

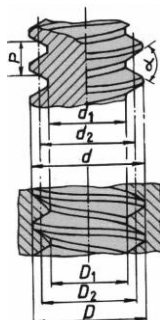
## NPSM & NPSL - AMERICAN PIPE THREADS 60°

### EXTERNAL THREAD

$d$  = Major diameter

$d_2$  = Pitch diameter

$d_1$  = Minor diameter



### INTERNAL THREAD

$D$  = Major diameter

$D_2$  = Pitch diameter

$D_1$  = minor diameter

$P$  = Pitch in Thread  
Per Inch T.P.i.

$\alpha$  = Flank angle  
60°

mm to ins. **mm/25.4**

### NPSM (Ref. ANSI/ASME B1.20.1 Table 6)

Nominal Pipe dimension	External pipe diameter mm	P T.P.I.	External thread Class 2A		Internal thread Class 2B	
			Pitch diameter $d_2$		Pitch diameter $D_2$	
			max	min	min	max
<b>1/8</b>	10,29	27	9,461	9,370	9,489	9,609
<b>1/4</b>	13,72	18	12,454	12,342	12,487	12,634
<b>3/8</b>	17,14	18	15,890	15,776	15,926	16,076
<b>1/2</b>	21,34	14	19,733	19,604	19,771	19,942
<b>3/4</b>	26,67	14	25,077	24,943	25,118	25,293
<b>1</b>	33,40	11,5	31,417	31,270	31,460	31,653
<b>1 1/4</b>	42,16	11,5	40,173	40,020	40,218	40,416
<b>1 1/2</b>	48,26	11,5	46,241	46,086	46,286	46,487
<b>2</b>	60,325	11,5	59,278	58,120	58,326	58,532
<b>2 1/2</b>	73,02	8	70,104	69,916	70,160	70,401
<b>3</b>	88,90	8	86,004	85,816	86,068	86,319
<b>3 1/2</b>	101,60	8	98,717	98,522	98,776	99,030
<b>4</b>	114,30	8	111,374	111,178	111,432	111,686
<b>5</b>	141,30	8	138,351	138,151	138,412	138,679
<b>6</b>	168,27	8	165,191	164,986	165,252	165,519

### NPSL (Ref. ANSI/ASME B1.20.1 Table 7)

Nominal Pipe dimension	External pipe diameter mm	P T.P.I.	External thread Class 2A		Internal thread Class 2B	
			Pitch diameter $d_2$		Pitch diameter $D_2$	
			max	min	min	max
<b>1/8</b>	10,29	27	9,754	9,665	9,812	9,901
<b>1/4</b>	13,72	18	12,797	12,664	12,885	13,017
<b>3/8</b>	17,14	18	16,279	16,147	16,368	16,500
<b>1/2</b>	21,34	14	20,226	20,056	20,340	20,510
<b>3/4</b>	26,67	14	25,570	25,400	25,684	25,855
<b>1</b>	33,40	11,5	32,014	31,808	32,151	32,357
<b>1 1/4</b>	42,16	11,5	40,770	40,564	40,909	41,115
<b>1 1/2</b>	48,26	11,5	46,840	46,634	46,977	47,183
<b>2</b>	60,325	11,5	58,877	58,671	59,014	59,220
<b>2 1/2</b>	73,02	8	70,952	70,655	71,150	71,448
<b>3</b>	88,90	8	86,863	86,566	87,061	87,358
<b>3 1/2</b>	101,60	8	98,571	99,273	99,769	100,066
<b>4</b>	114,30	8	112,227	111,930	112,425	112,723
<b>5</b>	141,30	8	139,204	138,908	139,405	139,702
<b>6</b>	168,27	8	166,045	165,748	166,243	166,540
<b>8</b>	219,07	8	216,695	216,398	216,893	217,190
<b>10</b>	273,05	8	270,566	270,269	270,764	271,061
<b>12</b>	323,85	8	321,287	320,990	321,485	321,782