

NATIONAL PHYSICAL LABORATORY

LIMITING DIAMETER FOR FEELER POINTS FOR INTERNAL EFFECTIVE
DIAMETER OF WHITWORTH, UNIFIED AND METRIC SCREWS

Engrave with appropriate pitch

Feelers marked	SUITABLE FOR THREADS			LIMITS OF DIAMETER OF FEELER POINTS	
	Whit. 55° T.P.I.	Unified 60° T.P.I.	Metric 60° pitch mm	mm	in
3	3	-	-	4.53 to 5.02	0.178 to 0.98
3 ¼	3 ¼	-	-	4.33 “ 4.48	0.171 “ 0.177
3 ½	3 ½	-	-	4.02 “ 4.17	0.158 “ 0.164
4	4	4	6	3.48 “ 3.63	0.137 “ 0.143
4 ½	4 ½	4 ½	5.5	3.11 “ 3.26	0.122 “ 0.128
5	5	5	5 & 4.5	2.72 “ 2.79	0.107 “ 0.110
6	6	6	4	2.30 “ 2.45	0.090 “ 0.096
7	7	7	3.5	1.97 “ 2.12	0.078 “ 0.084
8	8	8	3	1.70 “ 1.86	0.067 “ 0.073
9	9	9	-	1.52 “ 1.67	0.060 “ 0.067
10	10	10	2.5	1.36 “ 1.51	0.053 ₅ “ 0.059 ₅
11	11	11	-	1.24 “ 1.37	0.048 ₅ “ 0.054
12	12	12 & 13	2	1.13 “ 1.21	0.44 ₅ “ 0.047 ₅
14	14	14	1.75	0.97 “ 1.08	0.038 “ 0.042 ₅
16	16	16	1.5	0.85 “ 0.93	0.033 4 “ 0.036 6
18	18 & 19	18	-	0.75 ₅ “ 0.79 ₅	0.029 7 “ 0.031 2
20	20	20	1.25	0.68 “ 0.75 ₅	0.026 7 “ 0.029 6
22	22	-	-	0.62 “ 0.68 ₅	0.024 3 “ 0.027 0
24	24	24	-	0.56 ₅ “ 0.63	0.022 3 “ 0.024 7
26	26	-	1	0.53 ₅ “ 0.58	0.021 0 “ 0.022 8
28	28	28	-	0.48 ₅ “ 0.54	0.019 1 “ 0.021 2
32	32	32	0.75 & 0.8	0.42 ₅ “ 0.46 ₅	0.016 8 “ 0.018 3
36	36	36	0.7	0.37 ₅ “ 0.42	0.014 9 “ 0.016 5
40	40	40	0.6	0.34 “ 0.37	0.013 4 “ 0.014 6
44	-	44	-	0.31 “ 0.36	0.012 1 “ 0.014 1
48	-	48	0.5	0.28 ₅ “ 0.31	0.011 1 “ 0.012 2