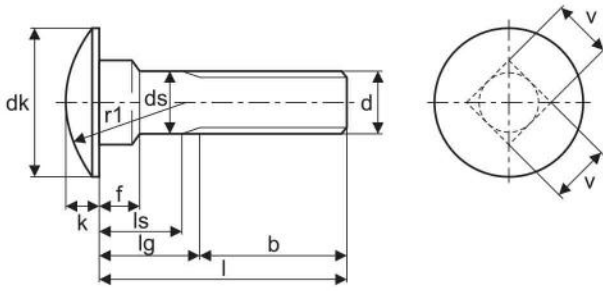


# Mushroom Head Square Neck Bolts (Cup Square)

## DIN 603 Mild Steel



### DIN 603 Dimensions of bolts

Nominal size and thread diameter <i>d</i>	Pitch of thread <i>P</i>	Thread Length <i>b</i>			Diameter of head <i>dk</i>		Diameter of unthreaded shank <i>ds</i>		Depth of square under head <i>f</i>		Thickness of head <i>k</i>		Radius of head <i>r1</i>	Width across flats of square under head <i>v</i>	
		Bolt $\leq 125$	Bolt 125-200	Bolt $\geq 200$	max.	min.	max.	min.	max.	min.	max.	min.		min.	max.
M5	0.80	16	22	-	13.55	12.45	5.00	4.52	4.10	2.90	3.30	2.70	10.7	5.48	4.52
M6	1.00	18	24	-	16.55	15.45	6.00	5.52	4.60	3.40	3.88	3.12	12.6	6.48	5.52
M8	1.25	22	28	41	20.65	19.35	8.00	7.42	5.60	4.40	4.88	4.12	16.0	8.58	7.42
M10	1.50	26	32	45	24.65	23.35	10.00	9.42	6.60	5.40	5.38	4.62	19.2	10.58	9.42
M12	1.75	30	36	49	30.65	29.35	12.00	11.30	8.75	7.25	6.95	6.05	24.1	12.70	11.30
M16	2.00	38	44	57	38.80	37.20	16.00	15.30	12.90	11.10	8.95	8.05	29.3	16.70	15.30
M20	2.50	46	52	65	46.80	45.20	20.00	19.16	15.90	14.10	11.05	9.95	33.9	20.84	19.16

Nominal size	min.	max.	M5		M6		M8		M10		M12		M16		M20	
			<i>ls</i> min.	<i>lg</i> max.	<i>ls</i> min.	<i>lg</i> max.	<i>ls</i> min.	<i>lg</i> max.	<i>ls</i> min.	<i>lg</i> max.	<i>ls</i> min.	<i>lg</i> max.	<i>ls</i> min.	<i>lg</i> max.	<i>ls</i> min.	<i>lg</i> max.
16	15.1	16.9	-	8	-	10	-	-	-	-	-	-	-	-	-	-
20	18.95	21.05	-	8	-	10	-	12	-	14	-	-	-	-	-	-
25	23.95	26.05	-	8	-	10	-	12	-	14	-	-	-	-	-	-
30	26.95	31.05	-	18	-	10	-	12	-	14	-	18	-	-	-	-
35	33.75	36.25	15	19	12	17	-	12	-	14	-	18	-	-	-	-
40	38.75	41.25	20	24	17	22	11.75	18	-	14	-	18	-	-	-	-
45	43.75	46.25	25	29	22	27	16.75	23	11.5	19	-	18	-	-	-	-
50	48.75	51.25	30	34	27	32	21.75	28	16.5	24	-	18	-	-	-	-
55	53.50	56.50	35	39	32	37	26.75	33	21.5	29	16.25	25	-	23	-	-
60	58.50	61.50	40	44	37	42	31.75	38	26.5	34	21.25	30	-	23	-	-
65	63.50	66.50	45	49	42	47	36.75	43	31.5	39	26.75	35	17	27	-	-
70	68.50	71.50	50	54	47	52	41.75	48	36.5	44	31.25	40	22	32	-	28.5
80	78.50	81.50	60	64	57	62	51.75	58	46.5	54	41.25	50	32	42	21.5	34.0
90	88.25	91.75	-	-	67	72	61.75	68	56.5	64	51.25	60	42	52	31.5	44.0
100	98.25	101.75	-	-	77	82	71.75	78	66.5	74	61.25	70	52	62	41.5	54.0
110	108.25	111.75	-	-	87	92	81.75	88	76.5	84	71.25	80	62	72	51.5	64.0
120	118.25	121.75	-	-	97	102	91.75	98	86.5	94	81.25	90	72	82	61.5	74.0
130	128.00	132.00	-	-	101	106	95.75	102	90.5	98	85.25	94	76	86	65.5	78.0
140	136.00	142.00	-	-	111	116	105.75	112	108.5	108	95.25	104	86	96	75.5	88.0
150	148.00	152.00	-	-	121	126	115.75	122	110.5	118	105.25	114	96	106	85.5	98.0
160	156.00	164.00	-	-	-	-	-	-	120.5	128	115.25	124	106	116	95.5	108.0
180	176.00	184.00	-	-	-	-	-	-	140.5	148	135.25	144	126	136	115.5	128.0
200	195.4	204.6	-	-	-	-	-	-	160.5	168	155.25	164	146	156	135.5	148.0