

## BRITISH THREADS

WHITWORTH FORM	NON - WHITWORTH FORM
<b>BSW</b> - British Standard Whitworth Thread	<b>BA</b> - British Association (Miniature Thread)
<b>BSF</b> - British Standard Fine Thread	
<b>BSP</b> - British Standard Pipe Thread (Parallel)	
<b>BSPT</b> - British Standard Pipe Thread (Tapered)	

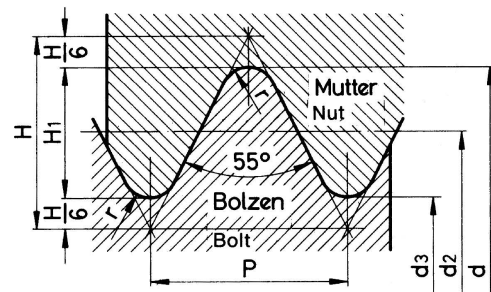
# Technical Data

## BRITISH SCREW THREADS - BSW & BSF FORMS

REF.: BS 84: 1956

**BSW:** British Standard Whitworth Thread after its introduction in 1841, was rapidly adopted throughout England and the continent.

**BSF:** British Standard Fine Thread is a second series which was established in 1908 to meet the needs of additional engineering activity.



Basic Whitworth thread forms have the following proportions:

Thread Angle: 55°  
Depth of Thread h: 0.64033 P  
P = Pitch

Shortening at crest and roots:  $1/6 H = 0.16008 P$   
Triangular Height H: 0.96049 P

Flank Angle: 27 1/2°  
Radius at crest and root r: 0.13733 P

### BSW - Basic Sizes

NOM. DIA. Inch	THREADS Per Inch	MAJOR DIA. Inch	EFFECT. DIA. Inch	MINOR DIA. Inch
1/8	40	.1250	.1090	.0930
3/16	24	.1875	.1608	.1314
1/4	20	.2500	.2180	.1860
5/16	18	.3125	.2769	.2413
3/8	16	.3750	.3350	.2950
7/16	14	.4375	.3918	.3461
1/2	12	.5000	.4466	.3932
9/16	12	.5625	.5091	.4557
5/8	11	.6250	.5668	.5086
11/16	11	.6875	.6293	.5711
3/4	10	.7500	.6860	.6220
7/8	9	.8750	.8039	.7328
1	8	1.0000	.9200	.8400
1 1/8	7	1.1250	1.0335	.9420
1 1/4	7	1.2500	1.1585	1.0670
1 1/2	6	1.5000	1.3933	1.2866
1 3/4	5	1.7500	1.6219	1.4938
2	4.5	2.0000	1.8577	1.7154

### BSF - Basic Sizes

NOM. DIA. Inch	THREADS Per Inch	MAJOR DIA. Inch	EFFECT. DIA. Inch	MINOR DIA. Inch
3/16	32	.1875	.1675	.1475
7/32	28	.2188	.1959	.1730
1/4	26	.2500	.2254	.2008
9/32	26	.2812	.2566	.2320
5/16	22	.3125	.2834	.2543
3/8	20	.3750	.3430	.3110
7/16	18	.4375	.4019	.3663
1/2	16	.5000	.4600	.4200
9/16	16	.5625	.5225	.4825
5/8	14	.6250	.5793	.5336
11/16	14	.6875	.6418	.5961
3/4	12	.7500	.6966	.6432
13/16	12	.8125	.7591	.7057
7/8	11	.8750	.8168	.7586
1	10	1.0000	.9360	.8720
1 1/8	9	1.1250	1.0539	.9828
1 1/4	9	1.2500	1.1789	1.1078
1 3/8	8	1.3750	1.2950	1.2150
1 1/2	8	1.5000	1.4200	1.3400
1 5/8	8	1.6250	1.5450	1.4650
1 3/4	7	1.7500	1.6585	1.5670
2	7	2.0000	1.9085	1.8170