



PMC  *Mercury*

Quality - Service - Responsibility





PMC



Mercury

PMC Mercury is a premier leader in the manufacture and calibration of precision thread and cylindrical gages. For nearly a century, customers from around the world have come to depend on the accuracy and durability of **PMC Mercury** gages. **PMC Mercury** prides itself on the quality and craftsmanship that goes into the manufacturing of each gage. **PMC Mercury** gages are heat treated and then deep frozen to assure dimensional stability for years to come. Plug gages are inspected twice to guard against any deviation from the true helical path of the thread forms (drunken threads). All finishing, lapping and inspection procedures are conducted in a constant temperature, humidity controlled laboratory for optimum accuracy. Our goal is to provide our customers with the highest quality products, service and on time delivery available in the industry. We strive to continually upgrade our manufacturing capabilities and improve our technical abilities through continuing education of our employees and implementation of the latest technology. Our motto is customer awareness and service. We welcome the opportunity to serve your gaging requirements whether they are from our standard product line or are unique to your specifications.

NICK BOSWORTH

PRESIDENT
PMC MERCURY





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**PMC Mercury offers a full range of calibration services,
including certifications to A2LA ISO 17025**

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METRIC THREAD PLUG GAGES



METRIC THREAD PLUG GAGES

SIZE	PITCH	TAPERLOCK THREAD PLUG GAGES			REVERSIBLE THREAD PLUG GAGES		
		GO 6H "X" TOL	NOT GO 6H "X" TOL	HANDLE	GO 6H "X" TOL	NOT GO 6H "X" TOL	HANDLE
M1.6	0.35	W0160356HG	W0160356HN	000	V0160356HG	V0160356HN	1W
M1.8	0.35	W0180356HG	W0180356HN	000	V0180356HG	V0180356HN	1W
M2	0.40	W0200406HG	W0200406HN	000	V0200406HG	V0200406HN	2W
M2.2	0.45	W0220456HG	W0220456HN	000	V0220456HG	V0220456HN	2W
M2.5	0.45	W0250456HG	W0250456HN	00	V0250456HG	V0250456HN	2W
M3	0.50	W0300506HG	W0300506HN	00	V0300506HG	V0300506HN	2W
M3.5	0.60	W0350606HG	W0350606HN	00	V0350606HG	V0350606HN	2W
M4	0.70	W0400706HG	W0400706HN	00	V0400706HG	V0400706HN	2W
M4.5	0.75	W0450756HG	W0450756HN	00	V0450756HG	V0450756HN	3W
M5	0.80	W0500806HG	W0500806HN	00	V0500806HG	V0500806HN	3W
M5.5	0.75	W0550756HG	W0550756HN	00	V0550756HG	V0550756HN	3W
M6	1.00	W0601006HG	W0601006HN	1	V0601006HG	V0601006HN	3W
M7	1.00	W0701006HG	W0701006HN	1	V0701006HG	V0701006HN	3W
M8	1.25	W0801256HG	W0801256HN	1	V0801256HG	V0801256HN	4W
M9	1.25	W0901256HG	W0901256HN	2	V0901256HG	V0901256HN	4W
M10	0.75	W1000756HG	W1000756HN	2	V1000756HG	V1000756HN	4W
M10	1.25	W1001256HG	W1001256HN	2	V1001256HG	V1001256HN	4W
M10	1.50	W1001506HG	W1001506HN	2	V1001506HG	V1001506HN	4W
M11	1.50	W1101506HG	W1101506HN	2	V1101506HG	V1101506HN	4W
M12	1.25	W1201256HG	W1201256HN	2	V1201256HG	V1201256HN	5W
M12	1.50	W1201506HG	W1201506HN	2	V1201506HG	V1201506HN	5W
M12	1.75	W1201756HG	W1201756HN	2	V1201756HG	V1201756HN	5W
M14	1.50	W1401506HG	W1401506HN	3	V1401506HG	V1401506HN	6W
M14	2.00	W1402006HG	W1402006HN	3	V1402006HG	V1402006HN	6W
M15	1.00	W1501006HG	W1501006HN	3	V1501006HG	V1501006HN	6W
M15	1.50	W1501506HG	W1501506HN	3	V1501506HG	V1501506HN	6W
M16	1.50	W1601506HG	W1601506HN	3	V1601506HG	V1601506HN	7W
M16	2.00	W1602006HG	W1602006HN	3	V1602006HG	V1602006HN	7W
M17	1.00	W1701006HG	W1701006HN	3	V1701006HG	V1701006HN	7W
M17	1.50	W1701506HG	W1701506HN	3	V1701506HG	V1701506HN	7W
M18	1.50	W1801506HG	W1801506HN	3	V1801506HG	V1801506HN	7W
M18	2.50	W1802506HG	W1802506HN	3	V1802506HG	V1802506HN	7W

METRIC THREAD PLUG GAGES CONTINUED



METRIC THREAD PLUG GAGES							
SIZE	PITCH	TAPERLOCK THREAD PLUG GAGES			REVERSIBLE THREAD PLUG GAGES		
		GO 6H “X” TOL	NOT GO 6H “X” TOL	HANDLE	GO 6H “X” TOL	NOT GO 6H “X” TOL	HANDLE
M20	1.00	W2001006HG	W2001006HN	4	Quoted Upon Request		
M20	1.50	W2001506HG	W2001506HN	4			
M20	2.50	W2002506HG	W2002506HN	4			
M22	1.50	W2201506HG	W2201506HN	4			
M22	2.50	W2202506HG	W2202506HN	4			
M24	2.00	W2402006HG	W2402006HN	4			
M24	3.00	W2403006HG	W2403006HN	4			
M25	1.50	W2501506HG	W2501506HN	4			
M25	2.00	W2502006HG	W2502006HN	4			
M26	1.00	W2601006HG	W2601006HN	4			
M26	1.50	W2601506HG	W2601506HN	4			
M27	2.00	W2702006HG	W2702006HN	4			
M27	3.00	W2703006HG	W2703006HN	4			
M28	1.00	W2801006HG	W2801006HN	4			
M28	1.50	W2801506HG	W2801506HN	4			
M28	2.00	W2802006HG	W2802006HN	4			
M30	1.50	W3001506HG	W3001506HN	5			
M30	2.00	W3002006HG	W3002006HN	5			
M30	3.50	W3003506HG	W3003506HN	5			
M32	1.50	W3201506HG	W3201506HN	5			
M32	2.00	W3202006HG	W3202006HN	5			
M33	2.00	W3302006HG	W3302006HN	5			
M33	3.50	W3303506HG	W3303506HN	5			
M35	1.50	W3501506HG	W3501506HN	5			
M36	2.00	W3602006HG	W3602006HN	5			
M36	3.00	W3603006HG	W3603006HN	5			
M36	4.00	W3604006HG	W3604006HN	5			
M38	1.50	W3801506HG	W3801506HN	5			
*M39	2.00	W3902006HG	W3902006HN	5			
*M39	3.00	W3903006HG	W3903006HN	5			
*M39	4.00	W3904006HG	W3904006HN	5			
* GAGES ARE TRILOCK DESIGN							

METRIC THREAD RING & SETTING PLUG GAGES



METRIC THREAD RING & SETTING PLUG GAGES

SIZE	PITCH	THREAD RING GAGES			TAPERLOCK TRUNCATED SETTING PLUG GAGES			TAPERLOCK HILO SETTING PLUG GAGES		
		GO 6g "X" TOL	NOT GO 6g "X" TOL	HOLDER	TRUNCATED GO 6g "X" TOL	TRUNCATED NOT GO 6g "X" TOL	HANDLE	HILO GO 6g "W" TOL	HILO NOT GO 6g "W" TOL	HANDLE
M1.6	0.35	R0160356GG	R0160356GN	1	S0160356GG	S0160356GN	000	HL0160356GG	HL0160356GN	000
M1.8	0.35	R0180356GG	R0180356GN	1	S0180356GG	S0180356GN	000	HL0180356GG	HL0180356GN	000
M2	0.40	R0200406GG	R0200406GN	1	S0200406GG	S0200406GN	000	HL0200406GG	HL0200406GN	000
M2.2	0.45	R0220456GG	R0220456GN	1	S0220456GG	S0220456GN	000	HL0220456GG	HL0220456GN	000
M2.5	0.45	R0250456GG	R0250456GN	1	S0250456GG	S0250456GN	00	HL0250456GG	HL0250456GN	00
M3	0.50	R0300506GG	R0300506GN	1	S0300506GG	S0300506GN	00	HL0300506GG	HL0300506GN	00
M3.5	0.60	R0350606GG	R0350606GN	1	S0350606GG	S0350606GN	00	HL0350606GG	HL0350606GN	00
M4	0.70	R0400706GG	R0400706GN	1	S0400706GG	S0400706GN	00	HL0400706GG	HL0400706GN	00
M4.5	0.75	R0450756GG	R0450756GN	1	S0450756GG	S0450756GN	00	HL0450756GG	HL0450756GN	00
M5	0.80	R0500806GG	R0500806GN	1	S0500806GG	S0500806GN	00	HL0500806GG	HL0500806GN	00
M5.5	0.75	R0550756GG	R0550756GN	1	S0550756GG	S0550756GN	00	*****	*****	**
M6	1.00	R0601006GG	R0601006GN	1	S0601006GG	S0601006GN	1	HL0601006GG	HL0601006GN	1
M7	1.00	R0701006GG	R0701006GN	2	S0701006GG	S0701006GN	1	HL0701006GG	HL0701006GN	1
M8	1.25	R0801256GG	R0801256GN	2	S0801256GG	S0801256GN	1	HL0801256GG	HL0801256GN	1
M9	1.25	R0901256GG	R0901256GN	3	S0901256GG	S0901256GN	2	*****	*****	**
M10	0.75	R1000756GG	R1000756GN	3	S1000756GG	S1000756GN	2	*****	*****	**
M10	1.25	R1001256GG	R1001256GN	3	S1001256GG	S1001256GN	2	HL1001256GG	HL1001256GN	2
M10	1.50	R1001506GG	R1001506GN	3	S1001506GG	S1001506GN	2	HL1001506GG	HL1001506GN	2
M11	1.50	R1101506GG	R1101506GN	3	S1101506GG	S1101506GN	2	*****	*****	**
M12	1.25	R1201256GG	R1201256GN	3	S1201256GG	S1201256GN	2	HL1201256GG	HL1201256GN	2
M12	1.50	R1201506GG	R1201506GN	3	S1201506GG	S1201506GN	2	HL1201506GG	HL1201506GN	2
M12	1.75	R1201756GG	R1201756GN	3	S1201756GG	S1201756GN	2	HL1201756GG	HL1201756GN	2
M14	1.50	R1401506GG	R1401506GN	4	S1401506GG	S1401506GN	3	HL1401506GG	HL1401506GN	3
M14	2.00	R1402006GG	R1402006GN	4	S1402006GG	S1402006GN	3	HL1402006GG	HL1402006GN	3
M15	1.00	R1501006GG	R1501006GN	4	S1501006GG	S1501006GN	3	*****	*****	**
M15	1.50	R1501506GG	R1501506GN	4	S1501506GG	S1501506GN	3	*****	*****	**
M16	1.50	R1601506GG	R1601506GN	4	S1601506GG	S1601506GN	3	HL1601506GG	HL1601506GN	3
M16	2.00	R1602006GG	R1602006GN	4	S1602006GG	S1602006GN	3	HL1602006GG	HL1602006GN	3
M17	1.00	R1701006GG	R1701006GN	4	S1701006GG	S1701006GN	3	*****	*****	**
M17	1.50	R1701506GG	R1701506GN	4	S1701506GG	S1701506GN	3	*****	*****	**
M18	1.50	R1801506GG	R1801506GN	4	S1801506GG	S1801506GN	3	HL1801506GG	HL1801506GN	3
M18	2.50	R1802506GG	R1802506GN	4	S1802506GG	S1802506GN	3	HL1802506GG	HL1802506GN	3

METRIC THREAD RING & SETTING PLUG GAGES CONTINUED



METRIC THREAD RING & SETTING PLUG GAGES										
SIZE	PITCH	THREAD RING GAGES			TAPERLOCK TRUNCATED SETTING PLUG GAGES			TAPERLOCK HILO SETTING PLUG GAGES		
		GO 6g "X" TOL	NOT GO 6g "X" TOL	HOLDER	TRUNCATED GO 6g "X" TOL	TRUNCATED NOT GO 6g "X" TOL	HANDLE	HILO GO 6g "W" TOL	HILO NOT GO 6g "W" TOL	HANDLE
M20	1.00	R2001006GG	R2001006GN	5	S2001006GG	S2001006GN	4	HL2001006GG	HL2001006GN	4
M20	1.50	R2001506GG	R2001506GN	5	S2001506GG	S2001506GN	4	HL2001506GG	HL2001506GN	4
M20	2.50	R2002506GG	R2002506GN	5	S2002506GG	S2002506GN	4	HL2002506GG	HL2002506GN	4
M22	1.50	R2201506GG	R2201506GN	5	S2201506GG	S2201506GN	4	HL2201506GG	HL2201506GN	4
M22	2.50	R2202506GG	R2202506GN	5	S2202506GG	S2202506GN	4	HL2202506GG	HL2202506GN	4
M24	2.00	R2402006GG	R2402006GN	5	S2402006GG	S2402006GN	4	HL2402006GG	HL2402006GN	4
M24	3.00	R2403006GG	R2403006GN	5	S2403006GG	S2403006GN	4	HL2403006GG	HL2403006GN	4
M25	1.50	R2501506GG	R2501506GN	5	S2501506GG	S2501506GN	4	*****	*****	**
M25	2.00	R2502006GG	R2502006GN	5	S2502006GG	S2502006GN	4	*****	*****	**
M26	1.00	R2601006GG	R2601006GN	5	S2601006GG	S2601006GN	4	*****	*****	**
M26	1.50	R2601506GG	R2601506GN	5	S2601506GG	S2601506GN	4	*****	*****	**
M27	2.00	R2702006GG	R2702006GN	5	S2702006GG	S2702006GN	4	HL2702006GG	HL2702006GN	4
M27	3.00	R2703006GG	R2703006GN	5	S2703006GG	S2703006GN	4	HL2703006GG	HL2703006GN	4
M28	1.00	R2801006GG	R2801006GN	5	S2801006GG	S2801006GN	4	*****	*****	**
M28	1.50	R2801506GG	R2801506GN	5	S2801506GG	S2801506GN	4	*****	*****	**
M28	2.00	R2802006GG	R2802006GN	5	S2802006GG	S2802006GN	4	*****	*****	**
M30	1.50	R3001506GG	R3001506GN	6	S3001506GG	S3001506GN	5	*****	*****	**
M30	2.00	R3002006GG	R3002006GN	6	S3002006GG	S3002006GN	5	HL3002006GG	HL3002006GN	5
M30	3.50	R3003506GG	R3003506GN	6	S3003506GG	S3003506GN	5	HL3003506GG	HL3003506GN	5
M32	1.50	R3201506GG	R3201506GN	6	S3201506GG	S3201506GN	5	*****	*****	**
M32	2.00	R3202006GG	R3202006GN	6	S3202006GG	S3202006GN	5	*****	*****	**
M33	2.00	R3302006GG	R3302006GN	6	S3302006GG	S3302006GN	5	HL3302006GG	HL3302006GN	5
M33	3.50	R3303506GG	R3303506GN	6	S3303506GG	S3303506GN	5	HL3303506GG	HL3303506GN	5
M35	1.50	R3501506GG	R3501506GN	6	S3501506GG	S3501506GN	5	HL3501506GG	HL3501506GN	5
M36	2.00	R3602006GG	R3602006GN	6	S3602006GG	S3602006GN	5	*****	*****	**
M36	3.00	R3603006GG	R3603006GN	6	S3603006GG	S3603006GN	5	HL3603006GG	HL3603006GN	5
M36	4.00	R3604006GG	R3604006GN	6	S3604006GG	S3604006GN	5	HL3604006GG	HL3604006GN	5
M38	1.50	R3801506GG	R3801506GN	6	S3801506GG	S3801506GN	5	*****	*****	**
*M39	2.00	R3902006GG	R3902006GN	6	S3902006GG	S3902006GN	5	*****	*****	**
*M39	3.00	R3903006GG	R3903006GN	6	S3903006GG	S3903006GN	5	HL3903006GG	HL3903006GN	5
*M39	4.00	R3904006GG	R3904006GN	6	S3904006GG	S3904006GN	5	HL3904006GG	HL3904006GN	5

*GAGES ARE TRILOCK DESIGN

UNIFIED THREAD PLUG GAGES



UNIFIED THREAD PLUG GAGES

CLASS X

SIZE	TAPERLOCK THREAD PLUGS				REVERSIBLE PIN THREAD PLUGS			
	GO 2B & 3B	NOTGO 2B	NOTGO 3B	HANDLE	GO 2B & 3B	NOTGO 2B	NOTGO 3B	HANDLE
0-80 UNF	W006080G	W0060802BN	W0060803BN	000	V006080G	V0060802BN	V0060803BN	1W
1-64 UNC	W007364G	W0073642BN	W0073643BN	000	V007364G	V0073642BN	V0073643BN	1W
1-72 UNF	W007372G	W0073722BN	W0073723BN	000	V007372G	V0073722BN	V0073723BN	1W
2-56 UNC	W008656G	W0086562BN	W0086563BN	000	V008656G	V0086562BN	V0086563BN	2W
2-64 UNF	W008664G	W0086642BN	W0086643BN	000	V008664G	V0086642BN	V0086643BN	2W
3-48 UNC	W009948G	W0099482BN	W0099483BN	000	V009948G	V0099482BN	V0099483BN	2W
3-56 UNF	W009956G	W0099562BN	W0099563BN	000	V009956G	V0099562BN	V0099563BN	2W
4-40 UNC	W011240G	W0112402BN	W0112403BN	00	V011240G	V0112402BN	V0112403BN	2W
4-48 UNF	W011248G	W0112482BN	W0112483BN	00	V011248G	V0112482BN	V0112483BN	2W
5-40 UNC	W012540G	W0125402BN	W0125403BN	00	V012540G	V0125402BN	V0125403BN	2W
5-44 UNF	W012544G	W0125442BN	W0125443BN	00	V012544G	V0125442BN	V0125443BN	2W
6-32 UNC	W013832G	W0138322BN	W0138323BN	00	V013832G	V0138322BN	V0138323BN	2W
6-40 UNF	W013840G	W0138402BN	W0138403BN	00	V013840G	V0138402BN	V0138403BN	2W
8-32 UNC	W016432G	W0164322BN	W0164323BN	0	V016432G	V0164322BN	V0164323BN	2W
8-36 UNF	W016436G	W0164362BN	W0164363BN	0	V016436G	V0164362BN	V0164363BN	2W
10-24 UNC	W019024G	W0190242BN	W0190243BN	0	V019024G	V0190242BN	V0190243BN	3W
10-32 UNF	W019032G	W0190322BN	W0190323BN	0	V019032G	V0190322BN	V0190323BN	3W
12-24 UNC	W021624G	W0216242BN	W0216243BN	0	V021624G	V0216242BN	V0216243BN	3W
12-28 UNF	W021628G	W0216282BN	W0216283BN	0	V021628G	V0216282BN	V0216283BN	3W
12-32 UNEF	W021632G	W0216322BN	W0216323BN	0	V021632G	V0216322BN	V0216323BN	3W
1/4-20 UNC	W025020G	W0250202BN	W0250203BN	1	V025020G	V0250202BN	V0250203BN	3W
1/4-28 UNF	W025028G	W0250282BN	W0250283BN	1	V025028G	V0250282BN	V0250283BN	3W
1/4-32 UNEF	W025032G	W0250322BN	W0250323BN	1	V025032G	V0250322BN	V0250323BN	3W
5/16-18 UNC	W031218G	W0312182BN	W0312183BN	1	V031218G	V0312182BN	V0312183BN	4W
5/16-24 UNF	W031224G	W0312242BN	W0312243BN	1	V031224G	V0312242BN	V0312243BN	4W
5/16-32 UNEF	W031232G	W0312322BN	W0312323BN	1	V031232G	V0312322BN	V0312323BN	4W
3/8-16 UNC	W037516G	W0375162BN	W0375163BN	2	V037516G	V0375162BN	V0375163BN	4W
3/8-24 UNF	W037524G	W0375242BN	W0375243BN	2	V037524G	V0375242BN	V0375243BN	4W
3/8-32 UNEF	W037532G	W0375322BN	W0375323BN	2	V037532G	V0375322BN	V0375323BN	4W
7/16-14 UNC	W043714G	W0437142BN	W0437143BN	2	V043714G	V0437142BN	V0437143BN	5W
7/16-20 UNF	W043720G	W0437202BN	W0437203BN	2	V043720G	V0437202BN	V0437203BN	5W
7/16-28 UNEF	W043728G	W0437282BN	W0437283BN	2	V043728G	V0437282BN	V0437283BN	5W
1/2-13 UNC	W050013G	W0500132BN	W0500133BN	2	V050013G	V0500132BN	V0500133BN	5W
1/2-20 UNF	W050020G	W0500202BN	W0500203BN	2	V050020G	V0500202BN	V0500203BN	5W
1/2-28 UNEF	W050028G	W0500282BN	W0500283BN	2	V050028G	V0500282BN	V0500283BN	5W
9/16-12 UNC	W056212G	W0562122BN	W0562123BN	3	V056212G	V0562122BN	V0562123BN	6W
9/16-18 UNF	W056218G	W0562182BN	W0562183BN	3	V056218G	V0562182BN	V0562183BN	6W
9/16-24 UNEF	W056224G	W0562242BN	W0562243BN	3	****	****	****	**

Quoted Upon Request

UNIFIED THREAD RING GAGES



UNIFIED THREAD RING GAGES					
SIZE	2A GO	2A NOTGO	3A GO	3A NOTGO	HOLDER
0-80 UNF	R0060802AG	R0060802AN	R0060803AG	R0060803AN	1
1-64 UNC	R0073642AG	R0073642AN	R0073643AG	R0073643AN	1
1-72 UNF	R0073722AG	R0073722AN	R0073723AG	R0073723AN	1
2-56 UNC	R0086562AG	R0086562AN	R0086563AG	R0086563AN	1
2-64 UNF	R0086642AG	R0086642AN	R0086643AG	R0086643AN	1
3-48 UNC	R0099482AG	R0099482AN	R0099483AG	R0099483AN	1
3-56 UNF	R0099562AG	R0099562AN	R0099563AG	R0099563AN	1
4-40 UNC	R0112402AG	R0112402AN	R0112403AG	R0112403AN	1
4-48 UNF	R0112482AG	R0112482AN	R0112483AG	R0112483AN	1
5-40 UNC	R0125402AG	R0125402AN	R0125403AG	R0125403AN	1
5-44 UNF	R0125442AG	R0125442AN	R0125443AG	R0125443AN	1
6-32 UNC	R0138322AG	R0138322AN	R0138323AG	R0138323AN	1
6-40 UNF	R0138402AG	R0138402AN	R0138403AG	R0138403AN	1
8-32 UNC	R0164322AG	R0164322AN	R0164323AG	R0164323AN	1
8-36 UNF	R0164362AG	R0164362AN	R0164363AG	R0164363AN	1
10-24 UNC	R0190242AG	R0190242AN	R0190243AG	R0190243AN	1
10-32 UNF	R0190322AG	R0190322AN	R0190323AG	R0190323AN	1
12-24 UNC	R0216242AG	R0216242AN	R0216243AG	R0216243AN	1
12-28 UNF	R0216282AG	R0216282AN	R0216283AG	R0216283AN	1
12-32 UNEF	R0216322AG	R0216322AN	R0216323AG	R0216323AN	1
1/4-20 UNC	R0250202AG	R0250202AN	R0250203AG	R0250203AN	2
1/4-28 UNF	R0250282AG	R0250282AN	R0250283AG	R0250283AN	2
1/4-32 UNEF	R0250322AG	R0250322AN	R0250323AG	R0250323AN	2
5/16-18 UNC	R0312182AG	R0312182AN	R0312183AG	R0312183AN	2
5/16-24 UNF	R0312242AG	R0312242AN	R0312243AG	R0312243AN	2
5/16-32 UNEF	R0312322AG	R0312322AN	R0312323AG	R0312323AN	2
3/8-16 UNC	R0375162AG	R0375162AN	R0375163AG	R0375163AN	3
3/8-24 UNF	R0375242AG	R0375242AN	R0375243AG	R0375243AN	3
3/8-32 UNEF	R0375322AG	R0375322AN	R0375323AG	R0375323AN	3
7/16-14 UNC	R0437142AG	R0437142AN	R0437143AG	R0437143AN	3
7/16-20 UNF	R0437202AG	R0437202AN	R0437203AG	R0437203AN	3
7/16-28 UNEF	R0437282AG	R0437282AN	R0437283AG	R0437283AN	3
1/2-13 UNC	R0500132AG	R0500132AN	R0500133AG	R0500133AN	3
1/2-20 UNF	R0500202AG	R0500202AN	R0500203AG	R0500203AN	3
1/2-28 UNEF	R0500282AG	R0500282AN	R0500283AG	R0500283AN	3
9/16-12 UNC	R0562122AG	R0562122AN	R0562123AG	R0562123AN	4
9/16-18 UNF	R0562182AG	R0562182AN	R0562183AG	R0562183AN	4
9/16-24 UNEF	R0562242AG	R0562242AN	R0562243AG	R0562243AN	4

UNIFIED THREAD RING GAGES CONTINUED



UNIFIED THREAD RING GAGES					
SIZE	2A GO	2A NOTGO	3A GO	3A NOTGO	HOLDER
5/8-11 UNC	R0625112AG	R0625112AN	R0625113AG	R0625113AN	4
5/8-18 UNF	R0625182AG	R0625182AN	R0625183AG	R0625183AN	4
5/8-24 UNEF	R0625242AG	R0625242AN	R0625243AG	R0625243AN	4
11/16-24 UNEF	R0687242AG	R0687242AN	R0687243AG	R0687243AN	4
3/4-10 UNC	R0750102AG	R0750102AN	R0750103AG	R0750103AN	4
3/4-16 UNF	R0750162AG	R0750162AN	R0750163AG	R0750163AN	4
3/4-20 UNEF	R0750202AG	R0750202AN	R0750203AG	R0750203AN	4
13/16-20 UNEF	R0812202AG	R0812202AN	R0812203AG	R0812203AN	4
7/8-9 UNC	R0875092AG	R0875092AN	R0875093AG	R0875093AN	5
7/8-14 UNF	R0875142AG	R0875142AN	R0875143AG	R0875143AN	5
7/8-20 UNEF	R0875202AG	R0875202AN	R0875203AG	R0875203AN	5
15/16-20 UNEF	R0937202AG	R0937202AN	R0937203AG	R0937203AN	5
1-8 UNC	R1000082AG	R1000082AN	R1000083AG	R1000083AN	5
1-12 UNF	R1000122AG	R1000122AN	R1000123AG	R1000123AN	5
1-14 UNS	R1000142AG	R1000142AN	R1000143AG	R1000143AN	5
1-20 UNEF	R1000202AG	R1000202AN	R1000203AG	R1000203AN	5
1 1/16-12 UNF	R1062122AG	R1062122AN	R1062123AG	R1062123AN	5
1 1/16-18 UNEF	R1062182AG	R1062182AN	R1062183AG	R1062183AN	5
1 1/8-7 UNC	R1125072AG	R1125072AN	R1125073AG	R1125073AN	5
1 1/8-12 UNF	R1125122AG	R1125122AN	R1125123AG	R1125123AN	5
1 1/8-18 UNEF	R1125182AG	R1125182AN	R1125183AG	R1125183AN	5
1 3/16-12 UNF	R1187122AG	R1187122AN	R1187123AG	R1187123AN	6
1 3/16-18 UNEF	R1187182AG	R1187182AN	R1187183AG	R1187183AN	6
1 1/4-7 UNC	R1250072AG	R1250072AN	R1250073AG	R1250073AN	6
1 1/4-12 UNF	R1250122AG	R1250122AN	R1250123AG	R1250123AN	6
1 1/4-18 UNEF	R1250182AG	R1250182AN	R1250183AG	R1250183AN	6
1 5/16-12 UNF	R1312122AG	R1312122AN	R1312123AG	R1312123AN	6
1 5/16-18 UNEF	R1312182AG	R1312182AN	R1312183AG	R1312183AN	6
1 3/8-6 UNC	R1375062AG	R1375062AN	R1375063AG	R1375063AN	6
1 3/8-12 UNF	R1375122AG	R1375122AN	R1375123AG	R1375123AN	6
1 3/8-18 UNEF	R1375182AG	R1375182AN	R1375183AG	R1375183AN	6
1 7/16-12 UNF	R1437122AG	R1437122AN	R1437123AG	R1437123AN	6
1 7/16-18 UNEF	R1437182AG	R1437182AN	R1437183AG	R1437183AN	6
1 1/2-6 UNC	R1500062AG	R1500062AN	R1500063AG	R1500063AN	6
1 1/2-12 UNF	R1500122AG	R1500122AN	R1500123AG	R1500123AN	6
1 1/2-18 UNEF	R1500182AG	R1500182AN	R1500183AG	R1500183AN	6

UNIFIED TRUNCATED THREAD SETTING PLUG GAGES



UNIFIED TRUNCATED THREAD SETTING PLUG GAGES					
SIZE	2A GO	2A NOTGO	3A GO	3A NOTGO	HANDLE
0-80 UNF	S0060802AG	S0060802AN	S0060803AG	S0060803AN	000
1-64 UNC	S0073642AG	S0073642AN	S0073643AG	S0073643AN	000
1-72 UNF	S0073722AG	S0073722AN	S0073723AG	S0073723AN	000
2-56 UNC	S0086562AG	S0086562AN	S0086563AG	S0086563AN	000
2-64 UNF	S0086642AG	S0086642AN	S0086643AG	S0086643AN	000
3-48 UNC	S0099482AG	S0099482AN	S0099483AG	S0099483AN	000
3-56 UNF	S0099562AG	S0099562AN	S0099563AG	S0099563AN	000
4-40 UNC	S0112402AG	S0112402AN	S0112403AG	S0112403AN	00
4-48 UNF	S0112482AG	S0112482AN	S0012483AG	S0012483AN	00
5-40 UNC	S0125402AG	S0125402AN	S0125403AG	S0125403AN	00
5-44 UNF	S0125442AG	S0125442AN	S0125443AG	S0125443AN	00
6-32 UNC	S0138322AG	S0138322AN	S0138323AG	S0138323AN	00
6-40 UNF	S0138402AG	S0138402AN	S0138403AG	S0138403AN	00
8-32 UNC	S0164322AG	S0164322AN	S0164323AG	S0164323AN	0
8-36 UNF	S0164362AG	S0164362AN	S0164363AG	S0164363AN	0
10-24 UNC	S0190242AG	S0190242AN	S0190243AG	S0190243AN	0
10-32 UNF	S0190322AG	S0190322AN	S0190323AG	S0190323AN	0
12-24 UNC	S0216242AG	S0216242AN	S0216243AG	S0216243AN	0
12-28 UNF	S0216282AG	S0216282AN	S0216283AG	S0216283AN	0
12-32 UNEF	S0216322AG	S0216322AN	S0216323AG	S0216323AN	0
1/4-20 UNC	S0250202AG	S0250202AN	S0250203AG	S0250203AN	1
1/4-28 UNF	S0250282AG	S0250282AN	S0250283AG	S0250283AN	1
1/4-32 UNEF	S0250322AG	S0250322AN	S0250323AG	S0250323AN	1
5/16-18 UNC	S0312182AG	S0312182AN	S0312183AG	S0312183AN	1
5/16-24 UNF	S0312242AG	S0312242AN	S0312243AG	S0312243AN	1
5/16-32 UNEF	S0312322AG	S0312322AN	S0312323AG	S0312323AN	1
3/8-16 UNC	S0375162AG	S0375162AN	S0375163AG	S0375163AN	2
3/8-24 UNF	S0375242AG	S0375242AN	S0375243AG	S0375243AN	2
3/8-32 UNEF	S0375322AG	S0375322AN	S0375323AG	S0375323AN	2
7/16-14 UNC	S0437142AG	S0437142AN	S0437143AG	S0437143AN	2
7/16-20 UNF	S0437202AG	S0437202AN	S0437203AG	S0437203AN	2
7/16-28 UNEF	S0437282AG	S0437282AN	S0437283AG	S0437283AN	2
1/2-13 UNC	S0500132AG	S0500132AN	S0500133AG	S0500133AN	2
1/2-20 UNF	S0500202AG	S0500202AN	S0500203AG	S0500203AN	2
1/2-28 UNEF	S0500282AG	S0500282AN	S0500283AG	S0500283AN	2
9/16-12 UNC	S0562122AG	S0562122AN	S0562123AG	S0562123AN	3
9/16-18 UNF	S0562182AG	S0562182AN	S0562183AG	S0562183AN	3
9/16-24 UNEF	S0562242AG	S0562242AN	S0562243AG	S0562243AN	3

UNIFIED TRUNCATED THREAD SETTING PLUG GAGES CONTINUED



UNIFIED TRUNCATED THREAD SETTING PLUG GAGES					
SIZE	2A GO	2A NOTGO	3A GO	3A NOTGO	HANDLE
5/8-11 UNC	S0625112AG	S0625112AN	S0625113AG	S0625113AN	3
5/8-18 UNF	S0625182AG	S0625182AN	S0625183AG	S0625183AN	3
5/8-24 UNEF	S0625242AG	S0625242AN	S0625243AG	S0625243AN	3
11/16-24 UNEF	S0687242AG	S0687242AN	S0687243AG	S0687243AN	3
3/4-10 UNC	S0750102AG	S0750102AN	S0750103AG	S0750103AN	3
3/4-16 UNF	S0750162AG	S0750162AN	S0750163AG	S0750163AN	3
3/4-20 UNEF	S0750202AG	S0750202AN	S0750203AG	S0750203AN	3
13/16-20 UNEF	S0812202AG	S0812202AN	S0812203AG	S0812203AN	3
7/8-9 UNC	S0875092AG	S0875092AN	S0875093AG	S0875093AN	4
7/8-14 UNF	S0875142AG	S0875142AN	S0875143AG	S0875143AN	4
7/8-20 UNEF	S0875202AG	S0875202AN	S0875203AG	S0875203AN	4
15/16-20 UNEF	S0937202AG	S0937202AN	S0937203AG	S0937203AN	4
1-8 UNC	S1000082AG	S1000082AN	S1000083AG	S1000083AN	4
1-12 UNF	S1000122AG	S1000122AN	S1000123AG	S1000123AN	4
1-14 UNS	S1000142AG	S1000142AN	S1000143AG	S1000143AN	4
1-20 UNEF	S1000202AG	S1000202AN	S1000203AG	S1000203AN	4
1 1/16-12 UNF	S1062122AG	S1062122AN	S1062123AG	S1062123AN	4
1 1/16-18 UNEF	S1062182AG	S1062182AN	S1062183AG	S1062183AN	4
1 1/8-7 UNC	S1125072AG	S1125072AN	S1125073AG	S1125073AN	4
1 1/8-12 UNF	S1125122AG	S1125122AN	S1125123AG	S1125123AN	4
1 1/8-18 UNEF	S1125182AG	S1125182AN	S1125183AG	S1125183AN	4
1 3/16-12 UNF	S1187122AG	S1187122AN	S1187123AG	S1187123AN	4
1 3/16-18 UNEF	S1187182AG	S1187182AN	S1187183AG	S1187183AN	4
1 1/4-7 UNC	S1250072AG	S1250072AN	S1250073AG	S1250073AN	5
1 1/4-12 UNF	S1250122AG	S1250122AN	S1250123AG	S1250123AN	5
1 1/4-18 UNEF	S1250182AG	S1250182AN	S1250183AG	S1250183AN	5
1 5/16-12 UNF	S1312122AG	S1312122AN	S1312123AG	S1312123AN	5
1 5/16-18 UNEF	S1312182AG	S1312182AN	S1312183AG	S1312183AN	5
1 3/8-6 UNC	S1375062AG	S1375062AN	S1375063AG	S1375063AN	5
1 3/8-12 UNF	S1375122AG	S1375122AN	S1375123AG	S1375123AN	5
1 3/8-18 UNEF	S1375182AG	S1375182AN	S1375183AG	S1375183AN	5
1 7/16-12 UNF	S1437122AG	S1437122AN	S1437123AG	S1437123AN	5
1 7/16-18 UNEF	S1437182AG	S1437182AN	S1437183AG	S1437183AN	5
1 1/2-6 UNC	S1500062AG	S1500062AN	S1500063AG	S1500063AN	5
1 1/2-12 UNF	S1500122AG	S1500122AN	S1500123AG	S1500123AN	5
1 1/2-18 UNEF	S1500182AG	S1500182AN	S1500183AG	S1500183AN	5

UNIFIED HILO THREAD SETTING PLUG GAGES



UNIFIED HILO THREAD SETTING PLUG GAGES					
SIZE	2A GO	2A NOTGO	3A GO	3A NOTGO	HANDLE
0-80 UNF	HL0060802AG	HL0060802AN	HL0060803AG	HL0060803AN	000
1-64 UNC	HL0073642AG	HL0073642AN	HL0073643AG	HL0073643AN	000
1-72 UNF	HL0073722AG	HL0073722AN	HL0073723AG	HL0073723AN	000
2-56 UNC	HL0086562AG	HL0086562AN	HL0086563AG	HL0086563AN	000
2-64 UNF	HL0086642AG	HL0086642AN	HL0086643AG	HL0086643AN	000
3-48 UNC	HL0099482AG	HL0099482AN	HL0099483AG	HL0099483AN	000
3-56 UNF	HL0099562AG	HL0099562AN	HL0099563AG	HL0099563AN	000
4-40 UNC	HL0112402AG	HL0112402AN	HL0112403AG	HL0112403AN	00
4-48 UNF	HL0112482AG	HL0112482AN	HL0012483AG	HL0012483AN	00
5-40 UNC	HL0125402AG	HL0125402AN	HL0125403AG	HL0125403AN	00
5-44 UNF	HL0125442AG	HL0125442AN	HL0125443AG	HL0125443AN	00
6-32 UNC	HL0138322AG	HL0138322AN	HL0138323AG	HL0138323AN	00
6-40 UNF	HL0138402AG	HL0138402AN	HL0138403AG	HL0138403AN	00
8-32 UNC	HL0164322AG	HL0164322AN	HL0164323AG	HL0164323AN	0
8-36 UNF	HL0164362AG	HL0164362AN	HL0164363AG	HL0164363AN	0
10-24 UNC	HL0190242AG	HL0190242AN	HL0190243AG	HL0190243AN	0
10-32 UNF	HL0190322AG	HL0190322AN	HL0190323AG	HL0190323AN	0
12-24 UNC	HL0216242AG	HL0216242AN	HL0216243AG	HL0216243AN	0
12-28 UNF	HL0216282AG	HL0216282AN	HL0216283AG	HL0216283AN	0
12-32 UNEF	HL0216322AG	HL0216322AN	HL0216323AG	HL0216323AN	0
1/4-20 UNC	HL0250202AG	HL0250202AN	HL0250203AG	HL0250203AN	1
1/4-28 UNF	HL0250282AG	HL0250282AN	HL0250283AG	HL0250283AN	1
1/4-32 UNEF	HL0250322AG	HL0250322AN	HL0250323AG	HL0250323AN	1
5/16-18 UNC	HL0312182AG	HL0312182AN	HL0312183AG	HL0312183AN	1
5/16-24 UNF	HL0312242AG	HL0312242AN	HL0312243AG	HL0312243AN	1
5/16-32 UNEF	HL0312322AG	HL0312322AN	HL0312323AG	HL0312323AN	1
3/8-16 UNC	HL0375162AG	HL0375162AN	HL0375163AG	HL0375163AN	2
3/8-24 UNF	HL0375242AG	HL0375242AN	HL0375243AG	HL0375243AN	2
3/8-32 UNEF	HL0375322AG	HL0375322AN	HL0375323AG	HL0375323AN	2
7/16-14 UNC	HL0437142AG	HL0437142AN	HL0437143AG	HL0437143AN	2
7/16-20 UNF	HL0437202AG	HL0437202AN	HL0437203AG	HL0437203AN	2
7/16-28 UNEF	HL0437282AG	HL0437282AN	HL0437283AG	HL0437283AN	2
1/2-13 UNC	HL0500132AG	HL0500132AN	HL0500133AG	HL0500133AN	2
1/2-20 UNF	HL0500202AG	HL0500202AN	HL0500203AG	HL0500203AN	2
1/2-28 UNEF	HL0500282AG	HL0500282AN	HL0500283AG	HL0500283AN	2
9/16-12 UNC	HL0562122AG	HL0562122AN	HL0562123AG	HL0562123AN	3
9/16-18 UNF	HL0562182AG	HL0562182AN	HL0562183AG	HL0562183AN	3
9/16-24 UNEF	HL0562242AG	HL0562242AN	HL0562243AG	HL0562243AN	3

UNIFIED HILO THREAD SETTING PLUG GAGES CONTINUED



UNIFIED HILO THREAD SETTING PLUG GAGES					
SIZE	2A GO	2A NOTGO	3A GO	3A NOTGO	HANDLE
5/8-11 UNC	HL0625112AG	HL0625112AN	HL0625113AG	HL0625113AN	3
5/8-18 UNF	HL0625182AG	HL0625182AN	HL0625183AG	HL0625183AN	3
5/8-24 UNEF	HL0625242AG	HL0625242AN	HL0625243AG	HL0625243AN	3
11/16-24 UNEF	HL0687242AG	HL0687242AN	HL0687243AG	HL0687243AN	3
3/4-10 UNC	HL0750102AG	HL0750102AN	HL0750103AG	HL0750103AN	3
3/4-16 UNF	HL0750162AG	HL0750162AN	HL0750163AG	HL0750163AN	3
3/4-20 UNEF	HL0750202AG	HL0750202AN	HL0750203AG	HL0750203AN	3
13/16-20 UNEF	HL0812202AG	HL0812202AN	HL0812203AG	HL0812203AN	3
7/8-9 UNC	HL0875092AG	HL0875092AN	HL0875093AG	HL0875093AN	4
7/8-14 UNF	HL0875142AG	HL0875142AN	HL0875143AG	HL0875143AN	4
7/8-20 UNEF	HL0875202AG	HL0875202AN	HL0875203AG	HL0875203AN	4
15/16-20 UNEF	HL0937202AG	HL0937202AN	HL0937203AG	HL0937203AN	4
1-8 UNC	HL1000082AG	HL1000082AN	HL1000083AG	HL1000083AN	4
1-12 UNF	HL1000122AG	HL1000122AN	HL1000123AG	HL1000123AN	4
1-14 UNS	HL1000142AG	HL1000142AN	HL1000143AG	HL1000143AN	4
1-20 UNEF	HL1000202AG	HL1000202AN	HL1000203AG	HL1000203AN	4
1 1/16-12 UNF	HL1062122AG	HL1062122AN	HL1062123AG	HL1062123AN	4
1 1/16-18 UNEF	HL1062182AG	HL1062182AN	HL1062183AG	HL1062183AN	4
1 1/8-7 UNC	HL1125072AG	HL1125072AN	HL1125073AG	HL1125073AN	4
1 1/8-12 UNF	HL1125122AG	HL1125122AN	HL1125123AG	HL1125123AN	4
1 1/8-18 UNEF	HL1125182AG	HL1125182AN	HL1125183AG	HL1125183AN	4
1 3/16-12 UNF	HL1187122AG	HL1187122AN	HL1187123AG	HL1187123AN	4
1 3/16-18 UNEF	HL1187182AG	HL1187182AN	HL1187183AG	HL1187183AN	4
1 1/4-7 UNC	HL1250072AG	HL1250072AN	HL1250073AG	HL1250073AN	5
1 1/4-12 UNF	HL1250122AG	HL1250122AN	HL1250123AG	HL1250123AN	5
1 1/4-18 UNEF	HL1250182AG	HL1250182AN	HL1250183AG	HL1250183AN	5
1 5/16-12 UNF	HL1312122AG	HL1312122AN	HL1312123AG	HL1312123AN	5
1 5/16-18 UNEF	HL1312182AG	HL1312182AN	HL1312183AG	HL1312183AN	5
1 3/8-6 UNC	HL1375062AG	HL1375062AN	HL1375063AG	HL1375063AN	5
1 3/8-12 UNF	HL1375122AG	HL1375122AN	HL1375123AG	HL1375123AN	5
1 3/8-18 UNEF	HL1375182AG	HL1375182AN	HL1375183AG	HL1375183AN	5
1 7/16-12 UNF	HL1437122AG	HL1437122AN	HL1437123AG	HL1437123AN	5
1 7/16-18 UNEF	HL1437182AG	HL1437182AN	HL1437183AG	HL1437183AN	5
1 1/2-6 UNC	HL1500062AG	HL1500062AN	HL1500063AG	HL1500063AN	5
1 1/2-12 UNF	HL1500122AG	HL1500122AN	HL1500123AG	HL1500123AN	5
1 1/2-18 UNEF	HL1500182AG	HL1500182AN	HL1500183AG	HL1500183AN	5

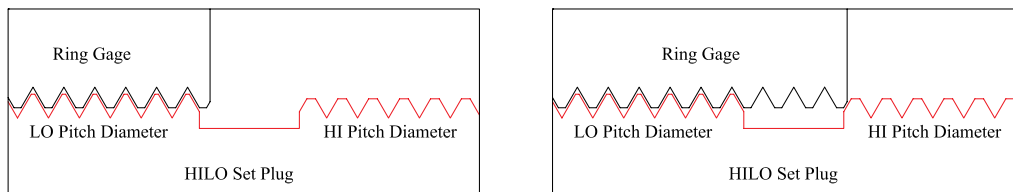
HILO™ Takes The Guesswork Out Of Setting Adjustable Ring Gages



Most times, you have to rely on an individual's sense of "good feel", "good fit", or amount of "shake", to set an adjustable ring gage with a truncated setting plug gage. And sometimes the accuracy of human judgement is highly debatable... especially if you're looking at hundreds of rejected parts.

A HILO setting plug gage provides optimum ring gage accuracy, without subjective human judgements for "fit", "feel", or "shake". It only relies on an inspector to turn it into the thread ring, and then helps the inspector make foolproof adjustments. Here's how:

First, the adjustable ring is set so it can be threaded onto the LO pitch diameter. The second, or HI pitch diameter portion indicates that the setting is too high if the ring gage can be threaded on to it more than 1½ turns. The setting is correct when the adjustable ring gage can be threaded only onto the LO pitch diameter portion, but not more than 1½ turns on the HI. It's that simple!



HILO Prolongs Ring Gage Life

How many gages has your company scrapped or sent to be reconditioned because the "feel", "fit", or "shake" wasn't right? HILO set plugs can tell you without a doubt when flanks are excessively worn, or too much "bell mouthing" has affected the accuracy of your gage. Plus, since HILO plugs are designed for the full use of the pitch diameter tolerance, you can often discover additional tolerances in thread rings that couldn't be found with conventional set plug gages.

More Than Just a Setting Plug

HILO is the only plug gage available with the HI and LO portions ground and lapped with identical lead and angles. That means you can use a HILO plug gage to perform positive and dependable wear checks on solid ring gages too.

HILO Thread Setting Gages For Standard and Special Threads

HILO master setting plug gages are designed to precisely size and check minimum and maximum tolerances of adjustable and solid type threaded ring gages. They're also ideal for checking flanks and angles for wear, and to determine excessive "bell mouthing". Each gage is engraved to indicate: size, threads per inch, thread type, and minimum pitch diameter limit for quick identification.

For Highly Accurate Adjustable Ring Gage Settings

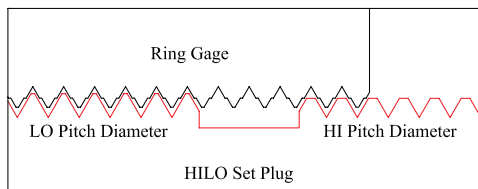
HILO set plugs take the guesswork out of setting high and low tolerances on adjustable thread ring gages. These unique setting plugs are designed with two different thread pitch diameters. The front portion is the low tolerance limit, and the back portion is the high tolerance limit. By adjusting the ring gage so it will thread onto the front portion without threading more than 1½ turns onto the back portion, a precise setting is achieved.

Worn Flank Checks

The back portion, or high limit end of each HILO gage has the outside diameter of the thread truncated in accordance with ANSI/ASME B1.2, latest edition. It automatically furnishes a check on worn flanks similar to, but more exacting than, standard truncated setting plug gages.

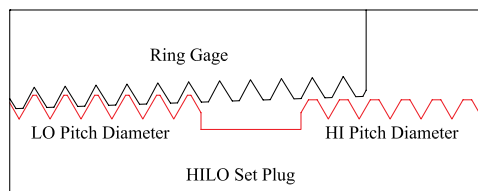
Angle Checks

In addition, HILO setting plugs can also provide a precise angle check on ring gages because of the high limit pitch diameter, and the low outside diameter on the back portion of the plug. Any worn flanks or angles will be indicated when the ring gage fits snugly on the low pitch diameter portion, and enters the high pitch diameter portion more than 1½ turns.



“Bell Mouthing” Inspection

The amount of excessive ring gage “bell mouthing” can be determined by the number of turns required for the high pitch diameter portion to enter the ring. If the high portion does not enter the ring, the ring is within tolerance.



Solid Ring Gage Checks

Since the HILO setting plug has the low and high limit portions ground and lapped with identical leads and angles, the low and high limits on solid gages can be easily and accurately checked. The HILO plug design provides a completely positive and dependable wear check, and allows for full utilization of the pitch diameter tolerance inside the ring in accordance with ANSI/ASME B1.2, latest edition.

Manufacturing Standards

Material.....	AGD Standard
LO Pitch Diameter Tolerance (Minimum Ring Pitch Diameter Tolerance).....	± 0.00005"
HI Pitch Diameter Tolerance (Maximum Ring Pitch Diameter Tolerance).....	+ 0.0001"
Lead & Angles	W Tolerance
Major Diameter Back Portion (HI)	Truncated per ANSI/ASME B1.2 Class X, Standard Truncation
Major Diameter Back Portion (LO)	Full Form Class X
Straightness & Taper.....	ANSI/ASME B1.2, Latest Edition



Ring Gage Set On LO
Limit Portion



Ring Gage At HI Limit
Portion



Ring Gage Is Out Of
Tolerance If The HI
Limit Portion Enters The
Ring More Than 1 1/2
Turns

CYLINDRICAL PLUG GAGES



GAGEMAKER'S TOLERANCES

SIZE RANGE		CLASS			
From	To & Incl.	XX	X	Y	Z
.029	.825	.00002	.00004	.00007	.00010
.826	1.510	.00003	.00006	.00009	.00012
1.511	2.510	.00004	.00008	.00012	.00016
2.511	4.510	.00005	.00010	.00015	.00020
4.511	6.510	.000065	.00013	.00019	.00025
6.511	9.010	.00008	.00016	.00024	.00032
9.011	12.010	.00010	.00020	.00030	.00040

CYLINDRICAL PLUG GAGES

REVERSIBLE PLAIN PLUG GAGES

SIZE RANGE		CLASS XX	CLASS X	CLASS Y	CLASS Z	HANDLE
From	To & Incl.					
.004	.006	PPR004-006XX	PPR004-006X	PPR004-006Y	PPR004-006Z	1W
.007	.010	PPR007-010XX	PPR007-010X	PPR007-010Y	PPR007-010Z	1W
.011	.030	PPR011-030XX	PPR011-030X	PPR011-030Y	PPR011-030Z	1W
.031	.075	PPR031-075XX	PPR031-075X	PPR031-075Y	PPR031-075Z	1W
.076	.180	PPR076-180XX	PPR076-180X	PPR076-180Y	PPR076-180Z	2W
.181	.281	PPR181-281XX	PPR181-281X	PPR181-281Y	PPR181-281Z	3W
.282	.406	PPR282-406XX	PPR282-406X	PPR282-406Y	PPR282-406Z	4W
.407	.510	PPR407-510XX	PPR407-510X	PPR407-510Y	PPR407-510Z	5W
.511	.635	PPR511-635XX	PPR511-635X	PPR511-635Y	PPR511-635Z	6W
.636	.760	PPR636-760XX	PPR636-760X	PPR636-760Y	PPR636-760Z	7W
.761	1.010	PPR761-1010XX	PPR761-1010X	PPR761-1010Y	PPR761-1010Z	8W

MIDGET TRILOCK PLAIN PLUG GAGES

.761	.825	PPM761-825XX	PPM761-825X	PPM761-825Y	PPM761-825Z	2-1/2
.826	.947	PPM826-947XX	PPM826-947X	PPM826-947Y	PPM826-947Z	2-1/2
.948	1.135	PPM948-1135XX	PPM948-1135X	PPM948-1135Y	PPM948-1135Z	3-1/2
1.136	1.510	PPM1136-1510XX	PPM1136-1510X	PPM1136-1510Y	PPM1136-1510Z	4-1/2

TAPERLOCK & TRILOCK PLAIN PLUG GAGES

.060	.105	PPT060-105XX	PPT060-105X	PPT060-105Y	PPT060-105Z	000
.106	.150	PPT106-150XX	PPT106-150X	PPT106-150Y	PPT106-150Z	00
.151	.230	PPT151-230XX	PPT151-230X	PPT151-230Y	PPT151-230Z	0
.231	.365	PPT231-365XX	PPT231-365X	PPT231-365Y	PPT231-365Z	1
.366	.510	PPT366-510XX	PPT366-510X	PPT366-510Y	PPT366-510Z	2
.511	.825	PPT511-825XX	PPT511-825X	PPT511-825Y	PPT511-825Z	3
.826	1.135	PPT826-1135XX	PPT826-1135X	PPT826-1135Y	PPT826-1135Z	4
1.136	1.510	PPT1136-1510XX	PPT1136-1510X	PPT1136-1510Y	PPT1136-1510Z	5
1.511	2.010	PPT1511-2010XX	PPT1511-2010X	PPT1511-2010Y	PPT1511-2010Z	5-1/2
2.011	2.510	PPT2011-2510XX	PPT2011-2510X	PPT2011-2510Y	PPT2011-2510Z	6
2.511	3.010	PPT2511-3010XX	PPT2511-3010X	PPT2511-3010Y	PPT2511-3010Z	7
3.011	3.510	PPT3011-3510XX	PPT3011-3510X	PPT3011-3510Y	PPT3011-3510Z	7

Above 3.510 Quoted Upon Request

MASTER SETTING DISCS

GAGEMAKER'S TOLERANCES					
SIZE RANGE		CLASS			
From	To & Incl.	XX	X	Y	Z
.029	.825	.00002	.00004	.00007	.00010
.826	1.510	.00003	.00006	.00009	.00012
1.511	2.510	.00004	.00008	.00012	.00016
2.511	4.510	.00005	.00010	.00015	.00020
4.511	6.510	.000065	.00013	.00019	.00025
6.511	9.010	.00008	.00016	.00024	.00032
9.011	12.010	.00010	.00020	.00030	.00040



STYLE 1



STYLE 2



STYLE 3

MASTER SETTING DISCS						
SIZE RANGE		STYLE NO.	CLASS XX	CLASS X	CLASS Y	CLASS Z
From	To & Incl.					
.150	.240	1	1MD150-240XX	1MD150-240X	1MD150-240Y	NOT AVAILABLE
		2	2MD150-240XX	2MD150-240X	2MD150-240Y	
		3	3MD150-240XX	3MD150-240X	3MD150-240Y	
.241	.365	1	1MD241-365XX	1MD241-365X	1MD241-365Y	
		2	2MD241-365XX	2MD241-365X	2MD241-365Y	
		3	3MD241-365XX	3MD241-365X	3MD241-365Y	
.366	.510	1	1MD366-510XX	1MD366-510X	1MD366-510Y	
		2	2MD366-510XX	2MD366-510X	2MD366-510Y	
		3	3MD366-510XX	3MD366-510X	3MD366-510Y	
.511	.825	1	1MD511-825XX	1MD511-825X	1MD511-825Y	
		2	2MD511-825XX	2MD511-825X	2MD511-825Y	
		3	3MD511-825XX	3MD511-825X	3MD511-825Y	
.826	1.135	1	1MD826-1135XX	1MD826-1135X	1MD826-1135Y	
		2	2MD826-1135XX	2MD826-1135X	2MD826-1135Y	
		3	3MD826-1135XX	3MD826-1135X	3MD826-1135Y	
1.136	1.510	1	1MD1136-1510XX	1MD1136-1510X	1MD1136-1510Y	
		2	2MD1136-1510XX	2MD1136-1510X	2MD1136-1510Y	
		3	3MD1136-1510XX	3MD1136-1510X	3MD1136-1510Y	
1.511	2.010	1	1MD1511-2010XX	1MD1511-2010X	1MD1511-2010Y	
		2	2MD1511-2010XX	2MD1511-2010X	2MD1511-2010Y	
		3	3MD1511-2010XX	3MD1511-2010X	3MD1511-2010Y	
2.011	2.510	1	1MD2011-2510XX	1MD2011-2510X	1MD2011-2510Y	
		2	2MD2011-2510XX	2MD2011-2510X	2MD2011-2510Y	
		3	3MD2011-2510XX	3MD2011-2510X	3MD2011-2510Y	
2.511	3.010	1	1MD2511-3010XX	1MD2511-3010X	1MD2511-3010Y	
		2	2MD2511-3010XX	2MD2511-3010X	2MD2511-3010Y	
		3	3MD2511-3010XX	3MD2511-3010X	3MD2511-3010Y	
3.011	3.510	1	1MD3011-3510XX	1MD3011-3510X	1MD3011-3510Y	
		2	2MD3011-3510XX	2MD3011-3510X	2MD3011-3510Y	
		3	3MD3011-3510XX	3MD3011-3510X	3MD3011-3510Y	
3.511	4.010	1	1MD3511-4010XX	1MD3511-4010X	1MD3511-4010Y	
		2	2MD3511-4010XX	2MD3511-4010X	2MD3511-4010Y	
		3	3MD3511-4010XX	3MD3511-4010X	3MD3511-4010Y	
Above 4.010 Quoted Upon Request						

CYLINDRICAL RING GAGES

GAGEMAKER'S TOLERANCES

SIZE RANGE		CLASS			
From	To & Incl.	XX	X	Y	Z
.029	.825	.00002	.00004	.00007	.00010
.826	1.510	.00003	.00006	.00009	.00012
1.511	2.510	.00004	.00008	.00012	.00016
2.511	4.510	.00005	.00010	.00015	.00020
4.511	6.510	.000065	.00013	.00019	.00025
6.511	9.010	.00008	.00016	.00024	.00032
9.011	12.010	.00010	.00020	.00030	.00040



STEEL CYLINDRICAL RING GAGES

SIZE RANGE		CLASS XX	CLASS X	CLASS Y	CLASS Z
From	To & Incl.				
.015	.020	PR015-020XX	PR015-020X	PR015-020Y	PR015-020Z
.021	.025	PR021-025XX	PR021-025X	PR021-025Y	PR021-025Z
.026	.040	PR026-040XX	PR026-040X	PR026-040Y	PR026-040Z
.041	.070	PR041-070XX	PR041-070X	PR041-070Y	PR041-070Z
.071	.150	PR071-150XX	PR071-150X	PR071-150Y	PR071-150Z
.151	.230	PR151-230XX	PR151-230X	PR151-230Y	PR151-230Z
.231	.365	PR231-365XX	PR231-365X	PR231-365Y	PR231-365Z
.366	.510	PR366-510XX	PR366-510X	PR366-510Y	PR366-510Z
.511	.825	PR511-825XX	PR511-825X	PR511-825Y	PR511-825Z
.826	1.135	PR826-1135XX	PR826-1135X	PR826-1135Y	PR826-1135Z
1.136	1.510	PR1136-1510XX	PR1136-1510X	PR1136-1510Y	PR1136-1510Z
1.511	2.010	PR1511-2010XX	PR1511-2010X	PR1511-2010Y	PR1511-2010Z
2.011	2.510	PR2011-2510XX	PR2011-2510X	PR2011-2510Y	PR2011-2510Z
2.511	3.010	PR2511-3010XX	PR2511-3010X	PR2511-3010Y	PR2511-3010Z
3.011	3.510	PR3011-3510XX	PR3011-3510X	PR3011-3510Y	PR3011-3510Z
3.511	4.010	PR3511-4010XX	PR3511-4010X	PR3511-4010Y	PR3511-4010Z
4.011	4.760	PR4011-4760XX	PR4011-4760X	PR4011-4760Y	PR4011-4760Z

Above 4.760 Quoted Upon Request

Class XXX Quoted Upon Request

Chrome Quoted Upon Request

CARBIDE CYLINDRICAL RING GAGES

SIZE RANGE		CLASS XX	CLASS X	CLASS Y	CLASS Z
From	To & Incl.				
.015	.020	PRC015-020XX	PRC015-020X	PRC015-020Y	PRC015-020Z
.021	.025	PRC021-025XX	PRC021-025X	PRC021-025Y	PRC021-025Z
.026	.040	PRC026-040XX	PRC026-040X	PRC026-040Y	PRC026-040Z
.041	.070	PRC041-070XX	PRC041-070X	PRC041-070Y	PRC041-070Z
.071	.150	PRC071-150XX	PRC071-150X	PRC071-150Y	PRC071-150Z
.151	.230	PRC151-230XX	PRC151-230X	PRC151-230Y	PRC151-230Z
.231	.365	PRC231-365XX	PRC231-365X	PRC231-365Y	PRC231-365Z
.366	.510	PRC366-510XX	PRC366-510X	PRC366-510Y	PRC366-510Z
.511	.825	PRC511-825XX	PRC511-825X	PRC511-825Y	PRC511-825Z
.826	1.135	PRC826-1135XX	PRC826-1135X	PRC826-1135Y	PRC826-1135Z
1.136	1.510	PRC1136-1510XX	PRC1136-1510X	PRC1136-1510Y	PRC1136-1510Z

Class XXX Quoted Upon Request

Master (Split) Tolerance
Go (Minus) Tolerance
Not Go (Plus) Tolerance

HELICAL COIL GAGES (STI)



HELICAL COIL GAGES (STI)						
CLASS X TAPERLOCK DESIGN						
SIZE	THREAD LENGTH		GO	NOT GO		HANDLE
	GO	NOT GO	2B & 3B	2B	3B	
2-56 UNC	5/16	7/32	H008656G	H0086562BN	G0086563BN	00
4-40 UNC	5/16	7/32	H011240G	H0112402BN	H0112403BN	00
4-48 UNF	5/16	7/32	H011248G	H0112482BN	H0112483BN	00
5-40 UNC	5/16	7/32	H012540G	H0125402BN	H0125403BN	00
6-32 UNC	13/32	7/32	H013832G	H0132322BN	H0138323BN	0
6-40 UNF	13/32	7/32	H013840G	H0138402BN	H0138403BN	0
8-32 UNC	13/32	7/32	H016432G	H0164322BN	G0164323BN	0
8-36 UNF	13/32	7/32	H016436G	H0164362BN	H0164363BN	0
10-24 UNC	13/32	7/32	H019024G	H0190242BN	H0190243BN	0
10-32 UNF	13/32	7/32	H019032G	H0190322BN	H0190323BN	0
12-24 UNC	1/2	5/16	H021624G	H0216242BN	H0216243BN	1
1/4-20 UNC	1/2	5/16	H025020G	H0250202BN	H0250203BN	1
1/4-28 UNF	1/2	5/16	H025028G	H0250282BN	H0250283BN	1
5/16-18 UNC	3/4	3/8	H031218G	H0312182BN	H0312183BN	2
5/16-24UNF	3/4	3/8	H031224G	H0312242BN	H0312243BN	2
3/8-16 UNC	3/4	3/8	H037516G	H0375162BN	H0375163BN	2
3/8-24 UNF	3/4	3/8	H037524G	H0375242BN	H0375243BN	2
7/16-14 UNC	3/4	3/8	H043714G	H0437142BN	H0375143BN	2
7/16-20 UNF	3/4	3/8	H043720G	H0437202BN	H0437203BN	2
1/2-13 UNC	7/8	1/2	H050013G	H0500132BN	H0500133BN	3
1/2-20 UNF	7/8	1/2	H050020G	H0500202BN	H0500203BN	3
9/16-12 UNC	7/8	1/2	H056212G	H0562122BN	H0562123BN	3
9/16-18 UNF	7/8	1/2	H056212G	H0562122BN	H0562123BN	3
5/8-11 UNC	7/8	1/2	H062511G	H0625112BN	H0625113BN	3
5/8-18 UNF	7/8	1/2	H062518G	H0625182BN	H0625183BN	3
3/4-10 UNC	1.0	5/8	H075010G	H0750102BN	H0750103BN	4
3/4-16 UNF	1.0	5/8	H075016G	H0750162BN	H0750163BN	4

STRAIGHT PIPE THREAD GAGES



NPSF					
SIZE	NPSF		PLUG		HANDLE
	PITCH DIA.		GO	NOT GO	
	MIN.	MAX.			
1/8-27	.3692	.3727	W012527NFG	W012527NFN	2
1/4-18	.4852	.4904	W025018NFG	W025018NFN	2
3/8-18	.6205	.6257	W037518NFG	W037518NFN	3
1/2-14	.7700	.7767	W050014NFG	W050014NFN	3
3/4-14	.9805	.9872	W075014NFG	W075014NFN	4
1-11 1/2	1.2284	1.2365	W100099NFG	W100099NFN	5

NPSM					
SIZE	NPSM-2B		NPSM-2B		HANDLE
	PITCH DIA.		PLUG		
	MIN.	MAX.	GO	NOT GO	
1/8-27	.3736	.3783	W012527G	W0125272BN	2
1/4-18	.4916	.4974	W025018G	W0250182BN	2
3/8-18	.6270	.6329	W037518G	W0375182BN	3
1/2-14	.7784	.7851	W050014G	W0500142BN	3
3/4-14	.9889	.9958	W075014G	W0750142BN	4
1-11 1/2	1.2386	1.2462	W100099G	W1000992BN	5
1 1/4-11 1/2	1.5834	1.5912	W125099G	W1250992BN	5-1/2
1 1/2-11 1/2	1.8223	1.8302	W150099G	W1500992BN	5-1/2
2-11 1/2	2.2963	2.3044	W200099G	W2000992BN	6
2 1/2-8	2.7622	2.7720	W250008G	W2500082BN	7
3-8	3.3885	3.3984	W300008G	W3000082BN	7

NPSM							
SIZE	NPSM-2A		NPSM-2A		NPSM-2A		HANDLE
	PITCH DIA.		RING		SET PLUG		
	MIN.	MAX.	GO	NOT GO	GO	NOT GO	
1/8-27	.3725	.3689	R0125272AG	R0125272AN	S0125272AG	S0125272AN	2
1/4-18	.4903	.4859	R0250182AG	R0250182AN	S0250182AG	S0250182AN	2
3/8-18	.6256	.6211	R0375182AG	R0375182AN	S0375182AG	S0375182AN	3
1/2-14	.7769	.7718	R0500142AG	R0500142AN	S0500142AG	S0500142AN	3
3/4-14	.9873	.9820	R0750142AG	R0750142AN	S0750142AG	S0750142AN	4
1-11 1/2	1.2369	1.2311	R1000992AG	R1000992AN	S1000992AG	S1000992AN	5
1 1/4-11 1/2	1.5816	1.5756	R1250992AG	R1250992AN	S1250992AG	S1250992AN	5-1/2
1 1/2-11 1/2	1.8205	1.8144	R1500992AG	R1500992AN	S1500992AG	S1500992AN	5-1/2
2-11 1/2	2.2944	2.2882	R2000992AG	R2000992AN	S2000992AG	S2000992AN	6
2 1/2-8	2.7600	2.7526	R2500082AG	R2500082AN	S2500082AG	S2500082AN	7
3-8	3.3862	3.3786	R3000082AG	R3000082AN	S3000082AG	S3000082AN	7

TAPER PIPE GAGES



NPT								
SIZE	PLUG GAGE					RING GAGE		
	L-1		L-3			L-1		L-2
1/16-27	P006227N		Quoted Upon Request			T006227N		Quoted Upon Request
1/8-27	P012527N					T012527N		
1/4-18	P025018N					T025018N		
3/8-18	P037518N					T037518N		
1/2-14	P050014N					T050014N		
3/4-14	P075014N					T075014N		
1-11 1/2	P100099N					T100099N		
1 1/4-11 1/2	P125099N					T125099N		
1 1/2-11 1/2	P150099N					T150099N		
2-11 1/2	P200099N					T200099N		
2 1/2-8	P250008N					T250008N		
3-8	P300008N					T300008N		
3 1/2-8	P350008N					T350008N		
4-8	P400008N					T400008N		
5-8	P500008N					T500008N		
6-8	P600008N					T600008N		
8-8	P800008N		T800008N					
NPT Gages Above 8" Quoted Upon Request								
NPTF								
SIZE	PLUG GAGE					RING GAGE		
	BASIC L-1	BASIC L-3	3-STEP L-1	3-STEP L-3	6-STEP PLAIN	L-1	L-2	6-STEP PLAIN
1/16-27	P006227NL1	P006227NL3	P006227NL1-3	P006227NL3-3	P006227N6	T006227NL1	T006227NL2	T006227N6
1/8-27	P012527NL1	P012527NL3	P012527NL1-3	P012527NL3-3	P012527N6	T012527NL1	T012527NL2	T012527N6
1/4-18	P025018NL1	P025018NL3	P025018NL1-3	P025018NL3-3	P025018N6	T025018NL1	T025018NL2	T025018N6
3/8-18	P037518NL1	P037518NL3	P037518NL1-3	P037518NL3-3	P037518N6	T037518NL1	T037518NL2	T037518N6
1/2-14	P050014NL1	P050014NL3	P050014NL1-3	P050014NL3-3	P050014N6	T050014NL1	T050014NL2	T050014N6
3/4-14	P075014NL1	P075014NL3	P075014NL1-3	P075014NL3-3	P075014N6	T075014NL1	T075014NL2	T075014N6
1-11 1/2	P100099NL1	P100099NL3	P100099NL1-3	P100099NL3-3	P100099N6	T100099NL1	T100099NL2	T100099N6
1 1/4-11 1/2	P125099NL1	P125099NL3	P125099NL1-3	P125099NL3-3	P125099N6	T125099NL1	T125099NL2	T125099N6
1 1/2-11 1/2	P150099NL1	P150099NL3	P150099NL1-3	P150099NL3-3	P150099N6	T150099NL1	T150099NL2	T150099N6
2-11 1/2	P200099NL1	P200099NL3	P200099NL1-3	P200099NL3-3	P200099N6	T200099NL1	T200099NL2	T200099N6
2 1/2-8	P250008NL1	P250008NL3	P250008NL1-3	P250008NL3-3	P250008N6	T250008NL1	T250008NL2	T250008N6
3-8	P300008NL1	P300008NL3	P300008NL1-3	P300008NL3-3	P300008N6	T300008NL1	T300008NL2	T300008N6
NPTF Gages Above 3" Quoted Upon Request								

TAPER PIPE GAGES CONTINUED



ANPT

SIZE	PLUG GAGE			RING GAGE		
	3-STEP L-1	3-STEP L-3	6-STEP PLAIN	L-1	L-2	6-STEP PLAIN
1/16-27	P006227AL1	P006227AL3	P006227A6	T006227AL1	T006227AL2	T006227A6
1/8-27	P012527AL1	P012527AL3	P012527A6	T012527AL1	T012527AL2	T012527A6
1/4-18	P025018AL1	P025018AL3	P025018A6	T025018AL1	T025018AL2	T025018A6
3/8-18	P037518AL1	P037518AL3	P037518A6	T037518AL1	T037518AL2	T037518A6
1/2-14	P050014AL1	P050014AL3	P050014A6	T050014AL1	T050014AL2	T050014A6
3/4-14	P075014AL1	P075014AL3	P075014A6	T075014AL1	T075014AL2	T075014A6
1-11 1/2	P100099AL1	P100099AL3	P100099A6	T100099AL1	T100099AL2	T100099A6
1 1/4-11 1/2	P125099AL1	P125099AL3	P125099A6	T125099AL1	T125099AL2	T125099A6
1 1/2-11 1/2	P150099AL1	P150099AL3	P150099A6	T150099AL1	T150099AL2	T150099A6
2-11 1/2	P200099AL1	P200099AL3	P200099A6	T200099AL1	T200099AL2	T200099A6
2 1/2-8	P250008AL1	P250008AL3	P250008A6	T250008AL1	T250008AL2	T250008A6
3-8	P300008AL1	P300008AL3	P300008A6	T300008AL1	T300008AL2	T300008A6

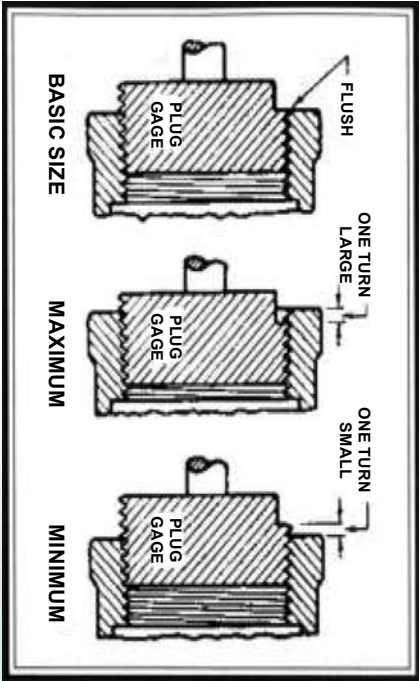
ANPT Gages Above 3" Quoted Upon Request

BASIC DIMENSIONS OF TAPER PIPE THREADS

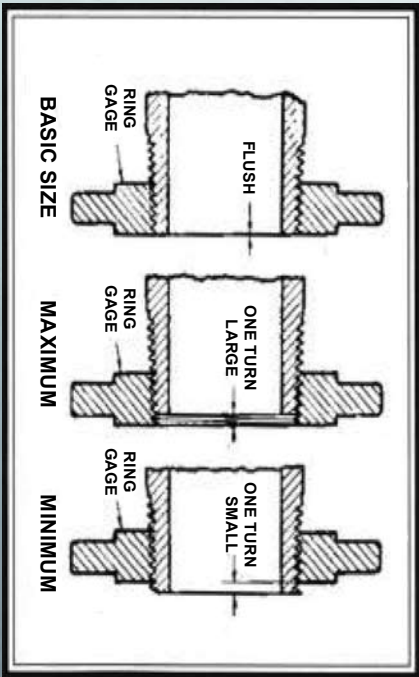
National Pipe Threads (NPT)

Nominal Pipe Size	O.D. of Pipe	Threads Per Inch	Pitch	Major Diameters of Plug Gages			Pitch Diameters of Plug & Ring Gages			Minor Diameters of Ring Gages		Increase In Diam./ Thread	Thickness of Ring
				At Small End	At Gaging Notch	At Large End	At Small End	At Gaging Notch	At Large End, Plug Gage	At Small End	At Gaging Notch		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1/16	0.3125	27	0.03704	0.29289	0.30289	0.30921	0.27118	0.28118	0.28750	0.24947	0.25947	0.00231	0.160
1/8	0.405	27	0.03704	0.38522	0.39531	0.40171	0.36351	0.37360	0.38000	0.34180	0.35189	0.00231	0.1615
1/4	0.540	18	0.05556	0.51339	0.52763	0.53850	0.47739	0.49163	0.50250	0.44139	0.45563	0.00347	0.2278
3/8	0.675	18	0.05556	0.64801	0.66301	0.67350	0.61201	0.62701	0.63750	0.57601	0.59101	0.00347	0.240
1/2	0.840	14	0.07143	0.80600	0.82600	0.83936	0.75843	0.77843	0.79179	0.71086	0.73086	0.00446	0.320
3/4	1.050	14	0.07143	1.01525	1.03644	1.04936	0.96768	0.98887	1.00179	0.92011	0.94129	0.00446	0.339
1	1.315	11.5	0.08696	1.27154	1.29654	1.31422	1.21363	1.23863	1.25630	1.15572	1.18072	0.00543	0.400
1-1/4	1.660	11.5	0.08696	1.61504	1.64129	1.65922	1.55713	1.58338	1.60130	1.49922	1.52547	0.00543	0.420
1-1/2	1.900	11.5	0.08696	1.85400	1.88025	1.89922	1.79609	1.82234	1.84130	1.73817	1.76442	0.00543	0.420
2	2.375	11.5	0.08696	2.32693	2.35418	2.37422	2.26902	2.29627	2.31630	2.21111	2.23836	0.00543	0.436
2-1/2	2.875	8	0.12500	2.80278	2.84541	2.87388	2.71953	2.76216	2.79062	2.63628	2.67891	0.00781	0.682
3	3.500	8	0.12500	3.42388	3.47175	3.49888	3.34062	3.38850	3.41562	3.25737	3.30525	0.00781	0.766
3-1/2	4.000	8	0.12500	3.92075	3.97207	3.99888	3.83750	3.88881	3.91562	3.75425	3.80556	0.00781	0.821
4	4.500	8	0.12500	4.41762	4.47038	4.49888	4.33438	4.38712	4.41562	4.25112	4.30387	0.00781	0.844

INTERNAL THREADS



EXTERNAL THREADS



NPT DIMENSIONS

GAGING PRACTICES

TAPER PIPE THREAD GAGES

N.P.T. (National Taper Pipe)

To gage **Internal N.P.T.** taper pipe threads, screw the N.P.T. thread plug firmly into the product – do not force. The thread is within the permissible tolerance when the gaging notch of the plug is not more than one turn plus or minus from being flush with the end of the product. N.P.T. plugs are regularly furnished with the basic step only. Minimum and maximum steps can be added on request. To gage **External N.P.T.** taper pipe threads, screw the N.P.T. thread ring on to the product as far as it will go without using force. If the face of the small end of the ring is flush with the face of the product the thread is basic. The permissible tolerance is one turn plus or minus from basic.

A.N.P.T. (Aeronautical National Pipe Taper)

A.N.P.T. internal taper pipe threads are basically the same as the N.P.T. pipe threads except that for Army and Navy Aeronautical use they must be more carefully controlled for diameter, taper and thread form.

To gage **Internal A.N.P.T.** taper pipe threads, check first with the A.N.P.T. L-1 thread plug gage. This plug differs in dimensions from the N.P.T. plug and has minimum and maximum steps in addition to the basic step. If the face of the product is between the minimum and maximum steps of the plug, the product is in tolerance. The A.N.P.T. L-3 plug gage is used to check the three threads beyond the L-1 depth. As a check on taper the “reading” on the L-3 thread plug must be within one-half turn of the “reading” on the L-1 thread plug gage. The truncation is checked with a six-step plain taper plug gage. This plug has minimum and maximum truncation steps for each of the three pitch diameter conditions – Minimum, Maximum and Basic. If the L-1 plug shows the product to be basic pitch diameter, the face of the product should lie between the basic minimum and the basic maximum steps of the truncation plug. If the pitch diameter is minimum, the part should fall between the MN and MNT step. If the pitch diameter is maximum, the part should fall between the MX and MXT steps. No appreciable shake or wobble is permitted. Shaky fit indicates taper error.

To gage **External A.N.P.T.** taper pipe threads, first check with the A.N.P.T. L-1 ring. The small end of the ring must be within one turn plus or minus of being flush with the end of the product thread. Note exactly what this “standoff” is and compare it with the “standoff” obtained with the A.N.P.T. L-2 thread ring. As a check on taper the total tolerance on standoff variation between the L-1 and L-2 rings must not exceed one-half turn. The truncation is checked with a six-step plain taper ring gage. This ring has minimum and maximum truncation steps for each of the three pitch diameter conditions – Minimum, Basic, and Maximum. If the L-1 ring shows the part to be basic pitch diameter, the end of the part should fall between the B and BT steps on the six-step plain ring. If the pitch diameter is minimum, the part should fall between the MN and MNT step. If the pitch diameter is maximum, the part should fall between the MX and MXT steps. No appreciable shake or wobble should be permitted. Lead, angles and root truncation should be checked whenever possible, by projection as a check on tool wear.

See Military Standard AS71051 latest edition for complete specifications

N.P.T.F. (National Pipe Taper Dryseal Pressure-Tight Joints)

N.P.T.F. Internal taper pipe threads may be gaged in the same manner as the A.N.P.T. threads. Gages are dimensionally different, however, and must not be interchanged. The turns method may be substituted for the “standoff” method to compensate for gage and product chamfers. With the turns method, the number of turns are counted from hand tight engagement to complete release, and the gaging steps are completely disregarded. A tolerance of plus or minus one turn is permitted from the basic number of turns specified. As a check on taper, the difference in turns between the L-1 and L-3 plugs shall be within one-half turn of the difference between the basic turns engagement of the plug gages. Truncation must be within the proper limits on a six-step dryseal plain taper plug gage.

N.P.T.F. External taper pipe threads are checked in the same manner as A.N.P.T. threads. Gages are dimensionally different, however, and must not be interchanged. The turns method may be substituted for the “standoff” method to compensate for gage and product chamfers. A tolerance of plus or minus one turn is permitted from the basic number of turns specified. As a check on taper, the difference in turns engagement with the L-1 and L-2 dryseal rings shall be within one-half turn of the difference between the basic turns engagement of the ring gages.

A.N.P.T. & N.P.T.F. Pipe Thread Gages

For Gaging Internal Threads – A.N.P.T. or N.P.T.F.



**L-1 THREAD PLUG
(3 STEPS)**



**L-3 THREAD PLUG
(3 STEPS)**



**PLAIN PLUG
(6 STEPS)**

In gaging internal threads, either A.N.P.T. or N.P.T.F., there are three gaging members involved: (1) L-1 thread plug gage which checks the thread elements within hand tight engagement; (2) L-3 thread plug which checks the threads that will be engaged when wrench tight; and (3) 6-Step plain plug which is used to check the minor diameter of the female fitting.

For Gaging External Threads – A.N.P.T. or N.P.T.F.



L-1 RING (THIN)



L-2 RING (THICK)



PLAIN RING (6 STEP)

In gaging external threads, either A.N.P.T. or N.P.T.F., there are three more gages employed: (1) L-1 (thin) ring which checks the thread elements over the distance of hand tight engagement; (2) L-2 (thick) ring which checks the thread elements of those threads engaged when wrench tight; and (3) 6-Step plain ring which checks the major diameter of the male fitting.

A.N.P.T. and N.P.T.F. are not meant to be interchangeable

UNIFIED THREAD PLUG P.D. CHART



UNIFIED THREAD GAGES			
THREAD PLUGS			
NOMINAL SIZE	GO BASIC	NOTGO 2B	NOTGO 3B
0-80 UNF	.0519	.0542	.0536
1-64 UNC	.0629	.0655	.0648
1-72 UNF	.0640	.0665	.0659
2-56 UNC	.0744	.0772	.0765
2-64 UNF	.0759	.0786	.0779
3-48 UNC	.0855	.0885	.0877
3-56 UNF	.0874	.0902	.0895
4-40 UNC	.0958	.0991	.0982
4-48 UNF	.0985	.1016	.1008
5-40 UNC	.1088	.1121	.1113
5-44 UNF	.1102	.1134	.1126
6-32 UNC	.1177	.1214	.1204
6-40 UNF	.1218	.1252	.1243
8-32 UNC	.1437	.1475	.1465
8-36 UNF	.1460	.1496	.1487
10-24 UNC	.1629	.1672	.1661
10-32 UNF	.1697	.1736	.1726
12-24 UNC	.1889	.1933	.1922
12-28 UNF	.1928	.1970	.1959
12-32 UNEF	.1957	.1998	.1988
1/4-20 UNC	.2175	.2224	.2211
1/4-28 UNF	.2268	.2311	.2300
1/4-32 UNEF	.2297	.2339	.2328
5/16-18 UNC	.2764	.2817	.2803
5/16-24 UNF	.2854	.2902	.2890
5/16-32 UNEF	.2922	.2964	.2953
3/8-16 UNC	.3344	.3401	.3387
3/8-24 UNF	.3479	.3528	.3516
3/8-32 UNEF	.3547	.3591	.3580
7/16-14 UNC	.3911	.3972	.3957
7/16-20 UNF	.4050	.4104	.4091
7/16-28 UNEF	.4143	.4189	.4178
1/2-13 UNC	.4500	.4565	.4548
1/2-20 UNF	.4675	.4731	.4717
1/2-28 UNEF	.4768	.4816	.4804
9/16-12 UNC	.5084	.5152	.5135
9/16-18 UNF	.5264	.5323	.5308

UNIFIED THREAD GAGES			
THREAD PLUGS			
NOMINAL SIZE	GO BASIC	NOTGO 2B	NOTGO 3B
9/16-24 UNEF	.5354	.5405	.5392
5/8-11 UNC	.5660	.5732	.5714
5/8-18 UNF	.5889	.5949	.5934
5/8-24 UNEF	.5979	.6031	.6018
11/16-24 UNEF	.6604	.6656	.6643
3/4-10 UNC	.6850	.6927	.6907
3/4-16 UNF	.7094	.7159	.7143
3/4-20 UNEF	.7175	.7232	.7218
13/16-20 UNEF	.7800	.7857	.7843
7/8-9 UNC	.8028	.8110	.8089
7/8-14 UNF	.8286	.8356	.8339
7/8-20 UNEF	.8425	.8482	.8468
15/16-20 UNEF	.9050	.9109	.9094
1-8 UNC	.9188	.9276	.9254
1-12 UNF	.9459	.9535	.9516
1-14 UNS	.9536	.9609	.9590
1-20 UNEF	.9675	.9734	.9719
1 1/16-12 UNF	1.0084	1.0158	1.0139
1 1/16-18 UNEF	1.0264	1.0326	1.0310
1 1/8-7 UNC	1.0322	1.0416	1.0393
1 1/8-12 UNF	1.0709	1.0787	1.0768
1 1/8-18 UNEF	1.0889	1.0951	1.0935
1 3/16-12 UNF	1.1334	1.1409	1.1390
1 3/16-18 UNEF	1.1514	1.1577	1.1561
1 1/4-7 UNC	1.1572	1.1668	1.1644
1 1/4-12 UNF	1.1959	1.2039	1.2019
1 1/4-18 UNEF	1.2139	1.2202	1.2186
1 5/16-12 UNF	1.2584	1.2659	1.2640
1 5/16-18 UNEF	1.2764	1.2827	1.2811
1 3/8-6 UNC	1.2667	1.2771	1.2745
1 3/8-12 UNF	1.3209	1.3291	1.3270
1 3/8-18 UNEF	1.3389	1.3452	1.3436
1 7/16-12 UNF	1.3834	1.3910	1.3891
1 7/16-18 UNEF	1.4014	1.4079	1.4062
1 1/2-6 UNC	1.3917	1.4022	1.3996
1 1/2-12 UNF	1.4459	1.4542	1.4522
1 1/2-18 UNEF	1.4639	1.4704	1.4687

UNIFIED THREAD RING & SETTING PLUG P.D. CHART



UNIFIED THREAD GAGES				
THREAD RING & SETTING PLUGS				
NOMINAL SIZE	GO 3A	NOTGO 3A	GO 2A	NOTGO 2A
0-80 UNF	.0519	.0506	.0514	.0496
1-64 UNC	.0629	.0614	.0623	.0603
1-72 UNF	.0640	.0626	.0634	.0615
2-56 UNC	.0744	.0728	.0738	.0717
2-64 UNF	.0759	.0744	.0753	.0733
3-48 UNC	.0855	.0838	.0848	.0825
3-56 UNF	.0874	.0858	.0867	.0845
4-40 UNC	.0958	.0939	.0950	.0925
4-48 UNF	.0985	.0967	.0978	.0954
5-40 UNC	.1088	.1069	.1080	.1054
5-44 UNF	.1102	.1083	.1095	.1070
6-32 UNC	.1177	.1156	.1169	.1141
6-40 UNF	.1218	.1198	.1210	.1184
8-32 UNC	.1437	.1415	.1428	.1399
8-36 UNF	.1460	.1439	.1452	.1424
10-24 UNC	.1629	.1604	.1619	.1586
10-32 UNF	.1697	.1674	.1688	.1658
12-24 UNC	.1889	.1863	.1879	.1845
12-28 UNF	.1928	.1904	.1918	.1886
12-32 UNEF	.1957	.1933	.1948	.1917
1/4-20 UNC	.2175	.2147	.2164	.2127
1/4-28 UNF	.2268	.2243	.2258	.2225
1/4-32 UNEF	.2297	.2273	.2287	.2255
5/16-18 UNC	.2764	.2734	.2752	.2712
5/16-24 UNF	.2854	.2827	.2843	.2806
5/16-32 UNEF	.2922	.2898	.2912	.2880
3/8-16 UNC	.3344	.3311	.3331	.3287
3/8-24 UNF	.3479	.3450	.3468	.3430
3/8-32 UNEF	.3547	.3522	.3537	.3503
7/16-14 UNC	.3911	.3876	.3897	.3850
7/16-20 UNF	.4050	.4019	.4037	.3995
7/16-28 UNEF	.4143	.4116	.4132	.4096
1/2-13 UNC	.4500	.4463	.4485	.4435
1/2-20 UNF	.4675	.4643	.4662	.4619
1/2-28 UNEF	.4768	.4740	.4757	.4720
9/16-12 UNC	.5084	.5045	.5068	.5016
9/16-18 UNF	.5264	.5230	.5250	.5205

UNIFIED THREAD GAGES				
THREAD RING & SETTING PLUGS				
NOMINAL SIZE	GO 3A	NOTGO 3A	GO 2A	NOTGO 2A
9/16-24 UNEF	.5354	.5325	.5342	.5303
5/8-11 UNC	.5660	.5619	.5644	.5589
5/8-18 UNF	.5889	.5854	.5875	.5828
5/8-24 UNEF	.5979	.5949	.5967	.5927
11/16-24 UNEF	.6604	.6574	.6592	.6552
3/4-10 UNC	.6850	.6806	.6832	.6773
3/4-16 UNF	.7094	.7056	.7079	.7029
3/4-20 UNEF	.7175	.7142	.7162	.7118
13/16-20 UNEF	.7800	.7767	.7787	.7743
7/8-9 UNC	.8028	.7981	.8009	.7946
7/8-14 UNF	.8286	.8245	.8270	.8216
7/8-20 UNEF	.8425	.8392	.8412	.8368
15/16-20 UNEF	.9050	.9016	.9036	.8991
1-8 UNC	.9188	.9137	.9168	.9100
1-12 UNF	.9459	.9415	.9441	.9382
1-14 UNS	.9536	.9494	.9519	.9463
1-20 UNEF	.9675	.9641	.9661	.9616
1 1/16-12 UNF	1.0084	1.0042	1.0067	1.0010
1 1/16-18 UNEF	1.0264	1.0228	1.0250	1.0203
1 1/8-7 UNC	1.0322	1.0268	1.0300	1.0228
1 1/8-12 UNF	1.0709	1.0664	1.0691	1.0631
1 1/8-18 UNEF	1.0889	1.0853	1.0875	1.0828
1 3/16-12 UNF	1.1334	1.1291	1.1317	1.1259
1 3/16-18 UNEF	1.1514	1.1478	1.1499	1.1450
1 1/4-7 UNC	1.1572	1.1517	1.1550	1.1476
1 1/4-12 UNF	1.1959	1.1913	1.1941	1.1879
1 1/4-18 UNEF	1.2139	1.2103	1.2124	1.2075
1 5/16-12 UNF	1.2584	1.2541	1.2567	1.2509
1 5/16-18 UNEF	1.2764	1.2728	1.2749	1.2700
1 3/8-6 UNC	1.2667	1.2607	1.2643	1.2563
1 3/8-12 UNF	1.3209	1.3162	1.3190	1.3127
1 3/8-18 UNEF	1.3389	1.3353	1.3374	1.3325
1 7/16-12 UNF	1.3834	1.3790	1.3816	1.3757
1 7/16-18 UNEF	1.4014	1.3977	1.3999	1.3949
1 1/2-6 UNC	1.3917	1.3856	1.3893	1.3812
1 1/2-12 UNF	1.4459	1.4411	1.4440	1.4376
1 1/2-18 UNEF	1.4639	1.4602	1.4624	1.4574

METRIC THREAD PLUG P.D. CHART



METRIC THREAD GAGES				
THREAD PLUGS				
NOMINAL SIZE	METRIC		DECIMAL REF.	
	GO 6H	NOTGO 6H	GO 6H	NOTGO 6H
1.6 x .35	1.373	1.458	.05406	.05740
1.8 x .35	1.573	1.658	.06193	.06528
2 x .4	1.740	1.830	.06850	.07205
2.2 x .45	1.908	2.003	.07512	.07886
2.5 x .45	2.208	2.303	.08693	.09067
3 x .5	2.675	2.775	.10531	.10925
3.5 x .6	3.110	3.222	.12244	.12685
4 x .7	3.545	3.663	.13957	.14421
4.5 x .75	4.013	4.131	.15799	.16264
5 x .8	4.480	4.605	.17638	.18130
5.5 x .75	5.013	5.131	.19736	.20201
6 x 1.0	5.350	5.500	.21063	.21654
6.3 x 1.0	5.650	5.800	.22244	.22835
7 x 1.0	6.350	6.500	.25000	.25591
8 x 1.25	7.188	7.348	.28299	.28929
8 x 1.0	7.350	7.500	.28937	.29528
9 x 1.25	8.188	8.348	.32236	.32866
10 x .75	9.513	9.645	.37453	.37972
10 x 1.5	9.026	9.206	.35535	.36244
10 x 1.25	9.188	9.348	.36173	.36803
11 x 1.5	10.026	10.206	.39472	.40181
12 x 1.0	11.350	11.510	.44685	.45315
12 x 1.5	11.026	11.216	.43409	.44157
12 x 1.75	10.863	11.063	.42768	.43555
12 x 1.25	11.188	11.368	.44047	.44756
14 x 2.0	12.701	12.913	.50004	.50838
14 x 1.5	13.026	13.216	.51283	.52031
15 x 1.5	14.026	14.216	.55220	.55968
15 x 1.0	14.350	14.510	.56496	.57126
16 x 2.0	14.701	14.913	.57878	.58712
16 x 1.5	15.026	15.216	.59157	.59905
17 x 1.0	16.350	16.510	.54370	.65000

METRIC THREAD GAGES				
THREAD PLUGS				
NOMINAL SIZE	METRIC		DECIMAL REF.	
	GO 6H	NOTGO 6H	GO 6H	NOTGO 6H
17 x 1.5	16.026	16.216	.63094	.63842
18 x 2.5	16.376	16.600	.64472	.65354
18 x 1.5	17.026	17.216	.67031	.67779
20 x 1.0	19.350	19.510	.76181	.76811
20 x 2.5	18.376	18.600	.72346	.73228
20 x 1.5	19.026	19.216	.74905	.75653
22 x 2.5	20.376	20.600	.80220	.81102
22 x 1.5	21.026	21.216	.82779	.83527
24 x 3.0	22.051	22.316	.86815	.87858
24 x 2.0	22.701	22.925	.89374	.90256
25 x 2.0	23.701	23.925	.93311	.94193
25 x 1.5	24.026	24.226	.94590	.95378
26 x 1.5	25.026	25.226	.98527	.99315
26 x 1.0	25.350	25.520	.99803	1.00472
27 x 3.0	25.051	25.316	.98626	.99669
27 x 2.0	25.701	25.925	1.01185	1.02067
28 x 2.0	26.701	26.925	1.05122	1.06004
28 x 1.5	27.026	27.226	1.06401	1.07189
28 x 1.0	27.350	27.520	1.07677	1.08346
30 x 1.5	29.026	29.226	1.14276	1.15063
30 x 3.5	27.727	28.007	1.09161	1.10264
30 x 2.0	28.701	28.925	1.12996	1.13878
32 x 2.0	30.701	30.925	1.20870	1.21752
32 x 1.5	31.026	31.226	1.22149	1.22937
33 x 3.5	30.727	31.007	1.20972	1.22075
33 x 2.0	31.701	31.925	1.24807	1.25689
35 x 1.5	34.026	34.226	1.33960	1.34748
36 x 2.0	34.701	34.925	1.36618	1.37500
36 x 4.0	33.402	33.702	1.31504	1.32685
36 x 3.0	34.051	34.316	1.34059	1.35102
38 x 1.5	37.026	37.226	1.45771	1.46559
39 x 2.0	37.701	37.925	1.48429	1.49311

METRIC THREAD RING & SETTING PLUG P.D. CHART



METRIC THREAD GAGES				
THREAD RING & SETTING PLUGS				
NOMINAL SIZE	METRIC		DECIMAL REF.	
	GO 6g	NOTGO 6g	GO 6g	NOTGO 6g
1.6 x .35	1.354	1.291	.05331	.05083
1.8 x .35	1.554	1.491	.06118	.05870
2 x .4	1.721	1.654	.06776	.06512
2.2 x .45	1.888	1.817	.07433	.07154
2.5 x .45	2.188	2.117	.08614	.08335
3 x .5	2.655	2.580	.10453	.10157
3.5 x .6	3.089	3.004	.12161	.11827
4 x .7	3.523	3.433	.13870	.13516
4.5 x .75	3.991	3.901	.15713	.15358
5 x .8	4.456	4.361	.17543	.17169
5.5 x .75	4.991	4.901	.19650	.19295
6 x 1.0	5.324	5.212	.20961	.20520
6.3 x 1.0	5.624	5.512	.22142	.21701
7 x 1.0	6.324	6.212	.24898	.24457
8 x 1.25	7.160	7.042	.28189	.27724
8 x 1.0	7.324	7.212	.28835	.28394
9 x 1.25	8.160	8.042	.32126	.31661
10 x .75	9.491	9.391	.37366	.36972
10 x 1.5	8.994	8.862	.35409	.34890
10 x 1.25	9.160	9.042	.36063	.35598
11 x 1.5	9.994	9.862	.39346	.38827
12 x 1.0	11.324	11.206	.44583	.44118
12 x 1.5	10.994	10.854	.43283	.42732
12 x 1.75	10.829	10.679	.42634	.42043
12 x 1.25	11.160	11.028	.43937	.43417
14 x 2.0	12.663	12.503	.49854	.49224
14 x 1.5	12.994	12.854	.51157	.50606
15 x 1.5	13.994	13.854	.55094	.54543
15 x 1.0	14.324	14.206	.56394	.55929
16 x 2.0	14.663	14.503	.57728	.57098
16 x 1.5	14.994	14.854	.59031	.58480
17 x 1.0	16.324	16.206	.64268	.63803

METRIC THREAD GAGES				
THREAD RING & SETTING PLUGS				
NOMINAL SIZE	METRIC		DECIMAL REF.	
	GO 6g	NOTGO 6g	GO 6g	NOTGO 6g
17 x 1.5	15.994	15.854	.62968	.62417
18 x 2.5	16.334	16.164	.64307	.63638
18 x 1.5	16.994	16.854	.66905	.66354
20 x 1.0	19.324	19.206	.76079	.75614
20 x 2.5	18.334	18.164	.72181	.71512
20 x 1.5	18.994	18.854	.74779	.74228
22 x 2.5	20.334	20.164	.80055	.79386
22 x 1.5	20.994	20.854	.82653	.82102
24 x 3.0	22.003	21.803	.86626	.85838
24 x 2.0	22.663	22.493	.89224	.88555
25 x 2.0	23.663	23.493	.93161	.92492
25 x 1.5	23.994	23.844	.94464	.93874
26 x 1.5	24.994	24.844	.98401	.97811
26 x 1.0	25.324	25.199	.99701	.99209
27 x 3.0	25.003	24.803	.98437	.97649
27 x 2.0	25.663	25.493	1.01035	1.00366
28 x 2.0	26.663	26.493	1.04972	1.04303
28 x 1.5	26.994	26.844	1.07625	1.05684
28 x 1.0	27.324	27.199	1.07575	1.07082
30 x 1.5	28.994	28.844	1.14150	1.13559
30 x 3.5	27.674	27.462	1.08953	1.08118
30 x 2.0	28.663	28.493	1.12846	1.12177
32 x 2.0	30.663	30.493	1.20720	1.20051
32 x 1.5	30.994	30.844	1.22023	1.21432
33 x 3.5	30.674	30.462	1.20764	1.19929
33 x 2.0	31.663	31.493	1.24657	1.23988
35 x 1.5	33.994	33.844	1.33834	1.33244
36 x 2.0	34.663	34.493	1.36469	1.35799
36 x 4.0	33.342	33.118	1.31267	1.30386
36 x 3.0	34.003	33.803	1.33870	1.33082
38 x 1.5	36.994	36.844	1.45645	1.45055
39 x 2.0	37.663	37.493	1.48280	1.47610

X TOLERANCE TABLE

X TOLERANCE

AMERICAN NATIONAL and UNIFIED FORM THREADS

For "GO" and "NOT GO" Thread Gages

TPI	LEAD	HALF ANGLE	MAJOR or MINOR DIAMETER		PITCH DIAMETER		
	+ -	+ -	To and Incl. 4"	Above 4" Dia.	To and Incl. 1 1/2"	Above 1 1/2" to 4" Incl.	Above 4" to 8" Incl.
80	.0002	30 min	.0003		.0002		
72	.0002	30 min	.0003		.0002		
64	.0002	30 min	.0004		.0002		
56	.0002	30 min	.0004		.0002	.0003	
48	.0002	30 min	.0004		.0002	.0003	
44	.0002	20 min	.0004		.0002	.0003	
40	.0002	20 min	.0004		.0002	.0003	
36	.0002	20 min	.0004		.0002	.0003	
32	.0003	15 min	.0005	.0007	.0003	.0004	.0005
28	.0003	15 min	.0005	.0007	.0003	.0004	.0005
24	.0003	15 min	.0005	.0007	.0003	.0004	.0005
20	.0003	15 min	.0005	.0007	.0003	.0004	.0005
18	.0003	10 min	.0005	.0007	.0003	.0004	.0005
16	.0003	10 min	.0006	.0009	.0003	.0004	.0006
14	.0003	10 min	.0006	.0009	.0003	.0004	.0006
13	.0003	10 min	.0006	.0009	.0003	.0004	.0006
12	.0003	10 min	.0006	.0009	.0003	.0004	.0006
11	.0003	10 min	.0006	.0009	.0003	.0004	.0006
10	.0003	10 min	.0006	.0009	.0003	.0004	.0006
9	.0003	10 min	.0007	.0011	.0003	.0004	.0006
8	.0004	5 min	.0007	.0011	.0004	.0005	.0006
7	.0004	5 min	.0007	.0011	.0004	.0005	.0006
6	.0004	5 min	.0008	.0013	.0004	.0005	.0006
5	.0004	5 min	.0008	.0013		.0005	.0006
4.5	.0004	5 min	.0008	.0013		.0005	.0006
4	.0004	5 min	.0009	.0015		.0005	.0006

Thread Gages are made to Class X tolerances unless otherwise specified on orders or drawings

DIRECTION OF TOLERANCES

	MAJOR DIAMETER FULL FORM	MAJOR DIAMETER TRUNCATED SECTION	PITCH DIAMETER	MINOR DIAMETER
"GO" Work Plug	Plus		Plus	
"NOT GO" Work Plug	Minus		Minus	
"GO" Ring			Minus	
"NOT GO" Ring			Plus	Minus
"GO" Set Plug	Plus	Minus	Minus	Plus
"NOT GO" Set Plug	Plus	Minus	Plus	

W TOLERANCE TABLE

W TOLERANCE														
AMERICAN NATIONAL and UNIFIED FORM THREADS														
For “GO” and “NOT GO” Thread Gages														
TPI	LEAD		HALF ANGLE	MAJOR or MINOR DIAMETER			PITCH DIAMETER				TOTAL CUMULATIVE TOLERANCE			
	To & Incl. 1/2” Dia.	Above 1/2” Dia.	+ -	To & Incl. 1/2”	Above 1/2” to 4”	Above 4”	To & Incl. 1/2”	Above 1/2” to 1 1/2”	Above 1 1/2” to 4”	Above 4” to 8”	To & Incl. 1/2”	Above 1/2” to 1 1/2”	Above 1 1/2” to 4”	Above 4” to 8”
80	.0001	.00015	20 min	.0003	.0003		.0001	.00015			.00038	.00052		
72	.0001	.00015	20 min	.0003	.0003		.0001	.00015			.00039	.00053		
64	.0001	.00015	20 min	.0003	.0004		.0001	.00015			.00041	.00055		
56	.0001	.00015	20 min	.0003	.0004		.0001	.00015	.0002		.00043	.00057	.00062	
48	.0001	.00015	18 min	.0003	.0004		.0001	.00015	.0002		.00044	.00057	.00062	
44	.0001	.00015	15 min	.0003	.0004		.0001	.00015	.0002		.00042	.00056	.00061	
40	.0001	.00015	15 min	.0003	.0004		.0001	.00015	.0002		.00044	.00057	.00062	
36	.0001	.00015	12 min	.0003	.0004		.0001	.00015	.0002		.00042	.00056	.00061	
32	.0001	.00015	12 min	.0003	.0005	.0007	.0001	.00015	.0002	.00025	.00044	.00057	.00062	.00067
28	.00015	.00015	8 min	.0005	.0005	.0007	.0001	.00015	.0002	.00025	.00048	.00053	.00058	.00063
24	.00015	.00015	8 min	.0005	.0005	.0007	.0001	.00015	.0002	.00025	.00051	.00056	.00061	.00066
20	.00015	.00015	8 min	.0005	.0005	.0007	.0001	.00015	.0002	.00025	.00053	.00058	.00063	.00068
18	.00015	.00015	8 min	.0005	.0005	.0007	.0001	.00015	.0002	.00025	.00055	.00060	.00065	.00070
16	.00015	.00015	8 min	.0006	.0006	.0009	.0001	.0002	.00025	.0003	.00058	.00068	.00073	.00078
14	.0002	.0002	6 min	.0006	.0006	.0009	.00015	.0002	.00025	.0003	.00068	.00073	.00078	.00083
13	.0002	.0002	6 min	.0006	.0006	.0009	.00015	.0002	.00025	.0003	.00070	.00075	.00080	.00085
12	.0002	.0002	6 min	.0006	.0006	.0009	.00015	.0002	.00025	.0003	.00071	.00076	.00081	.00086
11	.0002	.0002	6 min	.0006	.0006	.0009	.00015	.0002	.00025	.0003	.00073	.00078	.00083	.00088
10		.00025	6 min		.0006	.0009		.0002	.00025	.0003		.00089	.00094	.00099
9		.00025	6 min		.0007	.0011		.0002	.00025	.0003		.00092	.00097	.00102
8		.00025	5 min		.0007	.0011		.0002	.00025	.0003		.00091	.00096	.00101
7		.0003	5 min		.0007	.0011		.0002	.00025	.0003		.00103	.00108	.00113
6		.0003	5 min		.0008	.0013		.0002	.00025	.0003		.00108	.00113	.00118
5		.0003	4 min		.0008	.0013			.00025	.0003			.00112	.00117
4.5		.0003	4 min		.0008	.0013			.00025	.0003			.00116	.00121
4		.0003	4 min		.0009	.0015			.00025	.0003			.00121	.00126

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The operation of the ContouReader™ is simple. A part is placed in a fixture, and the tracing stylus moves gently over the surface of the part, transferring the stylus arm movements into electrical voltages which are amplified and transmitted to the chart recorder or computer display. The recorder moves a pen to draw an exact duplicate of the part contour on chart paper up to 200 times its original size, and with accuracy of ± 0.0002 inches on the standardized version. The computerized version will display an exact duplication of the part contour to an infinite magnification. A manual or electronic master overlay is used over the ContouReader™ tracing to compare for accuracy.

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