



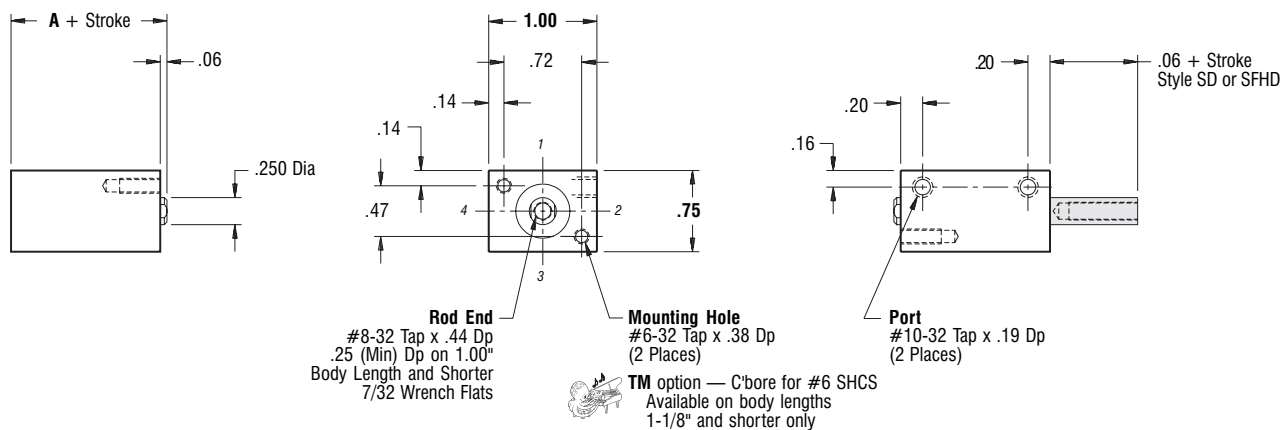
1/2" Bore

Non Magnetic Piston

Snap-Cap® Design

	Part Number			
Duty	Single Rod	Double Rod	Stock Stroke Length	A
Standard	S12x ___	SD12x ___	1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 1-7/8, 2	.69
Intermediate	SHH12x ___		1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 1-7/8, 2	.81
Heavy	SFH12x ___	SFHD12x ___	1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 2	.94

Standard Mounting:	TF
Optional Mounting:	TR TBE TM



Style “AS”



End Mount

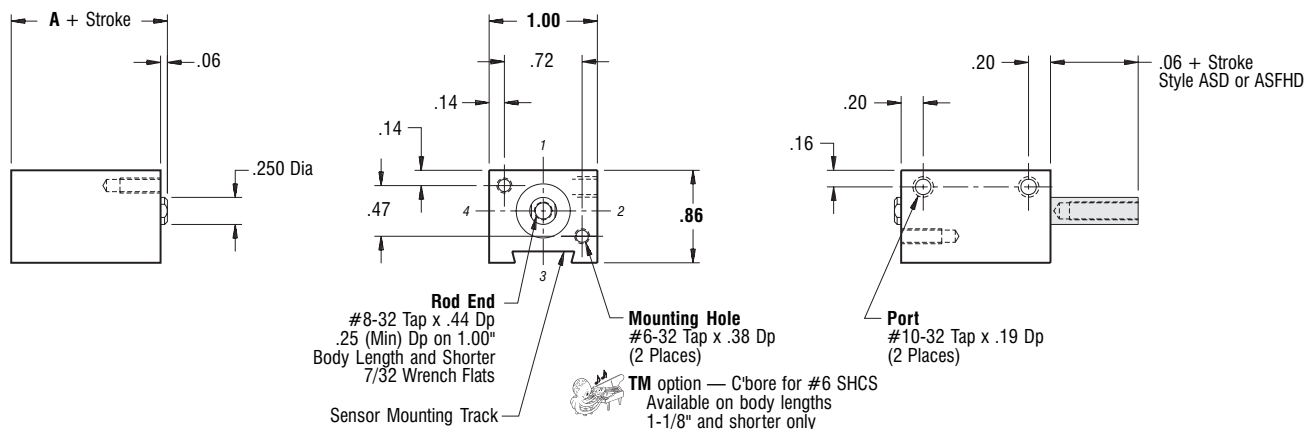
1/2" Bore

Magnetic Piston

Snap-Cap® Design

	Part Number			
Duty	Single Rod	Double Rod	Stock Stroke Length	A
Standard	AS12x__	ASD12x__	1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 2	.94
Intermediate	ASHH12x__		1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-7/8	1.06
Heavy	ASFH12x__	ASFHD12x__	1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-3/4, 2	1.19

Standard Mounting: **TF**
Optional Mounting:
TR TBE TM



Due to physical size, body lengths 1-1/2" and shorter have only one sensor; Body length = A + stroke - .06.
For modifications, consult factory.

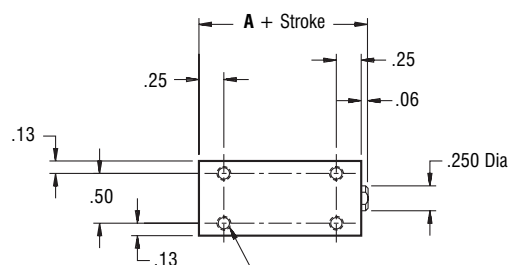


Non Magnetic Piston

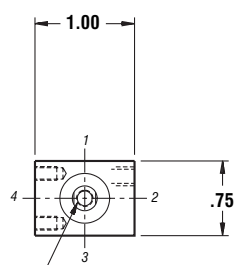
1/2" Bore

Snap-Cap® Design

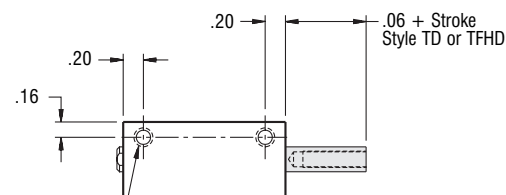
	Part Number		Stock Stroke Length	A
Duty	Single Rod	Double Rod		
Standard	T12x__	TD12x__	1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 1-7/8, 2	.69
Intermediate	THH12x__		1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 1-7/8, 2	.81
Heavy	TFH12x__	TFHD12x__	1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 2	.94



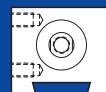
Mounting Hole
#6-32 Tap x .22 Dp
(4 Places)



Rod End
#8-32 Tap x .44 Dp
.25 (Min) Dp on 1.00"
Body Length and Shorter
7/32 Wrench Flats



Port
#10-32 Tap x .19 Dp
(2 Places)

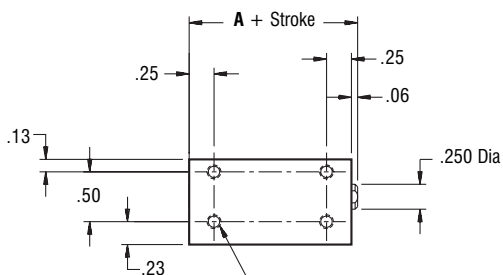


Magnetic Piston

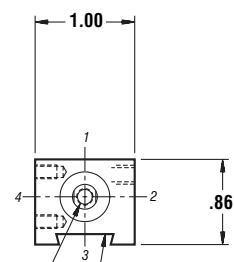
1/2" Bore

Snap-Cap® Design

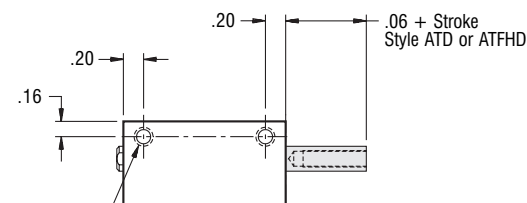
	Part Number		Stock Stroke Length	A
Duty	Single Rod	Double Rod		
Standard	AT12x__	ATD12x__	1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 2	.94
Intermediate	ATHH12x__		1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-7/8	1.06
Heavy	ATFH12x__	ATFHD12x__	1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-3/4, 2	1.19



Mounting Hole
#6-32 Tap x .22 Dp
(4 Places)



Rod End
#8-32 Tap x .44 Dp
.25 (Min) Dp on 1.00"
Body Length and Shorter
7/32 Wrench Flats



Port
#10-32 Tap x .19 Dp
(2 Places)



Due to physical size, body lengths 1-1/2" and shorter have only one sensor; Body length = A + stroke - .06. For modifications, consult factory.

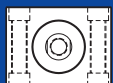
	X		
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Part Number

Stroke

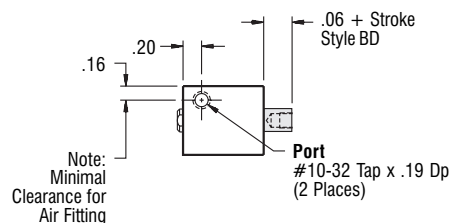
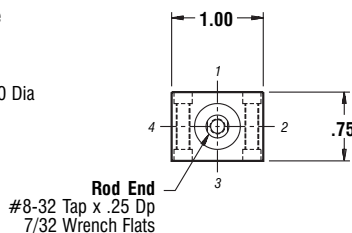
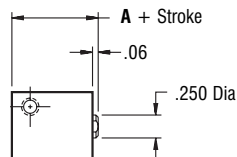
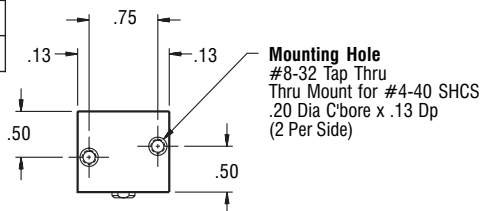
Options - See 'Options' section

COMPACT® Inch Cylinders



Part Number

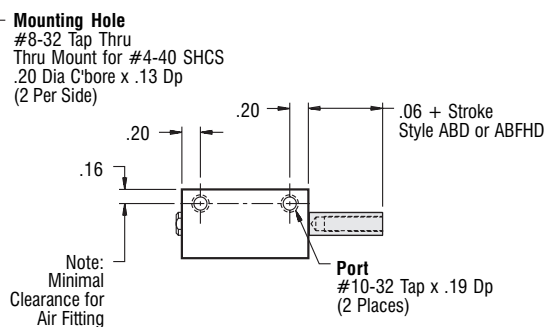
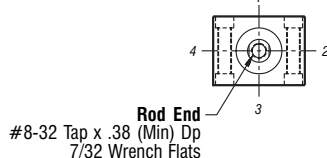
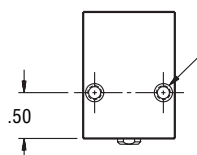
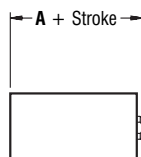
Duty	Single Rod	Double Rod	Stock Stroke Length	A
Standard	B12x__	BD12x__	1/8, 1/4	.69
Intermediate	BHH12x__		1/8	.81



Part Number

Duty	Single Rod	Double Rod	Stock Stroke Length	A
Standard	B12x__	BD12x__	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4	.69
Intermediate	BHH12x__		1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8	.81
Heavy	BFH12x__	BFHD12x__	1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1	.94

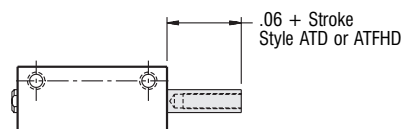
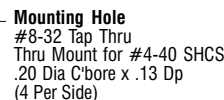
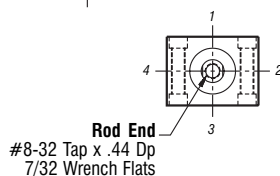
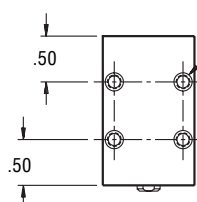
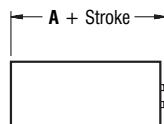
— Information same as above except where noted

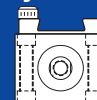


Part Number

Duty	Single Rod	Double Rod	Stock Stroke Length	A
Standard	B12x__	BD12x__	1-3/8, 1-1/2, 1-5/8, 1-3/4, 1-7/8, 2	.69
Intermediate	BHH12x__		1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 1-7/8, 2	.81
Heavy	BFH12x__	BFHD12x__	1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 2	.94

— Information same as above except where noted —





Non Magnetic Piston

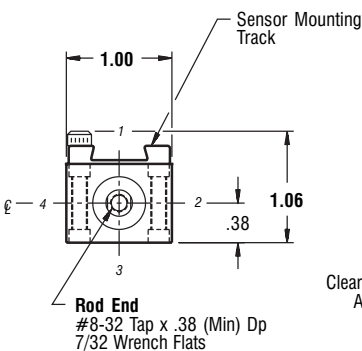
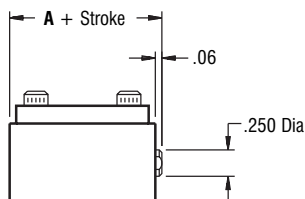
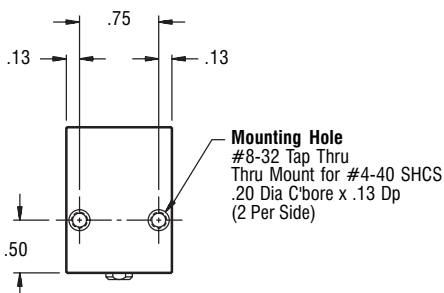
Snap-Cap® Design

1/2" Bore

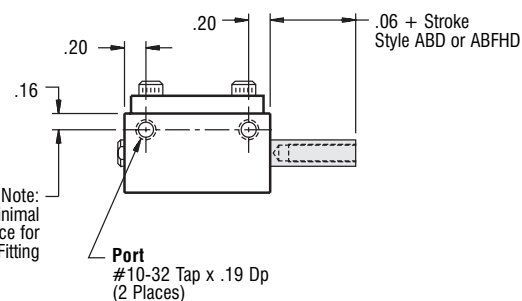
	Part Number			
Duty	Single Rod	Double Rod	Stock Stroke Length	A
Standard	AB12x	ABD12x	1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1	.94
Intermediate	ABHH12x		1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8	1.06
Heavy	ABFH12x	ABFHD12x	1/8, 1/4, 3/8, 1/2, 5/8, 3/4	1.19



Due to physical size, body lengths 1-1/2" and shorter have only one sensor; Body length = A + stroke - .06. For modifications, consult factory.



Note:
Minimal
Clearance for
Air Fitting



	Part Number			
Duty	Single Rod	Double Rod	Stock Stroke Length	A
Standard	AB12x	ABD12x	1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 2	.94
Intermediate	ABHH12x		1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-7/8	1.06
Heavy	ABFH12x	ABFHD12x	7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-3/4, 2	1.19

— Information same as above except where noted —

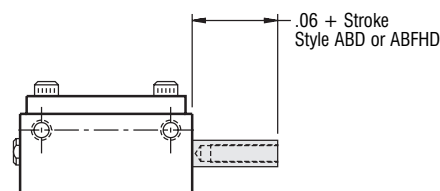
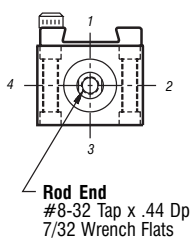
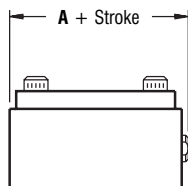
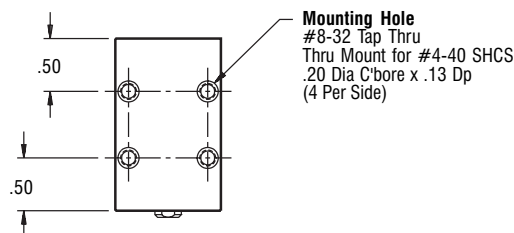


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EB - End Bracket	
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Flow Controls



RE - Rod Eye

*SRCE - Short Rear
Clevis with Eye Mount*

Seal Descriptions

Conversion Formula: $C^{\circ} = (F^{\circ} - 32^{\circ}) \times 5/9$

Type	Ordering Suffix	Rating	Description
Pneumatic Seals			
Nitrile	—	0° to 200° F -18° to 93° C	Most commonly used elastomer O-ring due to its excellent resistance to petroleum products, wear, tear and friction. Works with lubricated or non-lubricated air in the noted temperature range. Recommended for general purpose sealing with petroleum oils and fluids, water and silicone greases and oils.
Fluorocarbon	HTV	0° to 400° F -18° to 204° C	Used mainly for elevated temperatures, harsh environments where some coolants, solvents, cleaning agents or other chemicals will contact the seal gland. Lower compression set is characteristic. For your specific requirements, consult factory.



Corrosion Resistant 300 Series Stainless Steel

Standard Duty Features:

- 100% 300 series stainless steel components — interior and exterior
- Plastic rod bearings

Intermediate and Heavy Duty Feature:

- 100% 300 series stainless steel components — interior and exterior
- UHMW plastic rod bearings

Optional - A Crystalline PET Thermoplastic Polyester rod bearing is available for use in clean-room environments. Consult Factory for details.

Magnetic Piston Cylinders:

- Bolt-on Mounting Track is aluminum only



- **Ordering:** Specify "CR3" *before* cylinder part number
- **Delivery:** Non-standard delivery, consult factory

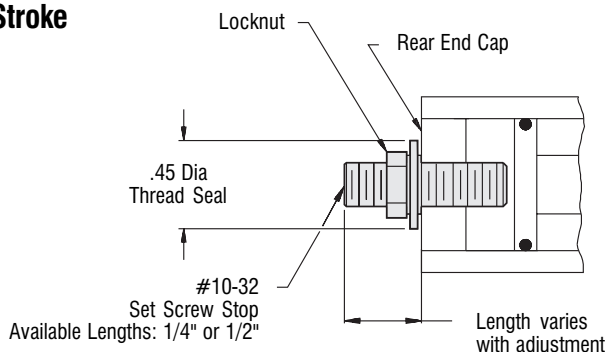
CR3

Ordering Prefix CR3
Material 300 Series stainless steel

Applications:

Chemical / Petroleum
Medical Equipment
Salt Water Exposure
Clean Rooms
Food Processing
Electronic Assembly
Nuclear
Pharmaceutical

Adjustable Retract Stroke

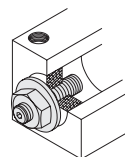


- **DO NOT** use with any pivoting applications
- Double ended unit - use rod as adjustment

ADJ

Specify length

Ordering Suffix ADJ
Length 14 or 12
Rod Single only
Temperature 200° F Max.
Material Aluminum endcap, steel locknut and thread seal



Positive Alignment Available on "S" style cylinders only

The alignment pocket and pilot are designed to fit between the cylinder and the mounting surface. This ensures accurate mounting and added shear strength.

PA

Ordering suffix PA
Style "S" only
Rod Single

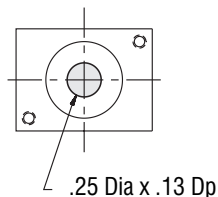
PL12

Part Number PL12
Rod Single
Material Stainless steel



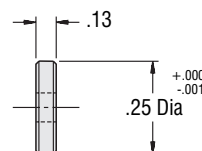
Alignment Pocket

- Provides positive means of locating cylinder centerline within .005"
- Double ended unit - use rod as pilot



Alignment Pilot

Sold separately



All dimensions are in inches unless otherwise noted.



Cylinder Part Number

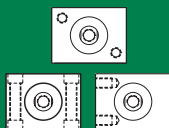
Stroke

Option

COMPACT® Inch Cylinders

3/98

19



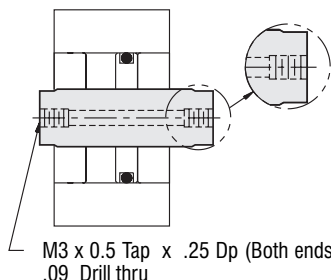
Rod End Options

1/2" Bore

HR / MS / CBSS

Hollow Rod Option

Our hollow rod option is available for applications that require passage through a double ended rod.



Stock Stroke Lengths				
Styles	Strokes			
	1/4, 1/2, 3/4, 1, 1-1/4	1-1/2	1-3/4	2
SD, BD, TD	✓	✓	✓	✓
SFHD, BFHD, TFHD	✓	✓		✓
ASD, ABD, ATD	✓	✓	✓	
ASFHD, ABFHD, ATFHD	✓		✓	

Applications

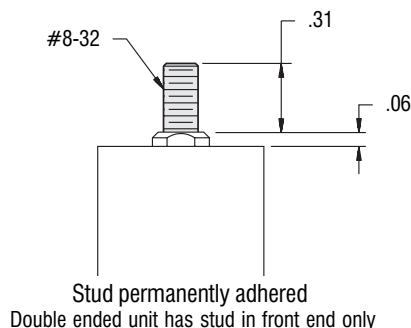
Example	YES	NO
Gases	✓	
Liquids	✓	
Vacuum	✓	
Linear / Rotary Cylinder	✓	
Clamp and Punch Cylinder	✓	
Blow Molding Cylinder	✓	
Hydraulic Cylinders		✗
Non-Rotating Rods		✗

SPECIALS: Consult factory with ID requirements, thread information, pipe taps, etc.

HR3

Ordering Suffix HR3
Rod Duty Double only
Standard and Full Husky only

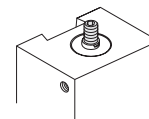
Male Stud



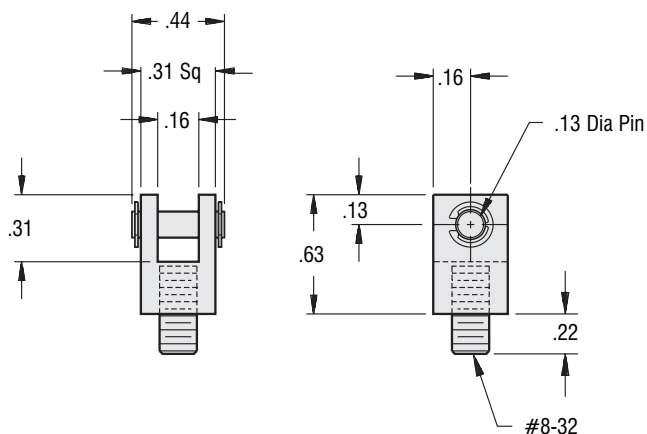
- Male stud thread: Same pitch and diameter as female rod tap

MS

Ordering Suffix MS
Material Steel black oxide



Clevis Bracket



CBSS12

Ordering Suffix CBSS12
Material Steel black oxide with case hardened pin and clips



"Flip" to our *Flow Control* flyer for more information, including part numbers for ordering

Clevis Bracket



All dimensions are in inches unless otherwise noted.



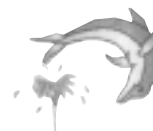
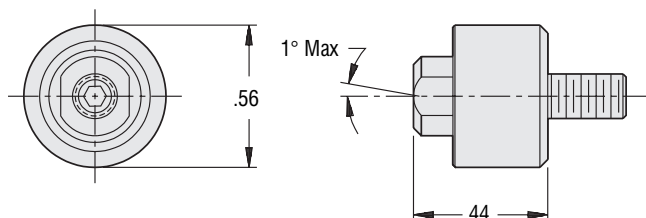
1/2" Bore

Rod End Options

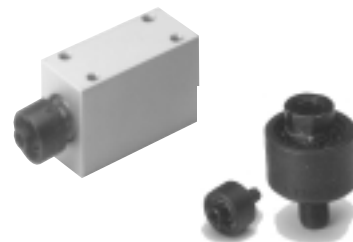
Coupler / EX / EXD / RE

Rod End Alignment Coupler

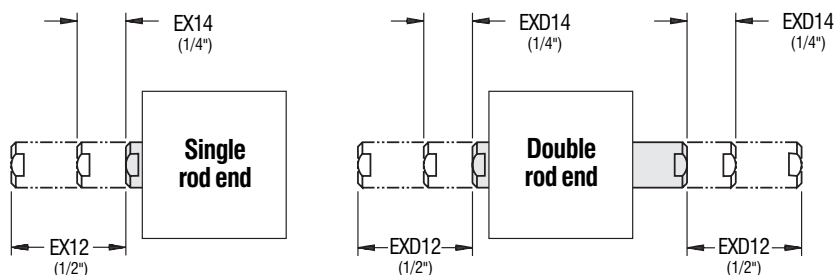
Dimensions based on part number ACCC8



"Flip" to our *Alignment Coupler* flyer for more information, including part numbers for ordering



Rod End Extension



Extended equally at both ends



- For special extension or length, single extension on double rod end - consult factory
- Not a screw on component
- Female tap does not change

Single Rod End

EX _____

Specify Length

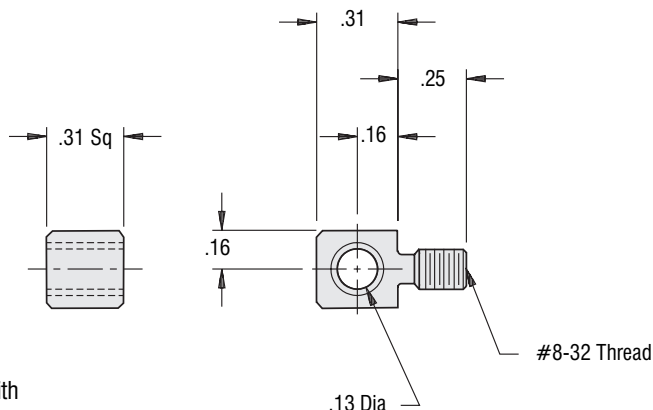
Double Rod End

EXD _____

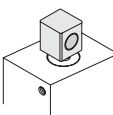
Specify Length

Ordering Suffix Length EX _____ or EXD _____
14 or 12

Rod Eye



- Screws flush with cylinder rod face



RE

Ordering Suffix Material

RE
Steel black oxide with sintered bronze bearing

All dimensions are in inches unless otherwise noted.



Cylinder Part Number X Stroke Option

COMPACT® Inch Cylinders

7/97

21

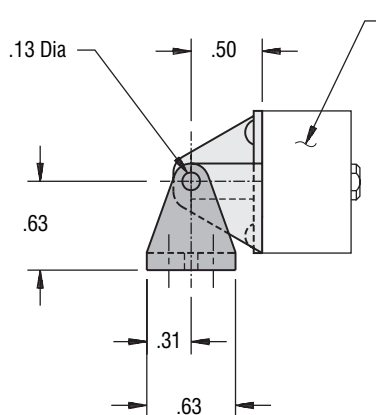
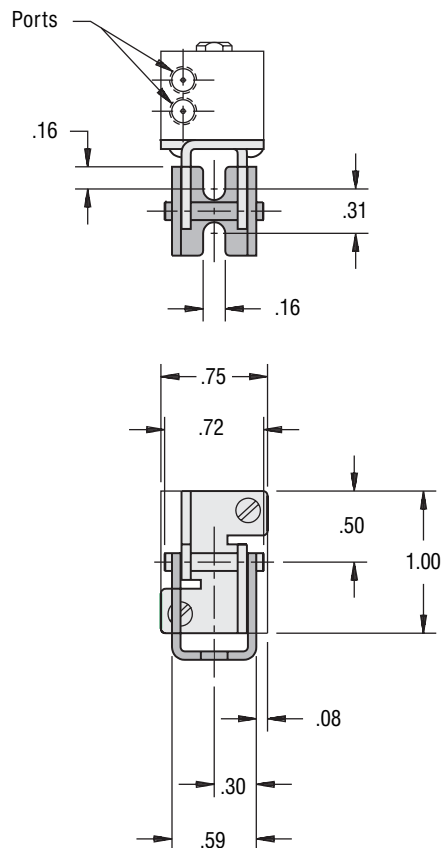


Pivot Options

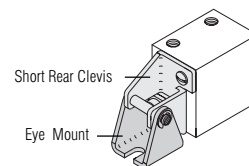
SRCE / SRC

1/2" Bore

Short Rear Clevis with Eye Mount



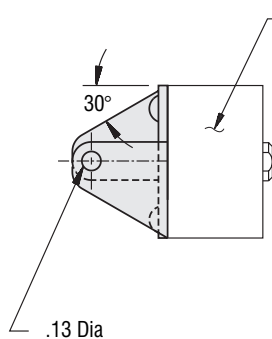
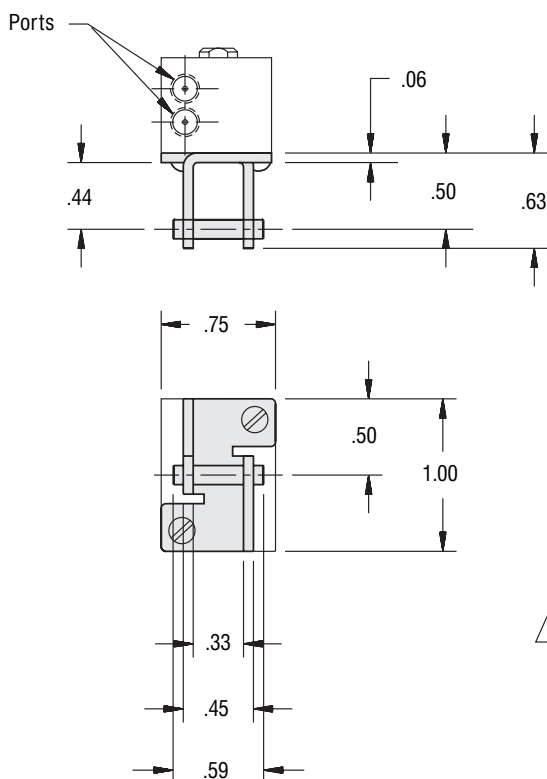
Due to variations in port orientation, refer to Compact-CAD or consult factory



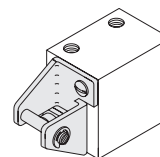
SRCE

Ordering Suffix SRCE
Style "S" only
Rod Single only
Pivot 180°
Material Short Rear Clevis:
 See Below
 Eye Mount:
 Steel black oxide

Short Rear Clevis

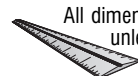


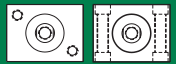
Due to variations in port orientation, refer to Compact-CAD or consult factory



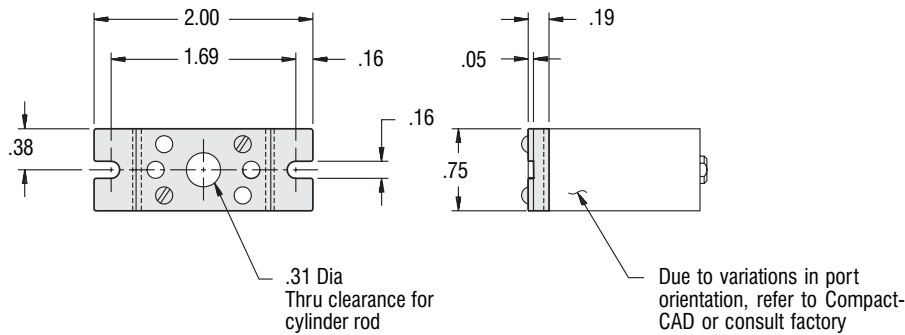
SRC

Ordering Suffix SRC
Style "S" only
Rod Single only
Material Short Rear Clevis:
 Steel black oxide with case hardened pin and clips





Flange Mount (shown as a Rear Flange)



Front Flange

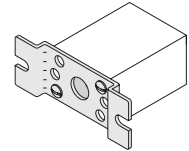
FF

Rear Flange

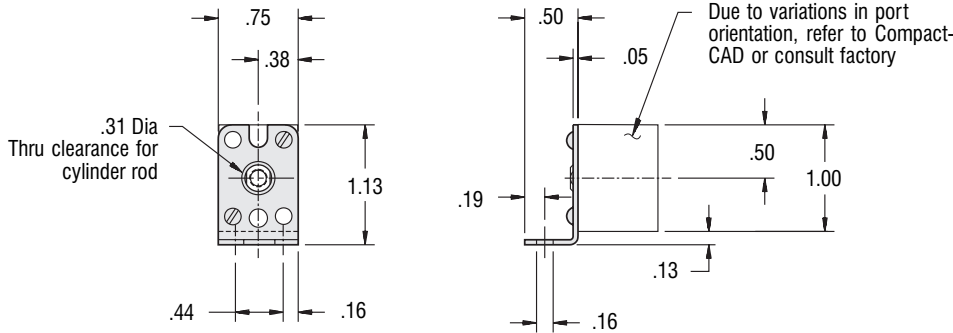
RF

Ordering Suffix
Style
Material

FF or RF
"S" only
Steel black oxide



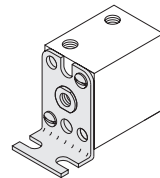
End Bracket



EB

Ordering Suffix
Style
Material

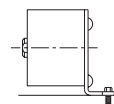
EB
"S" only
Steel black oxide



Number of brackets required:

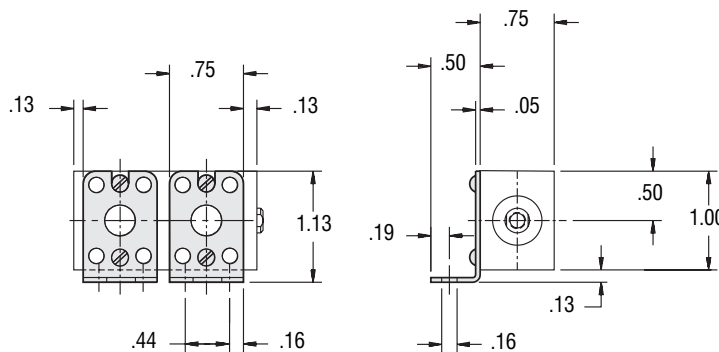
- 1-1/2" body length and shorter = 1 bracket
- Over 1-1/2" body length = 2 brackets
(must specify suffix: TBE mounting, threads both ends)

Application Idea



- Rear mounted on short stroke cylinder
- Available on body lengths 1-1/2" and shorter
- Order suffix: TR mounting, threads rear mounting

Side Bracket



SB

Ordering Suffix
Style
Body Length
Material

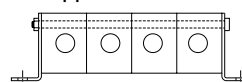
SB
"B" only
1" and larger
Steel black oxide



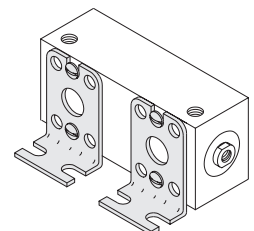
Number of brackets required:

- Two mounting holes = 1 bracket
- Four mounting holes = 2 brackets

Application Idea



- Gang mounted



All dimensions are in inches unless otherwise noted.

Cylinder Part Number	X	Stroke	Option
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