

EJP 089 1-Stage Specifications

Frame Size	089									
Ratio	Unit	Note	5	6	7	8	9	10	15	
Nominal Output Torque	[Nm]	--	340	380	400	430	440	460	480	
Maximum Acceleration Torque	[Nm]	--	480	540	570	600	620	640	660	
Emergency Stop Torque	[Nm]	--	1020	1140	1200	1290	1320	1380	1440	
No Load Running Torque	[Nm]	*1							4.20	
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							15,560	
Maximum Axial Load	[N]	*3							4,000	
Moment of Inertia ($\leq \varnothing 19$)	[kgcm ²]	--	28.3	23.9	21.2	19.5	18.3	17.4	15.4	
Moment of Inertia ($\leq \varnothing 28$)	[kgcm ²]	--	32.3	27.8	25.2	23.4	22.2	21.4	19.4	
Moment of Inertia ($\leq \varnothing 38$)	[kgcm ²]	--	36.9	32.5	29.8	28.1	26.9	26.0	24.0	
Efficiency	[%]	*4	91	91	91	90	90	89	87	
Torsional Rigidity	[Nm/arcmin]	--							71	
Maximum Torsional Backlash (Standard)	[Arc-min]	--							≤ 3	
Maximum Torsional Backlash (Zero)	[Arc-min]	--							≤ 0	
Noise Level	dB [A]	*5							≤ 83	
Ambient Temperature	[°C]	--							-25 ~ 100	
Permitted Housing Temperature	[°C]	--							100	
Protection Class	--	--							IP65	
Lubrication	--	--							Synthetic Oil	
Service Life	[Hours]	--							25,000	
Weight	[kg]	*6							50	

*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 089 1-Stage Specifications

Frame Size	089							
Ratio	Unit	Note	20	25	30	40	50	60
Nominal Output Torque	[Nm]	--	470	470	450	430	410	400
Maximum Acceleration Torque	[Nm]	--	650	650	620	590	570	550
Emergency Stop Torque	[Nm]	--	1410	1410	1350	1290	1230	1200
No Load Running Torque	[Nm]	*1	4.20					
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	15,560					
Maximum Axial Load	[N]	*3	4,000					
Moment of Inertia (≤ Ø19)	[kgcm ²]	--	14.7	14.4	14.2	14.0	13.9	13.9
Moment of Inertia (≤ Ø28)	[kgcm ²]	--	18.7	18.3	18.1	18.0	17.9	17.8
Moment of Inertia (≤ Ø38)	[kgcm ²]	--	23.3	23.0	22.8	22.6	22.5	22.5
Efficiency	[%]	*4	84	83	79	75	72	69
Torsional Rigidity	[Nm/arcmin]	--	71					
Maximum Torsional Backlash (Standard)	[Arc-min]	--	≤ 3					
Maximum Torsional Backlash (Zero)	[Arc-min]	--	≤ 0					
Noise Level	dB [A]	*5	≤ 83					
Ambient Temperature	[°C]	--	-25 ~ 100					
Permitted Housing Temperature	[°C]	--	100					
Protection Class	--	--	IP65					
Lubrication	--	--	Synthetic Oil					
Service Life	[Hours]	--	25,000					
Weight	[kg]	*6	50					

*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

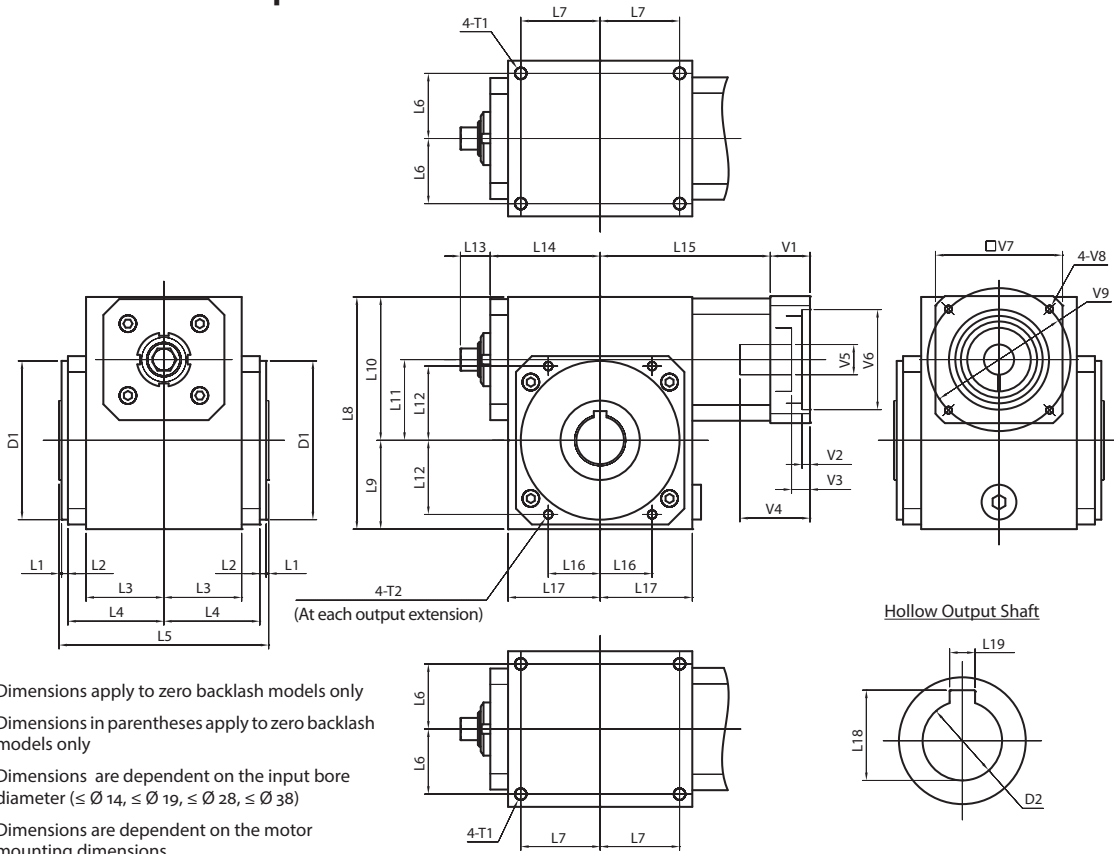
*4) The efficiency at the nominal output torque rating

*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

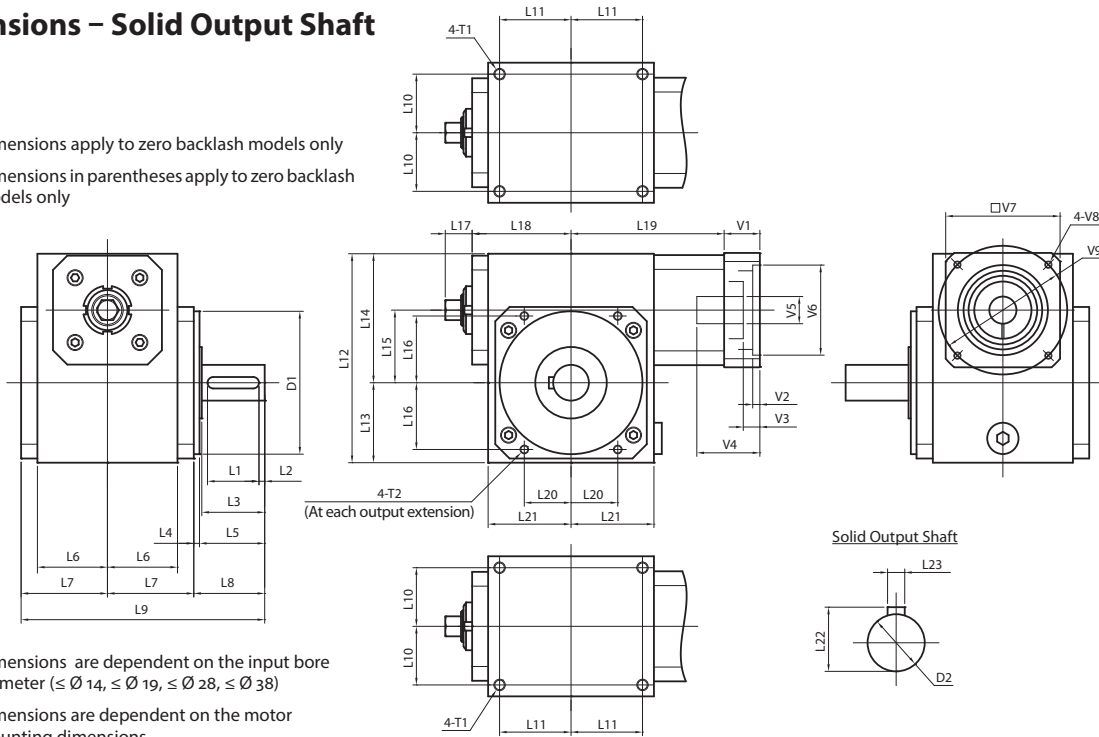


- *1) Dimensions apply to zero backlash models only
- *2) Dimensions in parentheses apply to zero backlash models only
- *3) Dimensions are dependent on the input bore diameter ($\leq \varnothing 14$, $\leq \varnothing 19$, $\leq \varnothing 28$, $\leq \varnothing 38$)
- *4) Dimensions are dependent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



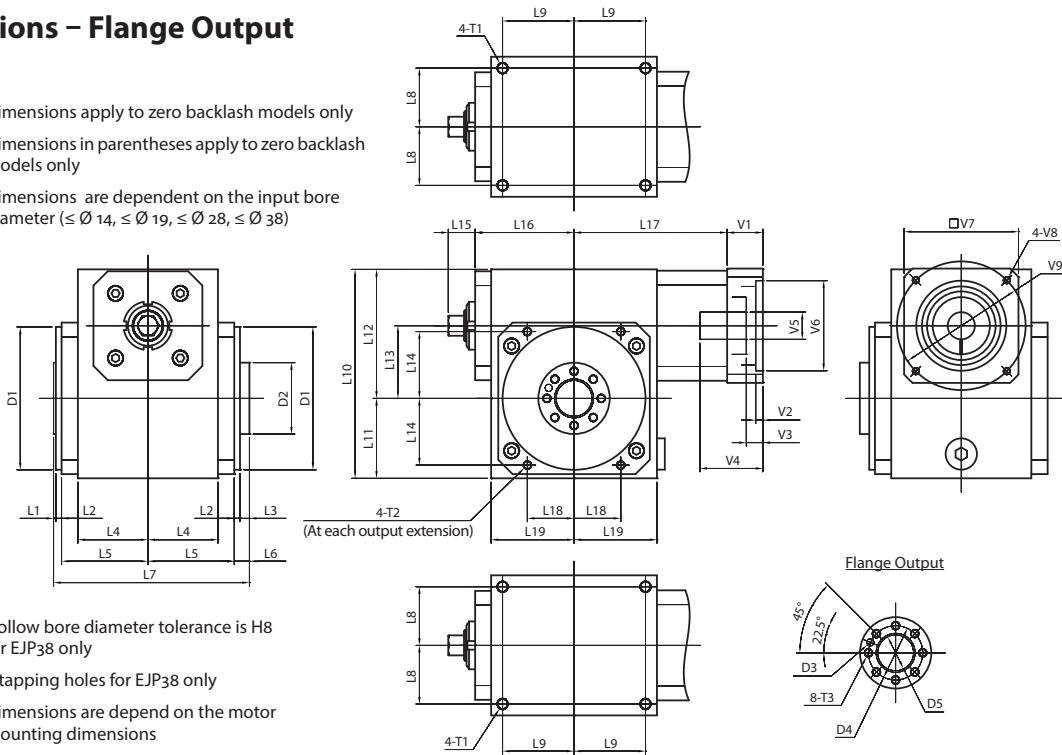
- *3) Dimensions are dependent on the input bore diameter ($\leq \varnothing 14$, $\leq \varnothing 19$, $\leq \varnothing 28$, $\leq \varnothing 38$)
- *4) Dimensions are dependent on the motor mounting dimensions

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

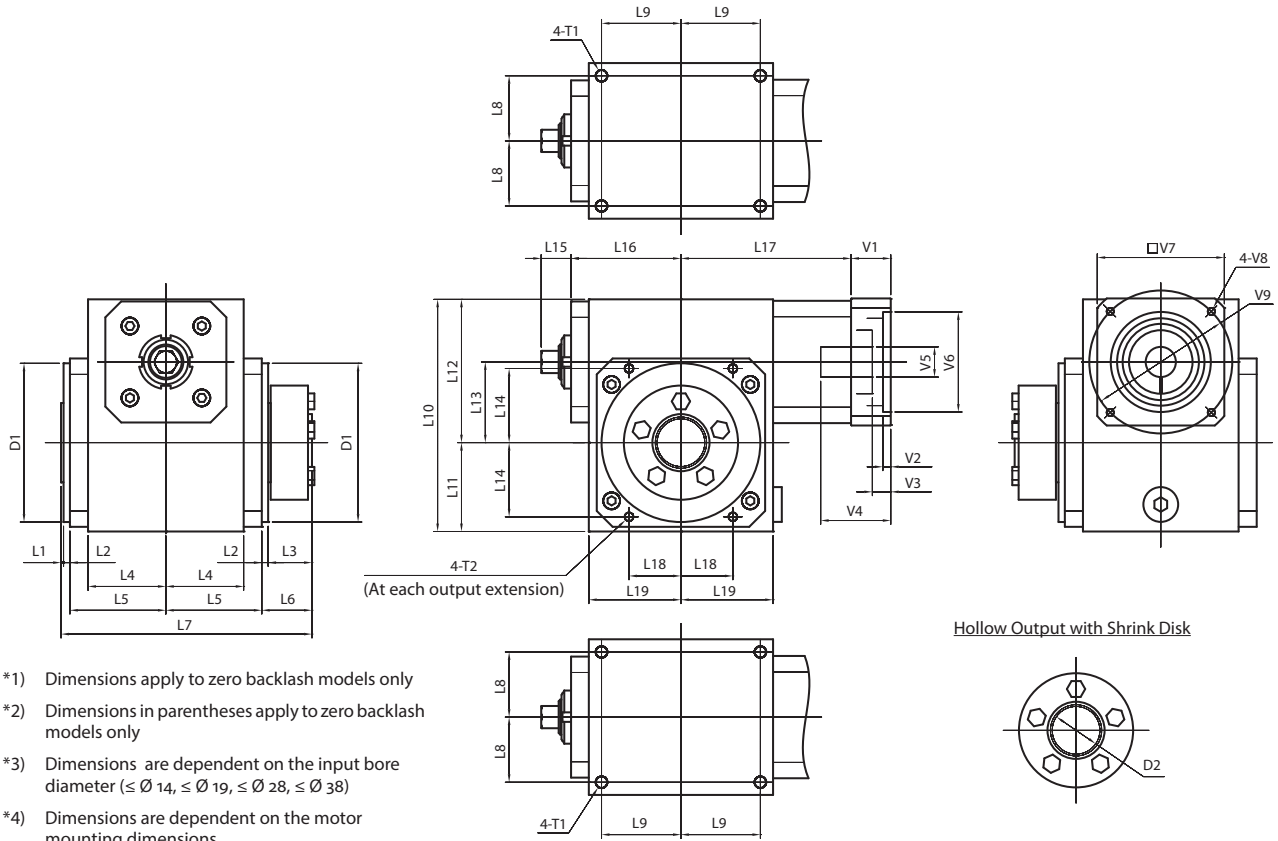
- *1) Dimensions apply to zero backlash models only
- *2) Dimensions in parentheses apply to zero backlash models only
- *3) Dimensions are dependent on the input bore diameter ($\leq \varnothing 14$, $\leq \varnothing 19$, $\leq \varnothing 28$, $\leq \varnothing 38$)



- *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]	--	ø64	ø100	ø120	ø134	ø145
D2 (h11)	[mm]	--	ø40	ø50	ø65	ø80	ø90
D3 (H9)	[mm]	--	ø5 x 10	ø5 x 10	ø6 x 10	ø8 x 10	ø8 x 10
D4	[mm]	--	ø28	ø38	ø50	ø60	ø70
D5 (H7)	[mm]	*4	ø16	ø25	ø30	ø35	ø45
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



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.				