

Data Sheet no. 1.75/1

## SF<sub>6</sub> - to - Air Bushings, Types PEG

### 1. Application

SF<sub>6</sub> - to - air bushings are used when a metal-clad, SF<sub>6</sub> -insulated HVAC test system (Catalog Sheet 1.70) shall supply high voltage to an “open” test place. It should be considered that the bushing interrupts the electromagnetic shielding of a metal-clad test system. The bushings are available with indoor as well as with outdoor design.

### 2. Design

All bushings have a special design for test systems and their active part have a resin-impregnated paper (RIP) insulation arranged inside a fiber glass tube. In case of outdoor design, the fiber glass is equipped with silicon rubber sheds.

### 3. Parameters

For rated voltages and geometric parameters see Table 1.

The following parameters are common for all types:

rated SF <sub>6</sub> pressure:	0.5 MPa (absolute)
maximum current:	≤ 10 A
frequency:	50/60 Hz (range 20...300 Hz on request)
temperature range:	-30 to + 40 °C

### 4. Type designation

SF<sub>6</sub> - to - air bushings are characterized by the abbreviation PEG for indoor application and PEGF for outdoor application in combination with the rated voltage.

Examples: PEG 1000 means a SF<sub>6</sub> - to - air indoor bushing for 1000 kV  
PEGF 400 means a SF<sub>6</sub> - to - air outdoor bushing for 400 kV

Table 1: Rated voltage and geometric parameters

rated voltage kV	length in air mm	length in SF <sub>6</sub> mm	total length mm	diameter RIP windings mm
250	1785	420	2205	170
400	2425	660	3085	285
510	2560	800	3360	275
600	3455	790	4445	350
680	4200	850	5050	500
800	5620	970	6590	520
1000	6200	1200	7400	600

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