# NYLON TUBULAR SPACERS

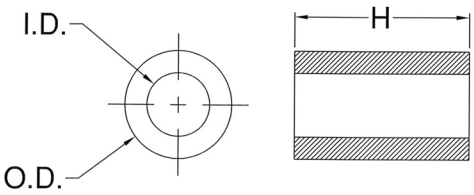
## Nylon Spacers for Standard Screw Sizes

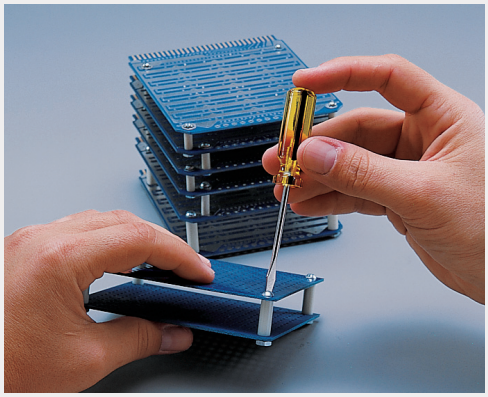
- Screw Spacers give users an extremely wide selection of tubular spacers for PCB support in almost any elevation
- Six basic ID/OD combinations with heights ranging from 1/16" (1.6mm) through 1.0" (25.4mm), are available from factory stock or within two weeks
- Such a broad selection permits the user to choose the most suitable sizes for strength, elevation and ease of assembly

**Material Specifications:**
Natural Nylon, per ASTM D4066 PA225, UL Rated 94V-2

**Oxygen Rating Index:** Over 23%

**Standard Drawing Tolerances:**
*(unless otherwise indicated)*
O.D. ±.005 (.13)
I.D. ±.005 (.13)
"H" Dim: 1/16-1/2 (1.6-12.7) is ±.005 (.13)
"H" Dim: 9/16-1.0 (14.3-25.4) is ±.010 (.25)



**99XX Series** | Color: Natural

| Series | Screw Size | I.D. | O.D. | "H" DIM. | Dash No. | Price Code |
|---|---|---|---|---|---|---|
| | | | | 1/16 (1.6) | -062 | U |
| 9913 | #2 | .091 (2.3) | .187 (4.7) | 1/8 (3.2) | -125 | U |
| | | | | 3/16 (4.8) | -187 | U |
| 9910 | #2 | .091 (2.3) | .250 (6.4) | 1/4 (6.4) | -250 | U |
| | | | | 5/16 (7.9) | -312 | U |
| | | | | 3/8 (9.5) | -375 | V |
| 9908 | #4 | .125 (3.2) | .187 (4.7) | 7/16 (11.1) | -437 | V |
| | | | | 1/2 (12.7) | -500 | V |
| | | | | 9/16 (14.3) | -562 | V |
| 9911 | #4 | .125 (3.2) | .250 (6.4) | 5/8 (15.9) | -625 | W |
| | | | | 3/4 (19.1) | -750 | W |
| 9905 | #6 | .147 (3.7) | .250 (6.4) | 13/16 (20.6) | -812 | X |
| | | | | 7/8 (22.2) | -875 | X |
| 9912 | #8 | .171 (4.3) | .250 (6.4) | 15/16 (23.8) | -937 | X |
| | | | | 1.0 (25.4) | -1000 | X |

*Examples:*
*9913-250 is for a #2 Screw, O.D. is .187 (4.7) Length is 1/4 (6.4), price code U.*

*9910-125 is for a #2 Screw, O.D. is .250 (6.4) Length is 1/8 (3.2), price code U.*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## Nylon Spacers for Standard Screw Sizes

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- Six basic ID/OD combinations with heights ranging from 1/16" (1.6mm) through 1.0" (25.4mm), are available from factory stock or within two weeks
- Such a broad selection permits the user to choose the most suitable sizes for strength, elevation and ease of assembly

**Material Specifications:**
Natural Nylon, per ASTM D4066 PA225, UL Rated 94V-2

**Oxygen Rating Index:** Over 23%

**Standard Drawing Tolerances:**
*(unless otherwise indicated)*
O.D. ±.005 (.13)
I.D. ±.005 (.13)
"H" Dim: 1/16-1/2 (1.6-12.7) is ±.005 (.13)
"H" Dim: 9/16-1.0 (14.3-25.4) is ±.010 (.25)

### mm Chart

| Series | 1mm .039 | 2mm .079 | 3mm .118 | 4mm .158 | 5mm .197 | 6mm .236 | 7mm .276 | 8mm .315 | 9mm .354 | 10mm .394 | 11mm .433 | 12mm .472 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9905 | 9905-1mm | 9905-2mm | 9905-3mm | 9905-4mm | 9905-5mm | 9905-6mm | 9905-7mm | 9905-8mm | 9905-9mm | 9905-10mm | 9905-11mm | 9905-12mm |
| 9908 | 9908-1mm | 9908-2mm | 9908-3mm | 9908-4mm | 9908-5mm | 9908-6mm | 9908-7mm | 9908-8mm | 9908-9mm | 9908-10mm | 9908-11mm | 9908-12mm |
| 9910 | 9910-1mm | 9910-2mm | 9910-3mm | 9910-4mm | 9910-5mm | 9910-6mm | 9910-7mm | 9910-8mm | 9910-9mm | 9910-10mm | 9910-11mm | 9910-12mm |
| 9911 | 9911-1mm | 9911-2mm | 9911-3mm | 9911-4mm | 9911-5mm | 9911-6mm | 9911-7mm | 9911-8mm | 9911-9mm | 9911-10mm | 9911-11mm | 9911-12mm |
| 9912 | 9912-1mm | 9912-2mm | 9912-3mm | 9912-4mm | 9912-5mm | 9912-6mm | 9912-7mm | 9912-8mm | 9912-9mm | 9912-10mm | 9912-11mm | 9912-12mm |
| 9913 | 9913-1mm | 9913-2mm | 9913-3mm | 9913-4mm | 9913-5mm | 9913-6mm | 9913-7mm | 9913-8mm | 9913-9mm | 9913-10mm | 9913-11mm | 9913-12mm |
| Price Code | U | U | U | U | U | U | U | V | V | V | V | V |

| Series | 13mm .512 | 14mm .551 | 15mm .591 | 16mm .630 | 17mm .669 | 18mm .709 |
|---|---|---|---|---|---|---|
| 9905 | 9905-13mm | 9905-14mm | 9905-15mm | 9905-16mm | 9905-17mm | 9905-18mm |
| 9908 | 9908-13mm | 9908-14mm | 9908-15mm | 9908-16mm | 9908-17mm | 9908-18mm |
| 9910 | 9910-13mm | 9910-14mm | 9910-15mm | 9910-16mm | 9910-17mm | 9910-18mm |
| 9911 | 9911-13mm | 9911-14mm | 9911-15mm | 9911-16mm | 9911-17mm | 9911-18mm |
| 9912 | 9912-13mm | 9912-14mm | 9912-15mm | 9912-16mm | 9912-17mm | 9912-18mm |
| 9913 | 9913-13mm | 9913-14mm | 9913-15mm | 9913-16mm | 9913-17mm | 9913-18mm |
| Price Code | V | V | W | W | W | W |

| Series | 19mm .748 | 20mm .787 | 21mm .827 | 22mm .868 | 23mm .906 | 24mm .945 |
|---|---|---|---|---|---|---|
| 9905 | 9905-19mm | 9905-20mm | 9905-21mm | 9905-22mm | 9905-23mm | 9905-24mm |
| 9908 | 9908-19mm | 9908-20mm | 9908-21mm | 9908-22mm | 9908-23mm | 9908-24mm |
| 9910 | 9910-19mm | 9910-20mm | 9910-21mm | 9910-22mm | 9910-23mm | 9910-24mm |
| 9911 | 9911-19mm | 9911-20mm | 9911-21mm | 9911-22mm | 9911-23mm | 9911-24mm |
| 9912 | 9912-19mm | 9912-20mm | 9912-21mm | 9912-22mm | 9912-23mm | 9912-24mm |
| 9913 | 9913-19mm | 9913-20mm | 9913-21mm | 9913-22mm | 9913-23mm | 9913-24mm |
| Price Code | W | X | X | X | X | X |

# SELF-RETAINING PVC SCREW SPACERS

- Simple Pre-Assembly Convenience Saves Handling
- Firm Retention Assured
- 5 Standard Sizes in Lengths from .050" - 1.250" (.76 - 31.8) in .005" (.127) Increments

Ribbed inner-wall design assures a snug fit onto #4, #6 and #8 screws, or M3 and M4 metric screws enabling the spacers to remain pre-assembled during handling and assembly. The SRS Series provides a dependable solution for otherwise awkward assembly steps and lost assembly time.

**Material Specifications:**
Gray Rigid PVC material, UL Rated 94V-0

**Oxygen Rating Index:** Over 45%

**Standard Drawing Tolerances:**
*(unless otherwise indicated)*
O.D. ±.005 (.13)
I.D. ±.005 (.13)
"H" Dim: 1/16-1/2 (1.6-12.7) is ±.005 (.13)
"H" Dim: 9/16-1.0 (14.3-25.4) is ±.010 (.25)

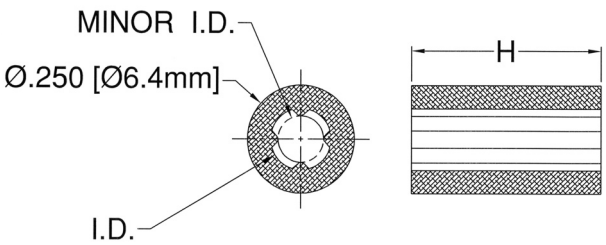
**Ordering Information:**
SRS X XXX

*Length Expressed in Inches*
*(Must be even multiples of .005")*
*or whole millimeters (example: 2mm)*
*0.050 = 050* *0.750 = 750*
*0.100 = 100* *1.250 = 1.250*

*Series*

**SRS Series** | Color: Gray

| Part No. | Screw Size | Minor I.D. | I.D. | "H" DIM. |
|---|---|---|---|---|
| SRS-1 | 4 | .107 (2.7) | .142 (3.6) | .050-1.250 (1.3-31.8) |
| SRS-2 | 6 (M3.5) | .131 (3.3) | .174 (4.4) | .050-1.250 (1.3-31.8) |
| SRS-3 | 8 | .155 (3.9) | .177 (4.5) | .050-1.250 (1.3-31.8) |
| SRS-4 | M3 | .113 (2.9) | .144 (3.7) | .050-1.250 (1.3-31.8) |
| SRS-5 | M4 | .149 (3.9) | .185 (4.7) | .050-1.250 (1.3-31.8) |




| "H" Dimension | Price Code SRS-1 thru SRS-5 |
|---|---|
| .050-.075 (1.3-1.9) | W |
| .080-.150 (2.0-3.8) | X |
| .155-.230 (4.0-5.8) | X |
| .235-.310 (6.0-7.9) | Y |
| .315-.380 (8.0-9.7) | Z |
| .385-.495 (9.8-12.6) | ZZ |
| .500-.750 (12.7-19.1) | ZZZ |
| .755-1.250 (19.2-31.8) | ZZZZ |

*Examples:*
*SRS-1-240 is price code Y*
*SRS-5-410 is price code ZZ*
*SRS-3-900 is price code ZZZZ*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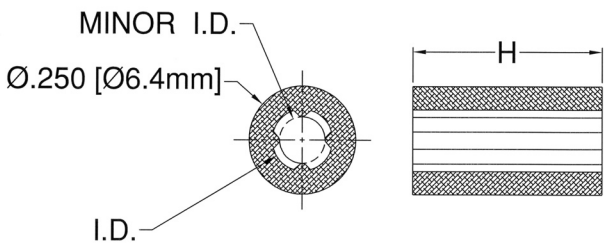
- Firm Retention Assured
- 5 Standard Sizes in Lengths from .050" - 1.250" (.76 - 31.8) in .005" (.127) Increments

**Material Specifications:**
Gray Rigid PVC material, UL Rated 94V-0

**Oxygen Rating Index:** Over 45%

**Standard Drawing Tolerances:**
*(unless otherwise indicated)*
O.D. ±.005 (.13)
I.D. ±.005 (.13)
"H" Dim: 1/16-1/2 (1.6-12.7) is ±.005 (.13)
"H" Dim: 9/16-1.0 (14.3-25.4) is ±.010 (.25)




## mm Chart

| Series | Screw Size | 2mm .079 | 3mm .118 | 4mm .158 | 5mm .197 | 6mm .236 | 7mm .276 | 8mm .315 |
|---|---|---|---|---|---|---|---|---|
| SRS-1 | 4 | SRS-1-2mm | SRS-1-3mm | SRS-1-4mm | SRS-1-5mm | SRS-1-6mm | SRS-1-7mm | SRS-1-8mm |
| SRS-2 | 6 (M3.5) | SRS-2-2mm | SRS-2-3mm | SRS-2-4mm | SRS-2-5mm | SRS-2-6mm | SRS-2-7mm | SRS-2-8mm |
| SRS-3 | 8 | SRS-3-2mm | SRS-3-3mm | SRS-3-4mm | SRS-3-5mm | SRS-3-6mm | SRS-3-7mm | SRS-3-8mm |
| SRS-4 | M3 | SRS-4-2mm | SRS-4-3mm | SRS-4-4mm | SRS-4-5mm | SRS-4-6mm | SRS-4-7mm | SRS-4-8mm |
| SRS-5 | M4 | SRS-5-2mm | SRS-5-3mm | SRS-5-4mm | SRS-5-5mm | SRS-5-6mm | SRS-5-7mm | SRS-5-8mm |
| Price Code | | W | W | X | X | Y | Y | Z |

| Series | Screw Size | 9mm .354 | 10mm .394 | 11mm .433 | 12mm .472 | 13mm .512 | 14mm .551 | 15mm .591 | 16mm .630 |
|---|---|---|---|---|---|---|---|---|---|
| SRS-1 | 4 | SRS-1-9mm | SRS-1-10mm | SRS-1-11mm | SRS-1-12mm | SRS-1-13mm | SRS-1-14mm | SRS-1-15mm | SRS-1-16mm |
| SRS-2 | 6 (M3.5) | SRS-2-9mm | SRS-2-10mm | SRS-2-11mm | SRS-2-12mm | SRS-2-13mm | SRS-2-14mm | SRS-2-15mm | SRS-2-16mm |
| SRS-3 | 8 | SRS-3-9mm | SRS-3-10mm | SRS-3-11mm | SRS-3-12mm | SRS-3-13mm | SRS-3-14mm | SRS-3-15mm | SRS-3-16mm |
| SRS-4 | M3 | SRS-4-9mm | SRS-4-10mm | SRS-4-11mm | SRS-4-12mm | SRS-4-13mm | SRS-4-14mm | SRS-4-15mm | SRS-4-16mm |
| SRS-5 | M4 | SRS-5-9mm | SRS-5-10mm | SRS-5-11mm | SRS-5-12mm | SRS-5-13mm | SRS-5-14mm | SRS-5-15mm | SRS-5-16mm |
| Price Code | | Z | ZZ | ZZ | ZZ | ZZZ | ZZZ | ZZZ | ZZZ |

| Series | Screw Size | 17mm .669 | 18mm .709 | 19mm .748 | 20mm .787 | 21mm .827 | 22mm .868 | 23mm .906 | 24mm .945 |
|---|---|---|---|---|---|---|---|---|---|
| SRS-1 | 4 | SRS-1-17mm | SRS-1-18mm | SRS-1-19mm | SRS-1-20mm | SRS-1-21mm | SRS-1-22mm | SRS-1-23mm | SRS-1-24mm |
| SRS-2 | 6 (M3.5) | SRS-2-17mm | SRS-2-18mm | SRS-2-19mm | SRS-2-20mm | SRS-2-21mm | SRS-2-22mm | SRS-2-23mm | SRS-2-24mm |
| SRS-3 | 8 | SRS-3-17mm | SRS-3-18mm | SRS-3-19mm | SRS-3-20mm | SRS-3-21mm | SRS-3-22mm | SRS-3-23mm | SRS-3-24mm |
| SRS-4 | M3 | SRS-4-17mm | SRS-4-18mm | SRS-4-19mm | SRS-4-20mm | SRS-4-21mm | SRS-4-22mm | SRS-4-23mm | SRS-4-24mm |
| SRS-5 | M4 | SRS-5-17mm | SRS-5-18mm | SRS-5-19mm | SRS-5-20mm | SRS-5-21mm | SRS-5-22mm | SRS-5-23mm | SRS-5-24mm |
| Price Code | | ZZZ | ZZZ | ZZZ | ZZZZ | ZZZZ | ZZZZ | ZZZZ | ZZZZ |

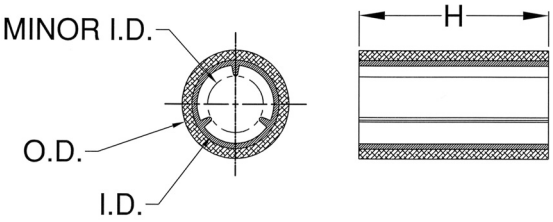
# CO-EXTRUDED SELF RETAINING SCREW SPACERS

- Unique Bi-Material Design, Patented
- Tight Fit with Low Insertion Force
- Works with #4 - #8 (M3-M4) Screw Sizes

| | | | |
|---|---|---|---|
| **CRS-1** | #4 Screws | **CRS-2** | #M3 Screws |
| **CRS-3** | #6 Screws | **CRS-4** | #M4, #8 Screws |

CRS Spacers provide precise spacing of electro-mechanical assemblies and eliminate shakes and rattles associated with movement in high-vibration PC-board applications, such as large rack-mounted fan cooling trays and multiple trays found in telecommunications, industrial networks, and avionics applications.

Designed with Bivar's patent-pending technology, these co-extruded self retaining screw spacers feature a soft pliable inner lining with a hard outer shell composed of UL rated 94V-0 PVC material. This unique design requires only a minimal amount of manual insertion force to cause the spacer's soft inside material to conform to the threads of the screw. The cushioning of the encapsulated screw and self-tapping design structure secures the screw in place, ensuring tight retention.




**Material Specifications:**
Natural, Rigid and Semi-Rigid PVC material,
UL Rated 94V-0

**Oxygen Rating Index:** Over 45%

**Standard Drawing Tolerances:**
*(unless otherwise indicated)*
O.D. ±.005 (.13)
I.D. ±.005 (.13)
"H" Dim: 1/16-1/2 (1.6-12.7) is ±.005 (.13)
"H" Dim: 9/16-1.0 (14.3-25.4) is ±.010 (.25)

| "H" Dimension | Price Code CRS-1 thru CRS-4 |
|---|---|
| .050-.075 (1.25-1.9) | W |
| .080-.150 (2.0-3.8) | X |
| .155-.230 (4.0-5.8) | X |
| .235-.310 (6.0-7.9) | Y |
| .315-.380 (8.0-9.7) | Z |
| .385-.495 (9.8-12.6) | ZZ |
| .500-.750 (12.7-19.1) | ZZZ |
| .755-1.250 (19.2-31.8) | ZZZZ |

**Ordering Information:**
CRS X XXX

*Length Expressed in Inches*
*(Must be even multiples of .005")*
*or whole millimeters (example: 2mm)*
*0.050 = 050 0.750 = 750*
*0.100 = 100 1.250 = 1.250*

*Series*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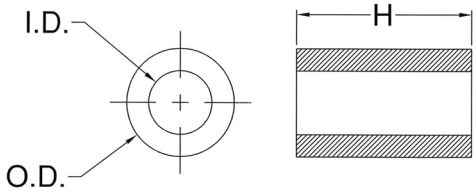
# NYLON TUBULAR SPACERS

## Universal Spacers for Discrete Components

- 4,182 Standard Sizes for "just Right" Fit
- Makes Solder Filleting and Board Cleaning More Effective




Universal Spacers give users an extremely wide selection of tubular spacers for mounting PCB discrete devices in any lead pattern and elevation.

Seventeen basic I.D./O.D. combinations with heights ranging from .030" (.76) through 1.250" (31.8), in .005" (.13) increments are available from factory stock or within two weeks.

Such a broad selection permits the user to choose the most suitable sizes for strength, elevation and ease of assembly, as well as providing for proper filleting and cleaning.

**Ordering Information:**

9XX XXX

*Length Expressed in Inches*
*(Must be even multiples of .005")*
*or whole millimeters (example: 2mm)*
*0.030 = 030  0.750 = 750*
*0.100 = 100  1.250 = 1.250*

*Series*

**900 Series** | Color: Natural

| Series | "H" DIM. | I.D. | O.D. | A55485/06 M38527/06 |
|---|---|---|---|---|
| 901 | .030-1.250 (.76-31.8) | .028 (.71) | .085 (2.2) | -029N |
| 902 | .030-1.250 (.76-31.8) | .032 (.81) | .125 (3.2) | -031N |
| 903 | .030-1.250 (.76-31.8) | .047 (1.2) | .156 (4.0) | -034N |
| 904 | .030-1.250 (.76-31.8) | .063 (1.6) | .187 (4.7) | -036N |
| 905 | .030-1.250 (.76-31.8) | .147 (3.7) | .250 (6.4) | -041N |
| 906 | .030-1.250 (.76-31.8) | .085 (2.2) | .148 (3.8) | -033N |
| 907 | .030-1.250 (.76-31.8) | .105 (2.7) | .167 (4.2) | -035N |
| 908 | .030-1.250 (.76-31.8) | .125 (3.2) | .187 (4.7) | -038N |
| 910 | .030-1.250 (.76-31.8) | .091 (2.3) | .250 (6.4) | -039N |
| 911 | .030-1.250 (.76-31.8) | .125 (3.2) | .250 (6.4) | - |
| 912 | .030-1.250 (.76-31.8) | .171 (4.3) | .250 (6.4) | -042N |
| 913 | .030-1.250 (.76-31.8) | .091 (2.3) | .187 (4.7) | -037N |
| 937 | .030-1.250 (.76-31.8) | .090 (2.3) | .125 (3.2) | - |
| 938 | .030-1.250 (.76-31.8) | .032 (.81) | .085 (2.2) | -030N |
| 939 | .030-1.250 (.76-31.8) | .047 (1.2) | .125 (3.2) | -032N |
| 940 | .030-1.250 (.76-31.8) | .063 (1.6) | .156 (4.0) | - |
| 941 | .030-1.250 (.76-31.8) | .135 (3.4) | .230 (5.8) | - |

| "H" Dimension | Price Code for 901, 902, 937, 938, 939 | Price Code for 903, 904, 905, 906, 907, 908 910, 911, 912, 913, 940, 941 |
|---|---|---|
| .030-.075 (.76-1.9) | U | W |
| .080-.150 (2.0-3.8) | V | W |
| .155-.230 (4.0-5.8) | W | X |
| .235-.310 (6.0-7.9) | X | Y |
| .315-.380 (8.0-9.7) | Y | Z |
| .385-.495 (9.8-12.6) | Z | ZZ |
| .500-.750 (12.7-19.1) | ZZ | ZZZ |
| .755-1.250 (19.2-31.8) | ZZZZ | ZZZZ |

*Examples:*
*901-050 is price code U  902-100 is price code V*
*903-120 is price code W  901-250 is price code X*

# NYLON TUBULAR SPACERS

## Universal Spacers for Discrete Components

- 4,182 Standard Sizes for "just Right" Fit
- Makes Solder Filleting and Board Cleaning More Effective

**Material Specifications:**
Natural Nylon, per ASTM D4066 PA225 UL Rated 94V-2

**Oxygen Rating Index:** Over 23%

**Standard Drawing Tolerances:**
O.D. ±.005 (.13)
I.D. ±.005 (.13)
"H" Dim: .030 - .500 (.76 - 12.7) is ±.005 (.13)
"H" Dim: .505 - .750 (12.8 - 19.1) is ±.008 (.20)
"H" Dim: .755 - 1.250 (19.2 - 31.8) is ±.015 (.38)

## mm Chart

1mm thru 12mm

| Series | 1mm .039 | 2mm .079 | 3mm .118 | 4mm .158 | 5mm .197 | 6mm .236 | 7mm .276 | 8mm .315 | 9mm .354 | 10mm .394 | 11mm .433 | 12mm .472 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 901 | 901-1mm | 901-2mm | 901-3mm | 901-4mm | 901-5mm | 901-6mm | 901-7mm | 901-8mm | 901-9mm | 901-10mm | 901-11mm | 901-12mm |
| 902 | 902-1mm | 902-2mm | 902-3mm | 902-4mm | 902-5mm | 902-6mm | 902-7mm | 902-8mm | 902-9mm | 902-10mm | 902-11mm | 902-12mm |
| 937 | 937-1mm | 937-2mm | 937-3mm | 937-4mm | 937-5mm | 937-6mm | 937-7mm | 937-8mm | 937-9mm | 937-10mm | 937-11mm | 937-12mm |
| 938 | 938-1mm | 938-2mm | 938-3mm | 938-4mm | 938-5mm | 938-6mm | 938-7mm | 938-8mm | 938-9mm | 938-10mm | 938-11mm | 938-12mm |
| 939 | 939-1mm | 939-2mm | 939-3mm | 939-4mm | 939-5mm | 939-6mm | 939-7mm | 939-8mm | 939-9mm | 939-10mm | 939-11mm | 939-12mm |
| Price Code | U | V | V | W | W | X | X | Y | Y | Z | Z | Z |

| Series | 1mm .039 | 2mm .079 | 3mm .118 | 4mm .158 | 5mm .197 | 6mm .236 | 7mm .276 | 8mm .315 | 9mm .354 | 10mm .394 | 11mm .433 | 12mm .472 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 903 | 903-1mm | 903-2mm | 903-3mm | 903-4mm | 903-5mm | 903-6mm | 903-7mm | 903-8mm | 903-9mm | 903-10mm | 903-11mm | 903-12mm |
| 904 | 904-1mm | 904-2mm | 904-3mm | 904-4mm | 904-5mm | 904-6mm | 904-7mm | 904-8mm | 904-9mm | 904-10mm | 904-11mm | 904-12mm |
| 905 | 905-1mm | 905-2mm | 905-3mm | 905-4mm | 905-5mm | 905-6mm | 905-7mm | 905-8mm | 905-9mm | 905-10mm | 905-11mm | 905-12mm |
| 906 | 906-1mm | 906-2mm | 906-3mm | 906-4mm | 906-5mm | 906-6mm | 906-7mm | 906-8mm | 906-9mm | 906-10mm | 906-11mm | 906-12mm |
| 907 | 907-1mm | 907-2mm | 907-3mm | 907-4mm | 907-5mm | 907-6mm | 907-7mm | 907-8mm | 907-9mm | 907-10mm | 907-11mm | 907-12mm |
| 908 | 908-1mm | 908-2mm | 908-3mm | 908-4mm | 908-5mm | 908-6mm | 908-7mm | 908-8mm | 908-9mm | 908-10mm | 908-11mm | 908-12mm |
| 910 | 910-1mm | 910-2mm | 910-3mm | 910-4mm | 910-5mm | 910-6mm | 910-7mm | 910-8mm | 910-9mm | 910-10mm | 910-11mm | 910-12mm |
| 911 | 911-1mm | 911-2mm | 911-3mm | 911-4mm | 911-5mm | 911-6mm | 911-7mm | 911-8mm | 911-9mm | 911-10mm | 911-11mm | 911-12mm |
| 912 | 912-1mm | 912-2mm | 912-3mm | 912-4mm | 912-5mm | 912-6mm | 912-7mm | 912-8mm | 912-9mm | 912-10mm | 912-11mm | 912-12mm |
| 913 | 913-1mm | 913-2mm | 913-3mm | 913-4mm | 913-5mm | 913-6mm | 913-7mm | 913-8mm | 913-9mm | 913-10mm | 913-11mm | 913-12mm |
| 940 | 940-1mm | 940-2mm | 940-3mm | 940-4mm | 940-5mm | 940-6mm | 940-7mm | 940-8mm | 940-9mm | 940-10mm | 940-11mm | 940-12mm |
| 941 | 941-1mm | 941-2mm | 941-3mm | 941-4mm | 941-5mm | 941-6mm | 941-7mm | 941-8mm | 941-9mm | 941-10mm | 941-11mm | 941-12mm |
| Price Code | W | W | W | X | X | Y | Y | Z | Z | ZZ | ZZ | ZZ |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# NYLON TUBULAR SPACERS

## Universal Spacers for Discrete Components

- 4,182 Standard Sizes for "just Right" Fit
- Makes Solder Filleting and Board Cleaning More Effective

**Material Specifications:**
Natural Nylon, per ASTM D4066 PA225 UL Rated 94V-2

**Oxygen Rating Index:** Over 23%

**Standard Drawing Tolerances:**
O.D. ±.005 (.13)
I.D. ±.005 (.13)
"H" Dim: .030 - .500 (.76 - 12.7) is ±.005 (.13)
"H" Dim: .505 - .750 (12.8 - 19.1) is ±.008 (.20)
"H" Dim: .755 - 1.250 (19.2 - 31.8) is ±.015 (.38)

## mm Chart | 13mm thru 24mm

| Series | 13mm .512 | 14mm .551 | 15mm .591 | 16mm .630 | 17mm .669 | 18mm .709 | 19mm .748 | 20mm .787 | 21mm .827 | 22mm .866 | 23mm .906 | 24mm .945 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 901 | 901-13mm | 901-14mm | 901-15mm | 901-16mm | 901-17mm | 901-18mm | 901-19mm | 901-20mm | 901-21mm | 901-22mm | 901-23mm | 901-24mm |
| 902 | 902-13mm | 902-14mm | 902-15mm | 902-16mm | 902-17mm | 902-18mm | 902-19mm | 902-20mm | 902-21mm | 902-22mm | 902-23mm | 902-24mm |
| 937 | 937-13mm | 937-14mm | 937-15mm | 937-16mm | 937-17mm | 937-18mm | 937-19mm | 937-20mm | 937-21mm | 937-22mm | 937-23mm | 937-24mm |
| 938 | 938-13mm | 938-14mm | 938-15mm | 938-16mm | 938-17mm | 938-18mm | 938-19mm | 938-20mm | 938-21mm | 938-22mm | 938-23mm | 938-24mm |
| 939 | 939-13mm | 939-14mm | 939-15mm | 939-16mm | 939-17mm | 939-18mm | 939-19mm | 939-20mm | 939-21mm | 939-22mm | 939-23mm | 939-24mm |
| Price Code | ZZ | ZZ | ZZ | ZZ | ZZ | ZZ | ZZ | ZZZZ | ZZZZ | ZZZZ | ZZZZ | ZZZZ |

| Series | 13mm .512 | 14mm .551 | 15mm .591 | 16mm .630 | 17mm .669 | 18mm .709 | 19mm .748 | 20mm .787 | 21mm .827 | 22mm .866 | 23mm .906 | 24mm .945 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 903 | 903-13mm | 903-14mm | 903-15mm | 903-16mm | 903-17mm | 903-18mm | 903-19mm | 903-20mm | 903-21mm | 903-22mm | 903-23mm | 903-24mm |
| 904 | 904-13mm | 904-14mm | 904-15mm | 904-16mm | 904-17mm | 904-18mm | 904-19mm | 904-20mm | 904-21mm | 904-22mm | 904-23mm | 904-24mm |
| 905 | 905-13mm | 905-14mm | 905-15mm | 905-16mm | 905-17mm | 905-18mm | 905-19mm | 905-20mm | 905-21mm | 905-22mm | 905-23mm | 905-24mm |
| 906 | 906-13mm | 906-14mm | 906-15mm | 906-16mm | 906-17mm | 906-18mm | 906-19mm | 906-20mm | 906-21mm | 906-22mm | 906-23mm | 906-24mm |
| 907 | 907-13mm | 907-14mm | 907-15mm | 907-16mm | 907-17mm | 907-18mm | 907-19mm | 907-20mm | 907-21mm | 907-22mm | 907-23mm | 907-24mm |
| 908 | 908-13mm | 908-14mm | 908-15mm | 908-16mm | 908-17mm | 908-18mm | 908-19mm | 908-20mm | 908-21mm | 908-22mm | 908-23mm | 908-24mm |
| 910 | 910-13mm | 910-14mm | 910-15mm | 910-16mm | 910-17mm | 910-18mm | 910-19mm | 910-20mm | 910-21mm | 910-22mm | 910-23mm | 910-24mm |
| 911 | 911-13mm | 911-14mm | 911-15mm | 911-16mm | 911-17mm | 911-18mm | 911-19mm | 911-20mm | 911-21mm | 911-22mm | 911-23mm | 911-24mm |
| 912 | 912-13mm | 912-14mm | 912-15mm | 912-16mm | 912-17mm | 912-18mm | 912-19mm | 912-20mm | 912-21mm | 912-22mm | 912-23mm | 912-24mm |
| 913 | 913-13mm | 913-14mm | 913-15mm | 913-16mm | 913-17mm | 913-18mm | 913-19mm | 913-20mm | 913-21mm | 913-22mm | 913-23mm | 913-24mm |
| 940 | 940-13mm | 940-14mm | 940-15mm | 940-16mm | 940-17mm | 940-18mm | 940-19mm | 940-20mm | 940-21mm | 940-22mm | 940-23mm | 940-24mm |
| 941 | 941-13mm | 941-14mm | 941-15mm | 941-16mm | 941-17mm | 941-18mm | 941-19mm | 941-20mm | 941-21mm | 941-22mm | 941-23mm | 941-24mm |
| Price Code | ZZZ | ZZZ | ZZZ | ZZZ | ZZZ | ZZZ | ZZZ | ZZZZ | ZZZZ | ZZZZ | ZZZZ | ZZZZ |