

Cables & Wires

Selection table for media technology

## MEDIA TECHNOLOGY

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#### Audio cables with braided shielding





## Type Cable structure

Conductor material: Core insulation: Core colours: Stranding element: Sheath material:

Cable external diameter:

Sheath colour:

#### **Electrical data**

Conductor resistance, max.: 75 Ohm/km Insulation resistance, min.: 5 MOhm x km

#### **Technical data**

Weight: Min. bending radius for laying:

Operating temperature range min.:
Operating temperature range max.:
Copper weight:

Norms



## HELUSOUND audio cable analog 2x0,25 + 0,25

Copper, bare PVC

rd, wh

2 cores with 1 filler and 1 earth conductor stranded

PVC

approx. 3,4 mm black

approx. 20 kg/km

35 mm -25°C +70°C 13,5 kg/km

Corrosiveness acc. to EN50267-2-3

Part no.	Cable structure	Conductor resistance Ohm / km	Outer diameter approx. mm	Cop. weight kg / km	Weight approx. kg / km
400000	2x0,25 + 0,25	< 75,0	3,4	13,5	20,0
400001	2x0,33+0,33	< 60,0	4,0	16,3	26,0
400002	2x0,5+0,33	< 36,8	5,6	26,1	49,0

Dimensions and specifications may be changed without prior notice.

#### **Application**

The HELUSOUND® audio cable is a 2-core, shielded multipurpose cable with earth conductor. It is particularly suitable for use in microphone, radio, studio and transmission systems.

Analog cable for short transmission distances and low frequencies.



#### Audio cables, multicore, with braided shielding



HELUSOUND® Audiokabel analog 3x0,75



## Type Cable structure

Conductor material: Core insulation: Stranding element: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying:

Operating temperature range min.: Operating temperature range max.: Copper weight:

## HELUSOUND audio cable analog 2x0,26 Copper, bare

Copper, bare

pairs stranded PVC

- V C

RoHS

approx. 5,2 mm

black

73,9 Ohm/km 1 GOhm x km

approx. 37 kg/km 52 mm

-25°C +70°C 16,8 kg/km

**Norms** Corrosiveness acc. to EN50267-2-3

Part no.	Cable structure	Conductor resistance Ohm / km	Outer diameter approx. mm	Cop. weight kg/km	Weight approx. kg / km
400003	2x0,26	< 73,9	5,2	16,8	37,0
400004	2x0,33	< 61,6	5,3	18,2	38,0
400005	4x0,33	< 61,6	5,9	27,2	52,0
400006	2x0,50	< 39,0	5,7	22,0	46,0
400007	2x0,75	< 26,0	7,2	30,0	70,0
400008	3x0,75	< 26,0	7,7	50,0	90,0
400009	4x0,75	< 26,0	8,3	60,0	102,0
400010	5x0,75	< 26,0	8,9	72,0	120,0

Dimensions and specifications may be changed without prior notice.

#### **Application**

The 2-5-core shielded HELUSOUND® audio cable with a common PE core insulation, braided shielding and PVC outer sheath is especially well suited for use in microphone, loudspeaker, radio and transmission systems.





#### Audio cables with foil shielding, single pair





## Type Cable structure

Conductor material: Core insulation: Core colours: Stranding element: Sheath material:

Cable external diameter: Sheath colour:

#### **Electrical data**

Conductor resistance, max.: 86 Ohm/km Insulation resistance, min.: 1 GOhm x km

#### **Technical data**

Weight: approx. 17 kg/km
Min. bending radius for laying: 35 mm
Operating temperature range min.: -25°C
Operating temperature range max.: +70°C
Copper weight: 6,6 kg/km

**Norms** Corrosiveness acc. to EN50267-2-3

**Part no.**Dimensions and specifications may be changed without prior notice.

#### **Application**

The 2-core HELUSOUND® audio cable is a foil shielded cable with earth conductor. This symmetrical cable is suitable for use in racks and for studio cabling.



## Analog audio cables 2x0,22

Copper, tinned

PE rd, bu

2 cores with 1 filler

PVC

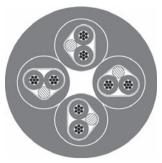
approx. 3,4 mm

black



#### Audio cables, multipaired, pairs with foil shielding





## **Type**

Conductor material: Core insulation: Core colours: Stranding element: Sheath material: Cable external diameter:

**Cable structure** 

Sheath colour:

#### **Electrical data**

Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

approx. 72 kg/km Weight:

Min. bending radius for laying: 76 mm Operating temperature range min.: -25°C Operating temperature range max.: +70°C 15,0 kg/km Copper weight:

**Norms** 



#### **Analog audio cables** 2x2x0,22

Copper, tinned PΕ rd, bu pairs stranded PVC

approx. 7,6 mm black

86 Ohm/km 1 GOhm x km

Corrosiveness acc. to EN50267-2-3

Part no.	Cable structure	Outer diameter approx. mm	Cop. weight kg/km	Weight approx. kg / km
400012	2x2x0,22	7,6	15,0	72,0
400013	4x2x0,22	9,2	29,0	100,0
400014	8x2x0,22	12,2	59,0	179,0
400015	12x2x0,22	14,2	90,0	248,0
400016	16x2x0,22	16,4	111,0	337,0
400017	20x2x0,22	18,4	149,0	421,0
400018	24x2x0,22	20,4	178,0	493,0
400019	32x2x0,22	22,4	238,0	620,0
400020	40×2×0.22	24.6	303.0	750 N

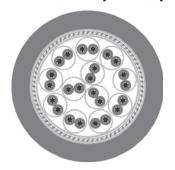
Dimensions and specifications may be changed without prior notice.

The HELUSOUND® audio cable is an insulated, multi-core audio cable which is screened symmetrically and in pairs. The cable is particularly suitable for permanent laying in public buildings, such as, e.g. theatres or music stages and for permanent studio installation.



## Audio cables, multipaired, spirally screened pairs and overall braided shielding





#### **Type Cable structure**

Conductor material: Core insulation: Stranding element: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight:

#### **Norms**

400042 Dimensions and specifications may be changed without prior notice.

# HELUSOUND® Audiokabel analog 12x2x0,14 **RoHS**

#### **Analog audio cables** 12x2x0,14

Copper, tinned TPE pairs stranded PUR approx. 12,7 mm black

150 Ohm/km 100 MOhm x km

approx. 190 kg/km 127 mm -25°C +70°C

118,0 kg/km

Halogen-free acc. to 60754-2

### pairs stranded

**Analog audio cables** 

Copper, tinned TPE PUR approx. 14,1 mm black

16x2x0,14

150 Ohm/km 100 MOhm x km

approx. 247 kg/km 142 mm -25°C +70°C 165,0 kg/km

Halogen-free acc. to 60754-2

400043

## Part no.

#### **Application**

The multipaired HELUSOUND® special sound audio cable has individually shielded pairs and is protected by an additional braided shielding and ribbed PUR sheath. This cable is particularly suitable for use in mobile radio and transmission systems.

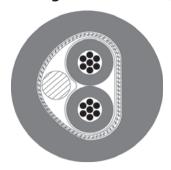


### S

## **Audio**

#### AES/EBU digital audio cables, single pair, with spiral screen





## Type Cable structure

Conductor material: Core insulation: Core colours:

Stranding element: Sheath material:

Cable external diameter:

Sheath colour:

#### **Electrical data**

Characteristic impedance:110 OhmConductor resistance, max.:86 Ohm/kmInsulation resistance, min.:1 GOhm x km

#### **Technical data**

Weight: approx. 35 kg/km

Min. bending radius for laying: 50 mm

Operating temperature range min.: -25°C

Operating temperature range max.: +70°C

Copper weight: 14,7 kg/km

**Norms** Corrosiveness acc. to EN50267-2-3

Part no. 400021

#### Dimensions and specifications may be changed without prior notice. **Application**

The HELUSOUND® AES/EBU audio cable is a 2-core, symmetrical and shielded digital sound cable with flexible spiral screen and PVC outer sheath. The cable is suitable for longer transmission rates and larger data volumes, the transmission of digital and analog audio signals and can therefore, for example, be used for connecting audio amplifiers, digital mixers, DAT recorders etc. The cable is also available with PUR outer sheath.



## Digital audio cables 2x0,22

Copper, bare

PE rd bu

rd, bu

2 cores with 1 earth conductor

PVC

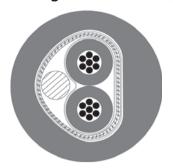
approx. 5,0 mm

black



#### AES/EBU digital audio cables, single pair, foil/braided shielding





#### Type Cable structure

Conductor material: Core insulation: Core colours: Stranding element: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Characteristic impedance: Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.:

Copper weight:

HELUSOUND® Audiokabel digital 2x0,22

## Digital audio cables 2x0,22

Copper, tinned
Cell PE
rd, bu
2 cores with 1 earth conductor
PVC
approx. 6,0 mm
black

approx. 43 kg/km

60 mm -25°C +70°C 16,5 kg/km

110 Ohm

86 Ohm/km

1 GOhm x km

**Norms** Corrosiveness acc. to EN50267-2-3

Part no.	Cable structure	Screen	Conductor resistance Ohm / km	Outer diameter approx. mm	Cop. weight kg/km	Weight approx. kg / km
400022	2x0,22	Foil + braid	< 86,0	6,0	16,5	43,0
400023	2x0,22	Foil + braid	< 86,0	4,5	15,7	25,0
400024	2x0,22	Foil	< 86,0	4,2	7,3	18,0

Dimensions and specifications may be changed without prior notice.

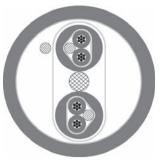
#### **Application**

The HELUSOUND® AES/EBU audio cable is a 2-core, symmetrical and shielded digital sound cable. The cable is available in three different versions. The standard version is characterised by double shielding; the patch variant has reduced outside diameter and the foil shielded variant is suitable for the permanent wiring of digital devices. All three versions are suitable for the transmission of digital audio signals.



#### AES/EBU digital audio cables, multipaired, pairs with foil shielding and overall foil shielding





## **Type Cable structure**

Conductor material:

Core insulation: Core colours: Stranding element: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Characteristic impedance: Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: approx. 85 kg/km Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight:

**Norms** 



#### **Digital audio cables** 2x2x0,22

Copper, tinned Cell PE rd, bu 2 cores with 1 earth conductor PVC approx. 9,9 mm black

1 GOhm x km

110 Ohm 86 Ohm/km

100 mm -25°C +70°C 16,0 kg/km

Part no.	Cable structure	Outer diameter approx. mm	Cop. weight kg / km	Weight approx. kg / km
400025	2x2x0,22	9,9	16,0	85,0
400026	4x2x0,22	11,8	31,0	119,0
400027	6x2x0,22	14,9	46,0	195,0
400028	8x2x0,22	16,1	59,0	232,0
400029	12x2x0,22	19,1	85,0	330,0
400158	24x2x0,22	24,5	162,0	670,0

Corrosiveness acc. to EN50267-2-3

Dimensions and specifications may be changed without prior notice.

The multipaired, digital HELUSOUND® AES/EBU audio cable is characterised by its shielding in pairs, its element sheaths and by the additional overall sheath. This cable is suitable for the transmission of digital audio signals.



#### AES/EBU digital audio cables, multipaired, spirally screened pairs and overall foil shielding





#### **Type Cable structure**

Conductor material: Core insulation: Core colours: Stranding element: Sheath material:

Cable external diameter:

Sheath colour:

#### **Electrical data**

Characteristic impedance: Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.:

Operating temperature range max.: Copper weight:

**Norms** Part no.

HELUSOUND® Audiokabel digital 12x2x0,22 **RoHS** 

#### **Digital audio cables** 12x2x0,22

Copper, bare Cell PE rd, bu

2 cores with 1 earth conductor

PVC

approx. 17,0 mm

black

86 Ohm/km 1 GOhm x km

110 Ohm

approx. 320 kg/km

170 mm -20°C +70°C 171,0 kg/km

Corrosiveness acc. to EN50267-2-3

400030

Dimensions and specifications may be changed without prior notice.

The multipaired, digital HELUSOUND® AES/EBU audio cable is characterised by its shielding in pairs, its element sheaths and by the additional overall sheath. This cable is suitable for the transmission of digital audio signals.



#### **AES/EBU & DMX patch cable**





#### **Type Cable structure**

Conductor material: Core insulation: Core colours: Stranding element: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Characteristic impedance: 110 Ohm 80 Ohm/km Conductor resistance, max.: Insulation resistance, min.: 5 GOhm x km

#### **Technical data**

Weight: approx. 33 kg/km

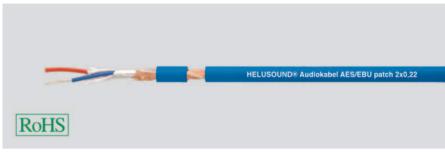
Min. bending radius for laying: 50 mm -30°C Operating temperature range min.: +70°C Operating temperature range max.: Copper weight: 14,0 kg/km

#### 400031 Part no.

Dimensions and specifications may be changed without prior notice.

#### **Application**

The 2-core HELUSOUND® AES/EBU & DMX patch cable is foil shielded and optimally protected against external interference by its copper spiral screen. This cable is suitable for indoor use for permanent laying for the control of lighting systems or for patching in studio technology.



#### **DMX** cables 2x0,22

Copper, tinned Cell PE rd, bu 2 cores with 1 filler PVC approx. 5,0 mm

blue



#### **AES/EBU & DMX cables**





#### Type Cable structure

Conductor material:
Core insulation:
Core colours:
Stranding element:
Sheath material:
Cable external diameter:
Sheath colour:

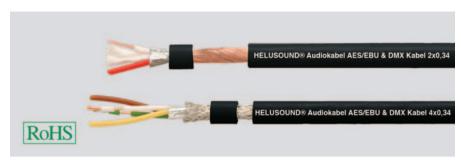
#### **Electrical data**

Characteristic impedance: Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight:

**Part no.**Dimensions and specifications may be changed without prior notice.



## DMX cables 2x0,34

Copper, bare Cell PE rd, wh 2 cores with textile filler stranded PVC approx. 6,4 mm black

110 Ohm 53 Ohm/km 10 GOhm x km

approx. 50 kg/km 64 mm -30°C +70°C 18,0 kg/km

+70°C 18,0 kg/km

## DMX cables 4x0,34

Copper, bare Cell PE wh,gn,bn,ye Star quad PVC approx. 7,0 mm black

110 Ohm 53 Ohm/km 5 GOhm x km

approx. 65 kg/km 70 mm -30°C +70°C 29,0 kg/km

400033

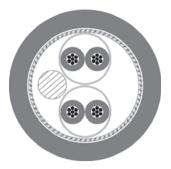
#### **Application**

The 2-core HELUSOUND® AES/EBU & DMX patch cable is protected against external interferences by its copper spiral screen. This cable is suitable for permanent laying for the control of lighting systems or for connecting digital audio amplifiers. It can be installed indoors and outdoors. The max. transmission path for DMX control amounts approx. 1000m



#### **AES/EBU TP DMX 512**





#### **Type Cable structure**

Conductor material: Core insulation: Core colours: Stranding element: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Characteristic impedance: 110 Ohm 85 Ohm/km Conductor resistance, max.: Insulation resistance, min.: 100 GOhm x km

#### **Technical data**

Weight: approx. 76 kg/km

Min. bending radius for laying: 80 mm -25°C Operating temperature range min.: Operating temperature range max.: +70°C Copper weight: 38,0 kg/km

#### 400034 Part no.

Dimensions and specifications may be changed without prior notice.

#### **Application**

The 4-core HELUSOUND® AES/EBU & DMX cable is protected against external interference by its AL/PT foil, its copper spiral screen and its PVC outer sheath. This cable is suitable for controlling all types of digital equipment. Also to use as microphon cabel.





pairs stranded

approx. 8,0 mm

PVC soft

black matt



#### DMX cables, multicore with spiral screen





#### Type Cable structure

Conductor material:
Core insulation:
Core colours:
Stranding element:
Sheath material:
Cable external diameter:
Sheath colour:

#### **Electrical data**

Characteristic impedance: Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.:

Operating temperature range max.:
Copper weight:

Norms Part no.

**Application** 

Corrosiveness acc. to EN50267-2-3

Dimensions and specifications may be changed without prior notice.

# HELUSOUND® Audiokabel AES/EBU & DMX Kabel 2x0,22+0,22

## DMX cables 2x0,22+0,22

Copper, tinned PE spumed wh,bu+rd pair and core stranded together PVC approx. 6,4 mm

black

110 Ohm 86 Ohm/km 1 MOhm x km

approx. 79 kg/km

#### 400035

64 mm

-25°C

+70°C

66,0 kg/km

The 3-core, shielded HELUSOUND® digital sound cable consists of a symmetrical pair and an additional third core. A double spiral screen and the PVC outer sheath protect the cable against electrical interference. This AES/EBU and DMX compliant (110 Ohm) special cable is suitable for the transmission of digital audio signals and can therefore, for example, be used for connecting digital mixers, audio amplifiers, DAT recorders, light and scanner systems etc.



## **Light+Power**

## **DMX-POWER**



#### **Type Cable structure**

Conductor material: Core insulation: Core colours: Stranding element: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Characteristic impedance:

#### **Technical data**

Weight: approx. 74 kg/km Copper weight: 36,0 kg/km

#### Part no. 400081

Dimensions and specifications may be changed without prior notice.

#### **Application**

The hybrid DMX Power cable is used in the professional DMX light controller. It transmits power for the light and control signals for the movement. The cable is compact, flexible and easy to process.



#### **DMX** cables (1x2x0,24)+2x1,0

110 Ohm

Copper, bare Foam-Skin-PE (DMX), PVC (Power) red, white (DMX); yellow, green (Power) 2 cores with 1 filler PVC soft approx. 7,4 mm black matt



## **HELUSOUND® DMX+POWER**



#### **Type Cable structure**

Conductor material: Core insulation: Core insulation 2: Core colours: Stranding element: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Characteristic impedance: Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.:

Operating temperature range max.: Copper weight:

Part no.

HELUSOUND DMX+POWER 1x2x0,25 + 3G1,5 QMM 400151 **RoHS** 

#### **DMX** cables (1x2x0,25)+3G1,5

Copper, bare Foam-Skin-PE (DMX), PVC (Power)

red, white (DMX); brown, blue, green/yellow (Power) DMX-Element together with Power-Element and filler stranded PVC flexible at low temperatures

approx. 13,2 mm black

110 Ohm 78 Ohm/km 20 GOhm x km

approx. 50 kg/km

64 mm -30°C +70°C 60,5 kg/km

400151

Dimensions and specifications may be changed without prior notice.

#### **Application**

The HELUSOUND® DMX+POWER hybrid cable combines a shielded light control wire and the power supply wire. The DMX-cable, which is shielded by a tin-coated copper braiding is perfectly suited for the control of light systems and mixing boards (110 Ohm characteristic intrinsic impedance). It highlights a soft PVC insulation and it is qualified for the use at indoor and outdoor installations. The DMX cable can also be used for the transmission of audio signals such as a microphone wire or as a power supply wire for active loudspeaker systems.



#### Instrument cables with spiral screen





# HELUSOUND® Instrumentenkabel 1x0,38 RoHS

#### **Type Cable structure**

Conductor material: Core insulation: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight:

**Norms** 

1x0,22

Copper, bare Foam-skin-PE PVC approx. 5,9 mm black

86 Ohm/km 1 GOhm x km

approx. 44 kg/km

60 mm -25°C +70°C 7,9 kg/km

Corrosiveness acc. to EN50267-2-3

**Instrument cables Instrument cables** 1x0,38

Copper, bare Cell PE PVC approx. 7,0 mm

black

55 Ohm/km 1 GOhm x km

approx. 55 kg/km

70 mm -25°C +70°C 29,0 kg/km

400037

Corrosiveness acc. to EN50267-2-3

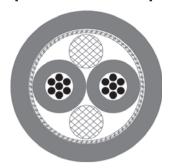
Part no. Dimensions and specifications may be changed without prior notice.

The HELUSOUND® instrument cable with spiral screen is a non-symmetrical, double shielded cable. This cable is specially suitable for connecting high ohmic components such as synthesisers, keyboards or guitars in professional stage and studio operation. The high-quality 1x0.38 special cable has an increased cross-section, a semi-conductor layer and a double spiral screen, which makes it suitable for the most stringent requirements of professional stages and studios.



#### Microphone cables with spiral screen, paired





#### Type Cable structure

Conductor material:
Core insulation:
Core colours:
Stranding element:
Sheath material:
Cable external diameter:
Sheath colour:

#### **Electrical data**

Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight:

#### Norms Part no.

Dimensions and specifications may be changed without prior notice.

# HELUSOUND® Mikrofonkabel 2x0,22 ROHS

## Microphone cable 2x0,22

Copper, bare
PE
rd, bu
2 cores with textile filler stranded
PVC
approx. 6,0 mm
black

86 Ohm/km 1 GOhm x km

approx. 55 kg/km 60 mm -25°C +70°C 12,1 kg/km

400038

Corrosiveness acc. to EN50267-2-3

## Microphone cable 2x0,15

Copper, bare PVC rd, wh pairs stranded PVC approx. 4,2 mm black

120 Ohm/km 1 GOhm x km

approx. 27 kg/km 42 mm -25°C +70°C 14,0 kg/km

Corrosiveness acc. to EN50267-2-3

400039

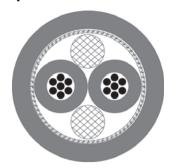
#### Application

The 2-core HELUSOUND® microphone cable with spiral screen is suitable for use in professional stage and studio operation. The microphone cable 2x0.15 has a double spiral screen made of bare copper wires.



#### Microphone cables with braided shielding





## HELUSOUND® Mikrofonkabel 2x0,34 HELUSOUND® Mikrofonkabel 2x0,50 RoHS

#### **Type Cable structure**

Conductor material: Core insulation: Core colours: Stranding element: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight:

#### Microphone cable 2x0,34

Copper, bare PΕ rd, bu

2 cores with textile filler stranded

PVC

approx. 6,5 mm black

53 Ohm/km 1 GOhm x km

65 mm -30°C +70°C

approx. 30 kg/km

15,2 kg/km

400040

approx. 59 kg/km 67 mm

Microphone cable

2 cores with textile filler stranded

2x0,50

PE

rd, wh

PVC

black

Copper, bare

approx. 6,7 mm

37 Ohm/km

1 GOhm x km

-30°C +70°C 37,0 kg/km

400080

#### Dimensions and specifications may be changed without prior notice.

#### **Application**

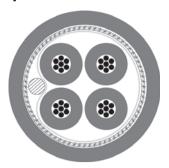
Part no.

The 2-wire HELUSOUND® microphone cable with copper braid shield is suitable for use in the professional stage and studio operations, as well as for fixed installation. The line is characterized by its highly flexible PVC jacket.



#### Microphone cables with braided shielding, star quads





## Type Cable structure

Conductor material: Core insulation: Core colours: Stranding element: Drain wire:

Inner sheath material: Sheath material:

Cable external diameter:

Sheath colour:

#### **Electrical data**

Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying:

Operating temperature range min.:
Operating temperature range max.:
Copper weight:

Norms



## Microphone cable 4x0,22

Copper, bare PE

rd,bu,gn,bk

Star quad AWG 26/7, copper bare

PE

PVC

approx. 6,1 mm

black

86 Ohm/km 1 GOhm x km

approx. 50 kg/km

62 mm -25°C +70°C 25,0 kg/km

Corrosiveness acc. to EN50267-2-3

#### Part no. 400041

Dimensions and specifications may be changed without prior notice.

#### **Application**

The 4-core HELUSOUND® microphone cable is stranded in star quads and suitable for special application due to its earth conductor and braided shielding. It is e.g. used as a stereo cable in the area of professional studio and microphone technique. Easy stripping.



## **Loudspeaker Cables**



Cross section (mm²) Part no.	<b>2 x 0,5</b> 40180	<b>2 x 0,5</b> 40023	<b>2 x 0,75</b> 40181	<b>2 x 0,75</b> 40024	<b>2 x 1,5</b> 40182	<b>2 x 1,5</b> 40025	<b>2 x 2,5</b> 40183	<b>2 x 2,5</b> 40026	<b>2 x 4</b> 40184	<b>2 x 4</b> 40027
Cable structure										
Conductor material: Copper li Identification: Grooves	itz wire, bare									
Cond. make-up	16 x 0,20	16 x 0,20	24 x 0,20	24 x 0,20	28 x 0,25	28 x 0,25	48 x 0,25	48 x 0,25	55 x 0,30	55 x 0,30
Insulation h x w mm	2,0 x 5,0	2,1 x 4,7	2,2 x 4,9	2,2 x 4,9	2,6 x 5,5	2,6 x 5,5	3,3 x 7,0	3,3 x 7,0	4,3 x 8,2	4,3 x 8,2
Sheath material	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC
Sheath colour	transparent	black/red	transparent	black/red	transparent	black/red	transparent	black/red	transparent	black/red
Weight approx. kg / km	15	15	20	20	37	37	63	63	80	80
Electrical characteristics										
Loop resistance										
max. (Ohm/km)	70	70	47	47	23	23	14	14	9	9
CapacitancepF/m	47	47	60	60	67	67	67	67	64	64
Inductance µH/m at										
1 kHz	0,7	0,67	0,61	0,61	0,54	0,54	0,54	0,54	0,58	0,58
10 kHz	0,8	0,79	0,73	0,73	0,59	0,59	0,62	0,62	0,65	0,65
100 kHz	0,8	0,85	0,73	0,73	0,59	0,59	0,62	0,62	0,65	0,65
1000 kHz	0,8	0,8	0,67	0,67	0,52	0,52	0,56	0,56	0,59	0,59
Copper weight kg/km	9,6	9,6	14,4	14,4	28,8	28,8	48,0	48,0	76,8	76,8
Cross section (mm²)	2 x 1,5		2 x 2,5		2 x 4		2 x 6		2 x 10	
Part no.	40185		40186		40187		40188		40189	
Cable structure										
Conductor material: Bare cop Identification: Stripes	per litz wire, high	ly flexible								
Cond. make-up	189 x 0.10		322 x 0.10		511 x 0.10		777 x 0.10		1273 x 0 10	
	189 x 0,10		322 x 0,10		511 x 0,10 5 x 10 2		777 x 0,10 6 1 x 12 5		1273 x 0,10	
Insulation h x w mm	3,1 x 6,5		3,6 x 7,5		5 x 10,2		6,1 x 12,5		7,0 x 15,0	
Insulation h x w mm Sheath material	3,1 x 6,5 PVC		3,6 x 7,5 PVC		5 x 10,2 PVC		6,1 x 12,5 PVC		7,0 x 15,0 PVC	
Insulation h x w mm Sheath material Sheath colour	3,1 x 6,5		3,6 x 7,5		5 x 10,2		6,1 x 12,5		7,0 x 15,0	
Cond. make-up Insulation h x w mm Sheath material Sheath colour Weight approx. kg / km	3,1 x 6,5 PVC transparent		3,6 x 7,5 PVC transparent		5 x 10,2 PVC transparent		6,1 x 12,5 PVC transparent		7,0 x 15,0 PVC transparent	
Insulation h x w mm Sheath material Sheath colour Weight approx. kg / km Electrical characteristics	3,1 x 6,5 PVC transparent		3,6 x 7,5 PVC transparent		5 x 10,2 PVC transparent		6,1 x 12,5 PVC transparent		7,0 x 15,0 PVC transparent	
Insulation h x w mm Sheath material Sheath colour Weight approx. kg / km Electrical characteristics Loop resistance	3,1 x 6,5 PVC transparent 41		3,6 x 7,5 PVC transparent 60		5 x 10,2 PVC transparent 79		6,1 x 12,5 PVC transparent 136		7,0 x 15,0 PVC transparent 254	
Insulation h x w mm Sheath material Sheath colour Weight approx. kg / km Electrical characteristics Loop resistance max. (Ohm/km)	3,1 x 6,5 PVC transparent 41		3,6 x 7,5 PVC transparent 60		5 x 10,2 PVC transparent 79		6,1 x 12,5 PVC transparent 136		7,0 x 15,0 PVC transparent 254	
Insulation h x w mm Sheath material Sheath colour Weight approx. kg / km  Electrical characteristics Loop resistance max. (Ohm/km) CapacitancepF/m	3,1 x 6,5 PVC transparent 41		3,6 x 7,5 PVC transparent 60		5 x 10,2 PVC transparent 79		6,1 x 12,5 PVC transparent 136		7,0 x 15,0 PVC transparent 254	
Insulation h x w mm Sheath material Sheath colour Weight approx. kg / km  Electrical characteristics Loop resistance max. (Ohm/km) CapacitancepF/m Inductance µH/m at	3,1 x 6,5 PVC transparent 41 23 67		3,6 x 7,5 PVC transparent 60 <b>14</b> 53		5 x 10,2 PVC transparent 79		6,1 x 12,5 PVC transparent 136		7,0 x 15,0 PVC transparent 254	
Insulation h x w mm Sheath material Sheath colour Weight approx. kg / km  Electrical characteristics Loop resistance max. (Ohm/km) CapacitancepF/m Inductance µH/m at 1 kHz	3,1 x 6,5 PVC transparent 41 23 67 0,54		3,6 x 7,5 PVC transparent 60 14 53		5 x 10,2 PVC transparent 79 <b>9</b> 50 0,49		6,1 x 12,5 PVC transparent 136 6 54 0,46		7,0 x 15,0 PVC transparent 254 3 59 0,45	
Insulation h x w mm Sheath material Sheath colour Weight approx. kg / km  Electrical characteristics Loop resistance max. (Ohm/km) CapacitancepF/m Inductance µH/m at 1 kHz 10 kHz	3,1 x 6,5 PVC transparent 41 23 67 0,54 0,61		3,6 x 7,5 PVC transparent 60 14 53 0,48 0,55		5 x 10,2 PVC transparent 79 9 50 0,49 0,56		6,1 x 12,5 PVC transparent 136 6 54 0,46 0,54		7,0 x 15,0 PVC transparent 254 3 59 0,45 0,53	
Insulation h x w mm Sheath material Sheath colour Weight approx. kg / km  Electrical characteristics Loop resistance max. (Ohm/km) CapacitancepF/m Inductance µH/m at 1 kHz 10 kHz 100 kHz	3,1 x 6,5 PVC transparent 41 23 67 0,54 0,61 0,62		3,6 x 7,5 PVC transparent 60 14 53 0,48 0,55 0,59		5 x 10,2 PVC transparent 79 9 50 0,49 0,56 0,6		6,1 x 12,5 PVC transparent 136 6 54 0,46 0,54 0,56		7,0 x 15,0 PVC transparent 254 3 59 0,45 0,53 0,56	
Insulation h x w mm Sheath material Sheath colour	3,1 x 6,5 PVC transparent 41 23 67 0,54 0,61		3,6 x 7,5 PVC transparent 60 14 53 0,48 0,55		5 x 10,2 PVC transparent 79 9 50 0,49 0,56		6,1 x 12,5 PVC transparent 136 6 54 0,46 0,54		7,0 x 15,0 PVC transparent 254 3 59 0,45 0,53	

Dimensions and specifications may be changed without prior notice. (RM01)

#### Note

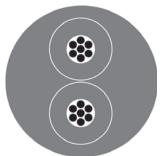
The materials used in manufacture are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers.



## **HELUSOUND® 400 PVC**

#### Speaker cables, round





### Type Cable structure

Conductor material: Core insulation: Core colours: Sheath material:

Cable external diameter:

Sheath colour:

#### **Electrical data**

Conductor resistance, max.:

#### **Technical data**

Weight:

Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight: HELUSOUND® 400 Lautsprecherkabel 2x1,5

## Speaker cable HELUSOUND® 400 2x1,5

Copper, bare PVC rd, bk PVC

approx. 6,6 mm

black

12,7 Ohm/km

approx. 73,4 kg/km

33 mm -10°C +70°C 28,8 kg/km

Part no.	Cable structure	Conductor resistance Ohm/km	Outer diameter approx. mm	Cop. weight kg / km	Weight approx. kg / km
400089	2x1,5	< 12,7	6,6	28,8	73,4
400090	2x2,5	< 7,9	7,5	48,0	106,9
400091	2x4,0	< 4,9	9,4	76,8	163,7
400092	4x2,5	< 7,9	8,8	96,0	169,3
400093	4x4,0	< 4,9	11,6	153,6	272,4
400060	8x2,5	< 7,9	13,5	192,0	349,0
400094	8x4,0	< 4,9	16,8	307,2	541,6

Dimensions and specifications may be changed without prior notice.

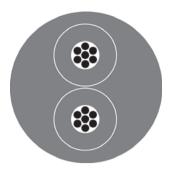
#### **Application**

All products of the HELUSOUND® 400 LOUDSPEAKER series impress with their extremely high flexibility. 0,15 stranded wires and a very soft PVC outer sheath make this possible. These cables are particularly used in mobile applications on stages, in studios or in the conference industry.



## **HELUSOUND® 500 PUR**





#### **Type Cable structure**

Conductor material: Core insulation: Core colours: Stranding element: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Conductor resistance, max.:

#### **Technical data**

Weight:

Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight:

RoHS

#### **Speaker cable HELUSOUND® 500 PUR** 2x1,5

Copper, bare PVC rd, bk pairs stranded PUR approx. 6,6 mm black

12,7 Ohm/km

approx. 66,9 kg/km

33 mm -25°C +80°C 28,8 kg/km

Part no.	Cable structure	Conductor resistance Ohm / km	Outer diameter approx. mm	Cop. weight kg/km	Weight approx. kg / km
400109	2x1,5	< 12,7	6,6	28,8	66,9
400110	2x2,5	< 7,9	7,5	48,0	98,5
400111	2x4,0	< 4,9	9,4	76,8	150,2
400112	4x2,5	< 7,9	8,8	96,0	159,1
400113	4x4,0	< 4,9	11,6	153,6	253,0
400114	8x2,5	< 7,9	13,5	192,0	332,1
400115	8x4,0	< 4,9	16,8	307,2	499,5

Dimensions and specifications may be changed without prior notice.

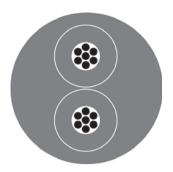
#### **Application**

The robust solution for medium and high mechanical stresses, as robust, abrasion-resistant and cut resistant. Also suitable for outdoor use.



## HELUSOUND® 600 FRNC, halogen-free HELUSOUND®





#### **Type Cable structure**

Conductor material: Core insulation: Core colours: Stranding element: Sheath material: Cable external diameter:

#### **Electrical data**

Sheath colour:

Conductor resistance, max.:

#### **Technical data**

Weight:

Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight:



#### Speaker cable HELUSOUND® 600 FRNC 2x1,5

Copper, bare FRNC rd, bk pairs stranded FRNC approx. 6,6 mm black

12,7 Ohm/km

approx. 77 kg/km 33 mm -5°C +70°C 28,8 kg/km

Part no.	Cable structure	Conductor resistance Ohm / km	Outer diameter approx. mm	Cop. weight kg / km	Weight approx. kg / km
400116	2x1,5	< 12,7	6,6	28,8	77,0
400117	2x2,5	< 7,9	7,5	48,0	105,6
400118	2x4,0	< 4,9	9,4	76,8	166,9
400119	4x2,5	< 7,9	8,8	96,0	161,5
400120	4x4,0	< 4,9	11,6	153,6	271,6
400121	8x2,5	< 7,9	13,5	192,0	338,6
400122	8x4,0	< 4,9	16,8	307,2	531,5

Dimensions and specifications may be changed without prior notice.

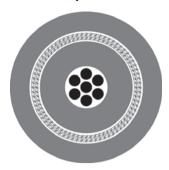
#### Application

The safe solution for increasing demands on the security in case of fire, as flame retardant, low smoke, halogen-free, no corrosion damage by released gases and fumes, no flame propagation provide for local flame propagation for the integrity of important systems.



#### Speaker cables, coaxial





#### **Type Cable structure**

Conductor material: Core insulation: Core colours: Sheath material: Cable external diameter: Sheath colour:

#### **Electrical data**

Conductor resistance, max.: Insulation resistance, min.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight:

Norms Part no.

Dimensions and specifications may be changed without prior notice.

Speaker cable 2x2,5

Copper, bare PVC Black PVC approx. 6,8 mm

black

7,98 Ohm/km 5 MOhm x km

approx. 84 kg/km 68 mm -25°C +70°C 52,0 kg/km

400061

Corrosiveness acc. to EN50267-2-3

HELUSOUND® Lautsprecherkabel, koxial RoHS

#### Speaker cable 2x4,0

Copper, bare PVC Black PVC

approx. 7,9 mm black

4,95 Ohm/km 5 MOhm x km

approx. 129 kg/km 80 mm -25°C +70°C 87,0 kg/km

Corrosiveness acc. to EN50267-2-3

400062

#### **Application**

The coaxial HELUSOUND® speaker cable is protected by a counter-rotating double spiral shield and outer jacket. It is characterized due to the construction, in addition to robustness and good drum reeling, especially by high flexibilty and small dimensions.



## Loadcable 300/500 V + 600/1000 V



#### Type Cable structure

Conductor material:
Core insulation:
Core colours:
Stranding element:
Sheath material:
Cable external diameter:
Sheath colour:

#### **Electrical data**

Conductor resistance, max.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight:

# HELUKABEL LASTKABEL 14G1,5 QMM 300/500V ROHS CE

#### Loadcable 300V/500V/0,6kV/1kV

Copper, bare PVC flexible at low temperatures black number coded + gn/ye 14 cores stranded PVC flexible at low temperatures approx. 13,4 mm black

13,3 Ohm/km

approx. 322 kg/km 53,6 mm -40°C +80°C 201,6 kg/km

#### Loadcable 300/500 V

Part no.	Cable structure	Conductor resistance Ohm / km	Outer diameter approx. mm	Cop. weight kg / km	Weight approx. kg / km
400143	14 G 1,5	< 13,3	13,4	201,6	322,0
400144	18 G 1,5	< 13,3	15,2	259,2	422,0
400145	14 G 2,5	< 7,98	16,6	336,0	487,0
400146	18 G 2 5	< 7.98	19.0	432 N	634 N

#### Loadcable 0,6/1 kV

Part no.	Cable structure	Conductor resistance Ohm/km	Outer diameter approx. mm	Cop. weight kg / km	Weight approx. kg / km
400147	14 G 1,5	< 13,3	17,7	201,6	430,0
400148	18 G 1,5	< 13,3	20,2	259,2	560,0
400149	14 G 2,5	< 7,98	20,0	336,0	604,0
400150	18 G 2,5	< 7,98	22,6	432,0	778,0

Dimensions and specifications may be changed without prior notice.

#### **Application**

The highly flexible load cables are applied at medium mechanical stress in the professional stage and lighting technology, and other load circuits. The flexibility is achieved through the building with extra fine 0,15 mm² strands and the core and sheath insulation from cold-flexible PVC.



## **Video Cables**



used as	Indoors	Indoors,	Indoors	Indoors	Indoors,	Indoors	Indoors	Indoors	Indoors,
Tumo	0.6/2.8	underground 1.0/6.6	1.0/6.6 2YD	1.0/6.6	underground 1.0/6.6D	0.6L/3.7	0.6/3.7	1.0/6.6D	outdoors 0,6L/3,7+2x0,75
<b>Type</b> Part no.	40022	40056	40175	40173	40073	40170	40171	40174	40028
raitilo.	40022	40036	40173	40173	40073	40170	40171	40174	40020
Cable structure									
Inner conductor diameter mm	0,6	1	1	1	1	0,2	0,6	1	0,6
	Copper, bare	Copper, bare	Copper, bare	Copper, bare	Copper, bare	Copper, bare	Copper, bare	Copper, bare	Copper, bare
Insulation Ø mm	2,8 Cell PE	6,4 PE	6,4 PE	6,4 PE	6,4 PE	3,7 PE	3,7 PE	6,4 PE	3,7 PE
1st Outer conductor	Polyester foil coated with aluminium on both sides	Bare copper braid	Bare copper braid	Bare copper braid	Bare copper braid	Bare copper braid	Bare copper braid	Bare copper braid	Bare copper braid
Ø approx. mm	-	7	7	7	7	4,2	4,3	7	-
Inner steath/Foil	-	-	PE	-	Foil	-	-	Foil	-
Ø approx. mm	-	-	8,5	-	-	-	-	-	-
2nd Outer conductor	Tinned copper braid	no	Bare copper braid	no	Bare copper braid	no	no	Bare copper braid	-
Ø approx. mm	-	-	9,1	-	7,6	-	-	7,6	-
Outer sheath	FRNC	PE	PVC	PVC	PE	PVC	PVC	PVC	PVC
Sheath colour	green	black	green	green	black	green	green	green	black
Outer Ø approx. mm	4,3	8,8	11,0	8,8	9,0	6,1	6,1	9,0	11,8
Min. bending radius approx. mm	25	45	55	45	50	30	30	50	50
Weight approx. kg / km	24	93	151	95	125	48	48	128	85
Electrical characteristics									
Impedance (Ohm)	75 ± 2	75 ± 1	75 ± 1	75 ± 1	75 ± 1	75 ± 1	75 ± 1	75 ± 1	75 ± 3
Attenuation at 20°C (db/100m)									
1 MHz	0,9	0,6	0,6	0,6	0,6	1,2	1,1	0,6	1,1
5 MHz	2,2	1,3	1,4	1,3	1,4	2,6	2,5	1,4	2,5
7 MHz	2,6	-	-	-	-	-	-	-	-
10 MHz	3,2	2	2	2	2	3,6	3,5	2	3,5
50 MHz	7,5	-	-	-	-	-	-	-	-
100 MHz	10,2	-	-	-	-	-	-	-	-
Propagation velocity v/c	0,8	0,66	0,66	0,66	0,66	0,66	0,66	0,66	0
DC resistance at 20°C									
Inner conductor max.Ohm/km	63	22	24	22	24	83	63	24	63
Outer conductor max.Ohm/km	21	7,5	6,5	7,5	3,5	12,5	13	3,5	13
CapacitancepF/m	54	67	67	67	67	67	67	67	67
Test voltage (50 Hz, kVeff.)	3,5	7	7	7	7	4,2	4,2	7	4
Working voltage at (kV)									
Pulse operation	-	6	6	6	6	3,6	3,6	6	-
HF-operation (peak value)	-	3	3	3	3	1,8	1,8	3	-
DC operation	-	14	14	14	14	8	8	14	-
Screening efficiency (dB)									
50 and 900 MHz≥	90	-	-	-	-	-	-	-	-
Copper weight kg/km	11.0	32.0	78,0	32.0	78,0	22.0	22.0	78,0	38.0

Dimensions and specifications may be changed without prior notice. (RM01)  $\,$ 

#### Note

- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers.
- ALPR=Polyesterfoil coated with Aluminium on both sides
   bl=Bare, bk=Black, Cu=Copper, D=2xbraiding, FRNC=Flame Retardant Non-Corrosive, G=Braid, gn=Green, PE=Polyethylene, PEE=Cell-PE, PVC=Polyvinylchloride



## **Video**

#### Video cables, multicore



## Type Cable structure

Conductor material: Core insulation: Sheath material: Cable external diameter: Sheath colour:

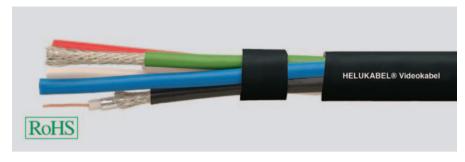
#### **Electrical data**

Characteristic impedance: Inner conductor resistance, max.:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.: Copper weight:

#### Norms



## Video Cables 3x(0,6/2,8)

Copper, bare Cell PE PVC approx. 12,9 mm black

65 Ohm/km

49,0 kg/km

75 Ohm

approx. 178 kg/km 130 mm -25°C +70°C

Corrosiveness acc. to EN50267-2-3

Part no.	Cable structure	Outer diameter approx. mm	Cop. weight kg/km	Weight approx. kg / km
400068	3x(0,6/2,8)	12,9	49,0	178,0
400069	4x(0,6/2,8)	14,1	65,0	214,0
400070	5x(0,6/2,8)	15,3	81,0	259,0
400071	6x(0,6/2,8)	16,7	97,0	295,0
400072	7x(0.6/2.8)	16.7	113.0	310.0

Dimensions and specifications may be changed without prior notice.

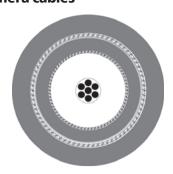
#### **Application**

The multi-core, coaxial HELUKABEL® video cable is distinguished by 75 Ohm, cell PE insulation, AL foil and braided shielding, PVC element sheath and outer sheath. Alternative we also offer a halogen-free and flame-resistant version. As example it is suitable for the parallel transmission of signals (e.g. RGB).



## **Video**

#### **Camera cables**



## Type Cable structure

Conductor material: Core insulation: Sheath material: Cable external diameter: Sheath colour:

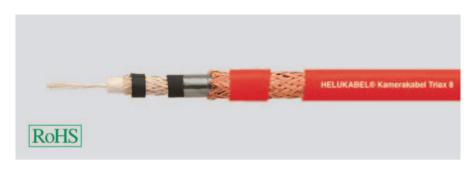
#### **Electrical data**

Characteristic impedance:

#### **Technical data**

Weight: Min. bending radius for laying: Operating temperature range min.: Operating temperature range max.:

Copper weight:



### Camera Cables

**Triax 8** 

Copper, silvered PE PUR

approx. 8,5 mm red

75 Ohm

approx. 95 kg/km 80 mm -30°C +80°C 55,0 kg/km

Part no.	Cable structure	Conductor insulation mm	Outer diameter approx. mm	Cop. weight kg/km	Weight approx. kg / km
400073	Triax 8	4,5	8,5	55,0	95,0
400074	Triax 11	6,5	11,0	80,0	150,0
400075	Triax 14	9,7	14,4	128,0	235,0
400076	Triax 8 flex	4,5	8,5	55,0	105,0
400077	Triax 11 flex	6,1	11,2	80,0	160,0
400078	Triax 14 flex	9,7	14,4	133,0	250,0

Dimensions and specifications may be changed without prior notice.

#### **Application**

The HELUKABEL® Triax cable ensures the optimal transmission of image signals. This is possible because of the low attenuation values, thick cross-braided shielding and an especially rugged outer sheath. For the Flex variant, the PVC inner and outer sheath are replaced by TPE to guarantee greater flexibility. The Triax cables are primarily used to connect video cameras and image transmission systems and are suitable for mobile use.

