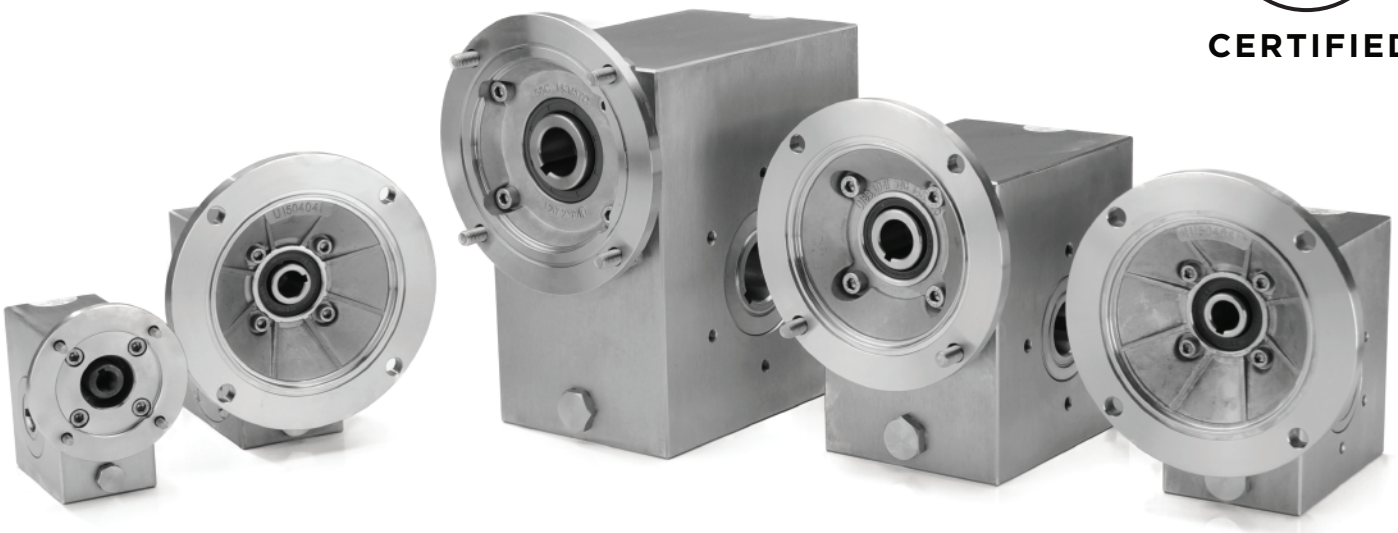
KELTECH

STAINLESS STEEL MOTORS & GEARS

SINCE 1990

IP69K CERTIFIED

NSF CERTIFIED

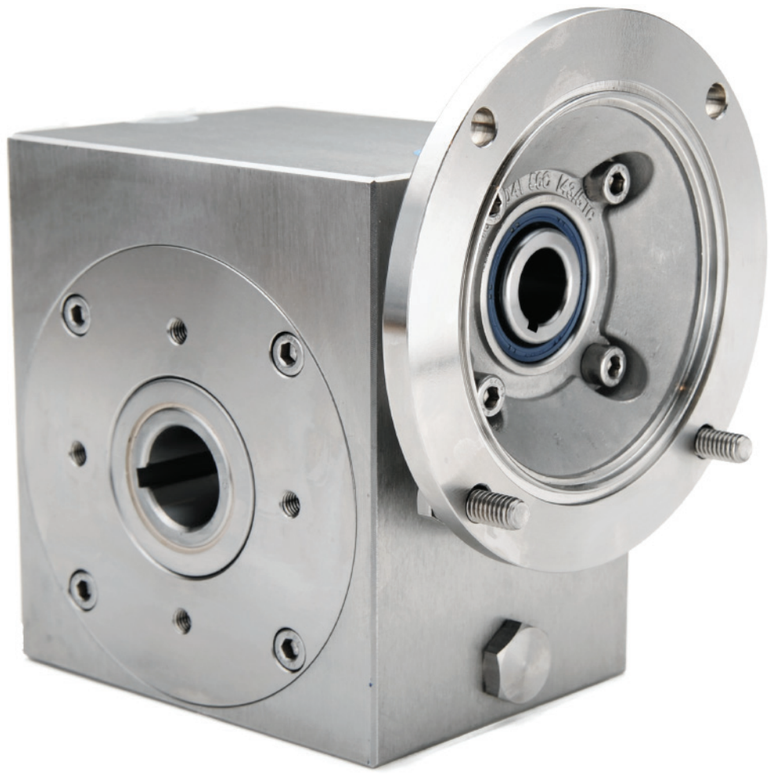


POWERING THE FOOD INDUSTRY

MOTORS | REDUCERS | INLINE RATIO MULTIPLIERS

KELTECH
STAINLESS STEEL MOTORS & GEARS

CONTENTS



SECTION 1

STAINLESS STEEL REDUCERS

K30R - K110R

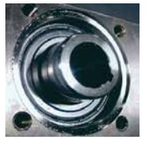
STANDARD FEATURES

Special enclosure to keep adequate lubrication with low Oil qty. to avoid internal pressures

Full stainless steel housing

Twin VITON seals with stainless steel shield

NEW REDESIGNED INPUT FLANGE O-Rings on all closing covers



ZZ Bearings on both sides of the input worm

316L Stainless steel hollow shaft

100% FACTORY PRESSURE TESTED

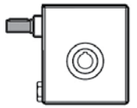
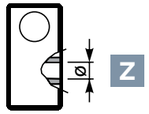
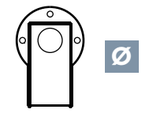
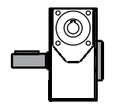
OPTIONAL FEATURES

New cover with O-ring to stand high pressure cleaning for hollow shaft version

Optional interchangeable right or left hand output shafts available

Optional torque arm for simple four bolt mounting

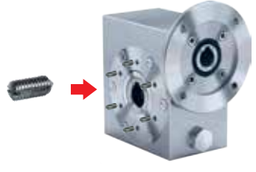
HOW TO ORDER

K TYPE	 K	 B  R SK Special Modification
45R SIZE	30R 45R 50R 63R 85R 110R	
10 RATIO		
Z HUB	 Z STANDARD: K30R > 0.625" K45R > 0.75" K50R > 1.00" K63R > 1.25" K85R > 1.50" K110R > 2.00"	I ON REQUEST: METRIC HOLLOW SHAFT: K30R > 14mm K45R > 18mm K50R > 25mm K63R > 25mm K85R > 35mm K110R > 42mm; ON REQUEST: SPECIAL HOLLOW SHAFT: S K63R > 1.00" T K63R > 1.125"
Ø OUTPUT SHAFT	 Ø  S	
W MOTOR SIZE	 M Without Flange	WITH NEMA MOTOR FLANGE: W 56C, X 143/5TC, Y 182/4TC, AA 213/5TC; FOR MODULAR BASE TYPE B: K45R > ø 5/8" K50R > ø 5/8" K63R > ø 7/8" K85R > ø 1"-1/8" K110R > ø 1"-1/8"; ON REQUEST IEC FLANGES B14: O = 56 (ø 80mm) P = 63 (ø 90mm) Q = 71 (ø 105mm) R = 80 (ø 120mm) T = 90 (ø 140mm) U = 100 (ø 160mm)
B3 MOUNTING POSITION	SEE PAGE 18.	

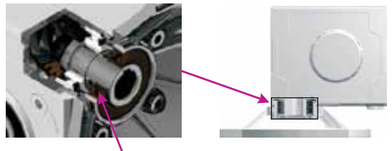
ORDERING OPTIONS

CLOSED CUP

Protective seals cups to stand high pressure cleaning

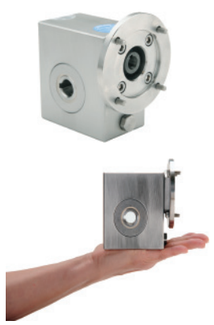


Slotted Screws now available to seal unused mounting holes



Two oil seals on motor flange vertical V6 position

K30R | IN.LBS 166, OUTPUT SHAFT DIAMETER 0.625”



SELECTION - INPUT RPM **1750**

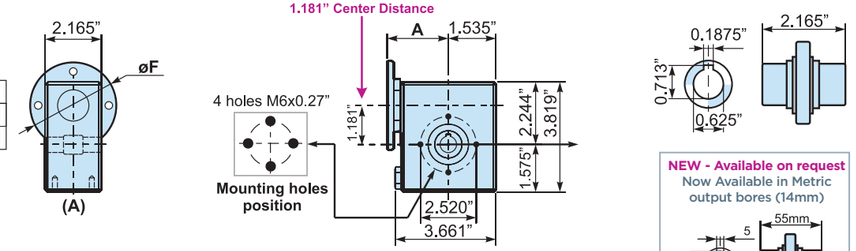
*** AVAILABLE MOTOR FLANGES**

TYPE	OUTPUT SPEED (RPM)	RATIO	INPUT HP	OUTPUT TORQUE [in.Lbs]	SERVICE FACTOR	*AVAILABLE B14 MOTOR FLANGES		RATIO CODE	TYPE
						O	P		
						56	63		
K30R	350	**5**	0.24	35	4.0	*	*	01	K30R
	250	**7**	0.24	48	2.9	*	*	02	
	175	**10**	0.24	67	2.1	*	*	03	
	117	**15**	0.24	95	1.7	*	*	04	
	88	**20**	0.24	121	1.3	*	*	05	
	58	**30**	0.24	161	1.1	*	*	06	
	43.8	**40**	0.12	99	1.7	*	*	07	
	28.7	**61**	0.12	132	1.3	*	*	08	
	21.9	**80**	0.12	166	0.8	*	*	09	

Supplied with Reduction Bushing

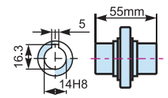
STANDARD HOLLOW SHAFT DIMENSIONS (IN)

M. flanges	øF	A
56B14	3.15”	2.421
63B14	3.54”	2.461

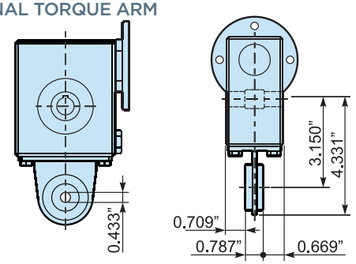


Standard Hollow Shaft

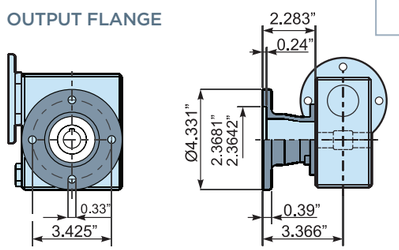
NEW - Available on request
Now Available in Metric output bores (14mm)



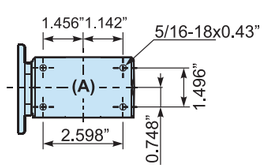
OPTIONAL TORQUE ARM

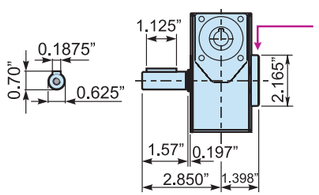


OUTPUT FLANGE



BOTTOM: SIDE (A) MOUNTING HOLES

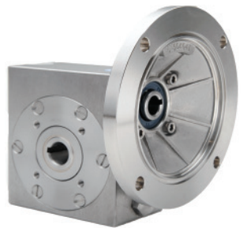




OPTIONAL OUTPUT SHAFT
Left or Right Angled
Protection Cup (by request)

WORMBOX WEIGHT	LB.
K30R	7

K45R | IN.LBS 328, OUTPUT SHAFT DIAMETER 0.75”

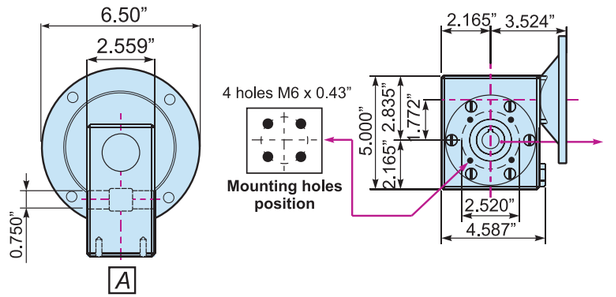


SELECTION - INPUT RPM **1800**

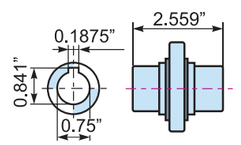
*** AVAILABLE MOTOR FLANGES**

TYPE	OUTPUT SPEED (RPM)	RATIO	INPUT HP	OUTPUT TORQUE [in.Lbs]	SERVICE FACTOR	W	X	Y	RATIO CODE	TYPE
						56C	143/5TC	182/4TC		
K45R	250	**7**	1.00	202	1.3	*			01	K45R
	175	**10**	0.75	213	1.2	*			02	
	124	**14**	0.75	291	0.9	*			03	
	83.3	**21**	0.50	253	1.4	*			04	
	62.5	**28**	0.50	328	1.1	*			05	
	47.3	**37**	0.33	277	1.2	*			06	
	38	**46**	0.33	323	1.1	*			07	
	29.1	**60**	0.25	303	1.2	*			08	
	25	**70**	0.12	163	1.6	*			09	
	17.2	**102**	0.12	215	1.2	*			10	

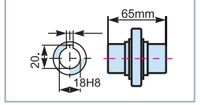
STANDARD HOLLOW SHAFT DIMENSIONS

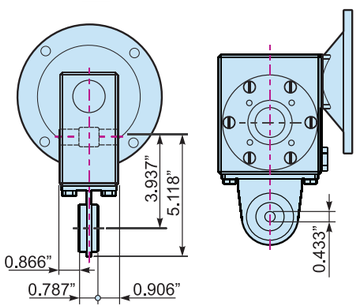


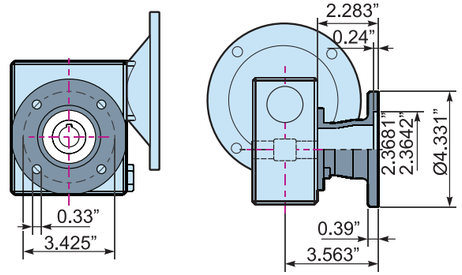
Standard Hollow Shaft



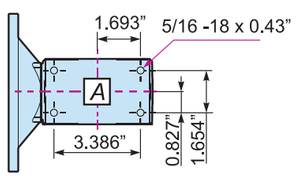
NEW - Available on request
Now Available in Metric output bores (18mm)



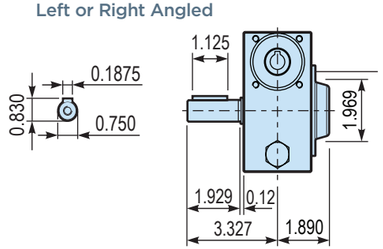




BOTTOM: SIDE (A) MOUNTING HOLES



OPTIONAL OUTPUT SHAFT
Left or Right Angled



Protection Cup (by request)
kit code KI450211

WORMBOX WEIGHT	LB.
K45R	16

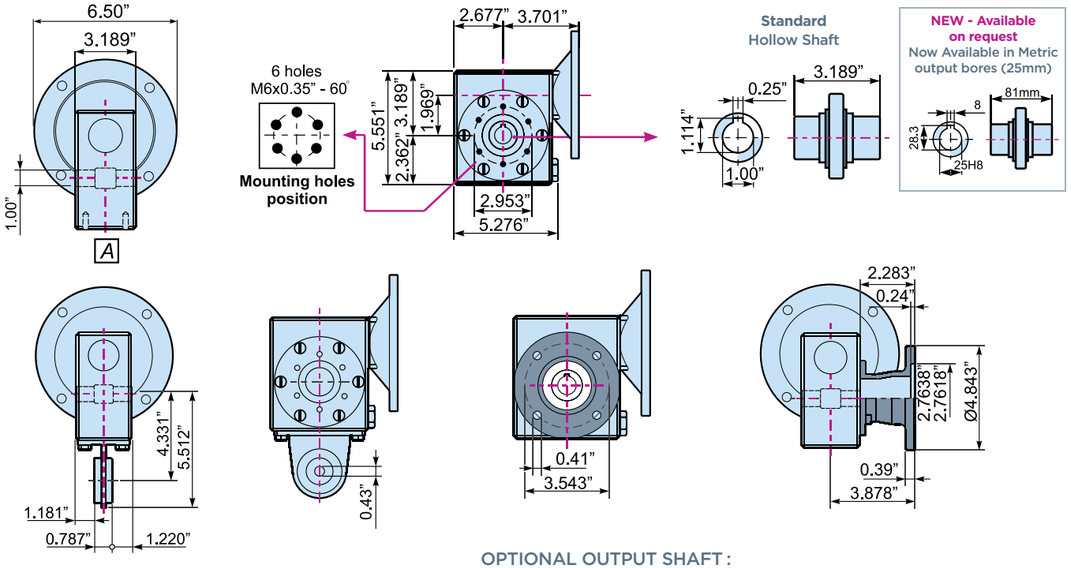
K50R | IN.LBS 567, OUTPUT SHAFT DIAMETER 1.00”

SELECTION - INPUT RPM **1800**

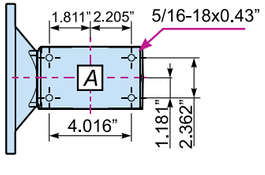
* AVAILABLE MOTOR FLANGES

TYPE	OUTPUT SPEED (RPM)	RATIO	INPUT HP	OUTPUT TORQUE [in.Lbs]	SERVICE FACTOR	W 56C	X 143/5TC	Y 182/4TC	RATIO CODE	TYPE
K50R	250	**7**	2.00	413	1.2	*			01	K50R
	175	**10**	1.50	432	1.2	*			02	
	125	**14**	1.00	398	1.4	*			03	
	97.2	**18**	1.00	486	1.1	*			04	
	67.3	**26**	0.75	485	1.2	*			05	
	58.3	**30**	0.75	567	1.1	*			12	
	48.6	**36**	0.50	447	1.4	*			06	
	40.7	**43**	0.50	511	1.1	*			07	
	35.0	**50**	0.50	558	1.0	*			13	
	29.2	**60**	0.33	414	1.3	*			08	
	25.7	**68**	0.33	461	1.1	*			09	
	21.9	**80**	0.25	389	1.2	*			10	
	17.5	**100**	0.25	450	1.0	*			11	

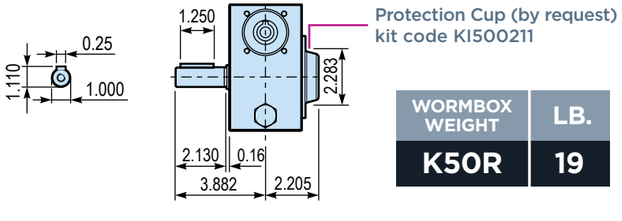
STANDARD HOLLOW SHAFT DIMENSIONS (IN)



BOTTOM: SIDE (A) MOUNTING HOLES



OPTIONAL OUTPUT SHAFT : Left or Right Angled



Protection Cup (by request) kit code KI500211

WORMBOX WEIGHT	LB.
K50R	19

K63R | IN.LBS 1199, OUTPUT SHAFT DIAMETER 1.25”

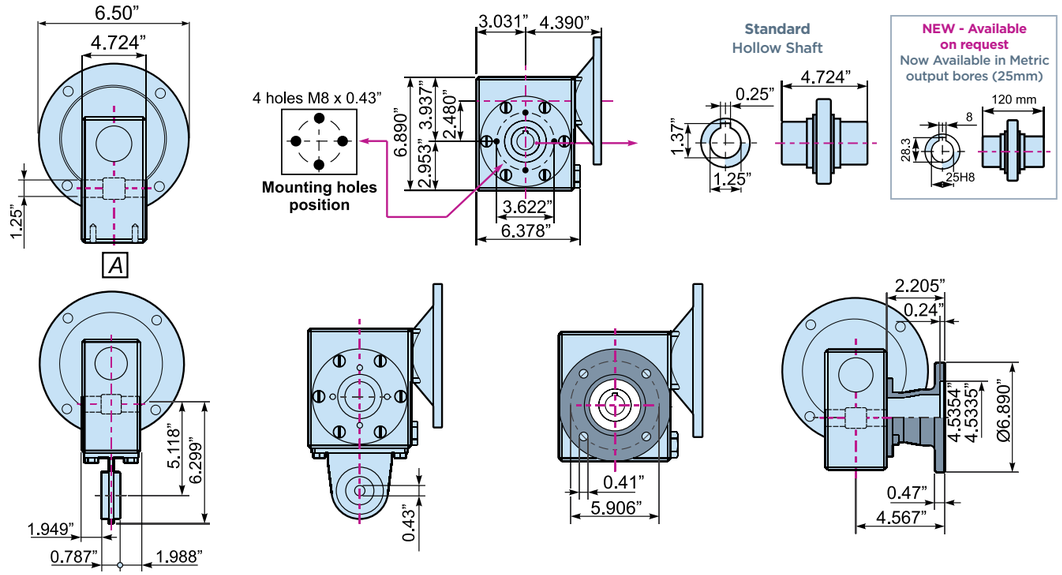
SELECTION - INPUT RPM **1800**

*** AVAILABLE MOTOR FLANGES**

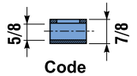
TYPE	OUTPUT SPEED (RPM)	RATIO	INPUT HP	OUTPUT TORQUE [in.Lbs]	SERVICE FACTOR	W 56C	X 143/5TC	Y 182/4TC	RATIO CODE	TYPE
K63R	250	**7**	2.00	419	2.5	*	*		01	K63R
	175	**10**	2.00	583	1.9	*	*		02	
	116.7	**15**	2.00	854	1.4	*	*		03	
	92.1	**19**	2.00	1068	1.1	*	*		04	
	72.9	**24**	1.50	972	1.2	*	*		05	
	58.3	**30**	1.50	1199	1.0	*	*		06	
	48.6	**36**	1.00	882	1.4	*	*		07	
	43.7	**40**	1.00	951	1.2	*	*		13	
	38.9	**45**	1.00	1070	1.1	*	*		08	
	29.2	**60**	0.75	1005	1.1	*	*		12	
	26.1	**67**	0.50	724	1.4	*	*		09	
	21.9	**80**	0.50	821	1.2	*	*		10	
	18.6	**94**	0.50	880	1.0	*	*		11	

***** REQUIRES REDUCTION RING

STANDARD HOLLOW SHAFT DIMENSIONS (IN)

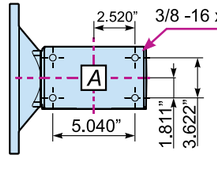


* REDUCTION RING FOR SMALLER MOTORS

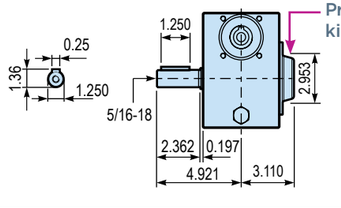


Code KBRU56143
Type
56C ➡ 143/5TC

BOTTOM: SIDE (A) MOUNTING HOLES



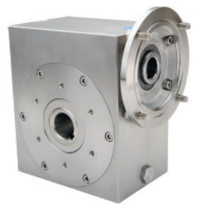
OPTIONAL OUTPUT SHAFT: Left or Right Angled



Protection Cup (by request) kit code KI630211

WORMBOX WEIGHT	LB.
K63R	35

K85R | IN.LBS 2915, OUTPUT SHAFT DIAMETER 1.50”



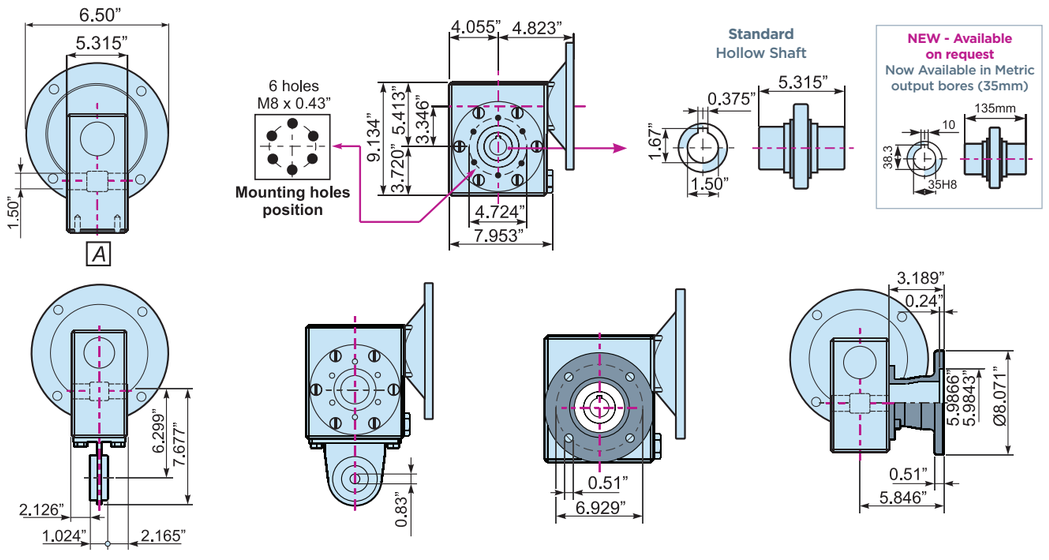
SELECTION - INPUT RPM **1800**

*** AVAILABLE MOTOR FLANGES**

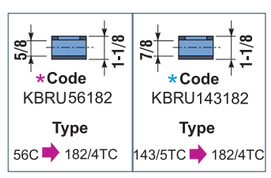
TYPE	OUTPUT SPEED (RPM)	RATIO	INPUT HP	OUTPUT TORQUE [in.Lbs]	SERVICE FACTOR	W 56C	X 143/5TC	Y 182/4TC	RATIO CODE	TYPE
K85R	250	**7**	5.00	1108	1.9	*	*	*	01	K85R
	175	**10**	5.00	1441	1.7	*	*	*	02	
	125	**14**	5.00	1967	1.3	*	*	*	03	
	87.5	**20**	3.00	1707	1.5	*	*	*	04	
	79.5	**22**	3.00	1854	1.3	*	*	*	05	
	62.5	**28**	3.00	2269	1.3	*	*	*	06	
	46.1	**38**	3.00	2915	1.0	*	*	*	07	
	38	**46**	2.00	2253	1.2	*	*	*	08	
	33.7	**52**	2.00	2472	1.0	*	*	*	09	
	26.1	**67**	1.50	2353	1.0	*	*	*	10	
	23.6	**74**	1.50	2319	1.0	*	*	*	11	
	18.2	**96**	1.00	1833	1.1	*	*	*	12	

** REDUCTION RING AND FLANGE REQUIRED

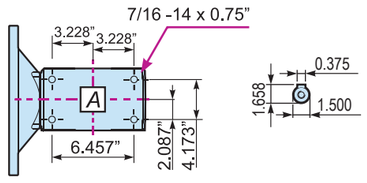
STANDARD HOLLOW SHAFT DIMENSIONS (IN)



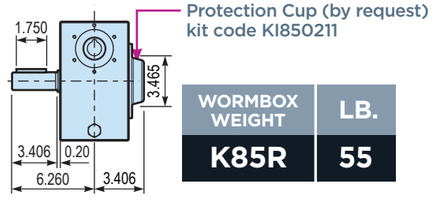
REDUCTION RING FOR SMALLER MOTORS



BOTTOM: SIDE (A) MOUNTING HOLES



OPTIONAL OUTPUT SHAFT: Left or Right Angled



WORMBOX WEIGHT	LB.
K85R	55

K110R | IN.LBS 5132, OUTPUT SHAFT DIAMETER 2.00”

SELECTION - INPUT RPM **1800**

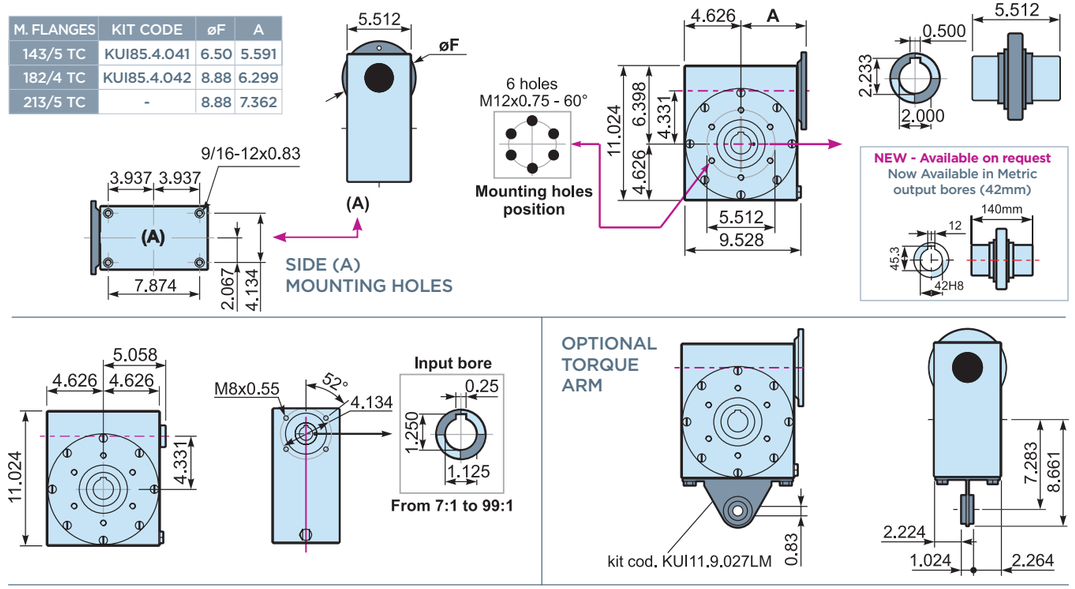
*** AVAILABLE MOTOR FLANGES**

TYPE	OUTPUT SPEED (RPM)	RATIO	INPUT HP	OUTPUT TORQUE [in.Lbs]	SERVICE FACTOR	X 143/5TC	Y 182/4TC	AA 213/215TC	RATIO CODE	TYPE
K110R	250	**7**	10.00	2219	1.8	*	*	*	01	K110R
	175	**10**	10.00	3097	1.4	*	*	*	02	
	109.4	**16**	10.00	4725	1.0	*	*	*	03	
	87.5	**20**	7.50	4430	1.0	*	*	*	04	
	76.1	**23**	5.00	3314	1.3	*	*		05	
	58.3	**30**	5.00	4106	1.3	*	*		06	
	46.1	**38**	5.00	5132	1.1	*	*		07	
	38.9	**45**	3.00	3549	1.4	*	*		08	
	33	**53**	3.00	4009	1.3	*	*		09	
	27.3	**64**	2.00	3181	1.4	*	*		10	
	20.8	**84**	2.00	3933	1.1	*	*		11	
	17.7	**99**	2.00	4279	1.0	*	*		12	

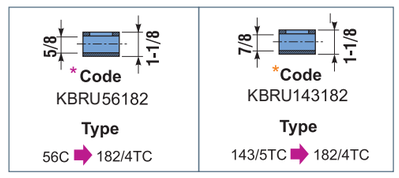
* REQUIRES REDUCTION BUSHING * AVAILABLE UPON REQUEST

STANDARD HOLLOW SHAFT DIMENSIONS

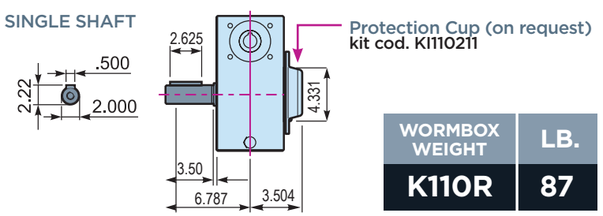
M. FLANGES	KIT CODE	øF	A
143/5 TC	KUI85.4.041	6.50	5.591
182/4 TC	KUI85.4.042	8.88	6.299
213/5 TC	-	8.88	7.362



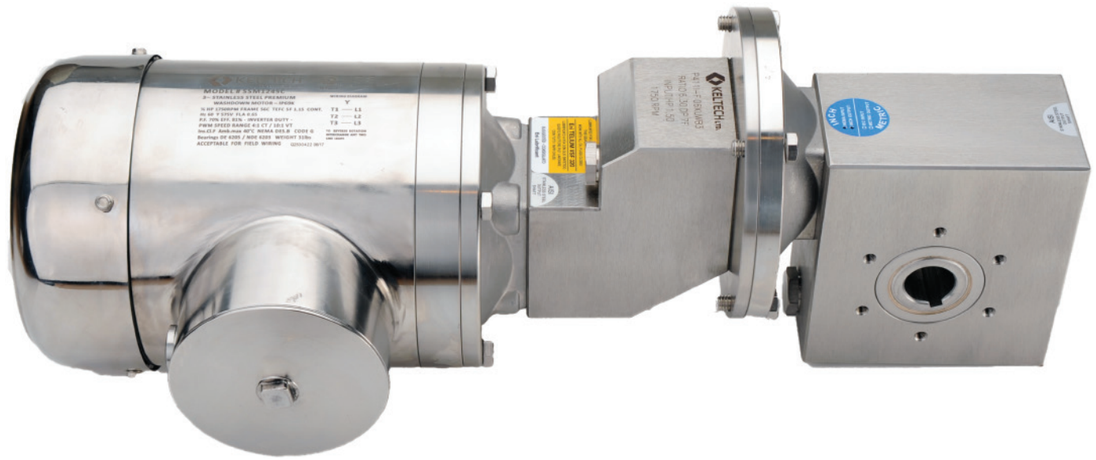
* REDUCTION RING FOR SMALLER MOTORS



SINGLE SHAFT



WORMBOX WEIGHT	LB.
K110R	87



SECTION 2

STAINLESS STEEL RATIO MULTIPLIERS & HELICAL WORM REDUCER COMBINATIONS

WASHDOWN STAINLESS STEEL REDUCERS

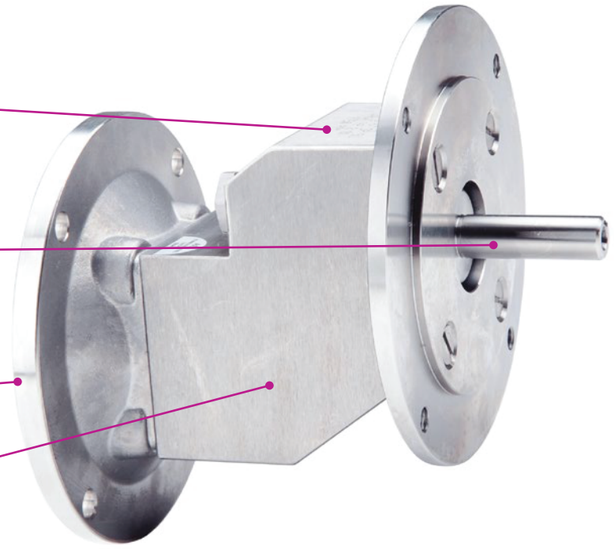
STANDARD FEATURES

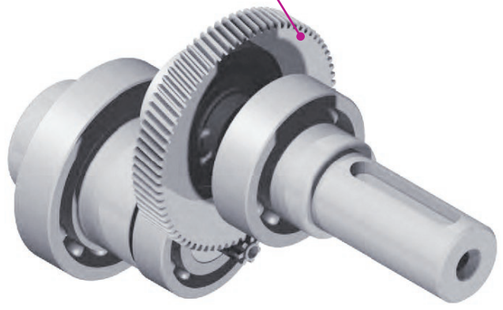
SMOOTH STAINLESS STEEL HOUSING

STAINLESS STEEL OUTPUT SHAFT
With well proportioned bearings

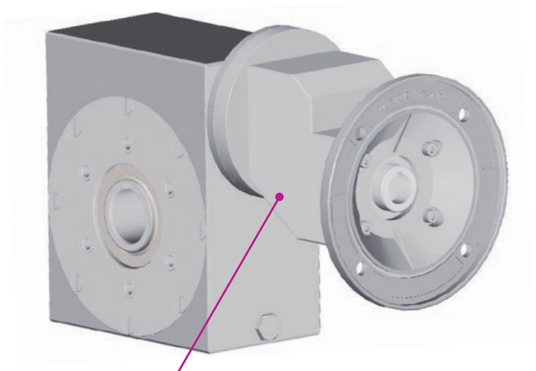
FLANGE
NEMA C Flange

GEARS
Hardened and ground gears





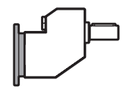
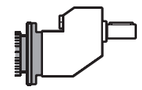
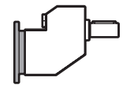
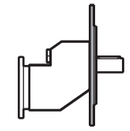
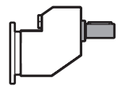
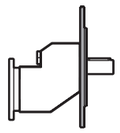
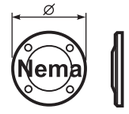
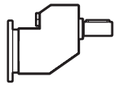
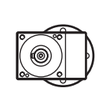
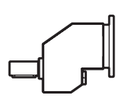
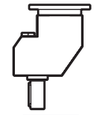
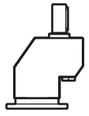
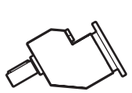
STANDARD FPM (fkm) SEALS



Use the SS ratio multiplier with a right angled SS reducer to create a helical worm reducer capable of ratios as high as 1040:1

STAINLESS STEEL RATIO MULTIPLIERS SECTION 2

HOW TO ORDER

TYPE **K**	 K	 M
SIZE **411I**	411I	
MOUNTING **-F**	 -N	 -F
RATIO **1.57**	SEE TECHNICAL DATA TABLE.	
OUTPUT SHAFT **X**	 ➡ STANDARD	411I X ➡ ø0.625
OUTPUT FLANGE **U**	 N WITHOUT FLANGE	411I U ➡ ø6.50
MOTOR SIZE **-W**		411I -W 56C -X 143/5TC
MOUNTING POSITION **B3**	 STANDARD B3	 B6  B7  B8  V5  V6  V8

ON REQUEST

A	DOUBLE INPUT / OUTPUT OIL SEALS
B	FOOD LUBE

STAINLESS STEEL RATIO MULTIPLIERS

411I | IN.LBS 334 INLINE HELICAL REDUCERS

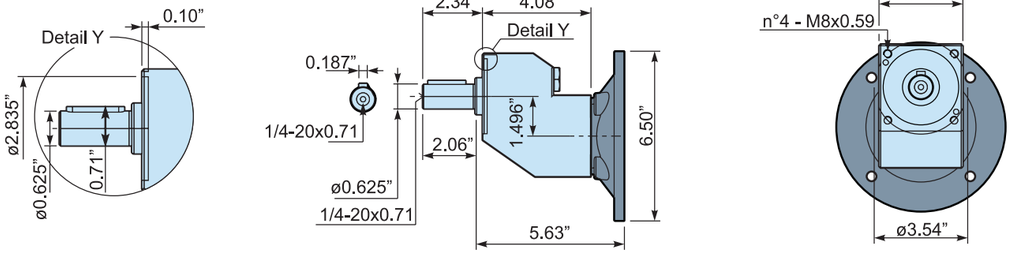
SELECTION - INPUT RPM **1750**

*** AVAILABLE MOTOR FLANGES**

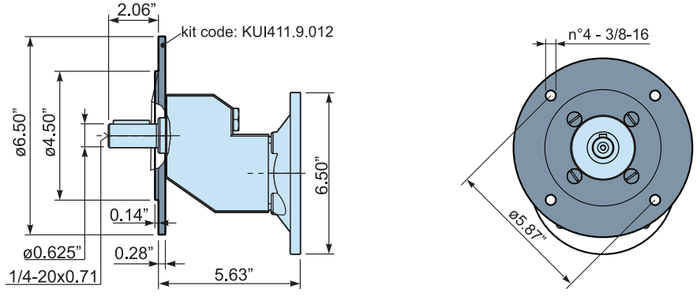
TYPE	OUTPUT SPEED (RPM)	RATIO	INPUT HP	OUTPUT TORQUE [in.Lbs]	SERVICE FACTOR	W 56C	X 143/5TC	RATIO CODE	TYPE
411I	1114	1.57	2	111	1.6	*	*	01	411I
	616	2.84	2	201	1.5	*	*	02	
	531	3.29	2	233	1.4	*	*	03	
	453	3.87	2	273	1.3	*	*	04	
	379	4.62	2	326	1.3	*	*	05	
	278	6.30	1.5	334	1.2	*	*	06	
	213	8.22	0.75	218	1.5	*	*	07	
	161	10.86	0.5	192	1.3	*	*	08	

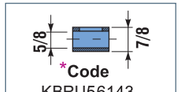
* REQUIRES REDUCTION BUSHING

STANDARD MULTIPLIER DIMENSIONS - INCH



OUTPUT FLANGE





*Code
KBRU56143
Type
56C ➡ 143/5TC

THE 411I GEARBOXES ARE SUPPLIED WITH AN OIL QUANTITY SUITABLE FOR ALL MOUNTING POSITIONS

GEARBOX	OIL QTY OUNCES
411I	4.9

WORMBOX WEIGHT	LB.
411I	12.5

K63R | 411I

INPUT RPM	OUTPUT RPM	TOTAL RATIO	411 MULTIPLIER RATIO	K63R GEARBOX RATIO	HP	OUTPUT TORQUE (IN.LBS)	SERVICE FACTOR
1750	54.17	32.31	**4.62**	**7**	1.5	1349	1.0
1750	46.40	37.71	**1.57**	**24**	1.5	1378	1.0
1750	45.26	38.67	**3.87**	**10**	1	1050	1.4
1750	41.05	42.63	**2.84**	**15**	1	1129	1.3
1750	39.68	44.10	**6.30**	**7**	1	1227	1.1
1750	37.92	46.15	**4.62**	**10**	1	1254	1.2
1750	35.42	49.41	**3.29**	**15**	1	1309	1.1
1750	32.41	54.00	**2.84**	**19**	1	1368	1.1
1750	30.41	57.56	**8.22**	**7**	0.75	1201	1.2
1750	27.96	62.59	**3.29**	**19**	0.75	1189	1.2
1750	25.28	69.23	**4.62**	**15**	0.75	1375	1.1
1750	24.75	70.71	**1.57**	**45**	0.75	1087	1.3
1750	23.82	73.47	**3.87**	**19**	0.75	1396	1.1
1750	22.14	79.06	**3.29**	**24**	0.5	963	1.6
1750	21.28	82.22	**8.22**	**10**	0.5	1117	1.3
1750	20.52	85.26	**2.84**	**30**	0.5	1002	1.5
1750	19.96	87.69	**4.62**	**19**	0.5	1111	1.4
1750	18.52	94.50	**6.30**	**15**	0.5	1252	1.2
1750	17.10	102.32	**2.84**	**36**	0.5	1081	1.4
1750	16.12	108.57	**10.86**	**10**	0.5	1474	1.0
1750	15.09	116.00	**3.87**	**30**	0.5	1363	1.2
1750	14.76	118.59	**3.29**	**36**	0.5	1252	1.2
1750	14.19	123.33	**8.22**	**15**	0.33	1078	1.4
1750	13.68	127.89	**2.84**	**45**	0.33	865	1.7
1750	12.64	138.46	**4.62**	**30**	0.33	1074	1.5
1750	11.81	148.24	**3.29**	**45**	0.33	1003	1.4
1750	10.53	166.15	**4.62**	**36**	0.33	1158	1.4
1750	9.26	189.00	**6.30**	**30**	0.33	1466	1.1
1750	8.43	207.69	**4.62**	**45**	0.25	1064	1.4
1750	7.72	226.80	**6.30**	**36**	0.25	1198	1.4
1750	7.09	246.67	**8.22**	**30**	0.25	1450	1.1
1750	6.72	260.57	**10.86**	**24**	0.25	1587	1.0
1750	6.17	283.50	**6.30**	**45**	0.25	1453	1.0
1750	5.91	296.00	**8.22**	**36**	0.25	1563	1.0
1750	5.66	309.23	**4.62**	**67**	0.25	1392	1.0
1750	5.37	325.71	**10.86**	**30**	0.08	613	2.6
1750	4.81	363.47	**3.87**	**94**	0.08	454	2.9
1750	4.03	433.85	**4.62**	**94**	0.08	541	2.4
1750	3.58	488.57	**10.86**	**45**	0.08	801	1.9
1750	3.18	550.89	**8.22**	**67**	0.08	793	1.7
1750	2.96	592.20	**6.30**	**94**	0.08	739	1.8
1750	2.41	727.43	**10.86**	**67**	0.08	1048	1.3
1750	2.26	772.89	**8.22**	**94**	0.08	965	1.4
1750	2.01	868.57	**10.86**	**80**	0.08	1188	1.1
1750	1.71	1020.57	**10.86**	**94**	0.08	1274	1.0

HELICAL WORM REDUCER COMBINATIONS

K85R | 411I

INPUT RPM	OUTPUT RPM	TOTAL RATIO	411 MULTIPLIER RATIO	K85R GEARBOX RATIO	HP	OUTPUT TORQUE (IN.LBS)	SERVICE FACTOR
1750	32.33	54.13	**3.87**	**14**	2	2832	1.2
1750	30.79	56.84	**2.84**	**20**	2	2916	1.1
1750	29.31	59.71	**1.57**	**38**	2	2634	1.3
1750	27.99	62.53	**2.84**	**22**	1.5	2376	1.3
1750	27.08	64.62	**4.62**	**14**	1.5	2535	1.3
1750	26.56	65.88	**3.29**	**20**	1.5	2535	1.2
1750	24.15	72.47	**3.29**	**22**	1.5	2753	1.1
1750	22.63	77.33	**3.87**	**20**	1.5	2976	1.1
1750	21.99	79.58	**2.84**	**28**	1.5	2844	1.3
1750	21.28	82.22	**8.22**	**10**	1	2206	1.2
1750	20.57	85.07	**3.87**	**22**	1	2155	1.5
1750	19.84	88.20	**6.30**	**14**	1	2307	1.5
1750	18.96	92.31	**4.62**	**20**	1	2368	1.4
1750	17.23	101.54	**4.62**	**22**	1	2572	1.3
1750	16.20	108.00	**2.84**	**38**	1	2382	1.5
1750	15.20	115.11	**8.22**	**14**	1	3011	1.1
1750	13.98	125.18	**3.29**	**38**	1	2761	1.3
1750	13.39	130.74	**2.84**	**46**	1	2761	1.3
1750	12.63	138.60	**6.30**	**22**	0.75	2633	1.2
1750	11.91	146.93	**3.87**	**38**	0.75	2430	1.5
1750	11.55	151.53	**3.29**	**46**	0.75	2400	1.4
1750	10.22	171.29	**3.29**	**52**	0.75	2544	1.2
1750	9.98	175.38	**4.62**	**38**	0.75	2901	1.3
1750	8.70	201.07	**3.87**	**52**	0.75	2986	1.1
1750	8.24	212.31	**4.62**	**46**	0.75	3363	1.1
1750	7.93	220.71	**3.29**	**67**	0.5	2152	1.4
1750	7.33	238.86	**10.86**	**22**	0.5	3025	1.1
1750	7.29	240.00	**4.62**	**52**	0.5	2376	1.3
1750	6.76	259.07	**3.87**	**67**	0.5	2526	1.3
1750	6.41	272.84	**2.84**	**96**	0.5	2169	1.2
1750	6.12	286.13	**3.87**	**74**	0.5	2490	1.2
1750	6.04	289.80	**6.30**	**46**	0.5	3061	1.2
1750	5.76	304.00	**10.86**	**28**	0.5	3621	1.1
1750	5.66	309.23	**4.62**	**67**	0.5	3015	1.1
1750	5.60	312.44	**8.22**	**38**	0.5	3445	1.1
1750	5.53	316.24	**3.29**	**96**	0.33	1659	1.5
1750	5.34	327.60	**6.30**	**52**	0.33	2141	1.5
1750	5.12	341.54	**4.62**	**74**	0.33	1961	1.5
1750	4.71	371.20	**3.87**	**96**	0.33	1948	1.4
1750	4.63	378.22	**8.22**	**46**	0.33	2636	1.4
1750	4.24	412.57	**10.86**	**38**	0.33	3003	1.2
1750	4.15	422.10	**6.30**	**67**	0.33	2716	1.2
1750	4.09	427.56	**8.22**	**52**	0.33	2794	1.1
1750	3.95	443.08	**4.62**	**96**	0.33	2325	1.2
1750	3.75	466.20	**6.30**	**74**	0.33	2677	1.1
1750	3.50	499.43	**10.86**	**46**	0.33	3481	1.0
1750	3.18	550.89	**8.22**	**67**	0.25	2686	1.2
1750	3.10	564.57	**10.86**	**52**	0.25	2795	1.1
1750	2.89	604.80	**6.30**	**96**	0.25	2404	1.1
1750	2.88	608.44	**8.22**	**74**	0.25	2647	1.1
1750	2.41	727.43	**10.86**	**67**	0.08	1135	2.8
1750	2.22	789.33	**8.22**	**96**	0.08	1004	2.7
1750	2.18	803.43	**10.86**	**74**	0.08	1118	2.7
1750	1.68	1042.29	**10.86**	**96**	0.08	1326	2.0

K110R | 411I

INPUT RPM	OUTPUT RPM	TOTAL RATIO	411 MULTIPLIER RATIO	K110R GEARBOX RATIO	HP	OUTPUT TORQUE (IN.LBS)	SERVICE FACTOR
1750	17.36	100.80	**6.30**	**16**	1.5	4157	1.2
1750	16.49	106.15	**4.62**	**23**	2	5515	1.0
1750	16.20	108.00	**2.84**	**38**	2	5032	1.4
1750	15.09	116.00	**3.87**	**30**	2	5601	1.3
1750	13.98	125.18	**3.29**	**38**	2	5832	1.2
1750	13.68	127.89	**2.84**	**45**	2	5800	1.1
1750	13.26	132.00	**1.57**	**84**	1.5	3861	1.3
1750	12.64	138.46	**4.62**	**30**	2	6686	1.1
1750	12.08	144.90	**6.30**	**23**	1.5	5646	1.0
1750	11.91	146.93	**3.87**	**38**	2	6846	1.0
1750	11.62	150.63	**2.84**	**53**	2	6327	1.0
1750	10.64	164.44	**8.22**	**20**	1	4379	1.2
1750	10.06	174.00	**3.87**	**45**	1.5	5918	1.1
1750	9.98	175.38	**4.62**	**38**	1.5	6129	1.2
1750	9.62	181.89	**2.84**	**64**	1.5	5648	1.0
1750	9.26	189.00	**6.30**	**30**	1.5	6845	1.1
1750	8.54	204.93	**3.87**	**53**	1.5	6456	1.1
1750	8.30	210.82	**3.29**	**64**	1	4364	1.3
1750	7.33	238.74	**2.84**	**84**	1	4656	1.1
1750	7.15	244.62	**4.62**	**53**	1	5137	1.3
1750	7.07	247.47	**3.87**	**64**	1	5123	1.2
1750	6.22	281.37	**2.84**	**99**	1	5065	1.0
1750	6.17	283.50	**6.30**	**45**	1	6428	1.0
1750	5.92	295.38	**4.62**	**64**	0.75	4586	1.3
1750	5.60	312.44	**8.22**	**38**	0.75	5459	1.3
1750	5.39	324.80	**3.87**	**84**	0.75	4751	1.2
1750	5.37	325.71	**10.86**	**30**	0.5	3932	1.3
1750	5.37	326.12	**3.29**	**99**	0.75	4403	1.2
1750	5.24	333.90	**6.30**	**53**	0.75	5259	1.3
1750	4.73	370.00	**8.22**	**45**	0.75	6292	1.1
1750	4.57	382.80	**3.87**	**99**	0.75	5168	1.0
1750	4.51	387.69	**4.62**	**84**	0.5	3780	1.4
1750	4.34	403.20	**6.30**	**64**	0.5	4173	1.4
1750	4.24	412.57	**10.86**	**38**	0.5	4806	1.3
1750	4.02	435.78	**8.22**	**53**	0.5	4576	1.5
1750	3.83	456.92	**4.62**	**99**	0.5	4113	1.3
1750	3.58	488.57	**10.86**	**45**	0.5	5539	1.2
1750	3.33	526.22	**8.22**	**64**	0.5	5447	1.1
1750	3.31	529.20	**6.30**	**84**	0.5	5160	1.1
1750	3.04	575.43	**10.86**	**53**	0.5	6042	1.1
1750	2.81	623.70	**6.30**	**99**	0.33	3705	1.4
1750	2.53	690.67	**8.22**	**84**	0.33	4445	1.2
1750	2.52	694.86	**10.86**	**64**	0.33	4747	1.2
1750	2.15	814.00	**8.22**	**99**	0.33	4836	1.1
1750	1.92	912.00	**10.86**	**84**	0.25	4446	1.2
1750	1.63	1074.86	**10.86**	**99**	0.25	4837	1.1

STANDARD LUBRICATION

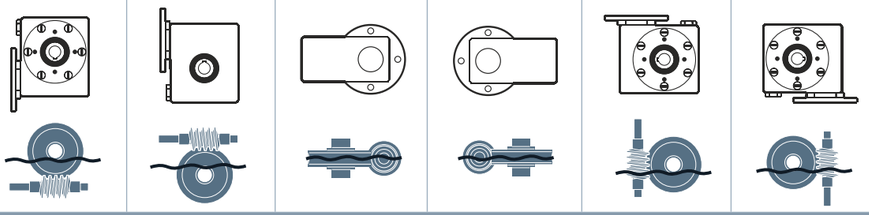
UNITS **K30R** TO **K110R** ARE SUPPLIED WITH SYNTHETIC OIL, PROVIDING "LONG LIFE" LUBRICATION FOR THE MOUNTING POSITIONS B8 - B3 - V5 - V6 (FOR B6 - B7 SPECIFY IN THE ORDER).

Agip / Eni	TEMPERATURE -85° 0° +120°		DIN 51517-3 ISO 12925-1		CFIA·ACIA APPROVED
TELIUM VSF 320*	-30°	+80°		SYNTHETIC	CFIA·ACIA APPROVED
FOODLUBE ENDURE 00-UH1	-20°	+150°			
Mobil MOBIL GLYGOYLE 460 H1	-33°	+265°		SYNTHETIC	
KLÜBER LUBRICATION KLUBERSYNTH Uh1 6-320	-35°	+120°		SYNTHETIC	

* STANDARD KEL-TECH OIL TYPE

FOR FOODS

STANDARD MOUNTING POSITIONS



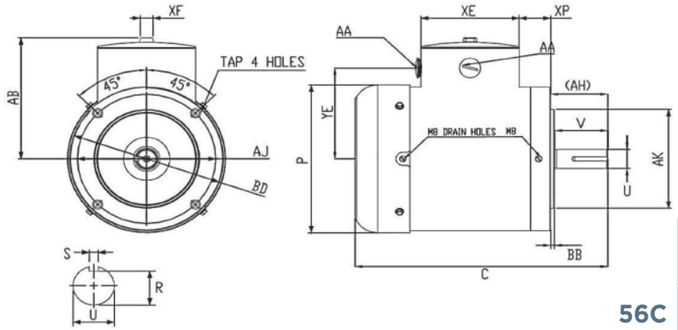
	B8	B3	B6	B7	V5	V6
OIL QUANTITY FOR EVERY POSITION (OUNCES)						
K30R	2.11	2.11	2.11	2.11	2.11	2.11
K45R	5.28	5.28	7.04	7.04	5.28	5.28
K50R	7.74	7.74	9.85	9.85	7.74	7.74
K63R	21.1	21.1	28.9	28.9	21.1	21.1
K85R	49.3	49.3	59.8	59.8	49.3	49.3
K110R	73.9*	123.2	87.9*	87.9*	56.3*	56.3*

* OIL QTY LINES ARE APPROX. AND FOR ORIENTATION REFERENCE ONLY
* SUBTRACT OIL FOR THE STANDARD QTY OR ADVISE AT TIME OF ORDER

OIL PLUG FOR OIL REMOVAL

SPECIAL PURPOSE LUBRICANTS AVAILABLE ON REQUEST

NEMA STANDARD | MOTOR DIMENSIONS TABLE



	XF	XP	YE	P	R	S
56C	9/16	1 1/3	4 1/8	6 3/4	33/64	3/16
145T	9/16	1 1/3	4 1/8	6 3/4	49/64	3/16

NEMA DIMENSIONS - TEFC

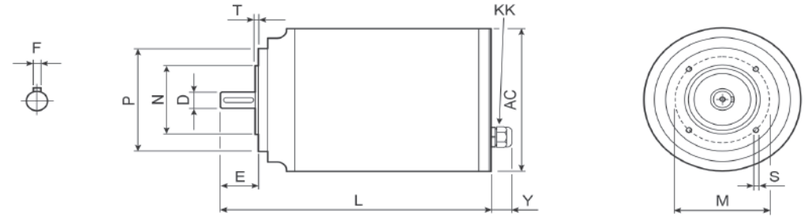
NEMA FRAME	BB	U	V	AH	AJ	AK	BD	TAP	S	AB	AA	XE
56C	1/8	5/8	1 7/8	2 1/16	5 7/8	4 1/2	6 1/2	3/8 - 16	3/16	5 1/2	1/2	4 1/6
143T 145T	1/8	7/8	2 1/4	2 1/8	5 7/8	4 1/2	6 1/2	3/8 - 16	3/16	5 1/2	1/2	4 1/6

* As dimension C is not governed by NEMA this dimension is different for each motor manufacturer.
See Manufacturers dimension print for exact C Dimension

METRIC DIMENSIONS - TENV

Outside dimensions (Lm) may be different according to manufacturers

	METRIC FRAME	kW	D	F	E	L	Y	AC	P	N	M	T	Kg
INCH	63B14	0.18	0.43	0.16	0.91	9.61	0.94	5.16	3.54	2.36	2.95	0.09	10
MM	63B14	0.18	11	4	23	244	24	131	90	60	75	2.5	10



The dimensions shown on these pages are for general reference only.

SERVICE FACTOR, RADIAL & AXIAL LOADS

• SERVICE FACTOR

STAINLESS STEEL WORMBOXES				
TYPE OF LOAD AND STARTS PER HOUR		OPERATION HOURS PER DAY		
		0-2 HOURS	2-8 HOURS	8-16 HOURS
Continuous Or Intermittent Application With Start/Hour	Uniform	0.9	1	1.25
	Moderate	1	1.25	1.5
	Heavy	1.25	1.5	1.75
Intermittent Application With Start/Hour	Uniform	1.25	1.5	1.75
	Moderate	1.5	1.75	2
	Heavy	1.75	2	2.25

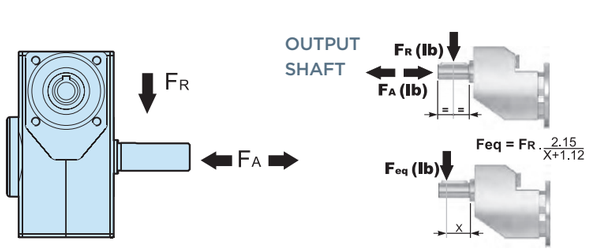
STAINLESS STEEL WORMBOXES				
TYPE OF LOAD AND STARTS PER HOUR		OPERATION HOURS PER DAY		
		0-3 HOURS	3-10 HOURS	10-24 HOURS
Continuous Or Intermittent Application With Start/Hour	Uniform	0.8	1	1.25
	Moderate	1.00	1.25	1.5
	Heavy	1.25	1.5	1.75
Intermittent Application With Start/Hour	Uniform	1.00	1.25	1.5
	Moderate	1.25	1.5	1.75
	Heavy	1.5	1.75	2.15

For high ambient Temperature, contact our technical department, as service factor may be increased for various heat limits.

2 poles (3600 rpm) only for very intermittent use.

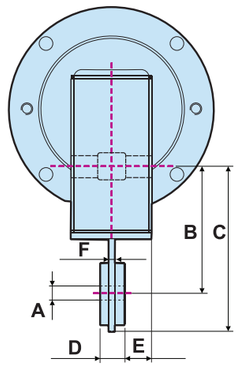
• RADIAL AND AXIAL LOADS

OUTPUT SPEED (RPM)	K30R		K45R		K50R		K63R		K85R		K110R	
	F_A [lb.]	F_R [lb.]	F_A [lb.]	F_R [lb.]	F_A [lb.]	F_R [lb.]	F_A [lb.]	F_R [lb.]	F_A [lb.]	F_R [lb.]	F_A [lb.]	F_R [lb.]
200	27	135	40	202	54	270	81	404.5	112	562	135	652
150	31	157	45	225	63	315	90	450	130	652	157	742
100	36	180	49	247	67	337	103.5	517	135	674	168	809
75	40	202	54	270	76	382	112.5	562	157	787	180	899
50	45	225	58	315	85	427	135	674.5	180	899	207	1034
25	56	281	67	405	108	562	157	854	225	1124	270	1349
15	63	315	90	450	126	629	180	899	261	1304	315	1574



OUTPUT SPEED (RPM)	411I	
	F_A [lb.]	F_R [lb.]
700	27	135
600	31	157
400	36	180
300	40	202
200	45	225
140	56	281

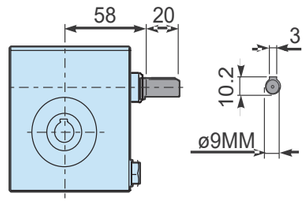
STAINLESS STEEL REACTION ARMS



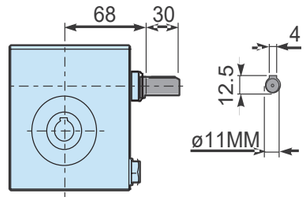
INCH	A	B	C	D	E	F
K30R	Ø 0.43	3.15	4.33	0.79	0.67	0.20
K45R	Ø 0.43	3.94	5.12	0.79	0.91	0.20
K50R	Ø 0.43	4.33	5.51	0.79	1.22	0.20
K63R	Ø 0.43	5.12	6.30	0.79	1.99	0.20
K85R	Ø 0.83	6.30	7.68	1.02	2.17	0.24
K110R	Ø 0.83	7.28	8.66	1.02	2.26	0.24

SOLID MALE INPUT SHAFT - METRIC MM DIMENSIONS KIT R

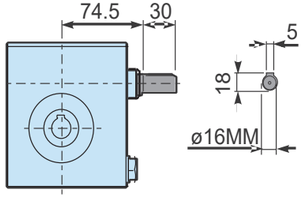
K30R



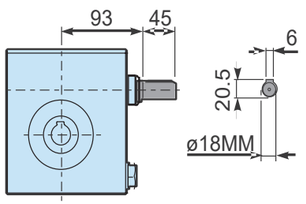
K45R



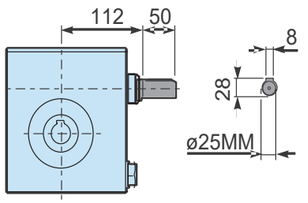
K50R



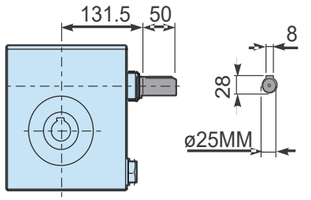
K63R



K85R



K110R



IP69K CERTIFIED

SECTION 3

IP69K STAINLESS STEEL MOTORS

IP69K CERTIFIED
WASHDOWN STAINLESS STEEL MOTORS

Three Phase 208-230/460 & 575V, NEMA Design B, Premium Efficiency (1HP and up), Squirrel Cage, TEFC, Class F Insulation, 40'C Ambient, Continuous Duty, 1.15 Service Factor.

- 300 Series Stainless Steel Construction
- CE, cCSAus Certified
- Inverter duty - Nema MG 1 Part 31
- Stainless Steel cooling fan
- Laser Etched Nameplate
- Corrosion Resistant
- IP69K Certified motor will withstand water pressure of between 1160-1450 psi, at a temperature of 176°F / 80°C
- Dust tight, No ingress of dust
- Oversized Conduit Box c/w O-Ring seal
- For food processing, pharmaceutical and other applications requiring extreme cleanliness and frequent washdowns.

HP	RPM	NEMA FRAME	MODEL NUMBER		LIST PRICE	
			208-230/460V	575V	ROUND BODY	WITH FEET
1/6	1800	56C	SSM1644C	SSM1645C		
1/4	1800	56C	SSM1444C	SSM1445C		
1/3	1800	56C	SSM1344C	SSM1345C		
1/2	1800	56C	SSM1244C	SSM1245C		
3/4	1800	56C	SSM3444C	SSM3445C		
1	1800	56C	SSM0144C	SSM0145C		
1	1800	143TC	SSM0144CT	SSM0145CT		
1.5	1800	56C	SSM3244C	SSM3245C		
1.5	1800	145TC	SSM3244CT	SSM3245CT		
2	1800	56C	SSM0244C	SSM0245C		
2	1800	145TC	SSM0244CT	SSM0245CT		

* ALL MOTORS 1HP AND ABOVE MEET NEMA PREMIUM AND EUROPEAN IE3 EFFICIENCY STANDARDS
* ½ – ¾ – 1HP THESE RATINGS ARE ALSO AVAILABLE IN TENV (NON VENTILATED) FROM STOCK.
ALL MODEL NUMBERS GIVEN ARE ROUND BODY MOTORS. FOR C-FLANGE MOTORS COMPLETE WITH BASE, ADD "F" AFTER THE MODEL NUMBER.

Special SS flinger to protect drive end seal. IP69K required

Laser etched name plates

Inverter duty wire

Internal O-rings on both drive end and non drive endbells provide a complete seal for IP69K protection

Round conduit box specifically designed for the food and beverage industry

New Stainless steel cooling fan for simple cleaning and maintanence. Made to withstand high pressure washing.

WASHDOWN STAINLESS STEEL MOTORS - IP65

PREMIUM EFFICIENCY

- Three Phase 208-230/460 & 575V
- 40°C Ambient, NEMA Design B Performace
- Premium Efficiency Ie3
- Class F Insulation. Squirrel Cage, TEFC,
- Continuous Duty
- 1.15 Service Factor
- CSA - C us CE Certified ULR Inverter duty - Nema MG 1 Part 31
- All motors meet NEMA Premium and European IE3 efficiency standards.
- Pharmaceutical & Food Processing
- Beverage Industry
- Mill and Chemical Duty
- Washdown Duty Applications
- Laser Etched Nameplate
- 300 Series Stainless Steel Construction

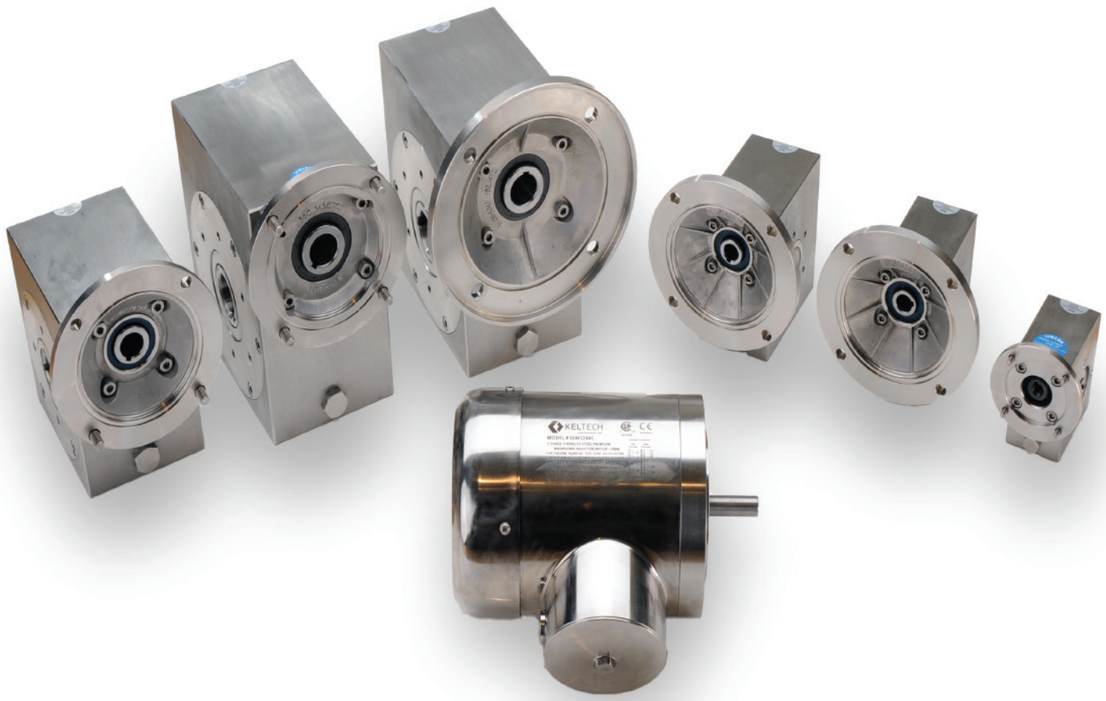
* ALL MOTORS MEET NEMA PREMIUM AND EUROPEAN IE3 EFFICIENCY STANDARDS.

HP	RPM	NEMA FRAME	MODEL NUMBER		LIST PRICE	
			208-230/460V	575V	ROUND BODY	WITH FEET
3	1800	182TC	SS0344CTP	SS0345CTP		
5	1800	184TC	SS0544CTP	SS0545CTP		

CHECK WITH SALES OFFICE FOR DELIVERY TIMES
* ALL MODEL NUMBERS GIVEN ARE ROUND BODY MOTORS.
FOR C-FLANGE MOTORS COMPLETE WITH BASE, ADD "F" AFTER THE MODEL NUMBER.

IP69K CERTIFIED
STAINLESS STEEL METRIC MOTORS - TENV

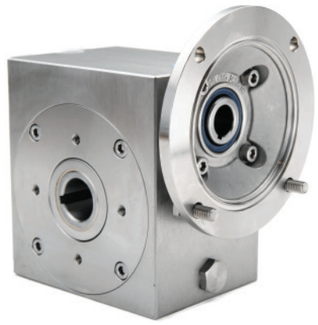
HP / KW	RPM	B14 FRAME	MODEL NUMBER	LIST PRICE
			208-230/460V	
1/4 / 0.18	1750	63B14	SSM184463CB14NV	



SECTION 4

REDUCER PRICING, INSTALLATION & MAINTENANCE

IP69K WASHDOWN STAINLESS STEEL REDUCERS | LIST PRICING



SIZE	BORE SIZE	INPUT FLANGE	LIST PRICE
K30R	0.625”	63B14	
K45R	0.75”	56C	
K50R	1.00”	56C	
K63R	1.25”	143/5TC	
K85R	1.50”	182/4TC	
K110R	2.00”	182/4TC	

STAINLESS STEEL ACCESSORIES



SIZE	OUTPUT SHAFT KIT		TORQUE ARM		OUTPUT FLANGE	
	MODEL	LIST PRICE	MODEL	LIST PRICE	MODEL	LIST PRICE
K30R	KUI305028		KUI309027LM		KI459011	
K45R	KUI455028		KUI459027LM		KI459011	
K50R	KUI505028		KUI509027LM		KI509011	
K63R	KUI635030		KUI639027LM		KI639011	
K85R	KUI855028		KUI859027LM		KI859011	
K110R	KUI115028		KUI119027LM		KI119011	

STAINLESS STEEL ACCESSORIES



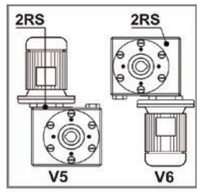
SIZE	OUTPUT SHAFT PROTECTION COVER		SHAFT CAP & SCREW	
	MODEL	LIST PRICE	MODEL	LIST PRICE
K30R	KI450211		UI300252	
K45R	KI450211		UI450252	
K50R	KI500211		UI450252	
K63R	KI630211		UI630253	
K85R	KI850211		UI630252	
K110R	KI110211		UI110252	

WASHDOWN STAINLESS STEEL REDUCER
LIST PRICING | STAINLESS STEEL INLINE MULTIPLIERS

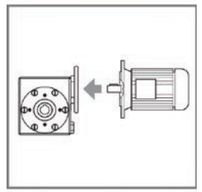
SIZE	BORE SIZE	INPUT FLANGE	LIST PRICE
411I	0.625”	56C	

INSTALLATION CHECK LIST

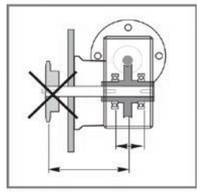
- ☐ Do not change mounting positions without contacting our factory. Altering the mounting position may require special lubrication pro-visions which must be installed from the factory. When reducers are mounted in V5 or V6 positions and used in continuous duty applications, replace the upper bearing with a self lubricated style bearing.



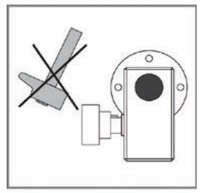
- ☐ When mounting a motor to a reducer, the fastening bolts should not be tightened until both the reducer flange and the motor face are in contact. When mounting is complete check by manually rotating the fan to be sure the assembly turns freely.



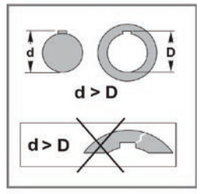
- ☐ Make sure that the mounting of pulleys or pinions does not create over hung loads exceeding the capacity of the reducer.



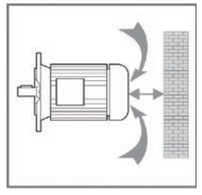
- ☐ When mounting pinions, pulleys or couplings on the reducers shaft, protect bearings from impact by using the appropriate pullers and threaded holes in the end of the reducer shaft.



- ☐ When mounting items to the reducer shaft, appropriate anti-seize and oxidizer compounds should be used. Also ensure key dimensions are correct.

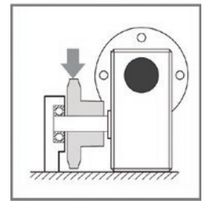


- ☐ Make sure there is sufficient space between any obstructions and the motors air intake area to provide adequate cooling for the motor.

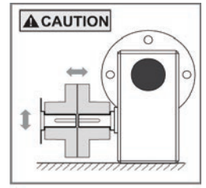


INSTALLATION CHECK LIST

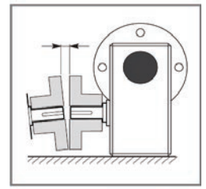
- ☐ For very heavy radial load, additional output shaft support may be required to prevent premature bearing failure or shaft breakage from bending fatigue.



- ☐ The system of connected rotating parts must be free from critical speed, torsional or other type vibration, no mater how induced. The responsibility for this system analysis lies with the purchaser of the speed reducer.



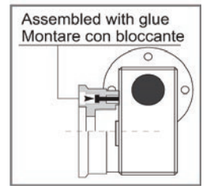
- ☐ Check shaft and coupling alignment. Check proper coupling gap before locking all foundation bolts which should be routinely checked.



- ☐ For safety, Buyer or User should provide protective guards over all shaft extensions and any moving apparatus mounted thereon. The User is responsible for checking all applicable safety codes in their area and providing suitable guards. Failure to do so may result in bodily harm and/or damage to the equipment.

- ☐ Test run the first unit to verify proper operation.

- ☐ In applications where multiple starts, stops or reverses occurs, it is recommended to glue/seal the fastening bolts of the output flange and feet.



OPERATING / MAINTENANCE INSTRUCTIONS

IN ORDER TO ASSURE THE SERVICE LIFE OF THIS GEARBOX AND TO MINIMIZE ANY DOWNTIME, PLEASE FOLLOW THE PROCEDURES INDICATED ON THIS PAGE.

DELIVERY

Visually inspect the gearbox for any apparent damage that may have occurred during shipping. If there is any damage to the shipping container/box and there is evidence of excessive damage, please refuse delivery of the gearbox, or contact us immediately.

INSTALLATION

Before installing the gearbox, make sure that the nameplate data is correct, and in accordance with the specifications required. All of this data can be found on the gearbox and motor name plates.

HOW TO ASSEMBLE THE MOTOR

1

Use Loctite Food Grade Anti-Seize 1167237 or equivalent on motor shaft before assembly.

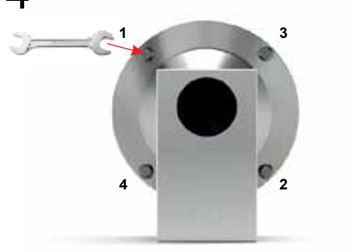
2

An o-ring must be installed in the input flange of the gearbox to unsure a water tight seal between the motor and the gearbox. This O-ring is provided in a bag which is attached to each and every gearbox.
To hold the O-ring in place use Loctite SI 5699 sealant grey paste or food grade grease.

3

Fit the motor on the gearbox paying attention to the correct position of the O-ring.

4



Tighten the screws in the sequence indicated by the numbers. First tighten the screws by carefully compressing the O-ring. Then repeat the sequence to fully secure the screws.

For more detailed information, please visit our website www.keltechltd.com

MEASURING THE OPERATING TEMPERATURE

Worm gearboxes, because of the design, transform part of their installed power into heat which is disposed of throughout the housing of the gearbox. This may cause measured temperatures at the top of the housing in the range of 80-100°C without causing any adverse effects on the gearbox.

This heat loss will often cause the housing to become too hot to touch. It is therefore wrong to assume that the gearbox is too hot just because it cannot be touched. In fact, it cannot be touched as soon as the temperature goes above 50 °C.

It is important to check that once the gearbox has reached the normal speed, the operating temperature remains more or less constant under the same work conditions. This indicates that the gearbox is running in a trouble-free manner.

WARNING

- Under no circumstances can the reducers be used in winch applications, man lift or people moving devices.
- Reducers are not to be considered fail safe or self-locking devices. If these features are required, a properly sized, independent holding device should be utilized. Reducers should not be used as a brake.
- Any brakes that are used in conjunction with a reducer must be sized or positioned in such a way so as to not subject the reducer to loads beyond the catalog rating.
- Hot oil and reducers can cause severe burns. Use extreme care when removing lubrication plugs or vents.
- Make certain that the power supply is disconnected before attempting to service or remove any components.
- Buyer shall be solely responsible for determining the adequacy of the product for any and all uses to which buyer shall apply the product.

SELLING CONDITIONS

Warranty for manufacturing defects will expire one year from the invoice date. Kel-Tech will replace or repair defective parts but will not accept any further charges for direct or indirect damages of any kind. The warranty will become null and void if repairs or changes are carried out without our prior written authorization.

Our company will not be responsible for any direct or indirect damages, caused by a wrong use of the products or for not observing any of the conditions stated above.

PRODUCT IDENTIFICATION

CONTACT US

ADDRESS

HEADQUARTERS
598 King Forest Court
Burlington, ON, CANADA

PHONE

TOLL FREE 1-877-279-4123
PHONE (905)-634-8004
FAX (905)-634-3113

ONLINE

www.keltechltd.com
Visit our website for the most up to date versions of catalogs and dimensions.

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