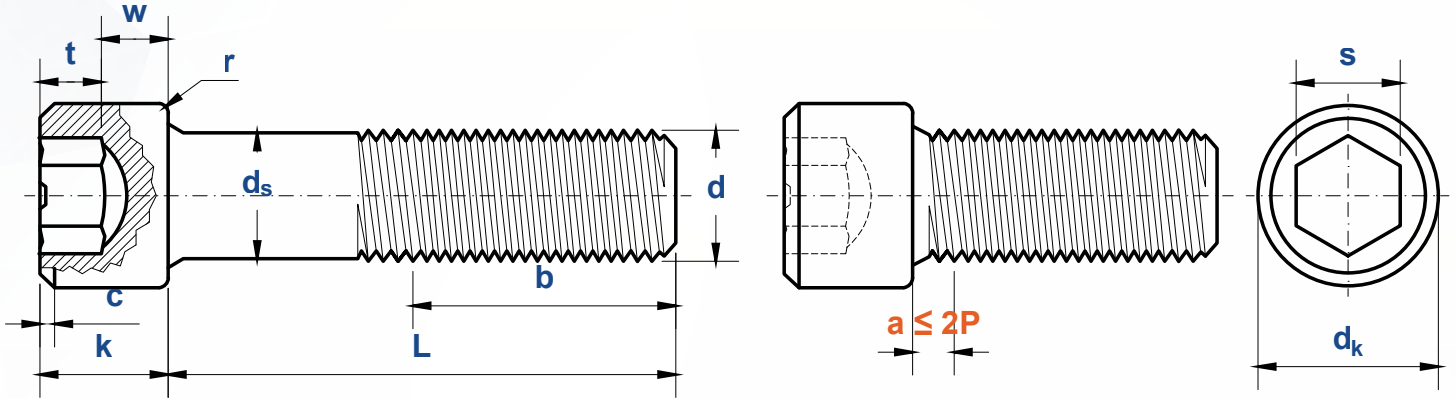




Size			0#	1#	2#	3#	4#	5#	6#	8#	10#	12#	1/4	5/16
PP	d	Screw Diameter	0.06	0.073	0.086	0.099	0.112	0.125	0.138	0.164	0.19	0.216	0.25	0.3125
		UNC	-	64	56	48	40	40	32	32	24	24	20	18
		UNF	80	72	64	56	48	44	40	36	32	28	28	24
		UNEF	-	-	-	-	-	-	-	-	-	32	32	32
d _s		max=nominal size	0.06	0.073	0.086	0.099	0.112	0.125	0.138	0.164	0.19	0.216	0.25	0.3125
		min	0.0568	0.0695	0.0822	0.0949	0.1075	0.1202	0.1329	0.1585	0.184	0.2095	0.2435	0.3053
d _k ①		max	0.096	0.118	0.14	0.161	0.183	0.205	0.226	0.27	0.312	0.324	0.375	0.469
		min	0.091	0.112	0.134	0.154	0.176	0.198	0.216	0.257	0.298	0.314	0.354	0.446
k		max	0.06	0.073	0.086	0.099	0.112	0.125	0.138	0.164	0.19	0.216	0.25	0.312
		min	0.057	0.07	0.083	0.095	0.108	0.121	0.134	0.159	0.185	0.21	0.244	0.306
s		Nominal Size	0.05	0.062	0.078	0.078	0.094	0.094	0.109	0.141	0.156	0.156	0.188	0.25
t		min	0.025	0.031	0.038	0.044	0.051	0.057	0.064	0.077	0.09	0.103	0.12	0.151
b		min	0.5	0.62	0.62	0.62	0.75	0.75	0.75	0.88	0.88	0.88	1	1.12
c	chamfer or radius	max	0.004	0.005	0.008	0.008	0.009	0.012	0.013	0.014	0.018	0.022	0.025	0.033
r	chamfer or radius	max	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.010	0.010	0.010
w		min	0.020	0.025	0.029	0.034	0.038	0.043	0.047	0.056	0.065	0.082	0.095	0.119

①. Material:

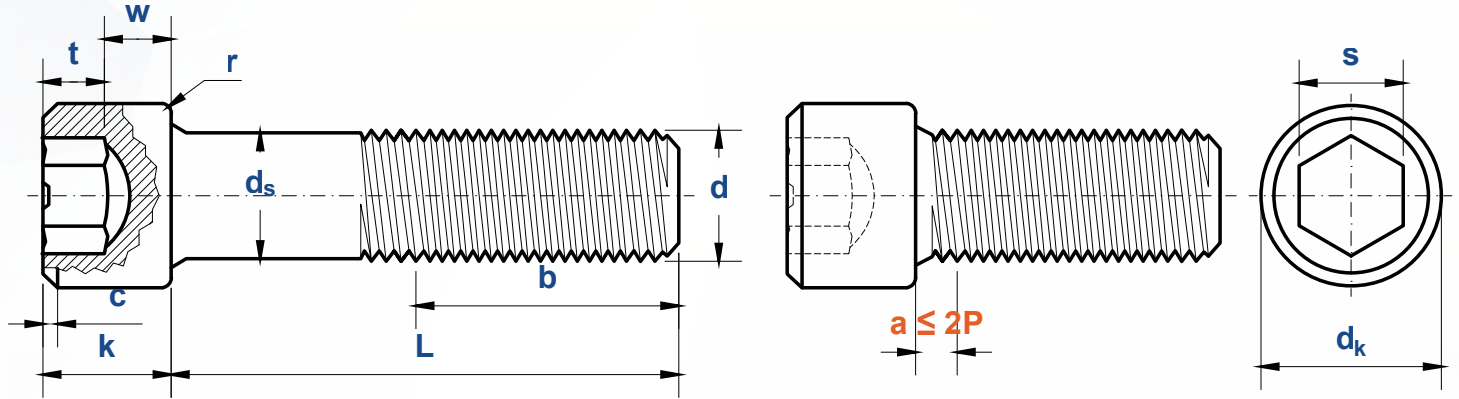
a). Fabricated from alloy steel and shall conform in all respects to ASTM A574

b). Fabricated from corrosion-resistant steel and shall conform in all respects to ASTM F837

②. Heads may be plain or knurled at the option of the manufacturer, unless specified otherwise by the customer. For knurled screws, the maximum head diameter shall be measured across the tops of the knurl, and the minimum head diameter shall be the diameter of the unknurled portion or the diameter across the tops of the knurl for those screws not having an unknurled portion, just above the radius or chamfer at the bottom edge of the head.

③. Thread. The thread shall be a Unified external thread with radius root: Class 3A UNRC and UNRF Series for screw sizes 0 (0.060 in) through 1 in.; Class 2A UNRC and UNRF Series for sizes over 1 in. to 1-1/2 in., inclusive; and Class 2A UNR Series for sizes larger than 1-1/2 in. For plated or unplated screws, acceptability shall be based upon System 22, ASME B1.3. Class 3A does not provide a plating allowance.

④. Surface Roughness. For alloy steel screws of sizes up to and including 5/8 in., and nominal lengths equal to or less than 8 times the basic screw diameter, the surface roughness of the screws shall not exceed 63 μin. (arithmetical average) on the fillet and head bearing surfaces, nor exceed 32 μin. (arithmetical average) on the threads. For larger sizes, longer lengths, and corrosion-resistant steel screws, the surface roughness of the screws shall not exceed 125 μin. (arithmetical average) on the body [see Note (8)], fillet [see Note (14)], and head bearing surfaces. Normally, it shall be sufficient to ascertain that these surfaces on screws have the equivalent of a smooth machined finish by visual comparison with known surface standards. However, where it is practical and deemed necessary to measure these surfaces with commercially available equipment, roughness measurements shall be taken axially on the body and fillet surfaces, and circumferentially on the bearing surface. (See ASME B46.1, Surface Texture.)



Size		3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2
d	Screw Diameter	0.375	0.4375	0.5	0.5625	0.625	0.75	0.875	1	1.125	1.25	1.375	1.5
PP	UNC	16	14	13	12	11	10	9	8	7	7	6	6
	UNF	24	20	20	18	18	16	14	12	12	12	12	12
	UNEF	32	28	28	24	24	20	20	20	18	18	18	18
d _s	max=nominal size	0.375	0.4375	0.5	0.5625	0.625	0.75	0.875	1	1.125	1.25	1.375	1.5
	min	0.3678	0.4294	0.4919	0.5538	0.6163	0.7406	0.8647	0.9886	1.1086	1.2336	1.3568	1.4818
d _k ①	max	0.562	0.656	0.75	0.843	0.938	1.125	1.312	1.5	1.688	1.875	2.062	2.25
	min	0.54	0.631	0.725	0.827	0.914	1.094	1.291	1.476	1.665	1.852	2.038	2.224
k	max	0.375	0.438	0.5	0.562	0.625	0.75	0.875	1	1.125	1.25	1.375	1.5
	min	0.368	0.43	0.492	0.554	0.616	0.74	0.864	0.988	1.111	1.236	1.36	1.485
s	Nominal Size	0.312	0.375	0.375	0.437	0.5	0.625	0.75	0.75	0.875	0.875	1	1
t	min	0.182	0.213	0.245	0.276	0.307	0.37	0.432	0.495	0.557	0.62	0.682	0.745
b	min	1.25	1.38	1.5	1.5	1.75	2	2.25	2.5	2.81	3.12	3.44	3.75
c	chamfer or radius	max	0.040	0.047	0.055	0.062	0.070	0.085	0.100	0.114	0.129	0.144	0.160
r	chamfer or radius	max	0.010	0.015	0.015	0.015	0.015	0.020	0.020	0.020	0.020	0.020	0.020
w	min	0.143	0.166	0.190	0.214	0.238	0.285	0.333	0.380	0.428	0.475	0.523	0.570

①. Material:

a). Fabricated from alloy steel and shall conform in all respects to ASTM A574

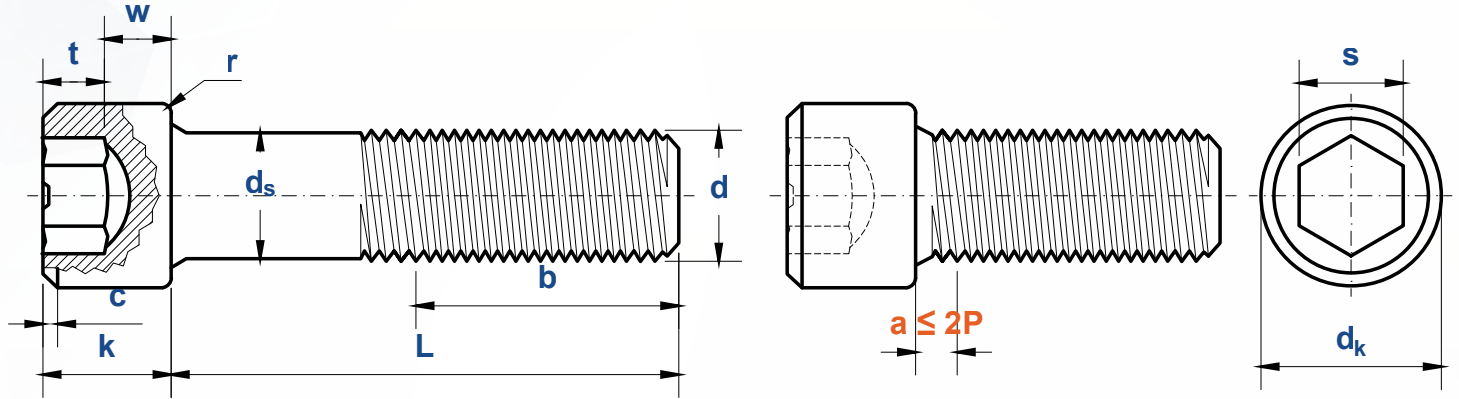
b). Fabricated from corrosion-resistant steel and shall conform in all respects to ASTM F837

②. Heads may be plain or knurled at the option of the manufacturer, unless specified otherwise by the customer. For knurled screws, the maximum head diameter shall be measured across the tops of the knurl, and the minimum head diameter shall be the diameter of the unknurled portion or the diameter across the tops of the knurl for those screws not having an unknurled portion, just above the radius or chamfer at the bottom edge of the head.

③. Thread. The thread shall be a Unified external thread with radius root: Class 3A UNRC and UNRF Series for screw sizes 0 (0.060 in) through 1 in.; Class 2A UNRC and UNRF Series for sizes over 1 in. to 1-1/2 in., inclusive; and Class 2A UNR Series for sizes larger than 1-1/2 in. For plated or unplated screws, acceptability shall be based upon System 22, ASME B1.3. Class 3A does not provide a plating allowance.

④. Surface Roughness. For alloy steel screws of sizes up to and including 5/8 in., and nominal lengths equal to or less than 8 times the basic screw diameter, the surface roughness of the screws shall not exceed 63 μin. (arithmetical average) on the fillet and head bearing surfaces, nor exceed 32 μin. (arithmetical average) on the threads. For larger sizes, longer lengths, and corrosion-resistant steel screws, the surface roughness of the screws shall not exceed 125 μin. (arithmetical average) on the body [see Note (8)], fillet [see Note (14)], and head bearing surfaces. Normally, it shall be sufficient to ascertain that these surfaces on screws have the equivalent of a smooth machined finish by visual comparison with known surface standards.

However, where it is practical and deemed necessary to measure these surfaces with commercially available equipment, roughness measurements shall be taken axially on the body and fillet surfaces, and circumferentially on the bearing surface. (See ASME B46.1, Surface Texture.)



Size			1-3/4	2	2-1/4	2-1/2	2-3/4	3	3-1/4	3-1/2	3-3/4	4
d	Screw Diameter		1.75	2	2.25	2.5	2.75	3	3.25	3.5	3.75	4
PP	UNC		5	4.5	4.5	4	4	4	4	4	4	4
	UNF		-	-	-	-	-	-	-	-	-	-
	UNEF		-	-	-	-	-	-	-	-	-	-
d _s	max=nominal size		1.75	2	2.25	2.5	2.75	3	3.25	3.5	3.75	4
	min		1.7295	1.978	2.228	2.4762	2.7262	2.9762	3.2262	3.4762	3.7262	3.9762
d _k ①	max		2.625	3	3.375	3.75	4.125	4.5	4.875	5.25	5.625	6
	min		2.597	2.97	3.344	3.717	4.09	4.464	4.837	5.211	5.584	5.958
k	max		1.75	2	2.25	2.5	2.75	3	3.25	3.5	3.75	4
	min		1.734	1.983	2.232	2.481	2.73	2.979	3.228	3.478	3.727	3.976
s	Nominal Size		1.25	1.5	1.75	1.75	2	2.25	2.25	2.75	2.75	3
t	min		0.87	0.995	1.12	1.245	1.37	1.495	1.62	1.745	1.87	1.995
b	min		4.38	5	5.62	6.25	6.88	7.5	8.12	8.75	9.38	10
c	chamfer or radius	max	0.207	0.238	0.269	0.300	0.332	0.363	0.394	0.426	0.458	0.489
r	chamfer or radius	max	0.020	0.020	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036
w	min		0.665	0.760	0.855	0.950	1.045	1.140	1.235	1.330	1.425	1.520

①, Material:
a), Fabricated from alloy steel and shall conform in all respects to ASTM A574
b), Fabricated from corrosion-resistant steel and shall conform in all respects to ASTM F837
②, Heads may be plain or knurled at the option of the manufacturer, unless specified otherwise by the customer. For knurled screws, the maximum head diameter shall be measured across the tops of the knurl, and the minimum head diameter shall be the diameter of the unknurled portion or the diameter across the tops of the knurl for those screws not having an unknurled portion, just above the radius or chamfer at the bottom edge of the head.
③, Thread. The thread shall be a Unified external thread with radius root: Class 3A UNRC and UNRF Series for screw sizes 0 (0.060 in) through 1 in.; Class 2A UNRC and UNRF Series for sizes over 1 in. to 1-1/2 in., inclusive; and Class 2A UNR Series for sizes larger than 1-1/2 in. For plated or unplated screws, acceptability shall be based upon System 22, ASME B1.3. Class 3A does not provide a plating allowance.
④, Surface Roughness. For alloy steel screws of sizes up to and including 5/8 in., and nominal lengths equal to or less than 8 times the basic screw diameter, the surface roughness of the screws shall not exceed 63 μin. (arithmetical average) on the fillet and head bearing surfaces, nor exceed 32 μin. (arithmetical average) on the threads. For larger sizes, longer lengths, and corrosion-resistant steel screws, the surface roughness of the screws shall not exceed 125 μin. (arithmetical average) on the body [see Note (8)], fillet [see Note (14)], and head bearing surfaces. Normally, it shall be sufficient to ascertain that these surfaces on screws have the equivalent of a smooth machined finish by visual comparison with known surface standards. However, where it is practical and deemed necessary to measure these surfaces with commercially available equipment, roughness measurements shall be taken axially on the body and fillet surfaces, and circumferentially on the bearing surface. (See ASME B46.1, Surface Texture.)