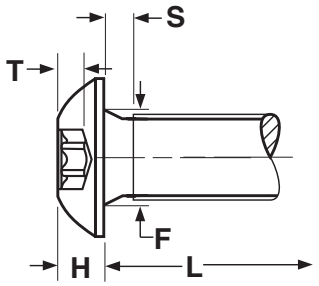
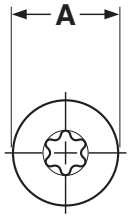
SOCKETS, SIX-LOBE

ISO 7380-1 TX Six-Lobe





METRIC - SIX-LOBE ISO 7380 BUTTON HEAD CAP SCREWS										ISO 7380
Nominal Size	Thread Pitch	A		H		T	S		F	Six-Lobe Recess Size
		Head Diameter		Head Height		Recess Penetration	Unthreaded Section Under the Head		Fillet Transition Diameter	
		Max	Min	Max	Min	Min	Max	Min	Max	
M3	0.5	5.7	5.4	1.65	1.40	1.01	1.0	0.5	3.6	T10
M4	0.7	7.60	7.24	2.20	1.95	1.27	1.4	0.7	4.7	T20
M5	0.8	9.50	9.14	2.75	2.50	1.52	1.6	0.8	5.7	T25
M6	1	10.50	10.07	3.3	3.0	2.02	2	1	6.8	T30
M8	1.25	14.00	13.57	4.4	4.1	2.85	2.50	1.25	9.2	T40
Tolerance on Length		6mm: ±.24		8-10mm: ±.29		12-16mm: ± .35	20-30mm: ±.42		35-50mm: ±.5	

Description	Has a similar thread design as a metric socket cap screw but is fully threaded to the head. The dome shaped head is wider and has a lower profile than a socket cap screw and has a six-lobed recess.	
Applications/ Advantages	Used when a wider bearing surface or a smoother, more finished appearance is desired, or in material too thin to accomodate a countersunk head. Button head screws do not afford the strength of socket head cap screws due to their head geometry and are designed for light fastening applications.	
Material	***Class 10.9 Steel***	***Stainless***
	May be made from a steel, which conforms to any of the following chemical composition requirements-- **Carbon Steel:** ***Carbon***: 0.25-0.55%; ***Phosphorous***: 0.035% maximum; ***Sulfur***: 0.035% maximum. **Carbon Steel with additives such as Boron, Manganese or Chromium:** ***Carbon***: 0.20-0.55%; ***Phosphorous***: 0.035% max; ***Sulfur***: 0.035% max. **Alloy steel which contains one or more of the following: Chromium, Nickel, Molybdenum or Vanadium**: ***Carbon***: 0.20-0.55%; ***Phosphorous***: 0.035% max; ***Sulfur***: 0.035% max.	A2 Class 50 Stainless Steel
Heat Treatment	Class 10.9 button head screws shall be heat treated by quenching in oil from above the transformation temperature and reheating to a tempering temperature of 425°C minimum.	-
Hardness	Rockwell C 32 - 39 (Vickers HV 320 - 380)	-
Tensile Strength	1,040 N/mm^2 minimum	600 N/mm^2
Proof Load	940 N/mm^2 minimum	450 N/mm^2
Plating	Screws are usually provided with a zinc finish.	Stainless screws are provided with a plain finish.