



A-S SERIES STUD PROFILE

The **A-S Series Stud** offers a unique design advantage in that once installed, a threaded stud is left protruding from the workpiece. Component parts can be located on the stud until final assembly is accomplished with a mating nut. The A-S series is an ideal alternative to clinch or weld studs. The A-S Series is designed to be used with Grade 5 or Metric Class 8.8/9.8 non thread locking type nuts.

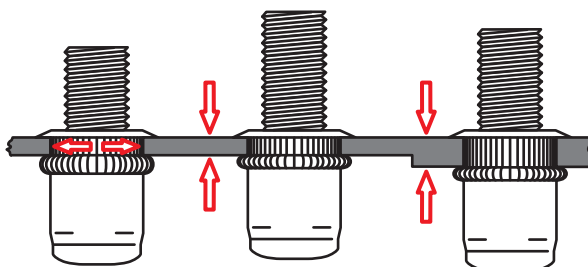
The A-S Series Stud is installed using AVK's ARO brand pneumatic tools or AVK's SPP™ pneumatic/hydraulic tools. These tools can be located at any position on your assembly line. The A-S Series Stud can be installed either before or after finish.



SPINWALL TECHNOLOGY™

HOW HOLE FILL WORKS FOR YOU

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



The installation tool then continues to install the stud forming a backside flange even in variable thickness material **WITHOUT ADJUSTMENT.**

DESIGN BENEFITS

- **PROTRUDING STUD** allows component parts to be located on the stud until final assembly is accomplished with a mating nut.
- **EXCEPTIONAL TORQUE STRENGTH** is achieved as the stud's knurled body expands **FILLING THE HOLE.**
- **QUALITY INSTALLATIONS** even in variable thickness materials are assured by AVK's spin/spin ARO pneumatic or AVK's pneumatic/hydraulic SPP2 Tool™.
- **ELIMINATE PAINT MASKING** procedures as required with weld or clinch studs. The A-S Series Stud can be installed after painting.
- **SUPERIOR CORROSION RESISTANCE** is provided by our standard zinc/yellow trivalent finish (120 hours. Salt spray to white corrosion). Alternative finishes are available.
- **AVAILABLE** in Steel 1010/1008 shell - Steel 1038 threaded stud.

ADDITIONAL DESIGN TYPES

SEALED HEAD

A PVC foam seal is bonded to the underside of the head and when installed provides a weather tight seal. Note that the addition of a seal reduces the parts grip range. Contact an AVK Sales Representative for more information.



WEDGE HEAD

The addition of wedges under the head provides even greater torque capability, especially in soft or thin materials, and is excellent for electrical grounding applications. Contact an AVK Sales Representative for more information.



HEX BODY

The hex shell offers exceptional resistance to spinning once installed. Also available in full body hex version. Contact an AVK Sales Representative for more information.



DOG POINT

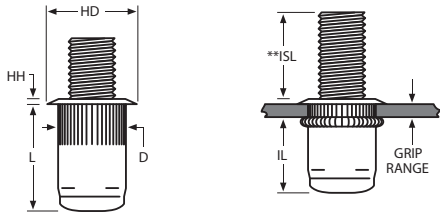
An optional Dog-Point provides ease in installing mating hardware and reduces the possibility of cross-threading. AVK offers Dog-Points in a variety of configurations. Contact an AVK Sales Representative for more information.



UNIFIED (INCH) AND METRIC THREAD SIZES



STUD
CAPTIVE THREADED STUD



**NOTE: The ISL Dimension shown below is the height of the installed stud at max grip. The height of the stud will increase if it is installed into thinner material. To calculate actual ISL use this formula: Max grip – actual grip + ISL = Actual ISL

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

THREAD SIZE	THREAD CALL OUT	GRIP RANGE	GRIP CALL OUT	STUD LENGTHS**			HOLE SIZE +.006 / -.000	HD ±.010 ±.025*	HH ±.003	L ±.020	D MAX.	IL MAX.
				ISL	ISL	ISL						
				CALL OUT	CALL OUT	CALL OUT						
6-32 UNC	632	.020-.080	80	.500 500	.625 625	.750 750	17/64 (.2656)	.390	.030	.485	.265	.360
6-32 UNC	632	.080-.130	130	.450 400	.575 575	.700 700	17/64 (.2656)	.390	.030	.535	.265	.360
8-32 UNC	832	.020-.080	80	.500 500	.625 625	.750 750	17/64 (.2656)	.390	.030	.485	.265	.360
8-32 UNC	832	.080-.130	130	.450 400	.575 575	.700 700	17/64 (.2656)	.390	.030	.535	.265	.360
10-24 UNC	1024	.020-.130	130	.500 500	.625 625	.750 750	19/64 (.2969)	.415	.030	.545	.296	.380
10-24 UNC	1024	.130-.225	225	.405 405	.530 530	.655 655	19/64 (.2969)	.415	.030	.655	.296	.380
10-32 UNF	1032	.020-.130	130	.500 500	.625 625	.750 750	19/64 (.2969)	.415	.030	.545	.296	.380
10-32 UNF	1032	.130-.225	225	.405 405	.530 530	.655 655	19/64 (.2969)	.415	.030	.655	.296	.380
1/4-20 UNC	420	.027-.165	165	.625 625	.8125 8125	1.000 1000	25/64 (.3906)	.500	.030	.670	.390	.465
1/4-20 UNC	420	.165-.260	260	.530 530	.7175 7175	.905 905	25/64 (.3906)	.500	.030	.770	.390	.465
5/16-18 UNC	518	.027-.150	150	.625 625	.875 875	1.125 1125	17/32 (.5312)	.685*	.035	.810	.530	.600
5/16-18 UNC	518	.150-.312	312	.463 463	.713 713	.963 963	17/32 (.5312)	.685*	.035	.925	.530	.555
3/8-16 UNC	616	.027-.150	150	.750 750	1.000 1000	1.250 1250	17/32 (.5312)	.685*	.035	.810	.530	.600
3/8-16 UNC	616	.150-.312	312	.588 588	.838 838	1.088 1088	17/32 (.5312)	.685*	.035	.925	.530	.535

THREAD SIZE	THREAD CALL OUT	GRIP RANGE	GRIP CALL OUT	STUD LENGTHS**			HOLE SIZE +.015 / -.000	HD ±0,25 ±0,64*	HH ±0,08	L ±0,50	D MAX.	IL MAX.
				ISL	ISL	ISL						
				CALL OUT	CALL OUT	CALL OUT						
M4 x 0,7 ISO	470	0,50 - 2,00	2.0	12,0 12	15,0 15	20,0 20	6,75	9,91	0,76	12,32	6,73	9,15
M4 x 0,7 ISO	470	2,00 - 3,30	3.3	10,7 10,7	13,7 13,7	18,7 18,7	6,75	9,91	0,76	13,59	6,73	9,15
M5 x 0,8 ISO	580	0,50 - 3,30	3.3	12,0 12	15,0 15	20,0 20	7,60	10,54	0,76	13,84	7,52	9,65
M5 x 0,8 ISO	580	3,30 - 5,70	5.7	9,6 9,6	12,6 12,6	17,6 17,6	7,60	10,54	0,76	16,64	7,52	9,65
M6 x 1,0 ISO	610	0,70 - 4,20	4.2	15,0 15	20,0 20	25,0 25	10,00	12,70	0,76	17,02	9,91	11,81
M6 x 1,0 ISO	610	4,20 - 6,60	6.6	12,6 12,6	17,6 17,6	22,6 22,6	10,00	12,70	0,76	19,56	9,91	11,81
M8 x 1,25 ISO	8125	0,70 - 3,80	3.8	16,0 16	22,0 22	28,0 28	13,50	17,40*	0,89	20,57	13,46	15,24
M8 x 1,25 ISO	8125	3,80 - 7,90	7.9	11,9 11,9	17,9 17,9	23,9 23,9	13,50	17,40*	0,89	23,50	13,46	14,10
M10 x 1,5 ISO	1015	0,70 - 3,80	3.8	20,0 20	25,0 25	30,0 30	13,50	17,40*	0,89	20,57	13,46	15,24
M10 x 1,5 ISO	1015	3,80 - 7,90	7.9	15,9 15,9	20,9 20,9	25,9 25,9	13,50	17,40*	0,89	23,50	13,46	13,60

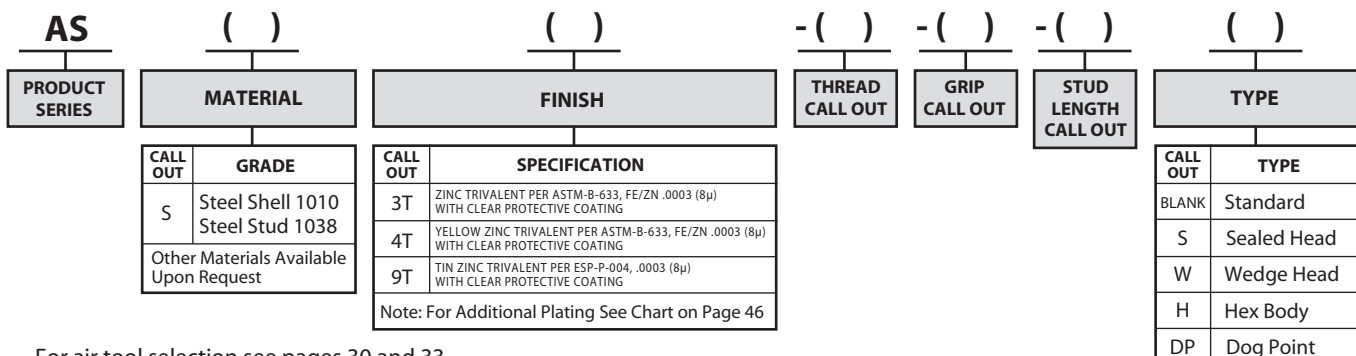
NOTE 1: Grip range can be affected by parent material density and actual hole size. AVK suggests trial installations to determine optimum grip.

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

**Dimensions in maximum grip condition.

PART NUMBERING SYSTEM

SAMPLE NUMBER: ASS3T-420-165-625



For air tool selection see pages 30 and 33