

### Features

- High directivity
- Multi-hole coupling
- Balanced response between side-coupled arms
- Three-way splitter



Flann's multi-hole 3-way power splitter consists of a central waveguide with coupling arrays in the broad walls designed to divide the input signal into three signals of equal magnitude. Normally, the instrument is a 4-port device as illustrated. However, for network analyser applications where only two equal amplitude signals are required the central output port may be terminated. Precision machining methods ensure that the balance between secondary waveguide ports is better than  $\pm 0.2$  dB over the full waveguide band ( $\pm 0.3$  dB WG20 to WG22). The coupling to each output port is 4.8 dB down with respect to the input signal. Directivity for most models is greater than 40 dB.

*IMPORTANT! Quoted directivity assumes an ideal termination.*

The diagram shows a side view of the power splitter. Dimension 'A' is the total length. Dimension 'B' is the distance from the left end to the first coupling point. Dimension 'C' is the diameter of the waveguide.

**ORDERING INFORMATION**

Model Description  
 Example: Model 20230  
 3 Way Power Splitter  
 (Multihole Directional Coupler)

**Series 230**



### Specifications

Model	Frequency Range (GHz)	Waveguide			Minimum Directivity (dB)	Balance between coupled ports (dB)	Dimensions (mm)			Weight (Kg)
		WG	R	WR			A	B	C	
10230	2.60 - 3.95	10	32	284	40	±0.2	1773	85	130	19.0
11A230	3.22 - 4.90	11A	40	229	40	±0.2	1407	79	100	9.3
12230	3.94 - 5.99	12	48	187	40	±0.2	1213	60	90	8.4
14230	5.38 - 8.18	14	70	137	40	±0.2	976	50	60	5.0
15230	6.58 - 10.0	15	84	112	40	±0.2	753	35	50	3.0
16230	8.20 - 12.5	16	100	90	40	±0.2	649	35	45	1.9
17230	9.84 - 15.0	17	120	75	40	±0.2	522	35	40	1.4
18230	11.9 - 18.0	18	140	62	40	±0.2	438	30	35	0.9
19230	14.5 - 22.0	19	180	51	40	±0.2	392	30	35	0.7
20230	17.6 - 26.7	20	220	42	38	±0.3	314	25	25	0.4
22230	26.4 - 40.1	22	320	28	38	±0.3	228	24	29	0.3

### Custom Design

Customised versions of this instrument are possible. Please contact the Sales Team for more information [sales@flann.com](mailto:sales@flann.com)

### Ordering Information

WG	Model	-	Optional
10 to 22	230		