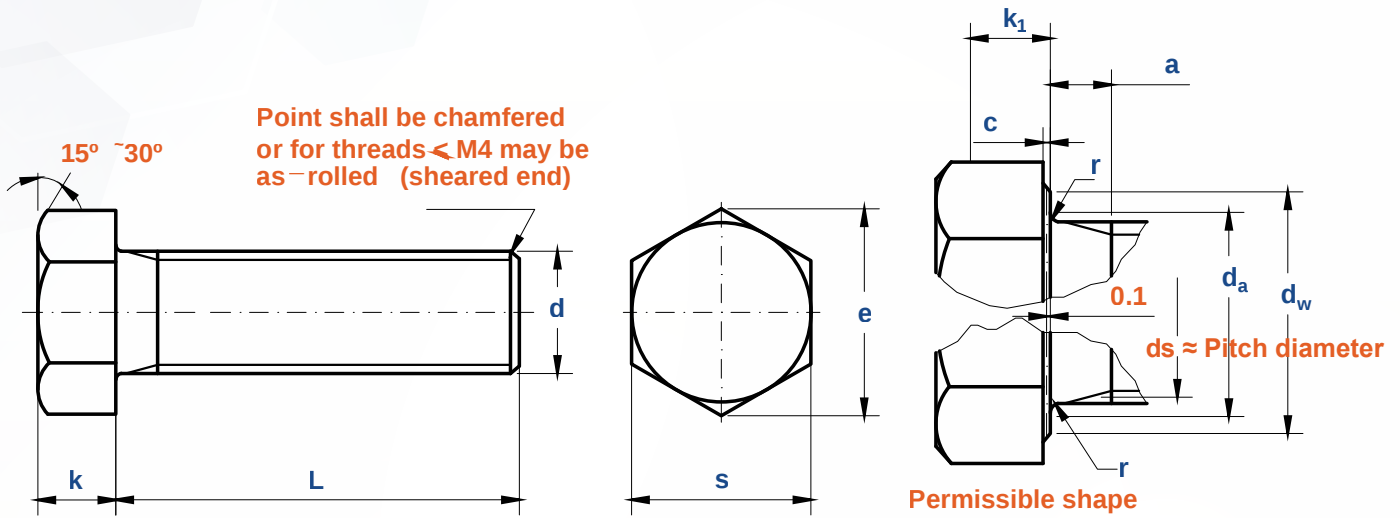
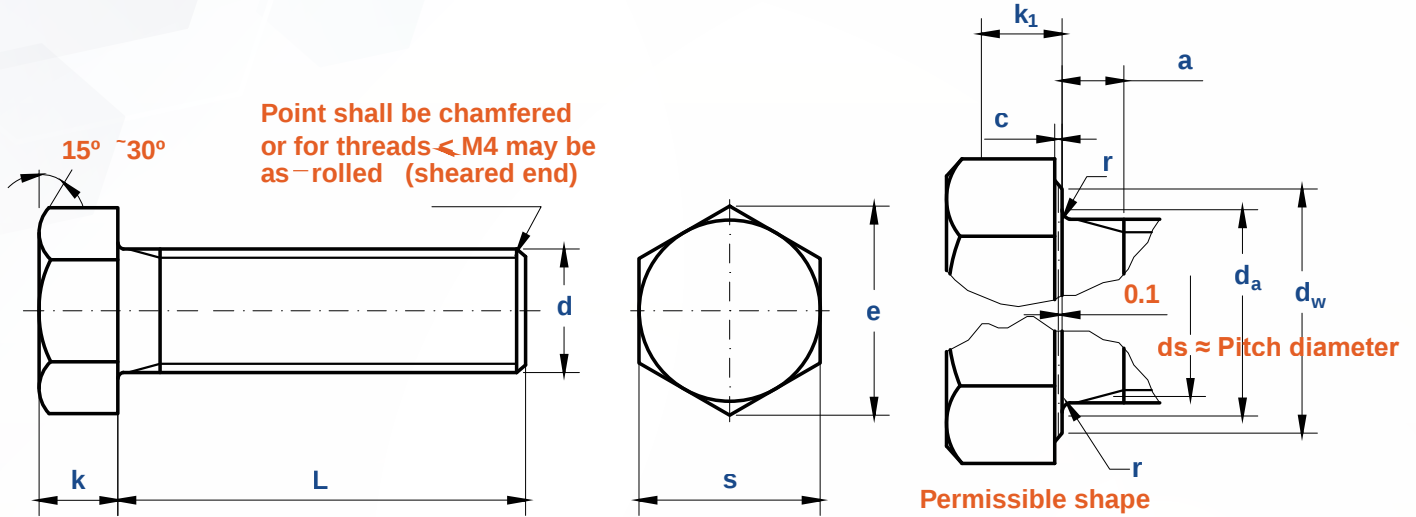




Screw Thread d			M1.6	M2	M2.5	M3	(M3.5)	M4	M5	M6	(M7)	M8	M10	M12	(M14)	M16
P	Pitch		0.35	0.4	0.45	0.5	0.6	0.7	0.8	1	1	1.25	1.5	1.75	2	2
a	max		1.05	1.2	1.35	1.5	1.8	2.1	2.4	3	3	3.75	4.5	5.25	6	6
c	min		0.1	0.1	0.1	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.2
	max		0.25	0.25	0.25	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.8
da	max		2	2.6	3.1	3.6	4.1	4.7	5.7	6.8	7.8	9.2	11.2	13.7	15.7	17.7
dw	Grade A	min	2.4	3.2	4.1	4.6	5.1	5.9	6.9	8.9	9.6	11.6	15.6	17.4	20.5	22.5
	Grade B	min	-	-	-	-	-	5.7	6.7	8.7	9.4	11.4	15.4	17.2	20.1	22
e	Grade A	min	3.41	4.32	5.45	6.01	6.58	7.66	8.79	11.05	12.12	14.38	18.9	21.1	24.49	26.75
	Grade B	min	-	-	-	-	-	7.5	8.63	10.89	11.94	14.2	18.72	20.88	23.91	26.17
k	Nominal Size		1.1	1.4	1.7	2	2.4	2.8	3.5	4	4.8	5.3	6.4	7.5	8.8	10
	Grade A	min	0.98	1.28	1.58	1.88	2.28	2.68	3.35	3.85	4.65	5.15	6.22	7.32	8.62	9.82
		max	1.22	1.52	1.82	2.12	2.52	2.92	3.65	4.15	4.95	5.45	6.56	7.68	8.98	10.18
	Grade B	min	-	-	-	-	-	2.6	3.26	3.76	4.56	5.06	6.11	7.21	8.51	9.71
		max	-	-	-	-	-	3	3.74	4.24	5.04	5.54	6.69	7.79	9.09	10.29
k1	min		0.7	0.9	1.1	1.3	1.6	1.9	2.28	2.63	3.19	3.54	4.28	5.05	5.96	6.8
r	min		0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.25	0.25	0.4	0.4	0.6	0.6	0.6
s	max=nominal size		3.2	4	5	5.5	6	7	8	10	11	13	17	19	22	24
	Grade A	min	3.02	3.82	4.82	5.32	5.82	6.78	7.78	9.78	10.73	12.73	16.73	18.67	21.67	23.67
	Grade B	min	-	-	-	-	-	6.64	7.64	9.64	10.57	12.57	16.57	18.48	21.16	23.16

- ①. This standard specifies requirements for M1.6 to M52 hexagon head screws threaded up to the head, assigned to product grade A, for sizes up to M24 and lengths not exceeding 10d or 150 mm, and to product grade B for sizes greater than M24 or lengths exceeding 10d or 150 mm.
②. For thread sizes not greater than M4, also permitted without chamfered end.



Screw Thread d			(M18)	M20	(M22)	M24	(M27)	M30	(M33)	M36	(M39)	M42	(M45)	M48	(M52)
P	Pitch		2.5	2.5	2.5	3	3	3.5	3.5	4	4	4.5	4.5	5	5
a	max		7.5	7.5	7.5	9	9	10.5	10.5	12	12	13.5	13.5	15	15
c	min		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
	max		0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1	1	1	1	1
d _a	max		20.2	22.4	24.4	26.4	30.4	33.4	36.4	39.4	42.4	45.6	48.6	52.6	56.6
d _w	Grade A	min	25.3	28.2	30	33.6	-	-	-	-	-	-	-	-	-
	Grade B	min	24.8	27.7	29.5	33.2	38	42.7	46.5	51.1	55.9	59.9	64.7	69.4	74.2
e	Grade A	min	30.14	33.53	35.72	39.98	-	-	-	-	-	-	-	-	-
	Grade B	min	29.56	32.95	35.03	39.55	45.2	50.85	55.37	60.79	66.44	71.3	76.95	82.6	88.25
k	Nominal Size		11.5	12.5	14	15	17	18.7	21	22.5	25	26	28	30	33
	Grade A	min	11.28	12.28	13.78	14.78	-	-	-	-	-	-	-	-	-
		max	11.72	12.72	14.22	15.22	-	-	-	-	-	-	-	-	-
	Grade B	min	11.15	12.15	13.65	14.65	16.65	18.28	20.58	22.08	24.58	25.58	27.58	29.58	32.5
		max	11.85	12.85	14.35	15.35	17.35	19.12	21.42	22.92	25.42	26.42	28.42	30.42	33.5
k ₁	min		7.8	8.5	9.6	10.3	11.7	12.8	14.4	15.5	17.2	17.9	19.3	20.9	22.8
r	min		0.6	0.8	0.8	0.8	1	1	1	1	1	1.2	1.2	1.6	1.6
s	max=nominal size		27	30	32	36	41	46	50	55	60	65	70	75	80
	Grade A	min	26.67	29.67	31.61	35.38	-	-	-	-	-	-	-	-	-
	Grade B	min	26.15	29.16	31	35	40	45	49	53.8	58.8	63.1	68.1	73.1	78.1

- ①. This standard specifies requirements for M1.6 to M52 hexagon head screws threaded up to the head, assigned to product grade A, for sizes up to M24 and lengths not exceeding 10d or 150 mm, and to product grade B for sizes greater than M24 or lengths exceeding 10d or 150 mm.
 ②. For thread sizes not greater than M4, also permitted without chamfered end.