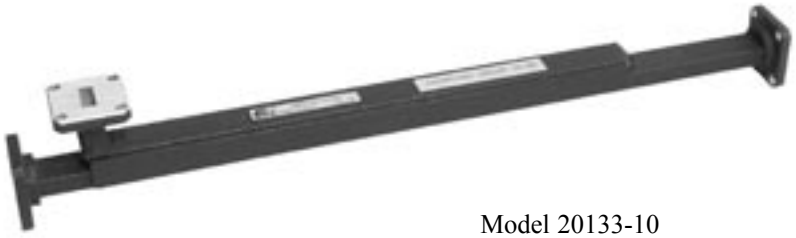
Multihole Directional Couplers
Series 133

Features
- **Ultra High Directivity**
- **Low Coupling Sensitivity**

The Flann Series 133 of ultra-high directivity multihole couplers has been developed principally for laboratory applications involving network analyser or reflectometer systems.



Model 20133-10

The couplers are a 3 port design with an extremely low reflection termination built into the fourth arm. The standard coupling values are 10 and 20 dB.

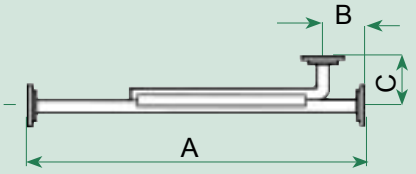
IMPORTANT! *All directivities quoted include the measuring port and flange performance when connected to an ideal termination.*

Specifications:

Model	Frequency Range (GHz)	Waveguide			Minimum Directivity (dB)	Coupling (10 & 20 dB)		Primary Arm VSWR	Secondary Arm VSWR	Model
		WG	R	WR		Sensitivity (±dB)	Nominal Accuracy (dB)			
11A133	3.30 - 4.90	11A	40	229	50	0.5	5%	1.03	1.10	**11A133**
12133	3.94 - 5.99	12	48	187	50	0.5	5%	1.03	1.10	**12133**
13133	4.64 - 7.05	13	58	159	50	0.5	5%	1.03	1.10	**13133**
14133	5.38 - 8.18	14	70	137	50	0.5	5%	1.03	1.10	**14133**
15133	6.58 - 10.0	15	84	112	50	0.5	5%	1.03	1.10	**15133**
16133	8.20 - 12.5	16	100	90	50	0.5	5%	1.03	1.10	**16133**
17133	9.84 - 15.0	17	120	75	50	0.5	5%	1.03	1.10	**17133**
18133	11.9 - 18.0	18	140	62	48	0.5	5%	1.03	1.10	**18133**
19133	14.5 - 22.0	19	180	51	48	0.5	5%	1.03	1.10	**19133**
20133	17.6 - 26.7	20	220	42	46	0.75	7%	1.03	1.20	**20133**
21133	21.7 - 33.0	21	260	34	46	0.75	7%	1.03	1.20	**21133**
22133	26.4 - 40.1	22	320	28	46	0.75	7%	1.03	1.20	**22133**

Model	Dimensions (mm)				Weight (kg)
	A		B	C	
	10 dB	20 dB			
11A133	1044	1044	70	100	6.0
12133	920	920	60	90	5.0
13133	802	802	55	75	2.5
14133	765	765	50	60	3.0
15133	620	620	35	50	1.8
16133	528	528	35	45	1.1
17133	427	427	35	40	0.85
18133	356	356	30	35	0.50
19133	330	330	30	35	0.40
20133	250	250	25	25	0.20
21133	235	235	25	25	0.20
22133	180	180	24	29	0.18

ORDERING INFORMATION
Model: coupling value suffix; description
Example: Model 14133-20 multihole directional coupler 20 dB coupling, directivity >50 dB



Series 133

Note: Please refer to page 27 for definitions of Flann coupler specifications.