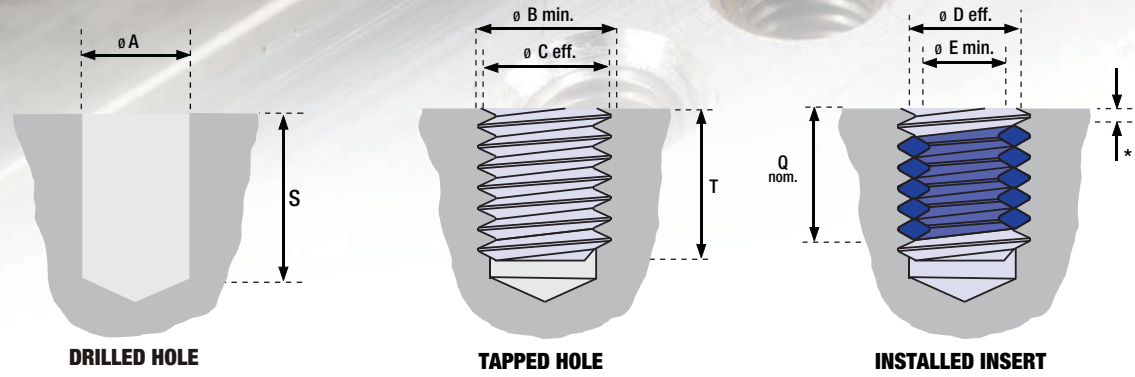


metric

wire thread



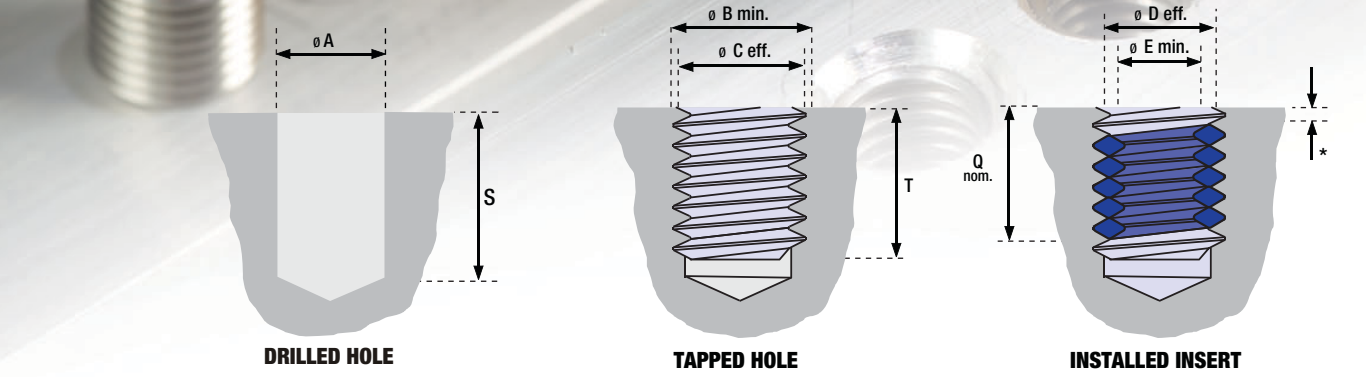
METRIC	
A	Minor Diameter
B	Major Diameter
C	Pitch Diameter of Tapped Hole (Class 5H)

D	Pitch Diameter of Installed Insert (Class 4H)
Q	Nominal Length
R	Installed Length - maximum

S	Drilling Length - minimum
T	Tapping Length - minimum
E	Installed Insert Internal Diameter - min.

metric

wire thread



METRIC	
A	Minor Diameter
B	Major Diameter
C	Pitch Diameter of Tapped Hole (Class 5H)

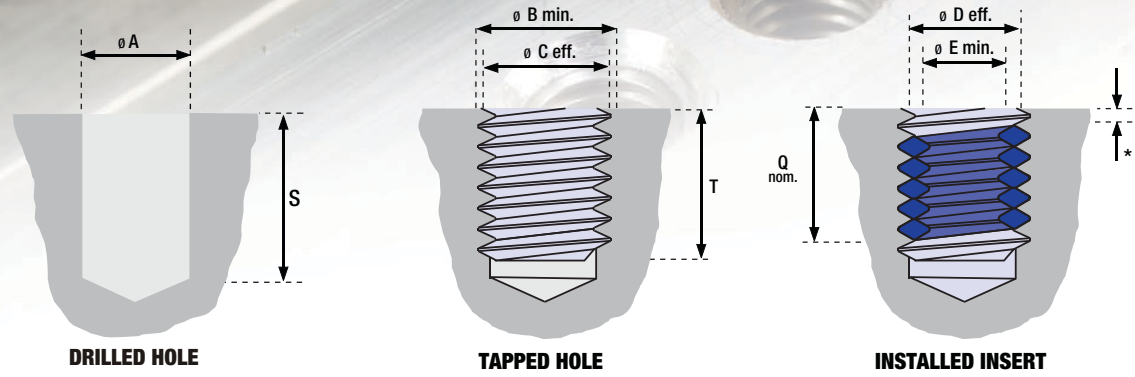
D	Pitch Diameter of Installed Insert (Class 4H)
Q	Nominal Length
R	Installed Length - maximum

S	Drilling Length - minimum
T	Tapping Length - minimum
E	Installed Insert Internal Diameter - min.

**IMPORTANT**  
As with all engineering practice, the success of any drilling & tapping operation is dependant upon many factors, i.e. the type of material being cut : style of tap : cutting speed / feed : coolant type etc. Due to the vast range of parent material now available to the engineer it is not possible to make specific recommendations. However when using PowerCoil Wire Thread Inserts it is important that the charted sizes for diameter and length are achieved. Using PowerCoil Wire Thread Inserts it is possible to achieve a closer class of fit on the final installation than those indicated for tapped holes.

\* To achieve optimum thread performance Wire Thread Inserts must be installed between 1/2 to 1 pitch below the surface of the tapped hole. For this reason the actual length of an installed insert is equal to dimension Q less 1/2 to 1 pitch. Dimensions S and T allow for tap end clearance of finishing taps. When using bottoming or spiral flute taps these dimensions may be reduced by an amount equal to two thread pitches. Any counterbore depths must be added to these dimensions.

SIZE mm	Drill mm	A max/min mm	B mm	C (5H) mm	D (4H) mm	C (6H) mm	D (5H) mm	E mm	S					T					Q					SIZE mm
									1D	1.5D	2D	2.5D	3D	1D	1.5D	2D	2.5D	3D	1D	1.5D	2D	2.5D	3D	
M2 X 0.40	2.10	2.177 / 2.087	2.520	2.296 / 2.260	1.796 / 1.740	2.311 / 2.260	1.811 / 1.740	1.567	3.80	4.80	5.80	6.80	7.80	3.40	4.40	5.40	6.40	7.40	2.00	3.00	4.00	5.00	6.00	M2 X 0.40
M2.5 X 0.45	2.60	2.697 / 2.597	3.085	2.832 / 2.792	2.268 / 2.208	2.847 / 2.792	2.283 / 2.208	2.013	4.52	5.77	7.02	8.27	9.52	4.07	5.32	6.57	7.82	9.07	2.50	3.75	5.00	6.25	7.50	M2.5 X 0.45
M3 X 0.50	3.20	3.220 / 3.108	3.650	3.367 / 3.325	2.738 / 2.675	3.384 / 3.325	2.755 / 2.675	2.459	5.25	6.75	8.25	9.75	11.25	4.75	6.25	7.75	9.25	10.75	3.00	4.50	6.00	7.50	9.00	M3 X 0.50
M3.5 X 0.60	3.70	3.755 / 3.630	4.279	3.940 / 3.890	3.181 / 3.110	3.959 / 3.890	3.200 / 3.110	2.85	6.20	7.95	9.70	11.45	13.20	5.60	7.35	9.10	10.85	12.60	3.50	5.25	7.00	8.75	10.50	M3.5 X 0.60
M4 x 0.70	4.20	4.292 / 4.152	4.909	4.509 / 4.455	3.620 / 3.545	4.529 / 4.455	3.640 / 3.545	3.242	7.15	9.15	11.15	13.15	15.15	6.45	8.45	10.45	12.45	14.45	4.00	6.00	8.00	10.00	12.00	M4 x 0.70
M5 X 0.80	5.20	5.333 / 5.173	6.039	5.577 / 5.520	4.560 / 4.480	5.597 / 5.520	4.580 / 4.480	4.134	8.60	11.10	13.60	16.10	18.60	7.80	10.30	12.80	15.30	17.80	5.00	7.50	10.00	12.50	15.00	M5 X 0.80
M6 X 1.00	6.30	6.406 / 6.216	7.299	6.719 / 6.650	5.445 / 5.350	6.742 / 6.650	5.468 / 5.350	4.917	10.50	13.50	16.50	19.50	22.50	9.50	12.50	15.50	18.50	21.50	6.00	9.00	12.00	15.00	18.00	M6 X 1.00
M7 X 1.00	7.30	7.406 / 7.216	8.299	7.719 / 7.650	6.445 / 6.350	7.742 / 7.650	6.468 / 6.350	5.917	11.50	15.00	18.50	22.00	25.50	10.50	14.00	17.50	21.00	24.50	7.00	10.50	14.00	17.50	21.00	M7 X 1.00
M8 X 1.25	8.30	8.483 / 8.271	9.624	8.886 / 8.182	7.288 / 7.188	8.912 / 8.812	7.313 / 7.188	6.647	13.62	17.62	21.62	25.62	29.62	12.37	16.37	20.37	24.37	28.37	8.00	12.00	16.00	20.00	24.00	M8 X 1.25
M8 X 1.00	8.30	8.406 / 8.216	9.299	8.719 / 8.650	7.445 / 7.350	8.742 / 8.650	7.468 / 7.350	6.917	12.50	16.50	20.50	24.50	28.50	11.50	15.50	19.50	23.50	27.50	8.00	12.00	16.00	20.00	24.00	M8 X 1.00
M9 X 1.25	9.30	9.483 / 9.271	10.624	9.886 / 9.812	8.288 / 8.188	9.912 / 9.812	8.313 / 8.188	7.647	14.62	19.12	23.62	28.13	32.62	13.37	17.87	22.37	26.87	31.37	9.00	13.50	18.00	22.50	27.00	M9 X 1.25
M9 x 1.00	9.30	9.406 / 9.216	10.299	9.719 / 9.650	8.445 / 8.350	9.742 / 9.650	8.468 / 8.350	7.917	13.50	18.00	22.50	27.00	31.50	12.50	17.00	21.50	26.00	30.50	9.00	13.50	18.00	22.50	27.00	M9 x 1.00
M10 X 1.50	10.40	10.561 / 10.325	11.949	11.061 / 10.974	9.138 / 9.026	11.089 / 10.974	9.166 / 9.026	8.376	16.75	21.75	26.75	31.75	36.75	15.25	20.25	25.25	30.25	35.25	10.00	15.00	20.00	25.00	30.00	M10 X 1.50
M10 X 1.25	10.30	10.483 / 10.271	11.624	10.886 / 10.812	9.288 / 9.188	10.912 / 10.812	9.313 / 9.188	8.647	15.62	20.62	25.62	30.62	35.62	14.37	19.37	24.37	29.37	34.37	10.00	15.00	20.00	25.00	30.00	M10 X 1.25
M10 x 1.00	10.30	10.406 / 10.216	11.299	10.724 / 10.650	9.445 / 9.350	10.742 / 10.650	9.468 / 9.350	8.917	14.50	19.50	24.50	29.50	34.50	13.50	18.50	23.50	28.50	33.50	10.00	15.00	20.00	25.00	30.00	M10 x 1.00
M11 X 1.50	11.40	11.561 / 11.325	12.949	12.061 / 11.974	10.138 / 10.026	12.089 / 11.974	10.166 / 10.026	9.376	17.75	23.25	28.75	34.25	39.75	16.25	21.75	27.25	32.75	38.25	11.00	16.50	22.00	27.50	33.00	M11 X 1.50
M11 X 1.25	11.30	11.483 / 11.271	12.624	11.898 / 11.812	10.300 / 10.188	11.926 / 11.812	10.328 / 10.188	9.647	16.62	22.12	27.62	33.12	38.62	15.37	20.87	26.37	31.87	37.37	11.00	16.50	22.00	27.50	33.00	M11 X 1.25
M12 X 1.75	12.40	12.644 / 12.379	14.273	13.236 / 13.137	10.988 / 10.863	13.271 / 13.137	11.023 / 10.863	10.106	19.87	25.87	31.87	37.87	43.87	18.12	24.12	30.12	36.12	42.12	12.00	18.00	24.00	30.00	36.00	M12 X 1.75
M12 X 1.50	12.40	12.561 / 12.325	13.949	13.067 / 12.974	11.144 / 11.026	13.099 / 12.974	11.176 / 11.026	10.376	18.75	24.75	30.75	36.75	42.75	17.25	23.25	29.25	35.25	41.25	12.00	18.00	24.00	30.00	36.00	M12 X 1.50
M12 X 1.25	12.30	12.483 / 12.271	13.624	12.898 / 12.812	11.300 / 11.188	12.926 / 12.812	11.328 / 11.188	10.647	17.62	23.62	29.62	35.62	41.62	16.37	22.37	28.37	34.37	40.37	12.00	18.00	24.00	30.00	36.00	M12 X 1.25
M14 X 2.00	14.50	14.733 / 14.433	16.598	15.406 / 15.299	12.833 / 12.701	15.444 / 15.299	12.871 / 12.701	11.835	23.00	30.00	37.00	44.00	51.00	21.00	28.00	35.00	42.00	49.00	14.00	21.00	28.00	35.00	42.00	M14 X 2.00
M14 X 1.50	14.40	14.561 / 14.325	15.949	15.067 / 14.974	13.144 / 13.026	15.099 / 14.974	13.176 / 13.026	12.376	20.75	27.75	34.75	41.75	48.75	19.25	26.25	33.25	40.25	47.25	14.00	21.00	28.00	35.00	42.00	M14 X 1.50
M14 X 1.25	14.40	14.483 / 14.271	15.624	14.898 / 14.812	13.300 / 13.188	14.926 / 14.812	13.328 / 13.188	12.674	19.62	26.62	33.62	40.62	47.62	18.37	25.37	32.37	39.37	46.37	14.00	21.00	28.00	35.00	42.00	M14 X 1.25
M16 X 2.00	16.50	16.733 / 16.433	18.598	17.406 / 17.299	14.833 / 14.701	17.444 / 17.299	14.871 / 14.701	13.835	25.00	33.00	41.00	49.00	57.00	23.00	31.00	39.00	47.00	55.00	16.00	24.00	32.00	40.00	48.00	M16 X 2.00
M16 X 1.50	16.40	16.561 / 16.325	17.949	17.067 / 16.974	15.144 / 15.026	17.099 / 16.974	15.176 / 15.026	14.376	22.75	30.75	38.75	46.75	54.75	21.25	29.25	37.25	45.25	53.25	16.00	24.00	32.00	40.00	48.00	M16 X 1.50
M18 X 2.50	18.50	18.896 / 18.541	21.248	19.738 / 19.624	16.516 / 16.376	19.778 / 19.624	16.556 / 16.376	15.294	29.25	38.25	47.25	56.25	65.25	26.75	35.75	44.75	53.75	62.75	18.00	27.00	36.00	45.00	54.00	M18 X 2.50
M18 X 2.00	18.50	18.733 / 18.433	20.598	19.406 / 19.299	16.833 / 16.701	19.444 / 19.299	16.871 / 16.701	15.835	27.00	36.00	45.00	54.00	63.00	25.00	34.00	43.00	52.00	61.00	18.00	27.00	36.00	45.00	54.00	M18 X 2.00
M20 X 2.50	20.60	20.896 / 20.541	23.248	21.738 / 21.624	18.516 / 18.376	21.778 / 21.624	18.556 / 18.376	17.294	31.25	41.25	51.25	61.25	71.25	28.75	38.75	48.75	58.75	68.75	20.00	30.00	40.00	50.00	60.00	M20 X 2.50
M20 X 2.00	20.50	20.733 / 20.433	22.598	21.406 / 21.299	18.833 / 18.701	21.444 / 21.299	18.871 / 18.701	17.835	29.00	39.00	49.00	59.00	69.00	27.00	37.00	47.00	57.00	67.00	20.00	30.00	40.00	50.00	60.00	M20 X 2.00
M20 X 1.50	20.50	20.561 / 20.325	21.949	21.067 / 20.974	19.144 / 19.026	21.099 / 20.974	19.176 / 19.026	18.376	26.75	36.75	46.75	56.75	66.75	25.25	35.25	45.25	55.25	65.25	20.00	30.00	40.00	50.00	60.00	M20 X 1.50
M22 X 2.50	22.50	22.896 / 22.541	25.248	23.738 / 23.624	20.516 / 20.376	23.778 / 23.624	20.556 / 20.376	19.294	33.25	44.25	55.25	66.25	77.25	30.75	41.75	52.75	63.75	74.75	22.00	33.00	44.00	55.00	66.00	M22 X 2.50
M22 X 2.00	22.50	22.733 / 22.433	24.598	23.406 / 23.299	20.833 / 20.701	23.444 / 23.299	20.871 / 20.701	19.835	31.00	42.00	53.00	64.00	75.00	29.00	40.00	51.00	62.00	73.00	22.00	33.00	44.00	55.00	66.00	M22 X 2.00
M22 X 1.50	22.50	22.561 / 22.325	23.949	23.067 / 22.974	21.144 / 21.026	23.099 / 22.974	21.176 / 21.026	20.376	28.75	39.75	50.75	61.75	72.75	27.25	38.25	49.25	60.25	71.25	22.00	33.00	44.00	55.00	66.00	M22 X 1.50
M24 X 3.00	24.75	25.050 / 24.650	27.897	26.093 / 25.948	22.221 / 22.051	26.135 / 25.948	22.263 / 22.051	20.752	37.50	49.50	61.50	73.50	85.50	34.50	46.50	58.50	70.50	82.50	24.00	36.00	48.00	60.00	72.00	M24 X 3.00
M24 X 2.00	24.50	24.733 / 24.433	26.598	25.414 / 25.299	22.841 / 22.701	25.454 / 25.299	22.881 / 22.701	21.835	33.00	45.00	57.00	69.00	81.00	31.00	43.00	55.00	67.00	79.00	24.00	36.00	48.00	60.00	72.00</	



UNF & UNC	
<b>A</b>	Minor Diameter
<b>B</b>	Major Diameter
<b>C</b>	Pitch Diameter of Tapped Hole (Class 5H)

<b>D</b>	Pitch Diameter of Installed Insert (Class 4H)
<b>Q</b>	Nominal Length
<b>R</b>	Installed Length - maximum

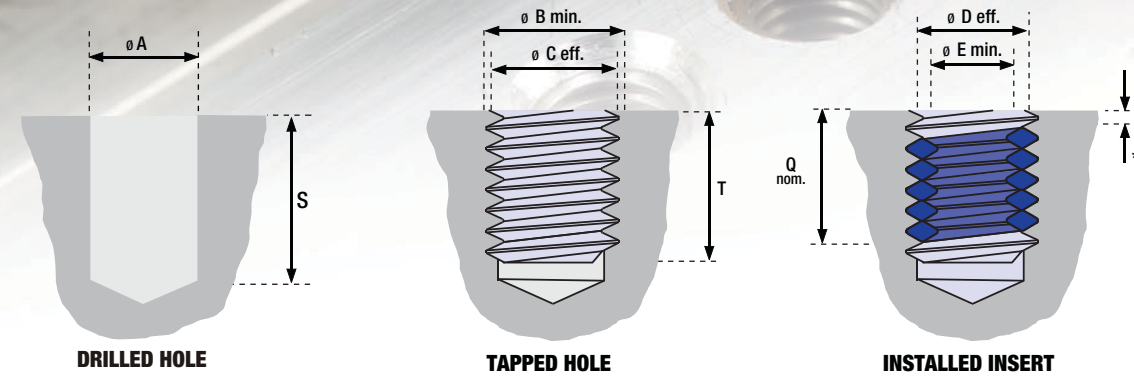
<b>S</b>	Drilling Length - minimum
<b>T</b>	Tapping Length - minimum
<b>E</b>	Installed Insert Internal Diameter - min.

SIZE inch	Drill mm	A max/min mm	B mm	C (2B) mm	D (3B) mm	C (1B) mm	D (2B) mm	E mm																		
									1D	1.5D	2D	2.5D	3D	1D	1.5D	2D	2.5D	3D								
<b>UNF</b>																										
2x64	2.3	.0931 / .0894	0.1063	.0974 / .0962	.0779 / .0759	.0980 / .0962	.0786 / .0759	0.0691	0.156	0.199	0.242	0.285	0.328	0.141	0.184	0.227	0.270	0.313	0.086	0.129	0.172	0.215	0.258	2x64		
3x56	2.7	.1068 / .1029	0.1222	.1119 / .1106	.0895 / .0874	.1126 / .1106	.0902 / .0874	0.0797	0.179	0.229	0.278	0.328	0.377	0.161	0.210	0.260	0.310	0.359	0.099	0.148	0.198	0.247	0.297	3x56		
4x48	3	.1207 / .1165	0.1391	.1270 / .1255	.1008 / .0985	.1278 / .1255	.1016 / .0985	0.0894	0.206	0.262	0.318	0.374	0.430	0.185	0.241	0.297	0.353	0.409	0.112	0.168	0.224	0.280	0.336	4x48		
5x44	3.4	.1342 / .1299	0.1545	.1414 / .1398	.1126 / .1102	.1422 / .1398	.1134 / .1102	0.1004	0.227	0.290	0.352	0.414	0.477	0.204	0.267	0.329	0.391	0.454	0.125	0.187	0.250	0.312	0.375	5x44		
6x40	3.7	.1478 / .1434	0.1705	.1559 / .1542	.1243 / .1218	.1568 / .1542	.1252 / .1218	0.1110	0.250	0.319	0.388	0.457	0.526	0.225	0.294	0.363	0.432	0.501	0.138	0.207	0.276	0.345	0.414	6x40		
8x36	4.4	.1745 / .1700	0.2001	.1839 / .1820	.1487 / .1460	.1848 / .1820	.1496 / .1460	0.1340	0.289	0.371	0.453	0.535	0.617	0.261	0.343	0.425	0.507	0.589	0.164	0.246	0.328	0.410	0.492	8x36		
10x32	5.1	.2015 / .1968	0.2306	.2123 / .2103	.1726 / .1697	.2133 / .2103	.1736 / .1697	0.1560	0.331	0.426	0.521	0.616	0.711	0.299	0.394	0.489	0.584	0.679	0.190	0.285	0.380	0.475	0.570	10x32		
1/4x28	6.6	.2647 / .2577	0.2964	.2754 / .2732	.2300 / .2268	.2765 / .2732	.2311 / .2268	0.2113	0.411	0.536	0.661	0.786	0.911	0.375	0.500	0.625	0.750	0.875	0.250	0.375	0.500	0.625	0.750	1/4x28		
5/16x24	8.2	.3289 / .3215	0.3666	.3421 / .3395	.2890 / .2854	.3433 / .3395	.2902 / .2854	0.2674	0.500	0.656	0.812	0.969	1.125	0.458	0.614	0.771	0.927	1.083	0.312	0.469	0.625	0.781	0.937	5/16x24		
3/8x24	9.8	.3909 / .3840	0.4291	.4047 / .4020	.3516 / .3479	.4059 / .4020	.3528 / .3479	0.3299	0.562	0.750	0.937	1.124	1.312	0.521	0.708	0.896	1.083	1.271	0.375	0.562	0.750	0.937	1.125	3/8x24		
7/16x20	11.5	.4561 / .4483	0.5025	.4731 / .4700	.4091 / .4050	.4744 / .4700	.4104 / .4050	0.3834	0.662	0.881	1.100	1.319	1.537	0.612	0.831	1.050	1.269	1.487	0.437	0.656	0.875	1.094	1.312	7/16x20		
1/2x20	13	.5182 / .5108	0.565	.5357 / .5325	.4717 / .4675	.5371 / .5325	.4731 / .4675	0.4459	0.725	0.975	1.225	1.475	1.725	0.675	0.925	1.175	1.425	1.675	0.500	0.750	1.000	1.250	1.500	1/2x20		
9/16x18	14.75	.5824 / .5745	0.6347	.6020 / .5986	.5308 / .5264	.6035 / .5986	.5323 / .5264	0.5024	0.811	1.093	1.374	1.655	1.936	0.756	1.038	1.319	1.600	1.881	0.562	0.844	1.125	1.406	1.687	9/16x18		
5/8x18	16.25	.6447 / .6370	0.6972	.6646 / .6611	.5934 / .5889	.6661 / .6611	.5949 / .5889	0.5649	0.874	1.187	1.500	1.812	2.124	0.819	1.132	1.444	1.757	2.069	0.625	0.937	1.250	1.562	1.875	5/8x18		
3/4x16	19.5	.7716 / .7635	0.8312	.7945 / .7906	.7143 / .7094	.7961 / .7906	.7159 / .7094	0.6823	1.031	1.406	1.781	2.156	2.531	0.969	1.344	1.719	2.094	2.469	0.750	1.125	1.500	1.875	2.250	3/4x16		
7/8x14	22.75	.8993 / .8905	0.9678	.9257 / .9214	.8339 / .8286	.9274 / .9214	.8356 / .8286	0.7977	1.196	1.634	2.071	2.509	2.946	1.125	1.562	2.000	2.437	2.875	0.875	1.312	1.750	2.187	2.625	7/8x14		
1x12	26	1.0280 / 1.0180	1.1083	1.0589 / 1.0542	.9516 / .9459	1.0608 / 1.0542	.9535 / .9459	0.9098	1.375	1.875	2.375	2.875	3.375	1.292	1.792	2.292	2.792	3.292	1.000	1.500	2.000	2.500	3.000	1x12		
1-1/8x12	29.25	1.1543 / 1.1430	1.2333	1.1841 / 1.1792	1.0768 / 1.0709	1.1860 / 1.1792	1.0787 / 1.0709	1.0348	1.500	2.062	2.625	3.187	3.750	1.417	1.979	2.542	3.104	3.667	1.125	1.687	2.250	2.812	3.375	1-1/8x12		
1-1/4x12	32.5	1.2793 / 1.2680	1.3583	1.3092 / 1.3042	1.2019 / 1.1959	1.3112 / 1.3042	1.2039 / 1.1959	1.1598	1.625	2.250	2.875	3.500	4.125	1.542	2.167	2.792	3.417	4.042	1.250	1.875	2.500	3.125	3.750	1-1/4x12		
1-3/8x12	35.5	1.4043 / 1.3930	1.4833	1.4343 / 1.4292	1.3270 / 1.3209	1.4364 / 1.4292	1.3291 / 1.3209	1.2848	1.750	2.438	3.125	3.813	4.500	1.667	2.354	3.042	3.729	4.417	1.375	2.062	2.750	3.437	4.125	1-3/8x12		
1-1/2x12	38.75	1.5293 / 1.5180	1.6083	1.5595 / 1.5542	1.4522 / 1.4459	1.5615 / 1.5542	1.4542 / 1.4459	1.4098	1.875	2.625	3.375	4.125	4.875	1.792	2.542	3.292	4.042	4.792	1.500	2.250	3.000	3.750	4.500	1-1/2x12		
<b>UNC</b>																										
2x56	2.4	.0941 / .0899	0.1092	.0989 / .0976	.0765 / .0744	.0996 / .0976	.0772 / .0744	0.0667	0.166	0.209	0.252	0.295	0.338	0.148	0.191	0.234	0.277	0.320	0.086	0.129	0.172	0.215	0.258	2x56		
3x48	2.7	.1080 / .1035	0.1261	.1139 / .1125	.0877 / .0855	.1147 / .1125	.0885 / .0855	0.0764	0.193	0.242	0.292	0.341	0.391	0.172	0.221	0.271	0.320	0.370	0.099	0.148	0.198	0.247	0.297	3x48		
4x40	3.0	.1224 / .1174	0.1445	.1298 / .1282	.0982 / .0958	.1307 / .1282	.0991 / .0958	0.0849	0.224	0.280	0.336	0.392	0.448	0.199	0.255	0.311	0.367	0.423	0.112	0.168	0.224	0.280	0.336	4x40		
5x40	3.4	.1354 / .1304	0.1575	.1429 / .1412	.1113 / .1088	.1437 / .1412	.1121 / .1088	0.0979	0.237	0.300	0.362	0.425	0.487	0.212	0.275	0.337	0.400	0.462	0.125	0.187	0.250	0.312	0.375	5x40		
6x32	3.7	.1503 / .1448	0.1786	.1601 / .1583	.1204 / .1177	.1611 / .1583	.1214 / .1177	0.104	0.279	0.348	0.417	0.486	0.555	0.247	0.316	0.385	0.454	0.523	0.138	0.207	0.276	0.345	0.414	6x32		
8x32	4.4	.1758 / .1708	0.2046	.1862 / .1843	.1465 / .1437	.1872 / .1843	.1475 / .1437	0.13	0.305	0.387	0.469	0.551	0.633	0.273	0.355	0.437	0.519	0.601	0.164	0.246	0.328	0.410	0.492	8x32		
10x24	5.1	.2051 / .1990	0.2441	.2193 / .2171	.1661 / .1629	.2204 / .2171	.1672 / .1629	0.145	0.377	0.472	0.567	0.662	0.757	0.336	0.431	0.526	0.621	0.716	0.190	0.285	0.380	0.475	0.570	10x24		
12x24	5.7	.2308 / .2250	0.2701	.2454 / .2431	.1922 / .1889	.2465 / .2431	.1933 / .1889	0.171	0.403	0.511	0.619	0.727	0.835	0.362	0.470	0.578	0.686	0.794	0.216	0.324	0.432	0.540	0.648	12x24		
1/4x20	6.7	.2703 / .2608	0.315	.2851 / .2825	.2211 / .2175	.2863 / .2825	.2223 / .2175	0.1959	0.475	0.600	0.725	0.850	0.975	0.425	0.550	0.675	0.800	0.925	0.250	0.375	0.500	0.625	0.750	1/4x20		
5/16x18	8.3	.3341 / .3245	0.3847	.3515 / .3486	.2803 / .2764	.3529 / .3486	.2817 / .2764	0.2524	0.562	0.718	0.875	1.031	1.187	0.507	0.663	0.819	0.975	1.132	0.312	0.469	0.625	0.781	0.937	5/16x18		
3/8x16	9.9	.3985 / .3885	0.4562	.4189 / .4156	.3387 / .3344	.4203 / .4156	.3401 / .3344	0.3073	0.656	0.844	1.031	1.219	1.406	0.594	0.781	0.969	1.156	1.344	0.375	0.562	0.750	0.937	1.125	3/8x16		
7/16x14	11.6	.4636 / .4530	0.5303	.4875 / .4839	.3957 / .3911	.4890 / .4839	.3972 / .3911	0.3602	0.758	0.977	1.196	1.415	1.633	0.687	0.906	1.125	1.344	1.562	0.437	0.656	0.875	1.094	1.312	7/16x14		
1/2x13	13.0	.5275 / .5166	0.5999	.5537 / .5499	.4548 / .4500	.5554 / .5499	.4565 / .4500	0.4167	0.846	1.096	1.346	1.596	1.846	0.769	1.019	1.269	1.519	1.769	0.500	0.750	1.000	1.250	1.500	1/2x13		
9/16x12	14.8	.5918 / .5805	0.6708	.6208 / .6167	.5135 / .5084	.6225 / .6167	.5152 / .5084	0.4723	0.937	1.219	1.500	1.781	2.062	0.854	1.135	1.417	1.698	1.979	0.562	0.844	1.125	1.406	1.687	9/16x12		
5/8x11	16.5	.6565 / .6447	0.7431	.6885 / .6841	.5714 / .5660	.6903 / .6841	.5732 / .5660	0.5266	1.034	1.347	1.659	1.972	2.284	0.943	1.256	1.568	1.881	2.193	0.625	0.937	1.250	1.562	1.875	5/8x11		
3/4x10	19.75	.7838 / .7716	0.8799	.8196 / .8149	.6907 / .6850	.8216 / .8149	.6927 / .6850	0.6417	1.200	1.575	1.950	2.325	2.700	1.100	1.475	1.850	2.225	2.600	0.750	1.125	1.500	1.875	2.250	3/4x10		
7/8x9	23	.9124 / .8991	1.0193	.9522 / .9471	.8089 / .8028	.9543 / .9471	.8110 / .8028	0.7547	1.375	1.812	2.250	2.687	3.125	1.264	1.701	2.139	2.576	3.014	0.875	1.312	1.750	2.187	2.625	7/8x9		
1x8	26.25	1.0421 / 1.0271	1.1624	1.0868 / 1.0812	.9254 / .9188	1.0890 / 1.0812	.9276 / .9188	0.8647	1.562	2.062	2.562	3.062	3.562	1.437	1.937	2.437	2.937	3.437	1.000	1.500	2.000	2.500	3.000	1x8		
1-1/8x7	29.5	1.1709 / 1.1559	1.3106	1.2239 / 1.2178	1.0393 / 1.0322	1.2262 / 1.2178	1.0416 / 1.0322	0.9704	1.768	2.330	2.893	3.455	4.018	1.625	2.187	2.750	3.312	3.875	1.125	1.687	2.250	2.812	3.375	1-		



bsf, bsw & bsp

wire thread



BSF, BSW & BSP	
<b>A</b>	Minor Diameter
<b>B</b>	Major Diameter
<b>C</b>	Pitch Diameter of Tapped Hole (Class 5H)

<b>D</b>	Pitch Diameter of Installed Insert (Class 4H)
<b>Q</b>	Nominal Length
<b>R</b>	Installed Length - maximum

<b>S</b>	Drilling Length - minimum
<b>T</b>	Tapping Length - minimum
<b>E</b>	Installed Insert Internal Diameter - min.

BSF, BSW & BSP	
<b>A</b>	Minor Diameter
<b>B</b>	Major Diameter
<b>C</b>	Pitch Diameter of Tapped Hole (Class 5H)

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<b>T</b>	Tapping Length - minimum
<b>E</b>	Installed Insert Internal Diameter - min.

bsf, bsw & bsp

wire thread

**IMPORTANT**

As with all engineering practice, the success of any drilling & tapping operation is dependant upon many factors, i.e. the type of material being cut : style of tap : cutting speed / feed : coolant type etc. Due to the vast range of parent material now available to the engineer it is not possible to make specific recommendations. However when using PowerCoil Wire Thread Inserts it is important that the charted sizes for diameter and length are achieved. Using PowerCoil Wire Thread Inserts it is possible to achieve a closer class of fit on the final installation than those indicated for tapped holes.

\* To achieve optimum thread performance Wire Thread Inserts must be installed between 1/2 to 1 pitch below the surface of the tapped hole. For this reason the actual length of an installed insert is equal to dimension Q less 1/2 to 1 pitch. Dimensions S and T allow for tap end clearance of finishing taps. When using bottoming or spiral flute taps these dimensions may be reduced by an amount equal to two thread pitches. Any counterbore depths must be added to these dimensions.

SIZE inch	Drill mm	A max/min mm	B mm	C (Close) mm	D (Close) mm	C (Medium) mm	D (Medium) mm	E mm	S					T					Q					SIZE inch
									1D	1.5D	2D	2.5D	3D	1D	1.5D	2D	2.5D	3D	1D	1.5D	2D	2.5D	3D	
<b>BSF</b>																						3/16x32		
1/4x26																						5/16x22		
3/8x20																						7/16x18		
1/2x16																						9/16x16		
3/4x12																						1x10		
1-1/8x9																						1-1/4x9		
1-3/8x8																						1-1/2x8		
<b>BSW</b>																						1/8x40		
3/16x24																						1/4x20		
5/16x18																						3/8x16		
7/16x14																						1/2x12		
9/16x12																						5/8x11		
3/4x10																						7/8x9		
1x8																						1-1/8x7		
1-1/4x7																						1-1/2x6		
<b>BSP</b>																						1/8x28		
1/4x19																						3/8x19		
1/2x14																						5/8x14		
3/4x14																						7/8x14		
1x11																						1-1/4x11		
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<b>BSF</b>																						3/16x32		
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1/2x16																						9/16x16		
3/4x12																						1x10		
1-1/8x9																						1-1/4x9		
1-3/8x8																						1-1/2x8		
<b>BSW</b>																						1/8x40		
3/16x24																						1/4x20		
5/16x18																						3/8x16		
7/16x14																						1/2x12		
9/16x12																						5/8x11		
3/4x10																						7/8x9		
1x8																						1-1/8x7		
1-1/4x7																						1-1/2x6		
<b>BSP</b>																						1/8x28		
1/4x19																						3/8x19		
1/2x14																						5/8x14		
3/4x14																						7/8x14		
1x11																						1-1/4x11		
1-1/2x11																								