



1 kV connection and transition joint kits

for plastic and paper insulated low voltage cables

Low voltage cables

Simple & safe connection

Shear bolt screw connectors have become the established technology for connecting low voltage cables. PFISTERER offers practical complete kits for simple and professional jointing of plastic insulated low voltage cables and for transitions from paper insulated to plastic insulated low voltage cables – with more than 100 years of contact technology expertise.

Ready-to-fit complete kit

Connection and transition joint kits are supplied ready to fit. Depending on the version, they contain parts and additional materials required to install four or five-core low voltage cables up to 1 kV.

In addition to heat-shrink sleeves conforming to DIN SPEC 47640, PFISTERER also offers solutions for special applications. Connection joints with a repair sleeve allow plastic insulated cables to be joined in confined spaces. Transition joints allow plastic insulated cables to be joined to paper insulated cables [N(A)KLEY and N(A)KBA].

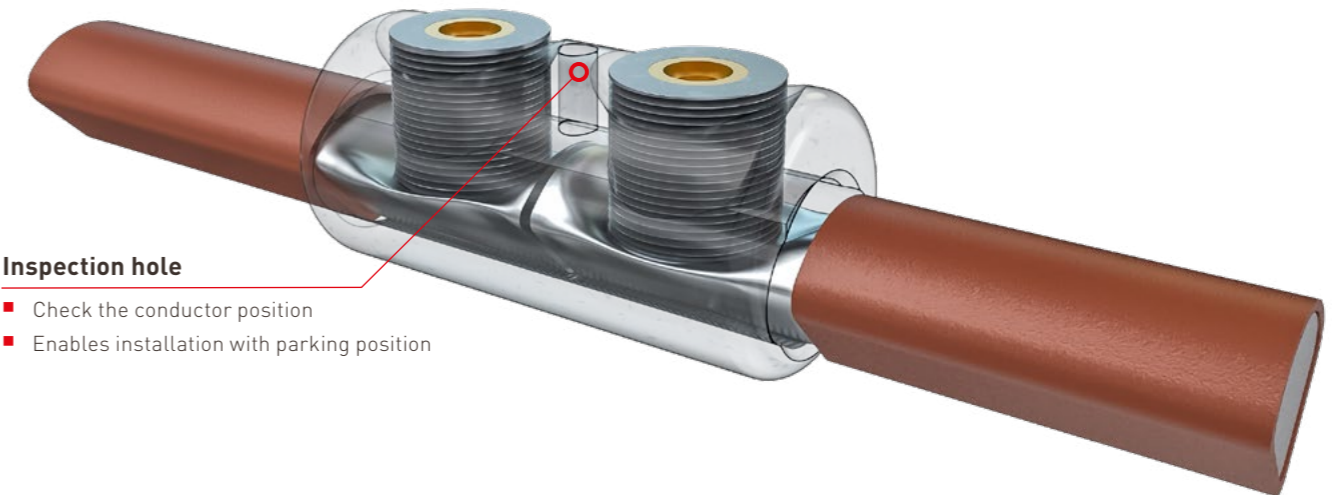
Perfectly matched

The screw connectors are made from high-grade aluminium with excellent electrical properties. They are resistant to chemicals and corrosion, ensuring reliable contacts and cable joints that remain stable over time.

The heat-shrink sleeves are made from irradiation crosslinked semicrystalline polymers, combining high mechanical strength with excellent insulation. They are halogen-free, UV and weather resistant, and resistant to alkaline earths. On the inside, they are coated with hot-melt adhesive. This liquefies as the sleeve shrinks and makes the joint watertight when it cools down.

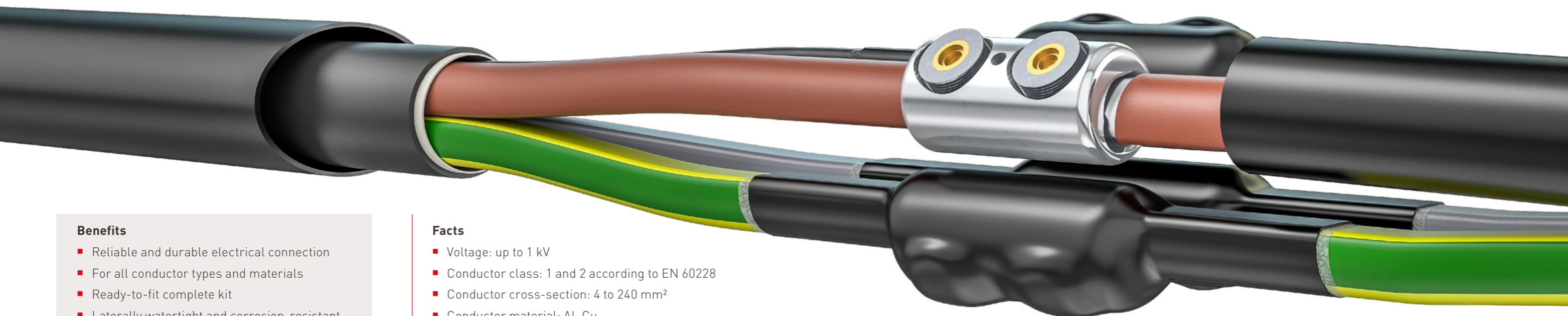
Barrier or inspection hole

PFISTERER low-voltage connectors can be used with any conductor type and conductor material. Connectors with barrier enable the longitudinally watertight connection of aluminium and copper cables. The combination of connector with an inspection hole and a joint with parking position makes installation easier, especially with larger conductor cross-sections. The connectors can be pushed completely over the conductor, bending the rigid conductors is not necessary.



Inspection hole

- Check the conductor position
- Enables installation with parking position



Benefits

- Reliable and durable electrical connection
- For all conductor types and materials
- Ready-to-fit complete kit
- Laterally watertight and corrosion-resistant
- Easy to install using standard tools
- Compact dimensions

Facts

- Voltage: up to 1 kV
- Conductor class: 1 and 2 according to EN 60228
- Conductor cross-section: 4 to 240 mm²
- Conductor material: Al, Cu
- Continuous operating temperature: -40 °C to +100 °C
- Standards: EN 50393:2015, IEC 61238-1 class A, DIN SPEC 47640: 2019-02

1 kV connection joints product range

Available connectors	Cable cross-section* [mm²]	Shear bolt	Barrier	Conductor channel	WAF	Connection joint article no.		
						Without parking position acc. to DIN SPEC 47640	With parking position acc. to DIN SPEC 47640	With repair sleeve
	4 x 2.5 - 16				2.5	333 111 221	333 111 121	-
	5 x 2.5 - 16				2.5	333 111 226	333 111 126	-
	4 x 16 - 50	x			4	-	333 111 122	333 115 221
	4 x 16 - 50	x	x		4	333 111 222	-	333 115 222
	4 x 25 - 95	x			8	-	333 111 123	333 115 223
	4 x 25 - 95	x	x		8	333 111 223	-	333 115 224
	4 x 35 - 150	x			8	-	333 111 124	333 115 225
	4 x 35 - 150	x	x		8	333 111 224	-	333 115 226
	4 x 95 - 240	x			8	-	333 111 125	333 115 227
	4 x 95 - 240	x	x		8	333 111 225	-	333 115 228

For conductors class 1 and 2 acc. to EN 60228 and cables acc. to HD 603

* VPE/PVC [N]AIYY, N[AI]Y2Y, N[AI]2XY, N[AI]YCWY

Connection joint kit contents

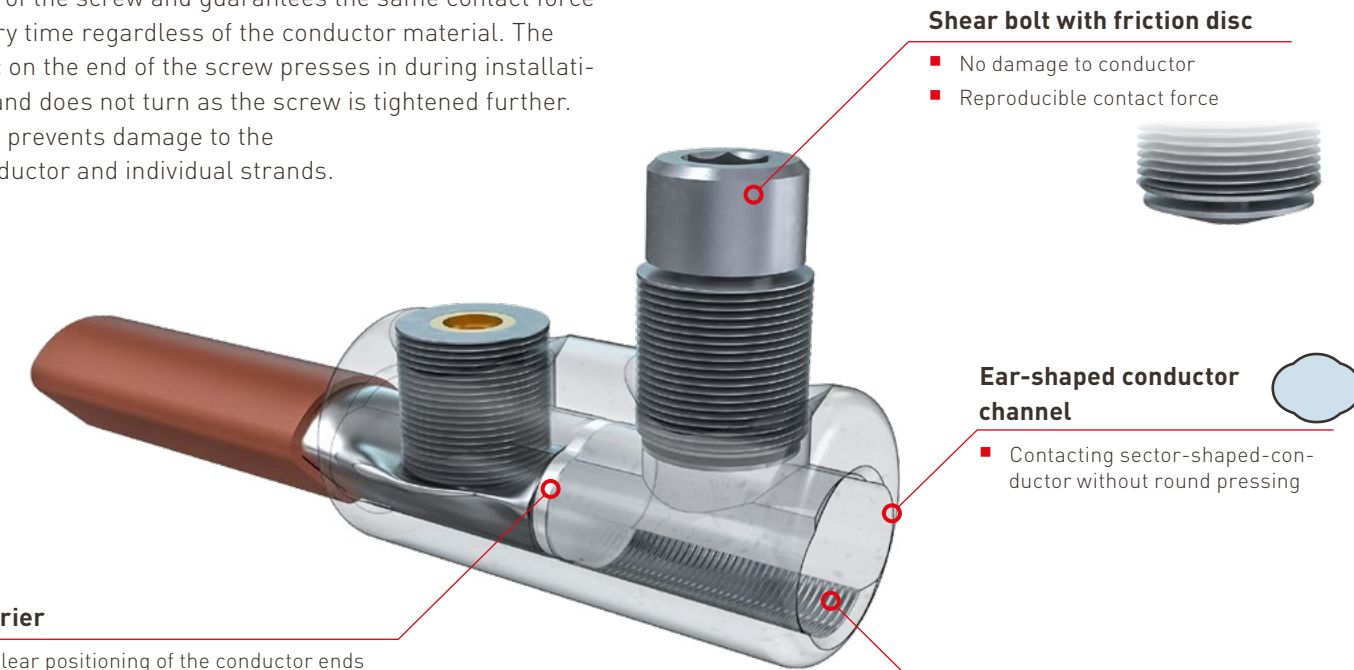
- 4 or 5 screw connectors (depending on number of cores)
- 4 or 5 inner heat-shrink sleeves (depending on number of cores)
- 1 outer heat-shrink sleeve
- Sanding paper
- Cleaning wipes
- Fitting instructions



Example illustration. Connector selected according to conductor cross-section and fitting type.

Simple installation

The shear bolt with friction disc minimises the head friction of the screw and guarantees the same contact force every time regardless of the conductor material. The disc on the end of the screw presses in during installation and does not turn as the screw is tightened further. This prevents damage to the conductor and individual strands.



Shear bolt with friction disc

- No damage to conductor
- Reproducible contact force



Ear-shaped conductor channel

- Contacting sector-shaped-conductor without round pressing

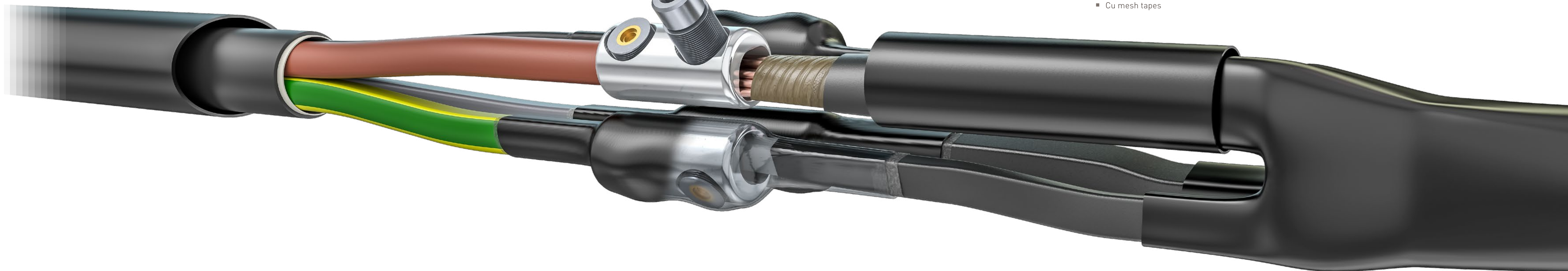


Contact grooves in conductor channel

- Defined contacting
- Increased pull-out forces

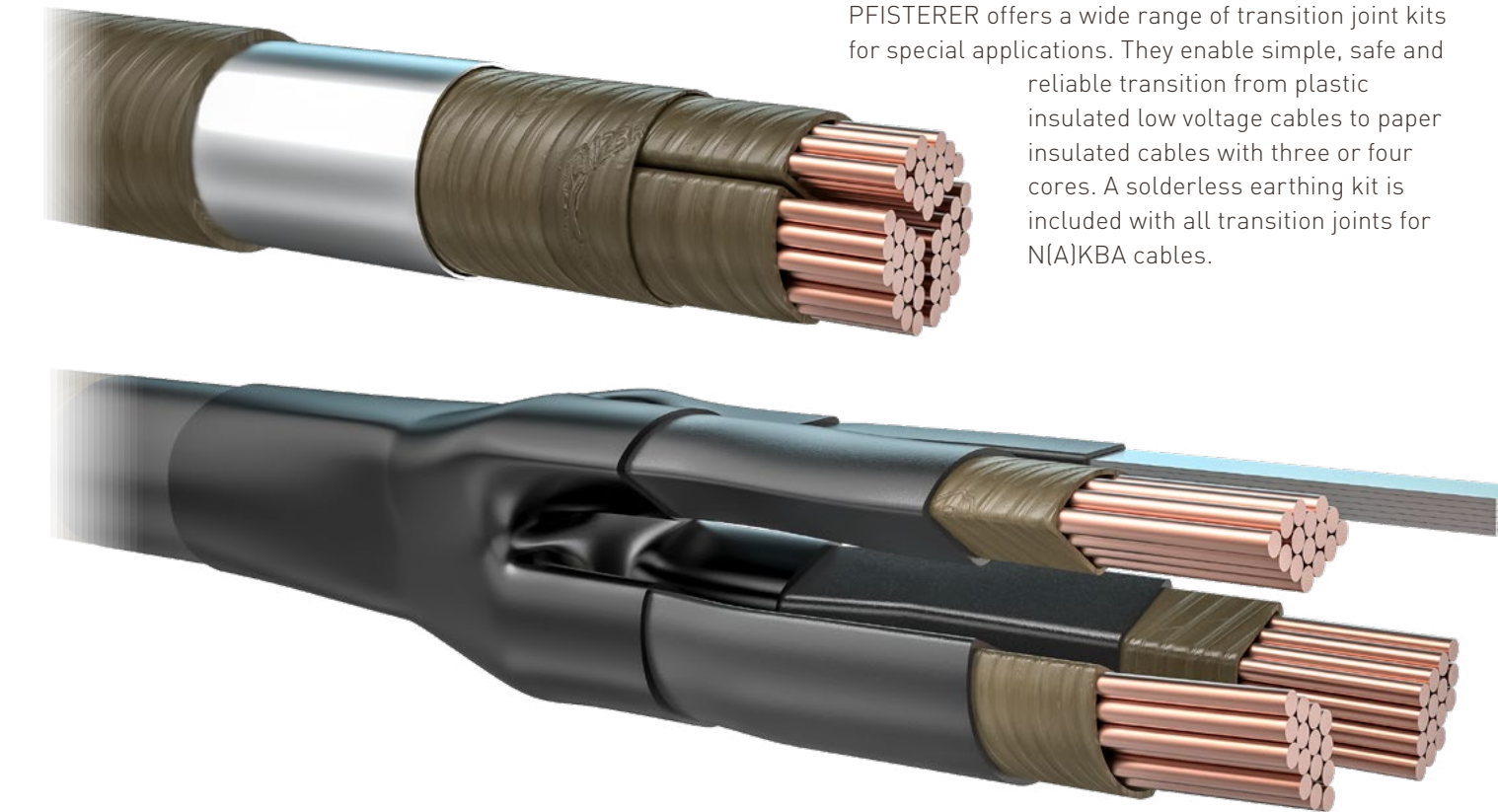
Barrier

- Clear positioning of the conductor ends
- Corrosion-free connection of Al and Cu conductors



Transition joints for special applications

In addition to the standard connection joint kits, PFISTERER offers a wide range of transition joint kits for special applications. They enable simple, safe and reliable transition from plastic insulated low voltage cables to paper insulated cables with three or four cores. A solderless earthing kit is included with all transition joints for N[AI]KBA cables.



Transition joints from plastic insulated to paper insulated cables

Available connectors	Cable cross-section [mm²]		Shear bolt	Barrier	Conductor channel	WAF	Transition joint article no.	
	Plastic *	Paper **					VPE/PVC to N[AI]KLEY	VPE/PVC to N[AI]KBA
	4 x 16 - 50	4 x 10 - 35	x	x		4	333 114 220	333 114 225 ***
	4 x 25 - 95	4 x 25 - 95	x	x		4	333 114 221	333 114 226 ***
	4 x 70 - 150	4 x 35 - 150	x	x		8	333 114 222	333 114 227 ***
	4 x 95 - 240	4 x 95 - 240	x	x		8	333 114 224	333 114 229 ***

For conductors class 1 and 2 acc. to EN 60228 and cables acc. to HD 603

* VPE/PVC [N]AIYY, N[AI]Y2Y, N[AI]2XY, N[AI]YCWY
 ** Paper [N]AIKLEY / N[AI]KBA
 *** Includes solderless earthing kit

Transition joint kit contents

- As for connection joint kit (see page 4)
- Additional components in transition joint kit
 - Barrier sleeves
 - Padding sleeve
 - Heat shrinkable boot
- Additional components in solderless earthing kit (for N[AI]KBA cables)
 - Earthing cord
 - Roll springs
 - Cu mesh tapes

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In 1921, Karl Pfisterer founded his factory in Stuttgart for special electrical products with the aim of improving the world of power transmission. The PFISTERER Group has pursued this goal of quality and technological leadership for more than 100 years. Today, PFISTERER is one of the world's leading specialists and system suppliers for energy infrastructure – with a complete range of cable accessories, overhead line technology and components along the entire transmission chain from power generation to consumption. With state-of-the-art manufacturing processes and 1,200 employees at 18 international locations, PFISTERER not only connects the power grids of today and tomorrow, but also makes an important contribution to a sustainable and secure energy supply.