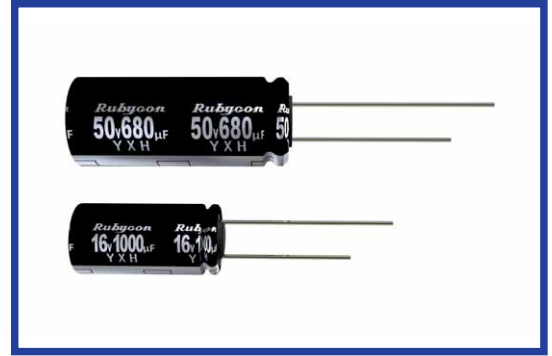


YXH SERIES
105°C Long Life, Low Impedance

*Load Life : 105°C 4000~10000 hours.

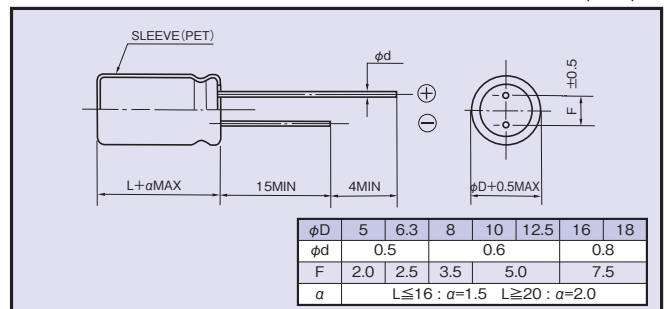
RoHS compliance


SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---------------------|-----------------------------------|-----------------|------|-----------|-----------|--------------------|--|--------|---------------|------|-----------------|------------------------------------|---------|------|------|---------|------|------------------|---|---|---|---|---|---|---|---|------------------|---|---|---|---|---|---|---|---|
| Category Temperature Range | -40~+105°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 6.3~100Vdc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current(MAX) | I=0.01CV or 3µA whichever is greater.(After 2 minutes) I=Leakage Current(µA) C=Capacitance(µF) V=Rated Voltage(Vdc) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor(MAX) (tanδ) | <table border="1"> <thead> <tr> <th>Rated Voltage (Vdc)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>(20°C, 120Hz)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> </tr> </tbody> </table> <p>When capacitance is over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.</p> | Rated Voltage (Vdc) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | (20°C, 120Hz) | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | | | | | | | | | | | | | | | | | |
| Rated Voltage (Vdc) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (20°C, 120Hz) | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endurance | <p>After applying rated voltage with rated ripple current for specified time at 105°C, the capacitors shall meet the following requirements.</p> <table border="1"> <thead> <tr> <th rowspan="2">Capacitance Change</th> <th rowspan="2">Within ±25% of the initial value.</th> <th colspan="2">Life Time (hrs)</th> </tr> <tr> <th>6.3~10Vdc</th> <th>16~100Vdc</th> </tr> </thead> <tbody> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> <td>φD≤6.3</td> <td>4000</td> <td>5000</td> </tr> <tr> <td rowspan="2">Leakage Current</td> <td rowspan="2">Not more than the specified value.</td> <td>φD=8,10</td> <td>6000</td> <td>7000</td> </tr> <tr> <td>φD≥12.5</td> <td>8000</td> <td>10000</td> </tr> </tbody> </table> | Capacitance Change | Within ±25% of the initial value. | Life Time (hrs) | | 6.3~10Vdc | 16~100Vdc | Dissipation Factor | Not more than 200% of the specified value. | φD≤6.3 | 4000 | 5000 | Leakage Current | Not more than the specified value. | φD=8,10 | 6000 | 7000 | φD≥12.5 | 8000 | 10000 | | | | | | | | | | | | | | | | | |
| Capacitance Change | Within ±25% of the initial value. | | | Life Time (hrs) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 6.3~10Vdc | 16~100Vdc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor | Not more than 200% of the specified value. | φD≤6.3 | 4000 | 5000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current | Not more than the specified value. | φD=8,10 | 6000 | 7000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | φD≥12.5 | 8000 | 10000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Low Temperature Stability Impedance Ratio(MAX) | <table border="1"> <thead> <tr> <th>Rated Voltage (Vdc)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>(120Hz)</td> <td colspan="8"></td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table> | Rated Voltage (Vdc) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | (120Hz) | | | | | | | | | Z(-25°C)/Z(20°C) | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | Z(-40°C)/Z(20°C) | 8 | 6 | 4 | 3 | 3 | 3 | 3 | 3 |
| Rated Voltage (Vdc) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (120Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z(-25°C)/Z(20°C) | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z(-40°C)/Z(20°C) | 8 | 6 | 4 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

MULTIPLIER FOR RIPPLE CURRENT

| Frequency (Hz) | | 120 | 1k | 10k | 100k≤ |
|----------------|--------------|------|------|------|-------|
| Coefficient | 6.8~33µF | 0.42 | 0.70 | 0.90 | 1.00 |
| | 39~270µF | 0.50 | 0.73 | 0.92 | 1.00 |
| | 330~680µF | 0.55 | 0.77 | 0.94 | 1.00 |
| | 820~1800µF | 0.60 | 0.80 | 0.96 | 1.00 |
| | 2200~18000µF | 0.70 | 0.85 | 0.98 | 1.00 |

DIMENSIONS

PART NUMBER

| | | | | | | |
|---------------|--------|-------------|-----------------------|--------|--------------|-----------|
| □□□ | YXH | □□□□□ | M | □□□ | □□ | DxL |
| Rated Voltage | Series | Capacitance | Capacitance Tolerance | Option | Lead Forming | Case Size |

OPTION

| Option | Code |
|------------|------|
| PET Sleeve | EFC |

◆STANDARD SIZE

| Rated Voltage (Vdc) | Capacitance (μF) | Size φD×L(mm) | Rated ripple current (mA r.m.s./105°C, 100kHz) | Impedance (Ω MAX) | |
|---------------------|------------------|---------------|--|-------------------|---------------|
| | | | | 20°C, 100kHz | -10°C, 100kHz |
| 6.3 | 150 | 5×11 | 210 | 0.58 | 2.3 |
| | 330 | 6.3×11 | 340 | 0.22 | 0.87 |
| | 680 | 8×11.5 | 640 | 0.13 | 0.52 |
| | 820 | 10×12.5 | 865 | 0.08 | 0.32 |
| | 1000 | 8×16 | 840 | 0.087 | 0.35 |
| | 1200 | 8×20 | 1050 | 0.069 | 0.27 |
| | 1200 | 10×16 | 1210 | 0.060 | 0.24 |
| | 1500 | 10×20 | 1400 | 0.046 | 0.18 |
| | 1800 | 12.5×16 | 1450 | 0.049 | 0.16 |
| | 2200 | 10×23 | 1650 | 0.042 | 0.17 |
| | 2700 | 10×28 | 1910 | 0.031 | 0.12 |
| | 2700 | 16×16 | 1940 | 0.042 | 0.12 |
| | 3300 | 12.5×20 | 1900 | 0.035 | 0.12 |
| | 3900 | 12.5×25 | 2230 | 0.027 | 0.089 |
| | 3900 | 18×16 | 2210 | 0.043 | 0.11 |
| | 4700 | 12.5×30 | 2650 | 0.024 | 0.078 |
| | 5600 | 12.5×35 | 2880 | 0.020 | 0.065 |
| | 5600 | 16×20 | 2530 | 0.027 | 0.078 |
| | 6800 | 12.5×40 | 3350 | 0.017 | 0.056 |
| | 6800 | 16×25 | 2930 | 0.021 | 0.060 |
| 6800 | 18×20 | 2860 | 0.026 | 0.067 | |
| 8200 | 16×31.5 | 3450 | 0.017 | 0.050 | |
| 10000 | 16×35.5 | 3610 | 0.015 | 0.044 | |
| 10000 | 18×25 | 3140 | 0.019 | 0.049 | |
| 12000 | 16×40 | 4080 | 0.013 | 0.038 | |
| 12000 | 18×31.5 | 4170 | 0.015 | 0.040 | |
| 15000 | 18×35.5 | 4220 | 0.014 | 0.038 | |
| 18000 | 18×40 | 4280 | 0.012 | 0.032 | |
| 10 | 100 | 5×11 | 210 | 0.58 | 2.3 |
| | 220 | 6.3×11 | 340 | 0.22 | 0.87 |
| | 470 | 8×11.5 | 640 | 0.13 | 0.52 |
| | 680 | 8×16 | 840 | 0.087 | 0.35 |
| | 680 | 10×12.5 | 865 | 0.080 | 0.32 |
| | 1000 | 8×20 | 1050 | 0.069 | 0.27 |
| | 1000 | 10×16 | 1210 | 0.060 | 0.24 |
| | 1200 | 10×20 | 1400 | 0.046 | 0.18 |
| | 1500 | 10×23 | 1650 | 0.042 | 0.17 |
| | 1500 | 12.5×16 | 1450 | 0.049 | 0.16 |
| | 2200 | 10×28 | 1910 | 0.031 | 0.12 |
| | 2200 | 12.5×20 | 1900 | 0.035 | 0.12 |
| | 2200 | 16×16 | 1940 | 0.042 | 0.12 |
| | 2700 | 18×16 | 2210 | 0.043 | 0.11 |
| | 3300 | 12.5×25 | 2230 | 0.027 | 0.089 |
| | 3900 | 12.5×30 | 2650 | 0.024 | 0.078 |
| | 3900 | 16×20 | 2530 | 0.027 | 0.078 |
| | 4700 | 12.5×35 | 2880 | 0.020 | 0.065 |
| | 5600 | 12.5×40 | 3350 | 0.017 | 0.056 |
| | 5600 | 16×25 | 2930 | 0.021 | 0.060 |
| 5600 | 18×20 | 2860 | 0.026 | 0.067 | |
| 6800 | 16×31.5 | 3450 | 0.017 | 0.050 | |
| 6800 | 18×25 | 3140 | 0.019 | 0.049 | |
| 8200 | 16×35.5 | 3610 | 0.015 | 0.044 | |
| 8200 | 18×31.5 | 4170 | 0.015 | 0.040 | |
| 10000 | 16×40 | 4080 | 0.013 | 0.038 | |
| 10000 | 18×35.5 | 4220 | 0.014 | 0.038 | |
| 12000 | 18×40 | 4280 | 0.012 | 0.032 | |
| 16 | 56 | 5×11 | 210 | 0.58 | 2.3 |
| | 120 | 6.3×11 | 340 | 0.22 | 0.87 |
| | 330 | 8×11.5 | 640 | 0.13 | 0.52 |
| | 470 | 8×16 | 840 | 0.087 | 0.35 |
| | 470 | 10×12.5 | 865 | 0.080 | 0.32 |
| | 680 | 8×20 | 1050 | 0.069 | 0.27 |
| | 680 | 10×16 | 1210 | 0.060 | 0.24 |
| | 1000 | 10×20 | 1400 | 0.046 | 0.18 |
| | 1000 | 12.5×16 | 1450 | 0.049 | 0.16 |
| | 1200 | 10×23 | 1650 | 0.042 | 0.17 |
| | 1500 | 10×28 | 1910 | 0.031 | 0.12 |
| | 1500 | 12.5×20 | 1900 | 0.035 | 0.12 |
| | 1500 | 16×16 | 1940 | 0.042 | 0.12 |
| | 2200 | 12.5×25 | 2230 | 0.027 | 0.089 |
| | 2200 | 18×16 | 2210 | 0.043 | 0.11 |
| | 2700 | 12.5×30 | 2650 | 0.024 | 0.078 |
| | 2700 | 16×20 | 2530 | 0.027 | 0.078 |
| | 3300 | 12.5×35 | 2880 | 0.020 | 0.065 |
| | 3900 | 12.5×40 | 3350 | 0.017 | 0.056 |
| | 3900 | 16×25 | 2930 | 0.021 | 0.060 |
| 3900 | 18×20 | 2860 | 0.026 | 0.067 | |
| 4700 | 16×31.5 | 3450 | 0.017 | 0.050 | |
| 4700 | 18×25 | 3140 | 0.019 | 0.049 | |
| 5600 | 16×35.5 | 3610 | 0.015 | 0.044 | |
| 5600 | 18×31.5 | 4170 | 0.015 | 0.040 | |
| 6800 | 16×40 | 4080 | 0.013 | 0.038 | |
| 8200 | 18×35.5 | 4220 | 0.014 | 0.038 | |
| 10000 | 18×40 | 4280 | 0.012 | 0.032 | |
| 25 | 47 | 5×11 | 210 | 0.58 | 2.3 |
| | 100 | 6.3×11 | 340 | 0.22 | 0.87 |
| | 220 | 8×11.5 | 640 | 0.13 | 0.52 |
| | 330 | 8×16 | 840 | 0.087 | 0.35 |
| | 330 | 10×12.5 | 865 | 0.080 | 0.32 |
| | 470 | 8×20 | 1050 | 0.069 | 0.27 |
| | 470 | 10×16 | 1210 | 0.060 | 0.24 |
| | 680 | 10×20 | 1400 | 0.046 | 0.18 |
| | 680 | 12.5×16 | 1450 | 0.049 | 0.16 |
| | 820 | 10×23 | 1650 | 0.042 | 0.17 |
| | 1000 | 10×28 | 1910 | 0.031 | 0.12 |
| | 1000 | 12.5×20 | 1900 | 0.035 | 0.12 |
| | 1000 | 16×16 | 1940 | 0.042 | 0.12 |
| | 1200 | 18×16 | 2210 | 0.043 | 0.11 |
| | 1500 | 12.5×25 | 2230 | 0.027 | 0.089 |
| | 1800 | 12.5×30 | 2650 | 0.024 | 0.078 |
| | 1800 | 16×20 | 2530 | 0.027 | 0.078 |
| | 2200 | 12.5×35 | 2880 | 0.020 | 0.065 |
| | 2200 | 18×20 | 2860 | 0.026 | 0.067 |
| | 2700 | 12.5×40 | 3350 | 0.017 | 0.056 |
| 2700 | 16×25 | 2930 | 0.021 | 0.060 | |
| 3300 | 16×31.5 | 3450 | 0.017 | 0.050 | |
| 3300 | 18×25 | 3140 | 0.019 | 0.049 | |
| 3900 | 16×35.5 | 3610 | 0.015 | 0.044 | |
| 3900 | 18×31.5 | 4170 | 0.015 | 0.040 | |
| 4700 | 16×40 | 4080 | 0.013 | 0.038 | |
| 4700 | 18×35.5 | 4220 | 0.014 | 0.038 | |
| 5600 | 18×40 | 4280 | 0.012 | 0.032 | |

◆STANDARD SIZE

| Rated Voltage (Vdc) | Capacitance (μF) | Size φD×L(mm) | Rated ripple current (mA r.m.s./105°C, 100kHz) | Impedance (Ω MAX) | |
|---------------------|------------------|---------------|--|-------------------|---------------|
| | | | | 20°C, 100kHz | -10°C, 100kHz |
| 35 | 33 | 5×11 | 210 | 0.58 | 2.3 |
| | 56 | 6.3×11 | 340 | 0.22 | 0.87 |
| | 150 | 8×11.5 | 640 | 0.13 | 0.52 |
| | 220 | 8×16 | 840 | 0.087 | 0.35 |
| | 220 | 10×12.5 | 865 | 0.080 | 0.32 |
| | 270 | 8×20 | 1050 | 0.069 | 0.27 |
| | 330 | 10×16 | 1210 | 0.060 | 0.24 |
| | 470 | 10×20 | 1400 | 0.046 | 0.18 |
| | 470 | 12.5×16 | 1450 | 0.049 | 0.16 |
| | 560 | 10×23 | 1650 | 0.042 | 0.17 |
| | 680 | 10×28 | 1910 | 0.031 | 0.12 |
| | 680 | 12.5×20 | 1900 | 0.035 | 0.12 |
| | 680 | 16×16 | 1940 | 0.042 | 0.12 |
| | 1000 | 12.5×25 | 2230 | 0.027 | 0.089 |
| | 1000 | 18×16 | 2210 | 0.043 | 0.11 |
| | 1200 | 12.5×30 | 2650 | 0.024 | 0.078 |
| | 1200 | 16×20 | 2530 | 0.027 | 0.078 |
| | 1500 | 12.5×35 | 2880 | 0.020 | 0.065 |
| | 1800 | 12.5×40 | 3350 | 0.017 | 0.056 |
| | 1800 | 16×25 | 2930 | 0.021 | 0.060 |
| 1800 | 18×20 | 2860 | 0.026 | 0.067 | |
| 2200 | 16×31.5 | 3450 | 0.017 | 0.050 | |
| 2200 | 18×25 | 3140 | 0.019 | 0.049 | |
| 2700 | 16×35.5 | 3610 | 0.015 | 0.044 | |
| 2700 | 18×31.5 | 4170 | 0.015 | 0.040 | |
| 3300 | 16×40 | 4080 | 0.013 | 0.038 | |
| 3300 | 18×35.5 | 4220 | 0.014 | 0.038 | |
| 3900 | 18×40 | 4280 | 0.012 | 0.032 | |
| 50 | 22 | 5×11 | 180 | 0.70 | 2.8 |
| | 56 | 6.3×11 | 295 | 0.30 | 1.2 |
| | 100 | 8×11.5 | 555 | 0.17 | 0.68 |
| | 120 | 8×16 | 730 | 0.12 | 0.48 |
| | 150 | 10×12.5 | 760 | 0.12 | 0.48 |
| | 180 | 8×20 | 910 | 0.091 | 0.36 |
| | 220 | 10×16 | 1050 | 0.084 | 0.34 |
| | 270 | 10×20 | 1220 | 0.060 | 0.24 |
| | 270 | 12.5×16 | 1260 | 0.061 | 0.20 |
| | 330 | 10×23 | 1440 | 0.055 | 0.22 |
| | 470 | 10×28 | 1690 | 0.043 | 0.17 |
| | 470 | 12.5×20 | 1660 | 0.045 | 0.15 |
| | 470 | 16×16 | 1690 | 0.055 | 0.17 |
| | 560 | 12.5×25 | 1950 | 0.034 | 0.11 |
| | 560 | 18×16 | 1930 | 0.054 | 0.15 |
| | 680 | 12.5×30 | 2310 | 0.030 | 0.10 |
| | 820 | 12.5×35 | 2510 | 0.025 | 0.083 |
| | 820 | 16×20 | 2210 | 0.034 | 0.10 |
| | 1000 | 12.5×40 | 2920 | 0.021 | 0.069 |
| | 1000 | 16×25 | 2555 | 0.025 | 0.075 |
| 1000 | 18×20 | 2490 | 0.036 | 0.097 | |
| 1200 | 16×31.5 | 3010 | 0.022 | 0.066 | |
| 1200 | 18×25 | 2740 | 0.026 | 0.070 | |
| 1500 | 16×35.5 | 3150 | 0.019 | 0.057 | |
| 1800 | 16×40 | 3710 | 0.016 | 0.048 | |
| 1800 | 18×31.5 | 3635 | 0.021 | 0.057 | |
| 2200 | 18×35.5 | 3680 | 0.017 | 0.046 | |
| 2700 | 18×40 | 3800 | 0.014 | 0.038 | |
| 3300 | 18×40 | 3800 | 0.014 | 0.038 | |

| Rated Voltage (Vdc) | Capacitance (μF) | Size φD×L(mm) | Rated ripple current (mA r.m.s./105°C, 100kHz) | Impedance (Ω MAX) | |
|---------------------|------------------|---------------|--|-------------------|---------------|
| | | | | 20°C, 100kHz | -10°C, 100kHz |
| 63 | 15 | 5×11 | 62 | 1.8 | 7.3 |
| | 33 | 6.3×11 | 126 | 1.0 | 4.1 |
| | 56 | 8×11.5 | 260 | 0.50 | 2.2 |
| | 82 | 8×16 | 335 | 0.36 | 1.7 |
| | 82 | 10×12.5 | 325 | 0.34 | 1.4 |
| | 120 | 8×20 | 408 | 0.26 | 1.3 |
| | 120 | 10×16 | 400 | 0.25 | 1.2 |
| | 180 | 10×20 | 518 | 0.17 | 0.76 |
| | 180 | 12.5×16 | 527 | 0.18 | 0.86 |
| | 220 | 10×23 | 595 | 0.16 | 0.67 |
| | 270 | 10×28 | 740 | 0.12 | 0.57 |
| | 270 | 12.5×20 | 765 | 0.13 | 0.52 |
| | 270 | 16×16 | 895 | 0.11 | 0.52 |
| | 330 | 12.5×25 | 875 | 0.096 | 0.36 |
| | 390 | 18×16 | 1030 | 0.096 | 0.40 |
| | 470 | 12.5×30 | 1010 | 0.080 | 0.34 |
| | 470 | 16×20 | 1130 | 0.077 | 0.32 |
| | 560 | 12.5×35 | 1140 | 0.070 | 0.30 |
| | 560 | 16×25 | 1350 | 0.062 | 0.23 |
| | 680 | 12.5×40 | 1280 | 0.060 | 0.25 |
| 680 | 18×20 | 1300 | 0.072 | 0.27 | |
| 820 | 16×31.5 | 1650 | 0.049 | 0.18 | |
| 820 | 18×25 | 1560 | 0.052 | 0.19 | |
| 1000 | 16×35.5 | 1900 | 0.040 | 0.15 | |
| 1000 | 18×31.5 | 1720 | 0.042 | 0.15 | |
| 1200 | 16×40 | 2130 | 0.036 | 0.13 | |
| 1200 | 18×35.5 | 1890 | 0.036 | 0.13 | |
| 1500 | 18×40 | 2470 | 0.032 | 0.12 | |
| 100 | 6.8 | 5×11 | 62 | 1.8 | 7.3 |
| | 15 | 6.3×11 | 126 | 1.0 | 4.1 |
| | 27 | 8×11.5 | 260 | 0.50 | 2.2 |
| | 39 | 8×16 | 335 | 0.36 | 1.7 |
| | 47 | 10×12.5 | 325 | 0.34 | 1.4 |
| | 56 | 8×20 | 408 | 0.26 | 1.3 |
| | 68 | 10×16 | 400 | 0.25 | 1.2 |
| | 82 | 10×20 | 518 | 0.17 | 0.76 |
| | 82 | 12.5×16 | 527 | 0.18 | 0.86 |
| | 100 | 10×23 | 595 | 0.16 | 0.67 |
| | 120 | 10×28 | 740 | 0.12 | 0.57 |
| | 120 | 12.5×20 | 765 | 0.13 | 0.52 |
| | 150 | 16×16 | 895 | 0.11 | 0.52 |
| | 180 | 12.5×25 | 875 | 0.096 | 0.36 |
| | 180 | 18×16 | 1030 | 0.096 | 0.40 |
| | 220 | 12.5×30 | 1010 | 0.080 | 0.34 |
| | 220 | 16×20 | 1130 | 0.077 | 0.32 |
| | 270 | 12.5×35 | 1140 | 0.070 | 0.30 |
| | 270 | 16×25 | 1350 | 0.062 | 0.23 |
| | 330 | 12.5×40 | 1280 | 0.060 | 0.25 |
| 330 | 18×20 | 1300 | 0.072 | 0.27 | |
| 390 | 16×31.5 | 1650 | 0.049 | 0.18 | |
| 390 | 18×25 | 1560 | 0.052 | 0.19 | |
| 470 | 16×35.5 | 1900 | 0.040 | 0.15 | |
| 470 | 18×31.5 | 1720 | 0.042 | 0.15 | |
| 560 | 16×40 | 2130 | 0.036 | 0.13 | |
| 680 | 18×35.5 | 1890 | 0.036 | 0.13 | |
| 820 | 18×40 | 2470 | 0.032 | 0.12 | |