How to identify the size of a BSP threaded fitting

Most fittings used in the UK for irrigation, pump inlets and outlets, plumbing pipework and general commercial and industrial pipework is carried out using pipes and fittings that have a BSP thread.

Just to confuse you, we generally refer to a fitting by size, a 1" BSP nipple is also known as a 25mm BSP nipple but this actually refers to the inside diameter. The outside diameter for a 1" BSP fitting is not 1" or 25mm it is in fact 33.249mm at the widest point.

To identify exactly which fitting you have, measure across the thread where the red arrows are on the image below. Now refer to the "Actual Major Diameter" column on the chart and then look left to see the Metric and Imperial name of that size. Below is the chart of names and actual measured sizes for BSPT fittings.

Metric Name	Imperial Name	Actual Major Diameter in mm Between red arrows	Actual Major Diameter in inches
6 m m	1/8″	9.728mm	0.383
8 m m	1/4 "	13.157mm	0.518
10 m m	3/8"	16.662mm	0.656
15 m m	1/2 "	20.995mm	0.825
20 m m	3/4 "	26.441mm	1.041
25 m m	1 "	33.249mm	1.309
3 2 m m	1 1/4 "	41.91mm	1.65
40 m m	1 ½"	47.803mm	1.882
50mm	2 "	59.614mm	2.347
65mm	2 1/2 "	75.184mm	2.96
75mm or 80mm	3 "	87.884mm	3.46
100mm	4 "	113.03mm	4.45
125 m m	5 "	138.43mm	5.45
150mm	6"	163.83mm	6.45



To accurately identify any BSPP or BSPT fitting, measure from one side of the thread to the other and refer to the chart above. EG: If the fitting measured 33.249mm across, it is a 1" BSP fitting and you would refer to it as a 1" BSP fitting. A 2" fitting would measure 59.614mm across the threads, it is still called a 2" BSP fitting.