



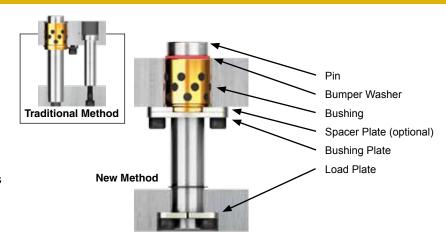
Guided Retainers

SUPERIOR GUIDANCE & RETENTION

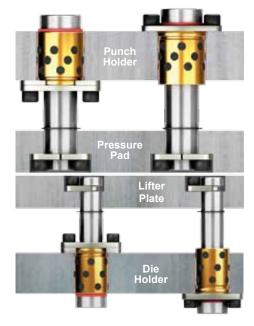
Lamina Guided Retainers

Lamina Guided Retainers are precision guide pin & bushing/retainer assemblies that occupy much less space in the die than traditional pin and retainer combinations.

Guide and retain the pad or stripper plate in progressive stamping dies, or use on stock rails and stock dies with a lifter plate. Lamina Guided Retainers reduce machining cost and save space within your die.



Versatile Mounting



Lamina's advanced design offers the following features:

Tight Assembly Tolerances

- Superior guiding, with the same assembly clearance as traditional pins and bushings
- Greater positional accuracy

Strength at the Pad

- · Accomplished with steel load plates
- No SHCS threaded into the pin

Strength at the Pin Head

• Unique one piece construction

Bronze Graphite-Plugged Bushing

- · Longer life
- Self lubricating
- No galling

Greater Shear Load capabilities from axial loads and side loads due to pin engagement in pad and hardened steel load plates.

Optional Mounting of Bushing

- Can be mounted on either side of the plate for additional clearance, solving design issues
- · Greater strength

Lamina Guided Retainers are available in 5 pin diameters, ranging in 1/8 inch increment lengths from 3.50 to 16.00 inches. Two bushing lengths are offered for each pin diameter.

*U.S. Patent No. 11,504,759 International Patents Pending

To configure and download CAD data:

daytonlamina.com/guided-retainers

Application Recommendations

This table is for reference only. Design considerations should be based on your own calculations.

Table is based on average speed of around 25-35 SPM.

At least three units should be used, and they should be equally spaced and not in line.

If there is excessive side load on the pad, heel blocks should be added.

Pin Dia.	Product Code	Travel (in)	Pad Weight (lbs) per Unit
	LGA100	< 2	22
1.00		2 - 3	19
		> 3	15
		< 2.5	50
1.25	LGA125	2.5 - 3.75	44
		> 3.75	33
		< 3	71
1.50	LGA150	3 - 4.5	62
		> 4.5	47
		< 3.5	111
1.75	LGA175	3.5 - 5.25	97
		> 5.25	73
		< 4	186
2.00	LGA200	4 - 6	162
		> 6	122

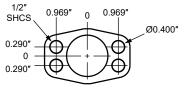
LGA 100 — Guided Retainer with 1.00 Inch Dia. Pin

How to Order

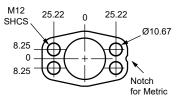
- Optionally choose a spacer plate (S) for retrofitting an existing tool.
- Choose a metric (M) or English inch (E) mount bushing plate.
- Choose a pin length from 3.50 to 16.00 in 1/8 inch increments.
- Use the table below to choose the snap ring slot number.
- Choose a short (S) or long (L) bushing.
- Two load plates are included, hardened to 28-34 HRc.
- · Socket Head Cap Screws not included.

Example Part Callout

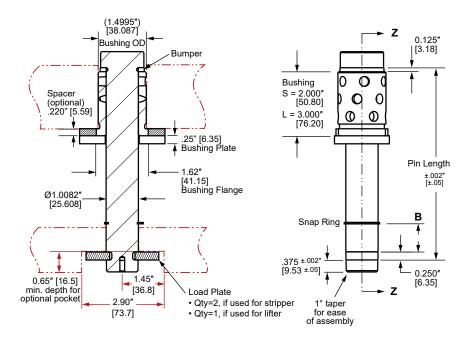
Product Spacer Bushing Plate Pin Dia. Pin Length Snap Ring Bushing Code (optional) Style Slot Style



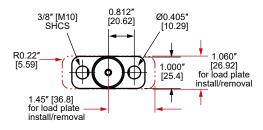




METRIC MOUNT BUSHING PLATE



SECTION Z-Z





Snap Ring Positions

В	Slot
.50	1
.75	2
1.00	3
1.25	4
1.50	5
2.00	6

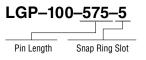
Bore Sizes

Pin	1.009 - 1.010" [25.63 - 25.65]
Bushing	1.500 - 1.501" [38.10 - 38.12]

Replacement Parts

Part #	Description
LGS-100	Spacer Plate
LGSR-100	Snap Ring
LGR-100	Load Plate
LGD-100	Bumper Washer
LGBPE-100	Bushing Plate, English Mount
LGBPM-100	Bushing Plate, Metric Mount
LGB100-S	Bushing, 2.000" Length
LGB100-L	Bushing, 3.000" Length
LGP-100-xxx-x*	Pin

*Example Pin Replacement Callout



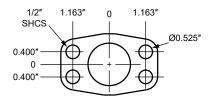
LGA 125 — Guided Retainer with 1.25 Inch Dia. Pin

How to Order

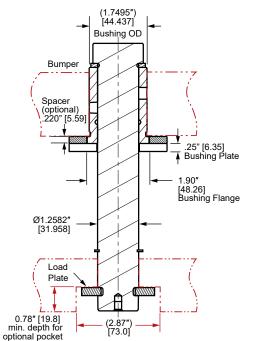
- Optionally choose a spacer plate (S) for retrofitting an existing tool.
- Choose a metric (M) or English inch (E) mount bushing plate.
- Choose a pin length from 3.75 to 16.00 in 1/8 inch increments.
- Use the table below to choose the snap ring slot number.
- · Choose a short (S) or long (L) bushing.
- Two load plates are included, hardened to 28-34 HRc.
- · Socket Head Cap Screws not included.

Example Part Callout

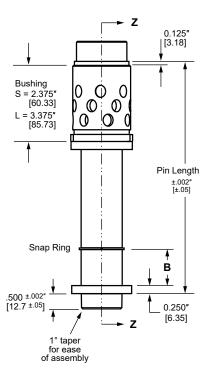
Product Spacer Bushing Plate Pin Dia. Pin Length Snap Ring Bushing Code (optional) Style Slot Style



INCH MOUNT BUSHING PLATE



METRIC MOUNT BUSHING PLATE



Snap Ring Positions

Slot
1
2
3
4
5
6

Bore Sizes

Pin	1.259 - 1.260" [31.98 - 32.00]
Bushing	1.750 - 1.751" [44.45 - 44.47]

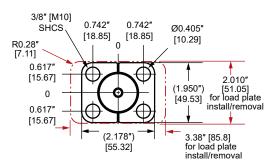
Replacement Parts

Part #	Description
LGS-125	Spacer Plate
LGSR-125	Snap Ring
LGR-125	Load Plate
LGD-125	Bumper Washer
LGBPE-125	Bushing Plate, English Mount
LGBPM-125	Bushing Plate, Metric Mount
LGB125-S	Bushing, 2.375" Length
LGB125-L	Bushing, 3.375" Length
LGP-125-xxx-x*	Pin

*Example Pin Replacement Callout



SECTION Z-Z



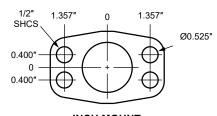
LGA 150 — Guided Retainer with 1.50 Inch Dia. Pin

How to Order

- Optionally choose a spacer plate (S) for retrofitting an existing tool.
- Choose a metric (M) or English inch (E) mount bushing plate.
- Choose a pin length from 3.75 to 16.00 in 1/8 inch increments.
- Use the table below to choose the snap ring slot number.
- · Choose a short (S) or long (L) bushing.
- Two load plates are included, hardened to 28-34 HRc.
- · Socket Head Cap Screws not included.

Example Part Callout

LGASM150-575-5-L Bushing Plate Pin Dia. Product Pin Length Snap Ring Bushing Spacer Code (optional) Style Slot Style

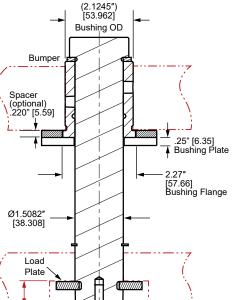


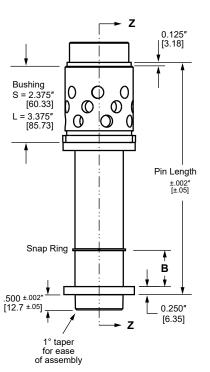
M12 34.00 34.00 SHCS Ø12.70 10.00 0 10.00 Notch for Metric

BUSHING PLATE

METRIC MOUNT

INCH MOUNT BUSHING PLATE

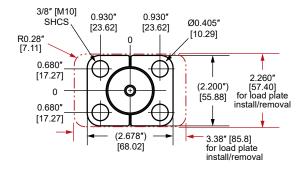




SECTION Z-Z

0.78" [19.8]

min. depth for optional pocket



(3.38″) [85.8]

Snap Ring Positions

Slot
1
2
3
4
5
6

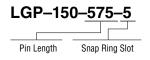
Bore Sizes

Pin	1.509 - 1.510" [38.33 - 38.35]
Bushing	2.125 - 2.126" [53.98 - 54.00]

Replacement Parts

Part #	Description
LGS-150	Spacer Plate
LGSR-150	Snap Ring
LGR-150	Load Plate
LGD-150	Bumper Washer
LGBPE-150	Bushing Plate, English Mount
LGBPM-150	Bushing Plate, Metric Mount
LGB150-S	Bushing, 2.375" Length
LGB150-L	Bushing, 3.375" Length
LGP-150-xxx-x*	Pin

*Example Pin Replacement Callout

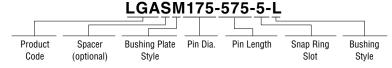


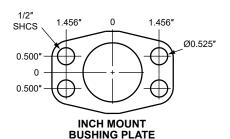
LGA 175 — Guided Retainer with 1.75 Inch Dia. Pin

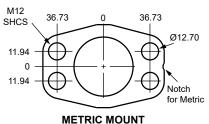
How to Order

- Optionally choose a spacer plate (S) for retrofitting an existing tool.
- Choose a metric (M) or English inch (E) mount bushing plate.
- Choose a pin length from 3.75 to 16.00 in 1/8 inch increments.
- Use the table below to choose the snap ring slot number.
- · Choose a short (S) or long (L) bushing.
- Two load plates are included, hardened to 28-34 HRc.
- · Socket Head Cap Screws not included.

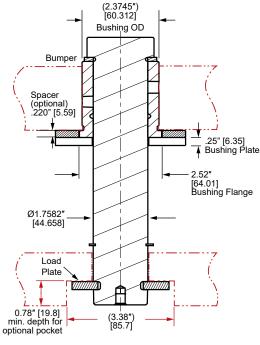
Example Part Callout

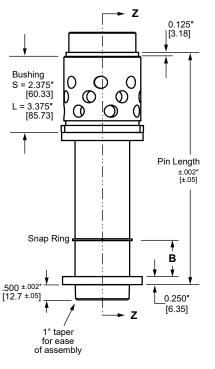






BUSHING PLATE



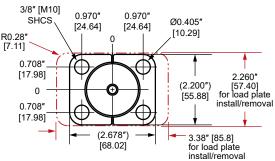


.50	1
.75	2
1.00	3
1.25	4
1.50	5
2.00	6

Bore Sizes

Pin	1.759 - 1.760" [44.68 - 44.70]
Bushing	2.375 - 2.376" [60.33 - 60.35]

SECTION Z-Z



Replacement Parts

Snap Ring Positions

Part #	Description	
LGS-175	Spacer Plate	
LGSR-175	Snap Ring	
LGR-175	Load Plate	
LGD-175	Bumper Washer	
LGBPE-175	Bushing Plate, English Mount	
LGBPM-175	Bushing Plate, Metric Mount	
LGB175-S	Bushing, 2.375" Length	
LGB175-L	Bushing, 3.375" Length	
LGP-175-xxx-x*	Pin	

*Example Pin Replacement Callout



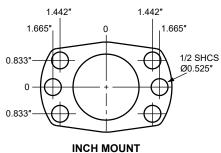
LGA 200 — Guided Retainer with 2.00 Inch Dia. Pin

How to Order

- Optionally choose a spacer plate (S) for retrofitting an existing tool.
- Choose a metric (M) or English inch (E) mount bushing plate.
- Choose a pin length from 5.00 to 16.00 in 1/8 inch increments.
- Use the table below to choose the snap ring slot number.
- · Choose a short (S) or long (L) bushing.
- Two load plates are included, hardened to 28-34 HRc.
- · Socket Head Cap Screws not included.

Example Part Callout

LGASE200-875-5-S Bushing Plate Pin Dia. Product Pin Length Snap Ring Bushing Spacer Code (optional) Style Slot Style

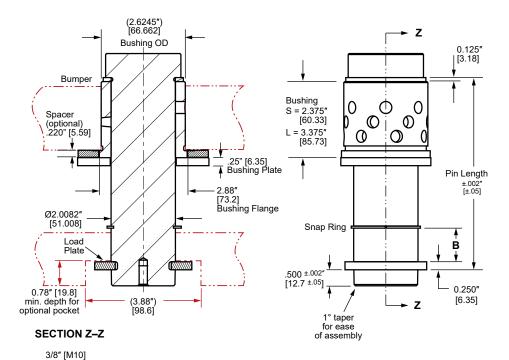


36.17 36.17 41.76 41.76 20.88 Ø12.70 0 Notch for Metric 20.88

M12 SHCS

BUSHING PLATE

METRIC MOUNT **BUSHING PLATE**



3.88" [98.6]

for load plate install/removal



Snap Ring Positions

Slot
1
2
3
4
5
6

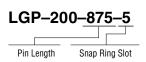
Bore Sizes

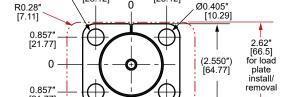
Pin	2.009 - 2.010" [51.03 - 51.05]
Bushina	2.625 - 2.626" [66.68 - 66.70]

Replacement Parts

Part #	Description
LGS-200	Spacer Plate
LGSR-200	Snap Ring
LGR-200	Load Plate
LGD-200	Bumper Washer
LGBPE-200	Bushing Plate, English Mount
LGBPM-200	Bushing Plate, Metric Mount
LGB200-S	Bushing, 2.375" Length
LGB200-L	Bushing, 3.375" Length
LGP-200-xxx-x*	Pin

*Example Pin Replacement Callout





(3.032") [77.01]

1.107" [28.12]

SHCS

1.107" [28.12]

Commitment to Quality & Customer Satisfaction

Dayton Lamina is a leading manufacturer of tool, die and mold components for the metal-working and plastics industries. As a customer-focused, world-class supplier of choice, we provide the brands, product breadth, distribution network and technical support for all your metal forming needs.

Our goal is to give our customers the most innovative and valueadded products and services.











*Dayton Lamina's line of Danly products is available only to North America.

www.daytonlamina.com