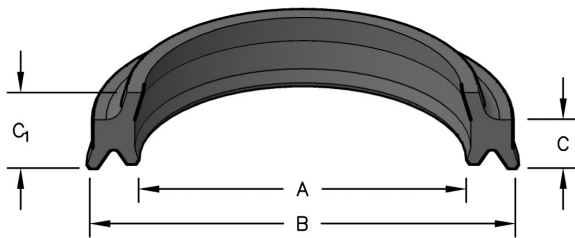


STYLE MSWH SNAP-IN WIPERS

Molded in urethane, this wiper features a double lip which prevents fluid that seeps by the rod seal from exiting the cylinder.

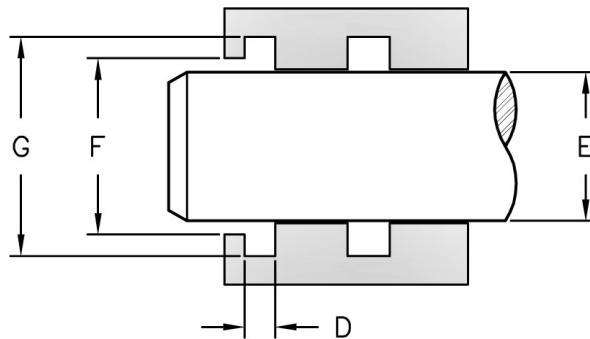


HERCULES PART NUMBERS

MSWH - 12 X 18 X 3.6

Type of Seal Inside Diameter Outside Diameter Height

| SEAL INFORMATION | |
|-------------------|-----------------|
| MATERIAL | URETHANE |
| TEMPERATURE RANGE | -30° TO +200° F |
| SPEED | 3 FT/SEC |



WIPER RINGS

| Part Number | A Nom. ID | B Nom. OD | C Nom. Ht | C ₁ OVERALL HEIGHT | D GROOVE WIDTH | E ROD DIAMETER | F THROAT DIAMETER | G HOUSING DIAMETER | List Price |
|--------------------|--------------|--------------|--------------|----------------------------------|----------------------|------------------------|-------------------------|--------------------------|---------------|
| MSWH-12X18X3.6 | 12 | 18 | 3.6 | 7.00 | 4.00 +0.20 +0.00 | 12.00 -0.016 -0.043 | 14.50 +0.11 +0.00 | 18.00 +0.043 +0.000 | \$21.14 |
| MSWH-14X20X3.6 | 14 | 20 | 3.6 | 7.00 | 4.00 +0.20 +0.00 | 14.00 -0.016 -0.043 | 16.50 +0.11 +0.00 | 20.00 +0.052 +0.000 | 21.77 |
| MSWH-14X22X4.5 | 14 | 22 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 14.00 -0.016 -0.043 | 18.30 +0.13 +0.00 | 22.00 +0.052 +0.000 | 2.99 |
| MSWH-16X24X4.5 | 16 | 24 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 16.00 -0.016 -0.043 | 20.30 +0.13 +0.00 | 24.00 +0.052 +0.000 | 3.17 |
| MSWH-18X24X3.6 | 18 | 24 | 3.6 | 7.00 | 4.00 +0.20 +0.00 | 18.00 -0.016 -0.043 | 20.50 +0.13 +0.00 | 24.00 +0.052 +0.000 | 13.82 |
| MSWH-18X26X4.5 | 18 | 26 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 18.00 -0.016 -0.043 | 22.30 +0.13 +0.00 | 26.00 +0.052 +0.000 | 3.17 |
| MSWH-20X26X3.8 | 20 | 26 | 3.8 | 4.70 | 4.00 +0.20 +0.00 | 20.00 +0.000 -0.052 | 22.50 +0.20 +0.00 | 26.00 +0.084 +0.000 | 4.01 |
| MSWH-20X28X4.5 | 20 | 28 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 20.00 -0.020 -0.053 | 24.30 +0.13 +0.00 | 28.00 +0.052 +0.000 | 3.34 |
| MSWH-22X28X3.6 | 22 | 28 | 3.6 | 5.00 | 4.00 +0.20 +0.00 | 22.00 -0.020 -0.053 | 24.50 +0.13 +0.00 | 28.00 +0.052 +0.000 | 23.39 |
| MSWH-22.4X30.4X4.5 | 22.4 | 30.4 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 22.40 -0.020 -0.053 | 26.70 +0.13 +0.00 | 30.40 +0.062 +0.000 | 3.43 |
| MSWH-23.5X31.5X4.5 | 23.5 | 31.5 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 23.50 -0.020 -0.053 | 27.80 +0.13 +0.00 | 31.50 +0.062 +0.000 | 3.43 |
| MSWH-25X31X5.1 | 25 | 31 | 5.1 | 7.30 | 5.60 +0.20 +0.00 | 25.00 -0.020 -0.041 | | 31.00 +0.16 +0.00 | 2.97 |
| MSWH-25X32X3.75 | 25 | 32 | 3.6 | 4.80 | 4.00 +0.20 +0.00 | 25.00 -0.020 -0.053 | 27.50 +0.13 +0.00 | 32.00 +0.062 +0.000 | 16.82 |
| MSWH-25X33X4.5 | 25 | 33 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 25.00 -0.020 -0.053 | 29.30 +0.13 +0.00 | 33.00 +0.062 +0.000 | 3.62 |
| MSWH-28X36X4.5 | 28 | 36 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 28.00 -0.020 -0.053 | 31.00 +0.16 +0.00 | 36.00 +0.062 +0.000 | 3.62 |
| MSWH-28X36X5.5 | 28 | 36 | 5.5 | 8.40 | 6.00 +0.20 +0.00 | 28.00 -0.020 -0.041 | | 36.00 +0.16 +0.00 | 7.60 |

STYLE MSWH SNAP-IN WIPERS

WIPER RINGS

| Part Number | A Nom. ID | B Nom. OD | C Nom. Ht | C ₁ OVERALL HEIGHT | D GROOVE WIDTH | E ROD DIAMETER | F THROAT DIAMETER | G HOUSING DIAMETER | List Price |
|-------------------|--------------|--------------|--------------|----------------------------------|---------------------|------------------------|----------------------|------------------------|------------|
| MSWH-30X38X5 | 30 | 38.6 | 5 | 7.00 | 5.30 +0.20 +0.00 | 30.00 -0.020 -0.053 | 33.00 +0.16 +0.00 | 38.60 +0.062 +0.000 | 3.74 |
| MSWH-31.5X39.5X5 | 31.5 | 39.5 | 5 | 6.50 | 6.00 +0.20 +0.00 | 31.50 -0.025 -0.064 | 35.50 +0.16 +0.00 | 39.50 +0.062 +0.000 | 3.97 |
| MSWH-32X40X6 | 32 | 40 | 6 | 8.40 | 6.00 +0.20 +0.00 | 32.00 -0.025 -0.064 | 35.00 +0.16 +0.00 | 40.00 +0.062 +0.000 | 20.43 |
| MSWH-32X40X5 | 32 | 40.6 | 5 | 7.00 | 5.30 +0.20 +0.00 | 32.00 -0.025 -0.064 | 35.00 +0.16 +0.00 | 40.60 +0.062 +0.000 | 6.94 |
| MSWH-35X43X4.8 | 35 | 43 | 4.8 | 7.50 | 5.00 +0.20 +0.00 | 35.00 -0.025 -0.064 | 38.00 +0.16 +0.00 | 43.00 +0.16 +0.00 | 9.46 |
| MSWH-35X43X5 | 35 | 43 | 5 | 6.50 | 6.00 ±0.20 | 35.00 -0.025 -0.064 | 38.00 +0.16 +0.00 | 43.00 +0.00 -0.20 | 4.45 |
| MSWH-35X44X3.6 | 35 | 44 | 3.6 | 4.90 | 4.00 +0.20 +0.00 | 35.00 -0.025 -0.064 | 41.50 +0.16 +0.00 | 44.00 +0.062 +0.000 | 29.47 |
| MSWH-35.5X43.5X5 | 35.5 | 43.5 | 5 | 6.50 | 6.00 +0.20 +0.00 | 35.50 -0.025 -0.064 | 39.50 +0.16 +0.00 | 43.50 +0.062 +0.000 | 4.69 |
| MSWH-36X44X4.5 | 36 | 44 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 36.00 -0.025 -0.064 | 39.00 +0.16 +0.00 | 44.00 +0.062 +0.000 | 9.24 |
| MSWH-36X44X6 | 36 | 44 | 6 | 8.40 | 6.00 +0.20 +0.00 | 36.00 -0.025 -0.064 | 39.00 +0.16 +0.00 | 44.00 +0.062 +0.000 | 26.05 |
| MSWH-38X46X4.6 | 38 | 46 | 4.6 | 5.80 | 5.00 +0.20 +0.00 | 38.00 -0.025 -0.064 | 41.00 +0.16 +0.00 | 46.00 +0.062 +0.000 | 9.98 |
| MSWH-40X48X4.8-ME | 40 | 48 | 4.8 | 7.50 | 5.00 +0.20 +0.00 | 40.00 -0.025 -0.064 | 43.00 +0.16 +0.00 | 48.00 +0.16 +0.00 | 12.22 |
| MSWHN-40X48X5 | 40 | 48 | 5 | 6.50 | 6.00 ±0.20 | 40.00 -0.025 -0.064 | 44.00 ±0.10 | 48.00 +0.00 -0.20 | 9.11 |
| MSWH-40X48X6 | 40 | 48 | 6 | 8.40 | 6.00 +0.20 +0.00 | 40.00 -0.025 -0.064 | 43.00 +0.16 +0.00 | 48.00 +0.062 +0.000 | 21.09 |
| MSWH-40X48X5 | 40 | 48.6 | 5 | 7.00 | 5.30 +0.20 +0.00 | 40.00 -0.025 -0.064 | 43.00 +0.16 +0.00 | 48.60 +0.062 +0.000 | 5.02 |
| MSWH-40X50X4.7 | 40 | 50 | 4.7 | 6.50 | 5.00 +0.20 +0.00 | 40.00 -0.025 -0.064 | 46.30 +0.16 +0.00 | 50.00 +0.062 +0.000 | 4.24 |
| MSWH-40X50.6X4.6 | 40 | 50.6 | 4.6 | 6.90 | 5.10 +0.20 +0.00 | 40.00 -0.025 -0.064 | 44.00 ±0.10 | 50.60 +0.00 -0.20 | 5.84 |
| MSWH-42X51X4.5 | 42 | 51 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 42.00 -0.025 -0.064 | 47.30 +0.16 +0.00 | 51.00 +0.074 +0.000 | 23.51 |
| MSWH-45X53X4.5 | 45 | 53 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 45.00 -0.025 -0.064 | 48.00 +0.16 +0.00 | 53.00 +0.074 +0.000 | 24.79 |
| MSWH-45X53X5.4-ME | 45 | 53 | 5.4 | 8.40 | 6.00 +0.20 +0.00 | 45.00 -0.020 -0.082 | 48.00 +0.16 +0.00 | 53.00 +0.19 +0.00 | 19.57 |
| MSWH-45X53X5 | 45 | 53.6 | 5 | 7.00 | 5.30 +0.20 +0.00 | 45.00 -0.025 -0.064 | 48.00 +0.16 +0.00 | 53.60 +0.074 +0.000 | 5.50 |
| MSWH-50X58X4.5 | 50 | 58 | 4.5 | 6.00 | 5.00 +0.20 +0.00 | 50.00 -0.025 -0.064 | 53.00 +0.19 +0.00 | 58.00 +0.074 +0.000 | 11.17 |
| MSWH-50X58X4.8-ME | 50 | 58 | 4.8 | 7.50 | 5.00 +0.20 +0.00 | 50.00 -0.025 -0.064 | 53.00 +0.19 +0.00 | 58.00 +0.19 +0.00 | 12.83 |
| MSWH-50X58X6 | 50 | 58 | 6 | 8.70 | 6.00 +0.20 +0.00 | 50.00 -0.025 -0.064 | 53.00 +0.19 +0.00 | 58.00 +0.074 +0.000 | 28.98 |
| MSWH-50X58X5 | 50 | 58.6 | 5 | 7.00 | 5.30 +0.20 +0.00 | 50.00 -0.025 -0.064 | 53.00 +0.19 +0.00 | 58.60 +0.074 +0.000 | 5.97 |
| MSWH-50X59X3.6 | 50 | 59 | 3.6 | 4.80 | 4.00 +0.20 +0.00 | 50.00 -0.025 -0.064 | 54.00 ±0.10 | 59.00 -1.00 -1.20 | 9.66 |
| MSWH-50X60X5 | 50 | 60.6 | 5 | 7.00 | 5.30 +0.20 +0.00 | 50.00 -0.025 -0.064 | 53.00 +0.19 +0.00 | 60.60 +0.074 +0.000 | 22.32 |
| MSWH-53X61X5 | 53 | 61 | 5 | 6.50 | 6.00 +0.20 +0.00 | 53.00 -0.030 -0.076 | 57.00 +0.19 +0.00 | 61.00 +0.074 +0.000 | 6.29 |
| MSWH-55X63X5 | 55 | 63.6 | 5 | 7.00 | 5.30 +0.20 +0.00 | 55.00 -0.030 -0.076 | 58.00 +0.19 +0.00 | 63.60 +0.074 +0.000 | 6.51 |
| MSWH-56X64X6 | 56 | 64 | 6 | 8.70 | 6.00 +0.20 +0.00 | 56.00 -0.030 -0.076 | 59.00 +0.16 +0.00 | 64.00 +0.074 +0.000 | 7.38 |
| MSWH-56X64X5 | 56 | 64.6 | 5 | 7.00 | 5.30 +0.20 +0.00 | 56.00 -0.030 -0.076 | 59.00 +0.19 +0.00 | 64.60 +0.074 +0.000 | 6.51 |
| MSWH-56X66X5.3 | 56 | 66 | 5.3 | 7.00 | 6.00 +0.20 +0.00 | 56.00 -0.030 -0.076 | 59.00 +0.19 +0.00 | 66.00 +0.074 +0.000 | 26.41 |
| MSWH-60X68X5 | 60 | 68.6 | 5 | 7.00 | 5.30 +0.20 +0.00 | 60.00 -0.030 -0.076 | 63.00 +0.19 +0.00 | 68.60 +0.074 +0.000 | 6.96 |

STYLE MSWH SNAP-IN WIPERS

WIPER RINGS

| Part Number | A Nom. ID | B Nom. OD | C Nom. Ht | C ₁ OVERALL HEIGHT | D GROOVE WIDTH | E ROD DIAMETER | F THROAT DIAMETER | G HOUSING DIAMETER | List Price |
|--------------------|--------------|--------------|--------------|----------------------------------|--|--|--|--|------------|
| MSWH-60X70X5.7-ME | 60 | 70 | 5.7 | 8.50 | 6.00 ^{+0.20} / _{+0.00} | 60.00 ^{-0.030} / _{-0.076} | 63.00 ^{+0.19} / _{+0.00} | 70.00 ^{+0.19} / _{+0.00} | 13.73 |
| MSWH-63X71X5 | 63 | 71.6 | 5 | 7.00 | 5.30 ^{+0.20} / _{+0.00} | 63.00 ^{-0.030} / _{-0.076} | 66.00 ^{+0.19} / _{+0.00} | 71.60 ^{+0.074} / _{+0.000} | 6.96 |
| MSWH-65X73X5 | 65 | 73.6 | 5 | 7.00 | 5.30 ^{+0.20} / _{+0.00} | 65.00 ^{-0.030} / _{-0.076} | 68.00 ^{+0.19} / _{+0.00} | 73.60 ^{+0.074} / _{+0.000} | 6.96 |
| MSWH-65X75X5.7-ME | 65 | 75 | 5.7 | 8.50 | 6.00 ^{+0.20} / _{+0.00} | 65.00 ^{-0.030} / _{-0.076} | 68.00 ^{+0.19} / _{+0.00} | 75.00 ^{+0.19} / _{+0.00} | 14.53 |
| MSWH-67X75X5 | 67 | 75 | 5 | 6.50 | 6.00 ^{+0.20} / _{+0.00} | 67.00 ^{-0.030} / _{-0.076} | 71.00 ^{+0.19} / _{+0.00} | 75.00 ^{+0.074} / _{+0.000} | 6.96 |
| MSWH-70X80X5.5 | 70 | 80 | 5.5 | 8.00 | 6.00 ^{+0.20} / _{+0.00} | 70.00 ^{-0.030} / _{-0.076} | 73.00 ^{+0.19} / _{+0.00} | 80.00 ^{+0.074} / _{+0.000} | 12.25 |
| MSWH-70X80X5.7-ME | 70 | 80 | 5.7 | 8.50 | 6.00 ^{+0.20} / _{+0.00} | 70.00 ^{-0.030} / _{-0.076} | 73.00 ^{+0.19} / _{+0.00} | 80.00 ^{+0.19} / _{+0.00} | 14.97 |
| MSWH-70X80X6 | 70 | 80 | 6 | 8.00 | 7.00 ^{+0.20} / _{+0.00} | 70.00 ^{-0.030} / _{-0.076} | 75.00 ^{+0.19} / _{+0.00} | 80.00 ^{+0.074} / _{+0.000} | 8.67 |
| MSWH-71X81X6 | 71 | 81 | 6 | 8.00 | 7.00 ^{+0.20} / _{+0.00} | 71.00 ^{-0.030} / _{-0.076} | 76.00 ^{+0.19} / _{+0.00} | 81.00 ^{+0.087} / _{+0.000} | 8.67 |
| MSWH-75X85X5.5 | 75 | 85 | 5.5 | 8.00 | 6.00 ^{+0.20} / _{+0.00} | 75.00 ^{-0.030} / _{-0.076} | 78.00 ^{+0.19} / _{+0.00} | 85.00 ^{+0.087} / _{+0.000} | 18.88 |
| MSWH-75X85X6 | 75 | 85 | 6 | 8.00 | 7.00 ^{+0.20} / _{+0.00} | 75.00 ^{-0.030} / _{-0.076} | 80.00 ^{+0.19} / _{+0.00} | 85.00 ^{+0.087} / _{+0.000} | 9.19 |
| MSWH-79X89X4.5 | 79 | 89 | 4.5 | 7.00 | 5.00 ^{+0.20} / _{+0.00} | 79.00 ^{-0.030} / _{-0.076} | 84.00 ^{+0.22} / _{+0.00} | 89.00 ^{+0.087} / _{+0.000} | 22.11 |
| MSWH-80X90X6 | 80 | 90 | 6 | 8.00 | 7.00 ^{+0.20} / _{+0.00} | 80.00 ^{-0.030} / _{-0.076} | 85.00 ^{+0.22} / _{+0.00} | 90.00 ^{+0.087} / _{+0.000} | 9.19 |
| MSWH-85X95X6 | 85 | 95 | 6 | 8.00 | 7.00 ^{+0.20} / _{+0.00} | 85.00 ^{-0.036} / _{-0.090} | 90.00 ^{+0.22} / _{+0.00} | 95.00 ^{+0.087} / _{+0.000} | 9.52 |
| MSWH-90X100X5.3 | 90 | 100 | 5.3 | 9.70 | 6.00 ^{+0.20} / _{+0.00} | 90.00 ^{-0.036} / _{-0.090} | 93.00 ^{+0.22} / _{+0.00} | 100.00 ^{+0.087} / _{+0.000} | 35.64 |
| MSWH-90X100X5.7-ME | 90 | 100 | 5.7 | 8.50 | 6.00 ^{+0.20} / _{+0.00} | 90.00 ^{-0.036} / _{-0.090} | 93.00 ^{+0.22} / _{+0.00} | 100.00 ^{+0.22} / _{+0.00} | 22.59 |
| MSWH-90X100X6 | 90 | 100 | 6 | 8.00 | 7.00 ^{+0.20} / _{+0.00} | 90.00 ^{-0.036} / _{-0.090} | 95.00 ^{+0.22} / _{+0.00} | 100.00 ^{+0.087} / _{+0.000} | 10.29 |
| MSWH-98X108X4.5 | 98 | 108 | 4.5 | 7.00 | 5.00 ^{+0.20} / _{+0.00} | 98.00 ^{-0.036} / _{-0.090} | 103.00 ^{+0.22} / _{+0.00} | 108.00 ^{+0.087} / _{+0.000} | 23.03 |
| MSWH-98X108X6 | 98 | 108 | 6 | 8.00 | 7.00 ^{+0.20} / _{+0.00} | 98.00 ^{-0.036} / _{-0.090} | 103.00 ^{+0.22} / _{+0.00} | 108.00 ^{+0.087} / _{+0.000} | 13.49 |
| MSWH-100X110X6 | 100 | 110 | 6 | 9.00 | 7.00 ^{+0.20} / _{+0.00} | 100.00 ^{-0.036} / _{-0.090} | 105.00 ^{+0.22} / _{+0.00} | 110.00 ^{+0.087} / _{+0.000} | 14.92 |
| MSWH-110X125X7.5 | 110 | 125 | 7.5 | 9.50 | 8.50 ^{+0.20} / _{+0.00} | 110.00 ^{-0.036} / _{-0.090} | 114.00 ^{+0.22} / _{+0.00} | 125.00 ^{+0.10} / _{+0.00} | 52.77 |
| MSWH-112X122X6 | 112 | 122 | 6 | 8.00 | 7.00 ^{+0.20} / _{+0.00} | 112.00 ^{-0.036} / _{-0.090} | 117.00 ^{+0.22} / _{+0.00} | 122.00 ^{+0.10} / _{+0.00} | 16.57 |
| MSWH-117X127X5.5 | 117 | 127 | 5.5 | 8.00 | 6.00 ^{+0.20} / _{+0.00} | 117.00 ^{-0.036} / _{-0.090} | 122.00 ^{+0.25} / _{+0.00} | 127.00 ^{+0.10} / _{+0.00} | 32.10 |
| MSWH-125X138X7 | 125 | 138 | 7 | 9.50 | 8.00 ^{+0.20} / _{+0.00} | 125.00 ^{-0.043} / _{-0.106} | 132.00 ^{+0.25} / _{+0.00} | 138.00 ^{+0.10} / _{+0.00} | 17.96 |
| MSWH-130X143X7.8 | 130 | 143 | 7.8 | 11.00 | 7.80 ^{+0.40} / _{+0.00} | 130.00 ^{-0.04} / _{-0.14} | 137.00 ^{±0.10} | 143.00 ^{+0.20} / _{+0.00} | 20.07 |
| MSWH-136X146X5.5 | 136 | 146 | 5.5 | 8.00 | 6.00 ^{+0.20} / _{+0.00} | 136.00 ^{-0.043} / _{-0.106} | 142.00 ^{+0.25} / _{+0.00} | 146.00 ^{+0.10} / _{+0.00} | 34.93 |
| MSWH-136X149X7 | 136 | 149 | 7 | 9.50 | 8.00 ^{+0.20} / _{+0.00} | 136.00 ^{-0.043} / _{-0.106} | 143.00 ^{+0.25} / _{+0.00} | 149.00 ^{+0.10} / _{+0.00} | 19.46 |
| MSWH-140X153X7 | 140 | 153 | 7 | 9.50 | 8.00 ^{+0.20} / _{+0.00} | 140.00 ^{-0.043} / _{-0.106} | 147.00 ^{+0.25} / _{+0.00} | 153.00 ^{+0.10} / _{+0.00} | 19.79 |
| MSWH-140X155X7.5 | 140 | 155 | 7.5 | 9.50 | 8.50 ^{+0.20} / _{+0.00} | 140.00 ^{-0.043} / _{-0.106} | 144.00 ^{+0.25} / _{+0.00} | 155.00 ^{+0.10} / _{+0.00} | 62.65 |
| MSWH-145X158X7 | 145 | 158 | 7 | 9.50 | 8.00 ^{+0.20} / _{+0.00} | 145.00 ^{-0.043} / _{-0.106} | 152.00 ^{+0.25} / _{+0.00} | 158.00 ^{+0.10} / _{+0.00} | 19.79 |
| MSWH-155X165X5.5 | 155 | 165 | 5.5 | 8.00 | 6.00 ^{+0.20} / _{+0.00} | 155.00 ^{-0.043} / _{-0.106} | 160.00 ^{+0.25} / _{+0.00} | 165.00 ^{+0.10} / _{+0.00} | 37.96 |
| MSWH-160X174X7 | 160 | 174 | 7 | 9.50 | 8.00 ^{+0.20} / _{+0.00} | 160.00 ^{-0.043} / _{-0.106} | 167.00 ^{+0.25} / _{+0.00} | 174.00 ^{+0.10} / _{+0.00} | 22.12 |
| MSWH-176X186X5.5 | 176 | 186 | 5.5 | 8.00 | 6.00 ^{+0.20} / _{+0.00} | 176.00 ^{-0.043} / _{-0.106} | 180.00 ^{+0.25} / _{+0.00} | 186.00 ^{+0.115} / _{+0.000} | 64.20 |