

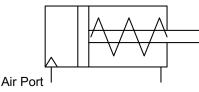
Pneumatic Cylinders - A-Series

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.

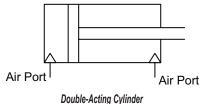
Pivot mount uses one APB or one APBP bracket.



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.

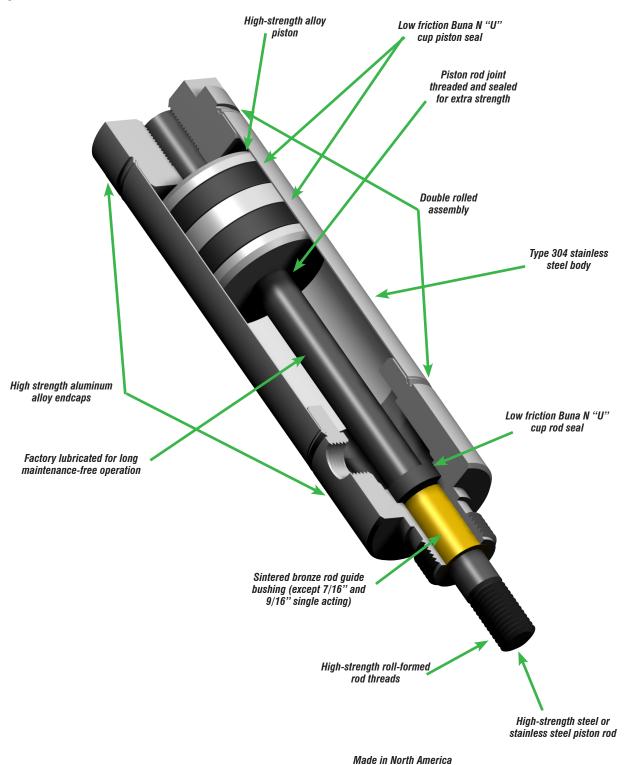


Double-Acting Cylinder (Force in Push and Pull Direction)



Pneumatic Cylinders - A-Series

Cylinder Features





7/16 in. Bore, Single-acting, Spring Return, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 7/16 inch bore, #10-32 port, single acting, spring return, front nose mount.

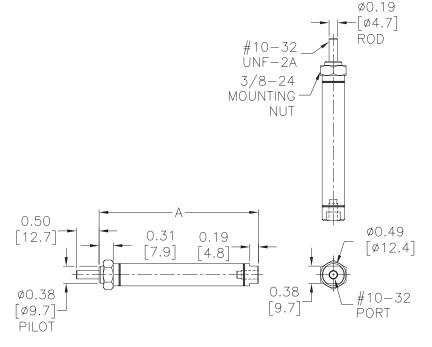
Cylinder, 7/16 in bore, single-acting, spring return,						
	front no	ose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A07005SN</u>	0.5	2.25	0.1	\$19.50		
<u>A07010SN</u>	1.0	3.19	0.1	\$21.50		
<u>A07015SN</u>	1.5	4.13	0.1	\$23.00		
<u>A07020SN</u>	2	5.07	0.1	\$24.50		
	Speci	fications				
304 SS cylinder body		0.15 sq. in. piston are	a			
High strength aluminu	im end caps	Pre-lubricated for mai	ntenance-free lif	e		
303 SS piston rod Pressure rating 250 psi						
Low friction Buna-N seals Temperature range -20°F to 200°F (-28 to 93°			28 to 93°C)			
Extend force at 100 psi = 15.0 lb. Spring force = 1 lb. relaxed, 2 lb. compressed				pressed		

Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-3</u>	AN-38-24*
Rear Pivot Mount		-	-
Double End Mount Front Rear		-	-
		-	-

* (1) Nut included with cylinder

Cylinder rod clevis ARC-10-32 See end of 7/16" bore section for Accessories

Dimensions





7/16 in. Bore, Single-acting, Spring Return, Rear Pivot Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 7/16 inch bore, #10-32 port, single acting, spring return, rear pivot mount (pivot pin included).

Cylinder, 7	Cylinder, 7/16 in bore, single acting, spring return,						
	rear pi	<u>vot mount</u>					
Part Number	Number Stroke Length (in.) "A" (in) Weight (lbs) Price						
<u>A07005SP</u>	0.5	2.69	0.1	\$25.00			
<u>A07010SP</u>	1.0	3.63	0.1	\$27.50			
<u>A07015SP</u>	1.5	4.57	0.1	\$24.00			
<u>A07020SP</u>	2	5.51	0.1	\$30.50			
	Speci	fications					
304 SS cylinder body		0.15 sq. in. piston are	а				
High strength aluminu	m end caps	Pre-lubricated for mai	ntenance-free lif	e			
303 SS piston rod	303 SS piston rod Pressure rating 250 psi						
Low friction Buna-N se	Low friction Buna-N seals Temperature range -20°F to 200°F (-28 to 93°C)						
Extend force at 100 psi = 15.0 lb. Spring force = 1 lb. relaxed, 2 lb. compressed							

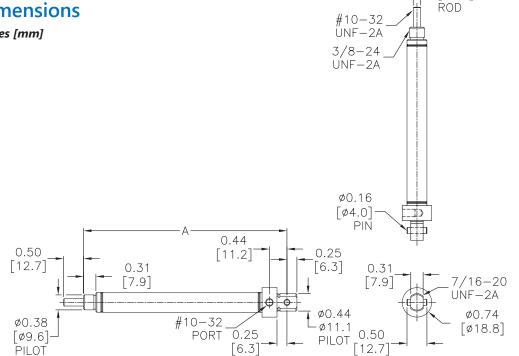
Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-3</u>	AN-38-24
Rear Pivot Mount		<u>APB-1</u>	-
Double End Mount	Front	<u>AMB-3</u>	AN-38-24
Double Ella Moulli	Rear	AMB-4	AN-716-24

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Cylinder rod clevis ARC-10-32

See end of 7/16" bore section for Accessories Note: Drive pin out for double end mounting

Dimensions





7/16 in. Bore, Double-acting, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 7/16 inch bore, #10-32 ports, double acting, front nose mount.

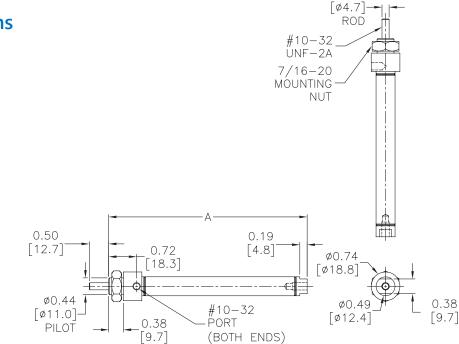
Cylinder, 7/1	l6 in bore, doι	uble acting, f	ront nose	mount
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
<u>A07005DN</u>	0.5	2.62	0.1	\$22.00
<u>A07010DN</u>	1.0	3.12	0.1	\$28.00
<u>A07015DN</u>	1.5	3.62	0.1	\$29.00
<u>A07020DN</u>	2.0	4.12	0.1	\$25.00
<u>A07030DN</u>	3.0	5.12	0.1	\$27.50
<u>A07040DN</u>	4.0	6.12	0.2	\$28.50
<u>A07060DN</u>	6.0	8.12	0.2	\$41.00
	Speci	fications		
304 SS cylinder body		0.15 sq. in. piston are	a	
High strength aluminu	um end caps	Pre-lubricated for maintenance-free life		
303 SS 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 = 15.0 lb.	Retract force at 100 p	osi = 13.8 lb.	

Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-4</u>	AN-716-20*
Rear Pivot Mou	nt	-	-
Fr		-	-
Double End Mount	Rear	-	-

* (1) Nut included with cylinder

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Cylinder rod clevis ARC-10-32 See end of 7/16" bore section for Accessories



Dimensions



7/16 in. Bore, Double-acting, Rear Pivot Mount

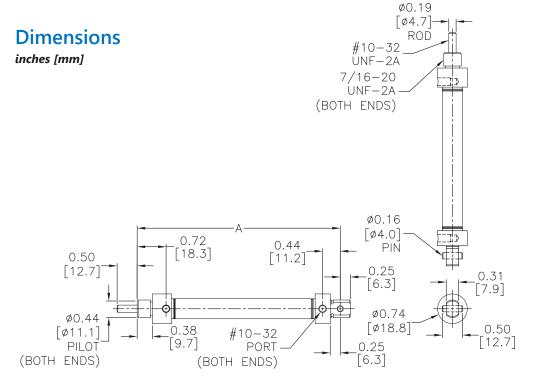


NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 7/16 inch bore, #10-32 ports, double acting, rear pivot mount (pivot pin included).

Cylinder, 7/16 in bore, double acting, rear pivot mount					
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A07005DP</u>	0.5	3.06	0.1	\$26.50	
<u>A07010DP</u>	1.0	3.56	0.1	\$33.00	
<u>A07015DP</u>	1.5	4.06	0.1	\$34.00	
<u>A07020DP</u>	2.0	4.56	0.1	\$35.00	
<u>A07030DP</u>	3.0	5.56	0.1	\$45.50	
	Specifi	cations			
304 SS cylinder body		0.15 sq. in. piston	area		
High strength aluminu	im end caps	Pre-lubricated for	maintenance-fre	e life	
303 SS piston rod		Pressure rating 25			
Low friction Buna-N s	eals	Temperature range -20°F to 200°F (-28 to 93°C)			
Extend force at 100 psi = 15.0 lb. Retract force at 100 psi = 13.8 lb.					

Mount Style		Bracket	Nut
Front Nose Mount		AMB-4	AN-716-20
Rear Pivot Mount		APB-1	-
Double End Mount	Front	AMB-4	AN-716-20
Double Ella Moulli	Rear	AMB-4	AN-716-20

Cylinder rod clevis ARC-10-32 See end of 7/16" bore section for Accessories Note: Drive pin out for double end mounting





A-Series Pneumatic Cylinders 7/16 inch Bore Accessories

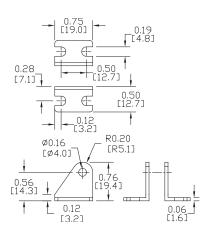
A-8	A-Series Pneumatic Cylinder 7/16 inch Bore Accessories					
Part Number	Description	Pcs/Pkg	Wt (lb)	Price		
<u>APB-1</u>	Cylinder pivot mounting bracket without pivot pin used to mount 7/16 and 9/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$5.00		
<u>AMB-3</u>	Cylinder mounting bracket used to mount 7/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$4.75		
<u>AMB-4</u>	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	\$5.00		
<u>ARC-10-32</u>	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	\$5.00		
<u>AN-38-24</u>	Cylinder mounting nut with 3/8-24 UNF-2B threads used to mount 7/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$1.25		
<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]

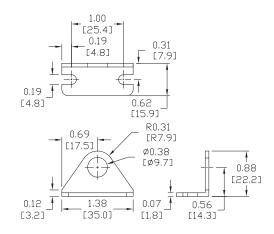
<u>APB-1</u>





AMB-3





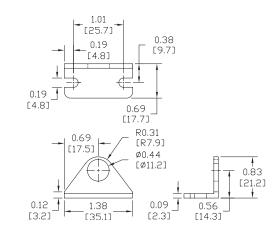


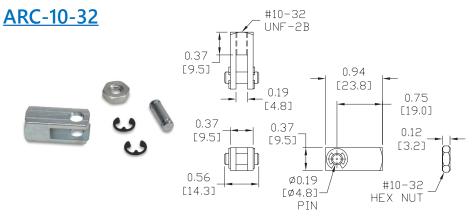
A-Series Pneumatic Cylinders 7/16 inch Bore Accessories

Dimensions

inches [mm]

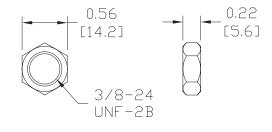
AMB-4





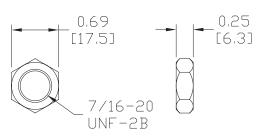
<u>AN-38-24</u>





<u>AN-716-20</u>







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, single acting, spring return, front nose mount					
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A09005SN</u>	0.5	2.34	0.1	\$21.00	
<u>A09010SN</u>	1.0	3.15	0.1	\$18.50	
<u>A09020SN</u>	2.0	4.77	0.2	\$22.00	
<u>A09030SN</u>	3.0	6.39	0.2	\$24.50	
	Specif	ications			
304 SS cylinder body		0.25 sq. in. piston a	area		
High strength aluminu	im end caps	Pre-lubricated for n	naintenance-free	life	
303 SS piston rod		Pressure rating 250			
Low friction Buna-N seals Temperature range 93°C)			-20°F to 200°F	(-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 Mount		AMB-4	AN-716-20*
Rear Pivot Mou	nt	_	-
Double End Mount	Front	-	-
Double End Mount	Rear	-	-

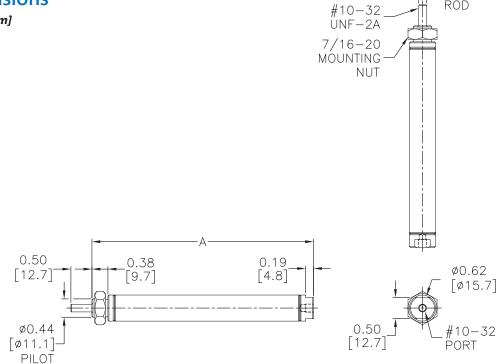
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ROD

* (1) Nut included with cylinder

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

Dimensions





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



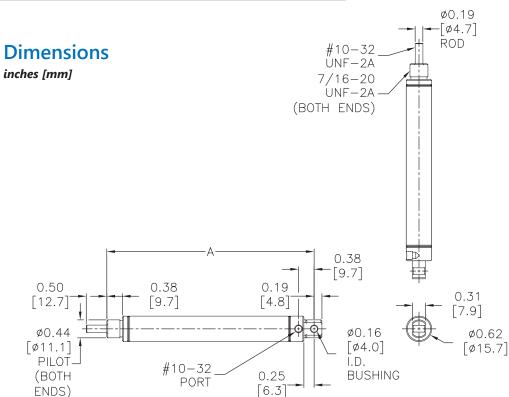
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 9/16 inch bore, #10-32 port, single acting, spring return, double end mount.

Cylinder, 9/16 in bore, single acting, spring return, double end mount							
Part Number	r Stroke Length (in.) "A" (in) Weight (lbs) Price						
<u>A09005SD</u>	0.5	2.62	0.1	\$26.50			
<u>A09010SD</u>	1.0	3.43	0.1	\$23.50			
<u>A09020SD</u>	2.0	5.05	0.2	\$27.00			
<u>A09030SD</u>	3.0	6.67	0.2	\$29.50			
	Specif	ications					
304 SS cylinder body		0.25 sq. in. piston	area				
High strength aluminu	um end caps	Pre-lubricated for	maintenance-free	life			
303 SS piston rod	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 Mount		AMB-4	AN-716-20
Rear Pivot Mount		APBP-2	-
Double End Mount	Front	AMB-4	AN-716-20
Double End Mount	Rear	<u>AMB-4</u>	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



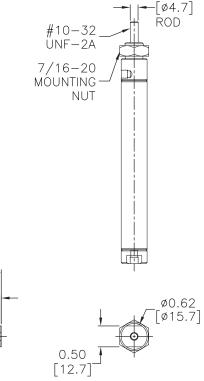
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 9/16 inch bore, #10-32 ports, double acting, front nose mount.

Cylinder, 9/16 in bore, double acting, front nose mount						
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A09005DN</u>	0.5	2.78	0.1	\$27.50		
<u>A09010DN</u>	1.0	3.28	0.1	\$23.50		
<u>A09020DN</u>	2.0	4.28	0.1	\$25.50		
<u>A09030DN</u>	3.0	5.28	0.2	\$28.00		
<u>A09040DN</u>	4.0	6.28	0.2	\$30.00		
<u>A09060DN</u>	6.0	8.28	0.2	\$34.50		
	Specifi	cations				
304 SS cylinder body		0.25 sq. in. piston	area			
High strength aluminu	im end caps	Pre-lubricated for	maintenance-fre	e life		
303 SS piston rod		Pressure rating 25	50 psi			
Low friction Buna-N seals Temperature range -20°F to 200°F (-24 93°C)			= (-28 to			
Extend force at 100 p	Extend force at 100 psi = 25.0 lb. Retract force at 100 psi = 22.2 lb.					

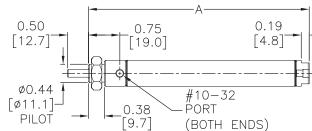
Mount Style Bracket Nut Front Nose Mount AMB-4 AN-716-20* Rear Pivot Mount _ _ Front _ _ **Double End Mount** Rear _ _

Ø0.19

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



Dimensions





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.

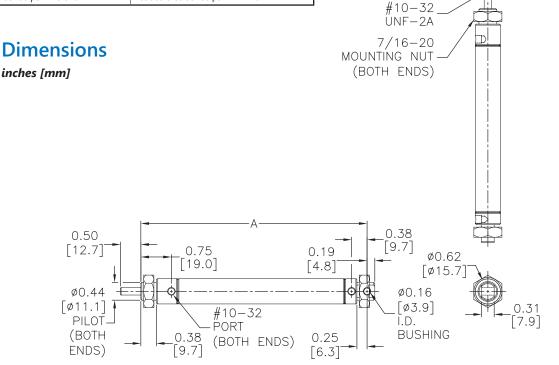
Cylinder, 9/16 in bore, double acting, double end					
	<u> </u>	<u>ount</u>			
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A09005DD</u>	0.5	3.06	0.1	\$32.50	
<u>A09010DD</u>	1.0	3.56	0.1	\$28.00	
<u>A09020DD</u>	2.0	4.56	0.1	\$30.00	
<u>A09030DD</u>	3.0	5.56	0.2	\$32.50	
<u>A09040DD</u>	4.0	6.56	0.2	\$34.50	
<u>A09060DD</u>	6.0	8.56	0.2	\$39.00	
	Specifi	cations			
304 SS cylinder body		0.25 sq. in. piston	area		
High strength aluminu	im end caps	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)			
Extend force at 100 psi = 25.0 lb. Retract force at 100 psi = 22.2 lb.					

Mount Style		Bracket	Nut
Front Nose Mount		AMB-4	AN-716-20*
Rear Pivot Mount		APBP-2	-
Double End Mount	Front	AMB-4	AN-716-20*
Double End Mount	Rear	<u>AMB-4</u>	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





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



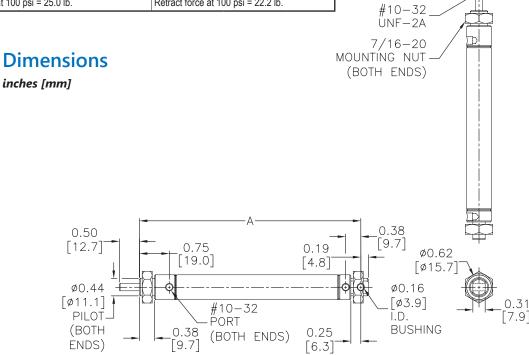
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 9/16 inch bore, #10-32 ports, double acting, double end mount, magnetic piston.

magnetic piston						
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A09010DD-M</u>	1.0	3.56	0.1	\$40.50		
<u>A09020DD-M</u>	2.0	4.56	0.1	\$42.50		
<u>A09030DD-M</u>	3.0	5.56	0.2	\$45.00		
<u>A09040DD-M</u>	4.0	6.56	0.2	\$47.00		
<u>A09060DD-M</u>	6.0	8.56	0.2	\$51.00		
	Specifica	tions				
304 SS cylinder body		0.25 sq. in. piston	area			
High strength aluminum end	caps	Pre-lubricated for	maintenance-fre	e life		
303 SS piston rod		Pressure rating 25	50 psi			
Low friction Buna-N seals Temperature range -20°F to 200°F (-28 93°C)			(-28 to			
Extend force at 100 psi = 25.0 lb. Retract force at 100 psi = 22.2 lb.						

Mount Style		Bracket	Nut
Front Nose Mount		AMB-4	AN-716-20*
Rear Pivot Mount		APBP-2	_
Fron		AMB-4	AN-716-20*
Double End Mount	Rear	<u>AMB-4</u>	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

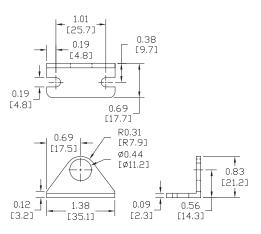
A-Series Pneumatic Cylinder 9/16 inch Bore Accessories						
Part Number	Description	Pcs/Pkg	Wt (lb)	Price		
<u>AMB-4</u>	Cylinder mounting bracket used to mount 7/16 and 9/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$5.00		
<u>ARC-10-32</u>	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	\$5.00		
<u>APBP-2</u>	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	\$5.75		
<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		

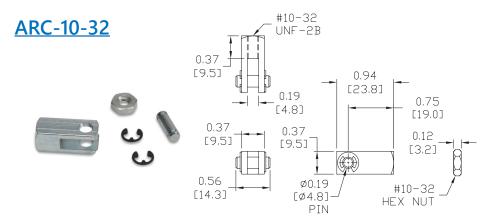
Dimensions

inches [mm]

AMB-4







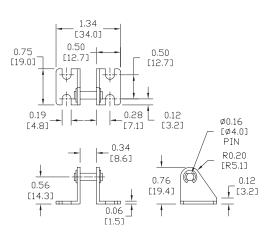


Dimensions

inches [mm]

APBP-2



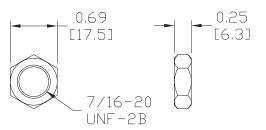


A-Series Pneumatic Cylinders

9/16 inch Bore Accessories

<u>AN-716-20</u>







3/4 in. Bore, Single-acting, Spring Return, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 NPT port, single acting, spring return, front nose mount.

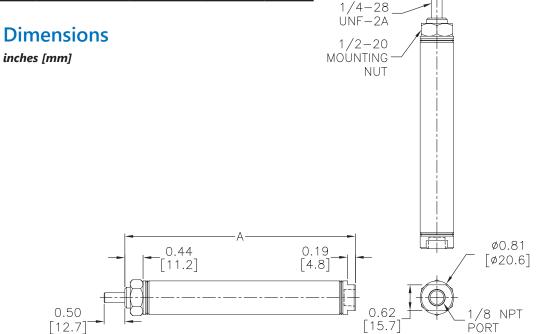
Cylinder, 3	/4 in bore, sin	gle acting,	spring re	eturn,	
	front no	se mount			
Part Number	Stroke Length (in.)	"'A'' (in)	Weight (lbs)	Price	
<u>A12005SN</u>	0.5	2.69	0.1	\$18.00	
<u>A12010SN</u>	1.0	3.19	0.2	\$23.00	
<u>A12015SN</u>	1.5	4.38	0.2	\$25.00	
<u>A12020SN</u>	2.0	4.88	0.3	\$27.50	
<u>A12030SN</u>	3.0	6.57	0.3	\$30.50	
<u>A12040SN</u>	4.0	8.26	0.4	\$34.00	
<u>A12050SN</u>	5.0	9.95	0.5	\$37.00	
<u>A12060SN</u>	6.0	11.64	0.6	\$34.00	
	Specifi	cations			
304 SS cylinder body		0.40 sq. in. piston	area		
High strength aluminu	im end caps	Pre-lubricated for	maintenance-fre	e life	
High-strength carbon-	High-strength carbon-steel 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	si = 40.0 lb.	Spring force = 3 lb	o. relaxed, 6 lb. c	ompressed	

Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-5</u>	AN-12-20*
Rear Pivot Mount		-	-
Double End Mount Front Rear		-	_
		-	-

Ø0.25 [Ø6.4] ROD

* (1) Nut included with cylinder Cylinder rod clevis ARC-14-28

See end of 3/4" bore section for Accessories





3/4 in. Bore, Single-acting, Spring Return, Rear Pivot Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 NPT port, single acting, spring return, rear pivot mount (pivot pin included).

Cylinder, 3	/4 in bore, sin	gle acting,	spring re	eturn,	
	rear piv	ot mount			
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A12005SP</u>	0.5	3.13	0.2	\$22.50	
A12010SP	1.0	3.97	0.2	\$29.00	
A12015SP	1.5	4.82	0.3	\$31.00	
<u>A12020SP</u>	2.0	5.66	0.3	\$32.50	
A12030SP	3.0	7.35	0.4	\$35.50	
A12040SP	4.0	9.04	0.5	\$39.00	
A12050SP	5.0	10.73	0.5	\$42.50	
A12060SP	6.0	12.42	0.6	\$39.00	
	Specifi	cations			
304 SS cylinder body		0.40 sq. in. piston	area		
High strength aluminu	High strength aluminum end caps		maintenance-fre	e life	
High-strength carbon-	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)			⁼ (-28 to		
Extend force at 100 p	Extend force at 100 psi = 40.0 lb. Spring force = 3 lb. relaxed, 6 lb. compresse				

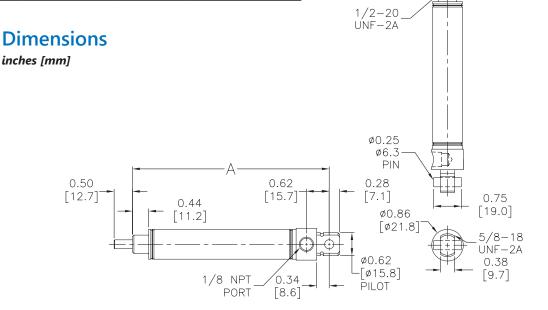
Mount Style		Bracket	Nut		
Front Nose Mount		AMB-5	AN-12-20		
Rear Pivot Mount		<u>APB-2</u>	-		
Double End Mount	Front	<u>AMB-5</u>	AN-12-20		
Double Ella Moulli	Rear	<u>AMB-6</u>	AN-58-18		
Ordinates and starts ADO 4					

Ø0.25 [Ø6.4] ROD

Cylinder rod clevis ARC-14-28 See end of 3/4" bore section for Accessories

1/4-28 UNF-2A

Note: Drive pin out for double end mounting





3/4 in. Bore, Double-acting, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 NPT ports, double acting, front nose mount.

Cylinder, S	Cylinder, 3/4 in bore, double acting, front nose					
	mo	<u>unt</u>				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A12005DN</u>	0.5	3.47	0.2	\$27.00		
<u>A12010DN</u>	1.0	3.97	0.2	\$28.50		
<u>A12015DN</u>	1.5	4.47	0.3	\$34.50		
<u>A12020DN</u>	2.0	4.97	0.3	\$31.00		
<u>A12030DN</u>	3.0	5.97	0.3	\$33.50		
<u>A12040DN</u>	4.0	6.97	0.3	\$35.50		
<u>A12050DN</u>	5.0	7.97	0.4	\$38.50		
A12060DN	6.0	8.97 0.4		\$41.50		
<u>A12080DN</u>	8.0	10.97	0.5	\$39.00		
A12100DN	10.0	12.97	0.5	\$43.50		
A12120DN	12.0	14.97	0.6	\$47.50		
	Specific	cations				
304 SS cylinder body		0.40 sq. in. pist	on area			
High strength aluminu	High strength aluminum end caps		or maintenance-	free life		
High-strength carbon-	High-strength carbon-steel piston rod		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 = 40.0 lb.	Retract force at	100 psi = 35.1 l	b.		

Dimensions

inches [mm]

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

* (1) Nut included with cylinder Cylinder rod clevis ARC-14-28 See end of 3/4" bore section for Accessories

Ø0.25 [ø6.4] ROD 1/4-28 ÚNF-2A 5/8-18 MOUNTING NUT 0.97 0.50 0.19 Ø0.86 [12.7] [24.7] [4.8] [ø21.8] Ø0.62 [Ø15.8] Ø0.81 1/8 NPT PILOT 0.50 0.62 [Ø20.6] PORT [12.7] [15.7] (BOTH ENDS)



3/4 in. Bore, Double-acting, Rear Pivot Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 NPT ports, double acting, rear pivot mount (pivot pin included).

Cylinder,	Cylinder, 3/4 in bore, double acting, rear pivot					
	mo	1				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A12005DP</u>	0.5	4.25	0.2	\$27.00		
A12010DP	1.0	4.75	0.2	\$33.50		
<u>A12020DP</u>	2.0	5.75	0.3	\$35.50		
A12030DP	3.0	6.75	0.3	\$38.50		
A12040DP	4.0	7.75	0.3	\$41.50		
A12050DP	5.0	8.75	0.4	\$44.50		
A12060DP	6.0	9.75	0.4	\$46.50		
A12080DP	8.0	11.75	0.5	\$43.50		
A12100DP	10.0	13.75	0.5	\$47.50		
A12120DP	12.0	15.75	0.6	\$52.00		
	Specific	cations				
304 SS cylinder body		0.40 sq. in. pist	on area			
High strength aluminu	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 = 40.0 lb.	Retract force at	100 psi = 35.1 l	b.		

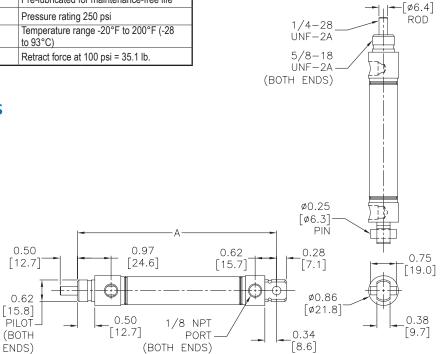
Dimensions inches [mm]

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

Ø0.25

Cylinder rod clevis ARC-14-28 See end of 3/4" bore section for Accessories

Note: Drive pin out for double end mounting





3/4 in. Bore, Double-acting, Rear Pivot Mount, Magnetic Piston



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 NPT ports, double acting, rear pivot mount (pivot pin included), magnetic piston.

Cylinder, 3/4 in bore, double acting, rear pivot mount, Magnetic Piston						
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
A12010DP-M	1.0	4.75	0.2	\$47.50		
<u>A12020DP-M</u>	2.0	5.75	0.3	\$51.00		
<u>A12030DP-M</u>	3.0	6.75	0.3	\$54.00		
<u>A12040DP-M</u>	4.0	7.75	0.3	\$56.00		
<u>A12050DP-M</u>	5.0	8.75	0.4	\$59.00		
<u>A12060DP-M</u>	6.0	9.75	0.4	\$51.00		
<u>A12080DP-M</u>	8.0	11.75	0.5	\$55.00		
<u>A12100DP-M</u>	10.0	13.75	0.5	\$60.00		
<u>A12120DP-M</u>	12.0	15.75	0.6	\$64.00		
	Speci	fications				
304 SS cylinder body		0.40 sq. in. piston	area			
High strength aluminu	aluminum end caps Pre-lubricated for maintenance-free life			life		
303 SS piston rod	d Pressure rating 250 psi					
Low friction Buna-N s	Low friction Buna-N seals Temperature range -20°F to 200°F (-28 to 9			-28 to 93°C)		
Extend force at 100 p	si = 40.0 lb.	Retract force at 10	00 psi = 35.1 lb.			

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	AMB-6	AN-58-18

Cylinder rod clevis ARC-14-28

See end of 3/4" bore section for Accessories Note: Drive pin out for double end mounting

Dimensions

0.50

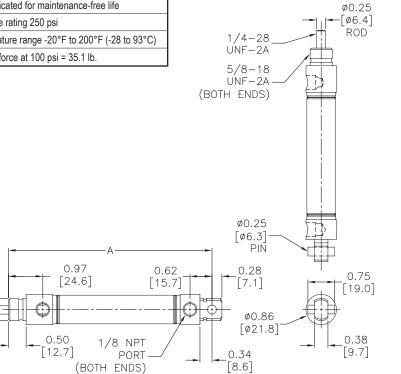
[12.7]

0.62 [15.8]

PILOT-

(BOTH

ENDS)

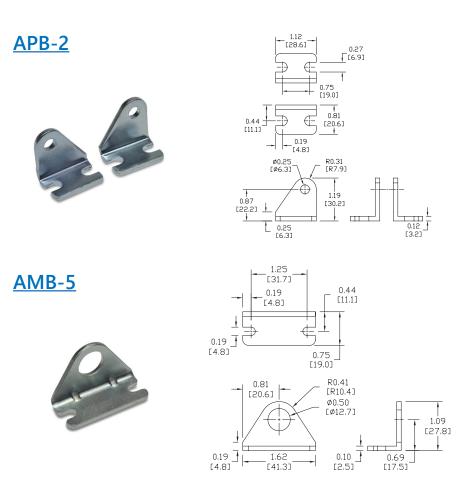




A-Series Pneumatic Cylinders 3/4 inch Bore Accessories

A-	A-Series Pneumatic Cylinder 3/4 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	0.1	\$5.00		
<u>AMB-5</u>	Cylinder mounting bracket used to mount 3/4 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$4.50		
<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	\$5.25		
<u>ARC-14-28</u>	Cylinder rod clevis and hex nut, 1/4-28 thread, for use with 3/4 and 7/8 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$5.25		
<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		
<u>AN-12-20</u>	Cylinder mounting nut with 1/2-10 UNF-2B threads used to mount 3/4 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.2	\$1.25		

Dimensions





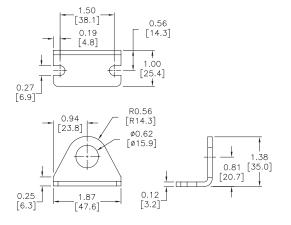
A-Series Pneumatic Cylinders 3/4 inch Bore Accessories

Dimensions

inches [mm]

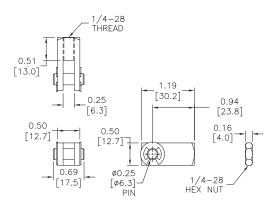
AMB-6





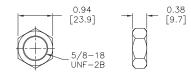
<u>ARC-14-28</u>





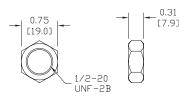
<u>AN-58-18</u>





<u>AN-12-20</u>







7/8 in. Bore, Single-acting, Spring Return, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 7/8 inch bore, 1/8 NPT port, single acting, spring return, front nose mount.

Cylinder, 7/8 in. bore, single acting, spring return, front nose mount						
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A14010SN</u>	1.0	3.40	0.3	\$25.00		
<u>A14020SN</u>	2.0	4.96	0.4	\$29.00		
<u>A14030SN</u>	3.0	6.52	0.4	\$33.50		
	Specifi	cations				
304 SS cylinder body						
High strength aluminun	n end caps	Pre-lubricated for maintenance-free life				
High strength carbon s	teel piston rod	Pressure rating 250 psi				
Low friction Buna-N sea	als	Temperature range -20°F to 200°F (-28 to 93°C)				
Extend force at 100 psi	= 60.0 lb.	Spring force = 3 lb	o. relaxed, 6 lb. c	ompressed		

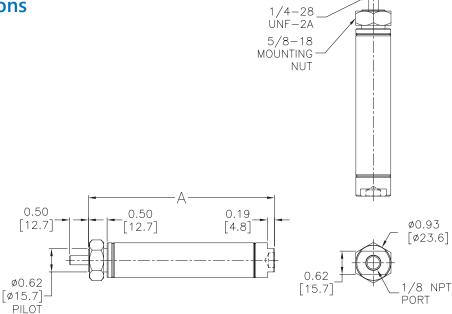
Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-6</u>	AN-58-18*
Rear Pivot Mount		-	-
Front		-	-
Double End Mount	Rear	-	-

Ø0.25 [Ø6.4] ROD

* (1) Nut included with cylinder Cylinder rod clevis ARC-14-28

See end of 7/8" bore section for Accessories







7/8 in. Bore, Single-acting, Spring Return, Rear Pivot Mount

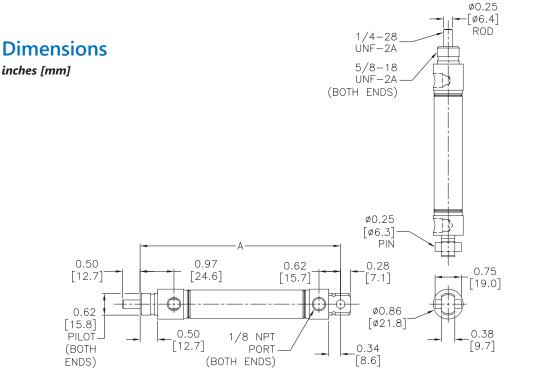


NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 7/8 inch bore, 1/8 NPT port, single acting, spring return, rear pivot mount (pivot pin included).

Cylinder, 7/8 in bore, single acting, spring return, rear pivot mount					
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A14010SP</u>	1.0	4.03	0.3	\$31.00	
<u>A14020SP</u>	2.0	5.59	0.4	\$35.00	
<u>A14030SP</u>	3.0	7.15	0.4	\$39.00	
	Specific	ations			
304 SS cylinder body		0.60 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 p	si = 60.0 lb.	Spring force = 3 lb. relaxed, 6 lb. compressed			

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

Cylinder rod clevis ARC-14-28 See end of 7/8" bore section for Accessories Note: Drive pin out for double end mounting





7/8 in. Bore, Double-acting, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 7/8 inch bore, 1/8 NPT ports, double acting, front nose mount.

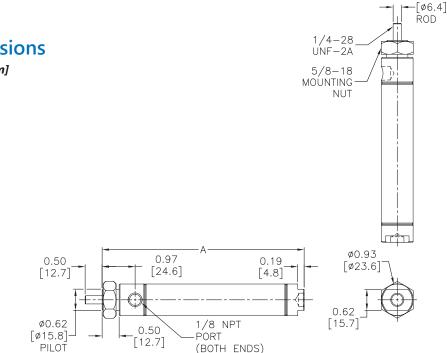
Cylinder, 7/8 in bore, double acting, front nose mount					
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A14010DN</u>	1.0	3.94	0.3	\$25.50	
<u>A14020DN</u>	2.0	4.94	0.3	\$33.50	
<u>A14030DN</u>	3.0	5.94	0.3	\$35.50	
<u>A14040DN</u>	4.0	6.94	0.4	\$38.50	
	Specifi	cations			
304 SS cylinder body					
High strength aluminu	im end caps	Pre-lubricated for	maintenance-fre	e 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 = 60.0 lb.	Retract force at 10	00 psi = 55.1 lb.		

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

Ø0.25

* (1) Nut included with cylinder Cylinder rod clevis ARC-14-28

See end of 7/8" bore section for Accessories



Dimensions



7/8 in. Bore, Double-acting, Double End Mount



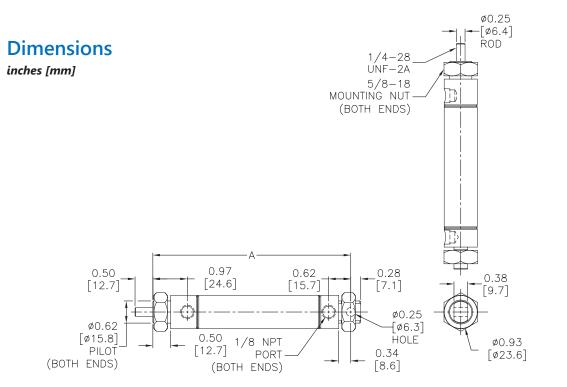
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 7/8 inch bore, 1/8 NPT ports, double acting, double end mount.

Cylinder, 7/8 in bore, double acting, double end mount						
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A14010DD</u>	1.0	4.56	0.4	\$33.50		
A14020DD	2.0	5.56	0.4	\$42.00		
A14030DD	3.0	6.56	0.4	\$45.00		
<u>A14040DD</u>	4.0	7.56	0.4	\$47.50		
	Specific	cations				
304 SS cylinder body		0.60 sq. in. pist	on area			
High strength aluminu	im end caps	Pre-lubricated f	or maintenance-	free life		
303 SS 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	Extend force at 100 psi = 60.0 lb. Retract force at 100 psi = 55.1 lb.					

Mount Style		Bracket	Nut
Front Nose Mou	nt	<u>AMB-6</u>	AN-58-18*
Rear Pivot Mount		APBP-3	-
Double End Mount	Front	<u>AMB-6</u>	AN-58-18*
Double Ella Moulli	Rear	AMB-6	AN-58-18*

* (2) Nut included with cylinder Cylinder rod clevis ARC-14-28

See end of 7/8" bore section for Accessories





7/8 in. Bore, Double-acting, Double end Mount, Magnetic Piston



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 7/8 inch bore, 1/8 NPT ports, double acting, double end mount, magnetic piston.

Cylinder, 7/8 in bore, double acting, double end mount, magnetic piston						
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A14010DD-M</u>	1.0	4.56	0.4	\$45.50		
<u>A14020DD-M</u>	2.0	5.56	0.4	\$58.00		
<u>A14030DD-M</u>	3.0	6.56	0.4	\$60.00		
<u>A14040DD-M</u>	4.0	7.56	0.4	\$62.00		
	Spec	ifications				
304 SS cylinder body		0.60 sq. in. pist	on area			
High strength aluminu	im end caps	Pre-lubricated f	or maintenance-free	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°			(-28 to 93°C)			
Extend force at 100 psi = 60.0 lb. Retract force at 100 psi = 55.1 lb.						

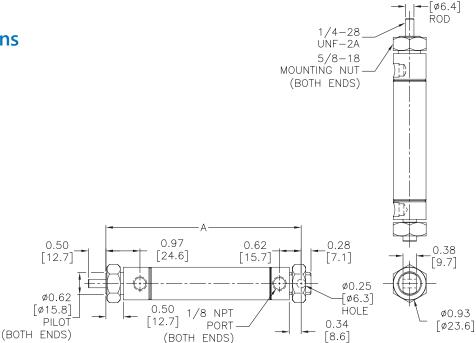
Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-6</u>	AN-58-18*
Rear Pivot Mount		APBP-3	-
Double End Mount	Front	<u>AMB-6</u>	AN-58-18*
Double Ella Moulli	Rear	AMB-6	AN-58-18*

Ø0.25

* (2) Nuts included with cylinder

Cylinder rod clevis ARC-14-28 See end of 7/8" bore section for Accessories

Dimensions





A-Series Pneumatic Cylinders 7/8 inch Bore Accessories

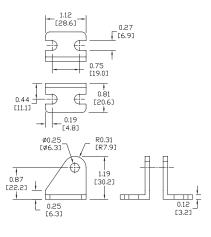
A-Series Pneumatic Cylinder 7/8 inch Bore Accessories						
Part Number	Description	Pcs/Pkg	Wt (lb)	Price		
<u>APB-2</u>	Cylinder pivot mounting bracket without pivot pin used to mount 3/4, 7/8, and 1-1/16 inch bore, NITRA pneumatic, stainless stee, I round body, interchangeable, non-repairable cylinders.	1	0.1	\$5.00		
<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	\$5.25		
<u>APBP-3</u>	Cylinder pivot mounting bracket with pivot pin used to mount 7/8 inch bore NITRA pneumatic, stainless steel, round body, interchangeable, non-repairable cylinders.	1	0.1	\$5.75		
<u>ARC-14-28</u>	Cylinder rod clevis and hex nut, 1/4-28 thread, for use with 3/4 and 7/8 inch bore NITRA pneumatic, stainless steel, round body, interchangeable, non-repairable cylinders.	1	0.1	\$5.25		
<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]

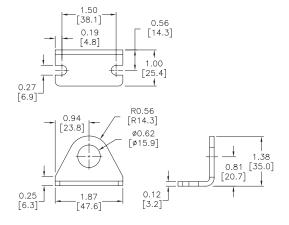
<u>APB-2</u>





<u>AMB-6</u>





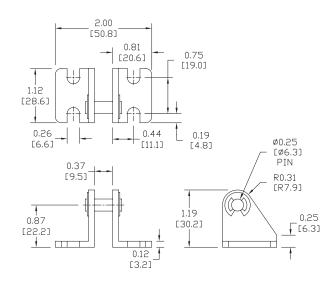


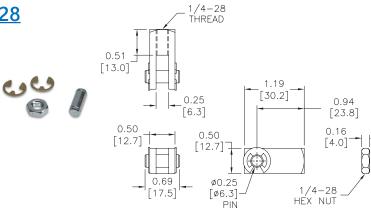
A-Series Pneumatic Cylinders 7/8 inch Bore Accessories

Dimensions

inches [mm]



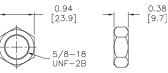




<u>AN-58-18</u>

ARC-14-28







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

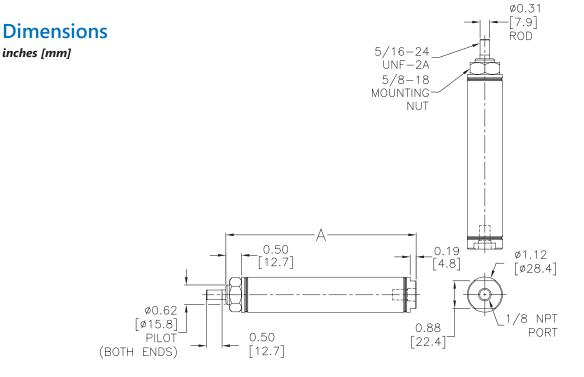


NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/16 inch bore, 1/8 NPT port, single acting, spring return, front nose mount.

Cylinder, 1-1/16 in bore, single acting, spring return,						
	<u>front n</u>	<u>ose mount</u>				
Part Number	Stroke Length (in) "A" (in) Weight (lbs) Price					
<u>A17010SN</u>	1.0	3.50	0.3	\$26.50		
<u>A17020SN</u>	2.0	5.06	0.5	\$31.00		
<u>A17030SN</u>	3.0	6.62	0.6	\$35.00		
	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 25	i0 psi			
Low friction Buna-N seals Temperature range -20°F to 200°F (-28 to 93°C)						
Extend force at 100 psi = 90.0 lb. Spring force = 3 lb. relaxed, 6 lb. compressed						

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

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





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	\$32.50		
<u>A17020SP</u>	2.0	5.78	0.5	\$36.50		
<u>A17030SP</u>	3.0	7.34	0.6	\$34.00		
	Specifi	cations				
304 SS cylinder body		0.90 sq. in. pistor	n 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	b. relaxed, 6 lb. co	mpressed		

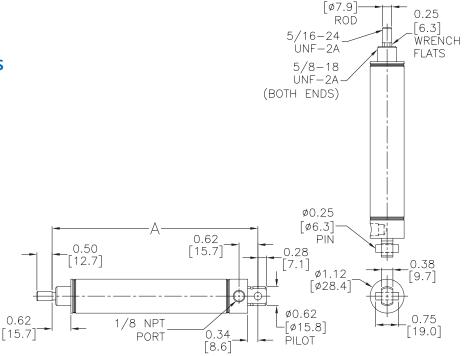
Mount Style		Bracket	Nut
Front Nose Mou	ınt	<u>AMB-6</u>	AN-58-18
Rear Pivot Mount		<u>APB-2</u>	-
Double End Mount	Front	AMB-6	AN-58-18
Double Ella Moulli	Rear	<u>AMB-6</u>	AN-58-18

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

Dimensions



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		acting, front r	iose	
Part Number	N Stroke Length (in.)	nount "A" (in)	Weight (lbs)	Price	
A17005DN	0.5	3.62	0.4	\$32.00	
A17010DN	1.0	4.12	0.4	\$33.00	
A17020DN	2.0	5.12	0.4	\$35.00	
<u>A17030DN</u>	3.0	6.12	0.5	\$38.00	
<u>A17040DN</u>	4.0	7.12	0.5	\$33.50	
<u>A17050DN</u>	5.0	8.12	0.6	\$36.00	
<u>A17060DN</u>	6.0	9.12	0.6	\$38.50	
<u>A17080DN</u>	8.0	11.12	0.7	\$53.00	
<u>A17100DN</u>	10.0	13.12	0.8	\$47.00	
<u>A17120DN</u>	12.0	15.12	0.9	\$51.00	
	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			8 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

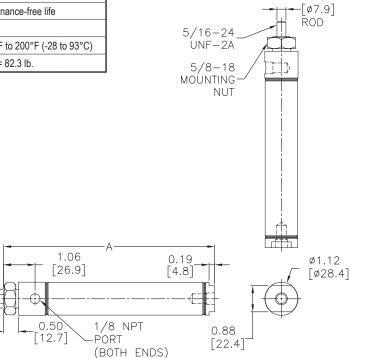
[ø15.7]

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



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	\$38.50		
<u>A17020DP</u>	2.0	5.84	0.4	\$41.00		
<u>A17030DP</u>	3.0	6.84	0.5	\$44.00		
<u>A17040DP</u>	4.0	7.84	0.5	\$38.50		
<u>A17050DP</u>	5.0	8.84	0.6	\$40.50		
<u>A17060DP</u>	6.0	9.84	0.6	\$42.50		
<u>A17080DP</u>	8.0	11.84	0.7	\$47.50		
<u>A17100DP</u>	10.0	13.84	0.8	\$52.00		
<u>A17120DP</u>	12.0	15.84	0.9	\$56.00		
	Spec	cifications				
304 SS cylinder body		0.90 sq. in. piston area				
High strength aluminu	High strength aluminum end caps		Pre-lubricated for maintenance-free life			
High strength carbon	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.			

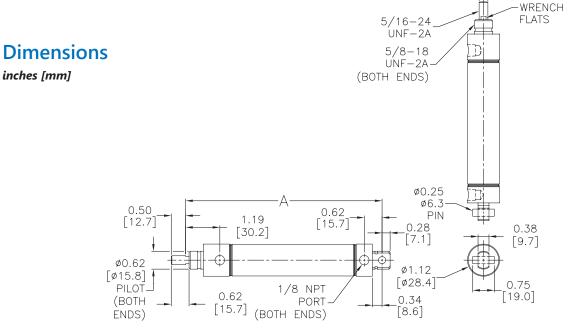
Mount Style		Bracket	Nut	
Front Nose Mount		<u>AMB-6</u>	AN-58-18	
Rear Pivot Mount		APB-2	-	
Double End Mount	Front	AMB-6	AN-58-18	
	Rear	<u>AMB-6</u>	AN-58-18	

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

0.25

-WRENCH FLATS



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 hore_d	ouble activ	n rear nivot	mount	Mount Style		Bracket
Cylinder, 1-1/16 in bore, double acting, rear pivot mount, magnetic piston							
Part Number	Stroke Length (in)	"A" (in)	Weight (lbs)	Price	Front Nose Mount Rear Pivot Mount		<u>AMB-6</u> <u>APB-2</u>
A17010DP-M	1.0	4.84	0.4	\$57.00		Front	APD-2 AMB-6
A17020DP-M	2.0	5.84	0.4	\$59.00	Double End Mount	Rear	AMB-6
A17030DP-M	3.0	6.84	0.5	\$62.00	Culinder red classic ADC 5		<u>AIND-0</u>
A17040DP-M	4.0	7.84	0.5	\$54.00	Cylinder rod clevis ARC-5 See end of 1-1/16" bore se		ccessories
A17050DP-M	5.0	8.84	0.6	\$56.00	Note: Drive pin out for dou		
<u>A17060DP-M</u>	6.0	9.84	0.6	\$58.00			
<u>A17080DP-M</u>	8.0	11.84	0.7	\$62.00			
A17100DP-M	10.0	13.84	0.8	\$67.00			
A17120DP-M	12.0	15.84	0.9	\$71.00			
	Spec	ifications					
304 SS cylinder body		0.90 sq. in. piston	area				
High strength aluminu	m end caps	Pre-lubricated for maintenance-free life					
303 SS piston rod	· · · · ·	Pressure rating 250 psi			Ø0.3		
Low friction Buna-N se	als	Temperature range -20°F to 200°F (-28 to 93°C)			[Ø7.9] ROE		-
Extend force at 100 ps	i = 90.0 lb.	Retract force at 10	00 psi = 82.3 lb.			́Н	0.2
	nensions es [mm]				5/16-24 UNF-2A 5/8-18 UNF-2A (BOTH ENDS)		FLA
	0. [12 Ø0.6 [Ø15.8 PILC (BOT ENDS			0.62 [15.7]	¢0.25 ¢6.3 PIN 0.28 [7.1] ¢1.12 [¢28.4] 0.34 [8.6]		0.38 [9.7] 0.75 [19.0]



NEUMATICS

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

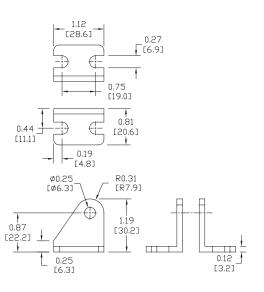
A-Series Pneumatic Cylinder 1-1/16 inch Bore Accessories							
Part Number	Description		Wt (lb)	Price			
<u>APB-2</u>	Cylinder pivot mounting bracket without pivot pin used to mount 3/4, 7/8, and 1-1/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non- repairable cylinders.	1	0.2	\$5.00			
	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	\$5.25			
	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	\$6.00			
<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]

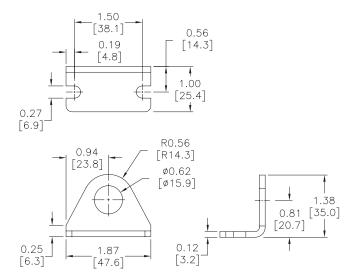
APB-2





AMB-6







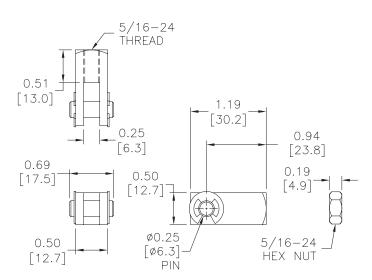
A-Series Pneumatic Cylinders 1-1/16 inch Bore Accessories

Dimensions

inches [mm]

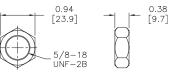






AN-58-18







1-1/4 in. Bore, Single-acting, Spring Return, Front Nose Mount



NITRA pneumatic stainless steel round body interchangeable, non-repairable cylinder, 1-1/4 inch bore, 1/8 NPT port, single acting, spring return, front nose mount.

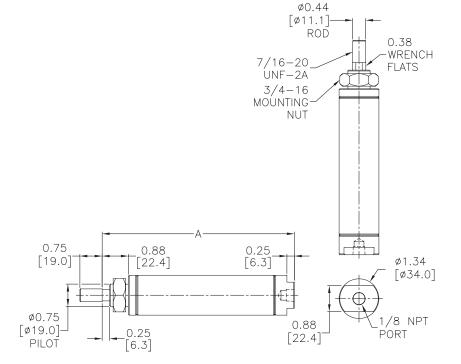
Cylinder, 1-1/4 in bore, single acting, spring return, front nose mount						
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
A20010SN	1.0	4.47	0.6	\$34.50		
A20020SN	2.0	6.28	0.8	\$47.00		
A20030SN	3.0	8.09	1.0	\$59.00		
	Speci	fications				
304 SS cylinder body		1.2 sq. in. piston a	irea			
High strength aluminu	um end caps	Pre-lubricated for	maintenance-fre	e life		
High strength carbon	High strength carbon steel piston rod Pressure rating 250 psi					
Low friction Buna-N seals Temperature range -20°F to 20			e -20°F to 200°I	= (-28 to 93°C)		
Extend force at 100 p	si = 120.0 lb.	Extend force at 100 psi = 120.0 lb. Spring force = 7.5 lb. relaxed, 15 lb. compresse				

Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-7</u>	AN-34-16*
Rear Pivot Mount		_	_
Double End Mount Front Rear		-	-
		-	-

* (1) Nut included with cylinder Cylinder rod clevis ARC-716-20

See end of 1-1/4" bore section for Accessories

Dimensions





1-1/4 in. Bore, Single-acting, Spring Return, Double End Mount



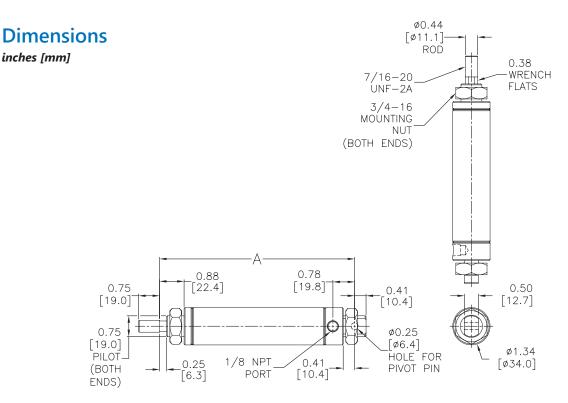
NITRA pneumatic stainless steel round body interchangeable, non-repairable cylinder, 1-1/4 inch bore, 1/8 NPT port, single acting, spring return, double end mount.

Cylinder, 1-1/4 in bore, single acting, spring return, double end mount							
Part Number							
A20010SD	1.0	5.19	0.7	\$41.50			
<u>A20020SD</u>	2.0	7.00	1.0	\$56.00			
<u>A20030SD</u>	3.0	8.81	1.2	\$61.00			
	Spe	cifications					
304 SS cylinder bo	dy	1.2 sq. in. piston a	irea				
High strength alum	inum end caps	Pre-lubricated for	maintenance-free life				
High strength carbo	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)				93°C)			
Extend force at 100	Extend force at 100 psi = 120.0 lb. Spring force = 7.5 lb. relaxed, 15 lb. compressed						

Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-7</u>	AN-34-16*
Rear Pivot Mount		APBP-4	-
Double End Mount		<u>AMB-7</u>	AN-34-16*
Double Ella Moulli	Rear	<u>AMB-7</u>	AN-34-16*

* (2) Nuts included with cylinder Cylinder rod clevis ARC-716-20

See end of 1-1/4" bore section for Accessories





1-1/4 in. Bore, Double-acting, Front Nose Mount



NITRA pneumatic stainless steel round body interchangeable, non-repairable cylinder, 1-1/4 inch bore, 1/8 NPT ports, double acting, front nose mount.

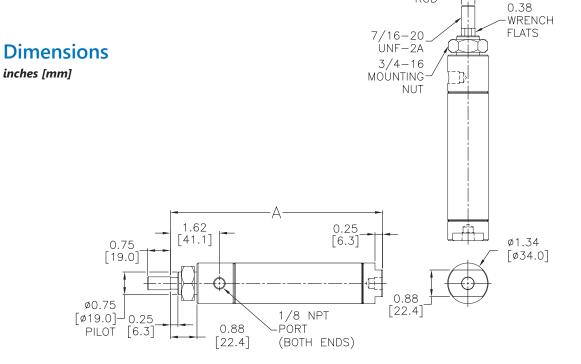
Cylinder, 1-1/4 in bore, double acting, front nose						
	<u> </u>	ount				
Part Number	Stroke Length (in)	"A" (in)	Weight (lbs)	Price		
<u>A20010DN</u>	1.0	5.00	0.7	\$41.00		
<u>A20020DN</u>	2.0	6.00	0.7	\$53.00		
<u>A20030DN</u>	3.0	7.00	0.8	\$56.00		
<u>A20040DN</u>	4.0	8.00	0.9	\$66.00		
<u>A20050DN</u>	5.0	9.00	1.0	\$70.00		
<u>A20060DN</u>	6.0	10.0	1.1	\$73.00		
<u>A20080DN</u>	8.0	12.0	1.2	\$81.00		
	Speci	fications				
304 SS cylinder body		1.2 sq. in. piston a	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	Extend force at 100 psi = 120.0 lb. Retract force at 100 psi = 105.0 lb.					

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

* (1) Nut included with cylinder

Cylinder rod clevis ARC-716-20 See end of 1-1/4" bore section for Accessories

> Ø0.44 [Ø11.1] ROD





1-1/4 in. Bore, Double-acting, Double End Mount



NITRA pneumatic stainless steel round body interchangeable, non-repairable cylinder, 1-1/4 inch bore, 1/8 NPT ports, double acting, double end mount.

Cylinder,	1-1/4 in bore,	double ac	ting, double	end	
	<u> </u>	<u>nount</u>			
Part Number	Stroke Length (in)	"A" (in)	Weight (lbs)	Price	
<u>A20010DD</u>	1.0	5.72	0.8	\$48.00	
<u>A20020DD</u>	2.0	6.72	0.9	\$51.00	
<u>A20030DD</u>	3.0	7.72	1.0	\$65.00	
<u>A20040DD</u>	4.0	8.72	1.0	\$76.00	
<u>A20050DD</u>	5.0	9.72	1.1	\$80.00	
<u>A20060DD</u>	6.0	10.72	1.2	\$83.00	
<u>A20080DD</u>	8.0	12.72	1.4	\$91.00	
<u>A20100DD</u>	10.0	14.72	1.5	\$97.00	
<u>A20120DD</u>	12.0	16.72	1.7	\$105.00	
	Spec	ifications			
304 SS cylinder body		1.2 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 = 120.0 lb.	Retract force at 10	00 psi = 105.0 lb.		

Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-7</u>	AN-34-16*
Rear Pivot Mount		APBP-4	-
Double End Mount	Front	AMB-7	AN-34-16*
Double Ella Moulli	Rear	AMB-7	AN-34-16*

* (2) Nuts included with cylinder

Cylinder rod clevis ARC-716-20

[Ø6.4]

HOLE FOR

PIVOT PIN

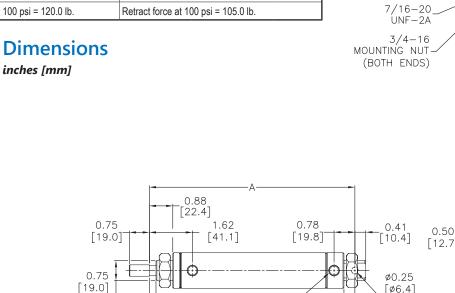
See end of 1-1/4" bore section for Accessories

Ø0.44 [ø11.1] ROD

Ъ

0.38 WRENCH

FLATS



1/8 NPT PORT

(BOTH ENDS)

0.41

[10.4]

0.25

[6.3]

PILOT-

(BOTH

ENDS)

ø1.34

[ø34.0]



NEUMATICS

A-Series Pneumatic Cylinders 1-1/4 inch Bore

1-1/4 in. Bore, Double-acting, Double End Mount, Magnetic Piston



NITRA pneumatic stainless steel round body interchangeable, non-repairable cylinder, 1-1/4 inch bore, 1/8 NPT ports, double acting, double end mount, magnetic piston.

Cylinder, 1-1	/4 in bore, do		, double end	mount,	
	magn	<u>etic piston</u>			
Part Number	Stroke Length (in)	"A" (in)	Weight (lbs)	Price	
<u>A20010DD-M</u>	1.0	5.72	0.8	\$64.00	
<u>A20020DD-M</u>	2.0	6.72	0.9	\$66.00	
<u>A20030DD-M</u>	3.0	7.72	1.0	\$83.00	
<u>A20040DD-M</u>	4.0	8.72	1.0	\$95.00	
<u>A20050DD-M</u>	5.0	9.72	1.1	\$100.00	
<u>A20060DD-M</u>	6.0	10.72	1.2	\$104.00	
<u>A20080DD-M</u>	8.0	12.72	1.4	\$111.00	
<u>A20100DD-M</u>	10.0	14.72	1.5	\$118.00	
<u>A20120DD-M</u>	12.0	16.72	1.7	\$125.00	
	Spec	ifications			
304 SS cylinder body		1.2 sq. in. piston area			
High strength aluminun	n end caps	Pre-lubricated for maintenance-free life			
303 SS piston rod		Pressure rating 250 psi			
Low friction Buna-N se	als	Temperature range -20°F to 200°F (-28 to 93°C)			
Extend force at 100 ps	i = 120.0 lb.	Retract force at 10	00 psi = 105.0 lb.		

Mount Style	Bracket	Nut	
Front Nose Mou	<u>AMB-7</u>	AN-34-16*	
Rear Pivot Mou	APBP-4	-	
Double End Mount	Front	<u>AMB-7</u>	AN-34-16*
	Rear	<u>AMB-7</u>	AN-34-16*

* (2) Nuts included with cylinder

Cylinder rod clevis ARC-716-20

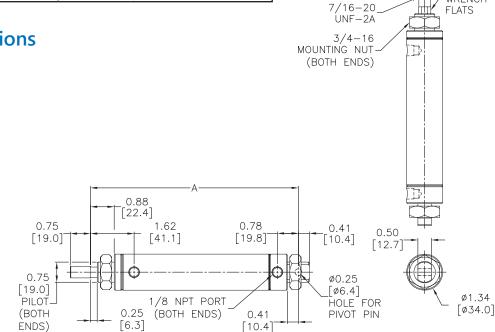
See end of 1-1/4" bore section for Accessories

Ø0.44 [Ø11.1] ROD

0.38 WRENCH

FLATS

 Π



Dimensions



A-Series Pneumatic Cylinders 1-1/4 inch Bore Accessories

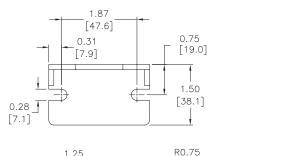
A-Series Pneumatic Cylinder 1-1/4 inch Bore Accessories						
Part Number	Description	Pcs/Pkg	Wt (lb)	Price		
	Cylinder mounting bracket used to mount 1-1/4 and 1-1/2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.2	\$8.25		
	Cylinder pivot mounting bracket with pivot pin used to mount 1-1/4 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	\$10.50		
	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	\$9.50		
	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	\$1.25		

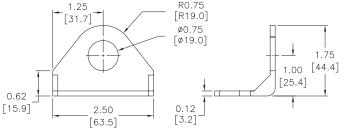
Dimensions

inches [mm]

AMB-7

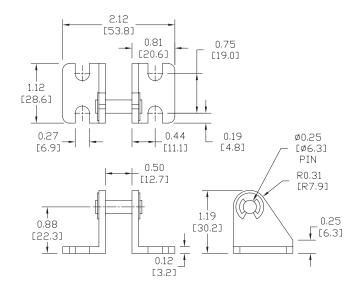










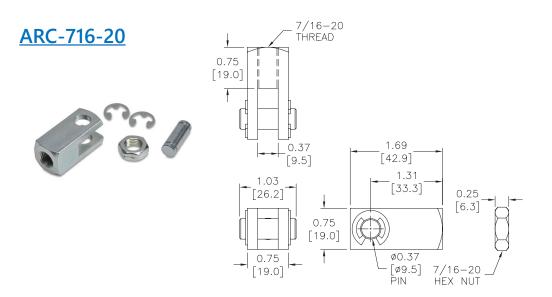




A-Series Pneumatic Cylinders 1-1/4 inch Bore Accessories

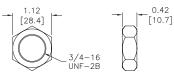
Dimensions

inches [mm]



<u>AN-34-16</u>







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



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	1-1/2 in bore,		ng, spring re	eturn,
		ose mount		
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
<u>A24010SN</u>	1.0	4.13	0.7	\$51.00
<u>A24020SN</u>	2.0	5.82	0.9	\$59.00
<u>A24030SN</u>	3.0	7.51	1.1	\$66.00
<u>A24040SN</u>	4.0	9.20	1.3	\$73.00
<u>A24050SN</u>	5.0	10.89	1.5	\$81.00
<u>A24060SN</u>	6.0	12.58	1.8	\$88.00
	Speci	fications		
304 SS cylinder body		1.7 sq. in. piston a	irea	
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 = 170.0 lb.	Spring force = 7.5	lb. relaxed, 14 lb. co	mpressed

Mount Style		Bracket	Nut
Front Nose Mount		AMB-7	AN-34-16*
Rear Pivot Mount		-	-
Front		-	-
Double End Mount	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 **Dimensions** 0.38 WRENCH inches [mm] 7/16-20 FLATS ÚNF-2A 3/4-16 MOUNTING NUT ф 0.88 0.25 [22.4] 0.75 [6.3] ø1.56 [19.0] [ø39.6] Ø0.75 0.88 [ø19.0]-[22.4] 1/8 NPT PILOT 0.25 PORT [6.3]



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



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	\$60.00	
A24020SP	2.0	6.50	0.9	\$67.00	
<u>A24030SP</u>	3.0	8.19	1.1	\$74.00	
A24040SP	4.0	9.88	1.3	\$81.00	
A24050SP	5.0	11.57	1.6	\$89.00	
A24060SP	6.0	13.26	1.8	\$95.00	
	Speci	fications			
304 SS cylinder body		1.7 sq. in. piston a	irea		
High strength aluminu	im end caps	Pre-lubricated for	maintenance-free lif	e	
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				28 to 93°C)	
Extend force at 100 psi = 170.0 lb. Spring force = 7.5 lb. relaxed, 14 lb. compressed					

Mount Style		Bracket	Nut
Front Nose Mou	nt	<u>AMB-7</u>	AN-34-16
Rear Pivot Mount		APB-3	-
Front		-	-
Double End Mount	Rear	-	-

0.38 WRENCH

FLATS

Cylinder rod clevis ARC-716-20

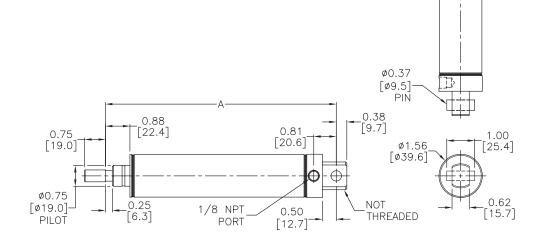
7/16-20 UNF-2A

> 3/4-16 UNF-2A

See end of 1-1/2" bore section for Accessories

Ø0.44 [Ø11.1] ROD

Dimensions





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						
	m	ount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A24010DN</u>	1.0	4.69	0.8	\$59.00		
<u>A24015DN</u>	1.5	5.19	0.8	\$61.00		
<u>A24020DN</u>	2.0	5.69	0.9	\$64.00		
<u>A24030DN</u>	3.0	6.69	0.9	\$67.00		
<u>A24040DN</u>	4.0	7.69	1.0	\$73.00		
<u>A24050DN</u>	5.0	8.69	1.1	\$77.00		
<u>A24060DN</u>	6.0	9.69	1.2	\$83.00		
<u>A24070DN</u>	7.0	10.69	1.3	\$87.00		
A24080DN	8.0	11.69	1.3	\$91.00		
<u>A24090DN</u>	9.0	12.69	1.4	\$94.00		
<u>A24100DN</u>	10.0	13.69	1.5	\$100.00		
A24110DN	11.0	14.69	1.6	\$104.00		
<u>A24120DN</u>	12.0	15.69	1.7	\$110.00		
	Speci	fications				
304 SS cylinder body		1.7 sq. in. piston area				
High strength aluminum end caps Pre-lubricate			maintenance-free lit	fe		
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			28 to 93°C)			
Extend force at 100 p	tend force at 100 psi = 170.0 lb. Retract force at 100 psi = 155.0 lb.					

1.50

[38.0]

1/8 NPT

PORT

_0.88 [22.3]

0.75

[19.0]

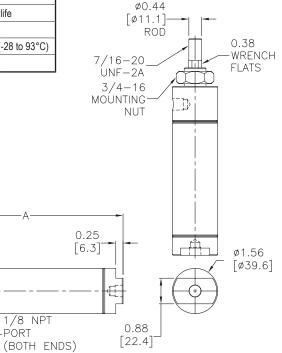
Ø0.75

[ø19.0]^{_]}0.25 PILOT [6.3]

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

* (1) Nut included with cylinder Cylinder rod clevis ARC-716-20

See end of 1-1/2" bore section for Accessories



Dimensions



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	j, rear pivot	mount
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
<u>A24010DP</u>	1.0	5.38	0.8	\$67.00
<u>A24020DP</u>	2.0	6.38	0.9	\$71.00
<u>A24030DP</u>	3.0	7.38	1.0	\$76.00
<u>A24040DP</u>	4.0	8.38	1.1	\$81.00
<u>A24050DP</u>	5.0	9.38	1.1	\$84.00
<u>A24060DP</u>	6.0	10.38	1.2	\$89.00
<u>A24070DP</u>	7.0	11.38	1.3	\$94.00
<u>A24080DP</u>	8.0	12.38	1.4	\$99.00
<u>A24090DP</u>	9.0	13.38	1.5	\$102.00
A24100DP	10.0	14.38	1.5	\$108.00
A24120DP	12.0	16.38	1.7	\$115.00
	Speci	fications		
304 SS cylinder body		1.7 sq. in. piston area		
High strength aluminum end caps Pre-lubricated for maintenance-free life			maintenance-free life	
High strength carbon steel piston rod Pressure rating 250 psi			i0 psi	
Low friction Buna-N s	ow friction Buna-N seals Temperature range -20°F to 200°F (-28 to 93			8 to 93°C)
Extend force at 100 p	force at 100 psi = 170.0 lb. Retract force at 100 psi = 155.0 lb.			

1.50

[38.1]

0.88

1/8 NPT

[22.4] (BOTH ENDS)

PORT

0.75

[19.0]

[6.3]

Ø0.75 [ø19.0]-[c.25

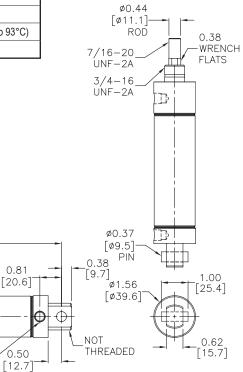
PILOT

Mount Style		Bracket	Nut
Front Nose Mo	unt	AMB-7	AN-34-16
Rear Pivot Mount		<u>APB-3</u>	-
Pourble Fred Mount		-	-
Double End Mount	Rear	-	-

Cylinder rod clevis ARC-716-20

See end of 1-1/2" bore section for Accessories

Dimensions





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, 1-1/2 in bore, double acting, rear pivot mount,

magnetic piston							
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price			
<u>A24010DP-M</u>	1.0	5.38	0.8	\$92.00			
<u>A24020DP-M</u>	2.0	6.38	0.9	\$95.00			
<u>A24030DP-M</u>	3.0	7.38	1.0	\$100.00			
<u>A24040DP-M</u>	4.0	8.38	1.1	\$105.00			
<u>A24050DP-M</u>	5.0	9.38	1.1	\$110.00			
<u>A24060DP-M</u>	6.0	10.38	1.2	\$113.00			
<u>A24070DP-M</u>	7.0	11.38	1.3	\$118.00			
<u>A24080DP-M</u>	8.0	12.38	1.4	\$123.00			
<u>A24090DP-M</u>	9.0	13.38	1.5	\$127.00			
<u>A24100DP-M</u>	10.0	14.38	1.5	\$131.00			
<u>A24120DP-M</u>	12.0	16.38	1.7	\$140.00			
	Specif	ications					
304 SS cylinder body	•	1.7 sq. in. piston area					
High strength aluminum end caps		Pre-lubricated for maintenance-free life					
303 SS piston rod Pressure			50 psi				
Low friction Buna-N sea	ls	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 Mou	Int	<u>AMB-7</u>	AN-34-16
Rear Pivot Mount		<u>APB-3</u>	-
Front		-	-
Double End Mount	Rear	-	-

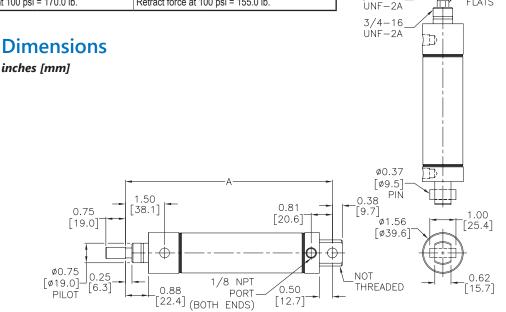
0.38 WRENCH

FLATS

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

> Ø0.44 [Ø11.1] ROD

7/16-20





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

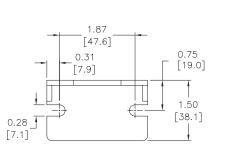
A-Series Pneumatic Cylinder 1-1/2 inch Bore Accessories						
Part Number	Description	Pcs/Pkg	Wt (lb)	Price		
<u>AMB-7</u>	Cylinder mounting bracket used to mount 1-1/4 and 1-1/2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.2	\$8.25		
	Cylinder 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	\$10.50		
	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	\$9.50		
	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	\$1.25		

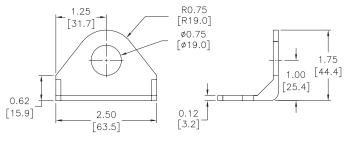
Dimensions

inches [mm]

AMB-7

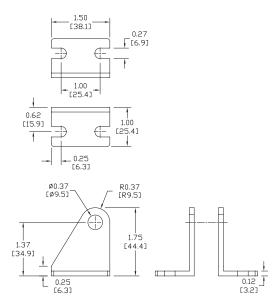






<u>APB-3</u>



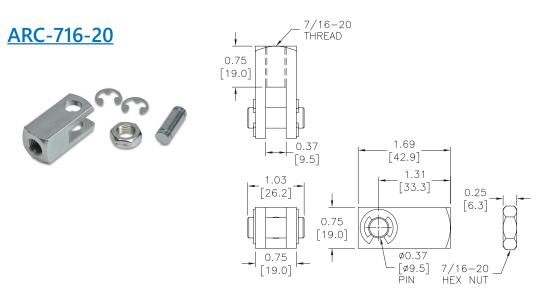




A-Series Pneumatic Cylinders 1-1/2 inch Bore Accessories

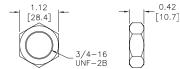
Dimensions

inches [mm]



<u>AN-34-16</u>







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

1.19

[30.2]

0.38 [9.7]



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 mount						
Part Number	t Number Stroke Length (in.) "A" (in) Weight (lbs) Price						
<u>A32010SN</u>	1.0	5.41	1.5	\$101.00			
<u>A32020SN</u>	2.0	7.41	1.9	\$111.00			
<u>A32030SN</u>	3.0	8.66	2.3	\$119.00			
	Speci	fications					
304 SS cylinder body		3.1 sq. in. piston a	irea				
High strength aluminu	im end caps	Pre-lubricated for	maintenance-free life				
High strength carbon steel piston rod Pressure rating 250 psi			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 p	si = 310.0 lb.	Spring force = 15	lb. relaxed, 30 lb. cor	npressed			

0.88

[22.4]

1.37

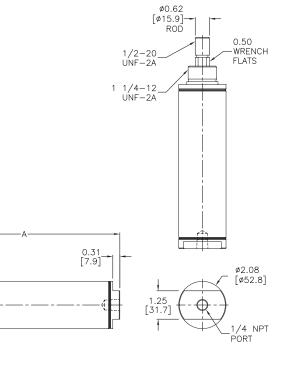
[34.9] PILOT (BOTH ENDS)

Mount Style		Bracket	Nut
Front Nose Mou	nt	<u>AMB-11</u>	AN-114-12
Rear Pivot Mount		_	-
Pouble Food Mount		-	-
Double End Mount	Rear	-	-

Cylinder rod clevis ARC-12-20

See end of 2" bore section for Accessories







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



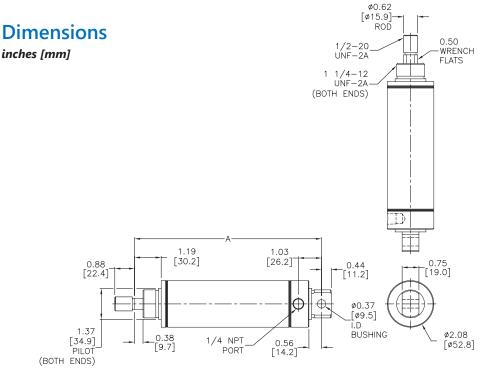
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 2 inch bore, 1/4 NPT port, single acting, spring return, double end mount.

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	\$122.00		
<u>A32020SD</u>	2.0	8.34	2.1	\$130.00		
<u>A32030SD</u>	3.0	9.59	2.6	\$141.00		
	Speci	fications				
304 SS cylinder body		3.1 sq. in. piston a	area			
High strength aluminu	im end caps	Pre-lubricated for	maintenance-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			3 to 93°C)			
Extend force at 100 p	Extend force at 100 psi = 310.0 lb. Spring force = 15 lb. relaxed, 30 lb. compressed					

Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-11</u>	AN-114-12
Rear Pivot Mount		APBP-5	-
Double End Mount	Front	<u>AMB-11</u>	AN-114-12
Double Ella Moulli	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, f	front nose n	nount		
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A32010DN</u>	1.0	5.69	1.6	\$93.00		
<u>A32020DN</u>	2.0	6.69	1.7	\$96.00		
<u>A32030DN</u>	3.0	7.69	1.9	\$102.00		
<u>A32040DN</u>	4.0	8.69	2.0	\$107.00		
<u>A32050DN</u>	5.0	9.69	2.2	\$112.00		
<u>A32060DN</u>	6.0	10.69	2.3	\$117.00		
	Specifications					
304 SS cylinder body		3.1 sq. in. piston a	area			
High strength aluminu	High strength aluminum end caps		Pre-lubricated for maintenance-free life			
High strength carbon steel piston rod Pressure rating 250 ps			50 psi			
Low friction Buna-N seals Temperature range -20°F to 200°F (-28 to 93			8 to 93°C)			
Extend force at 100 p	si = 310.0 lb.	Retract force at 10	00 psi = 279.3 lb.			

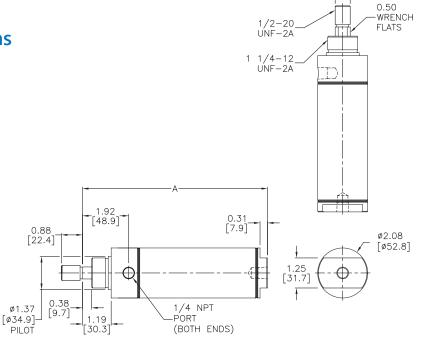
Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-11</u>	AN-114-12
Rear Pivot Mount		-	-
Double End Mount	Front	-	-
Double Ella Moulli	Rear	-	-

Cylinder rod clevis ARC-12-20

Ø0.62 [Ø15.9] ROD

See end of 2" bore section for Accessories

Dimensions





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, d	louble end n	nount	
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price	
<u>A32010DD</u>	1.0	6.62	1.8	\$111.00	
<u>A32020DD</u>	2.0	7.62	1.9	\$115.00	
<u>A32030DD</u>	3.0	8.62	2.1	\$119.00	
<u>A32040DD</u>	4.0	9.62	2.2	\$125.00	
<u>A32050DD</u>	5.0	10.62	2.4	\$130.00	
<u>A32060DD</u>	6.0	11.62	2.5	\$136.00	
<u>A32070DD</u>	7.0	12.62	2.7	\$140.00	
<u>A32080DD</u>	8.0	13.62	2.8	\$111.00	
<u>A32100DD</u>	10.0	15.62	3.1	\$157.00	
<u>A32120DD</u>	12.0	17.62	3.4	\$165.00	
<u>A32140DD</u>	14.0	19.62	3.7	\$176.00	
<u>A32160DD</u>	16.0	21.62	4.0	\$185.00	
<u>A32180DD</u>	18.0	23.62	4.3	\$196.00	
	Speci	fications			
304 SS cylinder body		3.1 sq. in. piston area			
High strength aluminu	High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod	303 SS 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 = 310.0 lb.	Retract force at 10	00 psi = 279.3 lb.		

1.92

[48.8]

1.19 [30.2]

-PORT

0.88

[22.4]

0.38

[9.7]

ø1.37

PILOT

[ø34.9]

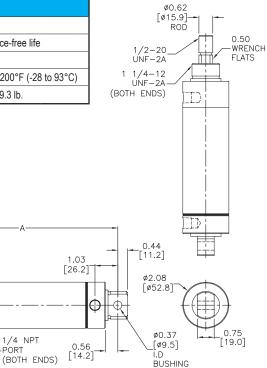
(BOTH ENDS)

Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-11</u>	AN-114-12
Rear Pivot Mount		APBP-5	-
Double End Mount	Front	<u>AMB-11</u>	AN-114-12
Double Ella Moulli	Rear	<u>AMB-11</u>	AN-114-12

Cylinder rod clevis ARC-12-20

See end of 2" bore section for Accessories







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.

	magne	etic piston				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price		
<u>A32010DD-M</u>	1.0	6.62	1.8	\$139.00		
<u>A32020DD-M</u>	2.0	7.62	1.9	\$143.00		
<u>A32030DD-M</u>	3.0	8.62	2.1	\$149.00		
<u>A32040DD-M</u>	4.0	9.62	2.2	\$153.00		
<u>A32050DD-M</u>	5.0	10.62	2.4	\$159.00		
<u>A32060DD-M</u>	6.0	11.62	2.5	\$164.00		
<u>A32070DD-M</u>	7.0	12.62	2.7	\$170.00		
<u>A32080DD-M</u>	8.0	13.62	2.8	\$130.00		
<u>A32100DD-M</u>	10.0	15.62	3.1	\$184.00		
<u>A32120DD-M</u>	12.0	17.62	3.4	\$194.00		
<u>A32140DD-M</u>	14.0	19.62	3.7	\$153.00		
<u>A32160DD-M</u>	16.0	21.62	4.0	\$214.00		
<u>A32180DD-M</u>	18.0	23.62	4.3	\$224.00		
	Speci	fications				
304 SS cylinder body		3.10 sq. in. piston	area			
High strength aluminu	im end caps	Pre-lubricated for maintenance-free life				
303 SS piston rod		Pressure rating 250 psi				
_ow friction Buna-N s	eals	Temperature range -20°F to 200°F (-28 to 93°C)				
Extend force at 100 p	si = 310 lb.	Retract force at 100 psi = 279.3 lb.				

1.92 [48.8]

1.19

[30.2]

1/4 NPT

(BOTH ENDS)

PORT

0.88

[22.4]

0.38 [ø34.9] [9.7]

ø1.37

PILOT

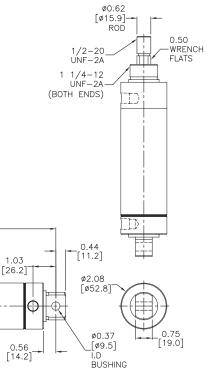
(BOTH ENDS)

Mount Style		Bracket	Nut
Front Nose Mount		<u>AMB-11</u>	AN-114-12
Rear Pivot Mount		APBP-5	-
Double End Mount	Front	<u>AMB-11</u>	AN-114-12
Double Ella Moulli	Rear	AMB-11	AN-114-12

Cylinder rod clevis ARC-12-20

See end of 2" bore section for Accessories

Dimensions





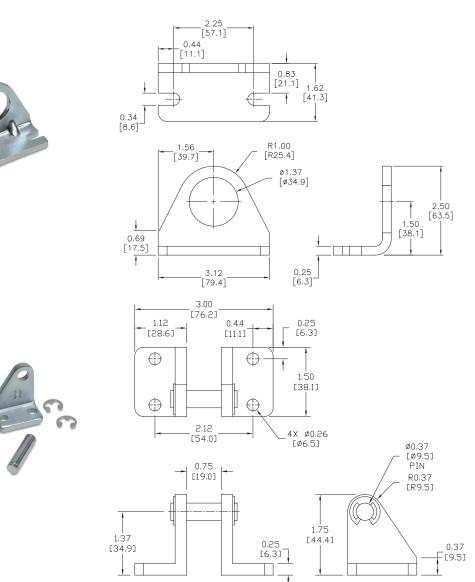
A-Series Pneumatic Cylinders 2 inch Bore Accessories

A-Series Pneumatic Cylinder 2 inch Bore Accessories						
Part Number	Part Number Description					
<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	\$17.50		
<u>APBP-5</u>	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	\$20.50		
<u>ARC-12-20</u>	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	\$8.50		
<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	\$7.75		

Dimensions

inches [mm]

AMB-11





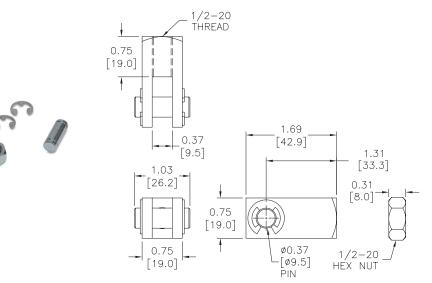


A-Series Pneumatic Cylinders 2 inch Bore Accessories

Dimensions

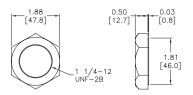
ARC-12-20

inches [mm]



<u>AN-114-12</u>







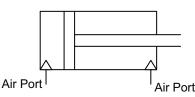
Pneumatic Cylinders - F-Series All Stainless Steel

Nitra F-Series Pneumatic Stainless Steel Round Body Air Cylinders

The NITRA Pneumatics F-Series non-repairable stainless steel round body cylinders includes bore sizes from 3/4" 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 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 aluminum piston is securely threaded and sealed to a piston rod that is ground and roller burnished 300 series stainless steel with roll-formed threads for exceptional strength. Low friction wear compensating Buna N U-cup rod and piston seals, PTFE rod guide bushing and slotted end caps all combine for smooth breakaway, even at low pressures.

Operation

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 FMB bracket and one FN nut.



Rear Pivot mount uses one FPBP bracket.



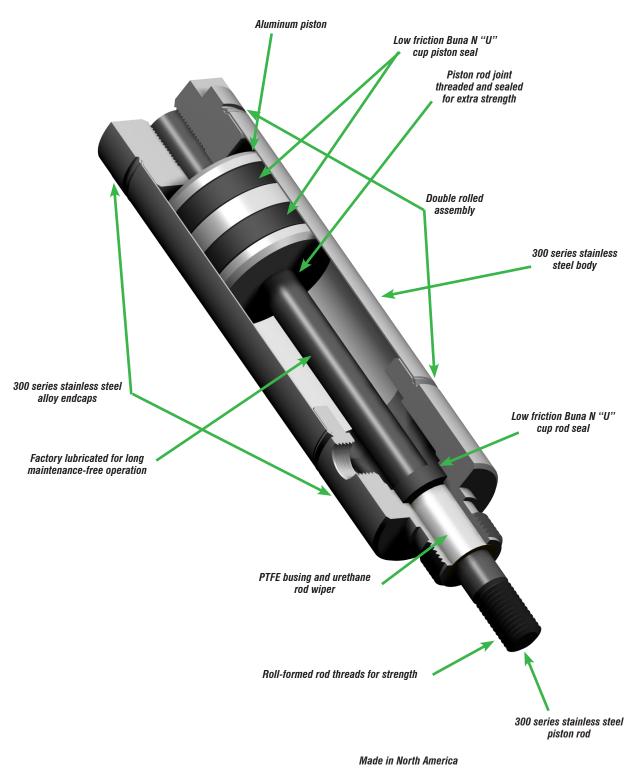
Double end mount uses two FMB brackets and two FN nuts.

- Features
- Interchangeable with other common brands of round body cylinders
- Available bore sizes: 3/4", 1-1/16", 1-1/2", 2"
- Excellent selection of stroke lengths
- Double-acting models
- Nose, rear pivot and double-end mounting options
- Type 300 series stainless steel body, end caps, and rod
- · Factory lubricated for long, maintenance-free operation
- 250 psi operating pressure
- Models available with magnetic piston for position indication
- All models are typically available for same-day shipment
- Made in North America
- 2-year warranty



Pneumatic Cylinders - F-Series All Stainless Steel

Cylinder Features





F-Series All Stainless Steel Pneumatic Cylinders - 3/4 inch Bore

3/4 in. Bore, Double-acting, Front Nose Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 inch female NPT ports, double acting, front nose mount.

All Stainless Steel Cylinder 3/4 in. bore, double acting, front nose mount

Part Number	Stroke Length (in.)	Weight (lbs)	Price	Drawing Link	
<u>F12005DN</u>	0.5	0.3	\$124.00	PDF	
<u>F12010DN</u>	1.0	0.3	\$125.00	PDF	
<u>F12015DN</u>	1.5	0.5	\$126.00	PDF	
<u>F12020DN</u>	2.0	0.5	\$127.00	PDF	
<u>F12030DN</u>	3.0	0.5	\$130.00	PDF	
<u>F12040DN</u>	4.0	0.5	\$132.00	PDF	
<u>F12050DN</u>	5.0	0.6	\$135.00	PDF	
<u>F12060DN</u>	6.0	0.6	\$138.00	PDF	
<u>F12080DN</u>	8.0	0.8	\$142.00	PDF	
<u>F12100DN</u>	10.0	0.8	\$148.00	PDF	
<u>F12120DN</u>	12.0	0.9	\$154.00	PDF	
	Specific	cations			
300 series stainless stee	el cylinder body	0.40 sq. in. piston area			
Rod diameter 1/4 in.		Rod thread 1/4-28			
300 series stainless steel end caps		Pre-lubricated for maintenance-free life			
300 series stainless 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 = 40.0 lb.		Retract force at 100 psi = 35.1 lb.			

Mount Style		Bracket	Nut
Front Nose Mount		<u>FMB-6</u>	FN-58-18
Rear Pivot Mount		-	_
Double End Mount	Front	-	-
Double End Mount	Rear	-	-

Cylinder rod clevis FRC-14-28

See end of F-series section for Accessories



F-Series All Stainless Steel Pneumatic Cylinders - 3/4 inch Bore

3/4 in. Bore, Double-acting, Double End Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 inch female NPT ports, double acting, double end mount.

All Stainless Steel Cylinder 3/4 in. bore, double acting, double end mount							
Part Number	Stroke Length (in.)	Weight (lbs)	Price	Drawing Link			
<u>F12005DD</u>	0.5	0.3	\$131.00	PDF			
<u>F12010DD</u>	1.0	0.3	\$151.00	PDF			
<u>F12020DD</u>	2.0	0.5	\$154.00	PDF			
<u>F12030DD</u>	3.0	0.5	\$158.00	PDF			
<u>F12040DD</u>	4.0	0.5	\$160.00	PDF			
<u>F12050DD</u>	5.0	0.6	\$163.00	PDF			
<u>F12060DD</u>	6.0	0.6	\$165.00	PDF			
<u>F12080DD</u>	8.0	0.8	\$171.00	PDF			
<u>F12100DD</u>	10.0	0.8	\$175.00	PDF			
<u>F12120DD</u>	12.0	0.9	\$181.00	PDF			
	Specifications						
300 series stainless steel	cylinder body	0.40 sq. in. piston area					
Rod diameter 1/4 in.		Rod thread 1/4-28					
300 series stainless steel	end caps	Pre-lubricated for maintenance-free life					
300 series stainless 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 =	40.0 lb.	Retract force at 10	Extend force at 100 psi = 40.0 lb. Retract force at 100 psi = 35.1 lb.				

Mount Style		Bracket	Nut
Front Nose Mount		FMB-6	FN-58-18
Rear Pivot Mount		FPBP-2	-
Double End Mount	Front	<u>FMB-6</u>	FN-58-18
Double End Mount	Rear	<u>FMB-6</u>	FN-58-18

Cylinder rod clevis FRC-14-28

See end of F-series section for Accessories



F-Series All Stainless Steel Pneumatic Cylinders - 3/4 inch Bore

3/4 in. Bore, Double-acting, Double End Mount, Magnetic Piston

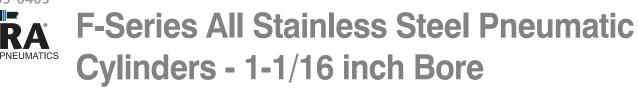


NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 3/4 inch bore, 1/8 inch female NPT ports, double acting, double end mount, magnetic piston.

3/4 in. bore,	All Stainless Steel Cylinder 3/4 in. bore, double acting, double end mount, magnetic piston					
Part Number	Stroke Length (in.)	Weight (lbs)	Price	Drawing Link		
<u>F12010DD-M</u>	1.0	0.3	\$166.00	PDF		
<u>F12020DD-M</u>	2.0	0.5	\$170.00	PDF		
<u>F12030DD-M</u>	3.0	0.5	\$172.00	<u>PDF</u>		
<u>F12040DD-M</u>	4.0	0.5	\$174.00	<u>PDF</u>		
<u>F12050DD-M</u>	5.0	0.6	\$176.00	<u>PDF</u>		
<u>F12060DD-M</u>	6.0	0.6	\$180.00	<u>PDF</u>		
F12080DD-M	8.0	0.8	\$184.00	PDF		
F12100DD-M	10.0	0.8	\$191.00	PDF		
<u>F12120DD-M</u>	12.0	0.9	\$196.00	PDF		
	Spe	cifications				
300 series stainless stee	el cylinder body	0.40 sq. in. piston ar	ea			
Rod diameter 1/4 in.	Rod diameter 1/4 in.		Rod thread 1/4-28			
300 series stainless stee	300 series stainless steel end caps		Pre-lubricated for maintenance-free life			
300 series stainless steel piston rod		Pressure rating 250 psi				
Low friction Buna-N seal	S	Temperature range -20°F to 185°F (-28 to 85°C)				
Extend force at 100 psi -	= 40.0 lb.	Retract force at 100	psi = 35.1 lb.			

Mount Style		Bracket	Nut
Front Nose Mou	ınt	FMB-6	FN-58-18
Rear Pivot Mount		FPBP-2	-
Double End Mount	Front	FMB-6	FN-58-18
	Rear	<u>FMB-6</u>	FN-58-18

Cylinder rod clevis FRC-14-28 See end of F-series section for Accessories



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



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

All Stainless Steel Cylinder					
1-1/16	in. bore, doubl			nt	
Part Number	Stroke Length (in.)	Weight (lbs)	Price	Drawing Link	
<u>F17005DN</u>	0.5	0.6	\$132.00	PDF	
<u>F17010DN</u>	1.0	0.6	\$134.00	PDF	
<u>F17020DN</u>	2.0	0.6	\$138.00	PDF	
<u>F17030DN</u>	3.0	0.8	\$140.00	PDF	
<u>F17040DN</u>	4.0	0.8	\$142.00	PDF	
<u>F17050DN</u>	5.0	0.9	\$146.00	PDF	
<u>F17060DN</u>	6.0	0.9	\$148.00	PDF	
<u>F17080DN</u>	8.0	1.1	\$152.00	PDF	
<u>F17100DN</u>	10.0	1.2	\$158.00	PDF	
<u>F17120DN</u>	12.0	1.4	\$164.00	PDF	
	Spec	ifications			
300 series stainless ste	el cylinder body	0.90 sq. in. piston area			
Rod diameter 5/16 in.	Rod diameter 5/16 in.		24		
300 series stainless ste	000 series stainless steel end caps		Pre-lubricated for maintenance-free life		
300 series stainless ste	300 series stainless steel piston rod		Pressure rating 250 psi		
Low friction Buna-N sea	na-N seals Temperature range -20°F to 200°F (-28 to 93°C)			93°C)	
Extend force at 100 psi	= 90.0 lb.	Retract force at 1	00 psi = 82.3 lb.		

Mount Style		Bracket	Nut
Front Nose Mou	ınt	<u>FMB-6</u>	FN-58-18
Rear Pivot Mou	ınt	-	_
Double End Mount	Front	-	-
Double End Mount	Rear	-	_

Cylinder rod clevis FRC-516-24 See end of F-series section for Accessories



PNEUMATICS

F-Series All Stainless Steel Pneumatic Cylinders - 1-1/16 inch Bore

1-1/16 in. Bore, Double-acting, Double End Mount



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/16 inch bore, 1/8 inch female NPT ports, double acting, double end mount.

All Stainless Steel Cylinder						
1 1/16			uble end moun			
Part Number	Stroke Length (in.)	Weight (lbs)	Price	Drawing Link		
<u>F17010DD</u>	1.0	0.6	\$161.00	PDF		
<u>F17020DD</u>	2.0	0.6	\$164.00	PDF		
<u>F17030DD</u>	3.0	0.8	\$166.00	PDF		
<u>F17040DD</u>	4.0	0.8	\$170.00	PDF		
<u>F17050DD</u>	5.0	0.9	\$172.00	PDF		
<u>F17060DD</u>	6.0	0.9	\$175.00	PDF		
<u>F17080DD</u>	8.0	1.1	\$181.00	PDF		
<u>F17100DD</u>	10.0	1.2	\$185.00	PDF		
<u>F17120DD</u>	12.0	1.4	\$191.00	PDF		
	Spe	cifications				
300 series stainless stee	el cylinder body	0.90 sq. in. piston a	rea			
Rod diameter 5/16 in.		Rod thread 5/16-24				
300 series stainless stee	300 series stainless steel end caps		Pre-lubricated for maintenance-free life			
300 series stainless steel piston rod		Pressure rating 250 psi				
Low friction Buna-N sea	ls	Temperature range -20°F to 200°F (-28 to 93°C)				
Extend force at 100 psi	= 90.0 lb.	Retract force at 100	psi = 82.3 lb.			

Mount Style		Bracket	Nut
Front Nose Mou	Int	FMB-6	FN-58-18
Rear Pivot Mount		FPBP-2	-
Double End Mount	Front	FMB-6	FN-58-18
Double End Mount Rear		<u>FMB-6</u>	FN-58-18

Cylinder rod clevis FRC-516-24 See end of F-series section for Accessories



F-Series All Stainless Steel Pneumatic Cylinders - 1-1/16 inch Bore

1-1/16 in. Bore, Double-acting, Double End Mount, Magnetic Piston



NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/16 inch bore, 1/8 inche female NPT ports, double acting, double end mount, magnetic piston.

All Stainless Steel Cylinder					
1-1/16 in h	pre, double acti			netic niston	
Part Number	Stroke Length (in.)	Weight (lbs)	Price	Drawing Link	
<u>F17010DD-M</u>	1.0	0.6	\$180.00	PDF	
<u>F17020DD-M</u>	2.0	0.6	\$182.00	PDF	
<u>F17030DD-M</u>	3.0	0.8	\$184.00	PDF	
<u>F17040DD-M</u>	4.0	0.8	\$188.00	PDF	
<u>F17050DD-M</u>	5.0	0.9	\$191.00	PDF	
<u>F17060DD-M</u>	6.0	0.9	\$193.00	PDF	
<u>F17080DD-M</u>	8.0	1.1	\$198.00	PDF	
<u>F17100DD-M</u>	10.0	1.2	\$204.00	PDF	
<u>F17120DD-M</u>	12.0	1.4	\$208.00	PDF	
	S	pecification	S		
300 series stainless s	teel cylinder body	0.90 sq. in. piston a	rea		
Rod diameter 5/16 in.		Rod thread 5/16-24			
300 series stainless s	teel end caps	Pre-lubricated for maintenance-free life			
300 series stainless s	teel piston rod	Pressure rating 250 psi			
Low friction Buna-N s	eals	Temperature range -20°F to 185°F (-28 to 85°C)			
Extend force at 100 p	si = 90.0 lb.	Retract force at 100	psi = 82.3 lb.		

Mount Style		Bracket	Nut
Front Nose Mount		FMB-6	FN-58-18
Rear Pivot Mount		FPBP-2	-
Front		FMB-6	FN-58-18
Double End Mount	Rear	FMB-6	FN-58-18

Cylinder rod clevis FRC-516-24 See end of F-series section for Accessories



F-Series All Stainless Steel Pneumatic Cylinders - 1-1/2 inch Bore

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 inch female NPT ports, double acting, front nose mount.

1 1/0 :	All Stainless				
Part Number	n. bore, double Stroke Length (in.)	Weight (lbs)	Price	Drawing Link	
F24010DN	1.0	1.2	\$149.00	PDF	
F24015DN	1.5	1.2	\$151.00	PDF	
F24020DN	2.0	1.4	\$154.00	PDF	
<u>F24030DN</u>	3.0	1.4	\$158.00	<u>PDF</u>	
<u>F24040DN</u>	4.0	1.5	\$161.00	PDF	
F24050DN	5.0	1.6	\$165.00	PDF	
F24060DN	6.0	1.8	\$171.00	PDF	
F24080DN	8.0	2.0	\$178.00	PDF	
<u>F24100DN</u>	10.0	2.3	\$185.00	PDF	
F24120DN	12.0	2.5	\$195.00	PDF	
	Speci	fications			
300 series stainless ste	el cylinder body	1.7 sq. in. piston area			
Rod diameter 7/16 in.		Rod thread 7/16-20			
300 series stainless steel end caps		Pre-lubricated for maintenance-free life			
300 series stainless steel piston rod		Pressure rating 250 psi			
Low friction Buna-N sea	als	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 Mou	ınt	<u>FMB-7</u>	FN-34-16
Rear Pivot Mount		-	-
Front Front		-	-
Double End Mount	Rear	-	-

Cylinder rod clevis FRC-716-20

See end of F-series section for Accessories



F-Series All Stainless Steel Pneumatic Cylinders - 1-1/2 inch Bore

1-1/2 in. Bore, Double-acting, Double End Mount



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

All Stainless Steel Cylinder						
1 1/2	in. bore, double					
Part Number	Stroke Length (in.)	Weight (lbs)	Price	Drawing Link		
<u>F24010DD</u>	1.0	1.2	\$172.00	PDF		
<u>F24020DD</u>	2.0	1.4	\$176.00	PDF		
F24030DD	3.0	1.5	\$181.00	PDF		
<u>F24040DD</u>	4.0	1.7	\$184.00	PDF		
F24050DD	5.0	1.7	\$188.00	PDF		
<u>F24060DD</u>	6.0	1.8	\$192.00	PDF		
<u>F24080DD</u>	8.0	2.1	\$200.00	PDF		
<u>F24100DD</u>	10.0	2.3	\$208.00	PDF		
F24120DD	12.0	2.6	\$217.00	PDF		
	Spec	ifications				
300 series stainless stee	el cylinder body	1.7 sq. in. piston area				
Rod diameter 7/16 in.		Rod thread 7/16-20				
300 series stainless steel end caps		Pre-lubricated for maintenance-free life				
300 series stainless steel piston rod		Pressure rating 250 psi				
Low friction Buna-N sea	ls	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 Mou	ınt	<u>FMB-7</u>	FN-34-16
Rear Pivot Mount		FPBP-3	-
Double End Mount	Front	FMB-7	FN-34-16
	Rear	FMB-7	FN-34-16

Cylinder rod clevis FRC-716-20

See end of F-series section for Accessories



F-Series All Stainless Steel Pneumatic Cylinders - 1-1/2 inch Bore

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



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

All Stainless Steel Cylinder 1-1/2 in. bore, double acting, double end mount, magnetic						
piston						
Part Number	Stroke Length (in.)	Weight (lbs)	Price	Drawing Link		
<u>F24010DD-M</u>	1.0	1.2	\$193.00	PDF		
<u>F24020DD-M</u>	2.0	1.4	\$198.00	PDF		
<u>F24030DD-M</u>	3.0	1.5	\$201.00	PDF		
<u>F24040DD-M</u>	4.0	1.7	\$209.00	PDF		
<u>F24050DD-M</u>	5.0	1.7	\$209.00	<u>PDF</u>		
<u>F24060DD-M</u>	6.0	1.8	\$215.00	PDF		
<u>F24080DD-M</u>	8.0	2.1	\$222.00	PDF		
<u>F24100DD-M</u>	10.0	2.3	\$231.00	PDF		
<u>F24120DD-M</u>	12.0	2.6	\$244.00	PDF		
	Speci	fications				
300 series stainless steel c	ylinder body	1.7 sq. in. piston area				
Rod diameter 7/16 in.		Rod thread 7/16-20				
300 series stainless steel end caps		Pre-lubricated for maintenance-free life				
300 series stainless steelpiston rod		Pressure rating 250 psi				
Low friction Buna-N seals		Temperature range -20°F to 185°F (-28 to 85°C)				
Extend force at 100 psi = 170.0 lb. Retract force at 100 psi = 155.0 lb.						

Mount Style		Bracket	Nut
Front Nose Mount		FMB-7	FN-34-16
Rear Pivot Mount		FPBP-3	-
Double End Mount		FMB-7	FN-34-16
Double Ella Moulli	Rear	FMB-7	FN-34-16

Cylinder rod clevis FRC-716-20 See end of F-series section for Accessories



F-Series All Stainless Steel Pneumatic Cylinders - 2 inch Bore

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



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

	All Stainless Steel Cylinder						
2 ir	<u>ı. bore, double a</u>	<u>icting, front r</u>	<u>iose mount</u>				
Part Number	Stroke Length (in.)	Weight (lbs)	Price	Drawing Link			
<u>F32010DN</u>	1.0	2.4	\$161.00	PDF			
<u>F32020DN</u>	2.0	2.6	\$166.00	PDF			
<u>F32030DN</u>	3.0	2.9	\$172.00	PDF			
<u>F32040DN</u>	4.0	3.0	\$175.00	PDF			
<u>F32050DN</u>	5.0	3.3	\$181.00	PDF			
<u>F32060DN</u>	6.0	3.5	\$185.00	PDF			
	Spec	ifications					
300 series stainless stee	l cylinder body	3.1 sq. in. piston area					
Rod diameter 5/8 in.		Rod thread 1/2-20					
300 series stainless steel end caps		Pre-lubricated for maintenance-free life					
300 series stainless 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 = 310.0 lb.		Retract force at 100 psi = 279.3 lb.					

Mount Style		Bracket	Nut
Front Nose Mount		<u>FMB-11</u>	FN-114-12
Rear Pivot Mount		-	-
Pouble Fred Mount Front		-	-
Double End Mount	Rear	_	-

Cylinder rod clevis FRC-12-20

See end of F-series section for Accessories



F-Series All Stainless Steel Pneumatic Cylinders - 2 inch Bore

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



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

0 in		s Steel Cylin				
Part Number	. bore, double at Stroke Length (in.)	Weight (lbs)	Price	Drawing Link		
<u>F32010DD</u>	1.0	2.7	\$185.00	PDF		
<u>F32020DD</u>	2.0	2.8	\$191.00	PDF		
<u>F32030DD</u>	3.0	3.2	\$195.00	PDF		
<u>F32040DD</u>	4.0	3.3	\$199.00	PDF		
<u>F32050DD</u>	5.0	3.6	\$205.00	PDF		
<u>F32060DD</u>	6.0	3.8	\$208.00	PDF		
<u>F32080DD</u>	8.0	4.2	\$218.00	PDF		
<u>F32100DD</u>	10.0	4.6	\$228.00	PDF		
<u>F32120DD</u>	12.0	5.1	\$235.00	PDF		
<u>F32140DD</u>	14.0	5.6	\$159.00	PDF		
<u>F32160DD</u>	16.0	6.0	\$255.00	PDF		
<u>F32180DD</u>	18.0	6.5	\$265.00	PDF		
	Spec	ifications				
300 series stainless stee	el cylinder body	3.1 sq. in. piston area				
Rod diameter 5/8 in.		Rod thread 1/2-20				
300 series stainless steel end caps		Pre-lubricated for maintenance-free life				
300 series stainless 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 :	= 310.0 lb.	Retract force at 100 psi = 279.3 lb.				

Mount Style		Bracket	Nut	
Front Nose Mount		FMB-11	FN-114-12	
Rear Pivot Mount		FPBP-4	-	
Double End Mount	Front	<u>FMB-11</u>	FN-114-12	
Double End Mount	Rear	<u>FMB-11</u>	FN-114-12	

Cylinder rod clevis FRC-12-20 See end of F-series section for Accessories



F-Series All Stainless Steel 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 inch female NPT ports, double acting, double end mount, magnetic piston.

All Stainless Steel Cylinder					
2 in. bore, do	buble acting, do	uble end mo	<mark>unt, magnetic</mark>	piston	
Part Number	Stroke Length (in.)	Weight (lbs)	Price	Drawing Link	
<u>F32010DD-M</u>	1.0	2.7	\$210.00	PDF	
<u>F32020DD-M</u>	2.0	2.8	\$215.00	PDF	
<u>F32030DD-M</u>	3.0	3.2	\$223.00	PDF	
<u>F32040DD-M</u>	4.0	3.3	\$224.00	PDF	
<u>F32050DD-M</u>	5.0	3.6	\$229.00	PDF	
<u>F32060DD-M</u>	6.0	3.8	\$233.00	PDF	
<u>F32080DD-M</u>	8.0	4.2	\$242.00	PDF	
<u>F32100DD-M</u>	10.0	4.6	\$253.00	PDF	
<u>F32120DD-M</u>	12.0	5.0	\$261.00	PDF	
<u>F32140DD-M</u>	14.0	5.6	\$272.00	PDF	
<u>F32160DD-M</u>	16.0	6.0	\$280.00	PDF	
<u>F32180DD-M</u>	18.0	6.5	\$289.00	PDF	
	Spec	ifications			
300 series stainless stee	l cylinder body	3.10 sq. in. piston area			
Rod diameter 5/8 in.		Rod thread 1/2-20			
300 series stainless steel end caps		Pre-lubricated for maintenance-free life			
300 series stainless stee	l piston rod	Pressure rating 250 psi			
Low friction Buna-N seal	S	Temperature range -20°F to 185°F (-28 to 85°C)			
Extend force at 100 psi = 310 lb. Retract force at 100 psi = 279.3 lb.					

Mount Style		Bracket	Nut	
Front Nose Mount		<u>FMB-11</u>	FN-114-12	
Rear Pivot Mount		FPBP-4	-	
Double End Mount	Front	<u>FMB-11</u>	FN-114-12	
Double Ella Moulli	Rear	<u>FMB-11</u>	FN-114-12	

Cylinder rod clevis FRC-12-20 See end of F-series section for Accessories



F-Series All Stainless Steel Pneumatic Cylinder Accessories

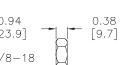
	F-Series All Stainless Steel Pneumatic Cylinder Accessories					
Part Number	Description	Pcs/Pkg	Wt (lb)	Price		
<u>FN-58-18</u>	Cylinder mounting nut with 5/8-18 UNF-2B threads, stainless steel, used to mount 3/4 and 1-1/16 inch bore NITRA F-series round body air cylinders	1	0.1	\$3.75		
<u>FN-34-16</u>	Cylinder mounting nut with 3/4-16 UNF-2B threads, stainless steel, used to mount 1-1/2 inch bore NITRA F-series round body air cylinders	1	0.1	\$5.00		
<u>FN-114-12</u>	Cylinder mounting nut with 1-1/4-12 UNF-2B threads, stainless steel, used to mount 2 inch bore NITRA F-series round body air cylinders	1	0.3	\$12.00		
<u>FMB-6</u>	Cylinder mounting bracket, stainless steel, used to mount 3/4 and 1-1/16 inch bore NITRA F-series round body air cylinders	1	0.1	\$11.00		
<u>FMB-7</u>	Cylinder mounting bracket, stainless steel, used to mount 1-1/2 inch bore NITRA F-series round body air cylinders	1	0.2	\$33.50		
<u>FMB-11</u>	Cylinder mounting bracket, stainless steel, used to mount 2 inch bore NITRA F-series round body air cylinders	1	0.5	\$48.00		
FPBP-2	Cylinder pivot mounting bracket with pivot pin, stainless steel, used to mount 3/4 and 1-1/16 inch bore NITRA F-series round body air cylinders	1	0.1	\$30.50		
<u>FPBP-3</u>	Cylinder pivot mounting bracket with pivot pin, stainless steel, used to mount 1-1/2 inch bore NITRA F-series round body air cylinders	1	0.2	\$38.50		
<u>FPBP-4</u>	Cylinder pivot mounting bracket with pivot pin, stainless steel, used to mount 2 inch bore NITRA F-series round body air cylinders	1	0.3	\$47.00		
<u>FRC-14-28</u>	Cylinder rod clevis and hex nut, stainless steel, 1/4-28 thread, for use with 3/4 inch bore NITRA F-series round body air cylinders	1	0.1	\$39.50		
FRC-516-24	Cylinder rod clevis and hex nut, stainless steel, 5/16-24 thread, for use with 1-1/16 inch bore NITRA F-series round body air cylinders	1	0.1	\$44.50		
<u>FRC-716-20</u>	Cylinder rod clevis and hex nut, stainless steel, 7/16-20 thread, for use with 1-1/2 inch bore NITRA F-series round body air cylinders	1	0.2	\$55.00		
<u>FRC-12-20</u>	Cylinder rod clevis and hex nut, stainless steel, 1/2-20 thread, for use with 2 inch bore NITRA F-series round body air cylinders	1	0.2	\$65.00		

Dimensions

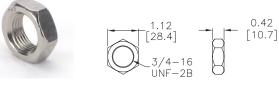
inches [mm]











FN-114-12

FMB-6





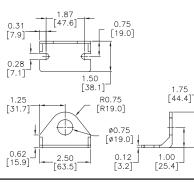
F-Series All Stainless Steel Pneumatic Cylinder Accessories

Dimensions

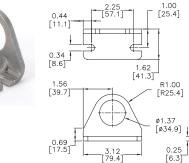
inches [mm]

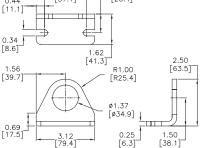
FMB-7





FMB-11



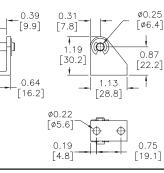


FPBP-2

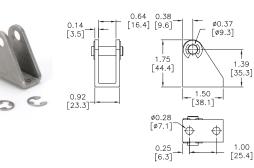


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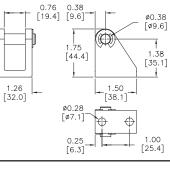


FPBP-3

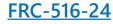


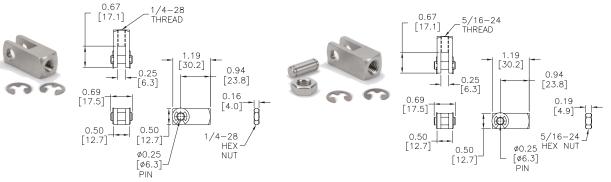
FPBP-4





FRC-14-28







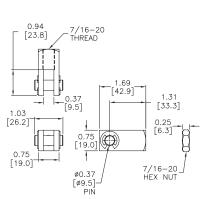
F-Series All Stainless Steel Pneumatic Cylinder Accessories

Dimensions

inches [mm]

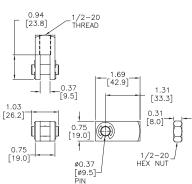
FRC-716-20





FRC-12-20







Pneumatic Cylinders - C-Series

Nitra Pneumatic Compact Air Cylinders

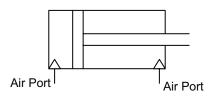
The NITRA Pneumatics C-Series compact cylinders includes bore sizes from 9/16" to 3" and stroke lengths from 1/4" to 4" to meet a broad range of applications where space is limited. These high quality cylinders are constructed with stainless steel bodies and high strength aluminum alloy end caps. To 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 compact piston is securely connected to a piston rod that is ground and polished 303 stainless steel. Oil impregnated bronze rod guide bushing and Buna-N o-ring piston and rod seals ensure smooth reliable operation.

Features

- Interchangeable with other common brands of compact cylinders
- Available bore sizes: 9/16", 3/4", 1-1/16", 1-1/2", 2", 2-1/2", 3"
- Excellent selection of stroke lengths
- All models are double-acting
- · Head and tail caps drilled for mounting
- Type 304 stainless steel body with high-strength aluminum alloy end caps
- Factory lubricated for long, low-maintenance operation
- 200 psi operating pressure (150 psi for 2" and larger bores)
- All models are available for same-day shipment
- Made in the USA

Operation

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.

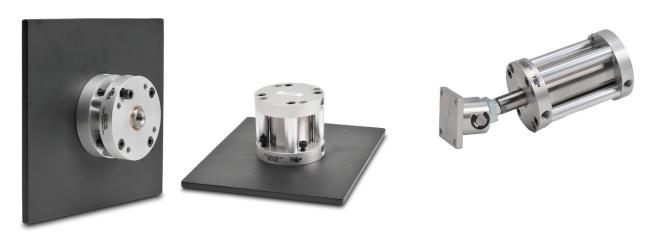


Double-Acting Cylinder (Force in Push and Pull Direction)

Mounting Options

Plate mount: The cylinder has holes that allow easy mounting to a plate or other surfaces.

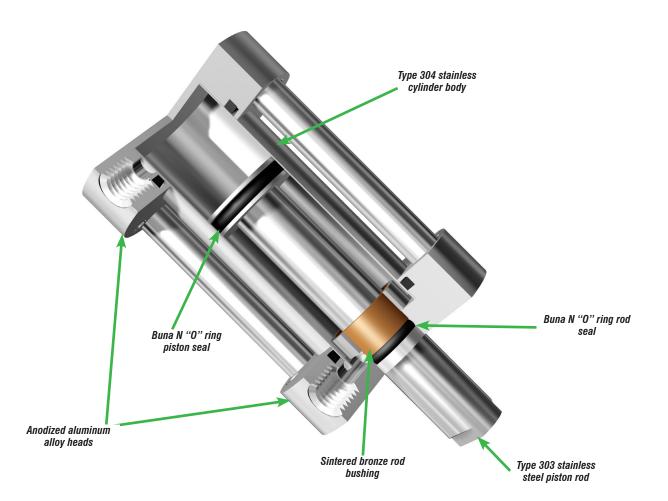
Clevis bracket mount uses a bracket that allows a pivoted mount.Clevis Bracket part number is CCB-40.





C-Series Compact Pneumatic Cylinders

Cylinder Features





C-Series Pneumatic Cylinders 9/16 inch Bore

Double-acting



NITRA pneumatic cylinder, stainless steel body, 9/16 inch bore, #10-32 ports, double-acting, single end rod, counter-bored mounting holes, interchangeable with other brands. 2-year warranty.

Accessories

Part No.	Description	Price
<u>CCB-17</u>	Clevis bracket, anodized aluminum, stainless steel pin, for use with 9/16, 3/4 and 1-1/16 inch bore NITRA C-series compact cylinders	\$26.50
<u>CRP-09</u>	Rod eye, #8-32 UNC threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 9/16 inch bore NITRA C-series compact cylinders	\$17.00

See end of C-Series cylinder section for additional accessory details.

Dimensions

Part Number

C090025D

C09005D

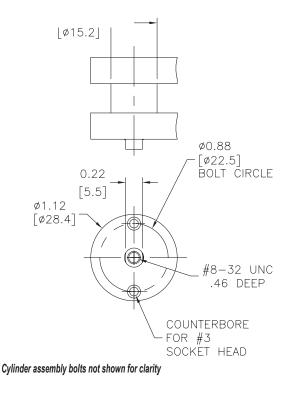
304 SS cylinder body

303 SS piston rod

Buna-N o-ring seals

High strength aluminum end caps

Extend force at 100 psi = 25.0 lb.



Cylinder, 9/16 in. bore, double-acting

Specifications

66°C)

"A" (in)

0.81

1.06

0.25 sq. in. piston area

Pressure rating 200 psi

Stroke Length (in.)

0.25

0.50

Weight (lb)

0.09

0.10

Pre-lubricated for maintenance-free life

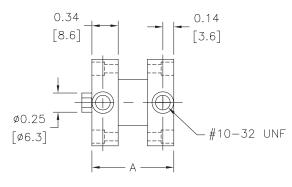
Retract force at 100 psi = 19.9 lb.

Temperature range -20°F to 150°F (-28° to

Price

\$59.00

\$59.00



Dimensions inches [mm]





C-Series Pneumatic Cylinders 3/4 inch Bore

NITRA pneumatic cylinder, stainless steel body, 3/4 inch bore, #10-32 ports, doubleacting, single end rod, counter-bored mounting holes, interchangeable with other brands. 2-year warranty.

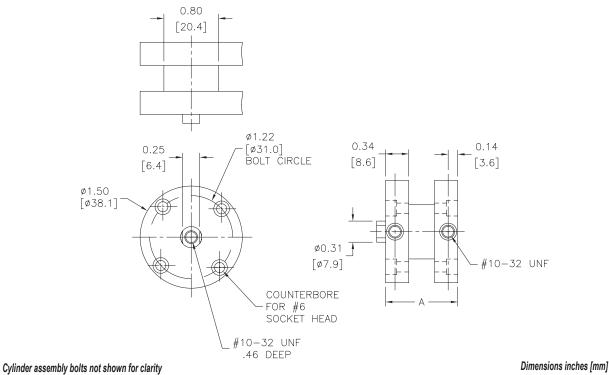
Accessories

Cy	linder, 3/4 in.	bore, doub	le-acting	
Part Number	Stroke Length (in.)	"A" (in.)	Weight (lb.)	Price
<u>C12005D</u>	0.50	1.06	0.14	\$61.00
<u>C120075D</u>	0.75	1.31	0.16	\$62.00
<u>C12010D</u>	1.00	1.56	0.17	\$64.00
<u>C12015D</u>	1.50	2.06	0.19	\$66.00
	Speci	fications		
304 SS cylinder body 0.44 sq. in. piston area				
High strength aluminu	im end caps	Pre-lubricated for	maintenance-free life	•
303 SS piston rod Pressure rating 200 psi				
Buna-N o-ring seals Temperature range -20°F to 150°F (-28° to 66°			3° to 66°C)	
Extend force at 100 p	Extend force at 100 psi = 44.2 lb. Retract force at 100 psi = 36.5 lb.			

	Description	Price
<u>CCB-17</u>	Clevis bracket, anodized aluminum, stainless steel pin, for use with 9/16, 3/4 and 1-1/16 inch bore NITRA C-series compact cylinders	\$26.50
<u>CRP-12</u>	Rod eye, #10-32 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 3/4 inch bore NITRA C-series compact cylinders	\$19.00

See end of C-Series cylinder section for additional accessory details.

Dimensions



www.automationdirect.com





C-Series Pneumatic Cylinders 1-1/16 inch Bore

> NITRA pneumatic cylinder, stainless steel body, 1-1/16 inch bore, 1/8 inch NPT ports, double-acting, single end rod, counter-bored mounting holes, interchangeable with other brands. 2-year warranty.

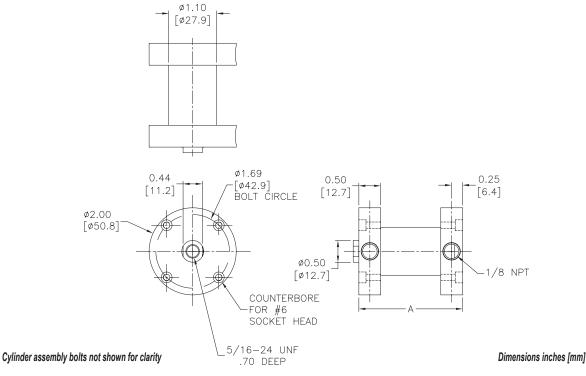
Accessories

Cyli	Cylinder, 1-1/16 in. bore, double-acting				
Part Number	Stroke Length (in.)	"A" (in.)	Weight (lb.)	Price	
<u>C170025D</u>	0.25	1.13	0.34	\$78.00	
<u>C17005D</u>	0.50	1.38	0.38	\$78.00	
<u>C170075D</u>	0.75	1.63	0.42	\$78.00	
<u>C17010D</u>	1.00	1.88	0.46	\$80.00	
<u>C17015D</u>	1.50	2.38	0.53	\$81.00	
<u>C17020D</u>	2.00	2.88	0.61	\$83.00	
<u>C17025D</u>	2.50	3.38	0.68	\$85.00	
<u>C17030D</u>	3.00	3.88	0.76	\$90.00	
	Speci	fications			
304 SS cylinder body		0.89 sq. in. piston area			
High strength aluminum end caps		Pre-lubricated for maintenance-free life			
303 SS steel piston rod		Pressure rating 200 psi			
Buna-N o-ring seals		Temperature range -20°F to 150°F (-28° to 66°C)			
Extend force at 100 p	si = 88.7 lb.	Retract force at 100 psi = 69.0 lb.			

Part No.	Description	Price
<u>CCB-17</u>	Clevis bracket, anodized aluminum, stainless steel pin, for use with 9/16, 3/4 and 1-1/16 inch bore NITRA C-series compact cylinders	\$26.50
<u>CRP-17</u>	Rod eye, 5/16-24 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 1-1/16 inch bore NITRA C-series compact cylinders	\$18.00

See end of C-Series cylinder section for additional accessory details.

Dimensions



www.automationdirect.com



C-Series Pneumatic Cylinders 1-1/2 inch Bore



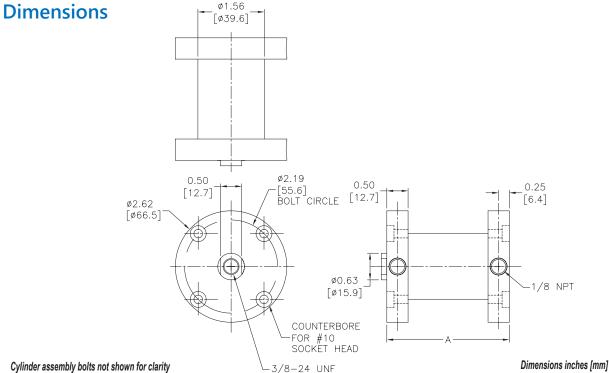
NITRA pneumatic cylinder, stainless steel body, 1-1/2 inch bore, 1/8 inch NPT ports, double-acting, single end rod, counter-bored mounting holes, interchangeable with other brands. 2-year warranty.

Accessories

inder, 1-1/2 in	. bore, dou	ble-acting		
Stroke Length (in.)	"A" (in.)	Weight (lb.)	Price	
0.50	1.38	0.70	\$95.00	
0.75	1.63	0.75	\$95.00	
1.00	1.88	0.80	\$96.00	
1.50	2.38	0.90	\$100.00	
2.00	2.88	1.00	\$104.00	
2.50	3.38	1.10	\$107.00	
3.00	3.88	1.20	\$112.00	
3.50	4.38	1.30	\$116.00	
4.00	4.88	1.40	\$119.00	
Speci	fications			
	1.77 sq. in. piston area			
um end caps	Pre-lubricated for maintenance-free life			
303 SS piston rod		Pressure rating 200 psi		
Buna-N o-ring seals		Temperature range -20°F to 150°F (-28° to 66°C)		
si = 176.7 lb.	Retract force at 10	00 psi = 146.0 lb.		
	Stroke Length (in.) 0.50 0.75 1.00 1.50 2.00 2.50 3.00 3.50 4.00 Speci am end caps	Stroke Length (in.) "A" (in.) 0.50 1.38 0.75 1.63 1.00 1.88 1.50 2.38 2.00 2.88 2.50 3.38 3.00 3.88 3.50 4.38 4.00 4.88 Specifications 1.77 sq. in. piston am end caps Pre-lubricated for Pressure rating 20 Temperature rang	0.50 1.38 0.70 0.75 1.63 0.75 1.00 1.88 0.80 1.50 2.38 0.90 2.00 2.88 1.00 2.50 3.38 1.10 3.00 3.88 1.20 3.50 4.38 1.30 4.00 4.88 1.40 Specifications 1.77 sq. in. piston area In end caps Pre-lubricated for maintenance-free life Pressure rating 200 psi Temperature range -20°F to 150°F (-26)	

Part No.	Description	Price
<u>CCB-40</u>	Clevis bracket, anodized aluminum, stainless steel pin, for use with 1-1/2, 2 and 2-1/2 inch bore NITRA C-series compact cylinders	\$38.00
<u>CRP-24</u>	Rod eye, 3/8-24 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 1-1/2 inch bore NITRA C-series compact cylinders	\$19.50

See end of C-Series cylinder section for additional accessory details.







C-Series Pneumatic Cylinders 2 inch Bore

NITRA pneumatic cylinder, stainless steel body, 2 inch bore, 1/8 inch NPT ports, double-acting, single end rod, counter-bored mounting holes, interchangeable with other brands. 2-year warranty.

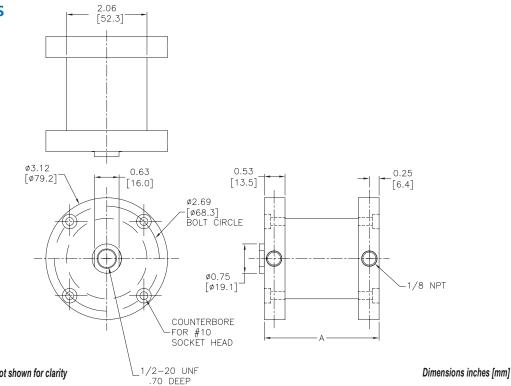
Accessories

details.

C	ylinder, 2 in. b	ore, doubl	e-acting		
Part Number	Stroke Length (in.)	"A" (in.)	Weight (lb.)	Price	
<u>C32005D</u>	0.50	1.44	0.94	\$112.00	
<u>C320075D</u>	0.75	1.69	1.00	\$113.00	
<u>C32010D</u>	1.00	1.94	1.06	\$114.00	
<u>C32015D</u>	1.50	2.44	1.19	\$120.00	
<u>C32020D</u>	2.00	2.94	1.31	\$127.00	
<u>C32025D</u>	2.50	3.44	1.44	\$131.00	
<u>C32030D</u>	3.00	3.94	1.56	\$137.00	
<u>C32035D</u>	3.50	4.44	1.69	\$143.00	
	Speci	fications			
304 SS cylinder body		3.14 sq. in. piston area			
High strength aluminu	High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 150 psi			
Buna-N o-ring seals		Temperature range -20°F to 150°F (-28° to 66°C)			
Extend force at 100 p	si = 314.2 lb.	Retract force at 100 psi = 270.0 lb.			

Part No.	Description	Price		
<u>CCB-40</u>	Clevis bracket, anodized aluminum, stainless steel pin, for use with 1-1/2, 2 and 2-1/2 inch bore NITRA C-series compact cylinders	\$38.00		
<u>CRP-40</u>	Rod eye, 1/2-20 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 2 or 2-1/2 inch bore NITRA C-series compact cylinders	\$19.50		
See end of C-Se	See end of C-Series cylinder section for additional accessory			

Dimensions





C-Series Pneumatic Cylinders 2-1/2 inch Bore

Double-acting



Dimensions

NITRA pneumatic cylinder, stainless steel body, 2-1/2 inch bore, 1/4 inch NPT ports, double-acting, single end rod, counter-bored mounting holes, interchangeable with other brands. 2-year warranty.

Accessories

Cyl	inder, 2-1/2 in	. bore, dou	ble-acting		
Part Number	Stroke Length (in.)	"A" (in.)	Weight (lb.)	Price	
<u>C40005D</u>	0.50	1.69	1.55	\$142.00	
<u>C40010D</u>	1.00	2.19	1.70	\$148.00	
<u>C40020D</u>	2.00	3.19	2.00	\$157.00	
<u>C40025D</u>	2.50	3.69	2.15	\$166.00	
	Speci	fications			
304 SS cylinder body		4.91 sq. in. piston area			
High strength aluminu	um end caps	Pre-lubricated for maintenance-free life			
303 SS piston rod	303 SS piston rod		Pressure rating 150 psi		
Buna-N o-ring seals		Temperature range -20°F to 150°F (-28° to 66°C)			
Extend force at 100 psi = 490.1 lb. Retract force at 100 psi = 446.7 lb.					

ø2.56 [ø65.0]

Part No.	Description	Price
<u>CCB-40</u>	Clevis bracket, anodized aluminum, stainless steel pin, for use with 1-1/2, 2 and 2-1/2 inch bore NITRA C-series compact cylinders	\$38.00
<u>CRP-40</u>	Rod eye, 1/2-20 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 2 or 2-1/2 inch bore NITRA C-series compact cylinders	\$19.50

See end of C-Series cylinder section for additional accessory details.

0.63 ø3.25 0.66 0.33 [16.0] . [8.4] [Ø82.6] BOLT CIRCLE [16.8] ø3.75 [ø95.3] 1/4 NPT ø0.75 [ø19.1] COUNTERBORE FOR 1/4" SOCKET HEAD Dimensions inches [mm] -1/2-20 UNF





C-Series Pneumatic Cylinders 3 inch Bore

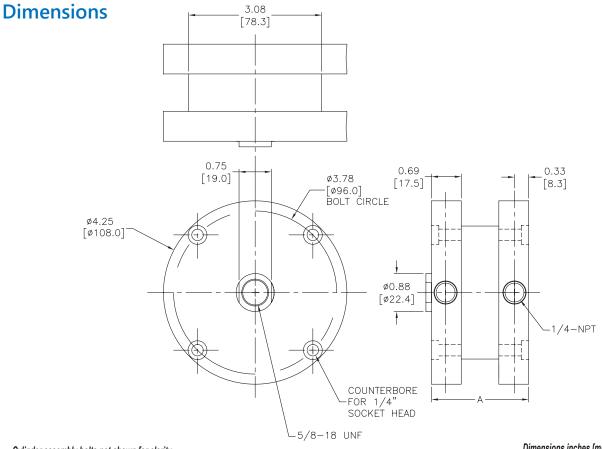
> NITRA pneumatic cylinder, stainless steel body, 3 inch bore, 1/4 inch NPT ports, double-acting, single end rod, counter-bored mounting holes, interchangeable with other brands. 2-year warranty.

Accessories

Cylinder, 3 in. bore, double-acting				
Part Number	Stroke Length (in.)	"A" (in.)	Weight (lb.)	Price
<u>C48005D</u>	0.50	1.75	2.01	\$170.00
<u>C48010D</u>	1.00	2.25	2.21	\$173.00
Specifications				
304 SS cylinder body 7.07 sq. in. piston area				
High strength aluminu	igh strength aluminum end caps Pre-lubricated for maintenance-free life			
303 SS steel piston rod		Pressure rating 150 psi		
Buna-N o-ring seals Temperature range -20°F to 150°F (-28° to 66		3° to 66°C)		
Extend force at 100 psi = 706.9 lb. Retract force at 100 psi = 646.7 lb.				



See end of C-Series cylinder section for additional accessory details.





C-Series Pneumatic Cylinders Accessories

	C-Series Pneumatic Cylinder Accessories							
Part Number	Description	Pcs/Pkg	Wt (lb)	Price				
<u>CCB-17</u>	Clevis bracket, anodized aluminum, stainless steel pin, for use with CRP-09, CRP-12 or CRP-17 Rod Eyes	1	0.20	\$26.50				
<u>CCB-40</u>	Clevis bracket, anodized aluminum, stainless steel pin, for use with CRP-24 or CRP-40 Rod Eyes	1	0.30	\$38.00				
<u>CCB-48</u>	Clevis bracket, anodized aluminum, stainless steel pin, for use with CRP-48 Rod Eye	1	0.40	\$50.00				
<u>CRP-09</u>	Rod eye, #8-32 UNC threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 9/16 inch bore NITRA C-series compact cylinders	1	0.10	\$17.00				
<u>CRP-12</u>	Rod eye, #10-32 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 3/4 inch bore NITRA C-series compact cylinders	1	0.10	\$19.00				
<u>CRP-17</u>	Rod eye, 5/16-24 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 1-1/16 inch bore NITRA C-series compact cylinders	1	0.20	\$18.00				
<u>CRP-24</u>	Rod eye, 3/8-24 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 1-1/2 inch bore NITRA C-series compact cylinders	1	0.30	\$19.50				
<u>CRP-40</u>	Rod eye, 1/2-20 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 2 or 2-1/2 inch bore NITRA C-series compact cylinders	1	0.40	\$19.50				
<u>CRP-48</u>	Rod eye, 5/8-18 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 3 inch bore NITRA C-series compact cylinders	1	0.50	\$22.50				

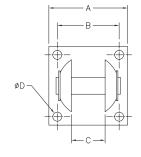


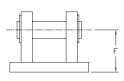
Photo shows C-series pneumatic cylinder with optional clevis bracket and rod eye.

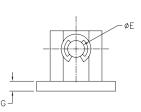
CCB Clevis Brackets



Part No. CCB-40







PART NUMBER	А	В	С	D	E	F	G
CCB-17	1.00 [25.4]	0.75 [19.1]	0.39 [9.9]	#6	0.19 [4.8]	0.56 [14.2]	0.16 [4.1]
CCB-40	1.75 [44.5]	1.38 [35.1]	0.75 [19.1]	#10	0.38 [9.7]	0.94 [23.9]	0.22 [5.6]
CCB-48	2.50 [63.5]	2.00 [50.8]	1.00 [25.4]	0.25 [6.4]	0.63 [16.0]	1.25 [31.8]	0.25 [6.4]

Dimensions inches [mm]

ØD

↓ E



C-Series Pneumatic Cylinders Accessories

CRP Rod Eyes



Part No. CRP-24

PART NUMBER	CYLINDER BORE SIZE	THREAD SIZE	А	В	С	ØD	E
CRP-09	9/16" [14.3]	#8-32 UNC	0.38 [9.6]	0.47 [11.9]	0.25 [6.4]	0.19 [4.8]	0.38 [9.6]
CRP-12	3/4" [19.1]	#10-32 UNF	0.38 [9.6]	0.47 [11.9]	0.25 [6.4]	0.19 [4.8]	0.38 [9.6]
CRP-17	1 1/16" [27.0]	5/16-24 UNF	0.63 [16.0]	0.47 [11.9]	0.25 [6.4]	0.19 [4.8]	0.38 [9.6]
CRP-24	1 1/2" [38.1]	3/8-24 UNF	0.63 [16.0]	0.72 [18.3]	0.44 [11.2]	0.38 [9.6]	0.75 [19.1
CRP-40	2.00" [50.8]	1/2-20 UNF	0.75 [19.1]	0.72 [18.3]	0.44 [11.2]	0.38 [9.6]	0.75 [19.1
CRP-40	2 1/2" [63.5]	1/2-20 UNF	0.75 [19.1]	0.72 [18.3]	0.44 [11.2]	0.38 [9.6]	0.75 [19.1
CRP-48	3.00" [76.2]	5/8-18 UNF	0.88 [22.4]	1.00 [25.4]	0.63 [16.0]	0.63 [16.0]	1.00 [25.4

- A ---

Dimensions inches [mm]



D2-Series Heavy Duty PNEUMATICS Pneumatic Cylinders Nitra Heavy Duty Pneumatic Air Cylinders

The NITRA Pneumatics D2-Series heavy duty cylinders include bore sizes from 1-1/2" to 4" and stroke lengths from 1" to 32" to meet a broad range of applications where abusive conditions exist. These NFPA heavy duty cylinders are constructed with high quality aluminum components and a magnetic piston fitted with a PTFE wear band.

The cylinders feature flush-mount sleeve nuts on the tie rods and are fitted with a PTFE coated cast iron bushing. This bearing ensures smooth rod motion while maintaining rod rigidity and stability.

All D2-Series cylinders have a magnetic piston that can be used along with solid state or reed switches for rod position sensing. The solid state and reed switches sense the rod position by emitting an electrical signal when the magnetized piston reaches a point adjacent to their location. Tie rod mounting allows fast and accurate positioning setup.

Cushioned cylinders are also available to provide end-of-

Operation

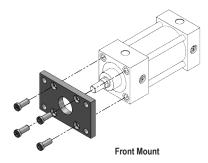
Double-acting cylinders have two compressed air ports. One of the ports will extend the rod in the "push" direction and the other port will retract the rod in the "pull" direction.

Mounting Options and Accessories

Front or Rear Flange Mount (MF1 or MF2)

For Front or Rear Flange mounting, use the Flange Mount Kit.

Use the drawings below for installation reference.

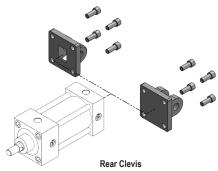




Rear Mount

Rear Clevis Mount (MP1 or MP2)

For Rear Clevis mounting, use the Rear Clevis Mount Kit. Use the drawing below for installation reference.





Click on the thumbnail or go to https://www.automationdirect.com/VID-PN-0047 for a short video on NITRA D2 Series Heavy Duty Cylinders.

stroke deceleration at both ends. The cushions decelerate the piston rod at the end-of-stroke and are adjustable with a flat head screwdriver.

Features

- Interchangeable with other popular brands of NFPA cylinders
- Available bore sizes: 1-1/2", 2", 2-1/2", 3-1/4", 4"
- Wide selection of stroke lengths
- · All models are double-acting
- · Head and end caps drilled for mounting
- All models have a magnetic piston
- PTFE coated cast iron bushing
- · 250 psi max operating pressure
- Some models available with adjustable cushions (both ends)

Air Port

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

Air Port

- · Made in the USA
- · All models are typically available for same-day shipment
- Temperature range is -20° F to 200° F

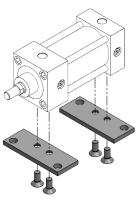


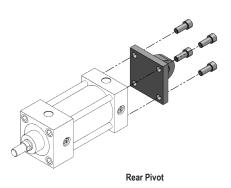
D2-Series Heavy Duty Pneumatic Cylinders

Base Mount Bracket (Non NFPA)

For base mounting, use the Base Mount Bracket Kit. Use the drawing below for installation reference. **Rear Pivot Mount (MP4)**

For Rear Pivot mounting, use the Pivot Attachment Kit. Use the drawing below for installation reference.





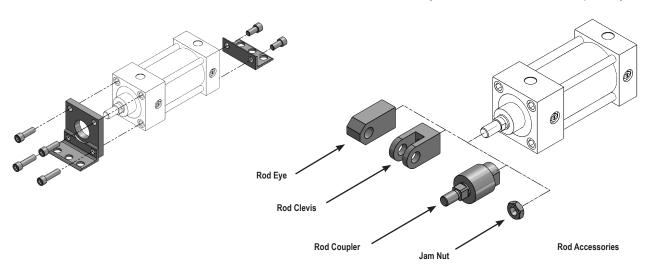
Base Mount

Angle Mount Bracket (MS1)

For angle mounting, use the Angle Mount Bracket Kit. Use the drawing below for installation reference.

Rod Accessories

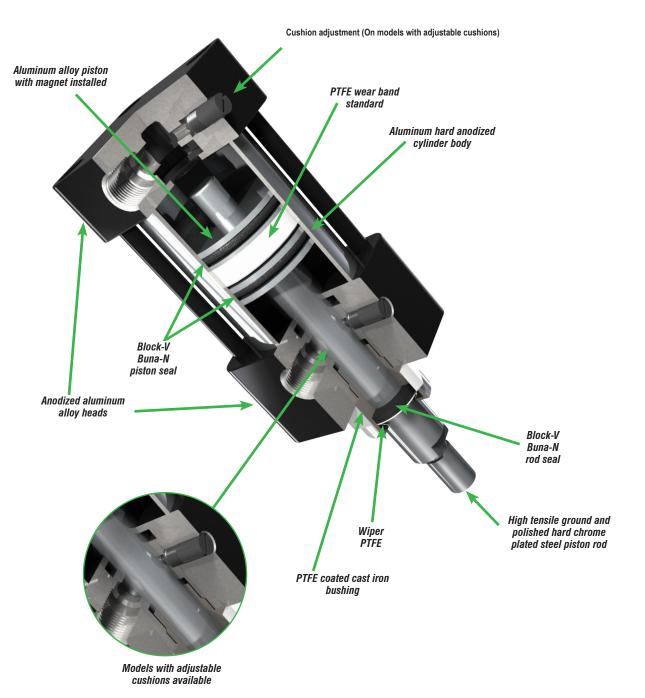
There is a Rod Eye, Rod Clevis and Self-Aligning Rod Coupler to fit each size piston rod. 7/16-20 thread size fits 1-1/2", 2" and 2-1/2" bore cylinders. 3/4-16 thread fits 3-1/4" and 4" bore cylinders. Jam nuts are sold separately.





D2-Series Heavy Duty Pneumatic Cylinders

Cylinder Features





D2-Series Heavy Duty Pneumatic PNEUMATICS Cylinders – 1-1/2 inch Bore 1-1/2 in. Bore, Double-acting, Tapped End Caps, Magnetic Piston



NITRA heavy duty pneumatic, NFPA interchangeable cylinder, 1-1/2" bore, 5/8" diameter piston rod, 7/16"-20 male threaded end, 1/4" female NPT ports, double acting, tapped end caps and one side for mount; flange, pivot and clevis mount options available. Some models available with cushions on both ends.

	1-1/2 in bore, double acting, tapped end caps							
Part Number no Cushions	Price	Drawing Link	Part Number w/ Cushions*	Price	Drawing Link	Stroke Length (in)	Weight (lb)	
<u>D224010DT-M</u>	\$231.00	PDF	D224010DT-MC	\$319.00	PDF	1	1.5	
<u>D224020DT-M</u>	\$239.00	PDF	D224020DT-MC	\$326.00	PDF	2	1.7	
<u>D224030DT-M</u>	\$246.00	PDF	D224030DT-MC	\$334.00	PDF	3	1.9	
<u>D224040DT-M</u>	\$253.00	PDF	D224040DT-MC	\$342.00	PDF	4	2.2	
<u>D224050DT-M</u>	\$262.00	PDF	D224050DT-MC	\$350.00	PDF	5	2.4	
<u>D224060DT-M</u>	\$269.00	PDF	D224060DT-MC	\$358.00	PDF	6	2.6	
<u>D224070DT-M</u>	\$277.00	PDF	D224070DT-MC	\$366.00	PDF	7	2.8	
<u>D224080DT-M</u>	\$284.00	PDF	D224080DT-MC	\$373.00	PDF	8	3.0	
<u>D224100DT-M</u>	\$300.00	PDF	D224100DT-MC	\$390.00	PDF	10	3.5	
<u>D224120DT-M</u>	\$314.00	PDF	D224120DT-MC	\$405.00	PDF	12	3.9	
<u>D224140DT-M</u>	\$331.00	PDF	D224140DT-MC	\$420.00	PDF	14	4.4	
<u>D224160DT-M</u>	\$345.00	PDF	D224160DT-MC	\$437.00	PDF	16	4.8	
<u>D224180DT-M</u>	\$360.00	PDF	D224180DT-MC	\$452.00	PDF	18	5.3	
<u>D224200DT-M</u>	\$376.00	PDF	D224200DT-MC	\$468.00	PDF	20	5.7	
<u>D224220DT-M</u>	\$391.00	PDF	D224220DT-MC	\$484.00	PDF	22	6.1	
D224240DT-M	\$405.00	PDF	D224240DT-MC	\$499.00	PDF	24	6.6	
D224280DT-M	\$437.00	PDF	D224280DT-MC	\$531.00	PDF	28	7.1	
<u>D224320DT-M</u>	\$466.00	PDF	D224320DT-MC	\$563.00	PDF	32	7.5	

* The cushions decelerate the piston rod over the last 11/16 inch (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile cushion seal.

Specifi	cations			
Aluminum hard anodized to 60 Rc cylinder body	1.77 sq. in. piston area			
Solid aluminum bar, black anodized end caps	Pressure rating 250 psi, AIR ONLY			
High tensile ground and polished hard chrome plated steel piston rod	Non-detergent petroleum based oil is recommended			
Low friction Buna-N seals	Temperature range -20°F to 200°F (-25 to 90°C)			
Extend force at 100 psi = 177 lb.	Retract force at 100 psi = 146 lb.			
Filtration: Not essential, however a standard 40 micron filter placed upstream will prolong seal life.				

Mou	ting Accord	ioo				
Mounting Accessories						
Style	NFPA Designation	Part No.				
Front Flange	MF1	D2FM-1				
Rear Flange	MF2	D2FM-1				
Rear Clevis	MP2	D2PC-1				
Rear Clevis Short	MP1	D2SPC-1				
Rear Pivot	MP4	D2PA-1				
Angle Mount	MS1	D2AM-1				
Base Mount	None	D2BB-1				

Rod A	Rod Accessories			
Style	Part No.			
Rod Clevis	D2RC-1			
Rod Eye	D2RE-1			
Rod Couplers	D2RCP-1			
Rod Nuts	D2-716-20			
Seal Kit	D2SK-24			



D2-Series Heavy Duty Pneumatic PNEUMATICS Cylinders – 2 inch Bore 2 in. Bore, Double-acting, Tapped End Caps, Magnetic Piston



NITRA heavy duty pneumatic, NFPA interchangeable cylinder, 2" bore, 5/8" diameter piston rod, 7/16"-20 male threaded end, 1/4" female NPT ports, double acting, tapped end caps and one side for mount, flange, pivot and clevis mount options available. Some models available with cushions on both ends.

	2 in bore, double acting, tapped end caps						
Part Number no Cushions	Price	Drawing Link	Part Number w/ Cushions*	Price	Drawing Link	Stroke Length (in)	Weight (lb)
<u>D232010DT-M</u>	\$264.00	PDF	-	-	-	1	2.5
<u>D232020DT-M</u>	\$272.00	PDF	<u>D232020DT-MC</u>	\$360.00	PDF	2	2.7
<u>D232030DT-M</u>	\$280.00	PDF	<u>D232030DT-MC</u>	\$369.00	PDF	3	2.9
<u>D232040DT-M</u>	\$288.00	PDF	D232040DT-MC	\$378.00	PDF	4	3.2
<u>D232050DT-M</u>	\$296.00	PDF	D232050DT-MC	\$385.00	PDF	5	3.4
<u>D232060DT-M</u>	\$306.00	PDF	<u>D232060DT-MC</u>	\$394.00	PDF	6	3.7
<u>D232070DT-M</u>	\$313.00	PDF	<u>D232070DT-MC</u>	\$403.00	PDF	7	3.9
<u>D232080DT-M</u>	\$321.00	PDF	D232080DT-MC	\$411.00	PDF	8	4.1
<u>D232100DT-M</u>	\$336.00	PDF	D232100DT-MC	\$428.00	PDF	10	4.6
<u>D232120DT-M</u>	\$353.00	PDF	<u>D232120DT-MC</u>	\$446.00	PDF	12	5.1
<u>D232140DT-M</u>	\$370.00	PDF	<u>D232140DT-MC</u>	\$461.00	PDF	14	5.6
<u>D232160DT-M</u>	\$385.00	PDF	D232160DT-MC	\$479.00	PDF	16	6.0
<u>D232180DT-M</u>	\$402.00	PDF	<u>D232180DT-MC</u>	\$496.00	PDF	18	6.5
<u>D232200DT-M</u>	\$418.00	PDF	<u>D232200DT-MC</u>	\$511.00	PDF	20	7.0
<u>D232220DT-M</u>	\$435.00	PDF	D232220DT-MC	\$529.00	PDF	22	7.5
<u>D232240DT-M</u>	\$451.00	PDF	<u>D232240DT-MC</u>	\$546.00	PDF	24	7.9
D232280DT-M	\$483.00	PDF	D232280DT-MC	\$579.00	PDF	28	8.4
<u>D232320DT-M</u>	\$516.00	PDF	<u>D232320DT-MC</u>	\$614.00	<u>PDF</u>	32	8.9

* The cushions decelerate the piston rod over the last 11/16 inch (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile cushion seal.

Specific	ations			
Aluminum hard anodized to 60 Rc cylinder body	3.14 sq. in. piston area			
Solid aluminum bar, black anodized end caps	Pressure rating 250 psi, AIR ONLY			
High tensile ground and polished hard chrome plated steel piston rod	Non-detergent petroleum based oil is recommended			
Low friction Buna-N seals	Temperature range -20°F to 200°F (-25 to 90°C)			
Extend force at 100 psi = 314 lb.	Retract force at 100 psi = 283 lb.			
Filtration: Not essential, however a standard 40 micron filter placed upstream will prolong seal life.				

Mou	nting Accessor	ies
Style	NFPA Designation	Part No.
Front Flange	MF1	D2FM-2
Rear Flange	MF2	D2FM-2
Rear Clevis	MP2	D2PC-2
Rear Clevis Short	MP1	D2SPC-2
Rear Pivot	MP4	D2PA-2
Angle Mount	MS1	D2AM-2
Base Mount	None	D2BB-2

Rod A	ccessories
Style	Part No.
Rod Clevis	D2RC-1
Rod Eye	D2RE-1
Rod Couplers	D2RCP-1
Rod Nuts	D2-716-20
Seal Kit	D2SK-32



D2-Series Heavy Duty Pneumatic Cylinders – 2-1/2 inch Bore

2-1/2 in. Bore, Double-acting, Tapped End Caps, Magnetic Piston



NITRA heavy duty pneumatic, NFPA interchangeable cylinder, 2-1/2" bore, 5/8" diameter piston rod, 7/16"-20 male threaded end, 1/4" female NPT ports, double acting, tapped end caps and one side for mount, flange, pivot and clevis mount options available. Some models available with cushions on both ends.

	2-1/2 in bore, double acting, tapped end caps						
Part Number no Cushions	Price	Drawing Link	Part Number w/ Cushions*	Price	Drawing Link	Stroke Length (in)	Weight (lb)
<u>D240010DT-M</u>	\$290.00	PDF	-			1	3.4
<u>D240020DT-M</u>	\$299.00	PDF	<u>D240020DT-MC</u>	\$389.00	PDF	2	3.7
<u>D240030DT-M</u>	\$308.00	PDF	<u>D240030DT-MC</u>	\$397.00	PDF	3	4.0
<u>D240040DT-M</u>	\$315.00	PDF	D240040DT-MC	\$407.00	PDF	4	4.2
<u>D240050DT-M</u>	\$325.00	PDF	<u>D240050DT-MC</u>	\$415.00	PDF	5	4.4
<u>D240060DT-M</u>	\$333.00	PDF	<u>D240060DT-MC</u>	\$424.00	PDF	6	4.7
<u>D240070DT-M</u>	\$342.00	PDF	<u>D240070DT-MC</u>	\$434.00	PDF	7	5.0
<u>D240080DT-M</u>	\$350.00	PDF	<u>D240080DT-MC</u>	\$441.00	PDF	8	5.2
<u>D240100DT-M</u>	\$368.00	PDF	<u>D240100DT-MC</u>	\$459.00	PDF	10	5.8
<u>D240120DT-M</u>	\$384.00	PDF	<u>D240120DT-MC</u>	\$477.00	PDF	12	6.3
<u>D240140DT-M</u>	\$402.00	PDF	D240140DT-MC	\$494.00	PDF	14	6.8
<u>D240160DT-M</u>	\$419.00	PDF	<u>D240160DT-MC</u>	\$512.00	PDF	16	7.3
<u>D240180DT-M</u>	\$437.00	PDF	<u>D240180DT-MC</u>	\$530.00	PDF	18	7.8
<u>D240200DT-M</u>	\$452.00	PDF	<u>D240200DT-MC</u>	\$548.00	PDF	20	8.4
<u>D240240DT-M</u>	\$486.00	PDF	D240240DT-MC	\$583.00	PDF	24	9.1
<u>D240280DT-M</u>	\$521.00	PDF	<u>D240280DT-MC</u>	\$619.00	PDF	28	9.8
<u>D240320DT-M</u>	\$555.00	<u>PDF</u>	<u>D240320DT-MC</u>	\$655.00	PDF	32	10.5

* The cushions decelerate the piston rod over the last 11/16 inch (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile cushion seal.

Specific	ations			
Aluminum hard anodized to 60 Rc cylinder body	4.91 sq. in. piston area			
Solid aluminum bar, black anodized end caps	Pressure rating 250 psi, AIR ONLY			
High tensile ground and polished hard chrome plated steel piston rod	Non-detergent petroleum based oil is recommended			
Low friction Buna-N seals	Temperature range -20°F to 200°F (-25 to 90°C)			
Extend force at 100 psi = 491 lb.	Retract force at 100 psi = 460 lb.			
Filtration: Not essential, however a standard 40 micron filter placed upstream will prolong seal life.				

Mounting Accessories						
Style NFPA Designation Part No.						
Front Flange	MF1	D2FM-3				
Rear Flange	MF2	D2FM-3				
Rear Clevis	MP2	D2PC-3				
Rear Clevis Short	MP1	D2SPC-3				
Rear Pivot	MP4	D2PA-3				
Angle Mount	MS1	D2AM-2				
Base Mount	None	D2BB-3				

Rod Accessories			
Style	Part No.		
Rod Clevis D2RC-1			
Rod Eye D2RE-1			
Rod Couplers	D2RCP-1		
Rod Nuts D2-716-20			
Seal Kit	D2SK-40		



D2-Series Heavy Duty Pneumatic Cylinders – 3-1/4 inch Bore

3-1/4 in. Bore, Double-acting, Tapped End Caps, Magnetic Piston



NITRA heavy duty pneumatic, NFPA interchangeable cylinder, 3-1/4" bore, 1" diameter piston rod, 3/4"-16 male threaded end, 3/8" female NPT ports, double acting, tapped end caps and one side for mount, flange, pivot and clevis mount options available. Some models available with cushions on both ends.

	3-1/4 iı	n bore,	double acting	, tappe	d end c	aps	
Part Number no Cushions	Price	Drawing Link	Part Number w/ Cushions*	Price	Drawing Link	Stroke Length (in)	Weight (lbs)
D252010DT-M	\$379.00	PDF	-	-	-	1	6.8
<u>D252020DT-M</u>	\$391.00	PDF	D252020DT-MC	\$507.00	PDF	2	7.3
D252030DT-M	\$404.00	PDF	D252030DT-MC	\$518.00	PDF	3	7.7
<u>D252040DT-M</u>	\$416.00	PDF	<u>D252040DT-MC</u>	\$531.00	PDF	4	8.1
D252050DT-M	\$429.00	PDF	D252050DT-MC	\$545.00	PDF	5	8.6
D252060DT-M	\$441.00	PDF	<u>D252060DT-MC</u>	\$557.00	PDF	6	9.0
D252070DT-M	\$454.00	PDF	D252070DT-MC	\$572.00	PDF	7	9.4
<u>D252080DT-M</u>	\$466.00	PDF	<u>D252080DT-MC</u>	\$585.00	PDF	8	9.9
<u>D252100DT-M</u>	\$492.00	PDF	D252100DT-MC	\$610.00	PDF	10	10.7
<u>D252120DT-M</u>	\$517.00	PDF	D252120DT-MC	\$636.00	PDF	12	11.6
<u>D252140DT-M</u>	\$542.00	PDF	D252140DT-MC	\$662.00	PDF	14	12.5
D252160DT-M	\$567.00	PDF	D252160DT-MC	\$689.00	PDF	16	13.4
<u>D252180DT-M</u>	\$592.00	PDF	D252180DT-MC	\$714.00	PDF	18	14.2
<u>D252200DT-M</u>	\$562.00	PDF	D252200DT-MC	\$650.00	PDF	20	15.1
<u>D252240DT-M</u>	\$668.00	PDF	D252240DT-MC	\$793.00	PDF	24	16.8
<u>D252280DT-M</u>	\$718.00	PDF	D252280DT-MC	\$845.00	PDF	28	18.5
<u>D252320DT-M</u>	\$769.00	PDF	D252320DT-MC	\$897.00	PDF	32	20.2

* The cushions decelerate the piston rod over the last 11/16 inch (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile cushion seal.

Specifications

Ορυσιιο	ομουπισατισπο				
Aluminum hard anodized to 60 Rc cylinder body	8.3 sq. in. piston area				
Solid aluminum bar, black anodized end caps	Pressure rating 250 psi, AIR ONLY				
High tensile ground and polished hard chrome plated steel piston rod	Non-detergent petroleum based oil is recommended				
Low friction Buna-N seals	Temperature range -20°F to 200°F (-25 to 90°C)				
Extend force at 100 psi = 830 lb.	Retract force at 100 psi = 751 lb.				
Filtration: Not essential, however a standard 40 micron filter placed upstream will prolong seal life.					

Mounting Accessories					
Style NFPA Designation Part N					
Front Flange	MF1	D2FM-4			
Rear Flange	MF2	D2FM-4			
Rear Clevis	MP2	D2PC-4			
Rear Clevis Short	MP1	D2SPC-4			
Rear Pivot	MP4	D2PA-4			
Angle Mount	MS1	D2AM-4			
Base Mount	None	D2BB-4			

Rod Accessories			
Style	Part No.		
Rod Clevis D2RC-2			
Rod Eye D2RE-2			
Rod Couplers	D2RCP-2		
Rod Nuts D2-34-16			
Seal Kit	D2SK-52		



D2-Series Heavy Duty Pneumatic Cylinders – 4 inch Bore

4 in. Bore, Double-acting, Tapped End Caps, Magnetic Piston



NITRA heavy duty pneumatic, NFPA interchangeable cylinder, 4" bore, 1" diameter piston rod, 3/4"-16 male threaded end, 3/8" female NPT ports, double acting, tapped end caps and one side for mount, flange, pivot and clevis mount options available. Some models available with cushions on both ends.

	4 in bore, double acting, tapped end caps						
Part Number no Cushions	Price	Drawing Link	Part Number w/ Cushions*	Price	Drawing Link	Stroke Length (in)	Weight (lb)
<u>D264010DT-M</u>	\$447.00	PDF	-	-	-	1	8.7
<u>D264020DT-M</u>	\$460.00	PDF	-	-	-	2	9.2
<u>D264030DT-M</u>	\$473.00	PDF	D264030DT-MC	\$591.00	PDF	3	9.7
<u>D264040DT-M</u>	\$486.00	PDF	D264040DT-MC	\$604.00	PDF	4	10.2
<u>D264050DT-M</u>	\$500.00	PDF	D264050DT-MC	\$619.00	PDF	5	10.7
<u>D264060DT-M</u>	\$512.00	PDF	D264060DT-MC	\$632.00	PDF	6	11.1
<u>D264070DT-M</u>	\$527.00	PDF	D264070DT-MC	\$645.00	PDF	7	11.6
<u>D264080DT-M</u>	\$540.00	PDF	D264080DT-MC	\$660.00	PDF	8	12.1
<u>D264100DT-M</u>	\$567.00	PDF	D264100DT-MC	\$688.00	PDF	10	13.1
<u>D264120DT-M</u>	\$595.00	PDF	D264120DT-MC	\$715.00	PDF	12	14.0
<u>D264140DT-M</u>	\$621.00	PDF	D264140DT-MC	\$744.00	PDF	14	15.0
<u>D264160DT-M</u>	\$647.00	PDF	D264160DT-MC	\$772.00	PDF	16	15.9
<u>D264180DT-M</u>	\$673.00	PDF	D264180DT-MC	\$798.00	PDF	18	16.9
<u>D264200DT-M</u>	\$700.00	PDF	D264200DT-MC	\$826.00	PDF	20	17.9
<u>D264240DT-M</u>	\$754.00	PDF	D264240DT-MC	\$881.00	PDF	24	19.8
D264280DT-M	\$807.00	PDF	D264280DT-MC	\$937.00	PDF	28	21.7
<u>D264320DT-M</u>	\$862.00	PDF	<u>D264320DT-MC</u>	\$993.00	PDF	32	23.6

* The cushions decelerate the piston rod over the last 11/16 inch (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile cushion seal.

Specifications

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Aluminum hard anodized to 60 Rc cylinder body	12.57 sq. in. piston area
Solid aluminum bar, black anodized end caps	Pressure rating 250 psi, AIR ONLY
High tensile ground and polished hard chrome plated steel piston rod	Non-detergent petroleum based oil is recommended
Low friction Buna-N seals	Temperature range -20°F to 200°F (-25 to 90°C)
Extend force at 100 psi = 1,257 lb.	Retract force at 100 psi = 1,178 lb.
Filtration: Not essential, howev placed upstream will	

Mounting Accessories					
Style NFPA Designation Part No.					
Front Flange	MF1	D2FM-5			
Rear Flange	MF2	D2FM-5			
Rear Clevis	MP2	D2PC-5			
Rear Clevis Short	MP1	D2SPC-5			
Rear Pivot	MP4	D2PA-5			
Angle Mount	MS1	D2AM-5			
Base Mount	None	D2BB-5			

Rod A	ccessories
Style	Part No.
Rod Clevis	D2RC-2
Rod Eye	D2RE-2
Rod Couplers	D2RCP-2
Rod Nuts	D2-34-16
Seal Kit	D2SK-64



Rod Clevis



Part no.D2RC-2

Note: Comes with Pivot Pin installed.

	D2-Series Heavy Duty Pneumatic Cylinder Accessories								
Part Number	Description Pres Pres Pres Pres Pres Pres Pres Pres								
<u>D2RC-1</u>	NITRA rod clevis, 7/16-20 UNF thread, steel. For use with D2 series NFPA cylinders.	1	0.3	\$32.00	<u>PDF</u>				
<u>D2RC-2</u>	NITRA rod clevis, 3/4-16 UNF thread, steel. For use with D2 series NFPA cylinders.	1	0.8	\$44.00	<u>PDF</u>				

Rod Eye



Part no. D2RE-2

D2-Series Heavy Duty Pneumatic Cylinder Accessories									
Part Number	Description	Pcs/Pkg	Wt (lb)	Price	Drawing Link				
<u>D2RE-1</u>	NITRA rod eye, 7/16-20 UNF thread, steel. For use with D2 series NFPA cylinders.	1	0.4	\$36.50	<u>PDF</u>				
<u>D2RE-2</u>	NITRA rod eye, 3/4-16 UNF thread, steel. For use with D2 series NFPA cylinders.	1	1.2	\$52.00	<u>PDF</u>				



Rear Clevis





Part no. <u>D2PC-3</u> Note: Comes with pivot pin installed.

Pa

Part no.	D2SPC-3
1 41 (110)	5201 0 0

D2-Series Heavy Duty Pneumatic Cylinder Accessories								
Part Number	Description	Pcs/Pkg	Wt (lb)	Price	Drawing Link			
<u>D2PC-1</u>	NITRA cylinder rear clevis bracket, steel. For use with 1.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.5	\$34.50	<u>PDF</u>			
<u>D2PC-2</u>	NITRA cylinder rear clevis bracket, steel. For use with 2in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.7	\$40.50	<u>PDF</u>			
<u>D2PC-3</u>	NITRA cylinder rear clevis bracket, steel. For use with 2.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.8	\$47.50	<u>PDF</u>			
<u>D2PC-4</u>	NITRA cylinder rear clevis bracket, steel. For use with 3.25in bore D2 series NFPA cylinders. Mounting hardware included.	1	1.6	\$60.00	<u>PDF</u>			
<u>D2PC-5</u>	NITRA cylinder rear clevis bracket, steel. For use with 4in bore D2 series NFPA cylinders. Mounting hardware included.	1	1.7	\$68.00	<u>PDF</u>			
<u>D2SPC-1</u>	NITRA cylinder rear short clevis bracket, steel. For use with 1.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.7	\$34.50	<u>PDF</u>			
<u>D2SPC-2</u>	NITRA cylinder rear short clevis bracket, steel. For use with 2in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.7	\$40.50	<u>PDF</u>			
D2SPC-3	NITRA cylinder rear short clevis bracket, steel. For use with 2.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.8	\$47.50	<u>PDF</u>			
D2SPC-4	NITRA cylinder rear short clevis bracket, steel. For use with 3.25in bore D2 series NFPA cylinders. Mounting hardware included.	1	2.4	\$60.00	<u>PDF</u>			
D2SPC-5	NITRA cylinder rear short clevis bracket, steel. For use with 4in bore D2 series NFPA cylinders. Mounting hardware included.	1	3.2	\$68.00	<u>PDF</u>			

Rear Pivot Eye



Part no. D2PA-3

	D2-Series Heavy Duty Pneumatic Cylinder Accessories									
Part Number	Description		Wt (lb)	Price	Drawing Link					
<u>D2PA-1</u>	NITRA rear pivot eye, steel. For use with 1.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.4	\$34.50	<u>PDF</u>					
<u>D2PA-2</u>	NITRA rear pivot eye, steel. For use with 2in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.5	\$40.50	<u>PDF</u>					
<u>D2PA-3</u>	NITRA rear pivot eye, steel. For use with 2.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.7	\$47.50	<u>PDF</u>					
<u>D2PA-4</u>	NITRA rear pivot eye, steel. For use with 3.25in bore D2 series NFPA cylinders. Mounting hardware included.	1	1.3	\$60.00	<u>PDF</u>					
<u>D2PA-5</u>	NITRA rear pivot eye, steel. For use with 4in bore D2 series NFPA cylinders. Mounting hardware included.	1	1.4	\$68.00	<u>PDF</u>					

Flange Attachment

NELIMATICS



Part no. D2FM-2

	D2-Series Heavy Duty Pneumatic Cylinder Accessories									
Part Number	Description		Wt (lb)	Price	Drawing Link					
<u>D2FM-1</u>	NITRA flange mount plate, steel. For use with 1.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.3	\$34.50	<u>PDF</u>					
<u>D2FM-2</u>	NITRA flange mount plate, steel. For use with 2in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.4	\$39.50	<u>PDF</u>					
<u>D2FM-3</u>	NITRA flange mount plate, steel. For use with 2.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.5	\$45.00	<u>PDF</u>					
<u>D2FM-4</u>	NITRA flange mount plate, steel. For use with 3.25in bore D2 series NFPA cylinders. Mounting hardware included.	1	3.0	\$58.00	<u>PDF</u>					
	NITRA flange mount plate, steel. For use with 4in bore D2 series NFPA cylinders. Mounting hardware included.	1	4.3	\$65.00	<u>PDF</u>					

Rod Couplers



NITRA self-aligning rod couplers reduce cylinder alignment issues by compensating for $\pm 1^{\circ}$ angular error and 1/16" lateral misalignment on both the extension and retraction strokes. Better reliability by reducing cylinder and component wear.

Part no. D2RCP-2

	D2-Series Heavy Duty Pneumatic Cylinder Accessories								
Part Number	Description	Pcs/Pkg	Wt (lb)	Price	Drawing Link				
	NITRA self-aligning rod coupler, 7/16-20 UNF thread, steel. For use with D2 series NFPA cylinders.	1	0.5	\$49.50	<u>PDF</u>				
	NITRA self-aligning rod coupler, 3/4-16 UNF thread, steel. For use with D2 series NFPA cylinders.	1	0.6	\$74.00	<u>PDF</u>				

Jam Nuts



Part no. D2-34-16

	D2-Series Heavy Duty Pneumatic Cylinder Accessories								
Part Number	Description	Pcs/Pkg	Wt (lb)	Price	Drawing Link				
<u>D2-716-20</u>	NITRA jam nut, 7/16-20 UNF thread, steel. For use with D2 series NFPA cylinders.	1	0.02	\$2.00	<u>PDF</u>				
<u>D2-34-16</u>	NITRA jam nut, 3/4-16 UNF thread, steel. For use with D2 series NFPA cylinders.	1	0.07	\$6.00	<u>PDF</u>				



Mount Brackets





Part no.	D2AM-3
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Part no. D2BB-3

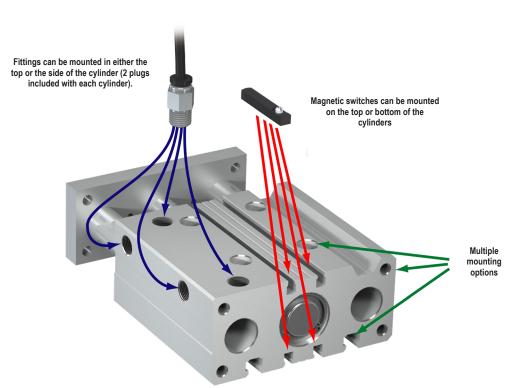
	D2-Series Heavy Duty Pneumatic Cylinder Accessories									
Part Number	Description	Wt (lb)	Price	Drawing Link						
<u>D2AM-1</u>	NITRA angle mount bracket, steel. For use with 1.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.5	\$32.50	PDF					
<u>D2AM-2</u>	NITRA angle mount bracket, steel. For use with 2in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.9	\$37.00	PDF					
<u>D2AM-3</u>	NITRA angle mount bracket, steel. For use with 2.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.9	\$43.50	PDF					
<u>D2AM-4</u>	NITRA angle mount bracket, steel. For use with 3.25in bore D2 series NFPA cylinders. Mounting hardware included.	1	1.5	\$55.00	PDF					
<u>D2AM-5</u>	NITRA angle mount bracket, steel. For use with 4in bore D2 series NFPA cylinders. Mounting hardware included.	1	2.2	\$61.00	PDF					
<u>D2BB-1</u>	NITRA base mount bracket, anodized aluminum. For use with 1.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.3	\$39.50	PDF					
<u>D2BB-2</u>	NITRA base mount bracket, anodized aluminum. For use with 2in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.4	\$45.50	PDF					
<u>D2BB-3</u>	NITRA base mount bracket, anodized aluminum. For use with 2.5in bore D2 series NFPA cylinders. Mounting hardware included.	1	0.6	\$54.00	PDF					
<u>D2BB-4</u>	NITRA base mount bracket, anodized aluminum. For use with 3.25in bore D2 series NFPA cylinders. Mounting hardware included.	1	1.1	\$65.00	PDF					
<u>D2BB-5</u>	NITRA base mount bracket, anodized aluminum. For use with 4in bore D2 series NFPA cylinders. Mounting hardware included.	1	1.2	\$65.00	<u>PDF</u>					

Seal Kits



D2-Ser	ies Heavy Duty Pneumatic Cylinder Replac	ement	Seal	Kit
Part Number	Description	Pcs/Pkg	Wt (lb)	Price
	NITRA seal kit, for use with 1.5in bore NFPA cylinders. All wear parts for both D-series and D2-series NFPA cylinders included.	1	0.1	\$95.00
<u>D2SK-32</u>	NITRA seal kit, for use with 2in bore NFPA cylinders. All wear parts for both D-series and D2-series NFPA cylinders included.	1	0.1	\$102.00
	NITRA seal kit, for use with 2.5in bore NFPA cylinders. All wear parts for both D-series and D2-series NFPA cylinders included.	1	0.1	\$105.00
	NITRA seal kit, for use with 3.25in bore NFPA cylinders. All wear parts for both D-series and D2-series NFPA cylinders included.	1	0.2	\$128.00
<u>D2SK-64</u>	NITRA seal kit, for use with 4in bore NFPA cylinders. All wear parts for both D-series and D2-series NFPA cylinders included.	1	0.2	\$139.00





NITRA pneumatic guided actuator with dual guide rods, bronze bushings, extruded aluminum housing and switch mounting tracks.

- Mild steel tooling plate
- Nitrile / Buna-N O-rings

- Eight bore sizes
- Interchangeable with other popular brands
- Work with 4mm square T-slot cylinder switches
- Chrome plated stainless steel guide rods



E-Series Dual Guide Rod Cylinder Specifications									
Bore Size (mm)	12	16	20	25	32	40	50	63	
Action				Double	e acting				
Fluid		Air (clean/dry)							
Temperature Range				23 to 158°F	(-5 to 70°C)				
Pressure Range				18-142 psi	(1.2-10 bar)				
Proof Pressure				213 psi	(15 bar)				
Lubrication				Not re	quired				
Cushion Type				Urethane	e Bumper				
Non-Rotate Tolerance	±0	.10°	±0.	.09°	±0.	.08°	±0.	.06°	
Port Size	M5x0.8 1/8-NPT 1/4-				NPT				
Extend Force @ 100 psi (lbs.)	17.5	31.2	48.7	76.1	124.7	194.8	304.3	483.2	
Retract Force @ 100 psi (lbs.)	9.7	19.0	31.2	44.9	76.0	146.1	255.6	434.5	

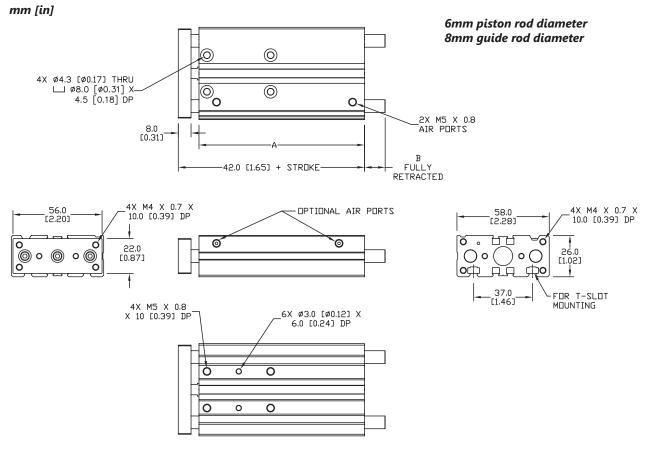


12 mm Bore, Double Acting



12 mm Bore	e E-Series D	Dual Guide R	od Cylinders	s - Double	e Acting
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Weight (lbs)	Price
<u>E12M010MD-M</u>	10	39.0 [1.53]	-4.0 [-0.16]	0.6	\$204.00
<u>E12M020MD-M</u>	20	49.0 [1.93]	-4.0 [-0.16]	0.6	\$159.00
<u>E12M025MD-M</u>	25	54.0 [2.13]	-4.0 [-0.16]	0.7	\$159.00
<u>E12M030MD-M</u>	30	59.0 [2.32]	-4.0 [-0.16]	0.7	\$219.00
<u>E12M040MD-M</u>	40	69.0 [2.72]	-4.0 [-0.16]	0.8	\$219.00
<u>E12M050MD-M</u>	50	79.0 [3.11]	-4.0 [-0.16]	0.9	\$171.00
<u>E12M075MD-M</u>	75	104.0 [4.09]	13.0 [0.51]	1.2	\$226.00
<u>E12M100MD-M</u>	100	129.0 [5.08]	13.0 [0.51]	1.4	\$237.00
<u>E12M125MD-M</u>	125	154.0 [6.06]	43.0 [1.69]	1.7	\$194.00
<u>E12M150MD-M</u>	150	179.0 [7.05]	43.0 [1.69]	1.9	\$262.00

Dimensions



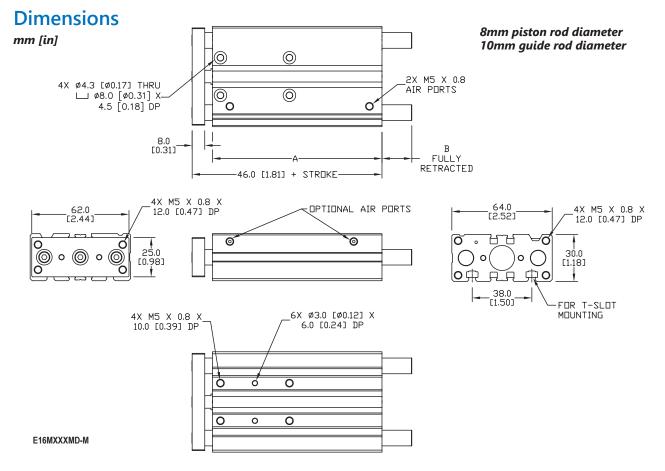
E12MXXXMD-M



16 mm Bore, Double Acting



16 mm Bor	e E-Series [Dual Guide R	od Cylinder	s - Doubl	e Acting
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Weight (lbs)	Price
<u>E16M010MD-M</u>	10	43.0 [1.69]	-3.0 [-0.12]	0.8	\$247.00
<u>E16M020MD-M</u>	20	53.0 [2.09]	-3.0 [-0.12]	0.9	\$229.00
<u>E16M025MD-M</u>	25	58.0 [2.28]	-3.0 [-0.12]	1.0	\$246.00
<u>E16M030MD-M</u>	30	63.0 [2.48]	-3.0 [-0.12]	1.0	\$246.00
<u>E16M040MD-M</u>	40	73.0 [2.87]	-3.0 [-0.12]	1.2	\$246.00
<u>E16M050MD-M</u>	50	83.0 [3.27]	-3.0 [-0.12]	1.3	\$246.00
<u>E16M075MD-M</u>	75	108.0 [4.25]	19.0 [0.75]	1.7	\$260.00
<u>E16M100MD-M</u>	100	133.0 [5.27]	19.0 [0.75]	2.0	\$286.00
<u>E16M125MD-M</u>	125	158.0 [6.22]	49.0 [1.93]	2.3	\$308.00
E16M150MD-M	150	183.0 [7.20]	49.0 [1.93]	2.6	\$249.00
<u>E16M175MD-M</u>	175	208.0 [8.19]	49.0 [1.93]	2.9	\$334.00
<u>E16M200MD-M</u>	200	233.0 [9.17]	49.0 [1.93]	3.2	\$337.00



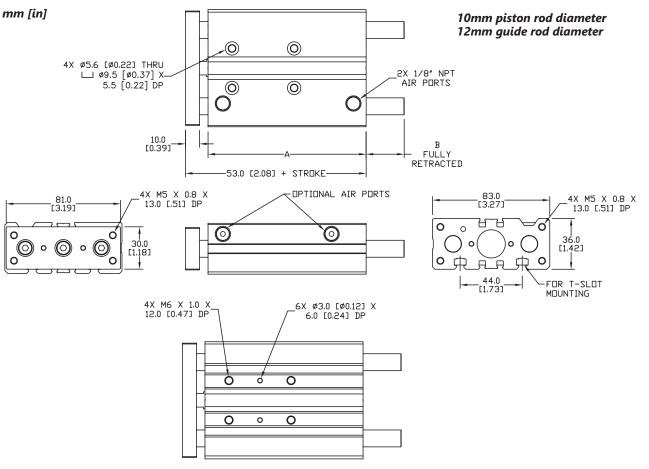


20 mm Bore, Double Acting



20 mm Bore	E-Series D	ual Guide R	od Cylinders	s - Double	e Acting
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Weight (lbs)	Price
<u>E20M020MD-M</u>	20	57.0 [2.24]	-2.0 [-0.079]	1.6	\$278.00
E20M025MD-M	25	62.0 [2.44]	-2.0 [-0.079]	1.7	\$293.00
<u>E20M030MD-M</u>	30	67.0 [2.64]	-2.0 [-0.079]	1.8	\$293.00
E20M040MD-M	40	77.0 [3.03]	-2.0 [-0.079]	2.0	\$230.00
<u>E20M050MD-M</u>	50	87.0 [3.43]	-2.0 [-0.079]	2.1	\$293.00
E20M075MD-M	75	112.0 [4.41]	27.0 [1.06]	2.8	\$318.00
<u>E20M100MD-M</u>	100	137.0 [5.39]	27.0 [1.06]	3.2	\$328.00
E20M125MD-M	125	162.0 [6.38]	51.0 [2.01]	3.8	\$349.00
E20M150MD-M	150	187.0 [7.36]	51.0 [2.01]	4.2	\$372.00
<u>E20M175MD-M</u>	175	212.0 [8.35]	51.0 [2.01]	4.6	\$391.00
E20M200MD-M	200	237.0 [9.33]	51.0 [2.01]	5.1	\$414.00
<u>E20M250MD-M</u>	250	287.0 [11.30]	69.0 [2.72]	6.0	\$350.00

Dimensions



E20MXXXMD-M



25 mm Bore, Double Acting



25 mm Bore	e E-Series D	lual Guide R	od Cylinders	- Double	Acting
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Weight (lbs)	Price
<u>E25M020MD-M</u>	20	57.5 [2.26]	-1.5 [-0.06]	2.2	\$311.00
E25M025MD-M	25	62.5 [2.40]	-1.5 [-0.06]	2.3	\$333.00
E25M030MD-M	30	67.5 [2.66]	-1.5 [-0.06]	2.4	\$261.00
E25M040MD-M	40	77.5 [3.05]	-1.5 [-0.06]	2.7	\$333.00
E25M050MD-M	50	87.5 [3.44]	-1.5 [-0.06]	2.9	\$261.00
E25M075MD-M	75	112.5 [4.43]	28.5 [1.12]	3.9	\$360.00
<u>E25M100MD-M</u>	100	137.5 [5.41]	28.5 [1.12]	4.5	\$300.00
E25M125MD-M	125	162.5 [6.40]	51.0 [2.01]	5.3	\$319.00
E25M150MD-M	150	187.5 [7.38]	51.0 [2.01]	5.8	\$431.00
E25M175MD-M	175	212.5 [8.37]	51.0 [2.01]	6.5	\$460.00
E25M200MD-M	200	237.5 [9.35]	51.0 [2.01]	7.1	\$484.00
<u>E25M250MD-M</u>	250	287.5 [11.32]	68.5 [2.70]	8.4	\$521.00

Dimensions mm [in] 12mm piston rod diameter *16mm guide rod diameter* \bigcirc 0 4X Ø5.6 [Ø0.22] THRU □ Ø9.5 [Ø0.37] X-5.5 [0.22] DP \bigcirc \bigcirc Ο O B - FULLY RETRACTED 10.0 [0.39] -53.5 [2.11] + STROKE OPTIONAL AIR PORTS 4X M6 X 1.0 X 15.0 [0.59] DP _ M6 X 1.0 X 15.0 [0.59] DP 93.0 [3.66] 91.0 [3.58] Ъ 0 Н Ó 0 \odot \odot 0 Q 42.0 [1.65] $\bigcirc \circ \bigcirc$ 38.0 [1.50] o (⊘) 0 C 0 0 C ф _ 50.0 [1.97] FOR T-SLOT 4X M6 X 1.0 X 12.0 [0.47] DP MOUNTING 6X Ø4.0 [Ø0.16] X 6.0 [0.24] DP б ò 0 0 0 0

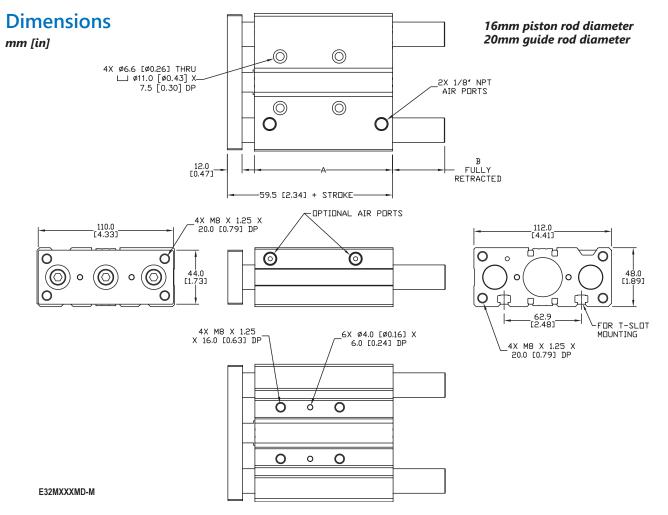
E25MXXXMD-M



32 mm Bore, Double Acting



32 mm Bore	D-Series D	ual Guide Ro	od Cylinders	- Double	Acting
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Weight (lbs)	Price
<u>E32M025MD-M</u>	25	62.5 [2.40]	18.5 [0.73]	3.3	\$407.00
<u>E32M030MD-M</u>	30	67.5 [2.66]	18.5 [0.73]	3.5	\$516.00
<u>E32M040MD-M</u>	40	77.5 [3.05]	18.5 [0.73]	3.8	\$442.00
E32M050MD-M	50	87.5 [3.44]	18.5 [0.73]	4.1	\$346.00
<u>E32M075MD-M</u>	75	112.5 [4.43]	42.5 [1.67]	5.8	\$481.00
<u>E32M100MD-M</u>	100	137.5 [5.41]	42.5 [1.67]	6.6	\$505.00
<u>E32M125MD-M</u>	125	162.5 [6.40]	58.5 [2.30]	7.6	\$548.00
<u>E32M150MD-M</u>	150	187.5 [7.38]	58.5 [2.30]	8.4	\$451.00
<u>E32M175MD-M</u>	175	212.5 [8.37]	58.5 [2.30]	9.3	\$470.00
<u>E32M200MD-M</u>	200	237.5 [9.35]	58.5 [2.30]	10.1	\$502.00
<u>E32M250MD-M</u>	250	287.5 [11.32]	80.0 [3.15]	12.0	\$547.00

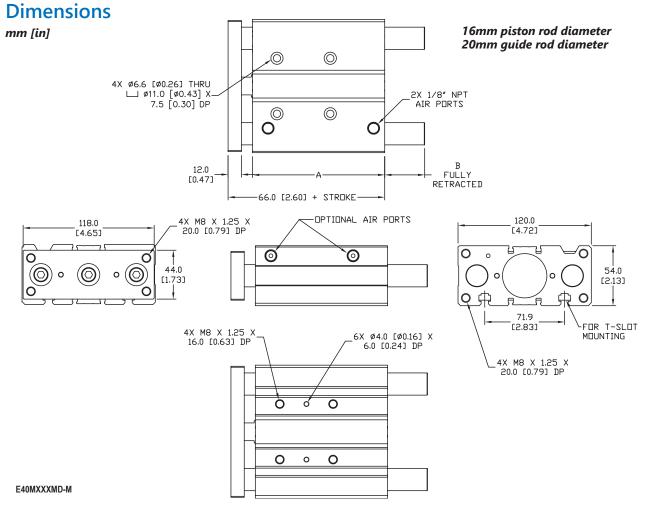




40 mm Bore, Double Acting



40 mm Bore	e E-Series D	ual Guide Ro	od Cylinders	- Double	Acting
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Weight (lbs)	Price
<u>E40M025MD-M</u>	25	69.0 [2.72]	12.0 [0.47]	3.8	\$431.00
<u>E40M030MD-M</u>	30	74.0 [2.91]	12.0 [0.47]	4.0	\$463.00
<u>E40M040MD-M</u>	40	84.0 [3.31]	12.0 [0.47]	4.4	\$463.00
<u>E40M050MD-M</u>	50	94.0 [3.70]	12.0 [0.47]	4.7	\$463.00
<u>E40M075MD-M</u>	75	119.0 [4.69]	36.0 [1.42]	6.5	\$392.00
<u>E40M100MD-M</u>	100	144.0 [5.67]	36.0 [1.42]	7.4	\$413.00
<u>E40M125MD-M</u>	125	169.0 [6.65]	52.0 [2.05]	8.5	\$567.00
E40M150MD-M	150	194.0 [7.64]	52.0 [2.05]	9.4	\$601.00
<u>E40M175MD-M</u>	175	219.0 [8.62]	52.0 [2.05]	10.5	\$622.00
<u>E40M200MD-M</u>	200	244.0 [9.61]	52.0 [2.05]	11.3	\$658.00
<u>E40M250MD-M</u>	250	294.0 [11.6]	74.0 [2.91]	13.4	\$724.00

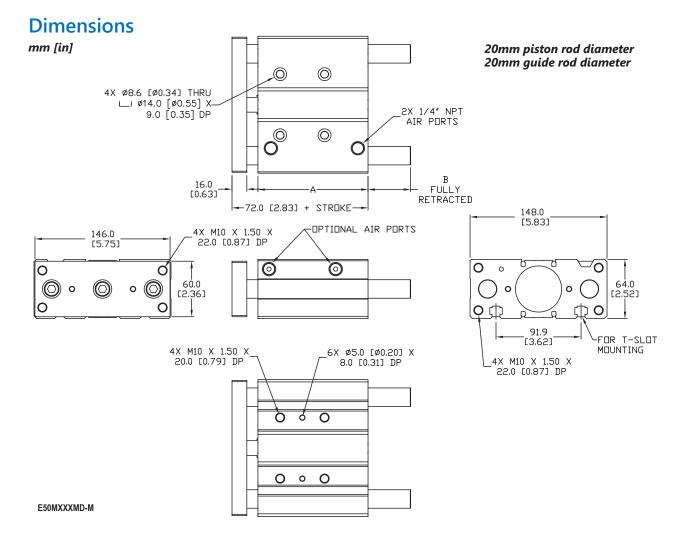




50 mm Bore, Double Acting



50 mm Bore	e E-Series D	ual Guide Ro	od Cylinders	- Double	Acting
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Weight (lbs)	Price
<u>E50M025MD-M</u>	25	69.0 [2.72]	17.0 [0.67]	6.0	\$497.00
<u>E50M030MD-M</u>	30	74.0 [2.91]	17.0 [0.67]	6.3	\$544.00
<u>E50M040MD-M</u>	40	84.0 [3.31]	17.0 [0.67]	6.8	\$544.00
<u>E50M050MD-M</u>	50	94.0 [3.70]	17.0 [0.67]	7.3	\$544.00
<u>E50M075MD-M</u>	75	119.0 [4.69]	46.0 [1.81]	9.8	\$573.00
<u>E50M100MD-M</u>	100	144.0 [5.67]	46.0 [1.81]	11.0	\$612.00
<u>E50M125MD-M</u>	125	169.0 [6.65]	62.0 [2.44]	12.5	\$652.00
E50M150MD-M	150	194.0 [7.64]	62.0 [2.44]	13.8	\$647.00
<u>E50M175MD-M</u>	175	219.0 [8.62]	62.0 [2.44]	15.1	\$565.00
<u>E50M200MD-M</u>	200	244.0 [9.61]	62.0 [2.44]	16.4	\$767.00
<u>E50M250MD-M</u>	250	294.0 [11.6]	89.0 [3.50]	19.6	\$869.00



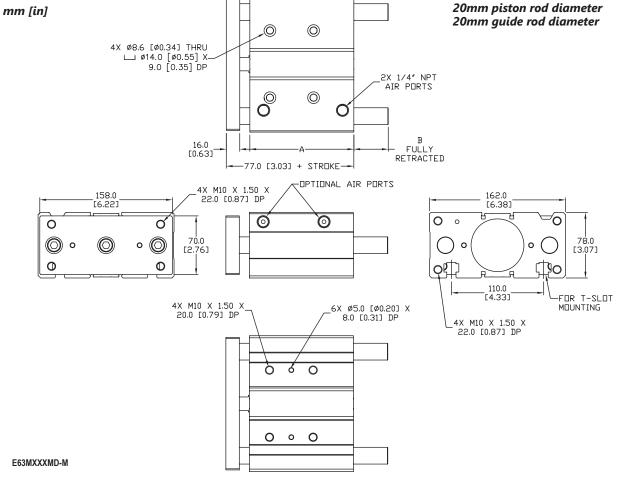


63 mm Bore, Double Acting



63 mm Bor	e E-Series D	ual Guide R	od Cylinders	- Double	Acting
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Weight (lbs)	Price
<u>E63M025MD-M</u>	25	74.0 [2.91]	12.0 [0.47]	7.6	\$528.00
<u>E63M030MD-M</u>	30	79.0 [3.11]	12.0 [0.47]	8.0	\$563.00
<u>E63M040MD-M</u>	40	89.0 [3.50]	12.0 [0.47]	8.6	\$563.00
<u>E63M050MD-M</u>	50	99.0 [3.90]	12.0 [0.47]	9.2	\$563.00
<u>E63M075MD-M</u>	75	124.0 [4.88]	41.0 [1.61]	11.9	\$610.00
<u>E63M100MD-M</u>	100	149.0 [5.87]	41.0 [1.61]	13.5	\$638.00
<u>E63M125MD-M</u>	125	174.0 [6.85]	57.0 [2.24]	15.3	\$676.00
<u>E63M150MD-M</u>	150	199.0 [7.83]	57.0 [2.24]	16.7	\$724.00
<u>E63M175MD-M</u>	175	224.0 [8.82]	57.0 [2.24]	18.2	\$749.00
<u>E63M200MD-M</u>	200	249.0 [9.80]	57.0 [2.24]	19.7	\$803.00
<u>E63M250MD-M</u>	250	299.0 [11.8]	84.0 [3.31]	23.1	\$863.00

Dimensions





E-Series Dual Guide Rod Cylinders - Load and Torque Ratings

Cylinder Max Side Load Ratings (lbs)												
					St	roke (m	nm)					
10	20	25	30	40	50	75	100	125	150	175	200	250
9.9	7.4	6.5	5.9	9.2	8.1	5.9	5.0	4.3	3.8	-	-	-
15	11	9.5	8.3	14	13	8.3	7.2	6.1	5.4	5.0	4.5	-
-	18	14	13	28	25	20	17	15	13	12	11	9.5
-	21	20	17	32	29	23	19	20	18	16	15	12
-	-	46	43	40	37	41	35	32	29	26	24	20
-	-	46	43	40	37	41	35	32	29	26	24	20
-	-	67	64	60	55	61	54	49	44	40	37	32
-	-	67	64	60	55	61	54	49	44	40	37	32
	9.9 15 - - -	10 20 9.9 7.4 15 11 - 18 - 21 - - - -	10 20 25 9.9 7.4 6.5 15 11 9.5 - 18 14 - 21 20 - - 46 - - 46 - - 67	10 20 25 30 9.9 7.4 6.5 5.9 15 11 9.5 8.3 - 18 14 13 - 21 20 17 - - 46 43 - 46 43 - - - 67 64	10 20 25 30 40 9.9 7.4 6.5 5.9 9.2 15 11 9.5 8.3 14 - 18 14 13 28 - 21 20 17 32 - - 46 43 40 - - 67 64 60	Str 10 20 25 30 40 50 9.9 7.4 6.5 5.9 9.2 8.1 15 11 9.5 8.3 14 13 - 18 14 13 28 25 - 21 20 17 32 29 - - 46 43 40 37 - - 67 64 60 55	10 20 25 30 40 50 75 9.9 7.4 6.5 5.9 9.2 8.1 5.9 15 11 9.5 8.3 14 13 8.3 - 18 14 13 28 25 20 - 21 20 17 32 29 23 - - 46 43 40 37 41 - - 67 64 60 55 61	Stretcher 10 20 25 30 40 50 75 100 9.9 7.4 6.5 5.9 9.2 8.1 5.9 5.0 15 11 9.5 8.3 14 13 8.3 7.2 - 18 14 13 28 25 20 17 - 21 20 17 32 29 23 19 - 46 43 40 37 41 35 - - 46 43 40 37 41 35 - - 67 64 60 55 61 54	10 20 25 30 40 50 75 100 125 9.9 7.4 6.5 5.9 9.2 8.1 5.9 5.0 4.3 15 11 9.5 8.3 14 13 8.3 7.2 6.1 - 18 14 13 28 25 20 17 15 - 21 20 17 32 29 23 19 20 - 46 43 40 37 41 35 32 - - 46 43 60 37 41 35 32 - - 46 43 60 55 61 54 49	10 20 25 30 40 50 75 100 125 150 9.9 7.4 6.5 5.9 9.2 8.1 5.9 5.0 4.3 3.8 15 11 9.5 8.3 14 13 8.3 7.2 6.1 5.4 - 18 14 13 28 25 20 17 15 13 - 21 20 17 32 29 23 19 20 18 - 21 20 17 32 29 23 19 20 18 - - 46 43 40 37 41 35 32 29 - - 46 43 40 37 41 35 32 29 - - 67 64 60 55 61 54 49 44	Strete (mm) 10 20 25 30 40 50 75 100 125 150 175 9.9 7.4 6.5 5.9 9.2 8.1 5.9 5.0 4.3 3.8 - 15 11 9.5 8.3 14 13 8.3 7.2 6.1 5.4 5.0 - 18 14 13 28 25 20 17 15 13 12 - 21 20 17 32 29 23 19 20 18 16 - - 46 43 40 37 41 35 32 29 26 - - 46 43 40 37 41 35 32 29 26 - - 67 64 60 55 61 54 49 44 40	10 20 25 30 40 50 75 100 125 150 175 200 9.9 7.4 6.5 5.9 9.2 8.1 5.9 5.0 4.3 3.8 - - 15 11 9.5 8.3 14 13 8.3 7.2 6.1 5.4 5.0 4.5 - 18 14 13 28 25 20 17 15 13 12 11 - 21 20 17 32 29 23 19 20 18 16 15 - - 46 43 40 37 41 35 32 29 26 24 - - 46 43 40 37 41 35 32 29 26 24 - - 67 64 60 55 61 54 49 44 <

Conversion: 1 lb = 4.45 N

		Cylinder Max Torque Ratings (in-lb)											
Bore Size						Str	oke (m	m)					
(mm)	10	20	25	30	40	50	75	100	125	150	175	200	250
12	7.97	6.99	6.28	5.75	6.82	6.37	4.43	3.19	2.74	2.39	-	-	-
16	10.7	9.20	8.32	7.79	10.89	9.82	6.11	5.13	4.43	3.89	3.54	3.19	-
20	-	13.9	12.6	11.6	21.2	19.0	16.6	14.4	12.7	11.3	10.3	9.38	7.97
25	-	21.2	19.6	17.8	32.4	29.7	26.2	22.7	20.0	17.9	16.2	14.8	12.6
32	-	-	56.2	53.1	50.7	45.4	50.4	44.0	39.1	35.2	32.0	29.3	25.1
40	-	-	62.0	58.4	54.1	50.1	55.5	48.5	43.1	38.8	35.2	32.3	27.7
50	-	-	115	112	97.4	95.6	106	93.8	84.1	76.1	69.6	64.1	55.2
63	-	-	130	120	114	107	119	105	94.7	85.8	78.4	72.2	62.3

Conversion: 1 in-lb = 0.113 N-m

32mm bore.

Part Number

G32M025MD-MC

G32M050MD-MC

G32M075MD-MC

G32M100MD-MC

G32M125MD-MC

G32M150MD-MC

G32M200MD-MC

G32M250MD-MC

G32M300MD-MC

G32M400MD-MC

G32M500MD-MC

G32M600MD-MC

cushion seal.



G-Series ISO 15552 Pneumatic Cylinders – 32mm Bore 32mm Bore, Double-acting, Magnetic Piston, Cushions



Stroke Length

(mm)

25

50

75

100

125

150

200

250

300

400

500

600

* The cushions decelerate the piston rod over the last mm (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile

tapped end

''A''

(mm [inch])

119 [4.69]

144 [5.67]

169 [6.65]

194 [7.64]

219 [8.62]

244 [9.61]

294 [11.57]

344 [13.54]

394 [15.51]

494 [19.45]

594 [23.39]

694 [27.32]

caps

Weight

(lb)

1.1

1.3

1.4

1.6

1.9

2.0

2.4

2.7

3.1

3.7

4.4

5.1

double acting,

Price

\$69.00

\$71.00

\$75.00

\$76.00

\$78.00

\$79.00

\$83.00

\$87.00

\$90.00

\$98.00

\$104.00

\$111.00

NITRA pneumatic ISO 15552 interchangeable cylinder, 32mm bore, 12mm diameter piston rod, G1/8 (BSPP) female ports, double acting; flange, pivot and clevis mount options available. Adjustable cushions on both ends. See the end of the section for accessory details.

Features

• Adjustable cushions



• Internal magnet for sensor switching • Three sides with longitudinal slots for inserting securing retractable sensors such as type CPS9F and CPS9Q (see

position switches at the end of the cylinder section for further details)

• G (BSPP) threaded ports

Specific	ations
Aluminum body and end caps	Plastoferrite magnet
C45 chromed piston rod	NBR (Nitrile Butadiene Rubber) buffer + static o-rings
Die cast aluminum head	NBR (Nitrile Butadiene Rubber) cushioning gasket
NBR (Nitrile Butadiene Rubber) piston and piston rod gasket	Brass cushioning needle with needle out movement safety system
Steel guide bushing with bronze and PTFE (Teflon) insert	Pressure rating 145 psi [10 bar], AIR ONLY
Drawn anodized aluminum body	Temperature rating 14°F to 176°F
Self-lubricating technopolymer piston	[-10°C to 80°C]
Extend force at 100 psi = 124.6 lb.	Retract force at 100 psi = 107.1 lb.

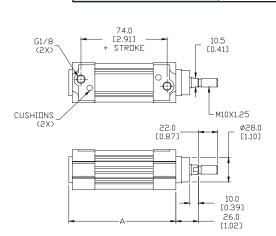
BSPP = British Standard Pipe Parallel

Mounting Accessories					
Style	Part No.				
Foot Mount	<u>GMB-32MM</u>				
Front or Rear Flange	GFL-32MM				
Male Rear Clevis	<u>GMC-32MM</u>				
Spherical Male Clevis	GSMC-32MM				

Rod Access	ories
Style	Part No.
Rod Clevis	<u>GRC-M10-125</u>
Rod Eye	<u>GRE-M10-125</u>
Self Aligning Rod Coupler	<u>GRCP-M10-125</u>
Rod Nut	<u>GN-M10-125</u>

Dimensions

mm [inches]





40mm bore.

Part Number

G40M025MD-MC

G40M050MD-MC

G40M075MD-MC

G40M100MD-MC

G40M125MD-MC

G40M150MD-MC

G40M200MD-MC

G40M250MD-MC

G40M300MD-MC G40M400MD-MC

G40M500MD-MC

G40M600MD-MC



G-Series ISO 15552 Pneumatic Cylinders – 40mm Bore 40mm Bore, Double-acting, Magnetic Piston, Cushions



double acting, tapped end caps

"A"

(mm [inch])

130 [5.12]

155 [6.10]

180 [7.09]

205 [8.07]

230 [9.06]

255 [10.04]

305 [12.01]

355 [13.98]

405 [15.94]

505 [19.88]

605 [23.82]

705 [27.76]

Weight

(lb)

1.8

2.0

2.2

2.5

2.7

2.9

3.4

38

4.3

5.1

6.0

6.9

Stroke Lenath

(mm)

25

50

75

100

125

150

200

250

300

400

500

600

Price

\$80.00

\$82.00

\$83.00

\$87.00

\$88.00

\$90.00

\$96.00

\$100.00

\$104.00

\$112.00

\$123.00

\$131.00

NITRA pneumatic ISO 15552 interchangeable cylinder, 40mm bore, 16mm diameter piston rod, G1/4 (BSPP) female ports, double acting; flange, pivot and clevis mount options available. Adjustable cushions on both ends. See the end of the section for accessory details.

Features

• Adjustable cushions



- Internal magnet for sensor switching • Three sides with longitudinal slots for inserting
- securing retractable sensors such as type CPS9F and CPS9Q (see position switches at the end of the cylinder section for further details)
- G (BSPP) threaded ports

Specifications			
Aluminum body and end caps	Plastoferrite magnet		
C45 chromed piston rod	NBR (Nitrile Butadiene Rubber) buffer + static o-rings		
Die cast aluminum head	NBR (Nitrile Butadiene Rubber) cushioning gasket		
NBR (Nitrile Butadiene Rubber) piston and piston rod gasket	Brass cushioning needle with needle out movement safety system		
Steel guide bushing with bronze and PTFE (Teflon) insert	Pressure rating 145 psi [10 bar], AIR ONLY		
Drawn anodized aluminum body	Temperature rating 14°F to 176°F		
Self-lubricating technopolymer piston	[-10°C to 80°C]		
Extend force at 100 psi = 194.6 lb.	Retract force at 100 psi = 163.4 lb.		

BSPP = British Standard Pipe Parallel

The cushions decelerate the piston rod over the last mm (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile cushion seal.

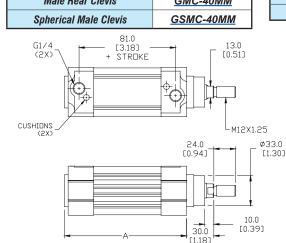
Mounting Accessories		
Style	Part No.	
Foot Mount	<u>GMB-40MM</u>	
Front or Rear Flange	<u>GFL-40MM</u>	
Male Rear Clevis	<u>GMC-40MM</u>	
Spherical Male Clevis	GSMC-40MM	

Rod Accessories Stvle Part No. **Rod Clevis** GRC-M12-125 Rod Eye GRE-M12-125 Self Aligning Rod Coupler GRCP-M12-125 Rod Nut GN-M12-125



See our website www.AutomationDirect.com for complete Engineering drawings.

Dimensions





G-Series ISO 15552 Pneumatic Cylinders – 50mm Bore

50mm Bore, Double-acting, Magnetic Piston, Cushions



NITRA pneumatic ISO 15552 interchangeable cylinder, 50mm bore, 20mm diameter piston rod, G1/4 (BSPP) female ports, double acting; flange, pivot and clevis mount options available. Adjustable cushions on both ends. See the end of the section for accessory details.

Features

Adjustable cushions

Internal magnet for sensor switching



- Three sides with longitudinal slots for inserting and securing retractable sensors such as type CPS9F and CPS9Q (see position switches at the end of the cylinder section for further details)
- G (BSPP) threaded ports

50mm bore,	double	acting, tap	oped end	caps
Part Number	Price	Stroke Length (mm)	"A" (mm [inch])	Weight (lb)
<u>G50M025MD-MC</u>	\$92.00	25	131 [5.16]	2.8
<u>G50M050MD-MC</u>	\$97.00	50	156 [6.14]	3.2
<u>G50M075MD-MC</u>	\$99.00	75	181 [7.13]	3.5
<u>G50M100MD-MC</u>	\$101.00	100	206 [8.11]	3.8
<u>G50M125MD-MC</u>	\$104.00	125	231 [9.09]	4.1
G50M150MD-MC	\$106.00	150	256 [10.08]	4.5
<u>G50M200MD-MC</u>	\$111.00	200	306 [12.05]	5.1
<u>G50M250MD-MC</u>	\$116.00	250	356 [14.06]	5.8
G50M300MD-MC	\$124.00	300	406 [15.98]	6.4
<u>G50M400MD-MC</u>	\$135.00	400	506 [19.92]	7.7
<u>G50M500MD-MC</u>	\$147.00	500	606 [23.86]	9.0
G50M600MD-MC	\$158.00	600	706 [27.80]	10.3

Specifications			
Aluminum body and end caps	Plastoferrite magnet		
C45 chromed piston rod	NBR (Nitrile Butadiene Rubber) buffer + static o-rings		
Die cast aluminum head	NBR (Nitrile Butadiene Rubber) cushioning gasket		
NBR (Nitrile Butadiene Rubber) piston and piston rod gasket	Brass cushioning needle with needle out movement safety system		
Steel guide bushing with bronze and PTFE (Teflon) insert	Pressure rating 145 psi [10 bar], AIR ONLY		
Drawn anodized aluminum body	Temperature rating 14°F to 176°F		
Self-lubricating technopolymer piston	[-10°C to 80°C]		
Extend force at 100 psi = 304.3 lb.	Retract force at 100 psi = 255.6 lb.		

BSPP = British Standard Pipe Parallel

12.0 [0.47]

37.0

[1.46]

* The cushions decelerate the piston rod over the last mm (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile cushion seal.

	essories	
Style	Part No.	
Foot Mount	GMB-50MM	
Front or Rear Flange	GFL-50MM	
Male Rear Clevis	<u>GMC-50MM</u>	
Spherical Male Clevis	GSMC-50MM	
G1/4 (2X)		
	32.0 (1.26)	5 38.0 [1.50]

Mounting Accessories

Rod Accessories			
Style	Part No.		
Rod Clevis	<u>GRC-M16-15</u>		
Rod Eye	<u>GRE-M16-15</u>		
Self Aligning Rod Coupler	<u>GRCP-M16-15</u>		
Rod Nut	<u>GN-M16-15</u>		



See our website <u>www.AutomationDirect.com</u> for complete Engineering drawings.

Dimensions



G-Series ISO 15552 Pneumatic Cylinders – 63mm Bore

· Internal magnet for sensor switching

63mm Bore, Double-acting, Magnetic Piston, Cushions



NITRA pneumatic ISO 15552 interchangeable cylinder, 63mm bore, 20mm diameter piston rod, G3/8 (BSPP) female ports, double acting; flange, pivot and clevis mount options available. Adjustable cushions on both ends. See the end of the section for accessory details.

Features

• Adjustable cushions

- Three sides with longitudinal slots for inserting and securing retractable sensors such as type CPS9F and CPS9Q (see position switches at the end of the cylinder section for further details) • G (BSPP) threaded ports
- 63mm bore, double acting, tapped end cabs Stroke Lenath "A" Weiaht Part Number Price (mm) (mm [inch]) (lb) G63M025MD-MC \$112.00 25 146 [5.75] 3.7 50 G63M050MD-MC \$115.00 171 [6.73] 4.0 G63M075MD-MC \$120.00 75 196 [7.72] 4.4 \$125.00 G63M100MD-MC 100 221 [8.70] 4.7 G63M125MD-MC \$127.00 125 246 [9.69] 5.0 G63M150MD-MC \$129.00 150 271 [10.67] 5.3 G63M200MD-MC \$135.00 200 321 [12.64] 6.0 G63M250MD-MC \$140.00 250 371 [14.61] 6.6 G63M300MD-MC \$147.00 300 421 [16.57] 7.3 G63M400MD-MC \$158.00 400 521 [20.51] 8.6 G63M500MD-MC \$172.00 500 621 [24.45] 9.8 721 [28.39] 11.2

Aluminum body and end caps	Plastoferrite magnet
C45 chromed piston rod	NBR (Nitrile Butadiene Rubber) buffer + static o-rings
Die cast aluminum head	NBR (Nitrile Butadiene Rubber) cushioning gasket
NBR (Nitrile Butadiene Rubber) piston and piston rod gasket	Brass cushioning needle with needle out movement safety system
Steel guide bushing with bronze and PTFE (Teflon) insert	Pressure rating 145 psi [10 bar], AIR ONLY
Drawn anodized aluminum body	Temperature rating 14°F to 176°F
Self-lubricating technopolymer piston	[-10°C to 80°C]
Extend force at 100 psi = 483.0 lb.	Retract force at 100 psi = 434.4 lb.

Specifications

BSPP = British Standard Pipe Parallel

Mounting Accessories			
Style	Part No.		
Foot Mount	<u>GMB-63MM</u>		
Front or Rear Flange	<u>GFL-63MM</u>		
Male Rear Clevis	<u>GMC-63MM</u>		
Spherical Male Clevis	<u>GSMC-63MM</u>		

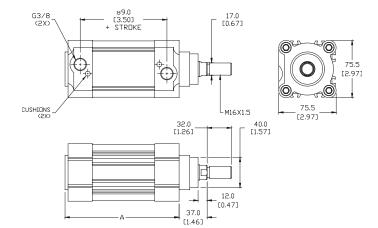
Rod Accessories		
Style	Part No.	
Rod Clevis	<u>GRC-M16-15</u>	
Rod Eye	<u>GRE-M16-15</u>	
Self Aligning Rod Coupler	<u>GRCP-M16-15</u>	
Rod Nut	<u>GN-M16-15</u>	

See our website www.AutomationDirect.com for complete Engineering drawings.

G63M600MD-MC \$184.00 600

* The cushions decelerate the piston rod over the last mm (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile cushion seal.

Dimensions





G-Series ISO 15552 Pneumatic Cylinders – 80mm Bore 80mm Bore, Double-acting, Magnetic Piston, Cushions



NITRA pneumatic ISO 15552 interchangeable cylinder, 80mm bore, 25mm diameter piston rod, G3/8 (BSPP) female ports, double acting; flange, pivot and clevis mount options available. Adjustable cushions on both ends. See the end of the section for accessory details.

Features

• Adjustable cushions

- Internal magnet for sensor switching
- Three sides with longitudinal slots for inserting and securing retractable sensors such as type CPS9F and CPS9Q (see position switches at the end of the cylinder section for further details)
- G (BSPP) threaded ports

80mm bore,	double	acting, ta	oped end	caps
Part Number	Price	Stroke Length (mm)	"A" (mm [inch])	Weight (lb)
<u>G80M025MD-MC</u>	\$131.00	25	153 [6.02]	6.9
<u>G80M050MD-MC</u>	\$135.00	50	178 [7.01]	7.4
<u>G80M075MD-MC</u>	\$139.00	75	203 [7.99]	7.9
<u>G80M100MD-MC</u>	\$142.00	100	228 [8.98]	8.4
<u>G80M125MD-MC</u>	\$148.00	125	253 [9.96]	8.9
G80M150MD-MC	\$152.00	150	278 [10.94]	9.4
<u>G80M200MD-MC</u>	\$160.00	200	328 [12.91]	10.4
G80M250MD-MC	\$172.00	250	378 [14.88]	11.4
<u>G80M300MD-MC</u>	\$181.00	300	428 [16.85]	12.4
<u>G80M400MD-MC</u>	\$197.00	400	528 [20.79]	14.4
<u>G80M500MD-MC</u>	\$216.00	500	628 [24.72]	16.4
<u>G80M600MD-MC</u>	\$233.00	600	728 [28.66]	18.4

Specifications			
Aluminum body and end caps	Plastoferrite magnet		
C45 chromed piston rod	NBR (Nitrile Butadiene Rubber) buffer + static o-rings		
Die cast aluminum head	NBR (Nitrile Butadiene Rubber) cushioning gasket		
NBR (Nitrile Butadiene Rubber) piston and piston rod gasket	Brass cushioning needle with needle out movement safety system		
Steel guide bushing with bronze and PTFE (Teflon) insert	Pressure rating 145 psi [10 bar], AIR ONLY		
Drawn anodized aluminum body	Temperature rating 14°F to 176°F		
Aluminum piston with PTFE (Teflon) pad	[-10°C to 80°C]		
Extend force at 100 psi = 779.1 lb.	Retract force at 100 psi = 703.0 lb.		

BSPP = British Standard Pipe Parallel

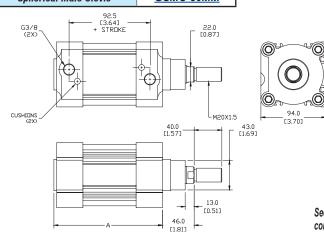
* The cushions decelerate the piston rod over the last mm (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile cushion seal.

Mounting Accessories		
Style	Part No.	
Foot Mount	<u>GMB-80MM</u>	
Front or Rear Flange	<u>GFL-80MM</u>	
Male Rear Clevis	<u>GMC-80MM</u>	
Spherical Male Clevis	GSMC-80MM	

Rod Access	Rod Accessories						
Style	Part No.						
Rod Clevis	<u>GRC-M20-15</u>						
Rod Eye	<u>GRE-M20-15</u>						
Self Aligning Rod Coupler	<u>GRCP-M20-15</u>						
Rod Nut	<u>GN-M20-15</u>						

Dimensions

mm [inches]



See our website www.AutomationDirect.com for complete Engineering drawings.

94.0 [3.70] Part Number

G100M025MD-MC

G100M050MD-MC

G100M075MD-MC

G100M100MD-MC



G-Series ISO 15552 Pneumatic Cylinders – 100mm Bore 100mm Bore, Double-acting, Magnetic Piston, Cushions



Stroke Lenath

(mm)

25

50

75

100

"A"

(mm [inch])

163 [6.42]

188 [7.40]

213 [8.39]

238 [9.37]

W

100mm bore, double acting, tapped end ca

Price

\$181.00

\$185.00

\$189.00

\$193.00

NITRA pneumatic ISO 15552 interchangeable cylinder, 100mm bore, 25mm diameter piston rod, G1/2 (BSPP) female ports, double acting; flange, pivot and clevis mount options available. Adjustable cushions on both ends. See the end of the section for accessory details.

Features

· Adjustable cushions

Internal magnet for sensor switching



- · Three sides with longitudinal slots for inserting and securing retractable sensors such as type CPS9F and CPS9Q (see position switches at the end of the cylinder section for further details)
- G (BSPP) threaded ports

aps	Specific	ations
Neight (lb)	Aluminum body and end caps	Plastoferrite magnet
9.3	C45 chromed piston rod	NBR (Nitrile Butadiene Rubber) buffer
9.8		+ static o-rings NBR (Nitrile Butadiene Rubber)
10.3	Die cast aluminum head	cushioning gasket
10.8	NBR (Nitrile Butadiene Rubber) piston and piston rod gasket	Brass cushioning needle with needle out movement safety system
11.4	Steel guide bushing with bronze and PTFE	Pressure rating 145 psi [10 bar], AIR
11.9	(Teflon) insert	ONLY
13.0	Drawn anodized aluminum body	Temperature rating 14°F to 176°F
14.0	Aluminum piston with PTFE (Teflon) pad	[-10°C to 80°C]
15.0		
17.1	Extend force at 100 psi = 1217.4 lb.	Retract force at 100 psi = 1141.3 lb.
19.2	RSPP = Rritish Standard Pine Parallel	

BSPP = British Standard Pipe Parallel

* The cushions decelerate the piston rod over the last mm (approx.) of stroke and are adjustable. Cushioned cylinders have an adjustable orifice and pre-lubricated nitrile cushion seal.

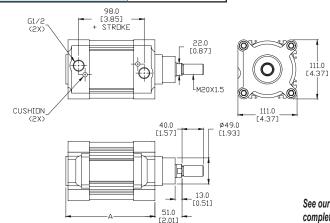
Mounting Accessories							
Style	Part No.						
Foot Mount	<u>GMB-100MM</u>						
Front or Rear Flange	<u>GFL-100MM</u>						
Male Rear Clevis	<u>GMC-100MM</u>						
Spherical Male Clevis	GSMC-100MM						

21.3

Rod Access	Rod Accessories							
Style	Part No.							
Rod Clevis	<u>GRC-M20-15</u>							
Rod Eye	<u>GRE-M20-15</u>							
Self Aligning Rod Coupler	<u>GRCP-M20-15</u>							
Rod Nut	<u>GN-M20-15</u>							

Dimensions

mm [inches]



See our website www.AutomationDirect.com for complete Engineering drawings.

G100M125MD-MC \$198.00 125 263 [10.35] G100M150MD-MC \$201.00 150 288 [11.34] G100M200MD-MC \$212.00 200 338 [13.31] G100M250MD-MC \$224.00 250 388 [15.28] G100M300MD-MC \$232.00 300 438 [17.24] G100M400MD-MC \$250.00 400 538 [21.18] G100M500MD-MC \$270.00 500 638 [25.12] G100M600MD-MC \$288.00 600 738 [29.10]



G-Series ISO 15552 Pneumatic Cylinders – Accessories

	G-Series Heavy Duty Pneumatic Cylinder Acces	sories			
Part Number	Description	Pcs/Pkg	Wt (lb)	Drawing Link	Price
<u>GRC-M10-125</u>	Rod clevis, M10 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$4.50
<u>GRC-M12-125</u>	Rod clevis, M12 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.3	PDF	\$7.50
<u>GRC-M16-15</u>	Rod clevis, M16 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.8	PDF	\$16.00
<u>GRC-M20-15</u>	Rod clevis, M20 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	1.5	PDF	\$26.00
<u>GRE-M10-125</u>	Rod eye, M10 X 1.25 thread, spherical bearing, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$25.00
<u>GRE-M12-125</u>	Rod eye, M12 X 1.25 thread, spherical bearing, zinc plated steel. For use with NITRA G-series cylinders.	1	0.3	PDF	\$28.50
<u>GRE-M16-15</u>	Rod eye, M16 X 1.5 thread, spherical bearing, zinc plated steel. For use with NITRA G-series cylinders.	1	0.5	PDF	\$53.00
<u>GRE-M20-15</u>	Rod eye, M20 X 1.5 thread, spherical bearing, zinc plated steel. For use with NITRA G-series cylinders.	1	0.9	PDF	\$71.00
<u>GRCP-M10-125</u>	Self-aligning rod coupler, M10 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.5	PDF	\$57.00
<u>GRCP-M12-125</u>	Self-aligning rod coupler, M12 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.7	PDF	\$60.00
<u>GRCP-M16-15</u>	Self-aligning rod coupler, M16 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	1.4	PDF	\$78.00
<u>GRCP-M20-15</u>	Self-aligning rod coupler, M20 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	1.5	PDF	\$96.00
GMB-32MM	Foot mount bracket, zinc plated steel. For use with 32mm bore NITRA G-series cylinders.	1	0.2	PDF	\$7.00
GMB-40MM	Foot mount bracket, zinc plated steel. For use with 40mm bore NITRA G-series cylinders.	1	0.3	PDF	\$8.25
GMB-50MM	Foot mount bracket, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	0.4	PDF	\$9.50
GMB-63MM	Foot mount bracket, zinc plated steel. For use with 63mm bore NITRA G-series cylinders.	1	0.6	PDF	\$10.50
GMB-80MM	Foot mount bracket, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	1.0	PDF	\$15.00
<u>GMB-100MM</u>	Foot mount bracket, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	1.3	PDF	\$24.00
<u>GMC-32MM</u>	Rear pivot eye, zinc plated steel. For use with 32mm bore NITRA G-series cylinders.	1	0.2	PDF	\$18.00
GMC-40MM	Rear pivot eye, zinc plated steel. For use with 40mm bore NITRA G-series cylinders.	1	0.3	PDF	\$19.00
GMC-50MM	Rear pivot eye, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	0.6	PDF	\$22.00
<u>GMC-63MM</u>	Rear pivot eye, zinc plated steel. For use with 63mm bore NITRA G-series cylinders.	1	0.9	PDF	\$26.00
<u>GMC-80MM</u>	Rear pivot eye, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	1.5	PDF	\$32.00
<u>GMC-100MM</u>	Rear pivot eye, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	2.4	<u>PDF</u>	\$44.50
GSMC-32MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 32mm bore NITRA G-series cylinders.	1	0.3	PDF	\$25.00
GSMC-40MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 40mm bore NITRA G-series cylinders.	1	0.4	PDF	\$27.00
GSMC-50MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	0.5	PDF	\$39.00
GSMC-63MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 63mm bore NITRA G-series cylinders.	1	0.7	PDF	\$50.00
GSMC-80MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	1.3	PDF	\$62.00
GSMC-100MM	Rear spherical pivot, spherical bearing, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	1.9	PDF	\$84.00
GFL-32MM	Flange mount plate, zinc plated steel. For use with 32mm bore NITRA G-series cylinders.	1	0.5	PDF	\$12.00
<u>GFL-40MM</u>	Flange mount plate, zinc plated steel. For use with 40mm bore NITRA G-series cylinders.	1	0.6	PDF	\$13.00
<u>GFL-50MM</u>	Flange mount plate, zinc plated steel. For use with 50mm bore NITRA G-series cylinders.	1	1.2	PDF	\$16.00
<u>GFL-63MM</u>	Flange mount plate, zinc plated steel. For use with 63mm bore NITRA G-series cylinders.	1	1.5	PDF	\$23.00
<u>GFL-80MM</u>	Flange mount plate, zinc plated steel. For use with 80mm bore NITRA G-series cylinders.	1	3.1	PDF	\$26.00
<u>GFL-100MM</u>	Flange mount plate, zinc plated steel. For use with 100mm bore NITRA G-series cylinders.	1	4.5	<u>PDF</u>	\$31.00
<u>GN-M10-125</u>	Rod nut, M10 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	<u>PDF</u>	\$1.50
<u>GN-M12-125</u>	Rod nut, M12 X 1.25 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	<u>PDF</u>	\$1.75
<u>GN-M16-15</u>	Rod nut, M16 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$2.00
<u>GN-M20-15</u>	Rod nut, M20 X 1.5 thread, zinc plated steel. For use with NITRA G-series cylinders.	1	0.2	PDF	\$2.25

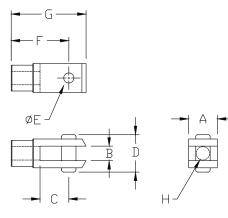


G-Series ISO Pneumatic Cylinders – Accessories

Rod Clevis



Part no. GRC-M10-125





Note: Comes with Pivot Pin installed.

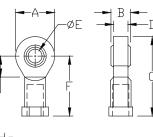
Rod Clevis Dimension Table										
Part #	A	В	С	D	Ε	F	G	Н		
<u>GRC-M10-125</u>	20.00 [0.78]	10.00 [0.39]	10.00 [0.39]	26.00 [1.02]	10.00 [0.39]	40.00 [1.57]	52.00 [2.04]	M10x1.25		
<u>GRC-M12-125</u>	24.00 [0.94]	12.00 [0.47]	24.00 [0.94]	32.00 [1.25]	12.00 [0.47]	48.00 [1.88]	62.00 [2.44]	M12x1.25		
<u>GRC-M16-15</u>	32.00 [1.25]	16.00 [0.62]	32.00 [1.25]	40.00 [1.57]	16.00 [0.62]	64.00 [2.51]	83.00 [3.26]	M16x1.5		
<u>GRC-M20-15</u>	40.00 [1.57]	20.00 [0.78]	40.00 [1.57]	48.00 [1.88]	20.00 [0.78]	80.00 [3.14]	105.00 [4.13]	M20x1.5		

Rod Eye



Dimensions

mm [inches]



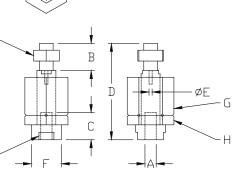




	Rod Eye Dimension Table											
Part #	A	В	С	D	Ε	F	G	Н	Ι			
<u>GRE-M10-125</u>	28.00 [1.10]	14.00 [0.55]	15.00 [0.59]	10.50 [0.41]	10.00 [0.39]	43.00 [1.69]	57.00 [2.24]	M10x1.25	19 [0.74]			
<u>GRE-M12-125</u>	32.00 [1.25]	16.00 [0.62]	17.00 [0.66]	12.00 [0.47]	12.00 [0.47]	50.00 [1.96]	66.00 [2.59]	M12x1.25	19 [0.74]			
<u>GRE-M16-15</u>	42.00 [1.65]	21.00 [0.82]	22.00 [0.86]	15.00 [0.59]	16.00 [0.62]	64.00 [2.51]	85.00 [3.34]	M16x1.5	22 [0.86]			
<u>GRE-M20-15</u>	50.00 [1.96]	25.00 [0.98]	26.00 [1.02]	18.00 [0.70]	20.00 [0.78]	77.00 [3.03]	102.00 [4.01]	M20x1.5	27 [1.06]			







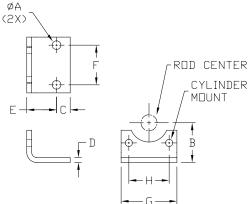
	Self Aligning Rod Coupler Dimension Table											
Part #	А	В	C	D	Ε	F	G	Н	Ι	J		
<u>GRCP-M10-125</u>	M10x1.25	20.00 [0.78]	20.00 [0.78]	71.00 [2.79]	4.00 [0.15]	22.00 [0.86]	30.00 [1.18]	30.00 [1.18]	19.00 [0.74]	17.00 [0.66]		
<u>GRCP-M12-125</u>	M12x1.25	24.00 [0.94]	20.00 [0.78]	75.00 [2.95]	4.00 [0.15]	22.00 [0.86]	30.00 [1.18]	30.00 [1.18]	19.00 [0.74]	19.00 [0.74]		
<u>GRCP-M16-15</u>	M16x1.5	32.00 [1.25]	32.00 [1.25]	103.00 [4.05]	4.00 [0.15]	32.00 [1.25]	41.00 [1.61]	41.00 [1.61]	30.00 [1.18]	24.00 [0.94]		
<u>GRCP-M20-15</u>	M20x1.5	40.00 [1.57]	40.00 [1.57]	119.00 [4.68]	4.00 [0.15]	32.00 [1.25]	41.00 [1.61]	41.00 [1.61]	30.00 [1.18]	30.00 [1.18]		

Foot Mount Bracket



mm [inches]

Dimensions



Part no. GMB-32MM

Note: Individually packed with 2 screws

		Foot	: Mount [Dimensio	n Table 👘			
Part #	А	В	C	D	Ε	F	G	Н
<u>GMB-32MM</u>	7.00	32.00	11.00	4.00	24.00	32.00	45.00	32.5
	[0.27]	[1.25]	[0.43]	[0.15]	[0.94]	[1.25]	[1.77]	[1.28]
<u>GMB-40MM</u>	9.00	36.00	15.00	4.00	28.00	36.00	52.00	38.0
	[0.35]	[1.41]	[0.59]	[0.15]	[1.10]	[1.41]	[2.04]	[1.50]
<u>GMB-50MM</u>	9.00	45.00	15.00	4.00	32.00	45.00	52.00	46.5
	[0.35]	[1.77]	[0.59]	[0.15]	[1.25]	[1.77]	[2.04]	[1.83]
<u>GMB-63MM</u>	9.00	50.00	15.00	6.00	32.00	50.00	75.00	56.5
	[0.35]	[1.96]	[0.59]	[0.23]	[1.25]	[1.96]	[2.95]	[2.22]
<u>GMB-80MM</u>	12.00	63.00	20.00	6.00	41.00	63.00	95.00	63.0
	[0.47]	[2.48]	[0.78]	[0.23]	[1.61]	[2.48]	[3.74]	[2.48]
<u>GMB-100MM</u>	14.00	71.00	25.00	6.00	41.00	75.00	115.00	89.0
	[0.55]	[2.79]	[0.98]	[0.23]	[1.61]	[2.95]	[4.52]	[3.50]

See our website www.AutomationDirect.com for complete Engineering drawings.

CYLINDER MOUNT

B ł



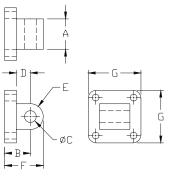
G-Series ISO Pneumatic Cylinders – Accessories

Rear Pivot Eye



Dimensions

mm [inches]



Part no. <u>GMC-32MM</u>



Note: Supplied with 4 screws, 4 washers

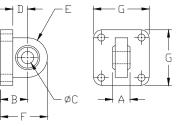
		lale Rear	Clevis Di	mension	Table		
Part #	A	В	С	D	Ε	F	G
<u>GMC-32MM</u>	26.00	22.00	10.00	12.00	11.00	33.00	45.00
	[1.02]	[0.86]	[0.39]	[0.47]	[0.43]	[1.29]	[1.77]
<u>GMC-40MM</u>	28.00	25.00	12.00	15.00	13.00	38.00	52.00
	[1.10]	[0.98]	[0.47]	[0.59]	[0.51]	[1.49]	[2.04]
<u>GMC-50MM</u>	32.00	27.00	12.00	15.00	13.00	40.00	65.00
	[1.25]	[1.06]	[0.47]	[0.59]	[0.51]	[1.57]	[2.55]
<u>GMC-63MM</u>	40.00	32.00	16.00	20.00	17.00	49.00	75.00
	[1.57]	[1.25]	[0.62]	[0.78]	[0.66]	[1.92]	[2.95]
<u>GMC-80MM</u>	50.00	36.00	16.00	20.00	17.00	53.00	95.00
	[1.96]	[1.41]	[0.62]	[0.78]	[0.66]	[2.08]	[3.74]
<u>GMC-100MM</u>	60.00	41.00	20.00	25.00	21.00	62.00	115.00
	[2.36]	[1.61]	[0.78]	[0.98]	[0.82]	[2.44]	[4.52]

Spherical Rear Pivot



Dimensions

mm [inches]



Part no. <u>GSMC-32MM</u>

Note: Supplied with 4 screws, 4 washers

	Spherical Male Clevis Dimension Table										
Part #	A	В	С	D	E	F	G				
<u>GSMC-32MM</u>	14.00	22.00	10.00	12.00	16.00	38.00	45.00				
	[0.55]	[0.86]	[0.39]	[0.47]	[0.62]	[1.49]	[1.77]				
<u>GSMC-40MM</u>	16.00	25.00	12.00	15.00	19.00	44.00	52.00				
	[0.62]	[0.98]	[0.47]	[0.59]	[0.74]	[1.73]	[2.04]				
<u>GSMC-50MM</u>	16.00	27.00	12.00	15.00	19.00	46.00	65.00				
	[0.62]	[1.06]	[0.47]	[0.59]	[0.74]	[1.81]	[2.55]				
<u>GSMC-63MM</u>	21.00	32.00	16.00	20.00	24.00	56.00	75.00				
	[0.82]	[1.25]	[0.62]	[0.78]	[0.94]	[2.20]	[2.95]				
<u>GSMC-80MM</u>	21.00	36.00	16.00	20.00	24.00	60.00	95.00				
	[0.82]	[1.41]	[0.62]	[0.78]	[0.94]	[2.36]	[3.74]				
<u>GSMC-100MM</u>	25.00	41.00	20.00	25.00	30.00	71.00	115.00				
	[0.98]	[1.61]	[0.78]	[0.98]	[1.18]	[2.79]	[4.52]				



G-Series ISO Pneumatic Cylinders – Accessories

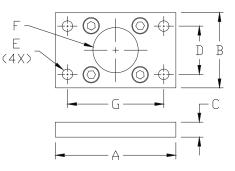
Front or Rear Flange



Part no. GFL-32MM

Dimensions

mm [inches]





Note: Supplied with 4 screws

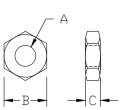
	Front or Rear Flange Dimension Table										
Part #	A	В	C	D	Ε	F	G				
<u>GFL-32MM</u>	80.00	50.00	10.00	32.00	7.00	32.00	64.00				
	[3.14]	[1.96]	[0.39]	[1.25]	[1.25]	[1.25]	[2.52]				
<u>GFL-40MM</u>	90.00	55.00	10.00	36.00	9.00	40.00	72.00				
	[3.54]	[2.16]	[0.39]	[1.41]	[0.35]	[1.57]	[2.83]				
<u>GFL-50MM</u>	110.00	65.00	12.00	45.00	9.00	50.00	90.00				
	[4.33]	[2.55]	[0.47]	[1.77]	[0.35]	[1.96]	[3.54]				
<u>GFL-63MM</u>	120.00	75.00	12.00	50.00	9.00	63.00	100.00				
	[4.72]	[2.95]	[0.47]	[1.96]	[0.35]	[2.48]	[3.93]				
<u>GFL-80MM</u>	153.00	95.00	16.00	63.00	12.00	80.00	126.00				
	[6.02]	[3.74]	[0.62]	[2.48]	[0.47]	[3.14]	[4.96]				
<u>GFL-100MM</u>	178.00	115.00	16.00	75.00	14.00	100.00	150.00				
	[7.00]	[4.52]	[0.62]	[2.95]	[0.55]	[3.93]	[5.90]				

Rod Nut



Dimensions mm [inches]

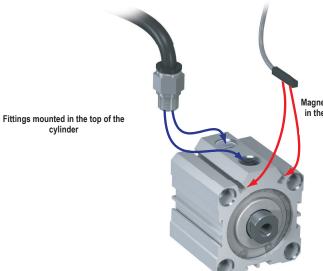




Rod Nut Dimension Table					
Part #	A	В	С		
<u>GN-M10-125</u>	M10x1.25	17.00 [0.66]	6.00 [0.23]		
<u>GN-M12-125</u>	M12x1.25	19.00 [0.74]	7.00 [0.27]		
<u>GN-M16-15</u>	M16x1.5	24.00 [0.94]	8.00 [0.31]		
<u>GN-M20-15</u>	M20x1.5	30.00 [1.18]	9.00 [0.35]		

H-Series Pneumatic Cylinders

NITRA Pneumatic Compact Extruded Body Air Cylinders



Magnetic switches can be mounted in the top grooves of the cylinder



Click on the thumbnail or go to <u>https://www.automationdirect.com/VID-PN-0052</u> for a short video on pneumatic cylinder selection and purchasing.

The NITRA Pneumatics H-Series compact extruded body cylinders includes bore sizes from 12mm to 100mm and stroke lengths from 5mm to 100mm to meet a broad range of limited space applications. These high quality cylinders are constructed with hard anodized extruded aluminum bodies and end caps. Cylinder switch

Features

- Ten bore sizes
- Eight stroke lengths
- Interchangeable with other popular brands
- Work with 4mm square T-slot cylinder switches
- Nitrile / Buna-N O-rings



mounting slots are built in to the bodies. All sizes include a magnet in the piston and a chrome plated steel piston rod. Interchangeable with other common brands, these cylinders are factory

lubricated for optimum performance and long, reliable life.



Click the icon or scan the QR code to be taken to <u>https://www.automationdirect.com/pneumatics/cylinders/cylinder sizing</u> for additional information regarding cylincer sizing & force.

H-Series Cylinder Specifications										
Bore Size (mm)	12	16	20	25	32	40	50	63	80	100
Action					Double	e acting				
Fluid					Air (cle	an/dry)				
Temperature Range					-4 to 176°F	(-20 to 80°C)				
Pressure Range				14	4 to 145 psi (0.96 to 9.9 ba	ar)			
Proof Pressure		215psi (14.8 bar)								
Lubrication		Not required								
Cushion Type		Bumper - Polyurethane (ø12 - ø25); Buna-N (ø32 - ø100)								
Speed Range		30 to 500 mm/s								
Stroke Tolerance					+1.0 /	-0 mm				
Port Size		M5	x0.8		1/8-	NPT	1/4-	NPT	3/8-	NPT
Extend Force @ 87psi (lbs.)	15	27	42	66	108	169	264	420	678	1059
Retract Force @ 87psi (lbs.)	11	20	32	51	81	142	222	378	611	950
Sensor Switch Compatibility					CPS9H Ser	ies Switches				



H-Series 12mm Pneumatic Cylinders

12mm Bore, Double Acting with Magnet



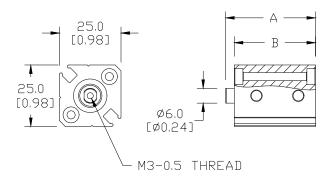
Part No. H12M005MD-M

12mm B o	ore H-Seri	es Cylinde	rs - Doubl	e Acting	j w/ Ma	gnet
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Port Size	Weight (Ibs)	Price
<u>H12M005MD-M</u>	5	36.5 [1.44]	33.0 [1.30]		0.1	\$40.00
<u>H12M010MD-M</u>	10	41.5 [1.63]	38.0 [1.50]		0.2	\$42.00
<u>H12M015MD-M</u>	15	46.5 [1.83]	43.0 [1.69]		0.2	\$43.50
<u>H12M020MD-M</u>	20	51.5 [2.03]	48.0 [1.89]	ME 0.0	0.2	\$45.00
<u>H12M025MD-M</u>	25	56.5 [2.22]	53.0 [2.09]	M5x0.8	0.2	\$46.00
<u>H12M030MD-M</u>	30	61.5 [2.42]	58.0 [2.28]		0.2	\$47.50
<u>H12M040MD-M</u>	40	71.5 [2.81]	68.0 [2.68]		0.3	\$55.00
<u>H12M050MD-M</u>	50	81.5 [3.21]	78.0 [3.07]		0.7	\$61.00

Mounting Accessories				
Rod Clevis	<u>HRC-12M</u>			
Rod Male Adapter	<u>HMA-12M</u>			
Female Rear Clevis	<u>HFC-12M</u>			

Note: For full details see Accessories at the end of the section.

Dimensions





H-Series 16mm Pneumatic Cylinders

16mm Bore, Double Acting with Magnet



Part No. H16M005MD-M

16mm Bor	16mm Bore H-Series Cylinders - Double Acting w/ Magnet					
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Port Size	Weight (lbs)	Price
<u>H16M005MD-M</u>	5	39.0 [1.54]	35.5 [1.40]		0.2	\$54.00
<u>H16M010MD-M</u>	10	44.0 [1.73]	40.5 [1.59]		0.2	\$55.00
<u>H16M015MD-M</u>	15	49.0 [1.93]	45.5 [1.79]	M5x0.8	0.2	\$57.00
<u>H16M020MD-M</u>	20	54.0 [2.13]	50.5 [1.99]		0.3	\$58.00
<u>H16M025MD-M</u>	25	59.0 [2.32]	55.5 [2.19]		0.3	\$60.00
<u>H16M030MD-M</u>	30	64.0 [2.52]	60.5 [2.38]		0.3	\$61.00
<u>H16M040MD-M</u>	40	74.0 [2.91]	70.5 [2.78]		0.4	\$68.00
<u>H16M050MD-M</u>	50	84.0 [3.31]	80.5 [3.17]		0.4	\$74.00

Mounting Accessories				
Rod Clevis	<u>HRC-16M</u>			
Rod Male Adapter	<u>HMA-16M</u>			
Female Rear Clevis	<u>HFC-16M</u>			

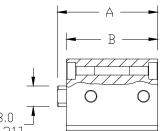
Note: For full details see Accessories at the end of the section.

Dimensions

mm [inches]



M4-0.7 THREAD





H-Series 20mm Pneumatic Cylinders

20mm Bore, Double Acting with Magnet



Part No. H20M005MD-M

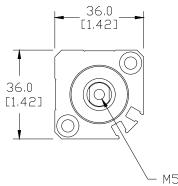
20mm Bore H-Series Cylinders - Double Acting w/ Magnet						
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Port Size	Weight (lbs)	Price
<u>H20M005MD-M</u>	5	41.0 [1.61]	36.5 [1.44]		0.3	\$65.00
<u>H20M010MD-M</u>	10	46.0 [1.81]	41.5 [1.63]		0.3	\$67.00
H20M015MD-M	15	51.0 [2.01]	46.5 [1.83]		0.4	\$68.00
<u>H20M020MD-M</u>	20	56.0 [2.20]	51.5 [2.03]	- - M5x0.8 -	0.4	\$69.00
H20M025MD-M	25	61.0 [2.40]	56.5 [2.22]		0.4	\$70.00
<u>H20M030MD-M</u>	30	66.0 [2.60]	61.5 [2.42]		0.4	\$71.00
<u>H20M040MD-M</u>	40	76.0 [2.99]	71.5 [2.81]		0.4	\$74.00
H20M050MD-M	50	86.0 [3.39]	81.5 [3.21]		0.5	\$78.00
<u>H20M075MD-M</u>	75	111.0 [4.37]	106.5 [4.19]		0.7	\$80.00
<u>H20M100MD-M</u>	100	136.0 [5.35]	131.5 [5.18]		0.7	\$87.00

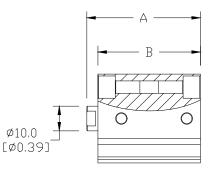
Mounting Accessories				
Rod Clevis <u>HRC-20M</u>				
Rod Male Adapter	<u>HMA-20M</u>			
Female Rear Clevis	<u>HFC-20M</u>			

Note: For full details see Accessories at the end of the section.

Dimensions

mm [inches]





M5-0.8 THREAD



H-Series 25mm Pneumatic Cylinders

25mm Bore, Double Acting with Magnet



Part No. H25M005MD-M

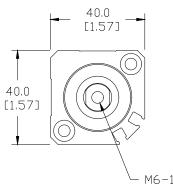
25mm B	25mm Bore H-Series Cylinders - Double Acting w/ Magnet					
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Port Size	Weight (Ibs)	Price
<u>H25M005MD-M</u>	5	42.5 [1.67]	37.5 [1.48]		0.4	\$60.00
<u>H25M010MD-M</u>	10	47.5 [1.87]	42.5 [1.67]		0.4	\$72.00
<u>H25M015MD-M</u>	15	52.5 [2.07]	47.5 [1.87]		0.4	\$74.00
<u>H25M020MD-M</u>	20	57.5 [2.26]	52.5 [2.07]		0.4	\$76.00
<u>H25M025MD-M</u>	25	62.5 [2.46]	57.5 [2.26]	M5x0.8	0.5	\$77.00
<u>H25M030MD-M</u>	30	67.5 [2.66]	62.5 [2.46]	WIJXU.0	0.5	\$78.00
<u>H25M040MD-M</u>	40	77.5 [3.05]	72.5 [2.85]		0.6	\$82.00
<u>H25M050MD-M</u>	50	87.5 [3.44]	82.5 [3.25]		0.7	\$84.00
<u>H25M075MD-M</u>	75	112.5 [4.43]	107.5 [4.23]		0.9	\$85.00
<u>H25M100MD-M</u>	100	137.5 [5.41]	132.5 [5.22]		1.1	\$108.00

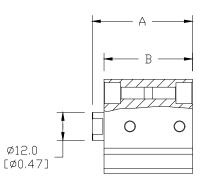
Mounting Accessories		
Rod Clevis	<u>HRC-25M</u>	
Rod Male Adapter	<u>HMA-25M</u>	
Female Rear Clevis	<u>HFC-25M</u>	

Note: For full details see Accessories at the end of the section.

Dimensions

mm [inches]





- M6-1.0 THREAD



H-Series 32mm Pneumatic Cylinders

32mm Bore, Double Acting with Magnet



Part No. H32M005MD-M

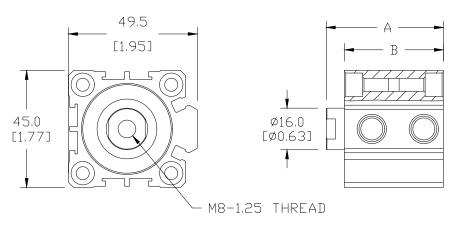
32mm B	ore H-Seri	es Cylinde	rs - Double	Acting	w/ Magi	net
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Port Size	Weight (Ibs)	Price
<u>H32M005MD-M</u>	5	45.0 [1.77]	38.0 [1.50]		0.5	\$87.00
<u>H32M010MD-M</u>	10	50.0 [1.97]	43.0 [1.69]		0.5	\$89.00
<u>H32M015MD-M</u>	15	55.0 [2.17]	48.0 [1.89]		0.6	\$90.00
<u>H32M020MD-M</u>	20	60.0 [2.36]	53.0 [2.09]	1/8-NPT	0.7	\$91.00
<u>H32M025MD-M</u>	25	65.0 [2.56]	58.0 [2.28]		0.7	\$92.00
<u>H32M030MD-M</u>	30	70.0 [2.76]	63.0 [2.48]	I/O-INF I	0.7	\$95.00
<u>H32M040MD-M</u>	40	80.0 [3.15]	73.0 [2.87]		0.8	\$97.00
<u>H32M050MD-M</u>	50	90.0 [3.54]	83.0 [3.27]		0.8	\$100.00
<u>H32M075MD-M</u>	75	115.0 [4.53]	108.0 [4.25]		1.3	\$107.00
<u>H32M100MD-M</u>	100	140.0 [5.51]	133.0 [5.24]		1.7	\$116.00

Mounting Accessories				
Rod Clevis	<u>HRC-32M</u>			
Rod Male Adapter	<u>HMA-32M</u>			
Female Rear Clevis	<u>HFC-32M</u>			

Note: For full details see Accessories at the end of the section.

Dimensions

mm [inches]



PNEUMATICS

H-Series 40mm Pneumatic Cylinders

40mm Bore, Double Acting with Magnet



Part No. H40M005MD-M

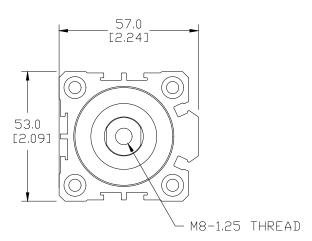
40mm Bore H-Series Cylinders - Double Acting w/ Magnet								
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Port Size	Weight (lbs)	Price		
<u>H40M005MD-M</u>	5	51.5 [2.03]	44.5 [1.75]	- 1/8-NPT	0.6	\$100.00		
<u>H40M010MD-M</u>	10	56.5 [2.22]	49.5 [1.95]		0.7	\$101.00		
<u>H40M015MD-M</u>	15	61.5 [2.42]	54.5 [2.15]		0.7	\$103.00		
<u>H40M020MD-M</u>	20	66.5 [2.62]	59.5 [2.34]		0.8	\$105.00		
<u>H40M025MD-M</u>	25	71.5 [2.81]	64.5 [2.54]		0.9	\$106.00		
<u>H40M030MD-M</u>	30	76.5 [3.01]	69.5 [2.74]		0.9	\$107.00		
<u>H40M040MD-M</u>	40	86.5 [3.41]	79.5 [3.13]		1.0	\$112.00		
<u>H40M050MD-M</u>	50	96.5 [3.80]	89.5 [3.52]		1.1	\$114.00		
<u>H40M075MD-M</u>	75	121.5 [4.78]	114.5 [4.51]		1.6	\$123.00		
<u>H40M100MD-M</u>	100	146.5 [5.77]	139.5 [5.49]		2.0	\$129.00		

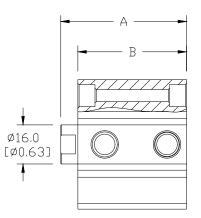
Mounting Accessories				
<u>HRC-40M</u>				
<u>HMA-40M</u>				
<u>HFC-40M</u>				

Note: For full details see Accessories at the end of the section.

Dimensions

mm [inches]







H-Series 50mm Pneumatic Cylinders

50mm Bore, Double Acting with Magnet



Part No. H50M005MD-M

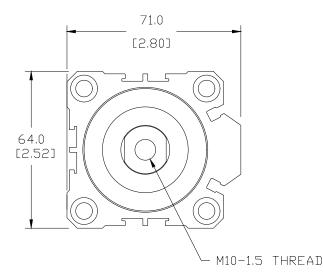
50mm B	ore H-Serie	s Cylinder	's - Doubl	e Acting	w/ Magi	net
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Port Size	Weight (lbs)	Price
H50M005MD-M	5	53.5 [2.11]	45.5 [1.79]		1.0	\$117.00
<u>H50M010MD-M</u>	10	58.5 [2.30]	50.5 [1.99]		1.1	\$120.00
H50M015MD-M	15	63.5 [2.50]	55.5 [2.19]		1.1	\$124.00
<u>H50M020MD-M</u>	20	68.5 [2.70]	60.5 [2.38]		1.2	\$125.00
H50M025MD-M	25	73.5 [2.89]	65.5 [2.58]	1/4-NPT	1.3	\$127.00
<u>H50M030MD-M</u>	30	78.5 [3.09]	70.5 [2.78]	1/4-INP 1	1.4	\$128.00
H50M040MD-M	40	88.5 [3.48]	80.5 [3.17]		1.6	\$134.00
H50M050MD-M	50	98.5 [3.88]	90.5 [3.56]		1.7	\$137.00
<u>H50M075MD-M</u>	75	123.5 [4.86]	115.5 [4.55]		2.2	\$148.00
<u>H50M100MD-M</u>	100	148.5 [5.85]	140.5 [5.53]		2.6	\$158.00

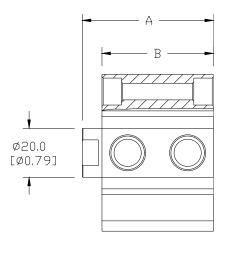
Mounting Accessories					
<u>HRC-50M</u>					
<u>HMA-50M</u>					
<u>HFC-50M</u>					

Note: For full details see Accessories at the end of the section.

Dimensions

mm [inches]







H-Series 63mm Pneumatic Cylinders

63mm Bore, Double Acting with Magnet



63mm Bore H-Series Cylinders - Double Acting w/ Magnet							
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Port Size	Weight (Ibs)	Price	
<u>H63M005MD-M</u>	5	59.0 [2.32]	51.0 [2.01]		1.5	\$136.00	
<u>H63M010MD-M</u>	10	64.0 [2.52]	56.0 [2.20]	- 1/4-NPT	1.6	\$140.00	
<u>H63M015MD-M</u>	15	69.0 [2.72]	61.0 [2.40]		1.7	\$142.00	
<u>H63M020MD-M</u>	20	74.0 [2.91]	66.0 [2.60]		1.8	\$146.00	
<u>H63M025MD-M</u>	25	79.0 [3.11]	71.0 [2.80]		1.9	\$147.00	
<u>H63M030MD-M</u>	30	84.0 [3.31]	76.0 [2.99]		2.0	\$149.00	
<u>H63M040MD-M</u>	40	94.0 [3.70]	86.0 [3.39]		2.2	\$154.00	
<u>H63M050MD-M</u>	50	104.0 [4.09]	96.0 [3.78]		2.4	\$158.00	
<u>H63M075MD-M</u>	75	129.0 [5.08]	121.0 [4.76]		3.0	\$170.00	
<u>H63M100MD-M</u>	100	154.0 [6.06]	146.0 [5.75]		3.5	\$181.00	

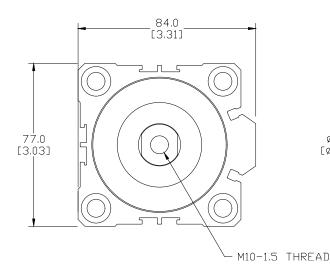
Part No. <u>H63M005MD-M</u>

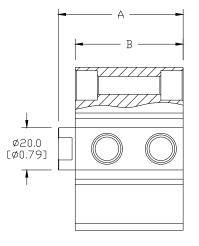
Mounting Accessories					
Rod Clevis <u>HRC-63M</u>					
Rod Male Adapter	<u>HMA-63M</u>				
Female Rear Clevis <u>HFC-63M</u>					

Note: For full details see Accessories at the end of the section.

Dimensions

mm [inches]







H-Series 80mm Pneumatic Cylinders

80mm Bore, Double Acting with Magnet

|



Part No. H80M005MD-M

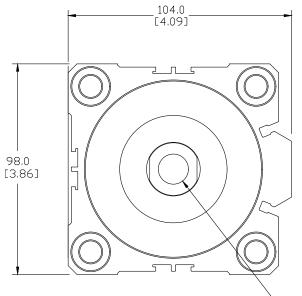
80mm Bo	ore H-Serie	s Cylinder	s - Double	Acting	w/ Magr	net
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Port Size	Weight (Ibs)	Price
<u>H80M005MD-M</u>	5	68.5 [2.70]	58.5 [2.30]		2.6	\$173.00
<u>H80M010MD-M</u>	10	73.5 [2.89]	63.5 [2.50]	- 3/8-NPT	2.9	\$176.00
<u>H80M015MD-M</u>	15	78.5 [3.09]	68.5 [2.70]		3.0	\$178.00
<u>H80M020MD-M</u>	20	83.5 [3.29]	73.5 [2.89]		3.2	\$182.00
<u>H80M025MD-M</u>	25	88.5 [3.48]	78.5 [3.09]		3.4	\$183.00
<u>H80M030MD-M</u>	30	93.5 [3.68]	83.5 [3.29]		3.5	\$185.00
<u>H80M040MD-M</u>	40	103.5 [4.07]	93.5 [3.68]		3.8	\$191.00
<u>H80M050MD-M</u>	50	113.5 [4.47]	103.5 [4.07]		4.2	\$196.00
<u>H80M075MD-M</u>	75	138.5 [5.45]	128.5 [5.06]		5.3	\$209.00
<u>H80M100MD-M</u>	100	163.5 [6.44]	153.5 [6.04]		6.4	\$221.00

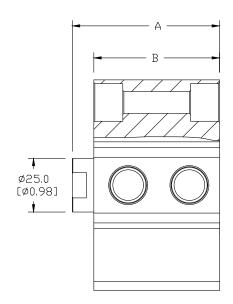
Mounting Accessories				
Rod Clevis <u>HRC-80N</u>				
Rod Male Adapter	<u>HMA-80M</u>			
Female Rear Clevis	<u>HFC-80M</u>			

Note: For full details see Accessories at the end of the section.

Dimensions

mm [inches]





- M16-2.0 THREAD



H-Series 100mm Pneumatic Cylinders

100mm Bore, Double Acting with Magnet



Part No. H100M005MD-M

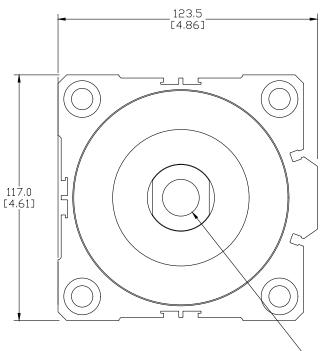
100mm Bore H-Series Cylinders - Double Acting w/ Magnet								
Part Number	Stroke Length (mm)	"A" (mm [in])	"B" (mm [in])	Port Size	Weight (Ibs)	Price		
<u>H100M005MD-M</u>	5	80.0 [3.15]	68.0 [2.68]	- - - - 3/8-NPT	4.9	\$226.00		
<u>H100M010MD-M</u>	10	85.0 [3.35]	73.0 [2.87]		4.9	\$247.00		
<u>H100M015MD-M</u>	15	90.0 [3.54]	78.0 [3.07]		5.1	\$252.00		
<u>H100M020MD-M</u>	20	95.0 [3.74]	83.0 [3.27]		5.4	\$254.00		
<u>H100M025MD-M</u>	25	100.0 [3.94]	88.0 [3.46]		5.6	\$258.00		
<u>H100M030MD-M</u>	30	105.0 [4.13]	93.0 [3.66]	3/0-INF I	5.8	\$261.00		
<u>H100M040MD-M</u>	40	115.0 [4.53]	103.0 [4.06]		6.2	\$267.00		
<u>H100M050MD-M</u>	50	125.0 [4.92]	113.0 [4.45]	-	7.5	\$274.00		
<u>H100M075MD-M</u>	75	150.0 [5.91]	138.0 [5.43]		9.7	\$226.00		
<u>H100M100MD-M</u>	100	175.0 [6.89]	163.0 [6.42]		11.9	\$306.00		

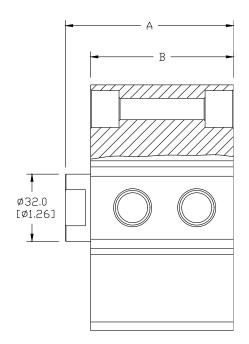
Mounting Accessories				
Rod Clevis	<u>HRC-100M</u>			
Rod Male Adapter	<u>HMA-100M</u>			
Female Rear Clevis <u>HFC-100M</u>				
Note: For full details see Accessories at the end of the				

details see Accessories at the end of the section.

Dimensions

mm [inches]





M20-2.5 THREAD



H-Series Pneumatic Cylinder Accessories

H-Series Pneumatic Cylinder Accessories							
Part Number	Description	Pcs/Pkg	Wt (lb)	Price			
<u>HRC-12M</u>	NITRAcylinder rod clevis, plated steel, M5x0.8 thread. For use with 12 mm H-series cylinders. Male adapter and hex nut included.	1	0.1	\$15.50			
<u>HRC-16M</u>	NITRAcylinder rod clevis, plated steel, M6 x 1.0 thread. For use with 16 mm H-series cylinders. Male adapter and hex nut included.	1	0.1	\$16.50			
<u>HRC-20M</u>	NITRAcylinderrodclevis, plated steel, M8x1.25thread. Foruse with 20mmH-series cylinders. Male adapter and hex nut included.	1	0.1	\$17.00			
<u>HRC-25M</u>	NITRAcylinderrodclevis,platedsteel,M10X1.25thread.Forusewith25mmH-seriescylinders. Male adapter and hex nut included.	1	0.2	\$19.00			
<u>HRC-32M</u>	NITRA cylinder rod clevis, cast iron, M14 x 1.5 thread. For use with 32 mm H-series cylinders. Male adapter and hex nut included.	1	0.3	\$21.50			
<u>HRC-40M</u>	NITRA cylinder rod clevis, cast iron, M14 x 1.5 thread. For use with 40 mm H-series cylinders. Male adapter and hex nut included.	1	0.3	\$21.50			
<u>HRC-50M</u>	NITRA cylinder rod clevis, cast iron, M18 x 1.5 thread. For use with 50 mm H-series cylinders. Male adapter and hex nut included.	1	0.6	\$27.50			
<u>HRC-63M</u>	NITRA cylinder rod clevis, cast iron, M18 x 1.5 thread. For use with 63 mm H-series cylinders. Male adapter and hex nut included.	1	0.6	\$28.00			
<u>HRC-80M</u>	NITRA cylinder rod clevis, cast iron, M22 X 1.5 thread. For use with 80 mm H-series cylinders. Male adapter and hex nut included.	1	1.5	\$38.50			
<u>HRC-100M</u>	NITRAcylinder rod clevis, cast iron, M26 x 1.5 thread. For use with 100 mm H-series cylinders. Male adapter and hex nut included.	1	2.0	\$45.00			
<u>HMA-12M</u>	NITRA cylinder male adapter, stainless steel, M5 x 0.8 thread. For use with 12 mm H-series cylinders. Hex nut included.	1	0.1	\$10.00			
<u>HMA-16M</u>	NITRA cylinder male adapter, stainless steel, M6 x 1.0 thread. For use with 16 mm H-series cylinders. Hex nut included.		0.1	\$10.00			
<u>HMA-20M</u>	NITRA cylinder male adapter, stainless steel, M8 x 1.25 thread. For use with 20 mm H-series cylinders. Hex nut included.	1	0.1	\$10.50			
<u>HMA-25M</u>	NITRA cylinder male adapter, stainless steel, M10 X 1.25 thread. For use with 25 mm H-series cylinders. Hex nut included.	1	0.1	\$11.00			
<u>HMA-32M</u>	ITRA cylinder male adapter, stainless steel, M14 x 1.5 thread. For use with 32 mm series cylinders. Hex nut included.		0.1	\$11.50			
<u>HMA-40M</u>	NITRA cylinder male adapter, stainless steel, M14 x 1.5 thread. For use with 40 mm H-series cylinders. Hex nut included.	1	0.1	\$11.50			
<u>HMA-50M</u>	NITRA cylinder male adapter, stainless steel, M18 x 1.5 thread. For use with 50 mm H-series cylinders. Hex nut included.	1	0.2	\$13.00			
<u>HMA-63M</u>	NITRA cylinder male adapter, stainless steel, M18 x 1.5 thread. For use with 63 mm H-series cylinders. Hex nut included.	1	0.2	\$13.00			
<u>HMA-80M</u>	NITRA cylinder male adapter, stainless steel, M22 x 1.5 thread. For use with 80 mm H-series cylinders. Hex nut included.	1	0.4	\$17.00			
<u>HMA-100M</u>	NITRA cylinder male adapter, stainless steel, M26 x 1.5 thread. For use with 100 mm H-series cylinders. Hex nut included.	1	0.5	\$20.50			
<u>HFC-12M</u>	NITRA cylinder rear clevis bracket, aluminum. For use with 12 mm H-series cylinders. Mounting hardware and pivot pin included.	1	0.1	\$15.50			
<u>HFC-16M</u>	NITRA cylinder rear clevis bracket, aluminum. For use with 16 mm H-series cylinders. Mounting hardware and pivot pin included. NITRA cylinder rear clevis bracket, aluminum. For use with 20 mm H-series cylinders.	1	0.1	\$16.00			
HFC-20M	Mounting hardware and pivot pin included. NITRA cylinder rear clevis bracket, aluminum. For use with 25 mm H-series cylinders.	1	0.2	\$17.50			
<u>HFC-25M</u>	Mounting hardware and pivot pin included. NITRA cylinder rear clevis bracket, cast iron. For use with 32 mm H-series cylinders.	1	0.2	\$21.00			
HFC-32M	Mounting hardware and pivot pin included. NITRA cylinder rear clevis bracket, cast iron. For use with 40 mm H-series cylinders.	1	0.4	\$24.50			
HFC-40M	Mounting hardware and pivot pin included. NITRA cylinder rear clevis bracket, cast iron. For use with 50 mm H-series cylinders.	1	0.4	\$24.50			
<u>HFC-50M</u> HFC-63M	Mounting hardware and pivot pin included. NITRA cylinder rear clevis bracket, cast iron. For use with 63 mm H-series cylinders.	1	0.8	\$34.00 \$34.00			
HFC-80M	Mounting hardware and pivot pin included. NITRA cylinder rear clevis bracket, cast iron. For use with 80 mm H-series cylinders.	1	2.3	\$45.50			
	Mounting hardware and pivot pin included. NITRA cylinder rear clevis bracket, cast iron. For use with 100 mm H-series cylinders.	1		-			
<u>HFC-100M</u>	Mounting hardware and pivot pin included.	1	3.8	\$51.00			



H-Series Pneumatic Cylinder Accessories

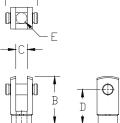
Rod Clevis





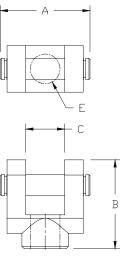
Dimensions

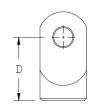
mm [inches]











HRC-32M - HRC-100M

Part no. <u>HRC-20M</u>

Part no. <u>HRC-32M</u>



Note: Comes with Pivot Pin installed. Includes Rod Male Adapter (see below)

R	od Clev	is Dim	ension	Table	
Part #	A	В	С	D	Ε
<u>HRC-12M</u>	14.6 [0.57]	22.0 [0.87]	5.3 [0.21]	16.0 [0.63]	M5x0.8
<u>HRC-16M</u>	16.8 [0.66]	28.0 [1.10]	6.6 [0.26]	21.0 [0.83]	M6x1.0
<u>HRC-20M</u>	21.0 [0.83]	34.0 [1.34]	8.3 [0.33]	25.0 [0.98]	M8x1.25
<u>HRC-25M</u>	26.4 [1.04]	41.0 [1.61]	10.3 [0.41]	30.0 [1.18]	M10x1.5
<u>HRC-32M</u>	42.4 [1.67]	42.0 [1.65]	18.4 [0.72]	30.0 [1.18]	M14x1.5
<u>HRC-40M</u>	42.4 [1.67]	42.0 [1.65]	18.4 [0.72]	30.0 [1.18]	M14x1.5
<u>HRC-50M</u>	50.4 [1.98]	56.0 [2.20]	22.4 [0.88]	40.0 [1.57]	M18x1.5
<u>HRC-63M</u>	50.4 [1.98]	56.0 [2.20]	22.4 [0.88]	40.0 [1.57]	M18x1.5
<u>HRC-80M</u>	63.6 [2.50]	71.0 [2.80]	28.4 [1.12]	50.0 [1.97]	M22x1.5
<u>HRC-100M</u>	72.6 [2.86]	79.0 [3.11]	32.4 [1.28]	55.0 [2.17]	M26x1.5

Rod Male Adapter

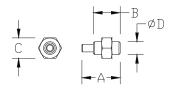


Part no. HMA-32M

Rod Ma	le Adap	ter Dime	nsion Ta	able
Part #	A	В	C	D
<u>HMA-12M</u>	15.0 [0.59]	10.5 [0.41]	8.0 [0.31]	M5x0.8
<u>HMA-16M</u>	18.0 [0.71]	12.0 [0.47]	10.0 [0.39]	M6x1.0
<u>HMA-20M</u>	19.5 [0.77]	14.0 [0.55]	12.0 [0.47]	M8x1.25
<u>HMA-25M</u>	26.5 [1.04]	17.5 [0.69]	17.0 [0.67]	M10x1.25
<u>HMA-32M</u>	31.5 [1.24]	21.5 [0.85]	19.0 [0.75]	M14x1.5
<u>HMA-40M</u>	31.5 [1.24]	21.5 [0.85]	19.0 [0.75]	M14x1.5
<u>HMA-50M</u>	36.5 [1.44]	25.5 [1.00]	27.0 [1.06]	M18x1.5
<u>HMA-63M</u>	36.5 [1.44]	25.5 [1.00]	27.0 [1.06]	M18x1.5
<u>HMA-80M</u>	49.5 [1.95]	33.5 [1.32]	32.0 [1.26]	M22x1.5
<u>HMA-100M</u>	51.5 [2.03]	31.5 [1.24]	36.0 [1.42]	M26x1.5

Dimensions

mm [inches]



HMA-12M - HMA-100M



H-Series Pneumatic Cylinder Accessories

Female Rear Clevis





Dimensions

mm [inches]

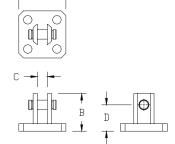
Part no. HFC-20M

Part no. <u>HFC-32M</u>

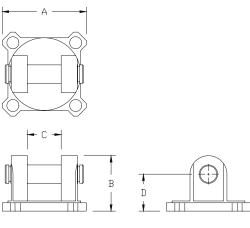


omes with Pivot Pin installed. Mountlware Included.

Female F	Rear Cle	vis Dime	ension Ta	able
Part #	A	В	C	D
<u>HFC-12M</u>	25.0 [0.98]	20.0 [0.79]	5.3 [0.21]	14.0 [0.55]
<u>HFC-16M</u>	29.0 [1.14]	21.0 [0.83]	6.8 [0.27]	15.0 [0.59]
<u>HFC-20M</u>	36.0 [1.42]	27.0 [1.06]	8.3 [0.33]	18.0 [0.71]
<u>HFC-25M</u>	40.0 [1.57]	30.0 [1.18]	10.3 [0.41]	20.0 [0.79]
<u>HFC-32M</u>	45.5 [1.79]	30.0 [1.18]	18.3 [0.72]	20.0 [0.79]
<u>HFC-40M</u>	53.5 [2.11]	32.0 [1.26]	18.3 [0.72]	22.0 [0.87]
<u>HFC-50M</u>	64.5 [2.54]	42.0 [1.65]	22.3 [0.88]	28.0 [1.10]
<u>HFC-63M</u>	77.5 [3.05]	44.0 [1.73]	22.3 [0.88]	30.0 [1.18]
<u>HFC-80M</u>	98.5 [3.88]	56.0 [2.20]	28.3 [1.11]	38.0 [1.50]
<u>HFC-100M</u>	117.5 [4.63]	67.0 [2.64]	32.3 [1.27]	45.0 [1.77]



HFC-12M - HFC-25M



HFC-32M - HFC-100M

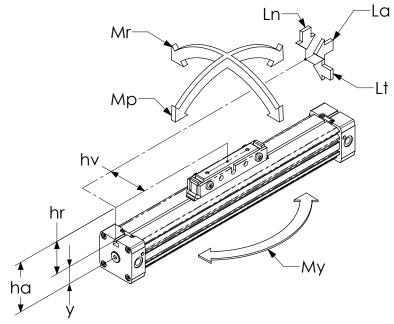




NITRA L-Series Rodless Cylinders offer a robust design in a compact package. Rodless cylinders can offer the same stroke as rodded cylinders in a smaller space. All sizes have magnetic pistons and are double acting. Mounting brackets and cylinder position switches are sold separately.

Features

- Rodless cylinder design
- Double acting with magnetic piston
- Front and rear adjustable cushions
- Tapped end caps mount
- 16mm to 40mm bore sizes available
- 100mm to 1000mm stroke lengths avaiable
- Operating pressure: 1 to 8 bar (14.5 to 116 psi)
- Temperature range: -10 to +80°C (14 to 176°F)
- 2-year warranty



NITRA L-Series Rodless Pneumatic Cylinder Force and Torque Information									
Bore	Center Distance Y	Actual Force F at 6 bar [N]	Cushioning Stroke [mm]	Max. Load Ln [N]	Mp Max [Nm]	Mr Max [Nm]	My Max [Nm]		
16	9	110	15	120	4	0.3	0.5		
25	14	250	21	300	15	1	3		
32	18	420	26	450	30	2	4		
40	22	640	32	750	60	4	8		

Note: When the cylinder is subjected simultaneously to torque and force, use the following equations, where the lengths have to be given in meters.

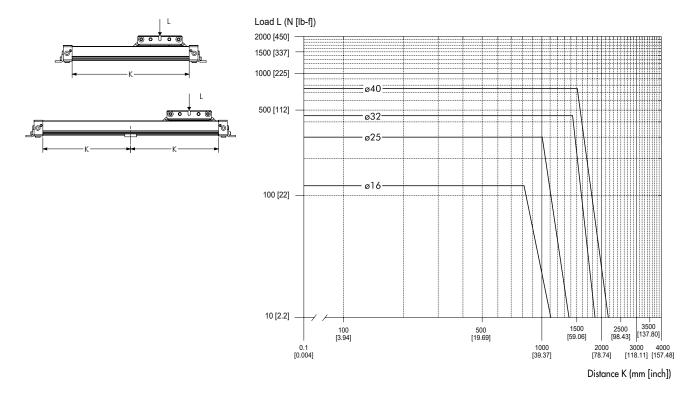
Mp = La x ha Mr = Ln x hv + Lt x hr My = La x hv

$$\frac{My}{My_{max}} \le 1; \qquad \frac{Ln}{Ln_{max}} \le 1; \qquad \frac{Mp}{Mp_{max}} + \frac{Mr}{Mr_{max}} + 0.22 x \frac{My}{My_{max}} + 0.4 \frac{Ln}{Ln_{max}} \le 1$$

Torque Information

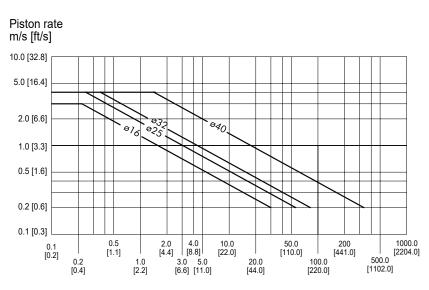


Load Information



Speed and Maximum Cushionable Load

For the cylinder to reach the end-of-stroke position without intense or repeated impact which would damage it, it is necessary to annul the kinetic energy of the moving mass and the work generated. The maximum cushionable load depends on the traversing speed and the absorption of the air buffer supplied standard with the various cylinders. The diagram shows the speeds and cushionable mass for the various diameters at a pressure of 6 bar (87psi).



Mass to be buffered kg [lb-m]



NITRA L-Series Rodless Pneumatic Cylinder Selection									
Part No.	Bore (mm)	Stroke (mm)	Weight (lbs)	Price					
L16M0100MD-MC		100	1.84	\$239.00					
<u>L16M0200MD-MC</u>		200	1.88	\$251.00					
L16M0300MD-MC		300	2.68	\$256.00					
<u>L16M0400MD-MC</u>	16	400	2.69	\$262.00					
<u>L16M0500MD-MC</u>		500	2.71	\$267.00					
<u>L16M0600MD-MC</u>		600	4.08	\$277.00					
<u>L16M0800MD-MC</u>		800	4.11	\$285.00					
<u>L25M0200MD-MC</u>		200	4.46	\$296.00					
<u>L25M0300MD-MC</u>		300	4.64	\$303.00					
<u>L25M0400MD-MC</u>		400	5.33	\$315.00					
L25M0500MD-MC	25	500	6.2	\$322.00					
L25M0600MD-MC		600	6.37	\$333.00					
L25M0800MD-MC		800	7.42	\$341.00					
<u>L25M1000MD-MC</u>		1000	8.45	\$349.00					
L32M0200MD-MC		200	7.24	\$350.00					
L32M0300MD-MC		300	7.74	\$360.00					
L32M0400MD-MC		400	8.14	\$372.00					
L32M0500MD-MC	32	500	9.96	\$395.00					
L32M0600MD-MC		600	10.44	\$401.00					
L32M0800MD-MC		800	12.16	\$416.00					
L32M1000MD-MC		1000	13.56	\$425.00					
L40M0200MD-MC		200	10.19	\$380.00					
L40M0300MD-MC		300	10.75	\$402.00					
L40M0400MD-MC		400	12.01	\$413.00					
L40M0500MD-MC	40	500	14.36	\$438.00					
L40M0600MD-MC		600	14.94	\$445.00					
L40M0800MD-MC		800	17.44	\$480.00					
L40M1000MD-MC		1000	19.44	\$513.00					

Click on the thumbnail or go to <u>https://www.automationdirect.com/VID-PN-0045</u> for a short video on NITRA Rodless Cylinders.





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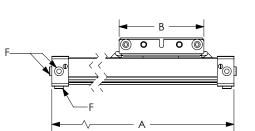
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Dimensions inches [mm]



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L-Series Rodless Pneumatic Cylinder Dimensions											
Model	A			B C		D		E		F	
	mm	[inches]	mm	[inches]	mm	[inches]	mm	[inches]	mm	[inches]	G (BSPP)
L16M0100MD-MC	230.0	9.06	76.0	2.99	43.5	1.71	27.0	1.06	27.0	1.06	M5
L16M0200MD-MC	330.0	12.99	76.0	2.99	43.5	1.71	27.0	1.06	27.0	1.06	M5
L16M0300MD-MC	430.0	16.93	76.0	2.99	43.5	1.71	27.0	1.06	27.0	1.06	M5
L16M0400MD-MC	530.0	20.87	76.0	2.99	43.5	1.71	27.0	1.06	27.0	1.06	M5
L16M0500MD-MC	630.0	24.80	76.0	2.99	43.5	1.71	27.0	1.06	27.0	1.06	M5
L16M0600MD-MC	730.0	28.74	76.0	2.99	43.5	1.71	27.0	1.06	27.0	1.06	M5
L16M0800MD-MC	930.0	36.61	76.0	2.99	43.5	1.71	27.0	1.06	27.0	1.06	M5
L25M0200MD-MC	400.0	15.75	120.0	4.72	66.0	2.60	40.0	1.57	40.0	1.57	1/8
L25M0300MD-MC	500.0	19.69	120.0	4.72	66.0	2.60	40.0	1.57	40.0	1.57	1/8
L25M0400MD-MC	600.0	23.62	120.0	4.72	66.0	2.60	40.0	1.57	40.0	1.57	1/8
L25M0500MD-MC	700.0	27.56	120.0	4.72	66.0	2.60	40.0	1.57	40.0	1.57	1/8
L25M0600MD-MC	800.0	31.50	120.0	4.72	66.0	2.60	40.0	1.57	40.0	1.57	1/8
L25M0800MD-MC	1000.0	39.37	120.0	4.72	66.0	2.60	40.0	1.57	40.0	1.57	1/8
L25M1000MD-MC	1200.0	47.24	120.0	4.72	66.0	2.60	40.0	1.57	40.0	1.57	1/8
L32M0200MD-MC	450.0	17.72	150.0	5.91	86.0	3.39	56.0	2.20	42.0	1.65	1/4
L32M0300MD-MC	550.0	21.65	150.0	5.91	86.0	3.39	56.0	2.20	42.0	1.65	1/4
L32M0400MD-MC	650.0	25.59	150.0	5.91	86.0	3.39	56.0	2.20	42.0	1.65	1/4
L32M0500MD-MC	750.0	29.53	150.0	5.91	86.0	3.39	56.0	2.20	42.0	1.65	1/4
L32M0600MD-MC	850.0	33.46	150.0	5.91	86.0	3.39	56.0	2.20	42.0	1.65	1/4
L32M0800MD-MC	1050.0	41.34	150.0	5.91	86.0	3.39	56.0	2.20	42.0	1.65	1/4
L32M1000MD-MC	1250.0	49.21	150.0	5.91	86.0	3.39	56.0	2.20	42.0	1.65	1/4
L40M0200MD-MC	500.0	19.69	150.0	5.91	97.0	3.82	69.0	2.72	72.0	2.83	1/4
L40M0300MD-MC	600.0	23.62	150.0	5.91	97.0	3.82	69.0	2.72	72.0	2.83	1/4
L40M0400MD-MC	700.0	27.56	150.0	5.91	97.0	3.82	69.0	2.72	72.0	2.83	1/4
L40M0500MD-MC	800.0	31.50	150.0	5.91	97.0	3.82	69.0	2.72	72.0	2.83	1/4
L40M0600MD-MC	900.0	35.43	150.0	5.91	97.0	3.82	69.0	2.72	72.0	2.83	1/4

See our website www.AutomationDirect.com for complete Engineering drawings

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L40M0800MD-MC

L40M1000MD-MC

1100.0

1300.0

43.31

51.18

150.0

150.0

5.91

5.91

97.0

97.0

3.82

3.82

69.0

69.0

72.0

72.0

2.83

2.83

1/4

1/4



L-Series Rodless Pneumatic Cylinder Accessories

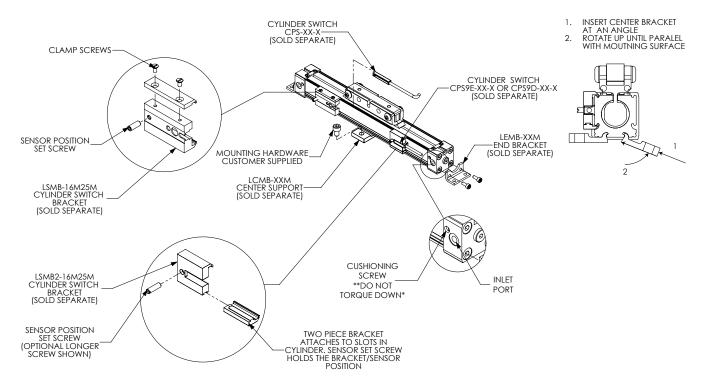
NITRA L-Series accessories include end mounting brackets and center support brackets for longer cylinders. Refer to load chart in this section to determine if a center support is required. Sensor clamp brackets are required for 16mm and 25mm bore cylinders.

NITRA L-Series Rodless Pneumatic Cylinder Accessories								
Item	Part No.	Description	Weight (lbs)	Price				
	<u>LEMB-16M</u>	NITRA mounting bracket, end, stainless steel. For use with L16M series rodless cylinders. Mounting screws included.	0.03	\$5.50				
C	<u>LEMB-25M</u>	NITRA mounting bracket, end, stainless steel. For use with L25M series rodless cylinders. Mounting screws included.	0.07	\$6.00				
····	<u>LEMB-32M</u>	NITRA mounting bracket, end, aluminum. For use with L32M series rodless cylinders. Mounting screws included.	0.2	\$21.50				
11	<u>LEMB-40M</u>	NITRA mounting bracket, end, aluminum. For use with L40M series rodless cylinders. Mounting screws included.	0.25	\$29.50				
e//	<u>LCMB-16M</u>	NITRA mounting bracket, center, aluminum. For use with L16M series rodless cylinders.	0.02	\$12.50				
01	<u>LCMB-25M</u>	NITRA mounting bracket, center, aluminum. For use with L25M series rodless cylinders.	0.02	\$14.00				
2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<u>LCMB-32M</u>	NITRA mounting bracket, center, aluminum. For use with L32M series rodless cylinders. Mounting screws included.	0.16	\$29.00				
N N N N N N N N N N N N N N N N N N N	<u>LCMB-40M</u>	NITRA mounting bracket, center, aluminum. For use with L40M series rodless cylinders. Mounting screws included.	0.23	\$30.00				
	<u>LSMB-16M25M</u>	NITRA mounting bracket, switch, aluminum. For use with L16M and L25M series rodless cylinders and CPS switches. Mounting screws included.	0.03	\$12.00				
	LSMB2-16M25M	NITRA mounting bracket, switch, aluminum. For use with L16M and L25M series rodless cylinders and CPS9D and CPS9E switches. Mounting screw included.	0.02	\$14.00				



L-Series Rodless Pneumatic Cylinder Accessories

Mounting guidelines for 16mm and 25mm bore cylinders



Mounting guidelines for 32mm and 40mm bore cylinders

