

How To Use Quick Selections

Maximum Rating Tables for Double Reduction Gear Reducers are shown on pages 123-124. 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 120-121. Note the basic mounting style (DXMQ, DXHMQ, etc.).

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

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

LEESON
HYDRO-MEC

Style DXMQ Motorized NEMA Frame Selections 1750 RPM Input

1 Find the appropriate Quick Selections page. The tables begin on page 126 and are organized by motor HP.

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.

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	Weight (lbs.)	Style DXMQ Solid Output Model Number	Weight (lbs.)	Style DXHMQ Hollow Output Model Number
58	2.09	201	299	30.1	56C	9	DXMQ518-30.1-56-12	8	DXHMQ518-30.1-H-56-12
58	2.85	206	414	30.1	56C	11	DXMQ520-30.1-56-16	9	DXHMQ520-30.1-H-56-16
41	1.59	264	348	43	56C	9	DXMQ518-43-56-12	8	DXHMQ518-43-H-56-12
41	2.14	275	483	43	56C	11	DXMQ520-43-56-16	9	DXHMQ520-43-H-56-16
38	6.70	235	764	46.5	56C	19	DXMQ525-46.5-56-18	17	DXHMQ525-46.5-H-56-18
					56C	19	DXMQ525-55.8-56-18	17	DXHMQ525-55.8-H-56-18
					56C	9	DXMQ518-60.2-56-12	8	DXHMQ518-60.2-H-56-12
					56				DXHMQ520-60.2-H-56-16
					56				DXHMQ525-69.8-H-56-18
					56				DXHMQ520-77.4-H-56-16
					56				DXHMQ525-87.8-H-56-18
					56				DXHMQ534-103.9-H-56
					56				DXHMQ525-110.9-H-56
					56C	19	DXMQ525-110.9-56-18	17	DXHMQ525-110.9-H-56
					56C	11	DXMQ520-111.8-56-16	9	DXHMQ520-111.8-H-56
					56C	47	DXMQ534-129.4-56-24	42	DXHMQ534-129.4-H-56
					56C	19	DXMQ525-138.6-56-18	17	DXHMQ525-138.6-H-56
					56C	19	DXMQ525-166.3-56-18	17	DXHMQ525-166.3-H-56
					56C	47	DXMQ534-175.6-56-24	42	DXHMQ534-175.6-H-56
					56C	19	DXMQ525-207.9-56-18	17	DXHMQ525-207.9-H-56
					56C	47	DXMQ534-240.2-56-24	42	DXHMQ534-240.2-H-56
					56C	19	DXMQ525-309.5-56-18	17	DXHMQ525-309.5-H-56
					56C	47	DXMQ534-309.5-H-56	42	DXHMQ534-309.5-H-56
					56C	47	DXMQ534-422.1-H-56	42	DXHMQ534-422.1-H-56
					56C	47	DXMQ534-443.5-H-56	42	DXHMQ534-443.5-H-56
					56C	47	DXMQ534-604.8-56-24	42	DXHMQ534-604.8-H-56

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.

5 Select motor frame size.

6 Identify the model number of the basic reducer by continuing to the right. See page 122 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.

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

LEESON
HYDRO-MEC

Style DXMQ Motorized NEMA Frame Selections 1750 RPM Input

7 Verify physical dimensions using the dimensional drawings shown on pages 130-141.

1/3 HP / 0.25 KW Gear Reducer Quick Selections									
Output Speed (RPM)	Service Factor	Output Torque (lb-in)	Overhung Load (lbs.)	Ratio	Motor Frame	Weight (lbs.)	Style DXMQ Solid Output Model Number	Weight (lbs.)	Style DXHMQ Hollow Output Model Number
58	1.58	265	299	30.1	56C	9	DXMQ518-30.1-56-12	8	DXHMQ518-30.1-H-56-12
58	2.16	272	414	30.1	56C	11	DXMQ520-30.1-56-16	9	DXHMQ520-30.1-H-56-16

Bravo® Helical / Worm Double Reduction

Bravo® Helical / Worm Double Reduction

**Style DXMQ & DXHMQ
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 DXMQ Solid Output		Style DXHMQ Hollow Output	
						Weight (lbs.)	Model Number ■	Weight (lbs.)	Model Number ■
58	2.09	201	299	30.1	56C	9	DXMQ518-30.1-__-56-12	8	DXHMQ518-30.1-H-56-12
58	2.85	206	414	30.1	56C	11	DXMQ520-30.1-__-56-16	9	DXHMQ520-30.1-H-56-16
41	1.59	264	348	43	56C	9	DXMQ518-43-__-56-12	8	DXHMQ518-43-H-56-12
41	2.14	275	483	43	56C	11	DXMQ520-43-__-56-16	9	DXHMQ520-43-H-56-16
38	6.70	235	764	46.5	56C	19	DXMQ525-46.5-__-56-18	17	DXHMQ525-46.5-H-56-18
31	4.83	325	798	55.8	56C	19	DXMQ525-55.8-__-56-18	17	DXHMQ525-55.8-H-56-18
29.1	1.29	326	393	60.2	56C	9	DXMQ518-60.2-__-56-12	8	DXHMQ518-60.2-H-56-12
29.1	1.57	375	528	60.2	56C	11	DXMQ520-60.2-__-56-16	9	DXHMQ520-60.2-H-56-16
25.1	4.11	383	854	69.8	56C	19	DXMQ525-69.8-__-56-18	17	DXHMQ525-69.8-H-56-18
22.6	1.58	425	573	77.4	56C	11	DXMQ520-77.4-__-56-16	9	DXHMQ520-77.4-H-56-16
19.9	2.92	570	877	87.8	56C	19	DXMQ525-87.8-__-56-18	17	DXHMQ525-87.8-H-56-18
16.9	5.26	559	1259	103.9	56C	47	DXMQ534-103.9-__-56-24	42	DXHMQ534-103.9-H-56-24
15.8	2.38	698	899	110.9	56C	19	DXMQ525-110.9-__-56-18	17	DXHMQ525-110.9-H-56-18
15.7	1.10	612	629	111.8	56C	11	DXMQ520-111.8-__-56-16	9	DXHMQ520-111.8-H-56-16
13.5	4.20	700	1304	129.4	56C	47	DXMQ534-129.4-__-56-24	42	DXHMQ534-129.4-H-56-24
12.6	2.02	825	899	138.6	56C	19	DXMQ525-138.6-__-56-18	17	DXHMQ525-138.6-H-56-18
10.5	1.85	900	899	166.3	56C	19	DXMQ525-166.3-__-56-18	17	DXHMQ525-166.3-H-56-18
9.97	3.38	996	1304	175.6	56C	47	DXMQ534-175.6-__-56-24	42	DXHMQ534-175.6-H-56-24
8.42	1.44	1029	899	207.9	56C	19	DXMQ525-207.9-__-56-18	17	DXHMQ525-207.9-H-56-18
7.28	2.79	1147	1304	240.2	56C	47	DXMQ534-240.2-__-56-24	42	DXHMQ534-240.2-H-56-24
5.65	1.04	1422	899	309.5	56C	19	DXMQ525-309.5-__-56-18	17	DXHMQ525-309.5-H-56-18
5.65	2.20	1450	1304	309.5	56C	47	DXMQ534-309.5-__-56-24	42	DXHMQ534-309.5-H-56-24
4.15	1.49	1974	1304	422.1	56C	47	DXMQ534-422.1-__-56-24	42	DXHMQ534-422.1-H-56-24
3.95	1.41	1795	1304	443.5	56C	47	DXMQ534-443.5-__-56-24	42	DXHMQ534-443.5-H-56-24
2.89	1.16	2181	1304	604.8	56C	47	DXMQ534-604.8-__-56-24	42	DXHMQ534-604.8-H-56-24
1/3 HP / 0.25 KW						Gear Reducer Quick Selections			
58	1.58	265	299	30.1	56C	9	DXMQ518-30.1-__-56-12	8	DXHMQ518-30.1-H-56-12
58	2.16	273	414	30.1	56C	11	DXMQ520-30.1-__-56-16	9	DXHMQ520-30.1-H-56-16
41	1.15	365	348	43	56C	9	DXMQ518-43-__-56-12	8	DXHMQ518-43-H-56-12
41	1.55	380	483	43	56C	11	DXMQ520-43-__-56-16	9	DXHMQ520-43-H-56-16
38	4.10	383	764	46.5	56C	19	DXMQ525-46.5-__-56-18	17	DXHMQ525-46.5-H-56-18
31	3.66	429	798	55.8	56C	19	DXMQ525-55.8-__-56-18	17	DXHMQ525-55.8-H-56-18
29.1	0.98	429	393	60.2	56C	9	DXMQ518-60.2-__-56-12	8	DXHMQ518-60.2-H-56-12
29.1	1.19	493	528	60.2	56C	11	DXMQ520-60.2-__-56-16	9	DXHMQ520-60.2-H-56-16

- ◆ NEMA input selections shown. Reducers are also available with metric IEC input flanges. Refer to page 129 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.

TABLE CONTINUES ON NEXT PAGE

This Quick Selection is only for style DXHMQ (solid output) & DXMQ (hollow output) reducers. For other reducer configurations, see the MAXIMUM RATING TABLES beginning on page 123.

Bravo® Helical / Worm Double Reduction

**Style DXMQ & DXHMQ
Motorized Quill Input
NEMA Frame Selections
1750 RPM Input**

1/3 HP / 0.25 KW						Gear Reducer Quick Selections			
Output Speed (RPM)	Service Factor▼	Output Torque (lb-in)	Overhung Load (lbs.)●	Ratio	Motor Frame◆	Style DXMQ Solid Output		Style DXHMQ Hollow Output	
						Weight (lbs.)	Model Number■	Weight (lbs.)	Model Number■
25.1	3.11	505	854	69.8	56C	19	DXMQ525-69.8-__-56-18	17	DXHMQ525-69.8-H-56-18
22.6	1.20	561	573	77.4	56C	11	DXMQ520-77.4-__-56-16	9	DXHMQ520-77.4-H-56-16
21.7	5.46	585	1169	80.6	56C	47	DXMQ534-80.6-__-56-24	42	DXHMQ534-80.6-H-56-24
19.9	2.21	752	877	87.8	56C	19	DXMQ525-87.8-__-56-18	17	DXHMQ525-87.8-H-56-18
16.9	3.99	738	1259	103.9	56C	47	DXMQ534-103.9-__-56-24	42	DXHMQ534-103.9-H-56-24
15.8	1.81	921	899	110.9	56C	19	DXMQ525-110.9-__-56-18	17	DXHMQ525-110.9-H-56-18
13.5	3.18	924	1304	129.4	56C	47	DXMQ534-129.4-__-56-24	42	DXHMQ534-129.4-H-56-24
12.6	1.53	1089	899	138.6	56C	19	DXMQ525-138.6-__-56-18	17	DXHMQ525-138.6-H-56-18
10.5	1.40	1188	899	166.3	56C	19	DXMQ525-166.3-__-56-18	17	DXHMQ525-166.3-H-56-18
9.97	2.56	1314	1304	175.6	56C	47	DXMQ534-175.6-__-56-24	42	DXHMQ534-175.6-H-56-24
8.42	1.09	1359	899	207.9	56C	19	DXMQ525-207.9-__-56-18	17	DXHMQ525-207.9-H-56-18
7.28	2.11	1514	1304	240.2	56C	47	DXMQ534-240.2-__-56-24	42	DXHMQ534-240.2-H-56-24
5.65	1.67	1914	1304	309.5	56C	47	DXMQ534-309.5-__-56-24	42	DXHMQ534-309.5-H-56-24
4.15	1.13	2606	1304	422.1	56C	47	DXMQ534-422.1-__-56-24	42	DXHMQ534-422.1-H-56-24
3.95	1.06	2369	1304	443.5	56C	47	DXMQ534-443.5-__-56-24	42	DXHMQ534-443.5-H-56-24

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 DXMQ Solid Output		Style DXHMQ Hollow Output	
						Weight (lbs.)	Model Number■	Weight (lbs.)	Model Number■
59	3.51	395	629	29.5	56C	19	DXMQ525-29.5-__-56-18	17	DXHMQ525-29.5-H-56-18
58	1.04	402	299	30.1	56C	9	DXMQ518-30.1-__-56-12	8	DXHMQ518-30.1-H-56-12
58	1.43	413	414	30.1	56C	11	DXMQ520-30.1-__-56-16	9	DXHMQ520-30.1-H-56-16
47	2.83	489	697	37.2	56C	19	DXMQ525-37.2-__-56-18	17	DXHMQ525-37.2-H-56-18
41	1.02	576	483	43	56C	11	DXMQ520-43-__-56-16	9	DXHMQ520-43-H-56-16
38	4.63	580	1007	46.2	56C	47	DXMQ534-46.2-__-56-24	42	DXHMQ534-46.2-H-56-24
38	2.71	580	764	46.5	56C	19	DXMQ525-46.5-__-56-18	17	DXHMQ525-46.5-H-56-18
31	2.42	651	798	55.8	56C	19	DXMQ525-55.8-__-56-18	17	DXHMQ525-55.8-H-56-18
29.7	4.49	711	1079	58.9	56C	47	DXMQ534-58.9-__-56-24	42	DXHMQ534-58.9-H-56-24
25.1	2.05	766	854	69.8	56C	19	DXMQ525-69.8-__-56-18	17	DXHMQ525-69.8-H-56-18
21.7	3.61	886	1169	80.6	56C	47	DXMQ534-80.6-__-56-24	42	DXHMQ534-80.6-H-56-24
19.9	1.46	1140	877	87.8	56C	19	DXMQ525-87.8-__-56-18	17	DXHMQ525-87.8-H-56-18
16.9	2.63	1119	1259	103.9	56C	47	DXMQ534-103.9-__-56-24	42	DXHMQ534-103.9-H-56-24
15.8	1.19	1396	899	110.9	56C	19	DXMQ525-110.9-__-56-18	17	DXHMQ525-110.9-H-56-18
13.5	2.10	1401	1304	129.4	56C	47	DXMQ534-129.4-__-56-24	42	DXHMQ534-129.4-H-56-24
12.6	1.01	1651	899	138.6	56C	19	DXMQ525-138.6-__-56-18	17	DXHMQ525-138.6-H-56-18
9.97	1.69	1991	1304	175.6	56C	47	DXMQ534-175.6-__-56-24	42	DXHMQ534-175.6-H-56-24
7.28	1.39	2294	1304	240.2	56C	47	DXMQ534-240.2-__-56-24	42	DXHMQ534-240.2-H-56-24
5.65	1.10	2900	1304	309.5	56C	47	DXMQ534-309.5-__-56-24	42	DXHMQ534-309.5-H-56-24

Bravo® Helical / Worm Double Reduction

- ◆ NEMA input selections shown. Reducers are also available with metric IEC input flanges. Refer to page 129 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 DXHMQ (solid output) & DXMQ (hollow output) reducers. For other reducer configurations, see the MAXIMUM RATING TABLES beginning on page 123.

**Style DXMQ & DXHMQ
Motorized Quill Input
NEMA Frame Selections
1750 RPM Input**

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 DXMQ Solid Output		Style DXHMQ Hollow Output	
						Weight (lbs.)	Model Number■	Weight (lbs.)	Model Number■
59	2.34	593	629	29.5	56C	19	DXMQ525-29.5-__-56-18	17	DXHMQ525-29.5-H-56-18
54	4.27	630	881	32.3	56C	47	DXMQ534-32.3-__-56-24	42	DXHMQ534-32.3-H-56-24
47	1.89	734	697	37.2	56C	19	DXMQ525-37.2-__-56-18	17	DXHMQ525-37.2-H-56-18
38	3.09	871	1007	46.2	56C	47	DXMQ534-46.2-__-56-24	42	DXHMQ534-46.2-H-56-24
38	1.81	871	764	46.5	56C	19	DXMQ525-46.5-__-56-18	17	DXHMQ525-46.5-H-56-18
31	1.61	976	798	55.8	56C	19	DXMQ525-55.8-__-56-18	17	DXHMQ525-55.8-H-56-18
29.7	3.03	1056	1079	58.9	56C	47	DXMQ534-58.9-__-56-24	42	DXHMQ534-58.9-H-56-24
25.1	1.37	1149	854	69.8	56C	19	DXMQ525-69.8-__-56-18	17	DXHMQ525-69.8-H-56-18
21.7	2.40	1329	1169	80.6	56C	47	DXMQ534-80.6-__-56-24	42	DXHMQ534-80.6-H-56-24
19.9	0.97	1710	877	87.8	56C	19	DXMQ525-87.8-__-56-18	17	DXHMQ525-87.8-H-56-18
16.9	1.75	1678	1259	103.9	56C	47	DXMQ534-103.9-__-56-24	42	DXHMQ534-103.9-H-56-24
13.5	1.40	2101	1304	129.4	56C	47	DXMQ534-129.4-__-56-24	42	DXHMQ534-129.4-H-56-24
9.97	1.13	2987	1304	175.6	56C	47	DXMQ534-175.6-__-56-24	42	DXHMQ534-175.6-H-56-24
1 HP / 0.75 KW						Gear Reducer Quick Selections			
59	1.75	790	629	29.5	56C	19	DXMQ525-29.5-__-56-18	17	DXHMQ525-29.5-H-56-18
54	3.20	840	881	32.3	56C	47	DXMQ534-32.3-__-56-24	42	DXHMQ534-32.3-H-56-24
47	1.42	979	697	37.2	56C	19	DXMQ525-37.2-__-56-18	17	DXHMQ525-37.2-H-56-18
38	2.32	1161	1007	46.2	56C	47	DXMQ534-46.2-__-56-24	42	DXHMQ534-46.2-H-56-24
38	1.35	1161	764	46.5	56C	19	DXMQ525-46.5-__-56-18	17	DXHMQ525-46.5-H-56-18
31	1.21	1301	798	55.8	56C	19	DXMQ525-55.8-__-56-18	17	DXHMQ525-55.8-H-56-18
29.7	2.27	1408	1079	58.9	56C	47	DXMQ534-58.9-__-56-24	42	DXHMQ534-58.9-H-56-24
25.1	1.02	1538	854	69.8	56C	19	DXMQ525-69.8-__-56-18	17	DXHMQ525-69.8-H-56-18
21.7	1.83	1748	1169	80.6	56C	47	DXMQ534-80.6-__-56-24	42	DXHMQ534-80.6-H-56-24
16.9	1.32	2238	1259	103.9	56C	47	DXMQ534-103.9-__-56-24	42	DXHMQ534-103.9-H-56-24
13.5	1.05	2801	1304	129.4	56C	47	DXMQ534-129.4-__-56-24	42	DXHMQ534-129.4-H-56-24
1-1/2 HP / 1.1 KW						Gear Reducer Quick Selections			
59	1.17	1186	629	29.5	56C	19	DXMQ525-29.5-__-56-18	17	DXHMQ525-29.5-H-56-18
54	2.13	1261	881	32.3	56C	47	DXMQ534-32.3-__-56-24	42	DXHMQ534-32.3-H-56-24
38	1.54	1746	1007	46.2	56C	47	DXMQ534-46.2-__-56-24	42	DXHMQ534-46.2-H-56-24
29.7	1.50	2133	1079	58.9	56C	47	DXMQ534-58.9-__-56-24	42	DXHMQ534-58.9-H-56-24
21.7	1.22	2621	1169	80.6	56C	47	DXMQ534-80.6-__-56-24	42	DXHMQ534-80.6-H-56-24

- ◆ NEMA input selections shown. Reducers are also available with metric IEC input flanges. Refer to page 129 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 DXHMQ (solid output) & DXMQ (hollow output) reducers. For other reducer configurations, see the MAXIMUM RATING TABLES beginning on page 123.