

### Data Sheet 3 Standard Screw Stock

This Data Sheet gives details of our "ex stock" and "short order" range of Screws and Nuts. It will be helpful in deciding the best size of screw and nut for your application to have our **Data Sheet 2 - Power Screw Products** to hand.

**Data Sheet 2** includes two **Screw Selection** tables; Table 1 provides a guide to screw size and thread pitch required for a known load and linear speed. Table 2 shows maximum load recommended to avoid buckling when screw is in compression.


Both tables show recommended maximum values based on Steel Screws and Phosphor Bronze, or Cast Iron Nuts, with good surface finish to all thread flank faces and a factor of safety of 2.1. In practice it is advisable to keep well inside these recommended maximum figures. For Screws and Nuts outside the range of the tables, or any other assistance, please refer to our **Technical Sales staff on +44 (0)1482 325676**, who will be pleased to advise.

All of our most popular sizes, as shown below, are available "ex stock". All other British Standard recommended sizes up to 200 mm diameter (8") are available on "short order" to suit your reasonable requirements.

**Screws** - Manufactured from specially produced precision ground medium carbon steel similar to 080M40. Class of fit: - 3G Acme, Class 8e Trapezoidal. All screws available from a minimum length and in steps of: - **Acme -3 ft; Trapezoidal - 500mm**, but let us know minimum length required and we will endeavour to supply with zero waste. **Left and Right hand** Screw Threads available.

ACME Thread - inch dimensions (nominal)						Trapezoidal Thread - mm dimensions (nominal)					
Order No.	A	TPI	R	Length - feet		Order No.	A	P	R	Length - metres	
				Standard	Maximum*					Standard	Maximum*
05010	0.500	10	0.40	3	9	1203	12	3	9	1	3
06258	0.625	8	0.50	5	9	1604	16	4	12	1.5	3
07508	0.750	8	0.63	5	15	2004	20	4	16	1.5	5
10005	1.000	5	0.80	8	15	2505	25	5	20	2.5	5
12504	1.250	4	1.00	8	15	3206	32	6	26	2.5	5
15004	1.500	4	1.25	10	15	4006	40	6	34	3	5
20003	2.000	3	1.67	10	15	5008	50	8	42	3	5
25002	2.500	2	2.00	12	15	6010	60	10	50	3.5	5

\*Normal maximum length. For longer lengths, seamless joined screws or special materials contact our Technical Staff



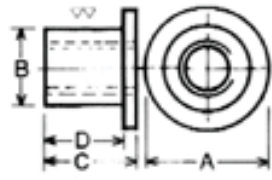
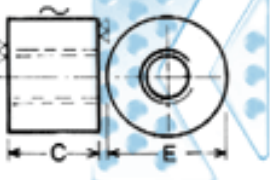
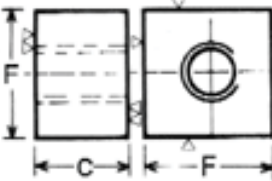
A - Thread diameter  
 TPI - Threads per inch  
 R - Root diameter  
 P - Pitch  
 L - Length

**Ordering:-** Examples  
 12 off 20003RH x 3 foot long  
 6 off 4006LH x 4.5 metres long

**NB: Right hand thread and standard length screws will be supplied unless specified otherwise**

Full range of **Power Nuts** to suit overleaf

We offer "ex stock" our three most popular Styles of Power Nuts to suit our Standard Stock range of Power Screws. Each of these styles are available in Phosphor Bronze (PB) or Cast Iron (CI); the materials most recommended to run trouble free on Steel Screws.

<b>Style "A" Round flanged type</b> 	ACME		Trapezoidal		Nut dimensions - mm					
	Thread Dia. inch	Screw reference	Thread Dia. mm	Screw reference	A	B (f8)	C	D	E	F
	0.500	05010	12	1203	35	20	25	20	38	38
	0.625	06258	16	1604	44	25	29	23	47	47
	0.750	07508	20	2004	52	30	32	25	55	55
<b>Style "B" Round type</b> 	1.000	10005	25	2505	65	38	45	37	70	70
	1.250	12504	32	3206	80	45	60	50	85	85
	1.500	15004	40	4006	110	55	60	48	115	100
	2.000	20003	50	5008	140	70	90	75	150	100
<b>Style "C" Square type</b> 	2.500	25002	60	6010	170	90	115	95	150	110


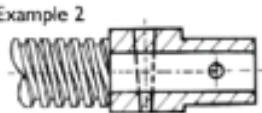
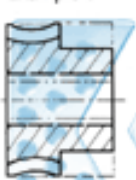
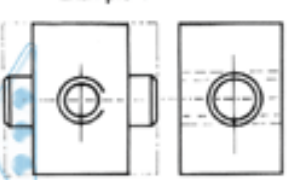
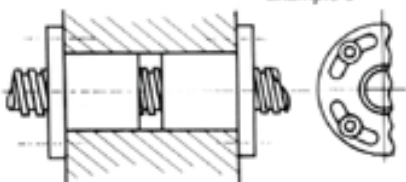
Nuts are machined on all external surfaces with diameter B on flanged style 'A' being finished machined to tolerance f8 for direct fitting into housings.

To order a Nut, place the **Style letter** in front of the Screw reference number, **material abbreviation** after it, followed by **LH** if left handed thread required. **Examples:** - 3 off **B3206CI**; 12 off **C12504PB**; 20 off **A07508PB LH** and 50 off **A1203CI LH**.

**NB** All threads will be assumed to be **Right-Hand** unless stated otherwise. If a **Left-Hand** thread is required please state **LH** after order number as shown.

In addition to the above we offer on "Short Order": - Nuts in hexagon style and from alternative materials such as steel or plastic, and 'light body' versions of "B" and "C" styles where subsequent machining is not required, all suitable for the Standard Stock range of Screws.

### Using and Modifying

 <p>Example 1</p>  <p>Example 2</p>	<p><b>Shaft ends:</b> - Screws can be adapted for use by simply machining journals and bearing locking threads smaller than the thread Root diameter. (Example 1). If larger diameter Journals are required, sleeves can be pinned or welded into place. (Example 2)</p>
 <p>Example 3</p>  <p>Example 4</p>	<p><b>Adapting Nuts:</b> - Style A Nuts only require fixing holes drilling in the flange before fitting into housings. Styles B and C have sufficient material in the body to allow machining of say Gear Teeth in Style B (Example 3), or Trunnions in Style C (Example 4).</p>
 <p>Example 5</p>	<p><b>Backlash/wear:</b> - To eliminate backlash resulting from wear between Screw and Nut, Style A Nuts can be mounted in pairs with one Nut either shimmed or with elongated holes enabling it to be turned in relation to the other Nut. (Example 5).</p>

**Specials** - If the standard range of Screws and Nuts doesn't satisfy your application see our **Data Sheet 2 - Power Screw Products** or contact our Technical Sales staff to discuss your requirements.