# **Cylinders**

# Centaur

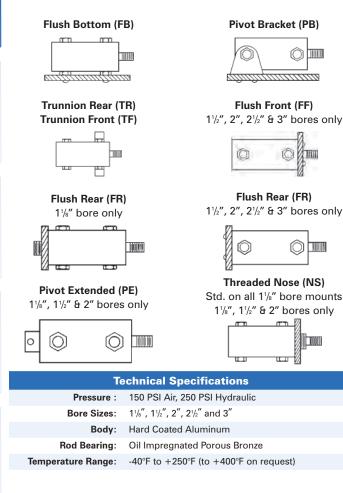


# Low Cost Mounting

Cylinders

Flush bottom cylinder mounts directly onto a base plate with only two bolts...needs no mounting brackets or other hardware. The pivot bracket is built-in for easy pivoting at the inlet axis. The bracket pivots within the cylinder length to save space and to eliminate one entire bracket that would be needed to mount other cylinders.

Because Centaur's trunnions serve both as mounts and as assembly elements, they cost less than any other trunnion mount on the market.



# **Economical & Repairable**

Mead Centaur cylinders are built to match tie-rod performance, but are up to 45% less expensive and offer lubrication-free service. Centaur cylinders are not permanently crimped like most other round cylinders...so they can be disassembled for maintenance.

# Teflon<sup>®</sup> Seals Create Smooth Breakaway

Centaur's unique Teflon® piston seal eliminates the forward lurch that occurs when rubber seals breakaway from the cylinder tube surface. Rod motion remains smooth throughout the stroke.



self-lubricated surface.

#### Non-Lube

During the cylinder break-in period, molecules from the unique graphite-filled Teflon® piston seal became embedded in the pores of the hard coated aluminum cylinder tube. This forms a long-lasting, super-smooth,

# **Built-In Bumpers Absorb Impact**



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Rubber bumpers are built into each cylinder head to eliminate the metallic "clank" that occurs at stroke completion.

# Self Aligning Rod Couplers



Rod couplers simplify cylinder alignment problems by compensating for 2° angular error and 1/16" lateral misalignment on both extension and retraction strokes.

See page 32 for complete listing of Mead's self aligning rod couplers.

Model	C-112	C-150	C-200	C-250	C-300
Rod Coupler	DMA-312	DMA-500	DMA-625	DMA-750	DMA-1000

# **Proximity Switches**



Solid State & Reed switches can sense rod position anywhere within the stroke. A stainless steel clamp facilitates mounting at any location along the cylinder tube. Switches may be used singly or in multiples and positioned at any point around the cylinder tube. The cylinder must have a magnetic piston. For technical information see pg. 35.

Model	C-112	C-150	C-200	C-250	C-300
Sinking	N/A	CS-6100N-150	CS-6100N-200	CS-6100N-250	CS-6100N-300
Sourcing	N/A	CS-6100P-150	CS-6100P-200	CS-6100P-250	CS-6100P-300
Reed	N/A	CS-6100R-150	CS-6100R-200	CS-6100R-250	CS-6100R-300

# For exploded views of models visit our website at www.mead-usa.com

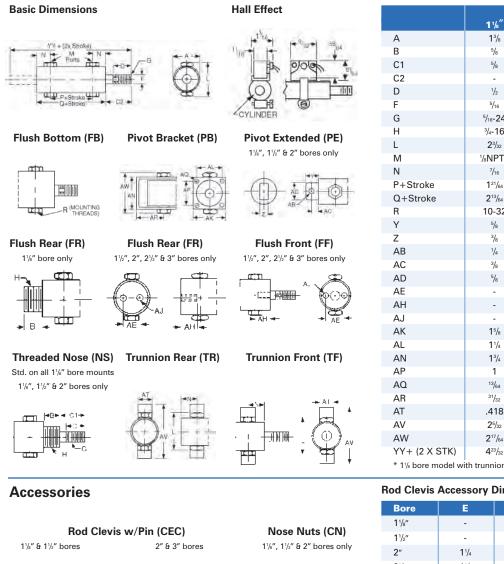
# **Centaur Dimensions and Ordering Information**

Cylinders

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**2**<sup>3</sup>/<sub>4</sub>



D	/8	/16	/16		
C1	5/8	15/8	17/8	-	-
C2	-	<b>1</b> <sup>7</sup> / <sub>16</sub>	<b>1</b> <sup>11</sup> / <sub>16</sub>	<b>1</b> <sup>3</sup> / <sub>4</sub>	<b>2</b> <sup>1</sup> / <sub>16</sub>
D	1/2	<b>1</b> <sup>1</sup> / <sub>4</sub>	<b>1</b> <sup>1</sup> / <sub>2</sub>	<b>1</b> <sup>1</sup> / <sub>2</sub>	<b>1</b> <sup>3</sup> / <sub>4</sub>
F	<sup>5</sup> /16	1/2	5/8	3/4	1
G	<sup>5</sup> /16 <b>-24</b>	<sup>1</sup> /2-20	⁵/₅-18	<sup>3</sup> /4-16	1-14
Н	<sup>3</sup> /4-16	1-14	11/4-12	-	-
L	<b>2</b> <sup>3</sup> / <sub>32</sub>	<b>2</b> <sup>1</sup> / <sub>8</sub>	<b>2</b> <sup>5</sup> /8	<b>3</b> 1/8	<b>3</b> <sup>5</sup> /8
M	¹∕₀NPT*	¹⁄₄NPSF	¹/₄NPSF	¹/₄NPSF	¹∕₄NPSF
N	7/16	<sup>51</sup> / <sub>64</sub>	<sup>51</sup> / <sub>64</sub>	<sup>51</sup> / <sub>64</sub>	<sup>51</sup> / <sub>64</sub>
P+Stroke	1 <sup>21</sup> /64	1 <sup>27</sup> /32	1 <sup>59</sup> /64	<b>2</b> <sup>3</sup> / <sub>64</sub>	<b>2</b> <sup>11</sup> / <sub>64</sub>
Q+Stroke	2 <sup>13</sup> /64	<b>3</b> <sup>7</sup> / <sub>16</sub>	<b>3</b> <sup>1</sup> / <sub>2</sub>	<b>3</b> ⁵/8	<b>3</b> <sup>3</sup> / <sub>4</sub>
R	10-32	³/8-24	³/8-24	<sup>3</sup> /8-24	³/8- <b>24</b>
Υ	5/8	<sup>15</sup> / <sub>16</sub>	<b>1</b> 1/8	-	-
Z	3/8	11/16	3/4	-	-
AB	1/4	3/8	1/2	-	-
AC	3/8	9/16	5/8	-	-
AD	5/8	1	<b>1</b> <sup>1</sup> / <sub>4</sub>	-	-
AE	-	<b>1</b> 1/8	<b>1</b> ½	<b>1</b> ³/₄	2
AH	-	1/2	5/8	3/4	7/8
AJ	-	1/4-28	<sup>5</sup> /16 <b>-24</b>	<sup>3</sup> /8-24	<sup>1</sup> /2-20
AK	<b>1</b> <sup>5</sup> /8	<b>2</b> <sup>1</sup> / <sub>4</sub>	<b>2</b> <sup>1</sup> / <sub>4</sub>	27/8	<b>3</b> 1/8
AL	<b>1</b> <sup>1</sup> / <sub>4</sub>	<b>1</b> <sup>5</sup> /8	<b>1</b> 5//s	<b>2</b> <sup>1</sup> / <sub>8</sub>	<b>2</b> <sup>3</sup> /8
AN	<b>1</b> <sup>3</sup> / <sub>4</sub>	<b>2</b> <sup>13</sup> / <sub>32</sub>	2 <sup>29</sup> / <sub>32</sub>	<b>3</b> <sup>13</sup> / <sub>32</sub>	3 <sup>29</sup> / <sub>32</sub>
AP	1	<b>1</b> 1/8	<b>1</b> 5/8	<b>2</b> <sup>1</sup> / <sub>8</sub>	<b>2</b> <sup>5</sup> /8
AQ	13/64	<sup>9</sup> /32	<sup>9</sup> /32	<sup>9</sup> /32	<sup>9</sup> /32
AR	<sup>31</sup> / <sub>32</sub>	<b>1</b> %/16	<b>1</b> <sup>13</sup> / <sub>16</sub>	<b>1</b> <sup>15</sup> /16	<b>2</b> <sup>5</sup> / <sub>16</sub>
AT	.418	.731	.731	.731	.731
AV	<b>2</b> <sup>5</sup> / <sub>32</sub>	<b>3</b> <sup>5</sup> /8	<b>4</b> <sup>1</sup> / <sub>8</sub>	<b>4</b> <sup>5</sup> / <sub>8</sub>	5 <sup>1</sup> /8
AW	2 <sup>17</sup> /64	<b>2</b> <sup>13</sup> / <sub>16</sub>	<b>3</b> <sup>5</sup> / <sub>16</sub>	<b>3</b> <sup>13</sup> / <sub>16</sub>	<b>4</b> <sup>5</sup> / <sub>16</sub>
YY+ (2 X STK)	4 <sup>23</sup> /32	65/16	67/8	<b>7</b> 1/8	<b>7</b> 1/8
* 11/8 bore model w	ith trunnion mo	unts has ¼-28	ports.		

**Bore Sizes** 

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1<sup>3</sup>/4

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#### **Rod Clevis Accessory Dimensions**

Bore	E	СА	СВ	CE	DD
<b>1</b> 1/8″	-	<sup>19</sup> /64	<sup>11</sup> / <sub>32</sub>	<b>1</b> <sup>3</sup> / <sub>16</sub>	5/16
11/2″	-	<sup>15</sup> / <sub>32</sub>	<sup>9</sup> / <sub>16</sub>	<b>1</b> <sup>13</sup> / <sub>16</sub>	1/2
2″	<b>1</b> 1/4	7/16	5/8	<b>2</b> <sup>1</sup> / <sub>16</sub>	1/2
<b>2</b> <sup>1</sup> / <sub>2</sub> "	<b>1</b> 1/2	3/4	<b>1</b> <sup>1</sup> / <sub>4</sub>	<b>2</b> <sup>3</sup> / <sub>8</sub>	3/4
3″	<b>1</b> 1/4	7/16	5/8	<b>2</b> <sup>1</sup> / <sub>16</sub>	1/2

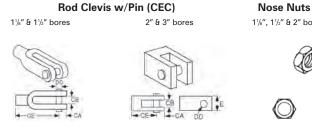
#### **Model Numbers**

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Bore Sizes Accessory	1¹/₅″	<b>1</b> ½″	2″	<b>2</b> ½″	3″
Rod Clevis, Pin	CEC-112	CEC-150	CEC-200	DMC-4	CEC-300
Nose Nut	CN-112	CN-150	CN-200	-	-

Bore Model	1 <sup></sup> /₀″ C-112	1½″ C-150	2″ C-200	2½″ C-250	3″ C-300
Nose Mount (NS)				NA	NA
Flush Bottom (FB)					
Flush Front (FF)	NA				
Flush Rear (FR)					
Pivot Bracket (PB)					
Pivot Extended (PE)				NA	NA
Trunnion Front (TF)					
Trunnion Rear (TR)					
Other Options:					
Double Rod (DR)					
Dupont Viton Seals(VI)					
Magnetic Piston (MP)	NA				
Air Reservoir (AR)					

Nose (NS) mounts standard on both ends of 11/8" bore model with double rod.



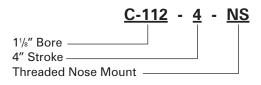
Note: For DMC-4, refer to pages 45.

# **Air Reservoirs**

Two Centaur rear heads and a tube form an economical air tank. Consult factory for more information. Simply add AR to model.

# **Ordering Information**

When ordering Centaur cylinders, list the model number, stroke length and mounting option(s) required. Please consult the factory for stainless steel rods, air reservoirs or any special cylinder need.





# **Proximity Switches (Reed/Solid State)**

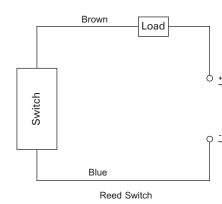
### Installation and Operation

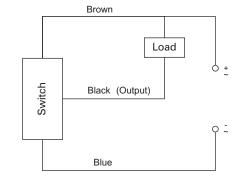
Proximity switches provide contactless switching capabilities and allow you to sense cylinder rod position practically anywhere within the stroke. Switches are easily mounted on any point along the cylinder body. The switch will provide an electrical signal when subjected to the magnetic field created by a cylinder piston that is specially fitted with a captivated magnet.



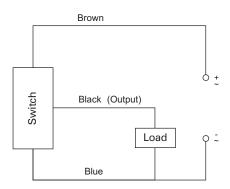
Model Number	Switch Type	Switching Logic	Operating Voltage	Switching Current	Switching Power	Switching Drop	Magnetic Sensitivity
CS-7500R	Reed	Normally	5~240	1 Amp.	30 Watts	3.5 V	
CS-6100R	Switch		VDC/VAC	•			85 Gauss
CS-6200R	Switch	Open SPST	50/60Hz	Max.	Max.	Max.	
CS-7500P							
CS-6100P	Solid-State					1.5 V	
CS-6200P		Normally	5~28	1 Amp.	24 Watts		85 Gauss
CS-7500N	(MR)	Open	VDC	Max.	Max.	Max.	oj Gauss
CS-6100N	Sensor					(0.5 Amp)	
CS-6200N							

# **Connection Diagrams**





Solid State: Sinking (NPN) Output



Solid State: Sourcing (PNP) Output