

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: G05 series

Parameter	Value	Information
Rated voltage	12 kV - 52 kV	
Rated current	200 A - 2000 A	
Insulation media	Pressurized air	N2: 80%, O2: 20 %, dry
Inside pressure	<= 10 bar	Higher pressure for higher voltages
Conductor	Aluminum	High conductivity, > 28 m/Ω*mm ²
Cond. Cross section	<= 2200 mm²	
Enclosure	Aluminum	Anticorodal. Nonflammable.
Encl. Cross section	<= 4400 mm²	Return current / ground connection included
Bending radius	0 mm	Angle pieces 1° - 60°; 90° available
Short circuit current	40 kA, 1 s	
AC Test voltage	95 kV	Partial discharge level: < 5 pC
BIL Test voltage	+/- 250 kV	
Capacitance	115 pF/m	Per phase
Inductance	97 nH/m	1 phase. 3 Phases depend on arrangement
Enclosure temperature	< 40°C < 65°C	@ 1200 A for > 8 h without forced cooling. @ 2000 A for > 8 h without forced cooling.
Components	Straight tube	Length available: 0.2 - 5m
	Bushing	Creepage: 1593 mm. Flash-over: 528 mm
	Angle	Phase distance: 180 mm
	Angle 1° - 60 °	Machining based on engineering needs
	Length compens.	Max. 80 mm length compensation
Pressurized air	Manometer	1 - 10 bar
	One-way valve	Festo ¼ inch Standard
	Filling connector	Festo ¼ inch Standard
Contact system	Spiral contacts	Contacts silver plated
Transport weight	< 150 kg	Per transport unit
Transport length	< 6 m	Per transport unit
Phase distance	>= 180 mm	
Width 3ph	>= 540 mm	Trough width for 3 phases side-by-side
Height	>= 200 mm	Trough height for 3 phases side-by-side
Diameter 3ph	>= 450 mm	For 3ph in triangular arrangement in tube
Grounding	As needed	100 % return current in enclosure is ok
Life expectancy	> 40 years	Expected lifetime. Maintenance free.
Reusable	Yes	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.