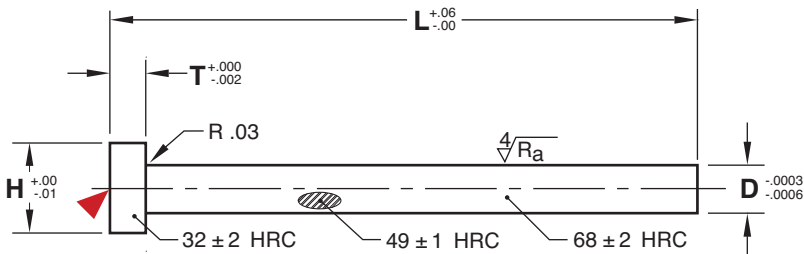


EJECTOR PINS
BLACK NITRIDE

Progressive's Die Cast Ejector Pins are proven to reduce hole damage and the frequency of replacing galled or damaged pins.



M H-13 **H** Core: 48-50 HRC, Surface: 66-70 HRC **S** Black Nitride (SBN) ▶ CAD insertion point

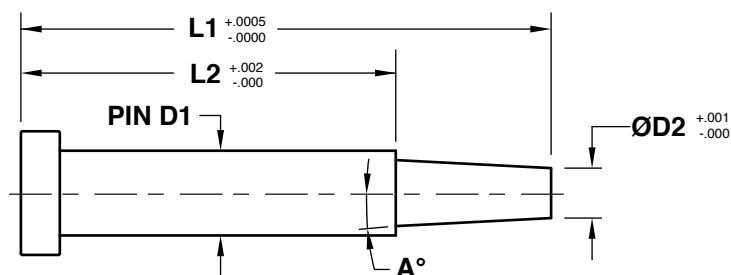
D Nominal Pin Diameter	H	T	L=10"		L=14"		L=18"		L=25"	
			D Standard	D .005 Oversize	D Standard	D .005 Oversize	D Standard	D .005 Oversize	D Standard	D .005 Oversize
7/64	.25	.125	EP109L10-BN	EP114L10-BN	—	—	—	—	—	—
1/8	.25	.125	EP125L10-BN	EP130L10-BN	—	—	—	—	—	—
9/64	.25	.125	EP141L10-BN	—	EP141L14-BN	EP146L14-BN	—	—	—	—
5/32	.28	.156	EP156L10-BN	EP161L10-BN	EP156L14-BN	EP161L14-BN	—	—	—	—
3/16	.37	.187	EP187L10-BN	EP192L10-BN	EP187L14-BN	EP192L14-BN	—	—	—	—
7/32	.40	.187	EP219L10-BN	EP224L10-BN	EP219L14-BN	EP224L14-BN	—	—	—	—
1/4	.43	.187	EP250L10-BN	EP255L10-BN	—	—	EP250L18-BN	EP255L18-BN	EP250L25-BN	—
9/32	.43	.250	EP281L10-BN	EP286L10-BN	—	—	EP281L18-BN	EP286L18-BN	EP281L25-BN	—
5/16	.50	.250	EP312L10-BN	EP317L10-BN	—	—	EP312L18-BN	EP317L18-BN	EP312L25-BN	EP317L25-BN
3/8	.62	.250	EP375L10-BN	EP380L10-BN	—	—	EP375L18-BN	EP380L18-BN	EP375L25-BN	EP380L25-BN
7/16	.68	.250	EP437L10-BN	EP442L10-BN	—	—	EP437L18-BN	EP442L18-BN	EP437L25-BN	EP442L25-BN
1/2	.75	.250	EP500L10-BN	EP505L10-BN	—	—	EP500L18-BN	—	EP500L25-BN	EP505L25-BN
9/16	.81	.250	EP562L10-BN	—	—	—	EP562L18-BN	—	EP562L25-BN	—
5/8	.87	.250	EP625L10-BN	—	—	—	EP625L18-BN	—	EP625L25-BN	—

For additional diameters or lengths in Inch, DIN, or JIS Ejector Pins, contact Customer Service for a quotation.
Also contact Customer Service for a quotation on cut-to-length or keyed Ejector Pins with the Black Nitride treatment.

 For die-ready detail, refer to templates at www.procomps.com



CORE PINS BLACK NITRIDE



Black Nitride
for soldering
resistance



Finished Detail

Pin dimensions and specifications are shown in the chart below.

All unspecified inside corners = R.010

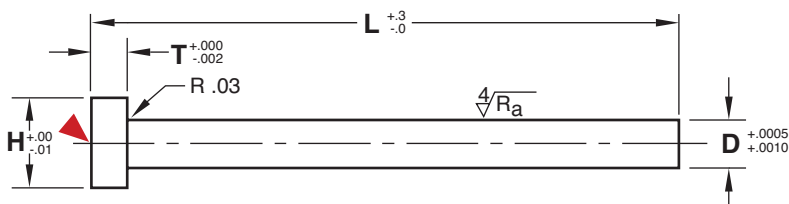
Angles ± .25°

To order, specify the dimensions for the variables as shown with the "-BN" Black Nitride suffix: CPHTH-D1-D2-L1-L2-A-BN

Ex: CPHTH-.500-.330-5.000-3.750-2-BN

For other made-to-order Core Pins with the Black Nitride treatment, contact Customer Service for a quotation.

BLANKS



M H-13 **H** 50-55 HRC

CAD insertion point

D Nominal Pin Dia.	H Head Dia.	T Head Thick.	L=3"	L=6"	L=10"	L=14"
3/32	.25	.125	CPH094L3	CPH094L6	CPH094L10	—
7/64	.25	.125	CPH109L3	CPH109L6	CPH109L10	—
1/8	.25	.125	CPH125L3	CPH125L6	CPH125L10	CPH125L14
9/64	.25	.125	CPH141L3	CPH141L6	CPH141L10	CPH141L14
5/32	.28	.156	CPH156L3	CPH156L6	CPH156L10	CPH156L14
11/64	.34	.187	CPH172L3	CPH172L6	CPH172L10	CPH172L14
3/16	.37	.187	CPH187L3	CPH187L6	CPH187L10	CPH187L14
13/64	.37	.187	CPH203L3	CPH203L6	CPH203L10	CPH203L14
7/32	.40	.187	CPH219L3	CPH219L6	CPH219L10	CPH219L14
15/64	.40	.187	—	CPH234L6	CPH234L10	—
1/4	.43	.187	CPH250L3	CPH250L6	CPH250L10	CPH250L14
9/32	.43	.250	CPH281L3	CPH281L6	CPH281L10	CPH281L14
5/16	.50	.250	CPH312L3	CPH312L6	CPH312L10	CPH312L14
11/32	.56	.250	CPH344L3	CPH344L6	CPH344L10	CPH344L14

D Nominal Pin Dia.	H Head Dia.	T Head Thick.	L=3"	L=6"	L=10"	L=14"
3/8	.62	.250	CPH375L3	CPH375L6	CPH375L10	CPH375L14
13/32	.68	.250	CPH406L3	CPH406L6	CPH406L10	CPH406L14
7/16	.68	.250	CPH437L3	CPH437L6	CPH437L10	CPH437L14
15/32	.75	.250	CPH469L3	CPH469L6	CPH469L10	CPH469L14
1/2	.75	.250	CPH500L3	CPH500L6	CPH500L10	CPH500L14
17/32	.75	.250	—	CPH531L6	CPH531L10	—
9/16	.81	.250	—	CPH562L6	CPH562L10	CPH562L14
5/8	.87	.250	—	CPH625L6	CPH625L10	CPH625L14
11/16	.93	.250	—	CPH687L6	CPH687L10	CPH687L14
3/4	1.00	.250	—	CPH750L6	CPH750L10	CPH750L14
13/16	1.125	.250	—	CPH812L6	CPH812L10	CPH812L14
7/8	1.125	.250	—	CPH875L6	CPH875L10	CPH875L14
1	1.25	.250	—	CPH1000L6	CPH1000L10	CPH1000L14

Note: Heads are annealed on 6", 10", and 14" lengths.

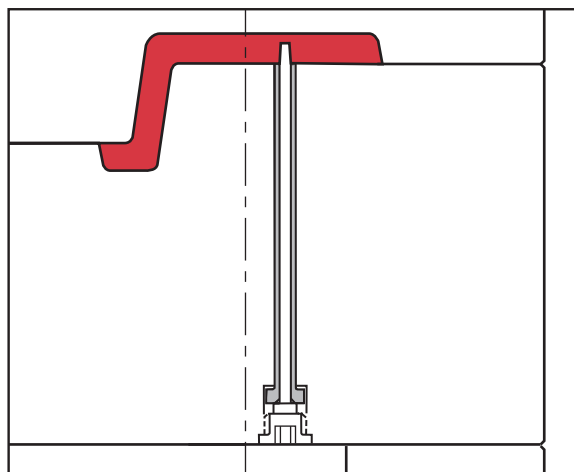
EJECTOR SLEEVES

STANDARD AND BLACK NITRIDE

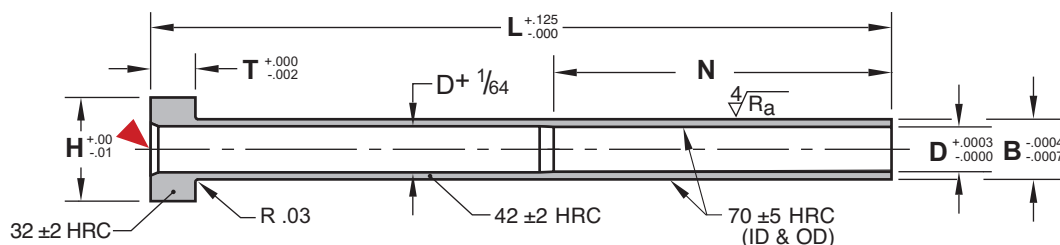


General Dimensions

N=1-3/4" for ES094 & ES125
 N=2-1/4" for ES156 and larger
 T=.187" for ES094 thru ES156
 T=.250" for ES187 and larger



Die Bushing Application



M H-13 **H** Core: 40-44 HRC, Surface: 65-75 HRC

CAD insertion point

D Nom. I.D.	B O.D.	H Head Dia.	L=3"	L=4"	L=5"	L=6"	L=7"	L=8"	L=9"	L=10"	L=11"	L=12"	L=13"	L=14"
3/32	.1875	.37	ES094L3	ES094L4	ES094L5	ES094L6	ES094L7	ES094L8	ES094L9	ES094L10	ES094L11	—	—	—
1/8	.2187	.40	ES125L3	ES125L4	ES125L5	ES125L6	ES125L7	ES125L8	ES125L9	ES125L10	ES125L11	—	—	—
5/32	.2500	.43	—	ES156L4	ES156L5	ES156L6	ES156L7	ES156L8	ES156L9	ES156L10	ES156L11	ES156L12	ES156L13	ES156L14
3/16	.3125	.50	—	ES187L4	ES187L5	ES187L6	ES187L7	ES187L8	ES187L9	ES187L10	ES187L11	ES187L12	ES187L13	ES187L14
7/32	.3437	.56	—	ES219L4	ES219L5	ES219L6	ES219L7	ES219L8	ES219L9	ES219L10	ES219L11	ES219L12	ES219L13	ES219L14
1/4	.3750	.62	—	ES250L4	ES250L5	ES250L6	ES250L7	ES250L8	ES250L9	ES250L10	ES250L11	ES250L12	ES250L13	ES250L14
5/16	.4375	.68	—	ES312L4	ES312L5	ES312L6	ES312L7	ES312L8	ES312L9	ES312L10	ES312L11	ES312L12	ES312L13	ES312L14
3/8	.5000	.75	—	ES375L4	ES375L5	ES375L6	ES375L7	ES375L8	ES375L9	ES375L10	ES375L11	ES375L12	ES375L13	ES375L14
7/16	.6250	.87	—	ES437L4	ES437L5	ES437L6	ES437L7	ES437L8	ES437L9	ES437L10	ES437L11	ES437L12	ES437L13	ES437L14
1/2	.6875	.93	—	ES500L4	ES500L5	ES500L6	ES500L7	ES500L8	ES500L9	ES500L10	ES500L11	ES500L12	ES500L13	ES500L14
9/16	.7500	1.00	—	ES562L4	ES562L5	ES562L6	ES562L7	ES562L8	ES562L9	ES562L10	ES562L11	ES562L12	ES562L13	ES562L14
5/8	.8750	1.12	—	ES625L4	ES625L5	ES625L6	ES625L7	ES625L8	ES625L9	ES625L10	ES625L11	ES625L12	ES625L13	ES625L14
3/4	1.0000	1.25	—	ES750L4	ES750L5	ES750L6	ES750L7	ES750L8	ES750L9	ES750L10	ES750L11	ES750L12	ES750L13	ES750L14

Any standard Ejector Sleeve can be ordered with the Black Nitride treatment.

To order specify -BN at the end of the Ejector Sleeve item number from the chart above. Ex: ES437L7-BN.

Contact Customer Service for a quotation on cut-to-length or keyed Ejector Sleeves with the Black Nitride treatment.



For custom Sleeves, refer to templates at www.procomps.com.