

INTERIOR ISOLATORS

SIDEWALL PANEL, FLOOR PANEL, CLOSE-OUT PANEL, ROD ENDS, GROMMETS



A COMPLETE 360 DEGREE SOLUTION TO AN AIRCRAFT'S INTERIOR NOISE AND VIBRATION CHALLENGES

LORD approaches each project with the same process: strive to offer a 360 degree solution and try to isolate all the surfaces in the passenger cabin. Highlighted here are mounts that are particularly good for aircraft interior applications including sidewall panels, floor panels, close-out panels, rod ends and grommets. The performance of these parts will focus on attenuating the noise paths to the passenger by isolating discrete attach points in panels, bulkheads, windows, etc.

Some of the benefits of LORD interior mounts are their compact geometry, lightweight materials, failsafe designs and the quick installing snap-in and thread locking features. Also included with some of the parts is LORD proprietary silicone elastomer providing incredible cold temperature performance while meeting flame, smoke and toxicity requirements.

Also available to customers in the earlier stages of designing an aircraft is the LORD engineering staff that can work with an aircraft OEM to achieve better cabin acoustics. Through years of isolation experience, LORD has come up with guidelines to achieve a quieter cabin. Please contact LORD at +1 877 ASK LORD (275 5673) for more information.

INTERIOR ISOLATORS

SIDEWALL PANEL ISOLATORS



- **Maximum rated load per mount:**
4 to 8 lb (1.8 to 3.6 kg)

- **Weight:**
J-23644-3 – 0.39 oz (11 g)
J-23767-1 – 0.21 oz (6 g)
J-23676-2 – 0.42 oz (11.9 g)

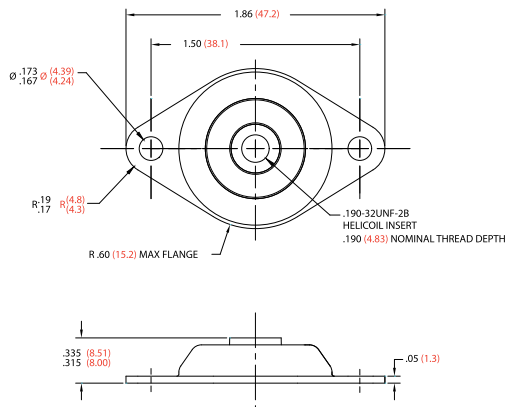
- **Materials:**

Inner member – 304 stainless steel, passivated

Outer member – 6061-T6 or 6061-T6511 aluminum alloy, chromate conversion coated per MIL-C-5541, Class 1A

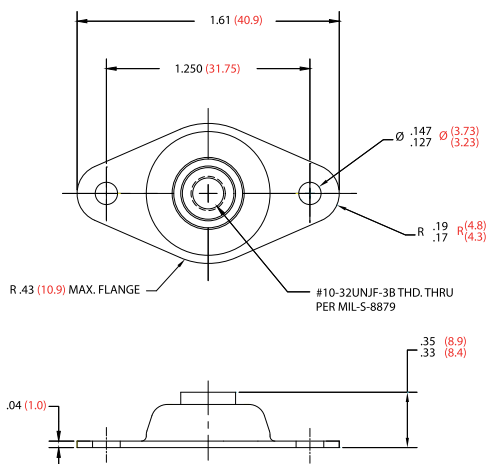
Elastomer – Silicone

**FIGURE 1 – J-23644-3
PART DIMENSIONS**



Metric values in parenthesis.

**FIGURE 2 – J-23676-1
PART DIMENSIONS**



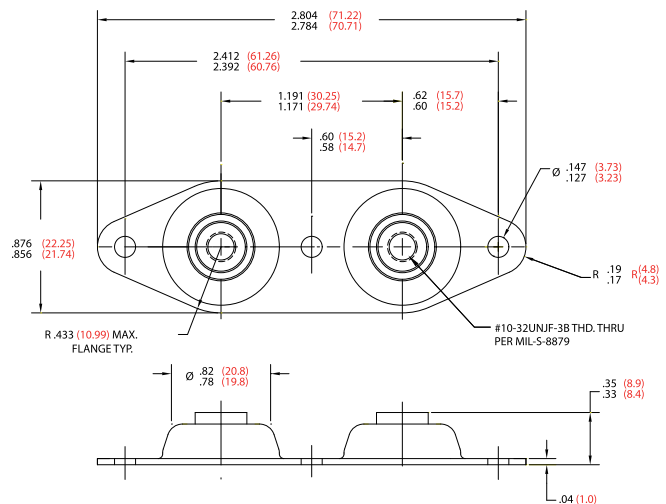
Metric values in parenthesis.

TABLE 1 – PERFORMANCE CHARACTERISTICS

Part Number	Load Rating		Dynamic Axial Spring Rate*		Natural Frequency (Hz)*
	lb	kg	lb/in	N/mm	
J-23644-3	7.5	3.4	700	120	30
J-23676-1	4	1.8	500	87.7	35
J-23676-2	8	3.6	1000	175.4	35

* At 0.002 in (0.05 mm) D.A. input and rated load.

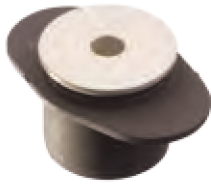
FIGURE 3 – J-23676-2 PART DIMENSIONS



Metric values in parenthesis.

INTERIOR ISOLATORS

FLOOR PANEL - J-23436 SERIES



- **Maximum rated load per mount:**
1 lb (0.45 kg)
- **Weight:**
J-23436-7 – 0.31 oz (8.7 g)
J-23436-8 – 0.27 oz (7.65 g)

- **Materials:**
Inner Member – 6061 aluminum alloy, anodized
Housing – J-23436-7 – 6061-T6 aluminum alloy, anodized;
J-23436-8 – high strength thermoplastic, glass reinforced
Retaining Cap (J-23436-8 only) – high strength thermoplastic, glass reinforced
Elastomer – NR

TABLE 1 – PERFORMANCE CHARACTERISTICS

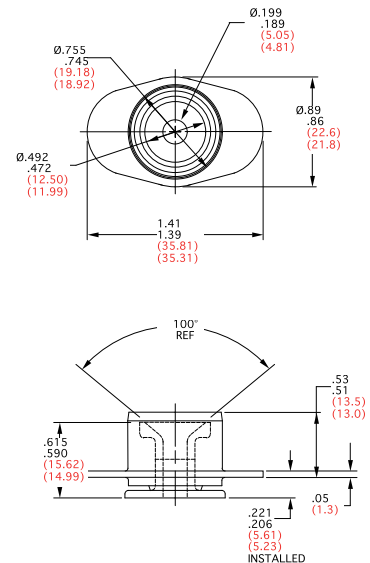
Part Number	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate*	
	lb/in	N/mm	lb/in	N/mm
J-23436-7	489	86	1700	298
J-23436-8	489	86	2000	351

* At 120 Hz with ± .001 in (0.025 mm) input.

Snap-in design accomodating variable panel thickness. No tool required.

These isolators work ideally with aerospace potting epoxy LORD-309GB which is available in bulk, or in various pre-mix commercial packages.

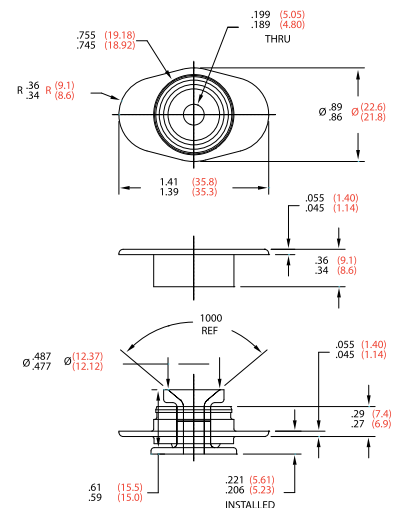
FIGURE 1 – J-23436-7 PART DIMENSIONS



Mechanical stake in 0.40 panel thickness, tool required.

Metric values in parenthesis.

FIGURE 2 – J-23436-8 PART DIMENSIONS



Metric values in parenthesis.

INTERIOR ISOLATORS

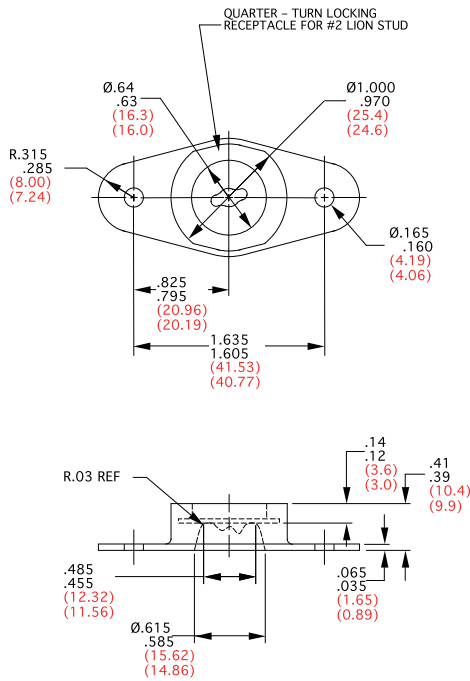
CLOSE-OUT PANEL - J-7444 SERIES



- **Maximum rated load per mount:**
2 lb (0.91 kg)
- **Weight:**
0.20 oz (5.7 g)

- **Materials:**
Base plate – 2024-T3 aluminum alloy, chromate treated per MIL-C-5541, Class 1A
Lock plate – 17-7PH stainless steel, passivated
Elastomer – Silicone

FIGURE 1 – PART DIMENSIONS



Metric values in parenthesis.

TABLE 1 – PERFORMANCE CHARACTERISTICS

Part Number	Dynamic Axial Spring Rate	
	lb/in	N/mm
J-7444-50	309	54.3

The term close-out panel refers to the interior sections which are last to go in and first to come out. Because they are frequently removed, they require a quick installation fastener and these LORD isolators incorporate a convenient quarter-turn fastener.

INTERIOR ISOLATORS

ROD ENDS FOR TURNBUCKLES AND LUGGAGE BINS



- **Maximum rated load per mount:**
60 to 80 lb (27 to 36 kg)
- **Weight:**
0.26 to 0.50 oz (7.3 to 14.1 g)

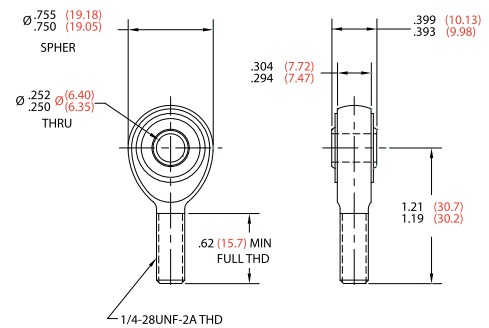
- **Materials:**
Inner member – 7075-T651 aluminum alloy
Rod end – 7075-T6 aluminum alloy
Finish – chromate treated per MIL-DTL-5541, Class 1A
Elastomer – NR

TABLE 1 – PERFORMANCE CHARACTERISTICS

Part Number	Rated Load	Thread Dir	Static Spring Rate		Dynamic Springrate		Ultimate Load		Nat Freq	Weight
	lbs		lb/in	N/mm	lb/in	N/mm	lbs	Kg	Hz	
RA-75-3-1	60	RH	7000	1226	8560	1500	2500	1130	37	0.26
RA-75-3-2	60	LH	7000	1226	8560	1500	2500	1130	37	0.26
RA-80-9-1	70	RH	7000	1226	8560	1500	2800	1270	34.5	0.38
RA-80-9-2	70	LH	7000	1226	8560	1500	2800	1270	34.5	0.38
RA-90-10-1	80	RH	7000	1226	8560	1500	3600	1630	32	0.50
RA-90-10-2	80	LH	7000	1226	8560	1500	3600	1630	32	0.50

Elastomeric Rod ends are a very effective means to isolate turnbuckles and strut applications in the aircraft interiors. Luggage (stow) bins are the most common use, but monuments also benefit from their use.

FIGURE 1 – RA-75-3-X PART DIMENSIONS



Metric values in parenthesis.

FIGURE 3 – RA-90-10-X PART DIMENSIONS

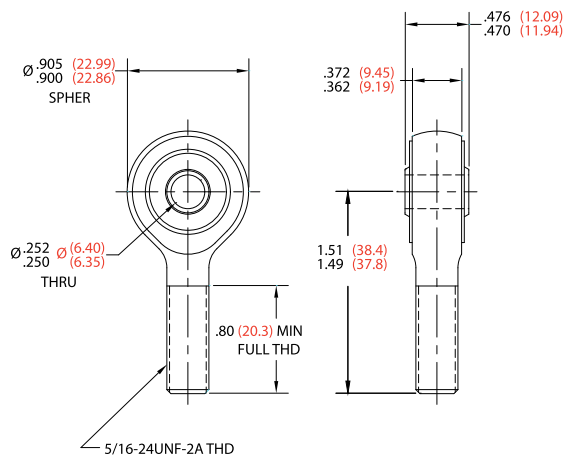
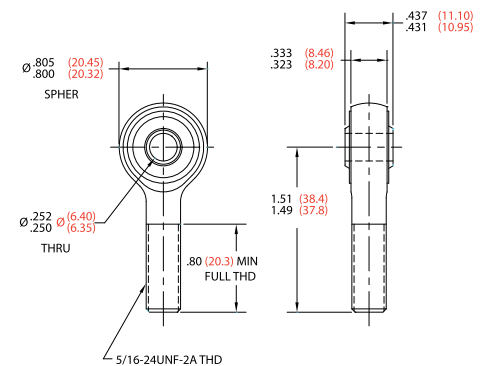


FIGURE 2 – RA-90-9-X PART DIMENSIONS



Metric values in parenthesis.

INTERIOR ISOLATORS

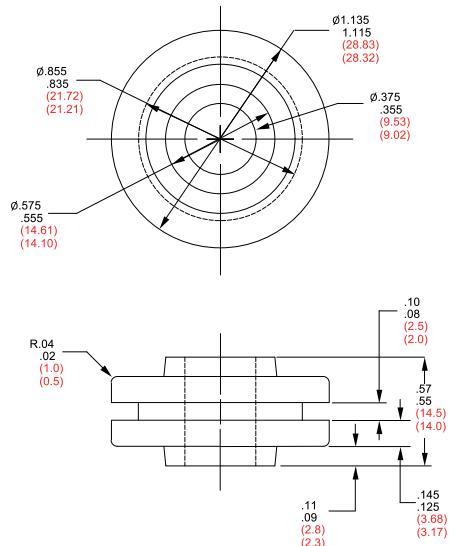
GROMMETS - FOR LIGHT STRUCTURE AND WINDOW REVEALS



- **Maximum rated load per mount:**
.25 to 3.5 lb (.11 to 1.6 kg)
- **Weight:**
.08 to .19 oz (2.27 to 5.39 g)

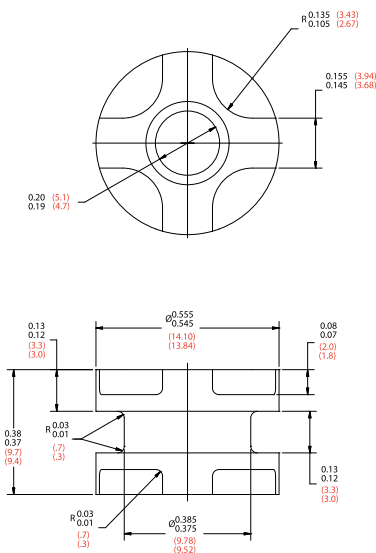
- **Materials:**
Elastomer – Silicone
Spacer (CB-1077-52) – Alloy steel, cadmium plated

FIGURE 2 – J-28132-1 PART DIMENSIONS



Metric values in parenthesis.

FIGURE 4 – CB-1077-52 PART DIMENSIONS



Metric values in parenthesis.

Elastomeric Grommets are an effective means to decoupling light weight panels and to avoiding a "short-circuit" in acoustic treatments. Wind reveals, door trim and bulkhead fascia are common uses.

FIGURE 1 – J-28132-1 INSTALLATION DRAWING

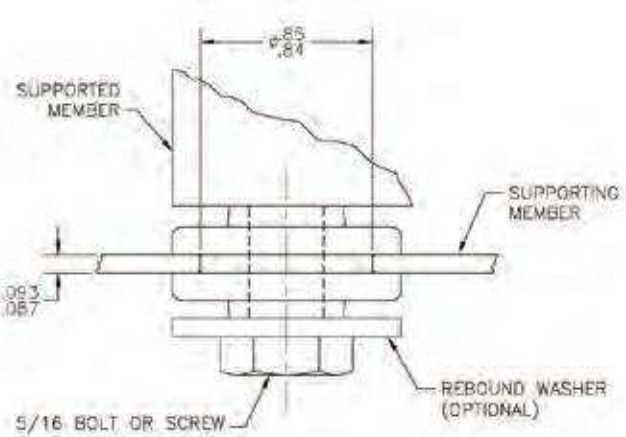


FIGURE 3 – CB-1077-52 INSTALLATION DRAWING

