

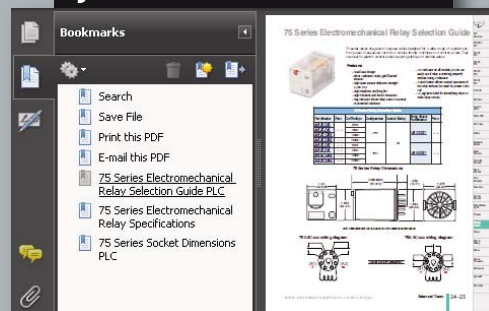
NITRA™ PNEUMATICS

NITRA Pneumatics

Section 34



In this interactive PDF
you can:



- Use bookmarks to navigate by product category
- Use bookmarks to save, search, print or e-mail the catalog section
- Click on part #s to link directly to our online store for current pricing, specs, stocking information and more





Pneumatics - everybody needs some!

The great prices and same-day shipping for NITRA Pneumatic components mean you can have the parts you need, when you need them!

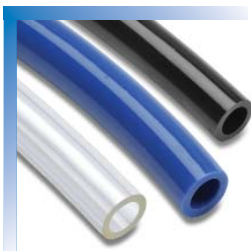
Stainless Steel Air Cylinders and Position Switches

The A-Series non-repairable stainless steel round body cylinders are an ideal choice for a host of applications in a broad range of industries. Dimensionally interchangeable with leading cylinder manufacturers, the NITRA A-Series is perfect for replacement

applications as well as new designs. There's no maintenance required with these non-repairable cylinders, just millions of trouble-free cycles. High quality is assured with made in the USA construction and a 3-year warranty.



Polyurethane (PUR) Tubing



Features:

- Inch and metric tubing sizes available
- Three colors – black, blue and clear polyurethane tubing
- 100 foot and 500 foot package sizes
- Shore A 98 hardness
- Strong, flexible and kink resistant
- Made in USA

Start on p. 34-66

Nylon 12 Tubing



Features:

- Inch and metric tubing sizes available
- Three colors – natural, black, blue nylon tubing
- 100 foot and 500 foot package sizes
- High working pressure and temperature/chemical resistance
- Made in the USA

Start on p. 34-69

Fittings and Valves



Fittings include:

- bulkhead unions
- union straight
- union reducers
- union Tee
- union elbow
- union Y
- union cross
- union triple branch

Start on p. 34-72

Valves include:

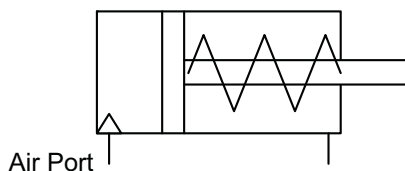
- manual hand valve
- stop
- check
- meter-in flow control
- meter-out flow control
- inline flow control

Nitra Pneumatic Stainless Steel Round Body Air Cylinders

The NITRA Pneumatics A-Series non-repairable stainless steel round body cylinders includes bore sizes from 7/16" to 2" and stroke lengths from 1/2" to 18" to meet a broad range of applications. These high quality cylinders are constructed with stainless steel bodies and double rolled-in high strength aluminum end caps with full flow ports. To minimize friction the inside of the cylinder body is polished to a mirror finish and all cylinders are factory lubricated for optimum performance and long, reliable life. The high strength aluminum alloy piston is securely threaded and sealed to a piston rod that is ground and roller burnished 303 stainless steel (7/16" and 9/16" bores) or ground and polished high strength steel (3/4" – 2" bores) with roll-formed threads for exceptional strength. Low friction wear compensating Buna N U-cup rod and piston seals, sintered bronze rod guide bushing (except 7/16" and 9/16" bores), and end caps with slots all combine for smooth breakaway even at low pressures.

Operation

Single-acting cylinders with spring return have one compressed air port to extend the rod in the "push" direction. The internal spring retracts in the "pull" direction.

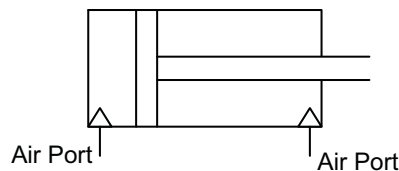


Single-Acting Cylinder with Spring Return
(Force in Push Direction)

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 the USA

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.



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

Mounting Options



Nose mount uses one AMB bracket and one AN nut.



Pivot mount uses one APB or one APBP bracket.



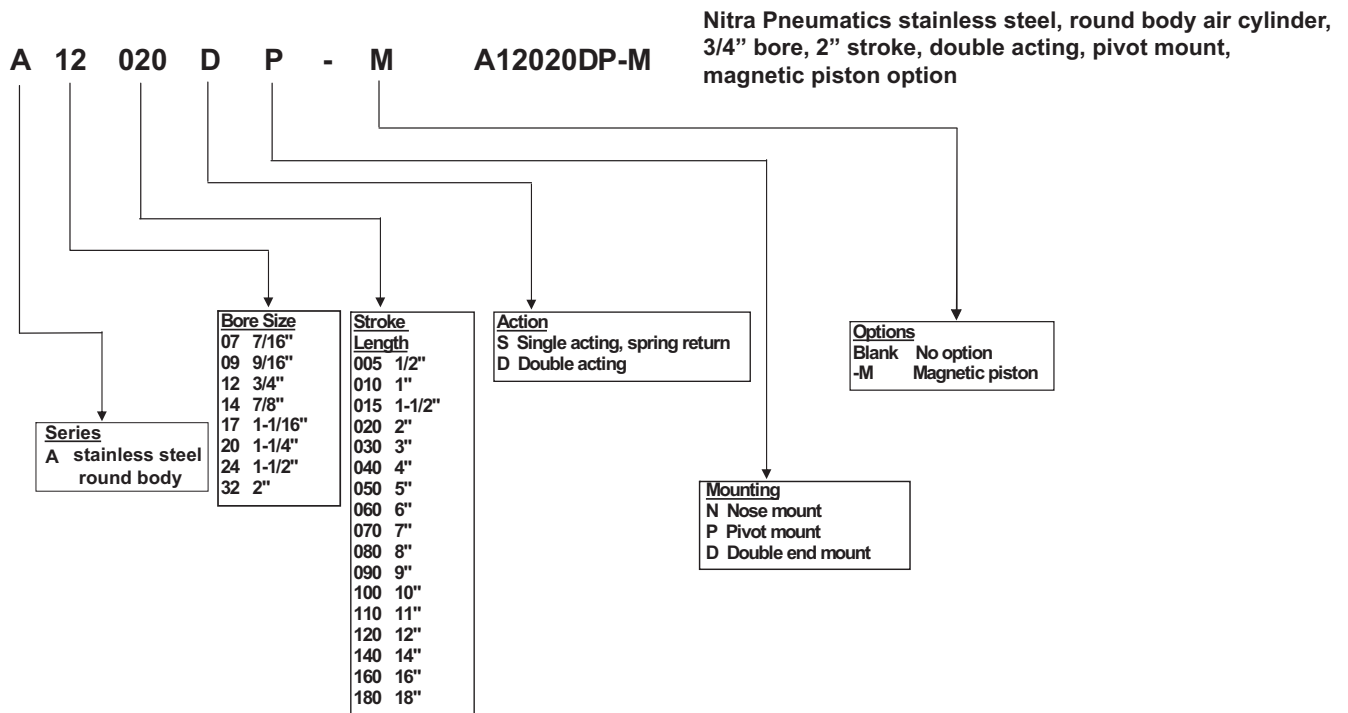
Double end mount uses two AMB brackets and two AN nuts.

Part Numbering Information

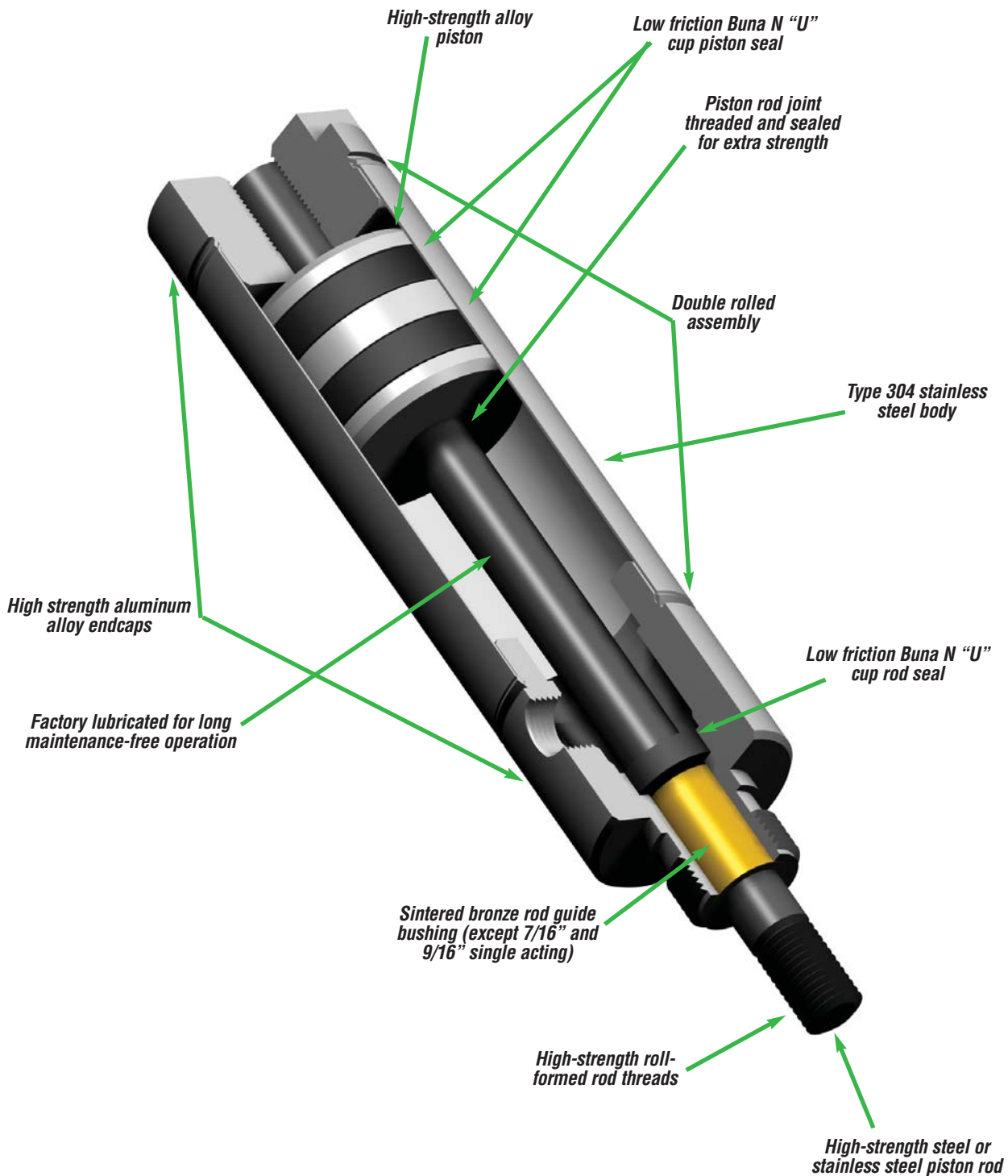


Part A12020DP-M shown

NITRA Pneumatics Cylinder Part Number Nomenclature



Cylinder Features



Made in the USA

Company Information

Systems Overview

Programmable Controllers

Field I/O

Software

C-more & other HMI

Drives

Soft Starters

Motors & Gearbox

Steppers/ Servos

Motor Controls

Proximity Sensors

Photo Sensors

Limit Switches

Encoders

Current Sensors

Pressure Sensors

Temperature Sensors

Pushbuttons/ Lights

Process

Relays/ Timers

Comm.

Terminal Blocks & Wiring

Power

Circuit Protection

Enclosures

Tools

Pneumatics

Appendix

Product Index

Part # Index



A-Series Pneumatic Cylinders

7/16 inch Bore

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



Part no. A07020SN

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

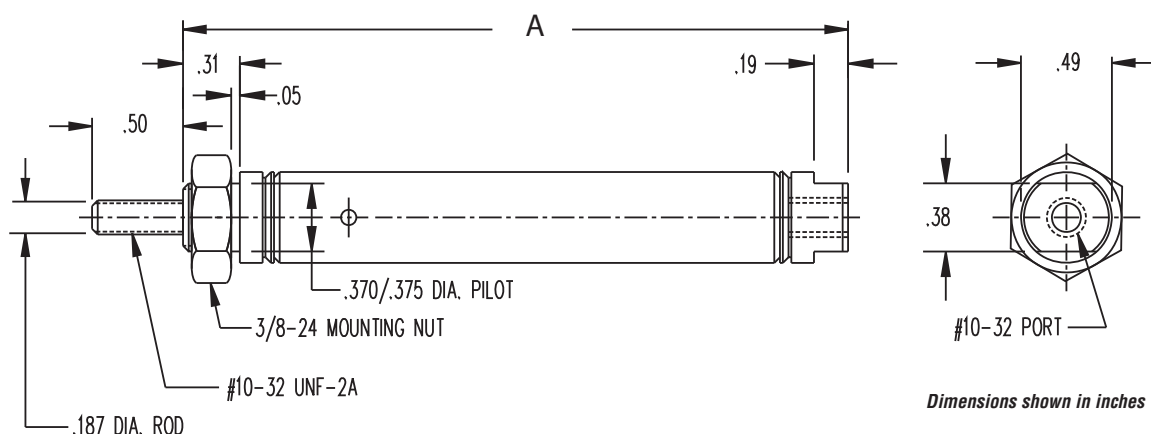
Cylinder, 7/16 in bore, single-acting, spring return, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A07005SN	0.5	2.25	0.1	<--->
A07010SN	1.0	3.19	0.1	<--->
A07015SN	1.5	4.13	0.1	<--->
A07020SN	2	5.07	0.1	<--->
Specifications				
304 SS cylinder body		0.15 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 15.0 lb.		Spring force = 1 lb. relaxed, 2 lb. compressed		

Mount Style	Bracket	Nut
Front Nose Mount	AMB-3	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 shown in inches

A-Series Pneumatic Cylinders

7/16 inch Bore

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



Part no. A07020SP

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).

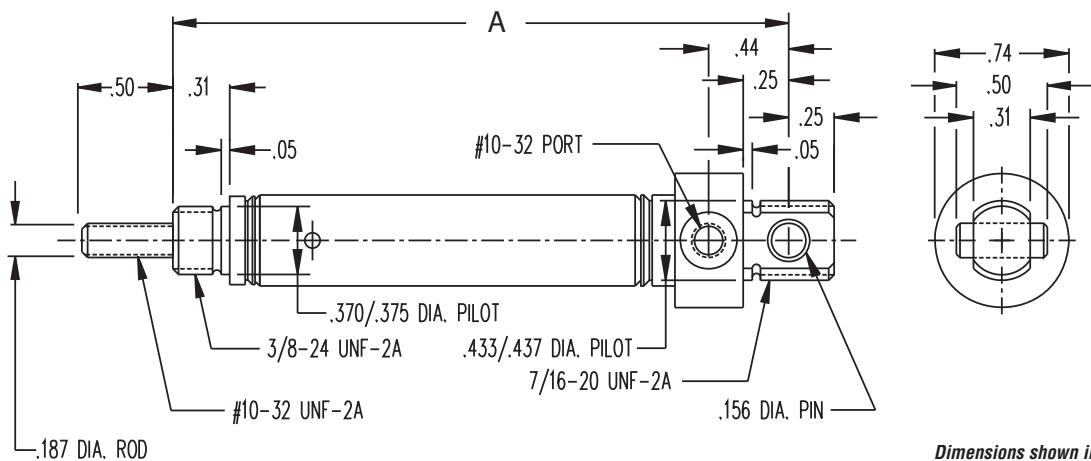
Cylinder, 7/16 in bore, single acting, spring return, rear pivot mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A07005SP	0.5	2.69	0.1	<--->
A07010SP	1.0	3.63	0.1	<--->
A07015SP	1.5	4.57	0.1	<--->
A07020SP	2	5.51	0.1	<--->
Specifications				
304 SS cylinder body		0.15 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 15.0 lb.		Spring force = 1 lb. relaxed, 2 lb. compressed		

Mount Style	Bracket	Nut
Front Nose Mount	AMB-3	AN-38-24
Rear Pivot Mount	APB-1	—
Double End Mount	Front	AMB-3
	Rear	AMB-4

Cylinder rod clevis ARC-10-32

See end of 7/16" bore section for Accessories

Note: Drive pin out for double end mounting



Dimensions shown in inches



A-Series Pneumatic Cylinders

7/16 inch Bore

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



Part no. A07020DN

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

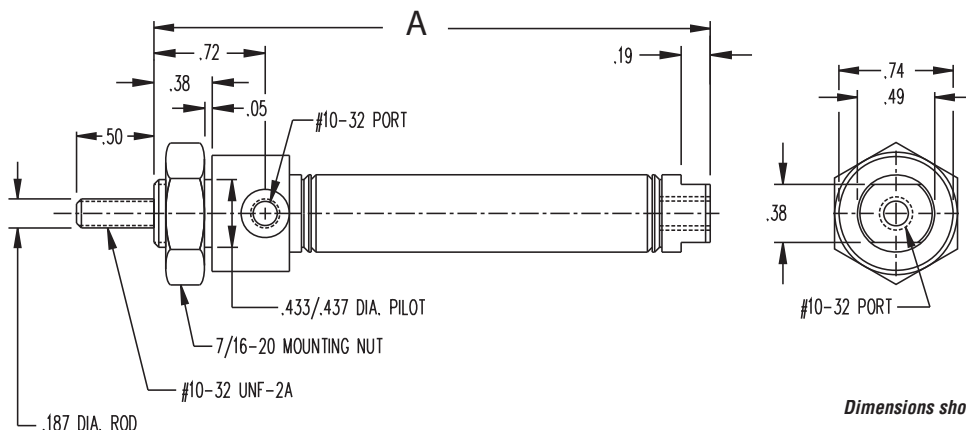
Cylinder, 7/16 in bore, double acting, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A07005DN	0.5	2.62	0.1	<--->
A07010DN	1.0	3.12	0.1	<--->
A07015DN	1.5	3.62	0.1	<--->
A07020DN	2.0	4.12	0.1	<--->
A07030DN	3.0	5.12	0.1	<--->
A07040DN	4.0	6.12	0.2	<--->
A07060DN	6.0	8.12	0.2	<--->
Specifications				
304 SS cylinder body		0.15 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 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	—	—
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 shown in inches

A-Series Pneumatic Cylinders

7/16 inch Bore

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



Part no. A07020DP

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).

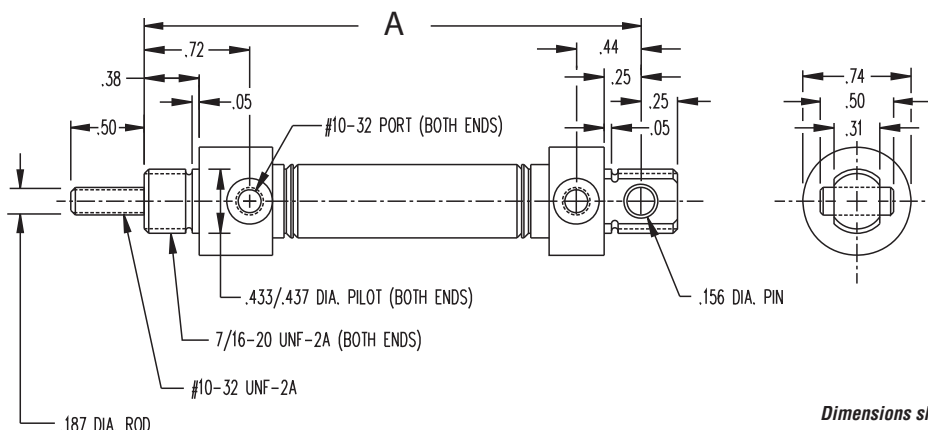
Cylinder, 7/16 in bore, double acting, rear pivot mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A07005DP	0.5	3.06	0.1	<--->
A07010DP	1.0	3.56	0.1	<--->
A07015DP	1.5	4.06	0.1	<--->
A07020DP	2.0	4.56	0.1	<--->
A07030DP	3.0	5.56	0.1	<--->
Specifications				
304 SS cylinder body		0.15 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 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
	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



Dimensions shown in inches

Company Information

Systems Overview

Programmable Controllers

Field I/O

Software

C-more & other HMI

Drives

Soft Starters

Motors & Gearbox

Steppers/ Servos

Motor Controls

Proximity Sensors

Photo Sensors

Limit Switches

Encoders

Current Sensors

Pressure Sensors

Temperature Sensors

Pushbuttons/ Lights

Process

Relays/ Timers

Comm.

Terminal Blocks & Wiring

Power

Circuit Protection

Enclosures

Tools

Pneumatics

Appendix

Product Index

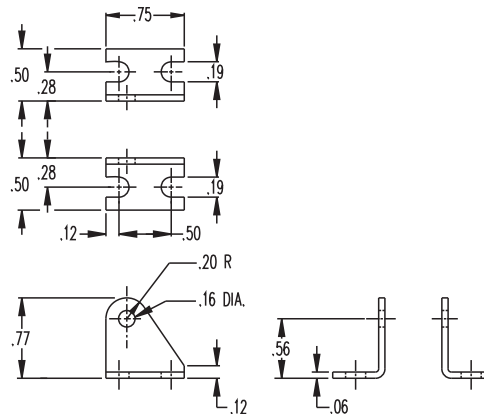
Part # Index

A-Series Pneumatic Cylinders

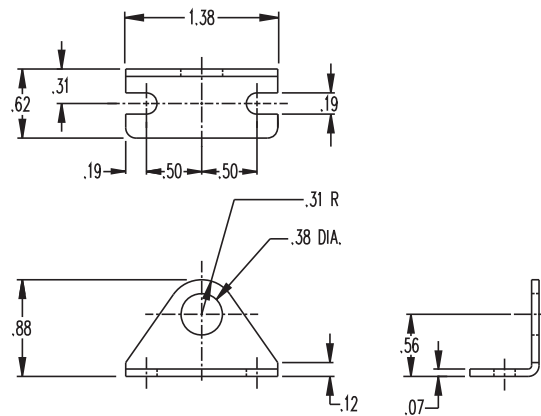
7/16 inch Bore Accessories

A-Series Pneumatic Cylinder 7/16 inch Bore Accessories				
Part Number	Description	Pcs/Pkg	Wt (lb)	Price
APB-1	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	<--->
AMB-3	Cylinder mounting bracket used to mount 7/16 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	<--->
AMB-4	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	<--->
ARC-10-32	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	<--->
AN-38-24	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	<--->
AN-716-20	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	<--->

APB-1



AMB-3

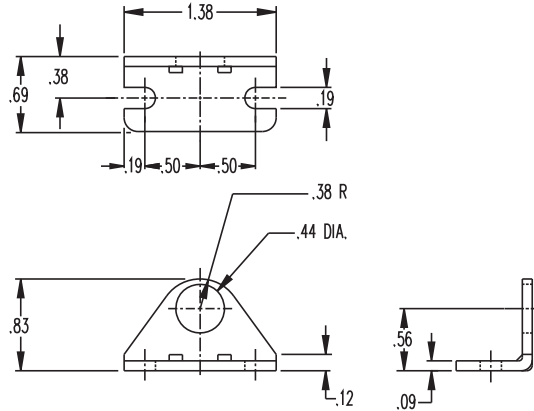


Dimensions shown in inches

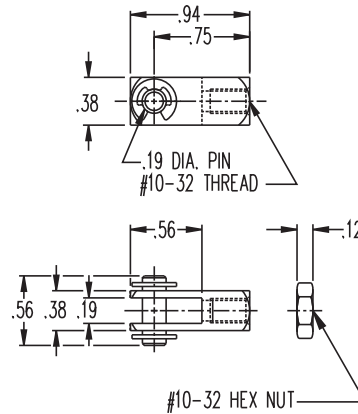
A-Series Pneumatic Cylinders

7/16 inch Bore Accessories

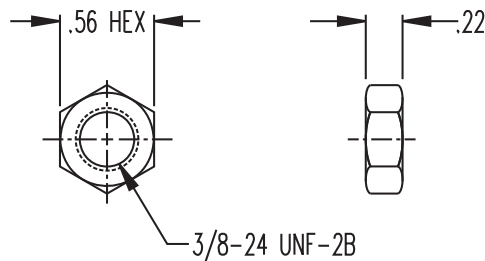
AMB-4



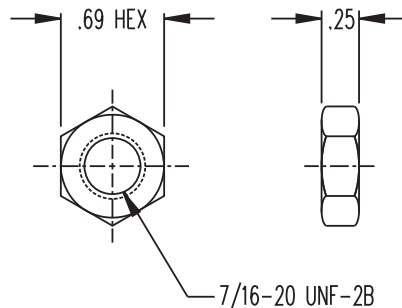
ARC-10-32



AN-38-24



AN-716-20



Dimensions shown in inches

Company
Information

Systems
Overview

Programmable
Controllers

Field I/O

Software

C-more &
other HMI

Drives

Soft
Starters

Motors &
Gearbox

Steppers/
Servos

Motor
Controls

Proximity
Sensors

Photo
Sensors

Limit
Switches

Encoders

Current
Sensors

Pressure
Sensors

Temperature
Sensors

Pushbuttons/
Lights

Process

Relays/
Timers

Comm.

Terminal
Blocks &
Wiring

Power

Circuit
Protection

Enclosures

Tools

Pneumatics

Appendix

Product
Index

Part #
Index



A-Series Pneumatic Cylinders

9/16 inch Bore

9/16 in. Bore, Single-acting, Spring Return, Front Nose Mount



Part no. A09020SN

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

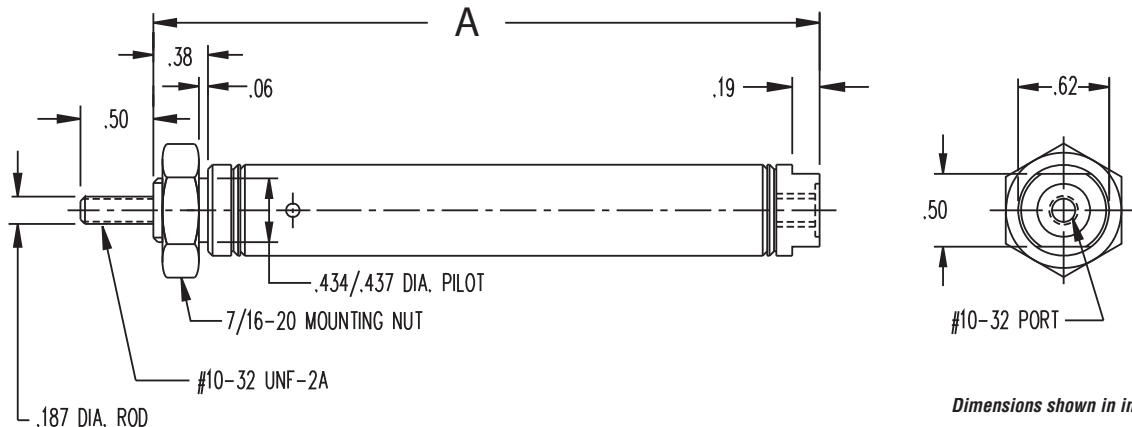
Cylinder, 9/16 in bore, single acting, spring return, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A09005SN	0.5	2.34	0.1	<--->
A09010SN	1.0	3.15	0.1	<--->
A09020SN	2.0	4.77	0.2	<--->
A09030SN	3.0	6.39	0.2	<--->
Specifications				
304 SS cylinder body		0.25 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 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	—	—
Double End Mount	Front	—
	Rear	—

* (1) Nut included with cylinder

Cylinder rod clevis ARC-10-32

See end of 9/16" bore section for Accessories



Dimensions shown in inches

A-Series Pneumatic Cylinders

9/16 inch Bore

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



Part no. A09020SD

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	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A09005SD	0.5	2.62	0.1	<--->
A09010SD	1.0	3.43	0.1	<--->
A09020SD	2.0	5.05	0.2	<--->
A09030SD	3.0	6.67	0.2	<--->

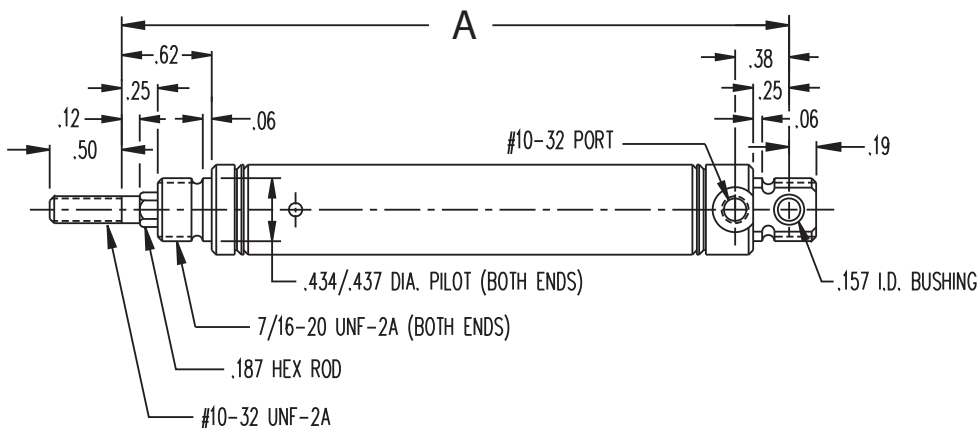
Specifications

304 SS cylinder body	0.25 sq. in. piston area
High strength aluminum end caps	Pre-lubricated for maintenance-free life
303 SS piston rod	Pressure rating 250 psi
Low friction Buna-N seals	Temperature range -20°F to 200°F (-28 to 93°C)
Extend force at 100 psi = 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
	Rear	AMB-4 AN-716-20

Cylinder rod clevis ARC-10-32

See end of 9/16" bore section for Accessories



Dimensions shown in inches

Company Information

Systems Overview

Programmable Controllers

Field I/O

Software

C-more & other HMI

Drives

Soft Starters

Motors & Gearbox

Steppers/ Servos

Motor Controls

Proximity Sensors

Photo Sensors

Limit Switches

Encoders

Current Sensors

Pressure Sensors

Temperature Sensors

Pushbuttons/ Lights

Process

Relays/ Timers

Comm.

Terminal Blocks & Wiring

Power

Circuit Protection

Enclosures

Tools

Pneumatics

Appendix

Product Index

Part # Index



A-Series Pneumatic Cylinders

9/16 inch Bore

9/16 in. Bore, Double-acting, Front Nose Mount



Part no. A09020DN

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

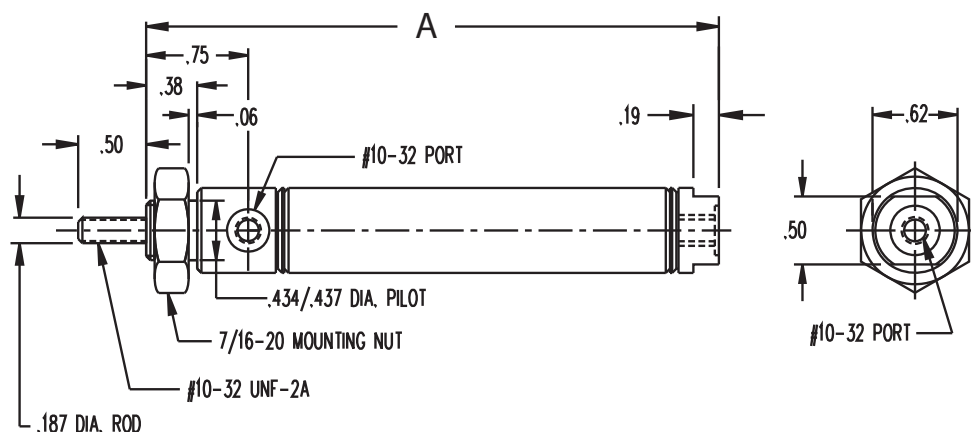
Cylinder, 9/16 in bore, double acting, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A09005DN	0.5	2.78	0.1	<--->
A09010DN	1.0	3.28	0.1	<--->
A09020DN	2.0	4.28	0.1	<--->
A09030DN	3.0	5.28	0.2	<--->
A09040DN	4.0	6.28	0.2	<--->
A09060DN	6.0	8.28	0.2	<--->
Specifications				
304 SS cylinder body		0.25 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 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	—	—
Double End Mount	Front	—
	Rear	—

* (1) Nut included with cylinder

Cylinder rod clevis ARC-10-32

See end of 9/16" bore section for Accessories



Dimensions shown in inches

A-Series Pneumatic Cylinders

9/16 inch Bore

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



Part no. A09020DD

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

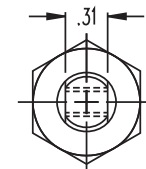
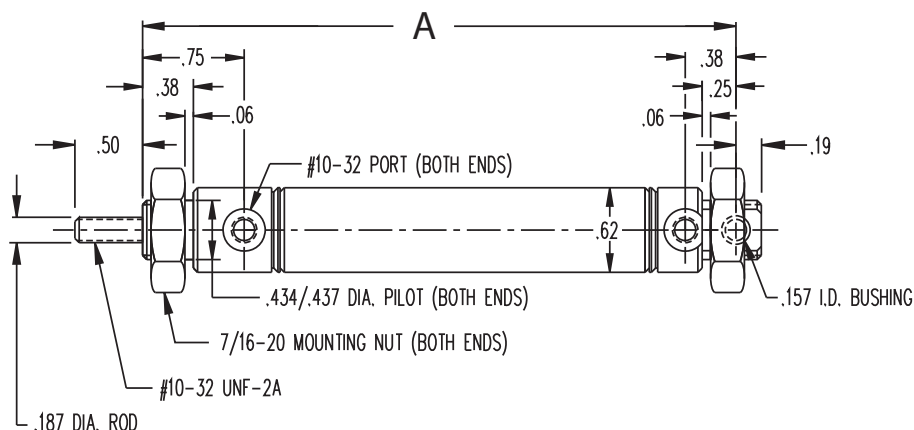
Cylinder, 9/16 in bore, double acting, double end mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A09005DD	0.5	3.06	0.1	<--->
A09010DD	1.0	3.56	0.1	<--->
A09020DD	2.0	4.56	0.1	<--->
A09030DD	3.0	5.56	0.2	<--->
A09040DD	4.0	6.56	0.2	<--->
A09060DD	6.0	8.56	0.2	<--->
Specifications				
304 SS cylinder body		0.25 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 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
	Rear	AMB-4

* (2) Nuts included with cylinder

Cylinder rod clevis ARC-10-32

See end of 9/16" bore section for Accessories



Dimensions shown in inches



A-Series Pneumatic Cylinders

9/16 inch Bore

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



Part no. A09020DD-M

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

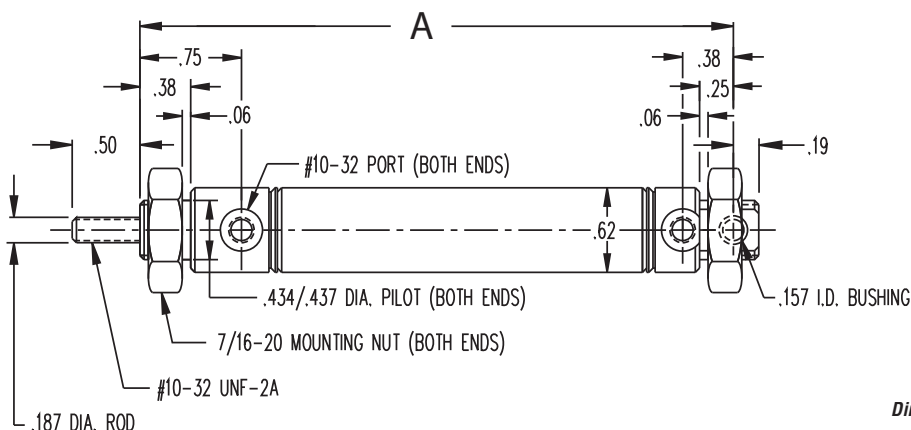
Cylinder, 9/16 in bore, double acting, double end mount, magnetic piston				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A09010DD-M	1.0	3.56	0.1	<--->
A09020DD-M	2.0	4.56	0.1	<--->
A09030DD-M	3.0	5.56	0.2	<--->
A09040DD-M	4.0	6.56	0.2	<--->
A09060DD-M	6.0	8.56	0.2	<--->
Specifications				
304 SS cylinder body		0.25 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 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
	Rear	AMB-4

* (2) Nuts included with cylinder

Cylinder rod clevis ARC-10-32

See end of 9/16" bore section for Accessories



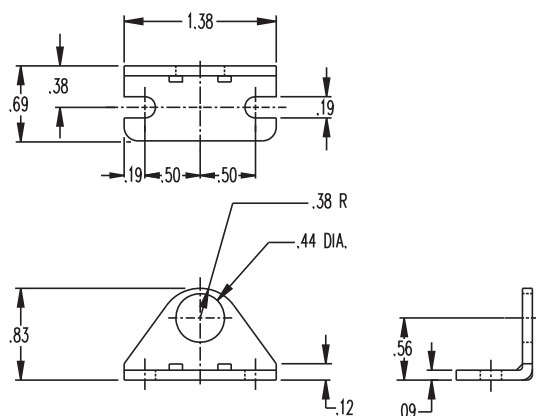
Dimensions shown in inches

A-Series Pneumatic Cylinders

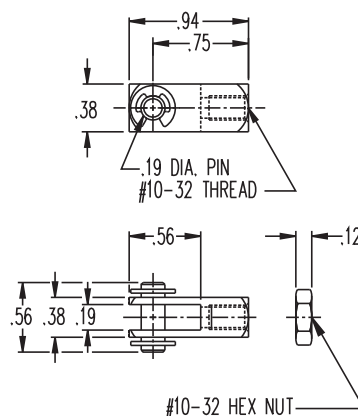
9/16 inch Bore Accessories

A-Series Pneumatic Cylinder 9/16 inch Bore Accessories				
Part Number	Description	Pcs/Pkg	Wt (lb)	Price
AMB-4	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	<--->
ARC-10-32	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	<--->
APBP-2	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	<--->
AN-716-20	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	<--->

AMB-4



ARC-10-32

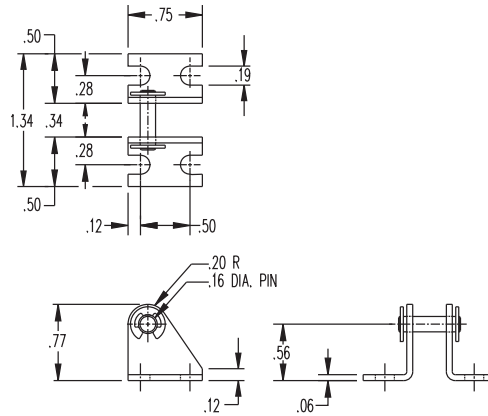


Dimensions shown in inches

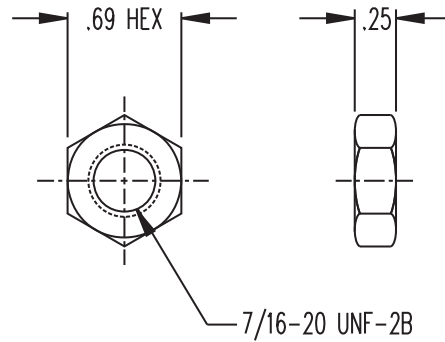
A-Series Pneumatic Cylinders

9/16 inch Bore Accessories

APBP-2



AN-716-20



Dimensions shown in inches

A-Series Pneumatic Cylinders

3/4 inch Bore

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



Part no. A12020SN

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, single acting, spring return, front nose mount

Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A12005SN	0.5	2.35	0.1	<--->
A12010SN	1.0	3.19	0.2	<--->
A12015SN	1.5	4.04	0.2	<--->
A12020SN	2.0	4.88	0.3	<--->
A12030SN	3.0	6.57	0.3	<--->
A12040SN	4.0	8.26	0.4	<--->
A12050SN	5.0	9.95	0.5	<--->
A12060SN	6.0	11.64	0.6	<--->

Specifications

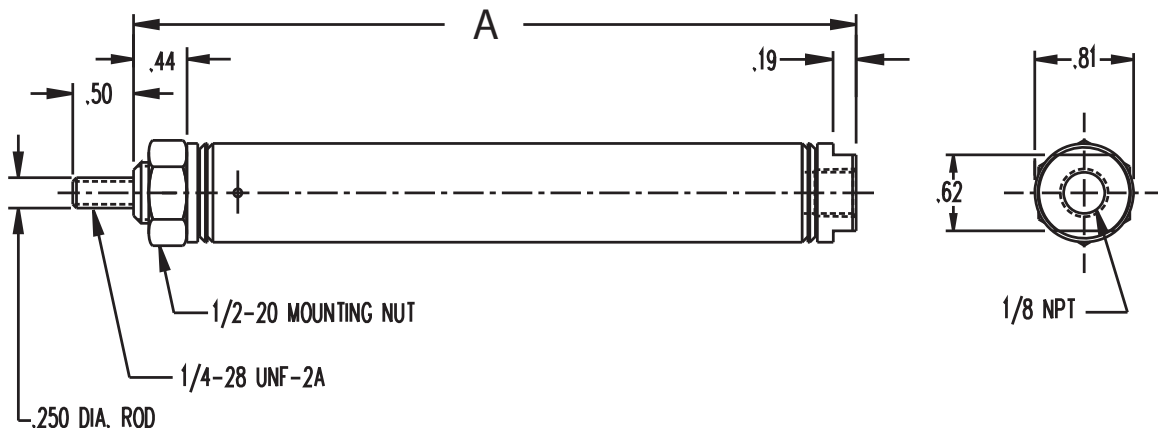
304 SS cylinder body	0.40 sq. in. piston area
High strength aluminum end caps	Pre-lubricated for maintenance-free life
High-strength carbon-steel piston rod	Pressure rating 250 psi
Low friction Buna-N seals	Temperature range -20°F to 200°F (-28 to 93°C)
Extend force at 100 psi = 40.0 lb.	Spring force = 3 lb. relaxed, 6 lb. compressed

Mount Style	Bracket	Nut
Front Nose Mount	AMB-5	AN-12-20*
Rear Pivot Mount	—	—
Double End Mount	Front	—
	Rear	—

* (1) Nut included with cylinder

Cylinder rod clevis ARC-14-28

See end of 3/4" bore section for Accessories



Dimensions shown in inches



A-Series Pneumatic Cylinders

3/4 inch Bore

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



Part no. A12020SP

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).

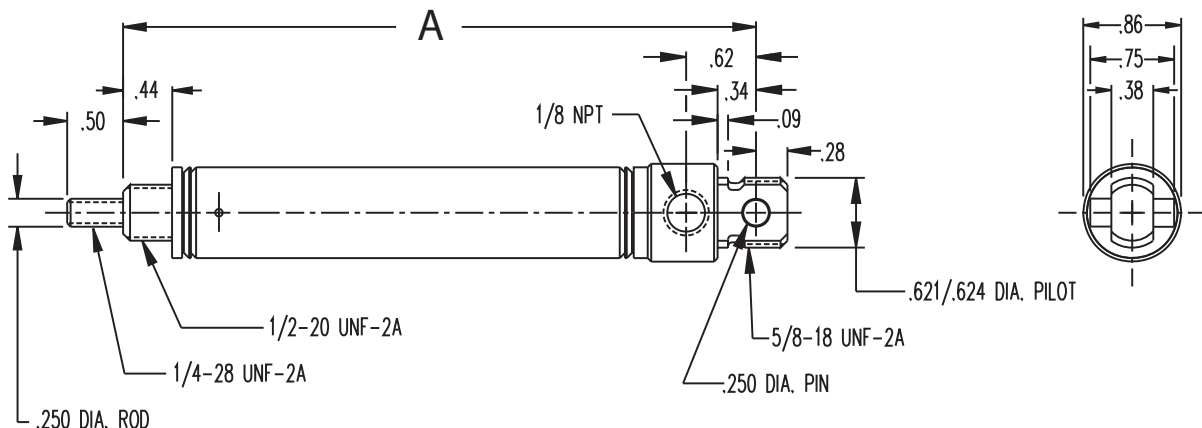
Cylinder, 3/4 in bore, single acting, spring return, rear pivot mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A12005SP	0.5	3.13	0.2	<--->
A12010SP	1.0	3.97	0.2	<--->
A12015SP	1.5	4.82	0.3	<--->
A12020SP	2.0	5.66	0.3	<--->
A12030SP	3.0	7.35	0.4	<--->
A12040SP	4.0	9.04	0.5	<--->
A12050SP	5.0	10.73	0.5	<--->
A12060SP	6.0	12.42	0.6	<--->
Specifications				
304 SS cylinder body		0.40 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High-strength carbon-steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 40.0 lb.		Spring force = 3 lb. relaxed, 6 lb. compressed		

Mount Style	Bracket	Nut
Front Nose Mount	AMB-5	AN-12-20
Rear Pivot Mount	APB-2	—
Double End Mount	Front	AMB-5
	Rear	AMB-6

Cylinder rod clevis ARC-14-28

See end of 3/4" bore section for Accessories

Note: Drive pin out for double end mounting



Dimensions shown in inches

A-Series Pneumatic Cylinders

3/4 inch Bore

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



Part no. A12020DN

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

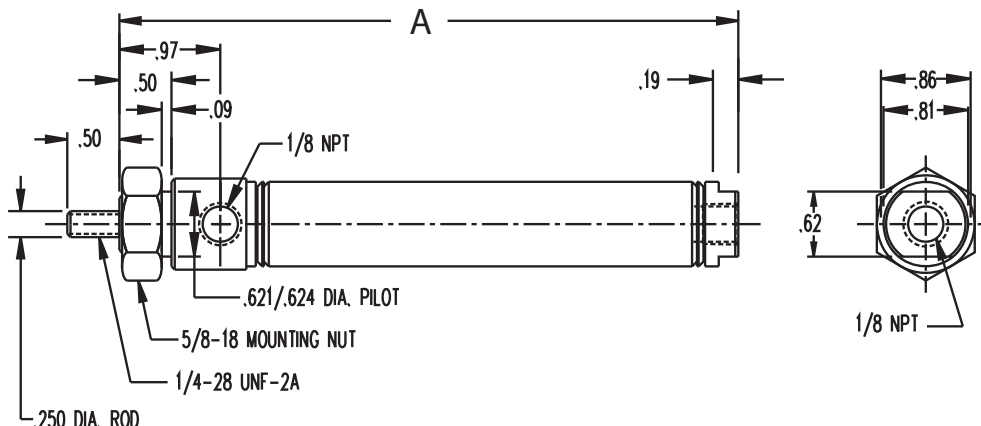
Cylinder, 3/4 in bore, double acting, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A12005DN	0.5	3.47	0.2	<--->
A12010DN	1.0	3.97	0.2	<--->
A12015DN	1.5	4.47	0.3	<--->
A12020DN	2.0	4.97	0.3	<--->
A12030DN	3.0	5.97	0.3	<--->
A12040DN	4.0	6.97	0.3	<--->
A12050DN	5.0	7.97	0.4	<--->
A12060DN	6.0	8.97	0.4	<--->
A12080DN	8.0	10.97	0.5	<--->
A12100DN	10.0	12.97	0.5	<--->
A12120DN	12.0	14.97	0.6	<--->
Specifications				
304 SS cylinder body		0.40 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High-strength carbon-steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 40.0 lb.		Retract force at 100 psi = 35.1 lb.		

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-14-28

See end of 3/4" bore section for Accessories



Dimensions shown in inches



A-Series Pneumatic Cylinders

3/4 inch Bore

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



Part no. A12020DP

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).

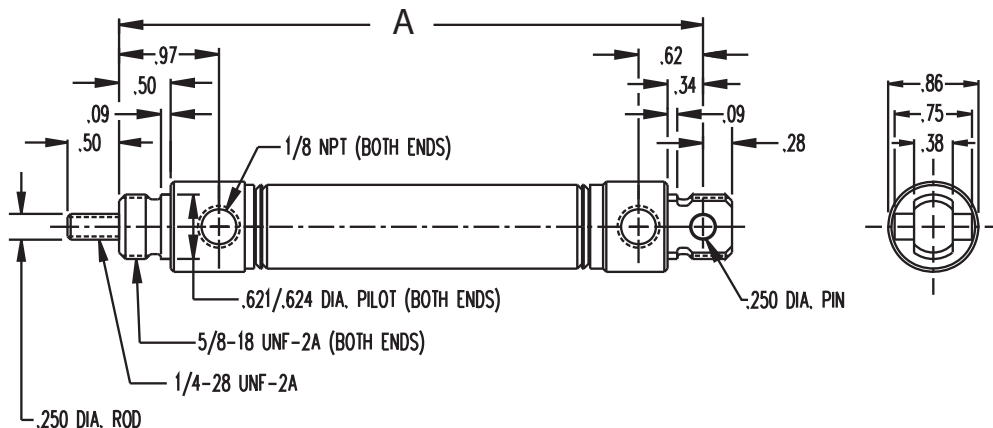
Cylinder, 3/4 in bore, double acting, rear pivot mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A12005DP	0.5	4.25	0.2	<--->
A12010DP	1.0	4.75	0.2	<--->
A12020DP	2.0	5.75	0.3	<--->
A12030DP	3.0	6.75	0.3	<--->
A12040DP	4.0	7.75	0.3	<--->
A12050DP	5.0	8.75	0.4	<--->
A12060DP	6.0	9.75	0.4	<--->
A12080DP	8.0	11.75	0.5	<--->
A12100DP	10.0	13.75	0.5	<--->
A12120DP	12.0	15.75	0.6	<--->
Specifications				
304 SS cylinder body		0.40 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High-strength carbon-steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 40.0 lb.		Retract force at 100 psi = 35.1 lb.		

Mount Style	Bracket	Nut
Front Nose Mount	AMB-6	AN-58-18
Rear Pivot Mount	APB-2	—
Double End Mount	Front	AMB-6
	Rear	AMB-6

Cylinder rod clevis ARC-14-28

See end of 3/4" bore section for Accessories

Note: Drive pin out for double end mounting



Dimensions shown in inches

A-Series Pneumatic Cylinders

3/4 inch Bore

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



Part no. A12020DP-M

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	<--->
A12020DP-M	2.0	5.75	0.3	<--->
A12030DP-M	3.0	6.75	0.3	<--->
A12040DP-M	4.0	7.75	0.3	<--->
A12050DP-M	5.0	8.75	0.4	<--->
A12060DP-M	6.0	9.75	0.4	<--->
A12080DP-M	8.0	11.75	0.5	<--->
A12100DP-M	10.0	13.75	0.5	<--->
A12120DP-M	12.0	15.75	0.6	<--->

Specifications

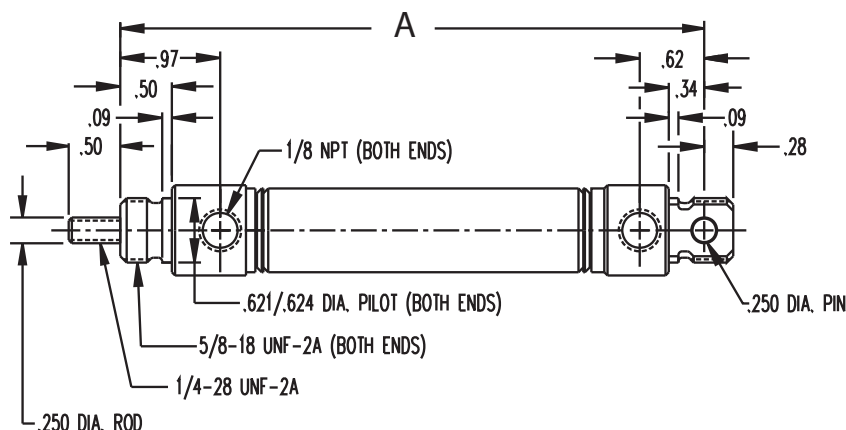
304 SS cylinder body	0.40 sq. in. piston area
High strength aluminum end caps	Pre-lubricated for maintenance-free life
303 SS piston rod	Pressure rating 250 psi
Low friction Buna-N seals	Temperature range -20°F to 200°F (-28 to 93°C)
Extend force at 100 psi = 40.0 lb.	Retract force at 100 psi = 35.1 lb.

Mount Style	Bracket	Nut
Front Nose Mount	AMB-6	AN-58-18
Rear Pivot Mount	APB-2	—
Double End Mount	Front	AMB-6
	Rear	AMB-6

Cylinder rod clevis ARC-14-28

See end of 3/4" bore section for Accessories

Note: Drive pin out for double end mounting



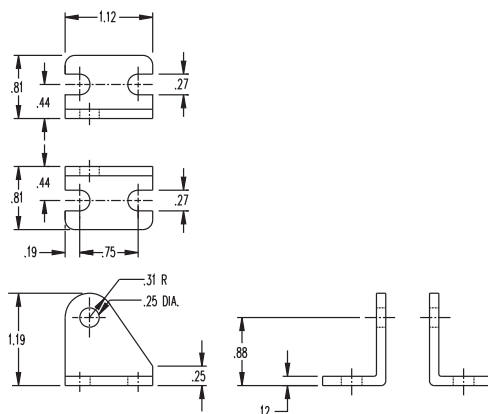
Dimensions shown in inches

A-Series Pneumatic Cylinders

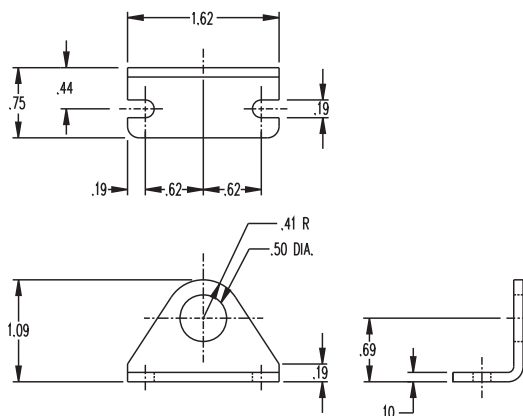
3/4 inch Bore Accessories

A-Series Pneumatic Cylinder 3/4 inch Bore Accessories				
Part Number	Description	Pcs/Pkg	Wt (lb)	Price
APB-2	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	<--->
AMB-5	Cylinder mounting bracket used to mount 3/4 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	<--->
AMB-6	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	<--->
ARC-14-28	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	<--->
AN-58-18	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	<--->
AN-12-20	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	<--->

APB-2



AMB-5

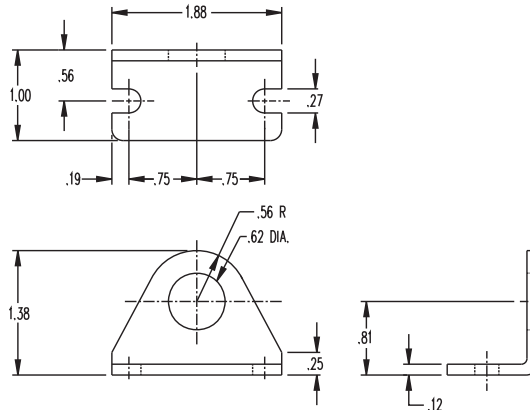


Dimensions shown in inches

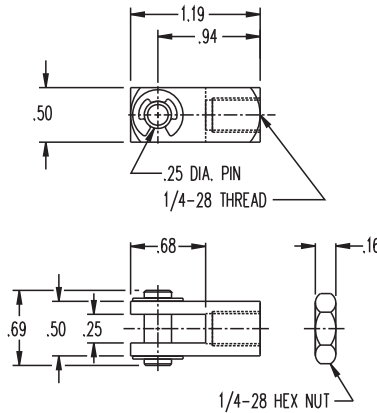
A-Series Pneumatic Cylinders

3/4 inch Bore Accessories

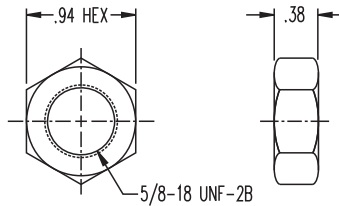
AMB-6



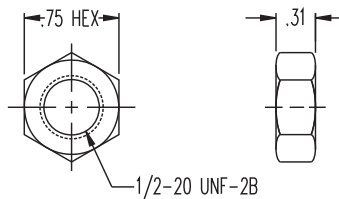
ARC-14-28



AN-58-18



AN-12-20



Dimensions shown in inches



A-Series Pneumatic Cylinders

7/8 inch Bore

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



Part no. A14020SN

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.

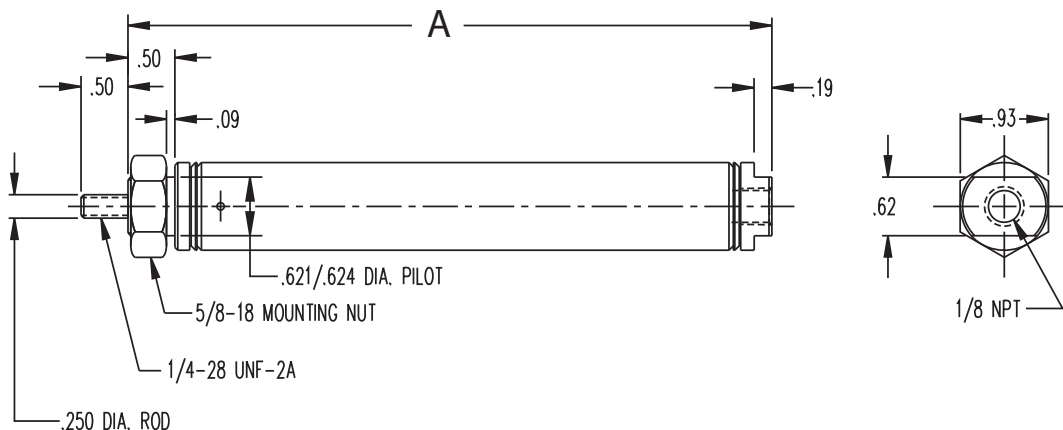
Cylinder, 7/8 in. bore, single acting, spring return, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A14010SN	1.0	3.40	0.3	<--->
A14020SN	2.0	4.96	0.4	<--->
A14030SN	3.0	6.52	0.4	<--->
Specifications				
304 SS cylinder body		0.60 sq. in. piston area		
High strength 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 psi = 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	—	—
Double End Mount	Front	—
	Rear	—

* (1) Nut included with cylinder

Cylinder rod clevis ARC-14-28

See end of 7/8" bore section for Accessories



Dimensions shown in inches

A-Series Pneumatic Cylinders

7/8 inch Bore

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



Part no. A14020SP

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).

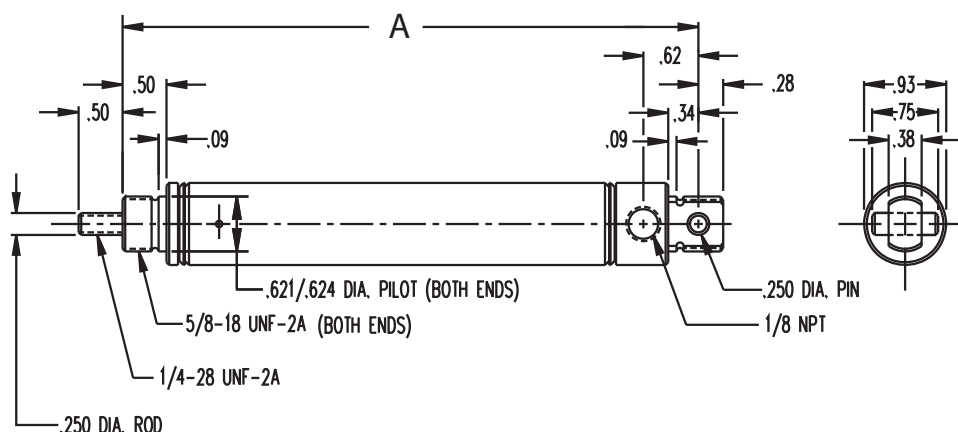
Cylinder, 7/8 in bore, single acting, spring return, rear pivot mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A14010SP	1.0	4.03	0.3	<--->
A14020SP	2.0	5.59	0.4	<--->
A14030SP	3.0	7.15	0.4	<--->
Specifications				
304 SS cylinder body		0.60 sq. in. piston area		
High strength aluminum 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 psi = 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	APB-2	—
Double End Mount	Front	AMB-6
	Rear	AMB-6

Cylinder rod clevis ARC-14-28

See end of 7/8" bore section for Accessories

Note: Drive pin out for double end mounting



Dimensions shown in inches



A-Series Pneumatic Cylinders

7/8 inch Bore

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



Part no. A14020DN

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

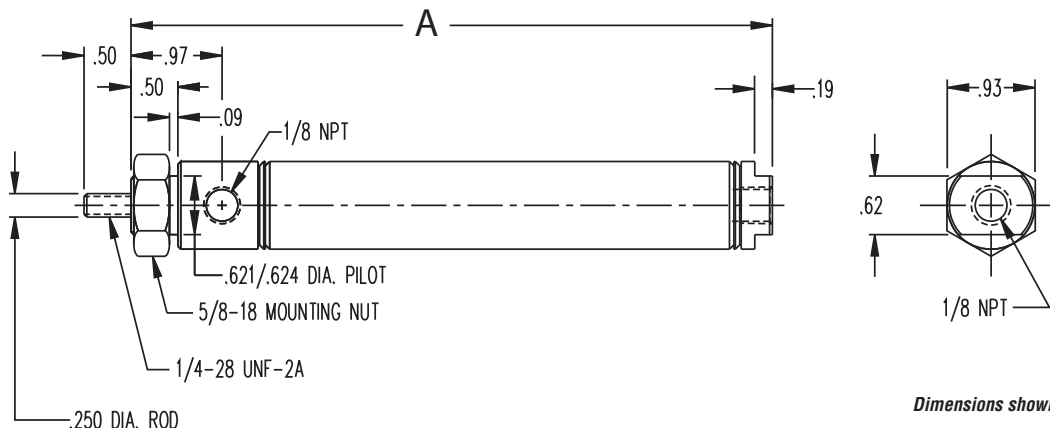
Cylinder, 7/8 in bore, double acting, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A14010DN	1.0	3.94	0.3	<--->
A14020DN	2.0	4.94	0.3	<--->
A14030DN	3.0	5.94	0.3	<--->
A14040DN	4.0	6.94	0.4	<--->
Specifications				
304 SS cylinder body		0.60 sq. in. piston area		
High 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 psi = 60.0 lb.		Retract force at 100 psi = 55.1 lb.		

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-14-28

See end of 7/8" bore section for Accessories



Dimensions shown in inches

A-Series Pneumatic Cylinders

7/8 inch Bore

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



Part no. A14020DD

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

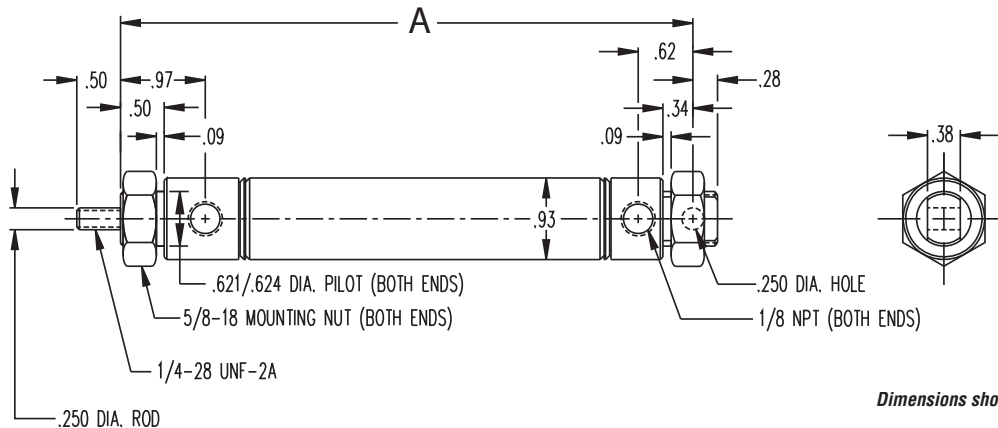
Cylinder, 7/8 in bore, double acting, double end mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A14010DD	1.0	4.56	0.4	<--->
A14020DD	2.0	5.56	0.4	<--->
A14030DD	3.0	6.56	0.4	<--->
A14040DD	4.0	7.56	0.4	<--->
Specifications				
304 SS cylinder body		0.60 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 60.0 lb.		Retract force at 100 psi = 55.1 lb.		

Mount Style	Bracket	Nut
Front Nose Mount	AMB-6	AN-58-18*
Rear Pivot Mount	APBP-3	—
Double End Mount	Front	AMB-6
	Rear	AMB-6

* (2) Nut included with cylinder

Cylinder rod clevis ARC-14-28

See end of 7/8" bore section for Accessories





A-Series Pneumatic Cylinders

7/8 inch Bore

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



Part no. A14020DD-M

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.

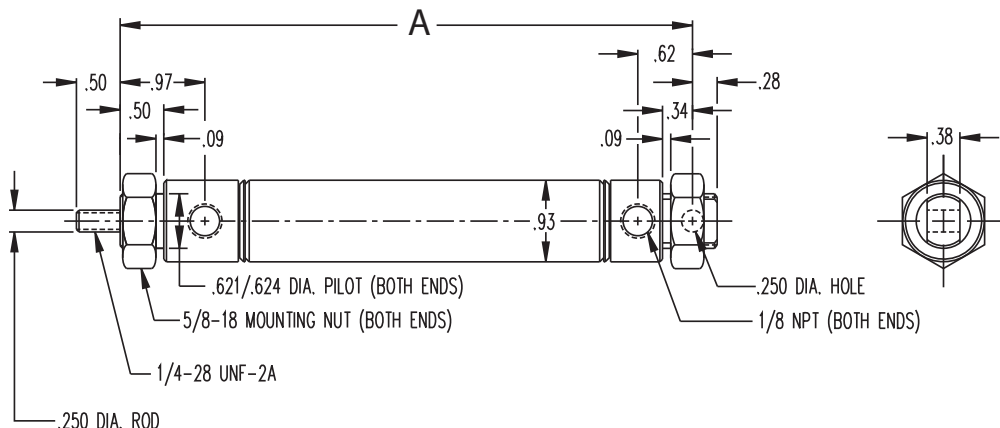
Cylinder, 7/8 in bore, double acting, double end mount, magnetic piston				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A14010DD-M	1.0	4.56	0.4	<--->
A14020DD-M	2.0	5.56	0.4	<--->
A14030DD-M	3.0	6.56	0.4	<--->
A14040DD-M	4.0	7.56	0.4	<--->
Specifications				
304 SS cylinder body		0.60 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 60.0 lb.		Retract force at 100 psi = 55.1 lb.		

Mount Style	Bracket	Nut
Front Nose Mount	AMB-6	AN-58-18*
Rear Pivot Mount	APBP-3	—
Double End Mount	Front	AMB-6
	Rear	AMB-6

* (2) Nuts included with cylinder

Cylinder rod clevis ARC-14-28

See end of 7/8" bore section for Accessories



Dimensions shown in inches

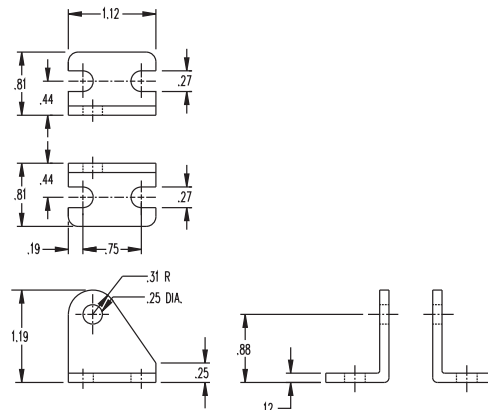
A-Series Pneumatic Cylinders

7/8 inch Bore Accessories

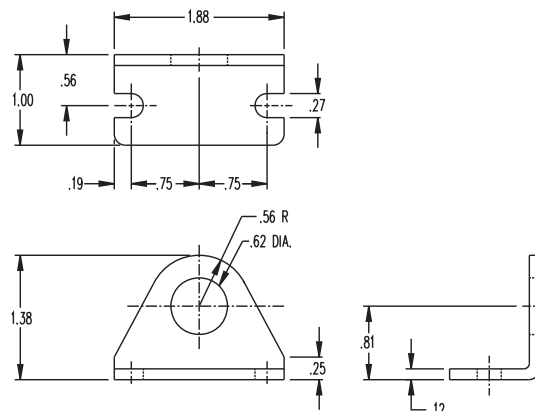
A-Series Pneumatic Cylinder 7/8 inch Bore Accessories

Part Number	Description	Pcs/Pkg	Wt (lb)	Price
APB-2	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	<--->
AMB-6	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	<--->
APBP-3	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	<--->
ARC-14-28	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	<--->
AN-58-18	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	<--->

APB-2



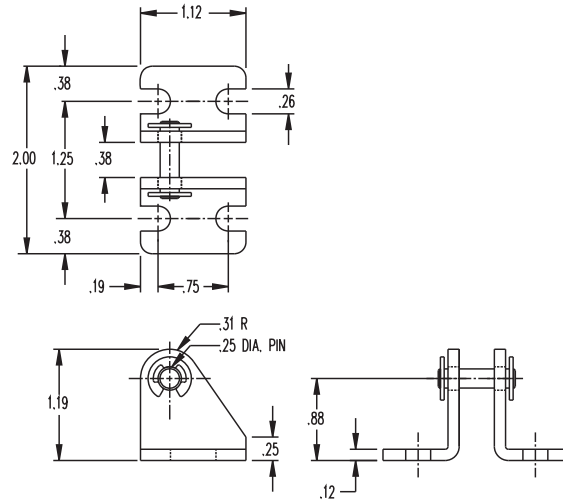
AMB-6



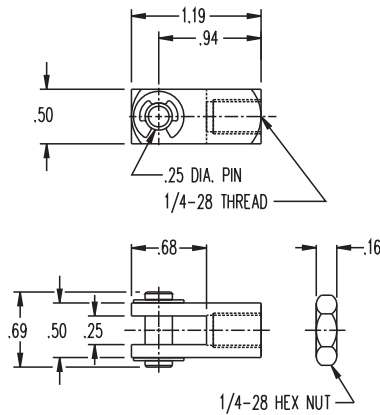
Dimensions shown in inches

A-Series Pneumatic Cylinders 7/8 inch Bore Accessories

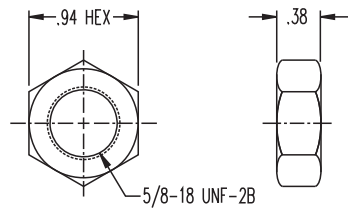
APBP-3



ARC-14-28



AN-58-18



Dimensions shown in inches

A-Series Pneumatic Cylinders

1-1/16 inch Bore

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



Part no. A17020SN

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

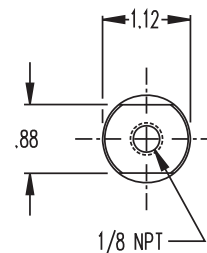
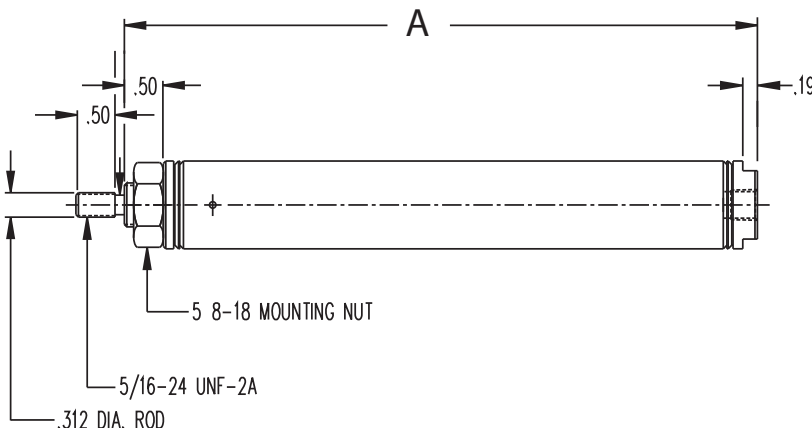
Cylinder, 1-1/16 in bore, single acting, spring return, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A17010SN	1.0	3.50	0.3	<--->
A17020SN	2.0	5.06	0.5	<--->
A17030SN	3.0	6.62	0.6	<--->
Specifications				
304 SS cylinder body		0.90 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N 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



Dimensions shown in inches



A-Series Pneumatic Cylinders

1-1/16 inch Bore

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



Part no. A17020SP

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).

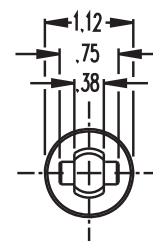
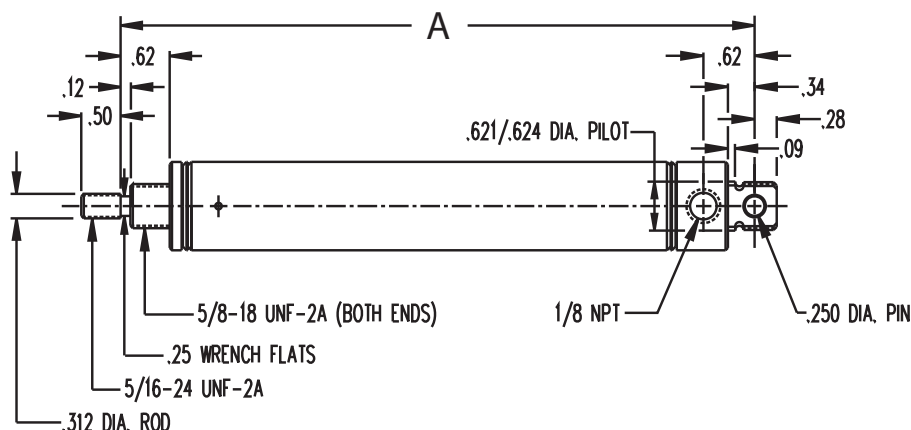
Cylinder, 1-1/16 in bore, single acting, spring return, rear pivot mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A17010SP	1.0	4.22	0.4	<--->
A17020SP	2.0	5.78	0.5	<--->
A17030SP	3.0	7.34	0.6	<--->
Specifications				
304 SS cylinder body		0.90 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N 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	APB-2	—
Double End Mount	Front	AMB-6
	Rear	AMB-6

Cylinder rod clevis ARC-516-24

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

Note: Drive pin out for double end mounting



Dimensions shown in inches

A-Series Pneumatic Cylinders

1-1/16 inch Bore

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



Part no. A17020DN

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

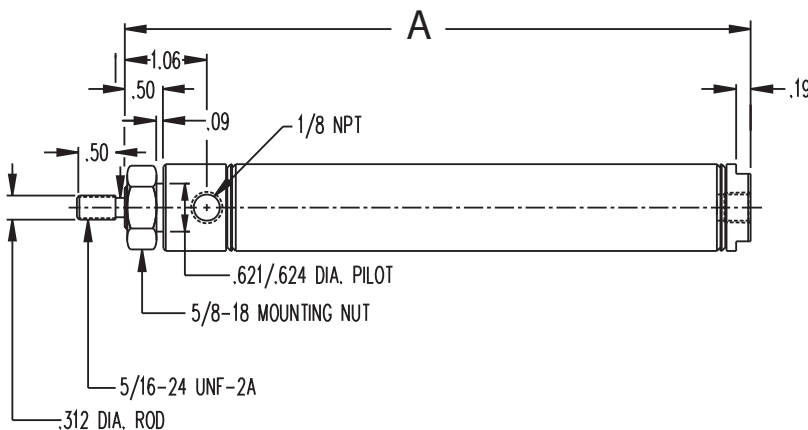
Cylinder, 1-1/16 in bore, double acting, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A17005DN	0.5	3.62	0.4	<--->
A17010DN	1.0	4.12	0.4	<--->
A17020DN	2.0	5.12	0.4	<--->
A17030DN	3.0	6.12	0.5	<--->
A17040DN	4.0	7.12	0.5	<--->
A17050DN	5.0	8.12	0.6	<--->
A17060DN	6.0	9.12	0.6	<--->
A17080DN	8.0	11.12	0.7	<--->
A17100DN	10.0	13.12	0.8	<--->
A17120DN	12.0	15.12	0.9	<--->
Specifications				
304 SS cylinder body		0.90 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High Strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		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 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



Dimensions shown in inches



A-Series Pneumatic Cylinders

1-1/16 inch Bore

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



Part no. A17020DP

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

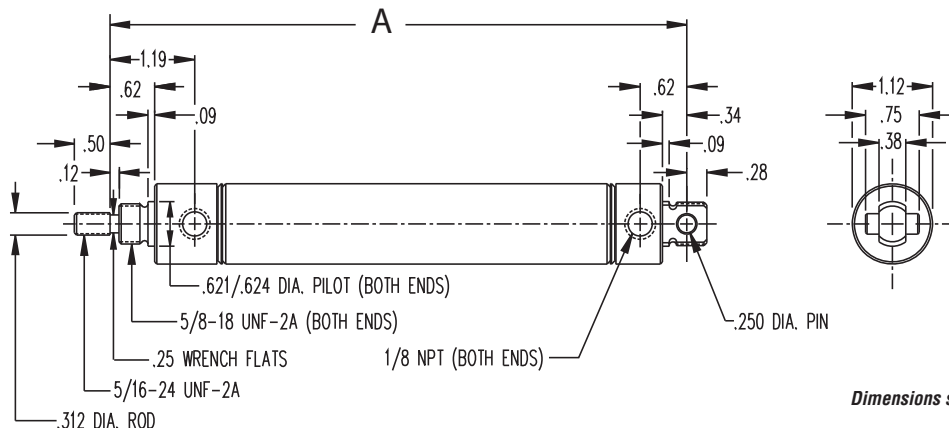
Cylinder, 1-1/16 in bore, double acting, rear pivot mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A17010DP	1.0	4.84	0.4	<--->
A17020DP	2.0	5.84	0.4	<--->
A17030DP	3.0	6.84	0.5	<--->
A17040DP	4.0	7.84	0.5	<--->
A17050DP	5.0	8.84	0.6	<--->
A17060DP	6.0	9.84	0.6	<--->
A17080DP	8.0	11.84	0.7	<--->
A17100DP	10.0	13.84	0.8	<--->
A17120DP	12.0	15.84	0.9	<--->
Specifications				
304 SS cylinder body		0.90 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		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 Mount	AMB-6	AN-58-18
Rear Pivot Mount	APB-2	—
Double End Mount	Front	AMB-6
	Rear	AMB-6
		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



Dimensions shown in inches



A-Series Pneumatic Cylinders

1-1/16 inch Bore

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



Part no. A17020DP-M

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

Cylinder, 1-1/16 in bore, double acting, rear pivot mount, magnetic piston

Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A17010DP-M	1.0	4.84	0.4	<--->
A17020DP-M	2.0	5.84	0.4	<--->
A17030DP-M	3.0	6.84	0.5	<--->
A17040DP-M	4.0	7.84	0.5	<--->
A17050DP-M	5.0	8.84	0.6	<--->
A17060DP-M	6.0	9.84	0.6	<--->
A17080DP-M	8.0	11.84	0.7	<--->
A17100DP-M	10.0	13.84	0.8	<--->
A17120DP-M	12.0	15.84	0.9	<--->

Specifications

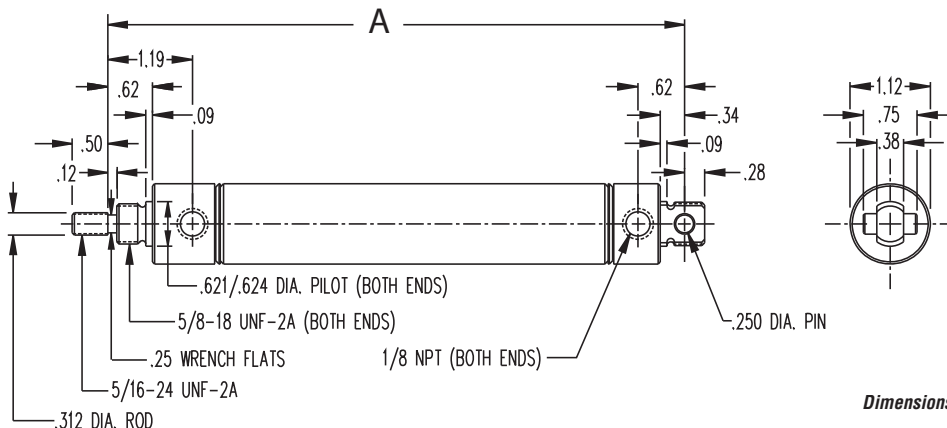
304 SS cylinder body	0.90 sq. in. piston area
High strength aluminum end caps	Pre-lubricated for maintenance-free life
303 SS piston rod	Pressure rating 250 psi
Low friction Buna-N seals	Temperature range -20°F to 200°F (-28 to 93°C)
Extend force at 100 psi = 90.0 lb.	Retract force at 100 psi = 82.3 lb.

Mount Style	Bracket	Nut
Front Nose Mount	AMB-6	AN-58-18
Rear Pivot Mount	APB-2	—
Double End Mount	Front	AMB-6
	Rear	AMB-6

Cylinder rod clevis ARC-516-24

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

Note: Drive pin out for double end mounting



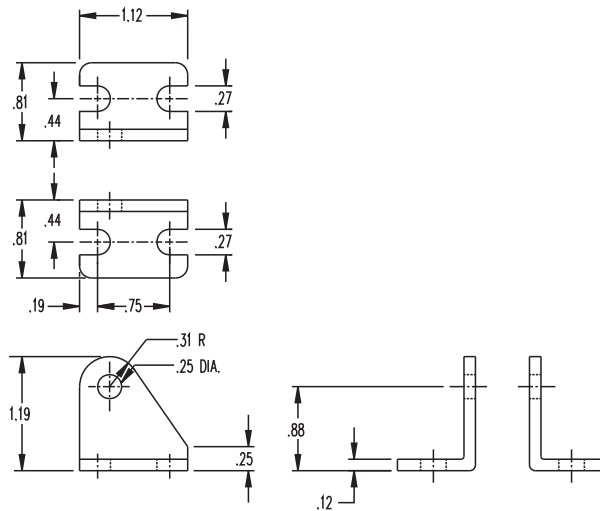
Dimensions shown in inches

A-Series Pneumatic Cylinders

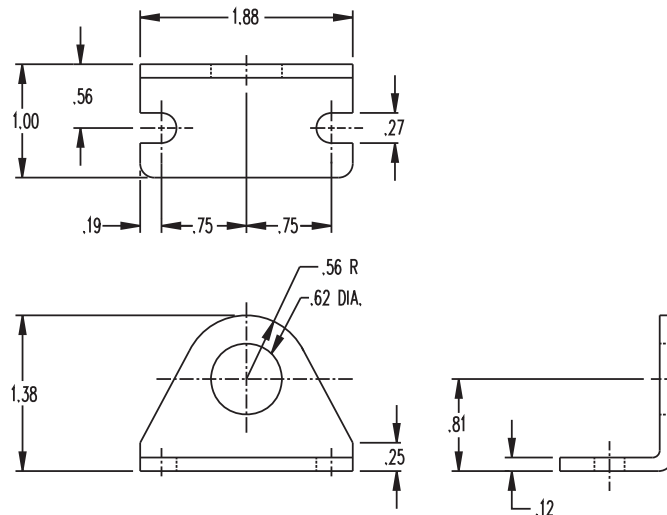
1-1/16 inch Bore Accessories

A-Series Pneumatic Cylinder 1-1/16 inch Bore Accessories				
Part Number	Description	Pcs/Pkg	Wt (lb)	Price
APB-2	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	<--->
AMB-6	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	<--->
ARC-516-24	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	<--->
AN-58-18	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	<--->

APB-2



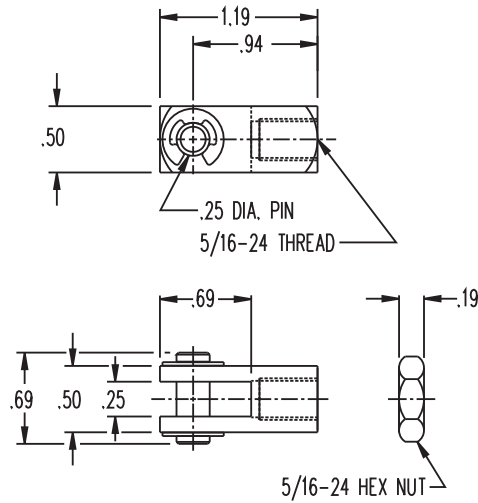
AMB-6



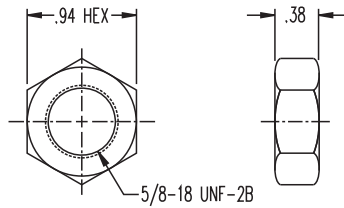
Dimensions shown in inches

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

ARC-516-24



AN-58-18



Dimensions shown in inches



A-Series Pneumatic Cylinders

1-1/4 inch Bore

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



Part no. A20020SN

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.

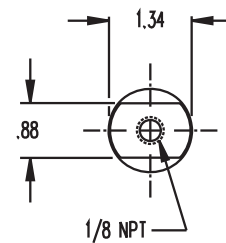
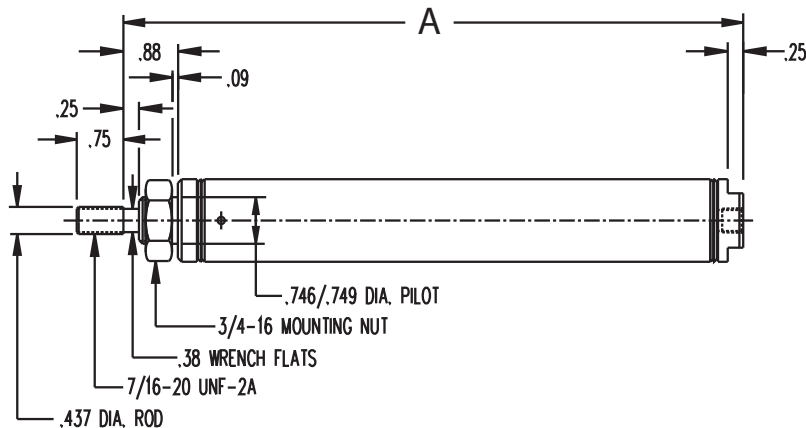
Cylinder, 1-1/4 in bore, single acting, spring return, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A20010SN	1.0	4.47	0.6	<--->
A20020SN	2.0	6.28	0.8	<--->
A20030SN	3.0	8.09	1.0	<--->
Specifications				
304 SS cylinder body		1.2 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 120.0 lb.		Spring force = 7.5 lb. relaxed, 15 lb. compressed.		

Mount Style	Bracket	Nut
Front Nose Mount	AMB-7	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 shown in inches

A-Series Pneumatic Cylinders

1-1/4 inch Bore

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



Part no. A20020SD

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.

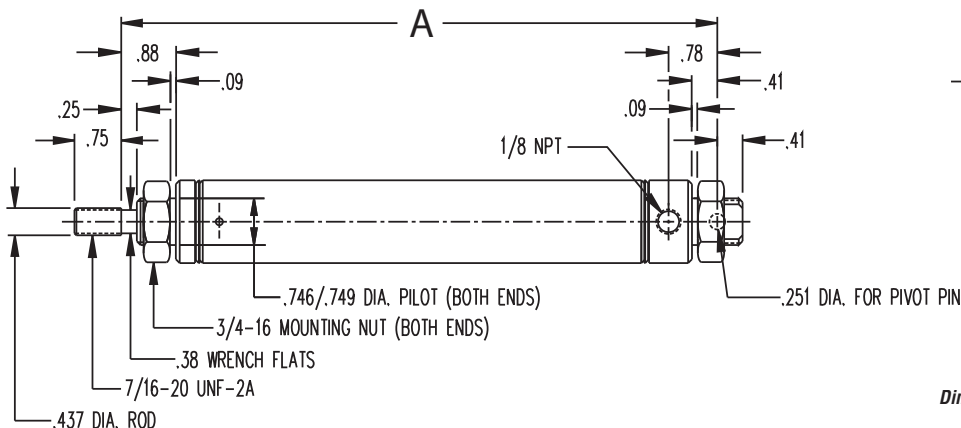
Cylinder, 1-1/4 in bore, single acting, spring return, double end mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A20010SD	1.0	5.19	0.7	<--->
A20020SD	2.0	7.00	1.0	<--->
A20030SD	3.0	8.81	1.2	<--->
Specifications				
304 SS cylinder body		1.2 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 120.0 lb.		Spring force = 7.5 lb. relaxed, 15 lb. compressed		

Mount Style	Bracket	Nut
Front Nose Mount	AMB-7	AN-34-16*
Rear Pivot Mount	APBP-4	—
Double End Mount	Front	AMB-7
	Rear	AMB-7

* (2) Nuts included with cylinder

Cylinder rod clevis ARC-716-20

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



Dimensions shown in inches



A-Series Pneumatic Cylinders

1-1/4 inch Bore

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



Part no. A20020DN

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

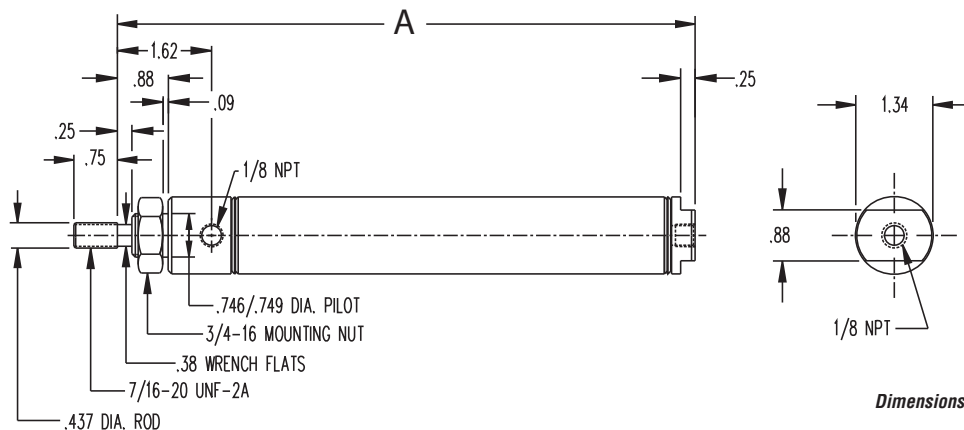
Cylinder, 1-1/4 in bore, double acting, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A20010DN	1.0	5.00	0.7	<--->
A20020DN	2.0	6.00	0.7	<--->
A20030DN	3.0	7.00	0.8	<--->
A20040DN	4.0	8.00	0.9	<--->
A20050DN	5.0	9.00	1.0	<--->
A20060DN	6.0	10.0	1.1	<--->
A20080DN	8.0	12.0	1.2	<--->
Specifications				
304 SS cylinder body		1.2 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 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	—	—
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 shown in inches

A-Series Pneumatic Cylinders

1-1/4 inch Bore

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



Part no. A20020DD

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

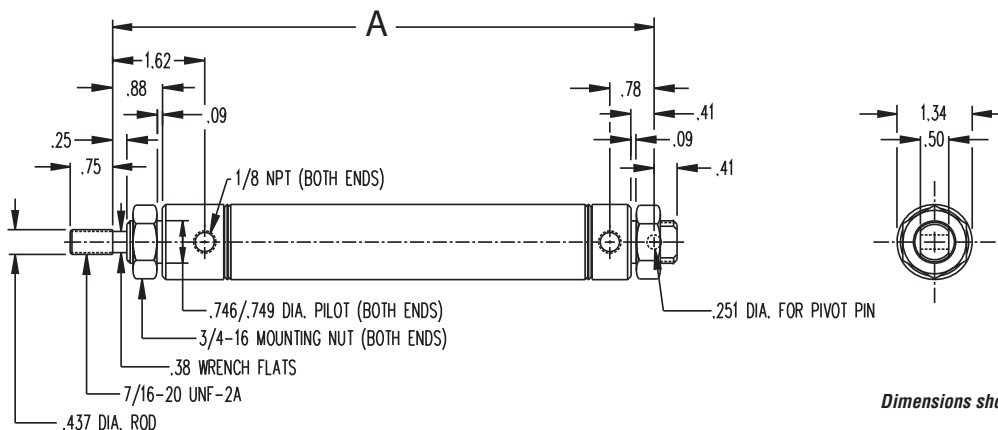
Cylinder, 1-1/4 in bore, double acting, double end mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A20010DD	1.0	5.72	0.8	<--->
A20020DD	2.0	6.72	0.9	<--->
A20030DD	3.0	7.72	1.0	<--->
A20040DD	4.0	8.72	1.0	<--->
A20050DD	5.0	9.72	1.1	<--->
A20060DD	6.0	10.72	1.2	<--->
A20080DD	8.0	12.72	1.4	<--->
A20100DD	10.0	14.72	1.5	<--->
A20120DD	12.0	16.72	1.7	<--->
Specifications				
304 SS cylinder body		1.2 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 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	APBP-4	—
Double End Mount	Front	AMB-7
	Rear	AMB-7

* (2) Nuts included with cylinder

Cylinder rod clevis ARC-716-20

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



Dimensions shown in inches



A-Series Pneumatic Cylinders

1-1/4 inch Bore

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



Part no. A20020DD-M

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.

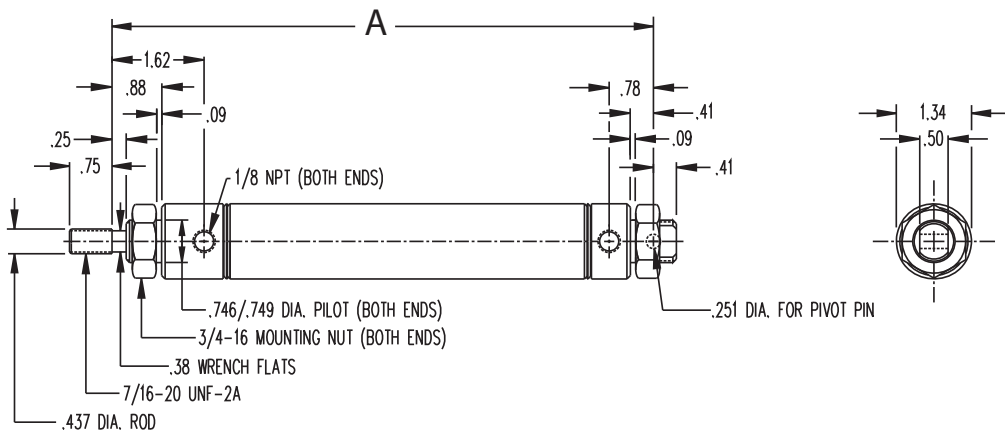
Cylinder, 1-1/4 in bore, double acting, double end mount, magnetic piston				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A20010DD-M	1.0	5.72	0.8	<--->
A20020DD-M	2.0	6.72	0.9	<--->
A20030DD-M	3.0	7.72	1.0	<--->
A20040DD-M	4.0	8.72	1.0	<--->
A20050DD-M	5.0	9.72	1.1	<--->
A20060DD-M	6.0	10.72	1.2	<--->
A20080DD-M	8.0	12.72	1.4	<--->
A20100DD-M	10.0	14.72	1.5	<--->
A20120DD-M	12.0	16.72	1.7	<--->
Specifications				
304 SS cylinder body		1.2 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 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	APBP-4	—
Double End Mount	Front	AMB-7
	Rear	AMB-7
		AN-34-16*

* (2) Nuts included with cylinder

Cylinder rod clevis ARC-716-20

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



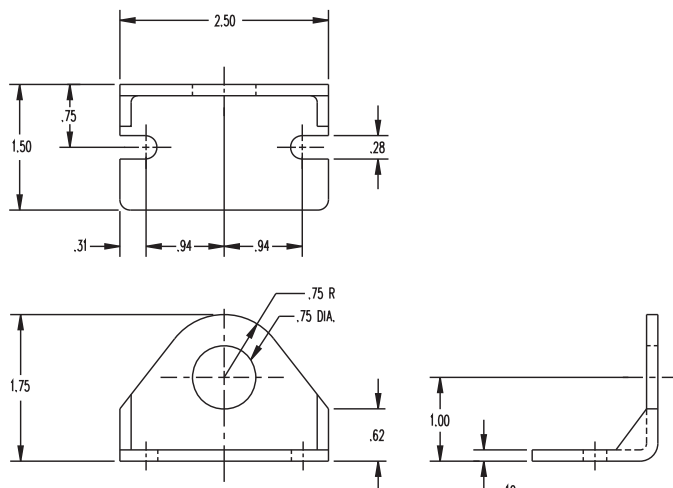
Dimensions shown in inches

A-Series Pneumatic Cylinders

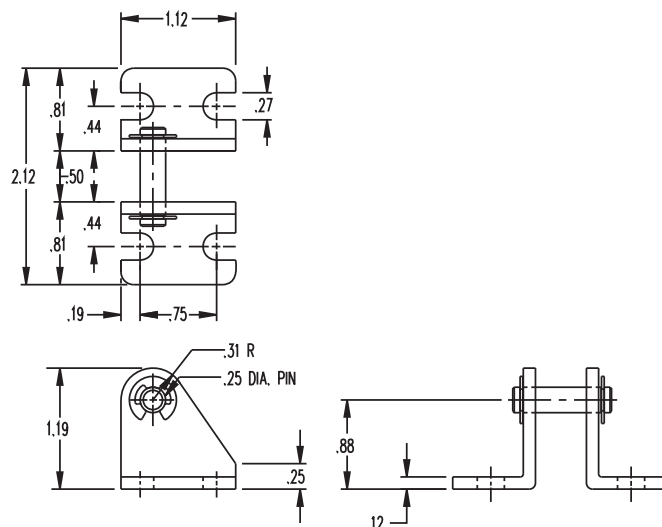
1-1/4 inch Bore Accessories

A-Series Pneumatic Cylinder 1-1/4 inch Bore Accessories				
Part Number	Description	Pcs/Pkg	Wt (lb)	Price
AMB-7	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	<--->
APBP-4	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	<--->
ARC-716-20	Cylinder rod clevis and hex nut, 7/16-20 thread, for use with 1-1/4 and 1-1/2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.1	<--->
AN-34-16	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	<--->

AMB-7



APBP-4

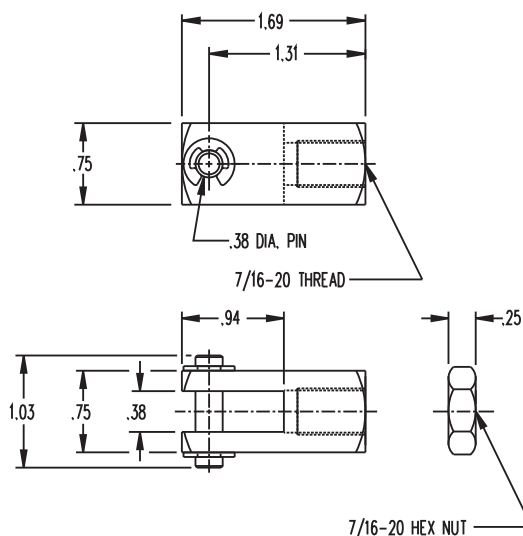


Dimensions shown in inches

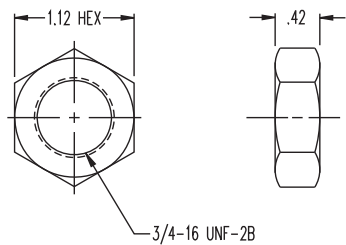
A-Series Pneumatic Cylinders

1-1/4 inch Bore Accessories

ARC-716-20



AN-34-16



Dimensions shown in inches



A-Series Pneumatic Cylinders

1-1/2 inch Bore

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



Part no. A24020SN

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

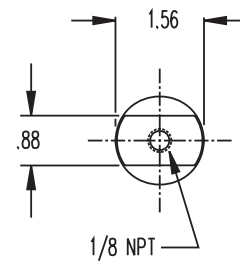
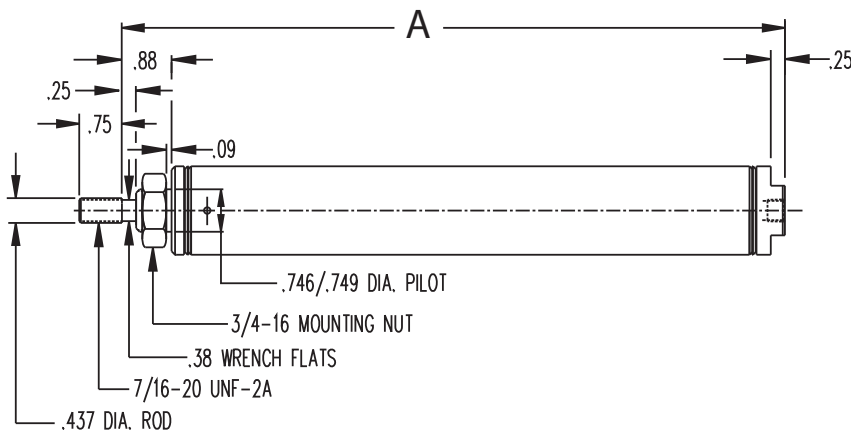
Cylinder, 1-1/2 in bore, single acting, spring return, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A24010SN	1.0	4.13	0.7	<--->
A24020SN	2.0	5.82	0.9	<--->
A24030SN	3.0	7.51	1.1	<--->
A24040SN	4.0	9.20	1.3	<--->
A24050SN	5.0	10.89	1.5	<--->
A24060SN	6.0	12.58	1.8	<--->
Specifications				
304 SS cylinder body		1.7 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 170.0 lb.		Spring force = 7.5 lb. relaxed, 14 lb. compressed		

Mount Style	Bracket	Nut
Front Nose Mount	AMB-7	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 1-1/2" bore section for Accessories



Dimensions shown in inches



A-Series Pneumatic Cylinders

1-1/2 inch Bore

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



Part no. A24020SP

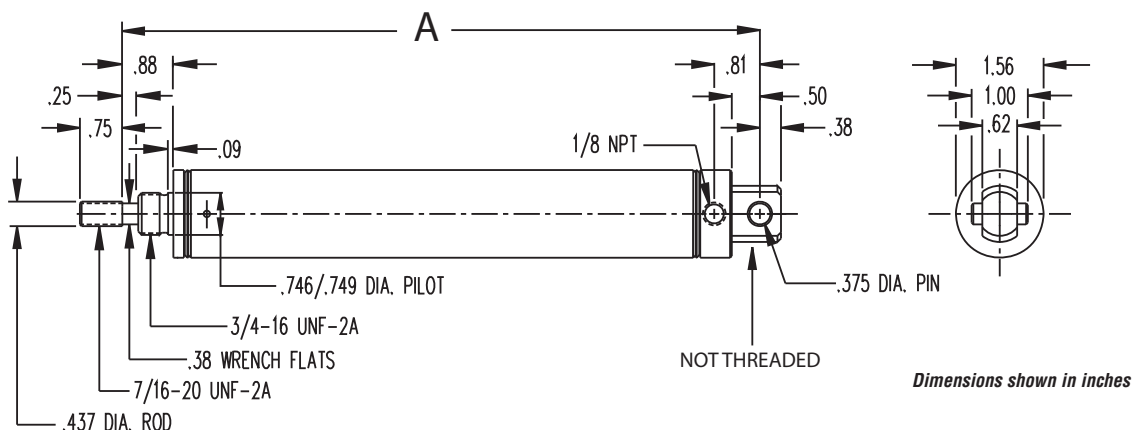
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/2 inch bore, 1/8 NPT port, single acting, spring return, rear pivot mount (pivot pin included). Cylinder cannot be double end mounted.

Cylinder, 1-1/2 in bore, single acting, spring return, rear pivot mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A24010SP	1.0	4.81	0.7	<--->
A24020SP	2.0	6.50	0.9	<--->
A24030SP	3.0	8.19	1.1	<--->
A24040SP	4.0	9.88	1.3	<--->
A24050SP	5.0	11.57	1.6	<--->
A24060SP	6.0	13.26	1.8	<--->
Specifications				
304 SS cylinder body		1.7 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 170.0 lb.		Spring force = 7.5 lb. relaxed, 14 lb. compressed		

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

Cylinder rod clevis ARC-716-20

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



A-Series Pneumatic Cylinders

1-1/2 inch Bore

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



Part no. A24020DN

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

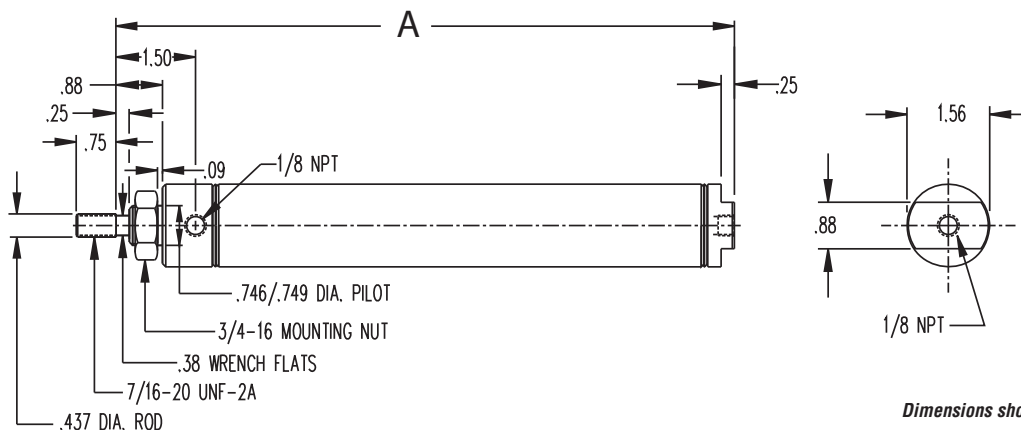
Cylinder, 1-1/2 in bore, double acting, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A24010DN	1.0	4.69	0.8	<--->
A24015DN	1.5	5.19	0.8	<--->
A24020DN	2.0	5.69	0.9	<--->
A24030DN	3.0	6.69	0.9	<--->
A24040DN	4.0	7.69	1.0	<--->
A24050DN	5.0	8.69	1.1	<--->
A24060DN	6.0	9.69	1.2	<--->
A24070DN	7.0	10.69	1.3	<--->
A24080DN	8.0	11.69	1.3	<--->
A24090DN	9.0	12.69	1.4	<--->
A24100DN	10.0	13.69	1.5	<--->
A24110DN	11.0	14.69	1.6	<--->
A24120DN	12.0	15.69	1.7	<--->
Specifications				
304 SS cylinder body		1.7 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 170.0 lb.		Retract force at 100 psi = 155.0 lb.		

Mount Style	Bracket	Nut
Front Nose Mount	AMB-7	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 1-1/2" bore section for Accessories



Dimensions shown in inches



A-Series Pneumatic Cylinders

1-1/2 inch Bore

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



Part no. A24020DP

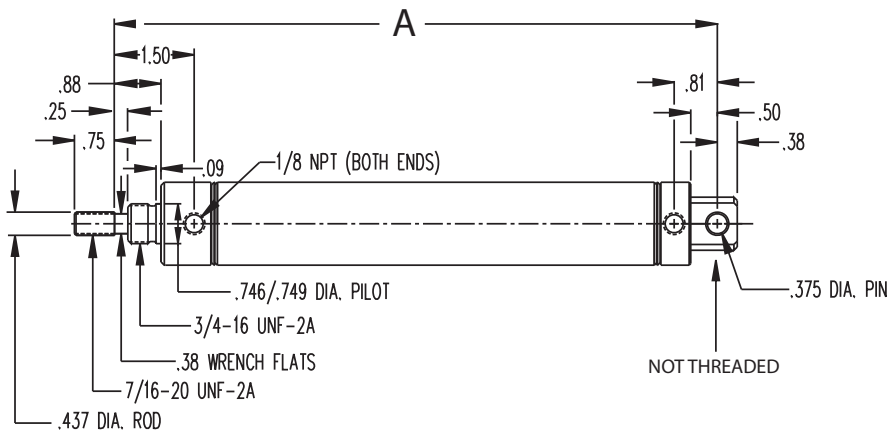
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 1-1/2 inch bore, 1/8 NPT ports, double acting, rear pivot mount (pivot pin included). Cylinder cannot be double end mounted.

Cylinder, 1-1/2 in bore, double acting, rear pivot mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A24010DP	1.0	5.38	0.8	<--->
A24020DP	2.0	6.38	0.9	<--->
A24030DP	3.0	7.38	1.0	<--->
A24040DP	4.0	8.38	1.1	<--->
A24050DP	5.0	9.38	1.1	<--->
A24060DP	6.0	10.38	1.2	<--->
A24070DP	7.0	11.38	1.3	<--->
A24080DP	8.0	12.38	1.4	<--->
A24090DP	9.0	13.38	1.5	<--->
A24100DP	10.0	14.38	1.5	<--->
A24120DP	12.0	16.38	1.7	<--->
Specifications				
304 SS cylinder body		1.7 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 170.0 lb.		Retract force at 100 psi = 155.0 lb.		

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

Cylinder rod clevis ARC-716-20

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



Dimensions shown in inches



A-Series Pneumatic Cylinders

1-1/2 inch Bore

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



Part no. A24020DP-M

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
A24010DP-M	1.0	5.38	0.8	<--->
A24020DP-M	2.0	6.38	0.9	<--->
A24030DP-M	3.0	7.38	1.0	<--->
A24040DP-M	4.0	8.38	1.1	<--->
A24050DP-M	5.0	9.38	1.1	<--->
A24060DP-M	6.0	10.38	1.2	<--->
A24070DP-M	7.0	11.38	1.3	<--->
A24080DP-M	8.0	12.38	1.4	<--->
A24090DP-M	9.0	13.38	1.5	<--->
A24100DP-M	10.0	14.38	1.5	<--->
A24120DP-M	12.0	16.38	1.7	<--->

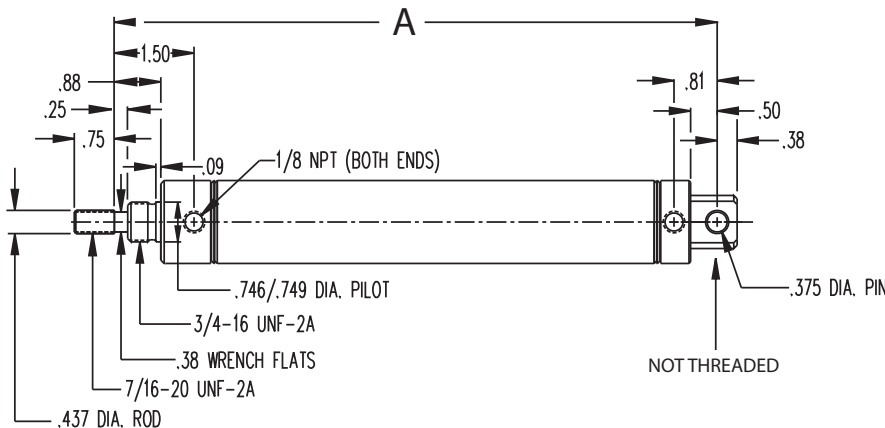
Specifications

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 rating 250 psi
Low friction Buna-N seals	Temperature range -20°F to 200°F (-28 to 93°C)
Extend force at 100 psi = 170.0 lb.	Retract force at 100 psi = 155.0 lb.

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

Cylinder rod clevis ARC-716-20

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



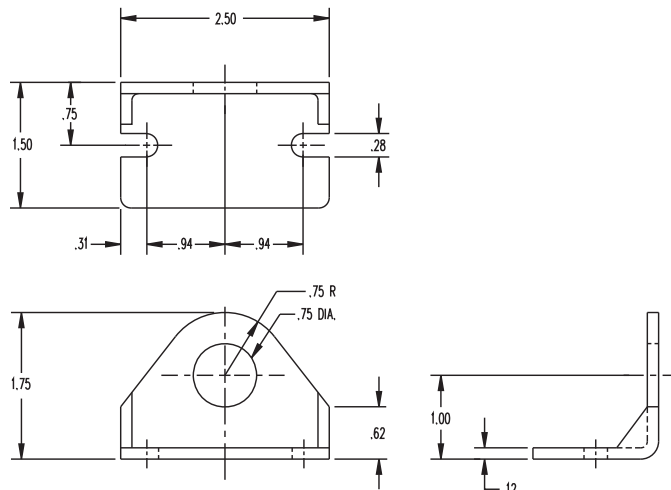
Dimensions shown in inches

A-Series Pneumatic Cylinders

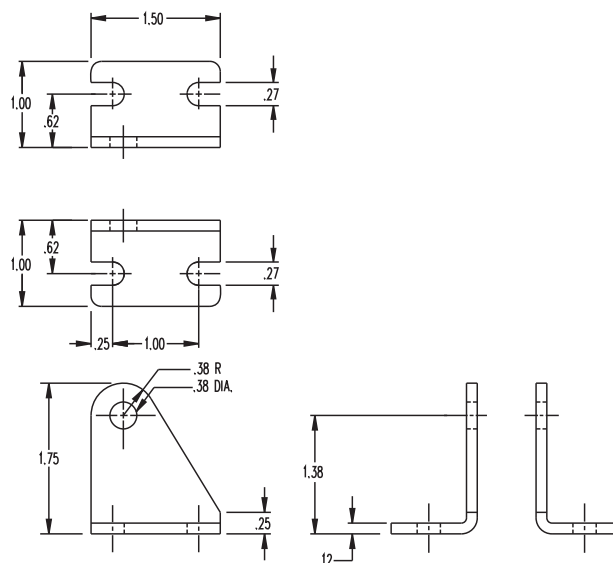
1-1/2 inch Bore Accessories

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

AMB-7



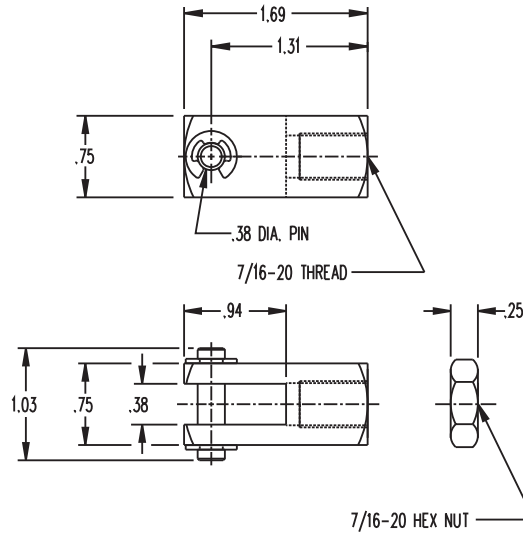
APB-3



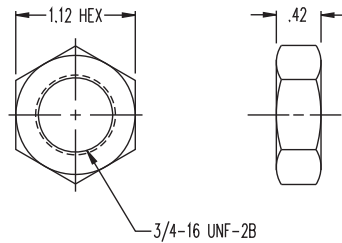
Dimensions shown in inches

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

ARC-716-20



AN-34-16



Dimensions shown in inches

Company
Information

Systems
Overview

Programmable
Controllers

Field I/O

Software

C-more &
other HMI

Drives

Soft
Starters

Motors &
Gearbox

Steppers/
Servos

Motor
Controls

Proximity
Sensors

Photo
Sensors

Limit
Switches

Encoders

Current
Sensors

Pressure
Sensors

Temperature
Sensors

Pushbuttons/
Lights

Process

Relays/
Timers

Comm.

Terminal
Blocks &
Wiring

Power

Circuit
Protection

Enclosures

Tools

Pneumatics

Appendix

Product
Index

Part #
Index



A-Series Pneumatic Cylinders

2 inch Bore

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



Part no. A32020SN

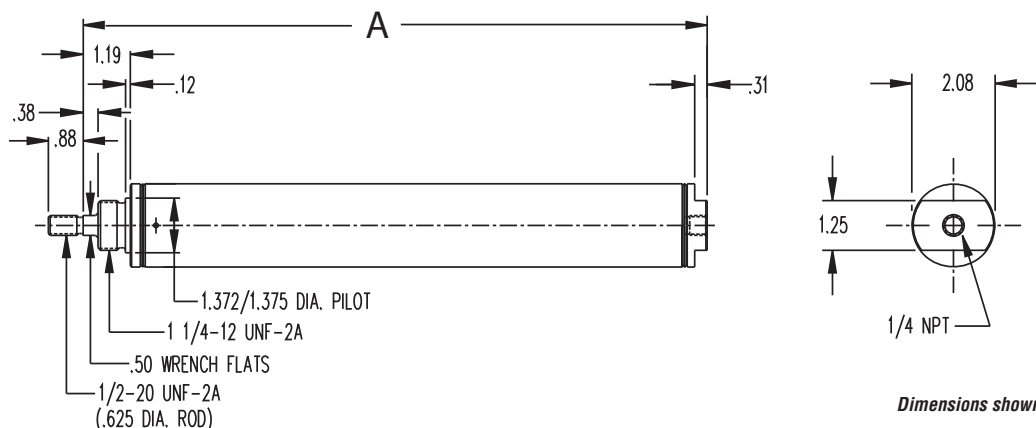
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 2 inch bore, 1/4 NPT port, single acting, spring return, front nose mount.

Cylinder, 2 in bore, single acting, spring return, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A32010SN	1.0	5.41	1.5	<--->
A32020SN	2.0	7.41	1.9	<--->
A32030SN	3.0	8.66	2.3	<--->
Specifications				
304 SS cylinder body		3.1 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 310.0 lb.		Spring force = 15 lb. relaxed, 30 lb. compressed		

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

Cylinder rod clevis ARC-12-20

See end of 2" bore section for Accessories



Dimensions shown in inches

A-Series Pneumatic Cylinders

2 inch Bore

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



Part no. A32020SD

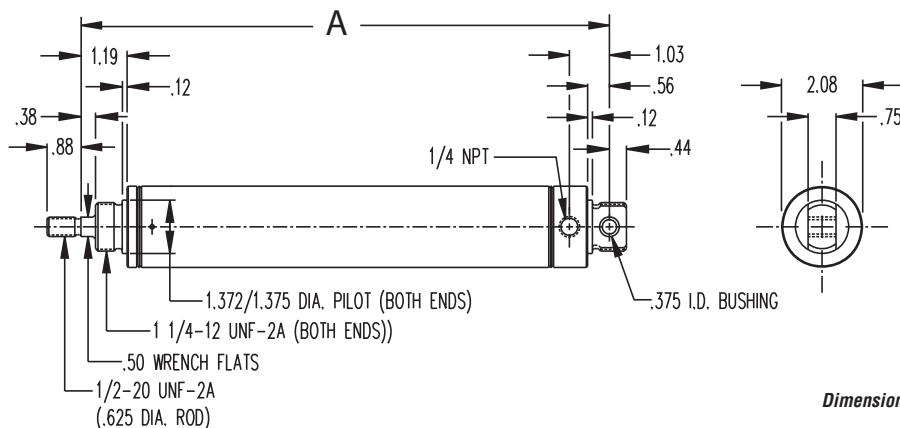
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 2 inch bore, 1/4 NPT port, single acting, spring return, double end mount.

Cylinder, 2 in bore, single acting, spring return, double end mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A32010SD	1.0	6.34	1.7	<--->
A32020SD	2.0	8.34	2.1	<--->
A32030SD	3.0	9.59	2.6	<--->
Specifications				
304 SS cylinder body		3.1 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 310.0 lb.		Spring force = 15 lb. relaxed, 30 lb. compressed		

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

Cylinder rod clevis ARC-12-20

See end of 2" bore section for Accessories



Dimensions shown in inches



A-Series Pneumatic Cylinders

2 inch Bore

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



Part no. A32020DN

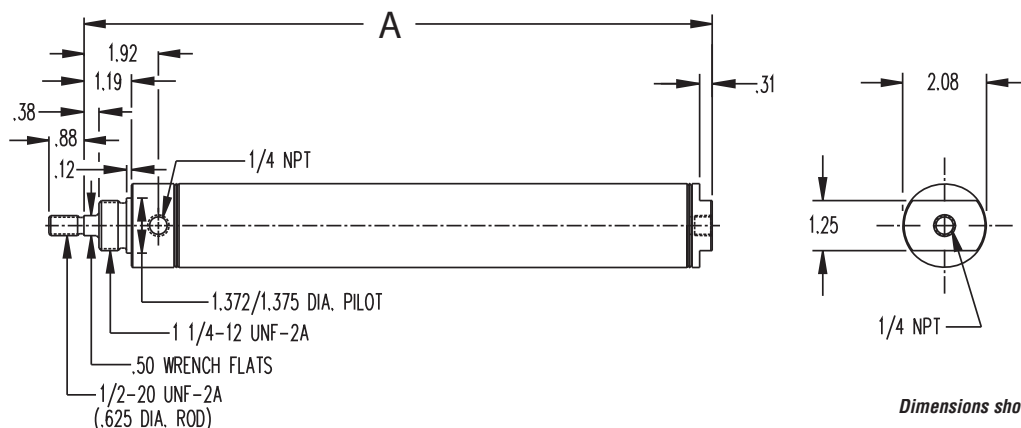
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 2 inch bore, 1/4 NPT ports, double acting, front nose mount.

Cylinder, 2 in bore, double acting, front nose mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A32010DN	1.0	5.69	1.6	<--->
A32020DN	2.0	6.69	1.7	<--->
A32030DN	3.0	7.69	1.9	<--->
A32040DN	4.0	8.69	2.0	<--->
A32050DN	5.0	9.69	2.2	<--->
A32060DN	6.0	10.69	2.3	<--->
Specifications				
304 SS cylinder body		3.1 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
High strength carbon steel piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 310.0 lb.		Retract force at 100 psi = 279.3 lb.		

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

Cylinder rod clevis ARC-12-20

See end of 2" bore section for Accessories



Dimensions shown in inches

A-Series Pneumatic Cylinders

2 inch Bore

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



Part no. A32020DD

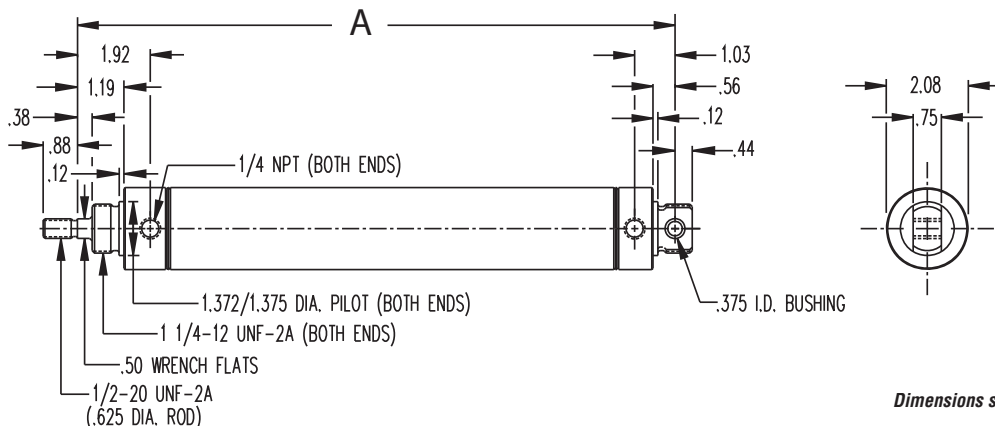
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 2 inch bore, 1/4 NPT ports, double acting, double end mount.

Cylinder, 2 in bore, double acting, double end mount				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A32010DD	1.0	6.62	1.8	<--->
A32020DD	2.0	7.62	1.9	<--->
A32030DD	3.0	8.62	2.1	<--->
A32040DD	4.0	9.62	2.2	<--->
A32050DD	5.0	10.62	2.4	<--->
A32060DD	6.0	11.62	2.5	<--->
A32070DD	7.0	12.62	2.7	<--->
A32080DD	8.0	13.62	2.8	<--->
A32100DD	10.0	15.62	3.1	<--->
A32120DD	12.0	17.62	3.4	<--->
A32140DD	14.0	19.62	3.7	<--->
A32160DD	16.0	21.62	4.0	<--->
A32180DD	18.0	23.62	4.3	<--->
Specifications				
304 SS cylinder body		3.1 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 310.0 lb.		Retract force at 100 psi = 279.3 lb.		

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

Cylinder rod clevis ARC-12-20

See end of 2" bore section for Accessories



Dimensions shown in inches



A-Series Pneumatic Cylinders

2 inch Bore

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



Part no. A32020DD-M

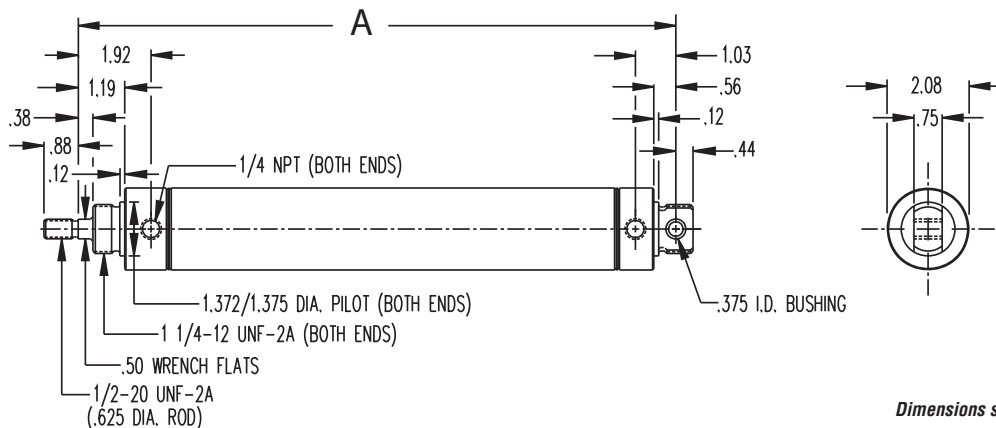
NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinder, 2 inch bore, 1/4 NPT ports, double acting, double end mount, magnetic piston.

Cylinder, 2 in bore, double acting, double end mount, magnetic piston				
Part Number	Stroke Length (in.)	"A" (in)	Weight (lbs)	Price
A32010DD-M	1.0	6.62	1.8	<--->
A32020DD-M	2.0	7.62	1.9	<--->
A32030DD-M	3.0	8.62	2.1	<--->
A32040DD-M	4.0	9.62	2.2	<--->
A32050DD-M	5.0	10.62	2.4	<--->
A32060DD-M	6.0	11.62	2.5	<--->
A32070DD-M	7.0	12.62	2.7	<--->
A32080DD-M	8.0	13.62	2.8	<--->
A32100DD-M	10.0	15.62	3.1	<--->
A32120DD-M	12.0	17.62	3.4	<--->
A32140DD-M	14.0	19.62	3.7	<--->
A32160DD-M	16.0	21.62	4.0	<--->
A32180DD-M	18.0	23.62	4.3	<--->
Specifications				
304 SS cylinder body		3.10 sq. in. piston area		
High strength aluminum end caps		Pre-lubricated for maintenance-free life		
303 SS piston rod		Pressure rating 250 psi		
Low friction Buna-N seals		Temperature range -20°F to 200°F (-28 to 93°C)		
Extend force at 100 psi = 310 lb.		Retract force at 100 psi = 279.3 lb.		

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

Cylinder rod clevis ARC-12-20

See end of 2" bore section for Accessories

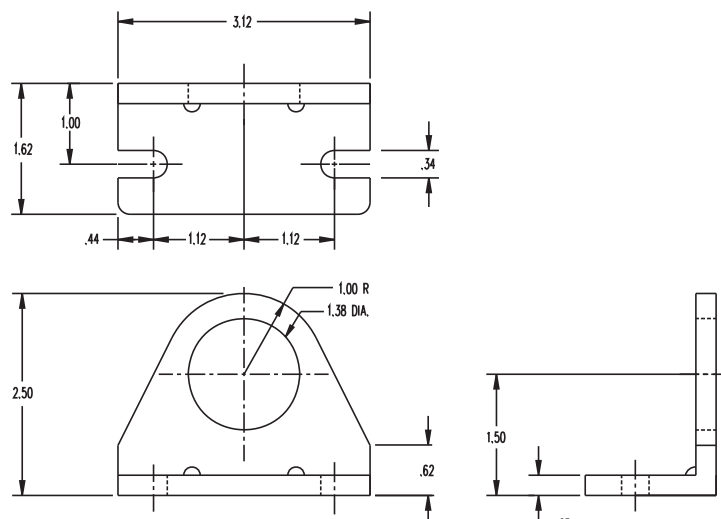


A-Series Pneumatic Cylinders

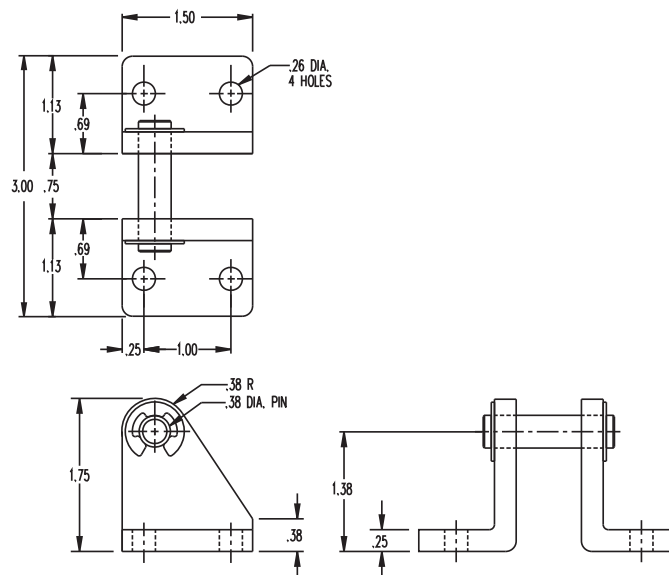
2 inch Bore Accessories

A-Series Pneumatic Cylinder 2 inch Bore Accessories				
Part Number	Description	Pcs/Pkg	Wt (lb)	Price
AMB-11	Cylinder mounting bracket used to mount 2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.5	<--->
APBP-5	Cylinder pivot mounting bracket with pivot pin used to mount 2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.4	<--->
ARC-12-20	Cylinder rod clevis and hex nut, 1/2-20 thread, for use with 2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.2	<--->
AN-114-12	Cylinder mounting nut with 1-1/4-12 UNF-2B threads used to mount 2 inch bore NITRA pneumatic stainless steel round body, interchangeable, non-repairable cylinders.	1	0.3	<--->

AMB-11



APBP-5

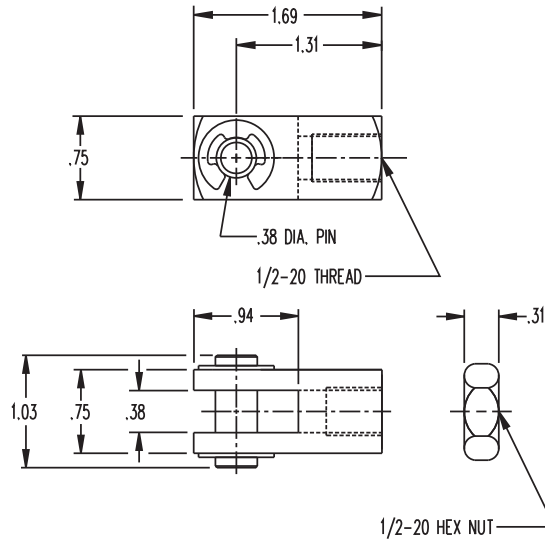


Dimensions shown in inches

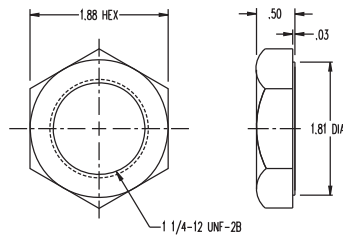
A-Series Pneumatic Cylinders

2 inch Bore Accessories

ARC-12-20



AN-114-12



Dimensions shown in inches

CPS Series Pneumatic Cylinder Position Switches

The NITRA CPS Series of pneumatic position switches offers a robust, yet cost-effective interface between pneumatic actuators and electrical control systems. Using state-of-the-art AMR magnetic sensing technology, these switches are designed for use with pneumatic cylinders that have a magnet incorporated in the cylinder piston. They can be used to provide cylinder position indication, cycle count or to confirm operation.

The NITRA CPS Series is available in 3-wire DC, PNP normally open, PNP normally closed, and NPN normally open electronic solid state switch configurations with either an M8 wiring connector or wire leads. Designed to provide a low profile, flush installation on cylinders with T-slot channels, these switches are also easily mounted on round body cylinders using CPSB series mounting bands. Integral LED indication provides switch status

for speedy switch positioning and troubleshooting. Pre-tested for use with NITRA pneumatic cylinders, the CPS Series is also suitable for use with other brands of cylinders with magnetic pistons.

Features:

- Electronic switch output, PNP or NPN, normally open and normally closed
- Solid state reliability, no moving parts for longer life
- AMR sensing technology with small hysteresis for precise sensing
- Compact and easy to mount on round body and T-slot cylinders
- LED switch status indication
- Available with an M8 wiring connector or 2-meter integral cable with wire leads
- Electronic switch performance at mechanical reed switch prices



Technology Comparison

Reed Switch vs. AutomationDirect CPS Series Electronic Switch			
	Mechanical Reed Switch	AutomationDirect CPS Series Electronic Switch	Details
Durability	low (1-2 million cycles typical)	high (virtually unlimited number of cycles)	Reed switches can stick, break, bounce and are prone to wear
Repeatability	low	high	Mechanical wear of reed switches can lead to switch point drift
Response time	low	high	Reed switches have a slower response time than electronic switches resulting in lower switch accuracy
Sensitivity to magnetic fields	low	high	Electronic sensors, more sensitive than reed switches, operate reliably even with weak magnetic fields
Temperature stability	high	high	Both switch technologies are extremely stable over the entire temperature range
Longevity	low	high	Electronic sensors are insensitive to long term effects of magnetic fields. Reed switches can become permanently magnetized over time.
Response sensitivity	medium	high	Electronic sensors have small hysteresis and are exceptional for short stroke cylinders
Price	low	low	Reed switches are usually much less expensive than electronic switches. The AutomationDirect CPS Series offers all the advantages of an electronic cylinder position switch at reed switch prices.

AMR vs. GMR Technology

Two solid state magnetic sensing technologies used for pneumatic cylinder position are GMR (Giant Magnetoresistive) and AMR (Anisotropic Magnetoresistive). Both sensing technologies consist of layers of ferromagnetic material that change in electrical resistance when exposed to an external magnetic field. NITRA CPS Series pneumatic cylinder position switches use AMR sensing

technology which provides higher sensitivity, better repeatability and lower hysteresis than GMR based switches. These exceptional performance characteristics make the NITRA CPS Series ideal for pneumatic cylinder position switch applications, especially for cylinders with short strokes.

CPS Series Pneumatic Cylinder Position Switches



CPS-AP-F

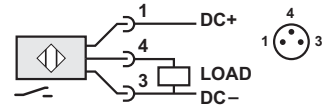


CPS-AP-A

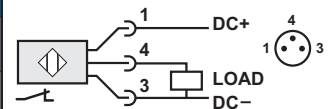
Switches include switch stop and wire retainer for t-slot mounting



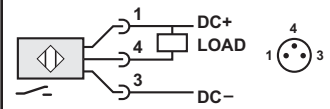
Wiring



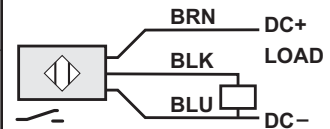
CPS-AP-F



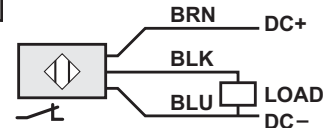
CPS-CP-F



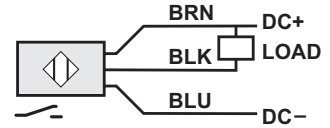
CPS-AN-F



CPS-AP-A



CPS-CP-A



CPS-AN-A

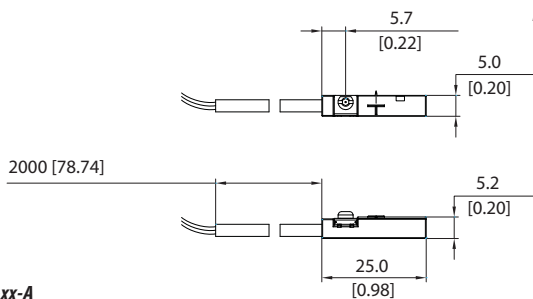
NITRA Cylinder Position Switch			
Part No.	Description	Price	Cable Assemblies
CPS-AP-F	NITRA pneumatic cylinder magnetic position sensing switch; normally open, 3-wire, 10-30 VDC, electronic PNP transistor output; status LED; 0.3 meter (0.98 ft) pigtail with M8 snap-fit connector. Can be mounted on cylinders with T-slots or round body cylinders using a CPSB series mounting band.	<--->	CD08-0A-020-A1 CD08-0A-020-C1 CD08-0C-050-A1 CD08-0C-050-C1 CD08-0A-050-A1 CD08-0A-050-C1 CD08-0A-070-A1 CD08-0A-070-C1 CDP08-0A-010-AA CDP08-0A-030-AA CDP08-0A-010-BB CDP08-0A-030-BB
CPS-CP-F	NITRA pneumatic cylinder magnetic position sensing switch; normally closed, 3-wire, 10-30 VDC, electronic PNP transistor output; status LED; 0.3 meter (0.98 ft) pigtail with M8 snap-fit connector. Can be mounted on cylinders with T-slots or round body cylinders using a CPSB series mounting band.	<--->	
CPS-AN-F	NITRA pneumatic cylinder magnetic position sensing switch; normally open, 3-wire, 10-30 VDC, electronic NPN transistor output; status LED; 0.3 meter (0.98 ft) pigtail with M8 snap-fit connector. Can be mounted on cylinders with T-slots or round body cylinders using a CPSB series mounting band.	<--->	
CPS-AP-A	NITRA pneumatic cylinder magnetic position sensing switch; normally open, 3-wire, 10-30 VDC, electronic PNP transistor output; status LED; 2 meter (6.56 ft) cable with wire leads. Can be mounted on cylinders with T-slots or round body cylinders using a CPSB series mounting band.	<--->	-
CPS-CP-A	NITRA pneumatic cylinder magnetic position sensing switch; normally closed, 3-wire, 10-30 VDC, electronic PNP transistor output; status LED; 2 meter (6.56 ft) cable with wire leads. Can be mounted on cylinders with T-slots or round body cylinders using a CPSB series mounting band.	<--->	-
CPS-AN-A	NITRA pneumatic cylinder magnetic position sensing switch; normally open, 3-wire, 10-30 VDC, electronic NPN transistor output; status LED; 2 meter (6.56 ft) cable with wire leads. Can be mounted on cylinders with T-slots or round body cylinders using a CPSB series mounting band.	<--->	-

NITRA Cylinder Switch Specifications	
Operating voltage	10-30 VDC
Voltage drop	< 2.5 V
Current rating	100 mA (built-in overload protection)
Leakage current	none
Hysteresis	< 1 mm
Function display	Switching status yellow
Switching frequency	3,000 Hz for 3-wire
Magnetic Sensitivity	2 millitesla (20 gauss)
Housing materials	polyamide and stainless steel
Operating temperature	-13°F to 392°F (-25 to 85°C)
Protection rating	IP 67 (hygienic and wet environments IP 68/IP 69K)
Agency approvals	CE, cULus (Class 2 source required), file E328811

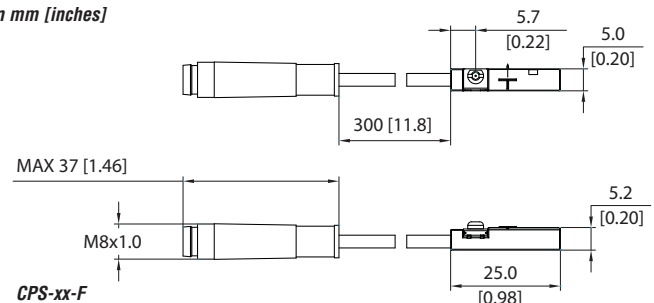
Cable Assembly Wiring Colors:
Pin 1 - Brown
Pin 3 - Blue
Pin 4 - Black

Note: wiring colors are based on AutomationDirect CD08 3-pole cable assemblies.

Dimensions in mm [inches]



CPS-xx-A



CPS-xx-F

CPS Series Pneumatic Cylinder Position Switches - Mounting Bands



CPSB-07



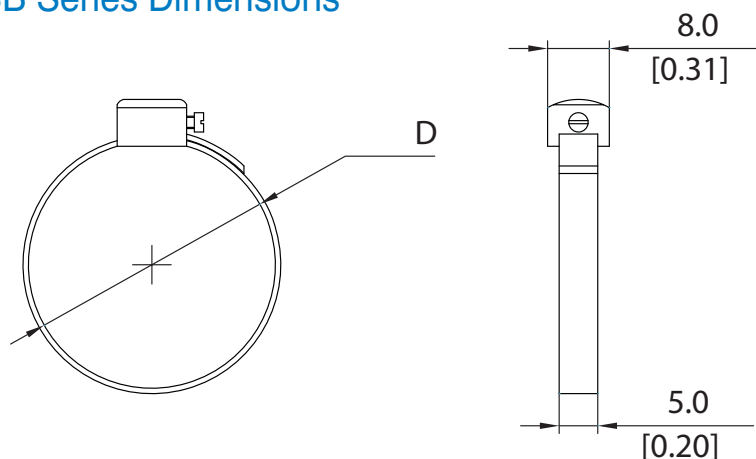
CPSB-20



CPSB-32

NITRA Cylinder Switch Mounting Bands		
Part No.	Description	Price
CPSB-07	Mounting band to secure cylinder position switch to a 5/16, 7/16, 9/16 inch (or 8, 10, 12, 16 mm) bore pneumatic round body cylinder.	<--->
CPSB-14	Mounting band to secure cylinder position switch to a 3/4, 7/8 inch (or 20 mm) bore pneumatic round body cylinder.	<--->
CPSB-20	Mounting band to secure cylinder position switch to a 1-1/16 or 1-1/4 inch (or 25, 32 mm) bore pneumatic round body cylinder.	<--->
CPSB-24	Mounting band to secure cylinder position switch to a 1-1/2, 1-3/4 inch (or 40 mm) bore pneumatic round body cylinder.	<--->
CPSB-32	Mounting band to secure cylinder position switch to a 2 inch (or 50 mm) bore pneumatic round body cylinder.	<--->

CPSB Series Dimensions



Dimensions in mm [inches]

PART NO.	CLAMP RANGE - D
CPSB-07	11-19 [.43-.75]
CPSB-14	18-29 [.71-1.14]
CPSB-20	28-39 [1.10-1.54]
CPSB-24	38-49 [1.50-1.93]
CPSB-32	48-59 [1.89-2.32]

Pneumatics for less from AutomationDirect



NITRA™ Pneumatic Tubing

Polyurethane (PUR) Tubing

NITRA polyurethane tubing is made from the highest quality, 100% virgin raw materials available and has a hardness specification of Shore A 98. It is ether based to provide excellent hydrolysis, oil and cold resistance. NITRA polyurethane tubing is strong, flexible, and offers superior kink resistance compared to other tubing. With its extremely tight outside diameter tolerance, NITRA Polyurethane Tubing is ideal for use with NITRA push-to-connect fittings.

- Inch and metric sizes available
- Three colors – black, blue and clear
- 100 foot and 500 foot package sizes
- Shore A 98 hardness
- Strong, flexible and kink resistant
- Made in USA



Nylon 12 Tubing

NITRA nylon 12 tubing is made from the highest quality, 100% virgin raw materials available and has a hardness specification of Shore D 70. Nylon tubing is recognized as an industry standard for applications which require higher working pressures and better heat/chemical resistance than polyurethane. NITRA Nylon 12 Tubing is strong, lightweight, and has a very low moisture absorption rate so it will remain flexible with a longer service life than other nylons. NITRA Nylon 12 is ideal for use with NITRA push-to-connect fittings.

- Inch and metric sizes available
- Three colors – black, blue and natural
- 100 foot and 500 foot package sizes
- High working pressure and temperature/chemical resistance
- Made in the USA



Polyurethane Pneumatic Tubing		
Colors Available	PKG/Reel Length (feet)	Price
Polyurethane 5/32 in. (4mm) Tubing		
Black, Blue, Clear	100 ft. Package	<---> (PU532xxx100)
Black, Blue, Clear	500 ft. Reel	<---> (PU532xxx500)
Polyurethane 1/4 in. Tubing		
Black, Blue, Clear	100 ft. Package	<---> (PU14xxx100)
Black, Blue, Clear	500 ft. Reel	<---> (PU14xxx500)
Polyurethane 3/8 in. Tubing		
Black, Blue, Clear	100 ft. Package	<---> (PU38xxx100)
Black, Blue, Clear	500 ft. Reel	<---> (PU38xxx500)
Polyurethane 1/2 in. Tubing		
Black, Blue, Clear	100 ft. Package	<---> (PU12xxx100)
Black, Blue, Clear	500 ft. Reel	<---> (PU12xxx500)
Polyurethane 6 mm Tubing		
Black, Blue, Clear	100 ft. Package	<---> (PU6Mxxx100)
Black, Blue, Clear	500 ft. Reel	<---> (PU6Mxxx500)
Polyurethane 8 mm Tubing		
Black, Blue, Clear	100 ft. Package	<---> (PU8Mxxx100)
Black, Blue, Clear	500 ft. Reel	<---> (PU8Mxxx500)
Polyurethane 10 mm Tubing		
Black, Blue, Clear	100 ft. Package	<---> (PU10Mxxx100)
Black, Blue, Clear	500 ft. Reel	<---> (PU10Mxxx500)
Polyurethane 12 mm Tubing		
Black, Blue, Clear	100 ft. Package	<---> (PU12Mxxx100)
Black, Blue, Clear	500 ft. Reel	<---> (PU12Mxxx500)

Nylon Pneumatic Tubing		
Colors Available	PKG/Reel Length (feet)	Price
Nylon 5/32 in. (4mm) Tubing		
Black, Blue, Natural	100 ft. Package	<---> (N532xxx100)
Black, Blue, Natural	500 ft. Reel	<---> (N532xxx500)
Nylon 1/4 in. Tubing		
Black, Blue, Natural	100 ft. Package	<---> (N14xxx100)
Black, Blue, Natural	500 ft. Reel	<---> (N14xxx500)
Nylon 3/8 in. Tubing		
Black, Blue, Natural	100 ft. Package	<---> (N38xxx100)
Black, Blue, Natural	500 ft. Reel	<---> (N38xxx500)
Nylon 1/2 in. Tubing		
Black, Blue, Natural	100 ft. Package	<---> (N12xxx100)
Black, Blue, Natural	500 ft. Reel	<---> (N12xxx500)
Nylon 6 mm Tubing		
Black, Blue, Natural	100 ft. Package	<---> (N6Mxxx100)
Black, Blue, Natural	500 ft. Reel	<---> (N6Mxxx500)
Nylon 8 mm Tubing		
Black, Blue, Natural	100 ft. Package	<---> (N8Mxxx100)
Black, Blue, Natural	500 ft. Reel	<---> (N8Mxxx500)
Nylon 10 mm Tubing		
Black, Blue, Natural	100 ft. Package	<---> (N10Mxxx100)
Black, Blue, Natural	500 ft. Reel	<---> (N10Mxxx500)
Nylon 12 mm Tubing		
Black, Blue, Natural	100 ft. Package	<---> (N12Mxxx100)
Black, Blue, Natural	500 ft. Reel	<---> (N12Mxxx500)

NITRA™ Pneumatic Air Fittings

A variety of fittings are available including:



UNION STRAIGHT
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (USxxx)



UNION REDUCER
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (URxxx)



UNION TEE
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (UTxxx)



MANUAL HAND VALVE
NITRA™ Pneumatic Fittings
from <--->
(2 pack) (HVUxxx)



STOP VALVE
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (SVUxxx)



CHECK VALVE
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (CVUxxx)



UNION TEE REDUCER
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (UTRxxx)



UNION ELBOW
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (ULxxx)



UNION Y
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (UYxxx)



UNION Y REDUCER
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (URYxxx)



UNION CROSS
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (UXxxx)



UNION TRIPLE BRANCH
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (3BRxxx)



BULKHEAD UNION
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (UBxxx)



PLUG
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (PLUGxxx)



PLUG-IN REDUCER
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (PRxxx)



MALE STRAIGHT
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (MSxxx)



FEMALE STRAIGHT
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (FSxxx)



MALE ELBOW
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (MExxx)



LONG MALE ELBOW
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (MELxxx)



FEMALE ELBOW
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (FEXxx)



MALE BRANCH TEE
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (MBTxxx)



MALE RUN TEE
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (MRTxxx)



MALE Y
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (MYxxx)



BULKHEAD FEMALE
NITRA™ Pneumatic Fittings
from <--->
(5 pack) (FBxxx)

Push-to-Connect Fittings

NITRA Pneumatic Push-to-Connect Fitting bodies are made of a strong thermoplastic (PBT) and have stainless steel tube gripping claws. Threaded components are made of nickel-plated brass and have pre-applied Teflon thread sealant.

The bodies of elbow and tee fittings with threaded connections can be rotated after installation to allow for variations in piping direction. NITRA Polyurethane and Nylon 12 tubing is easily connected by simply inserting the tubing end into the fitting. To release the tubing press the circular release ring and the tubing can be easily pulled out.

- Large selection of fitting configurations, including union, plug-in, straight, elbow, branch, and stop, hand and check valves
- Inch and metric sizes available
- NPT and BSPT (R) threads available
- Tough thermoplastic bodies, stainless steel tube gripping claws, nickel-plated threads with pre-applied Teflon sealant
- Elbow and Tee bodies can be rotated after installation
- Rings are color coded to differentiate between inch and metric sizes



ELBOW METER-IN
NITRA™ Flow Control Valve
from <--->
(2 pack) (FVRxxx)



ELBOW METER-OUT
NITRA™ Flow Control Valve
from <--->
(2 pack) (FVSxxx)



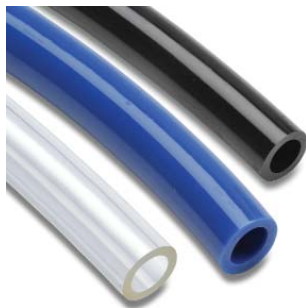
IN-LINE (STRAIGHT)
NITRA™ Flow Control Valve
from <--->
(2 pack) (FVUxxx)

Push-to-Connect Flow Control (Speed Controller) Valves

NITRA Pneumatic Push-to-Connect Flow Control (Speed Controller) Valves provide accurate airflow regulation for precise motion control of pneumatic cylinders. NITRA flow control valve bodies are made of strong thermoplastic (PBT) and have stainless steel tube gripping claws. Threaded components are nickel-plated brass and have pre-applied Teflon thread sealant. Flow control valve bodies can be rotated after installation to allow for variations in piping direction.

- Meter-in, meter-out and in-line configurations
- Inch and metric sizes available
- NPT and BSPT (R) threads available
- Tough thermoplastic bodies, stainless steel tube gripping claws, nickel-plated threads with pre-applied Teflon sealant
- Bodies can be rotated after installation
- Release rings are color coded to differentiate between meter-in and meter-out

Polyurethane Pneumatic Tubing



NITRA™ Polyurethane (PUR) tubing is made from the highest quality, 100% virgin raw materials available and has a hardness specification of Shore A 98. It is ether based to provide excellent hydrolysis, oil and cold resistance. **NITRA** Polyurethane tubing is strong, flexible, and offers superior kink resistance compared to other tubing. With its extremely tight outside diameter tolerance, **NITRA** Polyurethane tubing is ideal for use with **NITRA** push-to-connect fittings.

Features

- Inch and metric sizes available
- Three colors - black, blue and clear
- 100 foot and 500 foot package sizes
- Shore A 98 hardness
- Strong, flexible and kink resistant
- Made in USA

Polyurethane 5/32 in. (4mm) Tubing Specifications

Outside Diameter (in.)	0.156	Working Pressure (psi) @ 70°F	200	Temp. Range	-40°F to +160°F (-40°C to +71°C)
Inside Diameter (in.)	0.093	Burst Pressure (psi)	600	Hardness	Shore A 98
Wall Thickness (in.)	0.031	Vacuum Rating	To 28" Hg	Bend Radius (in.)	0.250
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
PU532BLK100	<--->	5/32 in. (4 mm)	Black	100 ft. Package	1.0
PU532BLK500	<--->	5/32 in. (4 mm)	Black	500 ft. Reel	4.0
PU532BLU100	<--->	5/32 in. (4 mm)	Blue	100 ft. Package	1.0
PU532BLU500	<--->	5/32 in. (4 mm)	Blue	500 ft. Reel	4.0
PU532CLR100	<--->	5/32 in. (4 mm)	Clear	100 ft. Package	1.0
PU532CLR500	<--->	5/32 in. (4 mm)	Clear	500 ft. Reel	4.0

Polyurethane 1/4 in. Tubing Specifications

Outside Diameter (in.)	0.250	Working Pressure (psi) @ 70°F	180	Temp. Range	-40°F to +160°F (-40°C to +71°C)
Inside Diameter (in.)	0.156	Burst Pressure (psi)	540	Hardness	Shore A 98
Wall Thickness (in.)	0.047	Vacuum Rating	To 28" Hg	Bend Radius (in.)	0.476
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
PU14BLK100	<--->	1/4 in.	Black	100 ft. Package	2.0
PU14BLK500	<--->	1/4 in.	Black	500 ft. Reel	8.0
PU14BLU100	<--->	1/4 in.	Blue	100 ft. Package	2.0
PU14BLU500	<--->	1/4 in.	Blue	500 ft. Reel	8.0
PU14CLR100	<--->	1/4 in.	Clear	100 ft. Package	2.0
PU14CLR500	<--->	1/4 in.	Clear	500 ft. Reel	8.0

Polyurethane 3/8 in. Tubing Specifications

Outside Diameter (in.)	0.375	Working Pressure (psi) @ 70°F	150	Temp. Range	-40°F to +160°F (-40°C to +71°C)
Inside Diameter (in.)	0.250	Burst Pressure (psi)	450	Hardness	Shore A 98
Wall Thickness (in.)	0.063	Vacuum Rating	To 28" Hg	Bend Radius (in.)	1.00
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
PU38BLK100	<--->	3/8 in.	Black	100 ft. Package	3.0
PU38BLK500	<--->	3/8 in.	Black	500 ft. Reel	16.0
PU38BLU100	<--->	3/8 in.	Blue	100 ft. Package	3.0
PU38BLU500	<--->	3/8 in.	Blue	500 ft. Reel	16.0
PU38CLR100	<--->	3/8 in.	Clear	100 ft. Package	3.0
PU38CLR500	<--->	3/8 in.	Clear	500 ft. Reel	16.0

Polyurethane 1/2 in. Tubing Specifications					
Outside Diameter (in.)	0.500	Working Pressure (psi) @ 70° F	150	Temp. Range	-40°F to +160°F (-40°C to +71°C)
Inside Diameter (in.)	0.328	Burst Pressure (psi)	450	Hardness	Shore A 98
Wall Thickness (in.)	0.086	Vacuum Rating	To 28" Hg	Bend Radius (in.)	1.102
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
PU12BLK100	<--->	1/2 in.	Black	100 ft. Package	6.0
PU12BLK500	<--->	1/2 in.	Black	500 ft. Reel	29.0
PU12BLU100	<--->	1/2 in.	Blue	100 ft. Package	6.0
PU12BLU500	<--->	1/2 in.	Blue	500 ft. Reel	29.0
PU12CLR100	<--->	1/2 in.	Clear	100 ft. Package	6.0
PU12CLR500	<--->	1/2 in.	Clear	500 ft. Reel	29.0

Polyurethane 6 mm Tubing Specifications					
Outside Diameter (mm)	6.0	Working Pressure (psi) @ 70° F	180	Temp. Range	-40°F to +160°F (-40°C to +71°C)
Inside Diameter (mm)	4.0	Burst Pressure (psi)	540	Hardness	Shore A 98
Wall Thickness (mm)	1.0	Vacuum Rating	To 28" Hg	Bend Radius (mm)	12
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
PU6MBLK100	<--->	6 mm	Black	100 ft. Package	2.0
PU6MBLK500	<--->	6 mm	Black	500 ft. Reel	7.0
PU6MBLU100	<--->	6 mm	Blue	100 ft. Package	2.0
PU6MBLU500	<--->	6 mm	Blue	500 ft. Reel	7.0
PU6MCLR100	<--->	6 mm	Clear	100 ft. Package	2.0
PU6MCLR500	<--->	6 mm	Clear	500 ft. Reel	7.0

Polyurethane 8 mm Tubing Specifications					
Outside Diameter (mm)	8.0	Working Pressure (psi) @ 70° F	175	Temp. Range	-40°F to +160°F (-40°C to +71°C)
Inside Diameter (mm)	5.0	Burst Pressure (psi)	525	Hardness	Shore A 98
Wall Thickness (mm)	1.5	Vacuum Rating	To 28" Hg	Bend Radius (mm)	15
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
PU8MBLK100	<--->	8 mm	Black	100 ft. Package	3.0
PU8MBLK500	<--->	8 mm	Black	500 ft. Reel	12.0
PU8MBLU100	<--->	8 mm	Blue	100 ft. Package	3.0
PU8MBLU500	<--->	8 mm	Blue	500 ft. Reel	12.0
PU8MCLR100	<--->	8 mm	Clear	100 ft. Package	3.0
PU8MCLR500	<--->	8 mm	Clear	500 ft. Reel	12.0

Polyurethane 10 mm Tubing Specifications					
Outside Diameter (mm)	10.0	Working Pressure (psi) @ 70° F	150	Temp. Range	-40°F to +160°F (-40°C to +71°C)
Inside Diameter (mm)	6.5	Burst Pressure (psi)	450	Hardness	Shore A 98
Wall Thickness (mm)	1.75	Vacuum Rating	To 28" Hg	Bend Radius (mm)	25
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
PU10MBLK100	<--->	10 mm	Black	100 ft. Package	4.0
PU10MBLK500	<--->	10 mm	Black	500 ft. Reel	18.0
PU10MBLU100	<--->	10 mm	Blue	100 ft. Package	4.0
PU10MBLU500	<--->	10 mm	Blue	500 ft. Reel	18.0
PU10MCLR100	<--->	10 mm	Clear	100 ft. Package	4.0
PU10MCLR500	<--->	10 mm	Clear	500 ft. Reel	18.0

Polyurethane Pneumatic Tubing

Polyurethane 12 mm Tubing Specifications					
Outside Diameter (mm)	12.0	Working Pressure (psi) @ 70° F	150	Temp. Range	-40°F to +160°F (-40°C to +71°C)
Inside Diameter (mm)	8.0	Burst Pressure (psi)	450	Hardness	Shore A 98
Wall Thickness (mm)	2.0	Vacuum Rating	To 28" Hg	Bend Radius (mm)	28
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
PU12MBLK100	<--->	12 mm	Black	100 ft. Package	5.0
PU12MBLK500	<--->	12 mm	Black	500 ft. Reel	24.0
PU12MBLU100	<--->	12 mm	Blue	100 ft. Package	5.0
PU12MBLU500	<--->	12 mm	Blue	500 ft. Reel	24.0
PU12MCLR100	<--->	12 mm	Clear	100 ft. Package	5.0
PU12MCLR500	<--->	12 mm	Clear	500 ft. Reel	24.0

NITRA Pneumatic Tubing Accessories

Pneumatic Tubing Cutter				
Part Number	Description	Pcs/Pkg	Wt (lb)	Price
TC-12	NITRA pneumatic tubing cutter for use with 1/8 to 1/2 inch and 4 to 12 mm outside diameter flexible plastic tubing.	1	0.1	<--->



TC-12



NITRA Nylon 12 tubing is made from the highest quality, 100% virgin raw materials and has a hardness specification of Shore D 70. Nylon tubing is recognized as an industry standard for applications which require higher working pressures and better heat/chemical resistance than polyurethane. NITRA Nylon 12 tubing is strong, lightweight, and has a very low moisture absorption rate so it will remain flexible with a longer life than other nylons. NITRA Nylon 12 is ideal for use with NITRA push-to-connect fittings.

Features

- Inch and metric sizes available
- Three colors - black, blue and natural
- 100 foot and 500 foot package sizes
- Shore D 70 hardness
- High working pressure and temperature/chemical resistance
- Made in USA

Nylon 5/32 in. (4mm) Tubing Specifications

Outside Diameter (in.)	0.156	Working Pressure (psi) @ 70°F	350	Temp. Range	-60°F to +200°F (-51°C to +93°C)
Inside Diameter (in.)	0.106	Burst Pressure (psi)	1050	Hardness	Shore D 70
Wall Thickness (in.)	0.025	Vacuum Rating	To 28" Hg	Bend Radius (in.)	0.50
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
N532BLK100	<--->	5/32 in. (4 mm)	Black	100 ft. Package	1.0
N532BLK500	<--->	5/32 in. (4 mm)	Black	500 ft. Reel	3.0
N532BLU100	<--->	5/32 in. (4 mm)	Blue	100 ft. Package	1.0
N532BLU500	<--->	5/32 in. (4 mm)	Blue	500 ft. Reel	3.0
N532NAT100	<--->	5/32 in. (4 mm)	Natural	100 ft. Package	1.0
N532NAT500	<--->	5/32 in. (4 mm)	Natural	500 ft. Reel	3.0

Nylon 1/4 in. Tubing Specifications

Outside Diameter (in.)	0.250	Working Pressure (psi) @ 70°F	290	Temp. Range	-60°F to +200°F (-51°C to +93°C)
Inside Diameter (in.)	0.180	Burst Pressure (psi)	870	Hardness	Shore D 70
Wall Thickness (in.)	0.035	Vacuum Rating	To 28" Hg	Bend Radius (in.)	1.25
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
N14BLK100	<--->	1/4 in.	Black	100 ft. Package	2.0
N14BLK500	<--->	1/4 in.	Black	500 ft. Reel	7.0
N14BLU100	<--->	1/4 in.	Blue	100 ft. Package	2.0
N14BLU500	<--->	1/4 in.	Blue	500 ft. Reel	7.0
N14NAT100	<--->	1/4 in.	Natural	100 ft. Package	2.0
N14NAT500	<--->	1/4 in.	Natural	500 ft. Reel	7.0

Nylon 3/8 in. Tubing Specifications

Outside Diameter (in.)	0.375	Working Pressure (psi) @ 70°F	250	Temp. Range	-60°F to +200°F (-51°C to +93°C)
Inside Diameter (in.)	0.275	Burst Pressure (psi)	750	Hardness	Shore D 70
Wall Thickness (in.)	0.050	Vacuum Rating	To 28" Hg	Bend Radius (in.)	2.00
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
N38BLK100	<--->	3/8 in.	Black	100 ft. Package	3.0
N38BLK500	<--->	3/8 in.	Black	500 ft. Reel	12.0
N38BLU100	<--->	3/8 in.	Blue	100 ft. Package	3.0
N38BLU500	<--->	3/8 in.	Blue	500 ft. Reel	12.0
N38NAT100	<--->	3/8 in.	Natural	100 ft. Package	3.0
N38NAT500	<--->	3/8 in.	Natural	500 ft. Reel	12.0

Nylon 1/2 in. Tubing Specifications

Outside Diameter (in.)	0.500	Working Pressure (psi) @ 70°F	240	Temp. Range	-60°F to +200°F (-51°C to +93°C)
Inside Diameter (in.)	0.375	Burst Pressure (psi)	720	Hardness	Shore D 70
Wall Thickness (in.)	0.062	Vacuum Rating	To 28" Hg	Bend Radius (in.)	3.50
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
N12BLK100	<--->	1/2 in.	Black	100 ft. Package	4.0
N12BLK500	<--->	1/2 in.	Black	500 ft. Reel	19.0
N12BLU100	<--->	1/2 in.	Blue	100 ft. Package	4.0
N12BLU500	<--->	1/2 in.	Blue	500 ft. Reel	19.0
N12NAT100	<--->	1/2 in.	Natural	100 ft. Package	4.0
N12NAT500	<--->	1/2 in.	Natural	500 ft. Reel	19.0

Nylon 6 mm Tubing Specifications

Outside Diameter (mm)	6.0	Working Pressure (psi) @ 70°F	340	Temp. Range	-60°F to +200°F (-51°C to +93°C)
Inside Diameter (mm)	4.0	Burst Pressure (psi)	1020	Hardness	Shore D 70
Wall Thickness (mm)	1.0	Vacuum Rating	To 28" Hg	Bend Radius (mm)	32
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
N6MBLK100	<--->	6 mm	Black	100 ft. Package	1.0
N6MBLK500	<--->	6 mm	Black	500 ft. Reel	6.0
N6MBLU100	<--->	6 mm	Blue	100 ft. Package	1.0
N6MBLU500	<--->	6 mm	Blue	500 ft. Reel	6.0
N6MNAT100	<--->	6 mm	Natural	100 ft. Package	1.0
N6MNAT500	<--->	6 mm	Natural	500 ft. Reel	6.0

Nylon 8 mm Tubing Specifications

Outside Diameter (mm)	8.0	Working Pressure (psi) @ 70°F	250	Temp. Range	-60°F to +200°F (-51°C to +93°C)
Inside Diameter (mm)	6.0	Burst Pressure (psi)	750	Hardness	Shore D 70
Wall Thickness (mm)	1.0	Vacuum Rating	To 28" Hg	Bend Radius (mm)	38
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
N8MBLK100	<--->	8 mm	Black	100 ft. Package	2.0
N8MBLK500	<--->	8 mm	Black	500 ft. Reel	9.0
N8MBLU100	<--->	8 mm	Blue	100 ft. Package	2.0
N8MBLU500	<--->	8 mm	Blue	500 ft. Reel	9.0
N8MNAT100	<--->	8 mm	Natural	100 ft. Package	2.0
N8MNAT500	<--->	8 mm	Natural	500 ft. Reel	9.0

Nylon 10 mm Tubing Specifications

Outside Diameter (mm)	10.0	Working Pressure (psi) @ 70°F	225	Temp. Range	-60°F to +200°F (-51°C to +93°C)
Inside Diameter (mm)	8.0	Burst Pressure (psi)	675	Hardness	Shore D 70
Wall Thickness (mm)	1.0	Vacuum Rating	To 28" Hg	Bend Radius (mm)	51
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
N10MBLK100	<--->	10 mm	Black	100 ft. Package	2.0
N10MBLK500	<--->	10 mm	Black	500 ft. Reel	11.0
N10MBLU100	<--->	10 mm	Blue	100 ft. Package	2.0
N10MBLU500	<--->	10 mm	Blue	500 ft. Reel	11.0
N10MNAT100	<--->	10 mm	Natural	100 ft. Package	2.0
N10MNAT500	<--->	10 mm	Natural	500 ft. Reel	11.0

Nylon 12 mm Tubing Specifications					
Outside Diameter (mm)	12.0	Working Pressure (psi) @ 70° F	200	Temp. Range	-60°F to +200°F (-51°C to +93°C)
Inside Diameter (mm)	10.0	Burst Pressure (psi)	600	Hardness	Shore D 70
Wall Thickness (mm)	1.0	Vacuum Rating	To 28" Hg	Bend Radius (mm)	63.5
Part Number	Price	Size	Color	PKG/Reel Length (feet)	PKG WT (lbs)
N12MBLK100	<--->	12 mm	Black	100 ft. Package	4.0
N12MBLK500	<--->	12 mm	Black	500 ft. Reel	19.0
N12MBLU100	<--->	12 mm	Blue	100 ft. Package	4.0
N12MBLU500	<--->	12 mm	Blue	500 ft. Reel	19.0
N12MNAT100	<--->	12 mm	Natural	100 ft. Package	4.0
N12MNAT500	<--->	12 mm	Natural	500 ft. Reel	19.0

NITRA Pneumatic Tubing Accessories

Pneumatic Tubing Cutter					
Part Number	Description	Pcs/Pkg	Wt (lb)	Price	
TC-12	NITRA pneumatic tubing cutter for use with 1/8 to 1/2 inch and 4 to 12 mm outside diameter flexible plastic tubing.	1	0.1	<--->	



TC-12

Pneumatic Fitting Instructions and Caution Information

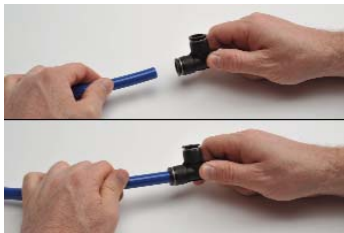
Assembly Instructions:



Prepare the **NITRA™** tubing for cutting and make sure to have the proper tubing cutters like the **NITRA TC-12**.



Cut the **NITRA** tubing at a right angle with the axis using a standard tube cutter. After cutting the tubing, make sure to check the cut end for an even cut with no debris.



Insertion of the **NITRA** tubing into fittings

- Make sure the tube is inserted fully into the fitting.
- Pull the tube gently to make sure it does not release.
- If the tube end is damaged or deformed leakage or unexpected tube release may occur. Make sure to check tubing end thoroughly.



Removing the **NITRA** tubing from fittings

- Make sure the pressure in the tube is zero before releasing the tube from the fittings
- To release the tubing, press the release ring at the end of the fitting and pull the tube with one hand.
- Inspect the released tube end and make a clean cut if it is damaged or deformed.

Common Precautions for Tubing and Fitting Products

Warnings:

- Do not use fittings with media other than air.
- Avoid installing with tubing under tension or with excessive bends.
- Do not use the product where weld spatters occur as fire may occur.
- Product damage or air leakage may occur at places where there is excessive rotation or vibration of the fittings.
- Use caution in water as the product may be damaged by surge pressure.
- Do not use the product where it is directly exposed to fluids such as cutting oil, lubricating oil, and coolant oil.

Cautions:

- Assemble the tubing only after cleaning away impurities such as dust and excess debris.
- Fitting products are recommended for air systems only. Avoid using for other purposes.
- When using tubing other than **NITRA** brand with **NITRA** fittings, be sure the tubing OD conforms to the tolerances in Table 1 below.

Table 1 - Tolerance of the Outer Diameter of the Tube

Tube Specifications	ø5/32 [ø4]	ø1/4 [ø6]	ø5/16 [ø8]	ø3/8 [ø10]	ø1/2 [ø12]
Permissible tolerance	+ 0.15/-0.1 [+/- 0.1]	+/- 0.1 [+/- 0.1]	+ 0.2/- 0.1 [+/- 0.1]	+/- 0.15 [+/- 0.15]	+/- 0.15 [+/- 0.15]

Note: Dimensions shown inches [mm]

Pneumatic Tubing Cutter

Part No.	Description	Price
TC-12	Tubing cutter, 1/8-1/2 in, 4-12mm	<--->

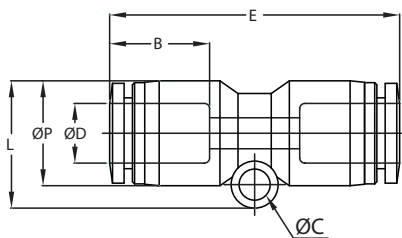
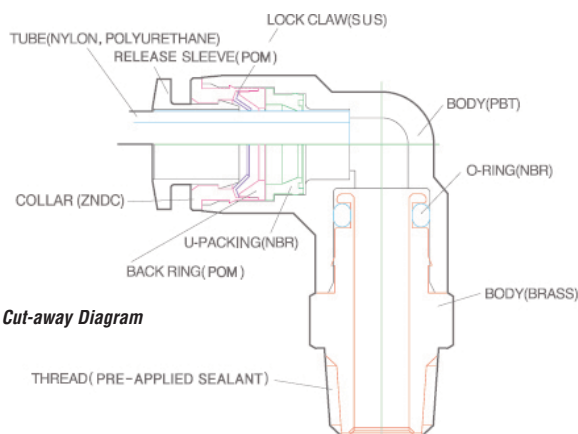
NITRA pneumatic push-to-connect fitting bodies are made of a strong thermoplastic (PBT) and have stainless steel tube gripping claws. Threaded components are made of nickel-plated brass and have pre-applied Teflon thread sealant (O-ring on #10-32 and M5 threads). The bodies of elbow and tee fittings with threaded connections can be rotated after installation to allow for variations in piping direction. NITRA Polyurethane and Nylon 12 tubing is easily connected by simply inserting the tubing end into the fitting. To release the tubing, press the circular release ring and the tubing can be easily pulled out.

Features

- Large selection of fitting configurations
- Inch and metric sizes available
- NPT and BSPT (R) threads available
- Tough thermoplastic bodies, stainless steel tube gripping claws, nickel-plated threads with pre-applied Teflon sealant (O-ring on #10-32 and M5 threads)
- Threaded Elbow and Tee bodies can be rotated after installation
- Release rings are color coded to differentiate between inch and metric sizes
- For use with air only.
- Working pressure: -29.5" Hg to 150 psi.
- Working Temperature 32 to 140°F (0 to 60°C)



Fitting Cut-away Diagram



NITRA pneumatic push-to-connect union straight fitting with thermoplastic (PBT) body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.

NITRA™ Union Straight

Inch Sizes - dimensions in inches (in.)

Part No.	Price	Size	ØD	ØP	L	E	ØC	B	Orifice	Package Weight (lbs)	Qty. per pack
US532	<--->	5/32 in [4 mm]	5/32	0.41	0.50	1.35	0.13	0.59	0.12	0.2	5
US14	<--->	1/4 in.	1/4	0.51	0.64	1.45	0.14	0.66	0.19	0.2	5
US38	<--->	3/8 in.	3/8	0.69	0.85	1.67	0.18	0.79	0.31	0.3	5
US12	<--->	1/2 in.	1/2	0.83	0.96	1.92	0.18	0.90	0.35	0.3	5

Metric Sizes - dimensions in millimeters (mm)

Part No.	Price	Size	ØD	ØP	L	E	ØC	B	Orifice	Package Weight (lbs)	Qty. per pack
US6M	<--->	6 mm	6	12.5	14.7	36.5	3.3	16.4	4.0	0.2	5
US8M	<--->	8 mm	8	14.5	17.6	40.1	4.3	18.7	6.5	0.2	5
US10M	<--->	10 mm	10	17.5	20.0	43.4	4.3	20.1	8.0	0.4	5
US12M	<--->	12 mm	12	20.5	23.3	48.3	4.3	22.8	10.0	0.4	5



Inch Fitting



Metric Fitting

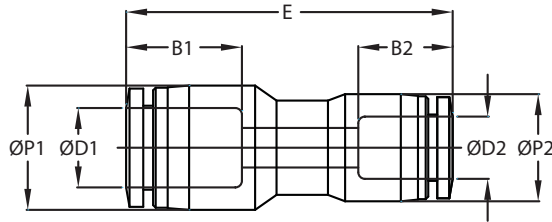
Pneumatic Push-to-Connect Fittings



Inch Fitting

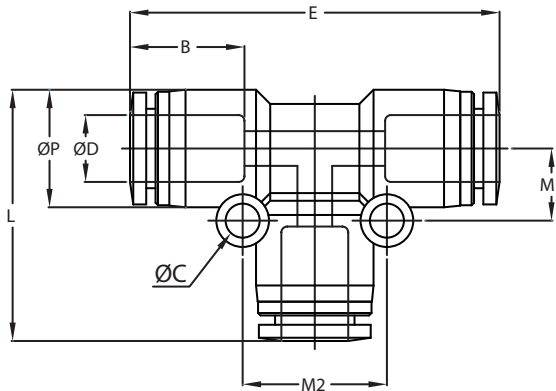


Metric Fitting



NITRA pneumatic push-to-connect union reducer fitting with thermoplastic (PBT) body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.

NITRA™ Union Reducer												
Inch Sizes - dimensions in inches (in.)												
Part No.	Price	Size	ØD1	ØD2	ØP1	ØP2	E	B1	B2	Orifice	Package Weight (lbs)	Qty. per pack
UR14-532	<--->	1/4 in. x 5/32 in.	1/4	5/32	0.51	0.41	1.40	0.66	0.59	0.13	0.1	5
UR38-14	<--->	3/8 in. x 1/4 in.	3/8	1/4	0.69	0.51	1.56	0.79	0.66	0.20	0.2	5
UR12-38	<--->	1/2 in. x 3/8 in.	1/2	3/8	0.83	0.69	1.78	0.90	0.79	0.31	0.4	5
Metric Sizes - dimensions in millimeters (mm)												
UR6M-4M	<--->	6 mm x 4 mm	6.0	4.0	12.5	10.5	35.2	16.4	14.9	3.0	0.1	5
UR8M-6M	<--->	8 mm x 6 mm	8.0	6.0	14.5	12.5	38.1	18.7	16.4	4.0	0.2	5
UR10M-8M	<--->	10 mm x 8 mm	10.0	8.0	17.5	14.5	40.3	20.1	18.7	6.5	0.3	5
UR12M-10M	<--->	12 mm x 10 mm	12.0	10.0	20.5	17.5	43.8	22.8	20.1	8.0	0.3	5



NITRA pneumatic push-to-connect union tee fitting with thermoplastic (PBT) body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.

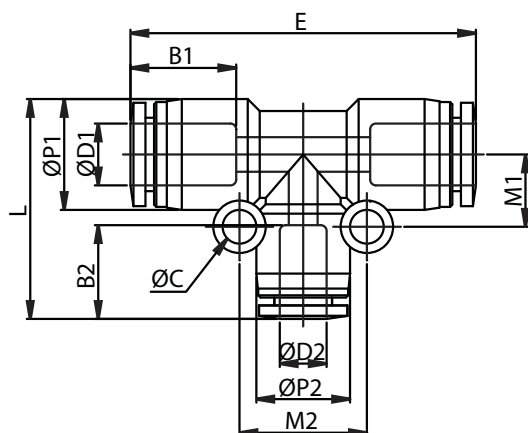


Inch Fitting



Metric Fitting

NITRA™ Union Tee													
Inch Sizes - dimensions in inches (in.)													
Part No.	Price	Size	øD	øP	L	E	øC	B	M1	M2	Orifice	Package Weight (lbs)	Qty. per pack
UT532	<--->	5/32 in. [4 mm]	5/32	0.41	0.94	1.43	0.13	0.59	0.25	0.50	0.12	0.1	5
UT14	<--->	1/4 in.	1/4	0.51	1.09	1.68	0.14	0.66	0.32	0.65	0.19	0.2	5
UT38	<--->	3/8 in.	3/8	0.69	1.35	2.02	0.18	0.79	0.43	0.87	0.31	0.4	5
UT12	<--->	1/2 in.	1/2	0.83	1.60	2.38	0.18	0.90	0.50	1.00	0.35	0.4	5
Metric Sizes - dimensions in millimeters (mm)													
UT6M	<--->	6 mm	6	12.5	27.3	41.5	3.3	16.4	7.7	15.4	5.0	0.2	5
UT8M	<--->	8 mm	8	14.5	31.0	45.6	4.3	18.7	8.9	17.8	6.5	0.2	5
UT10M	<--->	10 mm	10	17.5	34.1	48.4	4.3	20.1	9.8	19.7	8.0	0.4	5
UT12M	<--->	12 mm	12	20.5	40.1	57.3	4.3	22.8	13.2	26.3	10.0	0.4	5



NITRA pneumatic push-to-connect union tee reducer fitting with thermoplastic (PBT) body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.



Inch Fitting



Metric Fitting

NITRA™ Union Tee Reducer

Inch Sizes - dimensions in inches (in.)

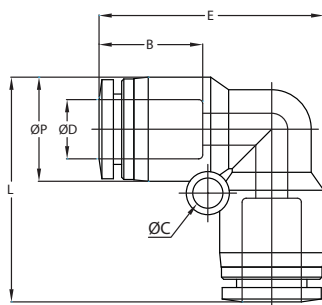
Part No.	Price	Size	ØD1	ØD2	ØP1	ØP2	L	E	ØC	B1	B2	M1	M2	Orifice	Package Weight (lbs)	Qty. per pack
UTR14-532	<--->	1/4 in. x 5/32 in.	1/4	5/32	0.51	0.41	1.04	1.60	0.17	0.66	0.59	0.32	0.57	0.13	0.2	5
UTR38-14	<--->	3/8 in. x 1/4 in.	3/8	1/4	0.69	0.51	1.26	1.90	0.18	0.79	0.66	0.43	0.69	0.20	0.3	5
UTR12-38	<--->	1/2 in. x 3/8 in.	1/2	3/8	0.83	0.69	1.44	2.30	0.18	0.90	0.79	0.50	0.87	0.31	0.4	5

Metric Sizes - dimensions in millimeters (mm)

UTR6M-4M	<--->	6 mm x 4 mm	6	4	12.5	10.4	25.4	41.6	3.3	16.4	14.9	7.9	13.8	3.0	0.2	5
UTR8M-6M	<--->	8 mm x 6 mm	8	6	14.8	12.5	29.3	46.1	4.5	18.7	16.4	9.6	17.0	5.0	0.4	5
UTR10M-8M	<--->	10 mm x 8 mm	10	8	17.5	14.5	33.9	49.4	4.3	20.1	18.7	10.9	18.8	6.5	0.4	5
UTR12M-10M	<--->	12 mm x 10 mm	12	10	20.5	17.5	37.6	56.1	4.3	22.8	20.1	12.4	21.9	8.0	0.4	5



Inch Fitting



NITRA pneumatic push-to-connect union elbow fitting with thermoplastic (PBT) body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.



Metric Fitting

NITRA™ Union Elbow

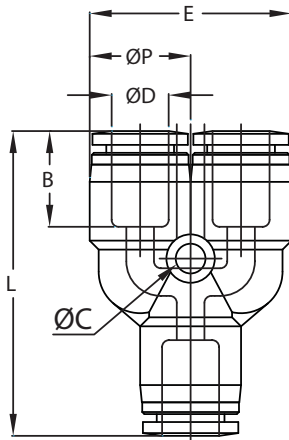
Inch Sizes - dimensions in inches (in.)

Part No.	Price	Size	ØD	ØP	L	E	ØC	B	Orifice	Package Weight (lbs)	Qty. per pack
UL532	<--->	5/32 in. [4 mm]	5/32	0.41	0.95	0.95	0.13	0.59	0.12	0.1	5
UL14	<--->	1/4 in.	1/4	0.51	1.09	1.09	0.14	0.66	0.19	0.1	5
UL38	<--->	3/8 in.	3/8	0.69	1.35	1.35	0.18	0.79	0.31	0.3	5
UL12	<--->	1/2 in.	1/2	0.83	1.60	1.60	0.18	0.90	0.35	0.4	5

Metric Sizes - dimensions in millimeters (mm)

UL6M	<--->	6 mm	6	12.5	27.3	27.3	4.3	16.4	5.0	0.2	5
UL8M	<--->	8 mm	8	14.5	31.3	31.3	4.3	18.7	7.0	0.2	5
UL10M	<--->	10 mm	10	17.5	33.9	33.9	4.3	20.1	8.0	0.4	5
UL12M	<--->	12 mm	12	20.5	38.8	38.8	4.3	22.8	10.0	0.4	5

Pneumatic Push-to-Connect Fittings



NITRA pneumatic push-to-connect union Y fitting with thermoplastic (PBT) body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.

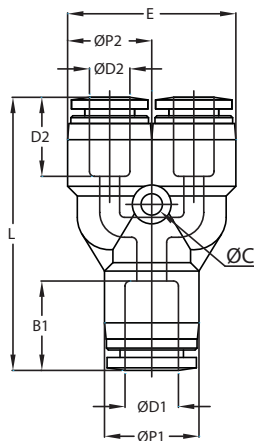


Inch Fitting



Metric Fitting

NITRA™ Union Y											
Inch Sizes - dimensions in inches (in)											
Part No.	Price	Size	ØD	ØP	L	E	ØC	B	Orifice	Package Weight (lbs)	Qty. per pack
UY532	<--->	5/32 in. [4 mm]	5/32	0.41	1.43	0.83	0.13	0.63	0.10	0.1	5
UY14	<--->	1/4 in.	1/4	0.51	1.57	1.02	0.13	0.70	0.16	0.1	5
UY38	<--->	3/8 in.	3/8	0.69	1.85	1.38	0.18	0.78	0.31	0.4	5
UY12	<--->	1/2 in.	1/2	0.83	2.16	1.65	0.18	0.90	0.41	0.4	5
Metric Sizes - dimensions in millimeters (mm)											
UY6M	<--->	6 mm	6	13.0	39.3	26.0	3.3	17.6	5.2	0.2	5
UY8M	<--->	8 mm	8	14.6	44.1	29.2	4.3	19.0	6.8	0.2	5
UY10M	<--->	10 mm	10	17.5	47.1	35.0	4.5	19.8	8.0	0.4	5
UY12M	<--->	12 mm	12	21.0	54.1	42.0	4.5	22.7	10.3	0.4	5



NITRA pneumatic push-to-connect union reducer Y fitting with thermoplastic (PBT) body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.

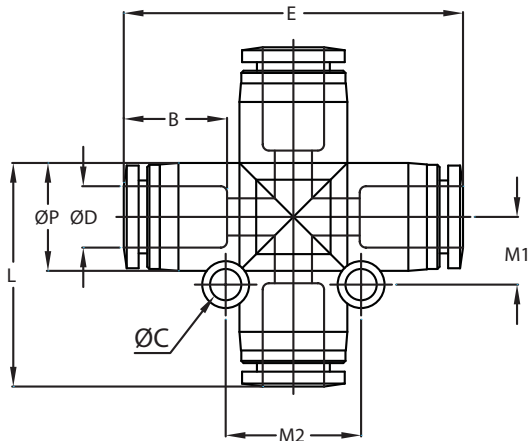


Inch Fitting



Metric Fitting

NITRA™ Union Reducer Y														
Inch Sizes - dimensions in inches (in.)														
Part No.	Price	Size	ØD1	ØD2	ØP1	ØP2	L	E	ØC	B1	B2	Orifice	Package Weight (lbs)	Qty. per pack
URY14-532	<--->	1/4 in. x 5/32 in.	1/4	5/32	0.51	10.5	38.0	0.83	0.13	0.70	0.63	0.13	0.1	5
URY38-14	<--->	3/8 in. x 1/4 in.	3/8	1/4	0.69	13.0	1.70	1.02	0.13	0.78	0.70	0.20	0.2	5
URY12-38	<--->	1/2 in. x 3/8 in.	1/2	3/8	0.83	17.5	2.00	1.38	0.18	0.90	0.78	0.28	0.3	5
Metric Sizes - dimensions in millimeters (mm)														
URY6M-4M	<--->	6 mm x 4 mm	6	4	13.0	10.5	37.8	21.0	3.3	17.6	16.1	3.4	0.1	5
URY8M-6M	<--->	8 mm x 6 mm	8	6	14.6	13.0	42.2	26.0	3.3	19.0	17.6	5.4	0.2	5
URY10M-8M	<--->	10 mm x 8 mm	10	8	17.5	14.6	44.8	29.2	4.3	19.7	19.0	7.0	0.3	5
URY12M-10M	<--->	12 mm x 10 mm	12	10	21.0	17.5	50.6	35.0	4.5	22.7	19.8	8.0	0.3	5



NITRA pneumatic push-to-connect union cross fitting with thermoplastic (PBT) body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.

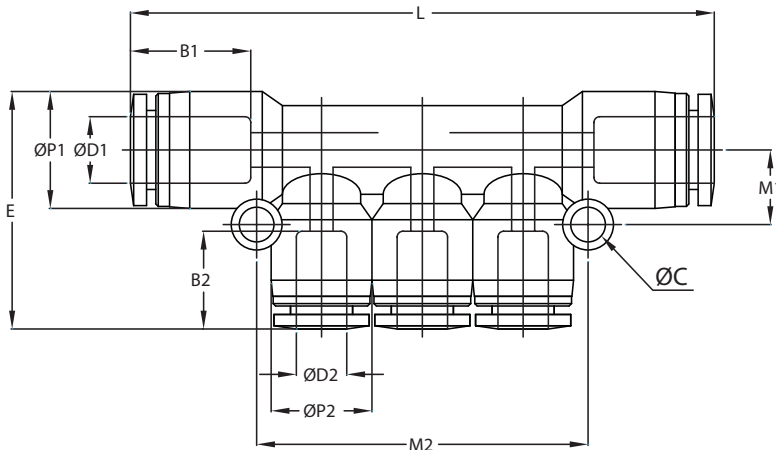


Inch Fitting



Metric Fitting

NITRA™ Union Cross													
Inch Sizes - dimensions in inches (in.)													
Part No.	Price	Size	ØD	ØP	L	E	ØC	B	M1	M2	Orifice	Package Weight (lbs)	Qty. per pack
UX532	<--->	5/32 in. [4 mm]	5/32	0.41	0.91	1.41	0.31	0.59	0.25	0.50	0.10	0.3	5
UX14	<--->	1/4 in.	1/4	0.51	1.09	1.68	0.13	0.66	0.32	0.64	0.20	0.3	5
UX38	<--->	3/8 in.	3/8	0.69	1.30	1.90	0.17	0.79	0.40	0.80	0.28	0.6	5
UX12	<--->	1/2 in.	1/2	0.83	1.60	2.38	0.17	0.90	0.50	1.00	0.35	0.6	5
Metric Sizes - dimensions in millimeters (mm)													
UX6M	<--->	6 mm	6	12.5	27.0	41.5	3.3	16.4	7.4	14.9	4.5	0.4	5
UX8M	<--->	8 mm	8	14.5	30.0	45.6	4.2	18.7	9.1	18.2	6.0	0.4	5
UX10M	<--->	10 mm	10	17.5	32.9	48.4	4.3	20.1	10.1	20.3	7.4	0.6	5
UX12M	<--->	12 mm	12	20.5	37.9	55.3	4.3	22.8	11.8	23.7	9.0	0.6	5



NITRA pneumatic push-to-connect union tri-branch fitting with thermoplastic (PBT) body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.



Inch Fitting



Metric Fitting

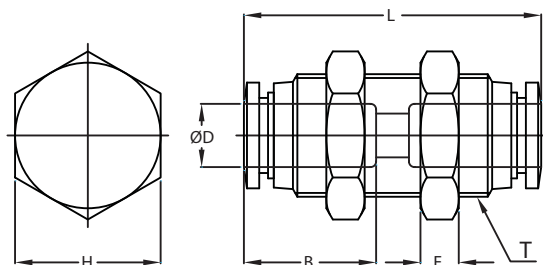
NITRA™ Union Tri-Branch																
Inch Sizes - dimensions in inches (in.)																
Part No.	Price	Size	ØD1	ØD2	ØP1	ØP2	L	E	ØC	B1	B2	M1	M2	Orifice	Package Weight (lbs)	Qty. per pack
U3B14-532	<--->	1/4 in. x 5/32 in.	1/4	5/32	0.51	0.41	2.43	1.06	0.18	0.66	0.59	0.34	1.42	0.13	0.4	5
U3B38-14	<--->	3/8 in. x 1/4 in.	3/8	1/4	0.69	0.51	2.91	1.26	0.18	0.79	0.66	0.43	1.71	0.20	0.6	5
Metric Sizes - dimensions in millimeters (mm)																
U3B6M-4M	<--->	6 mm x 4 mm	6	4	12.5	10.5	63.2	25.9	3.3	16.4	14.9	7.5	34.0	3.0	0.4	5
U3B8M-6M	<--->	8 mm x 6 mm	8	6	14.5	12.5	72.4	29.4	4.3	18.7	16.4	9.2	41.1	4.0	0.6	5
U3B10M-8M	<--->	10 mm x 8 mm	10	8	17.5	14.5	83.6	34.8	4.3	20.1	18.7	9.5	47.0	6.5	0.7	5



Inch Fitting

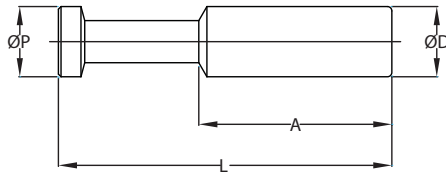


Metric Fitting



NITRA pneumatic push-to-connect bulkhead union fitting with nickel-plated brass body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.

NITRA™ Bulkhead Union											
Inch Sizes - dimensions in inches (in.)											
Part No.	Price	Size	ØD	T	L	E	B	H (Hex)	Orifice	Package Weight (lbs)	Qty. per pack
UB532	<--->	5/32 in. [4 mm]	5/32	M12*1.0p	1.40	0.16	0.58	0.55	0.12	0.2	5
UB14	<--->	1/4 in.	1/4	M14*1.0p	1.54	0.16	0.67	0.67	0.20	0.3	5
UB38	<--->	3/8 in.	3/8	M20*1.0p	1.69	0.20	0.77	0.94	0.31	0.6	5
UB12	<--->	1/2 in.	1/2	M22*1.0p	1.95	0.20	0.89	1.02	0.43	0.9	5
Metric Sizes - dimensions in millimeters (mm)											
UB6M	<--->	6 mm	6	M14*1.0p	39.9	4	16.4	17	5.0	0.2	5
UB8M	<--->	8 mm	8	M16*1.0p	42.2	5	18.4	19	7.0	0.4	5
UB10M	<--->	10 mm	10	M20*1.0p	45.1	5	19.6	24	9.0	0.6	5
UB12M	<--->	12 mm	12	M22*1.0p	50.3	5	21.9	26	11.0	0.8	5



NITRA pneumatic plug fitting. For use with push-to-connect fittings. Five fittings per package.

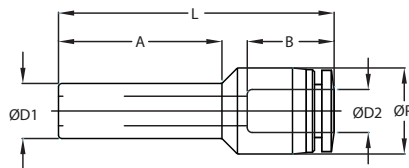


Inch/Metric Fitting

NITRA™ Plug								
Inch Sizes - dimensions in inches (in.)								
Part No.	Price	Size	$\varnothing D$	$\varnothing P$	L	A	Package Weight (lbs)	Qty. per pack
PLUG532	<--->	5/32 in. [4mm]	5/32	5/32	1.18	0.71	0.1	5
PLUG14	<--->	1/4 in.	1/4	1/4	1.34	0.79	0.1	5
PLUG38	<--->	3/8 in.	3/8	3/8	1.65	0.98	0.1	5
PLUG12	<--->	1/2 in.	1/2	1/2	1.81	1.10	0.1	5
Metric Sizes - dimensions in millimeters (mm)								
PLUG6M	<--->	6 mm	6	6	34.0	20.0	0.1	5
PLUG8M	<--->	8 mm	8	8	38.0	22.0	0.1	5
PLUG10M	<--->	10 mm	10	10	42.0	25.0	0.1	5
PLUG12M	<--->	12 mm	12	12	46.0	28.0	0.1	5



Inch Fitting

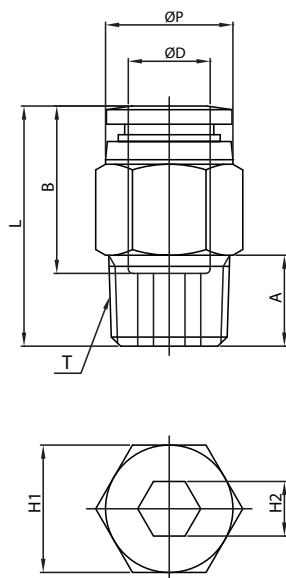


NITRA pneumatic plug-in to push-to-connect reducer fitting with thermoplastic (PBT) body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.



Metric Fitting

NITRA™ Plug-In Reducer											
Inch Sizes - dimensions in inches (in.)											
Part No.	Price	Size	$\varnothing D1$	$\varnothing D2$	$\varnothing P$	L	A	B	Orifice	Package Weight (lbs)	Qty. per pack
PR14-532	<--->	1/4 in. x 5/32 in.	1/4	5/32	0.41	1.59	0.89	0.59	0.13	0.1	5
PR38-14	<--->	3/8 in. x 1/4 in.	3/8	1/4	0.51	1.89	1.23	0.66	0.22	0.1	5
PR12-38	<--->	1/2 in. x 3/8 in.	1/2	3/8	0.69	2.04	1.20	0.79	0.31	0.1	5
Metric Sizes - dimensions in millimeters (mm)											
PR6M-4M	<--->	6 mm x 4 mm	6	4	10.5	37.8	21.7	14.9	3.0	0.1	5
PR8M-6M	<--->	8 mm x 6 mm	8	6	12.5	40.0	23.7	16.4	4.8	0.1	5
PR10M-8M	<--->	10 mm x 8 mm	10	8	14.8	46.8	27.6	18.7	6.8	0.1	5
PR12M-10M	<--->	12 mm x 10 mm	12	10	17.5	50.8	31.2	20.1	8.0	0.1	5



NITRA pneumatic push-to-connect male straight fitting with nickel-plated brass body and stainless steel tube gripping claws and pre-applied Teflon thread sealant (O-ring on #10-32 and M5 threads). For use with polyurethane or nylon tubing. Five fittings per package.



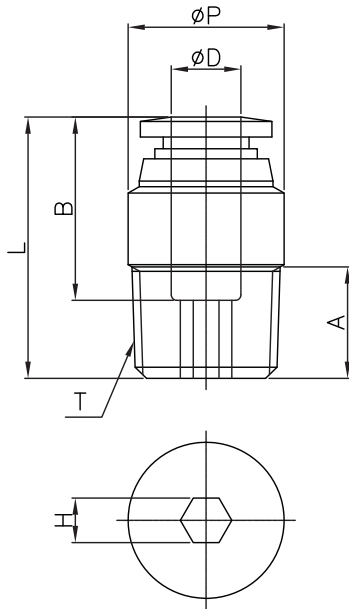
Inch Fitting



Metric Fitting

NITRA™ Male Straight													
Inch Sizes - dimensions in inches (in.)													
Part No.	Price	Size	øD	øP	T	L	A	B	H1 (Hex)	H2 (Hex)	Orifice	Package Weight (lbs)	Qty. per pack
MS532-10N	<--->	5/32 in. x #10-32	5/32	0.41	UNF 10-32	0.88	0.16	0.58	7/16	3/32	0.10	0.1	5
MS532-18N	<--->	5/32 in. x 1/8 NPT	5/32	0.41	NPT 1/8	0.76	0.33	0.58	7/16	1/8	0.13	0.1	5
MS532-14N	<--->	5/32 in. x 1/4 NPT	5/32	0.41	NPT 1/4	0.86	0.41	0.58	9/16	1/8	0.13	0.2	5
MS14-10N	<--->	1/4 in. x #10-32	1/4	0.50	UNF 10-32	0.95	0.16	0.67	1/2	3/32	0.10	0.1	5
MS14-18N	<--->	1/4 in. x 1/8 NPT	1/4	0.50	NPT 1/8	0.94	0.33	0.67	1/2	3/16	0.19	0.2	5
MS14-14N	<--->	1/4 in. x 1/4 NPT	1/4	0.50	NPT 1/4	0.92	0.41	0.67	9/16	3/16	0.19	0.2	5
MS14-38N	<--->	1/4 in. x 3/8 NPT	1/4	0.50	NPT 3/8	0.96	0.45	0.67	11/16	3/16	0.19	0.2	5
MS38-18N	<--->	3/8 in. x 1/8 NPT	3/8	0.66	NPT 1/8	1.18	0.33	0.77	11/16	3/16	0.19	0.2	5
MS38-14N	<--->	3/8 in. x 1/4 NPT	3/8	0.66	NPT 1/4	1.22	0.41	0.77	11/16	1/4	0.25	0.2	5
MS38-38N	<--->	3/8 in. x 3/8 NPT	3/8	0.66	NPT 3/8	1.09	0.45	0.77	11/16	5/16	0.31	0.2	5
MS38-12N	<--->	3/8 in. x 1/2 NPT	3/8	0.66	NPT 1/2	1.11	0.57	0.77	7/8	5/16	0.31	0.4	5
MS12-14N	<--->	1/2 in. x 1/4 NPT	1/2	0.82	NPT 1/4	1.39	0.41	0.89	7/8	1/4	0.25	0.4	5
MS12-38N	<--->	1/2 in. x 3/8 NPT	1/2	0.82	NPT 3/8	1.25	0.45	0.89	7/8	3/8	0.37	0.5	5
MS12-12N	<--->	1/2 in. x 1/2 NPT	1/2	0.82	NPT 1/2	1.23	0.57	0.89	7/8	3/8	0.37	0.5	5
Metric Sizes - dimensions in millimeters (mm)													
MS4M-M5	<--->	4 mm x M5	4	10.0	M5*0.8p	20.8	4.0	14.7	10	-	2.5	0.1	5
MS4M-18R	<--->	4 mm x R1/8	4	10.0	R 1/8	21.9	8.0	14.7	10	3	3.5	0.2	5
MS4M-14R	<--->	4 mm x R1/4	4	10.0	R 1/4	20.9	10.0	14.7	14	3	3.5	0.2	5
MS6M-M5	<--->	6 mm x M5	6	12.0	M5*0.8p	23.1	4.0	16.4	12	-	2.5	0.3	5
MS6M-18R	<--->	6 mm x R1/8	6	12.0	R 1/8	22.4	8.0	16.4	12	4	5.0	0.4	5
MS6M-14R	<--->	6 mm x R1/4	6	12.0	R 1/4	21.9	10.0	16.4	14	5	5.0	0.4	5
MS6M-38R	<--->	6 mm x R3/8	6	12.0	R 3/8	22.9	11.0	16.4	17	5	5.0	0.5	5
MS8M-18R	<--->	8 mm x R1/8	8	14.0	R 1/8	28.4	8.0	18.4	14	5	6.0	0.5	5
MS8M-14R	<--->	8 mm x R1/4	8	14.0	R1/4	26.4	10.0	18.4	14	6	7.0	0.6	5
MS8M-38R	<--->	8 mm x R3/8	8	14.0	R 3/8	23.9	11.0	18.4	17	6	7.0	0.4	5
MS8M-12R	<--->	8 mm x R1/2	8	14.0	R 1/2	29.4	14.0	18.4	19	6	7.0	0.5	5
MS10M-18R	<--->	10 mm x R1/8	10	16.1	R 1/8	29.8	8.0	19.6	17	5	6.0	0.6	5
MS10M-14R	<--->	10 mm x R1/4	10	16.1	R 1/4	31.3	10.0	19.6	17	6	7.0	0.6	5
MS10M-38R	<--->	10 mm x R3/8	10	16.1	R 3/8	27.4	11.0	19.6	17	8	8.0	0.7	5
MS10M-12R	<--->	10 mm x R1/2	10	16.1	R 1/2	29.8	14.0	19.6	19	8	8.0	0.8	5
MS12M-14R	<--->	12 mm x R1/4	12	19.0	R 1/4	33.7	10.0	21.9	19	6	8.0	0.8	5
MS12M-38R	<--->	12 mm x R3/8	12	19.0	R 3/8	30.7	11.0	21.9	19	8	10.0	0.8	5
MS12M-12R	<--->	12 mm x R1/2	12	19.0	R 1/2	30.2	14.0	21.9	19	8	10.0	1.0	5

Pneumatic Push-to-Connect Fittings



NITRA pneumatic push-to-connect round male straight fitting with nickel-plated brass body, internal hex, stainless steel tube gripping claws and pre-applied Teflon thread sealant (O-ring on #10-32 and M5 threads). For use with polyurethane or nylon tubing. Five fittings per package.

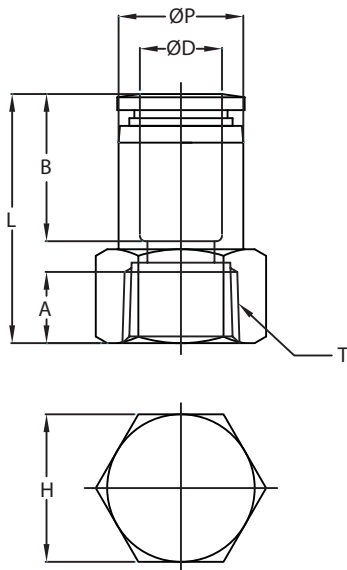


Inch Fitting



Metric Fitting

NITRA™ Round Male Straight												
<i>Inch Sizes - dimensions in inches (in.)</i>												
<i>Part No.</i>	<i>Price</i>	<i>Size</i>	<i>ϕD</i>	<i>ϕP</i>	<i>T</i>	<i>L</i>	<i>A</i>	<i>B</i>	<i>H (Hex)</i>	<i>Orifice</i>	<i>Package Weight (lbs)</i>	<i>Qty. per pack</i>
MSR532-10N	<--->	5/32 in. x #10-32	5/32	0.43	UNF 10-32	0.84	0.16	0.58	3/32	0.09	0.1	5
MSR532-18N	<--->	5/32 in. x 1/8 NPT	5/32	0.43	NPT 1/8	0.82	0.33	0.58	1/8	0.13	0.1	5
MSR14-10N	<--->	1/4 in. x #10-32	1/4	0.51	UNF 10-32	0.95	0.16	0.67	3/32	0.09	0.1	5
MSR14-18N	<--->	1/4 in. x 1/8 NPT	1/4	0.51	NPT 1/8	0.93	0.33	0.67	3/16	0.19	0.1	5
MSR14-14N	<--->	1/4 in. x 1/4 NPT	1/4	0.55	NPT 1/4	0.94	0.41	0.67	3/16	0.19	0.1	5
<i>Metric Sizes - dimensions in millimeters (mm)</i>												
MSR4M-M5	<--->	4 mm x M5	4	10.0	M5*0.8p	20.8	4.6	14.7	2	2.0	0.1	5
MSR4M-18R	<--->	4 mm x R1/8	4	10.0	R 1/8	20.7	8.0	14.7	3	3.0	0.1	5
MSR6M-M5	<--->	6 mm x M5	6	12.0	M5*0.8p	23.1	4.6	16.4	2	2.0	0.1	5
MSR6M-18R	<--->	6 mm x R1/8	6	12.0	R 1/8	22.7	8.0	16.4	4	4.0	0.1	5
MSR6M-14R	<--->	6 mm x R1/4	6	14.0	R 1/4	23.4	10.0	16.4	4	4.0	0.2	5



NITRA pneumatic push-to-connect female straight fitting with nickel-plated brass body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.

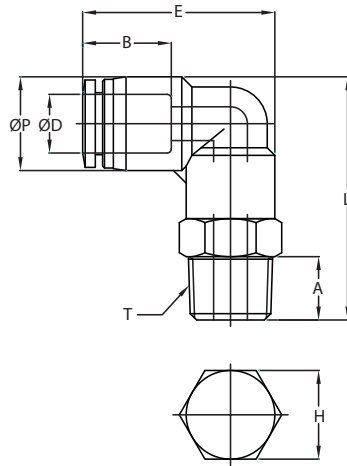


Inch Fitting



Metric Fitting

NITRA™ Female Straight												
Inch Sizes - dimensions in inches (in.)												
Part No.	Price	Size	ØD	ØP	T	L	A	B	H (Hex)	Orifice	Package Weight (lbs)	Qty. per pack
FS532-18N	<---	5/32 in. x 1/8 NPT	5/32	0.39	NPT 1/8	1.06	0.37	0.58	9/16	0.14	0.1	5
FS532-14N	<---	5/32 in. x 1/4 NPT	5/32	0.39	NPT 1/4	1.16	0.45	0.58	11/16	0.14	0.2	5
FS14-18N	<---	1/4 in. x 1/8 NPT	1/4	0.51	NPT 1/8	1.13	0.37	0.67	9/16	0.20	0.2	5
FS14-14N	<---	1/4 in. x 1/4 NPT	1/4	0.51	NPT 1/4	1.21	0.45	0.67	11/16	0.20	0.2	5
FS14-38N	<---	1/4 in. x 3/8 NPT	1/4	0.51	NPT 3/8	1.29	0.49	0.67	7/8	0.20	0.4	5
FS38-18N	<---	3/8 in. x 1/8 NPT	3/8	0.66	NPT 1/8	1.30	0.37	0.77	11/16	0.31	0.3	5
FS38-14N	<---	3/8 in. x 1/4 NPT	3/8	0.66	NPT 1/4	1.30	0.45	0.77	11/16	0.31	0.3	5
FS38-38N	<---	3/8 in. x 3/8 NPT	3/8	0.66	NPT 3/8	1.34	0.49	0.77	7/8	0.31	0.5	5
FS38-12N	<---	3/8 in. x 1/2 NPT	3/8	0.66	NPT 1/2	1.44	0.57	0.77	15/16	0.31	0.6	5
FS12-14N	<---	1/2 in. x 1/4 NPT	1/2	0.82	NPT 1/4	1.47	0.45	0.89	7/8	0.39	0.5	5
FS12-38N	<---	1/2 in. x 3/8 NPT	1/2	0.82	NPT 3/8	1.47	0.49	0.89	7/8	0.39	0.6	5
FS12-12N	<---	1/2 in. x 1/2 NPT	1/2	0.82	NPT 1/2	1.55	0.57	0.89	15/16	0.39	0.7	5
Metric Sizes - dimensions in millimeters (mm)												
FS4M-M5	<---	4 mm x M5	4	10.0	M5*0.8p	25.9	7.0	14.7	12	3.5	0.2	5
FS4M-18R	<---	4 mm x R1/8	4	10.0	R 1/8	27.0	9.0	14.7	14	3.5	0.2	5
FS4M-14R	<---	4 mm x R1/4	4	10.0	R 1/4	29.0	11.0	14.7	17	3.5	0.2	5
FS6M-M5	<---	6 mm x M5	6	12.0	M5*0.8p	26.7	7.0	16.4	12	4.2	0.2	5
FS6M-18R	<---	6 mm x R1/8	6	12.0	R 1/8	28.2	9.0	16.4	14	5.0	0.2	5
FS6M-14R	<---	6 mm x R1/4	6	12.0	R 1/4	30.2	11.0	16.4	17	5.0	0.2	5
FS6M-38R	<---	6 mm x R3/8	6	12.0	R 3/8	31.2	12.0	16.4	22	5.0	0.4	5
FS8M-18R	<---	8 mm x R1/8	8	14.0	R 1/8	29.4	9.0	18.4	14	6.0	0.2	5
FS8M-14R	<---	8 mm x R1/4	8	14.0	R 1/4	31.4	11.0	18.4	17	6.0	0.2	5
FS8M-38R	<---	8 mm x R3/8	8	14.0	R 3/8	32.4	12.0	18.4	22	6.0	0.5	5
FS8M-12R	<---	8 mm x R1/2	8	14.0	R 1/2	34.4	14.0	18.4	24	6.0	0.5	5
FS10M-18R	<---	10 mm x R1/8	10	16.4	R 1/8	32.5	9.0	19.6	17	8.5	0.3	5
FS10M-14R	<---	10 mm x R1/4	10	16.4	R 1/4	32.5	11.0	19.6	17	8.5	0.3	5
FS10M-38R	<---	10 mm x R3/8	10	16.4	R 3/8	33.5	12.0	19.6	22	8.5	0.5	5
FS10M-12R	<---	10 mm x R1/2	10	16.4	R 1/2	33.5	14.0	19.6	24	8.5	0.5	5
FS12M-14R	<---	12mm x R1/4	12	19.0	R 1/4	37.1	11.0	21.9	22	10.0	0.5	5
FS12M-38R	<---	12 mm x R3/8	12	19.0	R 3/8	37.1	12.0	21.9	22	10.0	0.5	5
FS12M-12R	<---	12 mm x R1/2	12	19.0	R 1/2	39.1	14.0	21.9	24	10.0	1.0	5



NITRA pneumatic push-to-connect male elbow fitting with rotating thermoplastic (PBT) body, nickel-plated brass threads, stainless steel tube gripping claws and pre-applied Teflon thread sealant (O-ring on #10-32 and M5 threads). For use with polyurethane or nylon tubing. Five fittings per package.

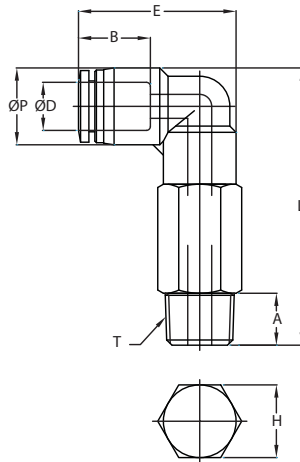


Inch Fitting



Metric Fitting

NITRA™ Male Elbow													
Inch Sizes - dimensions in inches (in.)													
Part No.	Price	Size	ØD	ØP	T	L	E	A	B	H (Hex)	Orifice	Package Weight (lbs)	Qty. per pack
ME532-10N	<-->	5/32 in. x #10-32	5/32	0.41	UNF 10-32	1.05	0.93	0.14	0.59	7/16	0.10	0.1	5
ME532-18N	<-->	5/32 in. x 1/8 NPT	5/32	0.41	NPT 1/8	1.19	0.93	0.33	0.59	7/16	0.12	0.1	5
ME532-14N	<-->	5/32 in. x 1/4 NPT	5/32	0.41	NPT 1/4	1.31	0.93	0.41	0.59	9/16	0.12	0.1	5
ME14-10N	<-->	1/4 in. x #10-32	1/4	0.51	UNF 10-32	1.28	1.04	0.14	0.66	1/2	0.10	0.1	5
ME14-18N	<-->	1/4 in. x 1/8 NPT	1/4	0.51	NPT 1/8	1.35	1.04	0.33	0.66	1/2	0.18	0.2	5
ME14-14N	<-->	1/4 in. x 1/4 NPT	1/4	0.51	NPT 1/4	1.46	1.04	0.41	0.66	9/16	0.18	0.2	5
ME14-38N	<-->	1/4 in. x 3/8 NPT	1/4	0.51	NPT 3/8	1.50	1.04	0.45	0.66	11/16	0.18	0.3	5
ME38-18N	<-->	3/8 in. x 1/8 NPT	3/8	0.69	NPT 1/8	1.52	1.27	0.33	0.79	11/16	0.20	0.3	5
ME38-14N	<-->	3/8 in. x 1/4 NPT	3/8	0.69	NPT 1/4	1.60	1.27	0.41	0.79	11/16	0.28	0.3	5
ME38-38N	<-->	3/8 in. x 3/8 NPT	3/8	0.69	NPT 3/8	1.64	1.27	0.45	0.79	11/16	0.28	0.4	5
ME38-12N	<-->	3/8 in. x 1/2 NPT	3/8	0.69	NPT 1/2	1.76	1.27	0.57	0.79	7/8	0.28	0.4	5
ME12-14N	<-->	1/2 in. x 1/4 NPT	1/2	0.83	NPT 1/4	1.81	1.49	0.41	0.90	3/4	0.31	0.4	5
ME12-38N	<-->	1/2 in. x 3/8 NPT	1/2	0.83	NPT 3/8	1.85	1.49	0.45	0.90	3/4	0.35	0.4	5
ME12-12N	<-->	1/2 in. x 1/2 NPT	1/2	0.83	NPT 1/2	1.97	1.49	0.57	0.90	7/8	0.35	0.5	5
Metric Sizes - dimensions in millimeters (mm)													
ME4M-M5	<-->	4 mm x M5	4	10.5	M5*0.8p	25.7	23.6	4.0	14.9	10	2.5	0.1	5
ME4M-18R	<-->	4 mm x R1/8	4	10.5	R 1/8	29.7	23.6	8.0	14.9	10	3.0	0.1	5
ME4M-14R	<-->	4 mm x R1/4	4	10.5	R 1/4	31.7	23.6	10.0	14.9	14	3.0	0.2	5
ME6M-M5	<-->	6 mm x M5	6	12.5	M5*0.8p	28.7	26.3	4.0	16.4	12	2.5	0.2	5
ME6M-18R	<-->	6 mm x R1/8	6	12.5	R 1/8	32.7	26.3	8.0	16.4	12	4.5	0.3	5
ME6M-14R	<-->	6mm x R1/4	6	12.5	R 1/4	35.7	26.3	10.0	16.4	14	4.5	0.3	5
ME6M-38R	<-->	6 mm x R3/8	6	12.5	R 3/8	36.7	26.3	11.0	16.4	17	4.5	0.3	5
ME8M-18R	<-->	8 mm x R1/8	8	14.8	R 1/8	35.4	30.3	8.0	18.7	14	6.0	0.4	5
ME8M-14R	<-->	8 mm x R1/4	8	14.8	R 1/4	38.4	30.3	10.0	18.7	14	6.0	0.4	5
ME8M-38R	<-->	8 mm x R3/8	8	14.8	R 3/8	39.4	30.3	11.0	18.7	17	6.0	0.4	5
ME8M-12R	<-->	8 mm x R1/2	8	14.8	R 1/2	42.4	30.3	14.0	18.7	21	6.5	0.4	5
ME10M-18R	<-->	10 mm x R1/8	10	17.5	R 1/8	37.2	33.0	8.0	20.1	17	6.0	0.5	5
ME10M-14R	<-->	10 mm x R1/4	10	17.5	R 1/4	40.2	33.0	10.0	20.1	17	7.0	0.5	5
ME10M-38R	<-->	10 mm x R3/8	10	17.5	R 3/8	41.2	33.0	11.0	20.1	17	7.0	0.6	5
ME10M-12R	<-->	10 mm x R1/2	10	17.5	R 1/2	44.2	33.0	14.0	20.1	21	7.0	0.7	5
ME12M-14R	<-->	12 mm x R1/4	12	20.5	R 1/4	44.6	38.1	10.0	22.8	19	7.0	0.7	5
ME12M-38R	<-->	12 mm x R3/8	12	20.5	R 3/8	45.6	38.1	11.0	22.8	19	10.0	0.7	5
ME12M-12R	<-->	12 mm x R1/2	12	20.5	R 1/2	48.6	38.1	14.0	22.8	21	10.0	0.8	5



NITRA pneumatic push-to-connect long male elbow fitting with rotating thermoplastic (PBT) body, nickel-plated brass threads, stainless steel tube gripping claws and pre-applied teflon thread sealant (O-ring on #10-32 and M5 threads). For use with polyurethane or nylon tubing. Five fittings per package.

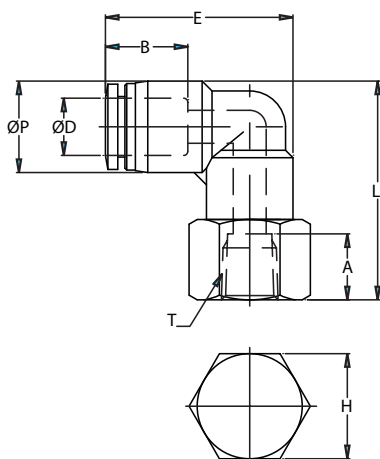


Inch Fitting



Metric Fitting

NITRA™ Long Male Elbow													
<i>Inch Sizes - dimensions in inches (in.)</i>													
Part No.	Price	Size	ØD	ØP	T	L	E	A	B	H (Hex)	Orifice	Package Weight (lbs)	Qty. per pack
MEL532-10N	<--->	5/32 in. x #10-32	5/32	0.41	UNF 10-32	1.48	0.93	0.14	0.59	7/16	0.08	0.2	5
MEL532-18N	<--->	5/32 in. x 1/8 NPT	5/32	0.41	NPT 1/8	1.62	0.93	0.33	0.59	7/16	0.12	0.2	5
MEL532-14N	<--->	5/32 in. x 1/4 NPT	5/32	0.41	NPT 1/4	1.68	0.93	0.41	0.59	9/16	0.12	0.2	5
MEL14-10N	<--->	1/4 in. x #10-32	1/4	0.51	UNF 10-32	1.73	1.04	0.14	0.66	1/2	0.08	0.3	5
MEL14-18N	<--->	1/4 in. x 1/8 NPT	1/4	0.51	NPT 1/8	1.87	1.04	0.33	0.66	1/2	0.18	0.2	5
MEL14-14N	<--->	1/4 in. x 1/4 NPT	1/4	0.51	NPT 1/4	1.99	1.04	0.41	0.66	9/16	0.18	0.3	5
MEL14-38N	<--->	1/4 in. x 3/8 NPT	1/4	0.51	NPT 3/8	2.03	1.04	0.45	0.66	11/16	0.18	0.3	5
MEL38-18N	<--->	3/8 in. x 1/8 NPT	3/8	0.68	NPT 1/8	2.24	1.27	0.33	0.79	11/16	0.24	0.3	5
MEL38-14N	<--->	3/8 in. x 1/4 NPT	3/8	0.69	NPT 1/4	2.31	1.27	0.41	0.79	11/16	0.28	0.4	5
MEL38-38N	<--->	3/8 in. x 3/8 NPT	3/8	0.69	NPT 3/8	2.35	1.27	0.45	0.79	11/16	0.28	0.5	5
MEL38-12N	<--->	3/8 in. x 1/2 NPT	3/8	0.69	NPT 1/2	2.47	1.27	0.57	0.79	7/8	0.28	0.7	5
MEL12-14N	<--->	1/2 in. x 1/4 NPT	1/2	0.83	NPT 1/4	2.68	1.49	0.41	0.90	3/4	0.31	0.6	5
MEL12-38N	<--->	1/2 in. x 3/8 NPT	1/2	0.83	NPT 3/8	2.72	1.49	0.45	0.90	3/4	0.35	0.7	5
MEL12-12N	<--->	1/2 in. x 1/2 NPT	1/2	0.83	NPT 1/2	2.83	1.49	0.57	0.90	7/8	0.35	0.8	5
<i>Metric Sizes - dimensions in millimeters (mm)</i>													
MEL4M-M5	<--->	4 mm x M5	4	10.5	M5*0.8p	38.2	23.6	4.1	14.9	10	2.0	0.2	5
MEL4M-18R	<--->	4 mm x R1/8	4	10.5	R 1/8	40.7	23.6	8.0	14.9	10	3.0	0.2	5
MEL4M-14R	<--->	4 mm x R1/4	4	10.5	R 1/4	42.7	23.6	10.0	14.9	14	3.0	0.2	5
MEL6M-M5	<--->	6 mm x M5	6	12.5	M5*0.8p	43.7	26.3	4.1	16.4	12	2.0	0.3	5
MEL6M-18R	<--->	6 mm x R1/8	6	12.5	R 1/8	46.2	26.3	8.0	16.4	12	4.0	0.3	5
MEL6M-14R	<--->	6 mm x R1/4	6	12.5	R 1/4	48.2	26.3	10.0	16.4	14	4.0	0.3	5
MEL6M-38R	<--->	6 mm x R3/8	6	12.5	R 3/8	49.2	26.3	11.0	16.4	17	4.5	0.4	5
MEL8M-18R	<--->	8 mm x R1/8	8	14.8	R 1/8	51.4	30.3	8.0	18.7	14	6.0	0.5	5
MEL8M-14R	<--->	8 mm x R1/4	8	14.8	R 1/4	53.4	30.3	10.0	18.7	14	6.0	0.7	5
MEL8M-38R	<--->	8 mm x R3/8	8	14.8	R 3/8	54.4	30.3	11.0	18.7	17	6.0	0.6	5
MEL8M-12R	<--->	8 mm x R1/2	8	14.8	R 1/2	57.4	30.3	14.0	18.7	22	6.0	0.7	5
MEL10M-18R	<--->	10 mm x R1/8	10	17.5	R 1/8	56.4	33.0	8.0	20.1	17	6.0	0.8	5
MEL10M-14R	<--->	10 mm x R1/4	10	17.5	R 1/4	58.4	33.0	10.0	20.1	17	7.0	0.8	5
MEL10M-38R	<--->	10 mm x R3/8	10	17.5	R 3/8	59.4	33.0	11.0	20.1	17	7.0	0.9	5
MEL10M-12R	<--->	10 mm x R1/2	10	17.5	R 1/2	62.4	33.0	14.0	20.1	22	7.0	1.0	5
MEL12M-14R	<--->	12 mm x R1/4	12	20.5	R 1/4	66.1	38.1	10.0	22.8	19	8.0	1.0	5
MEL12M-38R	<--->	12 mm x R3/8	12	20.5	R 3/8	67.1	38.1	11.0	22.8	19	10.0	1.0	5
MEL12M-12R	<--->	12 mm x R1/2	12	20.5	R 1/2	70.1	38.1	14.0	22.8	22	10.0	1.1	5



NITRA pneumatic push-to-connect female elbow fitting with rotating thermoplastic (PBT) body, nickel-plated brass threads, stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.

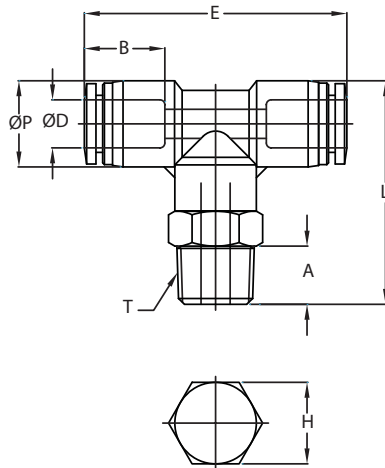


Inch Fitting



Metric Fitting

NITRA™ Female Elbow													
Inch Sizes - dimensions in inches (in.)													
Part No.	Price	Size	ØD	ØP	T	L	E	A	B	H (Hex)	Orifice	Package Weight (lbs)	Qty. per pack
FE532-18N	<--->	5/32 in. x 1/8 NPT	5/32	0.41	NPT 1/8	1.09	0.93	0.35	0.59	9/16	0.10	0.2	5
FE532-14N	<--->	5/32 in. x 1/4 NPT	5/32	0.41	NPT 1/4	1.09	0.93	0.43	0.59	11/16	0.10	0.2	5
FE14-18N	<--->	1/4 in. x 1/8 NPT	1/4	0.51	NPT 1/8	1.24	1.04	0.35	0.66	9/16	0.16	0.2	5
FE14-14N	<--->	1/4 in. x 1/4 NPT	1/4	0.51	NPT 1/4	1.34	1.04	0.43	0.66	11/16	0.16	0.3	5
FE14-38N	<--->	1/4 in. x 3/8 NPT	1/4	0.51	NPT 3/8	1.36	1.04	0.47	0.66	7/8	0.16	0.3	5
FE38-14N	<--->	3/8 in. x 1/4 NPT	3/8	0.69	NPT 1/4	1.46	1.27	0.43	0.79	11/16	0.28	0.3	5
FE38-38N	<--->	3/8 in. x 3/8 NPT	3/8	0.69	NPT 3/8	1.50	1.27	0.47	0.79	7/8	0.28	0.3	5
FE38-12N	<--->	3/8 in. x 1/2 NPT	3/8	0.69	NPT 1/2	1.58	1.27	0.57	0.79	15/16	0.28	0.4	5
FE12-38N	<--->	1/2 in. x 3/8 NPT	1/2	0.83	NPT 3/8	1.71	1.49	0.47	0.90	7/8	0.35	0.5	5
FE12-12N	<--->	1/2 in. x 1/2 NPT	1/2	0.83	NPT 1/2	1.79	1.49	0.57	0.90	15/16	0.35	0.6	5
Metric Sizes - dimensions in millimeters (mm)													
FE4M-M5	<--->	4 mm x M5	4	10.5	M5*0.8p	26.7	23.6	8.0	14.9	10	2.5	0.2	5
FE4M-18R	<--->	4 mm x R1/8	4	10.5	R 1/8	27.7	23.6	9.0	14.9	14	2.5	0.2	5
FE4M-14R	<--->	4 mm x R1/4	4	10.5	R 1/4	29.7	23.6	11.0	14.9	17	2.5	0.2	5
FE6M-M5	<--->	6 mm x M5	6	12.5	M5*0.8p	29.7	26.3	8.0	16.4	12	4.0	0.3	5
FE6M-18R	<--->	6 mm x R1/8	6	12.5	R 1/8	30.7	26.3	9.0	16.4	14	4.0	0.3	5
FE6M-14R	<--->	6 mm x R1/4	6	12.5	R 1/4	32.7	26.3	11.0	16.4	17	4.0	0.3	5
FE6M-38R	<--->	6 mm x R3/8	6	12.5	R 3/8	33.7	26.3	12.0	16.4	22	4.0	0.3	5
FE8M-18R	<--->	8 mm x R1/8	8	14.8	R 1/8	33.4	30.3	9.0	18.7	14	6.0	0.4	5
FE8M-14R	<--->	8 mm x R1/4	8	14.8	R 1/4	35.4	30.3	11.0	18.7	17	6.0	0.5	5
FE8M-38R	<--->	8 mm x R3/8	8	14.8	R 3/8	36.4	30.3	12.0	18.7	22	6.0	0.6	5
FE8M-12R	<--->	8 mm x R1/2	8	14.8	R 1/2	38.4	30.3	14.0	18.7	24	6.0	0.6	5
FE10M-18R	<--->	10 mm x R1/8	10	17.5	R 1/8	37.2	33.0	9.0	20.1	17	7.0	0.6	5
FE10M-14R	<--->	10 mm x R1/4	10	17.5	R 1/4	37.2	33.0	11.0	20.1	17	7.0	0.6	5
FE10M-38R	<--->	10 mm x R3/8	10	17.5	R 3/8	38.2	33.0	12.0	20.1	22	7.0	0.7	5
FE10M-12R	<--->	10 mm x R1/2	10	17.5	R 1/2	40.2	33.0	14.0	20.1	24	7.0	0.8	5
FE12M-14R	<--->	12 mm x R1/4	12	20.5	R 1/4	41.6	38.1	11.0	22.8	19	10.0	0.8	5
FE12M-38R	<--->	12 mm x R3/8	12	20.5	R 3/8	42.6	38.1	12.0	22.8	22	10.0	0.8	5
FE12M-12R	<--->	12 mm x R1/2	12	20.5	R 1/2	44.6	38.1	14.0	22.8	24	10.0	0.9	5



NITRA pneumatic push-to-connect male branch tee fitting with rotating thermoplastic (PBT) body, nickel-plated brass threads, stainless steel tube gripping claws and pre-applied Teflon thread sealant. For use with polyurethane or nylon tubing. Five fittings per package.

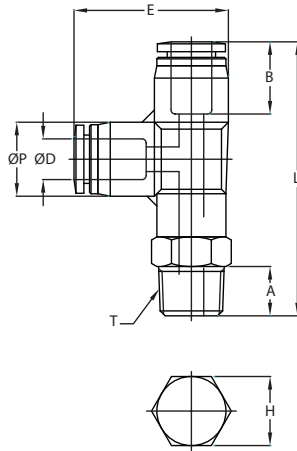


Inch Fitting



Metric Fitting

NITRA™ Male Branch Tee													
Inch Sizes - dimensions in inches (in.)													
Part No.	Price	Size	ØD	ØP	T	L	E	A	B	H (Hex)	Orifice	Package Weight (lbs)	Qty. per pack
MBT532-18N	<--->	5/32 in. x 1/8 NPT	5/32	0.41	NPT 1/8	1.19	1.47	0.33	0.59	7/16	0.12	0.2	5
MBT532-14N	<--->	5/32 in. x 1/4 NPT	5/32	0.41	NPT 1/4	1.31	1.47	0.41	0.59	9/16	0.12	0.2	5
MBT14-18N	<--->	1/4 in. x 1/8 NPT	1/4	0.51	NPT 1/8	1.35	1.61	0.33	0.67	1/2	0.18	0.2	5
MBT14-14N	<--->	1/4 in. x 1/4 NPT	1/4	0.51	NPT 1/4	1.46	1.61	0.41	0.67	9/16	0.18	0.3	5
MBT14-38N	<--->	1/4 in. x 3/8 NPT	1/4	0.51	NPT 3/8	1.50	1.61	0.45	0.67	11/16	0.18	0.3	5
MBT38-18N	<--->	3/8 in. x 1/8 NPT	3/8	0.69	NPT 1/8	1.52	1.87	0.33	0.79	11/16	0.20	0.3	5
MBT38-14N	<--->	3/8 in. x 1/4 NPT	3/8	0.69	NPT 1/4	1.60	1.87	0.41	0.79	11/16	0.28	0.4	5
MBT38-38N	<--->	3/8 in. x 3/8 NPT	3/8	0.69	NPT 3/8	1.64	1.87	0.45	0.79	11/16	0.28	0.4	5
MBT38-12N	<--->	3/8 in. x 1/2 NPT	3/8	0.69	NPT 1/2	1.76	1.87	0.57	0.79	7/8	0.28	0.5	5
MBT12-14N	<--->	1/2 in. x 1/4 NPT	1/2	0.83	NPT 1/4	1.81	2.22	0.41	0.90	3/4	0.31	0.4	5
MBT12-38N	<--->	1/2 in. x 3/8 NPT	1/2	0.83	NPT 3/8	1.85	2.22	0.45	0.90	3/4	0.35	0.5	5
MBT12-12N	<--->	1/2 in. x 1/2 NPT	1/2	0.83	NPT 1/2	1.97	2.22	0.57	0.90	7/8	0.35	0.6	5
Metric Sizes - dimensions in millimeters (mm)													
MBT4M-M5	<--->	4 mm x M5	4	10.5	M5*0.8p	25.7	37.3	4.0	14.9	10	2.0	0.2	5
MBT4M-18R	<--->	4 mm x R1/8	4	10.5	R 1/8	29.7	37.3	8.0	14.9	10	3.0	0.2	5
MBT4M-14R	<--->	4 mm x R1/4	4	10.5	R 1/4	31.7	37.3	10.0	14.9	14	3.0	0.2	5
MBT6M-M5	<--->	6 mm x M5	6	12.5	M5*0.8p	28.7	40.7	4.0	16.4	12	2.0	0.3	5
MBT6M-18R	<--->	6 mm x R1/8	6	12.5	R 1/8	32.7	40.7	8.0	16.4	12	4.5	0.3	5
MBT6M-14R	<--->	6 mm x R1/4	6	12.5	R 1/4	35.7	40.7	10.0	16.4	14	4.5	0.3	5
MBT6M-38R	<--->	6 mm x R3/8	6	12.5	R 3/8	36.7	40.7	11.0	16.4	17	4.5	0.3	5
MBT8M-18R	<--->	8 mm x R1/8	8	14.8	R 1/8	35.4	45.1	8.0	18.7	14	6.0	0.4	5
MBT8M-14R	<--->	8 mm x R1/4	8	14.8	R 1/4	38.4	45.1	10.0	18.7	14	6.0	0.5	5
MBT8M-38R	<--->	8 mm x R3/8	8	14.8	R 3/8	39.4	45.1	11.0	18.7	17	6.0	0.6	5
MBT8M-12R	<--->	8 mm x R1/2	8	14.8	R 1/2	42.4	45.1	14.0	18.7	21	6.5	0.6	5
MBT10M-18R	<--->	10 mm x R1/8	10	17.5	R 1/8	37.2	47.4	8.0	20.1	17	6.0	0.6	5
MBT10M-14R	<--->	10 mm x R1/4	10	17.5	R 1/4	40.2	47.4	10.0	20.1	17	7.0	0.6	5
MBT10M-38R	<--->	10 mm x R3/8	10	17.5	R 3/8	41.2	47.4	11.0	20.1	17	7.0	0.7	5
MBT10M-12R	<--->	10 mm x R1/2	10	17.5	R 1/2	44.2	47.4	14.0	20.1	21	7.0	0.8	5
MBT12M-14R	<--->	12 mm x R1/4	12	20.5	R 1/4	44.6	55.3	10.0	22.8	19	7.0	0.8	5
MBT12M-38R	<--->	12 mm x R3/8	12	20.5	R 3/8	45.6	55.3	11.0	22.8	19	10.0	0.8	5
MBT12M-12R	<--->	12 mm x R1/2	12	20.5	R1/2	48.6	55.3	14.0	22.8	21	10.0	0.9	5



NITRA pneumatic push-to-connect male run tee fitting with rotating thermoplastic (PBT) body, nickel-plated brass threads, stainless steel tube gripping claws and pre-applied Teflon thread sealant. For use with polyurethane or nylon tubing. Five fittings per package.

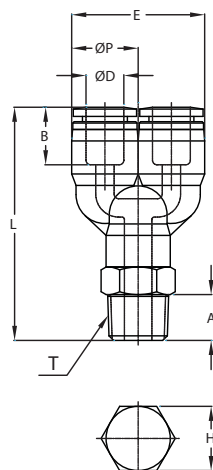


Inch Fitting



Metric Fitting

NITRA™ Male Run Tee													
Inch Sizes - dimensions in inches (in.)													
Part No.	Price	Size	ØD	ØP	T	L	E	A	B	H (Hex)	Orifice	Package Weight (lbs)	Qty. per pack
MRT532-18N	<--->	5/32 in. x 1/8 NPT	5/32	0.42	NPT 1/8	1.83	0.98	0.33	0.59	7/16	0.12	0.1	5
MRT532-14N	<--->	5/32 in. x 1/4 NPT	5/32	0.42	NPT 1/4	1.91	0.98	0.41	0.59	9/16	0.12	0.2	5
MRT14-18N	<--->	1/4 in. x 1/8 NPT	1/4	0.51	NPT 1/8	1.94	1.10	0.33	0.66	1/2	0.18	0.2	5
MRT14-14N	<--->	1/4 in. x 1/4 NPT	1/4	0.51	NPT 1/4	2.05	1.10	0.41	0.66	9/16	0.18	0.2	5
MRT14-38N	<--->	1/4 in. x 3/8 NPT	1/4	0.51	NPT 3/8	2.09	1.10	0.45	0.66	11/16	0.18	0.4	5
MRT38-18N	<--->	3/8 in. x 1/8 NPT	3/8	0.69	NPT 1/8	2.25	1.35	0.33	0.79	11/16	0.20	0.3	5
MRT38-14N	<--->	3/8 in. x 1/4 NPT	3/8	0.69	NPT 1/4	2.33	1.35	0.41	0.79	11/16	0.28	0.3	5
MRT38-38N	<--->	3/8 in. x 3/8 NPT	3/8	0.69	NPT 3/8	2.37	1.35	0.45	0.79	11/16	0.28	0.4	5
MRT38-12N	<--->	3/8 in. x 1/2 NPT	3/8	0.69	NPT 1/2	2.48	1.35	0.57	0.79	7/8	0.28	0.5	5
MRT12-14N	<--->	1/2 in. x 1/4 NPT	1/2	0.83	NPT 1/4	2.59	1.60	0.41	0.90	3/4	0.31	0.4	5
MRT12-38N	<--->	1/2 in. x 3/8 NPT	1/2	0.83	NPT 3/8	2.63	1.60	0.45	0.90	3/4	0.39	0.5	5
MRT12-12N	<--->	1/2 in. x 1/2 NPT	1/2	0.83	NPT 1/2	2.74	1.60	0.57	0.90	7/8	0.39	0.6	5
Metric Sizes - dimensions in millimeters (mm)													
MRT4M-M5	<--->	4 mm x M5	4	10.6	M5*0.8p	41.6	24.9	4.0	14.9	10	2.0	0.1	5
MRT4M-18R	<--->	4 mm x R1/8	4	10.6	R 1/8	45.1	24.9	8.0	14.9	10	3.0	0.1	5
MRT4M-14R	<--->	4 mm x R1/4	4	10.6	R 1/4	47.1	24.9	10.0	14.9	14	3.0	0.2	5
MRT6M-M5	<--->	6 mm x M5	6	13.0	M5*0.8p	44.9	27.9	4.0	16.4	12	2.0	0.2	5
MRT6M-18R	<--->	6 mm x R1/8	6	13.0	R 1/8	48.4	27.9	8.0	16.4	12	4.5	0.4	5
MRT6M-14R	<--->	6 mm x R1/4	6	13.0	R 1/4	51.4	27.9	10.0	16.4	14	4.5	0.3	5
MRT6M-38R	<--->	6 mm x R3/8	6	13.0	R 3/8	52.4	27.9	11.0	16.4	17	4.5	0.3	5
MRT8M-18R	<--->	8 mm x R1/8	8	15.0	R 1/8	52.5	31.3	8.0	18.7	14	6.0	0.4	5
MRT8M-14R	<--->	8 mm x R1/4	8	15.0	R 1/4	55.5	31.3	10.0	18.7	14	6.0	0.5	5
MRT8M-38R	<--->	8 mm x R3/8	8	15.0	R 3/8	56.5	31.3	11.0	18.7	17	6.0	0.4	5
MRT8M-12R	<--->	8 mm x R1/2	8	15.0	R 1/2	59.5	31.3	14.0	18.7	21	6.5	0.5	5
MRT10M-18R	<--->	10 mm x R1/8	10	18.0	R 1/8	55.7	34.7	8.0	20.1	17	6.0	0.6	5
MRT10M-14R	<--->	10 mm x R1/4	10	18.0	R 1/4	58.7	34.7	10.0	20.1	17	7.0	0.6	5
MRT10M-38R	<--->	10 mm x R3/8	10	18.0	R 3/8	59.7	34.7	11.0	20.1	17	7.0	0.7	5
MRT10M-12R	<--->	10 mm x R1/2	10	18.0	R 1/2	62.7	34.7	14.0	20.1	21	7.0	0.8	5
MRT12M-14R	<--->	12 mm x R1/4	12	20.8	R 1/4	65.0	40.5	10.0	22.8	19	7.0	0.8	5
MRT12M-38R	<--->	12 mm x R3/8	12	20.8	R 3/8	66.0	40.5	11.0	22.8	19	10.0	0.8	5
MRT12M-12R	<--->	12 mm x R1/2	12	20.8	R 1/2	69.0	40.5	14.0	22.8	21	10.0	0.9	5



NITRA pneumatic push-to-connect male Y fitting with rotating thermoplastic (PBT) body, nickel-plated brass threads, stainless steel tube gripping claws and pre-applied Teflon thread sealant. For use with polyurethane or nylon tubing. Five fittings per package.

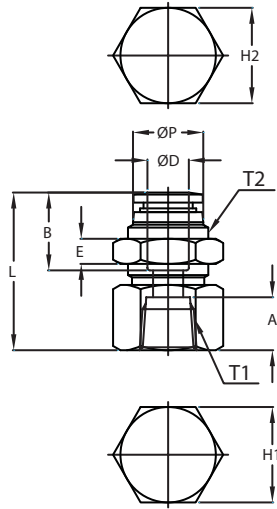


Inch Fitting



Metric Fitting

NITRA™ Male Y													
<i>Inch Sizes - dimensions in inches (in.)</i>													
<i>Part No.</i>	<i>Price</i>	<i>Size</i>	<i>ØD</i>	<i>ØP</i>	<i>T</i>	<i>L</i>	<i>E</i>	<i>A</i>	<i>B</i>	<i>H (Hex)</i>	<i>Orifice</i>	<i>Package Weight (lbs)</i>	<i>Qty. per pack</i>
MY532-18N	<---	5/32 in. x 1/8 NPT	5/32	0.41	NPT 1/8	1.73	0.83	0.33	0.61	7/16	0.12	0.1	5
MY532-14N	<---	5/32 in. x 1/4 NPT	5/32	0.41	NPT 1/4	1.85	0.83	0.41	0.61	9/16	0.12	0.2	5
MY14-18N	<---	1/4 in. x 1/8 NPT	1/4	0.51	NPT 1/8	1.88	1.02	0.33	0.70	1/2	0.18	0.2	5
MY14-14N	<---	1/4 in. x 1/4 NPT	1/4	0.51	NPT 1/4	1.99	1.02	0.41	0.70	9/16	0.18	0.2	5
MY14-38N	<---	1/4 in. x 3/8 NPT	1/4	0.51	NPT 3/8	2.03	1.02	0.45	0.70	11/16	0.18	0.3	5
MY38-18N	<---	3/8 in. x 1/8 NPT	3/8	0.69	NPT 1/8	2.07	1.39	0.33	0.79	11/16	0.20	0.3	5
MY38-14N	<---	3/8 in. x 1/4 NPT	3/8	0.69	NPT 1/4	2.15	1.39	0.41	0.79	11/16	0.28	0.3	5
MY38-38N	<---	3/8 in. x 3/8 NPT	3/8	0.69	NPT 3/8	2.19	1.39	0.45	0.79	11/16	0.28	0.4	5
MY38-12N	<---	3/8 in. x 1/2 NPT	3/8	0.69	NPT 1/2	2.31	1.39	0.57	0.79	7/8	0.28	0.4	5
MY12-14N	<---	1/2 in. x 1/4 NPT	1/2	0.83	NPT 1/4	2.54	1.65	0.41	0.90	3/4	0.28	0.4	5
MY12-38N	<---	1/2 in. x 3/8 NPT	1/2	0.83	NPT 3/8	2.58	1.65	0.45	0.90	3/4	0.28	0.6	5
MY12-12N	<---	1/2 in. x 1/2 NPT	1/2	0.83	NPT 1/2	2.70	1.65	0.57	0.90	7/8	0.28	0.8	5
<i>Metric Sizes - dimensions in millimeters (mm)</i>													
MY4M-M5	<---	4 mm x M5	4	10.5	M5*0.8p	39.5	21.0	4.0	15.6	10	2.5	0.1	5
MY4M-18R	<---	4 mm x R1/8	4	10.5	R 1/8	43.5	21.0	8.0	15.6	10	3.0	0.1	5
MY4M-14R	<---	4 mm x R1/4	4	10.5	R 1/4	45.5	21.0	10.0	15.6	14	3.0	0.2	5
MY6M-M5	<---	6 mm x M5	6	12.5	M5*0.8p	40.4	25.0	4.0	16.9	12	2.5	0.2	5
MY6M-18R	<---	6 mm x R1/8	6	12.5	R 1/8	44.4	25.0	8.0	16.9	12	4.5	0.3	5
MY6M-14R	<---	6 mm x R1/4	6	12.5	R 1/4	47.4	25.0	10.0	16.9	14	4.5	0.3	5
MY6M-38R	<---	6 mm x R3/8	6	12.5	R 3/8	48.4	25.0	11.0	16.9	17	4.5	0.3	5
MY8M-18R	<---	8 mm x R1/8	8	14.5	R 1/8	47.8	29.0	8.0	19.0	14	6.0	0.4	5
MY8M-14R	<---	8 mm x R1/4	8	14.5	R 1/4	50.8	29.0	10.0	19.0	14	6.0	0.4	5
MY8M-38R	<---	8 mm x R3/8	8	14.5	R 3/8	51.8	29.0	11.0	19.0	17	6.0	0.4	5
MY8M-12R	<---	8 mm x R1/2	8	14.5	R 1/2	54.8	29.0	14.0	19.0	21	6.5	0.6	5
MY10M-18R	<---	10 mm x R1/8	10	17.6	R 1/8	51.2	35.2	8.0	20.2	17	6.0	0.8	5
MY10M-14R	<---	10 mm x R1/4	10	17.6	R 1/4	54.2	35.2	10.0	20.2	17	7.0	0.8	5
MY10M-38R	<---	10 mm x R3/8	10	17.6	R 3/8	55.2	35.2	11.0	20.2	17	7.0	0.9	5
MY10M-12R	<---	10 mm x R1/2	10	17.6	R 1/2	58.2	35.2	14.0	20.2	21	7.0	1.0	5
MY12M-14R	<---	12 mm x R1/4	12	21.0	R 1/4	59.1	42.0	10.0	22.6	19	7.0	1.0	5
MY12M-38R	<---	12 mm x R3/8	12	21.0	R 3/8	60.1	42.0	11.0	22.6	19	10.0	1.1	5
MY12M-12R	<---	12 mm x R1/2	12	21.0	R 1/2	63.1	42.0	14.0	22.6	21	10.0	1.2	5



NITRA pneumatic push-to-connect bulkhead female straight fitting with nickel-plated brass body and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Five fittings per package.



Inch Fitting



Metric Fitting

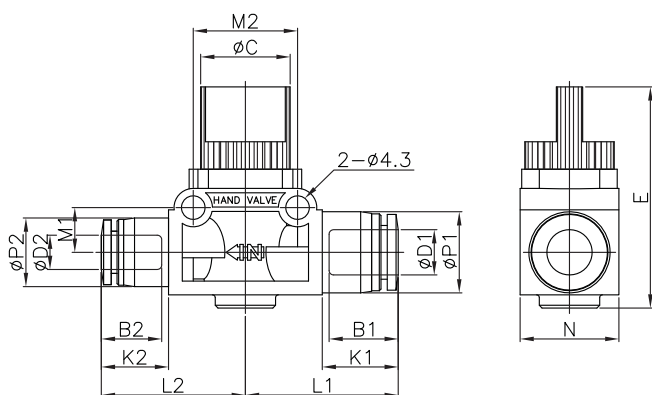
NITRA™ Bulkhead Female															
Inch Sizes - dimensions in inches (in.)															
Part No.	Price	Size	ØD	ØP	T1	T2	L	E	A	B	H1 (Hex)	H2 (Hex)	Orifice	Package Weight (lbs)	Qty. per pack
FB532-18N	<--->	5/32 in. x 1/8 NPT	5/32	0.39	NPT 1/8	M12*1.0p	1.06	0.16	0.37	0.58	9/16	14 mm	0.12	0.2	5
FB14-18N	<--->	1/4 in. x 1/8 NPT	1/4	0.51	NPT 1/8	M14*1.0p	1.22	0.16	0.37	0.67	11/16	17 mm	0.20	0.2	5
FB14-14N	<--->	1/4 in. x 1/4 NPT	1/4	0.51	NPT 1/4	M14*1.0p	1.22	0.16	0.45	0.67	11/16	17 mm	0.20	0.2	5
FB38-14N	<--->	3/8 in. x 1/4 NPT	3/8	0.65	NPT 1/4	M20*1.0p	1.40	0.20	0.45	0.77	15/16	24 mm	0.31	0.5	5
FB38-38N	<--->	3/8 in. x 3/8 NPT	3/8	0.65	NPT 3/8	M20*1.0p	1.40	0.20	0.49	0.77	15/16	24 mm	0.31	0.6	5
FB12-14N	<--->	1/2 in. x 1/4 NPT	1/2	0.81	NPT 1/4	M22*1.0p	1.57	0.20	0.45	0.89	15/16	26 mm	0.39	0.9	5
FB12-38N	<--->	1/2 in. x 3/8 NPT	1/2	0.81	NPT 3/8	M22*1.0p	1.57	0.20	0.49	0.89	15/16	26 mm	0.39	0.9	5
FB12-12N	<--->	1/2 in. x 1/2 NPT	1/2	0.81	NPT 1/2	M22*1.0p	1.57	0.20	0.57	0.89	15/16	26 mm	0.39	0.9	5
Metric Sizes - dimensions in millimeters (mm)															
FB4M-18R	<--->	4 mm x R1/8	4	10.0	R 1/8	M12*1.0p	27.0	4	9.0	14.7	14	14	3.0	0.2	5
FB4M-14R	<--->	4 mm x R1/4	4	10.0	R 1/4	M12*1.0p	29.0	4	11.0	14.7	17	14	3.0	0.3	5
FB6M-18R	<--->	6 mm x R1/8	6	12.0	R 1/8	M14*1.0p	30.2	4	9.0	16.4	17	17	5.0	0.3	5
FB6M-14R	<--->	6 mm x R1/4	6	12.0	R 1/4	M14*1.0p	30.2	4	11.0	16.4	17	17	5.0	0.6	5
FB6M-38R	<--->	6 mm x R3/8	6	12.0	R 3/8	M14*1.0p	31.2	4	12.0	16.4	22	17	5.0	0.6	5
FB8M-18R	<--->	8 mm x R1/8	8	14.0	R 1/8	M16*1.0p	31.4	5	9.0	18.4	19	19	6.0	1.0	5
FB8M-14R	<--->	8 mm x R1/4	8	14.0	R 1/4	M16*1.0p	31.4	5	11.0	18.4	19	19	6.0	1.2	5
FB8M-38R	<--->	8 mm x R3/8	8	14.0	R 3/8	M16*1.0p	32.4	5	12.0	18.4	22	19	6.0	1.2	5
FB8M-12R	<--->	8 mm x R1/2	8	14.0	R 1/2	M16*1.0p	34.4	5	14.0	18.4	24	19	6.0	1.3	5
FB10M-18R	<--->	10 mm x R1/8	10	16.1	R 1/8	M20*1.0p	33.5	5	9.0	19.6	24	24	8.0	1.3	5
FB10M-14R	<--->	10 mm x R1/4	10	16.1	R 1/4	M20*1.0p	33.5	5	11.0	19.6	24	24	8.0	1.3	5
FB10M-38R	<--->	10 mm x R3/8	10	16.1	R 3/8	M20*1.0p	33.5	5	12.0	19.6	24	24	8.0	1.4	5
FB10M-12R	<--->	10 mm x R1/2	10	16.1	R 1/2	M20*1.0p	35.5	5	14.0	19.6	24	24	8.0	1.5	5
FB12M-14R	<--->	12 mm x R1/4	12	19.0	R 1/4	M22*1.0p	38.3	5	11.0	21.9	24	26	10.0	1.5	5
FB12M-38R	<--->	12 mm x R3/8	12	19.0	R 3/8	M22*1.0p	38.3	5	12.0	21.9	24	26	10.0	1.6	5
FB12M-12R	<--->	12 mm x R1/2	12	19.0	R 1/2	M22*1.0p	40.3	5	14.0	21.9	24	26	10.0	1.7	5

Union Hand Valve

NITRA Pneumatic Push-to-Connect union straight manual hand valve bodies are made of a strong thermoplastic (PBT) and have stainless steel tube gripping claws. In the closed (off) position, upstream air pressure is blocked while downstream air pressure is vented to atmosphere. NITRA Polyurethane and Nylon 12 tubing is easily connected by simply inserting the tubing end into the fitting. To release the tubing, press the circular release ring and the tubing can be easily pulled out.

Features:

- Inch and metric sizes available
- Tough thermoplastic bodies and stainless steel tube gripping claws
- Release rings are color coded to differentiate between inch and metric sizes
- In the closed (off) position, upstream air pressure is blocked while downstream air pressure is vented to atmosphere.



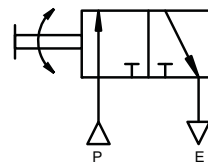
NITRA pneumatic push-to-connect union straight manual hand valve with thermoplastic (PBT) body and stainless steel tube gripping claws. In the closed (off) position, upstream air pressure is blocked while downstream air pressure is vented to atmosphere. For use with polyurethane or nylon tubing. Two valves per package.



Inch Fitting



Metric Fitting



NITRA™ Union Hand Valve																			
Inch Sizes - dimensions in inches (in.)																			
Part No.	Price	Size	ØD1	ØD2	ØP1	ØP2	ØC	N	E	B1	B2	K1	K2	L1	L2	M1	M2	Package Weight (lbs)	Qty. per pack
HVU14	<--->	1/4 in.	1/4	1/4	0.51	0.51	0.64	0.71	1.59	0.66	0.66	0.49	0.49	1.04	1.04	0.32	0.75	0.1	2
HVU38	<--->	3/8 in.	3/8	3/8	0.69	0.69	0.76	0.83	1.59	0.79	0.79	0.56	0.56	1.21	1.21	0.43	0.94	0.2	2
HVU12	<--->	1/2 in.	1/2	1/2	0.83	0.83	0.76	0.83	1.59	0.90	0.90	0.70	0.70	1.35	1.35	0.43	0.94	0.2	2
Metric Sizes - dimensions in millimeters (mm)																			
HVU6M	<--->	6 mm	6	6	12.5	12.5	16.3	18.0	40.3	16.4	16.4	12.3	12.3	26.3	26.3	8.2	19.0	0.1	2
HVU8M	<--->	8 mm	8	8	14.8	16.3	18.0	40.3	18.7	18.7	13.9	13.9	27.9	27.9	27.9	8.2	19.0	0.1	2
HVU10M	<--->	10 mm	10	10	17.5	17.5	19.3	21.2	40.5	20.1	20.1	14.4	14.4	30.9	30.9	10.9	24.0	0.2	2
HVU12M	<--->	12 mm	12	12	20.5	20.5	19.3	21.2	40.5	22.8	22.8	17.6	17.6	34.1	34.1	10.9	24.0	0.2	2

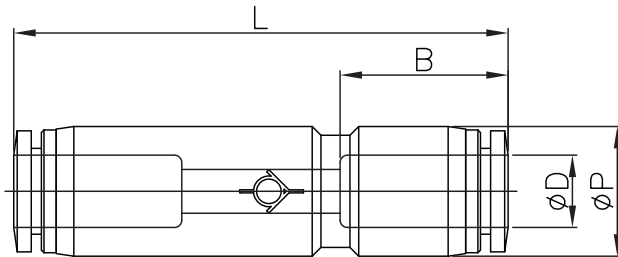
Union Check Valve

NITRA Pneumatic Push-to-Connect union straight check valve bodies are made of a strong thermoplastic (PBT) and have stainless steel tube gripping claws. The check valve allows air flow in one direction and blocks air flow in the reverse direction. NITRA Polyurethane and Nylon 12 tubing is easily connected by simply inserting the tubing end into the fitting. To release the tubing, press the circular release ring and the tubing can be easily pulled out.

Features:

- Inch and metric sizes available
- Tough thermoplastic bodies and stainless steel tube gripping claws
- Release rings are color coded to differentiate between inch and metric sizes
- Allows air flow in one direction and blocks air flow in the reverse direction.

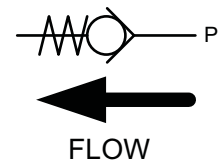
NITRA pneumatic push-to-connect union straight check valve with thermoplastic (PBT) body and stainless steel tube gripping claws. Check valve allows air flow in one direction and blocks air flow in the reverse direction. For use with polyurethane or nylon tubing. Five fittings per package.



Inch Fitting



Metric Fitting



NITRA™ Union Check Valve								
Inch Sizes - dimensions in inches (in.)								
Part No.	Price	Size	øD	øP	L	B	Package Weight (lbs)	Qty. per pack
CVU532	<--->	5/32 in. [4 mm]	5/32	0.41	1.67	0.59	0.1	5
CVU14	<--->	1/4 in.	1/4	0.51	1.91	0.66	0.1	5
CVU38	<--->	3/8 in.	3/8	0.91	2.55	0.79	0.5	5
Metric Sizes - dimensions in millimeters (mm)								
CVU6M	<--->	6 mm	6	12.5	47.5	16.4	0.1	5
CVU8M	<--->	8 mm	8	14.8	56.4	18.7	0.2	5

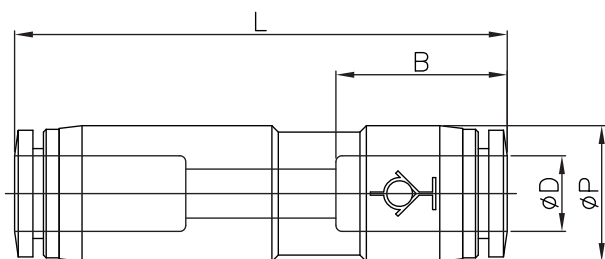
Union Stop Valve

NITRA Pneumatic Push-to-Connect union straight stop valve bodies are made of a strong thermoplastic (PBT) and have stainless steel tube gripping claws. When the downstream tube is removed from the stop valve, upstream air pressure is blocked. NITRA Polyurethane and Nylon 12 tubing is easily connected by simply inserting the tubing end into the fitting. To release the tubing, press the circular release ring and the tubing can be easily pulled out.

Features:

- Inch and metric sizes available
- Tough thermoplastic bodies and stainless steel tube gripping claws
- Release rings are color coded to differentiate between inch and metric sizes
- When the downstream tube is removed from the stop valve, upstream air pressure is blocked.

NITRA pneumatic push-to-connect union straight manual hand valve with thermoplastic (PBT) body and stainless steel tube gripping claws. When the downstream tube is removed from the stop valve, upstream air pressure is blocked. For use with polyurethane or nylon tubing. Five fittings per package.

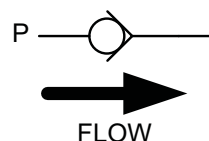


Inch Fitting



Metric Fitting

NITRA™ Union Stop Valve								
Inch Sizes - dimensions in inches (in.)								
Part No.	Price	Size	ØD	ØP	L	B	Package Weight (lbs)	Qty. per pack
SVU532	<--->	5/32 in. [4 mm]	5/32	0.41	1.66	0.59	0.1	5
SVU14	<--->	1/4 in.	1/4	0.51	1.85	0.66	0.1	5
SVU38	<--->	3/8 in.	3/8	0.69	2.29	0.79	0.2	5
SVU12	<--->	1/2 in.	1/2	0.83	2.67	0.90	0.4	5
Metric Sizes - dimensions in millimeters (mm)								
SVU6M	<--->	6 mm	6	12.5	46.0	16.4	0.1	5
SVU8M	<--->	8 mm	8	14.8	53.7	18.7	0.1	5
SVU10M	<--->	10 mm	10	17.5	58.2	20.1	0.2	5
SVU12M	<--->	12 mm	12	20.5	67.1	22.8	0.3	5



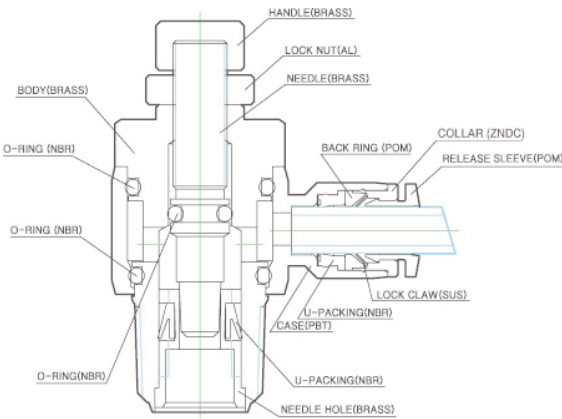
Pneumatic Push-to-Connect Flow Control (Speed Controller) Valves

NITRA Pneumatic Push-to-Connect Flow Control (Speed Controller) Valves provide accurate airflow regulation for precise motion control of pneumatic cylinders. NITRA flow control valve bodies are made of a strong thermoplastic (PBT) and have stainless steel tube gripping claws. Threaded components are made of nickel-plated brass and have pre-applied Teflon thread sealant (O-ring on #10-32 and M5 threads). Flow control valve bodies can be rotated after installation to allow for variations in piping direction. NITRA Polyurethane and Nylon 12 tubing is easily connected by simply inserting the tubing end into the fitting. To release the tubing, press the circular release ring and the tubing can be easily pulled out.

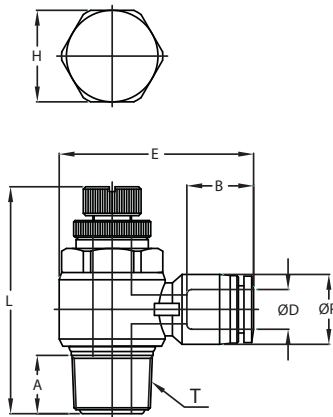
Features

- Meter-in, meter-out and in-line configurations
- Inch and metric sizes available
- NPT and BSPT (R) threads available
- Tough thermoplastic bodies, stainless steel tube gripping claws, nickel-plated threads with pre-applied Teflon sealant (O-ring on #10-32 and M5 threads)
- Bodies can be rotated after installation
- Release rings are color coded to differentiate between meter-in and meter-out
- For use with air only.
- Working pressure: -29.5" Hg to 150 psi.
- Working Temperature 32 to 140°F (0 to 60°C)

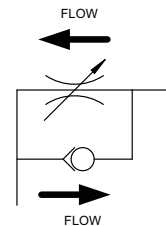
NITRA pneumatic push-to-connect meter-in flow control valve (speed controller) elbow with rotating thermoplastic (PBT) body, nickel-plated brass threads, stainless steel tube gripping claws, and pre-applied Teflon thread sealant (10-32 and M5 threads have O-ring instead of thread sealant). For use with polyurethane or nylon tubing. Two fittings per package.



Flow Control Valve Cut-away Diagram

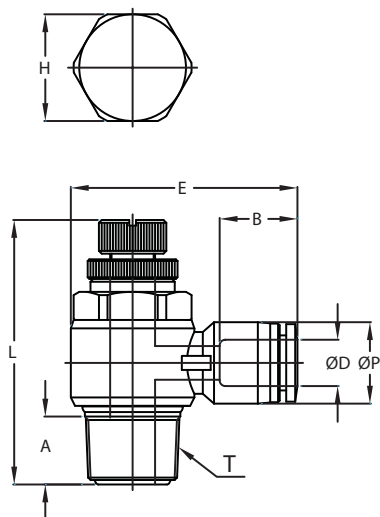


Inch/Metric Flow Control Valve



NITRA™ Elbow Flow Control Valve Meter-In													
<i>Inch Sizes - dimensions in inches (in.)</i>													
Part No.	Price	Size	øD	øP	T	L		E	A	B	H (Hex)	Package Weight (lbs)	Qty. per pack
						Min.	Max.						
FVR532-10N	<--->	5/32 in. x #10-32	5/32	0.41	UNF 10-32	1.06	1.15	1.04	0.14	0.59	5/16	0.1	2
FVR532-18N	<--->	5/32 in. x 1/8 NPT	5/32	0.41	NPT 1/8	1.37	1.57	1.21	0.32	0.59	7/16	0.1	2
FVR14-10N	<--->	1/4 in. x #10-32	1/4	0.51	UNF 10-32	1.06	1.15	1.13	0.14	0.66	5/16	0.1	2
FVR14-18N	<--->	1/4 in. x 1/8 NPT	1/4	0.51	NPT 1/8	1.37	1.57	1.26	0.32	0.66	7/16	0.1	2
FVR14-14N	<--->	1/4 in. x 1/4 NPT	1/4	0.51	NPT 1/4	1.60	1.85	1.41	0.43	0.66	19/32	0.2	2
FVR38-14N	<--->	3/8 in. x 1/4 NPT	3/8	0.69	NPT 1/4	1.60	1.85	1.57	0.43	0.79	19/32	0.2	2
<i>Metric Sizes - dimensions in millimeters (mm)</i>													
FVR4M-M5	<--->	4 mm x M5	4	10.5	M5*0.8p	27.1	29.1	25.4	3.6	14.9	8	0.1	2
FVR4M-18R	<--->	4 mm x R1/8	4	10.5	R 1/8	35.5	40.7	30.5	8.2	14.9	11	0.1	2
FVR6M-M5	<--->	6 mm x M5	6	12.5	M5*0.8p	27.1	29.1	27.8	3.6	16.4	8	0.1	2
FVR6M-18R	<--->	6 mm x R1/8	6	12.5	R 1/8	35.5	40.7	31.3	8.2	16.4	11	0.1	2
FVR6M-14R	<--->	6 mm x R1/4	6	12.5	R 1/4	40.3	46.6	35.3	11.0	16.4	15	0.2	2
FVR8M-14R	<--->	8 mm x R1/4	8	14.5	R 1/4	40.3	46.6	37.4	11.0	18.7	15	0.2	2
FVR8M-38R	<--->	8 mm x R3/8	8	14.5	R 3/8	46.9	54.9	40.4	12.2	18.7	19	0.1	2
FVR10M-14R	<--->	10 mm x R1/4	10	17.5	R 1/4	40.3	46.6	38.8	11.0	20.1	15	0.1	2
FVR10M-38R	<--->	10 mm x R3/8	10	17.5	R 3/8	46.9	54.9	42.1	12.2	20.1	19	0.1	2

Pneumatic Push-to-Connect Flow Control (Speed Controller) Valves



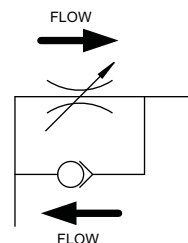
NITRA pneumatic push-to-connect meter-out flow control valve (speed controller) elbow with rotating thermoplastic (PBT) body, nickel-plated brass threads, stainless steel tube gripping claws, and pre-applied Teflon thread sealant (10-32 and M5 threads have O-ring instead of thread sealant). For use with polyurethane or nylon tubing. Two fittings per package.



Inch Fitting



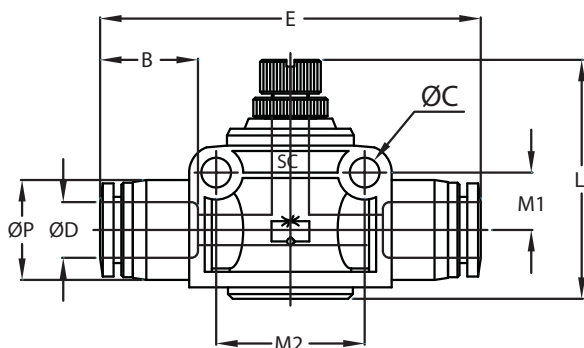
Metric Fitting



NITRA™ Elbow Flow Control Valve Meter-Out													
Inch Sizes - dimensions in inches (in.)													
Part No.	Price	Size	ØD	ØP	T	L		E	A	B	H (Hex)	Package Weight (lbs)	Qty. per pack
						Min.	Max.						
FVS532-10N	<--->	5/32 in. x #10-32	5/32	0.41	UNF 10-32	1.06	1.15	1.04	0.14	0.59	5/16	0.1	2
FVS532-18N	<--->	5/32 in. x 1/8 NPT	5/32	0.41	NPT 1/8	1.37	1.57	1.21	0.32	0.59	7/16	0.1	2
FVS14-10N	<--->	1/4 in. x #10-32	1/4	0.51	UNF 10-32	1.06	1.15	1.13	0.14	0.66	5/16	0.1	2
FVS14-18N	<--->	1/4 in. x 1/8 NPT	1/4	0.51	NPT 1/8	1.37	1.57	1.26	0.32	0.66	7/16	0.2	2
FVS14-14N	<--->	1/4 in. x 1/4 NPT	1/4	0.51	NPT 1/4	1.60	1.85	1.41	0.43	0.66	19/32	0.2	2
FVS38-14N	<--->	3/8 in. x 1/4 NPT	3/8	0.69	NPT 1/4	1.60	1.85	1.57	0.43	0.79	19/32	0.2	2
Metric Sizes - dimensions in millimeters (mm)													
FVS4M-M5	<--->	4 mm x M5	4	10.5	M5*0.8p	27.1	29.1	25.4	3.6	14.9	8	0.2	2
FVS4M-18R	<--->	4 mm x R1/8	4	10.5	R 1/8	35.5	40.7	30.5	8.2	14.9	11	0.2	2
FVS6M-M5	<--->	6 mm x M5	6	12.5	M5*0.8p	27.1	29.1	27.8	3.6	16.4	8	0.2	2
FVS6M-18R	<--->	6 mm x R1/8	6	12.5	R 1/8	35.5	40.7	31.3	8.2	16.4	11	0.2	2
FVS6M-14R	<--->	6 mm x R1/4	6	12.5	R 1/4	40.3	46.6	35.3	11.0	16.4	15	0.2	2
FVS8M-14R	<--->	8 mm x R1/4	8	14.5	R 1/4	40.3	46.6	37.4	11.0	18.7	15	0.3	2
FVS8M-38R	<--->	8 mm x R3/8	8	14.5	R 3/8	46.9	54.9	40.4	12.2	18.7	19	0.3	2
FVS10M-14R	<--->	10 mm x R1/4	10	17.5	R 1/4	40.3	46.6	38.8	11.0	20.1	15	0.4	2
FVS10M-38R	<--->	10 mm x R3/8	10	17.5	R 3/8	46.9	54.9	42.1	12.2	20.1	19	0.4	2

Pneumatic Push-to-Connect Flow Control (Speed Controller) Valves

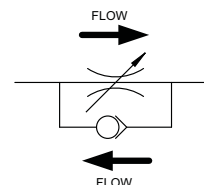
NITRA pneumatic push-to-connect in-line flow control valve (speed controller) elbow with thermoplastic (PBT) body, nickel-plated brass control knob and stainless steel tube gripping claws. For use with polyurethane or nylon tubing. Two fittings per package.



Inch Fitting



Metric Fitting



NITRA™ In-Line

Inch Sizes - dimensions in inches (in.)

Part No.	Price	Size	øD	øP	L		E	øC	B	M1	M2	Package Weight (lbs)	Qty. per pack
					Min.	Max.							
FVU532	<--->	5/32 [4 mm] in. x 5/32 [4 mm]	5/32	0.41	1.04	1.14	1.76	0.13	0.59	0.22	0.61	0.1	2
FVU14	<--->	1/4 in. x 1/4	1/4	0.52	1.32	1.53	1.97	0.17	0.66	0.31	0.80	0.1	2
FVU38	<--->	3/8 in. x 3/8	3/8	0.69	1.60	1.91	2.42	0.17	0.79	0.41	1.11	0.3	2
FVU12	<--->	1/2 in. x 1/2	1/2	0.81	1.79	2.10	2.78	0.17	0.90	0.48	1.26	0.5	2
Metric Sizes - dimensions in millimeters (mm)													
FVU6M	<--->	6 mm x 6 mm	6	12.5	33.5	37.9	49.6	4.3	16.4	8.0	20.4	0.1	2
FVU8M	<--->	8 mm x 8 mm	8	14.8	35.5	41.5	56.4	4.4	18.7	8.5	22.0	0.1	2
FVU10M	<--->	10 mm x 10 mm	10	17.5	40.7	48.7	61.4	4.3	20.1	10.3	28.1	0.3	2
FVU12M	<--->	12 mm x 12 mm	12	20.5	45.0	53.5	70.3	4.4	22.8	12.1	32.0	0.5	2



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