



A-Series Pneumatic Cylinders

1-1/16 inch Bore

1-1/16 in. Bore, Single-Acting, Spring Return, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/16 inch bore, 1/8 NPT port, single acting, spring return, front nose mount.

Cylinder, 1-1/16 in bore, single acting, spring return, front nose mount

Part Number	Stroke Length (in)	"A" (in)	Weight (lbs)	Price
A17010SN	1.0	3.50	0.3	\$25.00
A17020SN	2.0	5.06	0.5	\$30.00
A17030SN	3.0	6.62	0.6	\$33.50

Specifications

304 SS cylinder body	0.90 sq. in. piston area
High strength aluminum end caps	Pre-lubricated for maintenance-free life
High strength carbon steel piston rod	Pressure rating 250 psi
Low friction Buna-N seals	Temperature range -20°F to 200°F (-28 to 93°C)
Extend force at 100 psi = 90.0 lb.	Spring force = 3 lb. relaxed, 6 lb. compressed

Mount Style	Bracket	Nut
Front Nose Mount	AMB-6	AN-58-18*
Rear Pivot Mount	—	—
Double End Mount	Front	—
	Rear	—

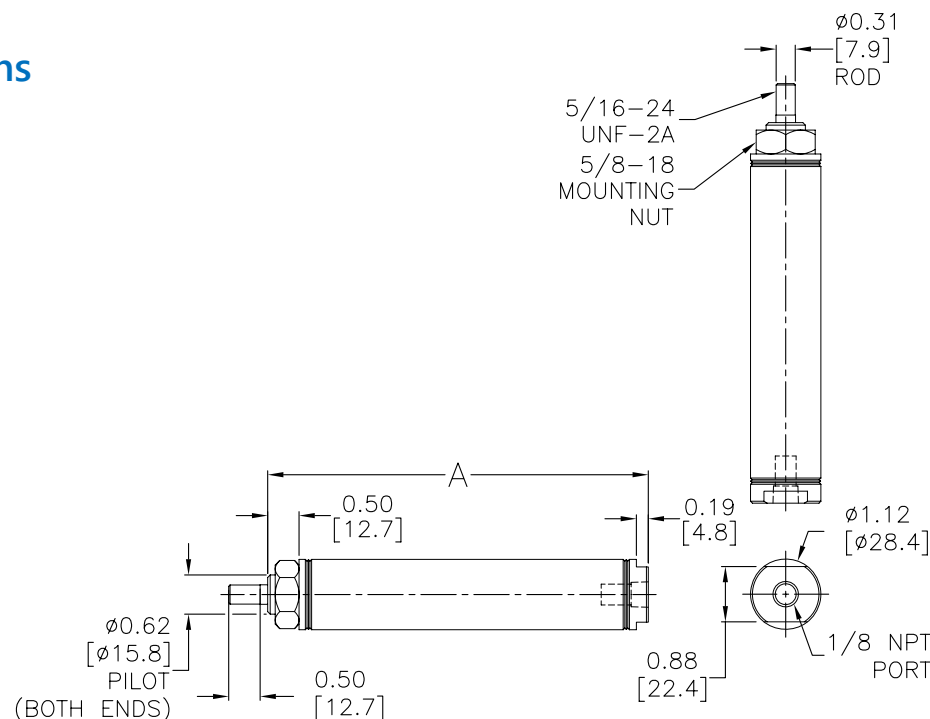
* (1) Nut included with cylinder

Cylinder rod clevis ARC-516-24

See end of 1-1/16" bore section for Accessories

Dimensions

inches [mm]





A-Series Pneumatic Cylinders

1-1/16 inch Bore

1-1/16 in. Bore, Single-acting, Spring Return, Rear Pivot Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/16 inch bore, 1/8 NPT port, single acting, spring return, rear pivot mount (pivot pin included).

Cylinder, 1-1/16 in bore, single acting, spring return, rear pivot mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A17010SP	1.0	4.22	0.4	\$31.00
A17020SP	2.0	5.78	0.5	\$35.00
A17030SP	3.0	7.34	0.6	\$32.50
Specifications				
304 SS cylinder body		0.90 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 90.0 lb.		Spring force = 3 lb. relaxed, 6 lb. compressed		

Mount Style	Bracket	Nut
Front Nose Mount	AMB-6	AN-58-18
Rear Pivot Mount	APB-2	—
Double End Mount	Front	AMB-6
	Rear	AMB-6

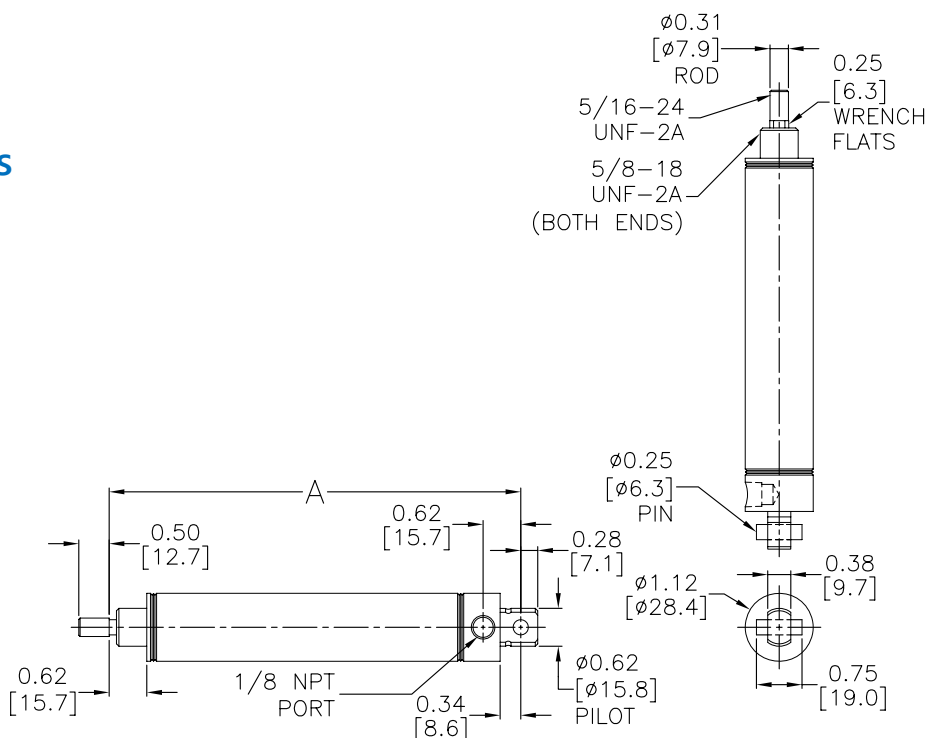
Cylinder rod clevis ARC-516-24

See end of 1-1/16" bore section for Accessories

Note: Drive pin out for double end mounting

Dimensions

inches [mm]





A-Series Pneumatic Cylinders

1-1/16 inch Bore

1-1/16 in. Bore, Double-acting, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, 1-1/16 inch bore, 1/8 NPT ports, double acting, front nose mount.

Cylinder, 1-1/16 in bore, double acting, front nose mount

Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A17005DN	0.5	3.62	0.4	\$30.50
A17010DN	1.0	4.12	0.4	\$31.50
A17020DN	2.0	5.12	0.4	\$33.50
A17030DN	3.0	6.12	0.5	\$36.00
A17040DN	4.0	7.12	0.5	\$32.00
A17050DN	5.0	8.12	0.6	\$34.50
A17060DN	6.0	9.12	0.6	\$36.50
A17080DN	8.0	11.12	0.7	\$51.00
A17100DN	10.0	13.12	0.8	\$45.00
A17120DN	12.0	15.12	0.9	\$49.00

Specifications

304 SS cylinder body	0.90 sq. in. piston area
High strength aluminum end caps	Pre-lubricated for maintenance-free life
High Strength carbon steel piston rod	Pressure rating 250 psi
Low friction Buna-N seals	Temperature range -20°F to 200°F (-28 to 93°C)
Extend force at 100 psi = 90.0 lb.	Retract force at 100 psi = 82.3 lb.

Mount Style	Bracket	Nut
Front Nose Mount	AMB-6	AN-58-18*
Rear Pivot Mount	—	—
Double End Mount	Front	—
	Rear	—

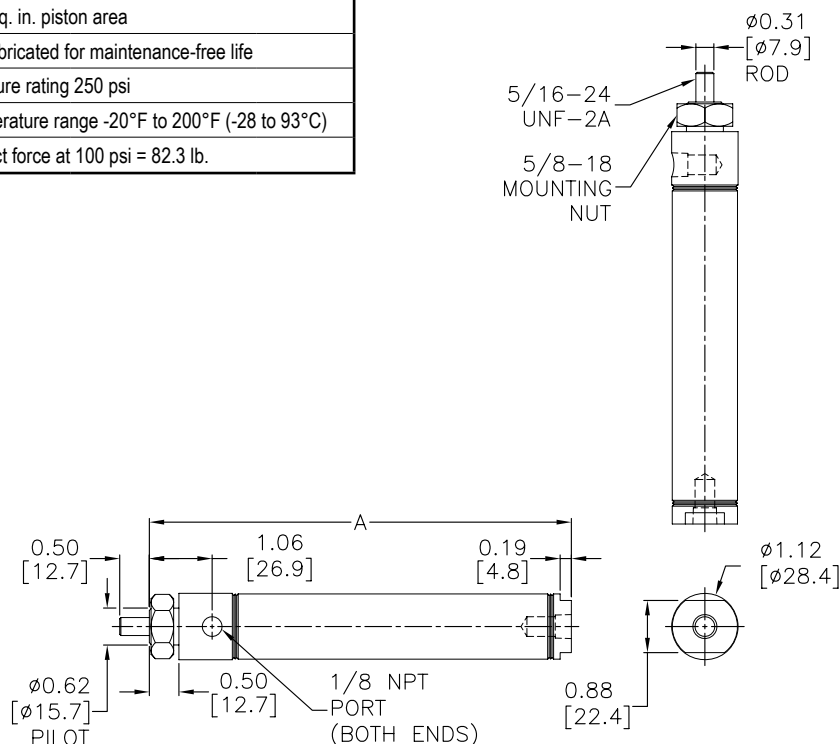
* (1) Nut included with cylinder

Cylinder rod clevis [ARC-516-24](#)

See end of 1-1/16" bore section for Accessories

Dimensions

inches [mm]





A-Series Pneumatic Cylinders

1-1/16 inch Bore

1-1/16 in. Bore, Double-acting, Rear Pivot Mount



NITRA pneumatic stainless steel round body,
interchangeable, 1-1/16 inch bore, 1/8 NPT ports,
double acting, rear pivot mount (pivot pin included).

Cylinder, 1-1/16 in bore, double acting, rear pivot mount

Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
<u>A17010DP</u>	1.0	4.84	0.4	\$36.50
<u>A17020DP</u>	2.0	5.84	0.4	\$39.50
<u>A17030DP</u>	3.0	6.84	0.5	\$42.00
<u>A17040DP</u>	4.0	7.84	0.5	\$36.50
<u>A17050DP</u>	5.0	8.84	0.6	\$38.50
<u>A17060DP</u>	6.0	9.84	0.6	\$41.00
<u>A17080DP</u>	8.0	11.84	0.7	\$45.50
<u>A17100DP</u>	10.0	13.84	0.8	\$49.50
<u>A17120DP</u>	12.0	15.84	0.9	\$54.00

Specifications

304 SS cylinder body	0.90 sq. in. piston area
High strength aluminum end caps	Pre-lubricated for maintenance-free life
High strength carbon steel piston rod	Pressure rating 250 psi
Low friction Buna-N seals	Temperature range -20°F to 200°F (-28 to 93°C)
Extend force at 100 psi = 90.0 lb.	Retract force at 100 psi = 82.3 lb.

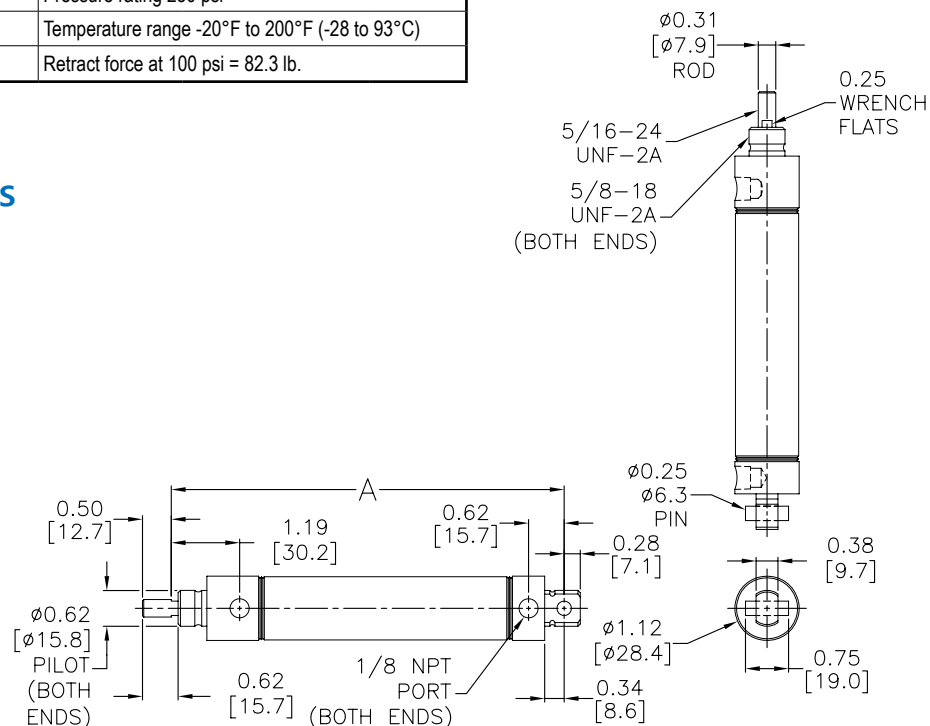
<i>Mount Style</i>		<i>Bracket</i>	<i>Nut</i>
<i>Front Nose Mount</i>		<u>AMB-6</u>	AN-58-18
<i>Rear Pivot Mount</i>		<u>APB-2</u>	–
<i>Double End Mount</i>	Front	<u>AMB-6</u>	AN-58-18
	Rear	<u>AMB-6</u>	AN-58-18

Cylinder rod clevis ARC-516-24

See end of 1-1/16" bore section for Accessories

Note: Drive pin out for double end mounting

Dimensions

inches [mm]

A stainless steel NITRA 1/2"

Cylinder, 1-1/16 in bore, double acting, rear pivot mount, magnetic piston

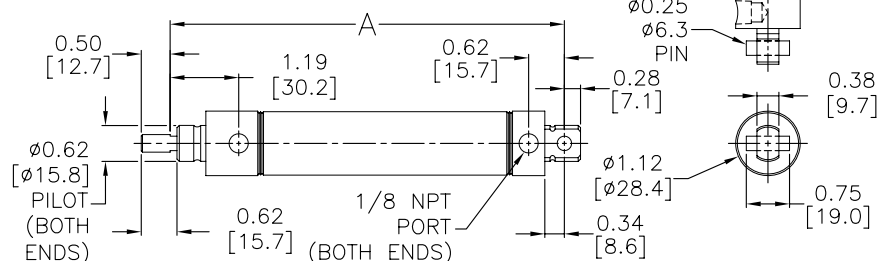
Mount Style		Bracket	Nut
Front Nose Mount		AMB-6	AN-58-18
Rear Pivot Mount		APB-2	–
Double End Mount	Front	AMB-6	AN-58-18
	Rear	AMB-6	AN-58-18

Note: Drive pin out for double end mounting

304 SS cylinder body	0.90 sq. in. piston area
High strength aluminum end caps	Pre-lubricated for maintenance-free life
303 SS piston rod	Pressure rating 250 psi
Low friction Buna-N seals	Temperature range -20°F to 200°F (-28 to 93°C)
Extend force at 100 psi = 90.0 lb.	Retract force at 100 psi = 82.3 lb.

Technical drawing of a rod assembly. The drawing includes a side view and a cross-sectional view. Key dimensions and labels are as follows:

- Top Rod End:**
 - Ø0.31
 - [Ø7.9]
 - ROD
- Upper Nut:**
 - 5/16-24 UNF-2A
- Lower Nut:**
 - 5/8-18 UNF-2A
- Wrench Flats:**
 - 0.25 WRENCH FLATS
- Pin:**
 - Ø0.25
 - Ø6.3
 - PIN
- Bottom Flange (Side View):**
 - 0.28 [7.1]
 - 0.34 [8.6]
- Bottom Flange (Cross Section):**
 - Ø1.12 [Ø28.4]
 - 0.38 [9.7]
 - 0.75 [19.0]





A-Series Pneumatic Cylinders

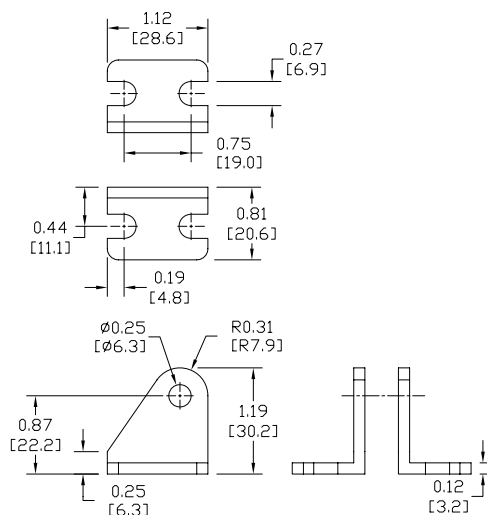
1-1/16 inch Bore Accessories

A-Series Pneumatic Cylinder 1-1/16 inch Bore Accessories				
Part Number	Description	Pcs/Pkg	Wt (lb)	Price
APB-2	Cylinder pivot mounting bracket without pivot pin used to mount 3/4, 7/8, and 1-1/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.2	\$4.75
AMB-6	Cylinder mounting bracket used to mount 3/4, 7/8, and 1-1/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$5.00
ARC-516-24	Cylinder rod clevis and hex nut, 5/16-24 thread, for use with 1-1/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$5.75
AN-58-18	Cylinder mounting nut with 5/8-18 UNF-2B threads used to mount 3/4, 7/8 and 1-1/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$1.25

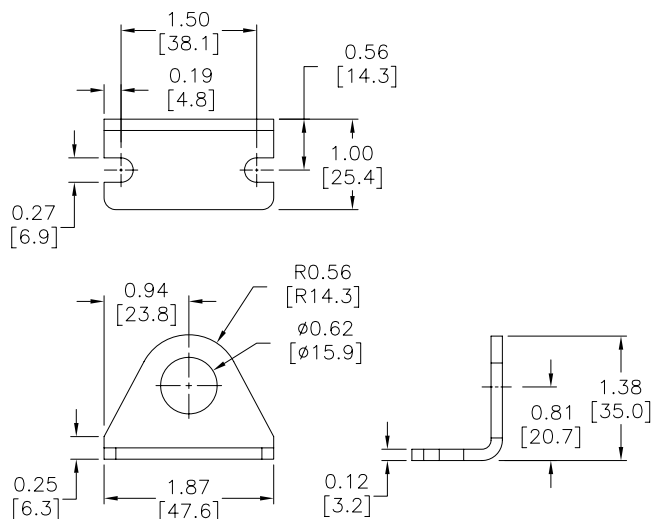
Dimensions

inches [mm]

APB-2



AMB-6





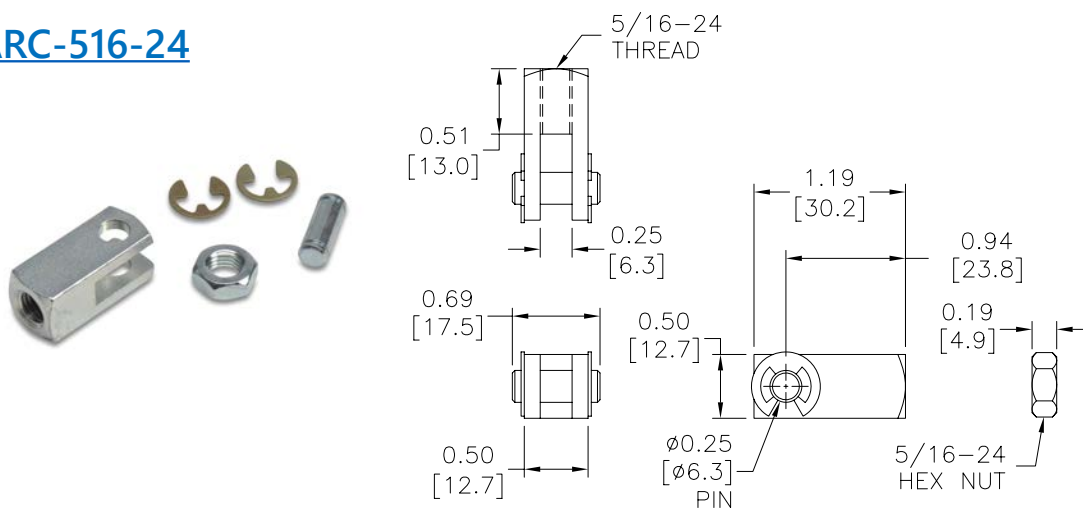
A-Series Pneumatic Cylinders

1-1/16 inch Bore Accessories

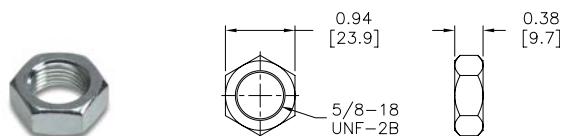
Dimensions

inches [mm]

ARC-516-24



AN-58-18





Pneumatic Cylinders - A-Series

Nitra A-Series Pneumatic Stainless Steel Round Body Air Cylinders

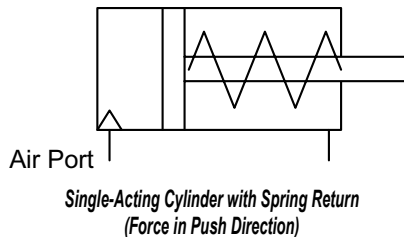
The NITRA Pneumatics A-Series non-repairable stainless steel round body cylinders includes bore sizes from 7/16" to 2" and stroke lengths from 1/2" to 18" to meet a broad range of applications. These high quality cylinders are constructed with stainless steel bodies and double rolled-in high strength aluminum end caps with full flow ports. To minimize friction the inside of the cylinder body is polished to a mirror finish and all cylinders are factory lubricated for optimum performance and long, reliable life. The high strength aluminum alloy piston is securely threaded and sealed to a piston rod that is ground and roller burnished 303 stainless steel (7/16" and 9/16" bores, and all cylinders with magnetic pistons) or ground and polished high strength steel (3/4" – 2" bores) with roll-formed threads for exceptional strength. Low friction wear compensating Buna N U-cup rod and piston seals, sintered bronze rod guide bushing (except 7/16" and 9/16" bores), and end caps with slots all combine for smooth breakaway even at low pressures.

Features

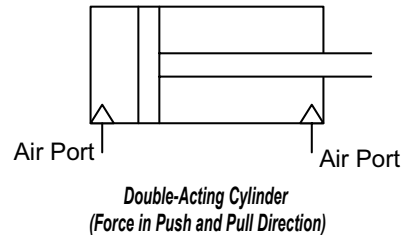
- Interchangeable with other common brands of round body cylinders
- Available bore sizes: 7/16", 9/16", 3/4", 7/8", 1-1/16", 1-1/4", 1-1/2", 2"
- Excellent selection of stroke lengths
- Single-acting (spring return) and double-acting models
- Nose, pivot and double-end mounting options
- Type 304 stainless steel body with high-strength aluminum alloy end caps
- Factory lubricated for long, maintenance-free operation
- 250 psi operating pressure
- Models available with magnetic piston for position indication
- All models are available for same-day shipment
- Made in North America
- 3-year warranty

Operation

Single-acting cylinders with spring return have one compressed air port to extend the rod in the "push" direction. The internal spring retracts in the "pull" direction.



Double-acting cylinders have two compressed air ports. One of the ports will extend the rod in the "push" direction and the other port will retract the rod in the "pull" direction.



Mounting Options



Nose mount uses one AMB bracket and one AN nut.



Pivot mount uses one APB or one APBP bracket.

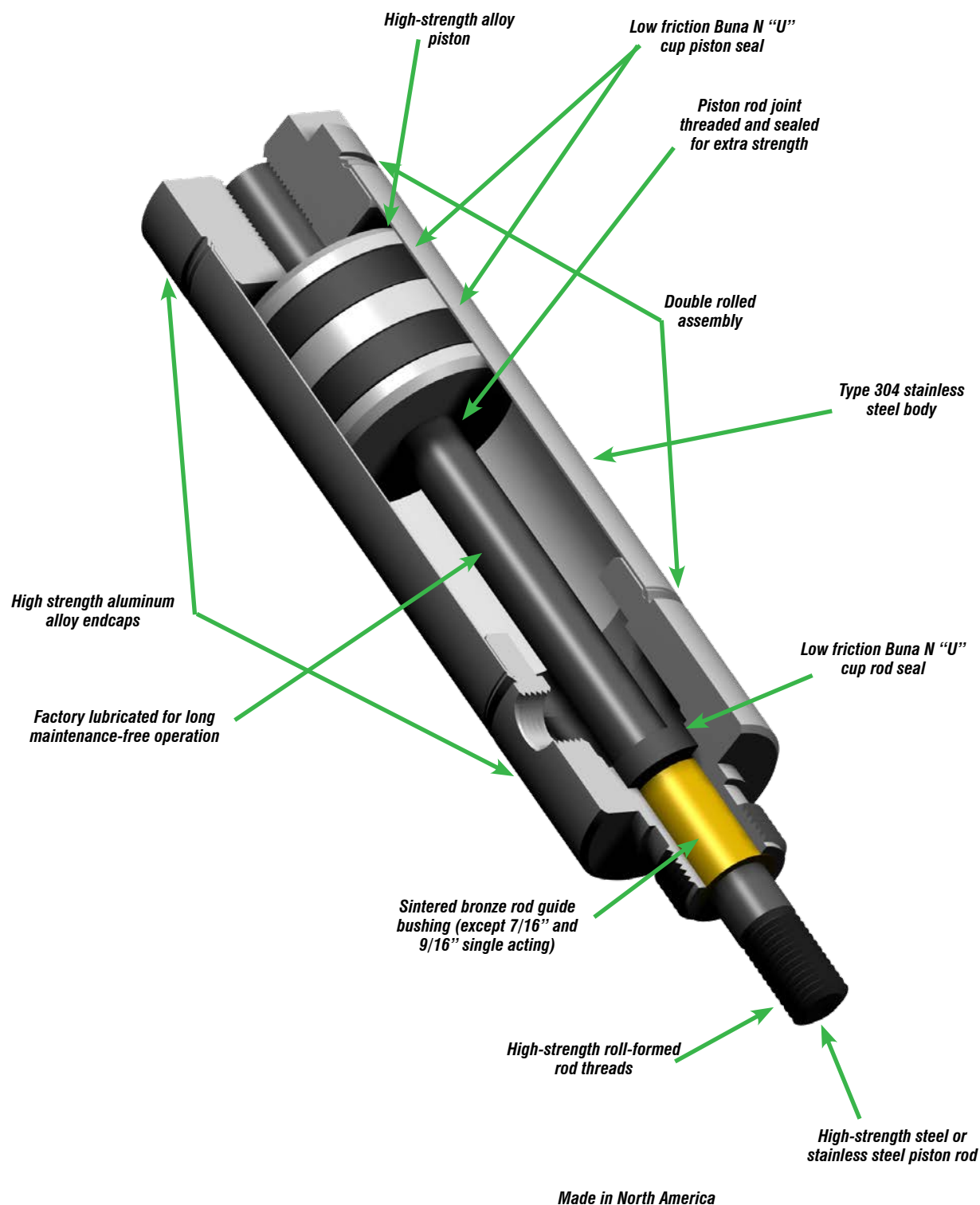


Double end mount uses two AMB brackets and two AN nuts.



Pneumatic Cylinders - A-Series

Cylinder Features





CPS Series Cylinder Position Switches

Position Switch Cross Reference Chart

NITRA Switch Type	Cylinder Brand (may fit some of these cylinders)	Photo Example	Groove Illustration	
CPS CPSF	NITRA A-Series NITRA D-Series NITRA F-Series			
CPS9C	DE-STA-CO Robohand SMC Compact Air Bimba Fabco			
CPS9D	NITRA L-Series Fabco Numatics Rotomation			
CPS9E	NITRA L-Series Fabco Numatics Rotomation			
CPS9F	NITRA G-Series Fabco Festo Numatics Rotomation			
CPS9H	NITRA E-Series NITRA H-Series			
CPS9M	Norgren			
CPS9Q	NITRA L-Series NITRA G-Series Parker Fabco Festo Numatics Rotomation			