



CONE POINT

METRIC - SOCKET SET SCREWS, CONE POINT										ISO 4027 & 898/5	
Nominal Size	Thread Pitch	C		E		S		T		Min Length of Screw for Torque Test	Test Torque
		Point Diameter	Socket Size Across Corners	Socket Size Across the Flats		Screws Below this Length are Short Sizes	Key Engagement (Min)				
				Max	Min		Max	Min	Short Sizes		Long Sizes
M1.6	0.35	0.4	0.803	0.724	0.711	3	0.7	1.5	-	-	
M2	0.4	0.5	1.003	0.902	0.889	3	0.8	1.7	-	-	
M2.5	0.45	0.65	1.427	1.295	1.270	4	1.2	2	-	-	
M3	0.5	0.75	1.73	1.545	1.520	4	1.2	2	5	0.9	
M4	0.7	1	2.3	2.045	2.020	5	1.5	2.5	6	2.5	
M5	0.8	1.25	2.87	2.560	2.520	6	2	3	8	5	
M6	1	1.5	3.44	3.071	3.020	8	2	3.5	8	8.5	
M8	1.25	2	4.58	4.084	4.020	10	3	5	10	20	
M10	1.5	2.5	5.72	5.084	5.020	12	4	6	12	40	
M12	1.75	3	6.86	6.095	6.020	16	4.8	8	16	65	
M16	2	4	9.15	8.115	8.025	20	6.4	10	20	160	
M20	2.5	5	11.43	10.115	10.025	25	8	12	20	310	
M24	3	6	13.72	12.142	12.032	30	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					

Description	A headless screw threaded the entire length with a metric thread pitch. It has a sharp conical-shaped point at the opposite end from the hexagonal drive.
Applications/Advantages	Cone point set screws are for permanent setting on soft or hardened shafts. The deep penetration it offers gives this style set screw the highest torsional & axial holding power. Can also be used as a pivot or hanger.
Material	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.
Heat Treatment	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.
Hardness	Rockwell HRC 45 - 53 (Vickers HV 450 - 560)
Torsional Strength	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.
Plating	Metric socket set screws are usually supplied with a thermal black finish.