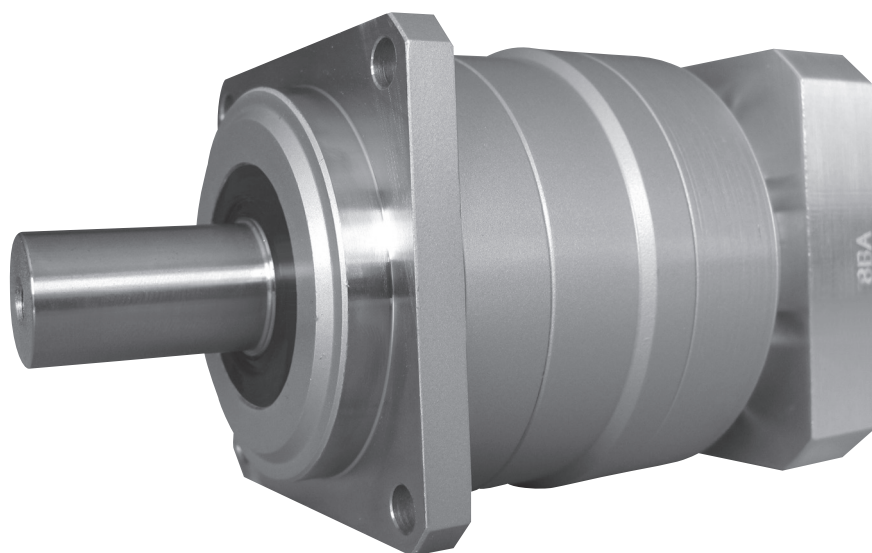


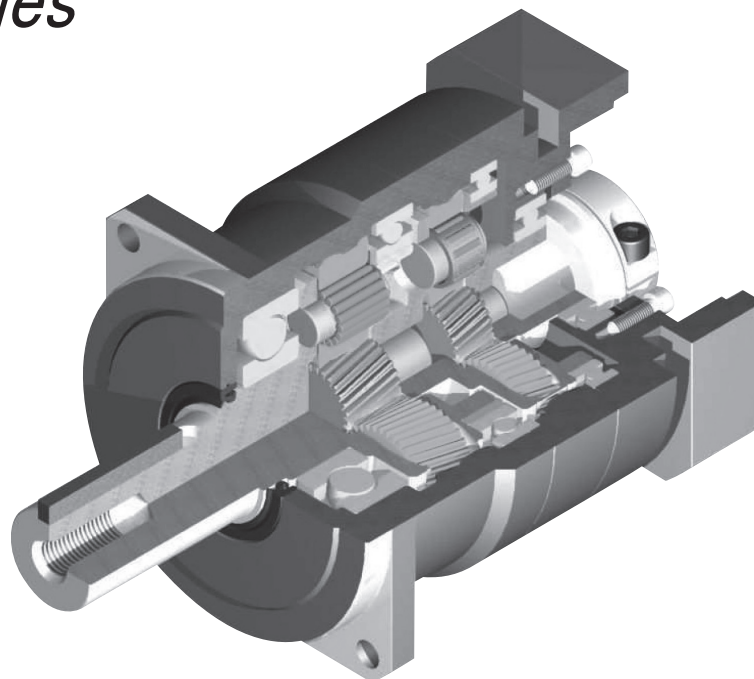
SHIMPO

For servo motor
***ABLE*REDUCER**

VRB Series



VRB series



ABLE REDUCER

VR

Quiet operation

Helical gears contribute to reduce vibration and noise.

High precision

Standard backlash is 3 arc-min, ideal for precision control.

High rigidity & torque

High rigidity & high torque were achieved by uncaged needle roller bearings.

Adapter-bushing connection

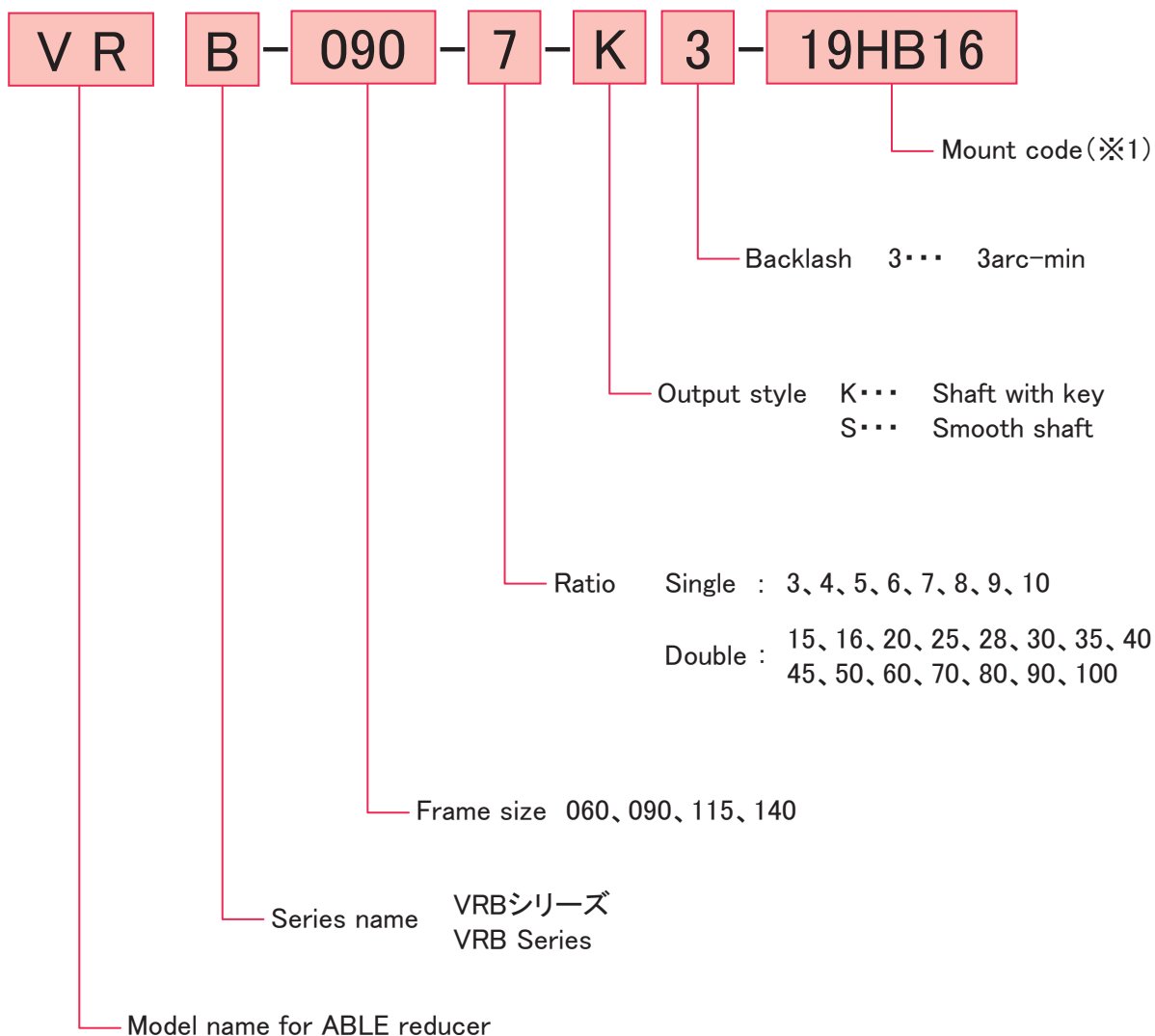
Can be attached to any motor all over the world.

No grease leakage

Perfect solution using high viscosity anti-separation grease.

Maintenance-free

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

VRB series

※1 Mount code

Mount code varies depending on the motor.

Please refer to reducer selection tool or contact us for more information.

Selection tool (English)

(<http://www.nidec-shimpo.co.jp/selection/eng/>)

VRB-060

| Frame size | Stage | Ratio | ※1 | ※2 | ※3 | ※4 | ※5 | ※6 | ※7 |
|------------|--------|-------|-------------------------------|-------------------------------|-------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------|
| | | | Nominal output torque [Nm] | Maximum output torque [Nm] | Emergency stop torque [Nm] | Nominal input speed [rpm] | Maximum input speed [rpm] | Permitted radial load [N] | Permitted axial load [N] |
| 060 | Single | 3 | 18 | 35 | 80 | 3000 | 6000 | 430 | 310 |
| | | 4 | 27 | 50 | 100 | 3000 | 6000 | 470 | 360 |
| | | 5 | 27 | 50 | 100 | 3000 | 6000 | 510 | 390 |
| | | 6 | 27 | 50 | 100 | 3000 | 6000 | 540 | 430 |
| | | 7 | 27 | 50 | 100 | 3000 | 6000 | 570 | 460 |
| | | 8 | 27 | 50 | 100 | 3000 | 6000 | 600 | 480 |
| | | 9 | 18 | 35 | 80 | 3000 | 6000 | 620 | 510 |
| | | 10 | 18 | 35 | 80 | 3000 | 6000 | 640 | 530 |
| | Double | 15 | 18 | 35 | 80 | 3000 | 6000 | 740 | 630 |
| | | 16 | 27 | 50 | 100 | 3000 | 6000 | 750 | 650 |
| | | 20 | 27 | 50 | 100 | 3000 | 6000 | 810 | 720 |
| | | 25 | 27 | 50 | 100 | 3000 | 6000 | 870 | 790 |
| | | 28 | 27 | 50 | 100 | 3000 | 6000 | 910 | 830 |
| | | 30 | 18 | 35 | 80 | 3000 | 6000 | 930 | 860 |
| | | 35 | 27 | 50 | 100 | 3000 | 6000 | 980 | 920 |
| | | 40 | 27 | 50 | 100 | 3000 | 6000 | 1000 | 970 |
| | | 45 | 18 | 35 | 80 | 3000 | 6000 | 1100 | 1000 |
| | | 50 | 27 | 50 | 100 | 3000 | 6000 | 1100 | 1100 |
| | | 60 | 27 | 50 | 100 | 3000 | 6000 | 1200 | 1100 |
| | | 70 | 27 | 50 | 100 | 3000 | 6000 | 1200 | 1100 |
| | | 80 | 27 | 50 | 100 | 3000 | 6000 | 1200 | 1100 |
| | | 90 | 18 | 35 | 80 | 3000 | 6000 | 1200 | 1100 |
| | | 100 | 18 | 35 | 80 | 3000 | 6000 | 1200 | 1100 |

| Frame size | Stage | Ratio | ※8 | ※9 | ※10 | Moment of inertia ($\leq \phi 8$) [kgcm ²] | Moment of inertia ($\leq \phi 14$) [kgcm ²] | Moment of inertia ($\leq \phi 19$) [kgcm ²] |
|------------|--------|-------|----------------------------|---------------------------|----------------|--|---|---|
| | | | Maximum radial load [N] | Maximum axial load [N] | Weight [kg] | | | |
| 060 | Single | 3 | 1200 | 1100 | 1.4 | 0.14 | 0.22 | 0.43 |
| | | 4 | 1200 | 1100 | | 0.095 | 0.17 | 0.38 |
| | | 5 | 1200 | 1100 | | 0.077 | 0.16 | 0.36 |
| | | 6 | 1200 | 1100 | | 0.068 | 0.15 | 0.36 |
| | | 7 | 1200 | 1100 | | 0.062 | 0.14 | 0.35 |
| | | 8 | 1200 | 1100 | | 0.059 | 0.14 | 0.35 |
| | | 9 | 1200 | 1100 | | 0.057 | 0.14 | 0.34 |
| | | 10 | 1200 | 1100 | | 0.056 | 0.14 | 0.34 |
| | Double | 15 | 1200 | 1100 | 1.6 | 0.055 | 0.14 | — |
| | | 16 | 1200 | 1100 | | 0.057 | 0.14 | — |
| | | 20 | 1200 | 1100 | | 0.054 | 0.13 | — |
| | | 25 | 1200 | 1100 | | 0.053 | 0.13 | — |
| | | 28 | 1200 | 1100 | | 0.055 | 0.14 | — |
| | | 30 | 1200 | 1100 | | 0.049 | 0.13 | — |
| | | 35 | 1200 | 1100 | | 0.053 | 0.13 | — |
| | | 40 | 1200 | 1100 | | 0.049 | 0.13 | — |
| | | 45 | 1200 | 1100 | | 0.053 | 0.13 | — |
| | | 50 | 1200 | 1100 | | 0.049 | 0.13 | — |
| | | 60 | 1200 | 1100 | | 0.049 | 0.13 | — |
| | | 70 | 1200 | 1100 | | 0.049 | 0.13 | — |
| | | 80 | 1200 | 1100 | | 0.049 | 0.13 | — |
| | | 90 | 1200 | 1100 | | 0.049 | 0.13 | — |
| | | 100 | 1200 | 1100 | | 0.049 | 0.13 | — |

- ※ 1 With nominal input speed, service life is 20,000 hours.
 ※ 2 The maximum torque when starting and stopping.
 ※ 3 The maximum torque when it receives shock (up to 1,000 times)
 ※ 4 The maximum average input speed.
 ※ 5 The maximum momentary input speed.
 ※ 6 With this load and nominal input speed, service life will be 20,000 hours.
 (Applied to the output shaft center, at axial load 0)
 ※ 7 With this load and nominal input speed, service life will be 20,000 hours.
 (Applied to the output side bearing, at radial load 0)
 ※ 8 The maximum radial load the reducer can accept.
 ※ 9 The maximum axial load the reducer can accept.
 ※ 10 The weight may vary slightly model to model.

Performance table

Coaxial shaft

VR series

VRB-090

| Frame size | Stage | Ratio | ※1 | ※2 | ※3 | ※4 | ※5 | ※6 | ※7 |
|------------|--------|-------|-------------------------------|-------------------------------|-------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------|
| | | | Nominal output torque [Nm] | Maximum output torque [Nm] | Emergency stop torque [Nm] | Nominal input speed [rpm] | Maximum input speed [rpm] | Permitted radial load [N] | Permitted axial load [N] |
| 090 | Single | 3 | 50 | 80 | 200 | 3000 | 6000 | 810 | 930 |
| | | 4 | 75 | 125 | 250 | 3000 | 6000 | 890 | 1100 |
| | | 5 | 75 | 125 | 250 | 3000 | 6000 | 960 | 1200 |
| | | 6 | 75 | 125 | 250 | 3000 | 6000 | 1000 | 1300 |
| | | 7 | 75 | 125 | 250 | 3000 | 6000 | 1100 | 1300 |
| | | 8 | 75 | 125 | 250 | 3000 | 6000 | 1100 | 1400 |
| | | 9 | 50 | 80 | 200 | 3000 | 6000 | 1200 | 1500 |
| | | 10 | 50 | 80 | 200 | 3000 | 6000 | 1200 | 1600 |
| | Double | 15 | 50 | 80 | 200 | 3000 | 6000 | 1400 | 1900 |
| | | 16 | 75 | 125 | 250 | 3000 | 6000 | 1400 | 1900 |
| | | 20 | 75 | 125 | 250 | 3000 | 6000 | 1500 | 2100 |
| | | 25 | 75 | 125 | 250 | 3000 | 6000 | 1600 | 2200 |
| | | 28 | 75 | 125 | 250 | 3000 | 6000 | 1700 | 2200 |
| | | 30 | 50 | 80 | 200 | 3000 | 6000 | 1700 | 2200 |
| | | 35 | 75 | 125 | 250 | 3000 | 6000 | 1800 | 2200 |
| | | 40 | 75 | 125 | 250 | 3000 | 6000 | 1900 | 2200 |
| | | 45 | 50 | 80 | 200 | 3000 | 6000 | 2000 | 2200 |
| | | 50 | 75 | 125 | 250 | 3000 | 6000 | 2100 | 2200 |
| | | 60 | 75 | 125 | 250 | 3000 | 6000 | 2200 | 2200 |
| | | 70 | 75 | 125 | 250 | 3000 | 6000 | 2300 | 2200 |
| | | 80 | 75 | 125 | 250 | 3000 | 6000 | 2400 | 2200 |
| | | 90 | 50 | 80 | 200 | 3000 | 6000 | 2400 | 2200 |
| | | 100 | 50 | 80 | 200 | 3000 | 6000 | 2400 | 2200 |

| Frame size | Stage | Ratio | ※8 | ※9 | ※10 | Moment of inertia ($\leq \phi 8$) [kgcm ²] | Moment of inertia ($\leq \phi 14$) [kgcm ²] | Moment of inertia ($\leq \phi 19$) [kgcm ²] | Moment of inertia ($\leq \phi 28$) [kgcm ²] |
|------------|--------|-------|----------------------------|---------------------------|----------------|--|---|---|---|
| | | | Maximum radial load [N] | Maximum axial load [N] | Weight [kg] | | | | |
| 090 | Single | 3 | 2400 | 2200 | 3.7 | — | 0.72 | 1.2 | 3.2 |
| | | 4 | 2400 | 2200 | | — | 0.49 | 0.95 | 3.0 |
| | | 5 | 2400 | 2200 | | — | 0.40 | 0.86 | 2.9 |
| | | 6 | 2400 | 2200 | | — | 0.36 | 0.82 | 2.8 |
| | | 7 | 2400 | 2200 | | — | 0.32 | 0.79 | 2.8 |
| | | 8 | 2400 | 2200 | | — | 0.31 | 0.77 | 2.8 |
| | | 9 | 2400 | 2200 | | — | 0.29 | 0.76 | 2.8 |
| | | 10 | 2400 | 2200 | | — | 0.29 | 0.75 | 2.8 |
| | Double | 15 | 2400 | 2200 | 4.2 | 0.13 | 0.28 | 0.72 | — |
| | | 16 | 2400 | 2200 | | 0.15 | 0.30 | 0.74 | — |
| | | 20 | 2400 | 2200 | | 0.13 | 0.28 | 0.72 | — |
| | | 25 | 2400 | 2200 | | 0.12 | 0.28 | 0.71 | — |
| | | 28 | 2400 | 2200 | | 0.14 | 0.29 | 0.73 | — |
| | | 30 | 2400 | 2200 | | 0.10 | 0.25 | 0.70 | — |
| | | 35 | 2400 | 2200 | | 0.12 | 0.27 | 0.71 | — |
| | | 40 | 2400 | 2200 | | 0.099 | 0.25 | 0.70 | — |
| | | 45 | 2400 | 2200 | | 0.12 | 0.27 | 0.71 | — |
| | | 50 | 2400 | 2200 | | 0.098 | 0.25 | 0.69 | — |
| | | 60 | 2400 | 2200 | | 0.098 | 0.25 | 0.69 | — |
| | | 70 | 2400 | 2200 | | 0.097 | 0.25 | 0.69 | — |
| | | 80 | 2400 | 2200 | | 0.097 | 0.25 | 0.69 | — |
| | | 90 | 2400 | 2200 | | 0.097 | 0.25 | 0.69 | — |
| | | 100 | 2400 | 2200 | | 0.097 | 0.25 | 0.69 | — |

- ※ 1 With nominal input speed, service life is 20,000 hours.
- ※ 2 The maximum torque when starting and stopping.
- ※ 3 The maximum torque when it receives shock (up to 1,000 times)
- ※ 4 The maximum average input speed.
- ※ 5 The maximum momentary input speed.
- ※ 6 With this load and nominal input speed, service life will be 20,000 hours.
(Applied to the output shaft center, at axial load 0)
- ※ 7 With this load and nominal input speed, service life will be 20,000 hours.
(Applied to the output side bearing, at radial load 0)
- ※ 8 The maximum radial load the reducer can accept.
- ※ 9 The maximum axial load the reducer can accept.
- ※ 10 The weight may vary slightly model to model.

ABLE REDUCER

VR

VRB-115

| Frame size | Stage | Ratio | ※1 | ※2 | ※3 | ※4 | ※5 | ※6 | ※7 |
|------------|--------|-------|-------------------------------|-------------------------------|-------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------|
| | | | Nominal output torque [Nm] | Maximum output torque [Nm] | Emergency stop torque [Nm] | Nominal input speed [rpm] | Maximum input speed [rpm] | Permitted radial load [N] | Permitted axial load [N] |
| 115 | Single | 3 | 120 | 225 | 500 | 3000 | 6000 | 1300 | 1500 |
| | | 4 | 120 | 330 | 625 | 3000 | 6000 | 1500 | 1700 |
| | | 5 | 180 | 330 | 625 | 3000 | 6000 | 1600 | 1900 |
| | | 6 | 180 | 330 | 625 | 3000 | 6000 | 1700 | 2000 |
| | | 7 | 180 | 330 | 625 | 3000 | 6000 | 1800 | 2100 |
| | | 8 | 180 | 330 | 625 | 3000 | 6000 | 1900 | 2300 |
| | | 9 | 120 | 225 | 500 | 3000 | 6000 | 1900 | 2400 |
| | | 10 | 120 | 225 | 500 | 3000 | 6000 | 2000 | 2500 |
| | Double | 15 | 120 | 225 | 500 | 3000 | 6000 | 2300 | 3000 |
| | | 16 | 180 | 330 | 625 | 3000 | 6000 | 2300 | 3100 |
| | | 20 | 180 | 330 | 625 | 3000 | 6000 | 2500 | 3400 |
| | | 25 | 180 | 330 | 625 | 3000 | 6000 | 2700 | 3700 |
| | | 28 | 180 | 330 | 625 | 3000 | 6000 | 2800 | 3900 |
| | | 30 | 120 | 225 | 500 | 3000 | 6000 | 2900 | 3900 |
| | | 35 | 180 | 330 | 625 | 3000 | 6000 | 3000 | 3900 |
| | | 40 | 180 | 330 | 625 | 3000 | 6000 | 3200 | 3900 |
| | | 45 | 120 | 225 | 500 | 3000 | 6000 | 3300 | 3900 |
| | | 50 | 180 | 330 | 625 | 3000 | 6000 | 3400 | 3900 |

| Frame size | Stage | Ratio | ※8 | ※9 | ※10 | Moment of inertia ($\leq \phi 14$) [kgcm ²] | Moment of inertia ($\leq \phi 19$) [kgcm ²] | Moment of inertia ($\leq \phi 28$) [kgcm ²] | Moment of inertia ($\leq \phi 38$) [kgcm ²] |
|------------|--------|-------|----------------------------|---------------------------|----------------|---|---|---|---|
| | | | Maximum radial load [N] | Maximum axial load [N] | Weight [kg] | | | | |
| 115 | Single | 3 | 4300 | 3900 | 8 | — | 3.3 | 5.3 | 13 |
| | | 4 | 4300 | 3900 | | — | 2.0 | 4.1 | 12 |
| | | 5 | 4300 | 3900 | | — | 1.6 | 3.6 | 11 |
| | | 6 | 4300 | 3900 | | — | 1.3 | 3.3 | 11 |
| | | 7 | 4300 | 3900 | | — | 1.1 | 3.2 | 11 |
| | | 8 | 4300 | 3900 | | — | 1.0 | 3.1 | 11 |
| | | 9 | 4300 | 3900 | | — | 0.98 | 3.0 | 11 |
| | | 10 | 4300 | 3900 | | — | 0.95 | 3.0 | 11 |
| | Double | 15 | 4300 | 3900 | 8.9 | 0.43 | 0.86 | 2.8 | — |
| | | 16 | 4300 | 3900 | | 0.48 | 0.92 | 2.9 | — |
| | | 20 | 4300 | 3900 | | 0.40 | 0.83 | 2.8 | — |
| | | 25 | 4300 | 3900 | | 0.38 | 0.82 | 2.8 | — |
| | | 28 | 4300 | 3900 | | 0.44 | 0.88 | 2.8 | — |
| | | 30 | 4300 | 3900 | | 0.29 | 0.74 | 2.7 | — |
| | | 35 | 4300 | 3900 | | 0.37 | 0.81 | 2.7 | — |
| | | 40 | 4300 | 3900 | | 0.28 | 0.73 | 2.7 | — |
| | | 45 | 4300 | 3900 | | 0.37 | 0.80 | 2.7 | — |
| | | 50 | 4300 | 3900 | | 0.28 | 0.73 | 2.7 | — |

- ※ 1 With nominal input speed, service life is 20,000 hours.
 ※ 2 The maximum torque when starting and stopping.
 ※ 3 The maximum torque when it receives shock (up to 1,000 times)
 ※ 4 The maximum average input speed.
 ※ 5 The maximum momentary input speed.
 ※ 6 With this load and nominal input speed, service life will be 20,000 hours.
 (Applied to the output shaft center, at axial load 0)
 ※ 7 With this load and nominal input speed, service life will be 20,000 hours.
 (Applied to the output side bearing, at radial load 0)
 ※ 8 The maximum radial load the reducer can accept.
 ※ 9 The maximum axial load the reducer can accept.
 ※ 10 The weight may vary slightly model to model.

Performance table

Coaxial shaft

VR series

VRB-140

| Frame size | Stage | Ratio | ※1 | ※2 | ※3 | ※4 | ※5 | ※6 | ※7 |
|------------|--------|-------|-------------------------------|-------------------------------|-------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------|
| | | | Nominal output torque [Nm] | Maximum output torque [Nm] | Emergency stop torque [Nm] | Nominal input speed [rpm] | Maximum input speed [rpm] | Permitted radial load [N] | Permitted axial load [N] |
| 140 | Single | 3 | 240 | 470 | 1000 | 2000 | 4000 | 3200 | 2400 |
| | | 4 | 240 | 700 | 1250 | 2000 | 4000 | 3500 | 2700 |
| | | 5 | 360 | 700 | 1250 | 2000 | 4000 | 3800 | 3000 |
| | | 6 | 360 | 700 | 1250 | 2000 | 4000 | 4000 | 3300 |
| | | 7 | 360 | 700 | 1250 | 2000 | 4000 | 4200 | 3500 |
| | | 8 | 360 | 700 | 1250 | 2000 | 4000 | 4400 | 3700 |
| | | 9 | 240 | 470 | 1000 | 2000 | 4000 | 4600 | 3900 |
| | | 10 | 240 | 470 | 1000 | 2000 | 4000 | 4700 | 4100 |
| | Double | 15 | 240 | 470 | 1000 | 2000 | 4000 | 5400 | 4900 |
| | | 16 | 360 | 700 | 1250 | 2000 | 4000 | 5500 | 5000 |
| | | 20 | 360 | 700 | 1250 | 2000 | 4000 | 6000 | 5500 |
| | | 25 | 360 | 700 | 1250 | 2000 | 4000 | 6400 | 6100 |
| | | 28 | 360 | 700 | 1250 | 2000 | 4000 | 6700 | 6400 |
| | | 30 | 240 | 470 | 1000 | 2000 | 4000 | 6800 | 6600 |
| | | 35 | 360 | 700 | 1250 | 2000 | 4000 | 7200 | 7000 |
| | | 40 | 360 | 700 | 1250 | 2000 | 4000 | 7500 | 7500 |
| | | 45 | 240 | 470 | 1000 | 2000 | 4000 | 7800 | 7900 |
| | | 50 | 360 | 700 | 1250 | 2000 | 4000 | 8100 | 8200 |
| | | 60 | 360 | 700 | 1250 | 2000 | 4000 | 8600 | 8200 |
| | | 70 | 360 | 700 | 1250 | 2000 | 4000 | 9100 | 8200 |
| | | 80 | 360 | 700 | 1250 | 2000 | 4000 | 9100 | 8200 |
| | | 90 | 240 | 470 | 1000 | 2000 | 4000 | 9100 | 8200 |
| | | 100 | 240 | 470 | 1000 | 2000 | 4000 | 9100 | 8200 |

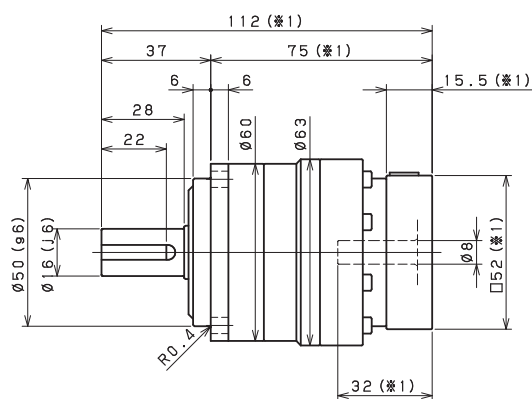
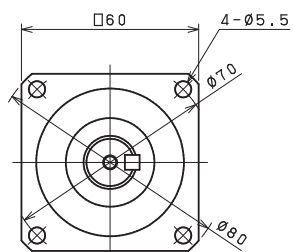
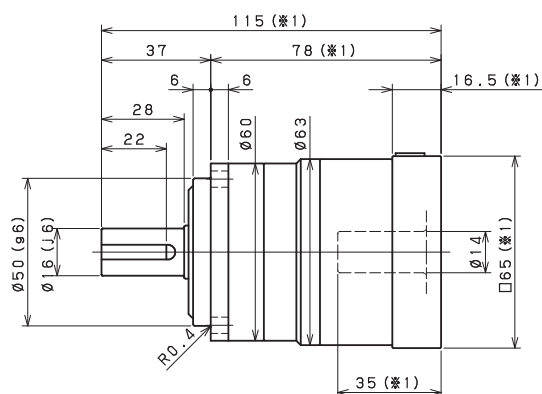
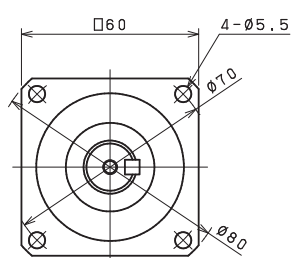
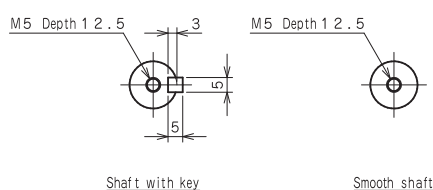
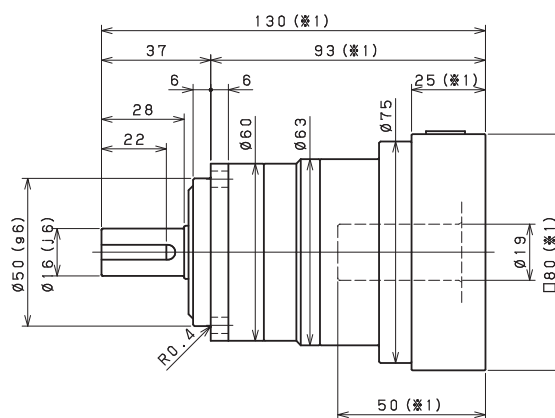
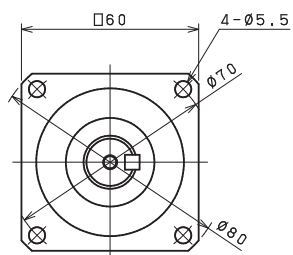
| Frame size | Stage | Ratio | ※8 | ※9 | ※10 | Moment of inertia ($\leq \phi 19$) [kgcm ²] | Moment of inertia ($\leq \phi 28$) [kgcm ²] | Moment of inertia ($\leq \phi 38$) [kgcm ²] | Moment of inertia ($\leq \phi 48$) [kgcm ²] |
|------------|--------|-------|----------------------------|---------------------------|----------------|---|---|---|---|
| | | | Maximum radial load [N] | Maximum axial load [N] | Weight [kg] | | | | |
| 140 | Single | 3 | 9100 | 8200 | 16 | — | 12 | 20 | 42 |
| | | 4 | 9100 | 8200 | | — | 7.5 | 15 | 37 |
| | | 5 | 9100 | 8200 | | — | 5.8 | 14 | 36 |
| | | 6 | 9100 | 8200 | | — | 4.9 | 13 | 35 |
| | | 7 | 9100 | 8200 | | — | 4.1 | 12 | 34 |
| | | 8 | 9100 | 8200 | | — | 3.8 | 12 | 34 |
| | | 9 | 9100 | 8200 | | — | 3.6 | 11 | 34 |
| | | 10 | 9100 | 8200 | | — | 3.5 | 11 | 34 |
| | Double | 15 | 9100 | 8200 | 17 | 1.3 | 3.2 | 11 | — |
| | | 16 | 9100 | 8200 | | 1.5 | 3.5 | 11 | — |
| | | 20 | 9100 | 8200 | | 1.2 | 3.1 | 11 | — |
| | | 25 | 9100 | 8200 | | 1.1 | 3.1 | 11 | — |
| | | 28 | 9100 | 8200 | | 1.4 | 3.3 | 11 | — |
| | | 30 | 9100 | 8200 | | 0.85 | 2.8 | 10 | — |
| | | 35 | 9100 | 8200 | | 1.1 | 3.1 | 11 | — |
| | | 40 | 9100 | 8200 | | 0.83 | 2.8 | 10 | — |
| | | 45 | 9100 | 8200 | | 1.1 | 3.0 | 11 | — |
| | | 50 | 9100 | 8200 | | 0.81 | 2.8 | 10 | — |
| | | 60 | 9100 | 8200 | | 0.81 | 2.8 | 10 | — |
| | | 70 | 9100 | 8200 | | 0.80 | 2.8 | 10 | — |
| | | 80 | 9100 | 8200 | | 0.80 | 2.8 | 10 | — |
| | | 90 | 9100 | 8200 | | 0.80 | 2.8 | 10 | — |
| | | 100 | 9100 | 8200 | | 0.80 | 2.8 | 10 | — |

- ※ 1 With nominal input speed, service life is 20,000 hours.
- ※ 2 The maximum torque when starting and stopping.
- ※ 3 The maximum torque when it receives shock (up to 1,000 times)
- ※ 4 The maximum average input speed.
- ※ 5 The maximum momentary input speed.
- ※ 6 With this load and nominal input speed, service life will be 20,000 hours.
(Applied to the output shaft center, at axial load 0)
- ※ 7 With this load and nominal input speed, service life will be 20,000 hours.
(Applied to the output side bearing, at radial load 0)
- ※ 8 The maximum radial load the reducer can accept.
- ※ 9 The maximum axial load the reducer can accept.
- ※ 10 The weight may vary slightly model to model.

ABLE REDUCER

VR

VRB-060 1stage

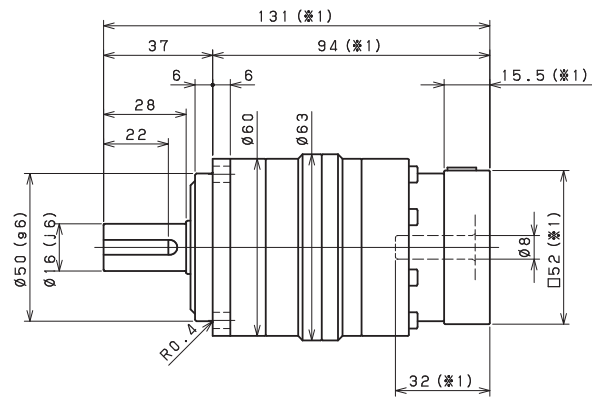
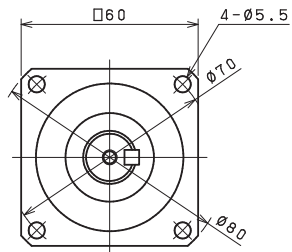
Input shaft bore $\leq \phi 8$ Input shaft bore $\leq \phi 14$ Input shaft bore $\leq \phi 19$ 

※1 Length will vary depending on motor.

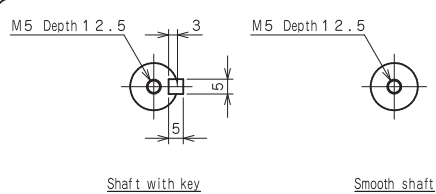
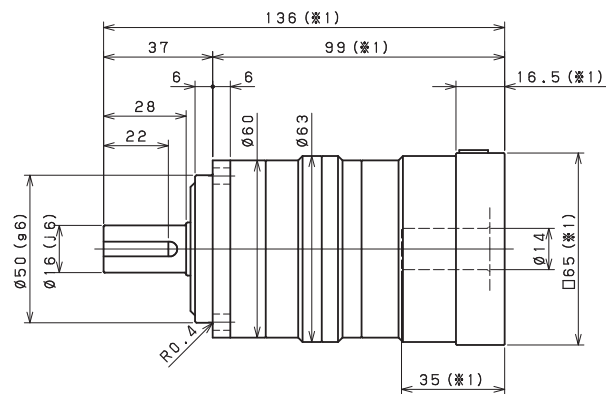
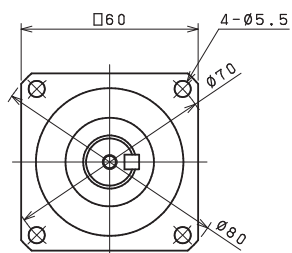
※2 Bushing will be inserted to adapt to motor shaft.

VRB-060 2stage

Input shaft bore $\leq \phi 8$



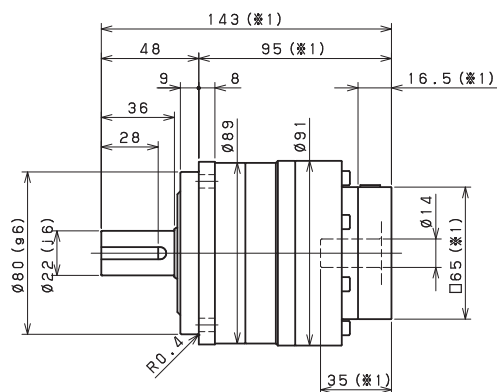
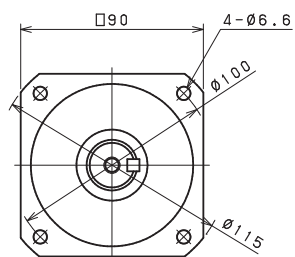
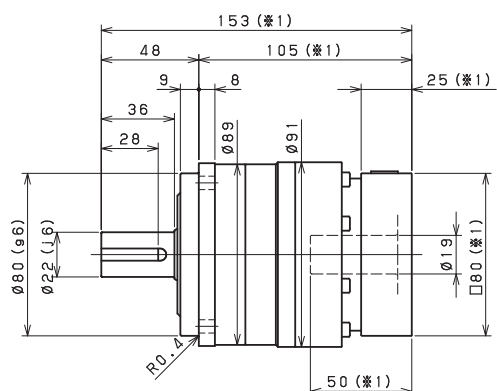
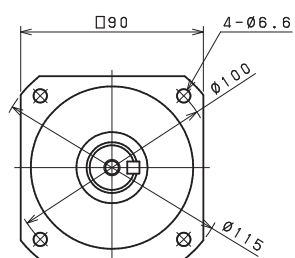
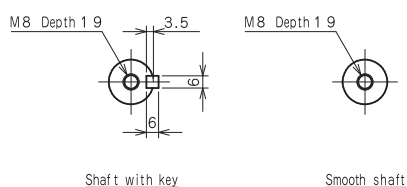
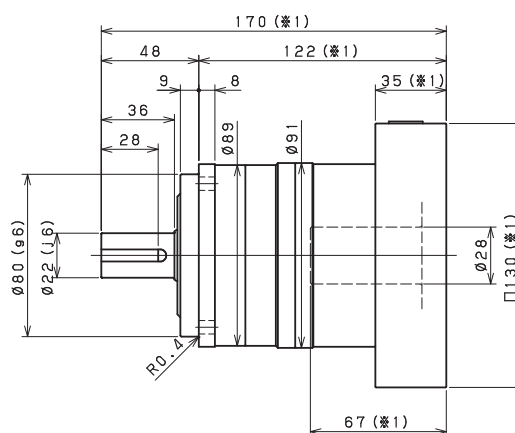
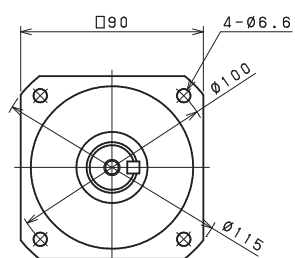
Input shaft bore $\leq \phi 14$



※ 1 Length will vary depending on motor.

※ 2 Bushing will be inserted to adapt to motor shaft.

VRB-090 1stage

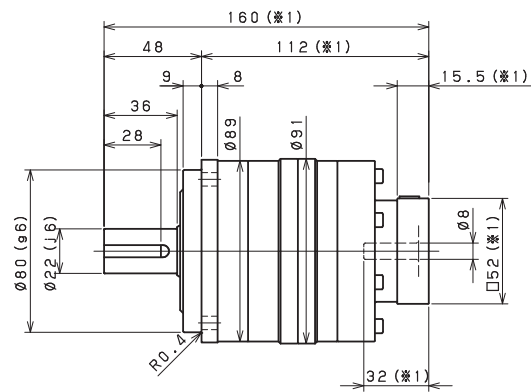
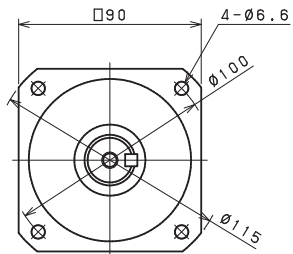
Input shaft bore $\leq \phi 14$ Input shaft bore $\leq \phi 19$ Input shaft bore $\leq \phi 28$ 

※1 Length will vary depending on motor.

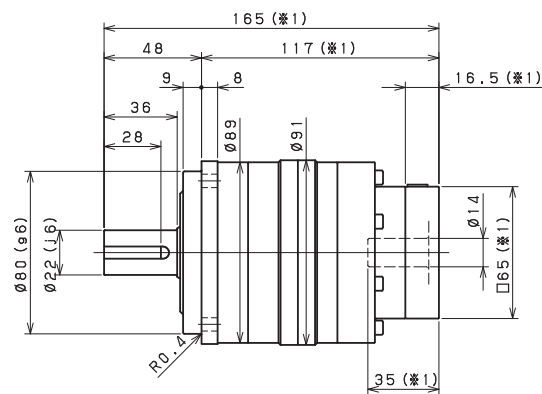
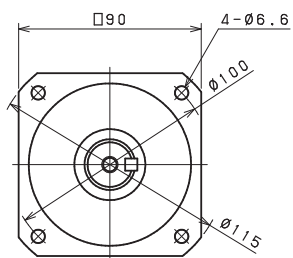
※2 Bushing will be inserted to adapt to motor shaft.

VRB-090 2stage

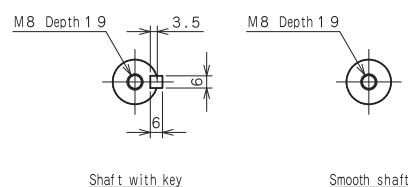
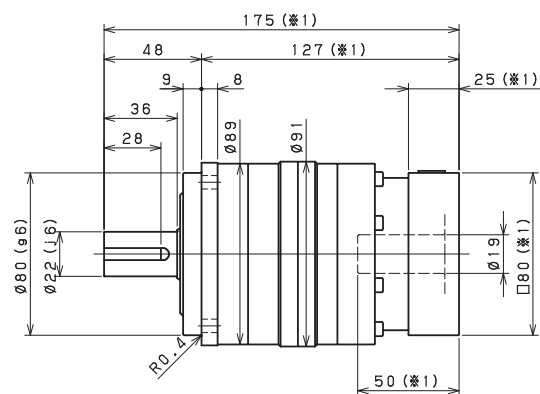
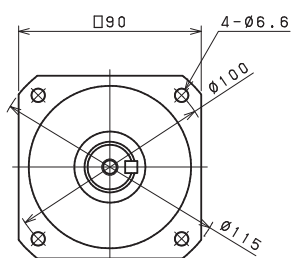
Input shaft bore $\leq \phi 8$



Input shaft bore $\leq \phi 14$



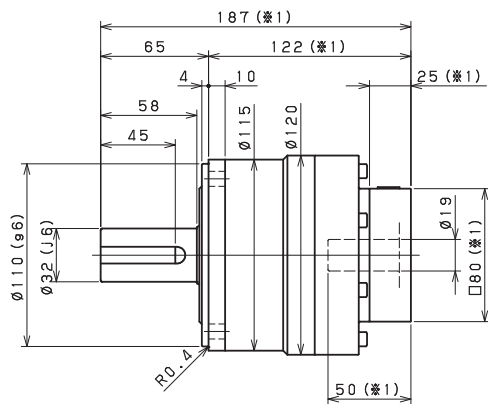
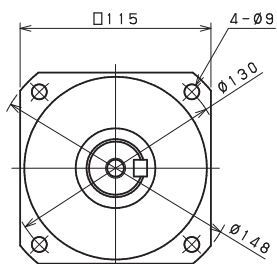
Input shaft bore $\leq \phi 19$



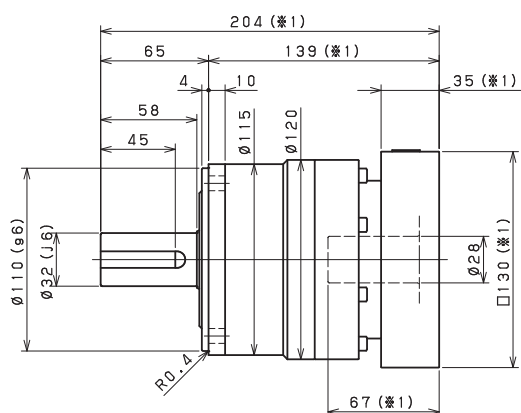
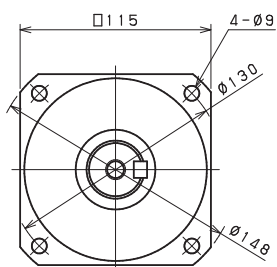
※1 Length will vary depending on motor.

※2 Bushing will be inserted to adapt to motor shaft.

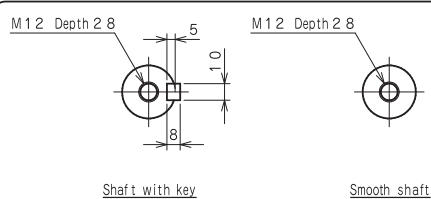
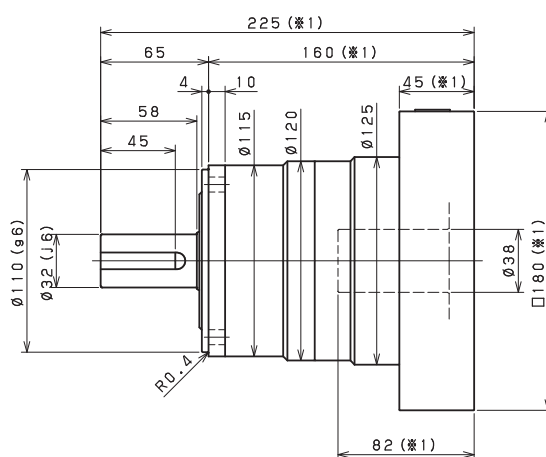
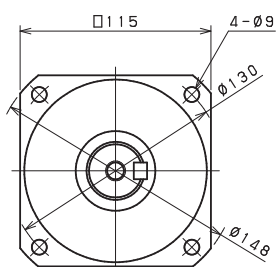
Input shaft bore $\leq \phi 19$



Input shaft bore $\leq \phi 28$



Input shaft bore $\leq \phi 38$

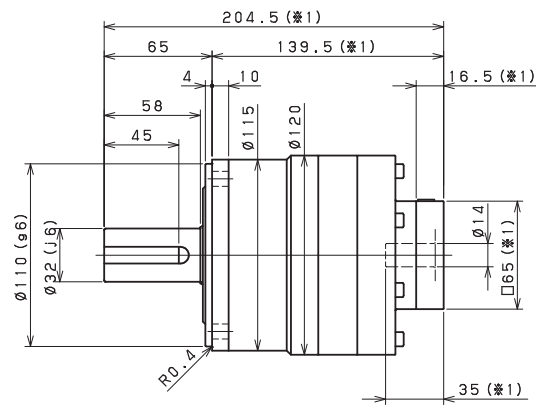
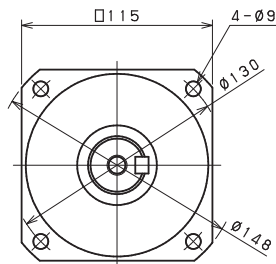


※1 Length will vary depending on motor.

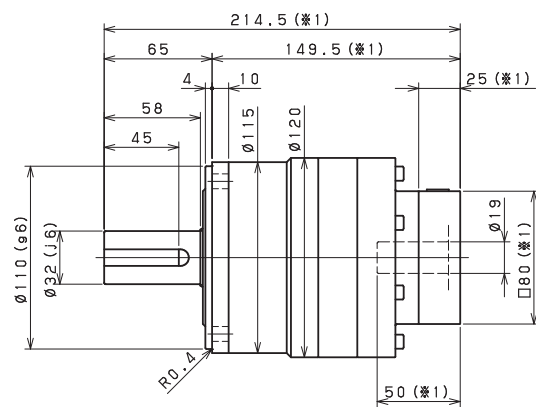
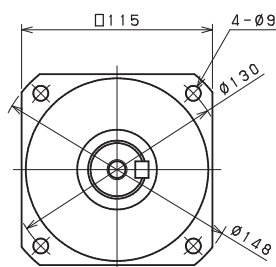
※2 Bushing will be inserted to adapt to motor shaft.

VRB-115 2stage

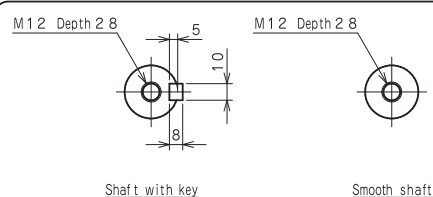
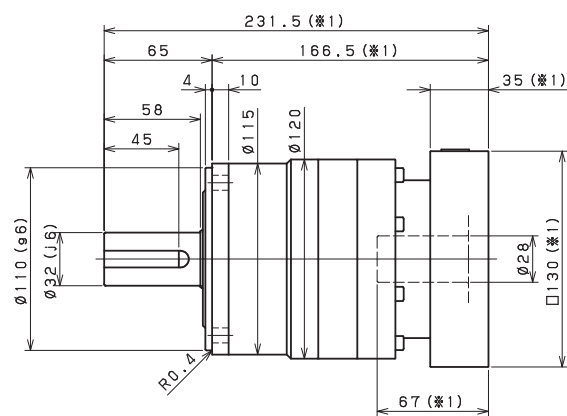
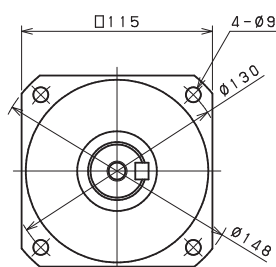
Input shaft bore $\leq \phi 14$



Input shaft bore $\leq \phi 19$



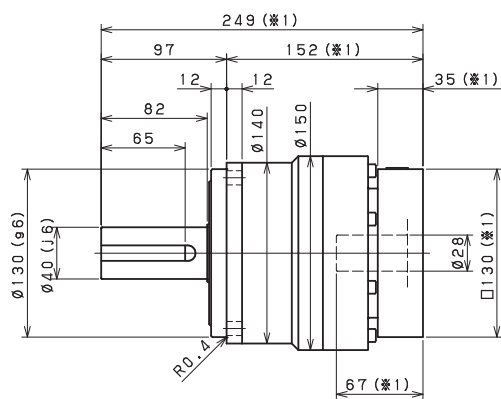
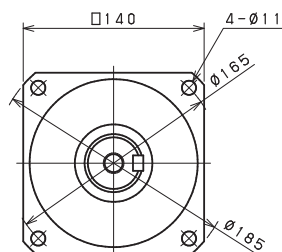
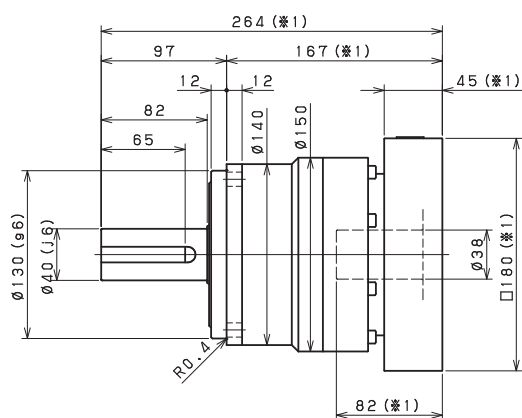
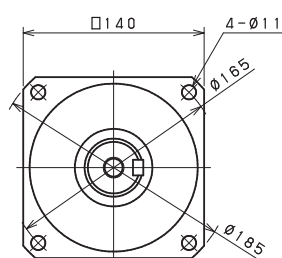
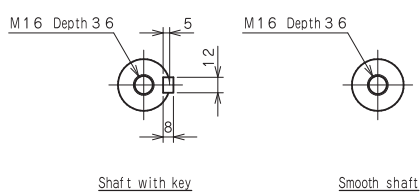
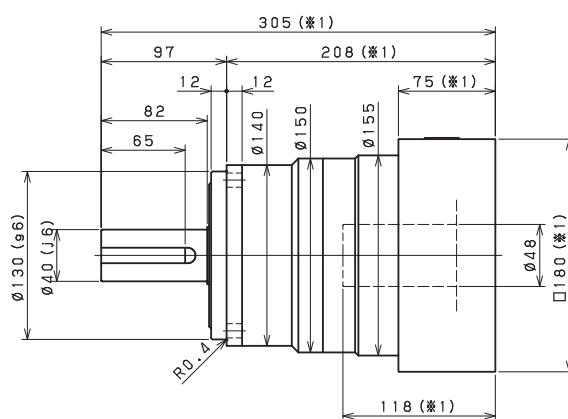
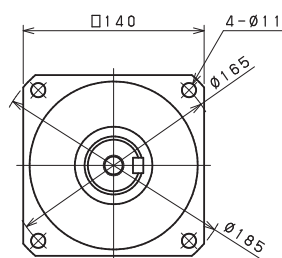
Input shaft bore $\leq \phi 28$



※1 Length will vary depending on motor.

※2 Bushing will be inserted to adapt to motor shaft.

VRB-140 1stage

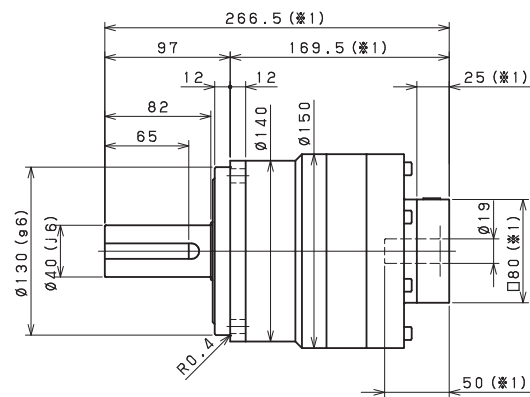
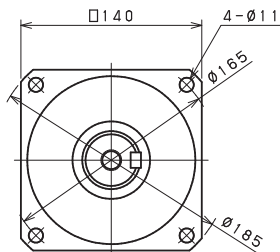
Input shaft bore $\leq \phi 28$ Input shaft bore $\leq \phi 38$ Input shaft bore $\leq \phi 48$ 

※1 Length will vary depending on motor.

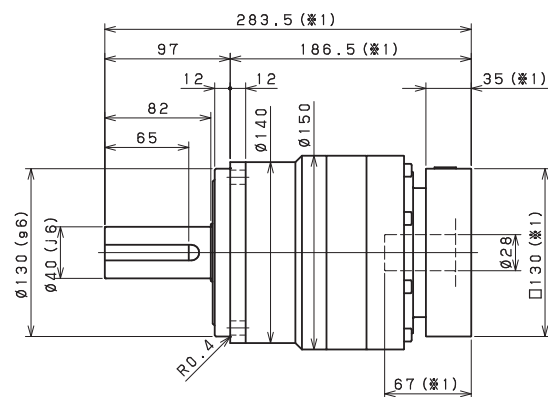
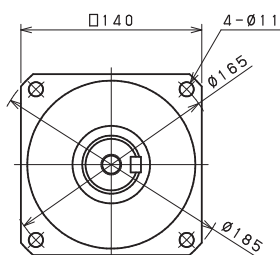
※2 Bushing will be inserted to adapt to motor shaft.

VRB-140 2stage

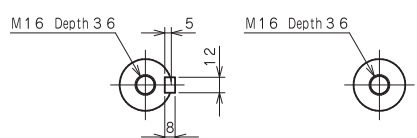
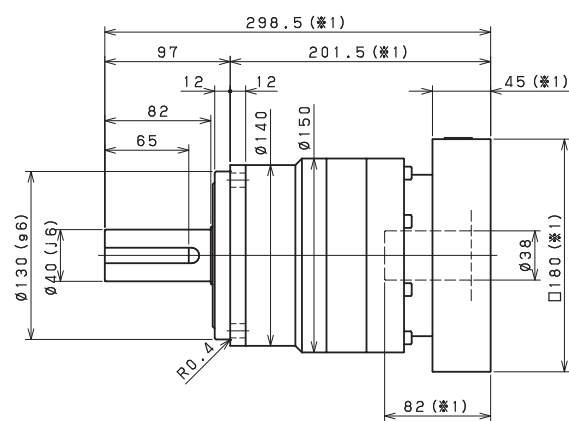
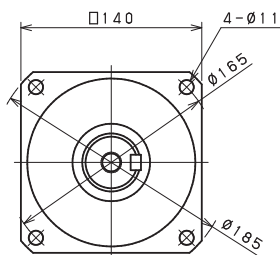
Input shaft bore $\leq \phi 19$



Input shaft bore $\leq \phi 28$



Input shaft bore $\leq \phi 38$



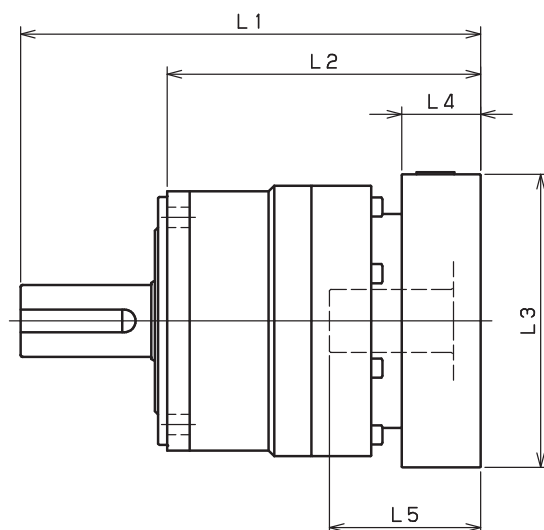
Shaft with key

Smooth shaft

※ 1 Length will vary depending on motor.

※ 2 Bushing will be inserted to adapt to motor shaft.

VRB-060

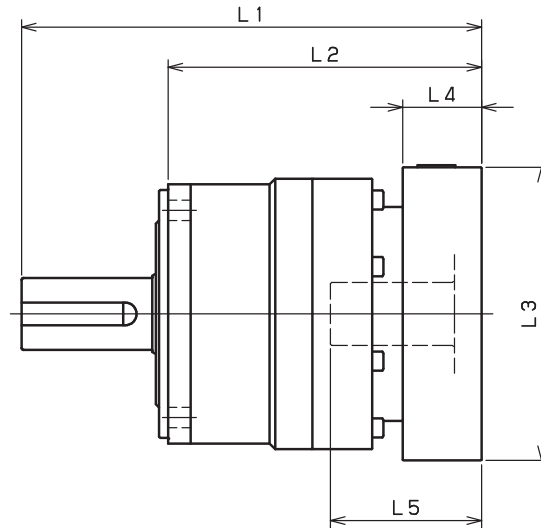


| Model number | **: Adapter code | Single | | | | | Double | | | | |
|--|-------------------------|--------|-----|------|------|----|--------|-----|------|------|----|
| | | L1 | L2 | L3 | L4 | L5 | L1 | L2 | L3 | L4 | L5 |
| VRB-060-□-□-8** (Input shaft bore $\leq \phi 8$) | AA•AC•AD•AF•AG | 112 | 75 | □52 | 15.5 | 32 | 131 | 94 | □52 | 15.5 | 32 |
| | AB•AE•AH•AJ•AK | 117 | 80 | □52 | 20.5 | 37 | 136 | 99 | □52 | 20.5 | 37 |
| | BA•BB•BD•BE | 112 | 75 | □60 | 15.5 | 32 | 131 | 94 | □60 | 15.5 | 32 |
| | BC•BF | 117 | 80 | □60 | 20.5 | 37 | 136 | 99 | □60 | 20.5 | 37 |
| | CA | 117 | 80 | □70 | 20.5 | 37 | 136 | 99 | □70 | 20.5 | 37 |
| VRB-060-□-□-14** (Input shaft bore $\leq \phi 14$) | BA•BB•BD•BE•BF•BG•BJ•BK | 115 | 78 | □65 | 16.5 | 35 | 136 | 99 | □65 | 16.5 | 35 |
| | BC•BH | 120 | 83 | □65 | 21.5 | 40 | 141 | 104 | □65 | 21.5 | 40 |
| | BL | 125 | 88 | □65 | 26.5 | 45 | 146 | 109 | □65 | 26.5 | 45 |
| | CA | 115 | 78 | □70 | 16.5 | 35 | 136 | 99 | □70 | 16.5 | 35 |
| | CB | 120 | 83 | □70 | 21.5 | 40 | 141 | 104 | □70 | 21.5 | 40 |
| | DA•DB•DC•DD•DF•DH | 115 | 78 | □80 | 16.5 | 35 | 136 | 99 | □80 | 16.5 | 35 |
| | DE | 120 | 83 | □80 | 21.5 | 40 | 141 | 104 | □80 | 21.5 | 40 |
| | DG | 125 | 88 | □80 | 26.5 | 45 | 146 | 109 | □80 | 26.5 | 45 |
| | EA•EB•EC | 115 | 78 | □90 | 16.5 | 35 | 136 | 99 | □90 | 16.5 | 35 |
| | ED | 125 | 88 | □90 | 26.5 | 45 | 146 | 109 | □90 | 26.5 | 45 |
| | FA | 115 | 78 | □100 | 16.5 | 35 | 136 | 99 | □100 | 16.5 | 35 |
| | GA | 115 | 78 | □115 | 16.5 | 35 | 136 | 99 | □115 | 16.5 | 35 |
| VRB-060-□-□-19** (Input shaft bore $\leq \phi 19$) | DA•DB•DC | 130 | 93 | □80 | 25 | 50 | | | | | |
| | DD | 140 | 103 | □80 | 35 | 60 | | | | | |
| | DE | 135 | 98 | □80 | 30 | 55 | | | | | |
| | EA | 135 | 98 | □90 | 30 | 55 | | | | | |
| | EB | 130 | 93 | □90 | 25 | 50 | | | | | |
| | EC | 140 | 103 | □90 | 35 | 60 | | | | | |
| | FA | 130 | 93 | □100 | 25 | 50 | | | | | |
| | FB | 140 | 103 | □100 | 35 | 60 | | | | | |
| | GA•GC | 135 | 98 | □115 | 30 | 55 | | | | | |
| | GB•GD | 130 | 93 | □115 | 25 | 50 | | | | | |
| | HA | 130 | 93 | □130 | 25 | 50 | | | | | |
| | HB | 145 | 108 | □130 | 40 | 65 | | | | | |
| | HC•HD•HE | 135 | 98 | □130 | 30 | 55 | | | | | |

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

※2 Bushing will be inserted to adapt to motor shaft.

VRB-090

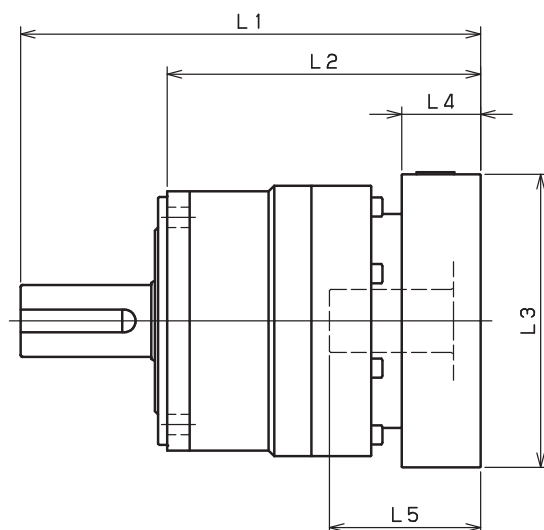


| Model number | *: Adapter code | Single | | | | | Double | | | | |
|---|-------------------------|--------|-----|------|------|----|--------|-----|------|------|----|
| | | L1 | L2 | L3 | L4 | L5 | L1 | L2 | L3 | L4 | L5 |
| VRB-090-□-□-8** (Input shaft bore ≤ φ 8) | AA·AC·AD·AF·AG | | | | | | 160 | 112 | □52 | 15.5 | 32 |
| | AB·AE·AH·AJ·AK | | | | | | 165 | 117 | □52 | 20.5 | 37 |
| | BA·BB·BD·BE | | | | | | 160 | 112 | □60 | 15.5 | 32 |
| | BC·BF | | | | | | 165 | 117 | □60 | 20.5 | 37 |
| | CA | | | | | | 165 | 117 | □70 | 20.5 | 37 |
| VRB-090-□-□-14** (Input shaft bore ≤ φ 14) | BA·BB·BD·BE·BF·BG·BJ·BK | 143 | 95 | □65 | 16.5 | 35 | 165 | 117 | □65 | 16.5 | 35 |
| | BC·BH | 148 | 100 | □65 | 21.5 | 40 | 170 | 122 | □65 | 21.5 | 40 |
| | BL | 153 | 105 | □65 | 26.5 | 45 | 175 | 127 | □65 | 26.5 | 45 |
| | CA | 143 | 95 | □70 | 16.5 | 35 | 165 | 117 | □70 | 16.5 | 35 |
| | CB | 148 | 100 | □70 | 21.5 | 40 | 170 | 122 | □70 | 21.5 | 40 |
| | DA·DB·DC·DD·DF·DH | 143 | 95 | □80 | 16.5 | 35 | 165 | 117 | □80 | 16.5 | 35 |
| | DE | 148 | 100 | □80 | 21.5 | 40 | 170 | 122 | □80 | 21.5 | 40 |
| | DG | 153 | 105 | □80 | 26.5 | 45 | 175 | 127 | □80 | 26.5 | 45 |
| | EA·EB·EC | 143 | 95 | □90 | 16.5 | 35 | 165 | 117 | □90 | 16.5 | 35 |
| | ED | 153 | 105 | □90 | 26.5 | 45 | 175 | 127 | □90 | 26.5 | 45 |
| | FA | 143 | 95 | □100 | 16.5 | 35 | 165 | 117 | □100 | 16.5 | 35 |
| | GA | 143 | 95 | □115 | 16.5 | 35 | 165 | 117 | □115 | 16.5 | 35 |
| VRB-090-□-□-19** (Input shaft bore ≤ φ 19) | DA·DB·DC | 153 | 105 | □80 | 25 | 50 | 175 | 127 | □80 | 25 | 50 |
| | DD | 163 | 115 | □80 | 35 | 60 | 185 | 137 | □80 | 35 | 60 |
| | DE | 158 | 110 | □80 | 30 | 55 | 180 | 132 | □80 | 30 | 55 |
| | EA | 158 | 110 | □90 | 30 | 55 | 180 | 132 | □90 | 30 | 55 |
| | EB | 153 | 105 | □90 | 25 | 50 | 175 | 127 | □90 | 25 | 50 |
| | EC | 163 | 115 | □90 | 35 | 60 | 185 | 137 | □90 | 35 | 60 |
| | FA | 153 | 105 | □100 | 25 | 50 | 175 | 127 | □100 | 25 | 50 |
| | FB | 163 | 115 | □100 | 35 | 60 | 185 | 137 | □100 | 35 | 60 |
| | GA·GC | 158 | 110 | □115 | 30 | 55 | 180 | 132 | □115 | 30 | 55 |
| | GB·GD | 153 | 105 | □115 | 25 | 50 | 175 | 127 | □115 | 25 | 50 |
| | HA | 153 | 105 | □130 | 25 | 50 | 175 | 127 | □130 | 25 | 50 |
| | HB | 168 | 120 | □130 | 40 | 65 | 190 | 142 | □130 | 40 | 65 |
| | HC·HD·HE | 158 | 110 | □130 | 30 | 55 | 180 | 132 | □130 | 30 | 55 |
| | FA·FB·FC | 170 | 122 | □100 | 35 | 67 | | | | | |
| VRB-090-□-□-28** (Input shaft bore ≤ φ 28) | GA·GB·GC·GD·GE·GF·GG | 170 | 122 | □115 | 35 | 67 | | | | | |
| | HA·HC·HD | 170 | 122 | □130 | 35 | 67 | | | | | |
| | HB | 180 | 132 | □130 | 45 | 77 | | | | | |
| | JA·JB·JC | 170 | 122 | □150 | 35 | 67 | | | | | |
| | KA·KB | 170 | 122 | □180 | 35 | 67 | | | | | |
| | LA | 170 | 122 | □200 | 35 | 67 | | | | | |
| | MA | 170 | 122 | □220 | 35 | 67 | | | | | |

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

※ 2 Bushing will be inserted to adapt to motor shaft.

VRB-115

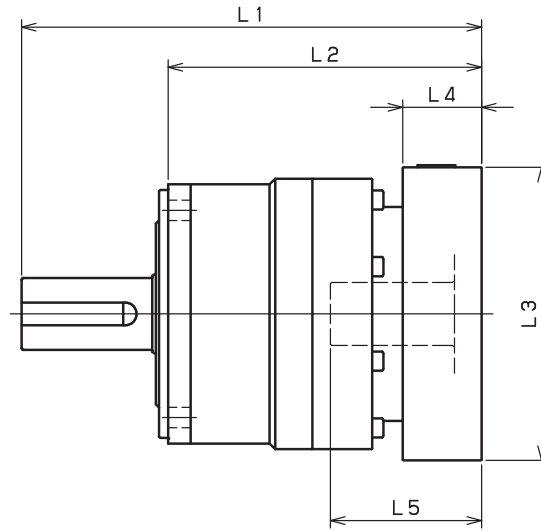


| Model number | **: Adapter code | Single | | | | | Double | | | | |
|--|-------------------------|--------|-----|------|----|----|--------|-------|------|------|----|
| | | L1 | L2 | L3 | L4 | L5 | L1 | L2 | L3 | L4 | L5 |
| VRB-115-□-□-14** (Input shaft bore ≤ φ14) | BA•BB•BD•BE•BF•BG•BJ•BK | | | | | | 204.5 | 139.5 | □65 | 16.5 | 35 |
| | BC•BH | | | | | | 209.5 | 144.5 | □65 | 21.5 | 40 |
| | BL | | | | | | 214.5 | 149.5 | □65 | 26.5 | 45 |
| | CA | | | | | | 204.5 | 139.5 | □70 | 16.5 | 35 |
| | CB | | | | | | 209.5 | 144.5 | □70 | 21.5 | 40 |
| | DA•DB•DC•DD•DF•DH | | | | | | 204.5 | 139.5 | □80 | 16.5 | 35 |
| | DE | | | | | | 209.5 | 144.5 | □80 | 21.5 | 40 |
| | DG | | | | | | 214.5 | 149.5 | □80 | 26.5 | 45 |
| | EA•EB•EC | | | | | | 204.5 | 139.5 | □90 | 16.5 | 35 |
| | ED | | | | | | 214.5 | 149.5 | □90 | 26.5 | 45 |
| | FA | | | | | | 204.5 | 139.5 | □100 | 16.5 | 35 |
| | GA | | | | | | 204.5 | 139.5 | □115 | 16.5 | 35 |
| VRB-115-□-□-19** (Input shaft bore ≤ φ19) | DA•DB•DC | 187 | 122 | □80 | 25 | 50 | 214.5 | 149.5 | □80 | 25 | 50 |
| | DD | 197 | 132 | □80 | 35 | 60 | 224.5 | 159.5 | □80 | 35 | 60 |
| | DE | 192 | 127 | □80 | 30 | 55 | 219.5 | 154.5 | □80 | 30 | 55 |
| | EA | 192 | 127 | □90 | 30 | 55 | 219.5 | 154.5 | □90 | 30 | 55 |
| | EB | 187 | 122 | □90 | 25 | 50 | 214.5 | 149.5 | □90 | 25 | 50 |
| | EC | 197 | 132 | □90 | 35 | 60 | 224.5 | 159.5 | □90 | 35 | 60 |
| | FA | 187 | 122 | □100 | 25 | 50 | 214.5 | 149.5 | □100 | 25 | 50 |
| | FB | 197 | 132 | □100 | 35 | 60 | 224.5 | 159.5 | □100 | 35 | 60 |
| | GA•GC | 192 | 127 | □115 | 30 | 55 | 219.5 | 154.5 | □115 | 30 | 55 |
| | GB•GD | 187 | 122 | □115 | 25 | 50 | 214.5 | 149.5 | □115 | 25 | 50 |
| | HA | 187 | 122 | □130 | 25 | 50 | 214.5 | 149.5 | □130 | 25 | 50 |
| | HB | 202 | 137 | □130 | 40 | 65 | 229.5 | 164.5 | □130 | 40 | 65 |
| VRB-115-□-□-28** (Input shaft bore ≤ φ28) | HC•HD•HE | 192 | 127 | □130 | 30 | 55 | 219.5 | 154.5 | □130 | 30 | 55 |
| | FA•FB•FC | 204 | 139 | □100 | 35 | 67 | 231.5 | 166.5 | □100 | 35 | 67 |
| | GA•GB•GC•GD•GE•GF•GG | 204 | 139 | □115 | 35 | 67 | 231.5 | 166.5 | □115 | 35 | 67 |
| | HA•HC•HD | 204 | 139 | □130 | 35 | 67 | 231.5 | 166.5 | □130 | 35 | 67 |
| | HB | 214 | 149 | □130 | 45 | 77 | 241.5 | 176.5 | □130 | 45 | 77 |
| | JA•JB•JC | 204 | 139 | □150 | 35 | 67 | 231.5 | 166.5 | □150 | 35 | 67 |
| | KA•KB | 204 | 139 | □180 | 35 | 67 | 231.5 | 166.5 | □180 | 35 | 67 |
| | LA | 204 | 139 | □200 | 35 | 67 | 231.5 | 166.5 | □200 | 35 | 67 |
| VRB-115-□-□-38** (Input shaft bore ≤ φ38) | MA | 204 | 139 | □220 | 35 | 67 | 231.5 | 166.5 | □220 | 35 | 67 |
| | HA | 225 | 160 | □130 | 45 | 82 | | | | | |
| | HB | 220 | 155 | □130 | 40 | 77 | | | | | |
| | JA | 225 | 160 | □150 | 45 | 82 | | | | | |
| | KA•KB•KC | 225 | 160 | □180 | 45 | 82 | | | | | |
| | LA | 225 | 160 | □200 | 45 | 82 | | | | | |
| | LB | 235 | 170 | □200 | 55 | 92 | | | | | |
| | MA•MB | 225 | 160 | □220 | 45 | 82 | | | | | |
| | NA | 225 | 160 | □250 | 45 | 82 | | | | | |

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

※2 Bushing will be inserted to adapt to motor shaft.

VRB-140



| Model number | **: Adapter code | Single | | | | | Double | | | | |
|---|----------------------|--------|-----|------|----|-----|--------|-------|------|----|----|
| | | L1 | L2 | L3 | L4 | L5 | L1 | L2 | L3 | L4 | L5 |
| VRB-140-□-□-19** (Input shaft bore ≤ φ 19) | DA•DB•DC | | | | | | 266.5 | 169.5 | □80 | 25 | 50 |
| | DD | | | | | | 276.5 | 179.5 | □80 | 35 | 60 |
| | DE | | | | | | 271.5 | 174.5 | □80 | 30 | 55 |
| | EA | | | | | | 271.5 | 174.5 | □90 | 30 | 55 |
| | EB | | | | | | 266.5 | 169.5 | □90 | 25 | 50 |
| | EC | | | | | | 276.5 | 179.5 | □90 | 35 | 60 |
| | FA | | | | | | 266.5 | 169.5 | □100 | 25 | 50 |
| | FB | | | | | | 276.5 | 179.5 | □100 | 35 | 60 |
| | GA•GC | | | | | | 271.5 | 174.5 | □115 | 30 | 55 |
| | GB•GD | | | | | | 266.5 | 169.5 | □115 | 25 | 50 |
| | HA | | | | | | 266.5 | 169.5 | □130 | 25 | 50 |
| | HB | | | | | | 281.5 | 184.5 | □130 | 40 | 65 |
| | HC•HD•HE | | | | | | 271.5 | 174.5 | □130 | 30 | 55 |
| VRB-140-□-□-28** (Input shaft bore ≤ φ 28) | FA•FB•FC | 249 | 152 | □100 | 35 | 67 | 283.5 | 186.5 | □100 | 35 | 67 |
| | GA•GB•GC•GD•GE•GF•GG | 249 | 152 | □115 | 35 | 67 | 283.5 | 186.5 | □115 | 35 | 67 |
| | HA•HC•HD | 249 | 152 | □130 | 35 | 67 | 283.5 | 186.5 | □130 | 35 | 67 |
| | HB | 259 | 162 | □130 | 45 | 77 | 293.5 | 196.5 | □130 | 45 | 77 |
| | JA•JB•JC | 249 | 152 | □150 | 35 | 67 | 283.5 | 186.5 | □150 | 35 | 67 |
| | KA•KB | 249 | 152 | □180 | 35 | 67 | 283.5 | 186.5 | □180 | 35 | 67 |
| | LA | 249 | 152 | □200 | 35 | 67 | 283.5 | 186.5 | □200 | 35 | 67 |
| VRB-140-□-□-38** (Input shaft bore ≤ φ 38) | MA | 249 | 152 | □220 | 35 | 67 | 283.5 | 186.5 | □220 | 35 | 67 |
| | HA | 264 | 167 | □130 | 45 | 82 | 298.5 | 201.5 | □130 | 45 | 82 |
| | HB | 259 | 162 | □130 | 40 | 77 | 293.5 | 196.5 | □130 | 40 | 77 |
| | JA | 264 | 167 | □150 | 45 | 82 | 298.5 | 201.5 | □150 | 45 | 82 |
| | KA•KB•KC | 264 | 167 | □180 | 45 | 82 | 298.5 | 201.5 | □180 | 45 | 82 |
| | LA | 264 | 167 | □200 | 45 | 82 | 298.5 | 201.5 | □200 | 45 | 82 |
| | LB | 274 | 177 | □200 | 55 | 92 | 308.5 | 211.5 | □200 | 55 | 92 |
| VRB-140-□-□-48** (Input shaft bore ≤ φ 48) | MA•MB | 264 | 167 | □220 | 45 | 82 | 298.5 | 201.5 | □220 | 45 | 82 |
| | NA | 264 | 167 | □250 | 45 | 82 | 298.5 | 201.5 | □250 | 45 | 82 |
| | KB•KC | 285 | 188 | □180 | 55 | 98 | | | | | |
| | KA | 305 | 208 | □180 | 75 | 118 | | | | | |
| | LA | 285 | 188 | □200 | 55 | 98 | | | | | |
| | MA | 285 | 188 | □220 | 55 | 98 | | | | | |
| | MB | 305 | 208 | □220 | 75 | 118 | | | | | |
| | NA | 305 | 208 | □250 | 75 | 118 | | | | | |
| | PA | 305 | 208 | □280 | 75 | 118 | | | | | |

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

※ 2 Bushing will be inserted to adapt to motor shaft.