

COUPLERS Catalog



PCU Production Control Units, Inc. 2280 West Dorothy Ln., Dayton Ohio 45439-1892, USA Phone: 937-299-5594 • FAX: 937-299-3843 • www.pcuinc.com

REGISTERED ISO 9001: 2008, ISO 14001: 2004



We specialize in custom Couplers to suit your application.



www.pcuinc.com

TABLE OF CONTENTS

Couplers

Two-way Shutoff Series 25 Model EPF - (PB005) Series 250 Models 61 & 62 - (PB006) Series 250 Models 64 & 65 - (PB050) Series 250 Models 71 & 72 - (PB004) Series 250 Models 76 & 77 - (PB052) Series 410 Models 66 & 67 - (PB008) Series 410 Models 78 & 79 - (PB068) **Tube Connect Couplers** Series 50 TQC Tube Quick-Connect Sizes (3/16", 1/4", 5/16", & 3/8") - (PB048) Series 91 TQC Tube Quick-Connect Sizes (1/4", 5/16", & 3/8") - (PB009) Series 93 TQC Tube Quick-Connect Sizes (1/4" to 1") - (PB024) Series 98 TQC Tube Quick-Connect Sizes (1/4" to 2") - (PBO42) Series 500 TQC Tube Quick-Connect Sizes (3/16", 1/4", 5/16", & 3/8") - (PB007) 1/4" Schrader Couplers 1/4" Schrader Couplers Models 24 & 88 (PB071) AC SAE J639 Hi and Low-Side Couplers Series HFC-134a BalLoc Model 86 (Low-Side) - (PB015) Series HFC-134a BalLoc Model 87 (Hi-Side) - (PB014) Pneumate Series 100 Model 86 Power Coupler (Vacuum Only) - (PB010) Pneumate Series 101 Model 86 Power Coupler (Vacuum & Charge) - (PB013) Pneumate Series 101 Model 87 Power Coupler (Vacuum & Charge) - (PB011) Series 107 Models 250 and 410 Power Coupler (PB067) Series 107 Model EPF Powered Coupler (PB070) **Pressure Relief Couplers** Series 10 Pressure Bleed Coupler - (PB054) Series 11 Pressure Bleed Coupler - (PB058) Series 250 Evacuate & Charge - (PB040)

Production Control Units, Inc.-Coupler Products

2280 West Dorothy Lane, Dayton, Ohio 45439-1892 USA - Phone (937) 299-5594 - FAX: (937) 299-4843 PCU Web Site: www.pcuinc.com - E-mail: couplers@pcuinc.com

Coupler Application Data Inquiry

Company		Phone # _	
Contact		Fax #	
Address		E-mail	
City	_ State	Country	Zip
Type & brand name for current c	oupler		
Customer product manufactured			
	Type of coup	ler required	
Size and type of tube or port to b	e sealed		
□ Straight □ Swaged	□ Expanded	Other	
Length of tube or port available f	or coupler		
Quantity required			
Delivery due date			
F	low will the cou	ipler be used?	
Refrigerant processing What type of refrigerant? (HFC-134a, HP62, R-22, etc.)			
А	dditional proce	ss information	



Series 25 Model EPF Quick-Connect Coupler

FEATURES

- Easy installation & removal
- Valved shutoff
- Leak-free
- Lightweight
- Corrosion resistant
- Low maintenance



The PCU Series 25/EPF Coupler is designed for easy installation onto Eaton Single Seal Valve (High Flow) Fittings.

Simply pull the collar back and hold, slide the coupler onto the process fitting and release the collar. The 8-ball detent lock provides a quick positive coupling.

Use the PCU Series 25/EPF Coupler for product evacuating, charging, pressure testing; wherever you need a quick connection in appliance manufacturing or processing. The PCU Series 25/EPF Coupler's standard seal material is neoprene. Other seal materials are available for applications using vacuum, refrigerant, air, helium, nitrogen, lubricants or water.

The PCU Series 25/EPF Coupler can be ordered with one of a variety of adapter caps to meet your installation needs.

The PCU Series 25/EPF Coupler is easy to maintain ensuring long term use.

For air operated power coupler, model EPF, contact order department at (1-937-299-5594) and request information on part number 107012-001.

Series 25/EPF Quick-Connect Coupler For "Single Seal Process Fitting"



Item Description Qty		Qty/	Part Number		
item	Description	Unit	1-Neoprene	2-Nitrile	3-Florocarbon
1	Retaining Ring	1		61832	
2	Sleeve	1		61831	
3	O-Ring	1	61834	61848	61854
4	Ring	1		47921	
5	O-Ring	1	61843	61847	61853
6	Stem	1		61886	
7	Body	1		61835	
8	O-Ring	1	61822	61846	61852
9	Ball	8		61833	
10	Retaining Ring	2		66814	
11	Spring	1		61801	
12	Retainer	1		61840	
13	Spring	1		61802	
14	Perch	1		61825	
15	Spacer	1		61837	
16	End Cap	1		See Below	



TECHNICAL SPECIFICATIONS:

- Weight
 7.3 oz (207 G)

 Size
 1-3/16" Dia (1-5/8" Collar) x 1-1/2" "L"

 [30mm Dia (41mm Collar) x 38mm "L"]

 Vacuum/Pressure 25 microns to 500 PSI (35 kg/cm²)
- Minimum proof pressure 5000 PSI (350 kg/cm²)

Temperature range0-250° F (0-121° C)

Standard stock units shipped same day:

- 62PF211 (Neoprene Seals)
- 62PF212 (Nitrile Seals)
- 62PF213 (Fluorocarbon Seals)
- 62PF221 (Neoprene Seals)
- 62PF321 (Neoprene Seals)



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- Leak-Free, Positive Locking
- Quick Connect/ Disconnect
- Valved Shutoff
- Adaptability
- Long Life
- •Repairable, Saves Cost
- Typical 0.7 Cv

APPLICATIONS

- Refrigerants
- Vacuum/Air
- Oil
- Water
- •Mass Spectrometer Applications
- •Helium
- •Nitrogen

Series 250 Models 61 and 62 Two-Way Shutoff Valved Nipples and Couplers



These tough, lightweight PCU Couplers and Nipples utilize heattreated parts for interchangeability and long life. They provide a large unrestricted flow rate for a variety of production uses, while minimizing process material loss during coupling and uncoupling.

An eight (8) ball detent lock provides instant positive coupling. Simply pull back the grooved locking ring on the Coupler, slide the Coupler over the Nipple and push together until the lock ring snaps to it's "lock position".

Because of the unique design of the Series 250 Couplers and Nipple assemblies, they are able to be built using inexpensive O-ring seals which provide positive leak-tight shutoff. They will hold pressure from vacuum to 1000 psig. The standard Series 250 Coupler and Nipple assembly can be built with a variety of seal compounds to satisfy your application. Neoprene compound is generally used for R-22, R404a, R410a and compressed air. Buna-N is generally used for HFC-134a with lubricants and R600a. Other applications, which require oils/lubricants, please contact our Order Department at (1-937-299-5594) for help in selecting the correct compound for your particular application.

The Series 250 Coupler and Nipples complement our Series 50, 500, 91, and 93 Tube Quick Connect Couplers, (TQC) to permit unrestricted flow.



SERVICE BULLETIN

Service Bulletin SB250-61_62 contains general description, spare parts list, and maintenance information.

Standard Stock Units: 61211, 61217, 62211, 62217, 62321





- Leak-Free, Positive Locking
- Quick Connect/ Disconnect
- Valved Shutoff
- Adaptability
- •Long Life
- •Repairable, Saves Cost
- Typical 0.7 Cv

APPLICATIONS

- Refrigerants
- Vacuum/Air
- Oil
- Water
- •Mass Spectrometer Applications
- •Helium
- •Nitrogen

Series 250 Models 64 and 65 Two-Way Shutoff Valved Nipples and Couplers



Models 64 and 65 Series 250 is the same flow and internal components as Models 61 and 62 however it is NOT interchangeable. Use these models when there are two fluids or more which should not be mixed. Models 64 and 65 are nickel plated for color difference from Models 61 and 62 which are black in color.

Model 64 and 65 utilize heat-treated parts for interchangeability and long life. They provide a large unrestricted flow rate for a variety of production uses, while minimizing process material loss during coupling and uncoupling.

An eight (8) ball detent lock provides instant positive coupling. Simply pull back the grooved locking ring on the Coupler, slide the Coupler over the Nipple and push together until the lock ring snaps to it's "lock position". Because of the unique design of the Series 250 Couplers and Nipple assemblies, they are able to be built using inexpensive O-ring seals which provide positive leak-tight shutoff. They will hold pressure from vacuum to 1000 psig.

The standard Series 250 Coupler and Nipple assembly can be built with a variety of seal compounds to satisfy your application. Neoprene compound is generally used for R-22, R404a, R410a and compressed air. Buna-N is generally used for HFC-134a with lubricants and R600a. Other applications, which require oils/lubricants, please contact our Order Department at (1-937-299-5594) for help in selecting the correct compound for your particular application.

The Series 250 Coupler and Nipples complement our Series 50, 500, 91, and 93 Tube Quick Connect Couplers, (TQC) to permit unrestricted flow.



SERVICE BULLETIN

Service Bulletin SB250-64_65 contains general description, spare parts list, and maintenance information.

Standard Stock Units: 64N211, 64N231, 65N211





- Leak-Free, Positive Locking
- Quick Connect/ Disconnect
- Valved Shutoff
- Adaptability

APPLICATIONS

- Refrigerants
- Vacuum/Air
- Oil
- Water
- Mass Spectrometer Applications
- Helium
- Nitrogen

Series 250 Models 71 and 72 Two-Way Shutoff Valved Nipples and Couplers



The Models 71 and 72 Nipple and Coupler assemblies have an improved seal design. Field testing has shown that this design will offer longer life and better compatibility characteristics with blended refrigerants and ester oils. They will provide positive leak-tight shutoff and will hold pressure from vacuum to 1000 psig.

These tough, lightweight PCU Couplers and Nipples utilize heattreated parts for interchangeability and long life. They provide a large unrestricted flow rate (0.7 Cv) for a variety of production uses, while minimizing process material loss during coupling and uncoupling, within a temperature range of 0° to 250°F.

An eight ball detent lock provides instant positive coupling. Simply pull back the groved locking ring on the Coupler, slide the Coupler over the Nipple and push together until the lock ring snaps to it's "lock position". The standard Series 250 Coupler and Nipple assembly is built using neoprene seal material. We recommend our standard products for processing R-22, R410a, R404a, R600a, and compressed air.

If currently using the Series 250 Model 61 Nipple or the Model 62 Coupler, inexpensive kits are available which can easily be retrofitted. This allows you to take advantage of this design improvement.

When vacuum and ester oils are being used please contact our Order Department at (937-299-5594) for help in selecting the correct elastomer for your particular application.

The Series 250 Coupler and Nipples complement our Series 50, 500, 91, and 93 Tube Quick Connect Couplers, (TQC) to permit unrestricted flow.



Rev. 03-11-10

- Leak-Free, **Positive Locking**
- Quick Connect/ Disconnect
- Valved Shutoff
- Adaptability
- Long Life
- Repairable, Saves Cost
- Typical 0.7 Cv

APPLICATIONS

- Refrigerants
- Vacuum/Air
- Oil
- Water
- Mass Spectrometer Applications
- Helium
- Nitrogen

Series 250 Models 76 and 77 **Two-Way Shutoff Valved Nipples and Couplers**

Models 76 and 77 Series 250 is the same as Models 61 and 62 with the exception of the stem. Model 76 nipple stem is flush with the nipple body. Use Flush stem design to insure no loss of pressure by accidentally bumping stem during process. Any Series 250 Models 61 and 62 can be converted to Models 76 and 77 by just changing the stem (stem 77422 for coupler and stem 77424 for nipple).

These tough, lightweight PCU Couplers and Nipples utilize heattreated parts for interchangeability and long life. They provide a large unrestricted flow rate for a variety of production uses, while minimizing process material loss during coupling and uncoupling.

An eight (8) ball detent lock provides instant positive coupling. Simply pull back the grooved locking ring on the Coupler, slide the Coupler over the Nipple and push together until the lock ring snaps to it's "lock position".

Because of the unique design of the Series 250 Couplers and Nipple REGISTERED ISO 9001: 2008, ISO 14001

assemblies, they are able to be built using inexpensive O-ring seals which provide positive leak-tight shutoff. They will hold pressure from vacuum to 1000 psig.

The standard Series 250 Coupler and Nipple assembly can be built with a variety of seal compounds to satisfy your application. Neoprene compound is generally used for R-22, R404a, R410a and compressed air. Buna-N is generally used for HFC-134a with lubricants and R600a. Other applications, which require oils/lubricants, please contact our Order Department at (1-937-299-5594) for help in selecting the correct compound for your particular application.

The Series 250 Coupler and Nipples complement our Series 50, 500, 91, and 93 Tube Quick Connect Couplers, (TQC) to permit unrestricted flow.

SERVICE BULLETIN

Service Bulletin SB250-76_77 contains general description, spare parts list, and maintenance information.

- Leak-Free, Positive Locking
- Quick Connect/ Disconnect
- Valved Shutoff
- Adaptability
- Long Life
- Repairable, Saves Cost
- Typical 1.5 Cv

APPLICATIONS

- Refrigerants
- Vacuum/Air
- Oil
- Water
- Mass Spectrometer Applications
- Helium
- Nitrogen

Series 410 Models 66 and 67 Two-Way Shutoff Valved Nipples and Couplers

These tough, lightweight PCU Couplers and Nipples utilize heattreated parts for interchangeability and long life. They provide a large unrestricted flow rate for a variety of production uses, while minimizing process material loss during coupling and uncoupling.

An eight (8) ball detent lock provides instant positive coupling. Simply pull back the grooved locking ring on the Coupler, slide the Coupler over the Nipple and push together until the lock ring snaps to it's "lock position".

Because of the unique design of the Series 410 Couplers and Nipple assemblies, they are able to be built using inexpensive O-ring seals which provide positive leak-tight shutoff. They will hold pressure from vacuum to 1000 psig. The standard Series 410 Coupler and Nipple assembly can be built with a variety of seal compounds to satisfy your application. Neoprene compound is generally used for R-22, R404a, R410a and compressed air. Buna-N is generally used for HFC-134a with lubricants and R600a. Other applications, which require oils/ lubricants, please contact our Order Department (937-299-5594) for help in selecting the correct compound for your particular application.

The Series 410 Coupler and Nipples complement our Series 500, 91, and 93 Tube Quick Connect Couplers, (TQC) to permit unrestricted flow.

SERVICE BULLETIN

Service Bulletin SB410-66_67 contains general description, spare parts list, and maintenance information.

Standard Stock Units: 66311, 67311

- Leak-Free, Positive Locking
- Quick Connect/ Disconnect
- Valved Shutoff
- Adaptability
- Long Life
- Repairable, Saves Cost
- Typical 1.5 Cv

APPLICATIONS

- Refrigerants
- Vacuum/Air
- Oil
- Water
- Mass Spectrometer Applications
- Helium
- Nitrogen

Series 410 Models 78 and 79 Two-Way Shutoff Valved Nipples and Couplers

Models 78 and 79 Series 410 is the same flow and internal components as Models 66 and 67 however it is NOT interchangeable. Use these models when there are two fluids or more which should not be mixed. Models 78 and 79 are nickel plated for color difference from Models 66 and 67 which are black in color.

These tough, lightweight PCU Couplers and Nipples utilize heattreated parts for interchangeability and long life. They provide a large unrestricted flow rate for a variety of production uses, while minimizing process material loss during coupling and uncoupling.

An eight (8) ball detent lock provides instant positive coupling. Simply pull back the grooved locking ring on the Coupler, slide the Coupler over the Nipple and push together until the lock ring snaps to it's "lock position". Because of the unique design of the Series 410 Couplers and Nipple assemblies, they are able to be built using inexpensive O-ring seals which provide positive leak-tight shutoff. They will hold pressure from vacuum to 1000 psig.

The Series 410 Coupler and Nipple assembly can be built with a variety of seal compounds to satisfy your application. Neoprene compound is generally used for R-22, R404a, R410a and compressed air. Buna-N is generally used for HFC-134a with lubricants and R600a. Other applications, which require oils/ lubricants, please contact our Order Department (937-299-5594) for help in selecting the correct compound for your particular application.

The Series 410 Coupler and Nipples complement our Series 500, 91, and 93 Tube Quick Connect Couplers, (TQC) to permit unrestricted flow.

SERVICE BULLETIN

Service Bulletin SB410-78_79 contains general description, spare parts list, and maintenance information.

Standard Stock Units: 78N317, 79N317

- •Leak-Free, Positive Locking
- Quick Connect
 Disconnect
- Valved Shutoff
- Adaptability
- •1" Straight Tube Length

APPLICATIONS

- Refrigerants
- •Vacuum/Air
- •Oil
- Water
- •Mass Spectrometer Applications
- Helium
- Nitrogen

Series 50 TQC Tube Quick-Connect Coupler For 3/16", 1/4", 5/16" and 3/8" O.D. Tubes

These tough, compact, lightweight PCU couplers utilize heat-treated parts for interchangability and long life, oxide and nickel finishes resist corrosion. They provide a large, unrestricted flow rate for a variety of production uses, while minimizing process material loss during coupling/uncoupling, in a temperature range of 0° to 250° F.

For a valved coupler, the "TQC" Coupler is shown with our Series 250 Nipple as an integral assembly.

The Production Control Units Series 50 "TQC" is designed for easy installation onto the end of straight tubing. Slide the coupler onto the tubing until seated and push down on the mechanical lock (lever) to make a positive seal. A cam-locking device grips uniformly-firmly but gently-without damage to steel, copper, brass or plastic tubing.

The tube seal will accept tubing outof-roundness conditions up to 2%. Long-life seal reduces connector maintenance costs.

STRONG-Holds pressures from 25 microns up to 500 psig, minimum proof pressure 4000 psig.

SAFE-Built-in valve automatically vents system pressure before the connector can be removed from the tube for operator safety. Blow-off or loss of seal connection by accidental bumping is eliminated.

FLEXIBLE-Internal parts are quickly interchangeable allowing the same connector body to fit all four tube sizes.

When vacuum and ester oils are being used, please contact our Order Department at (1-937-299-5594) for help in selection of the correct elastomer for your particular application.

Series 50 TQC Tube Quick-Connect Coupler Assemblies

* Special end cap adapters available at extra cost.

SERVICE BULLETIN

Service Bulletin SB50-1 contains general description, spare parts list, and maintenance information.

** Metric sizes available.

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- Quick Tube Connection
- Automated or Manual Applications
- Low Operating Force
- Applications for Refrigerant, Oil, Vacuum, Air & other Fluids
- Repairable, Saves Costs
- Positive Locking
- For 1/4", 5/16" & 3/8" Tube Sizes
- 1 1/8" Straight Tube Engagement

The Production Control Units Series 91 Tube Quick-Connect (TQC) Coupler is designed for easy installation onto the end of straight tubing either manually or by use of automated equipment.

For manual operation, slide the coupler onto the tubing until seated and pull the sleeve back to make a positive, leak-free seal. To release, simply push the sleeve forward. The field-proven cam locking device grips uniformly-firm but gently without damage to steel, copper, brass or plastic tubing.

The long-life tube seal reduces coupler maintenance costs and can easily be replaced. This seal accepts out-of-roundness conditions up to 2%.

Series 91 TQC Tube Quick-Connect Coupler

The Series 91 TQC holds pressures from 25 microns up to 500 psi, proof pressure 4000 psig.

A built-in valve automatically vents system pressure before the coupler can be removed from the tube for operation safety. Blow off or loss of sealed connections are eliminated.

Five internal parts are quickly interchangeable allowing the same connector body to fit all three tube sizes. This simple interchangeability allows for changing refrigerants and oils.

Seals are available in Neoprene, Nitrile, and Fluorocarbon for specific applications.

SERVICE BULLETIN

Service Bulletin SB91-1 contains general description, spare parts list, and maintenance information.

Manufactured under Patent Number: 5,439,258

- Leak Free,
 Positive Locking
- Quick Connect/ Disconnect
- Valved Shutoff

Adaptability

•1" Straight Tube Length Engagement

APPLICATIONS

- Refrigerants
- •Vacuum/Air
- •Oil
- Water
- •Mass Spectrometer Applications
- Helium
- Nitrogen

The Production Control Units Series 93 T.Q.C. is designed for easy installation onto the end of either straight or belled type tubing. With an engagement length of one (1"), the actual gripping to sealing length is three fourths (3/4") of an inch. Slide the coupler onto the tubing until seated and then push down the camming lever allowing the shuttle to drive forward causing the collet to grip and tubular seal to seal the process tube for the evacuation, charging or pressure testing.

The Series 93 T.Q.C. holds pressures from 25 microns vacuum up to 1000 PSIG with a minimum proof pressure of 4000 PSIG.

These tough compact PCU couplers utilize heat-treated parts for long life and interchangeability. With finishes that resist corrosion. They provide a large, unrestricted flow rate for a variety of production uses while minimizing process material loss during coupling/uncoupling in a temperature range of 0° to 250° F. Safety from accidental blow-off is maintained by the location of the camming lever. The lever is down inside the coupler body and can only be operated by manually overcoming body spring and charge pressure.

The PCU Series 250, 410 or the ISO "B" Nipple is completely serviceable by unscrewing the Nipple from the back side of the coupler. Any other end cap can be used in the same manner.

The tube seal is contained in the collet closer. To replace this seal simply remove the collet, collet closer, and seal. Replace the seal and install components in reverse order.

All Series 93 T.Q.C's are built with Neoprene as the standard elastomer. However, we offer Buna-N, Fluorocarbon, EPDM and many other seal materials to suit your application.

Series 93 Tube Quick-Connect Coupler

Series 93 Tube Quick-Connect Coupler

* PCU will customize to fit your tube size and end cap requirements. Please contact PCU Engineering.

Production Control Units, Inc.

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- Positive Locking
- Tight Seal
- Valve Shutoff
- Adaptability
- •Belled Tubing
- Optional Safety Latch
- Pressure from 25 microns to 1000 PSIG

APPLICATIONS

- Refrigerants
- •Vacuum/Air
- •Oil
- Water
- •Mass Spectrometer Applications
- Helium
- Nitrogen

The Production Control Units Series 98 TQC is designed for easy installation onto belled tubing. Used for evacuation, pressure testing, or refrigeration processing.

Slide the Series 98 Coupler onto the tube until reaching the internal stop. Rotate the handle, driving shuttle forward, causing the tube to be sealed for processing.

These tough PCU couplers utilize heat-treated parts for long life and interchangeability. They provide a large unrestricted flow for a variety of production uses.

The Series 98 TQC is offered with a wide variety of end cap configuration. We recommend the PCU Series 250 or 410 Nipple assembly for best

results. We also offer the ISO "B" nipples for our customers who require this configuration. Contact our Order Department at (1-927-299-5594) for your application requirements.

Series 98

All Series 98 TQC's are built with Buna-N as the standard elastomer. However we offer Neoprene, Fluorocarbon, EPDM and other seal materials to suit your application. The standard seal in the Series 98 may be used in a temperature range of 0 to 250 degrees F.

Optional safety latch provides the secure operation if the coupler handle is accidently rotated to the unlatch position. The coupler remains latched until operator disengages safety latch.

* Please consult PCU Engineering for Custom Made Series 98 to fit your fitting. (Sizes from 3/8" to 2")

- Leak-Free, Positive Locking
- Quick Connect/ Disconnect
- Valved Shutoff
- Adaptability
- 13/16" Straight Tube Engagement
- Long Life
- Repairable, Saves Cost

APPLICATIONS

- Vacuum/Air
- Refrigerants
- Water
- Oil
- Helium
- Nitrogen

Series 500 TQC Tube Quick-Connect Coupler For 3/16", 1/4", 5/16" and 3/8" O.D. Tubes

These tough, compact, lightweight PCU couplers utilize heat-treated parts for interchangeability and long life,oxide and nickel finishes resist corrosion. They provide a large, unrestricted flow rate for a variety of production uses while minimizing process material loss during coupling/uncoupling.

For a valved coupler, the "TQC" Coupler is shown with our Series 250 Nipple as an integral assembly.

The Production Control Units Series 500 "TQC" is designed for easy installation onto the end of straight tubing. Slide the coupler onto the tubing until seated and push down on the mechanical lock (lever) to make a positive seal. Acam-locking device grips uniformly-firmly but gently-without damage to steel, copper, brass or plastic tubing.

The tube seal will accept tubing outof-roundness conditions up to 2%. Long-life seal reduces connector maintenance costs.

STRONG-Holds pressures from 25 microns up to 500 psig, minimum proof pressure 4000 psig.

SAFE-Built-in valve automatically vents system pressure before the connector can be removed from the tube for operator safety. Blow-off or loss of seal connection by accidental bumping is eliminated.

FLEXIBLE-Internal parts are quickly interchangeable allowing the same connector body to fit all four tube sizes.

When vacuum and ester oils are being used, please contact our Order Department (1-937-299-5594) for help in selection of the correct elastomer for your particular application.

SERVICE BULLETIN

Service Bulletin SB500-1 contains general description, spare parts list, and maintenance information.

- •Leak-Free, Positive Locking
- Quick Connect/ Disconnect
- Adaptability
- Long Life
- •Repairable, Saves Cost
- •Typical 0.24 Cv

APPLICATIONS

- Refrigerants
- •Vacuum/Air
- •Oil
- Water
- •Mass Spectrometer Applications
- Helium
- Nitrogen

PN #24051

These tough, lightweight PCU Couplers utilize heat-treated parts for interchangeability and long life. They provide a large unrestricted flow rate for a variety of production uses.

Because of the unique design of the Models 24 and 88 assemblies, they are able to be built using inexpensive O-ring seals which provide positive leak-tight shutoff. They will hold pressure from vacuum to 500 psig. The standard Models 24 and 88 assemblies can be built with a variety of seal compounds to satisfy your application. Neoprene compound is generally used for R-22, R404a, R410a and compressed air. Buna-N is generally used for HFC-134a with lubricants. Other applications, which require oils/lubricants.

PN #88612

For other applications, which require oils/lubricants, or for help in selecting the correct compound for your particular application, please contact our Order Department at (1-937-853-1716).

1/4" Schrader Couplers Models 24 and 88

PN #88222

REGISTERED ISO 9001: 2008, ISO 14001: 2004

1/4" Schrader Couplers Models 24 and 88

* Please contact PCU for 1/4" Schrader valve jaw configuration.

03-11-10

Series HFC-134a BalLoc Model 86 Couplers

FEATURES

- •Quick Connect/ Disconnect
- Minimum Refrigerant Loss
- •Vacuum
- •HFC-134a
- •SAE J639 Compatible

The Production Control Units Series HFC 134a BalLoc Coupler, Model 86, is designed for easy installation onto the SAE J639 low side process fitting. Use the Model 86 Coupler for evacuation or refrigerant charging with de minimus refrigerant loss to atmosphere from the Coupler.

These tough, lightweight PCU Couplers utilize heat-treated parts for long life. A six-ball detent lock provides instant positive coupling. Simply pull back on the locking ring on the Coupler, slide the Coupler over the low side fitting and release the locking ring to achieve a positive, leak free, seal. The PCU Model 86 Coupler compliments our Pneumate Series 101 Model 86 powered Coupler which is used when automatic disconnect is required.

Coupler can be converted to a vented coupler just by changing the stem. Contact our order department for stem or coupler part number.

Contact our Order Department at (937-299-5594) to find out how our PCU Process Couplers can save you time and money.

SERVICE BULLETIN

Service Bulletin **SB134aBL-86LS** contains general description, spare parts list, and maintenance information.

Standard Stock Couplers: 86221

See Product Bulletin PB046 for PCU Standard Test Bottle Fittings.

Series HFC-134a BalLoc Model 87 Couplers

FEATURES

- •Quick Connect/ Disconnect
- Minimum Refrigerant Loss
- •HFC-134a
- SAE J639

The Production Control Units Series HFC 134a BalLoc Coupler, Model 87, is designed for easy installation into the SAE J639 high side process fitting. Use the Model 87 Coupler for evacuation or refrigerant charging with de minimis refrigerant loss to atmosphere from the Coupler.

These tough, lightweight PCU Couplers utilize heat-treated parts for long life. A six-ball detent lock provides instant positive coupling. Simply pull back on the locking ring on the Coupler, slide the Coupler over the low side fitting and release the locking ring to achieve a positive, leak free, seal.

The PCU Model 87 Coupler compliments our Pneumatic Series 101 Model 87 Powered Coupler which is used when automatic disconnect is required.

Contact our Order Department at (1-937-299-5594) to find out how our PCU Process Couplers can save you time and money.

SERVICE BULLETIN

Service Bulletin **SB134aBL-87HS** contains general description, spare parts list, and maintenance information.

Standard Stock Couplers: 87211 or 87221

See Product Bulletin PB046 for PCU Standard Test Bottle Fittings.

- Vacuum Only
- Automatic disconnect capability
- Automatic operation, upon connection to fitting
- High vacuum flow rates
- Air operated
- Lightweight

J639 Low Side Vacuum Only

The Production Control Units Pneumate Powered Coupler is the interface adapter for evacuation systems. The Pneumate Process Coupler is designed for easy installation on to the HFC-134a low side process fittings. Use the Pneumate, Part Number 102000, for evacuation only. With the added benefit of automatic disconnect at cycle completion. For refrigerant charging use our Series 101 Model 86 Powered Coupler, Part Number 109006-001. (See Product Bulletin PB013-CP.

Coupler operation is controlled automatically by the process equipment. The operator only has to locate the Coupler on the process fitting. After cycle completion the process fitting seal is reseated and the coupler disconnects. The clamping mechanism used is the time proven ball lock method. The six hardened steel balls which are constrained in the charge gate body are secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal.

The Pneumate Process Charging Coupler can be easily adapted to all PCU "PLC" or relay controlled charging equipment or application to other competitive evacuation systems. Electrical controlled pendant or mechanical air valve available to suit your application.

Call our Order Department at (1-937-299-5594) to find out how our PCU Process Couplers can save you time and money.

Pneumate Series 100 Model 86 Powered Coupler

STANDARD STOCK PART NUMBER: 102000

TECHNICAL SPECIFICATIONS:	
Weight 1.15 lbs (.5 kg)	Process fitting compatibility SAE J639 Flow Rate
Vacuum range ATM - 10 microns Vacuum flow 2.8 SCFM	Stem extension
Vacuum port fitting	
	Oil compatibility Polyolester or PAG
Air pilot	
Air supply pressure 60 PSIG (4.2 kg/cm ²) Air port fitting 1/4" dia. one touch connectors	PATENTS: This coupler is manufactured under U.S. Patent No. 4,805,417

* Please contact PCU Engineering for custom power couplers to fit your application.

- Evacuation & Charging
- Automatic disconnect capability
- Automatic operation, upon connection to fitting
- High vacuum and refrigerant flow rates
- Air operated
- Lightweight

J639 Low Side Vacuum & Charge

Pneumate Series 101

Model 86 Powered Coupler

The Production Control Units Pneumate Powered Coupler is the interface adapter for evacuation systems. The Pneumate Process Coupler is designed for easy installation on to the HFC-134a low side process fittings. Use the Pneumate Part Number 109006-001, for evacuation or refrigerant charging, with de minimus refrigerant loss to atmosphere from the coupler with the additional benefit of automatic disconnect at cycle completion.

Coupler operation is controlled automatically by the process equipment. The operator only has to locate the Coupler on the process fitting. The process equipment then causes the coupler to clamp, seal, and initiate the cycle including evacuation, vacuum check or refrigerant charging. After cycle completion the process fitting seal is reseated and the coupler disconnects. The clamping mechanism used is the time proven ball lock method. The six hardened steel balls which are constrained in the charge gate body are secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal.

The Pneumate Process Charging Coupler can be easily adapted to all PCU "PLC" or relay controlled charging equipment or application to other competitive evacuation systems. Electrical controlled pendant or mechanical air valve available to suit your application.

Contact our Order Department (1-937-299-5594) to find out how our PCU Process Couplers can save you time and money.

STANDARD STOCK PART NUMBER: 109006-001

TECHNICAL SPECIFICATIONS:	
Weight1.15 lbs (0.5 kg)	Stem extension7.8mm to 8.3mm Process fitting nose seal
Vacuum rangeATM - 10 microns Vacuum flow2.8 SCFM	Process fitting clamp system PCU BalLoc
Refrigerant HFC-134a at 600 PSIG max (42kg/cm ²) Refrig/Vacuum port fitting	Oil compatibility Polyolester or PAG
Air pilotClamp Air Air supply pressure60 PSIG (4.2 kg/cm ²) Air port fitting1/4" dia. one touch connectors Process fitting compatibilitySAE J639 Flow Rate0.41 Cv	

* Please contact PCU Engineering for custom power couplers to fit your application.

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Pneumate Series 101 Model 87 Powered Coupler

FEATURES

- Minimum
 refrigerant loss
- Automatic disconnect capability
- Automatic operation, upon connection to fitting
- High vacuum and refrigerant flow rates
- Air operated
- Lightweight

J639 High Side Vacuum & Charge

Reduce labor content and minimize emission of refrigerant to the atmosphere!

The Production Control Units Pneumate Powered Coupler is the interface adapter for a refrigerant charging or evacuation system. The Pneumate Process Coupler is designed for easy installation on to the HFC-134a high side process fittings. Use the Pneumate for evacuation or refrigerant charging, with de minimus refrigerant loss to atmosphere from the coupler with the additional benefit of automatic disconnect at cycle completion.

Coupler operation is controlled automatically by the process equipment. The operator only has to locate the Coupler on the process fitting. The process equipment then causes the coupler to clamp, seal, and initiate the cycle including evacuation, vacuum check or refrigerant charging. After cycle completion the process fitting seal is reseated and the coupler disconnects. The clamping mechanism used is the time proven ball lock method. The six hardened steel balls which are constrained in the charge gate body are secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal.

The Pneumate Process Charging Coupler can be easily adapted to all PCU "PLC" or relay controlled charging equipment. Application to other equipment, including competitive charging system, can also be accomplished. Electrical controlled pendant or mechanical air valve available to suit your application.

Contact our Order Department at (1-937-299-5594) to find out how our PCU Process Couplers can save you time and money.

STANDARD STOCK PART NUMBER: 102750-001

TECHNICAL SPECIFICATIONS:	
Weight1.15lbs (.5kg)	Process fitting compatibilitySAE J639 Flow Rate0.41 Cv
Vacuum rangeATM - 10 microns Vacuum flow2.8 SCFM	Stem extension7.8mm to 8.3mm Process fitting nose sealMolded Process fitting clamp systemPCU BalLoc
RefrigerantHFC-134a at 600 PSIG max. (42 kg/cm²) Refrigerant/Vacuum port fitting3/8" JIC Flare	Oil compatibilityPolyolester or PAG
Air pilot Clamp Air Air supply pressure	This coupler is manufactured under U.S. Patent No. 4,805,417

* Please contact PCU Engineering for custom power couplers to fit your application.

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- Evacuation & Charging
- Automatic disconnect capability
- •Automatic operation, upon connection to fitting
- High vacuum and fluid flow rates
- Air operated
- Light weight

Model 250

The Production Control Units Series 107 Powered Coupler is the interface adapter for evacuation and charging systems. The Pneumate Process Coupler is designed for easy installation on to Series 250 or Series 410 Nipple.

Coupler operation is controlled automatically by the process equipment. The operator only has to locate the Coupler on the process fitting. The process equipment then causes the coupler to clamp, seal, and initiate the cycle including evacuation, vacuum check or refrigerant charging. After cycle completion the process fitting seal is reseated and the coupler disconnects.

The clamping mechanism used is the time proven ball lock method.

The six hardened steel balls which are constrained in the charge gate body are secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal.

Model 410

The Pneumate Process Charging Coupler can be easily adapted to all PCU "PLC" or relay controlled charging equipment or application to other competitive evacuation systems. Electrical controlled pendant or mechanical air valve available to suit your application.

Contact our Order Department (1-937-299-5594) to find out how our PCU Process Couplers can save you time and money.

Series 107-Models 250 and 410 Powered Coupler

107006-001

107007-001

TECHNICAL SPECIFICATIONS:	
Weight for 250 1 lbs (0.45 kg) Weight for 410 1.55 lbs (0.7 kg)	Process fitting compatibility Series 250 or 410 Nipple
Vacuum range ATM - 10 microns	Flow Rate for 410 1.08 Cv
Fluid/Vacuum port fitting for 4101/2" JIC Flare	Process fitting nose sealO - R i n g Process fitting clamp systemPCU BalLoc
Air pilotClamp Air Min Air supply pressure 70 PSIG (4.9 kg/cm²)	Standard Seal compooundBuna-N (Nitrile)
Air port fitting 1/4" dia. one touch connectors	Oil compatibilityPolyolester or PAG

* Please contact PCU Engineering for custom power couplers to fit your application.

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- Evacuation & Charging
- •Automatic disconnect capability
- •Automatic operation, upon connection to fitting
- High vacuum and fluid flow rates
- •Air operated
- •Light weight
- •Diesel Prime System

The Production Control Units Series 107 Powered Coupler is the interface adapter for Evacuation and Fluid Charging Systems. The Pneumate Process Coupler is designed for easy installation on to Eaton Single Valved (High-Flow) Fitting.

Coupler operation is controlled automatically by the process equipment. The operator only has to locate the Coupler on the process fitting. The process equipment then causes the coupler to clamp, seal, and initiate the cycle including evacuation, vacuum check or refrigerant charging. After cycle completion the process fitting seal is reseated and the coupler disconnects.

The clamping mechanism used is the time proven ball lock method.

The six hardened steel balls which are constrained in the charge gate body are secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal.

The Pneumate Process Charging Coupler can be easily adapted to all PCU "PLC" or relay controlled charging equipment or application to other competitive evacuation systems. Electrical controlled pendant or mechanical air valve available to suit your application.

For manual coupler see product bulletin PB005.

Contact our Order Department (1-937-299-5594) to find out how our PCU Process Couplers can save you time and money.

107012-001

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TECHNICAL SPECIFICATIONS:	
Weight for EPF 1 lbs (0.45 kg)	Process fitting compatibility Eaton 3036C or E03024A
Vacuum range	Flow Rate for EPF 0.6 C v
Fluid/Vacuum port fitting for 2503/8" JIC Flare	Process fitting nose sealO - R i n g Process fitting clamp systemPCU BalLoc
Air pilotClamp Air Min. Air supply pressure70 PSIG (4.9 kg/cm ²) Air port fitting 1/4" dia. one touch connectors	Standard Seal compooundBuna-N (Nitrile)

* Please contact PCU Engineering for custom power couplers to fit your application.

Series 10 Pressure Bleed Coupler

FEATURES

- Minimal connection force
- Manual operation, upon connection to fitting
- Air operated poppet valve
- Lightweight

The series 10 coupler is the interface adapter for pressure bleed recovery. When a system is under pressure with helium or another gas, manually clamp the series 10 coupler onto the fitting, and start cycle. System controls will automatically apply air pressure to discharge system. When cycle is complete, the operator will remove BalLoc coupler by pulling on sleeve to release BalLoc Clamping.

The manual clamping mechanism used is the time proven BalLoc method. The eight hardened steel balls which are constrained in the charge gate body are secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal.

The Series 10 is designed to operate with helium tracer gas Systems. Tools with automatic clamping are available. Please contact PCU Engineering for further information.

Save money with the PCU Series 10 Charging Tool. Contact our Order Department at (1-937-299-5594) with your application and equipment specifications.

* For other configurations and multiple poppet valves, please contact PCU Engineering for dimensions and availability.

Series 10	Stem	PCU P/N	Coupler Kit
Model 250	Standard	102100	462-102100
Model 252	Standard	102358	462-102358
Model 253	Standard	102140	462-102140
Model 250	0.150" Extended	102362	462-102362

* Contact PCU Engineering for custom series 10 to meet your application.

TECHNICAL SPECIFICATIONS:

Weight1.9 lbs (0.86 kg)Vacuum range0-760 TORR (0-760 mmHg)Maximum Bleed Pressure@ 70 PSIDischarge port1/2" JIC flareManual BalLoc Coupler. See chart for coupler P/NAir supply pressure70 PSIG (4.9 kg/cm²)

Air port fittings1/4" dia.	one touch connectors
Coupler flow capacity	0.94Cv (Series 250)
Process fitting nose seal	O-Ring
Process fitting clamp system	PCU BalLoc

Series 11 Vacuum Coupler

FEATURES

- •Minimal connection force
- •Manual operation, upon connection to fitting
- •Air operated poppet valve
- Lightweight

The series 11 coupler is the interface adapter for vacuum applications that require independent stem operation. Manually clamp the series 11 coupler onto the fitting, and start cycle. System controls will automatically apply air pressure to evacuate system. When cycle is complete, the operator will remove BalLoc coupler by pulling on sleeve to release BalLoc Clamping.

The manual clamping mechanism used is the time proven BalLoc method. The eight hardened steel balls which are constrained in the charge gate body are secured onto the ball groove taper on the process fitting by the locking sleeve. Securing the balls on the taper assures positive force on the nose seal.

The Series 11 is designed to operate with helium tracer gas Systems. Tools with automatic clamping are available. Please contact PCU Engineering for further information.

Save money with the PCU Series 11 Charging Tool. Contact our Order Department at (1-937-299-5594) with your application and equipment specifications.

* Contact PCU Engineering for custom series 11 to meet your application.

Weight	1.25 lbs (0.57 kg)
Vacuum range 0–760	TORR (0–760 mmHg)
Discharge port	
Manual BalLoc Coupler	
Air supply pressure	70 PSIG (4.9 kg/cm ²)
Air port fittings1/4" dia.	one touch connectors

Coupler flow capacity 0.76Cv (coupler only) Process fitting nose sealO-Ring Process fitting clamp systemPCU BalLoc

Series 250 Evacuate & Charge Coupler

FEATURES

- •No Vacuum or Charge Media Loss
- Quick Connect
- Safety Shutoff
- Adaptability
- Mates to Series
 250 Nipple

APPLICATIONS

- •Vacuum/Air
- Helium
- Nitrogen

With the operating lever in the closed (down) position, the operator can connect the tool to the process nipple by pulling back on the tool sleeve and engaging the nipple.

After connecting to the nipple, the operator opens the flow passage and shutoff valve by opening the lever and rotating it in the "up" position. This action locks the tool onto the process nipple preventing release of the tool during processing. When processing is complete, the operator closes the flow passage and shutoff valve by rotating the lever into the "down" position. The tool may then be removed from the process nipple.

STANDARD STOCK PART NUMBER: 46211

TECHNICAL SPECIFICATIONS:

Weight 12.25 oz Pressure25 microns to 500 PSIG	Process fitting compatibility *
ORDER PART NUMBER:	Process fitting clamp system PCU BalLo
45635 Buna N (Nitrile) Seals	* Compatibility with other fittings are available. Please contact PCU Engineering.
46211Neoprene Seals	
46680 Fluorocarbon Seals	This coupler is manufactured under U.S. Patent No. 5,074,332

PCU can customize to meet your application.

Production Control Units, Inc.

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WE SPECIALIZE IN CUSTOM COUPLERS & TOOLING TO SUIT YOUR APPLICATION.

Series 25	Series 86	Series 87	Series 91
		A REAL PROPERTY OF	At a second
Series 93	Series 98	Series 100 & 101	Series 109
		COLUMN T	
Series 250	Series 410	Series 500	Series 250 Evac & Charge
	A REAL PROPERTY OF		
Series 13000	Series 104	Series 106	Series 106 Adapter
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