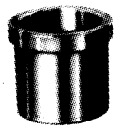


STANDARD HEAD PRESS FIT DRILL BUSHINGS

ANSI TYPE H

Ground To Press Fit On O.D.

AND

ANSI TYPE HU

Ground Oversize +.0150/.0200 On O.D. For Customer Fitting.

Specify Letter U After ANSI Symbol.

For Extended Range Refer to Page 16.

For Extra Thinwall Refer to Page 30.

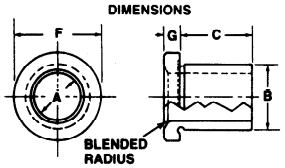
H-56-16 OR H-56-20 / 345

ANSI Standard Number

ANSI Equivalent Number

Price Code (Refer to Quantity Discount Schedule).

DIMENSIONS



BORE TOLERANCE

DRILL SIZE	I.D. TOLERANCE (OVERSIZE)
0135 - .2500	+.0001 to +.0004
.2510 - .7500	+.0001 to +.0005
.7510 - 1.5000	+.0002 to +.0006
1.5010 - up	+.0003 to +.0007

NOTES

- Counterbored Bushings

HOW TO ORDER

Specify By ANSI Number and Drill Hole Size.

"A" DRILL SIZE	"B" O.D.	GROUND O.D. LIMITS	F	G	"C" DIMENSION 1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1-1/4"	1-3/8"	1-1/2"	1-3/4"	2-1/8"	2-1/2"	3"
#80 .0135 to #70 .0280	5/32"	+.0010 +.0013	1/4	3/32	H-10-4 870	H-10-5 885	H-10-6 905	H-10-8 915										
#69 .0292 to 3/64 .0469	5/32"	+.0010 +.0013	1/4	3/32	H-10-4 770	H-10-5 780	H-10-6 800	H-10-8 820		H-10-12 • 900								
#55 .0520 to 1/16 .0625	5/32"	+.0010 +.0013	1/4	3/32	H-10-4 670	H-10-5 680	H-10-6 695	H-10-8 705		H-10-12 • 780								
#80 .0135 to #70 .0280	3/16"	+.0013 +.0016																
#69 .0292 to 3/64 .0469	3/16"	+.0013 +.0016																
#55 .0520 to 1/16 .0625	3/16"	+.0013 +.0016	5/16	3/32	H-12-4 670	H-12-5 680	H-12-6 695	H-12-8 705		H-12-12 • 780								
#52 .0635 to #39 .0995	3/16"	+.0013 +.0016	5/16	3/32	H-12-4 335	H-12-5 345	H-12-6 360	H-12-8 370		H-12-12 • 425								
#80 .0135 to #70 .0280	13/64"	+.0010 +.0013	19/64	3/32	H-13-4 870	H-13-5 885	H-13-6 905	H-13-8 915										
#69 .0292 to 3/64 .0469	13/64"	+.0010 +.0013	19/64	3/32	H-13-4 770	H-13-5 780	H-13-6 800	H-13-8 820		H-13-12 • 900								
#55 .0520 to 1/16 .0625	13/64"	+.0010 +.0013	19/64	3/32	H-13-4 670	H-13-5 680	H-13-6 695	H-13-8 705		H-13-12 • 780	H-13-16 • 890							
#52 .0635 to #39 .0995	13/64"	+.0010 +.0013	19/64	3/32	H-13-4 355	H-13-5 365	H-13-6 380	H-13-8 390		H-13-12 • 445	H-13-16 • 565							
#40 .0980 to 9/64 .1406	1/4"	+.0013 +.0016	23/64	3/32	H-16-4 315	H-16-5 330	H-16-6 350	H-16-8 355	H-16-10 395	H-16-12 435	H-16-16 580		H-16-22 775	H-16-24 855				
1/8 .1250 to #10 .1935	5/16"	+.0013 +.0016	27/64	1/8	H-20-4 260	H-20-5 275	H-20-6 290	H-20-8 295	H-20-10 305	H-20-12 305	H-20-16 365		H-20-22 595	H-20-24 715	H-20-28 785			
#10 .1935 to #1 .2280	3/8"	+.0013 +.0016	1/2	3/32	H-24-4 235	H-24-5 245	H-24-6 260	H-24-8 265	H-24-10 275	H-24-12 280	H-24-16 325							
3/16 "F" .1875 to .2570	13/32"	+.0013 +.0016	1/2	5/32	H-26-4 235	H-26-5 245	H-26-6 260	H-26-8 265		H-26-12 280	H-26-16 325		H-26-22 385	H-26-24 425	H-26-28 445			
"A" "L" .2340 to .2900	7/16"	+.0014 +.0017	9/16	3/32	H-28-4 235	H-28-5 245	H-28-6 260	H-28-8 265	H-28-10 275	H-28-12 280	H-28-16 325							
3/16 "O" .1875 to .3160	1/2"	+.0014 +.0017	39/64	7/32	H-32-4 235	H-32-5 245	H-32-6 260	H-32-8 265		H-32-12 280	H-32-16 325		H-32-22 385	H-32-24 425	H-32-28 445			
"M" .2950 to 11/32 .3437	9/16"	+.0014 +.0017	11/16	3/32	H-36-4 260	H-36-5 230	H-36-6 245	H-36-8 245	H-36-10 255	H-36-12 260	H-36-16 280							
5/16 .3125 to 7/16 .4375	5/8"	+.0014 +.0017	51/64	7/32	H-40-4 260	H-40-5 230	H-40-6 245	H-40-8 245	H-40-10 255	H-40-12 260	H-40-16 280	H-40-20 345	H-40-22 365	H-40-24 395	H-40-28 415	H-40-34 480		
5/16 .3125 to 17/32 .5312	3/4"	+.0015 +.0018	59/64	7/32	H-48-4 280	H-48-5 250	H-48-6 260	H-48-8 260	H-48-10 270	H-48-12 280	H-48-16 295	H-48-20 355	H-48-22 375	H-48-24 405	H-48-28 420	H-48-34 490	H-48-40 920	
1/2 .5000 to 21/32 .6562	7/8"	+.0015 +.0018	1-7/64	1/4			H-56-6 305	H-56-8 305	H-56-10 310	H-56-12 310	H-56-16 330	H-56-20 345	H-56-22 355	H-56-24 395	H-56-28 435	H-56-34 490	H-56-40 585	
1/2 .5000 to 49/64 .7656	1"	+.0015 +.0018	1-15/64	5/16				H-64-8 315		H-64-12 320	H-64-16 340		H-64-22 370	H-64-24 425	H-64-28 475	H-64-34 550	H-64-40 630	H-64-48 980
3/4 .7500 to 7/8 .8750	1-1/8"	+.0017 +.0020	1-5/16	3/16														
55/64 .8594 to 15/16 .9375	1-1/4"	+.0017 +.0020	1-1/2	1/4				H-80-8 495	H-80-10 475	H-80-12 450	H-80-16 495	H-80-20 550		H-80-24 590	H-80-28 630			
5/8 .6250 to 1-1/32 1.0312	1-3/8"	+.0018 +.0022	1-39/64	3/8				H-88-8 495		H-88-12 450	H-88-16 495		H-88-22 550	H-88-24 605	H-88-28 630	H-88-34 710	H-88-40 795	H-88-48 1110
1" 1.0000 to 1-1/8 1.1250	1-1/2"	+.0018 +.0022	1-3/4	1/4														
1" 1.0000 to 1-25/64 1.3906	1-3/4"	+.0018 +.0022	1-63/64	3/8						H-112-12 660	H-112-16 595		H-112-22 660	H-112-24 720	H-112-28 720	H-112-34 815	H-112-40 895	H-112-48 1260
1-3/8 1.3750 to 1-49/64 1.7656	2-1/4"	+.0018 +.0022	2-31/64	3/8							H-144-16 745		H-144-22 825	H-144-24 930	H-144-28 930	H-144-34 1020	H-144-40 1120	H-144-48 1410

COUNTERBORED BUSHINGS

- Small hole sizes with long lengths will be counterbored; providing a coolant well, chip clearance, and correct drill bearing surface.

I.D. SIZE	DRILL BEARING
.0135 - .0625	3/8"
.0626 - .0936	1/2"
.0937 & Above	No Counterbore

Note: Minimum counterbore depth 1/4 inch.

Counterbored bushings can be supplied without counterbore at extra charge.

STANDARD HEADLESS PRESS FIT DRILL BUSHINGS

ANSI TYPE P

Ground To Press Fit On O.D.

AND

ANSI TYPE PU

Ground Oversize +.0150/.0200 On O.D. For Customer Fitting.

Specify Letter U After ANSI Symbol.

For Extended Range Refer to Page 12.

For Extra Thinwall Refer to Page 30.

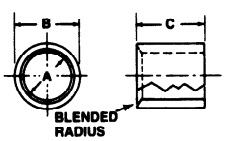
P-56-16 OR P-56-20 / 360

ANSI Standard Number

ANSI Equivalent Number

Price Code (Refer to Quantity Discount Schedule).

DIMENSIONS



BORE TOLERANCE

DRILL SIZE	I.D. TOLERANCE (OVERSIZE)
.0135 - .2500	+.0001 to +.0004
.2510 - .7500	+.0001 to +.0005
.7510 - 1.5000	+.0002 to +.0006
1.5010 - up	+.0003 to +.0007

NOTES

- Counterbored Bushings

HOW TO ORDER

Specify By ANSI Number and Drill Hole Size.

"A" DRILL SIZE	"B" O.D.	GROUND O.D. LIMITS	"C" DIMENSION 1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1-1/4"	1-3/8"	1-1/2"	1-3/4"	2"	2-1/8"	2-1/4"	2-1/2"	3"
#80 .0135 to #70 .0280	5/32"	+.0010 +.0013	P-10-4 830	P-10-5 865	P-10-6 885	P-10-8 900												
#69 .0292 to 3/64 .0469	5/32"	+.0010 +.0013	P-10-4 735	P-10-5 765	P-10-6 780	P-10-8 795		P-10-12 • 865										
#55 .0520 to 1/16 .0625	5/32"	+.0010 +.0013	P-10-4 640	P-10-5 665	P-10-6 680	P-10-8 690		P-10-12 • 750										
#80 .0135 to #70 .0280	3/16"	+.0013 +.0016																
#69 .0292 to 3/64 .0469	3/16"	+.0013 +.0016	P-12-4 735	P-12-5 765	P-12-6 780	P-12-8 795	P-12-10 • 830	P-12-12 • 865										
#55 .0520 to 1/16 .0625	3/16"	+.0013 +.0016	P-12-4 640	P-12-5 665	P-12-6 680	P-12-8 690	P-12-10 • 720	P-12-12 • 750										
#52 .0635 to #39 .0995	3/16"	+.0013 +.0016	P-12-4 275	P-12-5 310	P-12-6 325	P-12-8 335	P-12-10 355	P-12-12 • 370										
#80 .0135 to #70 .0280	13/64"	+.0010 +.0013	P-13-4 830	P-13-5 865	P-13-6 885	P-13-8 900												
#69 .0292 to 3/64 .0469	13/64"	+.0010 +.0013	P-13-4 735	P-13-5 765	P-13-6 780	P-13-8 795		P-13-12 • 865										
#55 .0520 to 1/16 .0625	13/64"	+.0010 +.0013	P-13-4 640	P-13-5 665	P-13-6 680	P-13-8 690		P-13-12 • 750	P-13-16 • 850									
#52 .0635 to #39 .0995	13/64"	+.0010 +.0013	P-13-4 275	P-13-5 310	P-13-6 325	P-13-8 335		P-13-12 • 370	P-13-16 • 405		P-13-22 650							
#40 .0980 to 9/64 .1406	1/4"	+.0013 +.0016	P-16-4 255	P-16-5 270	P-16-6 290	P-16-8 305	P-16-10 325	P-16-12 345	P-16-16 385		P-16-22 600	P-16-24 640	P-16-28 680					
1/8 .1250 to #10 .1935	5/16"	+.0013 +.0016	P-20-4 210	P-20-5 225	P-20-6 235	P-20-8 240	P-20-10 250	P-20-12 260	P-20-16 315		P-20-22 405	P-20-24 485	P-20-28 530					
#10 .1935 to #1 .2280	3/8"	+.0013 +.0016	P-24-4 185	P-24-5 190	P-24-6 205	P-24-8 210	P-24-10 220	P-24-12 230	P-24-16 270									
3/16 "F" .1875 to .2570	13/32"	+.0013 +.0016	P-26-4 185	P-26-5 190	P-26-6 205	P-26-8 210		P-26-12 230	P-26-16 270		P-26-22 305	P-26-24 360	P-26-28 385		P-26-34 765			
"A" "L" .2340 to .2900	7/16"	+.0014 +.0017	P-28-4 185	P-28-5 190	P-28-6 205	P-28-8 210	P-28-10 220	P-28-12 230	P-28-16 270									
3/16 "O" .1875 to .3160	1/2"	+.0014 +.0017	P-32-4 185	P-32-5 190	P-32-6 205	P-32-8 210	P-32-10 230	P-32-12 230	P-32-16 270		P-32-22 305	P-32-24 360	P-32-28 385		P-32-34 765			
"M" .2950 to 11/32 .3437	9/16"	+.0014 +.0017	P-36-4 210	P-36-5 185	P-36-6 195	P-36-8 195	P-36-10 205	P-36-12 210	P-36-16 225									
5/16 .3125 to 7/16 .4375	5/8"	+.0014 +.0017	P-40-4 210	P-40-5 185	P-40-6 195	P-40-8 195	P-40-10 205	P-40-12 210	P-40-16 225	P-40-20 275	P-40-22 300	P-40-24 335	P-40-28 345		P-40-34 415		P-40-40 765	
5/16 .3125 to 17/32 .5312	3/4"	+.0015 +.0018	P-48-4 225	P-48-5 190	P-48-6 210	P-48-8 210	P-48-10 220	P-48-12 225	P-48-16 240	P-48-20 295	P-48-22 305	P-48-24 340	P-48-28 355		P-48-34 420		P-48-40 765	
1/2 .5000 to 21/32 .6562	7/8"	+.0015 +.0018		P-56-5 275	P-56-6 285	P-56-8 255	P-56-10 260	P-56-12 260	P-56-16 275	P-56-20 300	P-56-22 300	P-56-24 330	P-56-28 360		P-56-34 415		P-56-40 475	P-56-48 800
1/2 .5000 to 49/64 .7656	1"	+.0015 +.0018				P-64-8 260	P-64-10 285	P-64-12 285	P-64-16 280	P-64-20 300	P-64-22 300	P-64-24 335	P-64-28 370		P-64-34 415		P-64-40 480	P-64-48 800
49/64 .7656 to 27/32 .8437	1-1/8"	+.0017 +.0020				P-72-8 405	P-72-10 375	P-72-12 345	P-72-16 405	P-72-20 450		P-72-24 480	P-72-28 530					
55/64 .8594 to 15/16 .9375	1-1/4"	+.0017 +.0020				P-80-8 406	P-80-10 375	P-80-12 345	P-80-16 405	P-80-20 450		P-80-24 480	P-80-28 530	P-80-32 610				
5/8 .6250 to 1-1/32 1.0312	1-3/8"	+.0018 +.0022				P-88-8 405	P-88-10 345	P-88-12 345	P-88-16 405	P-88-20 440	P-88-22 450	P-88-24 480	P-88-28 530	P-88-32 610	P-88-34 610		P-88-40 680	P-88-48 950
1-1/64 1.0156 to 1-1/8 1.1250	1-1/2"	+.0018 +.0022					P-96-10 505	P-96-12 505	P-96-16 450	P-96-20 505		P-96-24 540	P-96-28 570	P-96-32 665		P-96-36 710		
1" 1.0000 to 1-25/64 1.3906	1-3/4"	+.0018 +.0022						P-112-12 505	P-112-16 450	P-112-20 505	P-112-22 505	P-112-24 570	P-112-28 570	P-112-32 645	P-112-34 665		P-112-40 750	P-112-48 1100
1-3/8 1.3750 to 1-49/64 1.7656	2-1/4"	+.0018 +.0022							P-144-16 565		P-144-22 625	P-144-24 690	P-144-28 690		P-144-34 795		P-144-40 875	P-144-48 1250

COUNTERBORED BUSHINGS

- Small hole sizes with long lengths will be counterbored; providing a coolant well, chip clearance, and correct drill bearing surface.

I.D. SIZE	DRILL BEARING
.0135 - .0625	3/8"
.0626 - .0936	1/2"
.0937 & Above	No Counterbore

Note: Minimum counterbore depth 1/4 inch.

Counterbored bushings can be supplied without counterbore at extra charge.