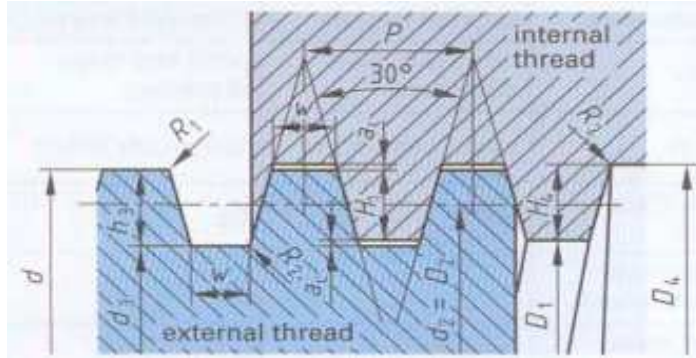


DE =	EN =	PT =	VN =
Trapezoidal threads			

Metric ISO trapezoidal screw threads

cf. DIN 103-1 (1977-04)



internal thread

- Nominal diameter d
- Single start pitch and multiple start lead P
- Multiple start pitch P_h
- No. of threads n = P_h : P
- Minor Ø external threads d₃ = d - (P + 2 · a_c)
- Major Ø internal threads D₄ = d + 2 · a_c
- Minor Ø internal threads D₁ = d - P
- Pitch Ø d₂ = D₂ = d - 0.5 · P
- Thread depth h₃ = H₄ = 0.5 · P + a_c
- Thread overlap H₁ = 0.5 · P
- Crest clearance a_c
- Radius R₁ and R₂
- Width of flat w = 0.366 · P - 0.54 · a_c
- Thread angle 30°

external thread

Dimension	For pitch P in mm			
	1.5	2-5	6-12	14-44
a _c	0.15	0.25	0.5	1
R ₁	0.075	0.125	0.25	0.5
R ₂	0.15	0.25	0.5	1

Thread designation d x P	Pitch Ø d ₂ = D ₂	Thread dimensions in mm					Thread designation d x P	Pitch Ø d ₂ = D ₂	Thread dimensions in mm				
		Minor Ø		Major Ø D ₄	Thread depth h ₃ = H ₄	Width of flat w			Minor Ø		Major Ø D ₄	Thread depth h ₃ = H ₄	Width of flat w
		ext. th. d ₃	int. th. D ₁						ext. th. d ₃	int. th. D ₁			
Tr 10 x 2	9	7.5	8	10.5	1.25	0.60	Tr 40 x 7	36.5	32	33	41	4	2.29
Tr 12 x 3	10.5	8.5	9	12.5	1.75	0.96	Tr 44x 7	40.5	36	37	45	4	2.29
Tr 16 x 4	14	11.5	12	16.5	2.25	1.33	Tr 48 x 8	44	39	40	49	4.5	2.66
Tr 20 x 4	18	15.5	16	20.5	2.25	1.33	Tr 52 x 8	48	43	44	53	4.5	2.66
Tr 24 x 5	21.5	18.5	19	24.5	2.75	1.70	Tr 60 x 9	55.5	50	51	61	5	3.02
Tr 28 x 5	25.5	22.5	23	28.5	2.75	1.70	Tr 70 x 10	65	59	60	71	5.5	3.39
Tr 32 x 6	29	25	26	33	3.5	1.93	Tr 80 x 10	75	69	70	81	5.5	3.39
Tr 36 x 3	34.5	32.5	33	36.5	2.0	0.83	Tr 90 x 12	84	77	78	91	6.5	4.12
Tr 36 x 6	33	29	30	37	3.5	1.93	Tr 100 x 12	94	87	88	101	6.5	4.12
Tr 36 x 10	31	25	26	37	5.5	3.39	Tr 140 x 14	133	124	126	142	8	4.58

gezeichnet:	HPW	Datum:		education project	Trapezgewinde	translate/en_ds/p_ct/vn_ro	origin: MT, S. 207
Aenderung:	an	Datum:	27.08.2013	WIAP KFKOK	Trapezoidal threads	r1a	datei_wi_8_f_19_k14_r1a_207_a_t
Aenderung:	control 2	Data:		Safenwil Schweiz	spear 2	www.wiap.ch	idee of / from HPW