

# Lathe Spindle Nose Identification Chart

Review the diagrams below to determine your spindle nose type. Analyze the corresponding chart and make the required measurements. Select the spindle nose size for your chuck or adapter plate.

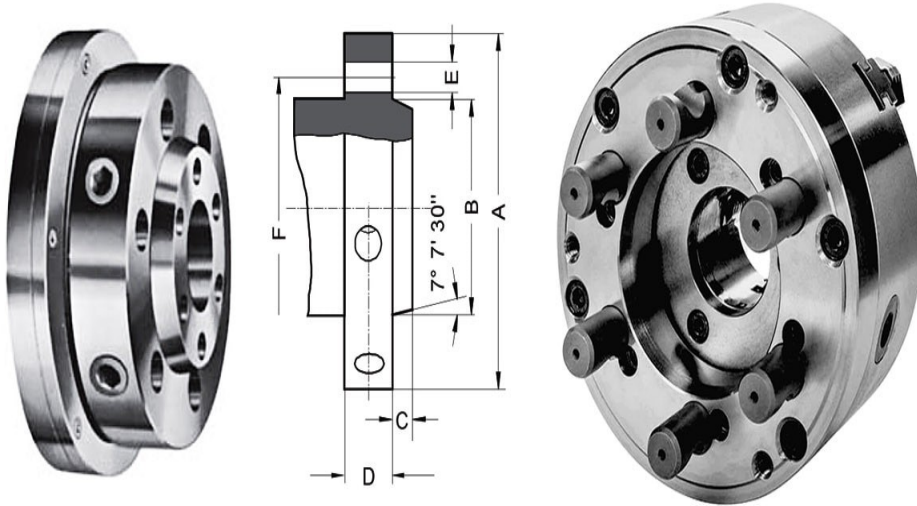
## Type D - Camlock

Camlock pins are made with a D shape cutout on its body. They are used to mount a chuck to a lathe spindle.

D1-3 to D1-4 chucks and adapter plates have 3 camlock pins.

D1-5 to D1-15 chucks and adapter plates have 6 camlock pins.

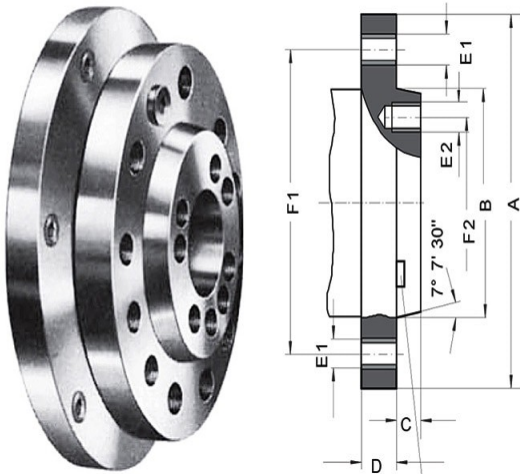
To mount a chuck, a lathe operator inserts a chuck's camlock pins into the lathe spindle, and using a wrench to rotate a cam inside the spindle, the operator pulls the camlock pins inward to snug the chuck tightly against the spindle.



Spindle Nose Size	A	B	C	D	E	F
D1-3	92	53.983	11	32	3x15.1	70.6
D1-4	117	63.521	11	34	3x16.7	82.6
D1-5	146	82.573	13	38	6x19.8	104.8
D1-6	181	106.385	14	45	6x23	133.4
D1-8	225	139.731	16	50	6x26.2	171.4
D1-11	298	196.883	18	60	6x31	235
D1-15	403	285.791	19	70	6x35.7	330.2
D1-20	546	412.795	21	82	6x42.1	463.6

## Type A1 - Short Taper

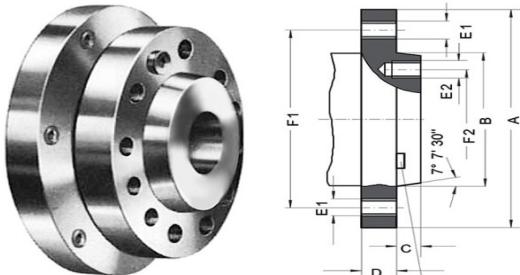
Tapped holes on outer-bolt circle and tapped holes on inner-bolt circle.



Spindle Nose Size	A	B	C	D	E1	F1	E2	F2
A1-5	133.4	82.575	14.288	22.2	11x7/16-14 UNC	104.8	8x7/16-14 UNC	61.9
A1-6	165.1	106.390	15.875	25.4	11x1/2-13 UNC	133.4	8x1/2-13 UNC	82.6
A1-8	209.5	139.735	17.462	28.6	11x5/8-11 UNC	171.4	8x5/8-11 UNC	111.1
A1-11	279.4	196.885	19.05	34.9	11x3/4-10 UNC	235	8x3/4-10 UNC	165.1
A1-15	381	285.8	20.638	41.3	12x7/8-9 UNC	330.2	11x7/8-9 UNC	247.6
A1-20	520	412.8	22.225	47.6	12x1-8 UNC	463.6	11x1-8 UNC	368.3

## Type A2 - Short Taper

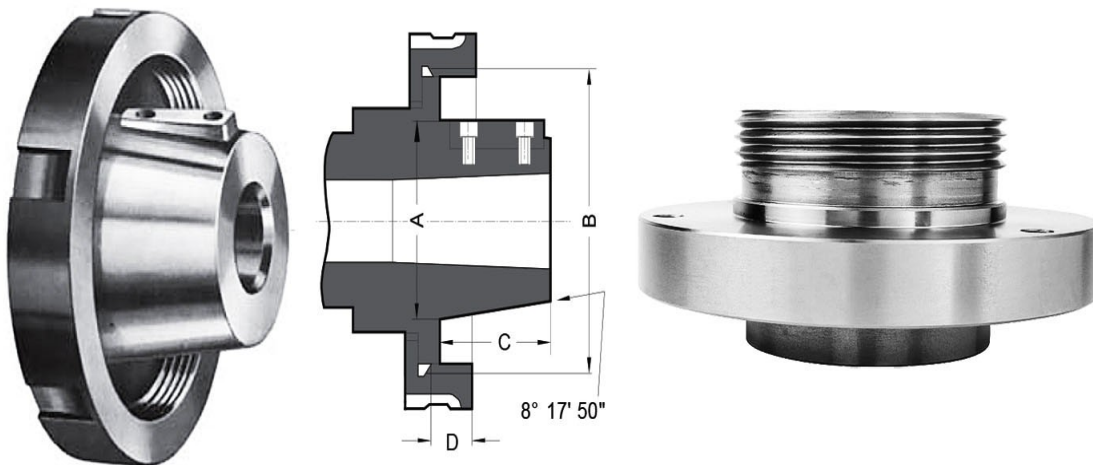
Tapped holes on outer-bolt circle, no holes on inner-bolt circle.



Spindle Nose Size	A	B	C	D	E1	F1
A2-3	92.1	53.985	11.1	15.9	3x7/16-14 UNC	70.66
A2-4	108	63.525	11.1	19	11x7/16-14 UNC	82.55
A2-5	133.4	82.575	12.7	22.2	11x7/16-14 UNC	104.8
A2-6	165.1	106.390	14.3	25.4	11x1/2-13 UNC	133.4
A2-8	209.5	139.735	15.9	28.6	11x5/8-11 UNC	171.4
A2-11	279.4	196.885	17.5	34.9	11x3/4-10 UNC	235
A2-15	381	285.8	19	41.3	12x7/8-9 UNC	330.2
A2-20	520	412.8	20.6	47.6	12x1-8 UNC	463.6

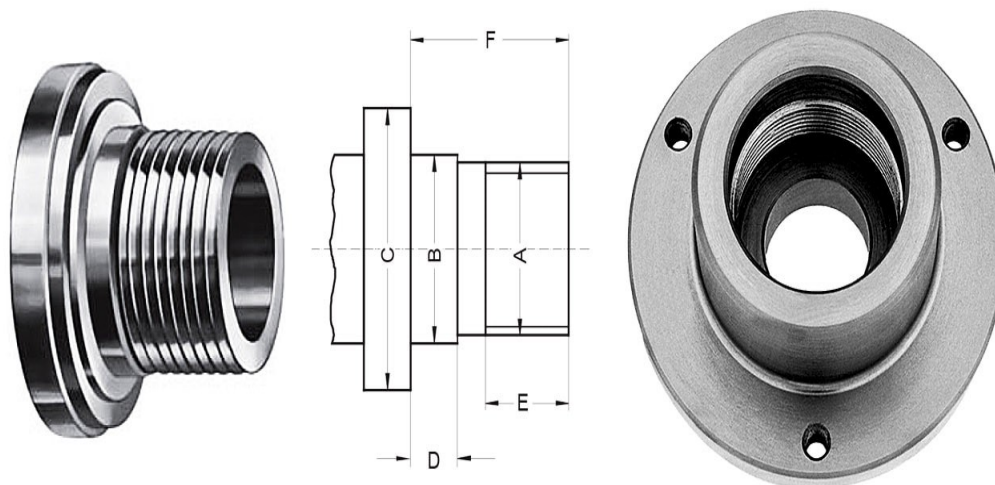
## Type L - Long Taper

For centering and locating fittings, a key for positive location, and a flanged retention nut.



Spindle Nose Size	A	B	C	D	Drive Key
L00	69.850	3 3/4-6 UNS	50.800	14.288	9.525x38.1
L0	82.550	4 1-2/-6	60.325	15.875	9.525x44.45
L1	104.775	6-6 UNS	73.025	19.050	15.875x60.32
L2	133.350	7 3/4-5 UNS	85.725	25.400	19.05x73.02
L3	165.100	10 3/8-4 UNS	94.425	28.575	25.4x82.55

## Threaded



	A	B	C	D	E	F
M 20	21	30	6.3	10	20	
M 24	25	36	8	12	24	
M 33	34	50	9	14	30	
M 39	40	56	10	16	35	
M 45	46	67	11	18	40	
M 52	55	80	12	20	45	
M 60	62	90	14	22	50	
M 76x6	78	112	16	30	63	
M 105x6	106	150	20	40	80	