



A-Series Pneumatic Cylinders

3/4 inch Bore

3/4 in. Bore, Single-acting, Spring Return, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 NPT port, single acting, spring return, front nose mount.

Cylinder, 3/4 in bore, single acting, spring return, front nose mount

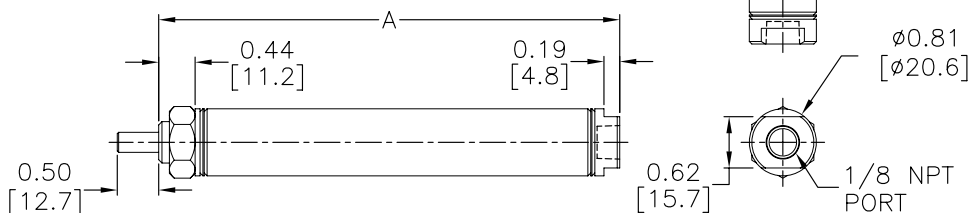
| Part Number | Stroke Length (in.) | "A" (in) | Weight (lbs) | Price |
|--------------------------|---------------------|----------|--------------|----------|
| A12005SN | 0.5 | 2.69 | 0.1 | \$06d8: |
| A12010SN | 1.0 | 3.19 | 0.2 | \$06dc: |
| A12015SN | 1.5 | 4.38 | 0.2 | \$;06df: |
| A12020SN | 2.0 | 4.88 | 0.3 | \$-06dj: |
| A12030SN | 3.0 | 6.57 | 0.3 | \$06do: |
| A12040SN | 4.0 | 8.26 | 0.4 | \$;06dt: |
| A12050SN | 5.0 | 9.95 | 0.5 | \$06dy: |
| A12060SN | 6.0 | 11.64 | 0.6 | \$06c?: |

Specifications

| | |
|---------------------------------------|--|
| 304 SS cylinder body | 0.40 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 = 40.0 lb. | Spring force = 3 lb. relaxed, 6 lb. compressed |

Dimensions

inches [mm]

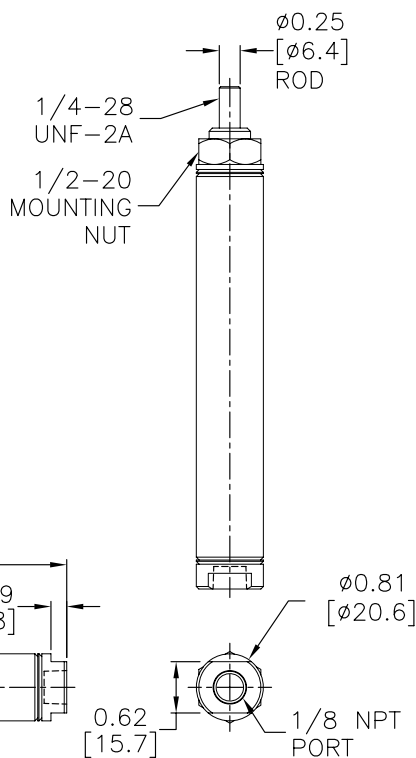


| Mount Style | Bracket | Nut |
|------------------|---------|-----------|
| Front Nose Mount | AMB-5 | AN-12-20* |
| Rear Pivot Mount | - | - |
| Double End Mount | Front | - |
| | Rear | - |

* (1) Nut included with cylinder

Cylinder rod clevis ARC-14-28

See end of 3/4" bore section for Accessories





A-Series Pneumatic Cylinders

3/4 inch Bore

3/4 in. Bore, Single-acting, Spring Return, Rear Pivot Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 NPT port, single acting, spring return, rear pivot mount (pivot pin included).

Cylinder, 3/4 in bore, single acting, spring return, rear pivot mount

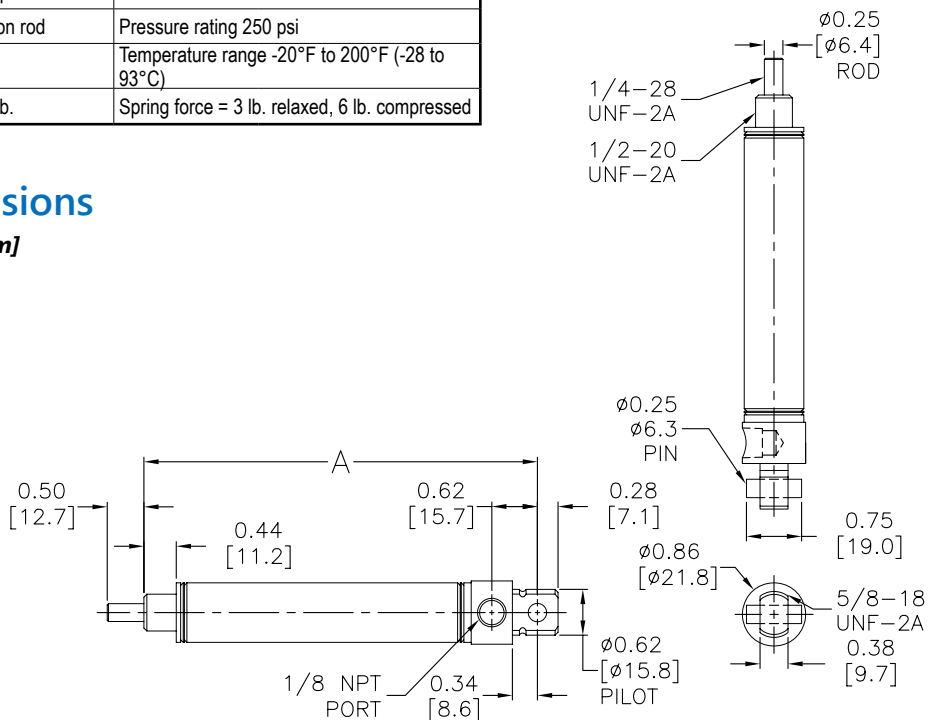
| Part Number | Stroke Length (in.) | "A" (in) | Weight (lbs) | Price |
|--------------------------|---------------------|----------|--------------|---------|
| A12005SP | 0.5 | 3.13 | 0.2 | \$06d9: |
| A12010SP | 1.0 | 3.97 | 0.2 | \$06dd: |
| A12015SP | 1.5 | 4.82 | 0.3 | \$06dg: |
| A12020SP | 2.0 | 5.66 | 0.3 | \$06dk: |
| A12030SP | 3.0 | 7.35 | 0.4 | \$06dp: |
| A12040SP | 4.0 | 9.04 | 0.5 | \$06du: |
| A12050SP | 5.0 | 10.73 | 0.5 | \$06dz: |
| A12060SP | 6.0 | 12.42 | 0.6 | \$06c,: |

Specifications

| | |
|---------------------------------------|--|
| 304 SS cylinder body | 0.40 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 = 40.0 lb. | Spring force = 3 lb. relaxed, 6 lb. compressed |

Dimensions

inches [mm]



| Mount Style | Bracket | Nut |
|------------------|-----------------------------|----------|
| Front Nose Mount | AMB-5 | AN-12-20 |
| Rear Pivot Mount | APB-2 | — |
| Double End Mount | Front AMB-5 | AN-12-20 |
| | Rear AMB-6 | AN-58-18 |

Cylinder rod clevis [ARC-14-28](#)

See end of 3/4" bore section for Accessories

Note: Drive pin out for double end mounting



A-Series Pneumatic Cylinders

3/4 inch Bore

3/4 in. Bore, Double-acting, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 NPT ports, double acting, front nose mount.

Cylinder, 3/4 in bore, double acting, front nose mount

| Part Number | Stroke Length (in.) | "A" (in) | Weight (lbs) | Price |
|--------------------------|---------------------|----------|--------------|----------|
| A12005DN | 0.5 | 3.47 | 0.2 | \$06d6: |
| A12010DN | 1.0 | 3.97 | 0.2 | \$06da: |
| A12015DN | 1.5 | 4.47 | 0.3 | \$06de: |
| A12020DN | 2.0 | 4.97 | 0.3 | \$06dh: |
| A12030DN | 3.0 | 5.97 | 0.3 | \$-06dl: |
| A12040DN | 4.0 | 6.97 | 0.3 | \$06dq: |
| A12050DN | 5.0 | 7.97 | 0.4 | \$06dv: |
| A12060DN | 6.0 | 8.97 | 0.4 | \$;06dj: |
| A12080DN | 8.0 | 10.97 | 0.5 | \$06d0: |
| A12100DN | 10.0 | 12.97 | 0.5 | \$06d2: |
| A12120DN | 12.0 | 14.97 | 0.6 | \$06d4: |

Specifications

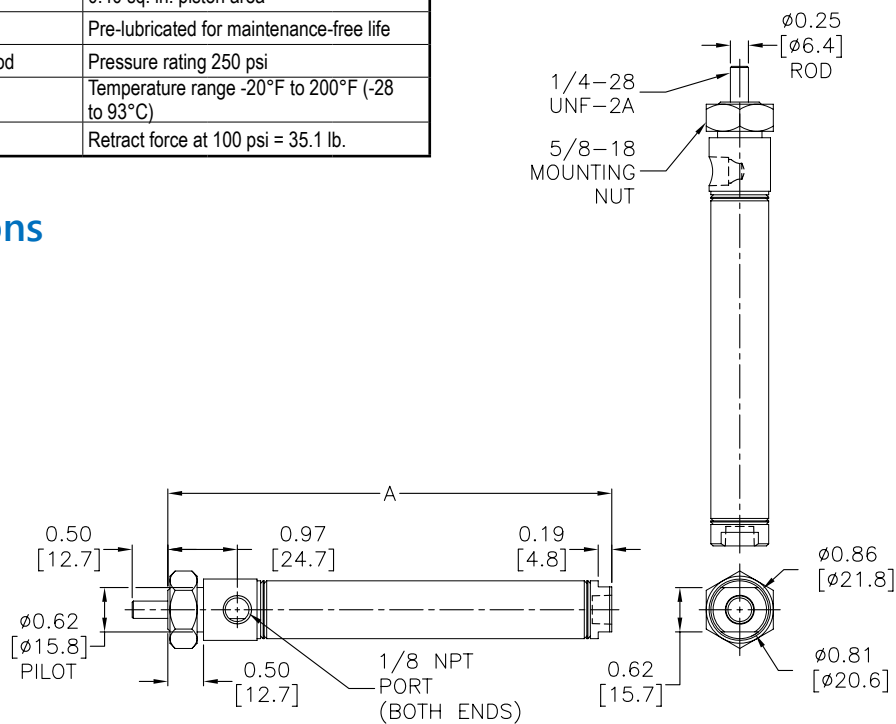
| | |
|---------------------------------------|--|
| 304 SS cylinder body | 0.40 sq. in. piston area |
| High strength aluminum end caps | Pre-lubricated for maintenance-free life |
| High-strength carbon-steel piston rod | Pressure rating 250 psi |
| Low friction Buna-N seals | Temperature range -20°F to 200°F (-28 to 93°C) |
| Extend force at 100 psi = 40.0 lb. | Retract force at 100 psi = 35.1 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-14-28
See end of 3/4" bore section for Accessories

Dimensions

inches [mm]





A-Series Pneumatic Cylinders

3/4 inch Bore

3/4 in. Bore, Double-acting, Rear Pivot Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 NPT ports, double acting, rear pivot mount (pivot pin included).

Cylinder, 3/4 in bore, double acting, rear pivot mount

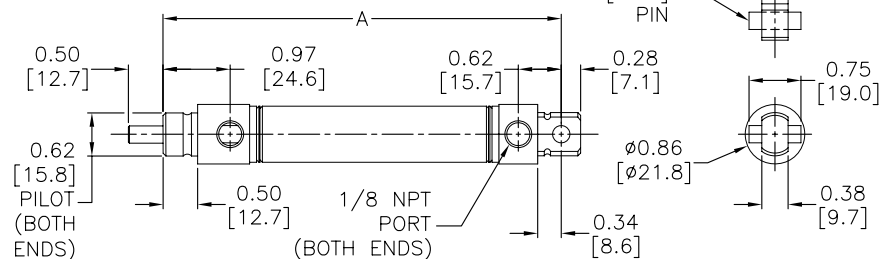
| Part Number | Stroke Length (in.) | "A" (in) | Weight (lbs) | Price |
|--------------------------|---------------------|----------|--------------|----------|
| A12005DP | 0.5 | 4.25 | 0.2 | \$06d7: |
| A12010DP | 1.0 | 4.75 | 0.2 | \$06db: |
| A12020DP | 2.0 | 5.75 | 0.3 | \$-06di: |
| A12030DP | 3.0 | 6.75 | 0.3 | \$06dn: |
| A12040DP | 4.0 | 7.75 | 0.3 | \$06ds: |
| A12050DP | 5.0 | 8.75 | 0.4 | \$06dx: |
| A12060DP | 6.0 | 9.75 | 0.4 | \$;06cl: |
| A12080DP | 8.0 | 11.75 | 0.5 | \$06d1: |
| A12100DP | 10.0 | 13.75 | 0.5 | \$06d3: |
| A12120DP | 12.0 | 15.75 | 0.6 | \$06d5: |

Specifications

| | |
|---------------------------------------|--|
| 304 SS cylinder body | 0.40 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 = 40.0 lb. | Retract force at 100 psi = 35.1 lb. |

Dimensions

inches [mm]

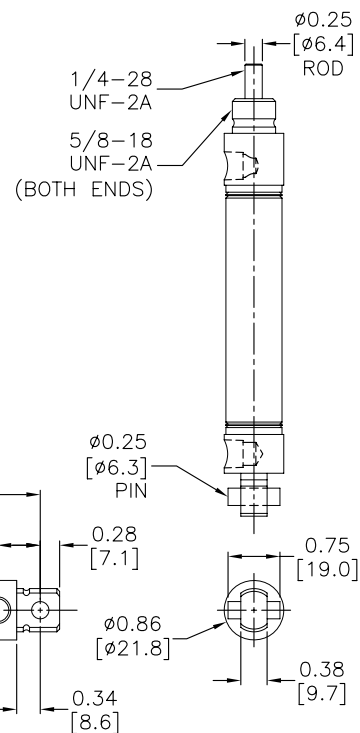


| Mount Style | Bracket | Nut |
|------------------|---------|----------|
| Front Nose Mount | AMB-6 | AN-58-18 |
| Rear Pivot Mount | APB-2 | - |
| Double End Mount | Front | AMB-6 |
| | Rear | AMB-6 |

Cylinder rod clevis ARC-14-28

See end of 3/4" bore section for Accessories

Note: Drive pin out for double end mounting





A-Series Pneumatic Cylinders

3/4 inch Bore

3/4 in. Bore, Double-acting, Rear Pivot Mount, Magnetic Piston



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 NPT ports, double acting, rear pivot mount (pivot pin included), magnetic piston.

Cylinder, 3/4 in bore, double acting, rear pivot mount, Magnetic Piston

| Part Number | Stroke Length (in.) | "A" (in) | Weight (lbs) | Price |
|----------------------------|---------------------|----------|--------------|-----------|
| A12010DP-M | 1.0 | 4.75 | 0.2 | \$;06d[|
| A12020DP-M | 2.0 | 5.75 | 0.3 | \$06d_: |
| A12030DP-M | 3.0 | 6.75 | 0.3 | \$06d#: |
| A12040DP-M | 4.0 | 7.75 | 0.3 | \$;06d!: |
| A12050DP-M | 5.0 | 8.75 | 0.4 | \$06d?: |
| A12060DP-M | 6.0 | 9.75 | 0.4 | \$;06d,:: |
| A12080DP-M | 8.0 | 11.75 | 0.5 | \$06e0: |
| A12100DP-M | 10.0 | 13.75 | 0.5 | \$06e1: |
| A12120DP-M | 12.0 | 15.75 | 0.6 | \$06e2: |

Specifications

| | |
|------------------------------------|--|
| 304 SS cylinder body | 0.40 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 = 40.0 lb. | Retract force at 100 psi = 35.1 lb. |

| 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 |

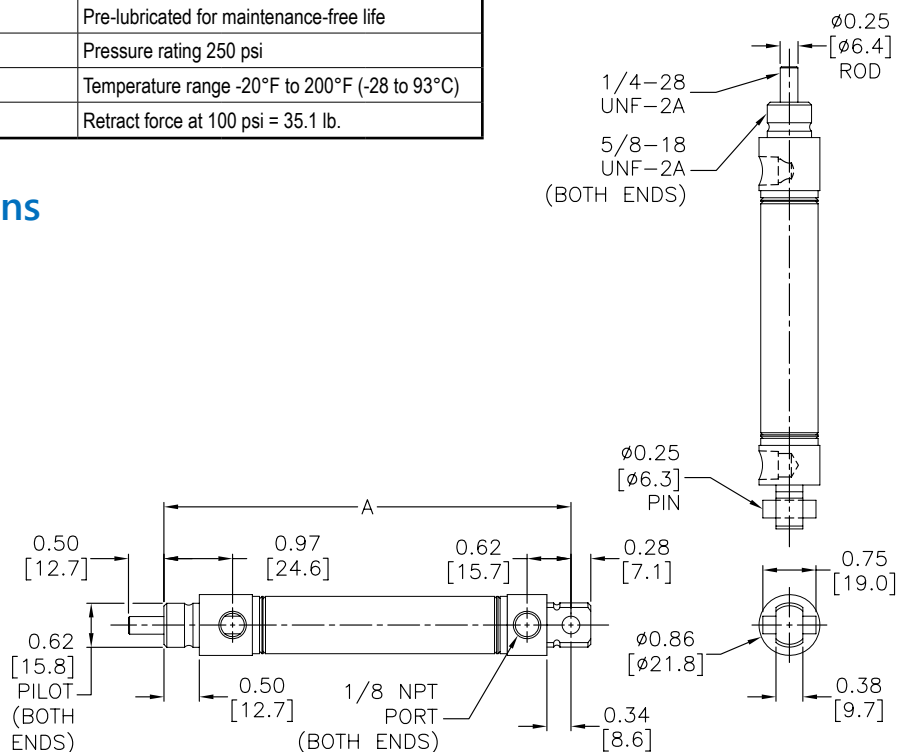
Cylinder rod clevis [ARC-14-28](#)

See end of 3/4" bore section for Accessories

Note: Drive pin out for double end mounting

Dimensions

inches [mm]





A-Series Pneumatic Cylinders

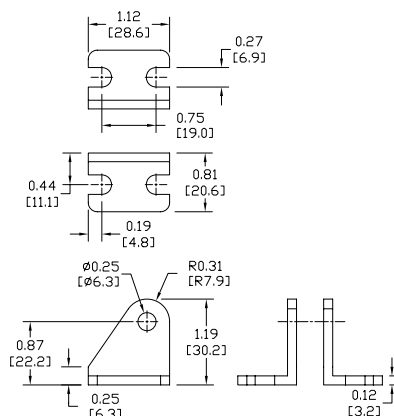
3/4 inch Bore Accessories

| A-Series Pneumatic Cylinder 3/4 inch Bore Accessories | | | | |
|---|---|---------|---------|---------|
| Part Number | Description | Pcs/Pkg | Wt (lb) | Price |
| <u>APB-2</u> | 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 | 0.1 | \$-5ie: |
| <u>AMB-5</u> | Cylinder mounting bracket used to mount 3/4 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders. | 1 | 0.1 | \$-5ia: |
| <u>AMB-6</u> | 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 | \$-5ib: |
| <u>ARC-14-28</u> | Cylinder rod clevis and hex nut, 1/4-28 thread, for use with 3/4 and 7/8 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders. | 1 | 0.1 | \$5u3: |
| <u>AN-58-18</u> | 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 | \$;6fy: |
| <u>AN-12-20</u> | Cylinder mounting nut with 1/2-10 UNF-2B threads used to mount 3/4 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders. | 1 | 0.2 | \$;6fu: |

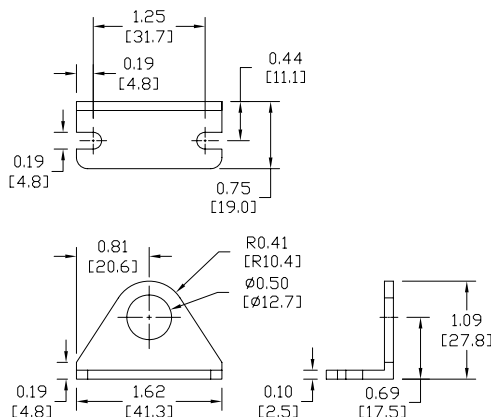
Dimensions

inches [mm]

APB-2



AMB-5





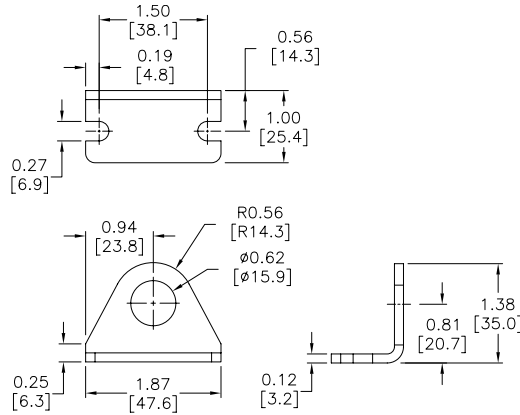
A-Series Pneumatic Cylinders

3/4 inch Bore Accessories

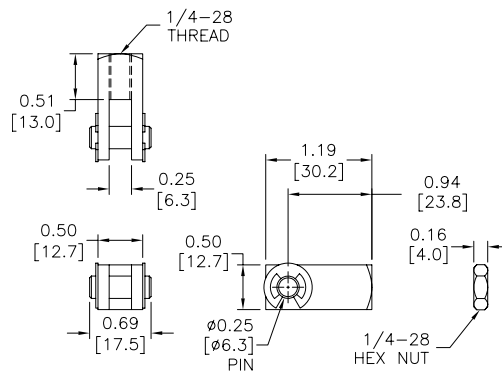
Dimensions

inches [mm]

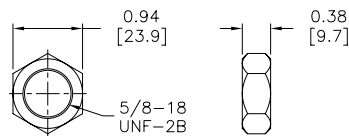
AMB-6



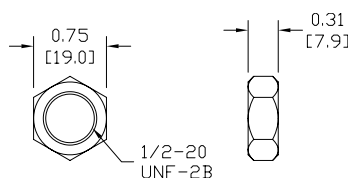
ARC-14-28



AN-58-18



AN-12-20





Pneumatic Cylinders - A-Series

Nitra A-Series Pneumatic Stainless Steel Round Body Air Cylinders

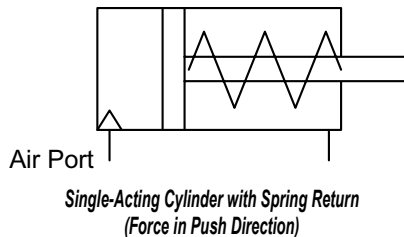
The NITRA Pneumatics A-Series non-repairable stainless steel round body cylinders includes bore sizes from 7/16" to 2" and stroke lengths from 1/2" to 18" to meet a broad range of applications. These high quality cylinders are constructed with stainless steel bodies and double rolled-in high strength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

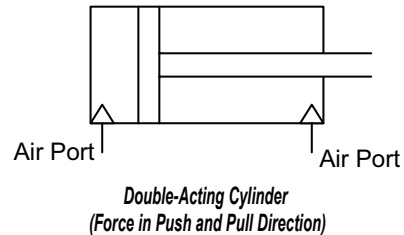
- Interchangeable with other common brands of round body cylinders
- Available bore sizes: 7/16", 9/16", 3/4", 7/8", 1-1/16", 1-1/4", 1-1/2", 2"
- Excellent selection of stroke lengths
- Single-acting (spring return) and double-acting models
- Nose, pivot and double-end mounting options
- Type 304 stainless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

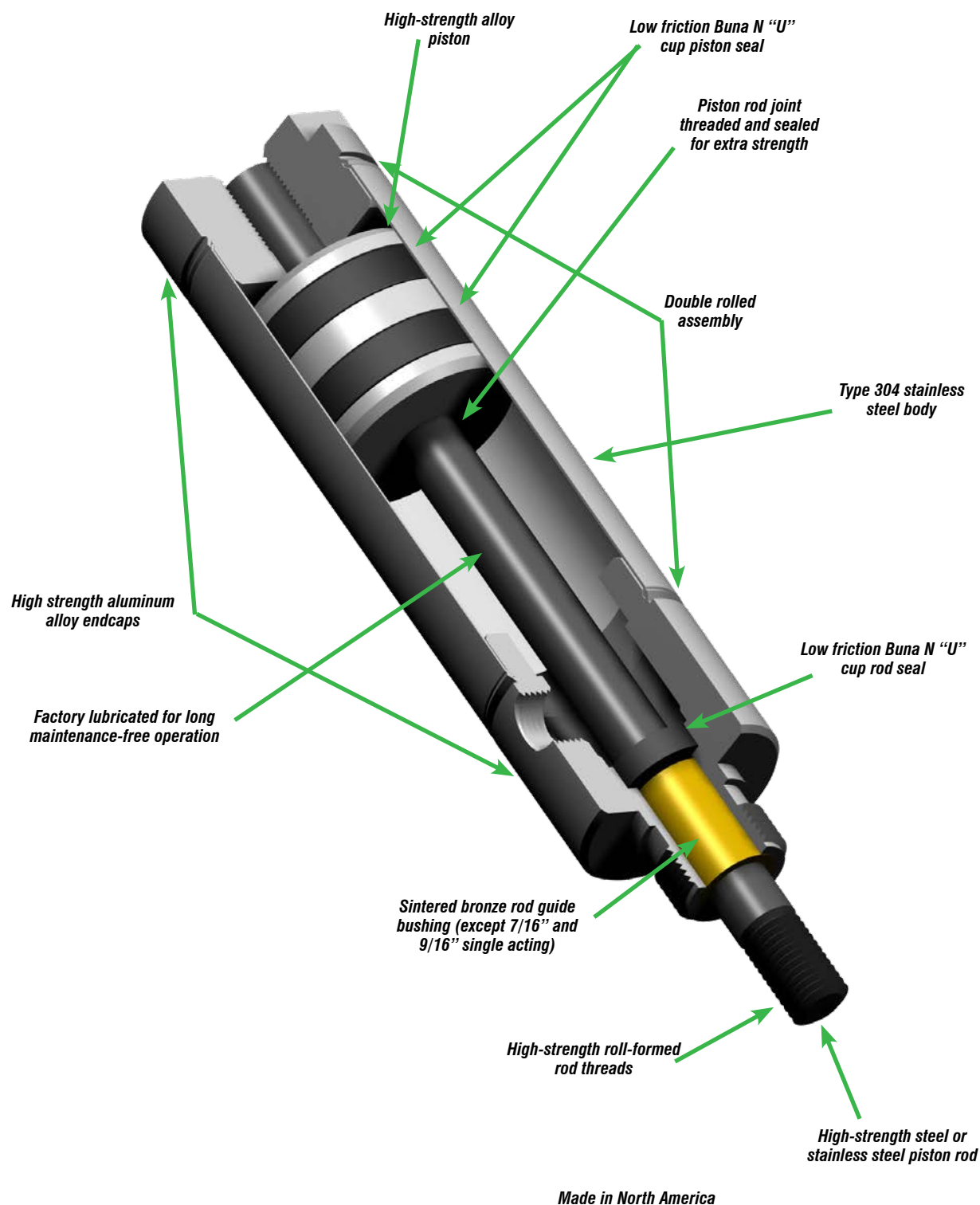


Double end mount uses two AMB brackets and two AN nuts.



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 | | | |