

ShinMaywa

Helical Rotor Blower

(Roots Type) ARH-S/SP Series

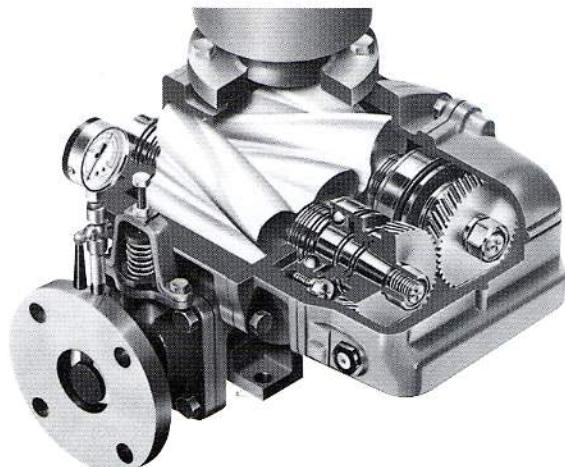


A Compact Body Packed with a High Degree of Reliability.

The Product Lineup Has Been Further Extended!

Increased discharge pressure

The blower temperature rise has been reduced through the use of a new tooth profile and the improvement of the radiation mechanism. At the same time, the burden to the grease has been reduced. As a result, the maximum discharge pressure has been increased to 50kPa {0.51kgf/cm²} for Models ARH20S to ARH40S and 60kPa {0.61kgf/cm²} for ARH50S and higher models. All models permit the use of ordinary grease available on the market.



Reliable oil seal

Fluororubber is used for the oil seal. The lubricating system is protected with the labyrinth seal which is effective to prevent oil leakage.

Easy maintenance

The bearing is fixed with a C-type snap ring. The timing gear can be disassembled easily by a gear puller. A ball bearing is employed instead of a roller bearing, to avoid damaging the inner case during reassembly. Thus, the blower maintenance has been significantly simplified.

Improved durability

The blower durability has been improved through the use of a larger bearing and the lowering of motor speed, as well as the reduction of temperature rise.

Inverter-controlled air flow rate

The inverter control system permits the motor speed to be easily changed electrically. When inverter control is used with the blower, the air flow rate can be varied freely. Also, by using a suitable control device with the blower, it is possible to implement automatic control of the blower.

(The controllable range of motor speed depends upon blower working conditions.)

When using an inverter with the blower, consult your nearest dealer.) ※ The inverter to be used should be a constant torque inverter.

Compact size

For example, the space required for installation of Model ARH100S has been reduced by more than 30% (compared with our former model). Thus, the new series saves your valuable space.

A Variety of Uses

Water treatment

- Aeration at sewage treatment plants
- Aeration of purifying tanks in condominiums, etc.
- Aeration of wastewater from food processing plants
- Aeration of wastewater from livestock farms

Cultivation

- Oxygen supply in aquariums, culture ponds, etc.

Pneumatic transportation

- Transportation of cement powder, etc.
- Transportation of wheat, soybeans, etc.
- Transfer of dust
- Collection of dust

Other

- Foaming of water in baths and swimming pools.

ARH-S Series**Standard Specifications**

Air Cooling Fan

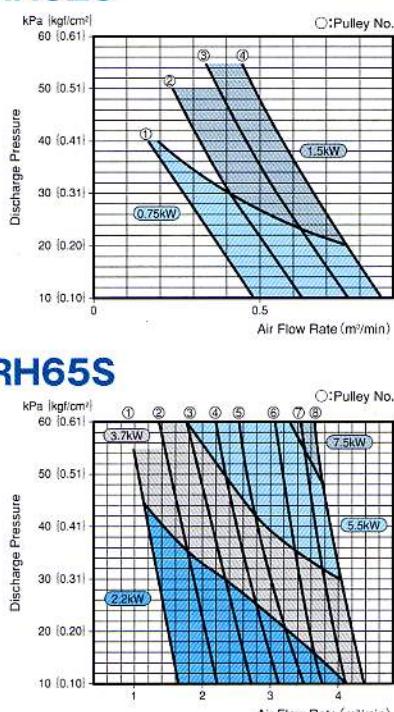
Q: Air Flow Rate (m³/min) P:Necessary Power (kW)

| Discharge Hole Dia. (mm) | Model | Pulley No. | Rotor Speed (min⁻¹) | 10kPa | | 15kPa | | 20kPa | | 25kPa | | 30kPa | | 35kPa | | 40kPa | | 45kPa | | 50kPa | | 55kPa | | 60kPa | | Standard Setting Motor Output (kW) |
|--------------------------|--------|------------|---------------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-------------|------------------------------------|
| | | | | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | |
| 20 | ARH20S | 1 | 1,630 | 0.30 | 0.25 | 0.27 | 0.29 | 0.24 | 0.32 | 0.22 | 0.35 | 0.19 | 0.38 | 0.17 | 0.40 | 0.14 | 0.46 | 0.12 | 0.52 | 0.10 | 0.58 | 0.08 | 0.65 | — | — | 0.4·0.75 |
| | | 2 | 1,730 | 0.33 | 0.26 | 0.30 | 0.30 | 0.28 | 0.34 | 0.25 | 0.38 | 0.22 | 0.40 | 0.20 | 0.45 | 0.18 | 0.51 | 0.16 | 0.56 | 0.14 | 0.61 | 0.12 | 0.67 | 0.10 | 0.72 | |
| 25 | ARH25S | 1 | 1,940 | 0.38 | 0.28 | 0.35 | 0.31 | 0.32 | 0.35 | 0.29 | 0.40 | 0.27 | 0.44 | 0.24 | 0.49 | 0.22 | 0.53 | 0.20 | 0.58 | 0.18 | 0.63 | 0.16 | 0.69 | 0.14 | 0.75 | 0.4·0.75·1.5 |
| | | 2 | 2,160 | 0.43 | 0.30 | 0.40 | 0.33 | 0.37 | 0.38 | 0.35 | 0.41 | 0.32 | 0.48 | 0.30 | 0.52 | 0.27 | 0.56 | 0.25 | 0.63 | 0.23 | 0.74 | 0.21 | 0.83 | 0.19 | 0.93 | |
| | | 3 | 2,400 | 0.51 | 0.35 | 0.48 | 0.40 | 0.45 | 0.43 | 0.42 | 0.48 | 0.39 | 0.53 | 0.37 | 0.58 | 0.34 | 0.65 | 0.32 | 0.75 | 0.30 | 0.86 | 0.28 | 0.97 | 0.26 | 1.07 | |
| | | 4 | 2,690 | 0.60 | 0.40 | 0.57 | 0.47 | 0.54 | 0.50 | 0.51 | 0.54 | 0.48 | 0.60 | 0.46 | 0.66 | 0.43 | 0.75 | 0.41 | 0.84 | 0.39 | 0.91 | 0.37 | 1.00 | 0.35 | 1.10 | |
| 32 | ARH32S | 1 | 1,240 | 0.48 | 0.53 | 0.43 | 0.57 | 0.38 | 0.61 | 0.33 | 0.64 | 0.27 | 0.68 | 0.22 | 0.71 | 0.17 | 0.74 | — | — | — | — | — | — | — | — | 0.75·1.5 |
| | | 2 | 1,480 | 0.62 | 0.57 | 0.62 | 0.52 | 0.67 | 0.47 | 0.70 | 0.41 | 0.75 | 0.36 | 0.95 | 0.32 | 1.13 | 0.28 | 1.18 | 0.24 | 1.23 | — | — | — | — | — | |
| | | 3 | 1,740 | 0.76 | 0.60 | 0.71 | 0.64 | 0.66 | 0.69 | 0.61 | 0.79 | 0.55 | 1.00 | 0.50 | 1.10 | 0.46 | 1.22 | 0.42 | 1.24 | 0.38 | 1.27 | 0.34 | 1.30 | — | — | |
| | | 4 | 1,910 | 0.86 | 0.64 | 0.81 | 0.69 | 0.76 | 0.75 | 0.71 | 0.90 | 0.66 | 1.05 | 0.61 | 1.15 | 0.57 | 1.25 | 0.53 | 1.35 | 0.49 | 1.42 | 0.45 | 1.49 | — | — | |
| 40 | ARH40S | 1 | 1,720 | 0.83 | 0.61 | 0.78 | 0.66 | 0.72 | 0.67 | 0.92 | 0.60 | 1.11 | 0.56 | 1.17 | 0.50 | 1.24 | 0.45 | 1.26 | 0.41 | 1.29 | 0.37 | 1.32 | — | — | 1.5·2·2·3·7 | |
| | | 2 | 1,840 | 0.87 | 0.64 | 0.82 | 0.69 | 0.77 | 0.76 | 0.94 | 0.67 | 1.14 | 0.63 | 1.20 | 0.58 | 1.28 | 0.55 | 1.35 | 0.50 | 1.42 | 0.46 | 1.49 | — | — | | |
| | | 3 | 1,960 | 0.95 | 0.71 | 0.91 | 0.77 | 0.86 | 0.85 | 0.80 | 1.03 | 0.76 | 1.20 | 0.71 | 1.27 | 0.67 | 1.35 | 0.63 | 1.43 | 0.58 | 1.50 | 0.53 | 1.61 | — | — | |
| | | 4 | 2,210 | 1.16 | 0.77 | 1.10 | 0.87 | 1.04 | 0.99 | 0.99 | 1.11 | 0.93 | 1.24 | 0.88 | 1.33 | 0.83 | 1.45 | 0.78 | 1.50 | 0.73 | 1.76 | 0.68 | 1.84 | 0.63 | 1.99 | |
| | | 5 | 2,380 | 1.25 | 0.83 | 1.19 | 0.97 | 1.13 | 1.12 | 1.08 | 1.19 | 1.03 | 1.28 | 0.99 | 1.39 | 0.95 | 1.50 | 0.91 | 1.68 | 0.87 | 1.86 | 0.84 | 2.02 | 0.80 | 2.18 | |
| | | 6 | 2,520 | 1.34 | 0.95 | 1.28 | 1.08 | 1.22 | 1.20 | 1.17 | 1.28 | 1.12 | 1.35 | 1.08 | 1.45 | 1.04 | 1.55 | 1.00 | 1.76 | 0.96 | 1.95 | 0.93 | 2.13 | 0.90 | 2.30 | |
| | | 7 | 2,620 | 1.42 | 1.07 | 1.37 | 1.19 | 1.31 | 1.32 | 1.26 | 1.36 | 1.21 | 1.42 | 1.17 | 1.55 | 1.12 | 1.70 | 1.09 | 1.89 | 1.05 | 2.08 | 1.03 | 2.25 | 1.00 | 2.41 | |
| | | 8 | 2,790 | 1.52 | 1.15 | 1.46 | 1.29 | 1.40 | 1.40 | 1.36 | 1.45 | 1.31 | 1.50 | 1.27 | 1.66 | 1.23 | 1.82 | 1.20 | 2.01 | 1.16 | 2.20 | 1.14 | 2.39 | 1.11 | 2.57 | |
| | | 9 | 3,000 | 1.61 | 1.30 | 1.55 | 1.40 | 1.49 | 1.50 | 1.45 | 1.64 | 1.40 | 1.78 | 1.36 | 1.92 | 1.32 | 2.06 | 1.28 | 2.20 | 1.24 | 2.33 | 1.21 | 2.51 | 1.18 | 2.69 | |
| 50 | ARH50S | 1 | 1,270 | 1.24 | 0.7 | 1.17 | 0.8 | 1.09 | 1.0 | 1.02 | 1.1 | 0.95 | 1.3 | 0.88 | 1.5 | 0.81 | 1.7 | 0.74 | 1.8 | 0.67 | 2.0 | — | — | — | — | 1.5·2·2·3·7 |
| | | 2 | 1,400 | 1.53 | 0.9 | 1.43 | 1.0 | 1.34 | 1.2 | 1.25 | 1.3 | 1.17 | 1.4 | 1.09 | 1.7 | 1.01 | 1.8 | 0.93 | 1.9 | 0.86 | 2.1 | — | — | — | — | |
| | | 3 | 1,650 | 1.85 | 1.0 | 1.74 | 1.2 | 1.64 | 1.3 | 1.54 | 1.4 | 1.44 | 1.7 | 1.35 | 1.8 | 1.27 | 2.0 | 1.19 | 2.2 | 1.11 | 2.5 | 1.04 | 2.7 | 0.98 | 2.9 | |
| | | 4 | 1,850 | 2.23 | 1.1 | 2.10 | 1.3 | 1.98 | 1.4 | 1.86 | 1.6 | 1.76 | 1.8 | 1.67 | 2.0 | 1.59 | 2.2 | 1.51 | 2.5 | 1.43 | 2.7 | 1.35 | 2.9 | 1.28 | 3.1 | |
| | | 5 | 2,080 | 2.54 | 1.2 | 2.44 | 1.5 | 2.35 | 1.7 | 2.26 | 1.9 | 2.17 | 2.1 | 2.08 | 2.4 | 1.99 | 2.6 | 1.91 | 2.8 | 1.84 | 3.0 | 1.76 | 3.2 | 1.69 | 3.4 | |
| | | 6 | 2,230 | 2.77 | 1.3 | 2.68 | 1.6 | 2.59 | 1.9 | 2.51 | 2.1 | 2.43 | 2.3 | 2.36 | 2.6 | 2.28 | 2.8 | 2.21 | 3.1 | 2.13 | 3.3 | 2.06 | 3.4 | — | — | |
| 65 | ARH65S | 1 | 1,100 | 1.64 | 0.9 | 1.57 | 1.1 | 1.49 | 1.3 | 1.41 | 1.5 | 1.34 | 1.7 | 1.27 | 1.9 | 1.20 | 2.1 | 1.13 | 2.2 | 1.07 | 2.6 | 1.01 | 2.8 | — | — | 2.2·3·7·5.5 |
| | | 2 | 1,320 | 2.22 | 1.2 | 2.12 | 1.4 | 2.03 | 1.6 | 1.94 | 1.8 | 1.86 | 2.0 | 1.78 | 2.2 | 1.70 | 2.4 | 1.62 | 2.7 | 1.53 | 3.0 | 1.45 | 3.2 | 1.37 | 3.4 | |
| | | 3 | 1,550 | 2.72 | 1.3 | 2.62 | 1.6 | 2.53 | 1.8 | 2.44 | 2.0 | 2.35 | 2.2 | 2.26 | 2.5 | 2.17 | 2.8 | 2.07 | 3.0 | 1.98 | 3.3 | 1.89 | 3.5 | 1.79 | 3.7 | |
| | | 4 | 1,730 | 3.12 | 1.5 | 3.01 | 1.8 | 2.91 | 2.0 | 2.81 | 2.2 | 2.71 | 2.7 | 2.61 | 2.9 | 2.52 | 3.2 | 2.42 | 3.4 | 2.36 | 3.7 | 2.30 | 3.9 | 2.23 | 4.2 | |
| | | 5 | 1,960 | 3.50 | 1.7 | 3.37 | 2.0 | 3.26 | 2.2 | 3.14 | 2.7 | 3.03 | 3.1 | 2.92 | 3.3 | 2.83 | 3.6 | 2.73 | 3.9 | 2.67 | 4.1 | 2.61 | 4.3 | 2.55 | 4.6 | |
| | | 6 | 2,200 | 3.77 | 1.9 | 3.70 | 2.2 | 3.62 | 2.4 | 3.54 | 2.8 | 3.46 | 3.2 | 3.39 | 3.7 | 3.32 | 4.1 | 3.26 | 4.5 | 3.20 | 4.9 | 3.15 | 5.2 | 3.09 | 5.4 | |
| | | 7 | 2,350 | 4.11 | 2.2 | 4.03 | 2.3 | 3.94 | 2.5 | 3.87 | 3.0 | 3.79 | 3.5 | 3.74 | 4.0 | 3.68 | 4.4 | 3.63 | 4.8 | 3.58 | 5.1 | 3.53 | 5.5 | 3.48 | 6.0 | |
| | | 8 | 2,500 | 4.38 | 2.4 | 4.29 | 2.6 | 4.20 | 2.8 | 4.12 | 3.3 | 4.04 | 3.7 | 3.97 | 4.2 | 3.84 | 4.7 | 3.77 | 5.2 | 3.77 | 5.7 | 3.73 | 6.1 | 3.68 | 6.5 | |
| 80 | ARH80S | 1 | 1,130 | 3.21 | 1.4 | 3.10 | 1.7 | 2.99 | 2.1 | 2.88 | 2.4 | 2.77 | 2.8 | 2.65 | 3.1 | 2.54 | 3.5 | 2.43 | 3.7 | 2.32 | 4.3 | 2.21 | 4.7 | 2.09 | 5.1 | 3.7·5.5·7.5 |
| | | 2 | 1,350 | 3.81 | 1.8 | 3.70 | 2.1 | 3.60 | 2.5 | 3.50 | 2.8 | 3.40 | 3.2 | 3.30 | 3.6 | 3.19 | 4.1 | 3.09 | 4.5 | 2.99 | 5.0 | 2.89 | 5.5 | 2.79 | 6.1 | |
| | | 3 | 1,490 | 4.22 | 2.1 | 4.11 | 2.4 | 4.01 | 2.8 | 3.91 | 3.2 | 3.81 | 3.6 | 3.71 | 4.0 | 3.60 | 4.5 | 3.50 | 5.0 | 3.40 | 5.5 | 3.30 | 6.1 | 3.20 | 6.6 | |
| | | 4 | 1,630 | 4.70 | 2.2 | 4.58 | 2.7 | 4.47 | 3.2 | 4.36 | 3.6 | 4.25 | 4.1 | 4.13 | 4.5 | 4.02 | 5.0 | 3.91 | 5.5 | 3.80 | 6.0 | 3.69 | 6.6 | 3.57 | 7.2 | |
| | | 5 | 1,730 | 5.02 | 2.3 | 4.90 | 2.8 | 4.79 | 3.4 | 4.68 | 3.7 | 4.57 | 4.3 | 4.45 | 4.7 | 4.34 | 5.2 | 4.23 | 5.9 | 4.15 | 6.5 | 4.06 | 7.1 | 3.96 | 7.5 | |
| | | 6 | 1,830 | 5.34 | 2.4 | 5.22 | 3.0 | 5.11 | 3.5 | 5.00 | 4.1 | 4.89 | 4.6 | 4.77 | 5.1 | 4.66 | 5.5 | 4.58 | 6.2 | 4.49 | 6.8 | 4.40 | 7.4 | 4.31 | 8.0 | |
| | | 7 | 2,040 | 5.74 | 2.8 | 5.63 | 3.4 | 5.52 | 4.0 | 5.44 | 4.6 | 5.35 | 5.2 | 5.29 | 5.6 | 5.22 | 6.2 | 5.16 | 6.9 | 5.09 | 7.5 | 5.03 | 8.1 | 4.97 | 8.6 | |
| | | 8 | 2,150 | 6.07 | 3.0 | 5.96 | 3.7 | 5.85 | 4.2 | 5.77 | 4.8 | 5.68 | 5.3 | 5.62 | 6.0 | 5.58 | 6.6 | 5.49 | 7.4 | 5.43 | 7.8 | 5.37 | 8.5 | 5.30 | 9.1 | |

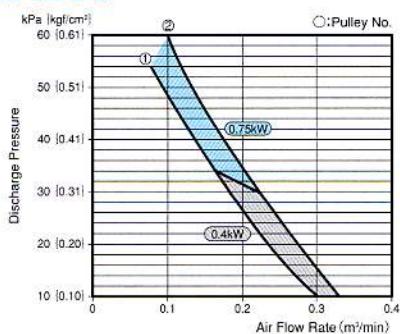
ARH-S Series

Performance Curves

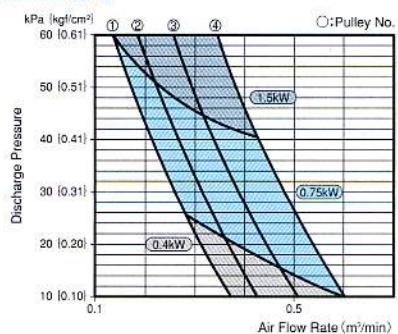
ARH32S



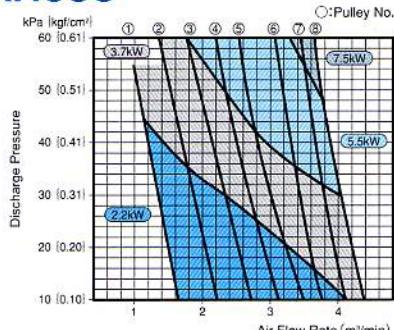
ARH20S



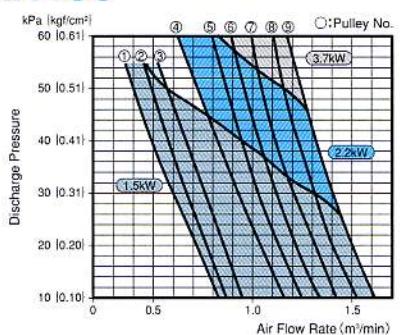
ARH25S



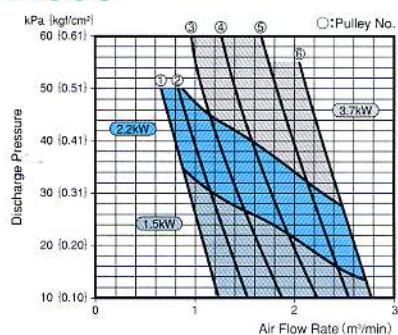
ARH65S



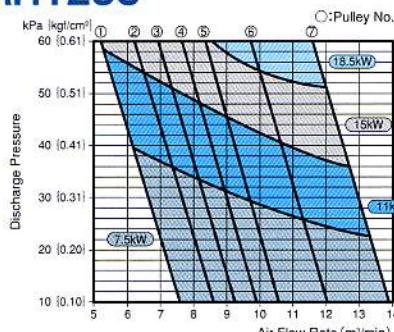
ARH40S



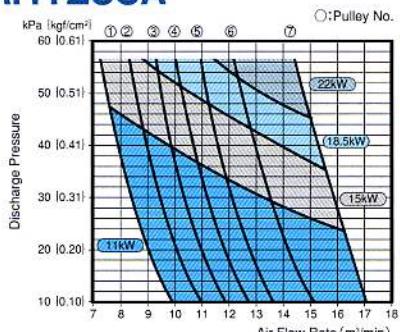
ARH50S



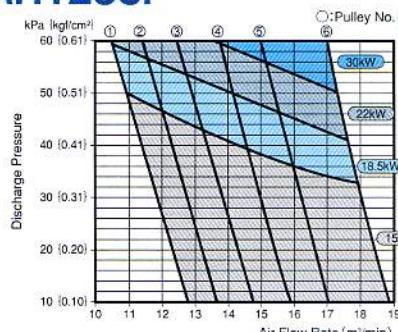
ARH125S



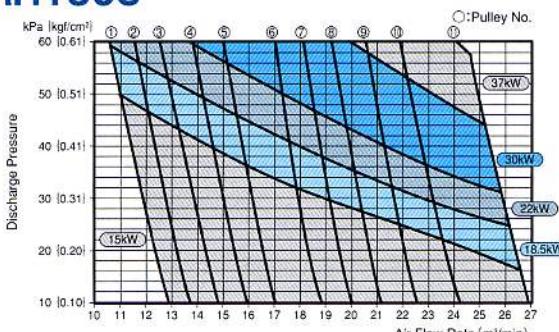
ARH125SA



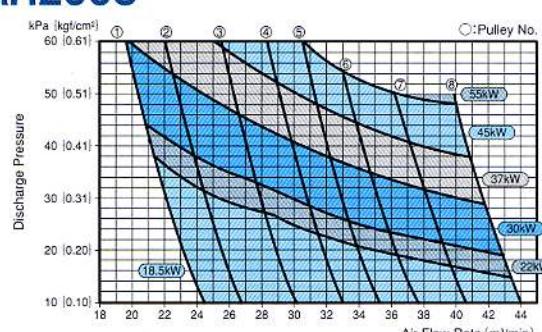
ARH125SF



ARH150S



ARH200S

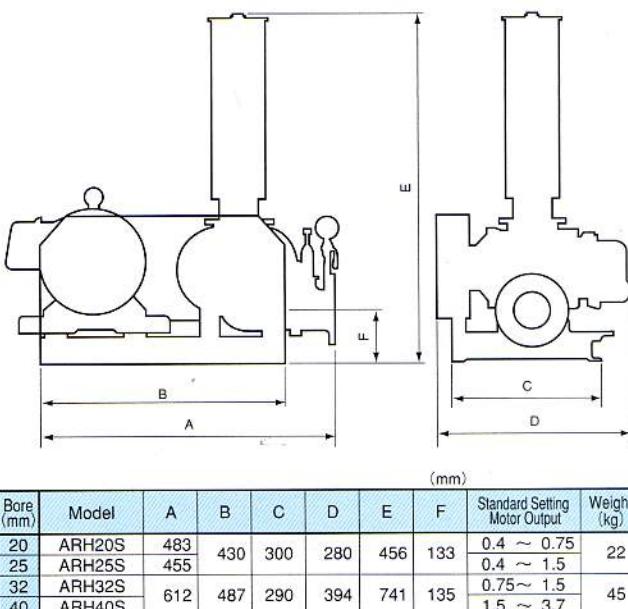


● Specifications are subject to change without notice.
● Before using the blower, read the instruction manual carefully.

Sound Levels

| Model | Pulley No. | Rotor Speed (min⁻¹) | 10kPa | 20kPa | 30kPa | 40kPa | 50kPa | 60kPa |
|----------|------------|---------------------|------------|------------|------------|------------|------------|------------|
| | | | 0.10kg/cm² | 0.20kg/cm² | 0.31kg/cm² | 0.41kg/cm² | 0.51kg/cm² | 0.61kg/cm² |
| ARH20S | 1 | 1,630 | 58 | 59 | 60 | 61 | 61 | — |
| | 2 | 1,730 | 60 | 61 | 62 | 63 | 63 | 64 |
| ARH25S | 1 | 1,940 | 62 | 63 | 63 | 64 | 64 | 65 |
| | 2 | 2,160 | 63 | 63 | 64 | 62 | 65 | 66 |
| ARH32S | 3 | 2,400 | 63 | 64 | 65 | 66 | 66 | 67 |
| | 4 | 2,690 | 65 | 66 | 67 | 68 | 68 | 69 |
| ARH40S | 1 | 1,240 | 65 | 66 | 67 | 68 | — | — |
| | 2 | 1,480 | 66 | 67 | 68 | 69 | 70 | — |
| ARH40S | 3 | 1,740 | 67 | 68 | 69 | 70 | 71 | — |
| | 4 | 1,910 | 69 | 70 | 71 | 72 | 73 | — |
| ARH50S | 1 | 1,720 | 66 | 67 | 68 | 69 | 70 | — |
| | 2 | 1,840 | 67 | 68 | 70 | 71 | 72 | — |
| ARH50S | 3 | 1,960 | 69 | 70 | 71 | 71 | 72 | — |
| | 4 | 2,210 | 70 | 71 | 71 | 71 | 72 | 73 |
| ARH65S | 5 | 2,380 | 70 | 71 | 71 | 71 | 72 | 74 |
| | 6 | 2,520 | 70 | 71 | 71 | 72 | 72 | 74 |
| ARH65S | 7 | 2,620 | 71 | 71 | 72 | 72 | 73 | 74 |
| | 8 | 2,790 | 71 | 72 | 72 | 73 | 73 | 75 |
| ARH80S | 9 | 3,000 | 71 | 72 | 72 | 73 | 74 | 75 |
| | 1 | 1,270 | 63 | 64 | 66 | 67 | 69 | — |
| ARH80S | 2 | 1,400 | 66 | 66 | 68 | 70 | 71 | — |
| | 3 | 1,650 | 69 | 70 | 71 | 72 | 73 | 74 |
| ARH80S | 4 | 1,850 | 70 | 70 | 71 | 72 | 73 | 74 |
| | 5 | 2,080 | 70 | 71 | 72 | 73 | 74 | 75 |
| ARH80S | 6 | 2,230 | 72 | 74 | 74 | 74 | 75 | 75 |
| | 1 | 1,100 | 66 | 67 | 68 | 68 | 69 | — |
| ARH100S | 2 | 1,320 | 66 | 67 | 68 | 69 | 71 | 72 |
| | 3 | 1,550 | 66 | 67 | 69 | 70 | 72 | 73 |
| ARH100S | 4 | 1,730 | 67 | 68 | 69 | 71 | 73 | 73 |
| | 5 | 1,960 | 67 | 69 | 71 | 72 | 74 | 75 |
| ARH100S | 6 | 2,200 | 68 | 70 | 71 | 72 | 74 | 75 |
| | 7 | 2,350 | 70 | 71 | 72 | 73 | 74 | 76 |
| ARH100S | 8 | 2,500 | 72 | 73 | 74 | 75 | 75 | 76 |
| | 1 | 1,130 | 70 | 71 | 72 | 73 | 74 | 75 |
| ARH125S | 2 | 1,350 | 71 | 71 | 73 | 74 | 75 | 76 |
| | 3 | 1,490 | 72 | 73 | 73 | 75 | 76 | 77 |
| ARH125S | 4 | 1,630 | 73 | 74 | 75 | 76 | 77 | 78 |
| | 5 | 1,730 | 74 | 75 | 76 | 76 | 78 | 79 |
| ARH125S | 6 | 1,830 | 75 | 76 | 77 | 78 | 79 | 80 |
| | 7 | 2,040 | 76 | 77 | 78 | 79 | 79 | 80 |
| ARH125S | 8 | 2,150 | 77 | 78 | 78 | 79 | 79 | 80 |
| | 9 | 2,270 | 77 | 78 | 79 | 79 | 79 | 80 |
| ARH125SA | 1 | 1,020 | 71 | 72 | 73 | 74 | 75 | 76 |
| | 2 | 1,200 | 72 | 73 | 74 | 76 | 76 | 78 |
| ARH125SA | 3 | 1,390 | 74 | 74 | 75 | 77 | 78 | 79 |
| | 4 | 1,490 | 75 | 76 | 77 | 78 | 79 | 80 |
| ARH125SA | 5 | 1,630 | 76 | 77 | 78 | 79 | 80 | 80 |
| | 6 | 1,830 | 77 | 78 | 79 | 80 | 81 | — |
| ARH125SF | 1 | 1,160 | 72 | 73 | 74 | 75 | 75 | 76 |
| | 2 | 1,290 | 72 | 73 | 74 | 75 | 76 | 76 |
| ARH125SF | 3 | 1,370 | 73 | 74 | 75 | 76 | 77 | 77 |
| | 4 | 1,460 | 73 | 74 | 75 | 76 | 77 | 78 |
| ARH125SF | 5 | 1,540 | 74 | 75 | 76 | 77 | 78 | 79 |
| | 6 | 1,710 | 75 | 76 | 77 | 78 | 79 | 81 |
| ARH125SF | 7 | 1,920 | 76 | 77 | 78 | 79 | 81 | 82 |
| | 1 | 1,160 | 72 | 73 | 74 | 75 | 77 | — |
| ARH125SA | 2 | 1,290 | 73 | 75 | 77 | 78 | 79 | — |
| | 3 | 1,370 | 73 | 75 | 78 | 78 | 79 | — |
| ARH125SA | 4 | 1,460 | 73 | 75 | 78 | 79 | 80 | — |
| | 5 | 1,540 | 74 | 76 | 79 | 79 | 80 | — |
| ARH125SA | 6 | 1,710 | 75 | 76 | 79 | 79 | 80 | — |
| | 7 | 1,920 | 77 | 79 | 80 | 81 | 82 | — |
| ARH150S | 1 | 1,000 | 72 | 73 | 74 | 75 | 77 | 78 |
| | 2 | 1,060 | 72 | 73 | 74 | 75 | 77 | 78 |
| ARH150S | 3 | 1,130 | 73 | 74 | 75 | 76 | 78 | 79 |
| | 4 | 1,210 | 74 | 75 | 76 | 78 | 79 | 80 |
| ARH150S | 5 | 1,300 | 75 | 76 | 77 | 79 | 80 | 81 |
| | 6 | 1,420 | 76 | 77 | 78 | 80 | 81 | 82 |
| ARH150S | 7 | 1,510 | 77 | 78 | 80 | 81 | 82 | 83 |
| | 8 | 1,590 | 77 | 79 | 81 | 82 | 83 | 84 |
| ARH150S | 9 | 1,680 | 79 | 80 | 81 | 82 | 83 | 84 |
| | 10 | 1,770 | 81 | 82 | 83 | 84 | 85 | 86 |
| ARH150S | 11 | 1,940 | 83 | 84 | 85 | 85 | 86 | 87 |
| | 1 | 1,000 | 72 | 73 | 74 | 75 | 77 | — |
| ARH200S | 2 | 1,100 | 79 | 80 | 82 | 84 | 84 | 85 |
| | 3 | 1,240 | 79 | 80 | 82 | 84 | 86 | 87 |
| ARH200S | 4 | 1,360 | 79 | 80 | 82 | 84 | 86 | 87 |
| | 5 | 1,440 | 80 | 81 | 83 | 85 | 86 | 87 |
| ARH200S | 6 | 1,530 | 82 | 82 | 83 | 85 | 86 | — |
| | 7 | 1,660 | 84 | 85 | 86 | 87 | 88 | — |
| ARH200S | 8 | 1,750 | 85 | 86 | 88 | 89 | 91 | — |

Dimensions



Motor Weight (with base)

| Output (kW) | 0.4 | 0.75 | 1.5 | 2.2 | 3.7 | 5.5 |
|-------------|-----|------|-----|------|-----|-----|
| Weight (kg) | 8 | 13 | 19 | 27 | 37 | 63 |
| Output (kW) | 7.5 | 11 | 15 | 18.5 | 22 | 30 |
| Weight (kg) | 77 | 105 | 118 | 133 | 176 | 191 |
| Output (kW) | 37 | 45 | 55 | | | |
| Weight (kg) | 236 | 256 | 306 | | | |

*The standard motor is a drip-proof type. In the case of a special motor, The base dimensions may differ.

Standard Specifications

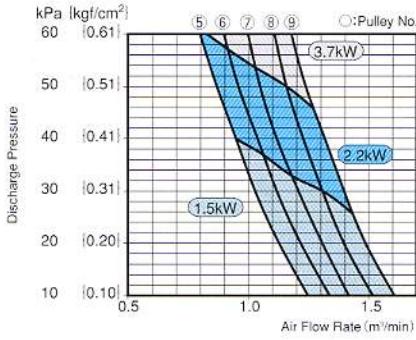
Q: Air Flow Rate (m³/min) P:Necessary Power (kW)

| Discharge Hole Dia. (mm) | Model | Pulley No. | Rotor Speed (min ⁻¹) | Standard Setting Motor Output | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|----------|------------|----------------------------------|----------------------------------|------|------|----------------------------------|------|------|----------------------------------|------|------|----------------------------------|------|------|----------------------------------|------|------|----------------------------------|------|------|----------------------------------|------|------|----------------------------------|-------------|---|----------------------------------|---|---|----------------------------------|--|--|----------------------------------|--|--|
| | | | | 10kPa 0.10kgf/cm ² | | | 15kPa 0.15kgf/cm ² | | | 20kPa 0.20kgf/cm ² | | | 25kPa 0.26kgf/cm ² | | | 30kPa 0.31kgf/cm ² | | | 35kPa 0.36kgf/cm ² | | | 40kPa 0.41kgf/cm ² | | | 45kPa 0.46kgf/cm ² | | | 50kPa 0.51kgf/cm ² | | | 55kPa 0.56kgf/cm ² | | | 60kPa 0.61kgf/cm ² | | |
| | | | | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | | | | | |
| 50 | ARH50SP | 5 | 2,380 | 1.25 | 0.83 | 1.19 | 0.97 | 1.13 | 1.12 | 1.08 | 1.19 | 1.03 | 1.28 | 0.99 | 1.39 | 0.95 | 1.50 | 0.91 | 1.68 | 0.87 | 1.86 | 0.84 | 2.02 | 0.80 | 2.18 | | | | | | | | | | | |
| | | 6 | 2,520 | 1.34 | 0.95 | 1.28 | 1.08 | 1.22 | 1.20 | 1.17 | 1.28 | 1.12 | 1.35 | 1.08 | 1.45 | 1.04 | 1.55 | 1.00 | 1.76 | 0.96 | 1.96 | 0.93 | 2.13 | 0.90 | 2.30 | 1.5~2.2~3.7 | | | | | | | | | | |
| | | 7 | 2,620 | 1.42 | 1.07 | 1.37 | 1.19 | 1.31 | 1.32 | 1.26 | 1.36 | 1.21 | 1.42 | 1.17 | 1.55 | 1.12 | 1.70 | 1.09 | 1.89 | 1.05 | 2.08 | 1.03 | 2.25 | 1.00 | 2.41 | | | | | | | | | | | |
| | | 8 | 2,790 | 1.52 | 1.15 | 1.46 | 1.09 | 1.40 | 1.40 | 1.36 | 1.35 | 1.31 | 1.50 | 1.27 | 1.66 | 1.23 | 1.82 | 1.20 | 2.01 | 1.16 | 2.20 | 1.14 | 2.39 | 1.11 | 2.57 | | | | | | | | | | | |
| | | 9 | 3,000 | 1.61 | 1.30 | 1.55 | 1.40 | 1.49 | 1.50 | 1.45 | 1.64 | 1.40 | 1.78 | 1.36 | 1.92 | 1.32 | 2.06 | 1.28 | 2.20 | 1.24 | 2.33 | 1.21 | 2.51 | 1.18 | 2.69 | | | | | | | | | | | |
| 65 | ARH65SP | 4 | 1,850 | 2.23 | 1.1 | 2.11 | 1.3 | 1.98 | 1.4 | 1.87 | 1.6 | 1.76 | 1.8 | 1.67 | 2.0 | 1.59 | 2.2 | 1.51 | 2.5 | 1.43 | 2.7 | 1.35 | 2.9 | — | — | 1.5~2.2~3.7 | | | | | | | | | | |
| | | 5 | 2,080 | 2.54 | 1.2 | 2.45 | 1.5 | 2.35 | 1.7 | 2.26 | 1.9 | 2.17 | 2.1 | 2.08 | 2.4 | 1.99 | 2.6 | 1.91 | 2.8 | 1.84 | 3.0 | 1.76 | 3.2 | — | — | 1.5~2.2~3.7 | | | | | | | | | | |
| | | 6 | 2,230 | 2.77 | 1.3 | 2.68 | 1.6 | 2.59 | 1.9 | 2.51 | 2.1 | 2.43 | 2.3 | 2.36 | 2.6 | 2.28 | 2.8 | 2.21 | 3.1 | 2.13 | 3.3 | 2.06 | 3.4 | — | — | | | | | | | | | | | |
| 80 | ARH80SP | 4 | 1,730 | 3.12 | 1.5 | 3.01 | 1.8 | 2.91 | 2.0 | 2.81 | 2.2 | 2.71 | 2.7 | 2.61 | 2.9 | 2.52 | 3.2 | 2.42 | 3.4 | 2.36 | 3.7 | 2.30 | 3.9 | 2.23 | 4.2 | 3.7~5.5~7.5 | | | | | | | | | | |
| | | 5 | 1,960 | 3.50 | 1.7 | 3.37 | 2.0 | 3.26 | 2.2 | 3.14 | 2.7 | 3.03 | 3.1 | 2.92 | 3.3 | 2.83 | 3.6 | 2.73 | 3.9 | 2.67 | 4.1 | 2.61 | 4.3 | 2.55 | 4.6 | | | | | | | | | | | |
| | | 6 | 2,200 | 3.77 | 1.9 | 3.70 | 2.2 | 3.62 | 2.4 | 3.54 | 2.8 | 3.46 | 3.2 | 3.39 | 3.7 | 3.32 | 4.1 | 3.26 | 4.5 | 3.20 | 4.9 | 3.15 | 5.2 | 3.09 | 5.4 | | | | | | | | | | | |
| | | 7 | 2,350 | 4.11 | 2.2 | 4.03 | 2.3 | 3.94 | 2.5 | 3.87 | 3.0 | 3.79 | 3.5 | 3.74 | 4.0 | 3.68 | 4.4 | 3.63 | 4.8 | 3.58 | 5.1 | 3.53 | 5.5 | 3.48 | 6.0 | | | | | | | | | | | |
| 100 | ARH100SP | 6 | 1,830 | 5.34 | 2.4 | 5.22 | 3.0 | 5.11 | 3.5 | 5.00 | 4.1 | 4.89 | 4.6 | 4.77 | 5.1 | 4.66 | 5.5 | 4.58 | 6.2 | 4.49 | 6.8 | 4.40 | 7.4 | 4.31 | 8.0 | 5.5~7.5~11 | | | | | | | | | | |
| | | 7 | 2,040 | 5.74 | 2.8 | 5.63 | 3.4 | 5.52 | 4.0 | 5.44 | 4.6 | 5.35 | 5.2 | 5.29 | 5.6 | 5.22 | 6.2 | 5.16 | 6.9 | 5.09 | 7.5 | 5.03 | 8.1 | 4.97 | 8.6 | | | | | | | | | | | |
| | | 8 | 2,150 | 6.07 | 3.0 | 5.96 | 3.7 | 5.85 | 4.2 | 5.77 | 4.8 | 5.68 | 5.3 | 5.62 | 6.0 | 5.55 | 6.6 | 5.49 | 7.4 | 5.43 | 7.8 | 5.37 | 8.5 | 5.30 | 9.1 | | | | | | | | | | | |
| | | 9 | 2,270 | 6.39 | 3.5 | 6.31 | 4.1 | 6.22 | 4.6 | 6.14 | 5.2 | 6.08 | 5.8 | 5.96 | 6.6 | 5.87 | 7.3 | 5.81 | 7.8 | 5.74 | 8.5 | 5.68 | 9.1 | 5.62 | 9.7 | | | | | | | | | | | |

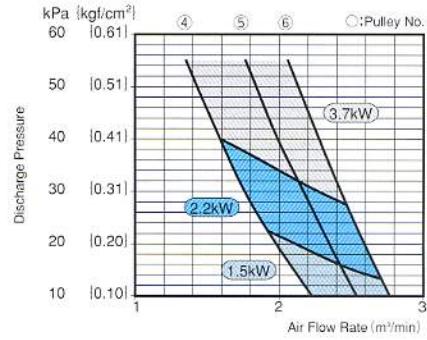
- Air flow rate indicates the volume of air under standard suction conditions (temperature 20°C (68°F), relative humidity 65%).
- The tolerance for air volume at the prescribed pressure is ±5%.

Performance Curves

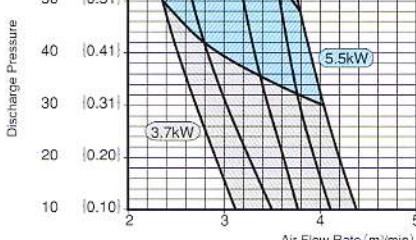
ARH50SP



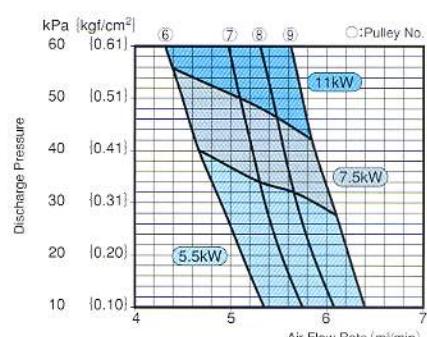
ARH65SP



ARH80SP



ARH100SP



- Specifications are subject to change without notice.
- Before using the blower, read the instruction manual carefully.

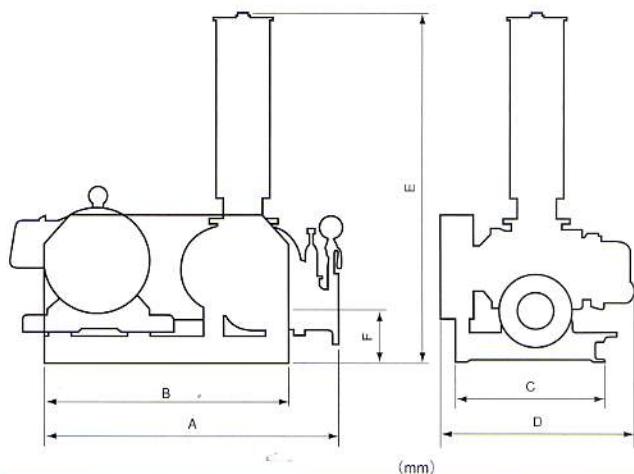
ARH-SP Series

Sound Levels

| Model | Pulley No. | Rotor Speed (min ⁻¹) | 10kPa | 20kPa | 30kPa | 40kPa | 50kPa | 60kPa |
|----------|------------|----------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | | | 0.10kgf/cm ² | 0.20kgf/cm ² | 0.31kgf/cm ² | 0.41kgf/cm ² | 0.51kgf/cm ² | 0.61kgf/cm ² |
| ARH50SP | 5 | 2,380 | 70 | 71 | 71 | 71 | 72 | 74 |
| | 6 | 2,520 | 70 | 71 | 71 | 72 | 72 | 74 |
| | 7 | 2,620 | 71 | 71 | 72 | 72 | 73 | 74 |
| | 8 | 2,790 | 71 | 72 | 72 | 73 | 73 | 75 |
| | 9 | 3,000 | 71 | 72 | 72 | 73 | 74 | 75 |
| ARH65SP | 4 | 1,850 | 70 | 70 | 71 | 72 | 73 | 74 |
| | 5 | 2,080 | 70 | 71 | 72 | 73 | 74 | 75 |
| | 6 | 2,230 | 72 | 74 | 74 | 74 | 75 | 75 |
| ARH80SP | 4 | 1,730 | 67 | 68 | 69 | 71 | 73 | 73 |
| | 5 | 1,960 | 67 | 69 | 71 | 72 | 74 | 75 |
| | 6 | 2,200 | 68 | 70 | 71 | 72 | 74 | 75 |
| | 7 | 2,350 | 70 | 71 | 72 | 73 | 74 | 76 |
| | 8 | 2,500 | 72 | 73 | 74 | 75 | 75 | 76 |
| ARH100SP | 6 | 1,830 | 75 | 76 | 77 | 78 | 79 | 80 |
| | 7 | 2,040 | 76 | 77 | 78 | 79 | 79 | 80 |
| | 8 | 2,150 | 77 | 78 | 78 | 79 | 79 | 80 |
| | 9 | 2,270 | 77 | 78 | 79 | 79 | 79 | 80 |

● Sound levels in dB (A) at a distance of 1m from machine side (± 3 dB (A)).

Dimensions



| Bore (mm) | Model | A | B | C | D | E | F | Standard Setting Motor Output | Weight (kg) |
|-----------|----------|-----|-----|-----|-----|-------|---------|-------------------------------|-------------|
| 50 | ARH50SP | 607 | 487 | 290 | 394 | 741 | 135 | 1.5~3.7 | 45 |
| 65 | ARH65SP | 681 | 556 | 330 | 430 | 809 | 137 | 1.5~3.7 | 70 |
| 80 | ARH80SP | 789 | 636 | 446 | 948 | 147 | 3.7~7.5 | 100 | |
| 100 | ARH100SP | 868 | 704 | 360 | 456 | 1,009 | 155 | 5.5~7.5 | 140 |
| | | 886 | 722 | 440 | 466 | 995 | 143 | 11 | 145 |

• The flange outside diameter and bolt hole pitch comply to JIS 10K.
• Models ARH20S/ARH25S are not provided with a pressure gauge.
• Indicated weight is for blower without motor (with base).

Motor Weight (with base)

| | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|
| Output(kW) | 1.5 | 2.2 | 3.7 | 5.5 | 7.5 | 11 |
| Weight(kg) | 19 | 27 | 37 | 63 | 77 | 105 |

• The standard motor is a drip-proof type. In the case of a special motor, The base dimensions may differ.

Accessories

■ Standard Accessories

- Common base 1
- V-pulley, V-belt,Belt cover 1
- Pressure gauge (with gauge cock 160kPa) 1
- Intake silencer (with filter) 1
- Check valve (with safety valve) 1

[ARH-S/SP Series]

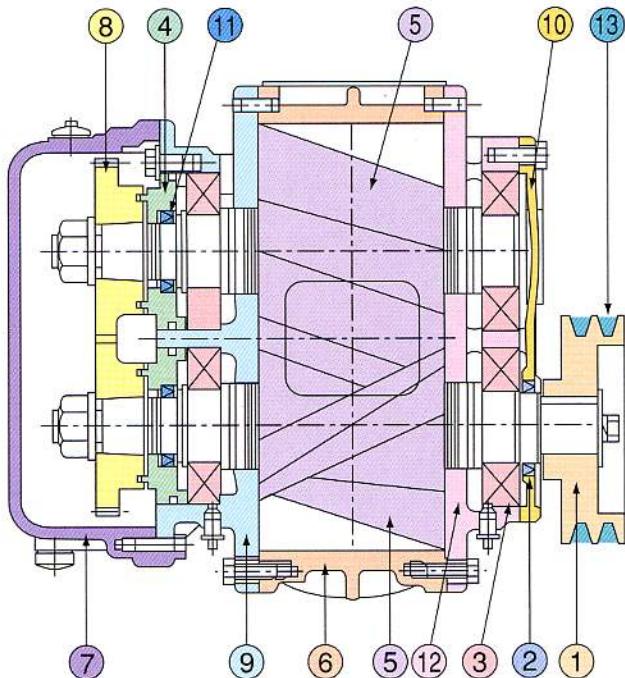
■ Optional Accessories

- Discharge Silencer
- Flexible tube
- Rubber vibration isolator

• Pressure gauge stand, belt cover with lining, and soundproof box are also available.

ARH-S/SP Series

Sectional view



| No. | Part name | Material |
|-----|---------------|--|
| 1 | V-pulley | FC200 |
| 2 | Oil seal | Nitryl rubber |
| 3 | Ball bearing | — |
| 4 | Oil stopper | SS400 |
| 5 | Rotor | FCD500 (FC200) |
| 6 | Casing | FC200 |
| 7 | Gear case | FC200 |
| 8 | Timing gear | SCM415 |
| 9 | Bearing case | FC200 |
| 10 | Bearing cover | ARH32S~65S:SPHC ARH80S~100S:SPCC Other:FC200 |
| 11 | Oil seal | Fluoro rubber |
| 12 | Bearing plate | FC200 |
| 13 | V-belt | — |

Note) FC : Gray iron casting
FCD : Ductile iron casting
SCM : Chromium molybdenum steel
SS : Mild steel
SPCC/SPHC : Rolled steel

Packing Size

■ARH-S

| Model | Length L | Width W | Height H (mm) |
|----------|-----------|---------|---------------|
| ARH20S | 520 | 460 | 300 |
| ARH25S | | | |
| ARH32S | 750 | 530 | 800 |
| ARH40S | | | |
| ARH50S | 850 | 610 | 820 |
| ARH65S | 990 | 630 | 890 |
| ARH80S | 3.7~7.5kW | 1,080 | 700 |
| | 11kW | 1,200 | 790 |
| ARH100S | | 1,200 | 790 |
| ARH125S | 1,280 | 910 | 1,150 |
| ARH125SA | 1,280 | 970 | 1,150 |
| ARH125SF | 1,520 | 960 | 1,310 |
| ARH150S | 1,520 | 960 | 1,310 |
| ARH200S | 1,780 | 1,230 | 1,300 |

■ARH-SP

| Model | Length L | Width W | Height H (mm) |
|----------|-----------|---------|---------------|
| ARH50SP | 750 | 530 | 800 |
| ARH65SP | 850 | 610 | 820 |
| ARH80SP | 990 | 630 | 890 |
| ARH100SP | 3.7~7.5kW | 1,080 | 700 |
| | 11kW | 1,200 | 790 |
| | | | 1,000 |

Specifications and dimensions are subject to change without notice.

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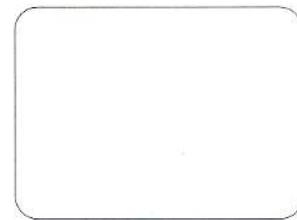
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