

How To Use Quick Selections

Maximum Rating Tables for Double Reduction Gear Reducers are shown on pages 101-102. Selection of the appropriate gear reducer can be made using those tables or the Quick Selections on the following pages.

BEFORE YOU START:

Identify the Service Factor of the application (see page 171).

Determine the actual input horsepower of the motor by multiplying the motor's nameplate horsepower by the Service Factor.

Determine the output speed (RPM) required at output shaft of reducer.

Identify the mounting style required by your application from the style charts shown on pages 98-99. Note the basic mounting style (DMQ, DHMQ, etc.).

To select the proper gear reducer size, use the Quick Selections as shown:

Bravo DOUBLE REDUCTION • WORM/WORM
ALUMINUM GEAR REDUCERS QUICK SELECTIONS

LEESON
HYDRO-MEC

1 Find the appropriate Quick Selections page. The tables begin on page 104 and are organized by motor HP.

2 Locate output RPM column on left side of the table. All ratings are based on an input speed of 1750 RPM. Scroll down to the output speed (RPM) required. Output speeds may be rounded to the nearest whole number. For exact output speed, divide 1750 by the ratio listed.

3 Move to the Service Factor column and find one suitable to meet the application requirements. Refer to page 171 for AGMA recommended service factors.

4 Check load capacities against the needs of your application. Do not exceed the overhung load (OHL) shown in the table. Detailed instructions for calculating the actual overhung load are shown on page 150. If overhung and thrust loads will be applied simultaneously or if the load exceeds listed capacities, contact LEESON.

5 Select motor frame size.

6 Identify the model number of the basic reducer by continuing to the right. See page 100 for detailed information on building an exact model number. Model numbers for solid and hollow output shaft styles are shown in quick selection tables. To complete model number, select shaft hand and mounting assembly from dimensional pages.

7 Verify physical dimensions using the dimensional drawings shown on pages 108-119.

Style DMQ & DHMQ Motorized Quill Input NEMA Frame Selections 1750 RPM Input

1/6 HP / 0.12 KW

Output Speed (RPM)	Service Factor	Output Torque (lb-in)	Overhung Load (lbs.)	Ratio	Motor Frame	Weight (lbs.)	Style DMQ Solid Output		Style DHMQ Hollow Output	
							Model Number	Weight (lbs.)	Model Number	Weight (lbs.)
25.0	2.07	222	405	70	56C	13	DMQ518-70-56-12	12	DHMQ518-70-H-56-12	
25.0	3.58	218	562	70	56C	15	DMQ520-70-56-16	13	DHMQ520-70-H-56-16	
17.9	1.54	299	427	98	56C	13	DMQ518-98-56-12	12	DHMQ518-98-H-56-12	
				98	56C	15	DMQ520-98-56-16	13	DHMQ520-98-H-56-16	
				108	56C	15	DMQ520-108-56-16	13	DHMQ520-108-H-56-16	
				141	56C	15	DMQ520-141-56-16	13	DHMQ520-141-H-56-16	
				141	56C	15	DMQ520-141-56-16	13	DHMQ520-141-H-56-16	
				151	56C	15	DMQ520-151-56-16	13	DHMQ520-151-H-56-16	
				180	56C	15	DMQ520-180-56-16	13	DHMQ520-180-H-56-16	
8.93	4.58	587	1304	196	56C	35	DMQ534-196-56-24	30	DHMQ534-196-H-56-24	
8.33	3.47	557	899	210	56C	20	DMQ525-210-56-18	18	DHMQ525-210-H-56-18	
6.73	1.24	644	629	260	56C	15	DMQ520-260-56-16	13	DHMQ520-260-H-56-16	
6.25	4.99	758	1304	280	56C	35	DMQ534-280-56-24	30	DHMQ534-280-H-56-24	
5.83	2.66	726	899	300	56C	20	DMQ525-300-56-18	18	DHMQ525-300-H-56-18	
4.46	3.80	995	1304	392	56C	35	DMQ534-392-56-24	30	DHMQ534-392-H-56-24	
4.17	2.05	943	899	420	56C	20	DMQ525-420-56-18	18	DHMQ525-420-H-56-18	
2.98	3.02	1250	1304	588	56C	35	DMQ534-588-56-24	30	DHMQ534-588-H-56-24	
2.78	1.62	1197	899	630	56C	30	DMQ525-630-56-18	18	DHMQ525-630-H-56-18	
2.23	2.46	1537	1304	784	56C	35	DMQ534-784-56-24	30	DHMQ534-784-H-56-24	
2.08	1.29	1503	899	840	56C	20	DMQ525-840-56-18	18	DHMQ525-840-H-56-18	
1.69	1.92	1969	1304	1036	56C	35	DMQ534-1036-56-24	30	DHMQ534-1036-H-56-24	
1.58	1.01	1915	899	1110	56C	20	DMQ525-1110-56-18	18	DHMQ525-1110-H-56-18	
1.36	1.70	2224	1304	1280	56C	35	DMQ534-1280-56-24	30	DHMQ534-1280-H-56-24	
1.04	1.13	2812	1304	1680	56C	35	DMQ534-1680-56-24	30	DHMQ534-1680-H-56-24	

Bravo® Worm / Worm Double Reduction

**Style DMQ & DHMQ
Motorized Quill Input
NEMA Frame Selections
1750 RPM Input**



Bravo® Worm / Worm Double Reduction

1/6 HP / 0.12 KW Gear Reducer Quick Selections										
Output Speed (RPM)	Service Factor▼	Output Torque (lb-in)	Overhung Load (lbs.)●	Ratio	Motor◆ Frame	Weight (lbs.)	Style DMQ Solid Output		Style DHMQ Hollow Output	
							Model Number■	Weight (lbs.)	Model Number■	
25.0	2.07	222	405	70	56C	13	DMQ518-70-__-56-12	12	DHMQ518-70-H_-56-12	
25.0	3.58	218	562	70	56C	15	DMQ520-70-__-56-16	13	DHMQ520-70-H_-56-16	
17.9	1.54	299	427	98	56C	13	DMQ518-98-__-56-12	12	DHMQ518-98-H_-56-12	
17.9	2.66	293	596	98	56C	15	DMQ520-98-__-56-16	13	DHMQ520-98-H_-56-16	
16.7	5.93	326	888	105	56C	20	DMQ525-105-__-56-18	18	DHMQ525-105-H_-56-18	
12.5	1.90	419	629	140	56C	15	DMQ520-140-__-56-16	13	DHMQ520-140-H_-56-16	
12.5	5.75	468	1304	140	56C	35	DMQ534-140-__-56-24	30	DHMQ534-140-H_-56-24	
11.9	1.19	424	450	147	56C	13	DMQ518-147-__-56-12	12	DHMQ518-147-H_-56-12	
11.7	4.32	448	899	150	56C	20	DMQ525-150-__-56-18	18	DHMQ525-150-H_-56-18	
9.62	1.62	493	629	182	56C	15	DMQ520-182-__-56-16	13	DHMQ520-182-H_-56-16	
8.93	4.58	587	1304	196	56C	35	DMQ534-196-__-56-24	30	DHMQ534-196-H_-56-24	
8.33	3.47	557	899	210	56C	20	DMQ525-210-__-56-18	18	DHMQ525-210-H_-56-18	
6.73	1.24	644	629	260	56C	15	DMQ520-260-__-56-16	13	DHMQ520-260-H_-56-16	
6.25	4.99	758	1304	280	56C	35	DMQ534-280-__-56-24	30	DHMQ534-280-H_-56-24	
5.83	2.66	726	899	300	56C	20	DMQ525-300-__-56-18	18	DHMQ525-300-H_-56-18	
4.46	3.80	995	1304	392	56C	35	DMQ534-392-__-56-24	30	DHMQ534-392-H_-56-24	
4.17	2.05	943	899	420	56C	20	DMQ525-420-__-56-18	18	DHMQ525-420-H_-56-18	
2.98	3.02	1252	1304	588	56C	35	DMQ534-588-__-56-24	30	DHMQ534-588-H_-56-24	
2.78	1.62	1197	899	630	56C	20	DMQ525-630-__-56-18	18	DHMQ525-630-H_-56-18	
2.23	2.46	1537	1304	784	56C	35	DMQ534-784-__-56-24	30	DHMQ534-784-H_-56-24	
2.08	1.29	1503	899	840	56C	20	DMQ525-840-__-56-18	18	DHMQ525-840-H_-56-18	
1.69	1.92	1969	1304	1036	56C	35	DMQ534-1036-__-56-24	30	DHMQ534-1036-H_-56-24	
1.58	1.01	1915	899	1110	56C	20	DMQ525-1110-__-56-18	18	DHMQ525-1110-H_-56-18	
1.36	1.70	2224	1304	1288	56C	35	DMQ534-1288-__-56-24	30	DHMQ534-1288-H_-56-24	
1.04	1.13	2812	1304	1680	56C	35	DMQ534-1680-__-56-24	30	DHMQ534-1680-H_-56-24	

- ◆ NEMA input selections shown. Reducers are also available with metric IEC input flanges. Refer to page 107 for frame options available. Metric IEC input selections will have a metric output shaft as standard. Contact LEESON for catalog number information.
- ▼ Service Factor is based on maximum torque rating of reducer. Refer to page 171 for special application considerations.
- Output shaft overhung load rating is based on load applied at center of output shaft extension (solid output shaft style).
- Double reduction reducer selections should be ordered using the model numbers shown. Replace “__” with appropriate mounting position. Refer to dimensional pages for mounting position options.

This Quick Selection is only for style DMQ (solid output) & DHMQ (hollow output) reducers. For other reducer configurations, see the MAXIMUM RATING TABLES beginning on page 101.

**Style DMQ & DHMQ
Motorized Quill Input
NEMA Frame Selections
1750 RPM Input**



1/4 HP / 0.18 KW						Gear Reducer Quick Selections			
Output Speed (RPM)	Service Factor▼	Output Torque (lb-in)	Overhung● Load (lbs.)	Ratio	Motor◆ Frame	Style DMQ Solid Output		Style DHMQ Hollow Output	
						Weight (lbs.)	Model Number■	Weight (lbs.)	Model Number■
25.0	1.33	347	405	70	56C	13	DMQ518-70-_-56-12	12	DHMQ518-70-H_-56-12
25.0	2.29	340	562	70	56C	15	DMQ520-70-_-56-16	13	DHMQ520-70-H_-56-16
17.9	0.99	467	427	98	56C	13	DMQ518-98-_-56-12	12	DHMQ518-98-H_-56-12
17.9	1.70	458	596	98	56C	15	DMQ520-98-_-56-16	13	DHMQ520-98-H_-56-16
17.9	4.52	502	1259	98	56C	35	DMQ534-98-_-56-24	30	DHMQ534-98-H_-56-24
16.7	3.80	509	888	105	56C	20	DMQ525-105-_-56-18	18	DHMQ525-105-H_-56-18
12.5	1.22	655	629	140	56C	15	DMQ520-140-_-56-16	13	DHMQ520-140-H_-56-16
12.5	3.68	731	1304	140	56C	35	DMQ534-140-_-56-24	30	DHMQ534-140-H_-56-24
11.7	2.76	700	899	150	56C	20	DMQ525-150-_-56-18	18	DHMQ525-150-H_-56-18
9.62	1.04	770	629	182	56C	15	DMQ520-182-_-56-16	13	DHMQ520-182-H_-56-16
8.93	2.93	917	1304	196	56C	35	DMQ534-196-_-56-24	30	DHMQ534-196-H_-56-24
8.33	2.22	870	899	210	56C	20	DMQ525-210-_-56-18	18	DHMQ525-210-H_-56-18
6.25	3.19	1185	1304	280	56C	35	DMQ534-280-_-56-24	30	DHMQ534-280-H_-56-24
5.83	1.70	1135	899	300	56C	20	DMQ525-300-_-56-18	18	DHMQ525-300-H_-56-18
4.46	2.43	1554	1304	392	56C	35	DMQ534-392-_-56-24	30	DHMQ534-392-H_-56-24
4.17	1.31	1474	899	420	56C	20	DMQ525-420-_-56-18	18	DHMQ525-420-H_-56-18
2.98	1.93	1956	1304	588	56C	35	DMQ534-588-_-56-24	30	DHMQ534-588-H_-56-24
2.78	1.03	1870	899	630	56C	20	DMQ525-630-_-56-18	18	DHMQ525-630-H_-56-18
2.23	1.58	2402	1304	784	56C	35	DMQ534-784-_-56-24	30	DHMQ534-784-H_-56-24
1.69	1.23	3077	1304	1036	56C	35	DMQ534-1036-_-56-24	30	DHMQ534-1036-H_-56-24
1.36	1.09	3476	1304	1288	56C	35	DMQ534-1288-_-56-24	30	DHMQ534-1288-H_-56-24
1/3 HP / 0.25 KW						Gear Reducer Quick Selections			
25.0	1.01	458	405	70	56C	13	DMQ518-70-_-56-12	12	DHMQ518-70-H_-56-12
25.0	1.74	449	562	70	56C	15	DMQ520-70-_-56-16	13	DHMQ520-70-H_-56-16
25.0	4.23	458	854	70	56C	20	DMQ525-70-_-56-18	18	DHMQ525-70-H_-56-18
17.9	1.29	604	596	98	56C	15	DMQ520-98-_-56-16	13	DHMQ520-98-H_-56-16
17.9	3.42	662	1259	98	56C	35	DMQ534-98-_-56-24	30	DHMQ534-98-H_-56-24
16.7	2.88	673	888	105	56C	20	DMQ525-105-_-56-18	18	DHMQ525-105-H_-56-18
12.5	2.79	965	1304	140	56C	35	DMQ534-140-_-56-24	30	DHMQ534-140-H_-56-24
11.7	2.09	924	899	150	56C	20	DMQ525-150-_-56-18	18	DHMQ525-150-H_-56-18
8.93	2.22	1211	1304	196	56C	35	DMQ534-196-_-56-24	30	DHMQ534-196-H_-56-24
8.33	1.68	1149	899	210	56C	20	DMQ525-210-_-56-18	18	DHMQ525-210-H_-56-18
6.25	2.42	1564	1304	280	56C	35	DMQ534-280-_-56-24	30	DHMQ534-280-H_-56-24
5.83	1.29	1498	899	300	56C	20	DMQ525-300-_-56-18	18	DHMQ525-300-H_-56-18
4.46	1.84	2052	1304	392	56C	35	DMQ534-392-_-56-24	30	DHMQ534-392-H_-56-24
4.17	0.99	1945	899	420	56C	20	DMQ525-420-_-56-18	18	DHMQ525-420-H_-56-18
2.98	1.47	2582	1304	588	56C	35	DMQ534-588-_-56-24	30	DHMQ534-588-H_-56-24
2.23	1.19	3171	1304	784	56C	35	DMQ534-784-_-56-24	30	DHMQ534-784-H_-56-24

Bravo® Worm / Worm
Double Reduction

◆ NEMA input selections shown. Reducers are also available with metric IEC input flanges. Refer to page 107 for frame options available. Metric IEC input selections will have a metric output shaft as standard. Contact LEESON for catalog number information.

▼ Service Factor is based on maximum torque rating of reducer. Refer to page 171 for special application considerations.

● Output shaft overhung load rating is based on load applied at center of output shaft extension (solid output shaft style).

■ Double reduction reducer selections should be ordered using the model numbers shown. Replace “_” with appropriate mounting position. Refer to dimensional pages for mounting position options.

This Quick Selection is only for style DMQ (solid output) & DHMQ (hollow output) reducers. For other reducer configurations, see the MAXIMUM RATING TABLES beginning on page 101.

**Style DMQ & DHMQ
Motorized Quill Input
NEMA Frame Selections
1750 RPM Input**



Bravo® Worm / Worm
Double Reduction

1/2 HP / 0.37 KW						Gear Reducer Quick Selections			
Output Speed (RPM)	Service Factor▼	Output Torque (lb-in)	Overhung Load (lbs.)●	Ratio	Motor Frame◆	Style DMQ Solid Output		Style DHMQ Hollow Output	
						Weight (lbs.)	Model Number■	Weight (lbs.)	Model Number■
25.0	1.15	681	562	70	56C	15	DMQ520-70-__-56-16	13	DHMQ520-70-H_-56-16
25.0	2.79	693	854	70	56C	20	DMQ525-70-__-56-18	18	DHMQ525-70-H_-56-18
17.9	2.26	1003	1259	98	56C	35	DMQ534-98-__-56-24	30	DHMQ534-98-H_-56-24
16.7	1.90	1019	888	105	56C	20	DMQ525-105-__-56-18	18	DHMQ525-105-H_-56-18
12.5	1.84	1462	1304	140	56C	35	DMQ534-140-__-56-24	30	DHMQ534-140-H_-56-24
11.7	1.38	1401	899	150	56C	20	DMQ525-150-__-56-18	18	DHMQ525-150-H_-56-18
8.93	1.47	1835	1304	196	56C	35	DMQ534-196-__-56-24	30	DHMQ534-196-H_-56-24
8.33	1.11	1740	899	210	56C	20	DMQ525-210-__-56-18	18	DHMQ525-210-H_-56-18
6.25	1.60	2370	1304	280	56C	35	DMQ534-280-__-56-24	30	DHMQ534-280-H_-56-24
4.46	1.22	3109	1304	392	56C	35	DMQ534-392-__-56-24	30	DHMQ534-392-H_-56-24
2.98	0.97	3913	1304	588	56C	35	DMQ534-588-__-56-24	30	DHMQ534-588-H_-56-24

3/4 HP / 0.55 KW						Gear Reducer Quick Selections			
Output Speed (RPM)	Service Factor▼	Output Torque (lb-in)	Overhung Load (lbs.)●	Ratio	Motor Frame◆	Style DMQ Solid Output		Style DHMQ Hollow Output	
						Weight (lbs.)	Model Number■	Weight (lbs.)	Model Number■
25.0	1.86	1040	854	70	56C	20	DMQ525-70-__-56-18	18	DHMQ525-70-H_-56-18
25.0	2.10	1078	1124	70	56C	35	DMQ534-70-__-56-24	30	DHMQ534-70-H_-56-24
17.9	1.51	1505	1259	98	56C	35	DMQ534-98-__-56-24	30	DHMQ534-98-H_-56-24
16.7	1.27	1528	888	105	56C	20	DMQ525-105-__-56-18	18	DHMQ525-105-H_-56-18
12.5	1.23	2193	1304	140	56C	35	DMQ534-140-__-56-24	30	DHMQ534-140-H_-56-24
11.7	0.92	2101	899	150	56C	20	DMQ525-150-__-56-18	18	DHMQ525-150-H_-56-18
8.93	0.98	2752	1304	196	56C	35	DMQ534-196-__-56-24	30	DHMQ534-196-H_-56-24
6.25	1.06	3555	1304	280	56C	35	DMQ534-280-__-56-24	30	DHMQ534-280-H_-56-24

1 HP / 0.75 KW						Gear Reducer Quick Selections			
Output Speed (RPM)	Service Factor▼	Output Torque (lb-in)	Overhung Load (lbs.)●	Ratio	Motor Frame◆	Style DMQ Solid Output		Style DHMQ Hollow Output	
						Weight (lbs.)	Model Number■	Weight (lbs.)	Model Number■
25.0	1.40	1387	854	70	56C	20	DMQ525-70-__-56-18	525	DHMQ525-70-H_-56-18
25.0	1.58	1437	1124	70	56C	35	DMQ534-70-__-56-24	534	DHMQ534-70-H_-56-24
17.9	1.13	2007	1259	98	56C	35	DMQ534-98-__-56-24	534	DHMQ534-98-H_-56-24
16.7	0.95	2038	888	105	56C	20	DMQ525-105-__-56-18	525	DHMQ525-105-H_-56-18
12.5	0.92	2924	1304	140	56C	35	DMQ534-140-__-56-24	534	DHMQ534-140-H_-56-24

- ◆ NEMA input selections shown. Reducers are also available with metric IEC input flanges. Refer to page 107 for frame options available. Metric IEC input selections will have a metric output shaft as standard. Contact LEESON for catalog number information.
- ▼ Service Factor is based on maximum torque rating of reducer. Refer to page 171 for special application considerations.
- Output shaft overhung load rating is based on load applied at center of output shaft extension (solid output shaft style).
- Double reduction reducer selections should be ordered using the model numbers shown. Replace " __ " with appropriate mounting position. Refer to dimensional pages for mounting position options.

This Quick Selection is only for style DMQ (solid output) & DHMQ (hollow output) reducers. For other reducer configurations, see the MAXIMUM RATING TABLES beginning on page 101.