

Data Sheet no. 1.73/1

Metal-Clad, Gas-Insulated HVAC Capacitors, Types WCG

1. Application

Capacitors are important components of metal-clad, gas-insulated HVAC test systems and used for

- decoupling of PD signals of a HV circuit to the PD measuring instrument (coupling capacitor);
- basic load in a HV resonant system of variable frequency (type WRV...G) to guarantee a certain maximum frequency (basic load capacitor);
- HV arm of a voltage divider for voltage measurement (divider capacitor, see also Data Sheet 1.72 for an alternative).

2. Design

The capacitors (Fig. 1) are arranged in cylinder elements (Data Sheet 1.72) with a cover and usually flanged to cross elements. They are insulated by a SF₆ gas of 5 bar (absolute) and fixed by spacers of the appropriate system configuration. Table 1 gives the electrical and mechanical main parameters of available capacitors, different parameters on special request.

Type designation: WCG a/b means a metal-clad capacitor with rated values of a nF and b kV AC voltage.

Example: WCG 0.2/1000 is a metal-clad capacitor of 0.2 nF and 1000 kV (AC)

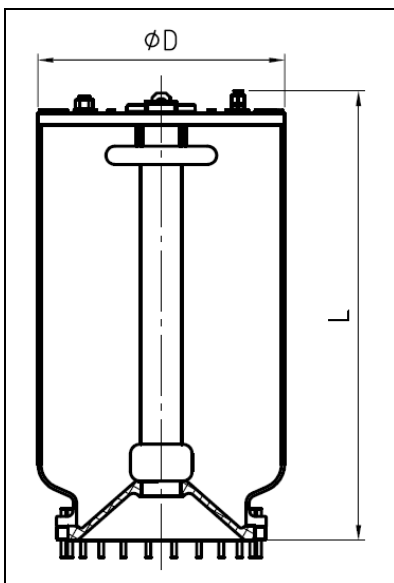


Fig. 1: Metal-clad capacitor

rated voltage	coupling capacitors				basic load and coupling capacitors				applicable for test systems (see Catalogue Sheet 1.70)
	capacitance C nF	diameter D mm	length L mm	weight kg	capacitance C nF	diameter D mm	length L mm	weight kg	
kV									
250	0.3 0.5	800 800	1467 1467	440 440	-	-	-	-	WPG 45/230G
400	0.2 1.0	800 800	1650 1650	540 540	3.3 6.2	900 1000	2100 2100	850 1000	WPG 30/325G WRV 1.5/325G WP 400/400G
510	0.2 0.5	800 800	1770 1770	600 620	3.3 8.25	900 1000	2250 2250	870 1050	WRV 1.5/460G WP 500/500G WPG 90/510G
600	0.2 0.5	800 800	1770 1770	600 620	3.3 6.2	900 1000	2330 2330	1010 1050	WRV 1.5/540G WP 600/600G
680	0.5	900	2500	800	3.3	900	2500	1050	WRV 1.5/680G
800	0.25 0.5	900 900	2500 2500	1000 1070	3.3	1200	3300	1950	WPG 250/750G WRV 1.9/750G WP 1000/800G
1000	0.2	1000	2650	1150	-	-	-	-	WRV 0.65/1000G WPG 375/1000G WPG 500/1000G

Remarks: All capacitors can also be used for divider capacitors.
The rated SF₆ gas pressure is 5.0 bar (absolute).

For further information please contact:

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