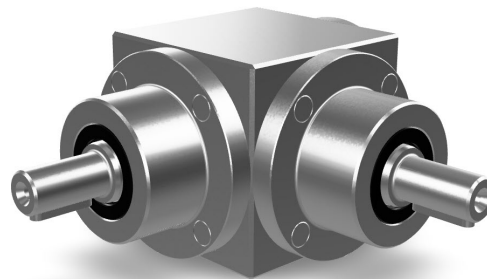


HDV Stainless Steel Spiral Bevel Gearboxes

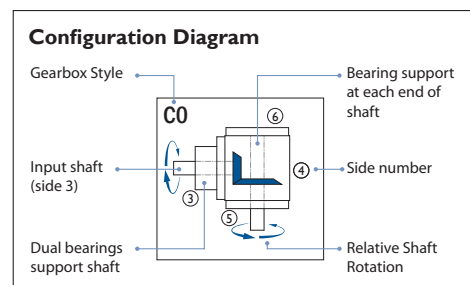
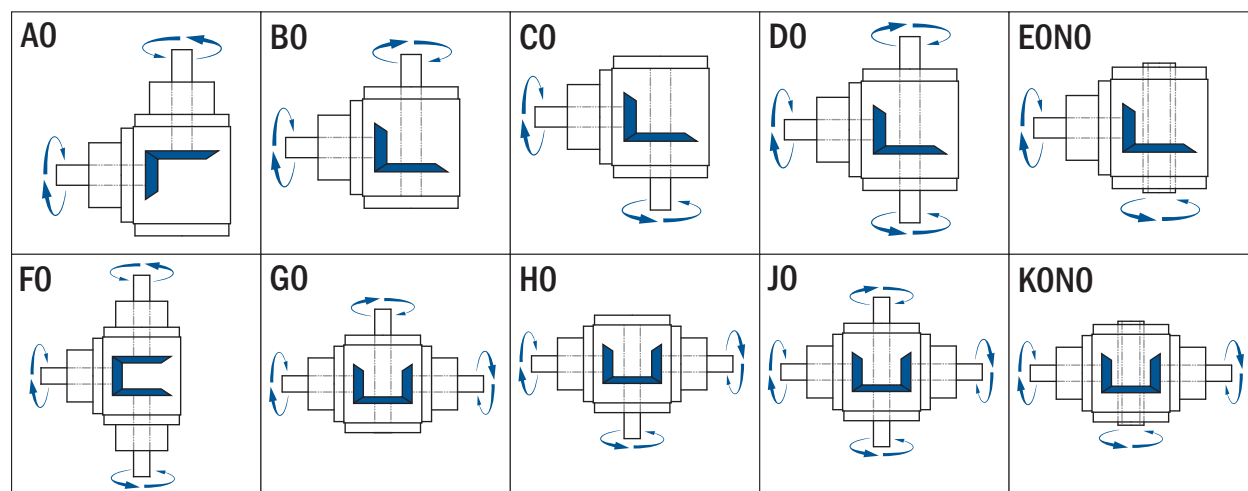
The HDV series is designed for clean or harsh environments such as food, beverage, and pharmaceutical processing, offshore or outdoor applications.

These bevel gearboxes are based on the V-Series and share the same external dimensions. Other features include:

- Frame sizes 065 - 140
- Ratios 1:1 to 1:6
- All external parts made from high quality stainless steel
- Surface roughness (Ra) < 0.8
- No holes or other dirt/dust pockets in the housing or flanges
- Any required mounting holes are drilled per your specifications
- Etched type plate
- No vents
- Lifetime NOTOX lubrication

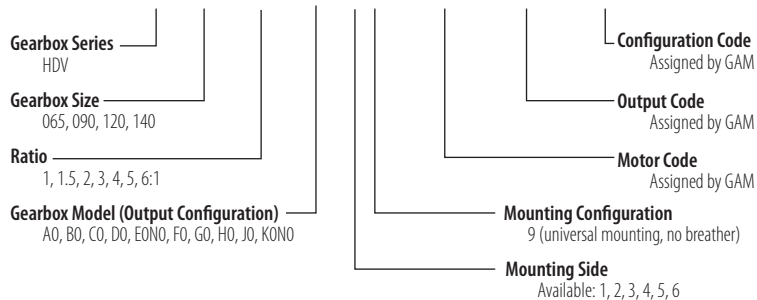


Configurations



TYPE CODE FOR HDV SERIES

Example: V - 090 - 001 - C0 - 9.9 - M0000-H0000-C0000



► HDV SERIES TECHNICAL SPECS

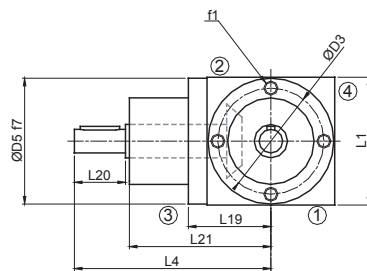
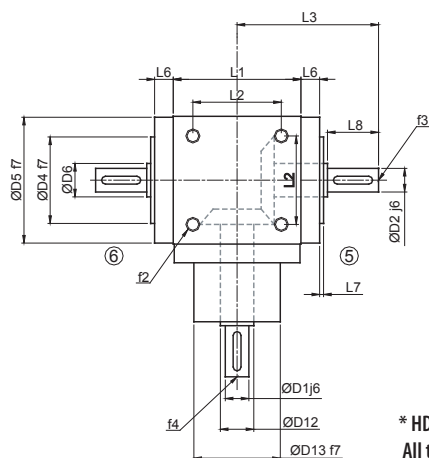
	Model	HDV-Series							
	Size	065		090		120		140	
	Ratios Available	1, 1.5, 2, 3:1		1, 1.5, 2, 3, 4, 5, 6:1					
Ratio	Input Speed (RPM)	Output Torque (Nm)	Power (kW)	Output Torque (Nm)	Power (kW)	Output Torque (Nm)	Power (kW)	Output Torque (Nm)	Power (kW)
1:1	50	18	0.1	50	0.28	130	0.72	220	1.21
	250	17	0.47	44	1.21	123	3.39	215	5.92
	500	15	0.83	40	2.2	115	6.34	208	11.46
	750	13	1.07	37	3.06	103	8.51	196	16.2
	1000	12	1.32	34	3.75	92	10.14	184	20.28
	1500	11	1.82	32	5.29	82	13.56	162	26.78
	2400	10	2.65	28	7.41	70	18.52	140	37.03
	3000	10	3.31	27	8.93	66	21.82	120	39.68
	50	18	0.07	45	0.16	113	0.41	210	0.76
	250	17	0.31	40	0.74	108	1.99	204	3.76
	500	15	0.55	37	1.36	105	3.85	200	7.34
	750	13	0.72	35	1.93	94	5.18	190	10.47
	1000	12	0.88	32	2.35	86	6.32	175	12.87
	1500	11	1.21	29	3.2	78	8.6	155	17.08
1.5:1	2400	10	1.76	26	4.59	65	11.46	126	22.22
	3000	10	2.2	25	5.51	61	13.45	113	24.91
	50	18	0.05	37	0.1	107	0.29	200	0.55
	250	17	0.23	36	0.5	98	1.35	190	2.62
	500	15	0.41	34	0.94	92	2.54	180	4.96
	750	13	0.54	32	1.32	86	3.55	166	6.86
	1000	12	0.66	31	1.71	81	4.46	152	8.38
2:1	1500	11	0.91	27	2.23	73	6.03	138	11.41
	2400	10	1.32	24	3.17	61	8.07	111	14.68
	3000	10	1.65	23	3.8	56	9.26	100	16.53
	50	14	0.03	37	0.07	110	0.21	180	0.34
	250	13	0.12	36	0.33	95	0.87	177	1.62
	500	13	0.24	34	0.63	90	1.66	174	3.2
	750	12	0.33	32	0.88	87	2.4	167	4.6
3:1	1000	12	0.44	31	1.14	82	3.01	160	5.87
	1500	11	0.61	27	1.49	74	4.08	146	8.05
	2400	10	0.88	24	2.12	63	5.56	130	11.46
	3000	10	1.1	23	2.54	58	6.39	110	12.12
	50	-	-	37	0.05	90	0.12	170	0.23
	250	-	-	36	0.25	87	0.6	162	1.12
	500	-	-	34	0.47	84	1.16	154	2.12
4:1	750	-	-	32	0.66	82	1.69	148	3.06
	1000	-	-	31	0.85	79	2.18	136	3.75
	1500	-	-	27	1.12	74	3.06	120	4.96
	2400	-	-	25	1.65	67	4.43	111	7.34
	3000	-	-	23	1.9	60	4.96	103	8.51
	50	-	-	37	0.04	95	0.1	150	0.17
	250	-	-	36	0.2	92	0.51	143	0.79
5:1	500	-	-	34	0.37	89	0.98	136	1.5
	750	-	-	32	0.53	86	1.42	130	2.15
	1000	-	-	31	0.68	80	1.76	124	2.73
	1500	-	-	27	0.89	72	2.38	115	3.8
	2400	-	-	25	1.32	65	3.44	105	5.56
	3000	-	-	23	1.52	60	3.97	100	6.61
	50	-	-	33	0.03	66	0.06	120	0.11
6:1	250	-	-	30	0.14	71	0.33	121	0.56
	500	-	-	29	0.27	69	0.63	119	1.09
	750	-	-	29	0.4	68	0.94	117	1.61
	1000	-	-	29	0.53	66	1.22	112	2.06
	1500	-	-	27	0.74	64	1.75	107	2.95
	2400	-	-	25	1.09	57	2.53	104	4.58
	3000	-	-	23	1.25	54	2.95	94	5.18
Standard Backlash	arcmin	<30							
Allowable Radial Loading*	N	750		1250		1900		3000	
Allowable Axial Loading*	N	375		625		950		1500	
Protection	IP 56								
Ambient Operating Temperature	-10°C to +90°C								
Efficiency at Load	94-98%								
Service Life	15,000 hours								
Lubrication	Synthetic (NOTOX)								

*Load applied at the center of output shaft @ 100 RPM

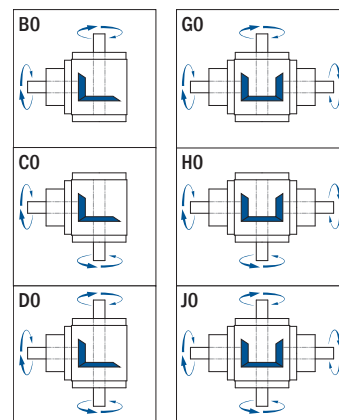
Model	Size	HDV-Series							
		065		090		120		140	
	Ratio	Mass Moment of Inertia (kg cm ²)	Weight (kg)	Mass Moment of Inertia (kg cm ²)	Weight (kg)	Mass Moment of Inertia (kg cm ²)	Weight (kg)	Mass Moment of Inertia (kg cm ²)	Weight (kg)
A0	1:1	0.3888	2.3	2.5590	5.1	10.4976	12.6	26.2670	19
	1.5:1	0.2406	2.3	1.4822	5.1	4.8409	12.6	11.8569	19
	2:1	0.1839	2.3	1.1437	5.1	3.6465	12.6	8.6762	19
	3:1	0.1036	2.3	0.8884	5.1	2.3159	12.6	6.4356	19
	4:1	-	-	0.3631	5.1	1.2164	12.6	1.8432	19
	5:1	-	-	0.3248	5.1	0.7516	12.6	1.5320	19
	6:1	-	-	0.3062	5.1	0.6766	12.6	1.3708	19
B0	1:1	0.4231	2.2	3.3543	5.4	15.3022	12.3	36.0994	18.5
	1.5:1	0.3111	2.2	2.1833	5.4	7.4441	12.3	18.7513	18.5
	2:1	0.2330	2.2	1.3652	5.4	4.9747	12.3	12.2785	18.5
	3:1	0.1001	2.2	1.0465	5.4	3.0123	12.3	7.9547	18.5
	4:1	-	-	0.4607	5.4	1.6729	12.3	2.6978	18.5
	5:1	-	-	0.3933	5.4	1.0539	12.3	2.2113	18.5
	6:1	-	-	0.3502	5.4	0.8982	12.3	1.8426	18.5
C0	1:1	0.4231	2.2	3.3543	5.4	15.3022	12.3	36.0994	18.5
	1.5:1	0.3111	2.2	2.1833	5.4	7.4441	12.3	18.7513	18.5
	2:1	0.2330	2.2	1.3652	5.4	4.9747	12.3	12.2785	18.5
	3:1	0.1001	2.2	1.0465	5.4	3.0123	12.3	7.9547	18.5
	4:1	-	-	0.4607	5.4	1.6729	12.3	2.6978	18.5
	5:1	-	-	0.3933	5.4	1.0539	12.3	2.2113	18.5
	6:1	-	-	0.3502	5.4	0.8982	12.3	1.8426	18.5
D0	1:1	0.4330	2.3	3.3827	5.5	15.5996	12.5	37.0815	19
	1.5:1	0.3155	2.3	2.1959	5.5	7.5762	12.5	19.1878	19
	2:1	0.2355	2.3	1.3723	5.5	5.0490	12.5	12.5241	19
	3:1	0.1012	2.3	1.0496	5.5	3.0453	12.5	8.0639	19
	4:1	-	-	0.4625	5.5	1.6915	12.5	2.7592	19
	5:1	-	-	0.3945	5.5	1.0712	12.5	2.2506	19
	6:1	-	-	0.3510	5.5	0.9065	12.5	1.8698	19
E0N0	1:1	0.4754	2.1	3.2507	5	15.1939	12	32.6630	18
	1.5:1	0.3634	2.1	2.1372	5	7.3959	12	17.2240	18
	2:1	0.2853	2.1	1.3393	5	4.9476	12	11.4194	18
	3:1	0.1524	2.1	1.0350	5	3.0003	12	7.5729	18
	4:1	-	-	0.4542	5	1.6661	12	2.4830	18
	5:1	-	-	0.3892	5	1.0550	12	2.0739	18
	6:1	-	-	0.3473	5	0.8952	12	1.7471	18

► HDV INERTIA & WEIGHT: FO, GO, HO, JO, KONO

Model		HDV-Series							
	Size	065		090		120		140	
	Ratios	Mass Moment of Inertia (kg cm ²)	Weight (kg)	Mass Moment of Inertia (kg cm ²)	Weight (kg)	Mass Moment of Inertia (kg cm ²)	Weight (kg)	Mass Moment of Inertia (kg cm ²)	Weight (kg)
FO	1:1	0.5832	2.7	3.8385	6.3	15.7464	15	39.4005	23
	1.5:1	0.3270	2.7	2.0508	6.3	7.1737	15	17.6940	23
	2:1	0.2325	2.7	1.4636	6.3	4.9587	15	11.9596	23
	3:1	0.1252	2.7	1.0305	6.3	2.8991	15	7.8949	23
	4:1	-	-	0.4430	6.3	1.5444	15	2.6641	23
	5:1	-	-	0.3760	6.3	0.9615	15	2.0574	23
	6:1	-	-	0.3418	6.3	0.8224	15	1.7356	23
GO	1:1	0.6175	2.6	4.6338	6.9	20.5510	14.7	49.2329	22.7
	1.5:1	0.4653	2.6	3.0968	6.9	9.9522	14.7	24.7711	22.7
	2:1	0.3683	2.6	2.1890	6.9	7.3090	14.7	17.6713	22.7
	3:1	0.1821	2.6	1.7927	6.9	4.7450	14.7	12.9310	22.7
	4:1	-	-	0.7438	6.9	2.5612	14.7	3.7202	22.7
	5:1	-	-	0.6669	6.9	1.6009	14.7	3.2180	22.7
	6:1	-	-	0.6206	6.9	1.4290	14.7	2.8486	22.7
HO	1:1	0.6175	2.6	4.6338	6.9	20.5510	14.7	49.2329	22.7
	1.5:1	0.4653	2.6	3.0968	6.9	9.9522	14.7	24.7711	22.7
	2:1	0.3683	2.6	2.1890	6.9	7.3090	14.7	17.6713	22.7
	3:1	0.1821	2.6	1.7927	6.9	4.7450	14.7	12.9310	22.7
	4:1	-	-	0.7438	6.9	2.5612	14.7	3.7202	22.7
	5:1	-	-	0.6669	6.9	1.6009	14.7	3.2180	22.7
	6:1	-	-	0.6206	6.9	1.4290	14.7	2.8486	22.7
JO	1:1	0.6274	2.7	4.6622	7	20.8484	14.9	50.2150	23.2
	1.5:1	0.4697	2.7	3.1094	7	10.0843	14.9	25.2076	23.2
	2:1	0.3708	2.7	2.1961	7	7.3833	14.9	17.9169	23.2
	3:1	0.1832	2.7	1.7958	7	4.7780	14.9	13.0402	23.2
	4:1	-	-	0.7456	7	2.5798	14.9	3.7816	23.2
	5:1	-	-	0.6681	7	1.6128	14.9	3.2573	23.2
	6:1	-	-	0.6217	7	1.4373	14.9	2.8758	23.2
KONO	1:1	0.6698	2.5	4.5302	6.5	20.4427	14.4	45.7965	22.2
	1.5:1	0.5176	2.5	3.0507	6.5	9.9040	14.4	23.2438	22.2
	2:1	0.4206	2.5	2.1631	6.5	7.2819	14.4	16.8122	22.2
	3:1	0.2344	2.5	1.7812	6.5	4.7330	14.4	12.5492	22.2
	4:1	-	-	0.7373	6.5	2.5544	14.4	3.5054	22.2
	5:1	-	-	0.6628	6.5	1.5966	14.4	3.0806	22.2
	6:1	-	-	0.6180	6.5	1.4260	14.4	2.7531	22.2

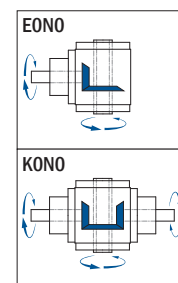
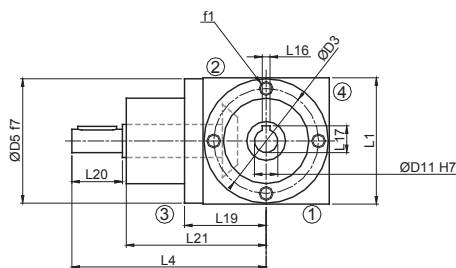


* HDV is supplied without tapped holes in housing and flanges.
All tapped mounting holes as shown are available upon request



	Dimension	Description	HDV-Series															
			065				090				120				140			
			mm				mm				mm				mm			
Major Dimensions (Applies to all models)	D3*	Bolt Circle*	54				75				100				115			
	D4 f7	Small Pilot Diameter	44				60				80				90			
	D5 f7	Pilot Diameter	64				89				119				135			
	f2*	Housing Thread*	M6x12				M8x14				M10x16				M10x20			
	L1	Housing Size	65				90				120				140			
	L2*	Housing Bolt Location*	45				70				100				110			
	L19	Centerline to Input Pilot	42				55				75				85			
Input Dimensions that change based on ratio	-	Ratio (:1)	1, 2	3	4	5, 6	1, 2	3	4	5, 6	1, 2	3	4	5, 6	1, 2	3	4	5, 6
	D1 j6	Input Shaft Diameter	12	12	-	-	18	12	12	12	25	20	20	15	32	28	24	24
	-	Input Shaft Key Width	4	4	-	-	6	4	4	4	8	6	6	5	10	8	8	8
	-	Input Shaft Key Length	20	20	-	-	28	28	28	28	36	36	36	28	45	45	45	45
	-	Input Shaft Key Height	1.5	1.5			2.5	1.5	1.5	1.5	3	2.5	2.5	2	3	3	3	3
	D12	Input Step Diameter	17	17	-	-	25	20	20	20	30	25	25	20	40	40	40	40
	D13 f7	Input Hub Pilot Diameter	44	44	-	-	60	60	60	60	80	80	80	70	90	90	85	85
	f4	Input Shaft Thread (DIN 332)	M4	M4	-	-	M6	M4	M4	M4	M10	M6	M6	M5	M12	M10	M8	M8
	L4	Centerline to End of Input Shaft	100	100	-	-	122	122	132	132	162	162	172	162	180	180	195	195
	L20	Input Shaft Length	26	26	-	-	35	35	35	35	45	45	45	35	50	50	50	50
Applies to models B0, C0, D0, G0, H0, J0	L21	Centerline to Input Hub	72	72	-	-	85	85	95	95	115	115	125	125	128	128	143	143
	D2 j6	Output Shaft Diameter	12				18				25				32			
	-	Output Shaft Key Width	4				6				8				10			
	-	Output Shaft Key Length	20				28				36				45			
	-	Output Shaft Key Height	1.5				2.5				3				3			
	D6	Output Step Diameter	17				30				35				50			
	f1*	Output Flange Thread*	M6x9.5				M8x10				M10x12				M10x12			
	f3	Output Shaft Thread (DIN 332)	M4				M6				M10				M12			
	L3	Output Shaft to Centerline	72				95				122				137			
	L6	Pilot Height	9.5				10				12				12			
Applies to models A0, F0	L7	Small Pilot Height	2				2				3				3			
	L8	Output Shaft Length	26				35				45				50			
	D2 j6	Output Shaft Diameter	12				18				25				32			
	-	Output Shaft Key Width	4				6				8				10			
	-	Output Shaft Key Length	20				28				36				45			
	-	Output Shaft Key Height	1.5				2.5				3				3			
	D6	Output Step Diameter	17				30				30				40			
	D15 f7	Output Hub Pilot Diameter	44				60				80				90			
	f1*	Output Flange Thread*	M6x9.5				M8x10				M10x15				M10x15			
	f3	Output Shaft Thread (DIN 332)	M4				M6				M10				M12			
L3	Output Shaft to Centerline	100				122				162				180				
L6	Pilot Height	9.5				10				15				15				
L8	Output Shaft Length	26				35				45				50				

* HDV is supplied without tapped holes in housing and flanges. All tapped mounting holes are available upon request



	Dimension	Description	HDV-Series															
			065				090				120				140			
			mm				mm				mm				mm			
Major Dimensions (Applies to all models)	D3*	Bolt Circle*	54				75				100				115			
	D4 f7	Small Pilot Diameter	44				60				80				90			
	D5 f7	Pilot Diameter	64				89				119				135			
	f2*	Housing Thread*	M6x12				M8x14				M10x16				M10x20			
	L1	Housing Size	65				90				120				140			
	L2*	Housing Bolt Location*	45				70				100				110			
	L19	Centerline to Input Pilot	42				55				75				85			
Input Dimensions that change based on ratio	-	Ratio (:1)	1, 2	3	4	5, 6	1, 2	3	4	5, 6	1, 2	3	4	5, 6	1, 2	3	4	5, 6
	D1 j6	Input Shaft Diameter	12	12	-	-	18	12	12	12	25	20	20	15	32	28	24	24
	-	Input Shaft Key Width	4	4	-	-	6	4	4	4	8	6	6	5	10	8	8	8
	-	Input Shaft Key Length	20	20	-	-	28	28	28	28	36	36	36	28	45	45	45	45
	-	Input Shaft Key Height	1.5	1.5			2.5	1.5	1.5	1.5	3	2.5	2.5	2	3	3	3	3
	D12	Input Step Diameter	17	17	-	-	25	20	20	20	30	25	25	20	40	40	40	40
	D13 f7	Input Hub Pilot Diameter	44	44	-	-	60	60	60	60	80	80	80	70	90	90	85	85
	f4	Input Shaft Thread (DIN 332)	M4	M4	-	-	M6	M4	M4	M4	M10	M6	M6	M5	M12	M10	M8	M8
	L4	Centerline to End of Input Shaft	100	100	-	-	122	122	132	132	162	162	172	162	180	180	195	195
	L20	Input Shaft Length	26	26	-	-	35	35	35	35	45	45	45	35	50	50	50	50
Applies to models E0, X0	L21	Centerline to Input Hub	72	72	-	-	85	85	95	95	115	115	125	125	128	128	143	143
	D11 H7	Hollow Shaft Diameter	12				18				25				32			
	D14	Extended Shaft Diameter	20				30				40				50			
	f1*	Output Flange Thread*	M6x9.5				M8x10				M10x12				M10x12			
	L6	Pilot Height	9.5				10				12				12			
	L7	Small Pilot Height	2				2				3				3			
	L14	Hollow Shaft to Centerline	46				62				80				90			
	L16 J59	Hollow Shaft Key Width	4				6				8				10			
L17	Hollow Shaft Height with Keyway	13.8				20.8				28.3				35.3				

HIV