A compression force keeps the bushing parts of the outer shell together. The force is strong enough to keep the bushing tight at service and at cantilever withstand test.

The bushings have a type of compression system, which gives a long length of spring with low sensitivity to varieties in the temperature. The compression system consists of three concentric tubes connected in series. It is described in Fig. 2 and schematically in Fig. 1.

The conductor tube is connected to the outer shell at the bottom end and to the spring tube at the top. The spring tube is connected to the pulling tube at the bottom end. The pulling tube is connected to the outer shell at the top end. At the assembly of the bushing a tractive force is applied to the top end of the pulling tube. This force will cause a tensile stress in the pulling tube and in the conductor tube and a compressive force in the spring tube and in the outer shell.

Schematic description of the compression of a GOE bushing.
Bushings type GOE 1950 and larger and bushings with a long porcelain insulator, are supplied with a spring device connected to the top end of the conductor tube and to the top of the porcelain insulator. See Fig. 2.