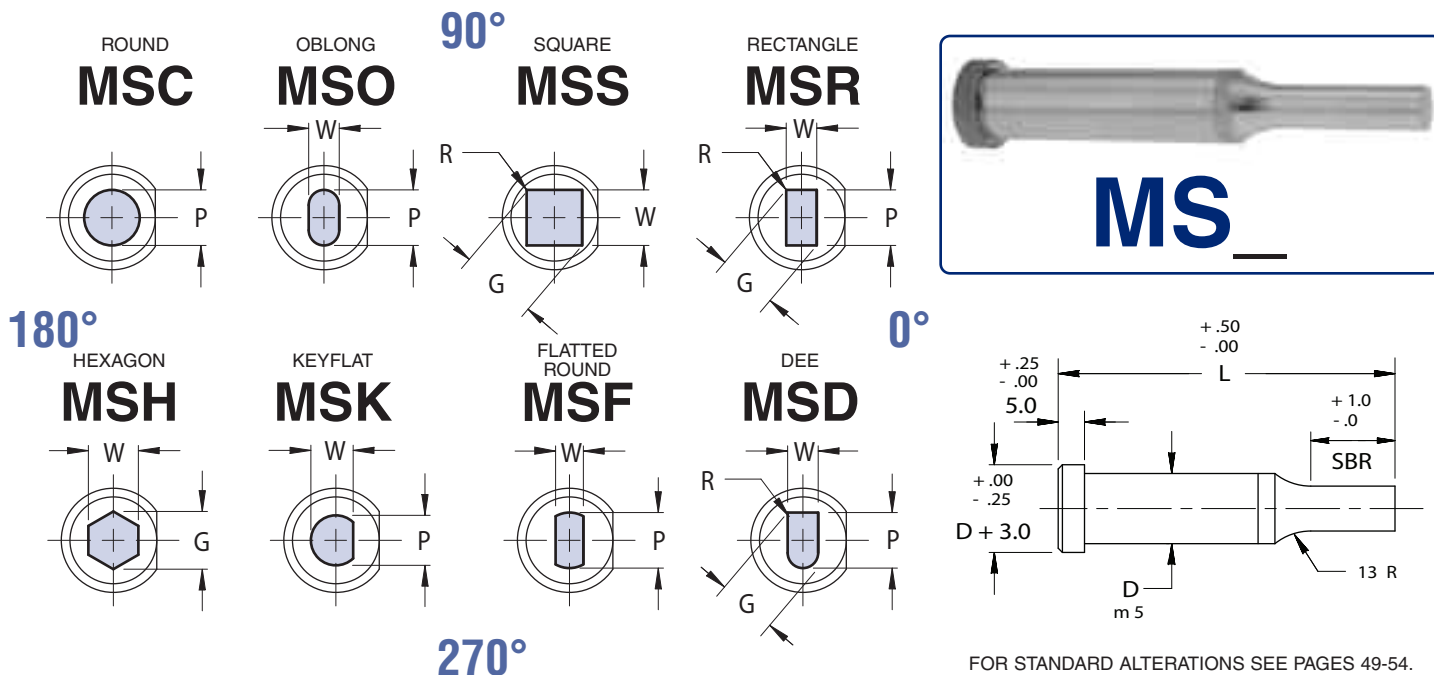


SHOULDER PUNCHES



SOLID



FOR STANDARD ALTERATIONS SEE PAGES 49-54.

VIEWS ARE SHOWN LOOKING THROUGH THE SHANK BUT DRAWN WITH SOLID LINES FOR CLARITY.

CATALOG TYPE	SHANK DIA D	ROUND	SHAPE		OVERALL LENGTH "L"										
		RANGE P	MIN W	MAX G/P	40	50	56	60	63	70	71	80	90	100	
MS_04	4	1.60 - 3.99	1.60	4.00	X	X	X	X	X	X	X	X	X	X	X
MS_05	5	1.60 - 4.99	1.60	5.00	X	X	X	X	X	X	X	X	X	X	X
MS_06	6	1.60 - 5.99	1.60	6.00		X	X	X	X	X	X	X	X	X	X
MS_08	8	2.50 - 7.99	2.50	8.00		X	X	X	X	X	X	X	X	X	X
MS_10	10	3.20 - 9.99	3.20	10.00		X	X	X	X	X	X	X	X	X	X
MS_13	13	5.00 - 12.99	4.50	13.00		X	X	X	X	X	X	X	X	X	X
MS_16	16	8.00 - 15.99	6.00	16.00		X	X	X	X	X	X	X	X	X	X
MS_20	20	10.00 - 19.99	8.00	20.00			X	X	X	X	X	X	X	X	X
MS_25	25	12.00 - 24.99	9.00	25.00			X	X	X	X	X	X	X	X	X
MS_32	32	16.00 - 31.99	10.00	32.00					X	X	X	X	X	X	X
MS_40	40	30.00 - 39.99	14.00	40.00								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

Shape P, W $\pm .01$.02 P to D

Alternate Point Tolerance **T2**

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

P to D $\begin{matrix} .008 \\ \text{circle with dot symbol} \end{matrix}$

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
MS_40	40	25	19	30

STANDARD FLAT LOCATION IS AT 0° AS SHOWN.
AVAILABLE AT 90°, 180°, 270°, FOR SAME ALTERATION PRICE.

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