

Flexible Dielectric Waveguide Set | BN 533662



Technical characteristics

Waveguide interface aperture	R 1.4k per IEC 60153-2 (WR 6.5, WR 7 per EIA-261, WM-1651 per IEEE Std. 1785.1)		
Waveguide interface mechanics	UFR 1.4k per IEC 60154-2 compatible with M3922/67, UG-387/U, and IEEE 1785-2a type flanges		
Frequency range	110 to 170 GHz (D band)		
Waveguide assembly	C0007	C0019	C0031
Number of tubular segments	7	19	31
Length, nom.	300 mm	600 mm	900 mm
Average power rating	1 W		
Return loss, min. / typ	16 dB / 20 dB	13 dB / 20 dB	10 dB / 20 dB
Insertion loss, max.	2.5 dB	3.2 dB @ 110 to 130 GHz 3.4 dB @ 130 to 150 GHz 3.9 dB @ 150 to 170 GHz	3.8 dB @ 110 to 130 GHz 4.3 dB @ 130 to 150 GHz 5.2 dB @ 150 to 170 GHz
Insertion loss, typ.	1.9 dB	2.6 dB @ 110 to 130 GHz 2.8 dB @ 130 to 150 GHz 3.3 dB @ 150 to 170 GHz	3.2 dB @ 110 to 130 GHz 3.7 dB @ 130 to 150 GHz 4.6 dB @ 150 to 170 GHz
Insertion loss variation with movement, typ.	0.4 dB @ 110 to 115 GHz 0.2 dB @ 115 to 170 GHz	0.8 dB @ 110 to 115 GHz 0.4 dB @ 115 to 120 GHz 0.2 dB @ 120 to 170 GHz	0.8 dB @ 110 to 115 GHz 0.6 dB @ 115 to 120 GHz 0.4 dB @ 120 to 125 GHz 0.2 dB @ 125 to 170 GHz
Bending radius, min.	75 mm (limited by jacket)		
Twisting angle, max.	± 40° (limited by jacket)	± 100° (limited by jacket)	± 160° (limited by jacket)
Tensile force, max.	20 N		
Housing material / surface coating	copper alloy (waveguide transitions) black polymer (protective jacket)		
Degree of protection	IP50 per EN 60529 (if properly installed)		
Weight, approx..	0.25 kg	0.35 kg	0.45 kg
Marking	laser engraving on waveguide transitions		
Lifetime, min.	100 000 flex cycles		

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Template Normal.dotm

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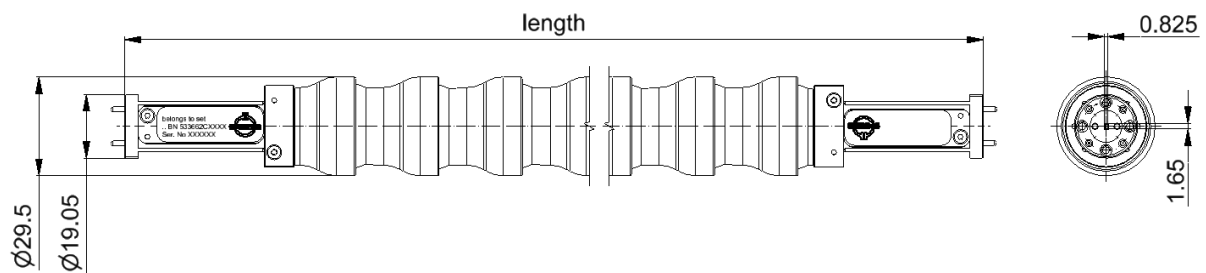
Environmental conditions

Operation	
Ambient temperature range	0 to +30°C
Relative humidity, max.	95% (non-condensing)
Storage	
Ambient temperature range	-55 to +70°C
Relative humidity, max.	95% (non-condensing)

Scope of delivery and accessories

Scope of delivery	dielectric waveguide assemblies as per table below storage case (A75537) product documentation ball end hexagon screwdriver 5/64" (A75573) socket-head cap screws 4-40 UNC (A61786) protective caps (A62935)
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Outline (all dimensions in millimeter)



Available set configurations, e.g.

Waveguide length, nominal	Qty. of waveguide assemblies per set	Order number
300 mm	1	533662C0107
300 mm	2	533662C0207
600 mm	1	533662C0119
600 mm	2	533662C0219
900 mm	1	533662C0131

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