

For servo motor



ABLE REDUCER

EVS series EVB series EVL series



NIDEC-SHIMPO CORPORATION

Future Creation of Richer Industries - For Ceaseless Development

NIDEC-SHIMPO developed and released Ringcone CVT equipped with an independent transmission in 1952. NIDEC-SHIMPO has continued to develop products meeting customer needs and produce new products on the basis of driving technology of reducers, etc. as well as advanced electronic technology and software development. NIDEC-SHIMPO's technical testing and reliability have been proven through the award of many prizes by the Japanese Machinery Society, including the National Invention Award. NIDEC-SHIMPO will offer ideal technologies and products by exactly meeting market demand for future development in various industries.



Reducer

Reducers and transmissions are essential as driving parts within factory automation robots, machine tools, or conveyor systems.





Used to measure "Strength" of all kinds necessary for R&D or QC, e.g. tensile strength, compression strength,

switching strength, etc.

Tester

Measuring instrument



Transmission

RX CVT that was successfully developed in Japan with the first independent transmission.



FA Machinery

Ceramic devices





FA machinery and testers equipped with operating or measuring technology are the major fields of SHIMPO.



electric potter's wheel

NIDEC SHIMPO is also the largest maker in ceramic machinery. It commercialized the first motor-driven pottery wheel in the world, showing market share of 80% home and 40% overseas. Besides, NIDEC SHIMPO is manufacturing and selling various ceramic products including electric kiln, positioning as top brand of total maker.



EV42

EV43

EV44

EV48

EV62

EVS series

High moment load type with high-precision



Features	EV2
Model number	EV3
Performance table	EV4
Dimensions	EV8
Dimensions (Adapter)	EV16
Installation	EV62

Can be mounted from the reducer side.

EVB series								
High precision type	Features	EV22						
	Model number	EV23						
A	Performance table	EV24						
	Dimensions	EV28						
	Dimensions (Adapter)	EV36						
	Installation	EV62						

Can be mounted from the reducer side.

	EVL series
General-purpose type	Features
	Model number
A	Performance table
	Dimensions
	Dimensions (Adapter)
	Installation

Can be mounted from the customer's machine side.

Applications







Attachable and applicable to a range of applications and devices

SHIMPO

For servo motor **ABLE**REDUCER







EVS series



Space - saving

Right angle reducer using spiral bevel gear Costomer can locate the motor at 90 degree away from the reducer if required to save space.

High rigidity & torque

High rigidity & high torque was achived by uncaged needle roller bearings.

High load capacity

Adopting taper roller bearing for the main output shaft to increase radial and axial load.

Adapter-bushing connection

Can be attached to any motor all over the world.

No grease leakage

Perfect solution by high viscosity anti-separation grease.

Maintenance-free

No need to replace the grease for the life time. Can be attached in any position.







※1 Mount code

Mount code varies depending on the motor. Please refer to reducer selection tool or contact us for more information.

Selection tool (English) (http://www.nidec-shimpo.co.jp/selection/eng/)

EV

EVS-060B			※ 1	※ 2	Ж3	※ 4	※ 5	※ 6	※ 7
Frame size	Stage	Ratio	Nominal output torque	Maximum output torque	Emergency stop torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load
		0		[INm]			[rpm]	[N]	
		3	12	24	50	<u>50 3000 6000</u>		1700	2300
2		4	16	32	65	3000	6000	1900	2500
		5	22	40	80	3000 6000		2000	2700
	2	6	24	45	90	3000 6000 210		2100	2700
		7	24	45	90	3000	6000	2200	2700
		8	24	45	90	3000 6000 23		2300	2700
_		9	16	32	65	3000 6000		2400	2700
		10	16	32	65	3000 6000 24		2400	2700
		15	16	32	65	3000	6000	2800	2700
		16	24	45	90	3000 6000 28		2800	2700
		20	24	45	90) 3000 6000		3000	2700
060B		25	24	45	90	3000	6000	3000	2700
		28	24	45	90	3000	6000	3000	2700
		30	16	32	65	3000	6000	3000	2700
		35	24	45	90	3000	6000	3000	2700
	3	40	24	45	90	3000	6000	3000	2700
		45	16	32	65	3000	6000	3000	2700
		50	24	45	90	3000	6000	3000	2700
		60	24	45	90	3000	6000	3000	2700
		70	24	45	90	3000	6000	3000	2700
		80	24	45	90	3000	6000	3000	2700
		90	16	32	65	3000	6000	3000	2700
		100	16	32	65	3000	6000	3000	2700
				※ 9	×10				

Frame size	Stage	Ratio	Maximum radial load	Maximum axial load	Weight	Moment of inertia $(\leq \phi 8)$	Moment of inertia $(\leq \phi 14)$	Moment of inertia $(\leq \phi 19)$
			[N]	[N]	[kg]	[kg•cm ²]	[kg•cm ²]	[kg•cm ²]
		3	3000	2700		0.320	0.395	0.584
		4	3000	2700		0.271	0.346	0.535
		5	3000	2700		0.251	0.326	0.516
	2	6	3000	2700	2.0	0.242	0.317	0.506
	2	7	3000	2700		2.0	0.235	0.310
		8	3000	2700		0.232	0.307	0.496
_		9	3000	2700		0.229	0.304	0.494
		10	3000	2700		0.228	0.303	0.492
		15	3000	2700		0.074	0.118	-
		16	3000	2700		0.079	0.124	-
		20	3000	2700		0.072	0.116	-
060B		25	3000	2700		0.071	0.115	-
		28	3000	2700		0.077	0.122	-
		30	3000	2700		0.062	0.106	-
		35	3000	2700		0.070	0.115	-
	3	40	3000	2700	1.8	0.061	0.106	-
		45	3000	2700		0.070	0.115	-
		50	3000	2700		0.061	0.106	-
		60	3000	2700		0.061	0.106	-
		70	3000	2700		0.061	0.106	-
		80	3000	2700		0.061	0.105	-
		90	3000	2700		0.061	0.105	-
		100	3000	2700		0.061	0.105	-

 $\,\, \ensuremath{\overset{\scriptstyle <}{\times}}\,\, 1\,$ With nominal input speed, service life is 20,000 hours.

 $\ensuremath{\,\overset{\,}{\times}}\xspace$ 2 The maximum torque when starting and stopping.

% 3 The maximum torque when it receives shock (up to 1,000 times)

% 4 The maximum average input speed.

% 5 The maximum momentary input speed.

- % 6 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)
- % 7 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output side bearing, at radial load 0)
- % 8 The maximum radial load the reducer can accept.
- \times 9 The maximum axial load the reducer can accept.
- ightarrow 10 The weight may vary slightly model to model

4



EVS-075B		※ 1	※ 2	Ж3	※ 4	※ 5	※ 6	※ 7	
Frame size	Stage	Ratio	Nominal output torque	Maximum Emergency Nominal output torque stop torque input speed in		Maximum input speed	Permitted radial load	Permitted axial load	
			[Nm]	[Nm]	[Nm]	[rpm]	[rpm]	[N]	[N]
		3	45	65	130 3000		6000	2300	3400
		4	60	90	170 300		6000	2500	3700
		5	65	90	220	3000	6000	2700	3900
	2	6	65	90	220	3000	6000	2800	3900
	2	7	65	90	220	3000	6000	3000	3900
		8	65	90	220	3000	6000	3100	3900
		9	45	65	170	70 3000 6000 32		3200	3900
		10	45	65	170	3000	6000	3300	3900
		15	45	65	170	3000	6000	3700	3900
		16	65	110	220	3000	6000	3800	3900
		20	65	110	220	20 3000 6000 4000		4000	3900
075B		25	65	110	220	220 3000 6000		4300	3900
		28	65	110	220	3000	6000	4300	3900
		30	45	65	170	3000	6000	4300	3900
		35	65	110	220	3000	6000	4300	3900
	3	40	65	110	220	3000	6000	4300	3900
		45	45	65	170	3000	6000	4300	3900
		50	65	110	220	3000	6000	4300	3900
		60	65	110	220	3000	6000	4300	3900
		70	65	110	220	3000	6000	4300	3900
		80	65	110	220	3000	6000	4300	3900
		90	45	65	170	3000	6000	4300	3900
		100	45	65	170	3000	6000	4300	3900
				※ 9	×10				

Frame size	Stage	Ratio	Maximum radial load	Maximum axial load	Weight	Moment of inertia $(\leq \phi 8)$	Moment of inertia $(\leq \phi 14)$	Moment of inertia $(\leq \phi 19)$	Moment of inertia $(\leq \phi 28)$
		-			[Kg]	[kg•cm⁻]	[kg•cm ⁻]	[kg•cm ⁻]	[kg•cm ⁻]
		3	4300	3900		-	2.07	2.40	4.53
		4	4300	3900		I	1.87	2.20	4.32
		5	4300	3900		-	1.78	2.11	4.24
	2	6	4300	3900	10	-	1.74	2.07	4.20
	2	7	4300	3900	ч.0	-	1.72	2.05	4.17
		8	4300	3900		-	1.70	2.03	4.16
		9	4300	3900		_	1.69	2.02	4.15
		10	4300	3900		-	1.69	2.02	4.15
		15	4300	3900		0.33	0.41	0.60	-
		16	4300	3900		0.38	0.46	0.65	Ι
		20	4300	3900		0.33	0.40	0.59	Ι
075B		25	4300	3900		0.32	0.40	0.59	1
		28	4300	3900		0.37	0.45	0.64	1
		30	4300	3900		0.25	0.32	0.51	-
		35	4300	3900		0.32	0.40	0.58	-
	3	40	4300	3900	4.1	0.25	0.32	0.51	-
		45	4300	3900		0.32	0.39	0.58	Ι
		50	4300	3900		0.25	0.32	0.51	-
		60	4300	3900		0.25	0.32	0.51	-
		70	4300	3900		0.25	0.32	0.51	-
		80	4300	3900		0.25	0.32	0.51	-
		90	4300	3900		0.25	0.32	0.51	-
		100	4300	3900		0.25	0.32	0.51	_

 $\,\, \ensuremath{\overset{\scriptstyle <}{\times}}\,\,$ 1 With nominal input speed, service life is 20,000 hours.

% 2 The maximum torque when starting and stopping.

times 3 The maximum torque when it receives shock (up to 1,000 times)

st 4 The maximum average input speed.

% 5 The maximum momentary input speed.

% 6 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)

% 7 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output side bearing, at radial load 0)

% 8 The maximum radial load the reducer can accept.

 \times 9 The maximum axial load the reducer can accept.

 $\%\,10$ The weight may vary slightly model to model.

EVS-100B		※ 1	※ 2	Ж3	※ 4	※ 5	※ 6	※ 7	
Frame size	Stage	Ratio	Nominal output torque	Nominal Maximum Emergency Nominal utput torque output torque stop torque input speed i		Maximum input speed	Permitted radial load	Permitted axial load	
			[Nm]	[Nm]	[Nm]	[rpm]	[rpm]	[N]	[N]
		3	75	150	320	3000 6000		3400	4800
		4	100	200	430	3000	6000	3700	5200
		5	120	240	500	3000	6000	4000	5600
	2	6	150	300	550	3000 6000 420		4200	5900
	2	7	150	300	550	3000 6000 4400		4400	6100
		8	150	300	550	3000 6000 460		4600	6300
		9	110	200	450	3000	6000	4800	6300
		10	110	200	450	3000	6000	4900	6300
		15	110	200	450	3000	6000	5600	6300
		16	130	260	550	3000	6000	5700	6300
		20	150	300	550	3000 6000 6100		6100	6300
100B		25	150	300	550	3000 600		6500	6300
		28	150	300	550	3000	6000	6700	6300
		30	110	200	450	3000	6000	6900	6300
		35	150	300	550	3000	6000	7000	6300
	3	40	150	300	550	3000	6000	7000	6300
		45	110	200	450	3000	6000	7000	6300
		50	150	300	550	3000	6000	7000	6300
		60	150	300	550	3000	6000	7000	6300
		70	150	300	550	3000	6000	7000	6300
		80	150	300	550	3000	6000	7000	6300
		90	110	200	450	3000	6000	7000	6300
		100	110	200	450	3000	6000	7000	6300
				※ 9	×10				

Frame size	Stage	Ratio	Maximum Maximum Ratio radial load axial load		Maximum Weight axial load		Moment of inertia $(\leq \phi 19)$	Moment of inertia $(\leq \phi 28)$	Moment of inertia $(\leq \phi 38)$
			[N]	[N]	[kg]	[kg·cm ²]	[kg•cm ²]	[kg•cm ²]	[kg·cm ²]
		3	7000	6300		-	6.61	8.21	15.28
		4	7000	6300		-	5.41	7.01	14.08
		5	7000	6300		-	4.97	6.57	13.64
	0	6	7000	6300	10.5	-	4.73	6.33	13.40
	2	7	7000	6300	10.5	-	4.62	6.22	13.29
		8	7000	6300		-	4.53	6.12	13.20
		9	7000	6300		-	4.47	6.07	13.14
		10	7000	6300		-	4.45	6.04	13.11
		15	7000	6300		2.24	2.57	4.70	-
		16	7000	6300		2.45	2.78	4.91	-
		20	7000	6300		2.19	2.52	4.65	Ι
100B		25	7000	6300		2.18	2.51	4.63	-
		28	7000	6300		2.40	2.73	4.86	-
		30	7000	6300		1.87	2.20	4.33	-
		35	7000	6300		2.16	2.49	4.62	Ι
	3	40	7000	6300	10.1	1.86	2.19	4.32	-
		45	7000	6300		2.15	2.48	4.61	-
		50	7000	6300		1.86	2.19	4.31	-
		60	7000	6300		1.85	2.18	4.31	-
		70	7000	6300		1.85	2.18	4.31	-
		80	7000	6300		1.85	2.18	4.31	-
		90	7000	6300		1.85	2.18	4.31	-
	-	100	7000	6300		1.85	2.18	4.31	-

 $\,\, \ensuremath{\overset{\scriptstyle <}{\times}}\,\, 1\,$ With nominal input speed, service life is 20,000 hours.

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times 3 The maximum torque when it receives shock (up to 1,000 times)

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% 6 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)

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% 8 The maximum radial load the reducer can accept.

% 9 The maximum axial load the reducer can accept.

% 10 The weight may vary slightly model to model.

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<u>EVS-140B</u>		※ 1	※ 2	₩3	※4 ※ 5		≫6	Ж7			
Frame size	Stage	Ratio	Nominal output torque Maximum output torque Emergency stop torque Nominal input speed		Maximum input speed	Permitted radial load	Permitted axial load				
		3	130	260	700	2000	2000 4000 6700				
		4	170	340	950	2000	4000	7400	9000		
		5	200	400	1100	2000	4000	7900	9000		
		6	260	520	1100	2000	4000	8300	9000		
	2	7	300	600	1100	2000	4000	8700	9000		
-		8	300	600	1100	2000	4000	9100	9000		
		9	200	400	750	2000 4000		9400	9000		
		10	200	400	750	2000	4000	9700	9000		
		15	200	400	750	2000	4000	10000	9000		
		16	300	600	1100	2000	4000	10000	9000		
		20	300	600	1100 2000 4000 1000		10000	9000			
140B		25	300	600	1100 2000 4000		4000	10000	9000		
		28	300	600	1100	2000	4000	10000	9000		
		30	200	400	750	2000	4000	10000	9000		
		35	300	600	1100	2000	4000	10000	9000		
	3	40	300	600	1100	2000	4000	10000	9000		
		45	200	400	750	2000	4000	10000	9000		
		50	300	600	1100	2000	4000	10000	9000		
		60	300	600	1100	2000	4000	10000	9000		
		70	300	600	1100	2000	4000	10000	9000		
		80	300	600	1100	2000	4000	10000	9000		
		90	200	400	750	2000	4000	10000	9000		
		100	200	400	750	2000	4000	10000	9000		
			X 8	×9	×10						

Frame size	Stage	tage Ratio Maximum Maximum Weight Weight		Moment of inertia $(\leq \phi 19)$	Moment of inertia $(\leq \phi 28)$	Moment of inertia $(\leq \phi 38)$	Moment of inertia $(\leq \phi 48)$		
			[N]	[N]	[kg]	[kg•cm ⁴]	[kg•cm ⁴]	[kg•cm ⁴]	[kg•cm ⁺]
		3	10000	9000		-	23.01	27.38	40.61
		4	10000	9000		-	18.49	22.86	36.09
		5	10000	9000			-	16.85	21.22
	2	6	10000	9000	20.6	-	15.97	20.34	33.57
	2	7	10000	9000	20.0	-	15.55	19.92	33.15
		8	10000	9000		-	15.21	19.58	32.81
		9	10000	9000		-	14.75	19.12	32.35
		10	10000	9000		I	14.64	19.02	32.25
		15	10000	9000		6.40	7.99	15.06	-
		16	10000	9000		7.29	8.88	15.95	I
		20	10000	9000		6.22	7.81	14.88	-
140B		25	10000	9000		6.15	7.75	14.82	I
		28	10000	9000		7.09	8.68	15.75	-
		30	10000	9000		4.99	6.58	13.66	I
		35	10000	9000		6.09	7.68	14.76	-
	3	40	10000	9000	20.7	4.94	6.54	13.61	I
		45	10000	9000		6.07	7.66	14.73	-
		50	10000	9000		4.93	6.52	13.59	I
		60	10000	9000		4.92	6.51	13.59	-
		70	10000	9000		4.91	6.51	13.58	-
		80	10000	9000		4.91	6.50	13.58	-
		90	10000	9000		4.91	6.50	13.57	-
		100	10000	9000		4.91	6.50	13.57	-

times 1 With nominal input speed, service life is 20,000 hours.

- % 2 The maximum torque when starting and stopping.
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- % 4 The maximum average input speed.
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- % 6 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)
- % 7 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output side bearing, at radial load 0)
- % 8 The maximum radial load the reducer can accept.
- ※ 9 The maximum axial load the reducer can accept.
- $\%\,10$ The weight may vary slightly model to model.

EVS-060B_2stage









- $\,\%\,1\,$ Length will vary depending on motor.
- $\,\, \ensuremath{\overset{\scriptstyle <}{_{\scriptstyle\sim}}}\, 2\,$ Bushing will be inserted to adapt to motor shaft

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Right angle shaft **EVS** series

EVS-060B 3stage







- $\,\%\,1\,$ Length will vary depending on motor.
- %2 Bushing will be inserted to adapt to motor shaft.

EVS-075B 2stage









- $\,\%\,1\,$ Length will vary depending on motor.
- %2 Bushing will be inserted to adapt to motor shaft.



EVS-075B 3stage









- $\,\%\,1\,$ Length will vary depending on motor.
- st 2 Bushing will be inserted to adapt to motor shaft.

EVS-100B 2stage









- $\,\%\,1\,$ Length will vary depending on motor.
- %2 Bushing will be inserted to adapt to motor shaft.



Right angle shaft **EVS** series

EVS-100B 3stage









- $\,\%\,1\,$ Length will vary depending on motor.
- st 2 Bushing will be inserted to adapt to motor shaft.

EVS-140B 2stage









- $\,\%\,1\,$ Length will vary depending on motor.
- st2 Bushing will be inserted to adapt to motor shaft.



Right angle shaft **EVS** series

EVS-140B 3stage









- $\,\%\,1\,$ Length will vary depending on motor.
- st 2 Bushing will be inserted to adapt to motor shaft.

ABLE REDUCER

Dimensions (Adapter)



Madalaran	states A design and a			Single					Double		
Model number	** : Adapter code	L1	L2	L3	L4	L5	L1	L2	L3	L4	L5
	AA•AC•AD•AF•AG	103	71.5	□52	15.5	32	96	64.5	□52	15.5	32
	AB•AE•AH•AJ•AK	108	76.5	□52	20.5	37	101	69.5	□52	20.5	37
EVS-000B-U-U-8**	BA•BB•BD•BE		71.5	□60	15.5	32	96	64.5	□60	15.5	32
(3≧0)	BC•BF	108	76.5	□60	20.5	37	101	69.5	□60	20.5	37
	CA	108	76.5	□70	20.5	37	101	69.5	□70	20.5	37
	BA•BB•BD•BE•BF•BG•BJ•BK	109	77.5	□65	16.5	35	100	68.5	□65	16.5	35
	BC•BH	114	82.5	□65	21.5	40	105	73.5	□65	21.5	40
	BL	119	87.5	□65	26.5	45	110	78.5	□65	26.5	45
	CA	109	77.5	□70	16.5	35	100	68.5	□70	16.5	35
	CB	114	82.5	□70	21.5	40	105	73.5	□70	21.5	40
EVS-060B-🛛-🖛-14**	DA·DB·DC·DD·DF·DH	109	77.5	□80	16.5	35	100	68.5	□80	16.5	35
(8 <s≦14)< td=""><td>DE</td><td>114</td><td>82.5</td><td>□80</td><td>21.5</td><td>40</td><td>105</td><td>73.5</td><td>□80</td><td>21.5</td><td>40</td></s≦14)<>	DE	114	82.5	□80	21.5	40	105	73.5	□80	21.5	40
	DG		87.5	□80	26.5	45	110	78.5	□80	26.5	45
	EA·EB·EC	109	77.5	□90	16.5	35	100	68.5	□90	16.5	35
	ED	119	87.5	□90	26.5	45	110	78.5	□90	26.5	45
	FA	109	77.5	□100	16.5	35	100	68.5	□100	16.5	35
	GA	109	77.5	□115	16.5	35	100	68.5	□115	16.5	35
	DA·DB·DC	126	94.5	□80	25	50					
	DD	136	104.5	□80	35	60					
	DE	131	99.5	□80	30	55					
	EA	131	99.5	□90	30	55					
	EB	126	94.5	□90	25	50					
	EC	136	104.5	□90	35	60					
EVS-000D-∐-19** (14∠S<10)	FA	126	94.5	□100	25	50					
(14 < 0 = 10)	FB	136	104.5	□100	35	60					
	GA•GC	131	99.5	□115	30	55					
	GB•GD	126	94.5	□115	25	50					
	НА	126	94.5	□130	25	50					
_	HB	141	109.5	□130	40	65					
	HC·HD·HE	131	99.5	□130	30	55				\geq	

 $\,\%\,1$ Single reduction : 1/3 ~ 1/10, Double reduction : 1/15 ~ 1/100

 2 Bushing will be inserted to adapt to motor shaft.





Madal number	** Adoptor anda			Single					Double				
	** Adapter code	Adapter code L1 L2 L3 L4 L5 L1 L2 L3		L4	L5								
	AA·AC·AD·AF·AG						116	71.5	□52	15.5	32		
	AB•AE•AH•AJ•AK						121	76.5	□52	20.5	37		
EV3-073B-∐-∐-8** (S<8)	BA•BB•BD•BE						116	71.5	□60	15.5	32		
Model number EVS-075B- \Box - \Box -8** (S \le 8) EVS-075B- \Box - \Box -14** (8 < S \le 14)	BC•BF						121	76.5	□60	20.5	37		
Model number EVS-075B-□-□-8** (S≤8) EVS-075B-□-□-14** (8 <s≤14)< td=""> EVS-075B-□-□-19** (14<s≤19)< td=""> EVS-075B-□-□-28** (19<s≤28)< td=""></s≤28)<></s≤19)<></s≤14)<>	CA						121	76.5	□70	20.5	37		
	BA•BB•BD•BE•BF•BG•BJ•BK	137.5	92	□65	16.5	35	122	77.5	□65	16.5	35		
	BC•BH	142.5	97	□65	21.5	40	127	82.5	□65	21.5	40		
	BL	147.5	102	□65	26.5	45	132	87.5	□65	26.5	45		
	CA 1		92	□70	16.5	35	122	77.5	□70	16.5	35		
	CB	142.5	97	□70	21.5	40	127	82.5	□70	21.5	40		
EVS-075B-D-D-14**	DA·DB·DC·DD·DF·DH	137.5	92	□80	16.5	35	122	77.5	□80	16.5	35		
(8 <s≦14)< td=""><td>DE</td><td>142.5</td><td>97</td><td>□80</td><td>21.5</td><td>40</td><td>127</td><td>82.5</td><td>□80</td><td>21.5</td><td>40</td></s≦14)<>	DE	142.5	97	□80	21.5	40	127	82.5	□80	21.5	40		
	DG	147.5	102	□80	26.5	45	132	87.5	□80	26.5	45		
	EA·EB·EC	137.5	92	□90	16.5	35	122	77.5	□90	16.5	35		
	ED	147.5	102	□90	26.5	45	132	87.5	□90	26.5	45		
	FA 1		92	□100	16.5	35	122	77.5	□100	16.5	35		
	GA	137.5	92	□115	16.5	35	122	77.5	□115	16.5	35		
	DA·DB·DC	145.5	100	□80	25	50	139	94.5	□80	25	50		
	DD	155.5	110	□80	35	60	149	104.5	□80	35	60		
	DE	150.5	105	□80	30	55	144	99.5	□80	30	55		
	EA	150.5	105	□90	30	55	144	99.5	□90	30	55		
	EB	145.5	100	□90	25	50	139	94.5	□90	25	50		
	EC	155.5	110	□90	35	60	149	104.5	□90	35	60		
$EVS = 0.72B = \Box = \Box = 19**$	FA	145.5	100	□100	25	50	139	94.5	□100	25	50		
(14<3=19)	FB	155.5	110	□100	35	60	149	104.5	□100	35	60		
	GA•GC	150.5	105	□115	30	55	144	99.5	□115	30	55		
	GB•GD	145.5	100	□115	25	50	139	94.5	□115	25	50		
	НА	145.5	100	□130	25	50	139	94.5	□130	25	50		
	HB	160.5	115	□130	40	65	154	109.5	□130	40	65		
	HC·HD·HE	150.5	105	□130	30	55	144	99.5	□130	30	55		
	FA•FB•FC	174.5	129	□100	35	67							
	GA•GB•GC•GD•GE•GF•GG	174.5	129	□115	35	67							
	HA·HC·HD	174.5	129	□130	35	67							
EVS-075B-🛛-🛨-28**	HB	184.5	139	□130	45	77							
(19 <s≦28)< td=""><td>JA•JB•JC</td><td>174.5</td><td>129</td><td>□150</td><td>35</td><td>67</td><td></td><td></td><td></td><td></td><td></td></s≦28)<>	JA•JB•JC	174.5	129	□150	35	67							
	KA•KB	174.5	129	□180	35	67							
	LA	174.5	129	□200	35	67							
	MA	174.5	129	□220	35	67				\angle			

 $\%\,1$ Single reduction : 1/3 ~ 1/10, Double reduction : 1/15 ~ 1/100

 $\,\%\,2$ Bushing will be inserted to adapt to motor shaft.

Dimensions (Adapter)



		Single						Double				
Model number	**:Adapter code	L1	L2	L3	L4	L5	L1	L2	L3	L4	L5	
	BA•BB•BD•BE•BF•BG•BJ•BK						152	92	□65	16.5	35	
	BC•BH						157	97	□65	21.5	40	
	BL						162	102	□65	26.5	45	
	CA						152	92	□70	16.5	35	
	СВ						157	97	□70	21.5	40	
EVS-100B-0-14**	DA·DB·DC·DD·DF·DH						152	92	□80	16.5	35	
(S≦14)	DE						157	97	□80	21.5	40	
	DG						162	102	□80	26.5	45	
	EA·EB·EC						152	92	□90	16.5	35	
	ED						162	102	□90	26.5	45	
	FA						152	92	□100	16.5	35	
	GA						152	92	□115	16.5	35	
	DA·DB·DC	170	110	□80	25	50	160	100	□80	25	50	
	DA-DB-DC		120	□80	35	60	170	110	□80	35	60	
EVS-100B-□-□-19** (14 <s≦19)< td=""><td>DE</td><td>175</td><td>115</td><td>□80</td><td>30</td><td>55</td><td>165</td><td>105</td><td>□80</td><td>30</td><td>55</td></s≦19)<>	DE	175	115	□80	30	55	165	105	□80	30	55	
	EA	175	115	□90	30	55	165	105	□90	30	55	
	EB		110	□90	25	50	160	100	□90	25	50	
	EC	180	120	□90	35	60	170	110	□90	35	60	
	FA	170	110	□100	25	50	160	100	□100	25	50	
	FB	180	120	□100	35	60	170	110	□100	35	60	
	GA•GC	175	115	□115	30	55	165	105	□115	30	55	
	GB•GD	170	110	□115	25	50	160	100	□115	25	50	
	НА	170	110	□130	25	50	160	100	□130	25	50	
-	HB	185	125	□130	40	65	175	115	□130	40	65	
	HC·HD·HE	175	115	□130	30	55	165	105	□130	30	55	
-	FA•FB•FC	196	136	□100	35	67	189	129	□100	35	67	
-	GA•GB•GC•GD•GE•GF•GG	196	136	□115	35	67	189	129		35	67	
-	HA·HC·HD	196	136	□130	35	67	189	129	□130	35	67	
EVS-100B-0-0-28**	HB	206	146	□130	45	77	199	139	□130	45	77	
(19 <s≦28)< td=""><td>JA•JB•JC</td><td>196</td><td>136</td><td>□150</td><td>35</td><td>67</td><td>189</td><td>129</td><td></td><td>35</td><td>67</td></s≦28)<>	JA•JB•JC	196	136	□150	35	67	189	129		35	67	
-	KA•KB	196	136	□180	35	67	189	129	□180	35	67	
-	LA	196	136	□200	35	67	189	129	□200	35	67	
	MA	196	136	□220	35	67	189	129		35	67	
-	НА	213	153	□130	45	82						
-	НВ	208	148		40	77			\sim			
-	JA	213	153	□150	45	82						
$\exists VS-100B-\Box-\Box-14** \\ (S \le 14)$	KA•KB•KC	213	153		45	82		\square	\sim			
(28 <s≦38)< td=""><td>LA</td><td>213</td><td>153</td><td>□200</td><td>45</td><td>82</td><td>\square</td><td>\square</td><td></td><td>\angle</td><td></td></s≦38)<>	LA	213	153	□200	45	82	\square	\square		\angle		
(20<3=30)	LB	223	163		55	92	\sim			\angle		
	MA•MB	213	153		45	82		\sim				
	NA	213	153	□250	45	82						

 $\,\%\,1$ Single reduction : 1/3 ~ 1/10, Double reduction : 1/15 ~ 1/100

 $\,\%\,2$ Bushing will be inserted to adapt to motor shaft.





Ma dal usunah au	www.A.dowtow.c.o.do	Single Double									
Model number	** Adapter code	L1	L2	L3	L4	L5	Double L1 L2 L3 L4 L5 185 110 80 25 50 195 120 80 35 60 190 115 80 30 55 190 115 90 30 55 185 110 90 25 50 195 120 90 35 60 185 110 100 25 50 195 120 90 35 60 195 120 100 35 60 190 115 115 30 55 185 110 1130 25 50 200 125 130 40 65 190 115 130 30 55 211 136 1100 35 67 211 136 130 45 77 211 136				
	DA·DB·DC						185	110	□80	25	50
	DD						195	120	□80	35	60
	DE						190	115	□80	30	55
	EA						190	115	□90	30	55
	EB						185	110	□90	25	50
	EC						195	120	□90	35	60
EVS-140B-∐-∐-19** (S<10)	FA						185	110	□100	25	50
(3=13)	FB						195	120	□100	35	60
	GA•GC						190	115	□115	30	55
	GB•GD						185	110	□115	25	50
	HA						185	110	□130	25	50
	HB						200	125	□130	40	65
	HC·HD·HE						190	115	□130	30	55
	FA•FB•FC	227	152	□100	35	67	211	136	□100	35	67
EVS-140B-⊡-⊡-28** (19 <s≦28)< td=""><td colspan="2">GA•GB•GC•GD•GE•GF•GG 2</td><td>152</td><td>□115</td><td>35</td><td>67</td><td>211</td><td>136</td><td>□115</td><td>35</td><td>67</td></s≦28)<>	GA•GB•GC•GD•GE•GF•GG 2		152	□115	35	67	211	136	□115	35	67
	HA·HC·HD	227	152	□130	35	67	211	136	□130	35	67
	HB	237	162	□130	45	77	221	146	□130	45	77
	JA•JB•JC	227	152	□150	35	67	211	136	□150	35	67
	КА•КВ		152	□180	35	67	211	136	□180	35	67
	LA		152	□200	35	67	211	136	□200	35	67
	MA	227	152	□220	35	67	211	136	□220	35	67
	HA	242	167	□130	45	82	228	153	□130	45	82
	HB	237	162	□130	40	77	223	148	□130	40	77
	JA	242	167	□150	45	82	228	153	□150	45	82
EVS-140B-D-D-38**	KA•KB•KC	242	167	□180	45	82	228	153	□180	45	82
(28 <s≦38)< td=""><td>LA</td><td>242</td><td>167</td><td>□200</td><td>45</td><td>82</td><td>228</td><td>153</td><td>□200</td><td>45</td><td>82</td></s≦38)<>	LA	242	167	□200	45	82	228	153	□200	45	82
	LB	252	177	□200	55	92	238	163	□200	55	92
	MA·MB	242	167	□220	45	82	228	153	□220	45	82
	NA	242	167	□250	45	82	228	153	□250	45	82
	KB•KC	268	193	□180	55	98					
	KA	288	213	□180	75	118					
	LA	268	193	□200	55	98					
EVS-140B-U-U-48** (38/S<48)	MA	268	193	□220	55	98					
EVS-140B-□-□-38** (28 <s≦38) EVS-140B-□-□-48** (38<s≦48)< td=""><td>MB</td><td>288</td><td>213</td><td>□220</td><td>75</td><td>118</td><td></td><td></td><td></td><td></td><td></td></s≦48)<></s≦38) 	MB	288	213	□220	75	118					
	NA	288	213	□250	75	118				\langle	
	PA	288	213	280	75	118				\geq	

% 1 Single reduction : 1/3 ~ 1/10, Double reduction : 1/15 ~ 1/100



MEMO



For servo motor ABLEREDUCER EVBSeries







Space - saving

Right angle reducer using spiral bevel gear Costomer can locate the motor at 90 degree away from the reducer if required to save space.

High rigidity & torque

High rigidity & high torque was achived by uncaged needle roller bearings.

Adapter-bushing connection

Can be attached to any motor all over the world.

No grease leakage

Perfect solution by high viscosity anti-separation grease.

Maintenance-free

No need to replace the grease for the life time. Can be attached in any position.





※1 Mount code

Mount code varies depending on the motor. Please refer to reducer selection tool or contact us for more information.

Selection tool (English) (http://www.nidec-shimpo.co.jp/selection/eng/)

siz

ABLE REDUCER

EVB-0	60		※ 1	※ 2	₩3	※ 4	※ 5	※ 6	※ 7
Frame size	Stage	Ratio	Nominal output torque	Maximum output torque	Emergency stop torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load
			[Nm]	[Nm]	[Nm]	[rpm]	[rpm]	[N]	[N]
		3	12	24	50	3000	6000	430	310
		4	16	32	65	3000	6000	470	360
		5	22	40	80	3000	6000	510	390
	2	6	24	45	90	3000	6000	540	430
	2	7	24	45	90	3000	6000	570	460
		8	24	45	90	3000	6000	600	480
		9	16	32	65	3000	6000	620	510
		10	16	32	65	3000	6000	640	530
		15	16	32	65	3000	6000	740	630
		16	24	45	90	3000	6000	750	650
060		20	24	45	90	3000	6000	810	720
		25	24	45	90	3000	6000	870	790
		28	24	45	90	3000	6000	910	830
		30	16	32	65	3000	6000	930	860
		35	24	45	90	3000	6000	980	920
	3	40	24	45	90	3000	6000	1000	970
		45	16	32	65	3000	6000	1100	1000
		50	24	45	90	3000	6000	1100	1100
		60	24	45	90	3000	6000	1200	1100
		70	24	45	90	3000	6000	1200	1100
		80	24	45	90	3000	6000	1200	1100
		90	16	32	65	3000	6000	1200	1100
		100	16	32	65	3000	6000	1200	1100
			※ 8	※ 9	※ 10				
Frame size	Stage	Ratio	Maximum radial load	Maximum axial load	Weight	Moment of inertia $(\leq \phi 8)$	Moment of inertia $(\leq \phi 14)$	Moment of inertia $(\leq \phi 19)$	
			[N]	[N]	[kg]	[kg•cm ²]	[kg·cm ²]	[kg·cm ²]	
		2	1200	1100		0.21	0.20	0.50	

size						$(\leq \phi 8)$	$(\leq \phi 14)$	$(\leq \phi 19)$
			[N]	[N]	[kg]	[kg•cm ²]	[kg•cm ²]	[kg•cm ²]
size		3	1200	1100		0.31	0.39	0.58
		4	1200	1100		0.27	0.34	0.53
		5	1200	1100		0.25	0.32	0.51
	2	6	1200	1100	10	0.24	0.31	0.50
	2	7	1200	1100	1.0	0.23	0.31	0.50
		8	1200	1100		0.23	0.31	0.50
		9	1200	1100		0.23	0.30	0.49
		10	1200	1100		0.23	0.30	0.49
		15	1200	1100		0.073	0.118	_
		16	1200	1100		0.079	0.124	-
		20	1200	1100	-	0.071	0.116	_
060		25	1200	1100		0.071	0.115	-
		28	1200	1100		0.077	0.122	_
		30	1200	1100		0.062	0.106	-
		35	1200	1100		0.070	0.115	_
	3	40	1200	1100	1.6	0.061	0.106	-
		45	1200	1100		0.070	0.115	_
		50	1200	1100		0.061	0.106	-
		60	1200	1100		0.061	0.106	_
		70	1200	1100		0.061	0.105	-
		80	1200	1100		0.061	0.105	
		90	1200	1100		0.061	0.105	
		100	1200	1100		0.061	0.105	_

% 1 With nominal input speed, service life is 20,000 hours.

% 2 The maximum torque when starting and stopping.

% 3 The maximum torque when it receives shock (up to 1,000 times)

% 4 The maximum average input speed.

% 5 The maximum momentary input speed.

%~6~ With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)

%~7 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output side bearing, at radial load 0)

% 8 The maximum radial load the reducer can accept.

% 9 The maximum axial load the reducer can accept.

times 10 The weight may vary slightly model to model



EVB-0	90		※ 1	※ 2	※ 3	※ 4	※ 5	※ 6	※ 7
Frame size	Stage	Ratio	Nominal output torque	Maximum output torque	Emergency stop torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load
		2		INM]65	[INM] 120	[rpm] 2000	[rpm] 6000	210	[N] 020
		1	40	00	130	2000	6000	800	1100
		5	65	90	220	2000	6000	060	1200
		6	65	90	220	2000	6000	1000	1200
	2	7	65	90	220	3000	0000	1100	1300
		8	65	90	220	3000	0000	1100	1400
		9	45	65	170	3000	6000	1200	1500
		10	45	65	170	3000	6000	1200	1600
		15	45	65	170	3000	6000	1400	1900
		16	65	110	220	3000	6000	1400	1900
		20	65	110	220	3000	6000	1500	2100
090	-	25	65	110	220	3000	6000	1600	2200
		28	65	110	220	3000	6000	1700	2200
		30	45	65	170	3000	6000	1700	2200
		35	65	110	220	3000	6000	1800	2200
	3	40	65	110	220	3000	6000	1900	2200
		45	45	65	170	3000	6000	2000	2200
		50	65	110	220	3000	6000	2100	2200
		60	65	110	220	3000	6000	2200	2200
		70	65	110	220	3000	6000	2300	2200
		80	65	110	220	3000	6000	2400	2200
		90	45	65	170	3000	6000	2400	2200
		100	45	65	170	3000	6000	2400	2200
			×8	※ 9	×10				
Frame	Stars	Datia	Maximum	Maximum	Weight	Moment of inertia	Moment of inertia	Moment of inertia	Moment of inertia

Frame size	Stage	Ratio	Maximum radial load	Maximum axial load	Weight	Moment of inertia $(\leq \phi 8)$	Moment of inertia $(\leq \phi 14)$	Moment of inertia $(\leq \phi 19)$	Moment of inertia $(\leq \phi 28)$
			[N]	[N]	[kg]	[kg•cm ²]	[kg•cm ²]	[kg•cm ²]	[kg•cm ²]
		3	2400	2200		_	2.12	2.45	4.57
		4	2400	2200		_	1.89	2.22	4.35
		5	2400	2200		_	1.80	2.13	4.26
	2	6	2400	2200	5 1	_	1.76	2.09	4.21
	2	7	2400	2200	5.1	_	1.73	2.06	4.18
		8	2400	2200		-	1.71	2.04	4.17
		9	2400	2200		_	1.70	2.03	4.16
		10	2400	2200		-	1.69	2.02	4.15
_		15	2400	2200		0.34	0.41	0.60	_
		16	2400	2200		0.38	0.46	0.65	-
		20	2400	2200		0.33	0.40	0.59	-
090		25	2400	2200		0.32	0.40	0.59	-
		28	2400	2200		0.37	0.45	0.64	-
		30	2400	2200		0.25	0.33	0.51	-
		35	2400	2200		0.32	0.40	0.59	-
	3	40	2400	2200	4.4	0.25	0.32	0.51	-
		45	2400	2200		0.32	0.39	0.58	-
		50	2400	2200		0.25	0.32	0.51	-
		60	2400	2200		0.25	0.32	0.51	-
		70	2400	2200		0.25	0.32	0.51	-
		80	2400	2200		0.25	0.32	0.51	-
		90	2400	2200		0.25	0.32	0.51	-
		100	2400	2200		0.25	0.32	0.51	-

% 1 With nominal input speed, service life is 20,000 hours.

st 2 The maximum torque when starting and stopping.

% 3 The maximum torque when it receives shock (up to 1,000 times)

% 4 The maximum average input speed.

% 5 The maximum momentary input speed.

% 6 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)

%~7~ With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output side bearing, at radial load 0)

% 8 The maximum radial load the reducer can accept.

% 9 The maximum axial load the reducer can accept.

% 10 The weight may vary slightly model to model

EVB-1	115
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<u>EVB-1</u>	15		※ 1	₩2	₩3	₩4	※ 5	※ 6	※ 7
Frame size	Stage	Ratio	Nominal output torque	Maximum output torque	Emergency stop torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load
		3	75	150	320	3000	6000	1300	1500
		4	100	200	430	3000	6000	1500	1700
		5	120	240	500	3000	6000	1600	1900
		6	150	300	550	3000	6000	1700	2000
	2	7	150	300	550	3000	6000	1800	2100
		8	150	300	550	3000	6000	1900	2300
-		9	110	200	450	3000	6000	1900	2400
		10	110	200	450	3000	6000	2000	2500
		15	110	200	450	3000	6000	2300	3000
		16	130	260	550	3000	6000	2300	3100
		20	150	300	550	3000	6000	2500	3400
115		25	150	300	550	3000	6000	2700	3700
		28	150	300	550	3000	6000	2800	3900
		30	110	200	450	3000	6000	2900	3900
		35	150	300	550	3000	6000	3000	3900
	3	40	150	300	550	3000	6000	3200	3900
		45	110	200	450	3000	6000	3300	3900
		50	150	300	550	3000	6000	3400	3900
		60	150	300	550	3000	6000	3600	3900
		70	150	300	550	3000	6000	3800	3900
		80	150	300	550	3000	6000	4000	3900
		90	110	200	450	3000	6000	4200	3900
		100	110	200	450	3000	6000	4300	3900
			※ 8	※ 9	※10				

Frame size	Stage	Ratio	Maximum radial load	Maximum axial load	Weight	Moment of inertia $(\leq \phi 14)$	Moment of inertia $(\leq \phi 19)$	Moment of inertia $(\leq \phi 28)$	Moment of inertia $(\leq \phi 38)$
			[N]	[N]	[kg]	[kg•cm ²]	[kg•cm ²]	[kg•cm ²]	[kg•cm ²]
		3	4300	3900		-	6.74	8.34	15.41
		4	4300	3900		-	5.49	7.08	14.15
		5	4300	3900		-	5.02	6.61	13.69
	2	6	4300	3900	10.4	-	4.77	6.36	13.43
	2	7	4300	3900	10.4	-	4.65	6.24	13.31
		8	4300	3900		-	4.55	6.14	13.22
		9	4300	3900		-	4.49	6.08	13.16
		10	4300	3900		-	4.46	6.05	13.12
		15	4300	3900		2.25	2.58	4.70	-
		16	4300	3900	-	2.46	2.79	4.91	-
	-	20	4300	3900		2.20	2.53	4.65	-
115		25	4300	3900		2.18	2.51	4.64	-
		28	4300	3900		2.40	2.73	4.86	I
		30	4300	3900		1.87	2.20	4.33	-
		35	4300	3900		2.16	2.49	4.62	I
	3	40	4300	3900	10.1	1.86	2.19	4.32	-
		45	4300	3900		2.15	2.48	4.61	I
		50	4300	3900		1.86	2.19	4.31	-
		60	4300	3900		1.85	2.18	4.31	I
		70	4300	3900		1.85	2.18	4.31	-
		80	4300	3900		1.85	2.18	4.31	-
		90	4300	3900		1.85	2.18	4.31	_
		100	4300	3900		1.85	2.18	4.31	-

% 1 With nominal input speed, service life is 20,000 hours.

times 2 The maximum torque when starting and stopping.

% 3 The maximum torque when it receives shock (up to 1,000 times)

% 4 The maximum average input speed.

% 5 The maximum momentary input speed.

% 6 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)

% 7 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output side bearing, at radial load 0)

% 8 The maximum radial load the reducer can accept.

% 9 The maximum axial load the reducer can accept.

% 10 The weight may vary slightly model to model



EVB-1	40		※ 1	※ 2	※ 3	※ 4	※ 5	≫6	※ 7
Frame size	Stage	Ratio	Nominal output torque [Nm]	Maximum output torque [Nm]	Emergency stop torque [Nm]	Nominal input speed [rpm]	Maximum input speed [rpm]	Permitted radial load [N]	Permitted axial load [N]
		3	130	260	700	2000	4000	3200	2400
		4	170	340	950	2000	4000	3500	2700
		5	200	400	1100	2000	4000	3800	3000
	2	6	260	520	1100	2000	4000	4000	3300
	2	7	300	600	1100	2000	4000	4200	3500
		8	300	600	1100	2000	4000	4400	3700
		9	200	400	750	2000	4000	4600	3900
		10	200	400	750	2000	4000	4700	4100
		15	200	400	750	2000	4000	5400	4900
		16	300	600	1100	2000	4000	5500	5000
		20	300	600	1100	2000	4000	6000	5500
140		25	300	600	1100	2000	4000	6400	6100
		28	300	600	1100	2000	4000	6700	6400
		30	200	400	750	2000	4000	6800	6600
		35	300	600	1100	2000	4000	7200	7000
	3	40	300	600	1100	2000	4000	7500	7500
		45	200	400	750	2000	4000	7800	7900
		50	300	600	1100	2000	4000	8100	8200
		60	300	600	1100	2000	4000	8600	8200
		70	300	600	1100	2000	4000	9100	8200
		80	300	600	1100	2000	4000	9100	8200
		90	200	400	750	2000	4000	9100	8200
		100	200	400	750	2000	4000	9100	8200
			※ 8	×9	×10				
Frame size	Stage	Ratio	Maximum radial load	Maximum axial load	Weight	Moment of inertia $(\leq \phi 19)$	Moment of inertia $(\leq \phi 28)$	Moment of inertia $(\leq \phi 38)$	Moment of inertia $(\leq \phi 48)$

Frame size	Stage	Ratio	radial load	axial load	Weight	of inertia $(\leq \phi 19)$	of inertia $(\leq \phi 28)$	of inertia $(\leq \phi 38)$	of inertia $(\leq \phi 48)$
			[N]	[N]	[kg]	[kg·cm ²]	[kg•cm ²]	[kg•cm ²]	[kg·cm ²]
140	2	3	9100	8200	19.1	-	23.13	27.50	40.73
		4	9100	8200		-	18.57	22.94	36.17
		5	9100	8200		-	16.91	21.28	34.51
		6	9100	8200		-	16.01	20.38	33.61
		7	9100	8200		-	15.58	19.95	33.18
		8	9100	8200		-	15.23	19.61	32.84
		9	9100	8200		-	14.77	19.41	32.37
		10	9100	8200		-	14.66	19.03	32.26
	3	15	9100	8200	19.6	6.40	8.00	15.07	-
		16	9100	8200		7.29	8.88	15.96	-
		20	9100	8200		6.22	7.81	14.89	-
		25	9100	8200		6.15	7.75	14.82	-
		28	9100	8200		7.09	8.68	15.76	-
		30	9100	8200		4.99	6.58	13.66	-
		35	9100	8200		6.09	7.69	14.76	-
		40	9100	8200		4.95	6.54	13.61	-
		45	9100	8200		6.07	7.66	14.74	-
		50	9100	8200		4.93	6.52	13.59	-
		60	9100	8200		4.92	6.51	13.59	-
		70	9100	8200		4.91	6.51	13.58	-
		80	9100	8200		4.91	6.50	13.58	_
		90	9100	8200		4.91	6.50	13.57	-
		100	9100	8200		4.91	6.50	13.57	-

% 1 With nominal input speed, service life is 20,000 hours.

st 2 The maximum torque when starting and stopping.

% 3 The maximum torque when it receives shock (up to 1,000 times)

% 4 The maximum average input speed.

% 5 The maximum momentary input speed.

% 6 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)

%~7~ With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output side bearing, at radial load 0)

% 8 The maximum radial load the reducer can accept.

% 9 The maximum axial load the reducer can accept.

% 10 The weight may vary slightly model to model











- $\,\%\,1\,$ Length will vary depending on motor.
- st2 Bushing will be inserted to adapt to motor shaft.



Right angle shaft **EVB** series

EVB-060 3stage







- %1 Length will vary depending on motor.
- %2 Bushing will be inserted to adapt to motor shaft.











- $\,\%\,1\,$ Length will vary depending on motor.
- st2 Bushing will be inserted to adapt to motor shaft.



Right angle shaft **EVB** series

EVB-090 3stage









- $\times 1$ Length will vary depending on motor.
- st2 Bushing will be inserted to adapt to motor shaft.

EVB-115 2stage









- $\,\%\,1\,$ Length will vary depending on motor.
- st2 Bushing will be inserted to adapt to motor shaft.


Right angle shaft **EVB** series

EVB-115 3stage









- $\times 1$ Length will vary depending on motor.
- $\gtrsim 2$ Bushing will be inserted to adapt to motor shaft.











- $\,\%\,1\,$ Length will vary depending on motor.
- st2 Bushing will be inserted to adapt to motor shaft.



Right angle shaft **EVB** series

EVB-140 3stage









- $\,\%\,1\,$ Length will vary depending on motor.
- %2 Bushing will be inserted to adapt to motor shaft.

Dimensions (Adapter)



Madalaran	**:Adapter code Single Double										
Model number	** : Adapter code	L1	L2	L3	L4	L5	L1	L2	L3	L4	L5
	AA•AC•AD•AF•AG	103	71.5	□52	15.5	32	96	64.5	□52	15.5	32
	AB•AE•AH•AJ•AK	108	76.5	□52	20.5	37	101	69.5	□52	20.5	37
	BA•BB•BD•BE	103	71.5	□60	15.5	32	96	64.5	□60	15.5	32
(3=0)	BC•BF	108	76.5	□60	20.5	37	101	69.5	□60	20.5	37
	CA	108	76.5	□70	20.5	37	101	69.5	□70	20.5	37
	BA•BB•BD•BE•BF•BG•BJ•BK	109	77.5	□65	16.5	35	100	68.5	□65	16.5	35
	BC•BH	114	82.5	□65	21.5	40	105	73.5	□65	21.5	40
	BL	119	87.5	□65	26.5	45	110	78.5	□65	26.5	45
	CA	109	77.5	□70	16.5	35	100	68.5	□70	16.5	35
	СВ	114	82.5	□70	21.5	40	105	73.5	□70	21.5	40
EVB-060-🛛-🗂-14**	DA • DB • DC • DD • DF • DH	109	77.5	□80	16.5	35	100	68.5	□80	16.5	35
(8 <s≦14)< td=""><td>DE</td><td>114</td><td>82.5</td><td>□80</td><td>21.5</td><td>40</td><td>105</td><td>73.5</td><td>□80</td><td>21.5</td><td>40</td></s≦14)<>	DE	114	82.5	□80	21.5	40	105	73.5	□80	21.5	40
	DG	119	87.5	□80	26.5	45	110	78.5	□80	26.5	45
	EA•EB•EC		77.5	□90	16.5	35	100	68.5	□90	16.5	35
	ED	119	87.5	□90	26.5	45	110	78.5	□90	26.5	45
	FA	109	77.5	□100	16.5	35	100	68.5	□100	16.5	35
	GA	109	77.5	□115	16.5	35	100	68.5	□115	16.5	35
	DA·DB·DC	126	94.5	□80	25	50					
	DD	136	104.5	□80	35	60					
	DE	131	99.5	□80	30	55					
	EA	131	99.5	□90	30	55					
	EB	126	94.5	□90	25	50					
	EC	136	104.5	□90	35	60					
(14 <s<19)< td=""><td>FA</td><td>126</td><td>94.5</td><td>□100</td><td>25</td><td>50</td><td></td><td></td><td></td><td></td><td></td></s<19)<>	FA	126	94.5	□100	25	50					
	FB	136	104.5	□100	35	60					
	GA•GC	131	99.5	□115	30	55					
	GB•GD	126	94.5	□115	25	50					
	НА	126	94.5	□130	25	50				\sim	
	HB	141	109.5	□130	40	65					
	HC·HD·HE	131	99.5	□130	30	55				/	

% 1 Single reduction : 1/3 \sim 1/10, Double reduction : 1/15 \sim 1/100 % 2 Bushing will be inserted to adapt to motor shaft.





Model number	Single Do								Double	ouble			
woder number	** Adapter code	L1	L2	L3	L4	L5	L1	L2	L3	L4	L5		
	AA•AC•AD•AF•AG						117	71.5	□52	15.5	32		
	AB•AE•AH•AJ•AK						122	76.5	□52	20.5	37		
EVB-090-∐-∐-0** (S<8)	BA•BB•BD•BE						117	71.5	□60	15.5	32		
(3=0)	BC•BF						122	76.5	□60	20.5	37		
	CA						122	76.5	□70	20.5	37		
	BA•BB•BD•BE•BF•BG•BJ•BK	137.5	92	□65	16.5	35	123	77.5	□65	16.5	35		
	BC•BH	142.5	97	□65	21.5	40	128	82.5	□65	21.5	40		
	BL	147.5	102	□65	26.5	45	133	87.5	□65	26.5	45		
	CA	137.5	92	□70	16.5	35	123	77.5	□70	16.5	35		
	CB		97	□70	21.5	40	128	82.5	□70	21.5	40		
EVB-090-D-D-14**	DA·DB·DC·DD·DF·DH	137.5	92	□80	16.5	35	123	77.5	□80	16.5	35		
(8 <s≦14)< td=""><td>DE</td><td>142.5</td><td>97</td><td>□80</td><td>21.5</td><td>40</td><td>128</td><td>82.5</td><td>□80</td><td>21.5</td><td>40</td></s≦14)<>	DE	142.5	97	□80	21.5	40	128	82.5	□80	21.5	40		
	DG	147.5	102	□80	26.5	45	133	87.5	□80	26.5	45		
	EA·EB·EC	137.5	92	□90	16.5	35	123	77.5	□90	16.5	35		
	ED	147.5	102	□90	26.5	45	133	87.5	□90	26.5	45		
	FA		92	□100	16.5	35	123	77.5	□100	16.5	35		
	GA	137.5	92	□115	16.5	35	123	77.5	□115	16.5	35		
	DA·DB·DC	145.5	100	□80	25	50	140	94.5	□80	25	50		
	DD	155.5	110	□80	35	60	150	104.5	□80	35	60		
	DE		105	□80	30	55	145	99.5	□80	30	55		
	EA	150.5	105	□90	30	55	145	99.5	□90	30	55		
	EB	145.5	100	□90	25	50	140	94.5	□90	25	50		
	EC	155.5	110	□90	35	60	150	104.5	□90	35	60		
EVB-090-∐-∐-19** (14∠S≤10)	FA	145.5	100	□100	25	50	140	94.5	□100	25	50		
(14<3=19)	FB	155.5	110	□100	35	60	150	104.5	□100	35	60		
	GA•GC	150.5	105	□115	30	55	145	99.5	□115	30	55		
	GB•GD	145.5	100	□115	25	50	140	94.5	□115	25	50		
	HA	145.5	100	□130	25	50	140	94.5	□130	25	50		
	HB	160.5	115	□130	40	65	155	109.5	□130	40	65		
	HC•HD•HE	150.5	105	□130	30	55	145	99.5	□130	30	55		
	FA•FB•FC	174.5	129	□100	35	67							
	GA•GB•GC•GD•GE•GF•GG	174.5	129	□115	35	67							
	HA•HC•HD	174.5	129	□130	35	67							
EVB-090-🛛-🛨-28**	HB	184.5	139	□130	45	77							
(19 <s≦28)< td=""><td>JA•JB•JC</td><td>174.5</td><td>129</td><td>□150</td><td>35</td><td>67</td><td></td><td></td><td></td><td></td><td></td></s≦28)<>	JA•JB•JC	174.5	129	□150	35	67							
	KA•KB	174.5	129	□180	35	67							
	LA	174.5	129	□200	35	67							
	MA	174.5	129	220	35	67				\geq			

1 Single reduction : 1/3 ~ 1/10, Double reduction : 1/15 ~ 1/100

 \times 2 Bushing will be inserted to adapt to motor shaft.

Dimensions (Adapter)



Madalarankan	states A deve to second a	Single					Double					
Model number	**: Adapter code	L1	L2	L3	L4	L5	L1	L2	L3	L4	L5	
	BA•BB•BD•BE•BF•BG•BJ•BK						152	92	□65	16.5	35	
	BC•BH						157	97	□65	21.5	40	
	BL						162	102	□65	26.5	45	
	CA						152	92	□70	16.5	35	
	СВ						157	97	□70	21.5	40	
EVB-115-0-0-14**	DA·DB·DC·DD·DF·DH						152	92	□80	16.5	35	
(S≦14)	DE						157	97	□80	21.5	40	
	DG						162	102	□80	26.5	45	
	EA·EB·EC						152	92	□90	16.5	35	
	ED						162	102	□90	26.5	45	
	FA						152	92	□100	16.5	35	
	GA						152	92	□115	16.5	35	
	DA·DB·DC	170	110	□80	25	50	160	100	□80	25	50	
	DD	180	120	□80	35	60	170	110	□80	35	60	
	DE	175	115	□80	30	55	165	105	□80	30	55	
	EA	175	115	□90	30	55	165	105	□90	30	55	
	EB	170	110	□90	25	50	160	100	□90	25	50	
	EC	180	120	□90	35	60	170	110	□90	35	60	
EVB-110-∐-∐-19** (14∠S<10)	FA	170	110	□100	25	50	160	100	□100	25	50	
(14 < 3 = 19)	FB	180	120	□100	35	60	170	110	□100	35	60	
	GA•GC	175	115	□115	30	55	165	105	□115	30	55	
	GB•GD	170	110	□115	25	50	160	100	□115	25	50	
	НА		110	□130	25	50	160	100	□130	25	50	
	HB	185	125	□130	40	65	175	115	□130	40	65	
	HC·HD·HE	175	115	□130	30	55	165	105	□130	30	55	
	FA•FB•FC	196	136	□100	35	67	189	129	□100	35	67	
	GA•GB•GC•GD•GE•GF•GG	196	136	□115	35	67	189	129	□115	35	67	
	HA·HC·HD	196	136	□130	35	67	189	129	□130	35	67	
EVB-115-🛛-🗌-28**	HB	206	146	□130	45	77	199	139	□130	45	77	
(19 <s≦28)< td=""><td>JA•JB•JC</td><td>196</td><td>136</td><td>□150</td><td>35</td><td>67</td><td>189</td><td>129</td><td>□150</td><td>35</td><td>67</td></s≦28)<>	JA•JB•JC	196	136	□150	35	67	189	129	□150	35	67	
	KA•KB	196	136	□180	35	67	189	129	□180	35	67	
	LA	196	136	□200	35	67	189	129	□200	35	67	
	MA	196	136	□220	35	67	189	129	□220	35	67	
	НА	213	153	□130	45	82						
	HB	208	148	□130	40	77						
	JA	213	153	□150	45	82						
EVB-115-🛛-🗍-38**	KA•KB•KC	213	153	□180	45	82						
(28 <s≦38)< td=""><td>LA</td><td>213</td><td>153</td><td>□200</td><td>45</td><td>82</td><td></td><td></td><td></td><td></td><td></td></s≦38)<>	LA	213	153	□200	45	82						
	LB	223	163	□200	55	92				\angle		
	MA·MB	213	153	□220	45	82				\geq		
	NA	213	153	□250	45	82				/		

%1 Single reduction : 1/3 ~ 1/10, Double reduction : 1/15 ~ 1/100

 \times 2 Bushing will be inserted to adapt to motor shaft.





Madal much au	** · Adapter code			Single			Double				
wodel number	** : Adapter code	L1	L2	L3	L4	L5	L1	L2	L3	L4	L5
	DA·DB·DC						185	110	□80	25	50
	DD						195	120	□80	35	60
	DE						190	115	□80	30	55
	EA						190	115	□90	30	55
	EB						185	110	□90	25	50
	EC						195	120	□90	35	60
$EVB-140-\Box-19**$	FA						185	110	□100	25	50
(3=19)	FB						195	120	□100	35	60
	GA•GC						190	115	□115	30	55
	GB•GD						185	110	□115	25	50
	HA						185	110	□130	25	50
	HB						200	125	□130	40	65
	HC • HD • HE						190	115	□130	30	55
	FA•FB•FC	227	152	□100	35	67	211	136	□100	35	67
	GA•GB•GC•GD•GE•GF•GG	227	152	□115	35	67	211	136	□115	35	67
	HA•HC•HD		152	□130	35	67	211	136	□130	35	67
EVB-140-🛛-🖵-28**	HB	237	162	□130	45	77	221	146	□130	45	77
(19 <s≦28)< td=""><td>JA•JB•JC</td><td>227</td><td>152</td><td>□150</td><td>35</td><td>67</td><td>211</td><td>136</td><td>□150</td><td>35</td><td>67</td></s≦28)<>	JA•JB•JC	227	152	□150	35	67	211	136	□150	35	67
	KA•KB	227	152	□180	35	67	211	136	□180	35	67
	LA	227	152	□200	35	67	211	136	□200	35	67
	MA	227	152	□220	35	67	211	136	□220	35	67
	HA	242	167	□130	45	82	228	153	□130	45	82
	HB	237	162	□130	40	77	223	148	□130	40	77
	JA	242	167	□150	45	82	228	153	□150	45	82
EVB-140-D-D-38**	KA•KB•KC	242	167	□180	45	82	228	153	□180	45	82
(28 <s≦38< td=""><td>LA</td><td>242</td><td>167</td><td>□200</td><td>45</td><td>82</td><td>228</td><td>153</td><td>□200</td><td>45</td><td>82</td></s≦38<>	LA	242	167	□200	45	82	228	153	□200	45	82
	LB	252	177	□200	55	92	238	163	□200	55	92
	MA • MB	242	167	□220	45	82	228	153	□220	45	82
	NA	242	167	□250	45	82	228	153	□250	45	82
	KB•KC	268	193	□180	55	98					
	KA	288	213	□180	75	118					
	LA	268	193	□200	55	98					
EVB-140-∐-∐-40** (38∠S≤48)	MA	268	193	□220	55	98					
(00 \ 0 = 40)	MB	288	213	□220	75	118					
	NA	288	213	□250	75	118					
	PA	288	213		75	118				_	

 $\,\%\,1$ Single reduction : 1/3 ~ 1/10, Double reduction : 1/15 ~ 1/100

 $\,\%\,2$ Bushing will be inserted to adapt to motor shaft.



MEMO

SHIMPO

For servo motor ABLEREDUCER EVIL Series







Space - saving

Right angle reducer using spiral bevel gear Costomer can locate the motor at 90 degree away from the reducer if required to save space.

High rigidity & torque

High rigidity & high torque was achived by uncaged needle roller bearings.

Adapter-bushing connection

Can be attached to any motor all over the world.

No grease leakage

Perfect solution by high viscosity anti-separation grease.

Maintenance-free

No need to replace the grease for the life time. Can be attached in any position.







※1 Mount code

Mount code varies depending on the motor. Please refer to reducer selection tool or contact us for more information.

Selection tool (English) (http://www.nidec-shimpo.co.jp/selection/eng/)

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EV

FVI -070R

EVL-0.	70B		※ 1	※ 2	₩3	※ 4	※ 5	₩6	※ 7
Frame size	Stage	Ratio	Nominal output torque	Maximum output torque	Emergency stop torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load
		3	12	24	50	3000	6000	430	310
		4	16	32	65	3000	6000	470	360
		5	22	40	80	3000	6000	510	390
		6	24	45	90	3000	6000	540	430
	2	7	24	45	90	3000	6000	570	460
		8	24	45	90	3000	6000	600	480
		9	16	32	65	3000	6000	620	510
		10	16	32	65	3000	6000	640	530
		15	16	32	65	3000	6000	740	630
		16	24	45	90	3000	6000	750	650
		20	24	45	90	3000	6000	810	720
070B		25	24	45	90	3000	6000	870	790
		28	24	45	90	3000	6000	910	830
		30	16	32	65	3000	6000	930	860
		35	24	45	90	3000	6000	980	920
	3	40	24	45	90	3000	6000	1000	970
		45	16	32	65	3000	6000	1100	1000
		50	24	45	90	3000	6000	1100	1100
		60	24	45	90	3000	6000	1200	1100
		70	24	45	90	3000	6000	1200	1100
		80	24	45	90	3000	6000	1200	1100
		90	16	32	65	3000	6000	1200	1100
		100	16	32	65	3000	6000	1200	1100
			※ 8	※ 9	※10				

Frame size	Stage	Ratio	Maximum radial load	Maximum axial load	Weight	Moment of inertia $(\leq \phi 8)$	Moment of inertia $(\leq \phi 14)$	Moment of inertia $(\leq \phi 19)$
			[N]	[N]	[kg]	[kg•cm ⁴]	[kg•cm ⁴]	[kg•cm ⁴]
		3	1200	1100		0.31	0.39	0.58
		4	1200	1100		0.27	0.34	0.53
		5	1200	1100		0.25	0.32	0.51
	2	6	1200	1100	1.0	0.24	0.31	0.50
	2	7	1200	1100	1.5	0.23	0.31	0.50
		8	1200	1100		0.23	0.31	0.50
		9	1200	1100		0.23	0.30	0.49
		10	1200	1100		0.23	0.30	0.49
		15	1200	1100		0.073	0.118	-
		16	1200	1100		0.079	0.124	-
		20	1200	1100		0.071	0.116	-
070B		25	1200	1100		0.071	0.115	-
		28	1200	1100		0.077	0.122	-
		30	1200	1100		0.062	0.106	-
		35	1200	1100		0.070	0.115	-
	3	40	1200	1100	1.7	0.061	0.106	-
		45	1200	1100		0.070	0.115	-
		50	1200	1100		0.061	0.106	-
		60	1200	1100		0.061	0.106	-
		70	1200	1100		0.061	0.105	-
		80	1200	1100		0.061	0.105	-
		90	1200	1100		0.061	0.105	-
		100	1200	1100		0.061	0.105	-

% 1 With nominal input speed, service life is 20,000 hours.

times 2 The maximum torque when starting and stopping.

% 3 The maximum torque when it receives shock (up to 1,000 times)

% 4 The maximum average input speed.

% 5 The maximum momentary input speed.

 \times 6 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)

% 7 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output side bearing, at radial load 0)

% 8 The maximum radial load the reducer can accept.

% 9 The maximum axial load the reducer can accept.

% 10 The weight may vary slightly model to model



EVL-0	90B		※ 1	※ 2	※ 3	※ 4	※ 5	※ 6	※ 7
Frame size	Stage	Ratio	Nominal output torque [Nm]	Maximum output torque [Nm]	Emergency stop torque	Nominal input speed [rpm]	Maximum input speed [rpm]	Permitted radial load [N]	Permitted axial load [N]
		3	45	65	130	3000	6000	810	930
		4	60	90	170	3000	6000	890	1100
		5	65	90	220	3000	6000	960	1200
		6	65	90	220	3000	6000	1000	1300
	2	7	65	90	220	3000	6000	1100	1300
		8	65	90	220	3000	6000	1100	1400
		9	45	65	170	3000	6000	1200	1500
		10	45	65	170	3000	6000	1200	1600
		15	45	65	170	3000	6000	1400	1900
		16	65	110	220	3000	6000	1400	1900
		20	65	110	220	3000	6000	1500	2100
090B		25	65	110	220	3000	6000	1600	2200
		28	65	110	220	3000	6000	1700	2200
		30	45	65	170	3000	6000	1700	2200
		35	65	110	220	3000	6000	1800	2200
	3	40	65	110	220	3000	6000	1900	2200
		45	45	65	170	3000	6000	2000	2200
		50	65	110	220	3000	6000	2100	2200
		60	65	110	220	3000	6000	2200	2200
		70	65	110	220	3000	6000	2300	2200
		80	65	110	220	3000	6000	2400	2200
		90	45	65	170	3000	6000	2400	2200
		100	45	65	170	3000	6000	2400	2200
			×8	<u> </u>	×10				
Frame	Stage	Ratio	Maximum radial load	Maximum axial load	Weight	Moment of inertia $(\leq \phi_R)$	Moment of inertia $(\leq \phi 14)$	Moment of inertia $(\leq \phi 19)$	Moment of inertia $(\leq d \cdot 28)$

Frame size	Stage	Ratio	Maximum radial load	Maximum axial load	Weight	of inertia $(\leq \phi 8)$	of inertia $(\leq \phi 14)$	of inertia $(\leq \phi 19)$	of inertia $(\leq \phi 28)$
			[N]	[N]	[kg]	[kg•cm ²]	[kg•cm ²]	[kg•cm ²]	[kg•cm ²]
		3	2400	2200		-	2.12	2.45	4.57
		4	2400	2200			1.89	2.22	4.35
		5	2400	2200		_	1.80	2.13	4.26
	2	6	2400	2200	19		1.76	2.09	4.21
	2	7	2400	2200	4.5	_	1.73	2.06	4.18
		8	2400	2200			1.71	2.04	4.17
		9	2400	2200		_	1.70	2.03	4.16
		10	2400	2200		_	1.69	2.02	4.15
		15	2400	2200		0.34	0.41	0.60	_
		16	2400	2200		0.38	0.46	0.65	_
		20	2400	2200		0.33	0.40	0.59	_
090B		25	2400	2200		0.32	0.40	0.59	_
		28	2400	2200		0.37	0.45	0.64	_
		30	2400	2200		0.25	0.33	0.51	_
		35	2400	2200		0.32	0.40	0.59	_
	3	40	2400	2200	4.3	0.25	0.32	0.51	_
		45	2400	2200		0.32	0.39	0.58	_
		50	2400	2200		0.25	0.32	0.51	_
		60	2400	2200		0.25	0.32	0.51	_
		70	2400	2200		0.25	0.32	0.51	_
		80	2400	2200		0.25	0.32	0.51	_
		90	2400	2200		0.25	0.32	0.51	_
		100	2400	2200		0.25	0.32	0.51	-

 $\,\,\%\,$ 1 With nominal input speed, service life is 20,000 hours.

% 2 The maximum torque when starting and stopping.

 $\,\, \ensuremath{\overset{\,\,}{\times}}\,$ 3 The maximum torque when it receives shock (up to 1,000 times)

% 4 The maximum average input speed.

% 5 The maximum momentary input speed.

%~6~ With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)

- % 7 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output side bearing, at radial load 0)
- % 8 The maximum radial load the reducer can accept.

% 9 The maximum axial load the reducer can accept.

% 10 The weight may vary slightly model to model

EV

EVL	-120B
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EVL^{-12}			X 1	※ 2	Ж3	※ 4	※ 5	※ 6	※ 7
Frame size	Stage	Ratio	Nominal output torque	Maximum output torque	Emergency stop torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load
			[Nm]	[Nm]	[Nm]	[rpm]	[rpm]	[N]	[N]
		3	75	150	320	3000	6000	1300	1500
		4	100	200	430	3000	6000	1500	1700
		5	120	240	500	3000	6000	1600	1900
	2	6	150	300	550	3000	6000	1700	2000
	-	7	150	300	550	3000	6000	1800	2100
		8	150	300	550	3000	6000	1900	2300
		9	110	200	450	3000	6000	1900	2400
		10	110	200	450	3000	6000	2000	2500
		15	110	200	450	3000	6000	2300	3000
		16	130	260	550	3000	6000	2300	3100
		20	150	300	550	3000	6000	2500	3400
120B		25	150	300	550	3000	6000	2700	3700
		28	150	300	550	3000	6000	2800	3900
		30	110	200	450	3000	6000	2900	3900
		35	150	300	550	3000	6000	3000	3900
	3	40	150	300	550	3000	6000	3200	3900
		45	110	200	450	3000	6000	3300	3900
		50	150	300	550	3000	6000	3400	3900
		60	150	300	550	3000	6000	3600	3900
		70	150	300	550	3000	6000	3800	3900
		80	150	300	550	3000	6000	4000	3900
		90	110	200	450	3000	6000	4200	3900
		100	110	200	450	3000	6000	4300	3900
			×8	×9	×10				

Frame size	Stage	Ratio	Maximum radial load	Maximum axial load	Weight	Moment of inertia $(\leq \phi 14)$	Moment of inertia $(\leq \phi 19)$	Moment of inertia $(\leq \phi 28)$	Moment of inertia $(\leq \phi 38)$
		-	[IN]	[N]	[Kg]	[kg•cm ⁻]	kg•cm⁻j	[kg•cm ⁻]	[kg•cm ⁻]
		3	4300	3900		-	6.74	8.34	15.41
		4	4300	3900		-	5.49	7.08	14.15
		5	4300	3900		-	5.02	6.61	13.69
	2	6	4300	3900	10.2	-	4.77	6.36	13.43
	2	7	4300	3900	10.2	-	4.65	6.24	13.31
		8	4300	3900		-	4.55	6.14	13.22
		9	4300	3900		-	4.49	6.08	13.16
		10	4300	3900		-	4.46	6.05	13.12
		15	4300	3900		2.25	2.58	4.70	-
		16	4300	3900		2.46	2.79	4.91	-
		20	4300	3900		2.20	2.53	4.65	-
120B		25	4300	3900		2.18	2.51	4.64	-
		28	4300	3900		2.40	2.73	4.86	-
		30	4300	3900		1.87	2.20	4.33	-
		35	4300	3900		2.16	2.49	4.62	-
	3	40	4300	3900	10.0	1.86	2.19	4.32	-
		45	4300	3900		2.15	2.48	4.61	-
		50	4300	3900		1.86	2.19	4.31	-
		60	4300	3900		1.85	2.18	4.31	-
		70	4300	3900		1.85	2.18	4.31	-
		80	4300	3900		1.85	2.18	4.31	-
		90	4300	3900		1.85	2.18	4.31	-
		100	4300	3900		1.85	2.18	4.31	-

% 1 With nominal input speed, service life is 20,000 hours.

st 2 The maximum torque when starting and stopping.

% 3 The maximum torque when it receives shock (up to 1,000 times)

% 4 The maximum average input speed.

% 5 The maximum momentary input speed.

%~6~ With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)

%~7 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output side bearing, at radial load 0)

% 8 The maximum radial load the reducer can accept.

% 9 The maximum axial load the reducer can accept.

※10 The weight may vary slightly model to model



EVL-1	55B		※ 1	※ 2	※ 3	※ 4	※ 5	※ 6	※ 7
Frame size	Stage	Ratio	Nominal output torque	Maximum output torque	Emergency stop torque	Nominal input speed	Maximum input speed	Permitted radial load	Permitted axial load
			[Nm]	[Nm]	[Nm]	[rpm]	[rpm]	[N]	[N]
		3	130	260	700	2000	4000	3200	2400
		4	170	340	950	2000	4000	3500	2700
		5	200	400	1100	2000	4000	3800	3000
	2	6	260	520	1100	2000	4000	4000	3300
	2	7	300	600	1100	2000	4000	4200	3500
		8	300	600	1100	2000	4000	4400	3700
		9	200	400	750	2000	4000	4600	3900
		10	200	400	750	2000	4000	4700	4100
		15	200	400	750	2000	4000	5400	4900
		16	300	600	1100	2000	4000	5500	5000
		20	300	600	1100	2000	4000	6000	5500
155B		25	300	600	1100	2000	4000	6400	6100
		28	300	600	1100	2000	4000	6700	6400
		30	200	400	750	2000	4000	6800	6600
		35	300	600	1100	2000	4000	7200	7000
	3	40	300	600	1100	2000	4000	7500	7500
		45	200	400	750	2000	4000	7800	7900
		50	300	600	1100	2000	4000	8100	8200
		60	300	600	1100	2000	4000	8600	8200
		70	300	600	1100	2000	4000	9100	8200
		80	300	600	1100	2000	4000	9100	8200
		90	200	400	750	2000	4000	9100	8200
		100	200	400	750	2000	4000	9100	8200
•			X 8	× 0	×10				

Frame size	Stage	Ratio	Maximum radial load	Maximum axial load	Weight	Moment of inertia $(\leq \phi 19)$	Moment of inertia $(\leq \phi 28)$	Moment of inertia $(\leq \phi 38)$	Moment of inertia $(\leq \phi 48)$
			[N]	[N]	[kg]	[kg•cm ²]	[kg•cm ²]	[kg•cm ²]	[kg•cm ²]
		3	9100	8200		-	23.13	27.50	40.73
		4	9100	8200		-	18.57	22.94	36.17
		5	9100	8200		I	16.91	21.28	34.51
	2	6	9100	8200	10.9	-	16.01	20.38	33.61
	2	7	9100	8200	19.0	I	15.58	19.95	33.18
		8	9100	8200		-	15.23	19.61	32.84
		9	9100	8200		-	14.77	19.41	32.37
		10	9100	8200		-	14.66	19.03	32.26
		15	9100	8200		6.40	8.00	15.07	-
		16	9100	8200		7.29	8.88	15.96	-
		20	9100	8200		6.22	7.81	14.89	I
155B		25	9100	8200		6.15	7.75	14.82	-
		28	9100	8200		7.09	8.68	15.76	I
		30	9100	8200		4.99	6.58	13.66	-
		35	9100	8200		6.09	7.69	14.76	-
	3	40	9100	8200	20.4	4.95	6.54	13.61	-
		45	9100	8200		6.07	7.66	14.74	-
		50	9100	8200		4.93	6.52	13.59	-
		60	9100	8200		4.92	6.51	13.59	I
		70	9100	8200		4.91	6.51	13.58	-
		80	9100	8200		4.91	6.50	13.58	_
		90	9100	8200		4.91	6.50	13.57	-
		100	9100	8200		4.91	6.50	13.57	-

% 1 With nominal input speed, service life is 20,000 hours.

% 2 The maximum torque when starting and stopping.

% 3 The maximum torque when it receives shock (up to 1,000 times)

 \times 4 The maximum average input speed.

% 5 The maximum momentary input speed.

% 6 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output shaft center, at axial load 0)

- % 7 With this load and nominal input speed, service life will be 20,000 hours. (Applied to the output side bearing, at radial load 0)
- % 8 The maximum radial load the reducer can accept.
- % 9 The maximum axial load the reducer can accept.

% 10 The weight may vary slightly model to model

EV

EVL-070B 2stage









- $\,\%\,1\,$ Length will vary depending on motor.
- st2 Bushing will be inserted to adapt to motor shaft.



Right angle shaft **EVL** series

EVL-070B 3stage







- %1 Length will vary depending on motor.
- $\gtrsim 2$ Bushing will be inserted to adapt to motor shaft.

EVL-090B 2stage









- $\,\%\,1\,$ Length will vary depending on motor.
- %2 Bushing will be inserted to adapt to motor shaft.



Right angle shaft **EVL** series

EVL-090B 3stage









- $\times 1$ Length will vary depending on motor.
- st2 Bushing will be inserted to adapt to motor shaft.

EVL-120B 2stage









- $\,\%\,1\,$ Length will vary depending on motor.
- %2 Bushing will be inserted to adapt to motor shaft.



Right angle shaft **EVL** series

ABLE REDUCER

EVL-120B 3stage









- $\times 1$ Length will vary depending on motor.
- %2 Bushing will be inserted to adapt to motor shaft.

EVL-155B 2stage









- $\,\%\,1\,$ Length will vary depending on motor.
- %2 Bushing will be inserted to adapt to motor shaft.



EVL-155B 3stage









- $\,\%\,1\,$ Length will vary depending on motor.
- $\gtrsim 2$ Bushing will be inserted to adapt to motor shaft.

Dimensions (Adapter)



Madalarandara		Single					Double				
Model number	Adapter code		L2	L3	L4	L5	L1	L2	L3	L4	L5
	AA•AC•AD•AF•AG	106.5	71.5	□52	15.5	32	99.5	64.5	□52	15.5	32
	AB•AE•AH•AJ•AK	111.5	76.5	□52	20.5	37	104.5	69.5	□52	20.5	37
EVL-0/0B-∐-∐-0** (S<8)	BA•BB•BD•BE	106.5	71.5	□60	15.5	32	99.5	64.5	□60	15.5	32
(0=0)	BC•BF	111.5	76.5	□60	20.5	37	104.5	69.5	□60	20.5	37
	CA	111.5	76.5	□70	20.5	37	104.5	69.5	□70	20.5	37
	BA•BB•BD•BE•BF•BG•BJ•BK	112.5	77.5	□65	16.5	35	103.5	68.5	□65	16.5	35
	BC•BH	117.5	82.5	□65	21.5	40	108.5	73.5	□65	21.5	40
	BL	122.5	87.5	□65	26.5	45	113.5	78.5	□65	26.5	45
	CA	112.5	77.5	□70	16.5	35	103.5	68.5	□70	16.5	35
	CB	117.5	82.5	□70	21.5	40	108.5	73.5	□70	21.5	40
EVL-070B-0-04**	DA·DB·DC·DD·DF·DH	112.5	77.5	□80	16.5	35	103.5	68.5	□80	16.5	35
(8 <s≦14)< td=""><td>DE</td><td>117.5</td><td>82.5</td><td>□80</td><td>21.5</td><td>40</td><td>108.5</td><td>73.5</td><td>□80</td><td>21.5</td><td>40</td></s≦14)<>	DE	117.5	82.5	□80	21.5	40	108.5	73.5	□80	21.5	40
	DG	122.5	87.5	□80	26.5	45	113.5	78.5	□80	26.5	45
	EA·EB·EC	112.5	77.5	□90	16.5	35	103.5	68.5	□90	16.5	35
	ED	122.5	87.5	□90	26.5	45	113.5	78.5	□90	26.5	45
	FA	112.5	77.5	□100	16.5	35	103.5	68.5	□100	16.5	35
	GA	112.5	77.5	□115	16.5	35	103.5	68.5	□115	16.5	35
	DA·DB·DC	129.5	94.5	□80	25	50	\sim				
	DD	139.5	104.5	□80	35	60		\square	\sim		
	DE	134.5	99.5	□80	30	55	\sim			\sim	
	EA	134.5	99.5	□90	30	55	\sim				
	EB	129.5	94.5	□90	25	50	\sim			\sim	
	EC	139.5	104.5	□90	35	60	\sim				
(14 <s≤19)< td=""><td>FA</td><td>129.5</td><td>94.5</td><td>□100</td><td>25</td><td>50</td><td>\sim</td><td></td><td></td><td>\sim</td><td></td></s≤19)<>	FA	129.5	94.5	□100	25	50	\sim			\sim	
	FB	139.5	104.5	□100	35	60			\sim		
	GA•GC	134.5	99.5	□115	30	55	\sim			\sim	
	GB•GD	129.5	94.5	□115	25	50	\sim				
	НА	129.5	94.5	□130	25	50				\sim	
	HB	144.5	109.5	□130	40	65				\sim	
	HC·HD·HE	134.5	99.5	□130	30	55					

 $\%\,1$ Single reduction : 1/3 ~ 1/10, Double reduction : 1/15 ~ 1/100

 $\,\%\,2$ Bushing will be inserted to adapt to motor shaft.





Madal number	Model number **: Adapter code			Single					Double				
woder number			L2	L3	L4	L5	L1	L2	L3	L4	L5		
	AA•AC•AD•AF•AG						117	71.5	□52	15.5	32		
	AB•AE•AH•AJ•AK						122	76.5	□52	20.5	37		
EVL-U90B-∐-∐-0** (S<8)	BA•BB•BD•BE						117	71.5	□60	15.5	32		
(3=0)	BC•BF						122	76.5	□60	20.5	37		
	CA						122	76.5	□70	20.5	37		
	BA·BB·BD·BE·BF·BG·BJ·BK	137.5	92	□65	16.5	35	123	77.5	□65	16.5	35		
	BC•BH	142.5	97	□65	21.5	40	128	82.5	□65	21.5	40		
	BL	147.5	102	□65	26.5	45	133	87.5	□65	26.5	45		
	CA	137.5	92	□70	16.5	35	123	77.5	□70	16.5	35		
	CB	142.5	97	□70	21.5	40	128	82.5	□70	21.5	40		
EVL-090B-0-14**	DA·DB·DC·DD·DF·DH	137.5	92	□80	16.5	35	123	77.5	□80	16.5	35		
(8 <s≦14)< td=""><td>DE</td><td>142.5</td><td>97</td><td>□80</td><td>21.5</td><td>40</td><td>128</td><td>82.5</td><td>□80</td><td>21.5</td><td>40</td></s≦14)<>	DE	142.5	97	□80	21.5	40	128	82.5	□80	21.5	40		
	DG	147.5	102	□80	26.5	45	133	87.5	□80	26.5	45		
	EA·EB·EC	137.5	92	□90	16.5	35	123	77.5	□90	16.5	35		
	ED	147.5	102	□90	26.5	45	133	87.5	□90	26.5	45		
	FA	137.5	92	□100	16.5	35	123	77.5	□100	16.5	35		
	GA	137.5	92	□115	16.5	35	123	77.5	□115	16.5	35		
	DA·DB·DC	145.5	100	□80	25	50	140	94.5	□80	25	50		
	DD	155.5	110	□80	35	60	150	104.5	□80	35	60		
	DE	150.5	105	□80	30	55	145	99.5	□80	30	55		
	EA	150.5	105	□90	30	55	145	99.5	□90	30	55		
	EB	145.5	100	□90	25	50	140	94.5	□90	25	50		
	EC	155.5	110	□90	35	60	150	104.5	□90	35	60		
$EV _ 090B _ _ _ _ _ 19 + +$ $(14 \angle S \leq 10)$	FA	145.5	100	□100	25	50	140	94.5	□100	25	50		
(14 < 3 = 13)	FB	155.5	110	□100	35	60	150	104.5	□100	35	60		
	GA•GC	150.5	105	□115	30	55	145	99.5	□115	30	55		
	GB•GD	145.5	100	□115	25	50	140	94.5	□115	25	50		
	HA	145.5	100	□130	25	50	140	94.5	□130	25	50		
	HB	160.5	115	□130	40	65	155	109.5	□130	40	65		
	HC·HD·HE	150.5	105	□130	30	55	145	99.5	□130	30	55		
	FA•FB•FC	174.5	129	□100	35	67							
	GA•GB•GC•GD•GE•GF•GG	174.5	129	□115	35	67							
	HA·HC·HD	174.5	129	□130	35	67							
EVL-090B-0-28**	HB	184.5	139	□130	45	77							
(19 <s≦28)< td=""><td>JA•JB•JC</td><td>174.5</td><td>129</td><td>□150</td><td>35</td><td>67</td><td></td><td></td><td></td><td></td><td></td></s≦28)<>	JA•JB•JC	174.5	129	□150	35	67							
	KA•KB	174.5	129	□180	35	67							
	LA	174.5	129	□200	35	67							
	МА	174.5	129	220	35	67	\sim			\geq			

 $\%\,1$ Single reduction : 1/3 ~ 1/10, Double reduction : 1/15 ~ 1/100

 $\,\%\,2$ Bushing will be inserted to adapt to motor shaft.

Dimensions (Adapter)



Madalarankan	dute A destruction and a			Single					Double		
Model number	**: Adapter code	L1	L2	L3	L4	L5	L1	L2	L3	L4	L5
	BA•BB•BD•BE•BF•BG•BJ•BK						152	92	□65	16.5	35
	BC•BH						157	97	□65	21.5	40
	BL						162	102	□65	26.5	45
	CA						152	92	□70	16.5	35
	СВ						157	97	□70	21.5	40
EVL-120B-🛛-🛨-14**	DA · DB · DC · DD · DF · DH						152	92	□80	16.5	35
(S≦14)	DE						157	97	□80	21.5	40
	DG	\sim	\sim		\sim		162	102	□80	26.5	45
	EA·EB·EC						152	92	□90	16.5	35
	ED	\sim	\sim		\sim		162	102	□90	26.5	45
	FA						152	92	□100	16.5	35
	GA						152	92	□115	16.5	35
	DA·DB·DC	170	110	□80	25	50	160	100	□80	25	50
	DD	180	120	□80	35	60	170	110	□80	35	60
	DE	175	115	□80	30	55	165	105	□80	30	55
	EA	175	115	□90	30	55	165	105	□90	30	55
	EB	170	110	□90	25	50	160	100	□90	25	50
	EC	180	120	□90	35	60	170	110	□90	35	60
[14 < S < 19)	FA	170	110	□100	25	50	160	100	□100	25	50
(14 < 0 = 13)	FB	180	120	□100	35	60	170	110	□100	35	60
	GA•GC	175	115	□115	30	55	165	105	□115	30	55
	GB•GD	170	110	□115	25	50	160	100	□115	25	50
	HA	170	110	□130	25	50	160	100	□130	25	50
	HB	185	125	□130	40	65	175	115	□130	40	65
	HC•HD•HE	175	115	□130	30	55	165	105	□130	30	55
	FA•FB•FC	196	136	□100	35	67	189	129	□100	35	67
	GA•GB•GC•GD•GE•GF•GG	196	136	□115	35	67	189	129	□115	35	67
	HA•HC•HD	196	136	□130	35	67	189	129	□130	35	67
EVL-120B-🛛-🗖-28**	HB	206	146	□130	45	77	199	139	□130	45	77
(19 <s≦28)< td=""><td>JA•JB•JC</td><td>196</td><td>136</td><td>□150</td><td>35</td><td>67</td><td>189</td><td>129</td><td>□150</td><td>35</td><td>67</td></s≦28)<>	JA•JB•JC	196	136	□150	35	67	189	129	□150	35	67
	KA•KB	196	136	□180	35	67	189	129	□180	35	67
	LA	196	136	□200	35	67	189	129	□200	35	67
	MA	196	136	□220	35	67	189	129	□220	35	67
	HA	213	153	□130	45	82					
	HB	208	148	□130	40	77					
	JA	213	153	□150	45	82					
EVL-120B-🛛-🕄-38**	КА•КВ•КС	213	153	□180	45	82					
(28 <s≦38)< td=""><td>LA</td><td>213</td><td>153</td><td>□200</td><td>45</td><td>82</td><td></td><td></td><td></td><td></td><td></td></s≦38)<>	LA	213	153	□200	45	82					
	LB	223	163	□200	55	92	\square			\sim	
	MA•MB	213	153	□220	45	82	\sim			\angle	
	NA	213	153	□250	45	82				\sim	

%1 Single reduction : 1/3 ~ 1/10, Double reduction : 1/15 ~ 1/100

 $\times 2$ Bushing will be inserted to adapt to motor shaft.





Madal number ** Adapter code			Single					Double				
			L2	L3	L4	L5	L1	L2	L3	L4	L5	
	DA·DB·DC						187.5	110	□80	25	50	
	DD						197.5	120	□80	35	60	
	DE						192.5	115	□80	30	55	
	EA						192.5	115	□90	30	55	
	EB						187.5	110	□90	25	50	
	EC						197.5	120	□90	35	60	
EVL-100D-∐-∐-19** (S<10)	FA						187.5	110	□100	25	50	
(0=10)	FB						197.5	120	□100	35	60	
	GA•GC						192.5	115	□115	30	55	
	GB•GD						187.5	110	□115	25	50	
	HA						187.5	110	□130	25	50	
	HB						202.5	125	□130	40	65	
	HC·HD·HE						192.5	115	□130	30	55	
	FA•FB•FC	229.5	152	□100	35	67	213.5	136	□100	35	67	
	GA•GB•GC•GD•GE•GF•GG	229.5	152	□115	35	67	213.5	136	□115	35	67	
	HA·HC·HD	229.5	152	□130	35	67	213.5	136	□130	35	67	
EVL-155B-🛛-🛨-28**	HB	239.5	162	□130	45	77	223.5	146	□130	45	77	
(19 <s≦28)< td=""><td>JA•JB•JC</td><td>229.5</td><td>152</td><td>□150</td><td>35</td><td>67</td><td>213.5</td><td>136</td><td>□150</td><td>35</td><td>67</td></s≦28)<>	JA•JB•JC	229.5	152	□150	35	67	213.5	136	□150	35	67	
	KA•KB	229.5	152	□180	35	67	213.5	136	□180	35	67	
	LA	229.5	152	□200	35	67	213.5	136	□200	35	67	
	MA	229.5	152	□220	35	67	213.5	136	□220	35	67	
	HA	244.5	167	□130	45	82	230.5	153	□130	45	82	
	HB	239.5	162	□130	40	77	225.5	148	□130	40	77	
	JA	244.5	167	□150	45	82	230.5	153	□150	45	82	
EVL-155B-🛛-🔲-38**	KA•KB•KC	244.5	167	□180	45	82	230.5	153	□180	45	82	
(28 <s≦38)< td=""><td>LA</td><td>244.5</td><td>167</td><td>□200</td><td>45</td><td>82</td><td>230.5</td><td>153</td><td>□200</td><td>45</td><td>82</td></s≦38)<>	LA	244.5	167	□200	45	82	230.5	153	□200	45	82	
	LB	254.5	177	□200	55	92	240.5	163	□200	55	92	
	MA • MB	244.5	167	□220	45	82	230.5	153	□220	45	82	
	NA	244.5	167	□250	45	82	230.5	153	□250	45	82	
	KB•KC	270.5	193	□180	55	98						
	KA	290.5	213	□180	75	118						
	LA	270.5	193	□200	55	98						
EVL-100B-U-U-48** (20/S<40)	MA	270.5	193	□220	55	98						
(30 \ 3 = 40)	MB	290.5	213	□220	75	118						
	NA	290.5	213	□250	75	118						
	PA	290.5	213	280	75	118		\geq		\geq		

 $\,\%\,1$ Single reduction : 1/3 ~ 1/10, Double reduction : 1/15 ~ 1/100



MEMO



1



Mounting procedure to the motor



Reducer installation

2

After confirming the installation surface is flat and clean, tighten the bolt using a torque wrench to the proper torque.(See table2)



Table 1

Bolt size	Motor inst	alling bolts	Clamping bolt			
	Nm kgfm		Nm	kgfm		
M3	1.1	0.11	1.9	0.18		
M4	2.5	0.26	4.3	0.44		
M5	5.1	0.52	8.7	0.89		
M6	8.7	0.89	15	1.5		
M8	21	2.1	36	3.7		
M10	42	4.3	71	7.2		
M12	72	7.3	125	13		
M16	134	14	-	-		

Table 2

Bolt size	Tightening torque						
	Nm	kgfm					
M3	1.9	0.18					
M4	4.3	0.44					
M5	8.7	0.89					
M6	15	1.5					
M8	36	3.7					
M10	71	7.2					
M12	125	13					
M16	310	32					
M20	603	62					

*Recommended bolt: Strength 12.9

Servo Motor Manufacturer List

Japanese Servo Motor Manufacturer					
Panasonic Corporation	TOSHIBA MACHINE CO.,LTD.				
YASKAWA Electric Corporation	FANUC CORPORATION				
Mitsubishi Electric Corporation	TAMAGAWA SEIKI CO.,LTD.				
FUJI ELECTRIC CO.,LTD.	Nikki Denso				
OMRON Corporation	Hitachi Industrial Equipment Systems Co.,Ltd.				
SANYO DENKI CO.,LTD.	Sanmei Co.,Inc.				
KEYENCE CORPORATION.	NIDEC SANKYO CORPORATION				
■ Global Servo Motor Manufacturer					
ALLEN BRADLEY	BECKHOFF				
ABB	LENZE				
B&R	LUST				
BALDOR	PARKER				
BAUMULLER	SAMSUNG				
BOSCH REXROTH	SCHNEIDER				
DELTA	SIEMENS				
EMERSON (CONTROL TECHNIQUES)	TECO				
ESTUN	GOLDEN AGE				

* For inquries for other servomotor manufacturer and servomotor series, please consult our subsidiary in your area.

Cautions for storage

Whenever temporarily keeping the product, keep the following directions:

- 1 Keep in a clean and dry place.
- 2 Whenever storing outdoors or in a humid place, put in a box so that it does not directly contact rain or external air and cover with a vinyl sheet(Take a measure to prevent rust.).

Cautions for operation

 When the reducer is delivered to you · · · When the product delivered, please confirm that you received the exact same model you have ordered. Please wipe out the input and output shaft of the reducer which is covered by anti-corrosive oil. * Please remove the rubber cap on the input shaft before you wipe the shafts. * Lubricant(grease) is already filled in the reducer. It is available as it is.
 Fixation & installation Avoid use in a place where rain or water drops directly. In case of use outdoors or in a place where dust and water drops, consult in advance. Install at 0°C ~40°C of surrounding temperature. In case of use at temperature out of the above-mentioned range, contact the headquarters and consult on this. Firmly fix with a bolt onto a solid stand without vibration. Install in consideration of convenience in repair and inspection.
 Cautions prior to starting the operation Reducer can be used soon after arrival, since it has already been filled out with lubrication. At initial operation, check the rotating direction of the output shaft and then gradually apply load.
 Cautions during operation Avoid overload. Ensure that input speed shall not be the number of revolutions beyond the specification. In the following cases, stop the operation and check the following points: If temperature sharply increases If an abnormal noise appears sharply If the number of revolutions becomes unstable sharply These may be caused by the following matters, so rapidly respond to it or contact us. Is it under overload condition? Is lubricant insufficient or deteriorated, or is lubricant of other type used? Is the axis, gear, and motor side damaged? Is jointing with other machines poor?
 Disassembly ABLE REDUCER is designed not to allow disassembly.
■Warranty ● A warranty period is one year after the product is delivered to you.
 Lubricant use The ABLE REDUCER is of grease-seal type in all models. A specified amount of grease is filled at factory release, so you can use as soon as it is delivered to you. It is impossible to exchange grease. In case of use at 0°C ~40°C of surrounding temperature at usual times, consider this in advance.
 Daily check points Is reducer case temperature excessively high during operation? (Up to + 50°C is not significant.) Is there an abnormal noise in the bearing, gear, etc? Is there abnormal vibration in the reducer? * Upon an abnormal phenomenon, immediately stop the operation and contact us. Is there a lubricant leak? * Upon e il hole contact un.

* Upon an oil leak, contact us.

Periodic check points

- Are there overload and abnormal rotation?
- Are free, sprocket, and reducer assembling bolts loose?
- Is there an abnormal condition in the electric system?
- Checkup and repair of major parts
- * Upon an abnormal condition, immediately stop the operation and contact us.
- Oil leak
- * Upon an oil leak, contact us.

Scrapping

Whenever scrapping the ABLE REDUCER, classify the parts by material into industrial wastes as specified in the laws and regulations of self-governing bodies. Material of parts can be divided into four:

- ① Rubber parts : Oil seal, seat packing, rubber cap, seal used for bearing on the motor flange, etc.
- 2 Aluminum parts : Motor flange, output shaft holder
- ③ Grease : Wipe off grease attached to parts with dry cloth and scrap into oils.
- ④ Iron parts : Parts other than those mentioned in the above

WARRANTY PROVISION

· Warranty scope is the delivered product only.

■ THE EXPENSES AND LOSSES THAT MENTIONED BELOW ARE NOT INCLUDED IN WARRANTY

1)The transport charges for repairing of our products.

2)The fee for the removal operation, reinstallation and other related operation in case our product is installed to the other machine. 3)The loss of the chances of use and indirect damages caused by the interruption of the services caused by our product's defects. 4)All other secondary expenses and losses. You can download the CAD drawings(2D \cdot 3D) of ABLE REDUCER EVS series.





[Make a selection from load condition].



DXF, IGS, STP format data can be downloaded.

Bases in Japan: Tokyo branch/Nagoya branch/Kansai branch/Kita Kanto branch/ Kanazawa branch/Fukuoka branch **NETWORK** Tokyo branch Tokyo (03) 3494-0721 Kita Kanto branch Nogoya branch TaNagoya (052) 219-6781 Kansai branch Kanazawa branch Kanazawa (076) 233-2626 Fukuoka branch ☎Hatogaya (048) 287-1159 (075) 958-3670 (092) 411-4750 **☎**Kyoto **☎**Fukuoka **a**Kyoto (075) 958-1298 International Sales & Marketing Dept. **a**Kyoto **a**Kyoto (075) 958-3606 Sales Dept. (075) 958-3608 Headquarters NIDEC Group: NIDEC Corporation/ NIDEC SANKYO Corporation/ NIDEC COPAL / NIDEC TOSOK Corporation/ NIDEC COPAL Electronics Corporation/ NIDEC Servo Corporation/ NIDEC LEAD Corporation/ NIDEC TECHNO MOTOR HOLDINGS CORPORATION/ NIDEC KYORI Corporation/ NIDEC Logistic Corporation/ NIDEC Machinery Corporation/ NIDEC Pigeon Corporation/ NIDEC Total Service Corporation/ NIDEC NISSIN Corporation Headquarters,Kyoto Beijing America, Chicago 🔿 Los Angeles Shanghai Pinghu 🔘 Japan Electronics Hong Kong Taiwan Headquarters in Kyoto Mexico-Querétaro 0 India-Bangalore Singapore São P Pinghu Shanghai Hong Kong Headquarters, Kvoto Nagaokakvo Chicago in U.S. We are making efforts for quality improvement on the Deming Award to be given to enterprises practicing QUALITY basis of the concept of total quality control. excellent quality control

■NIDEC-SHIMPO has obtained ISO 9001/ISO 14001 certification of quality assurance.

ISO 9001

Range of registrations Design, development, manufacturing, and relevant service(refurbishing) of the following products:

●CVT

- Reducer
- Electronic measuring instrument(Digital revolution indicator/ Stroboscope)
- Control units(digital controller)
 Ceramic devices(motor plane/kiln)
- Ceramic devices(motor plane

ISO 14001

- Range of registrations
- Design, development, manufacturing, and refurbishing of CVT, reducer, measuring instruments, control units, ceramic devices, and other industrial devices

Factories:







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