



HT SERIES

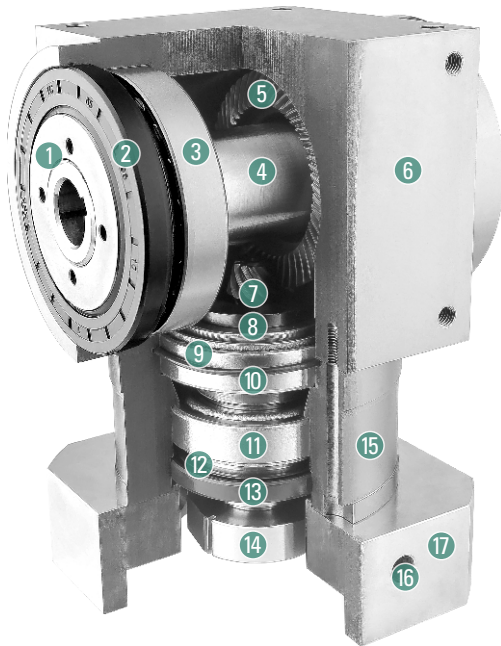
# HIGH PRECISION SPIRAL BEVEL GEARBOXES





# HT HIGH PRECISION SPIRAL BEVEL GEARBOXES

## Sectional drawing



- ① Adjustment nut
- ② Oil seal
- ③ Bearing
- ④ Output shaft
- ⑤ Output bevel gear
- ⑥ Output box
- ⑦ Input bevel gear
- ⑧ Input shaft
- ⑨ Bearing
- ⑩ O-rings
- ⑪ Bearing
- ⑫ Locking nut
- ⑬ Oil seal
- ⑭ Locking device
- ⑮ Input box
- ⑯ Screw
- ⑰ Rear end cover gasket

## Type And Model Number

HT Reducers	Servo motor
-------------	-------------

HT    110    -    L    -    2    P2    S1    -    1000          
 ①        ②               ③        ④        ⑤        ⑥               ⑦        ⑧

① Gear head series code: HT

② Gearbox size: 075, 090, 110, 140

③ Gearbox: L, L1, R1, H, FH, FL, FL1, FR1

④ Gear ratio: 1, 1.5, 2, 3, 4, 5, 7, 10, 15, 20, 25, 35, 50

⑤ Amount of backlash: Standard type P2 (Omission) Please refer to P06 for details  
 Precision (The load of output shaft is  $\pm 2\%$  of allowable output torque)

Input shaft type:

S1: Locking with locking ring (Omission)

⑥ (Regardless whether the motor with keyway can use it. But "D" cut can't use)

S2: Locking with keyway (Input shaft with key)

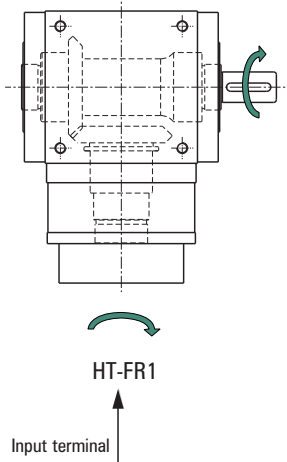
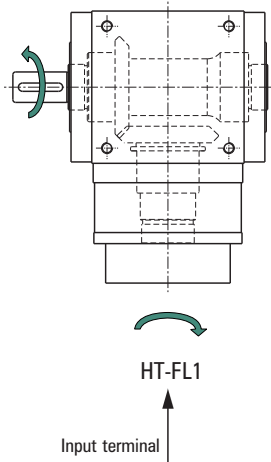
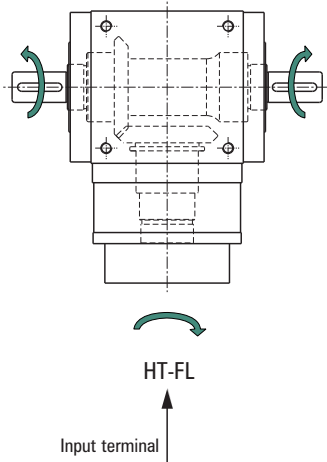
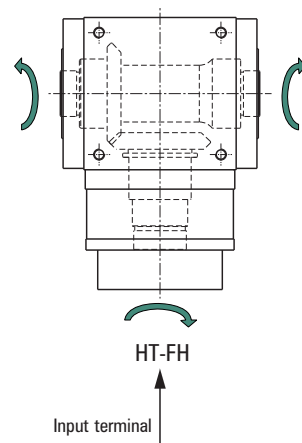
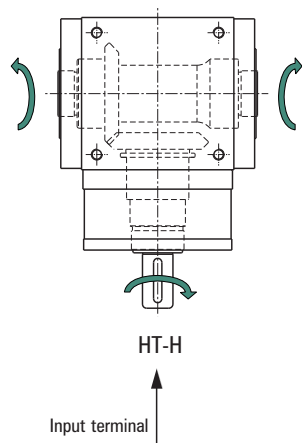
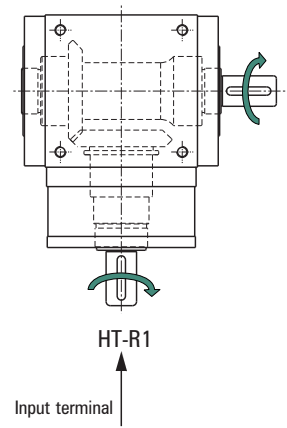
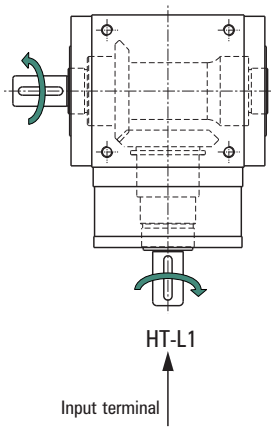
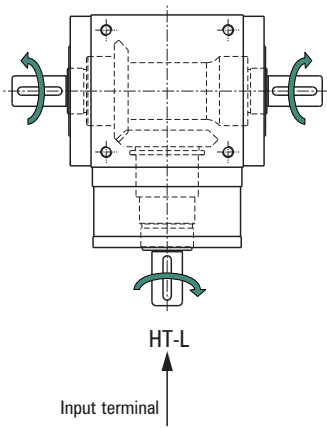
A: Other type (Please contact with us)

⑦ Applicable servo motor power (W)

⑧ Model of servo motor

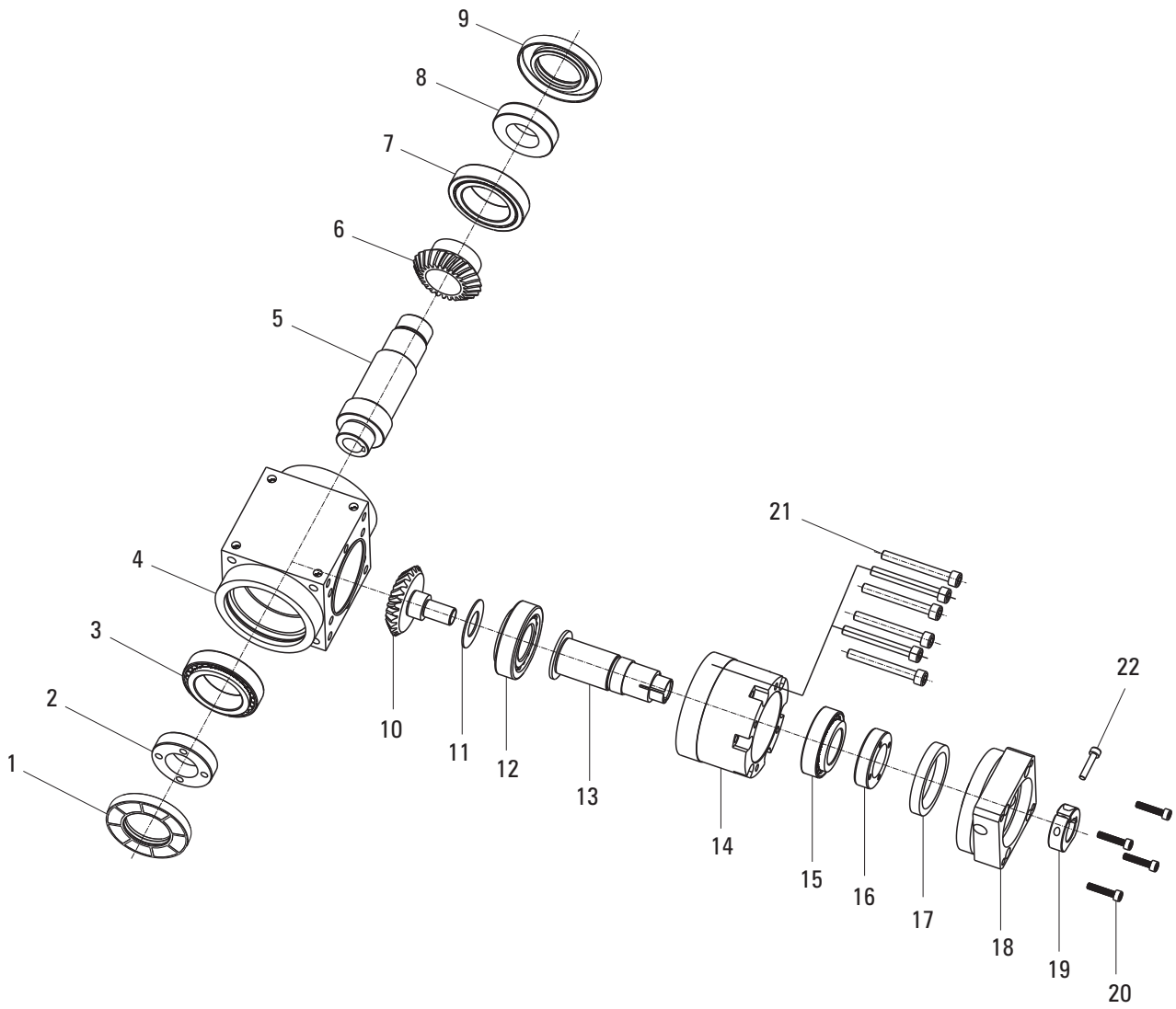
# HOW TO CHOOSE

## ■ Dimensions



# HT HIGH PRECISION SPIRAL BEVEL GEARBOXES

## HT basic structure



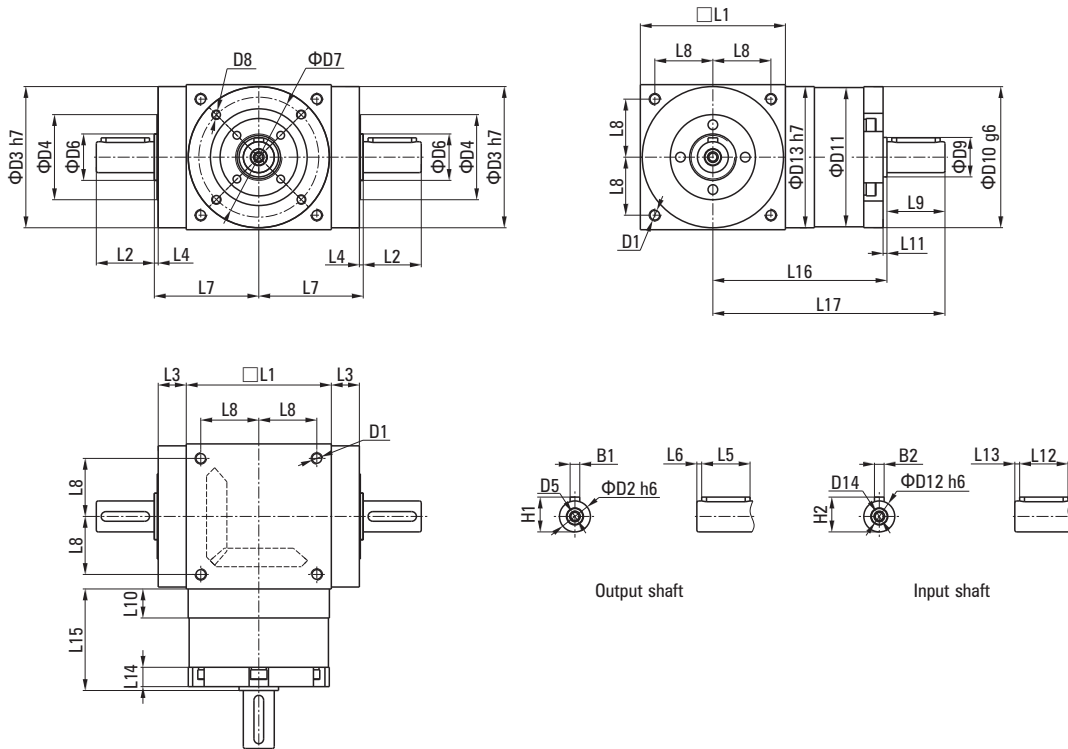
1 Oil seal	9 Oil seal	17 Oil seal
2 Lock nut	10 Input bevel gear	18 Input flange
3 Bearing	11 Shim ring	19 Locker
4 Output casing	12 Bearing	20 Inner hex screw
5 Hollow shaft	13 Input shaft	21 Inner hex screw
6 Output bevel gear	14 Input casing	22 Inner hex screw
7 Bearing	15 Bearing	
8 Lock nut	16 Lock nut	

# HT HIGH PRECISION SPIRAL BEVEL GEARBOXES

## Performance table

Specifications		Series	Reduction ratio	HT075	HT090	HT110	HT140
Rated output torque	Nm	1	1	45	78	150	360
			1.5	45	78	150	360
			2	42	68	150	330
			3	33	54	120	270
			4	28	48	100	224
		2	5	25	40	85	196
			7	12	33	91	91
			10	28	68	150	208
			15	33	54	120	270
			20	28	48	100	224
			25	25	40	85	196
			35	25	40	85	196
			50	25	40	85	196
			Maximum acceleration torque	Nm	1,2	1~50	1.5 times rated output torque
Maximum acceleration input speed	rpm	1	1~5	6500	5500	4500	3500
		2	7~50	8000	6000	6000	6000
Standard back gap	arcmin	1	1~5	≤6	≤6	≤6	≤6
		2	7~50	≤8	≤8	≤8	≤8
Allowable radial force output shaft d2	N	1,2	1~50	1100	1700	2700	4800
Allowable axial load output shaft d2	N	1,2	1~50	550	850	1350	2400
Service life	hr	1,2	1~50	20000 *			
Efficiency	%	1	1~5	≥98%			
		2	7~50	≥94%			
weight (FH)	Kg	1	1~5	4.1	6.7	11.4	18.9
		2	7~50	4.6	7.7	13.6	22.4
Service temperature	°C	1,2	1~50	-10°C~90°C			
Lubrication	-	1,2	1~50	Synthetic grease			
Degree of protection	-	1,2	1~50	IP65			
Installation direction	-	1,2	1~50	Any direction			
Noise value (n1=1500rpm, 载No load)	dB(A)	1,2	1~50	≤72	≤76	≤77	≤78
Moment of inertia	kg·cm <sup>2</sup>	1	1	1.3	3.14	7.62	23.54
			1.5	1.15	2.8	6.65	19.34
			2	1.1	2.68	6.23	17.72
			3	1.09	2.64	6.08	17.16
			4	1.08	2.63	6.05	17.03
		2	5	1.08	2.63	6.04	16.99
			7	0.15	0.5	2.79	2.79
			10	0.15	0.5	2.8	2.8
			15	0.15	0.5	2.8	2.8
			20	0.15	0.5	2.8	2.8
			25	0.15	0.5	2.8	2.8
			35	0.15	0.5	2.79	2.79
			50	0.15	0.5	2.79	2.79

## Dimensions



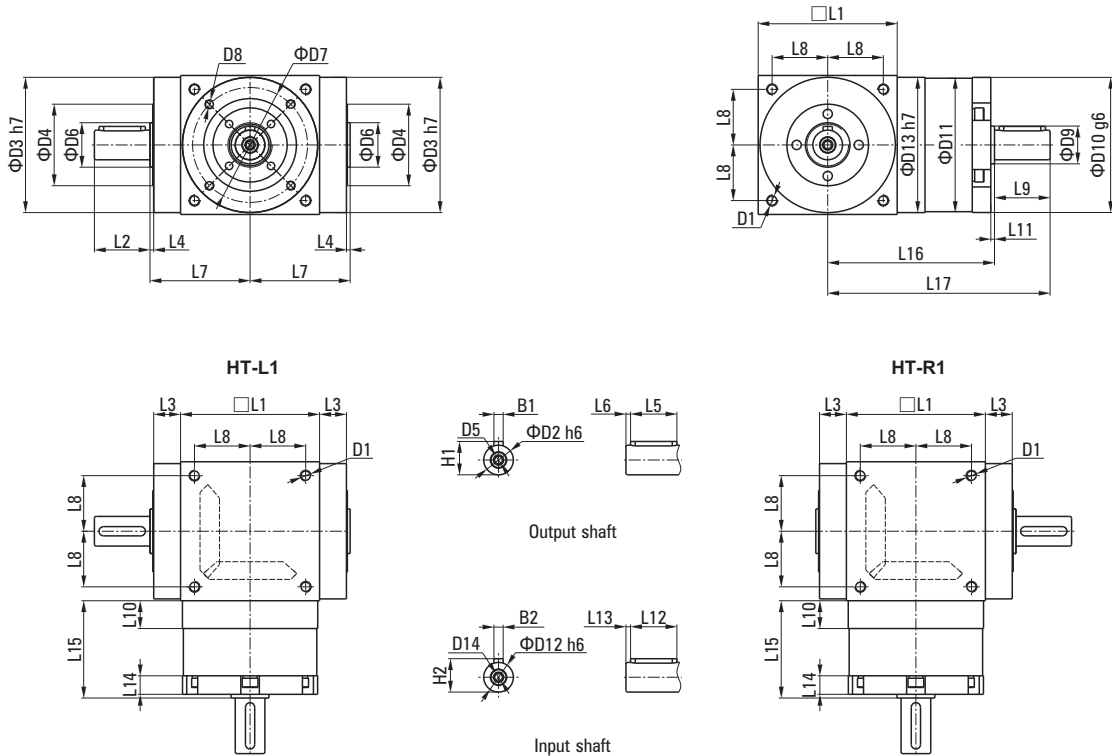
## Performance table (i = 1~5)

Unit: mm

Size	HT075-L	HT090-L	HT110-L	HT140-L
D1	M6	M6	M8	M10
D2 h6	16	18	22	32
D3 h7	73	88	108	135
D4	44	47	65	75
D5	M5	M5	M8	M12
D6	22	28	35	48
D7	62	76	95	92
D8	4×M5×L8	4×M5×L10	6×M6×L12	6×M6×L12
D9	20.4	25.8	35.8	45
D10 g6	72.9	87	107	107
D11	72	86	106	106
D12 h6	16	18	22	32
D13 h7	73	88	108	135
D14	M5	M5	M8	M12
L1	75	90	110	140
L2	30	35	40	50
L3	14.5	15	15	15
L4	2	2	2	2
L5	25	28	32	45
L6	2.5	3.5	4	2.5
L7	54	62	72	87
L8	30	36	44	55
L9	30	35	40	50
L10	15	15	15	15
L11	2	2	2	2
L12	25	28	32	32
L13	2.5	3.5	4	2.5
L14	10	11	8	10
L15	52.5	53	60	60
L16	90	100	115	130
L17	120	135	155	180
B1	5	6	6	10
B2	5	6	6	10
H1	18	20.5	24.5	35
H2	18	20.5	24.5	35

# HT-L1/R1 SERIES

## Dimensions



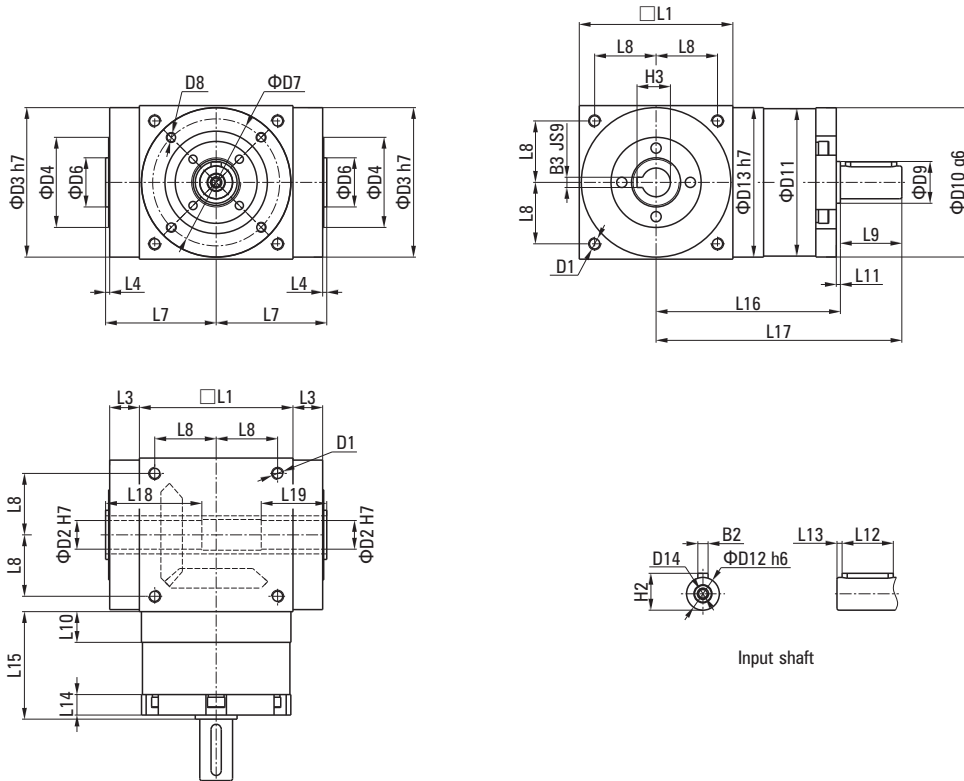
## Performance table (i = 1~5)

Unit: mm

Size	HT075-L1/R1	HT090-L1/R1	HT110-L1/R1	HT140-L1/R1
D1	M6	M6	M8	M10
D2 h6	16	18	22	32
D3 h7	73	88	108	135
D4	44	47	65	75
D5	M5	M5	M8	M12
D6	24	28	35	48
D7	62	76	95	92
D8	4×M5×L8	4×M5×L10	6×M6×L12	6×M6×L12
D9	20.4	25.8	35.8	45
D10 g6	72.9	87	107	107
D11	72	86	106	106
D12 h6	16	18	22	32
D13 h7	73	88	108	135
D14	M5	M5	M8	M12
L1	75	90	110	140
L2	30	35	40	50
L3	14.5	15	15	15
L4	2	2	2	2
L5	25	28	32	45
L6	2.5	3.5	4	2.5
L7	54	62	72	87
L8	30	36	44	55
L9	30	35	40	50
L10	15	15	15	15
L11	2	2	2	2
L12	25	28	32	45
L13	2.5	3.5	4	2.5
L14	10	11	8	10
L15	52.5	53	60	60
L16	90	100	115	130
L17	120	135	155	180
B1	5	6	6	10
B2	5	6	6	10
H1	18	20.5	24.5	35
H2	18	20.5	24.5	35

# HT-H SERIES

## Dimensions



Input shaft

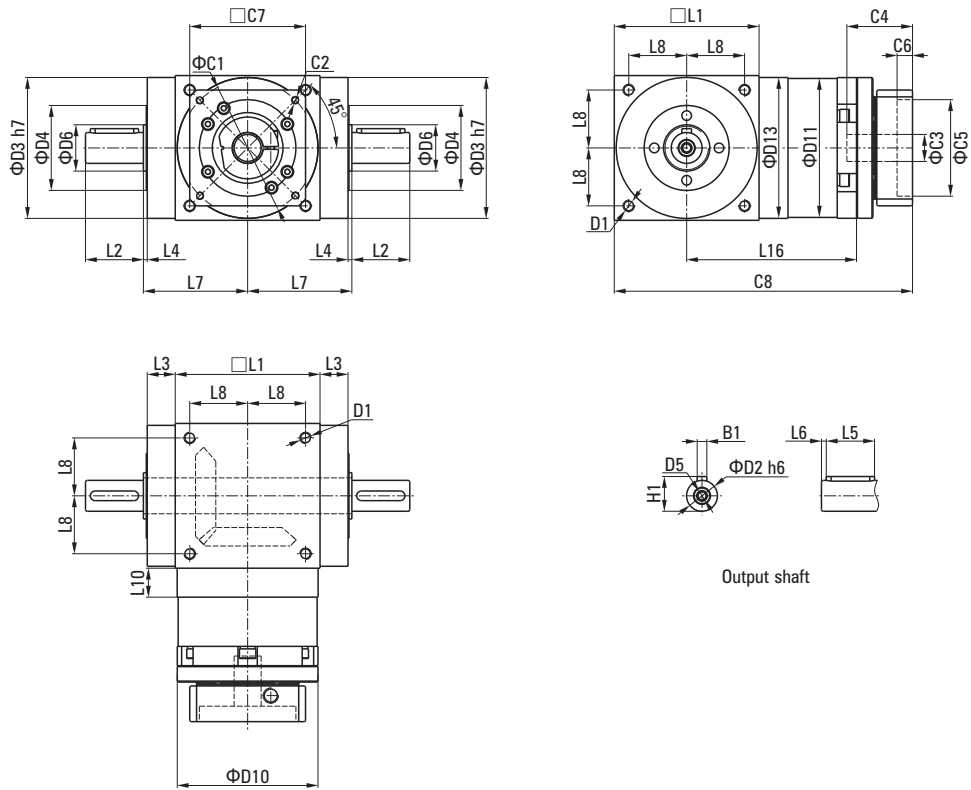
## Performance table (i = 1~5)

Unit: mm

Size	HT075-H	HT090-H	HT110-H	HT140-H
D1	M6	M6	M8	M10
D2 h7	14	18	22	32
D3 h7	73	88	108	135
D4	44	47	65	75
D6	24	28	35	48
D7	62	76	95	92
D8	4×M5×L8	4×M5×L10	6×M6×L12	6×M6×L10
D9	20.4	25.8	35.8	45
D10 g6	72.9	87	107	107
D11	72	86	106	106
D12 h6	16	18	22	32
D13 h7	73	88	108	135
D14	M5	M5	M8	M12
L1	75	90	110	140
L3	14.5	15	15	15
L4	2	2	2	2
L7	54	62	72	87
L8	30	36	44	55
L9	30	35	40	50
L10	15	15	15	15
L11	2	2	2	2
L12	25	28	32	45
L13	2.5	3.5	4	2.5
L14	10	11	8	10
L15	52.5	53	60	60
L16	90	100	115	130
L17	120	135	155	180
L18	47	52	53	70
L19	32	35	35	50
B2	5	6	6	10
B3 p9	5	6	6	10
H2	18	20.5	24.5	35
H3	16.3	20.8	24.8	35.3

# HT-FL SERIES

## Dimensions

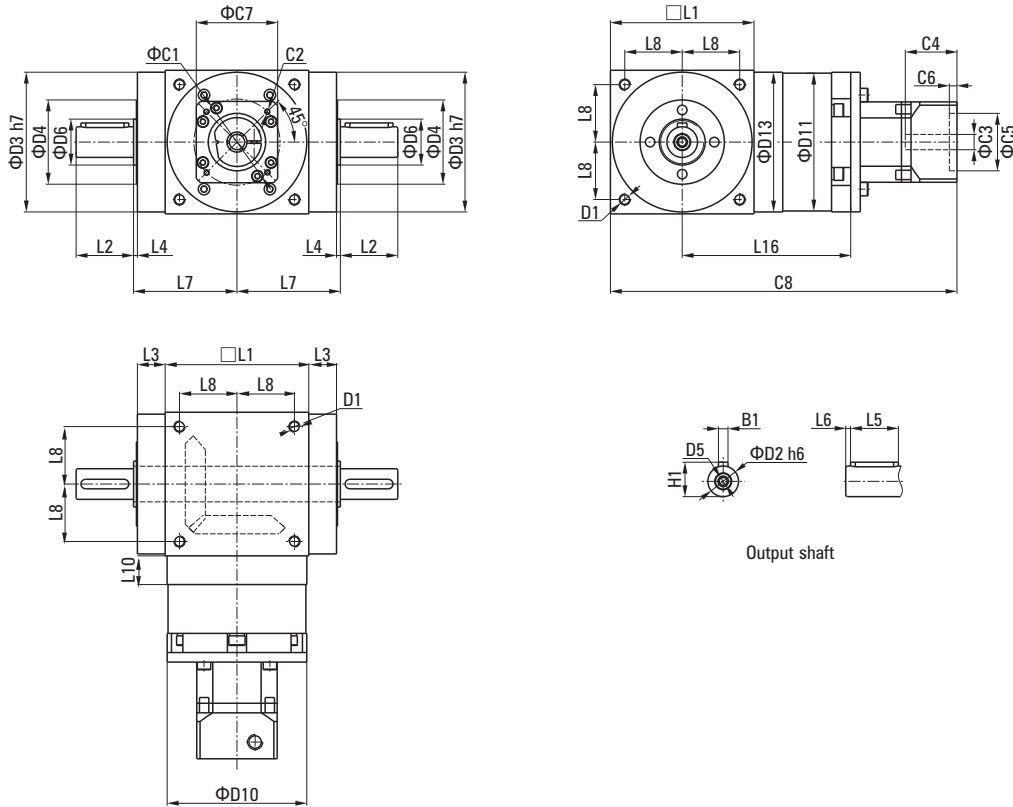


## Performance table (i=1~5)

Unit: mm

Size	HT075-FL	HT090-FL	HT110-FL	HT140-FL
D1	M6	M6	M8	M10
D2 h6	16	18	22	32
D3 h7	73	88	108	135
D4	44	47	65	75
D5	M5	M5	M8	M12
D6	24	28	35	48
D10	72.9	87	107	107
D11	72	86	106	106
D13	73	88	108	135
L1	75	90	110	140
L2	30	35	40	50
L3	14.5	15	15	15
L4	2	2	2	2
L5	25	28	32	45
L6	2.5	3.5	4	2.5
L7	54	62	72	87
L8	30	36	44	55
L10	15	15	15	15
L16	88	98	113	128
C1*	70	90	130	145
C2*	M4	M6	M8	M8
C3*	≤ 14	≤ 19	≤ 24	≤ 24
C4*	34	49	59	59
C5*	50	70	110	110
C6*	8	4	15	8
C7*	60	90	130	100
C8*	117	170	208.5	245
B1	5	6	6	10
H1	18	20.5	24.5	35

## Dimensions



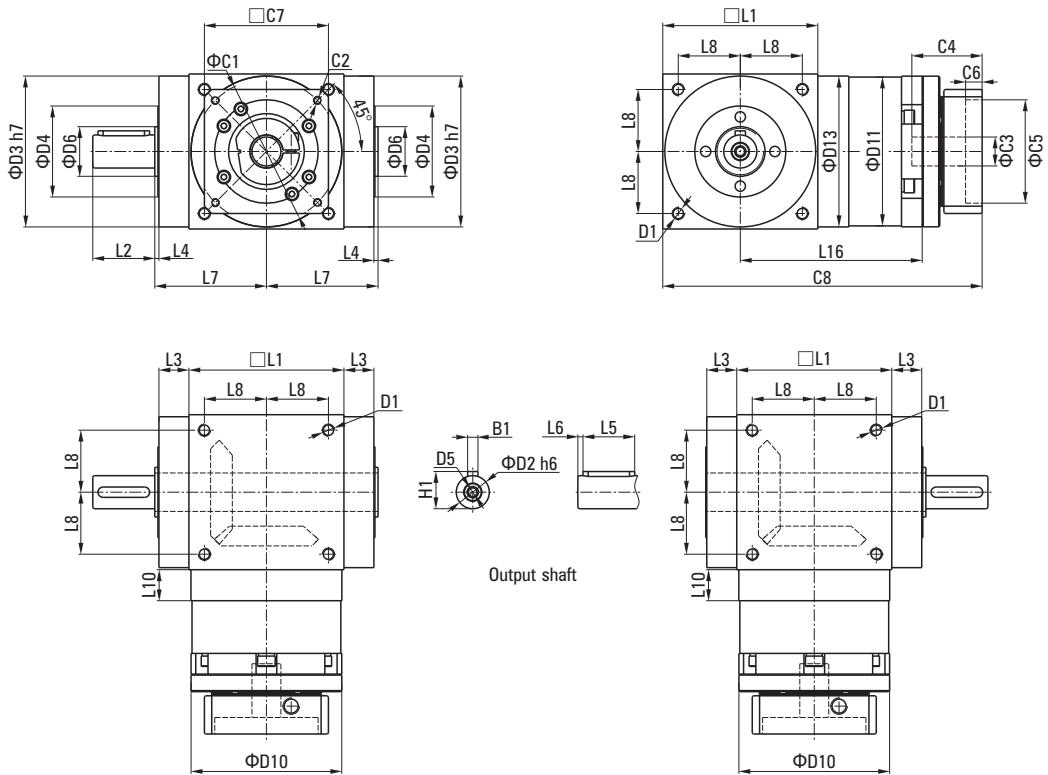
## Performance table (i = 7~50)

Unit: mm

Size	HT075-FL	HT090-FL	HT110-FL	HT140-FL
D1	M6	M6	M8	M10
D2 h6	16	18	22	32
D3 h7	73	88	108	135
D4	44	47	65	75
D5	M5	M5	M8	M12
D6	24	28	35	48
D10	72.9	87	107	107
D11	72	86	106	106
D13	73	88	108	135
L1	75	90	110	140
L2	30	35	40	50
L3	14.5	15	15	15
L4	2	2	2	2
L5	25	28	32	45
L6	2.5	3.5	4	2.5
L7	54	62	72	87
L8	30	36	44	55
L10	15	15	15	15
L16	88	118	113	128
C1*	45	70	90	145
C2*	M3	M5	M5	M8
C3*	≤8	≤14	≤19	≤22
C4*	27	37.5	44	59
C5*	30	50	70	110
C6*	4	8	7	8
C7*	42.5	60	80	130
C8*	181	213	255	305.5
B1	5	6	6	10
H1	18	20.5	24.5	35

# HT-FL1/FR1 SERIES

## Dimensions



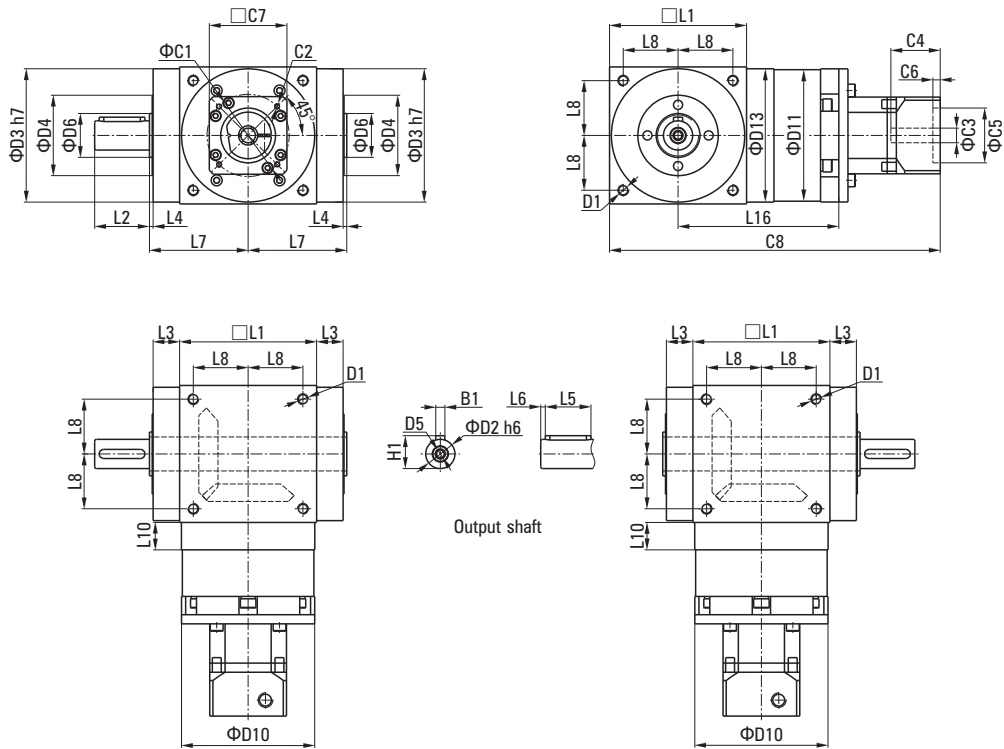
## Performance table (i=1~5)

Unit: mm

Size	HT075-FL1/FR1	HT090-FL1/FR1	HT110-FL1/FR1	HT140-FL1/FR1
D1	M6	M6	M8	M10
D2 h6	16	18	22	32
D3 h7	73	88	108	135
D4	44	47	65	75
D5	M5	M5	M8	M12
D6	24	28	35	48
D10	72.9	87	107	107
D11	72	86	106	106
D13	73	88	108	135
L1	75	90	110	140
L2	30	35	40	50
L3	14.5	15	15	15
L4	2	2	2	2
L5	25	28	32	45
L6	2.5	3.5	4	2.5
L7	54	62	72	87
L8	30	36	44	55
L10	15	15	15	15
L16	88	98	113	128
C1*	70	90	130	145
C2*	M4	M6	M8	M8
C3*	≤14	≤19	≤24	≤24
C4*	34	49	59	48
C5*	50	70	110	95
C6*	8	4	15	5
C7*	60	90	130	100
C8*	117	170	208.5	245
B1	5	6	6	10
H1	18	20.5	24.5	35

# HT-FL1/FR1 SERIES

## Dimensions



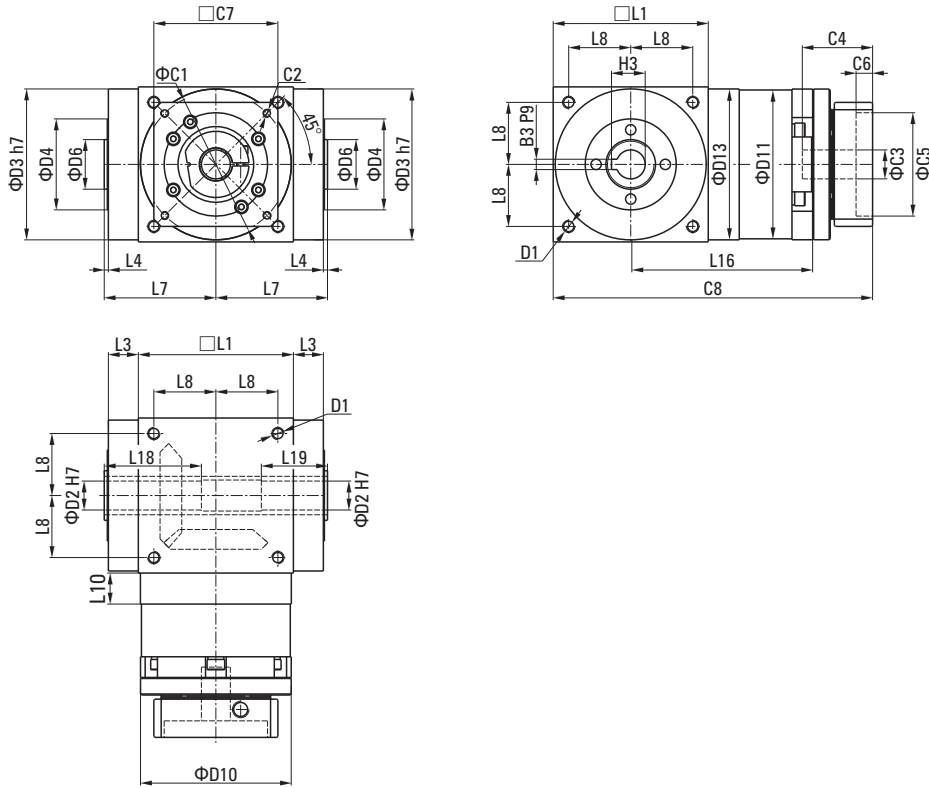
## Performance table (i = 7~50)

Unit: mm

Size	HT075-FL1/FR1	HT090-FL1/FR1	HT110-FL1/FR1	HT140-FL1/FR1
D1	M6	M6	M8	M10
D2 h6	16	18	22	32
D3 h7	73	88	108	135
D4	44	47	65	75
D5	M5	M5	M8	M12
D6	24	28	35	48
D10	72.9	87	107	107
D11	72	86	106	106
D13	73	88	108	135
L1	75	90	110	140
L2	30	35	40	50
L3	14.5	15	15	15
L4	2	2	2	2
L5	25	28	32	45
L6	2.5	3.5	4	2.5
L7	54	62	72	87
L8	30	36	44	55
L10	15	15	15	15
L16	88	118	113	128
C1*	45	70	90	145
C2*	M3	M5	M5	M8
C3*	≤8	≤14	≤19	≤24
C4*	27	37.5	44	59
C5*	30	50	70	110
C6*	4	8	7	8
C7*	42.5	60	80	130
C8*	181	213	255	305.5
B1	5	6	6	10
H1	18	20.5	24.5	35

# HT-FH SERIES

## Dimensions

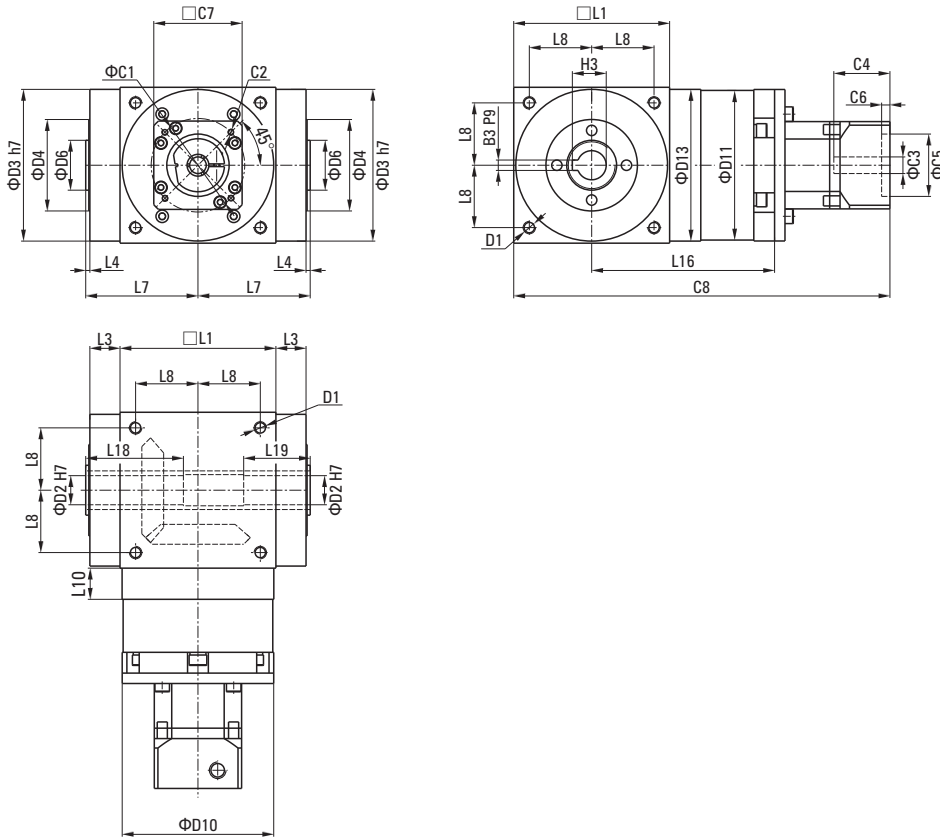


## Performance table (i=1~5)

Unit: mm

尺寸 Size	HT075-FH	HT090-FH	HT110-FH	HT140-FH
D1	M6	M6	M8	M10
D2 H7	14	18	22	32
D3 h7	73	88	108	135
D4	44	47	65	75
D6	24	28	35	48
D10	72.9	87	107	107
D11	72	86	106	106
D13	73	88	108	135
L1	75	90	110	140
L3	14.5	15	15	15
L4	2	2	2	2
L7	54	62	72	87
L8	30	36	44	55
L10	15	15	15	15
L16	88	98	113	128
L18	47	52	53	70
L19	32	35	35	50
C1*	70	90	130	145
C2*	M4	M6	M8	M8
C3*	≤14	≤19	≤24	≤24
C4*	34	49	59	48
C5*	50	70	110	95
C6*	8	4	15	5
C7*	60	90	130	100
C8*	117	170	208.5	245
B3	5	6	6	10
H3	16.3	20.8	24.8	35.3

## Dimensions



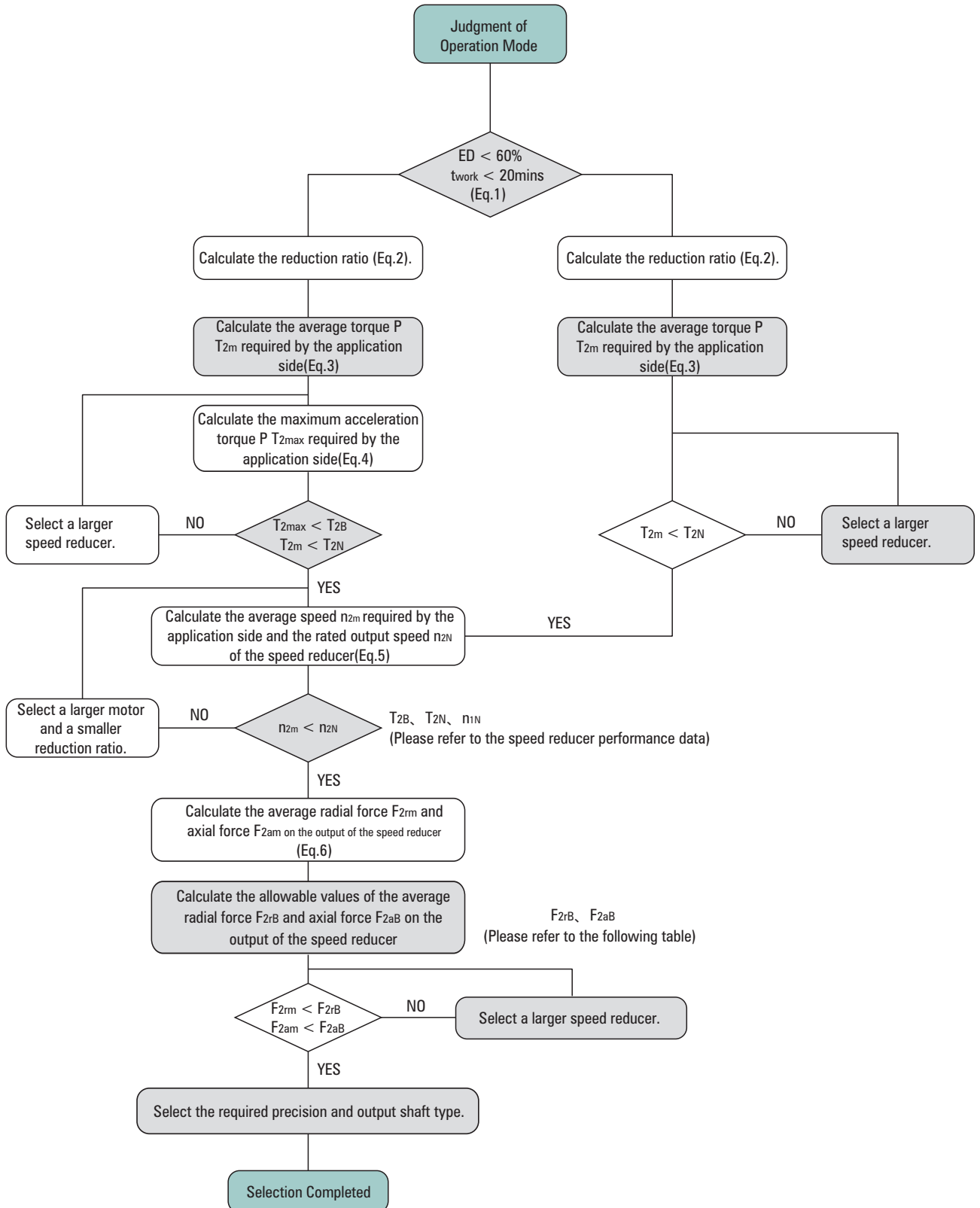
## Performance table (i = 7~50)

Unit: mm

Size	HT075-FH	HT090-FH	HT110-FH	HT140-FH
D1	M6	M6	M8	M10
D2 h7	14	18	22	32
D3 h7	73	88	108	135
D4	44	47	65	75
D6	24	28	35	48
D10	72.9	87	107	107
D11	72	86	106	106
D13	73	88	108	135
L1	75	90	110	140
L3	14.5	15	15	15
L4	2	2	2	2
L7	54	62	72	87
L8	30	36	44	55
L10	15	15	15	15
L16	88	118	113	128
L18	47	52	53	70
L19	32	35	35	50
C1*	45	70	90	145
C2*	M3	M5	M5	M8
C3*	≤8	≤14	≤19	≤22
C4*	27	37.5	44	59
C5*	30	50	70	110
C6*	4	8	7	8
C7*	42.5	60	80	130
C8*	181	213	255	305.5
B3 P9	5	6	6	10
H3	16.3	20.8	24.8	35.3

# HOW TO CHOOSE

## Dimensions



# HOW TO CHOOSE

## ■ Dimensions

$$1. ED = \frac{t_a + t_c + t_d}{t_{cycle}} \times 100\%, \quad t_{work} = t_a + t_c + t_d$$

a. Acceleration, c. Constant velocity (Eq.1)  
Subscript description: b. Slow down, p. Stop

$$2. i \approx \frac{n_m}{n_{work}}$$

$n_m$  Motor output speed (Eq.2)  
 $n_{work}$  Actual application speed

$$3. T_{2m} = 3 \sqrt{\frac{n_{2a} \times t_a \times T_{2a}^3 + n_{2c} \times t_c \times T_{2c}^3 + n_{2d} \times t_d \times T_{2d}^3}{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}}$$

$$4. T_{2max} = T_{mB} \times i \times K_s \times \eta$$
 (Eq.3)

●  $K_s$  Load factor

$K_s$	Number of cycles/hour
1.0	0~1000
1.1	1000~1500
1.3	1500~2000
1.6	2000~3000
1.8	3000~5000
2.0	5000~9000
2.05	9000~10000
Not recommended	Above 10000

$T_{mB}$  Maximum output torque of the motor (Eq.4)

$\eta$  Reducer operating efficiency

$$5. n_{2a} = n_{2d} = \frac{1}{2} \times n_{2c}$$

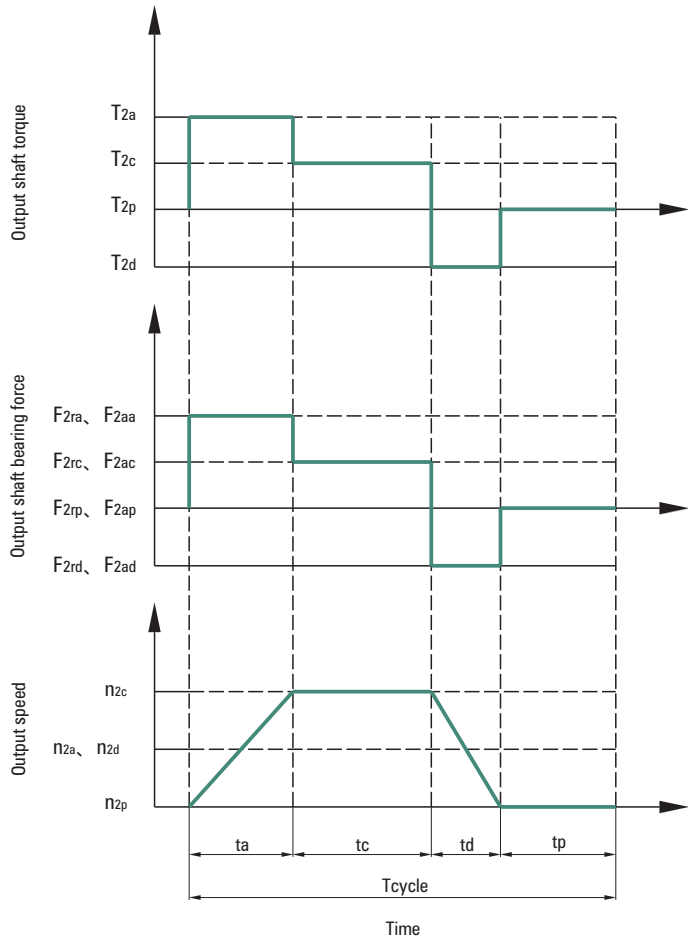
$$n_{2m} = \frac{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}{t_a + t_c + t_d}$$

$$n_{2N} = \frac{n_{1N}}{i}$$

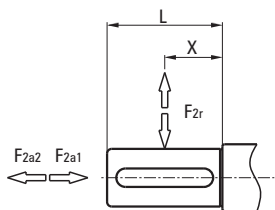
$$6. F_{2rm} = 3 \sqrt{\frac{n_{2a} \times t_a \times T_{2ra}^3 + n_{2c} \times t_c \times T_{2rc}^3 + n_{2d} \times t_d \times T_{2rd}^3}{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}}$$

$$F_{2am} = 3 \sqrt{\frac{n_{2a} \times t_a \times T_{2aa}^3 + n_{2c} \times t_c \times T_{2ac}^3 + n_{2d} \times t_d \times T_{2ad}^3}{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}}$$

## ■ Dimensions



## ■ Dimensions



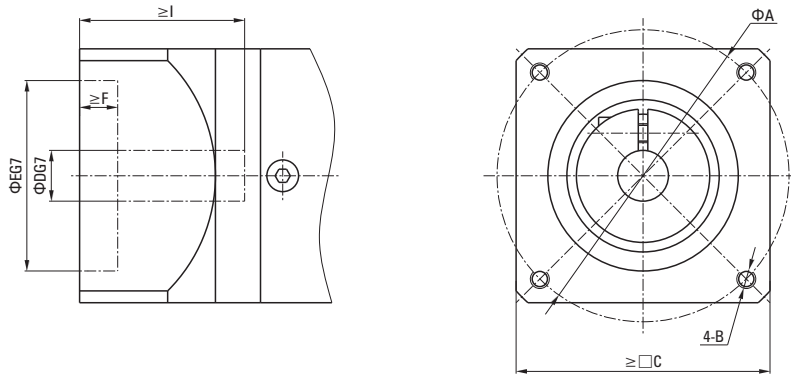
$F_{2r}$  Radial force  
 $F_{2a}$  Axial force

● Allowable radial and axial forces on the output shaft of the gearbox  
The maximum radial and axial force that the output shaft of the gearbox can withstand depends on the design of the internal support bearing.

The HengYao reducer adopts large-sized bearings and a large span design, which can withstand larger radial and axial loads.

# SERVO MOTOR CORRESPONDING SIZE TABLE

## Gearbox input



## Input flange and servo motor matching table

Motor power (W)	Motor size	Installation distance	Threaded hole	Frame	Aperture	Stop	Stop depth	Shaft extension
		A	B	C	D	E	F	I
50	T1	45	M3	38	8	30	3	25
	T2	46	M4	40	6	30	3	25
	T3	47	M4	40	8	30	3	25
	T4	48	M3	42	8	30	3	25
100	T1	45	M3	38	8	30	3	25
	T2	46	M4	40	8	30	3	25
	T3	46	M4	40	8	30	3	25
	T4	48	M3	42	8	30	3	25
200	T1	70	M4	60	11	50	3	30
	T2	70	M5	60	14	50	3	30
	T3	70	M5	60	14	50	3	30
400	T1	70	M4	60	14	50	3	30
	T2	70	M5	60	14	50	3	30
	T3	70	M5	60	14	50	3	30
750	T1	90	M5	80	19	70	3	35
	T2	90	M6	80	16	70	3	40
	T3	90	M6	80	19	70	3	40
	T4	100	M6	86	16	80	3	35
	T5	145	M8	130	19	110	6	58
	T6	100	M6	86	19	80	3	40
1000	T1	100	M6	90	19	80	3	55
	T2	115	M6	100	24	95	3	45
	T3	115	M8	100	24	95	5	45
	T4	145	M8	130	22	110	6	58
	T5	145	M8	130	22	110	6	70
	T6	115	M8	100	22	95	5	45
	T7	145	M8	130	24	110	3	55
1500	T1	115	M8	100	19	95	3	55
	T2	115	M6	100	24	95	3	45
	T3	115	M8	100	24	95	3	45
	T4	145	M8	130	22	110	6	58
	T5	145	M8	130	22	110	6	70
	T6	115	M8	100	22	95	5	45
	T7	145	M8	130	24	110	3	55

# SERVO MOTOR CORRESPONDING SIZE TABLE

## Input flange and servo motor matching table

Motor power (W)	Motor size	Installation distance	Threaded hole	Frame	Aperture	Stop	Stop depth	Shaft extension
		A	B	C	D	E	F	I
2000	T1	115	M8	100	19	95	3	55
	T2	115	M6	100	24	95	3	45
	T3	115	M8	100	24	95	3	45
	T4	145	M8	130	22	110	6	58
	T5	200	M12	175	35	114.3	10	80
	T6	115	M8	100	22	95	5	45
2500	T1	115	M8	100	19	95	3	55
	T2	115	M6	100	24	95	3	45
3000	T1	130	M8	120	22	110	3	55
	T2	145	M8	130	28	110	6	65
	T4	145	M8	130	24	110	6	65
	T5	200	M12	175	35	114.3	10	80
	T7	200	M12	175	35	114.3	10	65
3500	T1	130	M8	120	22	110	3	55
	T2	145	M8	130	28	110	3	63
	T5	200	M12	175	35	114.3	10	80
4000	T1	145	M8	130	24	110	6	65
	T2	145	M8	130	28	110	6	65
	T5	200	M12	175	35	114.3	10	80
	T6	200	M12	175	42	114.3	10	113
4500	T1	145	M8	130	24	110	6	65
	T5	200	M12	175	35	114.3	10	80
	T6	200	M12	175	42	114.3	10	113
	T7	200	M12	175	35	114.3	10	65
5000	T1	145	M8	130	24	110	6	65
	T2	145	M8	130	28	110	6	65
	T5	200	M12	175	35	114.3	10	80
	T7	200	M12	175	35	114.3	10	65

1) If an oil-seal is not present and the size is different, attachment of the oil-seal may correspond to special order, in some cases.

2) If the motor shaft is of D-cut and taper type, it corresponds to a special order.

3) Out-of-standard may correspond to a special order in some cases. For details, contact us.

# ASSEMBLY

## Assembly procedure

If a customer personally assembles the servo motor and reducer please use the following tip. The reducer flange to which the servo motor is attached has different dimensions based on the motor specified. Therefore, assembly may be impossible for some motor. Make sure the correct motor is specified before ordering the reducer.

Spec. in case of assembling a motor without key

- ① Take off the rubber cap, turn the input shaft, and match the head of the bolt to the hole of the rubber cap. Make sure that the set bolt is loosened.
- ② Gradually put the motor shaft into the input shaft (Ensure that it is smoothly put in without iam.)  
Be careful not to be inserted with the motor tilted.
- ③ Attach the motor to the reducer and fasten the bolt with designated fastening torque. (See table 1)
- ④ Fasten the set bolt of the input shaft with designated fastening torque wrench, etc. (See table 2)
- ⑤ Put on a rubber cap. It is the end of assembling.

● Table1

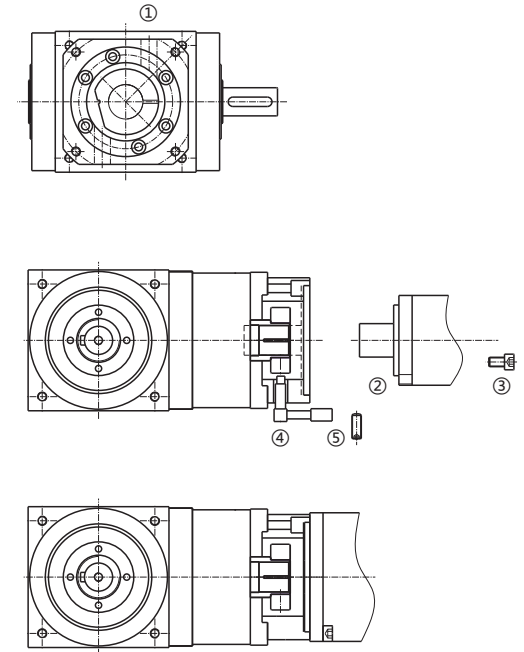
Motor combination bolt	Fastening torque	
	(N·m)	(kgf·cm)
M3	1.0	10
M4	3.0	30
M5	5.8	60
M6	9.8	100
M8	19.6	200
M10	39.2	400
M12	68.6	700
M16	168.0	1650

● Table2

Combination bolt	Fastening torque	
	(N·m)	(kgf·cm)
M3	1.5	15
M4	3.5	35
M5	7.1	71
M6	12	120
M8	30	300
M10	60	612

You can assemble the motor with keyway like above when take off the key. There is no risk of dislocation.

● HT series schematic diagram



## Reducer assembly

Jointing with reducer In case of jointing a reducer with the device, make sure that the combining side is plane without inconsistency, and when assemble reducer onto equipment, ensuring assembly surface smooth and without burr. (See table 3)

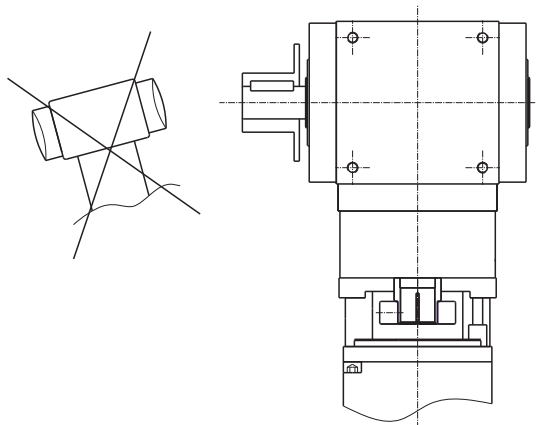
● Table 3

Reducer combination bolt	Fastening torque	
	(N·m)	(kgf·cm)
M5	5.8	60
M6	9.8	100
M8	19.6	200
M10	39.2	400
M12	68.6	700
M16	16.8	1650

## Connection to the output shaft

Cautions:

1. When assemble a coupling, pulley, etc. onto the output shaft, make sure that excessive axial load not be given to the output shaft.
2. In case of strongly hitting the shaft with a hammer, the shaft inlet or the inside of the reducer may be damaged, therefore it shall be prohibited.
3. If the shaft or key of a coupling assembled is loosed, it may cause carbonization, so be careful when assembling.
4. For assembling of a coupling, fix the key with a set bolt.
5. Please adjust shaft centre carefully in connecting.





## **HIGH PRECISION SPIRAL BEVEL GEARBOXES**

---

**Deputy Procurement Manager:Ming**  
Tel: +(86)18067150331  
E-mail: info@hy-motor.com  
Web: www.hy-motor.com

**NINGBO HENGYAO TRADING CO.,LTD.**  
Add: No. 7, Qianzhai Road, Cixi City, Ningbo City, Zhejiang Province.