

# Multihole Directional Couplers Series 132

## Features

- **46 dB High Directivity**
- **Models up to 40.1 GHz**
- **Low Coupling Sensitivity**

The Flann Series 132 directional couplers provide a very high directivity and have been designed for use in quality waveguide measurement systems within the frequency range 3.3 GHz to 40.1 GHz.

The configuration is of a 3 port instrument incorporating a built-in low reflection termination. The coupling array is designed to achieve low sensitivity of coupling versus frequency whilst maintaining main arm VSWR. The standard coupling values are 3, 10 and 20 dB for each waveguide size. Other values can be supplied, for example 6, 30 and 40 dB.



Model 22132-20

**IMPORTANT!** All directivities quoted include the measuring port and flange performance when connected to an ideal termination.

## Specifications:

Model	Frequency Range (GHz)	Waveguide			Minimum Directivity (dB)	Coupling (3, 10 & 20 dB)		Additional Primary Arm Loss (dB)	Primary Arm VSWR*	Secondary Arm VSWR
		WG	R	WR		Sensitivity ( $\pm$ dB)	Nominal Accuracy (dB)**			
10132	2.60 - 3.95	10	32	284	46	0.5	5%	N/A	1.03	1.10
11A132	3.22 - 4.90	11A	40	229	46	0.5	5%	N/A	1.03	1.10
12132	3.94 - 5.99	12	48	187	46	0.5	5%	N/A	1.03	1.10
13132	4.64 - 7.05	13	58	159	46	0.5	5%	N/A	1.03	1.10
14132	5.38 - 8.18	14	70	137	46	0.5	5%	N/A	1.03	1.10
15132	6.58 - 10.0	15	84	112	46	0.5	5%	N/A	1.03	1.10
16132	8.20 - 12.5	16	100	90	46	0.5	5%	N/A	1.03	1.10
17132	9.84 - 15.0	17	120	75	43	0.5	5%	N/A	1.03	1.10
18132	11.9 - 18.0	18	140	62	43	0.5	5%	N/A	1.03	1.10
19132	14.5 - 22.0	19	180	51	43	0.5	5%	0.2	1.03	1.10
20132	17.6 - 26.7	20	220	42	43	0.75	7%	0.3	1.03	1.20
21132	21.7 - 33.0	21	260	34	43	0.75	7%	0.4	1.03	1.20
22132	26.4 - 40.1	22	320	28	43	0.75	7%	0.5	1.03	1.20

See Series 137 for higher frequency models up to 330 GHz.

\* Primary arm VSWR specification is 1.10:1 for all 3 dB couplers.

\*\* Nominal coupling accuracy for 3 dB and 6 dB couplers is  $\pm 0.5$  dB.

Please refer to page 26 for definitions of Flann coupler specifications.

See overleaf for dimensions and ordering information.

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## Outline Dimensions

Model	Dimensions (mm)					Weight (kg)		
	A			B	C	3 dB	10 dB	20 dB
	3 dB	10 dB	20 dB					
10132	On request	1215	1029	85	130	On request	10.6	8.0
11A132	1432	965	817	70	100	8.4	5.7	4.6
12132	1233	853	733	60	90	6.2	4.3	3.0
13132	1108	785	676	55	75	4.7	3.3	2.6
14132	991	706	615	50	60	3.7	2.6	2.2
15132	766	534	460	35	50	2.0	1.5	1.3
16132	658	476	417	35	45	1.3	1.0	0.8
17132	538	387	338	35	40	1.0	0.8	0.6
18132	465	340	298	30	35	1.0	0.8	0.6
19132	397	300	262	30	35	0.4	0.4	0.3
20132	314	228	201	25	25	0.25	0.18	0.16
21132	284	215	194	25	25	0.25	0.18	0.16
22132	237	180	162	24	29	0.20	0.16	0.14

### ORDERING INFORMATION

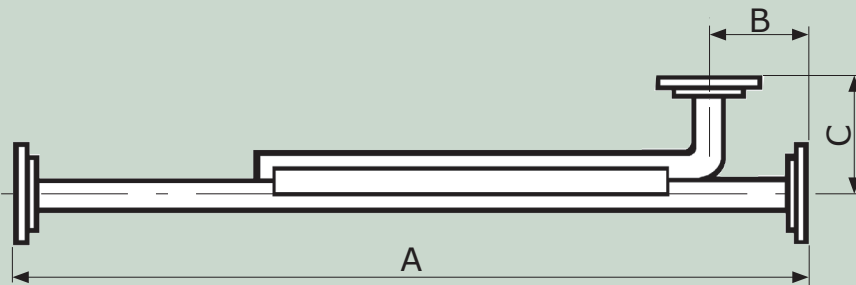
Model: coupling value suffix; description

Example: Model 16132-03 multihole directional coupler 03 dB coupling, directivity >46 dB

Standard Coupling Values	Suffix
3 dB	03
10 dB	10
20 dB	20

Other Coupling Values	Suffix
6 dB	06
30 dB	30
40 dB	40

Dimensions & Weights upon request



Series 132

For standard flange types and recommendations see pages 111 onwards