

LINKING DIMENSIONS

Scratch building requires dealing with a variety of dimensional systems; not just English and metric, but also systems for wire, drills and hardware. This table attempts to link those that are most likely to be used. Each row represents a common diameter.

LINKING DIMENSIONS																									
1/8 SCALE MODELERS GUIDE																									
Dimensions					American* Wire Gauge			Selected Telescopic Round Brass Tubes				Clearance Drill Sizes			Hardware										
English		Metric		Selected Full Size Eqvlt (1/8 Scale)	Ga	ins	mm	Normal (.014" Wall)		Thin Wall (.006" Wall)		#	ins	mm	(typical dimensions)				Rod Dia for External Thread Die		Tap Drill Sizes** Hole Dia for Internal Thread Tap (Drill Size)				
Fraction	Decimal	mm	Round					OD	ID	OD	ID				Size	Bolt Shaft	Hex Head (across flats)		(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
					28	0.014	0.36																		
1/64	0.016	0.40	0.4	1/8								78	0.016	0.41											
					26	0.017	0.43																		
					24	0.020	0.50					76	0.020	0.51	0.5mm	0.020	0.50	0.030	0.76	24 Gauge	0.50	0.015	0.37	79	
				3/16								74	0.022	0.56	0000-160	0.021	0.53	0.047	1.19	23 Gauge	-	0.016	0.41	78	
1/32	0.031	0.79	0.8	1/4	22	0.025	0.64			1/32	1/64	68	0.031	0.79	0.8mm	0.031	0.80	0.042	1.07	1/32	0.80	0.024	0.61	73	
					20	0.032	0.81																		
												66	0.033	0.84											
												64	0.036	0.91	000-120	0.034	0.86	0.078	1.98	0.036	-	0.026	0.66	71	
				5/16	18	0.040	1.02					60	0.040	1.02	1.0mm	0.039	1.00	0.055	1.40	0.040	1.00	0.031	0.79	68	
3/64	0.047	1.19	1.2	3/8						3/64	1/32	56	0.047	1.19	00-90	0.047	1.19	5/64	1.98	3/64	1.20	0.038	0.96	62	
					16	0.051	1.30																		
1/16	0.063	1.59		1/2	14	0.064	1.63	1/16	1/32	1/16	3/64	52	0.063	1.60	0-80	0.060	1.52	3/32	2.38	1/16	1.50	0.047	1.18	56	
5/64	0.078	1.98	2.0	5/8				5/64	3/64	5/64	1/16				1-72	0.073	1.85	7/64	2.78	0.072	-	0.060	1.51	53	
					12	0.081	2.06					46	0.081	2.06	Pocher Rod	0.079	2.00			5/64	2.00	0.063	1.61	52	
3/32	0.094	2.38		3/4				3/32	1/16	3/32	5/64	42	0.094	2.39	2-56	0.084	2.13	1/8	3.18	0.086	-	0.067	1.70	51	
					10	0.102	2.59																		
7/64	0.109	2.78		7/8				7/64	5/64	7/64	3/32														
1/8	0.125	3.18		1				1/8	3/32	1/8	7/64														
9/64	0.141	3.57						9/64	7/64	9/64	1/8														
5/32	0.156	3.97	4.0	11/4				5/32	1/8	5/32	9/64														
11/64	0.172	4.37						11/64	9/64	11/64	5/32														
3/16	0.188	4.76		11/2				3/16	5/32	3/16	11/64														
13/64	0.203	5.16																							
7/32	0.219	5.56																							
15/64	0.234	5.95	6.0																						
1/4	0.250	6.35																							
17/64	0.266	6.75																							
9/32	0.281	7.14																							
19/64	0.297	7.54																							
5/16	0.313	7.94	8.0																						

** Will result in approx. 75% - 80% of thread depth in "soft" metals and plastic.