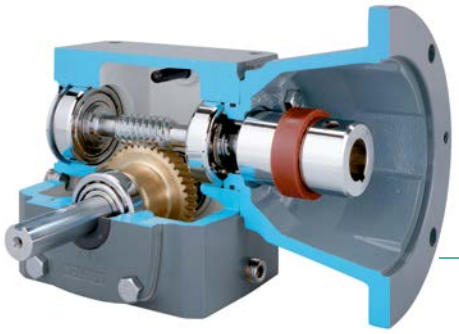
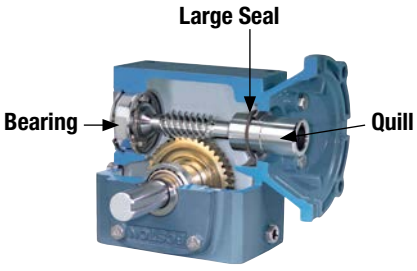
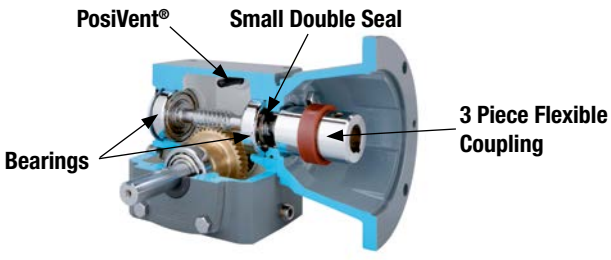


Material Handling Solutions

Boston Gear QC 700 Series

Long-Life Reliability and Leak-Free Operation

Features	Existing common Worm Gearboxes supplied by many integrators	Advantages of upgrading to the Boston Gear QC 700 Series
Bearings	3-bearing design; uses the motor bearings to support gearbox input shaft. If seal is damaged during the motor mounting process, premature leakage can occur.	4-bearing design; superior shaft support on both input and output shaft. The 4-bearing design keeps the high speed shaft steady during installation and during operation. The design can withstand heavier shock loads that may occur. No movement of input shaft and no premature leakage due to shaft wobble damaging the seals.
Venting	Industry standard is a simple vent to atmosphere. The simple vent permits contaminants to be sucked into the gearbox during cool down.	Unit is equipped with Boston Gear's PosiVent® internal pressure equalization system. PosiVent® keeps pressure low in the gearbox and the unit is completely sealed keeping any contamination out of the gearbox. **How?** The PosiVent® bladder and seal system minimizes internal pressure build-up by expanding or collapsing based on pressure. **Why?** A sealed system keeps dirt and moisture out and thus increases life of the entire gearbox.
Flange	Common flange designs use pry slots for motor removal or access holes for couplings	The QC flange completely encloses the high speed seal. This prevents atmospheric dirt from accumulating under the seal lip and accelerating seal/shaft wear. Longer seal life is insured due to a cleaner operating environment.
Seals	Single input seal	Unit is provided with two input seals **Why?** Double sealing offers extra protection from wear on the high speed shaft extending the time for maintenance due to leakage. The smaller shaft diameter of the QC design creates less seal wear and therefore longer life due to a lower surface speed.
Input Style	Quill style hollow input is very common and is widely used in the distribution warehouse industry by integrators.	Coupling style input as used by Boston Gear in the QC700 series provides easy motor removal and replacement while minimizing space constraints. Most gearmotor failures (85%) are due to a motor failure and therefore a coupling style of gearbox facilitates quick and easy replacement.
Upgrading	Example of a three bearing worm gearbox. 	Upgrading to the backward-compatible Boston Gear QC series with the above built-in features will provide longer, trouble free operation and virtually no maintenance. The QC flange is typically 1-2 inches longer than a quill style gearbox and causes the motor to stick out farther. 

Boston Gear®
Altra Industrial Motion

WHICH GEARBOX IS RIGHT FOR YOUR APPLICATION?

Quill Style

Quill Style with PosiVent® & double input seals

QC Coupling Style with PosiVent® & Double input seals

	Quill Style	Quill Style with PosiVent® & double input seals	QC Coupling Style with PosiVent® & Double input seals
Leak-Free Operation			
Works great for mounting Position #1 (As shown in picture).	√	√	√
Works great for mounting Position #5 (Motor above gearbox).	√	√	√
zWorks great for mounting Position #3 (worm under).		√	√
Works great for mounting Position #6 (Motor below gearbox).			√
Contamination-Free Operation			
Works great for applications with periods of intense operation followed by long non-operating periods.		√	√
Works great for applications with atmospheric contamination (ie humidity, dust).		√	√
Works great for applications sensitive to contamination (ie food processing).		√	√
Ready to install			
Factory-sealed gearbox.		√	√
No need to determine where to install vent based on mounting position.		√	√
Easy motor removal after years of operation			
Works great for reversing load applications.			√
Easy removal of motor from gearbox. No fretting corrosion between motor shaft and gearbox quill.			√

BUILD YOUR 700 SERIES RIGHT ANGLE WORM GEARBOX - SINGLE REDUCTION PART NUMBER

QC **7** **21** **– 40** **K** **Z** **T – B5 – G** **1** **–**

7 – 700 Series

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)

Center Distance (inches)
- **10** – 1.00
- **13** – 1.33
- **15** – 1.54
- **18** – 1.75
- **21** – 2.06
- **24** – 2.38
- **26** – 2.62
- **30** – 3.00
- **32** – 3.25
- **38** – 3.75
- **52** – 5.13
- **60** – 6.00

Exact Gear Ratio Ratio to 1

5	25
7	30
7.5	40
10	50
12	60
15	80
20	100

Or Consult Factory for Availability

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

Endcap or Fan (732-760 only)
- **E** – Endcap (standard)
- **F** – Fan

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

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

IP69K

Mounting Positions

Blank -No Lubrication Supplied

For Factory Prelubrication Indicate Mounting Position
- **1** – Standard Mounting (Worm over)
- **2-6** – Refer to Mounting Positions in Catalog

Output Shaft (When facing Input and worm on top)
- **G** - Carbon Steel Output Projection – Left
- **H** - Carbon Steel Double Output Projection
- **J** - Carbon Steel Output Projection – Right
- **GS** - Stainless Output Projection – Left
- **HS** - Stainless Double Output Projection
- **JS** - Stainless Output Projection – Right

***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 for availability by center distance. Consult Factory for Metric Bores

Base/Mounting Attachment*
- **Blank**–No Base
- **A** – Horizontal base – Top Mount
- **B** – Horizontal base – Bottom Mount
- **BRB** – Riser Block – Top Mount
- **C** – Vertical High base – Right Mount
- **D** – Vertical Low base – Right Mount
- **E** – Vertical High base – Left Mount
- **F** – Vertical Low base – Left Mount
- **R** – *BostMount* Bracket – Right Mount

*Projection of Base/Flange/Bracket assumes one is always looking into the input shaft in the #1 mounting position

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)

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

www.bostongear.com

Boston Gear® Altra Industrial Motion

701 Carrier Drive
Charlotte, NC 28216 - USA
888-243-3447
Fax: 704-588-7181