INFORMATION ON BOLTS & SET SCREWS

Question: When is a bolt not a bolt?

Answer: When it is a Set Screw.

We are referring to hexagon headed bolts and set screws – see diagram.

The difference between a bolt and a set screw is that there is thread the entire length of the set screw, whereas a bolt is only partly threaded.





THREAD LENGTHS FOR STANDARD BOLTS

		THREAD LENGTH	
METRIC	Up to 125mm long	2 x diameter + 6mm	
	125mm - 200mm long	2 x daimeter + 12mm	
	Over 200mm long	2 x daimeter + 25mm	
UNC/UNF	Up to 6" long	2 x dia + 1/4"	
	Over 6" long	2 x dia + 1/2"	
BSW/BSF		Up to 1/2" dia.	Over to 1/2" dia.
	Up to 4" long	2 x diameter	1.1/2 x diameter
	4" - 8" long	2 x diameter	2 x diameter
	Over 8" diameter	2.1/2 x diameter	2.1/2 x diameter

TERMINOLOGY

In SA we refer to these products as hexagon headed bolts and setscrews, however, in the USA they refer to them as cap screws. Another confusing terminology associated with these is the fact that a grub srew is also reffered to as a set screw....confusing isn't it.

SIZES

As mentioned, a set screw is fully threaded along the length of the body, therefore the length is stated by the measurement from under the head to the end.

The length of a bolt is also stated by the measurement from under the head to the end, but the length of the thread is determined by the diameter, as shown above.

Examples: M10 x 100 bolt = 26mm thread or 1/4"UNC x 2" bolt = 3/4" thread or 1/2"BSW x 5" bolt = 1" thread. The plain section (known as the shank) is the remainder of the length.

Note: These sizes are based on the DIN and British Standard specifications for standard bolts, however some manufacturers choose to add an extra turn or two of thread which increase the overall thread length and shortens the resulting plain shank section. There are also less popular hexagon bolts with differing specifications.

