

Type of AA(R) Slurry Pump



AOJIN

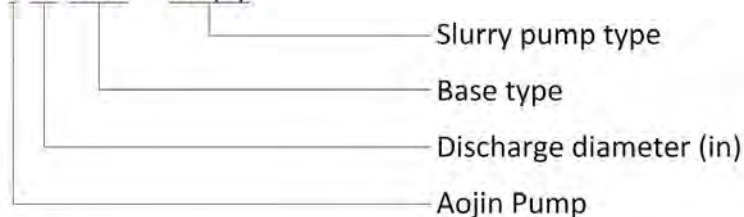
AA(R) Heavy Duty Slurry Pumps



AA(R) series is horizontal cantilever, single suction, centrifugal slurry pump. Suitable for mining, metallurgy, coal, electric power and other industrial sectors, conveying high concentration, strong abrasive slurry. This series of slurry pump can be used in single stage or in series. The slurry pump has a replaceable high hardness alloy or elastomer overcurrent lining to meet various erosive and corrosive working conditions. Pump outlet direction can be rotated in 8 directions at an interval of 45° as required.

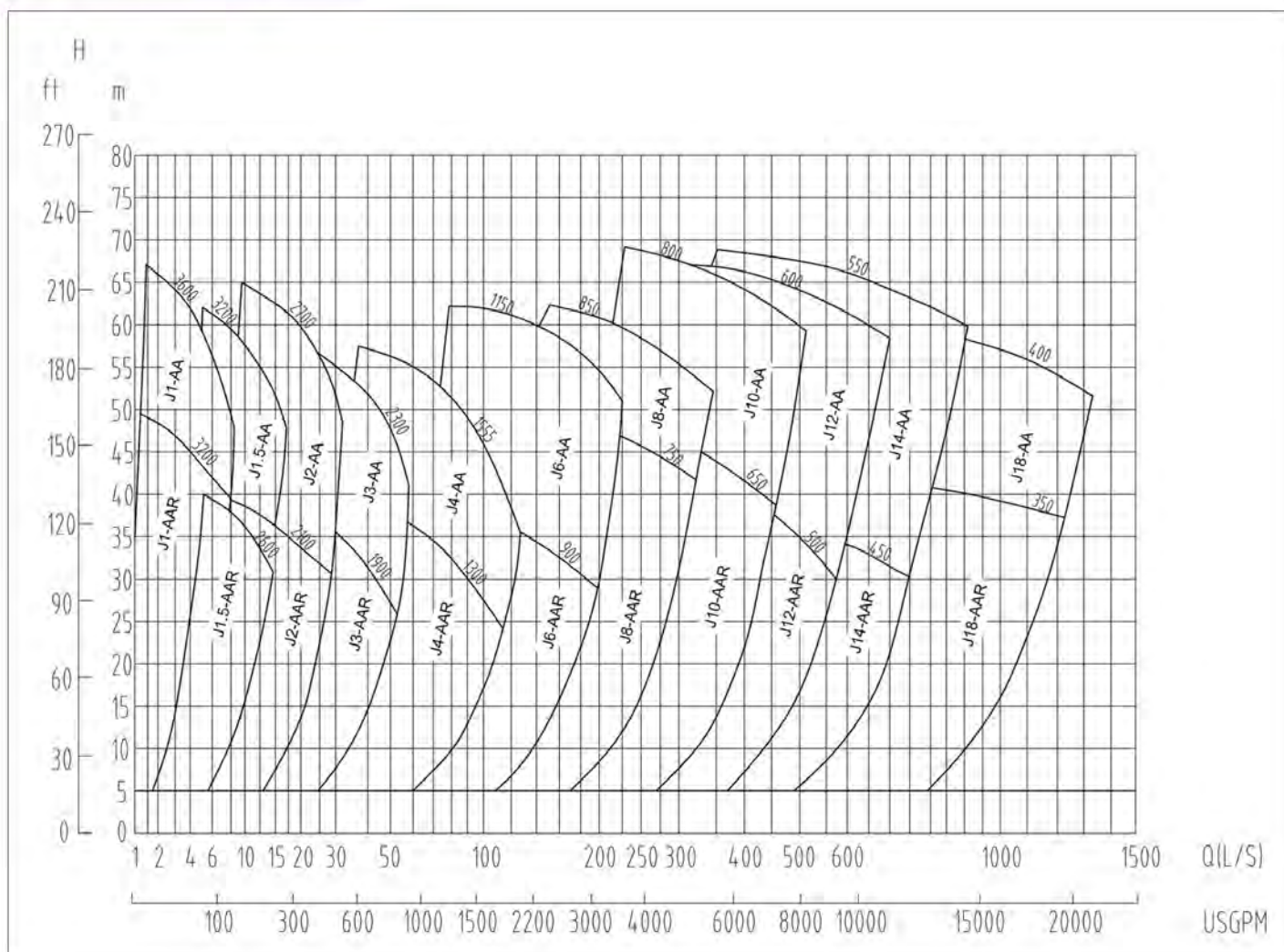
Notation

J 10 ST90 — AA(R)



| Type | Size range(discharges) | Flow Rate to | Heads to |
|------|------------------------|-----------------------|----------|
| AA | 1"~18"(25mmto450mm) | 5400m ³ /h | 68m |
| AAR | 1"~18"(25mmto450mm) | 4680m ³ /h | 50m |

Pump-selection chart



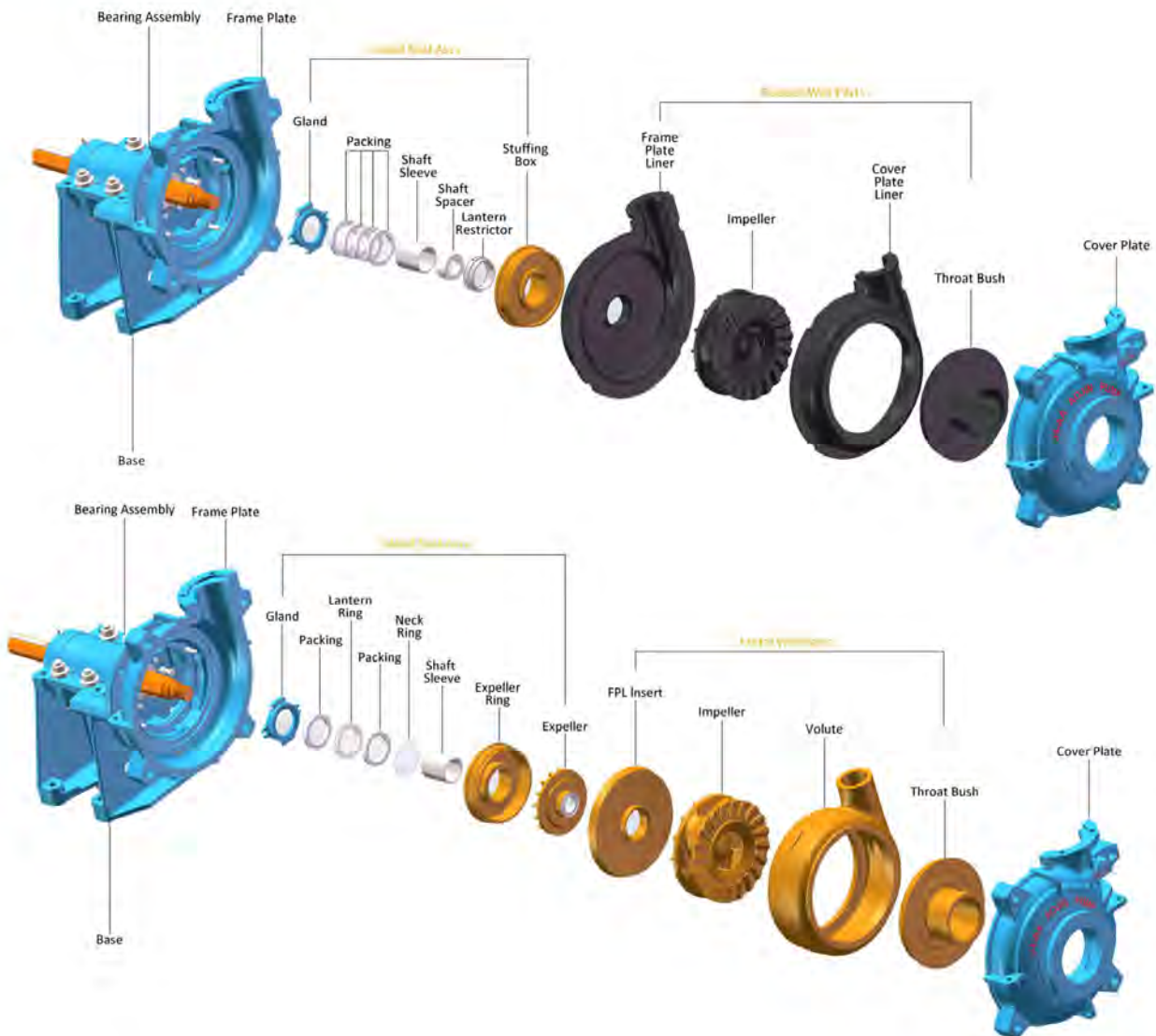
Clear Water Performance

| Type | Max. Motor Power(KW) | Material | | Clear Water Performance | | | | | |
|---------------|----------------------|----------|----------|-------------------------|------------|------------|----------------|---------|-----------|
| | | Liner | Impeller | Capacity | | Head H (m) | Speed n(r/min) | Eff. H% | NPSH (m) |
| | | | | (m ³ /h) | (l/s) | | | | |
| J1B2-AA(R) | 15 | M | M | 12.6-28.8 | 3.5 ~ 8 | 6 ~ 68 | 1200 ~ 3800 | 40 | 2 ~ 4 |
| | | RU | RU | 10.8 ~ 25.2 | 3 ~ 7 | 7 ~ 52 | 1400 ~ 3400 | 35 | 2 ~ 4 |
| J1.5B2- AA(R) | 15 | M | M | 32.4 ~ 72 | 9 ~ 20 | 6 ~ 58 | 1200 ~ 3200 | 45 | 3.5 ~ 8 |
| | | RU | RU | 25.2 ~ 54 | 7 ~ 15 | 5.5 ~ 41 | 1000 ~ 2600 | 50 | 2.5 ~ 5 |
| J2C3- AA(R) | 30 | M | M | 39.6-86.4 | 11 ~ 24 | 12 ~ 64 | 1300 ~ 2700 | 55 | 4 ~ 6 |
| | | RU | RU | 36 ~ 75.6 | 10 ~ 21 | 13 ~ 39 | 1300 ~ 2100 | 55 | 2 ~ 4 |
| J3C3- AA | 30 | M | M | 86.4 ~ 198 | 24 ~ 55 | 9 ~ 52 | 1000 ~ 2200 | 71 | 4 ~ 6 |
| J3D4- AA | 60 | | | | | | | | |
| J3C3- AAR | 30 | RU | RU | 79.2-180 | 22 ~ 50 | 5 ~ 34.5 | 800 ~ 1800 | 59 | 3 ~ 5 |
| J3D4- AAR | 60 | | | | | | | | |
| J4D4- AA | 60 | M | M | 162 ~ 360 | 45 ~ 100 | 12 ~ 56 | 800 ~ 1550 | 65 | 5 ~ 8 |
| J4E5- AA | 120 | | | | | | | | |
| J4D4- AAR | 60 | RU | RU | 144 ~ 324 | 40 ~ 90 | 12 ~ 45 | 800 ~ 1350 | 65 | 3 ~ 5 |
| J4E5- AAR | 120 | | | | | | | | |
| J6E5- AA | 120 | M | M | 360 ~ 828 | 100 ~ 230 | 10 ~ 61 | 500 ~ 1140 | 72 | 2 ~ 9 |
| J6R11- AA | 300 | | | | | | | | |
| J6E5- AAR | 120 | RU | RU | 32 ~ 720 | 90 ~ 200 | 7 ~ 49 | 400 ~ 1000 | 65 | 5 ~ 10 |
| J6R11- AAR | 300 | | | | | | | | |
| J8ST90-AA(R) | 560 | M | M | 612 ~ 1368 | 170 ~ 380 | 11-61 | 400 ~ 850 | 71 | 4 ~ 10 |
| | | RU | RU | 540-1188 | 150 ~ 330 | 12 ~ 50 | 400 ~ 750 | 75 | 4 ~ 12 |
| J10ST90-AA(R) | 560 | M | M | 936 ~ 1980 | 260 ~ 550 | 7 ~ 68 | 300 ~ 800 | 82 | 6 |
| | | RU | RU | 720 ~ 1620 | 200 ~ 450 | 7 ~ 45 | 300 ~ 650 | 80 | 2.5 ~ 7.5 |
| J12ST90-AA(R) | 560 | M | M | 1260 ~ 2772 | 350 ~ 770 | 13 ~ 63 | 300 ~ 600 | 77 | 3 ~ 10 |
| | | RU | RU | 1152 ~ 2520 | 320 ~ 700 | 13 ~ 44 | 300 ~ 500 | 79 | 3 ~ 8 |
| J14TU00-AA(R) | 1200 | M | M | 1368 ~ 3060 | 380 ~ 850 | 11 ~ 63 | 250 ~ 550 | 79 | 4 ~ 10 |
| | | RU | RU | 1260-2880 | 350 ~ 800 | 12-42.5 | 250 ~ 450 | 80 | 4 ~ 8 |
| J18TU00-AA(R) | 1200 | M | M | 2520 ~ 5400 | 700 ~ 1500 | 13-57 | 200 ~ 400 | 85 | 5 ~ 10 |
| | | RU | RU | 1800 ~ 4680 | 500 ~ 1300 | 13 ~ 44 | 200 ~ 350 | 80 | 2 ~ 7 |

1.Capacity range recommended 50%Q'<Q<110%Q', (Q-Capacity at Max. eff. point)

2.M means Alloy wear-resistant material, R means rubber

Product structure characteristics



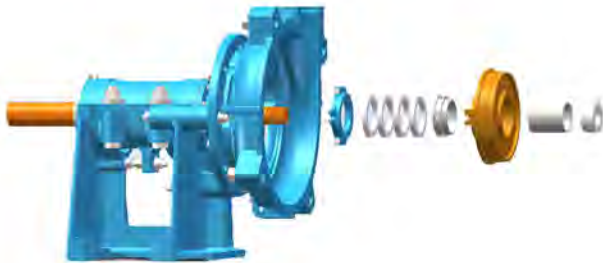
Products Features

- **Shaft** - A large diameter with a short overhang ensure the rigidity of shaft, suitable for high power condition.
- **Shaft sleeve** - Hardened stainless steel shaft sleeve with "O" ring seals at both ends. A slip fit allows the sleeve protects the shaft from the wear and corrosion.
- **Pump case** - Ductile iron pump case provides durability, strength, safety and long service life.
- **Bearing Assembly** - Cartridge-style bearing assembly allows for maintenance in a clean environment without removal of the pump, resulting in reliable operation and prolonged bearing life.
- **Wet parts** - The wet parts are made of high-chrome alloy or rubber, having the abrasion-resistant, corrosion-resistant and impact erosion-resistant properties, improve the service life; the metal wet parts and rubber wet parts are interchangeable or mixed use, suited for different working conditions.
- **Impeller** - Impeller adopt the method of wide flow and vane concave to improve flow and corrosion resistance, prolong service life.
- **Shaft seal** - The shaft seal may be adoptable of packing seal, expeller seal and mechanical seal to fit different working conditions.
- **Discharge branch** - The discharge branch can be positioned at intervals of 45 degrees by request and oriented to any eight positions to suit installations and applications.

Seal type

Interchangeable Shaft Seal

Aojin pumps provide complete interchangeability of seal arrangements. Full-flush, low-flow centrifugal or mechanical seals can be fitted to any size of pumps.



Seal options

Packing seal: Packing seal is widely used, simple in structure, convenient in maintenance and cheap in price. The packing seal shall be externally connected with clean flushing water, whose pressure is 0.035mpa higher than that of the pump chamber.



Metal expeller seal: The expeller seal does not need shaft sealing water, sealing effect is good, but the pump inlet positive pressure should not be more than 10% of the pump outlet pressure.



Mechanical seal: high cost of mechanical seal, used for corrosive, high temperature liquid, suitable for high seal requirements of working conditions.

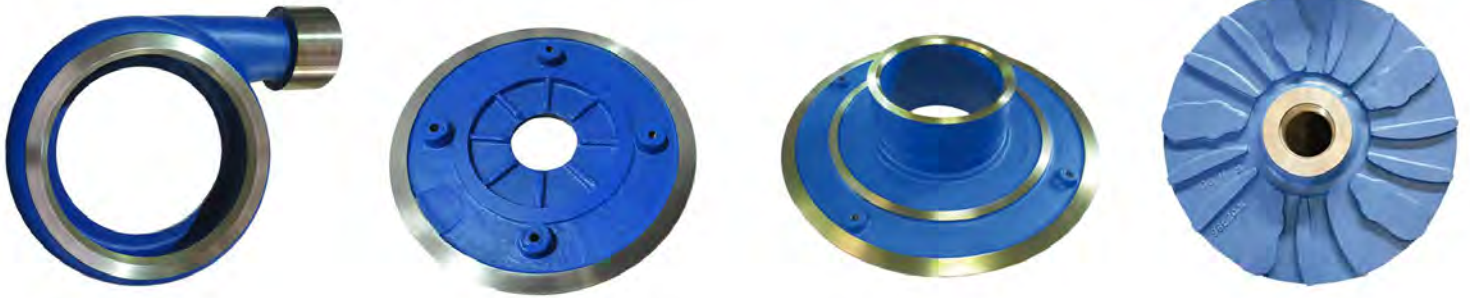


Rubber expeller seal: If the suction pressure of the pump is no greater than 10% of the discharge pressure, the application is suitable for a centrifugal shaft seal. For variations from this general rule, please contact AOJIN technical team.

Main materials of wet end parts

Hi-Chrome alloy material

Features: high hardness, good impact fatigue resistance, wear resistance and corrosion resistance. It is used for transporting the slurry containing solid particles and withstand large impact loads. Apply to making impeller, volute liner, throatbush, FPLI and other wet end parts.



Rubber material

Features: good elasticity, wear resistance, heat resistance, corrosion resistance, used for conveying fine particle slurry without edges and corners. Apply to making impeller, volute liner, throatbush, FPLI and other wet end parts.



Polyurethane material

Features: large elongation, wide hardness range, excellent wear resistance and corrosion resistance. Apply to making impeller, volute liner, throatbush, FPLI and other wet end parts.



Silicon carbide material

Features: High hardness, wear resistance, acid and alkali corrosion resistance, high temperature resistance.



Drive type



CV(Z)



DC(Z)



ZV(Z)



CR(z)\CL(z)

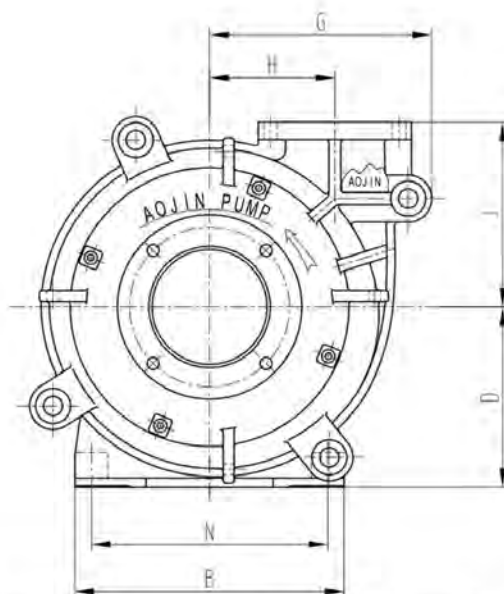
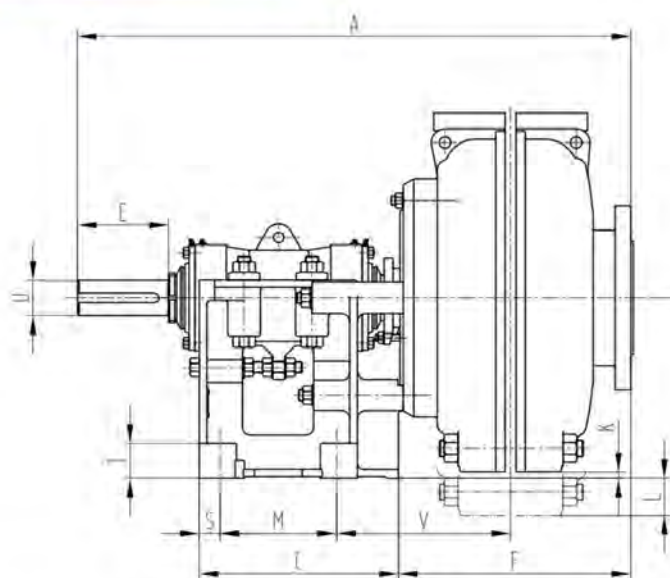
CV(Z) : It takes up little space and the speed can be adjusted, but it cannot be used in high-power output condition.

DC(Z) : Simple structure, stable operation.

ZV(Z) : Reasonable structure, adjustable speed, wide application.

CR(z)\CL(z) : Adjustable speed, small axial occupation of the site, can be used for some special occasions or high power belt transmission form.

Outline dimensions



| Pump Type | A | B | C | D | U | E | F | G | H | J | K | L | M | N | S | T | V | Weight(Kg) | |
|---------------|------|------|------|-----|-----|-----|------|------|-----|------|-----|-----|-----|------|----|-----|-----|------------|--------|
| | | | | | | | | | | | | | | | | | | Metal | Rubber |
| J1B2-AA(R) | 583 | 295 | 248 | 197 | 28 | 79 | 206 | 181 | 98 | 171 | 46 | | 143 | 254 | 24 | 38 | 181 | 91 | 77 |
| J1.5B2-AA(R) | 592 | 295 | 248 | 197 | 28 | 79 | 217 | 205 | 114 | 184 | 33 | | 143 | 254 | 24 | 38 | 184 | 104 | 118 |
| J2C3-AA(R) | 768 | 406 | 311 | 254 | 42 | 121 | 281 | 238 | 138 | 210 | 71 | | 175 | 356 | 32 | 48 | 233 | 191 | 154 |
| J3C3-AA(R) | 843 | 406 | 311 | 254 | 42 | 121 | 354 | 292 | 149 | 262 | 24 | | 175 | 356 | 32 | 48 | 270 | 263 | 236 |
| J3D4-AA(R) | 943 | 492 | 364 | 330 | 65 | 164 | 353 | 292 | 149 | 262 | 100 | | 213 | 432 | 38 | 64 | 279 | 363 | 290 |
| J4D4-AA(R) | 1021 | 492 | 364 | 330 | 65 | 164 | 421 | 406 | 229 | 338 | 11 | | 213 | 432 | 38 | 64 | 318 | 626 | 454 |
| J4E5-AA(R) | 1178 | 622 | 448 | 457 | 80 | 222 | 433 | 406 | 229 | 338 | 138 | | 257 | 546 | 54 | 76 | 351 | 728 | 635 |
| J6E5-AA(R) | 1302 | 622 | 448 | 457 | 80 | 222 | 557 | 551 | 318 | 460 | | 62 | 257 | 546 | 54 | 76 | 402 | 1473 | 982 |
| J6F6-AA(R) | 1507 | 857 | 635 | 610 | 100 | 279 | 539 | 551 | 318 | 460 | 90 | | 349 | 762 | 95 | 98 | 438 | 1860 | 1390 |
| J6R11-AA(R) | 1360 | 680 | 590 | 350 | 85 | 215 | 554 | 551 | 318 | 460 | | 170 | 490 | 560 | 50 | 70 | 312 | 1655 | 1164 |
| J8F6-AA(R) | 1646 | 991 | 705 | 610 | 100 | 279 | 682 | 673 | 419 | 635 | | 12 | 584 | 762 | 60 | 98 | 410 | 2920 | 2460 |
| J8ST90-AA(R) | 1748 | 1150 | 780 | 650 | 120 | 280 | 692 | 673 | 419 | 635 | 27 | | 620 | 900 | 80 | 125 | 439 | 3750 | 3130 |
| J10F6-AA(R) | 1721 | 991 | 705 | 610 | 279 | 752 | 755 | 464 | 673 | | 104 | | 584 | 762 | 60 | 98 | 432 | 3790 | 2940 |
| J10ST90-AA(R) | 1816 | 1150 | 780 | 650 | 120 | 280 | 762 | 755 | 464 | 674 | | 65 | 620 | 900 | 80 | 125 | 461 | 4318 | 3357 |
| J10G7-AA(R) | 1995 | 1207 | 876 | 851 | 140 | 356 | 750 | 755 | 464 | 673 | 136 | | 749 | 851 | 64 | 152 | 432 | 4380 | 3590 |
| J12ST90-AA(R) | 1873 | 1150 | 780 | 650 | 120 | 280 | 812 | 944 | 629 | 832 | | 224 | 620 | 900 | 80 | 125 | 486 | 6409 | 4672 |
| J12G7-AA(R) | 2038 | 1207 | 876 | 851 | 140 | 356 | 800 | 944 | 629 | 832 | | 22 | 749 | 851 | 64 | 152 | 457 | 6080 | 4970 |
| J14TU00-AA(R) | 2320 | 1460 | 1050 | 900 | 150 | 350 | 953 | 1048 | 660 | 889 | | 84 | 860 | 1200 | 95 | 150 | 597 | 10000 | 7867 |
| J18TU00-AA(R) | 2475 | 1460 | 1050 | 900 | 150 | 350 | 1100 | 1414 | 940 | 1230 | | 417 | 860 | 1200 | 95 | 150 | 615 | 17840 | 12750 |

The application case

