

Multihole Directional Couplers

Series 131

Features

- **High Directivity**
- **Models from 2.6 to 140 GHz**

The Flann Series 131 Directional Couplers are suitable where high quality is to be incorporated at moderate cost.

A high directivity is offered in all waveguide sizes within the frequency range 2.6 to 140 GHz. The standard coupling values are 3, 10 and 20 dB, other values for example 6, 30 and 40 dB can be supplied.

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

4 port couplers can be supplied to order, however the directivity will be less than for 3 port units.



Model 18131 - 10

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	Model
		WG	R	WR		Sensitivity (±dB)	Nominal Accuracy (dB)***				
10131	2.60 - 3.95	10	32	284	40	0.5	5%	Not Applicable	1.03	1.10	10131
11A131	3.30 - 4.90	11A	40	229	40	0.5	5%		1.03	1.10	11A131
12131	3.94 - 5.99	12	48	187	40	0.5	5%		1.03	1.10	12131
13131	4.64 - 7.05	13	58	159	40	0.5	5%		1.03	1.10	13131
14131	5.38 - 8.18	14	70	137	40	0.5	5%		1.03	1.10	14131
15131	6.58 - 10.0	15	84	112	40	0.5	5%		1.03	1.10	15131
16131	8.20 - 12.5	16	100	90	40	0.5	5%		1.03	1.10	16131
17131	9.84 - 15.0	17	120	75	40	0.5	5%		1.03	1.10	17131
18131	11.9 - 18.0	18	140	62	40	0.5	5%		1.03	1.10	18131
19131	14.5 - 22.0	19	180	51	40	0.5	5%		1.03	1.10	19131
20131	17.6 - 26.7	20	220	42	40	0.75	7%	0.3	1.03	1.20	20131
21131	21.7 - 33.0	21	260	34	40	0.75	7%	0.4	1.03	1.20	21131
22131	26.4 - 40.1	22	320	28	40	0.75	7%	0.5	1.03	1.20	22131

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

** Maximum coupling value available is 30 dB.

*** Nominal coupling accuracy for 3 dB and 6 dB couplers is ± 0.5 dB except models 27131-03 and 28131-03 which are ± 0.75 dB.

See overleaf for dimensions and ordering information.

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Model	Dimensions (mm)					Weight (kg)			Model
	A			B	C	3 dB	10 dB	20 dB	
	3 dB	10 dB	20 dB						
11A131	1432	965	817	70	100	8.4	5.7	4.6	11A131
12131	1233	853	733	60	90	6.2	4.3	3.0	12131
13131		785	676	55	75	4.7	3.3	2.6	13131
14131	991	706	615	50	60	3.7	2.6	2.2	14131
15131	766	534	460	35	50	2.0	1.5	1.3	15131
16131	658	476	417	35	45	1.3	1.0	0.8	16131
17131	538	387	338	35	40	1.0	0.8	0.6	17131
18131	465	340	298	30	35	1.0	0.8	0.6	18131
19131	397	300	262	30	35	0.4	0.4	0.3	19131
20131	314	228	201	25	25	0.25	0.18	0.16	20131
21131	284	215	194	25	25	0.25	0.18	0.16	21131
22131	237	180	162	24	29	0.20	0.16	0.14	22131

ORDERING INFORMATION

Model: Coupling Value Suffix; Description
 Example: Model 10131-20 Multihole Directional Coupler
 Directivity >40 dB, 20 dB coupling

Note:

If a 4 port coupler is required, add 4P to the ordering code:
 For example 18131-20-4P. Please note that the directivity
 will be reduced by approximately 8 dB for 4 port couplers.

Standard coupling values

3 dB
 10 dB
 20 dB

Suffix

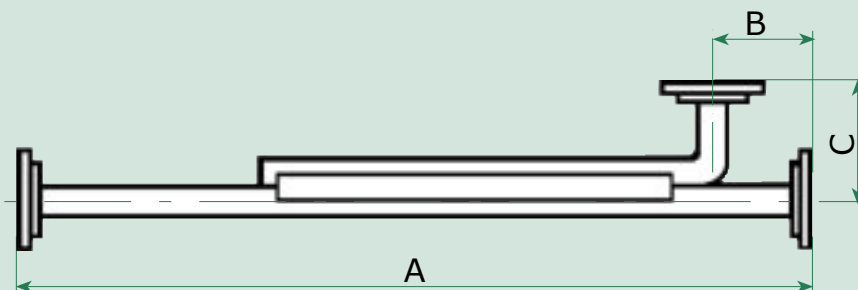
03
 10
 20

Other coupling values

6 dB
 30 dB
 40 dB

06
 30
 40

Dimensions
 & Weights
 upon request



Series 131

For standard flange types and recommendations see pages 108 onwards