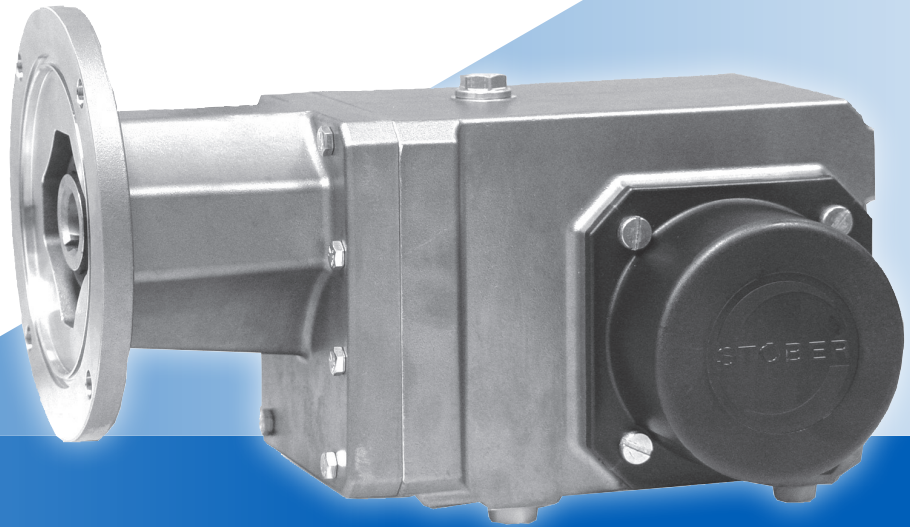


## KSS Series: RIGHT ANGLE — Solid Shaft/Hollow Output

### KSS Series Features

- Input rating up to 5 HP
- Ratio options 4:1 – 272:1
- Output torque capability up to 4872 lb-in
- NEMA input capabilities of 56C, 143/145TC, 182/184TC
- All stainless steel hardware
- Output bore diameters up to 1-1/2"
- Housing style options: feet, flange, torque arm bracket, or tapped holes

*The KSS Series utilizes our quality-proven, high-efficiency K Series helical/bevel speed reducer mechanics. Enclosed within a sealed, stainless steel housing, the KSS provides superior performance for food duty and severe wash down applications.*



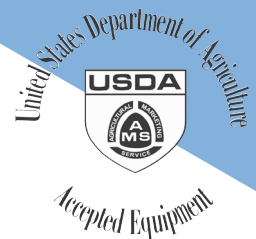
**SHIPS in  
1 DAY!**  
NO EXPEDITE FEE FOR 24  
HOUR SERVICE

### KSS Series Benefits

- No maintenance - totally enclosed with no breather to allow contaminants in or oil out
- Lubricated for life with Mobil SHC CIBUS 220 food grade oil
- No harborage point for bacteria because of our laser etched nameplate data
- Simple motor mounting and removal with Bowex coupling system
- Energy savings - up to 97% efficiency
- Easy installation and removal with our patented bushing system and any horizontal mounting position
- Reliability guaranteed with 3 year warranty
- Adaptability - mounting gear reducer from either machine side means stocking fewer options
- Durability - IP69K Certified to prevent water and dust ingress
- Assembled in USA

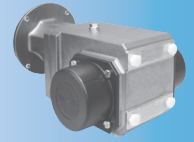
### The Optimum Food & Beverage Solution!

- Cast stainless steel housing outside; all stainless steel hardware inside
- Mobil SHC CIBUS 220 food grade oil
- Suitable for the most extreme wash down applications
- USDA Accepted Equipment/FDA compliant
- IP69K certified to prevent water and dust ingress (see page 6 for full details)



# Overview

# IP69K/STAINLESS STEEL



## KSS Ordering Options At-a-Glance

KSS Series are available in a wide range of user-selected design options that tailor the speed reducer to your motor and exact application requirements. Use the appropriate order codes below to build a part number for the complete assembly.

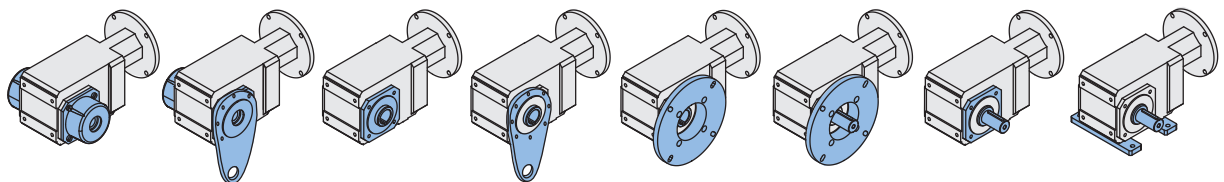
**Part Number Example:** 1 2 3 4 5 6 7 8 9 0\*

**Part Number Example:** KSS 1 0 2 W G 0040 MS1R 050 E1256

	Part Number	Description
<b>1 Series</b>	<b>KSS</b>	Stainless steel housing; right angle helical/bevel
<b>2 Size</b>	<b>1 2 3 4</b>	4 sizes of speed reducers
<b>3 Generation</b>	<b>0</b>	Version of speed reducers
<b>4 # of Stages</b>	<b>2 3</b>	Two stage or three stage
<b>5 Output</b>	<b>A</b>	Hollow bore output
	<b>V</b>	Solid shaft output (specify side 3, 4 or double sided)
	<b>W</b>	Double wobble-free bushing
<b>6 Housing</b>	<b>F</b>	Round output flange (specify side 3 or 4)
	<b>G</b>	Pilot Circle Diameter (PCD) tapped holes
	<b>GD</b>	Torque arm bracket
	<b>NG</b>	Foot mounting (specify side 1 or 5)
<b>7 Ratio</b>	<b>0040</b>	Ratios range from 4:1 to 272:1 (refer to Selection Data tables)
<b>8 Motor Adapter</b>	<b>MS1R</b>	For KSS1
	<b>MS2R</b>	For KSS2
	<b>MS3R</b>	For KSS3
	<b>MS4R</b>	For KSS4
<b>9 NEMA Frame Size</b>	<b>050</b>	56C
	<b>140</b>	143/145TC
	<b>180</b>	182/184TC
<b>0 Mounting Position*</b> <i>Refer to page 14 illustrations</i>	<b>EL1256</b> <b>E34</b>	Mounting positions for 3 year warranty

\*Note: Mounting position is added to "notes" section of order.

## Output and Housing Configurations

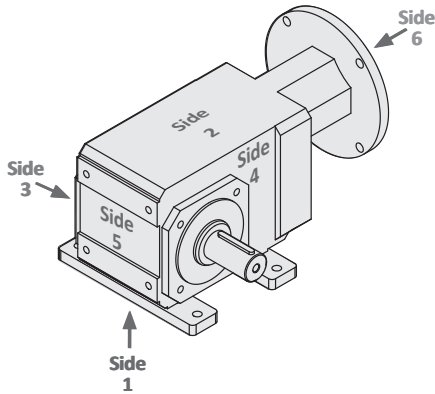


See Page	page 24	page 25	page 26	page 27	page 28	page 29	page 30	page 31
<b>Output</b>	<b>W</b> Double Bushing	<b>W</b> Double Bushing	<b>A</b> Hollow Bore	<b>A</b> Hollow Bore	<b>A</b> Hollow Bore	<b>V</b> Solid Shaft	<b>V</b> Solid Shaft	<b>V</b> Solid Shaft
<b>Housing</b>	<b>G</b> Tapped Holes	<b>GD</b> Torque Arm Bracket	<b>G</b> Tapped Holes	<b>GD</b> Torque Arm Bracket	<b>F</b> Round Flange	<b>F</b> Round Flange	<b>G</b> Tapped Holes	<b>NG</b> Foot Mount

**KSS Series: RIGHT ANGLE — Solid Shaft / Hollow Output**

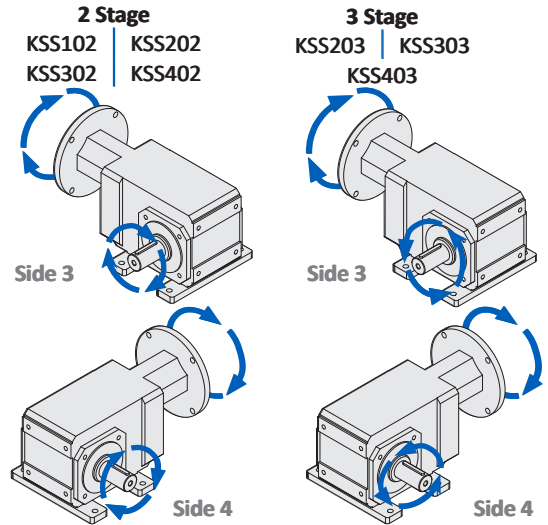
# KSS Series: RIGHT ANGLE — Solid Shaft/Hollow Output

## KSS Series Orientation



## KSS Series Direction of Rotation

Output available on side 3, 4 or both.  
 Note: With a double output, the shaft rotation of Side 3 will be the OPPOSITE direction of Side 4 when viewed from Side 5.



## KSS Series Output Options

BLUE: standard output diameters in stock  
 BLACK: optional diameters in stock

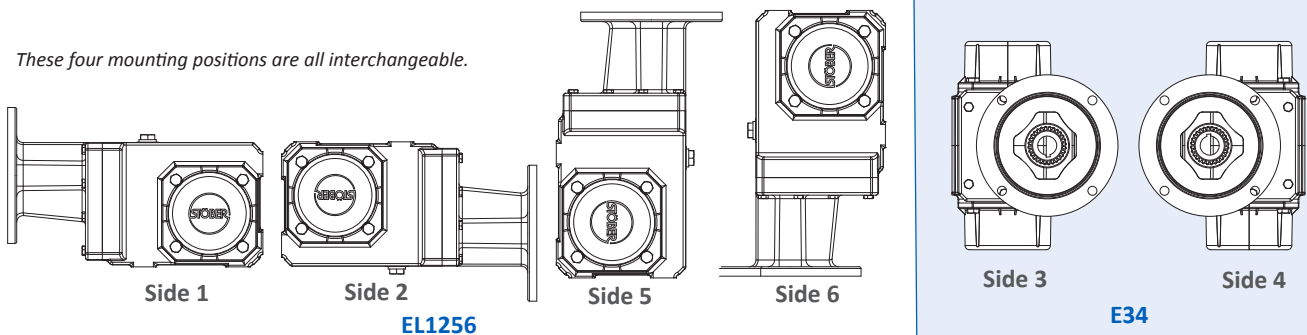
All Outputs Stainless Steel (Inches)		KSS1	KSS2	KSS3	KSS4
"V" Solid Shaft	Inches	1	1-1/4	1-1/4	1-3/8
"A" Hollow Bore	Inches	1	1-1/4	1-3/8	1-1/2
"W" Wobble Free Bushing	Inches	1	1 1-3/16 1-1/4 1-3/8 1-7/16 1-1/2	1 1-3/16 1-1/4 1-3/8 1-7/16 1-1/2	1-3/16 1-1/4 1-3/8 1-7/16 1-1/2
	Metric	25	30 35	30 35	40

## KSS Mounting Position Options

When ordering any KSS unit, the mounting position must be specified. Use one of the mounting position order codes illustrated below that corresponds to the intended application.

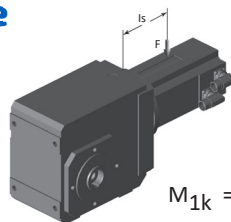
Note that KSS units are equipped with specialized seals, higher oil level, and additional features that enables all horizontal output positions to be used interchangeably.

These four mounting positions are all interchangeable.



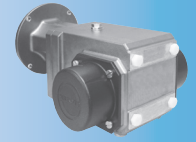
## Permissible Motor Tilting Torque

The permissible tilting torque of the motor attached to the gear unit is a result of the static and dynamic load "F" from the motor weight, mass acceleration, and vibration multiplied by the distance from the center of gravity "I<sub>s</sub>" of the motor.



$$M_{1k} = F \times I_s \leq M_{1K}$$

M <sub>1K</sub>	MS1R	MS2R	MS3R	MS4R
in.lbs	221	531	1106	2212



# Selection Data

# IP69K/STAINLESS STEEL

KSS Series: RIGHT ANGLE — Solid Shaft / Hollow Output

## KSS Sizing/Selection:

1. Find the **RPM Output (Approximate)** nearest the application requirement. (If the exact Output RPM is required, divide the Input RPM [1750] by the value listed in the Nominal Ratio column.)
- 2a. In the **Input HP** column, locate the rating that is greater than or equal to the required HP, or;
- 2b. If selection is based on Torque instead of HP, find an **Output Torque** that is equal to or greater than required.
3. Confirm that the **Overhung Load** is acceptable for the application.
4. Choose the appropriate **Base Module** and **Motor Adapter** part number code (see page 13 for complete ordering information).

1750 RPM Input		Nominal Ratio	Overhung Load Output Shaft <sup>1)</sup> (lbs)	Part Number Codes (in blue)		Compatible NEMA C-Frame <sup>2)</sup> with Designated Motor Adapter
Input HP	Output Torque (lb-in)			Base Module	Motor Adapter	

### 435 RPM Output (Approximate)

2.61	364	4.000	402	<b>KSS102_0040</b>	<b>MS1R050</b>	56C
7.00*	979	4.000	483	<b>KSS202_0040</b>	<b>MS2R050</b>	56C
					<b>MS2R140</b>	143/145TC
9.22*	1,289	4.000	563	<b>KSS302_0040</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
					<b>MS3R180</b>	182/184TC
9.22	1,289	4.000	901	<b>KSS402_0040</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC
18.40*	2,572	4.000	901	<b>KSS402_0040</b>	<b>MS4R180</b>	182/184TC

### 400 RPM Output (Approximate)

6.60*	1,008	4.364	497	<b>KSS202_0044</b>	<b>MS2R050</b>	56C
					<b>MS2R140</b>	143/145TC
9.22*	1,406	4.364	580	<b>KSS302_0044</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
11.57*	1,765	4.364	580	<b>KSS302_0044</b>	<b>MS3R180</b>	182/184TC
9.22	1,406	4.364	928	<b>KSS402_0044</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC
17.36*	2,648	4.364	928	<b>KSS402_0044</b>	<b>MS4R180</b>	182/184TC

### 340 RPM Output (Approximate)

5.89*	1,067	5.177	526	<b>KSS202_0052</b>	<b>MS2R050</b>	56C
					<b>MS2R140</b>	143/145TC

1) Overhung Load is measured at the center of the shaft extension. Hollow output units are not intended to support overhung loads. If a load rating is required, use 50% of the published overhung load.

2) Motor HP for TEFC NEMA C-Frame @ 1750 RPM

C-Frame	56C	143/145TC	182/184
HP	1/4 to 1-1/2	1 to 2	3 to 5

\* Thermal HP Limit

Base Module Size	KSS102	KSS202	KSS302	KSS402
HP Limit	2.95	5.36	7.38	12.34

# KSS Series: RIGHT ANGLE — Solid Shaft/Hollow Output

1750 RPM Input		Nominal Ratio	Overhung Load Output Shaft <sup>1)</sup> (lbs)	Part Number Codes (in blue)		Compatible NEMA C-Frame <sup>2)</sup> with Designated Motor Adapter
Input HP	Output Torque (lb-in)			Base Module	Motor Adapter	
<b>325 RPM Output (Approximate)</b>						
8.73*	1,640	5.375	621	KSS302_0054	MS3R050	56C
					MS3R140	143/145TC
10.07*	1,892	5.375	621	KSS302_0054	MS3R180	182/184TC
9.22	1,747	5.422	997	KSS402_0054	MS4R050	56C
					MS4R140	143/145TC
15.02*	2,847	5.422	997	KSS402_0054	MS4R180	182/184TC
<b>315 RPM Output (Approximate)</b>						
2.61	507	5.568	449	KSS102_0056	MS1R050	56C
<b>290 RPM Output (Approximate)</b>						
2.61	546	6.000	460	KSS102_0060	MS1R050	56C
5.34	1,120	6.000	553	KSS202_0060	MS2R050	56C
					MS2R140	143/145TC
9.22*	1,933	6.000	645	KSS302_0060	MS3R050	56C
					MS3R140	143/145TC
9.36*	1,962	6.000	645	KSS302_0060	MS3R180	182/184TC
9.22	1,933	6.000	1,031	KSS402_0060	MS4R050	56C
					MS4R140	143/145TC
14.04*	2,945	6.000	1,031	KSS402_0060	MS4R180	182/184TC
<b>260 RPM Output (Approximate)</b>						
2.61	605	6.644	476	KSS102_0066	MS1R050	56C
4.97	1,161	6.683	573	KSS202_0067	MS2R050	56C
					MS2R140	143/145TC
7.92*	1,865	6.740	670	KSS302_0067	MS3R050	56C
					MS3R140	143/145TC
8.66*	2,040	6.740	670	KSS302_0067	MS3R180	182/184TC
8.73	2,050	6.719	1,071	KSS402_0067	MS4R050	56C
					MS4R140	143/145TC
13.02*	3,058	6.719	1,071	KSS402_0067	MS4R180	182/184TC
<b>245 RPM Output (Approximate)</b>						
4.77	1,186	7.118	585	KSS202_0071	MS2R050	56C
					MS2R140	143/145TC

1) Overhung Load is measured at the center of the shaft extension. Hollow output units are not intended to support overhung loads. If a load rating is required, use 50% of the published overhung load.

2) Motor HP for TEFC NEMA C-Frame @ 1750 RPM

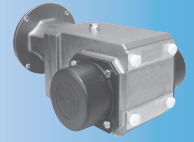
C-Frame	56C	143/145TC	182/184
HP	1/4 to 1-1/2	1 to 2	3 to 5

\* Thermal HP Limit

Base Module Size	KSS102	KSS202	KSS302	KSS402
HP Limit	2.95	5.36	7.38	12.34

# Selection Data

# IP69K/STAINLESS STEEL



1750 RPM Input		Nominal Ratio	Overhung Load Output Shaft <sup>1)</sup> (lbs)	Part Number Codes (in blue)		Compatible NEMA C-Frame <sup>2)</sup> with Designated Motor Adapter
Input HP	Output Torque (lb-in)			Base Module	Motor Adapter	

## 235 RPM Output (Approximate)

8.14*	2,104	7.391	691	KSS302_0074	MS3R050	56C
					MS3R140	143/145TC
					MS3R180	182/184TC
9.22	2,402	7.456	1,109	KSS402_0075	MS4R050	56C
					MS4R140	143/145TC
12.04	3,166	7.456	1,109	KSS402_0075	MS4R180	182/184TC

## 210 RPM Output (Approximate)

2.41	699	8.309	513	KSS102_0083	MS1R050	56C
4.27	1,253	8.397	618	KSS202_0084	MS2R050	56C
					MS2R140	143/145TC
6.87	2,029	8.444	722	KSS302_0084	MS3R050	56C
					MS3R140	143/145TC
7.45	2,199	8.444	722	KSS302_0084	MS3R180	182/184TC
7.70	2,256	8.377	1,153	KSS402_0084	MS4R050	56C
					MS4R140	143/145TC
11.24	3,291	8.377	1,153	KSS402_0084	MS4R180	182/184TC

## 190 RPM Output (Approximate)

2.24	725	9.249	532	KSS102_0092	MS1R050	56C
4.02	1,292	9.190	637	KSS202_0092	MS2R050	56C
					MS2R140	143/145TC
7.00	2,268	9.267	745	KSS302_0093	MS3R050	56C
					MS3R140	143/145TC
					MS3R180	182/184TC
8.73	2,819	9.238	1,191	KSS402_0092	MS4R050	56C
					MS4R140	143/145TC
10.53	3,400	9.238	1,191	KSS402_0092	MS4R180	182/184TC

## 170 RPM Output (Approximate)

2.11	747	10.140	548	KSS102_0100	MS1R050	56C
3.78	1,332	10.073	657	KSS202_0100	MS2R050	56C
					MS2R140	143/145TC
5.98	2,117	10.135	768	KSS302_0100	MS3R050	56C
					MS3R140	143/145TC
6.60	2,337	10.135	768	KSS302_0100	MS3R180	182/184TC
6.66	2,351	10.098	1,227	KSS402_0100	MS4R050	56C
					MS4R140	143/145TC
9.62	3,503	10.098	1,227	KSS402_0100	MS4R180	182/184TC

1) Overhung Load is measured at the center of the shaft extension. Hollow output units are not intended to support overhung loads. If a load rating is required, use 50% of the published overhung load.

2) Motor HP for TEFC NEMA C-Frame @ 1750 RPM

C-Frame	56C	143/145TC	182/184
HP	1/4 to 1-1/2	1 to 2	3 to 5

KSS Series: RIGHT ANGLE — Solid Shaft / Hollow Output

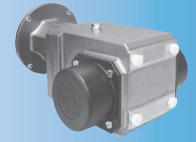
# KSS Series: RIGHT ANGLE — Solid Shaft/Hollow Output

1750 RPM Input		Nominal Ratio	Overhung Load Output Shaft <sup>1)</sup> (lbs)	Part Number Codes (in blue)		Compatible NEMA C-Frame <sup>2)</sup> with Designated Motor Adapter
Input HP	Output Torque (lb-in)			Base Module	Motor Adapter	
<b>150 RPM Output (Approximate)</b>						
1.93	781	11.565	573	KSS102_0115	MS1R050	56C
3.45	1,394	11.546	687	KSS202_0115	MS2R050	56C
					MS2R140	143/145TC
6.02	2,445	11.610	803	KSS302_0115	MS3R050	56C
					MS3R140	143/145TC
					MS3R180	182/184TC
7.70	3,102	11.518	1,282	KSS402_0115	MS4R050	56C
					MS4R140	143/145TC
9.09	3,660	11.518	1,282	KSS402_0115	MS4R180	182/184TC
<b>140 RPM Output (Approximate)</b>						
1.82	804	12.618	590	KSS102_0125	MS1R050	56C
3.24	1,439	12.705	710	KSS202_0125	MS2R050	56C
					MS2R140	143/145TC
5.12	2,251	12.577	825	KSS302_0125	MS3R050	56C
					MS3R140	143/145TC
5.71	2,511	12.577	825	KSS302_0125	MS3R180	182/184TC
5.86	2,594	12.658	1,323	KSS402_0125	MS4R050	56C
					MS4R140	143/145TC
8.53	3,777	12.658	1,323	KSS402_0125	MS4R180	182/184TC
<b>125 RPM Output (Approximate)</b>						
1.69	835	14.114	612	KSS102_0140	MS1R050	56C
3.06	1,481	13.851	730	KSS202_0140	MS2R050	56C
					MS2R140	143/145TC
5.33	2,599	13.935	854	KSS302_0140	MS3R050	56C
					MS3R140	143/145TC
					MS3R180	182/184TC
6.66	3,232	13.885	1,364	KSS402_0140	MS4R050	56C
					MS4R140	143/145TC
8.02	3,895	13.885	1,364	KSS402_0140	MS4R180	182/184TC
<b>105 RPM Output (Approximate)</b>						
1.51	883	16.714	648	KSS102_0165	MS1R050	56C
2.68	1,581	16.858	780	KSS202_0170	MS2R050	56C
					MS2R140	143/145TC
4.03	2,389	16.939	911	KSS302_0170	MS3R050	56C
					MS3R140	143/145TC
4.68	2,774	16.939	911	KSS302_0170	MS3R180	182/184TC
7.03	4,162	16.939	1,458	KSS402_0170	MS4R050	56C
					MS4R140	143/145TC
					MS4R180	182/184TC

1) Overhung Load is measured at the center of the shaft extension. Hollow output units are not intended to support overhung loads. If a load rating is required, use 50% of the published overhung load.

2) Motor HP for TEFC NEMA C-Frame @ 1750 RPM

C-Frame	56C	143/145TC	182/184
HP	1/4 to 1-1/2	1 to 2	3 to 5



# Selection Data

# IP69K/STAINLESS STEEL

1750 RPM Input		Nominal Ratio	Overhung Load Output Shaft <sup>1)</sup> (lbs)	Part Number Codes (in blue)		Compatible NEMA C-Frame <sup>2)</sup> with Designated Motor Adapter
Input HP	Output Torque (lb-in)			Base Module	Motor Adapter	
<b>100 RPM Output (Approximate)</b>						
1.46	898	17.563	659	KSS102_0175	MS1R050	56C
2.62	1,600	17.469	789	KSS202_0175	MS2R050	56C
					MS2R140	143/145TC
4.62	2,793	17.293	917	KSS302_0175	MS3R050	56C
					MS3R140	143/145TC
					MS3R180	182/184TC
5.86	3,567	17.405	1,471	KSS402_0175	MS4R050	56C
					MS4R140	143/145TC
6.90	4,200	17.405	1,471	KSS402_0175	MS4R180	182/184TC
<b>85 RPM Output (Approximate)</b>						
1.33	940	20.150	690	KSS102_0200	MS1R050	56C
2.37	1,683	20.327	830	KSS202_0200	MS2R050	56C
					MS2R140	143/145TC
3.56	2,526	20.278	967	KSS302_0200	MS3R050	56C
					MS3R140	143/145TC
4.15	2,945	20.278	967	KSS302_0200	MS3R180	182/184TC
4.03	2,849	20.197	1,546	KSS402_0200	MS4R050	56C
					MS4R140	143/145TC
6.25	4,413	20.197	1,546	KSS402_0200	MS4R180	182/184TC
<b>75 RPM Output (Approximate)</b>						
1.21	986	23.265	723	KSS102_0230	MS1R050	56C
2.17	1,758	23.180	867	KSS202_0230	MS2R050	56C
					MS2R140	143/145TC
3.79	3,084	23.292	1,013	KSS302_0230	MS3R050	56C
					MS3R140	143/145TC
					MS3R180	182/184TC
4.65	3,786	23.292	1,621	KSS402_0230	MS4R050	56C
					MS4R140	143/145TC
5.68	4,628	23.292	1,621	KSS402_0230	MS4R180	182/184TC
<b>70 RPM Output (Approximate)</b>						
0.96	851	25.220	743	KSS102_0250	MS1R050	56C
2.02	1,772	25.130	891	KSS202_0250	MS2R050	56C
					MS2R140	143/145TC
2.91	2,566	25.259	1,041	KSS302_0250	MS3R050	56C
					MS3R140	143/145TC
3.48	3,070	25.259	1,041	KSS302_0250	MS3R180	182/184TC
3.34	2,956	25.279	1,666	KSS402_0250	MS4R050	56C
					MS4R140	143/145TC
5.02	4,434	25.279	1,666	KSS402_0250	MS4R180	182/184TC

KSS Series: RIGHT ANGLE — Solid Shaft / Hollow Output

1) Overhung Load is measured at the center of the shaft extension. Hollow output units are not intended to support overhung loads. If a load rating is required, use 50% of the published overhung load.

2) Motor HP for TEFC NEMA C-Frame @ 1750 RPM

C-Frame	56C	143/145TC	182/184
HP	1/4 to 1-1/2	1 to 2	3 to 5



# KSS Series: RIGHT ANGLE — Solid Shaft/Hollow Output

1750 RPM Input		Nominal Ratio	Overhung Load Output Shaft <sup>1)</sup> (lbs)	Part Number Codes (in blue)		Compatible NEMA C-Frame <sup>2)</sup> with Designated Motor Adapter
Input HP	Output Torque (lb-in)			Base Module	Motor Adapter	

## 60 RPM Output (Approximate)

1.07	1,049	28.048	770	<b>KSS102_0280</b>	<b>MS1R050</b>	56C
1.81	1,772	27.950	923	<b>KSS202_0280</b>	<b>MS2R050</b>	56C
					<b>MS2R140</b>	143/145TC
3.18	3,100	27.883	1,076	<b>KSS302_0280</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
					<b>MS3R180</b>	182/184TC
4.03	3,917	27.771	1,719	<b>KSS402_0280</b>	<b>MS4R050</b>	56C
5.02	4,872	27.771	1,719	<b>KSS402_0280</b>	<b>MS4R140</b>	143/145TC
					<b>MS4R180</b>	182/184TC

## 55 RPM Output (Approximate)

2.76	3,100	32.649	1,134	<b>KSS303_0330</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
3.34	3,733	32.390	1,809	<b>KSS403_0320</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC

## 52 RPM Output (Approximate)

0.55	647	33.707	886	<b>KSS102_0340</b>	<b>MS1R050</b>	56C
1.16	1,364	33.618	1,063	<b>KSS202_0340</b>	<b>MS2R050</b>	56C
					<b>MS2R140</b>	143/145TC
1.89	2,217	33.618	1,240	<b>KSS302_0340</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
					<b>MS4R050</b>	56C
2.62	3,084	33.678	1,833	<b>KSS402_0340</b>	<b>MS4R140</b>	143/145TC
2.93	3,445	33.678	1,833	<b>KSS402_0340</b>	<b>MS4R180</b>	182/184TC

## 50 RPM Output (Approximate)

0.87	1,063	35.105	895	<b>KSS102_0350</b>	<b>MS1R050</b>	56C
1.47	1,772	34.554	1,070	<b>KSS202_0350</b>	<b>MS2R050</b>	56C
					<b>MS2R140</b>	143/145TC
2.51	3,100	35.833	1,260	<b>KSS303_0360</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
					<b>MS3R050</b>	56C
2.55	3,100	34.731	1,250	<b>KSS302_0350</b>	<b>MS3R140</b>	143/145TC
					<b>MS4R050</b>	56C
3.34	4,065	34.758	1,852	<b>KSS402_0350</b>	<b>MS4R140</b>	143/145TC
3.34	4,117	35.721	1,869	<b>KSS403_0360</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC
4.01	4,872	34.758	1,852	<b>KSS402_0350</b>	<b>MS4R180</b>	182/184TC

## 45 RPM Output (Approximate)

1.30	1,772	39.454	1,035	<b>KSS203_0390</b>	<b>MS2R050</b>	56C
2.30	3,100	39.187	1,288	<b>KSS303_0390</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
3.34	4,500	39.047	1,926	<b>KSS403_0390</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC

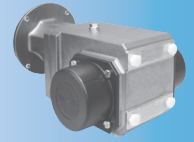
1) Overhung Load is measured at the center of the shaft extension. Hollow output units are not intended to support overhung loads. If a load rating is required, use 50% of the published overhung load.

2) Motor HP for TEFC NEMA C-Frame @ 1750 RPM

C-Frame	<b>56C</b>	<b>143/145TC</b>	<b>182/184</b>
HP	1/4 to 1-1/2	1 to 2	3 to 5

# Selection Data

# IP69K/STAINLESS STEEL



1750 RPM Input		Nominal Ratio	Overhung Load Output Shaft <sup>1)</sup> (lbs)	Part Number Codes (in blue)		Compatible NEMA C-Frame <sup>2)</sup> with Designated Motor Adapter
Input HP	Output Torque (lb-in)			Base Module	Motor Adapter	

### 43 RPM Output (Approximate)

0.39	544	40.300	927	<b>KSS102_0400</b>	<b>MS1R050</b>	56C
1.20	1,705	40.512	1,299	<b>KSS302_0410</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
1.93	2,729	40.512	1,950	<b>KSS402_0410</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC

### 40 RPM Output (Approximate)

1.10	1,772	46.225	1,151	<b>KSS202_0460</b>	<b>MS2R050</b>	56C
					<b>MS2R140</b>	143/145TC
1.14	1,772	45.223	1,083	<b>KSS203_0450</b>	<b>MS2R050</b>	56C
					<b>MS3R050</b>	56C
1.89	3,048	46.225	1,343	<b>KSS302_0460</b>	<b>MS3R140</b>	143/145TC
					<b>MS3R050</b>	56C
2.01	3,100	44.892	1,333	<b>KSS303_0450</b>	<b>MS3R140</b>	143/145TC
					<b>MS3R050</b>	56C
2.62	4,240	46.308	2,038	<b>KSS402_0460</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC
3.17	4,872	44.536	2,012	<b>KSS403_0450</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC

### 35 RPM Output (Approximate)

0.25	442	50.310	980	<b>KSS102_0500</b>	<b>MS1R050</b>	56C
0.55	900	46.918	963	<b>KSS102_0470</b>	<b>MS1R050</b>	56C
1.03	1,772	49.759	1,118	<b>KSS203_0500</b>	<b>MS2R050</b>	56C
1.85	3,100	48.631	1,360	<b>KSS303_0490</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
1.35	2,387	50.427	2,097	<b>KSS402_0500</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC
2.89	4,872	48.944	2,076	<b>KSS403_0490</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC

### 30 RPM Output (Approximate)

0.38	753	56.095	970	<b>KSS102_0560</b>	<b>MS1R050</b>	56C
0.95	1,772	54.25	1,151	<b>KSS203_0540</b>	<b>MS2R050</b>	56C
					<b>MS3R050</b>	56C
1.20	2,345	55.705	1,407	<b>KSS302_0560</b>	<b>MS3R140</b>	143/145TC
					<b>MS3R050</b>	56C
1.67	3,100	53.883	1,395	<b>KSS303_0540</b>	<b>MS3R140</b>	143/145TC
					<b>MS4R050</b>	56C
1.93	3,752	55.705	2,168	<b>KSS402_0560</b>	<b>MS4R140</b>	143/145TC
					<b>MS4R050</b>	56C
2.63	4,872	53.690	2,141	<b>KSS403_0540</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC

1) Overhung Load is measured at the center of the shaft extension. Hollow output units are not intended to support overhung loads. If a load rating is required, use 50% of the published overhung load.

2) Motor HP for TEFC NEMA C-Frame @ 1750 RPM

C-Frame	56C	143/145TC	182/184
HP	1/4 to 1-1/2	1 to 2	3 to 5

KSS Series: RIGHT ANGLE — Solid Shaft / Hollow Output

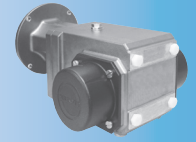
# KSS Series: RIGHT ANGLE — Solid Shaft/Hollow Output

1750 RPM Input		Nominal Ratio	Overhung Load Output Shaft <sup>1)</sup> (lbs)	Part Number Codes (in blue)		Compatible NEMA C-Frame <sup>2)</sup> with Designated Motor Adapter
Input HP	Output Torque (lb-in)			Base Module	Motor Adapter	
<b>27 RPM Output (Approximate)</b>						
0.78	1,772	66.027	1,229	<b>KSS203_0660</b>	<b>MS2R050</b>	56C
1.38	3,100	65.499	1,465	<b>KSS303_0650</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
1.32	3,016	66.346	2,298	<b>KSS403_0660</b>	<b>MS4R050</b>	56C
2.10	4,872	67.298	2,309	<b>KSS403_0670</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC
2.16	4,872	65.499	2,288	<b>KSS403_0650</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC
<b>25 RPM Output (Approximate)</b>						
0.25	616	70.029	1,064	<b>KSS102_0700</b>	<b>MS1R050</b>	56C
0.75	1,772	68.419	1,244	<b>KSS203_0680</b>	<b>MS2R050</b>	56C
1.35	3,100	66.868	1,473	<b>KSS303_0670</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
1.35	3,283	69.338	2,332	<b>KSS402_0690</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC
<b>22 RPM Output (Approximate)</b>						
0.65	1,772	79.615	1,308	<b>KSS203_0800</b>	<b>MS2R050</b>	56C
1.15	3,100	78.410	1,532	<b>KSS303_0780</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
1.81	4,872	78.095	2,426	<b>KSS403_0780</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC
<b>19 RPM Output (Approximate)</b>						
0.57	1,772	90.787	1,350	<b>KSS203_0910</b>	<b>MS2R050</b>	56C
1.00	3,100	90.061	1,575	<b>KSS303_0900</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
1.57	4,872	90.061	2,520	<b>KSS403_0900</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC
<b>16 RPM Output (Approximate)</b>						
0.47	1,772	109.471	1,350	<b>KSS203_1090</b>	<b>MS2R050</b>	56C
0.84	3,100	107.814	1,575	<b>KSS303_1080</b>	<b>MS3R050</b>	56C
					<b>MS3R140</b>	143/145TC
1.32	4,872	107.381	2,520	<b>KSS403_1070</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC

1) Overhung Load is measured at the center of the shaft extension. Hollow output units are not intended to support overhung loads. If a load rating is required, use 50% of the published overhung load.

2) Motor HP for TEFC NEMA C-Frame @ 1750 RPM

C-Frame	56C	143/145TC	182/184
HP	1/4 to 1-1/2	1 to 2	3 to 5



# Selection Data

# IP69K/STAINLESS STEEL

1750 RPM Input		Nominal Ratio	Overhung Load Output Shaft <sup>1)</sup> (lbs)	Part Number Codes (in blue)		Compatible NEMA C-Frame <sup>2)</sup> with Designated Motor Adapter
Input HP	Output Torque (lb-in)			Base Module	Motor Adapter	

### 13 RPM Output (Approximate)

0.38	1,772	135.335	1,350	<b>KSS203_1350</b>	<b>MS2R050</b>	56C
0.67	3,100	134.292	1,575	<b>KSS303_1340</b>	<b>MS3R050</b>	56C
1.05	4,872	134.399	2,520	<b>KSS403_1340</b>	<b>MS4R050</b>	56C
					<b>MS4R140</b>	143/145TC

### 10 RPM Output (Approximate)

0.28	1,772	181.048	1,350	<b>KSS203_1810</b>	<b>MS2R050</b>	56C
0.50	3,048	178.737	1,575	<b>KSS303_1790</b>	<b>MS3R050</b>	56C
0.77	4,737	179.056	2,520	<b>KSS403_1790</b>	<b>MS4R050</b>	56C

### 8 RPM Output (Approximate)

0.19	1,407	217.538	1,350	<b>KSS203_2180</b>	<b>MS2R050</b>	56C
0.13	1,172	271.923	1,350	<b>KSS203_2720</b>	<b>MS2R050</b>	56C
0.51	3,752	215.391	2,520	<b>KSS403_2150</b>	<b>MS4R050</b>	56C

### 6 RPM Output (Approximate)

0.19	1,407	217.538	1,350	<b>KSS203_2180</b>	<b>MS2R050</b>	56C
0.13	1,172	271.923	1,350	<b>KSS203_2720</b>	<b>MS2R050</b>	56C

1) Overhung Load is measured at the center of the shaft extension. Hollow output units are not intended to support overhung loads. If a load rating is required, use 50% of the published overhung load.

2) Motor HP for TEFC NEMA C-Frame @ 1750 RPM

C-Frame	56C	143/145TC	182/184
HP	1/4 to 1-1/2	1 to 2	3 to 5

KSS Series: RIGHT ANGLE — Solid Shaft / Hollow Output