

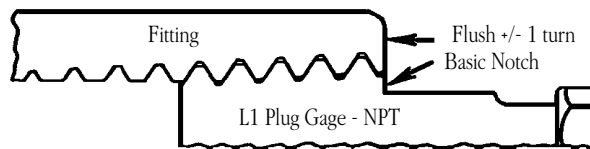
# NPT Thread Gages

**Willrich  
Precision**

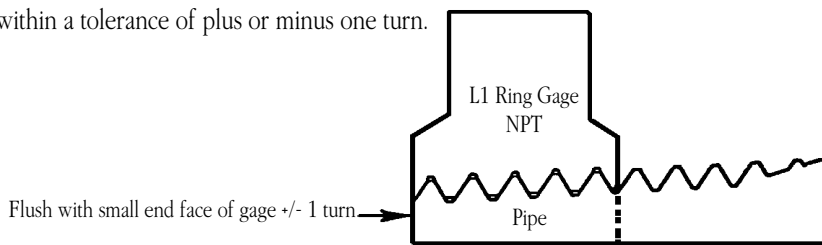


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Gaging of NPT threads is quite easy and differs from straight threads in that only one gage, an L1 plug or L1 ring is used to determine acceptability. The taper pipe thread plug has a step at the L1 distance from its small end. When turned hand tight into the product's internal pipe thread, (do not force the gage), the step is required to be flush with the large end of the product thread within a tolerance of plus or minus one turn. Many times the product thread is chamfered, countersunk or recessed, exceeding the major diameter of the thread. In these instances, the gaging point of the product thread becomes where the first visible sign of a scratch mark at the major diameter occurs on the chamfer cone.



The taper pipe thread ring gage has a thickness equal to the L1 length. The ring's large end (marked face) is turned hand tight onto the external pipe thread until it stops (do not force the gage). The small end of the ring gage is required to be flush with the small end of the pipe within a tolerance of plus or minus one turn.



Nominal Size of Pipe	Threads Per Inch	Basic L1 Length	Major Diameters			Pitch Diameters			Minor Diameters	
			At Small End	At Gaging Notch	At Large End	At Small End	At Gaging Notch	At Large End	At Small End	At Gaging Notch
1/16	27	.160	.29289	.30289	.30921	.27118	.28118	.28750	.24947	.25947
1/8	27	.1615	.38522	.39531	.40171	.36351	.37360	.38000	.34180	.35189
1/4	18	.2278	.51339	.52763	.53850	.47739	.49163	.50250	.44139	.45563
3/8	18	.240	.64801	.66301	.67350	.61201	.62701	.63750	.57601	.59101
1/2	14	.320	.80600	.82600	.83936	.75843	.77843	.79179	.71086	.73086
3/4	14	.339	1.01525	1.03644	1.04936	.96768	.98887	1.00179	.92011	.94129
1	11 1/2	.400	1.27154	1.29654	1.31422	1.21363	1.23863	1.25630	1.15572	1.18072
1 1/4	11 1/2	.420	1.61504	1.64129	1.65922	1.55713	1.58338	1.60130	1.49922	1.52547
1 1/2	11 1/2	.420	1.85400	1.88025	1.89922	1.79609	1.82234	1.84130	1.73817	1.76442
2	11 1/2	.436	2.32693	2.35418	2.37422	2.26902	2.29627	2.31630	2.21111	2.23836
2 1/2	8	.682	2.80278	2.84541	2.87388	2.71953	2.76216	2.79062	2.63628	2.67891
3	8	.766	3.42388	3.47175	3.49888	3.34062	3.38850	3.41562	3.25737	3.30525
3 1/2	8	.821	3.92075	3.97207	3.99888	3.83750	3.88881	3.91562	3.75425	3.80556
4	8	.844	4.41762	4.47038	4.49888	4.33438	4.38712	4.41562	4.25112	4.30387
5	8	.937	5.47398	5.53255	5.56188	5.39073	5.44929	5.47862	5.30748	5.36604
6	8	.958	6.52935	6.58922	6.62388	6.44609	6.50597	6.54062	6.36284	6.42272
8	8	1.063	8.51685	8.58328	8.62388	8.43359	8.50003	8.54062	8.35034	8.41678
10	8	1.210	10.62857	10.70419	10.74888	10.54531	10.62094	10.66562	10.46206	10.53768
12	8	1.360	12.61607	12.70107	12.74888	12.53281	12.61781	12.66562	12.44956	12.53456

## When Ordering Pipe Gages Please Specify:

1. Quantity
2. Nominal Size & Threads Per Inch.
3. Short or Long Form Certification if required.