

# WASHGUARD STAINLESS STEEL GEAR REDUCERS

## DESIGNED FOR WASHDOWN DUTY

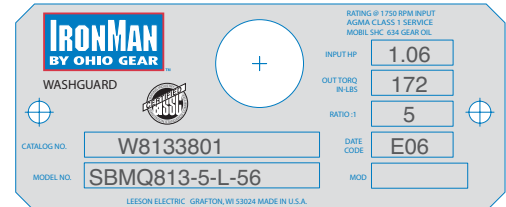
*Built to Withstand the Rigors of High-Pressure Washdowns*

### Product Features

LEESON All-Stainless Steel gear reducers are designed and built to withstand the rigors of high-pressure washdowns in nearly any severe environment, including: food service, chemical and poultry processing, car washes and more. Built on the foundation of LEESON's industrial-duty Ironman® by Ohio Gear line, these reducers add exclusive WASHGUARD All-Stainless features to ensure trouble-free operation.

Combine the gear reducer with a LEESON WASHGUARD All-Stainless motor for a Gear+Motor™ that boasts an unmatched ability to thrive under conditions that would quickly destroy most other motors and gear reducers.

**Stainless steel nameplate**, riveted to housing and adhesive backed to eliminate particle entrapment.



**O-ring on input flange** provides a positive seal against moisture intrusion.

**Premium 316 grade** cast stainless steel housing and covers highly polished for high luster as standard.

**Food-Grade Synthetic Oil** Mobil SHC634 meets USDS Class H2 standards while providing superior mechanical/thermal performance and extended life.

**O-ring seals on input and output covers** eliminate gaskets, sealants and leaks.

**Viton® double-lip seals** are up to five times more durable than nitrile seals and provide superior resistance to chemical corrosion in severe applications.

**Stainless steel assembly hardware** resists corrosion from moisture and chemicals.

**303 stainless steel output shaft** is corrosion resistant for long life and ease of servicing (also available with hollow shaft).

**Non-compressible stainless steel shims** keep factory bearing settings constant.

**Vent free design** - The ENVIRO-SEAL operates in any mounting position and is standard in all stock LEESON All-Stainless reducers to create a "Sealed For Life" design. There's no need to install a vent.



# CHEMICAL COMPATABILITY SUMMARY

Material	Where Found	Reaction Level to Material		
		316 Stainless	Cast Iron	Aluminum
<b>Acetic Acid</b>	vinegar, textiles, film	B	D	B
<b>Arsenic Acid</b>	insecticides	A	D	D
<b>Barium Chloride</b>	waste water treatment	A	C	D
<b>Barium Sulfate</b>	pulp & paper processing	B	B	B
<b>Butter</b>	food products & processing	A	D	A
<b>Calcium Chloride</b>	food processing, road maintenance	B	C	D
<b>Carbonic Acid</b>	beverage processing	A	D	B
<b>Catsup</b>	food products & processing	A	D	D
<b>Citric Acid</b>	fruit processing	A	D	C
<b>Detergents</b>	cleaning solutions	A	N/A	B
<b>Diethylene Glycol</b>	polyester resins	A	A	B
<b>Grape Juice</b>	beverage processing	A	D	N/A
<b>Lactic Acid</b>	dairy food products	B	D	B
<b>Mayonaise</b>	food products	A	D	A
<b>Nitric Acid (50%)</b>	acid rain, refining	A	D	D
<b>Salad Dressing</b>	food products & processing	A	D	B
<b>Soap Solutions</b>	cleaning solutions	A	A	C
<b>Sodium Hydroxide (80%)</b>	cleaning solvents, metal polishing	B	D	D
<b>Sodium Hypochlorite (&lt;20%)</b>	sanitizers, bleaches	C	D	D
<b>Soy Sauce</b>	food products & processing	A	D	A
<b>Sulfuric Acid (&lt;10%)</b>	fertilizers, chemical processing	B	C	D
<b>Sulfur Dioxide</b>	pulp & paper processing	A	N/A	C
<b>Tannic Acid</b>	wood and leather finishing	A	C	C
<b>Vegetable Juice</b>	food products & processing	A	D	D
<b>Vinegar</b>	food processing, pickling	A	D	D
<b>Water, Fresh</b>	water, fresh	A	D	B
<b>Water, salt</b>	brine, fishing, shrimping	B	D	B
<b>Whey</b>	food products & processing	A	N/A	B
<b>Whiskey and Wines</b>	beverages	A	D	C
<b>Zinc Chloride</b>	dry cell batteries	B	D	D
<b>Zinc Sulfate</b>	wastewater, chemical processing	A	D	D

A = Excellent

B = Good, minor effect

C = Fair, moderate affect (not recommended for continuous use)

D = Severe effect, not recommended

N/A = Information not available

NOTE: The information in this chart is meant to be used only as a guide in selecting LEESON products for appropriate chemical compatibility. Before installation, test equipment in your specific application conditions



## *Packaged Solutions With a **STAINLESS** Reputation*

### **Product Features**

LEESON Stainless Ironman® by Ohio Gear worm reducers, mounted to stainless LEESON motors provide you with a packaged solution offering superior corrosion resistance for nearly any severe environment. Drawing from a wide range of stainless Ironman® by Ohio Gear worm gear reducers and perhaps the industry's broadest stock of stainless NEMA C-face motors, LEESON has what it takes to deliver the perfect Gear+Motor™ package. Single-phase and three-phase or permanent magnet DC and brakemotor Gear+Motors™ are all available with stainless construction through our exclusive gear Mod-Squad service.

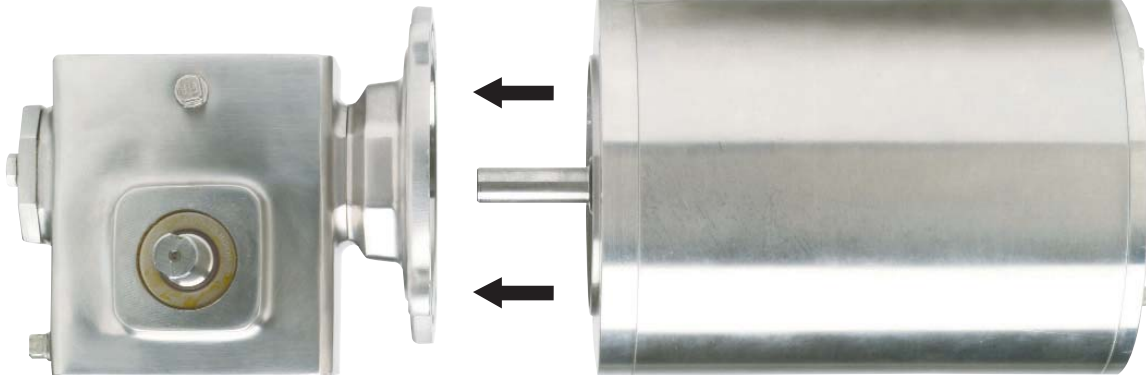
Better yet, there's no additional charge for the labor! You pay only for the reducer and motor. The assembly is on us and the complete package is shipped directly to your location.

NOTE: A Gear+Motor™ consists of the worm reducer model or catalog number followed by the motor's catalog number.

**GEAR**

+

**MOTOR**



**STYLE HMQ**



**STYLE BMQ  
GEAR+MOTOR**



**STYLE BMQ**

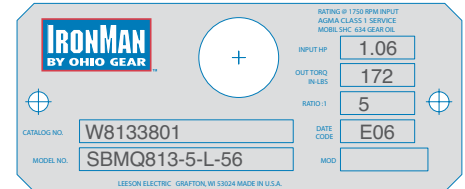
# STAINLESS STEEL GEAR REDUCER

## MODEL NUMBER SYSTEM



**OHIO GEAR™**

### TYPICAL NAMEPLATE




### LEESON 800 Series Gear Reducer Model Number Nomenclature

All stock and custom 800 series reducers are identified by a model number. The model number appears on the nameplate and describes pertinent features of the reducer. An example follows, along with a listing of the various letters and positions used.


NOTE: All reducers also have a catalog number—for example W8133801. Reducers and renewal parts should be ordered by catalog number. If a stock reducer has been factory modified by the addition of an optional base for example, the modification number T818, for example, is stamped in the blank column of the nameplate. Accessories that are field installed will not be noted on the nameplate.

Catalog numbers 5000 (for example, W8135000) and higher are custom reducers manufactured for a specific application. The machinery or equipment manufacturer should be contacted for replacement reducers. Renewal parts can be ordered from LEESON by catalog number.


**Style**




Style SBMQ




Style SBM




Style SHMQ




Style SHM




Style SDMQ



Style SDM



Style SDHMQ



Style SDHM

**Series**

**Ratio**

**Output Shaft Orientation**

**Motor Flange**

**Output Bore Code**

Hollow Shaft Only  
See page 23

NEMA Input Flange Code	For NEMA Frame
56	56C
140	143-5TC
180	182-4TC
210	213-5TC

See selection tables on pages 14-20 for quick selections. Refer to LEESON catalog 8050 for all ratios available.

**STAINLESS STEEL 800 SERIES CENTER DISTANCES**

Series	Center Distance (Inches)
813	1.33
815	1.50
818	1.75
821	2.06
824	2.38
832	3.25

L – Left-hand Output Shaft\*  
R – Right-hand Output Shaft\*  
D – Double Output Shaft  
H – Hollow Output Shaft  
\* Viewed from drive end of reducer.

**Sample Model Number**

**Solid Shaft**  
Motorized Quill Input, Single Reduction Stainless Steel Reducer, 1.75" Center Distance, 15:1 Ratio, Left Hand Output Shaft, and 5/8" Input Bore with NEMA 56C Flange.

<u>SBMQ</u>	<u>818</u>	<u>15</u>	<u>L</u>	<u>56</u>
Style	Series	Ratio	Mounting Assembly	Motor Input Flange

**Hollow Shaft**  
Motorized Quill Input, Single Reduction Stainless Steel Reducer, 1.75" Center Distance, 15:1 Ratio, 1.00" Hollow Output Shaft, and 5/8" Input Bore with NEMA 56C Flange.

<u>SHMQ</u>	<u>818</u>	<u>15</u>	<u>H1</u>	<u>56</u>	<u>16</u>
Style	Series	Ratio	Mounting Assembly	Motor Input Flange	Output Bore Code





# SINGLE REDUCTION "HOW TO USE"

## QUICK SELECTIONS



**OHIO GEAR™**

### How To Use Quick Selections

Before You Start:

- Identify the **Service Factor** of the application.
- Refer to pages 24-25 for **service factor guide**.
- Determine the **actual input horsepower** of the motor by multiplying the motor's name plate 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 page 12. Note the basic mounting style (SBMQ, SBM, etc.).

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

## QUICK SELECTION GUIDE

**1 Find the appropriate Quick Selections page.** The tables begin on page 14 and are organized by motor HP. The reducer should be selected first; Gear+Motor combinations follow.

**4 Check load capacities** against the needs of your application. Do not exceed the overhung load (OHL) shown in the table. Refer to catalog 8050 for detailed instructions to calculate the actual overhung load. If overhung and thrust loads will be applied simultaneously or if the load exceeds listed capacities, contact LEESON.

**800 SERIES C-FACED 1750 RPM INPUT**

**1/4 HP**

Output Speed (RPM)	Service Factor <sup>(1)</sup>	Output Torque (lb-in)	Overhung Load <sup>(2)</sup> (lbs.)	Ratio	Motor Frame	Solid Output Shaft <sup>(3)</sup>	Hollow Output Shaft <sup>(4)</sup>
350	4.20	41	700	5	56C	SBMQ813-5-X-56	SHMQ813-5-H-56-XX
233	3.75	56	700	7.5	56C	SBMQ813-7.5-X-56	SHMQ813-7.5-H-56-XX
175	3.00	76	700	10	56C	SBMQ813-10-X-56	SHMQ813-10-H-56-XX
117	2.24	108	700	15	56C	SBMQ813-15-X-56	SHMQ813-15-H-56-XX
88	1.82	135	700	20	56C	SBMQ813-20-X-56	SHMQ813-20-H-56-XX
			860	20	56C	SBMQ815-20-X-56	SHMQ815-20-H-56-XX
			700	25	56C	SBMQ813-25-X-56	SHMQ813-25-H-56-XX
			860	25	56C	SBMQ815-25-X-56	SHMQ815-25-H-56-XX
						BMQ813-30-X-56	SHMQ813-30-H-56-XX
						BMQ815-30-X-56	SHMQ815-30-H-56-XX
						BMQ818-30-X-56	SHMQ818-30-H-56-XX
						BMQ813-40-X-56	
						BMQ815-40-X-56	
			1200	40	56C	SBMQ818-40-X-56	
			860	50	56C	SBMQ815-50-X-56	
			1200	50	56C	SBMQ818-50-X-56	
			1385	50	56C	SBMQ821-50-X-56	
			860	60	56C	SBMQ815-60-X-56	
			1200	60	56C	SBMQ818-60-X-56	
			1415	60	56C	SBMQ821-60-X-56	
			1495	80	56C	SBMQ821-80-X-56	
			1770	80	56C	SBMQ824-80-X-56	
					56C	SBMQ824-100-X-56	
					56C	SBMQ832-100-X-56	
					56C	SDMQ821-150-XX-56	SDHM821-150-HX-56-XX
			1065	200	56C	SDMQ821-200-XX-56	SDHM821-200-HX-56-XX
			1770	200	56C	SDMQ824-200-XX-56	SDHM824-200-HX-56-XX
			2275	250	56C	SDMQ832-250-XX-56	SDHM832-250-HX-56-XX
			2275	300	56C	SDMQ832-300-XX-56	SDHM832-300-HX-56-XX
			2275	400	56C	SDMQ832-400-XX-56	SDHM832-400-HX-56-XX
			2275	600	56C	SDMQ832-600-XX-56	SDHM832-600-HX-56-XX
			2275	900	56C	SDMQ832-900-XX-56	SDHM832-900-HX-56-XX

**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 are 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 25 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 12 for detailed information on building an exact model number.

# QUICK SELECTION GUIDE



## 800 SERIES • ALL-STAINLESS STEEL REDUCERS C-FACED QUILL INPUT SELECTIONS 1750 RPM INPUT



### 1/4 HP

Output Speed (RPM)	Service Factor▲	Output Torque (lb-in)	Overhung Load■ (lbs.)	Ratio	Motor Frame	Model Numbers	
						Solid Output Shaft◆	Hollow Output Shaft▼
350	4.20	41	700	5	56C	SBMQ813-5-X-56	SHMQ813-5-H-56-XX
233	3.75	56	700	7.5	56C	SBMQ813-7.5-X-56	SHMQ813-7.5-H-56-XX
175	3.00	76	700	10	56C	SBMQ813-10-X-56	SHMQ813-10-H-56-XX
117	2.24	108	700	15	56C	SBMQ813-15-X-56	SHMQ813-15-H-56-XX
88	1.82	135	700	20	56C	SBMQ813-20-X-56	SHMQ813-20-H-56-XX
88	2.57	136	860	20	56C	SBMQ815-20-X-56	SHMQ815-20-H-56-XX
70	1.48	170	700	25	56C	SBMQ813-25-X-56	SHMQ813-25-H-56-XX
70	2.18	162	860	25	56C	SBMQ815-25-X-56	SHMQ815-25-H-56-XX
58	1.31	192	700	30	56C	SBMQ813-30-X-56	SHMQ813-30-H-56-XX
58	1.88	182	860	30	56C	SBMQ815-30-X-56	SHMQ815-30-H-56-XX
58	2.44	199	1200	30	56C	SBMQ818-30-X-56	SHMQ818-30-H-56-XX
44	1.03	239	700	40	56C	SBMQ813-40-X-56	SHMQ813-40-H-56-XX
44	1.57	221	860	40	56C	SBMQ815-40-X-56	SHMQ815-40-H-56-XX
44	1.94	247	1200	40	56C	SBMQ818-40-X-56	SHMQ818-40-H-56-XX
35	1.32	256	860	50	56C	SBMQ815-50-X-56	SHMQ815-50-H-56-XX
35	1.59	291	1200	50	56C	SBMQ818-50-X-56	SHMQ818-50-H-56-XX
35	2.29	315	1385	50	56C	SBMQ821-50-X-56	SHMQ821-50-H-56-XX
29	1.12	288	860	60	56C	SBMQ815-60-X-56	SHMQ815-60-H-56-XX
29	1.27	347	1200	60	56C	SBMQ818-60-X-56	SHMQ818-60-H-56-XX
29	1.96	344	1415	60	56C	SBMQ821-60-X-56	SHMQ821-60-H-56-XX
22	1.33	415	1495	80	56C	SBMQ821-80-X-56	SHMQ821-80-H-56-XX
22	1.83	453	1770	80	56C	SBMQ824-80-X-56	SHMQ824-80-H-56-XX
18	1.26	513	1770	100	56C	SBMQ824-100-X-56	SHMQ824-100-H-56-XX
18	2.92	530	2275	100	56C	SBMQ832-100-X-56	SHMQ832-100-H-56-XX
11.7	1.24	878	1065	150	56C	SDMQ821-150-XX-56	SDHMQ821-150-HX-56-XX
8.75	0.97	1127	1065	200	56C	SDMQ821-200-XX-56	SDHMQ821-200-HX-56-XX
8.75	1.54	1122	1770	200	56C	SDMQ824-200-XX-56	SDHMQ824-200-HX-56-XX
7.00	3.35	1366	2275	250	56C	SDMQ832-250-XX-56	SDHMQ832-250-HX-56-XX
5.83	3.27	1486	2275	300	56C	SDMQ832-300-XX-56	SDHMQ832-300-HX-56-XX
4.38	2.46	1959	2275	400	56C	SDMQ832-400-XX-56	SDHMQ832-400-HX-56-XX
2.92	1.98	2539	2275	600	56C	SDMQ832-600-XX-56	SDHMQ832-600-HX-56-XX
1.94	1.57	3241	2275	900	56C	SDMQ832-900-XX-56	SDHMQ832-900-HX-56-XX
1.46	1.32	3890	2275	1200	56C	SDMQ832-1200-XX-56	SDHMQ832-1200-HX-56-XX
1.17	1.15	4457	2275	1500	56C	SDMQ832-1500-XX-56	SDHMQ832-1500-HX-56-XX
0.97	1.06	4862	2275	1800	56C	SDMQ832-1800-XX-56	SDHMQ832-1800-HX-56-XX

▲ Service factor is based on maximum torque rating of reducer. Refer to catalog 8050 for maximum reducer ratings.

■ Output shaft overhung load rating is based on load applied one shaft diameter from face of reducer housing.

◆ Model numbers are for solid output shaft reducers. When ordering, substitute the X or XX with the required shaft hand assembly. Refer to pages 21-22 for shaft hand assemblies.

▼ Model numbers are for hollow output shaft reducers. When ordering, substitute the XX suffix with the required output bore code. Refer to page 23 for bore sizes available. For double reduction styles, confirm assembly position from page 22 and replace HX with required assembly.





# QUICK SELECTION GUIDE

## 800 SERIES • ALL-STAINLESS STEEL REDUCERS C-FACED QUILL INPUT SELECTIONS 1750 RPM INPUT



1/3 HP						Model Numbers	
Output Speed (RPM)	Service Factor▲	Output Torque (lb-in)	Overhung Load■ (lbs.)	Ratio	Motor Frame	Solid Output Shaft◆	Hollow Output Shaft▼
350	3.19	54	700	5	56C	SBMQ813-5-X-56	SHMQ813-5-H-56-XX
233	2.84	74	700	7.5	56C	SBMQ813-7.5-X-56	SHMQ813-7.5-H-56-XX
175	2.28	100	700	10	56C	SBMQ813-10-X-56	SHMQ813-10-H-56-XX
117	1.70	142	700	15	56C	SBMQ813-15-X-56	SHMQ813-15-H-56-XX
117	2.35	142	860	15	56C	SBMQ815-15-X-56	SHMQ815-15-H-56-XX
88	1.39	178	700	20	56C	SBMQ813-20-X-56	SHMQ813-20-H-56-XX
88	1.95	179	860	20	56C	SBMQ815-20-X-56	SHMQ815-20-H-56-XX
88	2.55	191	1200	20	56C	SBMQ818-20-X-56	SHMQ818-20-H-56-XX
70	1.12	225	700	25	56C	SBMQ813-25-X-56	SHMQ813-25-H-56-XX
70	1.65	214	860	25	56C	SBMQ815-25-X-56	SHMQ815-25-H-56-XX
70	2.02	236	1200	25	56C	SBMQ818-25-X-56	SHMQ818-25-H-56-XX
58	1.42	241	860	30	56C	SBMQ815-30-X-56	SHMQ815-30-H-56-XX
58	1.84	263	1200	30	56C	SBMQ818-30-X-56	SHMQ818-30-H-56-XX
58	2.71	276	1255	30	56C	SBMQ821-30-X-56	SHMQ821-30-H-56-XX
44	1.19	291	860	40	56C	SBMQ815-40-X-56	SHMQ815-40-H-56-XX
44	1.47	326	1200	40	56C	SBMQ818-40-X-56	SHMQ818-40-H-56-XX
44	2.23	338	1315	40	56C	SBMQ821-40-X-56	SHMQ821-40-H-56-XX
35	1.00	338	860	50	56C	SBMQ815-50-X-56	SHMQ815-50-H-56-XX
35	1.20	385	1200	50	56C	SBMQ818-50-X-56	SHMQ818-50-H-56-XX
35	1.73	416	1385	50	56C	SBMQ821-50-X-56	SHMQ821-50-H-56-XX
29	0.99	448	1200	60	56C	SBMQ818-60-X-56	SHMQ818-60-H-56-XX
29	1.53	454	1415	60	56C	SBMQ821-60-X-56	SHMQ821-60-H-56-XX
29	2.16	466	1770	60	56C	SBMQ824-60-X-56	SHMQ824-60-H-56-XX
22	1.01	548	1495	80	56C	SBMQ821-80-X-56	SHMQ821-80-H-56-XX
22	1.39	598	1770	80	56C	SBMQ824-80-X-56	SHMQ824-80-H-56-XX
22	3.21	612	2275	80	56C	SBMQ832-80-X-56	SHMQ832-80-H-56-XX
18	2.19	705	2275	100	56C	SBMQ832-100-X-56	SHMQ832-100-H-56-XX
11.7	1.48	1159	1770	150	56C	SDMQ824-150-XX-56	SDHMQ824-150-HX-56-XX
8.75	3.09	1512	2275	200	56C	SDMQ832-200-XX-56	SDHMQ832-200-HX-56-XX
7.00	2.54	1804	2275	250	56C	SDMQ832-250-XX-56	SDHMQ832-250-HX-56-XX
5.83	2.48	1961	2275	300	56C	SDMQ832-300-XX-56	SDHMQ832-300-HX-56-XX
4.38	1.87	2586	2275	400	56C	SDMQ832-400-XX-56	SDHMQ832-400-HX-56-XX
2.92	1.50	3351	2275	600	56C	SDMQ832-600-XX-56	SDHMQ832-600-HX-56-XX
1.94	1.19	4278	2275	900	56C	SDMQ832-900-XX-56	SDHMQ832-900-HX-56-XX
1.46	1.00	5134	2275	1200	56C	SDMQ832-1200-XX-56	SDHMQ832-1200-HX-56-XX

▲ Service factor is based on maximum torque rating of reducer. Refer to catalog 8050 for maximum reducer ratings.

■ Output shaft overhung load rating is based on load applied one shaft diameter from face of reducer housing.

◆ Model numbers are for solid output shaft reducers. When ordering, substitute the X or XX with the required shaft hand assembly. Refer to pages 21-22 for shaft hand assemblies.

▼ Model numbers are for hollow output shaft reducers. When ordering, substitute the XX suffix with the required output bore code. Refer to page 23 for bore sizes available. For double reduction styles, confirm assembly position from page 22 and replace HX with required assembly.

# QUICK SELECTION GUIDE



## 800 SERIES • ALL-STAINLESS STEEL REDUCERS C-FACED QUILL INPUT SELECTIONS 1750 RPM INPUT



### 1/2 HP

Output Speed (RPM)	Service Factor▲	Output Torque (lb-in)	Overhung Load■ (lbs.)	Ratio	Motor Frame	Model Numbers	
						Solid Output Shaft◆	Hollow Output Shaft▼
350	2.12	81	700	5	56C	SBMQ813-5-X-56	SHMQ813-5-H-56-XX
233	1.88	112	700	7.5	56C	SBMQ813-7.5-X-56	SHMQ813-7.5-H-56-XX
233	2.47	119	860	7.5	56C	SBMQ815-7.5-X-56	SHMQ815-7.5-H-56-XX
175	1.51	151	700	10	56C	SBMQ813-10-X-56	SHMQ813-10-H-56-XX
175	2.05	153	860	10	56C	SBMQ815-10-X-56	SHMQ815-10-H-56-XX
117	1.13	215	700	15	56C	SBMQ813-15-X-56	SHMQ813-15-H-56-XX
117	1.55	215	860	15	56C	SBMQ815-15-X-56	SHMQ815-15-H-56-XX
117	2.10	224	1200	15	56C	SBMQ818-15-X-56	SHMQ818-15-H-56-XX
88	1.29	271	860	20	56C	SBMQ815-20-X-56	SHMQ815-20-H-56-XX
88	1.69	289	1200	20	56C	SBMQ818-20-X-56	SHMQ818-20-H-56-XX
88	2.52	295	1175	20	56C	SBMQ821-20-X-56	SHMQ821-20-H-56-XX
70	1.09	324	860	25	56C	SBMQ815-25-X-56	SHMQ815-25-H-56-XX
70	1.34	357	1200	25	56C	SBMQ818-25-X-56	SHMQ818-25-H-56-XX
70	2.05	364	1175	25	56C	SBMQ821-25-X-56	SHMQ821-25-H-56-XX
58	1.22	398	1200	30	56C	SBMQ818-30-X-56	SHMQ818-30-H-56-XX
58	1.80	417	1255	30	56C	SBMQ821-30-X-56	SHMQ821-30-H-56-XX
58	2.65	420	1770	30	56C	SBMQ824-30-X-56	SHMQ824-30-H-56-XX
44	1.47	512	1315	40	56C	SBMQ821-40-X-56	SHMQ821-40-H-56-XX
44	2.12	520	1770	40	56C	SBMQ824-40-X-56	SHMQ824-40-H-56-XX
35	1.14	630	1385	50	56C	SBMQ821-50-X-56	SHMQ821-50-H-56-XX
35	1.72	619	1770	50	56C	SBMQ824-50-X-56	SHMQ824-50-H-56-XX
35	3.82	673	2275	50	56C	SBMQ832-50-X-56	SHMQ832-50-H-56-XX
29	1.01	687	1415	60	56C	SBMQ821-60-X-56	SHMQ821-60-H-56-XX
29	1.43	706	1770	60	56C	SBMQ824-60-X-56	SHMQ824-60-H-56-XX
29	3.13	779	2275	60	56C	SBMQ832-60-X-56	SHMQ832-60-H-56-XX
22	2.10	933	2275	80	56C	SBMQ832-80-X-56	SHMQ832-80-H-56-XX
18	1.45	1068	2275	100	56C	SBMQ832-100-X-56	SHMQ832-100-H-56-XX
11.7	2.67	1702	2275	150	56C	SDMQ832-150-XX-56	SDHMQ832-150-HX-56-XX
8.75	2.06	2269	2275	200	56C	SDMQ832-200-XX-56	SDHMQ832-200-HX-56-XX
7.00	1.67	2746	2275	250	56C	SDMQ832-250-XX-56	SDHMQ832-250-HX-56-XX
5.83	1.63	2993	2275	300	56C	SDMQ832-300-XX-56	SDHMQ832-300-HX-56-XX
4.38	1.23	3911	2275	400	56C	SDMQ832-400-XX-56	SDHMQ832-400-HX-56-XX

▲ Service factor is based on maximum torque rating of reducer. Refer to catalog 8050 for maximum reducer ratings.

■ Output shaft overhung load rating is based on load applied one shaft diameter from face of reducer housing.

◆ Model numbers are for solid output shaft reducers. When ordering, substitute the X or XX with the required shaft hand assembly. Refer to pages 21-22 for shaft hand assemblies.

▼ Model numbers are for hollow output shaft reducers. When ordering, substitute the XX suffix with the required output bore code. Refer to page 23 for bore sizes available. For double reduction styles, confirm assembly position from page 22 and replace HX with required assembly.







# QUICK SELECTION GUIDE

## 800 SERIES • ALL-STAINLESS STEEL REDUCERS C-FACED QUILL INPUT SELECTIONS 1750 RPM INPUT



3/4 HP						Model Numbers	
Output Speed (RPM)	Service Factor▲	Output Torque (lb-in)	Overhung Load■ (lbs.)	Ratio	Motor Frame	Solid Output Shaft◆	Hollow Output Shaft▼
350	1.41	122	700	5	56C	SBMQ813-5-X-56	SHMQ813-5-H-56-XX
350	2.16	122	860	5	56C	SBMQ815-5-X-56	SHMQ815-5-H-56-XX
233	1.25	168	700	7.5	56C	SBMQ813-7.5-X-56	SHMQ813-7.5-H-56-XX
233	1.64	179	860	7.5	56C	SBMQ815-7.5-X-56	SHMQ815-7.5-H-56-XX
233	2.25	182	1200	7.5	56C	SBMQ818-7.5-X-56	SHMQ818-7.5-H-56-XX
175	1.36	230	860	10	56C	SBMQ815-10-X-56	SHMQ815-10-H-56-XX
175	1.87	236	1200	10	56C	SBMQ818-10-X-56	SHMQ818-10-H-56-XX
175	2.85	239	1065	10	56C	SBMQ821-10-X-56	SHMQ821-10-H-56-XX
117	1.03	323	860	15	56C	SBMQ815-15-X-56	SHMQ815-15-H-56-XX
117	1.40	336	1200	15	56C	SBMQ818-15-X-56	SHMQ818-15-H-56-XX
117	2.11	344	1125	15	56C	SBMQ821-15-X-56	SHMQ821-15-H-56-XX
88	1.12	434	1200	20	56C	SBMQ818-20-X-56	SHMQ818-20-H-56-XX
88	1.68	442	1175	20	56C	SBMQ821-20-X-56	SHMQ821-20-H-56-XX
88	2.48	444	1770	20	56C	SBMQ824-20-X-56	SHMQ824-20-H-56-XX
70	1.37	546	1210	25	56C	SBMQ821-25-X-56	SHMQ821-25-H-56-XX
70	2.07	525	1770	25	56C	SBMQ824-25-X-56	SHMQ824-25-H-56-XX
58	1.20	626	1255	30	56C	SBMQ821-30-X-56	SHMQ821-30-H-56-XX
58	1.77	629	1770	30	56C	SBMQ824-30-X-56	SHMQ824-30-H-56-XX
58	4.09	630	2275	30	56C	SBMQ832-30-X-56	SHMQ832-30-H-56-XX
44	1.41	780	1770	40	56C	SBMQ824-40-X-56	SHMQ824-40-H-56-XX
44	3.15	839	2275	40	56C	SBMQ832-40-X-56	SHMQ832-40-H-56-XX
35	1.15	928	1770	50	56C	SBMQ824-50-X-56	SHMQ824-50-H-56-XX
35	2.54	1010	2275	50	56C	SBMQ832-50-X-56	SHMQ832-50-H-56-XX
29	2.08	1169	2275	60	56C	SBMQ832-60-X-56	SHMQ832-60-H-56-XX
22	1.40	1399	2275	80	56C	SBMQ832-80-X-56	SHMQ832-80-H-56-XX
17.5	2.15	1912	2275	100	56C	SDMQ832-100-XX-56	SDHMQ832-100-HX-56-XX
11.7	1.78	2553	2275	150	56C	SDMQ832-150-XX-56	SDHMQ832-150-HX-56-XX
8.8	1.36	3436	2275	200	56C	SDMQ832-200-XX-56	SDHMQ832-200-HX-56-XX
7.0	1.12	4099	2275	250	56C	SDMQ832-250-XX-56	SDHMQ832-250-HX-56-XX
5.83	1.09	4457	2275	300	56C	SDMQ832-300-XX-56	SDHMQ832-300-HX-56-XX

▲ Service factor is based on maximum torque rating of reducer. Refer to catalog 8050 for maximum reducer ratings.

■ Output shaft overhung load rating is based on load applied one shaft diameter from face of reducer housing.

◆ Model numbers are for solid output shaft reducers. When ordering, substitute the X or XX with the required shaft hand assembly. Refer to pages 21-22 for shaft hand assemblies.

▼ Model numbers are for hollow output shaft reducers. When ordering, substitute the XX suffix with the required output bore code. Refer to page 23 for bore sizes available. For double reduction styles, confirm assembly position from page 22 and replace HX with required assembly.

# QUICK SELECTION GUIDE



## 800 SERIES • ALL-STAINLESS STEEL REDUCERS C-FACED QUILL INPUT SELECTIONS 1750 RPM INPUT



### 1 HP

Output Speed (RPM)	Service Factor▲	Output Torque (lb-in)	Overhung Load■ (lbs.)	Ratio	Motor Frame	Model Numbers	
						Solid Output Shaft◆	Hollow Output Shaft▼
350	1.06	162	700	5	56C	SBMQ813-5-X-56	SHMQ813-5-H-56-XX
350	1.61	163	860	5	56C	SBMQ815-5-X-56	SHMQ815-5-H-56-XX
350	2.52	166	1000	5	56C	SBMQ821-5-X-56	SHMQ821-5-H-56-XX
233	1.24	238	860	7.5	56C	SBMQ815-7.5-X-56	SHMQ815-7.5-H-56-XX
233	1.69	242	1200	7.5	56C	SBMQ818-7.5-X-56	SHMQ818-7.5-H-56-XX
233	2.48	244	1035	7.5	56C	SBMQ821-7.5-X-56	SHMQ821-7.5-H-56-XX
175	1.02	307	860	10	56C	SBMQ815-10-X-56	SHMQ815-10-H-56-XX
175	1.40	315	1200	10	56C	SBMQ818-10-X-56	SHMQ818-10-H-56-XX
175	2.14	319	1065	10	56C	SBMQ821-10-X-56	SHMQ821-10-H-56-XX
117	1.05	448	1200	15	56C	SBMQ818-15-X-56	SHMQ818-15-H-56-XX
117	1.58	459	1125	15	56C	SBMQ821-15-X-56	SHMQ821-15-H-56-XX
117	2.34	460	1770	15	56C	SBMQ824-15-X-56	SHMQ824-15-H-56-XX
88	1.26	590	1175	20	56C	SBMQ821-20-X-56	SHMQ821-20-H-56-XX
88	1.86	592	1770	20	56C	SBMQ824-20-X-56	SHMQ824-20-H-56-XX
88	4.21	626	2275	20	56C	SBMQ832-20-X-56	SHMQ832-20-H-56-XX
70	1.02	728	1210	25	56C	SBMQ821-25-X-56	SHMQ821-25-H-56-XX
70	1.56	699	1770	25	56C	SBMQ824-25-X-56	SHMQ824-25-H-56-XX
70	3.47	767	2275	25	56C	SBMQ832-25-X-56	SHMQ832-25-H-56-XX
58	1.33	839	1770	30	56C	SBMQ824-30-X-56	SHMQ824-30-H-56-XX
58	3.07	840	2275	30	56C	SBMQ832-30-X-56	SHMQ832-30-H-56-XX
44	1.06	1040	1770	40	56C	SBMQ824-40-X-56	SHMQ824-40-H-56-XX
44	2.36	1119	2275	40	56C	SBMQ832-40-X-56	SHMQ832-40-H-56-XX
35	1.91	1347	2275	50	56C	SBMQ832-50-X-56	SHMQ832-50-H-56-XX
29	1.56	1558	2275	60	56C	SBMQ832-60-X-56	SHMQ832-60-H-56-XX
22	1.05	1865	2275	80	56C	SBMQ832-80-X-56	SHMQ832-80-H-56-XX
17.5	1.61	2550	2275	100	56C	SDMQ832-100-XX-56	SDHMQ832-100-HX-56-XX
11.7	1.34	3403	2275	150	56C	SDMQ832-150-XX-56	SDHMQ832-150-HX-56-XX
8.8	1.02	4581	2275	200	56C	SDMQ832-200-XX-56	SDHMQ832-200-HX-56-XX

▲ Service factor is based on maximum torque rating of reducer. Refer to catalog 8050 for maximum reducer ratings.

■ Output shaft overhung load rating is based on load applied one shaft diameter from face of reducer housing.

◆ Model numbers are for solid output shaft reducers. When ordering, substitute the X or XX with the required shaft hand assembly. Refer to pages 21-22 for shaft hand assemblies.

▼ Model numbers are for hollow output shaft reducers. When ordering, substitute the XX suffix with the required output bore code. Refer to page 23 for bore sizes available. For double reduction styles, confirm assembly position from page 22 and replace HX with required assembly.





# QUICK SELECTION GUIDE

## 800 SERIES • ALL-STAINLESS STEEL REDUCERS C-FACED QUILL INPUT SELECTIONS 1750 RPM INPUT



1-1/2 HP							Model Numbers	
Output Speed (RPM)	Service Factor▲	Output Torque (lb-in)	Overhung Load■ (lbs.)	Ratio	Motor Frame	Solid Output Shaft◆	Hollow Output Shaft▼	
350	1.07	245	860	5	56C	SBMQ815-5-X-56	SHMQ815-5-H-56-XX	
350	1.67	250	1000	5	143-5TC	SBMQ821-5-X-140	SHMQ821-5-H-140-XX	
350	2.59	252	1770	5	143-5TC	SBMQ824-5-X-140	SHMQ824-5-H-140-XX	
233	1.13	363	1200	7.5	56C	SBMQ818-7.5-X-56	SHMQ818-7.5-H-56-XX	
233	1.65	366	1035	7.5	143-5TC	SBMQ821-7.5-X-140	SHMQ821-7.5-H-140-XX	
233	2.31	374	1770	7.5	143-5TC	SBMQ824-7.5-X-140	SHMQ824-7.5-H-140-XX	
175	1.43	478	1065	10	143-5TC	SBMQ821-10-X-140	SHMQ821-10-H-140-XX	
175	2.08	476	1770	10	143-5TC	SBMQ824-10-X-140	SHMQ824-10-H-140-XX	
117	1.05	688	1125	15	56C	SBMQ821-15-X-56	SHMQ821-15-H-56-XX	
117	1.56	691	1770	15	143-5TC	SBMQ824-15-X-140	SHMQ824-15-H-140-XX	
117	3.53	723	2275	15	143-5TC	SBMQ832-15-X-140	SHMQ832-15-H-140-XX	
88	1.24	887	1770	20	56C	SBMQ824-20-X-56	SHMQ824-20-H-56-XX	
88	2.81	938	2275	20	143-5TC	SBMQ832-20-X-140	SHMQ832-20-H-140-XX	
70	1.04	1049	1770	25	56C	SBMQ824-25-X-56	SHMQ824-25-H-56-XX	
70	2.31	1151	2275	25	143-5TC	SBMQ832-25-X-140	SHMQ832-25-H-140-XX	
58	2.05	1260	2275	30	143-5TC	SBMQ832-30-X-140	SHMQ832-30-H-140-XX	
44	1.57	1678	2275	40	143-5TC	SBMQ832-40-X-140	SHMQ832-40-H-140-XX	
35	1.27	2020	2275	50	56C	SBMQ832-50-X-56	SHMQ832-50-H-56-XX	
29	1.04	2338	2275	60	56C	SBMQ832-60-X-56	SHMQ832-60-H-56-XX	
23	1.07	2994	2275	75	56C	SDMQ832-75-XX-56	SDHMQ832-75-HX-56-XX	
17.5	1.09	3782	2275	100	56C	SDMQ832-100-XX-56	SDHMQ832-100-HX-56-XX	

2 HP							Model Numbers	
Output Speed (RPM)	Service Factor▲	Output Torque (lb-in)	Overhung Load■ (lbs.)	Ratio	Motor Frame	Solid Output Shaft◆	Hollow Output Shaft▼	
350	1.26	333	1000	5	143-5TC	SBMQ821-5-X-140	SHMQ821-5-H-140-XX	
350	1.94	336	1770	5	143-5TC	SBMQ824-5-X-140	SHMQ824-5-H-140-XX	
233	1.24	489	1035	7.5	143-5TC	SBMQ821-7.5-X-140	SHMQ821-7.5-H-140-XX	
233	1.73	499	1770	7.5	143-5TC	SBMQ824-7.5-X-140	SHMQ824-7.5-H-140-XX	
233	3.91	505	2275	7.5	143-5TC	SBMQ832-7.5-X-140	SHMQ832-7.5-H-140-XX	
175	1.56	635	1770	10	143-5TC	SBMQ824-10-X-140	SHMQ824-10-H-140-XX	
175	3.51	667	2275	10	143-5TC	SBMQ832-10-X-140	SHMQ832-10-H-140-XX	
117	1.17	921	1770	15	143-5TC	SBMQ824-15-X-140	SHMQ824-15-H-140-XX	
117	2.65	964	2275	15	143-5TC	SBMQ832-15-X-140	SHMQ832-15-H-140-XX	
88	2.10	1251	2275	20	143-5TC	SBMQ832-20-X-140	SHMQ832-20-H-140-XX	
70	1.73	1535	2275	25	143-5TC	SBMQ832-25-X-140	SHMQ832-25-H-140-XX	
58	1.53	1680	2275	30	143-5TC	SBMQ832-30-X-140	SHMQ832-30-H-140-XX	

- ▲ Service factor is based on maximum torque rating of reducer. Refer to catalog 8050 for maximum reducer ratings.
- Output shaft overhung load rating is based on load applied one shaft diameter from face of reducer housing.
- ◆ Model numbers are for solid output shaft reducers. When ordering, substitute the X or XX with the required shaft hand assembly. Refer to pages 21-22 for shaft hand assemblies.
- ▼ Model numbers are for hollow output shaft reducers. When ordering, substitute the XX suffix with the required output bore code. Refer to page 23 for bore sizes available. For double reduction styles, confirm assembly position from page 22 and replace HX with required assembly.

# QUICK SELECTION GUIDE



## 800 SERIES • ALL-STAINLESS STEEL REDUCERS C-FACED QUILL INPUT SELECTIONS 1750 RPM INPUT



<b>3 HP</b>							Model Numbers	
Output Speed (RPM)	Service Factor▲	Output Torque (lb-in)	Overhung Load■ (lbs.)	Ratio	Motor Frame	Solid Output Shaft◆	Hollow Output Shaft▼	
350	1.30	504	1770	5	182-4TC	<b>SBMQ824-5-X-180</b>	<b>SHMQ824-5-X-180-XX</b>	
350	3.15	509	2275	5	182-4TC	<b>SBMQ832-5-X-180</b>	<b>SHMQ832-5-X-180-XX</b>	
233	1.15	748	1770	7.5	182-4TC	<b>SBMQ824-7.5-X-180</b>	<b>SHMQ824-7.5-X-180-XX</b>	
233	2.61	757	2275	7.5	182-4TC	<b>SBMQ832-7.5-X-180</b>	<b>SHMQ832-7.5-X-180-XX</b>	
175	1.04	952	1770	10	182-4TC	<b>SBMQ824-10-X-180</b>	<b>SHMQ824-10-X-180-XX</b>	
175	2.34	1000	2275	10	182-4TC	<b>SBMQ832-10-X-180</b>	<b>SHMQ832-10-X-180-XX</b>	
117	1.76	1446	2275	15	182-4TC	<b>SBMQ832-15-X-180</b>	<b>SHMQ832-15-X-180-XX</b>	
88	1.40	1877	2275	20	182-4TC	<b>SBMQ832-20-X-180</b>	<b>SHMQ832-20-X-180-XX</b>	
70	1.15	2302	2275	25	182-4TC	<b>SBMQ832-25-X-180</b>	<b>SHMQ832-25-X-180-XX</b>	
58	1.02	2520	2275	30	182-4TC	<b>SBMQ832-30-X-180</b>	<b>SHMQ832-30-X-180-XX</b>	

<b>5 HP</b>							Model Numbers	
Output Speed (RPM)	Service Factor▲	Output Torque (lb-in)	Overhung Load■ (lbs.)	Ratio	Motor Frame	Solid Output Shaft◆	Hollow Output Shaft▼	
350	1.89	849	2275	5	182-4TC	<b>SBMQ832-5-X-180</b>	<b>SHMQ832-5-X-180-XX</b>	
233	1.57	1262	2275	7.5	182-4TC	<b>SBMQ832-7.5-X-180</b>	<b>SHMQ832-7.5-X-180-XX</b>	
175	1.41	1667	2275	10	182-4TC	<b>SBMQ832-10-X-180</b>	<b>SHMQ832-10-X-180-XX</b>	
117	1.06	2410	2275	15	182-4TC	<b>SBMQ832-15-X-180</b>	<b>SHMQ832-15-X-180-XX</b>	

<b>7-1/2 HP</b>							Model Numbers	
Output Speed (RPM)	Service Factor▲	Output Torque (lb-in)	Overhung Load■ (lbs.)	Ratio	Motor Frame	Solid Output Shaft◆	Hollow Output Shaft▼	
350	1.26	1273	2275	5	182-4TC	<b>SBMQ832-5-X-180</b>	<b>SHMQ832-5-X-180-XX</b>	
233	1.04	1892	2275	7.5	182-4TC	<b>SBMQ832-7.5-X-180</b>	<b>SHMQ832-7.5-X-180-XX</b>	

- ▲ Service factor is based on maximum torque rating of reducer. Refer to catalog 8050 for maximum reducer ratings.
- Output shaft overhung load rating is based on load applied one shaft diameter from face of reducer housing.
- ◆ Model numbers are for solid output shaft reducers. When ordering, substitute the X or XX with the required shaft hand assembly. Refer to pages 21-22 for shaft hand assemblies.
- ▼ Model numbers are for hollow output shaft reducers. When ordering, substitute the XX suffix with the required output bore code. Refer to page 23 for bore sizes available. For double reduction styles, confirm assembly position from page 22 and replace HX with required assembly.

