

# Tubes made of Epoxy – Silicon Glass

Tubes made of epoxy-glass-fabric or silicon-glass-fabric are used in all branches of the electro industry because of their superior mechanic, thermal and electric characteristics. A high shape constancy also in upper temperature spheres makes tight tolerances possible against that in cold spheres type 700 has proved worthwhile.

Structure: Tubes type 700 or 750 consist of with epoxy resin impregnated glass-fabric-lengths against that we use silicon as resin with type 800. Type 704 tubes have a flame-retardant behaviour because of its special chemical additives. They are parallel winded on winding machines, where the resin and fabric glues together under the influence of heat and pressure. At the following hardening process the layers get indissoluble. The finished tubes then get grinded and mechanically worked as the customer wishes.

Type	DIN ISO EN 61212	DIN 7735
700	EP GC 21	Hgw 2375
704	PG GC 23	Hgw 2375.1
750	EP GC 22	Hgw 2375.4
750-H	EP GC 22	Hgw 2375.4
800	SI GC 21	Hgw 2575

## Normal sizes and tolerances:

<b>Inside diameter:</b>	from $\varnothing$ 3 mm to ca. $\varnothing$ 850 mm
<b>Wall tickness:</b>	from 1 mm, depending on diameter
<b>Lenght:</b>	from 500 mm to ca. 2000 mm depending on type and diameter
<b>Tolerances:</b>	according to EN 61212-3-1 or after agreement

Technical terms	Unit	Type 700/704	Type 750	Type 750-H	Type 800
Compression, axial	MPa	175	175	175	40
Flexural strenght, vertical	MPa	300	300	300	100
Tensile strenght	MPa	200	200	200	50
Density	g/cm <sup>3</sup>	1,7-1,9	1,7-1,9	1,7-1,9	1,6-1,8
Water absorbtion	mg/cm <sup>2</sup>	2,0	0,4	0,4	0,4
Temperature resistance	°C	130	155	180	180
Voltage, parallel	kV/25mm	40	40	40	35
Votlage, vertical	kV/3mm	23	23	23	14

The above called specifications were made to the best of our knowledge. It is recommended to prove the material in case of doubt for special applications. All values are the minimum requirement!