

# SHOULDER PILOTS



## PILOT

STANDARD STYLE

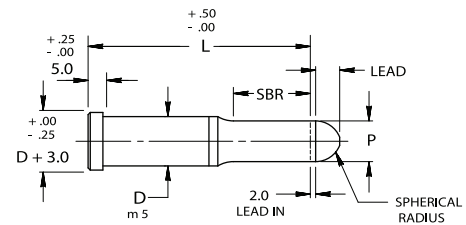
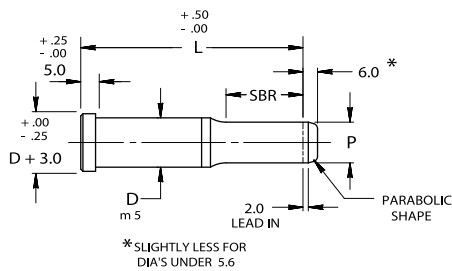


# MST

BULLET NOSE STYLE



# MSP



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	OVERALL LENGTH "L"										
			40	50	56	60	63	70	71	80	90	100	
MS_04	4	1.55 - 4.00	X	X	X	X	X	X	X	X	X	X	X
MS_05	5	1.55 - 5.00	X	X	X	X	X	X	X	X	X	X	X
MS_06	6	1.55 - 6.00		X	X	X	X	X	X	X	X	X	X
MS_08	8	2.45 - 8.00		X	X	X	X	X	X	X	X	X	X
MS_10	10	3.15 - 10.00		X	X	X	X	X	X	X	X	X	X
MS_13	13	4.95 - 13.00		X	X	X	X	X	X	X	X	X	X
MS_16	16	7.95 - 16.00		X	X	X	X	X	X	X	X	X	X
MS_20	20	9.95 - 20.00			X	X	X	X	X	X	X	X	X
MS_25	25	11.95 - 25.00			X	X	X	X	X	X	X	X	X
MS_32	32	15.95 - 32.00				X	X	X	X	X	X	X	X

### Material

Steel: M2, RC 60-63  
Heads RC 45-55

### Standard Point Tolerance

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

When P = D Shank Tolerances Apply

### Alternate Point Tolerance

**T2**

P TOLERANCE  $\begin{matrix} +.005 \\ -.000 \end{matrix}$   
P to D .008

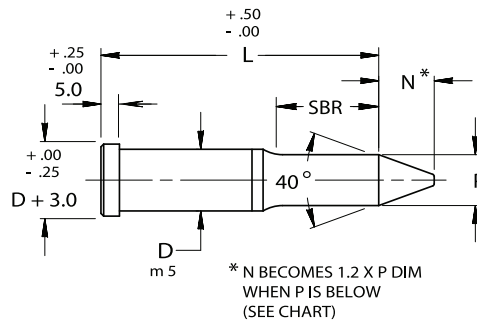
CATALOG TYPE	SHANK D	SBR		
		NAPMA STD	ALTERNATES	
			B	C
MS_04	4	8	10	—
MS_05	5	13	10	—
MS_06	6	13	10	—
MS_08	8	19	13	—
MS_10	10	19	13	25
MS_13	13	19	13	25
MS_16	16	19	13	25
MS_20	20	19	13	25
MS_25	25	19	13	25
MS_32	32	25	19	30

L=50 SBR MAX=13    L=60 SBR MAX=19  
L=56 SBR MAX=19    L=63 SBR MAX=25

# SHOULDER PILOTS

## PILOT

LONG LEAD STYLE



FOR STANDARD ALTERATIONS SEE PAGES 49-54.

CATALOG TYPE	SHANK DIA D	RANGE P	N	P BELOW SEE NOTE*	LENGTH "L"								
					63	70	71	80	90	100	110	125	140
MS_10	10	4.85 - 10.00	8	5.64	X	X	X	X	X	X	X		
MS_13	13	6.30 - 13.00	10	7.11	X	X	X	X	X	X	X	X	X
MS_16	16	9.95 - 16.00	15	10.74		X	X	X	X	X	X	X	X
MS_20	20	13.60 - 20.00	20	14.38		X	X	X	X	X	X	X	X
MS_25	25	17.25 - 25.00	25	18.00		X	X	X	X	X	X	X	X
MS_32	32	20.85 - 32.00	30	21.67			X	X	X	X	X	X	X

**Material**  
 Steel: M2, RC 60-63  
 Heads RC 45-55

**Standard Point Tolerance**

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

When P = D Shank Tolerances Apply

CATALOG TYPE	SHANK D	SBR	
		NAPMA	ALTERNATES
		STD	B
MS_10	10	19	25
MS_13	13	19	25
MS_16	16	19	25
MS_20	20	19	25
MS_25	25	19	25
MS_32	32	25	30

Alternate Point Tolerance **T2**

P TOLERANCE  $\begin{matrix} +.005 \\ -.000 \end{matrix}$

P to D .008  $\text{\textcircled{C}}$