

# A-Series Pneumatic Cylinders 1-1/16 inch Bore

#### 1-1/16 in. Bore, Single-Acting, Spring Return, Front Nose Mount

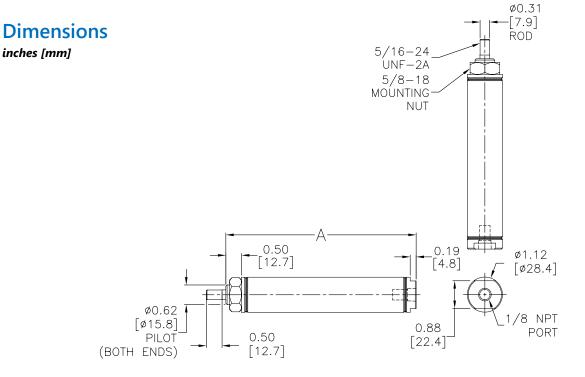


NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/16 inch bore, 1/8 NPT port, single acting, spring return, front nose mount.

Cylinder, 1-1/16 in bore, single acting, spring return,						
	front nose mount					
Part Number	Stroke Length (in)	"A" (in)	Weight (lbs)	Price		
<u>A17010SN</u>	1.0	3.50	0.3	\$25.00		
<u>A17020SN</u>	2.0	5.06	0.5	\$30.00		
<u>A17030SN</u>	3.0	6.62	0.6	\$33.50		
	Spec	ifications				
304 SS cylinder body		0.90 sq. in. piston area				
High strength aluminu	im 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 = 90.0 lb.	Spring force = 3 lb. relaxed, 6 lb. compressed				

Mount Style		Bracket	Nut
Front Nose Mou	Front Nose Mount		AN-58-18*
Rear Pivot Mou	-	-	
Front		-	-
Double End Mount	Rear	-	_

\* (1) Nut included with cylinder Cylinder rod clevis ARC-516-24 See end of 1-1/16" bore section for Accessories





# A-Series Pneumatic Cylinders 1-1/16 inch Bore

#### 1-1/16 in. Bore, Single-acting, Spring Return, Rear Pivot Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/16 inch bore, 1/8 NPT port, single acting, spring return, rear pivot mount (pivot pin included).

Cylinder, 1-1/16 in bore, single acting, spring return, rear pivot mount						
Part Number	Stroke Length (in.)	"'A'" (in)	Weight (lbs)	Price		
<u>A17010SP</u>	1.0	4.22	0.4	\$31.00		
A17020SP	2.0	5.78	0.5	\$35.00		
A17030SP	3.0	7.34	0.6	\$32.50		
	Specifi	cations				
304 SS cylinder body		0.90 sq. in. piston area				
High strength aluminu	um 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 = 90.0 lb.	Spring force = 3 I	Spring force = 3 lb. relaxed, 6 lb. compressed			

Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-6</u>	AN-58-18
Rear Pivot Mount		<u>APB-2</u>	-
Double End Mount	Front	<u>AMB-6</u>	AN-58-18
Double Ella Moulli	Rear	<u>AMB-6</u>	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

> Ø0.31 [Ø7.9]

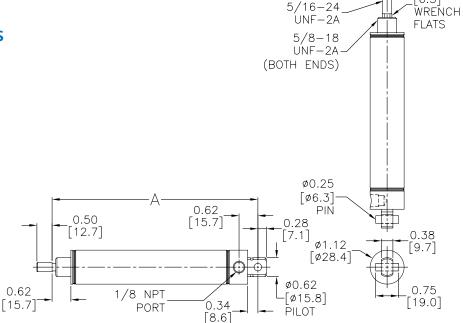
> > ROD

0.25

6.3

#### **Dimensions**

inches [mm]



Ø0.31



# A-Series Pneumatic Cylinders 1-1/16 inch Bore

### 1-1/16 in. Bore, Double-acting, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, 1-1/16 inch bore, 1/8 NPT ports, double acting, front nose mount.

Cylinder,	1-1/16 in bore	e, double	acting, front ı	iose	
	<u> </u>	<u>nount</u>			
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A17005DN</u>	0.5	3.62	0.4	\$30.50	
<u>A17010DN</u>	1.0	4.12	0.4	\$31.50	
<u>A17020DN</u>	2.0	5.12	0.4	\$33.50	
<u>A17030DN</u>	3.0	6.12	0.5	\$36.00	
<u>A17040DN</u>	4.0	7.12	0.5	\$32.00	
<u>A17050DN</u>	5.0	8.12	0.6	\$34.50	
<u>A17060DN</u>	6.0	9.12	0.6	\$36.50	
<u>A17080DN</u>	8.0	11.12	0.7	\$51.00	
<u>A17100DN</u>	10.0	13.12	0.8	\$45.00	
<u>A17120DN</u>	12.0	15.12	0.9	\$49.00	
	Spec	ifications			
304 SS cylinder body		0.90 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 s	eals	Temperature range -20°F to 200°F (-28 to 93°C)			
Extend force at 100 p	si = 90.0 lb.	Retract force at 100 psi = 82.3 lb.			

0.50 [12.7]

Ø0.62

PILOT

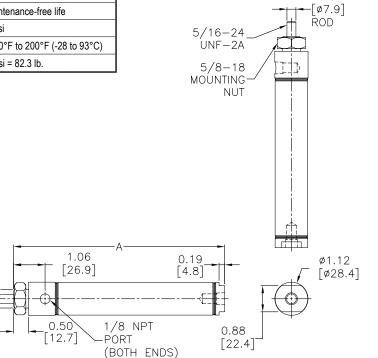
[ø15.7]

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

\* (1) Nut included with cylinder

Cylinder rod clevis ARC-516-24

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



#### **Dimensions**

inches [mm]



# A-Series Pneumatic Cylinders 1-1/16 inch Bore

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



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

Cylinder, 1-	1/16 in bore, (	double acti	ng, rear pivot	mount		
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A17010DP</u>	1.0	4.84	0.4	\$36.50		
A17020DP	2.0	5.84	0.4	\$39.50		
<u>A17030DP</u>	3.0	6.84	0.5	\$42.00		
<u>A17040DP</u>	4.0	7.84	0.5	\$36.50		
A17050DP	5.0	8.84	0.6	\$38.50		
<u>A17060DP</u>	6.0	9.84	0.6	\$41.00		
A17080DP	8.0	11.84	0.7	\$45.50		
A17100DP	10.0	13.84	0.8	\$49.50		
A17120DP	12.0	15.84	0.9	\$54.00		
	Spec	cifications				
304 SS cylinder body		0.90 sq. in. piston area				
High strength aluminu	im end caps	Pre-lubricated for maintenance-free life				
High strength carbon	steel piston rod	Pressure rating 250 psi				
Low friction Buna-N s	eals	Temperature range -20°F to 200°F (-28 to 93°C)				
Extend force at 100 p	si = 90.0 lb.	Retract force at 10	00 psi = 82.3 lb.			

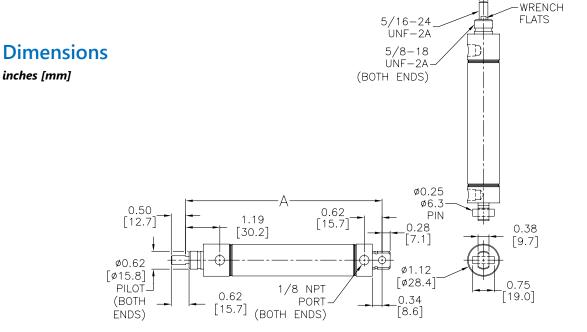
Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-6</u>	AN-58-18
Rear Pivot Mou	Rear Pivot Mount		-
Double End Mount	Front	AMB-6	AN-58-18
Double End Mount	Rear	<u>AMB-6</u>	AN-58-18

Cylinder rod clevis ARC-516-24

See end of 1-1/16" bore section for Accessories Note: Drive pin out for double end mounting

> Ø0.31 [Ø7.9] ROD

0.25



Nut AN-58-18 -AN-58-18 AN-58-18



# 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, d		ig, rear pivot	mount,	Mount Style		Bracket	N
		<u>etic piston</u>			Front Nose Mou	nt	AMB-6	AN-
Part Number	Stroke Length (in)	"A" (in)	Weight (lbs)	Price	Rear Pivot Mou	nt	APB-2	
<u>A17010DP-M</u>	1.0	4.84	0.4	\$54.00	Double End Mount	Front	AMB-6	AN-
<u>A17020DP-M</u>	2.0	5.84	0.4	\$57.00		Rear	<u>AMB-6</u>	AN-
<u>A17030DP-M</u>	3.0	6.84	0.5	\$60.00	Cylinder rod clevis ARC-51	6-24		
<u>A17040DP-M</u>	4.0	7.84	0.5	\$51.00	See end of 1-1/16" bore see			
<u>A17050DP-M</u>	5.0	8.84	0.6	\$53.00	Note: Drive pin out for dou	ble end m	ounting	
<u>A17060DP-M</u>	6.0	9.84	0.6	\$55.00				
<u>A17080DP-M</u>	8.0	11.84	0.7	\$60.00				
<u>A17100DP-M</u>	10.0	13.84	0.8	\$64.00				
<u>A17120DP-M</u>	12.0	15.84	0.9	\$68.00				
	Spec	ifications						
304 SS cylinder body		0.90 sq. in. piston	area					
			maintenance-free life					
303 SS piston rod		Pressure rating 25	i0 psi		ø0.31 [ø7.9]			
Low friction Buna-N se	als	Temperature range	e -20°F to 200°F (-28 t	o 93°C)	ROD			
Extend force at 100 ps	i = 90.0 lb.	Retract force at 10	00 psi = 82.3 lb.			_H	WRE	
	nensions <sup>25</sup> [mm]				5/16-24 UNF-2A 5/8-18 UNF-2A- (BOTH ENDS)		FLAT	2
	0. [12 Ø0.6 [Ø15.8 PILO (BOT ENDS			0.62 [15.7]	Ø0.25 Ø6.3 PIN 0.28 [7.1] Ø1.12 Ø28.4] 0.34 [8.6]		0.38 [9.7] 0.75 [19.0]	



# A-Series Pneumatic Cylinders 1-1/16 inch Bore Accessories

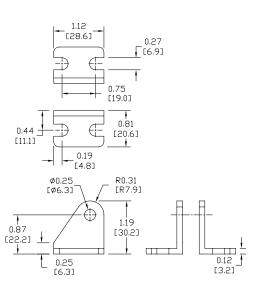
A-Se	A-Series Pneumatic Cylinder 1-1/16 inch Bore Accessories							
Part Number	Description	Pcs/Pkg	Wt (lb)	Price				
<u>APB-2</u>	Cylinder pivot mounting bracket without pivot pin used to mount 3/4, 7/8, and 1-1/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non- repairable cylinders.	1	0.2	\$4.75				
<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	\$5.00				
<u>ARC-516-24</u>	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	\$5.75				
<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	\$1.25				

#### Dimensions

inches [mm]

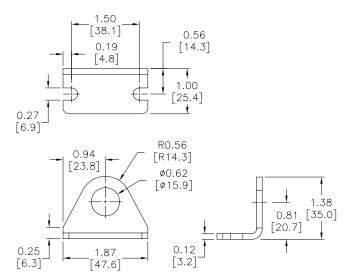
APB-2





<u>AMB-6</u>







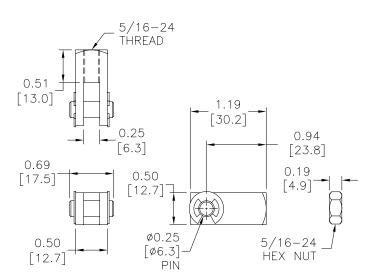
# A-Series Pneumatic Cylinders 1-1/16 inch Bore Accessories

#### **Dimensions**

inches [mm]

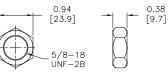






AN-58-18







### **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.

### 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)

### **Mounting Options**



Nose mount uses one AMB bracket and one AN nut.

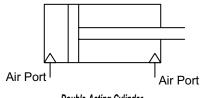
Pivot mount uses one APB or one APBP bracket.



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

- 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

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.

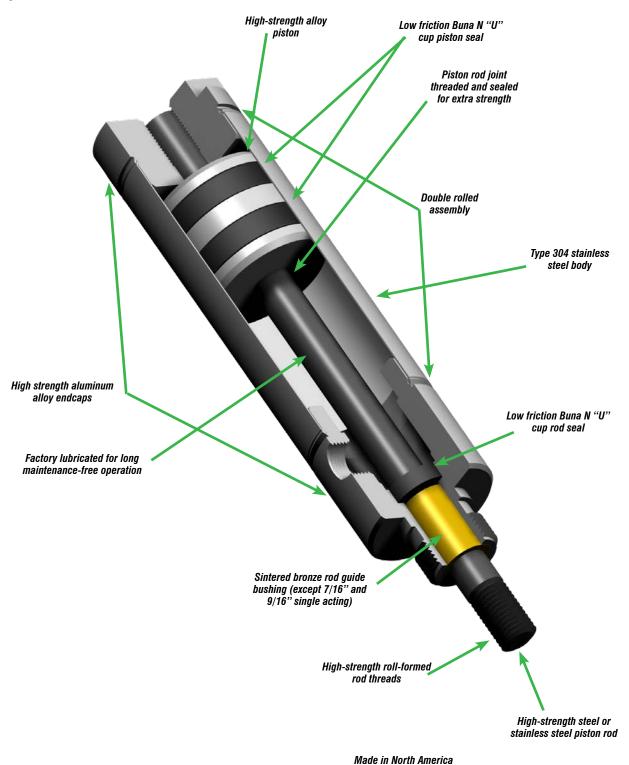


Double-Acting Cylinder (Force in Push and Pull Direction)



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

### **Cylinder Features**



1-800-633-0405



**CPS Series Cylinder Position Switches** 

		Position Switch Cros	ss 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 (CPSA 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		
CPS9E	NITRA L-Series Fabco Numatics Rotomation		
CPS9F	NITRA G-Series Fabco Festo Numatics Rotomation		
СРЅ9Н	NITRA E-Series NITRA H-Series		
СРЅ9М	Norgren		5.1 +/-0.1 5.1 +/-0.1 5.1 +/-0.1
CPS9Q	NITRA L-Series NITRA G-Series Parker Fabco Festo Numatics Rotomation		