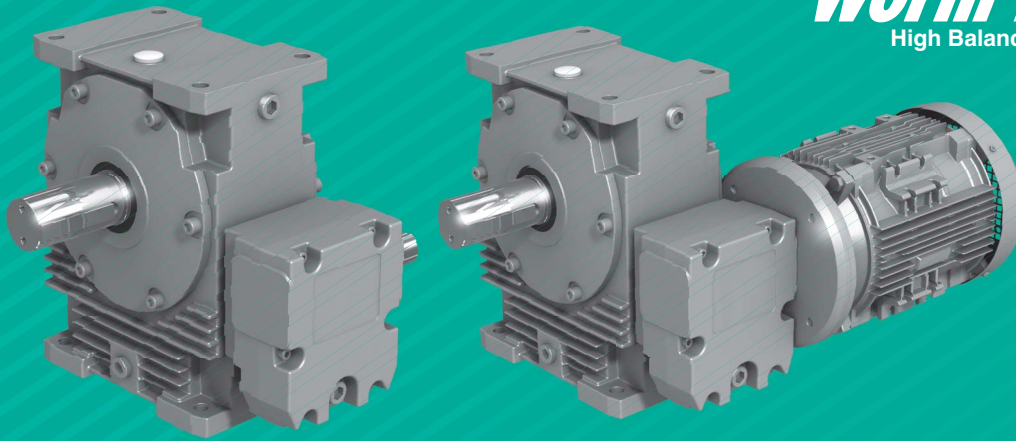
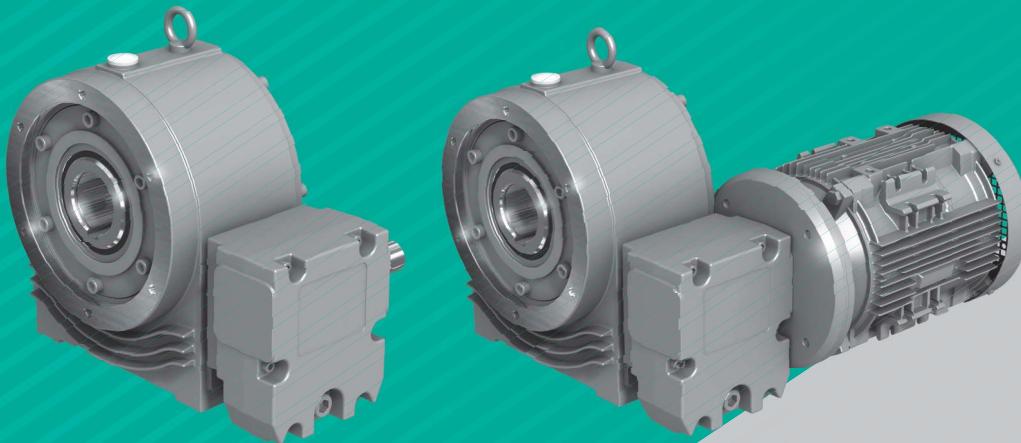




EWJ/EW/SW Series

Double Reduction (Reduction ratio 1/100 to 1/3600)



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Model

	Series	Size	Installation direction	Reduction ratio	Shaft arrangement	Motor kW	Motor specifications	Option	
EWJ EWJM EW EWM(R) SW SWM(R) Series	Double Reduction								
	Without motor EWJ	50	T	100	R-L				
	EW	100	B	300	L-R				
	SW	100	B	1200	R-LF			- K	
	With motor EWJM	70	B	500	R-L	020	S		
	EWMR	100	V	300	R-LUD	075		- V	
	SWMR	150	B	300	L-RF	370	B	- V	
	With motor	EWJ EWJM 50/63/70	EWJ50/63 EWJM50/63 T: T type V: V type	100: 1/100 150: 1/150 200: 1/200 250: 1/250 300: 1/300 400: 1/400 500: 1/500	Refer to page 74	(3-phase) 010: 0.1 kW 020: 0.2 kW 040: 0.4 kW	S: Standard motor mounted. SB: Standard motor with brake mounted. SX: Customer- supplied motor mounted.	Reducer Refer to pages 229 to 241	
	EWMR	EW/SW EWM(R) SWM(R) 80/100 125/150 175/200	EWJ70 EWJM70 EW/EWM(R) 80 to 200 SW/SWM(R) 80 to 200 B: B type V: V type	600: 1/600 800: 1/800 1000: 1/1000 1200: 1/1200 1500: 1/1500 1800: 1/1800 2400: 1/2400 3000: 1/3000 3600: 1/3600		075: 0.75 kW 150: 1.5 kW 220: 2.2 kW 370: 3.7 kW 550: 5.5 kW	Y: Customer to mount motor <u>0.75 to 5.5 kW</u> No code: IE3 motor without brake mounted. B: IE3 motor with brake mounted.		 Motor Refer to pages 242 to 243
	SWMR								

Shaft Arrangement

EWJ/EW Series

Arrows in figures indicate direction of rotation.

B type		B□L-R		B□L-R		B□L-H
		B□R-L		B□R-L		B□R-H
V type		V□L-RU		V□L-RD		V□L-RUD
		V□R-LU		V□R-LD		V□R-LUD

Note 1) When selecting B type for EWJ50 and EWJ63 double reduction models, the code will be "T" instead of "B". Eg. EWJ50T100L-R

2) Hollow output shafts are available only for EW Series.

3) Keyway positions do not match one another on double output shafts. Please contact Tsubaki representative when required.

EWJM/EWM(R) Series

Arrows in figures indicate direction of rotation.

B type		B□L-R		B□L-R		B□L-H
		B□R-L		B□R-L		B□R-H
V type		V□L-RU		V□L-RD		V□L-RUD
		V□R-LU		V□R-LD		V□R-LUD

Note 1) When selecting B type for EWJM50 and EWJM63 double reduction models, the code will be "T" instead of "B".

Eg. EWJM50T100L-R020S

2) Hollow output shafts are available only for EWM Series.

3) Keyway positions do not match one another on double output shafts. Please contact Tsubaki representative when required.

SW/SWM(R) Series

Arrows in figures indicate direction of rotation.

	Without motor				With motor			
B type		B-L-RF		B-L-SRF		B-L-RF		B-L-SRF
		B-R-LF		B-R-SLF		B-R-LF		B-R-SLF
V type		V-L-RF		V-L-SRF		V-L-RF		V-L-SRF
		V-R-LF		V-R-SLF		V-R-LF		V-R-SLF

Note) Keyway positions do not match one another on double output shafts. Please contact Tsubaki representative when required.

Models

Series		EWJ	EWJ/EW	SW	EWJ/EW	SW	Reducer options	SW	SW
Installation direction		T	B	B	V	V		B, V	B, V
Shaft arrangement	Solid output shaft	L-R R-L L-LR R-LR	L-R R-L L-LR R-LR	L-SRF R-SLF	L-RU R-LU L-RD R-LD L-RUD R-LUD	L-SRF R-SLF		—	—
	Hollow output shaft	—	L-H R-H	L-RF R-LF	—	L-RF R-LF		Power-Lock specification: K	Taper bushing specification: TB
Without motor	EWJ50	○	—	—	○	—		—	—
	EWJ63	○	—	—	○	—		—	—
	EWJ70	—	○ ¹	—	○	—		—	—
	EW/SW80	—	○	○	○	○		□	□
	EW/SW100	—	○	○	○	○		□	□
	EW/SW125	—	○	○	○	○		□	□
	EW/SW150	—	○	○	○	○		□	□
	EW/SW175	—	○	○	○	○		□	—
	EW/SW200	—	○	○	○	○		□	—
With motor	EWJM50	○	—	—	○ ^{2,3}	—		—	—
	EWJM63	○	—	—	○ ²	—		—	—
	EWJM70	—	○ ¹	—	○ ²	—		—	—
	EWM/SWM80	—	○	○	○	○		□	□
	EWM/SWM100	—	○	○	○	○		□	□
	EWM/SWM125	—	○	○	○	○		□	□
	EWM/SWM150	—	○	○	○	○		□	□
	EWM/SWM175	—	○	○	○	○		□	—
	EWM/SWM200	—	○	○	○	○		□	—

○: Standard product □: Made to order. Ask for delivery time.

The standard motor is a flange motor (with or without a brake). Contact us for non-standard motors.

*1) EWJ(M)70 output shaft: solid only.

2) Shaft arrangement L-RUD and R-LUD: Contact Tsubaki representative.

3) EWJM50 reduction ratio: 1/600 only.

Motor Options

Motor option	Description
Z	Inverter ready motors (0.4 kW or less)
W	Outdoor specification
V	400 V class ³⁾
V1	380 V, 50 Hz (0.4 kW or less, 3.7 kW, 5.5 kW)
V2	380 V, 60 Hz (0.4 kW or less)
V3	415 V, 50 Hz (0.4 kW or less)
V4	460 V, 60 Hz (0.4 kW or less)
N	200 V class CE compliant
N2	200 V class UL compliant
N3	200 V class CCC compliant
VN	400 V class CE compliant
VN2	400 V class UL compliant
VN3	400 V class CCC compliant
H	Hard terminal box (0.4 kW or less)
Q	Manual quick-release brake
M	Manual shaft (motor fan cover side) (2.2 kW or less)

(Without brake)

Z	ZW	ZWV
	ZV	ZVH
	ZH	
W	WV	
	WV1	
	WV2	
	WV3	
	WV4	
	WN	WVN
	WN3	WVN3

V	VN
	VN2
	VN3
	VH
V1	V1H
V2	V2H
V3	V3H
V4	V4H
N	
N2	
N3	
H	

(With brake)

Z	ZV	ZVH		V1	V1H
		ZVQ		V2	V2H
		ZVM		V3	V3H
	ZH	ZHQ		V4	V4H
		ZHM	N		
	ZQ	ZQM	N2		
	ZM		N3		
V	VN		H	HQ	HQM
	VN3			HM	
	VH	VHQ	Q	QM	
		VHM	M		
	VQ	VQM			
	VM				

Note 1) Shaded options are for 0.2 kW and 0.4 kW motors.

2) Motors with a brake for outdoor use are made to order. Contact Tsubaki representatives for details.

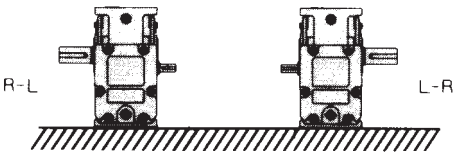
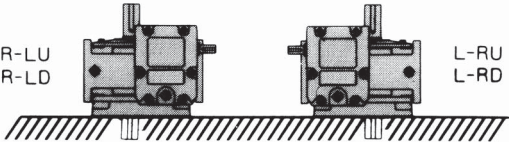
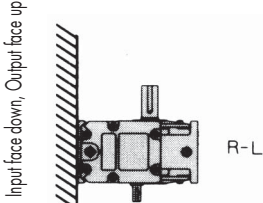
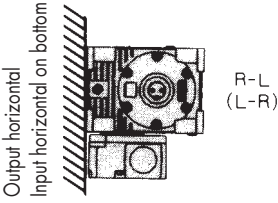
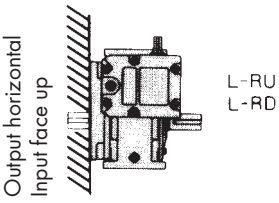
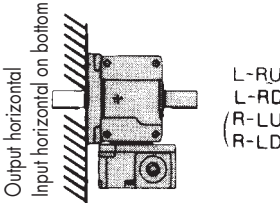
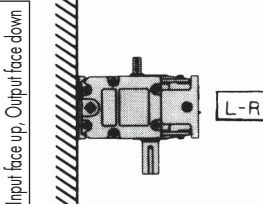
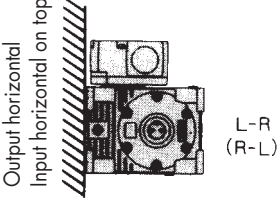
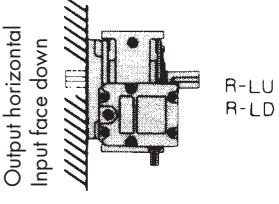
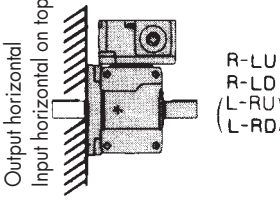
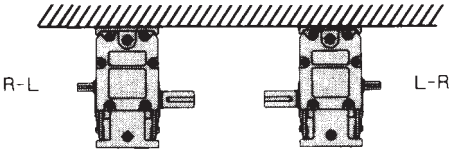
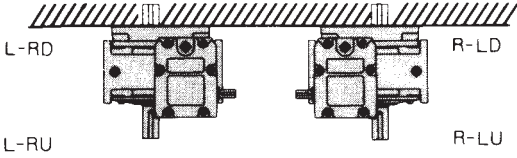
3) 400 V class voltage frequency

0.1 to 0.4 kW	400/400/440 V	50/60/60 Hz
0.75 to 2.2 kW	380/400/400/440 V	50/50/60/60 Hz
3.7 to 5.5 kW without brake	400/400/440/460 V	50/60/60/60 Hz
with brake	380/400/400/440 V	50/50/60/60 Hz

Mounting Examples

EW/EWM(R) Series

- Pressure vent and oil gauge positions will change when mounting EW sizes 80-200 on walls or ceilings. Make sure to specify the mounting method when ordering.
- The EWJ/EWJM(R) series may be mounted on any side.

	Installation direction B type		Installation direction V type	
Standard mounting				
Wall mount	Ex. 1 Ex. 2	Ex. 3	Ex. 5	Ex. 7
				
		Ex. 4	Ex. 6	Ex. 8
				
Ceiling mount	Ex. 9 		Ex. 10 	

SW/SWM(R) Series

- Pressure vent and oil gauge positions will change depending on the mounting method of SW sizes 80 to 200. Make sure to specify the mounting method when ordering.

Motor and Reduction Ratio Combinations

- Output torque values are for motor speeds at 1450 r/min and 1750 r/min (50/60 Hz).
- Motor/reducer combinations shown are standard.
- Shaded boxes indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using. (Thermal rating factor is 1.0)
- Torque values may be lower if the ambient temperature is cold. Contact Tsubaki representative for further details.
- Refer to pages 17 to 18 for sizing.

EWJM/EWM(R) Series

Efficiency class	IE1												IE3																			
	0.1 kW				0.2 kW				0.4 kW				0.75 kW				1.5 kW				2.2 kW				3.7 kW				5.5 kW			
	Size	Output torque		Size	Output torque		Size	Output torque		Size	Output torque		Size	Output torque		Size	Output torque		Size	Output torque		Size	Output torque		Size	Output torque						
		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz								
		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}								
100	Refer to Croise Motor, page 202.			50	91.1 {9.3}	76.4 {7.8}	63	185 {18.9}	156 {15.9}	80	362 {36.9}	305 {31.1}	125	749 {76.4}	631 {64.4}	150	1117 {114}	944 {96.3}	150	1882 {192}	1588 {116}	175	2862 {292}	2407 {246}								
150				50	100 {10.2}	100 {10.2}	63	207 {21.1}	205 {20.9}	80	433 {44.2}	429 {43.8}	125	1058 {108}	894 {91.2}	150	1597 {163}	1343 {137}	150	2381 {243}	2264 {231}	175	3459 {353}	3441 {351}								
200				50	101 {10.3}	101 {10.3}	70	293 {29.9}	291 {29.7}	100	664 {67.7}	561 {57.2}	125	1343 {137}	1137 {116}	150	2038 {208}	1725 {176}	175	3459 {353}	2969 {303}	200	5292 {540}	4469 {456}								
250	50	96 {9.8}	81.3 {8.3}	63	195 {19.9}	166 {16.9}	70	294 {30.0}	293 {29.9}	100	788 {80.4}	673 {68.7}	125	1499 {153}	1382 {141}	150	2450 {250}	2078 {212}	175	3459 {353}	3459 {353}	200	5488 {560}	5240 {535}								
300	50	104 {10.6}	94.1 {9.6}	63	219 {22.3}	189 {19.3}	80	455 {46.4}	404 {41.2}	100	854 {87.1}	772 {78.8}	125	1568 {160}	1548 {158}	150	2577 {263}	2362 {241}	175	3459 {353}	3459 {353}	200	5645 {575}	5537 {565}								
400	50	104 {10.6}	104 {10.6}	63	220 {22.4}	219 {22.3}	80	459 {46.8}	457 {46.6}	100	862 {88.0}	856 {87.3}	125	1578 {162}	1578 {162}	150	2626 {268}	2597 {265}	200	5704 {582}5351 {546}												
500	50	105 {10.7}	105 {10.7}	70	306 {31.2}	305 {31.1}	100	736 {75.1}	625 {63.8}	125	1392 {142}	1186 {121}	150	2656 {271}	2460 {251}	175	3459 {353}	3459 {353}	200	5704 {582}5704 {582}												
600	50	105 {10.7}	105 {10.7}	70	307 {31.3}	306 {31.2}	100	823 {84.0}	703 {71.7}	125	1558 {159}	1333 {136}	150	2666 {272}	2656 {271}	175	3459 {353}	3459 {353}	200	5704 {582}5704 {582}												
800	63	223 {22.7}	194 {19.8}	70	309 {31.5}	308 {31.4}	100	873 {89.1}	870 {88.8}	125	1578 {161}	1568 {160}	175	3459 {353}	3459 {353}	200	5704 {582}5527 {564}															
1000	63	223 {22.7}	223 {22.7}	80	467 {47.6}	466 {47.5}	100	875 {89.3}	872 {89.0}	125	1558 {159}	1548 {158}	175	3459 {353}	3459 {353}	200	5704 {582}5704 {582}															
1200	63	223 {22.7}	223 {22.7}	80	467 {47.7}	466 {47.6}	100	861 {87.9}	860 {87.7}	150	2617 {267}	2421 {247}	200	5704 {582}	5116 {522}	Refer to TERUS Series, page 170.																
1500	63	188 {19.2}	187 {19.1}	100	721 {73.6}	652 {66.5}	125	1372 {140}	1352 {138}	150	2234 {228}	2145 {226}	200	5116 {522}	5067 {517}																	
1800	63	188 {19.2}	188 {19.2}	100	723 {73.8}	721 {73.6}	125	1372 {140}	1372 {140}	175	3381 {345}	3136 {320}																				
2400	63	189 {19.3}	188 {19.2}	100	727 {74.2}	727 {74.2}	125	1382 {141}	1382 {141}	175	3420 {349}	3410 {348}																				
3000	63	189 {19.3}	189 {19.3}	125	1245 {127}	1068 {109}	150	2264 {231}	2254 {230}	Refer to TERUS Series, page 170.																						
3600	63	189 {19.3}	189 {19.3}	125	1392 {142}	1215 {124}	150	2264 {231}	2264 {231}																							

- Output torque values are for motor speeds at 1450 r/min and 1750 r/min (50/60 Hz).
- Motor/reducer combinations shown are standard.
- Shaded boxes indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using. (Thermal rating factor is 1.0)
- Torque values may be lower if the ambient temperature is cold. Contact Tsubaki representative for further details.
- Refer to pages 17 to 18 for sizing.

SWM(R) Series

Efficiency class	IE1						IE3																	
	0.2 kW				0.4 kW		0.75 kW			1.5 kW			2.2 kW			3.7 kW			5.5 kW					
	Size	Output torque		Size	Output torque		Size	Output torque		Size	Output torque		Size	Output torque		Size	Output torque		Size	Output torque				
		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz						
		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}		N·m {kgf·m}	N·m {kgf·m}						
100	Refer to Croise Motor, page 202.						80	362 {36.9}	305 {31.1}	125	749 {76.4}	631 {64.4}	150	1117 {114}	944 {96.3}	150	1882 {192}	1588 {162}	175	2862 {292}	2407 {246}			
150							80	433 {44.2}	429 {43.8}	125	1058 {108}	894 {91.2}	150	1597 {163}	1343 {137}	150	2381 {243}	2264 {231}	175	3459 {353}	3441 {351}			
200							80	417 {42.5}	353 {36.0}	100	663 {67.7}	561 {57.2}	125	1343 {137}	1137 {116}	150	2038 {208}	1725 {176}	175	3459 {353}	2969 {303}	200	5292 {540}	4469 {456}
250							80	455 {46.4}	404 {41.2}	100	788 {80.4}	673 {68.7}	125	1499 {153}	1382 {141}	150	2450 {250}	2078 {212}	175	3459 {353}	3459 {353}	200	5488 {560}	5243 {535}
300	Refer to TERUS Series, page 170.						80	854 {87.1}	772 {78.8}	125	1568 {160}	1548 {158}	150	2577 {263}	2362 {241}	175	3459 {353}	3459 {353}	200	5645 {575}	5537 {565}			
400							80	459 {46.8}	457 {46.6}	100	862 {88.0}	856 {87.3}	125	1578 {162}	1578 {161}	150	2626 {268}	2597 {265}	200	5704 {582}	5351 {546}			
500							80	405 {41.3}	345 {35.2}	100	736 {75.1}	625 {63.8}	125	1392 {142}	1186 {121}	150	2656 {271}	2460 {251}	175	3459 {353}	3459 {353}	200	5704 {582}	5704 {582}
600							80	466 {47.5}	430 {43.9}	100	823 {84.0}	703 {71.7}	125	1558 {159}	1333 {136}	150	2666 {272}	2656 {271}	175	3549 {353}	3459 {353}	200	5704 {582}	5704 {582}
800	80	466 {47.5}	466 {47.5}	100	873 {89.1}	870 {89.0}	125	1578 {161}	1568 {160}	175	3459 {353}	3459 {353}	200	5704 {582}	5527 {564}									
1000	80	466 {47.5}	466 {47.5}	100	875 {89.0}	872 {89.0}	125	1558 {159}	1548 {158}	175	3459 {353}	3459 {353}	200	5704 {582}	5704 {582}									
1200	80	467 {47.7}	466 {47.6}	100	861 {88.0}	859 {88.0}	150	2617 {267}	2421 {247}	200	5704 {582}	5116 {522}	Refer to TERUS Series, page 170.											
1500	100	721 {73.6}	652 {66.5}	125	1372 {140}	1352 {138}	150	2234 {228}	2215 {226}	200	5116 {522}	5067 {517}												
1800	100	723 {73.8}	721 {73.6}	125	1372 {140}	1372 {140}	175	3381 {345}	3136 {320}															
2400	100	727 {74.2}	727 {74.2}	125	1382 {141}	1382 {141}	175	3420 {349}	3410 {348}															
3000	125	1245 {127}	1068 {109}	150	2264 {231}	2254 {230}	Refer to TERUS Series, page 170.																	
3600	125	1392 {142}	1215 {124}	150	2264 {231}	2264 {231}																		

Note) : Made to order

Sizing Chart (Sizing Table 3)

Transfer Capacity Table (EWJ50 to 70)

Size	Input	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
	Reduction ratio	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
EWJ50	100	0.255	98 {10.03}	0.217	99 {10.11}	0.178	100 {10.19}	0.150	100 {10.25}	0.085	102 {10.37}	0.020	103 {10.48}
	150	0.186	100 {10.19}	0.158	100 {10.24}	0.129	101 {10.30}	0.110	101 {10.33}	0.063	102 {10.42}	0.015	103 {10.49}
	200	0.148	101 {10.27}	0.126	101 {10.31}	0.103	101 {10.35}	0.087	102 {10.38}	0.051	102 {10.44}	0.012	103 {10.50}
	250	0.124	101 {10.31}	0.106	101 {10.35}	0.087	102 {10.38}	0.074	102 {10.40}	0.043	102 {10.45}	0.010	103 {10.50}
	300	0.110	103 {10.54}	0.094	104 {10.59}	0.077	104 {10.64}	0.065	105 {10.67}	0.036	105 {10.74}	0.009	106 {10.81}
	400	0.088	104 {10.61}	0.075	104 {10.65}	0.061	105 {10.68}	0.052	105 {10.71}	0.031	106 {10.77}	0.007	106 {10.82}
	500	0.074	104 {10.65}	0.063	105 {10.68}	0.052	105 {10.71}	0.045	105 {10.73}	0.026	106 {10.78}	0.006	106 {10.82}
	600	0.067	105 {10.68}	0.058	105 {10.71}	0.048	105 {10.73}	0.041	105 {10.75}	0.024	106 {10.79}	0.006	106 {10.82}
	800	0.055	105 {10.72}	0.048	105 {10.74}	0.040	105 {10.76}	0.034	106 {10.77}	0.020	106 {10.80}	0.005	106 {10.82}
	1000	0.048	105 {10.74}	0.041	105 {10.76}	0.035	106 {10.77}	0.030	106 {10.78}	0.018	106 {10.80}	0.004	106 {10.82}
	1200	0.044	105 {10.76}	0.038	106 {10.77}	0.032	106 {10.78}	0.027	106 {10.79}	0.016	106 {10.81}	0.004	106 {10.82}
	1500	0.034	93 { 9.45}	0.029	93 { 9.47}	0.025	93 { 9.50}	0.021	93 { 9.51}	0.013	94 { 9.55}	0.003	94 { 9.58}
	1800	0.031	93 { 9.47}	0.027	93 { 9.49}	0.023	93 { 9.51}	0.020	93 { 9.53}	0.012	94 { 9.56}	0.003	94 { 9.59}
	2400	0.026	93 { 9.50}	0.023	93 { 9.52}	0.019	93 { 9.53}	0.016	94 { 9.54}	0.010	94 { 9.57}	0.002	94 { 9.59}
	3000	0.023	93 { 9.52}	0.020	93 { 9.53}	0.017	94 { 9.54}	0.014	94 { 9.55}	0.009	94 { 9.57}	0.002	94 { 9.59}
	3600	0.021	93 { 9.53}	0.018	94 { 9.54}	0.015	94 { 9.55}	0.013	94 { 9.56}	0.008	94 { 9.57}	0.002	94 { 9.59}
EWJ63	100	0.514	201 {20.51}	0.439	203 {20.72}	0.360	205 {20.93}	0.305	207 {21.07}	0.173	210 {21.40}	0.041	213 {21.69}
	150	0.375	205 {20.92}	0.320	206 {21.06}	0.262	208 {21.21}	0.223	209 {21.30}	0.127	211 {21.52}	0.030	213 {21.72}
	200	0.298	207 {21.13}	0.255	208 {21.24}	0.209	209 {21.35}	0.177	210 {21.42}	0.103	212 {21.58}	0.024	213 {21.73}
	250	0.251	208 {21.25}	0.214	209 {21.34}	0.176	210 {21.43}	0.150	211 {21.49}	0.087	212 {21.62}	0.021	213 {21.74}
	300	0.229	217 {22.12}	0.196	218 {22.26}	0.161	220 {22.40}	0.137	220 {22.49}	0.080	223 {22.71}	0.019	224 {22.89}
	400	0.183	219 {22.33}	0.156	220 {22.43}	0.129	221 {22.54}	0.110	222 {22.61}	0.064	223 {22.76}	0.016	224 {22.91}
	500	0.154	220 {22.45}	0.132	221 {22.53}	0.109	222 {22.62}	0.093	222 {22.67}	0.055	223 {22.80}	0.013	225 {22.91}
	600	0.140	221 {22.53}	0.120	221 {22.60}	0.100	222 {22.67}	0.086	223 {22.72}	0.051	224 {22.82}	0.013	225 {22.92}
	800	0.114	222 {22.63}	0.098	222 {22.69}	0.083	223 {22.74}	0.071	223 {22.77}	0.043	224 {22.85}	0.011	225 {22.92}
	1000	0.099	222 {22.69}	0.086	223 {22.74}	0.072	223 {22.78}	0.062	224 {22.81}	0.037	224 {22.87}	0.009	225 {22.93}
	1200	0.088	223 {22.74}	0.077	223 {22.77}	0.064	223 {22.81}	0.056	224 {22.83}	0.033	224 {22.88}	0.008	225 {22.93}
	1500	0.066	187 {19.10}	0.056	188 {19.16}	0.047	188 {19.22}	0.041	189 {19.26}	0.024	190 {19.35}	0.006	190 {19.44}
	1800	0.060	188 {19.16}	0.052	188 {19.21}	0.044	189 {19.26}	0.038	189 {19.29}	0.023	190 {19.37}	0.006	191 {19.44}
	2400	0.049	188 {19.23}	0.043	189 {19.27}	0.036	189 {19.31}	0.032	189 {19.34}	0.019	190 {19.39}	0.005	191 {19.45}
	3000	0.043	189 {19.28}	0.038	189 {19.31}	0.032	190 {19.34}	0.028	190 {19.36}	0.017	190 {19.41}	0.004	191 {19.45}
	3600	0.039	189 {19.31}	0.034	189 {19.33}	0.029	190 {19.36}	0.025	190 {19.38}	0.015	190 {19.42}	0.004	191 {19.45}
EWJ70	100	0.719	281 {28.7 }	0.614	285 {29.0 }	0.504	288 {29.4 }	0.428	290 {29.6 }	0.244	295 {30.1 }	0.057	300 {30.6 }
	150	0.525	288 {29.4 }	0.449	290 {29.6 }	0.369	292 {29.8 }	0.313	294 {30.0 }	0.179	297 {30.3 }	0.043	300 {30.6 }
	200	0.419	291 {29.7 }	0.358	293 {29.9 }	0.294	294 {30.0 }	0.250	295 {30.1 }	0.145	298 {30.4 }	0.035	300 {30.6 }
	250	0.353	293 {29.9 }	0.301	294 {30.0 }	0.248	296 {30.2 }	0.211	296 {30.3 }	0.123	299 {30.5 }	0.029	300 {30.6 }
	300	0.314	300 {30.6 }	0.268	302 {30.8 }	0.221	304 {31.0 }	0.188	305 {31.2 }	0.109	309 {31.5 }	0.027	311 {31.8 }
	400	0.251	303 {30.9 }	0.215	305 {31.1 }	0.177	306 {31.2 }	0.151	307 {31.3 }	0.088	309 {31.6 }	0.022	312 {31.8 }
	500	0.212	305 {31.1 }	0.182	306 {31.2 }	0.150	307 {31.4 }	0.128	308 {31.4 }	0.075	310 {31.6 }	0.018	312 {31.8 }
	600	0.192	306 {31.2 }	0.165	307 {31.3 }	0.137	308 {31.4 }	0.118	309 {31.5 }	0.071	310 {31.7 }	0.018	312 {31.8 }
	800	0.157	308 {31.4 }	0.135	308 {31.5 }	0.113	309 {31.5 }	0.098	310 {31.6 }	0.059	311 {31.7 }	0.015	312 {31.8 }
	1000	0.135	308 {31.5 }	0.118	309 {31.5 }	0.099	310 {31.6 }	0.085	310 {31.6 }	0.051	311 {31.7 }	0.013	312 {31.8 }
	1200	0.121	309 {31.5 }	0.105	310 {31.6 }	0.088	310 {31.6 }	0.076	310 {31.7 }	0.046	311 {31.8 }	0.012	312 {31.8 }
	1500	0.092	262 {26.7 }	0.079	263 {26.8 }	0.065	264 {26.9 }	0.056	264 {27.0 }	0.034	266 {27.1 }	0.009	267 {27.3 }
	1800	0.083	263 {26.8 }	0.072	264 {26.9 }	0.060	264 {27.0 }	0.053	265 {27.0 }	0.032	266 {27.2 }	0.008	267 {27.3 }
	2400	0.069	264 {26.9 }	0.060	265 {27.0 }	0.051	265 {27.1 }	0.044	266 {27.1 }	0.027	266 {27.2 }	0.007	267 {27.3 }
	3000	0.060	265 {27.0 }	0.053	265 {27.1 }	0.044	266 {27.1 }	0.039	266 {27.1 }	0.023	267 {27.2 }	0.006	267 {27.3 }
	3600	0.054	265 {27.0 }	0.047	265 {27.1 }	0.040	266 {27.1 }	0.035	266 {27.2 }	0.021	267 {27.2 }	0.005	267 {27.3 }

Transfer Capacity Table (EW80 to 125, SW80 to 125)

Size	Input Reduction ratio	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
		Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
EW80 SW80	100	1.032	419 { 42.8 }	0.881	424 { 43.3 }	0.722	430 { 43.9 }	0.612	433 { 44.2 }	0.347	442 { 45.1 }	0.081	449 { 45.8 }
	150	0.747	430 { 43.9 }	0.637	433 { 44.2 }	0.522	437 { 44.6 }	0.442	439 { 44.8 }	0.251	445 { 45.4 }	0.059	450 { 45.9 }
	200	0.591	435 { 44.4 }	0.503	438 { 44.7 }	0.412	440 { 44.9 }	0.349	442 { 45.1 }	0.200	446 { 45.5 }	0.047	450 { 45.9 }
	250	0.496	438 { 44.7 }	0.423	440 { 44.9 }	0.347	442 { 45.1 }	0.294	444 { 45.3 }	0.170	447 { 45.6 }	0.040	450 { 45.9 }
	300	0.447	452 { 46.1 }	0.382	455 { 46.4 }	0.314	459 { 46.8 }	0.266	461 { 47.0 }	0.153	466 { 47.5 }	0.037	470 { 48.0 }
	400	0.355	457 { 46.6 }	0.303	459 { 46.8 }	0.249	462 { 47.1 }	0.211	464 { 47.3 }	0.123	467 { 47.7 }	0.029	470 { 48.0 }
	500	0.299	460 { 46.9 }	0.255	462 { 47.1 }	0.210	464 { 47.3 }	0.178	465 { 47.4 }	0.104	467 { 47.7 }	0.025	470 { 48.0 }
	600	0.267	462 { 47.1 }	0.229	464 { 47.3 }	0.189	465 { 47.4 }	0.161	466 { 47.5 }	0.096	468 { 47.8 }	0.024	470 { 48.0 }
	800	0.215	464 { 47.3 }	0.185	466 { 47.5 }	0.154	466 { 47.6 }	0.132	467 { 47.7 }	0.078	469 { 47.9 }	0.019	471 { 48.1 }
	1000	0.185	466 { 47.5 }	0.160	466 { 47.6 }	0.134	467 { 47.7 }	0.115	468 { 47.8 }	0.068	469 { 47.9 }	0.017	471 { 48.1 }
	1200	0.165	466 { 47.6 }	0.143	467 { 47.7 }	0.120	468 { 47.8 }	0.103	468 { 47.8 }	0.062	470 { 48.0 }	0.015	471 { 48.1 }
	1500	0.124	390 { 39.8 }	0.107	391 { 39.9 }	0.088	393 { 40.1 }	0.075	394 { 40.2 }	0.045	396 { 40.4 }	0.011	398 { 40.6 }
	1800	0.112	391 { 39.9 }	0.096	392 { 40.0 }	0.080	394 { 40.2 }	0.069	394 { 40.2 }	0.042	396 { 40.4 }	0.011	398 { 40.6 }
	2400	0.091	393 { 40.1 }	0.078	394 { 40.2 }	0.066	395 { 40.3 }	0.057	396 { 40.4 }	0.034	397 { 40.5 }	0.009	398 { 40.6 }
	3000	0.078	394 { 40.2 }	0.069	395 { 40.3 }	0.058	396 { 40.4 }	0.050	396 { 40.4 }	0.030	397 { 40.5 }	0.008	398 { 40.6 }
	3600	0.071	395 { 40.3 }	0.062	395 { 40.3 }	0.052	396 { 40.4 }	0.045	397 { 40.5 }	0.027	397 { 40.5 }	0.007	398 { 40.6 }
EW100 SW100	100	1.704	705 { 71.9 }	1.544	758 { 77.3 }	1.271	769 { 78.5 }	1.079	777 { 79.3 }	0.628	813 { 83.0 }	0.144	813 { 83.0 }
	150	1.275	746 { 76.1 }	1.122	777 { 79.3 }	0.921	784 { 80.0 }	0.786	795 { 81.1 }	0.456	820 { 83.7 }	0.106	820 { 83.7 }
	200	0.998	747 { 76.2 }	0.889	786 { 80.2 }	0.729	792 { 80.8 }	0.632	814 { 83.1 }	0.360	822 { 83.9 }	0.084	822 { 83.9 }
	250	0.826	741 { 75.6 }	0.744	788 { 80.4 }	0.628	815 { 83.2 }	0.532	817 { 83.4 }	0.307	824 { 84.1 }	0.072	824 { 84.1 }
	300	0.821	846 { 86.3 }	0.703	854 { 87.1 }	0.579	862 { 88.0 }	0.492	864 { 88.2 }	0.283	875 { 89.3 }	0.068	875 { 89.3 }
	400	0.653	856 { 87.3 }	0.559	862 { 88.0 }	0.462	870 { 89.0 }	0.391	872 { 89.0 }	0.225	878 { 89.6 }	0.054	878 { 89.6 }
	500	0.550	861 { 87.9 }	0.472	867 { 88.5 }	0.389	873 { 89.1 }	0.330	873 { 89.1 }	0.192	880 { 89.8 }	0.047	880 { 89.8 }
	600	0.492	864 { 88.2 }	0.423	870 { 88.8 }	0.350	876 { 89.4 }	0.298	876 { 89.4 }	0.176	880 { 89.8 }	0.044	880 { 89.8 }
	800	0.398	870 { 88.8 }	0.342	873 { 89.1 }	0.283	877 { 89.5 }	0.244	878 { 89.6 }	0.145	882 { 90.0 }	0.036	882 { 90.0 }
	1000	0.341	872 { 89.0 }	0.293	875 { 89.3 }	0.246	879 { 89.7 }	0.212	882 { 90.0 }	0.127	884 { 90.2 }	0.031	884 { 90.2 }
	1200	0.298	859 { 87.7 }	0.258	861 { 87.9 }	0.220	880 { 89.8 }	0.190	882 { 90.0 }	0.114	884 { 90.2 }	0.028	884 { 90.2 }
	1500	0.221	718 { 73.3 }	0.189	721 { 73.6 }	0.157	724 { 73.9 }	0.135	727 { 74.2 }	0.081	734 { 74.9 }	0.020	734 { 74.9 }
	1800	0.198	721 { 73.6 }	0.171	723 { 73.8 }	0.142	726 { 74.1 }	0.121	730 { 74.5 }	0.075	734 { 74.9 }	0.019	734 { 74.9 }
	2400	0.162	727 { 74.2 }	0.140	727 { 74.2 }	0.115	728 { 74.3 }	0.101	729 { 74.4 }	0.062	736 { 75.1 }	0.015	736 { 75.1 }
	3000	0.140	729 { 74.4 }	0.120	729 { 74.4 }	0.102	730 { 74.5 }	0.089	731 { 74.6 }	0.054	736 { 75.1 }	0.014	736 { 75.1 }
	3600	0.125	730 { 74.5 }	0.109	732 { 74.7 }	0.092	733 { 74.8 }	0.080	733 { 74.8 }	0.047	736 { 75.1 }	0.012	736 { 75.1 }
EW125 SW125	100	3.08	1294 { 132 }	2.82	1401 { 143 }	2.32	1431 { 146 }	1.98	1450 { 148 }	1.14	1490 { 152 }	0.27	1529 { 156 }
	150	2.31	1372 { 140 }	2.05	1450 { 148 }	1.69	1470 { 150 }	1.46	1499 { 153 }	0.87	1597 { 163 }	0.20	1597 { 163 }
	200	1.93	1470 { 150 }	1.66	1490 { 152 }	1.38	1519 { 155 }	1.18	1539 { 157 }	0.70	1607 { 164 }	0.17	1607 { 164 }
	250	1.61	1480 { 151 }	1.38	1499 { 153 }	1.14	1519 { 155 }	0.97	1529 { 156 }	0.58	1607 { 164 }	0.14	1607 { 164 }
	300	1.49	1548 { 158 }	1.28	1568 { 160 }	1.06	1588 { 162 }	0.90	1597 { 163 }	0.52	1627 { 166 }	0.13	1656 { 169 }
	400	1.20	1578 { 161 }	1.03	1588 { 162 }	0.85	1607 { 164 }	0.72	1617 { 165 }	0.42	1637 { 167 }	0.104	1656 { 169 }
	500	1.01	1588 { 162 }	0.86	1607 { 164 }	0.71	1617 { 165 }	0.61	1627 { 166 }	0.35	1637 { 167 }	0.088	1656 { 169 }
	600	0.90	1607 { 164 }	0.77	1617 { 165 }	0.64	1627 { 166 }	0.55	1627 { 166 }	0.33	1646 { 168 }	0.083	1656 { 169 }
	800	0.68	1568 { 160 }	0.59	1578 { 161 }	0.49	1588 { 162 }	0.42	1588 { 162 }	0.25	1597 { 163 }	0.064	1597 { 163 }
	1000	0.58	1548 { 158 }	0.50	1558 { 159 }	0.42	1588 { 162 }	0.36	1597 { 163 }	0.22	1597 { 163 }	0.055	1597 { 163 }
	1200	0.51	1558 { 159 }	0.44	1558 { 159 }	0.37	1588 { 162 }	0.32	1597 { 163 }	0.19	1607 { 164 }	0.049	1607 { 164 }
	1500	0.41	1362 { 139 }	0.35	1372 { 140 }	0.29	1382 { 141 }	0.25	1382 { 141 }	0.15	1392 { 142 }	0.038	1392 { 142 }
	1800	0.37	1372 { 140 }	0.32	1372 { 140 }	0.27	1382 { 141 }	0.23	1392 { 142 }	0.14	1392 { 142 }	0.036	1392 { 142 }
	2400	0.30	1382 { 141 }	0.26	1382 { 141 }	0.22	1392 { 142 }	0.19	1392 { 142 }	0.12	1392 { 142 }	0.030	1392 { 142 }
	3000	0.26	1382 { 141 }	0.22	1382 { 141 }	0.19	1392 { 142 }	0.16	1401 { 143 }	0.100	1401 { 143 }	0.026	1401 { 143 }
	3600	0.23	1392 { 142 }	0.20	1392 { 142 }	0.17	1392 { 142 }	0.15	1401 { 143 }	0.090	1401 { 143 }	0.023	1401 { 143 }

Sizing Chart (Sizing Table 3)

Transfer Capacity Table (EW150 to 200, SW150 to 200)

Size	Input	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
	Reduction ratio	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
EW150 SW150	100	5.24	2244 {229}	4.51	2293 {234}	3.73	2352 {240}	3.18	2381 {243}	1.84	2470 {252}	0.43	2538 {259}
	150	3.84	2342 {239}	3.29	2381 {243}	2.71	2421 {247}	2.31	2440 {249}	1.33	2499 {255}	0.32	2548 {260}
	200	3.06	2401 {245}	2.62	2421 {247}	2.16	2450 {250}	1.83	2470 {252}	1.05	2509 {256}	0.25	2548 {260}
	250	2.57	2430 {248}	2.19	2450 {250}	1.80	2470 {252}	1.53	2489 {254}	0.88	2519 {257}	0.21	2548 {260}
	300	2.37	2548 {260}	2.04	2577 {263}	1.69	2617 {267}	1.45	2646 {270}	0.84	2695 {275}	0.21	2754 {281}
	400	1.91	2597 {265}	1.64	2626 {268}	1.35	2656 {271}	1.16	2675 {273}	0.67	2715 {277}	0.17	2754 {281}
	500	1.60	2626 {268}	1.38	2656 {271}	1.14	2675 {273}	0.97	2695 {275}	0.57	2724 {278}	0.14	2754 {281}
	600	1.43	2656 {271}	1.23	2666 {272}	1.02	2685 {274}	0.87	2705 {276}	0.51	2734 {279}	0.13	2754 {281}
	800	1.09	2587 {264}	0.93	2597 {265}	0.77	2617 {267}	0.66	2617 {267}	0.40	2636 {269}	0.11	2656 {271}
	1000	0.92	2597 {265}	0.79	2617 {267}	0.66	2626 {268}	0.57	2626 {268}	0.34	2646 {270}	0.09	2656 {271}
	1200	0.81	2607 {266}	0.70	2617 {267}	0.58	2626 {268}	0.50	2636 {269}	0.30	2646 {270}	0.08	2656 {271}
	1500	0.63	2607 {266}	0.54	2234 {228}	0.45	2244 {229}	0.39	2254 {230}	0.23	2274 {232}	0.06	2274 {232}
	1800	0.56	2225 {227}	0.49	2244 {229}	0.40	2254 {230}	0.35	2264 {231}	0.21	2274 {232}	0.06	2274 {232}
	2400	0.46	2244 {229}	0.40	2254 {230}	0.33	2264 {231}	0.28	2264 {231}	0.17	2283 {233}	0.05	2283 {233}
	3000	0.39	2254 {230}	0.34	2264 {231}	0.28	2274 {232}	0.25	2274 {232}	0.15	2283 {233}	0.04	2283 {233}
	3600	0.34	2264 {231}	0.30	2264 {231}	0.25	2274 {232}	0.22	2274 {232}	0.13	2283 {233}	0.04	2283 {233}
EW175 SW175	100	7.68	3361 {343}	6.63	3450 {352}	5.38	3459 {353}	4.52	3459 {353}	2.52	3459 {353}	0.58	3459 {353}
	150	5.53	3459 {353}	4.66	3459 {353}	3.78	3459 {353}	3.18	3459 {353}	1.78	3459 {353}	0.42	3459 {353}
	200	4.31	3459 {353}	3.64	3459 {353}	2.96	3459 {353}	2.50	3459 {353}	1.41	3459 {353}	0.34	3459 {353}
	250	3.55	3459 {353}	3.01	3459 {353}	2.45	3459 {353}	2.07	3459 {353}	1.17	3459 {353}	0.28	3459 {353}
	300	3.13	3459 {353}	2.65	3459 {353}	2.17	3459 {353}	1.83	3459 {353}	1.04	3459 {353}	0.25	3459 {353}
	400	2.46	3459 {353}	2.09	3459 {353}	1.71	3459 {353}	1.45	3459 {353}	0.83	3459 {353}	0.20	3459 {353}
	500	2.04	3459 {353}	1.73	3459 {353}	1.42	3459 {353}	1.20	3459 {353}	0.69	3459 {353}	0.17	3459 {353}
	600	1.79	3459 {353}	1.52	3459 {353}	1.25	3459 {353}	1.06	3459 {353}	0.62	3459 {353}	0.16	3459 {353}
	800	1.40	3459 {353}	1.19	3459 {353}	0.98	3459 {353}	0.84	3459 {353}	0.50	3459 {353}	0.13	3459 {353}
	1000	1.17	3459 {353}	1.00	3459 {353}	0.83	3459 {353}	0.71	3459 {353}	0.42	3459 {353}	0.11	3459 {353}
	1200	1.02	3459 {353}	0.87	3459 {353}	0.72	3459 {353}	0.62	3459 {353}	0.37	3459 {353}	0.10	3459 {353}
	1500	0.91	3352 {342}	0.78	3371 {344}	0.65	3401 {347}	0.56	3420 {349}	0.33	3459 {353}	0.09	3459 {353}
	1800	0.81	3361 {343}	0.69	3381 {345}	0.58	3410 {348}	0.50	3430 {350}	0.30	3459 {353}	0.08	3459 {353}
	2400	0.66	3410 {348}	0.57	3420 {349}	0.48	3440 {351}	0.41	3450 {352}	0.25	3459 {353}	0.07	3459 {353}
	3000	0.56	3430 {350}	0.48	3430 {350}	0.40	3400 {351}	0.35	3450 {352}	0.21	3459 {353}	0.06	3459 {353}
	3600	0.49	3440 {351}	0.43	3440 {351}	0.35	3450 {352}	0.31	3459 {353}	0.19	3459 {353}	0.05	3459 {353}
EW200 SW200	100	11.16	4911 {501}	9.71	5077 {518}	8.10	5238 {534}	6.95	5348 {546}	4.06	5605 {572}	0.95	5704 {582}
	150	8.04	5069 {517}	7.10	5304 {541}	5.92	5451 {556}	5.05	5528 {564}	2.93	5703 {582}	0.69	5704 {582}
	200	6.41	5203 {531}	5.67	5450 {556}	4.70	5562 {568}	4.00	5620 {573}	2.30	5704 {582}	0.55	5704 {582}
	250	5.34	5240 {535}	4.73	5486 {560}	3.95	5629 {574}	3.36	5676 {579}	1.92	5704 {582}	0.47	5704 {582}
	300	4.90	5535 {565}	4.23	5640 {576}	3.49	5704 {582}	2.95	5704 {582}	1.68	5704 {582}	0.41	5704 {582}
	400	3.94	5689 {580}	3.35	5704 {582}	2.74	5704 {582}	2.32	5704 {582}	1.32	5704 {582}	0.33	5704 {582}
	500	3.28	5704 {582}	2.79	5704 {582}	2.28	5704 {582}	1.93	5704 {582}	1.11	5704 {582}	0.28	5704 {582}
	600	2.87	5704 {582}	2.44	5704 {582}	2.01	5704 {582}	1.71	5704 {582}	0.99	5704 {582}	0.26	5704 {582}
	800	2.28	5704 {582}	1.94	5704 {582}	1.60	5704 {582}	1.36	5704 {582}	0.80	5704 {582}	0.21	5704 {582}
	1000	1.93	5704 {582}	1.65	5704 {582}	1.36	5704 {582}	1.16	5704 {582}	0.70	5704 {582}	0.19	5704 {582}
	1200	1.68	5704 {582}	1.44	5704 {582}	1.19	5704 {582}	1.02	5704 {582}	0.62	5704 {582}	0.17	5704 {582}
	1500	1.43	5063 {517}	1.24	5116 {522}	1.03	5169 {527}	0.89	5204 {531}	0.53	5286 {539}	0.15	5359 {547}
	1800	1.27	5114 {522}	1.10	5158 {526}	0.92	5203 {531}	0.80	5233 {534}	0.48	5301 {541}	0.14	5362 {547}
	2400	1.04	5179 {528}	0.90	5212 {532}	0.75	5246 {535}	0.67	5269 {538}	0.40	5320 {543}	0.11	5366 {548}
	3000	0.89	5218 {532}	0.77	5245 {535}	0.65	5272 {538}	0.56	5290 {540}	0.35	5331 {544}	0.10	5368 {548}
	3600	0.79	5244 {535}	0.68	5267 {537}	0.57	5290 {540}	0.50	5305 {541}	0.31	5339 {545}	0.09	5370 {548}

Technical Data

■ Actual Reduction Ratio

Reduction ratios for EWJ/EW/EWJM/EWM(R)/SW/SWM(R) series are all actual.

■ Allowable Loads on Shafts

1. Solid output shaft Allowable radial load

EWJ/EW/EWJM/EWM(R) Series

Size	EWJ50	EWJ63	EWJ70	EW80	EW100	EW125	EW150	EW175	EW200
Allowable radial load N {kgf}	2558 {261}	4155 {424}	5674 {579}	7575 {773}	11505 {1174}	15131 {1544}	21825 {2227}	24451 {2495}	29743 {3035}

SW/SWM(R) Series

Size	SW80	SW100	SW125	SW150	SW175	SW200
Allowable radial load N {kgf}	10427 {1064}	11524 {1176}	27057 {2761}	29723 {3033}	26558 {2710}	29743 {3035}

2. Hollow output shaft Allowable radial load

EW/EWM(R) Series

Size	EW80	EW100	EW125	EW150	EW175	EW200
Allowable radial load N {kgf}	8849 {903}	9369 {956}	15229 {1554}	18580 {1896}	19364 {1976}	22834 {2330}

SW/SWM(R) Series

Size	SW80	SW100	SW125	SW150	SW175	SW200
Allowable radial load N {kgf}	8849 {903}	10711 {1093}	18531 {1891}	15680 {1600}	19364 {1976}	22834 {2330}

3. Hollow output shaft Allowable axial load

EW/EWM(R) Series

Size	EW80	EW100	EW125	EW150	EW175	EW200
Allowable axial load N {kgf}	11593 {1183}	15572 {1589}	25832 {2636}	24607 {2511}	29057 {2965}	31859 {3251}

SW/SWM(R) Series

Size	SW80	SW100	SW125	SW150	SW175	SW200
Allowable axial load N {kgf}	11956 {1220}	17826 {1819}	28331 {2891}	12965 {1323}	22736 {2320}	16130 {1646}

Technical Data

■ EWJ/EW/SW Worm Starting Efficiency (Reference)

Size	Reduction ratio	Starting efficiency	Size	Reduction ratio	Starting efficiency	Size	Reduction ratio	Starting efficiency
EWJ50	100	39.0%	EW80	100	41.6%	EW150	100	42.9%
	150	34.6%		150	37.1%		150	37.6%
	200	30.1%		200	34.5%		200	35.0%
	250	27.5%		250	31.9%		250	33.0%
	300	28.6%		300	30.2%		300	31.4%
	400	24.9%		400	28.1%		400	29.2%
	500	22.8%		500	26.0%		500	27.5%
	600	20.7%		600	21.7%		600	23.1%
	800	16.4%		800	19.6%		800	20.4%
	1000	14.8%		1000	17.5%		1000	18.7%
	1200	12.7%		1200	15.9%		1200	17.6%
	1500	12.9%		1500	15.7%		1500	16.5%
	1800	11.7%		1800	13.1%		1800	13.9%
	2400	9.3%		2400	11.8%		2400	12.2%
	3000	8.4%		3000	10.6%		3000	11.2%
	3600	7.2%		3600	9.6%		3600	10.6%
EWJ63	100	39.0%	EW100	100	42.2%	EW175	100	43.6%
	150	34.6%		150	37.6%		150	38.9%
	200	30.1%		200	35.0%		200	35.6%
	250	28.2%		250	32.3%		250	33.7%
	300	28.1%		300	30.8%		300	32.5%
	400	24.4%		400	28.6%		400	29.7%
	500	22.9%		500	26.5%		500	28.1%
	600	19.8%		600	22.1%		600	24.2%
	800	16.6%		800	20.0%		800	20.9%
	1000	17.2%		1000	17.8%		1000	19.3%
	1200	13.5%		1200	16.2%		1200	18.2%
	1500	13.6%		1500	16.2%		1500	16.8%
	1800	11.8%		1800	13.5%		1800	14.5%
	2400	9.9%		2400	12.2%		2400	12.5%
	3000	9.0%		3000	10.9%		3000	11.6%
	3600	8.1%		3600	9.9%		3600	10.9%
EWJ70	100	38.4%	EW125	100	42.2%	EW200	100	42.9%
	150	34.0%		150	37.0%		150	38.4%
	200	29.6%		200	34.3%		200	35.8%
	250	27.7%		250	32.3%		250	33.2%
	300	28.1%		300	30.8%		300	31.3%
	400	24.4%		400	28.6%		400	29.2%
	500	22.9%		500	27.0%		500	27.0%
	600	19.8%		600	22.6%		600	23.3%
	800	16.6%		800	19.8%		800	20.7%
	1000	17.2%		1000	18.2%		1000	18.6%
	1200	13.5%		1200	17.1%		1200	17.0%
	1500	13.2%		1500	15.7%		1500	15.3%
	1800	11.4%		1800	13.1%		1800	13.2%
	2400	9.6%		2400	11.5%		2400	11.7%
	3000	8.7%		3000	10.6%		3000	10.5%
	3600	7.8%		3600	9.9%		3600	9.6%

Note) Starting efficiencies are from a standstill speed of 0 r/min. Starting a reducer requires a higher amount of power than during normal operation. Use the values given above for reference. Refer to the "Catalogue efficiency" and its calculation on page 18 for normal operation.

■ Moment of Inertia on Input Shaft (Solid Output Shaft / Hollow Output Shaft)

EWJ/EW/SW Series

Moment of inertia on input shaft $\{GD^2\} : \times 10^{-3} \text{ kg} \cdot \text{m}^2 \{ \times 10^{-3} \text{ kgf} \cdot \text{m}^2 \}$

Size Reduction ratio	EWJ50	EWJ63	EWJ70	EW80 SW80	EW100 SW100	EW125 SW125	EW150 SW150	EW175 SW175	EW200 SW200
100	0.01 {0.06}	0.03 {0.12}	0.03 {0.13}	0.2 {0.6}	0.2 {0.7}	0.4 {1.6}	0.9 {3.6}	2.2 {8.6}	4.1 {16.3}
150	0.01 {0.05}	0.03 {0.10}	0.03 {0.11}	0.2 {0.6}	0.2 {0.7}	0.4 {1.5}	0.8 {3.3}	2.0 {7.8}	3.5 {14.0}
200	0.01 {0.05}	0.02 {0.09}	0.02 {0.10}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.7 {2.9}	1.8 {7.2}	3.2 {12.8}
250	0.01 {0.04}	0.02 {0.08}	0.02 {0.10}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.7 {2.8}	1.7 {6.7}	3.1 {12.3}
300	0.01 {0.05}	0.03 {0.10}	0.03 {0.11}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.8 {3.2}	1.9 {7.7}	3.5 {13.9}
400	0.01 {0.05}	0.02 {0.09}	0.02 {0.10}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.7 {2.9}	1.8 {7.1}	3.2 {12.7}
500	0.01 {0.04}	0.02 {0.08}	0.02 {0.10}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.7 {2.7}	1.7 {6.7}	3.1 {12.3}
600	0.01 {0.05}	0.02 {0.09}	0.02 {0.09}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.8 {3.0}	1.8 {7.3}	3.2 {12.6}
800	0.01 {0.04}	0.02 {0.09}	0.02 {0.08}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.7 {2.8}	1.7 {6.8}	3.0 {12.0}
1000	0.01 {0.04}	0.02 {0.08}	0.02 {0.08}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.7 {2.7}	1.6 {6.5}	3.0 {11.8}
1200	0.01 {0.04}	0.02 {0.08}	0.02 {0.08}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.6 {2.5}	1.6 {6.2}	2.9 {11.7}
1500	0.01 {0.04}	0.02 {0.08}	0.02 {0.10}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.7 {2.7}	1.7 {6.7}	3.1 {12.3}
1800	0.01 {0.05}	0.02 {0.09}	0.02 {0.09}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.8 {3.0}	1.8 {7.3}	3.2 {12.6}
2400	0.01 {0.04}	0.02 {0.09}	0.02 {0.08}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.7 {2.8}	1.7 {6.8}	3.0 {12.0}
3000	0.01 {0.04}	0.02 {0.08}	0.02 {0.08}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.7 {2.7}	1.6 {6.5}	3.0 {11.8}
3600	0.01 {0.04}	0.02 {0.08}	0.02 {0.08}	0.2 {0.6}	0.2 {0.7}	0.4 {1.4}	0.6 {2.5}	1.6 {6.2}	2.9 {11.7}

EWJM/EWM(R)/SWM(R) Series

Moment of inertia on input shaft $\{GD^2\} : \times 10^{-3} \text{ kg} \cdot \text{m}^2 \{ \times 10^{-3} \text{ kgf} \cdot \text{m}^2 \}$

Size Reduction ratio	EWJM50		EWJM63		EWJM70	
	Motor kW	Moment of Inertia on Input Shaft	Motor kW	Moment of Inertia on Input Shaft	Motor kW	Moment of Inertia on Input Shaft
100	0.2	0.5 {1.9}	0.4	1.0 {4.2}	0.4	1.0 {4.2}
150	0.2	0.5 {1.9}	0.4	1.0 {4.2}	0.4	1.0 {4.2}
200	0.2	0.5 {1.9}	0.2	0.5 {2.0}	0.4	1.0 {4.2}
250	0.1	0.5 {1.9}	0.2	0.5 {2.0}	0.4	1.0 {4.2}
300	0.1	0.5 {1.9}	0.2	0.5 {2.0}	0.2	0.5 {2.0}
400	0.1	0.5 {1.9}	0.2	0.5 {2.0}	0.2	0.5 {2.0}
500	0.1	0.5 {1.9}	0.1	0.5 {2.0}	0.2	0.5 {2.0}
600	0.1	0.5 {1.9}	0.1	0.5 {2.0}	0.2	0.5 {2.0}
800	—	—	0.1	0.5 {2.0}	0.2	0.5 {2.0}
1000	—	—	0.1	0.5 {2.0}	0.1	0.5 {2.0}
1200	—	—	0.1	0.5 {2.0}	0.1	0.5 {2.0}
1500	—	—	0.1	0.5 {2.0}	0.1	0.5 {2.0}
1800	—	—	0.1	0.5 {2.0}	0.1	0.5 {2.0}
2400	—	—	0.1	0.5 {2.0}	0.1	0.5 {2.0}
3000	—	—	0.1	0.5 {2.0}	0.1	0.5 {2.0}
3600	—	—	0.1	0.5 {2.0}	0.1	0.5 {2.0}

Size Reduction ratio	EWM(R)80 SWM(R)80		EWM(R)100 SWM(R)100		EWM(R)125 SWM(R)125		EWM(R)150 SWM(R)150		EWM(R)175 SWM(R)175		EWM(R)200 SWM(R)200	
	Motor kW	Moment of Inertia on Input Shaft	Motor kW	Moment of Inertia on Input Shaft	Motor kW	Moment of Inertia on Input Shaft	Motor kW	Moment of Inertia on Input Shaft	Motor kW	Moment of Inertia on Input Shaft	Motor kW	Moment of Inertia on Input Shaft
100	0.75	2.4 {9.64}	0.75	2.4 {9.74}	1.5	7 {27.8}	2.2	10.2 {40.8}	5.5	40.6 {162.2}	5.5	42.4 {169.6}
	—	—	—	—	—	—	3.7	21.4 {85.6}	—	—	—	—
150	0.75	2.4 {9.64}	0.75	2.4 {9.74}	1.5	6.9 {27.7}	2.2	4.7 {18.9}	5.5	40.4 {161.4}	5.5	41.8 {167.3}
	—	—	—	—	—	—	3.7	21.3 {85.3}	—	—	—	—
200	0.4	1.1 {4.5}	0.75	2.4 {9.74}	1.5	6.9 {27.6}	2.2	10 {40.1}	3.7	22.3 {89.2}	5.5	41.5 {166.1}
250	0.4	1.1 {4.5}	0.75	2.4 {9.74}	1.5	6.9 {27.6}	2.2	10 {40.0}	3.7	22.2 {88.7}	5.5	41.4 {165.6}
300	0.4	1.1 {4.5}	0.75	2.4 {9.74}	1.5	6.9 {27.6}	2.2	10.1 {40.4}	3.7	22.4 {89.7}	5.5	41.8 {167.2}
400	0.4	1.1 {4.5}	0.75	2.4 {9.74}	1.5	6.9 {27.6}	2.2	10 {40.1}	2.2	11.1 {44.3}	3.7	23.6 {94.4}
500	0.2	0.6 {2.3}	0.4	1.2 {4.6}	0.75	2.6 {10.44}	1.5	7.2 {28.9}	2.2	11 {43.9}	3.7	23.5 {94.0}
600	0.2	0.6 {2.3}	0.4	1.2 {4.6}	0.75	2.6 {10.44}	1.5	7.3 {29.2}	2.2	11.1 {44.5}	3.7	23.6 {94.3}
800	0.2	0.6 {2.3}	0.4	1.2 {4.6}	0.75	2.6 {10.44}	0.75	3 {11.8}	1.5	8.3 {33.0}	2.2	12.2 {48.9}
1000	0.2	0.6 {2.3}	0.4	1.2 {4.6}	0.75	2.6 {10.44}	0.75	2.9 {11.74}	1.5	8.2 {32.7}	2.2	12.2 {48.7}
1200	0.2	0.6 {2.3}	0.4	1.2 {4.6}	0.4	1.3 {5.3}	0.75	2.9 {11.54}	0.75	3.8 {15.24}	1.5	9.4 {37.6}
1500	—	—	0.2	0.6 {2.4}	0.4	1.3 {5.3}	0.75	2.9 {11.74}	0.75	3.9 {15.74}	1.5	9.6 {38.2}
1800	—	—	0.2	0.6 {2.4}	0.4	1.3 {5.3}	0.4	1.7 {6.9}	0.75	4.1 {16.34}	—	—
2400	—	—	0.2	0.6 {2.4}	0.4	1.3 {5.3}	0.4	1.7 {6.7}	0.75	4.0 {15.8}	—	—
3000	—	—	—	—	0.2	0.8 {3.1}	0.4	1.7 {6.6}	—	—	—	—
3600	—	—	—	—	0.2	0.8 {3.1}	0.4	1.6 {6.4}	—	—	—	—

Note 1) For motors with brakes, add the moment of inertia and GD^2 listed in the Brake Characteristics table on page 222.

2) indicate non-standard combinations.

Structure

EWJ/EW Series

■ Reduction Ratio

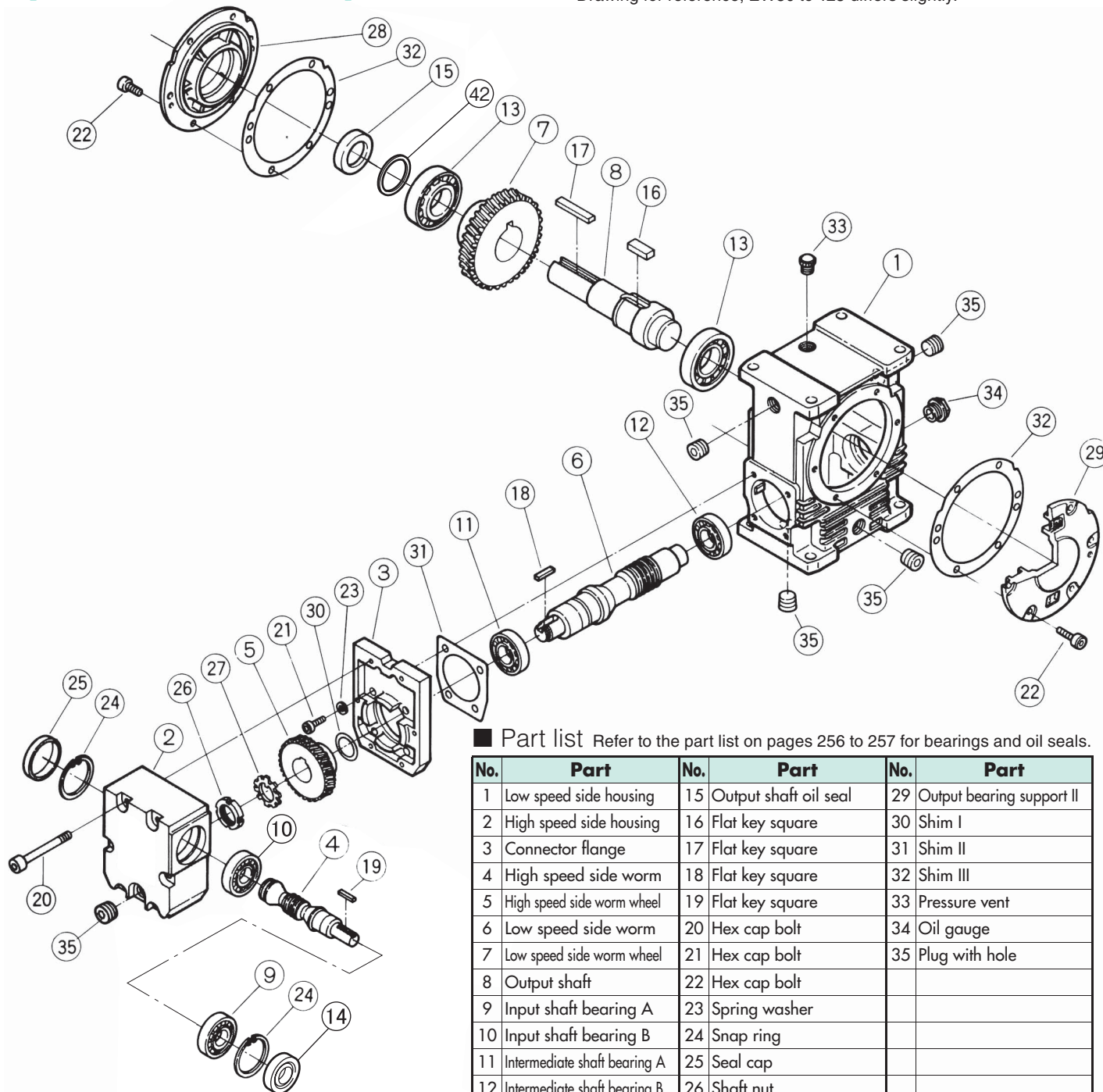
Double Reduction	1/100	1/150	1/200	1/250	1/300	1/400	1/500	1/600	1/800	1/1000	1/1200	1/1500	1/1800	1/2400	1/3000	1/3600
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■ Center Distance (lower speed side)

Size	50	63	70	80	100	125	150	175	200
Center distance	50 mm	63 mm	70 mm	80 mm	100 mm	125 mm	150 mm	175 mm	200 mm

[EWJ50 to 70, EW80 to 200]

• Drawing for reference, EW80 to 125 differs slightly.



■ Part list Refer to the part list on pages 256 to 257 for bearings and oil seals.

No.	Part	No.	Part	No.	Part
1	Low speed side housing	15	Output shaft oil seal	29	Output bearing support II
2	High speed side housing	16	Flat key square	30	Shim I
3	Connector flange	17	Flat key square	31	Shim II
4	High speed side worm	18	Flat key square	32	Shim III
5	High speed side worm wheel	19	Flat key square	33	Pressure vent
6	Low speed side worm	20	Hex cap bolt	34	Oil gauge
7	Low speed side worm wheel	21	Hex cap bolt	35	Plug with hole
8	Output shaft	22	Hex cap bolt		
9	Input shaft bearing A	23	Spring washer		
10	Input shaft bearing B	24	Snap ring		
11	Intermediate shaft bearing A	25	Seal cap		
12	Intermediate shaft bearing B	26	Shaft nut		
13	Output shaft bearing	27	Shaft washer		
14	Input shaft oil seal	28	Output bearing support I	42	Filter set

Note: [oil seals]

EWJ50 to 70 and EW150 to 200 input: with filter

EWJ50 to 70 and EW80 to 200 output: with filter

EWJM/EWM(R) Series

■ Reduction Ratio

Double Reduction	1/100	1/150	1/200	1/250	1/300	1/400	1/500	1/600	1/800	1/1000	1/1200	1/1500	1/1800	1/2400	1/3000	1/3600
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■ Standard Motor

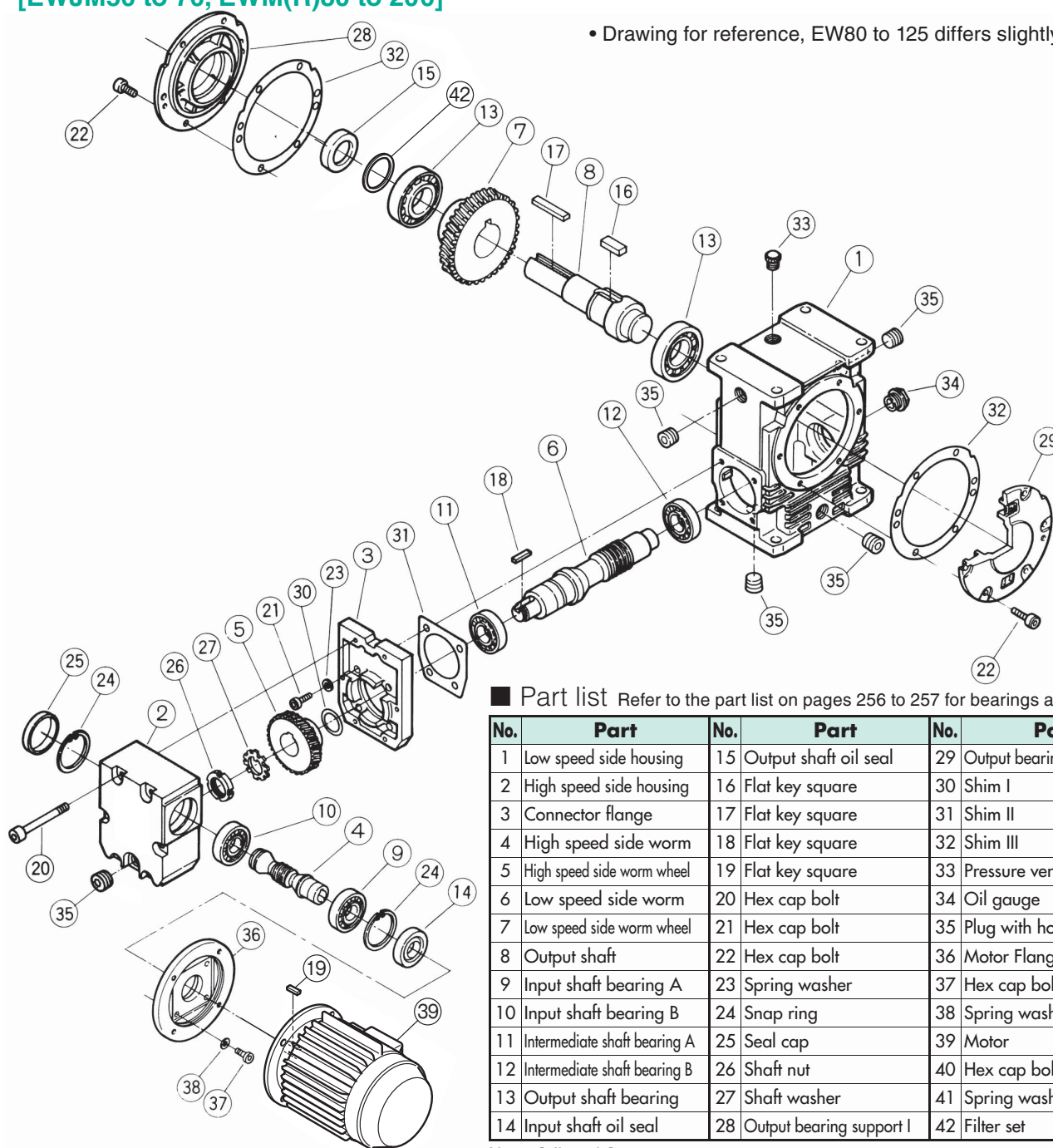
Size	50	63	70	80	100	125	150	175	200
Motor kW	0.1 to 0.2	0.1 to 0.4	0.1 to 0.4	0.2 to 0.75	0.2 to 0.75	0.2 to 1.5	0.4 to 3.7	0.75 to 3.7	1.5 to 5.5

■ Center Distance (lower speed side)

Size	50	63	70	80	100	125	150	175	200
Center Distance (low speed side)	50 mm	63 mm	70 mm	80 mm	100 mm	125 mm	150 mm	175 mm	200 mm

[EWJM50 to 70, EWM(R)80 to 200]

• Drawing for reference, EW80 to 125 differs slightly.



■ Part list Refer to the part list on pages 256 to 257 for bearings and oil seals.

No.	Part	No.	Part	No.	Part
1	Low speed side housing	15	Output shaft oil seal	29	Output bearing support II
2	High speed side housing	16	Flat key square	30	Shim I
3	Connector flange	17	Flat key square	31	Shim II
4	High speed side worm	18	Flat key square	32	Shim III
5	High speed side worm wheel	19	Flat key square	33	Pressure vent
6	Low speed side worm	20	Hex cap bolt	34	Oil gauge
7	Low speed side worm wheel	21	Hex cap bolt	35	Plug with hole
8	Output shaft	22	Hex cap bolt	36	Motor Flange
9	Input shaft bearing A	23	Spring washer	37	Hex cap bolt
10	Input shaft bearing B	24	Snap ring	38	Spring washer
11	Intermediate shaft bearing A	25	Seal cap	39	Motor
12	Intermediate shaft bearing B	26	Shaft nut	40	Hex cap bolt
13	Output shaft bearing	27	Shaft washer	41	Spring washer
14	Input shaft oil seal	28	Output bearing support I	42	Filter set

Note: [oil seals]

EWJ50 to 70 and EW150 to 200 input: with filter

EWJ50 to 70 and EW80 to 200 output: with filter

Structure

SW Series

■ Reduction Ratio

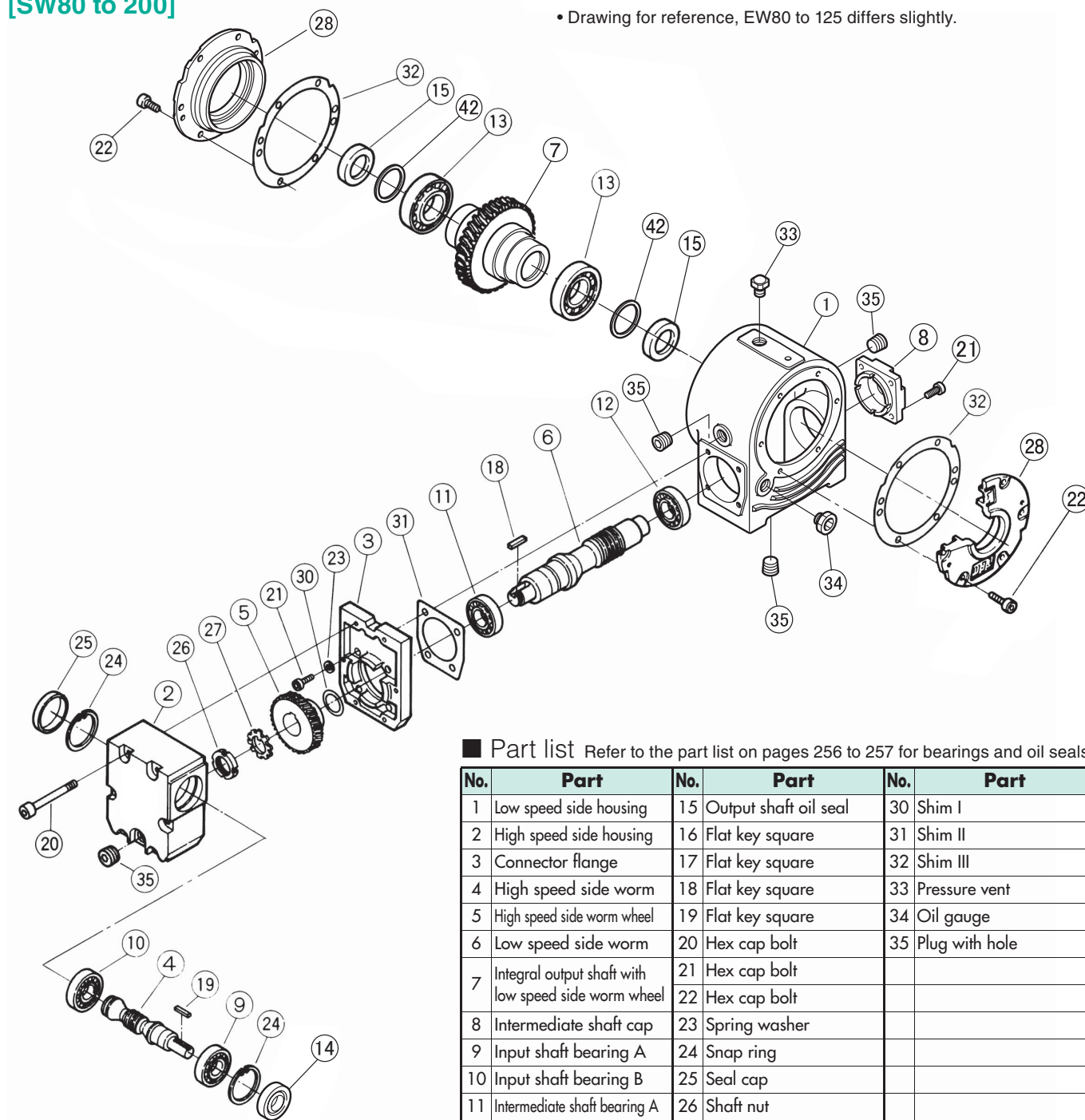
Double Reduction	1/100	1/150	1/200	1/250	1/300	1/400	1/500	1/600	1/800	1/1000	1/1200	1/1500	1/1800	1/2400	1/3000	1/3600
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■ Center Distance (lower speed side)

Size	80	100	125	150	175	200
Center distance	80 mm	100 mm	125 mm	150 mm	175 mm	200 mm

[SW80 to 200]

• Drawing for reference, EW80 to 125 differs slightly.



■ Part list Refer to the part list on pages 256 to 257 for bearings and oil seals.

No.	Part	No.	Part	No.	Part
1	Low speed side housing	15	Output shaft oil seal	30	Shim I
2	High speed side housing	16	Flat key square	31	Shim II
3	Connector flange	17	Flat key square	32	Shim III
4	High speed side worm	18	Flat key square	33	Pressure vent
5	High speed side worm wheel	19	Flat key square	34	Oil gauge
6	Low speed side worm	20	Hex cap bolt	35	Plug with hole
7	Integral output shaft with low speed side worm wheel	21	Hex cap bolt		
8	Intermediate shaft cap	22	Hex cap bolt		
9	Input shaft bearing A	23	Spring washer		
10	Input shaft bearing B	24	Snap ring		
11	Intermediate shaft bearing A	25	Seal cap		
12	Intermediate shaft bearing B	26	Shaft nut		
13	Output shaft bearing	27	Shaft washer	42	Filter set
14	Input shaft oil seal	28	Output bearing support I		

Note: [oil seals]

EWJ50 to 70 and EW150 to 200 input: with filter
EWJ50 to 70 and EW80 to 200 output: with filter

SWM(R) Series

■ Reduction Ratio

Double Reduction	1/100	1/150	1/200	1/250	1/300	1/400	1/500	1/600	1/800	1/1000	1/1200	1/1500	1/1800	1/2400	1/3000	1/3600
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■ Standard Built-in Motor

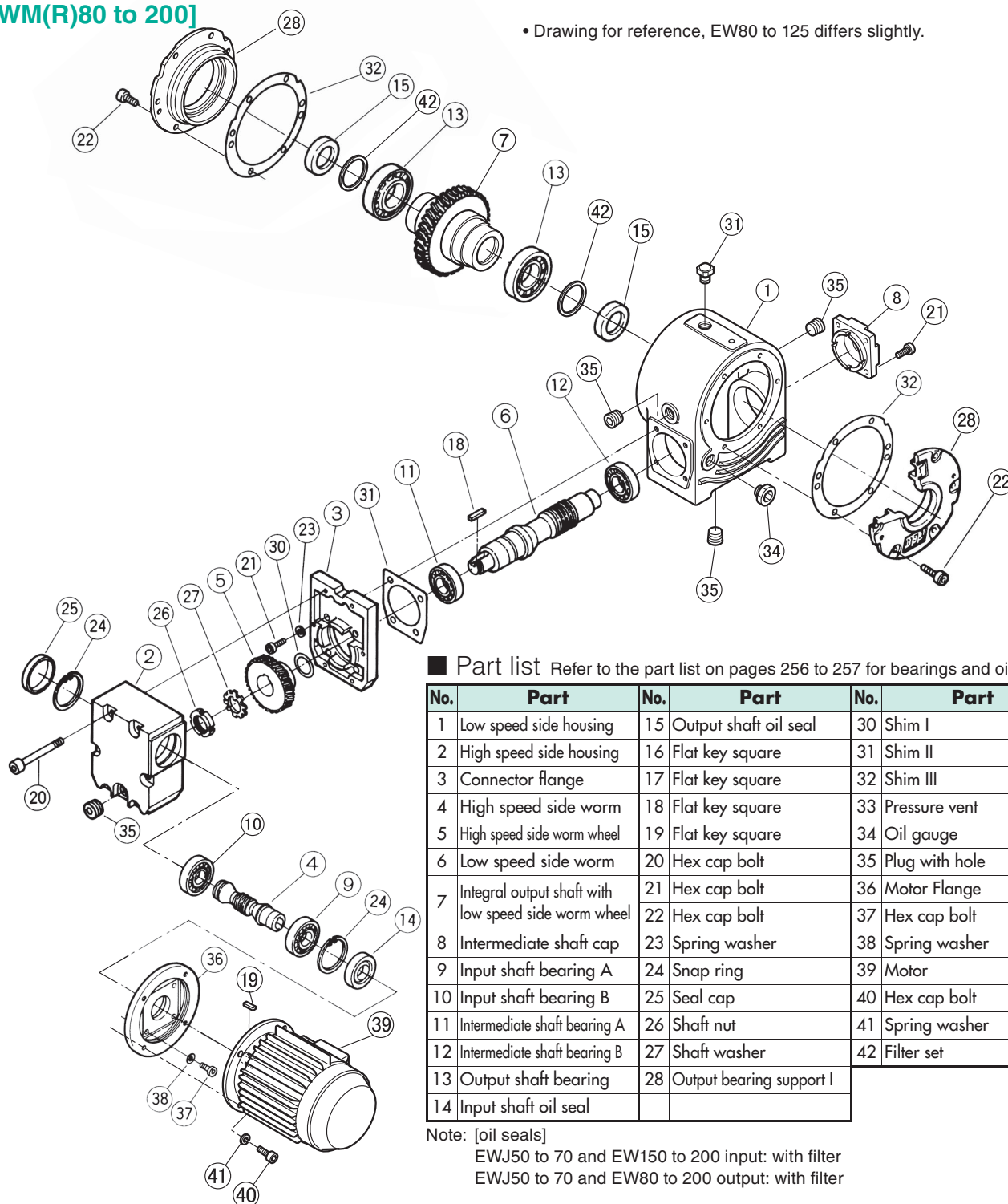
Size	80	100	125	150	175	200
Motor kW	0.2 to 0.75	0.2 to 0.75	0.2 to 1.5	0.4 to 3.7	0.75 to 3.7	1.5 to 5.5

■ Center Distance (lower speed side)

Size	80	100	125	150	175	200
Center Distance (low speed side)	80 mm	100 mm	125 mm	150 mm	175 mm	200 mm

[SWM(R)80 to 200]

• Drawing for reference, EW80 to 125 differs slightly.



■ Part list Refer to the part list on pages 256 to 257 for bearings and oil seals.

No.	Part	No.	Part	No.	Part
1	Low speed side housing	15	Output shaft oil seal	30	Shim I
2	High speed side housing	16	Flat key square	31	Shim II
3	Connector flange	17	Flat key square	32	Shim III
4	High speed side worm	18	Flat key square	33	Pressure vent
5	High speed side worm wheel	19	Flat key square	34	Oil gauge
6	Low speed side worm	20	Hex cap bolt	35	Plug with hole
7	Integral output shaft with low speed side worm wheel	21	Hex cap bolt	36	Motor Flange
8	Intermediate shaft cap	22	Hex cap bolt	37	Hex cap bolt
9	Input shaft bearing A	23	Spring washer	38	Spring washer
10	Input shaft bearing B	24	Snap ring	39	Motor
11	Intermediate shaft bearing A	25	Seal cap	40	Hex cap bolt
12	Intermediate shaft bearing B	26	Shaft nut	41	Spring washer
13	Output shaft bearing	27	Shaft washer	42	Filter set
14	Input shaft oil seal	28	Output bearing support I		

Note: [oil seals]

EWJ50 to 70 and EW150 to 200 input: with filter
EWJ50 to 70 and EW80 to 200 output: with filter

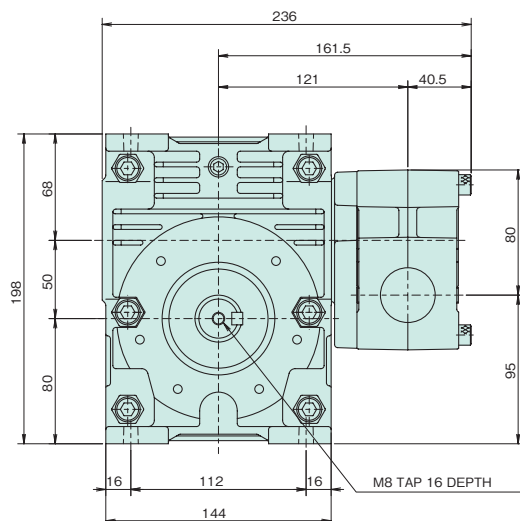
Dimensional Drawings EWJ50T/EWJ50V

See next page for reducers with motors

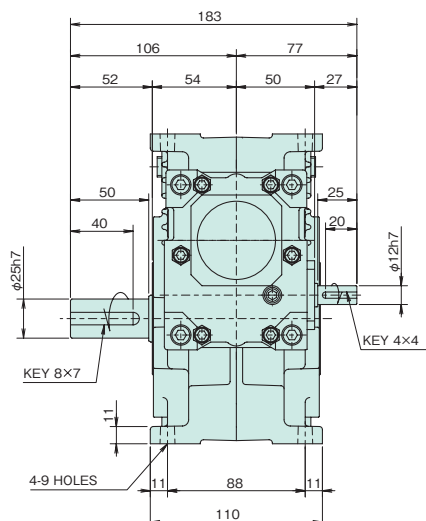


EWJ50T

[R-L]

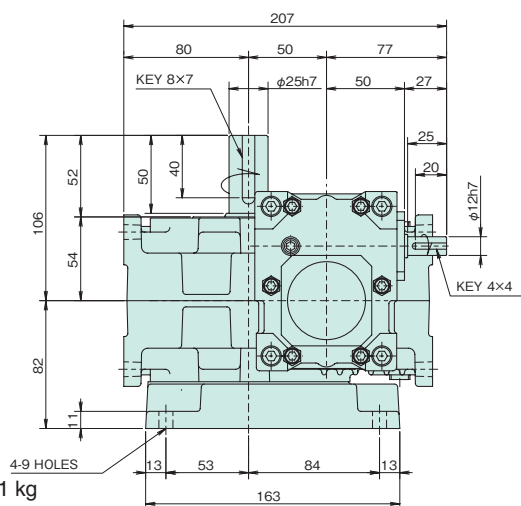


Estimated mass 11 kg

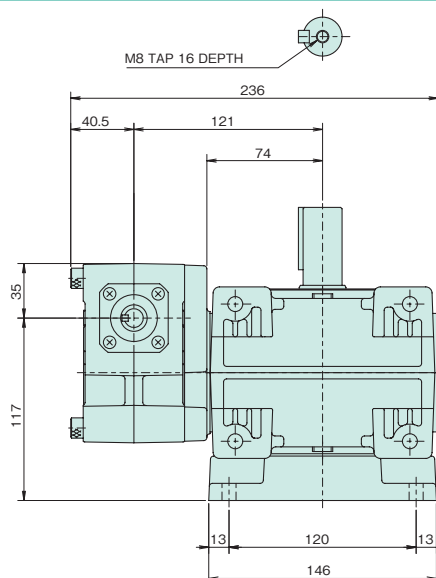


EWJ50V

[R-LU]



Estimated mass 11 kg



* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

Size	Input	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
	Reduction ratio	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
EWJ50	100	0.255	98 {10.03}	0.217	99 {10.11}	0.178	100 {10.19}	0.150	100 {10.25}	0.085	102 {10.37}	0.020	103 {10.48}
	150	0.186	100 {10.19}	0.158	100 {10.24}	0.129	101 {10.30}	0.110	101 {10.33}	0.063	102 {10.42}	0.015	103 {10.49}
	200	0.148	101 {10.27}	0.126	101 {10.31}	0.103	101 {10.35}	0.087	102 {10.38}	0.051	102 {10.44}	0.012	103 {10.50}
	250	0.124	101 {10.31}	0.106	101 {10.35}	0.087	102 {10.38}	0.074	102 {10.40}	0.043	102 {10.45}	0.010	103 {10.50}
	300	0.110	103 {10.54}	0.094	104 {10.59}	0.077	104 {10.64}	0.065	105 {10.67}	0.036	105 {10.74}	0.009	106 {10.81}
	400	0.088	104 {10.61}	0.075	104 {10.65}	0.061	105 {10.68}	0.052	105 {10.71}	0.031	106 {10.77}	0.007	106 {10.82}
	500	0.074	104 {10.65}	0.063	105 {10.68}	0.052	105 {10.71}	0.045	105 {10.73}	0.026	106 {10.78}	0.006	106 {10.82}
	600	0.067	105 {10.68}	0.058	105 {10.71}	0.048	105 {10.73}	0.041	105 {10.75}	0.024	106 {10.79}	0.006	106 {10.82}
	800	0.055	105 {10.72}	0.048	105 {10.74}	0.040	105 {10.76}	0.034	106 {10.77}	0.020	106 {10.80}	0.005	106 {10.82}
	1000	0.048	105 {10.74}	0.041	105 {10.76}	0.035	106 {10.77}	0.030	106 {10.78}	0.018	106 {10.80}	0.004	106 {10.82}
	1200	0.044	105 {10.76}	0.038	106 {10.77}	0.032	106 {10.78}	0.027	106 {10.79}	0.016	106 {10.81}	0.004	106 {10.82}
	1500	0.034	93 { 9.45}	0.029	93 { 9.47}	0.025	93 { 9.50}	0.021	93 { 9.51}	0.013	94 { 9.55}	0.003	94 { 9.58}
	1800	0.031	93 { 9.47}	0.027	93 { 9.49}	0.023	93 { 9.51}	0.020	93 { 9.53}	0.012	94 { 9.56}	0.003	94 { 9.59}
	2400	0.026	93 { 9.50}	0.023	93 { 9.52}	0.019	93 { 9.53}	0.016	94 { 9.54}	0.010	94 { 9.57}	0.002	94 { 9.59}
	3000	0.023	93 { 9.52}	0.020	93 { 9.53}	0.017	94 { 9.54}	0.014	94 { 9.55}	0.009	94 { 9.57}	0.002	94 { 9.59}
	3600	0.021	93 { 9.53}	0.018	94 { 9.54}	0.015	94 { 9.55}	0.013	94 { 9.56}	0.008	94 { 9.57}	0.002	94 { 9.59}

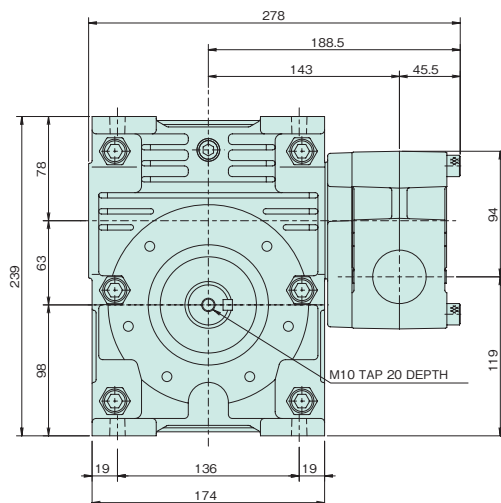
Dimensional Drawings EWJ63T/EWJ63V

See next page for reducers with motors

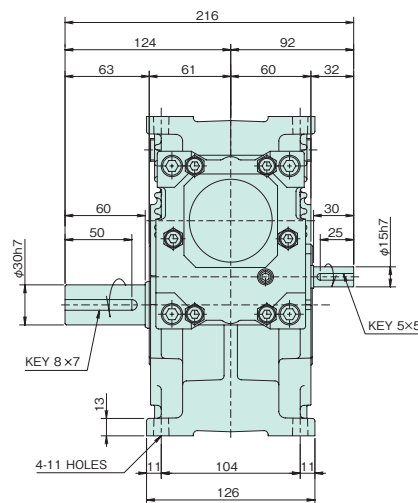


EWJ63T

[R-L]

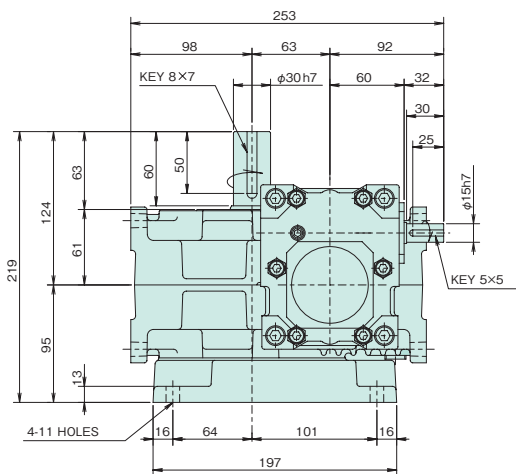


Estimated mass 16 kg

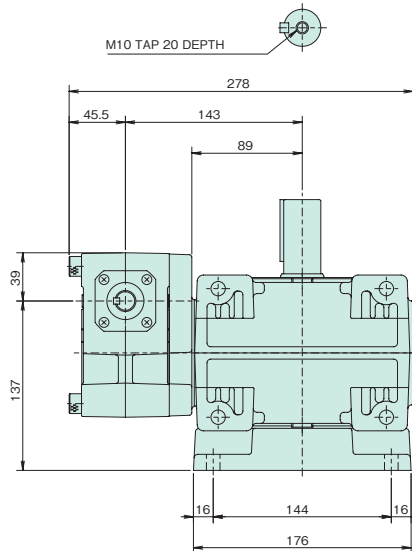


EWJ63V

[R-LU]



Estimated mass 17 kg



* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

Size	Input Reduction ratio	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
		Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
EWJ63	100	0.514	201 {20.51}	0.439	203 {20.72}	0.360	205 {20.93}	0.305	207 {21.07}	0.173	210 {21.40}	0.041	213 {21.69}
	150	0.375	205 {20.92}	0.320	206 {21.06}	0.262	208 {21.21}	0.223	209 {21.30}	0.127	211 {21.52}	0.030	213 {21.72}
	200	0.298	207 {21.13}	0.255	208 {21.24}	0.209	209 {21.35}	0.177	210 {21.42}	0.103	212 {21.58}	0.024	213 {21.73}
	250	0.251	208 {21.25}	0.214	209 {21.34}	0.176	210 {21.43}	0.150	211 {21.49}	0.087	212 {21.62}	0.021	213 {21.74}
	300	0.229	217 {22.12}	0.196	218 {22.26}	0.161	220 {22.40}	0.137	220 {22.49}	0.080	223 {22.71}	0.019	224 {22.89}
	400	0.183	219 {22.33}	0.156	220 {22.43}	0.129	221 {22.54}	0.110	222 {22.61}	0.064	223 {22.76}	0.016	224 {22.91}
	500	0.154	220 {22.45}	0.132	221 {22.53}	0.109	222 {22.62}	0.093	222 {22.67}	0.055	223 {22.80}	0.013	225 {22.91}
	600	0.140	221 {22.53}	0.120	221 {22.60}	0.100	222 {22.67}	0.086	223 {22.72}	0.051	224 {22.82}	0.013	225 {22.92}
	800	0.114	222 {22.63}	0.098	222 {22.69}	0.083	223 {22.74}	0.071	223 {22.77}	0.043	224 {22.85}	0.011	225 {22.92}
	1000	0.099	222 {22.69}	0.086	223 {22.74}	0.072	223 {22.78}	0.062	224 {22.81}	0.037	224 {22.87}	0.009	225 {22.93}
	1200	0.088	223 {22.74}	0.077	223 {22.77}	0.064	223 {22.81}	0.056	224 {22.83}	0.033	224 {22.88}	0.008	225 {22.93}
	1500	0.066	188 {19.10}	0.056	188 {19.16}	0.047	188 {19.22}	0.041	189 {19.26}	0.024	190 {19.35}	0.006	190 {19.44}
	1800	0.060	188 {19.16}	0.052	188 {19.21}	0.044	189 {19.26}	0.038	189 {19.29}	0.023	190 {19.37}	0.006	191 {19.44}
	2400	0.049	188 {19.23}	0.043	189 {19.27}	0.036	189 {19.31}	0.032	189 {19.34}	0.019	190 {19.39}	0.005	191 {19.45}
	3000	0.043	189 {19.28}	0.038	189 {19.31}	0.032	190 {19.34}	0.028	190 {19.36}	0.017	190 {19.41}	0.004	191 {19.45}
	3600	0.039	189 {19.31}	0.034	189 {19.33}	0.029	190 {19.36}	0.025	190 {19.38}	0.015	190 {19.42}	0.004	191 {19.45}

EWJM63T

[illegible]

Technical drawing of the front view of a 1/2 HP 3-Phase Motor. The drawing shows a light blue motor housing with a circular fan on the left. Dimensions are provided in millimeters. Key dimensions include: total width 278mm, distance between mounting feet 188.5mm, mounting foot width 45.5mm, distance between mounting feet 143mm, total height 239mm, mounting foot height 78mm, distance between mounting feet 63mm, total height 98mm, distance between mounting feet 19mm, and distance between mounting feet 136mm. A note indicates "M10 TAP 20 DEPTH" for the mounting feet. The motor is labeled "1/2 HP" and "3-Phase".

[L-RU]

Technical drawing of a mechanical part (Fig. 1.10) showing dimensions and features. The drawing includes the following dimensions and labels:

- Overall Dimensions:**
 - Top: MW (total width), MW_1 (width to start of key), 161 (width to end of key).
 - Bottom: 16, 101, 64, 16 (segment widths), 197 (total width).
 - Right: 63, 98, 50, 60, 63, 124, 219, 95, 13 (height dimensions).
- Internal Features and Labels:**
 - MA (width to start of first step), MC (width to start of second step).
 - ϕMD (diameter of first step).
 - $\phi 30h7$ (diameter of hole).
 - KEY 8x7 (key specification).
 - $\phi 12$ (diameter of internal hole).
 - 4-11 HOLES (four holes with diameter 11).

Technical drawing of a mechanical assembly, likely a valve or actuator, showing dimensions in millimeters. The drawing includes a side view and a top view. Key dimensions are:

- Overall width: 278
- Distance from left face to center of mounting holes: 45.5
- Distance between mounting holes: 143
- Distance from center of mounting holes to right face: 89
- Overall height: 137
- Distance from top face to center of mounting holes: 39
- Distance from left face to center of mounting holes: MT
- Distance from left face to center of mounting holes: 16
- Distance between mounting holes: 144
- Distance from center of mounting holes to right face: 176

The drawing also shows a detail of a mounting hole with the specification: M10 TAP 20 DEPTH.

Transfer Capacity Table

Size	Standard combination		1750 r/min	1450 r/min	Values in () for the motor indicates dimensions for a motor with a brake.									
	Motor kW	Reduction ratio	Output torque N·m {kgf·m}	Output torque N·m {kgf·m}	MA	MC	MW ₁	Installation T type MW	Installation V type MW	MB	MD	MT	Installation T type Estimated mass kg	Installation V type Estimated mass kg
EWJM63	0.1	500	143 {14.6}	167 {17.1}	180 (218)	130 (130)	310 (348)	434 (472)	471 (509)	127 (140)	140 (140)	81 (104.5)	23 (25)	24 (26)
		600	158 {16.1}	185 {18.8}										
		800	194 {19.8}	222 {22.7}										
		1000	222 {22.7}	223 {22.7}										
		1200	223 {22.7}	223 {22.7}										
		1500	187 {19.1}	188 {19.2}										
		1800	188 {19.2}	188 {19.2}										
		2400	188 {19.2}	189 {19.3}										
		3000	189 {19.3}	189 {19.3}										
	3600	189 {19.3}	189 {19.3}											
	0.2	200	139 {14.2}	163 {16.7}	212 (229)	130 (130)	342 (359)	466 (483)	503 (520)	140 (140)	160 (160)	81 (104.5)	24 (26)	25 (27)
		250	166 {16.9}	195 {19.9}										
		300	189 {19.3}	218 {22.3}										
		400	219 {22.3}	220 {22.4}										
	0.4	100	156 {15.9}	185 {18.9}	224 (241)	130 (130)	354 (371)	478 (495)	515 (532)	140 (140)	160 (160)	81 (104.5)	25 (28)	26 (29)
		150	205 {20.9}	206 {21.1}										

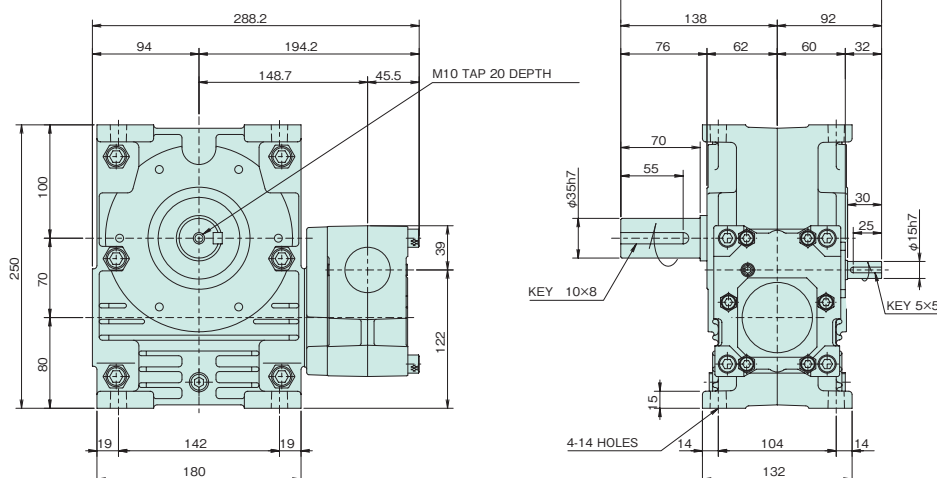
- 92

Dimensional Drawings EWJ70B/EWJ70V

See next page for reducers with motors

EWJ70B

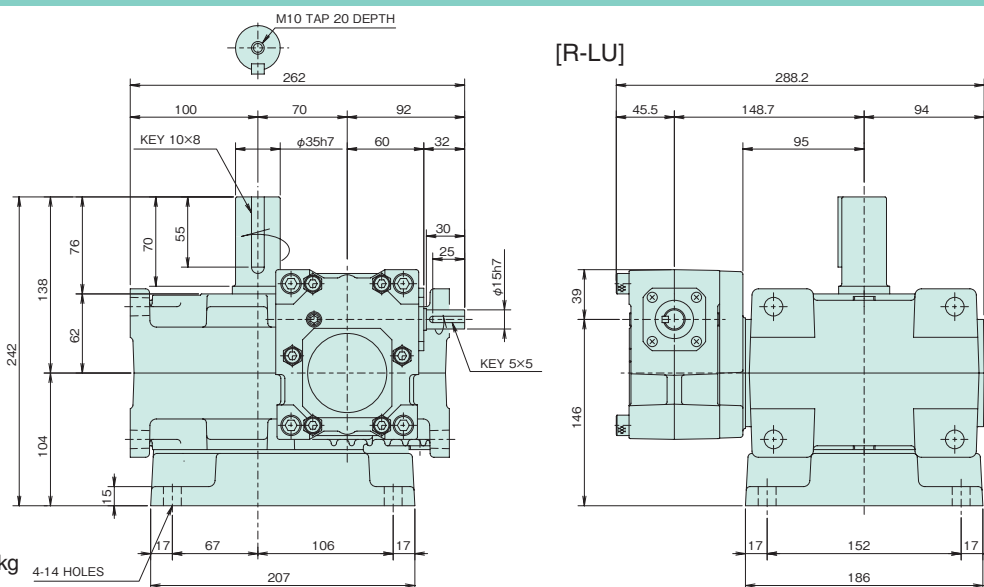
[R-L]



Estimated mass 18 kg

EWJ70V

[R-LU]



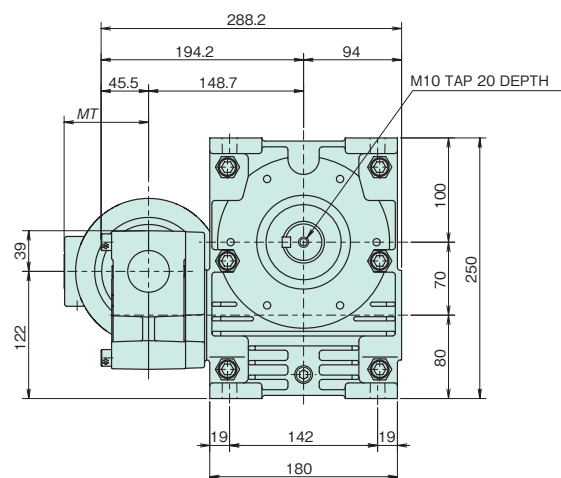
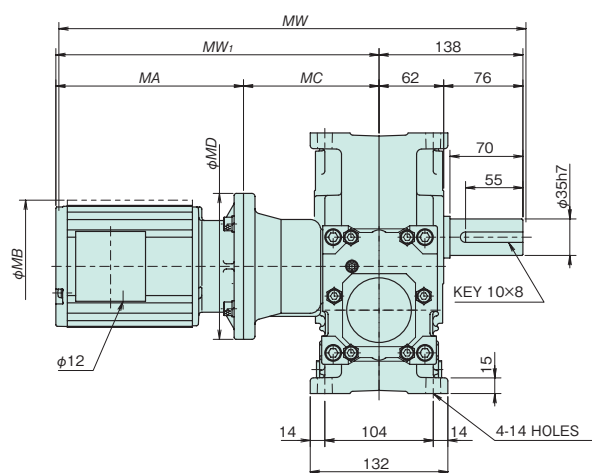
Estimated mass 19 kg

* Refer to page 74 for shaft arrangements and relative direction of rotation.

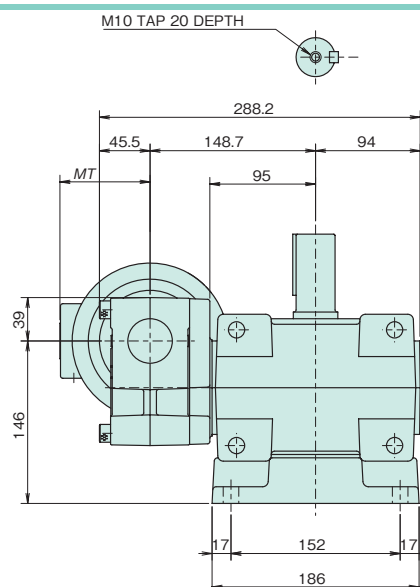
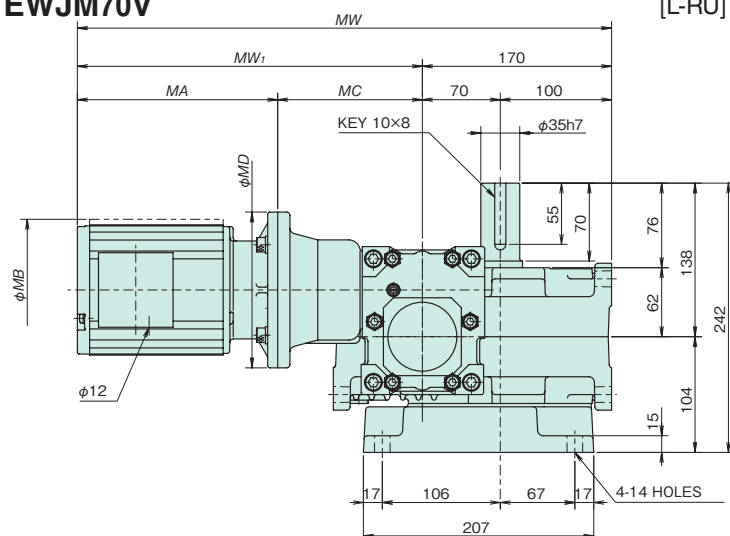
Transfer Capacity Table

Size	Input Reduction ratio	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
		Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
EWJ70	100	0.719	281 {28.7}	0.614	285 {29.0}	0.504	288 {29.4}	0.428	290 {29.6}	0.244	295 {30.1}	0.057	300 {30.6}
	150	0.525	288 {29.4}	0.449	290 {29.6}	0.369	292 {29.8}	0.313	294 {30.0}	0.179	297 {30.3}	0.043	300 {30.6}
	200	0.419	291 {29.7}	0.358	293 {29.9}	0.294	294 {30.0}	0.250	295 {30.1}	0.145	298 {30.4}	0.035	300 {30.6}
	250	0.353	293 {29.9}	0.301	294 {30.0}	0.248	296 {30.2}	0.211	296 {30.3}	0.123	299 {30.5}	0.029	300 {30.6}
	300	0.314	300 {30.6}	0.268	302 {30.8}	0.221	304 {31.0}	0.188	305 {31.2}	0.109	309 {31.5}	0.027	311 {31.8}
	400	0.251	303 {30.9}	0.215	305 {31.1}	0.177	306 {31.2}	0.151	307 {31.3}	0.088	309 {31.6}	0.022	312 {31.8}
	500	0.212	305 {31.1}	0.182	306 {31.2}	0.150	307 {31.4}	0.128	308 {31.4}	0.075	310 {31.6}	0.018	312 {31.8}
	600	0.192	306 {31.2}	0.165	307 {31.3}	0.137	308 {31.4}	0.118	309 {31.5}	0.071	310 {31.7}	0.018	312 {31.8}
	800	0.157	308 {31.4}	0.135	308 {31.5}	0.113	309 {31.5}	0.098	310 {31.6}	0.059	311 {31.7}	0.015	312 {31.8}
	1000	0.135	308 {31.5}	0.118	309 {31.5}	0.099	310 {31.6}	0.085	310 {31.6}	0.051	311 {31.7}	0.013	312 {31.8}
	1200	0.121	309 {31.5}	0.105	310 {31.6}	0.088	310 {31.6}	0.076	310 {31.7}	0.046	311 {31.8}	0.012	312 {31.8}
	1500	0.092	262 {26.7}	0.079	263 {26.8}	0.065	264 {26.9}	0.056	264 {27.0}	0.034	266 {27.1}	0.009	267 {27.3}
	1800	0.083	263 {26.8}	0.072	264 {26.9}	0.060	264 {27.0}	0.053	265 {27.0}	0.032	266 {27.2}	0.008	267 {27.3}
	2400	0.069	264 {26.9}	0.060	265 {27.0}	0.051	265 {27.1}	0.044	266 {27.1}	0.027	266 {27.2}	0.007	267 {27.3}
	3000	0.060	265 {27.0}	0.053	265 {27.1}	0.044	266 {27.1}	0.039	266 {27.1}	0.023	267 {27.2}	0.006	267 {27.3}
	3600	0.054	265 {27.0}	0.047	265 {27.1}	0.040	266 {27.1}	0.035	266 {27.2}	0.021	267 {27.2}	0.005	267 {27.3}

[L-R]



[L-RU]



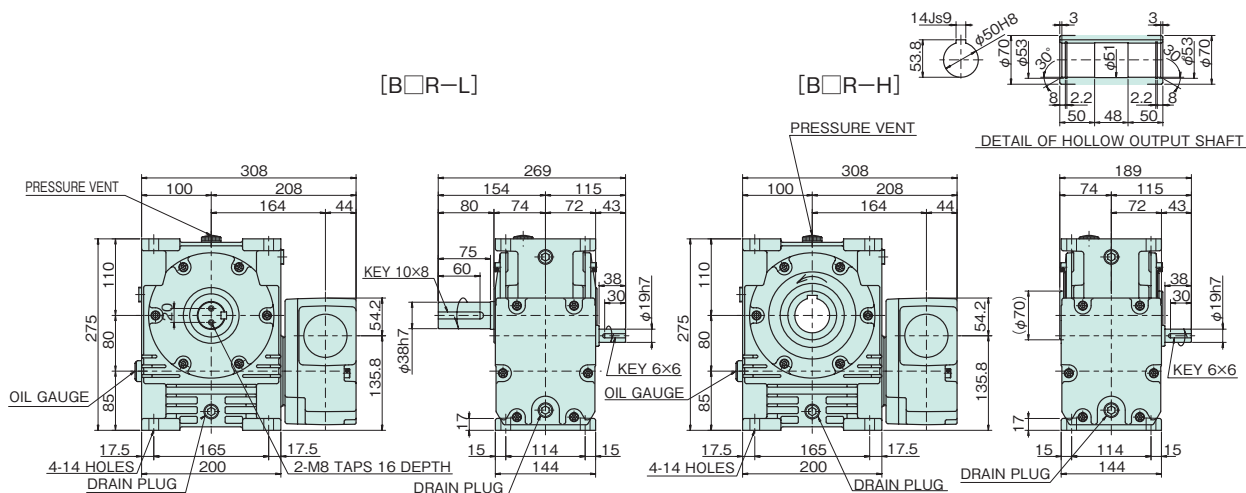
Transfer Capacity Table

Size	Standard combination		1750 r/min	1450 r/min	Values in () for the motor indicates dimensions for a motor with a brake.									
	Motor kW	Reduction ratio	Output torque N·m {kgf·m}	Output torque N·m {kgf·m}	MA	MC	MW ₁	Installation T type MW	Installation V type MW	MB	MD	MT	Installation T type Estimated mass kg	Installation V type Estimated mass kg
EWJM70	0.1	1000	228 {23.3}	262 {26.7}	180 (218)	130 (130)	310 (348)	448 (486)	480 (518)	127 (140)	140 (140)	81 (104.5)	25 (27)	26 (28)
		1200	255 {26.0}	295 {30.1}										
		1500	262 {26.7}	263 {26.8}										
		1800	263 {26.8}	264 {26.9}										
		2400	264 {26.9}	265 {27.0}										
		3000	265 {27.0}	265 {27.1}										
		3600	265 {27.0}	265 {27.1}										
	0.2	300	191 {19.5}	225 {23.0}	212 (229)	130 (130)	342 (359)	480 (497)	512 (529)	140 (140)	160 (160)	81 (104.5)	26 (28)	27 (29)
		400	241 {24.6}	283 {28.9}										
		500	305 {31.1}	306 {31.2}										
		600	306 {31.2}	307 {31.3}										
		800	308 {31.4}	308 {31.5}										
	0.4	100	157 {16.0}	185 {18.9}	224 (241)	130 (130)	354 (371)	492 (509)	524 (541)	140 (140)	160 (160)	81 (104.5)	27 (30)	28 (31)
		150	220 {22.4}	258 {26.4}										
		200	291 {29.7}	293 {29.9}										
250		293 {29.9}	294 {30.0}											

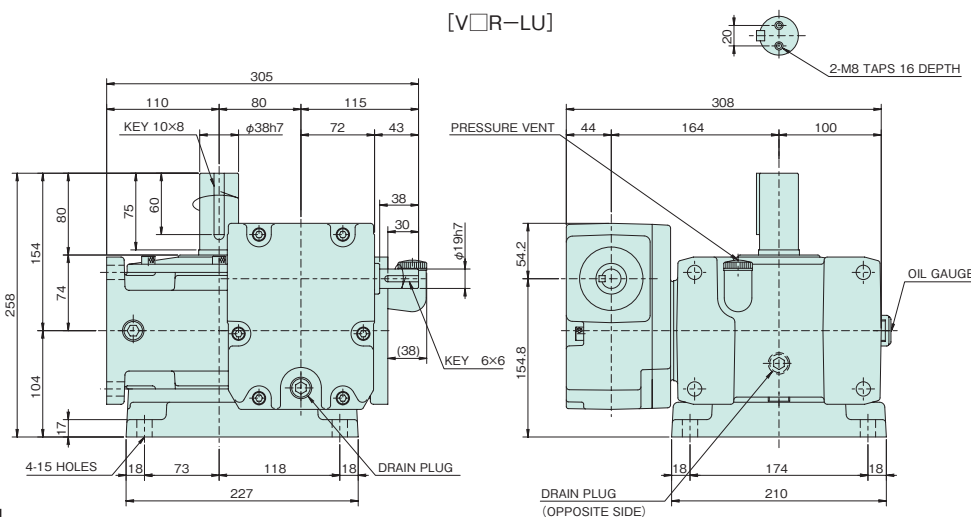
- 94

Dimensional Drawings EW80B/EW80V

EW80B



EW80V



* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

Size	Input Reduction ratio	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
		Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
EW80	100	1.032	419 {42.8}	0.881	424 {43.3}	0.722	430 {43.9}	0.612	433 {44.2}	0.347	442 {45.1}	0.081	499 {45.8}
	150	0.747	430 {43.9}	0.637	433 {44.2}	0.522	437 {44.6}	0.442	439 {44.8}	0.251	445 {45.4}	0.059	450 {45.9}
	200	0.591	435 {44.4}	0.503	438 {44.7}	0.412	440 {44.9}	0.349	442 {45.1}	0.200	446 {45.5}	0.047	450 {45.9}
	250	0.496	438 {44.7}	0.423	440 {44.9}	0.347	442 {45.1}	0.294	444 {45.3}	0.170	447 {45.6}	0.040	450 {45.9}
	300	0.447	452 {46.1}	0.382	455 {46.4}	0.314	459 {46.8}	0.266	461 {47.0}	0.153	466 {47.5}	0.037	470 {48.0}
	400	0.355	457 {46.6}	0.303	459 {46.8}	0.249	462 {47.1}	0.211	464 {47.3}	0.123	467 {47.7}	0.029	470 {48.0}
	500	0.299	460 {46.9}	0.255	462 {47.1}	0.210	464 {47.3}	0.178	465 {47.4}	0.104	467 {47.7}	0.025	470 {48.0}
	600	0.267	462 {47.1}	0.229	464 {47.3}	0.189	465 {47.4}	0.161	466 {47.5}	0.096	468 {47.8}	0.024	470 {48.0}
	800	0.215	464 {47.3}	0.185	466 {47.5}	0.154	466 {47.6}	0.132	467 {47.7}	0.078	469 {47.9}	0.019	471 {48.1}
	1000	0.185	466 {47.5}	0.160	466 {47.6}	0.134	467 {47.7}	0.115	468 {47.8}	0.068	469 {47.9}	0.017	471 {48.1}
	1200	0.165	466 {47.6}	0.143	467 {47.7}	0.120	468 {47.8}	0.103	468 {47.8}	0.062	470 {48.0}	0.015	471 {48.1}
	1500	0.124	390 {39.8}	0.107	391 {39.9}	0.088	393 {40.1}	0.075	394 {40.2}	0.045	396 {40.4}	0.011	398 {40.6}
	1800	0.112	391 {39.9}	0.096	392 {40.0}	0.080	394 {40.2}	0.069	394 {40.2}	0.042	396 {40.4}	0.011	398 {40.6}
	2400	0.091	393 {40.1}	0.078	394 {40.2}	0.066	395 {40.3}	0.057	396 {40.4}	0.034	397 {40.5}	0.009	398 {40.6}
	3000	0.078	394 {40.2}	0.069	395 {40.3}	0.058	396 {40.4}	0.050	396 {40.4}	0.030	397 {40.5}	0.008	398 {40.6}
	3600	0.071	395 {40.3}	0.062	395 {40.3}	0.052	396 {40.4}	0.045	397 {40.5}	0.027	397 {40.5}	0.007	398 {40.6}

Dimensional Drawings SW80B/SW80V

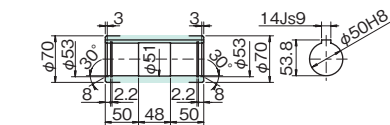
See next page for
reducers with motors



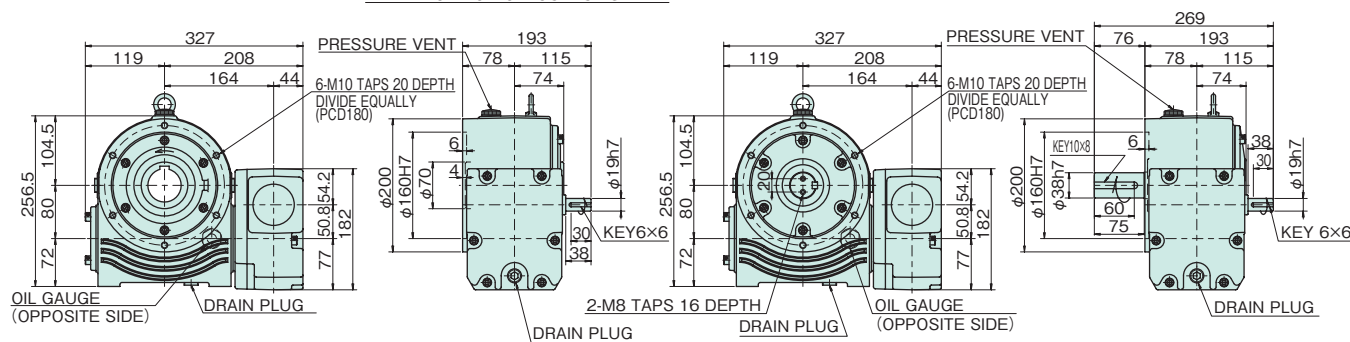
SW80B

[B□R-LF]

[B□R-SLF]



DETAIL OF HOLLOW OUTPUT SHAFT

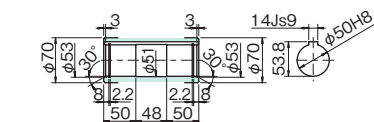


Estimated mass 38 kg

SW80V

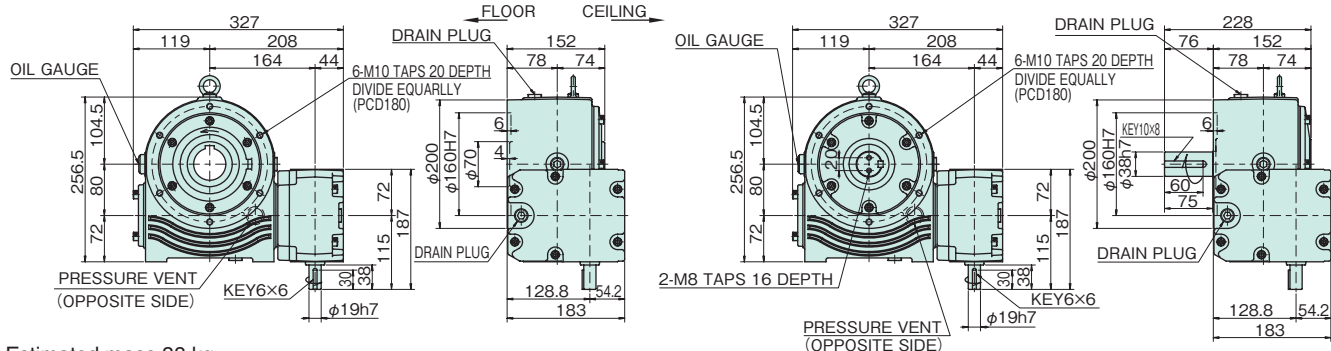
[V□R-LF]

[V□R-SLF]



DETAIL OF HOLLOW OUTPUT SHAFT

FLOOR CEILING



Estimated mass 38 kg

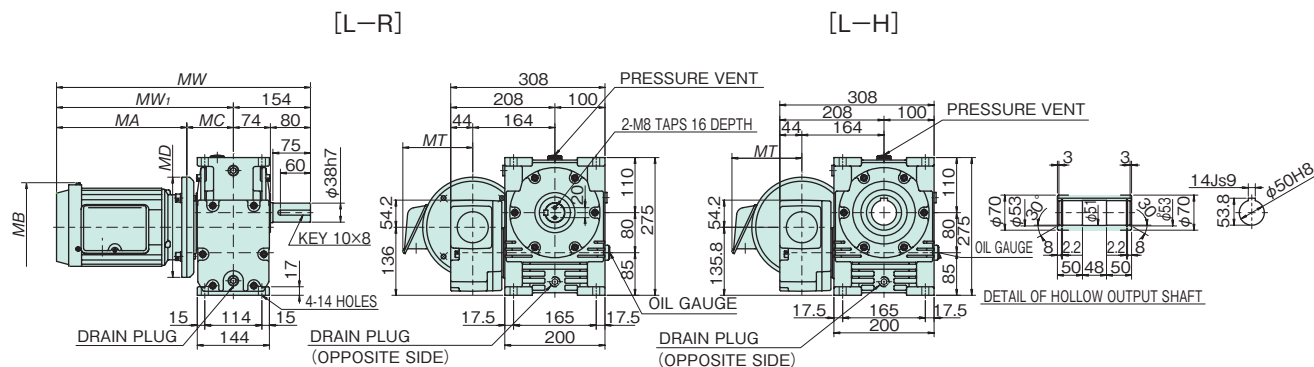
* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

Size	Input Reduction ratio	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
		Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
SW80	100	1.032	419 {42.8}	0.881	424 {43.3}	0.722	430 {43.9}	0.612	433 {44.2}	0.347	442 {45.1}	0.081	449 {45.8}
	150	0.747	430 {43.9}	0.637	433 {44.2}	0.552	437 {44.6}	0.442	439 {44.8}	0.251	445 {45.4}	0.059	450 {45.9}
	200	0.591	435 {44.4}	0.503	438 {44.7}	0.412	440 {44.9}	0.349	442 {45.1}	0.200	446 {45.5}	0.047	450 {45.9}
	250	0.496	438 {44.7}	0.423	440 {44.9}	0.347	442 {45.1}	0.294	444 {45.3}	0.170	447 {45.6}	0.040	450 {45.9}
	300	0.447	452 {46.1}	0.382	455 {46.4}	0.314	459 {46.8}	0.266	461 {47.0}	0.153	466 {47.5}	0.037	470 {48.0}
	400	0.355	457 {46.6}	0.303	459 {46.8}	0.249	462 {47.1}	0.211	464 {47.3}	0.123	467 {47.7}	0.029	470 {48.0}
	500	0.299	460 {46.9}	0.255	462 {47.1}	0.210	464 {47.3}	0.178	465 {47.4}	0.104	467 {47.7}	0.025	470 {48.0}
	600	0.267	462 {47.1}	0.229	464 {47.3}	0.189	465 {47.4}	0.161	466 {47.5}	0.096	468 {47.8}	0.024	470 {48.0}
	800	0.215	464 {47.3}	0.185	466 {47.5}	0.154	466 {47.6}	0.132	467 {47.7}	0.078	469 {47.9}	0.019	471 {48.1}
	1000	0.185	466 {47.5}	0.160	466 {47.6}	0.134	467 {47.7}	0.115	468 {47.8}	0.068	469 {47.9}	0.017	471 {48.1}
	1200	0.165	466 {47.6}	0.143	467 {47.7}	0.120	468 {47.8}	0.103	468 {47.8}	0.062	470 {48.0}	0.015	471 {48.1}
	1500	0.124	390 {39.8}	0.107	391 {39.9}	0.088	393 {40.1}	0.075	394 {40.2}	0.045	396 {40.4}	0.011	398 {40.6}
	1800	0.112	391 {39.9}	0.096	392 {40.0}	0.080	394 {40.2}	0.069	394 {40.2}	0.042	396 {40.4}	0.011	398 {40.6}
	2400	0.091	393 {40.1}	0.078	394 {40.2}	0.066	395 {40.3}	0.057	396 {40.4}	0.034	397 {40.5}	0.009	398 {40.6}
	3000	0.078	394 {40.2}	0.069	395 {40.3}	0.058	396 {40.4}	0.050	396 {40.4}	0.030	397 {40.5}	0.008	398 {40.6}
	3600	0.071	395 {40.3}	0.062	395 {40.3}	0.052	396 {40.4}	0.045	397 {40.5}	0.027	397 {40.5}	0.007	398 {40.6}

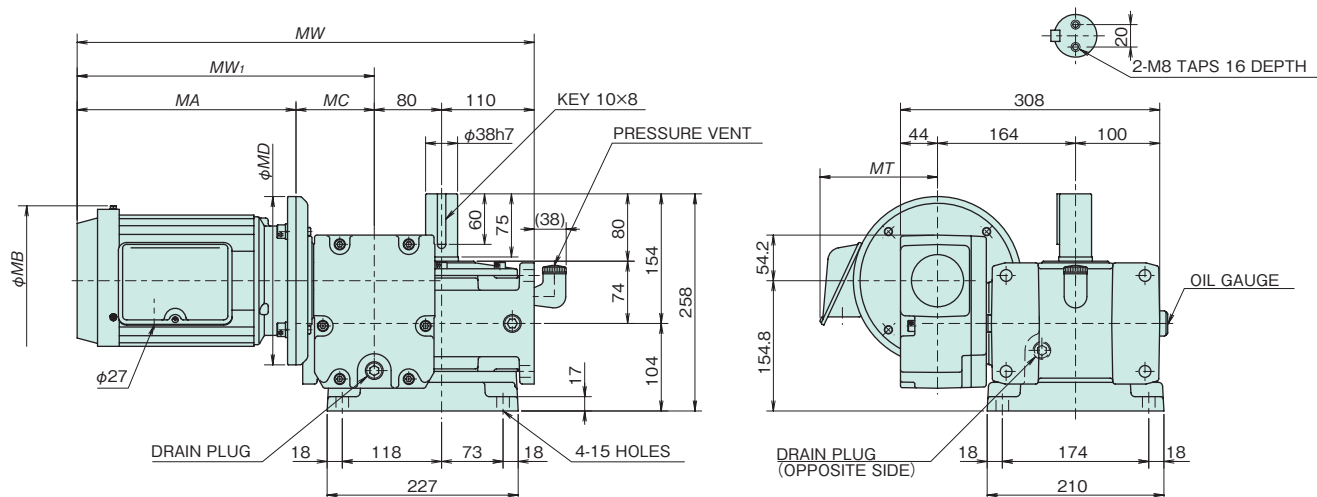
Dimensional Drawings EWM(R)80B/EWM(R)80V

EWM(R)80B



EWM(R)80V

[L-RU]



* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

Size	Standard combination		1750 r/min	1450 r/min	Values in () for the motor indicates dimensions for a motor with a brake.									
	Motor kW	Reduction ratio	Output torque N·m {kgf·m}	Output torque N·m {kgf·m}	MA	MC	MW ₁	Installation B type MW	Installation V type MW	MB	MD	MT	Installation B type Estimated mass kg	Installation V type Estimated mass kg
EWM80	0.2	500	307 {31.4}	362 {36.9}	212 (229)	91 (91)	303 (320)	457 (474)	493 (510)	140 (140)	160 (160)	81 (104.5)	45 (47)	48 (50)
		600	346 {35.8}	405 {41.3}										
		800	431 {44.0}	466 {47.5}										
		1000	466 {47.5}	466 {47.6}										
		1200	466 {47.6}	467 {47.7}										
	0.4	200	295 {30.1}	348 {35.5}	224 (241)	91 (91)	315 (332)	469 (486)	505 (522)	140 (140)	160 (160)	81 (104.5)	48 (51)	51 (54)
		250	353 {36.0}	416 {42.5}										
		300	404 {41.2}	455 {46.4}										
EWMR80	0.75	400	457 {46.6}	459 {46.8}	260 (305)	93 (93)	353 (398)	507 (552)	543 (588)	178 (178)	200 (200)	140 (140.0)	61 (64)	64 (67)
		100	305 {31.1}	362 {36.9}										
		150	430 {43.9}	433 {44.2}										

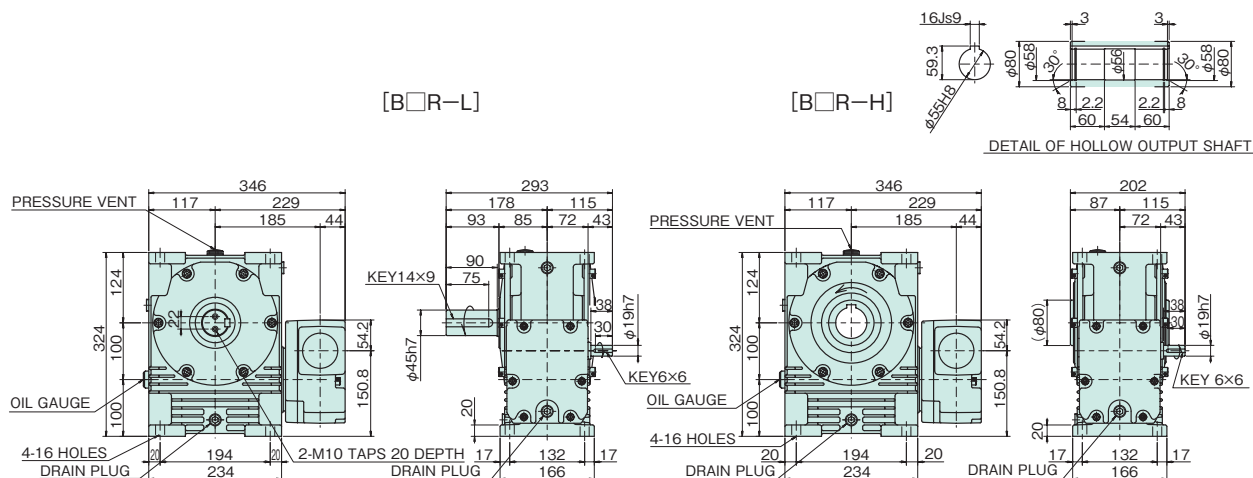
• Motor/reducer combinations shown are standard.

• Shaded boxes indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.

• Refer to page 17 for sizing. • Thermal rating factor is 1.0.

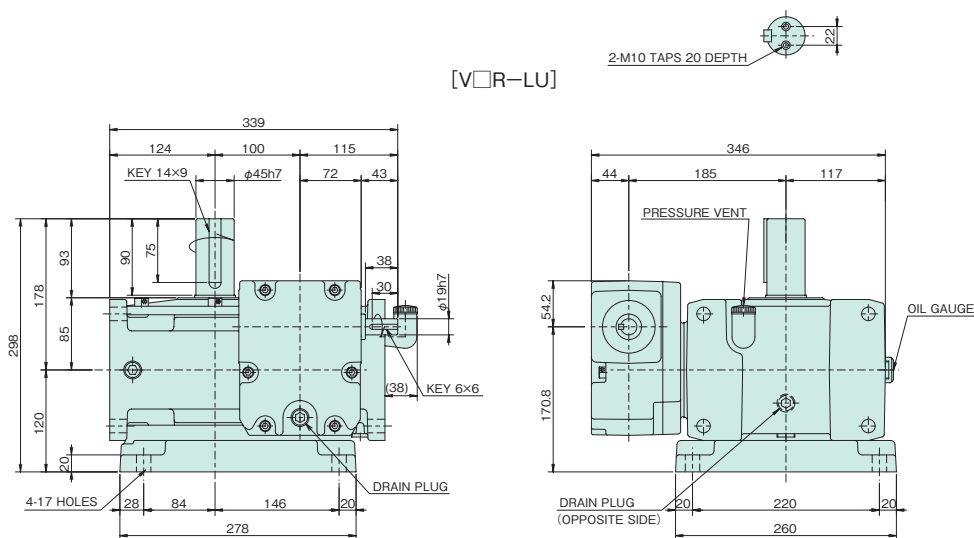
Dimensional Drawings EW100B/EW100V

EW100B



Estimated mass 53 kg

EW100V



Estimated mass 59 kg

* Refer to page 74 for shaft arrangements and relative direction of rotation.

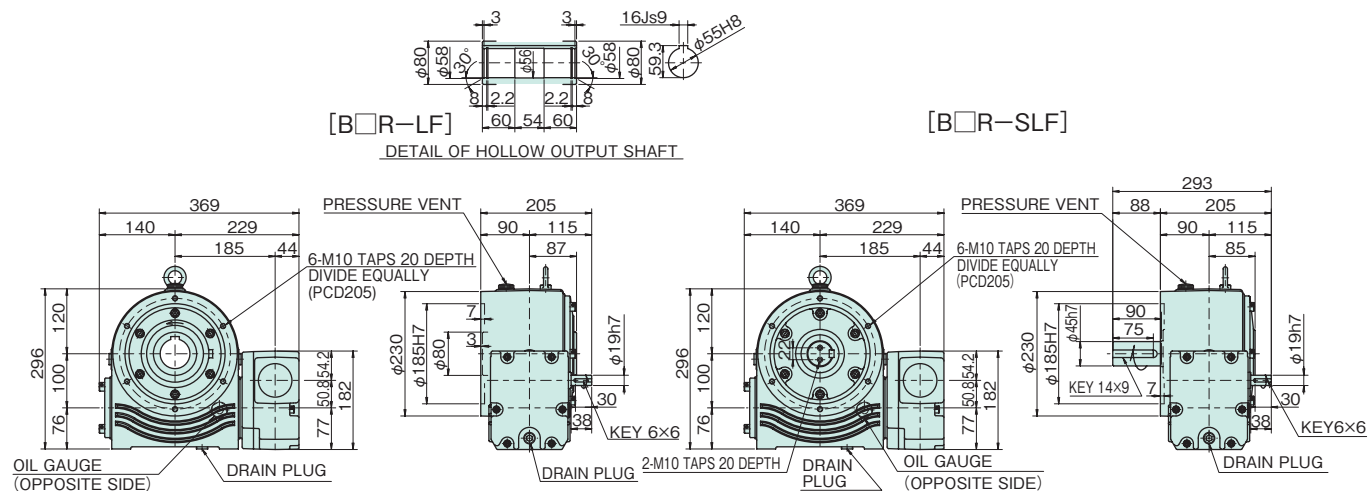
Transfer Capacity Table

Size	Input	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
	Reduction ratio	Input kW	Output torque N·m [kgf·m]	Input kW	Output torque N·m [kgf·m]	Input kW	Output torque N·m [kgf·m]	Input kW	Output torque N·m [kgf·m]	Input kW	Output torque N·m [kgf·m]	Input kW	Output torque N·m [kgf·m]
EW100	100	1.704	705 [71.9]	1.544	758 [77.3]	1.271	769 [78.5]	1.079	777 [79.3]	0.628	813 [83.0]	0.144	813 [83.0]
	150	1.275	746 [76.1]	1.122	777 [79.3]	0.921	784 [80.0]	0.786	795 [81.1]	0.456	820 [83.7]	0.106	820 [83.7]
	200	0.998	747 [76.2]	0.889	786 [80.2]	0.729	792 [80.8]	0.632	814 [83.1]	0.360	822 [83.9]	0.084	822 [83.9]
	250	0.826	741 [75.6]	0.744	788 [80.4]	0.628	815 [83.2]	0.532	817 [83.4]	0.307	824 [84.1]	0.072	824 [84.1]
	300	0.821	846 [86.3]	0.703	854 [87.1]	0.579	862 [88.0]	0.492	864 [88.2]	0.283	875 [89.3]	0.068	875 [89.3]
	400	0.653	856 [87.3]	0.559	862 [88.0]	0.462	870 [89.0]	0.391	872 [89.0]	0.225	878 [89.6]	0.054	878 [89.6]
	500	0.550	861 [87.9]	0.472	867 [88.5]	0.389	873 [89.1]	0.330	873 [89.1]	0.192	880 [89.8]	0.047	880 [89.8]
	600	0.492	864 [88.2]	0.423	870 [88.8]	0.350	876 [89.4]	0.298	876 [89.4]	0.176	880 [89.8]	0.044	880 [89.8]
	800	0.398	870 [88.8]	0.342	873 [89.1]	0.283	877 [89.5]	0.244	878 [89.6]	0.145	882 [90.0]	0.036	882 [90.0]
	1000	0.341	872 [89.0]	0.293	875 [89.3]	0.246	879 [89.7]	0.212	882 [90.0]	0.127	884 [90.2]	0.031	884 [90.2]
	1200	0.298	859 [87.7]	0.258	861 [87.9]	0.220	880 [89.8]	0.190	882 [90.0]	0.114	884 [90.2]	0.028	884 [90.2]
	1500	0.221	718 [73.3]	0.189	721 [73.6]	0.157	724 [73.9]	0.135	727 [74.2]	0.081	734 [74.9]	0.020	734 [74.9]
	1800	0.198	721 [73.6]	0.171	723 [73.8]	0.142	726 [74.1]	0.121	730 [74.5]	0.075	734 [74.9]	0.019	734 [74.9]
	2400	0.162	727 [74.2]	0.140	727 [74.2]	0.115	728 [74.3]	0.101	729 [74.4]	0.062	736 [75.1]	0.015	736 [75.1]
	3000	0.140	729 [74.4]	0.120	729 [74.4]	0.102	730 [74.5]	0.089	731 [74.6]	0.054	736 [75.1]	0.014	736 [75.1]
	3600	0.125	730 [74.5]	0.109	732 [74.7]	0.092	733 [74.8]	0.080	733 [74.8]	0.047	736 [75.1]	0.012	736 [75.1]

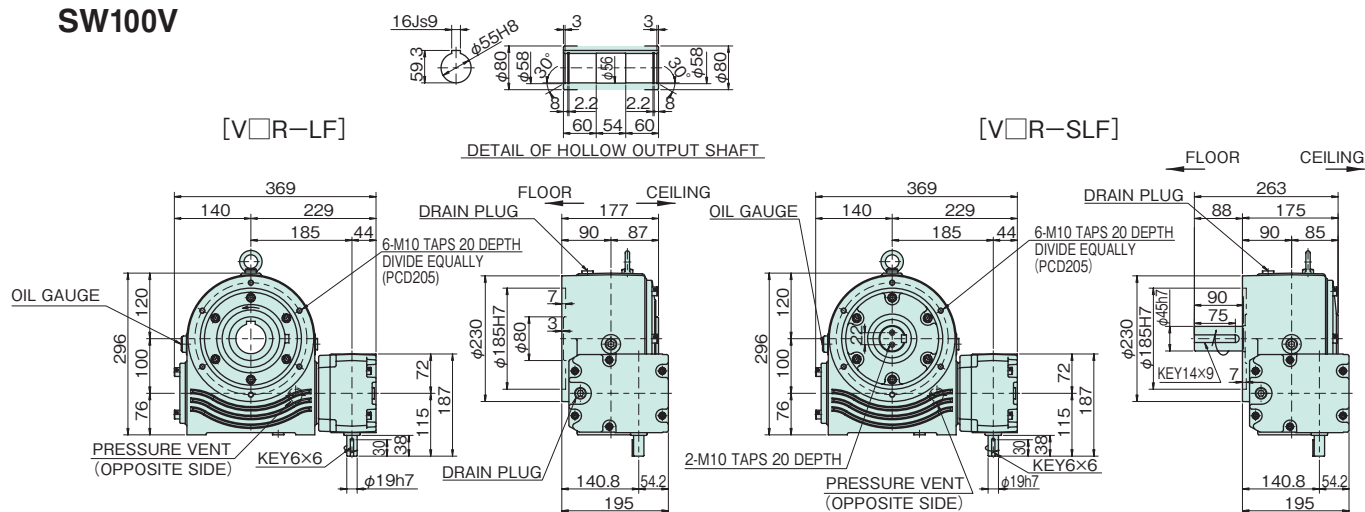
Dimensional Drawings SW100B/SW100V

SW100B

See next page for
reducers with motors



SW100V



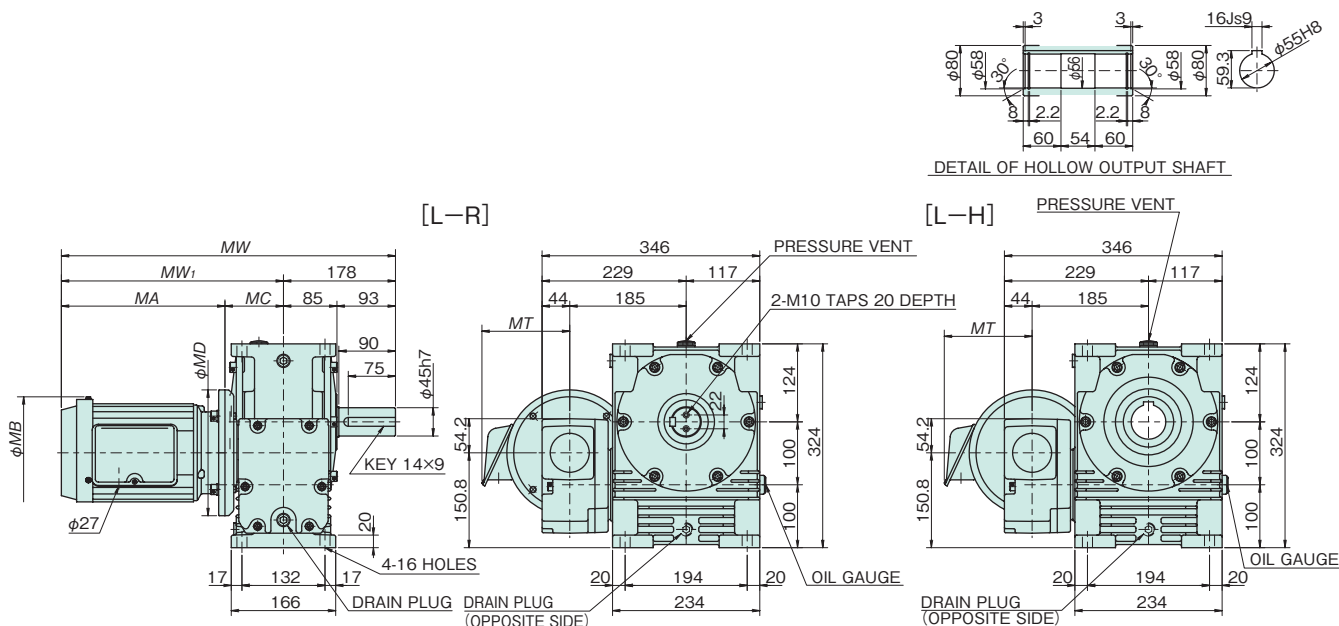
* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

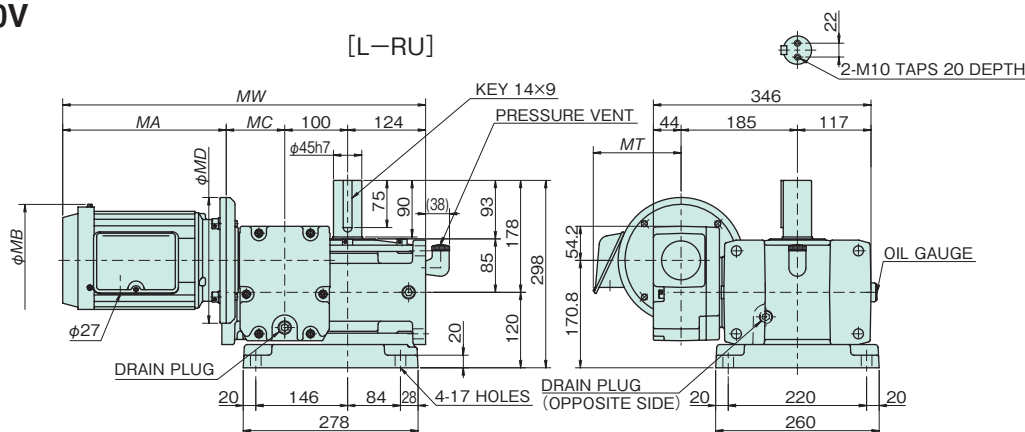
Size	Input Reduction ratio	1750 r/min Input kW	1750 r/min Output torque N·m {kgf·m}	1450 r/min Input kW	1450 r/min Output torque N·m {kgf·m}	1150 r/min Input kW	1150 r/min Output torque N·m {kgf·m}	950 r/min Input kW	950 r/min Output torque N·m {kgf·m}	500 r/min Input kW	500 r/min Output torque N·m {kgf·m}	100 r/min Input kW	100 r/min Output torque N·m {kgf·m}
SW100	100	1.704	705 {71.9}	1.544	758 {77.3}	1.271	769 {78.5}	1.079	777 {79.3}	0.628	813 {83.0}	0.144	813 {83.0}
	150	1.275	746 {76.1}	1.122	777 {79.3}	0.921	784 {80.0}	0.786	795 {81.1}	0.456	820 {83.7}	0.106	820 {83.7}
	200	0.998	747 {76.2}	0.889	786 {80.2}	0.729	792 {80.8}	0.632	814 {83.1}	0.360	822 {83.9}	0.084	822 {83.9}
	250	0.826	741 {75.6}	0.744	788 {80.4}	0.628	815 {83.2}	0.532	817 {83.4}	0.307	824 {84.1}	0.072	824 {84.1}
	300	0.821	846 {86.3}	0.703	854 {87.1}	0.579	862 {88.0}	0.492	864 {88.2}	0.283	875 {89.3}	0.068	875 {89.3}
	400	0.653	856 {87.3}	0.559	862 {88.0}	0.462	870 {89.0}	0.391	872 {89.0}	0.225	878 {89.6}	0.054	878 {89.6}
	500	0.550	861 {87.9}	0.472	867 {88.5}	0.389	873 {89.1}	0.330	873 {89.1}	0.192	880 {89.8}	0.047	880 {89.8}
	600	0.492	864 {88.2}	0.423	870 {88.8}	0.350	876 {89.4}	0.298	876 {89.4}	0.176	880 {89.8}	0.044	880 {89.8}
	800	0.398	870 {88.8}	0.342	873 {89.1}	0.293	877 {89.5}	0.244	878 {89.6}	0.145	882 {90.0}	0.036	882 {90.0}
	1000	0.341	872 {89.0}	0.293	875 {89.3}	0.246	879 {89.7}	0.212	882 {90.0}	0.127	884 {90.2}	0.031	884 {90.2}
	1200	0.298	859 {87.7}	0.258	861 {87.9}	0.220	880 {89.8}	0.190	882 {90.0}	0.114	884 {90.2}	0.028	884 {90.2}
	1500	0.221	718 {73.3}	0.189	721 {73.6}	0.157	724 {73.9}	0.135	727 {74.2}	0.081	734 {74.9}	0.020	734 {74.9}
	1800	0.198	721 {73.6}	0.171	723 {73.8}	0.142	726 {74.1}	0.121	730 {74.5}	0.075	734 {74.9}	0.019	734 {74.9}
	2400	0.162	727 {74.2}	0.140	727 {74.2}	0.115	728 {74.3}	0.101	729 {74.4}	0.062	736 {75.1}	0.015	736 {75.1}
	3000	0.140	729 {74.4}	0.120	729 {74.4}	0.102	730 {74.5}	0.089	731 {74.6}	0.054	736 {75.1}	0.014	736 {75.1}
	3600	0.125	730 {74.5}	0.109	732 {74.7}	0.092	733 {74.8}	0.080	733 {74.8}	0.047	736 {75.1}	0.012	736 {75.1}

Dimensional Drawings EWM(R)100B/EWM(R)100V

EWM(R)100B



EWM(R)100V



* Refer to page 74 for shaft arrangements and relative direction of rotation.

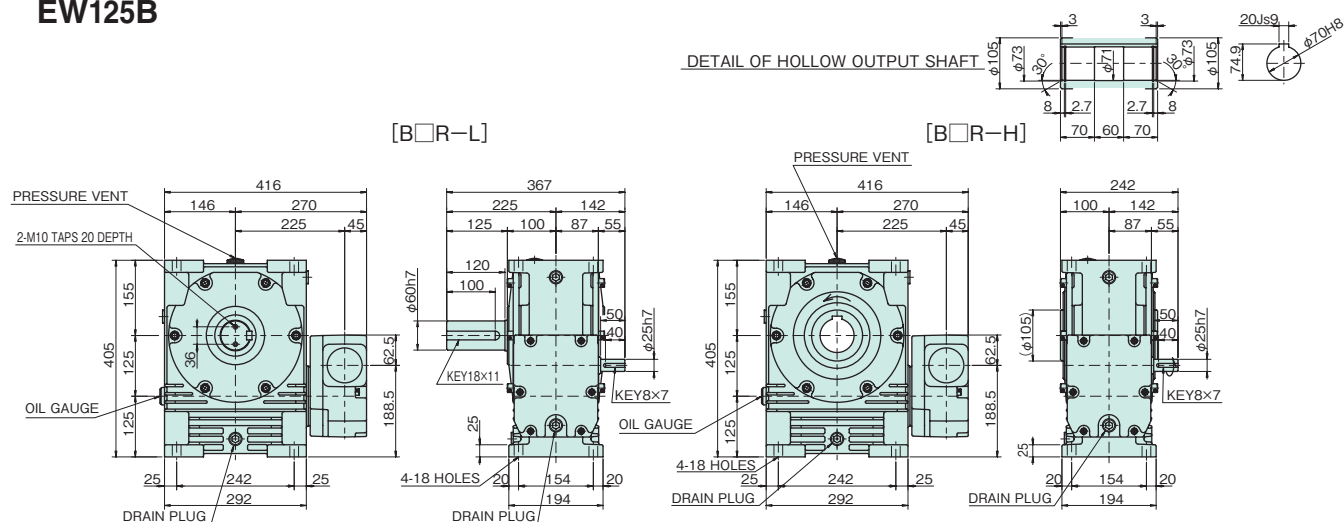
Transfer Capacity Table

Size	Standard combination		1750 r/min	1450 r/min	Values in () for the motor indicates dimensions for a motor with a brake.									
	Motor kW	Reduction ratio	Output torque N·m {kgf·m}	Output torque N·m {kgf·m}	MA	MC	MW ₁	Installation B type MW	Installation V type MW	MB	MD	MT	Installation B type Estimated mass kg	Installation V type Estimated mass kg
EWM100	0.2	1500	652 {66.5}	721 {73.6}	212 (229)	91 (91)	303 (320)	481 (498)	527 (544)	140 (140)	160 (160)	81 (104.5)	59 (61)	65 (67)
		1800	721 {73.6}	723 {73.8}										
		2400	727 {74.2}	727 {74.2}										
	0.4	500	625 {63.8}	736 {75.1}	224 (241)	91 (91)	315 (332)	493 (510)	539 (556)	140 (140)	160 (160)	81 (104.5)	62 (65)	68 (71)
		600	703 {71.7}	823 {84.0}										
		800	870 {88.8}	873 {89.1}										
		1000	872 {89.0}	875 {89.3}										
	1200	859 {87.7}	861 {87.9}											
EWMR100	0.75	200	561 {57.2}	664 {67.7}	260 (305)	93 (93)	353 (398)	531 (576)	577 (622)	178 (178)	200 (200)	140 (140.0)	75 (78)	81 (84)
		250	673 {68.7}	788 {80.4}										
		300	772 {78.8}	854 {87.1}										
		400	856 {87.3}	862 {88.0}										

- Motor/reducer combinations shown are standard.
- Shaded boxes  indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.
- Refer to page 17 for sizing. • Thermal rating factor is 1.0.

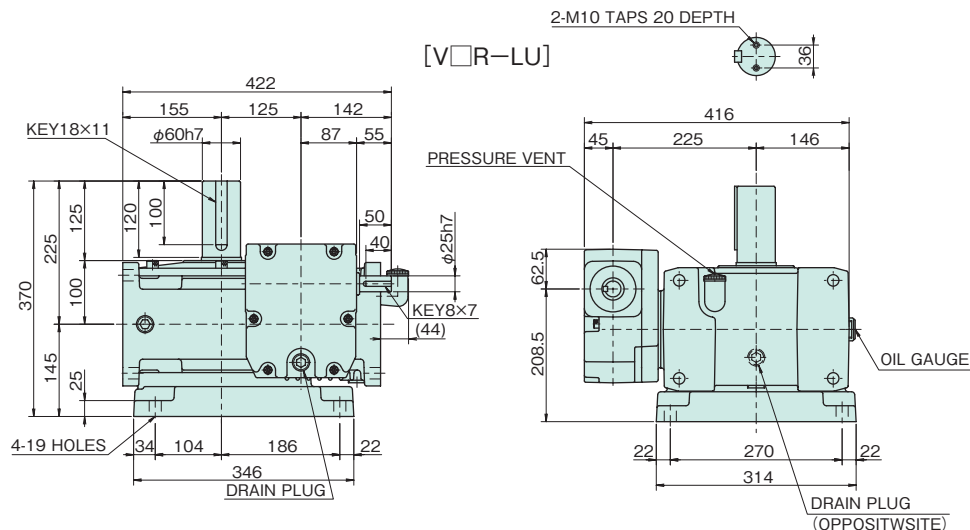
Dimensional Drawings EW125B/EW125V

EW125B



Estimated mass 96 kg

EW125V



Estimated mass 106 kg

* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

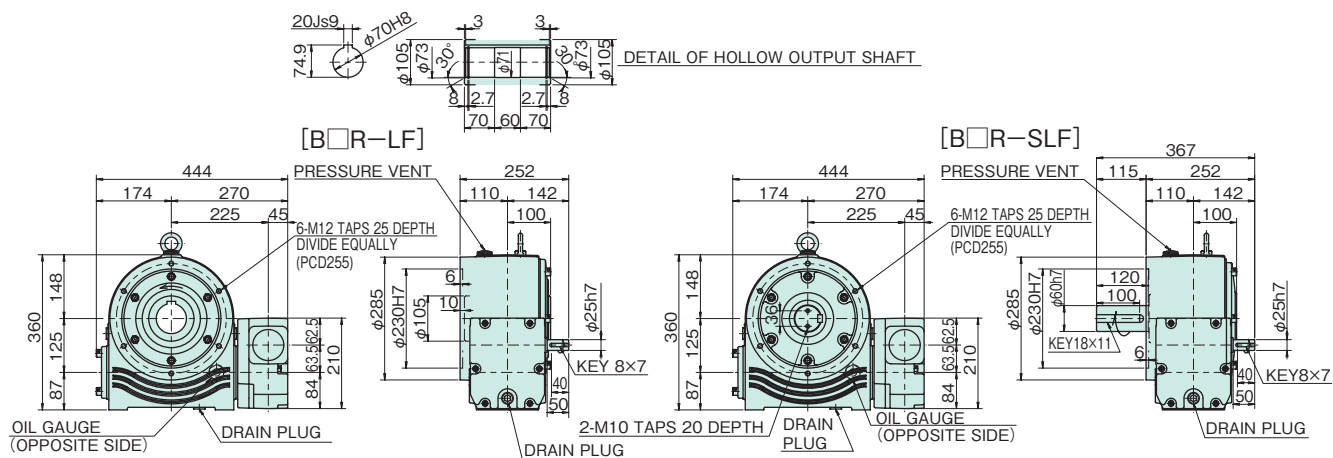
Size	Input Reduction ratio	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
		Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
EW125	100	3.08	1294 {132}	2.82	1401 {143}	2.32	1431 {146}	1.98	1450 {148}	1.14	1490 {152}	0.27	1529 {156}
	150	2.31	1372 {140}	2.05	1450 {148}	1.69	1470 {150}	1.46	1499 {153}	0.87	1597 {163}	0.20	1597 {163}
	200	1.93	1470 {150}	1.66	1490 {152}	1.38	1519 {155}	1.18	1539 {157}	0.70	1607 {164}	0.17	1607 {164}
	250	1.61	1480 {151}	1.38	1499 {153}	1.14	1519 {155}	0.97	1529 {156}	0.58	1607 {164}	0.14	1607 {164}
	300	1.49	1548 {158}	1.28	1568 {160}	1.06	1588 {162}	0.90	1597 {163}	0.52	1627 {166}	0.13	1656 {169}
	400	1.20	1578 {161}	1.03	1588 {162}	0.85	1607 {164}	0.72	1617 {165}	0.42	1637 {167}	0.104	1656 {169}
	500	1.01	1588 {162}	0.86	1607 {164}	0.71	1617 {165}	0.61	1627 {166}	0.35	1637 {167}	0.088	1656 {169}
	600	0.90	1607 {164}	0.77	1617 {165}	0.64	1627 {166}	0.55	1627 {166}	0.33	1646 {168}	0.083	1656 {169}
	800	0.68	1568 {160}	0.59	1578 {161}	0.49	1588 {162}	0.42	1588 {162}	0.25	1597 {163}	0.064	1597 {163}
	1000	0.58	1548 {158}	0.50	1558 {159}	0.42	1588 {162}	0.36	1597 {163}	0.22	1597 {163}	0.055	1597 {163}
	1200	0.51	1558 {159}	0.44	1558 {159}	0.37	1588 {162}	0.32	1597 {163}	0.19	1607 {164}	0.049	1607 {164}
	1500	0.41	1362 {139}	0.35	1372 {140}	0.29	1382 {141}	0.25	1382 {141}	0.15	1392 {142}	0.038	1392 {142}
	1800	0.37	1372 {140}	0.32	1372 {140}	0.27	1382 {141}	0.23	1392 {142}	0.14	1392 {142}	0.036	1392 {142}
	2400	0.30	1382 {141}	0.26	1382 {141}	0.22	1392 {142}	0.19	1392 {142}	0.12	1392 {142}	0.030	1392 {142}
	3000	0.26	1382 {141}	0.22	1382 {141}	0.19	1392 {142}	0.16	1401 {143}	0.100	1401 {143}	0.026	1401 {143}
	3600	0.23	1392 {142}	0.20	1392 {142}	0.17	1392 {142}	0.15	1401 {143}	0.090	1401 {143}	0.023	1401 {143}

Dimensional Drawings SW125B/SW125V

See next page for
reducers with motors

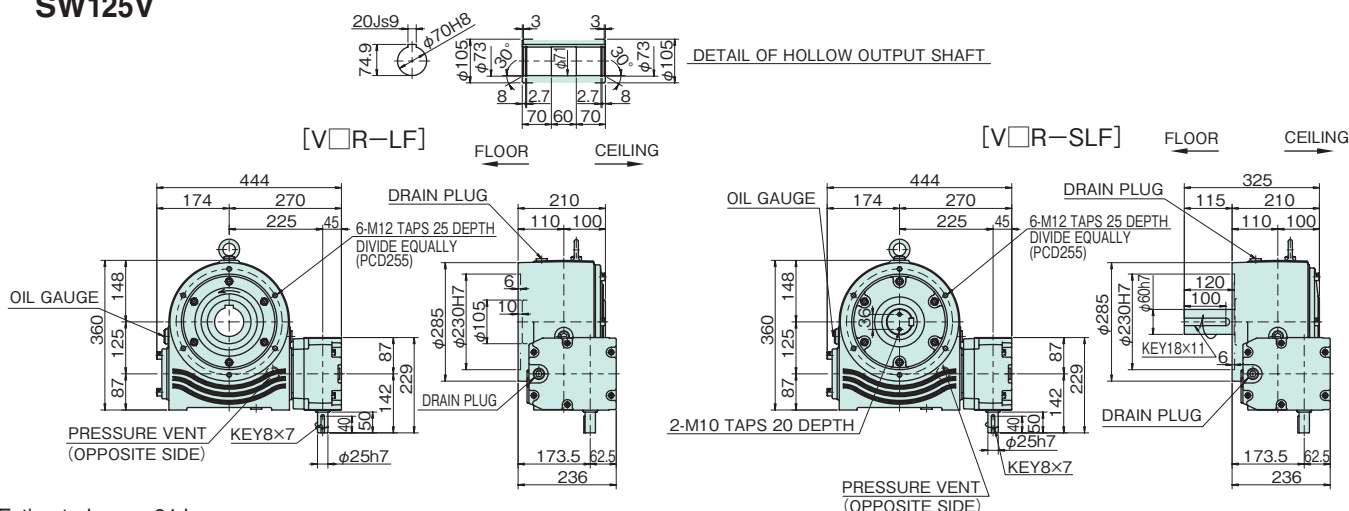


SW125B



Estimated mass 91 kg

SW125V



Estimated mass 91 kg

* Refer to page 74 for shaft arrangements and relative direction of rotation.

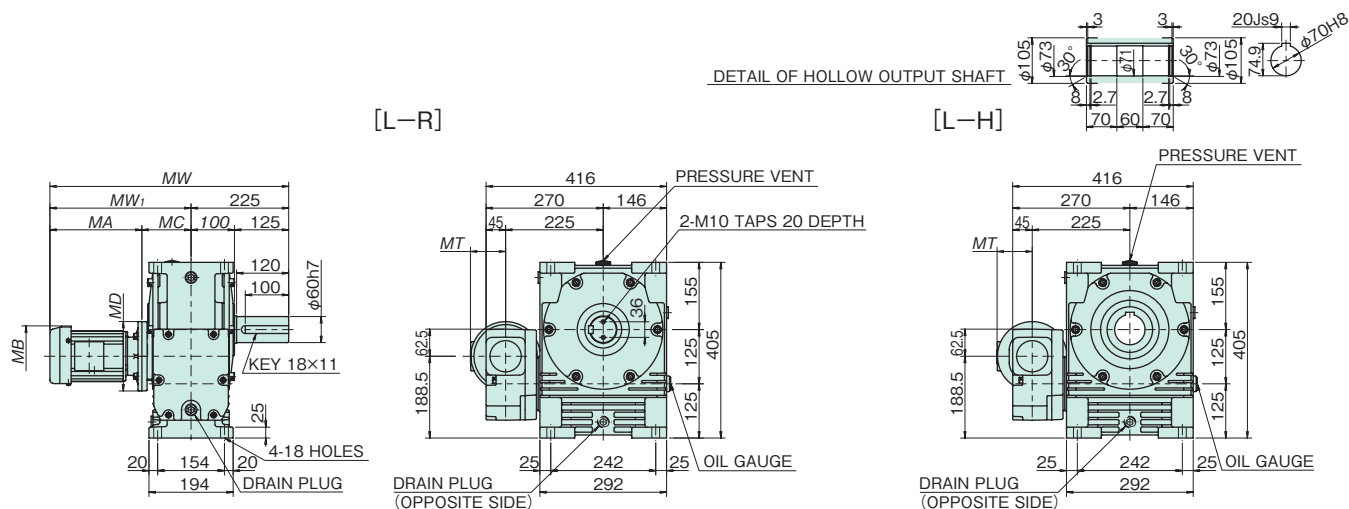
Transfer Capacity Table

Size	Input	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
	Reduction ratio	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
SW125	100	3.080	1294 {132.0}	2.820	1401 {143.0}	2.320	1431 {146.0}	1.980	1450 {148.0}	1.140	1490 {152.0}	0.270	1529 {156.0}
	150	2.310	1372 {140.0}	2.050	1450 {148.0}	1.690	1470 {150.0}	1.460	1499 {153.0}	0.870	1597 {163.0}	0.200	1597 {163.0}
	200	1.930	1470 {150.0}	1.660	1490 {152.0}	1.380	1519 {155.0}	1.180	1539 {157.0}	0.700	1607 {164.0}	0.170	1607 {164.0}
	250	1.610	1480 {151.0}	1.380	1499 {153.0}	1.140	1519 {155.0}	0.970	1529 {156.0}	0.580	1607 {164.0}	0.140	1607 {164.0}
	300	1.490	1548 {158.0}	1.280	1568 {160.0}	1.060	1588 {162.0}	0.900	1597 {163.0}	0.520	1627 {166.0}	0.130	1656 {169.0}
	400	1.200	1578 {161.0}	1.030	1588 {162.0}	0.850	1607 {164.0}	0.720	1617 {165.0}	0.420	1637 {167.0}	0.104	1656 {169.0}
	500	1.010	1588 {162.0}	0.860	1607 {164.0}	0.710	1617 {165.0}	0.610	1627 {166.0}	0.350	1637 {167.0}	0.088	1656 {169.0}
	600	0.900	1607 {164.0}	0.770	1617 {165.0}	0.640	1627 {166.0}	0.550	1627 {166.0}	0.330	1646 {168.0}	0.083	1656 {169.0}
	800	0.680	1568 {160.0}	0.590	1578 {161.0}	0.490	1588 {162.0}	0.420	1588 {162.0}	0.250	1597 {163.0}	0.064	1597 {163.0}
	1000	0.580	1548 {158.0}	0.500	1558 {159.0}	0.420	1588 {162.0}	0.360	1597 {163.0}	0.220	1597 {163.0}	0.055	1597 {163.0}
	1200	0.510	1558 {159.0}	0.440	1558 {159.0}	0.370	1588 {162.0}	0.320	1597 {163.0}	0.190	1607 {164.0}	0.049	1607 {164.0}
	1500	0.410	1362 {139.0}	0.350	1372 {140.0}	0.290	1382 {141.0}	0.250	1382 {141.0}	0.150	1392 {142.0}	0.038	1392 {142.0}
	1800	0.370	1372 {140.0}	0.320	1372 {140.0}	0.270	1382 {141.0}	0.230	1392 {142.0}	0.140	1392 {142.0}	0.036	1392 {142.0}
	2400	0.300	1382 {141.0}	0.260	1382 {141.0}	0.220	1392 {142.0}	0.190	1392 {142.0}	0.120	1392 {142.0}	0.030	1392 {142.0}
	3000	0.260	1382 {141.0}	0.220	1382 {141.0}	0.190	1392 {142.0}	0.160	1401 {143.0}	0.100	1401 {143.0}	0.026	1401 {143.0}
	3600	0.230	1392 {142.0}	0.200	1392 {142.0}	0.170	1392 {142.0}	0.150	1401 {143.0}	0.090	1401 {143.0}	0.023	1401 {143.0}

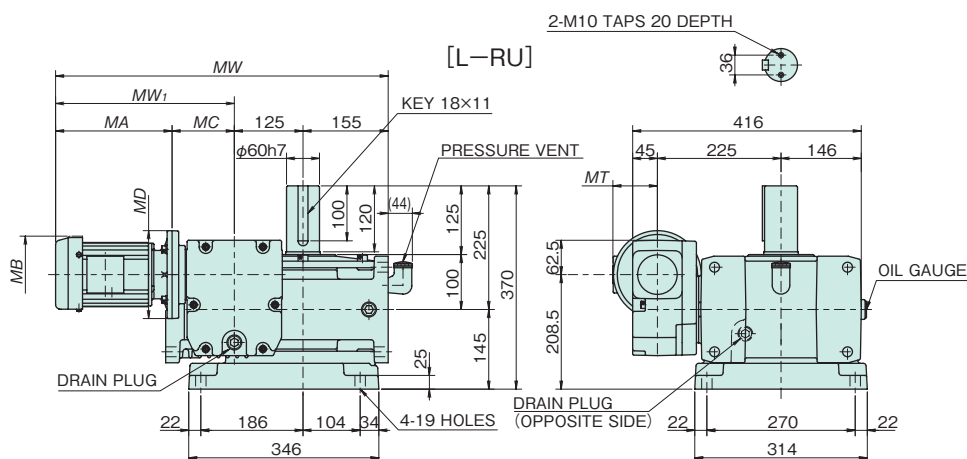
Dimensional Drawings EWM(R)125B/EWM(R)125V

EWM(R)125B

See previous page for reducers without motors



EWM(R)125V



* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

Size	Standard combination		1750 r/min	1450 r/min	Values in () for the motor indicates dimensions for a motor with a brake.									
	Motor kW	Reduction ratio	Output torque N·m {kgf·m}	Output torque N·m {kgf·m}	MA	MC	MW ₁	Installation B type MW	Installation V type MW	MB	MD	MT	Installation B type Estimated mass kg	Installation V type Estimated mass kg
EWM125	0.2	3000	1068 {109}	1245 {127}	212	113	325	550	605	140	160	81	102	112
		3600	1215 {124}	1392 {142}	(229)	(113)	(342)	(567)	(622)	(140)	(160)	(104.5)	(104)	(114)
	0.4	1500	1352 {138}	1372 {140}	224	113	337	562	617	140	160	81	105	115
		1800	1372 {140}	1372 {140}	(241)	(113)	(354)	(579)	(634)	(140)	(160)	(104.5)	(108)	(118)
		2400	1382 {141}	1382 {141}										
EWMR125	0.75	500	1186 {121}	1392 {142}	260	108	368	593	648	178	200	140	118	128
		600	1333 {136}	1558 {159}	(305)	(108)	(413)	(638)	(693)	(178)	(200)	(140.0)	(121)	(131)
		800	1568 {160}	1578 {161}										
		1000	1548 {158}	1558 {159}										
	1.5	100	631 {64.4}	749 {76.4}										
		150	894 {91.2}	1058 {108}										
		200	1137 {116}	1343 {137}	296	108	404	629	684	204	200	158	126	136
		250	1382 {141}	1499 {153}	(360)	(108)	(468)	(693)	(748)	(202)	(200)	(155.0)	(131)	(141)
		300	1548 {158}	1568 {160}										
		400	1578 {161}	1588 {162}										

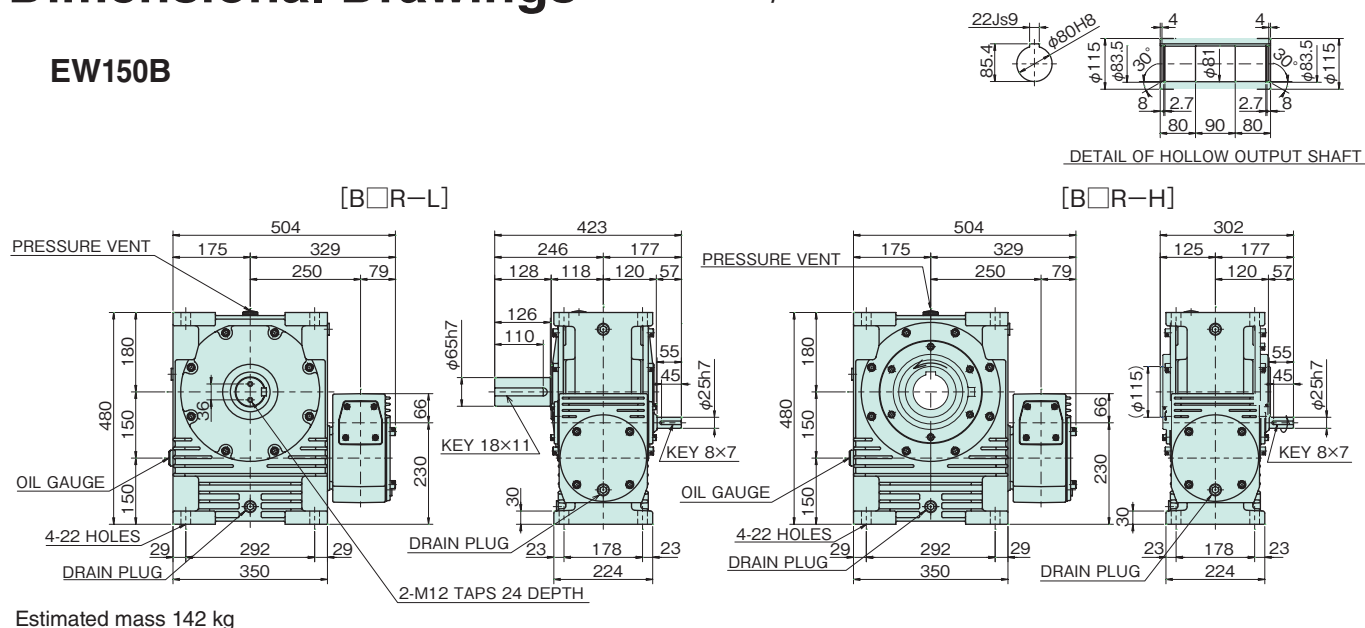
• Motor/reducer combinations shown are standard.

• Shaded boxes indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.

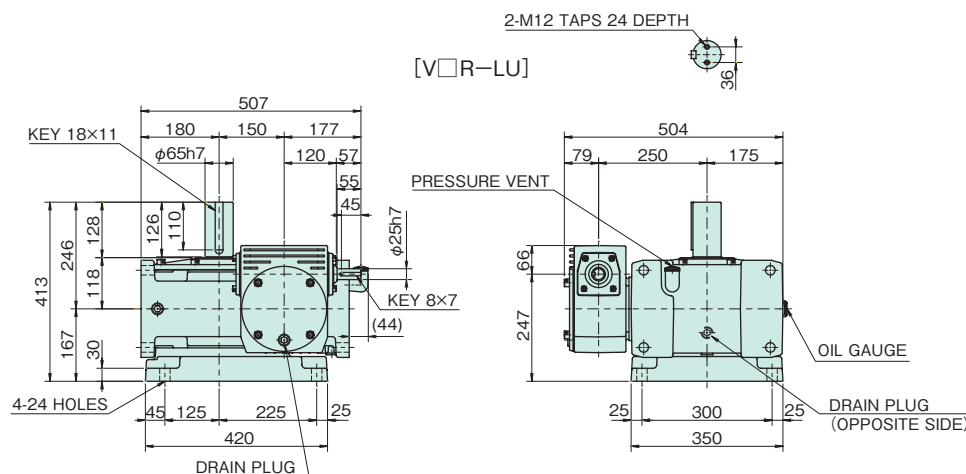
• Refer to page 17 for sizing. • Thermal rating factor is 1.0.

Dimensional Drawings EW150B/EW150V

EW150B



EW150V



* Refer to page 74 for shaft arrangements and relative direction of rotation.

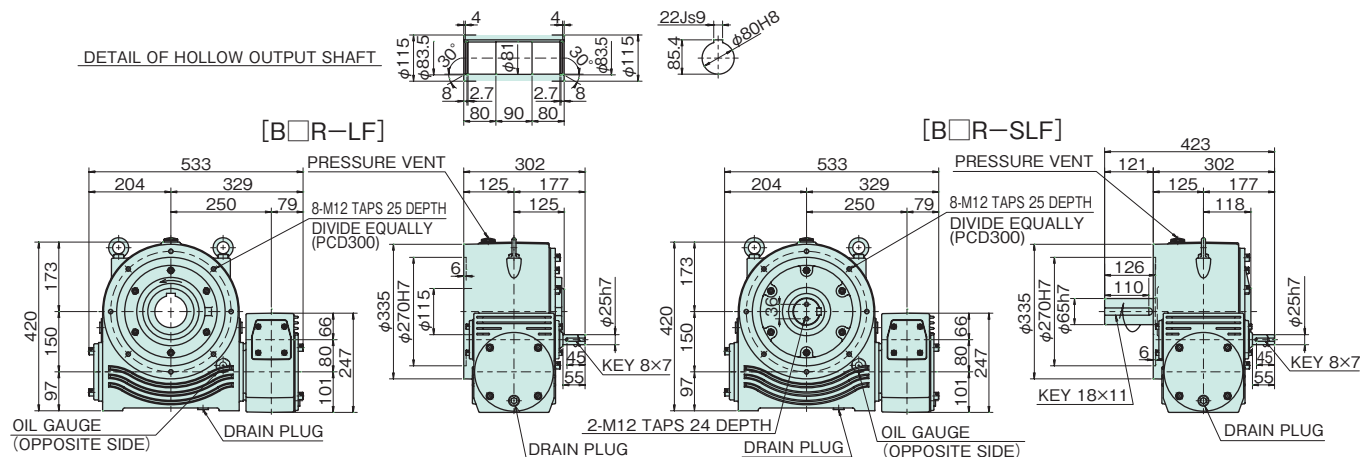
Transfer Capacity Table

Size	Input Reduction ratio	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
		Input kW	Output torque N·m (kgf·m)	Input kW	Output torque N·m (kgf·m)	Input kW	Output torque N·m (kgf·m)	Input kW	Output torque N·m (kgf·m)	Input kW	Output torque N·m (kgf·m)	Input kW	Output torque N·m (kgf·m)
EW150	100	5.24	2244 {229}	4.51	2293 {234}	3.73	2352 {240}	3.18	2381 {243}	1.84	2470 {252}	0.43	2538 {259}
	150	3.84	2342 {239}	3.29	2381 {234}	2.71	2421 {247}	2.31	2440 {249}	1.33	2499 {255}	0.32	2548 {260}
	200	3.06	2401 {245}	2.62	2421 {247}	2.16	2450 {250}	1.83	2470 {252}	1.05	2509 {256}	0.25	2548 {260}
	250	2.57	2430 {248}	2.19	2450 {250}	1.80	2470 {252}	1.53	2489 {254}	0.88	2519 {257}	0.21	2548 {260}
	300	2.37	2548 {260}	2.04	2577 {263}	1.69	2617 {267}	1.45	2646 {270}	0.84	2695 {275}	0.21	2754 {281}
	400	1.91	2597 {265}	1.64	2626 {268}	1.35	2656 {271}	1.16	2675 {273}	0.67	2715 {277}	0.17	2754 {281}
	500	1.60	2626 {268}	1.38	2656 {271}	1.14	2675 {273}	0.97	2695 {275}	0.57	2724 {278}	0.14	2754 {281}
	600	1.43	2656 {271}	1.23	2666 {272}	1.02	2685 {274}	0.87	2705 {276}	0.51	2734 {279}	0.13	2754 {281}
	800	1.09	2587 {264}	0.93	2597 {265}	0.77	2617 {267}	0.66	2617 {267}	0.40	2636 {269}	0.101	2656 {271}
	1000	0.92	2597 {265}	0.79	2617 {267}	0.66	2626 {268}	0.57	2626 {268}	0.34	2646 {270}	0.088	2656 {271}
	1200	0.81	2607 {266}	0.70	2617 {267}	0.58	2626 {268}	0.50	2636 {269}	0.30	2646 {270}	0.077	2656 {271}
	1500	0.63	2607 {266}	0.54	2234 {228}	0.45	2244 {229}	0.39	2254 {230}	0.23	2274 {232}	0.058	2274 {232}
	1800	0.56	2225 {227}	0.49	2244 {229}	0.40	2254 {230}	0.35	2264 {231}	0.21	2274 {232}	0.055	2274 {232}
	2400	0.46	2244 {229}	0.40	2254 {230}	0.33	2264 {231}	0.28	2264 {231}	0.17	2283 {233}	0.045	2283 {233}
	3000	0.39	2254 {230}	0.34	2264 {231}	0.28	2274 {232}	0.25	2274 {232}	0.15	2283 {233}	0.039	2283 {233}
	3600	0.34	2264 {231}	0.30	2264 {231}	0.25	2274 {232}	0.22	2274 {232}	0.13	2283 {233}	0.035	2283 {233}

Dimensional Drawings SW150B/SW150V

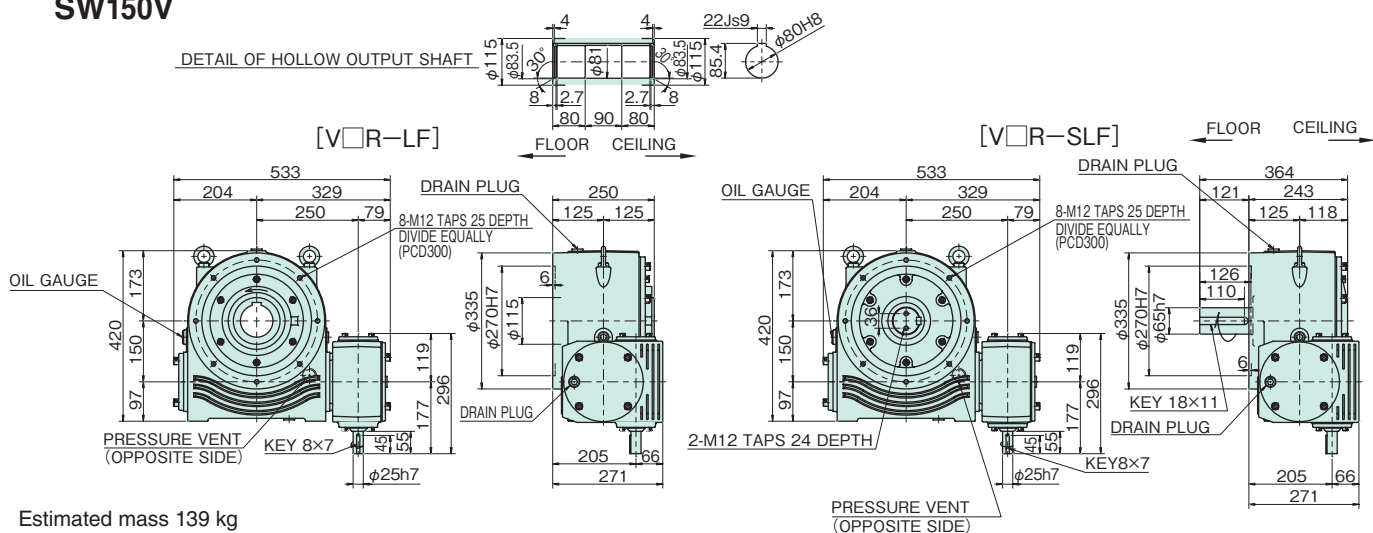
SW150B

See next page for
reducers with motors



Estimated mass 139 kg

SW150V



Estimated mass 139 kg

* Refer to page 74 for shaft arrangements and relative direction of rotation.

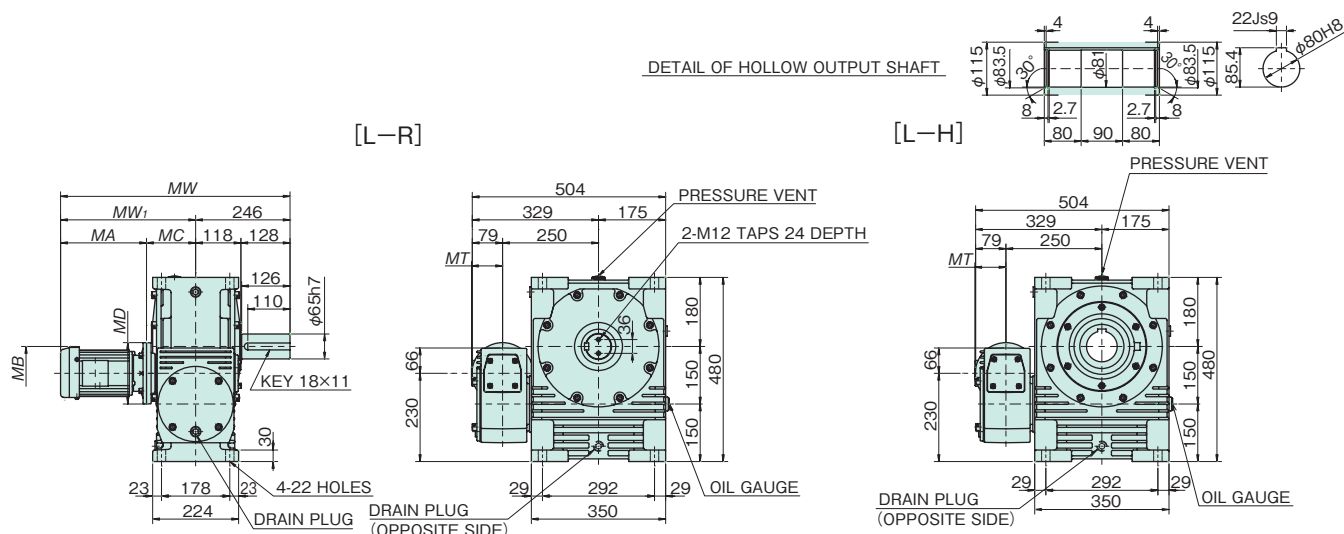
Transfer Capacity Table

Size	Input Reduction ratio	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
		Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
SW150	100	5.240	2244 {229}	4.510	2293 {234}	3.730	2352 {240}	3.180	2381 {243}	1.840	2470 {252}	0.430	2538 {259}
	150	3.840	2342 {239}	3.290	2381 {243}	2.710	2421 {247}	2.310	2440 {249}	1.330	2499 {255}	0.320	2548 {260}
	200	3.060	2401 {245}	2.620	2421 {247}	2.160	2450 {250}	1.830	2470 {252}	1.050	2509 {256}	0.250	2548 {260}
	250	2.570	2430 {248}	2.190	2450 {250}	1.800	2470 {252}	1.530	2489 {254}	0.880	2519 {257}	0.210	2548 {260}
	300	2.370	2548 {260}	2.040	2577 {263}	1.690	2617 {267}	1.450	2646 {270}	0.840	2695 {275}	0.210	2754 {281}
	400	1.910	2597 {265}	1.640	2626 {268}	1.350	2656 {271}	1.160	2675 {273}	0.670	2715 {277}	0.170	2754 {281}
	500	1.600	2626 {268}	1.380	2656 {271}	1.140	2675 {273}	0.970	2695 {275}	0.570	2724 {278}	0.140	2754 {281}
	600	1.430	2656 {271}	1.230	2666 {272}	1.020	2685 {274}	0.870	2705 {276}	0.510	2734 {279}	0.130	2754 {281}
	800	1.090	2587 {264}	0.930	2597 {265}	0.770	2617 {267}	0.660	2617 {267}	0.400	2636 {268}	0.101	2656 {271}
	1000	0.920	2597 {265}	0.790	2617 {267}	0.660	2626 {268}	0.570	2626 {268}	0.340	2646 {270}	0.088	2656 {271}
	1200	0.810	2607 {266}	0.700	2617 {267}	0.580	2626 {268}	0.500	2636 {269}	0.300	2646 {270}	0.077	2656 {271}
	1500	0.630	2607 {266}	0.540	2234 {228}	0.450	2244 {229}	0.390	2254 {230}	0.230	2274 {232}	0.058	2274 {232}
	1800	0.560	2225 {227}	0.490	2244 {229}	0.400	2254 {230}	0.350	2264 {231}	0.210	2274 {232}	0.055	2274 {232}
	2400	0.460	2244 {229}	0.400	2254 {230}	0.330	2264 {231}	0.280	2264 {231}	0.170	2283 {233}	0.045	2283 {233}
	3000	0.390	2254 {230}	0.340	2264 {231}	0.280	2274 {232}	0.250	2274 {232}	0.150	2283 {233}	0.039	2283 {233}
	3600	0.340	2264 {231}	0.300	2264 {231}	0.250	2274 {232}	0.220	2274 {232}	0.130	2283 {233}	0.035	2283 {233}

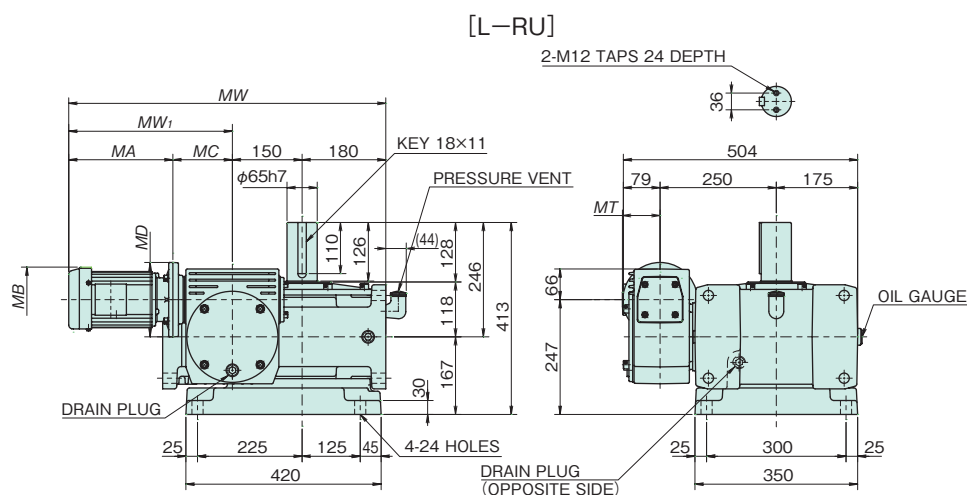
Dimensional Drawings EWM(R)150B/EWM(R)150V

EWM(R)150B

See previous page for reducers without motors



EWM(R)150V



* Refer to page 74 for shaft arrangements and relative direction of rotation.

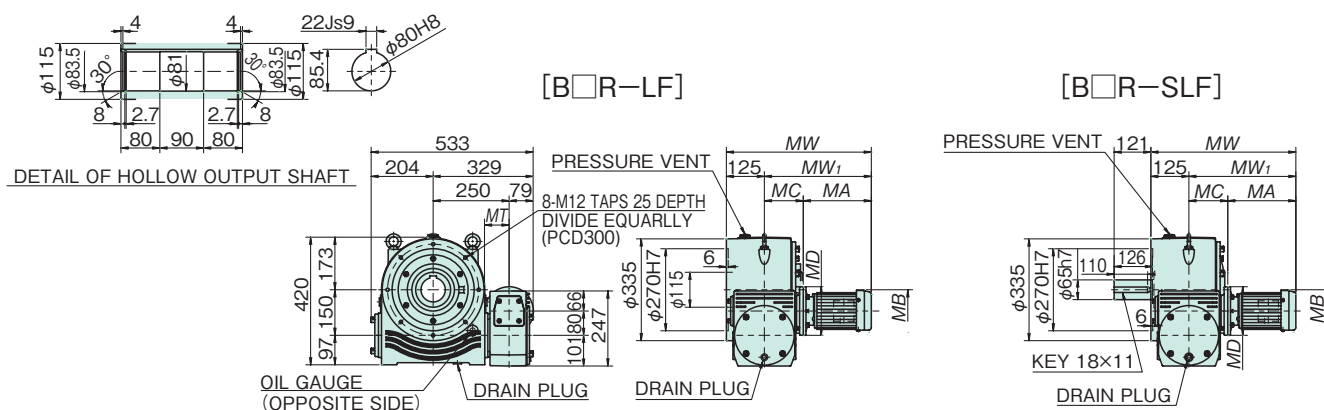
Transfer Capacity Table

Size	Standard combination		1750 r/min	1450 r/min	Values in () for the motor indicates dimensions for a motor with a brake.									
	Motor kW	Reduction ratio	Output torque N·m {kgf·m}	Output torque N·m {kgf·m}	MA	MC	MW ₁	Installation B type MW	Installation V type MW	MB	MD	MT	Installation B type Estimated mass kg	Installation V type Estimated mass kg
EWM150	0.4	3000	2254 {230}	2264 {231}	224	128	352	598	682	140	160	81	153	178
		3600	2264 {231}	2264 {231}	(241)	(128)	(369)	(615)	(699)	(140)	(160)	(104.5)	(156)	(181)
EWMR150	0.75	1200	2421 {247}	2617 {267}	260	128	388	634	718	178	200	140	166	191
		1500	2179 {222}	2234 {228}	(305)	(128)	(433)	(679)	(763)	(178)	(200)	(140.0)	(169)	(194)
	1.5	500	2460 {251}	2656 {271}	296	128	424	670	754	204	200	158	174	199
		600	2656 {271}	2666 {272}	(360)	(128)	(488)	(734)	(818)	(202)	(200)	(155.0)	(179)	(204)
	2.2	100	944 {96.3}	1117 {114}										
		150	1343 {137}	1597 {163}										
		200	1725 {176}	2038 {208}	318	128	446	692	776	218	250	169	189	214
		250	2078 {212}	2450 {250}	(374)	(128)	(502)	(748)	(832)	(226)	(250)	(166.0)	(194)	(219)
		300	2362 {241}	2577 {263}										
	3.7	400	2597 {265}	2626 {268}										
		100	1588 {162}	1882 {192}	343	128	471	717	801	237	250	181	194	219
		150	2264 {231}	2381 {243}	(424)	(128)	(552)	(798)	(882)	(235)	(250)	(178.0)	(204)	(229)

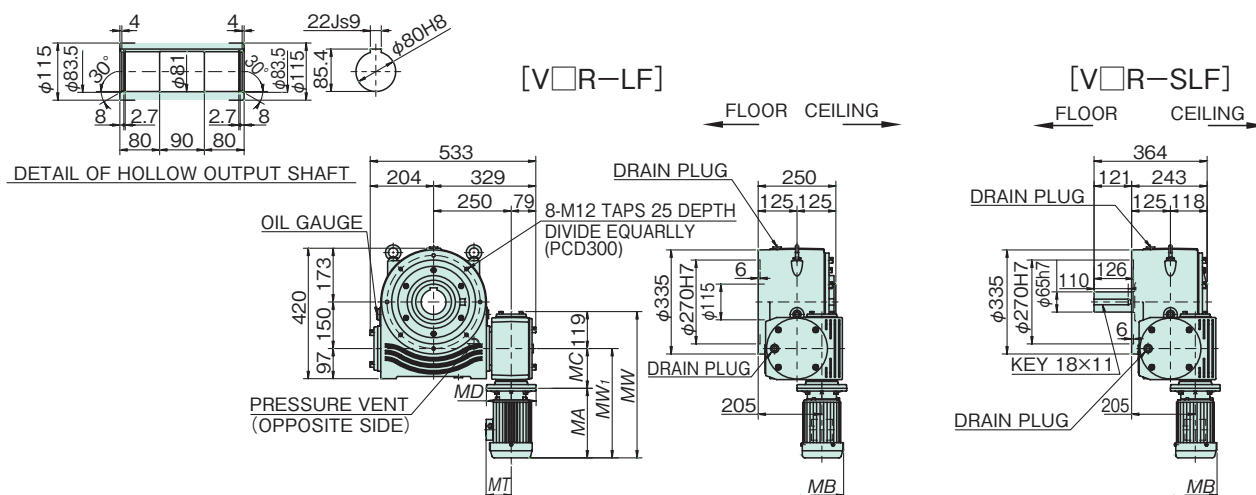
- Motor/reducer combinations shown are standard.
- Shaded boxes indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.
- Refer to page 17 for sizing. • Thermal rating factor is 1.0.

Dimensional Drawings SWM(R)150B/SWM(R)150V

SWM(R)150B



SWM(R)150V



* Refer to page 74 for shaft arrangements and relative direction of rotation.

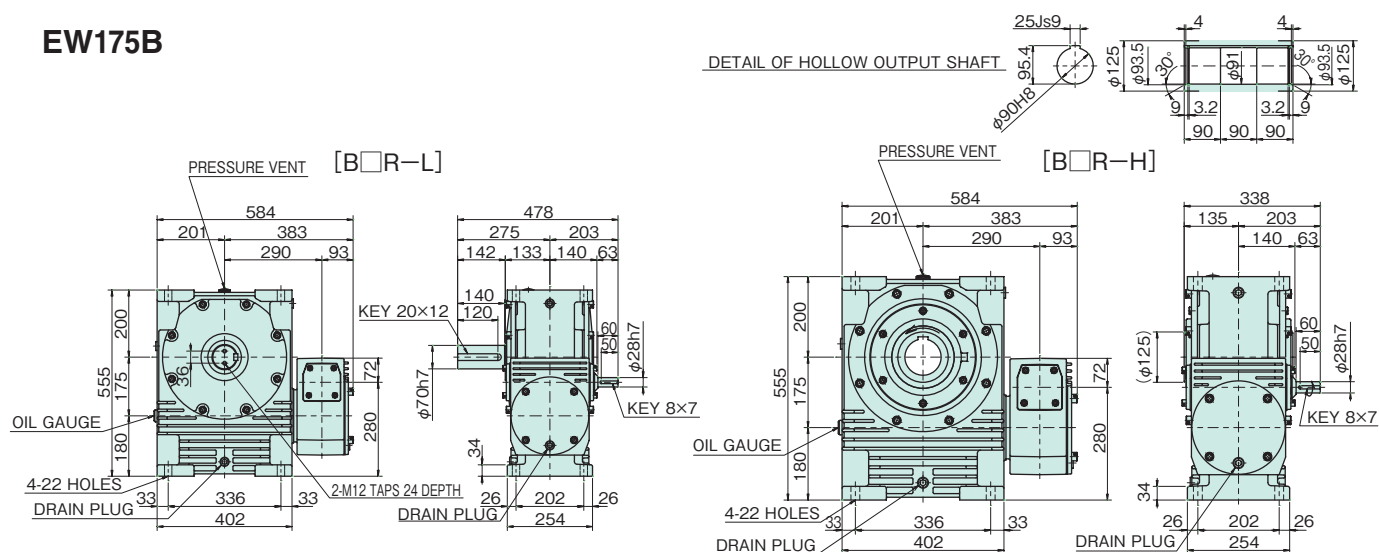
Transfer Capacity Table

Size	Standard combination		1750 r/min	1450 r/min	Values in () for the motor indicates dimensions for a motor with a brake.								
	Motor kW	Reduction ratio	Output torque N·m {kgf·m}	Output torque N·m {kgf·m}	MA	MC	MW ₁	Installation B type MW	Installation V type MW	MB	MD	MT	Estimated mass kg
SWM150	0.4	3000 3600	2254 {230} 2264 {231}	2264 {231} 2264 {231}	224 (241)	128 (128)	352 (369)	477 (494)	471 (488)	140 (140)	160 (160)	81 (104.5)	150 (153)
SWMR150	0.75	1200 1500	2421 {247} 2179 {222}	2617 {267} 2234 {228}	260 (305)	128 (128)	388 (433)	513 (558)	507 (552)	178 (178)	200 (200)	140 (140.0)	163 (166)
		1.5	500 600	2460 {251} 2656 {271}	2656 {271} 2666 {272}	296 (360)	128 (128)	424 (488)	549 (613)	543 (607)	204 (202)	200 (200)	158 (155.0)
	2.2		100 150 200 250 300 400	944 {96.3} 1343 {137} 1725 {176} 2078 {212} 2362 {241} 2597 {265}	1117 {114} 1597 {163} 2038 {208} 2450 {250} 2577 {263} 2626 {268}	318 (374)	128 (128)	446 (502)	571 (627)	565 (621)	218 (226)	250 (250)	169 (166.0)
	3.7	100 150	1588 {162} 2264 {231}	1882 {192} 2381 {243}	343 (424)	128 (128)	471 (552)	596 (677)	590 (671)	237 (235)	250 (250)	181 (178.0)	191 (201)

- Motor/reducer combinations shown are standard.
- Shaded boxes indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.
- Refer to page 17 for sizing. • Thermal rating factor is 1.0.

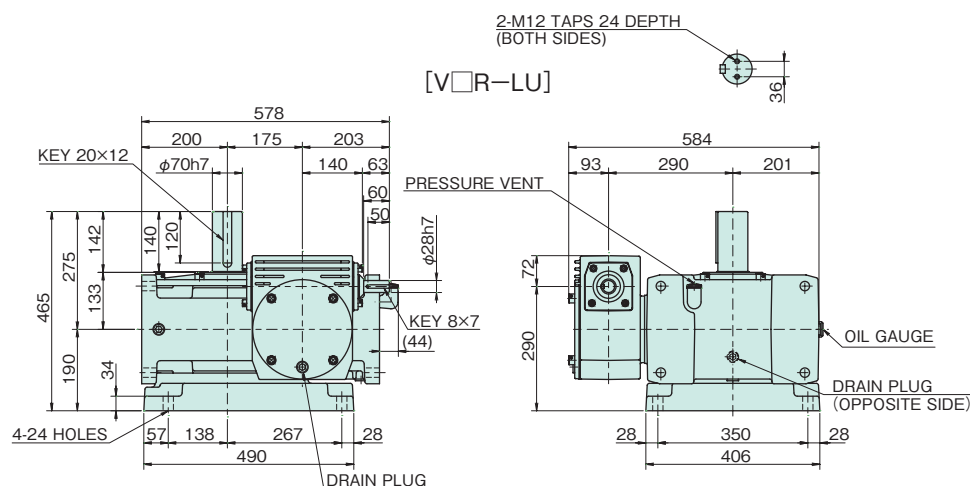
Dimensional Drawings EW175B/EW175V

EW175B



Estimated mass 215 kg

EW175V



Estimated mass 242 kg

* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

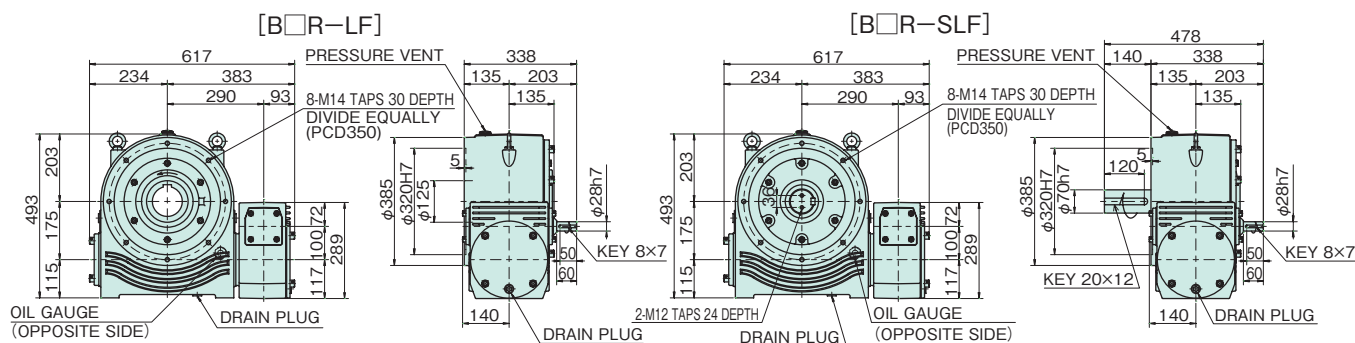
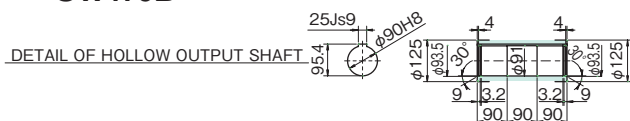
Size	Input	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
	Reduction ratio	Input kW	Output torque N·m (kgf·m)	Input kW	Output torque N·m (kgf·m)	Input kW	Output torque N·m (kgf·m)	Input kW	Output torque N·m (kgf·m)	Input kW	Output torque N·m (kgf·m)	Input kW	Output torque N·m (kgf·m)
EW175	100	7.68	3361 {343}	6.63	3450 {352}	5.38	3459 {353}	4.52	3459 {353}	2.52	3459 {353}	0.58	3459 {353}
	150	5.53	3459 {353}	4.66	3459 {353}	3.78	3459 {353}	3.18	3459 {353}	1.78	3459 {353}	0.42	3459 {353}
	200	4.31	3459 {353}	3.64	3459 {353}	2.96	3459 {353}	2.50	3459 {353}	1.41	3459 {353}	0.34	3459 {353}
	250	3.55	3459 {353}	3.01	3459 {353}	2.45	3459 {353}	2.07	3459 {353}	1.17	3459 {353}	0.28	3459 {353}
	300	3.13	3459 {353}	2.65	3459 {353}	2.17	3459 {353}	1.83	3459 {353}	1.04	3459 {353}	0.25	3459 {353}
	400	2.46	3459 {353}	2.09	3459 {353}	1.71	3459 {353}	1.45	3459 {353}	0.83	3459 {353}	0.20	3459 {353}
	500	2.04	3459 {353}	1.73	3459 {353}	1.42	3459 {353}	1.20	3459 {353}	0.69	3459 {353}	0.17	3459 {353}
	600	1.79	3459 {353}	1.52	3459 {353}	1.25	3459 {353}	1.06	3459 {353}	0.62	3459 {353}	0.16	3459 {353}
	800	1.40	3459 {353}	1.19	3459 {353}	0.98	3459 {353}	0.84	3459 {353}	0.50	3459 {353}	0.13	3459 {353}
	1000	1.17	3459 {353}	1.00	3459 {353}	0.83	3459 {353}	0.71	3459 {353}	0.42	3459 {353}	0.108	3459 {353}
	1200	1.02	3459 {353}	0.87	3459 {353}	0.72	3459 {353}	0.62	3459 {353}	0.37	3459 {353}	0.096	3459 {353}
	1500	0.91	3352 {342}	0.78	3371 {344}	0.65	3401 {347}	0.56	3420 {349}	0.33	3459 {353}	0.085	3459 {353}
	1800	0.81	3361 {343}	0.69	3381 {345}	0.58	3410 {348}	0.50	3430 {350}	0.30	3459 {353}	0.078	3459 {353}
	2400	0.66	3410 {348}	0.57	3420 {349}	0.48	3440 {351}	0.41	3450 {352}	0.25	3459 {353}	0.066	3459 {353}
	3000	0.56	3430 {350}	0.48	3430 {350}	0.40	3440 {351}	0.35	3450 {352}	0.21	3459 {353}	0.057	3459 {353}
	3600	0.49	3440 {351}	0.43	3440 {351}	0.35	3450 {352}	0.31	3459 {353}	0.19	3459 {353}	0.050	3459 {353}

Dimensional Drawings SW175B/SW175V

See next page for
reducers with motors

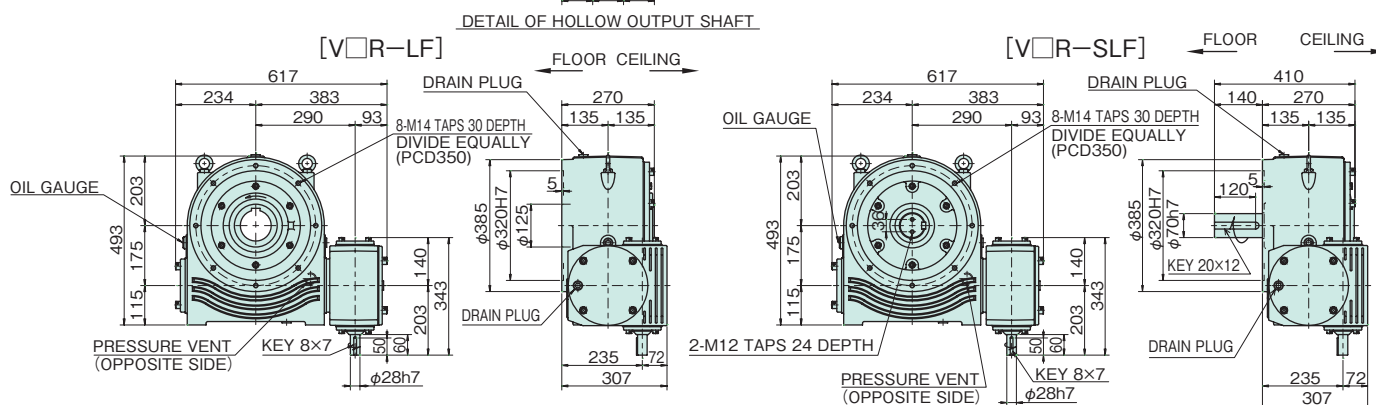
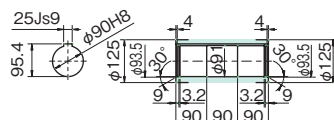


SW175B



Estimated mass 206 kg

SW175V



Estimated mass 206 kg

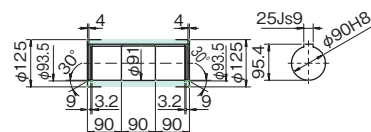
* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

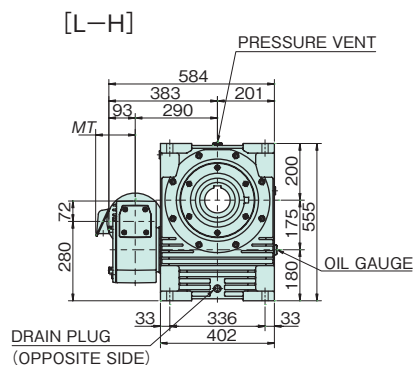
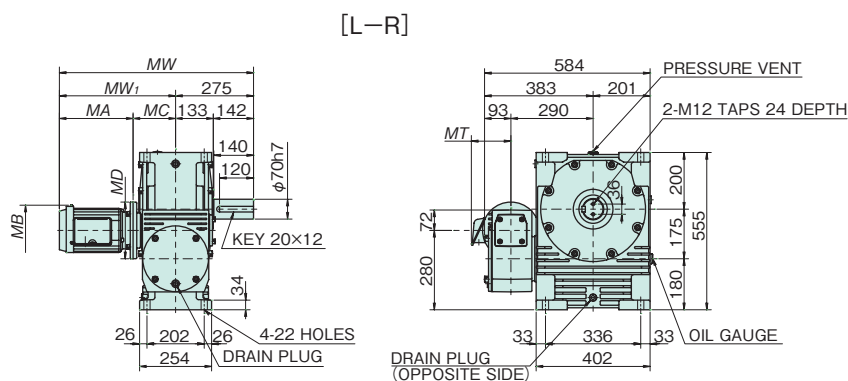
Size	Input	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
	Reduction ratio	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
SW175	100	7.680	3361 {343}	6.630	3450 {352}	5.380	3459 {353}	4.520	3459 {353}	2.520	3459 {353}	0.580	3459 {353}
	150	5.530	3459 {353}	4.660	3459 {353}	3.780	3459 {353}	3.180	3459 {353}	1.780	3459 {353}	0.420	3459 {353}
	200	4.310	3459 {353}	3.640	3459 {353}	2.960	3459 {353}	2.500	3459 {353}	1.410	3459 {353}	0.340	3459 {353}
	250	3.550	3459 {353}	3.010	3459 {353}	2.450	3459 {353}	2.070	3459 {353}	1.170	3459 {353}	0.280	3459 {353}
	300	3.130	3459 {353}	2.650	3459 {353}	2.170	3459 {353}	1.830	3459 {353}	1.040	3459 {353}	0.250	3459 {353}
	400	2.460	3459 {353}	2.090	3459 {353}	1.710	3459 {353}	1.450	3459 {353}	0.830	3459 {353}	0.200	3459 {353}
	500	2.040	3459 {353}	1.730	3459 {353}	1.420	3459 {353}	1.200	3459 {353}	0.690	3459 {353}	0.170	3459 {353}
	600	1.790	3459 {353}	1.520	3459 {353}	1.250	3459 {353}	1.060	3459 {353}	0.620	3459 {353}	0.160	3459 {353}
	800	1.400	3459 {353}	1.190	3459 {353}	0.980	3459 {353}	0.840	3459 {353}	0.500	3459 {353}	0.130	3459 {353}
	1000	1.170	3459 {353}	1.000	3459 {353}	0.830	3459 {353}	0.710	3459 {353}	0.420	3459 {353}	0.108	3459 {353}
	1200	1.020	3459 {353}	0.870	3459 {353}	0.720	3459 {353}	0.620	3459 {353}	0.370	3459 {353}	0.096	3459 {353}
	1500	0.910	3352 {342}	0.780	3371 {344}	0.650	3401 {347}	0.560	3420 {349}	0.330	3459 {353}	0.085	3459 {353}
	1800	0.810	3361 {343}	0.690	3381 {345}	0.580	3410 {348}	0.500	3430 {350}	0.300	3459 {353}	0.078	3459 {353}
	2400	0.660	3410 {348}	0.570	3420 {349}	0.480	3440 {351}	0.410	3450 {352}	0.250	3459 {353}	0.066	3459 {353}
	3000	0.560	3430 {350}	0.480	3430 {350}	0.400	3440 {351}	0.350	3450 {352}	0.210	3459 {353}	0.057	3459 {353}
	3600	0.490	3440 {351}	0.430	3440 {351}	0.350	3450 {352}	0.310	3459 {353}	0.190	3459 {353}	0.050	3459 {353}

Dimensional Drawings EWMR175B/EWMR175V

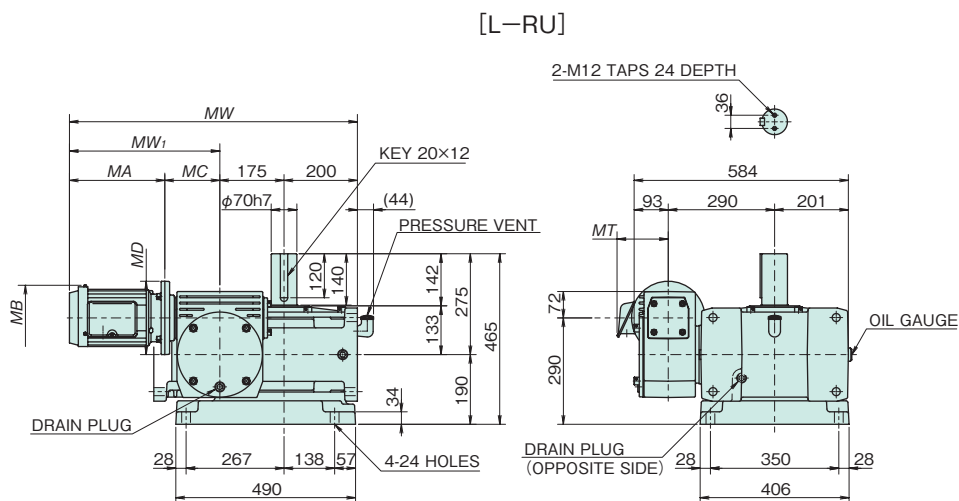
EWMR175B



DETAIL OF HOLLOW OUTPUT SHAFT



EWMR175V



Transfer Capacity Table

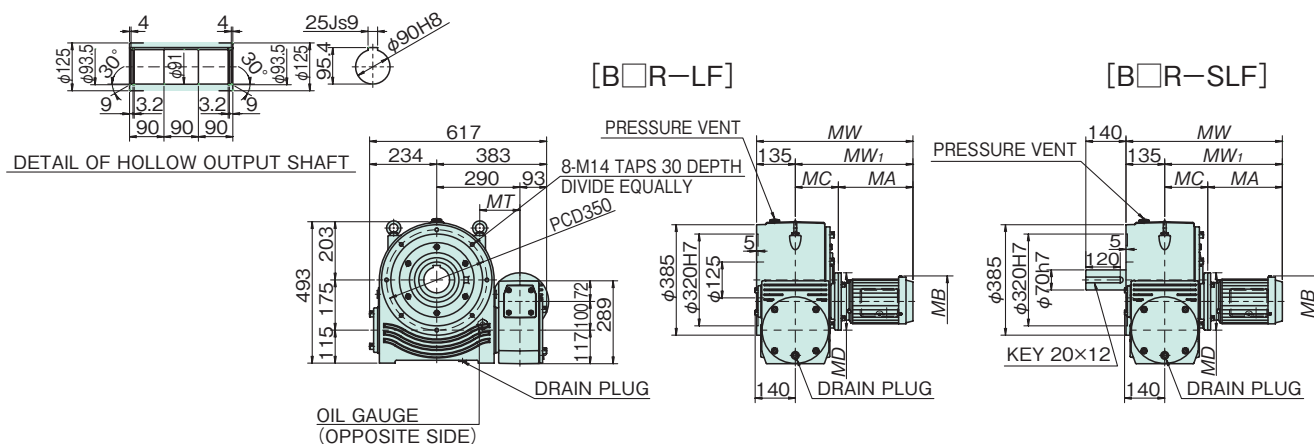
* Refer to page 74 for shaft arrangements and relative direction of rotation.

[illegible]

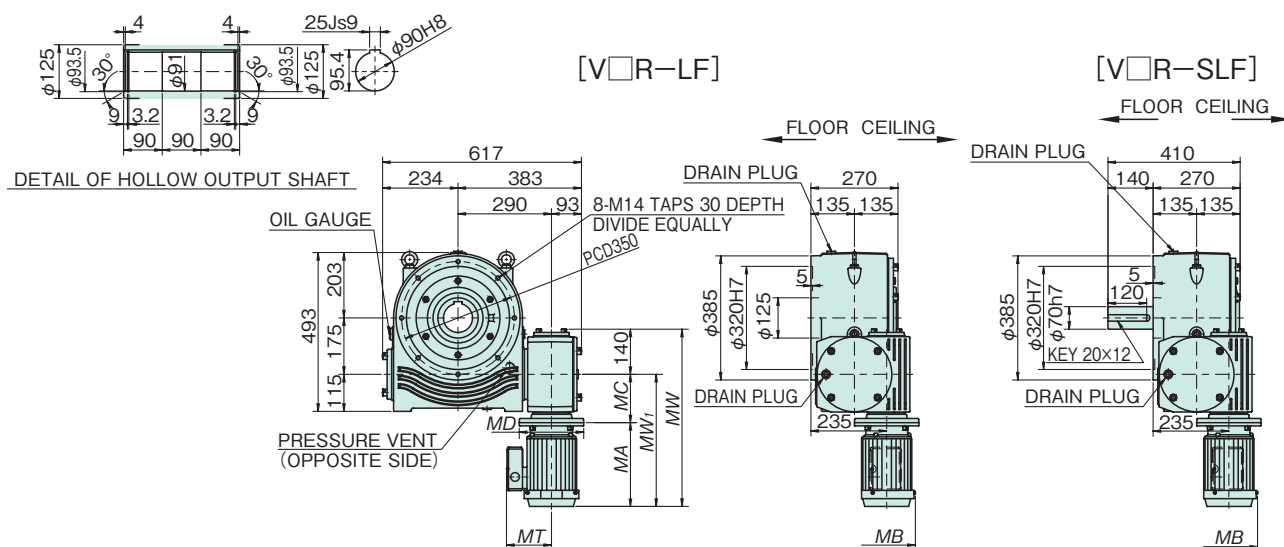
- Motor/reducer combinations shown are standard.
- Shaded boxes  indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.
- Refer to page 17 for sizing. • Thermal rating factor is 1.0.

Dimensional Drawings SWMR175B/SWMR175V

SWMR175B



SWMR175V



Transfer Capacity Table

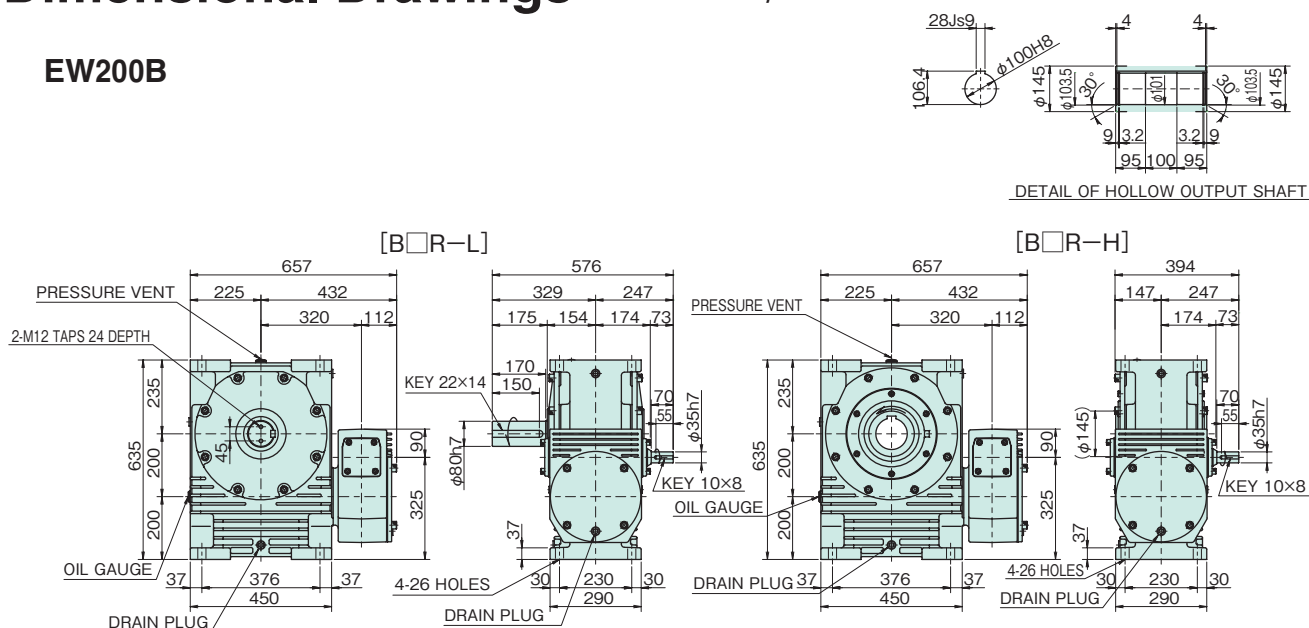
* Refer to page 74 for shaft arrangements and relative direction of rotation.

Size	Standard combination		1750 r/min	1450 r/min	Values in () for the motor indicates dimensions for a motor with a brake.								
	Motor kW	Reduction ratio	Output torque N·m {kgf·m}	Output torque N·m {kgf·m}	MA	MC	MW ₁	Installation B type MW	Installation V type MW	MB	MD	MT	Estimated mass kg
SWMR175	0.75	1800	3136 {320}	3381 {345}	260	150	410	545	550	178	200	140	232
		2400	3410 {348}	3420 {349}	(305)	(150)	(455)	(590)	(595)	(178)	(200)	(140.0)	(235)
	1.5	800	3459 {353}	3459 {353}	296	150	446	581	586	204	200	158	239
		1000	3459 {353}	3459 {353}	(360)	(150)	(510)	(645)	(650)	(202)	(200)	(155.0)	(244)
	2.2	500	3459 {353}	3459 {353}	318	150	468	603	608	218	250	169	255
		600	3459 {353}	3459 {353}	(374)	(150)	(524)	(659)	(664)	(226)	(250)	(166.0)	(260)
	3.7	200	2969 {303}	3459 {353}	343 (424)	150 (150)	493 (574)	628 (709)	633 (714)	237 (235)	250 (250)	181 (178.0)	260 (270)
		250	3459 {353}	3459 {353}									
		300	3459 {353}	3459 {353}									

- Motor/reducer combinations shown are standard.
- Shaded boxes  indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.
- Refer to page 17 for sizing. • Thermal rating factor is 1.0.

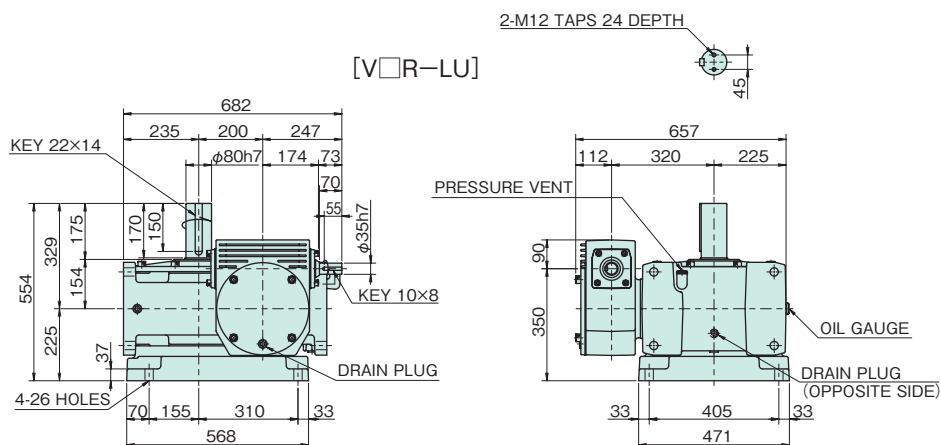
Dimensional Drawings EW200B/EW200V

EW200B



Estimated mass 364 kg

EW200V



Estimated mass 414 kg

* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

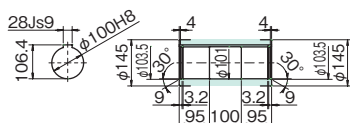
Size	Input	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
	Reduction ratio	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
EW200	100	11.156	4911 {501}	9.704	5077 {518}	8.099	5238 {534}	6.947	5348 {546}	4.059	5605 {572}	0.949	5704 {582}
	150	8.040	5069 {517}	7.093	5304 {541}	5.912	5451 {556}	5.047	5528 {564}	2.925	5703 {582}	0.688	5704 {582}
	200	6.403	5203 {531}	5.664	5450 {556}	4.695	5562 {568}	4.000	5620 {573}	2.291	5704 {582}	0.546	5704 {582}
	250	5.334	5240 {535}	4.723	5486 {560}	3.945	5629 {574}	3.360	5676 {579}	1.917	5704 {582}	0.464	5704 {582}
	300	4.899	5535 {565}	4.228	5640 {576}	3.487	5704 {582}	2.948	5704 {582}	1.677	5704 {582}	0.406	5704 {582}
	400	3.934	5689 {580}	3.345	5704 {582}	2.731	5704 {582}	2.312	5704 {582}	1.319	5704 {582}	0.323	5704 {582}
	500	3.279	5704 {582}	2.784	5704 {582}	2.277	5704 {582}	1.930	5704 {582}	1.108	5704 {582}	0.275	5704 {582}
	600	2.865	5704 {582}	2.438	5704 {582}	2.001	5704 {582}	1.701	5704 {582}	0.986	5704 {582}	0.253	5704 {582}
	800	2.272	5704 {582}	1.938	5704 {582}	1.594	5704 {582}	1.358	5704 {582}	0.794	5704 {582}	0.206	5704 {582}
	1000	1.921	5704 {582}	1.642	5704 {582}	1.355	5704 {582}	1.158	5704 {582}	0.691	5704 {582}	0.181	5704 {582}
	1200	1.674	5704 {582}	1.434	5704 {582}	1.186	5704 {582}	1.016	5704 {582}	0.613	5704 {582}	0.162	5704 {582}
	1500	1.423	5063 {517}	1.233	5116 {522}	1.030	5169 {527}	0.887	5204 {531}	0.530	5286 {539}	0.142	5359 {547}
	1800	1.268	5114 {522}	1.098	5158 {526}	0.919	5203 {531}	0.792	5233 {534}	0.476	5301 {541}	0.131	5362 {547}
	2400	1.032	5179 {528}	0.894	5212 {532}	0.747	5246 {535}	0.644	5269 {538}	0.393	5320 {543}	0.107	5366 {548}
	3000	0.888	5218 {532}	0.769	5245 {535}	0.643	5272 {538}	0.555	5290 {540}	0.344	5331 {544}	0.095	5368 {548}
	3600	0.784	5244 {535}	0.679	5267 {537}	0.569	5290 {540}	0.491	5305 {541}	0.308	5339 {545}	0.085	5370 {548}

Dimensional Drawings SW200B/SW200V

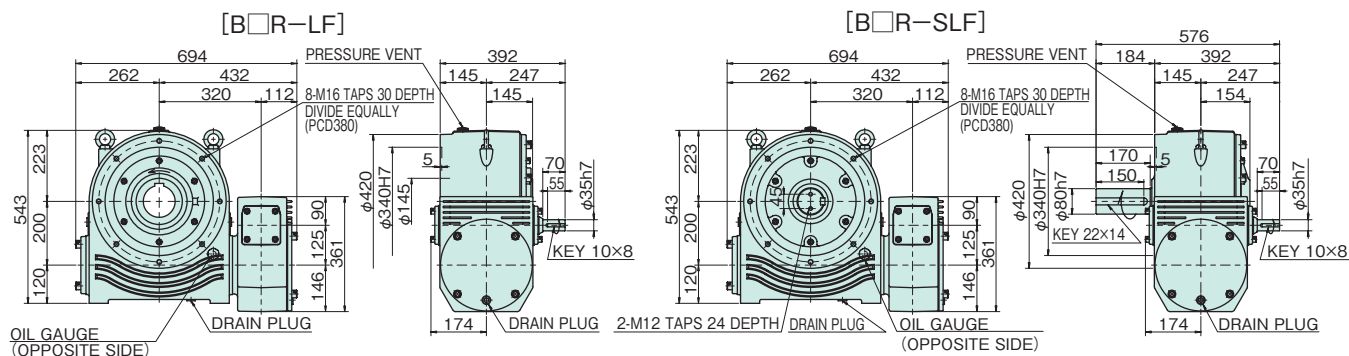
See next page for
reducers with motors



SW200B

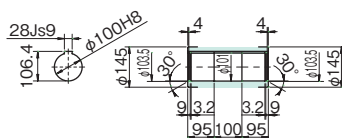


DETAIL OF HOLLOW OUTPUT SHAFT

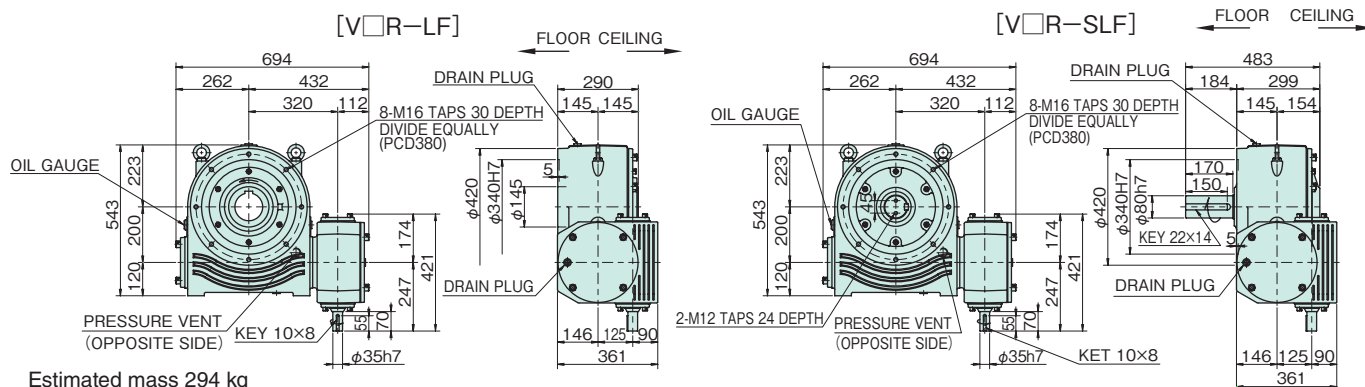


Estimated mass 294 kg

SW200V



DETAIL OF HOLLOW OUTPUT SHAFT



Estimated mass 294 kg

* Refer to page 74 for shaft arrangements and relative direction of rotation.

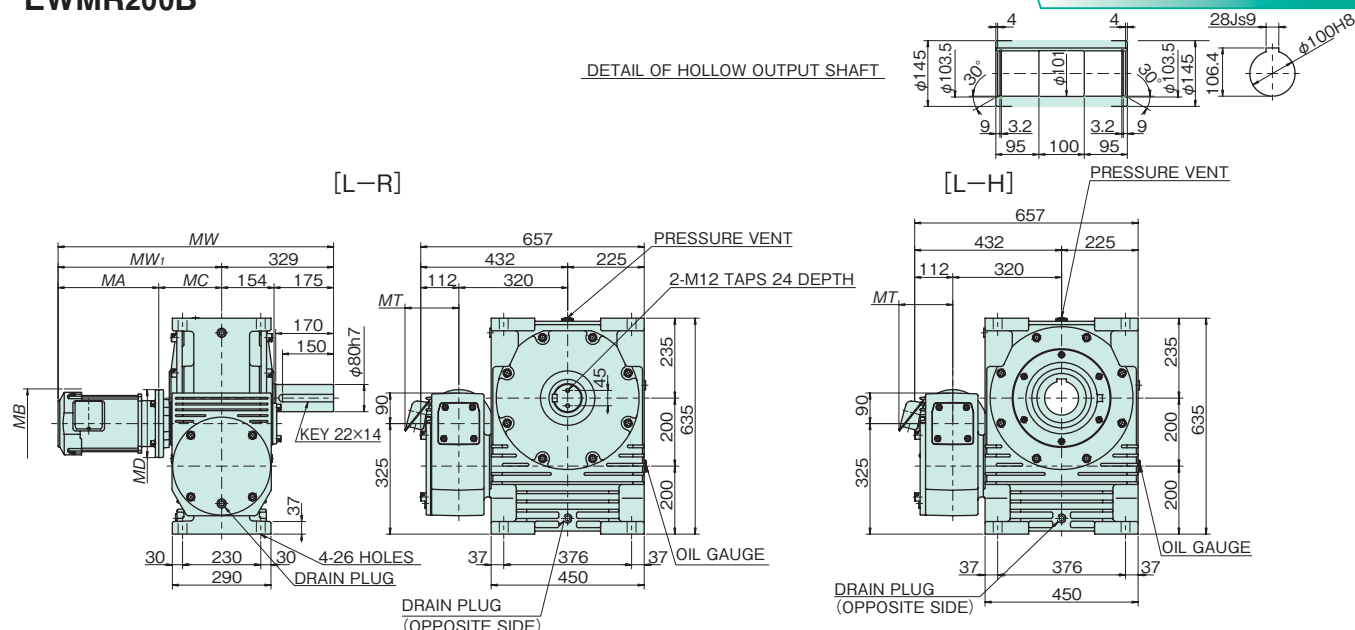
Transfer Capacity Table

Size	Input	1750 r/min		1450 r/min		1150 r/min		950 r/min		500 r/min		100 r/min	
	Reduction ratio	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}	Input kW	Output torque N·m {kgf·m}
SW200	100	11.156	4911 {501}	9.704	5077 {518}	8.099	5238 {534}	6.947	5348 {546}	4.059	5605 {572}	0.949	5704 {582}
	150	8.040	5069 {517}	7.093	5304 {541}	5.912	5451 {556}	5.047	5528 {564}	2.925	5703 {582}	0.688	5704 {582}
	200	6.403	5203 {531}	5.664	5450 {556}	4.695	5562 {568}	4.000	5620 {573}	2.291	5704 {582}	0.546	5704 {582}
	250	5.334	5240 {535}	4.723	5486 {560}	3.945	5629 {574}	3.360	5676 {579}	1.917	5704 {582}	0.464	5704 {582}
	300	4.899	5535 {565}	4.228	5640 {576}	3.487	5704 {582}	2.948	5704 {582}	1.677	5704 {582}	0.406	5704 {582}
	400	3.934	5689 {580}	3.345	5704 {582}	2.731	5704 {582}	2.312	5704 {582}	1.319	5704 {582}	0.323	5704 {582}
	500	3.279	5704 {582}	2.784	5704 {582}	2.277	5704 {582}	1.930	5704 {582}	1.108	5704 {582}	0.275	5704 {582}
	600	2.865	5704 {582}	2.438	5704 {582}	2.001	5704 {582}	1.701	5704 {582}	0.986	5704 {582}	0.253	5704 {582}
	800	2.272	5704 {582}	1.938	5704 {582}	1.594	5704 {582}	1.358	5704 {582}	0.794	5704 {582}	0.206	5704 {582}
	1000	1.921	5704 {582}	1.642	5704 {582}	1.355	5704 {582}	1.158	5704 {582}	0.691	5704 {582}	0.181	5704 {582}
	1200	1.674	5704 {582}	1.434	5704 {582}	1.186	5704 {582}	1.016	5704 {582}	0.613	5704 {582}	0.162	5704 {582}
	1500	1.423	5063 {517}	1.233	5116 {522}	1.030	5169 {527}	0.887	5204 {531}	0.580	5286 {539}	0.142	5359 {547}
	1800	1.268	5114 {522}	1.098	5158 {526}	0.919	5203 {531}	0.792	5233 {534}	0.476	5301 {541}	0.131	5362 {547}
	2400	1.032	5179 {528}	0.894	5212 {532}	0.747	5246 {535}	0.664	5269 {538}	0.393	5320 {543}	0.107	5366 {548}
	3000	0.888	5218 {532}	0.769	5245 {535}	0.643	5272 {538}	0.555	5290 {540}	0.344	5331 {544}	0.095	5366 {548}
	3600	0.784	5244 {535}	0.679	5267 {537}	0.569	5290 {540}	0.491	5305 {541}	0.388	5339 {545}	0.085	5370 {548}

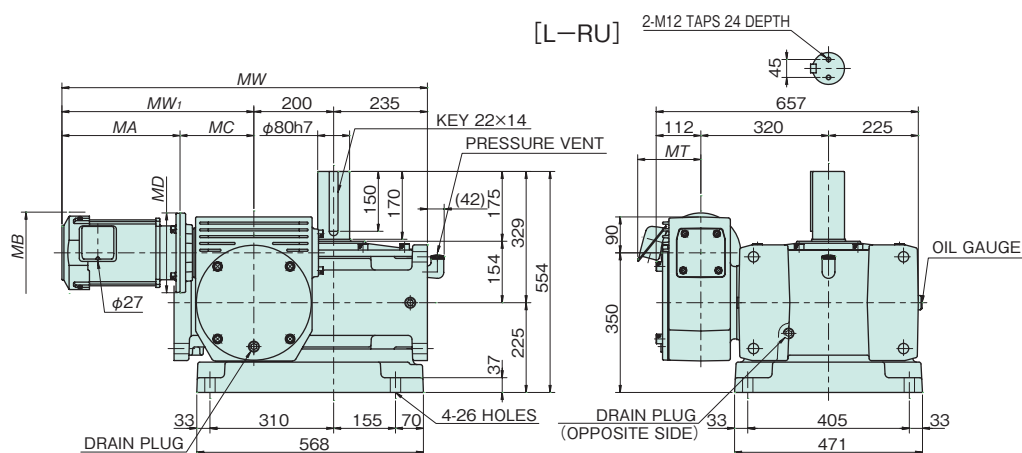
Dimensional Drawings EWMR200B/EWMR200V

EWMR200B

See previous page for reducers without motors



EWMR200V



* Refer to page 74 for shaft arrangements and relative direction of rotation.

Transfer Capacity Table

Size	Standard combination		1750 r/min	1450 r/min	Values in () for the motor indicates dimensions for a motor with a brake.									
	Motor kW	Reduction ratio	Output torque N·m {kgf·m}	Output torque N·m {kgf·m}	MA	MC	MW ₁	Installation B type MW	Installation V type MW	MB	MD	MT	Installation B type Estimated mass kg	Installation V type Estimated mass kg
EWMR200	1.5	1200	5116 {522}	5704 {582}	296 (360)	185 (185)	481 (545)	810 (874)	916 (980)	204 (202)	200 (200)	158 (155.0)	394 (399)	444 (449)
		1500	5063 {517}	5116 {522}										
	2.2	800	5527 {564}	5704 {582}	318 (374)	185 (185)	503 (559)	832 (888)	938 (994)	218 (226)	250 (250)	169 (166.0)	407 (412)	458 (463)
		1000	5704 {582}	5704 {582}										
	3.7	400	5351 {546}	5704 {582}	343 (424)	185 (185)	528 (609)	857 (938)	963 (1044)	237 (235)	250 (250)	181 (178.0)	415 (425)	465 (475)
		500	5704 {582}	5704 {582}										
		600	5704 {582}	5704 {582}										
	5.5	200	4469 {456}	5292 {540}	402 (475)	185 (185)	587 (660)	916 (989)	1022 (1095)	277 (275)	300 (300)	197 (200.0)	436 (448)	487 (499)
		250	5240 {535}	5486 {560}										
		300	5535 {565}	5640 {576}										

- Motor/reducer combinations shown are standard.
- Shaded boxes indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.
- Refer to page 17 for sizing. • Thermal rating factor is 1.0.



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