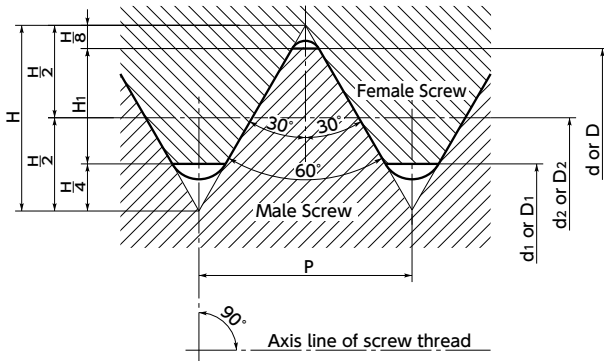


ISO General Purpose Metric Screw Threads

Excerpt from JIS B 0205-2*4:2001 / JIS B 0205:1997 (old standards) / JIS B 0207:1982 (old standards)

Basic profile, formula and basic dimensions of metric threads



$$H = 0.866025P \quad d_2 = d - 0.649519P$$

$$H_1 = 0.541266P \quad d_1 = d - 1.082532P$$

Unit: mm

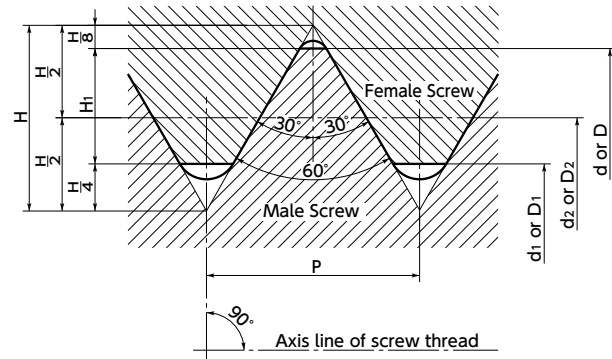
Nominal diameter* =			Pitch P	Height of engagement H ₁	Effective diameters D ₂ / d ₂	Female screw inside diameter D ₁ Male screw root diameter d ₁
Field 1	Field 2	Field 3				
Choice 1	Choice 2	Choice 3				
1	–	–	0.25	0.135	0.838	0.729
–	–	–	0.2	0.108	0.870	0.783
–	1.1	–	0.25	0.135	0.938	0.829
–	–	–	0.2	0.108	0.970	0.883
1.2	–	–	0.25	0.135	1.038	0.929
–	–	–	0.2	0.108	1.070	0.983
–	1.4	–	0.3	0.162	1.205	1.075
–	–	–	0.2	0.108	1.270	1.183
1.6	–	–	0.35	0.189	1.373	1.221
–	–	–	0.2	0.108	1.470	1.383
–	1.8	–	0.35	0.189	1.573	1.421
–	–	–	0.2	0.108	1.670	1.583
2	–	–	0.4	0.217	1.740	1.567
–	–	–	0.25	0.135	1.838	1.729
–	2.2	–	0.45	0.244	1.908	1.713
–	–	–	0.25	0.135	2.038	1.929
2.5	–	–	0.45	0.244	2.208	2.013
–	–	–	0.35	0.189	2.273	2.121
3	–	–	0.5	0.271	2.675	2.459
–	–	–	0.35	0.189	2.773	2.621
–	3.5	–	0.6	0.325	3.110	2.850
–	–	–	0.35	0.189	3.273	3.121
4	–	–	0.7	0.379	3.545	3.242
–	–	–	0.5	0.271	3.675	3.459
–	4.5	–	0.75	0.406	4.013	3.688
–	–	–	0.5	0.271	4.175	3.959
5	–	–	0.8	0.433	4.480	4.134
–	–	–	0.5	0.271	4.675	4.459
–	–	5.5	0.5	0.271	5.175	4.959
6	–	–	1	0.541	5.350	4.917
–	–	–	0.75	0.406	5.513	5.188
–	7	–	1	0.541	6.350	5.917
–	–	–	0.75	0.406	6.513	6.188
8	–	–	1.25	0.677	7.188	6.647
–	–	–	1	0.541	7.350	6.917
–	–	–	0.75	0.406	7.513	7.188
–	–	9	1.25	0.677	8.188	7.647
–	–	–	1	0.541	8.350	7.917
–	–	–	0.75	0.406	8.513	8.188
10	–	–	1.5	0.812	9.026	8.376
–	–	–	1.25	0.677	9.188	8.647
–	–	–	1	0.541	9.350	8.917
–	–	–	0.75	0.406	9.513	9.188
–	–	11	1.5	0.812	10.026	9.376
–	–	–	1	0.541	10.350	9.917
–	–	–	0.75	0.406	10.513	10.188

* Prioritize Field 1 and, if needed, choose Field 2 and Field 3 in that order.

ISO General Purpose Metric Screw Threads

Excerpt from JIS B 0205-2*4:2001 / JIS B 0205:1997 (old standards) / JIS B 0207:1982 (old standards)

Basic profile, formula and basic dimensions of metric threads



$$H = 0.866025P \quad d_2 = d - 0.649519P$$

$$H_1 = 0.541266P \quad d_1 = d - 1.082532P$$

Unit: mm

Nominal diameter* = Male screw outside diameter d, female screw root diameter D			Pitch P	Height of engagement H ₁	Effective diameters D ₂ / d ₂	Female screw inside diameter D ₁ Male screw root diameter d ₁
Field 1 Choice 1	Field 2 Choice 2	Field 3 Choice 3				
12	-	-	1.75	0.947	10.863	10.106
			1.5	0.812	11.026	10.376
			1.25	0.677	11.188	10.647
-	14	-	1	0.541	11.350	10.917
			2	1.083	12.701	11.835
			1.5	0.812	13.026	12.376
-	-	15	1.25	0.677	13.188	12.647
			1	0.541	13.350	12.917
			1.5	0.812	14.026	13.376
16	-	-	1	0.541	14.350	13.917
			2	1.083	14.701	13.835
			1.5	0.812	15.026	14.376
-	-	17	1	0.541	15.350	14.917
			1.5	0.812	16.026	15.376
			1	0.541	16.350	15.917
-	18	-	2.5	1.353	16.376	15.294
			2	1.083	16.701	15.835
			1.5	0.812	17.026	16.376
20	-	-	1	0.541	17.350	16.917
			2.5	1.353	18.376	17.294
			2	1.083	18.701	17.835
-	22	-	1.5	0.812	19.026	18.376
			1	0.541	19.350	18.917
			2.5	1.353	20.376	19.294
24	-	-	2	1.083	20.701	19.835
			1.5	0.812	21.026	20.376
			1	0.541	21.350	20.917
-	-	25	3	1.624	22.051	20.752
			2	1.083	22.701	21.835
			1.5	0.812	23.026	22.376
-	27	-	1	0.541	23.350	22.917
			2	1.083	23.701	22.835
			1.5	0.812	24.026	23.376
-	-	28	1	0.541	24.350	23.917
			1.5	0.812	25.026	24.376
			3	1.624	25.051	23.752
-	29	-	2	1.083	25.701	24.835
			1.5	0.812	26.026	25.376
			1	0.541	26.350	25.917
30	-	-	2	1.083	26.701	25.835
			1.5	0.812	27.026	26.376
			1	0.541	27.350	26.917
-	-	-	3.5	1.894	27.727	26.211
			3	1.624	28.051	26.752
			2	1.083	28.701	27.835
-	-	-	1.5	0.812	29.026	28.376
			1	0.541	29.350	28.917

* Prioritize Field 1 and, if needed, choose Field 2 and Field 3 in that order.

Unit: mm

Nominal diameter* = Male screw outside diameter d, female screw root diameter D			Pitch P	Height of engagement H ₁	Effective diameters D ₂ / d ₂	Female screw inside diameter D ₁ Male screw root diameter d ₁
Field 1 Choice 1	Field 2 Choice 2	Field 3 Choice 3				
-	-	32	2	1.083	30.701	29.835
			1.5	0.812	31.026	30.376
			3.5	1.894	30.727	29.211
-	33	-	3	1.624	31.051	29.752
			2	1.083	31.701	30.835
			1.5	0.812	32.026	31.376
-	-	35	1.5	0.812	34.026	33.376
			4	2.165	33.402	31.670
			3	1.624	34.051	32.752
36	-	-	2	1.083	34.701	33.835
			1.5	0.812	35.026	34.376
			1.5	0.812	37.026	36.376
-	-	38	4	2.165	36.402	34.670
			3	1.624	37.051	35.752
			2	1.083	37.701	36.835
-	39	-	1.5	0.812	38.026	37.376
			3	1.624	38.051	36.752
			2	1.083	38.701	37.835
-	-	40	1.5	0.812	39.026	38.376
			4.5	2.436	39.077	37.129
			4	2.165	39.402	37.670
42	-	-	3	1.624	40.051	38.752
			2	1.083	40.701	39.835
			1.5	0.812	41.026	40.376
-	-	45	4.5	2.436	42.077	40.129
			4	2.165	42.402	40.670
			3	1.624	43.051	41.752
-	47	-	2	1.083	43.701	42.835
			1.5	0.812	44.026	43.376
			5	2.706	44.752	42.587
48	-	-	4	2.165	45.402	43.670
			3	1.624	46.051	44.752
			2	1.083	46.701	45.835
-	-	50	1.5	0.812	47.026	46.376
			3	1.624	48.051	46.752
			2	1.083	48.701	47.835
-	-	52	1.5	0.812	49.026	48.376
			5	2.706	48.752	46.587
			4	2.165	49.402	47.670
-	-	-	3	1.624	50.051	48.752
			2	1.083	50.701	49.835
			1.5	0.812	51.026	50.376
-	-	55	4	2.165	52.402	50.670
			3	1.624	53.051	51.752
			2	1.083	53.701	52.835
-	-	-	1.5	0.812	54.026	53.376

* Prioritize Field 1 and, if needed, choose Field 2 and Field 3 in that order.