

1-1/2 in. Bore, Single-acting, Spring Return, Front Nose Mount

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

Spring force = 7.5 lb. relaxed, 14 lb. compressed



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/2 inch bore, 1/8 NPT port, single acting, spring return, front nose mount.

Cylinder, 1-1/2 in bore, single acting, spring return, front nose mount						
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
A24010SN	1.0	4.13	0.7	\$068d:		
A24020SN	2.0	5.82	0.9	\$-068i:		
A24030SN	3.0	7.51	1.1	\$068n:		
A24040SN	4.0	9.20	1.3	\$068s:		
<u>A24050SN</u>	5.0	10.89	1.5	\$068x:		
A24060SN	6.0	12.58	1.8	\$;068[:		
	Speci	ifications				
304 SS cylinder body 1.7 sq. in. piston area						
High strength aluminu	ım end caps	Pre-lubricated for maintenance-free life				
High strength carbon	steel niston rod	Pressure rating 250 psi				

Mount Style		Bracket	Nut
Front Nose Mou	ınt	AMB-7	AN-34-16*
Rear Pivot Mount		_	-
Double End Mount	Front	-	-
Double Ella Moull	Rear	-	_

* (1) Nut included with cylinder Cylinder rod clevis ARC-716-20 See end of 1-1/2" bore section for Accessories

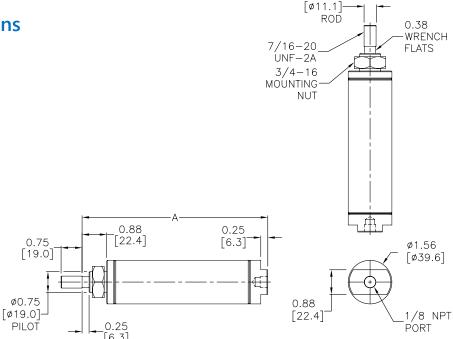
Ø0.44

Dimensions

inches [mm]

Low friction Buna-N seals

Extend force at 100 psi = 170.0 lb.





1-1/2 in. Bore, Single-acting, Spring Return, Rear Pivot Mount

Spring force = 7.5 lb. relaxed, 14 lb. compressed

1/8 NPT

PORT

0.81

[20.6]

0.50

[12.7]

O

0.88

[22.4]

[6.3]



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/2 inch bore, 1/8 NPT port, single acting, spring return, rear pivot mount (pivot pin included). Cylinder cannot be double end mounted.

Cylinder, 1-1/2 in bore, single acting, spring return,					
	rear pi	<u>vot mount</u>			
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A24010SP</u>	1.0	4.81	0.7	\$068e:	
A24020SP	2.0	6.50	0.9	\$-068j:	
<u>A24030SP</u>	3.0	8.19	1.1	\$068o:	
A24040SP	4.0	9.88	1.3	\$;068t:	
A24050SP	5.0	11.57	1.6	\$068y:	
A24060SP	6.0	13.26	1.8	\$068_:	
	Speci	fications			
304 SS cylinder body		1.7 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 s	eals	Temperature range -20°F to 200°F (-28 to 93°C)			
1		I			

Mount Style		Bracket	Nut
Front Nose Mou	nt	AMB-7	AN-34-16
Rear Pivot Mount		APB-3	-
Double End Mount	Front	_	-
Double Ella Moull	Rear	-	_

Cylinder rod clevis ARC-716-20 See end of 1-1/2" bore section for Accessories

Ø0.44



0.75

[19.0]

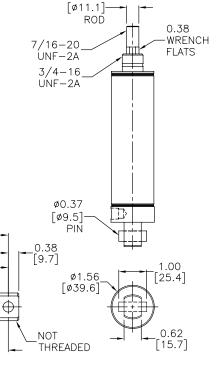
Ø0.75

PILOT

[ø19.0]

inches [mm]

Extend force at 100 psi = 170.0 lb.





1-1/2 in. Bore, Double-acting, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/2 inch bore, 1/8 NPT ports, double acting, front nose mount.

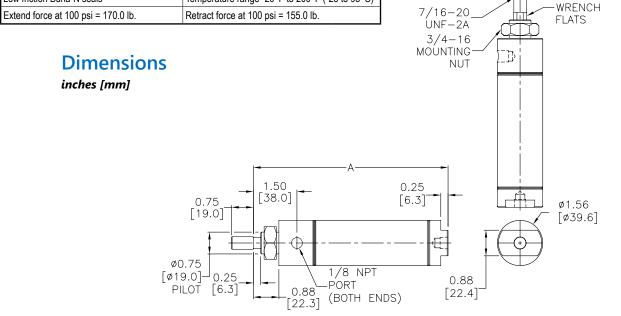
Cylinder, 1-1/2 in bore, double acting, front nose					
		ount			
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
A24010DN	1.0	4.69	0.8	\$068b:	
<u>A24015DN</u>	1.5	5.19	0.8	\$;068f:	
<u>A24020DN</u>	2.0	5.69	0.9	\$068g:	
<u>A24030DN</u>	3.0	6.69	0.9	\$068k:	
<u>A24040DN</u>	4.0	7.69	1.0	\$068p:	
<u>A24050DN</u>	5.0	8.69	1.1	\$068u:	
A24060DN	6.0	9.69	1.2	\$068z:	
<u>A24070DN</u>	7.0	10.69	1.3	\$068#:	
A24080DN	8.0	11.69	1.3	\$068?:	
A24090DN	9.0	12.69	1.4	\$0690:	
A24100DN	10.0	13.69	1.5	\$00692:	
A24110DN	11.0	14.69	1.6	\$00694:	
A24120DN	12.0	15.69	1.7	\$00695:	
	Speci	fications			
304 SS cylinder body		1.7 sq. in. piston a	irea		
High strength aluminu	ım end caps	Pre-lubricated for	maintenance-free li	fe	
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)			

Mount Style		Bracket	Nut
Front Nose Mou	ınt	AMB-7	AN-34-16*
Rear Pivot Mount		_	-
Double End Mount	Front	-	-
Double Ella Moull	Rear	-	-

* (1) Nut included with cylinder Cylinder rod clevis ARC-716-20 See end of 1-1/2" bore section for Accessories

> Ø0.44 [Ø11.1] ROD

0.38





1-1/2 in. Bore, Double-acting, Rear Pivot Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/2 inch bore, 1/8 NPT ports, double acting, rear pivot mount (pivot pin included). Cylinder cannot be double end mounted.

Cylinder, 1-	1/2 in bore, do	uble acting	g, rear pivot	mount
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A24010DP	1.0	5.38	0.8	\$068c:
A24020DP	2.0	6.38	0.9	\$068h:
A24030DP	3.0	7.38	1.0	\$-068I:
A24040DP	4.0	8.38	1.1	\$068q:
A24050DP	5.0	9.38	1.1	\$068v:
A24060DP	6.0	10.38	1.2	\$;068]:
A24070DP	7.0	11.38	1.3	\$;068!:
A24080DP	8.0	12.38	1.4	\$;068,:
A24090DP	9.0	13.38	1.5	\$00691:
A24100DP	10.0	14.38	1.5	\$00693:
A24120DP	12.0	16.38	1.7	\$00696:
	0	fi li		

Specifications Specification			
304 SS cylinder body	1.7 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 = 170.0 lb.	Retract force at 100 psi = 155.0 lb.		

Mount Style		Bracket	Nut
Front Nose Mod	unt	AMB-7	AN-34-16
Rear Pivot Mount		APB-3	-
Front		_	-
Double End Mount	Rear	-	-

0.38 WRENCH

FLATS

Cylinder rod clevis ARC-716-20 See end of 1-1/2" bore section for Accessories

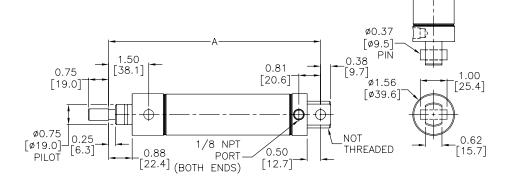
> Ø0.44 [Ø11.1]

7/16-20

ÚNF-2A 3/4-16 UNF-2A



inches [mm]





1-1/2 in. Bore, Double-acting, Rear Pivot Mount, Magnetic Piston



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/2 inch bore, 1/8 NPT ports, double acting, rear pivot mount, magnetic piston (pivot pin included). Cylinder cannot be double end mounted.

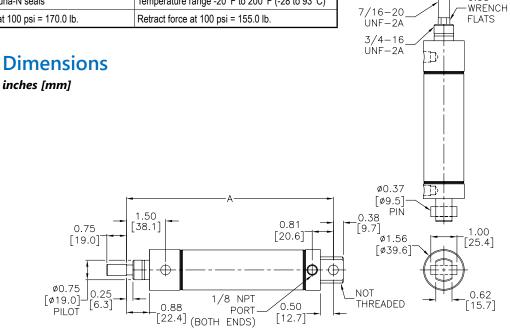
Cylinder, 1-1,	Cylinder, 1-1/2 in bore, double acting, rear pivot mount,					
	magne	tic piston				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A24010DP-M</u>	1.0	5.38	0.8	\$0697:		
<u>A24020DP-M</u>	2.0	6.38	0.9	\$0698:		
<u>A24030DP-M</u>	3.0	7.38	1.0	\$00699:		
A24040DP-M	4.0	8.38	1.1	\$0069a:		
A24050DP-M	5.0	9.38	1.1	\$0069b:		
A24060DP-M	6.0	10.38	1.2	\$0069c:		
A24070DP-M	7.0	11.38	1.3	\$0069d:		
A24080DP-M	8.0	12.38	1.4	\$0069e:		
A24090DP-M	9.0	13.38	1.5	\$;0069f:		
A24100DP-M	10.0	14.38	1.5	\$0069g:		
A24120DP-M	12.0	16.38	1.7	\$0069h:		
	Specif	ications				
304 SS cylinder body	-	1.7 sq. in. piston a	area			
High strength aluminum end caps 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			3 to 93°C)			
Extend force at 100 psi = 170.0 lb. Retract force at 100 psi = 155.0 lb.						

Mount Style		Bracket	Nut
Front Nose Mou	ınt	AMB-7	AN-34-16
Rear Pivot Mount		APB-3	_
Double End Mount	Front	-	_
Double Ella Moull	Rear	-	_

0.38

Cylinder rod clevis ARC-716-20 See end of 1-1/2" bore section for Accessories

> Ø0.44 [Ø11.1]





A-Series Pneumatic Cylinders 1-1/2 inch Bore Accessories

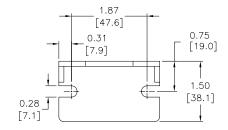
A-8	A-Series Pneumatic Cylinder 1-1/2 inch Bore Accessories					
Part Number	Description	Pcs/Pkg	Wt (lb)	Price		
<u>AMB-7</u>	Cylinder mounting bracket used to mount 1-1/4 and 1-1/2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.2	\$-5ic:		
APB-3	Cylinder pivot mounting bracket without pivot pin used to mount 1-1/2 bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.2	\$;-05if:		
ARC-716-20	Cylinder rod clevis and hex nut, 7/16-20 thread, for use with 1-1/4 and 1-1/2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$5u5:		
<u>AN-34-16</u>	Cylinder mounting nut with 3/4-16 UNF-2B threads used to mount 1-1/4 and 1-1/2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$;6fv:		

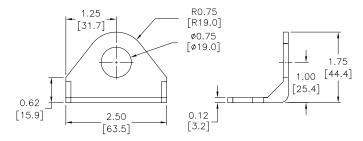
Dimensions

inches [mm]

AMB-7

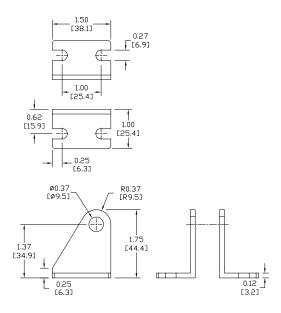






APB-3







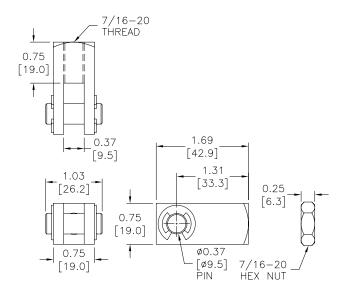
A-Series Pneumatic Cylinders 1-1/2 inch Bore Accessories

Dimensions

inches [mm]

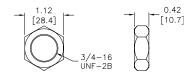






AN-34-16







Pneumatic Cylinders - A-Series

Nitra A-Series Pneumatic Stainless Steel Round Body Air Cylinders

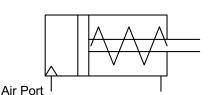
The NITRA Pneumatics A-Series non-repairable stainless steel round body cylinders includes bore sizes from 7/16" to 2" and stroke lengths from 1/2" to 18" to meet a broad range of applications. These high quality cylinders are constructed with stainless steel bodies and double rolled-in high strength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

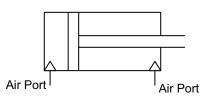
Operation

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.



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" directon.



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.

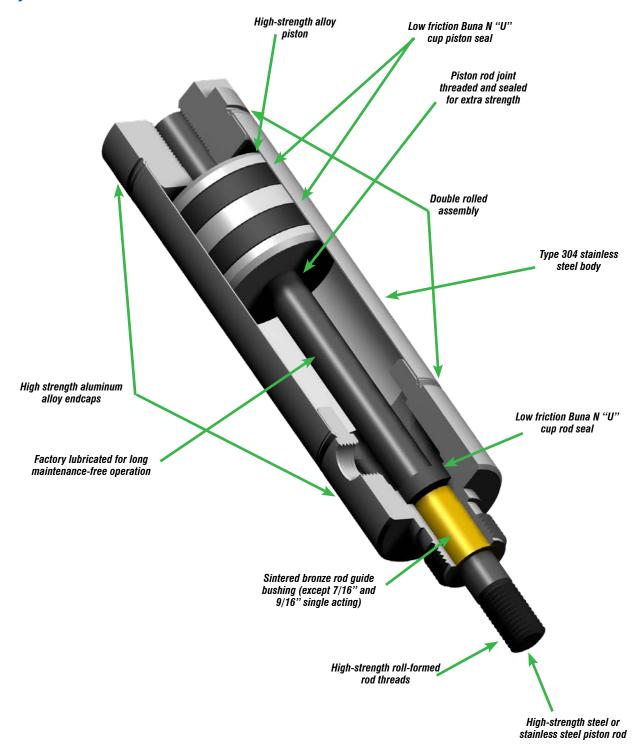


Double end mount uses two AMB brackets and two AN nuts.



Pneumatic Cylinders - A-Series

Cylinder Features





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		Switch Tie Rod Adapter (CFRA Series) 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		44 5.1 6.5 —
СРЅ9Н	NITRA E-Series NITRA H-Series		3.05 TR 0.2 R 0.2 R 0.2
CPS9M	Norgren		5.1 +/-0.1 R 3.25
CPS9Q	NITRA L-Series NITRA G-Series Parker Fabco Festo Numatics Rotomation		4.4 3.2 6.5 — 6.5