KFS

Sphere Gaps
Horizontal & Vertical

Datasheet

Sold & Serviced in USA by:
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Current and voltage – our passion

General Description

The sphere gaps can be used for Impulse, AC or DC voltage calibration according to the IEC 60052 recommendation. The sphere-gap presents the undeniable advantage of a direct and straightforward voltage measurement, where only the sphere diameter and their distance give a voltage measurement within ± 3 % accuracy.

As both spheres are mounted on columns of insulating material in the horizontal sphere gaps, it's possible to superimpose impulse, alternating and direct voltages for special tests. For the chopping of lightning impulses, the sphere gap can be equipped with the optional chopping device KFS Z.

The type designation consists of the characters KFS, H for horizontal design and V for vertical and the sphere diameter in mm, e.g. KFS H 250.

Designed for indoor operation. The spheres are made of highly polished copper with tight manufacturing tolerances.

In the horizontal design, they are mounted together with the adjusting gear on supporting columns. The adjusting gear consists of a hand-wheel and precision scale for adjustment of the sphere gap (accuracy 0.5 mm).

The vertical, motorised design includes the sphere drive placed on the base frame. The sphere distance is controlled by the impulse generator controls (Ex. GC 257) or by a specific control unit (Ex. GSC 219).

Technical data

Type	Sphere diameter D mm	Ratings for AC peak, DC and impulse voltage L.I. 1.2 / 50 µs measurements Spacing of 0.5 x D kV	Max. voltage L.I. 1.2 / 50 µs for Tail chopping Spacing of 0.5 x D (negative Polarity) kV
KFS H 150	150	177	210
KFS H 250	250	275	340
KFS V 250	250	275	340
KFS V 500	500	515	715
KFS V 750	750	750	920
KFS V 1000	1000	1010	1215

Technical data – Physical Dimensions

Type	Height m	Base frame, approx m	Weight, net approx. kg
KFS H 150	1.22	1.3 x 0.45	47
KFS H 250	1.76	2.6 x 0.7	60
KFS V 250	2.3	1.1 x 0.8	110
KFS V 500	3.4	2.3 x 1.0	350
KFS V 750	4.8	3.1 x 1.3	520
KFS V 1000	5.9	3.3 x 1.5	620

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Horizontal Sphere Gap KFS H

Global Presence

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