

Transition joints

Transition joints for polymer and oil-filled cables

Drawing upon a wealth of technological experience, Brugg Cables offers a wide range of transition joints.

Variety of joints for your individual application needs

Our joints are designed according to international standards, such as IEC 60141-1 or IEC 62271-209 (GIS standard).

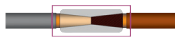
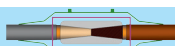
Their main advantages are:

- Outstanding properties and hence reliability of the prefabricated and pretested slip-on stress cones at the polymer cable side
- Reliable technology of prefabricated paper-taped coils at the oil-filled cable side
- Total moisture barrier with steel housing
- Oil stop at the joint
- Usable with a design pressure of 10 bar

- Higher pressure values for special applications of up to 14 bar possible
 - Can be installed independently of any sort of oil in the LPOF or HPPT circuit
 - Can be applied under supervision of Brugg personnel
 - Excellent track record in different laying and climate zones
 - In service for more than 20 years with outstanding results
- Profit from the advantages of our transition joints. All our transition joints are designed to be used independently of any type of cable or cable manufacturer from 72.5 to 420 kV and up to a conductor cross-section of 2500 mm²



Applications of transition joints

Type	Radial moisture barrier	Mechanical protection	Advantages	Application	Earthing
TOS...-11/-12 	Steel housing	Steel housing	<ul style="list-style-type: none"> • High degree of mechanical protection in different environments • Total sealing against moisture penetration 	<ul style="list-style-type: none"> • In laying with concrete, such as in tunnels or concrete pits • In insulated formations 	Straight through connection, not insulated to ground
TOS...-31/-32 	Steel housing	Steel housing with protection box	<ul style="list-style-type: none"> • Highest degree of mechanical protection in different environments • Total sealing against moisture penetration 	<ul style="list-style-type: none"> • In all types of laying, such as in tunnels, concrete or buried installations • In installations with permanent humidity or temporary flooding 	Straight through connection, insulated to ground

Technical data of transition joints

Operating voltage	Ø over XLPE insulation	Max. conductor cross-section (Cu/Al)	Max. Ø of outer sheath	Type	Mechanical protection
U _{max} /kV	mm	mm ²	mm		
72.5	< 80	800	115	TOS 1.72-11	Steel housing
	< 80	1200	115	TOS 1.72-31	Steel housing with protection box
145	56 - 80	1000	115	TOS 1.145-11	Steel housing
	56 - 80	1000	115	TOS 1.145-31	Steel housing with protection box
	56 - 110	2000	150	TOS 1.145-12	Steel housing
	56 - 110	2000	150	TOS 1.145-32	Steel housing with protection box
170	56 - 80	1000	115	TOS 1.170-11	Steel housing
	56 - 80	1000	115	TOS 1.170-31	Steel housing with protection box
	56 - 110	2000	150	TOS 1.170-12	Steel housing
	56 - 110	2000	150	TOS 1.170-32	Steel housing with protection box
245	70 - 117	2000	150	TOS 1.245-11	Steel housing
	70 - 117	2000	150	TOS 1.245-31	Steel housing with protection box
300	70 - 117	2000	150	TOS 1.300-11	Steel housing
	70 - 117	2000	150	TOS 1.300-31	Steel housing with protection box
420	80 - 117	2500	160	TOS 1.420-11	Steel housing
	80 - 117	2500	160	TOS 1.420-31	Steel housing with protection box