, mm	Nominal shell thickness, mm	Estimated cable diameter, mm	Estimated mass of the cable, kg/km	Electric resistance of the wire Ohm/km not more
H07Z1-K 1x10	0,7	1,4	7,7	138	1,83
H07Z1-K 1x16	0,7	1,4	9,2	205	1,15
H07Z1-K 1x25	0,9	1,4	10,9	302	0,727
H07Z1-K 1x35	0,9	1,4	12,0	398	0,524
H07Z1-K 1x50	1,0	1,4	13,4	521	0,387
H07Z1-K 1x70	1,1	1,4	15,2	724	0,268
H07Z1-K 1x95	1,1	1,6	17,4	976	0,193
H07Z1-K 1x120	1,2	1,6	19,1	1213	0,153
H07Z1-K 1x150	1,4	1,7	21,2	1481	0,124
H07Z1-K 1x185	1,6	1,7	23,4	1818	0,0991
H07Z1-K 1x240	1,7	1,8	26,2	2355	0,0754
H07Z1-K 1x300	1,8	1,9	29,0	2995	0,0601
H07Z1-K 1x400	2,0	2,1	34,0	3964	0,047
H07Z1-K 1x500	2,2	2,2	37,6	4897	0,0366
H07Z1-K 1x625	2,4	2,3	41,6	6192	0,0283
H07Z1-K 1x800	2,6	2,5	46,5	7816	0,0221
H07Z1-K 1x1000	2,8	2,6	51,8	9858	0,0176
H07Z1-K 2x10	0,7	1,8	13,4	295	1,83
H07Z1-K 2x16	0,7	1,8	16,4	437	1,15
H07Z1-K 2x25	0,9	1,8	19,7	641	0,727
H07Z1-K 2x35	0,9	1,8	22,0	838	0,524
H07Z1-K 2x50	1,0	1,8	24,8	1097	0,387
H07Z1-K 2x70	1,1	1,9	28,6	1530	0,268
H07Z1-K 2x95	1,1	2,0	32,4	2032	0,193
H07Z1-K 2x120	1,2	2,2	36,2	2558	0,153
H07Z1-K 2x150	1,4	2,3	40,2	3112	0,124
H07Z1-K 2x185	1,6	2,4	44,8	3832	0,0991
H07Z1-K 2x240	1,7	2,6	50,4	4966	0,0754
H07Z1-K 2x400	2,0	3,1	65,9	8357	0,047
H07Z1-K 3x10	0,7	1,8	14,2	397	1,83
H07Z1-K 3x16	0,7	1,8	17,4	597	1,15
H07Z1-K 3x25	0,9	1,8	21,0	889	0,727
H07Z1-K 3x35	0,9	1,8	23,4	1173	0,524
H07Z1-K 3x50	1,0	1,8	26,4	1556	0,387
H07Z1-K 3x70	1,1	1,9	30,5	2185	0,268
H07Z1-K 3x95	1,1	2,1	34,8	2934	0,193
H07Z1-K 3x120	1,2	2,2	38,6	3676	0,153
H07Z1-K 3x150	1,4	2,4	43,1	4502	0,124
H07Z1-K 3x185	1,6	2,6	48,3	5577	0,0991

The actual overall dimensions and weight of the cable may differ from the calculated ones.
The number and diameter of the wires in the core may vary, provided that the requirements of the core for electrical resistance are met..

H07Z1-K Number and wire crossing cable, mm²	Nominal insulation thickness, mm	Nominal shell thickness, mm	Estimated cable diameter, mm	Estimated mass of the cable, kg/km	Electric resistance of the wire Ohm/km not more
H07Z1-K 3x240	1,7	2,7	54,1	7209	0,0754
H07Z1-K 4x10	0,7	1,8	15,4	504	1,83
H07Z1-K 4x16	0,7	1,8	19,1	763	1,15
H07Z1-K 4x25	0,9	1,8	23,1	1146	0,727
H07Z1-K 4x35	0,9	1,8	25,8	1521	0,524
H07Z1-K 4x50	1,0	1,9	29,4	2040	0,387
H07Z1-K 4x70	1,1	2,1	34,1	2887	0,268
H07Z1-K 4x95	1,1	2,2	38,7	3856	0,193
H07Z1-K 4x120	1,2	2,4	43,2	4856	0,153
H07Z1-K 4x150	1,4	2,5	48,0	5919	0,124
H07Z1-K 4x185	1,6	2,7	53,7	7331	0,0991
H07Z1-K 4x240	1,7	3	60,6	9549	0,0754
H07Z1-K 5x10	0,7	1,8	16,8	612	1,83
H07Z1-K 5x16	0,7	1,8	20,9	932	1,15
H07Z1-K 5x25	0,9	1,8	25,4	1405	0,727
H07Z1-K 5x35	0,9	1,9	28,7	1885	0,524
H07Z1-K 5x50	1,0	2,0	32,6	2529	0,387
H07Z1-K 5x70	1,1	2,2	37,9	3581	0,268
H07Z1-K 5x95	1,1	2,4	43,1	4807	0,193
H07Z1-K 5x120	1,2	2,6	48,1	6050	0,153
H07Z1-K 5x150	1,4	2,7	53,5	7373	0,124
H07Z1-K 5x185	1,6	3	60,0	9159	0,0991
H07Z1-K 5x240	1,7	3,2	67,4	11885	0,0754

The actual overall dimensions and weight of the cable may differ from the calculated ones.
The number and diameter of the wires in the core may vary, provided that the requirements of the core for electrical resistance are met

NYM-J-F • NYM-J-F nf• NYM-J-F nfls (flat)

Power cables with copper conductors (flat design)

Purpose

The cable is intended for the transmission and distribution of electrical energy in stationary installations at an alternating voltage of 0.3/0.5 kV or 0.6/1 kV with a frequency of 50 Hz.

Cables with a nominal voltage of 0.3/0.5 kV can be used for electrical systems of 0.38/0.66 kV. The cable is designed for laying in dry and wet production premises, on overpasses, in blocks, as well as for laying in the open air.

NYM-J-F brand cables are intended for single laying. Cables of the NYM-J-F nf brand are intended for laying in conditions where non-spreading of cable burning is required when laying in bundles. Cables of the NYM-J-F nfls brand are designed for laying in conditions where non-spreading of cable burning when laying in bundles, reduced smoke generation and moderately dangerous toxicity of gases is required.

Cables belong to the class resistant to the spread of flame under the condition of single laying according to DSTU 4809. Cables of the brands NYM-J-F nf, NYM-J-F nfls belong to the class resistant to the spread of flame when laid in bundles according to category A according to DSTU 4809.

Construction

Conductive copper core - multi-wire round (mk) 3rd flexibility class. Cable insulation:
NYM-J-F, NYM-J-F nf - polyvinyl chloride plastic;
NYM-J-F nfls is a composition of reduced fire hazard. Color marking of the insulation of the wires. Insulated wires are located parallel to each other.
Cable sheath:
NYM-J-F – polyvinyl chloride plastic;
NYM-J-F nf – low-flammability polyvinyl chloride plastic; NYM-J-F nfls is a composition of reduced fire hazard.

Regulatory documentation

TU U 31.3-31549003-016:2007

Technical and operational characteristics

The temperature of laying the cable	not lower than-5 °C
The operating temperature of the cable	from -50 °C to +50 °C
Relative air humidity	up to 98% at +35 °C
Permissible heating temperature lasted cores of cables during operation	+70 °C
The construction length of the cables	subject to agreement
The term of service	30 years
Warranty period of operation	5 years

Cables are supplied in bundles or on wooden drums.

NYM-J-F	Conductor		Cable dimensions, calculated, mm		Net weight, calculated, kg/km	Max current load		The construction of the main core	
Numbe of conductors and intersections	Resistance of the main core at 20 °C, no more, Ohm/km	The nominal diameter of the conductor, mm	Height	Width		Air A	Ground A	Number of wires, pcs	Nominal diameter of wires, mm
2x1	18,1	1,13	4,63	6,86	52,0	-	-	1	1,13
2x1,5	12,1	1,35	4,85	7,3	62,7	21	27	1	1,35
2x2,5	7,41	1,73	5,23	8,06	84,5	27	36	1	1,73
2x2,5+1,5	7,41	1,73	5,23	10,51	113,0	27	36	1	1,73
2x4	4,61	2,2	5,9	9,4	121,9	36	47	1	2,2
2x6	3,08	2,7	6,4	10,4	163,8	46	59	1	2,7
3x1	18,1	1,13	4,63	9,09	73,5	-	-	1	1,13
3x1,5	12,1	1,35	4,85	9,75	89,5	21	27	1	1,35
3x2,5	7,41	1,73	5,23	10,89	122,0	27	36	1	1,73
3x4	4,61	2,2	5,9	12,9	178,1	36	47	1	2,2
3x6	3,08	2,7	6,4	14,4	241,0	46	59	1	2,7

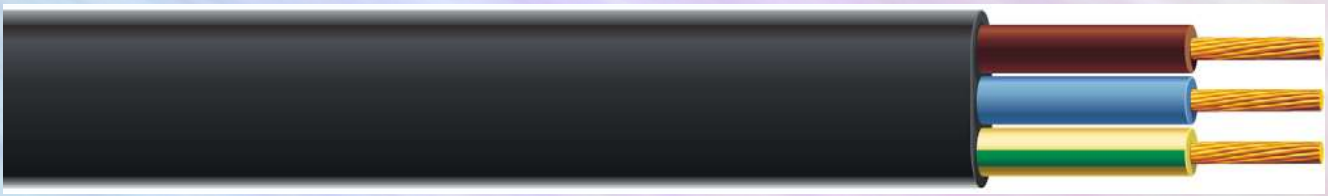
It is possible to manufacture the cable according to the customer's individual parameters!

The actual overall dimensions and weight of the cable may differ from the calculated ones.
The number and diameter of the wires in the core may vary, provided that the requirements of the core for electrical resistance are met. The maximum current loads are specified for the cables in normal operation and at 100% load factor of the cables. The maximum current loads are determined for laying in conditions if:

- *ambient temperature when laying cables in the air is +25 °C, when laying in the ground +15 °C;*
- *the depth of cable laying in the ground is 0.7 m;*
- *the specific thermal resistance of the soil is 1.2 K*m/W.*

H05VVH6-F • H05VVH6-F nf • H05VVH6-F nfls

Power cables with copper conductors (flat design)



Purpose

The cable is intended for the transmission and distribution of electrical energy in stationary installations at an alternating voltage of 0.3/0.5 kV or 0.6/1 kV with a frequency of 50 Hz.

Cables with a nominal voltage of 0.3/0.5 kV can be used for electrical systems of 0.38/0.66 kV. The cable is designed for laying in dry and wet production premises, on overpasses, in blocks, as well as for laying in the open air.

H05VVH6-F brand cables are intended for single laying. Cables of the H05VVH6-F nf brand are intended for laying in conditions where non-spreading of cable burning is required when laying in bundles. Cables of the H05VVH6-F nfls brand are designed for laying in conditions where non-spreading of cable burning when laying in bundles, reduced smoke generation and low-hazardous toxicity of gases is required.

Cables belong to the class resistant to the spread of flame under the condition of single laying according to DSTU 4809. Cables of the H05VVH6-F nf, H05VVH6-F nfls brands belong to the class resistant to the spread of flame when laid in bundles according to category A according to DSTU 4809.

Construction

Current-conducting copper core - multi-wire round (mk) 5 flexibility class. Cable insulation:
H05VVH6-F, H05VVH6-F nf - polyvinyl chloride plastic;
H05VVH6-F nfls is a composition of reduced fire hazard. Color marking of the insulation of the wires. Insulated wires are located parallel to each other.
Cable sheath:
H05VVH6-F – polyvinyl chloride plastic;
H05VVH6-F nf – low-flammability polyvinyl chloride plastic;
H05VVH6-F nfls is a composition of reduced fire hazard.

Regulatory documentation

TU U 31.3-31549003-007:2006
DSTU IEC 60502-1:2009

Technical and operational characteristics

The temperature of laying the cable	not lower than -5 °C
The operating temperature of the cable	від -50 °C до +50 °C
The relative humidity of the air	до 98% при +35 °C
Permissible heating temperature of the cable cores during operation	+70 °C
The construction length of the cables	subject to agreement
The term of service	30 years
Warranty period of operation	5 years

Cables are supplied in bundles or on wooden drums.

H05VVH6-F	Conductor		Cable dimensions, calculated, mm		Net weight, calculated, kg/km	Max current load		The construction of the main core	
Numbe of conductors and intersections	Resistance of the main core at 20 °C, no more, Ohm/km	The nominal diameter of the conductor, mm	Height	Width		Air A	Ground A	Numbe of conductors and intersections	The nominal diameter of the conductor, mm
2x1	18,1	1,13	4,63	6,86	52,0	-	-	1	1,13
2x1,5	12,1	1,35	4,85	7,3	62,7	21	27	1	1,35
2x2,5	7,41	1,73	5,23	8,06	84,5	27	36	1	1,73
2x2,5+1,5	7,41	1,73	5,23	10,51	113,0	27	36	1	1,73
2x4	4,61	2,2	5,9	9,4	121,9	36	47	1	2,2
2x6	3,08	2,7	6,4	10,4	163,8	46	59	1	2,7
3x1	18,1	1,13	4,63	9,09	73,5	-	-	1	1,13
3x1,5	12,1	1,35	4,85	9,75	89,5	21	27	1	1,35
3x2,5	7,41	1,73	5,23	10,89	122,0	27	36	1	1,73
3x4	4,61	2,2	5,9	12,9	178,1	36	47	1	2,2
3x6	3,08	2,7	6,4	14,4	241,0	46	59	1	2,7

It is possible to manufacture the cable according to the customer's individual parameters!

The actual overall dimensions and weight of the cable may differ from the calculated ones.
The number and diameter of the wires in the core may vary, provided that the requirements of the core for electrical resistance are met. The maximum current loads are specified for the cables in normal operation and at 100% load factor of the cables. The maximum current loads are determined for laying in conditions if:
- *ambient temperature when laying cables in the air is +25 °C, when laying in the ground +15 °C;*
- *the depth of cable laying in the ground is 0.7 m;*
- *specific thermal resistance of the soil is 1.2 K*m/W.*

NYIFY • NYIFY nf • NYIFY nfls

Power cables with copper conductors (flat design)

Purpose

The cable is intended for the transmission and distribution of electrical energy in stationary installations at an alternating voltage of 0.3/0.5 kV or 0.6/1 kV with a frequency of 50 Hz.

Cables with a nominal voltage of 0.3/0.5 kV can be used for electrical systems of 0.38/0.66 kV. The cable is designed for laying in dry and wet production premises, on overpasses, in blocks, as well as for laying in the open air.

NYIFY brand cables are intended for single laying. Cables of the NYIFY brand are intended for laying in conditions where non-spreading of cable burning is required when laying in bundles. Cables of the NYIFY nfls brands are intended for laying in conditions where non-spreading of cable burning when laying in bundles, reduced smoke generation and low-hazardous toxicity of gases is required.

Cables belong to the class resistant to the spread of flame under the condition of single laying according to DSTU 4809. Cables of the NYIFY nf, NYIFY nfls brands belong to the class resistant to the spread of flame when laid in bundles according to category A according to DSTU 4809.

Construction

Conductive copper core - single-wire round (approx) 1st flexibility class. Cable insulation:
NYIFY, NYIFY nf - polyvinyl chloride plastic;
NYIFY nfls is a composition of reduced fire hazard. Color marking of the insulation of the wires. Insulated wires are located parallel to each other.
Cable sheath:
NYIFY – polyvinyl chloride plastic;
NYIFYnf - low-flammability polyvinyl chloride plastic; NYIFY nfls is a composition of reduced fire hazard.

Regulatory documentation

TU U 31.3-31549003-007:2006
DSTU IEC 60502-1:2009

Technical and operational characteristics

The temperature of laying the cable	not lower than -5 °C
The operating temperature of the cable	from -50 °C to +50 °C
The relative humidity of the air	up to 98% at +35 °C
Permissible heating temperature of the cable cores during operation	+70 °C
The construction length of the cables	subject to agreement
The term of service	30 years
Warranty period of operation	5 years

Cables are supplied in bundles or on wooden drums.

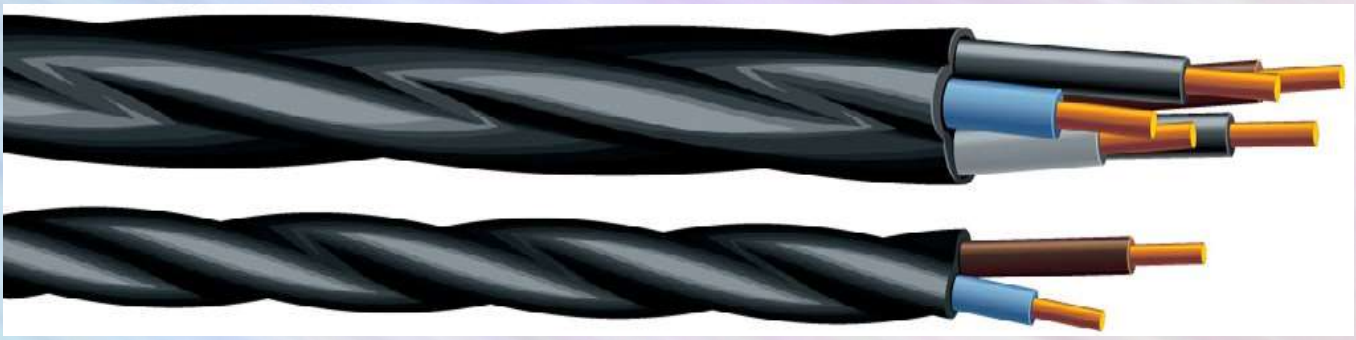
NYIFY	Conductor		Cable dimensions, calculated, mm		Net weight, calculated, kg/km	Max current load		The construction of the main core	
Numbe of conductors and intersections	Resistance of the main core at 20 °C, no more, Ohm/km	The nominal diameter of the conductor, mm	Height	Width		Air A	Ground A	Numbe of conductors and intersections	The nominal diameter of the conductor, mm
2x1	18,1	1,13	4,63	6,86	52,0	-	-	1	1,13
2x1,5	12,1	1,35	4,85	7,3	62,7	21	27	1	1,35
2x2,5	7,41	1,73	5,23	8,06	84,5	27	36	1	1,73
2x2,5+1,5	7,41	1,73	5,23	10,51	113,0	27	36	1	1,73
2x4	4,61	2,2	5,9	9,4	121,9	36	47	1	2,2
2x6	3,08	2,7	6,4	10,4	163,8	46	59	1	2,7
3x1	18,1	1,13	4,63	9,09	73,5	-	-	1	1,13
3x1,5	12,1	1,35	4,85	9,75	89,5	21	27	1	1,35
3x2,5	7,41	1,73	5,23	10,89	122,0	27	36	1	1,73
3x4	4,61	2,2	5,9	12,9	178,1	36	47	1	2,2
3x6	3,08	2,7	6,4	14,4	241,0	46	59	1	2,7

It is possible to manufacture the cable according to the customer's individual parameters!

The actual overall dimensions and weight of the cable may differ from the calculated ones.
The number and diameter of the wires in the core may vary, provided that the requirements of the core for electrical resistance are met. The maximum current loads are specified for the cables in normal operation and at 100% load factor of the cables. The maximum current loads are determined for laying in conditions if:
- *ambient temperature when laying cables in the air is +25 °C, when laying in the ground +15 °C;*
- *the depth of cable laying in the ground is 0.7 m;*
- *specific thermal resistance of the soil is 1.2 K*m/W.*

NYY • NYY nf • NYY nfls (NYY)

Power cables with copper conductors



Purpose

The cables are designed for the transmission and distribution of electrical energy in stationary installations at an alternating voltage of 0.3/0.5 kV or 0.6/1 kV with a frequency of 50 Hz. Cables with a nominal voltage of 0.3/0.5 kV can be used for electrical systems of 0.38/0.66 kV.

Cables are designed for laying in dry and wet production premises, on overpasses, in blocks, as well as for laying in the open air.

NYY brand cables are intended for single laying. Cables of the NYY nf brand are intended for laying in conditions that require non-spreading of cable burning when laying in bundles. Cables of the NYY nfls brand are intended for laying in conditions where non-spreading of cable burning when laying in bundles, reduced smoke emission and low toxicity of gases is required.

Cables belong to the class resistant to the spread of fire under conditions of single laying according to DSTU 4809.

Cables of the NYY nf, NYY nfls brands belong to the class resistant to the spread of fire when laid in bundles according to category A according to DSTU 4809.

Construction

Conductive copper core, single-wire round (ok) or multi-wire round (mk), 1 or 2 flexibility class. In four-core cables, class 2 cores with a cross-section of 70-240 mm2 can be sector-shaped (ms).
Insulation of NYY, NYY nf cables - polyvinyl chloride plastic; cables of the NYY nfls brand - a composition of reduced fire hazard. The marking of the insulation of the wires is color (solid) or digital. Cables are available with a blue neutral core or with a green-yellow grounding core.
The insulated cores of multi-core cables are twisted into a core. Shell:
NYY - polyvinyl chloride plastic;
NYY nf - low-flammability polyvinyl chloride plastic; VVHngd – composition of reduced fire hazard.

Regulatory documentation

TU U 31.3-31549003-007:2006
TU U 31.3-31549003-016:2007
DSTU IEC 60502 1:2009 DSTU HD 21.4 S2
DSTU ND 603 S1

Technical and operational characteristics

The operating temperature of the cable ..... from -50 °C to +50 °C

The relative humidity of the air..... up to 98% at +35 °C

Permissible heating temperature lasted

cores of cables during operation ..... +70 °C

The minimum bending radius when laying:

for single-core cables of NYY, NYY nf, NYY nfls brands ..... 15 ext. cable diameters

for stranded cables of NYY, NYY nf, NYY nfls brands ..... 12 ext. cable diameters

The construction length of the cables..... subject to agreement

The term of service ..... 30 years

Warranty period of operation..... 5 years

The temperature of laying the cable ..... not lower than -5 °C

Cables with an outer diameter of up to 12 mm are delivered in bundles or on wooden drums, cables with a diameter of more than 12 mm are delivered on wooden drums.

SOLID TEAM
Cable Technology

NYY nf	Conductor		The nominal diameter of the cable (wire) is calculated, mm	Net weight, calculated, kg/km	Max current load		The construction of the main vein	
Numbe of conductors and intersections	Resistance of the main core at 20 °C, no more, Ohm/km	The nominal diameter of the conductor, mm			Air A	Ground A	Number of wires, pcs	Nominal diameter of wires, mm
1x4	4,61	2,20	5,90	67,34	39	50	1	2,2
1x6	3,08	2,70	6,40	88,41	50	62	1	2,7
1x10	1,83	3,50	7,70	140,45	68	83	1	3.5
1x16	1,15	5,01	9,81	224,07	89	107	7	1,67
1x25	0,727	6,27	11,47	326,88	121	137	7	2,09
1x35	0,524	7,41	12,61	426,08	147	163	7	2,47
1x50	0,387	8,60	14,40	567,39	179	194	7	2,89
1x70	0,268	10,20	16,00	770,11	226	237	19	2,12
1x95	0,193	12,00	18,40	1037,70	280	285	19	2,48
1x120	0,153	13,50	19,90	1274,23	326	324	37	2
1x150	0,124	15,00	21,60	1531,69	373	364	37	2,21
1x185	0,0991	16,80	24,00	1877,25	431	412	37	2,46
1x240	0,0754	19,20	26,80	2439,97	512	477	37	2,82
1x300	0,0601	21,60	30,20	3133,83	591	539	37	3,2
1x400	0,047	25,83	35,23	4135,62	685	612	61	2,87
1x500	0,0366	28,80	38,60	5075,76	792	690	61	3,2
1x630	0,0283	32,23	42,03	6416,98	910	774	91	2,93
2x1	18,1	1,13	6,86	57,34	-	-	1	1,13
2x1,5	12,1	1,35	7,30	68,48	21	27	1	1,35
2x2,5	7,41	1,73	8,06	90,92	27	36	1	1,73
2x2,5+1,5	7,41	1,73	8,5	107,7	27	36	1	1,73
2x4	4,61	2,20	10,00	142.97	36	47	1	2,2
2x6	3,08	2,70	11,00	187,12	46	59	1	2,7
2x10	1,83	3,50	13,60	297,19	63	79	1	3,5
3x1	18,1	1,13	7,20	72,02	-	-	1	1,13
3x1,5	12,1	1,35	7,68	87,68	21	27	1	1,35
3x2,5	7,41	1,73	8,50	119,54	27	36	1	1,73
3x2,5+1,5	7,41	1,73	9,8	150,3	27	36	1	1,73
3x4	4,61	2,20	10,54	188,36	36	47	1	2,2
3x6	3,08	2,70	11,62	251.61	46	59	1	2,7
3x10	1,83	3,50	14,42	406,23	63	79	1	3,5
3x10+1x6	1,83	3,50	15,8	469,9	63	79	1	3,5
3x16+1x10	1,15	5,01	19,8	739,9	84	102	7	1,67
3x25+1x16	0,727	6,27	24,2	1131,1	112	133	7	2.09

3x35+1x16	0,524	7,41	27,0	1426,9	137	158	7	2,463
3x50+1x25	0,387	8,60	31,3	1954,2	167	187	7	2,89
3x50+1x35	0,387	8,60	31,3	2044,4	167	187	7	2,89
3x70+1x35	0,268	10,20	35,6	2696,7	211	231	19	2,12
3x70+1x50	0,268	10,20	35,6	2827,8	211	231	19	2,12
3x95+1x50	0,193	12,00	40,4	3589,8	261	279	19	2,48
3x95+1x70	0,193	12,00	40,4	3779,6	261	279	19	2,48
3x120+1x70	0,153	13,50	44,4	4539,5	302	317	37	2
3x150+1x95	0,124	15,00	48,5	5563,0	346	358	37	2,21
3x150+1x120	0,124	15,00	48,5	5790,5	346	358	37	2,21
3x185+1x95	0,0991	16,80	53,8	6637,5	397	405	37	2,46
3x185+1x120	0,0991	16,80	53,8	6865,0	397	405	37	2,46
3x240+1x120	0,0754	19,20	60,5	8536,5	472	471	37	2,82
3x240+1x185	0,0754	19,20	60,5	9156,2	472	471	37	2,82
4x1,5	12,1	1,35	8,31	105,68	20	25	1	1,35
4X2,5	7,41	1,73	9,23	146,84	25	33	1	1,73
4x4	4,61	2,20	11,45	231,70	33	44	1	2,2
4x6	3,08	2,70	12,66	313,86	43	55	1	2,7
4x10	1,83	3,50	15,79	512,30	59	73	1	3,5
4x16	1,15	5,01	19,84	798,24	78	95	7	1,67
4x25	0,727	6,27	24,25	1218,51	104	124	7	2,09
4x35	0,524	7,41	27,00	1609,07	127	147	7	2,463
4x50	0,387	8,60	31,32	2174,35	155	174	7	2,89
4x70	0,268	10,20	35,58	3017,64	196	215	19	2,12
4x95	0,193	12,00	40,41	4017,73	243	259	19	2,48
4x120	0,153	13,50	44,43	5005,03	281	259	37	2
4x150	0,124	15,00	48,53	6037,53	322	333	37	2,21

4x185	0,0991	16,80	53,36	7385,61	369	377	37	2,46
4x240	0,0754	19,20	60,52	9638,19	439	438	37	2,82
5x1,5	12,1	1,35	9,51	129,02	20	25	1	1.35
5x2,5	7,41	1,73	10,61	180,23	25	33	1	1,73
5x4	4,61	2,20	13,15	284,47	33	44	1	2,2
5x6	3,08	2,70	14,60	386,78	43	55	1	2,7
5x10	1,83	3,50	18,37	633,34	59	73	1	3,5
5x16	1,15	5,01	23,15	988,00	78	95	7	1,67
5x25	0,727	6,27	28,36	1509,99	104	124	7	2,09
5x35	0,524	7,41	31,67	1989,46	127	147	7	2,463
5x50	0,387	8,60	37,26	2736,58	155	174	7	2,89
5x70	0,268	10,20	41,90	3751,77	196	215	19	2,12
5x95	0,193	12,00	48,10	5044,63	243	259	19	2,48
5x120	0,153	13,50	52,45	6229,10	281	295	37	2
5x150	0,124	15,00	57,78	7571,72	322	333	37	2,21
5x185	0,0991	16,80	63,58	9259,74	369	377	37	2,46
5x240	0,0754	19,20	72,70	12178,41	439	438	37	2,82

It is possible to manufacture the cable according to the customer's individual parameters!