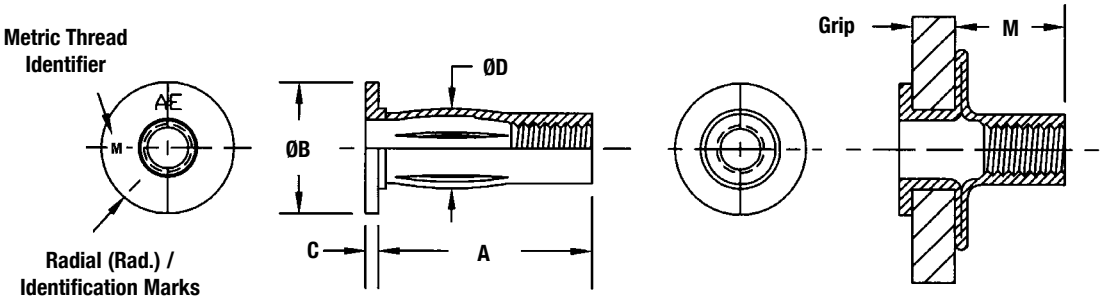


All dimensions are in inches.

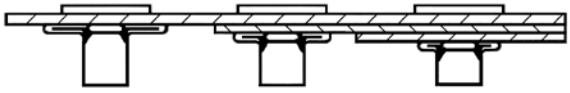
Thread Size	Part Number	Grip Range	Identification Mark	A ±.015	ØB Nom.	C Nom.	ØD Max.	M Max.	Hole Size In Sheet +.006 -.000
#10-32	AES10P175PBZYR	.020 - .175	None	.800	.500	.038	.310	.425	.312
#10-32	AES10P320PBZYR	.175 - .320	1 Rad.	.940	.500	.038	.310	.425	.312
1/4-20	AES25P280PBZYR	.020 - .280	None	1.000	.625	.057	.384	.520	.390
1/4-20	AES25P500PBZYR	.280 - .500	1 Rad.	1.235	.625	.057	.384	.520	.390
5/16-18	AES31P280PBZYR	.020 - .280	None	1.118	.750	.062	.495	.570	.500
5/16-18	AES31P500PBZYR	.280 - .500	1 Rad.	1.348	.750	.062	.495	.570	.500
3/8-16	AES37P280PBZYR	.020 - .280	None	1.270	.875	.088	.560	.605	.562
3/8-16	AES37P500PBZYR	.280 - .500	1 Rad.	1.490	.875	.088	.560	.605	.562

All dimensions are in millimeters.

Thread Size x Pitch	Part Number	Grip Range	Identification Mark	A ±0.38	ØB Nom.	C Nom.	ØD Max.	M Max.	Hole Size In Sheet +0.15
M6 x 1	AESM6P7.1PBZYR	0.50 - 7.1	None	25.4	15.88	1.45	9.75	13.2	9.91
M6 x 1	AESM6P12.7PBZYR	7.1 - 12.7	1 Rad.	31.34	15.88	1.45	9.75	13.2	9.91
M8 x 1.25	AESM8P7.1PBZYR	0.50 - 7.1	None	28.4	19.05	1.57	12.57	14.48	12.7
M8 x 1.25	AESM8P12.7PBZYR	7.1 - 12.7	1 Rad.	34.24	19.05	1.57	12.57	14.48	12.7
M10 x 1.5	AESM10P7.1PBZYR	0.50 - 7.1	None	32.3	22.2	2.24	14.23	15.4	14.27
M10 x 1.5	AES10P12.7PBZYR	7.1 - 12.7	1 Rad.	37.8	22.2	2.24	14.23	15.4	14.27

NOTE: The Atlas® spin-spin or spin-pull tool can be used to install pre-bulbed inserts. Material hardness will affect the published grip ranges. Trial installations of this product in your application are recommended. We will be happy to provide samples for this purpose.

**Pre-bulbed inserts require less installation load than straight shank and require slightly larger mounting hole size.*



Installs into single, variable, or multiple thickness materials.

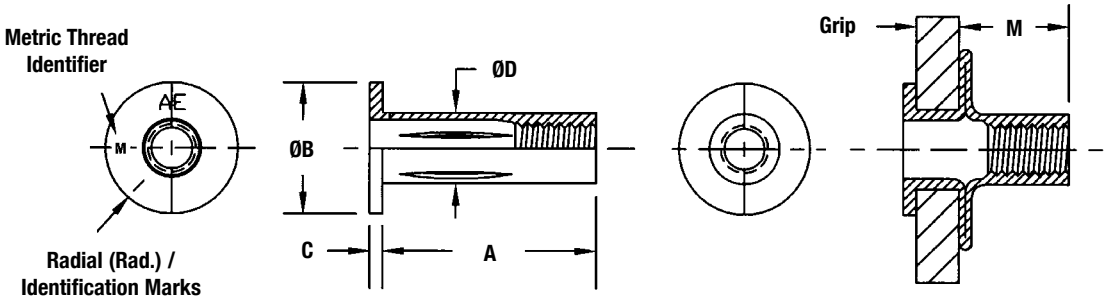
MATERIAL & FINISH SPECIFICATIONS

Type	Threads	Material	Standard Finish
AE	Unified, 2B per ASME B1.1 Metric, 6H per ASME B1.13M	Low Carbon Steel, C-1008 or C-1010, or equivalent	Zinc Yellow Plate per ASTM B 633, Fe/Zn 8, Type II

Part Number Designation

AE	S	25	-	P	-	280	PB	ZYR
Type	Material	Thread Code		Plus+Tite Designation		Max. Grip	Pre-bulbed Designation	Finish

SEE PAGE 35 FOR MORE DETAIL



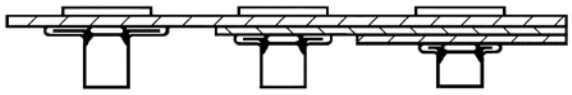
All dimensions are in inches.

Thread Size	Part Number	Grip Range	Identification Mark	A ±.015	ØB Nom.	C Nom.	ØD Max.	M Max.	Hole Size In Sheet +.006 -.000
#10-32	AES10P175ZYR	.020 - .175	None	.781	.500	.038	.272	.440	.273
#10-32	AES10P320ZYR	.175 - .320	1 Rad.	.921	.500	.038	.272	.440	.273
1/4-20	AES25P280ZYR	.020 - .280	None	1.058	.625	.057	.346	.505	.347
1/4-20	AES25P500ZYR	.280 - .500	1 Rad.	1.292	.625	.057	.346	.505	.347
5/16-18	AES31P280ZYR	.020 - .280	None	1.203	.750	.062	.437	.570	.438
5/16-18	AES31P500ZYR	.280 - .500	1 Rad.	1.437	.750	.062	.437	.570	.438
3/8-16	AES37P280ZYR	.020 - .280	None	1.306	.875	.088	.514	.605	.515
3/8-16	AES37P500ZYR	.280 - .500	1 Rad.	1.525	.875	.088	.514	.605	.515

All dimensions are in millimeters.

Thread Size x Pitch	Part Number	Grip Range	Identification Mark	A ±0.38	ØB Nom.	C Nom.	ØD Max.	M Max.	Hole Size In Sheet +0.15
M6 x 1	AESM6P7.1ZYR	0.50 - 7.1	None	26.9	15.9	1.5	8.79	12.8	8.8
M6 x 1	AESM6P12.7ZYR	7.1 - 12.7	1 Rad.	32.8	15.9	1.5	8.79	12.8	8.8
M8 x 1.25	AESM8P7.1ZYR	0.50 - 7.1	None	30.5	19	1.57	11.1	14.5	11.11
M8 x 1.25	AESM8P12.7ZYR	7.1 - 12.7	1 Rad.	36.5	19	1.57	11.1	14.5	11.11
M10 x 1.5	AESM10P7.1ZYR	0.50 - 7.1	None	33.2	22.2	2.24	13.06	15.8	13.07
M10 x 1.5	AES10P12.7ZYR	7.1 - 12.7	1 Rad.	38.7	22.2	2.24	13.06	15.8	13.07

NOTE: The Atlas® spin-pull tool is recommended to install straight shank inserts. Material hardness will affect the published grip ranges. Trial installations of this product in your application are recommended. We will be happy to provide samples for this purpose.



Installs into single, variable, or multiple thickness materials.

MATERIAL & FINISH SPECIFICATIONS

Type	Threads	Material	Standard Finish
AE	Unified, 2B per ASME B1.1 Metric, 6H per ASME B1.13M	Low Carbon Steel, C-1008 or C-1010, or equivalent	Zinc Yellow Plate per ASTM B 633, Fe/Zn 8, Type II

Part Number Designation

AE S 25 - P - 280 ZYR

AE: Type
S: Material
25: Thread Code
P: Plus+Tite Designation
280: Max. Grip
ZYR: Finish

SEE PAGE 35 FOR MORE DETAIL