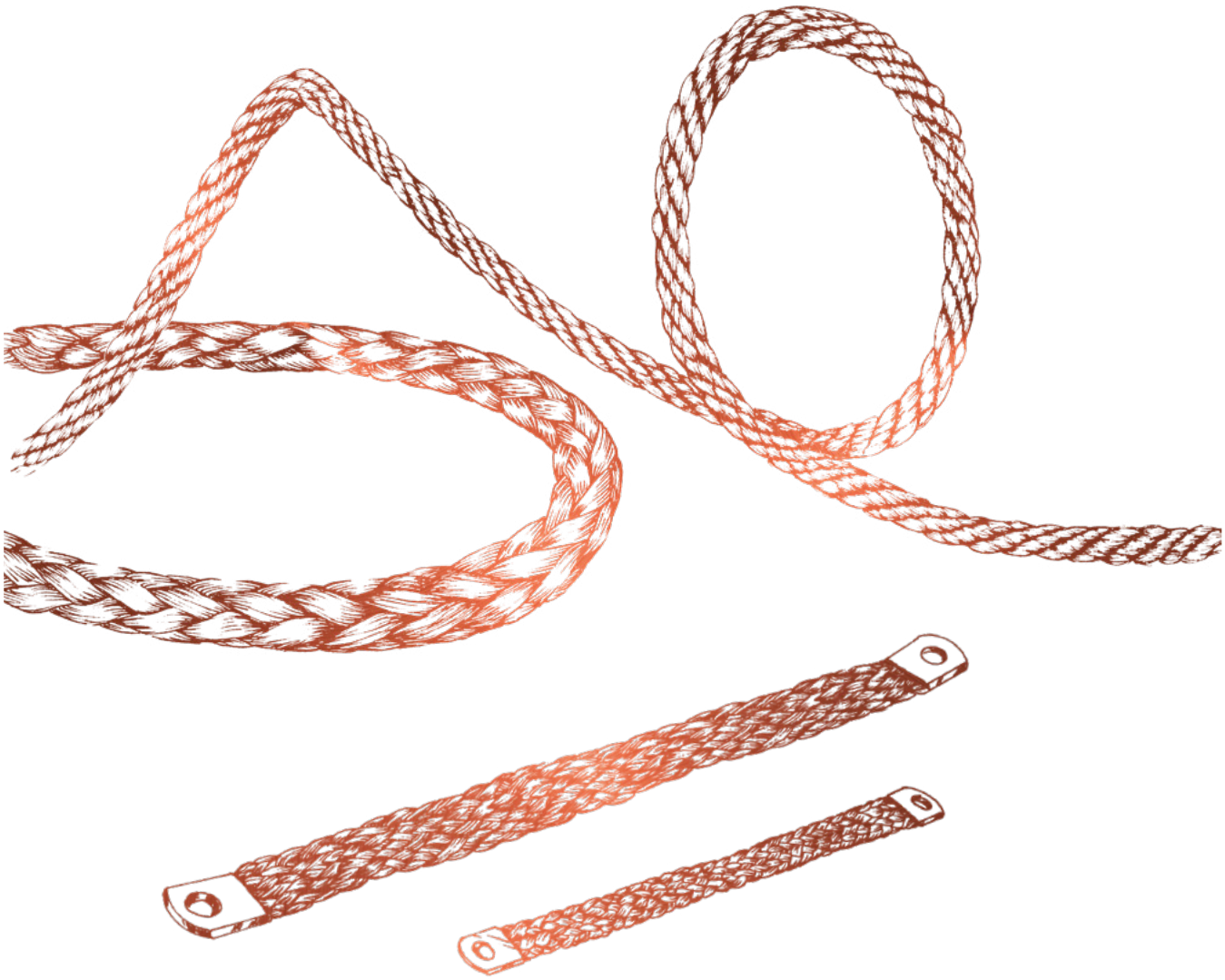
HELUKABEL®

Flexible & Superflexible Copper Conductors for Microwire Applications

EARTHING & SHIELDING SOLUTIONS



Channeling POWER

Flexible & Superflexible Copper Conductors, bare/tinned

for Microwire Applications / Earthing & Shielding Solutions

HELUPOWER® COPPER CONDUCTOR, STRANDED/BRAIDED

Wire diameter (mm) according to DIN VDE 0295 / IEC 60228 / HD 383

Cross Section mm²	Class 2	Class 5	Class 6			
	Column 1	Column 3	Column 4	Column 5	Column 6	Column 7
0.25		0.15	0.1	0.1	0.07	0.05
0.34		0.15	0.1	0.1	0.07	0.05
0.38		0.2	0.1	0.1	0.07	0.05
0.5	0.3	0.2	0.15	0.1	0.07	0.05
0.75	0.37	0.2	0.15	0.1	0.07	0.05
1	0.43	0.2	0.15	0.1	0.07	0.05
1.5	0.52	0.25	0.15	0.1	0.07	0.05
2.5	0.67	0.25	0.15	0.1	0.07	0.05
4	0.85	0.3	0.15	0.1	0.07	0.05
6	1.03	0.3	0.15	0.1	0.07	0.05
10	1.35	0.4	0.2	0.1	0.07	0.05
16	1.7	0.4	0.2	0.1	0.07	0.05
25	2.13	0.4	0.2	0.1	0.07	0.05
35	2.52	0.4	0.2	0.1	0.07	0.05
50	1.83	0.4	0.2	0.1	0.07	
70	2.17	0.5	0.3	0.1	0.07	
95	2.52	0.5	0.3	0.1	0.07	
120	2.03	0.5	0.3	0.1		
150	2.27	0.5	0.3	0.1		
185	2.52	0.5	0.3	0.1		
240	2.24	0.5	0.4	0.1		

Materials
- Annealed copper wire, soft: bare/tinned copper
- Uniform length of individual wires

Applications
- Electrotechnical industry
- Earthing connections
- Welding industry
- Movable connections of electrical devices
- Working in direct and alternating current circuits

Technical Data
- Technical specifications according to IEC EN 60228 / PN-EN 60228
- Conductor is twisted or stranded for high flexibility & bending strength
- Single wire diameter
  Class 2: 0.3-2.24 mm²
  Class 5: 0.15-0.5 mm²
  Class 6: 0.1-0.05 mm²

Note
- Silver-coated and nickel-coated conductors are available on request

ROUND STRANDED CONDUCTORS

Conductor for fixed installation

Class 2, tinned

- Standard flexibility & durability

Flexible Conductors

Class 5 / Class 6/4, **bare/tinned**

- Enhanced and standard flexibility & durability

Superflexible Conductors

Class 6/5-7, **bare**

- Unique flexibility & durability
- Technical specifications according to IEC EN 60228 / DIN 46438

ROUND BRAIDED CONDUCTORS

Flexible Conductors

Class 6/4, **bare/tinned**

- Improved flexibility & durability

Superflexible Conductors

Class 6/5-7, **bare/tinned**

- Unique flexibility & durability

SQUARE BRAIDED CONDUCTORS

Flexible Conductors

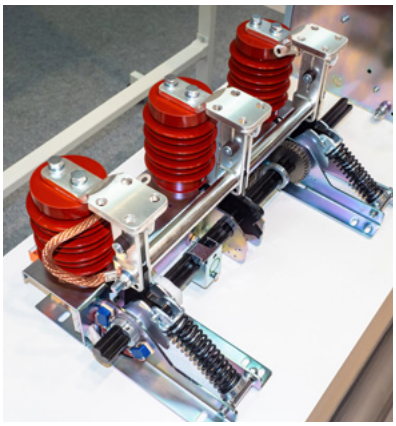
Class 6/4, **bare/tinned**

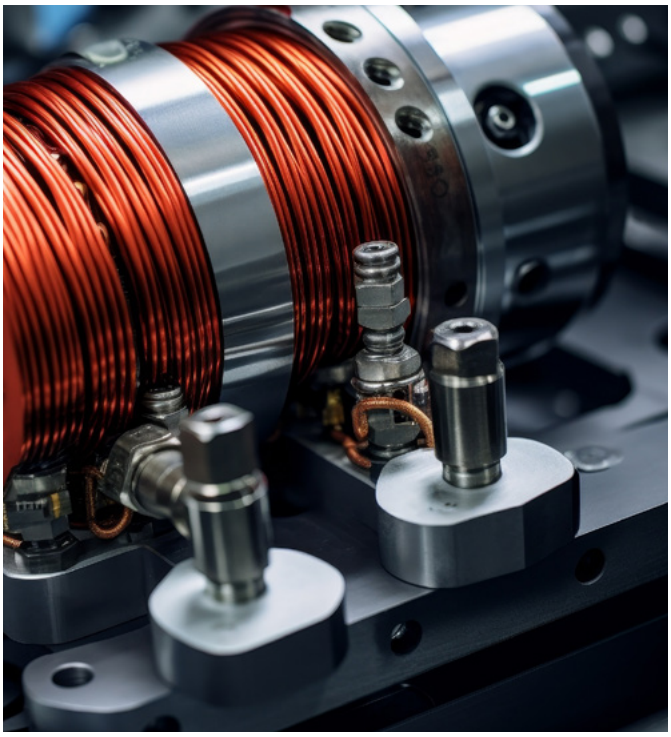
- Improved flexibility & durability

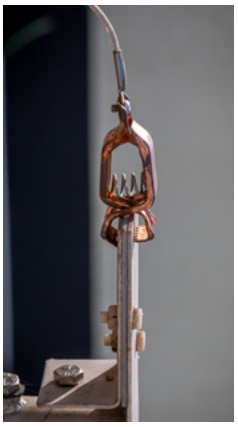
Superflexible Conductors

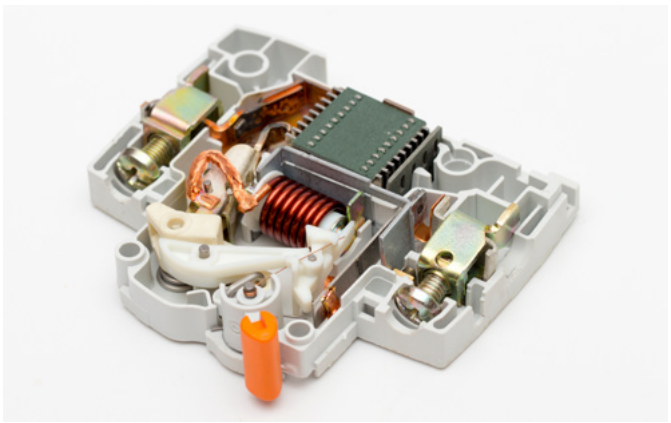
Class 6/5-7, **bare/tinned**

- Unique flexibility & durability








HELUPOWER® EARTHING SOLUTIONS

Braided Copper Tape with Connectors, bare/tinned

- Tinned = for grounding
- Bare = for power distribution
- Rounded contacts

Applications
- For EMC applications (eliminates interference)
- For current connectors and earthing tape
- Automotive & railway industry
- Energy sector, robotics
- Control panel elements, control cabinets, switchgear rooms and switchgears
- Movable connections of electrical devices
- Suitable for direct and alternating current circuits

Materials
- Bare/tinned copper
- Contacts: bare/tinned, round or square

Technical data
- Temperature range: -20°C up to + 125°C
- Single wire diameter: 0.2 mm
- Resistant to torsion
- Seamlessly pressed contacts

Note
- Earthing braided tapes with other lengths, hole diameters and contacts, made of 0.1 mm diameter single copper wires, bare / tinned
- Packaging as requested

Braided Copper Tape, bare/tinned

- For flexible connections

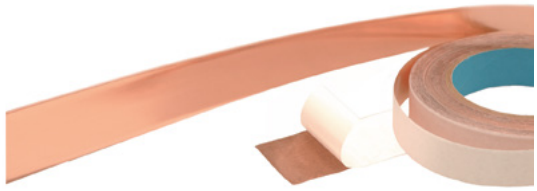
Applications
- Automotive & railway industry
- Energy sector, robotics
- Movable connections of electrical devices
- Suitable for direct and alternating current circuits

Materials
- Annealed copper wire, soft: bare/tinned copper

Technical data
- Temperature range: -20°C up to + 125°C
- Resistant to torsion

Note
- Packaging as requested

SHIELDING SOLUTIONS



Rolled Copper Tape

Materials
- Rolled copper foil

Application
- Stabilizing the braided ends of shielded cables/wires

Note
- Electrically-conductive self-adhesive. With protective cover for the adhesive strength 900g/inch (acc. to KS A 1107) thickness approx 40µm - thickness incl. adhesive approx 70µm. Other dimensions on request.

Tubular Braid, tinned

Temperature range
-20°C to +125°C

Material
- Copper tinned
- Axially compressible

Applications
- Machine & plant construction
- Robotics, automation, railway technology & installation technology
- Shipbuilding, control cabinet & vehicle construction
- For covering / EMC shielding
- For bundling, mechanical protection of electrical cables & lines

Note
- Also available in 10m lengths

EMC CABLE GLANDS

HELUTOP® MS-EP

Technical data
- Protection classification: IP 68 - 5 bar
- Temperature range: -20°C to +100°C
- Test standard: IEC EN 62444

Materials
- Brass, nickel plated
- Contact system: Copper-Beryllium
- Terminal insert: Polyamide PA 6
- Moulded seal: Chloroprene Rubber (CR)
- O-Ring: NBR

Properties
- Optimal strain relief through clamping plates
- No shield damage when assembling or disassembling rotating spring washers in the contact system
- Contact made automatically when gland is closed
- Excellent shield damping and current deflection
- Reduced installation time and costs

HELUTOP® MS-EP4

Technical data
- Protection classification: IP 68 - 5 bar
- Temperature range: -20°C to +100°C

Materials
- Brass, nickel plated
- Contact system: Copper-Beryllium
- Terminal insert: Polyamid PA 6
- Moulded seal: Chloroprene Rubber (CR)
- O-Ring: NBR

Properties
- Optimal strain relief through clamping plates
- No shield damage when assembling or disassembling rotating spring washers in the contact system
- Reduced installation time and costs
- Contact made automatically when gland is closed
- Excellent shield damping and current deflection
- Gentle contact of the springs on the shielding braid due to an extensive contact area system
- Best vibration resistance
- Suitable EMC lock nuts available on request

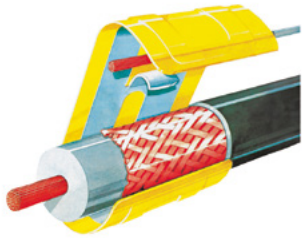
ACCESSORIES

ERG 740 Compression Tool

Applications
- Hand compression tool suitable for clamping Shield-Kon connectors
- Processing range for single-piece Shield-Kon connectors from 1.27 to 7.62mm

Tool Insert for ERG 740 D-101 A

Applications
- The tool inserts are simple and quick to change by hand
- Also available in other sizes



Shield Kon Connectors

Structure
- Material: Copper tinned
- Insulation: Polyester film

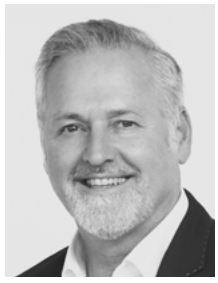
Applications
- Shield connectors are crimped like a cable lug. The special crimping technique using ERG tools enables the connector to roll around the sheath. Inside the connector is a clevis-type connector for the connector strip and a support for the sheathed cable. ERG 740 processing tool.

High-Quality Cable Shears

Structure
- Blade made of specialty stainless steel acc. to IEC EN 10020
- Ergonomical and extremely robust
- Micro-serrations on blade for improved cutting
- Anti-loosening screw/pin fixing
- 2-component handles
- With safety cover
- Cutting area of straight blade 0.5 up to 6 mm²
- Cutting area of integrated cable cutter up to 50 mm²
- Length 150 mm / Weight 170 g

Applications
- High quality cable shears for cutting finely-stranded Cu/Al wires. Adjustable by turning the slotted screw.

Contact



Our product expert is available to answer your questions and develop custom solutions.

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HELUKABEL®

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RS/Earthing & shielding solutions/04.2024/EN/2000/OP