

## EJP 051 1-Stage Specifications

Frame Size	051								
Ratio	Unit	Note	5	6	7	8	9	10	15
Nominal Output Torque	[Nm]	--	67	75	78	82	85	87	90
Maximum Acceleration Torque	[Nm]	--	90	99	110	110	110	120	120
Emergency Stop Torque	[Nm]	--	201	225	234	246	255	261	270
No Load Running Torque	[Nm]	*1	1.61						
Nominal Input Speed	[rpm]	--	2,000						
Maximum Continuous Input Speed	[rpm]	--	4,000						
Maximum Cyclic Input Speed	[rpm]	--	6,000						
Maximum Radial Load	[N]	*2	6,670						
Maximum Axial Load	[N]	*3	1,820						
Moment of Inertia ( $\leq \varnothing 14$ )	[kgcm <sup>2</sup> ]	--	1.52	1.28	1.14	1.04	0.98	0.94	0.83
Moment of Inertia ( $\leq \varnothing 19$ )	[kgcm <sup>2</sup> ]	--	1.72	1.48	1.34	1.24	1.18	1.14	1.03
Moment of Inertia ( $\leq \varnothing 28$ )	[kgcm <sup>2</sup> ]	--	2.89	2.66	2.52	2.42	2.36	2.31	2.21
Efficiency	[%]	*4	92	91	91	91	90	90	88
Torsional Rigidity	[Nm/arcmin]	--	7.6						
Maximum Torsional Backlash (Standard)	[Arc-min]	--	$\leq 6$						
Maximum Torsional Backlash (Zero)	[Arc-min]	--	$\leq 0$						
Noise Level	dB [A]	*5	$\leq 75$						
Ambient Temperature	[°C]	--	-25 ~ 100						
Permitted Housing Temperature	[°C]	--	100						
Protection Class	--	--	IP65						
Lubrication	--	--	Synthetic Oil						
Service Life	[Hours]	--	25,000						
Weight	[kg]	*6	8.2						

\*1) Torque at no load applied to the input shaft at 2,000 rpm

\*2) The maximum radial load the gearbox can accept

\*3) The maximum axial load the gearbox can accept

\*4) The efficiency at the nominal output torque rating

\*5) Measured with no load applied to the input shaft at 2,000 rpm

\*6) Weight may vary slightly between models

## EJP 051 1-Stage Specifications

Frame Size	051							
Ratio	Unit	Note	20	25	30	40	50	60
Nominal Output Torque	[Nm]	--	88	89	86	81	78	75
Maximum Acceleration Torque	[Nm]	--	120	120	110	110	100	100
Emergency Stop Torque	[Nm]	--	264	267	258	243	234	225
No Load Running Torque	[Nm]	*1	1.61					
Nominal Input Speed	[rpm]	--	2,000					
Maximum Continuous Input Speed	[rpm]	--	4,000					
Maximum Cyclic Input Speed	[rpm]	--	6,000					
Maximum Radial Load	[N]	*2	6,670					
Maximum Axial Load	[N]	*3	1,820					
Moment of Inertia (≤ Ø14)	[kgcm <sup>2</sup> ]	--	0.79	0.77	0.76	0.75	0.75	0.75
Moment of Inertia (≤ Ø19)	[kgcm <sup>2</sup> ]	--	0.99	0.97	0.96	0.95	0.95	0.95
Moment of Inertia (≤ Ø28)	[kgcm <sup>2</sup> ]	--	2.17	2.15	2.14	2.13	2.13	2.13
Efficiency	[%]	*4	85	84	80	76	73	70
Torsional Rigidity	[Nm/arcmin]	--	7.6					
Maximum Torsional Backlash (Standard)	[Arc-min]	--	≤ 6					
Maximum Torsional Backlash (Zero)	[Arc-min]	--	≤ 0					
Noise Level	dB [A]	*5	≤ 75					
Ambient Temperature	[°C]	--	-25 ~ 100					
Permitted Housing Temperature	[°C]	--	100					
Protection Class	--	--	IP65					
Lubrication	--	--	Synthetic Oil					
Service Life	[Hours]	--	25,000					
Weight	[kg]	*6	8.2					

\*1) Torque at no load applied to the input shaft at 2,000 rpm

\*2) The maximum radial load the gearbox can accept

\*3) The maximum axial load the gearbox can accept

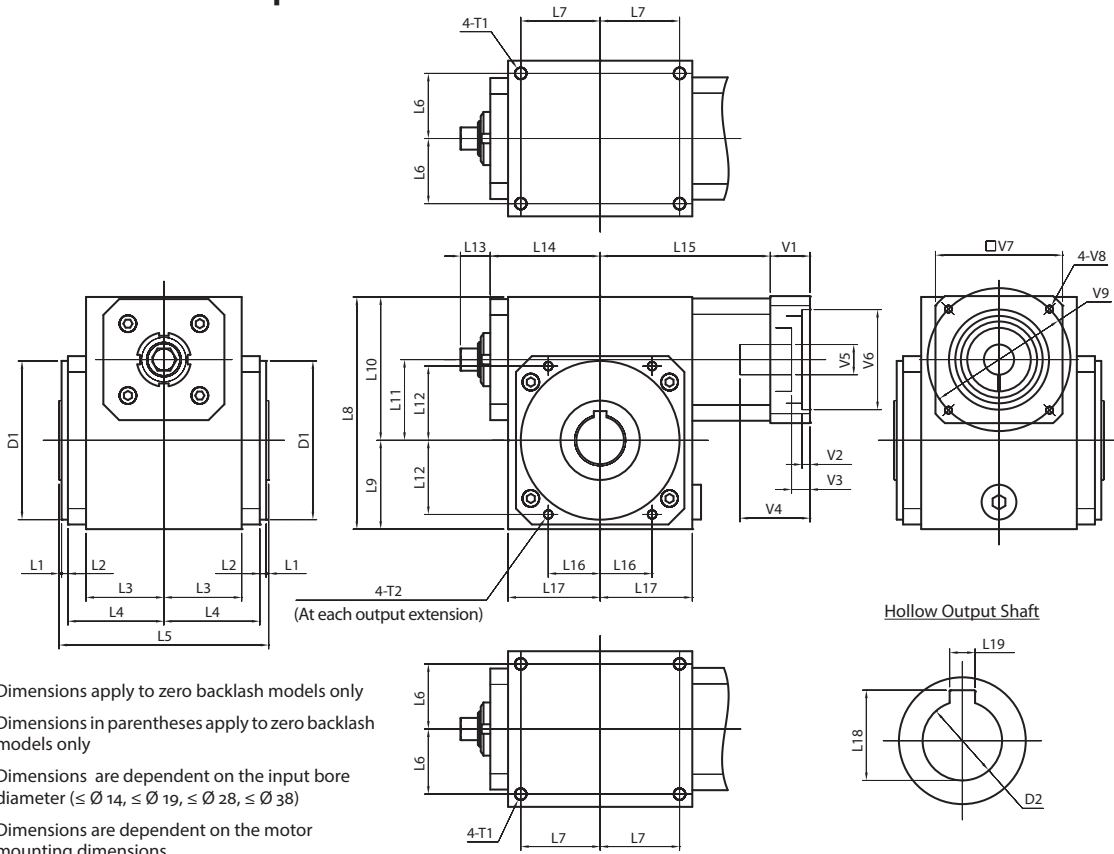
\*4) The efficiency at the nominal output torque rating

\*5) Measured with no load applied to the input shaft at 2,000 rpm

\*6) Weight may vary slightly between models

# EJP SERIES Right-angle Worm

## EJP Dimensions – Hollow Output Shaft

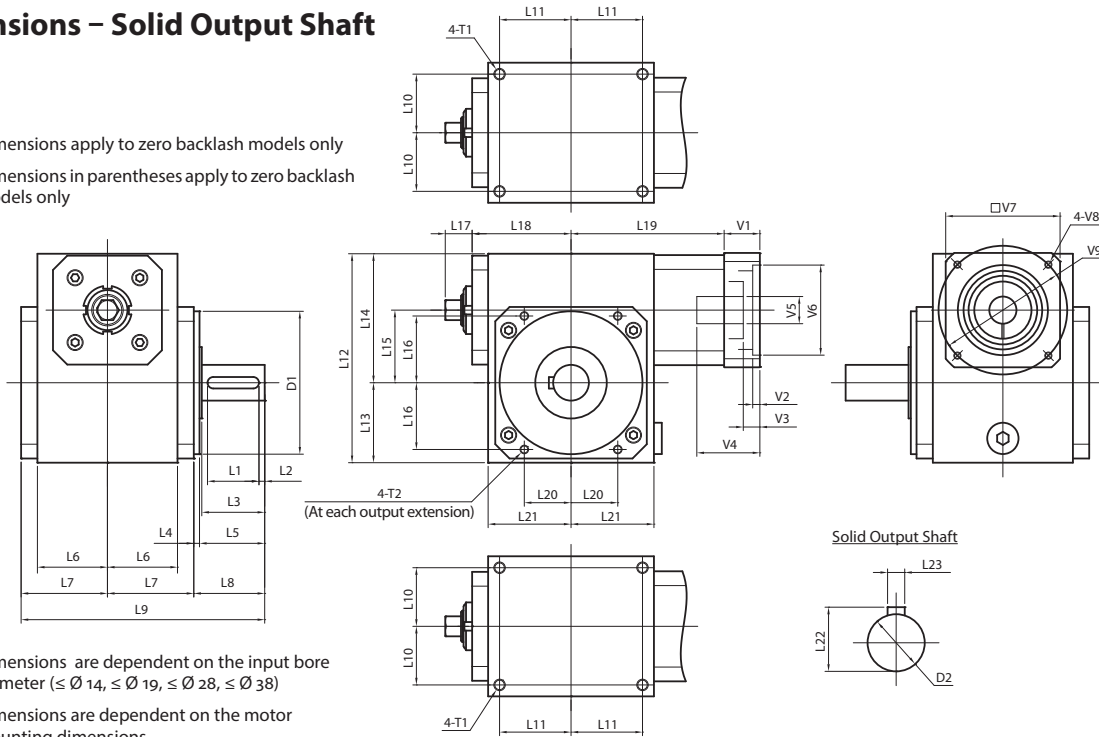


- \*1) Dimensions apply to zero backlash models only
- \*2) Dimensions in parentheses apply to zero backlash models only
- \*3) Dimensions are dependent on the input bore diameter ( $\leq \varnothing 14$ ,  $\leq \varnothing 19$ ,  $\leq \varnothing 28$ ,  $\leq \varnothing 38$ )
- \*4) Dimensions are dependent on the motor mounting dimensions

Frame Size	Unit	Note	EJP-038	EJP-051	EJP-064	EJP-076	EJP-089
L1	[mm]	--	1	1	1	2	2
L2	[mm]	--	4	4	4	4	4
L3	[mm]	--	39	49	54	73.5	90
L4	[mm]	--	51	60.5	70	94	111.5
L5	[mm]	--	112	132	148	200	234
L6	[mm]	--	32	41	44	63	80
L7	[mm]	--	42	50	68.5	79	95
L8	[mm]	--	118	146.5	181	214	252
L9	[mm]	--	45	56	73	82	100
L10	[mm]	--	73	90.5	108	132	152
L11	[mm]	--	38.1	50.8	63.5	76.2	88.9
L12	[mm]	--	34.5	46.5	57.5	64.5	80.5
L13	[mm]	*1	---	22	22	32	35
L14	[mm]	*2	63	69.5 (71)	94 (96)	110 (111)	125.5 (131)
L15	[mm]	*3	96.5 - 106.5	105 - 115	130.5 - 142.5	151 - 163	165 - 177
L16	[mm]	--	18.5	32.5	40	45.5	46.5
L17	[mm]	--	50.5	58	79	89.5	105
L18	[mm]	--	28.5	33.5	38.5	49.0	64.5
L19	[mm]	--	8	8	10	14	18
D1 (h8)	[mm]	--	$\varnothing 64$	$\varnothing 100$	$\varnothing 120$	$\varnothing 134$	$\varnothing 145$
D2 (H7)	[mm]	--	$\varnothing 25$	$\varnothing 30$	$\varnothing 35$	$\varnothing 45$	$\varnothing 60$
T1	[mm]	--	4xM8x12	4xM8x12	4xM8x12	4xM10x15	4xM10x15
T2	[mm]	--	4xM6x9	4xM6x9	4xM8x12	4xM10x15	4xM10x15
V1 ~ V9	[mm]	*4	Motor attachment dimensions are made to fit your servo motor.				

## EJP Dimensions – Solid Output Shaft

- \*1) Dimensions apply to zero backlash models only
- \*2) Dimensions in parentheses apply to zero backlash models only



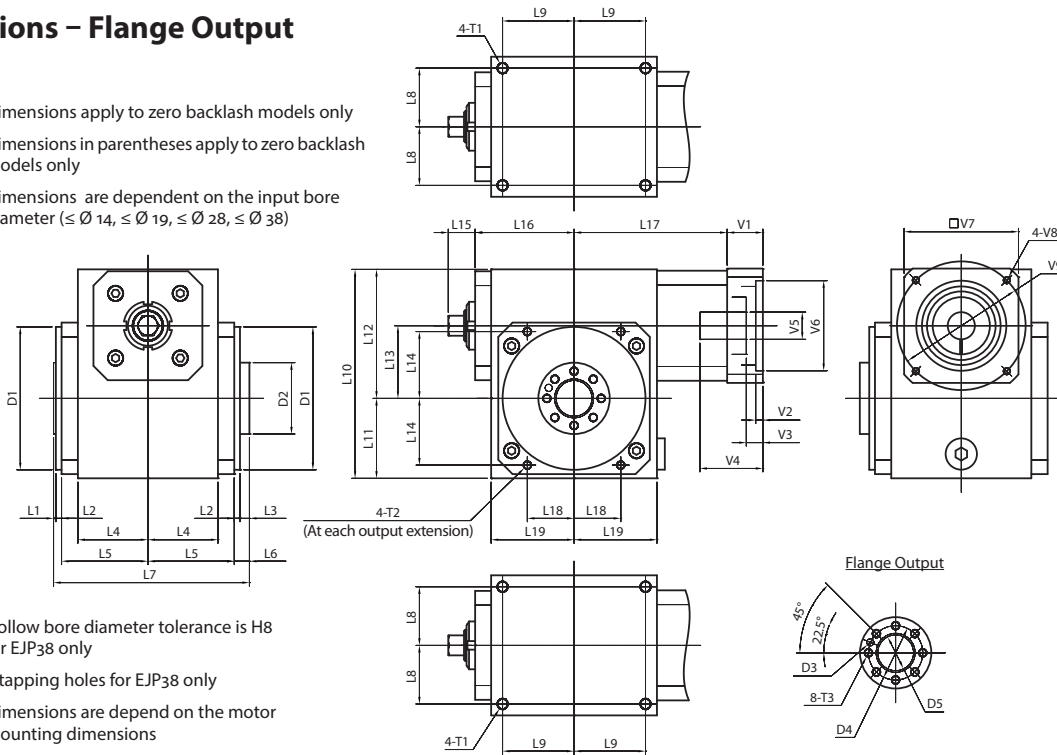
- \*3) Dimensions are dependent on the input bore diameter ( $\leq \varnothing 14$ ,  $\leq \varnothing 19$ ,  $\leq \varnothing 28$ ,  $\leq \varnothing 38$ )
- \*4) Dimensions are dependent on the motor mounting dimensions

Frame Size	Unit	Note	EJP-038	EJP-051	EJP-064	EJP-076	EJP-089
L1	[mm]	--	22	36	40	50	63
L2	[mm]	--	90	4	4	5	5
L3	[mm]	--	30	44	50	67	83
L4	[mm]	--	4	4	4	4	4
L5	[mm]	--	31	45.5	51	67	84.5
L6	[mm]	--	39	49	54	73.5	90
L7	[mm]	--	51	60.5	70	94	111
L8	[mm]	--	35	49.5	55	71	88.5
L9	[mm]	--	137	170.5	194	259	311.5
L10	[mm]	--	32	41	44	63	80
L11	[mm]	--	42	50	68.5	79	95
L12	[mm]	--	118	146.5	181	214	252
L13	[mm]	--	45	56	73	82	100
L14	[mm]	--	73	90.5	108	132	152
L15	[mm]	--	38.1	50.8	63.5	76.2	88.9
L16	[mm]	--	34.5	46.5	57.5	64.5	80.5
L17	[mm]	*1	---	22	22	32	35
L18	[mm]	*2	63	69.5 (71)	94 (96)	110 (111)	125.5 (131)
L19	[mm]	*3	96.5 - 106.5	105 - 115	130.5 - 142.5	151 - 163	165 - 177
L20	[mm]	--	18.5	32.5	40	45.5	46.5
L21	[mm]	--	50.5	58	79	89.5	105
L22	[mm]	--	22.5	28	33	38	48.5
L23	[mm]	--	6	8	8	10	14
D1 (h8)	[mm]	--	ø64	ø100	ø120	ø134	ø145
D2 (k6)	[mm]	--	ø20	ø25	ø30	ø35	ø45
T1	[mm]	--	4xM8x12	4xM8x12	4xM8x12	4xM10x15	4xM10x15
T2	[mm]	--	4xM6x9	4xM6x9	4xM8x12	4xM10x15	4xM10x15
V1 ~ V9	[mm]	*4	Motor attachment dimensions are made to fit your servo motor.				

# EJP SERIES Right-angle Worm

## EJP Dimensions – Flange Output

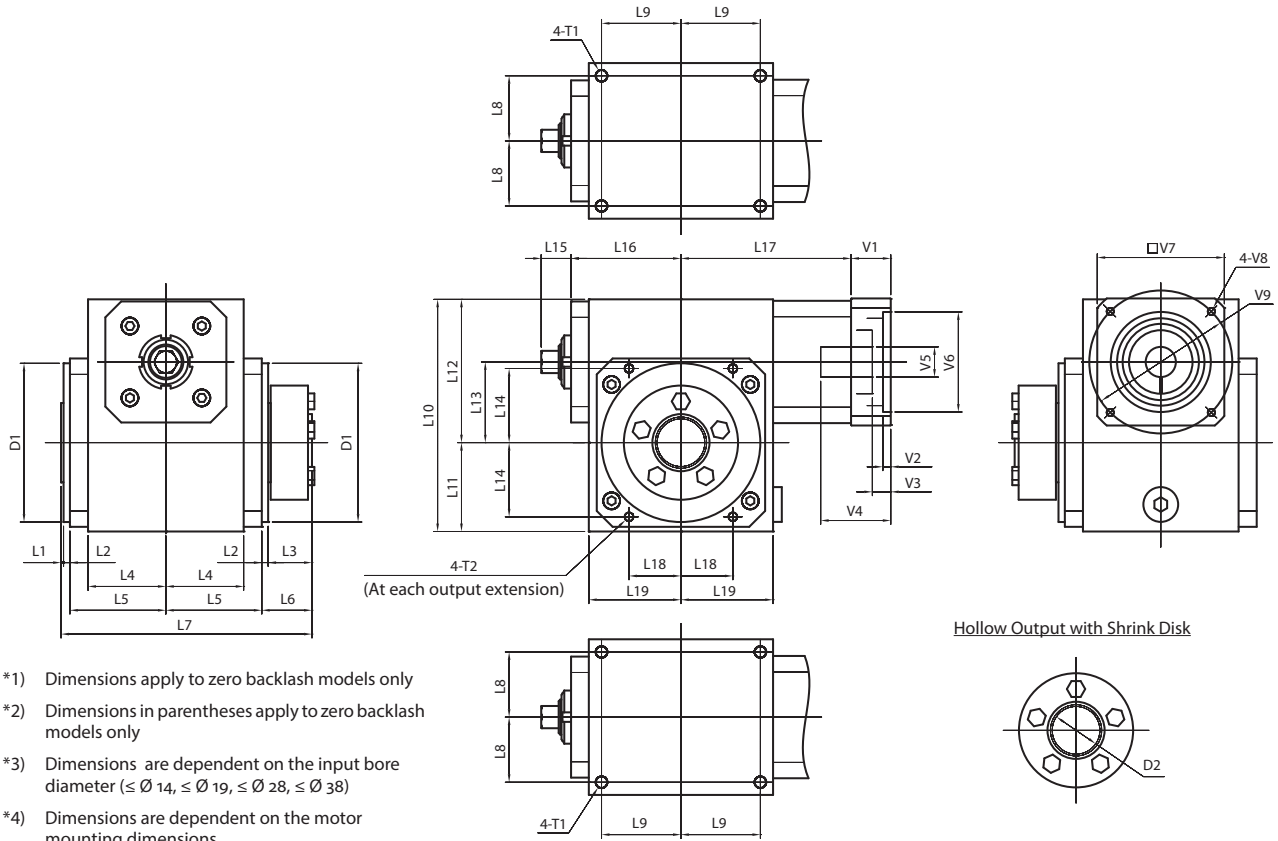
- \*1) Dimensions apply to zero backlash models only
- \*2) Dimensions in parentheses apply to zero backlash models only
- \*3) Dimensions are dependent on the input bore diameter ( $\leq \varnothing 14$ ,  $\leq \varnothing 19$ ,  $\leq \varnothing 28$ ,  $\leq \varnothing 38$ )



- \*4) Hollow bore diameter tolerance is H8 for EJP38 only
- \*5) 4 tapping holes for EJP38 only
- \*6) Dimensions are depend on the motor mounting dimensions

Frame Size	Unit	Note	EJP-038	EJP-051	EJP-064	EJP-076	EJP-089
L1	[mm]	--	1	1.5	1.5	2	2
L2	[mm]	--	4	4	4	4	4
L3	[mm]	--	6	6.5	6	7	7
L4	[mm]	--	39	49	54	73.5	90
L5	[mm]	--	51	60.5	70	94	111
L6	[mm]	--	10	10.5	10	11	11
L7	[mm]	--	117	137	153	205	239
L8	[mm]	--	32	41	44	63	80
L9	[mm]	--	42	50	68.5	79	95
L10	[mm]	--	118	146.5	181	214	252
L11	[mm]	--	45	56	73	82	100
L12	[mm]	--	73	90.5	108	132	152
L13	[mm]	--	38.1	50.8	63.5	76.2	88.9
L14	[mm]	--	34.5	46.5	57.5	64.5	80.5
L15	[mm]	*1	--	22	22	32	35
L16	[mm]	*2	63	69.5 (71)	94 (96)	110 (111)	125.5 (131)
L17	[mm]	*3	96.5 - 106.5	105 - 115	130.5 - 142.5	151 - 163	165 - 177
L18	[mm]	--	18.5	32.5	40	45.5	46.5
L19	[mm]	--	50.5	58	79	89.5	105
D1 (h8)	[mm]	--	$\varnothing 64$	$\varnothing 100$	$\varnothing 120$	$\varnothing 134$	$\varnothing 145$
D2 (h11)	[mm]	--	$\varnothing 40$	$\varnothing 50$	$\varnothing 65$	$\varnothing 80$	$\varnothing 90$
D3 (H9)	[mm]	--	$\varnothing 5 \times 10$	$\varnothing 5 \times 10$	$\varnothing 6 \times 10$	$\varnothing 8 \times 10$	$\varnothing 8 \times 10$
D4	[mm]	--	$\varnothing 28$	$\varnothing 38$	$\varnothing 50$	$\varnothing 60$	$\varnothing 70$
D5 (H7)	[mm]	*4	$\varnothing 16$	$\varnothing 25$	$\varnothing 30$	$\varnothing 35$	$\varnothing 45$
T1	[mm]	--	4xM8x12	4xM8x12	4xM8x12	4xM10x15	4xM10x15
T2	[mm]	--	4xM6x9	4xM6x9	4xM8x12	4xM10x15	4xM10x15
T3	[mm]	*5	4xM6x12	8xM6x12	8xM8x16	8xM8x16	8xM10x20
V1 ~ V9	[mm]	*6	Motor attachment dimensions are made to fit your servo motor.				

## EJP Dimensions – Hollow Output with Shrink Disk



- \*1) Dimensions apply to zero backlash models only
- \*2) Dimensions in parentheses apply to zero backlash models only
- \*3) Dimensions are dependent on the input bore diameter ( $\leq \varnothing 14$ ,  $\leq \varnothing 19$ ,  $\leq \varnothing 28$ ,  $\leq \varnothing 38$ )
- \*4) Dimensions are dependent on the motor mounting dimensions

Frame Size	Unit	Note	EJP-038	EJP-051	EJP-064	EJP-076	EJP-089	
L1	[mm]	--	1	1.5	1.5	2	2	
L2	[mm]	--	4	4	4	4	4	
L3	[mm]	--	25	27.5	36	37	38.5	
L4	[mm]	--	39	49	54	73.5	90	
L5	[mm]	--	51	60.5	70	94	111	
L6	[mm]	--	29	31.5	40	41	42.5	
L7	[mm]	--	136	158	183	235	271	
L8	[mm]	--	32	41	44	63	80	
L9	[mm]	--	42	50	68.5	79	95	
L10	[mm]	--	118	146.5	181	214	252	
L11	[mm]	--	45	56	73	82	100	
L12	[mm]	--	73	90.5	108	132	152	
L13	[mm]	--	38.1	50.8	63.5	76.2	88.9	
L14	[mm]	--	34.5	46.5	57.5	64.5	80.5	
L15	[mm]	*1	---	22	22	32	35	
L16	[mm]	*2	63	69.5 (71)	94 (96)	110 (111)	125.5 (131)	
L17	[mm]	*3	96.5 - 106.5	105 - 115	130.5 - 142.5	151 - 163	165 - 177	
L18	[mm]	--	18.5	32.5	40	45.5	46.5	
L19	[mm]	--	50.5	58	79	89.5	105	
D1 (h8)	[mm]	--	$\varnothing 64$	$\varnothing 100$	$\varnothing 120$	$\varnothing 134$	$\varnothing 145$	
D2 (H6)	[mm]	--	$\varnothing 25$	$\varnothing 30$	$\varnothing 35$	$\varnothing 45$	$\varnothing 60$	
T1	[mm]	--	4xM8x12	4xM8x12	4xM8x12	4xM10x15	4xM10x15	
T2	[mm]	--	4xM6x9	4xM6x9	4xM8x12	4xM10x15	4xM10x15	
V1 ~ V9	[mm]	*4	Motor attachment dimensions are made to fit your servo motor.					