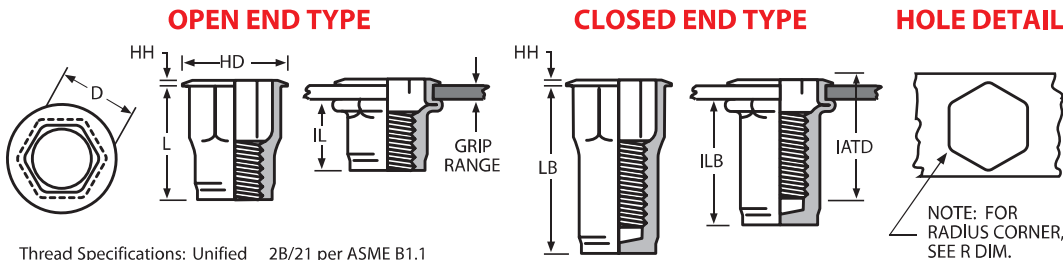


UNIFIED (INCH) AND METRIC THREAD SIZES



Thread Specifications: Unified 2B/21 per ASME B1.1
Metric 6H/21 per ASME B1.13M

NOTE: FOR RADIUS CORNER, SEE R DIM.

| THREAD SIZE | THREAD CALL OUT | GRIP RANGE | GRIP CALL OUT | HOLE SIZE (ACROSS FLATS) +.004 / -.000 | HD ±.010 ±.025* | HH ±.003 | L ±.015 | D MAX. | IL MAX. | LB MAX. | ILB MAX. | IATD** MAX. | R MAX. |
|-------------|-----------------|-------------|---------------|--|-----------------|----------|---------|--------|---------|---------|----------|-------------|--------|
| 6-32 UNC | 632 | .020 - .080 | 80 | .250 | .375 | .027 | .385 | .249 | .295 | .755 | .640 | .575 | .015 |
| 6-32 UNF | 632 | .080 - .130 | 130 | .250 | .375 | .027 | .435 | .249 | .295 | .755 | .580 | .640 | .015 |
| 8-32 UNC | 832 | .020 - .080 | 80 | .250 | .375 | .027 | .385 | .249 | .295 | .755 | .640 | .575 | .015 |
| 8-32 UNF | 832 | .080 - .130 | 130 | .250 | .375 | .027 | .435 | .249 | .295 | .755 | .580 | .640 | .015 |
| 10-24 UNC | 1024 | .020 - .130 | 130 | .281 | .390 | .027 | .435 | .280 | .275 | 1.045 | .845 | .695 | .020 |
| 10-24 UNF | 1024 | .130 - .225 | 225 | .281 | .390 | .027 | .535 | .280 | .275 | 1.045 | .735 | .805 | .020 |
| 10-32 UNF | 1032 | .020 - .130 | 130 | .281 | .390 | .027 | .435 | .280 | .275 | 1.045 | .845 | .695 | .020 |
| 10-32 UNC | 1032 | .130 - .225 | 225 | .281 | .390 | .027 | .535 | .280 | .275 | 1.045 | .735 | .805 | .020 |
| 1/4-20 UNC | 420 | .027 - .165 | 165 | .375 | .510 | .030 | .585 | .374 | .400 | 1.205 | 1.015 | .945 | .040 |
| 1/4-20 UNF | 420 | .165 - .260 | 260 | .375 | .510 | .030 | .685 | .374 | .400 | 1.205 | .915 | 1.085 | .040 |
| 5/16-18 UNC | 518 | .027 - .150 | 150 | .500 | .655* | .035 | .685 | .499 | .530 | 1.460 | 1.235 | 1.045 | .040 |
| 5/16-18 UNF | 518 | .150 - .312 | 312 | .500 | .655* | .035 | .845 | .499 | .515 | 1.460 | 1.220 | 1.170 | .040 |
| 3/8-16 UNC | 616 | .027 - .150 | 150 | .500 | .655* | .035 | .685 | .499 | .530 | 1.460 | 1.235 | 1.045 | .040 |
| 3/8-16 UNF | 616 | .150 - .312 | 312 | .500 | .655* | .035 | .845 | .499 | .515 | 1.460 | 1.220 | 1.170 | .040 |
| 1/2-13 UNC | 813 | .063 - .200 | 200 | .687 | .865* | .047 | 1.150 | .686 | .850 | 2.380 | 2.070 | 1.505 | .040 |
| 1/2-13 UNF | 813 | .200 - .350 | 350 | .687 | .865* | .047 | 1.300 | .686 | .850 | 2.380 | 1.920 | 1.505 | .040 |
| 1/2-13 UNC | 813 | .350 - .500 | 500 | .687 | .865* | .047 | 1.450 | .686 | .860 | 2.380 | 1.770 | 1.505 | .040 |

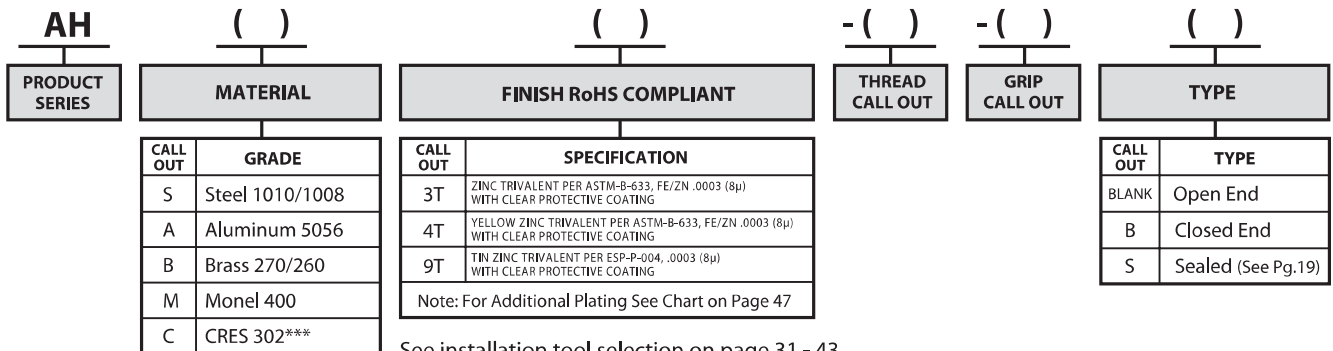
| THREAD SIZE | THREAD CALL OUT | GRIP RANGE | GRIP CALL OUT | HOLE SIZE (ACROSS FLATS) +.010 / -.000 | HD ±.025 ±.064* | HH ±.008 | L ±.038 | D MAX. | IL MAX. | LB MAX. | ILB MAX. | IATD** MAX. | R MAX. |
|----------------|-----------------|-------------|---------------|--|-----------------|----------|---------|--------|---------|---------|----------|-------------|--------|
| M4 x 0,7 ISO | 470 | 0,50 - 2,00 | 2,0 | 6,35 | 9,53 | 0,68 | 9,78 | 6,35 | 7,49 | 19,18 | 16,26 | 14,61 | 0,38 |
| M4 x 0,7 ISO | 470 | 2,00 - 3,30 | 3,3 | 6,35 | 9,53 | 0,68 | 11,05 | 6,35 | 7,49 | 19,18 | 14,73 | 16,26 | 0,38 |
| M5 x 0,8 ISO | 580 | 0,50 - 3,30 | 3,3 | 7,14 | 9,91 | 0,68 | 11,05 | 7,10 | 6,99 | 26,54 | 21,46 | 17,65 | 0,50 |
| M5 x 0,8 ISO | 580 | 3,30 - 5,70 | 5,7 | 7,14 | 9,91 | 0,68 | 13,59 | 7,10 | 6,99 | 26,54 | 18,67 | 20,45 | 0,50 |
| M6 x 1,0 ISO | 610 | 0,70 - 4,20 | 4,2 | 9,53 | 12,96 | 0,76 | 14,86 | 9,50 | 10,16 | 30,61 | 25,78 | 24,00 | 1,00 |
| M6 x 1,0 ISO | 610 | 4,20 - 6,60 | 6,6 | 9,53 | 12,96 | 0,76 | 17,40 | 9,50 | 10,16 | 30,61 | 23,24 | 27,56 | 1,00 |
| M8 x 1,25 ISO | 8125 | 0,70 - 3,80 | 3,8 | 12,70 | 16,64* | 0,89 | 17,40 | 12,70 | 13,46 | 37,08 | 31,37 | 26,54 | 1,00 |
| M8 x 1,25 ISO | 8125 | 3,80 - 7,90 | 7,9 | 12,70 | 16,64* | 0,89 | 21,46 | 12,70 | 13,08 | 37,08 | 30,99 | 29,72 | 1,00 |
| M10 x 1,5 ISO | 1015 | 0,70 - 3,80 | 3,8 | 12,70 | 16,64* | 0,89 | 17,40 | 12,70 | 13,46 | 37,08 | 31,37 | 26,54 | 1,00 |
| M10 x 1,5 ISO | 1015 | 3,80 - 7,90 | 7,9 | 12,70 | 16,64* | 0,89 | 21,46 | 12,70 | 13,08 | 37,08 | 30,99 | 29,72 | 1,00 |
| M12 x 1,75 ISO | 12175 | 1,60 - 5,10 | 5,1 | 17,45 | 21,97* | 1,19 | 29,21 | 17,42 | 21,59 | 60,45 | 52,58 | 38,23 | 1,00 |
| M12 x 1,75 ISO | 12175 | 5,10 - 8,90 | 8,9 | 17,45 | 21,97* | 1,19 | 33,02 | 17,42 | 21,59 | 60,45 | 48,77 | 38,23 | 1,00 |
| M12 x 1,75 ISO | 12175 | 8,90 - 12,7 | 12,7 | 17,45 | 21,97* | 1,19 | 36,83 | 17,42 | 21,84 | 60,45 | 44,96 | 38,23 | 1,00 |

NOTE 1: Grip range can be affected by parent material density and actual hole size. AVK suggests trial installations to determine optimum grip.
 NOTE 2: Additional UNF fine threads are available. Contact an AVK Sales Representative for details
 NOTE 3: Additional grip lengths are available in certain thread sizes. Contact an AVK Sales Representative for details. **Dimensions in minimum grip condition.
 ***NOTE 4: Closed End CRES inserts have a reduced "LB" and "ILB" dimension. Contact an AVK sales rep for details.

PART NUMBERING SYSTEM



SAMPLE NUMBER: AHS3T-420-165



See installation tool selection on page 31 - 43.