



Nominal Size	Thread Pitch	В		A Head Diameter		H Head Height		J	Т	W	D
		Body Diameter						Hex Socket Size	Key Engagement	Wall Thickness	Drill Allowance
		Max	Min	Theoretical Sharp	Absolute Min.		Flush Tolerance	Nom	Min	Min	Max
M3	0.5	3.00	2.86	6.72	5.35	1.86	0.30	2.0	1.1	0.25	0.3
M4	0.7	4.00	3.82	8.96	7.80	2.48	0.30	2.5	1.5	0.45	0.4
M5	8.0	5.00	4.82	11.20	9.75	3.10	0.35	3.0	1.9	0.66	0.5
M6	1	6.00	5.82	13.44	11.70	3.72	0.35	4.0	2.2	0.70	0.6
M8	1.25	8.00	7.78	17.92	15.60	4.96	0.40	5.0	3.0	1.16	0.8
M10	1.5	10.00	9.78	22.40	19.50	6.20	0.50	6.0	3.6	1.62	0.9
Tolerand	Tolerance on Length			Up to 16mm, incl.: ±0.3			Over 16mm to 60mm, incl.: ±0.5		Over 60mm to 150mm, incl.: ±0.8		

Description	Has a similar design as a metric socket button head screw but has an 82° countersunk flat head.				
Applications/ Advantages	Used when a flush mounting, high strength screw is required. Commonly used in tools and dies where moving parts pass over the faste area.				
Material	Class 10.9 socket flat head cap screws shall be made from an alloy steel which conforms to the following chemical composition requirements <i>Carbon:</i> 0.28-0.50%; <i>Phosphorous:</i> 0.035% maximum; <i>Sulfur:</i> 0.035% maximum.				
Heat Treatment	Class 10.9 socket flat head cap screws shall be heat treated by quenching in oil from above the transformation temperature and reheating to a tempering temperature of 380°C minimum.				
Hardness	Rockwell C 38 - 44				
Tensile	Full-size screws: 1040 MPa minimum; Machined test specimen: 1220 MPa minimum				
Yield Strength	Machined test specimen: 1100 MPa minimum				
Elongation in	8% minimum				
Reduction of	35% minimum				
Plating	Metric class 10.9 socket flat head cap screws are usually supplied with a plain finish.				