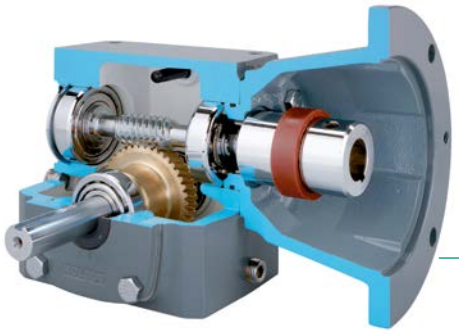
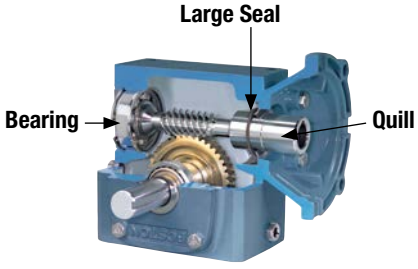
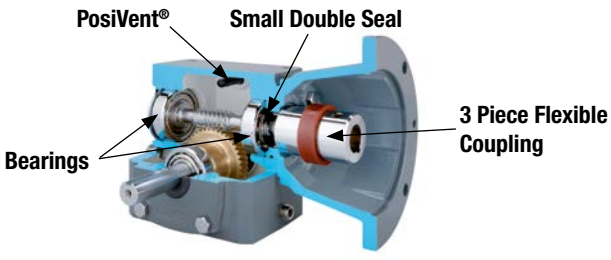


Material Handling Solutions

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

Build Your 700 Series Right Angle Worm Gearbox – Single Reduction Part Number Dodge Conversion Chart

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

Output Shaft Style
Blank–Solid Output Shaft
H – Hollow Output Shaft Dodge H or HA Output

Input Shaft Style
Blank–Dodge S Input
QC – *Quick Connect* Motor Flange (close coupled) Dodge Input Style Q or A

7 – 700 Series

Center Distance

Dodge	Boston Gear
13 –	**13**
15 –	**15****
17 –	**18**
20 –	**21**
23 –	**24**
26 –	**26**
30 –	**30**
35 –	**32**
40 –	**38****
176* –	**18**
202* –	**21**
232* –	**24**

*See Output Shaft selection for extended shafts

** Check catalog P-1485-BG for dimensional differences

Exact Gear Ratio
Ratio to 1

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

Dodge 7:1 is really a 7.5:1 ratio

Lubrication
K – Klubersynth UH1 6-460

Oil Seal
T – Two Standard Input Seals

Vent
Z – Posivent (sealed)

Endcap
(732-738 Only)
E – Endcap (standard)

NEMA Motor Mounting

DODGE MOTOR INPUT	BOSTON GEAR	NEMA	BORE	KEYWAY
56	**B5**	56C	.625	3/16 x 3/32
14	**B7**	140TC	.875	3/16 x 3/32
18	**B9**	180TC	1.125	1/4 x 1/8
21	**B11**	210TC	1.375	5/16 x 5/32

Blank Solid Input Shaft (No Flange) Dodge Input Style S

Output Shaft
(When facing input and worm on top)

G - Carbon Steel Output Projection – Dodge Left
H - Carbon Steel Double Output Projection Dodge LR
J - Carbon Steel Output Projection – Dodge Right

Dodge Sizes 176, 202, 232

GX - Carbon Steel Left Projection Extended Length
JX - Carbon Steel Right Projection Extended Length

Mounting Positions
1 – Standard Mounting

TG – Standard
DTG – 730 and 732 only

BostMount Output Bore Code
For H Series Only Specified in 1/16" increments.

Example: 1 1/4" = P20

Dodge Output Size	Boston Gear
	5/8 – **P10**
H Size 13 & 15	3/4 – **P12**
	7/8 – **P14**
	15/16 – **P15**
H Size 17	1 – **P16**
HA Size 20	1-3/16 – **P19**
H Size 20	1-1/4 – **P20**
	1-5/16 – **P21**
	1-3/8 – **P22**
H Size 23 & 26	1-7/16 – **P23**
HA Size 23	1-1/2 – **P24**
HA Size 26	1-11/16 – **P27**
H Size 30 or 35	1-15/16 – **P31**
	2 – **P32**
H Size 40	2-3/16 – **P35**
	2-7/16 – **P39**

See catalog for availability by center distance.
Consult Factory for Metric Bores

Example:
Dodge

23 **A** **10** **L** **14**

QC-724-10-KZT-B7-G1-TG

Boston Gear

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