Section Contents

For Other Boston Gear Reducers, Contact Factory.

700 Series Double Reduction Catalog Number & Reference Guide

700 Series Right Angle Worm Gearbox - Double Reduction

SBKC H QC HMA 7 38 B – 300 K E Z T – B5 –

Input Shaft Style
- **Blank**–Solid Projecting Input Shaft
- **F**- Quill Style Motor Flange
- **RF** – Coupling Style Motor Flange
- **QC** – *Quick Connect* Motor Flange (close coupled)

Output Shaft Style
- **Blank**–Solid Output Shaft
- **H** – *BostMount* Hollow Output (setscrews both sides, bore size selectable)
- **S** – Hollow Output (setscrews one side, bore size fixed)

Reducer Material/Paint
- **Blank**–Cast Iron, Std. Gray paint
- **BKC** – Cast Iron, White *BostKleen* paint
- **SBKC**– Cast Iron, Stainless *BostKleen* paint
- **SS** – Stainless Steel material – no paint

Reduction Type
- **WA** – Double Reduction Parallel Shafts
- **WB** – Double Reduction Parallel Shafts
- **WC** – Double Reduction Right Angle Shafts
- **WD** – Double Reduction Right Angle Shafts
- **HMA** – Helical Multiplier 12 O'clock
- **HMB** – Helical Multiplier 6 O' clock
- **HMC** – Helical Multiplier 3 O'clock
- **HMD** – Helical Multiplier 9 O'clock
- **WP** – Planetary Torque Mulitplier

7 – 700 Series

Center Distance (inches)
- **13** – 1.33
- **18** – 1.75
- **21** – 2.06
- **26** – 2.62
- **30** – 3.00
- **32** – 3.25
- **38** – 3.75
- **52** – 5.13
- **60** – 6.00

Base/Mounting Attachment*
- **Blank** – No base kit required
- **A & B** – Horizontal bases
- **C & E** – Vertical High bases
- **D & F** – Vertical Low bases
- **R/L** – *BostMount* Output Bracket
- **X** – Input Vertical Up
- **Y** – Input Vertical Down
- **V/W** – Hollow O/P with base
- **M/N** – Hollow O/P with CFA

*See catalog for mounting configurations

Exact Gear Ratio (Ratio to 1)

100	1200
150	1800
200	2000
300	2400
400	3000
600	3600
900	

Check Catalog – Or consult factory for availability

Lubrication
- **Blank**–No lubrication
- **K** – Klubersynth UH1 6-460
- **S** – Mobil SHC 634
- **X** – Mobil 600W

Endcap (732-760 only)
- **E** – Endcap (standard)

Vent
- **Blank**–Standard Vent
- **P** – Pressure Vent (5 psi)
- **Z** – Posivent (sealed)

Oil Seal
- **Blank**– Standard Seal
- **T**– Two Standard Input Seals
- **C**– High pressure washdown output seals and double input seals (stainless products only) **IP69K**

NEMA Motor Mounting

BORE CODE	NEMA MOUNTING	INPUT BORE	KEYWAY
B4	42CZ	.500"	1/8 x 1/16
B5	56C	.625	3/16 x 3/32
B7	140TC/180C	.875	3/16 x 3/32
B9	180TC/210C	1.125	1/4 x 1/8
B11	210TC/250UC	1.375	5/16 x 5/32
B13	250TC	1.625	3/8 x 3/16

Blank Solid Input Shaft (No Flange)

700 Series Double Reduction Flanged & Non-Flanged Reducers

Ordering Information - Page 70
Selection/Rating Information - Pages 71, 77-81
Lubrication - Page 76
Motor Selection - Pages 335 and 336

FWA/QCWA700 BASIC
Dimensions - Page 82

FWC/QCWC700 BASIC
Dimensions - Page 87

WA700 BASIC
Dimensions - Page 92

WC700 BASIC
Dimensions - Page 97

HFWA/HQCWA700 BASIC
Dimensions:
HFWA/QCWA700 - Page 83
HFWA/QCWA700R/L - Page 84
HFWC/QCWC700 - Page 87
HFWC/QCWC700R/L - Page 89

SFWA700 BASIC
Dimensions:
SFWA700 - Page 85
SFWA700V - Page 86
SFWC700 - Page 90
SFWC700V/W - Page 91

HWA/HWC700 BASIC
Dimensions:
HWA700 - Page 92
HWA700R - Page 94
HWC700 - Page 98
HWC700R/L - Page 99

SWA/SWC700 BASIC
Dimensions:
SWA700 - Page 95
SWA700V - Page 96
SWC700 - Page 100
SWC700V/W - Page 101

HS 1 – P24 –

BostMount Output Bore Code

For H Series Only Specified in 1/16" increments.

Example: 1 1/4" = P20

5/8 – **P10**	1-1/2 – **P24**
3/4 – **P12**	1-5/8 – **P26**
7/8 – **P14**	1-11/16 – **P27**
15/16 – **P15**	1-3/4 – **P28**
1 – **P16**	1-7/8 – **P30**
1-1/16 – **P17**	1-15/16 – **P31**
1-1/8 – **P18**	2 – **P32**
1-3/16 – **P19**	2-1/8 – **P34**
1-1/4 – **P20**	2-3/16 – **P35**
1-5/16 – **P21**	2-1/4 – **P36**
1-3/8 – **P22**	2-7/16 – **P39**
1-7/16 – **P23**	3-7/16 – **P55**

See catalog page 128 for availability by center distance.
Consult factory for metric bores

Mounting Positions

Blank -No Lubrication Supplied

For Factory Prelubrication Indicate Mounting Position

1 – Standard Mounting(Worm over)
2-6 – Refer to Mounting Positions on catalog page 72 and 73.

Output Shaft Assembly

Double Reduction WA and WB	
G	Output Projection Opposite Input
H	Double Output Projection
J	Output Projection Same Side as Input
GS	Stainless Output Projection Opposite Input
HS	Stainless Double Output Projection
JS	Stainless Output Projection Same Side as Input
Double Reduction WA and WB Mirrored Design	
K	Output Projection Opposite Input
L	Double Output Projection
M	Output Projection Same Side as Input
KS	Stainless Output Projection Opposite Input
LS	Stainless Double Output Projection
MS	Stainless Output Projection Same Side as Input
Double Reduction WC and WD (When facing Input)	
G	Output Projection Down
H	Double Output Projection
J	Output Projection Upward
GS	Stainless Output Projection Down
HS	Stainless Double Output Projection
JS	Stainless Output Projection Upward
Double Reduction WC and WD (When facing Input) Mirrored Design	
K	Output Projection Down
L	Double Output Projection
M	Output Projection Upward
KS	Stainless Output Projection Down
LS	Stainless Double Output Projection
MS	Stainless Output Projection Upward

Clutch/Brake

CMBA56U-6 –

Common C-Face Brakes Installed

115/230 VAC 60hz	Ft-Lb	Bore Code
CMBA56R-3	3	B5
CMBA56R-6	6	B5
CMBA140TR-6	6	B7

208-230/460 VAC 60hz	Ft-Lb	Bore Code
CMBA56U-3	3	B5
CMBA56U-6	6	B5
CMBA140TU-6	6	B7

Other sizes available. See catalog page 343.

Motor

HUTF5/8-IDB – 3

Motor Conduit box Orientation
(When looking at fan end of motor and gearbox is in mounting position #1)

0 – 12 O'clock
3 – 3 O'clock(standard for G & H shaft assemblies)
6 – 6 O'clock
9 – 9 O'clock (standard for J shaft assemblies)

Common C-Face Motors Installed

HP Rating	Bore Code	AC Voltage	
		115/208-230-1-60	208-230/460-3-60
1/4 HP	B5	DRTFB	DUTFB
1/3 HP	B5	ERTFB	EUTFB
1/2 HP	B5	FRTFB	FUTFB
	B5		FUT-SS
	B5		FUTF-IDB
3/4 HP	B5	GRTFB	GUTFB
	B5		GUT-SS
	B5		GUTF-IDB
1 HP	B5	HRTF-5/8B	HUTF5/8B
	B5		HUT5/8-SS
	B5		HUTF5/8-IDB
	B7		HUTFB
	B7		HUT-SS
	B7		HUTF-IDB
1.5 HP	B7		JUTFB
	B7		JUTF-SS
	B7		JUTF-IDB
2 HP	B5		KUTF5/8B
	B7		KUTFB
	B7		KUTF-SS
	B7		KUTF-IDB
3 HP	B9		LUTFB
	B9		LUTF-SS
	B9		LUTF-IDB
5 HP	B9		MUTFB

Other motors available, please see catalog pages 333 to 343.

T – Totally enclosed non-ventilated
TF – Totally enclosed fan cooled
SS – Stainless
IDB – Inverter Duty (10:1 turn down constant torque)
B5 – 56C
B7 – 140TC
B9 – 180TC

B

Double Reduction Numbering System / How to Order

Style	Size	Base	Ratio	Lubrication	Vent	Input Seal	NEMA Mounting	Shaft Assembly	Mounting Position	Output Bore Code

Style **Designates reducer or flanged reducer, projecting or hollow output shaft.**

- **C-** Prefix — Designates cast iron flange and base. Standard on motor flanges 3 HP (180TC) and up and all bases except horizontal (710-726).
- **WA-** Double reduction, parallel shaft reducer with projecting output shaft.
- **HWA-** Double reduction, parallel shaft reducer with BostMount hollow output shaft.
- **SWA-** Double reduction, parallel shaft reducer with hollow output shaft.
- **WC-** Double reduction, right angle shaft reducer with projecting output shaft.
- **HWC-** Double reduction, right angle shaft reducer with BostMount hollow output shaft.
- **SWC-** Double reduction, right angle shaft reducer with hollow output shaft.
- **FWA-** Double reduction, parallel shaft flanged reducer (Quill types) with projecting output shaft.
- **HFWA-** Double reduction, parallel shaft flanged reducer (Quill types) with BostMount hollow output shaft.
- **SFWA-** Double reduction, parallel shaft flanged reducer (Quill types) with hollow output shaft.
- **FWC-** Double reduction, right angle shaft flanged reducer (Quill types) with projecting output shaft.
- **HFWC-** Double reduction, right angle shaft flanged reducer (Quill types) with BostMount hollow output shaft.
- **SFWC-** Double reduction, right angle shaft flanged reducer (Quill types) with hollow output shaft.
- **QCWA-** Double reduction, parallel shaft flanged reducer (Coupling types) with projecting output shaft.
- **HQCWA-** Double reduction, parallel shaft flanged reducer (Coupling types) with BostMount hollow output shaft.
- **QCWC-** Double reduction, right angle shaft flanged reducer (Coupling types) with projecting output shaft.
- **HQCWC-** Double reduction, right angle shaft flanged reducer (Coupling types) with projecting output shaft.
- **SSFWB/SSFWD-** Stainless steel double reduction with solid output shaft.
- **SSHFWB/SSHFWD-** Stainless steel double reduction with hollow output shaft.

Size **Center distance, rounded off. On double reduction models this is the Center Distance of the second reduction.**

713 - 1.33	**726** - 2.62	**738** - 3.75
718 - 1.75	**730** - 3.00	**752** - 5.16
721 - 2.06	**732** - 3.25	**760** - 6.00

Base **Base positions relative to output shaft. Shipped separately as Base Kits. See Page 129.**

- **Blank** - No Base Kit
- **A,B** - Horizontal Bases
- **C,D,E,F** - Vertical Bases
- **R/L** - BostMount Output Bracket
- **X** - Input Vertical Up
- **Y** - Input Vertical Down
- **V,W** - Flanged bases, available on "S" hollow shaft models only. Factory assembled.
- **M,N-** Hollow Output with CFA

Ratio **See Selection Tables for available ratios**

Lubrication **Optional prelubrication.**

- **Blank** - No lubrication supplied.
- **K** - Klubersynth UH1 6-460
- **S** – Mobil SHC 634
- **X** – Mobil 600W

When specifying optional prelubrication, include mounting position after shaft assembly.

Vent **Pressure Relief.**

- **Blank** – Standard Vent
- **P** – 5 PSI Vent
- **Z** – PosiVent® Pressure Compensationg Bladder When specifying optional prelubrication, include mounting position after shaft assembly.

Input Oil Seal

- **Blank** – Standard Seal
- **T** – Double Input Seals. Recommended for mounting positions 2, 3, 4, 6

NEMA Mounting **Designates flange size and input bore diameter. Flanged reducers only. Leave blank for projecting input reducers.**

Bore Code	NEMA Mounting	Input Bore	Keyway
B4	42CZ	.500"	1/8 x 1/16
B5	56C	.625	3/16 x 3/32
B7	140TC/180C	.875	3/16 x 3/32
B9	180TC/210C	1.125	1/4 x 1/8

See page 252 for Mounting Dimensions.

Shaft Assembly **Assembly shaft arrangements. See Assemblies, Pages 72-75.**

- **G*** - Standard assembly
- **H*** - Double output shaft projection.
- **J*** - Opposite to standard.

* Add "**S**" after letter for Stainless Steel Shaft (ex. **GS**, **HS**, **JS**)

Mounting Position **Designates the position of oil and vent plugs with respect to mounting.**

- **Blank** - For units not supplied prelubricated.
- **1-6** - See Pages 58-61.

Output Bore Code **Specified in 1/16" increments. See Page 114 for complete offering. Example: 1 1/4" = P20 Required for H Series only.**

How to Order

When ordering reducers please include code letters for Style, Size, Base (if required), Ratio, Lubrication (if required), NEMA Mounting (if flanged reducer), Shaft Assembly and Motor (if required).

EXAMPLE: Required size, 726 Quill types flanged double reduction reducer, 100 to 1 ratio, 5/8" input bore, parallel shafts, standard assembly, no base.

Motor to be 3/4 HP, 1750 RPM, 230/460 Volt, 3 Phase, 60 cycle, Open Dripproof.

FWA | 726 – 100 – B5 – G – GUB3

ORDER: FWA726-100-B5-G-GUB3

NOTE: For other assembly configurations, contact factory.

To properly select a speed reducer, the following application information must be known:

Input RPM (Ratio)
Output Torque
Input Horsepower
Service Factor

Non-Motorized Speed Reducer

1. Determine service factor from table below.
2. Determine design horsepower.
   Design Horsepower =
   Application Load x Service Factor
3. Select a speed reducer size that satisfies output RPM, service class and/or output torque requirements.
4. Check overhung load capacity.

Motorized Speed Reducer

1. Determine service class from table below
2. Select a reducer size that satisfies output RPM, service class and/or output torque requirements.
3. Check overhung load capacity.

Service Factor Table

AGMA Class of Service	Service Factor	Operating Conditions
I	1.00	Moderate Shock-not more than 15 minutes in 2 hours.
		Uniform Load-not more than 10 hours per day.
II	1.25	Moderate Shock-not more than 10 hours per day.
		Uniform Load-more than 10 hours per day.
	1.50	Heavy Shock-not more than 15 minutes in 2 hours.
		Moderate Shock-more than 10 hours per day.
III	1.75	Heavy Shock-not more than 10 hours per day.
	2.00	Heavy Shock-more than 10 hours per day.

For complete AGMA Service Factors and Load Classifications, see Engineering Section, Pages 349 and 350.

Double Reduction Selection Tables

Capacity selection tables on Pages 77-81 list catalog numbers and ratios of both reducers and gearmotors. Output RPM, output torque and horsepower are all based on 1750 RPM input. For motorized reducer selection, select the desired output RPM and refer to the gearmotor ratings column. For non-motorized reducers, refer to the reducer gear capacity columns. For the desired HP, torque and service factor that satisfies your requirements, a 700 Series basic reducer number will be indicated. For complete catalog part number, descriptions and options, refer to Page 70.

Overhung Load

If the output shaft of a speed reducer is connected to the driven machine by other than a flexible coupling, an overhung load is imposed on the shaft. This load may be calculated as follows:

$$OHL = \frac{2TK}{D}$$

OHL = Overhung Load (LB.)

T = Shaft Torque (LB.IN.)

D = PD of Sprocket, Pinion or Pulley (IN.)

K = Load Connection Factor

Load Connection Factor

Sprocket or Timing Belt 1.00

Pinion and Gear Drive 1.25

Pulley and V-Belt Drive. 1.50

Pulley and Flat Belt Drive 2.50

An overhung load greater than permissible load value may be reduced to an acceptable value by the use of a sprocket, pinion or pulley or a larger PD. Relocation of the load closer to the center of reducer will also increase OHL capacity.

Permissible overhung loads and output shaft thrust loads are listed for each reducer in the tables on Pages 30-33.

Maximum Input Speeds

W713, W718, W721, W726. . . . . .4500 RPM

W730 through W760 . . . . . .3600 RPM

NOTE: Horsepower ratings for 1750 RPM should NOT be exceeded when operating at higher input speeds.

Ratings shown reflect maximum gear capacity with Klubersynth UH1 6-460 lubricant. The use of other lubricants may reduce ratings by up to 15%.

Ratings are mechanical not thermal.

B

Flanged Reducer Assemblies and Mounting Positions

Assemblies–FWA/QCWA700 Series

Standard assemblies define output shaft (slow speed) projection with respect to input shaft (high speed) and mounting surface.

Types “A” and “B” are horizontal bases.

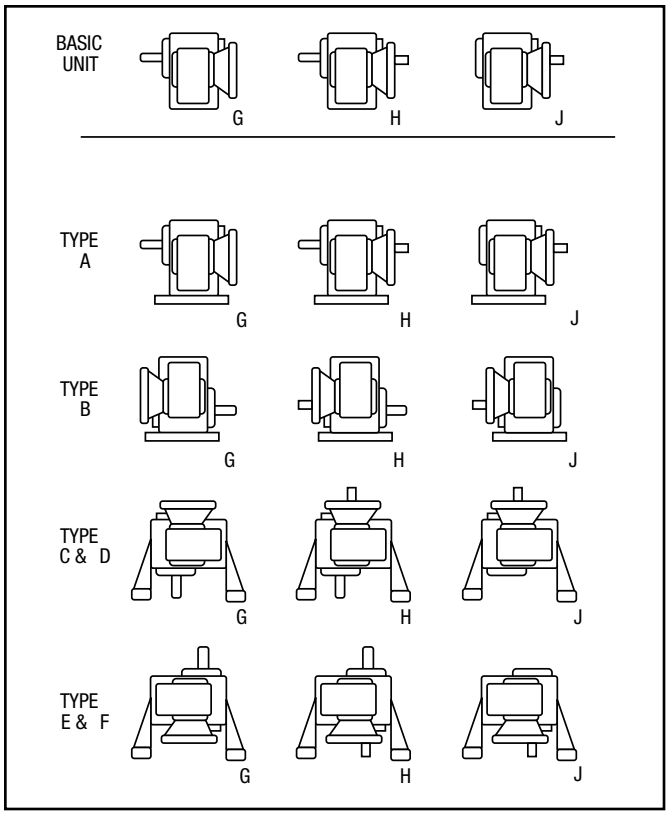
Types “C” and “E” are vertical high bases and Types “D” and “F” are vertical low bases.

Basic models and separate base kits are supplied unless otherwise specified. Assembly “H” available at a slight additional charge.

See Page 70 for complete ordering instructions.

Input may rotate clockwise or counter clockwise.

For other configurations not shown, contact factory.



Mounting Positions – FWA/QCWA – HFWA/HQCWA – SFWA700 Series

Standard assemblies are for Position 1. The design permits any types of assembly to be mounted in any position shown by the proper location of the vented oil filler, level and drain plugs, at the time of installation.

For other than Position 1, order standard and relocate vented oil filler, level and drain plugs.

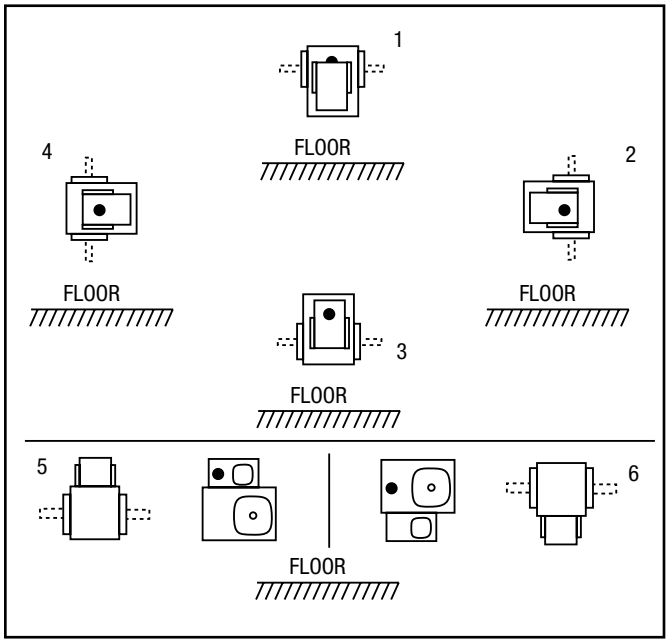
Vented oil filler plug must be located in the uppermost position.

For all mounting positions where the vented filler plug is located in a horizontal plane, the vent hole must point upward.

For all mounting positions where the vented filler plug is located in a vertical plane, the vent hole must point toward center of housing.

For production orders Boston Gear will assemble units for the specified mounting position desired at no additional charge.

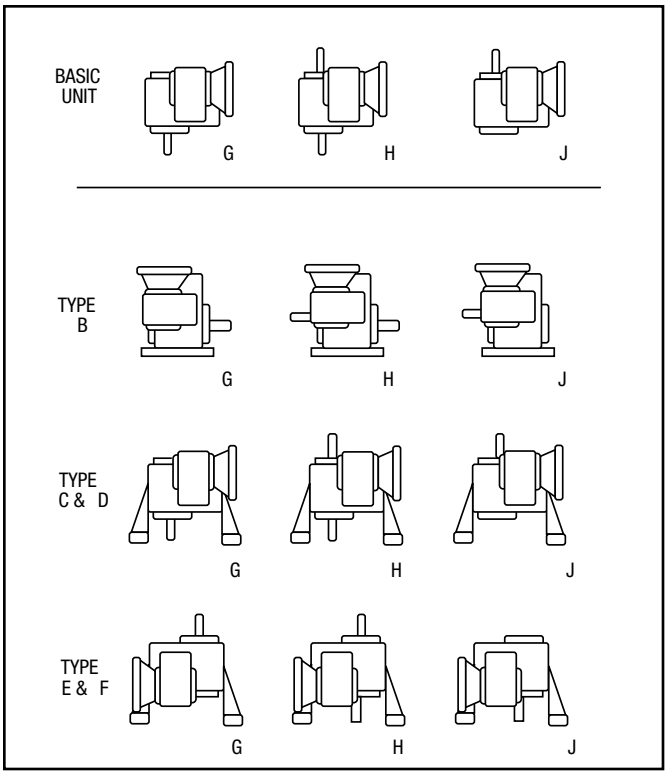
WARNING: The lubricant will flow between the large gearbox and the small gearbox. When filling with oil, make sure both gearboxes are full to the correct/same level. It is strongly recommended the oil level in each gearbox is verified after a short run.



- Indicates proper oil level.

CAUTION

When ordering speed reducers pre-lubricated, the Mounting Position must be indicated to ensure proper oil level.



Assemblies–FWC/QCWC700 Series

Standard assemblies define output shaft (slow speed) projection with respect to input shaft (high speed) and mounting surfaces.

Types “B” is a horizontal base.

Types “C” and “E” are vertical high bases and types “D” and “F” are vertical low bases.

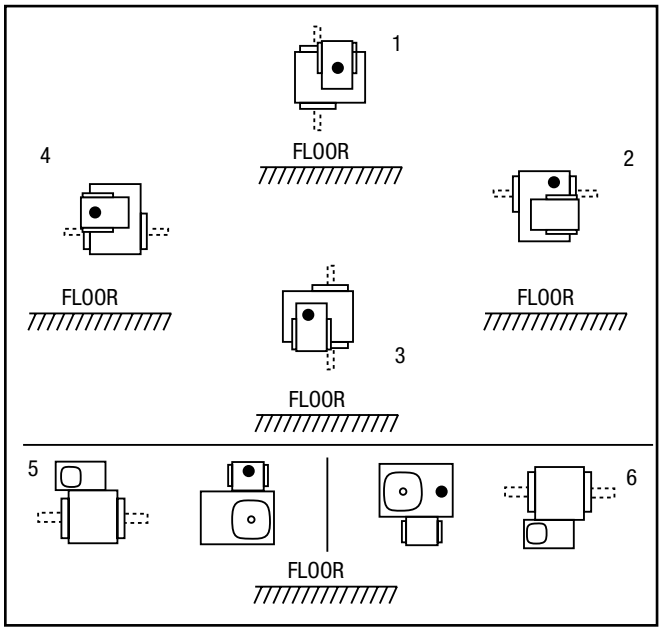
Basic models and separate base kits are supplied unless otherwise specified. Assembly “H” available at a slight additional charge.

See Page 70 for complete ordering instructions.

Input may rotate clockwise or counter clockwise.

For other configurations not shown, contact factory.

B



- Indicates proper oil level.

CAUTION

When ordering speed reducers pre-lubricated, the Mounting Position must be indicated to ensure proper oil level.

Mounting Positions – FWC/QCWC – HFWC/HQCWC – SFWC700 Series

Standard assemblies are for Position 1. The design permits any types of assembly to be mounted in any position shown by the proper location of the vented oil filler, level and drain plugs, at the time of installation.

For other than Position 1, order standard and relocate vented oil filler, level and drain plug.

Vented oil filler plug must be located in the uppermost position.

For all mounting positions where the vented filler plug is located in a horizontal plane, the vent hole must point upward.

For all mounting positions where the vented filler plug is located in a vertical plane, the vent hole must point toward center of housing.

For production orders Boston Gear will assemble units for the specified mounting position desired at no additional charge.

WARNING: The lubricant will flow between the large gearbox and the small gearbox. When filling with oil, make sure both gearboxes are full to the correct/same level. It is strongly recommended the oil level in each gearbox is verified after a short run.

Assemblies–WA700 Series

Standard assemblies define output shaft (slow speed) projection with respect to input shaft (high speed) and mounting surfaces.

Types “A” and “B” are horizontal bases.

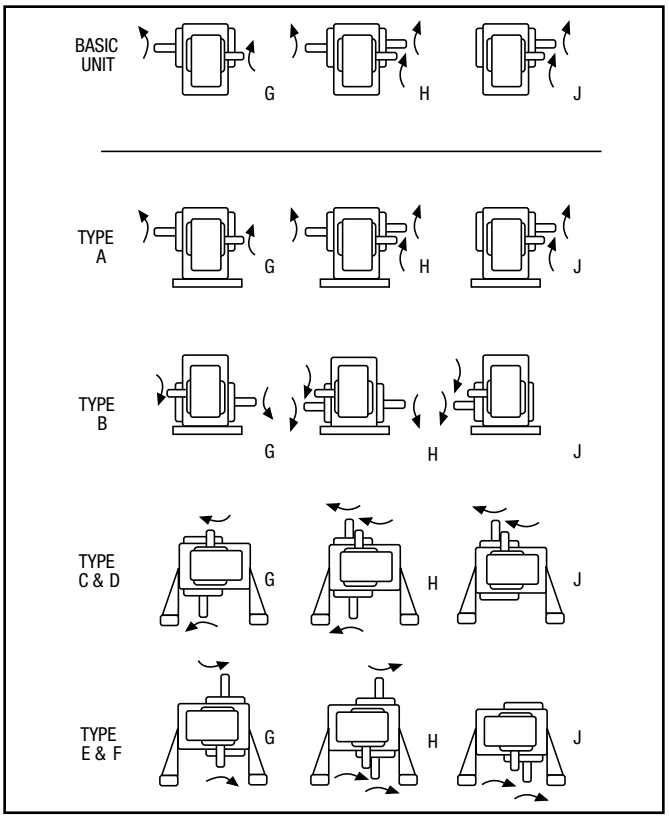
Types “C” and “E” are vertical high bases and types “D” and “F” are vertical low bases.

Basic models and separate base kits are supplied unless otherwise specified. Assembly “H” available at a slight additional charge.

See Page 70 for complete ordering instructions.

Input may rotate clockwise or counter clockwise. Arrows indicate relative rotation.

FOR OTHER CONFIGURATIONS NOT SHOWN, CONTACT FACTORY.



Mounting Positions – WA – HWA – SWA 700 Series

Standard assemblies are for Position 1. The design permits any types of assembly to be mounted in any position shown by the proper location of the vented oil filler, level and drain plugs, at the time of installation.

For other than Position 1, order standard and relocate vented oil filler, level and drain plug.

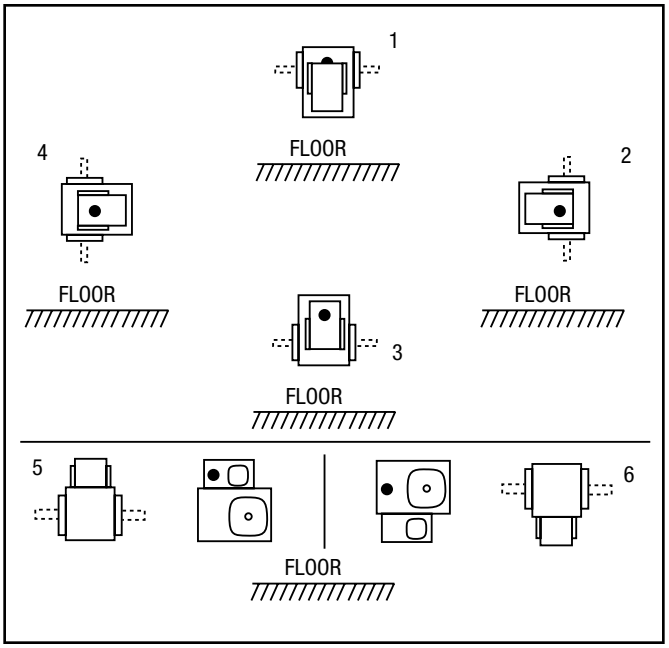
Vented oil filler plug must be located in the uppermost position.

For all mounting positions where the vented filler plug is located in a horizontal plane, the vent hole must point upward.

For all mounting positions where the vented filler plug is located in a vertical plane, the vent hole must point toward center of housing.

For production orders Boston Gear will assemble units for the specified mounting position desired at no additional charge.

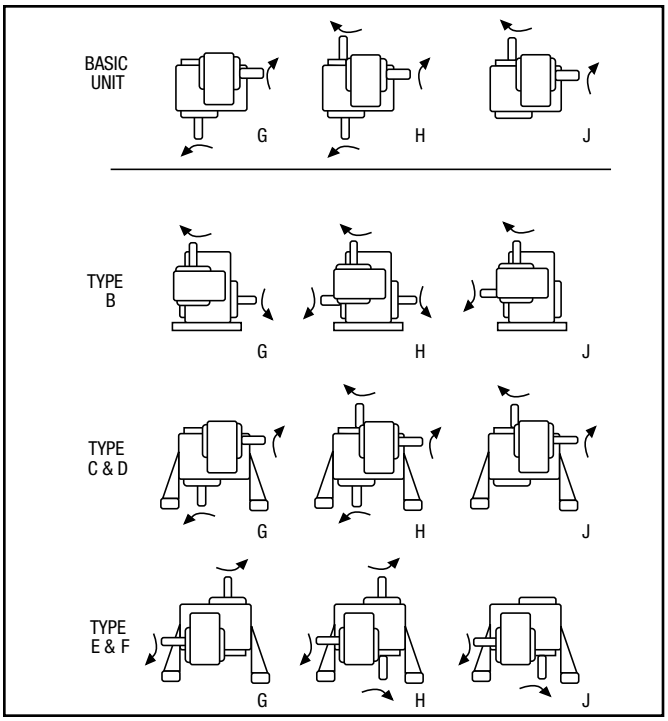
WARNING: The lubricant will flow between the large gearbox and the small gearbox. When filling with oil, make sure both gearboxes are full to the correct/same level. It is strongly recommended the oil level in each gearbox is verified after a short run.



- Indicates proper oil level.

CAUTION

When ordering speed reducers pre-lubricated, the Mounting Position must be indicated to ensure proper oil level.



Assemblies–WC700 Series

Standard assemblies define output shaft (slow speed) projection with respect to input shaft (high speed) and mounting surfaces.

Types “B” is a horizontal base.

Types “C” and “E” are vertical high bases and types “D” and “F” are vertical low bases.

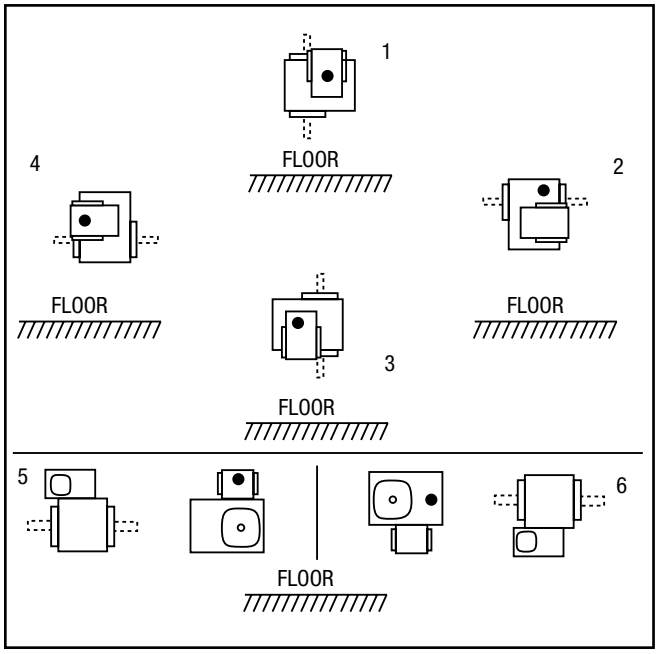
Basic models and separate base kits are supplied unless otherwise specified. Assembly “H” available at a slight additional charge.

See Page 70 for complete ordering instructions.

Input may rotate clockwise or counter clockwise. Arrows indicate relative rotation.

FOR OTHER CONFIGURATIONS NOT SHOWN, CONTACT FACTORY.

B



- **Indicates proper oil level.**

CAUTION

When ordering speed reducers pre-lubricated, the Mounting Position must be indicated to ensure proper oil level.

Mounting Positions – WC – HWC – SWC 700 Series

Standard assemblies are for Position 1. The design permits any types of assembly to be mounted in any position shown by the proper location of the vented oil filler, level and drain plugs, at the time of installation.

For other than Position 1, order standard and relocate vented oil filler, level and drain plug.

Vented oil filler plug must be located in the uppermost position.

For all mounting positions where the vented filler plug is located in a horizontal plane, the vent hole must point upward.

For all mounting positions where the vented filler plug is located in a vertical plane, the vent hole must point toward center of housing.

For production orders Boston Gear will assemble units for the specified mounting position desired at no additional charge.

WARNING: The lubricant will flow between the large gearbox and the small gearbox. When filling with oil, make sure both gearboxes are full to the correct/same level. It is strongly recommended the oil level in each gearbox is verified after a short run.

700 Series Recommended Lubricants

The following table indicates the types and viscosity of lubricants suitable for reducers operating at various temperatures.

Lubrication and maintenance instructions are provided with each speed reducer. These instructions should be followed for best results. It is important that the correct types of oil be used since many oils are not suitable for the lubrication of gears. Various types of gearing require different types of lubricants.

The lubricant must remain free from oxidation and contamination by water or debris, since only a very thin film of oil stands between efficient operation and failure. To assure long service life, the reducer should be periodically drained (preferably while warm) and refilled to the proper level with a recommended gear oil.

Under normal environmental conditions oil changes are suggested after the initial 250 hours of operation and thereafter at regular intervals of 2500 hours or every 6 months.

Synthetic lubricants will allow extended lubrication intervals due to its increased resistance to thermal and oxidation degradation. It is suggested that the initial oil change be made at 1500 hours and, thereafter, at 5000 hour intervals.

During the initial period of operation, higher than normal operating temperatures may be seen. This is due to the initial break-in of the gear set. The temperature of Single Reduction Worm Gear Reducers may reach approximately 225°F.

B

ENCLOSED WORM GEAR REDUCERS

Recommended Oil (or equivalent)	Viscosity Range SUS @ 100°F	Oil Type	ISO Viscosity Grade No.†
Klubersynth UH1 6-460* Synthetic	1950/2500	PAG	460
Mobil SHC634 Synthetic	1950/2500	PAO	320/460

Ambient temperature range of -20F to +125F is suitable for standard configured products and ratings. Contact technical support for operating conditions beyond this range.

WORM GEAR LUBRICANT AVAILABLE FROM BOSTON GEAR

TYPES	Klubersynth UH1 6-460	Mobil SHC634
SIZE	QUART	QUART
ITEM CODE	65159	51493

CAUTION: Relubricate more frequently if drive is operated in high ambient temperatures or unusually contaminated atmosphere. High loads and operating temperatures will also require more frequent lubrication.

* Synthetic recommendation is exclusively for Klubersynth UH1 6-460.

† Other lubricants corresponding to AGMA/ISO numbers are available from all major oil companies. See Page 135 for lubricant interchange.

** The Klubersynth UH1 6-460 lubricant will perform at temperatures considerably higher than 225°F. However, the factory should always be consulted prior to operating at higher temperatures as damage may occur to oil seals and other components.

Mounting Positions For Double Reduction Models Only

The variety of mounting possibilities for double-reduction drives makes it impractical to illustrate positions for these models. In general, the vent filler is at the uppermost plug position, and the drain plug at the lowest possible position. The oil level must be at the approximate centerline of the uppermost gear, with the lower box completely full.

The first and second reduction housings are open to one another allowing free flow of lubricant. Levels should be checked frequently on new installation to assure proper levels are maintained.

WARNING: The lubricant will flow between the large gearbox and the small gearbox. When filling with oil, make sure both gearboxes are full to the correct/same level. It is strongly recommended the oil level in each gearbox is verified after a short run.

WARNING: Different oil types should not be mixed. For example Klubersynth UH1 6-460 is not compatible with Mobil SHC634.

700 Series Double Reduction Output RPM & Capacity Selection Tables

@ 1750 RPM Input

Output RPM	Ratio#	Non-Flanged Reducers				Gearmotor								Motors**
		Gear Capacity				Ratings			Available Styles†					Cat. Nos.
		Output Torque (lb.in.)	HP		Size*	Motor HP	Output Torque (lb.in.)	Service Class	F	QC	HF	SF	HQC	Bore Code	230/460 VAC 3 Phase 60 Hz
			Input	Output											
17.5	100 TO 1	275	.16	.076	**W713-100**	**1/6** **1/6**	275 275	I I						B4 B5	ACUT CUTF
		570	.23	.16	**W718-100**	**1/4** **1/4** **1/6** **1/6**	570 570 414 414	I I II II						B4 B5 B4 B5	ADUTF DUTF ACUT CUTF
		910	.41	.25	**W721-100**	**1/2** **1/3** **1/4** **1/6**	910 750 585 390	I II II III						B5 B5 B5 B5	FUTF EUTF DUTF CUTF
		1785	.75	.50	**W726-100**	**3/4** **1/2** **1/3**	1785 1206 804	I II III						B5 B5 B5	GUTF FUTF EUTF
		3250	1.24	.90	**W730-100**	**1** **3/4** **1/2**	2844 2138 1426	I II III						B5 B5 B5	HUTF-5/8 GUTF FUTF
		3450	1.33	.96	**W732-100**	**1-1/2** **1** **3/4**	3450 2592 1944	I II III						B7 B5 B5	JUTF HUTF-5/8 GUTF
		4910	1.84	1.36	**W738-100**	**2** **1-1/2** **1**	4910 3995 2664	I II III						B7 B7 B7	KUTF JUTF HUTF
		8000	2.97	2.22	**W752-100**	**3** **2** **1-1/2**	8000 5400 4050	I II III						B9 B7 B7	LUTF KUTF JUTF
		16500	5.75	4.58	**W760-100**	**5** **3**	14200 8500	I III						B9 B9	MUTF LUTF
11.7	150 TO 1	280	.13	.052	**W713-150**	**1/6** **1/6**	280 280	I I						B4 B5	ACUT CUTF
		580	.23	.11	**W718-150**	**1/4** **1/4** **1/6** **1/6**	580 580 433 433	I I II II						B4 B5 B4 B5	ADUTF DUTF ACUT CUTF
		940	.30	.17	**W721-150**	**1/3** **1/4** **1/6**	940 770 513	I II III						B5 B5 B5	EUTF DUTF CUTF
		1840	.56	.34	**W726-150**	**3/4** **1/2** **1/3** **1/4**	1840 1647 1095 823	I I II III						B5 B5 B5 B5	GUTF FUTF EUTF DUTF
		3523	.98	.65	**W730-150**	**3/4** **1/2**	2592 1728	II III						B5 B5	GUTF FUTF
		3600	1.00	.67	**W732-150**	**1** **3/4** **1/2**	3600 2713 1800	I II III						B5 B5 B5	HUTF-5/8 GUTF FUTF

* Add “A” (for PARALLEL SHAFTS) or “C” (for RIGHT ANGLE SHAFTS) after “W” in Model Numbers. See Numbering System, Page 70.
** Totally Enclosed, Fan Cooled. For complete motor Catalog Numbers and additional motors, see Pages 337 and 340.
† Shaded areas denote which styles are available for a given center distance and ratio.
# Other ratios avialable. Contact factory for information.

B

700 Series Double Reduction Output RPM & Capacity Selection Tables

@ 1750 RPM Input

Output RPM	Ratio#	Non-Flanged Reducers				Gearmotor								Motors**
		Gear Capacity				Ratings			Available Styles†					Cat. Nos.
		Output Torque (lb.in.)	HP		Size*	Motor HP	Output Torque (lb.in.)	Service Class	F	QC	HF	SF	HQC	Bore Code	230/460 VAC 3 Phase 60 Hz
			Input	Output											
11.7	150 TO 1	5100	1.35	.94	**W738-150**	**1-1/2** **1** **3/4**	5100 3725 2974	I II III						B7 B7 B5	JUTF HUTF GUTF
		11750	2.99	2.18	**W752-150**	**3** **2** **1-1/2**	11750 7884 5913	I II III						B9 B7 B7	LUTF KUTF JUTF
		17000	4.22	3.15	**W760-150**	**5** **3** **2**	17000 11200 7992	I II III						B9 B9 B9	MUTF LUTF KUTF
8.8	200 TO 1	320	.12	.045	**W713-200**	**1/6** **1/6**	320 320	I I						B4 B5	ACUT CUTF
		660	.19	.09	**W718-200**	**1/4** **1/4**	660 660	I I						B4 B5	ADUTF DUTF
		990	.25	.14	**W721-200**	**1/4** **1/6**	990 720	I II						B5 B5	DUTF CUTF
		1875	.47	.26	**W726-200**	**1/2** **1/3** **1/4**	1875 1440 1080	I II III						B5 B5 B5	FUTF EUTF DUTF
		3477	.76	.48	**W730-200**	**3/4** **1/2** **1/4**	3402 2268 1134	I III III						B5 B5 B5	GUTF FUTF DUTF
		3800	.81	.53	**W732-200**	**3/4** **1/2** **1/3**	3510 2340 1560	I II III						B5 B5 B5	GUTF FUTF EUTF
		5500	1.14	.77	**W738-200**	**1** **3/4** **1/2**	4824 3618 2412	I II III						B5 B5 B5	HUTF-5/8 GUTF FUTF
		12250	2.40	1.70	**W752-200**	**3** **2** **1**	12250 10080 5040	I II III						B9 B7 B5	LUTF KUTF HUTF-5/8
		18000	3.43	2.50	**W760-200**	**5** **3** **2** **1-1/2**	18000 15768 10512 7884	I I II III						B9 B9 B7 B7	MUTF LUTF KUTF JUTF
5.8	300 TO 1	335	.10	.031	**W713-300**	**1/6** **1/6**	335 335	I I						B4 B5	ACUT CUTF
		690	.16	.063	**W718-300**	**1/6** **1/6**	690 690	I I						B4 B5	ACUT CUTF
		1025	.20	.094	**W721-300**	**1/4** **1/6**	1025 900	I I						B5 B5	DUTF CUTF
		1950	.37	.18	**W726-300**	**1/3** **1/4** **1/6**	1800 1350 900	I II III						B5 B5 B5	EUTF DUTF CUTF
		3612	.57	.33	**W730-300**	**1/2** **1/3** **1/4**	3132 2088 1566	I II III						B5 B5 B5	FUTF EUTF DUTF
		3950	.61	.36	**W732-300**	**3/4** **1/2** **1/3**	3950 2700 1800	I II III						B5 B5 B5	GUTF FUTF EUTF

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** Totally Enclosed, Fan Cooled. For complete motor Catalog Numbers and additional motors, see Pages 337 and 340.
† Shaded areas denote which styles are available for a given center distance and ratio.
# Other ratios avialable. Contact factory for information.

700 Series Double Reduction Output RPM & Capacity Selection Tables

@ 1750 RPM Input

Output RPM	Ratio#	Non-Flanged Reducers				Gearmotor								Motors**
		Gear Capacity				Ratings			Available Styles†					Cat. Nos.
		Output Torque (lb.in.)	HP		Size*	Motor HP	Output Torque (lb.in.)	Service Class	F	QC	HF	SF	HQC	Bore Code	230/460 VAC 3 Phase 60 Hz
			Input	Output											
5.8	300 TO 1	5800	.84	.53	**W738-300**	**1** **3/4** **1/2**	5800 4050 2700	I II III						B5 B5 B5	HUTF-5/8 GUTF FUTF
		12500	1.72	1.15	**W752-300**	**2** **1-1/2** **1**	12500 10850 7236	I II III						B7 B7 B5	KUTF JUTF HUTF-5/8
		18500	2.45	1.70	**W760-300**	**3** **2** **1-1/2** **1**	18500 14904 11180 7452	I II II III						B9 B7 B7 B5	LUTF KUTF JUTF HUTF
4.4	400 TO 1	330	.089	.023	**W713-400**	**1/6** **1/6**	330 330	I I						B4 B5	ACUT CUTF
		690	.12	.048	**W718-400**	**1/6** **1/6**	360 360	II II						B4 B5	ACUT CUTF
		1025	.17	.071	**W721-400**	**1/6**	984	I						B5	CUTF
		1950	.31	.14	**W726-400**	**1/4** **1/6**	1620 1080	I III						B5 B5	DUTF CUTF
		3602	.40	.25	**W730-400**	**1/3** **1/4** **1/6**	2856 2142 1428	I II III						B5 B5 B5	EUTF DUTF CUTF
		3900	.48	.27	**W732-400**	**1/2** **1/3** **1/4**	3900 2688 2016	I II III						B5 B5 B5	FUTF EUTF DUTF
		5700	.66	.40	**W738-400**	**3/4** **1/2** **1/3**	5700 4320 2880	I II III						B5 B5 B5	GUTF FUTF EUTF
		12600	1.39	.88	**W752-400**	**1-1/2** **1** **3/4**	12610 9072 6804	I II III						B7 B5 B5	JUTF HUTF-5/8 GUTF
		18430	1.94	1.29	**W760-400**	**2** **1-1/2** **1**	18430 13824 9216	I II II						B7 B7 B7	KUTF JUTF HUTF
2.9	600 TO 1	340	.081	.016	**W713-600**	**1/6** **1/6**	340 340	I I						B4 B5	ACUT CUTF
		710	.095	.032	**W718-600**	**1/6** **1/6**	710 710	I I						B4 B5	ACUT CUTF
		1025	.13	.047	**W721-600**	**1/6**	1025	I						B5	CUTF
		2000	.25	.092	**W726-600**	**1/4** **1/6**	2000 1332	I II						B5 B5	DUTF CUTF
		3717	.32	.17	**W730-600**	**1/4** **1/6**	2862 1908	II III						B5 B5	DUTF EUTF
		4025	.36	.18	**W732-600**	**1/3** **1/4** **1/6**	3600 2700 1800	I II III						B5 B5 B5	EUTF DUTF CUTF

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** Totally Enclosed, Fan Cooled. For complete motor Catalog Numbers and additional motors, see Pages 337 and 340.
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700 Series Double Reduction Output RPM & Capacity Selection Tables

@ 1750 RPM Input

Output RPM	Ratio#	Non-Flanged Reducers				Gearmotor								Motors**
		Gear Capacity				Ratings			Available Styles†					Cat. Nos.
		Output Torque (lb.in.)	HP		Size*	Motor HP	Output Torque (lb.in.)	Service Class	F	QC	HF	SF	HQC	Bore Code	230/460 VAC 3 Phase 60 Hz
			Input	Output											
2.9	600 TO 1	5900	.49	.27	**W738-600**	**1/2** **1/3** **1/4**	5900 3960 2970	I II III						B5 B5 B5	FUTF EUTF DUTF
		13000	1.00	.60	**W752-600**	**1** **3/4** **1/2**	13000 9720 6480	I II III						B5 B5 B5	HUTF-5/8 GUTF FUTF
		19000	1.40	.88	**W760-600**	**1-1/2** **1** **3/4**	19000 13608 10206	I II III						B7 B7 B7	JUTF HUTF GUTF
1.9	900 TO 1	340	.071	.010	**W713-900**	**1/6** **1/6**	340 340	I I						B4 B5	ACUT CUTF
		710	.079	.021	**W718-900**	**1/6** **1/6**	710 710	I I						B4 B5	ACUT CUTF
		1050	.11	.032	**W721-900**	**1/6**	1050	I						B5	CUTF
		2000	.21	.06	**W726-900**	**1/6**	2000	I						B5	CUTF
		3752	.23	.11	**W730-900**	**1/6**	2700	II						B5	CUTF
		4025	.28	.12	**W732-900**	**1/4** **1/6**	3483 2322	I III						B5 B5	DUTF CUTF
		5900	.37	.18	**W738-900**	**1/2** **1/3** **1/4** **1/6**	5900 5292 3969 2646	I I II III						B5 B5 B5 B5	FUTF EUTF DUTF CUTF
		13000	.74	.40	**W752-900**	**3/4** **1/2** **1/3**	13000 8748 5832	I II III						B5 B5 B5	GUTF FUTF EUTF
		19000	1.00	.59	**W760-900**	**1** **3/4** **1/2**	19000 14337 9558	I II III						B5 B5 B5	HUTF-5/8 GUTF FUTF
1.5	1200 TO 1	330	.068	.008	**W713-1200**	**1/6** **1/6**	330 330	I I						B4 B5	ACUT CUTF
		690	.071	.016	**W718-1200**	**1/6** **1/6**	690 690	I I						B4 B5	ACUT CUTF
		1025	.10	.024	**W721-1200**	**1/6**	1025	I						B5	CUTF
		1950	.19	.045	**W726-1200**	**1/6**	1728	I						B5	CUTF
		3650	.19	.084	**W730-1200**	**1/6**	3168	I						B5	CUTF
		3900	.23	.092	**W732-1200**	**1/4** **1/6**	3900 2880	I II						B5 B5	DUTF CUTF
		5700	.31	.13	**W738-1200**	**1/3** **1/4** **1/6**	5700 4536 3024	I II III						B5 B5 B5	EUT DUTF CUTF
		12610	.62	.29	**W752-1200**	**3/4** **1/2** **1/3**	12610 10152 6768	I II III						B5 B5 B5	GUTF FUTF EUTF

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† Shaded areas denote which styles are available for a given center distance and ratio.
# Other ratios avialable. Contact factory for information.

700 Series Double Reduction Output RPM & Capacity Selection Tables

@ 1750 RPM Input

Output RPM	Ratio#	Non-Flanged Reducers				Gearmotor								Motors**
		Gear Capacity				Ratings			Available Styles†					Cat. Nos.
		Output Torque (lb.in.)	HP		Size*	Motor HP	Output Torque (lb.in.)	Service Class	F	QC	HF	SF	HQC	Bore Code	230/460 VAC 3 Phase 60 Hz
			Input	Output											
1.5	1200 TO 1	18430	.81	.43	**W760-1200**	**1** **3/4** **1/2** **1/3**	18430 17172 11448 7632	I II II III						B5 B5 B5 B5	HUTF-5/8 GUTF FUTF EUTF
.97	1800 to 1	900	.082	.013	**W721-1800**	**1/6**	900	I						B5	CUTF
		1775	.16	.027	**W726-1800**	**1/6**	1775	I						B5	CUTF
		3650	.14	.056	**W730-1800**	**1/6**	2880	II						B5	CUTF
		3750	.19	.058	**W732-1800**	**1/6**	3240	I						B5	CUTF
		5400	.24	.083	**W738-1800**	**1/4** **1/6**	5400 3672	I II						B5 B5	DUTF CUTF
		11760	.47	.18	**W752-1800**	**1/2** **1/3** **1/4**	11760 8208 6156	I II III						B5 B5 B5	FUTF EUTF DUTF
		17280	.59	.27	**W760-1800**	**1/2** **1/3**	14900 9936	I III						B5 B5	FUTF EUTF
.88	2000 TO 1	590	.052	.008	**W718-2000**	**1/6**	590	I						B4 B5	ACUT CUTF
		1940	.16	.027	**W726-2000**	**1/6**	1940	I						B5	CUTF
		3600	.13	.055	**W730-2000**	**1/6**	3243	I						B5	CUTF
		3880	.22	.054	**W732-2000**	**1/6**	3600	I						B5	CUTF
		12610	.50	.18	**W752-2000**	**1/2** **1/3** **1/4**	12610 8810 5985	I II III						B5 B5 B5	FUTF EUTF DUTF
		18430	.66	.26	**W760-2000**	**1/2**	14400	II						B5	FUTF
.73	2400 TO 1	900	.053	.010	**W721-2400**	**1/6**	900	I						B5	CUTF
		3600	.11	.042	**W730-2400**	**1/6**	3128	I						B5	CUTF
		5725	.22	.066	**W738-2400**	**1/4** **1/6**	5725 4320	I II						B5 B5	DUTF CUTF
.58	3000 TO 1	1868	.05	.017	**W726-3000**	**1/6**	1800	I						B5	CUTF
		3500	.092	.033	**W730-3000**	**1/6**	3135	I						B5	CUTF
		3750	.14	.035	**W732-3000**	**1/6**	3750	I						B5	CUTF
		11760	.34	.11	**W752-3000**	**1/3** **1/4** **1/6**	11760 8640 5760	I II III						B5 B5 B5	EUTF DUTF CUTF
		17280	.41	.16	**W760-3000**	**1/2** **1/3** **1/4**	17280 12270 8640	I II III						B5 B5 B5	FUTF EUTF DUTF
.49	3600 TO 1	3400	.082	.026	**W730-3600**	**1/6**	3140	I						B5	CUTF
		5400	.17	.041	**W738-3600**	**1/6**	5400	I						B5	CUTF

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** Totally Enclosed, Fan Cooled. For complete motor Catalog Numbers and additional motors, see Pages 337 and 340.
† Shaded areas denote which styles are available for a given center distance and ratio.
# Other ratios avialable. Contact factory for information.

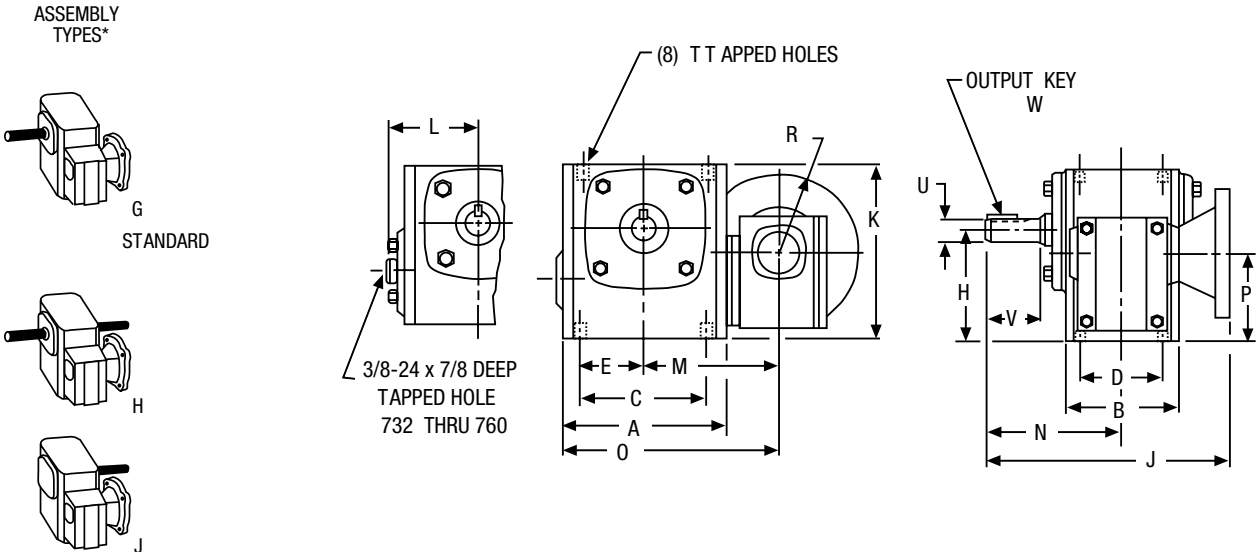
700 Series Double Reduction Flanged Reducer Dimensions

FWA700/QCWA700 Series Flanged Quill/Flanged Coupling Types

Basic Models (No Base); Parallel Shafts

FOR ORDERING INFORMATION, see Page 56.

FOR RATING INFORMATION, See Pages 71, 77-81.



ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	H	J-NEMA Mounting						K	L	M	N	O
							FWA700			QCWA700							
							42CZ	56C 140TC	180TC 210C	42CZ	56C 140TC	180TC 210C					
713	4.25	2.88	3.25	2.00	1.63	2.94	7.16	7.97	—	7.63	8.59	—	4.66	—	3.75	4.00	5.88
718	5.50	3.69	4.19	2.75	2.09	3.69	7.47	8.28	—	7.83	8.79	—	5.75	—	4.44	4.31	7.19
721	6.00	3.81	5.00	2.88	2.50	4.09	—	8.66	—	—	10.73	—	6.38	—	4.94	4.69	7.94
726	7.38	4.44	6.38	3.38	3.19	5.06	—	9.60	—	—	10.14	—	8.00	—	5.66	5.63	9.35
730	8.12	5.25	7.00	4.00	3.50	5.63	—	11.44	—	—	12.20	—	8.88	—	6.12	6.75	10.18
732	9.00	5.88	7.50	4.00	3.75	5.88	—	11.75	—	—	12.51	—	9.38	4.94	6.48	7.06	11.00
738	10.00	6.38	8.50	4.75	4.25	6.56	—	12.81	—	—	13.48	—	10.44	5.50	7.27	7.75	12.27
752	13.13	7.38	11.00	5.81	5.50	8.44	—	14.81	15.25	—	16.45	17.37	13.75	7.19	9.28	9.06	15.84
760	14.50	8.13	12.75	6.38	6.38	10.00	—	—	—	—	18.20	19.13	16.50	7.94	9.56	10.00	16.81

Size	P	R-NEMA Mounting			T		Low Speed Shaft				Approx. Weight (Lbs.)		Horizontal Base Kit No. †
		42CZ	56C 140TC	180TC	Tap Size	Depth	U +.000 -.001	V	W-Key Sq.	W-Key Length	FWA	QCWA	
713	2.59	2.16	3.31	—	5/16-18	.50	.625	2.00	3/16	1	16	18	56577
718	2.94	2.16	3.31	—	5/16-18	.50	.875	1.78	3/16	1	27	30	56585
721	3.38	—	3.31	—	3/8-16	.56	1.000	2.09	1/4	1-1/4	37	39	56440
726	3.78	—	3.31	—	3/8-16	.56	1.125	2.62	1/4	1-15/16	62	62	56595
730	4.38	—	3.31	—	7/16-14	.88	1.250	3.25	1/4	2-1/4	85	91	65544
732	4.38	—	3.31	—	7/16-14	.66	1.375	3.25	5/16	2-7/16	104	119	56599
738	4.88	—	3.31	—	1/2-13	.75	1.625	3.50	3/8	2-1/4	142	158	56603
752	5.88	—	3.31	4.63	5/8-11	1.00	2.000	4.16	1/2	2-15/16	247	267	56607
760	7.25	—	3.31	4.63	5/8-11	1.00	2.250	4.56	1/2	3-3/8	—	340	56610

* See Assemblies and Mounting Positions, Page 72.
† For Base Kits, see Page 129.
Note: For base dimensions see Single Reduction Flanged Reducer Dimension pages.

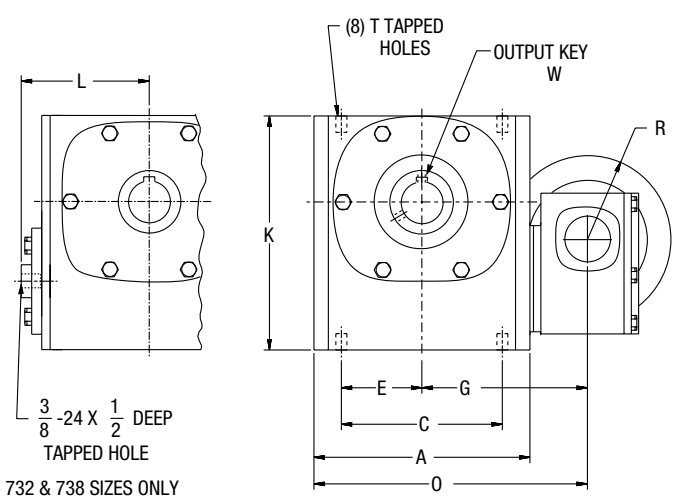
700 Series Double Reduction Flanged Reducer Dimensions

HFWA700/HQCWA700 Series Flanged Quill/Flanged Coupling Types

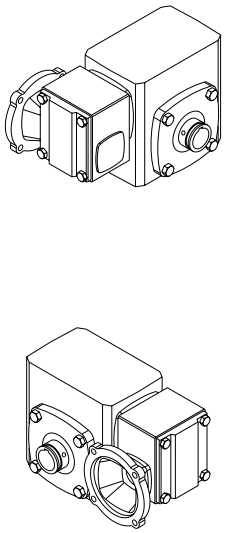
Basic Models (No Base); Parallel Shafts; Bored to Size Hollow Output

FOR ORDERING INFORMATION, see Page 56.

FOR RATING INFORMATION, See Pages 71, 77-81.



ASSEMBLY TYPES*



B

ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	J-NEMA Mounting FWA700 42CZ	J-NEMA Mounting FWA700 56C 140TC	J-NEMA Mounting QCWA700 42CZ	J-NEMA Mounting QCWA700 56C 140TC	K	L	N
713	4.25	2.88	3.25	2.00	1.63	1.00	3.75	2.94	3.16	3.94	4.15	5.01	4.66	—	2.50
718	5.50	3.69	4.19	2.75	2.09	1.38	4.44	3.69	3.16	3.94	4.15	5.01	5.75	—	3.03
721	6.00	3.81	5.00	2.88	2.50	1.44	4.94	4.09	—	3.94	—	5.46	6.38	—	3.22
726	7.38	4.44	6.38	3.38	3.19	1.69	5.66	5.06	—	3.94	—	5.46	8.00	—	3.44
730	8.12	5.25	7.00	4.00	3.50	2.00	6.12	5.63	—	4.69	—	6.29	8.88	—	4.19
732	9.00	5.88	7.50	4.00	3.75	2.00	6.48	5.88	—	4.69	—	6.29	9.38	4.94	4.31
738	10.00	6.38	8.50	4.75	4.25	2.38	7.27	6.56	—	5.06	—	6.76	10.44	5.50	4.81

Size	O	P	Q	R-NEMA Mounting 42CZ	R-NEMA Mounting 56C 140TC	S	T Tap Size	T Depth	Low Speed Shaft Max U +.0015 -.0000	Low Speed Shaft V	Low Speed Shaft W-Key Sq.	Low Speed Shaft W-Key Length	Approx. Weight (LBS.) HFWA	Approx. Weight (LBS.) HQCWA
713	5.88	2.59	#10-32	2.16	3.31	.88	5/16-18	.50	.625	.68			17	19
718	7.19	2.94	#10-32	2.16	3.31	1.38	5/16-18	.50	1.000	.74			27	31
721	7.94	3.38	1/4-28	—	3.31	1.94	3/8-16	.56	1.4375	.87	See Page		37	39
726	9.35	3.78	5/16-24	—	3.31	2.50	3/8-16	.56	1.9375	.78	128 For		60	67
730	10.18	4.38	5/16-24	—	3.31	2.88	7/16-14	.88	2.1875	1.11	Key Information		82	95
732	11.00	4.38	5/16-24	—	3.31	2.88	7/16-14	.66	2.1875	.93			104	121
738	12.27	4.88	5/16-24	—	3.31	3.25	1/2-13	.75	2.4375	1.11			149	166

* See Assemblies and Mounting Positions, Page 72.

Input may be rotated clockwise or counterclockwise.

Note: For base dimensions see Single Reduction Flanged Reducer Dimension pages. See Page 128 for available bore sizes.

700 Series Double Reduction Flanged Reducer Dimensions

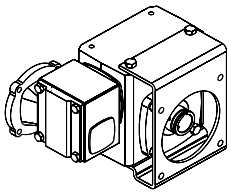
HFWA700/HQCWA700 Series Flanged Quill/Flanged Coupling Types

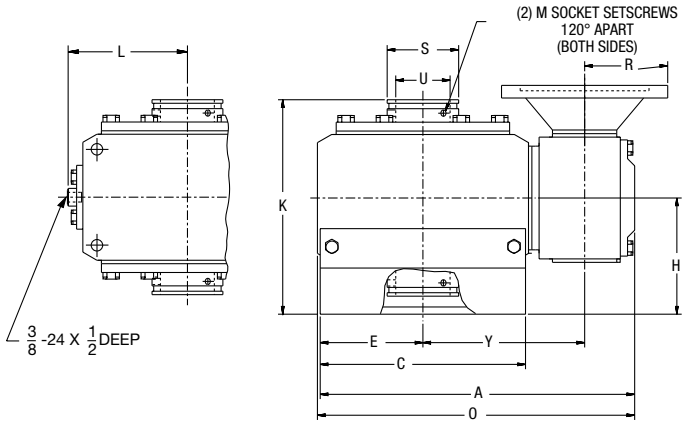
R Position Mounting Bracket; Parallel Shafts; Bored to Size Hollow Output

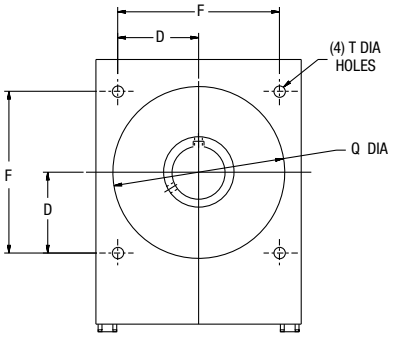
FOR ORDERING INFORMATION, see Page 56.

FOR RATING INFORMATION, See Pages 71, 77-81.

ASSEMBLY TYPES*







ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	J-NEMA Mounting HFWA700 42CZ	J-NEMA Mounting HFWA700 56C 140TC	J-NEMA Mounting HQCWA700 42CZ	J-NEMA Mounting HQCWA700 56C 140TC	K	L	M	N
713	7.40	5.55	4.25	1.77	2.12	3.54	.19	3.00	3.16	3.94	4.15	5.01	5.50	—	#10-32	2.50
718	8.38	6.66	4.81	2.08	2.41	4.16	.19	3.50	3.16	3.94	4.15	5.01	6.53	—	#10-32	3.03
721	9.57	7.47	5.75	2.30	2.88	4.60	.19	3.75	—	3.94	—	5.46	6.97	—	1/4-28	3.22
726	11.00	9.25	7.18	2.83	3.59	5.66	.25	4.06	—	3.94	—	5.46	7.50	—	5/16-24	3.44
730	12.39	10.38	8.00	3.18	4.00	6.36	.25	4.50	—	4.69	—	6.29	8.69	—	5/16-24	4.19
732	13.44	10.91	8.50	3.54	4.25	7.08	.25	5.25	—	4.69	—	6.29	9.56	4.94	5/16-24	4.31
738	14.91	11.84	9.50	4.06	4.75	8.12	.25	5.47	—	5.06	—	6.76	10.28	5.50	5/16-24	4.81

Size	O	P	Q	R-NEMA Mounting 42CZ	R-NEMA Mounting 56C 140TC	S	T Holes	Low Speed Shaft Max U +.0015 -.0000	Low Speed Shaft V	Low Speed Shaft W-Key Size	Low Speed Shaft W-Key Length	Y	Approx. Weight (LBS.) HFWA	Approx. Weight (LBS.) HQCWA
713	7.41	.50	3.62	2.16	3.31	.88	11/32	.625	.68			3.75	18	20
718	8.72	.47	4.06	2.16	3.31	1.38	11/32	1.000	.74			4.44	30	36
721	9.69	.53	4.50	—	3.31	1.94	13/32	1.4375	.87	See Page		4.94	42	47
726	11.09	.62	6.00	—	3.31	2.50	13/32	1.9375	.78	128 For		5.66	56	80
730	12.45	.31	7.00	—	3.31	2.88	13/32	2.1875	1.10	Key Information		6.12	95	116
732	13.69	.94	7.00	—	3.31	2.88	9/16	2.1875	.93			6.48	134	151
738	15.16	.66	8.00	—	3.31	3.25	9/16	2.4375	1.11			7.27	178	200

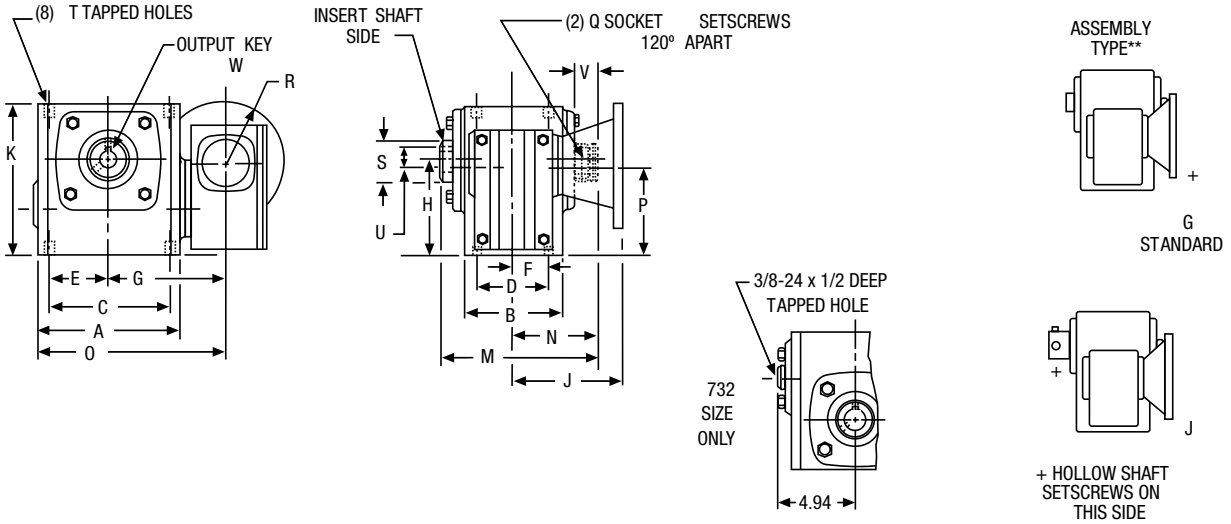
* See Assemblies and Mounting Positions, Page 72.
See Page 128 for available bore sizes.
Input may be rotated clockwise or counterclockwise.

SFWA700 Series Flanged Quill Type

Basic Models (No Base); Parallel Shafts; Hollow Output

FOR ORDERING INFORMATION, see Page 56.

FOR ADDITIONAL SIZES, See the H Series Pages 88-89.
FOR RATING INFORMATION, See Pages 71, 77-81.



B

ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	J-NEMA Mounting SFWA 42CZ	J-NEMA Mounting SFWA 56C 140TC	K	M	N
718	5.50	3.69	4.19	2.75	2.09	1.38	4.44	3.69	3.16	3.94	5.75	5.47	3.09
721	6.00	3.81	5.00	2.88	2.50	1.44	4.94	4.09	—	3.94	6.38	5.69	3.22
726	7.38	4.44	6.38	3.38	3.19	1.69	5.66	5.06	—	3.94	8.00	6.28	3.50
732	9.00	5.88	7.50	4.00	3.75	2.00	6.48	5.88	—	4.69	9.38	7.88	4.38

Size	O	P	Q	R-NEMA Mounting 42CZ	R-NEMA Mounting 56C 140TC	S	T Tap Size	T Depth	Low Speed Shaft U +.0015 -.000	Low Speed Shaft V	Low Speed Shaft W-Key Sq.	Low Speed Shaft W-Key Length	Approx. Weight (LBS.) SFWA
718	7.19	2.94	#10-32	2.16	3.31	1.38	5/16-18	.50	1.000	.78	See Page		26
721	7.94	3.38	1/4-28	—	3.31	1.50	3/8-16	.56	1.125	.88	128 For		35
726	9.34	3.78	1/4-28	—	3.31	2.16	3/8-16	.56	1.4375	.84	Key Information		57
732	11.00	4.38	5/16-24	—	3.31	2.56	7/16-14	.66	1.9375	1.00			99

** Assemblies define output (slow speed) shaft projection with respect to input (high speed) shaft and mounted surfaces. Input may be rotated clockwise or counterclockwise.

Note: For base dimensions see Single Reduction Flanged Reducer Dimension pages.

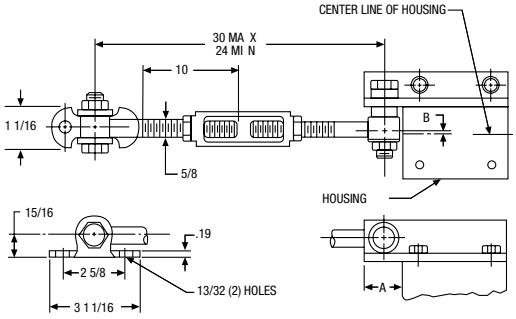
See Assemblies and Mounting Positions, Page 72.

Reaction Rod Kits

ALL DIMENSIONS IN INCHES

Size	A	B	Catalog Number	Kit No.
718	1.09	.09	X718-76K	69692
721	1.25	.03	X721-76K	69693
726	1.25	.22	X726-76K	69694
732	1.50	.53	X732-76K	69695

All hardware shown is included in the kits.



700 Series Double Reduction Flanged Reducer Dimensions

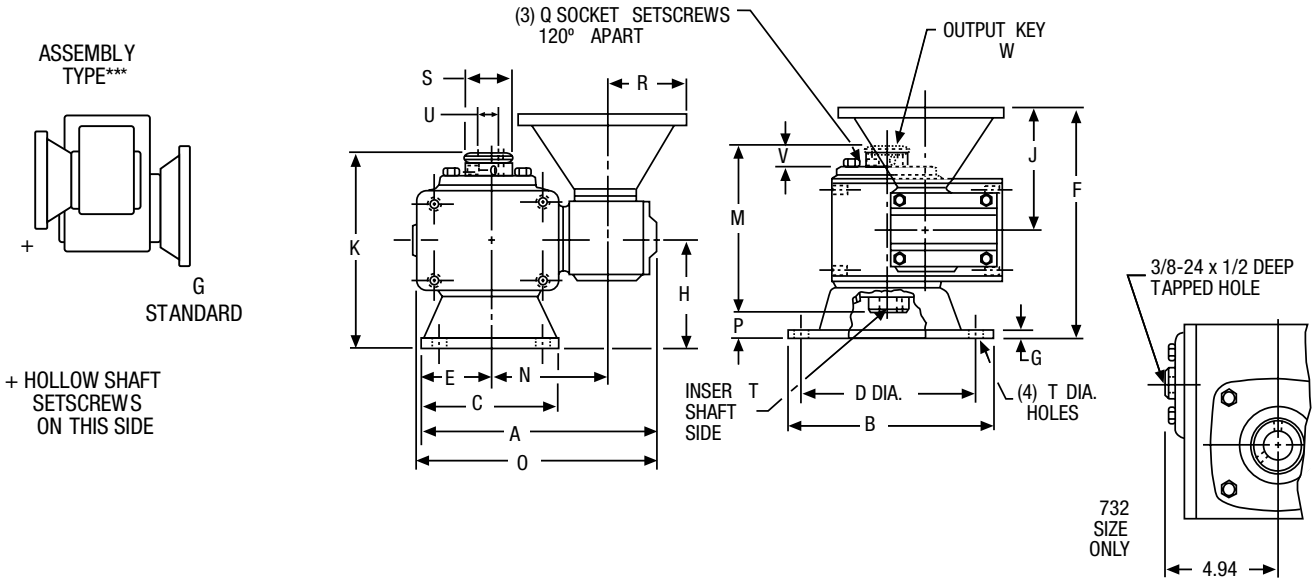
SFWA700 Series Flanged Quill Type

V Position Mounting Flange; Parallel Shafts; Hollow Output

FOR ORDERING INFORMATION, see Page 56.

FOR ADDITIONAL SIZES, See the H Series Pages 88-89.
FOR RATING INFORMATION, See Pages 71, 77-81.

B



ALL DIMENSIONS IN INCHES

Size	A	B	C	D DIA.	E	G	H	J-NEMA Mounting SFWA 42CZ	J-NEMA Mounting SFWA 56C 140TC	K	M	N
718	8.41	6.75	4.88	5.88	2.44	.38	3.50	3.16	3.94	6.59	5.69	4.44
721	9.56	7.38	5.75	6.50	2.88	.38	3.75	—	3.94	6.97	5.88	4.94
726	11.28	8.88	7.75	8.00	3.88	.38	4.06	—	3.94	7.56	6.47	5.66
732	13.25	11.00	9.00	10.00	4.50	.50	5.25	—	4.69	9.63	8.06	6.48

Size	O	P	Q	R-NEMA Mounting 42CZ	R-NEMA Mounting 56C 140TC	S	T Holes	Low Speed Shaft U +.0015 -.000	Low Speed Shaft V	Low Speed Shaft W-Key Size	Low Speed Shaft W-Key Length	Approx. Weight (LBS.) SFWA
718	8.72	.91	#10-32	2.16	3.31	1.38	11/32	1.000	.78	See Page		29
721	9.69	1.09	1/4-28	—	3.31	1.50	13/32	1.125	.88	128 For		40
726	11.09	1.09	1/4-28	—	3.31	2.16	13/32	1.4375	.84	Key Information		53
732	13.25	1.56	5/16-24	—	3.31	2.56	9/16	1.9375	1.00			128

*Assemblies define output (slow speed) shaft projection with respect to input (high speed) shaft. See Assemblies and Mounting Positions, Page 72.

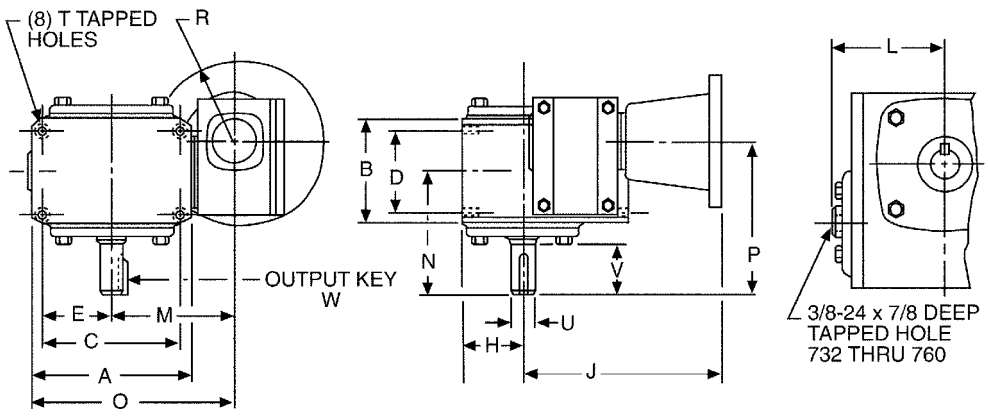
700 Series Double Reduction Flanged Reducer Dimensions

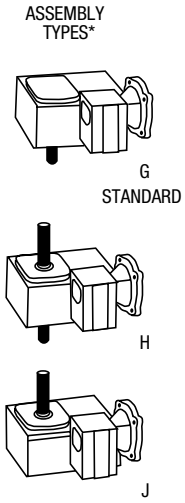
FWC700/QCWC700 Series Flanged Quill/Flanged Coupling Types

Basic Models (No Base); Right Angle Shafts

FOR ORDERING INFORMATION, see Page 56.

FOR RATING INFORMATION, See Pages 71, 77-81.





B

ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	H	J-NEMA Mounting						L	M	N	O
							FWC700			QCWC700						
							42CZ	56C 140TC	180TC 210C	42CZ	56C 140TC	180TC 210C				
713	4.25	2.88	3.25	2.00	1.63	1.72	4.49	5.30	—	5.48	6.35	—	—	3.75	4.00	5.88
718	5.50	3.69	4.19	2.75	2.09	2.06	4.91	5.72	—	5.90	6.76	—	—	4.44	4.31	7.19
721	6.00	3.81	5.00	2.88	2.50	2.28	—	6.00	—	—	7.52	—	—	4.94	4.69	7.94
726	7.38	4.44	6.38	3.38	3.19	2.94	—	6.56	—	—	9.22	—	—	5.66	5.63	9.35
730	8.12	5.25	7.00	4.00	3.50	3.25	—	7.69	—	—	9.29	—	—	6.12	6.75	10.18
732	9.00	5.88	7.50	4.00	3.75	3.50	—	7.94	—	—	9.54	—	4.94	6.48	7.06	10.98
738	10.00	6.38	8.50	4.75	4.25	3.88	—	8.81	—	—	10.51	—	5.50	7.27	7.75	12.27
752	13.13	7.38	11.00	5.81	5.50	5.31	—	11.00	11.34	—	12.64	13.55	7.19	9.28	9.06	15.84
760	14.50	8.12	12.75	6.38	6.38	6.50	—	—	—	—	14.70	15.12	7.94	9.56	10.00	16.81

Size	P	R-NEMA Mounting			T		Low Speed Shaft				Approx. Weight (LBS.)		Vertical Base Kit No. †	
							U +.000 -.001	V	W-Key					
		42CZ	56C 140TC	180TC 210C	Tap Size	Depth			Sq.	Length	FWA	QCWC	High	Low
713	5.00	2.16	3.31	—	5/16-18	.50	.625	2.00	3/16	1	16	18	56578	56579
718	5.31	2.16	3.31	—	5-16-18	.50	.875	1.78	3/16	1	27	30	56582	56583
721	6.03	—	3.31	—	3/8-16	.56	1.000	2.09	1/4	1-1/4	37	39	56588	56589
726	6.97	—	3.31	—	3/8-16	.56	1.125	2.62	1/4	1-15/16	62	62	56596	56597
730	8.50	—	3.31	—	7/16-14	.88	1.250	3.25	1/4	2-1/4	83	91	65545	65546
732	8.81	—	3.31	—	7/16-14	.66	1.375	3.25	5/16	2-7/16	103	119	56600	56601
738	9.81	—	3.31	—	1/2-13	.75	1.625	3.50	3/8	2-1/4	142	158	56604	56605
752	11.69	—	3.31	4.63	5/8-11	1.00	2.000	4.16	1/2	2-15/16	247	267	56608	56609
760	13.25	—	3.31	4.63	5/8-11	1.00	2.250	4.56	1/2	3-3/8	—	340	56611	56612

* See Assemblies and Mounting Positions, Page 73.

† For Base Kits, see Page 129 .

700 Series Double Reduction Flanged Reducer Dimensions

HFWC700/HQCWC700 Series Flanged Quill/Flanged Coupling Types

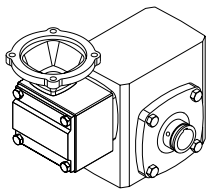
Basic Models (No Base); Right Angle Shafts; Bored to Size Hollow Output

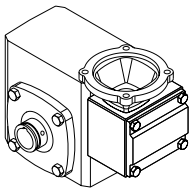
FOR ORDERING INFORMATION, see Page 56.

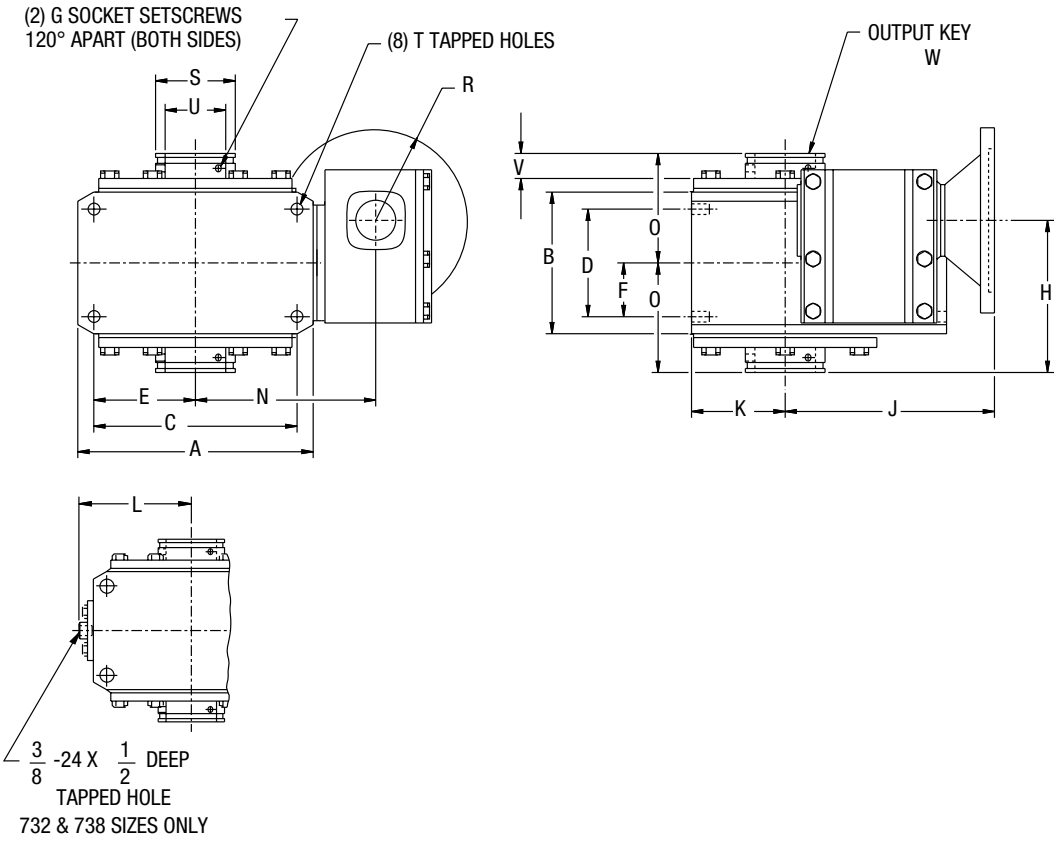
FOR RATING INFORMATION, See Pages 71, 77-81.

B

ASSEMBLY TYPES*







ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	J-NEMA Mounting HFWC 42CZ	J-NEMA Mounting HFWC 56C 140TC	J-NEMA Mounting HQCWC 42CZ	J-NEMA Mounting HQCWC 56C 140TC	K	L
713	4.25	2.88	3.25	2.00	1.63	1.00	#10-32	3.50	4.49	5.30	5.48	6.35	1.72	—
718	5.50	3.69	4.19	2.75	2.09	1.38	#10-32	4.03	4.91	5.72	5.90	6.76	2.06	—
721	6.00	3.81	5.00	2.88	2.50	1.44	1/4-28	4.55	—	6.00	—	7.52	2.28	—
726	7.38	4.44	6.38	3.38	3.19	1.69	5/16-24	4.77	—	6.56	—	9.22	2.94	—
730	8.12	5.25	7.00	4.00	3.50	2.00	5/16-24	5.94	—	7.69	—	9.29	3.25	—
732	9.00	5.88	7.50	4.00	3.75	2.00	5/16-24	6.06	—	7.94	—	9.54	3.50	4.94
738	10.00	6.38	8.50	4.75	4.25	2.38	5/16-24	6.87	—	8.81	—	10.51	3.88	5.50

Size	N	O	R-NEMA Mounting 42CZ	R-NEMA Mounting 56C 140TC	S	T Tap Size	T Depth	Low Speed Shaft Max U +.0015 -.0000	Low Speed Shaft V	Low Speed Shaft W-Key Size	Low Speed Shaft W-Key Length	Approx. Weight (LBS.) HFWC	Approx. Weight (LBS.) HQCWC
713	3.75	2.50	2.16	3.31	.88	5/16-18	.50	.625	.68			17	19
718	4.44	3.03	2.16	3.31	1.38	5/16-18	.50	1.000	.74			27	31
721	4.94	3.22	—	3.31	1.94	3/8-16	.56	1.4375	.87	See Page		37	39
726	5.66	3.44	—	3.31	2.50	3/8-16	.56	1.9375	.78	128 For		60	67
730	6.12	4.19	—	3.31	2.88	7/16-14	.88	2.1875	1.10	Key Information		82	95
732	6.48	4.31	—	3.31	2.88	7/16-14	.66	2.1875	.93			104	121
738	7.27	4.81	—	3.31	3.25	1/2-13	.75	2.4375	1.11			149	166

* See Assemblies and Mounting Positions, Page 73.

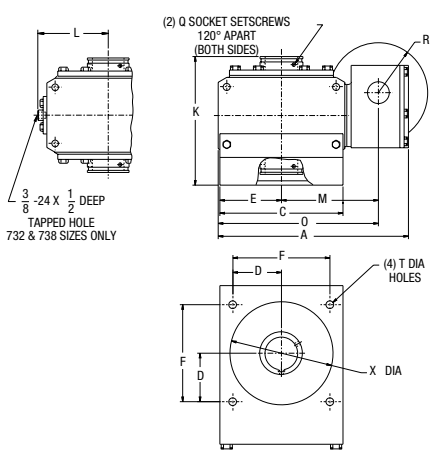
Note: For base dimensions see Single Reduction Flanged Reducer Dimension pages. See Page 128 for available bore sizes.

HFWC700/HQCWC700 Series Flanged Quill/Flanged Coupling Types

R/L Position Mounting Bracket; Right Angle Shafts; Bored to Size Hollow Output

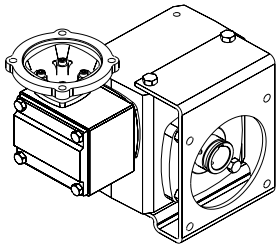
FOR ORDERING INFORMATION, see Page 56.

FOR RATING INFORMATION, See Pages 71, 77-81.



R Position

ASSEMBLY TYPES*



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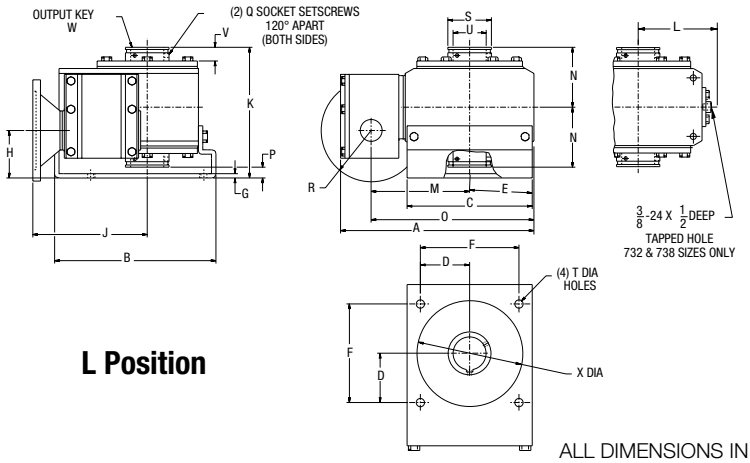
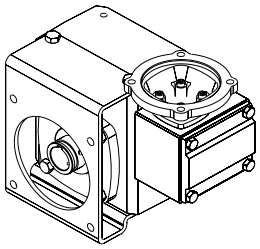


L Position



ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H R Model	H L Model	J-NEMA Mounting HFWC 42CZ	J-NEMA Mounting HFWC 56C 140TC	J-NEMA Mounting HQCWC 42CZ	J-NEMA Mounting HQCWC 56C 140TC	K	L	M
713	7.41	5.55	4.24	1.77	2.12	3.54	.19	4.00	2.00	4.49	5.30	5.48	6.35	5.50	—	3.75
718	8.72	6.66	5.00	2.08	2.41	4.16	.19	4.50	2.50	4.91	5.72	5.90	6.76	6.53	—	4.44
721	9.69	7.47	5.76	2.30	2.88	4.60	.19	5.08	2.42	—	6.00	—	7.52	6.97	—	4.94
726	11.09	9.25	7.18	2.83	3.59	5.66	.25	5.39	2.73	—	6.56	—	9.22	7.50	—	5.66
730	12.45	10.38	8.00	3.18	4.00	6.36	.25	6.25	2.75	—	7.69	—	9.29	8.69	—	6.12
732	13.69	10.91	8.50	3.54	4.25	7.08	.25	7.00	3.50	—	7.94	—	9.54	9.56	4.94	6.48
738	15.16	11.84	9.50	4.06	4.75	8.12	.25	7.53	3.41	—	8.81	—	10.51	10.28	5.50	7.27

Size	N	O	P	Q	R-NEMA Mounting 42CZ	R-NEMA Mounting 56C 140TC	S	T Holes	Low Speed Shaft Max U +.0015 -.0000	Low Speed Shaft V	Low Speed Shaft W-Key Size	Low Speed Shaft W-Key Length	X	Approx. Weight (LBS.) HFWC	Approx. Weight (LBS.) HQCWC
713	2.50	5.87	.50	#10-32	2.16	3.31	.88	11/32	.625	.68			3.62	18	20
718	3.03	7.19	.47	#10-32	2.16	3.31	1.38	11/32	1.000	.74			4.06	30	36
721	3.22	7.94	.53	1/4-28	—	3.31	1.94	13/32	1.4375	.87	See Page		4.50	42	47
726	3.44	9.35	.62	5/16-24	—	3.31	2.50	13/32	1.9375	.78	128 For		6.00	56	80
730	4.19	10.18	.31	5/16-24	—	3.31	2.88	13/32	2.1875	1.10	Key Information		7.00	95	116
732	4.31	10.98	.94	5/16-24	—	3.31	2.88	9/16	2.1875	.93			7.00	134	151
738	4.81	12.27	.66	5/16-24	—	3.31	3.25	9/16	2.4375	1.11			8.00	178	200

* See Assemblies and Mounting Positions, Page 73.

See Page 128 for available bore sizes.

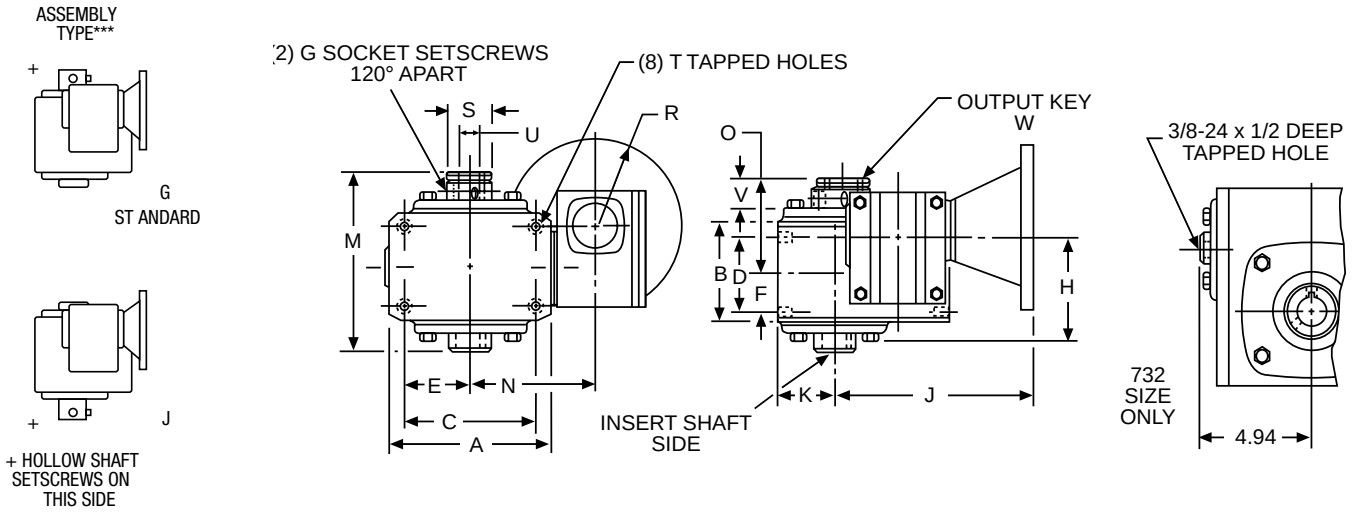
700 Series Double Reduction Flanged Reducer Dimensions

SFWC700 Series Flanged Quill Type

Basic Models (No Base); Right Angle Shafts; Hollow Output

FOR ORDERING INFORMATION, see Page 56.

FOR ADDITIONAL SIZES, See the H Series Pages 88-89.
FOR RATING INFORMATION, See Pages 71, 77-81.



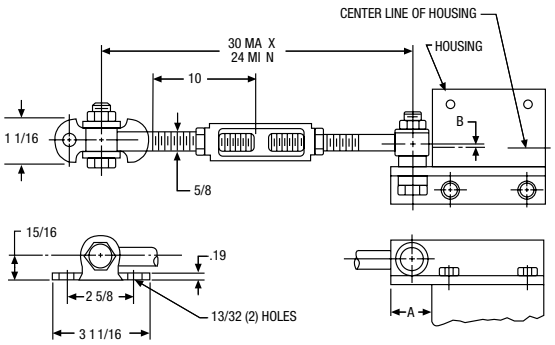
ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	J-NEMA Mounting SFWC 42CZ	J-NEMA Mounting SFWC 56C 140TC	K	M
718	5.50	3.69	4.19	2.75	2.09	1.38	#10-32	3.50	4.91	5.69	2.06	5.69
721	6.00	3.81	5.00	2.88	2.50	1.44	1/4-28	3.94	—	6.00	2.28	5.88
726	7.38	4.44	6.38	3.38	3.19	1.69	1/4-28	4.25	—	6.56	2.94	6.47
732	9.00	5.88	7.50	4.00	3.75	2.00	5/16-24	5.34	—	7.94	3.50	8.06

Size	N	O	R-NEMA Mounting 42CZ	R-NEMA Mounting 56C 140TC	S	T Tap Size	T Depth	Low Speed Shaft U +.0015 -.000	Low Speed Shaft V	Low Speed Shaft W-Key Size	Low Speed Shaft W-Key Length	Approx. Weight (LBS.) SFWC
718	4.44	3.09	2.16	3.31	1.38	5/16-18	.50	1.000	.78	See Page		24
721	4.94	3.22	—	3.31	1.50	3/8-16	.56	1.125	.88	128 For		32
726	5.66	3.50	—	3.31	2.16	3/8-16	.56	1.4375	.84	Key Information		51
732	6.48	4.38	—	3.31	2.56	7/16-14	.66	1.9375	1.00			99

*See Assemblies and Mounting Positions, Page 73. Assemblies define output (slow speed) shaft projection with respect to input (high speed) shaft.

Reaction Rod Kits



ALL DIMENSIONS IN INCHES

Size	A	B	Catalog Number	Kit No.
718	1.09	.09	X718-76K	69692
721	1.25	.03	X721-76K	69693
726	1.25	.22	X726-76K	69694
732	1.50	.53	X732-76K	69695

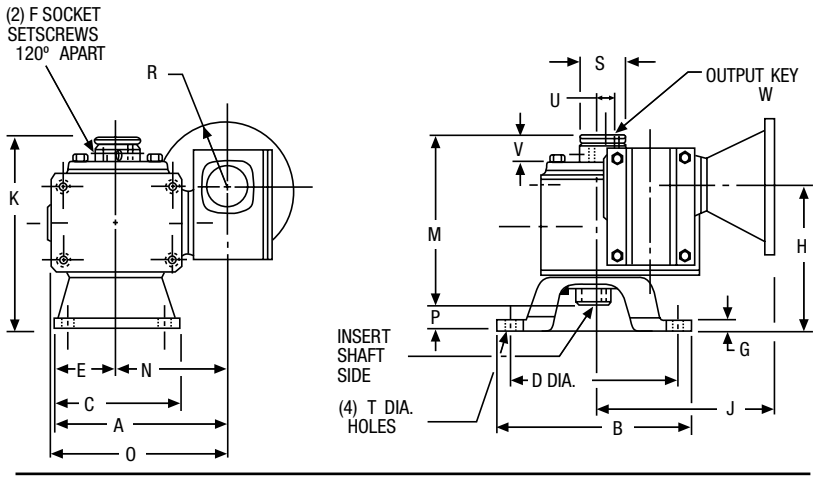
All hardware shown is included in the kits.

SFWC700 Series Flanged Quill Type

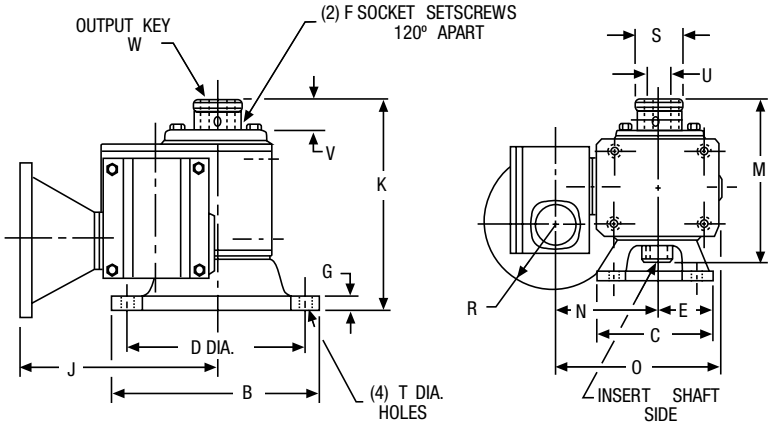
V/W Position Mounting Flange; Right Angle Shafts; Hollow Output

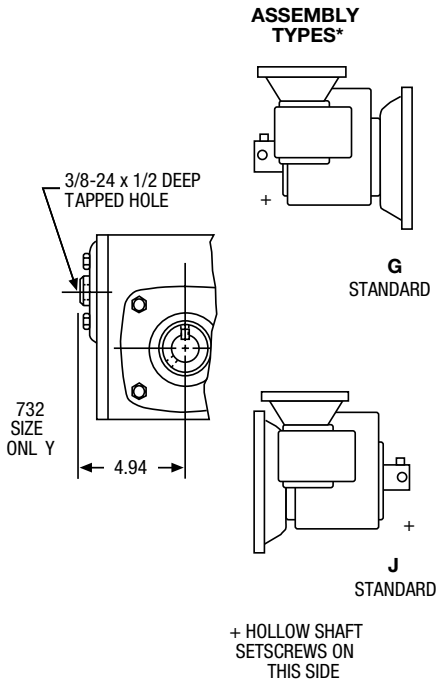
FOR ORDERING INFORMATION, see Page 56.
FOR ADDITIONAL SIZES, See the H Series Page 88-89.
FOR RATING INFORMATION, See Pages 71, 77-81.

V Position



W Position





ALL DIMENSIONS IN INCHES

SIZE	A	B	C	D DIA	E	F	G	H	J-NEMA Mounting SFWC 42CZ	J-NEMA Mounting SFWC 56C 140TC	K	M
718	6.88	6.75	4.88	5.88	2.44	#10-32	.38	4.50	4.91	5.69	6.59	5.69
721	7.81	7.38	5.75	6.50	2.88	1/4-28	.38	5.09	—	6.00	6.97	5.88
726	9.54	8.88	7.75	8.00	3.88	5/16-24	.38	5.41	—	6.56	7.56	6.47
732	11.00	11.00	9.00	10.00	4.50	5/16-24	.50	7.00	—	7.94	9.63	8.06

SIZE	N	O	P	R-NEMA Mounting 42CZ	R-NEMA Mounting 56C 140TC	S	T Hole	Low Speed Shaft U +.0015 -.000	Low Speed Shaft V	Low Speed Shaft W-KEY Size	Low Speed Shaft W-KEY Length	Approx. Weight (LBS.) SFWC
718	4.44	7.19	0.91	2.16	3.31	1.38	11/32	1.000	0.78			29
721	4.94	7.94	1.09	—	3.31	1.50	13/32	1.125	0.88	See Page		40
726	5.66	9.34	1.09	—	3.31	2.16	13/32	1.4375	0.84	128 For		53
732	6.48	11.00	1.56	—	3.31	2.56	9/16	1.9375	1.00	Key Information		128

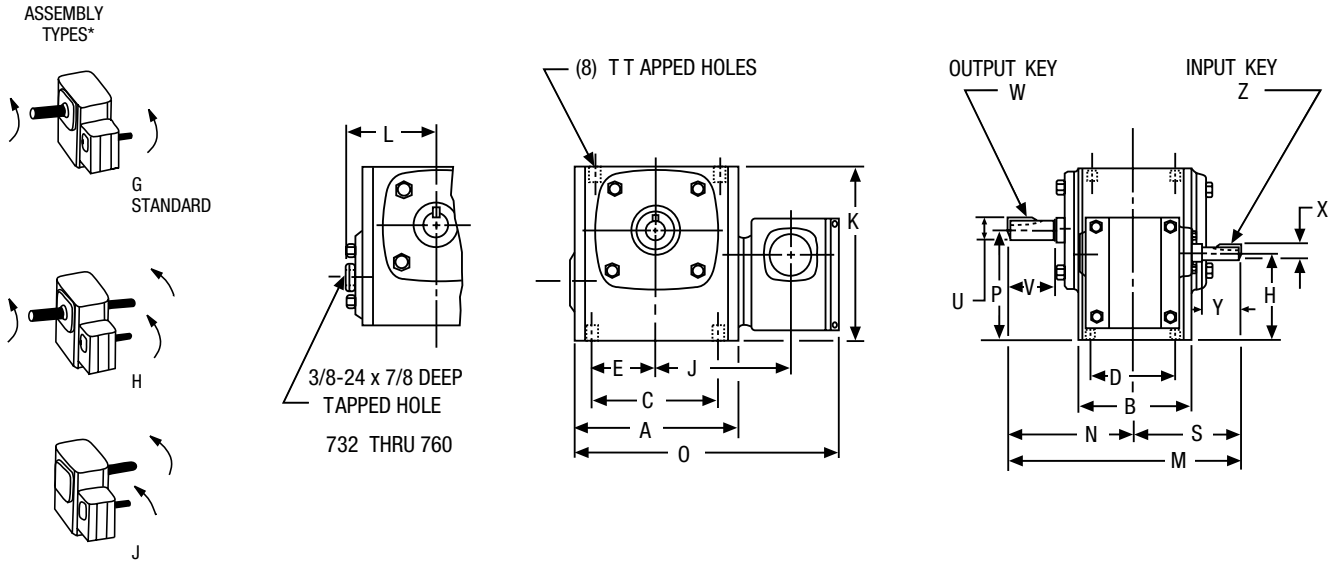
* See Assemblies and Mounting Positions, Page 73. Assemblies define output (slow speed) shaft projection with respect to input (high speed) shaft.

700 Series Double Reduction Non-Flanged Reducer Dimensions

WA700 Series

Basic Models (No Base); Parallel Shafts

FOR ORDERING INFORMATION, see Page 56.
FOR RATING INFORMATION, See Pages 71, 77-81.



ALL DIMENSIONS IN INCHES

SIZE	A	B	C	D	E	H	J	K	L	M	N	O	P
713	4.25	2.88	3.25	2.00	1.63	2.63	3.75	4.66	—	6.88	4.00	7.41	2.94
718	5.50	3.69	4.19	2.75	2.09	2.94	4.44	5.75	—	7.19	4.31	8.72	3.69
721	6.00	3.81	5.00	2.88	2.50	3.38	4.94	6.38	—	8.59	4.69	9.69	4.09
726	7.38	4.44	6.38	3.38	3.19	3.78	5.66	8.00	—	9.53	5.63	11.09	5.06
730	8.12	5.25	7.00	4.00	3.50	4.38	6.12	8.88	—	11.59	6.75	12.45	5.63
732	9.00	5.88	7.50	4.00	3.75	4.38	6.48	9.38	4.94	11.90	7.06	13.69	5.88
738	10.00	6.38	8.50	4.75	4.25	4.88	7.27	10.44	5.50	12.88	7.75	15.16	6.56
752	13.13	7.38	11.00	5.81	5.50	5.88	9.28	13.75	7.19	15.38	9.06	19.34	8.41
760	14.50	8.13	12.75	6.38	6.38	7.25	9.56	16.50	7.94	17.44	10.00	21.13	10.00

Size	S	T		Low Speed Shaft				High Speed Shaft				Approx. Weight (Lbs.)	Horizontal Base Kit No.
				U		W-KEY		X		Z-KEY			
		Tap Size	Depth	+.000 -.001	V	Sq	Length	+.000 -.001	Y	Sq	Length		
713	2.88	5/16-18	.50	.625	2.00	3/16	1	.3745	.81	3/32	3/8	15	56577
718	2.88	5/16-18	.50	.875	1.78	3/16	1	.3745	.81	3/32	3/8	28	56585
721	3.91	3/8-16	.56	1.000	2.09	1/4	1-1/4	.4995	1.31	1/8	5/8	37	56587
726	3.91	3/8-16	.56	1.125	2.63	1/4	1-5/16	.4995	1.31	1/8	5/8	55	56595
730	4.84	7/16-14	.88	1.250	3.25	1/4	2-1/4	.6245	1.56	3/16	13/16	73	65544
732	4.84	7/16-14	.66	1.375	3.25	5/16	2-7/16	.6245	1.56	3/16	13/16	93	56599
738	5.13	1/2-13	.75	1.625	3.50	3/8	2-1/4	.6245	1.56	3/16	13/16	132	56603
752	6.31	5/8-11	1.00	2.000	4.16	1/2	2-15/16	.7495	2.38	3/16	1	235	56607
760	7.44	5/8-11	1.00	2.250	4.56	1/2	3-3/8	.8745	2.31	3/16	1	298	56610

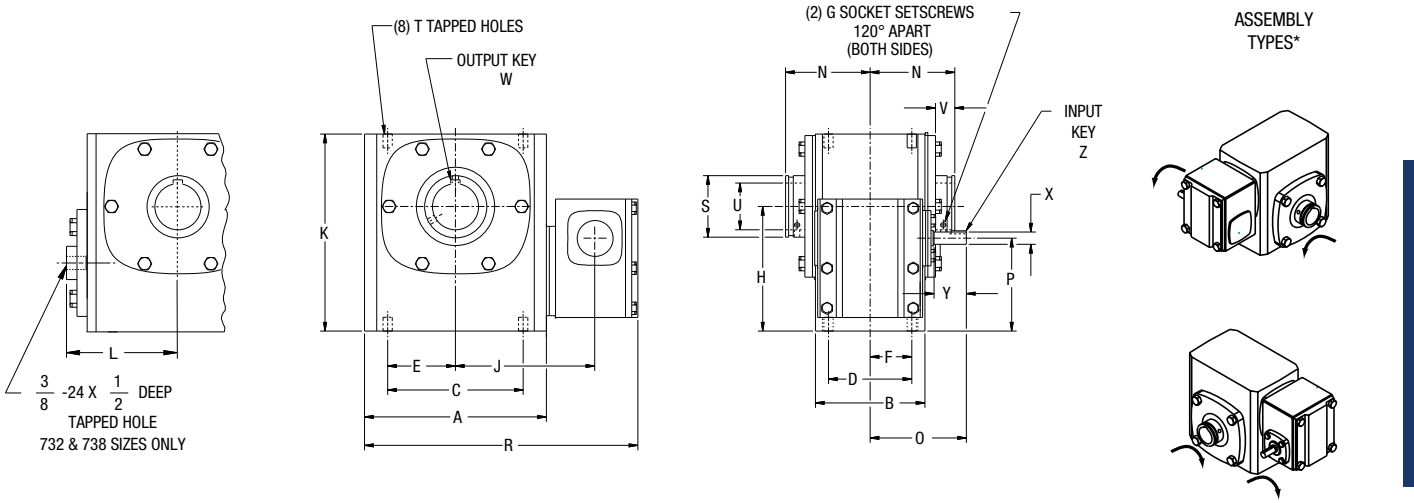
* See Assemblies and Mounting Positions, Page 74.
† For Base Kits, see Page 129.
Note: For base dimensions see Single Reduction Flanged Reducer Dimension pages.

700 Series Double Reduction Non-Flanged Reducer Dimensions

HWA700 Series

Basic Models (No Base); Parallel Shafts; Bored to Size Hollow Output

FOR ORDERING INFORMATION, see Page 56.
FOR RATING INFORMATION, See Pages 71, 77-81.



ALL DIMENSIONS IN INCHES

SIZE	A	B	C	D	E	F	G	H	J	K	L	N	O	P
713	4.25	2.88	3.25	2.00	1.63	1.00	#10-32	2.94	3.75	4.66	—	2.50	2.88	2.63
718	5.50	3.69	4.19	2.75	2.09	1.38	#10-32	3.69	4.44	5.75	—	3.03	2.88	2.94
721	6.00	3.81	5.00	2.88	2.50	1.44	1/4-28	4.09	4.94	6.38	—	3.22	3.91	3.38
726	7.38	4.44	6.38	3.38	3.19	1.69	5/16-24	5.06	5.66	8.00	—	3.44	3.91	3.78
730	8.12	5.25	7.00	4.00	3.50	2.00	5/16-24	5.63	6.12	8.88	—	4.19	4.84	4.38
732	9.00	5.88	7.50	4.00	3.75	2.00	5/16-24	5.88	6.48	9.38	4.94	4.31	4.88	4.38
738	10.00	6.38	8.50	4.75	4.25	2.38	5/16-24	6.56	7.27	10.44	5.50	4.81	5.13	4.88

Size	R	S	T		Low Speed Shaft				High Speed Shaft				Approx. Weight (Lbs.)
					Max U +.0015 -.0000	V	W-KEY		X +.000 -.001	Y	Z-KEY		
			Tap Size	Depth			Sq	Length			Sq	Length	
713	7.41	.88	5/16-18	.50	.625	.68			.3745	.81	3/32	3/8	17
718	8.72	1.38	5/16-18	.50	1.000	.84			.3745	.81	3/32	3/8	28
721	9.69	1.94	3/8-16	.56	1.4375	.87	See Page		.4995	1.31	1/8	5/8	37
726	11.09	2.50	3/8-16	.56	1.9375	.78	128 For		.4995	1.31	1/8	5/8	55
730	12.45	2.88	7/16-14	.88	2.1875	1.10	Key Information		.6245	1.56	3/16	13/16	76
732	13.69	2.88	7/16-14	.66	2.1875	.93			.6245	1.56	3/16	13/16	96
738	15.16	3.25	1/2-13	.75	2.4375	1.11			.6245	1.56	3/16	13/16	166

* See Assemblies and Mounting Positions, Page 74.
Input may be rotated clockwise or counterclockwise. Arrows indicate relative rotation.
See Page 128 for available bore sizes.

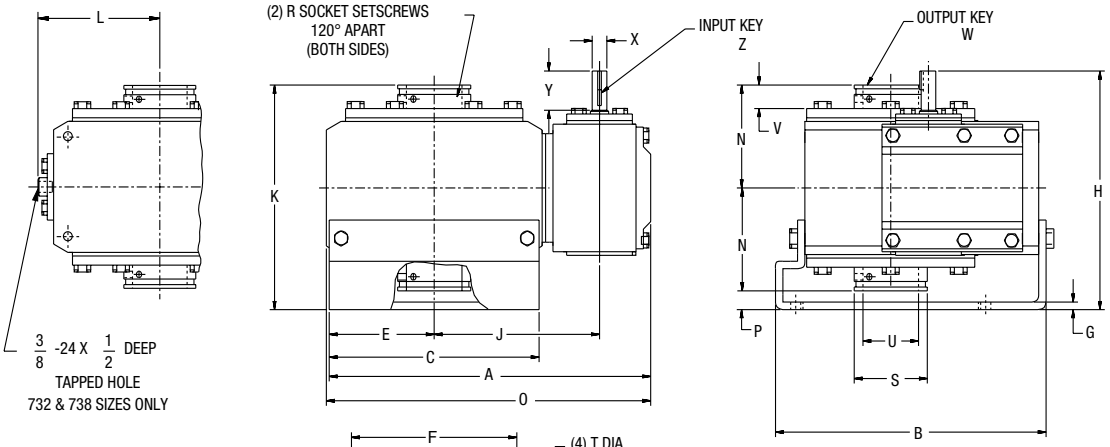
700 Series Double Reduction Non-Flanged Reducer Dimensions

HWA700 Series

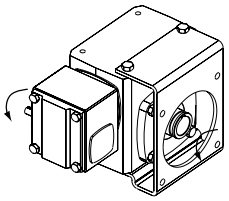
R Position Mounting Bracket; Parallel Shafts; Bored to Size Hollow Output

FOR ORDERING INFORMATION, see Page 56.
FOR RATING INFORMATION, See Pages 71, 77-81.

B



ASSEMBLY TYPES*



ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
713	7.40	5.55	4.25	1.77	2.12	3.54	.19	5.88	3.75	5.50	—	3.62	2.50	7.41	.50
718	8.38	6.66	4.81	2.08	2.41	4.16	.19	6.38	4.44	6.53	—	4.06	3.03	8.72	.47
721	9.57	7.47	5.75	2.30	2.88	4.60	.19	7.66	4.94	6.97	—	4.50	3.22	9.69	.53
726	11.00	9.25	7.18	2.83	3.59	5.66	.25	7.97	5.66	7.50	—	6.00	3.44	11.09	.62
730	12.39	10.38	8.00	3.18	4.00	6.36	.25	4.46	6.12	8.69	—	7.00	4.19	12.45	.31
732	13.44	10.91	8.50	3.54	4.25	7.08	.25	10.13	6.48	9.56	4.94	7.00	4.31	13.69	.94
738	14.91	11.84	9.50	4.06	4.75	8.12	.25	10.60	7.27	10.28	5.50	8.00	4.81	15.16	.66

				Low Speed Shaft				High Speed Shaft				
						W-KEY				Z-KEY		
Size	R	S	T DIA	Max U +.0015 -.0000	V	Sq	Length	X +.000 -.001	Y	Sq	Length	Approx. Weight (Lbs.)
713	#10-32	.88	11/32	.625	.68			.3745	.81	3/32	3/8	17
718	#10-32	1.38	11/32	1.000	.74			.3745	.81	3/32	3/8	34
721	1/4-28	1.94	13/32	1.4375	.87	See Page		.4995	1.31	1/8	5/8	42
726	5/16-24	2.50	13/32	1.9375	.78	128 For		.4995	1.31	1/8	5/8	66
730	5/16-24	2.88	13/33	2.1875	1.10	Key Information		.6245	1.56	3/16	13/16	86
732	5/16-24	2.88	9/16	2.1875	.93			.6245	1.56	3/16	13/16	126
738	5/16-24	3.25	9/16	2.4375	1.11			.6245	1.56	3/16	13/16	148

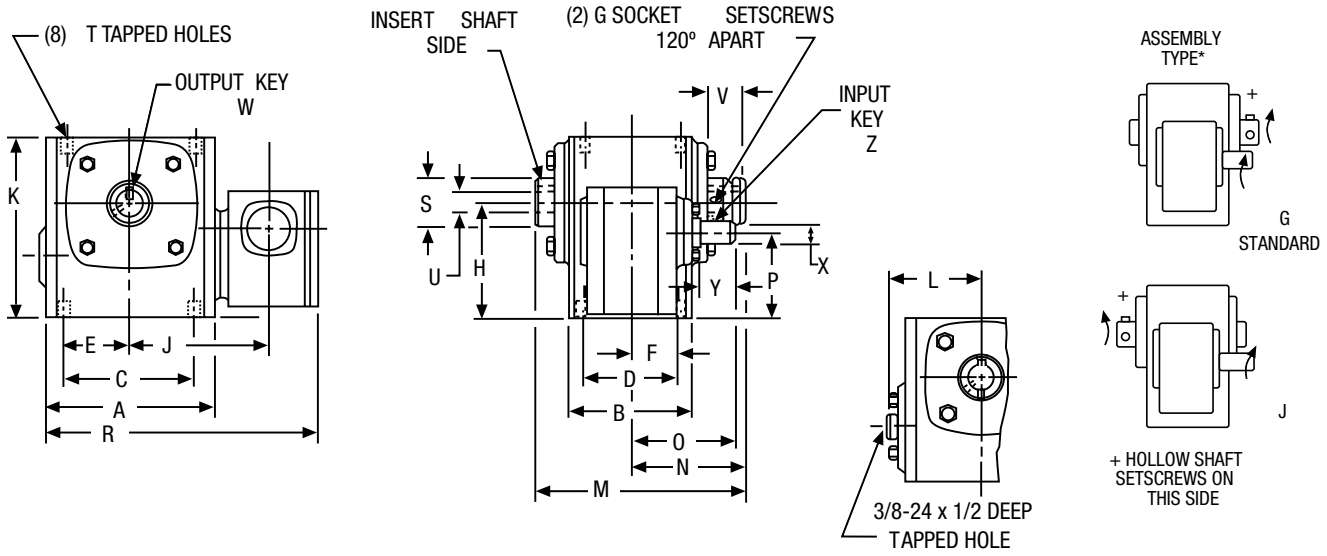
* See Assemblies and Mounting Position, Page 74
Input may be rotated clockwise or counterclockwise. Arrows indicate relative rotation.
See Page 128 for available bore sizes.

700 Series Double Reduction Non-Flanged Reducer Dimensions

SWA700 Series

Basic Models (No Base); Parallel Shafts; Hollow Output

FOR ORDERING INFORMATION, see Page 56.
FOR ADDITIONAL SIZES, See the H Series Page 88-89.
FOR RATING INFORMATION, See Pages 71, 77-81.



ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	J	K	M	N	O	P
718	5.50	3.69	4.19	2.75	2.09	1.38	#10-32	3.69	4.44	5.75	5.69	3.09	2.88	2.94
721	6.00	3.81	5.00	2.88	2.50	1.44	1/4-28	4.09	4.94	6.38	5.88	3.22	3.91	3.38
726	7.38	4.44	6.38	3.38	3.19	1.69	1/4-28	5.06	5.66	8.00	6.47	3.50	3.91	3.78
732	9.00	5.88	7.50	4.00	3.75	2.00	5/16-24	5.88	6.48	9.38	8.06	4.38	4.88	4.38

Size	R	S	T		Low Speed Shaft				High Speed Shaft				Approx. Weight (Lbs.)
					U +.0015 -.000	V	W-KEY		X +.000 -.001	Y	Z-KEY		
			Tap Size	Depth			Sq	Length			Sq	Length	
718	8.72	1.38	5/16-18	.50	1.000	.78	See Page		.3745	.81	3/32	3/8	27
721	9.69	1.50	3/8-16	.56	1.125	.88	128 For		.4995	1.31	1/8	5/8	35
726	11.09	2.16	3/8-16	.56	1.4375	.84	Key Information		.4995	1.31	1/8	5/8	52
732	13.69	2.56	7/16-14	.66	1.9375	1.00			.6245	1.56	3/16	13/16	91

* See Assemblies and Mounting Positions, Page 74. Assemblies define output (slow speed) shaft projection with respect to input (high speed) shaft and mounted surfaces, viewed from end of input shaft.
Input may be rotated clockwise or counterclockwise. Arrows indicate relative rotation.

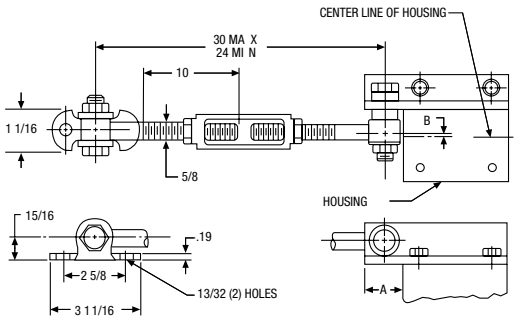
Note: For base dimensions see Single Reduction Flanged Reducer Dimension pages.

Reaction Rod Kits

ALL DIMENSIONS IN INCHES

SIZE	A	B	Catalog Number	Kit No.
718	1.09	.09	X718-76K	69692
721	1.25	.03	X721-76K	69693
726	1.25	.22	X726-76K	69694
732	1.50	.53	X732-76K	69695

All hardware shown is included in the kits.

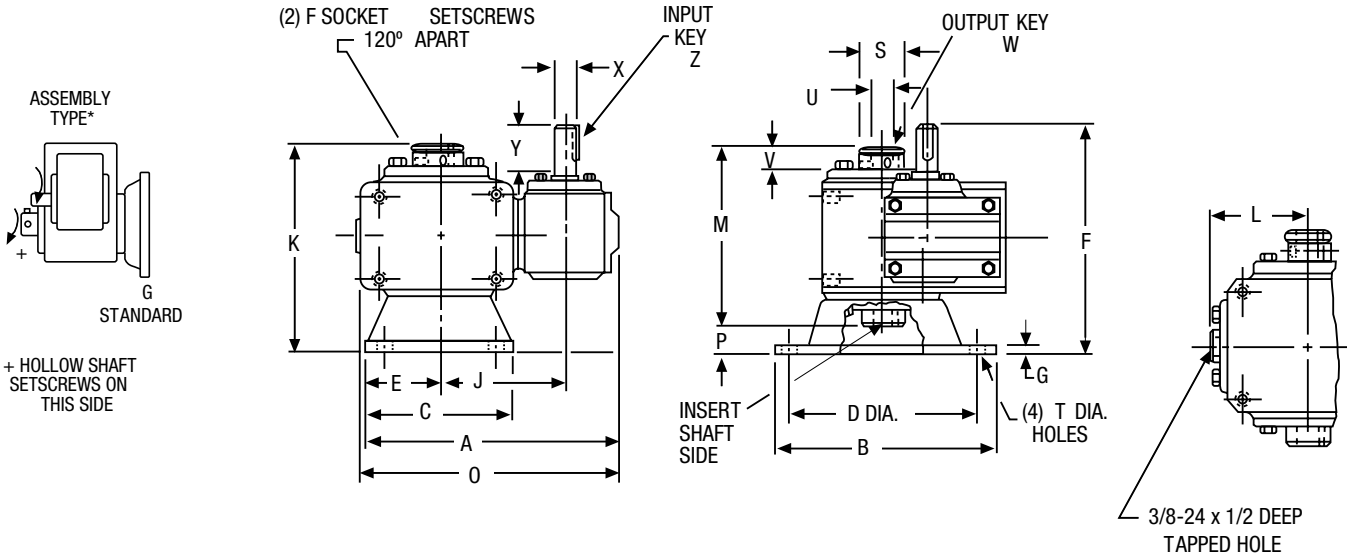


700 Series Double Reduction Non-Flanged Reducer Dimensions

SWA700 Series

V Position Mounting Flange; Parallel Shafts; Hollow Output

FOR ORDERING INFORMATION, see Page 56.
FOR ADDITIONAL SIZES, See the H Series Page 88-89.
FOR RATING INFORMATION, See Pages 71, 77-81.



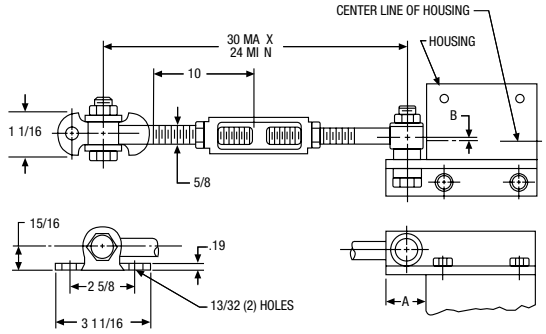
ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	J	K	M	O	P
718	8.41	6.75	4.88	5.88	2.44	#10-32	.38	4.44	6.59	5.69	8.72	.91
721	9.56	7.38	5.75	6.50	2.88	1/4-28	.38	4.94	6.97	5.88	9.69	1.09
726	11.28	8.88	7.75	8.00	3.88	1/4-28	.38	5.66	7.56	6.47	11.28	1.09
732	13.25	11.00	9.00	10.00	4.50	5/16-24	.50	6.48	9.63	8.06	13.69	1.56

Size	S	T Dia	Low Speed Shaft				High Speed Shaft				Approx. Weight (Lbs.)
			U +.0015 -.000	V	W-KEY		X +.000 -.001	Y	Z-KEY		
					Sq	Length			Sq	Length	
718	1.38	11/32	1.000	.78	See Page		.3745	.81	3/32	3/8	32
721	1.50	13/32	1.125	.88	128 For		.4995	1.31	1/8	5/8	40
726	2.16	13/32	1.4375	.84	Key Information		.4995	1.31	1/8	5/8	63
732	2.56	9/16	1.9375	1.00			.6245	1.56	3/16	13/16	120

* See Assemblies and Mounting Position, Page 74. Assemblies define output (slow speed) shaft projection with respect to input (high speed) shaft and mounted surfaces, viewed from end of input shaft.
Input may be rotated clockwise or counterclockwise. Arrows indicate relative rotation.

Reaction Rod Kits



ALL DIMENSIONS IN INCHES

Size	A	B	Catalog Number	Kit No.
718	1.09	.09	X718-76K	69692
721	1.25	.03	X721-76K	69693
726	1.25	.22	X726-76K	69694
732	1.50	.53	X732-76K	69695

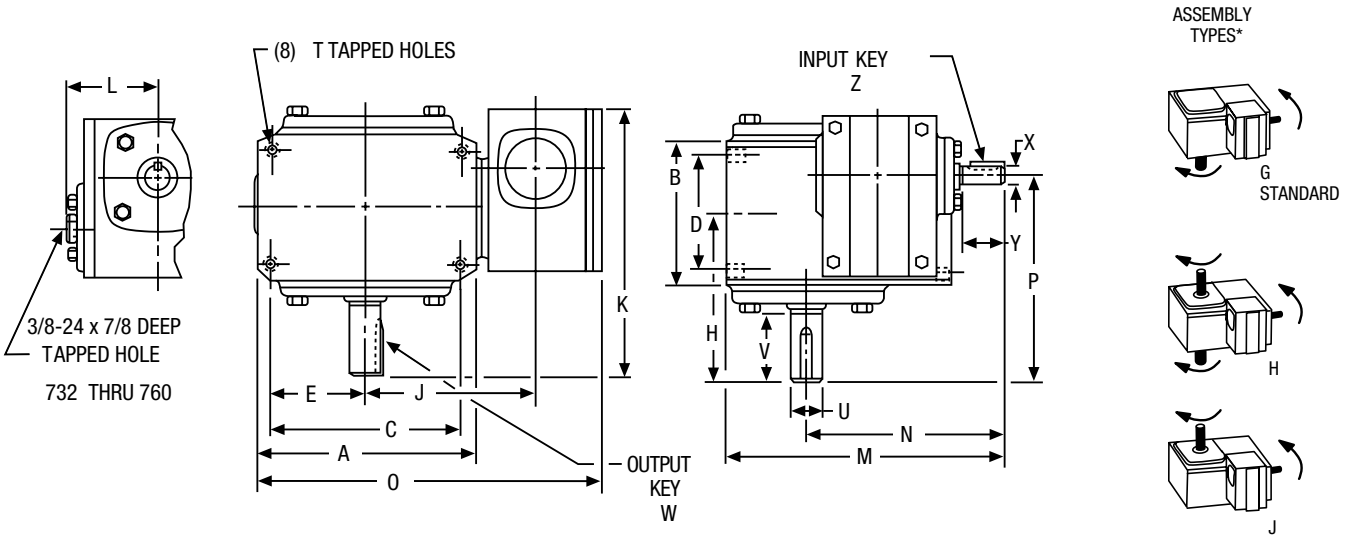
All hardware shown is included in the kits.

700 Series Double Reduction Non-Flanged Reducer Dimensions

WC700 Series

Basic Models (No Base); Right Angle Shafts

FOR ORDERING INFORMATION, see Page 56.
FOR RATING INFORMATION, See Pages 71, 77-81.



ALL DIMENSIONS IN INCHES

SIZE	A	B	C	D	E	H	J	K	L	M	N	O	P
713	4.25	2.88	3.25	2.00	1.63	4.00	3.75	6.19	—	5.94	4.22	7.41	5.00
718	5.50	3.69	4.19	2.75	2.09	4.31	4.44	6.50	—	6.69	4.63	8.72	5.31
721	6.00	3.81	5.00	2.88	2.50	4.69	4.94	7.63	—	8.25	5.97	9.69	6.03
726	7.38	4.44	6.38	3.38	3.19	5.63	5.66	8.56	—	9.47	6.53	11.09	6.97
730	8.12	5.25	7.00	4.00	3.50	6.75	6.12	10.44	—	11.09	7.84	12.45	8.50
732	9.00	5.88	7.50	4.00	3.75	7.06	6.48	10.75	4.94	11.63	8.13	13.69	8.81
738	10.00	6.38	8.50	4.75	4.25	7.75	7.27	11.84	5.50	12.75	8.88	15.16	9.81
752	13.13	7.38	11.00	5.81	5.50	9.06	9.28	14.00	7.19	16.81	11.50	19.34	11.69
760	14.50	8.13	12.75	6.38	6.38	10.00	9.56	15.88	7.94	19.94	13.44	21.13	13.25

Size	T		Low Speed Shaft				High Speed Shaft				Approx. Weight (LBS.)	Vertical Base Kit No. †	
	Tap Size	Depth	U +.000 -.001	V	W-KEY Sq	W-KEY Length	X +.000 -.001	Y	Z-KEY Sq	Z-KEY Length		High	Low
713	5/16-18	.50	.625	2.00	3/16	1	.3745	.81	3/32	3/8	15	56578	56579
718	5/16-18	.50	.875	1.78	3/16	1	.3745	.81	3/32	3/8	28	56582	56583
721	3/8-16	.56	1.000	2.09	1/4	1-1/4	.4995	1.31	1/8	5/8	37	56588	56589
726	3/8-16	.56	1.125	2.63	1/4	1-15/16	.4995	1.31	1/8	5/8	55	56596	56597
730	7/16-14	.88	1.250	3.25	1/4	2-1/4	.6245	1.56	3/16	13/16	73	65545	65546
732	7/16-14	.66	1.375	3.25	5/16	2-7/16	.6245	1.56	3/16	13/16	93	56600	56601
738	1/2-13	.75	1.625	3.50	3/8	2-1/4	.6245	1.56	3/16	13/16	132	56604	56605
752	5/8-11	1.00	2.000	4.16	1/2	2-15/16	.7495	2.38	3/16	1	235	56608	56609
760	5/8-11	1.00	2.250	4.56	1/2	3-3/8	.8745	2.31	3/16	1	298	56611	56612

* See Assemblies and Mounting Positions, Page 75.
† For Base Kits, see Page 129.

700 Series Double Reduction Non-Flanged Reducer Dimensions

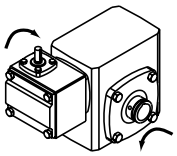
HWC700 Series

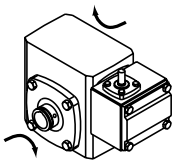
Basic Models (No Base); Right Angle Shafts; Bored to Size Hollow Output

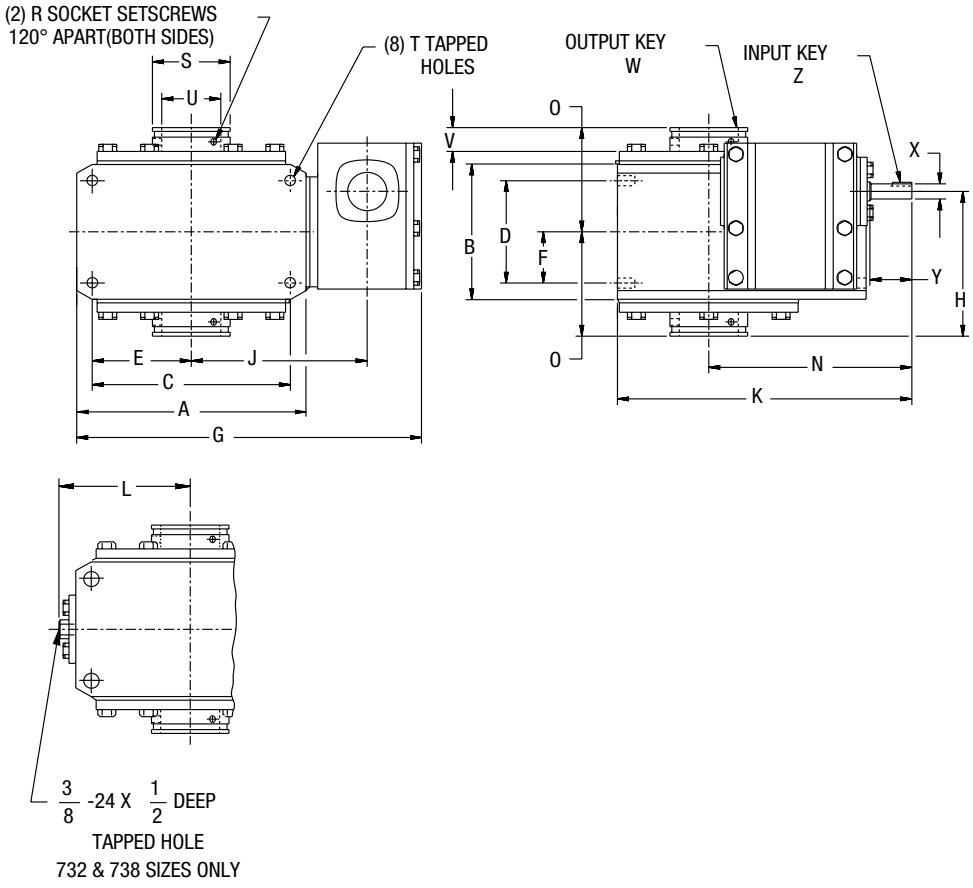
FOR ORDERING INFORMATION, see Page 56.
FOR RATING INFORMATION, See Pages 71, 77-81.

B

ASSEMBLY TYPES*







ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	J	K	L	N	O	R
713	4.25	2.88	3.25	2.00	1.63	1.00	7.41	3.50	3.75	5.94	—	4.22	2.50	#10-32
718	5.50	3.69	4.19	2.75	2.09	1.38	8.72	4.03	4.44	6.69	—	4.63	3.03	#10-32
721	6.00	3.81	5.00	2.88	2.50	1.44	9.69	4.55	4.94	8.25	—	5.97	3.22	1/4-28
726	7.38	4.44	6.38	3.38	3.19	1.69	11.09	4.77	5.66	9.47	—	6.53	3.44	5/16-24
730	8.12	5.25	7.00	4.00	3.50	2.00	12.45	5.94	6.12	11.09	—	7.84	4.19	5/16-24
732	9.00	5.88	7.50	4.00	3.75	2.00	13.69	6.06	6.48	11.63	4.94	8.13	4.31	5/16-24
738	10.00	6.38	8.50	4.75	4.25	2.38	15.16	6.87	7.27	12.75	5.50	8.88	4.81	5/16-24

Size	S	T		Low Speed Shaft				High Speed Shaft				Approx. Weight (Lbs.)
		Tap Size	Depth	Max U +.0015 -.000	V	W-KEY Sq	W-KEY Length	X +.000 -.001	Y	Z-KEY Sq	Z-KEY Length	
718	.88	5/16-18	.50	.625	.68			.3745	.81	3/32	3/8	17
721	1.38	5/16-18	.50	1.000	.74			.3745	.81	3/32	3/8	28
726	1.94	3/8-16	.56	1.4375	.87	See Page		.4995	1.31	1/8	5/8	37
732	2.50	3/8-16	.56	1.9375	.78	128 For		.4995	1.31	1/8	5/8	55
730	2.88	7/16-14	.88	2.1875	1.10	Key Information		.6245	1.56	3/16	13/16	76
732	2.88	7/16-14	.66	2.1875	.93			.6245	1.56	3/16	13/16	96
738	3.25	1/2-13	.75	2.4375	1.11			.6245	1.56	3/16	13/16	166

* See Assemblies and Mounting Positions, Page 75.
Input may be rotated clockwise or counterclockwise. Arrows indicate relative rotation.
See Page 128 for available bore sizes.

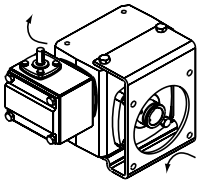
700 Series Double Reduction Non-Flanged Reducer Dimensions

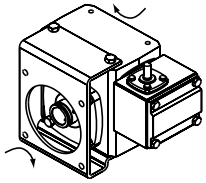
HWC700 Series

R/L Position Mounting Bracket; Right Angle Shafts; Bored to Size Hollow Output

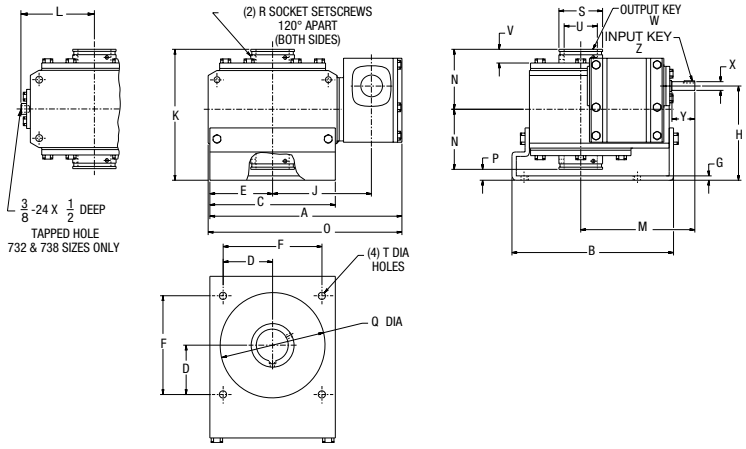
FOR ORDERING INFORMATION, see Page 56.
FOR RATING INFORMATION, See Pages 71, 77-81.

ASSEMBLY TYPES*

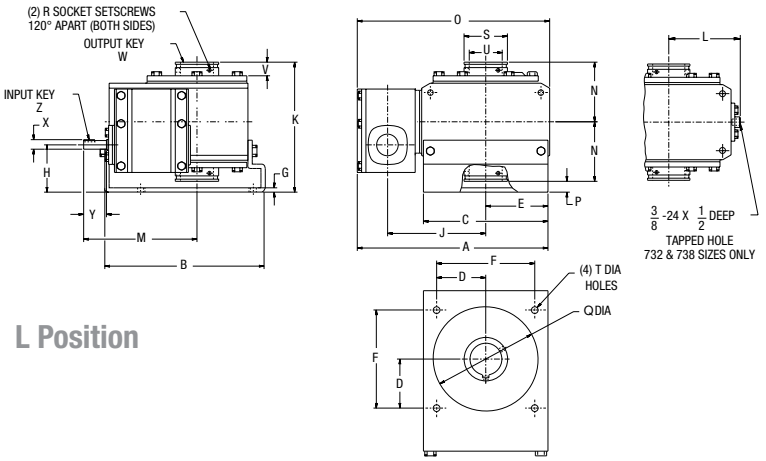




R Position



L Position



ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H		J	K	L	M	N	O	P
								R Model	L Model							
713	7.40	5.55	4.24	1.77	2.12	3.54	.19	4.00	2.00	3.75	5.50	—	4.22	2.50	7.41	.50
718	8.38	6.66	4.82	2.08	2.41	4.16	.19	4.50	2.50	4.44	6.53	—	4.63	3.03	8.72	.47
721	9.57	7.47	5.76	2.30	2.88	4.60	.19	5.08	2.42	4.94	6.97	—	5.97	3.22	9.69	.53
726	11.00	9.25	7.18	2.83	3.59	5.66	.25	5.39	2.73	5.66	7.50	—	6.53	3.44	11.09	.62
730	12.39	10.38	8.00	3.18	4.00	6.38	.25	6.25	2.75	6.12	8.69	—	7.84	4.19	12.45	.31
732	13.44	10.91	8.50	3.54	4.25	7.08	.25	7.00	3.50	6.48	9.56	4.94	8.13	4.31	13.69	.94
738	14.91	11.84	9.50	4.06	4.75	8.12	.25	7.53	3.41	7.27	10.28	5.50	8.88	4.81	15.16	.66

Size	Q	R	S	T Dia.	Low Speed Shaft				High Speed Shaft				Approx. Weight (Lbs.)
					Max U +.0015 -.0000	V	W-KEY		X +.000 -.001	Y	Z-KEY		
							Sq	Length			Sq	Length	
713	3.62	#10-32	.88	11/32	.625	.68			.3745	.81	3/32	3/8	17
718	4.06	#10-32	1.38	11/32	1.000	.74			.3745	.81	3/32	3/8	34
721	4.50	1/4-28	1.94	13/32	1.4375	.87	See Page		.4995	1.31	1/8	5/8	42
726	6.00	5/16-24	2.50	13/32	1.9375	.78	128 For		.4995	1.31	1/8	5/8	66
730	7.00	5/16-24	2.88	13/32	2.1875	1.10	Key Information		.6245	1.56	3/16	13/16	86
732	7.00	5/16-24	2.88	9/16	2.1875	.93			.6245	1.56	3/16	13/16	126
738	8.00	5/16-24	3.25	9/16	2.4375	1.11			.6245	1.56	3/16	13/16	148

* See Assemblies and Mounting Positions, Page 75.
Input may be rotated clockwise or counterclockwise. Arrows indicate relative rotation. See Page 128 for available bore sizes.

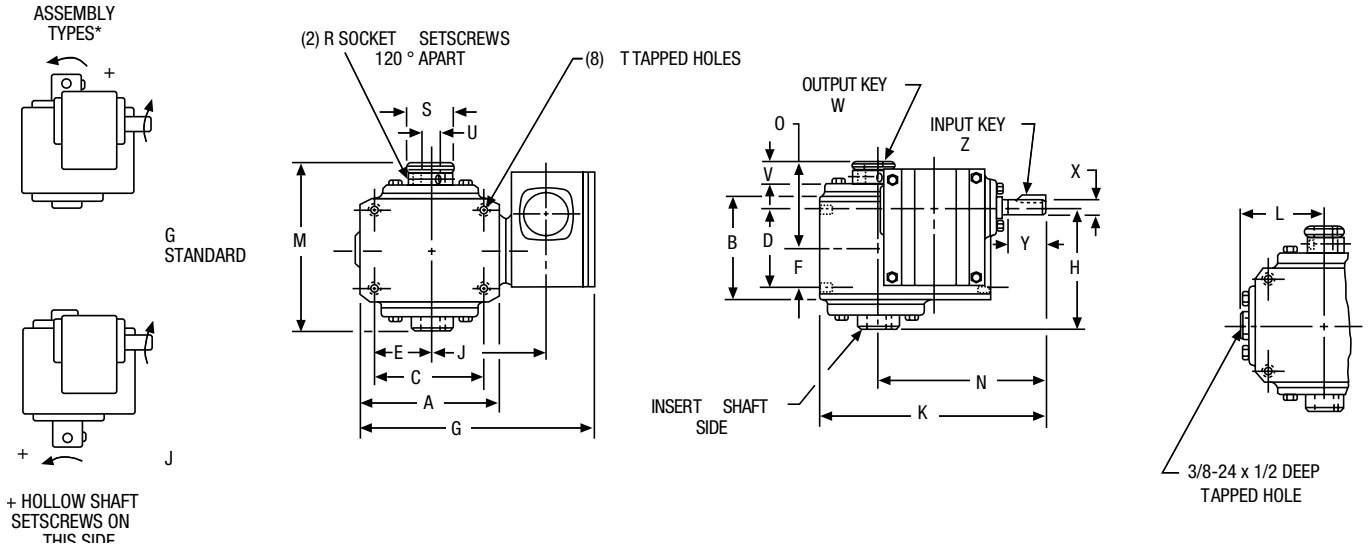
700 Series Double Reduction Non-Flanged Reducer Dimensions

SWC700 Series

Basic Models (No Base); Right Angle Shafts; Hollow Output

FOR ORDERING INFORMATION, see Page 56.
FOR ADDITIONAL SIZES, See the H Series Page 88-89.
FOR RATING INFORMATION, See Pages 71, 77-81.

B



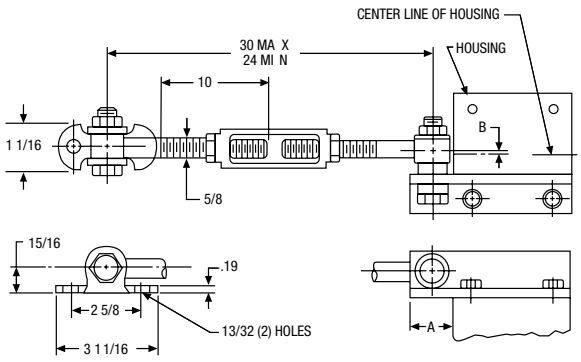
ALL DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	J	K	M	N	O	R
718	5.50	3.69	4.19	2.75	2.09	1.38	8.72	3.59	4.44	6.69	5.69	4.63	3.09	#10-32
721	6.00	3.81	5.00	2.88	2.50	1.44	9.69	4.00	4.94	8.25	5.88	5.97	3.22	1/4-28
726	7.38	4.44	6.38	3.38	3.19	1.69	11.09	4.31	5.66	9.47	6.47	6.53	3.50	1/4-28
732	9.00	5.88	7.50	4.00	3.75	2.00	13.69	5.44	6.48	11.63	8.06	8.13	4.38	5/16-24

Size	S	T		Low Speed Shaft				High Speed Shaft				Approx. Weight (Lbs.)
				U		W-KEY		X		Z-KEY		
		Tap Size	Depth	+.0015 -.000	V	Sq	Length	+.000 -.001	Y	Sq	Length	
718	1.38	5/16-18	.50	1.000	.78	See Page		.3745	.81	3/32	3/8	27
721	1.50	3/8-16	.56	1.125	.88	128 For		.4995	1.31	1/8	5/8	35
726	2.16	3/8-16	.56	1.4375	.84	Key Information		.4995	1.31	1/8	5/8	52
732	2.56	7/16-14	.66	1.9375	1.00			.6245	1.56	3/16	13/16	91

* See Assemblies and Mounting Positions, Page 75. Assemblies define output (slow speed) shaft projection with respect to input (high speed) shaft and mounted surfaces, viewed from end of input shaft. Input may be rotated clockwise or counterclockwise. Arrows indicate relative rotation.

Reaction Rod Kits



ALL DIMENSIONS IN INCHES

SIZE	A	B	Catalog Number	Kit No.
718	1.09	.09	X718-76K	69692
721	1.25	.03	X721-76K	69693
726	1.25	.22	X726-76K	69694
732	1.50	.53	X732-76K	69695

All hardware shown is included in the kits.

700 Series Double Reduction Non-Flanged Reducer Dimensions

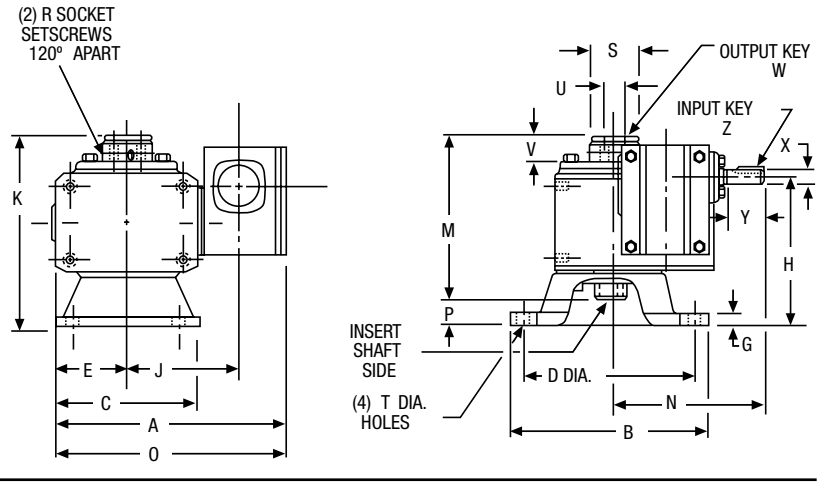
SWC700 Series

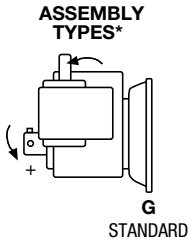
V/W Position Mounting Flange; Right Angle Shafts; Hollow Output

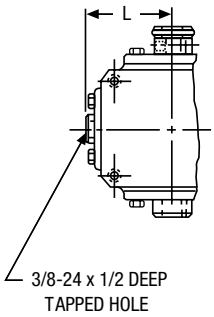
FOR ORDERING INFORMATION, see Page 56.
FOR ADDITIONAL SIZES, See the H Series Page 88-89.
FOR RATING INFORMATION, See Pages 71, 77-81.

B

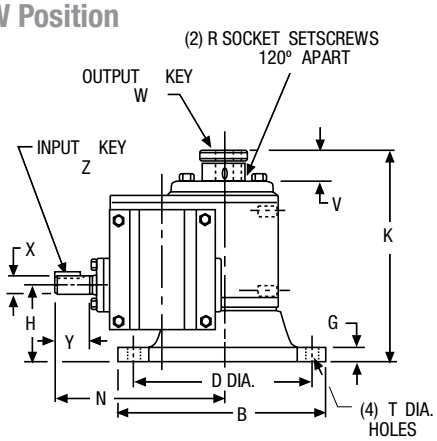
V Position

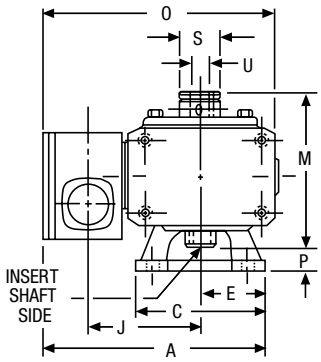


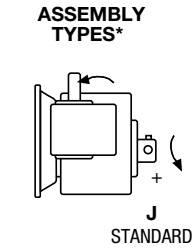




W Position







+ HOLLO W SHAFT SETSCREWS ON THIS SIDE.

ALL DIMENSIONS IN INCHES

SIZE	A	B	C	D	E	G	H V Model	H W Model	K	L	M	N	O	P
718	8.41	6.75	4.88	5.88	2.44	.38	4.50	3.50	4.44	6.59	5.69	4.63	8.72	.91
721	9.56	7.38	5.75	6.50	2.88	.38	5.09	3.75	4.94	6.97	5.88	5.97	9.69	1.09
726	11.28	8.88	7.75	8.00	3.88	.38	5.41	4.08	5.66	7.56	6.47	6.53	11.28	1.09
732	13.25	11.00	9.00	10.00	4.50	.50	7.00	5.25	6.48	9.63	8.06	8.13	13.69	1.56

Size	R	S	T Dia.	Low Speed Shaft U +.0015 -.000	V	W-KEY Sq	W-KEY Length	High Speed Shaft X +.000 -.001	Y	Z-KEY Sq	Z-KEY Length	Approx. Weight (Lbs.)
718	#10-32	1.38	11/32	1.000	.78	See Page		.3745	.81	3/32	3/8	32
721	1/4-28	1.50	13/32	1.125	.88	128 For		.4995	1.31	1/8	5/8	40
726	1/4-28	2.16	13/32	1.4375	.84	Key Information		.4995	1.31	1/8	5/8	63
732	5/16-24	2.56	9/16	1.9375	1.00			.6245	1.56	3/16	13/16	120

* See Assemblies and Mounting Positions, Page 75. Assemblies define output (slow speed) shaft projection with respect to input (high speed) shaft and mounted surfaces, viewed from end of input shaft. Input may be rotated clockwise or counterclockwise. Arrows indicate relative rotation.

Notes

B