



Air & Fluid Hose

Components for superior spray finishing solutions.

*Air and Fluid Hose • Tubing
Connections • Fittings • Valves*

DEVILBISS
The Right Way To Finish™



Hose products engineered to be the strongest link in any application.

Table of Contents

DeVilbiss.....	2
Features & Benefits.....	3
How to Select the Right Hose.....	4
ErgoFlex™ Hose.....	6
Air Hose/Smooth & Corrugated Cover.....	7
Air Hose/Static Wire Smooth Cover.....	8
Fluid Hose/Nyliner II.....	9
Tubing and Connections/Nylon.....	10
Tubing and Connections/Polyethylene.....	11
How to Select & Install 3-piece Connections.....	12
Reusable Connections.....	13
Quick Detachable Connections	14
Fittings.....	15-16
Valves.....	17
Strainers.....	18
Technical Data.....	19-20
How to Avoid Pressure Drop.....	20
Part Number Index.....	21-22
System Solutions.....	23

An industry leader in the development of high transfer efficiency atomization processes and technology, DeVilbiss also offers the highest quality air and fluid hose.



At DeVilbiss, we're concerned with every aspect of spray finishing. And we recognize how important it is for your equipment to receive air and fluids at the specified pressure and in adequate volume. If your hose doesn't meet at least this minimum level of performance, it's likely to become the weakest link in your application.



That's why DeVilbiss isn't content to meet industry standards - we work hard to exceed them. And we work equally hard to provide the best solutions for you, whether your application involves high-tech aerospace components or hand-hewn hardwood furniture.



Add to that the strength of our people - knowledgeable service professionals, experienced technical engineers - responsive partners determined to give you the best.



DeVilbiss. We're a strong link in your success.

DEVILBISS
The Right Way To Finish™

Exceeding Industry Standards

Features and Benefits

From construction to performance to selection, DeVilbiss leads the market with top-quality products to meet all of today's finishing needs.

Product Selection

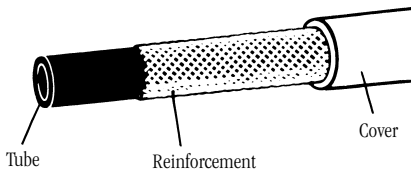
- Air and fluid hose for a wide variety of applications
- Static wire hose for use when applications require grounding
- Fluid hose for resinous materials with or without catalysts
- Nylon and polyethylene tubing
- Reusable and quick-detachable connections
- Air and fluid hose fittings
- Ball valves and air-adjusting valves
- Paint strainers
- Component construction in a variety of materials

Performance Benefits

- **Better Tolerances** – Consistent hose I.D. ensures constant fluid and air delivery and a uniform fit for connections. That's why DeVilbiss maintains I.D. tolerances better than rubber hose industry standards.
- **Maximum Flexibility** – Greater flexibility makes equipment easier to handle. DeVilbiss hose provides maximum flexibility under pressure, thanks to DeVilbiss' unique braid design.
- **Oil Resistance** – The synthetic rubber compound used in most DeVilbiss hose covers and tubes is unaffected by compressor oils. DeVilbiss Spray and Air Tool hose covers will not become gummy at the hose connections thereby weakening the assembly.
- **Abrasion Resistance** - Tough enough to resist tearing and abrasion from dirt, grit and cement floors, DeVilbiss hose is still pliable and flexible enough for use with all hand held tools.
- **Kink Resistance** – Constructed with a braid reinforcement design, DeVilbiss hose offers kink resistance and flexibility unobtainable with spiral wound, woven or knit reinforcements.
- **More Economical** – Given its value-added performance characteristics and superior quality, DeVilbiss hose is very reasonably priced, especially when compared to less carefully designed and manufactured hose.

How to Select the Right Hose

Hose is made up of three basic components - a tube, reinforcement and cover - and each layer plays an integral role in the product's overall performance.



- **Tube** - The flexible interior artery that carries air or liquid from one end of the hose to the other. Tubes are made from several different materials which provide various levels of chemical resistance.
 - **Reinforcement** - Located between the tube and cover, the reinforcement adds strength to the hose. In combination, the reinforcement's design and materials help determine the hose's pressure rating, kink and stretch resistance, flexibility and coupling retention.
 - **Cover** - The outer skin of the hose that protects the reinforcement from oils, moisture, chemicals and abrasive surfaces. Most DeVilbiss hose covers are imprinted with the DeVilbiss name, part number and rated maximum working pressure. In addition, DeVilbiss color-codes its hoses to make identification fast and easy:
 - *Red and tan compounded covers identify air hose*
 - *Gray covers identify static-wire grounded air hose*
 - *Black covers identify low pressure fluid hose*
- DeVilbiss quality standards provide accurate I.D. & O.D. tolerances to ensure hose connections always fit.

Selecting the Right Hose for Your Application

1. Review the Chemical and Temperature Resistance Chart on page 19 to identify the recommended hose for your intended application.
2. Determine the working length of hose you'll need.
3. Refer to the Pressure Drop Chart on page 21 to determine the I.D. required to ensure your spray gun or air tool works at maximum efficiency. Make sure the inside diameter of the hose you choose is correct. This will ensure your tool receives an adequate volume of air or fluid at pressures that will maximize efficiency.
4. Order DeVilbiss hose by name and part number. When you receive your order, check the cover for the DeVilbiss name to be sure you received the correct hose.

Testing a Hose for Usage Compatibility

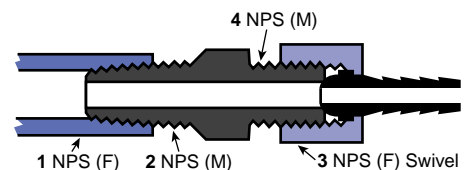
The Chemical and Temperature Resistance chart on page 19 identifies hose designed to deliver specific types of fluids. However, you also can use the following method to test a hose with the fluid you plan to use.

- Cut two 4"-long pieces of fluid hose. Remove the cover and reinforcement from both pieces.
- Place one of the tube sections into a jar of solvent or liquid that you plan to use in the hose. Leave the section of tube in the liquid for 24 hours.
- Remove the tube from the liquid and compare it visually with the section that was not immersed. If the tube has not dissolved or started to disintegrate, and if it has not expanded or swelled to more than 30% of the size of the non-immersed sample, the hose can be used with the test fluid.

- Note that halogenated hydrocarbon solvents and chlorinated-type solvents are not recommended for use in fluid hoses with a polysulfide (Thiokol) tube.

Common Hose Connection Terms

- NPT stands for National Pipe Tapered. Tapered internal and external threads provide firm leak proof joints. See examples 1 and 2 (below).
- NPS stands for National Pipe Straight. Internal and external threads are NPS parallel. To obtain a leak proof joint, an inverted flair type seal must be used to interface the two fittings. See examples 3 and 4 (below).
- (M) stands for male thread (external).
- (F) stands for female thread (internal).
- (MBE) stands for male both ends.
- Swivel is associated with a female fitting and means the fittings can be turned freely until the metal seal is obtained. It is only available in NPS thread style connections.



Metric Conversion

- 1 cm. = 0.3937 in.
- 1 bar = 14.5 psi.
- 1 liter = 0.264 gal. (U.S.)
- 1 kg. = 2.205 lb.
- 1 meter = 3.28 ft.

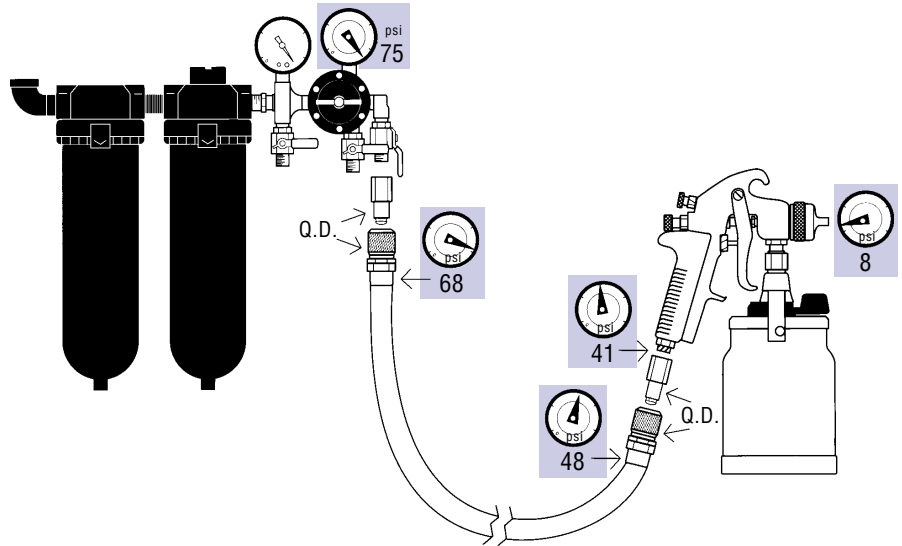
How to Avoid Pressure Drop

Using the Right Air Hose

Let's first look at hose diameter. With a smaller and more restrictive passage, less air gets through the line. Using a 1/4" hose means less pressure at the gun end than when using a 5/16" hose. Use of a 5/16" hose results in less pressure than if you use a 3/8" hose. It's simple. Small diameter hose, less pressure.

"Right diameter" doesn't mean that you have to use the biggest hose you can get, because hose length is also a factor. As air is forced through the line, pressure starts to drop off the farther the air has to travel. You can use the smaller 5/16" diameter when hose length is relatively short. Increase the distance that the air has to travel, and you have to increase the hose diameter.

The illustration above shows the loss in pressure over a system. A beginning pressure of 75 psi from the air filter/regulator unit is reduced to 68 psi after going through a typical quick disconnect. Traveling through 20' of 1/4" hose @ 15 cfm, air pressure drops to 48 psi before going through another Q.D., and drops again to just 41 psi at the point it enters the spray gun after going through another quick disconnect. That 41 psi is not sufficient to produce 10 psi at the air cap which may be necessary.



This illustration is meant to depict areas where pressure loss can occur. Actual losses in pressure are dependent on the variables of hose length, hose diameter, CFM, as well as the number and design of the quick disconnects.

This situation depicts pressure loss with NON-DeVilbiss quick disconnect using 1/4" x 20' hose @ 15 CFM.

Air Hose Pressure LOSS

	15 CFM	18 CFM	20 CFM	25 CFM
1/4" x 20'	20 psi	26 psi	28 psi	34 psi
5/16" x 20'	7 psi	10 psi	12 psi	20 psi
3/8" x 20'	2.8 psi	4 psi	4.8 psi	7 psi

The chart above illustrates loss in pressure with different hose diameters at different flow rates. For instance, there's almost 2 lbs./ft. loss with a 1/4" hose @ 25 CFM compared to less than 1/2 lb./ft. loss with the larger 3/8" I.D. hose.



ErgoFlex™ Hose

Our engineers and designers have made the best even better! Compare DeWalt's new 3/8" I.D. ErgoFlex hose with any other hose and see for yourself.

There's a difference you can see. A difference you can feel. Here's what makes ErgoFlex the better hose:

- 40% lighter weight than standard 3/8" I.D. air hose & fittings
- More flexible than 1/4", 5/16" and 3/8" I.D. air hose
- Durable, solvent resistant outer covering (exclusive ErgoFlex tan color)
- 200 psi working pressure
- 800 psi burst pressure
- New one-piece, reusable connection
- No outside clamp or locking device required
- Conductive core, dissipates static build-up at air tool



New ErgoFlex Hose

Bulk Hose Chart

SIZES AVAILABLE		BULK HOSE NUMBER	MAXIMUM WORKING PRESSURE (PSI)	FEET PER REEL*	APPROX. SHIPPING WEIGHT BASED ON AVG. FEET PER REEL	HOSE WEIGHT PER 100 FEET
I.D.	O.D.					
3/8"	.650"	H-3670	200	700	95 lbs.	12 lbs.

**Supplied in one continuous 700 ft. piece.*

Recommended Use - ErgoFlex hose is suitable for use with all kinds of air-operated equipment, including those requiring lubricant in the air line, or in environments where oil and grease are present.

Tube - Synthetic rubber compound. Excellent oil and water resistance. Conductive for static charge dissipation.

Reinforcement - High tensile strength Kevlar®, specially designed for maximum flexibility (under pressure) and maximum coupling retention.

Cover - Smooth, tan color synthetic rubber compounded with superior resistance to oil, weathering, ozone and abrasion.

Connection - One-piece reusable. (P-HC-4854)

I.D. Size - 3/8"

Air Hose

Smooth & Corrugated Covers

Recommended Use - Air hose is suitable for use with all kinds of air-operated equipment, including those requiring lubricant in the air line, or in environments where oil and grease are present. Can also be used for water lines or for spraying, including ceramic and water mix materials.

1/4" I.D. hose should not be used with spray guns requiring more than 8 SCFM (see pg. 20).

Tube - Synthetic rubber compound. Excellent oil and water resistance.

Reinforcement - High tensile strength braid, specially designed for maximum flexibility (under pressure) and maximum coupling retention.

Cover - Perforated, smooth brick red color (smooth cover); corrugated brick red (corrugated cover) synthetic rubber compounded with superior resistance to oil, weathering, ozone and abrasion.

Connections - Three-piece reusable.

I.D. Sizes - 1/4", 5/16", 3/8", 1/2" - smooth cover. 1/4", 5/16" - corrugated cover.

Additional information regarding connections is on page 13.

Refer to Chemical and Temperature Resistance Chart on page 19 for recommended use.



Smooth Cover Air Hose



Corrugated Cover Air Hose

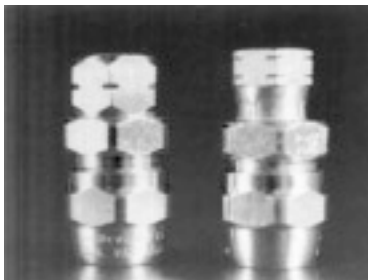
Bulk Hose Chart - Smooth Cover

SIZES AVAILABLE		BULK HOSE NUMBER	MAXIMUM WORKING PRESSURE (PSI)	FEET PER REEL*	APPROX. SHIPPING WEIGHT BASED ON AVG. FEET PER REEL	HOSE WEIGHT PER 100 FEET
I.D.	O.D.					
1/4"	1/2"	H-1957	250	400-600	62 lbs.	9.9 lbs.
5/16"	5/8"	H-1921	250	500-700	92 lbs.	13.8 lbs.
3/8"	1 1/16"	H-1958	250	400-600	112 lbs.	16.9 lbs.
1/2"	7/8"	H-1961	250	400-600	176 lbs.	26.5 lbs.

Bulk Hose Chart - Corrugated Cover

SIZES AVAILABLE		BULK HOSE NUMBER	MAXIMUM WORKING PRESSURE (PSI)	FEET PER REEL*	APPROX. SHIPPING WEIGHT BASED ON AVG. FEET PER REEL	HOSE WEIGHT PER 100 FEET
I.D.	O.D.					
1/4"	1/2"	H-1900	250	400-600	62 lbs.	9.9 lbs.
5/16"	5/8"	H-1901	250	500-700	92 lbs.	13.8 lbs.

*Maximum of 2 pieces per reel; minimum piece length 50 ft.



Reusable Connections

Air Hose

Static Wire Smooth Cover

Air Tool & Electrostatic Hose

Recommended Use - Commonly used with air atomizing spray guns in addition to electrostatic spray guns where the presence of static electricity requires grounding.

Tube - Synthetic rubber compound. Excellent oil and water resistance.

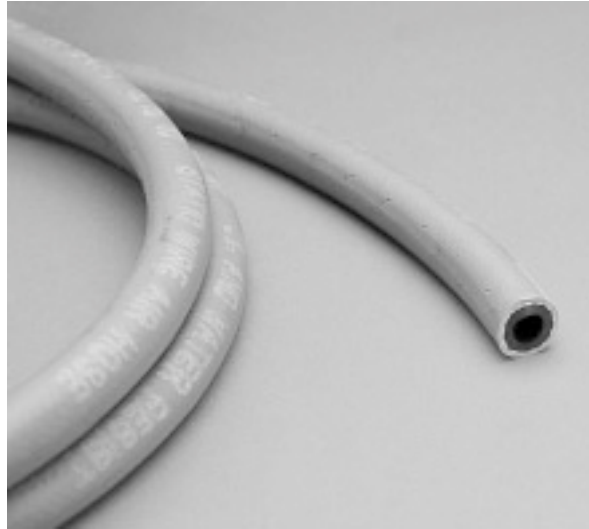
Reinforcement - Combination high tensile yarn braid and single stainless steel static wire.

Cover - Perforated, smooth gray color synthetic rubber, compounded with superior resistance to weathering, ozone, abrasion, oil and water.

Connections - Three-piece reusable.

I.D. Sizes - 5/16", 3/8"

See S.B. 12-002 for correct assembly of hose connections to ensure grounding.



Bulk Hose Chart Smooth Cover*

SIZES AVAILABLE		BULK HOSE NUMBER	MAXIMUM WORKING PRESSURE (PSI)	FEET PER REEL**	APPROX. SHIPPING WEIGHT BASED ON AVG. FEET PER REEL	HOSE WEIGHT PER 100 FEET
I.D.	O.D.					
5/16"	5/8"	H-1641-1	250	450-600	92 lbs.	14 lbs.
3/8"	1 1/16"	H-1995	200	400-600	105 lbs.	15.9 lbs.

*Refer to chart on page 13 for connections.

**Maximum of 3 pieces per Reel; Minimum Piece Length 50 ft.

Fluid Hose

Nyliner II

Recommended Use - Nyliner II fluid hose is ideal for use with a wide range of materials such as resins and solvents contained in latices, epoxies, urethanes, alkyds, primers, acrylics, polyesters, silicones, bitumastic coatings, oil and water based paints, lacquers, alcohol and latex coatings.

Tube - Nylon.

Reinforcement - High tensile strength yarn.

Cover - Neoprene rubber.

Connections - Three-piece reusable for 1/4", 5/16" and 3/8" I.D.

I.D. Sizes - 1/4", 5/16", 3/8", 1/2"

Refer to Chemical and Temperature Resistance Chart on page 19 for recommended use.

Additional information regarding connections is on page 13.



Bulk Hose Chart

SIZES AVAILABLE		BULK HOSE NUMBER	MAXIMUM WORKING PRESSURE (PSI)	FEET PER REEL*	APPROX. SHIPPING WEIGHT BASED ON AVG. FEET PER REEL	HOSE WEIGHT PER 100 FEET
I.D.	O.D.					
1/4"	1/2"	H-1975-1	500	400-650	60 lbs.	10 lbs
5/16"	5/8"	H-1976-1	500	400-650	85 lbs.	14 lbs.
3/8"	11/16"	H-1973-1	500	400-650	90.5 lbs.	15 lbs.
1/2"	7/8"	H-1974-1	750	400-650	156 lbs.	26 lbs.

*Maximum of 3 pieces per reel; minimum piece length 50 ft.

Tubing and Connections

Nylon – Air and Fluid

Recommended Use - Can be used for all types of air and fluid applications where durable, lightweight tubing is desired. Tube is unaffected by paint, enamel, lacquer, solvents, and water based materials. It is also not affected by oil when used for an air line.

Tube - Seamless extruded construction. Inside and outside dimensions held to close tolerances. Translucent white color.

Connections - See chart.

On connections, submerge nylon tubing end in hot water (or heat) for 2-3 minutes to ease assembly of connection.

Refer to Chemical and Temperature Resistance Chart on page 19 for recommended use.



Nylon Bulk Hose

PART NO.	TUBE I.D.	TUBE O.D.	MAXIMUM WORKING PRESSURE (PSI)	FEET PER REEL	SHIPPING WEIGHT	HOSE WEIGHT PER 100 FT.
PLH-NP-2	1/8"	.225"	250	500	8 lbs.	1.6 lbs.
PLH-NP-4	1/4"	.350"	250	1000	22 lbs.	2.8 lbs.

Stainless Steel Connections







STAINLESS STEEL TUBE CONNECTION	FITS TUBE PART NO.	TUBE I.D.	TUBE O.D.	MAXIMUM WORKING PRESSURE (PSI)	FEMALE THREAD SIZE
PLH-1838-SS	PLH-NP-2	1/8"	.225"	250	3/8" NPS
PLH-1414-SS	PLH-NP-4	1/4"	.350"	250	1/4" NPS
PLH-1438-SS	PLH-NP-4	1/4"	.350"	250	3/8" NPS

Stainless Steel Spring Guard Connections



STAINLESS STEEL TUBE CONNECTION	FITS TUBE PART NO.	TUBE I.D.	TUBE O.D.	MAXIMUM WORKING PRESSURE (PSI)	FEMALE THREAD SIZE
PLH-1414-SG-SS	PLH-NP-4	1/4"	.350"	250	1/4" NPS
PLH-1438-SG-SS	PLH-NP-4	1/4"	.350"	250	3/8" NPS

Aluminum, Plated Steel, Brass-Plated Connections

TUBE I.D.	SIZE O.D.	FITS TUBE NO.	THREAD SIZE				
				COMMON PARTS TO EACH HOSE SIZE	COMMON PARTS TO EACH HOSE SIZE	COMMON PARTS TO EACH HOSE SIZE	COMMON PARTS TO EACH HOSE SIZE
1/4"	.350"	PLH-NP-4	1/4" NPS	STRAIGHT CONNECTION FEMALE THREAD P-HC-4733	SLEEVE HC-1003	COMPRESSION RING* HC-1025	SPRING GUARD FEMALE THREAD P-HC-4223
			3/8" NPS	P-HC-4734	HC-1003	HC-1025	P-HC-4224

*Compression Rings are common to Spring Guard Connections and Straight Connections.

Tubing and Connections

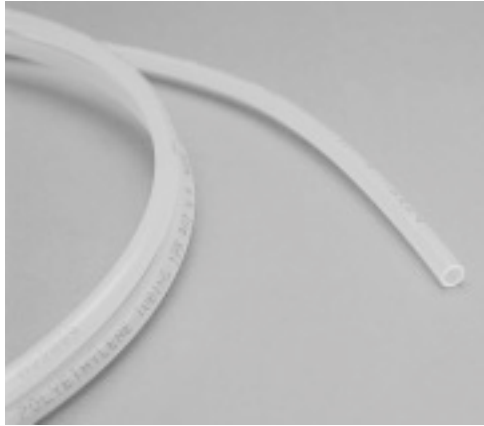
Polyethylene – Air

Recommended Use - General purpose air tubing. Limited use as paint tubing because of temperature and pressure limitations. Tubing is stress crack resistant polyethylene for durability and maximum flexibility.

Tube - Seamless extruded construction. Inside and outside dimensions held to close tolerances. Opaque white color.

Connections - See chart.

Refer to *Chemical and Temperature Resistance Chart* on page 19 for recommended use.



Bulk Hose Chart

SIZES AVAILABLE		BULK TUBE NUMBER	MAXIMUM WORKING PRESSURE (PSI)	FEET PER REEL	APPROX. SHIPPING WEIGHT BASED ON AVG. FEET PER REEL	HOSE WEIGHT PER 100 FEET
I.D.	O.D.					
.175"	1/4"	H-2339	125	1000	19 lbs.	1.4 lbs.
1/4"	3/8"	H-2338	125	1000	29 lbs.	2.5 lbs.

Connections for Polyethylene Tubing



TUBE I.D.	SIZE O.D.	FITS TUBE NO.	THREAD SIZE	STRAIGHT CONNECTION FEMALE THREAD	SLEEVE	COMPRESSION RING*	MAXIMUM WORKING PRESSURE	MATERIAL OF CONSTRUCTION
.175"	1/4"	H-2339	1/4" NPS	P-HC-4728	HC-1017	HC-1016-K10	125	Brass, Aluminum, Plated Brass, Plated Steel
1/4"	3/8"	H-2338	1/4" NPS	HC-4615	HC-1003	HC-199-K10	125	Brass, Aluminum, Plated Brass, Plated Steel

*Compression Rings are common to Spring Guard Connections and Straight Connections



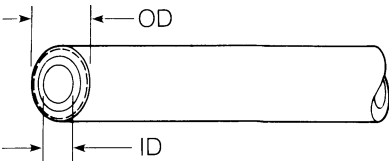
TUBE I.D.	SIZE O.D.	FITS TUBE NO.	FEMALE THREAD SIZE	SPRING GUARD FEMALE THREAD	MAXIMUM WORKING PRESSURE	MATERIAL OF CONSTRUCTION
.175"	1/4"	H-2339	1/4" NPS	P-HC-4221	125	Brass, Aluminum, Plated Brass, Plated Steel
1/4"	3/8"	H-2338	1/4" NPS	P-HC-4215	125	Brass, Aluminum, Plated Brass, Plated Steel
1/4"	3/8"	H-2338	3/8" NPS	P-HC-4216	125	Brass, Aluminum, Plated Brass, Plated Steel

Connections

How to Select and Install Three-piece Connections

Selecting the Proper Connection

1. Measure hose size, both inside diameter (I.D.) and outside diameter (O.D.).

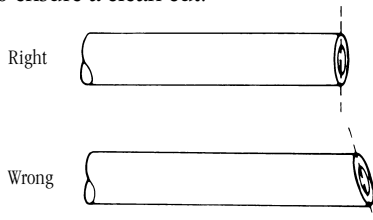


2. Check equipment for thread size, and whether a male or female connection is needed.

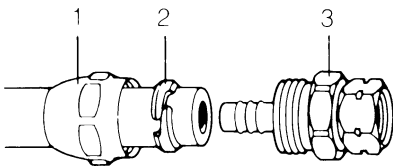
3. Select hose size and desired thread size and order corresponding connection listed. See page 12.

Installation

1. Cut hose to desired length. End of hose must be cut squarely with no nicks or ragged edges. Use a sharp instrument to ensure a clean cut.



2. Slide spring guard, if connection has one, and sleeve (1) over end of hose.



3. Slide ring (2) over end of hose.

4. Place connection body (3) in vise and push hose onto stem as far as it will go. As an aid in putting the connection onto the hose, either the male end of the connection or the end of the hose can be lubricated with SSL-10 gun lube which will act as a lubricant and allow the two to slip together easily.

5. Slide ring (2) up to connection body (3), compress to fit around hose.

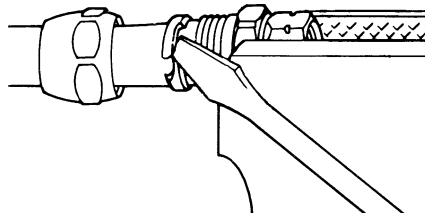
6. Slide sleeve (1) forward, over ring and thread onto body. Tighten with wrench.

Replacement of Parts

To remove connections from hose:

1. Place connection body in vise and with a wrench, loosen sleeve and slide it back on hose.

2. Gently pry ring loose with a screw driver and slide it back on hose. Do not distort ring any more than is necessary. This will ensure a good seal the next time the connection is used.



3. Remove hose from connection stem. Clean stem and body.

If old ring is badly distorted, it should be replaced.

Grounding Air Hose

Static electricity can be quite common in the portion of a compressed air system that is not grounded. This phenomenon

is caused by frictional forces of compressed air passing through electrically neutral air hose. Dissipation of these charges to ground may be through the air tool connected to the hose or through the operator. Depending on the method of discharge, it can be either inconvenient or present a safety hazard if occurring in the confines of a spray booth.

Static electricity can be simply and economically eliminated using a grounded air hose such as DeVilbiss No. H-1641-1 (5/16" I.D.), H-1995 (3/8" I.D.) or H-3670 (3/8" I.D.). Any of these hoses can be used to effectively ground any air tool, such as spray guns, duster guns, pneumatic tools, etc., to the grounded piping systems.

The static wire (used in H-1641-1 and H-1995) is stranded to allow flexibility and spiral wound along with the reinforcing fabric. To assure electrical continuity, follow the directions in service bulletin SB-12-001 for proper connection installation.

Pressure Drop Adjustment

Air pressure drop should be considered when choosing air hose. The chart below will help to determine pressure drop through certain sizes of air hose:

Pressure Drop Adjustment

HOSE INSIDE DIAMETER	PRESSURE DROP IN PSI THROUGH:		
	25 FEET HOSE LENGTH	50 FEET HOSE LENGTH	100 FEET HOSE LENGTH
1/4"	25	50	100
5/16"	9	18	36
3/8"	3	6	12

Above pressure drop based on 15 cubic feet per minute (CFM) air flow.

Example: 60 psi air pressure entering 50' of 5/16" air hose will yield 42 psi at the other end of the hose.

Connections

Reusable

Types of DeVilbiss Reusable Connections

Straight Connection - For use when hose is not subjected to bending at connection sleeve. Available in standard or quick detachable type.

Bent Connection - For use when hose is subjected to continuous bending or flexing at connection sleeve. Available in standard type only.

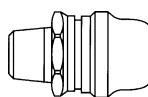
Reusable Connections*



HOSE SIZE & TYPE			STRAIGHT CONNECTION			COMMON PARTS TO EACH HOSE CONNECTION		
HOSE SIZE I.D.	O.D.	FITS ALL HOSE NOS.	CONNECTION THREAD SIZE	FEMALE COMPLETE CONNECTION NUMBER	(WETTED) MATERIAL CONSTRUCTION	SLEEVE NO.	RING NO.	
1/4"	1/2"	H-1900	1/4" NPS	P-HC-4523	Brass, Plated	HC-267-K3	HC-20-K10	
		H-1957	3/8" NPS	P-HC-4703 ¹	Stainless Steel	HC-267-K3	HC-299	
		H-1975-1	3/8" NPS	P-HC-4543	Brass, Plated	HC-267-K3	HC-20-K10	
5/16"	5/8"	H-1641-1	1/4" NPS	P-HC-4527	Brass, Plated	HC-268	HC-12-K10	
		H-1901	3/8" NPS	P-HC-4547	Brass, Plated	HC-268	HC-12-K10	
		H-1921						
		H-1976-1						
3/8"	11/16"	H-1958	1/4" NPS	P-HC-4528	Brass, Plated	HC-269	HC-23-K10	
		H-1973-1	3/8" NPS	P-HC-4548	Brass, Plated	HC-269	HC-23-K10	
		H-1995	3/8" NPS	P-HC-4561 ¹	Stainless Steel	HC-269	HC-23-K10	
3/8"	.650"	H-3670	1/4" NPS	P-HC-4854	Brass, Plated Steel			
1/2"	7/8"	H-1961 H-1974-1	3/8" NPS	P-HC-4551	Brass, Plated	HC-273	HC-33	

*Connections not intended for use in high pressure (i.e. airless) applications. Refer to the hose specifications for maximum working pressure.

¹ Stainless steel insert



HOSE SIZE I.D.	O.D.	FITS HOSE NO.	CONNECTION THREAD SIZE	MALE COMPLETE CONNECTION NUMBER	(WETTED) MATERIAL OF CONSTRUCTION	SLEEVE NUMBER	RING NUMBER
5/16"	5/8"	H-1901	1/4" NPT (M)	P-HC-4599	Brass, Plated	HC-268	HC-12-K10
		H-1921					
		H-1641-1					
		H-1976-1					



Connections

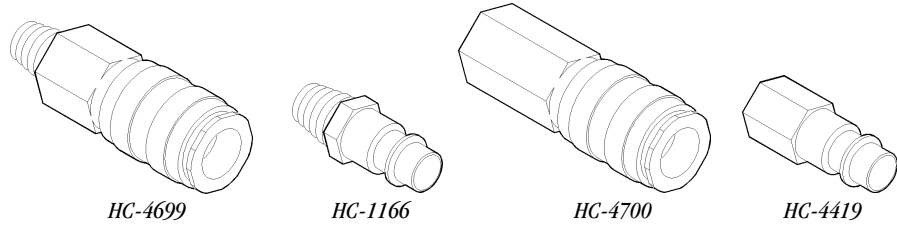
Air Quick Detachable Connectors

High Flow Air Connections

These connections improve the performance of any air tool by delivering greater air flow with less pressure drop, and are ideal for HVLV applications because they won't ever "starve" the spray gun. In addition, the quick-detach connection assures smooth, easy lock and release.

Construction: Precision manufactured lightweight aluminum body, with durable hardened steel sleeve.

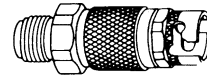
High Flow Quick Detachable Air Connections & Stems



THREAD SIZE AND TYPE	PART NO.	MAXIMUM WORKING PRESSURE (PSI)	MATERIAL OF CONSTRUCTION
1/4" NPT (M)	HC-4699	230	Plated Aluminum, Steel, Brass
1/4" NPT (M)	HC-1166	230	Plated Steel
1/4" NPT (F)	HC-4700	230	Plated Aluminum, Steel, Brass
1/4" NPS (F)	HC-4419	230	Plated Steel

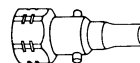
Fluid Quick Detachable Connectors

Threaded Connector Q.D.'s



MALE THREAD	CONNECTION NUMBER	MAXIMUM WORKING PRESSURE	MATERIAL OF CONSTRUCTION
3/8" NPS	P-HC-4808	500	Aluminum
3/8" NPS	HC-513	500	Stainless Steel
3/8" NPS	QDL-4808	500	Delrin, [®] Stainless Steel

Male Stems for Use With Any Fluid Q.D. Connection

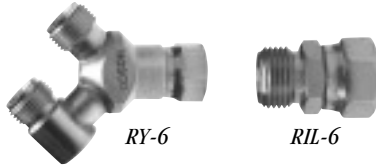


FEMALE THREAD	PASSAGE 1/4" I.D. STEM NO.	MAXIMUM WORKING PRESSURE	MATERIAL OF CONSTRUCTION
3/8" NPS Non-Swivel	P-HC-4482	750	Steel, Plated
3/8" NPS Swivel	HC-4691	500	Stainless Steel

Fittings

Air and Fluid

Restrictors*



PART NO.	MALE THREAD	FEMALE THREAD	MATERIAL OF CONST.
RY-6	3/8" NPS	3/8" NPS	Stainless Steel
RIL-6	3/8" NPS	3/8" NPS	Stainless Steel

*Products shown on this page are available from your local ITW Hosco distributor. For a full line of stainless steel fittings and connections call (313) 883-2600 for the ITW Hosco distributor nearest you.

Nylon Tubing*



SIZES AVAILABLE		PART NO.	MAX. WORKING PRESSURE (PSI)	FEET PER REEL
I.D.	O.D.			
5/16"	.425"	NP-5	250	500
3/8"	.500"	NP-6	250	500

*Products shown on this page are available from your local ITW Hosco distributor. For a full line of stainless steel fittings and connections call (313) 883-2600 for the ITW Hosco distributor nearest you.

Stainless Steel Fittings*



Stainless Steel Hose Connections

PART NO.	DESCRIPTION
3838-SS	3/8" Nylon Paint Hose x 3/8" NPS (F)



Stainless Steel Spring Guard Hose Connections

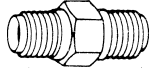
PART NO.	DESCRIPTION
51614-SGSS	5/16" Nylon Paint Hose x 1/4" NPS (F)
51638-SGSS	5/16" Nylon Paint Hose x 3/8" NPS (F)
3838-SGSS	3/8" Nylon Paint Hose x 3/8" NPS (F)

*Products shown on this page are available from your local ITW Hosco distributor. For a full line of stainless steel fittings and connections call (313) 883-2600 for the ITW Hosco distributor nearest you.

Fittings

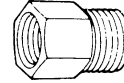
Air and Fluid

Hex Nipples, Rigid (MBE)



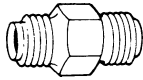
PART NO.	END 1 THREAD	END 2 THREAD	MAXIMUM WORKING PRESSURE	MATERIAL OF CONST.
AD-31	1/4" NPS	1/4" NPS	750	PB
H-2008	1/4" NPS	1/4" NPT	750	PB
H-1446	3/8" NPS	3/8" NPS	750	PB
AD-11	3/8" NPS	3/8" NPT	750	PB

Male to Female Adapters, Rigid



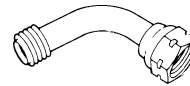
PART NO.	MALE THREAD	FEMALE THREAD	MAXIMUM WORKING PRESSURE	MATERIAL OF CONST.
AD-404	1/4" NPS	3/8" NPS	750	PB
P-H-4105	3/8" NPS	1/4" NPS	750	PB

Hex Reducing Nipples, Rigid (MBE)



PART NO.	SMALLER THREAD	LARGER THREAD	MAXIMUM WORKING PRESSURE	MATERIAL OF CONST.
H-1766	1/8" NPT	1/4" NPS	750	PB
AD-26	1/4" NPS	3/8" NPS	750	PB
H-1580	1/4" NPT	3/8" NPS	750	PB
H-209	1/4" NPT	9/16"-20	750	PB

Male to Female Elbow Bends, 45° Swivel



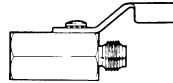
PART NO.	MALE THREAD	(F) SWIVEL THREAD	MAXIMUM WORKING PRESSURE	MATERIAL OF CONST.
P-H-431	1/4" NPS	1/4" NPS	750	PB
P-H-432	3/8" NPS	3/8" NPS	750	PB

PB = Plated Brass

Ball Valves, Air Adjusting Valves

Air and Fluid

Ball Valves - Standard



PART NO.	THREAD	THREAD	MAXIMUM WORKING PRESSURE	MATERIAL OF CONSTRUCTION
VA-528	3/8" NPS (M)	3/8" NPT (F)	500	SS
VA-527	3/8" NPS (M)	3/8" NPT (M)	500	SS
VA-542	1/4" NPT (M)	1/4" NPS (M)	500	PB
VA-541	1/4" NPS (M)	3/8" NPT (M)	500	PB
VA-540	3/8" NPS (M)	3/8" NPT (M)	500	PB

Air Adjusting Valves



P-H-5516



HAV-500



HAV-501



HARG-510

PART NO.	INLET MALE THREADS	OUTLET SWIVEL NUT (F) THREAD	TYPE	MAXIMUM WORKING PRESSURE
P-H-5516	1/4" NPS	1/4" NPS Swivel	Straight	250
HAV-500	1/4" NPS	1/4" NPS Swivel	Straight	250
HAV-501	1/4" NPS	1/4" NPS Swivel	w/Gauge	250
HARG-510	1/4" NPS	1/4" NPS Swivel	Diaphragm, Relieving	250

Strainers

Paint Strainers

Gun Mounted Strainers



VS-531



VS-532

STRAINER PART NO.	MAXIMUM WORKING PRESS. (PSI)	INLET THREADS	OUTLET THREADS	WETTED PARTS	SCREEN PART NO.	MESH SIZE	MICRON SIZE
VS-531	300	3/8" NPS (M)	3/8" NPS (F)	CS	31144-310-K10	100	149
VS-532	300	3/8" NPS (M)	3/8" NPS (F) Swivel	PB	VS-58-K10	100	149

Gun Mounted Mini Strainer



PLH-MF-6-100

STRAINER PART NO.	MAXIMUM WORKING PRESS. (PSI)	INLET THREADS	OUTLET THREADS	WETTED PARTS	SCREEN PART NO.	MESH SIZE	MICRON SIZE
PLH-MF-6-100	250	3/8" NPS (M)	3/8" NPS (F)	SS	PLH-MFC-100	100	149

Tank or Pump Mounted Strainer



VS-534

STRAINER PART NO.	MAXIMUM WORKING PRESS. (PSI)	INLET THREADS	OUTLET THREADS	WETTED PARTS	SCREEN PART NO.	MESH SIZE	MICRON SIZE
VS-534	300	3/8" NPS (F) Swivel	3/8" NPS (M)	SS	VS-58-K10	100	149

PB = Plated Brass SS = Stainless Steel CS = Carbon Steel

Technical Data

Chemical and Temperature Resistance Chart

Chemical Resistance Chart

This Chemical Resistance Chart is offered as a guide only in helping determine the type of hose to best suit the application. Pressure, temperature and environmental exposure all affect hose service life and should be considered in determining hose selection.

Accuracy of the ratings cannot be guaranteed due to the many variables that affect each hose application, such as continuous flexing and changes in temperature.

DeVilbiss hose is rated for continuous operation at working pressures up to those specified in the various hose sections throughout this catalog. DeVilbiss recommends that a hose be chosen with a higher working pressure rating, especially if your equipment has pressure surges. DeVilbiss hose is also designed to withstand maximum vibration and flexing when properly installed.

One fact you can depend on is that DeVilbiss hose is high quality.

Key to Chart

T = Test

U = Unsatisfactory

Material at Room Temperature:

√ = Continuous Service

• = Intermittent Service

Heated Materials:

Δ = Continuous Service

= Intermittent Service

TYPES OF FLUIDS	SMOOTH & CORRUGATED COVER - AIR PAGE 7	NYLINER II- FLUID HOSE PAGE 9	NYLON- AIR & FLUID TUBING PAGE 10	POLYETHYLENE TUBING-AIR PAGE 11
	H-1900 H-1901 H-1921 H-1957 H-1958 H-1961 H-3670	H-1973-1 H-1974-1 H-1975-1 H-1976-1	PLH-NP-2 PLH-NP-4	H-2338 H-2339
Drying Oils, Alkyds (Mineral Spirits)	U	√Δ	√Δ	√
Phenolic Varnishes, Epoxy Esters, Bituminous, Single Component Urethanes (Naphtha)	U	√Δ	√Δ	U
Chlorinated Rubber, Zinc Rich Silicones, Toluene-Xylene, MEK	U	√Δ	√#	U
Vinyls, Vinyl-Acrylics, Polyesters	U	√Δ	√Δ	U
Lacquers, Urethanes	U	√Δ	√Δ	•
PV Acetate, Polyacrylics, Latex Zinc Silicates (Water Based)	U	√	√	•
Amine, Poly Amides	U	√	U	•
MEK Peroxide	U	√	U	U
Waterborne Coatings	√Δ	√Δ	√Δ	T
Aromatic Solvent Base	U	√	√	U
Chlorinated Solvent Based	U	√	√	U
Maximum Temperature Used	200° F (95° C)	200° F (95° C)	200° F (95° C)	80° F (27° C)
Oil Resistance (when used for Air and Water Hose)	√Δ	√Δ	√Δ	√
Phenolics, Epoxies, Epoxy Zinc Rich, Vinyl Alkyds, Toluene, MEK	U	√Δ	√#	•
MEK, MIBK	U	√	√#	•

Technical Data

Pressure Drop Chart

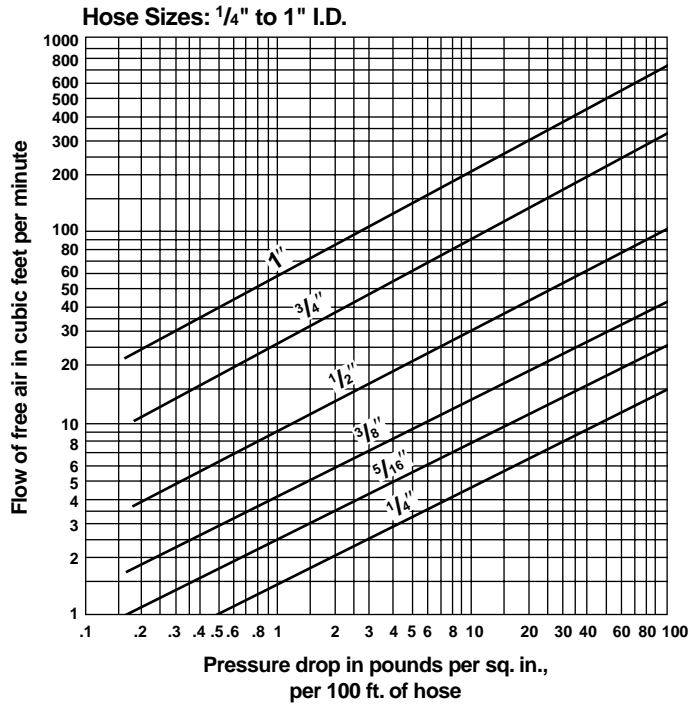
Air Flow Through Hose

Hose Sizes: 1/4" to 1" I.D.

This chart is for approximating and should serve only as a guide in sizing air hose. Pressure drops are directly proportional to hose lengths, i.e. if hose length doubles, pressure drop doubles.

Example:

- 100' x 1/2" I.D. hose at 40 CFM has a pressure loss of 17 1/2 psi.
- 200' x 1/2" I.D. will lose 35 psi.
- 50' x 1/2" I.D. will lose between 8 to 9 psi.



Formula to determine pressure drops for hose lengths other than 100':

$$\left(\frac{\text{Pressure Drop per Chart Figure}}{100} \right) \times (\text{Ft. of Hose}) = \text{Pressure drop for hose used}$$

Part Number Index

<u>PART NO.</u>	<u>PAGE NO.</u>	<u>PART NO.</u>	<u>PAGE NO.</u>
31144-310-K10	18	H-2339	11
AD-11	16	H-3670	6, 13
AD-26	16	HARG-510	17
AD-31	16	HAV-500	17
AD-404	16	HAV-501	17
H-209	16	HC-12-K10	13
H-1446	16	HC-20-K10	13
H-1580	16	HC-23-K10	13
H-1641-1	8, 13	HC-33	13
H-1766	16	HC-199-K10	11
H-1900	7, 13	HC-267	13
H-1901	7, 13	HC-268	13
H-1921	7, 13	HC-269	13
H-1957	7, 13	HC-273	13
H-1958	7, 13	HC-299	13
H-1961	7, 13	HC-513-1	14
H-1973-1	9, 13	HC-1003	10, 11
H-1974-1	9, 13	HC-1016-K10	11
H-1975-1	9, 13	HC-1017	11
H-1976-1	9, 13	HC-1025	10
H-1995	8, 13	HC-1166	14
H-2008	16	HC-4419	14
H-2338	11		

Part Number Index

<u>PART NO.</u>	<u>PAGE NO.</u>	<u>PART NO.</u>	<u>PAGE NO.</u>
HC-4615	11	P-HC-4854	13
HC-4691	14	PLH-1414-SG-SS	10
HC-4699	14	PLH-1438-SG-SS	10
HC-4700	14	PLH-1414-SS	10
P-H-4105	16	PLH-1438-SS	10
P-H-431	16	PLH-1838-SS	10
P-H-432	16	* PLH-3838-SS	15
P-H-5516	17	* PLH-51614-SG-SS	15
P-HC-4215	11	* PLH-51638-SG-SS	15
P-HC-4216	11	PLH-MF-6-100	18
P-HC-4221	11	PLH-MFC-100	18
P-HC-4223	10	PLH-NP-2	10
P-HC-4224	10	PLH-NP-4	10
P-HC-4482	14	* PLH-RY-6	15
P-HC-4523	13	* PLH-RIL-6	15
P-HC-4527	7, 13	* PLH-NP-5	15
P-HC-4528	7, 13	* PLH-NP-6	15
P-HC-4543	9, 13	QDL-4808	14
P-HC-4547	13	VA-527	17
P-HC-4548	9, 13	VA-528	17
P-HC-4551	13	VA-540	17
P-HC-4561	13	VA-541	17
P-HC-4599	13	VA-542	17
P-HC-4703	13	VS-58-K10	18
P-HC-4728	11	VS-531	18
P-HC-4733	10	VS-532	18
P-HC-4734	10	VS-534	18
P-HC-4808-1	14		

* Discontinued by ITW DeVilbiss.

Order from your local ITW Hosco distributor.

System Solutions for Your Spray Finishing Needs



More than just a spray gun manufacturer, DeVilbiss is your single source for practical solutions to all your spray finishing challenges.

To maximize your production output you need consistent, reliable performance, high-quality results and a responsive service partner who knows the industry and your business. And with DeVilbiss, you not only get the equipment, you also get the expertise.

Since 1888, we've advanced the science of spray finishing by introducing innovative products and technological developments that set the standards for the industry. These efforts help ensure that we can deliver the best solution for your particular spray finishing applications.

Spray Guns

- Conventional air spray and HVLV
- Standard-size, mid-size, manual and automatic
- Waterborne compatible, stainless steel passages
- Spot repair guns for precision control
- Decorator guns for spatter type finishes
- Duster guns
- Gravity feed, suction feed, pressure feed
- Internal mix and external mix atomization methods
- OMX™ - the only true ergonomic spray gun

Cups and Tanks

- Pressure, gravity and suction feed cups
- Aluminum, stainless steel and polyethylene
- Economical non-code waterborne-compatible 2-1/2 gal. tanks
- ASME-certified galvanized and stainless steel tanks
- Tank capacities from 2 gal. to 15 gal.
- Air motor drives

Air Control

- Regulators and gauges
- Adjusting valves
- Centrifugal, coalescing, in-line and desiccant filters

Hose

- Fluid and air hose
- Ball and air-adjusting valves
- Fittings and connections

Additional Accessories

- Adapters and couplings
- Nylon-tipped self-seating fluid needles
- SolventSaver™ gun and hose cleaners
- Gun-mounted fluid strainers
- Replacement parts kits
- Air cap test kits
- Fluid regulators
- Gun covers

Sales and Service
Through a Nationwide Network of Industrial Distributors



North American Office

ITW Industrial Finishing
DeVilbiss
195 Internationale Blvd.
Glendale Heights, IL 60139
630-237-5000
Fax 630-237-5011
www.devilbiss.com

Customer Service

1-800-992-4657

Technical Assistance

800-DEV-4448 (U.S. and Canada Only)



DEVILBISS
The Right Way To Finish™

