

UP TO 250 psi OPERATING PRESSURES

WITH

*LIFETIME CUSHIONS*

*& IMPACT BUSHINGS*

*As Standard Equipment*

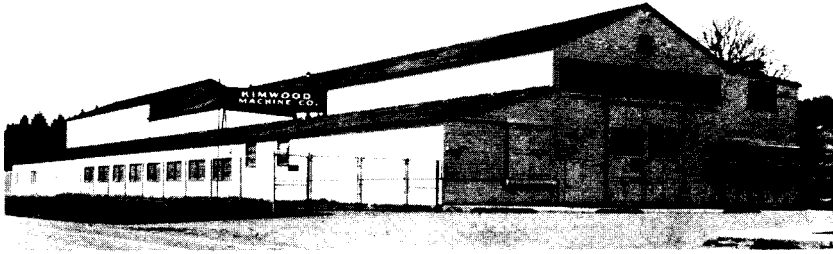
**DOUBLE ACTING**

**KIMWOOD**

***"Pacific Coast"***

**AIR CYLINDERS**

CATALOG No. 201



KIMWOOD MACHINE CO., COTTAGE GROVE, ORE.

## KIMWOOD "Pacific Coast" AIR CYLINDERS *Reliable!*

"Pacific Coast<sup>1</sup> Cylinders," manufactured in the heart of the Northwest's lumber and plywood industries, have been designed to take every abuse. Long noted for severe demands on equipment, the Pacific coast's industries have been the proving grounds for these cylinders.

Kimwood Pacific Coast<sup>1</sup> cylinders are engineered with one purpose in mind, to properly operate equipment without failure or down-time. The following features are part of the planning to make this the best cylinder on the market.

### LIFETIME CUSHIONS

Using a bypass check valve there is nothing to wear out, no choke plugs to score, no loose riders on the piston. The cushion will still operate after years of continuous use exactly as originally set. A cushion which must constantly be adjusted to do the job is an expensive cushion. Kimwood lifetime cushions never require adjustment.

### IMPACT BUSHINGS

The piston of an air cylinder must ultimately transmit any shock loading to the cylinder heads. If the shock is within reasonable limits it is absorbed by the cushion and no problem

arises. If, however, the piston is driven against the head with an overload the shock becomes a metal to metal impact.

All Kimwood Pacific Coast<sup>1</sup> cylinders have impact bushings mounted within the piston to handle these high shock conditions. Made from resilient neoprene and placed in direct compression, the bushings take the shocks which damage conventional cylinders and cause replacements.

### WRAP AROUND HEADS

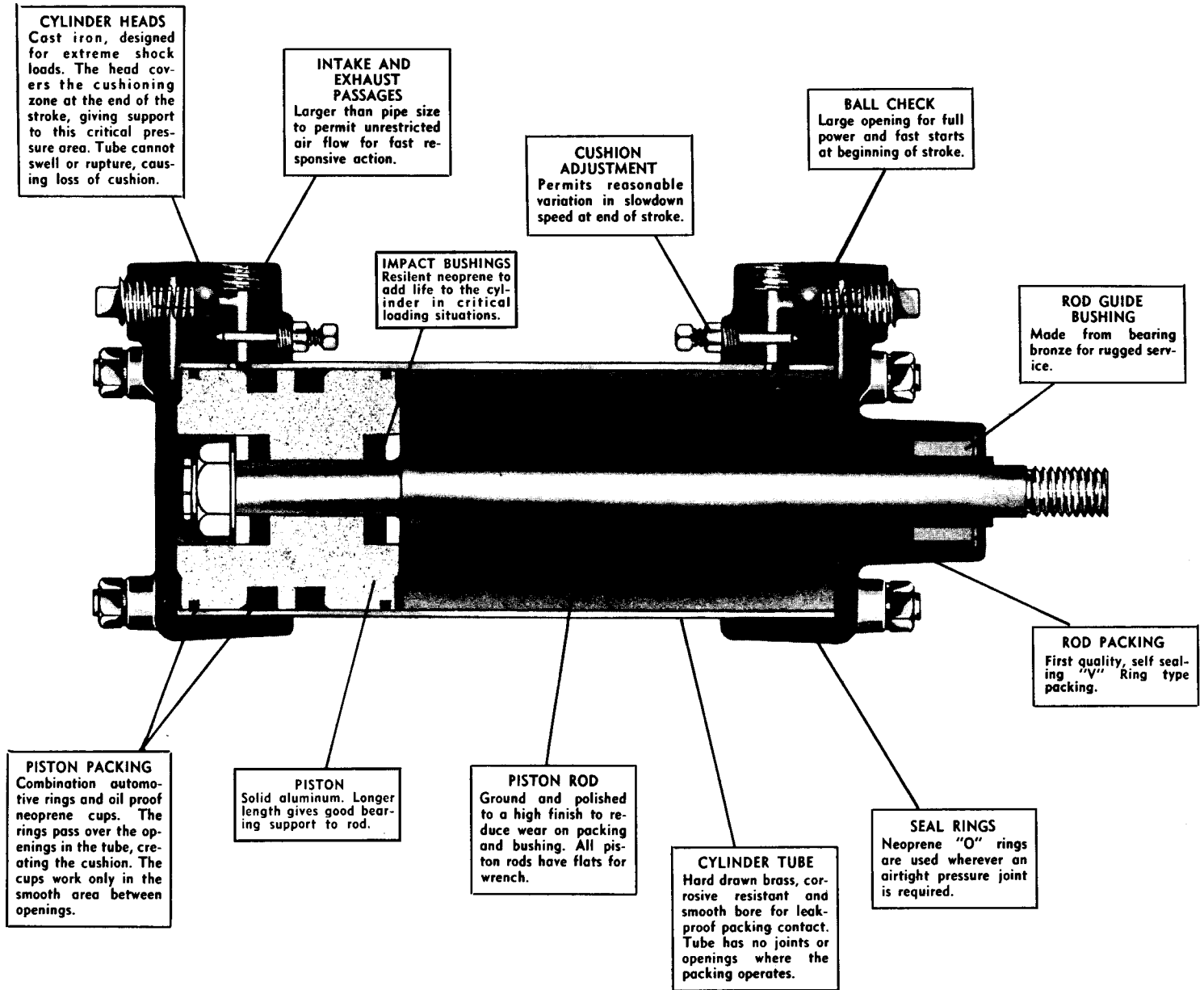
All stock "Pacific Coast"<sup>1</sup> cylinders use heads with wrap-around construction to support the barrel during cushioning. This prevents the so often bulging of barrels in unsupported cushioning zones.

### OTHER FEATURES

OTHER FEATURES are shown on pages 3, 13 and 21 with cutaway diagrams. See these additional features and the following specifications, then choose the cylinder that fits your needs. There is a cylinder to do every job, and a Kimwood Pacific Coast cylinder will do it best.

# KIMWOOD NORMAL DUTY AIR CYLINDERS

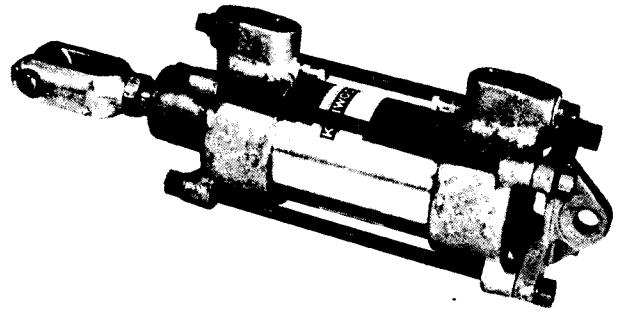
For Operating Pressures Up To 150 psi



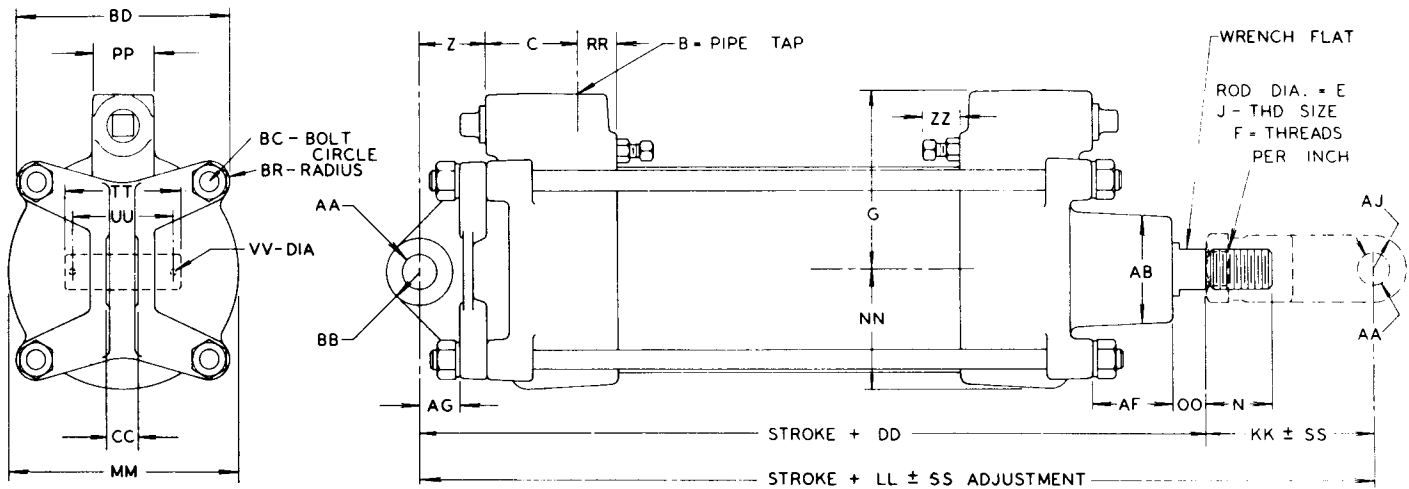
*Double Acting!*  
*Adjustable Cushions!*  
*Wrap-Around Heads!*

*Combination Packing!*  
*Impact Bushings!*  
*One-Piece Piston!*

# Style No. 1 PENDULUM MOUNTED SINGLE EAR



## 150 PSI – STEEL MOUNTINGS



All Dimensions Are in Inches

Bore	B	C	E	F	G	J	N	Z	AA	BB	CC	DD	KK	LL	MM	NN	OO	PP	RR	SS
2	1/4	1 5/8	3/4	18	2 1/8	5/8	1 1/8	7/8	1/2	1/2	3/8	7 1/8	2 1/8	10	2 1/8	1 1/8	1/2	1 1/8	3/4	3/32
2 1/2	3/8	1 5/8	3/4	18	2 3/8	5/8	1 1/8	7/8	1/2	1/2	3/8	7 1/8	2 1/8	10	3 1/2	1 3/4	1/2	1 1/8	3/4	3/32
3	3/8	1 3/4	1	16	3 3/8	3/4	1 3/4	1 1/4	5/8	5/8	1/2	8 1/8	3 1/8	11 1/8	4	2	1/2	1 1/4	3/4	1/8
3 1/2	3/8	1 3/4	1	16	3 3/8	3/4	1 3/4	1 1/4	5/8	5/8	1 1/8	8 1/8	3 3/8	11 1/8	4 1/2	2 1/4	1/2	1 1/4	3/4	1/8
4	3/8	2	1 1/4	14	3 11/16	7/8	2	1 1/2	3/4	1 3/16	3/4	9 3/16	3 15/16	13 1/8	5 1/8	2 1/8	5/8	1 1/4	1 3/16	3/16
5	1/2	2 1/4	1 1/2	12	4 3/8	1 1/4	2 1/2	1 5/8	7/8	1 5/16	7/8	10 3/8	4 1/2	14 7/8	6 1/4	3 1/8	3/4	1 1/2	1 5/16	1/8
6	3/4	2 1/2	2	12	5 1/8	1 1/2	2 3/4	1 7/8	1	1 1/16	1 1/8	11 3/4	5 3/4	17 1/2	7 3/8	3 11/16	3/4	2	1 1/8	3/16

Bore	TT	UU	VV	ZZ	AB	AF	AG	AJ	BC	BD	BR	Bore	APPROXIMATE SHIPPING WEIGHTS	
2	1 1/16	1 3/8	1/8	3/4	1 3/4	1 3/16	1/2	1/2	3 3/8	2 1/8	3/8	2	Base Weight	7.8 lbs. + .4 lb./in. Stroke
2 1/2	1 1/16	1 3/8	1/8	3/4	1 3/4	1 3/16	1/2	1/2	3 1/2	3 3/8	3/8	2 1/2	Base Weight	9.3 lbs. + .4 lb./in. Stroke
3	2	1 3/4	1/8	3/4	2 1/8	1 1/2	3/4	5/8	4 1/4	3 3/8	3/16	3	Base Weight	14.4 lbs. + .73 lb./in. Stroke
3 1/2	2	1 3/4	1/8	3/4	2 1/8	1 1/2	3/4	5/8	4 3/4	4 3/8	3/16	3 1/2	Base Weight	17.8 lbs. + .8 lb./in. Stroke
4	2 3/8	2	3/16	3/4	3	1 1/4	7/8	1 3/16	5 1/4	4 11/16	1/2	4	Base Weight	24.5 lbs. + 1 lb./in. Stroke
5	2 1/2	2 1/8	3/16	3/4	3 1/4	1 5/16	1	1 5/16	6 3/8	5 5/8	5/16	5	Base Weight	41.5 lbs. + 1.4 lb./in. Stroke
6	3 1/4	2 1/2	3/16	3/4	4	1 3/8	1 1/8	1 1/8	7 1/16	6 3/8	5/8	6	Base Weight	67.6 lbs. + 2 lb./in. Stroke

# SPECIFICATIONS

## SIZES, DIMENSIONS AND WEIGHTS

Sizes, dimensions and weights are given in this catalog on all Kimwood Pacific Coast<sup>1</sup> air cylinders. Special cylinders and stock 10" and 12" cylinder data available on request.

## LOAD CAPACITIES

Maximum operating pressures are shown with each detailed drawing for easy reference. Force outputs for various operating pressures are tabulated on the inside back cover. See Table 1.

## AIR REQUIREMENTS

Volume of free air per stroke can easily be obtained from Table 2 on inside back cover. It is important that sufficient air be supplied to the cylinder for proper performance. For aid in complete air system design consult factory.

## ADDITIONAL OPERATING MEDIA

Light non-foaming oil can be used in low pressure hydraulic installations not exceeding 400 p.s.i. for normal duty cylinders and 600 p.s.i. for heavy duty cylinders. For use with any other fluid, including water, consult factory.

## OPERATING TEMPERATURES

Temperatures above 250° F. are to be avoided with stock cylinders. For higher temperature applications consult factory.

## MATERIALS

Only highest quality materials are used in the manufacture of Kimwood "Pacific Coast"<sup>1</sup> air cylinders as indicated below.

### HEADS

- Grey cast iron in normal duty cylinders.
- Cast steel in heavy duty cylinders.

### BARRELS

- Hard drawn brass alloy #218<sup>2</sup> in 2" to 4" bores
- Hard drawn brass alloy #59<sup>2</sup> in 5" to 8" bores

### PISTONS

- Wrought aluminum #2024-T4 in 2" to 5" bores
- Cast aluminum alloy #356<sup>3</sup> in 6" and 8" bores

### RODS

- 1020 CRS polished at assembly.

<sup>1</sup> Patents applied for.

<sup>2</sup> ASTM Specification #B135.

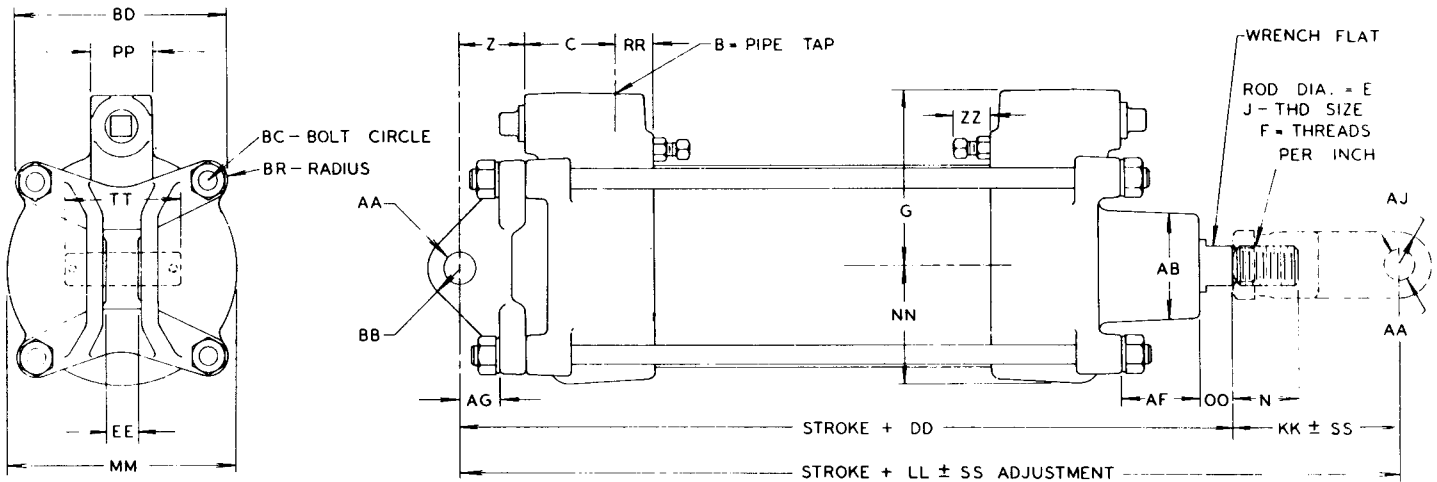
<sup>3</sup> ASTM Specification #B108-50T.

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# Style No. 2 PENDULUM MOUNTED DOUBLE EAR

## 150 PSI – STEEL MOUNTINGS

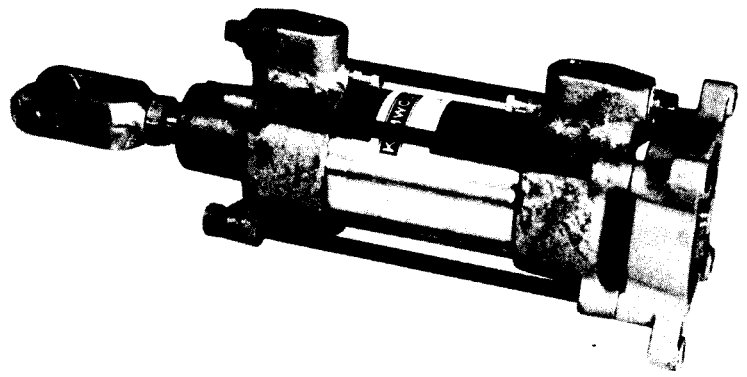


All Dimensions Are in Inches

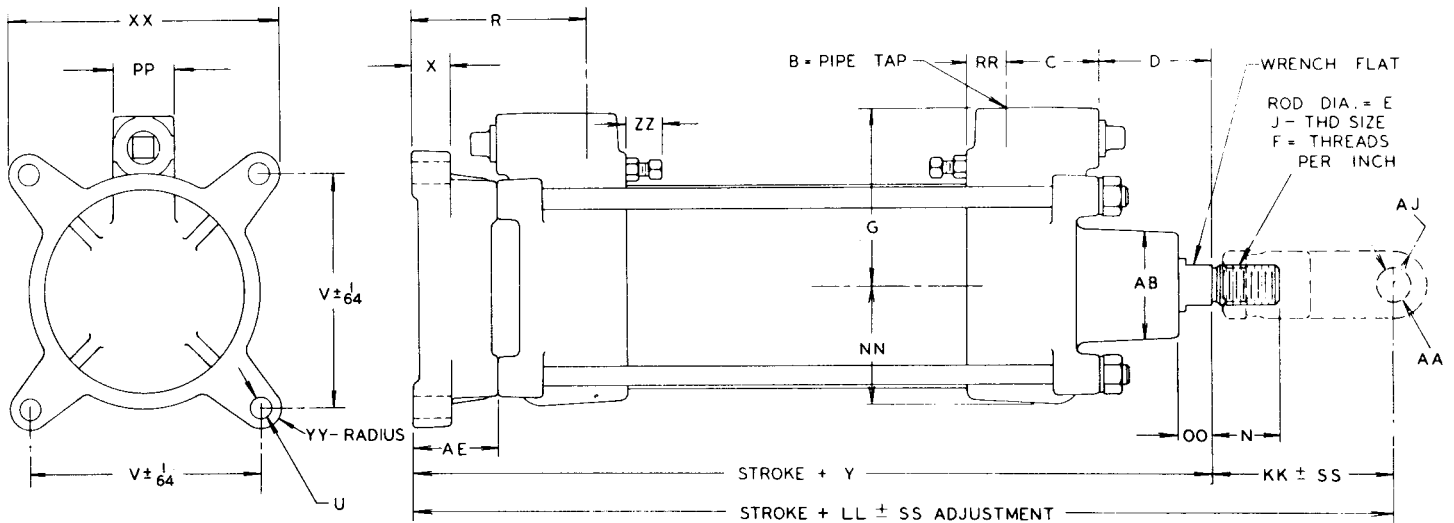
Bore	B	C	E	F	G	J	N	Z	AA	BB	DD	EE	KK	LL	MM	NN	OO	PP	RR
2	1/4	1 5/8	3/4	18	2 7/16	7/16	1 1/16	7/8	1/2	1/2	7 1/16	1/2	2 15/16	10	2 13/16	1 7/16	1/2	1 1/8	3/4
2 1/2	3/8	1 5/8	3/4	18	2 5/8	7/16	1 1/16	7/8	1/2	1/2	7 1/16	1/2	2 15/16	10	3 1/2	1 3/4	1/2	1 1/8	3/4
3	3/8	1 3/4	1	16	3 1/8	3/4	1 3/4	1 1/4	5/8	5/8	8 1/8	3/4	3 3/16	11 1/16	4	2	1/2	1 1/4	3/4
3 1/2	3/8	1 3/4	1	16	3 3/8	3/4	1 3/4	1 1/4	5/8	5/8	8 1/8	3/4	3 3/16	11 1/16	4 1/2	2 1/4	1/2	1 1/4	3/4
4	3/8	2	1 1/4	14	3 11/16	7/8	2	1 1/2	3/4	1 1/16	9 3/16	7/8	3 15/16	13 3/8	5 1/8	2 1/16	5/8	1 1/4	1 1/16
5	1/2	2 1/4	1 1/2	12	4 3/8	1 1/4	2 1/2	1 5/8	7/8	1 5/16	10 3/8	1 1/16	4 1/2	14 7/8	6 1/4	3 3/8	3/4	1 1/2	1 5/16
6	3/4	2 1/2	2	12	5 1/8	1 1/2	2 3/4	1 7/8	1	1 1/16	11 1/4	1 1/16	5 3/4	17 1/2	7 3/8	3 11/16	3/4	2	1 1/8

Bore	SS	TT	ZZ	AB	AF	AG	AJ	BC	BD	BR	Bore	APPROXIMATE SHIPPING WEIGHTS	
2	7/32	1 1/16	3/4	1 3/4	1 5/16	1/2	1/2	3 3/8	2 15/16	3/8	2	Base Weight 7.8 lbs. + .4 lb./in. Stroke	
2 1/2	7/32	1 1/16	3/4	1 3/4	1 5/16	1/2	1/2	3 1/2	3 3/16	3/8	2 1/2	Base Weight 9.3 lbs. + .4 lb./in. Stroke	
3	1/8	2	3/4	2 1/8	1 1/2	3/4	5/8	4 1/4	3 7/8	7/16	3	Base Weight 14.5 lbs. + .73 lb./in. Stroke	
3 1/2	1/8	2	3/4	2 1/8	1 1/2	3/4	5/8	4 1/4	4 5/16	7/16	3 1/2	Base Weight 17.9 lbs. + .8 lb./in. Stroke	
4	3/16	2 3/8	3/4	3	1 1/4	7/8	1 1/16	5 1/4	4 1/16	1/2	4	Base Weight 24.7 lbs. + 1 lb./in. Stroke	
5	1/8	2 1/2	3/4	3 1/4	1 5/16	1	1 5/16	6 3/8	5 5/8	1/16	5	Base Weight 41.8 lbs. + 1.4 lb./in. Stroke	
6	3/16	3 1/4	3/4	4	1 3/8	1 1/8	1 1/8	7 11/16	6 7/8	3/8	6	Base Weight 68.1 lbs. + 2 lb./in. Stroke	

# Style No. 3 FLANGE MOUNTED BLIND END



## 150 PSI – STEEL MOUNTINGS

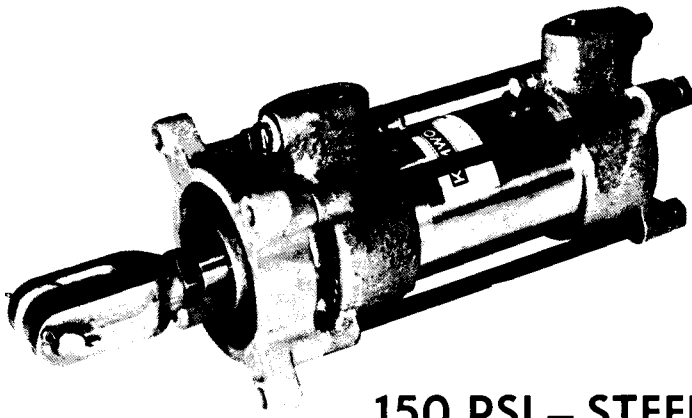


All Dimensions Are in Inches

Bore	B	C	D	E	F	G	H	J	N	R	U	V	X	Y	AA	KK	LL	NN	OO
2	1/4	1 5/8	1 13/16	3/4	18	2 1/16	1 1/2	5/16	1 1/16	3 1/16	1 1/32	3 3/16	3/4	7 5/8	1/2	2 1/16	10 1/16	1 1/16	1/2
2 1/2	3/8	1 5/8	1 13/16	3/4	18	2 5/8	1 11/16	5/16	1 1/16	3 1/16	1 1/32	3 3/16	3/4	7 5/8	1/2	2 1/16	10 1/16	1 1/4	1/2
3	3/8	1 3/4	2	1	16	3 1/8	2 1/8	3/4	1 3/4	3 3/8	1 1/32	4 5/32	3/4	8 1/2	5/8	3 3/16	11 11/16	2	1/2
3 1/2	3/8	1 3/4	2	1	16	3 3/8	2 3/16	3/4	1 3/4	3 3/8	1 1/32	4 15/32	3/4	8 1/2	5/8	3 3/16	11 11/16	2 1/4	1/2
4	3/8	2	2 3/16	1 1/4	14	3 11/16	2 11/16	7/8	2	3 11/16	1 1/32	5 1/32	3/4	9 3/8	3/4	3 11/16	13 3/16	2 1/16	5/8
5	1/2	2 1/4	2 7/16	1 1/2	12	4 3/8	3 1/2	1 1/4	2 1/2	4	1 1/32	6 3/16	7/8	10 1/2	7/8	4 1/2	15	3 3/8	3/4
6	3/4	2 1/2	2 3/8	2	12	5 1/8	3 3/8	1 1/2	2 3/4	4 1/2	2 1/32	7 1/16	1	11 7/8	1	5 3/4	17 5/8	3 11/16	3/4

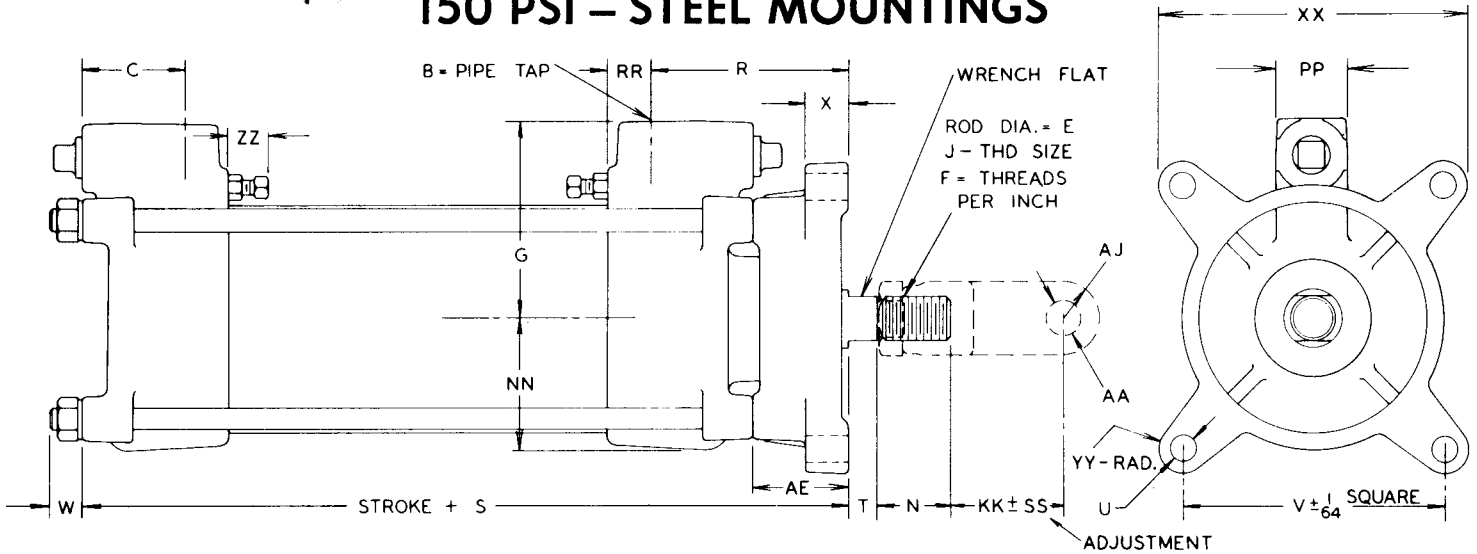
Bore	PP	RR	SS	XX	YY	ZZ	AB	AE	AJ	Bore	APPROXIMATE SHIPPING WEIGHTS
2	1 1/8	3/4	3/32	3 3/8	3/8	3/4	1 3/4	1 1/16	1/2	2	Base Weight 8.5 lbs. + .4 lb./in. Stroke
2 1/2	1 1/8	3/4	3/32	4 3/16	3/8	3/4	1 3/4	1 1/16	1/2	2 1/2	Base Weight 10.1 lbs. + .4 lb./in. Stroke
3	1 1/4	3/4	1/8	5	1/2	3/4	2 1/8	1 5/8	5/8	3	Base Weight 15.5 lbs. + .73 lb./in. Stroke
3 1/2	1 1/4	3/4	1/8	5 5/16	1/2	3/4	2 1/8	1 5/8	5/8	3 1/2	Base Weight 19.5 lbs. + .8 lb./in. Stroke
4	1 1/4	1 3/16	3/16	5 15/16	5/16	3/4	3	1 3/4	1 1/16	4	Base Weight 25.7 lbs. + 1 lb./in. Stroke
5	1 1/2	1 5/16	1/8	7 3/8	5/8	3/4	3 1/4	1 3/4	1 5/16	5	Base Weight 43 lbs. + 1.4 lb./in. Stroke
6	2	1 1/8	3/16	8 3/8	1 1/16	3/4	4	2	1 1/8	6	Base Weight 71 lbs. + 2 lb./in. Stroke





# Style No. 4 FLANGE MOUNTED ROD END

## 150 PSI – STEEL MOUNTINGS

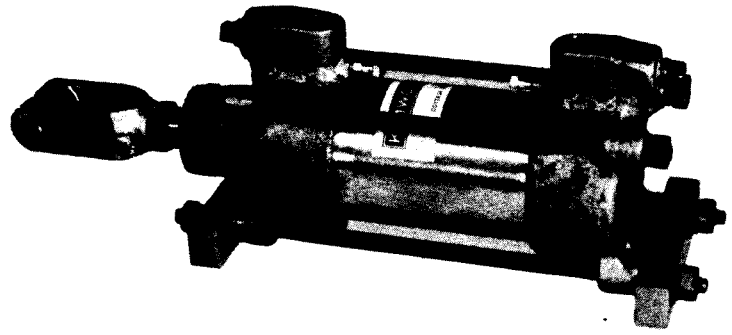


All Dimensions Are in Inches

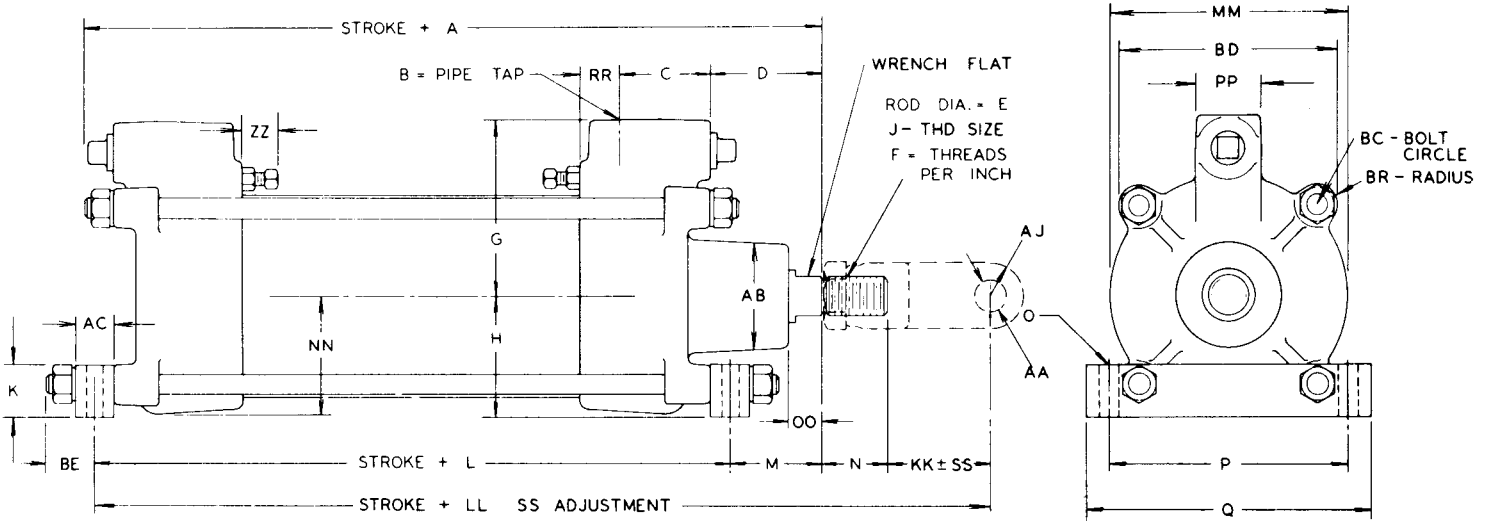
Bore	B	C	E	F	G	J	N	R	S	T	U	V	W	X	AA	KK	NN
2	1/4	1 5/8	3/4	18	2 1/16	9/16	1 1/16	3 1/16	5 13/16	3/8	1 1/32	3 3/16	1/16	3/4	1/2	1 5/8	1 1/16
2 1/2	3/8	1 5/8	3/4	18	2 5/8	9/16	1 1/16	3 1/16	5 13/16	3/8	1 1/32	3 3/16	1/16	3/4	1/2	1 5/8	1 3/4
3	3/8	1 3/4	1	16	3 3/8	3/4	1 3/4	3 3/8	6 1/2	3/8	1 3/32	4 5/32	3/4	3/4	5/8	1 15/16	2
3 1/2	3/8	1 3/4	1	16	3 3/8	3/4	1 3/4	3 3/8	6 1/2	3/8	1 3/32	4 15/16	3/4	3/4	5/8	1 15/16	2 1/4
4	3/8	2	1 1/4	14	3 11/16	7/8	2	3 11/16	7 1/16	1/2	1 5/32	5 5/32	1 1/16	3/4	3/4	2 3/16	2 1/16
5	1/2	2 1/4	1 1/2	12	4 3/8	1 1/4	2 1/2	4	8 3/8	5/8	1 9/32	6 3/16	7/8	7/8	7/8	2 3/8	3 3/8
6	3/4	2 1/2	2	12	5 1/8	1 1/2	2 3/4	4 1/2	9 1/4	5/8	2 1/32	7 1/16	1 5/16	1	1	3 3/8	3 11/16

Bore	PP	RR	SS	XX	YY	ZZ	AE	AJ	Bore	APPROXIMATE SHIPPING WEIGHTS
2	1 1/8	3/4	7/32	3 7/8	3/8	3/4	1 1/16	1/2	2	Base Weight 8.5 lbs. + .4 lb./in. Stroke
2 1/2	1 1/8	3/4	7/32	4 3/16	3/8	3/4	1 1/16	1/2	2 1/2	Base Weight 10.1 lbs. + .4 lb. in. Stroke
3	1 1/4	3/4	1/8	5	1/2	3/4	1 5/8	5/8	3	Base Weight 15.5 lbs. + .73 lb./in. Stroke
3 1/2	1 1/4	3/4	1/8	5 5/16	1/2	3/4	1 5/8	5/8	3 1/2	Base Weight 19.5 lbs. + .8 lb./in. Stroke
4	1 1/4	1 1/16	3/16	5 15/16	5/16	3/4	1 3/4	1 1/16	4	Base Weight 25.7 lbs. + 1 lb./in. Stroke
5	1 1/2	1 5/16	1/8	7 3/8	5/8	3/4	1 3/4	1 5/16	5	Base Weight 43 lbs. + 1.4 lb./in. Stroke
6	2	1 1/8	3/16	8 3/8	1 1/16	3/4	2	1 1/8	6	Base Weight 71 lbs. + 2 lb./in. Stroke

# Style No. 5 FOOT MOUNTED



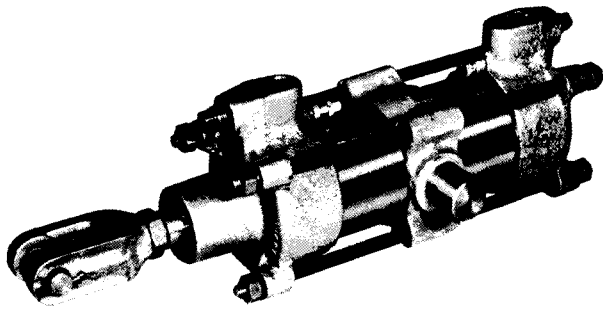
## 150 PSI – STEEL MOUNTINGS



All Dimensions Are in Inches

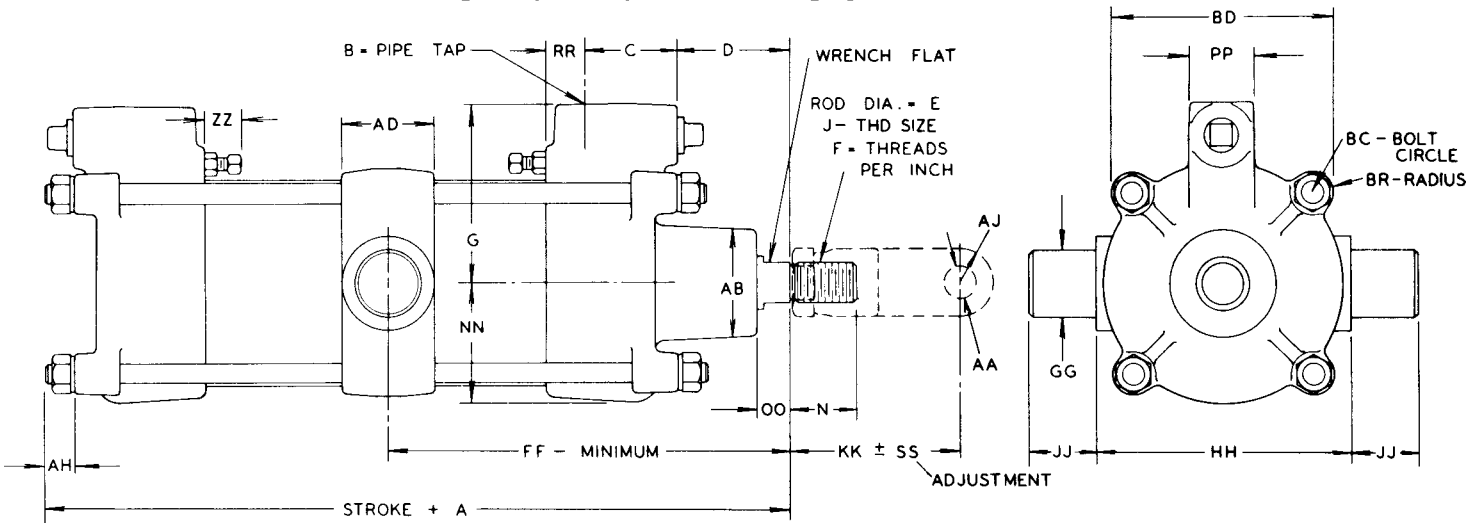
Bore	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	AA	KK	LL	MM	NN
2	6 $\frac{3}{4}$	$\frac{1}{4}$	1 $\frac{5}{8}$	1 $\frac{1}{6}$	$\frac{3}{4}$	18	2 $\frac{1}{6}$	1 $\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	5	1 $\frac{1}{2}$	1 $\frac{1}{6}$	$\frac{1}{32}$	3 $\frac{1}{6}$	3 $\frac{1}{6}$	$\frac{1}{2}$	1 $\frac{5}{8}$	9 $\frac{1}{6}$	2 $\frac{1}{6}$	1 $\frac{1}{6}$
2 $\frac{1}{2}$	6 $\frac{3}{4}$	$\frac{3}{8}$	1 $\frac{5}{8}$	1 $\frac{1}{6}$	$\frac{3}{4}$	18	2 $\frac{5}{8}$	1 $\frac{1}{6}$	$\frac{5}{8}$	1	5	1 $\frac{1}{2}$	1 $\frac{1}{6}$	$\frac{1}{32}$	3 $\frac{3}{8}$	4	$\frac{1}{2}$	1 $\frac{5}{8}$	9 $\frac{1}{6}$	3 $\frac{1}{2}$	1 $\frac{3}{4}$
3	7 $\frac{3}{8}$	$\frac{3}{8}$	1 $\frac{3}{4}$	2	1	16	3 $\frac{1}{8}$	2 $\frac{1}{8}$	$\frac{3}{4}$	1	5 $\frac{1}{2}$	1 $\frac{1}{6}$	1 $\frac{3}{4}$	$\frac{1}{32}$	4 $\frac{1}{4}$	5	$\frac{5}{8}$	1 $\frac{1}{6}$	10 $\frac{1}{2}$	4	2
3 $\frac{1}{2}$	7 $\frac{3}{8}$	$\frac{3}{8}$	1 $\frac{3}{4}$	2	1	16	3 $\frac{3}{8}$	2 $\frac{1}{6}$	$\frac{3}{4}$	1	5 $\frac{1}{2}$	1 $\frac{1}{6}$	1 $\frac{3}{4}$	$\frac{1}{32}$	4 $\frac{1}{2}$	5 $\frac{3}{8}$	$\frac{5}{8}$	1 $\frac{1}{6}$	10 $\frac{1}{2}$	4 $\frac{1}{2}$	2 $\frac{1}{4}$
4	8 $\frac{1}{2}$	$\frac{3}{8}$	2	2 $\frac{3}{6}$	1 $\frac{1}{4}$	14	3 $\frac{1}{6}$	2 $\frac{1}{6}$	$\frac{7}{8}$	1 $\frac{1}{4}$	6 $\frac{1}{2}$	1 $\frac{1}{6}$	2	$\frac{1}{32}$	5 $\frac{1}{8}$	6	$\frac{3}{4}$	2 $\frac{1}{6}$	12 $\frac{1}{8}$	5 $\frac{1}{8}$	2 $\frac{1}{6}$
5	9 $\frac{5}{8}$	$\frac{1}{2}$	2 $\frac{1}{4}$	2 $\frac{1}{6}$	1 $\frac{1}{2}$	12	4 $\frac{3}{8}$	3 $\frac{1}{2}$	1 $\frac{1}{4}$	2	7 $\frac{5}{8}$	1 $\frac{1}{6}$	2 $\frac{1}{2}$	$\frac{1}{32}$	6 $\frac{3}{4}$	7 $\frac{1}{8}$	$\frac{7}{8}$	2 $\frac{3}{8}$	13 $\frac{1}{6}$	6 $\frac{1}{4}$	3 $\frac{1}{8}$
6	10 $\frac{1}{6}$	$\frac{3}{4}$	2 $\frac{1}{4}$	2 $\frac{5}{8}$	2	12	5 $\frac{1}{8}$	3 $\frac{3}{8}$	1 $\frac{1}{2}$	2	8 $\frac{1}{2}$	2	2 $\frac{3}{4}$	$\frac{1}{32}$	7 $\frac{3}{4}$	9	1	3 $\frac{3}{8}$	16 $\frac{1}{4}$	7 $\frac{3}{8}$	3 $\frac{1}{6}$

Bore	OO	PP	RR	SS	ZZ	AB	AC	AJ	BC	BD	BE	BR	Bore	APPROXIMATE SHIPPING WEIGHTS
2	$\frac{1}{2}$	1 $\frac{1}{8}$	$\frac{3}{4}$	$\frac{1}{32}$	$\frac{3}{4}$	1 $\frac{3}{4}$	$\frac{5}{8}$	$\frac{1}{2}$	3 $\frac{1}{8}$	2 $\frac{1}{6}$	1 $\frac{1}{6}$	$\frac{3}{8}$	2	Base Weight 8.1 lbs. + .4 lb./in. Stroke
2 $\frac{1}{2}$	$\frac{1}{2}$	1 $\frac{1}{8}$	$\frac{3}{4}$	$\frac{1}{32}$	$\frac{3}{4}$	1 $\frac{3}{4}$	$\frac{5}{8}$	$\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{6}$	1 $\frac{1}{6}$	$\frac{3}{8}$	2 $\frac{1}{2}$	Base Weight 10 lbs. + .4 lb./in. Stroke
3	$\frac{1}{2}$	1 $\frac{1}{4}$	$\frac{3}{4}$	$\frac{1}{8}$	$\frac{3}{4}$	2 $\frac{1}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	4 $\frac{1}{4}$	3 $\frac{7}{8}$	1 $\frac{5}{6}$	$\frac{1}{6}$	3	Base Weight 15 lbs. + .73 lb./in. Stroke
3 $\frac{1}{2}$	$\frac{1}{2}$	1 $\frac{1}{4}$	$\frac{3}{4}$	$\frac{1}{8}$	$\frac{3}{4}$	2 $\frac{1}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	4 $\frac{3}{4}$	4 $\frac{1}{6}$	1 $\frac{5}{6}$	$\frac{1}{6}$	3 $\frac{1}{2}$	Base Weight 18.8 lbs. + .8 lb./in. Stroke
4	$\frac{5}{8}$	1 $\frac{1}{4}$	1 $\frac{3}{6}$	$\frac{3}{6}$	$\frac{3}{4}$	3	1	1 $\frac{1}{6}$	5 $\frac{1}{4}$	4 $\frac{1}{6}$	1 $\frac{1}{4}$	$\frac{1}{2}$	4	Base Weight 26 lbs. + 1 lb./in. Stroke
5	$\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{5}{6}$	$\frac{1}{8}$	$\frac{3}{4}$	3 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{5}{6}$	6 $\frac{3}{8}$	5 $\frac{5}{8}$	1 $\frac{3}{8}$	$\frac{1}{6}$	5	Base Weight 47.5 lbs. + 1.4 lb./in. Stroke
6	$\frac{3}{4}$	2	1 $\frac{1}{8}$	$\frac{3}{6}$	$\frac{3}{4}$	4	1 $\frac{1}{4}$	1 $\frac{1}{8}$	7 $\frac{1}{6}$	6 $\frac{7}{8}$	1 $\frac{1}{2}$	$\frac{5}{8}$	6	Base Weight 73.9 lbs. + 2 lb./in. Stroke



# Style No. 6 TRUNNION MOUNTED

## 150 PSI – STEEL MOUNTINGS



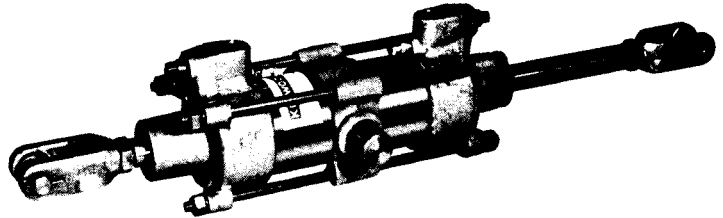
All Dimensions Are in Inches

Bore	A	B	C	D	E	F	G	J	N	FF	GG	HH	JJ	AA	KK	NN	OO	PP	RR
2	6 $\frac{3}{4}$	$\frac{1}{4}$	1 $\frac{5}{8}$	1 $\frac{13}{16}$	$\frac{3}{4}$	18	2 $\frac{1}{8}$	$\frac{9}{16}$	1 $\frac{1}{16}$	5 $\frac{15}{16}$	1 $\frac{1}{16}$	3 $\frac{1}{4}$	1	$\frac{1}{2}$	2 $\frac{1}{16}$	1 $\frac{1}{16}$	$\frac{1}{2}$	1 $\frac{1}{8}$	$\frac{3}{4}$
2 $\frac{1}{2}$	6 $\frac{3}{4}$	$\frac{3}{8}$	1 $\frac{5}{8}$	1 $\frac{13}{16}$	$\frac{3}{4}$	18	2 $\frac{5}{8}$	$\frac{9}{16}$	1 $\frac{1}{16}$	5 $\frac{15}{16}$	1 $\frac{1}{16}$	3 $\frac{1}{2}$	1	$\frac{1}{2}$	2 $\frac{1}{16}$	1 $\frac{3}{4}$	$\frac{1}{2}$	1 $\frac{1}{8}$	$\frac{3}{4}$
3	7 $\frac{5}{8}$	$\frac{3}{8}$	1 $\frac{3}{4}$	2	1	16	3 $\frac{1}{8}$	$\frac{3}{4}$	1 $\frac{3}{4}$	6 $\frac{3}{8}$	1 $\frac{1}{16}$	4	1 $\frac{1}{4}$	$\frac{5}{8}$	3 $\frac{3}{16}$	2	$\frac{1}{2}$	1 $\frac{1}{4}$	$\frac{3}{4}$
3 $\frac{1}{2}$	7 $\frac{5}{8}$	$\frac{3}{8}$	1 $\frac{3}{4}$	2	1	16	3 $\frac{3}{8}$	$\frac{3}{4}$	1 $\frac{3}{4}$	6 $\frac{3}{8}$	1 $\frac{1}{16}$	4 $\frac{1}{2}$	1 $\frac{1}{4}$	$\frac{5}{8}$	3 $\frac{3}{16}$	2 $\frac{1}{4}$	$\frac{1}{2}$	1 $\frac{1}{4}$	$\frac{3}{4}$
4	8 $\frac{1}{2}$	$\frac{3}{8}$	2	2 $\frac{3}{16}$	1 $\frac{1}{4}$	14	3 $\frac{1}{16}$	$\frac{7}{8}$	2	7	1 $\frac{1}{16}$	6	1 $\frac{1}{2}$	$\frac{3}{4}$	3 $\frac{1}{16}$	2 $\frac{1}{16}$	$\frac{5}{8}$	1 $\frac{1}{4}$	1 $\frac{1}{16}$
5	9 $\frac{5}{8}$	$\frac{1}{2}$	2 $\frac{1}{4}$	2 $\frac{1}{16}$	1 $\frac{1}{2}$	12	4 $\frac{3}{8}$	1 $\frac{1}{4}$	2 $\frac{1}{2}$	7 $\frac{1}{16}$	1 $\frac{1}{16}$	6 $\frac{1}{2}$	1 $\frac{1}{2}$	$\frac{7}{8}$	4 $\frac{1}{2}$	3 $\frac{1}{8}$	$\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{16}$
6	10 $\frac{1}{16}$	$\frac{3}{4}$	2 $\frac{1}{4}$	2 $\frac{5}{8}$	2	12	5 $\frac{1}{8}$	1 $\frac{1}{2}$	2 $\frac{3}{4}$	8 $\frac{1}{8}$	1 $\frac{1}{16}$	8	1 $\frac{3}{4}$	1	5 $\frac{3}{4}$	3 $\frac{1}{16}$	$\frac{3}{4}$	2	1 $\frac{1}{8}$

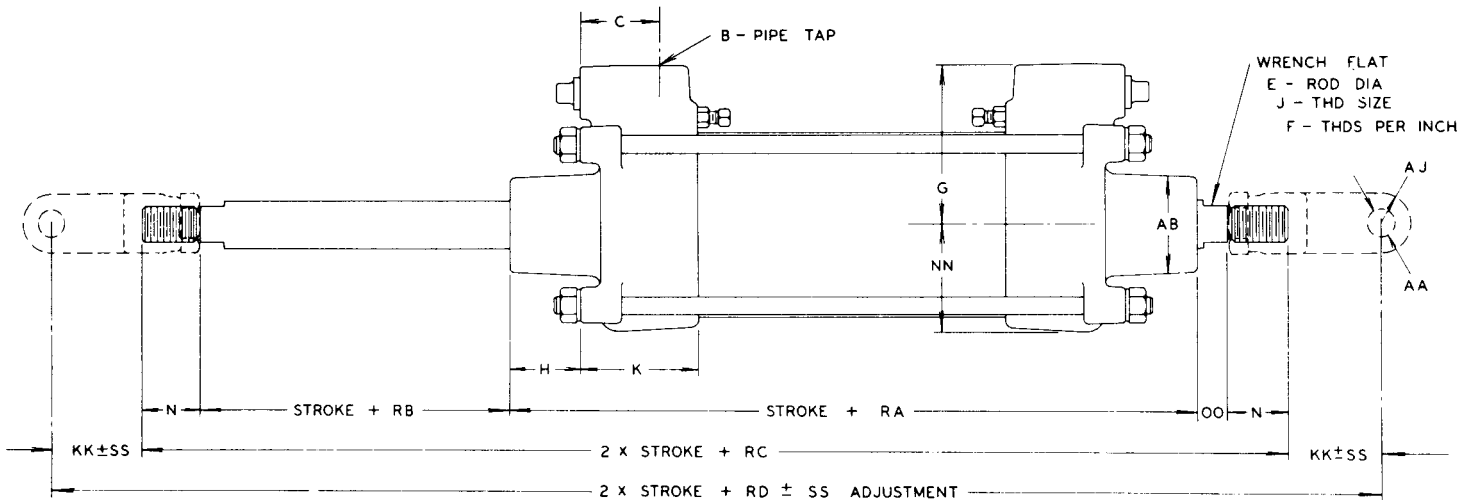
Bore	SS	ZZ	AB	AD	AH	AJ	BC	BD	BR	Bore	APPROXIMATE SHIPPING WEIGHTS
2	$\frac{7}{32}$	$\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	3 $\frac{1}{8}$	2 $\frac{15}{16}$	$\frac{3}{8}$	2	Base Weight 9.4 lbs. + .4 lb./in. Stroke
2 $\frac{1}{2}$	$\frac{7}{32}$	$\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{5}{16}$	$\frac{3}{8}$	2 $\frac{1}{2}$	Base Weight 10.8 lbs. + .4 lb./in. Stroke
3	$\frac{1}{8}$	$\frac{3}{4}$	2 $\frac{1}{8}$	1 $\frac{3}{4}$	$\frac{5}{8}$	$\frac{5}{8}$	4 $\frac{1}{4}$	3 $\frac{7}{8}$	$\frac{7}{16}$	3	Base Weight 16 lbs. + .73 lb./in. Stroke
3 $\frac{1}{2}$	$\frac{1}{8}$	$\frac{3}{4}$	2 $\frac{1}{8}$	1 $\frac{3}{4}$	$\frac{5}{8}$	$\frac{5}{8}$	4 $\frac{3}{4}$	4 $\frac{1}{16}$	$\frac{7}{16}$	3 $\frac{1}{2}$	Base Weight 19.8 lbs. + .8 lb./in. Stroke
4	$\frac{3}{16}$	$\frac{3}{4}$	3	2	$\frac{3}{4}$	1 $\frac{1}{16}$	5 $\frac{1}{4}$	4 $\frac{11}{16}$	$\frac{1}{2}$	4	Base Weight 28.5 lbs. + 1 lb./in. Stroke
5	$\frac{1}{8}$	$\frac{3}{4}$	3 $\frac{1}{4}$	2 $\frac{1}{2}$	$\frac{3}{4}$	1 $\frac{1}{16}$	6 $\frac{3}{8}$	5 $\frac{5}{8}$	$\frac{9}{16}$	5	Base Weight 45 lbs. + 1.4 in./lb. Stroke
6	$\frac{3}{16}$	$\frac{3}{4}$	4	3	$\frac{7}{8}$	1 $\frac{1}{8}$	7 $\frac{1}{16}$	6 $\frac{3}{8}$	$\frac{5}{8}$	6	Base Weight 75 lbs. + 2 lb./in. Stroke

Always specify dimension "FF" when ordering this cylinder

# Style No. 17 DOUBLE ROD



## 150 PSI – STEEL MOUNTINGS



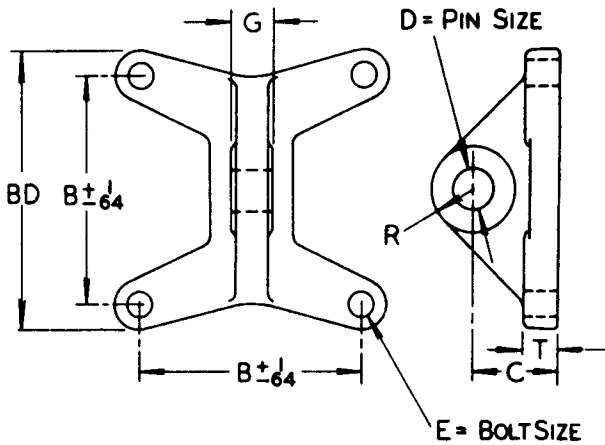
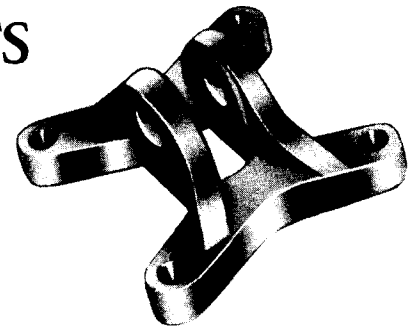
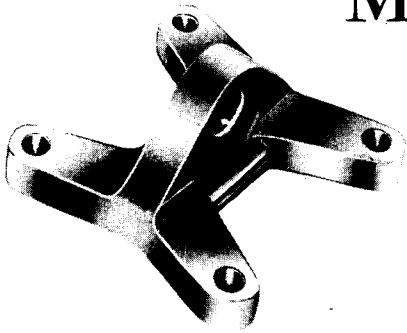
This cylinder can use foot mounts, flange mounts, or trunnion mounting.  
See respective pages for end dimensions.

All Dimensions Are in Inches

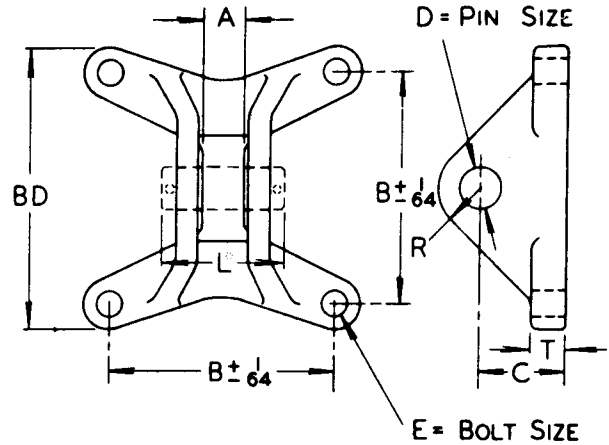
Bore	B	C	E	F	G	H	J	K	N	AA	KK	NN	OO	SS	AB
2	1/4	1 5/8	3/4	18	2 1/6	1 1/6	3/6	2 3/8	1 1/6	1/2	1 5/8	1 1/6	1/2	3/32	1 3/4
2 1/2	3/8	1 5/8	3/4	18	2 5/8	1 1/6	3/6	2 3/8	1 1/6	1/2	1 5/8	1 1/4	1/2	3/32	1 3/4
3	3/8	1 3/4	1	16	3 1/8	1 1/2	3/4	2 1/2	1 3/4	5/8	1 11/6	2	1/2	1/8	2 1/8
3 1/2	3/8	1 3/4	1	16	3 3/8	1 1/2	3/4	2 1/2	1 3/4	5/8	1 11/6	2 1/4	1/2	1/8	2 1/8
4	3/8	2	1 1/4	14	3 1/6	1 1/6	7/8	2 11/6	2	3/4	2 5/6	2 1/6	5/8	3/6	3
5	1/2	2 1/4	1 1/2	12	4 3/8	1 11/6	1 1/4	3 3/6	2 1/2	7/8	2 3/8	3 1/8	3/4	1/8	3 1/4
6	3/4	2 1/4	2	12	5 1/6	1 7/8	1 1/2	3 5/8	2 3/4	1	3 3/8	3 11/6	3/4	3/6	4

Bore	AJ	RA	RB	RC	RD Bore	APPROXIMATE SHIPPING WEIGHTS
2	1/2	7	1/2	10 5/8	13 3/8 2	Base Weight 8 lbs. + .45 lb./in. Stroke
2 1/2	1/2	7	1/2	10 5/8	13 3/8 2 1/2	Base Weight 9.5 lbs. + .5 lb./in. Stroke
3	3/8	7 7/8	1/2	11 5/8	15 1/2 3	Base Weight 14.5 lbs. + 1 lb./in. Stroke
3 1/2	3/8	7 7/8	1/2	11 5/8	15 1/2 3 1/2	Base Weight 17.9 lbs. + 1.05 lb./in. Stroke
4	1 1/6	8 5/8	3/8	13 1/6	17 1/4 4	Base Weight 27 lbs. + 1.4 lb./in. Stroke
5	1 1/6	9 3/4	3/4	15 1/2	20 1/4 5	Base Weight 41 lbs. + 2 lb./in. Stroke
6	1 1/8	11	3/4	17 1/4	24 6	Base Weight 66 lbs. + 3 lb./in. Stroke

# MOUNTING BRACKETS & CLEVISES

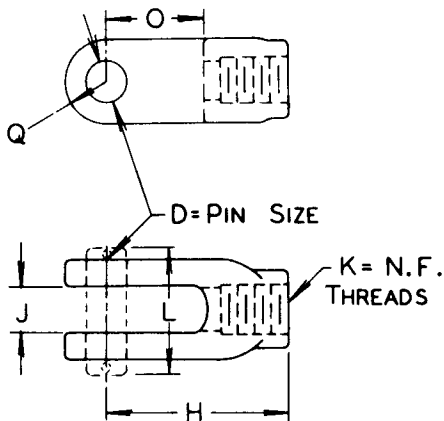


SINGLE EAR BRACKETS



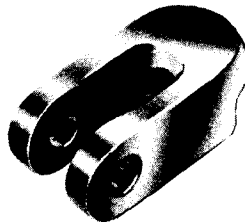
DOUBLE EAR BRACKETS

PINS INCLUDED



CLEVIS FOR 8" CYL. HAS 12 THDS/IN.

ROD CLEVISES  
PINS INCLUDED

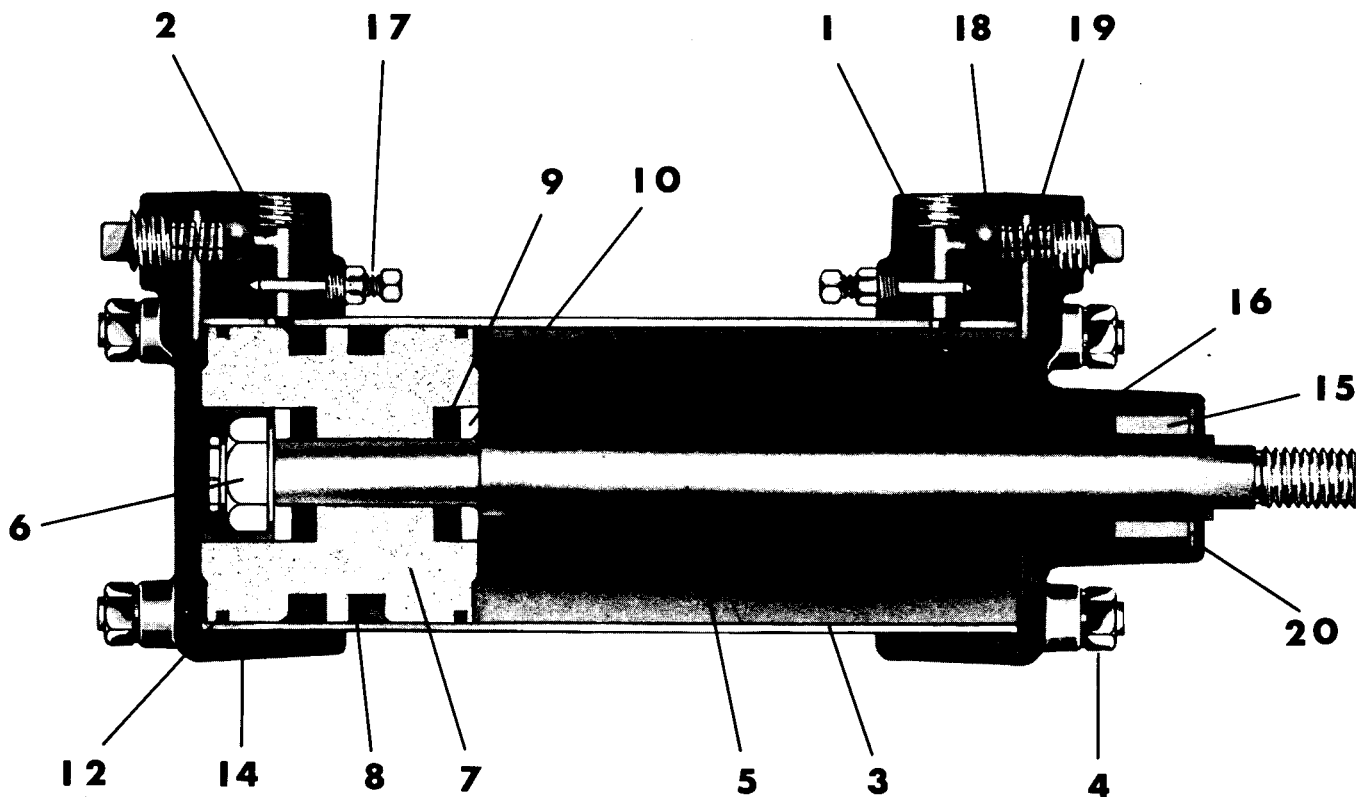


## CLEVIS WEIGHTS

2	—	0.6 lbs.
2½	—	0.6 lbs.
3	—	1 lb.
3½	—	1 lb.
4	—	2.4 lbs.
5	—	3.2 lbs.
6	—	5.2 lbs.
8	—	12 lbs.

Bore	A	B	C	D	E	G	H	J	K	L	N	O	Q	R	T	BD
2	½	2 <sup>7</sup> / <sub>32</sub>	7 <sup>1</sup> / <sub>8</sub>	½	5 <sup>1</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>16</sub>	2 <sup>5</sup> / <sub>16</sub>	½	7 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>4</sub>	½	½	3 <sup>1</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>16</sub>
2½	½	2 <sup>15</sup> / <sub>32</sub>	7 <sup>1</sup> / <sub>8</sub>	½	5 <sup>1</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>16</sub>	2 <sup>5</sup> / <sub>16</sub>	½	7 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>4</sub>	½	½	3 <sup>1</sup> / <sub>8</sub>	3 <sup>5</sup> / <sub>16</sub>
3	5 <sup>1</sup> / <sub>16</sub>	3	1 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	½	2 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>8</sub>	¾	2 <sup>1</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>8</sub>	½	3 <sup>3</sup> / <sub>8</sub>
3½	¾	3 <sup>23</sup> / <sub>32</sub>	1 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>8</sub>	¾	2 <sup>1</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>8</sub>	½	4 <sup>1</sup> / <sub>16</sub>
4	7 <sup>1</sup> / <sub>8</sub>	3 <sup>23</sup> / <sub>32</sub>	1 <sup>1</sup> / <sub>2</sub>	¾	7 <sup>1</sup> / <sub>16</sub>	¾	3 <sup>1</sup> / <sub>4</sub>	¾	7 <sup>1</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>8</sub>	2	1 <sup>3</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>8</sub>	4 <sup>11</sup> / <sub>16</sub>
5	1 <sup>5</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	1 <sup>5</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>4</sub>	2 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>
6	1 <sup>3</sup> / <sub>16</sub>	5 <sup>17</sup> / <sub>32</sub>	1 <sup>7</sup> / <sub>8</sub>	1	5 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	¾	6 <sup>7</sup> / <sub>8</sub>
8				1 <sup>1</sup> / <sub>8</sub>			6 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	2	4 <sup>1</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>			

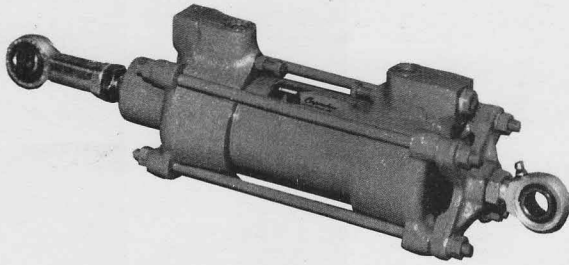
\* See Pages 4 and 5 for This Dimension.



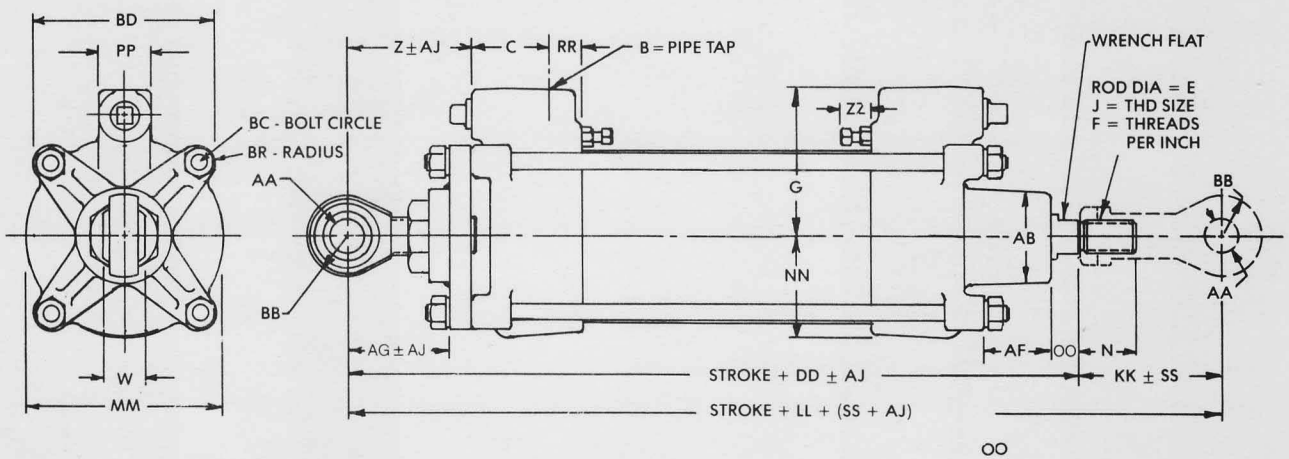
## PARTS LIST FOR NORMAL DUTY CYLINDERS

Ref. No.	Name	Part Number							No. Req'd Per Cyl.
		2" Cyl.	2½" Cyl.	3" Cyl.	3½" Cyl.	4" Cyl.	5" Cyl.	6" Cyl.	
1	Rod End Head .....	2A- 1	2.5A- 1	3A- 1	3.5A- 1	4A- 1	5A- 1	6A- 1	1
2	Blind End Head .....	2A- 2	2.5A- 2	3A- 2	3.5A- 2	4A- 2	5A- 2	6A- 2	1
3	Barrel † .....	2A- 3	2.5A- 3	3A- 3	3.5A- 3	4A- 3	5A- 3	6A- 3	1
4	Tie Bolts † .....	2A- 4	2.5A- 4	3A- 4	3.5A- 4	4A- 4	5A- 4	6A- 4	1
5	Piston Rod † .....	2A- 5	2.5A- 5	3A- 5	3.5A- 5	4A- 5	5A- 5	6A- 5	1
6	Lock Nut .....	2A-29	2.5A-29	3A-29	3.5A-29	4A-29	5A-29	6A-29	1
7	One Piece Piston .....	2A-30	2.5A-30	3A-30	3.5A-30	4A-30	5A-30	6A-30	1
8	Packing Cups .....	2A-31	2.5A-31	3A-31	3.5A-31	4A-31	5A-31	6A-31	2
9	Impact Bushing .....	2A-36	2.5A-36	3A-36	3.5A-36	4A-36	5A-36	6A-36	2
10	Impact Washer .....	2A-37	2.5A-37	3A-37	3.5A-37	4A-37	5A-37	6A-37	2
12	Piston Rings .....	2A-12	2.5A-12	3A-12	3.5A-12	4A-12	5A-12	6A-12	2
14	"O" Rings .....	2A-14	2.5A-14	3A-14	3.5A-14	4A-14	5A-14	6A-14	4
15	Packing Bushing .....	2A-15	2.5A-15	3A-15	3.5A-15	4A-15	5A-15	6A-15	1
16	Packing "V" Ring .....	2A-16	2.5A-16	3A-16	3.5A-16	4A-16	5A-16	6A-16	1 Set
17	Needle Valve Assemblies .....	2A-17	2.5A-17	3A-17	3.5A-17	4A-17	5A-17	6A-17	2
18	Ball .....	2A-18	2.5A-18	3A-18	3.5A-18	4A-18	5A-18	6A-18	2
19	Spring .....	2A-19	2.5A-19	3A-19	3.5A-19	4A-19	5A-19	6A-19	2
20	Retaining Ring †† .....	2A-20	2.5A-20	3A-20	3.5A-20				1
Not Shown	Pendulum Mount (Single Ear) ..	2A-21	2.5A-21	3A-21	3.5A-21	4A-21	5A-21	6A-21	See Pages 4-5
Not Shown	Pendulum Mount (Double Ear)	2A-22	2.5A-22	3A-22	3.5A-22	4A-22	5A-22	6A-22	9
Not Shown	Rod Clevis .....	2A-23	2.5A-23	3A-23	3.5A-23	4A-23	5A-23	6A-23	See Page 11
Not Shown	Trunnion .....	2A-24	2.5A-24	3A-24	3.5A-24	4A-24	5A-24	6A-24	See Page 9
Not Shown	Foot Mounts .....	2A-25	2.5A-25	3A-25	3.5A-25	4A-25	5A-25	6A-25	See Page 8
Not Shown	Flange Mount .....	2A-27	2.5A-27	3A-27	3.5A-27	4A-27	5A-27	6A-27	See Pages 6-7
Not Shown	Piston Rod for Dbl. Rod Cyl.—Female Half .....	2A-44	2.5A-44	3A-44	3.5A-44	4A-44	5A-44	6A-44	See Page 10

† **IMPORTANT!** Always include the length of stroke when re-ordering barrels, tie bolts, or piston rods.  
 †† 4", 5" and 6" Normal Duty Cylinder use cap screws rather than retaining rings.



# Style No. 20 Pendulum Mounted Spherco Rod Ends Both Ends



All Dimensions Are in Inches

Bore	B	C	E	F	G	J	N	Z	AA	BB	DD	W	KK	LL	MM	NN	OO	PP	RR
2	1/4	1 5/8	3/4	18	2 7/16	5/8	1 5/8	2 9/16	5/8	3/4	8 3/4	3/4	3 1/8	11 7/8	2 13/16	1 7/16	1/2	1 1/8	3/4
2 1/2	3/8	1 5/8	3/4	18	2 5/8	5/8	1 5/8	2 9/16	5/8	3/4	8 3/4	3/4	3 1/8	11 7/8	3 1/2	1 3/4	1/2	1 1/8	3/4
3	3/8	1 3/4	1	16	3 1/8	3/4	1 3/4	2 15/16	3/4	7/8	9 13/16	7/8	3 1/16	13 3/8	4	2	1/2	1 1/4	3/4
3 1/2	3/8	1 3/4	1	16	3 3/8	3/4	1 3/4	2 15/16	3/4	7/8	9 13/16	7/8	3 1/16	13 3/8	4 1/2	2 1/4	1/2	1 1/4	3/4
4	3/8	2	1 1/4	14	3 11/16	3/4	2	3 3/16	3/4	7/8	10 7/8	7/8	3 1/16	14 7/16	5 1/8	2 1/16	5/8	1 1/4	13/16
5	1/2	2 1/4	1 1/2	12	4 3/8	1 1/4	2 1/2	4 1/2	1	1 3/8	13 1/4	1 3/8	5 1/8	18 3/8	6 1/4	3 3/8	3/4	1 1/2	15/16
6	3/4	2 1/2	2	12	5 1/8	1 1/4	2 1/2	4 1/2	1	1 3/8	14 3/8	1 3/8	5 1/8	19 1/2	7 3/8	3 11/16	3/4	2	1 1/8

Bore	SS	ZZ	AB	AF	AG	AJ	BC	BD	BR	Bore	TAIL END	ROD END
2	1/4	3/4	1 3/4	1 5/16	2 7/16	1/4	3 3/8	3	3/8	2	TRE-10N	TR-10N
2 1/2	1/4	3/4	1 3/4	1 5/16	2 7/16	1/4	3 1/2	3 1/4	3/8	2 1/2	TRE-10N	TR-10N
3	1/4	3/4	2 1/8	1 1/2	2 7/16	1/4	4 1/4	4	7/16	3	TRE-12N	TR-12N
3 1/2	1/4	3/4	2 1/8	1 1/2	2 7/16	1/4	4 3/4	4 1/2	7/16	3 1/2	TRE-12N	TR-12N
4	1/4	3/4	3	1 1/4	2 9/16	1/4	5 1/4	4 1/2	1/2	4	TRE-12N	TR-12N
5	1/4	3/4	3 1/4	1 5/16	3 7/8	1/4	6 3/8	5 3/4	9/16	5	TRE-16	TR-16
6	1/4	3/4	4	1 3/8	3 7/8	1/4	7 11/16	6 7/8	5/8	6	TRE-16	TR-16