



MOUNTING NUTS

Stud Nut

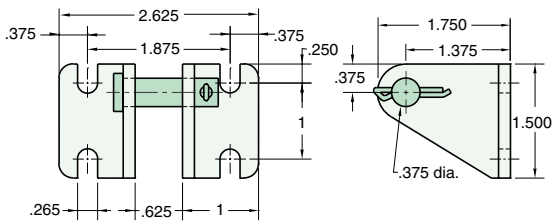
Part Number	Across Flats	Nut Thickness	Nut (Thread)
N16-14	1 1/2	35/64	1-14

Rod Nut

Part Number	Across Flats	Nut Thickness	Nut (Thread)
N07-20	11/16	1/4	7/16-20

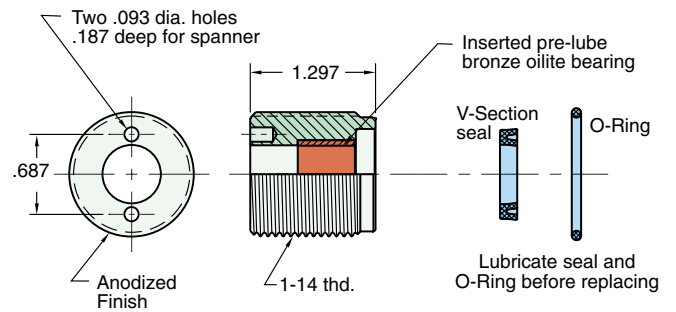
CB-2495

Clevis Bracket
Material: steel, bright zinc plated



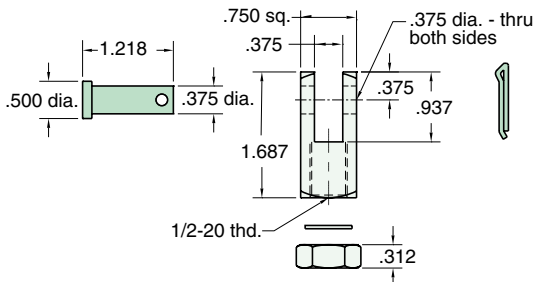
RK-2899

Replaceable Rod Seal
Material: aluminum body



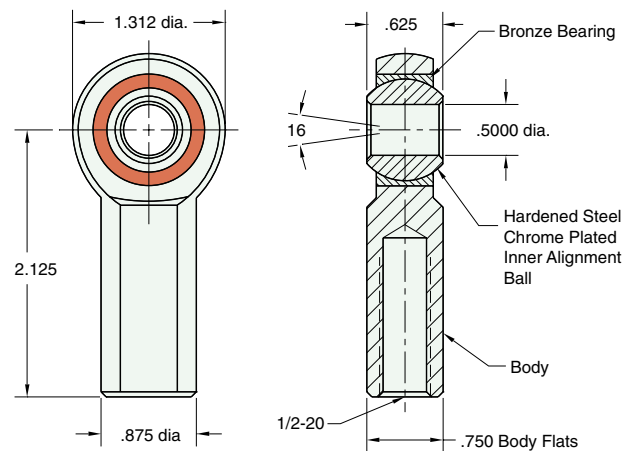
RC-3281

Rod Clevis
Material: steel, bright zinc plated



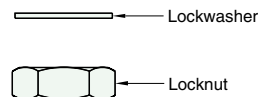
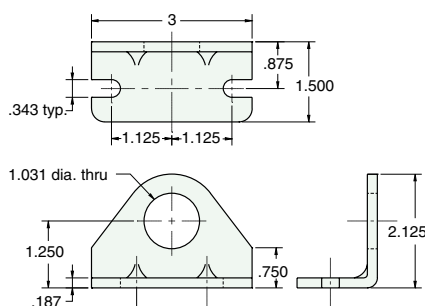
RE-3285

Rod End
Material: steel, bright zinc plated body



FB-2891

Foot Bracket
Material: steel, bright zinc plated



Max. Static Radial Load: 6700 lbs.
Fits Rod Thread Size: 1/2-20

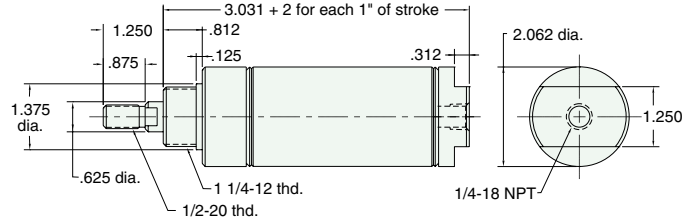


2" BORE STAINLESS STEEL CYLINDER

SSR-32-□-□

Single Acting

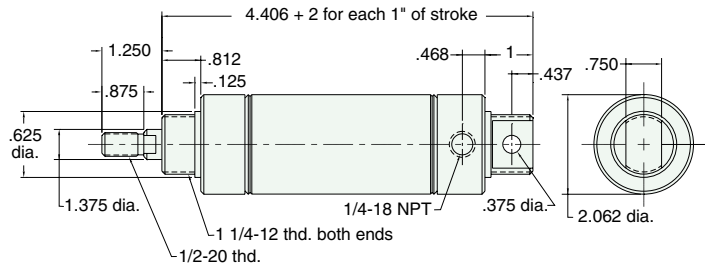
Mount: Stud **Standard Stroke Lengths:** 1, 2, 3, 4, 5, 6, 7, 8, 10, 12
Type: Rotating Rod **Spring Compressed:** 30 lbs. **Spring At Rest:** 15 lbs.
Options: MB, B, V, S, N For magnetic bumpers add .312
For S option add .375



USR-32-□-□

Single Acting

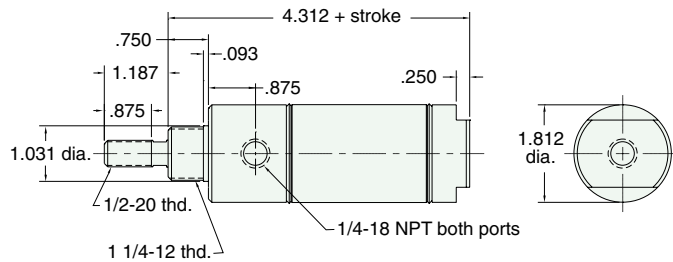
Mount: Universal **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4 Furnished without nut(s)
See chart on page 55
Type: Rotating Rod **Spring Compressed:** 30 lbs. **Spring At Rest:** 15 lbs.
Options: MB, B, V, N For magnetic bumpers add .312



SDR-32-□-□

Double Acting

Mount: Stud **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4, 5, 6
Type: Rotating Rod
Options: C, F, R, MB, B, W, V, P6, P7, P8, S, N For magnetic bumpers add .312
For S option add .375 For C, F, R and S options add .375

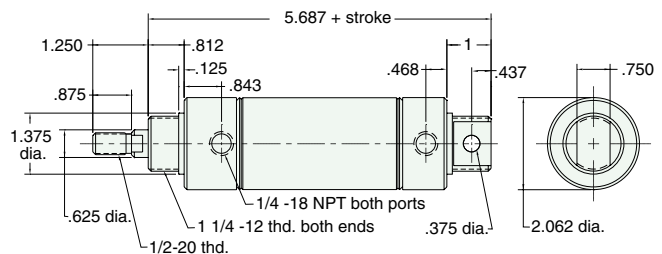


For C, F, & R options use side ported rear head

UDR-32-□-□

Double Acting

Mount: Universal **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4 Furnished without nut(s)
See chart on page 55
Type: Rotating Rod 5, 6, 7, 8, 10, 12
Options: C, F, R, MB, B, W, V, P2, P3, P4, P5, P6, P7, P8, N For magnetic bumpers add .312



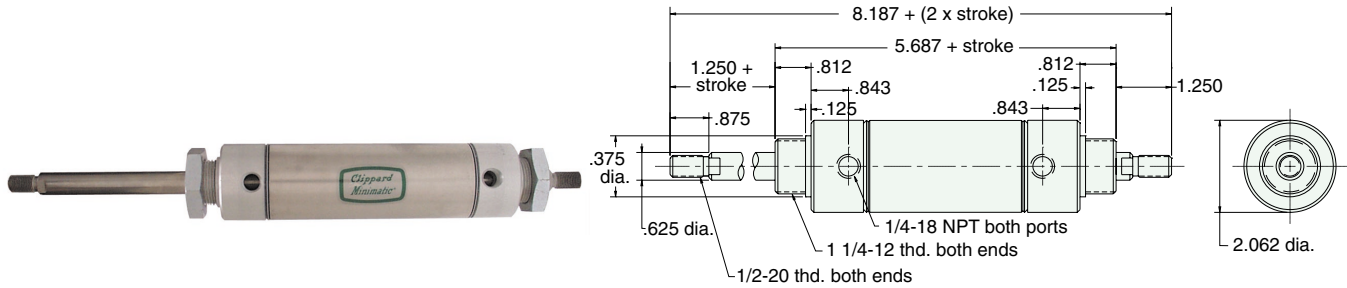
2" BORE STAINLESS STEEL CYLINDER



SDD-32-□-□

Double Acting

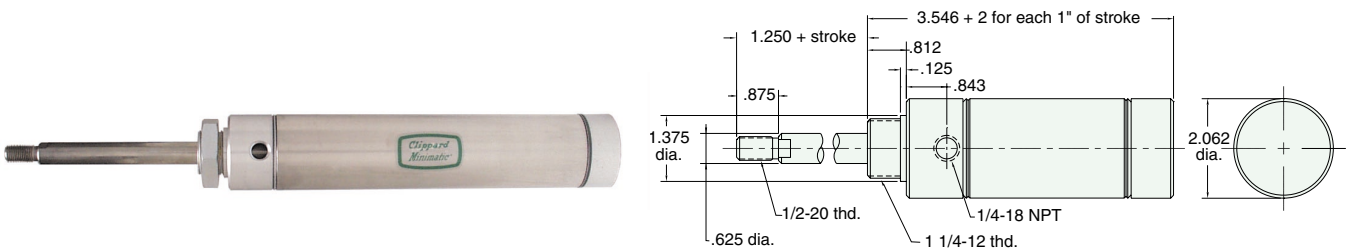
Mount: Stud **Standard Stroke Lengths:** 1, 2, 3, 4, 5, 6, 8, 10, 12
Type: Double Rod
Options: C, F, MB, B, W, V, P2, P3, P4, P5, P6, P7, P8, N For magnetic bumpers add .312



SRR-32-□-□

Reverse Acting

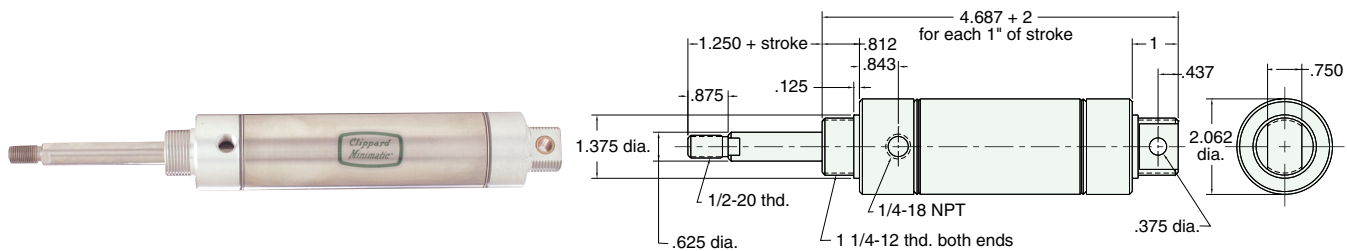
Mount: Stud **Standard Stroke Lengths:** 1, 2, 3, 4, 5, 6
Type: Rotating Rod **Spring Compressed:** 30 lbs. **Spring At Rest:** 15 lbs.
Options: MB, B, W, V, N For magnetic bumpers add .312



URR-32-□-□

Reverse Acting

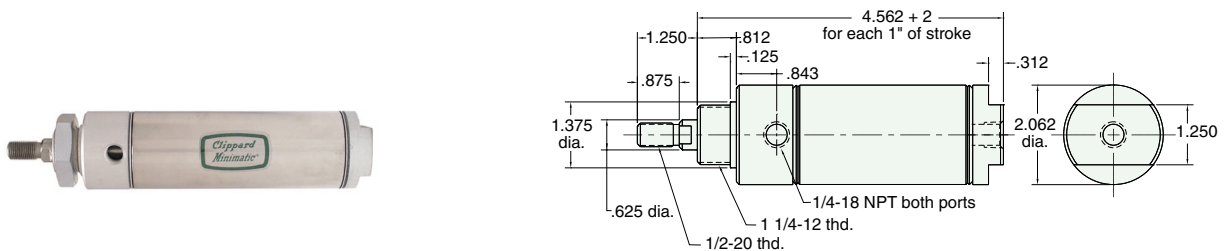
Mount: Universal **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4 Furnished without nut(s) See chart on page 55
Type: Rotating Rod **Spring Compressed:** 30 lbs. **Spring At Rest:** 15 lbs.
Options: MB, B, W, V, P6, N For magnetic bumpers add .312



SFR-32-□-□

Spring Bias

Mount: Stud **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4
Type: Rotating Rod **Spring Compressed:** 30 lbs. **Spring At Rest:** 15 lbs.
Options: MB, B, W, V, P6, P7, P8, S, N For magnetic bumpers add .312
 For S option add .375



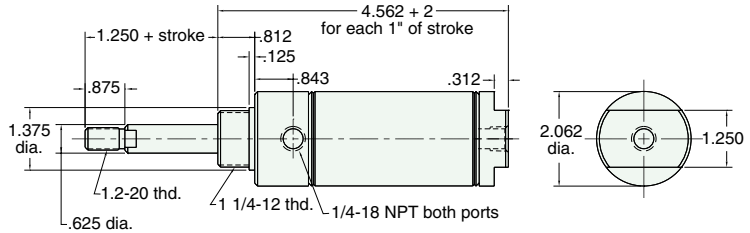


2" BORE STAINLESS STEEL CYLINDER

SBR-32-□-□

Spring Bias

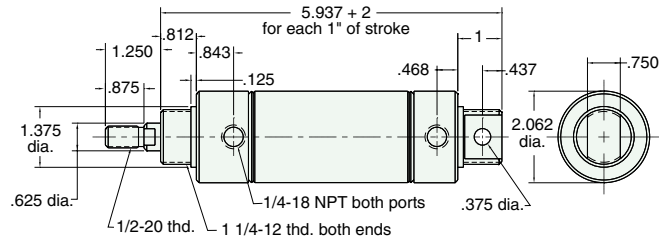
Mount: Stud **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4
Type: Rotating Rod **Spring Compressed:** 30 lbs. **Spring At Rest:** 15 lbs.
Options: MB, B, W, V, P6, P7, P8, S, N For magnetic bumpers add .312
For S option add .375



UFR-32-□-□

Spring Bias

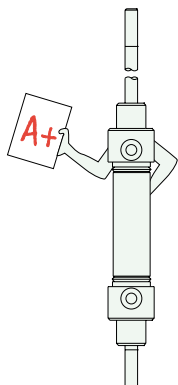
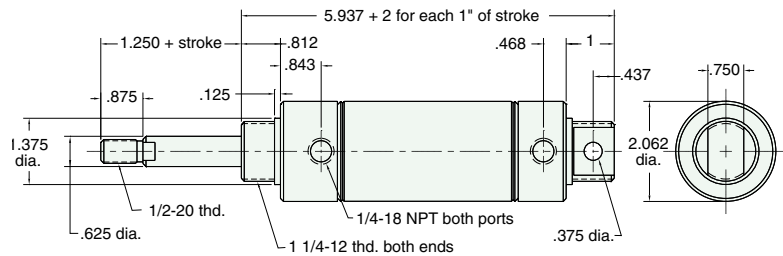
Mount: Universal **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4
Type: Rotating Rod **Spring Compressed:** 30 lbs. **Spring At Rest:** 15 lbs.
Options: MB, B, W, V, P2, P3, P4, P5, P6, P7, P8, N For magnetic bumpers add .312



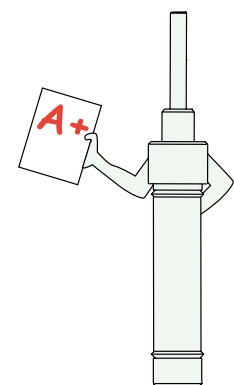
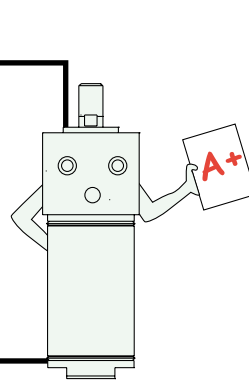
UBR-32-□-□

Spring Bias

Mount: Universal **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4
Type: Rotating Rod **Spring Compressed:** 30 lbs. **Spring At Rest:** 15 lbs.
Options: MB, B, W, V, P2, P3, P4, P5, P6, P7, P8, N For magnetic bumpers add .312



Did you know...
All Clippard Cylinders
are 100% tested.





MOUNTING NUTS

Stud Nut

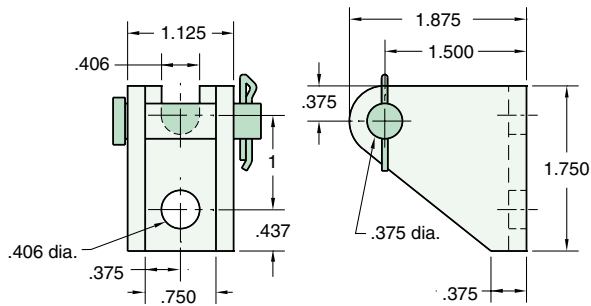
Part Number	Across Flats	Nut Thickness	Nut (Thread)
N20-12	1 3/4	7/16	1 1/4-12

Rod Nut

Part Number	Across Flats	Nut Thickness	Nut (Thread)
N08-20	3/4	5/16	1/2-20

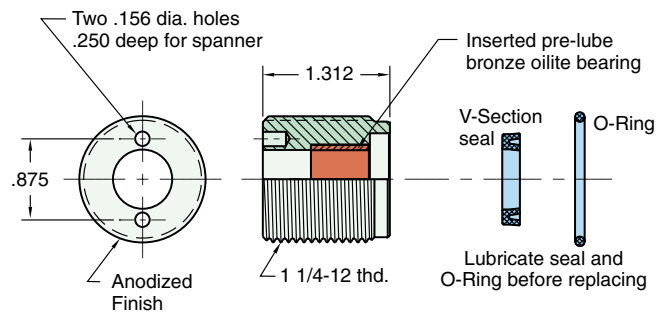
CB-3295

Clevis Bracket
Material: steel, bright zinc plated



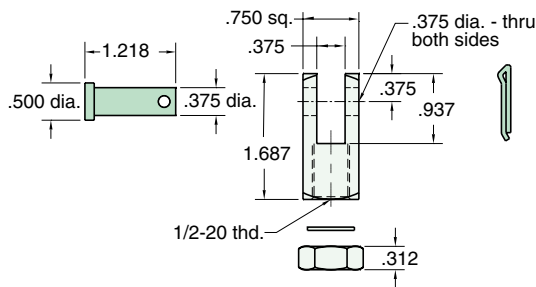
RK-3299

Replaceable Rod Seal
Material: aluminum body



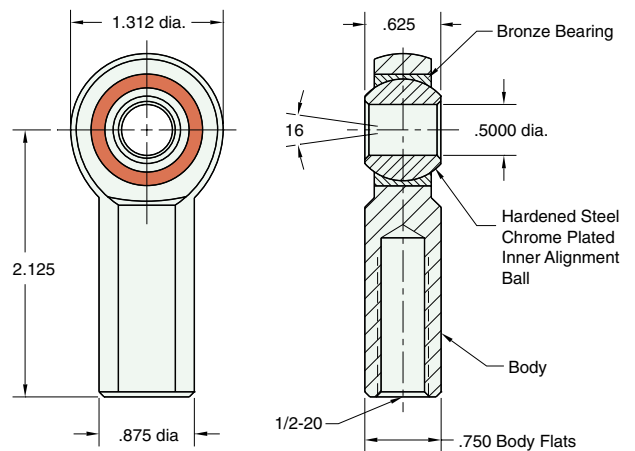
RC-3281

Rod Clevis
Material: steel, bright zinc plated



RE-3285

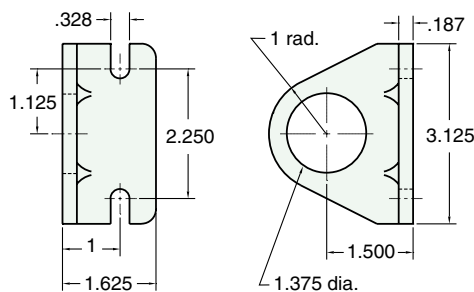
Rod End
Material: steel, bright zinc plated body



Max. Static Radial Load: 6700 lbs.
Fits Rod Thread Size: 1/2-20

FB-3291

Foot Bracket
Material: steel, bright zinc plated





2 1/2" BORE STAINLESS STEEL CYLINDER

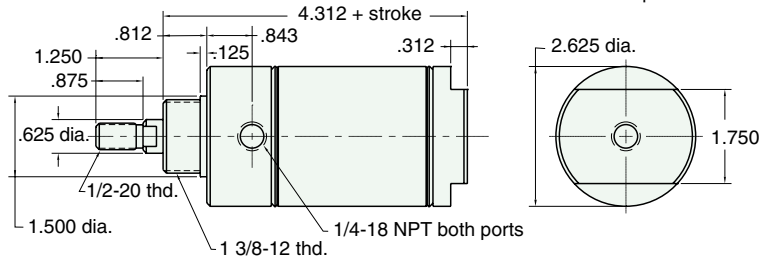
SDR-40-□-□

Double Acting



Mount: Stud **Standard Stroke Lengths:** 1, 2, 3, 4, 5, 6
Type: Rotating Rod
Options: C, F, R, MB, W, V, P6, P7, P8, S, N

Bumpers are standard
For magnetic bumpers add .312
For S option add .437



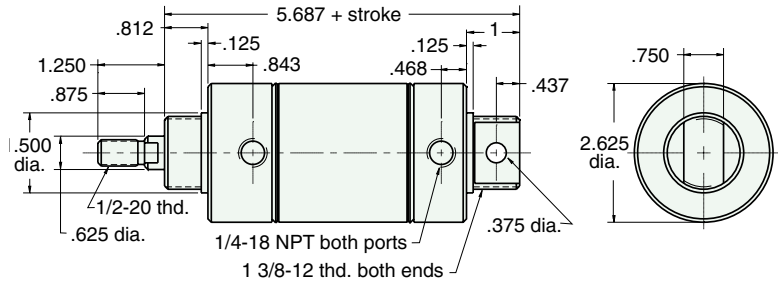
For C, F, & R options use side ported rear head

UDR-40-□-□

Double Acting



Mount: Universal **Standard Stroke Lengths:** 1, 2, 3, 4, 5, 6, 7, 8, 10, 12 Furnished without nut(s) See chart on page 57
Type: Rotating Rod
Options: C, F, R, MB, W, V, P2, P3, P4, P5, P6, P7, P8, N **Bumpers are standard** For magnetic bumpers add .312

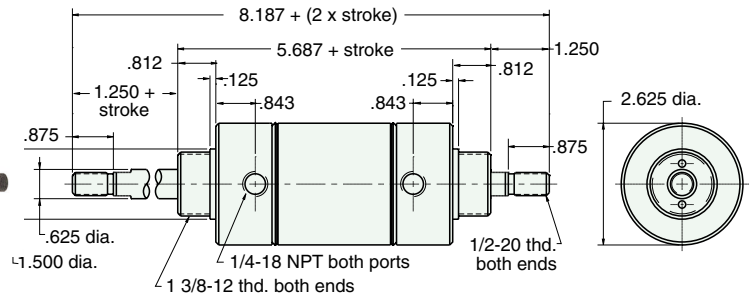


SDD-40-□-□

Double Acting



Mount: Stud **Standard Stroke Lengths:** 1, 2, 3, 4, 5, 6, 8, 10, 12
Type: Double Rod
Options: C, F, R, MB, W, V, P6, P7, P8, N **Bumpers are standard** For magnetic bumpers add .312





MOUNTING NUTS

Stud Nut

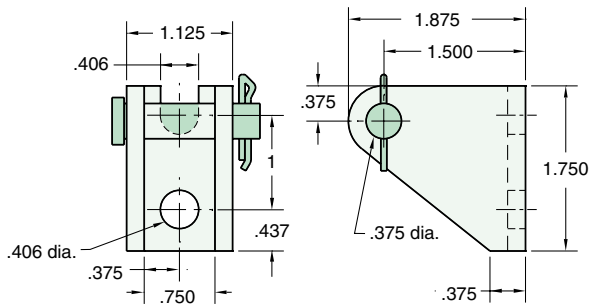
Part Number	Across Flats	Nut Thickness	Nut (Thread)
N22-12	1 7/8	1/2	1 3/8-12

Rod Nut

Part Number	Across Flats	Nut Thickness	Nut (Thread)
N08-20	3/4	5/16	1/2-20

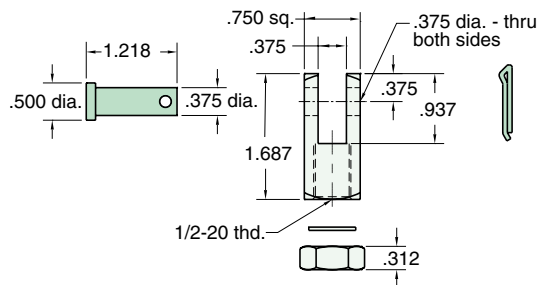
CB-3295

Clevis Bracket
Material: steel, bright zinc plated



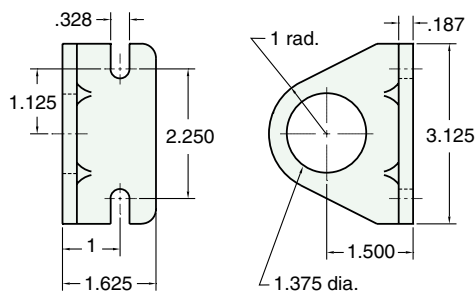
RC-3281

Rod Clevis
Material: steel, bright zinc plated



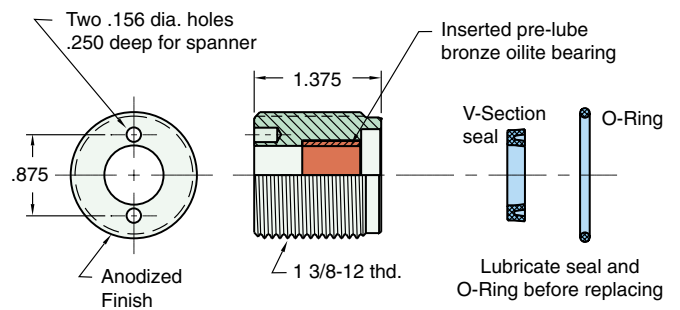
FB-3291

Foot Bracket
Material: steel, bright zinc plated



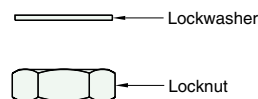
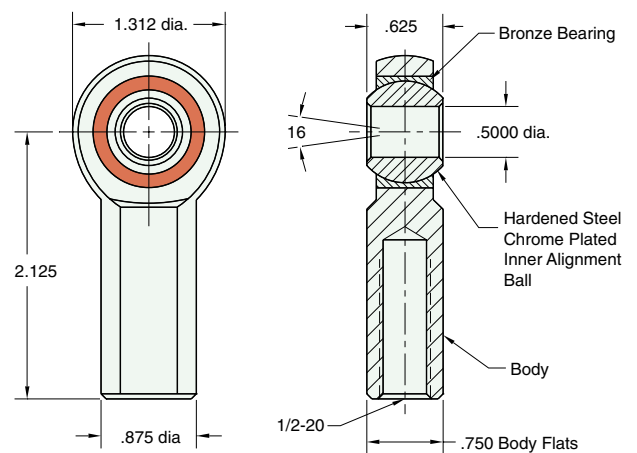
RK-4099

Replaceable Rod Seal
Material: aluminum body



RE-3285

Rod End
Material: steel, bright zinc plated body



Max. Static Radial Load: 6700 lbs.
Fits Rod Thread Size: 1/2-20



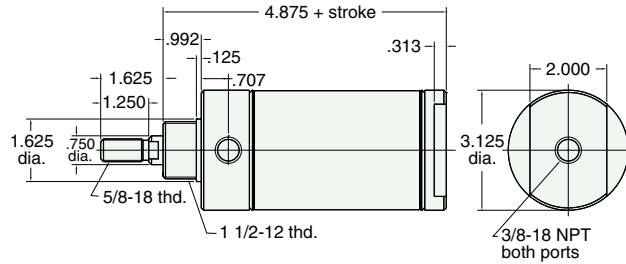
3" BORE STAINLESS STEEL CYLINDER

SDR-48-□-□

Double Acting

Mount: Stud **Standard Stroke Lengths:** 1, 2, 3, 4, 5, 6
Type: Rotating Rod
Options: MB, W, V, P6, P7, P8, S, N

Bumpers are standard
No additional length for bumpers
For S option add .437

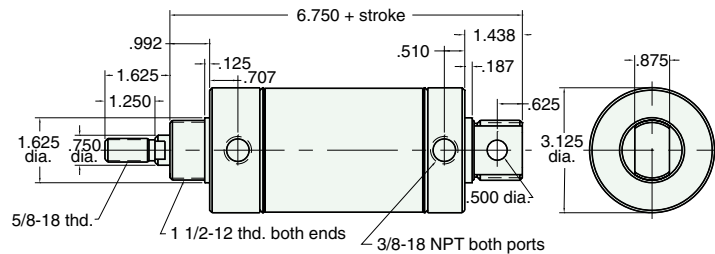


UDR-48-□-□

Double Acting

Mount: Universal **Standard Stroke Lengths:** 1, 2, 3, 4, 5, 6, 7, 8, 10, 12
Type: Rotating Rod
Options: MB, W, V, P2, P3, P4, P5, P6, P7, P8, N

Bumpers are standard
No additional length for bumpers

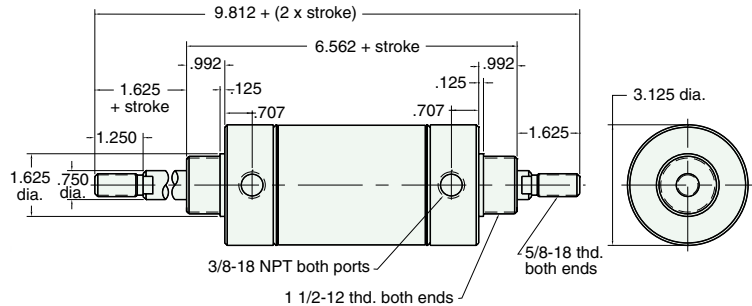


SDD-48-□-□

Double Acting

Mount: Stud **Standard Stroke Lengths:** 1, 2, 3, 4, 5, 6, 8, 10, 12
Type: Double Rod
Options: MB, W, V, P6, P7, P8, N

Bumpers are standard
No additional length for bumpers



Did you know...

Minimatic®
Minimetric®
Fluidamp®
Octoport®
Air-2-Electric® and Air Force One® are all Clippard's registered trademarks.





MOUNTING NUTS

Stud Nut

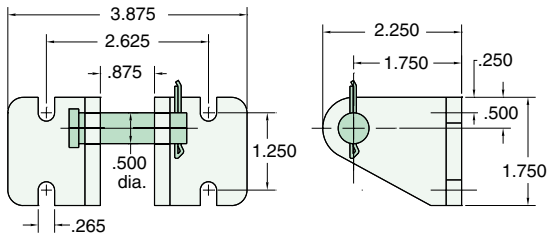
Part Number	Across Flats	Nut Thickness	Nut (Thread)
N24-12	2 1/4	1/2	1 1/2-12

Rod Nut

Part Number	Across Flats	Nut Thickness	Nut (Thread)
N08-20	3/4	5/16	1/2-20

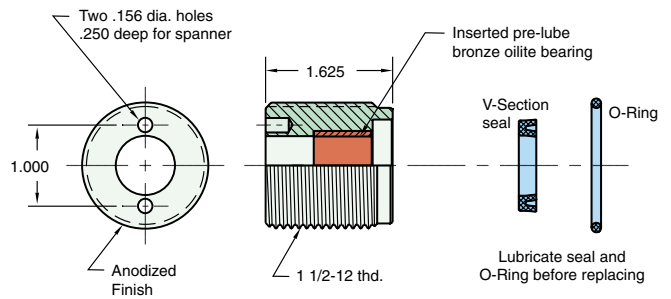
CB-4895

Clevis Bracket
Material: steel, bright zinc plated



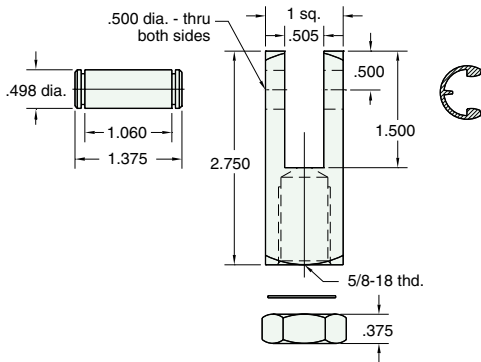
RK-4899

Replaceable Rod Seal
Material: aluminum body



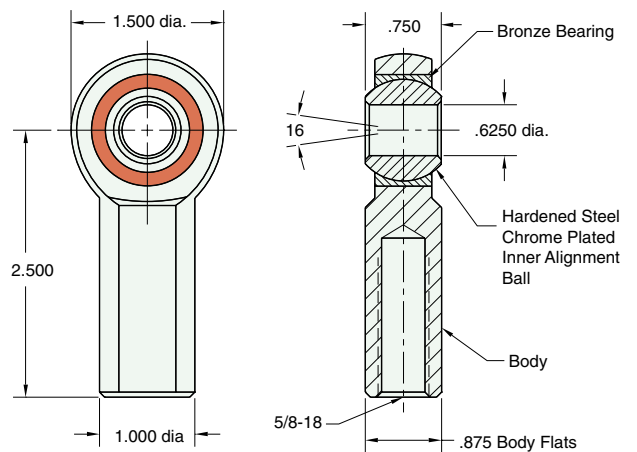
RC-4881

Rod Clevis
Material: steel, bright zinc plated



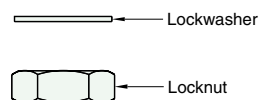
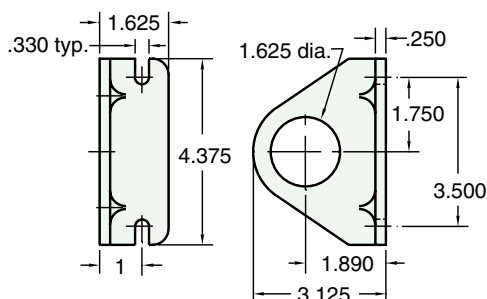
RE-4885

Rod End
Material: steel, bright zinc plated body



FB-4891

Foot Bracket
Material: steel, bright zinc plated



Max. Static Radial Load: 7400 lbs.
Fits Rod Thread Size: 5/8-18



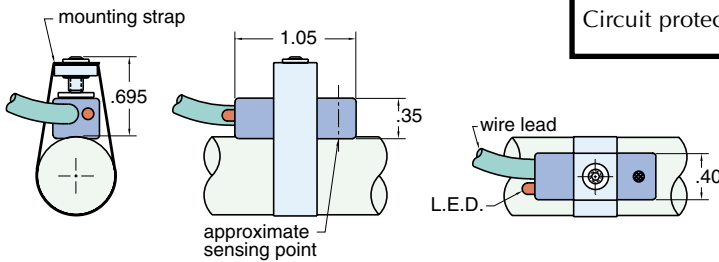
POSITION SENSORS

HS-9901

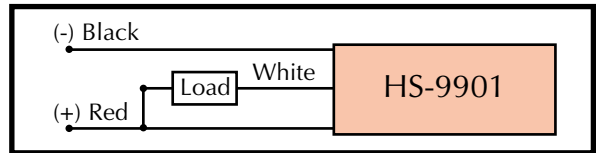
Hall Effect Sensors



Output type	Sinking (open collector output)
Input voltage (Vin)	5 to 28 VDC
Operation temp.	0 to 185°F
Input current (Iin)	25 mA maximum
Output voltage drop	.4 VDC maximum
Output current (Iout)	Iout = .3 Vin, 300 mA maximum
Power dissipation	300 mW maximum
Lead Wire	22 ga. x 4 ft. also avail. in 12 ft. length HS-9901-12
Circuit protection	Reverse polarity protected, transient voltage protected and false pulse protected.



Hall Effect Wiring Diagram

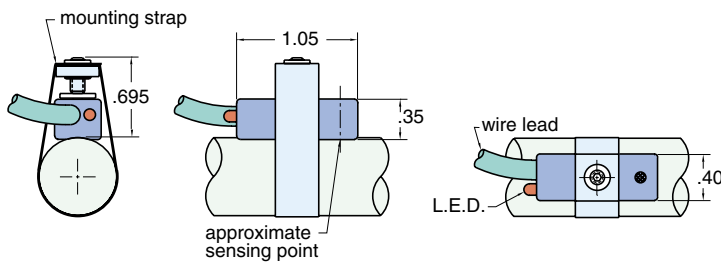
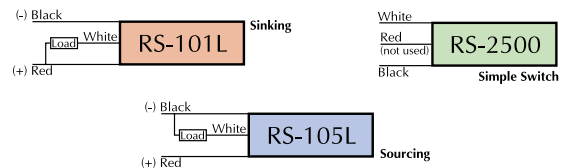


RS-

Magnetic Reed Switch

RS-101L • RS-105L • RS-2500

Circuit Diagram



RS-105L pictured

Part Number	RS-101L	RS-105L	RS-2500
Output Type	Sinking	Sourcing	Simple Switch
Power Range	10w	25w	25w
Supply Voltage	3 to 36 VAC or VDC	3 to 36 VAC or VDC	220 VAC or VDC
Current Range	1.0 A max.		
LED	Provided	Provided	Not Provided
Lead Wire	22 ga. x 4 ft.		
Operating Temp.	0 to 300°		
Rated Life	10,000,000 cycles		
Housing	molded plastic		
Response Time	1 mSec		
Switching Logic	SPST normally open		

■ RS-101L & RS-105L

■ RS-101L, RS-105L & RS-2500

Universal Clamps

- SC-08 • SC-10 • SC-12 • SC-14 • SC-17 • SC-20
 SC-24 • SC-28 • SC-32 • SC-40 • SC-48



Clippard's stainless steel clamps are designed to be used with the Hall Effect and the reed switch. All clamps should be ordered based upon the size of the cylinder on which it will be mounted. The part numbers show the bore size using the numerical code. Each clamp is .375 wide stainless steel, and is equipped with a locking screw with #5-40 threads.

AVT-□-□

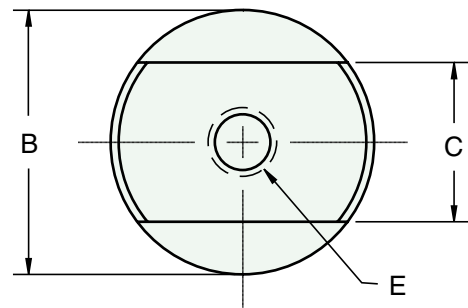
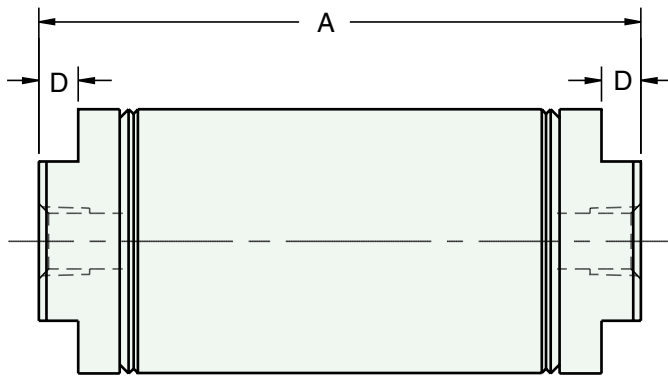
AVT-12-1	AVT-17-2 AVT-17-3	AVT-24-4 AVT-24-6	AVT-24-8 AVT-24-10	AVT-32-12 AVT-32-14	AVT-32-16
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Additional models are available upon request

Clippard offers a line of air volume tanks suitable for use with Clippard air components. Using the same quality rolled construction as Clippard stainless steel cylinders, tanks are manufactured to exacting standards. Each is provided with a threaded port at both ends. See chart for volume capacity, dimensions, and port information.

For additional corrosion resistance Clippard can offer air volume tanks with Delrin® heads. Call for more information.

Delrin® is a registered trademark of DuPont



FEATURES

- Volumes from 1 to 16 cu. in.
- Ten models
- 304 stainless steel tubes
- Precision rolled construction
- Easy to connect, mount and use in your circuits
- Anodized aluminum heads
- Maximum pressure 250 psig

Part Number	Volume Cubic In.	A	B	C	D	E
AVT-12-1	1.0	3.281	.812	.625	.156	1/8 27
AVT-17-2	2.0	3.593	1.125	.875	.187	1/8 27
AVT-17-3	3.0	4.718	1.125	.875	.187	1/8 27
AVT-24-4	4.0	3.687	1.562	.875	.250	1/8 27
AVT-24-6	6.0	4.843	1.562	.875	.250	1/8 27
AVT-24-8	8.0	5.968	1.562	.875	.250	1/8 27
AVT-24-10	10.0	7.093	1.562	.875	.250	1/8 27
AVT-32-12	12.0	5.718	2.062	1.250	.312	1/4 18
AVT-32-14	14.0	6.343	2.062	1.250	.312	1/4 18
AVT-32-16	16.0	6.968	2.062	1.250	.312	1/4 18



CORROSION RESISTANT CYLINDERS



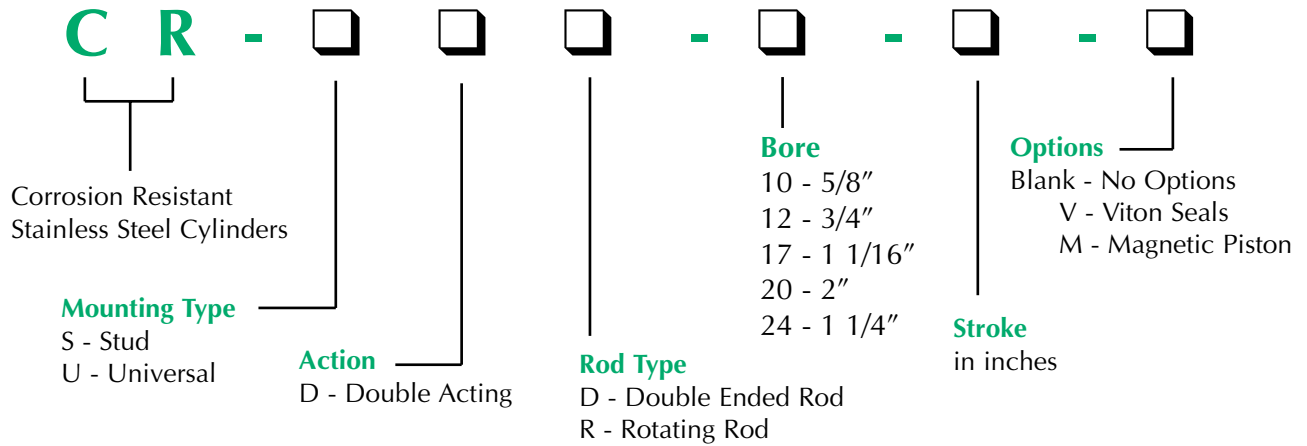
Clippard's line of Delrin® head stainless steel cylinders offer all of the advantages of Clippard's high quality, reliable stainless steel cylinders, with the added benefit of corrosion resistance. These cylinders are ideal for applications where equipment cleanliness is critical, since they can be put to work in harsh environments requiring frequent use of hot water and chemicals.

Clippard corrosion resistant cylinders are available in bore sizes ranging from 5/8" to 1 1/2". Standard stroke lengths range from 1/2" to 6". The cylinder tubes and rods are made of stainless steel. The rods are ground, polished, and roller burnished. Buna-N® seals are standard with a Viton® option available for compatibility. A magnetic piston is also optional.

These lightweight cylinders have a temperature range from 32° F to 180° F, and have a pressure rating of 150 psig (air). A variety of mounting styles are available.

Delrin® and Viton® are registered trademarks of DuPont

NUMBERING SYSTEM



Features

- Delrin® heads with a positive double seal
- Available with magnetic pistons
- 303 stainless steel ground, polished and roller burnished piston rods
- Precision rolled construction for a solid leakproof cylinder
- Buna-N seals (Viton® optional for compatibility only)
- 304 stainless steel tube
- Pressure Range 0 to 150 psig
- Temperature range: 32° F to 180° F
- Optional stainless steel mounting nuts
- Aluminum alloy pistons, optional Delrin® pistons available; consult factory

Delrin® is a registered trademark of Du Pont



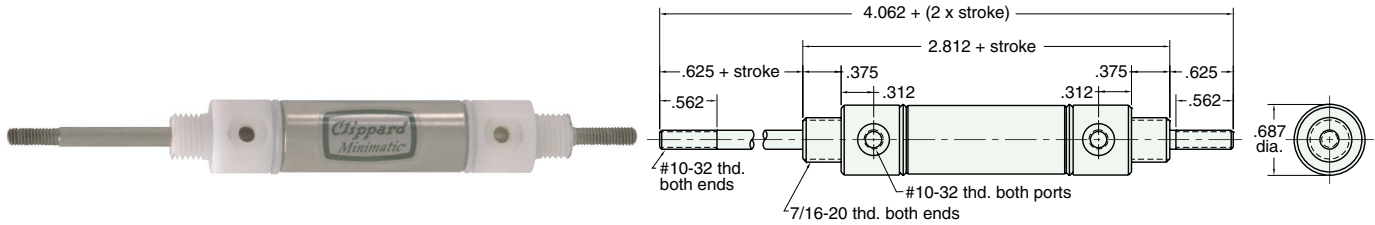


CORROSION RESISTANT CYLINDER

5/8" BORE

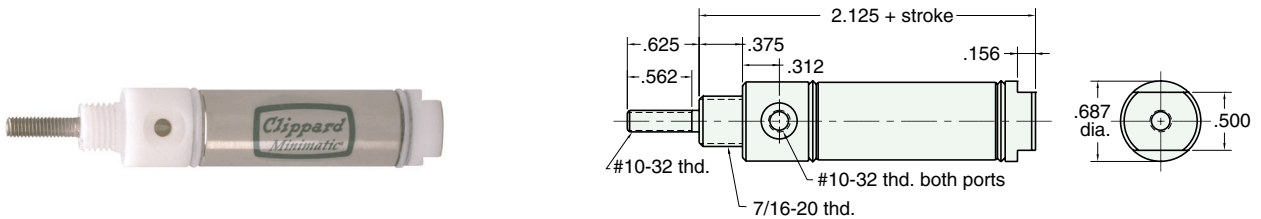
CR-SDD-10-□-□

Mount: Stud **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4
Type: Double Acting Double Rod **Options:** M, V, N, P2, P3, P4, P5, P6, P7, P8
 Furnished without nut(s).
 For magnetic option add .312



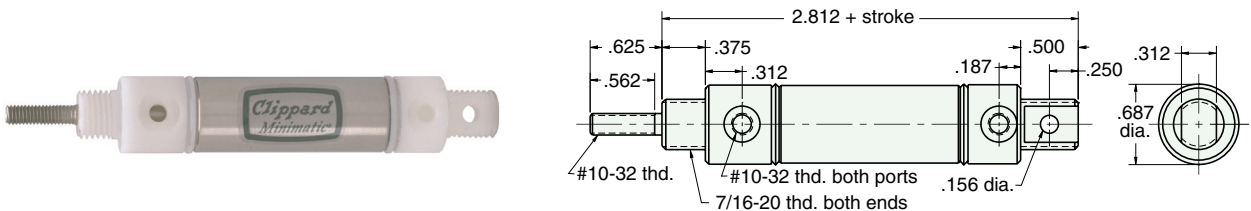
CR-SDR-10-□-□

Mount: Stud **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4
Type: Double Acting Rotating Rod **Options:** M, V, N
 Furnished without nut(s).
 For magnetic option add .312



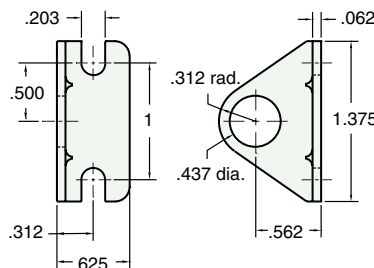
CR-UDR-10-□-□

Mount: Universal **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4
Type: Double Acting Rotating Rod **Options:** M, V, N, P2, P3, P4, P5, P6, P7, P8
 Furnished without nut(s).
 For magnetic option add .312



Stainless Steel Mounting

Foot Bracket
Model Number: FB-0892-SS
Nut
Model Number: N07-20-SS
Max. Torque in lbs.: 4.0

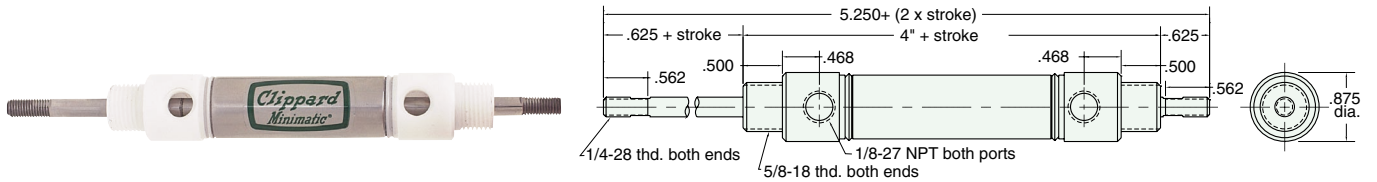




3/4" BORE

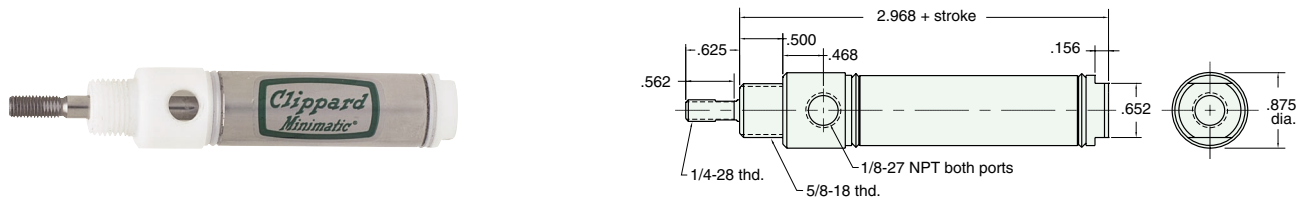
CR-SDD-12-□-□

Mount: Stud **Standard Stroke Lengths:** 1, 2, 3, 4, 5, 6
Type: Double Acting Double Rod **Options:** M, V, N, P2, P3, P4, P5, P6, P7, P8
 Furnished without nut(s).
 For magnetic option add .312



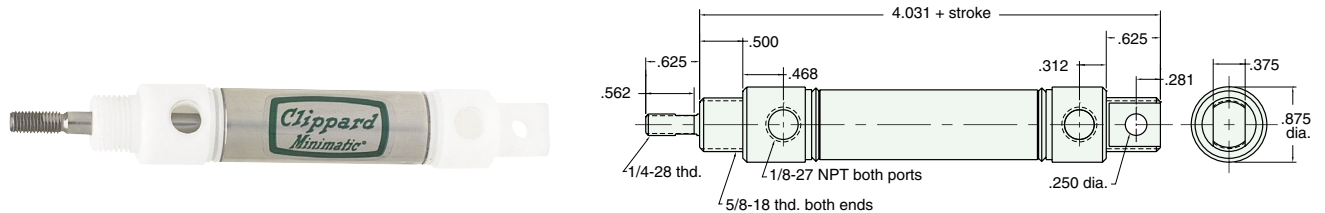
CR-SDR-12-□-□

Mount: Stud **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4, 5, 6
Type: Double Acting Rotating Rod **Options:** M, V, N, P6, P7, P8
 Furnished without nut(s).
 For magnetic option add .312



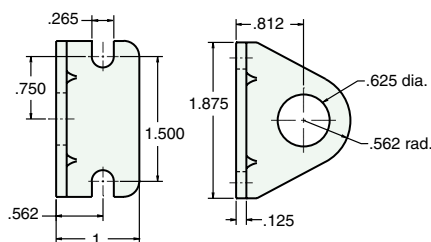
CR-UDR-12-□-□

Mount: Stud **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4, 5, 6, 8, 10, 12
Type: Double Acting Rotating Rod **Options:** M, V, N, P2, P3, P4, P5, P6, P7, P8
 Furnished without nut(s).
 For magnetic option add .312



Stainless Steel Mounting

Foot Bracket
Model Number: FB-1791-SS
Nut
Model Number: N10-18-SS
Max. Torque in lbs.: 12





CORROSION RESISTANT CYLINDER

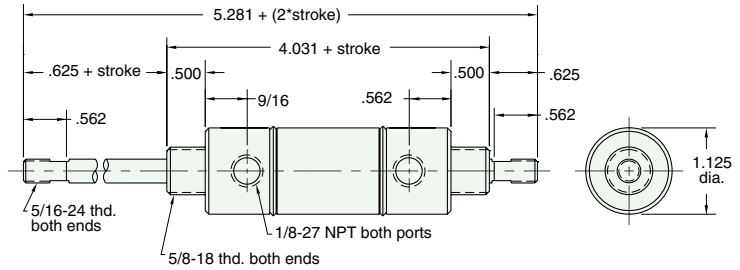
1 1/16" BORE

CR-SDD-17-□-□

Mount: Stud
Type: Double Acting
Double Rod

Standard Stroke Lengths: 1, 2, 3, 4, 5, 6
Options: M, V, N, P6, P7, P8

Furnished without nut(s).
For magnetic option add .312

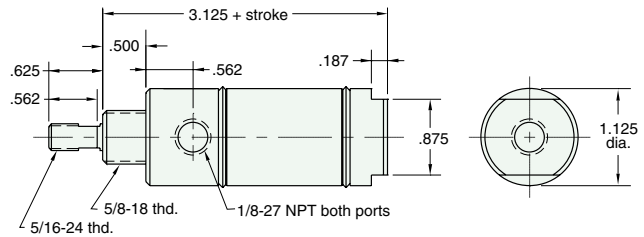


CR-SDR-17-□-□

Mount: Stud
Type: Double Acting
Rotating Rod

Standard Stroke Lengths: 1/2, 1, 1-1/2, 2, 3, 4, 5, 6
Options: M, V, N

Furnished without nut(s).
For magnetic option add .312

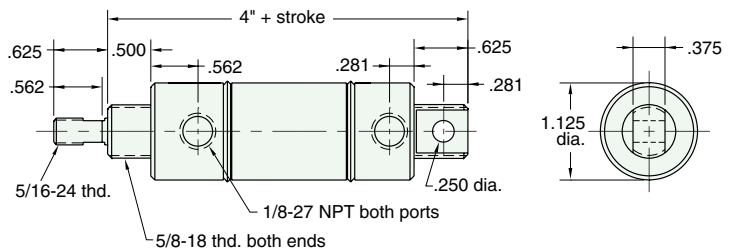


CR-UDR-17-□-□

Mount: Stud
Type: Double Acting
Rotating Rod

Standard Stroke Lengths: 1/2, 1, 1-1/2, 2, 3, 4, 5, 6, 8, 10, 12
Options: M, V, N, P2, P3, P4, P5, P6, P7, P8

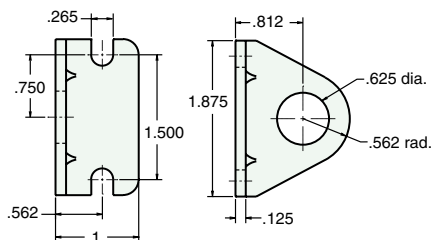
Furnished without nut(s).
For magnetic option add .312



Stainless Steel Mounting

Foot Bracket
Model Number: FB-1791-SS

Nut
Model Number: N10-18-SS
Max. Torque in lbs.: 12





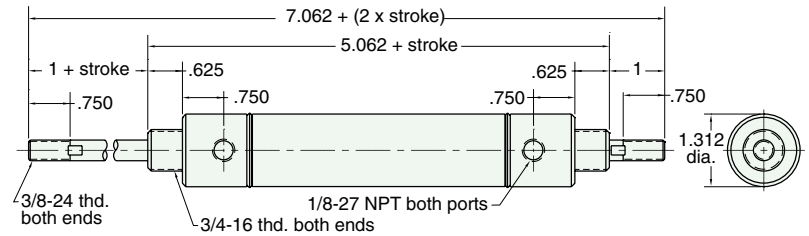
1 1/4" BORE

CR-SDD-20-□-□

Mount: Stud
Type: Double Acting
Double Rod

Standard Stroke Lengths: 1, 2, 3, 4, 5, 6
Options: M, V, N, P6, P7, P8

Furnished without nut(s).
For magnetic option add .312

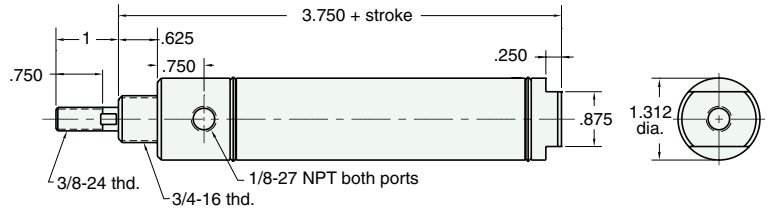


CR-SDR-20-□-□

Mount: Stud
Type: Double Acting
Rotating Rod

Standard Stroke Lengths: 1/2, 1, 1-1/2, 2, 3, 4, 5, 6
Options: M, V, N

Furnished without nut(s).
For magnetic option add .312

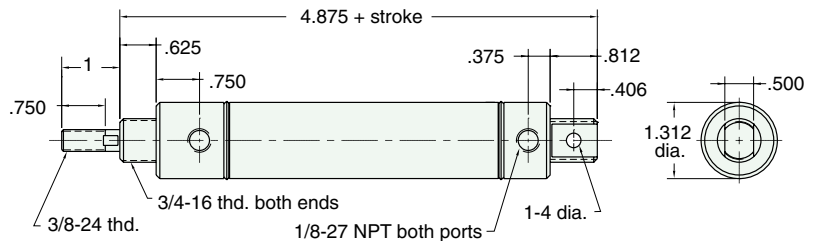


CR-UDR-20-□-□

Mount: Universal
Type: Double Acting
Rotating Rod

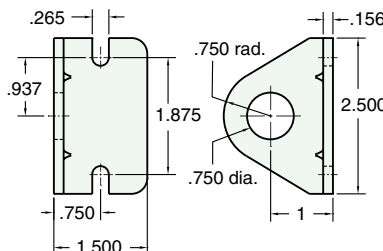
Standard Stroke Lengths: 1/2, 1, 1-1/2, 2, 3, 4, 5, 6, 8, 10, 12
Options: M, V, N, P2, P3, P4, P5, P6, P7, P8

Furnished without nut(s).
For magnetic option add .312



Stainless Steel Mounting

Foot Bracket
Model Number: FB-2491-SS
Nut
Model Number: N12-16-SS
Max. Torque in lbs.: 20



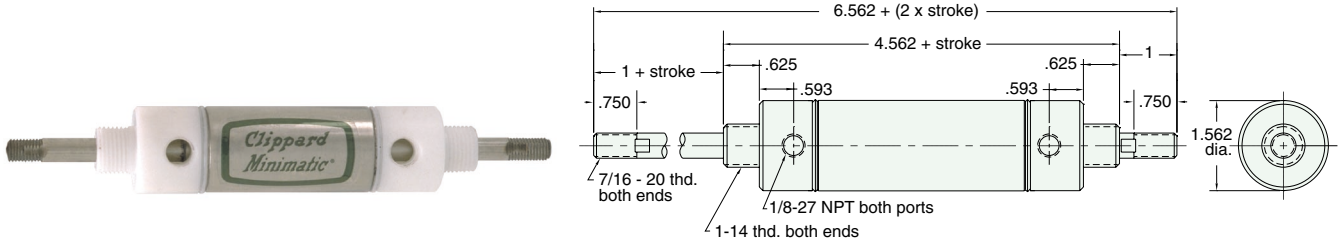


CORROSION RESISTANT CYLINDER

1 1/2" BORE

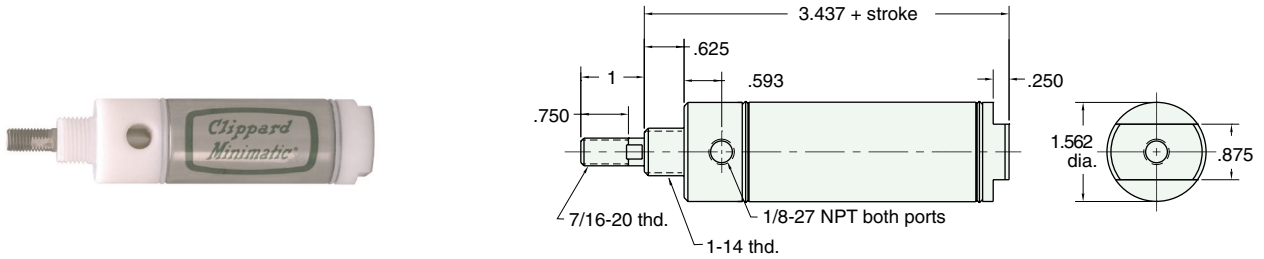
CR-SDD-24-□-□

Mount: Stud **Standard Stroke Lengths:** 1, 2, 3, 4, 5, 6, 8, 10, 12
Type: Double Acting Double Rod **Options:** M, V, N, P6, P7, P8
Furnished without nut(s).
For magnetic option add .312



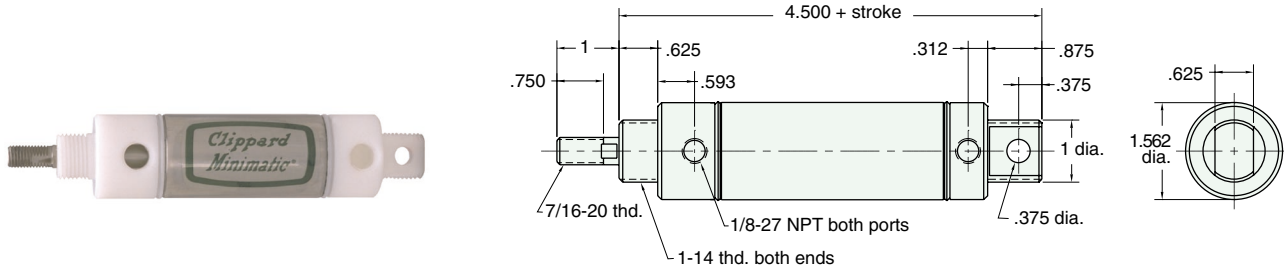
CR-SDR-24-□-□

Mount: Stud **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4, 5, 6, 8, 10, 12
Type: Double Acting Rotating Rod **Options:** M, V, N
Furnished without nut(s).
For magnetic option add .312



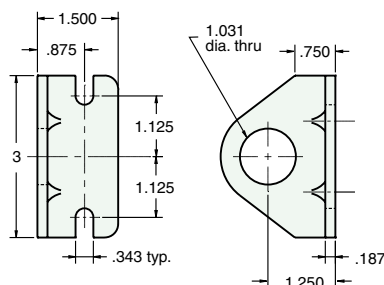
CR-UDR-24-□-□

Mount: Universal **Standard Stroke Lengths:** 1/2, 1, 1-1/2, 2, 3, 4, 5, 6, 8, 10, 12
Type: Double Acting Rotating Rod **Options:** M, V, N, P2, P3, P4, P5, P6, P7, P8
Furnished without nut(s).
For magnetic option add .312



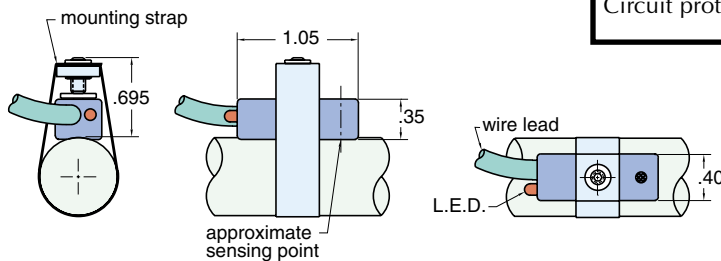
Stainless Steel Mounting

Foot Bracket
Model Number: FB-2891-SS
Nut
Model Number: N16-14-SS
Max. Torque in lbs.: 30



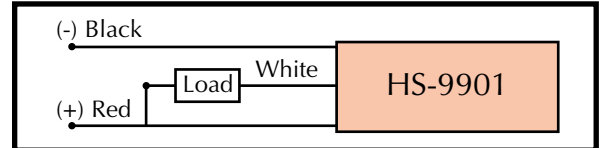
HS-9901

Hall Effect Sensor



Output type	Sinking (open collector output)
Input voltage (Vin)	5 to 28 VDC
Operation temp.	0 to 185°F
Input current (Iin)	25 mA maximum
Output voltage drop	.4 VDC maximum
Output current (Iout)	Iout = .3 Vin, 300 mA maximum
Power dissipation	300 mW maximum
Lead Wire	22 ga. x 4 ft. also avail. in 12 ft. length HS-9901-12
Circuit protection	Reverse polarity protected, transient voltage protected and false pulse protected.

Hall Effect Wiring Diagram

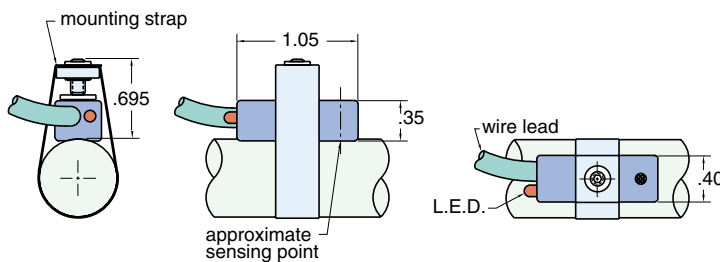
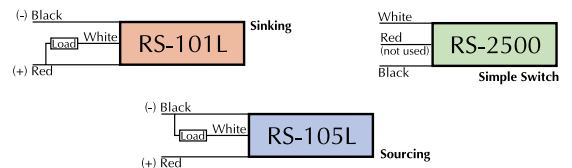


RS-

Magnetic Reed Switch

RS-101L • RS-105L • RS-2500

Circuit Diagram



Part Number	RS-101L	RS-105L	RS-2500
Output Type	Sinking	Sourcing	Simple Switch
Power Range	10w		25w
Supply Voltage	3 to 36 VAC or VDC		220 VAC or VDC
Current Range	1.0 A max.		
LED	Provided	Provided	Not Provided
Lead Wire	22 ga. x 4 ft.		
Operating Temp.	0 to 300°		
Rated Life	10,000,000 cycles		
Housing	molded plastic		
Response Time	1 mSec		
Switching Logic	SPST normally open		

■ RS-101L & RS-105L □ RS-101L, RS-105L & RS-2500

RS-2500 pictured

Universal Clamps

SC-08 • SC-10 • SC-12 • SC-14 • SC-17 • SC-20
SC-24 • SC-28 • SC-32 • SC-40 • SC-48



Clippard's stainless steel clamps are designed to be used with the Hall Effect and the reed switch. All clamps should be ordered based upon the size of the cylinder on which it will be mounted. The part numbers show the bore size using the numerical code. Each clamp is 3/8" wide stainless steel, and is equipped with a locking screw with #5-40 threads.



Clippard Instrument Laboratory, Inc. Air Force One® compact cylinders are available in double acting, spring return, spring extend and double rod models. Hall Effect sensors and magnetic piston versions are also available.

The AFO cylinder features include a stainless steel tube and roller burnished piston rod. This means longer rod and piston seal life. For corrosive environments, where dirt and abrasives may be ingested, and cause seals to wear faster than normally expected, the AFO offers the benefit of tie rod construction. This enables seals to be replaced, rather than replacing the entire cylinder. The non-corrosive construction of the AFO cylinder body is reliable in abrasive environments, able to withstand the toughest conditions.

The various mounting configurations available in the AFO cylinders assure freedom to interchange with most cylinders on the market. This means most systems can be upgraded to include quality AFO cylinders.

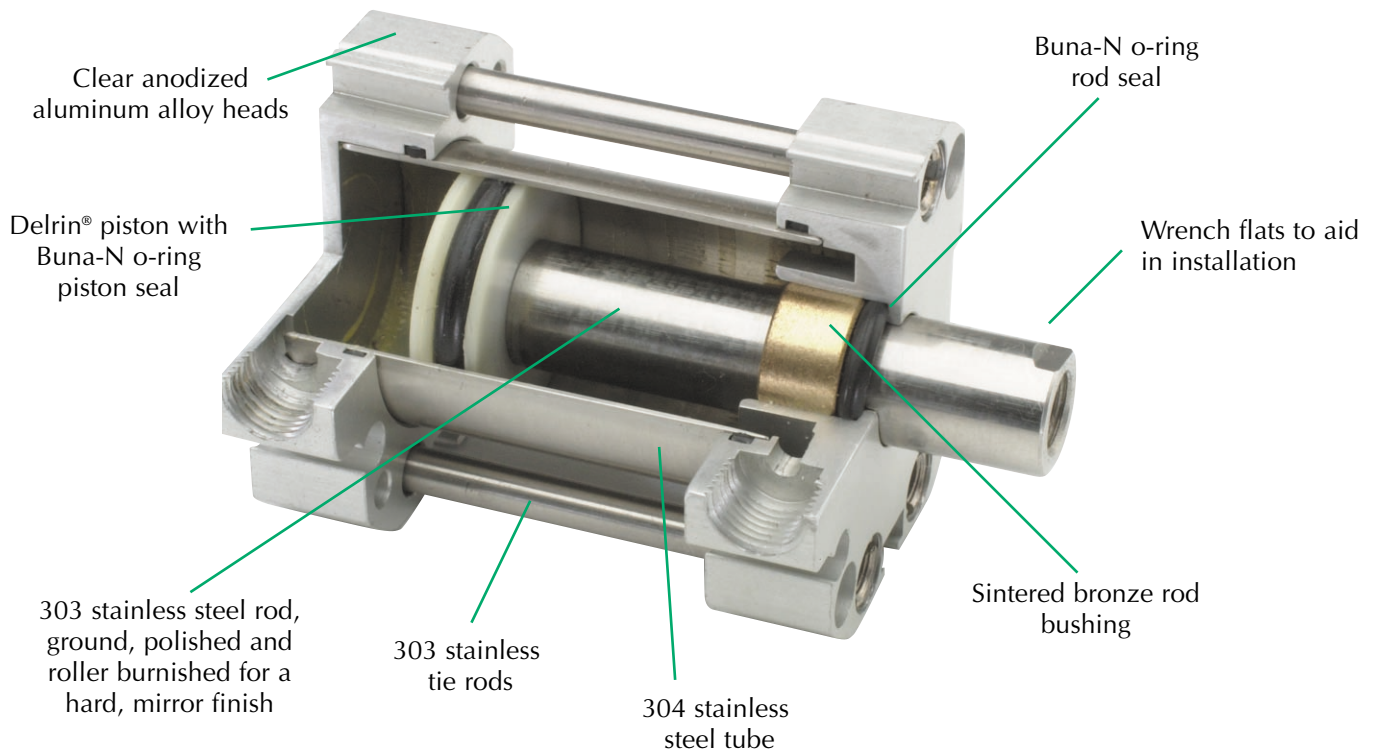


AIR FORCE ONE COMPACT CYLINDER



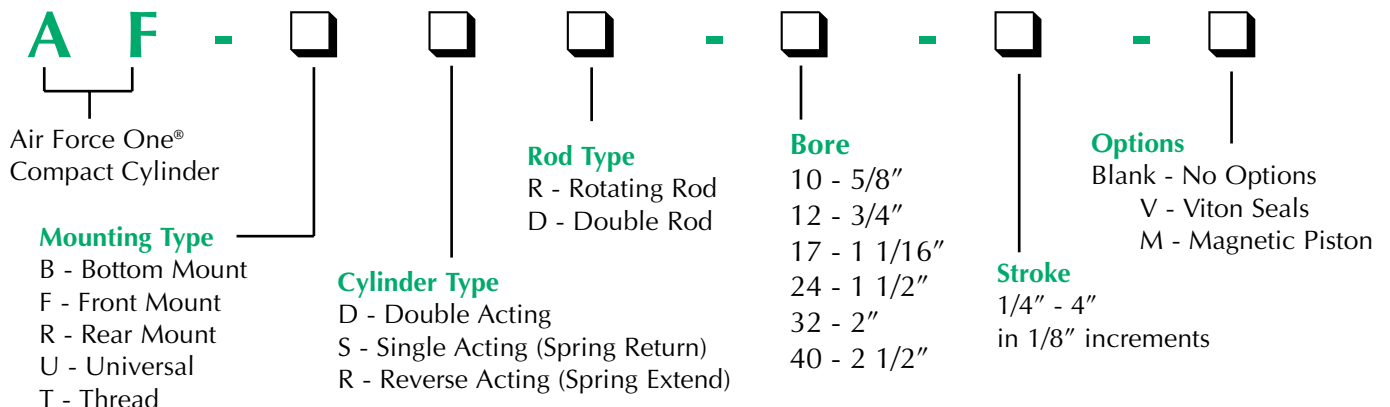
FEATURES

- Oil impregnated sintered bronze rod bushing
- Available with magnetic pistons
- 303 stainless steel ground, polished and roller burnished piston rods
- Double acting, spring return, spring extend & double rod cylinders
- 304 stainless steel sube
- Temperature range: 30° F to 180° F
- Anodized aluminum heads
- Air pressure rating to 250 psig

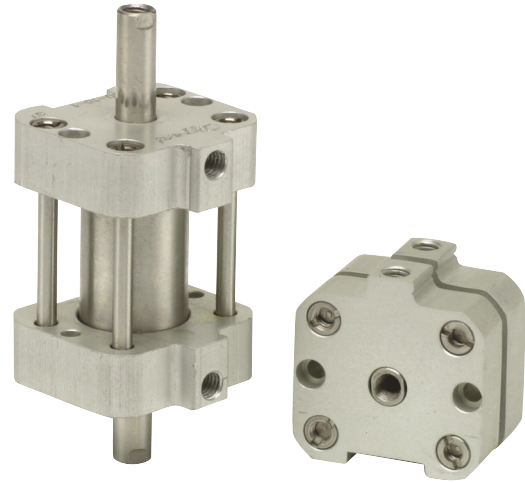
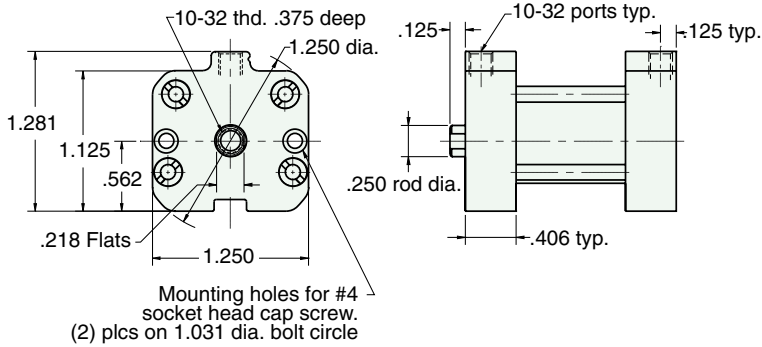


Delrin® is a registered trademark of E.I. DuPont Co.

NUMBERING SYSTEM



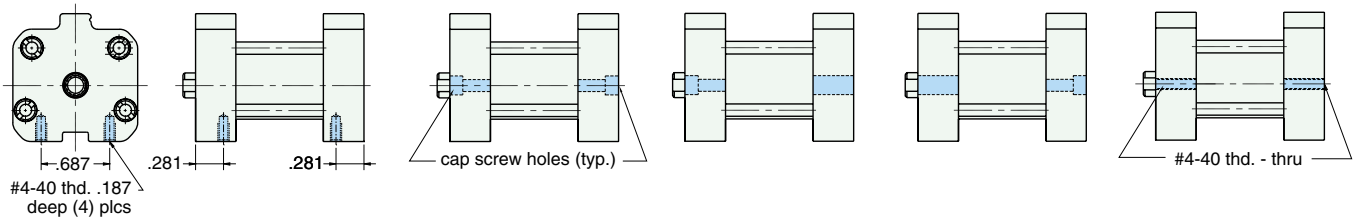
AF - □□□ - 10 - □



See page 71 for Air Force One numbering system

MOUNTING STYLES

Five mounting styles give you versatility and fast, easy installation.



Bottom Mount
AF-Bxx-10-x

Universal Mount
AF-Uxx-10-x

Front Mount
AF-Fxx-10-x

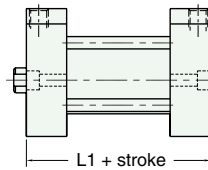
Rear Mount
AF-Rxx-10-x

Thread Mount
AF-Txx-10-x

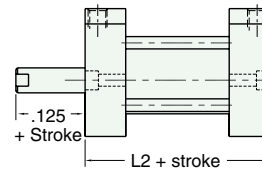
CYLINDER LENGTHS

"L"	Stroke	Spring Return	Spring Extend
L1	1/4" - 1"	13/16	
L1	1 1/8" - 2"	1 3/8	
L1	2 1/8" - 3"	1 15/16	
L1	3 1/8" - 4"	2 1/2	
L2	1/4" - 1"		1 1/16
L2	1 1/8" - 2"		1 5/8
L2	2 1/8" - 3"		2 3/16
L2	3 1/8" - 4"		2 3/4

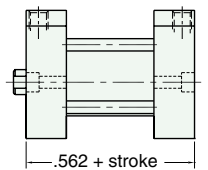
Overall length of body is stroke plus "L"



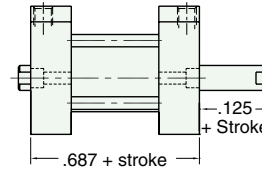
Spring Return
AF-xSR-10-x



Spring Extend
AF-xRR-10-x



Double Acting
Single Rod
AF-xDR-10-x



Double Acting
Double Rod
AF-xDD-10-x

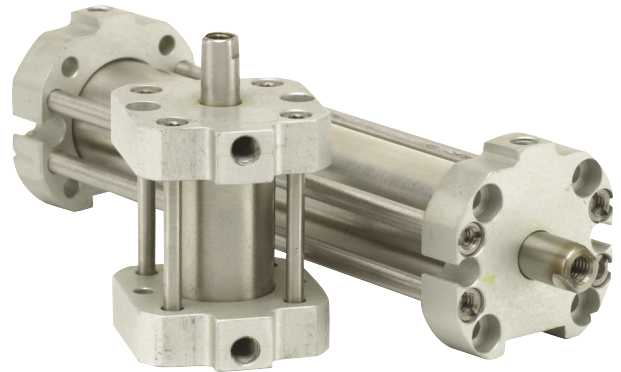
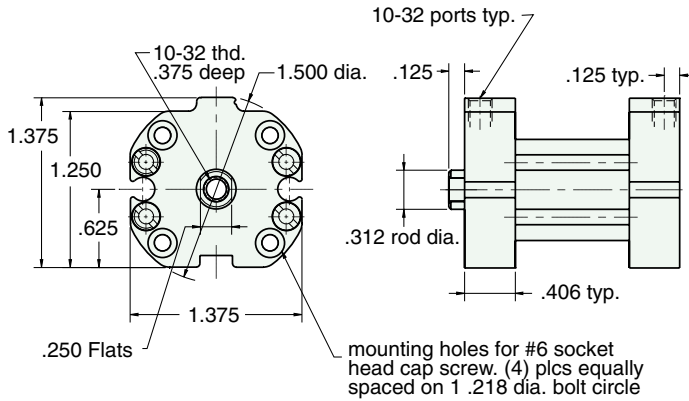
Spring Forces	
Spring Return	
Compressed	At Rest
5.750 lbs.	1.500 lbs.
Spring Extend	
Compressed	At Rest
5.750 lbs.	1.500 lbs.



3/4" BORE AFO COMPACT CYLINDER



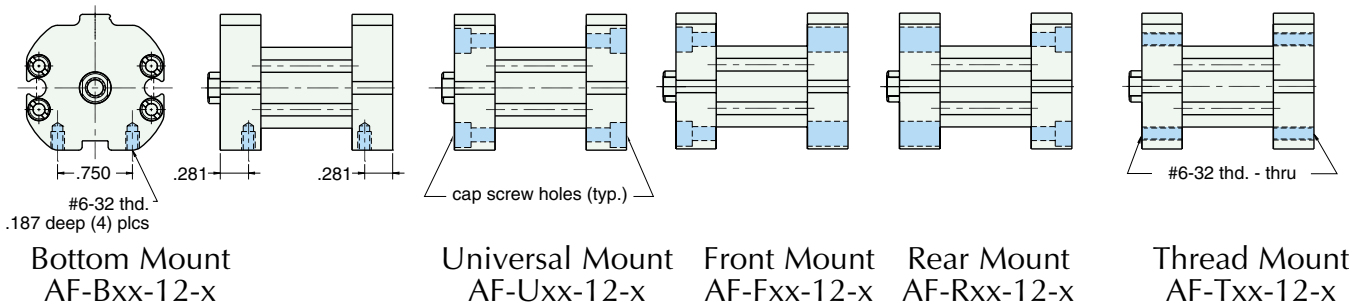
AF-□□□-12-□



See page 71 for Air Force One numbering system

MOUNTING STYLES

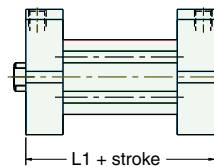
Five mounting styles give you versatility and fast, easy installation.



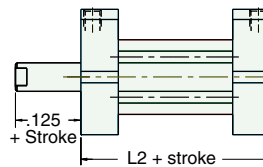
CYLINDER LENGTHS

"L"	Stroke	Spring Return	Spring Extend
L1	1/4" - 1"	13/16	
L1	1 1/8" - 2"	1 3/8	
L1	2 1/8" - 3"	1 15/16	
L1	3 1/8" - 4"	2 1/2	
L2	1/4" - 1"		1 1/16
L2	1 1/8" - 2"		1 5/8
L2	2 1/8" - 3"		2 3/16
L2	3 1/8" - 4"		2 3/4

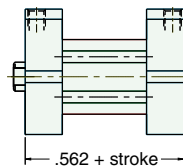
Overall length of body is stroke plus "L"



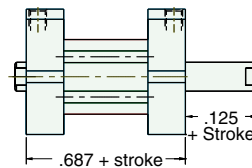
Spring Return
AF-xSR-12-x



Spring Extend
AF-xRR-12-x



Double Acting
Single Rod
AF-xDR-12-x



Double Acting
Double Rod
AF-xDD-12-x

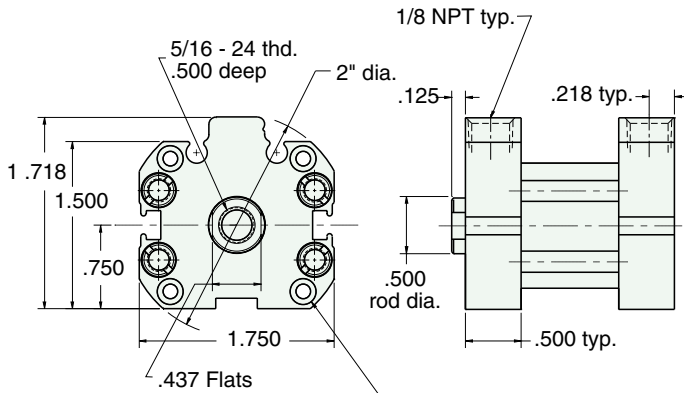
Spring Forces	
Spring Return	
Compressed	At Rest
10 lbs.	4 lbs.
Spring Extend	
Compressed	At Rest
10 lbs.	4 lbs.



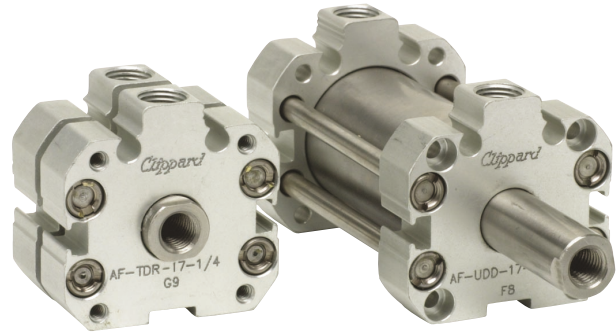
1 1/16" BORE AFO COMPACT CYLINDER



AF-□□□-17-□



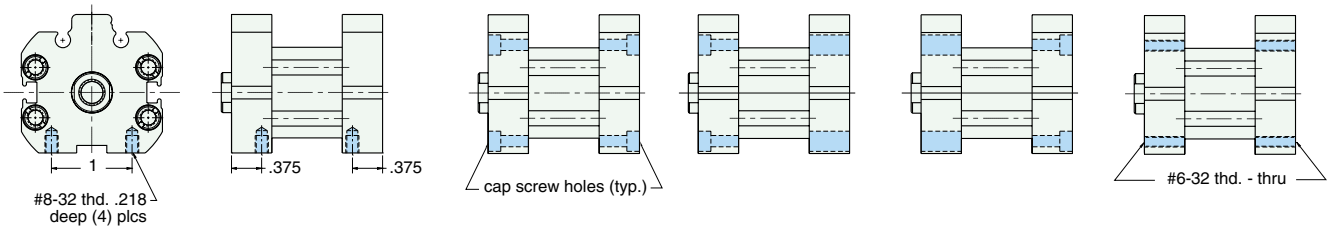
Mounting holes for #6 socket head cap screw. (4) plcs equally spaced on 1 .687 dia. bolt circle



See page 71 for Air Force One numbering system

MOUNTING STYLES

Five mounting styles give you versatility and fast, easy installation.



Bottom Mount
AF-Bxx-17-x

Universal Mount
AF-Uxx-17-x

Front Mount
AF-Fxx-17-x

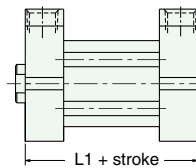
Rear Mount
AF-Rxx-17-x

Thread Mount
AF-Txx-17-x

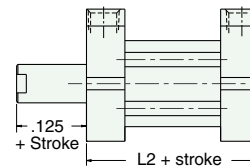
CYLINDER LENGTHS

"L"	Stroke	Spring Return	Spring Extend
L1	1/4" - 1"	7/8	
L1	1 1/8" - 2"	1 1/2	
L1	2 1/8" - 3"	2 1/8	
L1	3 1/8" - 4"	2 3/4	
L2	1/4" - 1"		1 3/8
L2	1 1/8" - 2"		2
L2	2 1/8" - 3"		2 5/8
L2	3 1/8" - 4"		3 1/4

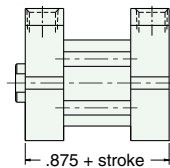
Overall length of body is stroke plus "L"



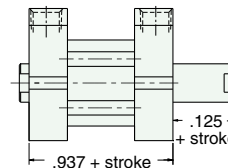
Spring Return
AF-xSR-17-x



Spring Extend
AF-xRR-17-x



Double Acting
Single Rod
AF-xDR-17-x



Double Acting
Double Rod
AF-xDD-17-x

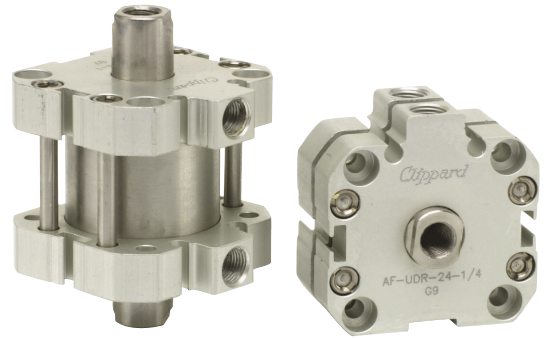
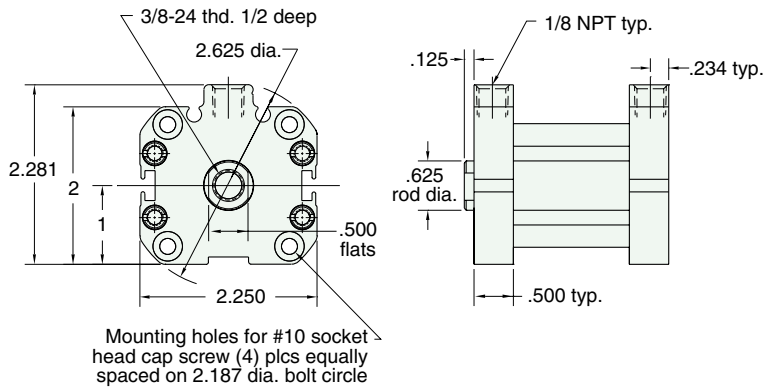
Spring Forces	
Spring Return	
Compressed	At Rest
11.500 lbs.	5.500 lbs.
Spring Extend	
Compressed	At Rest
11.500 lbs.	5.500 lbs.



1 1/2" BORE AFO COMPACT CYLINDER



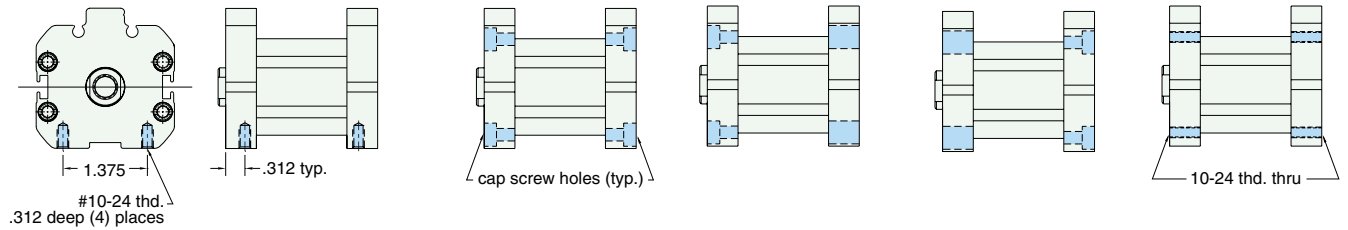
AF-□□□-24-□



See page 71 for Air Force One numbering system

MOUNTING STYLES

Five mounting styles give you versatility and fast, easy installation.



Bottom Mount
AF-Bxx-24-x

Universal Mount
AF-Uxx-24-x

Front Mount
AF-Fxx-24-x

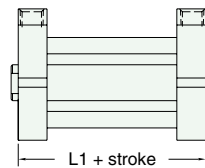
Rear Mount
AF-Rxx-24-x

Thread Mount
AF-Txx-24-x

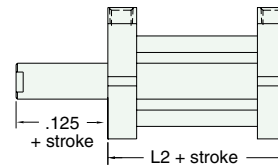
CYLINDER LENGTHS

"L"	Stroke	Spring Return	Spring Extend
L1	1/4" - 1"	7/8	
L1	1 1/8" - 2"	1 1/2	
L1	2 1/8" - 3"	2 1/8	
L1	3 1/8" - 4"	2 3/4	
L2	1/4" - 1"		1 3/8
L2	1 1/8" - 2"		2
L2	2 1/8" - 3"		2 5/8
L2	3 1/8" - 4"		3 1/4

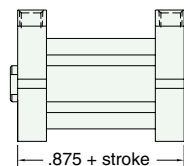
Overall length of body is stroke plus "L"



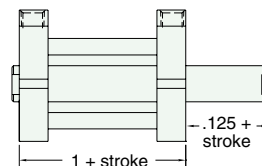
Spring Return
AF-xSR-24-x



Spring Extend
AF-xRR-24-x



Double Acting
Single Rod
AF-xDR-24-x



Double Acting
Double Rod
AF-xDD-24-x

Spring Forces	
Spring Return	
Compressed	At Rest
13 lbs.	7.500 lbs.
Spring Extend	
Compressed	At Rest
13 lbs.	7.500 lbs.