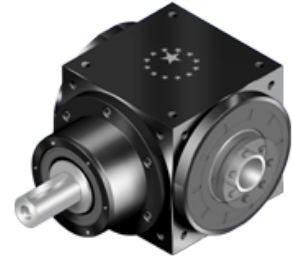


# ATB-C series

## Overview



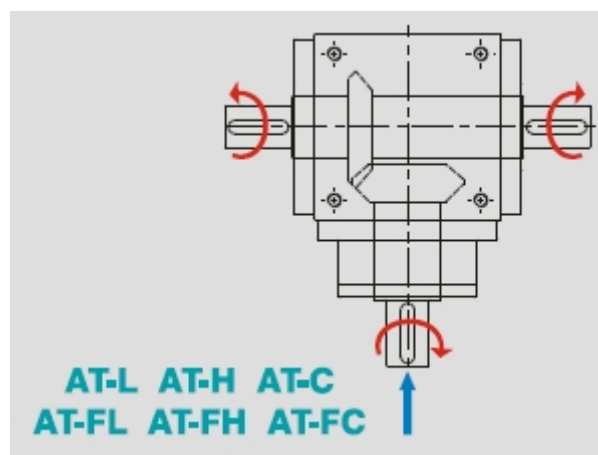
- Spiral bevel gearbox with one input shaft. Output is hollow shaft without keyway. Both end with shrink disc power lock
- Steel housing, black oxidized
- Steel hollow output shaft with two shrinks discs (are included)
- Nominal torques:
  - $T_{2N}$  : 12 Nm – 3.200 Nm
- Ratios
  - 1-stage : 1 / 1,5 / 2 / 3 / 4 / 5
- Low backlash
  - 1-stage:  $\leq 6$  arcmin
- high efficiency
  - 1-stage :  $\geq 98\%$
- Easy mount
- Low Noise
- Compact structure
- Sizes available: ATB065C / ATB075C / ATB090C / ATB110C / ATB140C / ATB170C / ATB210C / ATB240C / ATB280C

# Specifications

Model No.		Stage Ratio <sup>1</sup>	ATB065CATB075CATB090CATB110CATB140CATB170CATB210CATB240CATB280C										
Nominal Output Torque $T_{2N}$	Nm	1	1	25	45	78	150	360	585	1,300	2,150	3,200	
			1.5	25	45	78	150	360	585	1,300	2,150	3,200	
			2	24	42	68	150	330	544	1,220	2,010	3,050	
			3	18	33	54	120	270	450	1,020	1,650	2,850	
			4	13	28	48	100	224	376	860	1,410	2,300	
			5	12	25	40	85	196	320	740	1,210	2,000	
Max Acceleration Torque $T_{2B}$	Nm	1	1~5	1.5 times Nominal Output Torque $T_{2N}$									
Max. Acceleration Input Speed $n_{1B}$	rpm	1	1~5	7,500	6,500	5,500	4,500	3,500	3,000	2,200	2,000	1,700	
Backlash*	arcmin	1	1~5	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	
Max. Radial Load $F_{1rB2}$ Input d1	N	1	1~5	700	950	1,450	2,100	2,700	3,800	7,800	9,600	10,500	
Max. Radial Load $F_{2rB3}$ Output d2	N	1	1~5	900	1,100	1,700	2,700	4,800	6,600	11,500	16,000	18,000	
Max. Axial Load $F_{1aB2}$ Input d1	N	1	1~5	350	425	725	1,050	1,350	1,900	3,900	4,800	5,250	
Max. Axial Load $F_{2aB3}$ Output d2	N	1	1~5	450	550	850	1,350	2,400	3,300	5,750	8,500	9,000	
Service Life	hr	1	1~5	20,000*									
Efficiency	%	1	1~5	≥ 98 %									
Weight	kg	1	1~5	2.8	4.2	6.9	11.4	19.6	33.7	63.3	97.9	149.1	
Operating Temp	°C	1	1~5	-10°C~+90°C									
Lubrication		1	1~5	Synthetic lubrication oils, ISO VG 150									
Noise Level ( $n_1=1500$ rpm, No Load)	dB(A)	1	1~5	≤68	≤70	≤74	≤76	≤77	≤78	≤80	≤82	≤83	

1. Ratio ( $i=N$  in /  $N$  out )
  2. Apply to the input shaft center @ 100 rpm
  3. Apply to the output shaft center @ 100 rpm
- \* S1 service life 10,000 hrs  
 \* Backlash is measured at 2% Nominal Output Torque  $T_{2N}$

## Rotation direction

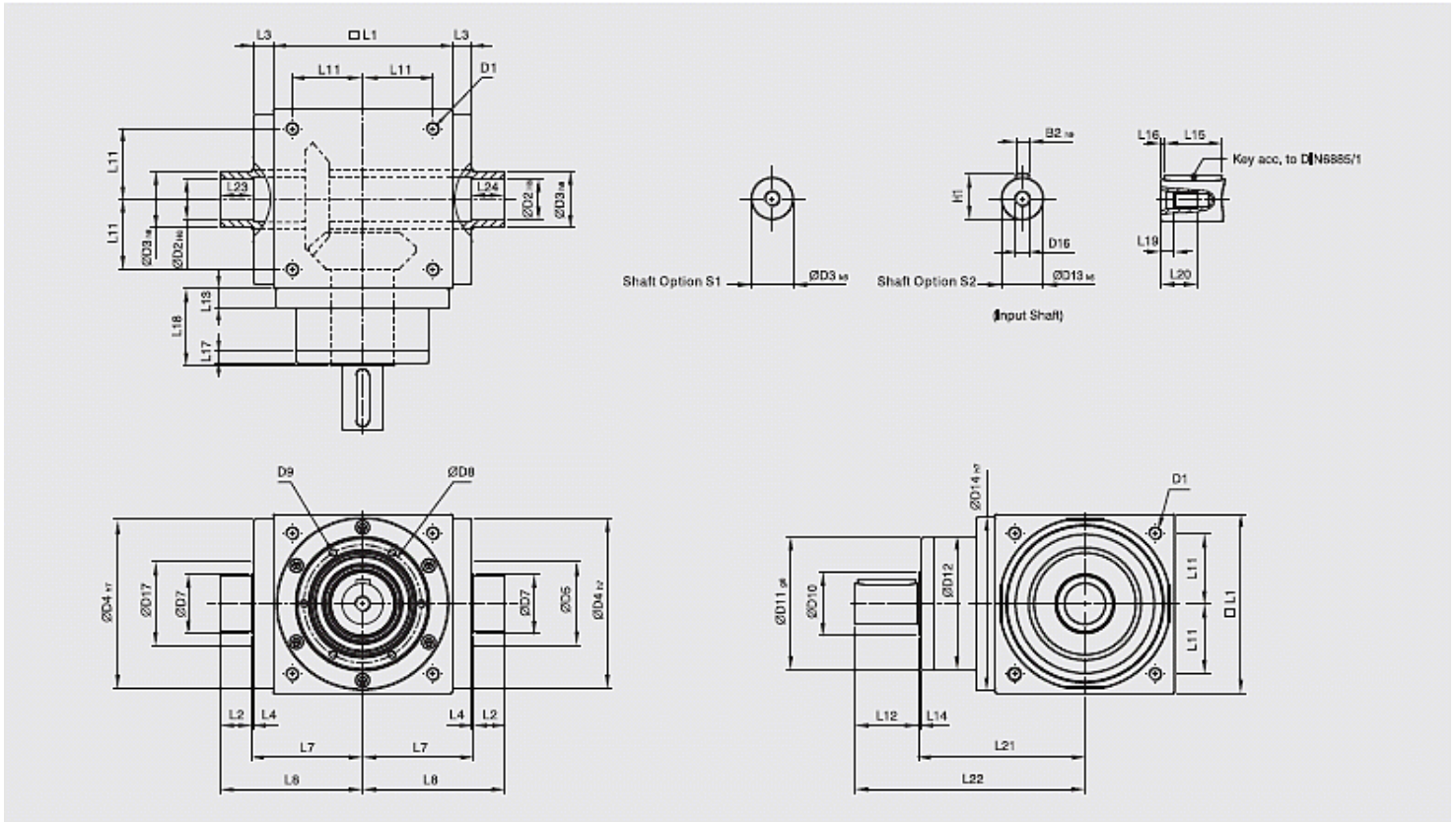


# Inertia

Model No.	Stage	Ratio <sup>1</sup>	ATB 065C	ATB 075C	ATB 090C	ATB 110C	ATB 140C	ATB 170C	ATB 210C	ATB 240C	ATB 280C	
Mass Moment of inertia J <sub>1</sub>	kg*cm <sup>2</sup>	1	1	0.51	1.30	3.16	7.70	23.57	58.99	195.40	369.34	799.12
			1.5	0.64	1.16	2.82	6.74	19.37	49.28	155.45	283.58	595.78
			2	0.44	1.11	2.70	6.31	17.75	45.35	140.24	249.74	511.76
			3	0.43	1.09	2.66	6.17	17.18	44.01	134.95	237.71	483.06
			4	0.43	1.09	2.65	6.13	17.06	43.70	133.58	234.72	476.26
			5	0.43	1.09	2.65	6.12	17.02	43.60	133.14	233.67	473.58

# Sizes

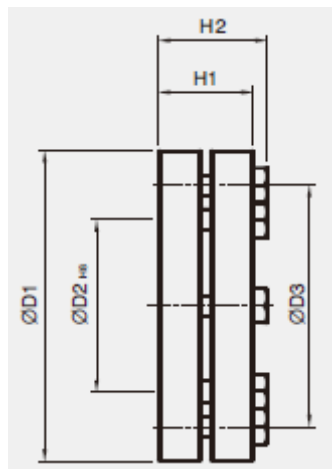
## ATB-C series 1-traps



	ATB065C	ATB075C	ATB090C	ATB110C	ATB140C	ATB170C	ATB210C	ATB240C	ATB280C
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D2 <sub>h6</sub>	13	14	18	22	32	40	50	55	60
D3 <sub>h8</sub>	16	16	22	25	44	50	62	68	75
D4 <sub>h7</sub>	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D7	21	22	28	33	47	55	75	85	110
D8	53	62	76	95	92	114	142	160	176
D9	4xM4xL7	4xM5xL8	4xM5xL8	6xM6xL10	6xM6xL10	6xM8xL12.5	6xM8xL12.5	6xM8xL12.5	6xM10xL15
D10	15.4	20.4	25.8	35.8	49.8	59.3	79.3	92.3	102.3
D11 <sub>g6</sub>	62.9	72.9	87	107	103	127	158	178	198
D12	62	72	86	106	104	128	160	180	200
D13 <sub>k6</sub>	13	16	18	22	32	40	50	55	60
D14 <sub>h7</sub>	63	73	88	108	135	165	205	235	275
D16	M4	M5	M5	M8	M12	M16	M16	M16	M20
L1	65	75	90	110	140	170	210	240	280
L2	14	14	18	18	24	26	29	29	30.5
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L7	47.5	54	62	72	87	102	127	147	167

L8	61.5	68	80	90	111	128	156	176	197.5
L11	27	30	36	44	55	67	85	95	110
L12	19.5	30	35	40	50	60	75	85	110
L13	13	15	15	15	15	15	20	25	25
L14	2	2	2	2	2	2	2	2	2
L15	16	25	28	32	45	50	70	80	100
L16	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L17	6	8	8	8	10	10	10	10	10
L18	43	52.5	55	60	60	70	90	105	120
L19	4.5	4.8	4.8	7.2	10	12	12	12	15
L20	10	12.5	12.5	19	28	36	36	36	42
L21	75.5	90	100	115	130	155	195	225	260
L22	95	120	135	155	180	215	270	310	370
L23	40	47	55	60	70	80	95	115	130
L24	30	32	35	40	50	55	65	80	80
B2 <sub>h9</sub>	5	5	6	6	10	12	14	16	18
H2	15	18	20.5	24.5	35	43	53.5	59	64

## Shrink disc



C / FC Serie	D1	D2	D3	H1	H2
SSD-d16xdw14	41	16	26	15	18,5
SSD-d22xdw18	50	22	36	19,5	23
SSD-d25xdw22	50	25	38	19,5	23
SSD-d44xdw32	80	44	61	25,5	29,5
SSD-d50xdw40	90	50	70	27,5	31,5
SSD-d62xdw50	110	62	86	30,5	34,5
SSD-d68xdw55	115	68	86	30,5	34,5
SSD-d75xdw60	138	75	100	32,5	38