

#### 9/16 in. Bore, Single-acting, Spring Return, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 9/16 inch bore, #10-32 port, single acting, spring return, front nose mount.

Cylinder, 9	/16 in bore, si		, spring r	eturn,			
	<u>front no</u>	<u>se mount</u>					
Part Number	umber   Stroke Length (in.)   "A" (in)   Weight (lbs)   Price						
<u>A09005SN</u>	0.5	2.34	0.1	\$19.00			
<u>A09010SN</u>	1.0	3.15	0.1	\$17.00			
<u>A09020SN</u>	2.0	4.77 0.2 \$20.0					
<u>A09030SN</u>	3.0	6.39	0.2	\$22.50			
	Specif	ications					
304 SS cylinder body		0.25 sq. in. piston a	area				
High strength aluminu	ım end caps	Pre-lubricated for n	naintenance-free	life			
303 SS piston rod	303 SS piston rod Pressure rating 250 psi						
Low friction Buna-N seals Temperature range -20°F to 200°F (-28 to 93°C)				(-28 to			
Extend force at 100 p	si = 25.0 lb.	Spring force = 2 lb.	relaxed, 4 lb. co	mpressed			

Mount Style		Bracket	Nut
Front Nose Mou	ınt	AMB-4	AN-716-20*
Rear Pivot Mount		_	_
Pourt Sed Mount		-	-
Double End Mount	Rear	-	-

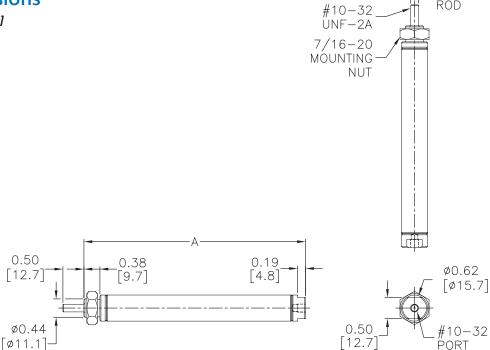
Ø0.19  $[ \emptyset 4.7 ]$ 

ROD

\* (1) Nut included with cylinder Cylinder rod clevis ARC-10-32 See end of 9/16" bore section for Accessories

### **Dimensions**

inches [mm]



PILOT



#### 9/16 in. Bore, Single-acting, Spring Return, Double End Mount

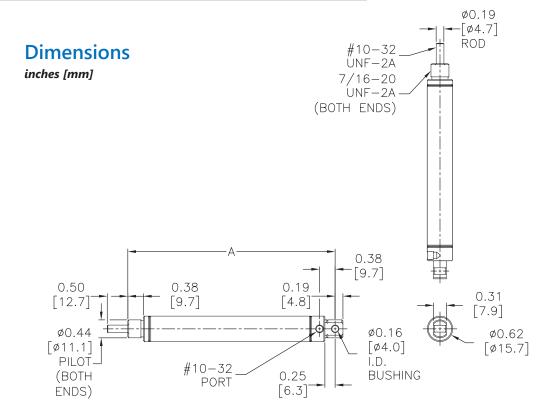


NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 9/16 inch bore, #10-32 port, single acting, spring return, double end mount.

Cylinder, 9/16 in bore, single acting, spring return, double end mount					
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
A09005SD	0.5	2.62	0.1	\$24.00	
A09010SD	1.0	3.43	0.1	\$21.50	
A09020SD	2.0	5.05	0.2	\$24.50	
A09030SD	3.0	6.67	0.2	\$27.00	
	Specif	fications			
304 SS cylinder body	-	0.25 sq. in. piston	area		
High strength aluminu	ım end caps	Pre-lubricated for	maintenance-free	life	
303 SS piston rod Pressure rating 250 psi					
Low friction Buna-N s	Low friction Buna-N seals Temperature range -20°F to 200°F (-28 to 93°C)				
Extend force at 100 p	Extend force at 100 psi = 25.0 lb. Spring force = 2 lb. relaxed, 4 lb. compressed				

Mount Style		Bracket	Nut
Front Nose Mou	nt	AMB-4	AN-716-20
Rear Pivot Mount		APBP-2	_
Double End Mount		AMB-4	AN-716-20
Double Ella Moull	Rear	AMB-4	AN-716-20

Cylinder rod clevis ARC-10-32 See end of 9/16" bore section for Accessories





#### 9/16 in. Bore, Double-acting, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 9/16 inch bore, #10-32 ports, double acting, front nose mount.

Cylinder, 9	9/16 in bore, <b>c</b>		ng, front i	10se	
	mo	unt			
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A09005DN</u>	0.5	2.78	0.1	\$25.00	
<u>A09010DN</u>	1.0	3.28	0.1	\$21.50	
<u>A09020DN</u>	2.0	4.28	0.1	\$23.50	
A09030DN	3.0	5.28	0.2	\$25.50	
A09040DN	4.0	6.28	0.2	\$27.50	
A09060DN	6.0	8.28	0.2	\$31.50	
	Specifi	cations			
304 SS cylinder body		0.25 sq. in. piston area			
High strength aluminu	ım 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 = 25.0 lb. Retract force at 100 psi = 22.2 lb.					

Mount Style		Bracket	Nut
Front Nose Mou	nt	AMB-4	AN-716-20*
Rear Pivot Mount		_	_
Front		-	-
Double End Mount	Rear	-	-

Ø0.19 ∙[Ø4.7] ROD

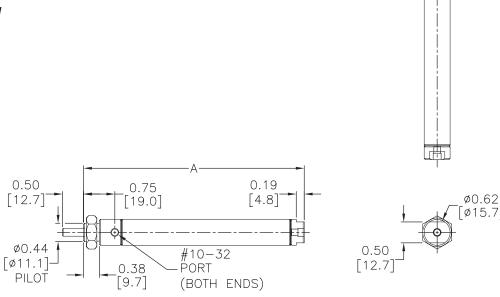
\* (1) Nut included with cylinder Cylinder rod clevis ARC-10-32 See end of 9/16" bore section for Accessories

> #10-32 UNF-2A 7/16-20 MOUNTING

> > NUT

#### **Dimensions**

inches [mm]





#### 9/16 in. Bore, Double-acting, Double End Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 9/16 inch bore, #10-32 ports, double acting, double end mount.

Cylinder, 9	)/16 in bore, d	ouble actir ount	ıg, double	end
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A09005DD	0.5	3.06	0.1	\$29.50
A09010DD	1.0	3.56	0.1	\$25.50
A09020DD	2.0	4.56	0.1	\$27.50
A09030DD	3.0	5.56 0.2 \$29		
A09040DD	4.0	6.56	0.2	\$31.50
A09060DD	6.0	8.56	0.2	\$35.50
	Specifi	cations		
304 SS cylinder body	•	0.25 sq. in. piston	area	
High strength aluminu	Pre-lubricated for	maintenance-fre	e 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)				(-28 to

Retract force at 100 psi = 22.2 lb.

0.75

[19.0]

#10-32

(BOTH ENDS)

PORT

Mount Style		Bracket	Nut
Front Nose Mou	ınt	AMB-4	AN-716-20*
Rear Pivot Mount		APBP-2	-
Pouble End Mount		AMB-4	AN-716-20*
Double End Mount	Rear	AMB-4	AN-716-20*

\*(2) Nuts included with cylinder Cylinder rod clevis ARC-10-32 See end of 9/16" bore section for Accessories

#### **Dimensions**

0.50

[12.7]

Ø0.44

PILOT-

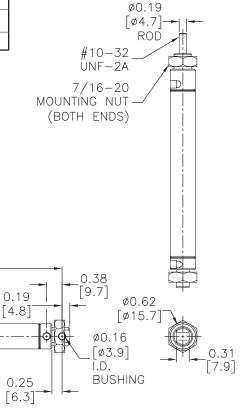
(BOTH

ENDS)

[Ø11.1]

inches [mm]

Extend force at 100 psi = 25.0 lb.





### 9/16 in. Bore, Double-acting, Double End Mount, Magnetic Piston



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 9/16 inch bore, #10-32 ports, double acting, double end mount, magnetic piston.

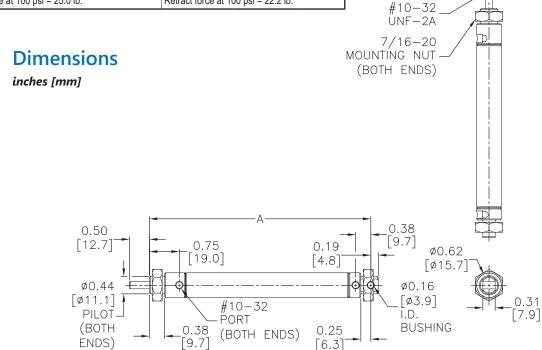
Cylinder, 9/16 in bore, double acting, double end mount,					
	magnetic	piston			
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A09010DD-M</u>	1.0	3.56	0.1	\$37.00	
A09020DD-M	2.0	4.56	0.1	\$39.00	
<u>A09030DD-M</u>	3.0	5.56	0.2	\$41.00	
A09040DD-M	4.0	6.56	0.2	\$43.00	
A09060DD-M	6.0	8.56	0.2	\$47.00	
	Specifica	tions			

A03000DD-III	0.0	0.50	0.2	Ψ+1.00
	Specifica	ations		
304 SS cylinder body		0.25 sq. in. piston	area	
High strength aluminum end	Pre-lubricated for maintenance-free life			
303 SS piston rod		Pressure rating 25	50 psi	
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 25.	Retract force at 10	00 psi = 22.2 lb.		

Mount Style		Bracket	Nut
Front Nose Mo	unt	AMB-4	AN-716-20*
Rear Pivot Mount		APBP-2	_
Double End Mount	Front	AMB-4	AN-716-20*
Double Ella Mount	Rear	AMB-4	AN-716-20*

\* (2) Nuts included with cylinder Cylinder rod clevis ARC-10-32 See end of 9/16" bore section for Accessories

> Ø0.19 [Ø4.7] ROD





## A-Series Pneumatic Cylinders 9/16 inch Bore Accessories

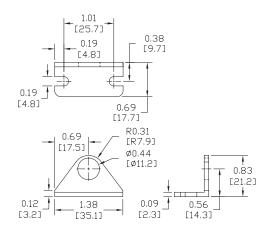
A-Series Pneumatic Cylinder 9/16 inch Bore Accessories					
Part Number	Description	Pcs/Pkg	Wt (lb)	Price	
AMB-4	Cylinder mounting bracket used to mount 7/16 and 9/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$4.50	
ARC-10-32	Cylinder rod clevis and hex nut, #10-32 thread, for use with 7/16 and 9/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$4.50	
APBP-2	Cylinder pivot mounting bracket with pivot pin used to mount 9/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$5.25	
<u>AN-716-20</u>	Cylinder mounting nut with 7/16-20 UNF-2B threads used to mount 7/16 inch and 9/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.2	\$1.25	

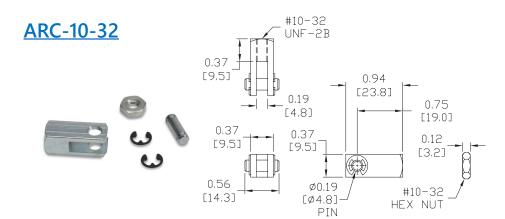
#### **Dimensions**

inches [mm]

#### AMB-4









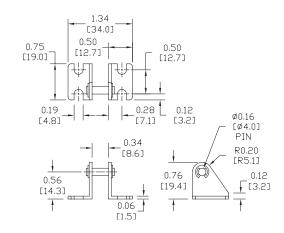
## A-Series Pneumatic Cylinders 9/16 inch Bore Accessories

#### **Dimensions**

inches [mm]

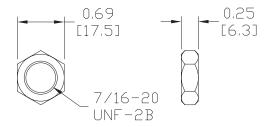
#### APBP-2





#### AN-716-20







### **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.

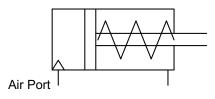
#### **Features**

- 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

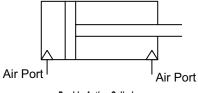
#### **Operation**

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" directon.



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

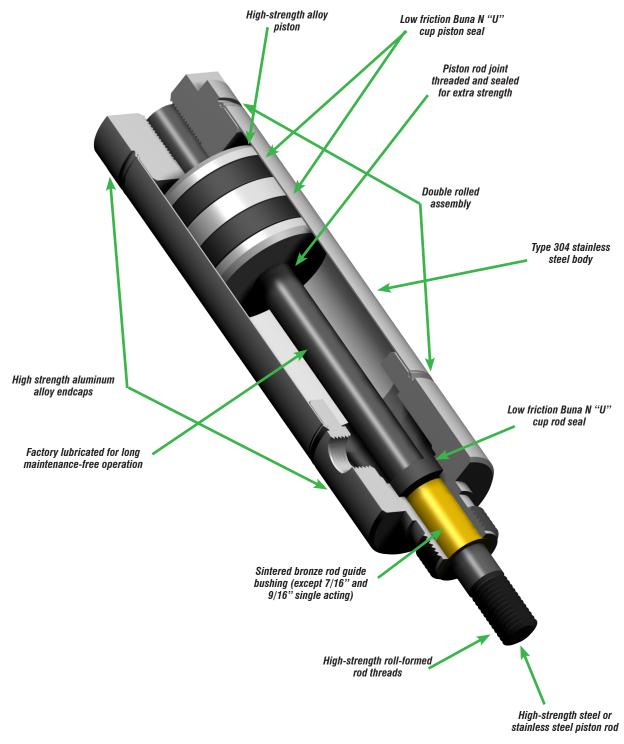


Double end mount uses two AMB brackets and two AN nuts.



### **Pneumatic Cylinders - A-Series**

#### **Cylinder Features**



Made in North America



## **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		Round Cylinder Adapter & Band (CPSB or CPSS Series)
CPS9C	DE-STA-CO Robohand SMC Compact Air Bimba Fabco		2.53 Min. +/- 0.1 R 2.13 +/- 0.05
CPS9D	NITRA L-Series Fabco Numatics Rotomation		1.52
CPS9E	NITRA L-Series Fabco Numatics Rotomation		1.52
CPS9F	NITRA G-Series Fabco Festo Numatics Rotomation		4.4 5.1 6.5 6.5 6.5
СРЅ9Н	NITRA E-Series NITRA H-Series		3.05 TRO2
СРЅЭМ	Norgren		5.1 +/-0.1 R 3.25
CPS9Q	NITRA L-Series NITRA G-Series Parker Fabco Festo Numatics Rotomation		4.4 1 5.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0