

Lead Gage Thread Lead

LG-5002

LG-5003



LG-5002
with LS-1005
setting standard
(Sold separately)



LG-5003



LS-5001



Inspecting Thread Lead

HOW TO ORDER

1. Select the LG-5002 or LG-5003 gage model.
2. Select the proper contact points for the application, based on the type of connection and pitch/TPI (sold separately and individually).
3. Select the lead gage setting standard, based on the type of connection, taper and threads per inch (sold separately).

The lead gage inspects both internal and external thread leads using contact points that seat in the threads of a part. Thread lead is the distance between threads, measured on a plane parallel to the centerline of the threaded part. The pitch of the thread determines the diameter of the contact points required for taking measurements.

The LG-5002 uses a **two-point** system to inspect thread lead for ACME, Stub ACME, UN, or API threads. The two points allow for a sweeping action to obtain the measurement.

The LG-5003 uses the **three-point** system to inspect thread lead for ACME, Stub ACME, UN threads, or API threads. Two fixed contact points at the rear of the gage and one moveable contact point at the front of the gage provide complete stability when taking thread lead measurements. This unique design does not require sweeping to obtain measurements. Plus, contact points can be easily changed to allow the gage to be used on a variety of thread forms.

Before inspecting parts, the lead gage must be preset to a nominal predetermined dimension using a lead gage setting standard. These setting standards are manufactured according to ANSI and API specifications. Lead standards are available for ACME, Stub ACME, UN and API threads.

Features

- Uses a three-point system for greater stability when inspecting parts (LG-5003)
- Uses interchangeable contact points to allow inspection on a variety of thread forms.
- Requires presetting using Gagemaker's lead gage setting standards.

LEAD GAGES

Gagemaker offers a variety of durable lead gages. Standards and contact points are sold separately.

Model	Description	Min. Bore	Range
LG-5002	Lead Gage 2-point, Contact Pt. Spacing .500"	1.200	½" - 4" Thread Length
LG-5002-1	Lead Gage 2-point, .0001" grad.	1.200	½" - 4" Thread Length
LG-5002-J	Lead Gage 2-point, Contact Pt. Spacing .193"	1.200	½" - 4" Thread Length
LG-5002-1J	Lead Gage 2-point, .0001" grad., Contact Point Spacing .193"	1.200	½" - 4" Thread Length
LG-5003	Lead Gage 3-point	1.340	½" - 4" Thread Length
LG-5003-1	Lead Gage 3-point, .0001" grad.	1.340	½" - 4" Thread Length
LG-5003-J	Lead Gage 3-point, Contact Pt. Spacing .193"	1.340	½" - 4" Thread Length
LG-5003-1J	Lead Gage 3-point, .0001" grad., Contact Point Spacing .193"	1.340	½" - 4" Thread Length
LG-5003-L	Special Load-to-Load pitch gage	1.500	½" - 4" Thread Length
LG-5003-S	Special Stab-to-Stab pitch gage	1.500	½" - 4" Thread Length

LG-5002 & LG-5003 Lead Gage Contact Points (Sold Individually)

Two per LG-5002 & three per LG-5003. All contact points are manufactured from carbide.

ACME or Stub ACME Threads		UN Series Threads	
Model	Thread Pitch	Model	Thread Pitch
T531T	1 pitch	T5625	1 pitch
T344T	1.5 pitch	T288	2 pitch
T266T	2 pitch	T188	3 & 3.5 pitch
T219T	2.5 pitch	T144	4 pitch
T1875T	3 pitch	T128	4.5 pitch
T144T	3.5 pitch	T115	5 pitch
T128T	4 pitch	T105	5.5 pitch
T105T	5 pitch	T096	6 pitch
T090T	6, 7 pitch	T072	8 pitch
T072T	8 pitch	T057	10 pitch
T062T	8 pitch	T050	11.5 & 12 pitch
T050T	10 pitch	T041	14 & 16 pitch
T041T	12 & 14 pitch	T032	18 pitch
T032T	16 pitch		

Lead Gage Thread Lead

LG-5002

LG-5003

LG-5002 & LG-5003 Lead Gage Contact Points (Sold Individually)

These contact points inspect the thread lead of API thread forms. Sold individually. Two per LG-5002 & three per LG-5003.

Model	Point Diameter	Threads Per Inch	Connection Type
T235	0.235"	3	Hughes Slim Line H-90
T200	0.200"	3½	All Hughes H-90
T144	0.144"	4	API Rotary Shouldered Connections
T128	0.128"	4½	API Rotary Shouldered Connections
T115	0.115"	5	API Rotary Shouldered Connections
T105T	0.105"	5½	Truncated for Extreme Line
T096	0.096"	6	API Rotary Shouldered Connections
T090	0.090"	5	Buttress Casing - Taper
T072	0.072"	8	API Rotary Shouldered Connections
T062	0.062"	5	Buttress Casing - Lead
T057	0.057"	10	API Tubing and Line Pipe
T050	0.050"	11½	API Line Pipe
T041	0.041"	14	API Line Pipe
T032	0.032"	18	API Line Pipe
T021	0.021"	27	API Line Pipe



LEAD GAGE SETTING STANDARDS

Gagemaker's precision lead gage setting standards are manufactured in accordance with API Spec 5B. Lead gage standards are used to preset the lead gages contact point location prior to the inspection of the threaded connector.

Model	Connection Type/Description	TPF*	TPI*	Cross Reference	
LS-1001	API 8-Round Casing, Tubing & Drill Pipe, All 10-Round Tubing	¾"	8 & 10	5691-A	
LS-1002	Straight Threads, 6 - 18 Pitch, 4" Length	Straight	8 & 10	5691-C	
LS-1003	11½" "V" API Line Pipe, American Std, NPT	¾"	11½	5691-D	
LS-1004	Straight Threads, Line Pipe	Straight	11½	5691-F	
LS-1005	API Buttress Casing, Internal/External 4½" - 13¾"	¾"	5	5691-K	
LS-1006	API Buttress Casing, Internal/External 16" & Larger	1"	5	5691-K16	
LS-1007	6⅝" API Reg 4", 5½", & 6⅝" API Full Hole 2⅞", 3½" - 5" Hughes Xtra Hole	2⅞", 2⅞" - 4½" Hughes Slim Hole 2⅞" - 5½" API INT Flush API Numbered Connectors #23-#50	2"	4	5691-L
LS-1008	5½", 7⅝" - 8⅝" API Reg	API Numbered Connectors #56-#77	3"	4	5691-M
LS-1009	2⅞" - 4" API Reg	3½", 4½" API Full Hole	3"	5	5691-N
LS-1010	API Numbered Connectors #10, #12, #13, #16, M.T. (Macaroni Tubing) 2⅞" - 3½" PAC 2⅞" - 4" American Open Hole		1½"	4	5691-T3
LS-1011	3½" - 6⅝" Hughes H-90		2"	3½	5691-P4A
LS-1012	7" - 8⅝" Hughes H-90		3"	3½	5691-P4B
LS-1013	2 ⅞" - 3 ½" Slim Line H-90		1¼"	3	5691-P4C
LS-1027	-		1⅞"	5	-
LS-1032	-		1⅞"	6	-
LS-5001	Straight Threads, 1-5 pitch, 4" length	-	-	STD-5001	
LS-5002	Straight Threads, 6-18 pitch, 4" length	-	-	STD-5002	

*TPF = Taper Per Foot, TPI = Threads Per Inch

SPECIFICATIONS

Model	Dimensions	Weights
LG-5002	5⅞" X 2" X ⅞" (149.2 mm x 50.8 mm x 22.2 mm)	1.0 lb. (.45kg)
LG-5003	7" X 2" X 2" (177.8 mm X 50.8 mm X 50.8 mm)	1.0 lb. (.45kg)
Lead Standards	4½" X ¾" X ⅝" (114.3 mm X 19.05 mm X 9.53 mm)	0.5 lb. (.22 kg)