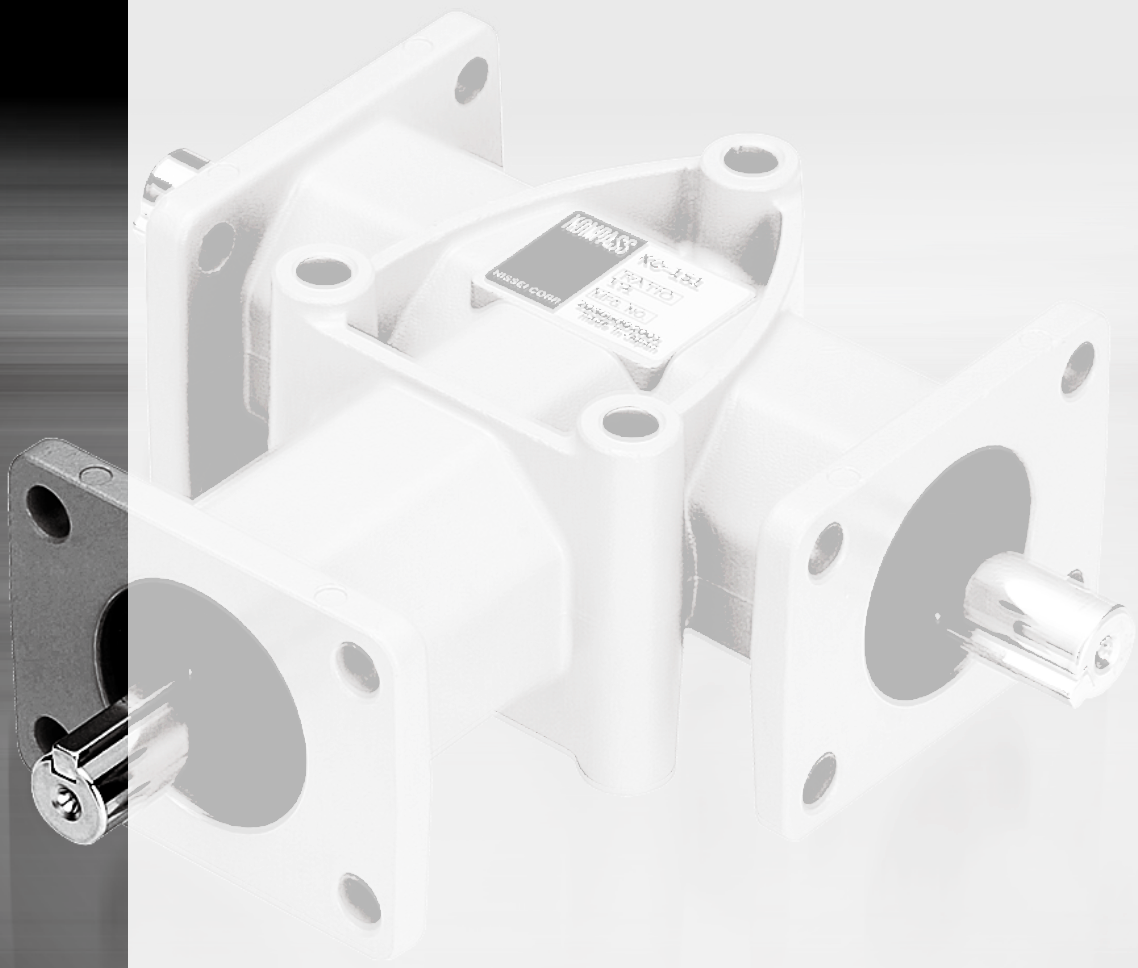
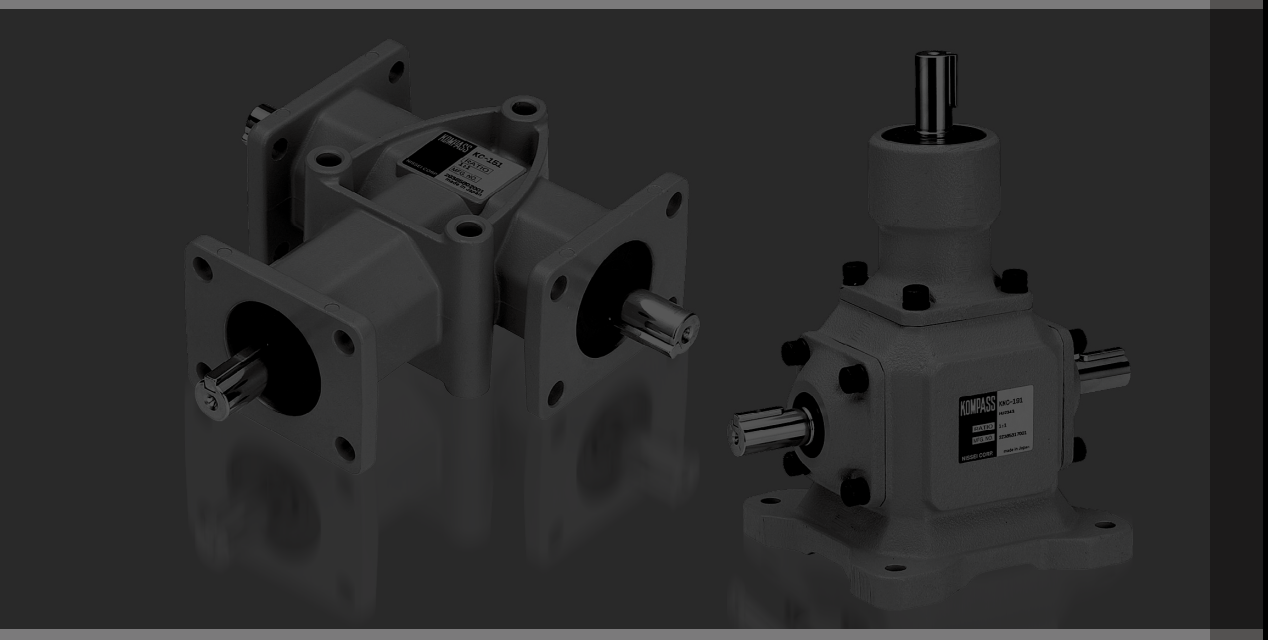
Gearmotors General Catalog



KOMPASS BEVEL GEARBOXES

KOMPASS BEVEL GEARBOXES

Technical Documentation



Standard Specification

Part Number		K Type	KN Type
Frame Size		10, 15, 20	19, 25, 32, 40
Reduction Ratio		1:1, 1:2	
Structure	Lubrication Type	Grease Lubrication	Oil Lubrication
	Case Material	Aluminum Die-cast	Cast Iron
	Internal Gear	Spiral Bevel Gear	
Paint	Paint Color	Gray	
Mounting Direction		No limitation	Horizontal Type, Vertical Type (Note 1)
Ambient Conditions	Ambient Temperature	-10 °C to 40 °C	
	Ambient Humidity	85 % max	
	Altitude	1,000 m max	
	Installation Environment	A place free from corrosive gas, explosive gas, and/or vapor. Well ventilated place with no dust.	
	Installation Place	Indoors	

Note 1: For the shaft arrangements and shaft arrangement codes of horizontal and vertical types, please refer to page 846.

Model and Type Codes

K Type

Type Code	Type		Frame Size and Output Shaft Diameter		Reduction Ratio
K	B	–	10	–	1
K	C	–	15	–	2
①	②		③		④

①Type Code	K	: K Type
②Type	B	: Y-axis one direction
	C	: Y-axis two directions
③Frame Size and Output Shaft Diameter	10	: Ø10
	15	: Ø15
	20	: Ø20
④Reduction Ratio	1	: 1/1
	2	: 1/2 (reduction from X-axis to Y-axis)

KN Type

Type Code	Type		Frame Size and Output Shaft Diameter		Reduction Ratio	Shaft Arrangement Code
KN	B	–	19	–	1	HH1043
KN	C	–	32	–	2	HU2344
①	②		③		④	⑤

①Type Code	KN	: KN Type
②Type	B	: Y-axis one direction
	C	: Y-axis two directions
③Frame Size and Output Shaft Diameter	19	: Ø19
	25	: Ø25
	32	: Ø32
	40	: Ø40
④Reduction Ratio	1	: 1/1
	2	: 1/2 (reduction from X-axis to Y-axis)
⑤Shaft Arrangement Code	Shaft Arrangement Option Code For details, please refer to the list of shaft arrangements on page 846.	

■ Lubrication

The specified amount of lubricant is sealed in each bevel gearbox before shipment from our factory.

Model	Lubricant Type		Approx. Amount of Lubricant	Paint Color	Key Dimensions
K-10 Model	Grease	Class NLGI-0 containing Li-based extreme pressure additive	10 g	Gray	JIS key adopted JIS B 1301-1996 (plain form)
K-15 Model			30 g		
K-20 Model			50 g		
KN-19 Model	Oil	JIS Grade 2 industrial gear oil ISO VG150	0.3 L	Gray	JIS key adopted JIS B 1301-1996 (plain form)
KN-25 Model			0.7 L		
KN-32 Model			1.0 L		
KN-40 Model			1.5 L		

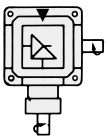
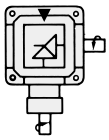
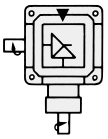
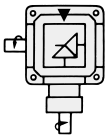
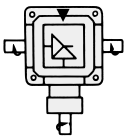
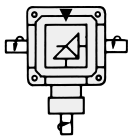
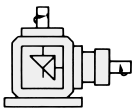
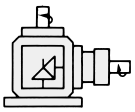
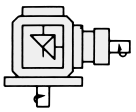
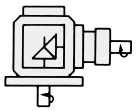
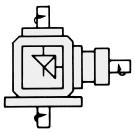
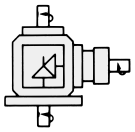
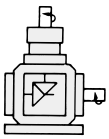
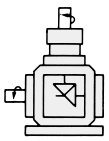
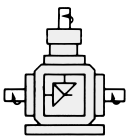
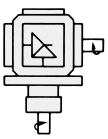
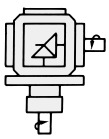
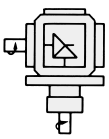
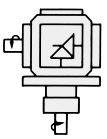
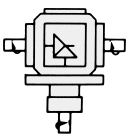
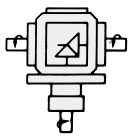
KN Model Shaft Arrangement Code

■ Shaft Arrangements and Shaft Arrangement Codes

24 standardized shaft arrangements through different shaft positioning directions and rotational directions are available for the KOMPASS Series KN Type.
Be sure to consider not only the type code but also a shaft arrangement.

[Notes]

- Each figure shows a mounting base and horizontal mounting (floor mounting).
- The rotational direction indicated by the arrow shows the rotation relationship between the shafts and does not limit the rotational direction. The shafts can rotate in the CW and CCW directions.
- The ▼ mark indicates the face provided with the oil filler port and the drain plug in horizontal mounting (floor mounting). In a figure without the mark, they are provided on the back face. (Standard specification)
- The bearing lubrication type is different in floor mounting in which the input shaft (X-axis) faces upward, except for “HU Type” shaft arrangements. Please inform us of the mounting method when placing an order.
- For use in mounting patterns other than mounting on a horizontal face, refer to page 865.

	KNB Model				KNC Model	
Horizontal Type (Top View)	 HH1043	 HH1044	 HH1033	 HH1034	 HH1343	 HH1344
Vertical Type (Front View)	 HH1022	 HH1025	 HH1052	 HH1055	 HH1252	 HH1255
	 HU2043	 HU2044	 HU2033	 HU2034	 HU2343	 HU2344
	 HD5043	 HD5044	 HD5033	 HD5034	 HD5343	 HD5344

MEMO

1. Bevel Gearboxes K Type

1-1. Performance Tables

[Notes]

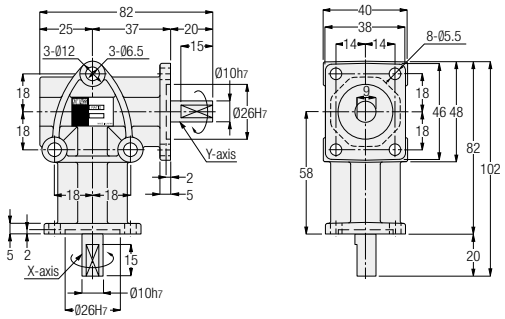
- Be sure to use the bevel gearbox within the specified tolerances. Bevel gear boxes with a reduction ratio of 1:2 will be decelerated to the Y-axis.
- The values shown in this performance table are those when the service factor is 1. To use a bevel gearbox under other conditions, refer to the service factors shown in [Table-1] on page 860.
- The O.H.L. (overhung load) means the allowable load that may be applied to the middle area of the shaft length. To use a bevel gearbox under other conditions, refer to the coefficients K1 and K2 shown in [Table-2 and Table-3] on page 860.
- When a bevel gearbox type with a reduction ratio of 1:2 is used at increased speed (speed-up from the Y-axis to the X-axis), the X-axis torque will become 1/2 of the value (Y-axis torque) shown in the performance table.
- The Y-axis torque of the KC Type is the total value of the right and left shafts.
- The Y-axis O.H.L. of the KC Type is the total value of the right and left shafts.

Reduction Ratio	Part Number	Option Code	X-axis Rotational Speed (r/min)												Allowable Thrust Load (N) {kgf}	
			50	100	200	300	400	600	900	1200	1500	1800	2500	3600	X-axis	Y-axis
1 : 1	KB-101 KC-101	Allowable Transmission Capacity (kW)	0.01	0.02	0.05	0.07	0.09	0.14	0.20	0.26	0.31	0.35	0.38	0.44	59 {6}	69 {7}
		Allowable X/Y-axis Torque (N·m) {kgf·m}	2.35 {0.24}	2.35 {0.24}	2.25 {0.23}	2.25 {0.23}	2.16 {0.22}	2.16 {0.22}	2.06 {0.21}	2.06 {0.21}	1.96 {0.20}	1.86 {0.19}	1.47 {0.15}	1.18 {0.12}		
		Allowable X-axis O.H.L. (N) {kgf}	78 {8}	78 {8}	78 {8}	78 {8}	69 {7}	69 {7}	69 {7}	69 {7}	69 {7}	59 {6}	49 {5}	39 {4}		
		Allowable Y-axis O.H.L. (N) {kgf}	127 {13}	127 {13}	118 {12}	118 {12}	118 {12}	118 {12}	108 {11}	108 {11}	108 {11}	98 {10}	78 {8}	59 {6}		
	KB-151 KC-151	Allowable Transmission Capacity (kW)	0.05	0.09	0.18	0.27	0.35	0.51	0.75	0.96	1.16	1.30	1.44	1.66	98 {10}	118 {12}
		Allowable X/Y-axis Torque (N·m) {kgf·m}	8.82 {0.90}	8.82 {0.90}	8.62 {0.88}	8.53 {0.87}	8.33 {0.85}	8.13 {0.83}	7.94 {0.81}	7.64 {0.78}	7.35 {0.75}	6.86 {0.70}	5.49 {0.56}	4.41 {0.45}		
		Allowable X-axis O.H.L. (N) {kgf}	255 {26}	255 {26}	255 {26}	245 {25}	245 {25}	235 {24}	225 {23}	216 {22}	216 {22}	186 {19}	157 {16}	127 {13}		
		Allowable Y-axis O.H.L. (N) {kgf}	294 {30}	294 {30}	284 {29}	284 {29}	274 {28}	265 {27}	265 {27}	255 {26}	245 {25}	216 {22}	176 {18}	147 {15}		
	KB-201 KC-201	Allowable Transmission Capacity (kW)	0.09	0.18	0.36	0.52	0.68	0.95	1.38	1.78	2.15	2.50	2.55	2.95	196 {20}	274 {28}
		Allowable X/Y-axis Torque (N·m) {kgf·m}	17.6 {1.80}	17.6 {1.80}	17.2 {1.75}	16.7 {1.70}	16.2 {1.65}	15.2 {1.55}	14.7 {1.50}	14.2 {1.45}	13.7 {1.40}	13.2 {1.35}	9.80 {1.00}	7.84 {0.80}		
		Allowable X-axis O.H.L. (N) {kgf}	353 {36}	353 {36}	343 {35}	333 {34}	333 {34}	323 {33}	314 {32}	304 {31}	294 {30}	265 {27}	216 {22}	176 {18}		
		Allowable Y-axis O.H.L. (N) {kgf}	529 {54}	529 {54}	519 {53}	510 {52}	500 {51}	490 {50}	470 {48}	451 {46}	441 {45}	392 {40}	314 {32}	255 {26}		
1 : 2	KB-102 KC-102	Allowable Transmission Capacity (kW)	0.005	0.01	0.02	0.03	0.04	0.06	0.09	0.12	0.14	0.16	0.17	0.20	59 {6}	69 {7}
		Allowable Y-axis Torque (N·m) {kgf·m}	2.06 {0.21}	2.06 {0.21}	2.06 {0.21}	1.96 {0.20}	1.96 {0.20}	1.96 {0.20}	1.86 {0.19}	1.86 {0.19}	1.76 {0.18}	1.67 {0.17}	1.27 {0.13}	1.08 {0.11}		
		Allowable X-axis O.H.L. (N) {kgf}	88 {9}	88 {9}	88 {9}	88 {9}	88 {9}	78 {8}	78 {8}	78 {8}	78 {8}	69 {7}	59 {6}	49 {5}		
		Allowable Y-axis O.H.L. (N) {kgf}	137 {14}	137 {14}	137 {14}	127 {13}	127 {13}	127 {13}	127 {13}	118 {12}	118 {12}	108 {11}	88 {9}	69 {7}		
	KB-152 KC-152	Allowable Transmission Capacity (kW)	0.02	0.04	0.08	0.13	0.17	0.25	0.36	0.46	0.55	0.62	0.69	0.80	98 {10}	118 {12}
		Allowable Y-axis Torque (N·m) {kgf·m}	8.43 {0.86}	8.43 {0.86}	8.23 {0.84}	8.13 {0.83}	8.04 {0.82}	7.84 {0.80}	7.55 {0.77}	7.25 {0.74}	7.06 {0.72}	6.57 {0.67}	5.29 {0.54}	4.21 {0.43}		
		Allowable X-axis O.H.L. (N) {kgf}	255 {26}	255 {26}	255 {26}	245 {25}	245 {25}	235 {24}	225 {23}	216 {22}	216 {22}	186 {19}	157 {16}	127 {13}		
		Allowable Y-axis O.H.L. (N) {kgf}	294 {30}	294 {30}	284 {29}	284 {29}	274 {28}	265 {27}	265 {27}	255 {26}	245 {25}	216 {22}	176 {18}	147 {15}		
	KB-202 KC-202	Allowable Transmission Capacity (kW)	0.05	0.10	0.19	0.28	0.37	0.53	0.77	0.99	1.15	1.31	1.40	1.57	196 {20}	274 {28}
		Allowable Y-axis Torque (N·m) {kgf·m}	19.6 {2.00}	19.6 {2.00}	18.6 {1.90}	18.1 {1.85}	17.6 {1.80}	17.0 {1.73}	16.4 {1.67}	15.7 {1.60}	14.7 {1.50}	13.9 {1.42}	10.8 {1.10}	8.33 {0.85}		
		Allowable X-axis O.H.L. (N) {kgf}	372 {38}	372 {38}	363 {37}	363 {37}	353 {36}	343 {35}	333 {34}	323 {33}	314 {32}	274 {28}	235 {24}	186 {19}		
		Allowable Y-axis O.H.L. (N) {kgf}	588 {60}	588 {60}	578 {59}	568 {58}	559 {57}	539 {55}	529 {54}	510 {52}	490 {50}	441 {45}	363 {37}	294 {30}		

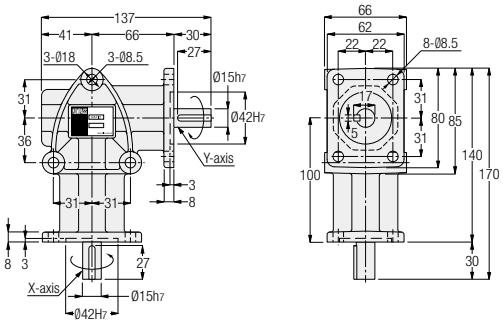
1-2. Drawings

KB Type

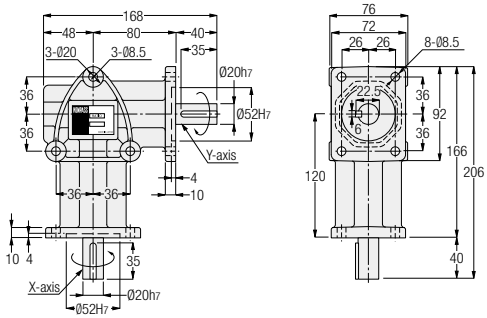
<Figure 1>



<Figure 2>



<Figure 3>

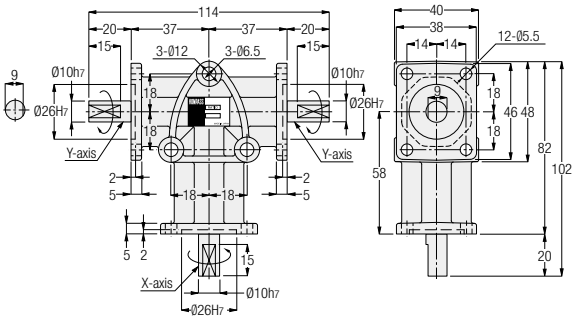


Part Number	Figure Number	Approx. Weight (kg)
KB-101	1	0.4
KB-102	1	0.4
KB-151	2	1.8
KB-152	2	1.8
KB-201	3	3.1
KB-202	3	3.1

Note 1: The rotational directions indicated by the arrows show the rotation relationship between the shafts and do not limit the rotational directions. The shafts can rotate in the CW and CCW directions.
Note 2: In the standard rotation relationship, the X-axis rotates in the CW direction, whereas the Y-axis rotates in the CCW direction.
Note 3: The phase of the key groove of the X-axis and that of the Y-axis do not always match.

KC Type

<Figure 1>



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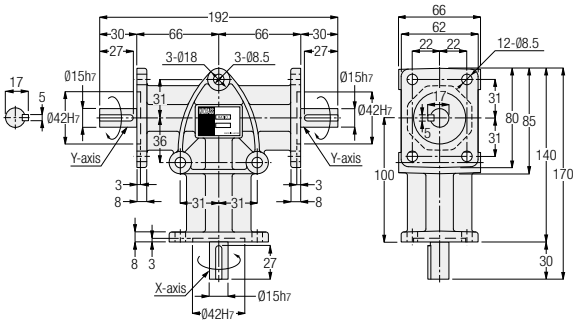
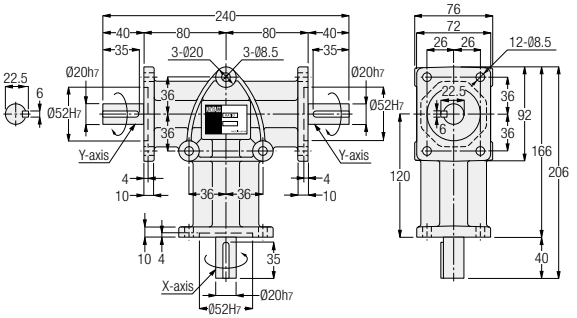


<Figure 3>



Part Number	Figure Number	Approx. Weight (kg)
KC-101	1	0.5
KC-102	1	0.5
KC-151	2	2.2
KC-152	2	2.2
KC-201	3	3.4
KC-202	3	3.4

Note 1: The rotational directions indicated by the arrows show the rotation relationship between the shafts and do not limit the rotational directions. The shafts can rotate in the CW and CCW directions.
Note 2: In the standard rotation relationship, the X-axis rotates in the CW direction, whereas the Y-axis rotates in the CCW direction.
Note 3: The phase of the key groove of the X-axis and that of the Y-axis do not always match.

MEMO

2. Bevel Gearboxes KN Type

2-1. Performance Tables

[Notes]

- Be sure to use the bevel gearbox within the specified tolerances. Bevel gear boxes with a reduction ratio of 1:2 will be decelerated to the Y-axis.
- The values shown in this performance table are those when the service factor is 1. To use a bevel gearbox under other conditions, refer to the service factors shown in [Table-1] on page 860.
- The O.H.L. (overhung load) means the allowable load that may be applied to the middle area of the shaft length. To use a bevel gearbox under other conditions, refer to the coefficients K1 and K2 shown in [Table-2 and Table-3] on page 860.
- When a bevel gearbox type with a reduction ratio of 1:2 is used at increased speed (speed-up from the Y-axis to the X-axis), the X-axis torque will become 1/2 of the value (Y-axis torque) shown in the performance table.
- The Y-axis torque of the KNC Type is the total value of the right and left shafts.
- The Y-axis O.H.L. of the KNC Type is the total value of the right and left shafts.
- The allowable thrust load will become half of each O.H.L. value.

Reduction Ratio	Part Number	Option Code	X-axis Rotational Speed (r/min)												
			20	50	100	200	300	400	600	900	1200	1500	1800	2500	3600
1 : 1	KNB-191 KNC-191	Allowable Transmission Capacity (kW)	0.08	0.20	0.39	0.77	1.15	1.50	2.05	2.67	3.30	3.95	4.40	4.40	4.40
		Allowable X/Y-axis Torque (N·m) {kgf·m}	37.2 {3.8}	37.2 {3.8}	37.2 {3.8}	36.3 {3.7}	36.3 {3.7}	36.3 {3.6}	32.3 {3.3}	28.4 {2.9}	26.5 {2.7}	24.5 {2.5}	23.5 {2.4}	16.7 {1.7}	10.8 {1.1}
		Allowable X-axis O.H.L. (N) {kgf}	1760 {180}	1760 {180}	1760 {180}	1760 {180}	1670 {170}	1620 {165}	1270 {130}	1080 {110}	882 {90}	833 {85}	784 {80}	686 {70}	637 {65}
		Allowable Y-axis O.H.L. (N) {kgf}	1960 {200}	1960 {200}	1960 {200}	1960 {200}	1960 {200}	1810 {185}	1470 {150}	1180 {120}	1030 {105}	980 {100}	931 {95}	784 {80}	735 {75}
1 : 2	KNB-192 KNC-192	Allowable Transmission Capacity (kW)	0.03	0.07	0.14	0.27	0.40	0.53	0.78	1.15	1.50	1.85	2.17	2.20	2.20
		Allowable X/Y-axis Torque (N·m) {kgf·m}	25.5 {2.6}	25.5 {2.6}	25.5 {2.6}	25.5 {2.6}	25.5 {2.6}	24.5 {2.5}	24.5 {2.5}	24.5 {2.5}	23.5 {2.4}	23.5 {2.4}	22.5 {2.3}	16.7 {1.7}	10.8 {1.1}
		Allowable X-axis O.H.L. (N) {kgf}	1180 {120}	1180 {120}	1180 {120}	1180 {120}	1180 {120}	1130 {115}	1130 {115}	1080 {110}	1080 {110}	882 {90}	833 {85}	784 {80}	735 {75}
		Allowable Y-axis O.H.L. (N) {kgf}	1760 {180}	1760 {180}	1760 {180}	1760 {180}	1760 {180}	1720 {175}	1670 {170}	1470 {150}	1270 {130}	1080 {110}	980 {100}	833 {85}	784 {80}
1 : 1	KNB-251 KNC-251	Allowable Transmission Capacity (kW)	0.25	0.62	1.24	2.47	3.68	4.70	6.40	8.60	10.5	12.3	13.8	—	—
		Allowable X/Y-axis Torque (N·m) {kgf·m}	118 {12.0}	118 {12.0}	118 {12.0}	118 {12.0}	116 {11.8}	112 {11.4}	101 {10.3}	91.1 {9.3}	83.3 {8.5}	78.4 {8.0}	73.5 {7.5}	—	—
		Allowable X-axis O.H.L. (N) {kgf}	3920 {400}	3920 {400}	3920 {400}	3920 {400}	3630 {370}	3330 {340}	2940 {300}	2450 {250}	2160 {220}	1960 {200}	1760 {180}	—	—
		Allowable Y-axis O.H.L. (N) {kgf}	4120 {420}	4120 {420}	4120 {420}	4120 {420}	4020 {410}	3920 {400}	3430 {350}	2940 {300}	2550 {260}	2450 {250}	2250 {230}	—	—
1 : 2	KNB-252 KNC-252	Allowable Transmission Capacity (kW)	0.09	0.23	0.45	0.90	1.34	1.78	2.67	4.00	5.30	6.33	7.50	7.50	—
		Allowable Y-axis Torque (N·m) {kgf·m}	85.3 {8.7}	85.3 {8.7}	85.3 {8.7}	85.3 {8.7}	85.3 {8.7}	84.3 {8.6}	84.3 {8.6}	84.3 {8.6}	84.3 {8.6}	80.4 {8.2}	79.4 {8.1}	56.8 {5.8}	—
		Allowable X-axis O.H.L. (N) {kgf}	3920 {400}	3920 {400}	3920 {400}	3920 {400}	3920 {400}	3720 {380}	3630 {370}	3530 {360}	3230 {330}	2740 {280}	2250 {230}	1670 {170}	—
		Allowable Y-axis O.H.L. (N) {kgf}	4120 {420}	4120 {420}	4120 {420}	4120 {420}	4020 {410}	3920 {400}	3820 {390}	3720 {380}	3430 {350}	3040 {310}	2650 {270}	2350 {240}	—

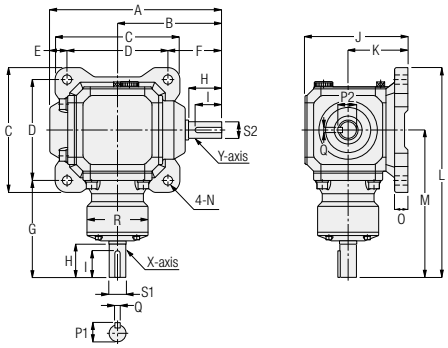
Reduction Ratio	Part Number	Option Code	X-axis Rotational Speed (r/min)										
			20	50	100	200	300	400	600	900	1200	1500	1800
1 : 1	KNB-321 KNC-321	Allowable Transmission Capacity (kW)	0.36	0.88	1.77	3.53	5.26	6.72	9.15	12.3	15.0	17.5	19.7
		Allowable X/Y-axis Torque (N·m) {kgf·m}	167 {17.0}	167 {17.0}	167 {17.0}	167 {17.0}	165 {16.8}	160 {16.3}	144 {14.7}	130 {13.3}	119 {12.1}	112 {11.4}	104 {10.6}
		Allowable X-axis O.H.L. (N) {kgf}	4900 {500}	4900 {500}	4900 {500}	4900 {500}	4610 {470}	4210 {430}	3720 {380}	3140 {320}	2740 {280}	2450 {250}	2160 {220}
		Allowable Y-axis O.H.L. (N) {kgf}	5190 {530}	5190 {530}	5190 {530}	5190 {530}	5100 {520}	4900 {500}	4310 {440}	3720 {380}	3230 {330}	3140 {320}	2840 {290}
1 : 2	KNB-322 KNC-322	Allowable Transmission Capacity (kW)	0.13	0.32	0.64	1.28	1.91	2.54	3.80	5.72	7.57	9.05	10.7
		Allowable X/Y-axis Torque (N·m) {kgf·m}	123 {12.5}	123 {12.5}	123 {12.5}	123 {12.5}	122 {12.4}	122 {12.4}	121 {12.3}	121 {12.3}	120 {12.2}	115 {11.7}	114 {11.6}
		Allowable X-axis O.H.L. (N) {kgf}	4900 {500}	4900 {500}	4900 {500}	4900 {500}	4900 {500}	4700 {480}	4610 {470}	4410 {450}	4120 {420}	3430 {350}	2840 {290}
		Allowable Y-axis O.H.L. (N) {kgf}	5190 {530}	5190 {530}	5190 {530}	5190 {530}	5100 {520}	4900 {500}	4800 {490}	4700 {480}	4310 {440}	3820 {390}	3330 {340}
1 : 1	KNB-401 KNC-401	Allowable Transmission Capacity (kW)	0.62	1.59	3.18	6.32	9.50	12.0	16.1	22.0	26.5	—	—
		Allowable X/Y-axis Torque (N·m) {kgf·m}	294 {30.0}	294 {30.0}	294 {30.0}	294 {30.0}	294 {30.0}	284 {29.0}	255 {26.0}	231 {23.6}	211 {21.5}	—	—
		Allowable X-axis O.H.L. (N) {kgf}	9800 {1000}	9800 {1000}	9800 {1000}	7840 {800}	5880 {600}	4900 {500}	4410 {450}	3720 {380}	3430 {350}	—	—
		Allowable Y-axis O.H.L. (N) {kgf}	11760 {1200}	11760 {1200}	11760 {1200}	9800 {1000}	7350 {750}	6370 {650}	5880 {600}	5100 {520}	4020 {410}	—	—
1 : 2	KNB-402 KNC-402	Allowable Transmission Capacity (kW)	0.20	0.48	0.96	1.93	2.90	3.84	5.72	8.55	11.0	13.8	16.4
		Allowable Y-axis Torque (N·m) {kgf·m}	183 {18.7}	183 {18.7}	183 {18.7}	183 {18.7}	183 {18.7}	182 {18.6}	181 {18.5}	180 {18.4}	174 {17.8}	173 {17.6}	172 {17.5}
		Allowable X-axis O.H.L. (N) {kgf}	9800 {1000}	9800 {1000}	9800 {1000}	9800 {1000}	9800 {1000}	8820 {900}	7840 {800}	6860 {700}	5880 {600}	4900 {500}	3920 {400}
		Allowable Y-axis O.H.L. (N) {kgf}	11760 {1200}	11760 {1200}	11760 {1200}	11760 {1200}	11760 {1200}	9800 {1000}	8820 {900}	8820 {900}	8820 {900}	7840 {800}	6860 {700}

2-2. Drawings

KNB Type

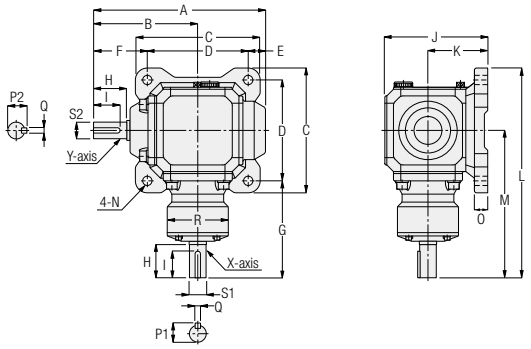
Shaft Arrangement Code: HH1043 HH1044

<Figure 1>



Shaft Arrangement Code: HH1033 HH1034

<Figure 2>

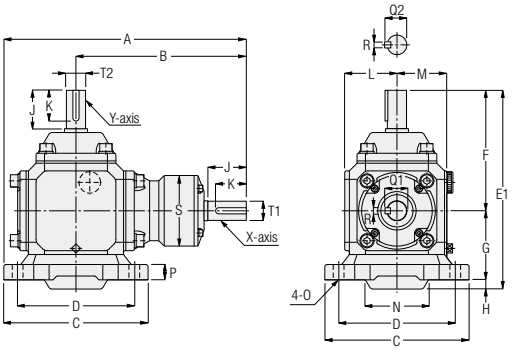


Part Number	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P1	P2	Q	R	S1	S2	Approx. Weight (kg)
KNB-191	193	116	154	125	14.5	53.5	117.5	38	27	129	76	257	180	Ø10.5	17	21.5	21.5	6	Ø66	Ø19h6	Ø19h6	10
KNB-192	193	116	154	125	14.5	53.5	117.5	38	27	129	76	257	180	Ø10.5	17	20.5	21.5	6	Ø66	Ø18h6	Ø19h6	10
KNB-251	259	157	188	152	26	81	146	50	40	155	90	316	222	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	17
KNB-252	259	157	188	152	26	81	146	50	40	155	90	316	222	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	17
KNB-321	277	168	196	160	29	88	162	55	50	174	100	340	242	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	22
KNB-322	277	168	196	160	29	88	162	55	50	174	100	340	242	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	22
KNB-401	337	208	234	195	31.5	110.5	210.5	75	60	200	115	425	308	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	33
KNB-402	337	208	234	195	31.5	110.5	210.5	75	60	200	115	425	308	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	33

Note: The size of the oil cap for the oil filler port is PF1/2, and that for the oil drain port is PT1/4. (Standard specification)
Note: The phase of the key groove of the X-axis and that of the Y-axis do not always match.

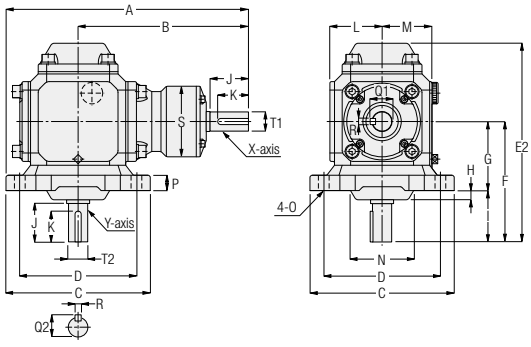
Shaft Arrangement Code: HH1022 HH1025

<Figure 3>



Shaft Arrangement Code: HH1052 HH1055

<Figure 4>

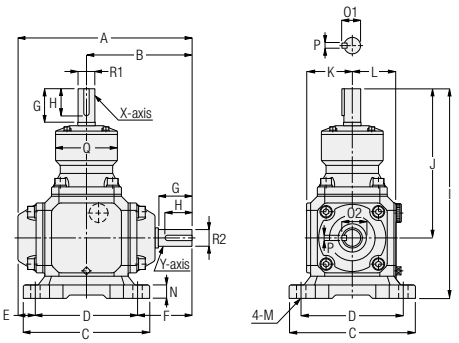


Part Number	A	B	C	D	E1	E2	F	G	H	I	J	K	L	M	N	O	P	Q1	Q2	R	S	T1	T2	Approx. Weight (kg)
KNB-191	257	180	154	125	192	191	116	76	—	40	38	27	56	53	—	Ø10.5	17	21.5	21.5	6	Ø66	Ø19h6	Ø19h6	10
KNB-192	257	180	154	125	192	191	116	76	—	40	38	27	56	53	—	Ø10.5	17	20.5	21.5	6	Ø66	Ø18h6	Ø19h6	10
KNB-251	316	222	188	152	259	259	157	90	12	67	50	40	68	65	Ø82.5	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	17
KNB-252	316	222	188	152	259	259	157	90	12	67	50	40	68	65	Ø82.5	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	17
KNB-321	340	242	196	160	277	277	168	100	9	68	55	50	77	74	Ø88.5	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	22
KNB-322	340	242	196	160	277	277	168	100	9	68	55	50	77	74	Ø88.5	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	22
KNB-401	425	308	234	195	337	337	208	115	14	93	75	60	88	85	Ø114.5	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	33
KNB-402	425	308	234	195	337	337	208	115	14	93	75	60	88	85	Ø114.5	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	33

Note: The size of the oil cap for the oil filler port is PF1/2, and that for the oil drain port is PT1/4. (Standard specification)
Note: The phase of the key groove of the X-axis and that of the Y-axis do not always match.

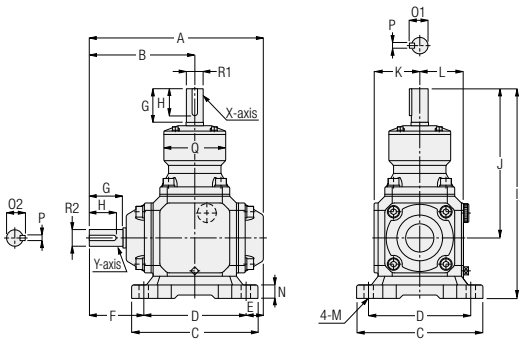
Shaft Arrangement Code: HU2043 HU2044

<Figure 1>



Shaft Arrangement Code: HU2033 HU2034

<Figure 2>

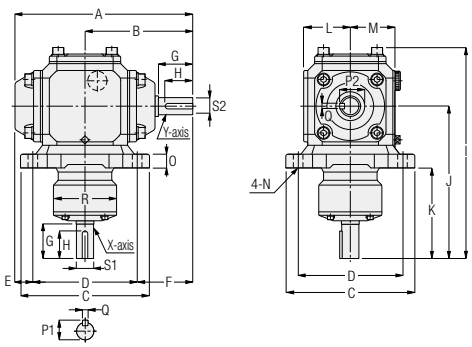


Part Number	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O1	O2	P	Q	R1	R2	Approx. Weight (kg)
KNB-191	193	116	154	125	14.5	53.5	38	27	256	180	56	53	Ø10.5	17	21.5	21.5	6	Ø66	Ø19h6	Ø19h6	10
KNB-192	193	116	154	125	14.5	53.5	38	27	256	180	56	53	Ø10.5	17	20.5	21.5	6	Ø66	Ø18h6	Ø19h6	10
KNB-251	259	157	188	152	26	81	50	40	312	222	68	65	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	17
KNB-252	259	157	188	152	26	81	50	40	312	222	68	65	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	17
KNB-321	277	168	196	160	29	88	55	50	342	242	77	74	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	22
KNB-322	277	168	196	160	29	88	55	50	342	242	77	74	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	22
KNB-401	337	208	234	195	31.5	110.5	75	60	423	308	88	85	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	33
KNB-402	337	208	234	195	31.5	110.5	75	60	423	308	88	85	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	33

Note: The size of the oil cap for the oil filler port is PF1/2, and that for the oil drain port is PT1/4. (Standard specification)
Note: The phase of the key groove of the X-axis and that of the Y-axis do not always match.

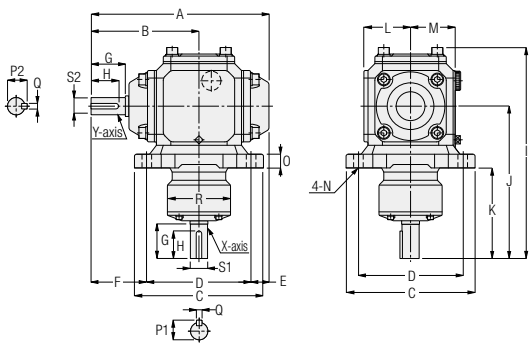
Shaft Arrangement Code: HD5043 HD5044

<Figure 3>



Shaft Arrangement Code: HD5033 HD5034

<Figure 4>



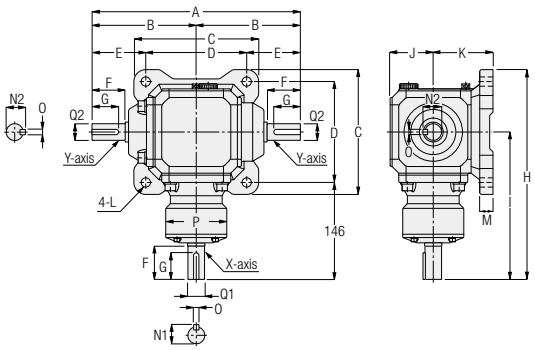
Part Number	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P1	P2	Q	R	S1	S2	Approx. Weight (kg)
KNB-191	193	116	154	125	14.5	53.5	38	27	250	180	104	56	53	Ø10.5	17	21.5	21.5	6	Ø66	Ø19h6	Ø19h6	10
KNB-192	193	116	154	125	14.5	53.5	38	27	250	180	104	56	53	Ø10.5	17	20.5	21.5	6	Ø66	Ø18h6	Ø19h6	10
KNB-251	259	157	188	152	26	81	50	40	307.5	222	132	68	65	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	17
KNB-252	259	157	188	152	26	81	50	40	307.5	222	132	68	65	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	17
KNB-321	277	168	196	160	29	88	55	50	334.5	242	142	77	74	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	22
KNB-322	277	168	196	160	29	88	55	50	334.5	242	142	77	74	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	22
KNB-401	337	208	234	195	31.5	110.5	75	60	418	308	193	88	85	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	33
KNB-402	337	208	234	195	31.5	110.5	75	60	418	308	193	88	85	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	33

Note: The size of the oil cap for the oil filler port is PF1/2, and that for the oil drain port is PT1/4. (Standard specification)
Note: The phase of the key groove of the X-axis and that of the Y-axis do not always match.

KNC Type

Shaft Arrangement Code: HH1343 HH1344

<Figure 1>

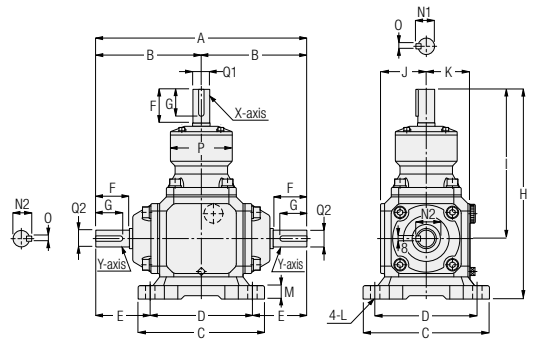


Part Number	A	B	C	D	E	F	G	H	I	J	K	L	M	N1	N2	O	P	Q1	Q2	Approx. Weight (kg)
KNC-191	232	116	154	125	53.5	38	27	257	180	53	76	Ø10.5	17	21.5	21.5	6	Ø66	Ø19h6	Ø19h6	10
KNC-192	232	116	154	125	53.5	38	27	257	180	53	76	Ø10.5	17	20.5	21.5	6	Ø66	Ø18h6	Ø19h6	10
KNC-251	314	157	188	152	81	50	40	316	222	65	90	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	18
KNC-252	314	157	188	152	81	50	40	316	222	65	90	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	18
KNC-321	336	168	196	160	88	55	50	340	242	74	100	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	23
KNC-322	336	168	196	160	88	55	50	340	242	74	100	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	23
KNC-401	416	208	234	195	110.5	75	60	425	308	85	115	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	34
KNC-402	416	208	234	195	110.5	75	60	425	308	85	115	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	34

Note: The size of the oil cap for the oil filler port is PF1/2, and that for the oil drain port is PT1/4. (Standard specification)
Note: The phase of the key groove of the X-axis and that of the Y-axis do not always match.

Shaft Arrangement Code: HU2343 HU2344

<Figure 2>

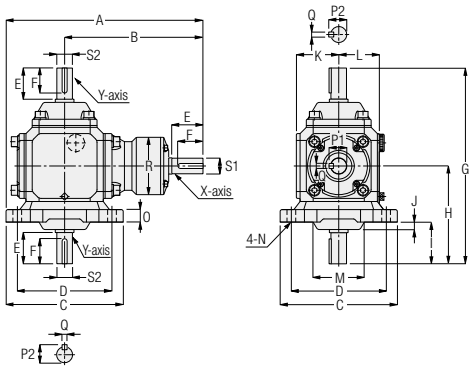


Part Number	A	B	C	D	E	F	G	H	I	J	K	L	M	N1	N2	O	P	Q1	Q2	Approx. Weight (kg)
KNC-191	232	116	154	125	53.5	38	27	256	180	56	53	Ø10.5	17	21.5	21.5	6	Ø66	Ø19h6	Ø19h6	10
KNC-192	232	116	154	125	53.5	38	27	256	180	56	53	Ø10.5	17	20.5	21.5	6	Ø66	Ø18h6	Ø19h6	10
KNC-251	314	157	188	152	81	50	40	312	222	68	65	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	18
KNC-252	314	157	188	152	81	50	40	312	222	68	65	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	18
KNC-321	336	168	196	160	88	55	50	342	242	77	74	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	23
KNC-322	336	168	196	160	88	55	50	342	242	77	74	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	23
KNC-401	416	208	234	195	110.5	75	60	423	308	88	85	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	34
KNC-402	416	208	234	195	110.5	75	60	423	308	88	85	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	34

Note: The size of the oil cap for the oil filler port is PF1/2, and that for the oil drain port is PT1/4. (Standard specification)
Note: The phase of the key groove of the X-axis and that of the Y-axis do not always match.

Shaft Arrangement Code: HH1252 HH1255

<Figure 1>

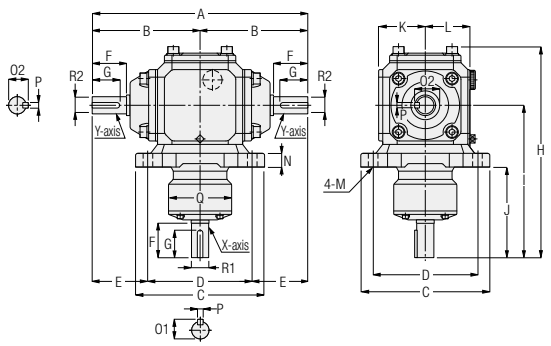


Part Number	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P1	P2	Q	R	S1	S2	Approx. Weight (kg)
KNC-191	257	180	154	125	38	27	232	116	40	—	56	53	—	Ø10.5	17	21.5	21.5	6	Ø66	Ø19h6	Ø19h6	10
KNC-192	257	180	154	125	38	27	232	116	40	—	56	53	—	Ø10.5	17	20.5	21.5	6	Ø66	Ø18h6	Ø19h6	10
KNC-251	316	222	188	152	50	40	314	157	67	12	68	65	Ø82.5	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	18
KNC-252	316	222	188	152	50	40	314	157	67	12	68	65	Ø82.5	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	18
KNC-321	340	242	196	160	55	50	336	168	68	9	77	74	Ø88.5	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	23
KNC-322	340	242	196	160	55	50	336	168	68	9	77	74	Ø88.5	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	23
KNC-401	425	308	234	195	75	60	416	208	93	14	88	85	Ø114.5	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	34
KNC-402	425	308	234	195	75	60	416	208	93	14	88	85	Ø114.5	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	34

Note: The size of the oil cap for the oil filler port is PF1/2, and that for the oil drain port is PT1/4. (Standard specification)
Note: The phase of the key groove of the X-axis and that of the Y-axis do not always match.

Shaft Arrangement Code: HD5343 HD5344

<Figure 2>



Part Number	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O1	O2	P	Q	R1	R2	Approx. Weight (kg)
KNC-191	232	116	154	125	53.5	38	27	250	180	104	56	53	Ø10.5	17	21.5	21.5	6	Ø66	Ø19h6	Ø19h6	10
KNC-192	232	116	154	125	53.5	38	27	250	180	104	56	53	Ø10.5	17	20.5	21.5	6	Ø66	Ø18h6	Ø19h6	10
KNC-251	314	157	188	152	81	50	40	307.5	222	132	68	65	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	18
KNC-252	314	157	188	152	81	50	40	307.5	222	132	68	65	Ø14	20	28	28	8	Ø92	Ø25h6	Ø25h6	18
KNC-321	336	168	196	160	88	55	50	334.5	242	142	77	74	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	23
KNC-322	336	168	196	160	88	55	50	334.5	242	142	77	74	Ø14	20	35	35	10	Ø100	Ø32h6	Ø32h6	23
KNC-401	416	208	234	195	110.5	75	60	418	308	193	88	85	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	34
KNC-402	416	208	234	195	110.5	75	60	418	308	193	88	85	Ø14	22	43	43	12	Ø124	Ø40h6	Ø40h6	34

Note: The size of the oil cap for the oil filler port is PF1/2, and that for the oil drain port is PT1/4. (Standard specification)
Note: The phase of the key groove of the X-axis and that of the Y-axis do not always match.

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