



WAVEGUIDE Couplers



QUASAR offer Waveguide Couplers that have been designed to operate to a high specification.

Types include:

- Broadwall, flanged, SMA or N-Type
- Loop, SMA and N-Type
- Cross Guide, Dual and Triple, in SMA and N-Type

Manufactured from brass or aluminium with flanges to suit, please see the datasheets in appendix A for more details on appropriate flange types.

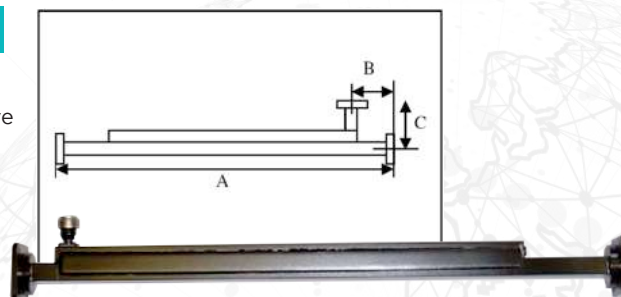
All couplers are made to the highest standards and are finished in hard wearing black epoxy paint; other finishes such as powdercoat, internal and flange silver plating are available to order.

Female connectors are used as standard, male connectors are available on most models to special order. Each coupler is individually tuned for optimal performance.

Broadwall Couplers

Multihole directional couplers are excellent test benches that allow measurement over the entire waveguide frequency band. They have good directivity and minimal frequency sensitivity variation.

Please note: Quoted directivities include the measuring port and flange performance when connected to an ideal load



Model Number	WG Size	Frequency Range (GHz)	Dimensions (mm)			Max VSWR		Directivity (dB)	Coupling Values (dB)	
			A	B	C	A	B		Nom. Accuracy	Sensitivity
21-010	10	2.60 - 3.95	1220	90	135	1.03	1.10	35	+/- 2	+/- 1
21-11A	11A	3.30 - 4.90	970	75	105	1.03	1.10	35	+/- 2	+/- 1
21-012	12	3.94 - 5.99	855	65	95	1.03	1.10	35	+/- 2	+/- 1
21-014	14	5.38 - 8.18	710	55	65	1.03	1.10	35	+/- 2	+/- 1
21-015	15	6.58 - 10.0	535	40	55	1.03	1.10	35	+/- 2	+/- 1
21-016	16	8.20 - 12.5	480	40	50	1.03	1.10	35	+/- 2	+/- 1
21-017	17	9.84 - 15.0	390	40	45	1.03	1.10	35	+/- 2	+/- 1
21-018	18	11.9 - 18.0	345	35	40	1.03	1.10	35	+/- 2	+/- 1
21-022	22	26.4 - 40.1	285	25	30	1.03	1.10	35	+/- 2	+/- 1

Note:

When ordering, please refer to the datasheets in the Appendix for more details on Flange types E.g. Copper WG10 with three brass CPR284-F flanges would be 21-010-020202-2

Required coupling value should be specified when ordering.

Versions with SMA and N-type connectors instead of the upper flange are also available.



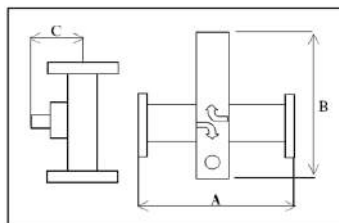


WAVEGUIDE Couplers

Cross Guides (3 Ports)

Both SMA and N-type adapter versions are available, female connectors are used as standard, male available on most models to special order.

Can be manufactured from Copper/Brass or Aluminium/Aluminium.



Model Number	WG Size	Frequency Range (GHz)	Dimensions (mm)			Max VSWR		Directivity (dB)	Coupling Values (dB)	
			A	B	C	A	B		Nom. Accuracy	Sensitivity
24-010	10	2.60 - 3.95	185	310		1.03	1.10	20	+/- 2	+/- 1
24-11A	11A	3.30 - 4.90	127	260		1.03	1.10	20	+/- 2	+/- 1
24-012	12	3.94 - 5.99	125	230		1.03	1.10	20	+/- 2	+/- 1
24-014	14	5.38 - 8.18	107	182		1.03	1.10	20	+/- 2	+/- 1
24-015	15	6.58 - 10.0	90	171		1.03	1.10	20	+/- 2	+/- 1
24-016	16	8.20 - 12.5	78	145		1.03	1.10	20	+/- 2	+/- 1
24-017	17	9.84 - 15.0	75	120		1.03	1.10	20	+/- 2	+/- 1
24-018	18	11.9 - 18.0	70	112	33	1.03	1.10	20	+/- 2	+/- 1
24-022	22	26.4 - 40.1	47	55		1.03	1.10	20	+/- 2	+/- 1

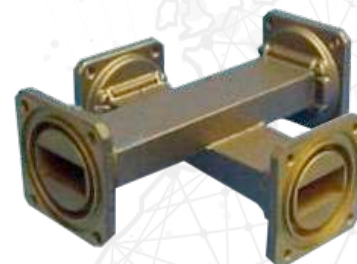
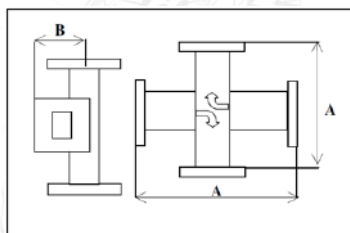
Note:

When ordering, please refer to the datasheets in the Appendix for more details on Flange types. E.g. Copper WG10 with two brass CPR284-F flanges would be 24-010-0202-2 SMA or N-type connectors and required coupling value should also be specified.

Cross Guides (4 Ports)

Precision coupling across high quality waveguide.

Can be manufactured from Copper/Brass or Aluminium/Aluminium.



Model Number	WG Size	Frequency Range (GHz)	Dimensions (mm)		Max VSWR	Coupling Values (dB)
			A	B		
23-010	10	2.60 - 3.95	185		1.03	As per Customer Req.
23-11A	11A	3.30 - 4.90	127		1.03	As per Customer Req.
23-012	12	3.94 - 4.99	125		1.03	As per Customer Req.
23-014	14	5.38 - 8.18	107		1.03	As per Customer Req.
23-015	15	6.58 - 10.0	90		1.03	As per Customer Req.
23-016	16	8.20 - 12.5	78		1.03	As per Customer Req.
23-017	17	9.84 - 15.0	75	32	1.03	As per Customer Req.
23-018	18	11.9 - 18.0	70		1.03	As per Customer Req.

Note:

When ordering, please refer to the datasheets in the Appendix for more details on Flange types. E.g. Copper WG10 with all brass CPR284-F flanges would be 23-010-02020202-2



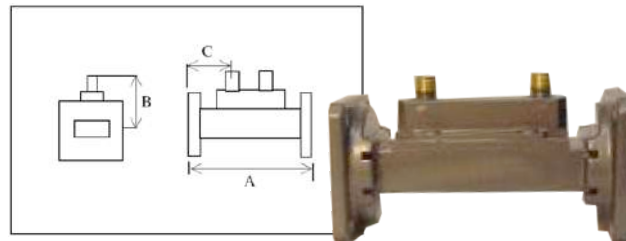


WAVEGUIDE Couplers

Loop Couplers

Both SMA and N-type adapter versions are available, female connectors are used as standard, male available on most models to special order.

Can be manufactured from Copper/Brass or Aluminium/Aluminium.



Model Number	WG Size	Frequency Range (GHz)	Dimensions (mm)			Max VSWR		Coupling Values (dB)
			A	B	C	A	B	
27-010	10	2.60 - 3.95	115		42	1.03	1.10	As per Customer Req.
27-11A	11A	3.30 - 4.90	102		35	1.03	1.10	As per Customer Req.
27-012	12	3.94 - 5.99	89		29	1.03	1.10	As per Customer Req.
27-014	14	5.38 - 8.18	75		25	1.03	1.10	As per Customer Req.
27-015	15	6.58 - 10.0	75		25	1.03	1.10	As per Customer Req.
27-016	16	8.20 - 12.5	75		25	1.03	1.10	As per Customer Req.
27-017	17	9.84 - 15.0	75		25	1.03	1.10	As per Customer Req.
27-018	18	11.9 - 18.0	75		25	1.03	1.10	As per Customer Req.
27-022	22	26.4 - 40.1	75		25	1.03	1.10	As per Customer Req.

Note:

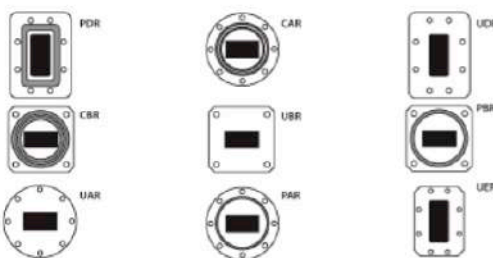
When ordering, please refer to the datasheets in the Appendix for more details on Flange types

E.g. Copper WG10 with two brass CPR284-F flanges would be 27-010-0202-2 SMA or N-type connectors should also be specified.

Flange Types

J & N Microwave Components and Engineering manufacture and supply flanges made to current IEC and EIA standards.

European IEC Standard Flanges



North American EIA Standard Specifications

