



AVK INDUSTRIAL PRODUCTS
FASTENERS & EIPG DIVISION, A PCC COMPANY

*"Improving the way
we assemble the world"*

World market leader of design, development and manufacturing of blind installed fasteners

HOME PRODUCTS INSTALLATION TOOLS APPLICATIONS SALES REPS. SUPPLIER SUPPORT CONTACT US



A-K SERIES™ KNURLED THREADED INSERT

The A-K Series™ Knurled Threaded Insert features a knurled body and a reduced profile head to allow for virtually flush installation. Countersink drilling or dimpling of the parent material can be eliminated. The A-K Insert is designed to be used with Grade 5 or Metric Class 8.8/9.8 mating screws.

The A-K Series™ is identical to the A-L Series™ but features a low profile head for applications requiring near flush mating part assembly.

The A-K Insert can be installed using AVK's ARO brand *Pneumatic Tools* or AVK's SPP™ *Pneumatic/Hydraulic Tools*. These tools can be located at any position on your assembly line. The A-K Insert can be installed either before or after finish.

Design Benefits

Design Types

Part Numbering System

Thread Sizes

THE A-K SERIES™ INSERT – DESIGN BENEFITS

-  **VIRTUALLY FLUSH INSTALLATIONS** are achieved without special hole preparation due to the A-K Series™ minimal head profile.
-  **EXCEPTIONAL TORQUE STRENGTH** is achieved as the insert's knurled body expands **FILLING THE HOLE**.
-  **QUALITY INSTALLATIONS** even in variable thickness materials are assured by AVK's spin/spin ARO *Pneumatic Tools* and our SPP™ *Pneumatic/Hydraulic SPP2 Tool™*.
-  **SUPERIOR THREAD STRENGTH** is provided due to our internal rolled thread manufacturing process.
-  **THREADS GAUGE** before and after installation due to the increased cross-sectional thickness of the thread area. Thread dilation is prevented.
-  **INVENTORY REDUCTION** is possible because of the A-K Series™ wide grip range capacity. It is 2.5 times greater than conventional rivet nuts.
-  **SUPERIOR CORROSION RESISTANCE** is provided by our standard zinc/yellow trivalent finish (120 hrs. salt spray to white corrosion). For exceptional corrosion protection we offer a trivalent tin/zinc alloy finish.
-  **AVAILABLE** in Steel. Additional materials such as aluminum, brass and monel are available by special order. [Contact AVK](#) for details.



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THE A-K SERIES™ INSERT - VARIOUS DESIGN TYPES



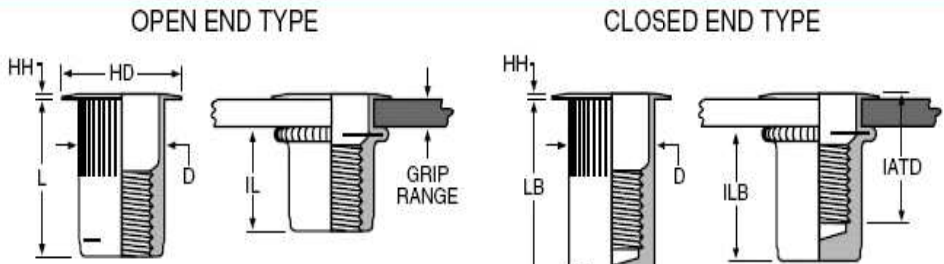
OPEN END



CLOSED END

Thread area is enclosed eliminating leakage past the threads from either side of the application.

THE A-K SERIES™ INSERT – THREAD SIZES



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

| Thread Size | Thread Call Out | Grip Range | Grip Call Out | Hole Size +.006 -0.00 | HD ±.015 | HH ±.003 | L ±.015 | D Max. | IL Max. | LB ±.015 | ILB Max. | IATD* Max. |
|-------------|-----------------|------------|---------------|-----------------------|----------|----------|---------|--------|---------|----------|----------|------------|
| 6-32 UNC | 632 | .020-.080 | 80 | 17/64 (.2656) | .310 | .019 | .420 | .265 | .305 | .740 | .640 | .610 |
| 6-32 UNC | 632 | .080-.130 | 130 | 17/64 (.2656) | .310 | .019 | .470 | .265 | .305 | .740 | .580 | .670 |
| 8-32 UNC | 832 | .020-.080 | 80 | 17/64 (.2656) | .310 | .019 | .420 | .265 | .305 | .740 | .640 | .610 |
| 8-32 UNC | 832 | .080-.130 | 130 | 17/64 (.2656) | .310 | .019 | .470 | .265 | .305 | .740 | .580 | .670 |
| 10-24 UNC | 1024 | .020-.130 | 130 | 19/64 (.2969) | .340 | .019 | .475 | .296 | .315 | .990 | .845 | .730 |
| 10-24 UNC | 1024 | .130-.225 | 225 | 19/64 (.2969) | .340 | .019 | .585 | .296 | .315 | .990 | .735 | .840 |
| 10-32 UNF | 1032 | .020-.130 | 130 | 19/64 (.2969) | .340 | .019 | .475 | .296 | .315 | .990 | .845 | .730 |
| 10-32 UNF | 1032 | .130-.225 | 225 | 19/64 (.2969) | .340 | .019 | .585 | .296 | .315 | .990 | .735 | .840 |
| 1/4-20 UNC | 420 | .027-.165 | 165 | 25/64 (.3906) | .455 | .022 | .580 | .390 | .380 | 1.190 | 1.005 | .895 |
| 1/4-20 UNC | 420 | .165-.260 | 260 | 25/64 (.3906) | .455 | .022 | .680 | .390 | .380 | 1.190 | .905 | 1.035 |
| 5/16-18 UNC | 518 | .027-.150 | 150 | 17/32 (.5312) | .595 | .022 | .690 | .530 | .470 | 1.390 | 1.175 | .995 |
| 5/16-18 UNC | 518 | .150-.312 | 312 | 17/32 (.5312) | .595 | .022 | .805 | .530 | .425 | 1.390 | 1.025 | 1.120 |
| 3/8-16 UNC | 616 | .027-.150 | 150 | 17/32 (.5312) | .595 | .022 | .690 | .530 | .470 | 1.390 | 1.175 | .995 |
| 3/8-16 UNC | 616 | .150-.312 | 312 | 17/32 (.5312) | .595 | .022 | .805 | .530 | .425 | 1.390 | 1.025 | 1.120 |

| Thread Size | Thread Call Out | Grip Range | Grip Call Out | Hole Size +0,15 -0,00 | HD ±0,38 | HH ±0,08 | L ±0,38 | D Max. | IL Max. | LB ±0,38 | ILB Max. | IATD* Max. |
|---------------|-----------------|------------|---------------|-----------------------|----------|----------|---------|--------|---------|----------|----------|------------|
| M4 x 0,7 ISO | 470 | 0,50-2,00 | 2.0 | 6,75 | 7,87 | 0,48 | 10,67 | 6,73 | 7,75 | 18,80 | 16,26 | 15,49 |
| M4 x 0,7 ISO | 470 | 2,00-3,30 | 3.3 | 6,75 | 7,87 | 0,48 | 11,94 | 6,73 | 7,75 | 18,80 | 14,73 | 17,02 |
| M5 x 0,8 ISO | 580 | 0,50-3,30 | 3.3 | 7,60 | 8,64 | 0,48 | 12,07 | 7,52 | 8,00 | 25,15 | 21,46 | 18,54 |
| M5 x 0,8 ISO | 580 | 3,30-5,70 | 5.7 | 7,60 | 8,64 | 0,48 | 14,86 | 7,52 | 8,00 | 25,15 | 18,67 | 21,34 |
| M6 x 1,0 ISO | 610 | 0,70-4,20 | 4.2 | 10,00 | 11,56 | 0,55 | 14,73 | 9,91 | 9,65 | 30,23 | 25,53 | 22,73 |
| M6 x 1,0 ISO | 610 | 4,20-6,60 | 6.6 | 10,00 | 11,56 | 0,55 | 17,27 | 9,91 | 9,65 | 30,23 | 22,99 | 26,29 |
| M8 x 1,25 ISO | 8125 | 0,70-3,80 | 3.8 | 13,50 | 15,11 | 0,55 | 17,53 | 13,46 | 11,94 | 35,31 | 29,85 | 25,27 |
| M8 x 1,25 ISO | 8125 | 3,80-7,90 | 7.9 | 13,50 | 15,11 | 0,55 | 20,45 | 13,46 | 10,80 | 35,31 | 26,04 | 28,45 |
| M10 x 1,5 ISO | 1015 | 0,70-3,80 | 3.8 | 13,50 | 15,11 | 0,55 | 17,53 | 13,46 | 11,94 | 35,31 | 29,85 | 25,27 |
| M10 x 1,5 ISO | 1015 | 3,80-7,90 | 7.9 | 13,50 | 15,11 | 0,55 | 20,45 | 13,46 | 10,80 | 35,31 | 26,04 | 28,45 |

- 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 AVK for details.
- NOTE 3:** Additional grip lengths are available in certain thread sizes. Contact AVK for details.
- *Dimensions in minimum grip condition.