

# STABILIZER CYLINDERS

**OEM HYDRAULIC CYLINDER SPECIALISTS** 



# 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. Such as:

#### Aggregate:

- Crushers
- Screen decks
- Conveyors
- Grizzlies, etc.

#### Trailers used for fixed location deployment:

- Mobile radar
- Communication towers
- Observation trailers, etc.

#### Oil and Gas Sector:

- Service rigs
- Coiled tubing rigs
- Drilling rigs
- Catwalks
- Pipe rubs, etc.

#### Mobile Cranes:

Commercial and industrial crane applications





### STANDARD FEATURES

Intended Use:	Leveling and outrigger applications
<b>Rated Pressure:</b>	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 CLocking Nut:44W steelLocking Thread:4 TPI acmePorts:NPTFPort Plugs:High quality steelInternal Seals:North AmericanPaint Finish:2 part urethane blackTesting:100% full cycle tested

### **BUILT TO YOUR SPECIFICATIONS**

- Ball end mounts
- Solid locking nut
- Split locking nut
- Jacking pad
- Custom mounts

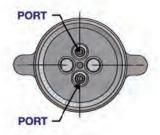
- Internal pilot operated check valve
- Internal counterbalance valve
- ORB ports
- Side ports
- Custom stroke length





# **STANDARD STABILIZER** SOLID LOCKING NU





Bore Size (inches)	А	В	С	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	

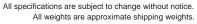


Measurements for A, B, C, D, E, F are in inches.

All specifications are subject to change without notice.

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





# **STANDARD STABILIZER** SPLIT LOCKING NUT





Bore Size (inches)	А	В	С	D	Е	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.

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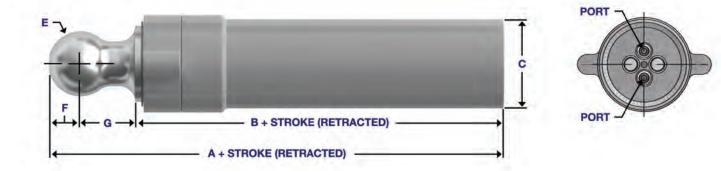
Bore Size	RAM Part	Stroke	Rod Diameter (inches)		Overall Length (inches)		Pin Diameter	Cylinder Push*	Maximum Load**	Shipping Weight
(inches)	Number	(inches)		Retracted	Extended		Nominal (inches)	(lbf)	(lbf)	(lbs)
	R4507420	12.00		25.25	37.25					104
	R4507421	14.75		28.00	42.75		1.250	37700		114
4.00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

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# **BALL END STABILIZER** SOLID LOCKING NU



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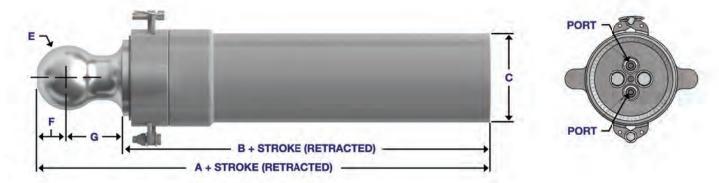
Bore RAM Size Part		Stroke	Rod Diameter	Overall Length (inches)		Ports	Pin Diameter	Cylinder Push*	Maximum Load**	Shipping Weight
(inches)	Number	(inches)	(inches)	Retracted	Extended		Nominal (inches)	(lbf)	(lbf)	(lbs)
	R4507700	12.00		28.38	40.38					128
	R4507701	14.75		30.81	45.56		4.000	37700	129000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

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### **BALL END STABILIZER** OCKING NL





А	В	С	D	Е	F	G	н	Ports	Thread
14.88	10.75	5.50	3.63	4.00	1.30	2.00	12.00	1/4 NPTF	5.00-4 ACME 2G
17.50	10.75	6.75	5.75	4.00	1.93	3.38	16.00	1/4 NPTF	6.00-4 ACME 2G
17.50	10.75	8.00	5.75	4.00	1.93	3.38	16.00	1/4 NPTF	7.00-4 ACME 2G
	14.88 17.50	14.88         10.75           17.50         10.75	14.88         10.75         5.50           17.50         10.75         6.75	14.88         10.75         5.50         3.63           17.50         10.75         6.75         5.75	14.88         10.75         5.50         3.63         4.00           17.50         10.75         6.75         5.75         4.00	14.88         10.75         5.50         3.63         4.00         1.30           17.50         10.75         6.75         5.75         4.00         1.93	14.88         10.75         5.50         3.63         4.00         1.30         2.00           17.50         10.75         6.75         5.75         4.00         1.93         3.38	14.88         10.75         5.50         3.63         4.00         1.30         2.00         12.00           17.50         10.75         6.75         5.75         4.00         1.93         3.38         16.00	14.88         10.75         5.50         3.63         4.00         1.30         2.00         12.00         1/4 NPTF           17.50         10.75         6.75         5.75         4.00         1.93         3.38         16.00         1/4 NPTF

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

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