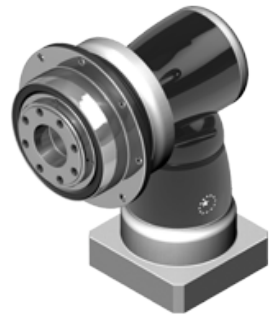


AHKB series (3-stage)

Overview

- Heavy Duty right angel Hypoid gearbox
- Black coated steel housing, aluminum output and motor adapter flange
- Steel output shaft, flange ISO 9409
- Helical gear technology
- Nominal Torques:
 - T_{2N} : 55 Nm – 5.630 Nm
- Ratios
 - 3-stage : 64 / 84 / 100 / 125 / 140 / 175 / 200 / 250 / 280 / 350 / 400 / 500 / 700 / 1.000
- Low Backlash
 - 3-traps : ≤ 2 arcmin
- High Efficiency
 - 3-stage : $\geq 92\%$
- Easy mount
- Low noise
- Compact structure
- Sizes available: AHKB090 / AHKB110 / AHKB140 / AHKB200 / AHKB255 / AHKB285 / AHKB355



Specifications

Model		Stage	Ratio ¹	AHKB090	AHKB110	AHKB140	AHKB200	AHKB255	AHKB285	AHKB355
Nominal output torque T _{2N}	Nm	3	64	200	360	615	1.325	-	-	-
			85	200	360	620	1.325	-	-	-
			100	200	360	620	1.330	1.780	3.345	5.620
			125	170	310	535	1.170	1.780	3.345	5.625
			140	200	360	620	1.330	1.780	3.345	5.625
			175	170	310	535	1.170	1.780	3.345	5.625
			200	200	360	620	1.330	1.780	3.345	5.625
			250	170	310	535	1.170	1.780	3.345	5.625
			280	200	360	620	1.330	1.510	-	-
			350	170	310	535	1.170	1.775	3.345	5.630
			400	160	340	620	1.330	-	-	-
			500	170	310	535	1.170	1.780	3.000	5.500
			700	130	250	440	990	1.510	2.555	4.825
			1.000	55	160	290	640	980	1.655	3.250
Emergency stop torque T _{2NOT} ³	Nm	3	64~1.000	2 times nominal output torque T _{2N}						
Max. Acceleration torque T _{2B}	Nm	3	64~1.000	1,5 times nominal output torque T _{2N}						
No load running torque ⁽³⁾	arcmin	3	64~1.000	0,2	0,2	0,3	0,4	1	1,2	1,5
Backlash ⁽²⁾	arcmin	3	64~1.000	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2
Torsional rigidity	Nm/arcmin	3	64~1.000	27	56	112	389	642	1.275	2.500
Nominal input speed N _{1N}	rpm	3	64~1.000	5.500	4.600	4.600	4.000	3.700	3.400	3.100
Max. input speed N _{1B}	rpm	3	64~1.000	7.000	7.000	7.000	6.000	5.500	5.000	4.500
Max. radial load F _{2a}	N	3	64~1.000	2.220	4.070	8.530	17.000	26.900	39.200	101.500
Max. Bending moment M _{2k}	Nm	3	64~1.000	280	480	1.310	3.530	5.920	9.230	29.100
Service Life ⁽⁴⁾	hr	3	64~1.000	20,000						
Operating temperature	°C	3	64~1.000	-10°C ~+ 90°C						
Degree of Protection		3	64~1.000	IP65						
Lubrication		3	64~1.000	Synthetisch lubrication grease (NYOGEL 792D)						
Mounting position		3	64~1.000	All directions						
Running noise (n ₁ =3000rpm,No Load)	dB(A)	3	64~1.000	≤ 66	≤ 68	≤ 68	≤ 70	≤ 70	≤ 72	≤ 74
Efficiency	%	3	64~1.000	≥ 92 %						

(1) Ratio (i = N in / N out)
(2) Backlash is measured at 2% of Nominal output torque T2N.
(3) These values are measured by gearbox with ratio = 1.000 (3-stage) at 3.000 rpm without load.
(4) Continuous operation (S1) is not recommended.

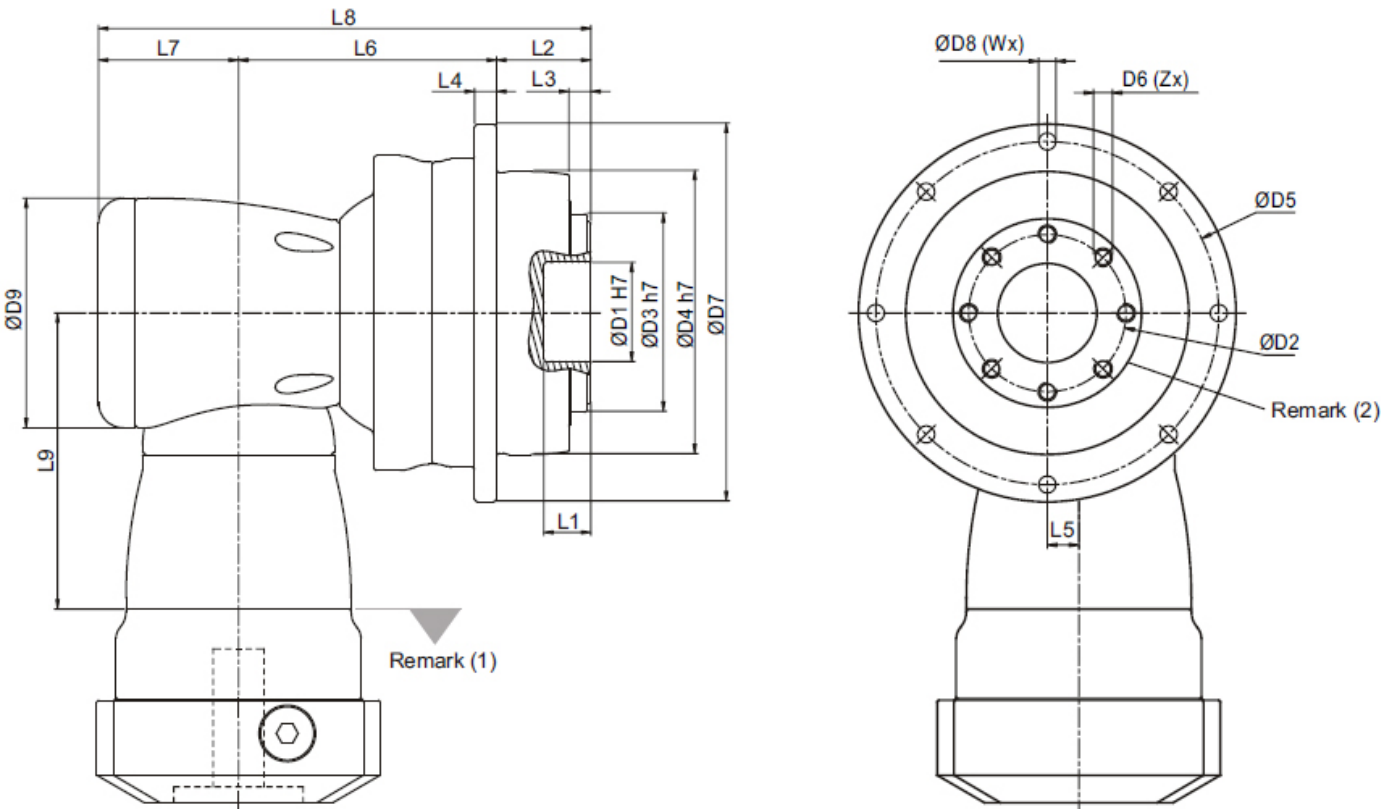
Inertia

Model	AHKB090	AHKB110	AHKB140	AHKB200	AHKB255	AHKB285	AHKB355
Ø ^(A) (C3)	3-st.	3-st.	3-st.	3-st.	3-st.	3-st.	3-st.
8	0,17	-	-	-	-	-	-
11	0,17	0,52	-	-	-	-	-
14	0,21	0,53	1,83	-	-	-	-
19	-	0,68	1,83	5,60	-	-	-
24	-	-	5,04	5,63	5,63	-	-
28	-	-	-	7,18	7,18	-	-
32	-	-	-	10,10	10,10	12,63	-
35	-	-	-	15,54	15,54	17,75	17,35
38	-	-	-	21,32	21,32	23,26	23,61
42	-	-	-	-	23,20	25,40	25,50
48	-	-	-	-	56,07	61,02	61,22

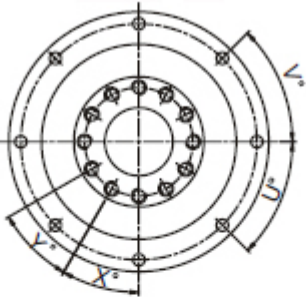
(A) Ø = Input shaft diameter

Sizes

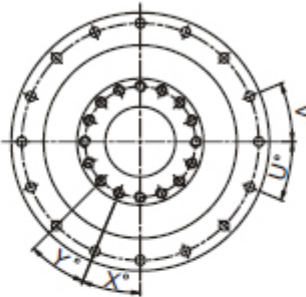
AHKB 3-stage series:



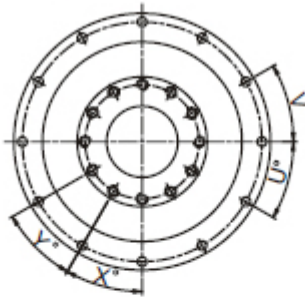
AHKB090



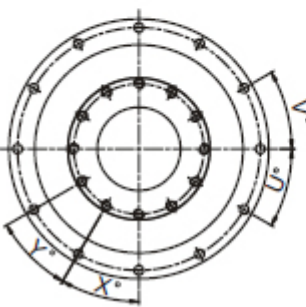
AHKB110



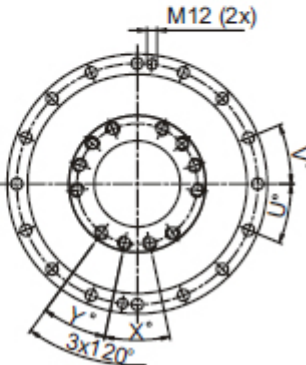
AHKB140



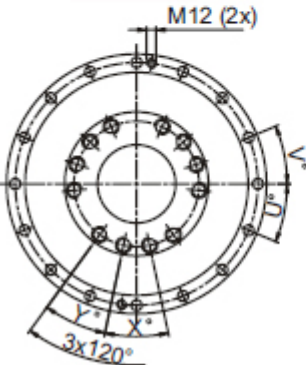
AHKB200



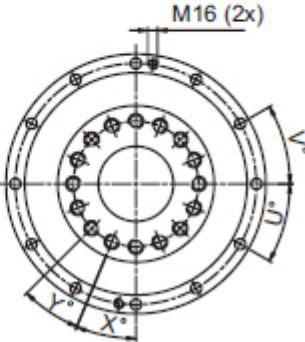
AHKB255



AHKB285



AHKB355



D1 H7	31,5	40	50	80	100	100	120
D2	50	63	80	125	140	160	200
D3 h7	63	80	100	160	180	200	250
D4 h7	90	110	140	200	255	285	355
D5	109	135	168	233	280	310	385
D6 x spoed x diepte	M6 x 1P x 10	M6 x 1P x 11	M8 x x1.25P x15	M10 x 1.5P x 20	M16 x 2P x 25	M20 x 2.5P x 31	M24 x 3P x 32
D7	120	147	180	249,5	302	332	415
D8	5,5	5,5	6,6	9	13,5	13,5	17,5
D9	94	116	163	210	210	255	300
L1	15	15	15	16	16	16	35
L2	30	29	38	50	66	75	80
L3	7	7	7,5	8,5	13,5	16,5	20
L4	7	8	10	12	18	20	45
L5	13	17	25	31	31	36	43
L6	90,5	114	147,5	175	191,5	249,5	290
L7	53	68,3	89	115	115	131	165
L8	173,5	211,3	274,5	340	372,5	455,5	535
L9	114,5	129	173,5	228	228	265,5	294,5
X in degrees	30	22,5	30	30	24	24	22,5
Y in degrees	30	22,5	30	30	24	24	22,5
Z	12	16	12	12	12	13	16
U in degrees	45	22,5	30	30	22,5	22,5	30
V degrees	45	22,5	30	30	22,5	22,5	30
W	8	16	12	12	16	16	12

(1) Input dimensions vary according to motor flange. Please contact Apex Dynamics for details.