

### 2 in. Bore, Single-acting, Spring Return, Front Nose Mount

[30.2]



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 2 inch bore, 1/4 NPT port, single acting, spring return, front nose mount.

Cylinder, 2 in bore, single acting, spring return, front					
	nose	<u>mount</u>			
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u> A32010SN</u>	1.0	5.41	1.5	\$92.00	
<u>A32020SN</u>	2.0	7.41	1.9	\$101.00	
<u>A32030SN</u>	3.0	8.66	2.3	\$109.00	
	Speci	fications			
304 SS cylinder body		3.1 sq. in. piston a	rea		
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 p	si = 310.0 lb.	Spring force = 15 lb. relaxed, 30 lb. compressed			

0.88

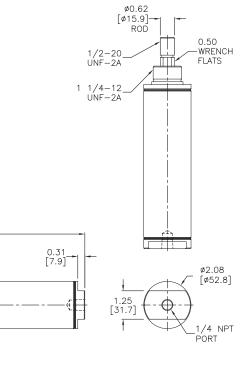
[34.9] PILOT (BOTH ENDS)

Mount Style		Bracket	Nut
Front Nose Mount		AMB-11	AN-114-12
Rear Pivot Mount		-	-
Pour la Front		-	-
Double End Mount	Rear	-	-

Cylinder rod clevis ARC-12-20 See end of 2" bore section for Accessories

#### **Dimensions**

inches [mm]





### 2 in. Bore, Single-acting, Spring Return, Double End Mount

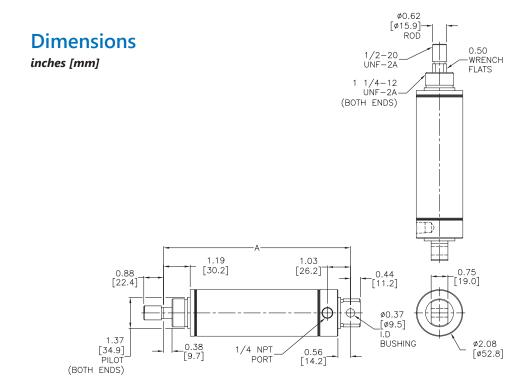


NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 2 inch bore, 1/4 NPT port, single acting, spring return, double end mount.

Cylinder, 2 in bore, single acting, spring return, double					
	end	mount			
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A32010SD</u>	1.0	6.34	1.7	\$111.00	
<u>A32020SD</u>	2.0	8.34	2.1	\$119.00	
A32030SD	3.0	9.59	2.6	\$129.00	
<b>Specifications</b>					
304 SS cylinder body		3.1 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 p	si = 310.0 lb.	Spring force = 15	lb. relaxed, 30 lb. cor	npressed	

Mount Style		Bracket	Nut
Front Nose Mount		AMB-11	AN-114-12
Rear Pivot Mount		APBP-5	-
Double End Mount	Pront Front		AN-114-12
Double End Mount	Rear	AMB-11	AN-114-12

Cylinder rod clevis ARC-12-20 See end of 2" bore section for Accessories





### 2 in. Bore, Double-acting, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 2 inch bore, 1/4 NPT ports, double acting, front nose mount.

Cylinder, 2	2 in bore, doub	le acting,	front nose m	ount
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
<u>A32010DN</u>	1.0	5.69	1.6	\$85.00
A32020DN	2.0	6.69	1.7	\$88.00
A32030DN	3.0	7.69	1.9	\$93.00
<u>A32040DN</u>	4.0	8.69	2.0	\$98.00
A32050DN	5.0	9.69	2.2	\$102.00
A32060DN	6.0	10.69	2.3	\$107.00
	Speci	fications		
304 SS cylinder body	-	3.1 sq. in. piston a	irea	
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 p	si = 310.0 lb.	Retract force at 100 psi = 279.3 lb.		

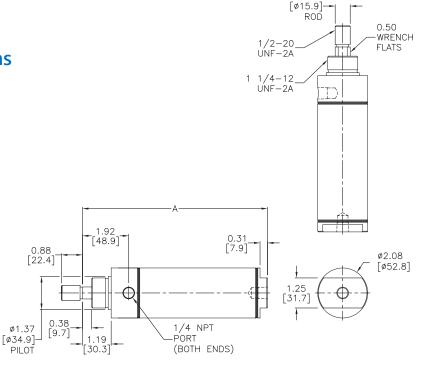
Mount Style		Bracket	Nut
Front Nose Mount		AMB-11	AN-114-12
Rear Pivot Mount		_	-
Pour Front Front		-	-
Double End Mount	Rear	-	_

Cylinder rod clevis ARC-12-20 See end of 2" bore section for Accessories

Ø0.62

### Dimensions

inches [mm]





#### 2 in. Bore, Double-acting, Double End Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 2 inch bore, 1/4 NPT ports, double acting, double end mount.

Cylinder, 2	in bore, doub	le acting, c	louble end r	nount		
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A32010DD</u>	1.0	6.62	1.8	\$101.00		
<u>A32020DD</u>	2.0	7.62	1.9	\$105.00		
<u>A32030DD</u>	3.0	8.62	2.1	\$109.00		
<u>A32040DD</u>	4.0	9.62	2.2	\$114.00		
<u>A32050DD</u>	5.0	10.62	2.4	\$119.00		
<u>A32060DD</u>	6.0	11.62	2.5	\$124.00		
A32070DD	7.0	12.62	2.7	\$128.00		
A32080DD	8.0	13.62	2.8	\$101.00		
A32100DD	10.0	15.62	3.1	\$143.00		
A32120DD	12.0	17.62	3.4	\$151.00		
A32140DD	14.0	19.62	3.7	\$161.00		
A32160DD	16.0	21.62	4.0	\$169.00		
A32180DD	18.0	23.62	4.3	\$179.00		
	Specifications					

Specifications Specification Specif				
304 SS cylinder body	3.1 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 = 310.0 lb.	Retract force at 100 psi = 279.3 lb.			

 Mount Style
 Bracket
 Nut

 Front Nose Mount
 AMB-11
 AN-114-12

 Rear Pivot Mount
 APBP-5

 Double End Mount
 Front
 AMB-11
 AN-114-12

 Rear
 AMB-11
 AN-114-12

0.50 WRENCH

**FLATS** 

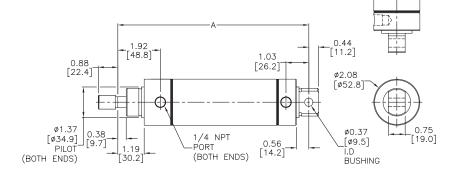
Cylinder rod clevis ARC-12-20 See end of 2" bore section for Accessories

Ø0.62

1/2-20 UNF-2A

1 1/4-12 UNF-2A (BOTH ENDS)







#### 2 in. Bore, Double-acting, Double End Mount, Magnetic Piston

Temperature range -20°F to 200°F (-28 to 93°C)

Retract force at 100 psi = 279.3 lb.



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 2 inch bore, 1/4 NPT ports, double acting, double end mount, magnetic piston.

Cylinder, 2 in bore, double acting, double end mount,					
magnetic piston					
Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
1.0	6.62	1.8	\$127.00		
2.0	7.62	1.9	\$131.00		
3.0	8.62	2.1	\$136.00		
4.0	9.62	2.2	\$140.00		
5.0	10.62	2.4	\$145.00		
6.0	11.62	2.5	\$150.00		
7.0	12.62	2.7	\$155.00		
8.0	13.62	2.8	\$119.00		
10.0	15.62	3.1	\$168.00		
12.0	17.62	3.4	\$177.00		
14.0	19.62	3.7	\$140.00		
16.0	21.62	4.0	\$195.00		
18.0	23.62	4.3	\$205.00		
Specifications Specif					
304 SS cylinder body		3.10 sq. in. piston area			
High strength aluminum end caps		Pre-lubricated for maintenance-free life			
	Pressure rating 250 psi				
	### Magne    Stroke Length (in.)	magnetic piston           Stroke Length (in.)         "A" (in)           1.0         6.62           2.0         7.62           3.0         8.62           4.0         9.62           5.0         10.62           6.0         11.62           7.0         12.62           8.0         13.62           10.0         15.62           12.0         17.62           14.0         19.62           16.0         21.62           18.0         23.62           Specifications           3.10 sq. in. piston           pre-lubricated for	magnetic piston           Stroke Length (in.)         "A" (in)         Weight (lbs)           1.0         6.62         1.8           2.0         7.62         1.9           3.0         8.62         2.1           4.0         9.62         2.2           5.0         10.62         2.4           6.0         11.62         2.5           7.0         12.62         2.7           8.0         13.62         2.8           10.0         15.62         3.1           12.0         17.62         3.4           14.0         19.62         3.7           16.0         21.62         4.0           18.0         23.62         4.3           Specifications           3.10 sq. in. piston area           Pre-lubricated for maintenance-free life		

Mount Style		Bracket	Nut
Front Nose Mo	unt	AMB-11	AN-114-12
Rear Pivot Mount		APBP-5	-
Dauble End Mount	Front Front		AN-114-12
Double End Mount	Rear	AMB-11	AN-114-12

Cylinder rod clevis ARC-12-20 See end of 2" bore section for Accessories

> ø0.62 [ø15.9]

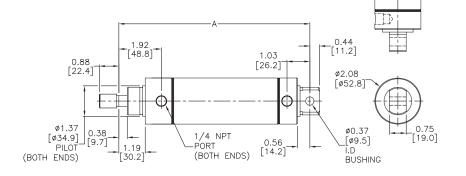
1 1/4-12 UNF-2A (BOTH ENDS) 0.50 WRENCH FLATS



inches [mm]

Low friction Buna-N seals

Extend force at 100 psi = 310 lb.





# A-Series Pneumatic Cylinders 2 inch Bore Accessories

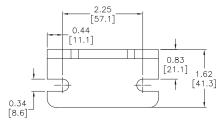
A-Series Pneumatic Cylinder 2 inch Bore Accessories					
Part Number	Description	Pcs/Pkg	Wt (lb)	Price	
<u>AMB-11</u>	Cylinder mounting bracket used to mount 2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.5	\$16.00	
APBP-5	Cylinder pivot mounting bracket with pivot pin used to mount 2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.4	\$18.50	
ARC-12-20	Cylinder rod clevis and hex nut, 1/2-20 thread, for use with 2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.2	\$7.75	
<u>AN-114-12</u>	Cylinder mounting nut with 1-1/14-12 UNF-2B threads used to mount 2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.3	\$7.00	

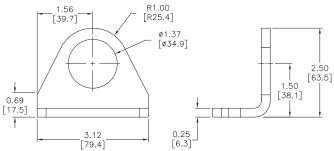
#### **Dimensions**

inches [mm]

#### **AMB-11**

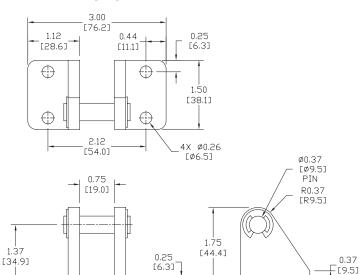






### APBP-5







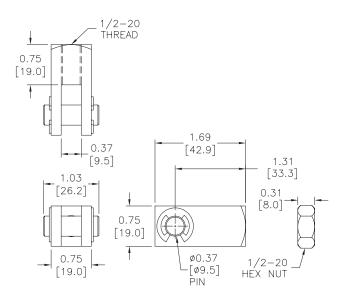
# A-Series Pneumatic Cylinders 2 inch Bore Accessories

#### **Dimensions**

inches [mm]

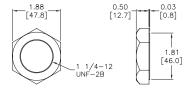
#### ARC-12-20





#### AN-114-12







### **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.

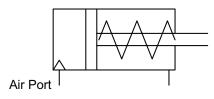
#### **Features**

- 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

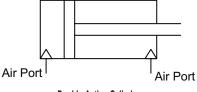
#### **Operation**

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.

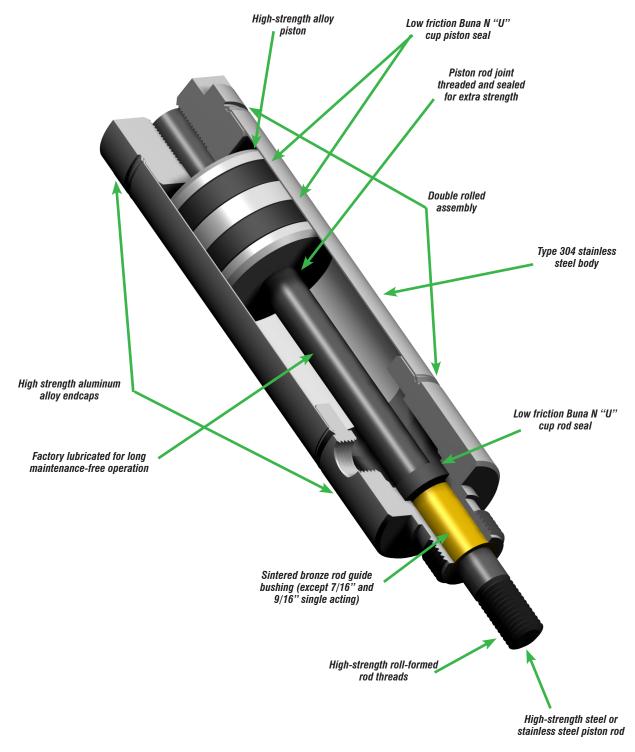


Double end mount uses two AMB brackets and two AN nuts.



## **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 4.82	
CPS9F	NITRA G-Series Fabco Festo Numatics Rotomation		4.4 5.1 6.5 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 T	