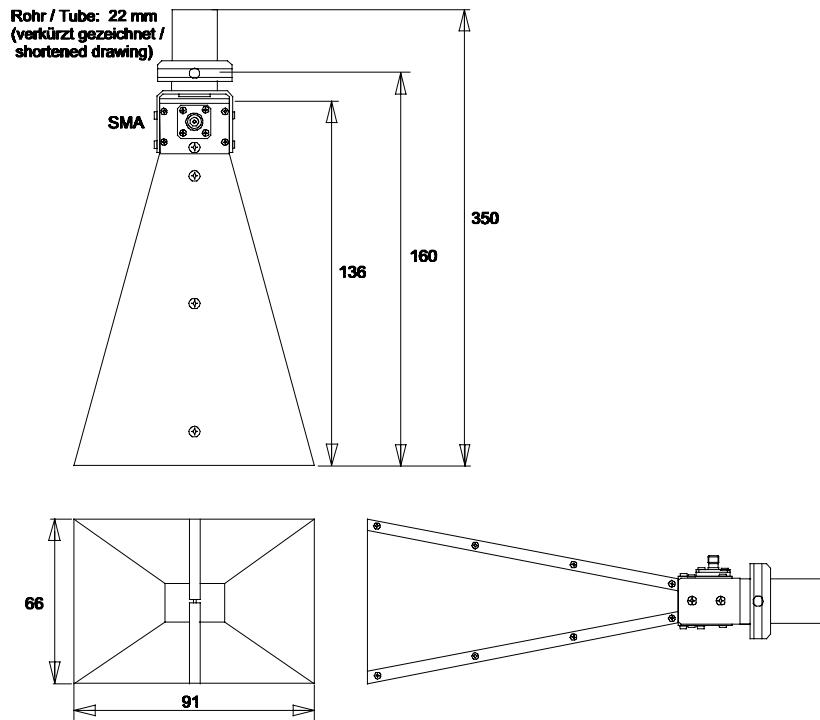


# SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

## Doppelsteg Breitband-Hornantenne BBHA 9120 C Double Ridged Broadband Horn Antenna BBHA 9120 C



### Technische Daten:

Bauart:  
Linear polarisierte Doppelsteg  
Breitband Hornantenne in  
Aluminiumausführung für Empfangs-  
und Sendeanwendungen.

Frequenzbereich, nominell:	2...18 GHz
Nutzbarer Frequenzbereich:	2 ... 20 GHz
Isotropgewinn:	10 ... 16 dBi (f > 4 GHz)
Antennenfaktor:	32 ... 39 dB/m (f > 4 GHz)
Impedanz, nominell:	50 Ω
Stehwellenverhältnis SWR typisch:	1.8
Stehwellenverhältnis SWR max.:	< 3 (f > 4 GHz)
Vor- Rückverhältnis:	typ. 25 dB
Polarisationsentkopplung:	typ. > 25 dB
3 dB Öffnungswinkel typ.(E-Ebene):	29°
3 dB Öffnungswinkel typ.(H-Ebene):	26°
6 dB Öffnungswinkel typ.(E-Ebene):	40°
6 dB Öffnungswinkel typ.(H-Ebene):	40°
Max. Eingangsleistung:	100 W (intermitt.) 50 W (cont.)

Anschlußart: SMA-Buchse  
Halterung: 22 mm Rohr, Rastring  
Breite x Länge x Dicke:  
Gewicht:

98 x 140 (345) x 69 mm  
0.5 kg

### BBHA 9120 C

### Specifications:

Type:  
Linear polarized double ridged  
broadband horn antenna for receive  
and transmit applications made of  
aluminium.

Nominal Frequency Range:	2...18 GHz
Usable Frequency Range:	2 ... 20 GHz
Isotropic Gain:	10 ... 16 dBi (f > 4 GHz)
Antenna Factor:	32 ... 39 dB/m (f > 4 GHz)
Nominal Impedance:	50 Ω
Standing Wave Ratio SWR typical:	1.8
Standing Wave Ratio SWR max.:	< 3 (f > 4 GHz)
Front to Back Ratio:	typ. 25 dB
Cross Polarisation:	typ. > 25 dB
3 dB Beamwidth typ. (E-Plane):	29°
3 dB Beamwidth typ. (H-Plane):	26°
6 dB Beamwidth typ. (E-Plane):	40°
6 dB Beamwidth typ. (H-Plane):	40°
Max. Input Power:	100 W (intermitt.) 50 W (cont.)

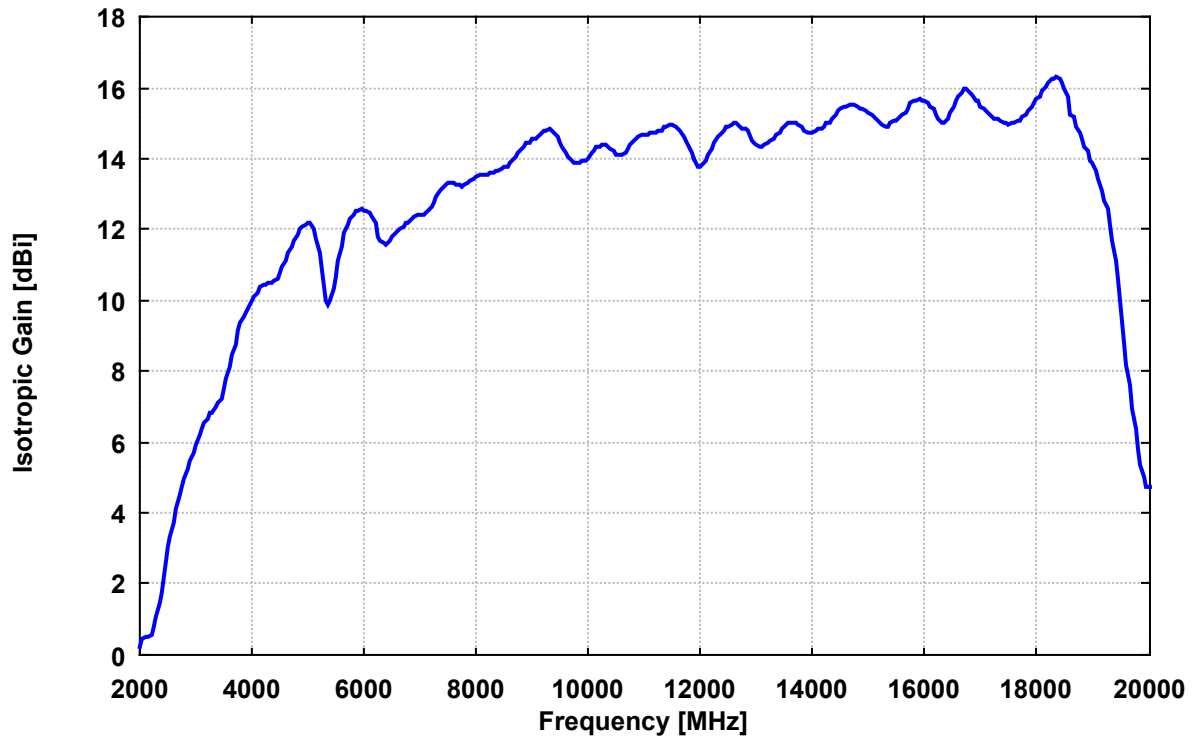
SMA-Connector female  
Mount: 22 mm Tube, Indexing Ring  
Width x Length x Thickness:  
Weight:

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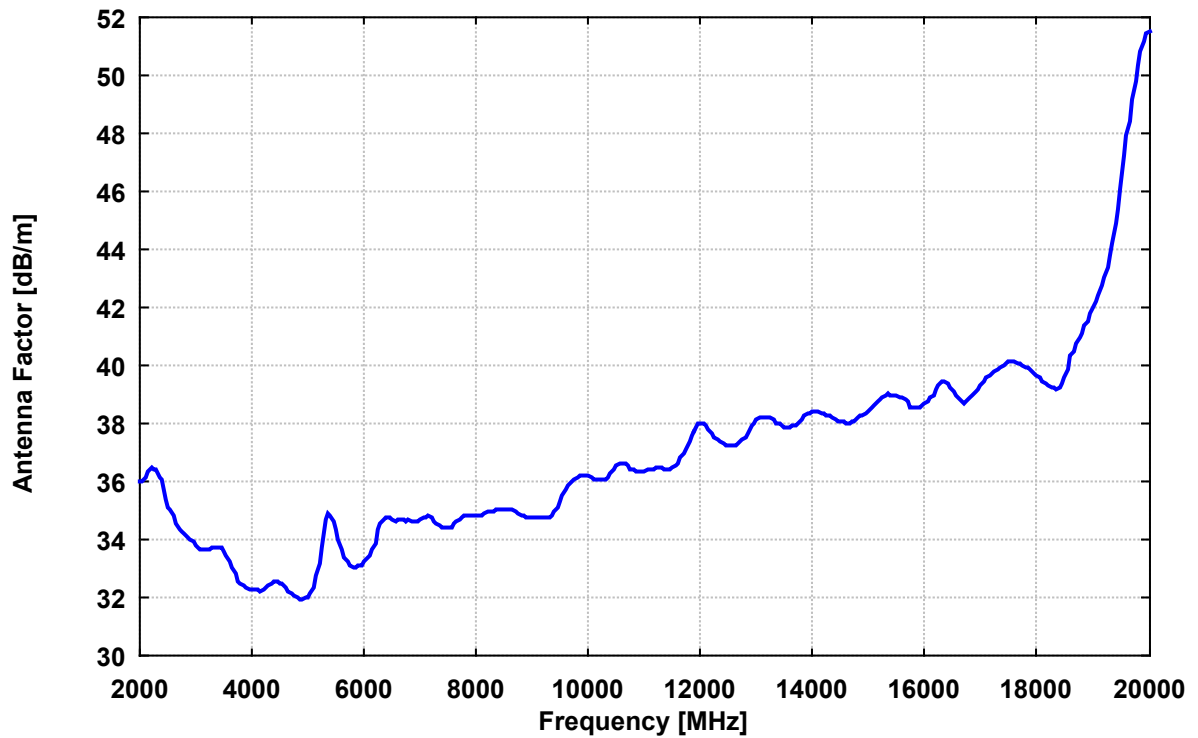
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## Doppelsteg Breitband-Hornantenne BBHA 9120 C *Double Ridged Broadband Horn Antenna BBHA 9120 C*

Isotropgewinn  
BBHA 9120 C



Antennenwandlungsmaß  
BBHA 9120 C



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## Doppelsteg Breitband-Hornantenne BBHA 9120 C Double Ridged Broadband Horn Antenna BBHA 9120 C

Frequency Frequenz	Distance Abstand	Wavelength Wellenlänge	Attenuation Dämpfung	Gain(Isotr.) Isotropgewinn	Gain(Dipole) Gewinn über Dipol	Ant.-Factor Ant.-Wandlungsmaß
MHz	m	m	dB	dBi	dBd	dB/m
2000	1.13	0.150	39.11	0.21	-1.94	36.03
2100	1.13	0.143	38.96	0.50	-1.65	36.17
2200	1.13	0.136	39.22	0.57	-1.58	36.50
2300	1.13	0.130	38.63	1.06	-1.09	36.40
2400	1.13	0.125	37.63	1.74	-0.41	36.08
2500	1.13	0.120	35.34	3.06	0.91	35.12
2600	1.13	0.115	34.38	3.72	1.56	34.80
2700	1.13	0.111	33.16	4.49	2.34	34.36
2800	1.13	0.107	32.50	4.98	2.83	34.19
2900	1.13	0.103	31.79	5.48	3.33	33.99
3000	1.13	0.100	31.16	5.94	3.79	33.82
3100	1.13	0.097	30.54	6.40	4.25	33.65
3200	1.13	0.094	30.28	6.67	4.52	33.65
3300	1.13	0.091	30.17	6.85	4.70	33.74
3400	1.13	0.088	29.88	7.13	4.98	33.72
3500	1.13	0.086	29.40	7.50	5.34	33.61
3600	1.13	0.083	28.39	8.12	5.97	33.22
3700	1.13	0.081	27.34	8.77	6.62	32.82
3800	1.13	0.079	26.42	9.34	7.19	32.47
3900	1.13	0.077	25.99	9.67	7.52	32.37
4000	1.13	0.075	25.57	9.99	7.84	32.27
4100	1.13	0.073	25.32	10.22	8.07	32.25
4200	1.13	0.071	25.11	10.43	8.28	32.25
4300	1.13	0.070	25.23	10.47	8.32	32.42
4400	1.13	0.068	25.29	10.54	8.39	32.54
4500	1.13	0.067	25.02	10.78	8.63	32.51
4600	1.13	0.065	24.49	11.14	8.99	32.34
4700	1.13	0.064	23.86	11.54	9.39	32.12
4800	1.13	0.063	23.41	11.86	9.71	31.98
4900	1.13	0.061	23.13	12.09	9.94	31.93
5000	1.13	0.060	23.12	12.19	10.03	32.01
5200	1.13	0.058	25.13	11.35	9.20	33.19
5400	1.13	0.056	28.12	10.02	7.87	34.85
5600	1.13	0.054	25.43	11.52	9.37	33.66
5800	1.13	0.052	23.91	12.43	10.28	33.05
6000	1.13	0.050	23.98	12.55	10.39	33.24
6200	1.13	0.048	25.01	12.17	10.02	33.89
6400	1.13	0.047	26.46	11.59	9.44	34.76
6600	1.13	0.045	26.04	11.93	9.78	34.68
6800	1.13	0.044	25.73	12.21	10.06	34.66
7000	1.13	0.043	25.55	12.43	10.28	34.69
7200	1.13	0.042	25.37	12.65	10.49	34.72
7400	1.13	0.041	24.56	13.17	11.02	34.44
7600	1.13	0.039	24.51	13.31	11.16	34.53
7800	1.13	0.038	24.86	13.25	11.10	34.82
MHz	m	m	dB	dBi	dBd	dB/m

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Frequency Frequenz	Distance Abstand	Wavelength Wellenlänge	Attenuation Dämpfung	Gain(Isotr.) Isotropgewinn	Gain(Dipole) Gewinn über Dipol	Ant.-Factor Ant.-Wandlungsmaß
MHz	m	m	dB	dBi	dBd	dB/m
8000	1.13	0.038	24.61	13.48	11.33	34.80
8200	1.13	0.037	24.70	13.54	11.39	34.95
8400	1.13	0.036	24.64	13.68	11.53	35.03
8600	1.13	0.035	24.47	13.87	11.71	35.04
8800	1.13	0.034	23.91	14.25	12.10	34.86
9000	1.13	0.033	23.51	14.54	12.39	34.76
9200	1.13	0.033	23.26	14.76	12.61	34.73
9400	1.13	0.032	23.49	14.74	12.59	34.94
9600	1.13	0.031	24.82	14.17	12.02	35.70
9800	1.13	0.031	25.55	13.89	11.74	36.15
10000	1.13	0.030	25.50	14.01	11.86	36.21
10500	1.13	0.029	25.73	14.10	11.95	36.54
11000	1.13	0.027	24.96	14.69	12.54	36.36
11500	1.13	0.026	24.80	14.96	12.81	36.47
12000	1.13	0.025	27.54	13.78	11.63	38.02
12500	1.13	0.024	25.61	14.92	12.77	37.24
13000	1.13	0.023	27.03	14.38	12.23	38.12
13500	1.13	0.022	26.26	14.93	12.78	37.90
14000	1.13	0.021	26.98	14.73	12.58	38.42
14500	1.13	0.021	25.93	15.40	13.25	38.04
15000	1.13	0.020	26.44	15.30	13.15	38.44
15500	1.13	0.019	27.16	15.08	12.93	38.95
16000	1.13	0.019	26.38	15.61	13.45	38.70
16500	1.13	0.018	26.89	15.48	13.33	39.09
17000	1.13	0.018	27.14	15.49	13.34	39.34
17500	1.13	0.017	28.44	14.97	12.82	40.11
18000	1.13	0.017	27.23	15.69	13.54	39.63
18500	1.13	0.016	26.88	15.99	13.83	39.58
19000	1.13	0.016	31.31	13.89	11.74	41.91
19500	1.13	0.015	39.36	9.98	7.83	46.04
20000	1.13	0.015	50.05	4.74	2.59	51.50
MHz	m	m	dB	dBi	dBd	dB/m



Kalibrierbezugspunkt:  
Mitte zwischen Aperturöffnung und SMA-  
Buchse (= 6.5 cm hinter Vorderkante)

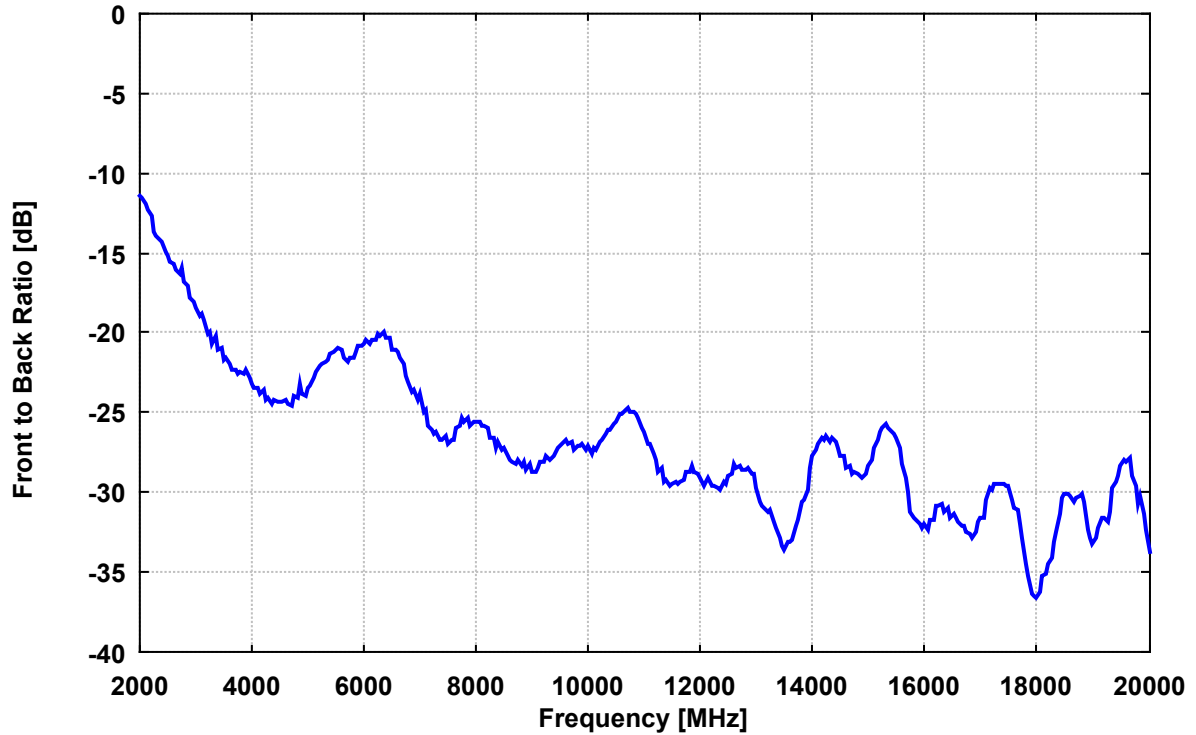
Calibration Reference Point:  
Center between SMA-Connector and Aperture-  
Plane (=6.5 cm behind Apt. Plane)

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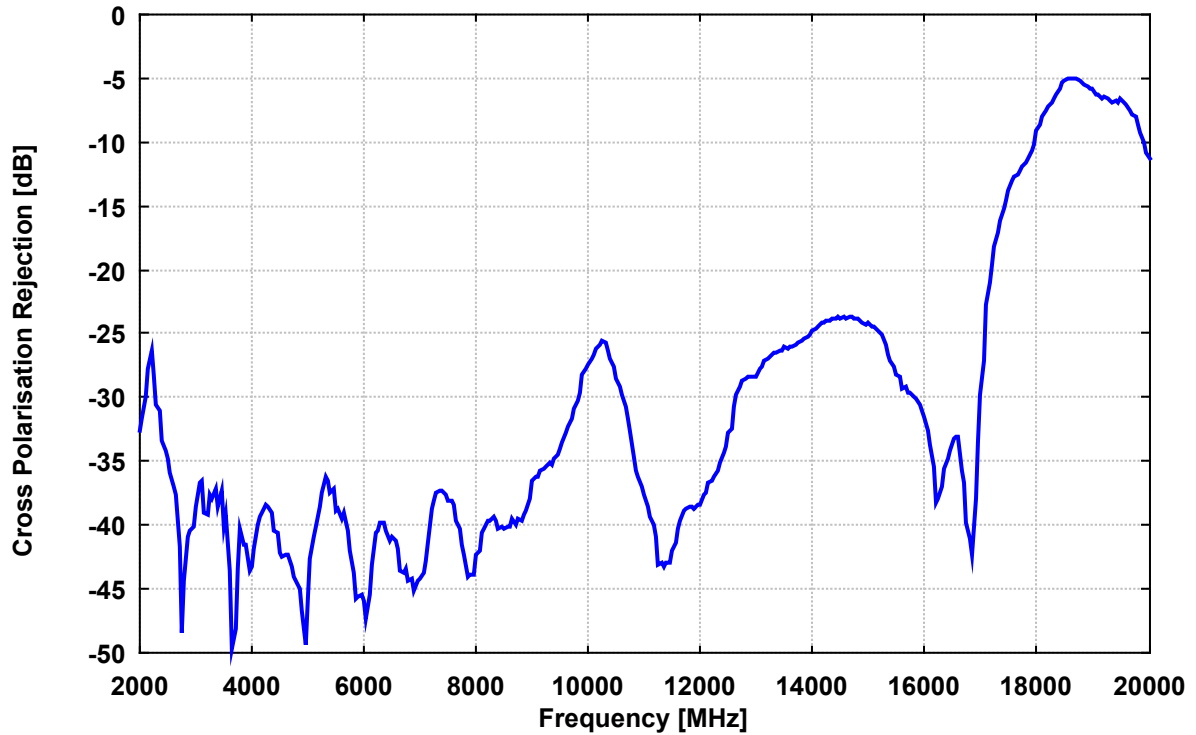
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Vor- Rückmaß  
BBHA 9120 C



Kreuzpolarisationsunterdrückung  
BBHA 9120 C

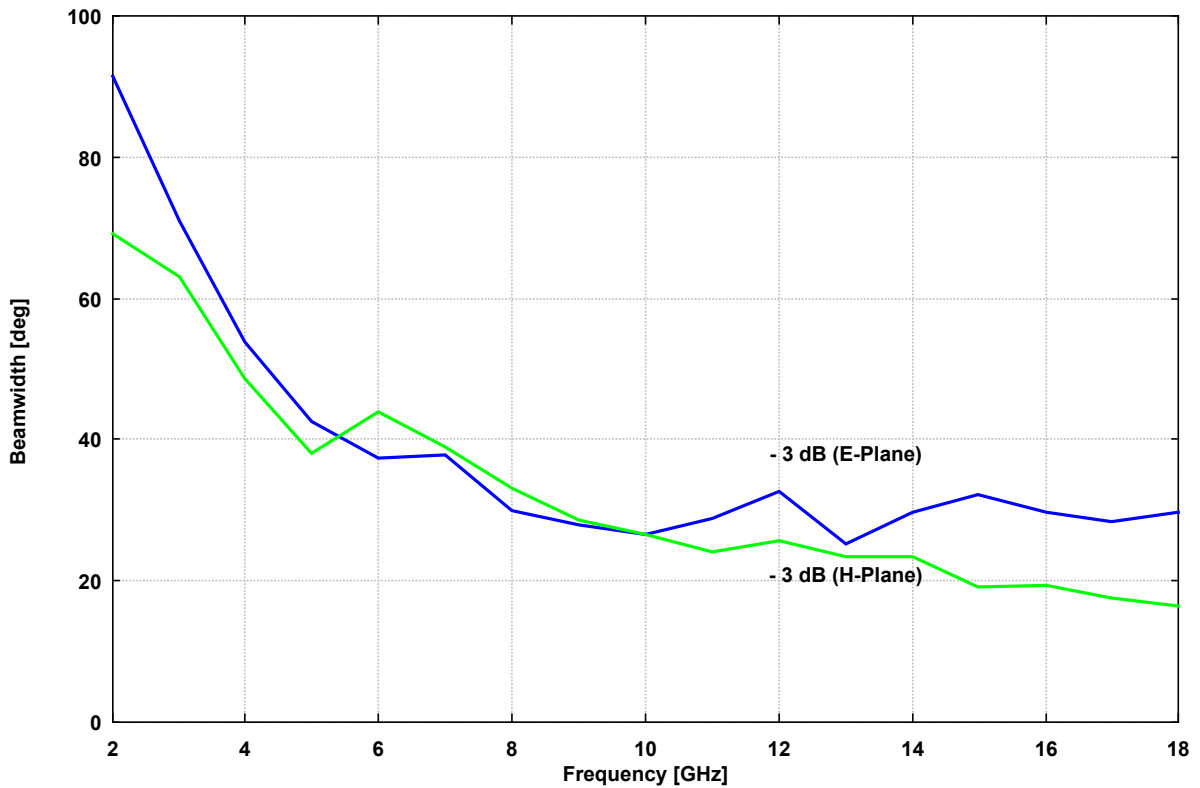


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## Doppelsteg Breitband-Hornantenne BBHA 9120 C Double Ridged Broadband Horn Antenna BBHA 9120 C

3 dB Öffnungswinkel  
3 dB Beamwidth BBHA 9120 C



Stehwellenverhältnis  
BBHA 9120 C

