

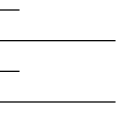
CL-XXXX

Cone Loads

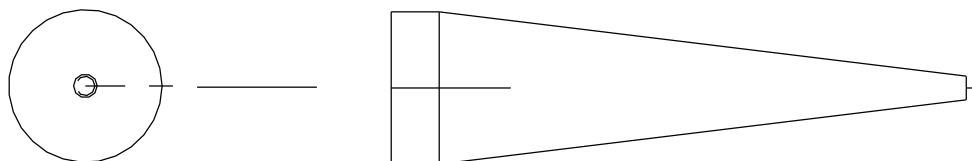


Thorndike Cone loads are precision machined, linear tapered, lossy inserts to give the best VSWR over the widest frequency range. They can be used for precision bench measurements and calibrations when the most accurate measurement results are required. They are typically used as calibration loads when making return loss or VSWR measurements using vector network analysis techniques. These are used in waveguide calibration kits to remove equipment errors during reflection measurements.

The cone load is installed into the center of a waveguide cavity with a short circuit plate directly behind the larger diameter. Typical VSWR values for cone loads are less than 1.02:1 over the waveguide operating frequency band. Thorndike manufactures cone loads ranging in frequency from 1 – 110 GHz. covering waveguide sizes from WR-650 to WR-10.



Thorndike manufactures high power equivalent versions of cone loads however we do not recommend using them at excessive power levels to the limited heat sinking availability of the parts.



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WR-	P/N	FREQ	VSWR	LENGTH
770	CL050B	.96-1.45	1.02	20.00
770	CL050	.96-1.45	1.05	15.00
650	CL0207	1.12 -1.7	1.04	11.50
650	CLS1200	6.5-18.0	1.03	11.0
650	CL4900	1.12-1.7	1.02	18.00
650	CL0200	1.12-1.7	1.02	13.00
650	CL0100	1.12-1.7	1.02	16.50
510	CL0250	1.45-2.20	1.03	12.00
430	CL0300	1.7-2.6	1.035	9.50
430	CL0325	1.7-2.6	1.02	11.00
430	CL0400	1.7-2.6	1.02	13.50
430	CL4200	1.7-2.6	1.02	13.38
430	CL3200	1.7-2.6	1.02	13.50
369	CL0500	2.32-2.68	1.02	8.50
340	CL0625	2.20 - 3.30	1.02	10.0
340	CL0605	2.4 -3.3	1.20	6.0
340	CL0600HH	2.2 - 3.3	1.05	8.00
340	CL0600	2.2-3.3	1.02	8.50
340	CL0505	2.2-3.3	1.03	8.50
284	CL0700	2.6-3.95	1.02	7.50
284	CL0800	2.6-3.95	1.02	9.00
284	CL5100	2.6-3.95	1.02	9.50
284	CL0700M	2.7 - 3.95	1.02	6.50
284	CL0700HH	2.6 -3.95	1.02	9.50
284	CL0655	2.6-3.95	1.08	5.50
284	CL3300	2.6-3.95	1.02	9.50
284	CL5500	2.40 -3.95	1.02	13.00
284	CL700M	2.7-3.95	1.02	6.50
284	CL5300	2.6-3.95	1.02	12.00
284	CL0650	2.6-3.95	1.02	12.00
229	CL5600	3.3-4.9	1.02	9.50
229	CL0900	3.3-4.9	1.02	6.50
229	CL0951H	3.6-4.2	1.02	6.50
229	CL0900HH	3.3 -4.9	1.06	8.0
229	CL0950	3.3-5.0	1.10	3.50
187	CL3550	4.0-5.85	1.005	11.00
187	CL3500	3.95-5.85	1.02	7.0
187	CL1000	3.95-5.85	1.02	5.50
159	CL1110	4.9 -7.1	1.15	2.75"
159	CL3700	4.90-7.05	1.02	7.00
159	CL1100	4.9-7.05	1.02	5.00
159	CL1050	4.9-7.05	1.02	6.00

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WR-	P/N	FREQ	VSWR	LENGTH
137	CL4000	5.85-8.2	1.02	6.00
137	CL5200	5.85-8.2	1.02	4.50
137	CL1250	5.3-8.2	1.02	6.00
137	CL1200	5.85-8.2	1.02	4.50
137	CL1300	5.85-8.2	1.02	3.25
112	CL1400	7.05-10	1.02	4.50
112	CL1450	7.05-10.0	1.01	6.00
112	CL4300	7.05-10	1.02	4.50
112	CL1600M	7.5-10.0	1.02	3.00
112	CL1600	7.0-11.0	1.02	2.75
112	CL1500	7.05-10	1.02	4.00
102	CL1520	7.00-11.00	1.02	5.00
96	CL8000	7 - 17	1.03	4.5
90	CL1821HH	9.0 -12.4	1.07	4.50
90	CL1825	8.2-12.4	1.10	1.372
90	CL5400D	9.5-12.4	1.07	.500
90	CL1650	8.2-12.4	1.02	3.75
90	CL1675	8.2- 12.4	1.02	4.00
90	CL1700	8.2-12.4	1.03	3.00
90	CL1700-1	8.2-12.4	1.02	3.00
90	CL1800	8.2-12.4	1.15	.90
90	CL1820	9.0-12.0	1.10	1.100
90	CL1820HH	9.0-10.0	1.02	4.5
90	CL1822HH	8.2 - 12.4	1.02	4.50
90	CL1650	8.2-12.4	1.02	3.75
90	CL1875HH	8.2-12.4	1.05	3.00
90	CL1900	8.2-12.4	1.005	4.500
90	CL1950	8.20 - 12.40	1.02	4.75
90	CL2000	8.2-12.4	1.05	1.850
90	CL2001	8.2-12.4	1.05	2.00
90	CL5400	8-10.2	1.05	1.300
90	CL1700-3	9.0-12.4	1.05	3.00
90	CL5400C	8.2-12.4	1.10	1.225
90	CL5400B	8.2-12.4	1.04	1.50
90	CL1850HH	8.7-12.4	1.03	2.10
75	CL2050	8.2 -15.0	1.02	4.00
75	CL2025HH	10.0-15.0	1.03	3.50
75	CL5700	10-15	1.02	4.25
75	CL2105	10.7-15.0	1.20	1.125
75	CL2100	10.0-15.0	1.02	3.00
62	CL2250	12.4-18.0	1.02	3.00
62	CL2150	12.4-18.0	1.02	3.63

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WR-	P/N	FREQ	VSWR	LENGTH
62	CL2200	12.4-18	1.02	2.875
62	CL3400	12.4-18	1.02	3.5
62	CL2250	12.4-18.0	1.02	3.00
62	CL2275	14.0-18.0	1.04	2.00
62	CL2280	12.4 -18.0	1.15	1.35
62	CL2300	12.4-18	1.02	2.75
62	CL2225HH	13.5-18.0	1.02	2.50
51	CL2400	15-22	1.02	2.60
51	CL2420	15 -22	1.10	1.00
42	CL2550	17.5-26.5	1.02	3.25
42	CL2500	18-26.5	1.02	2.2
42	CL2575	18.0 -26.5	1.10	1.25
42	CL2580	18.0 - 26.0	1.05	1.40
42	CL2576	18.0 -26.5	1.15	1.00
42	CL2550M	18.5-26.5	1.02	3.25
34	CL2610	22.00-33.0)	1.02	3.00
34	CL2600	22.0-33.0	1.02	2.2
34	CL2623	22 -33	1.07	1.0
28	CL2650M	26.5-40	1.02	2.00
28	CL2650	26.5-40.0	1.02	2.00
28	CL2700	26.5-40.0	1.02	1.625
28	CL2750	26.5-40	1.02	1.70
28	CL2775	28 - 40.0	1.10	0.60
28	CL4700	26.5-40	1.5	.500
28	CL5900	26.5-40.0	1.03	1.10
28	CL2625	35-40	1.05	0.50
22	CL5000	33-50	1.02	1.180
22	CL2850	33-50	1.02	1.16
22	CL2800	33.0-50.0	1.03	1.180
19	CL2900	40.0-60.0	1.06	.950
15	CL3010	55-75	1.06	.90
15	CL3000	50.0-75.0	1.06	.745
12	CL3100	60.0-90.0	1.02	.610



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WR-	P/N	FREQ	VSWR	LEN
229	CL0970HPC	3.3-4.9	1.03	7.00
187	CL187HPC	4.40-5.85	1.10	3.00
187	CL7100HPC	3.95-5.85	1.04	6.00
187	CL7500HPC	3.95-5.85	1.04	6.00
137	CL137HPC	5.9-8.2	1.06	3.00
137	CL7600HPC	5.85-8.2	1.03	4.50
112	CL7750HPC	7.05-10.0	1.02	5.50
112	CL7700HPC	7.05-10	1.03	4.50
112	CL1400HPC	7.1 -10.0	1.02	4.50
90	CL7200HPC	8.2-12.4	1.04	3.00
90	CL7800HPC	8.2-12.4	1.04	3.00
90	CL5400HPC	8.2 -12.4	1.20	1.50
90	CL7225HPC	8.2-12.4	1.03	4.00
90	CL2000HPC	8.2 -12.4	1.15	2.00
90	CL5410HPC	8.2 -12.4	1.20	1.40"
90	CL1800HPC	8.5-12.4	1.10	1.00
75	CL2107HPC	11.0 -15.0	1.05	1.90
75	CL7400HPC	10-15	1.02	3.00
62	CL7300HPC	12.4-18	1.03	3.00
62	CL2300HPC	12.4-18.0	1.15	1.00
62	CL2280HPC	12.4 -18	1.20	0.75
51	CL2420HPC	15 -22	1.10	1.00
51	CL2410HPC	15-22	1.02	2.75
51	CL2400HPC	15-22	1.04	2.00
34	CL2660HPC	22 -33	1.20	0.65
28	CL2625HPC	34-40	1.07	.40
28	CL2650HPC	26.5-40	1.02	2.00

