

ISO Metric Threads

M

ISO Metric coarse thread DIN 13

Nom. size	D ₁ (6H)		mm
	D	P	
M 1	0,25	0,75	0,75
1,1	0,25	0,829	0,885
1,2	0,25	0,929	0,985
1,4	0,3	1,075	1,142
1,6	0,35	1,221	1,321
1,7	0,35	1,321	1,421
1,8	0,35	1,421	1,521
2	0,4	1,567	1,679
2,2	0,45	1,713	1,838
2,3	0,4	1,867	1,979
2,5	0,45	2,013	2,138
2,6	0,45	2,113	2,238
3	0,5	2,459	2,599
3,5	0,6	2,850	3,010
4	0,7	3,242	3,422
4,5	0,75	3,688	3,878
5	0,8	4,134	4,344
5,5	0,9	4,526	4,750
6	1	4,917	5,153
7	1	5,917	6,153
8	1,25	6,647	6,912
9	1,25	7,647	7,912
10	1,5	8,376	8,676
11	1,5	9,376	9,676
12	1,75	10,106	10,441
14	2	11,835	12,210
16	2	13,835	14,210
18	2,5	15,294	15,744
20	2,5	17,294	17,744
22	2,5	19,294	19,744
24	3	20,752	21,252
27	3	23,752	24,252
30	3,5	26,211	26,711
33	3,5	29,211	29,711
36	4	31,670	32,270
39	4	34,670	35,270
42	4,5	37,129	37,789
45	4,5	40,129	40,789
48	5	42,587	43,287
52	5	46,587	47,287
56	5,5	50,046	50,796
60	5,5	54,046	54,796
64	6	57,505	58,305
68	6	61,505	62,305

MF

ISO Metric fine thread DIN 13

Nom. size	D ₁ (6H)		mm
	D	P	
M 2,5 x 0,35	2,212	2,221	2,15
2,6 x 0,35	2,221	2,231	2,15
3 x 0,35	2,621	2,721	2,65
3,5 x 0,35	3,121	3,221	3,15
4 x 0,35	3,621	3,721	3,65
4 x 0,5	3,459	3,599	3,5
5 x 0,5	4,459	4,599	4,5
6 x 0,5	5,459	5,599	5,5
6 x 0,75	5,188	5,378	5,2
7 x 0,75	6,188	6,378	6,2
8 x 0,75	7,188	7,378	7,2
9 x 0,75	8,188	8,378	8,2
9 x 1	7,917	8,153	8
10 x 0,75	9,188	9,378	9,2
10 x 1	8,917	9,153	9
10 x 1,25	8,647	8,912	8,8
11 x 1	9,917	10,153	10
12 x 1	10,917	11,153	11
12 x 1,25	10,647	10,912	10,8
12 x 1,5	10,376	10,676	10,5
14 x 1	12,917	13,153	13
14 x 1,25	12,647	12,912	12,8
14 x 1,5	12,376	12,676	12,5
15 x 1	13,917	14,153	14
16 x 1	14,917	15,153	15
16 x 1,5	14,376	14,676	14,5
18 x 1	16,917	17,153	17
18 x 1,5	16,376	16,676	16,5
18 x 2	15,835	16,210	16
20 x 1	18,917	19,153	19
20 x 1,5	18,376	18,676	18,5
20 x 2	17,835	18,210	18
22 x 1	20,917	21,153	21
22 x 1,5	20,376	20,676	20,5
22 x 2	19,835	20,210	20
24 x 1	22,917	23,153	23
24 x 1,5	22,376	22,676	22,5
24 x 2	21,835	22,210	22
25 x 1,5	23,376	23,676	23,5
26 x 1,5	24,376	24,676	24,5
27 x 1,5	25,376	25,676	25,5
27 x 2	24,835	25,210	25
28 x 1,5	26,376	26,676	26,5
28 x 2	25,835	26,210	26
30 x 1,5	28,376	28,676	28,5
30 x 2	27,835	28,210	28
32 x 1,5	30,376	30,676	30,5
32 x 2	29,835	30,210	30
33 x 1,5	31,376	31,676	31,5
33 x 2	30,835	31,210	31
34 x 1,5	32,376	32,676	32,5

Tr

ISO Metric trapezoidal coarse thread DIN 103

Nom. size	D ₁ (7H)		mm
	D	P	
Tr 8 x 1,5	6,5	6,6	6,6
9 x 2	7	7,236	7,2
10 x 2	8	8,236	8,2
10 x 3	7	7,315	7,25
11 x 3	8	8,315	8,25
12 x 3	9	9,315	9,25
14 x 3	11	11,315	11,25
14 x 4	10	10,375	10,25
16 x 4	12	12,375	12,25
18 x 4	14	14,375	14,25
20 x 4	16	16,375	16,25
22 x 5	17	17,45	17,25
24 x 5	19	19,45	19,25
26 x 5	21	21,45	21,25
28 x 5	23	23,45	23,25
30 x 6	24	24,5	24,25
32 x 6	26	26,5	26,25
34 x 6	28	28,5	28,25
36 x 6	30	30,5	30,25
38 x 7	31	31,56	31,5
40 x 7	33	33,56	33,5
42 x 7	35	35,56	35,5
44 x 7	37	37,56	37,5
46 x 8	38	38,63	38,5
48 x 8	40	40,63	40,5
50 x 8	42	42,63	42,5
52 x 8	44	44,63	44,5

Rd

Round thread DIN 405

Nom. size	D ₁ (7H)		mm
	D	P	
Rd 8 x 10	5,714	6,164	6
9 x 10	6,714	7,164	7
10 x 10	7,714	8,164	8
11 x 10	8,714	9,164	9
12 x 10	9,714	10,164	10
14 x 8	11,142	11,672	11,5
16 x 8	13,142	13,672	13,5
18 x 8	15,142	15,672	15,5
20 x 8	17,142	17,672	17,5
22 x 8	19,142	19,672	19,5
24 x 8	21,142	21,672	21,5
26 x 8	23,142	23,672	23,5
28 x 8	25,142	25,672	25,5
30 x 8	27,142	27,672	27,5

Pg

Steel conduit thread (Pg) DIN 40430 will be replaced by Metric fine thread acc. DIN EN 60423. The steel conduit thread will be used only for repair work.

Nom. size	D ₁		mm
	D	P	
Pg 7	20	11,28	11,43
9	18	13,86	14,01
11	18	17,26	17,41
13,5	18	19,06	19,21
16	18	21,16	21,31
21	16	26,78	27,03
29	16	35,48	35,73
36	16	45,48	45,73
42	16	52,48	52,73
48	16	57,78	58,03

Cylindrical Pipe Threads

Whitworth pipe thread DIN EN ISO 228

Nom. size	D ₁		mm
	D	P	
G 1/16 - 28	6,561	6,843	6,8
1/8 - 28	8,566	8,848	8,8
1/4 - 19	11,445	11,890	11,8
3/8 - 19	14,950	15,395	15,25
1/2 - 14	18,631	19,172	19
5/8 - 14	20,587	21,128	21
3/4 - 14	24,117	24,658	24,5
7/8 - 14	27,877	28,418	28,25
1" - 11	30,291	30,931	30,75
1 1/8 - 11	34,839	35,579	35,5
1 1/4 - 11	38,952	39,592	39,5
1 3/8 - 11	41,365	42,005	41,75
1 1/2 - 11	44,845	45,485	45,25
1 5/8 - 11	49,030	49,670	49,5
2" - 11	50,788	51,428	51
2 1/4 - 11	56,656	57,296	56,5
2 1/2 - 11	62,752	63,392	62,5
2 3/4 - 11	72,226	72,866	72,8
3" - 11	78,576	79,216	79,1
3 1/2 - 11	84,926	85,566	85,5

Preparatory diameters for taps of type HCT

Nom. size	D ₁		mm
	D	P	
Rp 1/16 - 28	6,490	6,632	6,55
1/8 - 28	8,495	8,637	8,6
1/4 - 19	11,341	11,549	11,5
3/8 - 19	14,846	15,054	15
1/2 - 14	18,489	18,773	18,5
3/4 - 14	24,975	24,259	24
1" - 11	30,111	30,471	30,25

American Standard straight pipe thread ANSI/ASME B1.20.1 for mechanical joints (previously NPS)

Nom. size	D ₁		mm
	D	P	
NPSM 1/8 - 27	9,093	9,246	9,1
1/4 - 18	11,887	12,217	12
3/8 - 18	15,316	15,545	15,5
1/2 - 14	18,974	19,279	19
3/4 - 14	24,333	24,638	24,5
1" - 11 1/2	30,505	30,759	30,5

American Standard straight pipe thread ANSI B1.20.3 dryseal internal straight pipe thread for fuel, combined with external tapered pipe thread NPTF or PTF-SAE-SHORT. Gauge with tapered gauges

Nom. size	D ₁		mm
	D	P	
NPSF 1/16 - 27	6,304	6,393	6,35
1/8 - 27	8,651	8,740	8,7
1/4 - 18	11,232	11,364	11,3
3/8 - 18	14,671	14,803	14,75
1/2 - 14	18,118	18,288	18,2
3/4 - 14	23,465	23,635	23,5
1" - 11 1/2	29,464	29,670	29,5

Rp (BSPP)

Cylindrical Whitworth pipe thread DIN EN 10226-1 and ISO 7-1 where pressure-tight joints are made on the threads

Nom. size	D ₁		mm
	D	P	
Rp 1/16 - 28	6,490	6,632	6,55
1/8 - 28	8,495	8,637	8,6
1/4 - 19	11,341	11,549	11,5
3/8 - 19	14,846	15,054	15
1/2 - 14	18,489	18,773	18,5
3/4 - 14	24,975	24,259	24
1" - 11	30,111	30,471	30,25

British Threads

Whitworth thread BS 48

Nom. size	D ₁		mm
	D	P	
BSW 1/16 - 60	1,045	1,120	1,15
3/32 - 48	1,704	1,912	1,85
1/8 - 40	2,362	2,591	2,55
5/32 - 32	2,952	3,214	3,2
3/16 - 24	3,406	3,744	3,7
7/32 - 24	4,201	4,539	4,5
1/4 - 20	4,724	5,156	5,1
5/16 - 18	6,129	6,589	6,5
3/8 - 16	7,493	7,988	7,9
7/16 - 14	8,791	9,322	9,25
1/2 - 12	9,987	10,589	10,5
9/16 - 12	11,575	12,177	12
5/8 - 11	12,918	13,559	13,5
3/4 - 10	15,799	16,485	16,4
7/8 - 9	18,613	19,355	19,25
1" - 8	21,336	22,149	22
1 1/8 - 7	23,927	24,831	24,75
1 1/4 - 7	27,102	28,006	27,75
1 3/8 - 6	29,504	30,528	30,5
1 1/2 - 6	32,680	33,703	33,5
1 5/8 - 5	34,769	35,963	35,5
1 3/4 - 5	37,943	39,136	39
1 7/8 - 4 1/2	40,396	41,702	41,5
2" - 4 1/2	43,571	44,877	44,5

BSF

Whitworth fine thread BS 48

Nom. size	D ₁		mm
	D	P	
BSF 3/16 - 32	3,747	4,006	4
1/4 - 28	5,100	5,398	5,3
5/16 - 22	6,459	6,817	6,8
3/8 - 20	7,899	8,331	8,3
7/16 - 18	9,304	9,764	9,7
1/2 - 16	10,688	11,163	11,1
5/8 - 14	13,553	14,094	14
3/4 - 12	16,337	16,939	16,75
7/8 - 11	19,288	19,909	19,75
1" - 10	22,149	22,835	22,75

Threads for the Aerospace Industry

MJ thread DIN ISO 5855

Nom. size	D ₁		mm
	D	P	
MJ 3 x 0,5	2,513	2,653</	