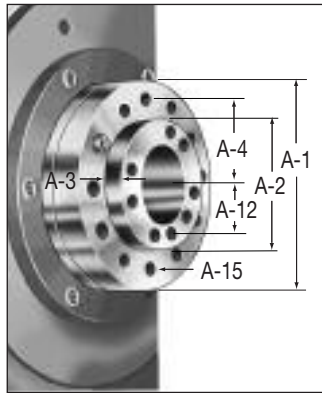
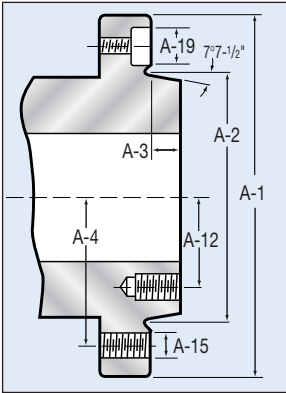




Atlas Workholding American Standard Spindle Nose Data

Source: American Standard Bulletin ASA B5.9 1960



Type A American Standard A-1, A-2, B-1, B-2 Spindle

	A5	A6	A8	A11	A15	A20
A-1	5¼	6½	8¼	11	15	20½
A-2*	3.2505	4.1880	5.50075	7.75075	11.251**	16.251**
A-3***	.5625	.625	.6875	.750	.8125	.875
A-4	2¼/16	25/8	33/8	45/8	6½	9½
A-12	17/32	15/8	23/16	3¼	47/8	7¼
A-15	7/16-14	1/2-13	5/8-11	3/4-10	7/8-9	1-8

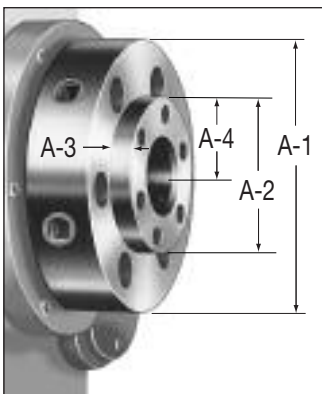
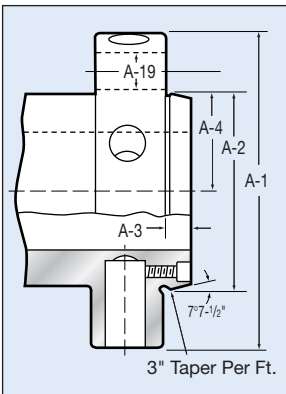
*Tolerance +.0005/-0.000 **Tolerance +.001/-0.000 ***Tolerance +.000/-0.001

A-1 Has tapped holes on both the inner bolt circle and outer bolt circle.

A-2 Has tapped holes on the outer bolt circle, but has no hole on inner bolt circle.

B-1 Has drilled holes on the outer bolt circles, and has tapped holes on inner bolt circle.

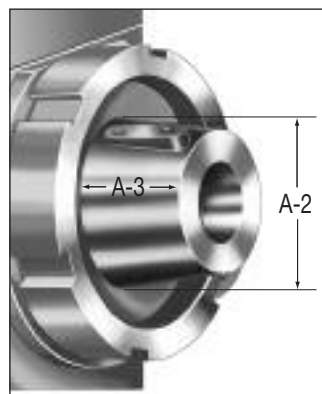
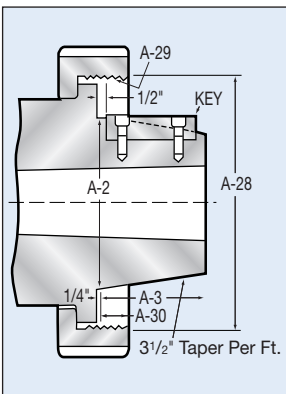
B-2 Has drilled holes on the outer bolt circles, but has no holes on inner bolt circle.



Type D1 American Standard cam lock spindles

	D3	D4	D5	D6	D8	D11
A-1	35/8	45/8	5¾	7¼	87/8	11¾
A-2*	2.1250**	2.5005	3.2505	4.1880	5.50075	7.75075
A-3	7/16	7/16	1/2	9/16	5/8	11/16
A-4	125/64	15/8	21/16	25/8	33/8	45/8
A-19	.594	.656	.781	.906	1.031	1.218

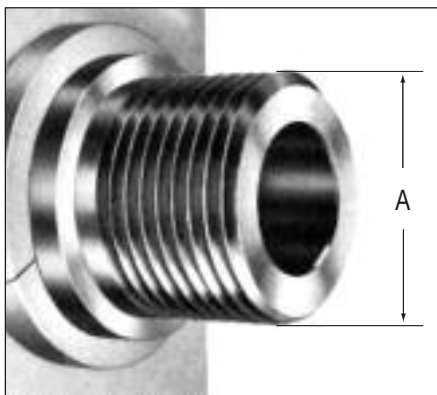
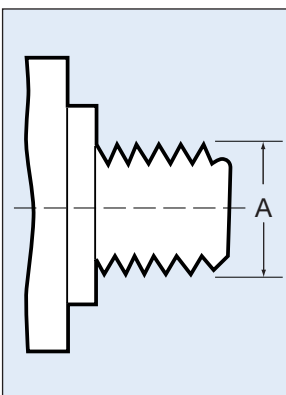
*Tolerance +.0005/-0.000 **Tolerance +.00025/-0.000



Type L long taper key drive

	L00	L0	L1	L2	L3
A-2*	2¾	3¼	41/8	5¼	6½
A-3	2	23/8	27/8	33/8	37/8
A-28	3¾	4½	6	7¾	103/8
A-29	6TPI	6TPI	6TPI	5TPI	4TPI

*Tolerance +.002/-0.000



Threaded Spindle

Thread size
A
1½-8
2¼-8
2¾-6