## UB2 Series Legend Packet



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The primary purpose of this Legend Packet is to let our customers know that NKK Switches provides full support regarding your legending requirements. The packet is designed to provide information to make your legending choices easy and concise, and to let you know that our availability can range from answering a few questions to guiding you through the entire process. Feel free to acquaint yourself with the following pages specific to your applications, then contact us and let us know how we may be of further assistance. We look forward to serving all you legending needs.

## Customer Request Form

UB2 Series Legend Instructions

| 1 Customer Information | Today's Date |  |
| :--- | :--- | :--- |
| Company Name |  | Phone ( 1 |
| Address |  | Fax ( 1 |
| City | State | Zip Code |
| Contact Person | Email |  |

Important! Please complete one Request Form for each legend requested.

## 2 Switch

Switch Part Number

## Quantity Requested

## Cap Part Number

Refer to Legend Packet page UB2-3 if you need assistance.

## 3 Surface



See Legend Packet page UB2-3 if you need more information on printable surfaces.

## 4 Font Style and Size



Refer to Legend Packet pages UB2-4 through UB2-8 to determine your font stye and point size.

## 5 Characters

|  | 1 line |  | 2 lines |  | 3 lines |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | AC | Not Recommended |
| START | Your Legend Text Here | OFF | Your Legend Text Here | FAN ONLY |  |
| Sample |  | Sample |  | Sample | Your Legend Text Here |

Minimum distance between characters is critical to legibility and cannot be less than $.015^{\prime \prime}$.
Refer to Legend Packet page UB2-9 to determine your maximum printable area. Legend Packet pages UB2-4 through UB2-8 provide character widths and heights. Note: All legends will be centered unless otherwise indicated.

Please make your selections below by checking one box in each row.

| Legend Color | $\square$ Black | $\square$ White | $\square$ Other (contact factory) |  |
| :--- | :--- | :--- | :--- | :--- |
| Printing Method | $\square$ Screen Print | $\square$ Pad Print | $\square$ Laser Etch | $\square$ Other (contact factory) |
| *Legend Orientation | $\square$ P/N Left | $\square$ P/N Top | $\square$ P/N Right | $\square$ P/N Bottom |

*See Legend Packet page UB2-3 for legend orientation specifications.

## Cap Types and Combinations

## UB2 Series Legend Instructions

Caps for Illuminated


## Legend Orientation

## UB2 Series Legend Instructions

Orientation of Legends on Illuminated and Nonilluminated Switches


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## UB2 Series Legend Instructions

The following tables display Helvetica font styles in graduated point sizes. These tables can give you an idea at a glance which size might be most compatible for your legend. For more detailed information on each font style and individual character widths, see pages UB2-5 through UB2-8.

HELVETICA LIGHT

| Actual Font <br> and Size | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWVI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Font Size in Points | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 16 | 18 | 20 | 22 |
| Character Height | $.063^{\prime \prime}$ | $.075^{\prime \prime}$ | $.084^{\prime \prime}$ | $.092^{\prime \prime}$ | $.100^{\prime \prime}$ | $.111^{\prime \prime}$ | $.120^{\prime \prime}$ | $.141^{\prime \prime}$ | $.161^{\prime \prime}$ | $.189^{\prime \prime}$ | $.211^{\prime \prime}$ | $.231^{\prime \prime}$ |

See page UB2-5 for the Helvetica Light Font Style table.

## HELVETICA REGULAR

| Actual Font <br> and Size | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWVI |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Font Size in Points | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 16 | 18 | 20 | 22 |
| Character Height | $064^{\prime \prime}$ | $.077^{\prime \prime}$ | $.086^{\prime \prime}$ | $.096^{\prime \prime}$ | $.107^{\prime \prime}$ | $.118^{\prime \prime}$ | $.129^{\prime \prime}$ | $.149^{\prime \prime}$ | $.171^{\prime \prime}$ | $.189^{\prime \prime}$ | $.214^{\prime \prime}$ | $.250^{\prime \prime}$ |

See page UB2-6 for the Helvetica Regular Font Style table.

HELVETICA BOLD

| Actual Font <br> and Size |  |  | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EW | EMV | EMM |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Font Size in Points | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 16 | 18 | 20 | 22 |
| Character Height | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $.086^{\prime \prime}$ | $.096^{\prime \prime}$ | $.107^{\prime \prime}$ | $.117^{\prime \prime}$ | $.128^{\prime \prime}$ | $.149^{\prime \prime}$ | $.170^{\prime \prime}$ | $.191^{\prime \prime}$ | $.203^{\prime \prime}$ | $.234^{\prime \prime}$ |

See page UB2-7 for the Helvetica Bold Font Style table.

HELVETICA BLACK

| Actual Font <br> and Size |  |  | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | ENVI | EVII |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Font Size in Points | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 16 | 18 | 20 | 22 |
| Character Height | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $.084^{\prime \prime}$ | $.095^{\prime \prime}$ | $.106^{\prime \prime}$ | $.116^{\prime \prime}$ | $.126^{\prime \prime}$ | $.149^{\prime \prime}$ | $.169^{\prime \prime}$ | $.189^{\prime \prime}$ | $.211^{\prime \prime}$ | $.229^{\prime \prime}$ |

See page UB2-8 for the Helvetica Black Font Style table.

Note: Minimum distance between characters on any font style is critical to legibility and cannot be less than $.015^{\prime \prime}$. Remember to include this dimension between each character width when calculating overall legend length.


Note: Minimum distance between characters is critical to legibility and cannot be less than $.015^{\prime \prime}$.

Helvetica Regular
UB2 Series Legend Instructions


Note: Minimum distance between characters is critical to legibility and cannot be less than $.015^{\prime \prime}$.

Helvetica Bold
UB2 Series Legend Instructions

| Actual Font and Size |  |  | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | $E W$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Font Size in Points | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 16 | 18 | 20 | 22 |
| Character Height | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | .086" | .096" | .107" | .117" | .128" | .149 ${ }^{\prime \prime}$ | .170" | .191" | .203" | . 234 " |
| Character | Character Widths in Inches |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { A } \\ & \text { B } \\ & \text { C } \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .076 \\ & .065 \\ & .073 \end{aligned}$ | $\begin{aligned} & .085 \\ & .073 \\ & .081 \end{aligned}$ | $\begin{aligned} & .095 \\ & .082 \\ & .089 \end{aligned}$ | $\begin{aligned} & .105 \\ & .089 \\ & .098 \end{aligned}$ | $\begin{aligned} & .113 \\ & .097 \\ & .107 \end{aligned}$ | $\begin{array}{r} .132 \\ .114 \\ .125 \\ \hline \end{array}$ | $\begin{aligned} & .150 \\ & .129 \\ & .144 \end{aligned}$ | $\begin{aligned} & .170 \\ & .146 \\ & .162 \end{aligned}$ | $\begin{aligned} & .189 \\ & .163 \\ & .179 \end{aligned}$ | $\begin{aligned} & .208 \\ & .179 \\ & .196 \end{aligned}$ |
| $\begin{aligned} & \hline D \\ & \mathrm{E} \\ & \mathrm{~F} \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .068 \\ & .062 \\ & .057 \end{aligned}$ | $\begin{aligned} & .076 \\ & .069 \\ & .065 \end{aligned}$ | $\begin{aligned} & .085 \\ & .076 \\ & .072 \end{aligned}$ | $\begin{aligned} & \hline .093 \\ & .084 \\ & .079 \end{aligned}$ | $\begin{aligned} & .102 \\ & .092 \\ & .086 \end{aligned}$ | $\begin{aligned} & .119 \\ & .107 \\ & .101 \end{aligned}$ | $\begin{aligned} & .135 \\ & .122 \\ & .115 \end{aligned}$ | $\begin{aligned} & .151 \\ & .137 \\ & .129 \end{aligned}$ | $\begin{aligned} & .168 \\ & .152 \\ & .143 \end{aligned}$ | $\begin{aligned} & .186 \\ & .168 \\ & .157 \end{aligned}$ |
| $\begin{aligned} & \text { G } \\ & H \\ & \text { I } \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\begin{aligned} & .075 \\ & .065 \\ & .017 \end{aligned}$ | $\begin{aligned} & .084 \\ & .075 \\ & .019 \end{aligned}$ | $\begin{aligned} & .094 \\ & .083 \\ & .022 \end{aligned}$ | $\begin{aligned} & .103 \\ & .090 \\ & .023 \end{aligned}$ | $\begin{aligned} & .112 \\ & .099 \\ & .026 \end{aligned}$ | $\begin{aligned} & .130 \\ & .116 \\ & .030 \end{aligned}$ | $\begin{aligned} & .149 \\ & .131 \\ & .034 \end{aligned}$ | $\begin{aligned} & .168 \\ & .148 \\ & .038 \end{aligned}$ | $\begin{aligned} & .186 \\ & .164 \\ & .043 \end{aligned}$ | $\begin{aligned} & .205 \\ & .181 \\ & .047 \end{aligned}$ |
| $\begin{aligned} & \hline \text { J } \\ & \text { K } \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .052 \\ & .073 \\ & .056 \end{aligned}$ | $\begin{aligned} & .059 \\ & .082 \\ & .063 \end{aligned}$ | $\begin{aligned} & .065 \\ & .090 \\ & .070 \end{aligned}$ | $\begin{aligned} & .071 \\ & .099 \\ & .076 \end{aligned}$ | $\begin{aligned} & .077 \\ & .109 \\ & .084 \end{aligned}$ | $\begin{aligned} & .091 \\ & .126 \\ & .098 \end{aligned}$ | $\begin{aligned} & .103 \\ & .143 \\ & .111 \end{aligned}$ | $\begin{aligned} & .116 \\ & .162 \\ & .126 \end{aligned}$ | $\begin{aligned} & .129 \\ & .180 \\ & .140 \end{aligned}$ | $\begin{aligned} & .142 \\ & .198 \\ & .154 \end{aligned}$ |
| $\begin{aligned} & M \\ & \mathrm{~N} \\ & \mathrm{O} \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .080 \\ & .067 \\ & .079 \end{aligned}$ | $\begin{aligned} & .089 \\ & .075 \\ & .088 \\ & \hline \end{aligned}$ | $\begin{aligned} & .100 \\ & .083 \\ & .097 \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline .109 \\ .091 \\ .107 \\ \hline \end{array}$ | $\begin{aligned} & .120 \\ & .100 \\ & .118 \\ & \hline \end{aligned}$ | $\begin{array}{r} .140 \\ .116 \\ .137 \\ \hline \end{array}$ | $\begin{aligned} & .159 \\ & .132 \\ & .156 \end{aligned}$ | $\begin{array}{r} .179 \\ .148 \\ .176 \end{array}$ | $\begin{aligned} & .199 \\ & .166 \\ & .195 \\ & \hline \end{aligned}$ | $\begin{aligned} & .219 \\ & .182 \\ & .215 \end{aligned}$ |
| $\begin{aligned} & \hline \mathrm{P} \\ & \mathrm{Q} \\ & \mathrm{R} \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .063 \\ & .077 \\ & .067 \end{aligned}$ | $\begin{aligned} & .070 \\ & .088 \\ & .076 \end{aligned}$ | $\begin{aligned} & .078 \\ & .098 \\ & .083 \end{aligned}$ | $\begin{aligned} & .086 \\ & .108 \\ & .092 \end{aligned}$ | $\begin{aligned} & .095 \\ & .118 \\ & .100 \end{aligned}$ | $\begin{aligned} & .109 \\ & .137 \\ & .116 \end{aligned}$ | $\begin{aligned} & .124 \\ & .157 \\ & .133 \\ & \hline \end{aligned}$ | $\begin{aligned} & .140 \\ & .175 \\ & .149 \end{aligned}$ | $\begin{aligned} & .155 \\ & .195 \\ & .167 \end{aligned}$ | $\begin{aligned} & .171 \\ & .216 \\ & .184 \end{aligned}$ |
| $\begin{aligned} & \hline S \\ & T \\ & U \\ & \hline \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .068 \\ & .065 \\ & .065 \end{aligned}$ | $\begin{aligned} & .076 \\ & .074 \\ & .073 \\ & \hline \end{aligned}$ | $\begin{aligned} & .084 \\ & .082 \\ & .082 \end{aligned}$ | $\begin{array}{\|l\|} \hline .092 \\ .089 \\ \hline .089 \\ \hline \end{array}$ | $\begin{array}{r} .102 \\ .098 \\ .098 \\ \hline \end{array}$ | $\begin{array}{r} .118 \\ .115 \\ .114 \\ \hline \end{array}$ | $\begin{array}{r} .135 \\ .131 \\ .129 \\ \hline \end{array}$ | $\begin{aligned} & .151 \\ & .147 \\ & .145 \end{aligned}$ | $\begin{array}{r} .168 \\ .163 \\ .162 \\ \hline \end{array}$ | $\begin{array}{r} .185 \\ .180 \\ .177 \\ \hline \end{array}$ |
| $\begin{aligned} & \hline V \\ & W \\ & X \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .069 \\ & .102 \\ & .070 \end{aligned}$ | $\begin{aligned} & \hline .078 \\ & .116 \\ & .081 \end{aligned}$ | $\begin{aligned} & .087 \\ & .089 \\ & .089 \end{aligned}$ | $\begin{aligned} & .096 \\ & .142 \\ & .098 \end{aligned}$ | $\begin{aligned} & .104 \\ & .155 \\ & .106 \end{aligned}$ | $\begin{aligned} & .122 \\ & .180 \\ & .122 \end{aligned}$ | $\begin{aligned} & .140 \\ & .206 \\ & .140 \end{aligned}$ | $\begin{aligned} & .157 \\ & .230 \\ & .159 \end{aligned}$ | $\begin{aligned} & .175 \\ & .256 \\ & .176 \end{aligned}$ | $\begin{aligned} & .191 \\ & .281 \\ & .193 \end{aligned}$ |
| $\begin{aligned} & Y \\ & Z \\ & Z \\ & 1 \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & \hline .069 \\ & .062 \\ & .035 \\ & \hline \end{aligned}$ | $\begin{aligned} & .078 \\ & .069 \\ & .039 \\ & \hline \end{aligned}$ | $\begin{aligned} & .087 \\ & .077 \\ & .043 \\ & \hline \end{aligned}$ | $\begin{aligned} & .096 \\ & .084 \\ & .049 \end{aligned}$ | $\begin{array}{r} .105 \\ .092 \\ .053 \\ \hline \end{array}$ | $\begin{array}{r} .122 \\ .108 \\ .060 \\ \hline \end{array}$ | $\begin{aligned} & .139 \\ & .122 \\ & .069 \\ & \hline \end{aligned}$ | $\begin{aligned} & .156 \\ & .138 \\ & .078 \\ & \hline \end{aligned}$ | $\begin{array}{r} .175 \\ .153 \\ .086 \\ \hline \end{array}$ | $\begin{aligned} & .191 \\ & .168 \\ & .096 \\ & \hline \end{aligned}$ |
| $\begin{aligned} & 2 \\ & 3 \\ & 4 \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .054 \\ & .055 \\ & .056 \end{aligned}$ | $\begin{aligned} & .061 \\ & .062 \\ & .063 \end{aligned}$ | $\begin{aligned} & .067 \\ & .069 \\ & .069 \end{aligned}$ | $\begin{aligned} & .074 \\ & .076 \\ & .077 \end{aligned}$ | $\begin{aligned} & .082 \\ & .082 \\ & .083 \end{aligned}$ | $\begin{aligned} & .094 \\ & .095 \\ & .098 \end{aligned}$ | $\begin{aligned} & .107 \\ & .109 \\ & .112 \end{aligned}$ | $\begin{aligned} & .122 \\ & .122 \\ & .125 \end{aligned}$ | $\begin{aligned} & .135 \\ & .136 \\ & .140 \end{aligned}$ | $\begin{aligned} & .148 \\ & .149 \\ & .153 \end{aligned}$ |
| $\begin{aligned} & 5 \\ & 6 \\ & 7 \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .056 \\ & .055 \\ & .056 \end{aligned}$ | $\begin{aligned} & .062 \\ & .063 \\ & .063 \end{aligned}$ | $\begin{aligned} & .069 \\ & .069 \\ & .070 \end{aligned}$ | $\begin{aligned} & .076 \\ & .076 \\ & .077 \end{aligned}$ | $\begin{aligned} & .083 \\ & .082 \\ & .084 \end{aligned}$ | $\begin{aligned} & .096 \\ & .096 \\ & .098 \end{aligned}$ | $\begin{aligned} & .109 \\ & .109 \\ & .112 \end{aligned}$ | $\begin{aligned} & .122 \\ & .122 \\ & .119 \end{aligned}$ | $\begin{aligned} & .136 \\ & .138 \\ & .140 \end{aligned}$ | $\begin{aligned} & .151 \\ & .149 \\ & .154 \end{aligned}$ |
| $\begin{aligned} & \hline 8 \\ & 9 \\ & 0 \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .056 \\ & .055 \\ & .055 \\ & \hline \end{aligned}$ | $\begin{aligned} & .063 \\ & .061 \\ & .062 \\ & \hline \end{aligned}$ | $\begin{aligned} & .069 \\ & .069 \\ & .069 \\ & \hline \end{aligned}$ | $\begin{aligned} & .078 \\ & .076 \\ & .076 \\ & \hline \end{aligned}$ | $\begin{aligned} & .085 \\ & .083 \\ & .081 \end{aligned}$ | $\begin{aligned} & .099 \\ & .096 \\ & .096 \\ & \hline \end{aligned}$ | $\begin{aligned} & .112 \\ & .109 \\ & .109 \\ & \hline \end{aligned}$ | $\begin{aligned} & .127 \\ & .122 \\ & .122 \end{aligned}$ | $\begin{aligned} & .140 \\ & .135 \\ & .137 \end{aligned}$ | $\begin{aligned} & .154 \\ & .149 \\ & .150 \end{aligned}$ |
| + | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .017 \\ & .017 \\ & .054 \end{aligned}$ | $\begin{aligned} & \hline .019 \\ & .020 \\ & .061 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline .021 \\ & .022 \\ & .068 \\ & \hline \end{aligned}$ | $\begin{array}{\|l} \hline .023 \\ .023 \\ .075 \\ \hline \end{array}$ | $\begin{aligned} & .026 \\ & .026 \\ & .081 \end{aligned}$ | $\begin{aligned} & .030 \\ & .030 \\ & .096 \\ & \hline \end{aligned}$ | $\begin{array}{r} .033 \\ .034 \\ .108 \\ \hline \end{array}$ | $\begin{aligned} & .038 \\ & .038 \\ & .122 \end{aligned}$ | $\begin{aligned} & .043 \\ & .043 \\ & .135 \end{aligned}$ | $\begin{aligned} & .047 \\ & .047 \\ & .148 \end{aligned}$ |
| / | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & \hline .031 \\ & .030 \end{aligned}$ | $\begin{aligned} & .034 \\ & .035 \end{aligned}$ | $\begin{aligned} & .038 \\ & .038 \end{aligned}$ | $\begin{aligned} & .042 \\ & .043 \end{aligned}$ | $\begin{aligned} & .046 \\ & .046 \end{aligned}$ | $\begin{aligned} & .054 \\ & .054 \end{aligned}$ | $\begin{aligned} & .061 \\ & .062 \end{aligned}$ | $\begin{aligned} & .069 \\ & .069 \end{aligned}$ | $\begin{aligned} & \hline .078 \\ & .076 \end{aligned}$ | $\begin{aligned} & .084 \\ & .084 \end{aligned}$ |

Note: Minimum distance between characters is critical to legibility and cannot be less than $.015^{\prime \prime}$.

| Actual Font and Size |  |  | EWI | EWI | EWI | EWI | EWI | EWI | EWI | EWI | $E W$ | EM |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Font Size in Points | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 16 | 18 | 20 | 22 |
| Character Height | $\mathrm{n} / \mathrm{a}$ | n/a | .084" | .095" | .106" | .116" | 126" | .149" | .169" | .189" | 211" | .229" |
| Character | Character Widths in Inches |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { A } \\ & \text { B } \\ & \text { C } \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .085 \\ & .075 \\ & 0 \end{aligned}$ | $\begin{aligned} & .096 \\ & .084 \\ & .091 \\ & \hline \end{aligned}$ | $\begin{aligned} & .106 \\ & .093 \\ & .102 \end{aligned}$ | $\begin{aligned} & .116 \\ & .102 \\ & .112 \end{aligned}$ | $\begin{aligned} & .127 \\ & .111 \\ & .122 \end{aligned}$ | $\begin{aligned} & .148 \\ & .129 \\ & .142 \end{aligned}$ | $\begin{aligned} & .170 \\ & .147 \\ & .162 \end{aligned}$ | $\begin{aligned} & .186 \\ & .167 \\ & .182 \end{aligned}$ | $\begin{aligned} & .211 \\ & .184 \\ & .203 \end{aligned}$ | $\begin{aligned} & .233 \\ & .203 \\ & .222 \end{aligned}$ |
| $\begin{aligned} & \mathrm{D} \\ & \mathrm{E} \\ & \mathrm{~F} \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .078 \\ & .068 \\ & .063 \end{aligned}$ | $\begin{aligned} & .088 \\ & .076 \\ & .071 \end{aligned}$ | $\begin{aligned} & .097 \\ & .084 \\ & .079 \end{aligned}$ | $\begin{aligned} & .107 \\ & .093 \\ & .087 \end{aligned}$ | $\begin{aligned} & .115 \\ & .101 \\ & 091 \end{aligned}$ | $\begin{aligned} & .136 \\ & .117 \\ & .110 \end{aligned}$ | $\begin{aligned} & .155 \\ & .134 \\ & .125 \end{aligned}$ | $\begin{aligned} & .174 \\ & .151 \\ & .141 \end{aligned}$ | $\begin{aligned} & .193 \\ & .168 \\ & .157 \end{aligned}$ | $\begin{aligned} & .214 \\ & .184 \\ & .173 \end{aligned}$ |
| $\begin{gathered} \mathrm{G} \\ \mathrm{H} \\ \mathrm{I} \end{gathered}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .082 \\ & .078 \\ & .027 \end{aligned}$ | $\begin{aligned} & .092 \\ & .088 \\ & .030 \end{aligned}$ | $\begin{aligned} & .102 \\ & .097 \\ & .034 \end{aligned}$ | $\begin{aligned} & .112 \\ & .108 \\ & .037 \end{aligned}$ | $\begin{aligned} & .122 \\ & .117 \\ & .040 \end{aligned}$ | $\begin{aligned} & .141 \\ & .136 \\ & .047 \end{aligned}$ | $\begin{aligned} & .162 \\ & .155 \\ & .053 \end{aligned}$ | $\begin{aligned} & .183 \\ & .175 \\ & .060 \end{aligned}$ | $\begin{aligned} & .203 \\ & .194 \\ & .067 \end{aligned}$ | $\begin{aligned} & .223 \\ & .212 \\ & .072 \end{aligned}$ |
| $\begin{aligned} & \mathrm{J} \\ & \mathrm{~K} \\ & \mathrm{~L} \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .065 \\ & .084 \\ & .063 \end{aligned}$ | $\begin{aligned} & .072 \\ & .095 \\ & .071 \end{aligned}$ | $\begin{aligned} & .081 \\ & .104 \\ & .079 \end{aligned}$ | $\begin{aligned} & .088 \\ & .116 \\ & .087 \end{aligned}$ | $\begin{aligned} & .096 \\ & .125 \\ & .094 \end{aligned}$ | $\begin{aligned} & .112 \\ & .147 \\ & .110 \end{aligned}$ | $\begin{aligned} & .127 \\ & .167 \\ & .125 \end{aligned}$ | $\begin{aligned} & .142 \\ & .188 \\ & .141 \end{aligned}$ | $\begin{aligned} & .159 \\ & .210 \\ & .157 \end{aligned}$ | $\begin{aligned} & .175 \\ & .230 \\ & .171 \end{aligned}$ |
| $\begin{aligned} & M \\ & N \\ & \mathrm{~N} \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{array}{\|l} .092 \\ .078 \\ .085 \end{array}$ | $\begin{aligned} & .103 \\ & .087 \\ & .095 \end{aligned}$ | $\begin{aligned} & .115 \\ & .097 \\ & .106 \end{aligned}$ | $\begin{aligned} & .126 \\ & .108 \\ & .116 \end{aligned}$ | $\begin{aligned} & .139 \\ & .116 \\ & .126 \end{aligned}$ | $\begin{aligned} & .161 \\ & .136 \\ & .148 \end{aligned}$ | $\begin{aligned} & .184 \\ & .155 \\ & .168 \end{aligned}$ | $\begin{aligned} & .208 \\ & .175 \\ & .190 \end{aligned}$ | $\begin{aligned} & .230 \\ & .194 \\ & .211 \end{aligned}$ | $\begin{aligned} & .251 \\ & .214 \\ & .231 \end{aligned}$ |
| $\begin{aligned} & \hline \mathrm{P} \\ & \mathrm{Q} \\ & \mathrm{R} \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .074 \\ & .085 \\ & .076 \end{aligned}$ | $\begin{aligned} & .083 \\ & .095 \\ & .087 \end{aligned}$ | $\begin{aligned} & .092 \\ & .066 \\ & .096 \end{aligned}$ | $\begin{aligned} & .101 \\ & .116 \\ & .105 \end{aligned}$ | $\begin{aligned} & .109 \\ & .126 \\ & .115 \end{aligned}$ | $\begin{aligned} & .128 \\ & .147 \\ & .135 \end{aligned}$ | $\begin{aligned} & .146 \\ & .168 \\ & .153 \end{aligned}$ | $\begin{aligned} & .165 \\ & .189 \\ & .172 \end{aligned}$ | $\begin{aligned} & .183 \\ & .211 \\ & .192 \end{aligned}$ | $\begin{aligned} & .200 \\ & .230 \\ & .212 \end{aligned}$ |
| $\begin{aligned} & \hline S \\ & T \\ & U \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .074 \\ & .074 \\ & .078 \end{aligned}$ | $\begin{aligned} & .083 \\ & .084 \\ & .088 \end{aligned}$ | $\begin{aligned} & .092 \\ & .093 \\ & .097 \end{aligned}$ | $\begin{aligned} & .101 \\ & .102 \\ & .108 \end{aligned}$ | $\begin{aligned} & .109 \\ & .110 \\ & .116 \end{aligned}$ | $\begin{aligned} & .129 \\ & .129 \\ & .135 \end{aligned}$ | $\begin{aligned} & .147 \\ & .147 \\ & .155 \end{aligned}$ | $\begin{aligned} & .165 \\ & .166 \\ & .175 \end{aligned}$ | $\begin{aligned} & .182 \\ & .185 \\ & .194 \end{aligned}$ | $\begin{aligned} & .201 \\ & .203 \\ & \hline 211 \end{aligned}$ |
| $\begin{gathered} \hline V \\ w \\ \text { X } \\ \hline \end{gathered}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .083 \\ & .111 \\ & .086 \end{aligned}$ | $\begin{aligned} & \hline .093 \\ & .124 \\ & .097 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline .102 \\ & .138 \\ & .106 \\ & \hline \end{aligned}$ | $\begin{array}{r} .112 \\ .152 \\ .117 \\ \hline \end{array}$ | $\begin{array}{r} .123 \\ .167 \\ .128 \\ \hline \end{array}$ | $\begin{array}{r} .142 \\ .194 \\ .149 \\ \hline \end{array}$ | $\begin{aligned} & .164 \\ & .221 \\ & .171 \\ & \hline \end{aligned}$ | $\begin{aligned} & .184 \\ & .250 \\ & .190 \\ & \hline \end{aligned}$ | $\begin{aligned} & .205 \\ & .275 \\ & .213 \end{aligned}$ | $\begin{aligned} & .226 \\ & .303 \\ & .234 \end{aligned}$ |
| $\begin{aligned} & Y \\ & Z \\ & 1 \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .086 \\ & .073 \\ & .042 \end{aligned}$ | $\begin{aligned} & .098 \\ & .082 \\ & .047 \end{aligned}$ | $\begin{aligned} & .109 \\ & .090 \\ & .052 \end{aligned}$ | $\begin{aligned} & .119 \\ & .100 \\ & .058 \end{aligned}$ | $\begin{aligned} & .129 \\ & .109 \\ & .063 \end{aligned}$ | $\begin{aligned} & .150 \\ & .127 \\ & .073 \end{aligned}$ | $\begin{aligned} & .172 \\ & .145 \\ & .083 \end{aligned}$ | $\begin{aligned} & .194 \\ & .163 \\ & .094 \end{aligned}$ | $\begin{aligned} & .215 \\ & .181 \\ & .104 \end{aligned}$ | $\begin{aligned} & .237 \\ & .199 \\ & .113 \end{aligned}$ |
| $\begin{aligned} & 2 \\ & 3 \\ & 4 \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .068 \\ & .069 \\ & .069 \end{aligned}$ | $\begin{aligned} & .076 \\ & .076 \\ & .076 \end{aligned}$ | $\begin{aligned} & .083 \\ & .083 \\ & .086 \end{aligned}$ | $\begin{aligned} & .091 \\ & .092 \\ & .094 \end{aligned}$ | $\begin{aligned} & .100 \\ & .101 \\ & .102 \\ & \hline \end{aligned}$ | $\begin{aligned} & .117 \\ & .117 \\ & .120 \\ & \hline \end{aligned}$ | $\begin{aligned} & .132 \\ & .133 \\ & .136 \end{aligned}$ | $\begin{aligned} & .149 \\ & .150 \\ & .154 \end{aligned}$ | $\begin{aligned} & .167 \\ & .167 \\ & .170 \\ & \hline \end{aligned}$ | $\begin{aligned} & .183 \\ & .184 \\ & .188 \end{aligned}$ |
| $\begin{aligned} & 5 \\ & 6 \\ & 7 \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .069 \\ & .069 \\ & .064 \end{aligned}$ | $\begin{aligned} & .076 \\ & .077 \\ & .072 \end{aligned}$ | $\begin{aligned} & .085 \\ & .086 \\ & .080 \end{aligned}$ | $\begin{aligned} & .094 \\ & .095 \\ & .088 \end{aligned}$ | $\begin{aligned} & .102 \\ & .103 \\ & .096 \end{aligned}$ | $\begin{aligned} & .120 \\ & .121 \\ & .111 \end{aligned}$ | $\begin{aligned} & .136 \\ & .137 \\ & .127 \end{aligned}$ | $\begin{aligned} & .153 \\ & .154 \\ & .142 \end{aligned}$ | $\begin{aligned} & .170 \\ & .171 \\ & .158 \end{aligned}$ | $\begin{aligned} & .186 \\ & .189 \\ & .175 \end{aligned}$ |
| $\begin{aligned} & 88 \\ & 9 \\ & 0 \end{aligned}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & .069 \\ & .069 \\ & .069 \end{aligned}$ | $\begin{aligned} & .077 \\ & .077 \\ & .076 \end{aligned}$ | $\begin{aligned} & .085 \\ & .085 \\ & .085 \end{aligned}$ | $\begin{aligned} & .094 \\ & .096 \\ & .095 \end{aligned}$ | $\begin{aligned} & .102 \\ & .102 \\ & .103 \end{aligned}$ | $\begin{aligned} & .120 \\ & .121 \\ & .119 \end{aligned}$ | $\begin{aligned} & .135 \\ & .136 \\ & .136 \end{aligned}$ | $\begin{aligned} & .154 \\ & .155 \\ & .154 \end{aligned}$ | $\begin{aligned} & .170 \\ & .170 \\ & .171 \end{aligned}$ | $\begin{aligned} & .186 \\ & .189 \\ & .189 \end{aligned}$ |
| + | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & \hline .023 \\ & .023 \\ & .056 \end{aligned}$ | $\begin{aligned} & .027 \\ & .027 \\ & .063 \end{aligned}$ | $\begin{aligned} & .030 \\ & .030 \\ & .071 \end{aligned}$ | $\begin{aligned} & .033 \\ & .033 \\ & .077 \end{aligned}$ | $\begin{aligned} & .036 \\ & .037 \\ & .084 \end{aligned}$ | $\begin{aligned} & .042 \\ & .042 \\ & .098 \end{aligned}$ | $\begin{aligned} & .048 \\ & .048 \\ & .114 \end{aligned}$ | $\begin{aligned} & .053 \\ & .054 \\ & .127 \end{aligned}$ | $\begin{aligned} & .060 \\ & .060 \\ & .141 \end{aligned}$ | $\begin{aligned} & .066 \\ & .066 \\ & .1555 \end{aligned}$ |
| $/$ | $\mathrm{n} / \mathrm{a}$ | n/a | $\begin{aligned} & \hline .030 \\ & .039 \end{aligned}$ | $\begin{aligned} & .034 \\ & .043 \end{aligned}$ | $\begin{aligned} & \hline .037 \\ & .049 \end{aligned}$ | $\begin{aligned} & \hline .042 \\ & .052 \end{aligned}$ | $\begin{aligned} & \hline .045 \\ & .058 \end{aligned}$ | $\begin{aligned} & \hline .053 \\ & .068 \end{aligned}$ | $\begin{aligned} & .061 \\ & .077 \end{aligned}$ | $\begin{aligned} & .068 \\ & .086 \end{aligned}$ | $\begin{aligned} & .076 \\ & .096 \end{aligned}$ | $\begin{aligned} & \hline .083 \\ & .104 \end{aligned}$ |

Note: Minimum distance between characters is critical to legibility and cannot be less than $.015^{\prime \prime}$.

Note: All gray areas represent printable surfaces.


AT3074 Sculptured Cap Diffuser, Illuminated, or AT3073 Sculptured Cap Insert, Nonilluminated
1 line maximum height $.468^{\prime \prime}$
2 lines maximum height . $219^{\prime \prime}$
Maximum width .468"


## AT3076 Flat Cap Lens, Illuminated

1 line maximum height .531"
2 lines maximum height . $251^{\prime \prime}$
3 lines maximum height .157"
Maximum width .531"


## AT3076 Flat Cap Film Insert, Illuminated,

 or AT3076 Flat Cap Diffuser, Illuminated1 line maximum height $.468^{\prime \prime}$
2 lines maximum height . $219^{\prime \prime}$
3 lines maximum height . $136^{\prime \prime}$
Maximum width . $468^{\prime \prime}$


## AT3075 Beveled Cap, Illuminated, or AT3077 Beveled Cap, Nonilluminated

1 line maximum height . $393^{\prime \prime}$
2 lines maximum height . 181"
3 lines maximum height .111"
Maximum width .393


For Sculptured: Note maximum space available for 1 or 2 line legends. These dimensions must be considered when choosing font style and size for round printable area of cap lens, diffuser, insert or film insert.

