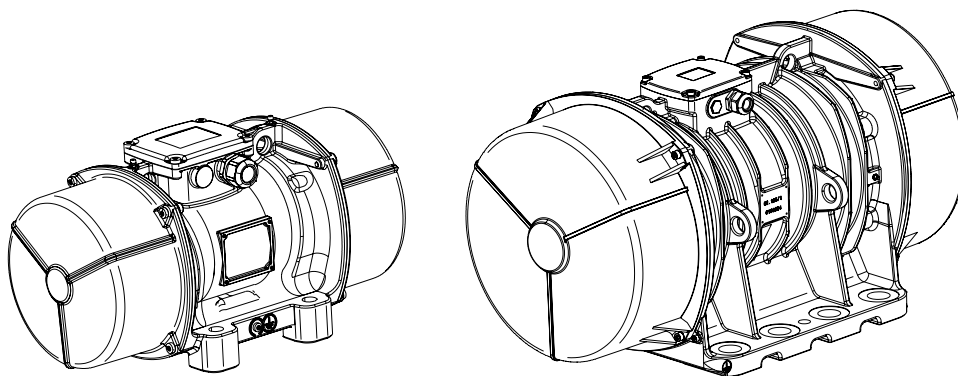




LOW FREQUENCY VIBRATION MOTOR EVSI·EVUR SERIES OPERATION MANUAL



4 Poles EVSI 15-80/200/400/550/700A/900B/1100A/1410/1710
/9500/11500

EVUR 15-1410/1710/2410/3810/5010/7000

6 Poles EVSI 10-310A/550A/1110/6600/10000/11200/15000/17500

EVUR 10-1110/1400A/1610/2610/3810/4700/5200

8 Poles EVSI 075-10000/12000/14000/17000/22000/30000

EVUR 075-2110/3110/5300

EXEN CORPORATION

☆ SAFETY PRECAUTIONS

- ☆ This product is a vibration motor to be mounted on a vibration transporter, vibration selector or vibration hopper, etc. Do not use the vibration motor for any other purpose.
- ☆ Be sure to read and understand this operation manual carefully before using the product so that it can be operated safely and efficiently. Improper machine use may result in injury or machine failure. Keep this manual for further reference.
- ☆ The following symbols are DANGER, WARNING, and CAUTION instruction for the use of this product so that the product will not cause harm or damage to users or others.



DANGER

【DANGER】 indicates an imminent dangerous situation which may lead to death or serious injury.



WARNING

【WARNING】 refers to a hazard that may cause death or serious injury.



CAUTION

【CAUTION】 refers to a hazard that may cause minor or moderate injury.



(To prevent death)

-  Do not use power supply that is not equipped with earth leakage circuit breaker to this product to prevent electric shock.
-  Be sure to connect the ground wire. Otherwise, you may get an electric shock.
-  Please do not use this product in explosive or corrosive environments, in the presence of flammable gases, locations subjected to splashing water, or near combustibles. Otherwise, it may cause a fire or injury.
-  Please turn off the power during blackout. Otherwise, at the time of power recovery, a motor may start suddenly and may cause injury and machine damage.
-  When you install it in high places, provide an anti-drop measure. Falling object may cause injury or damage.
-  In case of falling object, be sure to replace a wire for preventing drop even if there is no abnormality in appearance.



(To prevent injury or damages)

-  Be sure to operate this product within the voltage specified in the nameplate. Applying a higher voltage may cause burnout of the motor. Burnout may lead to breaking of the insulator thus, electric shock.
-  This product vibrates.
When installing this product, select a position that does not resonate and install it securely.
-  Sympathetic vibration may cause falling product by damaging installation parts and loosening or breaking bolts.
-  Do not operate the product without the side covers. Otherwise, you may get injury.
-  Be careful to adjust the centrifugal force of the motor installed at tilted place enough so that the weight does not fall.
-  Do not touch the motor for a while after driving or stopping operation. The high temperature of the motor surface causes burn.

○ INTRODUCTION

Thank you for purchasing the low frequency vibration motor.

Be sure to read this operation manual before use.

Be sure to read and understand this operation manual carefully before using the product until it can be operated safely and efficiently. Handle and maintain the product appropriately for safety operation.

Keep this manual for further reference.

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○ SAFETY



(For personal protection during operation)

- Put on a safety helmet, safety gloves, safety boots and safety harness, before installing the vibration motor.



Safety helmet



Safety gloves



Safety boots



Safety harness

- Be sure to gain footholds in a safe environment when installing this product.
- Do not connect the cable wrongly. The green wire (E) is the ground wire. A wrong connection may cause an electric shock.
- When checking this product, be sure to disconnect the cable from the power supply. If not, electric shock may occur.
- Be sure to wear a safety harness when installing and inspecting this product at a high place.
- This product reaches high temperature during operation. Be careful not to touch your hands or body carelessly.
- Do not operate the product without the side covers. It may cause a serious accident due to touching rotary parts.
- When adjusting eccentric weights, please turn off the power in advance. Otherwise, it may cause injury.
- When transporting this product, check its mass and use a hoisting attachment with a load rating of more than or equal to the mass. Otherwise, you may get injury by falling vibration motor.



CAUTION

(For longer service life)

- Be sure to install it firmly on the installation location to avoid sympathetic or irregular vibration when installing this product. Sympathetic or irregular vibration may cause loosening bolts or damaging the installation part.
- This product incorporates waterproof structure (IEC Standards IP66 equivalent.) However, do not pour water on it intentionally and do not operate it in water.

IP code	Type	Definition
IP66	Dust-tight	No ingress of dust
	Protected against water jets	Water projected from a nozzle against the enclosure from any direction shall have no harmful effect

- When transferring or loading this product onto the carrier of a car, be sure to use a hoist by using a wire and a shackle to hook the hanging hook at the top of the motor. Do not hang or pull this product with the cable. It may damage the cable.
- It is recommended to use an over-current protective device (with open-phase protection circuit) in order to automatically protect motor from over-current (larger than the rated current.)

NOTE: Set the current setting of the over-current protective device to the rated current value.

NOTE: When this product is used for a vibratory conveyor or shaking separator, the rated current is rarely exceeded. However, when it is used for a vibratory hopper, over-current may occur.

- Depending on the use condition, the rated current may be exceeded. In this case, adjust the eccentric weight angle (to lower the centrifugal force) so that the rated current is not exceeded.
- The operating ambient temperature for this product is 0 to 40°C. Using it out of this temperature range may cause an operation failure or breaking of an insulator.
- When abnormalities occur, please stop operation immediately. Otherwise, it may cause a fire, an electric shock, or injury.

○ INSTALLATION



When installing this product, be sure to disconnect the cable from the power. Otherwise, vibration motor starts suddenly and there is a possibility of causing an unexpected injury. When installing it at a high place, provide an anti-drop measure.

- Before installing this product, make sure the four installation positions machined flat where the motor feet contact. Otherwise, this product or other attached equipment may be damaged due to sympathetic or irregular vibration.
- Please do not put combustibles near the circumference of a motor. Otherwise, it causes a fire or burn.
- When installing this product, be sure to secure it with high-tensile strength bolts, flat washers, spring washers, and double nuts.
- Only one loose bolt may cause an unexpected accident due to falling of the motor or breaking of the motor.
- If this product is installed on a channel steel, be sure to use tapered washers. Otherwise, bolts may bend and break.
- The cable also vibrates during operation. Do not bend the cable at its outlet at a steep angle. If the cable is bent, the bend radius must be at least 75 mm or more.
- Keep the cable away from other machines or objects. Contacting objects causes abrasion or breaking due to vibration. In order to avoid abrasion or breaking, be sure to wrap spiral tube around the cable and secure it in a vibration-free place.
- For the size of attaching bolts and the tightening torque, see the "Tightening torque table" below.

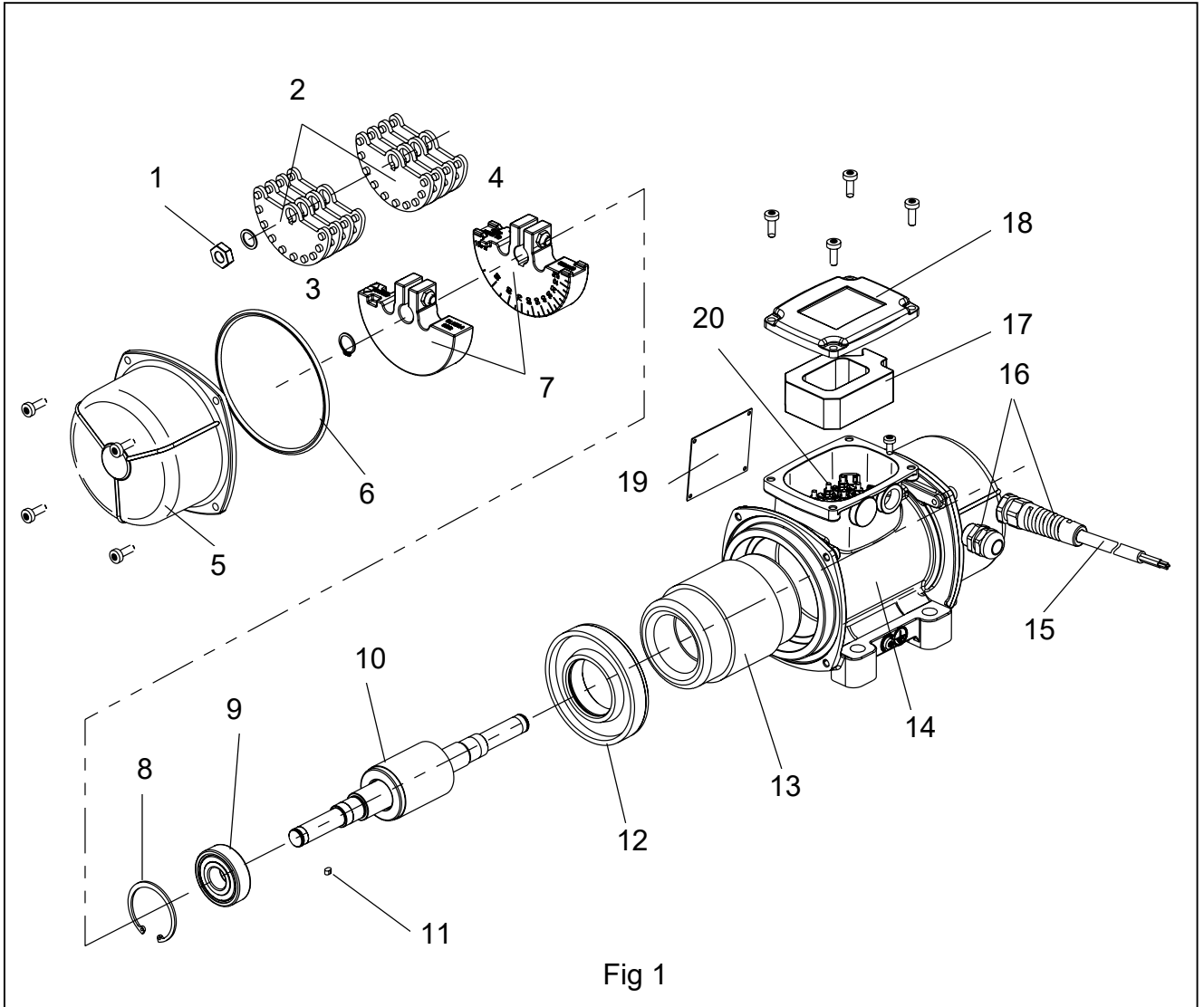
■ Tightening torque table

High-tensile strength bolt (Strength type 10.9)

Bolt size	M8	M10	M12	M16	M20	M22	M24	M36	M42
Tightening torque (N·m)	31	62	109	270	520	710	910	3160	5080

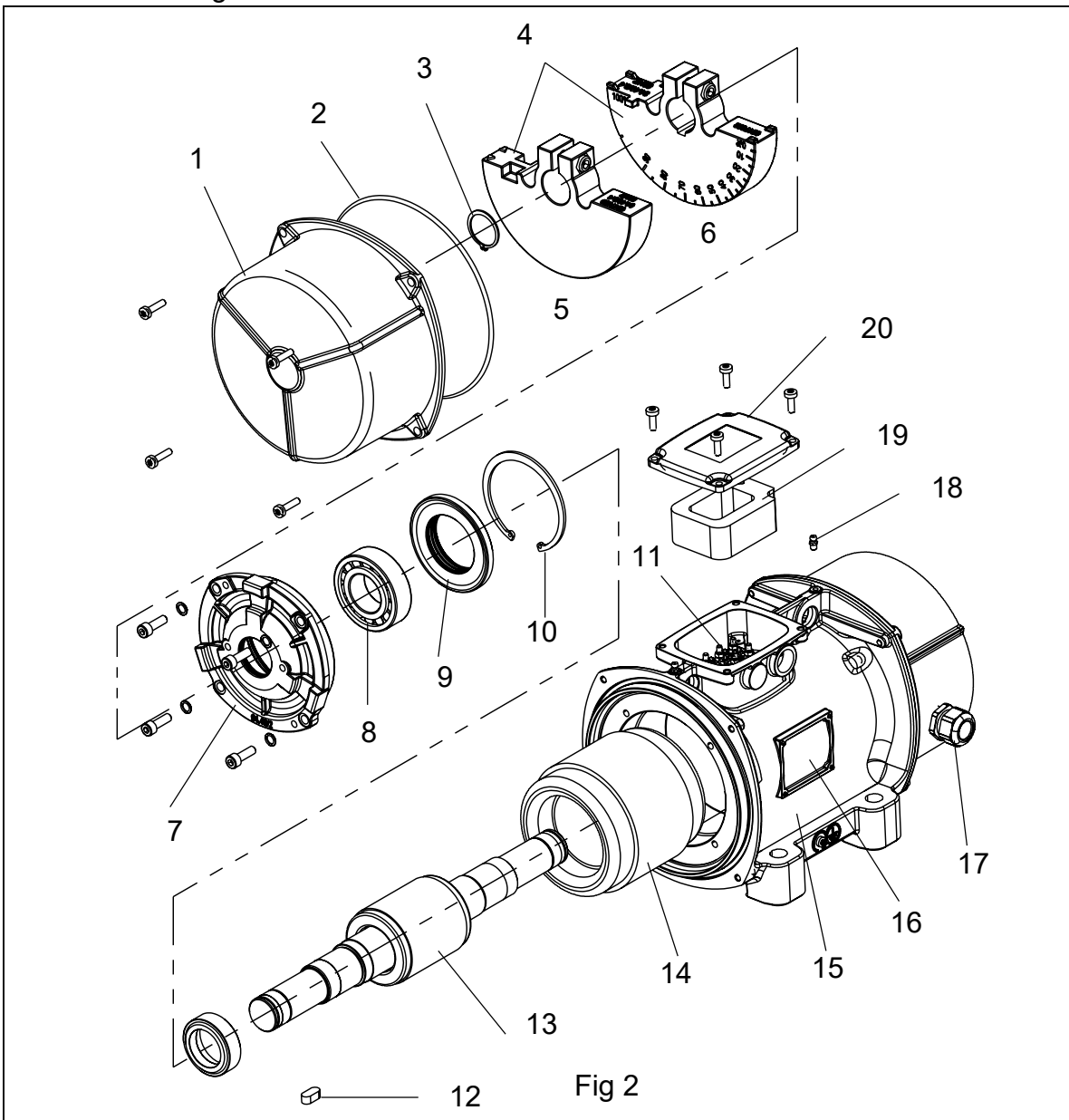
○ NAMES OF PARTS

■ Ball bearing



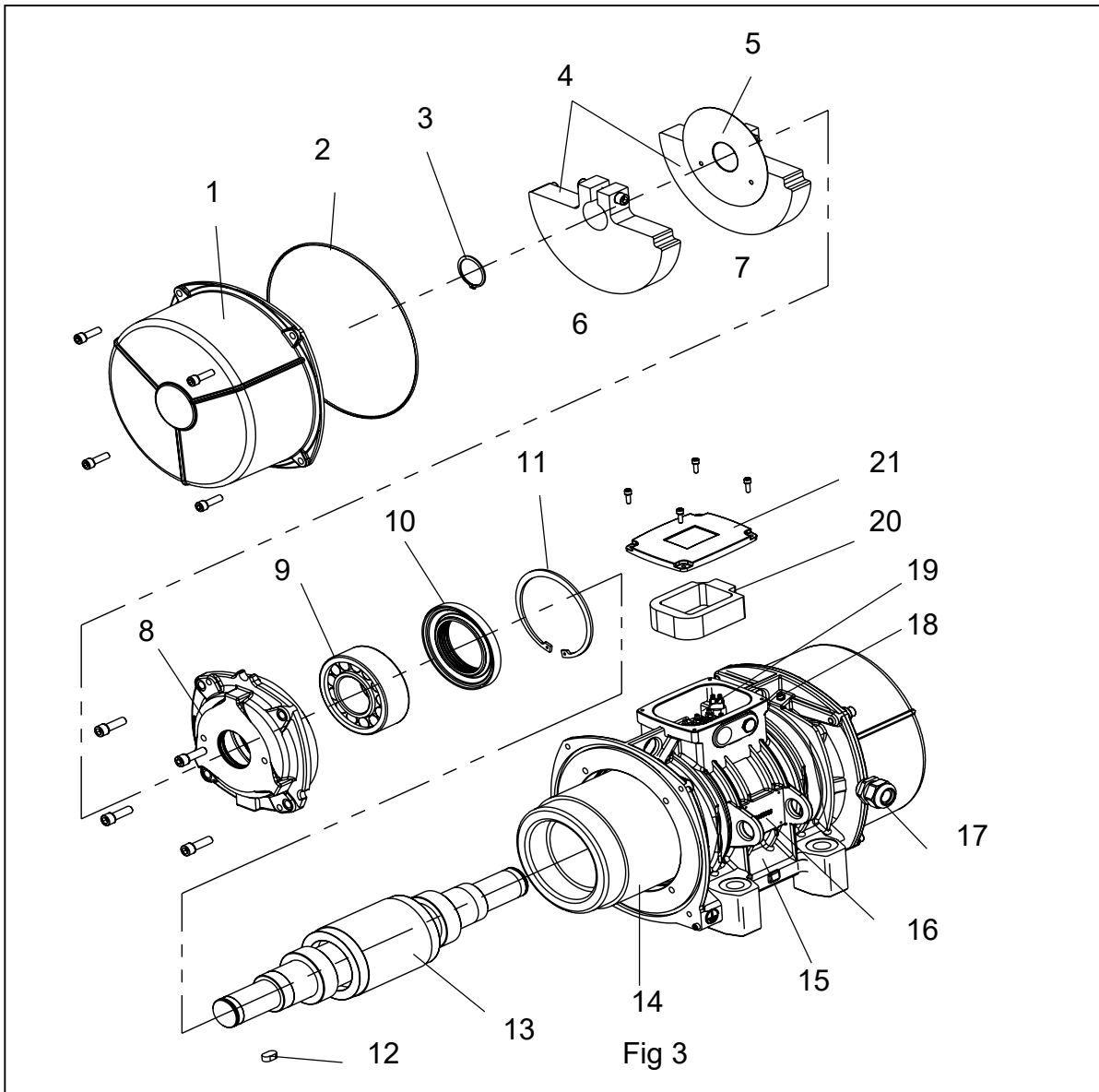
1	Fixing nut	11	Key
2	Plate-type eccentric weights	12	Bearing case
3	Adjustment weight	13	Stator
4	Fixed weight	14	Motor case
5	Side cover	15	Cable
6	O-ring	16	Cable gland nut
7	Casting eccentric weights	17	Packing
8	Snap ring	18	Terminal cover
9	Bearing	19	Nameplate
10	Rotor	20	Terminal block

■ Roller bearing



1	Side cover	11	Terminal block
2	O-ring	12	Key
3	Snap ring	13	Rotor
4	Casting eccentric weights	14	Stator
5	Adjustment weight	15	Motor case
6	Fixed weight	16	Nameplate
7	Bearing case	17	Cable gland nut
8	Roller bearing	18	Grease nipple
9	Oil stop washer	19	Packing
10	Snap ring	20	Terminal cover

■ Roller bearing (With a centrifugal adjusting plate)



1	Side cover	12	Key
2	O-ring	13	Rotor
3	Snap ring	14	Stator
4	Steel plate eccentric weights	15	Motor case
5	Centrifugal adjusting plate	16	Nameplate
6	Adjustment weight	17	Cable gland nut
7	Fixed weight assembly	18	Grease nipple
8	Bearing case	19	Terminal block
9	Roller bearing	20	Packing
10	Oil stop washer	21	Terminal cover
11	Snap ring	—	—

○ CONNECTION METHOD OF CABLE

⚠ When you wire the cable, please be sure to remove the cable from a power socket before the task. Otherwise, there is a possibility of an electric shock.

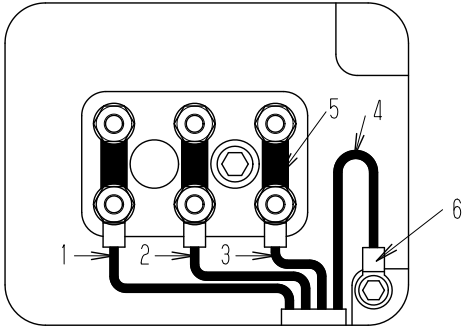
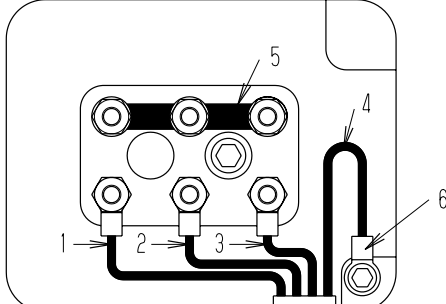
- The power supply which can be used for this product depends on wire connection in the terminal box. Please connect a wire to the cable after confirming the power supply conditions to be used.
- For model with the rated output exceeding 750W, cables are not included as a standard equipment, so please select a cable that exceeds the rated current value of the product.

Cable size (mm ²)	2.0	3.5	5.5	8.0	14.0
Allowable current (A)	19	27	35	43	62

- Please connect the cable with the supplied nuts and washers. Bolt size of the terminal block varies with the model. When connecting the cable to the terminal block by yourself, please attach round terminal suitable for bolt size before connection.

Nut size	M4	M5	M6	M8	M10
Tightening torque (N·m)	1.2	2.0	2.9	6.4	13

■ Connection method depending on power supply condition

Connection	Voltage 3 ϕ	Frequency	Connection method
Delta connection	200 V	50 Hz	
	200 V	60 Hz	
	220 V	60 Hz	
Star connection	380 V	50 Hz	
	400 V	50 Hz	
	400 V	60 Hz	
	415 V	50 Hz	
	440 V	60 Hz	

▶ 1.Red 2.White 3.Black 4.Green 5.Copper plate 6.Ground terminal.

○ ADJUSTING CENTRIFUGAL FORCE OF ECCENTRIC WEIGHT



Before adjusting the centrifugal force of the weights, be sure to disconnect the cable from the power socket. Otherwise, you may get an electric shock due to unexpected movement.

- When the frequency is 60 Hz, there is a prohibited area for using eccentric weight adjustment. Please check "Correspondence of centrifugal efficiency between weight angle and frequency".
- If sympathetic vibration occurs in the main unit or the rated current is exceeded, adjust the centrifugal force by the weight angle.
- Loosen the fixing bolt and adjust the centrifugal force by sliding the adjustment weight (outer.)
- Make sure to check that the weight angles (direction of the eccentric weight) on both sides of the main body are symmetrical.

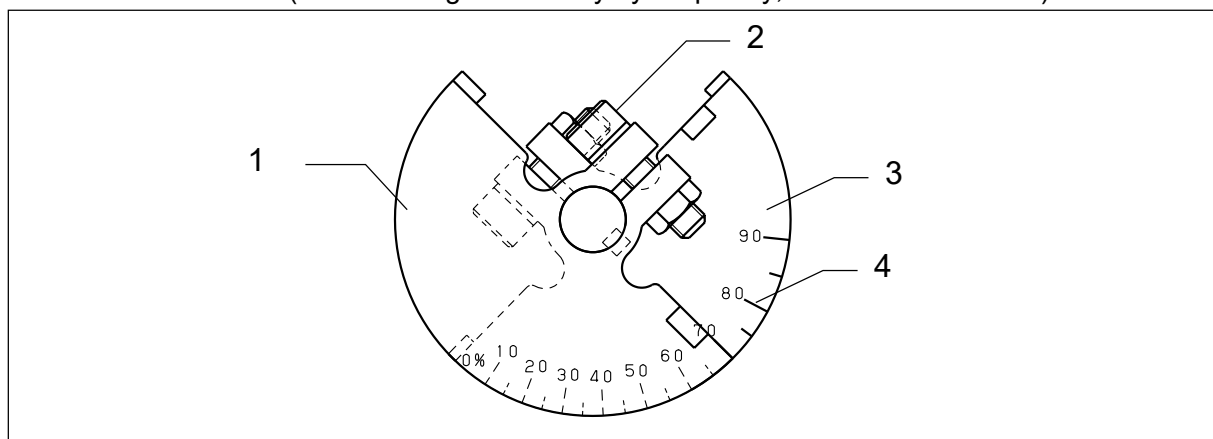
■ Casting eccentric weight with a scale attachment (see Fig1)

1. Slide the adjustment weight according to the scale number on the fixed weight and fix it with a fixing bolt.

Fixing bolt size	M8	M10	M12	M14	M16	M20
Tightening torque (N·m)	23	47	78	127	186	265

2. At the time of factory shipment, the product is adjusted to the specified position shown below (at 70% on the scale.)
3. The scale number (%) of the fixed weight indicates the centrifugal efficiency at 50 Hz frequency.

When using at frequency 60 Hz, please note that the exceeding 70% scale number cannot be used. (For Centrifugal efficiency by frequency, see the table below.)



1. Adjustment weight (Outer) 2. Fixing bolt 3. Fixed weight (Inner) 4. Scale

■ Correspondence of centrifugal efficiency between weight angle and frequency
(in case of the same thickness for fixed weight and adjustment weight)

Weight scale (%)	100	90	80	70	60	50	40	30	20	10	0
	Maximum centrifugal contrast efficiency (%)										
50Hz	100	90	80	70	60	50	40	30	20	10	0
60Hz	Unavailable			100	86	71	57	43	28	14	0

■ Correspondence of centrifugal efficiency between weight angle and frequency
(in case of different thicknesses for fixed weight and adjustment weight)

Weight scale (%)	100	90	80	70	60	50	40	34	—	—	—
	Maximum centrifugal contrast efficiency (%)										
50Hz	100	90	80	70	60	50	40	34	—	—	—
60Hz	Unavailable			100	86	72	57	49	—	—	—

[Position at the factory shipment]

■ Steel plate eccentric weight with centrifugal adjusting plate (see Fig3)

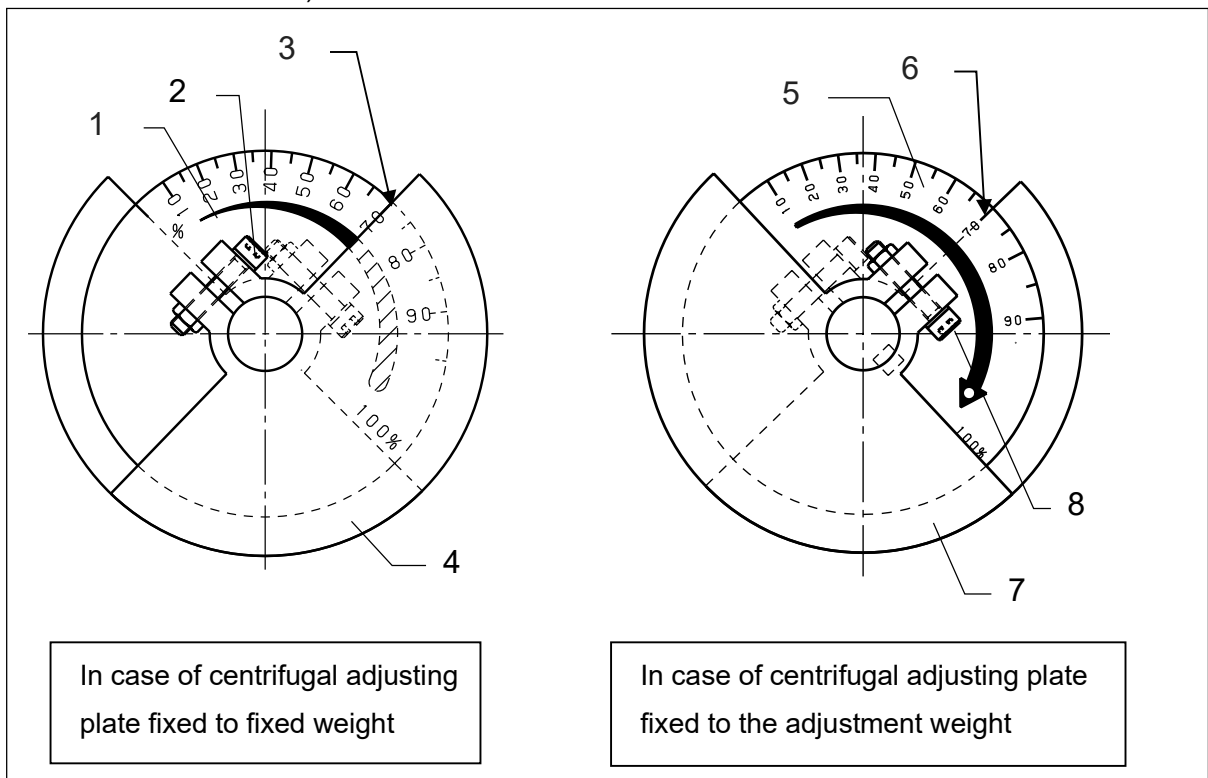
1. Slide the weight according to the scale number of the centrifugal adjustment plate and fix with the fixing bolt.

Fixing bolt size	M8	M10	M12	M14	M16	M20
Tightening torque (N·m)	23	47	78	127	186	265

2. When shipping the product, it is adjusted to the position shown below (scale of 70%.)

3. The numbers on the % scale of the centrifugal adjustment plate indicate the centrifugal efficiency at 50 Hz frequency.

When using at frequency 60 Hz, please note that the range exceeding 70% of the scale of the centrifugal adjusting plate cannot be allowed. (For Centrifugal efficiency by frequency, see the table below.)



- ▶ 1. Centrifugal adjusting plate 2. Fixing bolt 3. Align the adjustment weight to here
4. Adjustment weight (Outer) 5. Centrifugal adjusting plate
6. Align the adjustment weight to here 7. Adjustment weight (Outer) 8. Fixing bolt

■ Correspondence of centrifugal efficiency between weight angle and frequency
(in case of the same thickness for fixed weight and adjustment weight)

Weight scale (%)	100	90	80	70	60	50	40	30	20	10	0
	Maximum centrifugal contrast efficiency (%)										
50Hz	100	90	80	70	60	50	40	30	20	10	0
60Hz	Unavailable			100	86	71	57	43	28	14	0

■ Correspondence of centrifugal efficiency between weight angle and frequency
(in case of different thicknesses for fixed weight and adjustment weight)

Weight scale (%)	100	90	80	70	60	50	40	34	—	—	—
	Maximum centrifugal contrast efficiency (%)										
50Hz	100	90	80	70	60	50	40	34	—	—	—
60Hz	Unavailable			100	86	72	57	49	—	—	—

■ Correspondence of centrifugal efficiency between weight angle and frequency
(EVSI 10-1110 / EVUR 10-1110)

Weight scale (%)	100	90	80	70	60	50	40	30	20	15	—
	Maximum centrifugal contrast efficiency (%)										
50Hz	100	90	80	70	60	50	40	30	20	15	—
60Hz	Unavailable			100	86	72	57	43	29	20	—

■ Correspondence of centrifugal efficiency between weight angle and frequency
(EVUR 10-4700)

Weight scale (%)	100	90	80	70	60	50	40	30	20	17	—
	Maximum centrifugal contrast efficiency (%)										
50Hz	100	90	80	70	60	50	40	30	20	17	—
60Hz	Unavailable			100	87	73	59	46	32	29	—

[Position at the factory shipment]

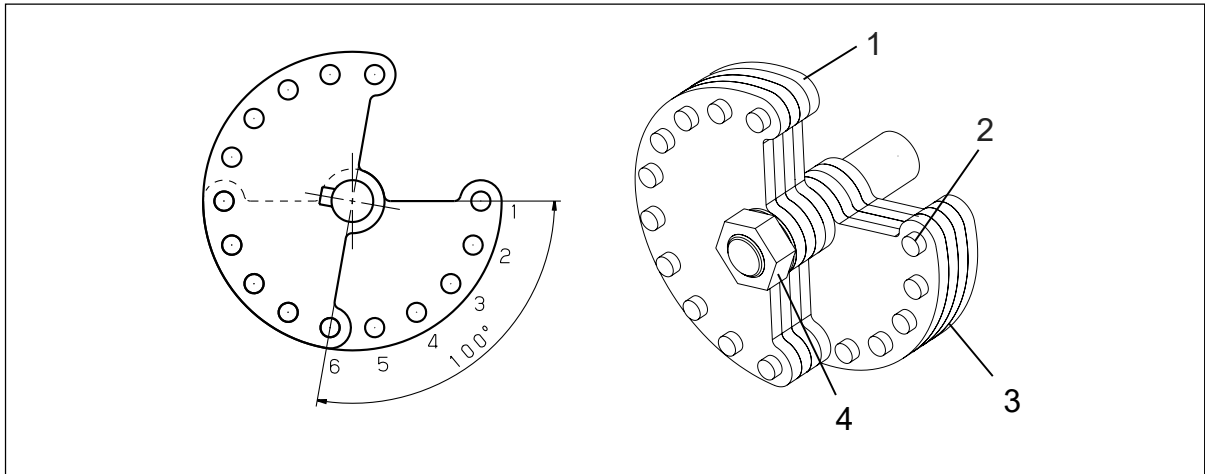
■ Plate type eccentric weights

Note : EVSI 15-80 uses a plate type eccentric weight. Please note that the casting eccentric weight and adjustment method are different.

1. Adjustment weights should be adjusted on all four weights at the same time.
2. Align the concavity of the adjustment weight with the convex of the fixed weight and fix with the fixing nut.

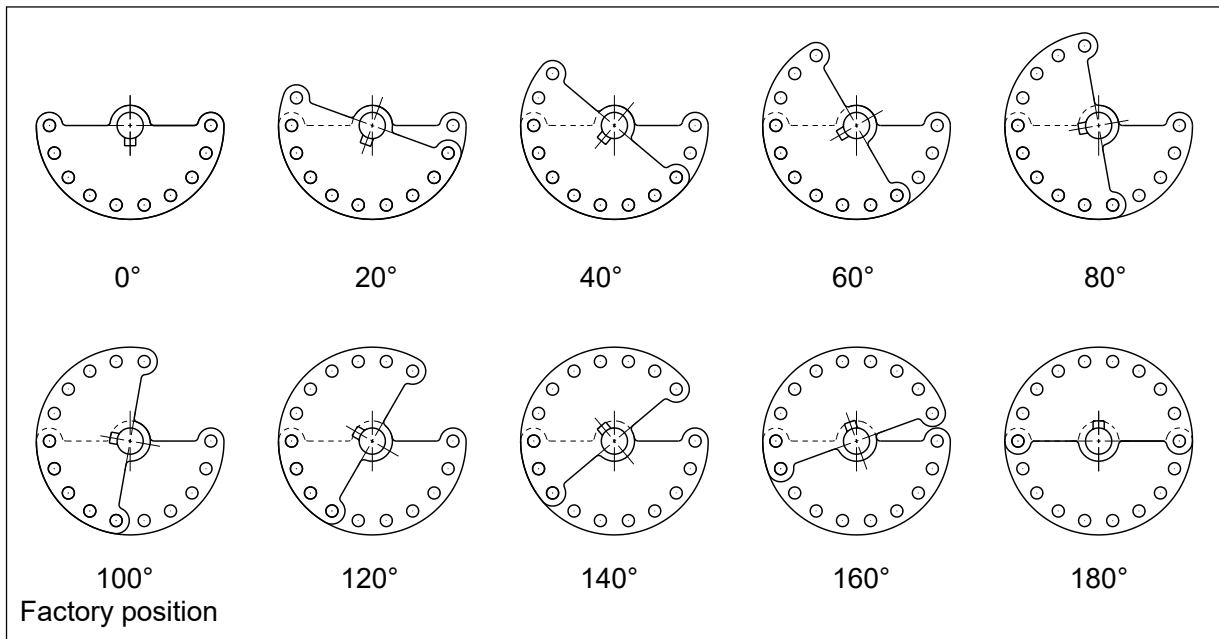
Tightening torque : 30 N·m

3. When shipping the product, adjust it to the position shown below (100 °.)



- ▶ 1. 4 Adjustment weights 2. Fixed weight protrusion 3. 4 Fixed weights 4. Fixing nut

■ Adjustment weight setting angle



■ Correspondence of centrifugal efficiency between weight angle and frequency

Model	Weight QTY Adjustment/ Fixed	Frequency (Hz)	Weight angle / Maximum centrifugal contrast efficiency (%)									
			0°	20°	40°	60°	80°	100°	120°	140°	160°	180°
EVS1 15-80	4／4	50	100	99.0	94.0	87.0	77.0	64.0	50.0	35.0	18.0	0
		60	Unavailable					100	78.0	54.5	28.0	0

[Position at the factory shipment]

○ HOW TO REPLACE BEARINGS



Before replacing the bearings, be sure to disconnect the cable from the power socket, remove the motor from the installation part, and place it on a workbench for task. Otherwise, you may get an electric shock or injury.

- Replacement and maintenance procedures for bearings vary depending on bearing type and motor model. Also, bearing replacement, a "Bearing replacement manual" is available.

■ Bearing replacement cycle

If abnormal heat, abnormal sound such as metallic clank, or increase of the current value occurs during operation, there can be something wrong with bearings. Dismount the cases from the main unit to replace the bearings.

Bearing replacement cycle (reference): 10,000 hours

NOTE: The replacement cycle depends on the usage conditions such as weight angle and environment around the machine.

■ Time for replenishing grease

Periodic replenishment of grease is required for roller bearings.

Estimated grease replenishment time: 1000 hours

Recommended grease	:	STABURAGS NBU8EP (NOK KLUBER)
Features	:	Load bearing capacity, abrasion resistance, water resistance
Temperature range	:	—35 to 150°C
Consistency	:	No.2

■ Roller bearing and grease lubrication amount (rough standard)

Model	Brand new	Replenishment
NJ308E C4	32g	16g
NJ309E C4	28g	14g
NJ311E C4	36g	18g
NJ313E C4	60g	30g
NJ2208E C4	40g	20g
NJ2308E C4	30g	16g
NJ2309E C4	38g	19g
NJ2311E C4	52g	26g
NJ2313E C4	80g	40g
NJ2314E C4	100g	50g
NJ2315E C4	120g	60g
NJ2318E C4	180g	90g
NJ2320E C4	260g	130g
NJ2322E C4	300g	150g
NJ2324E C4	360g	108g
NJ2326E C4	440g	220g

○ INSPECTION

- This product is operated under harsh conditions for the motor. Be sure to perform the following inspection in order to minimize troubles during operation.

 **After starting operation, you need to check tightening bolts and nuts and retighten them once a week. If any loose is not found then, subsequent retightening may be needed monthly.**

Inspection cycle	Inspection point/item	Inspection procedure and evaluation criteria
Daily	Current for load	Rated current is not exceeded
	Bearing sound / Operation sound	There is no metallic clank nor abnormal noncontiguous sound.
Monthly	Installed condition	Looseness of bolts and nuts (Tighten them with specified torque)
	Cable damage	Visual inspection of abrasion and breaking
Annual	Insulated resistance	Measure with a megger. DC500V/10MΩ at minimum

○ TROUBLESHOOTING

Phenomenon	Cause	Solution
Motor does not start	Single phase operation	Check the connection inside the terminal
	Disconnection of connecting part	Replace the stator or cable
	Difference in wiring	Check the connection inside the terminal
Protective device is activated	Wrong setting in protective device	Set to the rated current
	Long start-up period	Improve installation environment (0 to 40°C)
	Difference in wiring	Check the connection inside the terminal
	Poor installation	Tighten bolts. Resolve deformation of installation surface
	Overload	Reduce load or adjusting centrifugal force
	Bearing failure	Replace the bearing
	Distortion of installation surface	Correct distortion
	Improper fitting	Replace the bearings or bearing cases
Abnormal heat of main unit	Damage or lack of lubrication	Replace the bearing
	Too high ambient temperature	Improve installation environment (0 to 40°C)
Weak vibration	Unbalance of left and right weights	Balance the angles (bilateral symmetry)
	Difference in wiring	Check the connection inside the terminal

○ SPECIFICATION

■ 4-pole motors

Model	Output (W)	Voltage / Frequency								Maximum centrifugal force (kN)		Mass (kg)
		200V	200V	220V	380V	400V	415V	400V	440V			
		50Hz	60Hz		50Hz			60Hz				
		Rated current (A) Vibration frequency (Hz)								50Hz	60Hz	
EVSI 15-80	35	0.42 20.8	0.40 27.2	0.36 27.8	0.27 21.7	0.27 22.4	0.27 22.7	0.22 28.1	0.24 28.5	0.76	0.70	6.6

Model	Output (W)	Voltage / Frequency								Maximum centrifugal force (kN)	Mass (kg)
		200V	200V	220V	380V	400V	415V	400V	440V		
		50Hz	60Hz		50Hz			60Hz			
		Rated current (A) Vibration frequency (Hz)									
EVSI 15-200	90	0.93 22.3	0.80 26.9	0.82 27.6	0.55 22.8	0.57 23.2	0.59 23.2	0.48 28.0	0.51 28.4	2.09	12.1
EVSI 15-400	220	1.25 22.7	1.26 27.0	1.18 27.3	0.74 23.1	0.75 23.4	0.76 23.4	0.67 27.9	0.67 28.4	4.04	19.5
EVSI 15-550	220	1.54 21.4	1.42 26.0	1.30 27.0	0.87 22.3	0.86 22.6	0.87 23.0	0.68 28.0	0.69 28.4	5.42	21.2
EVSI 15-700A	380	1.93 22.4	2.30 25.4	2.18 26.5	1.13 22.9	1.13 23.2	1.12 23.3	1.09 27.0	1.12 27.9	7.06	26.7
EVSI 15-900B	380	2.68 20.2	2.37 24.8	2.18 26.1	1.33 21.8	1.33 22.0	1.31 22.4	1.23 26.6	1.16 27.5	8.83	29.5
EVSI 15-1100A	400	2.37 22.7	2.09 27.7	1.84 28.4	1.32 23.2	1.26 23.5	1.25 23.5	1.00 28.6	0.95 29.0	10.3	33.5
EVSI 15-1410	740	3.50 22.1	2.76 27.5	2.51 28.0	1.75 22.8	1.65 22.9	1.65 23.0	1.39 28.1	1.37 28.3	13.9	42.0
EVUR 15-1410	740	2.90 22.5	2.89 26.9	2.51 27.9	1.68 22.8	1.58 23.2	1.54 23.2	1.39 27.9	1.37 28.3	13.9	53.0
EVSI 15-1710	830	4.08 23.1	4.65 27.3	4.30 27.9	2.38 23.6	2.35 23.8	2.36 23.8	2.27 28.1	2.20 28.7	17.6	48.0
EVUR 15-1710	830	4.80 23.2	4.65 27.7	4.30 28.2	2.80 23.5	2.48 23.7	2.45 23.7	2.27 28.3	2.20 28.8	17.6	57.0
EVUR 15-2410	1340	7.86 23.2	7.10 28.1	6.70 28.3	4.40 23.5	4.35 23.6	4.38 23.7	3.92 28.3	3.75 28.7	23.7	81.0
EVUR 15-3810	1780	10.6 23.9	9.70 28.8	8.85 29.1	6.05 24.1	5.95 24.2	6.00 24.2	4.76 29.2	4.70 29.4	37.7	119
EVUR 15-5010	2950	12.0 25.0	11.5 30.0	10.5 30.0	6.32 25.0	6.00 25.0	5.78 25.0	5.80 30.0	5.27 30.0	49.1	161
EVUR 15-7000	4980	23.2 23.9	21.2 28.7	19.1 28.7	11.8 24.2	11.3 24.4	11.2 24.4	12.1 29.2	10.2 29.2	64.1	208
EVSI 15-9500	6000	24.4 25.0	24.1 30.0	21.9 30.0	12.8 25.0	12.2 25.0	11.8 25.0	12.1 30.0	11.0 30.0	82.6	317
EVSI 15-11500	8600	—	—	—	18.4 25.0	17.5 25.0	16.9 25.0	16.7 30.0	15.1 30.0	112	433

NOTE: The product more than 750 W output does not include cable mass.

■ 6-pole motors

Model	Output (W)	Voltage / Frequency								Maximum Centrifugal Force (kN)	Mass (kg)
		200V	200V	220V	380V	400V	415V	400V	440V		
		50Hz	60Hz		50Hz			60Hz			
		Rated current (A) Vibration frequency (Hz)									
EVSI 10-310A	220	1.50 15.5	1.37 18.7	1.36 18.9	0.95 15.8	1.00 15.9	1.02 16.0	0.81 19.1	0.88 19.3	3.15	26.2
EVSI 10-550A	240	1.62 14.5	1.42 18.4	1.29 18.8	0.89 15.1	0.85 15.5	0.89 15.4	0.71 18.9	0.71 19.1	5.02	33.6
EVSI 10-1110	550	3.65 14.8	3.89 17.6	3.75 18.0	2.45 14.7	2.52 14.8	2.62 14.9	2.10 18.2	2.06 18.4	11.1	56.0
EVUR 10-1110	550	4.30 14.3	3.60 18.0	3.40 18.4	2.25 14.9	2.28 15.2	2.28 15.3	1.95 18.4	1.95 18.8	11.1	64.0
EVUR 10-1400A	650	4.90 13.6	4.50 16.9	4.20 17.7	2.80 14.4	2.75 14.7	2.70 15.0	2.50 18.0	2.20 18.5	14.0	77.2
EVUR 10-1610	830	5.02 15.4	4.20 18.8	4.15 18.9	2.84 15.7	2.84 15.8	2.85 15.9	2.50 18.9	2.50 19.3	16.1	93.0
EVUR 10-2610	1590	8.70 16.0	7.75 19.3	7.05 19.4	5.14 16.0	5.02 16.2	5.12 16.2	4.03 19.4	4.20 19.3	25.5	130
EVUR 10-3810	1930	13.7 15.7	10.4 19.3	9.80 19.4	7.12 15.9	7.04 16.1	6.95 16.1	5.75 19.5	5.42 19.6	37.5	188
EVUR 10-4700	2600	18.8 15.5	17.0 18.6	15.0 19.1	10.3 15.7	9.80 15.9	9.30 15.9	9.50 19.0	8.30 19.4	46.1	204
EVUR 10-5200	2890	15.8 15.7	14.8 18.7	13.4 19.1	8.70 15.8	8.68 15.9	8.60 16.0	8.20 19.1	7.55 19.4	51.1	238
EVSI 10-6600	4150	23.0 16.2	17.5 19.5	17.7 19.7	13.2 16.2	12.9 16.3	13.0 16.3	9.95 19.7	10.0 19.7	66.7	285
EVSI 10-10000	6300	27.0 16.6	25.5 20.0	23.2 20.0	14.2 16.6	13.5 16.6	13.0 16.6	12.8 20.0	11.6 20.0	95.1	381
EVSI 10-11200	6300	27.0 16.6	25.5 20.0	23.2 20.0	14.2 16.6	13.5 16.6	13.0 16.6	12.8 20.0	11.6 20.0	109	405
EVSI 10-15000	9000	—	—	—	20.0 16.6	19.0 16.6	18.3 16.6	18.1 20.0	16.4 20.0	139	643
EVSI 10-17500	11000	—	—	—	25.8 16.6	24.5 16.6	23.6 16.6	23.3 20.0	21.1 20.0	170	705

NOTE: The product more than 750 W output does not include cable mass.

■ 8-pole motors

Model	Output (W)	Voltage / Frequency								Maximum Centrifugal Force (kN)	Mass (kg)
		200V	200V	220V	380V	400V	415V	400V	440V		
		50Hz	60Hz		50Hz			60Hz			
		Rated current (A)									
		Vibration frequency (Hz)									
EVUR 075-2110	1060	8.20 12.1	8.17 14.5	7.43 14.6	5.10 12.0	5.40 12.3	5.60 12.3	4.40 14.6	4.70 14.7	14.4	130
EVUR 075-3110	1460	10.8 12.0	10.3 14.5	9.37 14.5	6.00 12.1	6.20 12.1	6.30 12.2	5.18 14.6	5.30 14.6	21.1	188
EVUR 075-5300	2960	19.0 11.6	16.3 14.0	15.6 14.3	11.4 11.7	10.9 11.9	10.8 11.9	9.20 14.7	8.80 14.5	36.0	268
EVSI 075-10000	5300	26.4 12.5	25.2 15.0	22.9 15.0	13.9 12.5	13.2 12.5	12.7 12.5	12.6 15.0	11.5 15.0	76.4	438
EVSI 075-12000	5700	28.0 12.5	27.4 15.0	24.9 15.0	14.7 12.5	14.0 12.5	13.5 12.5	13.8 15.0	12.5 15.0	85.2	540
EVSI 075-14000	7640	—	—	—	22.1 12.5	21.0 11.9	20.2 12.5	16.9 14.2	18.6 14.2	111	702
EVSI 075-17000	8940	—	—	—	23.2 12.5	22.0 12.5	21.2 12.5	20.9 15.0	19.0 15.0	132	755
EVSI 075-22000	11000	—	—	—	—	26.5 12.5	25.5 12.5	25.2 15.0	22.9 15.0	177	1015
EVSI 075-30000	17000	—	—	—	—	34.0 12.5	32.8 12.5	32.4 15.0	29.4 15.0	207	1125

NOTE: The product more than 750 W output does not include cable mass.

■ 4-pole motors

units : mm

Model	E	F	G	C	H	L	N	M	P	ϕ d
EVSI 15-80	106	62 74	22	61	150	235	98	125	4	9 (Long hole)
EVSI 15-200	125	90	28	73	171	301	128	152	4	13
EVSI 15-400	140	105	30	82.5	203	344	146	167	4	13
EVSI 15-550	140	105	30	82.5	203	386	146	167	4	13
EVSI 15-700A	170	120	45	93.5	211	394	174	205	4	17
EVSI 15-900B	170	120	45	93.5	211	396	174	205	4	17
EVSI 15-1100A	170	120	42	104.5	224	435	162	205	4	17
EVSI 15-1410	190	140	45	116	244	448	190	230	4	17
EVUR 15-1410	240	140	22	116	246	448	200	300	4	26
EVSI 15-1710	190	140	45	116	244	500	190	230	4	17
EVUR 15-1710	240	140	22	116	246	500	200	300	4	26
EVUR 15-2410	260	150	22	132.5	273	537	257	325	4	26
EVUR 15-3810	310	170	28	155	329	584	240	380	4	33
EVUR 15-5010	350	220	33	166	361	630	300	430	4	38
EVUR 15-7000	350	220	33	181	371	676	300	430	4	38
EVSI 15-9500	380	125	35	215	437	862	320	460	6	39
EVSI 15-11500	440	140	38	230	454	990	370	530	6	44

■ 6-pole motors

units : mm

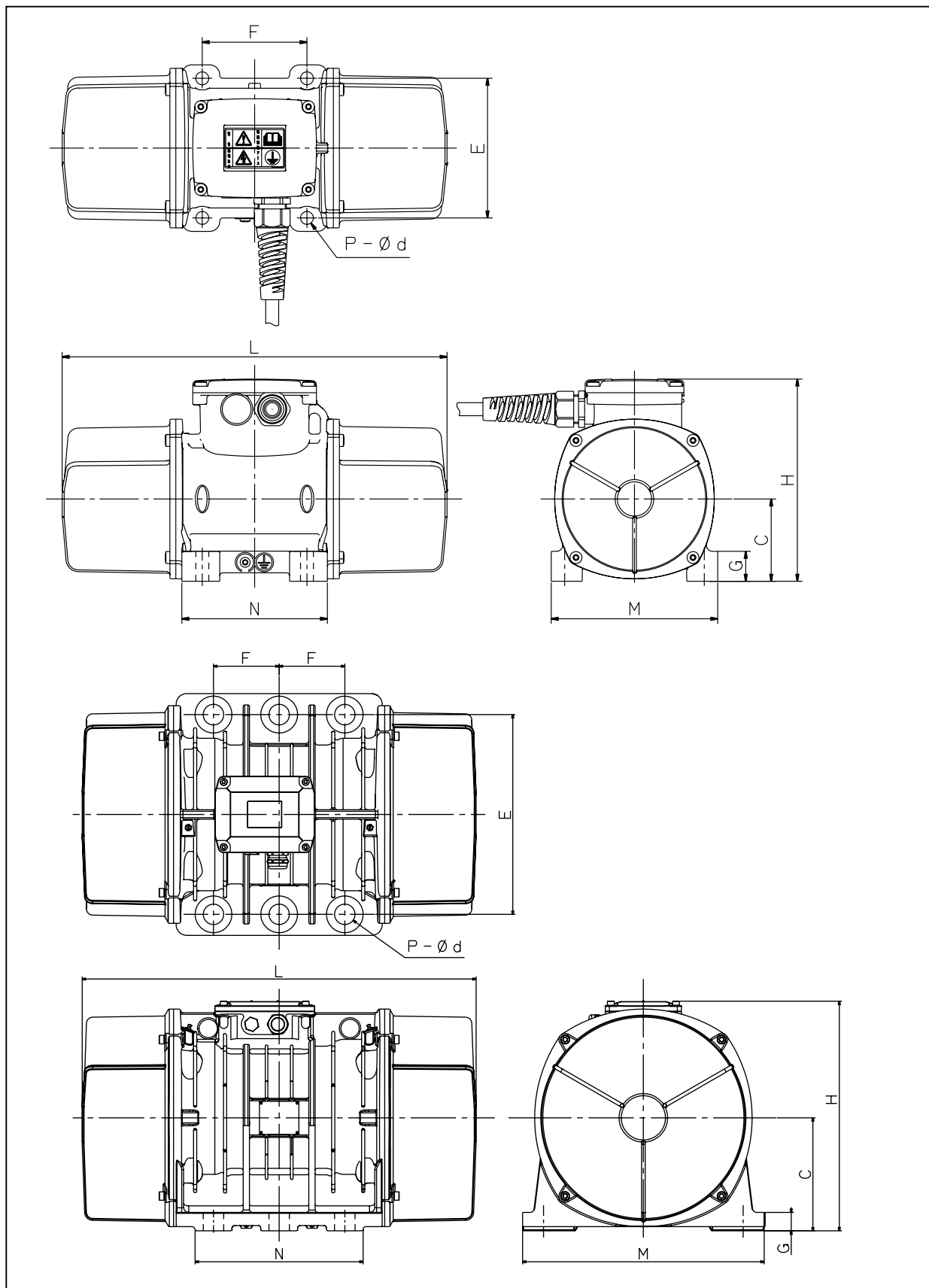
Model	E	F	G	C	H	L	N	M	P	ϕ d
EVSI 10-310A	170	120	45	93.5	211	394	174	205	4	17
EVSI 10-550A	170	120	42	104.5	224	435	162	205	4	17
EVSI 10-1110	190	140	45	116	244	574	190	230	4	17
EVUR10-1110	240	140	22	116	246	568	200	300	4	26
EVUR10-1400A	240	140	22	116	248	622	200	300	4	26
EVUR10-1610	260	150	22	132.5	273	617	257	325	4	26
EVUR10-2610	310	170	28	155	329	666	240	380	4	33
EVUR10-3810	350	220	33	166	361	734	300	430	4	38
EVUR10-4700	350	220	33	166	361	796	300	430	4	38
EVUR10-5200	350	220	33	181	371	740	300	430	4	38
EVSI 10-6600	380	125	35	215	437	750	320	460	6	39
EVSI10-10000	380	125	35	215	437	862	320	460	6	39
EVSI10-11200	380	125	35	215	437	912	320	460	6	39
EVSI10-15000	480	140	41	268	526	960	510	570	8	45
EVSI10-17500	480	140	41	268	526	1040	510	570	8	45

■ 8-pole motors

units : mm

Model	E	F	G	C	H	L	N	M	P	ϕ d
EVUR 075-2110	310	170	28	155	329	666	240	380	4	33
EVUR 075-3110	350	220	33	166	361	734	300	430	4	38
EVUR 075-5300	350	220	33	181	371	840	300	430	4	38
EVSI 075-10000	380	125	35	215	437	1002	320	460	6	39
EVSI 075-12000	440	140	38	230	454	1070	370	530	6	44
EVSI 075-14000	480	140	41	268	526	1040	510	570	8	45
EVSI 075-17000	480	140	41	268	526	1120	510	570	8	45
EVSI 075-22000	520	140	38	297	607	1150	510	610	8	45
EVSI 075-30000	600	140	45	320	648	1205	510	700	8	45

■ Dimension drawing



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