## **Safety**

- · Use Dixon couplings, retention devices and accessory products only for their intended service.
- All recommendations of the Hose Manufacturer, and the Coupling Manufacturer, must be employed with regards to Size,
   Temperature, Application, Media, and Pressure when selecting the components for a hose assembly.
- All finished hose assemblies should be tested in accordance with the Association for Rubber Products Manufacturers recommendations.
- · All hose assemblies should be thoroughly inspected prior to each use to ensure they are undamaged, and properly coupled.
- Use safety clips on couplings, and King Safety Cables on assemblies where required by the manufacturer, as well as State and Federal regulations. (OSHA regulations may be viewed in full on the OSHA website, www.osha.gov.)
- Under no circumstances should the assembly working pressure or working temperature exceed the working pressure or working temperature of the lowest rated component (coupling, clamp, ferrule, or hose).
- Call Dixon (800.355.1991) for advice on couplings, retention devices, and accessories for your application.
- Dixon recommends that all hose assemblies be marked with the assembly working pressure and media of the intended application.
   Under no circumstances should the assembly working pressure exceed the working pressure of the lowest rated component (coupling, clamp, ferrule or hose).

## 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 protection against coupling breakage and related hazards, Dixon recommends the use of a whip hose. To construct a whip hose, connect one end of a short (3' to 10') air hose to the air tool using a 3500 type steel nipple. Connect the other end of the hose to the air supply using the standard quick-acting coupling. The heat-treated 3500 nipple will withstand vibration far better than the standard coupling and provide a safer connection. 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, http://www.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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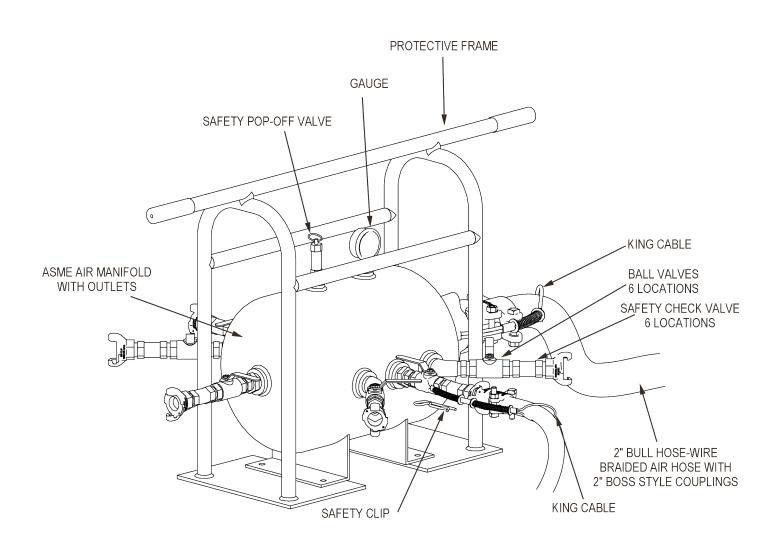
Download a free QR-Code 2D barcode reader. http://www.mobile-barcodes.com/gr-code-software/

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

All dimensions are nominal.

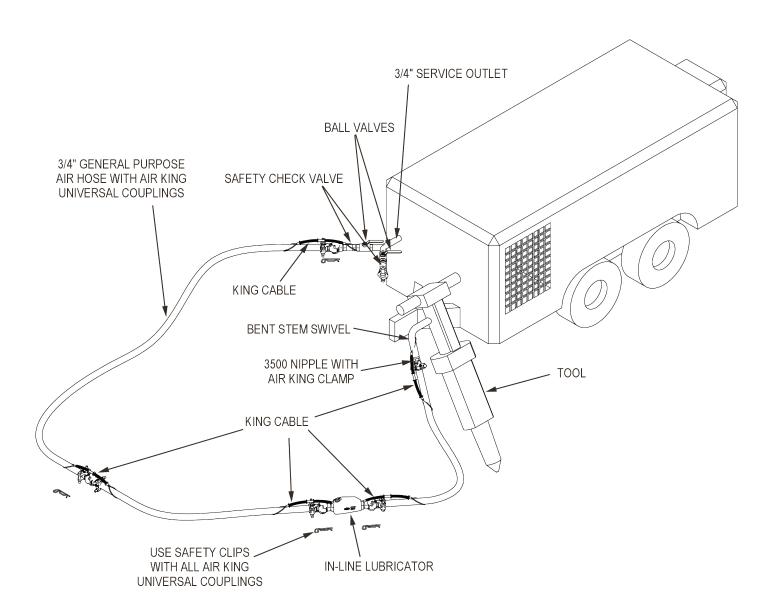
All package quantity shown is optional.

## **Detailed view of manifold assembly**

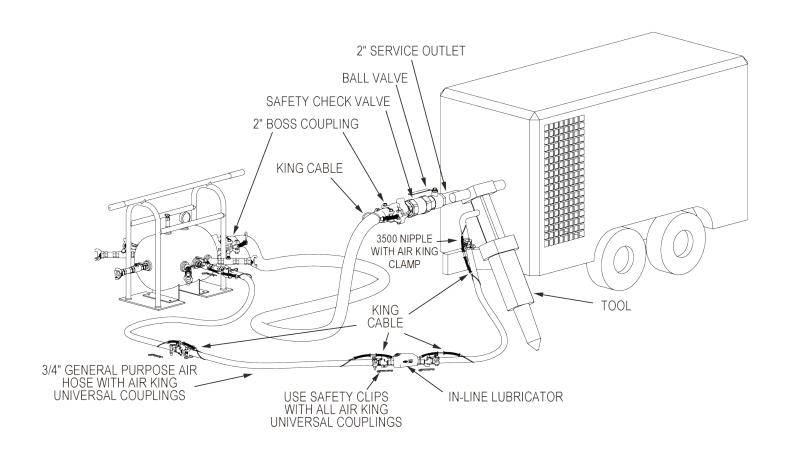


## Compressor

# 125 CFM



# $\begin{array}{c} \text{Compressor} \\ 600 \text{ CFM} \end{array}$



## 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. SAFEY 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:
  - 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.

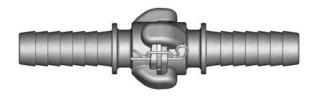
#### **Disconnecting:**

• 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.



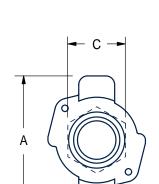


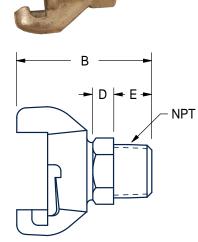
Air King meets pressure requirements as specified in Commercial Item Description A-A-59553 that supersedes Mil Spec. WWC-633D.

## **Male NPT Ends**

- 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	Iro	on	Bra	ass	316 Stainless Steel
Size	Part #	Pkg Qty	Part #	Pkg Qty	Part #
1/4"	AMB1	25	ABB1	25	
3/8"	AMB	25	ABB	25	RAMB
1/2"	AM2	50	AB2	50	RAM2
3/4"	AM7	50	AB7	50	RAM7
1"	AM12	50	AB12	50	RAM12





## **Dimensions**

Size	Α	В	С	D	Е	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"	3/8"	1/2"	1/2"
3/4"	2-1/2"	2-13/16"	1-3/8"	3/8"	9/16"	3/4"
1"	2-1/2"	2-7/8"	1-1/2"	3/8"	5/8"	1"

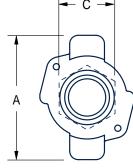
## **Female NPT Ends**

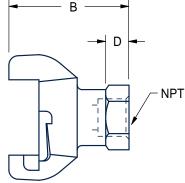
- · female NPT thread with hex for a wrench
- · available in malleable iron, brass or 316 stainless steel
- available in sizes ¼" to 1", ¼" not available in stainless steel

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

# B B

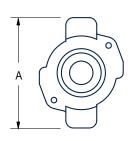
Size	Α	В	С	D	NPT
1/4"	2-1/2"	2-7/16"	1-1/8"	3/8"	1/4"
3/8"	2-1/2"	2-7/16"	1-1/8"	3/8"	3/8"
1/2"	2-1/2"	2-7/16"	1-1/8"	3/8"	1/2"
3/4"	2-1/2"	2-1/2"	1-7/16"	3/8"	3/4"
1"	2-1/2"	2-1/16"	1-5/8"	3/8"	1"

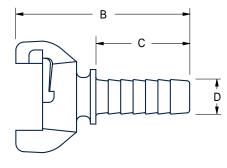




## **Hose Ends**







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

	Irc		Dro		316 Stainless Steel
Size	1/0	)rı	Bra		
0,20	Part #	Pkg Qty	Part #	Pkg Qty	Part #
3/8"	AMH	25	ABH	25	RAMH
1/2"	AM1	50	AB1 1	50	RAM1
5/8"	AM5	50	AB5	50	
3/4"	AM6	50	AB6 1	50	RAM6
1"	AM11	50	AB11 <sup>1</sup>	50	RAM11

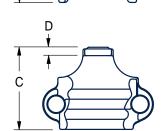
<sup>&</sup>lt;sup>1</sup> may be used with Air King ferrules

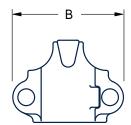
## **Dimensions**

Size	Α	В	С	D
3/8"	2-1/2"	3"	1-11/16"	7/16"
1/2"	2-1/2"	3-9/32"	1-5/8"	17/32"
5/8"	2-1/2"	4-1/4"	2-7/16"	11/16"
3/4"	2-1/2"	4-3/16"	2-1/8"	25/32"
1"	2-1/2"	4-25/32"	2-13/16"	1-1/16"

## **Clamps**







- 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	e OD	Torque 1	Part #	Dka Otv
Size	From:	To:	Torque <sup>1</sup>	Pail#	Pkg Qty
3/8"	11/16"	7/8"	6	<b>CD</b> <sup>3</sup>	100
1/2"	1"	1-3/16"	6	A4	50
3/4"	1-1/8"	1-5/16"	21	<b>A9</b> 3	50
1"	1-5/16"	1-1/2"	12	A 10 <sup>2,3</sup>	50
1"	1-1/2"	1-13/16"	21	A14	50

- <sup>1</sup> recommended torque rating in ft. lbs.
- <sup>2</sup> can be used with **AM6** and **AM11**
- <sup>3</sup> investment carbon steel

Note: Torque values for clamps are based on dry bolts. The use of lubricant on bolts will adversely effect

clamp performance. SAFETY

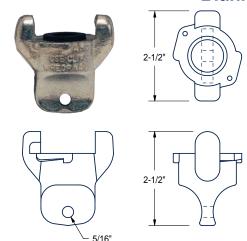


Size	Α	В	С	D
3/8"	15/32"	1-11/16"	1-7/16"	1/8"
1/2"	11/16"	2-1/16"	1-17/32"	5/32"
3/4	7/8"	2-1/2"	1-21/32"	1/8"
1"	7/8"	2-19/32"	1-15/16"	9/32"
1"	1"	3-1/32"	2-1/4"	5/32"

## **Blank Ends**

- 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

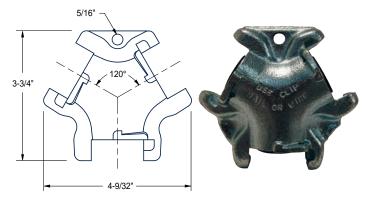
Iron		Bra	SS	316 Stainless Steel
Part #	Pkg Qty	Part #	Pkg Qty	Part #
AM0	25	AB0	25	RAM0



## **Triple Connections**

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

Iro	on	Br	ass
Part #	Pkg Qty	Part #	Pkg Qty
AM10	25	AB10	25



## 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**

- same size for all coupling sizes
- sold only in bags of 25

Wire Diameter	Part #
.080	AC1



- · heavy duty
- oversized

Wire Diameter	Part #
.058	AKSP1
.091	AKSP25



**Stainless Steel Clips** 



## Lanyards

- same size for all coupling sizes
- synthetic cord
- sold only in bags of 25

Part #	Pkg Qty
ACL8	25

stainless steel cable

Part #	Pkg Qty
LR7	25





same size for all coupling
 sizes

0.200	
Wire Diameter	Part #
.072	AC7



## rubber temperature range: -20°F to 160°F

- neoprene temperature range: -20°F to 190°F
- neoprene is oil resistant
- same size for all coupling sizes
- sold only in bags of 50

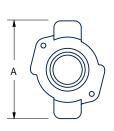
Description	Part #
black natural	AWR4
rubber	
Neoprene	AWS6

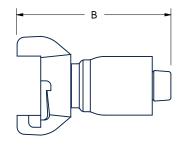




## **Air King with Ferrules**







- · 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

ALERT

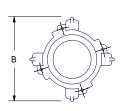
Size	OD R	ange	Brass	Stainless Steel
Size	From #	To	Part #	Part #
1/2"	27/32"	1-1/32"	AM1WF	
3/4"	1-1/16"	1-11/32"	AM6WF	RAM6WF
1"	1-18/64"	1-34/64"	AM11WF-1	
1"	1-30/64"	1-46/64"	AM11WF	

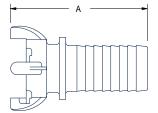
#### **Dimensions**

Size	Α	В
1/2"	2½"	3-13/16"
3/4"	2½"	4-3/16"
1"	21/2"	4-25/32"

## **4-Lug Quick Acting Couplings**







Not to be used for steam service. Must use safety clips. Note: 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	Brass	pkg gty
SIZE	Part #	Part #	pkg qty
11/4"	AM16	AB16	25
1½"	AM21	AB21	25
2"	AM26	AB26	10

#### **Dimensions**

Size	Α	В
11/4"	5-5/8"	3-3/4"
1½"	5-7/8"	3-3/4"
2"	6-1/16"	3-3/4"



Size	Iron	Brass	nlea atu
Size	Part #	Part #	pkg qty
11/4"	AM18	AB18	25
1½"	AM23	AB23	25
2"	AM28	AB28	20

#### **Dimensions**

Size	А	В
11/4"	2-15/16"	3-3/4"
1½"	3"	3-3/4"
2"	3-3/32"	3-3/4"



## Rubber Washer for 4-lug

Part #	
AWR14	

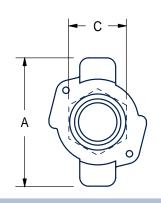
· fits all sizes

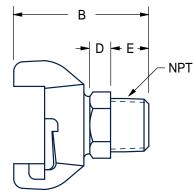
## **Male NPT Ends**

male NPT thread with hex for a wrench

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







## Dimensions

Size	Α	В	С	D	Е	NPT
1/2"	2½"	2-11/16"	1"	3/8"	7/8"	1/2"
3/4"	2½"	2-11/16"	1-11/32"	3/8"	7/8"	3/4"
1"	2½"	2-13/16"	1½"	3/8"	1"	1"

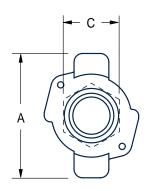
## **Female NPT Ends**

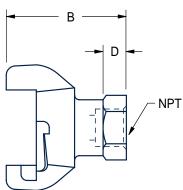
· female NPT thread with hex for a wrench

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

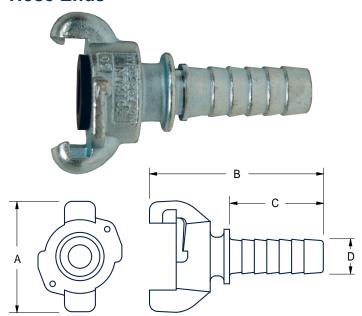


Size	Α	В	С	D	NPT
1/2"	21/2"	2-1/8"	1-1/8"	3/8"	1/2"
3/4"	2½"	2-5/32"	1-7/16"	3/8"	3/4"
1"	2½"	2-13/16"	1½"	3/8"	1"





## **Hose Ends**

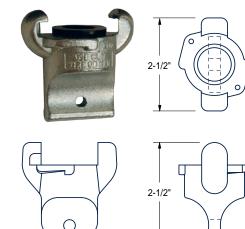


0:	Plated Steel		
Size	Part #	Pkg Qty	
1/2"	GAM1	25	
3/4"	GAM6	50	
1"	GAM11	50	

## Dimensions

Size	А	В	С	D
1/2"	2½"	3-3/8"	1-5/8"	17/32"
3/4"	2½"	3-31/32"	2-1/8"	25/32"
1"	2½"	4-21/32	2-25/32"	1-1/16"

## **Blank Ends**

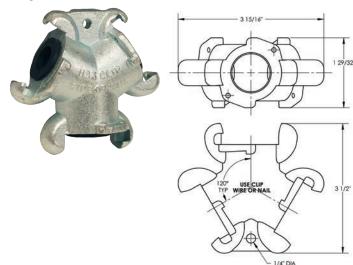


- Blank end fittings have no outlet and are used to block the line at any coupling point.
- The end opposite the coupling head is flat, with an eye for a chain to secure the fitting when not in use.

0:	Plated Steel		
Size	Part #	Pkg Qty	
	GAM0	25	

## **Triple Connection**

5/16"



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

0:	Plated Steel			
Size	Part #	Pkg Qty		
	GAM10	25		

## 4-Lug Quick Acting Couplings - Hose Ends

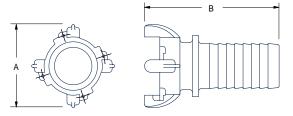
- Caution: Must use safety clips. Safety clips are same size for both 2-lug and 4-lug Universal Couplings.
- rated to 150 PSI working pressure at 70° F ambient temperature





C:	Plated Steel			
Size	Part #	Pkg Qty		
11/4"	GAM16	25		
1½"	GAM21	25		
2"	GAM26	10		



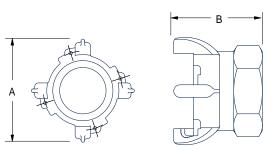


## **4-Lug Quick Acting Couplings - Female NPT Ends**

Ci	Plated Steel		
Size	Part #	Pkg Qty	
11/4"	GAM18	25	
1½"	GAM23	25	
2"	GAM28	50	

Size	А	В
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.

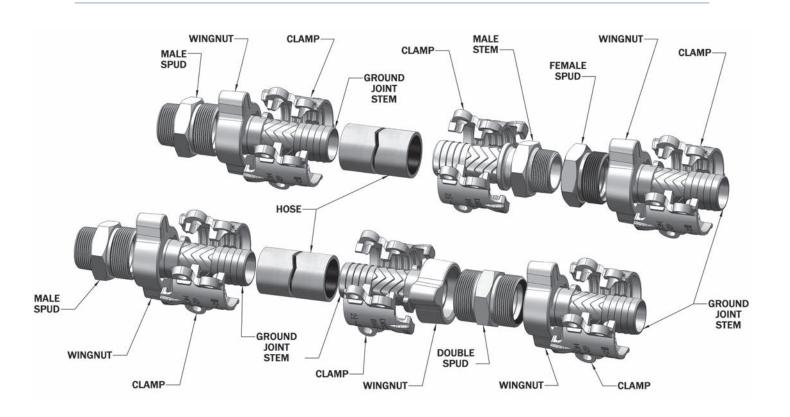
<u>Features:</u> The spud part of the coupling serves as one half of the connection and is usually fixed to the equipment. The stem part that is clamped to the hose is the other half. The two halves are connected or disconnected by rotating the wing nut onto the spud. When connected they achieve a mechanical,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

<u>Services:</u> 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.

<u>Purpose:</u> 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: 1/4" plated steel, 3/8" 6" plated iron





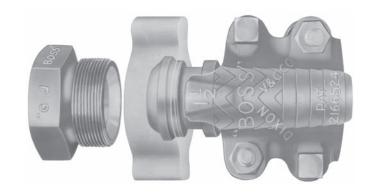
Worn-out hose couplings can be dangerous. They should be checked regularly and replaced when necessary.

Each coupling user should review applications and add safety devices where indicated.

## **Ground Joint**

## Positive Metal-to-Polymer Seal

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



## Plated Steel and/or Iron







ALERT









complete female

stem

nuts

knurled

female spud

male spud

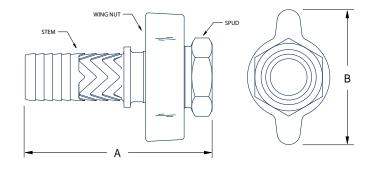
double spud

Hose Shank	Complete Female	Stem	Wing Nut	Knurled Nut	Female Spud	Male Spud	Double Spud
x NPT	Part #	Part #	Part #	Part #	Part #	Part #	Part #
1/4"	GF1 <sup>1</sup>	GBA	BA2		GBC 1		
3/8"	GF3 <sup>1</sup>	GCA	СВ		GCC 1	GMC 1	
1/2"	GF6	GB1	B2		GB3	GM3	GDB3
3/4"	GF26	GB6	B12	KB12	GB8	GM8	GDB13
1"	GF36	GB11	B12	KB12	GB13	GM13	GDB13
1-1/4"	GF51	GB16	B17		GB18	GM18	GDB23
1-1/2"	GF61	GB21	B17		GB23	GM23	GDB23
2"	GF81 <sup>2</sup>	<b>GB26</b> <sup>2</sup>	B27		GB28	GM28	GDB28
2-1/2"	GF96	GB31	B32		GB33	GM33	GDB33
3"	GF111	GB36	B37		GB38	GM38	GDB38
4"	GF141	GB46	B47		GB48		
6"	GF201 <sup>1</sup>	GB66	B67		GB68 <sup>1</sup>		

<sup>&</sup>lt;sup>1</sup> 1/4", 3/8" and 6" come only with copper seat spuds.

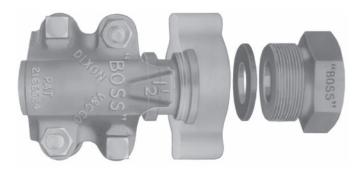
- 'A' dimension represents a complete coupling length with a female spud
- 'B' dimension is the largest dimension over the wing nut
- 1 1/4" coupling has a hex style nut
- <sup>2</sup> 4" and 6" couplings have a 3 wing nut design

Size	Α	В
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>



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

## **Washer Type**



- A Klingersil® C-4401 washer is inserted between the stem and spud.
- A leakproof seal is formed by rotating the wing nut and hammering it tight.

## Plated Steel and/or Iron











coupling female

stem

nuts

female spud

male spud

double spud

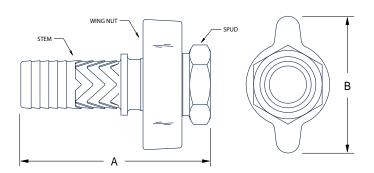
washer

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

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

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

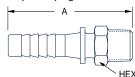




- 'A' dimension represents a complete coupling length with a female spud.
- · 'B' dimension is the largest dimension over the wing nut.

Size	Α	В
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"

- steel bar stockuse with Boss clamps on pages 20 and 21

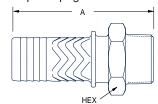


• hex dimension is the distance across the flats



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

- castingsuse with Boss clamps on pages 20 and 21



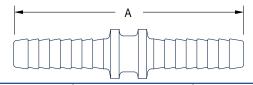
- hex dimension is the distance across the flats
- tubular steel



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

## **Hose Menders**

· collars engage grip fingers of Boss clamps



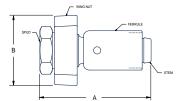


• 1/2" plated steel, 3/4" - 3": plated iron

	Size	Dimension A	Part#	Size	Dimension A	Part #
_	1/2"	4"	M1	1½"	8-3/8"	M21
	3/4"	6"	M6	2"	9-1/16"	M26
	1"	6-13/16"	M11	2½"	10-1/2"	M31
	11/4"	7-7/8"	M16	3"	11-7/8"	M36

- Holedall Fittings
   Designed for air or liquid applications where a permanent, low profile clamping system is desired.
- Fittings are supplied with carbon steel ferrules.
- Consult the factory for swage and/or crimp specifications.
- not for steam service SAFETY





•	'A' dimension represents a complete coupling length with a
	female soud

'B' dimension is the largest dimension over the wing nut.

Size	OD R	ange	Iron	Stainless Steel
Size	From #	То	Part #	Part #
	1-10/64"	1-14/64"	GF26P1	
3/4"	1-15/64"	1-18/64"	GF26P2	
	1-19/64"	1-22/64"	GF26P3	
	1-30/64"	1-34/64"	GF36P1	
1"	1-35/64"	1-38/64"	GF36P2	
	1-39/64"	1-42/64"	GF36P3	
	1-15/16"	2"	GF61P1	RGF61P1
1½"	2-1/64"	2-1/8"	GF61P2	RGF61P2
	2-9/64"	2-1/4"	GF61P3	
	2-9/16"	2-5/8"	GF81P1	RGF81P1
2"	2-41/64"	2-3/4"	GF81P2	RGF81P2
	2-49/64"	2-7/8"	GF81P3	
	3-9/16"	3-5/8"	GF111P1	
3"	3-41/64"	3-3/4"	GF111P2	
	3-49/64"	3-7/8"	GF111P3	

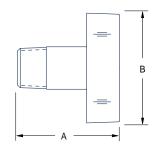
#### **Dimensions**

Size	A	В
3/4"	4-3/4"	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**

- These fittings have male or female NPT threads and are designed to fit the standard ground joint spuds on page 15.
- Couplings come with adapter and wing nut.





#### Male NPT

Size	Part #	pkg qty
3/4"	GMAS6	25
1"	GMAS11	25
11/4"	GMAS16	10
1½"	GMAS21	10
2"	GMAS26 1	10

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

## Dimensions

Size	Α	В
3/4"	3-1/16"	3-9/16"
1"	3-5/16"	3-9/16"
11/4"	4"	4-1/4"
1½"	4-1/8"	4-1/4"
2"	4-5/16"	5-5/8"

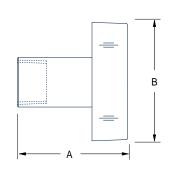
## Female NPT

Size	Part #
3/4"	GFAS6
1"	GFAS11
11/4"	GFAS16
1½"	GFAS21 <sup>1</sup>
2"	GFAS26 <sup>1</sup>

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

Differsions					





## **Wing Nut Caps**

- for best results, use with washer style spuds on page 16
- supplied with 12" chain and washer
- Note: Boss wing nut caps are not intended for pressure applications.
   SAFETY ALERT

Size	Part #	Pkq Qty
3/4" and 1"	B12SC	25
1¼" and 1½"	B17SC	25
2"	B27SC	10
3"	B37SC	5



## **Ground Joint Air Hammer Couplings**

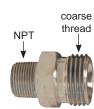
- superior sealing
- The plated steel head of the stem fits into concave copper seat of the spud.
- · wing nut is plated iron
- · use with Boss clamps on page 20 and 21













coupling female

stem

wing nut

female spud

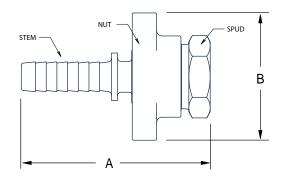
male spud

double spud

Style	Hose x NPT	Coarse Thread	Complete Female Part #	Stem Part #	Wing Nut Part #	Female Spud Part #	Male Spud Part #	Double Spud Part #
0	1/2"	4 04/04!! OD 0 T.D.I	GDF6	GBA45	J47	GJ65	GJ60	GJ75
Compact	3/4"	1-31/64" OD x 8 T.P.I.	GDF8	GBA46	J47	GJ55	GJ50	GJ75
Heavy	3/4"	4 47/C4" OD :: 0 T.D.I	GDF10	GBB18	DLB12	GDL8	GDL7	GDL25
	1"	1-47/64" OD x 8 T.P.I.	GDF12	GBB11	DLB12	GDL13	GDL10	GDL25

Style	Size	Α	В
Compost	1/2"	4-5/32"	2-15/16"
Compact	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



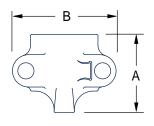
## **Clamps**



2-bolt type

Size	Hose	OD	Investment cast Carbon Steel	pkg	316 Stain	less Steel	Bra	ass
OIZO	From #	То	Part #	qty	Part #	Torque <sup>2</sup>	Part #	Torque
1/4"	36/64"	42/64"	BD	100		6		
3/8"	44/64"	56/64"	CD	100		6		
1/2"	52/64"	60/64"	DD	100		6		
1/2"	60/64"	1-4/64"	B4	25	RB4	12	BB4	10
1/2"	1-4/64"	1-12/64"	B5	25		12		
3/4"	1-12/64"	1-20/64"	BU9	50	RBU9	21	BBU9	18
3/4"	1-20/64"	1-32/64"	<b>B9</b> <sup>1</sup>	25	RB9	21	BB9	18
3/4"	1-32/64"	1-44/64"	B10	25		21	BB10	

plated iron





Size	Part #	А	В
1/4"	BD	1-3/16"	1-1/2"
3/8"	CD	1-11/16"	1-11/16"
1/2"	DD	1-3/4"	1-7/8"
1/2"	B4	1-13/16"	2-11/32"
1/2"	B5	1-13/16"	2-13/32"
3/4"	BU9S	2-9/16"	2-3/4"
3/4"	BU9	2-9/16"	2-3/4"
3/4"	B9	2-3/4"	2-7/8"
3/4"	B10	2-11/16"	3-1/32"

- · Replacement nuts and bolts are available, contact the factory for more information.
- . 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



- 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 torque rating in ft. lbs.

  SAFETY



<sup>&</sup>lt;sup>2</sup> torque applies to plated iron *and* stainless steel clamps

Size	Hose	OD	Plated Iron	pkg	316 Stain	less Steel	Bra	iss
SIZE	From #	То	Part #	qty	Part #	Torque <sup>2</sup>	Part #	Torque
1/2"	58/64"	1-2/64"	968	50		6		
1"	1-26/64"	1-36/64"	<b>156</b> 1, 3	20		21		
1"	1-34/64"	1-46/64"	BU14	25	RBU14	21	BBU14	18
1"	1-44/64"	1-60/64"	<b>B14</b> <sup>3</sup>	25	RB14	21	BB14	18
1"	1-60/64"	2-8/64"	B15	20		21		
1-1/4"	1-32/64"	1-50/64"	BU18	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"	BU19	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"	B19	10	RB19	40		
1-1/2"	1-52/64"	2"	BU22	10		40		
1-1/2"	2"	2-14/64"	B22	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"	BU24	10	RBU24	40		
1-1/2"	2-24/64"	2-36/64"	B24	10	RB24	40		
1-1/2"	2-36/64"	2-48/64"	B25	10		40		
2"	2-16/64"	2-32/64"	<b>250</b> 1, 4	10		40		
2"	2-22/64"	2-34/64"	BU28	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"	BU29	10	RBU29	60		
2"	2-48/64"	3-4/64"	B29	10	RB29	60		40
2"	2-48/64"	3-4/64"	<b>306</b> <sup>1, 4</sup>	10		60		
2"	3-6/64"	3-28/64"	B30	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"	BU34	5		60		
2-1/2"	3-32/64"	3-60/64"	B34	5		150		
3"	3-32/64"	3-48/64"	375 <sup>1</sup>	5		60		
3"	3-32/64"	3-60/64"	BU35	5	RBU35	150		
3"	3-48/64"	4"	<b>401</b> <sup>1</sup>	5		150		
3"	3-52/64"	4-4/64"	B35	5		150		
3"	4"	4-12/64"	418 <sup>1</sup>	4		200		
3"	4-4/64"	4-28/64"	B39	5		200		
3"	4-12/64"	4-32/64"	<b>450</b> <sup>1</sup>	2		200		



4-bolt type 2 gripping fingers

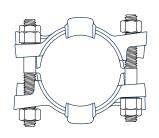


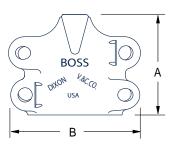
4-bolt type 4 gripping fingers

- 4 gripping fingers
   torque applies to plated iron and stainless steel clamps
   investment cast carbon steel
   not to be used with GF81, GB26, WF81, B26, RGF81, RGB26, BGF81, BGB26, RWF81, RB26

Part #		_
rait#	A	В
968	1-11/16"	2-1/16"
156 <sup>1, 3</sup>	2-21/32"	3-3/16"
BU14	3-3/32"	3-1/2"
<b>B14</b> <sup>3</sup>	3-1/8"	3-3/8"
B15	3-1/8"	3-3/4"
BU18	3-11/16"	3-5/8"
187 ¹	3-1/16"	3-9/16"
BU19	3-11/16"	3-7/8"
<b>206</b> <sup>1</sup>	2-29/32"	3-21/32"
B19	3-3/4"	4"
BU22	3-13/16"	4"
B22	3-13/16"	4-1/8"
212 ¹	3-3/8"	4"
<b>225</b> <sup>1</sup>	3-5/8"	4"
BU24	3-25/32"	4-3/32"
B24	3-31/32"	4-1/8"
B25	3-15/16"	4-1/2"
	968 156 1.3 BU14 B14 3 B15 BU18 187 1 BU19 206 1 B19 BU22 B22 212 1 225 1 BU24 B24	968 1-11/16" 156 1.3 2-21/32" BU14 3-3/32" B14 3 3-1/8" B15 3-1/8" BU18 3-11/16" 187 1 3-1/16" BU19 3-11/16" 206 1 2-29/32" B19 3-3/4" BU22 3-13/16" B22 3-13/16" B22 3-13/16" B22 3-5/8" BU24 3-25/32" B24 3-31/32"

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

- The recommended working pressure for Dix-Lock quick acting couplings is 300 PSI.
- 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

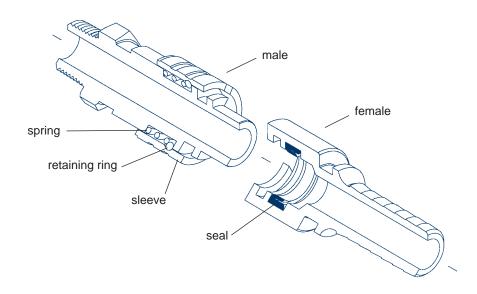
#### **Disconnecting:**

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



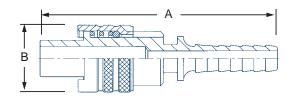
## Male Head x Hose End

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

## | 25 | **QB5** | 25 | ---

Body	Hose	۸	Ъ
Size	Shank	A	В
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"





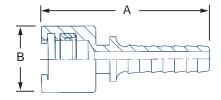
## Female Head x Hose End

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

## **Dimensions**

Body	Hose	٨	В
Size	Shank	А	Ь
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"



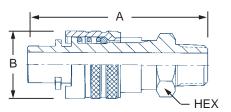


## Male Head x Male NPT End

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

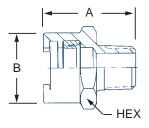
	Body Size	Hose Shank	А	В	Hex
	3/8"	1/2"	3.28"	1.13"	1-3/16"
_	1/2"	3/8"	3.65"	1.40"	1-1/8"
	1/2"	1/2"	3.65"	1.40"	1-1/8"
	1/2"	3/4"	3.74"	1.40"	1-3/8"
	1/2"	1"	3.78"	1.40"	1-1/2"





## Female Head x Male NPT End





## \* valved coupler not shown

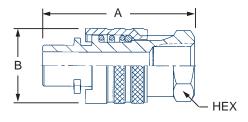
Body	Hose	Plated	Pkg	Proce	Pkg	Stainless	Pkg
Size	Shank	Steel	Qty	Brass	Qty	Steel	Qty
3/8"	1/2"	QM60	25				
1/2"	3/8"	QM61	25	QB61			
1/2"	1/2"	QM62	25	QB62			
1/2"	3/4"	QM63	25	QB63		QSS63	
1/2"	3/4"	QM63V *	25				
1/2"	1"	QM65	25	QB65	25		

## **Dimensions**

Body Size	Hose Shank	А	В	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





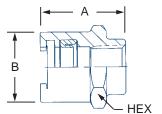
	Body	Hose	Plated	Pkg	Brass	Pkg	Stainless	Pkg
	Size	Shank	Steel	Qty	DIASS	Qty	Steel	Qty
ľ	1/2"	3/8"	QM81	25	QB81			
	1/2"	1/2"	QM82	25	QB82			
	1/2"	3/4"	QM83	25	QB83		QSS83	
	1/2"	1"	QM85	25	QB85	25		

#### **Dimensions**

Body Size	Hose Shank	А	В	Hex
OIZC	Unank			
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





## \* valved coupler not shown

Body	Hose	Plated	Pkg	Brass	Pkg	Stainless	Pkg
Size	Shank	Steel	Qty	DIASS	Qty	Steel	Qty
1/2"	3/8"	QM101	25	QB101			
1/2"	1/2"	QM102	25	QB102			
1/2"	3/4"	QM103	25	QB103		QSS103	
1/2"	3/4"	QM103V *	25				
1/2"	1"	QM105	25	QB105	25		

Body Size	Hose Shank	А	В	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"

## Male Locking Head x Hose End

Body Size	Hose Shank	Plated Steel	Brass
Body Size	HUSE SHAHK	Part #	Part #
1/2"	1/2"	QM33	QB33
1/2"	3/4"	QM44	QB44

#### **Dimensions**

Body Size	А	В
1/2"	4.63"	1.40"
3/4"	4.77"	1.40"

Positive Safety Lock
With locking nut in place sleeve cannot be moved to open coupling.

SAFETY
ALERT



<b>↑</b> B <b>↓</b>	A — I

## Male Locking Head x Male NPT

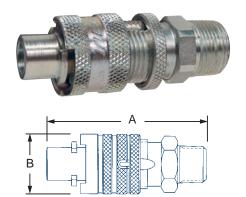
Pody Sizo	Male NPT	Plated Steel	Brass
Body Size	IVIAIE INF I	Part #	Part #
1/2"	1/2"	QM66	QB66
1/2"	3/4"	QM88	QB88

#### **Dimensions**

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

Positive Safety Lock
With locking nut in place sleeve cannot be moved to open coupling.





## Cap



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

## Converter



Body Size	Brass Part #	Pkg. Qty.
1/2"	QM0	25

## (Buna-N) Gaskets



Body Size	Brass Part #
3/8"	QBM1
1/2"	QBM2

## **Male Head**



- · rated to 300 PSI working pressure
- · for crimp recommendations visit dixonvalve.com
- also available in stainless steel, contact the factory for further information

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

## **Female Head**



- · rated to 300 PSI working pressure
- for crimp recommendations visit dixonvalve.com
- also available in stainless steel, contact the factory for further information

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

## **Male Locking Head**



- · rated to 300 PSI working pressure
- for crimp recommendations visit dixonvalve.com
- also available in stainless steel, contact the factory for further information

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

# **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 for Dual-Lock quick acting couplings is 300 PSI.
- The operating temperature range is -40° to +250°F (-40° to +121°C).

#### Features:

- unisex design
- spring loaded interlocking engagement
- · corrosion resistant coatings and materials improve performance
- smooth flow paths permit tool optimization
- · optional locking key prevents accidental sleeve retraction
- · wide variety of end configurations

#### **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 - Viton®

#### **Connecting:**

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

#### **Disconnecting:**

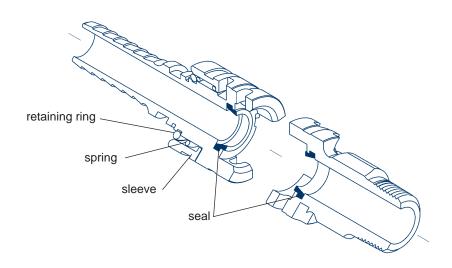
pull and twist

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



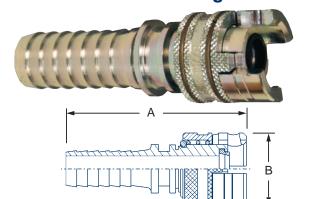
#### Interchange:

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



Viton® is a registered trademark of DuPont Dow Elastomers.

## **Hose Barb with Locking Sleeve**

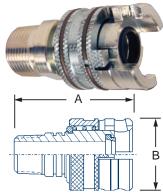


Body	Hose	Plated	Pkg	Brass	Pkg	Stainless	Pkg
Size	Shank	Steel	Qty	2.000	Qty	Steel	Qty
1/2"	3/8"	PHL6	25				
1/2"	1/2"	PHL8	25				
1/2"	3/4"	PHL12	25	PHLB12	25	PHL12SS	10
1/2"	1"	PHL16	25	PHLB16	25		

## **Dimensions**

Size	А	В
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

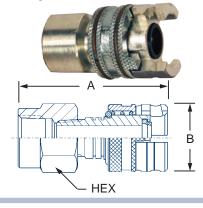


Body Size	Male NPT	Plated Steel	Pkg Qty	Stainless Steel	Pkg Qty
1/2"	3/8"	PML6	25		
1/2"	1/2"	PML8	25		
1/2"	3/4"	PML12	25	PML12SS	10

#### **Dimensions**

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

## **Female Pipe Thread with Locking Sleeve**



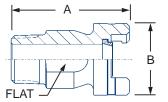
Body Size	Female NPT	Plated Steel	Pkg Qty	Stainless Steel	Pkg Qty
1/2"	3/8"	PFL8	25		
1/2"	1/2"	PFL12	25	PFL12SS	10

#### **Dimensions**

Size	А	В	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.

Ī	Body	Male	Plated	Pkg	D	Pkg	Stainless	Pkg
	Size	NPT	Steel	Qty	Brass	Qty	Steel	Qty
_	1/2"	3/8"	PM6	25				
	1/2"	1/2"	PM8	25	PMB8	25		
	1/2"	3/4"	PM12	25	PMB12	25	PM12SS	10
	1/2"	1"	PM16	25	PMB16	25		

Size	А	В	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"

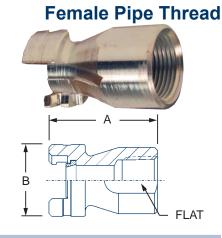
## Must be used with locking sleeve fittings on page 28.

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

#### **Dimensions**

Size	А	В	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"

## Hose Barb with Knurled Flanged Sleeve



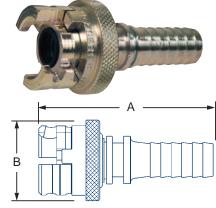
## zinc coated

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

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

#### **Dimensions**

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



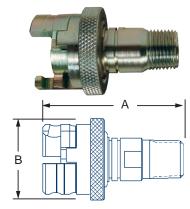
## Male Pipe Thread with Knurled Flanged Sleeve

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

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

#### **Dimensions**

Size	А	В
3/8"	2.93"	1.55"
1/2"	2.98"	1.55"
3/4"	2.98"	1.55"



## Female Pipe Thread with Knurled Flanged Sleeve

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

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

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

## **Replacement Gaskets**



Part #	Description
855206	Buna-N (standard)
452963	Viton®

Viton® is a registered trademark of DuPont Dow Elastomers.

## **Sleeve Locking Key**

- · fits couplings with locking sleeve
- · prevents sleeve retraction



Part #	
855231	

## **Dual-Lock with Ferrule**



- Dual Lock couplings with ferrules are rated to 300 PSI working pressure.
- · yellow zinc coated coupling with plated steel ferrule
- · also available in brass and stainless steel
- for crimp recommendations visit dixonvalve.com

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

# 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

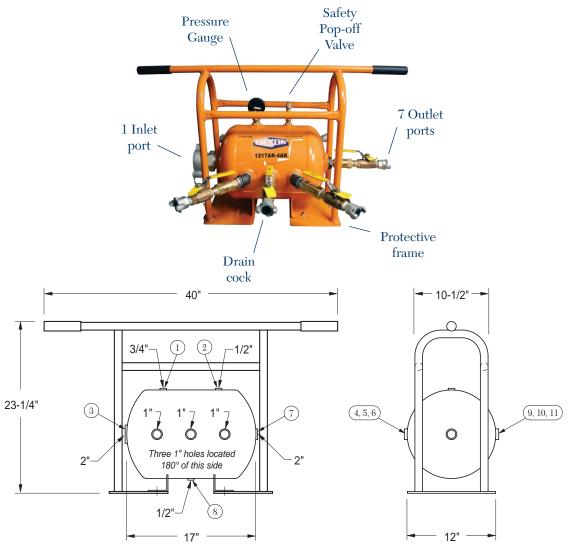
#### **Components:**

- 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





Includes the following:

Part #	Description					
1217AR-4AK	Air King receiver manifold complete assembly					
1217AR-4	7 gallon ASME compressed air receiver					
Location 1	1 HB2F6M 3/4" male x 1/4" female hex bushing					
	1 <i>GL345</i> 0-300 PSI gauge					
Location 2	1 HB2F4M ½" male x ¼" female hex bushing					
	1 SV200 safety pop-off valve					
Location 3	1 <b>GM28</b> 2" male spud					
	1 B27SC wing nut cap					
Locations	6 HB6F8M 1" male x 3/4" female bushings					
4, 5, 6, 9,	6 BCN75 ¾" brass hex nipples					
10, 11	6 BBLV75 locking handle ball valves					
	6 SCVS6 safety shut-off valves					
	6 AM7 Air King universal couplings *					
	4 <b>SE45100</b> 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 ¾" brass hex nipple					
	1 BBLV75 locking handle ball valve					
	1 SCVS6 safety shut-off valve					
	1 AM7 Air King universal coupling *					
Location 8	1 HB2F4M ½" male x ¼" female hex bushing					
	1 <b>D04</b> ¼" drain cock					
1217FRAME	1 protective frame					

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



## **ASME Air Tank with Fittings and Watts Filter**

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 tank.

- 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 tank
- Air supply hose connects directly to GM28 2" male spud on the filter air inlet.
- includes a B27SC wing nut cap with a chain



## **ASME** air tank with fittings and Watts filter

Size	Part #				
2" inlet, 3/4" outlets	1217AR-4AKWF				

## **Wilkerson Combination Unit with Protective Frame**

Provides downstream air preparation with protective frame and includes the following components:

- 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 conditions:

maximum pressure: **250 PSIG** temperature range: **40°F** to **150°F** 

SCFM: 320

#### FRL with protective frame

Size	Part #				
1"	C31-08FRAME				



## 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

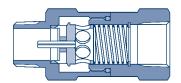
#### Use:

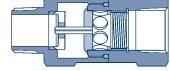
- Safety Check Valves operate by using the pressure differential across the valve to operate the valve and spring assembly. The pressure differential is directly related to the flow of air through the valve.
- When the pressure differential is within the operating limits -- below the cutoff flow -- of 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'.

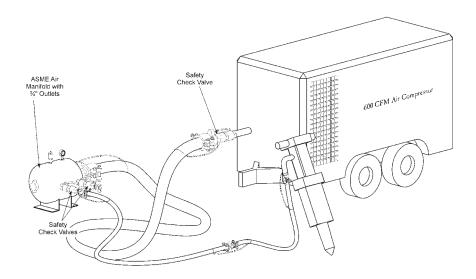






**Check Valve In Open Position** 

**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:

- 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

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

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 3/8" hose will require a 3/8" safety check. Do not use a different size safety check. One exception to this rule is for 5/8" hose, use a 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 slowy 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	Hose Size (ID)										
(feet)	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	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 1/2" Safety Check Valve for 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"	SCVL2	23-29
3/8"	SCVM3	39-47
	SCVS3	52-65
1/2"	SCVM4	70-78
	SCVS4	80-96
3/4"	SCVL6	72-88
	SCVM6	92-108
	SCVR6	112-128
	SCVJ6	132-148
	SCVS6	160-180
	SCVH6	180-200
1"	SCVL8	165-195
	SCVM8	220-260
	SCVS8	280-320
	SCVH8	310-340
1-1/4"	SCVL10	260-290
	SCVM10	300-340
	SCVS10	440-500
	SCVH10	570-630
1-1/2"	SCVL12	300-360
	SCVM12	470-530
	SCVS12	640-720
	SCVH12	750-830
2"	SCVL16	510-590
	SCVM16	725-825
	SCVS16	900-1050
	SCVH16	1100-1200
3"	SCVL24	1200-1400
	SCVS24	2400-2700
	SCVH24	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')
ľ	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>&</sup>lt;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.

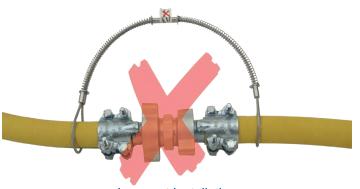
#### Standards - 29 CFR, 1926.603 (partial):

(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





Hose End

Hose End

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

Cable	Hose I.D.	Longth	Part #		
Cable	HUSE I.D.	Length	Steel	Stainless	
1/8"	1/2" to 1-1/4"	20-1/4"	WSR1	WSR1SS	
3/16"	1/2" to 2"	28"	WSR3		
1/4"	1-1/2" to 3"	38"	WSR2	WSR2SS	
3/8"	4"	44"	WSR4		

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

Cable	Hose I.D.	Length	Part #		
Cable	11056 1.D.	Lengui	Steel	Stainless	
1/8"	1/2" to 1-1/4"	20-1/4"	WB1		
3/16"	1/2" to 2"	28"	WB3		
1/4"	1-1/2" to 3"	38-1/4"	WA2	WA2SS	
3/8"	4"	44"	WA4		

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

# WB1C

WB1 with safety clip and lanyard

# **King Safety Cable Options**



WSR1E

WSR1E with stainless steel marine eye

Cabl	e Part#	Description	Maximum WP <b>PSI</b>
1/8'	WSR1C	WSR1 with safety clip and lanyard used to lock Air King couplings	200
1/8'	WB1C	WB1 with safety clip and lanyard used to lock Air King couplings	200
1/8'	WSR1E	WSR1 with stainless steel safety marine eye used to connect safety cable to a bolt on tool	200
1/4'	WA2B	WA2 with bronze/copper ferrule for special environmental conditions	200
1/8'	WB1SS	<b>WB1</b> made with 304 stainless steel cable and springs with bronze/copper ferrules 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.
- 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.
- 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)

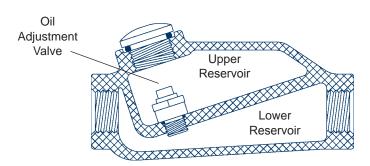
- 1. Open the cable loop on one end and slide it over the coupling of one hose.
- 2. Open the cable loop on the connecting end and slide it over the coupling on the other hose.
- 3. Couple the hoses together.
- 4. Remove slack by sliding both cables equally apart.

#### 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.





- 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.

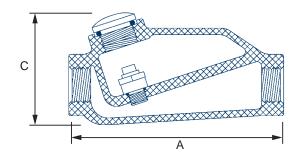
  A setting of 5 is suitable for average conditions using 10-weight oil. Remember that the lag time between adjustment and resulting effect at the tool may be as long as an hour. Make small adjustments, and check the result.

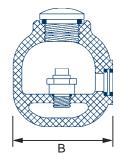
#### Storage:

 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"	PL300	1.4 fluid ozs.	500 PSI	30 SCFM	41/2"	21/4"	21/4"	14 ozs.
3/4"	PL400	3.7 fluid ozs.	200 PSI	70 SCFM	6"	2¾"	23/4"	22 ozs.
3/4"	PL400L	11.0 fluid ozs.	300 PSI	70 SCFM	7"	3½"	3¾"	38 ozs.
1"	PL500	16.0 fluid ozs.	250 PSI	100 SCFM	10"	41/4"	4"	69 ozs.

#### **Available with Filter**

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

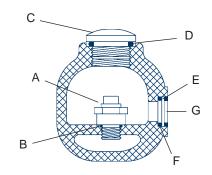
Part #	Max. WP
PL400WF	200 PSI
PL400LWF	300 PSI



#### **Repair Parts**

(same for all sizes)

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



#### 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.

SAFETY
ALERT

#### Lubricant

Anti-Freeze
-------------

Part #	Size	Pkg. Qty.	Part #	Size	Pkg. Qty.
DATL016	1 pint	12	DATL016W	1 pint	12
DATL128	1 gallon	4	DATL128W	1 gallon	4

#### **In-Line Lubricator Base**

 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	LB300
leveling base for PL400	LB400
leveling base for PL500	LB500



## **Accessories**

# **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**

- · 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







#### used with whip hose to withstand vibration

- zinc plated steel material
- male nipple: hose size ½" 1", NPT size 1/8" 1" female nipple: hose size ½" ¾", NPT size ½" ¾"
- · Offered in the Dixon Price List Catalog





# Compressor Y

- · 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**

- 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**



- · 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

#### **Steel Bent Stem Swivels**



- · 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

#### **Hose Rack and Reels**

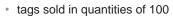


- Reelcraft<sup>®</sup> spring driven hose reels 5000, 7000, and 80000 series available
- hose racks for hose sizes 1½" to 2½", 50' to 200'
- · Offered in the Dixon Price List Catalog

## **Filters and Lubricators**

- 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





- length of tape 55 yards, approximately 255 warnings
- · Offered in the Dixon Price List Catalog



# **Safety Tag and Tape**



#### S.T.A.M.P.E.D.

## **Questions to Ask**

S

Size

**T** 

**Temperature** 

A

**Application** 

M

Media

P

**Pressure** 

E

**Ends** 

D

**Dixon** 

#### **Pressure Conversions**

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

# Air Supply Requirements (operating pressure: 90 PSI)

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

#### Force Chart Force (In Pounds)

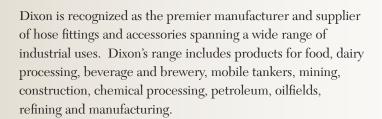
Hose ID	25 PSI	50 PSI	75 PSI	100 PSI	150 PSI	200 PSI	250 PSI	300 PSI	500 PSI	1000 PSI
1/4"	1	2	4	5	7	10	12	15	25	49
3/8"	3	6	8	11	17	22	28	33	55	110
1/2"	5	10	15	20	29	39	49	59	98	196
3/4"	11	22	33	44	66	88	110	133	221	442
1"	20	39	59	79	118	157	196	236	393	785
1-1/4"	31	61	92	123	184	245	307	368	614	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: "x r² (PI [3.1416] times radius squared)
- Force = Area x Pressure

# **Fraction - Decimal Conversion Chart**

		Inches	<u>Millimeters</u>			Inches	Millimeters
	1 64	.015625	.3969		33	.515625	13.0969
$\begin{pmatrix} \frac{1}{32} \end{pmatrix}$	64	.03125	.7938	<u>17</u> 32	64	.53125	13.4938
32	<u>3</u> 64	.046875	1.1906	32	35 64	.546875	13.8907
1	64	.0625	1.5875	9	64	.5625	14.2876
16	<u>5</u> 64	.078125	1.9844	16	<u>37</u> 64	.578125	14.6844
$\begin{pmatrix} \underline{3} \\ 32 \end{pmatrix}$	64	.09375	2.3813	<u>19</u> 32	64	.59375	15.0813
32	<u>7</u> 64	.109375	2.7781	32	39 64	.609375	15.4782
$\left(\begin{array}{c} 1\\ 8 \end{array}\right)$	64	.125	3.1750	<u>5</u> 8	64	.625	15.8751
	9 64	.140625	3.5719		<u>41</u> 64	.640625	16.2719
<u>5</u> 32	04	.15625	3.9688	<u>21</u> 32	04	.65625	16.6688
	<u>11</u> 64	.171875	4.3656		<u>43</u> 64	.671875	17.0657
<u>3</u> 16		.1875	4.7625	( <u>11</u> )		.6875	17.4626
	13 64	.203125	5.1594		<u>45</u> 64	.703125	17.8594
$\begin{pmatrix} \frac{7}{32} \end{pmatrix}$		.21875	5.5563	<u>23</u> 32		.71875	18.2563
	15 64	.234375	5.9531		<u>47</u> 64	.734375	18.6532
$\left(\begin{array}{c} \frac{1}{4} \end{array}\right)$		.250	6.3500	<u>3</u> 4		.750	19.0501
	<b>17</b> 64	.265625	6.7469		<u>49</u> 64	.765625	19.4470
<u>9</u> 32		.28125	7.1438	<u>25</u> 32		.78125	19.8438
	<u>19</u> 64	.296875	7.5406		<u>51</u> 64	.796875	20.2407
<u>5</u> 16		.3125	7.9375	1 <u>3</u>		.8125	20.6376
	<u>21</u> 64	.328125	8.3344		<u>53</u> 64	.828125	21.0345
$\left(\frac{11}{32}\right)$		.34375	8.7313	<u>27</u> 32		.84375	21.4313
	<b>23</b> 64	.359375	9.1282		<u>55</u> 64	.859375	21.8282
<u>3</u> 8		.375	9.5250	<u>7</u>		.875	22.2251
	25 64	.390625	9.9219		<u>57</u> 64	.890625	22.6220
<u>13</u> 32		.40625	10.3188	<u>29</u> 32		.90625	23.0188
	<b>27</b> 64	.421875	10.7157		<u>59</u> 64	.921875	23.4157
<u>7</u>		.4375	11.1125	1 <u>5</u>	04	.9375	23.8126
	<u>29</u> 64	.453125	11.5094		<u>61</u> 64	.953125	24.2095
<u>15</u> 32		.46875	11.9063	<u>31</u> 32		.96875	24.6063
	31 64	.484375	12.3032		63 64	.984375	25.0032
$\left(\begin{array}{c} \frac{1}{2} \end{array}\right)$		500	12.7001			1.000	25.4001







The Right Connection™

#### **Dixon Valve**

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