

Tap Drill Sizes

Thread Size	Thread Diam.	Tap Drill	Drill Diam.
0-80 NF	0.060	3/64	0.0469
1-64 NC	0.073	53	0.0595
1-72 NF	0.073	53	0.0595
2-56 NC	0.086	50	0.0700
2-64 NF	0.086	50	0.0700
3-48 NC	0.099	47	0.0785
3-56 NF	0.099	45	0.0820
4-40 NC	0.112	43	0.0890
4-48 NF	0.112	42	0.0935
5-40 NC	0.125	38	0.1015
5-44 NF	0.125	37	0.1040
6-32 NC	0.138	36	0.1065
6-40 NF	0.138	33	0.1130
8-32 NC	0.164	29	0.1360
8-36 NF	0.164	29	0.1360
10-24 NC	0.190	25	0.1495
10-32 NF	0.190	21	0.1590
12-24 NC	0.216	16	0.1770
12-28 NF	0.216	14	0.1820
12-32 NEF	0.216	13	0.1850

Thread Size	Tap Drill	Drill Diam.
1/4-20 NC & UNC	7	0.2010
1/4-28 NF & UNF	3	0.2130
1/4-32 NEF	7/32	0.2157
5/16-18 NC & UNC	F	0.2570
5/16-24 NF & UNF	I	0.2720
5/16-32 NEF	9/32	0.2812
3/8-16 NC & UNC	5/16	0.3125
3/8-24 NF & UNF	Q	0.3320
7/16-14 NC & UNC	U	0.3680
7/16-20 NF & UNF	25/64	0.3906
1/2-13 NC & UNC	27/64	0.4219
1/2-20 NF & UNF	29/64	0.4531
9/16-12 NC & UNC	31/64	0.4844
9/16-18 NF & UNF	33/64	0.5156
5/8-11 NC & UNC	17/32	0.5312
5/8-18 NF & UNF	37/64	0.5781
3/4-10 NC & UNC	21/32	0.6562
3/4-16 NF & UNF	11/16	0.6875
7/8-9 NC & UNC	49/64	0.7656
7/8-14 NF & UNF	13/16	0.8125
1-8 NC & UNC	7/8	0.8750
1-12 NF & UNF	59/64	0.9219

Pipe Tap Drill Sizes

The drill sizes shown are those recommended for tapping American National (NPT) taper pipe threads. The same drill sizes can also be used for tapping Dryseal (NPTF) threads. Dryseal pipe taps should always be used for tapping hydraulic oil connections to reduce thread leakage. Taper reaming is not usually necessary to produce a good seal although reaming may reduce the horsepower needed for tapping. Taper is 3/4" per foot.

Pipe Size	Threads per Inch	Drill Diameter	Decimal Equiv.
1/8	27	R	0.339
1/4	18	7/16	0.437
3/8	18	37/64	0.578
1/2	14	23/32	0.719
3/4	14	59/64	0.921
1	11½	1½	1.156

Pipe Size	Threads per Inch	Drill Diameter	Decimal Equiv.
1¼	11½	1½	1.500
1½	11½	1¾	1.734
2	11½	2⅜	2.218
2½	8	2⅝	2.625
3	8	3¼	3.250
3½	8	3¾	3.750
4	8	4¼	4.250

SAE Pads

These mounting dimensions are for SAE rectangular 4-bolt solid or split flanges used on pumps, motors, and valves. Please note reduced pressure ratings on the larger size flanges in the 3000 PSI Series.

Size	3000 PSI Flanges Hole Centers	Max. PSI	Bolt Size	6000 PSI Flanges Hole Centers	Bolt Size	O-Ring Size
1/2	1⅞ × 1½	3000	5/16-18	— — — —	— — — —	-210
3/4	7/8 × 1⅞	3000	3/8-16	1⅞ × 2	3/8-16	-214
1	1½ × 2⅞	3000	3/8-16	1⅞ × 2¼	7/16-14	-219
1¼	1⅞ × 2⅞	3000	7/16-14	1¼ × 2⅞	1/2-13	-222
1½	1⅞ × 2¾	3000	1/2-13	1⅞ × 3⅞	5/8-11	-225
2	1⅞ × 3⅞	3000	1/2-13	1¼ × 3⅞	3/4-10	-228
2½	2 × 3½	2500	1/2-13	— — — —	— — — —	-232
3	2⅞ × 4⅞	2000	5/8-11	— — — —	— — — —	-237
3½	2¾ × 4¾	500	5/8-11	— — — —	— — — —	-241
4	3⅞ × 5⅞	500	5/8-11	— — — —	— — — —	-245
5	3⅞ × 6	500	5/8-11	— — — —	— — — —	-253