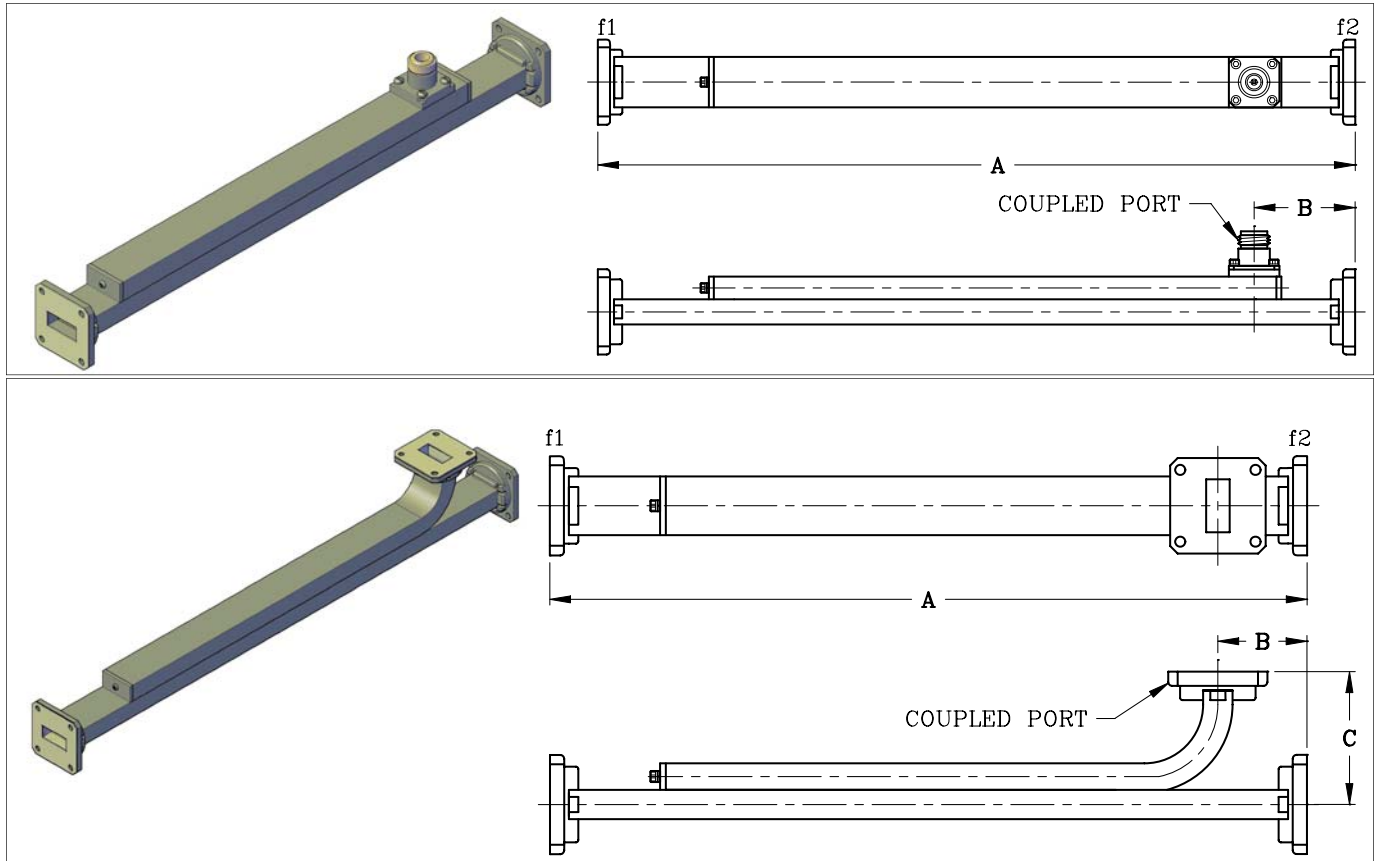


Rectangular Waveguide Topwall Couplers



Space Machine custom fabricates a standard product line of topwall couplers covering waveguide sizes WR28 thru WR284. Coupling variation is typically $\pm 0.5\text{dB}$ over the full waveguide band. Directivity is 35dB minimum. Additional sizes and configurations are available upon request. See next page for standard dimensions.

Ordering Information:

Topwall Coupler, WR90, Aluminum, 30dB Coupling, Type N Female Coupled Port, Cover / Choke Flanges, Chromated, Paint Space Machine Gray.

Example part number:

<u>DTC</u>	<u>wr</u>	<u>-m</u>	<u>c</u>	<u>cp</u>	<u>-f1</u>	<u>f2</u>	<u>-p</u>	<u>f</u>
DTC	90	-A	30	NF	-01	02	-C	P

Series (DTC):

Waveguide Size (wr): WR28 thru WR284

Material (-m): A – Aluminum, B – Bronze, O – Other

Coupling (c): 20 - 60 dB

Coupled Port (cp): Connector – See [Appendix E](#)
Flange – See [Appendix G](#)

Flange (-f1 f2): See [Appendix G](#)

Plating (-p): C – Chromate, S – Silver, G – Gold, O – Other, N – None

Finish (f): P – Paint Space Machine Gray, N – None, O – Other

Rectangular Waveguide Top Wall Coupler Dimensions

Model	WR #	Frequency (GHz)	A	B	C
DTC28-	28	26.50 - 40.00	9.25	1.00	1.50
DTC34-	34	22.00 - 33.00	10.75	1.00	1.50
DTC42-	42	18.00 - 26.50	10.75	1.00	1.63
DTC51-	51	15.00 - 22.00	11.75	1.20	2.25
DTC62-	62	12.40 - 18.00	12.75	1.20	2.25
DTC75-	75	10.00 - 15.00	14.25	1.20	2.25
DTC90-	90	8.20 - 12.40	17.25	1.50	2.25
DTC102-	102	7.00 - 11.00	19.00	1.50	3.25
DTC112-	112	7.05 - 10.00	19.55	1.50	3.25
DTC137-	137	5.85 - 8.20	22.25	1.70	3.25
DTC159-	159	4.90 - 7.05	25.25	2.00	4.25
DTC187-	187	3.95 - 5.85	30.25	2.20	4.50
DTC229-	229	3.30 - 4.90	35.25	2.20	5.25
DTC284-	284	2.60 - 3.95	46.25	2.70	6.75

All dimensions are in inches.