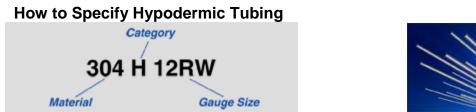


Other sizes are available please call us at 800-ALL-TUBE if you don't see your size.



OD

Nominal Inches

Gauge

12 XX

.1090

.005

.100

.1080

.1100

.0990

.1010

304H12XX

316 SS

Hypodermic Tubing is welded and drawn to tight OD and ID tolerances, and is sold and stocked in gauge sizes. Tolerances meet or exceed ASTM A908 standard.

MicroGroup maintains both 304 Stainless Steel and 316 Stainless Steel in stock, typically in full-hard temper condition. Refer to chart below for the sizes that are typically in stock.

Size Item # Item # OD Wall ID Min Min Max Max 6 RW .2030 .015 .173 .2020 .2040 .1700 .1760 304H06RW 316H06RW .1850 6 TW .2030 .010 .183 .2020 .2040 .1810 304H06TW 316H06TW 6 X .2030 .007 .189 .2020 .2040 .1870 .1910 304H06X 6.5 .1880 .010 .168 .1870 .1890 .1650 .1710 304H06.5 7 RW .1800 .015 .150 .1790 .1810 .1470 .1530 304H07RW 316H07RW 7 TW .1800 .010 .160 .1790 .1810 .1580 .1620 304H07TW 7 X .007 .1800 .166 .1790 .1810 .1640 .1680 304H07X .004 .1790 .1740 7 XX .1800 .173 .1810 .1720 304H07XX 7.5 .150 .1470 .1530 .1720 .011 .1710 .1730 304H07.5 8 RW .015 .135 .1660 .1320 .1380 .1650 .1640 304H08RW 316H08RW 8 TW .1650 .010 .145 .1640 .1660 .1430 .1470 304H08TW 8 XX .1650 .007 .150 .1640 .1660 .1475 .1530 304H08XX 8.5 .1560 .010 .136 .1550 .1570 .1330 .1390 304H08.5 9 RW .1480 .015 .118 .1470 .1490 .1150 .1210 304H09RW 316H09RW 9 TW .1480 .010 .128 .1470 .1490 .1260 .1300 304H09TW 316H09TW .1480 .007 .135 .1470 .1490 .1330 .1370 304H09XX 9 X X 9.5 .1410 .011 .119 .1400 .1420 .1170 .1210 304H09.5 10 RW .1340 .014 .106 .1330 .1350 .1040 .1080 304H10RW 316H10RW 10 TW .1340 .010 .114 .1330 .1350 .1120 .1160 304H10TW 316H10TW 10 X .1340 .008 .118 .1330 .1350 .1165 .1200 304H10X .1260 .010 .106 .1250 .1040 .1080 304H10.5 10.5 .1270 11 RW .1200 .013 .094 .1190 .1210 .0920 .0960 304H11RW 316H11RW 11 TW .1200 .010 .100 .1190 .1210 .0980 .1020 304H11TW 316H11TW 11 X .007 .1200 .106 .1190 .1210 .1040 .1080 304H11X 11 XX .1200 .004 .112 .1190 .1210 .1100 .1140 304H11XX .1150 .0930 304H11.5 11.5 .010 .095 .1140 .1160 .0960 .1090 .016 .077 .1080 .1100 .0750 .0790 12 H 304H12H 12 RW .1090 .012 .085 .1080 .1100 .0830 .0870 304H12RW 316H12RW 12 TW .1090 .009 .091 .1080 .1100 .0890 .0930 304H12TW 316H12TW .1090 .006 .097 .1080 .1100 .0950 .0990 12 X 304H12X

To place an order, call 800-ALL-TUBE or visit us on the web at www.microgroup.com.

ID

304 SS



| | Other sizes are availa | | | | | | | you don't see | your size. |
|---------------|------------------------|--------------|--------------|----------------|-------|----------------|----------------|---------------------|------------------|
| Gauge Size | | minal Inc | | - | D | - | D | 304 SS Item # | 316 SS Item # |
| | OD 1000 | Wall | ID | Min | Max | Min | Max | | nem# |
| 12.5 13 RW | .1000 | .009 | .082 | .0990 | .1010 | .0800 | .0840 .0730 | 304H12.5 | 21611201 |
| | .0950 | .012 | .071 | .0940 | .0960 | .0690 | | 304H13RW | 316H13RW |
| 13 TW 13 X | .0950 .0950 | .009 .005 | .077 .085 | .0940 .0940 | .0960 | .7500 .0840 | .0790 .0860 | 304H13TW 304H13X | 316H13TW |
| 13 X | .0950 | .003 | .085 | .0940 | .0960 | .0840 | .0800 | 304H13XX | |
| | | | | | | | | | |
| 13.5 14 XH | .0890 .0830 | .009 | .071 | .0880 | .0900 | .0690 | .0730 | 304H13.5 | |
| 14 An | | .022 | .039 | .0820 | .0840 | .0370 | .0410 | 304H14XH | |
| | .0830 | .017 | .049 | .0820 | .0840 | .0470 | .0510 | 304H14H | |
| 14 RW | .0830 | .010 | .063 | .0820 | .0840 | .0610 | .0650 | 304H14RW | 316H14RW |
| 14 M | .0830 | .008 | .068 | .0820 | .0840 | .0660 | .0690 | 304H14M | |
| 14 TW | .0830 | .006 | .072 | .0820 | .0840 | .0700 | .0730 | 304H14TW | 316H14TW |
| 14 XX | .0830 | .003 | .077 | .0820 | .0840 | .0760 | .0780 | 304H14XX | |
| 14.5 | .0780 | .008 | .063 | .0770 | .0790 | .0620 | .0640 | 304H14.5 | |
| 15 RW | .0720 | .009 | .054 | .0715 | .0725 | .0525 | .0555 | 304H15RW | 316H15RW |
| 15 TW | .0720 | .006 | .060 | .0715 | .0725 | .0585 | .0615 | 304H15TW | 316H15TW |
| 15 X | .0720 | .005 | .063 | .0715 | .0725 | .0620 | .0640 | 304H15X | 0401450 |
| 15 S | .072 | .009 | .054 | .0725 | .0715 | .0548 | .0532 | | 316H15S |
| 15 H | .0720 | .011 | .050 | .0715 | .0725 | .0480 | .0520 | 304H15H | 316H15H |
| 15.5 | .0680 | .007 | .054 | .0675 | .0685 | .0525 | .0555 | 304H15.5 | |
| 16 RW | .0650 | .009 | .047 | .0645 | .0655 | .0455 | .0485 | 304H16RW | 316H16RW |
| 16 TW | .0650 | .006 | .053 | .0645 | .0655 | .0525 | .0545 | 304H16TW | 316H16TW |
| 16 X | .0650 | .004 | .057 | .0645 | .0655 | .0550 | .0580 | 304H16X | |
| 16 XX | .0650 | .003 | .060 | .0645 | .0655 | .5850 | .0610 | 304H16XX | |
| 16 H | .0650 | .016 | .033 | .0645 | .0655 | .0310 | .0350 | 304H16H | 316H16H |
| 16.5 | .0620 | .005 | .052 | .0615 | .0625 | .0505 | .0535 | 304H16.5 | 316H16.5 |
| 17 RW | .0590 | .009 | .041 | .0585 | .0595 | .0395 | .0425 | 304H17RW | 316H17RW |
| 17TW | .0590 | .007 | .046 | .0585 | .0595 | .0445 | .0475 | 304H17TW | 316H17TW |
| 17 X | .0590 | .004 | .052 | .0585 | .0595 | .5100 | .0530 | 304H17X | |
| 17 XX | .0590 | .002 | .054 | .0585 | .0595 | .0535 | .0550 | 304H17XX | |
| 17 S | .0580 | .008 | .042 | .0575 | .0585 | .0405 | .0435 | 304H17S | 316H17S |
| 17 SX | .0580 | .004 | .050 | .0575 | .0585 | .0490 | .0510 | 304H17SX | ļ |
| 17 H | .0590 | .010 | .039 | .0585 | .0595 | .0370 | .0410 | 304H17H | |
| 17.5 | .0560 | .005 | .046 | .0555 | .0565 | .0445 | .0475 | 304H17.5 | |
| 18 RW | .0500 | .009 | .033 | .0495 | .0505 | .0315 | .0345 | 304H18RW | 316H18RW |
| 18 S | .0500 | .006 | .038 | .0495 | .0505 | .0365 | .0395 | 304H18S | 316H18S |
| 18 TW | .0500 | .004 | .042 | .0495 | .0505 | .0410 | .0430 | 304H18TW | 316H18TW |
| 18 XX | .0500 | .003 | .045 | .0495 | .0505 | .0440 | .0460 | 304H18XX | 316H18XX |
| 18 H | .0500 | .010 | .030 | .0495 | .0505 | .0280 | .0320 | 304H18H | 316H18H |
| 18.5 | .0460 | .006 | .034 | .0455 | .0465 | .0325 | .0355 | 304H18.5 | |
| 19 RW | .0425 | .008 | .028 | .0420 | .0430 | .0260 | .0290 | 304H19RW | 316H19RW |
| 19TW | .0425 | .005 | .033 | .0420 | .0430 | .0315 | .0335 | 304H19TW | 316H19TW |
| 19 X | .0425 | .004 | .035 | .0420 | .0430 | .0340 | .0360 | 304H19X | |
| 19 XX | .0425 | .003 | .038 | .0420 | .0430 | .0365 | .0385 | 304H19XX | |
| 19 H | .0425 | .010 | .023 | .0420 | .0430 | .0210 | .0240 | 304H19H | |



Other sizes are available please call us at 800-ALL-TUBE if you don't see your size.

| Gauge | Nominal Inches | | | OD | | ID | | 304 SS | 316 SS |
|-------|----------------|------|------|-------|-------|-------|-------|----------|----------|
| Size | OD | Wall | ID | Min | Max | Min | Max | Item # | Item # |
| 19.5 | .0390 | .006 | .027 | .0385 | .0395 | .0255 | .0285 | 304H19.5 | |
| 20 RW | .0355 | .006 | .024 | .0355 | .0360 | .0230 | .0245 | 304H20RW | 316H20RW |
| 20TW | .0355 | .005 | .026 | .0355 | .0360 | .0250 | .0265 | 304H20TW | 316H20TW |
| 20 X | .0355 | .004 | .028 | .0355 | .0360 | .0270 | .0285 | 304H20X | |
| 20 XX | .0355 | .003 | .031 | .0355 | .0360 | .0295 | .0315 | 304H20XX | |
| 20.5 | .0340 | .004 | .027 | .0340 | .0345 | .0255 | .0275 | 304H20.5 | |
| 21 H | .0320 | .008 | .017 | .0320 | .0325 | .0150 | .0180 | 304H21H | |
| 21 RW | .0320 | .006 | .020 | .0320 | .0325 | .0195 | .0210 | 304H21RW | 316H21RW |
| 21TW | .0320 | .005 | .023 | .0320 | .0325 | .0220 | .0240 | 304H21TW | 316H21TW |
| 21 XX | .0320 | .002 | .029 | .0320 | .0325 | .0280 | .0295 | 304H21XX | |
| 21.5 | .0300 | .003 | .024 | .0300 | .0305 | .0230 | .0245 | 304H21.5 | |
| 22 RW | .0280 | .006 | .016 | .0280 | .0285 | .0155 | .0170 | 304H22RW | 316H22RW |
| 22TW | .0280 | .004 | .020 | .0280 | .0285 | .0190 | .0205 | 304H22TW | 316H22TW |
| 22 XX | .0280 | .002 | .024 | .0280 | .0285 | .0230 | .0240 | 304H22XX | |
| 22 X | .0280 | .003 | .022 | .0280 | .0285 | .0210 | .0225 | 304H22X | |
| 22 XH | .0280 | .011 | .007 | .0280 | .0285 | .0050 | .0090 | 304H22XH | |
| 22.5 | .0260 | .003 | .020 | .0260 | .0265 | .0195 | .0210 | 304H22.5 | |
| 23 RW | .0250 | .006 | .013 | .0250 | .0255 | .0125 | .0140 | 304H23RW | 316H23RW |
| 23TW | .0250 | .004 | .017 | .0250 | .0255 | .0165 | .0180 | 304H23TW | 316H23TW |
| 23 XX | .0250 | .002 | .020 | .0250 | .0255 | .0195 | .0210 | 304H23XX | |
| 23.5 | .0230 | .003 | .017 | .0230 | .0235 | .0165 | .0180 | 304H23.5 | |
| 24 RW | .0220 | .005 | .012 | .0220 | .0225 | .0115 | .0130 | 304H24RW | 316H24RW |
| 24TW | .0220 | .004 | .014 | .0220 | .0225 | .0135 | .0150 | 304H24TW | 316H24TW |
| 24 XX | .0220 | .003 | .016 | .0220 | .0225 | .0155 | .0170 | 304H24XX | |
| 24.5 | .0210 | .002 | .016 | .0210 | .0215 | .0155 | .0170 | 304H24.5 | |
| 25 RW | .0200 | .005 | .010 | .0200 | .0205 | .0095 | .0110 | 304H25RW | 316H25RW |
| 25TW | .0200 | .004 | .012 | .0200 | .0205 | .0115 | .0130 | 304H25TW | 316H25TW |
| 25 XX | .0200 | .002 | .016 | .0200 | .0205 | .0155 | .0170 | 304H25XX | |
| 25.5 | .0190 | .002 | .014 | .0190 | .0195 | .0135 | .0150 | 304H25.5 | |
| 26 RW | .0180 | .004 | .010 | .0180 | .0185 | .0095 | .0110 | 304H26RW | 316H26RW |
| 27 RW | .0160 | .004 | .008 | .0160 | .0165 | .0075 | .0090 | 304H27RW | 316H27RW |
| 28 RW | .0140 | .003 | .007 | .0140 | .0145 | .0065 | .0080 | 304H28RW | 316H28RW |
| 29 RW | .0130 | .003 | .007 | .0130 | .0135 | .0065 | .0080 | 304H29RW | 316H29RW |
| 30 XH | .0120 | .004 | .003 | .0115 | .0125 | .0020 | .0040 | | 316H30XH |
| 30 H | .0120 | .004 | .004 | .0120 | .0125 | .0035 | .0050 | 304H30H | |
| 30 RW | .0120 | .003 | .006 | .0120 | .0125 | .0055 | .0070 | 304H30RW | 316H30RW |
| 31 RW | .0100 | .002 | .005 | .0100 | .0105 | .0045 | .0060 | 304H31RW | 316H31RW |
| 32 RW | .0090 | .002 | .004 | .0090 | .0095 | .0035 | .0050 | 304H32RW | |
| 33 RW | .0080 | .002 | .004 | .0080 | .0085 | .0035 | .0050 | 304H33RW | |
| 33 X | .0080 | .001 | .006 | .0080 | .0085 | .0060 | .0070 | 304H33X | |
| 34 RW | .0060 | .002 | .002 | .0060 | .0065 | .0015 | .0030 | 304H34RW | |