

# MARYLAND METRICS

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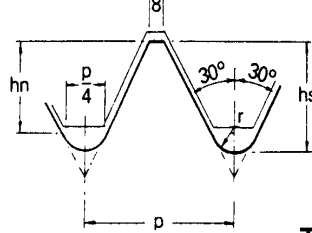
## THREAD FORM

$r = \text{Basic Radius} = \cdot 1443 p$

$h_n = \text{Basic Height of Internal Thread \& Depth of Thread Engagement} = \cdot 54127 p$

$h_s = \text{Basic Height of External Thread} = \cdot 61344 p$

DIN 13 ISO 965



$p = \text{Pitch}$

## I.S.O. METRIC (M)

nom. diam.	pitch	basic major diam.	basic effective diam.	basic minor diam. external threads	basic minor diam. internal threads	reccmd. tap drill size	clearance drill size
1.0	0.25	1.000	0.838	0.693	0.729	0.75	1.05
1.1	0.25	1.100	0.938	0.783	0.829	0.85	1.15
1.2	0.25	1.200	1.038	0.893	0.929	0.95	1.25
1.4	0.30	1.400	1.205	1.032	1.075	1.10	1.45
1.6	0.35	1.600	1.373	1.170	1.221	1.25	1.65
1.8	0.35	1.800	1.573	1.370	1.421	1.45	1.85
2	0.40	2.000	1.740	1.509	1.567	1.60	2.05
2.2	0.45	2.200	1.908	1.648	1.713	1.75	2.25
2.5	0.45	2.500	2.208	1.948	2.013	2.05	2.60
3	0.50	3.000	2.675	2.387	2.459	2.50	3.10
3.5	0.60	3.500	3.110	2.764	2.850	2.90	3.60
4	0.70	4.000	3.545	3.141	3.242	3.30	4.10
4.5	0.75	4.500	4.013	3.580	3.688	3.70	4.60
5	0.80	5.000	4.480	4.019	4.134	4.20	5.10
6	1.00	6.000	5.350	4.773	4.917	5.00	6.10
7	1.00	7.000	6.350	5.773	5.917	6.00	7.20
8	1.25	8.000	7.188	6.466	6.647	6.80	8.20
9	1.25	9.000	8.188	7.466	7.647	7.80	9.20
10	1.50	10.000	9.026	8.160	8.376	8.50	10.20
11	1.50	11.000	10.026	9.160	9.376	9.50	11.20
12	1.75	12.000	10.863	9.853	10.106	10.20	12.20
14	2.00	14.000	12.701	11.546	11.835	12.00	14.25
16	2.00	16.000	14.701	13.546	13.835	14.00	16.25
18	2.50	18.000	16.375	14.933	15.294	15.50	18.25
20	2.50	20.000	18.376	16.933	17.294	17.50	20.25
22	2.50	22.000	20.376	18.933	19.294	19.50	22.25
24	3.00	24.000	22.051	20.319	20.752	21.00	24.25
27	3.00	27.000	25.051	23.319	23.752	24.00	27.25
30	3.50	30.000	27.727	25.706	26.211	26.50	30.50
33	3.50	33.000	30.727	28.706	29.211	29.50	33.50
36	4.00	36.000	33.402	31.093	31.670	32.00	36.50
39	4.00	39.000	36.402	34.093	34.670	35.00	39.50
42	4.50	42.000	39.077	36.479	37.129	37.50	42.50
45	4.50	45.000	42.077	39.479	40.129	40.50	45.50
48	5.00	48.000	44.752	41.866	42.587	43.00	48.50
52	5.00	52.000	48.752	45.866	46.587	47.00	53.00
56	5.50	56.000	52.428	49.252	50.046	50.50	57.00

nom. diam.	pitch	basic major diam.	basic effective diam.	basic minor diam.	reccmd. tap drill size	clearance drill size	
							mm
3.00	0.35	3.000	2.773	2.570	2.621	2.65	3.10
4.00	0.50	4.000	3.675	3.387	3.459	3.50	4.10
5.00	0.60	5.000	4.675	4.387	4.459	4.50	5.10
6.00	0.75	6.000	5.513	5.080	5.188	5.20	6.10
7.00	0.75	7.000	6.513	6.080	6.188	6.20	7.20
8.00	1.00	8.000	7.350	6.773	6.917	7.00	8.20
10.00	1.25	10.000	9.189	8.647	8.80	10.20	9.20
12.00	1.25*	12.000	11.188	10.466	10.647	10.80	12.20
14.00	1.50	14.000	13.026	12.160	12.376	12.50	14.25
16.00	1.50*	16.000	15.026	14.160	14.376	14.50	16.25
18.00	1.50*	18.000	17.026	16.160	16.376	16.50	18.25
20.00	1.50*	20.000	19.026	18.160	18.376	18.50	20.25
22.00	1.50	22.000	21.026	20.160	20.376	20.50	22.25
24.00	2.00	24.000	22.701	21.546	21.835	22.00	24.25
27.00	2.00	27.000	25.701	24.506	24.835	25.00	27.25
30.00	2.00	30.000	28.701	27.546	27.835	28.00	30.50

nom. diam.	pitch	basic major diam.	basic effective diam.	basic minor diam.	reccmd. tap drill size	clearance drill size	
							mm
1.70	0.35	1.700	1.473	1.270	1.321	1.35	1.80
2.00	0.45	2.000	1.708	1.448	1.513	1.55	2.10
2.30	0.40	2.300	2.040	1.809	1.867	1.90	2.40
2.60	0.45	2.600	2.308	2.048	2.113	2.15	2.70
3.00	0.60	3.000	2.610	2.264	2.350	2.40	3.10
4.00	0.75	4.000	3.513	3.080	3.188	3.20	4.10
5.00	0.90	5.000	4.415	3.896	4.026	4.10	5.10
5.50	0.90	5.500	4.915	4.396	4.526	4.60	5.60
8.00	0.75	8.000	7.513	7.080	7.188	7.20	8.20
9.00	1.00	9.000	8.350	7.773	7.917	8.00	9.20
10.00	0.75	10.000	9.513	9.080	9.188	9.20	10.20
10.00	1.00*	10.000	9.350	8.773	8.917	9.00	10.20
12.00	1.00	12.000	11.350	10.773	10.917	11.00	12.20
12.00	1.50	12.000	11.026	10.160	10.376	10.50	12.20
14.00	1.25*	14.000	13.188	12.466	12.647	12.80	14.25
16.00	1.00	16.000	15.350	14.773	14.917	15.00	16.25
20.00	1.00	20.000	19.350	18.773	18.917	19.00	20.25
20.00	2.00	20.000	10.701	17.546	17.835	18.00	20.25
24.00	1.00	24.000	23.350	22.917	22.917	23.00	24.25
24.00	1.50	24.000	23.026	22.160	22.376	22.50	24.25
25.00	1.50	25.000	24.026	23.160	23.376	23.50	25.25
32.00	1.50*	32.000	31.026	30.160	30.376	30.50	32.50

Note: Pitch/diameter combinations marked (\*) are also metric spark plug sizes. Pitch/diameter marked (\*\*) are also metric conduitsizes.

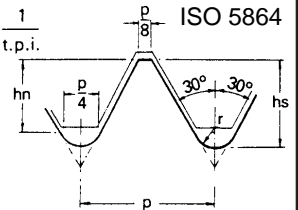
## THREAD FORM

$r = \text{Basic Radius} = \cdot 1443 p$

$h_n = \text{Basic Height of Internal Thread \& Depth of Thread Engagement} = \cdot 54127 p$

$h_s = \text{Basic Height of External Thread} = \cdot 61344 p$

$p = \text{Pitch} = \frac{1}{t.p.i.}$



## UNIFIED COARSE (U.N.C.)

nom. diameter	t.p.i.	basic major diam.	basic effective diam.	basic minor diam. external threads	basic minor diam. internal threads	reccmd. tap drill size	clearance drill size
No. 1	64	0.0730	0.0629	0.0538	0.0561	1.55	1.95
No. 2	56	0.0860	0.0744	0.0641	0.0667	1.85	2.30
No. 3	48	0.0990	0.0855	0.0734	0.0764	2.10	2.65
No. 4	40	0.1120	0.0958	0.0813	0.0849	2.35	2.95
No. 5	40	0.1250	0.1088	0.0943	0.0979	2.65	3.30
No. 6	32	0.1380	0.1177	0.0997	0.1042	2.85	3.60
No. 8	32	0.1640	0.1437	0.1257	0.1302	3.50	4.30
No. 10	24	0.1900	0.1629	0.1389	0.1449	3.90	4.90
No. 12	24	0.2160	0.1889	0.1649	0.1709	4.50	5.60
1/4	20	0.2500	0.2175	0.1887	0.1959	5.10	6.50
5/16	18	0.3125	0.2764	0.2443	0.2524	6.60	8.10
3/8	16	0.3750	0.3344	0.2983	0.3073	8.00	9.70
7/16	14	0.4375	0.3911	0.3499	0.3602	9.40	11.30
1/2	13	0.5000	0.4500	0.4056	0.4167	10.80	13.00
9/16	12	0.5625	0.5084	0.4603	0.4723	12.20	14.50
5/8	11	0.6250	0.5660	0.5135	0.5266	13.50	16.25
3/4	10	0.7500	0.6850	0.6273	0.6417	16.50	19.25
7/8	9	0.8750	0.8028	0.7387	0.7547	19.50	22.50
1	8	1.0000	0.9188	0.8466	0.8647	22.25	25.75
1 1/8	7	1.1250	1.0322	0.9497	0.9704	25.00	29.00
1 1/4	7	1.2500	1.1572	1.0747	1.0954	28.00	32.00
1 3/8	6	1.3750	1.2667	1.1705	1.1946	30.75	35.50
1 1/2	6	1.5000	1.3917	1.2955	1.3196	34.00	38.50
1 3/4	5	1.7500	1.6201	1.5046	1.5335	39.50	45.00
2	4 1/2	2.0000	1.8557	1.7274	1.7594	45.00	51.00
2 1/4	4 1/2	2.2500	2.1057	1.9774	2.0094	52.00	58.00

## UNIFIED FINE (U.N.F.)

nom. diameter	t.p.i.	basic major diam.	basic effective diam.	basic minor diam. external threads	basic minor diam. internal threads	reccmd. tap drill size	clearance drill size
No. 0	80	0.0600	0.0519	0.0447	0.0465	1.25	1.60
No. 1	72	0.0730	0.0640	0.0560	0.0580	1.55	1.95
No. 2	64	0.0860	0.0759	0.0668	0.0691	1.90	2.30
No. 3	56	0.0990	0.0874	0.0771	0.0797	2.15	2.65
No. 4	48	0.1120	0.0985	0.0864	0.0894	2.40	2.95
No. 5	44	0.1250	0.1102	0.0971	0.1004	2.70	3.30
No. 6	40	0.1380	0.1218	0.1073	0.1119	2.95	3.60
No. 8	36	0.1640	0.1460	0.1299	0.1339	3.50	4.30
No. 10	32	0.1900	0.1697	0.1517	0.1562	4.10	4.90
No. 12	28	0.2160	0.1928	0.1722	0.1773	4.70	5.60
1/4	28	0.2500	0.2268	0.2062	0.2113	5.50	6.50
5/16	24	0.3125	0.2854	0.2614	0.2674	6.90	8.10
3/8	24	0.3750	0.3479	0.3239	0.3299	8.50	9.70
7/16	20	0.4375	0.4050	0.3762	0.3834	9.90	11.30
1/2	20	0.5000	0.4675	0.4387	0.4459	11.50	13.00
9/16	18	0.5625	0.5264	0.4943	0.5024	12.90	14.50
5/8	18	0.6250	0.5889	0.5568	0.5649	14.50	16.25
3/4	16	0.7500	0.7094	0.6733	0.6823	17.50	19.25
7/8	14	0.8750	0.8286	0.7874	0.7977	20.40	22.50
1	12	1.0000	0.9459	0.8978	0.9098	23.25	25.75
1 1/4	12	1.1250	1.0709	1.0228	1.0348	26.50	29.00
1 1/8	12	1.2500	1.1959	1.1478	1.1598		