

# A-H SERIES INSERT PROFILE

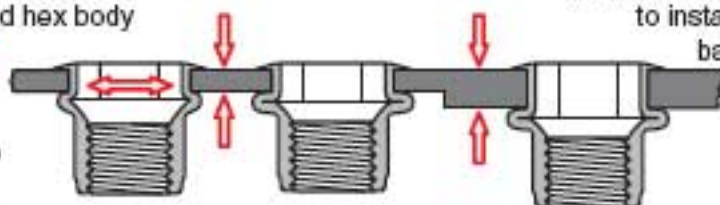
The **A-H Series Insert** features a radius corner hex body. When installed into a corresponding hex hole, the radius corners of the A-H Series Insert expand and fill the hole corners providing exceptional resistance to spinning in the panel. The A-H Series is designed to be used with Grade 5 or Metric Class 8.8/9.8 mating screws.

The A-H 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-H Series Insert can be installed either before or after finish.

## SPINWALL TECHNOLOGY™

### HOW HOLE FILL WORKS FOR YOU

As the A-H Series is installed, the radius cornered hex body expands **FILLING THE HOLE**. This feature provides exceptional torque strength and vibration resistance.



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** resistance to spinning in the panel is achieved as the A-H Series' hex body expands **FILLING THE HOLE**.
- ◆ **AVOID STRESS FRACTURES** of your material and prolong punch and die life by specifying a radius corner in your hex hole. This is possible when using the A-H Series radius hex body insert.
- ◆ **QUALITY INSTALLATIONS** even in variable thickness materials are assured by AVK's spin/spin ARO pneumatic tools and our SPP™ pneumatic/hydraulic tools.
- ◆ **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-H 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 dichromate finish (96 hours. salt spray to white corrosion). For exceptional corrosion protection we offer a tin/zinc alloy finish.
- ◆ **AVAILABLE IN STEEL.**

## ADDITIONAL DESIGN TYPES

### CLOSED END

Thread area is enclosed eliminating leakage past the threads from either side of the application. See page 15.



### SEALED HEAD

A PVC foam seal is bonded to the underside of the head and when installed provides a weathertight seal. Also available in the closed end version. See page 19 for important grip information.

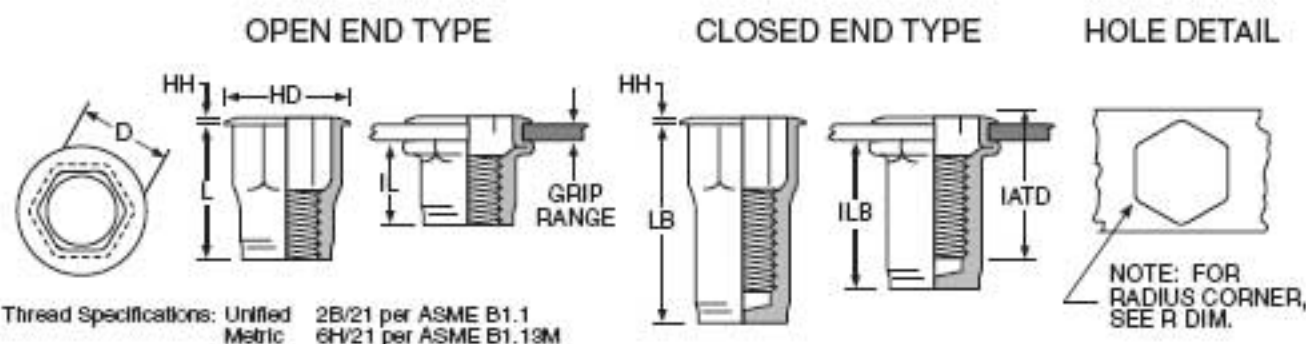


### OPEN END

Stainless Steel Hex body insert available in specific thread ranges only. Please contact your AVK Sales Representative for more information.



# UNIFIED (INCH) AND METRIC THREAD SIZES

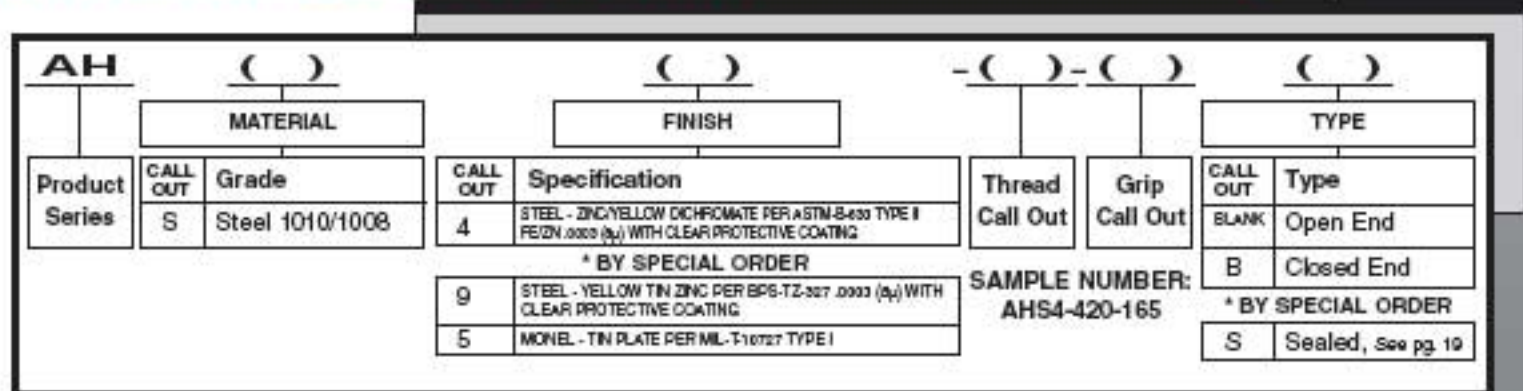


THREAD SIZE	THREAD CALL OUT	GRIP RANGE	GRIP CALL OUT	HOLE SIZE (ACROSS FLATS) +.004 - .000	HD ±.010 ±.025*	HH ±.003	L ±.015	D MAX.	IL MAX.	LB ±.015	ILB MAX.	IATD** MAX.	R MAX.
6-32 UNC	632	.020-.080	80	.250	.375	.027	.385	.249	.295	.740	.640	.575	.015
6-32 UNC	632	.080-.130	130	.250	.375	.027	.435	.249	.295	.740	.580	.640	.015
8-32 UNC	832	.020-.080	80	.250	.375	.027	.385	.249	.295	.740	.640	.575	.015
8-32 UNC	832	.080-.130	130	.250	.375	.027	.435	.249	.295	.740	.580	.640	.015
10-24 UNC	1024	.020-.130	130	.281	.390	.027	.435	.290	.275	1.030	.845	.685	.020
10-24 UNC	1024	.130-.225	225	.281	.390	.027	.535	.290	.275	1.030	.735	.805	.020
10-32 UNF	1032	.020-.130	130	.281	.390	.027	.435	.290	.275	1.030	.845	.685	.020
10-32 UNF	1032	.130-.225	225	.281	.390	.027	.535	.290	.275	1.030	.735	.805	.020
1/4-20 UNC	420	.027-.165	165	.375	.510	.030	.585	.374	.400	1.190	1.015	.945	.040
1/4-20 UNC	420	.165-.260	260	.375	.510	.030	.685	.374	.400	1.190	.915	1.085	.040
5/16-18 UNC	518	.027-.150	150	.500	.655*	.035	.685	.499	.530	1.445	1.235	1.045	.040
5/16-18 UNC	518	.150-.312	312	.500	.655*	.035	.845	.499	.515	1.445	1.220	1.170	.040
3/8-16 UNC	616	.027-.150	150	.500	.655*	.035	.685	.499	.530	1.445	1.235	1.045	.040
3/8-16 UNC	616	.150-.312	312	.500	.655*	.035	.845	.499	.515	1.445	1.220	1.170	.040

THREAD SIZE	THREAD CALL OUT	GRIP RANGE	GRIP CALL OUT	HOLE SIZE (ACROSS FLATS) +.010 - .000	HD ±0.25 ±0.64*	HH ±0.08	L ±0.38	D MAX.	IL MAX.	LB ±0.38	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	18,90	16,26	14,61	,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	18,90	14,73	16,26	,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	26,16	21,46	17,85	,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	26,16	18,67	20,45	,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	30,23	25,78	24,00	1,0
M6 x 1,0 ISO	610	4,20-6,60	6.6	9,53	12,96	0,76	17,40	9,50	10,16	30,23	23,24	27,56	1,0
M8 x 1,25 ISO	8125	0,70-8,8	3.8	12,70	16,64*	0,89	17,40	12,70	13,46	36,70	31,37	26,54	1,0
M8 x 1,25 ISO	8125	3,8-7,90	7.9	12,70	16,64*	0,89	21,46	12,70	13,08	36,70	30,99	29,72	1,0
M10 x 1,5 ISO	1015	0,70-8,8	3.8	12,70	16,64*	0,89	17,40	12,70	13,46	36,70	31,37	26,54	1,0
M10 x 1,5 ISO	1015	3,8-7,90	7.9	12,70	16,64*	0,89	21,46	12,70	13,08	36,70	30,99	29,72	1,0

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: Available in additional materials and sizes. Contact AVK for details. \*\*Dimensions in minimum grip condition.

## PART NUMBERING SYSTEM



\* Special order items are subject to minimum order requirements. Contact AVK for details.

For air tool selection see pages 28 and 30