

CONCENTRIC TWO STAGE HELICAL GEARBOXES WITH NEMA INPUT

DESIGN FEATURES

Aluminum NEMA C-Face

Machined input flange with motor shaft quill for precision motor and bearing alignment.

Aluminum Alloy Housing

Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing. Vacuum impregnated with resinol RT (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint.

Gears

Hardened and ground gears (AGMA Class 10 minimum), for maximum efficiency and quiet operation. Permanently Lubricated with Mobil SHC 320 synthetic oil for maximum efficiency and versatility.

Removable Inspection Cover

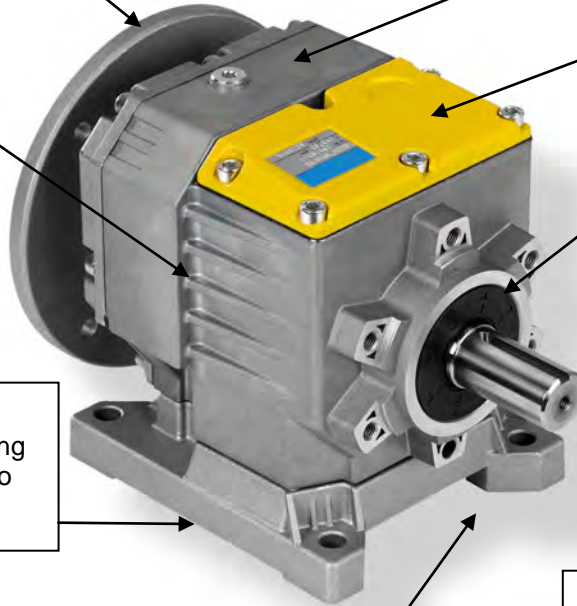
Allows periodic inspection of gearing during routine maintenance.

Viton Oil Seal

Protects against contaminants and leakage.

Feet

Removable feet with patented locking system. Footprints are compatible to the main standards of the industry.



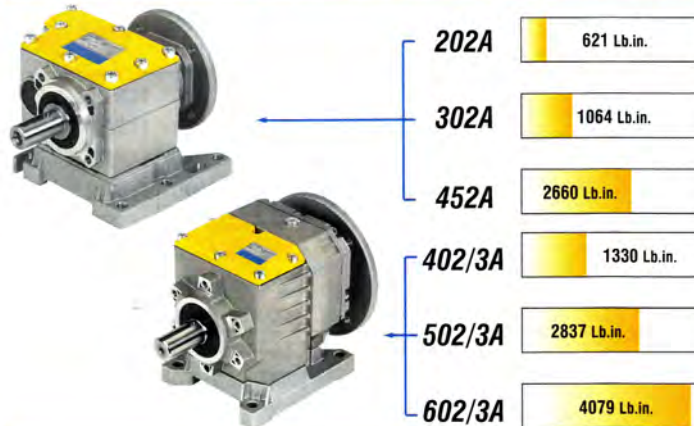
Output Shaft

High strength steel alloy provides superior torque and overhung load capabilities.

Bolt-On Output Flange

Also available for direct mounting to machinery. Available in different sizes to match industry standards.

Aluminum Double & Triple Reduction



BASE UNIT	202A	302A	402A	502A	602A
NEMA INPUT	56C	143/145TC	143/145TC	182/184TC	182/184TC
AVAILABLE RATIOS (:1)	3.44 through 61.89*	3.53 through 61.89*	3.52 through 61.88*	3.61 through 60.9*	3.61 through 60.9*
LIST	\$600	\$630	\$728	\$1,061	\$1,162

*Note: See full catalogue for list of all ratios. Higher ratios also available in Three Stage gearboxes.



Shown with optional foot kit

ACCESSORIES							
UNIT SIZE	INPUT SHAFT KIT	DIA.	LIST	FOOT MOUNTING KITS	LIST	OUTPUT FLANGES	LIST
202A	KC35.5.069U	.625	\$148	KC30.9.022 "B1" KC30.9.023LM "B2" KC30.9.024 "S1"	\$60 \$100 \$72	KU311.9.012 (56C) KC30.9.010 (120mm) KC30.9.011 (140mm) KC30.9.012 (160mm) KC30.9.013 (200mm)	\$101 \$64 \$64 \$37 \$42
302A	KC40.5.069U	.625	\$160	KC30.9.022 "B1" KC30.9.023LM "B2" KC30.9.024 "S1"	\$60 \$100 \$72	KU311.9.012 (56C) KC30.9.010 (120mm) KC30.9.011 (140mm) KC30.9.012 (160mm) KC30.9.013 (200mm)	\$101 \$64 \$64 \$37 \$42
302A	KC40.5.070U	.75	\$160	—	—	—	—
402A	KC40.5.069U	.625	\$160	KC35.9.021 "B1" KC40.9.025 "B2" KC40.9.022 "S1" KC40.9.024 "S2"	\$85 \$64 \$60 \$64	KC40.9.010 KC40.9.011 KC40.9.012 KC40.9.013 KC40.9.014	\$68 \$68 \$41 \$49 \$78
402A	KC40.5.070U	.75	\$160	—	—	—	—
502A	KC50.5.070U	0.875	\$208	KC50.9.024 "B3" KC60.9.024 "B4" KC50.9.022 "S4"	\$68 \$160 \$72	KC50.9.011 (160mm) KC50.9.012 (200mm) KC50.9.013 (250mm)	\$75 \$75 \$97
602A	KC50.5.070U	0.875	\$208	KC60.9.024 "B4" KC50.9.022 "S4"	\$160 \$72	KC50.9.011 (160mm) KC50.9.012 (200mm) KC50.9.013 (250mm)	\$75 \$75 \$97



REDUCTION BUSHINGS			
Input Bore Reduction Bushings for Converting to Smaller NEMA Motor Frame Size	KBRU56 143 7/8" to 5/8"	KBRU143 182 1 1/8" to 7/8"	KBRU56 182 1-1/8" to 5/8"
LIST	\$36	\$48	\$68

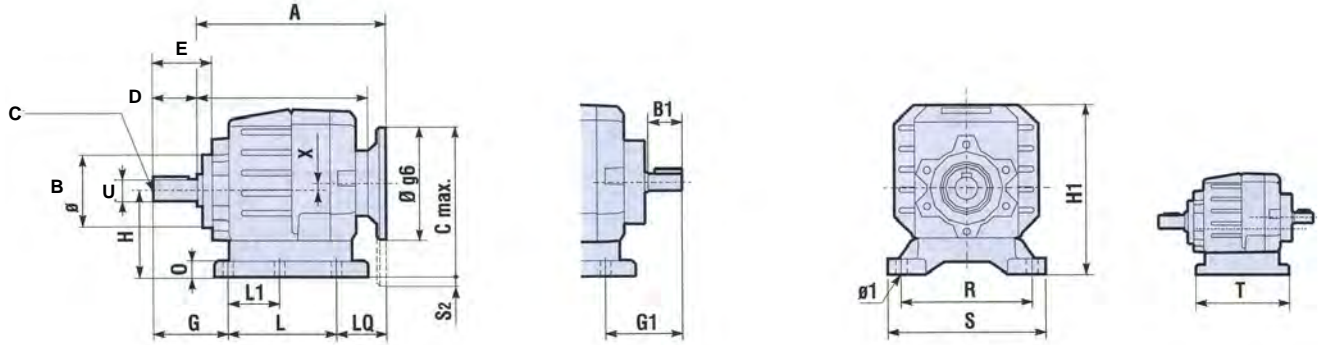
*Other/Higher ratios are available by combining HYDROMECC Concentric Gearboxes with HYDROMECC "One Step Inline reducers. For selection tables and application guides for HYDROMECC "One Step" and Two Stage Coaxial Reducers, visit www.phelanmotors.com or contact *Phelan-Electromec* for details.

CONCENTRIC TWO STAGE GEARBOXES - NEMA INPUT RATINGS - LIST PRICING

SIZE	RATIO	OUTPUT RPM	AVAILABLE INPUT	MAX HP (1800 RPM)	OUTPUT TQ. Inch/lbs.	LIST		
						QUILL INPUT	ADDERS	
		"B1" BASE	120 MM OUTPUT FLANGE					
202A	5.45	321	56C	2.35	443	\$600.00	\$60.00	\$64.00
	9.85	178		1.56	531			
	15.1	116		1.02	531			
	21.15	83		0.73	531			
	28.88	61		0.62	620			
	37.69	46		0.48	620			
	46.87	37		0.38	620			
	61.89	28		0.29	620			
SIZE	RATIO	OUTPUT RPM	AVAILABLE INPUT	MAX HP (1800 RPM)	OUTPUT TQ. Inch/lbs.	QUILL INPUT	ADDERS	
		"B1" BASE	140 MM OUTPUT FLANGE					
302A	4.28	409	56C* or 143/5TC *with shaft reduction bushing	2.84	420	\$630.00	\$60.00	\$64.00
	9.85	178		2.34	799			
	15.1	116		1.83	959			
	21.15	83		1.31	959			
	28.88	61		0.96	959			
	37.69	46		0.66	858			
	46.87	37		0.53	852			
	61.89	28		0.4	852			
SIZE	RATIO	OUTPUT RPM	AVAILABLE INPUT	MAX HP (1800 RPM)	OUTPUT TQ. Inch/lbs.	QUILL INPUT	ADDERS	
		"B2" BASE	160 MM OUTPUT FLANGE					
402A	5.56	315	56C* or 143/5TC *with shaft reduction bushing	4.46	859	\$728.00	\$64.00	\$49.00
	10.06	174		3.7	1288			
	15.37	114		2.58	1374			
	21.54	81		1.84	1374			
	26.30	65		1.19	1099			
	36.54	48		0.87	1099			
	47.69	37		0.67	1099			
	62.97	28		0.5	1099			
SIZE	RATIO	OUTPUT RPM	AVAILABLE INPUT	MAX HP (1800 RPM)	OUTPUT TQ. Inch/lbs.	QUILL INPUT	ADDERS	
		"B3" BASE	200 MM OUTPUT FLANGE					
502A	5.01	349	56-143/5TC* 182/4TC *with shaft reduction bushing	9.9	1717	\$1,061.00	\$68.00	\$75.00
	9.45	185		9.29	3039			
	14.21	123		4.5	2214			
	20.1	87		4.02	2799			
	24.98	70		2.56	2214			
	35.58	49		2.27	2799			
	44.23	40		1.45	2214			
	60.9	20.9		1.05	2214			
SIZE	RATIO	OUTPUT RPM	AVAILABLE INPUT SIZE	MAX HP (1800 RPM)	OUTPUT TQ. Inch/lbs.	QUILL INPUT	ADDERS	
		"S4" BASE	250 MM OUTPUT FLANGE					
602A	4.23	414	56-143/5TC* 182/4TC *with shaft reduction bushing	11.74	1717	\$1,162.00	\$72.00	\$97.00
	9.45	185		10.5	3434			
	14.21	123		6.89	3388			
	20.1	87		6.16	4287			
	24.98	70		3.92	3388			
	35.58	49		3.48	4287			
	44.22	40		2.21	3388			
	60.9	29		1.61	3388			

NOTES: Other size/styles of bases and output flanges are also available - see previous page.

NOTE: Pricing and specifications subject to change without notice.



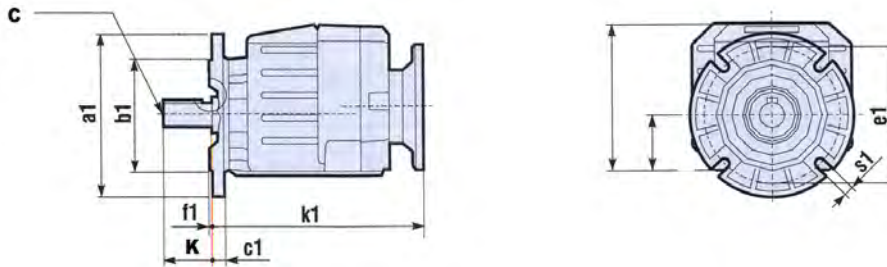
DIMENSIONS FOR DOUBLE REDUCTION C FLANGE INPUT UNIT WITH "B" FOOT*

SIZE	G	G1	H	H1	L	L1	LQ	O	R	S	T	X	A	B	C	D	E	J	U
202A	2.28	2.56	3.35	4.92	3.43	1.97	1.63	0.59	4.33	5.12	4.21	--	5.77	2.36	1/4-20 X .062	1.57	--	4.63	.625
302A	2.28	3.09	3.35	4.92	3.43	1.97	2.01	0.59	4.33	5.12	4.21	--	6.28	2.36	1/4-20 X .062	1.57	--	5.14	.750
402A	2.68	3.77	3.94	7.17	4.23	2.36	2.99	.67	5.12	6.10	5.35	0.27	7.26	2.60	5/16-18 X 0.83	1.97	2.42	6.30	1.00
502A	3.07	4.81	4.33	8.33	5.12	--	3.31^ 4.01#	0.79	6.30	7.48	6.14	0.21	9.13^ 9.84#	4.17	5/16-18 X 0.83	2.36	2.97	8.21	1.25
602A	3.43	4.64	5.12	9.17	5.89	--	2.88^ 3.59#	0.71	7.09	8.50	7.30	0.86	9.83^ 10.54#	4.17	5/16-18 X 0.83	2.64	3.25	8.88	1.375

*DIMENSIONS ARE FOR B1 FOOT FOR 202A, 302A, 402A - B3 FOOT FOR 502A - B4 FOOT FOR 602A. OTHER TYPES OF FEET ARE AVAILABLE TO MATCH MAJOR COMPETITORS.

^"A" DIMENSION WITH 56/140TC INPUT FLANGE

#" DIMENSION WITH 180TC INPUT FLANGE



OUTPUT FLANGE DIMENSIONS

SIZE	CAT. NO.	CODE	a1 (mm)	a1	b1	c1	e1	f1	s1
202A/302A	KC30.9.010	1	120	4.72	3.15	0.45	3.94	0.12	0.35
	KC30.9.011	2	140	5.51	3.74	0.45	4.53	0.12	0.35
	KC30.9.012	3	160	6.30	4.33	0.45	5.12	0.14	0.35
	KC30.9.013	4	200	7.87	5.12	0.43	6.50	0.14	0.43
402A	KC40.9.010	1	120	4.72	3.15	0.45	3.94	0.12	0.35
	KC40.9.011	2	140	5.51	3.74	0.39	4.53	0.12	0.35
	KC40.9.012	3	160	6.30	4.33	0.39	5.12	0.14	0.35
	KC40.9.013	4	200	7.87	5.12	0.43	6.50	0.14	0.43
	KC40.9.014	5	250	9.84	7.09	0.61	8.46	0.16	0.55
502A/602A	KC50.9.011	3	160	6.30	4.33	0.39	5.12	0.14	0.35
	KC50.9.012	4	200	7.87	5.12	0.43	6.50	0.14	0.43
	KC50.9.013	5	250	9.84	7.09	0.61	8.46	0.16	0.55

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