

Gyrogage



Features

Missing ferrule indicator:

Scribing tool:

Usable by both assembler and post assembly inspector:

Color-coded gages:

Size markings:

Single tool per size:

Choice of marking methods:

Benefits

- Maximizes system safety by confirming that all components are in place. **HOKE exclusive**

- Assures proper assembly by marking tubing to show that it has been properly inserted into fitting, and that fitting has been properly tightened.

- Redundant method of verification.

- Simplifies selection of appropriate system gage: metric (blue) or fractional (green). **HOKE exclusive**

- Simplifies selection of appropriate size gage.

- Eliminates need for extra tools; use one tool for installation and inspection, even for hard-to-reach assemblies.

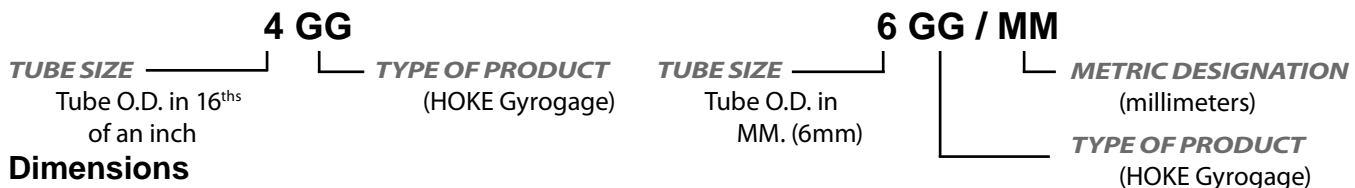
- Adds flexibility to assembly and inspection with choice of marking systems: built-in scriber or separate ink marker*. **HOKE exclusive**

Today's safety conscious users are paying greater attention to tube fitting performance. User studies indicate that, while superior fittings will greatly improve performance, problems still occur. Why? Data shows that the leading cause of performance loss is the incorrect assembly of the tubing and fitting. They found, for example, that:

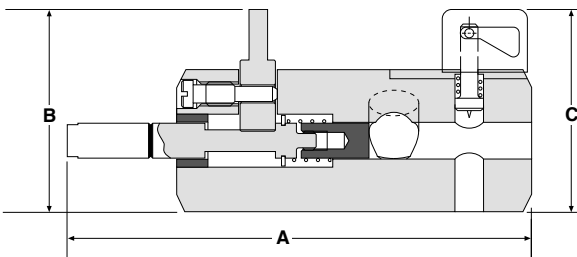
- Difficult-to-reach fitting nuts were not always tightened.
- Improper ferrule set occurred because burrs, or too short a tube length after a bend, prevented tubing from being fully inserted
- Improper make-up was caused by missing ferrules, because a ferrule borrowed from a fitting in inventory was never replaced

HOKE has addressed all of these concerns with the HOKE Gyrogage!

How to Order



Dimensions



Part Number	Tube Size	A	B	C	Options: Replacement Scribers*
Fractional Sizes Inch					
1GG	1/16	3 3/64	1 11/16	1	SPGGK1
2GG	1/8	3 1/64	1 11/16	1	SPGGK2
3GG	3/16	3 1/64	1 11/16	1	SPGGK3
4GG	1/4	3 17/64	1 11/16	1	SPGGK4
6GG	3/8	3 15/32	1 13/16	1 1/8	SPGGK4
8GG	1/2	4 3/64	1 31/32	1 1/4	SPGGK4
10GG	5/8	4 35/64	2 5/8	1 5/8	SPGGK5
12GG	3/4	4 47/64	2 11/16	1 3/4	SPGGK5
14GG	7/8	4 63/64	2 13/16	1 7/8	SPGGK5
16GG	1	5 9/16	3 1/32	2	SPGGK5
Metric Sizes mm					
3GG/MM	3	3 13/64	1 11/16	1	SPGGK2
6GG/MM	6	3 1/4	1 11/16	1	SPGGK4
8GG/MM	8	3 11/32	1 3/4	1 1/16	SPGGK4
10GG/MM	10	3 1/2	1 13/16	1 1/8	SPGGK4
12GG/MM	12	4 7/64	1 31/32	1 1/4	SPGGK4
14GG/MM	14	4 3/16	2 15/32	1 9/16	SPGGK5
16GG/MM	16	4 9/16	2 17/32	1 5/8	SPGGK5
18GG/MM	18	4 23/32	2 5/8	1 11/16	SPGGK5
20GG/MM	20	5 1/8	2 3/4	1 13/16	SPGGK5
22GG/MM	22	4 61/64	2 13/16	1 7/8	SPGGK5
25GG/MM	25	5 35/64	3 1/32	2	SPGGK5

* Gyrogage scribers can be quickly and easily replaced using the referenced kit numbers.

Gyrolok® Marking Tool

Tube fitting users have long recognized that proper tube and tube fitting system function requires good tubing preparation followed by the use of correct installation procedures. Improper ferrule set in any flareless tube and fitting system may be the result of burrs created during the tube cutting process, improper tube insertion into the fitting, or inadequate tightening of the fitting nut. In order to maximize tube and fitting system performance and safety, HOKE offers several tool options combined with detailed installer training. The Gyrolok® Marking Tool provides the installer with an economical means of ensuring both proper tubing insertion into the fitting and adequate nut tightening.



Usage Instructions

1. Squarely cut tubing, preferably with a tube cutter, and then deburr both inside and outside diameters as necessary.
2. Firmly insert tubing into the tool as far as possible.
3. Mark the tubing, as shown, with a pencil or FINE POINT marker utilizing low chloride ink.
4. Firmly insert the marked tubing into the Gyrolok® fitting to which it will be assembled. Finger-tighten the nut. The mark should NOT be visible at this point. If not visible, continue to step 5. If any part of the mark is visible above the Gyrolok® nut after only finger-tightening, the tubing is either not properly seated within the fitting or a ferrule is missing. Disassemble and determine cause.
5. If the mark is not visible after finger-tightening, continue by following appropriate Gyrolok® assembly instructions for tubing O.D. and wall thickness.

Part Numbers

SIZE	PART NUMBER	SIZE	PART NUMBER
1/8"	2GMT	6MM	6GMTMM
1/4"	4GMT	8MM	8GMTMM
3/8"	6GMT	10MM	10GMTMM
1/2"	8GMT	12MM	12GMTMM
5/8"	10GMT	14MM	14GMTMM
3/4"	12GMT	15MM	15GMTMM
1"	16GMT	16MM	16GMTMM
		18MM	18GMTMM
		20MM	20GMTMM
		22MM	22GMTMM
		25MM	25GMTMM

Pre-setting Tool: PST

Used strictly for pre-assembling ferrules to tubing.

Fractional

Part Number*	Tube O.D.	Dimensions — inches	
		Length	Across Flats
1PST	1/16	2.25	3/8
2PST	1/8	1.94	11/16
3PST	3/16	2	1/2
4PST	1/4	1.94	11/16
6PST	3/8	1.97	11/16
8PST	1/2	2	7/8
12PST	3/4	2.50	1 1/8
16PST	1	2.50	1 1/2

Metric

Part Number*	Tube O.D.	Dimensions — mm	
		Length	Across Flats
3PSTMM	3	49.2	17.3
6PSTMM	6	49.0	17.3
8PSTMM	8	50.0	17.3
10PSTMM	10	50.8	17.3
12PSTMM	12	50.8	22.0
14PSTMM	14	50.8	22.0
16PSTMM	16	63.5	28.4
18PSTMM	18	63.5	28.4
20PSTMM	20	63.5	28.4
22PSTMM	22	63.5	37.9
25PSTMM	25	63.5	37.9



Usage Instructions

1. Place PST in vise.
2. Loosely assemble nut and ferrules to PSI. Use HOKE Gyrolok Safety Changer Nut & Ferrule Sets.
3. Follow standard HOKE Gyrolok assembly instructions to set ferrules onto tubing, see page 53.
4. Loosen nut and remove tubing with pre-set ferrules and nut.
5. With pre-set ferrules and nut in permanent location, reassemble tubing by following HOKE Gyrolok reassembly instructions on page 53.

Note: Threads of pre-setting tools should be lubricated the very first time and relubricated every tenth time thereafter.

* [] see page 6 for material specifications.

Leak Detective Products



HOKE's Leak Detective products are used to detect leaks in pressurized gas systems. Use the Leak Detective to locate fugitive gas emissions in compressed air, oxygen, helium, hydrogen, nitrogen, natural gas, acetylene, and propane systems.

The Leak Detective is manufactured to meet specification MIL-L-25567D and is available in two types. Type 1 is for regular temperature applications 27° F to 200° F (-3° C to 95° C) while Type 2 is for colder application from -65° F to 200° F (-55° C to 95° C). The Leak Detective is packaged as standard in 8 ounce (230 ml) bottles or 1 gallon (4 liter) containers. A tracer tube is provided with each small bottle. 5 gallon containers and 55 gallon drums can also be provided upon request.



Benefits

- Safety:**
 - Oxygen compatible and manufactured in accordance with MIL-L-25567D
 - Meets requirements of ASME Section V for composition and purity
- Certifications:**
 - Material Safety Data Sheets (MSDS) available
- Helps eliminate fugitive emissions:**
 - Verifies leak-tight systems
- Cleanliness:**
 - Leaves virtually no residue

Packaging

<u>Standard</u>	<u>Options</u>
8 ounce	2 ounce
1 gallon	5 gallon
230 ml	55 gallon drum
4 liter	

Technical Data

Specification

- Complies with MIL-L-25567D

Operating Temperatures

- Type 1: 27° F to 200° F (-3° C to 95° C)
- Type 2: -65° F to 200° F (-55° C to 95° C)

Usage Instructions

1. Extend 12" tracer tube
2. Direct solution
3. Squeeze bottle
4. Inspect system for foaming that indicates leakage

Ordering Information

PARTNUMBER	TYPE	LABEL LANGUAGE	SIZE
1LDE8OZ	1	English	8 ounce
1LDE1G	1	English	1 gallon
2LDE8OZ	2	English	8 ounce
2LDE1G	2	English	1 gallon
1LDEF230	1	English/French	230 ml
1LDEF4L	1	English/French	4 liter
2LDEF230	2	English/French	230 ml
2LDEF4L	2	English/French	4 liter
1LDS230	1	Spanish	230 ml
1LDS4L	1	Spanish	4 liter
2LDS230	2	Spanish	230 ml
2LDS4L	2	Spanish	4 liter

Hydraulic Pre-Setting Tool



Larger tube fittings often require more effort to assemble properly than can be consistently achieved using hand wrenches. HOKE offers a portable Hydraulic Pre-setting Tool to make the assembly of larger fittings:

- **Safer.** The Hydraulic Pre-setting Tool helps assure consistently correct assembly of larger fittings.
- **Simpler.** Interchangeable die sets allow easy conversion from one tube and fitting size to another.
- **More cost-efficient.** Using the Hydraulic Pre-setting Tool extends fitting life and reduces assembly time.

Using the portable Hydraulic Pre-setting Tool, the Gyrolok nut and ferrule system is initially set onto the tubing. The pre-set fitting and tube assembly is then easily installed by following the Gyrolok reassembly instructions.

Features

One basic pre-setting head for all sizes:

Interchangeable die sets:

10,000 PSI hydraulic pump:

Carrying case:

Benefits

- Provides versatility and value by covering sizes from 1/2" through 2" and 12mm through 50mm.
- Allows easy conversion from one tube and fitting size to another.
- Provides the force necessary for consistent, fast, and simple fitting assembly.
- Rugged steel carrying case offers easy transportation as well as a single storage location for all tool components.

How It Works



Gyrolok nut and ferrule system components are assembled onto Hydraulic Pre-Setting Tool. Hand pump is operated until indicator arm releases.



Pre-set tube assembly is ready for installation using standard Gyrolok remake instructions

How to Order

HOKE's Hydraulic Pre-Setting Tool, Pump and Ram Assembly.

Carrying case is included. Carrying case has room for 6 die sets.

Standard Fractional Kits

2HPSTSF	≤1" FRACTIONAL PACKAGE CONTAINS:
• 2HPST	Basic kit
• 2DJS-8	1/2" die set
• 2DJS-12	3/4" die set
• 2DJS-16	1" die set
2HPSTLF	>1" FRACTIONAL PACKAGE CONTAINS:
• 2HPST	Basic kit
• 2DJS-20	1 1/4" die set
• 2DJS-24	1 1/2" die set
• 2DJS-32	2" die set

Standard Metric Kits

2HPSTSM	≤25 MM METRIC PACKAGE CONTAINS:
• 2HPST	Basic kit
• 2DJS-12MM	12 mm die set
• 2DJS-18MM	18 mm die set
• 2DJS-25MM	25 mm die set
2HPSTLM	>25 MM METRIC PACKAGE CONTAINS:
• 2HPST	Basic kit
• 2DJS-30MM	30 mm die set
• 2DJS-32MM	32 mm die set
• 2DJS-38MM	38 mm die set

2HPST LM

TYPE OF PRODUCT

SF	Small fractional package
SM	Small metric package
LF	Large fractional package
LM	Large metric package



Die Sets - Consists of one die and one jig for an individual tube size.



2DJS - 12 MM

TUBE SIZE

Tube O.D. in 1/16"
Tube O.D. in mm (with "MM" suffix)

METRIC DESIGNATION (MILLIMETERS)

FRACTIONAL TUBE SIZE	PART NUMBER	METRIC TUBE SIZE	PART NUMBER
1/2"	2DJS-8	12 MM	2DJS-12MM
5/8"	2DJS-10	14 MM	2DJS-14MM
3/4"	2DJS-12	16 MM	2DJS-16MM
7/8"	2DJS-14	18 MM	2DJS-18MM
1"	2DJS-16	20 MM	2DJS-20MM
1-1/4"	2DJS-20	22 MM	2DJS-22MM
1-1/2"	2DJS-24	25 MM	2DJS-25MM
2"	2DJS-32	28 MM	2DJS-28MM
		30 MM	2DJS-30MM
		32 MM	2DJS-32MM
		38 MM	2DJS-38MM
		50 MM	2DJS-50MM

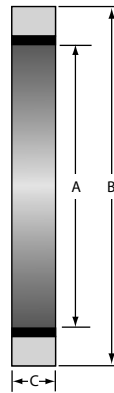
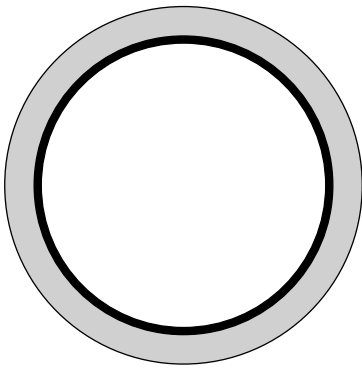
HOKE Gyrolok RS Bonded Seals

RS Bonded Seals

RS bonded gaskets create a seal with DIN 3852, Type A (RS) parallel threads. Gasket outer rings are available in both 316 stainless steel and zinc plated carbon steel. The inner ring, bonded to the outer ring, consists of either Buna-N or fluorocarbon FKM. To order, specify pipe size, outer ring, and inner ring material.

Note: For use only with Gyrolok RS fittings

BSP PIPE SIZE	DIMENSIONS (INCHES)		
	A	B	C
1/8"	0.41	0.63	0.08
1/4"	0.54	0.81	0.08
3/8"	0.68	0.94	0.08
1/2"	0.85	1.13	0.09
3/4"	1.06	1.38	0.09
1"	1.33	1.69	0.09



How to Order

[8] - RSG - [316] [B]

Inner Ring

- B Buna-N
- V Fluoroelastomer FKM

Outer Ring

- 316 316 stainless steel
- CS Carbon steel, zinc plated

BSP Pipe Sizes

- 2 G 1/8" A
- 4 G 1/4" A
- 6 G 3/8" A
- 8 G 1/2" A
- 12 G 3/4" A
- 16 G 1" A