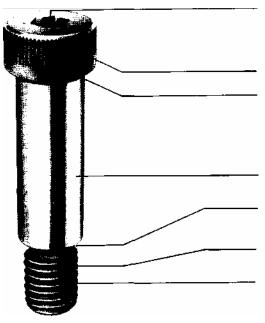


## When it comes to Socket Head Shoulder Screws, insist on "Unilok"

## Here's why:



Precise control of socket depth gives more wrench engagement than with other screws, permits full tightening without cracking or reaming socket, yet provides ample metal in the crucial fillet area for maximum strength.

Knurled head allows sure finger grip, fast assembly.

Neck allows assembly with no chamfering or other hole preparation.

Controlled concentricity between head, body, and threads for easier, more accurate assembly

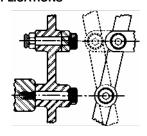
Shoulder diameter held to close tolerance.

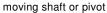
Squareness of shoulder is held to close tolerances to provide more accurate seating.

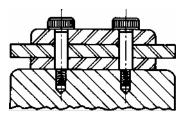
Fully formed threads are finished close to shoulder.

Heat treated alloy steel for maximum strength without brittleness or decarburisation.

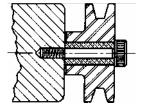
### **APPLICATIONS**







stationary guide



pulley shaft uses

"UNILOK" shoulder screws are actually hardened shafts with a knurled head and threaded portion. The shoulder formed where the threads meet the larger diameter body acts as a stop when the screw is threaded into a tapped hole, permitting the screw to be used as a pivot, shaft, or stationary guide.

"UNILOK" shoulder screws are used to operate stripper plates and pressure pads in a wide variety of tool and die work. They are also used as shafts or pivots, holding pulleys, gears, cams and cam followers, ratchets and circular form tools. Stationary guide applications include locating pins in fixtures, latch stops, alignment of stationary members, linkage blocks, and stock guides in dies.

"UNILOK" shoulder screws are specially advantageous

in applications where the fastened part must be removed frequently. For instance, when the shoulder screw is used as a shaft for circular form tools, the screw can be removed to permit sharpening of the tool in a matter of seconds. Assembly is equally as fast.

"UNILOK" shoulder screws are made of high grade alloy steel, and have knurled heads for sure gripping and quick assembly. The precision hex socket gives maximum wrench engagement to allow tightening to the full strength of the screw. Concentricity between body and threads is closely controlled, permitting easy, accurate assembly. Fully formed radiused root threads ensure maximum tensile strength and resist stripping.

## **Socket Head Shoulder Screws**

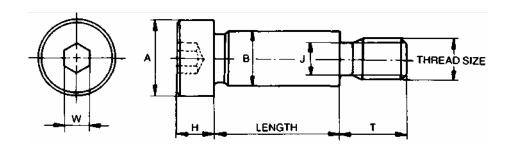
# Unilok

### Metric Series

### Dimensions - Physical Properties - Lengths

#### Notes:

- 1. The screws will generally conform to BS: 4168
- 2. Threads will conform to class 4g6g of IS: 4218, ISO-261/965. Coarse Series
- 3. Material: "UNILOK" High Grade Alloy Steel
- 4. Heat Treatment : HRc 38-44.
- 5. Shear strength: 730 N/mm<sup>2</sup>.
- Length range available: Lengths between bold stepped lines as tabulated Length tolerance: +0.25 mm -0.
- 7. All dimensions are in millimeters.
- 8 Screws will be designated by Body Size and Shoulder Length.



| Body<br>Size |      | 6.00  | 8.00  | 10.00  | 12.00    | 16.00  | 20.00  | 24.00  |  |
|--------------|------|-------|-------|--------|----------|--------|--------|--------|--|
| Thread Size  |      | M5    | M6    | M8     | M10      | M12    | M16    | M20    |  |
| Pitch        |      | 0.80  | 1.00  | 1.25   | 1.50     | 1.75   | 2.00   | 2.50   |  |
| В            | Max. | 6.000 | 8.000 | 10.000 | 12.000   | 16.000 | 20.000 | 24.000 |  |
|              | Min. | 5.982 | 7.978 | 9.978  | 1 1 .973 | 15.973 | 19.967 | 23.967 |  |
| A Max.       |      | 10.00 | 13.00 | 16.00  |          | 24.00  | 30.00  | 36.00  |  |
| HMax.        |      | 4.50  | 5.50  | 7.00   | 9.00     | 11.00  | 14.00  | 16.00  |  |
| JMax.        |      | 3.84  | 4.56  | 6.23   | 7.89     | 9.54   | 13.20  | 16.54  |  |
| TNom.        |      | 9.50  | 11.00 | 13.00  | 16.00    | 18.00  | 22.00  | 27.00  |  |
| WNom.        |      | 3     | 4     | 5      | 6        | 8      | 10     | 12     |  |

|              | Lengths |    |    |    |    |    |    |    |    |    |    |    |     |     |
|--------------|---------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|
| Body<br>Size | 10      | 12 | 16 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 120 |
| 6.00         |         |    |    |    |    |    |    |    |    |    |    |    |     |     |
| 8.00         |         |    |    |    |    |    |    |    |    |    |    |    |     |     |
| 10.00        |         |    |    |    |    |    |    |    |    |    |    |    |     |     |
| 12.00        |         |    |    |    |    |    |    |    |    |    |    |    |     |     |
| 16.00        |         |    |    |    |    |    |    |    |    |    |    |    |     |     |
| 20.00        |         |    |    |    |    |    |    |    |    |    |    |    |     |     |
| 24.00        |         |    |    |    |    |    |    |    |    |    |    |    |     |     |