

Thread Wires

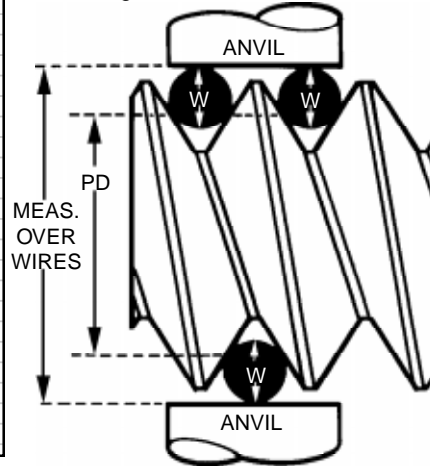


- Measuring Wire Sets
- Inch and Metric Sizes

These wires are the best sizes for standard 60° inch and metric threads. They may be used with other thread forms or with special pitches, constants for which may be calculated from the formula shown below.

The formula for determining wire constants for all 60° threads = $3W - .866025P$.

They are made from selected high speed steel, are extremely accurate in roundness and straightness and are within .00020" (20 millionths) of exact size.



Formula Values

- E = Pitch Diameter
- W = Diameter of Wire
- Mw = Measurement over Wires
- Tangent Helix Angle = Lead / 3.1416E
- N = Threads per inch

The most accurate and universally recognized method obtaining pitch diameter measurements of thread plug or setting plug gages is by means of using three hardened steel measuring wires laid into opposite sides of the thread, as shown in the diagram. Precise measurements with proper pressures over these wires minus the appropriate constant equals the measured pitch diameter.

| Threads Per Inch | Best Size Wire Inches W | Constant Inches | 1594 EDP No. | Price Set / 3 |
|------------------|-------------------------|-----------------|---------------|---------------|
| 100 | .00577 | .00865 | 701229 | 81.00 |
| 96 | .00601 | .00901 | 701230 | 81.00 |
| 90 | .00642 | .00964 | 701231 | 81.00 |
| 80 | .00722 | .01083 | 701232 | 81.00 |
| 72 | .00802 | .01203 | 701233 | 81.00 |
| 64 | .00902 | .01353 | 701234 | 71.00 |
| 56 | .01031 | .01547 | 701235 | 71.00 |
| 48 | .01203 | .01805 | 701237 | 61.00 |
| 44 | .01312 | .01968 | 701238 | 61.00 |
| 40 | .01443 | .02164 | 701239 | 61.00 |
| 36 | .01604 | .02406 | 701240 | 42.00 |
| 32 | .01804 | .02706 | 701241 | 42.00 |
| 28 | .02062 | .03093 | 701243 | 42.00 |
| 24 | .02406 | .03610 | 701246 | 42.00 |
| 20 | .02887 | .04331 | 701248 | 42.00 |
| 18 | .03208 | .04813 | 701249 | 42.00 |
| 16 | .03608 | .05411 | 701250 | 42.00 |
| 14 | .04124 | .06186 | 701251 | 42.00 |
| 13 | .04441 | .06661 | 701252 | 42.00 |
| 12 | .04811 | .07216 | 701253 | 42.00 |
| 11-1/2 | .05020 | .07529 | 701254 | 42.00 |
| 11 | .05249 | .07874 | 701255 | 42.00 |
| 10 | .05774 | .08662 | 701256 | 42.00 |
| 9 | .06415 | .09622 | 701257 | 42.00 |
| 8 | .07217 | .10826 | 701258 | 42.00 |
| 7 | .08248 | .12372 | 701260 | 42.00 |
| 6 | .09623 | .14435 | 701261 | 42.00 |
| 5-1/2 | .10497 | .15745 | 701262 | 72.00 |
| 5 | .11547 | .17320 | 701263 | 72.00 |
| 4-1/2 | .12830 | .19245 | 701264 | 72.00 |
| 4 | .14434 | .21651 | 701265 | 72.00 |

| Pitch | Best Wire Sizes | | Constant | | 1596 EDP No. (set / 3) | Price |
|-------|-----------------|--------|----------|--------|------------------------|---------------------|
| | mm | Inches | mm | Inches | | |
| 0.25 | .00984 | .1130 | .00568 | .2165 | .00852 | 701306 90.00 |
| 0.3 | .01181 | .1732 | .00682 | .2596 | .01023 | 701307 90.00 |
| 0.35 | .01378 | .2021 | .00796 | .3031 | .01193 | 701308 90.00 |
| 0.4 | .01575 | .2309 | .00909 | .3464 | .01364 | 701309 90.00 |
| 0.45 | .01772 | .2598 | .01023 | .3897 | .01534 | 701310 80.00 |
| 0.5 | .01969 | .2887 | .01137 | .4330 | .01705 | 701311 80.00 |
| 0.6 | .02362 | .3464 | .01364 | .5196 | .02046 | 701312 67.00 |
| 0.7 | .02756 | .4041 | .01591 | .6062 | .02387 | 701313 67.00 |
| 0.75 | .02953 | .4330 | .01705 | .6495 | .02557 | 701314 46.00 |
| 0.8 | .03150 | .4619 | .01818 | .6928 | .02728 | 701315 46.00 |
| 0.9 | .03543 | .5196 | .02046 | .7794 | .03069 | 701316 46.00 |
| 1 | .03937 | .5774 | .02273 | .8660 | .03410 | 701317 46.00 |
| 1.25 | .04921 | .7217 | .02841 | 1.0825 | .04262 | 701318 46.00 |
| 1.5 | .05906 | .8660 | .03410 | 1.2990 | .05114 | 701319 46.00 |
| 1.75 | .06890 | 1.0104 | .03978 | 1.5155 | .05967 | 701320 46.00 |
| 2 | .07874 | 1.1547 | .04546 | 1.7321 | .06819 | 701321 46.00 |
| 2.5 | .09843 | 1.4434 | .05683 | 2.1651 | .08524 | 701322 46.00 |
| 3 | .11811 | 1.7321 | .06819 | 2.5981 | .10229 | 701323 46.00 |
| 3.5 | .13780 | 2.0207 | .07956 | 3.0311 | .11933 | 701411 46.00 |
| 4 | .15748 | 2.3094 | .09092 | 3.4641 | .13638 | 701412 46.00 |
| 4.5 | .17717 | 2.5981 | .10229 | 3.8971 | .15343 | 701413 80.00 |
| 5 | .19685 | 2.8868 | .11365 | 4.3301 | .17048 | 701414 80.00 |
| 5.5 | .21654 | 3.1754 | .12502 | 4.7631 | .18753 | 701415 80.00 |
| 6 | .23622 | 3.4641 | .13638 | 5.1962 | .20457 | 701416 80.00 |

Thread Measuring Wire Sets

Wood case with upright vials

| Description | EDP No. | Price |
|--|--------------|---------|
| Set No. 20, inches: Sizes 6-36 inclusive, except 7-1/2 and 22 pitches. | 39688 | 752.00 |
| Set No. 30, inches: Sizes 5-80 inclusive, except 7-1/2 and 22 pitches. | 39689 | 1408.00 |
| Set No. 23mm, metric: 23 sizes from 0.3mm pitch thru 6.00mm pitch. | 39690 | 1191.00 |
| Set No. 30mm, metric: 30 sizes from 0.2mm thru 10.00mm pitch. | 39691 | 1675.00 |

When ordering, please use EDP numbers.