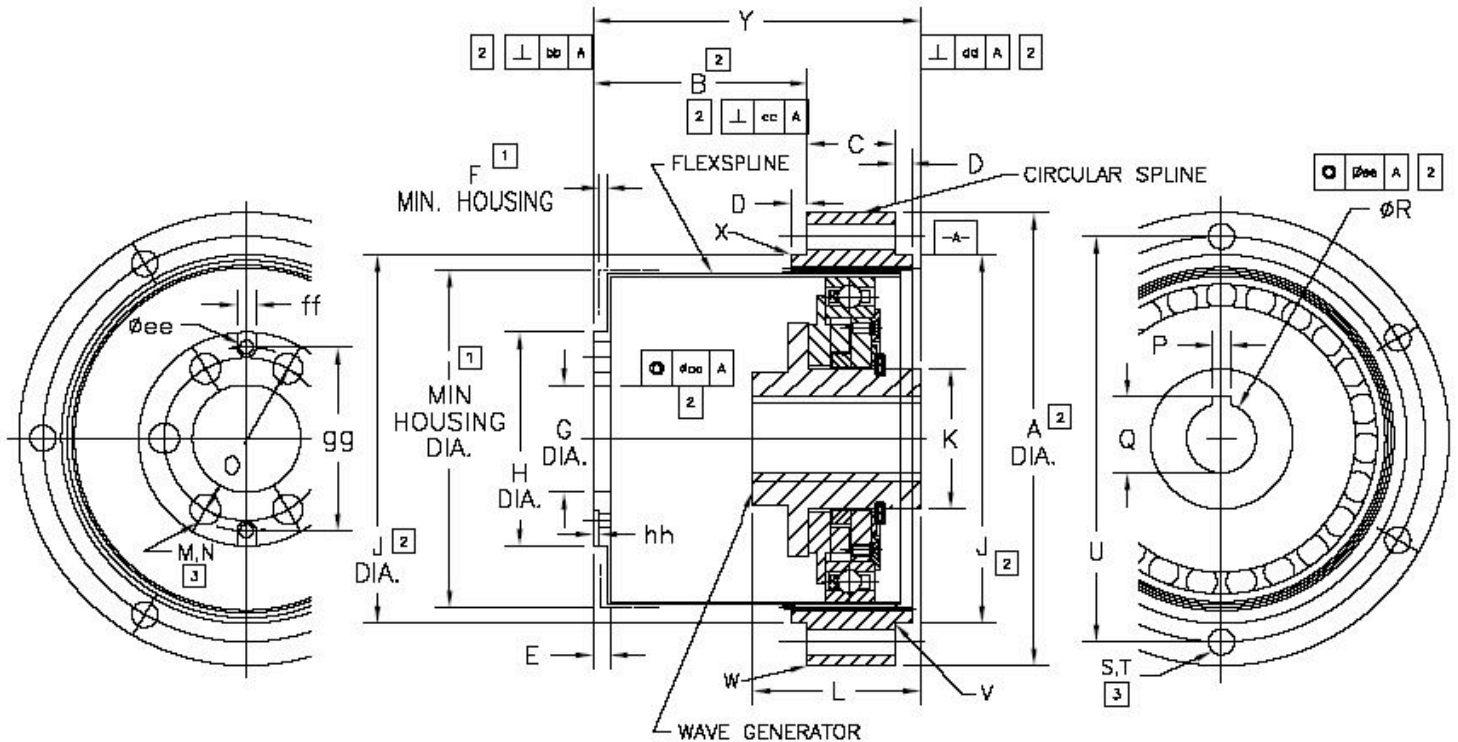




N-HDC-M1 Installation Drawing



- 1 DIMENSIONS DENOTE MAXIMUM EXTENT OF ENCROACHMENT OF ADJOINING STRUCTURE.
- 2 DIMENSIONS ESTABLISH INTERFACE AND INSTALLATION REQUIREMENTS. MAINTAIN AT ASSEMBLY AND UNDER ALL OPERATING LOAD CONDITIONS.
- 3 USE ALLOY STEEL SCREWS TORQUE TO MANUFACTURES MAXIMUM RECOMMENDED VALUE. USE LOCTITE OR OTHER MEANS TO PREVENT LOOSENING.
4. MAINTAINING STANDARD COMPONENTS IN "AS RECEIVED" SETS IS RECOMMENDED.
5. DRAWING IS FOR DIMENSIONAL REVIEW ONLY.
***DO NOT SCALE**



	20	25	32	40	50	65	80	100
ØA	70 ⁺⁰ _{-.019}	85 ⁺⁰ _{-.022}	110 ⁺⁰ _{-.022}	135 ⁺⁰ _{-.025}	170 ⁺⁰ _{-.025}	215 ⁺⁰ _{-.029}	265 ⁺⁰ _{-.029}	330 ⁺⁰ _{-.036}
B	31.3 ± .3	40.3 ± .3	52.3 ± .3	63.3 ± .3	80.3 ± .3	100.3 ± .3	119.3 ± .3	153.5 ± .5
C	14	16	20	25	30	40	50	60
D	3	3	3	4	4	5	6	6
E	5.4	6.5	8.6	9.5	13.0	16.3	14.6	18
F	2	2	2	3	3	4	5	6
ØG	16 ^{+0.011} ₋₀	20 ^{+0.013} ₋₀	26 ^{+0.013} ₋₀	32 ^{+0.016} ₋₀	40 ^{+0.016} ₋₀	52 ^{+0.019} ₋₀	65 ^{+0.019} ₋₀	80 ^{+0.019} ₋₀
ØH	31.6	39.5	52	64	79	103	126	158
ØI	52.3	65	84.6	104.6	131	169.4	209.3	261
ØJ	54 ⁺⁰ _{-.019}	67 ⁺⁰ _{-.019}	90 ⁺⁰ _{-.022}	110 ⁺⁰ _{-.022}	135 ⁺⁰ _{-.025}	177 ⁺⁰ _{-.025}	218 ⁺⁰ _{-.029}	272 ⁺⁰ _{-.032}
ØK	21	26	26	32	32	48	55	65
L	27 ⁺⁰ _{-.1}	32 ⁺⁰ _{-.1}	32 ⁺⁰ _{-.1}	40 ⁺⁰ _{-.1}	40 ⁺⁰ _{-.1}	52 ⁺⁰ _{-.1}	65 ⁺⁰ _{-.1}	70 ⁺⁰ _{-.1}
M	6	6	6	6	6	6	12	12
ØN	4.5	5.5	6.6	9	14	14	11	14
ØO	24	30	40	50	60	80	104	130
P	3 ± .0125	4 ± .0150	5 ± .0150	5 ± .0150	6 ± .0150	8 ± .0180	8 ± .0180	8 ± .0180
Q	10.4	12.8	16.3	16.3	21.8	27.3	31.3	31.3
ØR	9 ^{+0.015} ₋₀	11 ^{+0.018} ₋₀	14 ^{+0.018} ₋₀	14 ^{+0.018} ₋₀	19 ^{+0.021} ₋₀	24 ^{+0.021} ₋₀	28 ^{+0.021} ₋₀	28 ^{+0.021} ₋₀
S	6	6	6	6	6	6	8	8
ØT	3.5	4.5	5.5	6.6	9	11	11	14
ØU	60	75	100	120	150	195	240	290
V	.3	.3	.3	.3	.3	.3	.3	.3
W	.4	.4	.4	.4	.4	.4	.4	.4
X	.4	.4	.4	.4	.4	.4	.4	.4
Y	51.5 ± .5	63.5 ± .5	77.5 ± .6	95.5 ± .6	116.4 ± .7	146.3 ± .7	177.3 ± .7	220.2 ± .7
aa	.044	.047	.050	.063	.066	.070	.090	.110
bb	.028	.036	.044	.050	.060	.070	.080	.090
cc	.031	.033	.035	.045	.047	.049	.064	.080
dd	.025	.036	.036	.048	.048	.048	.054	.060
ee	.044	.047	.050	.063	.066	.070	.090	.110
ff	2.66	2.94	2.94	3.17	3.94	6	6	6
gg	16.66	23.80	34.11	42.85	56.06	58.72	77.77	95.25
hh	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27

Contact NAC Harmonic Drive For Certified Engineering Drawings.



Size	Ratio	Input Speed 3000rpm			Input Speed 1500rpm			Input Speed 1000rpm		
		Output Torque Nm	Output Speed rpm	Input Power kw	Output Torque Nm	Output Speed rpm	Input Power kw	Output Torque Nm	Output Speed rpm	Input Power kw
English: 1C	64	4.5	46.9	0.025	4.5	23.4	0.012	4.5	15.6	0.008
	80	5	37.5	0.025	5.5	18.8	0.013	5.5	12.5	0.009
Metric: 17	80	12	37.5	0.059	12	18.8	0.029	12	12.5	0.019
	100	15	30	0.059	16.5	15	0.031	17	10	0.021
English: 3C Metric: 20	80	25	37.5	0.123	25	18.8	0.059	25	12.5	0.039
	84	25	35.7	0.117	25	17.9	0.056	25	11.9	0.037
	100	30	30	0.118	33	15	0.062	33.6	10	0.041
	125	30	24	0.097	37.5	12	0.058	43.5	8	0.044
English: 5C Metric: 25	80	40	37.5	0.197	40	18.8	0.094	40	12.5	0.062
	100	50	30	0.197	55	15	0.104	56	10	0.069
	120	50	25	0.169	62.5	12.5	0.101	72.5	8.3	0.074
	150	50	20	0.146	62.5	10	0.085	72.5	6.7	0.062
English: 1M Metric: 32	80	100	37.5	0.493	100	18.8	0.235	100	12.5	0.153
	100	120	30	0.473	132	15	0.248	135	10	0.165
	135	120	22.2	0.363	150	11.2	0.215	175	7.5	0.163
	160	120	18.8	0.312	150	9.4	0.185	175	6.3	0.140
English: 2M Metric: 40	200	120	15	0.264	150	7.5	0.156	175	5	0.118
	80	200	37.5	0.986	200	18.8	0.469	200	12.5	0.305
	84	200	35.7	0.939	200	17.9	0.447	200	11.9	0.291
	100	240	30	0.947	265	15	0.497	270	10	0.330
	125	240	24	0.777	300	12	0.462	300	8	0.300
	160	240	18.8	0.624	300	9.4	0.370	300	6.3	0.240
English: 4M Metric: 50	168	240	17.9	0.594	300	8.9	0.352	300	6	0.228
	200	240	15	0.527	300	7.5	0.312	300	5	0.202
	80	360	37.5	1.775	360	18.8	0.844	360	12.5	0.549
	100	450	30	1.775	495	15	0.929	505	10	0.617
	120	450	25	1.518	550	12.5	0.881	600	8.3	0.625
English: 8M Metric: 65	150	450	20	1.25	550	10	0.723	600	6.7	0.513
	160	450	18.8	1.169	550	9.4	0.678	600	6.3	0.481
	200	450	15	0.989	550	7.5	0.572	600	5	0.405
	80				800	18.8	1.876	800	12.5	1.221
	100				900	15	1.689	1015	10	1.282
English: 15M Metric: 80	134				1000	11.2	1.435	1150	7.5	1.073
	160				1000	9.4	1.233	1150	6.3	0.921
	200				1000	7.5	1.040	1150	5	0.776
	267				1000	5.6	0.823	1150	3.7	0.614
	80				1500	18.8	3.518	1500	12.5	2.289
English: Metric: 100	100				1800	15	3.377	2000	10	2.442
	125				2000	12	3.077	2300	8	2.301
	168				2000	8.9	2.348	2300	6	1.755
	200				2000	7.5	2.079	2300	5	1.552
	250				2000	6	1.758	2300	4	1.311
Metric: 100	80				2500	18.8	5.863	2500	12.5	3.816
	100				3500	15	6.567	3650	10	4.457
	120				3500	12.5	5.609	4000	8.3	4.169
	150				3500	10	4.602	4000	6.7	3.419
	160				3500	9.4	4.315	4000	6.3	3.205
	200				3500	7.5	3.638	4000	5	2.699
	250				3500	6	3.077	4000	4	2.280
315				3500	4.8	2.514	4000	3.2	1.920	

Note: Output Torque ratings are based on an L-10 life of 5000 hours.

Contact NAC Harmonic Drive for information on non-standard ratios and high torque units.