

# NPTF CLASS 2 SPECIFICATIONS

Basic Dimensions for L1 Plug Gages, NPTF												Basic Dimensions for L3 Plug Gages											
Nominal Size & T.P.I.	Basic Length L1	Small End		Basic Dim. at L1 Plane		Min. Range		Basic Range		Max. Range		Small End		Four		Min. Range		Basic Range		Max. Range			
		Pitch Dia.	Major Dia.	Pitch Dia.	Major Dia.	Min. Step 1	Max. Step 2	Min. Step 2	Max. Step 3	Min. Step 3	Max. Step 4	Min. Step 4	Max. Length L1+L3	Pitch Dia.	Major Dia.	Thread L3+p	Min. Step 1	Max. Step 2	Min. Step 2	Max. Step 3	Min. Step 3	Max. Step 4	
						L1-p	L1-1/3p	L1-1/3p	L1-1/3p	L1+1/3p	L1+1/3p	L1+1/3p	L1+p					U+L3-p	U+L3-1/3p	U+L3-1/3p	U+L3+1/3p	U+L3+1/3p	U+L3+p
1/16-27	.1600	.27118	.29289	.28118	.30289	.12296	.14766	.14766	.17234	.17234	.19704	.2711	.2642	.2815	.1482	.23406	.25876	.25876	.28344	.28344	.30814		
1/8-27	.1615	.36351	.38522	.37360	.39531	.12446	.14916	.14916	.17384	.17384	.19854	.2726	.3566	.3738	.1482	.23556	.26026	.26026	.28494	.28494	.30964		
1/4-18	.2278	.47739	.51339	.49168	.52763	.17224	.20928	.20928	.24632	.24632	.28336	.3945	.4670	.4928	.2222	.33894	.37598	.37598	.41302	.41302	.45006		
3/8-18	.2400	.61201	.64801	.62701	.66301	.18444	.22148	.22148	.25852	.25852	.29556	.4067	.6016	.6275	.2222	.35114	.38818	.38818	.42522	.42522	.46226		
1/2-14	.3200	.75843	.80815	.77848	.82815	.24857	.29619	.29619	.34381	.34381	.39143	.5343	.7451	.7783	.2857	.46287	.51049	.51049	.55811	.55811	.60573		
3/4-14	.3390	.96768	1.01740	.98887	1.03859	.26757	.31519	.31519	.36281	.36281	.41043	.5533	.9543	.9876	.2857	.48187	.52949	.52949	.57711	.57711	.62473		
1-11/2	.4000	1.21368	1.27329	1.23868	1.29829	.31304	.37102	.37102	.42898	.42898	.48696	.6609	1.1973	1.2379	.3478	.57394	.63192	.63192	.68988	.68988	.74786		
1 1/4-11/2	.4200	1.55713	1.61679	1.58338	1.64304	.33304	.39102	.39102	.44898	.44898	.50696	.6809	1.5408	1.5814	.3478	.59394	.65192	.65192	.70988	.70988	.76786		
1 1/2-11/2	.4200	1.79609	1.85575	1.82234	1.88200	.33304	.39102	.39102	.44898	.44898	.50696	.6809	1.7798	1.8203	.3478	.59394	.65192	.65192	.70988	.70988	.76786		
2-11/2	.4360	2.26902	2.32868	2.29627	2.35593	.34904	.40702	.40702	.46498	.46498	.52296	.6969	2.2527	2.2932	.3478	.60994	.66792	.66792	.72588	.72588	.78386		

Basic Dimensions for Crest Check Plug Gages										Basic Dimensions for Root Check Plug Gages							
Nominal Size & T.P.I.	Max. Dia. at L3 Basic Thread with Max. Truncation	Basic Pipe Thread		Min. Thread		Max. Thread		Max. Dia. at L1+L3 length from end of fitting	Max. width of crest at Major Dia.	Basic Pipe Thread		Min. Thread		Max. Thread			
		Min. Truncation	Max. Truncation	Min. Truncation	Max. Truncation	Min. Truncation	Max. Truncation			Min. Truncation	Max. Truncation	Min. Truncation	Max. Truncation	Min. Truncation	Max. Truncation		
	+ .00015		+ .000			+ .000		+ .0002			+ .002		+ .002		+ .002		
	- .00000	+/- .001	- .002	+/- .001	- .002	+/- .001	- .002	- .0000		+/- .001	- .000	+/- .001	- .000	+/- .001	- .000		
1/16-27	.2391	.2154	.2711	.1907	.2464	.2401	.2958	.2893	.003	.2711	.2166	.2464	.1919	.2958	.2413		
1/8-27	.3315	.2169	.2726	.1922	.2479	.2416	.2973	.3817	.003	.2726	.2181	.2479	.1934	.2973	.2428		
1/4-18	.4276	.3394	.3945	.3024	.3575	.3764	.4315	.5064	.004	.3945	.3394	.3575	.3024	.4315	.3764		
3/8-18	.5622	.3516	.4067	.3146	.3697	.3886	.4437	.6410	.004	.4067	.3516	.3697	.3146	.4437	.3886		
1/2-14	.6918	.4794	.5343	.4318	.4867	.5270	.5819	.7984	.004	.5343	.4772	.4867	.4296	.5819	.5248		
3/4-14	.9010	.4984	.5533	.4508	.5057	.5460	.6009	1.0076	.004	.5533	.4962	.5057	.4486	.6009	.5438		
1-11/2	1.1324	.6052	.6609	.5472	.6029	.6632	.7189	1.2622	.005	.6609	.5774	.6029	.5194	.7189	.6354		
1 1/4-11/2	1.4759	.6252	.6809	.5672	.6229	.6832	.7389	1.6057	.005	.6809	.5974	.6229	.5394	.7389	.6554		
1 1/2-11/2	1.7149	.6252	.6809	.5672	.6229	.6832	.7389	1.8447	.005	.6809	.5974	.6229	.5394	.7389	.6554		
2-11/2	2.1878	.6412	.6969	.5832	.6389	.6992	.7549	2.3176	.005	.6969	.6134	.6389	.5554	.7549	.6714		

Basic Dimensions for L1 Ring Gages										Basic Dimensions L2 Ring Gages								
Nominal Size & T.P.I.	Large End		Maximum Range		Basic Range		Minimum Range		Basic Length L2	Large End		Maximum Range		Basic Range		Minimum Range		
	Basic Length L1	Pitch Dia.	Minor Dia.	Max. Step 1	Min. Step 2	Max. Step 2	Min. Step 3	Max. Step 3		Min. Step 4	Pitch Dia.	Minor Dia.	Max. Step 1	Min. Step 2	Max. Step 2	Min. Step 3	Max. Step 3	Min. Step 4
				(L1-p)	(L1-1/3p)	(L1-1/3p)	(L1+1/3p)	(L1+1/3p)		(L1+p)				L2-p	L2-1/3p	L2-1/3p	L2+1/3p	L2+1/3p
1/16-27	.1600	.28118	.25947	.12296	.14766	.14766	.17234	.17234	.19704	.26113	.28750	.27024	.22409	.24879	.24879	.27347	.27347	.29817
1/8-27	.1615	.37360	.35189	.12446	.14916	.14916	.17384	.17384	.19854	.26385	.38000	.36274	.22681	.25151	.25151	.27619	.27619	.30089
1/4-18	.2278	.49163	.45563	.17224	.20928	.20928	.24632	.24632	.28336	.40178	.50250	.47661	.34622	.38326	.38326	.42030	.42030	.45734
3/8-18	.2400	.62701	.59101	.18444	.22148	.22148	.25852	.25852	.29556	.40778	.63750	.61161	.35222	.38926	.38926	.42630	.42630	.46334
1/2-14	.3200	.77843	.72871	.24857	.29619	.29619	.34381	.34381	.39143	.53371	.79179	.75850	.46228	.50990	.50990	.55752	.55752	.60514
3/4-14	.3390	.98887	.93915	.26757	.31519	.31519	.36281	.36281	.41043	.54571	1.00179	.96850	.47428	.52190	.52190	.56952	.56952	.61714
1-11/2	.4000	1.23853	1.17897	.31304	.37102	.37102	.42898	.42898	.48696	.68278	1.25630	1.21577	.59582	.65379	.65379	.71176	.71176	.76974
1 1/4-11/2	.4200	1.58338	1.52372	.33304	.39102	.39102	.44898	.44898	.50696	.70678	1.60130	1.56077	.61982	.67780	.67780	.73576	.73576	.79374
1 1/2-11/2	.4200	1.82234	1.76268	.33304	.39102	.39102	.44898	.44898	.50696	.72348	1.84130	1.80077	.63652	.69450	.69450	.75246	.75246	.81044
2-11/2	.4360	2.29627	2.23661	.34904	.40702	.40702	.46498	.46498	.52296	.75652	2.31630	2.27577	.66956	.72754	.72754	.78550	.78550	.84348

Basic Dimensions for Crest Check Ring Gages										Basic Dimensions for Root Check Ring Gages							
Nominal Size & T.P.I.	Major Dia. at L2 Basic Thread with Max. Trunc. D	Basic Pipe Thread		Min. Thread		Max. Thread		Minor Dia. at L2 length from end of pipe Basic thread with Min. Trunc. D	Max. width of Crest at Minor Dia. F	Basic Pipe Thread		Min. Thread		Max. Thread			
		Min. Trunc. B	Max. Trunc. Bt	Min. Trunc. MN	Max. Trunc. MNt	Min. Trunc. MX	Max. Trunc. MXt			Ring Diameter	Min. Trunc. B	Max. Trunc. Bt	Min. Trunc. MN	Max. Trunc. MNt	Min. Trunc. MX	Max. Trunc. MXt	
	- .00015		+ .000		+ .000		+ .000		+ .0002			+ .002		+ .002			
	+ .00000	+/- .001	- .002	+/- .001	- .002	+/- .001	- .002	+/- .003	- .0000		+/- .001	- .000	+/- .001	- .000	+/- .001	- .000	
1/16-27	.3126	.2054	.2611	.2301	.2858	.1807	.2364	1-1/4.2624	.003	.2611	.2066	.2858	.2313	.2364	.1819		
1/8-27	.4051	.2082	.2639	.2329	.2886	.1835	.2392	1-1/4	.3549	.003	.2639	.2094	.2886	.2341	.2392	.1847	
1/4-18	.5419	.3467	.4018	.3837	.4388	.3097	.3648	1-1/2	.4631	.004	.4018	.3467	.4388	.3837	.3648	.3097	
3/8-18	.6769	.3527	.4078	.3897	.4448	.3157	.3708	1-3/4	.5981	.004	.4078	.3527	.4448	.3897	.3708	.3157	
1/2-14	.8451	.4788	.5337	.5264	.5813	.4312	.4861	2	.7385	.004	.5337	.4766	.5813	.5242	.4861	.4290	
3/4-14	1.0551	.4908	.5457	.5384	.5933	.4432	.4981	2-1/4	.9485	.004	.5457	.4886	.5933	.5362	.4981	.4410	
1-11/2	1.3212	.6272	.6828	.6852	.7408	.5692	.6248	2-5/8	1.1914	.005	.6828	.5993	.7408	.6573	.6248	.5413	
1 1/4-11/2	1.6662	.6512	.7068	.7092	.7648	.5932	.6488	3-1/8	1.5364	.005	.7068	.6233	.7648	.6813	.6488	.5653	
1 1/2-11/2	1.9062	.6678	.7235	.7258	.7815	.6098	.6655	3-3/8	1.7764	.005	.7235	.6400	.7815	.6980	.6655	.5820	
2-11/2	2.3812	.7008	.7565	.7588	.8145	.6428	.6985	4.00	2.2514	.005	.7565	.6730	.8145	.7310	.6985	.6150	