

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<br>Category Temperature Range                                   | -40~+105°C  |                               |   |                     |                      |                              |  |        |               |                         |   |                  |      |      |      |       |      |      |      |         |      |                  |   |   |   |   |   |   |   |   |  |
| 定格電圧範囲<br>Rated Voltage Range  | 6.3~100Vdc  |                               |   |                     |                      |                              |  |        |               |                         |   |                  |      |      |      |       |      |      |      |         |      |                  |   |   |   |   |   |   |   |   |  |
| 静電容量許容差<br>Capacitance Tolerance   | ±20% (20°C, 120Hz)  |                               |   |                     |                      |                              |  |        |               |                         |   |                  |      |      |      |       |      |      |      |         |      |                  |   |   |   |   |   |   |   |   |  |
| 漏れ電流<br>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)<br>I=0.01CV or 3µA whichever is greater. (After 2 minutes)<br>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)<br>Dissipation Factor (MAX)                                | <table border="1"> <tr> <td>定格電圧(Vdc)<br/>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。<br/>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)<br>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)<br>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<br>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。<br/>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<br/>Capacitance Change</td> <td>初期値の±25%以内<br/>Within ±25% of the initial value.</td> <td>ケースサイズ<br/>Case Size</td> <td>時間(hrs)<br/>Life Time</td> </tr> <tr> <td>損失角の正接<br/>Dissipation Factor</td> <td>規格値の200%以下<br/>Not more than 200% of the specified value.</td> <td>φD≤6.3</td> <td>3000</td> </tr> <tr> <td>漏れ電流<br/>Leakage Current</td> <td>規格値以下<br/>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<br>Capacitance Change | 初期値の±25%以内<br>Within ±25% of the initial value. | ケースサイズ<br>Case Size | 時間(hrs)<br>Life Time | 損失角の正接<br>Dissipation Factor | 規格値の200%以下<br>Not more than 200% of the specified value. | φD≤6.3 | 3000          | 漏れ電流<br>Leakage Current | 規格値以下<br>Not more than the specified value. | φD=8             | 4000 |      |      | φD=10 | 5000 |      |      | φD≥12.5 | 6000 |                  |   |   |   |   |   |   |   |   |  |
| 静電容量変化率<br>Capacitance Change  | 初期値の±25%以内<br>Within ±25% of the initial value.   | ケースサイズ<br>Case Size           | 時間(hrs)<br>Life Time                            |                     |                      |                              |  |        |               |                         |   |                  |      |      |      |       |      |      |      |         |      |                  |   |   |   |   |   |   |   |   |  |
| 損失角の正接<br>Dissipation Factor   | 規格値の200%以下<br>Not more than 200% of the specified value.  | φD≤6.3                        | 3000  |                     |                      |                              |  |        |               |                         |   |                  |      |      |      |       |      |      |      |         |      |                  |   |   |   |   |   |   |   |   |  |
| 漏れ電流<br>Leakage Current  | 規格値以下<br>Not more than the specified value.   | φD=8                          | 4000  |                     |                      |                              |  |        |               |                         |   |                  |      |      |      |       |      |      |      |         |      |                  |   |   |   |   |   |   |   |   |  |
|  |   | φD=10                         | 5000  |                     |                      |                              |  |        |               |                         |   |                  |      |      |      |       |      |      |      |         |      |                  |   |   |   |   |   |   |   |   |  |
|  |   | φD≥12.5                       | 6000  |                     |                      |                              |  |        |               |                         |   |                  |      |      |      |       |      |      |      |         |      |                  |   |   |   |   |   |   |   |   |  |
| 低温特性<br>Low Temperature Stability<br>(インピーダンス比)<br>Impedance Ratio (MAX) | <table border="1"> <tr> <td>定格電圧(Vdc)<br/>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)<br>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)<br>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)<br>Frequency |              | 120  | 1k   | 10k  | 100k≤ |
|----------------------|--------------|------|------|------|-------|
| 係数<br>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  |

◆寸法図 / DIMENSIONS (mm)



◆呼称方法 / PART NUMBER

|                       |                 |                     |                                  |               |                         |                     |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-------------------------|---------------------|
| □□□                   | YXG             | □□□□□               | M                                | □□□           | □□                      | DxL                 |
| 定格電圧<br>Rated Voltage | シリーズ名<br>Series | 静電容量<br>Capacitance | 静電容量許容差<br>Capacitance Tolerance | 副記号<br>Option | リード加工記号<br>Lead Forming | ケースサイズ<br>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<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>( $\mu$ F) | 外形寸法<br>Size<br>$\phi$ D×L(mm) | 定格リップル電流<br>Rated ripple current<br>(mA r.m.s./105°C, 100kHz) | インピーダンス( $\Omega$ MAX)<br>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                               |               |
| 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                               |               |

| 定格電圧<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>( $\mu$ F) | 外形寸法<br>Size<br>$\phi$ D×L(mm) | 定格リップル電流<br>Rated ripple current<br>(mA r.m.s./105°C, 100kHz) | インピーダンス( $\Omega$ MAX)<br>Impedance |               |
|--------------------------------|-----------------------------------|--------------------------------|---|-------------------------------------|---------------|
|                                |                                   |                                |   | 20°C, 100kHz                        | -10°C, 100kHz |
| 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                               | 10×12.5                        | 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<br>Rated Voltage<br>(Vdc) | 静電容量<br>Capacitance<br>( $\mu$ F) | 外形寸法<br>Size<br>$\phi$ D×L(mm) | 定格リプル電流<br>Rated ripple current<br>(mA r.m.s./105°C, 100kHz) | インピーダンス( $\Omega$ MAX)<br>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                               |               |
| 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                               |               |
| 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                                |               |
| 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                                |               |