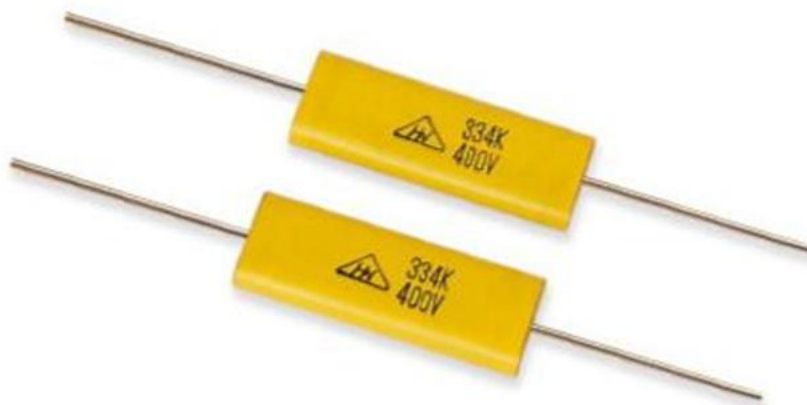
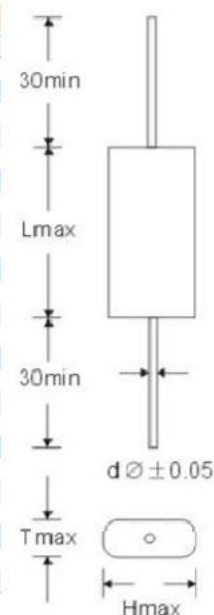


## ПЛЁНОЧНЫЕ ПОЛИСТИРОЛЬНЫЕ НЕИНДУКТИВНЫЕ КОНДЕНСАТОРЫ **CL20**. аналог (К73-11).



Конденсаторы соответствуют стандарту IEC60384-2. Диапазон рабочих температур от минус 40 до плюс 85 градусов (Ц). Допустимое отклонение емкости для «К»  $\pm 10\%$ , для «j»  $\pm 5\%$ . Тангенс угла диэлектрических потерь (на частоте 1 кГц) менее 0,01. Предельно допустимое напряжение  $1,5U_{ном}$ . (в течении 5 сек.) Сопротивление изоляции более 7500 мОм.

| CAPACITANCE |         | 100VDC |      |      |                 | 250VDC |      |      |                 | 400VDC |      |      |                 | 630VDC |      |      |                 |
|-------------|---------|--------|------|------|-----------------|--------|------|------|-----------------|--------|------|------|-----------------|--------|------|------|-----------------|
| SYMBOL      | $\mu F$ | L      | H    | T    | d $\varnothing$ | L      | H    | T    | d $\varnothing$ | L      | H    | T    | d $\varnothing$ | L      | H    | T    | d $\varnothing$ |
| 103         | 0.010   | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 4.5  | 7.0  | 0.6             |
| 153         | 0.015   | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 4.5  | 7.0  | 0.6             |
| 223         | 0.022   | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 8.0  | 4.0  | 0.6             | 16.0   | 5.0  | 9.0  | 0.6             |
| 333         | 0.033   | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 8.0  | 4.0  | 0.6             | 16.0   | 5.0  | 9.0  | 0.6             |
| 473         | 0.047   | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 8.0  | 5.0  | 0.6             | 16.0   | 6.0  | 10.0 | 0.6             |
| 683         | 0.068   | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 6.0  | 4.0  | 0.6             | 16.0   | 9.0  | 5.0  | 0.6             | 21.0   | 7.0  | 11.0 | 0.8             |
| 104         | 0.10    | 16.0   | 7.0  | 4.0  | 0.6             | 16.0   | 7.0  | 4.0  | 0.6             | 21.0   | 9.0  | 5.0  | 0.8             | 21.0   | 8.0  | 12.0 | 0.8             |
| 154         | 0.15    | 16.0   | 8.0  | 4.0  | 0.6             | 16.0   | 8.0  | 4.0  | 0.6             | 21.0   | 10.0 | 6.0  | 0.8             | 26.0   | 8.0  | 13.0 | 0.8             |
| 224         | 0.22    | 16.0   | 8.0  | 5.0  | 0.6             | 16.0   | 9.0  | 5.0  | 0.6             | 21.0   | 12.0 | 7.0  | 0.8             | 26.0   | 9.0  | 15.0 | 0.8             |
| 334         | 0.33    | 16.0   | 9.0  | 6.0  | 0.6             | 21.0   | 10.0 | 6.0  | 0.8             | 26.0   | 13.0 | 8.0  | 0.8             | 26.0   | 11.0 | 16.0 | 0.8             |
| 474         | 0.47    | 16.0   | 10.0 | 7.0  | 0.6             | 21.0   | 10.5 | 6.5  | 0.8             | 26.0   | 14.0 | 8.0  | 0.8             | 31.0   | 12.0 | 17.0 | 0.8             |
| 684         | 0.68    | 21.0   | 11.0 | 6.0  | 0.8             | 26.0   | 11.0 | 6.5  | 0.8             | 26.0   | 16.0 | 9.0  | 0.8             | 31.0   | 16.0 | 20.0 | 0.8             |
| 105         | 1.0     | 21.0   | 12.0 | 7.0  | 0.8             | 26.0   | 12.5 | 7.0  | 0.8             | 31.0   | 18.0 | 10.0 | 0.85            | 31.0   | 19.5 | 25.0 | 0.8             |
| 155         | 1.5     | 21.0   | 12.0 | 7.0  | 0.8             | 31.0   | 14.0 | 8.0  | 0.8             | 31.0   | 19.0 | 11.0 | 0.8             |        |      |      |                 |
| 225         | 2.2     | 26.0   | 16.0 | 9.0  | 0.8             | 31.0   | 16.5 | 9.0  | 0.8             |        |      |      |                 |        |      |      |                 |
| 335         | 3.3     | 26.0   | 17.5 | 9.5  | 0.8             | 31.0   | 19.0 | 12.0 | 0.8             |        |      |      |                 |        |      |      |                 |
| 475         | 4.7     | 31.0   | 18.0 | 11.0 | 0.8             | 36.0   | 21.0 | 11.0 | 0.8             |        |      |      |                 |        |      |      |                 |
| 685         | 6.8     | 31.0   | 20.0 | 11.0 | 0.8             | 36.0   | 24.0 | 13.5 | 0.8             |        |      |      |                 |        |      |      |                 |
| 106         | 10      | 31.0   | 24.0 | 12.5 | 0.8             | 46.0   | 25.0 | 14.0 | 0.8             |        |      |      |                 |        |      |      |                 |
| 126         | 12      | 31.0   | 25.5 | 15.0 | 0.8             | 46.0   | 28.0 | 15.5 | 0.8             |        |      |      |                 |        |      |      |                 |
| 156         | 15      | 31.0   | 25.5 | 16.0 | 0.8             | 46.0   | 30.0 | 17.5 | 0.8             |        |      |      |                 |        |      |      |                 |
| 186         | 18      | 31.0   | 18.5 | 17.0 | 0.8             | 46.0   | 32.0 | 19.5 | 0.8             |        |      |      |                 |        |      |      |                 |
| 226         | 22      | 31.0   | 30.0 | 18.5 | 0.8             |        |      |      |                 |        |      |      |                 |        |      |      |                 |
| 256         | 25      | 31.0   | 31.0 | 20.0 | 0.8             |        |      |      |                 |        |      |      |                 |        |      |      |                 |



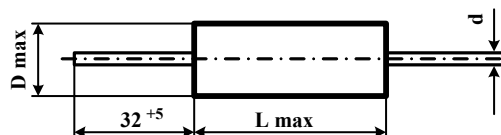
# K73-11

## МЕТАЛЛОПЛЕНОЧНЫЕ ПОЛИЭТИЛТЕРЕФТАЛАТНЫЕ КОНДЕНСАТОРЫ

Предназначены для работы в цепях постоянного, переменного, пульсирующего токов и в импульсных режимах.

Могут применяться взамен K73-16, МБМ, МБГЦ, МБГО, К42У-2.

**Конструкция:** обернута липкой лентой, залиты по торцам эпоксидным компаундом.



|   |   |
|---|---|
| Номинальная емкость   | 0,001 ... 100 мкФ                                   |
| Номинальное напряжение<br>(в интервале температур<br>-60°C ... +85°C)                                 | 50; 63; 100; 160; 250;<br>400; 630; 1000;<br>1600 В |
| Допускаемое отклонение емкости  | $\pm 5$ ; $\pm 10$ ; $\pm 20$ %                     |
| Тангенс угла потерь при $f = 1$ кГц   | $\leq 0,012$  |
| Сопротивление изоляции для<br>$C_{ном} \leq 0,33$ мкФ<br>$U_{ном} = 50-100$ В<br>$U_{ном} \geq 160$ В | $\geq 12\ 000$ МОм<br>$\geq 30\ 000$ МОм            |
| Постоянная времени для<br>$C_{ном} > 0,33$ мкФ<br>$U_{ном} = 50-100$ В<br>$U_{ном} \geq 160$ В        | $\geq 4000$ МОм·мкФ<br>$\geq 10\ 000$ МОм·мкФ       |
| Интервал рабочих температур<br>для $U_{ном} = 250$ В, $C_{ном} \geq 2,7$ мкФ                          | -60...+125°C<br>-60...+85°C                         |
| Изменение емкости в интервале<br>положительных температур   | $\leq 18$ %   |
| Наработка<br>при рабочей температуре до 125°C<br>при рабочей температуре до 70°C                      | 15 000 ч<br>20 000 ч                                |
| Срок сохраняемости  | 20 лет  |
| Климатическое исполнение  | В (93±3% отн.<br>влажности при<br>40±2°C, 21 сутки) |

| C <sub>НОМ</sub> ,<br>МКФ<br>C <sub>r</sub> , μF | U <sub>НОМ</sub> =50 В / U <sub>r</sub> =50 В |                          |          |                           | U <sub>НОМ</sub> =63 В / U <sub>r</sub> =63 В |                          |          |                           | U <sub>НОМ</sub> =100 В / U <sub>r</sub> =100 В |                          |          |                           |     |
|--|---|--------------------------|----------|---------------------------|---|--------------------------|----------|---------------------------|---|--------------------------|----------|---------------------------|-----|
|  | D <sub>max</sub> ,<br>mm                      | L <sub>max</sub> ,<br>mm | d,<br>mm | Macca,г<br>Mass, g<br>max | D <sub>max</sub> ,<br>mm                      | L <sub>max</sub> ,<br>mm | d,<br>mm | Macca,г<br>Mass, g<br>max | D <sub>max</sub> ,<br>mm                        | L <sub>max</sub> ,<br>mm | d,<br>mm | Macca,г<br>Mass, g<br>max |     |
| 0.10   |   |                          |          |                           | 6   | 14                       | 0.6      | 1.5                       | 6   | 14                       | 0.6      | 1.5                       |     |
| 0.12   |   |                          |          |                           | 7   |                          |          | 1.7                       |   |                          |          | 7                         | 1.8 |
| 0.15   |   |                          |          |                           | 8   |                          |          | 1.8                       |   |                          |          | 8                         | 2.0 |
| 0.18   |   |                          |          |                           | 9   |                          |          | 1.9                       |   |                          |          | 9                         | 2.2 |
| 0.22   |   |                          |          |                           | 10  |                          |          | 2.0                       |   |                          |          | 10                        | 2.5 |
| 0.27   |   |                          |          |                           | 8   |                          |          | 2.2                       |   |                          |          | 11                        | 3.0 |
| 0.33   |   |                          |          |                           | 9   |                          |          | 2.5                       |   |                          |          | 12                        | 3.5 |
| 0.39   |   |                          |          |                           | 10  |                          |          | 3.0                       |   |                          |          | 8                         | 4.0 |
| 0.47   |   |                          |          |                           | 8   |                          |          | 3.5                       |   |                          |          | 9                         | 4.5 |
| 0.56   |   |                          |          |                           | 9   |                          |          | 5.0                       |   |                          |          | 10                        | 5.0 |
| 0.68   | 10  | 5.5                      | 11       | 6.0                       |   |                          |          |                           |   |                          |          |                           |     |
| 0.82   | 11  | 6.5                      | 9        | 7.0                       |   |                          |          |                           |   |                          |          |                           |     |
| 1.0  | 8   | 16                       | 0.6      | 2.2                       | 18  | 0.8                      | 3.5      | 28                        | 0.8   | 4.5                      |          |                           |     |
| 1.2  | 9   |                          |          | 2.5                       |   |                          | 12       |                           |   | 5.0                      | 10       | 5.0                       |     |
| 1.5  | 10  |                          |          | 3.0                       |   |                          | 13       |                           |   | 5.5                      | 11       | 6.0                       |     |
| 1.8  | 11  |                          |          | 3.5                       |   |                          | 14       |                           |   | 6.5                      | 9        | 7.0                       |     |
| 2.2  | 12  |                          |          | 4.0                       |   |                          | 10       |                           |   | 5.0                      | 10       | 9.0                       |     |
| 2.7  | 8   |                          |          | 3.0                       |   |                          | 11       |                           |   | 6.0                      | 11       | 10                        |     |
| 3.3  | 9   |                          |          | 4.0                       |   |                          | 12       |                           |   | 7.0                      | 12       | 11                        |     |
| 3.9  | 10  |                          |          | 5.0                       |   |                          | 13       |                           |   | 8.0                      | 13       | 12                        |     |
| 4.7  | 11  |                          |          | 6.0                       |   |                          | 15       |                           |   | 9.0                      | 15       | 14                        |     |
| 5.6  | 12  |                          |          | 7.0                       |   |                          | 16       |                           |   | 10                       | 17       | 18                        |     |
| 6.8  | 13  | 8.0                      | 14       | 11                        | 19  | 21                       |          |                           |   |                          |          |                           |     |
| 8.2  | 14  | 9.0                      | 16       | 12                        | 21  | 26                       |          |                           |   |                          |          |                           |     |
| 10   | 15  | 11                       | 17       | 15                        | 18  |                          |          |                           |   |                          |          |                           |     |
| 12   | 16  | 12                       | 19       | 18                        | 21  |                          |          |                           |   |                          |          |                           |     |
| 15   | 17  | 13                       | 21       | 21                        | 26  |                          |          |                           |   |                          |          |                           |     |
| 18   | 14  | 44                       | 1.0      | 14                        |   |                          |          |                           |   |                          |          |                           |     |
| 22   | 15  |                          |          | 18                        |   |                          |          |                           |   |                          |          |                           |     |
| 27   | 17  |                          |          | 22                        |   |                          |          |                           |   |                          |          |                           |     |
| 33   | 20  |                          |          | 26                        |   |                          |          |                           |   |                          |          |                           |     |
| 39   | 21  |                          |          | 30                        |   |                          |          |                           |   |                          |          |                           |     |
| 47   | 23  |                          |          | 50                        |   |                          |          |                           |   |                          |          |                           |     |
| 56   | 25  |                          |          | 60                        |   |                          |          |                           |   |                          |          |                           |     |
| 68   | 28  |                          |          | 74                        |   |                          |          |                           |   |                          |          |                           |     |
| 82   | 30  |                          |          |                           |   |                          |          |                           |   |                          |          |                           |     |
| 100  | 30  |                          |          |                           |   |                          |          |                           |   |                          |          |                           |     |

| C <sub>НОМ</sub> ,<br>МКФ<br>C <sub>r</sub> , μF | U <sub>НОМ</sub> =160 В / U <sub>r</sub> =160 В |                          |          |                           | U <sub>НОМ</sub> =250 В / U <sub>r</sub> =250 В |                          |          |                           | U <sub>НОМ</sub> =400 В / U <sub>r</sub> =400 В |                          |          |                           |
|--|---|--------------------------|----------|---------------------------|---|--------------------------|----------|---------------------------|---|--------------------------|----------|---------------------------|
|  | D <sub>max</sub> ,<br>mm                        | L <sub>max</sub> ,<br>mm | d,<br>mm | Macca,г<br>Mass, g<br>max | D <sub>max</sub> ,<br>mm                        | L <sub>max</sub> ,<br>mm | d,<br>mm | Macca,г<br>Mass, g<br>max | D <sub>max</sub> ,<br>mm                        | L <sub>max</sub> ,<br>mm | d,<br>mm | Macca,г<br>Mass, g<br>max |
| 0.022  |   |                          |          |                           |   |                          |          |                           | 7   | 14                       | 0.6      | 1.5                       |
| 0.027  |   |                          |          |                           |   |                          |          |                           | 8   |                          |          | 2.0                       |
| 0.033  |   |                          |          |                           |   |                          |          |                           |   |                          |          | 9                         |
| 0.039  |   |                          |          |                           |   |                          |          |                           | 10  |                          |          |                           |
| 0.047  | 6   | 14                       | 0.6      | 1.5                       | 7   | 14                       | 0.6      | 1.5                       | 9   | 18                       | 0.8      | 2.5                       |
| 0.056  | 7   |                          |          | 1.7                       | 8   |                          |          | 1.6                       | 10  |                          |          | 3.0                       |
| 0.068  |   |                          |          | 1.8                       | 9   |                          |          | 1.7                       | 9   |                          |          | 3.5                       |
| 0.082  | 8   |                          |          | 1.9                       | 10  |                          |          | 1.8                       | 10  |                          |          | 4.0                       |
| 0.10   | 9   | 18                       | 0.8      | 2.0                       | 8   | 18                       | 0.8      | 2.0                       | 11  | 30                       | 0.8      | 4.5                       |
| 0.12   | 10  |                          |          | 2.2                       | 9   |                          |          | 2.4                       | 12  |                          |          | 5.0                       |
| 0.15   | 10  |                          |          | 2.5                       | 11  |                          |          | 2.8                       | 13  |                          |          | 6.0                       |
| 0.18   | 8   |                          |          | 3.0                       | 12  |                          |          | 3.0                       | 14  |                          |          | 7.0                       |
| 0.22   | 9   | 18                       | 0.8      | 3.5                       | 13  | 18                       | 0.8      | 3.5                       | 15  | 30                       | 0.8      | 8.0                       |
| 0.27   | 11  |                          |          | 4.5                       | 14  |                          |          | 6.0                       | 11  |                          |          | 9.0                       |
| 0.33   | 11  |                          |          | 5.0                       | 10  |                          |          | 6.5                       | 12  |                          |          | 10                        |
| 0.39   | 10  |                          |          | 5.5                       | 11  |                          |          | 7.0                       | 13  |                          |          | 11                        |
| 0.47   | 11  | 30                       | 0.8      | 6.0                       | 13  | 30                       | 0.8      | 6.5                       | 14  | 30                       | 0.8      | 12                        |
| 0.56   | 12  |                          |          | 7.0                       | 14  |                          |          | 7.5                       | 14  |                          |          | 13                        |
| 0.68   | 13  |                          |          | 8.0                       | 15  |                          |          | 8.0                       | 15  |                          |          | 14                        |
| 0.82   | 10  |                          |          | 9.0                       | 17  |                          |          | 9.0                       | 15  |                          |          | 15                        |
| 1.0  | 11  | 30                       | 0.8      | 10                        | 12  | 30                       | 0.8      | 10                        | 16  | 30                       | 0.8      | 15                        |
| 1.2  | 12  |                          |          | 11                        | 13  |                          |          | 11                        | 17  |                          |          | 16                        |
| 1.5  | 13  |                          |          | 12                        | 14  |                          |          | 12                        | 18  |                          |          | 17                        |
| 1.8  | 14  |                          |          | 13                        | 15  |                          |          | 13                        | 19  |                          |          | 18                        |
| 2.2  | 14  | 44                       | 1.0      | 14                        | 14  | 44                       | 1.0      | 14                        | 21  | 44                       | 1.0      | 21                        |
| 2.7  | 12  |                          |          | 15                        | 15  |                          |          | 15                        | 22  |                          |          | 22                        |
| 3.3  | 13  |                          |          | 16                        | 16  |                          |          | 16                        | 24  |                          |          | 24                        |
| 3.9  | 14  |                          |          | 17                        | 17  |                          |          | 17                        | 28  |                          |          | 28                        |
| 4.7  | 15  | 44                       | 1.0      | 18                        | 19  | 44                       | 1.0      | 18                        | 28  | 44                       | 1.0      | 40                        |
| 5.6  | 17  |                          |          | 20                        | 20  |                          |          | 20                        | 40  |                          |          | 40                        |
| 6.8  | 19  |                          |          | 21                        | 22  |                          |          | 21                        | 46  |                          |          | 46                        |
| 8.2  |   |                          |          |                           | 26  |                          |          |                           |   |                          |          | 46                        |
| 10   |   |                          |          |                           | 28  |                          |          |                           |   | 46                       |          |                           |

| C <sub>НОМ</sub> ,<br>МКФ<br>C <sub>r</sub> , μF | U <sub>НОМ</sub> =630 В / U <sub>r</sub> =630 В |                          |          |                               | U <sub>НОМ</sub> =1000 В / U <sub>r</sub> =1000 В |                          |          |                               | U <sub>НОМ</sub> =1600 В / U <sub>r</sub> =1600 В |                          |          |                               |
|--|---|--------------------------|----------|-------------------------------|---|--------------------------|----------|-------------------------------|---|--------------------------|----------|-------------------------------|
|  | D <sub>max</sub> ,<br>mm                        | L <sub>max</sub> ,<br>mm | d,<br>mm | Macca,<br>г<br>Mass, g<br>max | D <sub>max</sub> ,<br>mm                          | L <sub>max</sub> ,<br>mm | d,<br>mm | Macca,<br>г<br>Mass, g<br>max | D <sub>max</sub> ,<br>mm                          | L <sub>max</sub> ,<br>mm | d,<br>mm | Macca,<br>г<br>Mass, g<br>max |
| 0.0010   | 6   | 14                       | 0.6      | 1.0                           |   |                          |          |                               |   |                          |          |                               |
| 0.0012   |   |                          |          | 1.2                           |   |                          |          |                               |   |                          |          |                               |
| 0.0015   |   |                          |          | 1.3                           |   |                          |          |                               |   |                          |          |                               |
| 0.0018   |   |                          |          | 1.4                           |   |                          |          |                               |   |                          |          |                               |
| 0.0022   |   |                          |          | 1.5                           |   |                          |          |                               |   |                          |          |                               |
| 0.0027   |   |                          |          | 1.6                           |   |                          |          |                               |   |                          |          |                               |
| 0.0033   |   |                          |          | 1.7                           |   |                          |          |                               |   |                          |          |                               |
| 0.0039   |   |                          |          | 1.8                           |   |                          |          |                               |   |                          |          |                               |
| 0.0047   |   |                          |          | 1.9                           |   |                          |          |                               |   |                          |          |                               |
| 0.0056   |   |                          |          | 2.0                           |   |                          |          |                               |   |                          |          |                               |
| 0.0068   | 7   | 14                       | 0.6      | 2.2                           |   |                          |          |                               |   |                          |          |                               |
| 0.0082   |   |                          |          | 2.4                           |   |                          |          |                               |   |                          |          |                               |
| 0.010  |   |                          |          | 2.5                           |   |                          |          |                               |   |                          |          |                               |
| 0.012  |   |                          |          | 2.6                           |   |                          |          |                               |   |                          |          |                               |
| 0.015  |   |                          |          | 2.7                           |   |                          |          |                               |   |                          |          |                               |
| 0.018  |   |                          |          | 2.8                           |   |                          |          |                               |   |                          |          |                               |
| 0.022  |   |                          |          | 2.9                           |   |                          |          |                               |   |                          |          |                               |
| 0.027  |   |                          |          | 3.0                           |   |                          |          |                               |   |                          |          |                               |
| 0.033  |   |                          |          | 3.1                           |   |                          |          |                               |   |                          |          |                               |
| 0.039  |   |                          |          | 3.2                           |   |                          |          |                               |   |                          |          |                               |
| 0.047  | 8   | 14                       | 0.6      | 3.5                           |   |                          |          |                               |   |                          |          |                               |
| 0.056  |   |                          |          | 3.6                           |   |                          |          |                               |   |                          |          |                               |
| 0.068  |   |                          |          | 3.7                           |   |                          |          |                               |   |                          |          |                               |
| 0.082  |   |                          |          | 3.8                           |   |                          |          |                               |   |                          |          |                               |
| 0.10   |   |                          |          | 3.9                           |   |                          |          |                               |   |                          |          |                               |
| 0.12   |   |                          |          | 4.0                           |   |                          |          |                               |   |                          |          |                               |
| 0.15   |   |                          |          | 4.1                           |   |                          |          |                               |   |                          |          |                               |
| 0.18   |   |                          |          | 4.2                           |   |                          |          |                               |   |                          |          |                               |
| 0.22   |   |                          |          | 4.3                           |   |                          |          |                               |   |                          |          |                               |
| 0.27   |   |                          |          | 4.4                           |   |                          |          |                               |   |                          |          |                               |
| 0.33   | 9   | 14                       | 0.6      | 4.5                           |   |                          |          |                               |   |                          |          |                               |
| 0.39   |   |                          |          | 4.6                           |   |                          |          |                               |   |                          |          |                               |
| 0.47   |   |                          |          | 4.7                           |   |                          |          |                               |   |                          |          |                               |
| 0.010  |   |                          |          | 4.8                           |   |                          |          |                               |   |                          |          |                               |
| 0.012  |   |                          |          | 4.9                           |   |                          |          |                               |   |                          |          |                               |
| 0.015  |   |                          |          | 5.0                           |   |                          |          |                               |   |                          |          |                               |
| 0.018  |   |                          |          | 5.1                           |   |                          |          |                               |   |                          |          |                               |
| 0.022  |   |                          |          | 5.2                           |   |                          |          |                               |   |                          |          |                               |
| 0.027  |   |                          |          | 5.3                           |   |                          |          |                               |   |                          |          |                               |
| 0.033  |   |                          |          | 5.4                           |   |                          |          |                               |   |                          |          |                               |
| 0.039  | 10  | 18                       | 0.8      | 5.5                           |   |                          |          |                               |   |                          |          |                               |
| 0.047  |   |                          |          | 5.6                           |   |                          |          |                               |   |                          |          |                               |
| 0.056  |   |                          |          | 5.7                           |   |                          |          |                               |   |                          |          |                               |
| 0.068  |   |                          |          | 5.8                           |   |                          |          |                               |   |                          |          |                               |
| 0.082  |   |                          |          | 5.9                           |   |                          |          |                               |   |                          |          |                               |
| 0.10   |   |                          |          | 6.0                           |   |                          |          |                               |   |                          |          |                               |
| 0.12   |   |                          |          | 6.1                           |   |                          |          |                               |   |                          |          |                               |
| 0.15   |   |                          |          | 6.2                           |   |                          |          |                               |   |                          |          |                               |
| 0.18   |   |                          |          | 6.3                           |   |                          |          |                               |   |                          |          |                               |
| 0.22   |   |                          |          | 6.4                           |   |                          |          |                               |   |                          |          |                               |
| 0.27   | 11  | 18                       | 0.8      | 6.5                           |   |                          |          |                               |   |                          |          |                               |
| 0.33   |   |                          |          | 6.6                           |   |                          |          |                               |   |                          |          |                               |
| 0.39   |   |                          |          | 6.7                           |   |                          |          |                               |   |                          |          |                               |
| 0.47   |   |                          |          | 6.8                           |   |                          |          |                               |   |                          |          |                               |
| 0.010  |   |                          |          | 6.9                           |   |                          |          |                               |   |                          |          |                               |
| 0.012  |   |                          |          | 7.0                           |   |                          |          |                               |   |                          |          |                               |
| 0.015  |   |                          |          | 7.1                           |   |                          |          |                               |   |                          |          |                               |
| 0.018  |   |                          |          | 7.2                           |   |                          |          |                               |   |                          |          |                               |
| 0.022  |   |                          |          | 7.3                           |   |                          |          |                               |   |                          |          |                               |
| 0.027  |   |                          |          | 7.4                           |   |                          |          |                               |   |                          |          |                               |
| 0.033  | 12  | 30                       | 0.8      | 7.5                           |   |                          |          |                               |   |                          |          |                               |
| 0.039  |   |                          |          | 7.6                           |   |                          |          |                               |   |                          |          |                               |
| 0.047  |   |                          |          | 7.7                           |   |                          |          |                               |   |                          |          |                               |
| 0.056  |   |                          |          | 7.8                           |   |                          |          |                               |   |                          |          |                               |
| 0.068  |   |                          |          | 7.9                           |   |                          |          |                               |   |                          |          |                               |
| 0.082  |   |                          |          | 8.0                           |   |                          |          |                               |   |                          |          |                               |
| 0.10   |   |                          |          | 8.1                           |   |                          |          |                               |   |                          |          |                               |
| 0.12   |   |                          |          | 8.2                           |   |                          |          |                               |   |                          |          |                               |
| 0.15   |   |                          |          | 8.3                           |   |                          |          |                               |   |                          |          |                               |
| 0.18   |   |                          |          | 8.4                           |   |                          |          |                               |   |                          |          |                               |
| 0.22   | 13  | 30                       | 0.8      | 8.5                           |   |                          |          |                               |   |                          |          |                               |
| 0.27   |   |                          |          | 8.6                           |   |                          |          |                               |   |                          |          |                               |
| 0.33   |   |                          |          | 8.7                           |   |                          |          |                               |   |                          |          |                               |
| 0.39   |   |                          |          | 8.8                           |   |                          |          |                               |   |                          |          |                               |
| 0.47   |   |                          |          | 8.9                           |   |                          |          |                               |   |                          |          |                               |
| 0.010  |   |                          |          | 9.0                           |   |                          |          |                               |   |                          |          |                               |
| 0.012  |   |                          |          | 9.1                           |   |                          |          |                               |   |                          |          |                               |
| 0.015  |   |                          |          | 9.2                           |   |                          |          |                               |   |                          |          |                               |
| 0.018  |   |                          |          | 9.3                           |   |                          |          |                               |   |                          |          |                               |
| 0.022  |   |                          |          | 9.4                           |   |                          |          |                               |   |                          |          |                               |
| 0.027  | 14  | 30                       | 0.8      | 9.5                           |   |                          |          |                               |   |                          |          |                               |
| 0.033  |   |                          |          | 9.6                           |   |                          |          |                               |   |                          |          |                               |
| 0.039  |   |                          |          | 9.7                           |   |                          |          |                               |   |                          |          |                               |
| 0.047  |   |                          |          | 9.8                           |   |                          |          |                               |   |                          |          |                               |
| 0.056  |   |                          |          | 9.9                           |   |                          |          |                               |   |                          |          |                               |
| 0.068  |   |                          |          | 10.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.082  |   |                          |          | 10.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.10   |   |                          |          | 10.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.12   |   |                          |          | 10.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.15   |   |                          |          | 10.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.18   | 15  | 30                       | 0.8      | 10.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.22   |   |                          |          | 10.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.27   |   |                          |          | 10.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.33   |   |                          |          | 10.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.39   |   |                          |          | 10.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.47   |   |                          |          | 11.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.010  |   |                          |          | 11.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.012  |   |                          |          | 11.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.015  |   |                          |          | 11.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.018  |   |                          |          | 11.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.022  | 16  | 30                       | 0.8      | 11.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.027  |   |                          |          | 11.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.033  |   |                          |          | 11.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.039  |   |                          |          | 11.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.047  |   |                          |          | 11.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.056  |   |                          |          | 12.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.068  |   |                          |          | 12.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.082  |   |                          |          | 12.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.10   |   |                          |          | 12.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.12   |   |                          |          | 12.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.15   | 17  | 30                       | 0.8      | 12.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.18   |   |                          |          | 12.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.22   |   |                          |          | 12.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.27   |   |                          |          | 12.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.33   |   |                          |          | 12.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.39   |   |                          |          | 13.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.47   |   |                          |          | 13.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.010  |   |                          |          | 13.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.012  |   |                          |          | 13.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.015  |   |                          |          | 13.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.018  | 18  | 30                       | 0.8      | 13.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.022  |   |                          |          | 13.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.027  |   |                          |          | 13.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.033  |   |                          |          | 13.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.039  |   |                          |          | 13.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.047  |   |                          |          | 14.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.056  |   |                          |          | 14.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.068  |   |                          |          | 14.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.082  |   |                          |          | 14.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.10   |   |                          |          | 14.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.12   | 19  | 30                       | 0.8      | 14.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.15   |   |                          |          | 14.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.18   |   |                          |          | 14.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.22   |   |                          |          | 14.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.27   |   |                          |          | 14.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.33   |   |                          |          | 15.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.39   |   |                          |          | 15.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.47   |   |                          |          | 15.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.010  |   |                          |          | 15.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.012  |   |                          |          | 15.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.015  | 20  | 30                       | 0.8      | 15.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.018  |   |                          |          | 15.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.022  |   |                          |          | 15.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.027  |   |                          |          | 15.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.033  |   |                          |          | 15.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.039  |   |                          |          | 16.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.047  |   |                          |          | 16.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.056  |   |                          |          | 16.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.068  |   |                          |          | 16.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.082  |   |                          |          | 16.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.10   | 21  | 30                       | 0.8      | 16.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.12   |   |                          |          | 16.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.15   |   |                          |          | 16.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.18   |   |                          |          | 16.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.22   |   |                          |          | 16.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.27   |   |                          |          | 17.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.33   |   |                          |          | 17.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.39   |   |                          |          | 17.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.47   |   |                          |          | 17.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.010  |   |                          |          | 17.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.012  | 22  | 30                       | 0.8      | 17.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.015  |   |                          |          | 17.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.018  |   |                          |          | 17.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.022  |   |                          |          | 17.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.027  |   |                          |          | 17.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.033  |   |                          |          | 18.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.039  |   |                          |          | 18.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.047  |   |                          |          | 18.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.056  |   |                          |          | 18.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.068  |   |                          |          | 18.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.082  | 23  | 30                       | 0.8      | 18.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.10   |   |                          |          | 18.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.12   |   |                          |          | 18.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.15   |   |                          |          | 18.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.18   |   |                          |          | 18.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.22   |   |                          |          | 19.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.27   |   |                          |          | 19.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.33   |   |                          |          | 19.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.39   |   |                          |          | 19.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.47   |   |                          |          | 19.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.010  | 24  | 30                       | 0.8      | 19.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.012  |   |                          |          | 19.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.015  |   |                          |          | 19.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.018  |   |                          |          | 19.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.022  |   |                          |          | 19.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.027  |   |                          |          | 20.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.033  |   |                          |          | 20.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.039  |   |                          |          | 20.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.047  |   |                          |          | 20.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.056  |   |                          |          | 20.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.068  | 25  | 30                       | 0.8      | 20.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.082  |   |                          |          | 20.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.10   |   |                          |          | 20.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.12   |   |                          |          | 20.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.15   |   |                          |          | 20.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.18   |   |                          |          | 21.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.22   |   |                          |          | 21.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.27   |   |                          |          | 21.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.33   |   |                          |          | 21.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.39   |   |                          |          | 21.4                          |   |                          |          |                               |   |                          |          |                               |
| 0.47   | 26  | 30                       | 0.8      | 21.5                          |   |                          |          |                               |   |                          |          |                               |
| 0.010  |   |                          |          | 21.6                          |   |                          |          |                               |   |                          |          |                               |
| 0.012  |   |                          |          | 21.7                          |   |                          |          |                               |   |                          |          |                               |
| 0.015  |   |                          |          | 21.8                          |   |                          |          |                               |   |                          |          |                               |
| 0.018  |   |                          |          | 21.9                          |   |                          |          |                               |   |                          |          |                               |
| 0.022  |   |                          |          | 22.0                          |   |                          |          |                               |   |                          |          |                               |
| 0.027  |   |                          |          | 22.1                          |   |                          |          |                               |   |                          |          |                               |
| 0.033  |   |                          |          | 22.2                          |   |                          |          |                               |   |                          |          |                               |
| 0.039  |   |                          |          | 22.3                          |   |                          |          |                               |   |                          |          |                               |
| 0.047  |   |                          |          | 22.4                          |   |                          |          |                               |   |                          |          |                               |