



A-L SERIES INSERT PROFILE

The **A-L Series Insert** features a knurled body and large diameter—low profile head making it ideal for use in punched or drilled holes. It offers the highest all around strength characteristics and has been designed to be used with Grade 5 or Metric 8.8/9.8 mating screws. The A-L Series is AVK's most versatile performer.

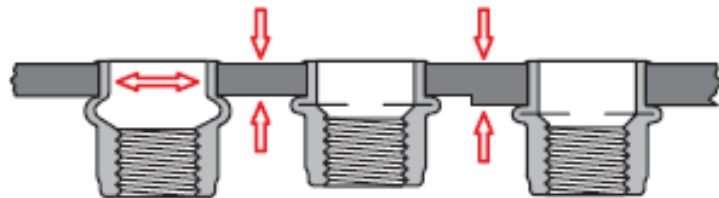
The A-L Series Insert can be installed using AVK's ARO brand pneumatic tools or AVK's SPP™ pneumatic/hydraulic tooling. These tools can be located at any position on your assembly line. The A-L Series can be installed either before or after finish.



As the A-L Series is installed, the knurled body expands 360° **FILLING THE HOLE**. This feature provides exceptional torque strength and vibration resistance.

SPINWALL TECHNOLOGY™

HOW HOLE FILL WORKS FOR YOU



The installation tool then continues to install the insert forming a backside flange even in multiple or variable thickness materials **WITHOUT ADJUSTMENT**.

DESIGN BENEFITS

- **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 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-L 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 hours. 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 an AVK Sales Representatives.



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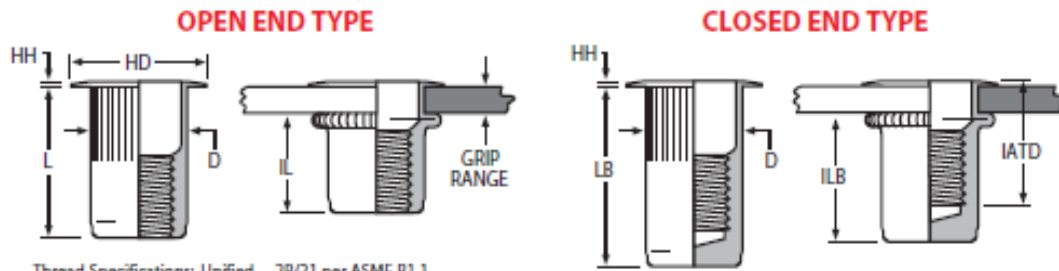
The **A-K Series Insert** features a knurled body and a reduced profile head to allow for virtually flush installation. Countersink drilling or dimpling of the parent material can be eliminated. The A-K Series is designed to be used with Grade 5 or Metric Class 8.8/9.8 mating screws.

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UNIFIED (INCH) AND METRIC THREAD SIZES



INSERT
KNURLED THREADED INSERTS



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 +0,15 / -0,00	HD ±0,25 ±0,64*	HH ±0,08	L ±0,38	D MAX.	IL MAX.	LB MAX.	ILB MAX.	IATD** MAX.
M4 x 0,7 ISO	470	0,50 - 2,00	2,0	6,75	9,91	0,76	10,67	6,73	7,75	19,18	16,26	15,49
M4 x 0,7 ISO	470	2,00 - 3,30	3,3	6,75	9,91	0,76	11,94	6,73	7,75	19,18	14,73	17,02
M5 x 0,8 ISO	580	0,50 - 3,30	3,3	7,60	10,54	0,76	12,07	7,52	8,00	25,53	21,46	18,54
M5 x 0,8 ISO	580	3,30 - 5,70	5,7	7,60	10,54	0,76	14,86	7,52	8,00	25,53	18,67	21,34
M6 x 1,0 ISO	610	0,70 - 4,20	4,2	10,00	12,70	0,76	14,73	9,91	9,65	30,61	25,53	22,73
M6 x 1,0 ISO	610	4,20 - 6,60	6,6	10,00	12,70	0,76	17,27	9,91	9,65	30,61	22,99	26,29
M8 x 1,25 ISO	8125	0,70 - 3,80	3,8	13,50	17,40*	0,89	17,53	13,46	11,94	35,69	29,85	25,27
M8 x 1,25 ISO	8125	3,80 - 7,90	7,9	13,50	17,40*	0,89	20,45	13,46	10,80	35,69	26,04	28,45
M10 x 1,5 ISO	1015	0,70 - 3,80	3,8	13,50	17,40*	0,89	17,53	13,46	11,94	35,69	29,85	25,27
M10 x 1,5 ISO	1015	3,80 - 7,90	7,9	13,50	17,40*	0,89	20,45	13,46	10,80	35,69	26,04	28,45
M12 x 1,75 ISO	12175	1,60 - 5,10	5,1	17,45	21,97*	1,19	29,21	17,4	21,59	60,45	52,58	38,23
M12 x 1,75 ISO	12175	5,10 - 8,90	8,9	17,45	21,97*	1,19	33,02	17,4	21,59	60,45	48,77	38,23
M12 x 1,75 ISO	12175	8,90 - 12,7	12,7	17,45	21,97*	1,19	36,83	17,4	21,84	60,45	44,96	38,23

NOTE 1: Grip range can be affected by parent material density and actual hole size. AVK suggests trial installations to determine optimum grip.

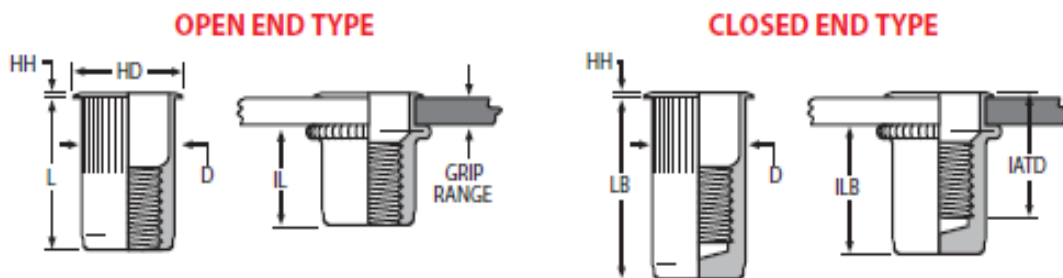
NOTE 2: Additional UNF fine threads are available. Contact an AVK Sales Representative for details.

NOTE 3: Additional grip lengths are available. Contact an AVK Sales Representative for details. **Dimensions in minimum grip condition.

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NOTE 4: Contact an AVK Sales Representative regarding optional materials.

AA170 PLIER TOOL

The AA170 tool is ideal for prototyping or making repairs with the A-K, A-L, A-H, A-P, A-O, E-L and E-H Series threaded inserts.



INSTALLATION:

- Thread AVK part onto tool.
- Place into Hole
- Squeeze handles.

THREAD SIZE	CONVERSION KIT
6-32 UNC	AA271-632
8-32 UNC	AA271-832
10-24 UNC	AA271-1024
10-32 UNF	AA271-1032
1/4-20 UNC	AA271-420
5/16-18 UNC	AA271-518*
3/8-16 UNC	AA271-616*
M4 x 0,7 ISO	AA271-470
M5 x 0,8 ISO	AA271-580
M6 x 1,0 ISO	AA271-610
M8 x 1,25 ISO	AA271-8125*
M10 x 1,5 ISO	AA271-1015*

*These sizes cannot be used with 2nd grip AVK fasteners