



# A-Series Pneumatic Cylinders

## 1-1/16 inch Bore

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



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

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

| Part Number                | Stroke Length (in) | "A" (in) | Weight (lbs) | Price   |
|----------------------------|--------------------|----------|--------------|---------|
| <a href="#">A17010DP-M</a> | 1.0                | 4.84     | 0.4          | \$52.00 |
| <a href="#">A17020DP-M</a> | 2.0                | 5.84     | 0.4          | \$54.00 |
| <a href="#">A17030DP-M</a> | 3.0                | 6.84     | 0.5          | \$57.00 |
| <a href="#">A17040DP-M</a> | 4.0                | 7.84     | 0.5          | \$49.00 |
| <a href="#">A17050DP-M</a> | 5.0                | 8.84     | 0.6          | \$51.00 |
| <a href="#">A17060DP-M</a> | 6.0                | 9.84     | 0.6          | \$53.00 |
| <a href="#">A17080DP-M</a> | 8.0                | 11.84    | 0.7          | \$57.00 |
| <a href="#">A17100DP-M</a> | 10.0               | 13.84    | 0.8          | \$61.00 |
| <a href="#">A17120DP-M</a> | 12.0               | 15.84    | 0.9          | \$65.00 |

### Specifications

|                                    |                                                |
|------------------------------------|------------------------------------------------|
| 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.            |

| Mount Style      | Bracket                     | Nut      |
|------------------|-----------------------------|----------|
| Front Nose Mount | <a href="#">AMB-6</a>       | AN-58-18 |
| Rear Pivot Mount | <a href="#">APB-2</a>       | —        |
| Double End Mount | Front <a href="#">AMB-6</a> | AN-58-18 |
|                  | Rear <a href="#">AMB-6</a>  | AN-58-18 |

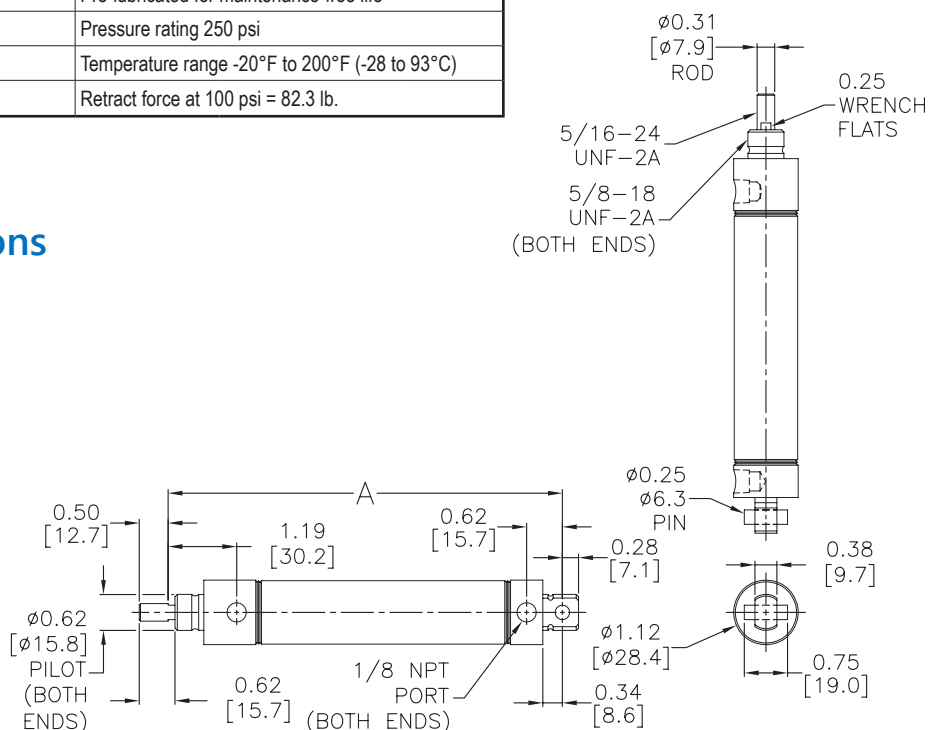
Cylinder rod clevis [ARC-516-24](#)

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

Note: Drive pin out for double end mounting

## Dimensions

inches [mm]





# A-Series Pneumatic Cylinders

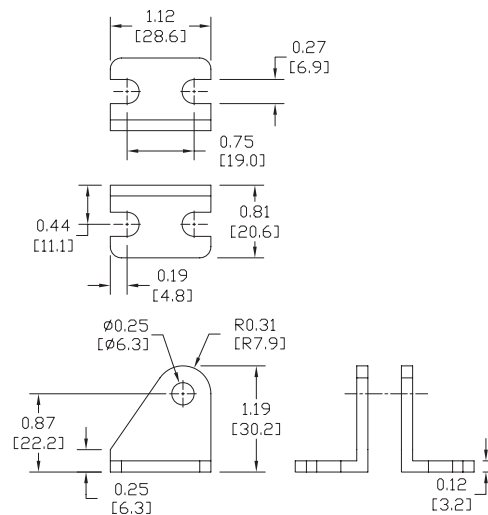
## 1-1/16 inch Bore Accessories

| A-Series Pneumatic Cylinder 1-1/16 inch Bore Accessories |                                                                                                                                                                                       |         |         |        |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|--------|
| Part Number                                              | Description                                                                                                                                                                           | Pcs/Pkg | Wt (lb) | Price  |
| <a href="#"><u>APB-2</u></a>                             | 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     | \$4.50 |
| <a href="#"><u>AMB-6</u></a>                             | 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     | \$4.75 |
| <a href="#"><u>ARC-516-24</u></a>                        | 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     | \$5.50 |
| <a href="#"><u>AN-58-18</u></a>                          | 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 |

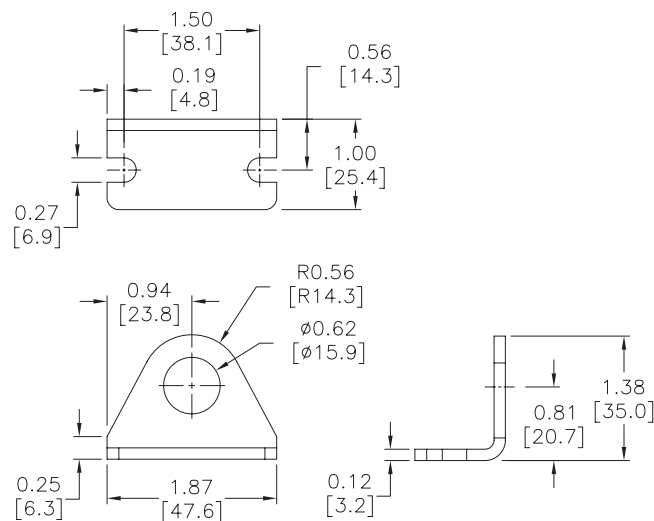
## Dimensions

***inches [mm]***

APB-2



## AMB-6





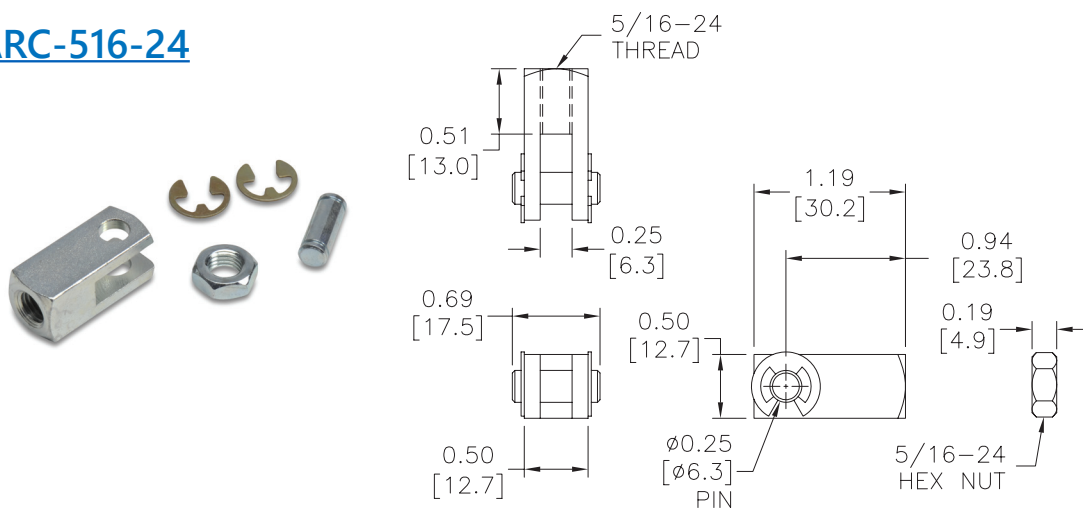
# A-Series Pneumatic Cylinders

## 1-1/16 inch Bore Accessories

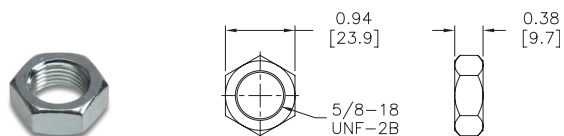
### Dimensions

inches [mm]

#### ARC-516-24



#### AN-58-18





# Pneumatic Cylinders - A-Series

## Nitra A-Series Pneumatic Stainless Steel Round Body Air Cylinders

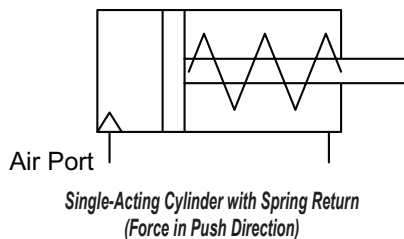
The NITRA Pneumatics A-Series non-repairable stainless steel round body cylinders includes bore sizes from 7/16" to 2" and stroke lengths from 1/2" to 18" to meet a broad range of applications. These high quality cylinders are constructed with stainless steel bodies and double rolled-in high strength 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

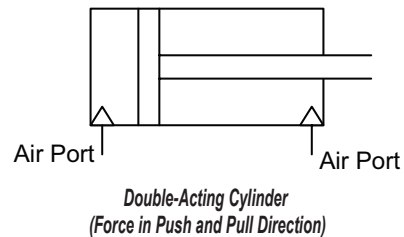
- Interchangeable with other common brands of round body cylinders
- Available bore sizes: 7/16", 9/16", 3/4", 7/8", 1-1/16", 1-1/4", 1-1/2", 2"
- Excellent selection of stroke lengths
- Single-acting (spring return) and double-acting models
- Nose, pivot and double-end mounting options
- Type 304 stainless 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.

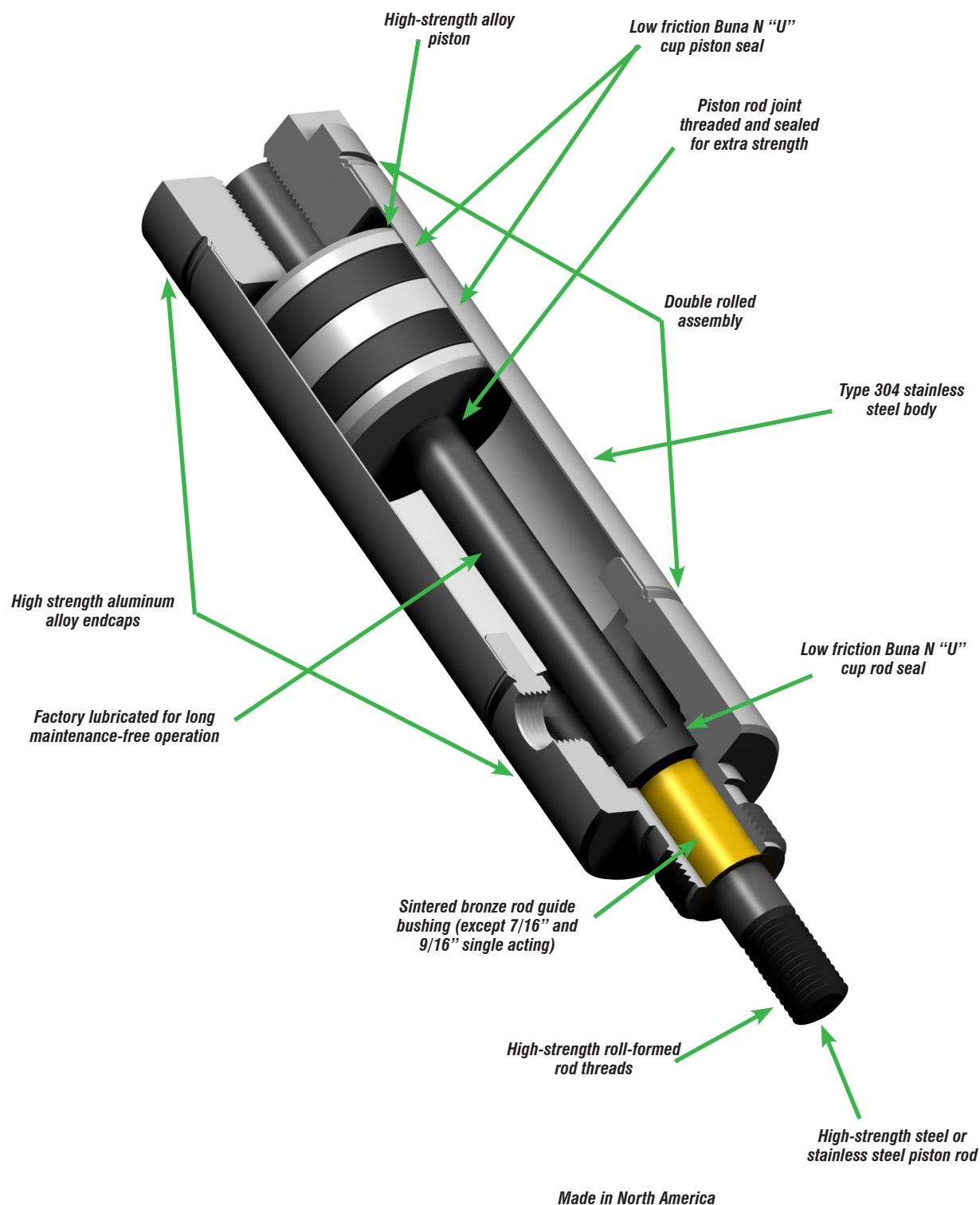


Double end mount uses two AMB brackets and two AN nuts.



# 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 |  |
|---------------------|----------------------------------------------------------------------------------------|---------------|---------------------|--|
| <b>CPS<br/>CPSF</b> | NITRA A-Series<br>NITRA D-Series<br>NITRA F-Series                                     |               |                     |  |
| <b>CPS9C</b>        | DE-STA-CO<br>Robohand<br>SMC<br>Compact Air<br>Bimba<br>Fabco                          |               |                     |  |
| <b>CPS9D</b>        | NITRA L-Series<br>Fabco<br>Numatics<br>Rotomation                                      |               |                     |  |
| <b>CPS9E</b>        | NITRA L-Series<br>Fabco<br>Numatics<br>Rotomation                                      |               |                     |  |
| <b>CPS9F</b>        | NITRA G-Series<br>Fabco<br>Festo<br>Numatics<br>Rotomation                             |               |                     |  |
| <b>CPS9H</b>        | NITRA E-Series<br>NITRA H-Series                                                       |               |                     |  |
| <b>CPS9M</b>        | Norgren                                                                                |               |                     |  |
| <b>CPS9Q</b>        | NITRA L-Series<br>NITRA G-Series<br>Parker<br>Fabco<br>Festo<br>Numatics<br>Rotomation |               |                     |  |