



## Safety

Dixon's couplings and retention devices are designed to work safely for their intended use. The selection of the proper hose, coupling and retention device, and the proper application of the coupling to the hose are of utmost importance.

Users must consider the size, temperature, application, media, pressure and hose and coupling manufacturer's recommendations when selecting the proper hose assembly components. Dixon recommends that all hose assemblies be tested in accordance with the Association for Rubber Products Manufacturer's (ARPM) recommendations and be inspected regularly (before each use) to ensure that they are not damaged or have become loose. Visit [ARPMINC.com](http://ARPMINC.com) for more information.

Where safety devices are integral to the coupling, they must be working and utilized. The use of supplementary safety devices such as safety clips or safety cables are recommended.

If any problem is detected, couplings must be removed from service immediately.

Dixon is available to consult, train and recommend the proper selection and application of all fittings we sell. We strongly recommend that distributors and end users make use of Dixon's Testing and Recommendation Services. Call 877.963.4966 or click [dixonvalve.com](http://dixonvalve.com) to learn more.

## The Importance of Whip Hose

The constant vibration created by air tools, like air drills and pavement breakers, is destructive to air hose couplings, especially the quick-acting type. To provide a safer working environment, connect one end of a 3' to 10' length of air hose to the tool using Dixon's No. 3500 Steel Nipple. This nipple is designed to specifically handle vibration applications. Connect the other end of hose to the air supply using the standard quick-acting coupling. The Whip Hose should remain permanently connected to the tool.

## OSHA Regulations

**ASME Air Receiver Manifold-**  
1910.169; 1926.306  
**King Safety Cable-**  
1926.302 (b1)  
**Air King Safety Clip-**  
1926.302 (b2)

**Safety Check Valve-**  
1926.302 (b7)  
**Safety Vented Ball Valve-**  
1910.147

*The regulations may be viewed in full on the OSHA website, [osha.gov](http://osha.gov). Please check the website for updates.*

## Installation and Inspection Procedures

### Procedure # 1000

Boss clamp selection

### Procedure # 2000

Installation of Boss 2 bolt clamp

### Procedure # 2001

Installation of Boss 4 bolt clamp



Coupling Procedures



Dixon Customer Service

### Procedure # 2300

Installation of King Cable Safety Cable

### Procedure # 2306

Crimping Unirange, Air King, Dix-Lock and Dual-Lock couplings

### Procedure # 3001

Bolt Clamp Inspection



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YouTube Videos

Scan me with your Smart Phone.

No reader?

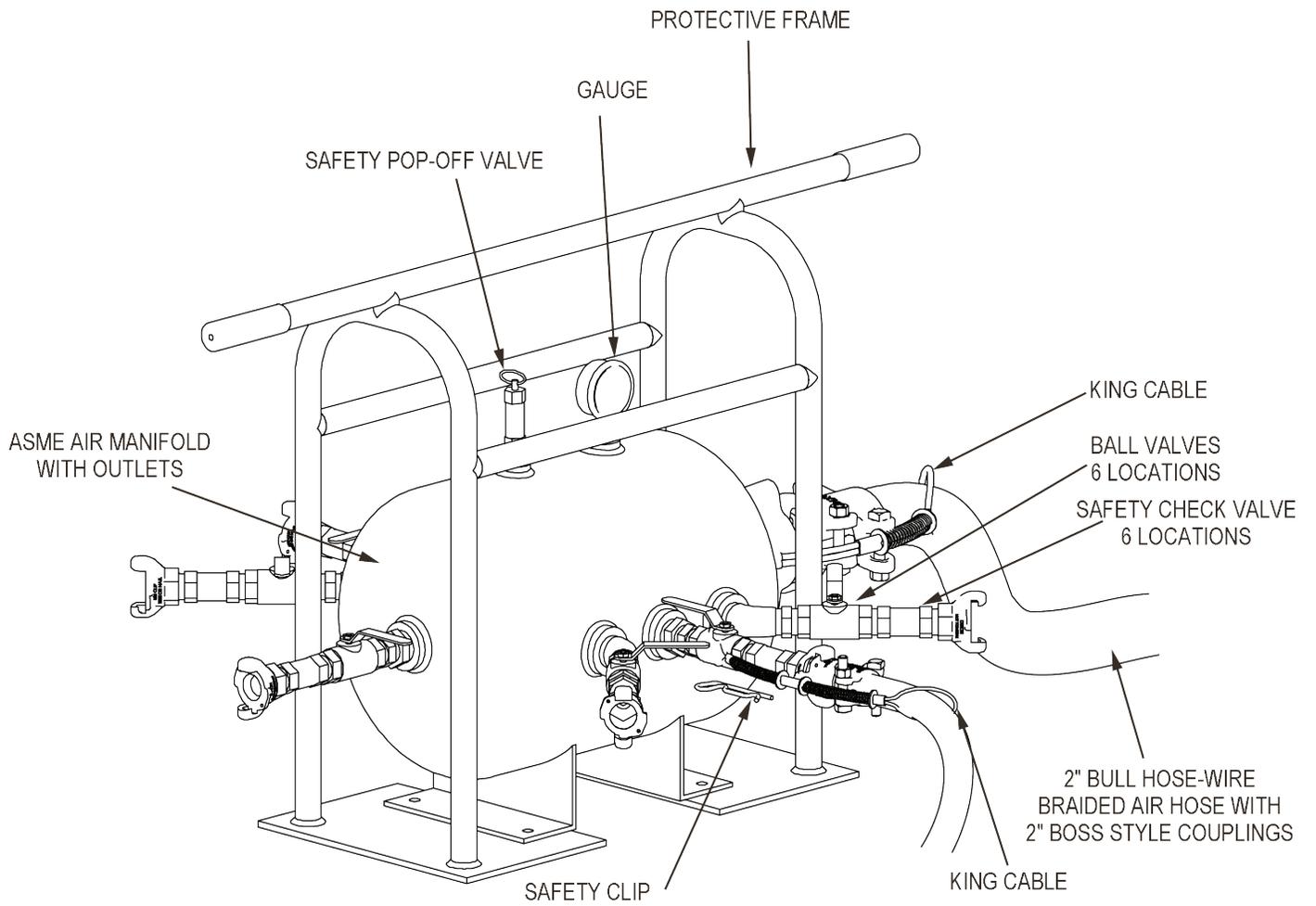
Download a free QR-Code 2D barcode reader.  
[mobile-barcodes.com/qr-code-software/](http://mobile-barcodes.com/qr-code-software/)

*A printed copy of the complete Installation and Inspection Procedures Manual is available upon request.*

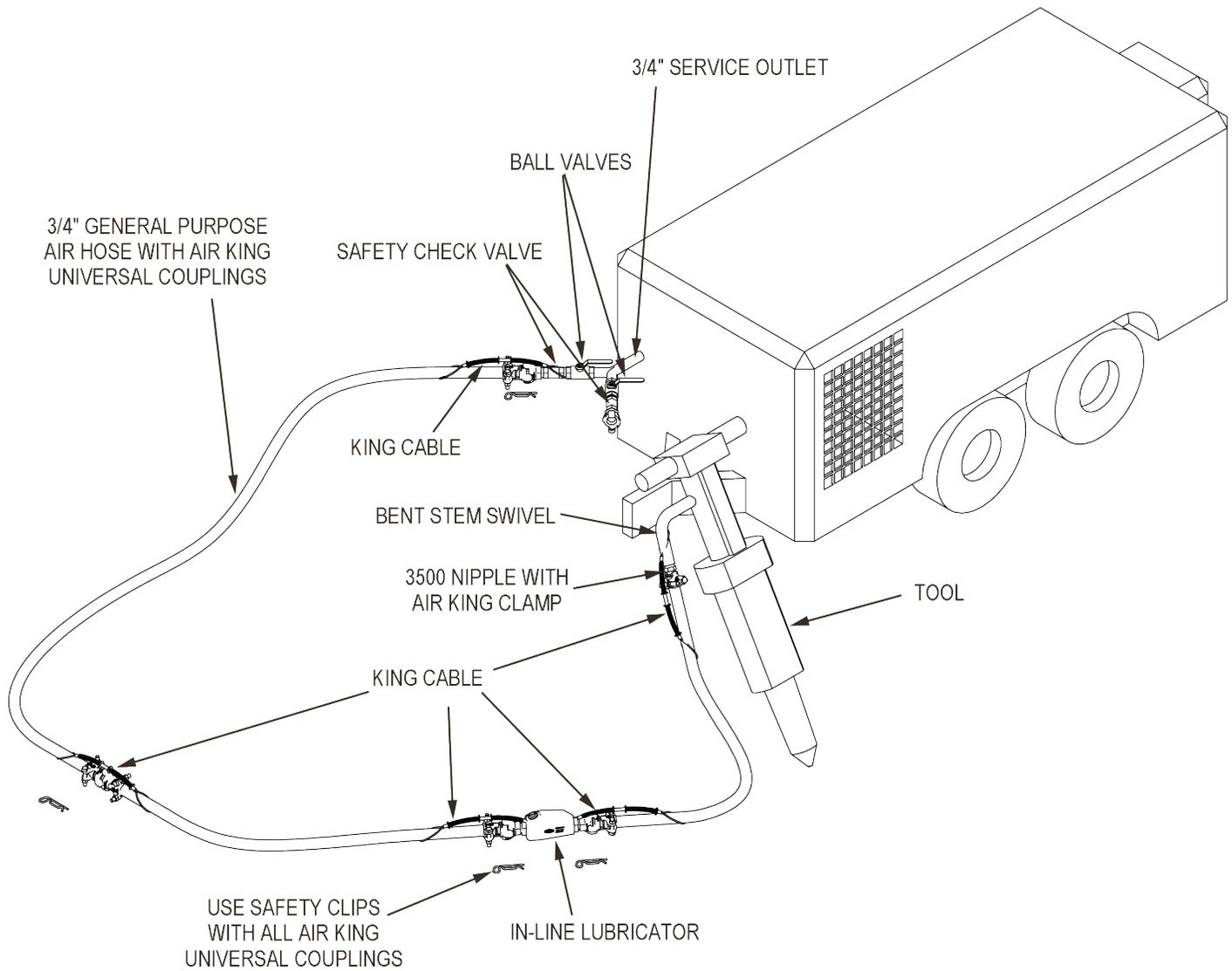
**All dimensions are nominal.**

**All package quantity shown is optional.**

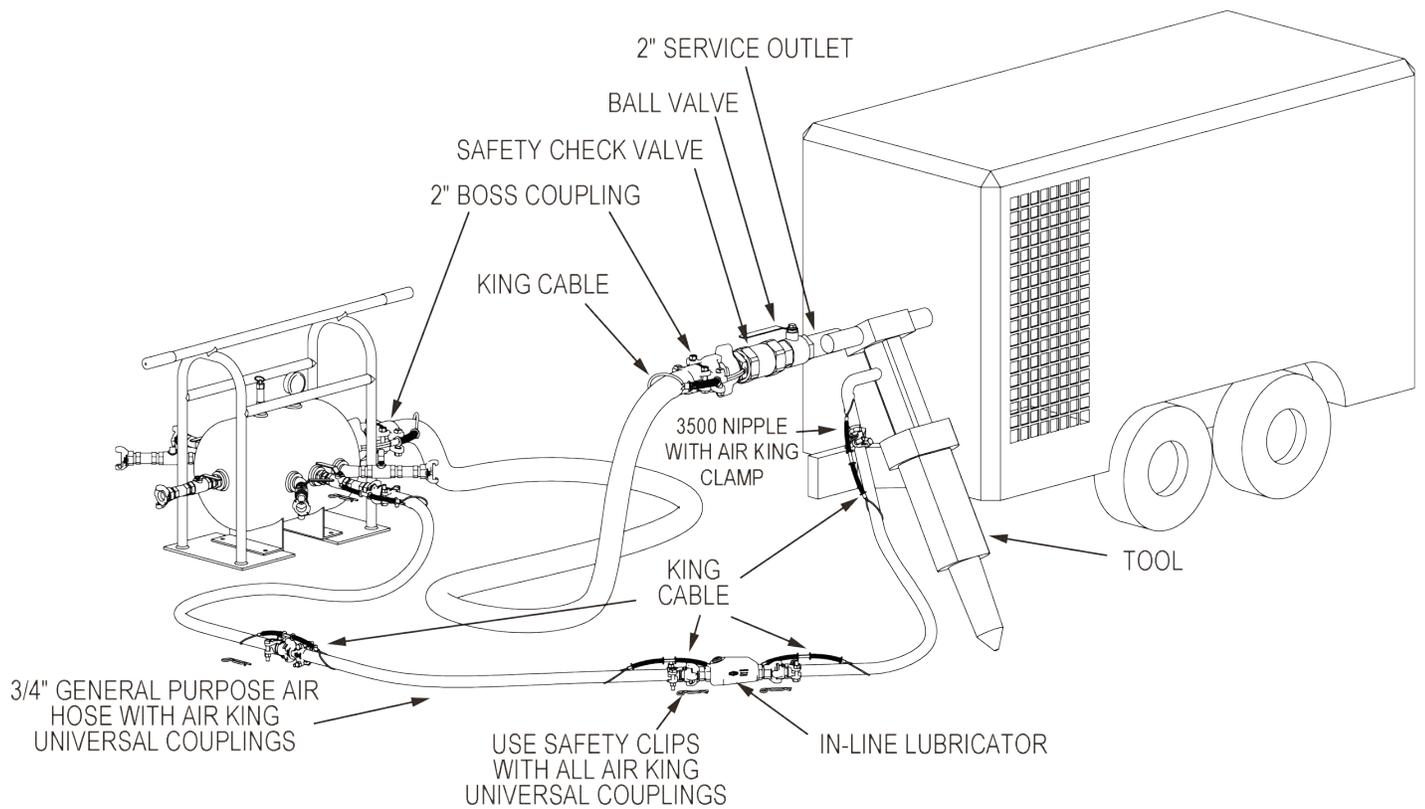
# Detailed view of manifold assembly



# Compressor 125 CFM



# Compressor **600 CFM**



## Air-King

# Universal Couplings

*Dixon Air King couplings are recommended for use on virtually any type of pneumatic equipment.*

### Service:

- The maximum recommended working pressure for Dixon Air King is **150 PSI** at ambient temperature (70°F).
- for air and water service only.

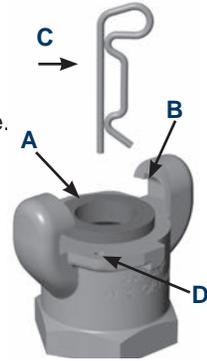


**Warning: Not to be used for steam.**

### Features:

- A universal head that is identical for all parts in the 1/4" to 1" range. With this head, any Dixon fittings within that range can be connected regardless of hose shank or thread size.
- Couplings with optional ferrules permanently attached are provided ready to install.
- **Safety** - There are three safety features built into every Dixon Air King:

1. Washer design (A) – Dixon AWR4 washers supplied with every Air King are designed to seal up to 150 PSI. The washer design helps keep the coupling together while pressurized.
2. Internal lug design (B) – Cast inside each Air King lug is a ninety-degree step that locks with an opposite step on the outside of the adjoining Air King part. These step-locks provide additional holding power to keep the Air King connected up to its **150 PSI** rating at **70° F** ambient temperature.
3. Safety Clip (C) – Unexpected twisting of hose assemblies can occur during use. To eliminate the possibility of accidentally disconnecting, each Air King comes with a Safety Clip. This clip is designed to be inserted into the locking holes (D) on the fittings. The use of a Safety Clip assures the users that the fittings have been properly connected.



### Connecting:

- Push two couplings together and turn the one in your right hand until they seat.
- Insert an Air King safety clip through the hole in the flanged area of the head. If a safety clip is not available, use a cotter pin or wire type retainer. Lanyards (not pictured, see page 9) are available separately to fasten the Safety Clip to the locking head.

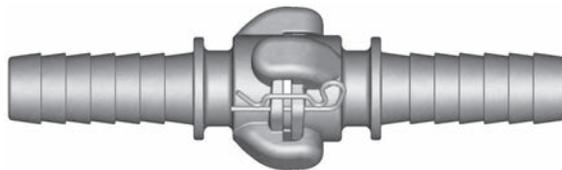
### Disconnecting:

- Remove the safety clip, cotter pin or wire. Press the couplings together and turn the one in your right hand until they unseat. **Never attempt to disconnect any hose while pressure is in the line.**



### Interchange:

- Although Air King may couple with other manufacturers' fittings, **we do not recommend their use with other products.** Not all universal locking heads are made to the same standard.



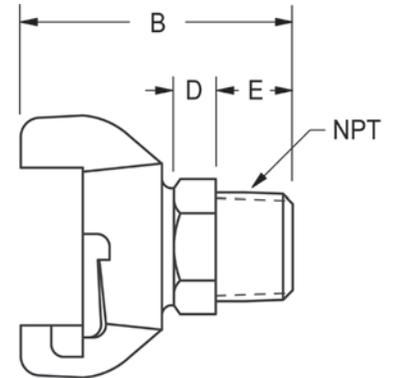
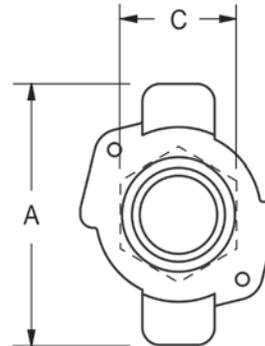
**Air King meets pressure requirements as specified in Commercial Item Description A-A-59553 that supersedes Mil Spec. WWC-633D.**

**Male NPT Ends**

**Features:**

- male NPT thread with hex for a wrench
- available in iron, brass or 316 stainless steel
- available in sizes 1/4" to 1", 1/4" not available in stainless steel

Size	Iron Part #	Opt Qty	Brass Part #	Opt Qty	316 Stainless Steel Part #
1/4"	<b>AMB1</b>	25	<b>ABB1</b>	25	---
3/8"	<b>AMB</b>	25	<b>ABB</b>	25	<b>RAMB</b>
1/2"	<b>AM2</b>	50	<b>AB2<sup>1</sup></b>	50	<b>RAM2</b>
3/4"	<b>AM7</b>	50	<b>AB7<sup>1</sup></b>	50	<b>RAM7</b>
1"	<b>AM12</b>	50	<b>AB12<sup>1</sup></b>	50	<b>RAM12</b>



**Dimensions**

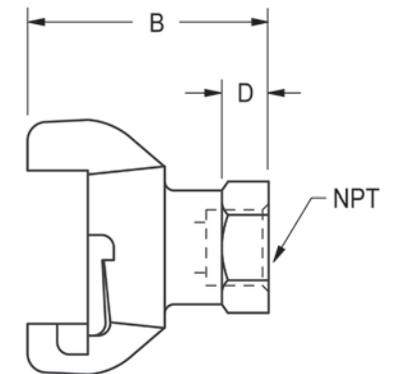
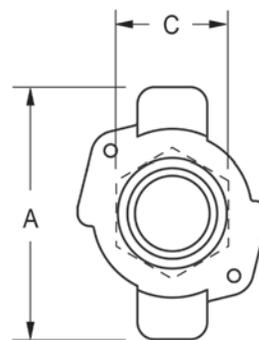
Size	A	B	C	D	E	NPT
1/4"	2-1/2"	2-9/16"	1"	9/16"	5/8"	1/4"
3/8"	2-1/2"	2-9/16"	1"	9/16"	5/8"	3/8"
1/2"	2-1/2"	2-11/16"	1-1/8"	1/2"	3/4"	1/2"
3/4"	2-1/2"	2-13/16"	1-3/8"	9-16"	13/16"	3/4"
1"	2-1/2"	2-13/16"	1-1/2"	3/8"	13/16"	1"

**Female NPT Ends**

**Features:**

- female NPT thread with hex for a wrench
- available in malleable iron, brass or 316 stainless steel
- available in sizes 1/4" to 1", 1/4" not available in stainless steel

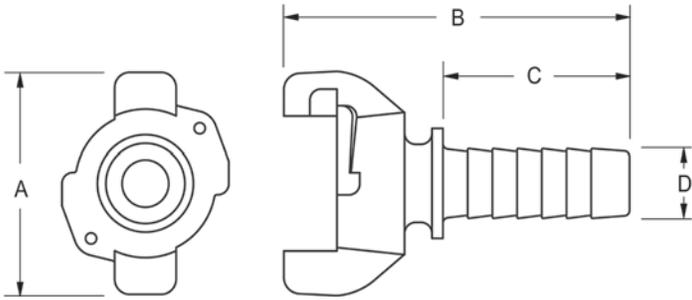
Size	Iron Part #	Opt Qty	Brass Part #	Opt Qty	316 Stainless Steel Part #
1/4"	<b>AMC1</b>	25	<b>ABC1</b>	25	---
3/8"	<b>AMC</b>	25	<b>ABC</b>	25	<b>RAMC</b>
1/2"	<b>AM3</b>	50	<b>AB3<sup>1</sup></b>	50	<b>RAM3</b>
3/4"	<b>AM8</b>	50	<b>AB8<sup>1</sup></b>	50	<b>RAM8</b>
1"	<b>AM13</b>	50	<b>AB13<sup>1</sup></b>	50	<b>RAM13</b>



**Dimensions**

Size	A	B	C	D	NPT
1/4"	2-1/2"	2-7/16"	1-1/8"	3/8"	1/4"
3/8"	2-1/2"	2-7/16"	1-1/8"	3/8"	3/8"
1/2"	2-1/2"	2-7/16"	1-1/8"	3/8"	1/2"
3/4"	2-1/2"	2-7/16"	1-7/16"	3/8"	3/4"
1"	2-1/2"	2-1/16"	1-5/8"	3/8"	1"

## Hose Ends



### Features:

- available in iron, brass or 316 stainless steel
- available in sizes 3/8" to 1", 5/8" not available in stainless steel

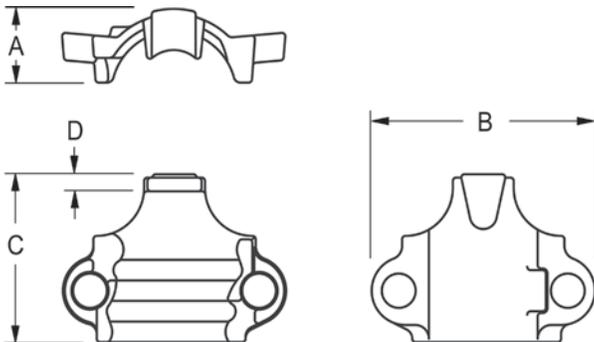
Size	Iron Part #	Opt Qty	Brass Part #	Opt Qty	316 Stainless Steel Qty
3/8"	<b>AMH</b> <sup>1</sup>	25	<b>ABH</b>	25	<b>RAMH</b>
1/2"	<b>AM1</b>	50	<b>AB1</b> <sup>1</sup>	50	<b>RAM1</b>
5/8"	<b>AM5</b>	50	<b>AB5</b>	50	---
3/4"	<b>AM6</b>	50	<b>AB6</b> <sup>1</sup>	50	<b>RAM6</b>
1"	<b>AM11</b>	50	<b>AB11</b> <sup>1</sup>	50	<b>RAM11</b>

<sup>1</sup> may be used with Air King ferrules

### Dimensions

Size	A	B	C	D
3/8"	2-1/2"	3-7/16"	1-5/8"	7/16"
1/2"	2-1/2"	3-7/16"	1-5/8"	17/32"
5/8"	2-1/2"	4-1/4"	2-7/16"	11/16"
3/4"	2-1/2"	4"	2-1/16"	25/32"
1"	2-1/2"	4-25/32"	2-11/16"	1-1/16"

## Clamps



### Features:

- Air King clamps should be used on all Air King shank fittings
- clamp fingers engage on the collar behind the universal head to anchor the coupling to the hose
- the ridges on the underside provide additional retention
- available in zinc plated iron in sizes 3/8" to 1"

Size	Hose OD		Plated Iron Part #	Opt Qty	Torque <sup>1</sup>
	From:	To:			
3/8"	44/64"	56/64"	<b>CD</b> <sup>3</sup>	100	6
1/2"	1"	1-12/64"	<b>A4</b>	50	6
3/4"	1-8/64"	1-20/64"	<b>A9</b> <sup>3</sup>	50	21
1"	1-20/64"	1-32/64"	<b>A10</b> <sup>2,3</sup>	50	21
1"	1-32/64"	1-52/64"	<b>A14</b>	50	21

<sup>1</sup> recommended torque rating in lbs.

<sup>2</sup> can be used with **AM6** and **AM11**

<sup>3</sup> global investment cast carbon steel

**Note:** Torque values for clamps are based on dry bolts.

The use of lubricant on bolts will adversely effect clamp performance.



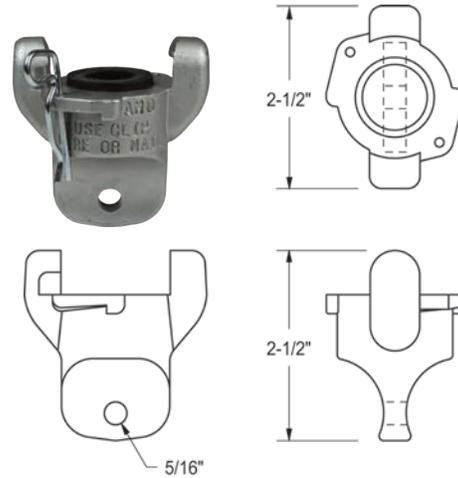
### Dimensions

Size	A	B	C	D
3/8"	17/32"	1-11/16"	1-7/16"	1/8"
1/2"	25/32"	2-1/16"	1-17/32"	5/32"
3/4"	7/8"	2-13/16"	1-21/32"	1/8"
1"	1"	2-19/32"	1-15/16"	9/32"
1"	3/4"	3-1/32"	2-1/4"	5/32"

**Blank Ends**

**Features:**

- Blank end fittings have no outlet and are used to block the line at any coupling point.
- The end opposite the coupling head is flat, with an eye for a chain to secure the fitting when not in use.
- available in iron, brass and 316 stainless steel



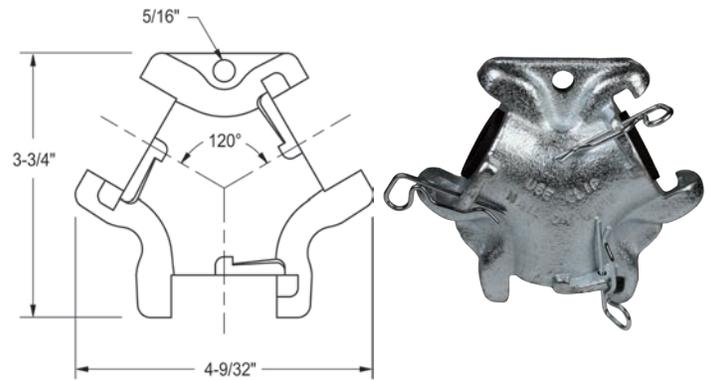
Iron Part #	Opt Qty	Brass Part #	Opt Qty	316 Stainless Steel Part #
<b>AM0</b>	25	<b>AB0<sup>1</sup></b>	25	<b>RAM0</b>

<sup>1</sup> global investment cast

**Triple Connections**

**Features:**

- Triple connection consists of three universal couplings that provide an extra outlet when connected to the line.
- available in iron or brass



Iron Part #	Opt Qty	Brass Part #	Opt Qty
<b>AM10</b>	25	<b>AB10<sup>1</sup></b>	25

<sup>1</sup> global investment cast

**Air King Safety Pins, Clips, Lanyards and Washers**

The use of an Air King safety clip or wire type retainer is necessary to ensure the couplings will not become accidentally disconnected. The clip will not go through the locking holes unless the couplings are locked in place. Only one safety clip or wire type retainer is required for each assembly.



**Standard Safety Clips**

**Features:**

- same size for all coupling sizes

Wire Diameter	Part #	Pkg Qty
.080	<b>AC1</b>	25



**Air King Safety Pins**

**Features:**

- heavy duty, oversized

Wire Diameter	Part #
.058	<b>AKSP1</b>
.091	<b>AKSP25</b>



**Lanyards**

**Features:**

- same size for all coupling sizes
- synthetic cord

Part #	Pkg Qty
<b>ACL8</b>	25



**Features:**

- breaking strength: 160 lbs.
- overall length: 7" eye to eye

304 Stainless Part #
<b>LR7</b>



**Stainless Steel Clips**

**Features:**

- same size for all coupling sizes

Wire Diameter	Part #
.072	<b>AC7</b>



**Features:**

- 2 lug couplings use the same size washer (AWR4, AWS6)
- 4 lug couplings use the same size washer (AWR14)
- rubber temperature range: -20°F to 160°F
- neoprene temperature range: -20°F to 190°F
- neoprene is oil resistant

**Washers**

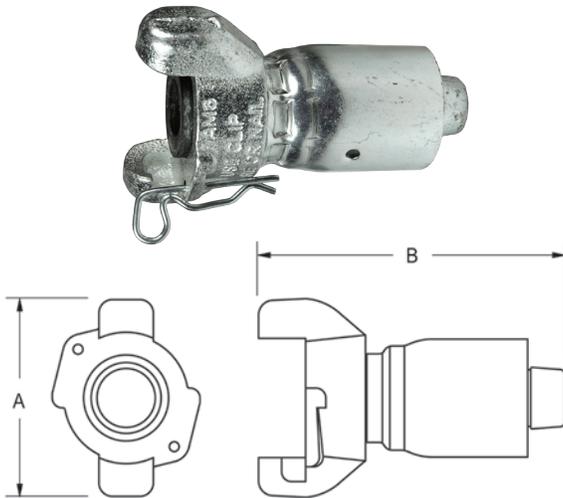
Part #	Material	Style	Pkg Qty
<b>AWR4<sup>1</sup></b>	rubber	2 lug	50
<b>AWS6</b>	neoprene	2 lug	50
<b>AWR14</b>	rubber	4 lug	---



<sup>1</sup> made from Styrene-butadiene (SBR)



## Air King with Ferrules



### Features:

- couples with other Air King fittings
- rated to **150 PSI** working pressure at **70° F** ambient temperature
- ferrules are available on iron and stainless steel
- *carbon steel ferrules* can be crimped or swaged
- for air and water service only

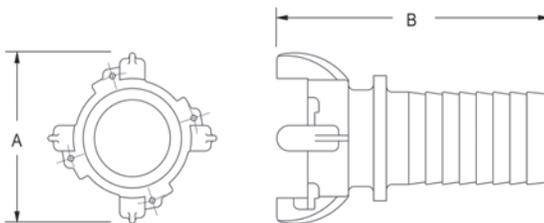


Style	Hose OD		Iron	316 Stainless Steel
	From	To	Part #	Part #
1/2"	5/4/64"	1-2/64"	<b>AM1WF</b>	---
3/4"	1-4/64"	1-22/64"	<b>AM6WF</b>	<b>RAM6WF</b>
1"	1-18/64"	1-34/64"	<b>AM11WF-1</b>	---
1"	1-30/64"	1-46/64"	<b>AM11WF</b>	---

### Dimensions

Size	A	B
1/2"	2 1/2"	3-7/16"
3/4"	2 1/2"	3-15/16"
1"	2 1/2"	4-25/32"

## 4-Lug Quick Acting Couplings



### Features:

- *Not to be used for steam service. Must use safety clips.*
- Safety clips are same size for both 2-lug and 4-lug Universal Couplings, see page 9. Use safety clips on all Universal Coupling applications.
- Boss clamps recommended, see pages 20 and 21 for clamp selection.
- rated to **150 PSI** working pressure at **70° F** ambient temperature



### Hose Ends

Size	Iron Part #	Brass Part #	Opt Qty
1 1/4"	<b>AM16</b>	<b>AB16<sup>1</sup></b>	25
1 1/2"	<b>AM21</b>	<b>AB21<sup>1</sup></b>	25
2"	<b>AM26</b>	<b>AB26</b>	10

<sup>1</sup> item will be discontinued when stock is depleted

### Dimensions

Size	A	B
1 1/4"	5-5/8"	3-3/4"
1 1/2"	5-7/8"	3-3/4"
2"	6-1/16"	3-3/4"

### Female NPT Ends

Size	Iron Part #	Brass Part #	Opt Qty
1 1/4"	<b>AM18</b>	<b>AB18<sup>1</sup></b>	25
1 1/2"	<b>AM23</b>	<b>AB23<sup>1</sup></b>	25
2"	<b>AM28</b>	<b>AB28</b>	10

<sup>1</sup> item will be discontinued when stock is depleted

### Dimensions

Size	A	B
1 1/4"	2-15/16"	3-3/4"
1 1/2"	3"	3-3/4"
2"	3-3/32"	3-3/4"

### Rubber Washer for 4-lug

Part #

**AWR14**

- fits all sizes



Male NPT Ends

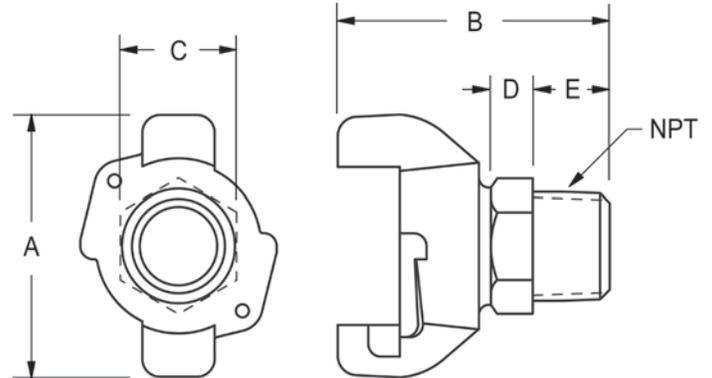
Features:

- male NPT thread with hex for a wrench
- supplied with safety clip and rubber washers

Size	Plated Steel Part #	Pkg Qty
1/2"	<b>GAM2</b>	25
3/4"	<b>GAM7</b>	50
1"	<b>GAM12</b>	50

Dimensions

Size	A	B	C	D	E	NPT
1/2"	2 1/2"	2-11/16"	1"	3/8"	7/8"	1/2"
3/4"	2 1/2"	2-11/16"	1-11/32"	21/64"	7/8"	3/4"
1"	2 1/2"	2-3/4"	1 1/2"	5/16"	1"	1"



Female NPT Ends

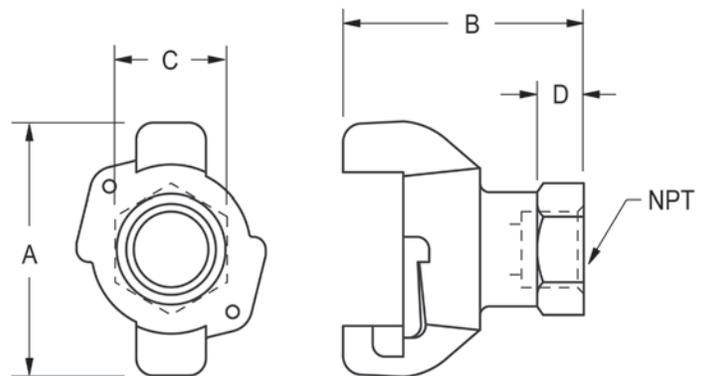
Features:

- female NPT thread with hex for a wrench
- supplied with safety clip and rubber washers

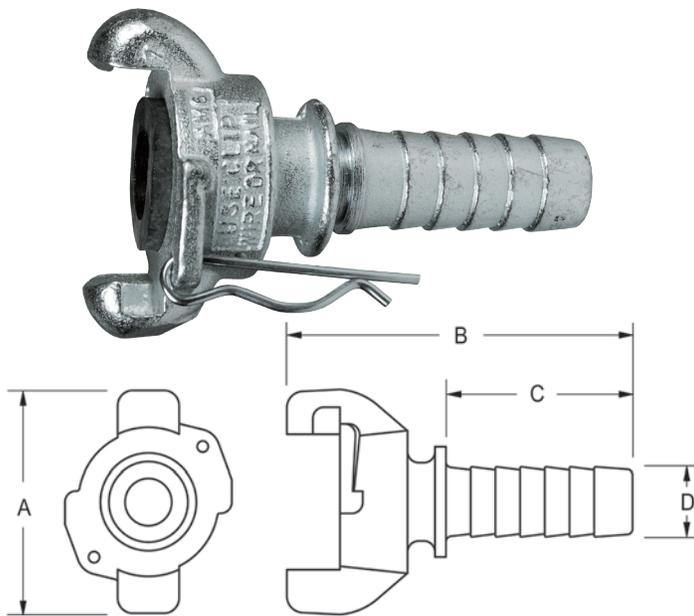
Size	Plated Steel Part #	Pkg Qty
1/2"	<b>GAM3</b>	25
3/4"	<b>GAM8</b>	50
1"	<b>GAM13</b>	50

Dimensions

Size	A	B	C	D	NPT
1/2"	2 1/2"	2-1/8"	1-1/8"	3/8"	1/2"
3/4"	2 1/2"	2-5/32"	1-7/16"	3/8"	3/4"
1"	2 1/2"	2-13/16"	1-5/8"	3/8"	1"



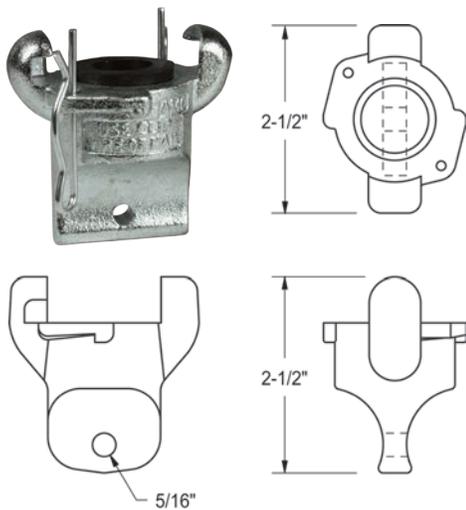
## Hose Ends



Size	Plated Steel Part #	Pkg Qty
1/2"	<b>GAM1</b>	25
3/4"	<b>GAM6</b>	50
1"	<b>GAM11</b>	50

Size	Dimensions			
	A	B	C	D
1/2"	2 1/2"	3-3/8"	1-21/32"	17/32"
3/4"	2 1/2"	3-31/32"	2-1/8"	25/32"
1"	2 1/2"	4-21/32"	2-25/32"	1-1/16"

## Blank Ends

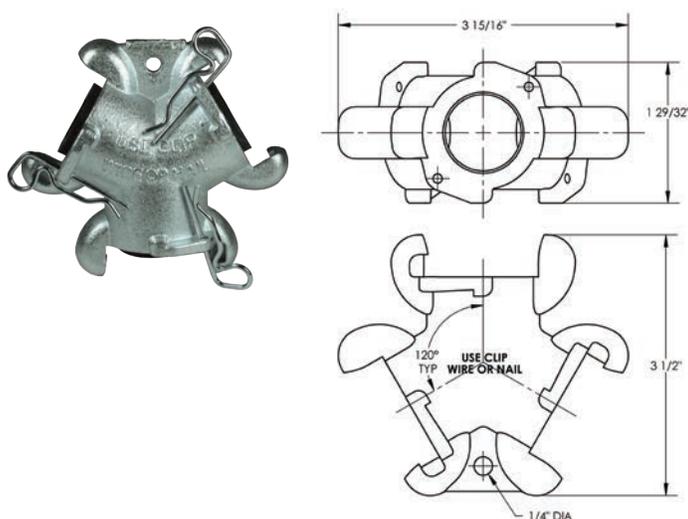


### Features:

- Blank end fittings have no outlet and are used to block the line at any coupling point.
- The end opposite the coupling head is flat, with an eye for a chain to secure the fitting when not in use.

Plated Steel Part #	Pkg Qty
<b>GAM0</b>	25

## Triple Connection



### Feature:

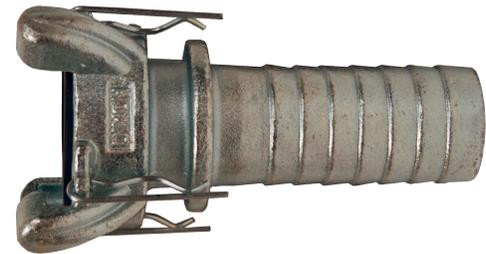
- Triple connection consists of three universal couplings that provide an extra outlet when connected to the line.

Plated Steel Part #	Pkg Qty
<b>GAM10</b>	25

### 4-Lug Quick Acting Couplings - Hose Ends

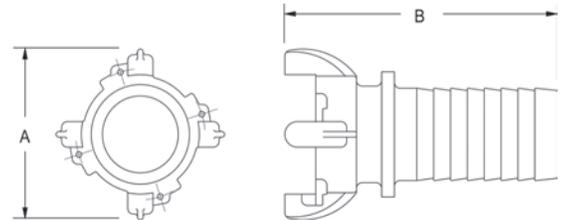
**Features:**

- supplied with safety clip and rubber washers
- pressure rating: **150 PSI** at ambient temperature (70°F)
- use with Boss clamps
- not to be used for steam service
- must use safety clips, safety clips are same size for both 2-lug and 4-lug Air King Couplings



Size	Plated Steel Part #	Pkg Qty
1¼"	<b>GAM16</b>	25
1½"	<b>GAM21</b>	25
2"	<b>GAM26</b>	10

Size	A	B
1¼"	3¾"	5-5/8"
1½"	3¾"	5-7/8"
2"	3¾"	6-1/16"

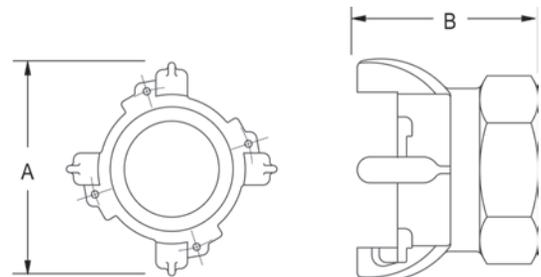


### 4-Lug Quick Acting Couplings - Female NPT Ends

Size	Plated Steel Part #	Pkg Qty
1¼"	<b>GAM18</b>	25
1½"	<b>GAM23</b>	25
2"	<b>GAM28</b>	20



Size	A	B
1¼"	3¾"	2-15/16"
1½"	3¾"	3"
2"	3¾"	3-3/32"



BOSS

# Coupling System

*Boss Couplings supply a convenient threaded fitting to connect two lengths of hose, or a single length to a male or female threaded (NPT) outlet.*

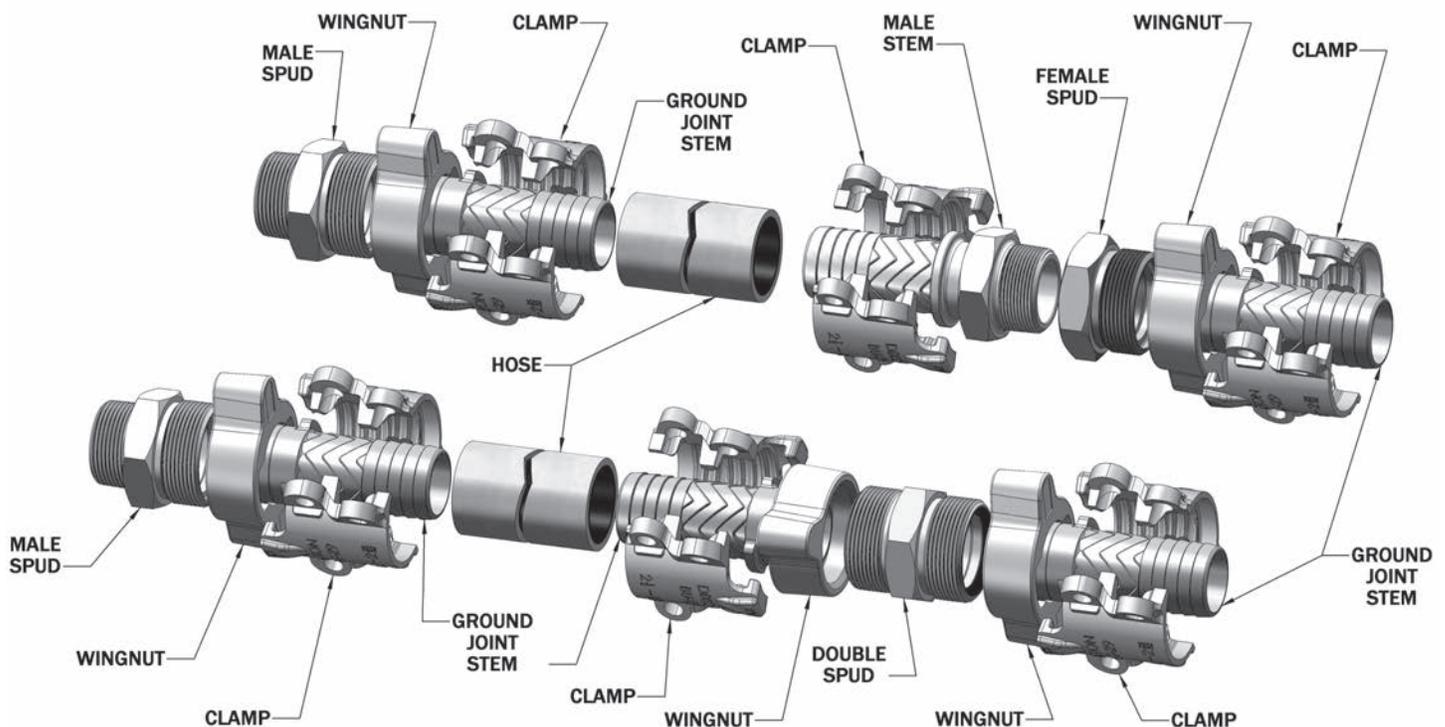
**Features:** The spud part of the coupling serves as one half of the connection and is usually fixed to the equipment. The stem part that is clamped to the hose is the other half. The two halves are connected or disconnected by rotating the wing nut onto the spud. When connected they achieve a mechanical, as well as, a pressure seal.

**Services:** Boss couplings are all-purpose hose couplings, universally recommended for steam hose connections. They are also widely used for air, water, fluid petroleum, chemicals and liquid petroleum gas up to 1" ID. Boss couplings can be applied to many types of rubber, synthetic, plastic, metallic or semi-metallic hose. Consult the factory for specific media capabilities.

**Purpose:** Boss couplings supply a convenient threaded fitting to connect two lengths of hose, or a single length to a male or female threaded (NPT) outlet.

**Material:**

- stem: ¼" - 1" plated steel, 1¼" - 4" plated iron, 6" tubular steel
- spud: ¼" - 1" plated steel, 1¼" - 6" plated iron
- wing nut: ¼" plated steel, 3/8" - 6" plated iron



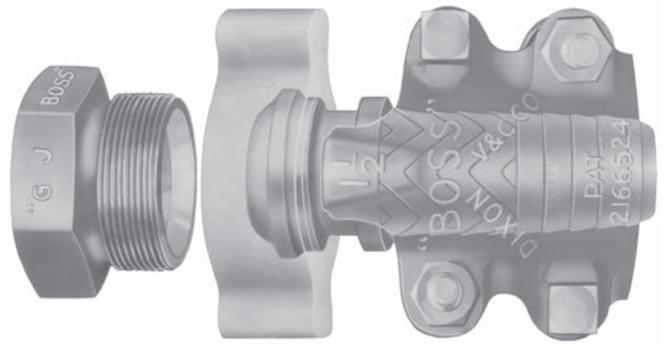
*Worn-out hose couplings can be dangerous. They should be checked regularly and replaced when necessary. Each coupling user should review applications and add safety devices where indicated.*

## Ground Joint

Positive Metal-to-Polymer Seal

**Features:**

- A leakproof seal is formed when the metal head of the stem makes contact with the patented polymer seal in the spud.
- The non-metallic polymer seat resists most chemicals found in manufacturing facilities.
- recommended for steam service up to **450°F** 
- easy to seal
- works with existing Ground Joint fittings
- use with Boss clamps found on pages 20 and 21



*Plated Steel and/or Iron*



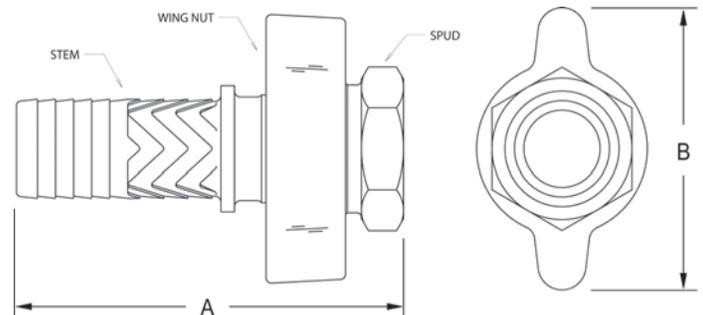
Hose Shank x NPT	Complete Female Part #	Stem Part #	Opt Qty	Wing Nut Part #	Knurled Nut Part #	Female Spud Part #	Male Spud Part #	Double Spud Part #
1/4"	<b>GF1<sup>1</sup></b>	<b>GBA</b>	100	<b>SLS4</b>	---	<b>GBC<sup>1</sup></b>	---	---
3/8"	<b>GF3<sup>1</sup></b>	<b>GCA</b>	100	<b>CB</b>	---	<b>GCC<sup>1</sup></b>	<b>GMC<sup>1</sup></b>	---
1/2"	<b>GF6</b>	<b>GB1</b>	100	<b>B2</b>	---	<b>GB3</b>	<b>GM3</b>	<b>GDB3</b>
1/2" x 3/4"	<b>GF26-1</b>	<b>GB6-1</b>	50	<b>B12</b>	---	---	---	---
3/4"	<b>GF26</b>	<b>GB6</b>	50	<b>B12</b>	<b>KB12</b>	<b>GB8</b>	<b>GM8</b>	<b>GDB13</b>
1"	<b>GF36</b>	<b>GB11</b>	50	<b>B12</b>	<b>KB12</b>	<b>GB13</b>	<b>GM13</b>	<b>GDB13</b>
1 1/4"	<b>GF51</b>	<b>GB16</b>	25	<b>B17</b>	---	<b>GB18</b>	<b>GM18</b>	<b>GDB23</b>
1 1/2"	<b>GF61</b>	<b>GB21</b>	25	<b>B17</b>	---	<b>GB23</b>	<b>GM23</b>	<b>GDB23</b>
2"	<b>GF81<sup>2</sup></b>	<b>GB26<sup>2</sup></b>	10	<b>B27</b>	---	<b>GB28</b>	<b>GM28</b>	<b>GDB28</b>
2 1/2"	<b>GF96</b>	<b>GB31</b>	5	<b>B32</b>	---	<b>GB33</b>	<b>GM33</b>	<b>GDB33</b>
3"	<b>GF111</b>	<b>GB36<sup>3</sup></b>	5	<b>B37</b>	---	<b>GB38</b>	<b>GM38</b>	<b>GDB38</b>
4"	<b>GF141</b>	<b>GB46</b>	5	<b>B47</b>	---	<b>GB48</b>	---	---
6"	<b>GF201<sup>1</sup></b>	<b>GB66</b>	2	<b>B67</b>	---	<b>GB68<sup>1</sup></b>	---	---

-  <sup>1</sup> 1/4", 3/8" and 6" come only with copper seat spuds.
- <sup>2</sup> not to be used with #250 or #306 Boss clamps
- GB36 will be replaced with GB36CR, this replacement part will have a machined hose shank to accommodate a Boss clamp, King Crimp sleeve or ferrule

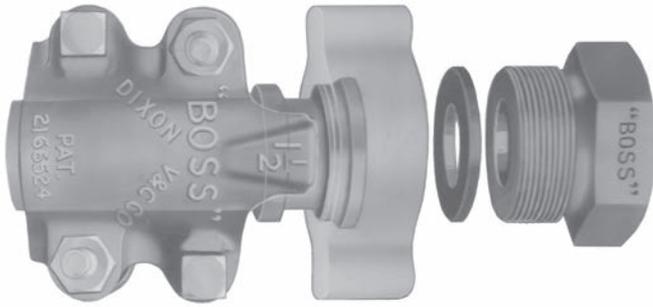
- 'A' dimension represents a complete coupling length with a female spud
- 'B' dimension is the largest dimension over the wing nut
- <sup>1</sup> 1/4" coupling has a hex style nut
- <sup>2</sup> 4" and 6" couplings have a 3 wing nut design

**Dimensions**

Size	A	B
1/4"	2-1/2"	1-5/32" <sup>1</sup>
3/8"	3-1/32"	1-3/4"
1/2"	3-21/32"	2-3/8"
3/4"	4-15/16"	3-9/16"
1"	5-3/16"	3-9/16"
1-1/4"	7"	4-1/4"
1-1/2"	7-1/4"	4-1/4"
2"	7-23/32"	5-5/8"
2-1/2"	9-5/32"	6-3/4"
3"	10-1/32"	7-3/4"
4"	11-1/2"	9-1/2" <sup>2</sup>
6"	12"	12-1/4" <sup>2</sup>

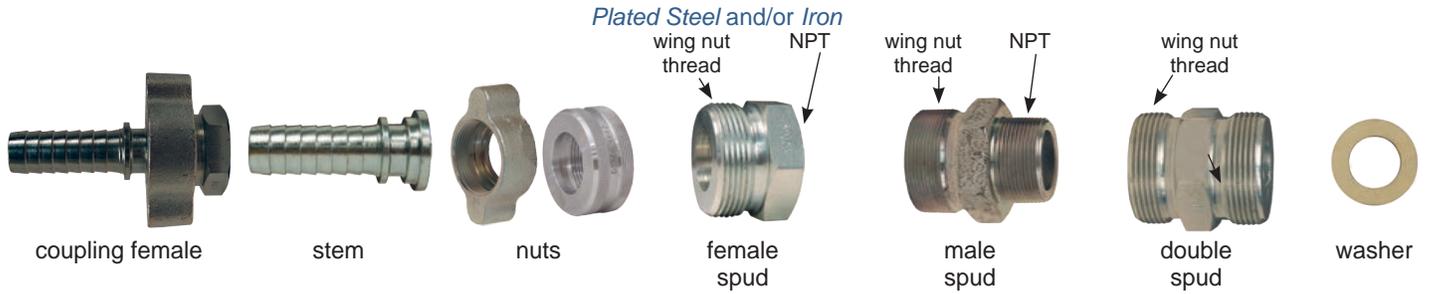


# Washer Type



## Features:

- recommended for steam service up to **450°F**
- easy to seal
- Klingersil® C-4401 washer is inserted between the stem and spud
- leakproof seal forms by rotating the wing nut and hammering it tight
- works with existing fittings
- *plated steel* and / or *iron*
- use with Boss clamps found on pages 20 and 21



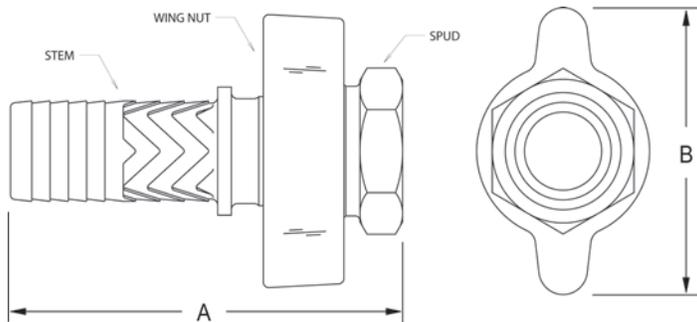
Hose Shank x NPT	Complete Female Part #	Stem Part #	Wing Nut Part #	Knurled Nut Part #	Opt Qty	Female Spud Part #	Male Spud Part #	Double Spud Part #	Washer <sup>1</sup> Part #
3/8"	<b>WF3</b>	<b>SS337</b>	<b>CB</b>	---	---	<b>CC</b>	<b>WMC</b>	---	<b>WBC</b>
1/2"	<b>WF6</b>	<b>B1</b>	<b>B2</b>	---	---	<b>B3</b>	<b>WM3</b>	<b>DB3</b>	<b>W2</b>
1/2" x 3/4"	<b>WF26-1</b>	<b>B6-1</b>	<b>B12</b>	---	---	---	---	---	---
3/4"	<b>WF26</b>	<b>B6</b>	<b>B12</b>	<b>KB12</b>	25	<b>B8</b>	<b>WM8</b>	<b>DB13</b>	<b>W12</b>
1"	<b>WF36</b>	<b>B11</b>	<b>B12</b>	<b>KB12</b>	25	<b>B13</b>	<b>WM13</b>	<b>DB13</b>	<b>W12</b>
1-1/4"	<b>WF51</b>	<b>B16</b>	<b>B17</b>	---	---	<b>B18</b>	<b>WM18</b>	<b>DB23</b>	<b>W17</b>
1-1/2"	<b>WF61</b>	<b>B21</b>	<b>B17</b>	---	---	<b>B23</b>	<b>WM23</b>	<b>DB23</b>	<b>W17</b>
2"	<b>WF81 <sup>2</sup></b>	<b>B26 <sup>2</sup></b>	<b>B27</b>	---	---	<b>B28</b>	<b>WM28</b>	<b>DB28</b>	<b>W27</b>
2-1/2"	<b>WF96</b>	<b>B31</b>	<b>B32</b>	---	---	<b>B33</b>	---	---	<b>W32</b>
3"	<b>WF111</b>	<b>B36</b>	<b>B37</b>	---	---	<b>B38</b>	<b>WM38</b>	<b>DB38</b>	<b>W37</b>

<sup>1</sup> washer is nitrile rubber bonded, non-asbestos Klingersil® C-4401

<sup>2</sup> not to be used with #250 or #306 Boss clamps



- 'A' dimension represents a complete coupling length with a female spud.
- 'B' dimension is the largest dimension over the wing nut.



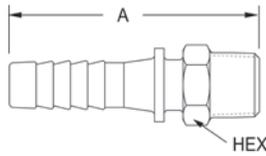
Size	Dimensions	
	A	B
3/8"	2-25/32"	1-3/4"
1/2"	3-7/16"	2-3/8"
3/4"	4-25/32"	3-9/16"
1"	4-31/32"	3-9/16"
1-1/4"	6-21/32"	4-1/4"
1-1/2"	6-7/8"	4-1/4"
2"	7-15/32"	5-5/8"
2-1/2"	8-25/32"	6-3/4"
3"	9-7/16"	7-3/4"

**Male Stems**

**Features:**

- plated steel bar stock
- use with Boss clamps on pages 20 and 21

- hex dimension is the distance across the flats
- recommended for steam service up to **450°F**

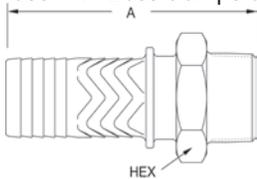


Hose x NPT Size	Dimensions		Steel Part #	Pkg Qty
	A	Hex		
1/4" x 1/8"	2-1/4"	9/16"	<b>MS4X2</b>	25
1/4" x 1/4"	2-3/8"	9/16"	<b>MSA</b>	50
1/4" x 3/8"	2-7/16"	11/16"	<b>MSB</b>	25
3/8" x 1/4"	2-5/8"	11/16"	<b>MS6X4</b>	25
3/8" x 3/8"	2-11/16"	11/16"	<b>MSC</b>	100
3/8" x 1/2"	2-15/16"	7/8"	<b>MS6X8</b>	25
1/2" x 1/4"	3"	13/16"	<b>MS8X4</b>	25
1/2" x 3/8"	3"	7/8"	<b>MS8X6</b>	50
1/2" x 1/2"	3-3/16"	7/8"	<b>MS1</b>	25
1/2" x 3/4"	3-3/16"	1-1/8"	<b>MS8X12</b>	25
3/4" x 1/2"	4-3/32"	1-1/8"	<b>MS12X8</b>	25
3/4" x 3/4"	4-3/32"	1-1/8"	<b>MS6</b>	25
3/4" x 1"	4-11/32"	1-3/8"	<b>MS12X16</b>	25
1" x 3/4"	4-13/32"	1-3/8"	<b>MS16X12</b>	25
1" x 1"	4-19/32"	1-3/8"	<b>MS11</b>	25

**Features:**

- castings
- use with Boss clamps on pages 20 and 21

- hex dimension is the distance across the flats
- recommended for steam service up to **450°F**



plated iron



brass



316 stainless

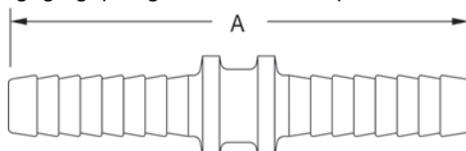
Hose x NPT Size	Dimensions		Plated Iron Part #	Pkg Qty	Brass Part #	316 Stainless Part #
	A	Hex				
1/2"	3-1/4"	7/8"	---	--	---	<b>RMS1</b>
3/4"	4-5/32"	1-1/8"	---	--	<b>BMS6</b>	<b>RMS6</b>
1"	4-21/32"	1-3/8"	---	--	<b>BMS11</b>	<b>RMS11</b>
1 1/4"	6-1/32"	2-1/8"	<b>MS16</b>	20	<b>BMS16</b>	<b>RMS16</b>
1 1/2"	6-5/16"	2-7/16"	<b>MS21</b>	20	<b>BMS21</b>	<b>RMS21</b>
2"	6-7/8"	2-7/8"	<b>MS26</b>	10	<b>BMS26</b>	<b>RMS26</b>
2 1/2"	8-5/8"	3-5/8"	<b>MS31</b>	5	---	<b>RMS31</b>
3"	9-1/2"	4-1/8"	<b>MS36</b>	5	<b>BMS36</b>	<b>RLP36<sup>1</sup></b>
4"	11"	5"	<b>MS46</b>	2	---	<b>RLP46<sup>1</sup></b>

<sup>1</sup> tubular steel

**Features:**

- collars engage grip fingers of Boss clamps

- 1/2" plated steel, 3/4" - 3": plated iron



Size	Dimension A	Part #	Size	Dimension A	Part #
1/2"	4"	<b>M1</b>	1 1/2"	8-3/8"	<b>M21</b>
3/4"	6"	<b>M6</b>	2"	9-1/16"	<b>M26</b>
1"	6-13/16"	<b>M11</b>	2 1/2"	10-1/2"	<b>M31</b>
1 1/4"	7-7/8"	<b>M16</b>	3"	11-7/8"	<b>M36</b>

## Holedall Fittings

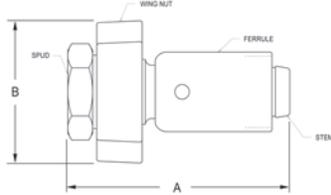
### Applications:

- designed for air and liquid applications where a permanent, low profile clamping system is desired
- not for steam service



### Features:

- supplied with carbon steel ferrules
- consult Dixon for swage and/or crimp specifications



- 'A' dimension represents a complete coupling length with a female spud.
- 'B' dimension is the largest dimension over the wing nut.

Size	Hose OD		Plated Iron /	Stainless Steel
	From:	To:	Steel Part #	Part #
¾"	1-10/64"	1-14/64"	<b>GF26P1</b>	---
	1-15/64"	1-18/64"	<b>GF26P2</b>	---
	1-19/64"	1-22/64"	<b>GF26P3</b>	---
1"	1-30/64"	1-34/64"	<b>GF36P1</b>	---
	1-35/64"	1-38/64"	<b>GF36P2</b>	---
	1-39/64"	1-42/64"	<b>GF36P3</b>	---
1½"	1-20/64"	2"	<b>GF61P1</b>	<b>RGF61P1</b>
	2-1/64"	2-8/64"	<b>GF61P2</b>	<b>RGF61P2</b>
	2-9/64"	2-16/64"	<b>GF61P3</b>	---
2"	2-36/64"	2-40/64"	<b>GF81P1</b>	<b>RGF81P1</b>
	2-41/64"	2-48/64"	<b>GF81P2</b>	<b>RGF81P2</b>
	2-49/64"	2-56/64"	<b>GF81P3</b>	---
3"	3-26/64"	3-40/64"	<b>GF111P1</b>	---
	3-41/64"	3-48/64"	<b>GF111P2</b>	---
	3-49/64"	3-56/64"	<b>GF111P3</b>	---

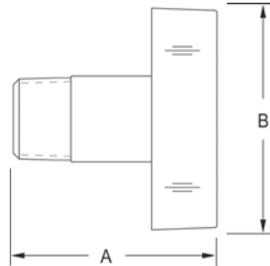
### Dimensions

Size	A	B
¾"	4-¾"	3-9/16"
1"	5-1/8"	3-9/16"
1-1/2"	7-1/16"	4-3/8"
2"	7-9/16"	5-5/8"
3"	9-1/2"	7-3/4"

## Adapters

### Features:

- plated steel and / or iron
- designed to fit the standard ground joint spuds on page 15
- supplied with a wing nut, as shown
- for safety tags and safety tape, see page 45



### Male NPT

Size	Part #	Pkg Qty
¾"	<b>GMAS6</b>	25
1"	<b>GMAS11</b>	25
1¼"	<b>GMAS16</b>	10
1½"	<b>GMAS21</b>	10
2"	<b>GMAS26<sup>1</sup></b>	10

<sup>1</sup> uses a special wing nut, part # B27-3

### Dimensions

Size	A	B
¾"	3-1/16"	3-9/16"
1"	3-5/16"	3-9/16"
1¼"	4"	4-1/4"
1½"	4-1/8"	4-1/4"
2"	4-5/16"	5-5/8"

### Female NPT

Size	Part #
¾"	<b>GFAS6</b>
1"	<b>GFAS11</b>
1¼"	<b>GFAS16</b>
1½"	<b>GFAS21<sup>1</sup></b>
2"	<b>GFAS26</b>

<sup>1</sup> part is produced as a welded fabrication

### Dimensions

Size	A	B
¾"	3-1/8"	3-9/16"
1"	3-5/16"	3-9/16"
1¼"	4"	4-1/4"
1½"	3-25/32"	4-1/4"
2"	5"	5-5/8"

**Features:**

- plated steel and / or iron
- supplied with 12" chain and washer
- for best results, use with washer style spuds and washers on page 16

**!** Boss wing nut caps are not intended for pressure applications.

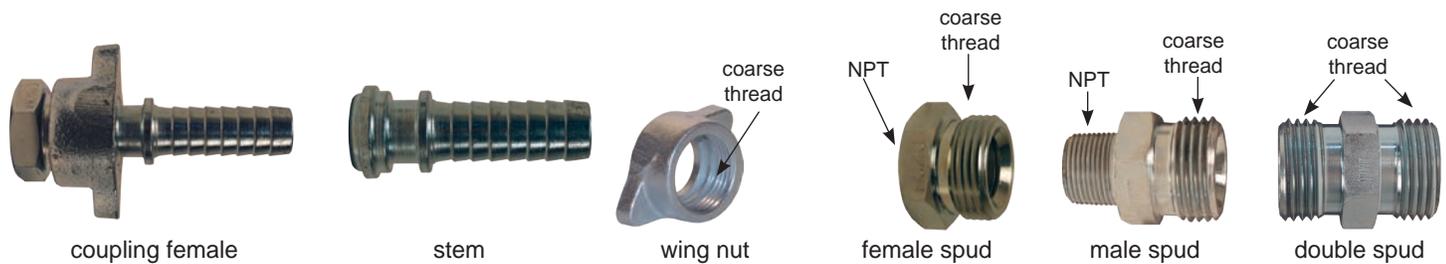


Size	Part #	Opt Qty
3/4" and 1"	<b>B12SC</b>	25
1 1/4" and 1 1/2"	<b>B17SC</b>	25
2"	<b>B27SC</b>	10
3"	<b>B37SC</b>	5

**Ground Joint Air Hammer Couplings**

**Features:**

- rounded steel head of stem fits concave inserts in spuds for superior sealing
- metal-to-metal copper seat seal
- *plated steel* and / or *iron*
- use with Boss clamps on page 20 and 21

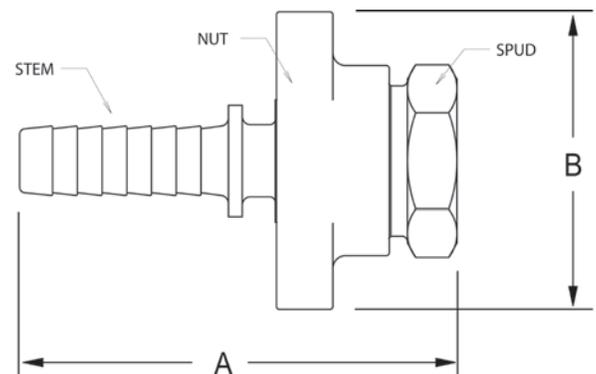


Style	Hose ID and NPT Sizes	Coarse Thread	Complete Female Part #	Plated Steel Stem Part #	Iron Wing Nut Part #	Plated Steel w/ Copper seat	Plated Steel w/ Copper seat	Plated Steel w/ Copper seat
						Female Spud Part #	Male Spud Part #	Double Spud Part #
Compact	1/2"	1-31/64" OD x 8 T.P.I.	<b>GDF6</b>	<b>GBA45</b>	<b>J47</b>	<b>GJ65</b>	<b>GJ60</b>	<b>GJ75</b>
	3/4"		<b>GDF8</b>	<b>GBA46</b>	<b>J47</b>	<b>GJ55</b>	<b>GJ50</b>	<b>GJ75</b>
Heavy	3/4"	1-47/64" OD x 8 T.P.I.	<b>GDF10</b>	<b>GBB18</b>	<b>DLB12</b>	<b>GDL8</b>	<b>GDL7</b>	<b>GDL25</b>
	1"		<b>GDF12</b>	<b>GBB11</b>	<b>DLB12</b>	<b>GDL13</b>	<b>GDL10</b>	<b>GDL25</b>

**Dimensions**

Style	Size	A	B
Compact	1/2"	4-5/32"	2-15/16"
	3/4"	4-15/16"	2-15/16"
Heavy	3/4"	5"	3-5/8"
	1"	5-13/32"	3-5/8"

- 'A' dimension represents a complete coupling length with a female spud
- 'B' dimension is the largest dimension over the wing nut



# Clamps

## ⚠ WARNING

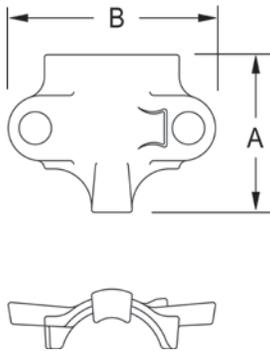
- The bolts used in the Boss interlocking clamps are not standard bolts. They vary from standard bolts in their length, diameter, overall thread length and material hardness. These bolts can be retorqued, but it is **not** recommended that the bolts or clamps be reused, as they are designed for a single bend only. Dixon recommends using only factory supplied replacement bolts.
- Torque values for clamps are based on dry bolts. The use of lubricant on bolts will adversely effect clamp performance. *Do not lubricate nuts and bolts.*
- recommended for steam service up to **450°F**
- recommended torque rating in ft. lbs.
- replacement nuts and bolts are available, contact Dixon for more information
- see page 47 for Fraction to Decimal conversion chart



two clamp sections  
2-bolt type  
2 gripping fingers  
¼" - ¾" design

Hose ID	Hose OD		Zinc Plated Iron	Opt	Stainless Steel	Torque <sup>2</sup>	Brass	Torque
	From:	To:	Part #	Qty	Part #		Part #	
¼"	36/64"	42/64"	<b>BD</b> <sup>1</sup>	100	---	6	---	--
⅜"	44/64"	56/64"	<b>CD</b> <sup>1</sup>	100	---	6	---	--
½"	52/64"	60/64"	<b>DD</b> <sup>1</sup>	100	---	6	---	--
½"	60/64"	1-4/64"	<b>B4</b> <sup>1</sup>	25	<b>RB4</b>	12	<b>BB4</b>	10
½"	1-4/64"	1-12/64"	<b>B5</b>	25	---	12	---	--
¾"	1-10/64"	1-20/64"	<b>BU9</b> <sup>1</sup>	50	<b>RBU9</b>	21	<b>BBU9</b>	18
¾"	1-20/64"	1-32/64"	<b>B9</b>	25	<b>RB9</b>	21	---	18
¾"	1-32/64"	1-44/64"	<b>B10</b> <sup>1</sup>	25	---	21	---	--

<sup>1</sup> global investment cast carbon steel  
<sup>2</sup> torque applies to plated iron *and* stainless steel clamps



### Dimensions

Size	Part #	A	B
1/4"	<b>BD</b>	1-3/16"	1-1/2"
3/8"	<b>CD</b>	1-11/16"	1-11/16"
1/2"	<b>DD</b>	1-3/4"	1-7/8"
1/2"	<b>B4, RB4, BB4</b>	1-13/16"	2-11/32"
1/2"	<b>B5</b>	1-13/16"	2-13/32"
3/4"	<b>BU9, RBU9, BBU9</b>	2-9/16"	2-3/4"
3/4"	<b>B9, RB9</b>	2-3/4"	2-7/8"
3/4"	<b>B10</b>	2-11/16"	3-1/32"

**Clamps**

Hose ID	Hose OD		Zinc Plated Iron	Opt Qty	Stainless Steel	Torque <sup>3</sup>	Brass	Torque
	From:	To:	Part #		Part #		Part #	
1/2"	5/8/64"	1-2/64"	<b>968</b> <sup>1</sup>	50	---	6	---	--
1"	1-26/64"	1-36/64"	<b>156</b> <sup>1</sup>	20	---	21	---	--
1"	1-34/64"	1-46/64"	<b>BU14</b>	25	<b>RBU14</b>	21	<b>BBU14</b>	18
1"	1-44/64"	1-60/64"	<b>B14</b>	25	<b>RB14</b>	21	<b>BB14</b>	18
1"	1-60/64"	2-8/64"	<b>B15</b>	20	---	21	---	--
1 1/4"	1-32/64"	1-50/64"	<b>BU18</b>	10	---	40	---	--
1 1/4"	1-44/64"	1-56/64"	<b>187</b> <sup>1</sup>	10	---	21	---	--
1 1/4"	1-50/64"	2-6/64"	<b>BU19</b>	10	---	40	---	--
1 1/4"	1-56/64"	2-4/64"	<b>206</b> <sup>1</sup>	20	---	21	---	--
1 1/4"	2-8/64"	2-24/64"	<b>B19</b>	10	<b>RB19</b>	40	---	28
1 1/2"	1-52/64"	2"	<b>BU22</b>	10	---	40	---	--
1 1/2"	2"	2-14/64"	<b>B22</b>	10	---	40	---	--
1 1/2"	2"	2-8/64"	<b>212</b> <sup>1</sup>	10	---	21	---	--
1 1/2"	2-4/64"	2-16/64"	<b>225</b> <sup>1</sup>	10	---	40	---	--
1 1/2"	2-12/64"	2-24/64"	<b>BU24</b>	10	<b>RBU24</b>	40	---	28
1 1/2"	2-24/64"	2-36/64"	<b>B24</b>	10	<b>RB24</b>	40	---	--
1 1/2"	2-36/64"	2-48/64"	<b>B25</b>	10	---	40	---	--
2"	2-16/64"	2-32/64"	<b>250</b> <sup>1,4</sup>	10	---	40	---	--
2"	2-22/64"	2-34/64"	<b>BU28</b>	10	---	60	---	--
2"	2-32/64"	2-48/64"	<b>275</b> <sup>1,4</sup>	10	---	40	---	--
2"	2-32/64"	2-50/64"	<b>BU29</b>	10	<b>RBU29</b>	60	<b>BBU29</b> <sup>2</sup>	40
2"	2-48/64"	3-4/64"	<b>B29</b>	10	<b>RB29</b>	60	---	--
2"	2-48/64"	3-4/64"	<b>306</b> <sup>1,4</sup>	10	---	60	---	--
2"	3-6/64"	3-28/64"	<b>B30</b>	5	---	60	---	--
2 1/2"	3-4/64"	3-32/64"	<b>350</b> <sup>1</sup>	5	---	60	---	--
2 1/2"	3-6/64"	3-28/64"	<b>BU34</b>	5	---	60	---	--
2 1/2"	3-32/64"	3-60/64"	<b>B34</b>	5	---	150	---	--
3"	3-32/64"	3-48/64"	<b>375</b> <sup>1</sup>	5	---	60	---	--
3"	3-32/64"	3-60/64"	<b>BU35</b>	5	<b>RBU35</b>	150	---	--
3"	3-48/64"	4"	<b>401</b> <sup>1</sup>	5	---	150	---	--
3"	3-52/64"	4-4/64"	<b>B35</b>	5	---	150	---	--
3"	4"	4-12/64"	<b>418</b> <sup>1</sup>	4	---	200	---	--
3"	4-4/64"	4-28/64"	<b>B39</b>	5	---	200	---	--
3"	4-12/64"	4-32/64"	<b>450</b> <sup>1</sup>	2	---	200	---	--

<sup>1</sup> 4 gripping fingers and 4 bolts

<sup>2</sup> will become obsolete as inventory is depleted

<sup>3</sup> torque applies to plated iron and stainless steel clamps

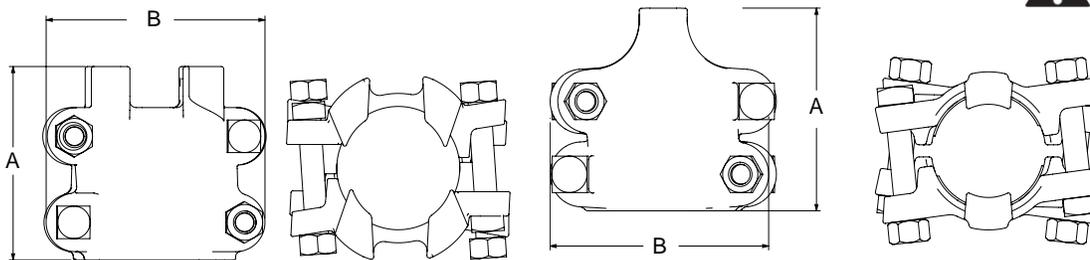
<sup>4</sup> not to be used with GF81, GB26, WF81, B26, RGF81, RGB26, BGF81, BGB26, RWF81, RB26



two clamp sections  
4-bolt type  
2 gripping fingers



two clamp sections  
4-bolt type  
4 gripping fingers



Size	Part #	A	B
1/2"	<b>968</b>	1-11/16"	2-1/16"
1"	<b>156</b>	2-21/32"	3-3/16"
1"	<b>BU14, RBU14, BBU14</b>	3-3/32"	3-1/2"
1"	<b>B14, RB14, BB14</b>	3-1/8"	3-3/8"
1"	<b>B15</b>	3-1/8"	3-3/4"
1-1/4"	<b>BU18</b>	3-11/16"	3-5/8"
1-1/4"	<b>187</b>	3-1/16"	3-9/16"
1-1/4"	<b>BU19</b>	3-11/16"	3-7/8"
1-1/4"	<b>206</b>	2-29/32"	3-21/32"
1-1/4"	<b>B19, RB19</b>	3-3/4"	4"
1-1/2"	<b>BU22</b>	3-13/16"	4"
1-1/2"	<b>B22</b>	3-13/16"	4-1/8"
1-1/2"	<b>212</b>	3-3/8"	4"
1-1/2"	<b>225</b>	3-5/8"	4"
1-1/2"	<b>BU24, RBU24</b>	3-25/32"	4-3/32"
1-1/2"	<b>B24, RB24</b>	3-31/32"	4-1/8"
1-1/2"	<b>B25</b>	3-15/16"	4-1/2"

Size	Part #	A	B
2"	<b>250</b>	3-13/16"	4-3/16"
2"	<b>BU28</b>	3-15/16"	4-7/16"
2"	<b>275</b>	3-7/8"	4-1/2"
2"	<b>BU29, RBU29, BBU29</b>	3-7/8"	4-13/32"
2"	<b>B29, RB29</b>	4-5/16"	5-1/16"
2"	<b>306</b>	4-1/8"	5-1/8"
2"	<b>B30</b>	4-1/4"	5-5/8"
2-1/2"	<b>350</b>	4-1/8"	5-3/4"
2-1/2"	<b>BU34</b>	4-5/16"	5-3/4"
2-1/2"	<b>B34</b>	5"	6-9/16"
3"	<b>375</b>	4-15/32"	6-1/8"
3"	<b>BU35, RBU35</b>	5"	6-1/2"
3"	<b>401</b>	4-23/32"	6-1/2"
3"	<b>B35</b>	5-1/16"	6-11/16"
3"	<b>418</b>	4-29/32"	7"
3"	<b>B39</b>	5-1/2"	7-1/2"
3"	<b>450</b>	5-3/16"	7-1/2"

## Dix-Lock

# Quick Acting Couplings

*Dix-Lock coupling's non-valved design allows air flow to the tool, while providing a quick, secure connection.*

### Service:

- pressure: **300 PSI** in brass; 500 PSI in steel, 303 stainless steel at ambient temperature (70°F)
- The operating temperature range is **-40° to +250°F** (-40° to +121°C).

### Features:

- dual-guide sleeve tabs ensure smooth action
- corrosion resistant coatings and materials improve performance
- pneumatically energized seal for optimal performance at a variety of pressures
- wide variety of end configurations

### Materials:

- female and male bodies: zinc plated steel  
*optional* - brass or 303 stainless steel
- sleeve: steel
- retaining ring and spring: phosphor bronze
- seal: nitrile (buna-n)

### Connecting:

- convenient push-twist and click

### Disconnecting:

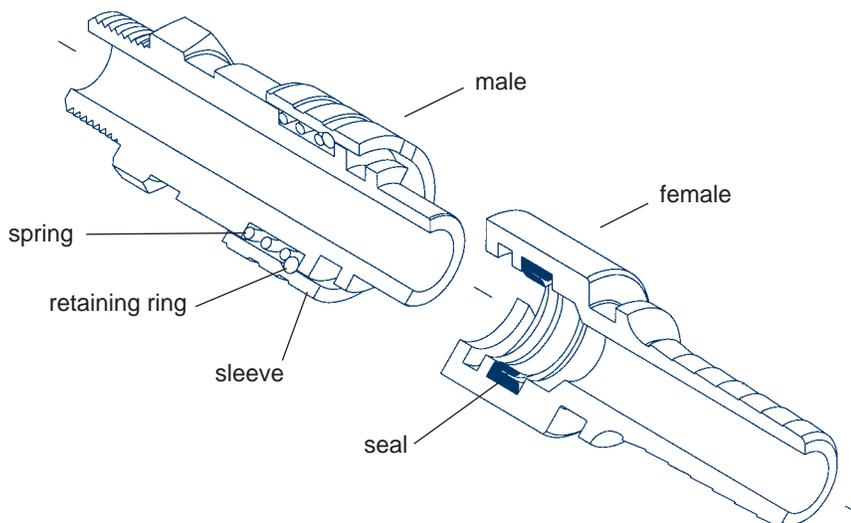
- retract sleeve, twist and pull

**Never attempt to disconnect any hose while pressure is in the line.**



### Interchange:

- interchanges with the MIL-C-3486 Standard and the A-A50431-A Commercial Item Description
- interchanges with Bowes and National brands

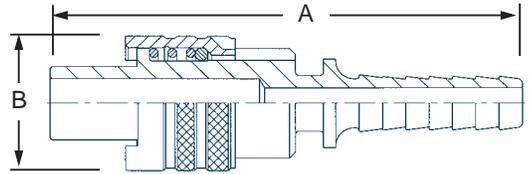


Male Head x Hose End

Body Size	Hose Shank	Plated Steel	Pkg Qty	Brass	Pkg Qty	Stainless Steel	Pkg Qty
3/8"	1/2"	<b>QM1</b>	25	---	--	---	--
1/2"	3/8"	<b>QM2</b>	25	<b>QB2</b>	--	---	--
1/2"	1/2"	<b>QM3</b>	25	<b>QB3</b>	--	---	--
1/2"	3/4"	<b>QM4</b>	25	<b>QB4</b>	--	<b>QSS4</b>	--
1/2"	1"	<b>QM5</b>	25	<b>QB5</b>	25	---	--

Dimensions

Body Size	Hose Shank	A	B
3/8"	1/2"	3.73"	1.13"
1/2"	3/8"	4.36"	1.40"
1/2"	1/2"	4.63"	1.40"
1/2"	3/4"	4.77"	1.40"
1/2"	1"	4.77"	1.40"

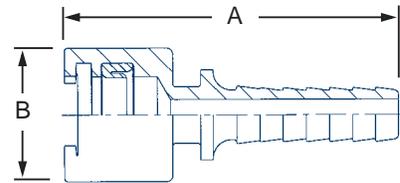


Female Head x Hose End

Body Size	Hose Shank	Plated Steel	Pkg Qty	Brass	Pkg Qty	Stainless Steel	Pkg Qty
3/8"	1/2"	<b>QM20</b>	25	---	--	---	--
1/2"	3/8"	<b>QM21</b>	25	<b>QB21</b>	--	---	--
1/2"	1/2"	<b>QM22</b>	25	<b>QB22</b>	--	---	--
1/2"	3/4"	<b>QM23</b>	25	<b>QB23</b>	--	<b>QSS23</b>	--
1/2"	1"	<b>QM25</b>	25	<b>QB25</b>	25	---	--

Dimensions

Body Size	Hose Shank	A	B
3/8"	1/2"	2.41"	1.20"
1/2"	3/8"	2.98"	1.33"
1/2"	1/2"	3.37"	1.33"
1/2"	3/4"	3.37"	1.33"
1/2"	1"	3.49"	1.33"

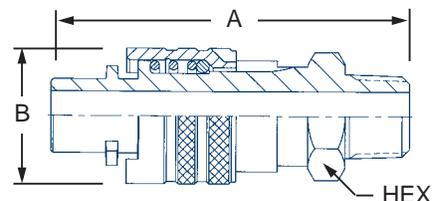


Male Head x Male NPT End

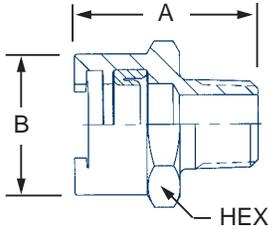
Body Size	Hose Shank	Plated Steel	Pkg Qty	Brass	Pkg Qty	Stainless Steel	Pkg Qty
3/8"	1/2"	<b>QM20</b>	25	---	--	---	--
1/2"	3/8"	<b>QM21</b>	25	<b>QB21</b>	--	---	--
1/2"	1/2"	<b>QM22</b>	25	<b>QB22</b>	--	---	--
1/2"	3/4"	<b>QM23</b>	25	<b>QB23</b>	25	<b>QSS23</b>	10
1/2"	1"	<b>QM25</b>	25	<b>QB25</b>	--	---	--

Dimensions

Body Size	Hose Shank	A	B	Hex
3/8"	1/2"	3.28"	1.13"	1-3/16"
1/2"	3/8"	3.65"	1.40"	1-1/8"
1/2"	1/2"	3.65"	1.40"	1-1/8"
1/2"	3/4"	3.74"	1.40"	1-3/8"
1/2"	1"	3.78"	1.40"	1-1/2"



## Female Head x Male NPT End



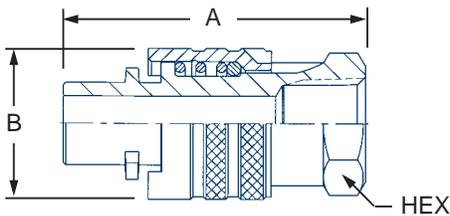
Body Size	Hose Shank	Plated Steel	Pkg Qty	Brass	Pkg Qty	Stainless Steel	Pkg Qty
3/8"	1/2"	<b>QM60</b>	25	---	--	---	--
1/2"	3/8"	<b>QM61</b>	25	<b>QB61</b>	--	---	--
1/2"	1/2"	<b>QM62</b>	25	<b>QB62</b>	--	---	--
1/2"	3/4"	<b>QM63</b>	25	<b>QB63</b>	--	<b>QSS63</b>	--
1/2"	1"	<b>QM65</b>	25	<b>QB65</b>	25	---	--

<sup>1</sup> valved coupler not shown

### Dimensions

Body Size	Hose Shank	A	B	Hex
3/8"	1/2"	1.72"	1.20"	1-3/16"
1/2"	3/8"	1.77"	1.33"	1-3/8"
1/2"	1/2"	1.77"	1.33"	1-3/8"
1/2"	3/4"	1.77"	1.33"	1-3/8"
1/2"	1"	1.84"	1.33"	1-1/2"

## Male Head x Female NPT End

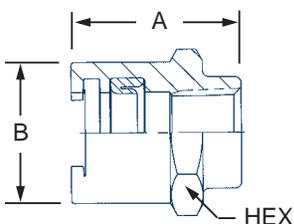


Body Size	Hose Shank	Plated Steel	Pkg Qty	Brass	Pkg Qty	Stainless Steel	Pkg Qty
1/2"	3/8"	<b>QM81</b>	25	<b>QB81</b>	--	---	--
1/2"	1/2"	<b>QM82</b>	25	<b>QB82</b>	--	---	--
1/2"	3/4"	<b>QM83</b>	25	<b>QB83</b>	--	<b>QSS83</b>	--
1/2"	1"	<b>QM85</b>	25	<b>QB85</b>	25	---	--

### Dimensions

Body Size	Hose Shank	A	B	Hex
1/2"	3/8"	2.73"	1.40"	1-1/8"
1/2"	1/2"	2.73"	1.40"	1-1/8"
1/2"	3/4"	3.34"	1.40"	1-3/8"
1/2"	1"	3.37"	1.40"	1-1/2"

## Female Head x Female NPT End



Body Size	Hose Shank	Plated Steel	Pkg Qty	Brass	Pkg Qty	Stainless Steel	Pkg Qty
1/2"	3/8"	<b>QM101</b>	25	<b>QB101</b>	--	---	--
1/2"	1/2"	<b>QM102</b>	25	<b>QB102</b>	--	---	--
1/2"	3/4"	<b>QM103</b>	25	<b>QB103</b>	--	<b>QSS103</b>	--
1/2"	1"	<b>QM105</b>	25	<b>QB105</b>	25	---	--

### Dimensions

Body Size	Hose Shank	A	B	Hex
1/2"	3/8"	1.63"	1.33"	1-3/8"
1/2"	1/2"	1.63"	1.33"	1-3/8"
1/2"	3/4"	1.63"	1.33"	1-3/8"
1/2"	1"	1.68"	1.33"	1-1/2"

**Feature:**

- positive safety lock; with locking nut in place sleeve cannot be moved to open coupling

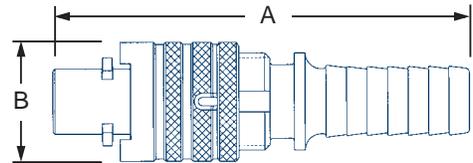


Body Size	Hose Shank	Plated Steel Part #	Brass Part #
1/2"	1/2"	<b>QM33</b>	<b>QB33</b>
1/2"	3/4"	<b>QM44</b>	<b>QB44</b>

**Dimensions**

Body Size	A	B
1/2"	4.63"	1.40"
3/4"	4.77"	1.40"

**Male Locking Head x Hose End**



**Feature:**

- positive safety lock; with locking nut in place sleeve cannot be moved to open coupling

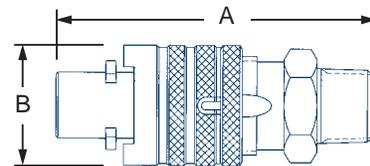


Body Size	Male NPT	Plated Steel Part #	Brass Part #
1/2"	1/2"	<b>QM66</b>	<b>QB66</b>
1/2"	3/4"	<b>QM88</b>	<b>QB88</b>

**Dimensions**

Body Size	A	B
1/2"	3.65"	1.40"
3/4"	3.74"	1.40"

**Male Locking Head x Male NPT**



## Cap



Body Size	Brass Part #	Steel Part #	Pkg. Qty.
1/2"	<b>QBCAP</b>	<b>QMCAP</b>	25

## Converter



Body Size	Plated Steel Part #	Pkg. Qty.
1/2"	<b>QMO</b>	25

## (Buna-N) Gaskets



Body Size	Part #
3/8"	<b>QBM1</b>
1/2"	<b>QBM2</b>

## Male Head



### Features:

- working pressure: **300 PSI** at ambient temperature (70°F)
- for crimp recommendations visit [dixonvalve.com](http://dixonvalve.com)
- also available in stainless steel, contact Dixon for further information

Body Size	Hose ID	OD Range		Plated Steel Part #	Brass Part #
		From:	To:		
1/2"	1/2"	27/32"	1-1/32"	<b>QM3WF</b>	<b>QB3WF</b>
1/2"	3/4"	1-5/32"	1-11/32"	<b>QM4WF</b>	<b>QB4WF</b>

## Female Head



### Features:

- working pressure: **300 PSI** at ambient temperature (70°F)
- for crimp recommendations visit [dixonvalve.com](http://dixonvalve.com)
- also available in stainless steel, contact Dixon for further information

Body Size	Hose ID	OD Range		Plated Steel Part #	Brass Part #
		From:	To:		
1/2"	1/2"	27/32"	1-1/32"	<b>QM22WF</b>	<b>QB22WF</b>
1/2"	3/4"	1-5/32"	1-11/32"	<b>QM23WF</b>	<b>QB23WF</b>

## Male Locking Head



### Features:

- working pressure: **300 PSI** at ambient temperature (70°F)
- for crimp recommendations visit [dixonvalve.com](http://dixonvalve.com)
- also available in stainless steel, contact Dixon for further information

Body Size	Hose ID	OD Range		Plated Steel Part #	Brass Part #
		From:	To:		
1/2"	1/2"	27/32"	1-1/32"	<b>QM33WF</b>	<b>QB33WF</b>
1/2"	3/4"	1-5/32"	1-11/32"	<b>QM44WF</b>	<b>QB44WF</b>

# Quick Acting Couplings

*Dual-Lock couplings allow full air flow for general purpose air handling requiring high flow and pneumatic impact tools.*

## Service:

- The recommended working pressure: **300 PSI** at ambient temperature (70°F)
- The operating temperature range is **-40° to +250°F** (-40° to +121°C).

## Features:

- interchanges with National A type, Dixon Quick Coupling P type and Thor PHC series couplings
- PM and PF series must be used with mating locking sleeve fittings
- spring loaded interlocking engagement
- full opening permits full flow to tool
- optional locking key prevents sleeve retraction
- trivalent chrome plated

## Materials:

- body: trivalent chrome plated steel  
*optional* - brass or 303 stainless steel
- sleeve: steel  
*optional* - brass or 303 stainless steel
- retaining ring and spring: phosphor bronze
- seal: nitrile (buna-n)  
*optional* - FKM

## Connecting:

- push and twist  
Locking clip is available to prevent unintentional disconnection.

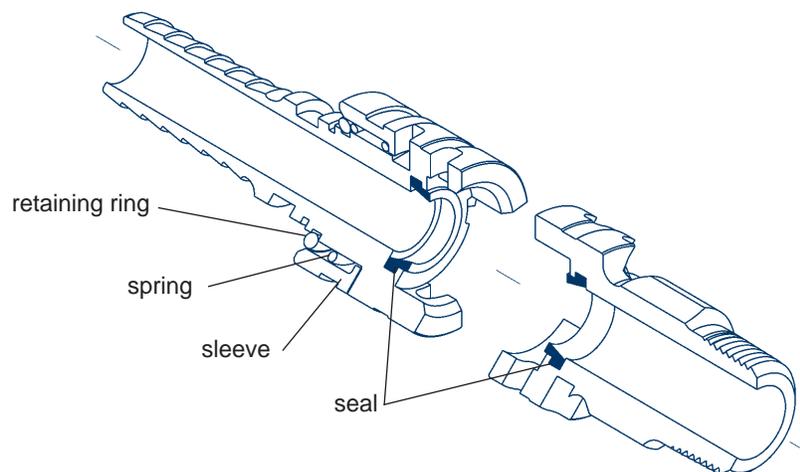
## Disconnecting:

- pull and twist  
**Never attempt to disconnect any hose while pressure is in the line.**

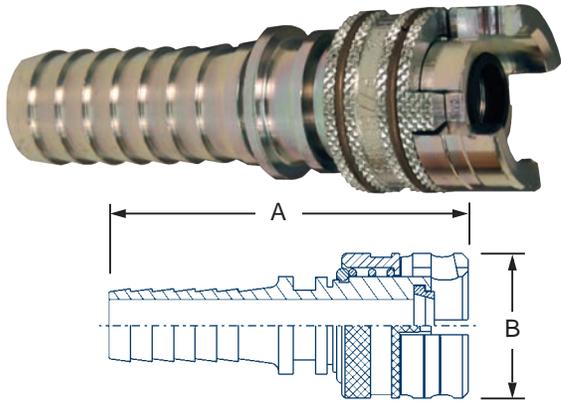


## Interchange:

- interchangeable with National A type, Dixon Quick Coupling P type and Thor PHC series couplings



## Hose Barb with Locking Sleeve

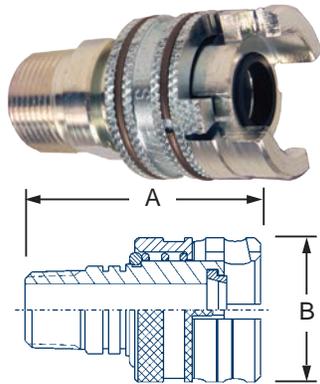


Body Size	Hose Shank	Plated Steel	Pkg Qty	Brass	Pkg Qty	Stainless Steel	Pkg Qty
1/2"	3/8"	<b>PHL6</b>	25	---	--	---	--
1/2"	1/2"	<b>PHL8</b>	25	---	--	---	--
1/2"	3/4"	<b>PHL12</b>	25	<b>PHLB12</b>	25	<b>PHL12SS</b>	10
1/2"	1"	<b>PHL16</b>	25	<b>PHLB16</b>	25	---	--

Dimensions

Size	A	B
3/8"	3.53"	1.55"
1/2"	3.95"	1.55"
3/4"	3.95"	1.55"
1"	6.06"	1.55"

## Male Pipe Thread with Locking Sleeve

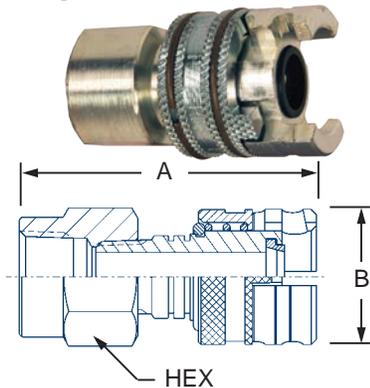


Body Size	Male NPT	Plated Steel	Pkg Qty	Stainless Steel	Pkg Qty
1/2"	3/8"	<b>PML6</b>	25	---	--
1/2"	1/2"	<b>PML8</b>	25	---	--
1/2"	3/4"	<b>PML12</b>	25	<b>PML12SS</b>	10

Dimensions

Size	A	B
1/2"	2.93"	1.55"
3/4"	2.98"	1.55"
1"	2.98"	1.55"

## Female Pipe Thread with Locking Sleeve

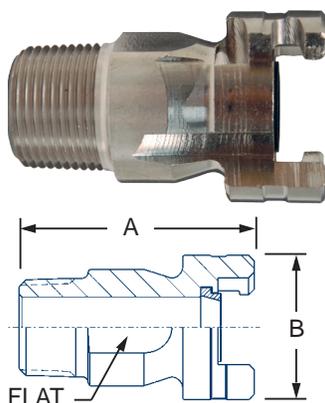


Body Size	Female NPT	Plated Steel	Pkg Qty	Stainless Steel	Pkg Qty
1/2"	3/8"	<b>PFL8</b>	25	---	--
1/2"	1/2"	<b>PFL12</b>	25	<b>PFL12SS</b>	10

Dimensions

Size	A	B	Hex
1/2"	2.75"	1.55"	1.25"
3/4"	2.75"	1.55"	1.25"

## Male Pipe Thread



Must be used with locking sleeve fittings above.

Body Size	Male NPT	Plated Steel	Pkg Qty	Brass	Pkg Qty	Stainless Steel	Pkg Qty
1/2"	3/8"	<b>PM6</b>	25	--	--	---	--
1/2"	1/2"	<b>PM8</b>	25	<b>PMB8</b>	25	---	--
1/2"	3/4"	<b>PM12</b>	25	<b>PMB12</b>	25	<b>PM12SS</b>	10
1/2"	1"	<b>PM16</b>	25	<b>PMB16</b>	25	---	--

Dimensions

Size	A	B	Flat
3/8"	2.00"	1.55"	0.88"
1/2"	2.25"	1.55"	0.97"
3/4"	2.55"	1.55"	1.13"
1"	3.25"	1.55"	1.38"

Must be used with locking sleeve fittings on page 28.

Body Size	Female NPT	Plated Steel	Pkg Qty	Brass	Pkg Qty	Stainless Steel	Pkg Qty
1/2"	3/8"	<b>PF6</b>	25	---	--	---	--
1/2"	1/2"	<b>PF8</b>	25	<b>PFB8</b>	25	---	--
1/2"	3/4"	<b>PF12</b>	25	<b>PFB12</b>	25	<b>PF12SS</b>	10
1/2"	1"	<b>PF16</b>	25	<b>PFB16</b>	25	---	--

Dimensions

Size	A	B	Flat
3/8"	1.79"	1.55"	0.88"
1/2"	2.25"	1.55"	1.31"
3/4"	2.34"	1.55"	1.31"
1"	2.76"	1.55"	1.44"

Features:

- zinc coated
- Large, raised collar sleeve permits easier handling when wearing gloves.

Body Size	Hose Shank	Plated Steel	Pkg Qty
1/2"	3/8"	<b>PHL6FS</b>	25
1/2"	1/2"	<b>PHL8FS</b>	25
1/2"	3/4"	<b>PHL12FS</b>	25

Dimensions

Size	A	B
3/8"	3.53"	1.55"
1/2"	3.95"	1.55"
3/4"	3.95"	1.55"

Features:

- zinc coated
- Large, raised collar sleeve permits easier handling when wearing gloves.

Body Size	Male NPT	Plated Steel	Pkg Qty
1/2"	3/8"	<b>PML6FS</b>	25
1/2"	1/2"	<b>PML8FS</b>	25
1/2"	3/4"	<b>PML12FS</b>	25

Dimensions

Size	A	B
3/8"	2.93"	1.55"
1/2"	2.98"	1.55"
3/4"	2.98"	1.55"

Feature:

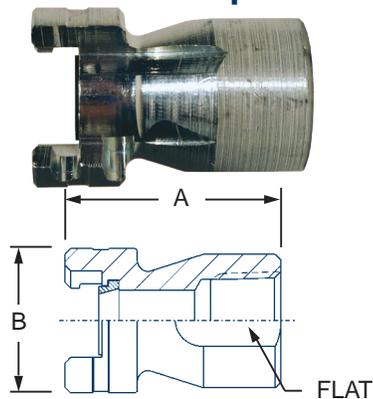
- Large, raised collar sleeve permits easier handling when wearing gloves.

Body Size	Female NPT	Plated Steel	Pkg Qty
1/2"	1/2"	<b>PFL8FS</b>	25
1/2"	3/4"	<b>PFL12FS</b>	25

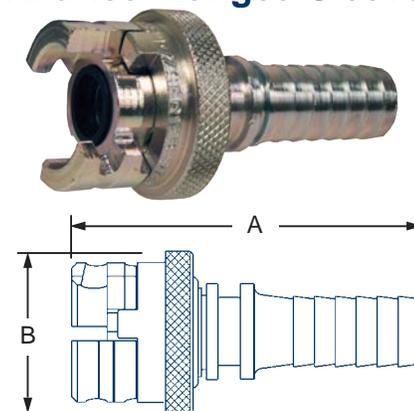
Dimensions

Size	A	B
1/2"	2.75"	1.55"
3/4"	2.75"	1.55"

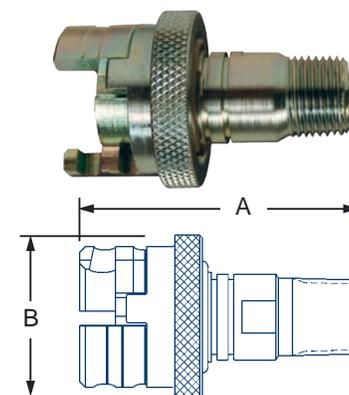
Female Pipe Thread



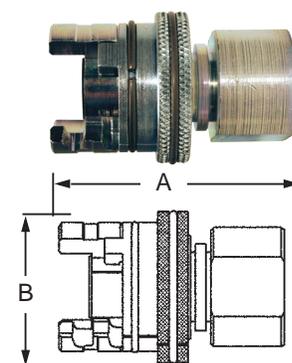
Hose Barb with Knurled Flanged Sleeve



Male Pipe Thread with Knurled Flanged Sleeve



Female Pipe Thread with Knurled Flanged Sleeve



## Replacement Gaskets



Part #	Description
855206	Buna-N (standard)
452963	FKM

## Sleeve Locking Key

**Features:**

- fits couplings with locking sleeve
- prevents sleeve retraction



Part #
855231

## Dual-Lock with Ferrule



**Features:**

- working pressure: **300 PSI** at ambient temperature (70°F)
- trivalent chrome plated coupling with plated steel ferrule
- also available in brass and stainless steel
- for crimp recommendations visit [dixonvalve.com](http://dixonvalve.com)
- 3/8" and 1" sizes available upon request, contact Dixon

Body Size	Hose ID	OD Range		Plated Steel Part #
		From:	To:	
1/2"	1/2"	54/64"	1-2/64"	<b>PHL8WF</b>
1/2"	3/4"	1-10/64"	1-22/64"	<b>PHL12WF</b>

# Air Receiver Manifold Assembly

*used to safely distribute air to machines and tools*

*Tank provides (1) 2" Ground Joint inlet for supply hose and (7) 3/4" outlets for tool hoses.*

## Service:

- 7 gallon capacity provides air reserve needed for operation of tools
- **200 PSI** maximum working pressure for tank (Working pressure of the system is limited to maximum working pressure of the components. i.e. 150 PSI for Air King)

## Features:

- all tank outlets have female NPT threads
- portable - easy carry handles standard
- solid base with mounting holes standard
- approximate tank dimensions are 12" x 17"; 40" x 24" with frame
- painted safety orange

## Components:

- spring-loaded Safety Shut-off Valves (Cut-off Flow Rate 160-180 CFM at 90 PSI)
- safety Pop-off Valve (200 PSI) to protect against over-pressurizing of tank
- 0-300 PSI gauge
- drain valve provides for removal of accumulated oil and water
- locking handle ball valve

## Codes and Standards:

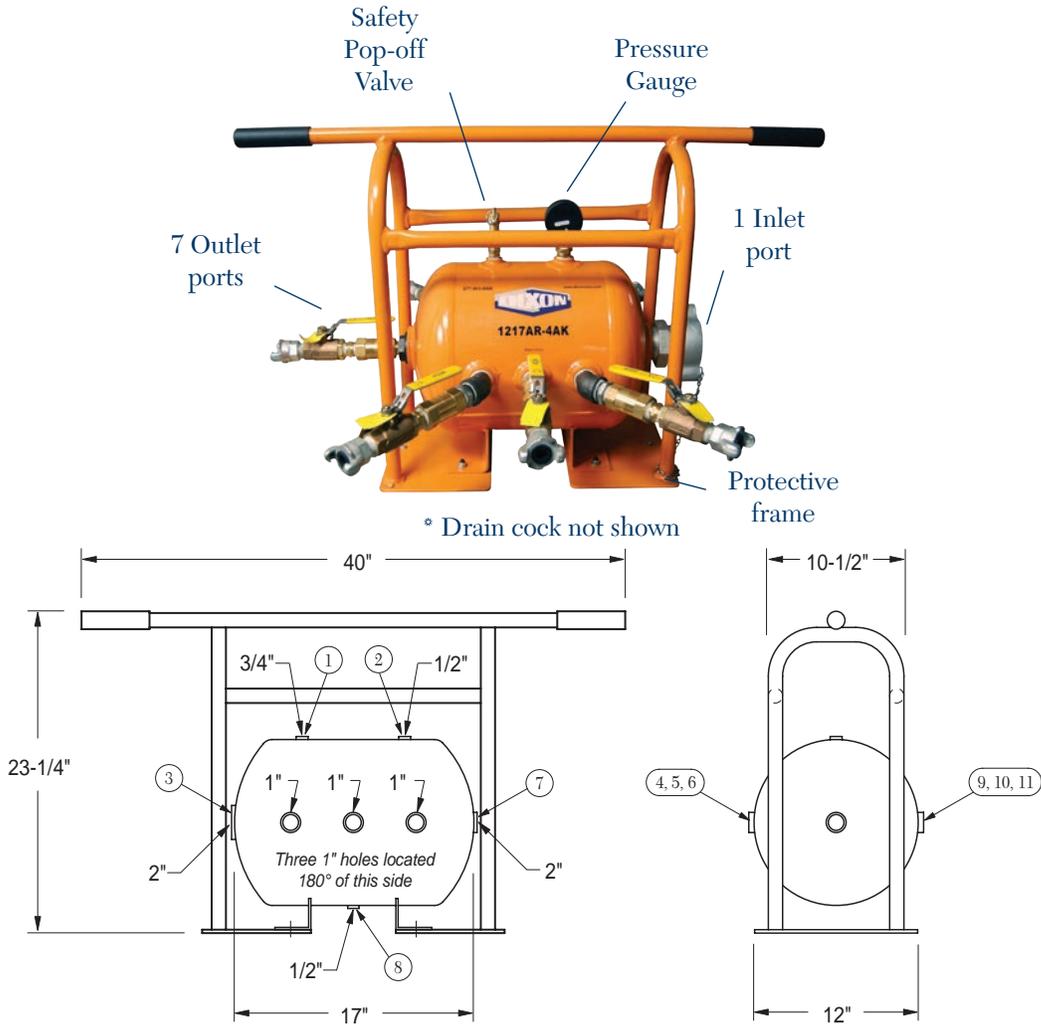
- built to ASME Code, National Board registered
- conforms to OSHA Standards 1910.169 and 1926.306



1217AR-4AK



1217AR-4FR



Dixon 1217AR-4AK air receiver manifold assembly with Air King outlet ports includes the following components:

Part # / Locations	Qty	Description
<b>1217AR-4</b>	1	ASME compressed air receiver
<b>1217FRAME</b>	1	protective frame
Location 1	1	HB2F6M 3/4" male x 1/4" female hex bushing
	1	GL345 0-300 PSI gauge
Location 2	1	HB2F4M 1/2" male x 1/4" female hex bushing
	1	SV200 safety pop-off valve
Location 3	1	GM28 2" male spud
	1	B27SC wing nut cap
Locations 4, 5, 6, 9, 10, 11	6	HB1075G 1" male x 3/4" female bushings
	6	BCN75 3/4" brass hex nipples
	6	BBLV75 ball valves
	6	SCVS6 safety shut-off valves
	6	AM7 Air King universal couplings
	4	SE45100 45° street elbow (1 each in locations 4, 6, 9 and 11 only)
Location 7	1	HB2075 2" male x 3/4" female bushing
	1	BCN75 3/4" brass hex nipples
	1	BBLV75 ball valve
	1	SCVS6 safety shut-off valve
	1	AM7 Air King universal coupling
Location 8	1	HB2F4M 1/2" male x 1/4" female hex bushing
	1	D04 1/4" drain cock
	---	Labor cost for assembly of complete unit
<b>1217AR-4AK</b>	1	7 gallon ASME compressed air receiver manifold complete assembly with Air King
		<b>Tank and Frame only</b>
<b>1217AR-4FR</b>	1	7 gallon ASME compressed air receiver with frame only

\* Dixon recommends the use of safety clips and King safety cables on all air hose connections.



## ASME Air Tank with Fittings and Watts Filter

### Application:

- Designed to remove compressed air contaminants such as water, compressor oil, dirt, pipe scale and water particles from the air supply at the point of entry into the ASME air receiver manifold.

### Features:

- includes basic 1217AR-4AK ASME manifold assembly
- F602-16WJR 2" auto drain filter with 26 ounce metal bowl and related plumbing installed on the inlet port of the ASME air receiver manifold
- air supply hose connects directly to GM28 2" male spud on the filter air inlet
- includes a B27SC wing nut cap with a chain



Inlet	Outlet	Part #
2"	3/4"	<b>1217AR-4AKWF</b>

## Wilkerson Combination Unit with Protective Frame

### Features:

- provides downstream air preparation with protective frame
- C31-08AMB 1" FRL with metal bowls and auto drain filter
- FBV100 1" brass ball valve and AM12 air king on inlet port
- BBV100DTW 2-way ball valve installed between regulator and lubricator provides option for non-lubricated air
- heavy duty frame protects air prep components
- operating:
  - maximum pressure: **250 PSIG**
  - temperature range: **40°F to 150°F**
  - flow: 320 SCFM



Size	Part #
1"	<b>C31-08FRAME</b>

## Safety

# Safety Check Valve

*Prevents dangerous hose whip on portable air compressors*

### Features:

- does not prevent backflow
- high flow valve to provide optimum performance
- controls excess air flow (SCFM) in only one direction
- not for use in applications where 100% of the available air is required, i.e. sand blast, pile driving rigs, expansion joint blow down pipes, etc.
- automatically senses change in air flow and shuts off the flow in the event of a surge in excess of valve flow rating thus preventing hose whip
- conforms to OSHA regulation 1926.302 (b) (7) requiring a safety device at the source of the air supply and at branch air lines.
- applications include temporary plant/factory air, construction sites, shipyards or utilities

### Construction:

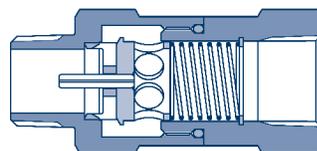
- solid brass body and valve
- stainless steel spring and roll pin
- maximum working pressure: **250 PSI**
- maximum temperature: **250°F**

### Use:

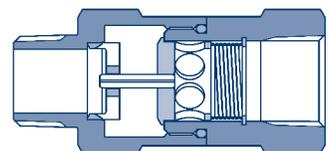
- Safety Check Valves operate by using the pressure differential across the valve to operate the valve and spring assembly. The pressure differential is directly related to the flow of air through the valve.
- When the pressure differential is within the operating limits -- below the cutoff flow -- of the unit, the force on the valve exerted by the spring is greater than that caused by the pressure differential (see open position graphic below). The valve remains open and normal operation continues.
- When the pressure differential is above the cutoff limit, the force on the valve exerted by the pressure differential is greater than the force exerted by the spring, and the valve closes (see the closed position graphic below).
- After the repair is made, normal operation is automatically enabled when pressure across the valve equalizes through the bleeder hole.
- The valve spring size can be specified by determining the air flow during normal operation and by estimating the air flow if a failure or rupture occurs.

### Questions to ask when selecting a safety shut-off valve:

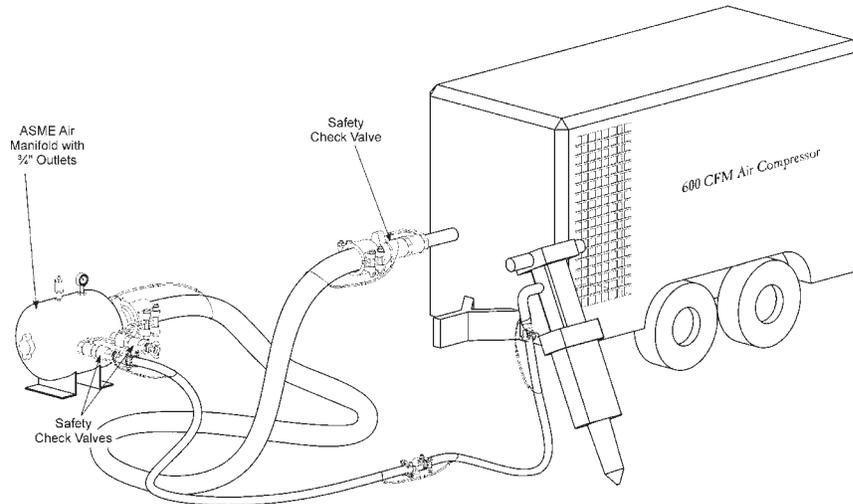
1. What is the hose ID size you are using?
2. What is the operating pressure of the compressor, in PSI?
3. What is the SCFM of your compressor? (printed on the side of most air compressors)
4. How much air flow, in SCFM, does the tool(s) require?
5. What is the maximum air flow possible, in SCFM, through your air hose, at the end of the length of the hose? Contact Dixon for recommendations if the hose length is over 100'.



Check Valve In Open Position



Check Valve In Closed Position



**Installation:**

A safety shut-off valve should be placed immediately after the air control valve and before the hose on a compressor, and on each discharge port on a manifold (see drawing above).

**Sizing the safety shut-off valve:**

1. The safety shut-off valve NPT size must be the same as the nominal ID size of the air line on which it is used.  
*Note: Never increase or decrease the hose size from the compressor to the tool or from the compressor to the manifold.*
2. One safety shut-off valve must be used on each hose outlet from the manifold.
3. To avoid nuisance cut-off's, the shut-off valve selected should have a cut-off range of 110% of the maximum anticipated air flow to the tool, or tools, to be used.
4. The maximum SCFM of the supply side air line must be above the cut-off range of the valve. The cut-off range of Dixon's shut-off valves is given at 90 PSI. To determine the cut-off range at other PSI's, use the formula or the sample numbers in the Cut-off Rate Chart below to find the flow rate multiplier. Multiply the flow rate multiplier by the numbers in the cut-off flow range column to find the cut-off range at your PSI.

**Safety Shut-off Valve Cut-off Rates  
at PSI's Other Than 90 PSI**

$$\text{Flow rate multiplier} = \sqrt{\frac{\text{PSIG} + 14.7}{104.7}}$$

Inlet pressure (PSI)	25	50	75	100	125
Flow rate multiplier	.62	.79	.93	1.05	1.16

**Operation:**

Before starting the compressor the air control valve should be closed completely. When the compressor unloads, open the air control valve *very slowly*. Full port ball valves tend to work better than gate or butterfly type valves.

The air control valve must be fully open for the safety shut-off valve to work. Some portable air compressor manufacturers recommend start-up with the air control valve slightly open. In this case you may have to close the valve and reopen it slowly to the full open position, or wait for the safety shut-off valve to reset itself.

If the valve fails to operate despite meeting all conditions, check the hose line for obstructions or a hose mender restricting normal air flow.

## SCV-Series Selection Guide:

1. Sketch the position of the tool, fittings, safety check and supply line. Measure the length of hose from the safety check to the tool. There should be no jump sizes in the hose between the safety check and the tool. You will need one safety check valve for each branch line feeding the tool. A safety check in the main supply line is also recommended.
2. Determine the hose size you want to protect. Select the same size safety check as the hose size. For example, a  $\frac{3}{8}$ " hose will require a  $\frac{3}{8}$ " safety check. Do not use a different size safety check. One exception to this rule is for  $\frac{5}{8}$ " hose, use a  $\frac{1}{2}$ " safety check valve.
3. Determine the maximum operating air flow (SCFM) required through the safety check during normal use. For example, the maximum air consumption of the largest tool used on that supply line. Determine the optimum cutoff flow by multiplying the maximum operating air flow by 110%.
4. Add to the length of hose, you measured in step 1, length adders to compensate for system components. Add 0.91m (3') for each elbow, 0.91m (3') for each tee, 3.05m (10') for each globe valve, 0.61m (2') for each gate valve, 0.91m (3') for each hose fitting. This calculation will result in the total length for your safety check valve selection. Find the column in the Unobstructed Air Flow Chart, below, that corresponds to your hose size and the row that corresponds to your calculated total length. Where they intersect, is the unobstructed air flow in SCFM.
5. If the optimum cutoff flow is 80% of the unobstructed air flow or less, you should use the optimum cutoff flow (110% of the maximum calculated air flow) to select the appropriate safety check valve. To do this, find the safety check that has a corresponding cutoff flow rate in the product list on the next page.
6. If the optimum cutoff flow is greater than 80% of the unobstructed air flow, there may be a problem with the safety check valve sensing the difference between normal air demand and a line rupture. You may want to consider removing fittings from the flow path, reducing the length of your hose or increasing your hose diameter. If you are not sure, call your Dixon distributor for assistance.
7. Always install one safety check and test the performance of the system before you continue other installations. When start-up is underway, open the air control valve at the compressor or manifold *very slowly* to allow air to bleed through the check valve so that pressure is equalized on each side of the valve. If the valve fails to operate despite meeting all conditions, check the supply line for obstructions or a hose mender restricting normal air flow.

## Unobstructed Air Flow Chart (SCFM)

Total Length (feet)	Hose Size (ID)										
	$\frac{1}{4}$ "	$\frac{3}{8}$ "	$\frac{1}{2}$ "	$\frac{5}{8}$ "	$\frac{3}{4}$ "	1"	1 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	2"	2 $\frac{1}{2}$ "	3"
5	28	66	124	199	294	550	1200	1800	3300	5300	7900
8	27	65	123	196	290	540	1140	1700	3100	5000	7500
10	27	64	121	194	286	531	1100	1640	3000	4600	7200
20	26	62	116	189	278	520	960	1420	2500	4200	6300
30	24	58	108	175	258	480	850	1280	2300	3800	5600
50	22	54	101	163	240	447	720	1080	2000	3200	4700
75	20	47	86	140	207	385	670	960	1850	3000	4400
100	17	41	77	124	178	340	620	940	1760	2800	4200
150	15	35	65	105	158	290	590	870	1630	2600	3900
200	13	30	57	92	136	253	550	820	1520	2400	3600
250	11	27	51	83	123	228	520	780	1450	2300	3400
300	10	25	47	56	114	210	500	750	1390	2200	3300

**Length Adders:**  
 3' for each elbow  
 3' for each tee  
 10' for each globe valve  
 2' for each gate valve  
 3' for each hose fitting

• Use  $\frac{1}{2}$ " Safety Check Valve for  $\frac{5}{8}$ " Hose.

Not recommended for applications requiring 100% of the available air supply. These applications include, but are not limited to, sand blast equipment, pile driving rigs, and expansion joint blow down pipes.

It is recommended to install auxiliary safety devices, including Safety Cables, to ensure optimum safety for the operator in the event of a coupling failure or hose rupture. (see page 39)



NPT and Hose ID Size	Part #	Cut-off Flow Range (SCFM at 90 PSI)
1/4"	<b>SCVL2</b>	23-29
3/8"	<b>SCVM3</b>	39-47
	<b>SCVS3</b>	52-65
1/2"	<b>SCVM4</b>	70-78
	<b>SCVS4</b>	80-96
3/4"	<b>SCVL6</b>	72-88
	<b>SCVM6</b>	92-108
	<b>SCVR6</b>	112-128
	<b>SCVJ6</b>	132-148
	<b>SCVS6</b>	160-180
	<b>SCVH6</b>	180-200
1"	<b>SCVL8</b>	165-195
	<b>SCVM8</b>	220-260
	<b>SCVS8</b>	280-320
	<b>SCVH8</b>	310-340
1 1/4"	<b>SCVL10</b>	260-290
	<b>SCVM10</b>	300-340
	<b>SCVS10</b>	440-500
	<b>SCVH10</b>	570-630
1 1/2"	<b>SCVL12</b>	300-360
	<b>SCVM12</b>	470-530
	<b>SCVS12</b>	640-720
	<b>SCVH12</b>	750-830
2"	<b>SCVL16</b>	510-590
	<b>SCVM16</b>	725-825
	<b>SCVS16</b>	900-1050
	<b>SCVH16</b>	1100-1200
3"	<b>SCVL24</b>	1200-1400
	<b>SCVS24</b>	2400-2700
	<b>SCVH24</b>	2850-3050

## Performance Specifications

- high flow design results in maximum flow with minimal pressure drop
- automatically and instantly protects the operator against hose whip in the event of a damaged hose or coupling
- In the event of a hose rupture or coupling failure, the valve will automatically reset after the problem is fixed.
- SCV-Series is available in a large selection of sizes ranging from 1/4" to 3", NPTF or BSPP/BSPT threads.
- Valve operation is fully compliant with OSHA Safety Regulation 1926.302(b)(7), (referenced on Page 5).

Performance Specifications	Operating Bar (PSI)	Minimum Burst Bar (PSI)	Temperature °C (°F)	Air Flow <sup>1</sup> 30.5m (100')
1/4"	17 (250)	138 (2,000)	121 (250)	17 SCFM
3/8"	17 (250)	138 (2,000)	121 (250)	41 SCFM
1/2"	17 (250)	138 (2,000)	121 (250)	77 SCFM
3/4"	17 (250)	138 (2,000)	121 (250)	178 SCFM
1"	17 (250)	138 (2,000)	121 (250)	340 SCFM
1 1/4"	17 (250)	138 (2,000)	121 (250)	620 SCFM
1 1/2"	17 (250)	138 (2,000)	121 (250)	940 SCFM
2"	17 (250)	138 (2,000)	121 (250)	1,760 SCFM
2 1/2"	17 (250)	138 (2,000)	121 (250)	2,800 SCFM
3"	17 (250)	138 (2,000)	121 (250)	4,200 SCFM



<sup>1</sup> Air flow rating is based upon calculated values using unobstructed air flow for the applicable hose size.

# King Safety Cable

*A positive safeguard for air hose connections King Safety Cable helps you meet today's safety standards*

- Hose-to-hose or hose-to-rigid outlet styles available
- Low cost answer to eliminating injuries caused by broken air hose connections
- Highly resistant to rust and corrosion
- Easy installation and removal - no tools needed
- Custom lengths available

When a pressurized air hose becomes accidentally uncoupled, or a hose failure occurs, the quick exhaust of air causes the hose assembly to whip violently, creating a potentially dangerous situation.

**King Safety Cables** prevent hose whip in the event of the accidental separation of a coupling or clamp device. The steel cables span the hose fittings to provide standby safety for the hose. Spring-loaded loops in the cable ends are easily opened to pass over the couplings and provide a firm grip on the hose.

The cables can be used in hose to hose installations, as well as hose to rigid outlet, or tool.

On hose to hose applications the **King Safety Cable** should be installed on the hose portion of the assembly in a fully extended position. When used on hose to rigid outlet, or tool, the spring loaded end should be over the hose, while the choker end is installed on the outlet, or tool. **King Safety Cable should always be installed in a fully extended position.**



## OSHA Regulations

**Standards - 29 CFR, 1915.131 (partial):**

**(e)** Before use, pneumatic tools shall be secured to the extension hose or whip by some positive means to prevent the tool from becoming accidentally disconnected from the whip.

**Standards - 29 CFR, 1926.302 (partial):**

**(b)(1)** Pneumatic power tools shall be secured to the hose or whip by some positive means to prevent the tool from becoming accidentally disconnected.

**Standards - 29 CFR, 1926.603 (partial):**

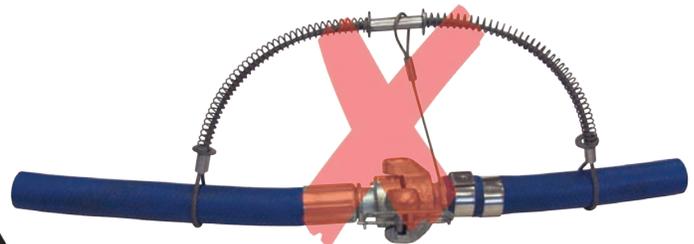
**(a)(9)** Steam hose leading to a steam hammer or jet pipe shall be securely attached to the hammer with an adequate length of at least 1/4-inch diameter chain or cable to prevent whipping in the event the joint at the hammer is broken. Air hammer hoses shall be provided with the same protection as required for steam lines.

**(a)(10)** Safety chains, or equivalent means, shall be provided for each hose connection to prevent the line from thrashing around in case the coupling becomes disconnected.



**Correct Installation**

King Safety Cable installed in the extended position (no slack).



**Incorrect Installation**

King Safety Cable is not installed in the extended position (too much slack).

**Features:**

- hose-to-hose or hose-to-rigid outlet
- King Cable is the low cost answer to eliminate injuries caused by broken air hose connections
- highly resistant to rust and corrosion
- no tools needed - easy to install and remove
- maximum working pressure **200 PSI**



**Style WSR, for hose-to-tool service**

Hose ID	Cable	Length	Maximum Working Pressure (PSI)	Steel Part #	Stainless Steel Part #
½" - 1¼"	⅛"	20¼"	200	<b>WSR1</b>	<b>WSR1SS</b>
½" - 2"	3/16"	28"	200	<b>WSR3</b>	---
1½" - 3"	¼"	38"	200	<b>WSR2</b>	<b>WSR2SS</b>
4"	⅜"	44"	200	<b>WSR4</b>	---



**Style W, for hose-to-hose service**

Hose ID	Cable	Length	Maximum Working Pressure (PSI)	Steel Part #	Stainless Steel Part #
½" - 1¼"	1/8"	20¼"	200	<b>WB1</b>	<b>WB1SS</b>
½" - 2"	3/16"	28"	200	<b>WB3</b>	---
1½" - 3"	1/4"	38"	200	<b>WA2</b>	<b>WA2SS</b>
4"	3/8"	44"	200	<b>WA4</b>	---

Note: Cables are shipped with safety restraint labels attached. Labels are not pictured.

## King Safety Cable Options



**WB1C**  
WB1 with safety clip and lanyard



**WSR1E**  
WSR1E with stainless steel marine eye

Hose ID	Cable	Part #	Description	Max. Work. Press. PSI
½" - 1¼"	⅛"	<b>WSR1C</b>	WSR1 with safety clip and lanyard used to lock Air King couplings	200
½" - 1¼"	⅛"	<b>WB1C</b>	WB1 with safety clip and lanyard used to lock Air King couplings	200
½" - 1¼"	⅛"	<b>WSR1E</b>	WSR1 with stainless steel safety marine eye used to connect safety cable to a bolt on tool	200
1½" - 3"	¼"	<b>WA2B</b>	WA2 with bronze/copper ferrule for special environmental conditions	200

## King Safety Cable Installation Procedures

**A. For Hose to Tool Installation (WSR1, WSR2, WSR3, WSR4)**

1. Loosen cinch on end of cable without spring.
2. Loop cable over tool or connection. The connection must be shaped so that the cable will not slip off if a failure occurs. The connection or tool is the anchor for the cable.
3. Open the cable loop on the spring end and slide it over the hose end.
4. Attach hose to tool or connection.
5. Remove slack from cable by loosening spring on hose and sliding cable as far away as possible from tool or connections.

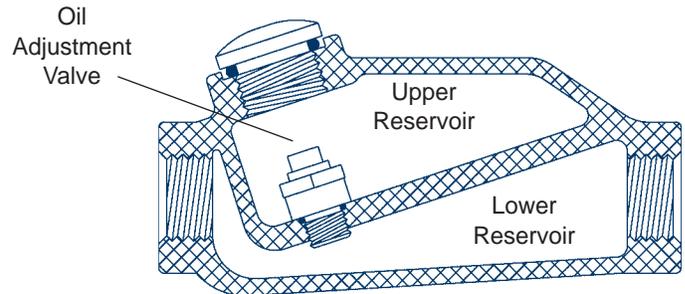
**B. For Hose to Hose Installation (WB1, WA2, WB3, WA4)**

1. Open the cable loop on one end and slide it over the coupling of one hose.
2. Open the cable loop on the connecting end and slide it over the coupling on the other hose.
3. Couple the hoses together.
4. Remove slack by sliding both cables equally apart.

Dixon

# In-Line Lubricators

*Designed for use with hose-connected tools that are too far from the compressor to be lubricated by a permanently mounted unit.*



## Features:

- The minimum flow rate that must be achieved for the PL series lubricators to work is 30 SCFM. A flow rate less than 30 SCFM will not create the pressure difference needed between chambers to force the oil into the air stream.
- Install within 25 feet of the air tool requiring lubrication. Refer to the arrow for proper air flow direction.
- transparent sight disc allows visual inspection of oil level
- oil flow regulated by screwdriver adjustment of oil adjustment valve inside body
- not recommended for constant flow applications
- *for use on reciprocating tools only*
- can dispense standard air tool lubricant or Dixon anti-freeze lubricant
- lubricator body is 356-T6 aluminum

## Description:

- The lubricator has two reservoirs. The upper reservoir holds the oil, and a lower reservoir that is the passageway for the air to enter. The air and oil mixture exits through the lower reservoir. The oil adjustment valve between the two compartments initially allows air to enter the reservoir to pressurize it, and then it controls the amount of oil entering the air stream.

## How it works:

- Before the hose is charged with air, the pressure in both chambers of the lubricator are equal. When the tool is turned on it draws air from the compressor through the lower chamber. As air passes through the lower chamber it creates an area of low pressure. When the pressure in the lower chamber is less than the pressure in the upper chamber the dual purpose oil adjustment valve allows oil to flow at the set rate into the airstream of the chamber below to lubricate the tool. When the flow of air stops, the oil adjustment valve allows pressure to build in the top chamber until the pressure is equal between the top and bottom. As long as the pressure in the upper chamber is less than or equal to the pressure in the lower chamber no oil will flow through the oil adjustment valve.

*Note: These lubricators are only recommended for use with tools that are frequently turned on and off.*



## Installation:

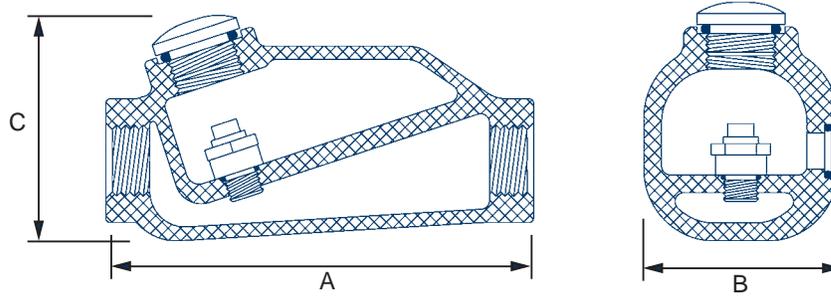
- At start up, additional lubricant is required to coat the inside of the line between the lubricator and the tool. To avoid operating a dry tool, add 1/2 ounce (15cc) of oil directly into the line.
- By removing the fill plug and using a screwdriver, the operator can adjust the amount of oil flowing into the air stream. It is not necessary to shut off the airflow to do this.
- The viscosity of the oil used and uniqueness of the application determine the right setting for proper lubrication. A setting of 5 is suitable for average conditions using 10-weight oil. Remember that the lag time between adjustment and resulting effect at the tool may be as long as an hour. Make small adjustments, and check the result.

## Storage:

- The simple principle behind the operation of this lubricator does not provide for oil shut off when the tool is not being used. To prevent a pressure differential from forcing the remaining oil from the reservoir into the air line, turn the lubricator upside down or open the fill plug to depressurize the reservoir.

## Safety Notes:

- Wear eye protection when connecting or disconnecting couplings. Always use a whip hose with impact tools, King Cable to protect junctions, and couplings that are compatible with the media being transferred.
- Always unscrew fill plug slowly to depressurize upper chamber before filling or adjusting valve.



NPT Sizes	Part #	Oil Capacity	Max. Working Pressure	Air Flow at 70 PSI	Length A	Width B	Height C	Weight
1/2"	<b>PL300</b>	1.4 fluid ozs.	<b>500 PSI</b>	30 SCFM	4 1/2"	2 1/4"	2 1/4"	14 ozs.
3/4"	<b>PL400</b>	3.7 fluid ozs.	<b>200 PSI</b>	70 SCFM	6"	2 3/4"	2 3/4"	22 ozs.
3/4"	<b>PL400L</b>	11.0 fluid ozs.	<b>300 PSI</b>	70 SCFM	7"	3 1/2"	3 3/4"	38 ozs.
1"	<b>PL500</b>	16.0 fluid ozs.	<b>250 PSI</b>	100 SCFM	10"	4 1/4"	4"	69 ozs.

**Feature:**

**Available with Filter**

- consists of **9076M** particle filter with 40 micron sintered bronze element and **PL400** (3.7 ounce) or **PL400L** (11.0 ounce) lubricator

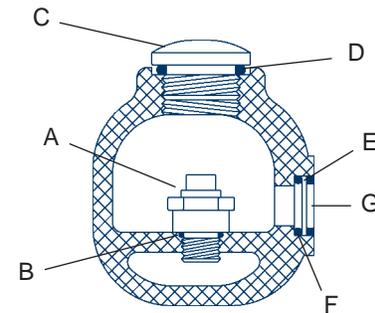
NPT Size	Oil Capacity	Max. Work. Press. at ambient temp. (70°F)	Aluminum Part #
3/4"	3.7 fluid ozs.	<b>200 PSI</b>	<b>PL400WF</b>
3/4"	11.0 fluid ozs.	<b>300 PSI</b>	<b>PL400LWF</b>



**Repair Parts**

(same for all sizes)

Description	Part #
(A) oil adjustment valve assembly	<b>851661</b>
(B) valve gasket	<b>452531</b>
(C) fill plug	<b>452525</b>
(D) fill plug O-ring	<b>844319</b>
(E) sight disk	<b>452532</b>
(F) sight disk seal	<b>847272</b>
(G) sight disk lock nut	<b>452533</b>



Type of oil to use:

- Any petroleum-base, non-detergent light weight oil (SAE 10/150SSU) which will readily break up into a mist, i.e., Mobil DTE light or comparable oil. *Do not use any synthetic oil or oils containing additives or solvents.*



**Lubricant**

Part #	Size	Pkg. Qty.
<b>DATL016</b>	1 pint	12
<b>DATL128</b>	1 gallon	4

**Anti-Freeze**

Part #	Size	Pkg. Qty.
<b>DATL016W</b>	1 pint	12
<b>DATL128W</b>	1 gallon	4

**Features:**

- base can be fitted to any existing PL lubricator
- keeps lubricator from flipping or rolling over, ensuring that it provides continuous lubrication to the downstream air tool

Description	Aluminum Part #
leveling base for PL300	<b>LB300</b>
leveling base for PL400	<b>LB400</b>
leveling base for PL500	<b>LB500</b>



lubricator is not included with the base

# Air Accessories

*Additional Contractor Air Related Products*



**Safety Pop-Off Valves:**

- section E in the DPL (Dixon Price List)

**Filters and Lubricators:**

- section E in the DPL (Dixon Price List)

**Gauges:**

- section E in the DPL (Dixon Price List)

**Ball Valves:**

- section N in the DPL (Dixon Price List)

**Boss Fittings and Clamps:**

- section D in the DPL (Dixon Price List)

**3500 Series nipples:**

- section F in the DPL (Dixon Price List)

**Bent Stem Swivels:**

- section E in the DPL (Dixon Price List)

**Compressor Y fitting:**

- section E in the DPL (Dixon Price List)

## Gauges

**Features:**

- designed for long reliable service
- materials available brass, stainless steel, plastic
- standard dry and liquid-filled pressure gauges, compound pressure gauges, vacuum gauges, and welding gauges
- Offered in the Dixon Price List Catalog



## 3500 Nipples

**Features:**

- used with whip hose to withstand vibration
- zinc plated steel material
- male nipple: hose size ¼" - 1", NPT size 1/8" - 1"
- female nipple: hose size ¼" - ¾", NPT size ¼" - ¾"
- Offered in the Dixon Price List Catalog



## Compressor Y

**Features:**

- converts a single supply source to a dual outlet
- female NPT 1" (1), male NPT ¾" (2)
- material: iron
- Offered in the Dixon Price List Catalog



## Safety Pop-Off Valves

**Features:**

- National Board Certified Safety Valves
- max operating temperature **400°F (204°C)**
- material brass and stainless steel
- available in heavy duty high capacity, standard, and soft seat
- Offered in the Dixon Price List Catalog



## Safety Vented Ball Valves



### Features:

- handle position quickly indicates if valve is open or closed
- rated to **600 PSI**
- blow-out proof stem design
- RTFE seats and stuffing box ring
- Offered in the Dixon Price List Catalog

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## Steel Bent Stem Swivels



### Features:

- convenient air tool connectors
- designed for normal operation at 90 PSI as ambient temperature (70°F)
- comes in 7/8" thread which fits most chipping hammers
- Offered in the Dixon Price List Catalog

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## Hose Rack and Reels



### Features:

- Reelcraft® spring driven hose reels  
5000, 7000, and 80000 series available
- hose racks for hose sizes 1½" to 2½", 50' to 200'
- Offered in the Dixon Price List Catalog

Filters and Lubricators

Features:

- Norgren, Watts and Wilkerson brands available
- inventories all components and sizes from 1/8" to 2"
- general purpose, rugged and reliable
- Offered in the Dixon Price List Catalog



Safety Tag and Tape

Features:

- tags sold in quantities of 100
- length of tape - 55 yards, approximately 255 warnings
- Offered in the Dixon Price List Catalog



Questions to Ask

- S** Size
- T** Temperature
- A** Application
- M** Media
- P** Pressure
- E** Ends
- D** Dixon

**Pressure Conversions**

100 PSI = 6.9 Bars                      5 Bars = 72.5 PSI  
 250 PSI = 17.25 Bars                10 Bars = 145 PSI  
 600 PSI = 41.4 Bars                  25 Bars = 362.5 PSI

**Air Supply Requirements**  
(operating pressure: 90 PSI)

Tool	Class	Typical Air Consumption (CFM)	Hose Size (inches)		
			0-10 ft.	10-50 ft.	50-200 ft.
Paving Breakers	25 lb.	45	1/2	1/2	3/4
	35 lb.	50	1/2	3/4	3/4
	60 lb.	65	1/2	3/4	1
	80 lb.	80	3/4	3/4	1
Claydiggers		45	1/2	1/2	3/4
Hand Drills	8 lb.	20	3/8	3/8	1/2
	15 lb.	32	3/8	1/2	1/2
Rock (Sinker) Drills	45 lb.	105	3/4	3/4	1
	55 lb.	130	3/4	1	1
Tampers	5" butt	20	3/8	1/2	1/2
	6" butt	30	1/2	1/2	3/4
Sump Pump Sludge Pump	3 HP	100	3/4	3/4	1
	Ejector	90	1	1	1
Vibrators	2-1/2"	60	1	1	1
	3"	60	1	1	1
Chipping Hammers		25	3/8	1/2	1/2
Impact Wrenches	3/8" sq. dr.	10	5/16	3/8	3/8
	1/2"	15	5/16	3/8	1/2
	3/4"	25	3/8	1/2	1/2
	1"	50	1/2	3/4	3/4
Drills	1/4" - 1/2"	22	3/8	3/8	1/2
Grinders	die/burr	20	3/8	3/8	1/2
	small angle	20	3/8	3/8	1/2
	3 HP vertical	75	1/2	3/4	1

**Force Chart**  
Force (In Pounds)

Hose ID	25 PSI	50 PSI	75 PSI	100 PSI	150 PSI	200 PSI	250 PSI	300 PSI	500 PSI	1000 PSI
1/4"	1	2	4	5	7	10	12	15	25	49
3/8"	3	6	8	11	17	22	28	33	55	110
1/2"	5	10	15	20	29	39	49	59	98	196
3/4"	11	22	33	44	66	88	110	133	221	442
1"	20	39	59	79	118	157	196	236	393	785
1-1/4"	31	61	92	123	184	245	307	368	614	1227
1-1/2"	44	88	133	177	265	353	442	530	884	1767
2"	79	157	236	314	471	628	785	942	1571	3142
2-1/2"	123	245	368	491	736	982	1227	1473	2454	4909
3"	177	353	530	707	1060	1414	1767	2121	3534	7069
4"	314	628	942	1257	1885	2513	3142	3770	6283	12566
5"	491	982	1473	1964	2945	3927	4909	5891	9818	19635
6"	707	1414	2121	2827	4241	5655	7069	8482	14137	28274
8"	1257	2513	3770	5027	7540	10053	12566	15080	25133	50266
10"	1964	3927	5891	7854	11781	15708	19635	23562	39270	78540
12"	2827	5655	8482	11310	16965	22620	28274	33929	56549	113098

*Note: For hose ID's from 1-1/4" to 12" the force in pounds is greater than the PSI.*

- Force is the dynamic power which is exported longitudinally through a hose, towards the ends. To arrive at the number of pounds of force exerted, you merely multiply the area of the ID times the working pressure being used.
- Area of a circle:  $\pi \times r^2$  (PI [3.1416] times radius squared)
- Force = Area x Pressure

Fraction - Decimal Conversion Chart

	<u>Inches</u>	<u>Millimeters</u>		<u>Inches</u>	<u>Millimeters</u>
$\frac{1}{32}$	$\frac{1}{64}$ .015625	.3969	$\frac{17}{32}$	$\frac{33}{64}$ .515625	13.0969
$\frac{1}{16}$	$\frac{3}{64}$ .046875	1.1906	$\frac{9}{16}$	$\frac{35}{64}$ .546875	13.8907
$\frac{3}{32}$	$\frac{5}{64}$ .078125	1.9844	$\frac{19}{32}$	$\frac{37}{64}$ .578125	14.6844
$\frac{1}{8}$	$\frac{7}{64}$ .109375	2.7781	$\frac{5}{8}$	$\frac{39}{64}$ .609375	15.4782
$\frac{5}{32}$	$\frac{9}{64}$ .140625	3.5719	$\frac{21}{32}$	$\frac{41}{64}$ .640625	16.2719
$\frac{3}{16}$	$\frac{11}{64}$ .171875	4.3656	$\frac{11}{16}$	$\frac{43}{64}$ .671875	17.0657
$\frac{7}{32}$	$\frac{13}{64}$ .203125	5.1594	$\frac{23}{32}$	$\frac{45}{64}$ .703125	17.8594
$\frac{1}{4}$	$\frac{15}{64}$ .234375	5.9531	$\frac{11}{16}$	$\frac{47}{64}$ .734375	18.6532
$\frac{9}{32}$	$\frac{17}{64}$ .265625	6.7469	$\frac{3}{4}$	$\frac{49}{64}$ .765625	19.4470
$\frac{5}{16}$	$\frac{19}{64}$ .296875	7.5406	$\frac{25}{32}$	$\frac{51}{64}$ .796875	20.2407
$\frac{11}{32}$	$\frac{21}{64}$ .328125	8.3344	$\frac{13}{16}$	$\frac{53}{64}$ .828125	21.0345
$\frac{3}{8}$	$\frac{23}{64}$ .359375	9.1282	$\frac{27}{32}$	$\frac{55}{64}$ .859375	21.8282
$\frac{13}{32}$	$\frac{25}{64}$ .390625	9.9219	$\frac{7}{8}$	$\frac{57}{64}$ .890625	22.6220
$\frac{7}{16}$	$\frac{27}{64}$ .421875	10.7157	$\frac{29}{32}$	$\frac{59}{64}$ .921875	23.4157
$\frac{15}{32}$	$\frac{29}{64}$ .453125	11.5094	$\frac{15}{16}$	$\frac{61}{64}$ .953125	24.2095
$\frac{1}{2}$	$\frac{31}{64}$ .484375	12.3032	$\frac{31}{32}$	$\frac{63}{64}$ .984375	25.0032
	$\frac{1}{2}$ .500	12.7001	$1$	1.000	25.4001

Dixon is recognized as the premier manufacturer and supplier of hose fittings and accessories spanning a wide range of industrial uses. Dixon's range includes products for food, dairy processing, beverage and brewery, mobile tankers, mining, construction, chemical processing, petroleum, oilfields, refining and manufacturing.

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