## X-RINGS

X-Rings are designed to retrofit AS568 O-Ring grooves but offer two contact points on the sealing surface vs. one with an O-Ring. This dual sealing lip feature gives positive sealing with reduced radial squeeze, and thus reduced friction. By reducing the friction you find a reduction in wear, giving the seal a longer service life over the standard O-Ring design. X-Rings are excellent for use in rotary applications and for providing seal stability due to a design that resists twisting in the groove.

## MFP PART NUMBER

 $\underset{\substack{\text { SEAL TYPE } \\ \text { AS568D DASH } \#}}{\substack{\text { COMPOUND }}}$| DASH NUMBER | NOMINAL SIZE |  |  | ACTUAL SIZE |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ID | OD | C/S | ID | C/S |
| 3/64 - CROSS SECTION |  |  |  |  |  |
| -002 | 3/64 | 9/64 | 3/64 | . $042 \pm .004$ | . $050 \pm .003$ |
| 1/16-CROSS SECTION |  |  |  |  |  |
| -003 | 1/16 | 3/16 | 1/16 | . $056 \pm .004$ | . $060 \pm .003$ |
| -004 | 5/64 | 13/64 | 1/16 | . $070 \pm .005$ | . $070 \pm .003$ |
| -005 | 3/32 | 7/32 | 1/16 | . $101 \pm .005$ | . $070 \pm .003$ |
| -006 | 1/8 | 1/4 | 1/16 | . $114 \pm .005$ | . $070 \pm .003$ |
| -007 | 5/32 | 9/32 | 1/16 | . $145 \pm .005$ | . $070 \pm .003$ |
| -008 | 3/16 | 5/16 | 1/16 | . $176 \pm .005$ | . $070 \pm .003$ |
| -009 | 7/32 | 11/32 | 1/16 | . $208 \pm .005$ | . $070 \pm .003$ |
| -010 | 1/4 | 3/8 | 1/16 | . $239 \pm .005$ | . $070 \pm .003$ |
| -011 | 5/16 | 7/16 | 1/16 | . $301 \pm .005$ | . $070 \pm .003$ |
| -012 | 3/8 | 1/2 | 1/16 | . $364 \pm .005$ | . $070 \pm .003$ |
| -013 | 7/16 | 9/16 | 1/16 | . $426 \pm .005$ | . $070 \pm .003$ |
| -014 | 1/2 | 5/8 | 1/16 | . $489 \pm .005$ | . $070 \pm .003$ |
| -015 | 9/16 | 11/16 | 1/16 | . $551 \pm .007$ | . $070 \pm .003$ |
| -016 | 5/8 | 3/4 | 1/16 | . $614 \pm .009$ | . $070 \pm .003$ |
| -017 | 11/16 | 13/16 | 1/16 | . $676 \pm .009$ | . $070 \pm .003$ |
| -018 | 3/4 | 7/8 | 1/16 | . $739 \pm .009$ | . $070 \pm .003$ |
| -019 | 13/16 | 15/16 | 1/16 | . $801 \pm .009$ | . $070 \pm .003$ |
| -020 | 7/8 | 1 | 1/16 | . $864 \pm .009$ | . $070 \pm .003$ |
| -021 | 15/16 | 1-1/16 | 1/16 | . $926 \pm .009$ | . $070 \pm .003$ |
| -022 | 1 | 1-1/8 | 1/16 | . $989 \pm .010$ | . $070 \pm .003$ |
| -023 | 1-1/16 | 1-3/16 | 1/16 | $1.051 \pm .010$ | . $070 \pm .003$ |
| -024 | 1-1/8 | 1-1/4 | 1/16 | $1.114 \pm .010$ | . $070 \pm .003$ |
| -025 | 1-3/16 | 1-5/16 | 1/16 | $1.176 \pm .011$ | . $070 \pm .003$ |
| -026 | 1-1/4 | 1-3/8 | 1/16 | $1.239 \pm .011$ | . $070 \pm .003$ |
| -027 | 1-5/16 | 1-7/16 | 1/16 | $1.301 \pm .011$ | . $070 \pm .003$ |
| -028 | 1-3/8 | 1-1/2 | 1/16 | $1.364 \pm .013$ | . $070 \pm .003$ |
| -029 | 1-1/2 | 1-5/8 | 1/16 | $1.489 \pm .013$ | . $070 \pm .003$ |
| -030 | 1-5/8 | 1-3/4 | 1/16 | $1.614 \pm .013$ | . $070 \pm .003$ |
| -031 | 1-3/4 | 1-7/8 | 1/16 | $1.739 \pm .015$ | . $070 \pm .003$ |
| -032 | 1-7/8 | 2 | 1/16 | $1.864 \pm .015$ | . $070 \pm .003$ |
| -033 | 2 | 2-1/8 | 1/16 | $1.989 \pm .018$ | . $070 \pm .003$ |



The standard compound for this seal is N6014. Other compounds available.

## For more information about this product, please contact your MFP Seals' Sales Representative.

| DASH <br> DUM <br> NUMBR | ID | NOMINAL SIZE |  | ACTUAL SIZE |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1/16 - CROSS SECTION | C/S | ID | C/S |  |  |
| -034 | $2-1 / 8$ | $2-1 / 4$ | $1 / 16$ | $2.114 \pm .018$ | $.070 \pm .003$ |
| -035 | $2-1 / 4$ | $2-3 / 8$ | $1 / 16$ | $2.239 \pm .018$ | $.070 \pm .003$ |
| -036 | $2-3 / 8$ | $2-1 / 2$ | $1 / 16$ | $2.364 \pm .018$ | $.070 \pm .003$ |
| -037 | $2-1 / 2$ | $2-5 / 8$ | $1 / 16$ | $2.489 \pm .018$ | $.070 \pm .003$ |
| -038 | $2-5 / 8$ | $2-3 / 4$ | $1 / 16$ | $2.614 \pm .020$ | $.070 \pm .003$ |
| -039 | $2-3 / 4$ | $2-7 / 8$ | $1 / 16$ | $2.739 \pm .020$ | $.070 \pm .003$ |
| -040 | $2-7 / 8$ | 3 | $1 / 16$ | $2.864 \pm .020$ | $.070 \pm .003$ |
| -041 | 3 | $3-1 / 8$ | $1 / 16$ | $2.989 \pm .024$ | $.070 \pm .003$ |
| -042 | $3-1 / 4$ | $3-3 / 8$ | $1 / 16$ | $3.239 \pm .024$ | $.070 \pm .003$ |
| -043 | $3-1 / 2$ | $3-5 / 8$ | $1 / 16$ | $3.489 \pm .024$ | $.070 \pm .003$ |
| -044 | $3-3 / 4$ | $3-7 / 8$ | $1 / 16$ | $3.739 \pm .027$ | $.070 \pm .003$ |
| -045 | 4 | $4-1 / 8$ | $1 / 16$ | $3.989 \pm .027$ | $.070 \pm .003$ |
| -046 | $4-1 / 4$ | $4-3 / 8$ | $1 / 16$ | $4.239 \pm .030$ | $.070 \pm .003$ |
| -047 | $4-1 / 2$ | $4-5 / 8$ | $1 / 16$ | $4.489 \pm .030$ | $.070 \pm .003$ |
| -048 | $4-3 / 4$ | $4-7 / 8$ | $1 / 16$ | $4.739 \pm .030$ | $.070 \pm .003$ |
| -049 | 5 | $5-1 / 8$ | $1 / 16$ | $4.989 \pm .037$ | $.070 \pm .003$ |
| -050 | $5-1 / 4$ | $5-3 / 8$ | $1 / 16$ | $5.239 \pm .037$ | $.070 \pm .003$ |
| $3 / 32-$ CROSS SECTION |  |  |  |  |  |
| -102 | $1 / 16$ | $1 / 4$ | $3 / 32$ | $.049 \pm .005$ | $.103 \pm .003$ |
| -103 | $3 / 32$ | $9 / 32$ | $3 / 32$ | $.081 \pm .005$ | $.103 \pm .003$ |
| -104 | $1 / 8$ | $5 / 16$ | $3 / 32$ | $.112 \pm .005$ | $.103 \pm .003$ |
| -105 | $5 / 32$ | $11 / 32$ | $3 / 32$ | $.143 \pm .005$ | $.103 \pm .003$ |
| -106 | $3 / 16$ | $3 / 8$ | $3 / 32$ | $.174 \pm .005$ | $.103 \pm .003$ |
| -107 | $7 / 32$ | $13 / 32$ | $3 / 32$ | $.206 \pm .005$ | $.103 \pm .003$ |
| -108 | $1 / 4$ | $7 / 16$ | $3 / 32$ | $.237 \pm .005$ | $.103 \pm .003$ |
| -109 | $5 / 16$ | $1 / 2$ | $3 / 32$ | $.299 \pm .005$ | $.103 \pm .003$ |
| -110 | $3 / 8$ | $9 / 16$ | $3 / 32$ | $.362 \pm .005$ | $.103 \pm .003$ |
| -111 | $7 / 16$ | $5 / 8$ | $3 / 32$ | $.424 \pm .005$ | $.103 \pm .003$ |
| -112 | $1 / 2$ | $11 / 16$ | $3 / 32$ | $.487 \pm .005$ | $.103 \pm .003$ |
| -113 | $9 / 16$ | $3 / 4$ | $3 / 32$ | $.549 \pm .007$ | $.103 \pm .003$ |
| -114 | $5 / 8$ | $13 / 16$ | $3 / 32$ | $.612 \pm .009$ | $.103 \pm .003$ |
| -115 | $11 / 16$ | $7 / 8$ | $3 / 32$ | $.674 \pm .009$ | $.103 \pm .003$ |
| -116 | $3 / 4$ | $15 / 16$ | $3 / 32$ | $.737 \pm .009$ | $.103 \pm .003$ |


| $\begin{aligned} & \text { DASH } \\ & \text { NUMBER } \end{aligned}$ | NOMINAL SIZE |  |  | ACTUAL SIZE |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ID | OD | c/s | ID | C/S |
| 3/32-CROSS SECTION |  |  |  |  |  |
| -117 | 13/16 | 1 | 3/32 | . $799 \pm .010$ | . $103 \pm .003$ |
| -118 | 7/8 | 1-1/16 | 3/32 | . $862 \pm .010$ | . $103 \pm .003$ |
| -119 | 15/16 | 1-1/8 | 3/32 | . $924 \pm .010$ | . $103 \pm .003$ |
| -120 | 1 | 1-3/16 | 3/32 | 987 $\pm .010$ | . $103 \pm .003$ |
| -121 | 1-1/16 | 1-1/4 | 3/32 | $1.049 \pm .010$ | . $103 \pm .003$ |
| -122 | 1-1/8 | 1-5/16 | 3/32 | $1.112 \pm .010$ | . $103 \pm .003$ |
| -123 | 1-3/16 | 1-3/8 | 3/32 | $1.174 \pm .012$ | . $103 \pm .003$ |
| -124 | 1-1/4 | 1-7/16 | 3/32 | $1.237 \pm .012$ | . $103 \pm .003$ |
| -125 | 1-5/16 | 1-1/2 | 3/32 | $1.299 \pm .012$ | . $103 \pm .003$ |
| -126 | 1-3/8 | 1-9/16 | 3/32 | $1.362 \pm .012$ | . $103 \pm .003$ |
| -127 | 1-7/16 | 1-5/8 | 3/32 | $1.424 \pm .012$ | . $103 \pm .003$ |
| -128 | 1-1/2 | 1-11/16 | 3/32 | $1.487 \pm .012$ | . $103 \pm .003$ |
| -129 | 1-9/16 | 1-3/4 | 3/32 | $1.549 \pm .015$ | . $103 \pm .003$ |
| -130 | 1-5/8 | 1-13/16 | 3/32 | $1.612 \pm .015$ | . $103 \pm .003$ |
| -131 | 1-11/16 | 1-7/8 | 3/32 | $1.674 \pm .015$ | . $103 \pm .003$ |
| -132 | 1-3/4 | 1-15/16 | 3/32 | $1.737 \pm .015$ | . $103 \pm .003$ |
| -133 | 1-13/16 | 2 | 3/32 | $1.799 \pm .015$ | . $103 \pm .003$ |
| -134 | 1-7/8 | 2-1/16 | 3/32 | $1.862 \pm .015$ | . $103 \pm .003$ |
| -135 | 1-15/16 | 2-1/8 | 3/32 | $1.925 \pm .017$ | . $103 \pm .003$ |
| -136 | 2 | 2-3/16 | 3/32 | $1.987 \pm .017$ | . $103 \pm .003$ |
| -137 | 2-1/16 | 2-1/4 | 3/32 | $2.050 \pm .017$ | . $103 \pm .003$ |
| -138 | 2-1/8 | 2-5/16 | 3/32 | $2.112 \pm .017$ | . $103 \pm .003$ |
| -139 | 2-3/16 | 2-3/8 | 3/32 | $2.175 \pm .017$ | . $103 \pm .003$ |
| -140 | 2-1/4 | 2-7/16 | 3/32 | $2.237 \pm .017$ | . $103 \pm .003$ |
| -141 | 2-5/16 | 2-1/2 | 3/32 | $2.300 \pm .020$ | . $103 \pm .003$ |
| -142 | 2-3/8 | 2-9/16 | 3/32 | $2.362 \pm .020$ | . $103 \pm .003$ |
| -143 | 2-7/16 | 2-5/8 | 3/32 | $2.425 \pm .020$ | . $103 \pm .003$ |
| -144 | 2-1/2 | 2-11/16 | 3/32 | $2.487 \pm .020$ | . $103 \pm .003$ |
| -145 | 2-9/16 | 2-3/4 | 3/32 | $2.550 \pm .020$ | . $103 \pm .003$ |
| -146 | 2-5/8 | 2-13/16 | 3/32 | $2.612 \pm .020$ | . $103 \pm .003$ |
| -147 | 2-11/16 | 2-7/8 | 3/32 | $2.675 \pm .022$ | . $103 \pm .003$ |
| -148 | 2-3/4 | 2-15/16 | 3/32 | $2.737 \pm .022$ | . $103 \pm .003$ |
| -149 | 2-13/16 | 3 | 3/32 | $2.800 \pm .022$ | . $103 \pm .003$ |
| -150 | 2-7/8 | 3-1/16 | 3/32 | $2.862 \pm .022$ | . $103 \pm .003$ |
| -151 | 3 | 3-3/16 | 3/32 | $2.987 \pm .024$ | . $103 \pm .003$ |
| -152 | 3-1/4 | 3-7/16 | 3/32 | $3.237 \pm .024$ | . $103 \pm .003$ |
| -153 | 3-1/2 | 3-11/16 | 3/32 | $3.487 \pm .024$ | . $103 \pm .003$ |
| -154 | 3-3/4 | 3-15/16 | 3/32 | $3.737 \pm .028$ | . $103 \pm .003$ |
| -155 | 4 | 4-3/16 | 3/32 | $3.987 \pm .028$ | . $103 \pm .003$ |
| -156 | 4-1/4 | 4-7/16 | 3/32 | $4.237 \pm .030$ | . $103 \pm .003$ |
| -157 | 4-1/2 | 4-11/16 | 3/32 | $4.487 \pm .030$ | . $103 \pm .003$ |
| -158 | 4-3/4 | 4-15/16 | 3/32 | $4.737 \pm .030$ | . $103 \pm .003$ |
| -159 | 5 | 5-3/16 | 3/32 | $4.987 \pm .035$ | . $103 \pm .003$ |
| -160 | 5-1/4 | 5-7/16 | 3/32 | $5.237 \pm .035$ | . $103 \pm .003$ |
| -161 | 5-1/2 | 5-11/16 | 3/32 | $5.487 \pm .035$ | . $103 \pm .003$ |
| -162 | 5-3/4 | 5-15/16 | 3/32 | $5.737 \pm .035$ | . $103 \pm .003$ |
| -163 | 6 | 6-3/16 | 3/32 | $5.987 \pm .035$ | . $103 \pm .003$ |
| -164 | 6-1/4 | 6-7/16 | 3/32 | $6.237 \pm .040$ | . $103 \pm .003$ |
| -165 | 6-1/2 | 6-11/16 | 3/32 | $6.487 \pm .040$ | . $103 \pm .003$ |
| -166 | 6-3/4 | 6-15/16 | 3/32 | $6.737 \pm .040$ | . $103 \pm .003$ |
| -167 | 7 | 7-3/16 | 3/32 | $6.987 \pm .040$ | . $103 \pm .003$ |
| -168 | 7-1/4 | 7-7/16 | 3/32 | $7.237 \pm .045$ | . $103 \pm .003$ |
| 169 | 7-1/2 | -11/16 | 3/32 | . 48 |  |


| DASH | NOMINAL SIZE |  |  | ACTUAL SIZE |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| NUMBER | ID | OD | C/S | ID | C/S |
| 3/32 - CROSS SECTION |  |  |  |  |  |
| -170 | $7-3 / 4$ | $7-15 / 16$ | $3 / 32$ | $7.737 \pm .045$ | $.103 \pm .003$ |
| -171 | 8 | $8-3 / 16$ | $3 / 32$ | $7.987 \pm .045$ | $.103 \pm .003$ |
| -172 | $8-1 / 4$ | $8-7 / 16$ | $3 / 32$ | $8.237 \pm .050$ | $.103 \pm .003$ |
| -173 | $8-1 / 2$ | $8-11 / 16$ | $3 / 32$ | $8.487 \pm .050$ | $.103 \pm .003$ |
| -174 | $8-3 / 4$ | $8-15 / 16$ | $3 / 32$ | $8.737 \pm .050$ | $.103 \pm .003$ |
| -175 | 9 | $9-3 / 16$ | $3 / 32$ | $8.987 \pm .050$ | $.103 \pm .003$ |
| -176 | $9-1 / 4$ | $9-7 / 16$ | $3 / 32$ | $9.237 \pm .055$ | $.103 \pm .003$ |
| -177 | $9-1 / 2$ | $9-11 / 16$ | $3 / 32$ | $9.487 \pm .055$ | $.103 \pm .003$ |
| -178 | $9-3 / 4$ | $9-15 / 16$ | $3 / 32$ | $9.737 \pm .055$ | $.103 \pm .003$ |


| $\mathbf{1 / 8 - C R O S S ~ S E C T I O N}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| -201 | $3 / 16$ | $7 / 16$ | $1 / 8$ | $.171 \pm .005$ | $.139 \pm .004$ |
| -202 | $1 / 4$ | $1 / 2$ | $1 / 8$ | $.234 \pm .005$ | $.139 \pm .004$ |
| -203 | $5 / 16$ | $9 / 16$ | $1 / 8$ | $.296 \pm .005$ | $.139 \pm .004$ |
| -204 | $3 / 8$ | $5 / 8$ | $1 / 8$ | $.359 \pm .005$ | $.139 \pm .004$ |
| -205 | $7 / 16$ | $11 / 16$ | $1 / 8$ | $.421 \pm .005$ | $.139 \pm .004$ |
| -206 | $1 / 2$ | $3 / 4$ | $1 / 8$ | $.484 \pm .005$ | $.139 \pm .004$ |
| -207 | $9 / 16$ | $13 / 16$ | $1 / 8$ | $.546 \pm .007$ | $.139 \pm .004$ |
| -208 | $5 / 8$ | $7 / 8$ | $1 / 8$ | $.609 \pm .009$ | $.139 \pm .004$ |
| -209 | $11 / 16$ | $15 / 16$ | $1 / 8$ | $.671 \pm .009$ | $.139 \pm .004$ |
| -210 | $3 / 4$ | 1 | $1 / 8$ | $.734 \pm .010$ | $.139 \pm .004$ |
| -211 | $13 / 16$ | $1-1 / 16$ | $1 / 8$ | $.796 \pm .010$ | $.139 \pm .004$ |
| -212 | $7 / 8$ | $1-1 / 8$ | $1 / 8$ | $.859 \pm .010$ | $.139 \pm .004$ |
| -213 | $15 / 16$ | $1-3 / 16$ | $1 / 8$ | $.921 \pm .010$ | $.139 \pm .004$ |
| -214 | 1 | $1-1 / 4$ | $1 / 8$ | $.984 \pm .010$ | $.139 \pm .004$ |
| -215 | $1-1 / 16$ | $1-5 / 16$ | $1 / 8$ | $1.046 \pm .010$ | $.139 \pm .004$ |
| -216 | $1-1 / 8$ | $1-3 / 8$ | $1 / 8$ | $1.109 \pm .012$ | $.139 \pm .004$ |
| -217 | $1-3 / 16$ | $1-7 / 16$ | $1 / 8$ | $1.171 \pm .012$ | $.139 \pm .004$ |
| -218 | $1-1 / 4$ | $1-1 / 2$ | $1 / 8$ | $1.234 \pm .012$ | $.139 \pm .004$ |
| -219 | $1-5 / 16$ | $1-9 / 16$ | $1 / 8$ | $1.296 \pm .012$ | $.139 \pm .004$ |
| -220 | $1-3 / 8$ | $1-5 / 8$ | $1 / 8$ | $1.359 \pm .012$ | $.139 \pm .004$ |
| -221 | $1-7 / 16$ | $1-11 / 16$ | $1 / 8$ | $1.421 \pm .012$ | $.139 \pm .004$ |
| -222 | $1-1 / 2$ | $1-3 / 4$ | $1 / 8$ | $1.484 \pm .015$ | $.139 \pm .004$ |
| -223 | $1-5 / 8$ | $1-7 / 8$ | $1 / 8$ | $1.609 \pm .015$ | $.139 \pm .004$ |
| -224 | $1-3 / 4$ | 2 | $1 / 8$ | $1.734 \pm .015$ | $.139 \pm .004$ |
| -225 | $1-7 / 8$ | $2-1 / 8$ | $1 / 8$ | $1.859 \pm .018$ | $.139 \pm .004$ |
| -226 | 2 | $2-1 / 4$ | $1 / 8$ | $1.984 \pm .018$ | $.139 \pm .004$ |
| -227 | $2-1 / 8$ | $2-3 / 8$ | $1 / 8$ | $2.109 \pm .018$ | $.139 \pm .004$ |
| -228 | $2-1 / 4$ | $2-1 / 2$ | $1 / 8$ | $2.234 \pm .020$ | $.139 \pm .004$ |
| -229 | $2-3 / 8$ | $2-5 / 8$ | $1 / 8$ | $2.359 \pm .020$ | $.139 \pm .004$ |
| -230 | $2-1 / 2$ | $2-3 / 4$ | $1 / 8$ | $2.484 \pm .020$ | $.139 \pm .004$ |
| -231 | $2-5 / 8$ | $2-7 / 8$ | $1 / 8$ | $2.609 \pm .020$ | $.139 \pm .004$ |
| -232 | $2-3 / 4$ | 3 | $1 / 8$ | $2.734 \pm .024$ | $.139 \pm .004$ |
| -233 | $2-7 / 8$ | $3-1 / 8$ | $1 / 8$ | $2.859 \pm .024$ | $.139 \pm .004$ |
| -234 | 3 | $3-1 / 4$ | $1 / 8$ | $2.984 \pm .024$ | $.139 \pm .004$ |
| -235 | $3-1 / 8$ | $3-3 / 8$ | $1 / 8$ | $3.109 \pm .024$ | $.139 \pm .004$ |
| -236 | $3-1 / 4$ | $3-1 / 2$ | $1 / 8$ | $3.234 \pm .024$ | $.139 \pm .004$ |
| -237 | $3-3 / 8$ | $3-5 / 8$ | $1 / 8$ | $3.359 \pm .024$ | $.139 \pm .004$ |
| -238 | $3-1 / 2$ | $3-3 / 4$ | $1 / 8$ | $3.484 \pm .024$ | $.139 \pm .004$ |
| -239 | $3-5 / 8$ | $3-7 / 8$ | $1 / 8$ | $3.609 \pm .028$ | $.139 \pm .004$ |
| -240 | $3-3 / 4$ | 4 | $1 / 8$ | $3.734 \pm .028$ | $.139 \pm .004$ |
| -241 | $3-7 / 8$ | $4-1 / 8$ | $1 / 8$ | $3.859 \pm .028$ | $.139 \pm .004$ |
| -242 | 4 | $4-1 / 4$ | $1 / 8$ | $3.984 \pm .028$ | $.139 \pm .004$ |


| DASH NUMBER | NOMINAL SIZE |  |  | ACTUAL SIZE |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ID | OD | C/S | ID | C/S |
| 1/8-CROSS SECTION |  |  |  |  |  |
| -243 | 4-1/8 | 4-3/8 | 1/8 | $4.109 \pm .028$ | . $139 \pm .004$ |
| -244 | 4-1/4 | 4-1/2 | 1/8 | $4.234 \pm .030$ | . $139 \pm .004$ |
| -245 | 4-3/8 | 4-5/8 | 1/8 | $4.359 \pm .030$ | . $139 \pm .004$ |
| -246 | 4-1/2 | 4-3/4 | 1/8 | $4.484 \pm .030$ | . $139 \pm .004$ |
| -247 | 4-5/8 | 4-7/8 | 1/8 | $4.609 \pm .030$ | . $139 \pm .004$ |
| -248 | 4-3/4 | 5 | 1/8 | $4.734 \pm .030$ | . $139 \pm .004$ |
| -249 | 4-7/8 | 5-1/8 | 1/8 | $4.859 \pm .035$ | . $139 \pm .004$ |
| -250 | 5 | 5-1/4 | 1/8 | $4.984 \pm .035$ | . $139 \pm .004$ |
| -251 | 5-1/8 | 5-3/8 | 1/8 | $5.109 \pm .035$ | . $139 \pm .004$ |
| -252 | 5-1/4 | 5-1/2 | 1/8 | $5.234 \pm .035$ | . $139 \pm .004$ |
| -253 | 5-3/8 | 5-5/8 | 1/8 | $5.359 \pm .035$ | . $139 \pm .004$ |
| -254 | 5-1/2 | 5-3/4 | 1/8 | $5.484 \pm .035$ | . $139 \pm .004$ |
| -255 | 5-5/8 | 5-7/8 | 1/8 | $5.609 \pm .035$ | . $139 \pm .004$ |
| -256 | 5-3/4 | 6 | 1/8 | $5.734 \pm .035$ | . $139 \pm .004$ |
| -257 | 5-7/8 | 6-1/8 | 1/8 | $5.859 \pm .035$ | . $139 \pm .004$ |
| -258 | 6 | 6-1/4 | 1/8 | $5.984 \pm .035$ | . $139 \pm .004$ |
| -259 | 6-1/4 | 6-1/2 | 1/8 | $6.234 \pm .040$ | . $139 \pm .004$ |
| -260 | 6-1/2 | 6-3/4 | 1/8 | $6.484 \pm .040$ | . $139 \pm .004$ |
| -261 | 6-3/4 | 7 | 1/8 | $6.734 \pm .040$ | . $139 \pm .004$ |
| -262 | 7 | 7-1/4 | 1/8 | $6.984 \pm .040$ | . $139 \pm .004$ |
| -263 | 7-1/4 | 7-1/2 | 1/8 | $7.234 \pm .045$ | . $139 \pm .004$ |
| -264 | 7-1/2 | 7-3/4 | 1/8 | $7.484 \pm .045$ | . $139 \pm .004$ |
| -265 | 7-3/4 | 8 | 1/8 | $7.734 \pm .045$ | . $139 \pm .004$ |
| -266 | 8 | 8-1/4 | 1/8 | $7.984 \pm .045$ | . $139 \pm .004$ |
| -267 | 8-1/4 | 8-1/2 | 1/8 | $8.234 \pm .050$ | . $139 \pm .004$ |
| -268 | 8-1/2 | 8-3/4 | 1/8 | $8.484 \pm .050$ | . $139 \pm .004$ |
| -269 | 8-3/4 | 9 | 1/8 | $8.734 \pm .050$ | . $139 \pm .004$ |
| -270 | 9 | 9-1/4 | 1/8 | $8.984 \pm .050$ | . $139 \pm .004$ |
| -271 | 9-1/4 | 9-1/2 | 1/8 | $9.234 \pm .055$ | . $139 \pm .004$ |
| -272 | 9-1/2 | 9-3/4 | 1/8 | $9.484 \pm .055$ | . $139 \pm .004$ |
| -273 | 9-3/4 | 10 | 1/8 | $9.734 \pm .055$ | . $139 \pm .004$ |
| -274 | 10 | 10-1/4 | 1/8 | $9.984 \pm .055$ | . $139 \pm .004$ |
| -275 | 10-1/2 | 10-3/4 | 1/8 | $10.484 \pm .055$ | . $139 \pm .004$ |
| -276 | 11 | 11-1/4 | 1/8 | $10.984 \pm .065$ | . $139 \pm .004$ |
| -277 | 11-1/2 | 11-3/4 | 1/8 | $11.484 \pm .065$ | . $139 \pm .004$ |
| -278 | 12 | 12-1/4 | 1/8 | $11.984 \pm .065$ | . $139 \pm .004$ |
| -279 | 13 | 13-1/4 | 1/8 | $12.984 \pm .065$ | . $139 \pm .004$ |
| -280 | 14 | 14-1/4 | 1/8 | $13.984 \pm .065$ | . $139 \pm .004$ |
| -281 | 15 | 15-1/4 | 1/8 | $14.984 \pm .065$ | . $139 \pm .004$ |
| -282 | 16 | 16-1/4 | 1/8 | $15.955 \pm .075$ | . $139 \pm .004$ |
| -283 | 17 | 17-1/4 | 1/8 | $16.955 \pm .080$ | . $139 \pm .004$ |
| -284 | 18 | 18-1/4 | 1/8 | $17.955 \pm .085$ | . $139 \pm .004$ |

3/16-CROSS SECTION

| -309 | $7 / 16$ | $13 / 16$ | $3 / 16$ | $.412 \pm .005$ | $.210 \pm .005$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| -310 | $1 / 2$ | $7 / 8$ | $3 / 16$ | $.475 \pm .005$ | $.210 \pm .005$ |
| -311 | $9 / 16$ | $15 / 16$ | $3 / 16$ | $.537 \pm .007$ | $.210 \pm .005$ |
| -312 | $5 / 8$ | 1 | $3 / 16$ | $.600 \pm .009$ | $.210 \pm .005$ |
| -313 | $11 / 16$ | $1-1 / 16$ | $3 / 16$ | $.662 \pm .009$ | $.210 \pm .005$ |
| -314 | $3 / 4$ | $1-1 / 8$ | $3 / 16$ | $.725 \pm .010$ | $.210 \pm .005$ |
| -315 | $13 / 16$ | $1-3 / 16$ | $3 / 16$ | $.787 \pm .010$ | $.210 \pm .005$ |
| -316 | $7 / 8$ | $1-1 / 4$ | $3 / 16$ | $.850 \pm .010$ | $.210 \pm .005$ |
| -317 | $15 / 16$ | $1-5 / 16$ | $3 / 16$ | $.912 \pm .010$ | $.210 \pm .005$ |


| DASH NUMBER | NOMINAL SIZE |  |  | ACTUAL SIZE |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ID | OD | C/S | ID | C/S |
| 3/16-CROSS SECTION |  |  |  |  |  |
| -318 | 1 | 1-3/8 | 3/16 | . $975 \pm .010$ | . $210 \pm .005$ |
| -319 | 1-1/16 | 1-7/16 | 3/16 | $1.037 \pm .010$ | . $210 \pm .005$ |
| -320 | 1-1/8 | 1-1/2 | 3/16 | $1.100 \pm .012$ | . $210 \pm .005$ |
| -321 | 1-3/16 | 1-9/16 | 3/16 | $1.162 \pm .012$ | . $210 \pm .005$ |
| -322 | 1-1/4 | 1-5/8 | 3/16 | $1.225 \pm .012$ | . $210 \pm .005$ |
| -323 | 1-5/16 | 1-11/16 | 3/16 | $1.287 \pm .012$ | . $210 \pm .005$ |
| -324 | 1-3/8 | 1-3/4 | 3/16 | $1.350 \pm .012$ | . $210 \pm .005$ |
| -325 | 1-1/2 | 1-7/8 | 3/16 | $1.475 \pm .015$ | . $210 \pm .005$ |
| -326 | 1-5/8 | 2 | 3/16 | $1.600 \pm .015$ | . $210 \pm .005$ |
| -327 | 1-3/4 | 2-1/8 | 3/16 | $1.725 \pm .015$ | . $210 \pm .005$ |
| -328 | 1-7/8 | 2-1/4 | 3/16 | $1.850 \pm .015$ | . $210 \pm .005$ |
| -329 | 2 | 2-3/8 | 3/16 | $1.975 \pm .018$ | . $210 \pm .005$ |
| -330 | 2-1/8 | 2-1/2 | 3/16 | $2.100 \pm .018$ | . $210 \pm .005$ |
| -331 | 2-1/4 | 2-5/8 | 3/16 | $2.225 \pm .018$ | . $210 \pm .005$ |
| -332 | 2-3/8 | 2-3/4 | 3/16 | $2.350 \pm .018$ | . $210 \pm .005$ |
| -333 | 2-1/2 | 2-7/8 | 3/16 | $2.475 \pm .020$ | . $210 \pm .005$ |
| -334 | 2-5/8 | 3 | 3/16 | $2.600 \pm .020$ | . $210 \pm .005$ |
| -335 | 2-3/4 | 3-1/8 | 3/16 | $2.725 \pm .020$ | . $210 \pm .005$ |
| -336 | 2-7/8 | 3-1/4 | 3/16 | $2.850 \pm .020$ | . $210 \pm .005$ |
| -337 | 3 | 3-3/8 | 3/16 | $2.975 \pm .024$ | . $210 \pm .005$ |
| -338 | 3-1/8 | 3-1/2 | 3/16 | $3.100 \pm .024$ | . $210 \pm .005$ |
| -339 | 3-1/4 | 3-5/8 | 3/16 | $3.225 \pm .024$ | . $210 \pm .005$ |
| -340 | 3-3/8 | 3-3/4 | 3/16 | $3.350 \pm .024$ | . $210 \pm .005$ |
| -341 | 3-1/2 | 3-7/8 | 3/16 | $3.475 \pm .024$ | . $210 \pm .005$ |
| -342 | 3-5/8 | 4 | 3/16 | $3.600 \pm .028$ | . $210 \pm .005$ |
| -343 | 3-3/4 | 4-1/8 | 3/16 | $3.725 \pm .028$ | . $210 \pm .005$ |
| -344 | 3-7/8 | 4-1/4 | 3/16 | $3.850 \pm .028$ | . $210 \pm .005$ |
| -345 | 4 | 4-3/8 | 3/16 | $3.975 \pm .028$ | . $210 \pm .005$ |
| -346 | 4-1/8 | 4-1/2 | 3/16 | $4.100 \pm .028$ | . $210 \pm .005$ |
| -347 | 4-1/4 | 4-5/8 | 3/16 | $4.225 \pm .030$ | . $210 \pm .005$ |
| -348 | 4-3/8 | 4-3/4 | 3/16 | $4.350 \pm .030$ | . $210 \pm .005$ |
| -349 | 4-1/2 | 4-7/8 | 3/16 | $4.475 \pm .030$ | . $210 \pm .005$ |
| -350 | 4-5/8 | 5 | 3/16 | $4.600 \pm .030$ | . $210 \pm .005$ |
| -351 | 4-3/4 | 5-1/8 | 3/16 | $4.725 \pm .030$ | . $210 \pm .005$ |
| -352 | 4-7/8 | 5-1/4 | 3/16 | $4.850 \pm .030$ | . $210 \pm .005$ |
| -353 | 5 | 5-3/8 | 3/16 | $4.975 \pm .037$ | . $210 \pm .005$ |
| -354 | 5-1/8 | 5-1/2 | 3/16 | $5.100 \pm .037$ | . $210 \pm .005$ |
| -355 | 5-1/4 | 5-5/8 | 3/16 | $5.225 \pm .037$ | . $210 \pm .005$ |
| -356 | 5-3/8 | 5-3/4 | 3/16 | $5.350 \pm .037$ | . $210 \pm .005$ |
| -357 | 5-1/2 | 5-7/8 | 3/16 | $5.475 \pm .037$ | . $210 \pm .005$ |
| -358 | 5-5/8 | 6 | 3/16 | $5.600 \pm .037$ | . $210 \pm .005$ |
| -359 | 5-3/4 | 6-1/8 | 3/16 | $5.725 \pm .037$ | . $210 \pm .005$ |
| -360 | 5-7/8 | 6-1/4 | 3/16 | $5.850 \pm .037$ | . $210 \pm .005$ |
| -361 | 6 | 6-3/8 | 3/16 | $5.975 \pm .037$ | . $210 \pm .005$ |
| -362 | 6-1/4 | 6-5/8 | 3/16 | $6.225 \pm .040$ | . $210 \pm .005$ |
| -363 | 6-1/2 | 6-7/8 | 3/16 | $6.475 \pm .040$ | . $210 \pm .005$ |
| -364 | 6-3/4 | 7-1/8 | 3/16 | $6.725 \pm .040$ | . $210 \pm .005$ |
| -365 | 7 | 7-3/8 | 3/16 | $6.975 \pm .040$ | . $210 \pm .005$ |
| -366 | 7-1/4 | 7-5/8 | 3/16 | $7.225 \pm .045$ | . $210 \pm .005$ |
| -367 | 7-1/2 | 7-7/8 | 3/16 | $7.475 \pm .045$ | . $210 \pm .005$ |
| -368 | 7-3/4 | 8-1/8 | 3/16 | $7.725 \pm .045$ | . $210 \pm .005$ |
| -369 | 8 | 8-3/8 | 3/16 | $7.975 \pm .045$ | . $210 \pm .005$ |
| -370 | 8-1/4 | 8-5/8 | 3/16 | $8.225 \pm .050$ | 210 |


| DASH NUMBER | NOMINAL SIZE |  |  | ACTUAL SIZE |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ID | OD | C/S | ID | C/S |
| 3/16-CROSS SECTION |  |  |  |  |  |
| -371 | 8-1/2 | 8-7/8 | 3/16 | $8.475 \pm .050$ | . $210 \pm .005$ |
| -372 | 8-3/4 | 9-1/8 | 3/16 | $8.725 \pm .050$ | . $210 \pm .005$ |
| -373 | 9 | 9-3/8 | 3/16 | $8.975 \pm .050$ | . $210 \pm .005$ |
| -374 | 9-1/4 | 9-5/8 | 3/16 | $9.225 \pm .055$ | . $210 \pm .005$ |
| -375 | 9-1/2 | 9-7/8 | 3/16 | $9.475 \pm .055$ | . $210 \pm .005$ |
| -376 | 9-3/4 | 10-1/8 | 3/16 | $9.725 \pm .055$ | . $210 \pm .005$ |
| -377 | 10 | 10-3/8 | 3/16 | $9.975 \pm .055$ | . $210 \pm .005$ |
| -378 | 10-1/2 | 10-7/8 | 3/16 | $10.475 \pm .060$ | . $210 \pm .005$ |
| -379 | 11 | 11-3/8 | 3/16 | $10.975 \pm .060$ | . $210 \pm .005$ |
| -380 | 11-1/2 | 11-7/8 | 3/16 | $11.475 \pm .065$ | . $210 \pm .005$ |
| -381 | 12 | 12-3/8 | 3/16 | $11.975 \pm .065$ | . $210 \pm .005$ |
| -382 | 13 | 13-3/8 | 3/16 | $12.975 \pm .065$ | . $210 \pm .005$ |
| -383 | 14 | 14-3/8 | 3/16 | $13.975 \pm .070$ | . $210 \pm .005$ |
| -384 | 15 | 15-3/8 | 3/16 | $14.975 \pm .070$ | . $210 \pm .005$ |
| -385 | 16 | 16-3/8 | 3/16 | $15.955 \pm .075$ | . $210 \pm .005$ |
| -386 | 17 | 17-3/8 | 3/16 | $16.955 \pm .080$ | . $210 \pm .005$ |
| -387 | 18 | 18-3/8 | 3/16 | $17.955 \pm .085$ | . $210 \pm .005$ |
| -388 | 19 | 19-3/8 | 3/16 | $18.955 \pm .090$ | . $210 \pm .005$ |
| -389 | 20 | 20-3/8 | 3/16 | $19.955 \pm .095$ | . $210 \pm .005$ |
| -390 | 21 | 21-3/8 | 3/16 | $20.955 \pm .095$ | . $210 \pm .005$ |
| -391 | 22 | 22-3/8 | 3/16 | $21.955 \pm .100$ | . $210 \pm .005$ |
| -392 | 23 | 23-3/8 | 3/16 | $22.940 \pm .105$ | . $210 \pm .005$ |
| -393 | 24 | 24-3/8 | 3/16 | $23.940 \pm .110$ | . $210 \pm .005$ |
| -394 | 25 | 25-3/8 | 3/16 | $24.940 \pm .115$ | . $210 \pm .005$ |
| -395 | 26 | 26-3/8 | 3/16 | $25.940 \pm .120$ | . $210 \pm .005$ |

## 1/4 - CROSS SECTION

| -400 | $1-3 / 8$ | $1-7 / 8$ | $1 / 4$ | $1.350 \pm .014$ | $.275 \pm .006$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| -401 | $1-1 / 2$ | 2 | $1 / 4$ | $1.475 \pm .014$ | $.275 \pm .006$ |
| -402 | $1-5 / 8$ | $2-1 / 8$ | $1 / 4$ | $1.600 \pm .015$ | $.275 \pm .006$ |
| -403 | $1-3 / 4$ | $2-1 / 4$ | $1 / 4$ | $1.725 \pm .016$ | $.275 \pm .006$ |
| -404 | $1-7 / 8$ | $2-3 / 8$ | $1 / 4$ | $1.850 \pm .016$ | $.275 \pm .006$ |
| -405 | 2 | $2-1 / 2$ | $1 / 4$ | $1.975 \pm .017$ | $.275 \pm .006$ |
| -406 | $2-1 / 8$ | $2-5 / 8$ | $1 / 4$ | $2.100 \pm .018$ | $.275 \pm .006$ |
| -407 | $2-1 / 4$ | $2-3 / 4$ | $1 / 4$ | $2.225 \pm .018$ | $.275 \pm .006$ |
| -408 | $2-3 / 8$ | $2-7 / 8$ | $1 / 4$ | $2.350 \pm .020$ | $.275 \pm .006$ |
| -409 | $2-1 / 2$ | 3 | $1 / 4$ | $2.475 \pm .020$ | $.275 \pm .006$ |
| -410 | $2-5 / 8$ | $3-1 / 8$ | $1 / 4$ | $2.600 \pm .020$ | $.275 \pm .006$ |
| -411 | $2-3 / 4$ | $3-1 / 4$ | $1 / 4$ | $2.725 \pm .022$ | $.275 \pm .006$ |
| -412 | $2-7 / 8$ | $3-3 / 8$ | $1 / 4$ | $2.850 \pm .022$ | $.275 \pm .006$ |
| -413 | 3 | $3-1 / 2$ | $1 / 4$ | $2.975 \pm .024$ | $.275 \pm .006$ |
| -414 | $3-1 / 8$ | $3-5 / 8$ | $1 / 4$ | $3.100 \pm .024$ | $.275 \pm .006$ |
| -415 | $3-1 / 4$ | $3-3 / 4$ | $1 / 4$ | $3.225 \pm .024$ | $.275 \pm .006$ |
| -416 | $3-3 / 8$ | $3-7 / 8$ | $1 / 4$ | $3.350 \pm .026$ | $.275 \pm .006$ |
| -417 | $3-1 / 2$ | 4 | $1 / 4$ | $3.475 \pm .026$ | $.275 \pm .006$ |
| -418 | $3-5 / 8$ | $4-1 / 8$ | $1 / 4$ | $3.600 \pm .026$ | $.275 \pm .006$ |
| -419 | $3-3 / 4$ | $4-1 / 4$ | $1 / 4$ | $3.725 \pm .028$ | $.275 \pm .006$ |
| -420 | $3-7 / 8$ | $3-3 / 8$ | $1 / 4$ | $3.850 \pm .028$ | $.275 \pm .006$ |
| -421 | 4 | $4-1 / 2$ | $1 / 4$ | $3.975 \pm .028$ | $.275 \pm .006$ |
| -422 | $4-1 / 8$ | $4-5 / 8$ | $1 / 4$ | $4.100 \pm .030$ | $.275 \pm .006$ |
| -423 | $4-1 / 4$ | $4-3 / 4$ | $1 / 4$ | $4.225 \pm .030$ | $.275 \pm .006$ |
| -424 | $4-3 / 8$ | $4-7 / 8$ | $1 / 4$ | $4.350 \pm .030$ | $.275 \pm .006$ |
| -425 | $4-1 / 2$ | 5 | $1 / 4$ | $4.475 \pm .033$ | $.275 \pm .006$ |


| DASH NUMBER | NOMINAL SIZE |  |  | ACTUAL SIZE |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ID | OD | C/S | ID | C/S |
| 1/4 - CROSS SECTION |  |  |  |  |  |
| -426 | 4-5/8 | 5-1/8 | 1/4 | $4.600 \pm .033$ | . $275 \pm .006$ |
| -427 | 4-3/4 | 5-1/4 | 1/4 | $4.725 \pm .033$ | . $275 \pm .006$ |
| -428 | 4-7/8 | 5-3/8 | 1/4 | $4.850 \pm .033$ | . $275 \pm .006$ |
| -429 | 5 | 5-1/2 | 1/4 | $4.975 \pm .037$ | . $275 \pm .006$ |
| -430 | 5-1/8 | 5-5/8 | 1/4 | $5.100 \pm .037$ | . $275 \pm .006$ |
| -431 | 5-1/4 | 5-3/4 | 1/4 | $5.225 \pm .037$ | . $275 \pm .006$ |
| -432 | 5-3/8 | 5-7/8 | 1/4 | $5.350 \pm .037$ | . $275 \pm .006$ |
| -433 | 5-1/2 | 6 | 1/4 | $5.475 \pm .037$ | . $275 \pm .006$ |
| -434 | 5-5/8 | 6-1/8 | 1/4 | $5.600 \pm .037$ | . $275 \pm .006$ |
| -435 | 5-3/4 | 6-1/4 | 1/4 | $5.725 \pm .037$ | . $275 \pm .006$ |
| -436 | 5-7/8 | 6-3/8 | 1/4 | $5.850 \pm .037$ | . $275 \pm .006$ |
| -437 | 6 | 6-1/2 | 1/4 | $5.975 \pm .037$ | . $275 \pm .006$ |
| -438 | 6-1/4 | 6-3/4 | 1/4 | $6.225 \pm .040$ | . $275 \pm .006$ |
| -439 | 6-1/2 | 7 | 1/4 | $6.475 \pm .040$ | . $275 \pm .006$ |
| -440 | 6-3/4 | 7-1/4 | 1/4 | $6.725 \pm .040$ | . $275 \pm .006$ |
| -441 | 7 | 7-1/2 | 1/4 | $6.975 \pm .040$ | . $275 \pm .006$ |
| -442 | 7-1/4 | 7-3/4 | 1/4 | $7.225 \pm .045$ | . $275 \pm .006$ |
| -443 | 7-1/2 | 8 | 1/4 | $7.475 \pm .045$ | . $275 \pm .006$ |
| -444 | 7-3/4 | 8-1/4 | 1/4 | $7.725 \pm .045$ | . $275 \pm .006$ |
| -445 | 8 | 8-1/2 | 1/4 | $7.975 \pm .045$ | . $275 \pm .006$ |
| -446 | 8-1/2 | 9 | 1/4 | $8.475 \pm .055$ | . $275 \pm .006$ |
| -447 | 9 | 9-1/2 | 1/4 | $8.975 \pm .055$ | . $275 \pm .006$ |
| -448 | 9-1/2 | 10 | 1/4 | $9.475 \pm .055$ | . $275 \pm .006$ |
| -449 | 10 | 10-1/2 | 1/4 | $9.975 \pm .055$ | . $275 \pm .006$ |
| -450 | 10-1/2 | 11 | 1/4 | $10.475 \pm .060$ | . $275 \pm .006$ |
| -451 | 11 | 11-1/2 | 1/4 | $10.975 \pm .060$ | . $275 \pm .006$ |
| -452 | 11-1/2 | 12 | 1/4 | $11.475 \pm .060$ | . $275 \pm .006$ |
| -453 | 12 | 12-1/2 | 1/4 | $11.975 \pm .060$ | . $275 \pm .006$ |
| -454 | 12-1/2 | 13 | 1/4 | $12.475 \pm .060$ | . $275 \pm .006$ |
| -455 | 13 | 13-1/2 | 1/4 | $12.975 \pm .060$ | . $275 \pm .006$ |
| -456 | 13-1/2 | 14 | 1/4 | $13.475 \pm .070$ | . $275 \pm .006$ |
| -457 | 14 | 14-1/2 | 1/4 | $13.975 \pm .070$ | . $275 \pm .006$ |
| -458 | 14-1/2 | 15 | 1/4 | $14.475 \pm .070$ | . $275 \pm .006$ |
| -459 | 15 | 15-1/2 | 1/4 | $14.975 \pm .070$ | . $275 \pm .006$ |
| -460 | 15-1/2 | 16 | 1/4 | $15.475 \pm .070$ | . $275 \pm .006$ |
| -461 | 16 | 16-1/2 | 1/4 | $15.955 \pm .075$ | . $275 \pm .006$ |
| -462 | 16-1/2 | 17 | 1/4 | $16.455 \pm .075$ | . $275 \pm .006$ |
| -463 | 17 | 17-1/2 | 1/4 | $16.955 \pm .080$ | . $275 \pm .006$ |
| -464 | 17-1/2 | 18 | 1/4 | $17.455 \pm .085$ | . $275 \pm .006$ |
| -465 | 18 | 18-1/2 | 1/4 | $17.955 \pm .085$ | . $275 \pm .006$ |
| -466 | 18-1/2 | 19 | 1/4 | $18.455 \pm .085$ | . $275 \pm .006$ |
| -467 | 19 | 19-1/2 | 1/4 | $18.955 \pm .090$ | . $275 \pm .006$ |
| -468 | 19-1/2 | 20 | 1/4 | $19.455 \pm .090$ | . $275 \pm .006$ |
| -469 | 20 | 20-1/2 | 1/4 | $19.955 \pm .095$ | . $275 \pm .006$ |
| -470 | 21 | 21-1/2 | 1/4 | $20.955 \pm .095$ | . $275 \pm .006$ |
| -471 | 22 | 22-1/2 | 1/4 | $21.955 \pm .100$ | . $275 \pm .006$ |
| -472 | 23 | 23-1/2 | 1/4 | $22.940 \pm .105$ | . $275 \pm .006$ |
| -473 | 24 | 24-1/2 | 1/4 | $23.940 \pm .110$ | . $275 \pm .006$ |
| -474 | 25 | 25-1/2 | 1/4 | $24.940 \pm .115$ | . $275 \pm .006$ |
| -475 | 26 | 26-1/2 | 1/4 | $25.940 \pm .120$ | . $275 \pm .006$ |

