



METRIC - SOCKET SET SCREW, FLAT POINT											ISO 4026 & 898/5	
Nominal Size	Thread Pitch	C		E	S		Screws Below this Length are Short Sizes	T		Min Length of Screw for Torque Test	Test Torque	
		Point Diameter		Socket Size Across Corners	Socket Size Across the Flats			Key Engagement (Min)				N. m
		Max	Min	Min	Max	Min		Short Sizes	Long Sizes			
M1.6	0.35	0.80	0.55	0.803	0.724	0.711	2.5	0.7	1.5	-	-	
M2	0.4	1.00	0.75	1.003	0.902	0.889	3	0.8	1.7	-	-	
M2.5	0.45	1.50	1.25	1.427	1.295	1.270	4	1.2	2	-	-	
M3	0.5	2.00	1.75	1.73	1.545	1.520	4	1.2	2	4	0.9	
M4	0.7	2.50	2.25	2.3	2.045	2.020	5	1.5	2.5	5	2.5	
M5	0.8	3.5	3.2	2.87	2.560	2.520	6	2	3	5	5	
M6	1	4.0	3.7	3.44	3.071	3.020	8	2	3.5	8	8.5	
M8	1.25	5.5	5.2	4.58	4.084	4.020	8	3	5	8	20	
M10	1.5	7.00	6.64	5.72	5.084	5.020	10	4	6	10	40	
M12	1.75	8.50	8.14	6.86	6.095	6.020	16	4.8	8	16	65	
M16	2	12.00	11.57	9.15	8.115	8.025	20	6.4	10	20	160	
M20	2.5	15.00	14.57	11.43	10.115	10.025	20	8	12	20	310	
M24	3	18.00	17.57	13.72	12.142	12.032	25	10	15	25	520	
Tolerance on Length		2-3mm: ±0.2		4-6mm: ±0.24		8-10mm: ±0.29		12-16mm: ±0.35				
		20-30mm: ±0.42		35-50mm: ±0.5		55-60mm: ±0.6						

<b>Description</b>	A headless screw threaded the entire length with a metric thread pitch. It has a flat surface at the end opposite that of the hexagonal drive.
<b>Applications/ Advantages</b>	Flat point set screws are designed for frequent resetting or relocating on hard steel shafts and where minimal damage to shafts is a concern.
<b>Material</b>	Metric socket set screws shall be made from an alloy steel which conforms to the following chemical composition requirements-- <i>Carbon:</i> 0.19-0.50%; <i>Phosphorous:</i> 0.05% maximum; <i>Sulfur:</i> 0.05% maximum; <i>Lead:</i> 0.35% maximum. Set screws shall also contain one or more of these following elements: chromium, nickel, molybdenum, vanadium or boron.
<b>Heat Treatment</b>	Metric socket set screws shall be heat treated by quenching in oil from above the transformation temperature and then tempered by reheating to meet the hardness requirements listed below.
<b>Hardness</b>	Rockwell HRC 45 - 53 (Vickers HV 450 - 560)
<b>Torsional Strength</b>	Metric socket set screws of a sufficient length to be tested (as listed in the above table) shall withstand application of the test torque specified in said table without evidence of the socket reaming or the screw bursting.
<b>Plating</b>	Metric socket set screws are usually supplied with a thermal black finish.