



# STABILIZER CYLINDERS



EXPERIENCE • EXPERTISE • QUALITY • SERVICE



# STABILIZER

**RAM** Mechanical Locking Stabilizer cylinders replace manual systems used to position equipment at a desired location and height. Traditional methods to secure equipment are the use of crank type trailer jacks, manual jacking and blocking systems, or the use of fixed hydraulic lifting jacks and wood blocking to set equipment in place.

The primary advantages of replacing these manual methods of stabilizing equipment with a RAM Mechanical Locking Stabilizer cylinder are operator ease, speed, and accuracy. These unique cylinders provide infinite adjustments over a long range which means operators can more quickly and precisely set equipment in the field before use. Furthermore, the positive locking feature provides greater assurance there will be no creeping from the desired settings.

RAM offers a standard, pre-engineered line up of Mechanical Locking Stabilizer cylinders in Standard and Ball End designs for quick order turnaround. Each model includes a wide range of standard features to accommodate many OEM applications. Standard Stabilizer cylinder sizes range in bore diameters from 4" to 6", and stroke lengths from 12" to 30".

All standard RAM Stabilizer cylinders are pressure rated up to 3000 PSI. Every RAM Stabilizer cylinder model features an external adjustable solid or split ring mechanism that locks the Stabilizer in position and eliminates the need for manual blocking.

RAM Mechanical Locking Stabilizer cylinders are commonly used for levelling and outrigger applications, including:

- **Aggregate Equipment:**  
Crushers, screen decks, conveyors, grizzlies, etc.
- **Trailers used for fixed location deployment:**  
Mobile radar, communication towers, observation trailers, etc.
- **Oil and Gas Sector Equipment:**  
Service rigs, coiled tubing rigs, drilling rigs, catwalks, pipe tubs, etc.
- **Mobile Cranes:**  
Commercial and industrial crane applications



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# STANDARD FEATURES

**Intended Use:** Leveling and outrigger applications

**Rated Pressure:** 3000 PSI

**Rod Material:** High tensile SAE C1026/St2.3 DOM, hard chrome plated

**Barrel Material:** High tensile SAE C1026/St52.3 cold drawn tube precision honed for extended seal life

**Gland Material:** Ductile iron 65-45-12 (ASTM A536)

**Piston Material:** Ductile iron 65-45-12 (ASTM A536)

**Piston Locknut:** High tensile grade C

**Locking Nut:** 44W steel

**Locking Thread:** 4 TPI Acme

**Ports:** NPTF

**Port Plugs:** High quality steel

**Internal Seals:** North American

**Paint Finish:** 2 part urethane black (or custom colors)

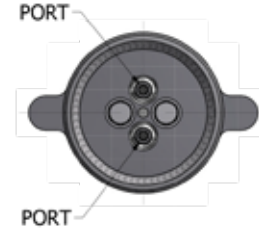
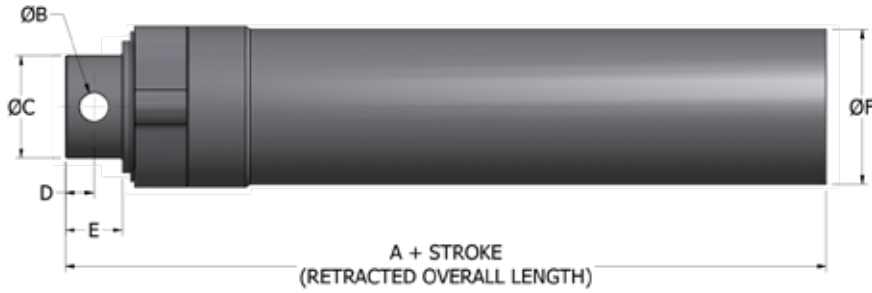
**Testing:** 100% full cycle tested

# BUILT TO YOUR SPECIFICATIONS

- Ball end mounts
- Solid or Split locking nut
- Jacking pad
- Custom mounts
- Internal pilot operated check valve
- Internal counterbalance valve
- ORB ports
- Side ports
- Custom stroke length



# STANDARD STABILIZER (SOLID LOCKING NUT)



Bore (inches)	A	B	C	D	E	F	Ports	Thread
4.00	13.25	1.28	3.50	1.25	2.50	5.50	1/4 NPTF	5.00-4 ACME 2G
5.00	13.25	1.28	4.50	1.25	2.50	6.75	1/4 NPTF	6.00-4 ACME 2G
6.00	13.25	1.28	4.50	1.25	2.50	8.00	1/4 NPTF	7.00-4 ACME 2G

Measurements for A, B, C, D, E, F are in inches.

All Specifications are subject to change without notice.



Bore (inches)	RAM Part Number	Stroke (inches)	Rod Diameter (inches)	Overall Length (inches)		Ports	Pin Diameter Nominal (inches)	Cylinder Push* (lbf)	Maximum Load** (lbf)	Shipping Weight (lbs)
				Retracted	Extended					
4.00	R4507400	12.00	3.500	25.25	37.25	1/4 NPTF	1.250	37700	129000	104
	R4506811	14.75		28.00	42.75					114
	R4507402	20.00		33.25	53.25					133
	R4507404	24.00		37.25	61.25					148
	R4507406	30.00		43.25	73.25					169
5.00	R4507408	12.00	3.500	25.25	37.25	1/4 NPTF	1.250	58900	156100	140
	R4506812	14.75		28.00	42.75					153
	R4507319	20.00		33.25	53.25					177
	R4507410	24.00		37.25	61.25					195
	R4507412	30.00		43.25	73.25					222
6.00	R4507414	12.00	4.500	25.25	37.25	1/4 NPTF	1.250	84800	212800	216
	R4506813	14.75		28.00	42.75					235
	R4507416	20.00		33.25	53.25					272
	R4506931	24.00		37.25	61.25					300
	R4507418	30.00		43.25	73.25					341

\* Cylinder push is calculated at the design pressure of 3000 PSI.

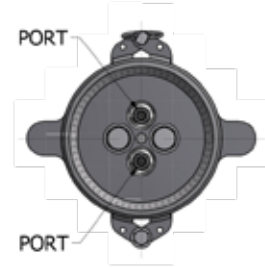
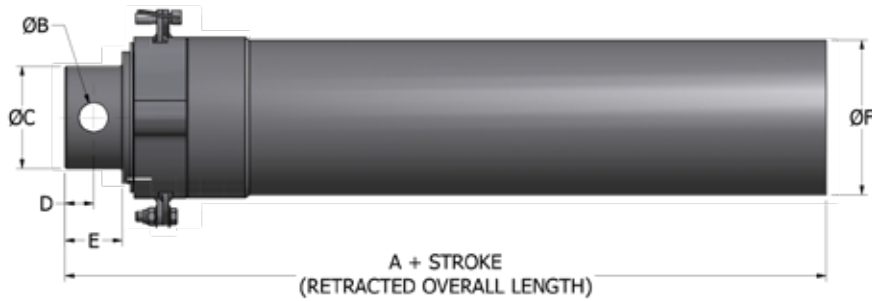
\*\* Maximum Load is based on a SF of 2, and is applicable when the stabilizer is in the locked position.

All Specifications are subject to change without notice.  
All weights are approximate shipping weights.



**STANDARD STABILIZER  
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# STANDARD STABILIZER (SPLIT LOCKING NUT)



Bore (inches)	A	B	C	D	E	F	Ports	Thread
4.00	13.25	1.28	3.50	1.25	2.50	5.50	1/4 NPTF	5.00-4 ACME 2G
5.00	13.25	1.28	4.50	1.25	2.50	6.75	1/4 NPTF	6.00-4 ACME 2G
6.00	13.25	1.28	4.50	1.25	2.50	8.00	1/4 NPTF	7.00-4 ACME 2G

Measurements for A, B, C, D, E, F are in inches.

All Specifications are subject to change without notice.

Bore (inches)	RAM Part Number	Stroke (inches)	Rod Diameter (inches)	Overall Length (inches)		Ports	Pin Diameter Nominal (inches)	Cylinder Push* (lbf)	Maximum Load** (lbf)	Shipping Weight (lbs)
				Retracted	Extended					
4.00	R4507420	12.00	3.500	25.25	37.25	1/4 NPTF	1.250	37700	129000	104
	R4507421	14.75		28.00	42.75					114
	R4507422	20.00		33.25	53.25					133
	R4507423	24.00		37.25	61.25					148
	R4507424	30.00		43.25	73.25					169
5.00	R4507425	12.00	3.500	25.25	37.25	1/4 NPTF	1.250	58900	156100	140
	R4507426	14.75		28.00	42.75					153
	R4507427	20.00		33.25	53.25					177
	R4507428	24.00		37.25	61.25					195
	R4507429	30.00		43.25	73.25					222
6.00	R4507430	12.00	4.500	25.25	37.25	1/4 NPTF	1.250	84800	212800	216
	R4507431	14.25		28.00	42.75					235
	R4507432	20.00		33.25	53.25					272
	R4507433	24.00		37.25	61.25					300
	R4507434	30.00		43.25	73.25					341

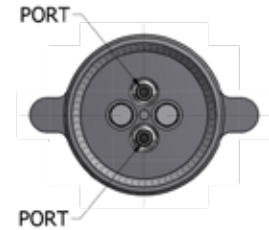
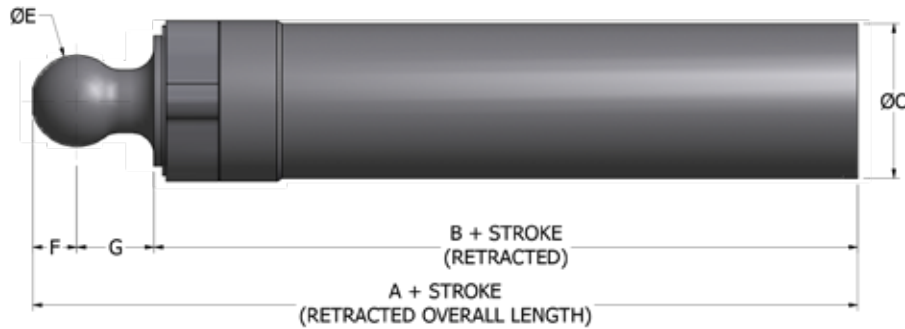
\* Cylinder push is calculated at the design pressure of 3000 PSI.

\*\* Maximum Load is based on a SF of 2, and is applicable when the stabilizer is in the locked position.

All Specifications are subject to change without notice.

All weights are approximate shipping weights.

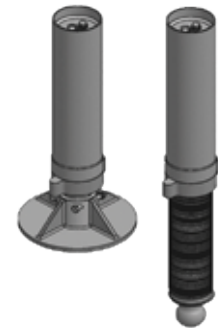
# BALL END STABILIZER (SOLID LOCKING NUT)



Bore (inches)	A	B	C	D	E	F	G	H	Ports	Thread
4.00	14.88	10.75	5.50	3.63	4.00	1.30	2.00	12.00	1/4 NPTF	5.00-4 ACME 2G
5.00	17.50	10.75	6.75	5.75	4.00	1.93	3.38	16.00	1/4 NPTF	6.00-4 ACME 2G
6.00	17.50	10.75	8.00	5.75	4.00	1.93	3.38	16.00	1/4 NPTF	7.00-4 ACME 2G

Measurements for A, B, C, D, E, F, G, H are in inches.

All Specifications are subject to change without notice.



Bore (inches)	RAM Part Number	Stroke (inches)	Rod Diameter (inches)	Overall Length (inches)		Ports	Pin Diameter Nominal (inches)	Cylinder Push* (lbf)	Maximum Load** (lbf)	Shipping Weight (lbs)
				Retracted	Extended					
4.00	R4507700	12.00	3.500	28.38	40.38	1/4 NPTF	4.000	37700	129000	128
	R4507701	14.75		30.81	45.56					138
	R4507702	20.00		40.06	56.06					157
	R4507703	24.00		46.05	64.06					172
	R4507704	30.00		44.88	76.05					193
5.00	R4507705	12.00	3.500	28.06	40.06	1/4 NPTF	4.000	58900	156100	214
	R4506903	14.75		30.81	45.56					226
	R4507206	20.00		36.06	56.06					251
	R4507706	24.00		40.06	64.06					269
	R4507707	30.00		46.05	76.05					296
6.00	R4507708	12.00	4.500	28.06	40.06	1/4 NPTF	4.000	84800	212800	290
	R4507709	14.75		30.81	45.56					309
	R4507710	20.00		36.06	56.06					345
	R4507711	24.00		40.06	64.06					374
	R4507712	30.00		46.05	76.05					415

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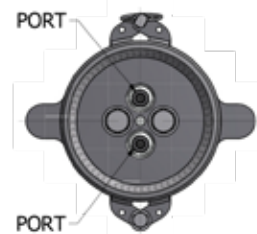
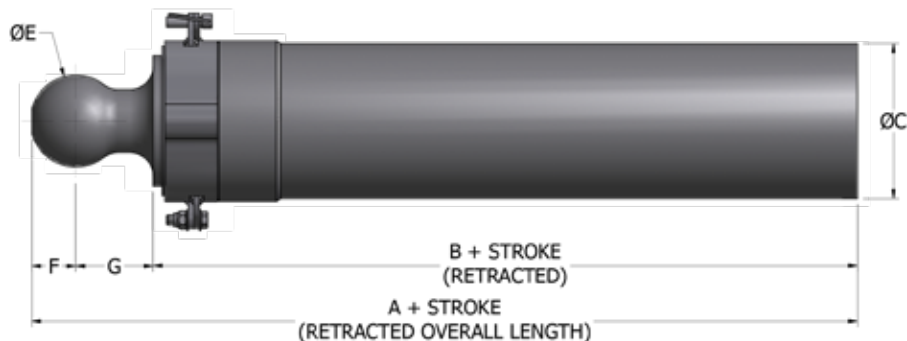
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**BALL END STABILIZER  
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# BALL END STABILIZER (SPLIT LOCKING NUT)



Bore (inches)	A	B	C	D	E	F	G	H	Ports	Thread
4.00	14.88	10.75	5.50	3.63	4.00	1.30	2.00	12.00	1/4 NPTF	5.00-4 ACME 2G
5.00	17.50	10.75	6.75	5.75	4.00	1.93	3.38	16.00	1/4 NPTF	6.00-4 ACME 2G
6.00	17.50	10.75	8.00	5.75	4.00	1.93	3.38	16.00	1/4 NPTF	7.00-4 ACME 2G

Measurements for A, B, C, D, E, F, G, H are in inches.

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Bore (inches)	RAM Part Number	Stroke (inches)	Rod Diameter (inches)	Overall Length (inches)		Ports	Pin Diameter Nominal (inches)	Cylinder Push* (lbf)	Maximum Load** (lbf)	Shipping Weight (lbs)
				Retracted	Extended					
4.00	R4507713	12.00	3.500	28.38	40.38	1/4 NPTF	4.000	37700	129000	128
	R4507714	14.75		30.81	45.56					138
	R4507715	20.00		40.06	56.06					157
	R4507716	24.00		46.05	64.06					172
	R4507717	30.00		44.88	76.05					193
5.00	R4507718	12.00	3.500	28.06	40.06	1/4 NPTF	4.000	58900	156100	214
	R4507719	14.75		30.81	45.56					226
	R4507720	20.00		36.06	56.06					251
	R4507721	24.00		40.06	64.06					269
	R4507722	30.00		46.05	76.05					296
6.00	R4507723	12.00	4.500	28.06	40.06	1/4 NPTF	4.000	84800	212800	290
	R4507724	14.25		30.81	45.56					309
	R4507725	20.00		36.06	56.06					345
	R4507726	24.00		40.06	64.06					374
	R4507727	30.00		46.05	76.05					415

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