



A-Series Pneumatic Cylinders

3/4 inch Bore

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



Part no. A12020SN

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

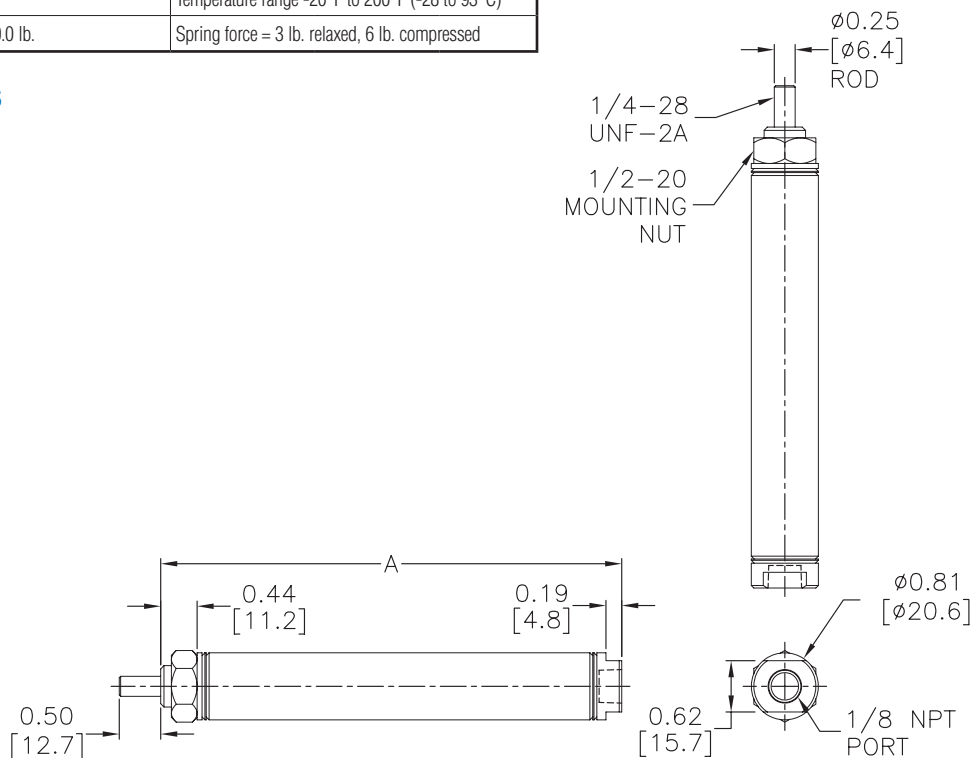
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A12005SN	0.5	2.69	0.1	
A12010SN	1.0	3.19	0.2	
A12015SN	1.5	4.38	0.2	
A12020SN	2.0	4.88	0.3	
A12030SN	3.0	6.57	0.3	
A12040SN	4.0	8.26	0.4	
A12050SN	5.0	9.95	0.5	
A12060SN	6.0	11.64	0.6	

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, Double-acting, Front Nose Mount



Part no. A12020DN

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	
A12010DN	1.0	3.97	0.2	
A12015DN	1.5	4.47	0.3	
A12020DN	2.0	4.97	0.3	
A12030DN	3.0	5.97	0.3	
A12040DN	4.0	6.97	0.3	
A12050DN	5.0	7.97	0.4	
A12060DN	6.0	8.97	0.4	
A12080DN	8.0	10.97	0.5	
A12100DN	10.0	12.97	0.5	
A12120DN	12.0	14.97	0.6	

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

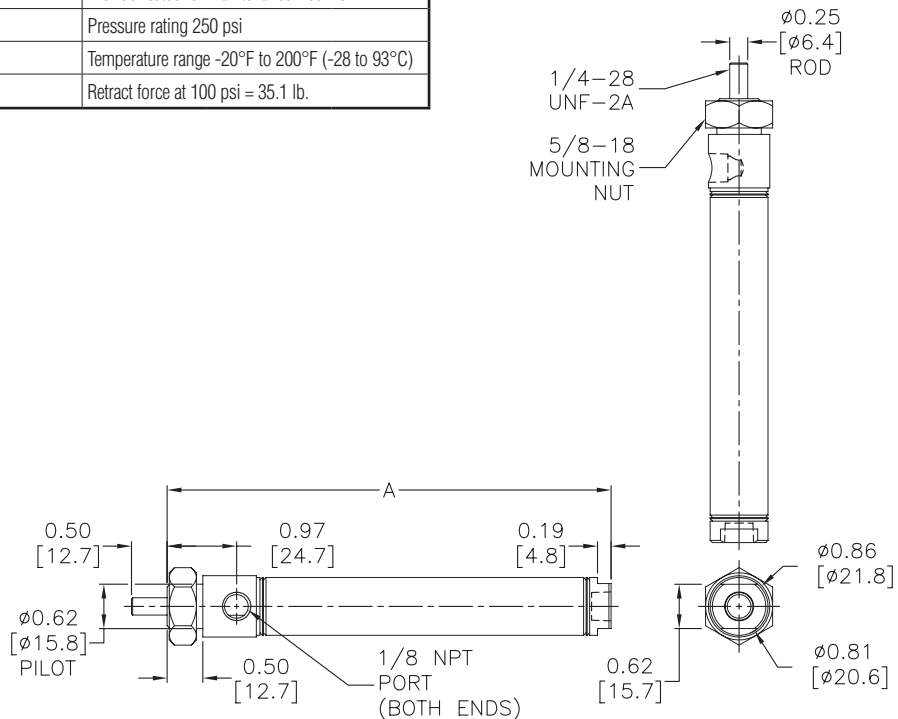
inches [mm]

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



Part no. A12020DP

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	
A12010DP	1.0	4.75	0.2	
A12020DP	2.0	5.75	0.3	
A12030DP	3.0	6.75	0.3	
A12040DP	4.0	7.75	0.3	
A12050DP	5.0	8.75	0.4	
A12060DP	6.0	9.75	0.4	
A12080DP	8.0	11.75	0.5	
A12100DP	10.0	13.75	0.5	
A12120DP	12.0	15.75	0.6	

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	APB-2	—
Double End Mount	Front	AMB-6
	Rear	AMB-6

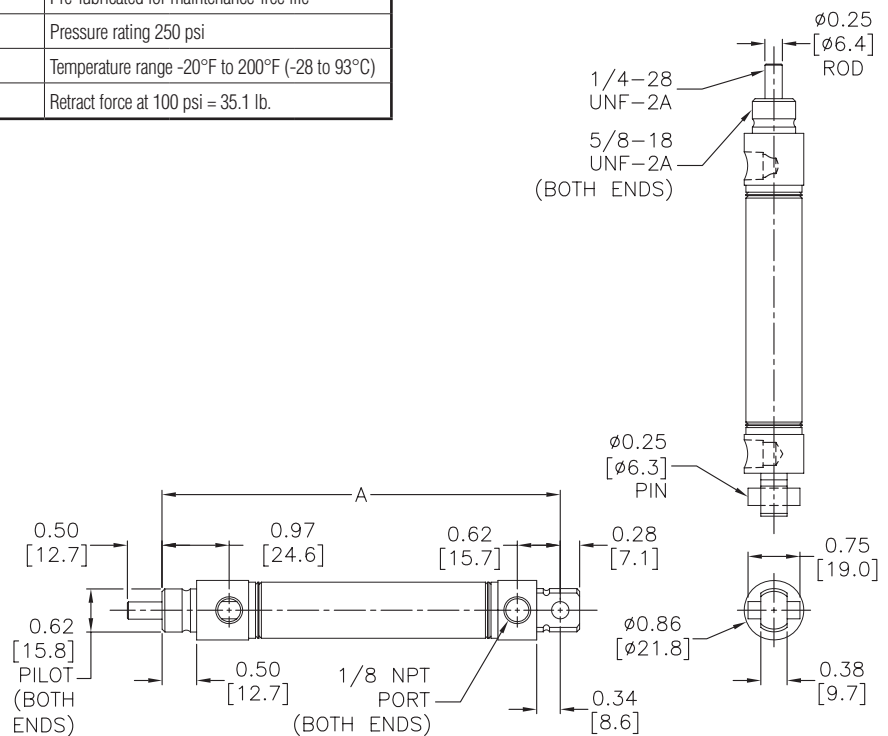
Cylinder rod clevis ARC-14-28

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

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



Part no. A12020DP-M

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	
A12020DP-M	2.0	5.75	0.3	
A12030DP-M	3.0	6.75	0.3	
A12040DP-M	4.0	7.75	0.3	
A12050DP-M	5.0	8.75	0.4	
A12060DP-M	6.0	9.75	0.4	
A12080DP-M	8.0	11.75	0.5	
A12100DP-M	10.0	13.75	0.5	
A12120DP-M	12.0	15.75	0.6	

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 AN-58-18
	Rear	AMB-6 AN-58-18

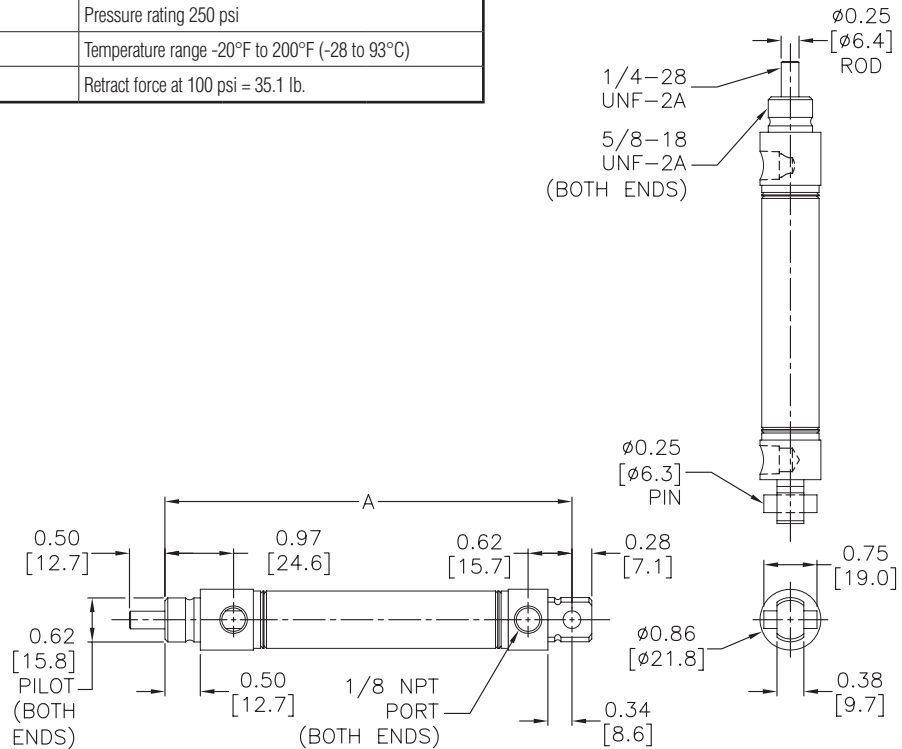
Cylinder rod clevis ARC-14-28

See end of 3/4" bore section for Accessories

Note: Drive pin out for double end mounting

Dimensions

inches [mm]





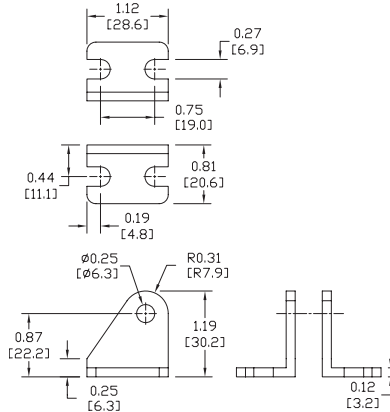
A-Series Pneumatic Cylinders 3/4 inch Bore Accessories

A-Series Pneumatic Cylinder 3/4 inch Bore Accessories				
Part Number	Description	Pcs/Pkg	Wt (lb)	Price
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	0.1	
AMB-5	Cylinder mounting bracket used to mount 3/4 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	
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	
ARC-14-28	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	
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	
AN-12-20	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	

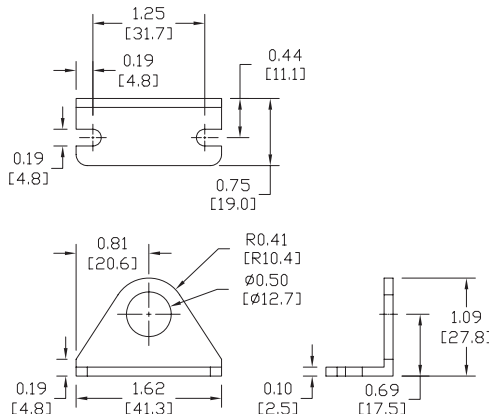
Dimensions

inches [mm]

APB-2



AMB-5



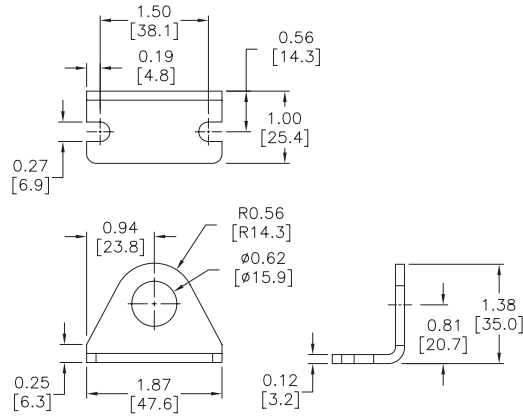
A-Series Pneumatic Cylinders

3/4 inch Bore Accessories

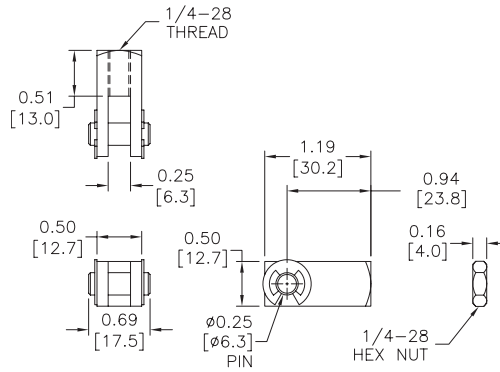
Dimensions

inches [mm]

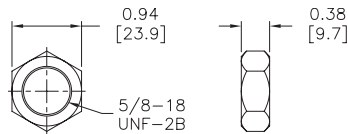
AMB-6



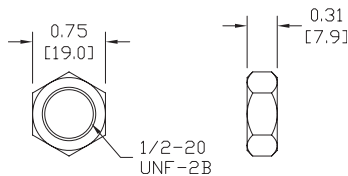
ARC-14-28



AN-58-18



AN-12-20





Pneumatic Cylinders - A-Series

Nitra A-Series Pneumatic Stainless Steel Round Body Air Cylinders

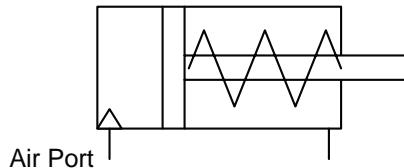
The NITRA Pneumatics A-Series non-repairable stainless steel round body cylinders includes bore sizes from 7/16" to 2" and stroke lengths from 1/2" to 18" to meet a broad range of applications. These high quality cylinders are constructed with stainless steel bodies and double rolled-in high strength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

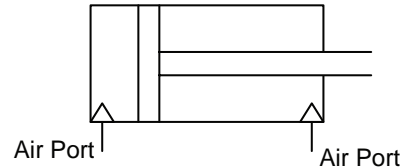
Operation

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.



*Single-Acting Cylinder with Spring Return
(Force in Push 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.



*Double-Acting Cylinder
(Force in Push and Pull Direction)*

Mounting Options



Nose mount uses one AMB bracket and one AN nut.

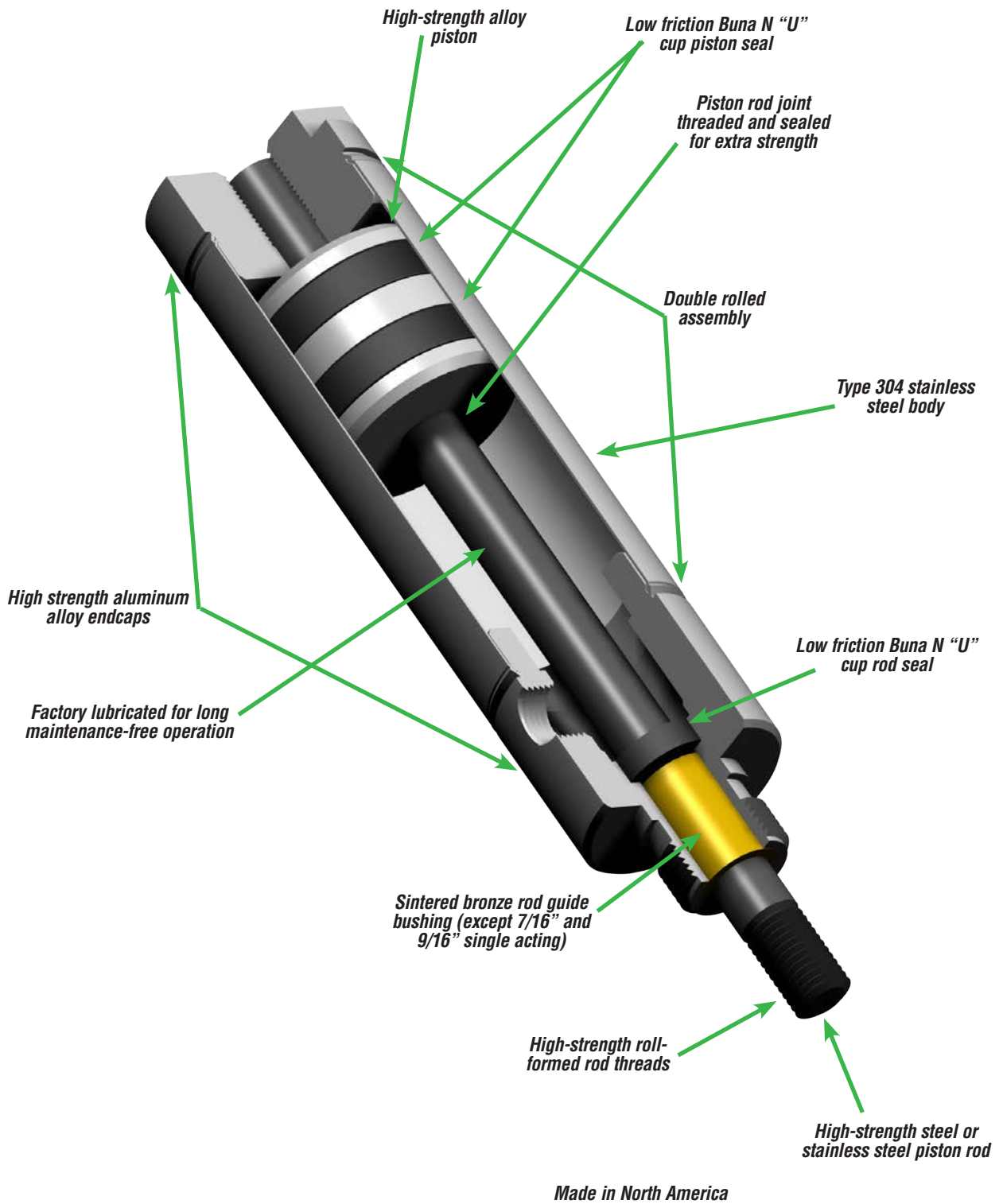


Pivot mount uses one APB or one APBP bracket.



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

Cylinder Features



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, D-Series, F-Series		
CPS9C	DE-STA-CO Robohand SMC Compact Air		
CPS9D	Fabco Numatics Rotomation		
CPS9F	NITRA G-Series Fabco Festo Numatics Rotomation		
CPS9H	NITRA E-Series NITRA H-Series		
CPS9M	Norgren		
CPS9Q	NITRA G-Series Parker		
CPS9T	SMC		