

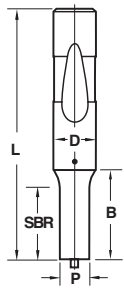


Inch / Metric
 Heavy Duty / Light Duty

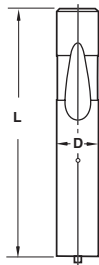
CUSTOMER: _____
 ORDERED BY: _____
 ADDRESS: _____
 CITY STATE ZIP

P.O.#: _____
 DATE: _____
 PHONE#: _____
 FAX#: _____

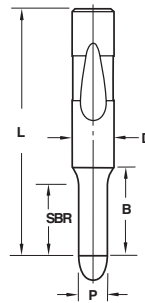
**JEKTOLE (J) OR
REGULAR (P) PUNCH**



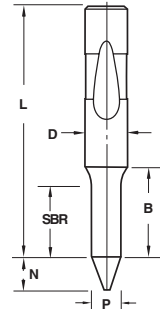
**JEKTOLE (JB) OR
REGULAR (PB) PUNCH
BLANK**



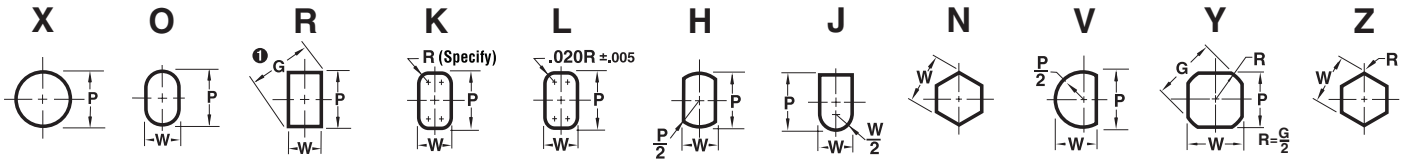
**REGULAR PILOT
(PT)**



**POSITIVE PICK-UP PILOT
(PA)**



STANDARD SHAPES



REFLECTED VIEW FOR PUNCHES / LAND END VIEW FOR DIE BUTTONS

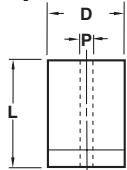
BODY DIMENSIONS

POINT DIMENSIONS

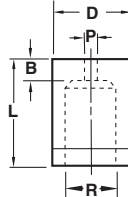
DET	QTY	MAT'L	D	H	T	B	SBR	L	EJECTOR	SHAPE	P	W	R	LOCATOR	NOTES

Punches & Dies Available In A2 - M2 - PS - PS4 - D2

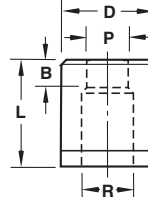
**EDM MATRIX BLANK
(ADU/KDU)**



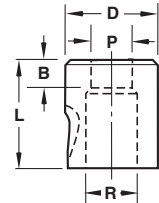
**EDM MATRIX BLANK
(ADE/KDE)**



**PRESS FIT MATRIX
(AD /KD)**



**BALL LOCK MATRIX
(CD /LD)**



BODY DIMENSIONS

ID SHAPE DIMENSIONS

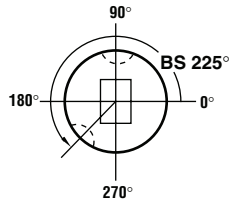
SLUG CONTROL

DET	QTY	MAT'L	D	H	T	L	TAPER C'BORE	SHAPE	P	W	R	B	LOCATOR	CLEARANCE	MATERIAL THICKNESS

Locking Devices—Flats vs. Dowel Slots

Orientation

The standard ball seat location is at 90°. Alternate locations of 0°, 180°, or 270° may be specified at no extra cost. Custom ball seat locations may be specified as “BS” and at the degree required counter-clockwise from 0°. (See drawing on right.)



Views

A plan view is used for the die button, and a reflected view is used for the punch. The reflected view, a mirror image (see p. 31, “Classified Shapes”), simplifies orientation: All locking devices are in the same position.



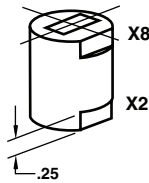
Identify as “reflected view” on the punch drawing.

How to Specify

This page shows the most common locking devices available for press-fit die buttons—single flat, double flat, and dowel. Select the type, then add the code to the component description. (See “how to order” box on right.)

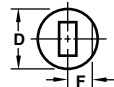
Single Flats X2, X5, X8, X9

The standard key flat locking device is at 0°. Specify “X2” (bottom) or “X8” (top) for die buttons. Alternate locations of 90°, 180°, or 270° may be specified at no additional cost. Specify “X2” or “X8” and the degree required. Example: X2—90°.



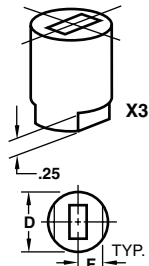
Custom Location

Specify “X5” (bottom) or “X9” (top) and the degree required counter-clockwise from 0°. Example: X5—135°.



Double Flats X3, X6

The double key flat locking device is at 0°. Specify “X3” for die buttons. Alternate locations of 90°, 180°, and 270° may be specified at no additional cost. Specify “X3” and the degree required. Example: X3—90°.



Custom Location

Specify “X6” for die buttons and the degree required counter-clockwise from 0°. Example: X6—135°.

F Dimension for Flats for Press-Fit Die Buttons

Body Dia.	25	37	50	62	75	87	100
F	.110	.165	.220	.270	.325	.380	.435
Body Dia.	125	150	175	200	225	250	275
F	.540	.650	.775	.900	1.025	1.150	1.275

Location Tolerance

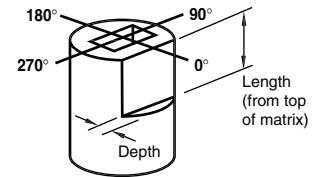
Flat		Dowel	
F	Radial	F	Radial
+ .0005	.001/ inch	+ .0005	0°-4'
- .0000		- .0000	

HOW TO ORDER

Specify:	Qty.	Type	D Code	P (or P&W)	Steel	Alteration
Example:	5	LAO	87-100	P.394, W.209	A2	X2
	9	LAR	50-125	P.275, W.092	M2	X83

Additional Flat For Punches and Die Buttons

The depth of the flat is taken from the shank, not the head, on punches.



	Code	Depth	Length
Standard Location	X81	.060	.500
	X82	.060	.625
	X83	.060	.750
	X84	.060	Full Length
	X85	.093	.500
	X86	.093	.625
	X87	.093	.750
	X88	.093	Full Length
	X89		Specify Dimensions
Custom Location	X91	.060	.500
	X92	.060	.625
	X93	.060	.750
	X94	.060	Full Length
	X95	.093	.500
	X96	.093	.625
	X97	.093	.750
	X98	.093	Full Length
	X99		Specify Dimensions

Dowel Slots X0, X1, X4, X7, X41, X71

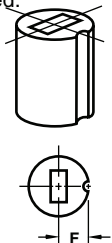
The standard dowel locking device is at 0°. Specify “X4” (.125 dowel) or “X41” (.1875 dowel) for die buttons. Specify “X0” (F=.5D) for die buttons only.

Alternate locations of 90°, 180°, or 270° may be specified at no additional cost. Specify “X0,” “X4,” or “X41” and the degree required.

Example: X4—90°.

Custom Location

Specify “X7” (.125 dowel) or “X71” (.1875 dowel) for die buttons. Specify “X1” (F=.5D) for die buttons only. Specify “X1,” “X7,” or “X71,” and the degree required counter-clockwise from 0°.



F Dimension for Dowels for Press-Fit Die Buttons

Body Dia.	25	31	37	43	50	62-275
X0, X1	.1250	.1562	.1875	.2188	.2500	D/2
X4, X7	.1625	.1875	.2125	.2375	.2625	D/2
X41, X71	.1938	.2188	.2438	.2688	.2938	D/2

Order example:

X0, X1, X4, & X7 — .1250 Dowel X41 & X71 — .1875 Dowel