

Hivoduct «pressurized air cables» are medium voltage and high-voltage cables for electrical energy transmission. Pressurized air cables are environmentally friendly, powerful, have reduced losses, are maintenance free, and non-flammable.

## Pressurized air cable: **G11, 4000 A**

Parameter	Value	Information
Rated voltage	<b>12 kV - 72 kV</b>	
Rated current	<b>1000 A - 4000 A</b>	
Insulation media	<b>Pressurized air</b>	N2: 80%, O2: 20 %, dry
Inside pressure	<b>&lt;= 10 bar</b>	Higher pressure for higher voltages
Conductor	<b>Aluminum</b>	High conductivity, > 28 m/Ω*mm <sup>2</sup>
Cond. Cross section	<b>&lt;= 3300 mm<sup>2</sup></b>	
Enclosure	<b>Aluminum</b>	Anticorodal. Nonflammable.
Encl. Cross section	<b>&lt;= 6250 mm<sup>2</sup></b>	Return current / ground connection included
Bending radius	<b>0 mm</b>	Angle pieces 1° - 60°; 90° available
Short circuit current	<b>50 kA, 1 s</b>	
AC Test voltage	<b>140 kV</b>	Partial discharge level: < 5 pC
BIL Test voltage	<b>+/- 350 kV</b>	
Capacitance	<b>130 pF/m</b>	Per phase
Inductance	<b>83 nH/m</b>	1 phase. 3 Phases depend on arrangement
Enclosure temperature	<b>&lt; 40°C</b> <b>&lt; 65°C</b>	@ 2000 A for > 8 h without forced cooling. @ 4000 A for > 8 h without forced cooling.
Components	<b>Straight tube</b>	Length available: 0.2 - 5m
	<b>Bushing</b>	Creepage: 3930 mm. Flash-over: 1558 mm
	<b>Angle</b>	Phase distance: 300 mm
	<b>Angle 1° - 60 °</b>	Machining based on engineering needs
	<b>Length compens.</b>	Max. 80 mm length compensation
Pressurized air	<b>Manometer</b>	1 - 10 bar
	<b>One-way valve</b>	Festo ¼ inch Standard
	<b>Filling connector</b>	Festo ¼ inch Standard
Contact system	<b>Spiral contacts</b>	Contacts silver plated
Transport weight	<b>&lt; 250 kg</b>	Per transport unit
Transport length	<b>&lt; 6 m</b>	Per transport unit
Phase distance	<b>&gt;= 300 mm</b>	
Width 3ph	<b>&gt;= 900 mm</b>	Trough width for 3 phases side-by-side
Height	<b>&gt;= 500 mm</b>	Trough height for 3 phases side-by-side
Diameter 3ph	<b>&gt;= 630 mm</b>	For 3ph in triangular arrangement in tube
Grounding	<b>As needed</b>	100 % return current in enclosure is ok
Life expectancy	<b>&gt; 40 years</b>	Expected lifetime. Maintenance free.
Reusable	<b>Yes</b>	Disassembly on each flange possible.

Pressurized air cables are best suitable for critical installations where high power, best fire protection, quick assembly and disassembly and reduced outside magnetic fields are required.