

Maximum Rating Tables

Size 832 • NH Series

Single Reduction
Worm Gear Reducers

Double Reduction
Worm - Worm Gear Reducers

Double Reduction
Helical - Worm Gear Reducers

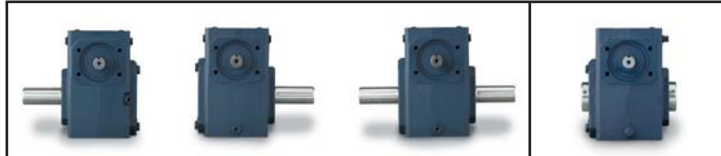
WASHGUARD® Reducers
and GEAR+MOTOR™

Ratio Multipliers

Accessories and
Additional Capabilities

Style B

Style H



Size 832

Ratio	Input RPM	Output RPM	Input HP	Output HP	Output Torque (lb-in)	Left Hand Catalog No.	Right Hand Catalog No.	Double Extension Catalog No.	Hollow Output Catalog No.*
5	2500	500	10.56	10.03	1306	NH8320097	NH8320101	NH8320105	NH8320557.XX
	1750	350	9.135	8.611	1602				
	1170	234	7.694	7.172	1995				
	100	20	1.289	1.097	3571				
7.5	2500	333	9.053	8.527	1612	NH8320098	NH8320102	NH8320106	NH8320558.XX
	1750	233	7.844	7.317	1976				
	1170	156	6.642	6.114	2469				
	100	13	1.136	0.949	4075				
10	2500	250	8.232	7.701	1941	NH8320001	NH8320009	NH8320017	NH8320501.XX
	1750	175	7.034	6.507	2343				
	1170	117	5.974	5.446	2932				
	100	10	0.857	0.704	4437				
15	2500	166	6.161	5.603	2118	NH8320002	NH8320010	NH8320018	NH8320502.XX
	1750	116	5.277	4.724	2551				
	1170	78	4.531	3.971	3207				
	100	6.7	0.682	0.518	4895				
20	2500	125	4.836	4.306	2170	NH8320003	NH8320011	NH8320019	NH8320503.XX
	1750	87	4.188	3.658	2633				
	1170	58	3.547	3.020	3253				
	100	5.0	0.528	0.381	4802				
25	2500	100	3.977	3.468	2185	NH8320004	NH8320012	NH8320020	NH8320504.XX
	1750	70	3.465	2.953	2658				
	1170	46	2.914	2.413	3248				
	100	4.0	0.434	0.298	4701				
30	2500	83	3.452	2.903	2195	NH8320005	NH8320013	NH8320021	NH8320505.XX
	1750	58	3.003	2.454	2651				
	1170	39	2.604	2.052	3315				
	100	3.3	0.425	0.265	5007				
40	2500	62	2.669	2.157	2174	NH8320006	NH8320014	NH8320022	NH8320506.XX
	1750	43	2.348	1.834	2641				
	1170	29	2.019	1.509	3251				
	100	2.5	0.330	0.189	4769				
50	2500	50	2.152	1.674	2110	NH8320007	NH8320015	NH8320023	NH8320507.XX
	1750	35	1.907	1.426	2568				
	1170	23	1.634	1.163	3130				
	100	2.0	0.270	0.143	4510				
60	2500	41	1.764	1.323	2001	NH8320008	NH8320016	NH8320024	NH8320508.XX
	1750	29	1.573	1.128	2437				
	1170	19	1.346	0.913	2951				
	100	1.7	0.225	0.111	4201				
80	2500	31	1.122	0.796	1605	NH8320099	NH8320103	NH8320107	NH8320559.XX
	1750	21	1.030	0.695	2000				
	1170	14	0.869	0.551	2371				
	100	1.3	0.143	0.064	3246				
100	2500	25	0.754	0.503	1268	NH8320100	NH8320104	NH8320108	NH8320560.XX
	1750	17	0.691	0.435	1567				
	1170	11	0.584	0.343	1846				
	100	1.0	0.097	0.040	2496				

How To Build a Part Number For Size NH832

1. Select catalog number from the selection table
2. For hollow output, replace "XX" suffix with bore code (see next page for codes)

NEMA C Input Flange ▲	Style BM			Style HM	Style BMQ			Style HMQ	Ratio
	Left Hand Catalog No.	Right Hand Catalog No.	Double Extension Catalog No.	Hollow Output Catalog No.*	Left Hand Catalog No.	Right Hand Catalog No.	Double Extension Catalog No.	Hollow Output Catalog No.*	
182-4TC 213-5TC	NH8320205 NH8320217	NH8320209 NH8320229	NH8320213 NH8320241	NH8320569.XX NH8320573.XX	NH8320277 NH8320289	NH8320281 NH8320301	NH8320285 NH8320313	NH8320593.XX NH8320597.XX	5
182-4TC 213-5TC	NH8320206 NH8320218	NH8320210 NH8320230	NH8320214 NH8320242	NH8320570.XX NH8320574.XX	NH8320278 NH8320290	NH8320282 NH8320302	NH8320286 NH8320314	NH8320594.XX NH8320598.XX	7.5
143-5TC 182-4TC 213-5TC	NH8320049 NH8320073 NH8320219	NH8320057 NH8320081 NH8320231	NH8320065 NH8320089 NH8320243	NH8320517.XX NH8320525.XX NH8320575.XX	NH8320145 NH8320169 NH8320291	NH8320153 NH8320177 NH8320303	NH8320161 NH8320185 NH8320315	NH8320541.XX NH8320549.XX NH8320599.XX	10
143-5TC 182-4TC	NH8320050 NH8320074	NH8320058 NH8320082	NH8320066 NH8320090	NH8320518.XX NH8320526.XX	NH8320146 NH8320170	NH8320154 NH8320178	NH8320162 NH8320186	NH8320542.XX NH8320550.XX	15
143-5TC 182-4TC	NH8320051 NH8320075	NH8320059 NH8320083	NH8320067 NH8320091	NH8320519.XX NH8320527.XX	NH8320147 NH8320171	NH8320155 NH8320179	NH8320163 NH8320187	NH8320543.XX NH8320551.XX	20
143-5TC 182-4TC	NH8320052 NH8320076	NH8320060 NH8320084	NH8320068 NH8320092	NH8320520.XX NH8320528.XX	NH8320148 NH8320172	NH8320156 NH8320180	NH8320164 NH8320188	NH8320544.XX NH8320552.XX	25
143-5TC 182-4TC	NH8320053 NH8320077	NH8320061 NH8320085	NH8320069 NH8320093	NH8320521.XX NH8320529.XX	NH8320149 NH8320173	NH8320157 NH8320181	NH8320165 NH8320189	NH8320545.XX NH8320553.XX	30
56C 143-5TC 182-4TC	NH8320030 NH8320054 NH8320078	NH8320038 NH8320062 NH8320086	NH8320046 NH8320070 NH8320094	NH8320514.XX NH8320522.XX NH8320530.XX	NH8320126 NH8320150 NH8320174	NH8320134 NH8320158 NH8320182	NH8320142 NH8320166 NH8320190	NH8320538.XX NH8320546.XX NH8320554.XX	40
56C 143-5TC 182-4TC	NH8320031 NH8320055 NH8320079	NH8320039 NH8320063 NH8320087	NH8320047 NH8320071 NH8320095	NH8320515.XX NH8320523.XX NH8320531.XX	NH8320127 NH8320151 NH8320175	NH8320135 NH8320159 NH8320183	NH8320143 NH8320167 NH8320191	NH8320539.XX NH8320547.XX NH8320555.XX	50
56C 143-5TC 182-4TC	NH8320032 NH8320056 NH8320080	NH8320040 NH8320064 NH8320088	NH8320048 NH8320072 NH8320096	NH8320516.XX NH8320524.XX NH8320532.XX	NH8320128 NH8320152 NH8320176	NH8320136 NH8320160 NH8320184	NH8320144 NH8320168 NH8320192	NH8320540.XX NH8320548.XX NH8320556.XX	60
56C 143-5TC	NH8320111 NH8320195	NH8320115 NH8320199	NH8320119 NH8320203	NH8320563.XX NH8320567.XX	NH8320255 NH8320267	NH8320259 NH8320271	NH8320263 NH8320275	NH8320587.XX NH8320591.XX	80
56C	NH8320112	NH8320116	NH8320120	NH8320564.XX	NH8320256	NH8320260	NH8320264	NH8320588.XX	100

For input/ output shaft overhung load and thrust load ratings, refer to pages 419-422.

▲ Consult Factory for other motor flanges available.

* Catalog numbers are for hollow output shaft reducers.

When ordering, substitute the XX suffix with the required output bore code.

Available bore codes

Fraction Size	1-3/16"	1-1/4"	1-7/16"	1-1/2"	1-5/8"	1-11/16"	1-3/4"	1-7/8"	1-15/16"	2"	2-3/16"
Decimal Size	1.188	1.250	1.438	1.500	1.625	1.688	1.750	1.875	1.938	2.000	2.188
Output Bore Code	19	20	23	24	26	27	28	30	31	32	35



NH Series Dimensions

Styles: BMQ, BM, B

CAST IRON
NH SERIES

Single Reduction
Worm Gear Reducers

Double Reduction
Worm - Worm Gear Reducers

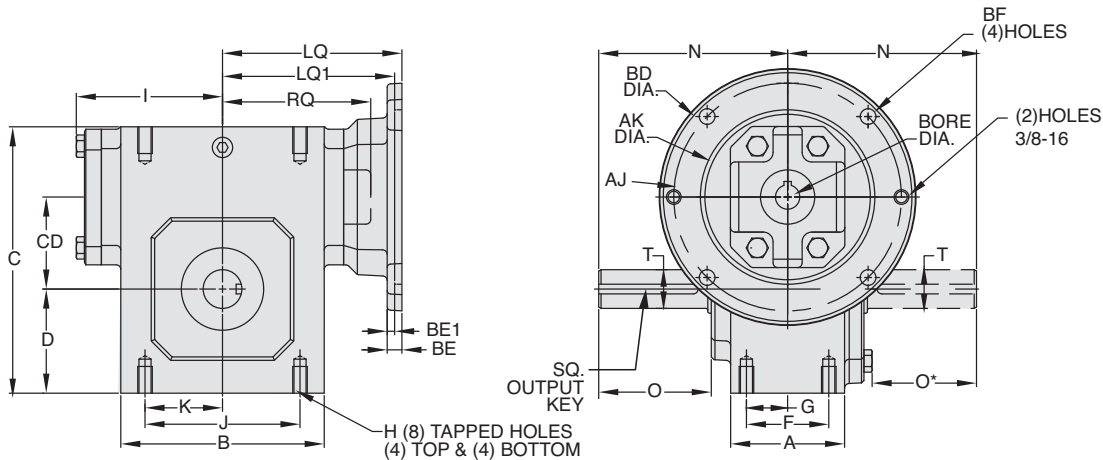
Double Reduction
Helical - Worm Gear Reducers

WASHGUARD® Reducers
and GEAR+MOTOR™

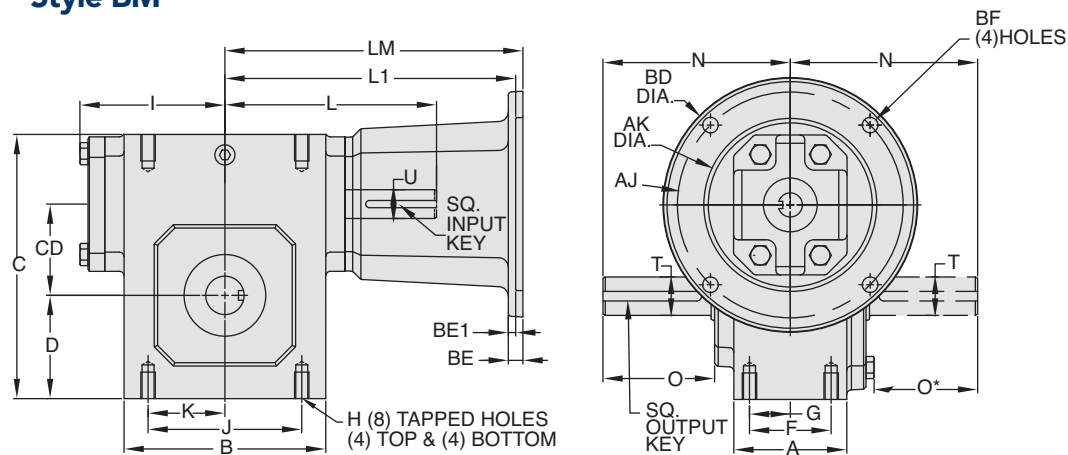
Ratio Multipliers

Accessories and
Additional Capabilities

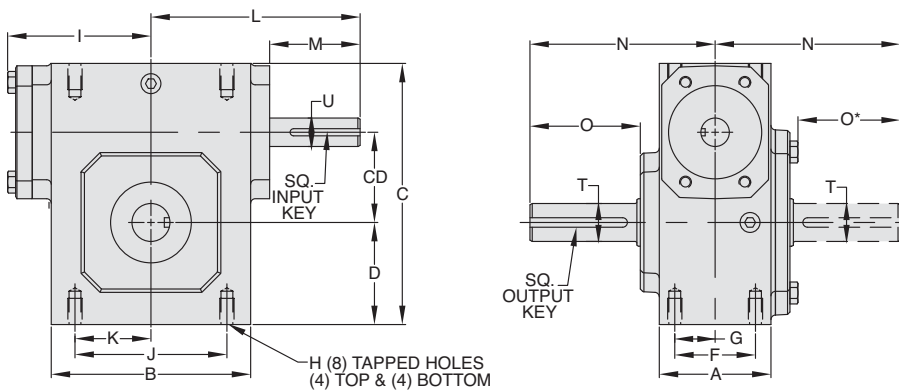
Style BMQ



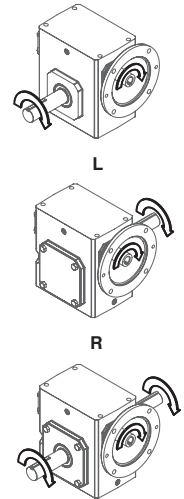
Style BM



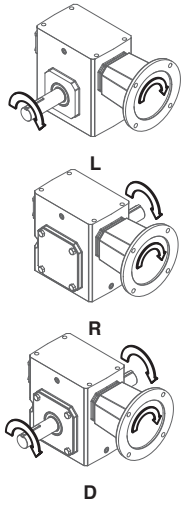
Style B



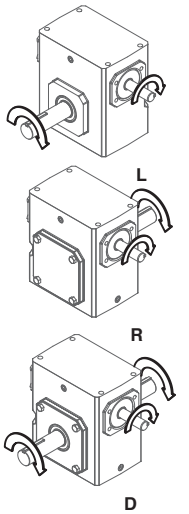
ASSEMBLIES



ASSEMBLIES



ASSEMBLIES



REVERSE ALL ARROWS FOR OPPOSITE INPUT SHAFT ROTATION. CONTACT FACTORY FOR OTHER MOUNTINGS OR ASSEMBLY POSITIONS.

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NH Series Dimensions

Styles: BMQ, BM, B



Single Reduction
Worm Gear Reducers

Double Reduction
Worm - Worm Gear Reducers

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Ratio Multipliers

Accessories and
Additional Capabilities

STYLE BMQ, BM, B DIMENSIONS (Inches)

Size	A	B	C	CD	D	F	G	H		I	J	K	L	M	N	O	O*	T +0.000 -0.0015	U +0.000 -0.0015	Input Key**	Output Key
								Tap Size	Depth												
NH813	2.82	3.80	4.66	1.33	1.72	2.00	1.00	5/16-18 UNC	.50	2.61	3.25	1.63	3.82	1.76	4.00	2.16	1.94	0.750	0.500	1/8 X 1.00	3/16 X 1.50
NH815	2.57	4.06	5.00	1.54	1.88	1.88	0.94	5/16-18 UNC	.63	3.14	3.25	1.63	4.35	1.76	4.25	2.56	2.35	0.750	0.625	3/16 X 1.38	3/16 X 1.50
NH818	2.56	4.50	5.44	1.75	2.06	1.88	0.94	5/16-18 UNC	.63	3.24	3.75	1.88	4.45	1.76	4.75	2.94	2.73	1.000	0.625	3/16 X 1.38	1/4 X 1.75
NH821	2.50	4.50	6.00	2.06	2.31	1.88	0.94	5/16-18 UNC	.63	3.61	3.25	1.63	4.82	1.76	4.34	2.66	2.45	0.875	0.625	3/16 X 1.38	3/16 X 1.50
NH824	2.94	5.25	6.88	2.38	2.69	2.13	1.06	3/8-16 UNC	.69	3.77	4.00	2.00	5.51	2.38	4.88	2.91	2.69	1.000	0.750	3/16 X 1.63	1/4 X 1.75
NH826	2.88	5.75	7.38	2.63	2.94	2.13	1.06	3/8-16 UNC	.69	4.34	4.00	2.00	6.07	2.38	5.25	3.28	3.07	1.125	0.750	3/16 X 1.63	1/4 X 1.75
NH830	3.12	6.62	8.25	3.00	3.38	2.38	1.19	3/8-16 UNC	.75	4.84	4.63	2.31	6.57	2.38	5.77	3.56	3.31	1.250	0.875	3/16 X 1.63	1/4 X 1.75
NH832	4.44	8.00	10.06	3.25	4.19	3.50	1.75	1/2-13 UNC	1.00	5.02	7.00	3.50	6.76	2.38	7.03	4.24	3.99	1.500	0.875	3/16 X 1.63	3/8 X 2.25
NH842	4.75	9.75	11.50	4.25	4.50	3.75	1.88	1/2-13 UNC	1.00	6.10	7.50	3.75	9.57	3.47	7.50	3.88	3.59	1.750	1.250	1/4 X 2.50	3/8 X 2.25
NH852	6.19	11.00	12.69	5.25	4.88	4.50	2.25	5/8-11 UNC	1.25	7.50	9.00	4.50	10.88	3.38	9.00	4.72	4.47	2.000	1.250	1/4 X 3.00	1/2 X 2.50

Motor Mounting Dimensions

NEMA DIMENSIONS (Inches)

Size	LM		L1		LQ	180TC	LQ1		48CZ/56C/140TC	RQ		
	48CZ	56C/140TC	180TC/210TC	250TC	48CZ/56C/140TC		180TC	210TC		250TC	180TC	210TC
NH813	5.63	6.07	N/A	N/A	3.46	N/A	N/A	N/A	3.09	N/A	N/A	N/A
NH815	6.16	6.60	N/A	N/A	3.99	N/A	N/A	N/A	3.62	N/A	N/A	N/A
NH818	6.26	6.70	N/A	N/A	4.09	N/A	N/A	N/A	3.59	N/A	N/A	N/A
NH821	6.63	7.07	N/A	N/A	4.46	N/A	N/A	N/A	4.06	N/A	N/A	N/A
NH824	N/A	7.76	8.76	N/A	4.63	5.06	N/A	N/A	4.09	4.56	N/A	N/A
NH826	N/A	8.32	9.32	N/A	5.19	5.62	N/A	N/A	4.82	5.13	N/A	N/A
NH830	N/A	8.82	9.82	N/A	5.69	6.12	6.56	N/A	5.32	5.63	6.06	N/A
NH832	N/A	9.01	10.01	N/A	5.88	6.31	6.75	N/A	5.51	5.81	6.25	N/A
NH842	N/A	11.81	12.90	13.46	6.77	7.21	7.21	7.77	6.04	6.68	6.68	7.24
NH852	N/A	13.21	14.30	14.86	7.85	8.61	8.61	9.17	7.35	7.98	7.98	8.54

NEMA DIMENSIONS (Inches)

Frame	AJ	AK	BD	BE	BE1	Bore Dia.	Keyway	BF
48CZ	3.75	3.00	4.36	0.38	N/A	0.500	1/8 X 1/16	0.28
56C	5.88	4.50	6.50	0.38	N/A	0.625	3/16 X 3/32	0.41
140TC	5.88	4.50	6.50	0.38	N/A	0.875	3/16 X 3/32	0.41
180TC	7.25	8.50	9.00	N/A	0.50	1.125	1/4 X 1/8	0.53
210TC	7.25	8.50	9.00	N/A	0.50	1.375	5/16 X 5/32	0.53
250TC	7.25	8.50	9.00	N/A	0.50	1.625	3/8 X 3/16	0.53

IEC B5 & B3/B5 METRIC DIMENSIONS (Inches)

Size	LQ1					RQ						
	D63D	D71D	D80D	D90D	D100LD/D112MD	D132D	D63D	D71D	D80D	D90D	D100LD/D112MD	D132D
NH813	2.62	2.65	2.89	N/A	N/A	N/A	2.45	2.47	2.71	N/A	N/A	N/A
NH815	3.15	3.18	3.42	N/A	N/A	N/A	2.98	3.00	3.24	N/A	N/A	N/A
NH818	3.25	3.28	3.52	N/A	N/A	N/A	2.95	2.97	3.21	N/A	N/A	N/A
NH821	3.62	3.65	3.89	N/A	N/A	N/A	3.43	3.44	3.68	N/A	N/A	N/A
NH824	N/A	3.72	4.34	N/A	N/A	N/A	N/A	3.46	3.71	N/A	N/A	N/A
NH826	N/A	4.28	4.90	4.90	5.30	N/A	N/A	4.09	4.72	4.72	5.07	N/A
NH830	N/A	4.78	5.41	5.41	5.80	N/A	N/A	4.59	5.22	5.22	5.57	N/A
NH832	N/A	4.97	5.59	5.59	5.99	N/A	N/A	4.78	5.41	5.41	5.76	N/A
NH842	N/A	N/A	N/A	6.38	6.39	7.17	N/A	N/A	N/A	6.16	6.14	6.93
NH852	N/A	N/A	N/A	7.78	7.78	8.57	N/A	N/A	N/A	7.46	7.45	8.24

IEC B5 & B3/B5 METRIC DIMENSIONS (MM)

Frame	AJ	AK	BD	BE	Bore Dia.	Keyway	BF TAP	OD
D63D	115	95	117	10	11	4 X 2	M8 X 1.25	131
D71D	130	110	132	11	14	5 X 2.5	M8 X 1.25	146
D80D	165	130	165	15	19	6 X 3	M10 X 1.50	184
D90D	165	130	165	15	24	8 X 3.5	M10 X 1.50	184
D100LD/D112MD	215	180	216	18	28	8 X 3.5	M12 X 1.75	237
D132D	265	230	267	18	38	10 X 4	M12 X 1.75	290

- * Applies to double output shaft
- ◆ Keyway width by depth
- 48CZ not available
- ◇ Metric IEC B5 input flange options are available only on quill input styles.
- * Style B and BM only.



For safety, purchaser or user should provide protective guards over shaft extensions and any couplings, sheaves and belts, sprockets and chains, etc., mounted thereon.

GROVE GEAR OE SERIES INTERCHANGE GUIDE

Grove Gear OE Series	Grove Gear IRONMAN NH Series
UF	BMQ
UFC	BM
U	B

Refer to page 8 for complete interchange guide for original Grove Gear OE Series products.