

C-Series Pneumatic Cylinders 3 inch Bore

Double-acting



Part no. C48005D

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

Accessories

CRP-48

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Part No.	Description	Pric
CCB-48	Clevis bracket, anodized aluminum, stainless steel pin, for use with 3 inch bore NITRA C-series compact cylinders	
	Rod eye, 5/8-18 UNF threads, zinc plated, high strength, heat treated alloy	

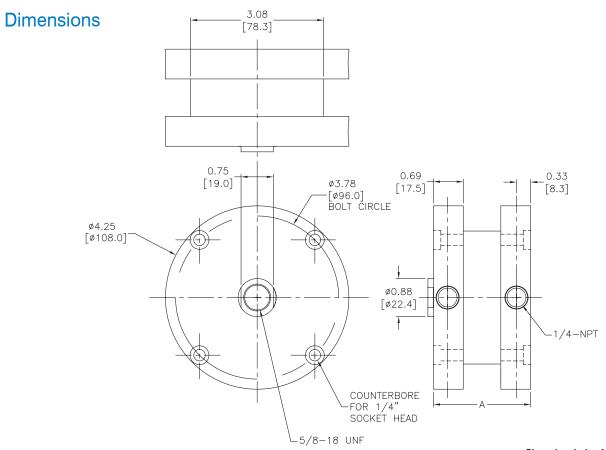
See end of C-Series cylinder section for additional accessory details.

compact cylinders

steel, bronze pivot bushing and nut for

use with 3 inch bore NITRA C-series

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



Dimensions inches [mm]



Pneumatic Cylinders - C-Series

Nitra Pneumatic Compact Air Cylinders

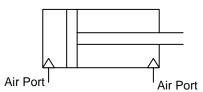
The NITRA Pneumatics C-Series compact cylinders includes bore sizes from 9/16" to 3" and stroke lengths from 1/4" to 4" to meet a broad range of applications where space is limited. These high quality cylinders are constructed with stainless steel bodies and high strength aluminum alloy end caps. To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

Features

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

Operation

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



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

Mounting Options

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





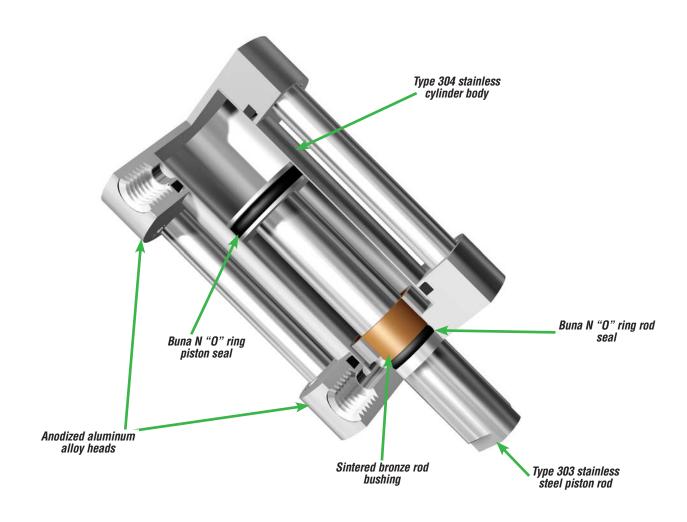
Clevis bracket mount uses a bracket that allows a pivoted mount. Clevis Bracket part number is CCB-40.





C-Series Compact Pneumatic Cylinders

Cylinder Features





C-Series Pneumatic Cylinders Accessories

C-Series Pneumatic Cylinder Accessories							
Part Number	mber Description						
CCB-17	Clevis bracket, anodized aluminum, stainless steel pin, for use with CRP-09, CRP-12 or CRP-17 Rod Eyes	1	0.20				
CCB-40	Clevis bracket, anodized aluminum, stainless steel pin, for use with CRP-24 or CRP-40 Rod Eyes	1	0.30				
CCB-48	Clevis bracket, anodized aluminum, stainless steel pin, for use with CRP-48 Rod Eye	1	0.40				
CRP-09	Rod eye, #8-32 UNC threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 9/16 inch bore NITRA C-series compact cylinders	1	0.10				
CRP-12	Rod eye, #10-32 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 3/4 inch bore NITRA C-series compact cylinders	1	0.10				
CRP-17	Rod eye, 5/16-24 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 1-1/16 inch bore NITRA C-series compact cylinders	1	0.20				
CRP-24	Rod eye, 3/8-24 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 1-1/2 inch bore NITRA C-series compact cylinders	1	0.30				
CRP-40	Rod eye, 1/2-20 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 2 or 2-1/2 inch bore NITRA C-series compact cylinders	1	0.40				
CRP-48	Rod eye, 5/8-18 UNF threads, zinc plated, high strength, heat treated alloy steel, bronze pivot bushing and nut for use with 3 inch bore NITRA C-series compact cylinders	1	0.50				

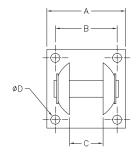


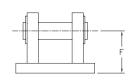
Photo shows C-series pneumatic cylinder with optional clevis bracket and rod eye.

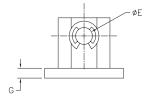
CCB Clevis Brackets



Part No. CCB-40







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

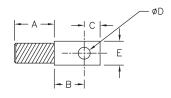
Dimensions inches [mm]



C-Series Pneumatic Cylinders Accessories

CRP Rod Eyes







Part No. CRP-24

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

Dimensions inches [mm]



CPS Series Cylinder Position Switches

		Position Switch Cr	ross Reference Chart
NITRA Switch Type	Cylinder Brand (may fit some of these cylinders)	Photo Example	Groove Illustration
CPS CPSF	NITRA A-Series, D-Series, F-Series		Switch Switch Tie Rod Adapter (CPSA Series) Adapter & Band (CPSB or CPSS Series)
CPS9C	DE-STA-CO Robohand SMC Compact Air		2.53 Min. +/- 0.1 R 2.13 +/- 0.05
CPS9D	Fabco Numatics Rotomation		1.52
CPS9F	NITRA G-Series Fabco Festo Numatics Rotomation		4.4 3.2 4.4 3.2 4.6.5
СРЅ9Н	NITRA E-Series NITRA H-Series		5.0 4.2 R 0.2
CPS9M	Norgren		5.1 +/-0.1 R 3.25
CPS9Q	NITRA G-Series Parker		5.1 — 6.5 —
СРЅ9Т	SMC		1.06 T 3.9 7.2