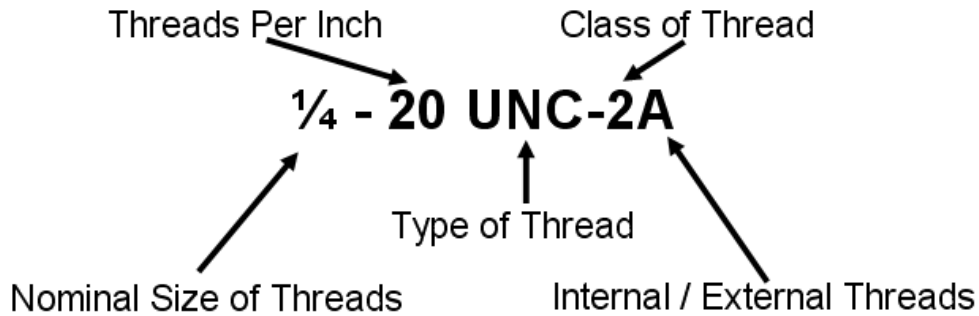


Understanding Thread Notes

Standard Thread Notes



Nominal Size of Threads

Threads per Inch

Type of Thread

Class of Thread

Internal/External Threads

External diameter of the threads.

Number of threads contained in one inch.

UNC – Unified Coarse thread (most common)

UNF – Unified Fine thread

UNEF – Unified Extra Fine thread

Accuracy of manufacture.

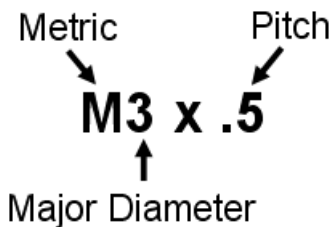
1 is least accurate.

2 and 3 are more accurate and most common.

A indicates internal threads.

B indicates external threads.

Metric Thread Notes



Metric

Major Diameter

Pitch

Indicates that it is a metric thread.

External diameter of the threads in millimeters.

Pitch distance in millimeters.

Machinist Handbook for

1/4 - 20 UNC

THREAD	DIM		TAP DRILL		CL HOLE		CL HOLE	
					NORMAL FIT		CLOSE FIT	
SIZE	inch	mm	inch	mm	inch	mm	inch	mm
0-80	0.060	1.52	0.047	1.19	0.073	1.85	0.067	1.70
1-64	0.073	1.85	0.059	1.50	0.089	2.26	0.081	2.06
1-72	0.073	1.85	0.059	1.50	0.089	2.26	0.081	2.06
2-56	0.086	2.18	0.067	1.70	0.106	2.69	0.094	2.39
2-64	0.086	2.18	0.070	1.78	0.106	2.69	0.094	2.39
3-48	0.090	2.29	0.078	1.98	0.120	3.05	0.106	2.69
3-56	0.090	2.29	0.081	2.06	0.120	3.05	0.106	2.69
4-40	0.112	2.84	0.089	2.26	0.136	3.45	0.125	3.18
4-48	0.112	2.84	0.094	2.37	0.136	3.45	0.125	3.18
5-40	0.125	3.18	0.100	2.53	0.154	3.91	0.141	3.58
5-44	0.125	3.18	0.104	2.64	0.154	3.91	0.141	3.58
6-32	0.138	3.51	0.107	2.71	0.170	4.32	0.154	3.91
6-40	0.138	3.51	0.113	2.87	0.170	4.32	0.154	3.91
8-32	0.164	4.17	0.136	3.45	0.194	4.93	0.180	4.57
8-36	0.164	4.17	0.136	3.45	0.194	4.93	0.180	4.57
10-24	0.190	4.83	0.150	3.80	0.221	5.61	0.206	5.23
10-32	0.190	4.83	0.159	4.04	0.221	5.61	0.206	5.23
12-24	0.216	5.49	0.173	4.39				
12-28	0.216	5.49	0.180	4.57				
1/4-20	0.250	6.35	0.201	5.11	0.281	7.14	0.266	6.76

*The #7 drill (.2010 inch diameter) is for steel with 75% thread depth. For copper, aluminum, cast iron, bakelite, or very thin materials, use one drill size larger (i.e. a slightly smaller diameter #8 = .1990 inch diameter).

