

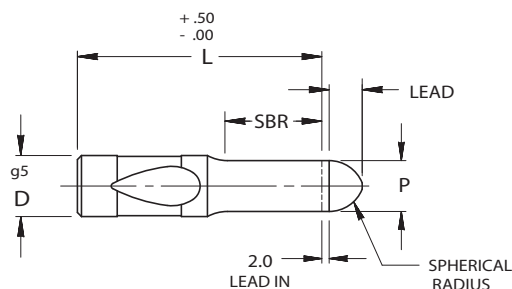
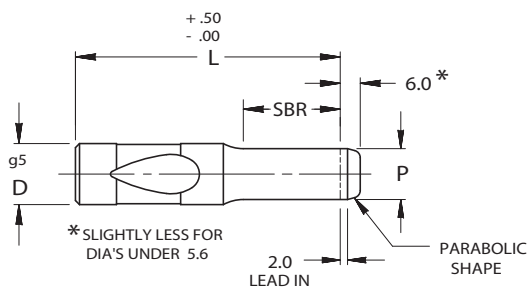
# BALL LOCK PILOTS

## HEAVY DUTY

STANDARD STYLE



BULLET NOSE STYLE



P DIM	LEAD
1.50-9.50	4
9.51-up	10

FOR STANDARD ALTERATIONS SEE PAGES 49-54.

CATALOG TYPE	SHANK DIA D	RANGE P	LENGTH "L"					
			71	80	90	100	110	125
MH_10	10	2.50 - 10.00	X	X	X	X	X	X
MH_13	13	5.00 - 13.00	X	X	X	X	X	X
MH_16	16	8.00 - 16.00	X	X	X	X	X	X
MH_20	20	12.00 - 20.00	X	X	X	X	X	X
MH_25	25	16.00 - 25.00		X	X	X	X	X
MH_32	32	24.00 - 32.00		X	X	X	X	X
MH_40	40	30.00 - 40.00		X	X	X	X	X

### Material

Steel: M2, RC 60-63

### Standard Point Tolerance

Round P  $\begin{matrix} +.01 \\ -.00 \end{matrix}$  .01 P to D

When P = D Shank Tolerances Apply

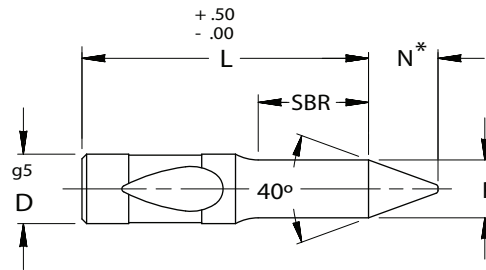
CATALOG TYPE	SHANK D	SBR		
		NAPMA STD	ALTERNATES	
			B	C
MH_10	10	19	10	—
MH_13	13	19	13	25
MH_16	16	19	13	25
MH_20	20	19	13	25
MH_25	25	19	13	25
MH_32	32	19	13	25
MH_40	40	25	19	30

L=71 SBR MAX=19

# BALL LOCK PILOTS

## HEAVY DUTY

LONG LEAD STYLE



\* N BECOMES 1.2 X P MIN  
WHEN P IS BELOW  
(SEE CHART)

FOR STANDARD ALTERATIONS SEE PAGES 49-54.

CATALOG TYPE	SHANK DIA D	RANGE P	N	P BELOW SEE NOTE*	LENGTH "L"						
					80	90	100	110	125	140	150
MHA 10	10	5.90 - 10.00	8	5.64	X	X	X	X	X		
MHA 13	13	9.90 - 13.00	10	7.11	X	X	X	X	X	X	
MHA 16	16	12.90 - 16.00	15	10.74	X	X	X	X	X	X	X
MHA 20	20	15.90 - 20.00	20	14.38	X	X	X	X	X	X	X
MHA 25	25	19.90 - 25.00	25	18.00	X	X	X	X	X	X	X
MHA 32	32	24.90 - 32.00	30	21.67	X	X	X	X	X	X	X
MHA 40	40	31.90 - 40.00	40	28.96	X	X	X	X	X	X	X

**Material**  
Steel: M2, RC 60-63

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**Standard Point Tolerance**

Round P  $\begin{matrix} +.01 \\ -.00 \end{matrix}$  ◎ .01 P to D

When P = D Shank Tolerances Apply

CATALOG TYPE	SHANK D	SBR		
		NAPMA STD	ALTERNATES	
			B	C
MHA 10	10	19	32	L MINUS 48
MHA 13	13	19	32	
MHA 16	16	25	38	
MHA 20	20	25	38	
MHA 25	25	25	38	
MHA 32	32	25	38	
MHA 40	40	30	45	