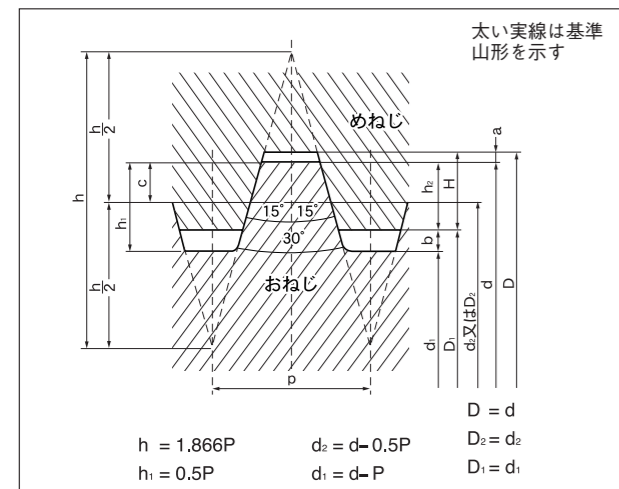


送りねじ規格表

2.1 メートル台形ねじ(Tr)

メートル台形ねじ(JIS B 0261)



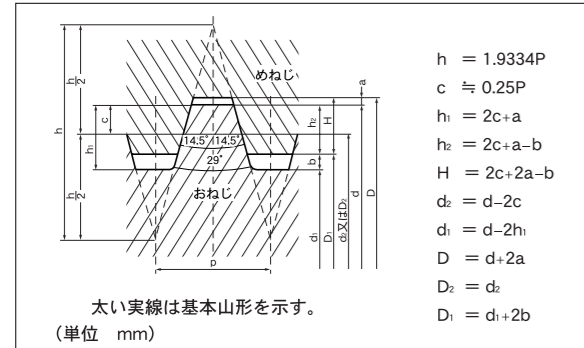
ねじの呼び	ピッチ P	ひっかかりの高さ h_1	めねじ		
			谷の径 D	有効径 D_2	内径 D_1
			おねじ		
			外径 d	有効径 d_2	谷の径 d_1
Tr 34×10	10	5	34,000	29,000	24,000
Tr 34× 6	6	3	34,000	31,000	28,000
Tr 34× 3	3	1.5	34,000	32,500	31,000
Tr 36×10	10	5	36,000	31,000	26,000
Tr 36× 6	6	3	36,000	33,000	30,000
Tr 36× 3	3	1.5	36,000	34,500	33,000
Tr 38×10	10	5	38,000	33,000	28,000
Tr 38× 7	7	3.5	38,000	34,500	31,000
Tr 38× 3	3	1.5	38,000	36,500	35,000
Tr 40×10	10	5	40,000	35,000	30,000
Tr 40× 7	7	3.5	40,000	36,500	33,000
Tr 40× 3	3	1.5	40,000	38,500	37,000
Tr 42×10	10	5	42,000	37,000	32,000
Tr 42× 7	7	3.5	42,000	38,500	35,000
Tr 42× 3	3	1.5	42,000	40,500	39,000
Tr 44×12	12	6	44,000	38,000	32,000
Tr 44× 7	7	3.5	44,000	40,500	37,000
Tr 44× 3	3	1.5	44,000	42,500	41,000
Tr 46×12	12	6	46,000	40,000	34,000
Tr 46× 8	8	4	46,000	42,000	38,000
Tr 46× 3	3	1.5	46,000	44,500	43,000
Tr 48×12	12	6	48,000	42,000	36,000
Tr 48× 8	8	4	48,000	44,000	40,000
Tr 48× 3	3	1.5	48,000	46,500	45,000
Tr 50×12	12	6	50,000	44,000	38,000
Tr 50× 8	8	4	50,000	46,000	42,000
Tr 50× 3	3	1.5	50,000	48,500	47,000
Tr 52×12	12	6	52,000	46,000	40,000
Tr 52× 8	8	4	52,000	48,000	44,000
Tr 52× 3	3	1.5	52,000	50,500	49,000
Tr 55×14	14	7	55,000	48,000	41,000
Tr 55× 9	9	4.5	55,000	50,500	46,000
Tr 55× 3	3	1.5	55,000	53,500	52,000
Tr 60×14	14	7	60,000	53,000	46,000
Tr 60× 9	9	4.5	60,000	55,500	51,000
Tr 60× 3	3	1.5	60,000	58,500	57,000
Tr 65×16	16	8	65,000	57,000	49,000
Tr 65×10	10	5	65,000	60,000	55,000
Tr 65× 4	4	2	65,000	63,000	61,000
Tr 70×16	16	8	70,000	62,000	54,000
Tr 70×10	10	5	70,000	65,000	60,000
Tr 70× 4	4	2	70,000	68,000	66,000
Tr 75×16	16	8	75,000	67,000	59,000
Tr 75×10	10	5	75,000	70,000	65,000
Tr 75× 4	4	2	75,000	73,000	71,000
Tr 80×16	16	8	80,000	72,000	64,000
Tr 80×10	10	5	80,000	75,000	70,000
Tr 80× 4	4	2	80,000	78,000	76,000
Tr 85×18	18	9	85,000	76,000	67,000
Tr 85×12	12	6	85,000	79,000	73,000
Tr 85× 4	4	2	85,000	83,000	81,000
Tr 90×18	18	9	90,000	81,000	72,000
Tr 90×12	12	6	90,000	84,000	78,000
Tr 90× 4	4	2	90,000	88,000	86,000

ねじの呼び	ピッチ P	ひっかかりの高さ h_1	めねじ		
			谷の径 D	有効径 D_2	内径 D_1
			おねじ		
			外径 d	有効径 d_2	谷の径 d_1
Tr 8× 1.5	1.5	0.75	8,000	7,250	6,500
Tr 9× 2	2	1	9,000	8,000	7,000
Tr 9× 1.5	1.5	0.75	9,000	8,250	7,500
Tr 10× 2	2	1	10,000	9,000	8,000
Tr 10× 1.5	1.5	0.75	10,000	9,250	8,500
Tr 11× 3	3	1.5	11,000	9,500	8,000
Tr 11× 2	2	1	11,000	10,000	9,000
Tr 12× 3	3	1.5	12,000	10,500	9,000
Tr 12× 2	2	1	12,000	11,000	10,000
Tr 14× 3	3	1.5	14,000	12,500	11,000
Tr 14× 2	2	1	14,000	13,000	12,000
Tr 16× 4	4	2	16,000	14,000	12,000
Tr 16× 2	2	1	16,000	15,000	14,000
Tr 18× 4	4	2	18,000	16,000	14,000
Tr 18× 2	2	1	18,000	17,000	16,000
Tr 20× 4	4	2	20,000	18,000	16,000
Tr 20× 2	2	1	20,000	19,000	18,000
Tr 22× 8	8	4	22,000	18,000	14,000
Tr 22× 5	5	2.5	22,000	19,500	17,000
Tr 22× 3	3	1.5	22,000	20,500	19,000
Tr 24× 8	8	4	24,000	20,000	16,000
Tr 24× 5	5	2.5	24,000	21,500	19,000
Tr 24× 3	3	1.5	24,000	22,500	21,000
Tr 26× 8	8	4	26,000	22,000	18,000
Tr 26× 5	5	2.5	26,000	23,500	21,000
Tr 26× 3	3	1.5	26,000	24,500	23,000
Tr 28× 8	8	4	28,000	24,000	20,000
Tr 28× 5	5	2.5	28,000	25,500	23,000
Tr 28× 3	3	1.5	28,000	26,500	25,000
Tr 30×10	10	5	30,000	25,000	20,000
Tr 30× 6	6	3	30,000	27,000	24,000
Tr 30× 3	3	1.5	30,000	28,500	27,000
Tr 32×10	10	5	32,000	27,000	22,000
Tr 32× 6	6	3	32,000	29,000	26,000
Tr 32× 3	3	1.5	32,000	30,500	29,000

ねじの呼び	ピッチ P	ひっかかりの高さ h_1	めねじ			ねじの呼び	ピッチ P	ひっかかりの高さ h_1	めねじ		
			谷の径 D	有効径 D_2	内径 D_1				谷の径 D	有効径 D_2	内径 D_1
			おねじ						おねじ		
			外径 d	有効径 d_2	谷の径 d_1				外径 d	有効径 d_2	谷の径 d_1
Tr 95×18	18	9	95,000	86,000	77,000	(Tr 175×28)	28	14	175,000	161,000	147,000
Tr 95×12	12	6	95,000	89,000	83,000	(Tr 175×16)	16	8	175,000	167,000	159,000
Tr 95× 4	4	2	95,000	93,000	91,000	(Tr 175× 8)	8	4	175,000	171,000	167,000
Tr 100×20	20	10	100,000	90,000	80,000	Tr 180×28	28	14	180,000	166,000	152,000
Tr 100×12	12	6	100,000	94,000	88,000	Tr 180×18	18	9	180,000	171,000	162,000
Tr 100× 4	4	2	100,000	98,000	96,000	Tr 180× 8	8	4	180,000	176,000	172,000
(Tr 105×20)	20	10	105,000	95,000	85,000	(Tr 185×32)	32	16	185,000	169,000	153,000
(Tr 105×12)	12	6	105,000	99,000	93,000	(Tr 185×18)	18	9	185,000	176,000	167,000
(Tr 105× 4)	4	2	105,000	103,000	101,000	(Tr 185× 8)	8	4	185,000	181,000	177,000
Tr 110×20	20	10	110,000	100,000	90,000	Tr 190×32	32	16	190,000	174,000	158,000
Tr 110×12	12	6	110,000	104,000	98,000	Tr 190×18	18	9	190,000	181,000	172,000
Tr 110× 4	4	2	110,000	108,000	106,000	Tr 190× 8	8	4	190,000	186,000	182,000
(Tr 115×22)	22	11	115,000	104,000	93,000	(Tr 195×32)	32	16	195,000	179,000	163,000
(Tr 115×14)	14	7	115,000	108,000	101,000	(Tr 195×18)	18	9	195,000	186,000	177,000
(Tr 115× 6)	6	3	115,000	112,000	109,000	(Tr 195× 8)	8	4	195,000	191,000	187,000
Tr 120×22	22	11	120,000	109,000	98,000	Tr 200×32	32	16	200,000	184,000	168,000
Tr 120×14	14	7	120,000	113,000	106,000	Tr 200×18	18	9	200,000	191,000	182,000
Tr 120× 6	6	3	120,000	117,000	114,000	Tr 200× 8	8	4	200,000	196,000	192,000
(Tr 125×22)	22	11	125,000	114,000	103,000	Tr 210×36	36	18	210,000	192,000	174,000
(Tr 125×14)	14	7	125,000	118,000	111,000	Tr 210×20	20	10	210,000	200,000	190,000
(Tr 125× 6)	6	3	125,000	122,000	119,000	Tr 210× 8	8	4	210,000	206,000	202,000
Tr 130×22	22	11	130,000	119,000	108,000	Tr 220×36	36	18	220,000	202,000	184,000
Tr 130×14	14	7	130,000	123,000	116,000	Tr 220×20	20	10	220,000	210,000	200,000
Tr 130× 6	6	3	130,000	127,000	124,000	Tr 220× 8	8	4	220,000	216,000	212,000
(Tr 135×22)	22	11	135,000	123,000	111,000	Tr 230×36	36	18	230,000	212,000	194,000
(Tr 135×14)	14	7	135,000	128,000	121,000	Tr 230×20	20	10	230,000	220,000	210,000
(Tr 135× 6)	6	3	135,000	132,000	129,000	Tr 230× 8	8	4	230,000	226,000	222,000
Tr 140×24	24	12	140,000	128,000	116,000	Tr 240×36	36	18	240,000	222,000	204,000
Tr 140×14	14	7	140,000	133,000	126,000	Tr 240×22	22	11	240,000	229,000	218,000
Tr 140× 6	6	3	140,000	137,000	134,000	Tr 240× 8	8	4	240,000	236,000	232,000
(Tr 145×24)	24	12	145,000	133,000	121,000	Tr 250×40	40	20	250,000	230,000	210,000
(Tr 145×14)	14	7	145,000	138,000	131,000	Tr 250×22	22	11	250,000	239,000	228,000
(Tr 145× 6)	6	3	145,000	142,000	139,000	Tr 250×12	12	6	250,000	244,000	238,000
Tr 150×24	24	12	150,000	138,000	126,000	Tr 260×40	40	20	260,000	240,000	220,000
Tr 150×16	16	8	150,000	142,000	134,000	Tr 260×22	22	11	260,000	249,000	238,000
Tr 150× 6	6	3	150,000	147,000	144,000	Tr 260×12	12	6	260,000	254,000	248,000
(Tr 155×24)	24	12	155,000	143,000	131,000	Tr 270×40	40	20	270,000	250,000	230,000
(Tr 155×16)	16	8	155,000	147,000	139,000	Tr 270×24	24	12	270,000	258,000	246,000
(Tr 155× 6)	6	3	155,000	152,000	149,000	Tr 270×12	12	6	270,000	264,000	268,000
Tr 160×28	28	14	160,000	146,000	132,000	Tr 280×40	40	20	280,000	260,000	240,000
Tr 160×16	16	8	160,000	152,000	144,000	Tr 280×24	24	12	280,000	268,000	256,000
Tr 160× 6	6	3	160,000	157,000	154,000	Tr 280×12	12	6	280,000	274,000	258,000
(Tr 165×28)	28	14	165,000	151,000	137,000						

2.2 29度台形ねじ (TW)

29度台形ねじの基本寸法



29度台形ねじの山数系列

(単位 mm)

呼び	山数 (25.4mmにつき)	呼び	山数 (25.4mmにつき)
TW 10	12	TW 52	3
TW 12	10	TW 55	3
TW 14	8	TW 58	3
TW 16	8	TW 60	3
TW 18	6	TW 62	3
TW 20	6	TW 65	2½
TW 22	5	TW 68	2½
TW 24	5	TW 70	2½
TW 26	5	TW 72	2½
TW 28	5	TW 75	2½
TW 30	4	TW 78	2½
TW 32	4	TW 80	2½
TW 34	4	TW 82	2½
TW 36	4	TW 85	2
TW 38	3½	TW 88	2
TW 40	3½	TW 90	2
TW 42	3½	TW 92	2
TW 44	3½	TW 95	2
TW 46	3	TW 98	2
TW 48	3	TW 100	2
TW 50	3		

山数 (25.4mmにつき)	ピッチ P	すきま		c	ひっか かりの 高さ h ₂	おねじ のねじ 山の 高さ h ₁	めねじ のねじ 山の 高さ H	おねじ の谷の すみの 丸み r
		a	b					
12	2.1167	0.25	0.50	0.50	0.75	1.25	1.00	0.25
10	2.5400	0.25	0.50	0.60	0.95	1.45	1.20	0.25
8	3.1750	0.25	0.50	0.75	1.25	1.75	1.50	0.25
6	4.2333	0.25	0.50	1.00	1.75	2.25	2.00	0.25
5	5.0800	0.25	0.75	1.25	2.00	2.75	2.25	0.25
4	6.3500	0.25	0.75	1.50	2.50	3.25	2.75	0.25
3½	7.2571	0.25	0.75	1.75	3.00	3.75	3.25	0.25
3	8.4667	0.25	0.75	2.00	3.50	4.25	3.75	0.25
2½	10.1600	0.25	0.75	2.50	4.50	5.25	4.75	0.25
2	12.7000	0.25	0.75	3.00	5.50	6.25	5.75	0.25

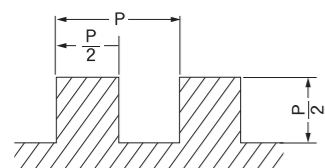
2.3 角ねじ

セラス標準角ねじ

(単位 mm)

呼び径	d	d ₁	N	呼び径	d	d ₁	N	呼び径	d	d ₁	N
12	12	8.8	8	40	40	33.6	4	95	95	85	2.5
14	14	10.8	8	44	44	37.6	4	100	100	90	2.5
16	16	12.4	7	48	48	41.6	4	110	110	100	2.5
18	18	14.4	7	52	52	45.6	4	120	120	110	2.5
20	20	15.8	6	56	56	48.7	3.5	130	130	120	2.5
22	22	17.8	6	60	60	52.7	3.5	140	140	128	2
24	24	19.8	6	65	65	57.7	3.5	150	150	138	2
26	26	20.9	5	70	70	62.7	3.5	160	160	148	2
28	28	22.9	5	75	75	66.5	3	170	170	158	2
30	30	24.9	5	80	80	71.5	3	180	180	165	1½
32	32	26.4	4.5	85	85	76.5	3	190	190	175	1½

[注] 表中Nは25.4mmについてのねじの山数である。



$P = \frac{25.4}{N}$ (mm)

2.4 ノコ歯ねじ

歯ねじ 並目

(単位 mm)

ピッチ P	おねじ の山の 高さ h ₁	接面の 深さ h ₂	ねじ山の寸法			
			e	b	r	r ₁
5	4.339	3.75	1.319	0.589	0.621	0.25
6	5.207	4.5	1.583	0.707	0.746	0.3
7	6.074	5.25	1.847	0.824	0.870	0.35
8	6.942	6	2.111	0.942	0.994	0.4
9	7.810	6.75	2.375	1.060	1.118	0.45
10	8.678	7.5	2.638	1.178	1.243	0.5
12	10.413	9	3.166	1.413	1.491	0.6
14	12.149	10.5	3.694	1.649	1.740	0.7
16	13.884	12	4.221	1.884	1.988	0.8
18	15.620	13.5	4.749	2.120	2.237	0.9
20	17.355	15	5.277	2.355	2.485	1.0
22	19.091	16.5	5.804	2.591	2.734	1.1
24	20.826	18	6.332	2.826	2.982	1.2
26	22.562	19.5	6.860	3.062	3.231	1.3

荒目

(単位 mm)

ピッチ P	おねじ の山の 高さ h ₁	接面の 深さ h ₂	ねじ山の寸法			
			e	b	r	r ₁
8	6.942	6	2.111	0.942	0.994	0.4
10	8.678	7.5	2.638	1.178	1.243	0.5
12	10.413	9	3.166	1.413	1.491	0.6
14	12.149	10.5	3.694	1.649	1.740	0.7
16	13.884	12	4.221	1.884	1.988	0.8
18	15.620	13.5	4.749	2.120	2.237	0.9
20	17.355	15	5.277	2.355	2.485	1.0
22	19.091	16.5	5.804	2.591	2.734	1.1
24	20.826	18	6.332	2.826	2.982	1.2
28	24.298	21	7.388	3.298	3.480	1.4
32	27.769	24	8.443	3.769	3.977	1.6
36	31.240	27	9.498	4.240	4.474	1.8
40	34.711	30	10.544	4.711	4.971	2.0
44	38.182	33	11.609	5.182	5.468	2.2
48	41.653	36	12.664	5.653	5.965	2.4

$h = 1.73205P$ $i = 0.52507P$
 $h_1 = h_2 + b$ $i_1 = 0.45698P$
 $h_2 = 0.75P$ $b = 0.11777P$
 $e = 0.26384P$ $r = 0.12427P$
 $r_1 = 0.05P$