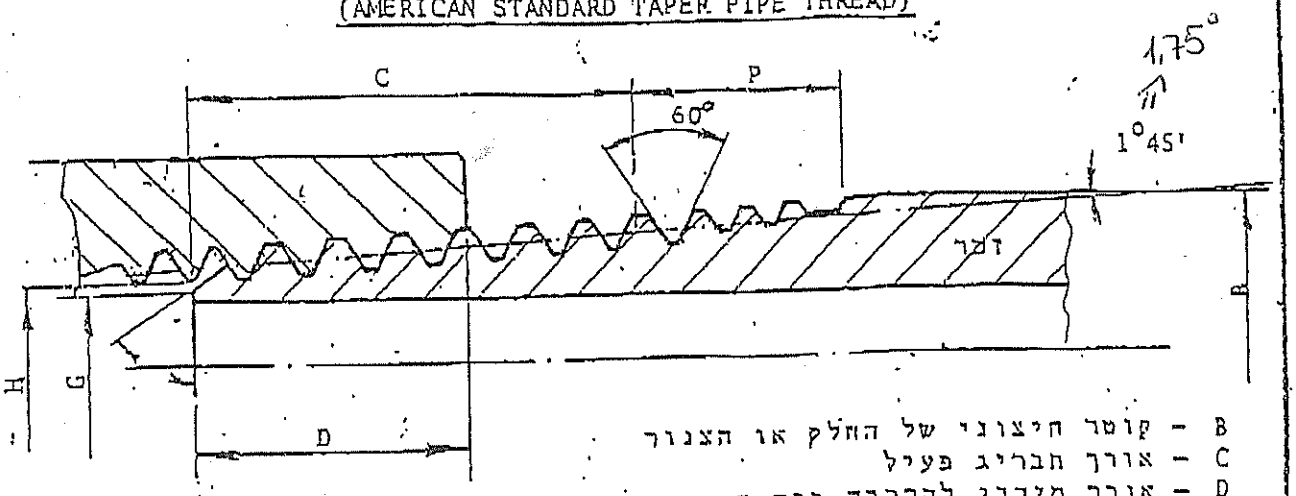
חבריג צנרת קוני לפי תקן אמריקאי N.P.T.

(AMERICAN STANDARD TAPER PIPE THREAD)



B – קוטר חיצוני של החלק או הצנור
C – אורך חבריג פעיל
D – אורך מירבי להרכבה ביד חפשית
P – אורך קטע כיניים בלחי טלמות
G – קוטר קצה החלק (זכר)
H – קוטר קדח להברגה פנימית
n – מספר הכיניים באינץ'.

Size	B	n	C	D	G	H	
1/16"	7.94	27	6.6	4.1	6.1	6.25	
1/8"	10.3	27	6.7	4.6	8.5	8.4	
1/4"	13.72	18	10.2	5.1	11	11.1	
3/8"	17.14	18	10.4	6.1	14.4	14.3	
1/2"	21.34	14	13.6	8.1	17.8	17.85	
3/4"	26.7	14	13.9	8.6	23.1	23.0	
1"	33.4	11-1/2	17.3	10.2	29.1	29.0	
1-1/4"	42.16	11-1/2	18	10.7	37.8	37.7	
1-1/2"	48.26	11-1/2	18.4	10.7	43.8	44.0	
2"	60.32	11-1/2	19.2	11.1	55.9	56.0	
2-1/2"	73.02	8	28.9	17.3	66.5	66.7	
3"	88.9	8	30.5	19.5	82.3	82.5	
4"	114.3	8	33.0	21.4	107.5	107.7	
5"	141.3	8	35.7	23.8	134.4	134.7	
6"	168.3	8	38.4	24.3	161.2	161.5	
8"	219	8	43.5	27	212	212.4	
10"	273	8	48.9	30.7	267	267.5	

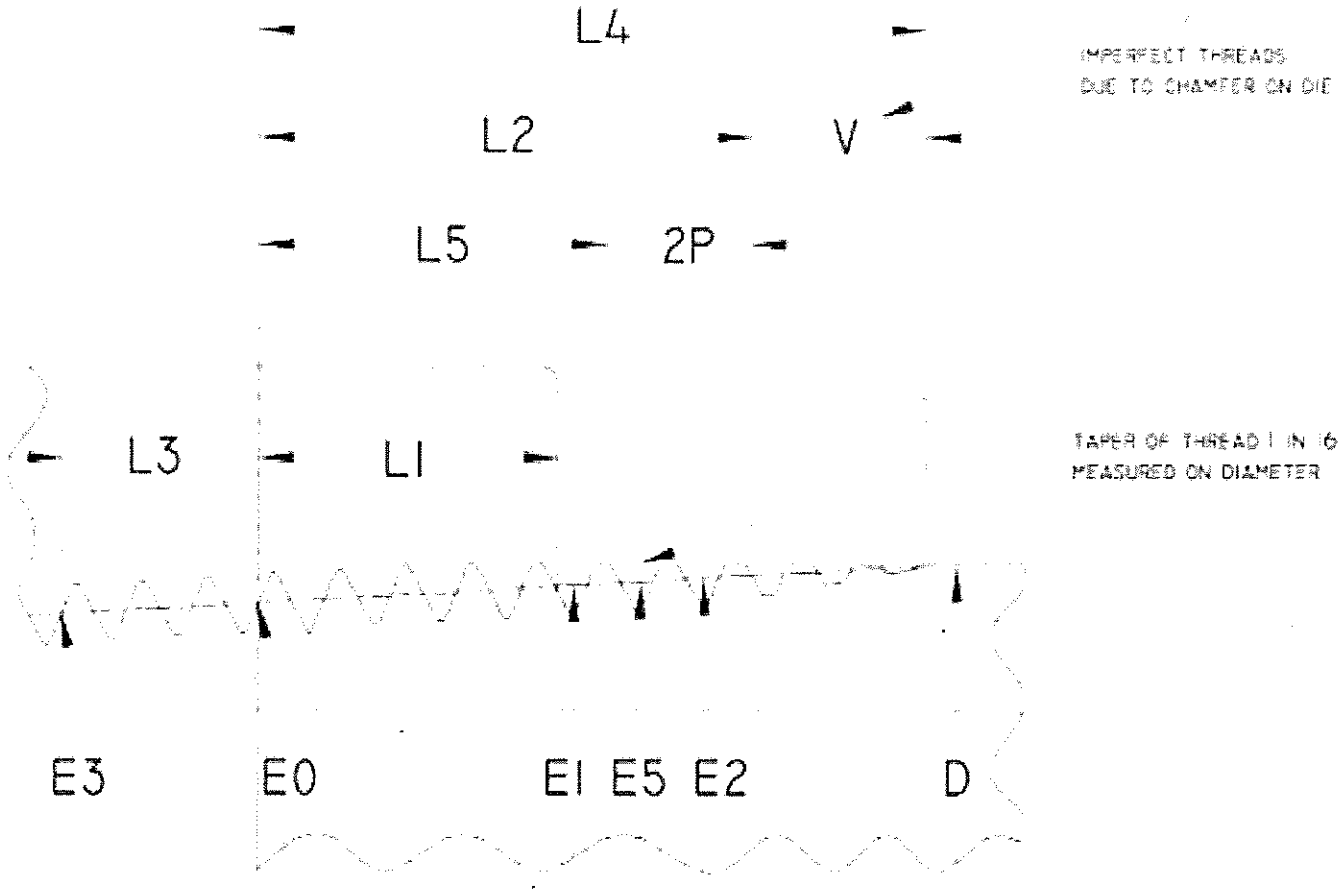
לשימוש פנימי בלבד.

הנדסת התפלה לישראל (תהליך זרחין) בע"מ
ISRAEL DESALINATION ENGINEERING (Zarchin Process) LTD.

E - 5904

11. JUL. 2006 7:57 ... IDE TECHNOLOGIES 972-9-8972788 ... NO. 706 ... P. 7

Basic Dimensions, American National Standard Taper Pipe Threads, NPT, (ANSI B2.1-1968)



For all dimensions see corresponding reference letters in table.

Anglebetween sides of thread is 60 degrees. Taper of thread, on diameter, is 3/4 inch per foot. Angle of taper with centerline is 1 °47'.

The basic maximum thread hight, h, of the truncated thread is 0.8Xpitch of thread. The crest and root are truncated a minimum of 0.033Xpitch for all pitches.

Nominal Pipe Size	Outside Diameter of Pipe	Threads per Inch	Pitch of Thread	Pitch Diameter at Beginning of External Thread	Handtight Engagement		Effective Thread, External	
					Length	Diameter	Length	Diameter
					See Note	See Note	See Note	-
					< 2 >	< 3 >	< 4 >	-
					In.	-	In.	-
-	(D)	(n)	(p)	(Eo)	(L1)	(E1)	(L2)	(E2)
1/16	0.313	27	0.03704	0.27118	0.1600	0.28118	0.2611	0.28750
1/8	0.405	27	0.03704	0.36351	0.1615	0.37360	0.2639	0.38000
1/4	0.540	18	0.05556	0.47739	0.2278	0.49163	0.4018	0.50250
3/8	0.675	18	0.05556	0.61201	0.2400	0.62701	0.4078	0.63750
1/2	0.840	14	0.07143	0.75843	0.3200	0.77843	0.5337	0.79179
3/4	1.050	14	0.07143	0.96768	0.3390	0.98887	0.5457	1.00179
1	1.315	11 1/2	0.08696	1.21363	0.4000	1.23863	0.6828	1.25630
1 1/4	1.660	11 1/2	0.08696	1.55713	0.4200	1.58338	0.7068	1.60130
1 1/2	1.900	11 1/2	0.08696	1.79609	0.4200	1.82234	0.7235	1.84130
2	2.375	11 1/2	0.08696	2.26902	0.4360	2.29627	0.7565	2.31630
2 1/2	2.875	8	0.12500	2.71953	0.6820	2.76216	1.1375	2.79062
3	3.500	8	0.12500	3.34062	0.7660	3.38850	1.2000	3.41562
3 1/2	4.000	8	0.12500	3.83750	0.8210	3.88881	1.2500	3.91562
4	4.500	8	0.12500	4.33438	0.8440	4.38712	1.3000	4.41562
5	5.563	8	0.12500	5.39073	0.9370	5.44929	1.4063	5.47862
6	6.625	8	0.12500	6.44609	0.9580	6.50597	1.5125	6.54062
8	8.625	8	0.12500	8.43359	1.0630	8.50003	1.7125	8.54062
10	10.750	8	0.12500	10.54531	1.2100	10.62094	1.9250	10.66562

Wrench Makeup Length for Internal Thread			Vanish Thread	Overall Length External Thread	Nominal Perfect External Threads		Height of Thread	Basic Minor Diameter at Small End of Pipe
Length	-	Diameter			Length	Diameter		
See Note	-	-			-	-		
< 7 >	-	-			-	-		See Note
-	-	-			-	-		< 6 >
(L3)	-	(E3)	(V)	(L4)	(L5)	(E5)	(h)	(Ko)
0.1111	-	0.26424	0.1285	0.3896	0.1870	0.28287	0.02963	0.2416
0.1111	-	0.35656	0.1285	0.3924	0.1898	0.37537	0.02963	0.3339
0.1667	-	0.46697	0.1928	0.5946	0.2907	0.49556	0.04444	0.4329
0.1667	-	0.60160	0.1928	0.6006	0.2967	0.63056	0.04444	0.5676
0.2143	-	0.74504	0.2478	0.7815	0.3909	0.78286	0.05714	0.7013
0.2143	-	0.95492	0.2478	0.7935	0.4029	0.99286	0.05714	0.9105
0.2609	-	1.19733	0.3017	0.9845	0.5089	1.24543	0.06957	1.1441
0.2609	-	1.54083	0.3017	1.0085	0.5329	1.59043	0.06957	1.4876
0.2609	-	1.77978	0.3017	1.0252	0.5496	1.83043	0.06957	1.7265
0.2609	-	2.25272	0.3017	1.0582	0.5826	2.30543	0.06957	2.1995
0.2500	See Note < 8 >	2.70391	0.4337	1.5712	0.8875	2.77500	0.1	2.6195
0.2500	See Note < 8 >	3.32500	0.4337	1.6337	0.9500	3.40000	0.1	3.2406
0.2500	-	3.82188	0.4337	1.6837	1.0000	3.90000	0.1	3.7375
0.2500	-	4.31875	0.4337	1.7337	1.0500	4.40000	0.1	4.2344
0.2500	-	5.37511	0.4337	1.8400	1.1563	5.46300	0.1	5.2907
0.2500	-	6.43047	0.4337	1.9462	1.2625	6.52500	0.1	6.3461
0.2500	-	8.41797	0.4337	2.1462	1.4625	8.52500	0.1	8.3336
0.2500	-	10.52969	0.4337	2.3587	1.6750	10.65000	0.1	10.4453

PRECION

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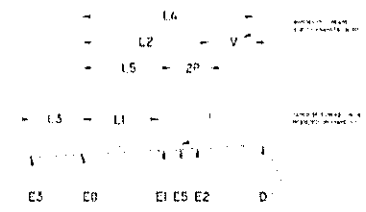
info@precion-inc.net

Basic Dimensions, American National Standard Taper Pipe Threads, NPT, (ANSI B2.1-1968)



For all dimensions see corresponding reference letters in table.

Angle between sides of thread is 60 degrees. Taper of thread, on diameter, is 3/4 inch per foot. Angle of taper with centerline is 1°47'

The basic maximum thread hight, h, of the truncated thread is 0.8Xpitch of thread. The crest and root are truncated a minimum of 0.033Xpitch for all pitches.

*** All dimensions are given in inches

Nominal Pipe Size	Outside Diameter of Pipe	Threads per Inch	Pitch of Thread	Pitch Diameter at Beginning of External Thread	Handtight Engagement		Effective Thread, External		Wrench Makeup Length for Internal Thread			Vanish Thread	Overall Length External Thread	Nominal Perfect External Threads		Height of Thread	Basic Minor Diameter at Small End of Pipe
					Length	Diameter	Length	Diameter	Length	-	Diameter			Length	Diameter		
					See Note < 2 >	See Note < 3 >	See Note < 4 >	-	See Note < 7 >	-	-			-	-		See Note < 8 >
					in		in										
n	(D)	(n)	(p)	(E0)	(L1)	(E1)	(L2)	(E2)	(L3)		(E3)	(V)	(L4)	(L5)	(E5)	(h)	(K0)
1/16	0.313	27	0.03704	0.27118	0.1600	0.28118	0.2611	0.28750	0.1111		0.27424	0.1285	0.3896	0.1870	0.28741	0.02963	0.2416
1/8	0.405	27	0.03704	0.36351	0.1615	0.37360	0.2639	0.38000	0.1111		0.37020	0.1285	0.3924	0.1898	0.37937	0.02963	0.3339
1/4	0.540	18	0.055556	0.47739	0.2278	0.49163	0.4018	0.50250	0.1667		0.49567	0.1928	0.5946	0.2907	0.49956	0.04444	0.4329
3/8	0.675	18	0.055556	0.61201	0.2400	0.62701	0.4078	0.63750	0.1667		0.63150	0.1928	0.6006	0.2967	0.63556	0.04444	0.5676
1/2	0.840	14	0.071429	0.75843	0.3200	0.77843	0.5337	0.79179	0.2143		0.74804	0.2478	0.7815	0.3909	0.78266	0.05134	0.7013
3/4	1.050	14	0.071429	0.96169	0.3390	0.98057	0.5457	1.00179	0.2143		0.95402	0.2478	0.7935	0.4029	0.99266	0.05134	0.9125
1	1.315	11 1/2	0.086956	1.21363	0.4000	1.23563	0.6828	1.25630	0.2609		1.19733	0.3017	0.9845	0.5080	1.24543	0.06057	1.1441
1 1/4	1.660	11 1/2	0.086956	1.55713	0.4200	1.58338	0.7068	1.60130	0.2609		1.54091	0.3017	1.0085	0.5320	1.59049	0.06057	1.4876
1 1/2	1.900	11 1/2	0.086956	1.79039	0.4200	1.82234	0.7235	1.84130	0.2609		1.77979	0.3017	1.0252	0.5490	1.83043	0.06057	1.7265
2	2.375	11 1/2	0.086956	2.26593	0.4360	2.29837	0.7565	2.31830	0.2679		2.25272	0.3017	1.0581	0.5826	2.30543	0.06057	2.1995
2 1/2	2.875	8	0.125000	2.71063	0.6630	2.76338	1.1375	2.78992	0.2500	See Note < 8 >	2.76091	0.4337	1.5712	0.8835	2.77500	0.1	2.6195
3	3.500	8	0.125000	3.34063	0.7500	3.38050	1.2000	3.41562	0.2500	See Note < 8 >	3.37500	0.4337	1.6337	0.9500	3.40000	0.1	3.2495
3 1/2	4.000	8	0.125000	3.81720	0.8230	3.86581	1.2500	3.91062	0.2500		3.85938	0.4337	1.6837	1.0000	3.90000	0.1	3.7325
4	4.500	8	0.125000	4.33438	0.8440	4.38712	1.3000	4.41562	0.2500		4.39375	0.4337	1.7337	1.0500	4.40000	0.1	4.2484
5	5.563	8	0.125000	5.39073	0.9370	5.44929	1.4063	5.47062	0.2500		5.39531	0.4337	1.8409	1.1563	5.45100	0.1	5.2307
6	6.625	8	0.125000	6.44609	0.9580	6.50597	1.5125	6.54062	0.2500		6.45047	0.4337	1.9482	1.2625	6.51200	0.1	6.2681
8	8.625	8	0.125000	8.43359	1.0630	8.50003	1.7125	8.54062	0.2500		8.43750	0.4337	2.1652	1.4675	8.55400	0.1	8.3335
10	10.750	8	0.125000	10.54531	1.2300	10.62094	1.9250	10.66562	0.2500		10.55469	0.4337	2.3697	1.6750	10.65600	0.1	10.4483

Note < 1>

The basic dimension of the ANSI standard taper pipe thread are given in inches to four or five decimal places. While this implies a greater degree of precision than is ordinarily attained, these dimensions are the basis of gage dimensions and are so expressed for the purpose of eliminating errors in computations

Note < 2 >

Also length of thin ring gage and length from gaging notch to small end of plug age.

Note < 3 >

Also pitch diameter at gaging notch (handtight plane).

Note < 4 >

Also length of plug gage.

Note < 5 >

The length L5 from the end of the pipe determines the plane beyond which the thread form is imperfect at the crest. The next few threads are perfect at the root. At this plane the cone formed by the crests of the thread intersects the cylinder forming the external surface of the pipe. L5=L2-2p

Note < 6 >

Given as information for use in selecting tap drills.

Note < 7 >

Three threads for 2-inch size and smaller; two threads for larger sizes.

Note < 8 >

Military Specification MIL-P-7105 gives the wrench makeup as three threads for 3 in. and smaller. The E3 dimensions are then as follows: Size 2 1/2 in., 2.68809 and size 3 in., 3.31719. Increase in diameter per thread is equal to 0.0625in.

The above data sheet can be used for information purpose only. No responsibility can be accepted for errors or omissions by whatever cause

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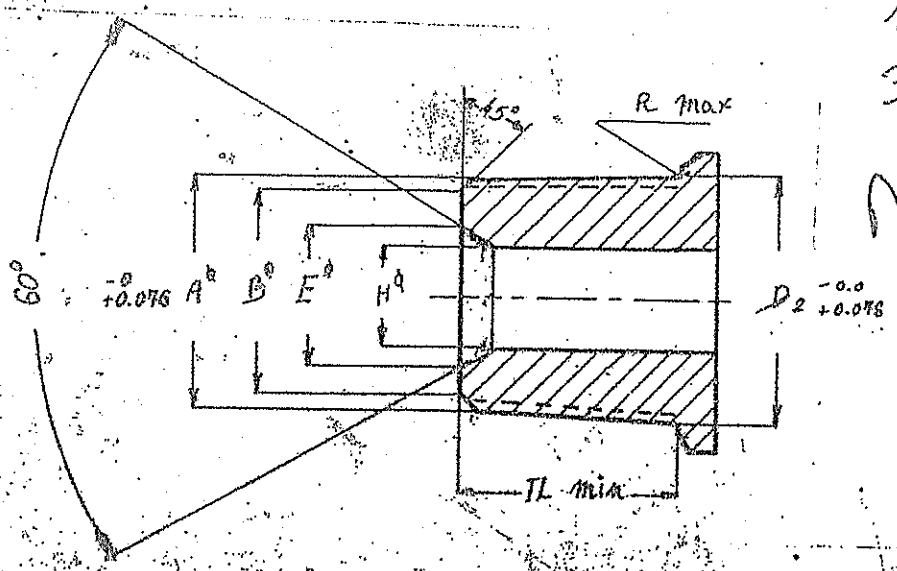
60° NPT

NPT

1/4 - 0.540 - 0.42...
3/8 - 0.675 - 0,567
1/2 - 0.840 - 0.70...
3/4 - 1.050 - 0.91...



Type	H°	B	A	TL	R	D_2	E° ±0,25
1/16-27	3,05	5,84 +0 -0.5	7,645	9,65	0,76	8.001	
1/8-27	4,83 2,3	8,15 +0 -0.5	9,982	9,65	0.76	10,338	7,14
1/4-18	7,11 2,0	10,67 +0 -0.5	13,284	14,22	1,52	13,868	8,74
3/8-18	10,41 6,6	13,97 +0 -0.5	16,713	14,22	1,52	17,297	11,91
1/2-14	14,82 8,12	17,27 +0 -0.5	20,828	19,05	2,03	21,590	15,87
3/4-14	18,29 13,5	22,61 +0 -0.5	26,139	19,05	2,03	26,924	20,05
1-11½	23,88 19,81	28,45 +0 -0.5	32,741	23,88	2,29	33,706	25,11
1¼-11½	31,75 25,65	37,08 +0 -0.76	41,478	24,64	2,29	42,469	34,11
1½-11½	37,34 31,75	43,18 +0 -0.76	47,549	25,4	2,29	48,56	
2-11½	49,20 44,2	55,12 +0 -0.80	59,563	26,16	2,29	60,96	