



6. Цилиндрические мотор-редукторы с параллельными валами серии F реукторов

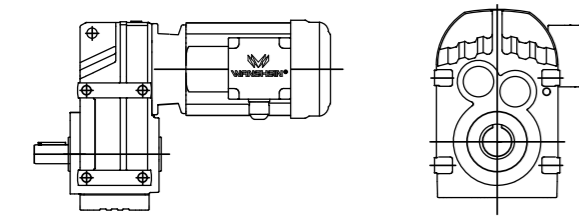
6. F Parallel shaft-Helical Geared Motor

6.1 Исполнение мотор-редукторов

6.1 Versions geared motors

The following types of Parallel Shaft-Helical Geared Motor can be supplied

Поставляются следующие виды цилиндрических мотор-редукторов с параллельными валами серии F



F..D..
Цельный вал
Резьбовые отверстия для установки на лапы
Solid shaft
Foot mount tapped holes

FA..BD..
Установка на лапы с полым валом и резьбовыми отверстиями
Foot mounted with Hollow shaft and tapped holes

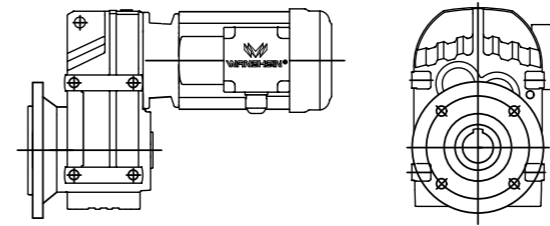
FV..BD
Установка на лапы с полым валом для шлицевого соединения и резьбовыми отверстиями
Foot mounted with splined hollow shaft and tapped holes

FH..BD..
Установка на лапы с полым валом, стяжной муфтой и резьбовыми отверстиями
Foot mounted with hollow shaft, shrink disk and tapped holes

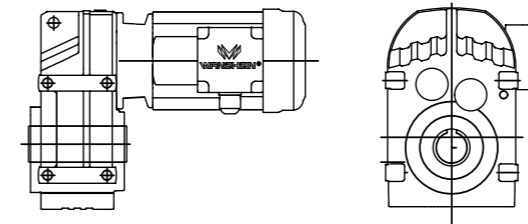
FF..D..
Цельный вал
Установка с фланцем (фланец типа D и B5 с резьбовыми отверстиями)
Solid shaft
Flange mounted (D&B5 style flange with tapped holes)

FAF..D..
B5 Flange mounted with hollow shaft and tapped holes
устанавливается с помощью фланцев B5 с полым валом для шлицевого бвдесидизм з ндорсвтыъз вятднбязмъз

FVF..D..
B5 flange mounted with splined hollow shaft and tapped holes



FHF..D..
Устанавливается с помощью фланцев B5 с полым валом и стяжной муфтой
B5 flange mounted with hollow shaft and shrink disk



FA..D..
Полый вал для шлицевого соединения и шпонкой
Устанавливается на вал
Splined hollow shaft with key
Shaft mount

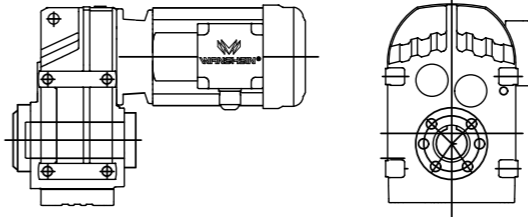
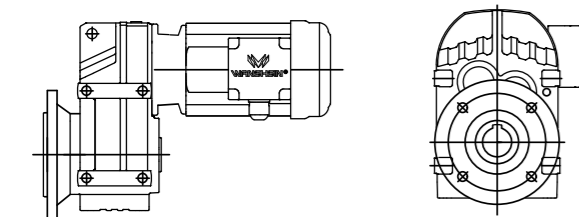
FV..D..
Полый вал со шлицем
Устанавливается на валу
Splined hollow shaft
Shaft mount

FH..D..
Полый вал со стяжной муфтой
Устанавливается на валу
Shrink disk hollow shaft
Shaft mount

FAZ..D..
Полый вал со шпонкой
Торцевое крепление (фланец типа C и B14 с резьбовыми отверстиями)
Hollow shaft with key
Face mount (C & B14 style flange with tapped holes)

FVZ..D..
Полый вал со шпонкой
Торцевое крепление (фланец типа C и B14 с резьбовыми отверстиями)
Hollow shaft with key
Face mount (C&B14 style flange with tapped holes)

FHZ..D..
B14
Полый вал со стяжной муфтой Торцевое крепление (фланец типа C и B14 с резьбовыми отверстиями)
Shrink disk hollow shaft Face mount (C&B14 style flange with tapped holes)





6.2 Виды комбинаций 6.2 Type of Combination

The below is combination table between gear box and electro motor in each list the ratio range.

| Gear unit size Размеры редуктора | Stages Ступени | D63/71 (0.12-0.37KW) | D80 (0.55-0.75KW) | D90 (1.1-1.5KW) | D100 (2.2-3.0KW) | D112 (4.0KW) | D132S (5.5KW) | D132M (7.5KW) |
|-------------------------------------|-------------------|-----------------------------|--------------------------|--|---|-----------------------------|-----------------------------|-----------------------------|
| F/FF/FA/FAF37 | 2 | 4.22-7.44 8.97-23.63 | 3.77-23.63 | 3.77-20.57 | 3.77-6.74 8.01-14.33 17.03 | | | |
| F/FF/FA/FAF37 | 3 | 23.88-128.51 | 23.88-100.36 | 23.88-51.70 58.32-86.53 | 23.88-31.69 38.31 51.70 58.32 70.50 | | | |
| F/FF/FA/FAF47 | 2 | 6.34-8.96 13.93-30.86 | 4.99-30.86 | 4.99-30.86 | 4.99-25.72 | | | |
| F/FF/FA/FAF47 | 3 | 28.88-190.76 | 28.88-150.06 | 28.88-130.07 | 28.88-56.49 68.09-105.09 | | | |
| F/FF/FA/FAF57 | 2 | 6.58-9.31 13.52-40.13 | 5.18-34.24 | 5.18-29.94 | 5.18-24.96 | 5.18-21.17 | | |
| F/FF/FA/FAF57 | 3 | 30.15-199.70 | 30.15-157.09 | 30.15-136.16 | 30.15-58.97 83.46-110.01 | 30.15-50.10 83.46-93.47 | | |
| F/FF/FA/FAF67 | 2 | 7.53-9.08 18.29-36.30 | 5.95-9.08 14.46-36.30 | 3.97-36.30 | 3.97-32.08 | 3.97-27.41 | 3.97-22.05 | 3.97-22.05 |
| F/FF/FA/FAF67 | 3 | 43.20-228.99 | 34.01-195.39 | 34.01-170.85 | 34.01-142.40 | 34.01-67.65 90.59-120.79 | 34.01-53.73 90.59-95.94 | 34.01-53.73 90.59-95.94 |
| F/FF/FA/FAF77 | 2 | 21.43-36.58 | 8.26-9.30 17.49-36.58 | 5.76-9.30 12.20-36.58 | 4.28-36.58 | 4.28-31.51 | 4.28-25.50 | 4.28-25.50 |
| F/FF/FA/FAF77 | 3 | 48.37-72.50 94.93-281.71 | 38.23-225.79 | 25.54-198.31 | 25.54-166.47 | 25.54-142.27 | 25.54-58.32 75.02-114.45 | 25.54-58.32 75.02-114.45 |
| F/FF/FA/FAF87 | 2 | | 23.68-33.92 | 7.35-8.29 17.12-33.92 | 5.63-8.29 13.12-33.92 | 5.63-8.29 13.12-33.92 | 4.12-33.92 | 4.12-33.92 |
| F/FF/FA/FAF87 | 3 | | 109.49-270.68 | 39.30-50.36 76.39-270.68 | 29.20-228.93 | 29.20-197.20 | 29.20-159.61 | 29.20-159.61 |
| F/FF/FA/FAF97 | 2 | | | 9.06 22.11-43.28 | 7.07-9.06 17.25-43.28 | 7.07-9.06 17.25-43.28 | 4.57-43.28 | 4.57-43.28 |
| F/FF/FA/FAF97 | 3 | | | 58.06-72.29 80.31 89.85-97.58 112.99-276.77 | 44.49-72.29 80.31-276.77 | 44.49-72.29 80.31-276.77 | 32.50-223.88 | 32.50-223.88 |
| F/FF/FA/FAF107 | 2 | | | | 21.76-33.79 | 21.76-33.79 | 7.40-9.69 14.67-33.79 | 7.40-9.69 14.67-33.79 |
| F/FF/FA/FAF107 | 3 | | | | 58.12-83.99 92.47-254.40 | 58.12-83.99 92.47-254.40 | 37.61-254.40 | 37.61-254.40 |
| F/FF/FA/FAF127 | 2 | | | | | | | 7.88-8.86 14.55-26.86 |
| F/FF/FA/FAF127 | 3 | | | | | | | 37.28-170.83 |

| Gear unit size Габариты редуктора | Stages Ступени | D132ML (9.2KW) | D160M (11KW) | D160L (15KW) | D180 (18.5KW) | D200 (30KW) |
|--------------------------------------|-------------------|------------------------------|------------------------------|------------------------------|---------------------------------------|----------------|
| F/FF/FA/FAF77 | 2 | 4.28-19.70 | 4.28-19.70 | | | |
| F/FF/FA/FAF77 | 3 | 25.54-43.58 | 25.54-43.58 | | | |
| F/FF/FA/FAF87 | 2 | 4.12-26.50 | 4.12-26.50 | 4.12-26.50 | 4.12-21.32 | |
| F/FF/FA/FAF87 | 3 | 29.20-123.29 | 29.20-123.29 | 29.20-123.29 | 29.20-50.36 | |
| F/FF/FA/FAF97 | 2 | 4.57-33.91 | 4.57-33.91 | 4.57-33.91 | 4.57-27.44 | |
| F/FF/FA/FAF97 | 3 | 32.50-89.85 102.16-174.87 | 32.50-89.85 102.16-174.87 | 32.50-89.85 102.16-174.87 | 32.50-75.63 86.59 102.16-140.71 | |
| F/FF/FA/FAF107 | 2 | 6.22-9.69 12.33-33.79 | 6.22-9.69 12.33-33.79 | 6.22-9.69 12.33-33.79 | 6.22-33.79 | |
| F/FF/FA/FAF107 | 3 | 31.80-199.31 | 31.80-199.31 | 31.80-199.31 | 31.80-161.28 | 31.80-161.28 |
| F/FF/FA/FAF127 | 2 | 6.80-8.86 12.54-26.86 | 6.80-8.86 12.54-26.86 | 6.80-8.86 12.54-26.86 | 5.52-26.86 | 4.86-26.86 |
| F/FF/FA/FAF127 | 3 | 31.33-170.83 | 31.33-170.83 | 31.33-170.83 | 25.30-153.67 | 25.30-125.37 |
| F/FF/FA/FAF157 | 2 | | 16.85-53.55 | 16.85-53.55 | 13.96-43.94 | 11.92-35.75 |
| F/FF/FA/FAF157 | 3 | | 40.06-267.43 | 40.06-267.43 | 32.55-217.62 | 27.60-178.20 |

| Gear unit size Габариты редуктора | Stages Ступени | D225 (37-45KW) | D250M (55KW) | D280 (75-90KW) | D315/ (110-132KW) | D315-A/B (160-200KW) |
|--------------------------------------|-------------------|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------|
| F/FF/FA/FAF107 | 2 | 6.22-27.57 | | | | |
| F/FF/FA/FAF107 | 3 | 31.80-74.52 88.49 101.38-129.97 | | | | |
| F/FF/FA/FAF127 | 2 | 4.68-26.86 | 4.68-21.38 | 4.68-21.38 | | |
| F/FF/FA/FAF127 | 3 | 25.30-125.37 | 25.30-55.31 75.41-98.95 | 25.30-55.31 75.41-98.95 | | |
| F/FF/FA/FAF157 | 2 | 11.92-35.75 | 11.92-28.60 | 11.92-28.60 | 11.92-22.16 | 11.92-16.85 |
| F/FF/FA/FAF157 | 3 | 27.60-178.20 | 27.60-68.28 96.53-141.80 | 27.60-68.28 96.53-141.80 | 27.60-52.24 96.53-108.49 | 27.60-40.06 |



6.3 Передаточное число и максимальный крутящий момент

6.3 Ratio and Max. Torque

F37-57 n_a=1400 r/min n_a=1400 об/мин

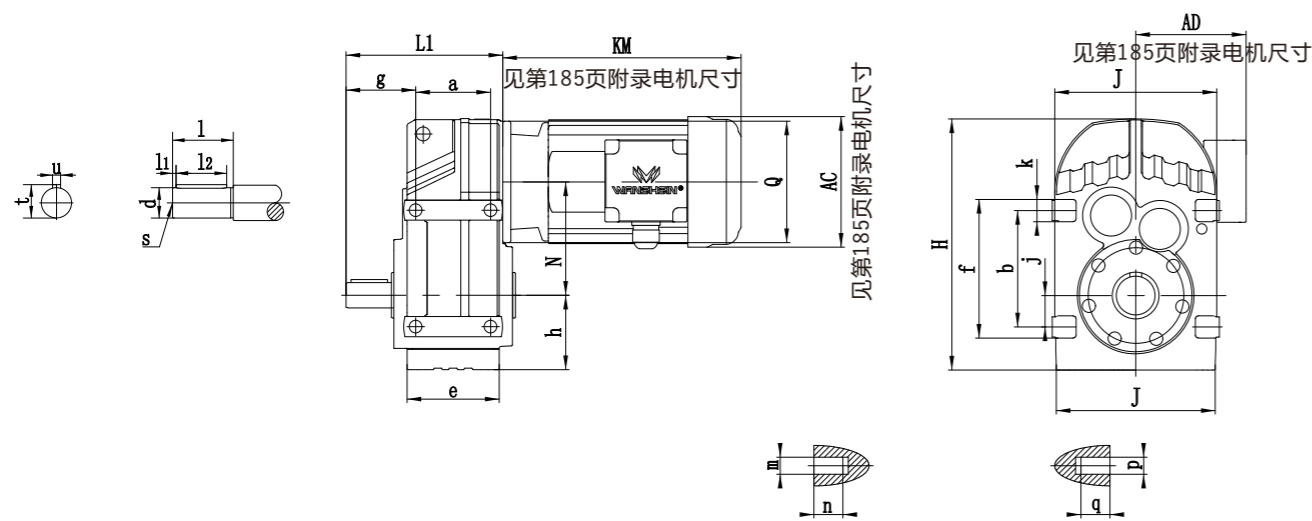
| F37 200Nm | | | | | F47 400Nm | | | | | F57 600Nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|------------------------|-----------------------|---------------------|-------|-----------------------|------------------------|-----------------------|---------------------|-----|-----------------------|------------------------|-----------------------|---------------------|-----|-------|----|-----|------|-------|-------|-----|------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|------|-------|-----|-----|------|-------|-------|-----|------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------------|-------|-------|-------|-----------------------|-----------------------|-------|-------|-----------------------|-----------------------|-----------------------|-----------------------|-------|-----------------------|-----------------------|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------|-----------------------|-----------------------|-------|-----------------------|-------|-------|-----------------------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-----|-------|-------|-----|-------|------|-----|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|
| i | n _a [r/min] | M _{max} [Nm] | F _{ra} [N] | AD | i | n _a [r/min] | M _{max} [Nm] | F _{ra} [N] | AD | i | n _a [r/min] | M _{max} [Nm] | F _{ra} [N] | AD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-stage 3-ступенчатый | | | | | 3-stage 3-ступенчатый | | | | | 3-stage 3-ступенчатый | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 128.51 | 11 | 200 | 4290 | AD1 | 190.76 | 7.3 | 400 | 5920 | AD1 | 199.70 | 7.0 | 600 | 8200 | AD2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 117.88 | 12 | 200 | 4290 | | 100.36 | 14 | 200 | 4290 | | 86.53 | 16 | 200 | 4290 | | 80.65 | 17 | 200 | 4290 | 70.50 | 20 | 200 | 4290 | 66.09 | 21 | 200 | 4290 | 58.32 | 24 | 200 | 4290 | 54.54 | 26 | 200 | 4290 | 51.70 | 27 | 200 | 4290 | AD2 | | | | | AD2 | | | | | AD2 | | | | | 47.02 | 30 | 200 | 4290 | 65.36 | 21 | 400 | 5920 | 68.22 | 21 | 600 | 8200 | AD2 | 43.83 | 32 | 200 | 4290 | 56.49 | 25 | 400 | 5920 | 58.97 | 24 | 600 | 8200 | 38.31 | 37 | 200 | 4290 | 48.00 | 29 | 400 | 5920 | 50.10 | 28 | 600 | 8200 | 35.91 | 39 | 200 | 4290 | 42.86 | 33 | 400 | 5920 | 44.73 | 31 | 600 | 8200 | 31.69 | 44 | 200 | 4290 | 36.61 | 38 | 400 | 5920 | 38.21 | 37 | 600 | 8200 | 28.09 | 50 | 200 | 4060 | 34.29 | 41 | 400 | 5920 | 35.79 | 39 | 600 | 8200 | 23.88 | 59 | 200 | 3760 | 28.88 | 48 | 400 | 5790 | 30.15 | 46 | 590 | 7650 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 23.63 | 59 | 200 | 3740 | 30.86 | 45 | 400 | 5920 | 40.13 | 35 | 290 | 9710 | AD2 | 20.57 | 68 | 200 | 3500 | 29.32 | 48 | 400 | 5830 | 34.24 | 41 | 500 | 8670 | 19.27 | 73 | 200 | 3390 | 25.72 | 54 | 400 | 5470 | 29.94 | 47 | 545 | 7890 | 17.03 | 82 | 200 | 3180 | 21.82 | 64 | 400 | 5030 | 28.45 | 49 | 535 | 7760 | 15.81 | 89 | 200 | 3070 | 19.70 | 71 | 400 | 4770 | 24.96 | 56 | 575 | 7060 | 14.33 | 98 | 200 | 2910 | 17.33 | 81 | 400 | 4450 | AD3 | 12.87 | 109 | 200 | 2750 | 16.36 | 86 | 400 | 4320 | 11.08 | 126 | 190 | 2620 | 13.93 | 100 | 400 | 3950 | 10.42 | 134 | 185 | 2580 | 12.66 | 111 | 400 | 3740 | 8.97 | 156 | 175 | 2460 | 10.97 | 128 | 400 | 3440 | 8.01 | 175 | 170 | 2360 | 8.96 | 156 | 330 | 3250 | 7.44 | 188 | 145 | 2350 | 7.88 | 178 | 380 | 2630 | 6.74 | 208 | 140 | 2270 | 7.44 | 188 | 380 | 2530 | 6.05 | 231 | 135 | 2190 | 6.34 | 221 | 350 | 2470 | 5.21 | 269 | 125 | 2120 | 5.76 | 243 | 340 | 2390 | 4.90 | 286 | 120 | 2100 | 4.99 | 281 | 320 | 2310 | 4.22 | 332 | 110 | 2030 | | | | | 3.77 | 372 | 105 | 1970 | | | | |
| 100.36 | 14 | 200 | 4290 | | 86.53 | 16 | 200 | 4290 | | 80.65 | 17 | 200 | 4290 | | 70.50 | 20 | 200 | 4290 | 66.09 | 21 | 200 | 4290 | 58.32 | 24 | 200 | 4290 | 54.54 | 26 | 200 | 4290 | 51.70 | 27 | 200 | 4290 | AD2 | | | | | AD2 | | | | | AD2 | | | | | 47.02 | 30 | 200 | 4290 | 65.36 | 21 | 400 | 5920 | 68.22 | 21 | 600 | 8200 | AD2 | 43.83 | 32 | 200 | | 4290 | 56.49 | 25 | 400 | 5920 | 58.97 | 24 | 600 | 8200 | 38.31 | 37 | 200 | 4290 | 48.00 | 29 | 400 | 5920 | 50.10 | 28 | 600 | 8200 | 35.91 | 39 | 200 | 4290 | 42.86 | 33 | 400 | 5920 | 44.73 | 31 | 600 | 8200 | 31.69 | 44 | 200 | 4290 | 36.61 | 38 | 400 | 5920 | 38.21 | 37 | 600 | 8200 | 28.09 | 50 | 200 | 4060 | 34.29 | 41 | 400 | 5920 | 35.79 | 39 | 600 | 8200 | 23.88 | 59 | 200 | 3760 | 28.88 | 48 | 400 | 5790 | 30.15 | 46 | 590 | 7650 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 23.63 | 59 | 200 | 3740 | 30.86 | 45 | 400 | 5920 | 40.13 | 35 | 290 | 9710 | AD2 | 20.57 | 68 | | 200 | 3500 | 29.32 | 48 | 400 | 5830 | 34.24 | 41 | 500 | 8670 | 19.27 | 73 | 200 | 3390 | 25.72 | 54 | 400 | 5470 | 29.94 | 47 | 545 | 7890 | 17.03 | 82 | 200 | 3180 | 21.82 | 64 | 400 | 5030 | 28.45 | 49 | 535 | 7760 | 15.81 | 89 | 200 | 3070 | 19.70 | 71 | 400 | 4770 | 24.96 | 56 | 575 | 7060 | 14.33 | 98 | 200 | 2910 | 17.33 | 81 | 400 | 4450 | AD3 | 12.87 | | 109 | 200 | 2750 | 16.36 | 86 | 400 | 4320 | 11.08 | 126 | 190 | 2620 | 13.93 | 100 | 400 | 3950 | 10.42 | 134 | 185 | 2580 | 12.66 | 111 | 400 | 3740 | 8.97 | 156 | 175 | 2460 | 10.97 | 128 | 400 | 3440 | 8.01 | 175 | 170 | 2360 | 8.96 | 156 | 330 | 3250 | 7.44 | 188 | 145 | 2350 | 7.88 | 178 | 380 | 2630 | 6.74 | 208 | 140 | 2270 | 7.44 | 188 | 380 | 2530 | 6.05 | 231 | 135 | 2190 | 6.34 | 221 | 350 | 2470 | 5.21 | 269 | 125 | 2120 | 5.76 | 243 | 340 | 2390 | 4.90 | 286 | 120 | 2100 | 4.99 | 281 | 320 | 2310 | 4.22 | 332 | 110 | 2030 | | | | | 3.77 | 372 | 105 | 1970 | | | | | |
| 86.53 | 16 | 200 | 4290 | | 80.65 | 17 | 200 | 4290 | | 70.50 | 20 | 200 | 4290 | | 66.09 | 21 | 200 | 4290 | 58.32 | 24 | 200 | 4290 | 54.54 | 26 | 200 | 4290 | 51.70 | 27 | 200 | 4290 | AD2 | | | | | AD2 | | | | | AD2 | | | | | 47.02 | 30 | 200 | 4290 | 65.36 | 21 | 400 | 5920 | 68.22 | 21 | 600 | 8200 | AD2 | 43.83 | 32 | 200 | | 4290 | 56.49 | 25 | | 400 | 5920 | 58.97 | 24 | 600 | 8200 | 38.31 | 37 | 200 | 4290 | 48.00 | 29 | 400 | 5920 | 50.10 | 28 | 600 | 8200 | 35.91 | 39 | 200 | 4290 | 42.86 | 33 | 400 | 5920 | 44.73 | 31 | 600 | 8200 | 31.69 | 44 | 200 | 4290 | 36.61 | 38 | 400 | 5920 | 38.21 | 37 | 600 | 8200 | 28.09 | 50 | 200 | 4060 | 34.29 | 41 | 400 | 5920 | 35.79 | 39 | 600 | 8200 | 23.88 | 59 | 200 | 3760 | 28.88 | 48 | 400 | 5790 | 30.15 | 46 | 590 | 7650 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 23.63 | 59 | 200 | 3740 | 30.86 | 45 | 400 | 5920 | 40.13 | 35 | 290 | 9710 | AD2 | 20.57 | 68 | | 200 | 3500 | | 29.32 | 48 | 400 | 5830 | 34.24 | 41 | 500 | 8670 | 19.27 | 73 | 200 | 3390 | 25.72 | 54 | 400 | 5470 | 29.94 | 47 | 545 | 7890 | 17.03 | 82 | 200 | 3180 | 21.82 | 64 | 400 | 5030 | 28.45 | 49 | 535 | 7760 | 15.81 | 89 | 200 | 3070 | 19.70 | 71 | 400 | 4770 | 24.96 | 56 | 575 | 7060 | 14.33 | 98 | 200 | 2910 | 17.33 | 81 | 400 | 4450 | AD3 | 12.87 | | 109 | | 200 | 2750 | 16.36 | 86 | 400 | 4320 | 11.08 | 126 | 190 | 2620 | 13.93 | 100 | 400 | 3950 | 10.42 | 134 | 185 | 2580 | 12.66 | 111 | 400 | 3740 | 8.97 | 156 | 175 | 2460 | 10.97 | 128 | 400 | 3440 | 8.01 | 175 | 170 | 2360 | 8.96 | 156 | 330 | 3250 | 7.44 | 188 | 145 | 2350 | 7.88 | 178 | 380 | 2630 | 6.74 | 208 | 140 | 2270 | 7.44 | 188 | 380 | 2530 | 6.05 | 231 | 135 | 2190 | 6.34 | 221 | 350 | 2470 | 5.21 | 269 | 125 | 2120 | 5.76 | 243 | 340 | 2390 | 4.90 | 286 | 120 | 2100 | 4.99 | 281 | 320 | 2310 | 4.22 | 332 | 110 | 2030 | | | | | 3.77 | 372 | 105 | 1970 | | | | | | |
| 80.65 | 17 | 200 | 4290 | | 70.50 | 20 | 200 | 4290 | | 66.09 | 21 | 200 | 4290 | | 58.32 | 24 | 200 | 4290 | 54.54 | 26 | 200 | 4290 | 51.70 | 27 | 200 | 4290 | AD2 | | | | | AD2 | | | | | AD2 | | | | | 47.02 | 30 | 200 | 4290 | 65.36 | 21 | 400 | 5920 | 68.22 | 21 | 600 | 8200 | AD2 | 43.83 | 32 | 200 | | 4290 | 56.49 | 25 | | 400 | 5920 | 58.97 | | 24 | 600 | 8200 | 38.31 | 37 | 200 | 4290 | 48.00 | 29 | 400 | 5920 | 50.10 | 28 | 600 | 8200 | 35.91 | 39 | 200 | 4290 | 42.86 | 33 | 400 | 5920 | 44.73 | 31 | 600 | 8200 | 31.69 | 44 | 200 | 4290 | 36.61 | 38 | 400 | 5920 | 38.21 | 37 | 600 | 8200 | 28.09 | 50 | 200 | 4060 | 34.29 | 41 | 400 | 5920 | 35.79 | 39 | 600 | 8200 | 23.88 | 59 | 200 | 3760 | 28.88 | 48 | 400 | 5790 | 30.15 | 46 | 590 | 7650 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 23.63 | 59 | 200 | 3740 | 30.86 | 45 | 400 | 5920 | 40.13 | 35 | 290 | 9710 | AD2 | 20.57 | 68 | | 200 | 3500 | | 29.32 | 48 | | 400 | 5830 | 34.24 | 41 | 500 | 8670 | 19.27 | 73 | 200 | 3390 | 25.72 | 54 | 400 | 5470 | 29.94 | 47 | 545 | 7890 | 17.03 | 82 | 200 | 3180 | 21.82 | 64 | 400 | 5030 | 28.45 | 49 | 535 | 7760 | 15.81 | 89 | 200 | 3070 | 19.70 | 71 | 400 | 4770 | 24.96 | 56 | 575 | 7060 | 14.33 | 98 | 200 | 2910 | 17.33 | 81 | 400 | 4450 | AD3 | 12.87 | | 109 | | 200 | | 2750 | 16.36 | 86 | 400 | 4320 | 11.08 | 126 | 190 | 2620 | 13.93 | 100 | 400 | 3950 | 10.42 | 134 | 185 | 2580 | 12.66 | 111 | 400 | 3740 | 8.97 | 156 | 175 | 2460 | 10.97 | 128 | 400 | 3440 | 8.01 | 175 | 170 | 2360 | 8.96 | 156 | 330 | 3250 | 7.44 | 188 | 145 | 2350 | 7.88 | 178 | 380 | 2630 | 6.74 | 208 | 140 | 2270 | 7.44 | 188 | 380 | 2530 | 6.05 | 231 | 135 | 2190 | 6.34 | 221 | 350 | 2470 | 5.21 | 269 | 125 | 2120 | 5.76 | 243 | 340 | 2390 | 4.90 | 286 | 120 | 2100 | 4.99 | 281 | 320 | 2310 | 4.22 | 332 | 110 | 2030 | | | | | 3.77 | 372 | 105 | 1970 | | | | | | | |
| 70.50 | 20 | 200 | 4290 | | 66.09 | 21 | 200 | 4290 | | 58.32 | 24 | 200 | 4290 | | 54.54 | 26 | 200 | 4290 | 51.70 | 27 | 200 | 4290 | AD2 | | | | | AD2 | | | | | AD2 | | | | | 47.02 | 30 | 200 | 4290 | 65.36 | 21 | 400 | 5920 | 68.22 | 21 | 600 | 8200 | AD2 | 43.83 | 32 | 200 | | 4290 | 56.49 | 25 | | 400 | 5920 | 58.97 | | 24 | 600 | 8200 | | 38.31 | 37 | 200 | 4290 | 48.00 | 29 | 400 | 5920 | 50.10 | 28 | 600 | 8200 | 35.91 | 39 | 200 | 4290 | 42.86 | 33 | 400 | 5920 | 44.73 | 31 | 600 | 8200 | 31.69 | 44 | 200 | 4290 | 36.61 | 38 | 400 | 5920 | 38.21 | 37 | 600 | 8200 | 28.09 | 50 | 200 | 4060 | 34.29 | 41 | 400 | 5920 | 35.79 | 39 | 600 | 8200 | 23.88 | 59 | 200 | 3760 | 28.88 | 48 | 400 | 5790 | 30.15 | 46 | 590 | 7650 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 23.63 | 59 | 200 | 3740 | 30.86 | 45 | 400 | 5920 | 40.13 | 35 | 290 | 9710 | AD2 | 20.57 | 68 | | 200 | 3500 | | 29.32 | 48 | | 400 | 5830 | | 34.24 | 41 | 500 | 8670 | 19.27 | 73 | 200 | 3390 | 25.72 | 54 | 400 | 5470 | 29.94 | 47 | 545 | 7890 | 17.03 | 82 | 200 | 3180 | 21.82 | 64 | 400 | 5030 | 28.45 | 49 | 535 | 7760 | 15.81 | 89 | 200 | 3070 | 19.70 | 71 | 400 | 4770 | 24.96 | 56 | 575 | 7060 | 14.33 | 98 | 200 | 2910 | 17.33 | 81 | 400 | 4450 | AD3 | 12.87 | | 109 | | 200 | | 2750 | | 16.36 | 86 | 400 | 4320 | 11.08 | 126 | 190 | 2620 | 13.93 | 100 | 400 | 3950 | 10.42 | 134 | 185 | 2580 | 12.66 | 111 | 400 | 3740 | 8.97 | 156 | 175 | 2460 | 10.97 | 128 | 400 | 3440 | 8.01 | 175 | 170 | 2360 | 8.96 | 156 | 330 | 3250 | 7.44 | 188 | 145 | 2350 | 7.88 | 178 | 380 | 2630 | 6.74 | 208 | 140 | 2270 | 7.44 | 188 | 380 | 2530 | 6.05 | 231 | 135 | 2190 | 6.34 | 221 | 350 | 2470 | 5.21 | 269 | 125 | 2120 | 5.76 | 243 | 340 | 2390 | 4.90 | 286 | 120 | 2100 | 4.99 | 281 | 320 | 2310 | 4.22 | 332 | 110 | 2030 | | | | | 3.77 | 372 | 105 | 1970 | | | | | | | | |
| 66.09 | 21 | 200 | 4290 | | 58.32 | 24 | 200 | 4290 | | 54.54 | 26 | 200 | 4290 | | 51.70 | 27 | 200 | 4290 | AD2 | | | | | AD2 | | | | | AD2 | | | | | 47.02 | 30 | 200 | 4290 | 65.36 | 21 | 400 | 5920 | 68.22 | 21 | 600 | 8200 | AD2 | 43.83 | 32 | 200 | | 4290 | 56.49 | 25 | | 400 | 5920 | 58.97 | | 24 | 600 | 8200 | | 38.31 | 37 | 200 | | 4290 | 48.00 | 29 | 400 | 5920 | 50.10 | 28 | 600 | 8200 | 35.91 | 39 | 200 | 4290 | 42.86 | 33 | 400 | 5920 | 44.73 | 31 | 600 | 8200 | 31.69 | 44 | 200 | 4290 | 36.61 | 38 | 400 | 5920 | 38.21 | 37 | 600 | 8200 | 28.09 | 50 | 200 | 4060 | 34.29 | 41 | 400 | 5920 | 35.79 | 39 | 600 | 8200 | 23.88 | 59 | 200 | 3760 | 28.88 | 48 | 400 | 5790 | 30.15 | 46 | 590 | 7650 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 23.63 | 59 | 200 | 3740 | 30.86 | 45 | 400 | 5920 | 40.13 | 35 | 290 | 9710 | AD2 | 20.57 | 68 | | 200 | 3500 | | 29.32 | 48 | | 400 | 5830 | | 34.24 | 41 | | 500 | 8670 | 19.27 | 73 | 200 | 3390 | 25.72 | 54 | 400 | 5470 | 29.94 | 47 | 545 | 7890 | 17.03 | 82 | 200 | 3180 | 21.82 | 64 | 400 | 5030 | 28.45 | 49 | 535 | 7760 | 15.81 | 89 | 200 | 3070 | 19.70 | 71 | 400 | 4770 | 24.96 | 56 | 575 | 7060 | 14.33 | 98 | 200 | 2910 | 17.33 | 81 | 400 | 4450 | AD3 | 12.87 | | 109 | | 200 | | 2750 | | 16.36 | | 86 | 400 | 4320 | 11.08 | 126 | 190 | 2620 | 13.93 | 100 | 400 | 3950 | 10.42 | 134 | 185 | 2580 | 12.66 | 111 | 400 | 3740 | 8.97 | 156 | 175 | 2460 | 10.97 | 128 | 400 | 3440 | 8.01 | 175 | 170 | 2360 | 8.96 | 156 | 330 | 3250 | 7.44 | 188 | 145 | 2350 | 7.88 | 178 | 380 | 2630 | 6.74 | 208 | 140 | 2270 | 7.44 | 188 | 380 | 2530 | 6.05 | 231 | 135 | 2190 | 6.34 | 221 | 350 | 2470 | 5.21 | 269 | 125 | 2120 | 5.76 | 243 | 340 | 2390 | 4.90 | 286 | 120 | 2100 | 4.99 | 281 | 320 | 2310 | 4.22 | 332 | 110 | 2030 | | | | | 3.77 | 372 | 105 | 1970 | | | | | | | | | |
| 58.32 | 24 | 200 | 4290 | | 54.54 | 26 | 200 | 4290 | | 51.70 | 27 | 200 | 4290 | | AD2 | | | | | AD2 | | | | | AD2 | | | | | 47.02 | 30 | 200 | 4290 | 65.36 | 21 | 400 | 5920 | 68.22 | 21 | 600 | 8200 | AD2 | 43.83 | 32 | 200 | | 4290 | 56.49 | 25 | | 400 | 5920 | 58.97 | | 24 | 600 | 8200 | | 38.31 | 37 | 200 | | 4290 | 48.00 | 29 | | 400 | 5920 | 50.10 | 28 | 600 | 8200 | 35.91 | 39 | 200 | 4290 | 42.86 | 33 | 400 | 5920 | 44.73 | 31 | 600 | 8200 | 31.69 | 44 | 200 | 4290 | 36.61 | 38 | 400 | 5920 | 38.21 | 37 | 600 | 8200 | 28.09 | 50 | 200 | 4060 | 34.29 | 41 | 400 | 5920 | 35.79 | 39 | 600 | 8200 | 23.88 | 59 | 200 | 3760 | 28.88 | 48 | 400 | 5790 | 30.15 | 46 | 590 | 7650 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 23.63 | 59 | 200 | 3740 | 30.86 | 45 | 400 | 5920 | 40.13 | 35 | 290 | 9710 | AD2 | 20.57 | 68 | | 200 | 3500 | | 29.32 | 48 | | 400 | 5830 | | 34.24 | 41 | | 500 | 8670 | | 19.27 | 73 | 200 | 3390 | 25.72 | 54 | 400 | 5470 | 29.94 | 47 | 545 | 7890 | 17.03 | 82 | 200 | 3180 | 21.82 | 64 | 400 | 5030 | 28.45 | 49 | 535 | 7760 | 15.81 | 89 | 200 | 3070 | 19.70 | 71 | 400 | 4770 | 24.96 | 56 | 575 | 7060 | 14.33 | 98 | 200 | 2910 | 17.33 | 81 | 400 | 4450 | AD3 | 12.87 | | 109 | | 200 | | 2750 | | 16.36 | | 86 | | 400 | 4320 | 11.08 | 126 | 190 | 2620 | 13.93 | 100 | 400 | 3950 | 10.42 | 134 | 185 | 2580 | 12.66 | 111 | 400 | 3740 | 8.97 | 156 | 175 | 2460 | 10.97 | 128 | 400 | 3440 | 8.01 | 175 | 170 | 2360 | 8.96 | 156 | 330 | 3250 | 7.44 | 188 | 145 | 2350 | 7.88 | 178 | 380 | 2630 | 6.74 | 208 | 140 | 2270 | 7.44 | 188 | 380 | 2530 | 6.05 | 231 | 135 | 2190 | 6.34 | 221 | 350 | 2470 | 5.21 | 269 | 125 | 2120 | 5.76 | 243 | 340 | 2390 | 4.90 | 286 | 120 | 2100 | 4.99 | 281 | 320 | 2310 | 4.22 | 332 | 110 | 2030 | | | | | 3.77 | 372 | 105 | 1970 | | | | | | | | | | |
| 54.54 | 26 | 200 | 4290 | | 51.70 | 27 | 200 | 4290 | | AD2 | | | | | AD2 | | | | | AD2 | | | | | 47.02 | 30 | 200 | 4290 | 65.36 | 21 | 400 | 5920 | 68.22 | 21 | 600 | 8200 | AD2 | 43.83 | 32 | 200 | 4290 | | 56.49 | 25 | 400 | | 5920 | 58.97 | 24 | | 600 | 8200 | 38.31 | | 37 | 200 | 4290 | | 48.00 | 29 | 400 | | 5920 | 50.10 | 28 | | 600 | 8200 | 35.91 | 39 | 200 | 4290 | 42.86 | 33 | 400 | 5920 | 44.73 | 31 | 600 | 8200 | 31.69 | 44 | 200 | 4290 | 36.61 | 38 | 400 | 5920 | 38.21 | 37 | 600 | 8200 | 28.09 | 50 | 200 | 4060 | 34.29 | 41 | 400 | 5920 | 35.79 | 39 | 600 | 8200 | 23.88 | 59 | 200 | 3760 | 28.88 | 48 | 400 | 5790 | 30.15 | 46 | 590 | 7650 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 23.63 | 59 | 200 | 3740 | 30.86 | 45 | 400 | 5920 | 40.13 | 35 | 290 | 9710 | AD2 | 20.57 | 68 | 200 | | 3500 | 29.32 | | 48 | 400 | | 5830 | 34.24 | | 41 | 500 | | 8670 | 19.27 | | 73 | 200 | | 3390 | 25.72 | 54 | 400 | 5470 | 29.94 | 47 | 545 | 7890 | 17.03 | 82 | 200 | 3180 | 21.82 | 64 | 400 | 5030 | 28.45 | 49 | 535 | 7760 | 15.81 | 89 | 200 | 3070 | 19.70 | 71 | 400 | 4770 | 24.96 | 56 | 575 | 7060 | 14.33 | 98 | 200 | 2910 | 17.33 | 81 | 400 | 4450 | AD3 | 12.87 | 109 | | 200 | | 2750 | | 16.36 | | 86 | | 400 | | 4320 | | 11.08 | 126 | 190 | 2620 | 13.93 | 100 | 400 | 3950 | 10.42 | 134 | 185 | 2580 | 12.66 | 111 | 400 | 3740 | 8.97 | 156 | 175 | 2460 | 10.97 | 128 | 400 | 3440 | 8.01 | 175 | 170 | 2360 | 8.96 | 156 | 330 | 3250 | 7.44 | 188 | 145 | 2350 | 7.88 | 178 | 380 | 2630 | 6.74 | 208 | 140 | 2270 | 7.44 | 188 | 380 | 2530 | 6.05 | 231 | 135 | 2190 | 6.34 | 221 | 350 | 2470 | 5.21 | 269 | 125 | 2120 | 5.76 | 243 | 340 | 2390 | 4.90 | 286 | 120 | 2100 | 4.99 | 281 | 320 | 2310 | 4.22 | 332 | 110 | 2030 | | | | | 3.77 | 372 | 105 | 1970 | | | | | | | | | | | | |
| 51.70 | 27 | 200 | 4290 | | AD2 | | | | | AD2 | | | | | AD2 | | | | | 47.02 | 30 | 200 | 4290 | 65.36 | 21 | 400 | 5920 | 68.22 | 21 | 600 | 8200 | AD2 | 43.83 | 32 | 200 | 4290 | | 56.49 | 25 | 400 | 5920 | | 58.97 | 24 | 600 | | 8200 | 38.31 | 37 | | 200 | 4290 | 48.00 | | 29 | 400 | 5920 | | 50.10 | 28 | 600 | | 8200 | 35.91 | 39 | | 200 | 4290 | 42.86 | 33 | 400 | 5920 | 44.73 | 31 | 600 | 8200 | 31.69 | 44 | 200 | 4290 | 36.61 | 38 | 400 | 5920 | 38.21 | 37 | 600 | 8200 | 28.09 | 50 | 200 | 4060 | 34.29 | 41 | 400 | 5920 | 35.79 | 39 | 600 | 8200 | 23.88 | 59 | 200 | 3760 | 28.88 | 48 | 400 | 5790 | 30.15 | 46 | 590 | 7650 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 23.63 | 59 | 200 | 3740 | 30.86 | 45 | 400 | 5920 | 40.13 | 35 | 290 | 9710 | AD2 | 20.57 | 68 | 200 | | 3500 | 29.32 | 48 | | 400 | 5830 | | 34.24 | 41 | | 500 | 8670 | | 19.27 | 73 | | 200 | 3390 | | 25.72 | 54 | | 400 | 5470 | 29.94 | 47 | 545 | 7890 | 17.03 | 82 | 200 | 3180 | 21.82 | 64 | 400 | 5030 | 28.45 | 49 | 535 | 7760 | 15.81 | 89 | 200 | 3070 | 19.70 | 71 | 400 | 4770 | 24.96 | 56 | 575 | 7060 | 14.33 | 98 | 200 | 2910 | 17.33 | 81 | 400 | 4450 | AD3 | 12.87 | 109 | | 200 | 2750 | | 16.36 | | 86 | | 400 | | 4320 | | 11.08 | | 126 | | 190 | 2620 | 13.93 | 100 | 400 | 3950 | 10.42 | 134 | 185 | 2580 | 12.66 | 111 | 400 | 3740 | 8.97 | 156 | 175 | 2460 | 10.97 | 128 | 400 | 3440 | 8.01 | 175 | 170 | 2360 | 8.96 | 156 | 330 | 3250 | 7.44 | 188 | 145 | 2350 | 7.88 | 178 | 380 | 2630 | 6.74 | 208 | 140 | 2270 | 7.44 | 188 | 380 | 2530 | 6.05 | 231 | 135 | 2190 | 6.34 | 221 | 350 | 2470 | 5.21 | 269 | 125 | 2120 | 5.76 | 243 | 340 | 2390 | 4.90 | 286 | 120 | 2100 | 4.99 | 281 | 320 | 2310 | 4.22 | 332 | 110 | 2030 | | | | | 3.77 | 372 | 105 | 1970 | | | | | | | | | | | | | | |
| AD2 | | | | | AD2 | | | | | AD2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 47.02 | 30 | 200 | 4290 | 65.36 | 21 | 400 | 5920 | 68.22 | 21 | 600 | 8200 | AD2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 43.83 | 32 | 200 | 4290 | 56.49 | 25 | 400 | 5920 | 58.97 | 24 | 600 | 8200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 38.31 | 37 | 200 | 4290 | 48.00 | 29 | 400 | 5920 | 50.10 | 28 | 600 | 8200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 35.91 | 39 | 200 | 4290 | 42.86 | 33 | 400 | 5920 | 44.73 | 31 | 600 | 8200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31.69 | 44 | 200 | 4290 | 36.61 | 38 | 400 | 5920 | 38.21 | 37 | 600 | 8200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28.09 | 50 | 200 | 4060 | 34.29 | 41 | 400 | 5920 | 35.79 | 39 | 600 | 8200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23.88 | 59 | 200 | 3760 | 28.88 | 48 | 400 | 5790 | 30.15 | 46 | 590 | 7650 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23.63 | 59 | 200 | 3740 | 30.86 | 45 | 400 | 5920 | 40.13 | 35 | 290 | 9710 | | AD2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20.57 | 68 | 200 | 3500 | 29.32 | 48 | 400 | 5830 | 34.24 | 41 | 500 | 8670 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19.27 | 73 | 200 | 3390 | 25.72 | 54 | 400 | 5470 | 29.94 | 47 | 545 | 7890 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17.03 | 82 | 200 | 3180 | 21.82 | 64 | 400 | 5030 | 28.45 | 49 | 535 | 7760 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15.81 | 89 | 200 | 3070 | 19.70 | 71 | 400 | 4770 | 24.96 | 56 | 575 | 7060 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14.33 | 98 | 200 | 2910 | 17.33 | 81 | 400 | 4450 | AD3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.87 | 109 | 200 | 2750 | 16.36 | 86 | 400 | 4320 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11.08 | 126 | 190 | 2620 | 13.93 | 100 | 400 | 3950 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10.42 | 134 | 185 | 2580 | 12.66 | 111 | 400 | 3740 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.97 | 156 | 175 | 2460 | 10.97 | 128 | 400 | 3440 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.01 | 175 | 170 | 2360 | 8.96 | 156 | 330 | 3250 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.44 | 188 | 145 | 2350 | 7.88 | 178 | 380 | 2630 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.74 | 208 | 140 | 2270 | 7.44 | 188 | 380 | 2530 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.05 | 231 | 135 | 2190 | 6.34 | 221 | 350 | 2470 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.21 | 269 | 125 | 2120 | 5.76 | 243 | 340 | 2390 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.90 | 286 | 120 | 2100 | 4.99 | 281 | 320 | 2310 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.22 | 332 | 110 | 2030 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.77 | 372 | 105 | 1970 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

F67-87 n_a=1400 r/min n_a=1400 об/мин

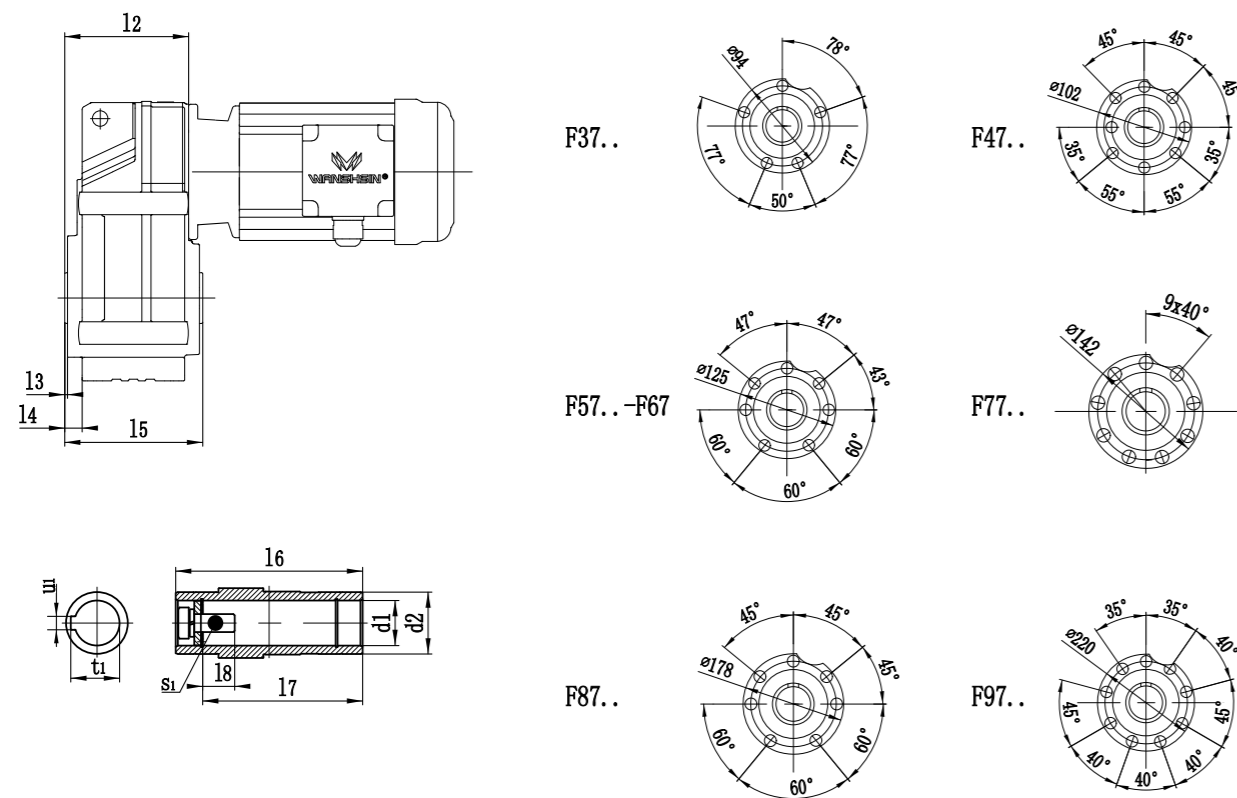
| F67 820Nm | | | | | F77 1500Nm | | | | | F87 3000Nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| i | n _a [r/min] | M _{max} [Nm] | F _{ra} [N] | AD | i | n _a [r/min] | M _{max} [Nm] | F _{ra} [N] | AD | i | n _a [r/min] | M _{max} [Nm] | F _{ra} [N] | AD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-stage 3-ступенчатый | | | | | 3-stage 3-ступенчатый | | | | | 3-stage 3-ступенчатый | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 228.99 | 6.1 | 820 | 10300 | AD2 | 281.71 | 5.0 | 1500 | 15700 | AD2 | 270.68 | 5.2 | 3000 | 19800 | AD2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 195.39 | 7.2 | 820 | 10300 | | 170.85 | 8.2 | 820 | 10300 | | 162.31 | 8.6 | 820 | 10300 | | 142.40 | 9.8 | 820 | 10300 | 120.79 | 12 | 820 | 10300 | 109.04 | 13 | 820 | 10300 | 95.94 | 15 | 820 | 10300 | 90.59 | 15 | 820 | 10300 | 79.76 | 18 | 820 | 10300 | 67.65 | 21 | 820 | 10300 | 61.07 | 23 | 820 | 10300 | 53.73 | 26 | 820 | 10300 | 50.74 | 28 | 820 | 10300 | 43.20 | 32 | 820 | 10300 | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | 15700 | 19.31 | 73 | 3000 | 8840 | 11.31 | 124 | 820 | 10300 | 21.43 | 65 | 1500 | 15700 | 17.12 | 82 | 3000 | 8040 | 9.66 | 145 | 820 | 10300 | 19.70 | 71 | 1500 | 15700 | 15.48 | 90 | 3000 | 7390 | 9.08 | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | |
| 170.85 | 8.2 | 820 | 10300 | | 162.31 | 8.6 | 820 | 10300 | | 142.40 | 9.8 | 820 | 10300 | | 120.79 | 12 | 820 | 10300 | 109.04 | 13 | 820 | 10300 | 95.94 | 15 | 820 | 10300 | 90.59 | 15 | 820 | 10300 | 79.76 | 18 | 820 | 10300 | 67.65 | 21 | 820 | 10300 | 61.07 | 23 | 820 | 10300 | 53.73 | 26 | 820 | 10300 | 50.74 | 28 | 820 | 10300 | 43.20 | 32 | 820 | 10300 | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | 3000 | 8840 | 11.31 | 124 | 820 | 10300 | 21.43 | 65 | 1500 | 15700 | 17.12 | 82 | 3000 | 8040 | 9.66 | 145 | 820 | 10300 | 19.70 | 71 | 1500 | 15700 | 15.48 | 90 | 3000 | 7390 | 9.08 | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | |
| 162.31 | 8.6 | 820 | 10300 | | 142.40 | 9.8 | 820 | 10300 | | 120.79 | 12 | 820 | 10300 | | 109.04 | 13 | 820 | 10300 | 95.94 | 15 | 820 | 10300 | 90.59 | 15 | 820 | 10300 | 79.76 | 18 | 820 | 10300 | 67.65 | 21 | 820 | 10300 | 61.07 | 23 | 820 | 10300 | 53.73 | 26 | 820 | 10300 | 50.74 | 28 | 820 | 10300 | 43.20 | 32 | 820 | 10300 | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | 124 | 820 | 10300 | 21.43 | 65 | 1500 | 15700 | 17.12 | 82 | 3000 | 8040 | 9.66 | 145 | 820 | 10300 | 19.70 | 71 | 1500 | 15700 | 15.48 | 90 | 3000 | 7390 | 9.08 | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | |
| 142.40 | 9.8 | 820 | 10300 | | 120.79 | 12 | 820 | 10300 | | 109.04 | 13 | 820 | 10300 | | 95.94 | 15 | 820 | 10300 | 90.59 | 15 | 820 | 10300 | 79.76 | 18 | 820 | 10300 | 67.65 | 21 | 820 | 10300 | 61.07 | 23 | 820 | 10300 | 53.73 | 26 | 820 | 10300 | 50.74 | 28 | 820 | 10300 | 43.20 | 32 | 820 | 10300 | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | 21.43 | 65 | 1500 | 15700 | 17.12 | 82 | 3000 | 8040 | 9.66 | 145 | 820 | 10300 | 19.70 | 71 | 1500 | 15700 | 15.48 | 90 | 3000 | 7390 | 9.08 | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | |
| 120.79 | 12 | 820 | 10300 | | 109.04 | 13 | 820 | 10300 | | 95.94 | 15 | 820 | 10300 | | 90.59 | 15 | 820 | 10300 | 79.76 | 18 | 820 | 10300 | 67.65 | 21 | 820 | 10300 | 61.07 | 23 | 820 | 10300 | 53.73 | 26 | 820 | 10300 | 50.74 | 28 | 820 | 10300 | 43.20 | 32 | 820 | 10300 | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | 15700 | 17.12 | 82 | 3000 | 8040 | 9.66 | 145 | 820 | 10300 | 19.70 | 71 | 1500 | 15700 | 15.48 | 90 | 3000 | 7390 | 9.08 | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | |
| 109.04 | 13 | 820 | 10300 | | 95.94 | 15 | 820 | 10300 | | 90.59 | 15 | 820 | 10300 | | 79.76 | 18 | 820 | 10300 | 67.65 | 21 | 820 | 10300 | 61.07 | 23 | 820 | 10300 | 53.73 | 26 | 820 | 10300 | 50.74 | 28 | 820 | 10300 | 43.20 | 32 | 820 | 10300 | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | | 15700 | 17.12 | 82 | 3000 | 8040 | 9.66 | 145 | 820 | 10300 | 19.70 | 71 | 1500 | 15700 | 15.48 | 90 | 3000 | 7390 | 9.08 | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | |
| 95.94 | 15 | 820 | 10300 | | 90.59 | 15 | 820 | 10300 | | 79.76 | 18 | 820 | 10300 | | 67.65 | 21 | 820 | 10300 | 61.07 | 23 | 820 | 10300 | 53.73 | 26 | 820 | 10300 | 50.74 | 28 | 820 | 10300 | 43.20 | 32 | 820 | 10300 | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | | 15700 | 17.12 | 82 | | 3000 | 8040 | 9.66 | 145 | 820 | 10300 | 19.70 | 71 | 1500 | 15700 | 15.48 | 90 | 3000 | 7390 | 9.08 | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | | | | |
| 90.59 | 15 | 820 | 10300 | | 79.76 | 18 | 820 | 10300 | | 67.65 | 21 | 820 | 10300 | | 61.07 | 23 | 820 | 10300 | 53.73 | 26 | 820 | 10300 | 50.74 | 28 | 820 | 10300 | 43.20 | 32 | 820 | 10300 | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | | 15700 | 17.12 | 82 | | 3000 | 8040 | 9.66 | | 145 | 820 | 10300 | 19.70 | 71 | 1500 | 15700 | 15.48 | 90 | 3000 | 7390 | 9.08 | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 79.76 | 18 | 820 | 10300 | | 67.65 | 21 | 820 | 10300 | | 61.07 | 23 | 820 | 10300 | | 53.73 | 26 | 820 | 10300 | 50.74 | 28 | 820 | 10300 | 43.20 | 32 | 820 | 10300 | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | | 15700 | 17.12 | 82 | | 3000 | 8040 | 9.66 | | 145 | 820 | 10300 | | 19.70 | 71 | 1500 | 15700 | 15.48 | 90 | 3000 | 7390 | 9.08 | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 67.65 | 21 | 820 | 10300 | | 61.07 | 23 | 820 | 10300 | | 53.73 | 26 | 820 | 10300 | | 50.74 | 28 | 820 | 10300 | 43.20 | 32 | 820 | 10300 | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | | 15700 | 17.12 | 82 | | 3000 | 8040 | 9.66 | | 145 | 820 | 10300 | | 19.70 | 71 | 1500 | | 15700 | 15.48 | 90 | 3000 | 7390 | 9.08 | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 61.07 | 23 | 820 | 10300 | | 53.73 | 26 | 820 | 10300 | | 50.74 | 28 | 820 | 10300 | | 43.20 | 32 | 820 | 10300 | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | | 15700 | 17.12 | 82 | | 3000 | 8040 | 9.66 | | 145 | 820 | 10300 | | 19.70 | 71 | 1500 | | 15700 | 15.48 | 90 | | 3000 | 7390 | 9.08 | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 53.73 | 26 | 820 | 10300 | | 50.74 | 28 | 820 | 10300 | | 43.20 | 32 | 820 | 10300 | | 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | | 15700 | 17.12 | 82 | | 3000 | 8040 | 9.66 | | 145 | 820 | 10300 | | 19.70 | 71 | 1500 | | 15700 | 15.48 | 90 | | 3000 | 7390 | 9.08 | | 154 | 530 | 11400 | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50.74 | 28 | 820 | 10300 | | 43.20 | 32 | 820 | 10300 | | 39.26 | 36 | 780 | 10700 | | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | | 15700 | 17.12 | 82 | | 3000 | 8040 | 9.66 | | 145 | 820 | 10300 | | 19.70 | 71 | 1500 | | 15700 | 15.48 | 90 | | 3000 | 7390 | 9.08 | | 154 | 530 | 11400 | | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 43.20 | 32 | 820 | 10300 | | 39.26 | 36 | 780 | 10700 | | 34.01 | 41 | 740 | 11000 | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | | 15700 | 17.12 | 82 | | 3000 | 8040 | 9.66 | | 145 | 820 | 10300 | | 19.70 | 71 | 1500 | | 15700 | 15.48 | 90 | | 3000 | 7390 | 9.08 | | 154 | 530 | 11400 | | 17.49 | 80 | 1500 | | 15700 | 13.12 | 107 | 3000 | 6370 | 8.60 | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 39.26 | 36 | 780 | 10700 | 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | 15700 | 19.31 | 73 | | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | | 15700 | 17.12 | 82 | | 3000 | 8040 | 9.66 | | 145 | 820 | 10300 | | 19.70 | 71 | 1500 | | 15700 | 15.48 | 90 | | 3000 | 7390 | 9.08 | | 154 | 530 | 11400 | | 17.49 | 80 | 1500 | | 15700 | 13.12 | 107 | | 3000 | 6370 | 8.60 | | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 34.01 | 41 | 740 | 11000 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | | 15700 | 19.31 | 73 | 3000 | 8840 | 11.31 | | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | | 15700 | 17.12 | 82 | | 3000 | 8040 | 9.66 | | 145 | 820 | 10300 | | 19.70 | 71 | 1500 | | 15700 | 15.48 | 90 | | 3000 | 7390 | 9.08 | | 154 | 530 | 11400 | | 17.49 | 80 | 1500 | | 15700 | 13.12 | 107 | | 3000 | 6370 | 8.60 | | 163 | 570 | 10900 | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | 7.53 | 186 | 610 | 10100 | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | 6.78 | 206 | 620 | 9660 | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | 5.95 | 235 | 610 | 9200 | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | 5.25 | 267 | 590 | 8850 | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | 4.66 | 300 | 560 | 8590 | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | 3.97 | 353 | 500 | 8390 | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 36.30 | 39 | 820 | 10300 | 43.58 | 32 | 1500 | 15700 | 35.19 | 40 | 2610 | 14900 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 32.08 | 44 | 820 | 10300 | 38.23 | 37 | 1500 | 15700 | 29.20 | 48 | 2510 | 13800 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27.41 | 51 | 820 | 10300 | 33.74 | 41 | 1500 | 15700 | 2-stage 2-ступенчатый | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25.13 | 56 | 820 | 10300 | 29.91 | 47 | 1500 | 15700 | 33.92 | 41 | 2610 | 14600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22.05 | 63 | 820 | 10300 | 25.54 | 55 | 1450 | 16100 | 28.78 | 49 | 2450 | 13900 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20.90 | 67 | 820 | 10300 | 2-stage 2-ступенчатый | | | | | 2-stage 2-ступенчатый | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18.29 | 77 | 820 | 10300 | 36.58 | 38 | 1110 | 17900 | 26.50 | 53 | 3000 | 11100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16.48 | 85 | 820 | 10300 | 31.51 | 44 | 1380 | 16500 | 23.68 | 59 | 3000 | 10300 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14.46 | 97 | 820 | 10300 | 28.75 | 49 | 1430 | 16200 | 21.32 | 66 | 3000 | 9530 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.76 | 110 | 820 | 10300 | AD3 | 25.50 | 55 | 1500 | 15700 | 19.31 | 73 | 3000 | 8840 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11.31 | 124 | 820 | 10300 | | 21.43 | 65 | 1500 | 15700 | 17.12 | 82 | 3000 | 8040 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9.66 | 145 | 820 | 10300 | | 19.70 | 71 | 1500 | 15700 | 15.48 | 90 | 3000 | 7390 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9.08 | 154 | 530 | 11400 | | 17.49 | 80 | 1500 | 15700 | 13.12 | 107 | 3000 | 6370 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.60 | 163 | 570 | 10900 | | 15.64 | 90 | 1500 | 15700 | 11.46 | 122 | 3000 | 5580 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.53 | 186 | 610 | 10100 | | 14.06 | 100 | 1500 | 15700 | 9.58 | 146 | 2880 | 5050 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.78 | 206 | 620 | 9660 | | 12.20 | 115 | 1500 | 14900 | 8.29 | 169 | 1530 | 8890 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.95 | 235 | 610 | 9200 | | 10.93 | 128 | 1500 | 14200 | 7.35 | 190 | 1530 | 8280 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.25 | 267 | 590 | 8850 | | 9.30 | 151 | 1080 | 13800 | 6.65 | 211 | 1530 | 7790 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.66 | 300 | 560 | 8590 | | 8.26 | 169 | 1080 | 13100 | 5.63 | 248 | 1530 | 7020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.97 | 353 | 500 | 8390 | | 7.39 | 189 | 1080 | 12500 | 4.92 | 284 | 1530 | 6430 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | 6.64 | 211 | 1080 | 12000 | 4.12 | 340 | 1460 | 5980 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | 5.76 | 243 | 1080 | 11300 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | 5.16 | 271 | 1080 | 10700 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | 4.28 | 327 | 1010 | 10200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



F37..~F157..



FA37B..~FA157B..

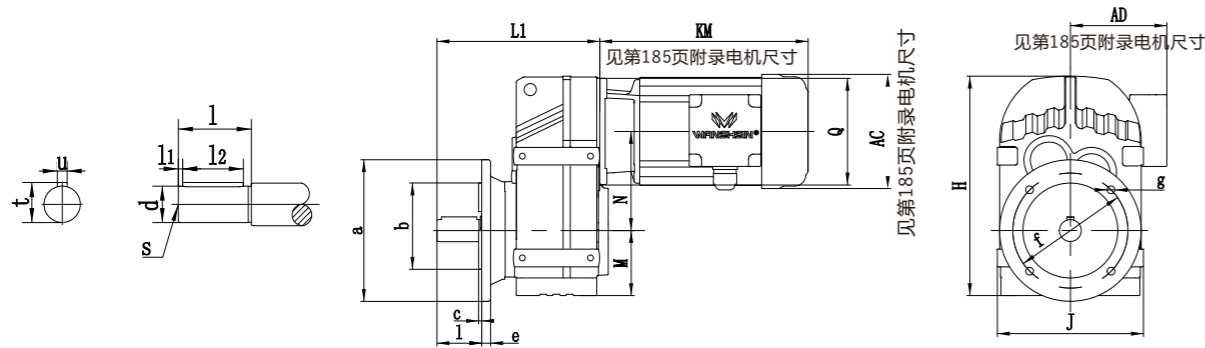


| Model Модель | a b | e f | g | h | j | k | m n | p q | Shaft dimension Габариты вала | | | | |
|--------------------|------------|------------|-------|-----|-----|----|-----------|-----------|-------------------------------|-----|------------|-----|------------|
| | | | | | | | | | d | l | l1 l2 | s | t u |
| F37.. FA37B.. | 77 115 | 95 135 | 72.5 | 76 | 31 | 20 | M8 11 | M8 11 | 25k6 | 50 | 5 40 | M10 | 28 8 |
| F47.. FA47B.. | 93 145 | 109 165 | 91 | 77 | 43 | 20 | M8 11 | M10 15 | 30k6 | 60 | 3.5 50 | M10 | 33 8 |
| F57.. FA57B.. | 102 170 | 126 195 | 104.5 | 93 | 55 | 25 | M12 17 | M12 17 | 35k6 | 70 | 7 56 | M12 | 38 10 |
| F67.. FA67B.. | 112 190 | 131 215 | 118.5 | 97 | 60 | 25 | M12 17 | M12 17 | 40k6 | 80 | 5 70 | M16 | 43 12 |
| F77.. FA77B.. | 140 240 | 165 275 | 137.5 | 121 | 70 | 35 | M12 17 | M16 26 | 50k6 | 100 | 10 80 | M16 | 53.5 14 |
| F87.. FA87B.. | 165 310 | 195 350 | 163 | 152 | 100 | 40 | M16 26 | M16 26 | 60m6 | 120 | 5 110 | M20 | 64 18 |
| F97.. FA97B.. | 205 350 | 240 400 | 190.5 | 178 | 120 | 50 | M16 26 | M20 28 | 70m6 | 140 | 7.5 125 | M20 | 74.5 20 |
| F107.. FA107B.. | 220 400 | 260 460 | 241.5 | 200 | 125 | 60 | / / | M24 36 | 90m6 | 170 | 5 160 | M24 | 95 25 |
| F127.. FA127B.. | 270 450 | 316 520 | 291 | 236 | 142 | 70 | / / | M30 45 | 110m6 | 210 | 15 180 | M24 | 116 28 |
| F157.. FA157B.. | 310 540 | 364 620 | 325 | 286 | 170 | 80 | / / | M36 55 | 120m6 | 210 | 5 200 | M24 | 127 32 |

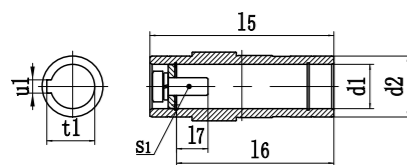
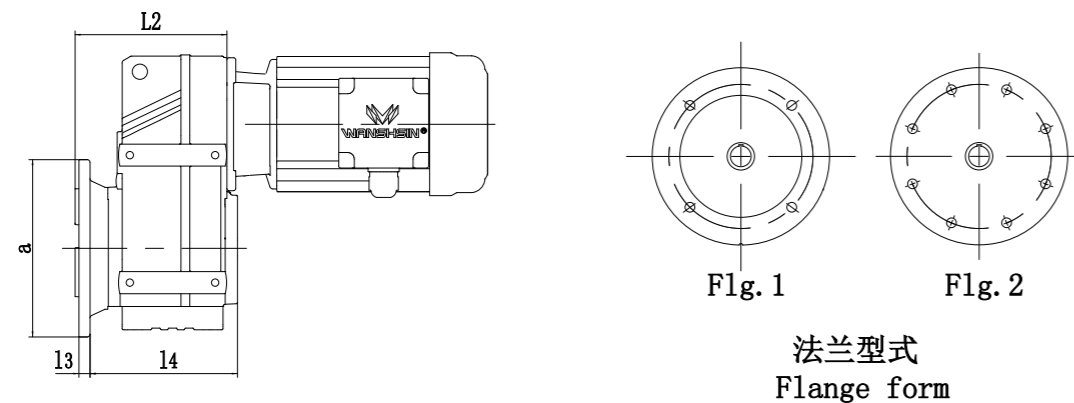
| Model Модель | Hollow Shaft dimension Габариты полого вала | | | | | | | | H J | L1 | L2 | N | Q |
|--------------------|---|-----|--------------|-----|------------|----|--------|-------------|-------------|-----|-----|-------|-----|
| | d1 | d2 | l3 l4 | l5 | l6 l7 | l8 | s1 | l1 u1 | | | | | |
| F37.. FA37B.. | 30H7 | 45 | 2.5 22.5 | 123 | 120 105 | 17 | M10X25 | 33.3 8 | 252 165 | 160 | 110 | 112 | 120 |
| F47.. FA47B.. | 35H7 | 50 | 3 31 | 153 | 150 132 | 22 | M10X25 | 38.3 10 | 269 180 | 193 | 133 | 128.1 | 120 |
| F57.. FA57B.. | 40H7 | 55 | 3 33.5 | 170 | 166 142 | 29 | M16X40 | 43.3 12 | 317 200 | 221 | 150 | 136 | 160 |
| F67.. FA67B.. | 40H7 | 55 | 3.5 37 | 184 | 180 156 | 29 | M16X40 | 43.3 12 | 343 212 | 242 | 161 | 159.5 | 160 |
| F77.. FA77B.. | 50H7 | 70 | 4 36.5 | 213 | 210 183 | 32 | M16X45 | 53.8 14 | 426 270 | 294 | 193 | 200 | 200 |
| F87.. FA87B.. | 60H7 | 85 | 4 43 | 243 | 240 210 | 36 | M20X50 | 64.4 18 | 531 330 | 344 | 224 | 246.7 | 250 |
| F97.. FA97B.. | 70H7 | 95 | 4 48.5 | 303 | 300 270 | 34 | M20X50 | 74.9 20 | 623 400 | 416 | 274 | 285 | 300 |
| F107.. FA107B.. | 90H7 | 118 | 2.5 69.5 | 353 | 350 313 | 40 | M24X60 | 95.4 25 | 717 450 | 484 | 312 | 332.4 | 350 |
| F127.. FA127B.. | 100H7 | 135 | 2.5 79.25 | 413 | 410 373 | 38 | M24X60 | 106.4 28 | 856 530 | 585 | 373 | 382.6 | 450 |
| F157.. FA157B.. | 120H7 | 155 | 7 118 | 503 | 500 460 | 36 | M24X60 | 127.4 32 | 1021 660 | 662 | 455 | 447 | 550 |



FF37..~FF157..



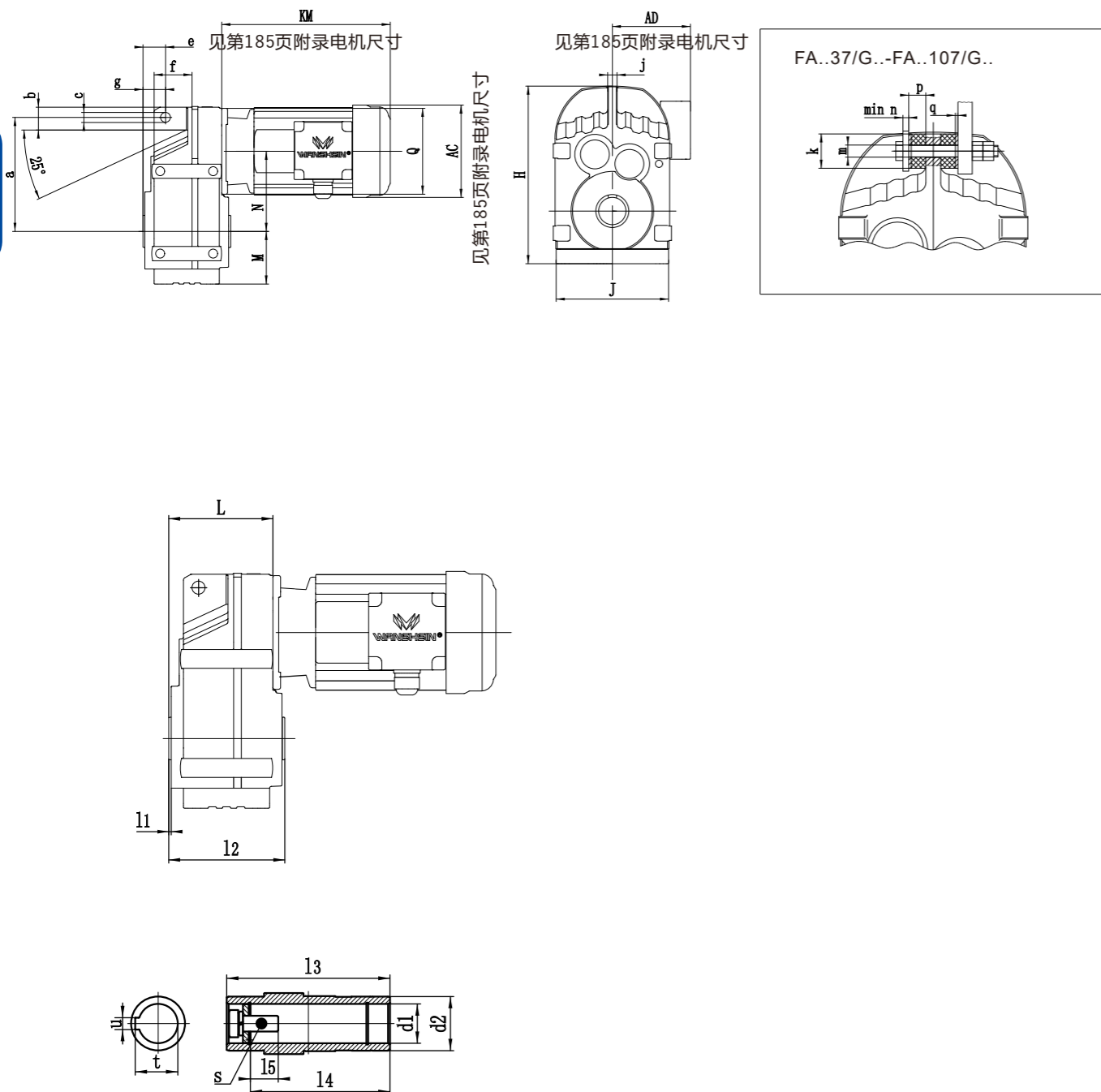
FAF37..~FAF157..



| Model Модель | Forma фланца Flange form | a b | c e | f g | Габариты вала Shaft dimension | | | | | | | | H J | L1 L2 | M N Q | |
|---------------------|-----------------------------|--------------|-----------|-------------|----------------------------------|------------|-----|------------|--------------|-------------|------------|--------------|-------------|-------------|-------------|---------------------|
| | | | | | d l | l1 l2 | s | t u | d1 d2 | l3 l4 | l5 l6 | l7 l8 | | | | t1 u1 |
| FF37.. FAF37.. | Fig.1 | 160 110j6 | 3.5 10 | 130 9 | 25k6 50 | 5 40 | M10 | 28 8 | 30H7 45 | 24 123 | 120 105 | 17 M10X25 | 33.3 8 | 252 165 | 184 138 | 76 112 120 |
| FF47.. FAF47.. | Fig.1 | 200 130j6 | 3.5 12 | 165 11 | 30k6 60 | 3.5 50 | M10 | 33 8 | 35H7 50 | 25 153 | 150 132 | 22 M10X25 | 38.3 10 | 269 180 | 218 162 | 77 128.1 120 |
| FF57.. FAF57.. | Fig.1 | 250 180j6 | 4 15 | 215 13.5 | 35k6 70 | 7 56 | M12 | 38 10 | 40H7 55 | 23.5 170 | 166 142 | 29 M16X40 | 43.3 12 | 317 200 | 243 177 | 93 136 160 |
| FF67.. FAF67.. | Fig.1 | 250 180j6 | 4 15 | 215 13.5 | 40k6 80 | 5 70 | M16 | 43 12 | 40H7 55 | 23 184 | 180 156 | 29 M16X40 | 43.3 12 | 343 212 | 264 188 | 97 159.5 160 |
| FF77.. FAF77.. | Fig.1 | 300 230h6 | 4 16 | 265 13.5 | 50k6 100 | 10 80 | M16 | 53.5 14 | 50H7 70 | 37 213 | 210 183 | 32 M16X45 | 53.8 14 | 426 270 | 330 234 | 121 200 200 |
| FF87.. FAF87.. | Fig.1 | 350 250h6 | 5 18 | 300 17.5 | 60m6 120 | 5 110 | M20 | 64 18 | 60H7 85 | 30 243 | 240 210 | 36 M20X50 | 64.4 18 | 531 330 | 374 259 | 152 246.7 250 |
| FF97.. FAF97.. | Fig.2 | 450 350h6 | 5 22 | 400 17.5 | 70m6 140 | 7.5 125 | M20 | 74.5 20 | 70H7 95 | 41.5 303 | 300 270 | 34 M20X50 | 74.9 20 | 623 400 | 456 321 | 178 285 300 |
| FF107.. FAF107.. | Fig.2 | 450 350h6 | 5 22 | 400 17.5 | 90m6 170 | 5 160 | M24 | 95 25 | 90H7 118 | 41 353 | 350 313 | 40 M24X60 | 95.4 25 | 717 450 | 523 358 | 200 332.4 350 |
| FF127.. FAF127.. | Fig.2 | 550 450h6 | 5 25 | 500 17.5 | 110m6 210 | 15 180 | M24 | 116 28 | 100H7 135 | 51 413 | 410 373 | 36 M24X60 | 106.4 28 | 856 530 | 634 426 | 236 382.6 450 |
| FF157.. FAF157.. | Fig.2 | 660 450h6 | 6 28 | 600 22 | 120m6 210 | 5 200 | M24 | 127 32 | 120H7 155 | 60 503 | 500 460 | 36 M24X60 | 127.4 32 | 1021 660 | 725 521 | 286 447 550 |



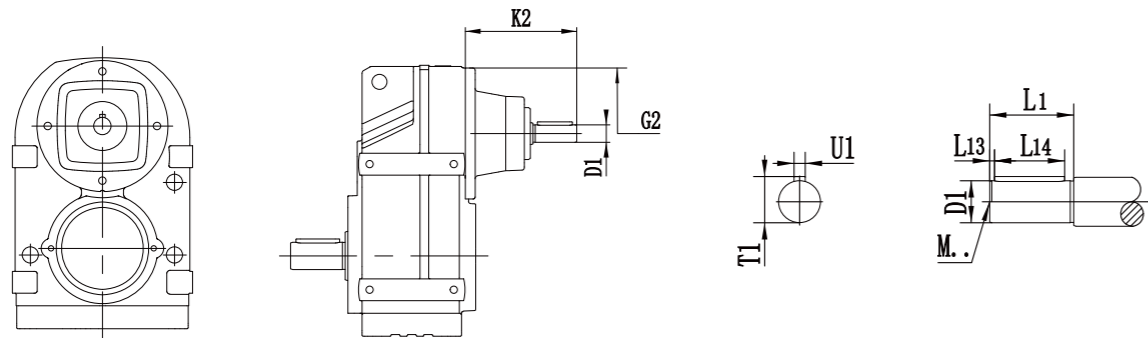
FA37...~FA157..



| Model Модель | a b | c e | f g | Hollow Shaft Dimension Габариты полого вала | | | | | Torque arm form | | H J j | L | M | N Q |
|--------------------------|------------|------------|------------|---|------------|------------|--------------|-------------|-----------------|-----------|-------------------|-----|-----|--------------|
| | | | | d1 d2 | l1 l2 | l3 l4 | l5 s | t u | K M N | p q | | | | |
| FA37.. FA..37/G.. | 158 30 | 14 31.5 | 46 15 | 30H7 45 | 0.5 123 | 120 105 | 17 M10X25 | 33.3 8 | 40 12.5 5 | 20 1 | 252 172 12 | 110 | 76 | 112 120 |
| FA47.. FA..47/G.. | 170 22 | 14 32 | 64 12 | 35H7 50 | 1 153 | 150 132 | 22 M10X25 | 38.3 10 | 40 12.5 5 | 20 1.8 | 269 189 12 | 133 | 77 | 128.1 120 |
| FA57.. FA..57/G.. | 198 31 | 14 40.5 | 60 19.5 | 40H7 55 | 1 170 | 166 142 | 29 M16X40 | 43.3 12 | 40 12.5 5 | 20 2.4 | 317 210 14 | 150 | 93 | 136 160 |
| FA67.. FA..67/G.. | 218 40 | 14 41 | 65 21 | 40H7 55 | 1 184 | 180 156 | 29 M16X40 | 43.3 12 | 40 12.5 5 | 20 3 | 343 223 16 | 161 | 97 | 159.5 160 |
| FA77.. FA..77/G.. | 278 49 | 22 50 | 69 28 | 50H7 70 | 1 213 | 210 183 | 32 M16X45 | 53.8 14 | 60 21 10 | 30 3.2 | 426 282 20 | 193 | 121 | 200 200 |
| FA87.. FA..87/G.. | 346 57 | 22 62 | 79 32 | 60H7 85 | 1 243 | 240 210 | 36 M20X50 | 64.4 18 | 60 21 10 | 30 4.5 | 531 336 26 | 224 | 152 | 246.7 250 |
| FA97.. FA..97/G.. | 395 88 | 26 70 | 104 34 | 70H7 95 | 1 303 | 300 270 | 34 M20X50 | 74.9 20 | 80 25 12 | 40 5 | 623 414 30 | 274 | 178 | 285 300 |
| FA107.. FA..107/G.. | 485 108 | 26 88 | 100 57 | 90H7 118 | 2.5 353 | 350 313 | 40 M24X60 | 95.4 25 | 80 25 12 | 40 6 | 717 456 36 | 312 | 200 | 332.4 350 |
| FA127.. FA..127/G.. | 550 138 | 33 110 | 125 66 | 100H7 135 | 2.5 413 | 410 373 | 38 M24X60 | 106.4 28 | 100 32 15 | 60 9 | 856 530 40 | 373 | 236 | 382.6 450 |
| FAa157.. FAa..157/G.. | 660 170 | 33 150 | 140 98 | 120H7 155 | 7 503 | 500 460 | 36 M24X60 | 127.4 32 | 120 32 15 | 60 9 | 1021 660 45 | 455 | 286 | 447 550 |

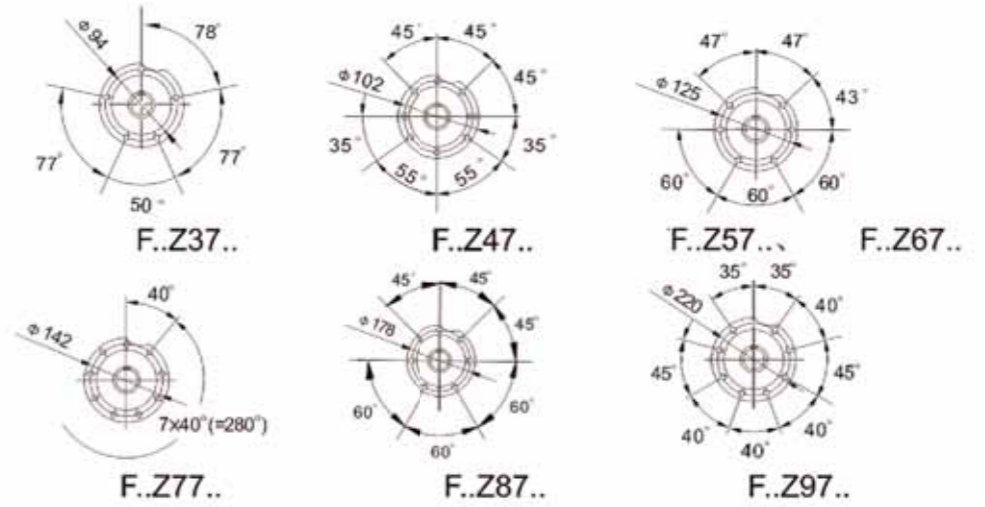
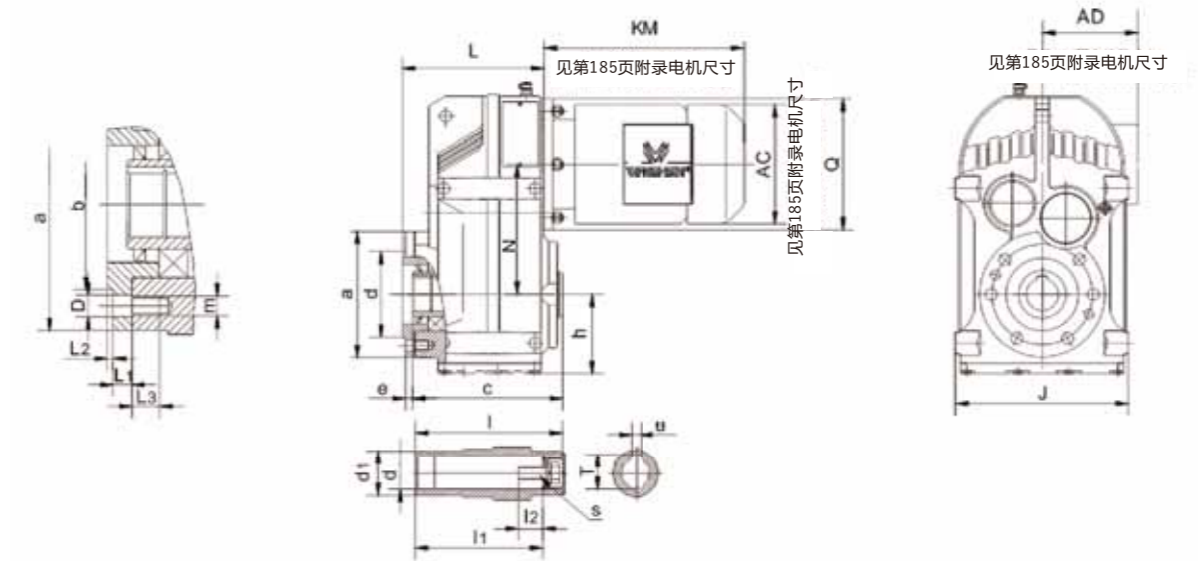


F..AD..

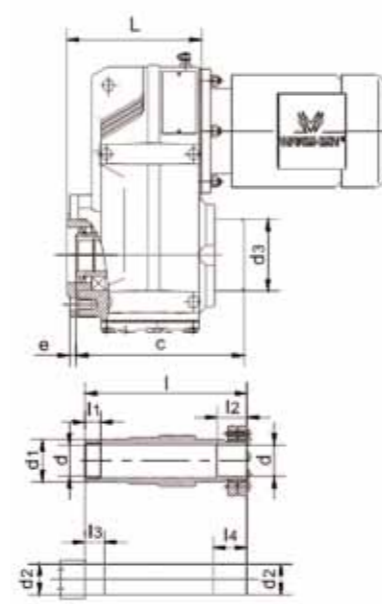


| | | G2 | K2 | D1 | L1 | L13 | L14 | T1 | U1 | M |
|----------------|-----|-----|-----|----|-----|-----|-----|------|----|-----|
| F..37 F..47 | AD1 | 120 | 102 | 16 | 40 | 4 | 32 | 18 | 5 | M5 |
| | AD2 | | 130 | 19 | 40 | 4 | 32 | 21.5 | 6 | M6 |
| F..57 F..67 | AD2 | 160 | 123 | 19 | 40 | 4 | 32 | 21.5 | 6 | M6 |
| | AD3 | | 159 | 24 | 50 | 5 | 40 | 27 | 8 | M8 |
| F..77 | AD2 | 200 | 116 | 19 | 40 | 4 | 32 | 21.5 | 6 | M6 |
| | AD3 | | 151 | 24 | 50 | 5 | 40 | 27 | 8 | M8 |
| | AD4 | | 224 | 38 | 80 | 5 | 70 | 41 | 10 | M12 |
| F..87 | AD2 | 250 | 111 | 19 | 40 | 4 | 32 | 21.5 | 6 | M6 |
| | AD3 | | 156 | 28 | 60 | 5 | 50 | 31 | 8 | M10 |
| | AD4 | | 219 | 38 | 80 | 5 | 70 | 41 | 10 | M12 |
| F..97 | AD5 | 300 | 292 | 42 | 110 | 10 | 70 | 45 | 12 | M16 |
| | AD3 | | 151 | 28 | 60 | 5 | 50 | 31 | 8 | M10 |
| | AD4 | | 214 | 38 | 80 | 5 | 70 | 41 | 10 | M12 |
| F..107 | AD5 | 350 | 287 | 42 | 110 | 10 | 70 | 45 | 12 | M16 |
| | AD6 | | 327 | 48 | 110 | 10 | 80 | 51.5 | 14 | M16 |
| | AD3 | | 145 | 28 | 60 | 5 | 50 | 31 | 8 | M10 |
| F..127 | AD4 | 450 | 208 | 38 | 80 | 5 | 70 | 41 | 10 | M12 |
| | AD5 | | 266 | 42 | 110 | 10 | 70 | 45 | 12 | M16 |
| | AD6 | | 306 | 48 | 110 | 10 | 80 | 51.5 | 14 | M16 |
| F..157 | AD7 | 550 | 300 | 55 | 110 | 10 | 90 | 59 | 16 | M20 |
| | AD8 | | 383 | 70 | 140 | 15 | 110 | 74.5 | 20 | M20 |
| | AD4 | | 193 | 38 | 80 | 5 | 70 | 41 | 10 | M12 |
| F..157 | AD5 | 550 | 258 | 42 | 110 | 10 | 70 | 45 | 12 | M16 |
| | AD6 | | 298 | 48 | 110 | 10 | 80 | 51.5 | 14 | M16 |
| | AD7 | | 292 | 55 | 110 | 10 | 90 | 59 | 16 | M20 |
| | AD8 | | 374 | 70 | 140 | 15 | 110 | 74.5 | 20 | M20 |

FAZ37..~FAZ157..



FAZ37..~FAZ157..





F..AM..

Рис. 1
Fig. 1

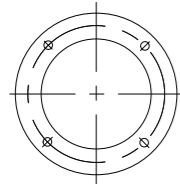
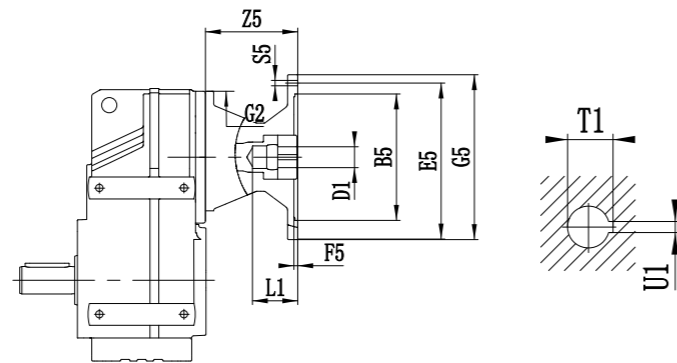
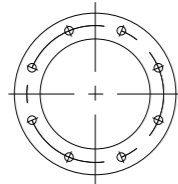


Рис. 2
Fig. 2



F..AM..

Рис. 1
Fig. 1

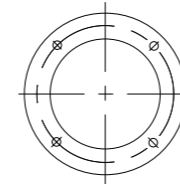
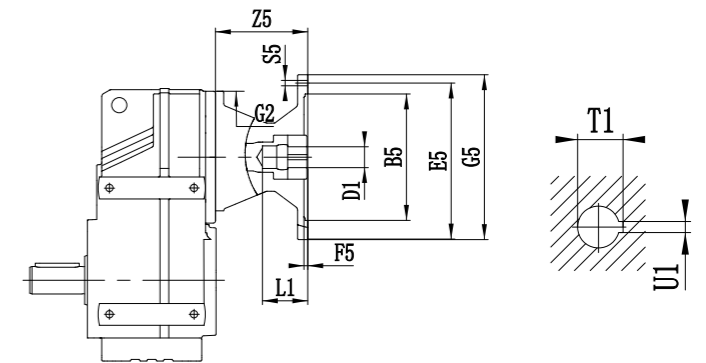
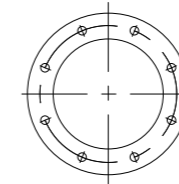


Рис. 2
Fig. 2

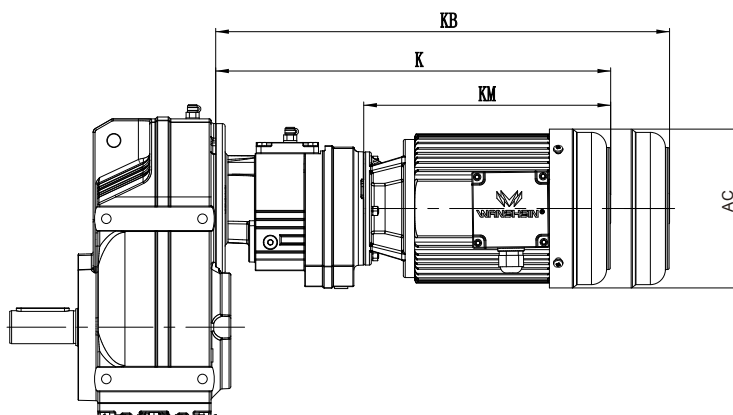


| | | Fig. | B5 | E5 | F5 | G2 | G5 | S5 | Z5 | D1 | L1 | T1 | U1 | |
|----------------|---------------------|------|-----|-----|-----|-----|------|-----|-----|-----|------|------|------|----|
| F..37 F..47 | AM63 | 1 | 95 | 115 | 3.5 | 120 | 140 | M8 | 72 | 11 | 23 | 12.8 | 4 | |
| | AM71 | | 110 | 130 | | | 14 | | | 30 | 16.3 | 5 | | |
| | AM80 | | 130 | 165 | 4.5 | | 200 | M10 | | 19 | 40 | 21.8 | 6 | |
| | AM90 | | | | | | 24 | | | 50 | 27.3 | 8 | | |
| F..57 F..67 | AM63 | 1 | 95 | 115 | 3.5 | 160 | 140 | M8 | 66 | 11 | 23 | 12.8 | 4 | |
| | AM71 | | 110 | 130 | | | 14 | | | 30 | 16.3 | 5 | | |
| | AM80 | | 130 | 165 | 4.5 | | 200 | M10 | | 19 | 40 | 21.8 | 6 | |
| | AM90 | | | | | | 24 | | | 50 | 27.3 | 8 | | |
| | AM100 | | 180 | 215 | 5 | | 250 | M12 | | 28 | 60 | 31.3 | 8 | |
| | AM112 | | | | | | 134 | | | 28 | 60 | 31.3 | 8 | |
| F..77 | AM63 | 1 | 95 | 115 | 3.5 | 200 | 140 | M8 | 60 | 11 | 23 | 12.8 | 4 | |
| | AM71 | | 110 | 130 | | | 14 | | | 30 | 16.3 | 5 | | |
| | AM80 | | 130 | 165 | 4.5 | | 200 | M10 | | 19 | 40 | 21.8 | 6 | |
| | AM90 | | | | | | 24 | | | 50 | 27.3 | 8 | | |
| | AM100 | | 180 | 215 | 5 | | 250 | M12 | | 28 | 60 | 31.3 | 8 | |
| | AM112 | | | | | | 126 | | | 28 | 60 | 31.3 | 8 | |
| | AM132S AM132M | | 230 | 265 | 5 | | 300 | M12 | | 38 | 80 | 41.3 | 10 | |
| AM132ML | 179 | 38 | | | | 80 | 41.3 | | 10 | | | | | |
| F..87 | AM80 | 1 | 130 | 165 | 4.5 | 250 | 200 | M10 | 87 | 19 | 40 | 21.8 | 6 | |
| | AM90 | | | | | | | | | 24 | 50 | 27.3 | 8 | |
| | AM100 | | 180 | 215 | 5 | | 250 | M12 | | 121 | 28 | 60 | 31.3 | 8 |
| | AM112 | | | | | | 121 | | | 28 | 60 | 31.3 | 8 | |
| | AM132S AM132M | | 230 | 265 | 5 | | 300 | M12 | | 174 | 38 | 80 | 41.3 | 10 |
| | AM132ML | | | | | | 174 | | | 38 | 80 | 41.3 | 10 | |
| | AM160 | | 250 | 300 | 6 | | 350 | M16 | | 42 | 110 | 45.3 | 12 | |
| | AM180 | | | | | | 48 | | | 110 | | 51.8 | 14 | |
| F..97 | AM100 | 1 | 180 | 215 | 5 | 300 | 250 | M12 | 116 | 28 | 60 | 31.3 | 8 | |
| | AM112 | | | | | | | | | 116 | 28 | 60 | 31.3 | 8 |
| | AM132S AM132M | | 230 | 265 | 5 | | 300 | M12 | | 169 | 38 | 80 | 41.3 | 10 |
| | AM132ML | | | | | | 169 | | | 38 | 80 | 41.3 | 10 | |
| | AM160 | | 250 | 300 | 6 | | 350 | M16 | | 42 | 110 | 45.3 | 12 | |
| | AM180 | | | | | | 48 | | | 110 | | 51.8 | 14 | |
| | AM200 | | 300 | 350 | 7 | | 400 | M16 | | 65 | 140 | 69.4 | 18 | |
| | AM225 ¹⁾ | | | | | | 75 | | | 140 | | 79.9 | 20 | |

| | | Fig. | B5 | E5 | F5 | G2 | G5 | S5 | Z5 | D1 | L1 | T1 | U1 | |
|--------|------------------|------|-----|-----|----|------|-----|-----|-----|-----|-----|------|------|----|
| F..107 | AM100 | 1 | 180 | 215 | 5 | 350 | 250 | M12 | 110 | 28 | 60 | 31.3 | 8 | |
| | AM112 | | | | | | | | | 28 | 60 | 31.3 | 8 | |
| | AM132S AM132M | | 230 | 265 | 5 | | 300 | M12 | | 163 | 38 | 80 | 41.3 | 10 |
| | AM132ML | | | | | | 163 | | | 38 | 80 | 41.3 | 10 | |
| | AM160 | | 250 | 300 | 6 | | 350 | M16 | | 42 | 110 | 45.3 | 12 | |
| | AM180 | | | | | | 48 | | | 110 | | 51.8 | 14 | |
| | AM200 | | 300 | 350 | 7 | | 400 | M16 | | 55 | 140 | 59.3 | 16 | |
| AM225 | 75 | 140 | | | | 64.4 | 18 | | | | | | | |
| F..127 | AM132S AM132M | 1 | 230 | 265 | 5 | 450 | 300 | M12 | 148 | 38 | 80 | 41.3 | 10 | |
| | AM132ML | | | | | | | | | 148 | 38 | 80 | 41.3 | 10 |
| | AM160 | | 250 | 300 | 6 | | 350 | M16 | | 42 | 110 | 45.3 | 12 | |
| | AM180 | | | | | | 48 | | | 110 | | 51.8 | 14 | |
| | AM200 | | 300 | 350 | 7 | | 400 | M16 | | 55 | 140 | 59.3 | 16 | |
| | AM225 | | | | | | 75 | | | 140 | | 64.4 | 18 | |
| | AM250 | | 450 | 500 | 7 | | 550 | M16 | | 65 | 140 | 69.4 | 18 | |
| AM280 | 75 | 140 | | | | 79.9 | 20 | | | | | | | |
| F..157 | AM160 | 1 | 250 | 300 | 6 | 550 | 350 | M16 | 198 | 42 | 110 | 45.3 | 12 | |
| | AM180 | | | | | | | | | 48 | 110 | 51.8 | 14 | |
| | AM200 | | 300 | 350 | 7 | | 400 | M16 | | 55 | 140 | 59.3 | 16 | |
| | AM225 | | | | | | 75 | | | 140 | | 64.4 | 18 | |
| | AM250 | | 450 | 500 | 7 | | 550 | M16 | | 65 | 140 | 69.4 | 18 | |
| | AM280 | | | | | | 75 | | | 140 | | 79.9 | 20 | |



F..R..



| 型号组合 | 功率 (KW) | AC | K | KB | KM | 型号组合 | 功率 (KW) | AC | K | KB | KM |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|-----------|-----------|-----------|
| F..57R37 | 0.18 | 129 | 371.5 | 408 | 206.5 | F..127R77 | 0.18 | 129 | 438.5 | 475 | 206.5 |
| | 0.25-0.37 | 129 | 372/384.5 | 407.5/421 | 207/219.5 | | 0.25-0.37 | 129 | 439/451.5 | 474.5/488 | 207/219.5 |
| | 0.55-0.75 | 169 | 411.5/412 | 456.5/457 | 246.5/247 | | 0.55-0.75 | 169 | 478.5/479 | 523.5/524 | 246.5/247 |
| F..67R37 | 0.18 | 129 | 371.5 | 408 | 206.5 | | 1.1-1.5 | 192 | 530 | 575.5 | 298 |
| | 0.25-0.37 | 129 | 372/384.5 | 407.5/421 | 207/219.5 | | 2.2 | 219 | 554.5 | 616.5 | 322.5 |
| | 0.55-0.75 | 169 | 411.5/412 | 456.5/457 | 246.5/247 | | 3 | 219 | 554.5 | 616.5 | 322.5 |
| | 1.1-1.5 | 192 | 463 | 508.5 | 298 | | 4 | 219 | 570.5 | 632.5 | 338.5 |
| F..77R37 | 0.18 | 129 | 363.5 | 400 | 206.5 | | 5.5 | 257 | 641 | 709 | 409 |
| | 0.25-0.37 | 129 | 364/367.5 | 399.5/413 | 207/219.5 | | 7.5 | 257 | 684 | 752 | 452 |
| | 0.55-0.75 | 169 | 403.5/404 | 448.5/449 | 246.5/247 | 9.2 | 257 | 684 | 752 | 452 | |
| | 1.1-1.5 | 192 | 455 | 500.5 | 298 | 11-15 | 318 | 740 | 840 | 508 | |
| F..87R57 | 0.18 | 129 | 422.5 | 459 | 206.5 | F..127R87 | 1.1-1.5 | 192 | 578 | 623.5 | 298 |
| | 0.25-0.37 | 129 | 423/433.5 | 458.5/472 | 207/219.5 | | 2.2 | 219 | 602.5 | 664.5 | 322.5 |
| | 0.55-0.75 | 169 | 462.5/463 | 507.5/508 | 246.5/247 | | 3 | 219 | 602.5 | 664.5 | 322.5 |
| | 1.1-1.5 | 192 | 514 | 559.5 | 298 | | 4 | 219 | 618.5 | 680.5 | 338.5 |
| | 2.2 | 219 | 538.5 | 600.5 | 322.5 | | 5.5 | 257 | 689 | 757 | 409 |
| | 3 | 219 | 538.5 | 600.5 | 322.5 | | 7.5 | 257 | 732 | 800 | 452 |
| F..97R57 | 0.18 | 129 | 417.5 | 454 | 206.5 | | 9.2 | 257 | 732 | 800 | 452 |
| | 0.25-0.37 | 129 | 418/430.5 | 453.5/467 | 207/219.5 | | 11 | 318 | 788 | 888 | 508 |
| | 0.55-0.75 | 169 | 475.5/458 | 502.5/503 | 246.5/247 | | 15 | 318 | 788 | 888 | 508 |
| | 1.1-1.5 | 192 | 509 | 554.5 | 298 | 18.5 | 380 | 844 | 944 | 564 | |
| | 2.2 | 219 | 533.5 | 595.5 | 322.5 | F..157R97 | 0.55-0.75 | 169 | 571.5/572 | 616.5/617 | 246.5/247 |
| | 3 | 219 | 533.5 | 595.5 | 322.5 | | 1.1-1.5 | 192 | 623 | 668.5 | 298 |
| 4 | 219 | 549.5 | 611.5 | 338.5 | 2.2 | | 219 | 647.5 | 709.5 | 322.5 | |
| 0.18 | 129 | 453.5 | 490 | 206.5 | 3 | | 219 | 647.5 | 709.5 | 322.5 | |
| 0.25-0.37 | 129 | 454/466.5 | 489.5/503 | 207/219.5 | 4 | | 219 | 663.5 | 725.5 | 338.5 | |
| 0.55-0.75 | 169 | 493.5/494 | 538.5/539 | 246.5/247 | 5.5 | | 257 | 734 | 802 | 409 | |
| 1.1-1.5 | 192 | 545 | 590.5 | 298 | 7.5 | | 257 | 777 | 845 | 452 | |
| 2.2 | 219 | 569.5 | 631.5 | 322.5 | 9.2 | | 257 | 777 | 845 | 452 | |
| 3 | 219 | 569.5 | 631.5 | 322.5 | 11 | | 318 | 833 | 933 | 508 | |
| F..107R77 | 4 | 219 | 585.5 | 647.5 | 338.5 | 15 | 318 | 833 | 933 | 508 | |
| | 5.5 | 257 | 656 | 724 | 409 | 18.5 | 380 | 889 | 989 | 564 | |
| | 7.5 | 257 | 699 | 767 | 452 | | | | | | |
| | 9.2 | 257 | 699 | 767 | 452 | | | | | | |
| | 11-15 | 318 | 755 | 855 | 508 | | | | | | |

Примечания: габариты мотора, указанные в таблице, приведены в качестве справки. В случае особых требований просьба обратиться к производителю.

Notes: The dimension of motor in the above table is only reference. If you have special requirement, Please consult us.