

YXG シリーズ
SERIES

105°C 低インピーダンス品
105°C Low Impedance

・105°C 3000~6000時間品。
Load Life : 105°C 3000~6000 hours.

RoHS
compliance



◆規格表 / SPECIFICATIONS

| 項目 Items | 特性 Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|-------------------------------|---|---------------------|----------------------|------------------------------|--|--------|---------------|-------------------------|---|------------------|------|------|------|-------|------|------|------|---------|------|------------------|---|---|---|---|---|---|---|---|--|
| カテゴリ温度範囲 Category Temperature Range | -40~+105°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 定格電圧範囲 Rated Voltage Range | 6.3~100Vdc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 静電容量許容差 Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏れ電流 Leakage Current (MAX) | I=0.01CV又は3µAのいずれか大なる値以下 (定格電圧印加2分後) I=0.01CV or 3µA whichever is greater. (After 2 minutes) I=漏れ電流(µA) Leakage Current C=静電容量(µF) Capacitance V=定格電圧(Vdc) Rated Voltage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 損失角の正接 (tanδ) Dissipation Factor (MAX) | <table border="1"> <tr> <td>定格電圧(Vdc) Rated Voltage</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tanδ</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> <td></td> </tr> </table> <p>1000µFを越えるものは1000µF増す毎に上表の値に0.02を加えた値とする。 When capacitance is over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.</p> | 定格電圧(Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | (20°C, 120Hz) | tanδ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | | | | | | | | | | |
| 定格電圧(Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | (20°C, 120Hz) | | | | | | | | | | | | | | | | | | | | | | |
| tanδ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | | | | | | | | | | | | | | | | | | | | | | |
| 耐久性 Endurance | <p>105°C中で右表の時間定格電圧(リップル重量)印加後、下記項目を満足すること。 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"> <tr> <td>静電容量変化率 Capacitance Change</td> <td>初期値の±25%以内 Within ±25% of the initial value.</td> <td>ケースサイズ Case Size</td> <td>時間(hrs) Life Time</td> </tr> <tr> <td>損失角の正接 Dissipation Factor</td> <td>規格値の200%以下 Not more than 200% of the specified value.</td> <td>φD≤6.3</td> <td>3000</td> </tr> <tr> <td>漏れ電流 Leakage Current</td> <td>規格値以下 Not more than the specified value.</td> <td>φD=8</td> <td>4000</td> </tr> <tr> <td></td> <td></td> <td>φD=10</td> <td>5000</td> </tr> <tr> <td></td> <td></td> <td>φD≥12.5</td> <td>6000</td> </tr> </table> | 静電容量変化率 Capacitance Change | 初期値の±25%以内 Within ±25% of the initial value. | ケースサイズ Case Size | 時間(hrs) Life Time | 損失角の正接 Dissipation Factor | 規格値の200%以下 Not more than 200% of the specified value. | φD≤6.3 | 3000 | 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | φD=8 | 4000 | | | φD=10 | 5000 | | | φD≥12.5 | 6000 | | | | | | | | | | |
| 静電容量変化率 Capacitance Change | 初期値の±25%以内 Within ±25% of the initial value. | ケースサイズ Case Size | 時間(hrs) Life Time | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 損失角の正接 Dissipation Factor | 規格値の200%以下 Not more than 200% of the specified value. | φD≤6.3 | 3000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | φD=8 | 4000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | φD=10 | 5000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | φD≥12.5 | 6000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 低温特性 Low Temperature Stability (インピーダンス比) Impedance Ratio (MAX) | <table border="1"> <tr> <td>定格電圧(Vdc) Rated Voltage</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>(120Hz)</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> <td></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> <td></td> </tr> </table> | 定格電圧(Vdc) Rated Voltage | 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 | |
| 定格電圧(Vdc) Rated Voltage | 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 | | | | | | | | | | | | | | | | | | | | | | | |

◆リップル電流補正係数 / MULTIPLIER FOR RIPPLE CURRENT

| 周波数(Hz) Frequency | 120 | 1k | 10k | 100k≤ |
|----------------------|------|------|------|-------|
| 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 |

◆寸法図 / DIMENSIONS (mm)



◆呼称方法 / PART NUMBER

| | | | | | | |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-------------------------|---------------------|
| □□□ | YXG | □□□□□ | M | □□□ | □□ | DxL |
| 定格電圧 Rated Voltage | シリーズ名 Series | 静電容量 Capacitance | 静電容量許容差 Capacitance Tolerance | 副記号 Option | リード加工記号 Lead Forming | ケースサイズ Case Size |

◆副記号 / OPTION

| | |
|--------------------|---------|
| | 記号 Code |
| PETスリーブ PET Sleeve | EFC |

◆標準品一覧表 / STANDARD SIZE

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μ F) | 外形寸法 Size ϕ D×L(mm) | 定格リップル電流 Rated ripple current (mA r.m.s./105°C, 100kHz) | インピーダンス(Ω MAX) Impedance | |
|--------------------------------|-----------------------------------|--------------------------------|---|-------------------------------------|---------------|
| | | | | 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 | 0.080 | 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 | |
| 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 | |
| 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 | |
| 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 | 10×12.5 | 1700 | 0.053 | 0.16 |
| | 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 | |

◆標準品一覧表 / STANDARD SIZE

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μ F) | 外形寸法 Size ϕ D×L(mm) | 定格リプル電流 Rated ripple current (mA r.m.s./105°C, 100kHz) | インピーダンス(Ω MAX) Impedance | |
|--------------------------------|-----------------------------------|--------------------------------|--|-------------------------------------|---------------|
| | | | | 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 | |
| 63 | 15 | 5×11 | 55 | 2.3 | 9.3 |
| | 33 | 6.3×11 | 115 | 1.2 | 5.0 |
| | 56 | 8×11.5 | 232 | 0.63 | 2.8 |
| | 82 | 8×16 | 300 | 0.45 | 2.1 |
| | 82 | 10×12.5 | 288 | 0.43 | 1.8 |
| | 120 | 8×20 | 362 | 0.33 | 1.6 |
| | 120 | 10×16 | 357 | 0.31 | 1.5 |
| | 180 | 10×20 | 466 | 0.21 | 0.94 |
| | 180 | 12.5×16 | 466 | 0.23 | 1.1 |
| | 220 | 10×23 | 531 | 0.20 | 0.84 |
| | 270 | 10×28 | 663 | 0.15 | 0.71 |
| | 270 | 12.5×20 | 690 | 0.16 | 0.64 |
| | 270 | 16×16 | 795 | 0.14 | 0.66 |
| | 330 | 12.5×25 | 784 | 0.12 | 0.45 |
| | 390 | 18×16 | 920 | 0.12 | 0.50 |
| | 470 | 12.5×30 | 905 | 0.10 | 0.42 |
| | 470 | 16×20 | 1040 | 0.091 | 0.38 |
| | 560 | 12.5×35 | 1050 | 0.083 | 0.35 |
| | 560 | 16×25 | 1250 | 0.073 | 0.27 |
| | 680 | 12.5×40 | 1180 | 0.071 | 0.30 |
| | 680 | 18×20 | 1240 | 0.080 | 0.30 |
| | 820 | 16×31.5 | 1570 | 0.054 | 0.20 |
| | 820 | 18×25 | 1490 | 0.057 | 0.21 |
| 1000 | 16×35.5 | 1790 | 0.045 | 0.17 | |
| 1000 | 18×31.5 | 1630 | 0.047 | 0.17 | |
| 1200 | 16×40 | 2020 | 0.040 | 0.15 | |
| 1200 | 18×35.5 | 1790 | 0.040 | 0.15 | |
| 1500 | 18×40 | 2330 | 0.036 | 0.13 | |
| 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 |
| | 150 | 10×12.5 | 1280 | 0.073 | 0.22 |
| | 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 | |
| 100 | 6.8 | 5×11 | 55 | 2.3 | 9.3 |
| | 15 | 6.3×11 | 115 | 1.2 | 5.0 |
| | 27 | 8×11.5 | 232 | 0.63 | 2.8 |
| | 39 | 8×16 | 300 | 0.45 | 2.1 |
| | 47 | 10×12.5 | 288 | 0.43 | 1.8 |
| | 56 | 8×20 | 362 | 0.33 | 1.6 |
| | 56 | 10×12.5 | 1000 | 0.17 | 0.66 |
| | 68 | 10×16 | 357 | 0.31 | 1.5 |
| | 82 | 10×20 | 466 | 0.21 | 0.94 |
| | 82 | 12.5×16 | 466 | 0.23 | 1.1 |
| | 100 | 10×23 | 531 | 0.20 | 0.84 |
| | 120 | 10×28 | 663 | 0.15 | 0.71 |
| | 120 | 12.5×20 | 690 | 0.16 | 0.64 |
| | 150 | 16×16 | 795 | 0.14 | 0.66 |
| | 180 | 12.5×25 | 784 | 0.12 | 0.45 |
| | 180 | 18×16 | 920 | 0.12 | 0.50 |
| | 220 | 12.5×30 | 905 | 0.10 | 0.42 |
| | 220 | 16×20 | 1040 | 0.091 | 0.38 |
| | 270 | 12.5×35 | 1050 | 0.083 | 0.35 |
| | 270 | 16×25 | 1250 | 0.073 | 0.27 |
| | 330 | 12.5×40 | 1180 | 0.071 | 0.30 |
| | 330 | 18×20 | 1240 | 0.080 | 0.30 |
| | 390 | 16×31.5 | 1570 | 0.054 | 0.20 |
| 390 | 18×25 | 1490 | 0.057 | 0.21 | |
| 470 | 16×35.5 | 1790 | 0.045 | 0.17 | |
| 470 | 18×31.5 | 1630 | 0.047 | 0.17 | |
| 560 | 16×40 | 2020 | 0.040 | 0.15 | |
| 680 | 18×35.5 | 1790 | 0.040 | 0.15 | |
| 820 | 18×40 | 2330 | 0.036 | 0.13 | |