

## **A-Series Pneumatic Cylinders** 2 inch Bore

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



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						
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
A32010DD-M	1.0	6.62	1.8			
A32020DD-M	2.0	7.62	1.9			
A32030DD-M	3.0	8.62	2.1			
A32040DD-M	4.0	9.62	2.2			
A32050DD-M	5.0	10.62	2.4			
A32060DD-M	6.0	11.62	2.5			
A32070DD-M	7.0	12.62	2.7			
A32080DD-M	8.0	13.62	2.8			
A32100DD-M	10.0	15.62	3.1			
A32120DD-M	12.0	17.62	3.4			
A32140DD-M	14.0	19.62	3.7			
A32160DD-M	16.0	21.62	4.0			
A32180DD-M	18.0	23.62	4.3			
Specifications						
304 SS cylinder body		3.10 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 seal	S	Temperature range -20°F to 200°F (-28 to 93°C)				
Extend force at 100 psi =	310 lb.	Retract force at 100 psi = 279.3 lb.				

0.88 [22.4]

0 [9.7

ø1.37 [ø34.9]

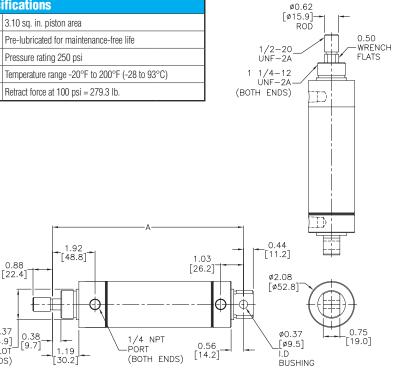
PILOT

(BOTH ENDS)

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

Cylinder rod clevis ARC-12-20

See end of 2" bore section for Accessories



### **Dimensions**

inches [mm]



# A-Series Pneumatic Cylinders 2 inch Bore Accessories

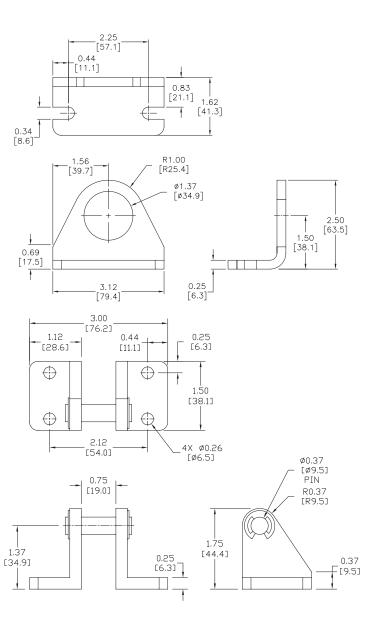
A-Series Pneumatic Cylinder 2 inch Bore Accessories					
Part Number	Part Number Description		Wt (lb)	Price	
AMB-11	Cylinder mounting bracket used to mount 2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.5		
APBP-5	Cylinder pivot mounting bracket with pivot pin used to mount 2 inch bore NITRA pneumatic stain- less steel round body, interchangeable, non-repairable cylinders.	1	0.4		
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		
AN-114-12	Cylinder mounting nut with 1-1/14-12 UNF-2B threads used to mount 2 inch bore NITRA pneu- matic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.3		

#### **Dimensions**

inches [mm]

#### AMB-11





APBP-5

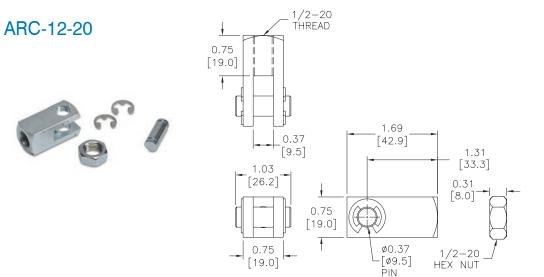




# A-Series Pneumatic Cylinders 2 inch Bore Accessories

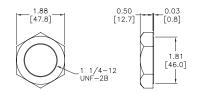
#### **Dimensions**

inches [mm]



AN-114-12







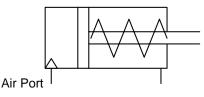
### **Pneumatic Cylinders - A-Series**

#### 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) 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)

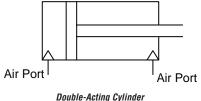
#### **Mounting Options**



#### 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.



(Force in Push and Pull Direction)

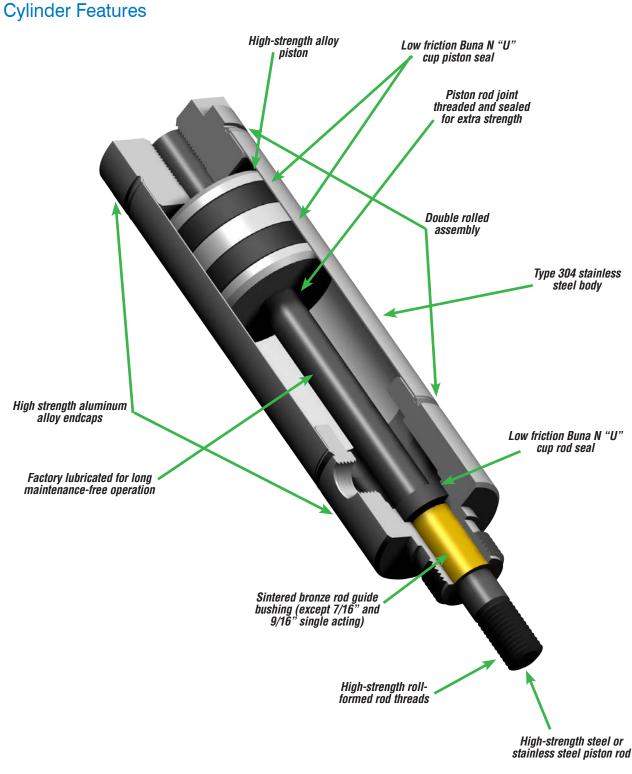
Nose mount uses one AMB bracket and one AN nut.

Pivot mount uses one APB or one APBP bracket.

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



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



Made in North America



	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		Round Cylinder (CPSB or CPSS Series)	
CPS9C	DE-STA-CO Robohand SMC Compact Air		2.53 Min. +/- 0.1 R 2.13 +/- 0.05	
CPS9D	Fabco Numatics Rotomation			
CPS9F	NITRA G-Series Fabco Festo Numatics Rotomation			
СРЅ9Н	NITRA E-Series NITRA H-Series			
CPS9M	Norgren		5.1 +/-0.1 5.1 +/-0.1 5.1 +/-0.1	
CPS9Q	NITRA G-Series Parker			
CPS9T	SMC			