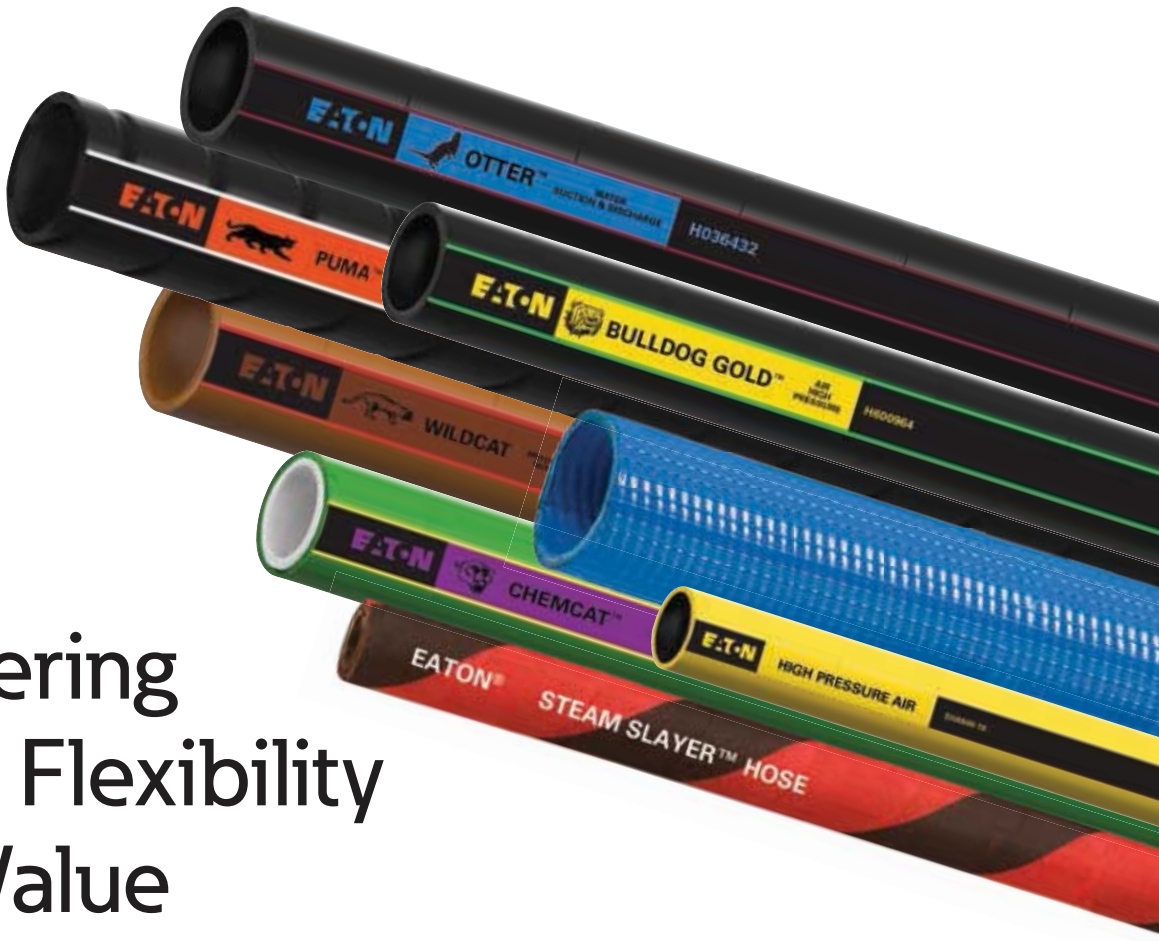

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- Dependable Solutions to Drive Your Performance
- Innovation to Take on the Toughest Challenges

Eaton Industrial Hose offers dependable parts and solutions to optimize Performance.

Defining Quality and Reliability

Applications

- Air transfer
- Beverage dispensing
- Chemical transfer
- Food transfer
- Hot air blower
- Washdown applications
- LPG transfer
- Nitrogen transfer
- Dry material & bulk transfer
- Mud suction & discharge
- Frac application
- Oil transfer
- Gasoline dispensing
- Steam transfer
- Hydrocarbon drain
- Water suction & discharge

...and many more!

Eaton Industrial Hose—Markets

Construction Industry

Chemical Plants

Mining

Oil & Gas Exploration

Steel Mill

Food and Beverage Industry

Tank Truck

Petrochemical

Eaton Industrial Hose

Part Number Nomenclature

A hose part number is composed of several different elements, all combined to make the final number. The following is a diagram of an example hose part number and the elements that go into creating that number.

Hose Type

The hose number is simply the type of hose you wish to order. Hose numbers are found at the top of each page within the hose section of the catalog.

Hose Size

These are two digits after the base hose number. The hose size code follows industry standards.

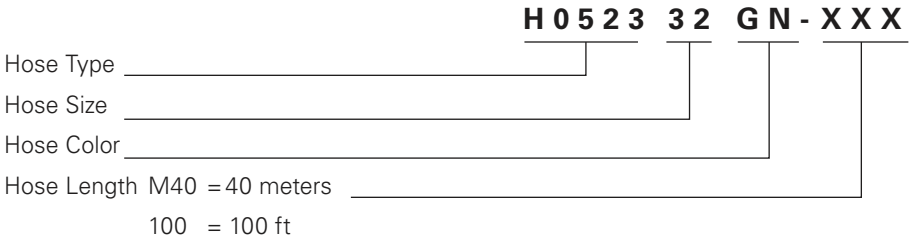
Metric equivalents are found with the hose specification charts on each hose page within the hose section of the catalog.

Hose Length

The hose length is indicated in feet. Metric equivalents are found in the length section of the hose specification charts.

New Eaton Part Numbers

Old Eaton Part Numbers



Eaton Industrial Hose Products

Eaton Industrial Hose Products

Hose Listing

Page	Hose	Description
Air and Multipurpose		
B-5	H6009	BULLDOG GOLD™
B-6	H6008	BULLDOG YELLOW JACK™
B-7	EHA500	High Pressure Air
B-8	H6002	BULLDOG™ Air
B-9	H9949	SHOCK-SAFE™
B-10	H1776 & H177	PERFECTION™ 300
B-11	H201	EASY COUPLE™
B-12	H275	POLYFORCE II™
B-13	H1812	INDUSTRIAL AIR/WATER
B-14	H1981 & H1982	MARATHONER™ Non-Conductive
B-15	H0105	BOSFLEX™ A/W
B-16	H0106	BOSFLEX™ A/W
Chemical		
C-6	H0060	ARMORCAT™ Corrugated Petrochemical
C-7	H0554	ARMORCAT™ Petrochemical
C-8	H0599	CHEMCAT™ Corrugated Petrochemical
C-9	H0523	CHEMCAT™ Petrochemical
C-10	H0661	COUGAR™ Corrugated
C-11	H8359	PANTHER™ Chemical
C-12	H0615	Corrugated Green CROSS-LINKED™
C-13	H0378	Green CROSS-LINKED™
C-14	H0345	TIGER™ Chemical Suction & Discharge
C-15	H9699	ALLEYCAT™ Hot Liquid
C-16	H0346	LEOPARD™ Chemical Discharge
C-17	H1941 & H1942	NYALL™
C-18	H1561	CHEMFORCE™
Food and Beverage		
D-4	H0350	LION™ Food Transfer
D-5	H0384	Grey Food Transfer
D-6	EHF002	Liquid Food Suction & Discharge
D-7	H285	CLEARFORCE™ - R
D-8	PT200	CLEARFORCE™
D-9	H0413	Dry Bulk Discharge
D-10	H1066	Creamery/Packaging Washdown
D-11	H9673	WASHDOWN™ 1250
D-12	H9610	WASHDOWN™ 1000
Gaseous		
E-4	H900	UL LPG
E-5	EH920	UL LPG
Material Handling		
F-4	H0347	WILDCAT™ Dry Material
F-5	H0521	WILDCAT™ Heavy Duty Dry Material
F-6	H0319	WILDCAT™ Softwall Dry Material
F-7	H0349	WILDCAT™ Hot Air Transfer
F-8	H0034	WILDCAT™ Sandblast

Page	Hose	Description
Oil and Gas Exploration		
G-4	EHP001	BLACKCAT™ FRAC
G-5	H0377	Kelly Power Drilling
G-6	EHP009	Oilfield Vacuum
Petroleum		
H-4	H1193	ROYALFLEX™ Petroleum
H-5	EHP522	Heavy Duty Petroleum/Oil Suction & Discharge
H-6	H0327	JAGUAR™ Heavy Duty Petroleum S & D
H-7	EHP521	PUMA™ Cold Temperature Suction and Discharge
H-8	EHP519	PUMA™ Flat Corrugated Suction and Discharge
H-9	H0363	PUMA™ Suction and Discharge
H-10	H0436	Light Duty Petroleum Suction & Discharge
H-11	H901	BOSTON BULLDOG™ Fuel Oil
Specialty		
I-4	H5751 & H5752	Chemical Booster
I-5	H0372	BLACKCAT™ Hot Tar & Asphalt
I-6	H0616	BLACKCAT™ Corrugated Hot Tar & Asphalt
I-7	H9603	Hot Tar Pumping
I-8	EH066	Diesel Exhaust Fluid Dispensing
I-9	H9690	Hydrocarbon Drain
I-10	H8811	Nitrogen
Steam		
J-6	EH084	STEAM SLAYER™
J-7	EH080 & EH081	STEAM SLAYER™
J-8	H0084	Concord Standard
J-9	H9568	Concord 250 Steam
J-10	EJ Series Couplings	EJ Series Crimp Couplings
J-11	FK6496 & FK6500 Assemblies	Eaton Steam Hose Assemblies
Water		
K-4	EHW030	OTTER™ PLUS Water Suction & Discharge
K-5	H0364	OTTER™ Water Suction & Discharge
K-6	EHW029	OTTER™ Layflat Water Discharge
K-7	H0307 & H0379	LEADER™ Water Discharge
K-8	H1196	ROYALFLEX™ Water
K-9	EHW028	Heavy Duty MSHA Mine Spray
K-10	H345	Pressure Washer
K-11	FC701	Eaton GATOR™ Hose
K-12	FC702	Eaton GATOR™ Hose
K-13	FC701 & FC702 Fittings	Permanent Fittings, Eaton GATOR™ Hose

New Hose Selection

Worksheet

Eaton recommends using the **STAMPED** process to aid in determining the correct hose and coupling for your application. This worksheet is designed to help you organize information for determining the best hose for a given application. The questions are based on the hose selection factors described in this catalog.

When selecting a hose, always use this worksheet in conjunction with this catalog. Read all instructions concerning the hose you are selecting. If any questions arise contact Eaton Technical Support at 1-888-258-0222.

S - Size (I.D., O.D. and length)

T - Temperature of material conveyed and environmental

A - Application, the conditions of use

M - Material being conveyed, type and concentration

P - Pressure to which the assembly will be exposed

E - Ends; style, type, orientation, attachment methods, etc.

D - Delivery testing, quality, packaging, and delivery requirements

1. Size

Flow (cubic feet per minute) requirements? _____

See RMA Water Discharge table.

Hose I.D. requirements given the flow requirements? _____

Pressure drop? _____

Length requirements (excluding hose ends)? _____

2. Temperature

Temperature range of material to be transferred?

Min. _____ Max. _____ Average _____

Year-round external environment temperature range? _____

Cleaning temperature? _____

3. Application

If the application is new, what service is to be performed? _____

4. Material: Compatibility & Environment

Internal and external environment consideration. Internal environment relates to the material being conveyed. External environment relates to anything originating from outside the hose.

Check all that apply.

- ☐ Abrasive materials (conveyants and external)
- ☐ Petroleum products (aromatics, aliphatics, etc.)
- ☐ Materials that could cut or gouge hose
- ☐ Solvents
- ☐ Ozone
- ☐ Acids/caustics
- ☐ Animal fats (oils)
- ☐ Sparking or flames
- ☐ Cleaning with steam

Material to be transferred? _____

Material concentration (%)? _____

What hose cleaning solution(s) will be used? _____

If you have any questions, please contact Eaton Technical Support at 1-888-258-0222.

S - Size (I.D., O.D. and length)

T - Temperature of material conveyed and environmental

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D - Delivery testing, quality, packaging, and delivery requirements

5. Pressure & Suction

What working pressure is required? _____

Are pressure surges involved in this application? How high? _____

What safety factor is required? _____

Is this a suction application? What vacuum rating is required? _____

6. Ends

End _____

Material _____

Attachment Method _____

7. Delivery

Qty. required _____ Date required _____ Pkg. requirements _____

Testing Required - ☐ No ☐ Yes If Yes, Type: _____

Certification Required - ☐ No ☐ Yes If Yes, Type: _____

Special Requirements/Other Information

Will the selected hose need to possess any of the following features:

Branding information needed on the hose? _____

Color coding? _____

Any special designations required by agencies or associations? _____

Will any regulatory agency approvals be required? If yes, which one(s)? _____

Non-conductive rubber needed to prevent transmittal of electricity? _____

Static wire or static-dissipating tube to prevent static electricity buildup and discharge sparks? _____

Pin-pricked cover to resist blistering when transferring hot materials or air/gases under pressure? _____

Abrasion sleeve or guard? _____

Heat shield? _____

Sub-zero exposure resistance? _____

Special assembly requirements? _____

Continuous transfer service or intermittent service? _____

Flexibility: Do space restrictions exist where the hose will be used? _____

Bend Radius: of the hose relative to space in which hose will be used? _____

Considering the intended use of the hose, how flexible will it need to be (check one)?

☐ Extremely flexible ☐ Slightly flexible ☐ Not an issue

Weight: How will the hose be handled during use, if all? _____

How important is the weight of the hose going to be in this application (check one)?

☐ Very important ☐ Slightly important ☐ Not an issue

Be sure to reference chemical compatibility recommendations in the Chemical Resistance Charts starting on page L-1 through L-11.

If you have any questions, please contact Eaton Technical Support at 1-888-258-0222.

Application Data

Important Safety Information

Read this page before using any of the products/information in this catalog.

This catalog is designed to be used as a guide in selecting the proper hose for the applications listed herein. It contains many cautions, warnings, guidelines, and directions for the safe and proper use of Eaton Industrial hose. All these directions and footnotes should be read and understood before specifying or using any of these hoses.

Throughout this catalog, potentially harmful situations are highlighted with the following symbols.

This symbol is used to indicate imminently hazardous situations which, if not avoided, will result in serious injury or death.

This symbol is used to indicate potentially hazardous situations which, if not avoided, could result in serious injury or death.

This symbol is used to indicate potentially hazardous situations which, if not avoided, may result in property or equipment damage.

Some of the most common problems in the chemical hose industry result from improper hose and coupling selection, improper assembly techniques, failure to correctly inspect and test hose assemblies, and improper cleaning practices and hose assembly storage techniques.

In turn, these situations can lead to material leakage, spraying, spattering, end blow-offs, explosions, and other situations that may result in serious personal injury and property damage.

Personal injuries caused by improper hose assembly specification, installation, and usage could include cuts and abrasions, serious burns, irreparable eye damage, or even death. Therefore, for your safety and the safety of others working around you, Eaton strongly urges you to read and comply with all safety information printed in this publication.

WARNING: Failure to properly follow the manufacturer's recommended procedures for the care, maintenance and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, and damage to property.

WARNING: Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

Consult the coupling manufacturer to make sure you choose the correct coupling and proper assembly for the application, or contact Eaton Technical Support.

Before using any hose in this catalog, consult the safety section in this catalog and the guidelines on the Eaton web site for the most current information or for North America, contact Eaton Technical Support at 1-888-258-0222; for global support contact your local Eaton technical representative.

Selection of Hose

Selection of the proper Eaton Industrial hose for an application is essential to the proper operation and safe use of the hose and related equipment. Inappropriate hose selection may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage from spraying fluids or flying projectiles. To avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog. Some of the factors to consider in proper hose selection are known as **STAMPED:**

- **S - Size** (I.D., O.D. and length)
- **T - Temperature** of material conveyed and environmental
- **A - Application,** the conditions of use
- **M - Material** being conveyed, type and concentration
- **P - Pressure** to which the assembly will be exposed
- **E - Ends;** style, type, orientation, attachment methods, etc.
- **D - Delivery** testing, quality, packaging, and delivery requirements

These factors and the supplemental information contained in this catalog should be considered in selecting the proper hose for your application. If you have any questions regarding the proper hose for your application, please contact Eaton for North America contact Eaton Technical Support 1-888-258-0222, for global support contact your local Eaton technical representative.

Application Data

Important Safety Information

Proper Selection of Hose Ends

Selection of the proper Eaton Industrial hose end or coupling is essential to the proper operation and safe use of hose assemblies and related equipment. Inadequate attention to the selection of the end fittings may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage from spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from selection of an incompatible hose end or coupling, you should carefully review the information in this catalog. Some of the factors which are involved in the selection of the proper hose couplings are:

- fluid compatibility
- temperature
- installation design
- hose size
- corrosion requirements
- fluid conveyed

The given hose and hose end selection factors and the other information contained in this catalog should be considered by you in selecting the proper hose end fitting for your application.

If you have any questions regarding the use of hose/hose ends, for North America, contact Eaton Technical Support at 1-888-258-0222 available 7:30 AM CST-4:30 PM CST, for global support contact your local Eaton technical representative.

Hose Installation

Proper installation is essential to the proper operation and safe use of the hose assembly and related equipment.

Improper hose assembly installation may result in serious injury or property damage caused by spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from improper hose assembly installation carefully review the information in this catalog. Some of the factors to be considered when installing a hose assembly are:

- hose elongation or contraction
- proper bend radius/hose routing under pressure
- elbows and adapters to relieve strain
- protection from rubbing or abrasion high temperature sources
- protection against excessive movement
- twisting from pressure spikes/surges

These hose assembly installation factors and the other information in this catalog should be considered by you before installing the hose assembly. If you have any questions regarding proper hose installation, for North America, contact Eaton Technical Support at 1-888-258-0222 available 7:30 AM CST-4:30 PM CST, for global support contact your local Eaton technical representative.

Hose Maintenance

Proper maintenance of the hose is essential to the safe use of the hose and related equipment. Hose should be stored in a dry place. Hose should also be visually inspected. Any hose that has a cut or gouge in the cover that exposes the reinforcement should be retired from service. Hoses should also be inspected for kinking or broken reinforcement. If the outside diameter of the hose is reduced by 20% or more, the hose should be repaired or removed from service. Inadequate attention to hose maintenance may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances.

WARNING: Eaton industrial hose, should be used only with compatible/approved fittings and assembly equipment. Do not combine or use Aeroquip or Weatherhead fittings and assembly equipment with each other, i.e. Aeroquip fittings with Weatherhead assembly equipment, or with hose, hose fittings or assembly equipment supplied by another manufacturer. Eaton hereby disclaims any obligation or liability (including incidental and consequential damages) arising from breach or contract, warranty, or tort (under negligence or strict liability theories) should Aeroquip or Weatherhead hose fittings or assembly equipment be used interchangeably or with any fittings or assembly equipment supplied by another manufacturer, or in the event that product instructions for each specified hose assembly are not followed.

Important — User Responsibility

The user should carefully observe the precautions listed in this catalog or brochure, including the recommendations on the selection of hose and fittings on the relevant pages on fluid compatibility. In addition, care should be taken not to exceed the minimum bend radius listed for each hose size and type in the hose section. Maximum operating pressure should not exceed pressures listed in the hose data. Instructions for assembling fittings to different hose should be followed carefully to ensure the performance of the completed assembly.

⚠ **WARNING** Application considerations must be observed in selecting appropriate components for the application of these products contained herein. The failure to follow the recommendations set forth in this catalog may result in an unstable application which may result in serious personal injury or property damage.

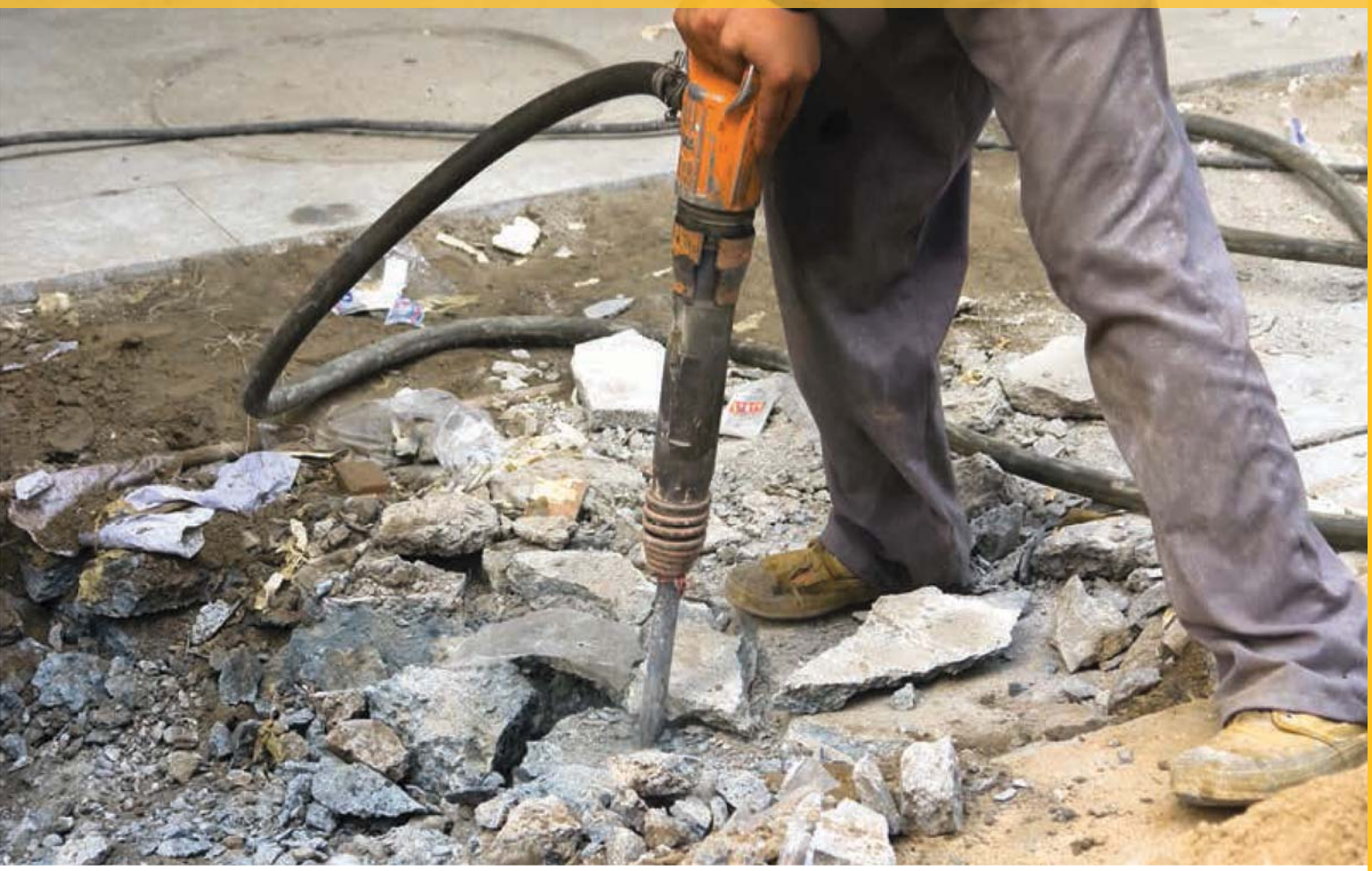
⚠ **WARNING** Eaton or any of its affiliates or subsidiaries shall not be subject to and disclaims any obligations or liabilities (including but not limited to all consequential, incidental and contingent damages) arising from tort claims (including without limitation negligence and strict liability) or other theories of law.

Failure to follow these processes and product instructions and limitations could lead to premature hose assembly failures resulting in property damage, serious injury or death.

Product Warranty

The Eaton Hydraulics warranty policy is located at www.hydraulics.eaton.com/warranty

Air and Multipurpose



Air and Multipurpose

High Pressure

H6009 BULLDOG GOLD™ page B-5

Application: Air-operated equipment, boring and mining
Tube: Nitrile (RMA Class A)
Reinforcement: 1-, 2- and 3-wire braid
Cover: Pin-pricked Carboxylated nitrile
Temp: -40°C to +121°C (-40°F to +250°F)
Pressure: 35-70 bar / 500-1000 psi

H6008 BULLDOG YELLOW JACK™ page B-6

Application: Power drills, boring, mining and air-operated equipment
Tube: Vinyl nitrile, (RMA Class A)
Reinforcement: 1-, 2- & 3-wire braid
Cover: Neoprene MSHA approved
Temp: -40°C to +93°C, (-40°F to +200°F)
Pressure: 28-103 bar / 400-1500 psi

EHA500 High Pressure Air page B-7

Application: High-pressure air
Tube: Oil-resistant nitrile blend
Reinforcement: High-tensile steel wire
Cover: Synthetic rubber
Temp: -40°C to +93°C, (-40°F to +200°F)
Pressure: 41 bar / 600 psi

Medium Pressure

H6002 BULLDOG™ Air page B-8

Application: Power drills, boring, mining and air-operated equipment
Tube: Nitrile
Reinforcement: 2-fiber braid or fiber ply
Cover: Neoprene or vinyl nitrile
Temp: -40°C to +93°C, (-40°F to +200°F)
Pressure: 13,8-28,0 bar / 200-400 psi

Low Working Pressure

H9949 SHOCK-SAFE™ page B-9

Application: Air and water transfer where hose must be non-conductive
Tube: Nitrile (non-conductive)
Reinforcement: 2-fiber braid
Cover: Vinyl nitrile (non-conductive)
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 19 bar / 275 psi

H1776 & H1777 PERFECTION™ 300 page B-10

Application: Air and water transfer, air tools
Tube: Nitrile (RMA Class A)
Reinforcement: 2-fiber braid
Cover: Vinyl nitrile
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 22,4 bar / 325 psi

H201 EASY COUPLE™ page B-11

Application: Air and water transfer, power for air-operated and pneumatic tools
Tube: Vinyl Nitrile (RMA Class A)
Reinforcement: 1-braid fiber
Cover: Neoprene or Vinyl nitrile
Temp: -40°C to +100°C, (-40°F to +212°F)
Pressure: 14-21 bar / 200-300 psi

H275 POLYFORCE II™ page B-12

Application: Air and water transfer, air-operated tools and lubricated air
Tube: PVC
Reinforcement: 2 spiral fiber
Cover: Pin-pricked PVC
Temp: -23°C to +65°C, (-10°F to +150°F)
Pressure: 8,5-17,2 bar / 125-250 psi

H1812 Industrial Air/ Water page B-13

Application: Air and water transfer, pneumatic tools and spraying water-based fertilizers and pesticides
Tube: EPDM rubber
Reinforcement: 2-fiber braid
Cover: EPDM rubber
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 17,2-19 bar / 250-275 psi

General Air & Water

H1981 & H1982 MARATHONER™ – Non-Conductive page B-14

Application: Medium oil-resistance, air and water transfer
Tube: Nitrile blend
Reinforcement: 2- or 4-fiber spiral
Cover: Pin-pricked nitrile blend
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 13,8-20,7 bar / 200-300 psi

H0105 BOSFLEX™ A/W page B-15

Application: Air and water transfer, and spraying and conveying water-based liquid fertilizers and pesticides
Tube: EPDM
Reinforcement: 4-fiber spiral and 2-fiber braid
Cover: EPDM
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 13,8-20,7 bar / 200-300 psi

H0106 BOSFLEX™ A/W page B-16

Application: Air and water transfer, and spraying and conveying water-based liquid fertilizers and pesticides
Tube: EPDM
Reinforcement: 2-spiral fiber
Cover: EPDM
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 13,8-20,7 bar / 200-300 psi

Air and Multipurpose

Introduction and Safety Information

Every Hose is Easily Identified

- Every foot of hose is easily identified by means of permanent branding. This makes hose selection on the job quicker, easier and safer, and buying hose is easier too—because you can tell at a glance that you're getting exactly the hose you ordered.

Multi-Purpose Hose for Specialized Uses

- Eaton calls them "Multipurpose" hoses, meaning they'll do a tremendous variety of jobs. In many cases one Eaton hose can replace several different "special purpose" styles. This helps keep expenses low.

Brand Name Identity (and the quality that goes behind it)

- With the Eaton brand name on the hose you buy, you are assured maximum value and consistent quality. With over 100 years worth of reputation at stake, we wouldn't have it any other way.

Air and Multipurpose Hose Safety Information

Important!

WARNING: Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

WARNING: Failure to properly follow the manufacturer's recommended procedures for the care, maintenance, and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, or damage to property.

WARNING: Consult with the Coupling Manufacturer to make sure you choose the correct coupling and proper assembly for the application. Such matching of hose and couplings, and assembling of couplings, should be performed only by trained personnel using proper tools and procedures. Failure to follow manufacturer's instructions or failure to use trained personnel may result in serious bodily injury and/or property damage.

WARNING: Never use a hose to transfer material it is not specifically meant to transfer. Doing so could deteriorate the hose and result in leaking, hose bursting, or end blow-offs. This could lead to serious personal injury or death. Always transfer material in a hose that is designed specifically to transfer that material. This information is listed in this catalog.

WARNING: Consider both working pressure and pressure surges when determining "maximum" pressure. Failure to select a hose that meets both these requirements could lead to end blow-offs, hose leakage, and hose bursting. The result could be serious injury or death. The Eaton hose you choose must meet or exceed the required working pressure, and must have a safety factor to allow for surge pressure.

WARNING: Be aware that if you replace a hose with one having a different I.D. than the original hose, material velocity could increase or decrease, possibly creating static electricity. This could lead to an explosion causing serious injury or death.

WARNING: Selection of the proper hose for the application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to selection of hose for the application can result in serious bodily injury or property damage. In order to avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog.

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H6009 BULLDOG GOLD™

Construction:

Tube: Nitrile (RMA Class A)

Reinforcement:

1.00" - 1.25" 1-wire braid
1.50" - 3.00" 2-wire braid
4.00" 3-wire braid

Cover: Pin-pricked carboxylated nitrile

Operating Temperature:

-40°C to +121°C
(-40°F to +250°F)

Application:

- Provide power to air-operated construction equipment
- Power air-operated drills, boring, and mining equipment

Markets:

- Construction
- Mining
- Oil and gas exploration
- Water drilling
- Ship building

Type of Couplings:

- Eaton "Z" series
- Eaton "U" series
- TTC
- Union
- Boss male
- Ground joint female
- Air hammer
- Air king
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

#		Hose I.D.		Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
Part No.	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H600916	25	25,4	1.00	38,1	1.50	70,0	1000	275	4000	0,96	0.64	15,2	50
H600916-100	25	25,4	1.00	38,1	1.50	70,0	1000	275	4000	0,96	0.64	30,5	100
H600920	31	31,8	1.25	46,0	1.81	55,0	800	220	3200	1,80	1.20	15,2	50
H600924	38	38,1	1.50	54,0	2.12	41,0	600	165	2400	2,01	1.34	15,2	50
H600924-100	38	38,1	1.50	54,0	2.12	41,0	600	165	2400	2,01	1.34	30,5	100
H600932	51	50,8	2.00	67,5	2.66	41,0	600	165	2400	2,95	1.97	15,2	50
H600932-100	51	50,8	2.00	67,5	2.66	41,0	600	165	2400	2,95	1.97	30,5	100
H600932-150	51	50,8	2.00	67,5	2.66	41,0	600	165	2400	2,95	1.97	45,7	150
H600940	60	63,5	2.50	80,2	3.16	41,0	600	165	2400	3,75	2.50	15,2	50
H600940-100	60	63,5	2.50	80,2	3.16	41,0	600	165	2400	3,75	2.50	30,5	100
H600948	80	76,2	3.00	94,5	3.72	41,0	600	165	2400	4,72	3.15	15,2	50
H600948-100	80	76,2	3.00	94,5	3.72	41,0	600	165	2400	4,72	3.15	30,5	100
H600964	102	101,6	4.00	127,0	5.00	35,0	500	138	2000	7,97	5.32	15,2	50
H600964-100	102	101,6	4.00	127,0	5.00	35,0	500	138	2000	7,97	5.32	30,5	100
H600964-150	102	101,6	4.00	127,0	5.00	35,0	500	138	2000	7,97	5.32	45,7	150

Air and Multipurpose
High Pressure

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H6008 BULLDOG YELLOW JACK™

Construction:

Tube: Vinyl nitrile (RMA Class A)

Reinforcement:

0.50" – 1.25" 1-wire braid
1.50" – 3.00" 2-wire braid
4.00" 3-wire braid

Cover: Pin-pricked neoprene MSHA approved

Operating Temperature:

-40°C to +93°C
(-40°F to +200°F)

Application:

- Power operated drills, boring, and mining equipment
- Provide power to air-operated equipment

Markets:

- Oil and gas exploration
- Metal working
- Construction
- Mining

Type of Couplings:

- Eaton "U" series
- Eaton "Z" series
- TTC
- Boss
- Ground joint
- Air hammer
- Air king
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H600808	12	12,7	0.50	24,6	0.97	103,0	1500	420	6000	0,60	0.40	15,2	50
H600808-100	12	12,7	0.50	24,6	0.97	103,0	1500	420	6000	0,60	0.40	30,5	100
H600812-100	19	19,0	0.75	31,8	1.25	83,0	1200	335	4800	1,00	0.67	30,5	100
H600816	25	25,4	1.00	38,1	1.50	69,0	1000	280	4000	1,27	0.85	15,2	50
H600816-100	25	25,4	1.00	38,1	1.50	69,0	1000	280	4000	1,27	0.85	30,5	100
H600820	31	31,8	1.25	46,0	1.81	45,0	650	182	2600	1,87	1.25	15,2	50
H600824	38	38,1	1.50	54,0	2.12	42,0	600	168	2400	2,49	1.66	15,2	50
H600824-100	38	38,1	1.50	54,0	2.12	42,0	600	168	2400	2,49	1.66	30,5	100
H600832	51	50,8	2.00	67,4	2.66	42,0	600	168	2400	3,09	2.06	15,2	50
H600832-100*	51	50,8	2.00	67,4	2.66	42,0	600	168	2400	3,09	2.06	30,5	100
H600840	60	63,5	2.50	80,2	3.16	28,0	400	112	1600	3,66	2.44	15,2	50
H600840-100*	60	63,5	2.50	80,2	3.16	28,0	400	112	1600	3,66	2.44	30,5	100
H600848	80	76,2	3.00	94,5	3.72	28,0	400	112	1600	4,15	2.77	15,2	50
H600848-100	80	76,2	3.00	94,5	3.72	28,0	400	112	1600	4,15	2.77	30,5	100
H600864	102	101,6	4.00	126,9	4.99	28,0	400	112	1600	6,43	4.29	15,2	50

* 150 ft. length available

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EHA500 High Pressure Air

Construction:

Tube: Oil-resistant nitrile blend

Reinforcement: High-tensile steel wire

Cover: Pin-pricked, abrasion, ozone, and weather resistant synthetic rubber

Operating Temperature:

-40°C to +93°C
(-40°F to +200°F)

Application:

- High-pressure air service

Markets:

- Construction
- Oil field equipment
- Drilling equipment
- Mining
- Rental industry
- Steel
- Paper

Type of Couplings:

- Boss
- Ground joint
- Air hammer
- Air king
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
EHA500-08YW-100	12	12,7	0.50	23,0	0.91	41,0	600	165	2400	0,51	0.34	30,5	100
EHA500-12YW-100	19	19,0	0.75	29,5	1.16	41,0	600	165	2400	0,62	0.42	30,5	100
EHA500-16YW-100	25	25,4	1.00	36,0	1.42	41,0	600	165	2400	0,88	0.59	30,5	100
EHA500-20YW-100	31	31,8	1.25	43,0	1.69	41,0	600	165	2400	1,12	0.75	30,5	100
EHA500-24YW-100	38	38,1	1.50	50,0	1.97	41,0	600	165	2400	1,55	1.04	30,5	100
EHA500-32YW-100	51	50,8	2.00	66,0	2.60	41,0	600	165	2400	2,51	1.69	30,5	100
EHA500-40YW-100	60	63,5	2.50	80,0	3.15	41,0	600	165	2400	3,36	2.26	30,5	100
EHA500-48YW-100	80	76,2	3.00	93,9	3.70	41,0	600	165	2400	4,49	3.02	30,5	100
EHA500-64YW-100	102	101,6	4.00	122,0	4.80	41,0	600	165	2400	6,77	4.55	30,5	100

**50 ft. length also available and black cover available on a MTO basis

Air and Multipurpose
Medium Pressure

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H6002 BULLDOG™ Air

Construction:

Tube: Nitrile

Reinforcement:
.50" - 1.00" 2-fiber braid
1.25" - 3.00" 2-fiber ply

Cover:
.50" - 1.00" pin-pricked neoprene
1.25" - 3.00" pin-pricked vinyl nitrile

Operating Temperature:

-40°C to +93°C
(-40°F to +200°F)

Application:
- Power operated drills, boring and mining equipment
- Provide power to air-operated equipment

Markets:
- Metal working
- Construction
- Mining
- Forest industry

Type of Couplings:
- Eaton "U" series
- Eaton "Z" series
- TTC
- Boss
- Ground joint
- Air hammer
- Air king
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H600208	12	12,7	0.50	23,0	0.91	28,0	400	110,0	1600	0,46	0.31	15,2	50
H600208-100*	12	12,7	0.50	23,0	0.91	28,0	400	110,0	1600	0,46	0.31	30,5	100
H600212	19	19,0	0.75	30,2	1.19	28,0	400	110,0	1600	0,68	0.46	15,2	50
H600212-100	19	19,0	0.75	30,2	1.19	28,0	400	110,0	1600	0,68	0.46	30,5	100
H600216	25	25,4	1.00	38,1	1.50	28,0	400	110,0	1600	1,00	0.67	15,2	50
H600216-100	25	25,4	1.00	38,1	1.50	28,0	400	110,0	1600	1,00	0.67	30,5	100
H600220	31	31,8	1.25	46,0	1.81	28,0	400	110,0	1600	1,28	0.86	15,2	50
H600220-100	31	31,8	1.25	46,0	1.81	28,0	400	110,0	1600	1,28	0.86	30,5	100
H600224	38	38,1	1.50	52,4	2.06	28,0	400	110,0	1600	1,47	0.99	15,2	50
H600224-100	38	38,1	1.50	52,4	2.06	28,0	400	110,0	1600	1,47	0.99	30,5	100
H600232	51	50,8	2.00	66,7	2.63	20,7	300	83,0	1200	1,89	1.27	15,2	50
H600232-100	51	50,8	2.00	66,7	2.63	20,7	300	83,0	1200	1,89	1.27	30,5	100
H600248-150	80	76,2	3.00	90,5	3.56	13,8	200	55,0	800	2,86	1.92	45,7	150

* 150 ft. length available

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H9949 SHOCK-SAFE™

Construction:

Tube: Nitrile (non-conductive)

Reinforcement: 2-fiber braid

Cover: Vinyl nitrile (non-conductive)

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- Air and water transfer where hose must be non-conductive

Markets:

- Oil and gas exploration
- Steel and metal
- Mining
- In-plant service

Type of Couplings:

- Eaton "U" series
- Eaton "Z" series
- TTC
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H994904-500R	6	6,4	0.25	15,1	0.59	19,0	275	75,0	1100	0,22	0.15	152,4	500
H994906-500R	10	9,5	0.38	18,3	0.72	19,0	275	75,0	1100	0,28	0.19	152,4	500
H994908-500R	12	12,7	0.50	22,2	0.88	19,0	275	75,0	1100	0,40	0.27	152,4	500
H994912-500R	19	19,0	0.75	29,4	1.16	19,0	275	75,0	1100	0,61	0.41	152,4	500
H994916-300R	25	25,4	1.00	36,5	1.44	19,0	275	75,0	1100	0,95	0.64	91,4	300

Air and Multipurpose
Low Working Pressure

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H1776 & H1777 PERFECTION™ 300

Construction:

Tube: Nitrile (RMA Class A)

Reinforcement:
H1777 1-fiber braid

H1776 2-fiber braid

Cover: Vinyl nitrile

Operating Temperature:
-40°C to +82°C
(-40°F to +180°F)

Application:
- For air and water transfer
- Air tools

Markets:
- Construction
- Mining
- General industry
- In-plant air service
- Food processing

Type of Couplings:
- Eaton "U" series
- Eaton "Z" series
- TTC
- Long shank
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
H1777	**DN**	**mm**	**in**	**mm**	**in**	**bar**	**psi**	**bar**	**psi**	**kg/m**	**lbs/ft**	**mtr**	**ft**
H177704-500R	6	6,4	0.25	12,7	0.50	22,4	325	90,0	1300	0,16	0.11	152,4	500
H177705-500R	8	7,9	0.31	15,9	0.63	22,4	325	90,0	1300	0,25	0.17	152,4	500
H177706-500R	10	9,5	0.38	16,7	0.66	22,4	325	90,0	1300	0,25	0.17	152,4	500
H177708-500R	12	12,7	0.50	20,6	0.81	22,4	325	90,0	1300	0,36	0.24	152,4	500
H1776													
H177604-500R	6	6,4	0.25	15,1	0.59	22,4	325	90,0	1300	0,22	0.15	152,4	500
H177606-500R	10	9,5	0.38	18,3	0.72	22,4	325	90,0	1300	0,30	0.20	152,4	500
H177608-500R	12	12,7	0.50	22,2	0.87	22,4	325	90,0	1300	0,46	0.31	152,4	500
H177610-500R	16	15,9	0.62	25,4	1.00	22,4	325	90,0	1300	0,54	0.36	152,4	500
H177612-500R	19	19,0	0.75	29,4	1.16	22,4	325	90,0	1300	0,65	0.44	152,4	500
H177616-300R	25	25,4	1.00	36,5	1.44	22,4	325	90,0	1300	0,89	0.46	91,4	300
H177620-300R	31	31,8	1.25	44,5	1.75	22,4	325	90,0	1300	0,97	0.65	91,4	300
H177624-300R	38	38,1	1.50	50,8	2.00	22,4	325	90,0	1300	1,22	0.82	91,4	300

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H201 EASY COUPLE™

Construction:

Tube: Vinyl Nitrile (RMA Class A)

Reinforcement: 1-braid fiber

Cover: (BK) Neoprene (MSHA Approved)

(BU,GN, GY, RD,YW) Vinyl nitrile

Operating Temperature:

-40°C to +100°C
(-40°F to +212°F)

Application:

- Air and water transfer
- Pneumatic tools
- Air tools

Markets:

- Oil and gas exploration
- Construction
- Mining
- Plastic molding

Type of Couplings:

- Aeroquip® socketless
- Push-on couplings
- Eaton "B" series
- Eaton quick disconnect

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H20104XX	6	6,4	0.25	12,7	0.50	21,0	300	84,0	1200	0,13	0.09	15,2	50
H20104XX-250R**	6	6,4	0.25	12,7	0.50	21,0	300	84,0	1200	0,13	0.09	76,2	250
H20104XX-500R	6	6,4	0.25	12,7	0.50	21,0	300	84,0	1200	0,13	0.09	152,4	500
H20106XX	10	9,5	0.38	16,7	0.66	21,0	300	84,0	1200	0,19	0.13	15,2	50
H20106XX-250R**	10	9,5	0.38	16,7	0.66	21,0	300	84,0	1200	0,19	0.13	76,2	250
H20106XX-500R	10	9,5	0.38	16,7	0.66	21,0	300	84,0	1200	0,19	0.13	152,4	500
H20108XX	12	12,7	0.50	19,2	0.76	21,0	300	84,0	1200	0,22	0.15	15,2	50
H20108XX-250R**	12	12,7	0.50	19,2	0.76	21,0	300	84,0	1200	0,22	0.15	76,2	250
H20108XX-500R	12	12,7	0.50	19,2	0.76	21,0	300	84,0	1200	0,22	0.15	152,4	500
H20110XX	16	15,9	0.62	23,6	0.93	21,0	300	84,0	1200	0,34	0.23	15,2	50
H20110XX-250R	16	15,9	0.62	23,6	0.93	21,0	300	84,0	1200	0,34	0.23	76,2	250
H20112XX	19	19,0	0.75	26,3	1.04	21,0	300	84,0	1200	0,39	0.26	15,2	50
H20112XX-250R	19	19,0	0.75	26,3	1.04	21,0	300	84,0	1200	0,39	0.26	76,2	250
H20116XX	25	25,4	1.00	34,9	1.38	14,0	200	55,0	800	0,57	0.38	15,2	50
H20116XX-250R	25	25,4	1.00	34,9	1.38	14,0	200	55,0	800	0,57	0.38	76,2	250

* All sizes available in Black, Blue and Red **Green, Gray and Yellow available

Air and Multipurpose

Low Working Pressure

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H275 POLYFORCE II™

Construction:

Tube: PVC

Reinforcement: 2-spiral fiber

Cover: Pin-pricked PVC

Operating Temperature:

-23°C to +65°C
(-10°F to +150°F)

Application:

- For transfer of air and water
- Air tools
- Lubricated air

Markets:

- Construction
- Mining
- General industry
- In-plant air service
- Food processing

Type of Couplings:

- Eaton "E" series
- Eaton "P" series
- Eaton "Z" series
- TTC
- Barbed inserts
- Quick acting or long shank
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H27504RD-600R*	6	6,4	0.25	12,7	0.50	17,2	250	70,0	1000	0,10	0.07	182,9	600
H27506RD-600R*	10	9,5	0.38	15,9	0.62	17,2	250	70,0	1000	0,18	0.12	182,9	600
H27508RD-500R*	12	12,7	0.50	19,1	0.75	17,2	250	70,0	1000	0,22	0.15	152,4	500
H27510RD-500R	16	15,9	0.62	22,6	0.89	17,2	250	70,0	1000	0,28	0.19	152,4	500
H27512RD-500R	19	19,0	0.75	26,2	1.03	17,2	250	70,0	1000	0,34	0.23	152,4	500
H27516RD-200R	25	25,4	1.00	33,3	1.31	13,8	200	55,0	800	0,51	0.34	60,1	200
H27520RD-100	31	31,8	1.25	42,9	1.69	13,8	200	55,0	800	0,77	0.52	30,5	100
H27524RD-100	38	38,1	1.50	49,2	1.94	13,8	200	55,0	800	0,91	0.61	30,5	100
H27532RD-100	51	50,8	2.00	63,5	2.50	8,5	125	26,0	375	1,35	0.91	30,5	100

* Additional colors available ** Additional lengths available on select items

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H1812 Industrial Air/Water

Construction:

Tube: EPDM rubber

Reinforcement: 2-fiber braid

Cover: EPDM rubber

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- For transfer of air and water
- Pneumatic tools
- For spraying water-based fertilizers and pesticides

Markets:

- Metal working
- Construction
- Mining
- Oil and gas exploration
- In-plant service
- Agriculture

Type of Couplings:

- Eaton "U" series
- Eaton "Z" series
- Barbed inserts
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H181204-500R	6	6,4	0.25	15,1	0.59	19,0	275	75,0	1100	0,18	0.12	152,4	500
H181206-500R	10	9,5	0.38	18,3	0.72	19,0	275	75,0	1100	0,27	0.18	152,4	500
H181208-500R	12	12,7	0.50	22,2	0.87	17,2	250	70,0	1000	0,34	0.23	152,4	500
H181210-500R	16	15,9	0.62	25,4	1.00	17,2	250	70,0	1000	0,42	0.28	152,4	500
H181212-500R	19	19,0	0.75	29,4	1.16	17,2	250	70,0	1000	0,49	0.33	152,4	500
H181216-300R	25	25,4	1.00	36,5	1.44	17,2	250	70,0	1000	0,68	0.46	91,4	300
H181220-300R	31	31,8	1.25	44,5	1.75	17,2	250	70,0	1000	0,89	0.60	91,4	300
H181224-300R	38	38,1	1.50	50,8	2.00	17,2	250	70,0	1000	1,08	0.73	91,4	300

Air and Multipurpose

General Air and Water

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H1981 & H1982 MARATHONER™ – Non-Conductive

Construction:

Tube: Nitrile blend

Reinforcement: 2- or 4-fiber spiral

Cover: Pin-pricked nitrile blend

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- Medium duty oil-resistant
- Air and water transfer

Markets:

- Construction
- Mining
- Paper industry
- Oil and gas exploration
- In-plant service

Type of Couplings:

- Eaton "U" series
- Eaton "Z" series
- TTC
- Boss
- Ground joint
- Air hammer
- Air king
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.		Hose I.D.		Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
H1981	**DN**	**mm**	**in**	**mm**	**in**	**bar**	**psi**	**bar**	**psi**	**kg/m**	**lbs/ft**	**mtr**	**ft**
H198104RD-600R	6	6,4	0.25	12,7	0.50	13,8	200	55,0	800	0,15	0.10	182,9	600
H198106RD-600R	10	9,5	0.38	17,3	0.68	13,8	200	55,0	800	0,22	0.15	182,9	600
H198108RD-600R	12	12,7	0.50	20,6	0.81	13,8	200	55,0	800	0,28	0.19	182,9	600
H198112RD-600R*	19	19,0	0.75	30,2	1.19	16,0	225	62,0	900	0,55	0.37	182,9	600
H1982													
H198204RD-600R	6	6,4	0.25	15,9	0.62	20,7	300	83,0	1200	0,19	0.13	182,9	600
H198206RD-600R**	10	9,5	0.38	18,3	0.72	20,7	300	83,0	1200	0,27	0.18	182,9	600
H198208RD-600R**	12	12,7	0.50	25,4	1.00	20,7	300	83,0	1200	0,34	0.23	182,9	600
H198210RD-600R**	16	15,9	0.62	26,2	1.03	20,7	300	83,0	1200	0,37	0.25	182,9	600
H198212RD-600R**	19	19,0	0.75	30,2	1.19	20,7	300	83,0	1200	0,55	0.37	182,9	600
H198216RD-400R**	25	25,4	1.00	36,5	1.44	20,7	300	83,0	1200	0,96	0.64	121,9	400

*Additional packaging available ** Additional colors available

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0105 BOSFLEX™ A/W

Construction:

Tube: EPDM

Reinforcement: 4-fiber spiral, -20 & -24 2-fiber braid

Cover: EPDM

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- Air and water transfer
- Spraying and conveying water based liquid fertilizers and pesticides

Markets:

- Construction
- Mining
- Rental industry
- Oil and gas exploration
- In-plant air service
- Agriculture
- Assembly/manufacturers
- Paper/pulp
- Ship building

Type of Couplings:

- Eaton "U" series
- Barbed inserts
- Quick disconnect
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H010504RD	6	6,4	0.25	15,6	0.62	20,7	300	83,0	1200	0,16	0.14	15,2	50
H010504RD-600R	6	6,4	0.25	15,6	0.62	20,7	300	83,0	1200	0,16	0.14	182,9	600
H010506RD	10	9,5	0.38	18,0	0.71	20,7	300	83,0	1200	0,27	0.18	15,2	50
H010506RD-600R	10	9,5	0.38	18,0	0.71	20,7	300	83,0	1200	0,27	0.18	182,9	600
H010508RD	12	12,7	0.50	22,1	0.87	20,7	300	83,0	1200	0,34	0.23	15,2	50
H010508RD-600R	12	12,7	0.50	22,1	0.87	20,7	300	83,0	1200	0,34	0.23	182,9	600
H010510RD-600R	16	15,9	0.62	25,3	1.00	20,7	300	83,0	1200	0,45	0.30	182,9	600
H010512RD*	19	19,0	0.75	29,1	1.15	15,5	225	62,0	900	0,55	0.37	15,2	50
H010512RD-600R*	19	19,0	0.75	29,1	1.15	15,5	225	62,0	900	0,55	0.37	182,9	600
H010516RD*	25	25,4	1.00	34,7	1.37	13,8	200	55,0	800	0,89	0.60	15,2	50
H010516RD-600R*	25	25,4	1.00	34,7	1.37	13,8	200	55,0	800	0,89	0.60	182,9	600
H010520BK-300R	31	31,8	1.25	44,5	1.75	13,8	200	55,0	800	0,97	0.65	91,4	300
H010524BK-300R	38	38,1	1.50	50,8	2.00	13,8	200	55,0	800	1,22	0.82	91,4	300

*Product also available in BK-Black

Air and Multipurpose

General Air and Water

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0106 BOSFLEX™ A/W

Construction:

Tube: EPDM

Reinforcement: 2-spiral fiber

Cover: EPDM

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- Air and water transfer
- Spraying and conveying water-based liquid fertilizers and pesticides

Markets:

- Construction
- Mining
- Rental industry
- Oil and gas exploration
- In-plant air service
- Agriculture
- Assembly/manufacturers
- Paper/pulp
- Ship building

Type of Couplings:

- Eaton "U" series
- Barbed inserts
- Quick disconnect
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H010604BK-600R	6	6,4	0.25	12,4	0.49	13,8	200	55,0	800	0,15	0.10	182,9	600
H010604RD	6	6,4	0.25	12,4	0.49	13,8	200	55,0	800	0,15	0.10	15,2	50
H010604RD-600R	6	6,4	0.25	12,4	0.49	13,8	200	5,05	800	0,15	0.10	182,9	600
H010606BK-600R	10	9,5	0.38	17,2	0.68	13,8	200	55,0	800	0,22	0.15	182,9	600
H010606RD	10	9,5	0.38	17,2	0.68	13,8	200	55,0	800	0,22	0.15	15,2	50
H010606RD-600R	10	9,5	0.38	17,2	0.68	13,8	200	55,0	800	0,22	0.15	182,9	600
H010608BK-600R	12	12,7	0.50	20,6	0.81	13,8	200	55,0	800	0,28	0.19	182,9	600
H010608RD	12	12,7	0.50	20,6	0.81	13,8	200	55,0	800	0,28	0.19	15,2	50
H010608RD-600R	12	12,7	0.50	20,6	0.81	13,8	200	55,0	800	0,28	0.19	182,9	600
H010610BK-600R	16	15,9	0.62	23,6	0.93	13,8	200	55,0	800	0,42	0.28	182,9	600
H010612RD-600R	19	19,0	0.75	29,1	1.15	20,7	300	83,0	1200	0,60	0.40	182,9	600

Chemical

Chemical

Suction & Discharge

H0060 ARMORCAT™ Corrugated Petrochemical page C-6

Application: Transfer of acids, chemicals, solvents, and petroleum products; Loading and unloading, pumping, suction, or gravity flow discharge
Tube: UHMW–PE FDA-approved material
Reinforcement: 2-wire braid, dual stainless steel static wire
Cover: Corrugated EPDM
Temp: -40°C to +121°C, (-40°F to +250°F) *Intermittent
Pressure: 35 bar / 500 psi

H0554 ARMORCAT™ Petrochemical page C-7

Application: Transfer of acids, chemicals, solvents, and petroleum products; Loading and unloading, pumping, suction, or gravity flow discharge
Tube: UHMW-PE FDA-approved material
Reinforcement: 2-wire braid, dual stainless steel static wire, and helical wire
Cover: EPDM
Temp: -40°C to +121°C, (-40°F to +250°F) *Intermittent
Pressure: 35 bar / 500 psi

H0599 CHEMCAT™ Corrugated Petrochemical page C-8

Application: Transfer of acids, chemicals, solvents, and petroleum products; Loading and unloading, pumping, suction, or gravity flow discharge
Tube: UHMW–PE FDA-approved material
Reinforcement: 2-ply fiber with dual helical wire
Cover: Corrugated EPDM
Temp: -40°C to +121°C, (-40°F to +250°F) *Intermittent
Pressure: 12,1–20,7 bar / 175-300 psi

H0523 CHEMCAT™ Petrochemical page C-9

Application: Transfer of acids, chemicals, solvents, and petroleum products, and food transfer
Tube: UHMW-PE FDA-approved material
Reinforcement: 2-ply fiber and dual helical wires
Cover: EPDM
Temp: -40°C to +121°C, (-40°F to +250°F) *Intermittent
Pressure: 12,1-20,7 bar / 175-300 psi

H0661 COUGAR™ Corrugated page C-10

Application: In-plant transfer of chemicals, alcohols, acids and petroleum
Tube: CPE
Reinforcement: 2-ply fiber with helical wire
Cover: EPDM
Temp: -43°C to +135°C, (-45°F to +275°F)
Pressure: 12,1 bar / 175 psi

H8359 PANTHER™ Chemical page C-11

Application: Transfer of acids, chemicals, solvents and petroleum products
Tube: XLPE
Reinforcement: 2-ply fiber with helical wire
Cover: EPDM
Temp: -43°C to +66°C, (-45°F to +150°F)
Pressure: 12,1-17,2 bar / 175-250 psi

H0615 Corrugated Green CROSS-LINKED™ page C-12

Application: Transfer of acids, chemicals, solvents, and petroleum products; loading and unloading, pumping, suction, or gravity flow discharge
Tube: XLPE
Reinforcement: 2-ply fiber with helical wire
Cover: Corrugated EPDM
Temp: -43°C to +66°C, (-45°F to +150°F)
Pressure: 12,1-17,2 bar / 175-250 psi

H0378 Green CROSS-LINKED™ page C-13

Application: Transfer of acids, chemicals, solvents, and petroleum products; Loading and unloading, pumping, suction, or gravity flow discharge
Tube: XLPE
Reinforcement: 2-ply fiber, with helical wire
Cover: EPDM
Temp: -43°C to +66°C, (-45°F to +150°F)
Pressure: 12,1-17,2 bar / 175-250 psI

H0345 TIGER™ Chemical S & D page C-14

Application: Transfer of acids, chemicals, solvents, and petroleum products; loading and unloading, pumping, suction, or gravity flow discharge
Tube: EPDM
Reinforcement: 2-ply fiber with helical wire
Cover: EPDM
Temp: -43°C to +82°C, (-45°F to +180°F)
Pressure: 10,5 bar / 150 psi

Chemical

Discharge

H9699 ALLEYCAT™ Hot Liquid

page C-15

Application: For inplant transfer of cleaning solutions
Tube: EPDM
Reinforcement: 2-wire braid with anti-static wire
Cover: EPDM
Temp: -40°C to +149°C, (-40°F to +300°F)
Pressure: 41 bar / 600 psi

H0346 LEOPARD™ Chemical Discharge

page C-16

Application: Transfer of acids, chemicals, solvents, and petroleum products; loading and unloading, pumping, suction, or gravity flow discharge
Tube: EPDM
Reinforcement: 2-ply fiber
Cover: EPDM
Temp: -43°C to +82°C, (-45°F to +180°F)
Pressure: 7,0-10,5 bar / 100-150 psi

Specialty

H1941 & H1942 NYALL™

page C-17

Application: Spray pesticides, fertilizers and paint
Tube: Nylon
Reinforcement: 1- or 2-fiber braid
Cover: Neoprene or Vinyl Nitrile
Temp: -34°C to +71°C, (+30°F to +160°F)
Pressure: 35-52 bar / 500-750 psi

H1561 CHEMFORCE™

page C-18

Application: Spray pesticides, fertilizers and paint
Tube: PVC/Polyurethane blend
Reinforcement: 4-spiral fiber
Cover: PVC
Temp: -9°C to +71°C, (+15°F to +160°F)
Pressure: 41 bar / 600 psi

Chemical

Introduction and Safety Information

Remove the Guesswork from Selecting, Buying and Using Critical Application Hose

- When you're handling easily contaminated or hazardous material it is critical to select the proper hose. The high visibility branding and color coding removes the guess work for hose selection.

Environmental Resistance

- The tube and cover materials of Eaton Industrial hose products are designed to assure maximum hose life at a superior value to the customer. Specialty service Eaton hoses are sophisticated transfer products for demanding jobs. Exceptional aging, weathering and heat resistant properties keep the hose flexible and easy to use.

Variety and Selection

- Eaton offers a variety of choices to meet all of your chemical needs. Whether you need a color coded system, flexibility, or wide chemical tolerances, Eaton can meet your needs.

Chemical Hose Safety Information

Important!

⚠ **WARNING:** A failure of chemical hose in service can result in serious injury, death, or damage to property.

All chemical hose manufacturers recommend specific hose constructions to handle various chemicals.

IF AFTER CAREFUL REVIEW OF THE CHEMICAL RESISTANCE CHART FOUND IN THIS CATALOG, YOU HAVE ANY QUESTIONS ABOUT PROPER SELECTION OF THE HOSE, DO NOT USE OR RECOMMEND THE HOSE WITHOUT FIRST CONSULTING EATON FOR TECHNICAL ASSISTANCE. IF YOU DO NOT HAVE A MOST RECENT COPY, CONTACT CUSTOMER SUPPORT AT 1-888-258-0222. FOR GLOBAL SUPPORT, CONTACT YOUR LOCAL EATON REPRESENTATIVE.

The chemical resistance chart lists the more commonly used materials, chemicals, solvents, oils, etc. The recommendations are based on room temperature and pressure conditions normally recommended for the particular type of hose being used. Where conditions beyond this can be met readily, they have been so indicated; where conditions are not normal and cannot be readily met, Eaton should always be consulted. The chart does not imply conformance to the Food & Drug Administration requirements or Federal or State Laws when handling food products. The list of chemicals is offered as a guide to the chemical resistance properties of the tube material of the hoses shown. It should be used as a guide only, as the degree of resistance of any elastomer with a particular fluid depends upon such variables as temperature, concentration, pressure conditions, velocity of flow, duration of exposure, aeration, stability of the fluid, etc. Therefore, when in doubt, it is advisable not to use the hose and you should contact your Eaton representative for assistance. Do not use chemical hose at temperatures or pressures above those recommended by the manufacturer. All operators must be thoroughly trained in the care and use of this hose and must at all times wear protective clothing. A hose or system failure could cause the release of a poisonous, corrosive or flammable material.

⚠ **WARNING:** If cover blisters exist, be careful not to pop them. If the hose was damaged in such a way that material was allowed to leak between the cover and inner tube, the blisters may contain this material. If the material is hazardous and splatters when the blisters are popped, it could cause serious physical injury.

⚠ **WARNING:** Failure to properly follow the manufacturer's recommended procedures for the care, maintenance, and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, or damage to property.

⚠ **WARNING:** Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

Chemical Service Hose Maintenance, Testing and Inspection

Foreword

The object of the following procedures is to detect any weakness in a hose assembly before the weakness causes failure of a hose in service. While these testing and inspection procedures may be applied to any hose, the periodic testing and inspection procedures outlined herein are mandatory for all hoses.

Rules for proper selection, handling, use and storage of hose are to be carefully followed. It is imperative that hose, while in storage or in service, not be subjected to any form of abuse such as kinking, exposure to an environment involving extremes of temperature, corrosive or oxidizing fumes or liquids, oils and solvents, ozone, etc. The procedures outlined in the ARPM Hose Handbook, Chapter IX, Care, Maintenance and Storage of Hose should be followed carefully.

Scope

This procedure is intended as a guide for the inspection, maintenance, and testing of chemical hose. It covers hose containing carcass reinforcements of woven fiber fabric; fiber cords; fiber or wire braids; flat, oval or round wire helix; spiral wire or cable; or any combinations of these reinforcements. Chemical hose is available with various types of ends or, where specified, suitable metal fittings.

Handling

Crushing or kinking of the hose can cause severe damage to the reinforcement. Care should be exercised to prevent mishandling.

Do not drag the hose or lift large bore hose from the middle of its length with the ends hanging down. Limit the curvature of the hose to the bend radius recommended by the manufacturer and avoid sharp bends at the end fittings and at manifold connections.

Operation

Important: Personnel involved in an operation using chemical hose must use safety precautions such as wearing eye or face protection, rubber gloves, boots, and other types of protective clothing.

Pressures and temperatures are to be monitored to see that the hose is not exposed to conditions above specified limits. Exceeding specified limits could injure the hose and result in damage to property and serious bodily harm.

Never allow chemicals to drip on the exterior of a hose or allow hose to lay in a pool of chemicals since the hose cover may not have the chemical resistance of the tube. Should a corrosive material come in contact with the reinforcing material, early failure could result.

If kinking or crushing occurs, examine the hose carefully, and, if the outside diameter is reduced 5% to 20%, the hose must be immediately subjected to the Hydrostatic Pressure Test and Examination. If the reduction in diameter is more than 20%, retire the hose from service.

Care must be taken when different chemicals are conveyed in the same hose; the chemicals may react and shorten the service life of the hose. When it is impractical to disconnect the hose line after use, drain any remaining chemical from the hose.

Storage

Before placing chemical hose in storage, the hose must be completely drained and any potentially explosive vapors or corrosive residues flushed out.

⚠ **WARNING:** EXTREME CARE MUST BE TAKEN WHEN FLUSHING OUT A CHEMICAL HOSE WITH WATER; SOME CHEMICALS, SUCH AS CONCENTRATED ACIDS, MAY REACT WITH WATER AND CAUSE SPATTERING WHICH COULD RESULT IN SERIOUS INJURY TO EYES OR OTHER AREAS OF THE BODY.

When flushing a hose, disposal of the effluent must be made in such a manner that environmental problems are not created.

Chemical hose should be stored so that air can circulate through it. This procedure helps extend the life of the hose. Hose should be stored in a cool, dark, dry place at a temperature less than 100°F (38°C).

Frequency of Inspection and Pressure Testing When chemical hose is used in bulk transfer service, it shall be visually inspected daily and hydrostatically tested every 90 days. The details of the examination and testing are listed in this catalog. An inspection card and recording system should be adopted for chemical hose used in dock applications.

⚠ **WARNING:** Consult with the coupling manufacturer to make sure you choose the correct coupling and proper assembly for the application. Such matching of hose and couplings, and assembling of couplings, should be performed only by trained personnel using proper tools and procedures. Failure to follow manufacturer's instructions or failure to use trained personnel may result in serious bodily injury and/or property damage.

⚠ **WARNING:** Never use a hose to transfer material it is not specifically meant to transfer. Doing so could deteriorate the hose and result in leaking, hose bursting, or end blow-offs. This could lead to serious personal injury or death. Always transfer material in a hose that is designed specifically to transfer that material. This information is listed in this catalog.

⚠ **WARNING**: Kinks can cause hose to burst, leading to bodily harm.

This information taken from the ARPM, Hose Technical Information Sub Committee, IP-11-7 Chemical Hose, Copyright 1979, Revised 1987. (202) 682-1338

Chemical

Suction & Discharge

⚠ Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0060 ARMORCAT™ Corrugated Petrochemical

Construction:

Tube: UHMW–PE FDA-approved material

Reinforcement: 2-wire braid, dual stainless steel anti-static wire

Cover: Corrugated EPDM

Operating Temperature:

-40°C to +121°C
(-40°F to +250°F)
WARNING: Intermittent

Application:

- For transfer of acids, chemicals, solvents, and petroleum products
- Loading and unloading, pumping, suction, or gravity flow discharge

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling
- Oil and gas exploration

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H006032-100	51	50,8	2.00	65,9	2.59	35	500	138	2000	254,0	12.0	94,8	28	2,31	1.55	30,5	100
H006032-150	51	50,8	2.00	65,9	2.59	35	500	138	2000	254,0	12.0	94,8	28	2,31	1.55	45,7	150

⚠ *Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.*

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0554 ARMORCAT™ Petrochemical

Construction:

Tube: UHMW-PE
FDA-approved material

Reinforcement: 2-wire braid, dual stainless steel anti-static wire, 3.00" and 4.00" helical wire

Cover: EPDM

Operating Temperature:

-40°C to +121°C
(-40°F to +250°F)
WARNING: Intermittent

Application:

- For transfer of acids, chemicals, solvents, and petroleum products
- Loading and unloading, pumping, suction, or gravity flow discharge

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling
- Oil and gas exploration

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H055416	25	25,4	1.00	38,7	1.52	35,0	500	138	2000	152,4	6.00	94,8	28	0,82	0.55	15,2	50
H055416-150	25	25,4	1.00	38,7	1.52	35,0	500	138	2000	152,4	6.00	94,8	28	0,82	0.55	45,7	150
H055424-150	38	38,1	1.50	50,0	1.97	35,0	500	138	2000	203,2	8.00	94,8	28	1,44	0.97	45,7	150
H055432	51	50,8	2.00	65,9	2.59	35,0	500	138	2000	254,0	14.00	94,8	28	2,31	1.55	15,2	50
H055432-100	51	50,8	2.00	65,9	2.59	35,0	500	138	2000	254,0	14.00	94,8	28	2,31	1.55	30,5	100
H055448	80	76,2	3.00	95,3	3.75	35,0	500	138	2000	558,8	22.00	94,8	28	3,44	2.31	15,2	50
H055448-150	80	76,2	3.00	95,3	3.75	35,0	500	138	2000	558,8	22.00	94,8	28	3,44	2.31	45,7	150
H055464-150	102	101,6	4.00	121,2	4.77	35,0	500	138	2000	558,8	22.00	94,8	28	6,28	4.22	45,7	150

Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.

Chemical

Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0599 CHEMCAT™ Corrugated Petrochemical

Construction:

Tube: UHMW–PE FDA-approved material

Reinforcement: 2-ply fiber with dual helical wire

Cover: Corrugated EPDM

Operating Temperature:

-40°C to +121°C
(-40°F to +250°F)
WARNING: Intermittent

Application:

- For transfer of acids, chemicals, solvents, and petroleum products
- Loading and unloading, pumping, suction, or gravity flow discharge

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling
- Oil and gas exploration

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H059916-150	25	25,4	1.00	38,9	1.53	20,7	300	83,0	1200	76,2	3.00	94,8	28	0,82	0.55	45,7	150
H059920-150	31	31,8	1.25	47,6	1.87	20,7	300	83,0	1200	101,6	4.00	94,8	28	1,00	0.67	45,7	150
H059924	38	38,1	1.50	54,0	2.13	20,7	300	83,0	1200	101,6	4.00	94,8	28	1,32	0.89	15,2	50
H059924-100	38	38,1	1.50	54,0	2.13	20,7	300	83,0	1200	101,6	4.00	94,8	28	1,32	0.89	30,5	100
H059932	51	50,8	2.00	67,0	2.64	20,7	300	83,0	1200	127,0	5.00	94,8	28	1,73	1.16	15,2	50
H059932-100	51	50,8	2.00	67,0	2.64	20,7	300	83,0	1200	127,0	5.00	94,8	28	1,73	1.16	30,5	100
H059948	80	76,2	3.00	92,2	3.63	20,7	250	70,0	1000	165,1	6.50	94,8	28	2,50	1.68	15,2	50
H059948-100	80	76,2	3.00	92,2	3.63	20,7	250	70,0	1000	165,1	6.50	94,8	28	2,50	1.68	30,5	100
H059964-150	102	101,6	4.00	118,7	4.67	12,1	175	48,0	700	241,3	9.50	94,8	28	3,36	2.26	45,7	150

Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0523 CHEMCAT™ Petrochemical

Construction:

Tube: UHMW-PE
FDA-approved material

Reinforcement: 2-ply fiber and dual helical wires

Cover: EPDM

Operating Temperature:

-40°C to +121°C
(-40°F to +250°F)
WARNING: Intermittent

Application:

- For transfer of acids, chemicals, solvents, and petroleum products
- Food transfer

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling
- Ship building
- Forest products

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H052312XX-100	19	19,0	0.75	30,6	1.20	20,7	300	83	1200	101,6	4.00	94,8	28	0,46	0.31	30,5	100
H052316XX-100	25	25,4	1.00	38,9	1.53	20,7	300	83	1200	139,7	5.50	94,8	28	0,82	0.55	30,5	100
H052320XX-100	31	31,8	1.25	47,8	1.88	20,7	300	83	1200	152,4	6.00	94,8	28	1,00	0.67	30,5	100
H052324XX-100	38	38,1	1.50	54,1	2.13	20,7	300	83	1200	190,5	7.50	94,8	28	1,33	0.89	30,5	100
H052332XX-100	51	50,8	2.00	66,8	2.63	20,7	300	83	1200	203,2	8.00	94,8	28	1,74	1.16	30,5	100
H052340XX-100	60	63,5	2.50	79,5	3.13	20,7	300	83	1200	203,2	8.00	94,8	28	2,13	1.42	30,5	100
H052348XX-100	80	76,2	3.00	92,2	3.63	17,2	250	70	1000	228,6	9.00	94,8	28	2,52	1.68	30,5	100
H052364XX-100	102	101,6	4.00	118,6	4.67	12,1	175	48	700	381,0	15.00	94,8	28	3,39	2.26	30,5	100

* Additional lengths available on select items
** XX notes color; GN for green, PR for purple

Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.

Chemical

Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0661 COUGAR™ Corrugated

Construction:

Tube: CPE

Reinforcement: 2-ply fiber with helical wire

Cover: EPDM

Operating Temperature:

-43°C to +135°C
(-45°F to +275°F)

Application:

- For in-plant transfer of chemicals, alcohols, acids and petroleum products

Markets:

- In-plant transfers
- Tank truck
- Paper/pulp industry

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H066132-150	51	50,8	2.00	67,0	2.64	12,1	175	48	700	152,4	6.00	94,8	28	1,73	1.16	45,7	150
H066148-150	80	76,2	3.00	92,2	3.63	12,1	175	48	700	229,0	9.00	94,8	28	2,50	1.68	45,7	150

Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H8359 PANTHER™ Chemical

Construction:

Tube: XLPE

Reinforcement: 2-ply fiber with helical wire

Cover: EPDM

Operating Temperature:

-43°C to +66°C
(-45°F to +150°F)

Application:

- For transfer of acids, chemicals, solvents, and petroleum products

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H835916-150	25	25,4	1.00	38,9	1.53	17,2	250	70,0	1000	127,0	5.00	94,8	28	1,07	0.72	45,7	150
H835920-150	31	31,8	1.25	47,6	1.87	17,2	250	70,0	1000	203,2	8.00	94,8	28	1,28	0.86	45,7	150
H835924-150	38	38,1	1.50	54,0	2.13	17,2	250	70,0	1000	203,2	8.00	94,8	28	1,32	0.89	45,7	150
H835932-150	51	50,8	2.00	66,7	2.63	17,2	250	70,0	1000	228,6	9.00	94,8	28	1,68	1.13	45,7	150
H835940-150	60	63,5	2.50	79,4	3.13	12,1	175	48,0	700	304,8	12.00	94,8	28	2,08	1.40	45,7	150
H835948-150	80	76,2	3.00	92,1	3.63	12,1	175	48,0	700	406,4	16.00	94,8	28	2,44	1.64	45,7	150
H835964-150	102	101,6	4.00	119,1	4.69	12,1	175	48,0	700	533,4	21.00	94,8	28	3,56	2.39	45,7	150

Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.

Chemical

Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0615 Corrugated Green CROSS-LINKED™

Construction:

Tube: XLPE

Reinforcement: 2-ply fiber with helical wire

Cover: Corrugated EPDM

Operating Temperature:

-43°C to +66°C
(-45°F to +150°F)

Application:

- For transfer of acids, chemicals, solvents, and petroleum products
- Loading and unloading, pumping, suction, or gravity flow discharge

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling
- Oil and gas exploration

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H061532-150	51	50,8	2.00	66,7	2.63	17,2	250	70	1000	152,4	7.00	94,8	28	1,68	1.13	45,7	150
H061548-150	80	76,2	3.00	92,1	3.63	12,1	175	48	700	304,8	12.00	94,8	28	2,44	1.64	45,7	150

Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0378 Green CROSS-LINKED™

Construction:

Tube: XLPE

Reinforcement: 2-ply fiber with helical wire

Cover: EPDM

Operating Temperature:

-43°C to +66°C
(-45°F to +150°F)

Application:

- For transfer of acids, chemicals, solvents, and petroleum products
- Loading and unloading, pumping, suction, or gravity flow discharge

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling
- Oil and gas exploration

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H037816-150	25	25,4	1.00	38,9	1.53	17,2	250	70,0	1000	127,0	5.00	94,8	28	1,07	0.72	45,7	150
H037820-150	31	31,8	1.25	47,6	1.87	17,2	250	70,0	1000	203,2	8.00	94,8	28	1,28	0.86	45,7	150
H037824-150	38	38,1	1.50	54,0	2.13	17,2	250	70,0	1000	203,2	8.00	94,8	28	1,32	0.89	45,7	150
H037832-150	51	50,8	2.00	66,7	2.63	17,2	250	70,0	1000	228,6	9.00	94,8	28	1,68	1.13	45,7	150
H037848-150	80	76,2	3.00	92,1	3.63	12,1	175	48,0	700	406,4	16.00	94,8	28	2,44	1.64	45,7	150
H037864-150	102	101,6	4.00	119,1	4.67	12,1	175	48,0	700	533,4	21.00	94,8	28	3,56	2.39	45,7	150

Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.

Chemical

Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0345 TIGER™ Chemical Suction & Discharge

Construction:

Tube: EPDM

Reinforcement:
2-ply fiber with helical wire

Cover: EPDM

Operating Temperature:

-43°C to +82°C
(-45°F to +180°F)

Application:

- For transfer of acids, chemicals, solvents, and petroleum products
- Loading and unloading, pumping, suction, or gravity flow discharge

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling
- Oil and gas exploration

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H034524-100	38	38,1	1.50	60,3	2.37	10,5	150	41	600	101,6	4.00	94,8	28	2,31	1.55	30,5	100
H034532-100	51	50,8	2.00	73,0	2.87	10,5	150	41	600	127,0	5.00	94,8	28	2,86	1.92	30,5	100
H034548-100	80	76,2	3.00	100,0	3.94	10,5	150	41	600	228,6	9.00	94,8	28	4,25	2.86	30,5	100
H034564-150	102	101,6	4.00	125,4	4.94	10,5	150	41	600	279,4	11.00	94,8	28	5,49	3.69	45,7	150
H034596-150	150	152,4	6.00	183,4	7.22	10,5	150	41	600	762,0	30.00	94,8	28	11,63	7.82	45,7	150

Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H9699 ALLEYCAT™ Hot Liquid

Construction:

Tube: EPDM

Reinforcement: 2-wire braid with anti-static wire

Cover: EPDM

Operating Temperature:

-40°C to +149°C
(-40°F to +300°F)

Application:

- For in-plant transfer of liquors and cleaning solutions

Markets:

- In-plant transfers
- Tank truck
- Paper/pulp industry

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
H969924	38	38,1	1.50	55,6	2.19	41,0	600	165	2400	203,2	8.00	2,23	1.50	15,2	50
H969924-150	38	38,1	1.50	55,6	2.19	41,0	600	165	2400	203,2	8.00	2,23	1.50	45,7	150
H969932	51	50,8	2.00	68,3	2.69	41,0	600	165	2400	406,4	16.00	2,63	1.77	15,2	50

Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.

Chemical
Discharge

⚠ Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0346 LEOPARD™ Chemical Discharge

Construction:

Tube: EPDM

Reinforcement: 2-ply fiber

Cover: EPDM

Operating Temperature:

-43°C to +82°C
(-45°F to +180°F)

Application:

- For transfer of acids, chemicals, solvents, and petroleum products
- Loading and unloading, pumping, suction, or gravity flow discharge

Markets:

- Chemical petroleum industry
- In-plant transfers
- Tank truck
- Paper/pulp industry
- Bulk hauling
- Oil and gas exploration

Type of Couplings:

- Cam and groove
- Combination nipple
- Male NPT

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
H034624-100	38	38,1	1.50	57,4	2.26	10,5	150	41,0	600	152,4	6.00	1,79	1.20	30,5	100
H034632-100	51	50,8	2.00	69,9	2.75	10,5	150	41,0	600	228,6	9.00	2,23	1.50	30,5	100
H034648-100	80	76,2	3.00	98,0	3.86	7,0	100	28,0	400	508,0	20.00	3,12	2.10	30,5	100
H034664	102	101,6	4.00	123,4	4.86	7,0	100	28,0	400	762,0	30.00	3,87	2.60	15,2	50

⚠ *Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.*

⚠ Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H1941 & H1942 NYALL™ Hose

Construction:

Tube: Nylon

Reinforcement:

H1941 1-fiber braid
H1942 2-fiber braid

Cover: (BK) Neoprene
(RD) Vinyl Nitrile and
RMA Class B oil resistant

Operating Temperature:

-34°C to +71°C
(-30°F to +160°F)

Application:

- Spraying pesticides and fertilizers
- Paint spray

Markets:

- Agriculture

Type of Couplings:

- Barbed inserts

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
H1941	**DN**	**mm**	**in**	**mm**	**in**	**bar**	**psi**	**bar**	**psi**	**kg/m**	**lbs/ft**	**mtr**	**ft**
H194104BK-500R	6	6,4	0.25	12,7	0.50	35,0	500	138	2000	0,12	0.08	152,4	500
H194104RD-500R	6	6,4	0.25	12,7	0.50	35,0	500	138	2000	0,12	0.08	152,4	500
H194105BK-500R	8	7,9	0.31	14,3	0.56	35,0	500	138	2000	0,16	0.11	152,4	500
H194106BK-500R	10	9,7	0.38	17,5	0.69	35,0	500	138	2000	0,22	0.15	152,4	500
H194106RD-500R	10	9,7	0.38	17,5	0.69	35,0	500	138	2000	0,22	0.15	152,4	500
H194108RD-500R	12	12,7	0.50	19,9	0.78	35,0	500	138	2000	0,22	0.15	152,4	500
H1942													
H194208BK-500R	12	12,7	0.50	22,2	0.88	52,0	750	207	3000	0,31	0.21	152,4	500
H194208RD-500R	12	12,7	0.50	22,2	0.88	52,0	750	207	3000	0,31	0.21	152,4	500
H194212RD-500R	19	19,0	0.75	30,2	1.19	52,0	750	207	3000	0,59	0.40	152,4	500
H194216RD-300R	25	25,4	1.00	38,1	1.50	35,0	500	138	2000	0,83	0.56	91,4	300

⚠ *Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.*

Chemical
Speciality

⚠ Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H1561 CHEMFORCE™

Construction:

Tube: PVC / Polyurethane blend

Reinforcement: 4-spiral fiber

Cover: PVC

Operating Temperature:

-9°C to +71°C
(+15°F to +160°F)

Application:

- Spraying pesticides and fertilizers
- Paint spray

Markets:

- Agriculture

Type of Couplings:

- Barbed inserts

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H156106-300R	10	9,7	0.38	16,5	0.65	41,0	600	165	2400	0,20	0.13	91,4	300
H156108-300R	12	12,7	0.50	21,3	0.84	41,0	600	165	2400	0,27	0.17	91,4	300
H156112-300R	19	19,0	0.75	29,0	1.14	41,0	600	165	2400	0,53	0.35	91,4	300

*Additional pressures and colors available on a MTO basis

⚠ *Elevated temperatures can change chemical resistance ratings. Please refer to the Chemical Compatibility information prior to use. Factors such as concentration, fluid contamination, and extreme temperatures may affect these performance specification. Please consult Eaton catalog or Technical Support for proper application.*

Food and Beverage

Food and Beverage

Food Suction and Discharge

H0350 LION™ Food Transfer page D-4

Application: Suction and discharge of non-dairy food products
Tube: Vinyl nitrile
Reinforcement: 2-ply fiber helical wire
Cover: Vinyl nitrile
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 17,5 bar / 250 psi

H0384 Grey Food Transfer page D-5

Application: Suction and discharge of bulk abrasive material for food industry
Tube: Vinyl nitrile **Reinforcement:** 2-ply fiber helical wire
Cover: Vinyl nitrile
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 10,5 bar / 150 psi

EHF002 Liquid Food Suction & Discharge page D-6

Application: Suction and discharge of milk, vegetable oil and beverages
Tube: Vegetable oil resistant NBR
Reinforcement: High-tensile synthetic textile with a single steel helical wire
Cover: Synthetic rubber
Temp: -40°C to +80°C, (-40°F to +176°F)
Pressure: 10,5 bar / 150 psi

Beverage Discharge

H285 CLEARFORCE™ —R page D-7

Application: For food and beverage dispensing; and spraying and conveying fertilizer and pesticides
Tube: Clear PVC
Reinforcement: 2-spiral fiber
Cover: Clear PVC
Temp: -26°C to +66°C, (-15°F to +150°F)
Pressure: 5,0-17,2 bar / 75-250 psi

PT200 CLEARFORCE™ page D-8

Application: For food and beverage dispensing; and spraying and conveying fertilizer and pesticides
Tube: Clear PVC
Cover: Clear PVC
Temp: -20°C to +41°C, (-5°F to +105°F)
Pressure: 2,1-4,5 bar / 30-65 psi

Dry Bulk Discharge

H0413 Dry Bulk Discharge page D-9

Application: Discharge of bulk abrasive material for food industry
Tube: Natural rubber
Reinforcement: High-tensile synthetic textile and anti-static copper wire
Cover: Natural/SBR blend rubber
Temp: -29°C to +71°C, (-20°F to +160°F)
Pressure: 3,5 bar / 50 psi

Cleaning Service

H1066 Creamery/Packing Washdown page D-10

Application: Washdown food processing facilities & equipment, not for milk
Tube: Nitrile
Reinforcement: 2-braid fiber
Cover: Pin-pricked vinyl nitrile
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 13,8 bar / 200 psi

H9673 WASHDOWN™ 1250 page D-11

Application: Washdown of food processing facilities & equipment
Tube: Nitrile
Reinforcement: 1- and 2-braid fiber
Cover: Vinyl nitrile
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 86 bar / 1250 psi

H9610 WASHDOWN™ 1000 page D-12

Application: Washdown of food processing facilities & equipment
Tube: Nitrile
Reinforcement: 1-braid fiber
Cover: Vinyl nitrile
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 70 bar / 1000 psi

Food and Beverage

Introduction and Safety Information

Remove the Guesswork from Selecting, Buying and Using Critical Application Hose

- When you are handling easily contaminated or hazardous material it is critical to select the proper hose. The high visibility branding and color coding removes the guesswork from hose selection.

Environmental Resistance

- The tube and cover materials of the Eaton Industrial Hose are designed to assure maximum life and top value. They are sophisticated hoses for demanding jobs.

Built to Make Work Faster, Easier and Safer

- Moving and connecting hose several times a day isn't easy work. Each of the Industrial Hose is designed to be easy to handle as safety and job performance will allow.

Honest Value

- There is only one way to make hose cost less — build it cheaper. You won't find compromises in the Industrial Hose. That's why we put the Eaton brand name on them.

Food Hose Sanification

- Max 120°C for 15 min. with steam -or- Max 50°C for 15 min. with 5% caustic soda.

Food and Beverage Hose Safety Information

Important!

WARNING: Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

WARNING: Failure to properly follow the manufacturer's recommended procedures for the care, maintenance, and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, or damage to property.

WARNING: Consult with the coupling manufacturer to make sure you choose the correct coupling and proper assembly for the application. Such matching of hose and couplings, and assembling of couplings, should be performed only by trained personnel using proper tools and procedures. Failure to follow manufacturer's instructions or failure to use trained personnel may result in serious bodily injury and/or property damage.

WARNING: Consider both working pressure and pressure surges when determining "maximum" pressure. Failure to select a hose that meets both these requirements could lead to end blow-offs, hose leakage, and hose bursting. The result could be serious injury or death. The Eaton hose you choose must meet or exceed the required working pressure, and must have a safety factor to allow for surge pressure.

WARNING: Do not use hose at temperatures that exceed the hose temperature rating. Doing so could deteriorate the hose, leading to leaks, hose bursting, and end blow-offs. This could result in serious personal injury or death.

WARNING: Selection of the proper hose for the application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to selection of hose for the application can result in serious bodily injury or property damage. In order to avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog.

Food and Beverage

Food Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0350 LION™ Food Transfer

Construction:

Tube: Vinyl nitrile
FDA approved material

Reinforcement: 2-ply fiber with helical wire

Cover: Vinyl nitrile

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- For suction and discharge of non-dairy food products

Markets:

- Food processing
- Tank truck
- Rail car

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H035032-100	51	50,8	2.00	66,7	2.63	17,2	250	70,0	1000	127,0	5.00	94,8	28,0	2,38	1.60	30,5	100
H035032-150	51	50,8	2.00	66,7	2.63	17,2	250	70,0	1000	127,0	5.00	94,8	28,0	2,38	1.60	45,7	150
H035048-100	80	76,2	3.00	92,1	3.63	17,2	250	70,0	1000	317,5	12.50	94,8	28,0	3,17	2.13	30,5	100
H035064-150	102	101,6	4.00	118,3	4.66	17,2	250	70,0	1000	317,5	12.50	94,8	28,0	5,24	3.52	45,7	150

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0384 Grey Food Transfer

Construction:

Tube: Vinyl nitrile
FDA approved material

Reinforcement: 2-ply fiber with helical wire

Cover: Vinyl nitrile

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- For suction and discharge of bulk abrasive material for food industry

Markets:

- Food processing
- Tank truck
- Plastic industry

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H038432-100	51	50,8	2.00	66,7	2.63	10,5	150	41,0	600	127,0	5.00	94,8	28	2,15	1.45	30,5	100
H038448-100	80	76,2	3.00	92,1	3.63	10,5	150	41,0	600	228,6	9.00	94,8	28	3,27	2.20	30,5	100
H038464-100	102	101,6	4.00	117,2	4.61	10,5	150	41,0	600	279,4	11.00	94,8	28	4,69	3.15	30,5	100

Food and Beverage

Food Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EHF002 Liquid Food Suction & Discharge

Construction:

Tube: Vegetable oil-resistant NBR, FDA approved material

Reinforcement: High-tensile synthetic textile with a single steel helical wire

Cover: Oil, abrasion, ozone, and weather resistant synthetic rubber

Operating Temperature:

-40°C to +80°C
(-40°F to +176°F)

Application:

- For suction and discharge of milk, vegetable oil and beverages

Markets:

- Food processing
- Tank truck
- Dairy processing
- Milk processing

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
EHF002-12GY-100	19	19,0	0.75	31,0	1.22	10,5	150	31	450	70	2.76	94,8	28	0,71	0.48	30,5	100
EHF002-16GY-100	25	25,4	1.00	38,0	1.50	10,5	150	31	450	85	3.35	94,8	28	0,96	0.65	30,5	100
EHF002-20GY-100	31	31,8	1.25	45,0	1.69	10,5	150	31	450	100	3.94	94,8	28	1,23	0.83	30,5	100
EHF002-24GY-100	38	38,1	1.50	52,0	2.06	10,5	150	31	450	120	4.72	94,8	28	1,65	1.11	30,5	100
EHF002-28GY-100	45	44,5	1.75	58,5	2.30	10,5	150	31	450	140	5.51	94,8	28	1,83	1.23	30,5	100
EHF002-32GY-100	51	50,8	2.00	66,0	2.60	10,5	150	31	450	160	6.30	94,8	28	2,29	1.54	30,5	100
EHF002-40GY-100	60	63,5	2.50	78,5	3.09	10,5	150	31	450	280	11.02	94,8	28	2,80	1.88	30,5	100
EHF002-48GY-100	80	76,2	3.00	93,0	3.66	10,5	150	31	450	360	14.17	94,8	28	3,74	2.51	30,5	100
EHF002-64GY-100	102	101,6	4.00	118,5	4.67	10,5	150	31	450	450	17.72	94,8	28	4,73	3.18	30,5	100

Food and Beverage

Beverage Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H285 CLEARFORCE™–R

Construction:

Tube: Clear PVC
NSF-51 certified
FDA approved material

Reinforcement: 2-spiral fiber

Cover: Clear PVC

Operating Temperature:

-26°C to +66°C
(-15°F to +150°F)

Application:

- For food and beverage dispensing
- For spraying and conveying fertilizer and pesticides

Markets:

- Food processing
- Agriculture
- In-plant service

Type of Couplings:

- "E" Series
- 265 "P" Series
- Barbed inserts

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H28503-300R	5	4,8	0.19	9,5	0.37	17,2	250	70,0	1000	0,07	0.05	91,4	300
H28504-300R	6	6,4	0.25	11,3	0.44	17,2	250	70,0	1000	0,09	0.06	91,4	300
H28505-300R	8	7,9	0.31	13,5	0.53	17,2	250	70,0	1000	0,11	0.08	91,4	300
H28506-300R	10	9,5	0.38	15,1	0.59	15,5	225	62,0	900	0,14	0.09	91,4	300
H28508-300R	12	12,7	0.50	19,1	0.75	13,8	200	55,0	800	0,19	0.13	91,4	300
H28510-300R	16	15,9	0.62	22,2	0.87	13,8	200	55,0	800	0,23	0.15	91,4	300
H28512-300R	19	19,0	0.75	26,2	1.03	10,5	150	41,0	600	0,29	0.20	91,4	300
H28516-200R	25	25,4	1.00	33,3	1.31	8,5	125	35,0	500	0,42	0.28	61,0	200
H28520-100	31	31,8	1.25	42,9	1.69	7,0	100	28,0	400	0,76	0.51	30,5	100
H28524-100	38	38,1	1.50	49,2	1.94	7,0	100	28,0	400	0,88	0.60	30,5	100
H28532-100	51	50,8	2.00	63,5	2.50	5,0	75	20,7	300	1,27	0.85	30,5	100

Food and Beverage

Beverage Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

PT200 CLEARFORCE™

Construction:

Tube: Clear PVC
NSF-51 certified
FDA approved material

Cover: Clear PVC

Operating Temperature:

-5°F to +105°F
(-20°C to +41°C)

Application:

- For food and beverage dispensing
- For spraying and conveying fertilizer and pesticides
- Any low pressure laboratory, industrial, agricultural or domestic application

Markets:

- Food processing
- Agriculture
- In-plant service

Type of Couplings:

- Polyline
- SelfAlign with 2030x insert
- Compression with 2030x insert
- Molded Compression

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Tube I.D.*		Tube O.D.		Tube Wall		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Weight		Length	
	mm	in	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
PT20004NA-100	3,2	.126	6,4	0.25	1.57	.062	4,5	65	13,4	195	25,4	1.0	0,03	.02	30,5	100
PT20044NA-100	4,3	.170	6,4	0.25	1.01	.040	3,9	55	11,4	165	25,4	1.0	0,03	.02	30,5	100
PT20005NA-100	4,8	.188	7,9	0.312	1.57	.062	3,9	55	11,4	165	31,8	1.25	0,04	.026	30,5	100
PT20006NA-100	6,4	.251	9,6	0.375	1.57	.062	3,9	55	11,4	165	38,1	1.5	0,05	.033	30,5	100
PT20008NA-100	9,6	.376	12,7	0.5	1.57	.062	3,0	45	9,3	135	50,8	2.0	0,07	.046	30,5	100
PT20010NA-100	12,7	.501	15,9	0.625	1.57	.062	2,0	30	6,2	90	63,5	2.5	0,09	.059	30,5	100
PT20012NA-100	14,3	.562	19,0	0.75	2.39	.094	2,8	40	8,3	120	76,2	3.0	0,15	.103	30,5	100
PT20016NA-100	19,0	.750	25,4	1.00	3.18	.125	2,5	35	7,2	105	101,6	4.0	0,28	.185	30,5	100

* Used only as a reference dimension.

Food and Beverage

Dry Bulk Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0413 Dry Bulk Discharge

Construction:

Tube: Natural rubber

Reinforcement: High-tensile synthetic textile and anti-static copper wire

Cover: Natural/SBR blend rubber

Operating Temperature:

-29°C to +71°C
(-20°F to +160°F)

Application:

- For discharge of bulk abrasive material for food industry

Markets:

- Food processing
- Tank truck
- Plastic industry

Type of Couplings:

- Cam and groove

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H041364-100	102	101,6	4.00	121,9	4.80	3,5	50	13,8	200	3,35	2.25	30,5	100
H041364-150	102	101,6	4.00	121,9	4.80	3,5	50	13,8	200	3,35	2.25	45,7	150

Food and Beverage

Cleaning Service

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H1066 Creamery/Packing Washdown

Construction:

Tube: Nitrile

Reinforcement: 2-braid fiber

Cover: Pin-pricked vinyl nitrile

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- For washdown of food processing facilities and equipment

Not for conveying milk.

Markets:

- Food processing
- Meat packing and rendering
- Chicken processing
- Dairies
- Canneries
- Syrup manufacturing

Type of Couplings:

- Barbed inserts
- "U" series

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H106612-500R	19	19,0	0.75	31,8	1.25	13,8	200	55,0	800	0,65	0.44	152,4	500

Food and Beverage

Cleaning Service

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H9673 WASHDOWN™ 1250

Construction:

Tube: Nitrile

Reinforcement: 1- and 2-braid fiber

Cover: Vinyl nitrile

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- For washdown of food processing facilities and equipment

Markets:

- Food processing
- Industry cleaning
- Construction
- Poultry

Type of Couplings:

- "U" series
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H967306-350R	10	9,5	0.38	17,8	0.70	86,0	1250	345	5000	0,25	0.17	106,7	350
H967308-100	12	12,7	0.50	21,7	0.86	86,0	1250	345	5000	0,31	0.21	30,5	100
H967308-350R	12	12,7	0.50	21,7	0.86	86,0	1250	345	5000	0,31	0.21	106,7	350
H967312-350R	19	19,1	0.75	29,7	1.17	86,0	1250	345	5000	0.49	0.33	106,7	350

Food and Beverage

Cleaning Service

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H9610 WASHDOWN™ 1000

Construction:

Tube: Nitrile

Reinforcement: 1-braid fiber

Cover: Vinyl nitrile

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- For washdown of food processing facilities and equipment

Markets:

- Food processing
- Industry cleaning
- Construction
- Poultry

Type of Couplings:

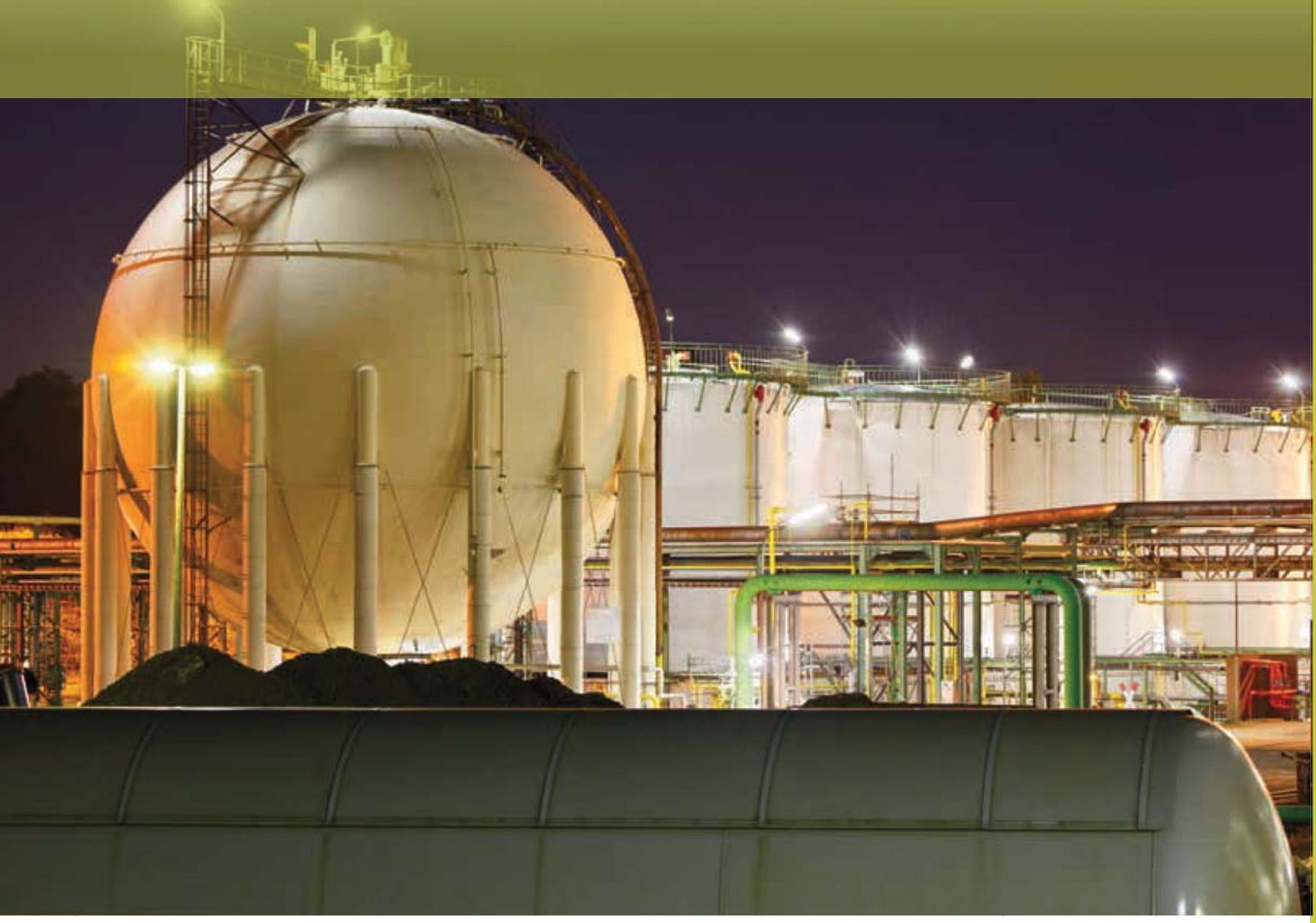
- "U" series

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H961006GY-350R	10	9,5	0.38	17,7	0.70	70,0	1000	275	4000	0,35	0.24	106,7	350
H961008GY-350R	12	12,7	0.50	20,6	0.81	70,0	1000	275	4000	0,45	0.30	106,7	350
H961008YW-350R	12	12,7	0.50	21,6	0.85	70,0	1000	275	4000	0,48	0.32	106,7	350
H961012GY-350R	19	19,0	0.75	29,4	1.16	70,0	1000	275	4000	0,77	0.52	106,7	350

Gaseous

LPG



Gaseous

LPG

H900 UL LPG

page E-4

Application: Transfer and delivery of propane and butane, and natural gas in open, well ventilated areas (1 psiG max. working pressure): UL 21 Approved
Tube: Nitrile
Reinforcement: Textile braid
Cover: Pin-pricked vinyl nitrile
Temp: -40°C to +60°C, (-40°F to +140°F)
Hose is capable of this rating. LP-Gas should never be elevated above 100°F
Pressure: 24 bar / 350 psi

EH920 UL LPG

page E-5

Application: Transfer and delivery of propane and butane, and natural gas in open, well ventilated areas (1 psiG max. working pressure): UL 21 Approved
Tube: Nitrile
Reinforcement: Textile braids and stainless steel static wire
Cover: Pin-pricked neoprene
Temp: -40°C to +60°C, (-40°F to +140°F)
Hose is capable of this rating. LP-Gas should never be elevated above 100°F
Pressure: 24 bar / 350 psi

Safety Aware

- Eaton understands that specialty hoses need quality tubes and cover to assure safe hose life. When your jobs requires safety, think Eaton.

Permanent Branding for Easy Identification

- The name of the hose and the working pressure are molded into the hose cover can't rub off. This makes hose selection on the job quicker, easier and safer.

The Eaton Reputation for Quality

- Your assurance of dependable performance.

Gaseous Hose Safety Information

Important!

WARNING: Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

WARNING: Failure to properly follow the manufacturer's recommended procedures for the care, maintenance, and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, or damage to property.

WARNING: Do not use chemical hose at temperatures or pressures above those recommended by the manufacturer. All operators must be thoroughly trained in the care and use of this hose and must at all times wear protective clothing. A hose or system failure could cause the release of a poisonous, corrosive or flammable material.

WARNING: Consult with the Coupling Manufacturer to make sure you choose the correct coupling and proper assembly for the application. Such matching of hose and couplings, and assembling of couplings, should be performed only by trained personnel using proper tools and procedures. Failure to follow manufacturer's instructions or failure to use trained personnel may result in serious bodily injury and/or property damage.

WARNING: Never use a hose to transfer material it is not specifically meant to transfer. Doing so could deteriorate the hose and result in leaking, hose bursting, or end blow-offs. This could lead to serious personal injury or death. Always transfer material in a hose that is designed specifically to transfer that material. This information is listed in this catalog.

WARNING: Consider both working pressure and pressure surges when determining "maximum" pressure. Failure to select a hose that meets both these requirements could lead to end blow-offs, hose leakage, and hose bursting. The result could be serious injury or death. The Eaton industrial hose you choose must meet or exceed the required working pressure, and must have a safety factor to allow for surge pressure.

WARNING: Do not use hose at temperatures that exceed the hose temperature rating. Doing so could deteriorate the hose, leading to leaks, hose bursting, and end blow-offs. This could result in serious personal injury or death.

WARNING: Selection of the proper hose for the application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to selection of hose for the application can result in serious bodily injury or property damage. In order to avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog.

Gaseous
LPG

Refer to warnings and safety information on pages M-1 – M-15.

Not to be used for NH_3. Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H900

UL LPG
UL 21 Approved

Construction:

Tube: Nitrile

Reinforcement: Textile braid

Cover: Pin-pricked vinyl nitrile

Operating Temperature:

-40°C to +60°C
(-40°F to +140°F)

Hose is capable of this rating. LP-Gas should never be elevated above 100°F.

Application:

- For transfer and delivery of propane and butane
- Transfer of natural gas in open, well ventilated areas (1 psiG max. working pressure)

Markets:

- LPG delivery vehicles
- Petroleum refineries
- Chemical processing
- Tank truck

Type of Couplings:

- "U" series
- Swaged or crimp male couplings

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H90004-500R	6	6,4	0.25	14,9	0.59	24,0	350	120	1750	0,18	0.12	152,4	500
H90006-500R	10	9,5	0.38	18,4	0,73	24,0	350	120	1750	0,25	0.17	152,4	500
H90008-500R	12	12,7	0.50	23,3	0,92	24,0	350	120	1750	0,36	0.24	152,4	500
H90012-500R	19	19,0	0.75	31,2	1.23	24,0	350	120	1750	0,61	0.41	152,4	500
H90016-150	25	25,4	1.00	38,1	1.50	24,0	350	120	1750	0,77	0.52	45,7	150
H90016-300R	25	25,4	1.00	38,1	1.50	24,0	350	120	1750	0,77	0.52	91,4	300

*Additional lengths available on select items

Refer to warnings and safety information on pages M-1 – M-15.

Not to be used for NH_3. Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EH920

UL LPG

UL 21 Approved

Construction:

Tube: Nitrile

Reinforcement: Textile braids and stainless steel anti-static wire

Cover: Pin-pricked neoprene

Operating Temperature:

-40°C to +60°C
(-40°F to +140°F)

Hose is capable of this rating. LP-Gas should never be elevated above 100°F.

Application:

- For transfer and delivery of propane and butane
- Transfer of natural gas in open, well ventilated areas (1 psiG maximum working pressure)

Markets:

- LPG delivery vehicles
- Petroleum refineries
- Chemical processing
- Tank truck

Type of Couplings:

- Swaged or crimp male couplings

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
EH92032-150	51	50,8	2.00	69,9	2.75	24,0	350	120	1750	2,38	1.60	45,7	150

Eaton Industrial Hose Reminder

Hose Selection

Selection of Hose

Selection of the proper Eaton Industrial hose for an application is essential to the proper operation and safe use of the hose ad related equipment. Inappropriate hose selection may result in hose leakage, bursting, or other failure which may cause bodily injury or property damage from spraying fluids or flying projectiles. To avoid serious bodily injury or property damage resulting form selection of the wrong hose, carefully review the information in this catalog. Some of the factors to consider on proper hose selection are known as STAMPED:

S - **Size,** (I.D., O.D. and length)

T - **Temperature** of material conveyed and environmental

A - **Application**, the conditions of use

M - **Material** being conveyed, type and concentration

P - **Pressure** to which the assembly will be exposed

E - **Ends**; style, type, orientation, attachment method, etc.

D - **Delivery** testing, quality, packaging and delivery requirements

These factors and the supplemental information contained in this catalog should be considered in selecting the proper hose for your application. If you have any questions regarding the proper hose for your application, please contact Eaton for North America, Eaton Technical Support 1-888-258-0222 for global support contact your local Eaton Technical Representative.

Notes

Material Handling

Material Handling

Dry Material

H0347 WILDCAT™ Dry Material

page F-4

Application: Transfer of dry bulk, of bottle caps and of cleaning agents. Discharge of abrasive materials
Tube: Static dissipating natural rubber/SBR
Reinforcement: 2-ply fiber with dual helical wires
Cover: SBR
Temp: -23°C to +71°C, (-10°F to +160°F)
Pressure: 7 bar / 100 psi

H0521 WILDCAT™ Heavy Duty Dry Material

page F-5

Application: Transfer of dry bulk, of bottle caps and of cleaning agents. Discharge of abrasive materials
Tube: 1/4" tube thickness natural rubber blend
Reinforcement: 2-ply textile with conductive copper anti-static wire
Cover: SBR
Temp: -40°C to +70°C, (-40°F to +158°F)
Pressure: 5 bar / 75 psi

H0319 WILDCAT™ Soft Wall Dry Material

page F-6

Application: Transfer of dry bulk, of bottle caps and of cleaning agents. Discharge of abrasive materials
Tube: 3/16" tube thickness natural rubber blend
Reinforcement: 2-ply textile with conductive copper anti-static wire
Cover: NR blend
Temp: -40°C to +70°C, (-40°F to +158°F)
Pressure: 5 bar / 75 psi

H0349 WILDCAT™ Hot Air Transfer

page F-7

Application: Hot air blower hose; hot, dry, non-oily applications
Tube: EPDM
Reinforcement: Textile with dual helical wires
Cover: Pin-pricked EPDM
Temp: -34°C to +177°C, (-30°F to +350°F)
Pressure: 7,0-10,5 bar / 100-150 psi

Sandblast

H0034 WILDCAT™ Sandblast

page F-8

Application: Conveys sand or shot for cleaning purposes, sandblast equipment to clean steel or concrete before painting or sealing
Tube: Natural rubber
Reinforcement: 4-ply textile
Cover: SBR
Temp: -40°C to +70°C, (-40°F to +158°F)
Pressure: 7,0-10,5 bar / 100-150 psi

Material Handling
Introduction and Safety Information

Slurry and Abrasive Resistant

- Where you are transferring abrasive slurries and dry materials, think longer life. Eaton offers a wide selection of industrial hoses that meet and exceed your job needs.

Flexibility

- Eaton offers channeled, corrugated and wrapped covers so you can decide how much flexibility your job requires.

Eaton Value

- Eaton stands behind our products with a commitment for excellence.

Material Handling Hose Safety Information

Important!

⚠ **WARNING:** Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

⚠ **WARNING:** Failure to properly follow the manufacturer's recommended procedures for the care, maintenance, and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, or damage to property.

⚠ **WARNING:** Consult with the Coupling Manufacturer to make sure you choose the correct coupling and proper assembly for the application. Such matching of hose and couplings, and assembling of couplings, should be performed only by trained personnel using proper tools and procedures. Failure to follow manufacturer's instructions or failure to use trained personnel may result in serious bodily injury and/or property damage.

⚠ **WARNING:** Never use a hose to transfer material it is not specifically meant to transfer. Doing so could deteriorate the hose and result in leaking, hose bursting, or end blow-offs. This could lead to serious personal injury or death. Always transfer material in a hose that is designed specifically to transfer that material. This information is listed in this catalog.

⚠ **WARNING:** Consider both working pressure and pressure surges when determining "maximum" pressure. Failure to select a hose that meets both these requirements could lead to end blow-offs, hose leakage, and hose bursting. The result could be serious injury or death. The Eaton hose you choose must meet or exceed the required working pressure, and must have a safety factor to allow for surge pressure.

⚠ **WARNING:** Do not use hose at temperatures that exceed the hose temperature rating. Doing so could deteriorate the hose, leading to leaks, hose bursting, and end blow-offs. This could result in serious personal injury or death.

Material Handling
Dry Material

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0347

WILDCAT™ Dry Material
formerly Sabertooth

Construction:

Tube: Static dissipating natural rubber/SBR

Reinforcement: 2-ply fiber with dual helical wires

Cover: SBR

Operating Temperature:

-23°C to +71°C
(-10°F to +160°F)

Application:

- Transfer of dry bulk
- Discharge of abrasive material
- Transfer of bottle caps
- Transfer of cleaning agents

Markets:

- In-plant transfers
- Tank truck
- Bottling plant
- Coal plant
- Dry cement operations
- Well service

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius				Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H034748-100	80	76,2	3.00	101,6	4.00	7,0	100	28,0	400	228,6	9.00	94,8	28	4.76	3.20	30,5	100
H034764-100	102	101,6	4.00	127,0	5.00	7,0	100	28,0	400	279,4	11.00	94,8	28	6,55	4.40	30,5	100

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0521

WILDCAT™ Heavy Duty Dry Material

formerly LYNX

Construction:

Tube: 1/4" tube thickness natural rubber blend

Reinforcement: 2-ply textile and conductive copper anti-static wire

Cover: SBR

Operating Temperature:

-40°C to +70°C
(-40°F to +158°F)

Application:

- Transfer of dry bulk
- Discharge of abrasive material
- Transfer of bottle caps
- Transfer of cleaning agents

Markets:

- In-plant transfers
- Tank truck
- Bottling plant
- Coal plant
- Dry cement operations
- Well service

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H052164-100	102	101,6	4.00	122,2	4.81	5,0	75	20,7	300	4,03	2.71	30,5	100
H052180-100	130	127,0	5.00	147,0	5.79	5,0	75	20,7	300	5,02	3.37	30,5	100

Material Handling
Dry Material

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0319

WILDCAT™ Soft Wall Dry Material
formerly LYNX

Construction:

Tube: 3/16" tube thickness natural rubber blend

Reinforcement: 2-ply textile and conductive copper anti-static wire

Cover: NR blend

Operating Temperature:

-40°C to +70°C
(-40°F to +158°F)

Application:

- Transfer of dry bulk
- Discharge of abrasive material
- Transfer of bottle caps
- Transfer of cleaning agents

Markets:

- In-plant transfers
- Tank truck
- Bottling plant
- Coal plant
- Dry cement operations
- Well service

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H031964-100	102	101,6	4.00	117	4.61	5,0	75	20,7	300	3,35	2.25	30,5	100
H031980-100	130	127,0	5.00	144	5.67	5,0	75	20,7	300	4,22	2.84	30,5	100

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0349 WILDCAT™ Hot Air Transfer

Construction:

Tube: EPDM

Reinforcement: Textile with dual helical wires

Cover: Pin-pricked EPDM

Operating Temperature:

-34°C to +177°C
(-30°F to +300°F)
Intermittent +350F

Application:

- Hot air blower hose
- Hot, dry, non-oily applications

Markets:

- Construction
- In-plant transfers
- Tank truck
- Dry cement delivery

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H034948-100	80	76,2	3.00	90,5	3.56	10,5	150	42	600	350	13.78	81,3	24	2,85	1.92	30,5	100
H034964-100	102	101,6	4.00	116,6	4.59	7,0	100	28	400	460	18.11	81,3	24	3,58	2.41	30,5	100

Material Handling
Sandblast

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0034

WILDCAT™ Sandblast
formerly Concord Sandblast

Construction:

Tube: Natural rubber

Reinforcement: 4-ply textile

Cover: SBR

Operating Temperature:

-40°C to +70°C
(-40°F to +158°F)

Application:

- Conveys sand or shot for cleaning purposes
- Conveys sand from sandblast equipment to clean steel or concrete before painting or sealing

Markets:

- Construction
- Metal working
- Ship building

Type of Couplings:

- Sandblast couplings that attach to the O.D. of hose

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
H003408-100	12	12,7	0.50	27,0	1.06	10,5	150	41	600	60	2.36	0,60	0.40	30,5	100
H003412-100	19	19,0	0.75	38,1	1.50	10,5	150	41	600	80	3.15	1,03	0.69	30,5	100
H003416-100	24	25,4	1.00	47,6	1.87	10,5	150	41	600	115	4.53	1,53	1.03	30,5	100
H003420-100	31	31,8	1.25	54,8	2.16	8,5	125	35	500	135	5.31	1,84	1.23	30,5	100
H003424-100	38	38,0	1.50	60,0	2.36	7,0	100	28	400	175	6.89	1.98	1.33	30,5	100
H003432-100	51	50,8	2.00	73,0	2.87	7,0	100	28	400	310	12,2	2.47	1.66	30,5	100

Abrasion loss value acc. DIN53516 ≤60mm³

Oil and Gas Exploration

Oil and Gas Exploration

Frac and Well Service

EHP001 BLACKCAT™ FRAC

page G-4

Application: Petroleum based fluids, non-potable and salt water, fracturing solutions and slurries
Tube: Nitrile blend (RMA Class A)
Reinforcement: 4-ply polyester fabric
Cover: BRUISER™ abrasion resistant cover
Temp: -40°C to +93°C, (-40°F to +200°F)
Pressure: 28 bar / 400 psi

H0377 Kelly Power Drilling

page G-5

Application: Rotary drilling: portable drilling, work-over rigs and slim hole rigs
Tube: Nitrile/Hypalon blend
Reinforcement: 4-spiral wire
Cover: Neoprene
Temp: -40°C to +121°C, (-40°F to +250°F)
Pressure: 207 bar / 3000 psi

Suction and Discharge

EHP009 Oilfield Vacuum

page G-6

Application: Transfer applications drilling mud or crude oil. Not recommended for refined petroleum products
Tube: Nitrile blend
Reinforcement: High-tensile synthetic textile with dual steel helical wires
Cover: Corrugated Synthetic rubber
Temp: -30°C to +80°C, (-22°F to +176°F)
Pressure: 10,5 bar / 150 psi

Oil and Gas Exploration

Introduction and Safety Information

Pressure and Vacuum Rated

- Eaton manufactures braided and spiral hoses using the latest technology in wire and synthetic yarns. As a result, Eaton hoses are pressure and vacuum resistant, as well as flexible and easy to handle.

Quality Assured

- Value through design and quality control assures you of maximum performance from Eaton products.

Oil and Gas Exploration Hose Safety Information

Important!

WARNING: Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

WARNING: Failure to properly follow the manufacturer's recommended procedures for the care, maintenance, and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, or damage to property.

WARNING: Never use a hose to transfer material it is not specifically meant to transfer. Doing so could deteriorate the hose and result in leaking, hose bursting, or end blow-offs. This could lead to serious personal injury or death. Always transfer material in a hose that is designed specifically to transfer that material. This information is listed in this catalog.

WARNING: Consider both working pressure and pressure surges when determining "maximum" pressure. Failure to select a hose that meets both these requirements could lead to end blow-offs, hose leakage, and hose bursting. The result could be serious injury or death. The Eaton hose you choose must meet or exceed the required working pressure, and must have a safety factor to allow for surge pressure.

WARNING: Do not use hose at temperatures that exceed the hose temperature rating. Doing so could deteriorate the hose, leading to leaks, hose bursting, and end blow-offs. This could result in serious personal injury or death.

WARNING: Selection of the proper hose for the application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to selection of hose for the application can result in serious bodily injury or property damage. In order to avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog.

Oil and Gas Exploration

Frac and Well Service

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EHP001 BLACKCAT™ FRAC

Construction:

Tube: Nitrile blend (RMA Class A)

Reinforcement: 4-ply polyester fabric

Cover: BRUISER™ abrasion resistant cover

Operating Temperature:

-40°C to +93°C
(-40°F to +200°F)

Application:

- Petroleum based fluids, non-potable and salt water, fracturing solutions, and slurries

Markets:

- Oil and gas exploration
- Well service
- Fracking industry

Type of Couplings:

- King crimp style combination nipples
- One-piece hammer union frac fitting

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
EHP00148	80	76,2	3.00	93,7	3.69	28	400	110	1600	762	30.0	3,08	2.07	15,2	50
EHP00148-100	80	76,2	3.00	93,7	3.69	28	400	110	1600	762	30.0	3,08	2.07	30,5	100
EHP00164	102	101,6	4.00	118,7	4.67	28	400	110	1600	1016	40.0	3,58	2.43	15,2	50
EHP00164-100	102	101,6	4.00	118,7	4.67	28	400	110	1600	1016	40.0	3,58	2.43	30,5	100

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0377 Kelly Power Drilling

Construction:

Tube: Nitrile/Hypalon blend

Reinforcement:
4-spiral wire

Cover: Neoprene

Operating Temperature:

-40°C to +121°C
(-40°F to +250°F)

Application:

- Rotary drilling on portable drilling rigs, work over rigs and slim hole rigs

Markets:

- Oil and gas exploration
- Well service
- Fracking industry

Type of Couplings:

- 430 "U" series
- Unions
- Boss male

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	DN	Hose I.D.		Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Weight		Length	
		mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
H037732	51	50,8	2.00	66,7	2.63	207	3000	830	12000	635	25.00	4,61	3.10	15,2	50
H037732-100	51	50,8	2.00	66,7	2.63	207	3000	830	12000	635	25.00	4,61	3.10	30,5	100

Oil and Gas Exploration

Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EHP009 Oilfield Vacuum

Construction:

Tube: Nitrile blend

Reinforcement: High-tensile synthetic textile with dual steel helical wires

Cover: Corrugated SBR blend

Operating Temperature:

-30°C to +80°C
(-22°F to +176°F)

Application:

- For transfer applications such as drilling mud or crude oil

Not recommended for refined petroleum products

Markets:

- Oil and gas exploration
- Well service
- Fracking industry

Type of Couplings:

- Cam and groove
- Male NPT
- Unions

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
EHP009-24-100	38	38,1	1.50	45,1	1.78	10,5	150	31	450	115	4.53	94,8	28	1,07	0.72	30,5	100
EHP009-32-100	51	50,8	2.00	61,1	2.41	10,5	150	31	450	145	5.71	94,8	28	1,58	1.06	30,5	100
EHP009-40-100	60	63,5	2.50	80,5	3.17	10,5	150	31	450	195	7.68	94,8	28	2,12	1.42	30,5	100
EHP009-48-100	80	76,2	3.00	90,9	3.58	10,5	150	31	450	240	9.45	94,8	28	2,70	1.81	30,5	100
EHP009-64-100	102	101,6	4.00	116,4	4.58	10,5	150	31	450	340	13.39	94,8	28	3,87	2.60	30,5	100
EHP009-96-100	150	152,4	6.00	171,4	6.75	10,5	150	31	450	650	25.59	80,0	24	7,57	5.09	30,5	100
EHP009-128-100	200	203,2	8.00	224,5	8.84	10,5	150	31	450	900	35.43	80,0	24	13,52	9.09	30,5	100
EHP009-128-100	200	203,2	8.00	224,5	8.84	10,5	150	31	450	900	35.43	80,0	24	13,52	9.09	30,5	100
EHP009-160-100	250	254,0	10.00	276,5	10.88	10,5	150	31	450	1400	55.12	80,0	24	17,89	12.02	30,5	100
EHP009-160-100	250	254,0	10.00	276,4	10.88	10,5	150	31	450	1400	55.12	80,0	24	17,89	12.02	30,5	100

Petroleum

Petroleum

Suction & Discharge

H1193 ROYALFLEX™ Petroleum
Page H-4

Application: Transfer of petroleum products
Tube: Nitrile blend
Reinforcement: 100% polyester and helical wire
Cover: Nitrile blend
Temp: -29°C to +82°C, (-20°F to +180°F)
Pressure: 14-21 bar / 200-300 psi

EHP522 Heavy Duty Petroleum/Oil S & D
Page H-5

Application: High-pressure suction and discharge of petroleum products with aromatic content up to 50%
Tube: NBR blend
Reinforcement: High-tensile synthetic textile with helical wire and anti-static copper wire
Cover: NBR blend (RMA Class A)
Temp: -35°C to +70°C, (-31°F to +158°F)
Pressure: 20,7 bar / 300 psi

H0327 JAGUAR™ Heavy Duty Petroleum S & D
Page H-6

Application: Suction and discharge of petroleum products
Tube: Vinyl nitrile **Reinforcement:** 2-ply fiber with helical wire
Cover: Vinyl nitrile
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 17,2 bar / 250 psi

EHP521 PUMA™ Cold Temperature S & D
Page H-7

Application: Suction & discharge of petroleum products
Tube: NBR
Reinforcement: High-tensile synthetic textile with dual helical wires and anti-static copper wire
Cover: Flat corrugated NBR blend
Temp: -55°C to +80°C, (-67°F to +176°F)
Pressure: 10,5 bar / 150 psi

EHP519 PUMA™ Flat Corrugated S & D
Page H-8

Application: Suction & discharge of petroleum products
Tube: NBR blend
Reinforcement: High-tensile synthetic textile dual steel helical wires and dual anti-static copper wire
Cover: Flat corrugated NBR blend
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 10,5 bar / 150 psi

H0363 PUMA™ Suction & Discharge
Page H-9

Application: Suction & discharge of petroleum products
Tube: Vinyl nitrile blend
Reinforcement: Fiber 2- or 4-ply with dual helical wires and anti-static copper wire
Cover: Vinyl nitrile blend
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 10,5 bar / 150 psi

H0436 Light Duty Petroleum S & D
Page H-10

Application: Suction & discharge of petroleum products
Tube: Vinyl nitrile
Reinforcement: 2-ply fiber with dual helical wire
Cover: Vinyl nitrile
Temp: -40°C to +71°C, (-40°F to +160°F)
Pressure: 7,0 bar / 100 psi

Discharge

H901 BOSTON BULLDOG™ Fuel Oil
Page H-11

Application: Fuel oil transfer for residential and/or commercial delivery
Tube: Nitrile rubber (RMA Class A)
Reinforcement: Double fiber braid
Cover: Vinyl nitrile rubber
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 17,2 bar / 250 psi

Petroleum

Introduction and Safety Information

Environmental Resistance

- The tube and cover materials of the Eaton industrial hose are designed to assure maximum life and top value. They are sophisticated hoses for demanding jobs.

Remove the Guesswork from Selecting, Buying and Using Critical Application Hose

- When you are handling hazardous material, it is critical to select the proper hose. Eaton products' high visibility branding and color coding removes the guesswork for hose selection.

Built to Make Work Faster, Easier and Safer

- Moving and connecting hose several times a day isn't easy work. Each of the industrial hose is designed to be easy to handle as safety and job performance will allow.

The Eaton Reputation for Quality

- Your assurance of dependable performance.

Petroleum Hose Safety Information

Important!

⚠ **WARNING:** Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

⚠ **WARNING:** Failure to properly follow the manufacturer's recommended procedures for the care, maintenance, and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, or damage to property.

⚠ **WARNING:** Consult with the Coupling Manufacturer to make sure you choose the correct coupling and proper assembly for the application. Such matching of hose and couplings, and assembling of couplings, should be performed only by trained personnel using proper tools and procedures. Failure to follow manufacturer's instructions or failure to use trained personnel may result in serious bodily injury and/or property damage.

⚠ **WARNING:** Never use a hose to transfer material it is not specifically meant to transfer. Doing so could deteriorate the hose and result in leaking, hose bursting, or end blow-offs. This could lead to serious personal injury or death. Always transfer material in a hose that is designed specifically to transfer that material. This information is listed in this catalog.

⚠ **WARNING:** If cover blisters exist, be careful not to pop them. If the hose was damaged in such a way that material was allowed to leak between the cover and inner tube, the blisters may contain this material. If the material is hazardous and splatters when the blisters are popped, it could cause . serious physical injury.

⚠ **WARNING:** Kinks can cause hose to burst, leading to bodily harm.

Petroleum

Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H1193 ROYALFLEX™ Petroleum

Construction:

Tube: Nitrile blend

Reinforcement: 100% polyester and helical wire

Cover: Nitrile blend

Operating Temperature:

-29°C to +82°C
(-20°F to +180°F)

Application:

- For transfer of petroleum products

Markets:

- Petroleum industry
- Oil exploration
- Tank trucks
- Waste hauling
- Batch plants
- Refineries

Type of Couplings:

- Male NPT
- Cam locks

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H119324	38	38,1	1.50	50,8	2.00	21	300	62	900	152,4	6.00	100	30	1,19	0.80	15,2	50
H119324-100	38	38,1	1.50	50,8	2.00	21	300	62	900	152,4	6.00	100	30	1,19	0.80	30,5	100
H119324-120	38	38,1	1.50	50,8	2.00	21	300	62	900	152,4	6.00	100	30	1,19	0.80	36,6	120
H119332	51	50,8	2.00	63,5	2.50	21	300	62	900	203,2	8.00	100	30	1,64	1.10	15,2	50
H119332-100	51	50,8	2.00	63,5	2.50	21	300	62	900	203,2	8.00	100	30	1,64	1.10	30,5	100
H119332-120	51	50,8	2.00	63,5	2.50	21	300	62	900	203,2	8.00	100	30	1,64	1.10	36,6	120
H119340-100	60	63,5	2.50	76,2	3.00	21	300	62	900	254,0	10.00	100	30	1,99	1.34	30,5	100
H119340-120	60	63,5	2.50	76,2	3.00	21	300	62	900	254,0	10.00	100	30	1,99	1.34	36,6	120
H119348	80	76,2	3.00	88,9	3.50	17	250	52	750	304,8	12.00	100	30	2,98	2.00	15,2	50
H119348-100	80	76,2	3.00	88,9	3.50	17	250	52	750	304,8	12.00	100	30	2,98	2.00	30,5	100
H119348-120	80	76,2	3.00	88,9	3.50	17	250	52	750	304,8	12.00	100	30	2,98	2.00	36,6	120
H119364	102	101,6	4.00	114,3	4.50	14	200	41	600	406,4	16.00	100	30	4,05	2.72	15,2	50
H119364-100	102	101,6	4.00	114,3	4.50	14	200	41	600	406,4	16.00	100	30	4,05	2.72	30,5	100
H119364-120	102	101,6	4.00	114,3	4.50	14	200	41	600	406,4	16.00	100	30	4,05	2.72	36,6	120

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EHP522 Heavy Duty Petroleum/Oil Suction & Discharge

Construction:

Tube: NBR blend

Reinforcement: High-tensile synthetic textile with helical wire and anti-static copper wire

Cover: NBR blend (RMA Class A)

Operating Temperature:

-35°C to +70°C
(-31°F to +158°F)

Application:

- For high-pressure petroleum suction and discharge

For use with petroleum products with aromatic content up to 50%

Markets:

- Tank truck
- Paper/pulp industry
- Oil exploration
- Ship building
- Batch plants

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
EHP522-32-100	51	50,8	2.00	66,8	2.63	20,7	300	62	900	200	7.87	85	25	2,25	1.51	30,5	100
EHP522-48-100	80	76,2	3.00	92,0	3.62	20,7	300	62	900	300	11.81	85	25	3,25	2.19	30,5	100
EHP522-64-100	102	101,6	4.00	120,0	4.72	20,7	300	62	900	440	17.32	85	25	4,88	3.28	30,5	100

Petroleum

Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0327 JAGUAR™ Heavy Duty Petroleum Suction & Discharge

Construction:

Tube: Vinyl nitrile

Reinforcement: 2-ply fiber with helical wire

Cover: Vinyl nitrile

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- For suction and discharge of petroleum products

Markets:

- Petroleum industry
- Paper/pulp industry
- Oil and gas exploration
- Ship building
- Tank trucks
- Waste hauling

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H032732-100	51	50,8	2.00	65,1	2.56	17,2	250	70	1000	127,0	5.00	94,8	28	1,24	0.83	30,5	100
H032740-100	60	63,5	2.50	77,0	3.03	17,2	250	70	1000	190,5	7.50	94,8	28	1,59	1.07	30,5	100
H032748-100	80	76,2	3.00	90,5	3.56	17,2	250	70	1000	203,2	8.00	94,8	28	1,98	1.33	30,5	100
H032764-100	102	101,6	4.00	115,9	4.56	17,2	250	70	1000	317,5	12.50	94,8	28	2,90	1.95	30,5	100
H032796-100	150	152,4	6.00	184,2	7.24	17,2	250	70	1000	762,0	30.00	80,0	24	7,16	4.81	30,5	100

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EHP521 PUMA™ Cold Temperature Suction & Discharge

Construction:

Tube: NBR

Reinforcement: High-tensile synthetic textile with dual helical wires and anti-static copper wire

Cover: Flat corrugated NBR blend

Operating Temperature:

-55°C to +80°C
(-67°F to +176°F)

Application:

- For suction & discharge of petroleum products

Markets:

- Petroleum industry
- Paper/pulp industry
- Oil and gas exploration
- Ship building
- Tank trucks

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
EHP521-48-100	80	76,2	3.00	92,8	3.65	10,5	150	41,0	600	250	9.84	94,8	28	2,85	1.92	30,5	100
EHP521-64-100	102	101,6	4.00	118,4	4.66	10,5	150	41,0	600	350	13.78	94,8	28	4,04	2.71	30,5	100

Petroleum

Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EHP519 PUMA™ Flat Corrugated Suction & Discharge

Construction:

Tube: NBR blend

Reinforcement: High-tensile synthetic textile dual steel helical wires and dual anti-static copper wire

Cover: Flat corrugated NBR blend

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- For suction and discharge of petroleum

Markets:

- Petroleum industry
- Paper/pulp industry
- Oil and gas exploration
- Ship building
- Tank trucks
- Waste hauling
- Well service

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
EHP519-12-100	19	19,1	0.75	28,4	1.12	10,5	150	41	600	55	2.17	94,8	28	0,47	0.31	30,5	100
EHP519-16-100	25	25,4	1.00	35,2	1.39	10,5	150	41	600	75	2.95	94,8	28	0,62	0.41	30,5	100
EHP519-20-100	31	31,8	1.25	43,2	1.70	10,5	150	41	600	90	3.54	94,8	28	0,94	0.63	30,5	100
EHP519-24-100	38	38,1	1.50	49,2	1.94	10,5	150	41	600	115	4.53	94,8	28	1.10	0.74	30,5	100
EHP519-32-100	51	50,8	2.00	62,8	2.47	10,5	150	41	600	145	5.71	94,8	28	1.51	1.02	30,5	100
EHP519-40-100	60	63,5	2.50	78,3	3.08	10,5	150	41	600	195	7.68	94,8	28	2.35	1.58	30,5	100
EHP519-48-100	80	76,2	3.00	91,4	3.60	10,5	150	41	600	240	9.45	94,8	28	2.87	1.93	30,5	100
EHP519-64-100	102	101,6	4.00	116,8	4.60	10,5	150	41	600	340	13.39	94,8	28	4.05	2.72	30,5	100
EHP519-96-100	150	152,4	6.00	174,0	6.85	10,5	150	41	600	650	25.59	94,8	28	9.54	6.41	30,5	100
EHP519-128-100	200	203,2	8.00	226,6	8.92	10,5	150	41	600	900	35.43	80,0	24	13.00	8.74	30,5	100

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0363 PUMA™ Suction & Discharge

Construction:

Tube: Vinyl nitrile blend

Reinforcement: 2- or 4-ply fiber with dual helical wires and anti-static copper wire

Cover: Vinyl nitrile blend

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- For suction and discharge of petroleum products

Markets:

- Tank truck
- Paper/pulp industry
- Oil and gas exploration
- Ship building
- Batch plants

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length*	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H036312BK- 100	19	19,1	0.75	28,8	1.13	10,5	150	42	600	110	4.33	94,8	28	0,59	0.40	30,5	100
H036316BK- 100	25	25,4	1.00	38,0	1.50	10,5	150	42	600	152	5.98	94,8	28	0,91	0.61	30,5	100
H036320BK- 100	31	31,8	1.25	45,0	1.77	10,5	150	42	600	190	7,48	94,8	28	1,09	0.73	30,5	100
H036324BK- 100	38	38,1	1.50	52,5	2.07	10,5	150	42	600	200	7.87	94,8	28	1,44	0.97	30,5	100
H036332BK- 100	51	50,8	2.00	65,0	2.56	10,5	150	42	600	255	10.04	94,8	28	2,01	1.35	30,5	100
H036340BK- 100	60	63,5	2.50	77,0	3.03	10,5	150	42	600	315	12.40	94,8	28	2,30	1.55	30,5	100
H036348BK- 100	80	76,2	3.00	90,5	3.56	10,5	150	42	600	380	14.96	94,8	28	2,93	1.97	30,5	100
H036364BK- 100	102	101,6	4.00	116,3	4.58	10,5	150	42	600	510	20.08	94,8	28	3,78	2.54	30,5	100
H036396BK- 100	150	152,4	6.00	174,0	6.85	10,5	150	42	600	780	30.71	94,8	28	8,45	5.68	30,5	100
H036396BK- 100	150	152,4	6.00	174,0	6.85	10,5	150	42	600	780	30.71	94,8	28	8,45	5.68	30,5	100
H03638ABK- 100	200	203,2	8.00	226,8	8.93	10,5	150	42	600	1100	43.31	80,0	24	13,19	8.86	30,5	100
H03638ABK- 100	200	203,2	8.00	226,8	8.93	10,5	150	42	600	1100	43.31	80,0	24	13,19	8.86	30,5	100

* 50 ft. lengths available on select items

Petroleum

Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0436 Light Duty Petroleum Suction & Discharge

Construction:

Tube: Vinyl nitrile

Reinforcement: 2-ply fiber with dual helical wire

Cover: Vinyl nitrile

Operating Temperature:

-40°C to +71°C
(-40°F to +160°F)

Application:

- For suction and discharge of petroleum products

Markets:

- Petroleum industry
- Paper/pulp industry
- Oil and gas exploration
- Ship building
- Tank trucks
- Waste hauling

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H043624-100	38	38,1	1.50	50,8	2.00	7,0	100	28	400	127,0	5.00	94,8	28	1,58	1.06	30,5	100
H043632-100	51	50,8	2.00	63,5	2.50	7,0	100	28	400	152,4	6.00	94,8	28	1,90	1.28	30,5	100
H043648-100	80	76,2	3.00	90,5	3.56	7,0	100	28	400	304,8	12.00	94,8	28	2,86	1.92	30,5	100
H043664-100	102	101,6	4.00	115,9	4.56	7,0	100	28	400	355,6	14.00	94,8	28	3,97	2.67	30,5	100

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H901 BOSTON BULLDOG™ Fuel Oil

Construction:

Tube: Nitrile rubber (RMA Class A)

Reinforcement: Double fiber braid

Cover: Vinyl nitrile rubber

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- For fuel oil transfer for residential and/or commercial delivery

Markets:

- Tank truck
- Petroleum refining
- Chemical processing
- Home delivery of fuel

Type of Couplings:

- Reattachable
- Internally expanded permanent attached

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H90120-150	31	31,8	1.25	44,5	1.75	17,2	250	70,0	1000	0,93	0.62	45,7	150
H90122-150	35	34,9	1.38	47,6	1.87	17,2	250	70,0	1000	0,99	0.66	45,7	150
H90124-100	38	38,1	1.50	50,8	2.00	17,2	250	70,0	1000	1,11	0.75	30,5	100
H90124-150	38	38,1	1.50	50,8	2.00	17,2	250	70,0	1000	1,11	0.75	45,7	150

Eaton Industrial Hose Reminder

Selection of Hose Ends

Proper Selection of Hose Ends

Selection of the proper Eaton Industrial hose end or coupling is essential to the proper operation and safe use of hose assemblies and related equipment.

Inadequate attention to the selection of the end fittings may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage form spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from selection of an incompatible hose end or coupling, you should carefully review the information in this catalog. Some factors which are involved in selection of the proper hose couplings are:

- Fluid compatibility
- Temperature
- Installation design
- Hose size
- Corrosion requirements
- Fluid conveyed

The given hose and hose end selection factors and the other information contained in this catalog should be considered by you in selecting the proper hose end fitting for your application.

If you have any questions regarding the use of hose/hose ends for North America contact Eaton Technical Support 1-888-258-0222, for global support contact your local Eaton technical representative.

Contact coupling manufacturer for other coupling recommendations including proper metal selection (stainless, aluminum, brass etc.) and attachment procedure with crimp specifications.

Notes

Specialty

Specialty

Fire Fighting

H5751 & H5752 Chemical Booster Page I-4

Application: Pressure booster hose on fire fighting equipment
Tube: Synthetic rubber
Reinforcement: 2-textile braid
Cover: Synthetic rubber
Temp: -40°C to +82°C, (-40°F to +180°F)
Pressure: 55 bar / 800 psi

Road Construction

H0372 BLACKCAT™ Hot Tar & Asphalt Page I-5

Application: Suction & discharge of tar and asphalt
Tube: Nitrile
Reinforcement: 2-ply fiberglass with helical wire
Cover: Neoprene
Temp: +177°C Intermittent, (+350°F) up to +400°F
Pressure: 13,8 bar / 200 psi

H0616 BLACKCAT™ Corrugated Hot Tar & Asphalt Page I-6

Application: Suction & discharge of tar and asphalt
Tube: Nitrile
Reinforcement: 2-ply fiberglass with helical wire
Cover: Corrugated neoprene
Temp: +177°C Intermittent (+350°F) up to +400°F
Pressure: 13,8 bar / 200 psi

H9603 Hot Tar Pumping Page I-7

Application: Hot tar projects
Tube: Nitrile (RMA Class A)
Reinforcement: 2-wire braid
Cover: Pin-pricked CPE
Temp: +177°C Intermittent, (+350°F)
Pressure: 17,2 bar / 250 psi

Specialized

EH066 Diesel Exhaust Fluid Dispensing Page I-8

Application: Conveying diesel exhaust fluid
Tube: Peroxide cured EPDM
Reinforcement: Fiber braid with stainless steel anti-static wire
Cover: Peroxide cured EPDM
Temp: -40°C to +125°C, (-40°F to +257°F)
Pressure: 21 bar / 300 psi

H9690 Hydrocarbon Drain Page I-9

Application: Hydrocarbon drain service
Tube: Nitrile (RMA Class A)
Reinforcement: 2-wire braid
Cover: Pin-pricked chlorinated polyethylene
Temp: +177°C, (+350°F)
Pressure: 21 bar / 300 psi

H8811 Nitrogen Page I-10

Application: Transfer of nitrogen at ambient temperatures
Tube: Nitrile
Reinforcement: 4-spiral fiber
Cover: Pin-pricked neoprene
Temp: -40°C to 80°C, (-40°F to 180°F)
Pressure: 21 bar / 300 psi

Specialty

Introduction and Safety Information

Remove the Guesswork from Selecting, Buying and Using Critical Application Hose

- When you're handling easily contaminated or hazardous material, it is critical to select the proper hose. The high visibility branding and color coding of Eaton removes the guesswork for hose selection.

Environmental Resistance

- The tube and cover materials of Eaton industrial hose products are designed to assure maximum hose life at a superior value to the customer. Specialty service Eaton hoses are sophisticated transfer products for demanding jobs. Exceptional aging, weathering and heat resistant properties keep the hose flexible and easy to use.

Permanent Branding for Easy Identification

- The name of the hose and the working pressure are molded into the hose cover can't rub off. This makes hose selection on the job quicker, easier and safer.

The Eaton Reputation for Quality

- Your assurance of dependable performance.

Specialty Hose Safety Information

Important!

⚠ **WARNING:** Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

⚠ **WARNING:** Failure to properly follow the manufacturer's recommended procedures for the care, maintenance, and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, or damage to property.

⚠ **WARNING:** Do not use chemical hose at temperatures or pressures above those recommended by the manufacturer. All operators must be thoroughly trained in the care and use of this hose and must at all times wear protective clothing. A hose or system failure could cause the release of a poisonous, corrosive or flammable material.

⚠ **WARNING:** Consult with the Coupling Manufacturer to make sure you choose the correct coupling and proper assembly for the application. Such matching of hose and couplings, and assembling of couplings, should be performed only by trained personnel using proper tools and procedures. Failure to follow manufacturer's instructions or failure to use trained personnel may result in serious bodily injury and/or property damage.

⚠ **WARNING:** Never use a hose to transfer material it is not specifically meant to transfer. Doing so could deteriorate the hose and result in leaking, hose bursting, or end blow-offs. This could lead to serious personal injury or death. Always transfer material in a hose that is designed specifically to transfer that material. This information is listed in this catalog.

⚠ **WARNING:** Consider both working pressure and pressure surges when determining "maximum" pressure. Failure to select a hose that meets both these requirements could lead to end blow-offs, hose leakage, and hose bursting. The result could be serious injury or death. The Eaton industrial hose you choose must meet or exceed the required working pressure, and must have a safety factor to allow for surge pressure.

⚠ **WARNING:** Do not use hose at temperatures that exceed the hose temperature rating. Doing so could deteriorate the hose, leading to leaks, hose bursting, and end blow-offs. This could result in serious personal injury or death.

⚠ **WARNING:** Selection of the proper hose for the application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to selection of hose for the application can result in serious bodily injury or property damage. In order to avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog.

Specialty
Fire Fighting

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H5751 & H5752 Chemical Booster*

Construction:

Tube: Synthetic rubber

Reinforcement: 2 textile braid

Cover: Synthetic rubber

Operating Temperature:

-40°C to +82°C
(-40°F to +180°F)

Application:

- For pressure booster hose on fire fighting equipment

Markets:

- Fire fighting

Type of Couplings:

- Spanner hole type
- Barway

Contact coupling manufacturer for attachment procedure and other coupling recommendations

#													
Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Weight		Length	
H5751*	**DN**	**mm**	**in**	**mm**	**in**	**bar**	**psi**	**bar**	**psi**	**kg/m**	**lbs/ft**	**mtr**	**ft**
H5751-50	19	19,0	0.75	31,8	1.25	55,0	800	165	2400	0,83	0.56	15,2	50
H5751-100	19	19,0	0.75	31,8	1.25	55,0	800	165	2400	0,83	0.56	30,5	100
H5751-150	19	19,0	0.75	31,8	1.25	55,0	800	165	2400	0,83	0.56	45,7	150
H5751-200	19	19,0	0.75	31,8	1.25	55,0	800	165	2400	0,83	0.56	60,1	200
H5752*													
H5752-50	25	25,4	1.00	40,5	1.59	55,0	800	165	2400	1,20	0.81	15,2	50
H5752-100	25	25,4	1.00	40,5	1.59	55,0	800	165	2400	1,20	0.81	30,5	100
H5752-150	25	25,4	1.00	40,5	1.59	55,0	800	165	2400	1,20	0.81	45,7	150
H5752-200	25	25,4	1.00	40,5	1.59	55,0	800	165	2400	1,20	0.81	61,0	200

*** Product is not stocked and only available as an MTO item.**

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0372 BLACKCAT™ Hot Tar & Asphalt

Construction:

Tube: Nitrile

Reinforcement: 2-ply fiberglass with helical wire

Cover: Neoprene

Operating Temperature:

+177°C Intermittent (+350°F)

Handle intermittent temperature of hot tar and asphalt up to +400°F

Application:

- For suction & discharge of tar and asphalt

Markets:

- Road construction
- Roof construction

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H037232-100**	51	50,8	2.00	74,6	2.94	13,8	200	55,0	800	177,8	7.00	94,8	28	3,48	2.34	30,5	100
H037240-100	60	63,5	2.50	87,3	3.44	13,8	200	55,0	800	254,0	10.00	94,8	28	4,24	2.85	30,5	100
H037248-100**	80	76,2	3.00	97,6	3.84	13,8	200	55,0	800	254,0	10.00	94,8	28	4,95	3.33	30,5	100
H037264-100	102	101,6	4.00	126,2	4.97	13,8	200	55,0	800	304,8	12.00	94,8	28	6,74	4.53	30,5	100

Product available in 50 ft. lengths. ** Product available in 150 ft. lengths.

Specialty
Road Construction

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0616 BLACKCAT™ Corrugated Hot Tar & Asphalt

Construction:

Tube: Nitrile

Reinforcement: 2-ply fiberglass with helical wire

Cover: Corrugated neoprene

Operating Temperature:

+177°C Intermittent (+350°F)

Handle intermittent temperature of hot tar and asphalt up to +400°F

Application:

- For suction & discharge of tar and asphalt

Markets:

- Road construction
- Roof construction

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H061632	51	50,8	2.00	76,2	3.00	13,8	200	55	800	127,0	5.00	94,8	28	3,48	2.34	15,2	50
H061632-100	51	50,8	2.00	76,2	3.00	13,8	200	55	800	127,0	5.00	94,8	28	3,48	2.34	30,5	100

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H9603 Hot Tar Pumping

Construction:

Tube: Nitrile (RMA Class A)

Reinforcement: 2-wire braid

Cover: Pin-pricked CPE

Operating Temperature:

+177°C Intermittent (+350°F)

Application:

- For hot tar projects

Markets:

- Road construction
- Roof construction

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
H960316-50	25	25,4	1.00	39,7	1.56	17,2	250	172	2500	304,8	12.00	1,34	.90	15,2	50
H960316-100	25	25,4	1.00	39,7	1.56	17,2	250	172	2500	304,8	12.00	1,34	.90	30,5	100
H960316-150	25	25,4	1.00	39,7	1.56	17,2	250	172	2500	304,8	12.00	1,34	.90	45,7	150

Specialty
Specialized

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EH066 Diesel Exhaust Fluid Dispensing

Construction:

Tube: Peroxide cured EPDM

Reinforcement: Fiber braid with stainless steel anti-static wire

Cover: Peroxide cured EPDM

Operating Temperature:

-40°C to +125°C
(-40°F to +257°F)

Application:

- For conveying diesel exhaust fluid

Markets:

- Tank truck

Type of Couplings:

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
EH06608	12	12,7	0.50	21,6	0.85	21	300	83	1200	101	3,98	0,26	0.18	15,2	50
EH06612	19	19,0	0.75	29,0	1.14	21	300	83	1200	152	5,98	0,42	0.29	15,2	50

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H9690 Hydrocarbon Drain

Construction:

Tube: Nitrile (RMA Class A)

Reinforcement: 2-wire braid

Cover: Pin-pricked chlorinated polyethylene

Operating Temperature:

+177°C
(+350°F)

Application:

- For hydrocarbon drain service

Markets:

- Petroleum
- Refineries

Type of Couplings:

- Boss Male
- Ground joint female
- Eaton EJ series

Contact coupling manufacturer for attachment procedure and other coupling recommendations

Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H969012	19	19,0	0.75	34,1	1.34	21,0	300	207	3000	0,89	0.60	15,2	50

Specialty
Specialized

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H8811 Nitrogen

Construction:

Tube: Nitrile

Reinforcement: 4-spiral fiber

Cover: Pin-pricked neoprene

Operating Temperature:

-40°C to 82°C
(-40°F to 180°F)

Application:

- For transfer of nitrogen at ambient temperatures

Markets:

- Refineries
- Petroleum industry

Type of Couplings:

- "U" series
- Barbed inserts
- Boss male
- Ground joint female

Contact coupling manufacturer for attachment procedure and other coupling recommendations

#		Hose I.D.		Hose O.D.		Max Oper Pressure		Burst Pressure		Weight		Length	
Part No.	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H881112YW-250	19	19,0	0.75	30,2	1.19	21,0	300	83,0	1200	0,57	0.38	76,2	250

Steam

Steam Hose

Steam

Steam Hose

EH084 STEAM SLAYER™ Page J-6

Application: Transfer of steam for processing products & cleaning equipment
Tube: Special chlorobutyl blend
Reinforcement: 2-wire braid
Cover: Pin-pricked EPDM
Temp: -40°C to +208°C, (-40°F to +407°F)
For superheated steam, +232°C (+450°F)
Pressure: 17,2 bar / 250 psi

EH080 & EH081 STEAM SLAYER™ Page J-7

Application: Transfer of steam for processing products & cleaning equipment
Tube: Special chlorobutyl blend
Reinforcement: 2-wire braid
Cover: Pin-pricked EPDM
Temp: -40°C to +208°C, (-40°F to +407°F)
For superheated steam, +232°C (+450°F)
Pressure: 17,2 bar / 250 psi

H0084 Concord Standard Page J-8

Application: Transfer of steam for processing products & cleaning equipment
Tube: Special chlorobutyl blend
Reinforcement: 2-wire braid with stainless steel anti-static wire
Cover: Pin-pricked EPDM
Temp: Maximum Operating: +232°C (+450°F)
Pressure: 17,2 bar / 250 psi

H9568 Concord 250 Steam Page J-9

Application: Transfer of steam for processing products & cleaning equipment
Tube: EPDM
Reinforcement: 2-wire braid
Cover: Pin-pricked EPDM
Temp: Maximum Operating: +232°C (+450°F)
Pressure: 17,2 bar / 250 psi

Steam

Introduction and Safety Information

Heat Resisting Patrex or EPDM Tubes

- Eaton products' exclusive elastomers with superior heat resistance provide for longer service life...and will resist flaking rubber particles (popcorning) and will handle most steam cleaner detergents.

Hi-Strength Steel Wire Braided Reinforcement

- Keeps the hose limber and easy to handle. Adds versatility... hot water cleaning to high-pressure process steam service.

EPDM or Oil Resistant

- Stand up to the dragging, scuffing and abuse found in many applications.

Covers

- Ensures maximum service life and value. Exceptional aging, weathering, and heat resisting properties keep the hose flexible and easy to use.

Permanent Branding for Easy Identification

- The name of the hose and the working pressure are molded into the hose cover...can't rub off. This lets the operator know that the hose is for steam service.

The Eaton Brand Reputation for Quality

- Your assurance of dependable performance.

Steam Hose Safety Information

Important!

⚠ **WARNING:** Exposure to steam is hazardous. If not properly controlled, steam can cause property damage, serious bodily injury, or death. In order to avoid property damage, serious injury, or death, you must select the proper steam hose for the given application. Also, proper installation, usage and maintenance of the steam hose you select will contribute to increased operator safety.

⚠ **WARNING:** Failure to properly follow the manufacturer's recommended procedures for the care, maintenance and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, and damage to property.

⚠ **WARNING:** Only specially trained persons should engage in applications or testing procedures that require particular skills. Failure to do so may result in damage to the hose products or to other property and more importantly, may result in serious injury.

⚠ **WARNING:** Steam heat is hotter than 212°F (boiling water) and increases in temperature as pressure increases. See safety information in this catalog.

Steam
Safety Tips

Safety Tips

Common Sense with Steam Hose

- Provide operators with adequate safety clothing. Include gloves, rubber boots, full length protective clothing and eye protection. The objective is to provide protection from scalding burns resulting from splash back of steam or hot water.
- Ensure that the work area is free of tripping hazards and other clutter.
- Check the tightness of the coupling with each use.
- Do not allow the hose to remain pressurized when not in service. Turning off the pressure can provide dramatic increases in steam hose service life.
- Periodic maintenance of steam hose can pay big dividends. All steam hoses are expected to wear out in time. It is important to continually be on the lookout for hose that has deteriorated to the point where it can no longer provide safe service. The following guidelines can help in that determination.

Operators should be aware of the obvious signs of trouble:

- Cover blisters or lumps
- Cuts or gouges in the outside of the hose which expose the reinforcement
- Hardened or inflexible hose
- Steam leakages at the coupling ends or anywhere along the length of the hose
- Flattened or kinked areas which have damaged the hose
- A reduction of steam flow indicating that the tube is swelling

When any of the above abnormalities appear it is good safety sense to immediately remove the hose from service. Once removed, the hose can be carefully inspected before further use. Steam hose failures occur near the ends due to flexing and strain at the couplings. In those cases the hose can frequently be cut back and recoupled, providing additional service life. Hose used in continuous high pressure/ temperature service should be inspected periodically for signs of tube hardening. In most cases it is necessary to remove a coupling for tube inspection.

Make Your Selection With Safety in Mind

- Be sure to select a hose identified as steam hose.
- Hose identification should be in the form of permanent branding on the hose outer cover, not just on the package.
- You must identify the type of service the steam hose is required to accomplish.
  a) Is the hose manually handled?
  b) What is the anticipated frequency of use?
  c) What is the actual pressure of the steam service?
  d) Is it subject to surges or peak pressures?
  e) What is the temperature of the steam?
  f) Saturated (wet) or superheated (dry) steam?
  g) What are the external conditions in the area where the hose will be used?
- You should recognize that spillage or accumulations of corrosive chemicals or petroleum based materials externally can have a deteriorating effect on the hose cover.

Making Sure the Hose is Installed Properly

- Be certain to use hose couplings designed for steam hose service. Follow the coupling manufacturer's instruction for coupling attachment. Check tightness with each use.
- Avoid extreme flexing of the hose near the coupling. If necessary use elbows in the piping system to assure a straight line connection with the hose.
- Installing and using a shut-off valve between the steam source and the hose will maximize service life and operator safety, and we consider such a value mandatory for safe operation.
- The use of spring guards can relieve some of the acute flexing encountered in heavy manual handling applications.
- Provide a suitable means of storing the hose when not in use. A permanent rack or tray will minimize the damage to the hose in storage. Do not hang the hose on a hook, nail, or other device which could cut or damage the hose.

Recommendations

1. Install an OSHA approved safety cable on the hose at every junction to prevent whipping of the end if the coupling should disconnect.
2. Ensure continuous static grounding of the hose at each coupling.
3. If the clamps are a bolt-on style, tighten them to the correct torque before use. Use calibrated torque wrenches, not impact or other types.
4. Repairs on steam hoses and couplings should be done only by fully qualified distributors or fabricators.
5. All workers near the hose should wear full protective safety gear including gloves, safety shoes, full-length protective clothing and protective glasses or goggles.
6. Perform a complete safety check before the steam is turned on. Inspect the area and remove all unnecessary objects and debris. Inspect the hose for gouges, kinks, worn areas, loose couplings and other potential safety problems.
7. Install a shut-off valve between the source of steam and hose assembly.
8. Use spring guards to protect the hose from kinking when handling of the hose is required.
9. Avoid excessive flexing of the hose, particularly near couplings. Flexing can weaken the assembly.
10. Examine connections to the steam source. Use straight connections instead of bending the hose. Install pipe elbows to ensure either straight vertical connections pointing downward, or a 45° downward angle that allows the hose to gently contact the ground without too much flexing.
11. Be aware of the danger of hammer effect and take steps to prevent it. Hammer effect is caused by spikes of extreme pressure; it can damage hose assemblies and break couplings free. The usual causes are blockage, pinched-off flow or valves being opened or closed too fast. Make personnel aware of both the danger and causes, and urge them to avoid actions that can cause the hammer effect.
12. When finished using steam, always close the pressure valve from the steam source. In addition to providing an extra safety margin, this action can extend the working life of the hose.
13. Add an extra measure of safety by ensuring that all steam hose connections are incompatible with other hoses in the plant or by color-coding for different applications. Manufacturers can often cooperate with these requests and suggest good color-coding systems.
14. Train workers to look for signs of problems during usage, such as steam leakage, loose clamps, hose shrinkage, cover damage or exposed reinforcement.

Steam

Steam Hose

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EH084 STEAM SLAYER™

Construction:

Tube: Special chlorobutyl blend

Reinforcement: 2-wire braid

Cover: Pin-pricked EPDM

Operating Temperature:

-40°C to +208°C
(-40°F to +407°F)

For superheated steam +232°C (+450°F)

Application:

- Transfer of steam for processing products and cleaning equipment

Markets:

- Refining and petrochemical
- Paper industry
- Industrial cleaning markets
- Oil and gas exploration
- Steel
- Ship building

Type of Couplings:

- Eaton EJ series

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
EH08408	12	12,7	0.50	27,7	1.09	17,2	250	172	2500	0,73	0.49	15,2	50
EH08412	19	19,0	0.75	33,5	1.32	17,2	250	172	2500	0,94	0.63	15,2	50
EH08416	25	25,4	1.00	40,4	1.59	17,2	250	172	2500	1,28	0.86	15,2	50

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EH080 & EH081 STEAM SLAYER™

Construction:

Tube: Special chlorobutyl blend

Reinforcement: 2-wire braid

Cover: Pin-pricked EPDM

Operating Temperature:

-40°C to +208°C
(-40°F to +407°F)

For superheated steam
+232°C (+450°F)

Application:

- Transfer of steam for processing products and cleaning equipment

Markets:

- Refining and petrochemical
- Paper industry
- Industrial cleaning markets
- Oil and gas exploration
- Steel
- Ship building

Type of Couplings:

- Eaton EJ series

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
EH080	**DN**	**mm**	**in**	**mm**	**in**	**bar**	**psi**	**bar**	**psi**	**kg/m**	**lbs/ft**	**mtr**	**ft**
EH08008	12	12,7	0.50	27,7	1.09	17,2	250	172	2500	0,73	0.49	15,2	50
EH08012	19	19,0	0.75	33,5	1.32	17,2	250	172	2500	0,94	0.63	15,2	50
EH08016	25	25,4	1.00	40,4	1.59	17,2	250	172	2500	1,28	0.86	15,2	50
EH081													
EH08108	12	12,7	0.50	27,7	1.09	17,2	250	172	2500	0,73	0.49	15,2	50
EH08112	19	19,0	0.75	33,5	1.32	17,2	250	172	2500	0,94	0.63	15,2	50
EH08116	25	25,4	1.00	40,4	1.59	17,2	250	172	2500	1,28	0.86	15,2	50

Steam

Steam Hose

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H0084 Concord Standard

Construction:

Tube: Special chlorobutyl blend

Reinforcement: 2-wire braid with stainless steel anti-static wire

Cover: Pin-pricked EPDM

Operating Temperature:

Maximum Operating +232°C (+450°F)

Application:

- Transfer of steam for processing products and cleaning equipment

Markets:

- Refining and petrochemical
- Paper industry
- Industrial cleaning markets
- Oil and gas exploration
- Steel
- Ship building

Type of Couplings:

- Ground joint female
- Boss male

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H008420BK	31	31,8	1.25	50,0	1.97	17,2	250	172	2500	2,0	1.35	15,2	50
H008424BK	38	38,1	1.50	56,4	2.22	17,2	250	172	2500	2,3	1.55	15,2	50
H008432BK	51	50,8	2.00	69,1	2.72	17,2	250	172	2500	2,9	1.94	15,2	50

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H9568 Concord 250 Steam

Construction:

Tube: EPDM

Reinforcement: 2-wire braid

Cover: Pin-pricked EPDM

Operating Temperature:

Maximum Operating +232°C (+450°F)

Application:

- Transfer of steam for processing products and cleaning equipment

Markets:

- Refining and petrochemical
- Paper industry
- Industrial cleaning markets
- Oil and gas exploration
- Steel
- Ship building

Type of Couplings:

- Eaton EJ Series

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H956808BK	12	12,7	0.50	26,2	1.03	17,2	250	172	2500	0,68	0.46	15,2	50
H95608BK-100*	12	12,7	0.50	26,2	1.03	17,2	250	172	2500	0,68	0.46	30,5	100
H956812BK	19	19,0	0.75	34,0	1.34	17,2	250	172	2500	1,04	0.70	15,2	50
H956812BK-100*	19	19,0	0.75	34,0	1.34	17,2	250	172	2500	1,04	0.70	30,5	100
H956816BK	25	25,4	1.00	39,6	1.56	17,2	250	172	2500	1,43	0.96	15,2	50
H956816BK-100*	25	25,4	1.00	39,6	1.56	17,2	250	172	2500	1,43	0.96	30,5	100

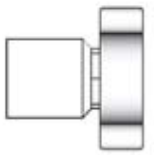
**Also product available in RD-Red for select items

Steam

EJ Series Crimp Couplings

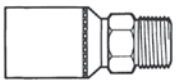
EJ Series Crimp Couplings

Wing Nut Swivel Ground Joint



Part Number	Hose I.D.		Thread Size	DIM A		Hole Dia		DIM D	
	mm	in	NPSM	mm	in	mm	in	mm	in
EJ5323-0808S	12,7	0.50	1 1/2 – 11 1/2	72,3	2.85	12,7	0.50	60,5	2.38
EJ5323-1212S	19,1	0.75	1 1/2 – 11 1/2	72,3	2.85	12,7	0.50	90,4	3.56
EJ5323-1216S	25,4	1.00	1 1/2 – 11 1/2	72,3	2.85	12,7	0.50	90,4	3.56

Male Pipe (NPTF) Rigid



Part Number	Hose I.D.		Thread Size	DIM A		Hole Dia		Hex E	
	mm	in	NPTF	mm	in	mm	in	mm	in
EJ5324-0808S	12,7	0.50	1/2 – 14	76,5	3.01	9,1	0.36	22,2	0.875
EJ5324-1212S	19,1	0.75	3/4 – 14	77,8	3.08	15,5	0.61	30,2	1.188
EJ5324-1616S	25,4	1.00	1 – 11 1/2	82,6	3.25	20,6	0.81	34,9	1.375

Female Spud

Part Number	Hose I.D.		Thread Size (M)	Thread Size (F)	DIM A		Hole Dia		Hex E	
	mm	in	NPSM	NPTF	mm	in	mm	in	mm	in
FF91058-08S	12,7	0.50	1 1/2 – 11 1/2	1 1/2 – 14	30,1	1.185	9,1	0.36	50,8	2.00
FF91058-12S	19,1	0.75	1 1/2 – 11 1/2	3/4 – 14	30,1	1.185	15,5	0.61	50,8	2.00
FF91058-16S	23,9	1.00	1 1/2 – 11 1/2	1 – 11 1/2	30,1	1.185	20,6	0.81	50,8	2.00

* NOTE: EJ Series couplings were specifically designed and tested for use with Eaton hoses and wall thicknesses, use on other hose is not recommended.

Assembly Instructions

Step 1

Cut the hose square to the required length using a cut-off wheel. Clean the cut end and hose bore.

Step 2

Mark the end of the hose with the correct insertion depth by size. See chart.

Step 3

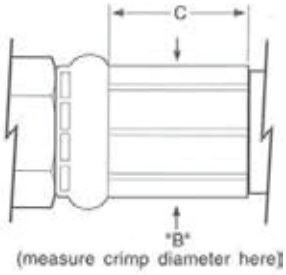
Lubricate the I.D. of the hose with a water based lubricant such as P-80. You can also utilize a 5% dish soap/95% water mixture.

Step 4

Insert the fitting into the hose. Twist the fitting while inserting to help with spreading the lubricant and easier insertion. Be sure the fitting is fully inserted by checking the end of the socket is aligned with the insertion depth mark on the hose.

Step 5

Crimp the hose to the specifications found in chart. Measure the crimp diameter in 3 locations utilizing calipers and take the average to verify that the crimp is within the specified range. Also verify that the insertion depth mark on the hose is still at the end of the socket and that the hose has not pulled off of the fitting during the crimping process.



Hose Dash Size	Fitting Insertion Depth	Crimp Diameter "B"	Crimp Position "C"
		±0.12 mm ±0.005 in	±0.75 mm ±0.030 in
Steam Slayer Hose: EH080, EH081, EH084			
-08	34,7 mm 1.37 in	30,23 mm 1.190 in	32,39 mm 1.275 in
-12	35,5 mm 1.40 in	35,94 mm 1.415 in	32,39 mm 1.275 in
-16	34,7 mm 1.37 in	41,40 mm 1.630 in	32,39 mm 1.275 in
Concord 250 Hose: H9568			
-08	34,7 mm 1.37 in	30,23 mm 1.190 in	32,39 mm 1.275 in
-12	35,5 mm 1.40 in	35,94 mm 1.415 in	32,39 mm 1.275 in
-16	34,7 mm 1.37 in	41,78 mm 1.645 in	32,39 mm 1.275 in

None of the hoses listed are to be used as a pressure washer hose.

MTO (Made-to-Order) – Contact Eaton at 800-833-3837 for availability, minimum run quantity, and ordering information.

Steam applications are hazardous to both personnel and equipment. These hazards are due to the high pressures and temperatures of steam conveyance. Hot water, low pressure steam and high pressure steam can cause severe scalding or bodily injury. Operators should use extreme caution to avoid burns. Eaton understands the importance of utilizing quality products that provide maximum safety, especially when it comes to steam application, **safety always comes first.**

FK6496 & FK6500 Eaton Steam Hose Assemblies

Losses from a leaking steam system can cost in many ways. Personal safety, procurement, maintenance, and premature product replacement can all affect the bottom line. Eaton's new steam hose assembly system with our STEAM SLAYER hose and the EJ Series fitting offer a matched engineered assembly that was tested for over 2000 hours without any leakage.

This new matched assembly will also reduce the affects of static electric discharge. These new assemblies not only reduce maintenance cost, but also reduce operator's exposure to hazardous situations. Be sure to choose a matched hose and fitting engineered system designed specifically for steam applications.

50' Steam Hose Assemblies

Base # FK6496

Base # FK6500

Part Number	Hose I.D. (mm)	Hose I.D. (in)	End "A" Male Pipe	End "B" Wing Nut Female Swivel	Hose
FK6496HHH6000	13,0	1/2	- 8	- 8	EH08408 Steam Slayer
FK6496KKK6000	19,1	3/4	-12	-12	EH08412 Steam Slayer
FK6496MMK6000	25,4	1	-16	-12	EH08416 Steam Slayer
FK6500HHH6000	12,7	1/2	- 8	- 8	H956808 Concord 250
FK6500KKK6000	19,1	3/4	-12	-12	H956812 Concord 250
FK6500MMK6000	25,4	1	-16	-12	H956816 Concord 250

Eaton Industrial Reminder

Proper Hose Handling

Proper Hose Handling

Proper hose handling can help preserve hose assembly life and work environment safety. Therefore, consider the following points when handling hose assemblies.

- Avoid crushing or kinking the hose. This can cause severe damage to the reinforcement that isn't always obvious when looking at the cover.
- Do not drag the hose or lift a large bore hose from the middle of its length with the ends hanging down. Doing so can cause kinking, cover cuts, hose reinforcement damage, and coupling damage.
- Limit curvature of the hose to the minimum bend radius recommended by the manufacturer. Also avoid sharp bends at the end fittings and the manifold connections.
- Do not exceed pressure and temperature limits because this could damage the hose and ultimately result in serious bodily injury or property damage. Monitor pressure and temperature during hose use.
- Never allow chemicals, solvents, or any other hazardous materials to drip onto ground. Always comply with environmental laws.
- Never allow chemicals to drip on the exterior of a hose or allow hose to lay in a pool of chemicals. The hose cover may not have the chemical resistance of the tube. If a corrosive material comes into contact with the hose reinforcement, the result could be early hose failure.
- Avoid extreme flexing of the hose near the coupling. If necessary, use elbows in the piping system to assure a straight line connection with the hose.
- Protect hose from heat, flame, cutting and twisting. Use shields or clamps to do this.
- Support hose to avoid mechanical strain on couplings.
- Be aware that dropping or dragging the assembly, chemical incompatibility, exposure to temperature extremes, or extensive internal coupling abrasion can cause leaks and reduce coupling retention.

Water

Water

Suction & Discharge

EHW030 OTTER™ PLUS Water S & D

Page K-4

Application: S & D of water, mud and slurries; ag fertilizers, salt water (brine)
Tube: EPDM
Reinforcement: High-tensile synthetic textile / dual helical wires
Cover: EPDM
Temp: -40°C to +120°C, (-40°F to +248°F)
Pressure: 17,2-20,7 bar / 250-300 psi

H0364 OTTER™ Water Suction & Discharge

Page K-5

Application: S & D of water, mud and slurries; ag fertilizers, salt water (brine)
Tube: EPDM
Reinforcement: High-tensile synthetic textile / steel helical wire
Cover: EPDM
Temp: -40°C to +120°C, (-40°F to +248°F)
Pressure: 10,5 bar / 150 psi

Discharge

EHW029 OTTER™ Layflat Water Discharge

Page K-6

Application: Water discharge
Tube: EPDM
Reinforcement: High-tensile synthetic textile
Cover: EPDM
Temp: -40°C to +120°C, (-40°F to +248°F)
Pressure: 10,5 bar / 150 psi

H0307 and H0379 LEADER™ Water Discharge

Page K-7

Application: Discharge of water
Tube: EPDM
Reinforcement: 2-ply, 2 or 4 spiral fiber
Cover: EPDM
Temp: -23°C to +66°C, (-10°F to +150°F)
Pressure: 5,5-10,5 bar / 80-150 psi

Specialty

H1196 ROYALFLEX™ Water

Page K-8

Application: Transfer of water, liquid, diluted fertilizers and pesticides; pumping, S & D of water and slurries
Tube: Thermoplastic vinyl nitrile
Reinforcement: 100% polyester and helical wire
Cover: Thermoplastic vinyl nitrile
Temp: -29°C to +82°C, (-20°F to +180°F)
Pressure: 20,7 bar / 300 psi

EHW028 Heavy Duty MSHA Mine Spray

Page K-9

Application: High pressure water in mines
Tube: Oil-mist resistant NBR blend
Reinforcement: High-tensile steel wire
Cover: MSHA pin-pricked neoprene blend
Temp: -35°C to +100°C, (-31°F to +212°F)
Pressure: 70 bar / 1000 psi

H345 Pressure Washer

Page K-10

Application: High pressure cleaning and degreasing
Tube: Nitrile (RMA Class A)
Reinforcement: 1-braid wire
Cover: Vinyl
Temp: -18°C to +93°C, (0°F to +200°F)
Pressure: 207 bar / 3000 psi

Sewer Cleaning

FC701 Eaton GATOR™ Hose

Page K-11

Application: High-pressure sewer cleaning
Tube: Elastomer
Reinforcement: Single braid high-textile
Cover: Ether-based polyurethane
Temp: -40°C to +66°C, (-40°F to +150°F)
Pressure: 172 bar / 2,500 psi

FC702 Eaton GATOR™ Hose

Page K-12

Application: High-pressure sewer cleaning
Tube: Elastomer
Reinforcement: Single braid high-textile
Cover: Ether-based polyurethane
Temp: -40°C to +66°C, (-40°F to +150°F)
Pressure: 207 bar / 3,000 psi

Water Hose

Introduction and Safety Information

Job Related Construction Service

- Eaton makes a wide variety of hose styles for water suction and discharge applications. Each product is manufactured utilizing the components and construction which makes it best suited for the job to be performed.

Pressure and Vacuum Rated

- Eaton manufactures braided and spiral hoses using the latest technology in wire and synthetic yarns. As a result, Eaton hoses are pressure and vacuum resistant, as well as flexible and easy to handle.

Quality Assured

- Value through design and quality control assures you of maximum performance from Eaton products.

Water Suction and Discharge Hose Safety Information

Important!

⚠ **WARNING:** Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

⚠ **WARNING:** Failure to properly follow the manufacturer's recommended procedures for the care, maintenance, and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, or damage to property.

⚠ **WARNING:** Never use a hose to transfer material it is not specifically meant to transfer. Doing so could deteriorate the hose and result in leaking, hose bursting, or end blow-offs. This could lead to serious personal injury or death. Always transfer material in a hose that is designed specifically to transfer that material. This information is listed in this catalog.

⚠ **WARNING:** Consider both working pressure and pressure surges when determining "maximum" pressure. Failure to select a hose that meets both these requirements could lead to end blow-offs, hose leakage, and hose bursting. The result could be serious injury or death. The Eaton hose you choose must meet or exceed the required working pressure, and must have a safety factor to allow for surge pressure.

⚠ **WARNING:** Do not use hose at temperatures that exceed the hose temperature rating. Doing so could deteriorate the hose, leading to leaks, hose bursting, and end blow-offs. This could result in serious personal injury or death.

⚠ **WARNING:** Selection of the proper hose for the application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to selection of hose for the application can result in serious bodily injury or property damage. In order to avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog.

Water

Suction & Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EHW030 OTTER™ PLUS Water Suction & Discharge

Construction:

Tube: EPDM

Reinforcement: High-tensile synthetic textile with dual helical wires

Cover: EPDM

Operating Temperature:

-40°C to +120°C
(-40°F to +248°F)

Application:

- Pumping, suction, and discharge of water, mud and slurries
- Diluted agricultural fertilizers
- Convey water
- Transfer and haul salt water (brine)

Markets:

- Agriculture
- Construction
- Equipment rental
- Mining
- Ship building
- Oil and gas exploration
- Tank truck

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
EHW030-16-100	25	25,4	1.00	38,1	1.49	17,2	250	70	1000	100	3.94	94,8	28	0,88	0.59	30,5	100
EHW030-24-100	38	38,1	1.50	52,4	2.06	20,7	300	83	1200	150	5.91	94,8	28	1,54	1.04	30,5	100
EHW030-32-100	51	50,8	2.00	65,0	2.56	20,7	300	83	1200	200	7.87	94,8	28	1,98	1.33	30,5	100
EHW030-40-100	60	63,5	2.50	81,0	3.19	20,7	300	83	1200	250	9.84	94,8	28	2,98	2.00	30,5	100
EHW030-48-100	80	76,2	3.00	93,7	3.69	20,7	300	83	1200	300	11.81	94,8	28	3,63	2.44	30,5	100
EHW030-64-100	102	101,6	4.00	123,0	4.84	20,7	300	83	1200	400	15.75	94,8	28	5,49	3.69	30,5	100
EHW030-80-100	130	127,0	5.00	146,0	5.76	17,2	250	70	1000	580	22.83	94,8	28	6,32	4.25	30,5	100

H0364 OTTER™ Water Suction & Discharge

Construction:

Tube: EPDM

Reinforcement: High-tensile synthetic textile and steel helical wire

Cover: EPDM

Operating Temperature:

-40°C to +120°C
(-40°F to +248°F)

Application:

- Pumping, suction, and discharge of water, mud, and slurries
- Diluted agricultural fertilizers
- Convey water
- Transfer and haul salt water (brine)

Markets:

- Agriculture
- Construction
- Equipment rental
- Mining
- Ship building
- Oil and gas exploration
- Tank truck

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length*	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H036420-100	31	31,8	1.25	42,0	1.65	10,5	150	31,5	450	110	4.33	94,8	28	0,86	0.58	30,5	100
H036424-100	38	38,1	1.50	48,0	1.89	10,5	150	31,5	450	135	5.31	94,8	28	1,09	0.73	30,5	100
H036432-100	51	50,8	2.00	62,0	2.44	10,5	150	31,5	450	200	7.87	94,8	28	1,63	1.10	30,5	100
H036440-100	60	63,5	2.50	75,0	2.95	10,5	150	31,5	450	270	10.63	94,8	28	2,07	1.39	30,5	100
H036448-100	80	76,2	3.00	89,0	3.50	10,5	150	31,5	450	340	13.39	94,8	28	2,69	1.81	30,5	100
H036464-100	102	101,6	4.00	115,0	4.53	10,5	150	31,5	450	450	17.72	80,0	24	3,72	2.50	30,5	100
H036480-100	130	127,0	5.00	142,0	5.59	10,5	150	31,5	450	572	22.52	80,0	24	5,32	3.57	30,5	100
H036496-100	150	152,4	6.00	168,0	6.61	10,5	150	31,5	450	700	27.56	80,0	24	6,98	4.69	30,5	100
H03648A-100	200	203,2	8.00	225,0	8.86	10,5	150	31,5	450	1100	43.31	80,0	24	12,84	8.62	30,5	100

*Additional lengths available on select sizes

Water
Discharge

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

EHW029 OTTER™ Layflat Water Discharge

Construction:

Tube: EPDM

Reinforcement: High-tensile synthetic textile

Cover: EPDM

Operating Temperature:

-40°C to +120°C
(-40°F to +248°F)

Application:

- For water discharge

Markets:

- Agriculture
- Construction
- Equipment rental
- Mining
- Ship building
- Oil and gas exploration
- Tank truck

Type of Couplings:

- Shank type male x female
- Cam and groove

Contact coupling manufacturer for attachment procedure and other coupling recommendations

#		Hose I.D.		Hose O.D.		Max Oper Pressure		Burst Pressure		Weight		Length	
Part No.	DN	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
EHW029-20-100	31	31,8	1.25	38,0	1.50	10,5	150	31,5	450	0,45	0.30	30,5	100
EHW029-24-100	38	38,1	1.50	44,0	1.73	10,5	150	31,5	450	0,52	0.35	30,5	100
EHW029-32-100	51	50,8	2.00	57,0	2.24	10,5	150	31,5	450	0,73	0.49	30,5	100
EHW029-40-100	60	63,5	2.50	70,0	2.76	10,5	150	31,5	450	0,90	0.60	30,5	100
EHW029-48-100	80	76,2	3.00	83,0	3.27	10,5	150	31,5	450	1,15	0.77	30,5	100
EHW029-64-100	102	101,6	4.00	109,0	4.29	10,5	150	31,5	450	1,67	1.12	30,5	100
EHW029-80-100	130	127,0	5.00	136,0	5.35	10,5	150	31,5	450	2,51	1.69	30,5	100
EHW029-96-100	150	152,4	6.00	162,0	6.38	10,5	150	31,5	450	3,36	2.26	30,5	100
EHW029-128-100	200	203,2	8.00	216,5	8.52	10,5	150	31,5	450	5,94	3.99	30,5	100
EHW029-160-100	250	254,0	10.00	268,0	10.55	10,5	150	31,5	450	8.00	5.37	30,5	100
EHW029-192-100	305	304,8	12.00	320,0	12,60	10,5	150	31,5	450	8,70	5.84	30,5	100

H0307 and H0379 LEADER™ Water Discharge

Construction:

Tube: EPDM

Reinforcement: 2-ply, 2 or 4-spiral fiber

Cover: EPDM

Operating Temperature:

-23°C to +66°C
(-10°F to +150°F)

Application:

- For water discharge

Markets:

- Mining
- Construction
- Equipment rental
- Ship building
- Tank truck

Type of Couplings:

- Cam and groove
- Combination nipple

Contact coupling manufacturer for attachment procedure and other coupling recommendations

#		Hose I.D.		Hose O.D.		Max Oper Pressure		Burst Pressure		Weight		Length	
Part No.													
H0307	**DN**	**mm**	**in**	**mm**	**in**	**bar**	**psi**	**bar**	**psi**	**kg/m**	**lbs/ft**	**mtr**	**ft**
H030724-100	38	38,1	1.50	45,7	1.80	7,0	100	20,7	300	0,85	0.57	30,5	100
H030732-100	51	50,8	2.00	58,7	2.31	7,0	100	20,7	300	1,09	0.73	30,5	100
H030740-100	60	63,5	2.50	73,5	2.89	7,0	100	20,7	300	1,34	0.90	30,5	100
H030748-100	80	76,2	3.00	86,5	3.41	7,0	100	20,7	300	1,64	1.10	30,5	100
H030764-100	102	101,6	4.00	111,9	4.41	7,0	100	20,7	300	2,16	1.45	30,5	100
H030796	150	152,4	6.00	161,8	6.37	5,5	80	17,2	250	3,18	2.14	15,2	50
H0379													
H037924-100	38	38,1	1.50	52,4	2.06	10,5	150	31	450	0,95	0.64	30,5	100
H037932-100	51	50,8	2.00	65,1	2.56	10,5	150	31	450	1,26	0.85	30,5	100
H037940-100	60	63,5	2.50	73,9	2.91	10,5	150	31	450	1,55	1.04	30,5	100
H037948-100	80	76,2	3.00	90,5	3.56	10,5	150	31	450	1,83	1.23	30,5	100
H037964-100	102	101,6	4.00	115,9	4.56	10,5	150	31	450	2,40	1.61	30,5	100
H037980-100	130	127,0	5.00	137,5	5.41	10,5	105	31	450	3,08	2.07	30,5	100
H037996	150	152,4	6.00	163,9	6.45	10,5	150	31	450	3,79	2.55	15,2	50
H037996-100	150	152,4	6.00	163,9	6.45	10,5	150	31	450	3,79	2.55	30,5	100

Water
Specialty

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H1196 ROYALFLEX™ Water

Construction:

Tube: Thermoplastic vinyl nitrile

Reinforcement: 100% polyester and helical wire

Cover: Thermoplastic vinyl nitrile

Operating Temperature:

-29°C to +82°C
(-20°F to +180°F)

Application:

- Transfer of water, liquid diluted fertilizers and pesticides
- Pumping, suction, and discharge of water and slurries

Markets:

- Petroleum industry
- Oil and gas exploration
- Tank trucks
- Waste hauling
- Batch plants

Type of Couplings:

- Male NPT
- Cam and groove

Contact coupling manufacturer for attachment procedure and other coupling recommendations

#		Hose I.D.		Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
Part No.	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H119624	38	38,1	1.50	50,8	2.00	20,7	300	83	1200	152,4	6.00	100	30	1,19	0.81	15,2	50
H119624-100	38	38,1	1.50	50,8	2.00	20,7	300	83	1200	152,4	6.00	100	30	1,19	0.81	30,5	100
H119624-120	38	38,1	1.50	50,8	2.00	20,7	300	83	1200	152,4	6.00	100	30	1,19	0.81	36,6	120
H119632	51	50,8	2.00	63,5	2.50	20,7	300	83	1200	203,2	8.00	100	30	1,64	1.10	15,2	50
H119632-100	51	50,8	2.00	63,5	2.50	20,7	300	83	1200	203,2	8.00	100	30	1,64	1.10	30,5	100
H119632-120	51	50,8	2.00	63,5	2.50	20,7	300	83	1200	203,2	8.00	100	30	1,64	1.10	36,6	120
H119640	60	63,5	2.50	76,2	3.00	20,7	300	83	1200	254,0	10.00	100	30	1,99	1.34	15,2	50
H119640-100	60	63,5	2.50	76,2	3.00	20,7	300	83	1200	254,0	10.00	100	30	1,99	1.34	30,5	100
H119640-120	60	63,5	2.50	76,2	3.00	20,7	300	83	1200	254,0	10.00	100	30	1,99	1.34	36,0	120
H119648	80	76,2	3.00	88,9	3.50	17,2	250	70	1000	304,8	12.00	100	30	2,98	2.00	15,2	50
H119648-100	80	76,2	3.00	88,9	3.50	17,2	250	70	1000	304,8	12.00	100	30	2,98	2.00	30,5	100
H119648-120	80	76,2	3.00	88,9	3.50	17,2	250	70	1000	304,8	12.00	100	30	2,98	2.00	36,6	120
H119664	102	101,6	4.00	114,3	4.50	13,8	200	41	600	406,4	16.00	100	30	4,05	2.72	15,2	50
H119664-100	102	101,6	4.00	114,3	4.50	13,8	200	41	600	406,4	16.00	100	30	4,05	2.72	30,5	100
H119664-120	102	101,6	4.00	114,3	4.50	13,8	200	41	600	406,4	16.00	100	30	4,05	2.72	36,6	120

*Additional lengths available

EHW028 Heavy Duty MSHA Mine Spray

Construction:

Tube: Oil-mist resistant NBR blend

Reinforcement: High-tensile steel wire

Cover: MSHA pin-pricked neoprene blend

Operating Temperature:

-35°C to +100°C
(-31°F to +212°F)

Application:

- High pressure air in mines

Markets:

- Mining
- Construction
- Equipment rental

Type of Couplings:

- Male NPT
- Eaton quick disconnect

Contact coupling manufacturer for attachment procedure and other coupling recommendations

#		Hose I.D.		Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Weight		Length	
Part No.	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
EHW028-08-50	12	12,7	0.50	24,4	0.94	70,0	1000	20,7	3000	150	5.91	0,60	0.40	15,2	50
EHW028-08-100	12	12,7	0.50	24,4	0.94	70,0	1000	20,7	3000	150	5.91	0,60	0.40	30,5	100
EHW028-12-50	19	19,0	0.75	28,0	1.10	70,0	1000	20,7	3000	203	9.06	0,61	0.41	15,2	50
EHW028-12-100	19	19,0	0.75	28,0	1.10	70,0	1000	20,7	3000	203	9.06	0,61	0.41	30,5	100
EHW028-16-50	25	25,4	1.00	34,3	1.35	70,0	1000	20,7	3000	305	12.01	0,82	0.55	15,2	50
EHW028-16-100	25	25,4	1.00	34,3	1.35	70,0	1000	20,7	3000	305	12.01	0,82	0.55	30,5	100
EHW028-20-50	31	31,8	1.25	41,4	1.63	70,0	1000	20,7	3000	385	15.16	1,10	0.74	15,2	50
EHW028-20-100	31	31,8	1.25	41,4	1.63	70,0	1000	20,7	3000	385	15.16	1,10	0.74	30,5	100
EHW028-24-50	38	38,1	1.50	48,0	1.89	70,0	1000	20,7	3000	455	17.91	1,41	0.95	15,2	50
EHW028-24-100	38	38,1	1.50	48,0	1.89	70,0	1000	20,7	3000	455	17.91	1,41	0.95	30,5	100
EHW028-32-50	51	50,8	2.00	62,0	2,44	70,0	1000	20,7	3000	610	24.02	2,19	1.47	15,2	50
EHW028-32-100	51	50,8	2.00	62,0	2,44	70,0	1000	20,7	3000	610	24.02	2,19	1.47	30,5	100
EHW028-40-50	60	63,5	2.50	82,0	3,23	70,0	1000	20,7	3000	765	30.12	3,93	2.64	15,2	50
EHW028-40-100	60	63,5	2.50	82,0	3,23	70,0	1000	20,7	3000	765	30.12	3,93	2.64	30,5	100

Water
Specialty

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

H345 Pressure Washer

Construction:

Tube: Oil-resistant Nitrile (RMA Class A)

Reinforcement: 1-braid wire

Cover: Vinyl nitrile MSHA approved

Operating Temperature:

-18°C to +93°C
(0°F to +200°F)

Application:

- High pressure cleaning and degreasing
- Washdown of food processing equipment
- Pressure wash engines, equipment, tanks, building, etc.

Markets:

- Construction
- Food
- Marine
- Agriculture
- Oil exploration/drilling
- General industry
- Mining

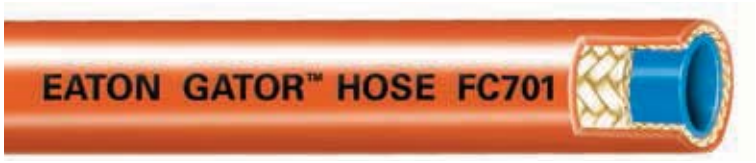
Type of Couplings:

- TTC
- "Z" series

Contact coupling manufacturer for attachment procedure and other coupling recommendations

# Part No.	Hose I.D.			Hose O.D.		Max Operating Pressure		Burst Pressure		Minimum Bend Radius		Weight		Length	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
H34504	6	6,4	0.25	12,1	0.48	207	3000	828	12000	50,8	2.00	0,19	0.13	15,2	50
H34504-100	6	6,4	0.25	12,1	0.48	207	3000	828	12000	50,8	2.00	0,19	0.13	30,5	100
H34504-250R	6	6,4	0.25	12,1	0.48	207	3000	828	12000	50,8	2.00	0,19	0.13	76,2	250
H34504-500R	6	6,4	0.25	12,1	0.48	207	3000	828	12000	50,8	2.00	0,19	0.13	152,4	500
H34506	10	9,5	0.38	16,0	0.63	207	3000	828	12000	63,5	2.50	0,31	0.21	15,2	50
H34506-100	10	9,5	0.38	16,0	0.63	207	3000	828	12000	63,5	2.50	0,31	0.21	30,5	100
H34506-250R	10	9,5	0.38	16,0	0.63	207	3000	828	12000	63,5	2.50	0,31	0.21	76,2	250
H34506-500R	10	9,5	0.38	16,0	0.63	207	3000	828	12000	63,5	2.50	0,31	0.21	152,4	500
H34508	12	12,7	0.50	20,1	0.79	207	3000	828	12000	88,9	3.50	0,46	0.31	15,2	50
H34508-100	12	12,7	0.50	20,1	0.79	207	3000	828	12000	88,9	3.50	0,46	0.31	30,5	100
H34508-250R	12	12,7	0.50	20,1	0.79	207	3000	828	12000	88,9	3.50	0,46	0.31	76,2	250
H34508-500R	12	12,7	0.50	20,1	0.79	207	3000	828	12000	88,9	3.50	0,46	0.31	152,4	500

FC701 Eaton GATOR™ Hose



Construction:

Tube: Blue elastomer tube

Reinforcement: Single braid, high strength textile

Cover: Orange ether-based polyurethane

Operating Temperature:

-40°C to +66°C
(-40°F to +150°F)

Application:

- High-pressure sewer cleaning

Agency Listing:

Meets WEMI specifications

Markets:

- Waste management

# Part No.		Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Weight		Color	Length
		DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft		
FC701-12XXX*	-12	19	19,1	0.75	29,2	1.15	172	2,500	430,9	6,250	241,3	9.50	0.40	0.27	Orange	Bulk
FC701-16XXX*	-16	25	25,7	1.01	35,8	1.41	172	2,500	430,9	6,250	304,8	12.00	0.54	0.36	Orange	Bulk
FC701-20XXX*	-20	31	32,0	1.26	45,5	1.79	172	2,500	430,9	6,250	304,8	12.00	0.86	0.58	Orange	Bulk

*Sold as assemblies only. Reference assembly part numbers below:

FC701-12 Gator Hose with FJ9372-1212S Fittings

Part Number	Reel Length ft
FB7186-0046	100
FB7186-0051	200
FB7186-0021	300
FB7186-0028	400
FB7186-0007	500
FB7186-0020	600
FB7186-0052	800
FB7186-0038	1000

FC701-16 Gator Hose with FJ9372-1616S Fittings

Part Number	Reel Length ft
FB7186-0008	100
FB7186-0026	150
FB7186-0009	200
FB7186-0016	250
FB7186-0013	300
FB7186-0004	400
FB7186-0001	500
FB7186-0002	600
FB7186-0005	700
FB7186-0006	800
FB7186-0019	900
FB7186-0018	1000
FB7186-0049	1200

FC701-20 Gator Hose with FJ9372-2020S Fittings

Part Number	Reel Length ft
FB7186-0039	100
FB7186-0040	150
FB7186-0015	200
FB7186-0022	250
FB7186-0045	300
FB7186-0011	400
FB7186-0010	500
FB7186-0012	600
FB7186-0027	700
FB7186-0044	800
FB7186-0024	1000
FB7186-0042	1200

Water

Sewer Cleaning

Refer to warnings and safety information on pages M-1 – M-15.

Use of damaged hose or improper use may result in bodily injury or property damage. Please consult Eaton catalog or Technical Support for proper application.

FC702 Eaton GATOR™ Hose

Construction:

Tube: Blue elastomer tube

Reinforcement: Single braid, high strength textile

Cover: Blue ether-based polyurethane

Operating Temperature:

-40°C to +66°C
(-40°F to +150°F)

Application:

- High-pressure sewer cleaning

Agency Listing:

Meets WEMI specifications

Markets:

- Waste management

# Part No.		Hose I.D.			Hose O.D.		Max Oper Pressure		Burst Pressure		Minimum Bend Radius		Weight		Color	Length
		DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft		
FC702-12XXX*	-12	19	19,1	0.75	30,2	1.19	207	3,000	517,1	7,500	241,3	9.50	0,43	0.29	Blue	Bulk
FC702-16XXX*	-16	25	25,7	1.01	35,8	1.41	207	3,000	517,1	7,500	304,8	12.00	0,54	0.36	Blue	Bulk

*Sold as assemblies only. Reference assembly part numbers below:

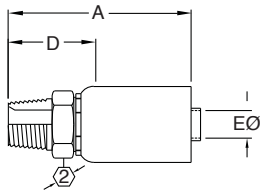
FC702-12 Gator Hose with FJ5020-1212S Fittings

Part Number	Reel Length ft
FB7187-0020	100
FB7187-0019	150
FB7187-0013	200
FB7187-0010	300
FB7187-0004	400
FB7187-0005	500
FB7187-0006	600
FB7187-0029	700
FB7187-0016	800
FB7187-0011	900
FB7187-0014	1000

FC702-16 Gator Hose with FJ9372-1616S Fittings

Part Number	Reel Length ft
FB7187-0012	50
FB7187-0008	100
FB7187-0028	150
FB7187-0009	200
FB7187-0022	250
FB7187-0007	300
FB7187-0002	400
FB7187-0001	500
FB7187-0003	600
FB7187-0015	700
FB7187-0017	800
FB7187-0018	1000

Permanent Fittings, GATOR™ Hose

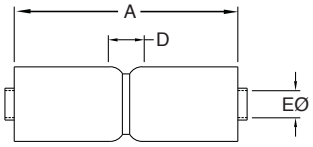


Male Pipe (Swage Only)

Fittings for use with hose: FC701, FC702

# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
FJ9372-1212S	-12	3/4- 14	19	-12	81,3	3.20	34,3	1.35	14,7	0.58	--	1.12
FJ5020-1212S*	-12	3/4 - 14	19	-12	81,3	3.20	34,3	1.35	14,7	0.58	--	1.37
FJ9372-1616S	-16	1 - 11 1/2	25	-16	94,5	3.72	40,1	1.58	19,8	0.78	--	1.37
FJ9372-2020S	-20	1 1/4 - 11 1/2	31	-20	110,5	4.35	50,5	1.99	25,9	1.02	--	1.87

*For FC702-12 hose only.



Hose Mender Fitting (Swage Only)

Fittings for use with hose: FC701, FC702

# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
FJ9373-1212S	-12	--	19	-12	85,9	3.38	9,7	0.38	14,7	0.58	--	--
FJ5021-1212S*	-12	--	19	-12	85,9	3.38	9,7	0.38	14,7	0.58	--	--
FJ7938-1616S	-16	--	25	-16	101,6	4.00	11,7	0.46	20,6	0.81	--	--
FJ9373-2020S	-20	--	31	-20	124,7	4.91	13,2	0.52	25,9	1.02	--	--

*For FC702-12 hose only.

Eaton Industrial Hose Reminder

Hose Maintenance

Hose Maintenance

Proper maintenance of the hose is essential to the safe use of the hose and related equipment. Hose should be stored in a dry place. Hose should also be visually inspected. Any hose that has a cut or gouge in the cover that exposes the reinforcement should be retired from service. Hoses should also be inspected for kinking or broken reinforcement. If the outside diameter of the hose is reduced by 20% or more, the hose should be repaired or removed from service. Inadequate attention to hose maintenance may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage for spraying fluids, flying projectiles, or other substances.

Notes

Chemical Resistance

Chemical Resistance

Charts

Fluid	Hose and Tubing Material																			Metals		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neoprene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	EVA	LLDPE	Nylon 11	PVC / PU Blends	Brass	Steel	316 Stainless
Aluminum Chloride	G	G	G	G	G	G	G	G	X	G	G	G	G	G	G	G	G	X	G	X	X	F
Aluminum Fluoride	G	G	G	G	G	F	G	G	X	G	G	G	—	G	X	G	G	X	G	X	X	X
Aluminum Hydroxide	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	G	G	G	G	X	F	G
Aluminum Nitrate	G	G	G	G	G	G	G	G	F	G	G	G	—	X	—	G	G	G	G	X	X	G
Aluminum Sulfate	G	G	G	G	G	G	G	G	F	G	G	G	G	G	G	G	G	G	G	X	X	G
Alums	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G	F	G	X	X	F
Ammonia, Anhydrous	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	F	G
Ammonia Solution (10%)	G	G	G	G	G	F	G	G	X	G	G	F	X	X	X	—	G	G	—	X	G	G
Ammonium Chloride	G	G	G	G	G	G	G	G	X	G	G	G	G	F	G	G	G	X	G	X	G	F
Ammonium Hydroxide	G	G	X	F	F	F	G	G	X	G	G	F	X	X	G	G	G	G	F	X	F	G
Ammonium Nitrate	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G	G	—	—	G
Ammonium Phosphate	G	G	F	G	G	G	G	G	G	G	G	G	G	F	G	G	G	G	G	X	X	G
Ammonium Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	X	F
Amyl Acetate	G	G	X	X	X	X	G	G	G	F	X	X	F	X	X	X	X	G	X	G	F	G
Amyl Alcohol	G	G	X	G	G	F	G	G	G	G	G	G	G	X	G	G	G	G	X	G	F	F
Aniline	G	G	X	X	X	X	G	G	X	X	X	X	X	X	X	X	X	X	X	X	G	G
Aniline Dyes	G	G	X	F	F	F	G	G	X	G	F	F	X	X	X	X	X	X	X	X	X	F
Animal Oils and Fats	G	G	G	G	G	X	G	G	—	F	F	X	G	X	F	X	X	G	X	G	G	G
Anti—Freeze (Glycol Base)	G	G	G	G	G	G	G	G	—	G	G	G	G	X	G	G	F	G	G	G	G	G
Aqua Regia	X	X	X	X	X	X	G	F	X	X	X	X	X	X	X	X	X	X	F	—	X	X
Aromatic Hydrocarbons	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	—	G*	G	—	G	G	G
Asphalt Emulsion	X	X	X	G	X	X	G	G	—	X	X	X	G	X	F	X	—	G	F	G	G	G
Barium Chloride	G	G	G	G	G	G	G	G	—	G	G	G	G	G	G	G	G	G	G	X	F	G
Barium Hydroxide	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G	G	X	G	G
Barium Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	X	G	X	G	G	G	G	G	G	G
Barium Sulfide	G	G	G	G	G	G	G	G	—	G	G	G	X	G	G	G	G	X	G	X	X	G

G - Good F - Fair X - Not Recommended — - Insufficient Information *For Intermittent Transfer Only **Use Approved Freon Hose

***Use Propane Approved Hose Only ◇Use Pinpricked Hose for Gas Applications

Chemical Resistance

Charts

Fluid	Hose and Tubing Material																			Metals		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neoprene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	EVA	LLDPE	Nylon 11	PVC / PU Blends	Brass	Steel	316 Stainless
Beet Sugar Liquors	G	G	G	G	G	G	G	G	G	X	G	G	—	X	G	G	G	G	—	X	G	G
Benzaldehyde	G	G	X	X	X	X	G	G	G	F	X	X	X	X	X	X	X	G	X	F	F	G
Benzene, Benzol	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	F	X	X	G	F	G	G	G
Benzoic Acid	G	G	X	X	X	G	G	G	X	X	X	X	X	X	G	G	G	X	G	F	X	F
Black Sulfate Liquor	G	F	X	F	F	G	G	G	X	G	F	X	G	X	X	G	G	X	G	X	G	G
Bleach Solution	F	F	F	X	X	X	G	G	X	G	F	X	F	F	G	G*	G	X	G	X	X	G
Borax Solution	G	G	G	F	F	G	G	G	—	G	G	G	G	G	G	G	G	G	G	G	G	G
Boric Acid	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G	X	X	G
Brake Fluid (Glycol Ether Base)	G	G	X	X	X	F	G	G	—	G	X	X	—	X	G	—	X	G	X	G	G	G
Brine	G	G	G	G	G	G	G	G	—	G	G	G	G	X	G	G	G	G	G	—	X	F
Bromine	X	X	X	X	X	X	G	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Butyl Acetate	G	G	X	X	X	X	G	G	—	F	X	X	F	X	F	—	X	G	X	G	G	G
Butyl Alcohol, Butanol	G	G	X	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G	F	G	G	G
Calcium Bisulfite	G	G	G	G	G	G	G	G	X	G	G	G	X	G	X	G	G	G	G	X	X	X
Calcium Chloride	G	G	G	G	G	G	G	G	X	G	G	G	G	G	G	G	G	G	G	X	F	F
Calcium Hydroxide	G	G	G	F	F	G	G	G	G	G	F	G	G	X	G	G	G	G	G	F	G	G
Calcium Hypochlorite	G	G	G	F	F	F	G	G	X	G	F	X	F	X	G	G	G	X	G	F	X	F
Cane Sugar Liquors	G	G	G	G	G	G	G	G	—	G	G	G	G	X	G	G	G	G	—	F	G	G
Carbon Dioxide (Dry)	G	G	G	G	G	G	G	G	G	G	G	F	G	G	G	G	G	G	G	G	G	G
Carbon Dioxide (Wet)	G	G	G	G	G	G	G	G	G	G	G	F	—	G	—	G	G	G	G	F	G	G
Carbon Disulfide (Bisulfide)	F	X	X	X	X	X	G	G	X	X	X	X	X	G	X	—	X	X	—	G	G	G
Carbon Monoxide (Hot)	—	—	X	F	F	F	G	G	X	F	G	X	G	F	G	G	X	X	G	X	F	G
Carbon Tetrachloride	G*	G*	X	X	X	X	G	G	G	X	X	X	F	X	X	—	X	G	X	G	G	G
Carbonic Acid	G	G	G	G	G	G	G	G	—	G	G	G	X	G	X	G	G	G	G	X	X	F
Castor Oil	G	G	G	G	G	F	G	G	—	F	G	X	F	F	G	X	X	G	G	G	G	G
Cellosolve Acetate	G	G	X	X	X	X	G	G	—	F	F	X	X	X	X	X	—	G	G	X	X	G
Chlorinated Solvents	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	—	X	F	X	G	G	F

G - Good F - Fair X - Not Recommended — - Insufficient Information *For Intermittent Transfer Only **Use Approved Freon Hose

***Use Propane Approved Hose Only ◇ Use Pinpricked Hose for Gas Applications

Chemical Resistance

Charts

Fluid	Hose and Tubing Material																			Metals		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neoprene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	EVA	LLDPE	Nylon 11	PVC / PU Blends	Brass	Steel	316 Stainless
Chloroacetic Acid	G	G	X	X	X	X	G	G	X	F	X	X	X	X	X	X	X	X	F	X	X	F
Chloro-benzene	G*	G*	X	X	X	X	G	G	X	X	X	X	X	X	—	X	X	X	X	F	F	G
Chlorine Gas (Dry)	X	X	X	X	X	X	G	X	X	X	X	X	X	X	X	X	X	X	G	F	F	G
Chlorine Gas (Wet)	X	X	X	X	X	X	G	X	X	X	X	X	X	X	X	X	X	X	F	X	X	X
Chloroform	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	X	X	F	U	G	G	G
Chlorosul-fonic Acid	F*	F*	X	X	X	X	G	G	X	X	X	X	X	X	X	X	X	X	X	X	F	X
Chromic Acid (under 25%	G	X	F	X	X	X	G	G	X	G	G	X	X	X	X	G	F	X	G	X	X	G
Chromic Acid (25-40%)	G	X	X	X	X	X	G	G	X	G	G	X	X	X	X	F	X	X	F	X	X	F
Citric Acid	G	G	G	F	F	G	G	G	F	G	G	G	G	X	X	G	G	X	G	X	X	G
Coke Oven Gas	X	X	X	X	X	X	G	G	—	X	X	X	—	X	X	—	G	—	G	F	G	G
Copper Chloride	G	G	G	G	G	F	G	G	X	G	G	G	G	G	X	G	G	X	G	X	X	G
Copper Cyanide	G	G	G	G	G	F	G	G	G	G	G	G	—	G	—	G	G	G	G	X	X	G
Copper Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	X	G
Corn Syrup (Non-food)	G	G	G	G	G	F	G	G	—	G	F	F	G	G	—	G	G	G	G	—	G	G
Cottonseed Oil	G	G	F	G	G	X	G	G	—	F	F	X	G	G	G	G	G	G	G	G	G	G
Creosote	G	G	X	F	F	X	G	G	X	X	F	X	X	F	F	X	X	X	X	F	—	G
Cresol	G	G	X	X	X	X	G	G	X	X	X	X	X	X	G	X	X	X	—	—	G	G
Cyclohexanol	G	G	X	F	F	F	G	G	G	G	G	F	—	—	G	G	F	G	X	G	F	G
Dextrose (Food Grade)	G	X	X	X	X	X	G	G	X	X	X	X	X	X	X	G	G	X	—	—	—	G
Dichloro-benzene	G*	G*	X	X	X	X	G	G	—	X	X	X	X	X	X	X	X	G	X	—	—	G
Diesel Fuel	G	G	X	G	G	X	G	G	—	X	F	X	F	F	G	—	X	G	—	G	G	G
Diethanol-amine	G	G	X	F	X	X	G	G	—	G	X	F	X	X	—	—	—	G	—	X	G	G
Diethylene-triamine	G	G	X	F	X	X	G	G	X	G	X	F	—	X	—	—	G	X	—	—	—	—
Dowtherm A	—	—	X	X	X	X	G	G	X	X	X	X	X	—	X	X	X	X	X	X	F	G
Enamel (Solvent Base)	G	G	X	F	F	X	G	G	—	X	X	X	G	—	G	—	G	G	—	G	—	G
Ethanolamine	G	G	X	F	F	X	G	G	—	G	X	G	—	X	—	—	G	G	—	X	G	G
Ethers (Ethyl Ether)	G	G	X	X	X	X	G	G	—	X	X	X	X	X	G	X	X	G	X	G	G	G
Ethyl Alcohol	G	G	F	G	G	G	G	G	G	G	G	G	G	G	G	F	G	G	G	F	G	G

G - Good F - Fair X - Not Recommended — - Insufficient Information *For Intermittent Transfer Only **Use Approved Freon Hose

***Use Propane Approved Hose Only ◇Use Pinpricked Hose for Gas Applications

Chemical Resistance

Charts

Fluid	Hose and Tubing Material																			Metals		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neoprene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	EVA	LLDPE	Nylon 11	PVC / PU Blends	Brass	Steel	316 Stainless
Ethyl Acetate	G	G	X	X	X	X	G	G	G	G	X	X	F	X	F	F	G	G	X	G	G	G
Ethyl Acrylate	G	G	X	X	X	X	G	G	—	F	X	X	—	X	F	—	—	X	X	—	G	G
Ethyl Methacrylate	G	G	X	X	X	X	G	G	—	F	X	X	—	X	F	—	—	X	—	—	G	G
Ethylamine	G	G	X	X	X	X	G	G	X	F	X	X	—	X	—	—	G	X	—	G	—	G
Ethyl Cellulose	G	G	X	F	F	F	G	G	—	F	F	G	—	F	G	—	G	F	—	F	G	F
Ethyl Chloride	G*	G*	X	X	X	X	G	G	—	X	X	X	X	F	X	X	X	G	X	F	F	G
Ethylene-diamine	G	G	X	F	X	G	G	G	X	G	F	G	—	X	—	—	G	X	—	G	G	G
Ethylene Dibromide	G	G	X	X	X	X	G	G	—	X	X	X	—	X	—	—	—	F	—	—	—	—
Ethylene Dichloride	G*	G*	X	X	X	X	G	G	—	X	X	X	X	X	X	X	X	F	X	G	X	X
Ethylene Glycol	G	G	G	G	G	G	G	G	G	G	G	G	G	F	G	G	G	G	G	F	G	G
Ethylene Oxide	G	G	X	X	X	X	G	G	—	X	X	X	G	X	X	X	X	G	X	X	F	F
Fatty Acids	G	G	G	F	F	X	G	G	G	F	X	X	G	—	F	F	G	G	G	F	F	G
Ferric Chloride 5%	G	G	G	G	G	G	G	G	G	G	G	G	—	F	G	G	G	G	G	X	X	X
Ferric Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	G	G	G	X	X	F
Fertilizer Salts Solution	G	G	G	F	F	F	G	G	—	G	G	G	—	—	—	—	F	G	—	—	—	G
Formaldehyde	G	G	X	F	F	F	G	G	G	G	X	F	F	X	G	G	G	X	G	F	X	G
Formic Acid	G	G	X	F	F	F	G	G	X	G	X	X	X	X	G	G	G	X	—	F	X	G
Freon 12**	—	—	—	—	—	—	G	—	—	—	—	—	—	—	—	—	—	—	—	G	G	G
Freon 134a**	—	—	—	—	—	—	G	—	—	—	—	—	—	—	—	—	—	—	—	—	G	G
Fuel Oil	G	G	F	G	G	F	G	G	—	X	X	X	—	F	G	X	X	G	G	F	G	G
Furfural	G	G	X	X	X	X	G	G	X	F	F	X	—	—	F	X	X	X	X	F	G	G
Gasoline (Refined)	G	G	X	F	F	X	G	G	G	X	X	X	G	F	G	—	X	G	X	G	G	G
Gasoline (Unleaded)	G	G	X	G	G	X	G	G	G	X	F	X	X	X	G	—	X	G	F	G	G	G
Gasoline (10% Ethanol)	G	G	X	G	G	X	G	G	G	X	X	X	X	X	—	—	X	G	F	G	G	G
Gasoline (10% Methanol)	G	G	X	F	F	X	G	G	G	X	X	X	X	X	—	—	X	G	F	G	G	G
Glucose (Non-food)	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Glycerine, Glycerol (Non-food)	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G	G	G	G	G
Greases	G	G	G	G	G	F	G	G	G	X	F	X	G	G	G	—	G	G	G	G	G	G
Green Sulfate Liquor	G	G	G	F	F	F	G	G	X	G	G	G	X	G	X	G	G	X	F	X	X	G
Heptane	G	G	X	G	G	F	G	G	G	X	F	X	G	F	G	X	X	G	G	G	G	G

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Chemical Resistance

Charts

Fluid	Hose and Tubing Material																			Metals		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neoprene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	EVA	LLDPE	Nylon 11	PVC / PU Blends	Brass	Steel	316 Stainless
Hexane	G	G	X	G	G	F	G	G	G	X	F	X	G	F	G	X	X	G	X	G	G	G
Houghto Safe 273 to 640	G	G	F	G	G	G	G	G	—	G	—	F	—	X	G	—	G	G	—	G	G	G
Houghto Safe 5046, 5047F	G	G	G	G	G	G	G	G	—	X	X	X	G	X	G	—	G	G	—	G	G	G
Houghto Safe 1000 Series	G	G	X	X	X	X	G	G	—	G	X	X	—	X	—	—	X	G	—	G	G	G
Hydraulic Oils:																						
Straight Petroleum Base	G	G	G	G	G	F	G	G	G	X	F	X	G	G	G	F	G	G	G	G	G	G
Water Petroleum Emulsion	G	G	—	G	G	F	G	G	—	X	F	X	G	X	G	—	F	G	—	G	G	G
Water Glycol	G	G	X	G	G	G	G	G	G	G	X	F	X	X	G	—	—	G	—	G	G	G
Hydraulic Oils:																						
Straight Phosphate Ester	G	G	X	X	X	X	G	G	G	G	X	X	—	X	G	—	X	G	—	G	G	G
Phos. Ester/ Petroleum Blend	G	G	X	X	X	X	G	G	G	X	X	X	—	X	G	—	X	G	—	G	G	G
Polyol Ester	G	G	—	G	G	X	G	G	—	X	—	X	—	G	G	—	—	G	—	G	G	G
Hydrobromic Acid (under 48%)	G	G	G	X	X	X	G	G	X	G	G	X	X	X	G	G	G	X	G	X	X	X
Hydrochloric Acid	G	G	G	X	X	X	G	G	X	G	G	X	X	X	G	G	G	X	G	X	X	X
Hydrocyanic Acid	G	G	G	F	F	X	G	G	X	F	G	X	X	—	X	G	G	X	F	X	F	G
Hydrofluoric Acid (under 50%)	G	G	F	X	X	X	G	G	X	F	G	X	X	X	X	G	F	X	G	X	X	G
Hydrofluoric Acid (over 50%)	G	G	X	X	X	X	G	G	X	X	G	X	X	X	X	G	X	X	G	X	X	G
Hydrofluosilicic Acid	G	G	G	F	F	X	G	G	X	G	G	X	—	—	G	—	G	X	—	X	X	X
Hydrogen	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	F	—	—	F	—	—	G
Hydrogen Peroxide	F	F	—	X	X	X	G	G	X	F	X	X	—	—	G	X	G	X	F	X	X	G
Hydrogen Sulfide	G	G	G	X	X	X	G	G	X	X	F	X	G	—	X	G	G	X	G	F	F	F
Hydrolube	G	G	G	G	G	F	G	G	—	G	—	—	F	X	—	—	G	G	—	G	G	G
Iodine	F	F	X	F	X	X	G	G	X	G	G	X	—	X	G	X	X	X	X	X	X	X
Isocyanates	G	X	X	X	X	X	G	—	X	X	X	X	X	X	X	—	X	X	—	—	—	—
Isopropyl Alcohol, Isopropanol	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	—	G	G	G	G	G	G
Isopropylamine	G	G	X	X	X	F	G	G	—	F	X	F	—	—	—	—	—	X	—	G	—	G
Iso-Octane	G	G	X	G	G	F	G	G	G	X	F	X	G	X	G	—	X	G	X	G	G	G
Jet Fuel (Transfer Only)	G	G	X	G	G	F	G	G	G	X	X	X	G	F	G	—	X	G	X	G	F	G

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Chemical Resistance

Charts

Fluid	Hose and Tubing Material																			Metals		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neoprene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	EVA	LLDPE	Nylon 11	PVC / PU Blends	Brass	Steel	316 Stainless
Kerosene	G	G	X	G	G	F	G	G	G	X	F	X	F	G	G	X	X	G	X	G	G	G
Lacquer	G	G	X	X	X	X	G	G	G	X	X	X	X	X	F	X	F	G	X	G	X	G
Lacquer Solvents	G	G	X	X	X	X	G	G	G	X	X	X	F	X	F	X	F	G	X	G	X	G
Lactic Acid	G	G	G	X	X	G	G	G	G	F	G	X	X	X	X	G	G	G	G	F	F	G
Lime Sulfur	G	G	G	X	X	G	G	G	F	G	F	F	—	—	—	G	G	G	G	X	—	G
Lindol	G	G	—	X	X	X	G	G	G	G	X	X	—	X	—	—	—	G	X	F	G	G
Linseed Oil	G	G	G	G	G	X	G	G	G	X	F	X	F	F	G	X	G	G	G	F	G	G
Lubricating Oils	G	G	G	G	G	F	G	G	G	X	F	X	G	F	G	X	G	G	G	G	G	G
Lye	G	G	G	F	F	G	G	G	F	G	G	G	—	X	F	—	G	G	—	F	X	G
Magnesium Chloride	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	G	G	G	G	F	F	G
Magnesium Hydroxide	G	G	G	F	F	G	G	G	G	G	F	G	—	X	G	G	G	G	G	G	G	G
Magnesium Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	—	—	G	G	G	G	G	F	G	G
Mercuric Chloride	G	G	F	F	F	G	G	G	X	G	G	F	—	—	X	G	G	X	G	X	X	X
Mercury	G	G	F	G	G	G	G	G	G	G	G	F	G	G	G	G	G	G	G	X	G	G
Methyl Alc., Methanol	G	G	X	G	G	G	G	G	G	G	G	G	G	F	G	G	G	G	X	F	G	G
Methyl Acrylate	G	G	X	X	X	X	G	G	X	F	X	X	—	X	X	—	—	X	—	G	G	G
Methyl Bromide	X	X	X	X	X	X	G	G	F	X	X	X	X	X	X	X	X	G	X	G	G	G
Methyl Chloride	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	F	X	X	G	X	G	G	G
Methylene Chloride	G*	G*	X	X	X	X	G	G	F	X	X	X	X	X	X	X	X	F	X	G	G	G
Methyl-t-Butyl Ether (MTBE)	G	G	X	F	F	X	G	G	G	X	X	X	—	—	G	—	—	G	—	—	G	G
Methyl Ethyl Ketone	G	G	X	X	X	X	G	G	G	F	X	X	G	X	X	X	G	G	X	G	G	G
Methyl Iso-butyl Ketone	G	G	X	X	X	X	G	G	G	F	X	X	—	X	X	X	G	G	X	G	G	G
Methyl Iso-propyl Ketone	G	G	X	X	X	X	G	G	G	F	X	X	—	X	X	—	G	G	X	G	G	G
Methyl Methacrylate	G	G	X	X	X	X	G	G	—	X	X	X	—	X	X	—	—	G	—	—	G	G
Mineral Oil	G	G	F	G	G	F	G	G	G	X	F	X	G	G	G	X	X	G	G	G	G	G
Mineral Spirits	G	G	X	G	G	F	G	G	G	X	X	X	G	F	G	—	G	G	—	G	G	G
Naphtha	G	G	X	F	F	F	G	G	G	X	X	X	G	F	G	X	G	G	X	F	G	G
Napthalene	G	G	X	X	X	X	G	G	G	X	X	X	F	F	G	X	X	G	X	F	G	G

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Chemical Resistance

Charts

Fluid	Hose and Tubing Material																			Metals		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neoprene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	EVA	LLDPE	Nylon 11	PVC / PU Blends	Brass	Steel	316 Stainless
Nickel Acetate	G	G	G	X	X	G	G	G	G	G	G	G	—	X	—	G	G	G	G	G	G	G
Nickel Chloride	G	G	G	G	G	F	G	G	G	G	G	G	X	X	G	G	G	G	G	X	X	F
Nickel Sulfate	G	G	G	G	G	F	G	G	G	G	G	G	—	F	G	G	G	G	G	X	X	G
Nitric Acid (under 35%)	G	F*	G	X	X	X	G	G	X	F	F	X	X	X	X	G	F*	X	G	X	X	G
Nitric Acid (35% to 60%)	F	X	F	X	X	X	G	G	X	X	X	X	X	X	X	X	X	X	G	X	X	G
Nitric Acid (over 60%)	X	X	X	X	X	X	G	G	X	X	X	X	X	X	X	X	X	X	G	X	X	G
Nitrobenzene	G	G	X	X	X	X	G	G	—	X	X	X	X	X	X	X	X	X	X	F	G	G
Nitrogen Gas ◇	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	—	G	G	—	G	G	G
Nitrous Oxide	G	G	X	X	X	X	G	G	F	X	X	G	X	X	X	—	X	F	G	G	G	G
Oleic Acid	G	G	F	F	F	X	G	G	G	F	F	X	G	F	G	X	G	G	G	F	F	G
Oleum (Fuming Sulfuric Acid)	X	X	X	X	X	X	G	G	X	X	X	X	X	X	X	X	X	X	X	X	F	G
Oxalic Acid	G	G	G	X	X	X	G	G	X	G	X	X	X	—	G	G	G	X	G	F	X	G
Oxygen (non-breathing, non-welding) ◇	G	G	G	F	F	G	G	G	G	G	G	F	G	G	G	G	G	G	G	G	G	G
Ozone (300 pphm)	F	F	X	X	X	X	G	G	X	G	G	X	X	G	G	X	X	X	X	—	F	G
Paint (Solvent Base)	G	G	X	F	F	X	G	G	G	X	X	X	—	X	—	—	F	G	—	G	G	G
Palmitic Acid	G	G	F	F	F	F	G	G	G	F	X	X	G	X	G	F	G	G	F	X	F	F
Paper Mill Liquors	G	G	X	F	F	F	G	G	X	G	F	F	X	X	—	—	X	X	—	—	—	—
Pentane	G	G	X	G	G	F	G	G	—	X	F	X	G	X	G	—	X	G	X	G	G	G
Perchloro-ethylene	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	—	F	X	F	F	G	G
Petroleum Ether	G	G	X	G	F	X	G	G	G	X	X	X	—	G	G	X	X	G	F	G	G	G
Petroleum Oils	G	G	G	G	G	F	G	G	G	X	F	X	G	G	G	—	G	G	—	G	G	G
Phenol	G	G	X	X	X	X	G	G	X	X	X	X	X	—	G	X	X	X	X	F	X	F
Phosphoric Acid (to 85%)	G	G	G	X	X	F	G	G	X	G	G	F	X	X	X	G	G	X	G	X	X	F
Picric Acid (Molten)	X	X	X	X	X	X	G	G	X	X	F	X	X	X	X	G	X	X	X	X	X	F
Picric Acid (Solution)	G	G	X	F	F	X	G	G	X	F	G	X	X	F	X	G	X	X	X	X	X	F
Potassium Chloride	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	G	G	G	G	F	X	G

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Fluid	Hose and Tubing Material																			Metals		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neoprene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	EVA	LLDPE	Nylon 11	PVC / PU Blends	Brass	Steel	316 Stainless
Potassium Cyanide	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	G	G	F	X	G	G
Potassium Dichromate	G	G	G	X	X	X	G	G	—	G	X	X	—	G	G	G	G	F	G	X	G	G
Potassium Hydroxide	G	G	G	F	F	F	G	G	F	G	G	G	F	X	G	G	G	G	G	F	X	G
Potassium Permanganate	G	G	G	X	X	X	G	G	X	G	G	G	X	X	—	X	G	X	G	—	—	—
Potassium Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	G	G	G	G	F	F	G
Propane Liquid***	—	—	—	G	—	—	—	G	—	—	—	—	—	—	—	X	—	—	—	G	G	G
Propylene Glycol	G	G	F	G	F	G	G	G	—	G	G	G	G	—	G	G	G	G	—	F	G	G
Pyridine	G	G	X	X	X	X	G	G	X	F	X	X	X	X	X	—	G	X	—	F	G	G
Sea Water	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G	G	G	F	G
Silver Nitrate	G	G	G	G	G	G	G	G	G	G	G	G	—	G	—	G	G	G	G	X	X	F
Skydrol	G	G	X	X	X	X	G	G	G	G	X	X	—	X	G	—	X	G	—	G	G	G
Soap Solution	G	G	G	G	G	F	G	G	G	G	G	X	G	G	G	G	X	G	G	G	G	G
Sodium Bicarbonate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	F	G
Sodium Bisulfate	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G	G	G	G	G	F	F	F
Sodium Bisulfite	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	X	G
Sodium Borate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	—	—	G	G	—	G	G	G
Sodium Carbonate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	G	G
Sodium Chloride	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	F	G
Sodium Cyanide	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	F	G
Sodium Hydroxide	G	G	G	F	F	G	G	G	F	G	G	G	—	X	F	G	G	G	F	F	X	G
Sodium Hypochlorite	G	G	G	X	X	X	G	G	X	G	G	X	G	X	F	G	G	X	G	X	X	F
Sodium Nitrate	G	G	G	G	G	F	G	G	G	G	G	G	G	F	G	G	G	G	G	F	G	G
Sodium Perborate	G	G	G	G	G	X	G	G	F	G	X	G	G	X	X	—	G	G	—	F	F	G
Sodium Peroxide	G	G	X	F	F	F	G	G	X	G	F	X	G	X	X	—	X	G	—	X	F	G
Sodium Phosphates	G	G	G	G	G	F	G	G	G	G	G	G	G	G	X	G	G	G	G	F	F	F
Sodium Silicate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	F	G

G - Good F - Fair X - Not Recommended — - Insufficient Information *For Intermittent Transfer Only **Use Approved Freon Hose

***Use Propane Approved Hose Only ◇Use Pinpricked Hose for Gas Applications

Chemical Resistance

Charts

Fluid	Hose and Tubing Material																			Metals		
	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neoprene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	EVA	LLDPE	Nylon 11	PVC / PU Blends	Brass	Steel	316 Stainless
Sodium Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	F	G
Sodium Sulfide	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	X	X	G
Sodium Thiosulfate	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G	G	G	G	G	X	X	G
Soybean Oil	G	G	F	G	G	F	G	G	—	F	G	X	G	G	G	—	G	G	—	G	G	G
Stannic Chloride	G	G	G	G	G	X	G	G	X	G	G	G	G	G	G	G	G	F	G	X	X	X
Steam 450°F	X	X	X	X	X	X	G	G	X	G	X	X	X	X	X	—	X	X	—	F	F	G
Stearic Acid	G	G	F	F	F	F	G	G	G	F	F	X	G	G	G	G	G	G	F	X	X	G
Stoddard Solvent	G	G	X	G	G	F	G	G	G	X	X	X	G	G	G	X	X	G	G	G	G	G
Styrene	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	—	X	G	X	G	G	G
Sulfur 70°F	G	G	F	X	X	G	G	G	G	G	G	X	G	F	G	G	G	G	G	X	X	G
Sulfur 200°F	X	X	X	X	X	X	G	G	X	X	G	X	X	X	X	—	X	X	—	X	X	G
Sulfur Chloride	G	G	X	X	X	X	G	G	X	X	F	X	X	X	G	—	G	X	—	X	X	X
Sulfur Dioxide	X	X	X	X	X	X	G	G	X	G	X	X	X	X	X	X	X	X	F	X	—	G
Sulfuric Acid (under 50%)	G	G	G	X	X	X	G	G	X	G	G	X	X	X	X	G	G	X	G	X	X	X
Sulfuric Acid (51% to 70%)	G	G	G	X	X	X	G	G	X	F	G	X	X	X	X	X	X	X	F	X	X	X
Sulfuric Acid (71% to 95%)	G	F	X	X	X	X	G	G	X	F	F	X	X	X	X	X	X	X	G	X	X	X
Sulfuric Acid (96% to 98%)	G	X	X	X	X	X	G	G	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Tannic Acid	G	G	G	F	F	F	G	G	X	G	G	G	G	G	G	G	G	X	G	F	X	G
Tar	X	X	X	F	F	F	G	G	G	X	X	X	G	F	F	—	X	X	—	F	F	G
Tartaric Acid	G	G	G	G	G	F	G	G	G	G	G	G	—	G	G	G	G	G	G	F	X	F
Tetrachloro-ethane	G*	G*	X	X	X	X	G	G	—	X	X	X	X	X	X	—	F	F	X	—	—	G
Tetrahydro-furan (THF)	G	G	X	X	X	X	G	G	—	X	X	X	—	X	—	X	X	G	X	—	—	G
Toluene	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	X	G*	G	X	G	G	G
Transmission Oil (Petrol. Base)	G	G	G	G	G	F	G	G	G	X	F	X	G	G	G	X	G	G	—	G	G	G
Trichloro-ethane	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	—	G*	F	—	G	G	G
Trichloro-ethylene	G*	G*	X	X	X	X	G	G	G	X	X	X	X	X	X	X	G*	F	—	G	G	G
Tung Oil	G	G	—	G	G	F	G	G	—	X	F	X	G	F	X	—	—	G	—	F	G	G
Turpentine	G	G	X	F	F	X	G	G	G	X	X	X	F	X	F	X	G	G	G	F	G	G
Urea (Water Solution)	G	G	G	X	X	G	G	G	G	G	G	G	G	G	G	G	G	G	G	—	G	G

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***Use Propane Approved Hose Only ◇Use Pinpricked Hose for Gas Applications

Chemical Resistance

Charts

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	UHMW	XLPE	PVC	Nitrile	Vinyl Nitrile	Neoprene	Teflon (PTFE)	Teflon (FEP)	Nylon 6/66	EPDM	Hypalon	Natural Rubber/SBR	Hytrel	Polyurethane	CPE	EVA	LLDPE	Nylon 11	PVC / PU Blends	Brass	Steel	316 Stainless
Uric Acid	G	G	G	—	—	—	G	G	G	—	—	—	X	X	—	G	G	G	G	—	—	F
Varnish	G	G	X	X	X	X	G	G	G	X	X	X	—	X	F	X	G	G	X	G	G	G
Vegetable Oil (Non-food)	G	G	F	G	G	X	G	G	G	X	G	X	—	G	—	X	G	G	G	G	G	G
Vinegar	G	G	G	F	F	G	G	G	X	G	G	F	—	X	F	G	G	G	—	X	F	G
Vinyl Acetate	G	G	X	X	X	X	G	G	—	F	X	X	—	X	—	X	—	G	X	F	G	G
Water (non-potable)	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	F	F	G
Water— Glycol Mixture	G	G	X	G	G	G	G	G	G	G	X	F	X	X	G	G	—	G	G	G	G	G
Water— Petroleum Mixture	G	G	—	G	G	F	G	G	G	X	F	X	G	X	G	G	F	G	G	G	G	G
Xylene	G*	G*	X	X	X	X	G	G	G	X	X	X	F	X	X	X	G*	G	X	G	G	G
Zinc Chloride	G	G	G	G	G	G	G	G	X	G	G	G	X	G	X	G	G	X	G	X	X	X
Zinc Sulfate	G	G	G	G	G	G	G	G	G	G	G	G	—	G	X	G	G	G	G	X	X	G

G - Good F - Fair X - Not Recommended — - Insufficient Information *For Intermittent Transfer Only **Use Approved Freon Hose

***Use Propane Approved Hose Only ◇Use Pinpricked Hose for Gas Applications

Eaton Industrial Hose Reminder
Proper Hose Storage

Proper Storage of Hose Product

Proper storage conditions can enhance and extend substantially the ultimate life of hose product. Rubber hose products in storage can be affected adversely by temperature, humidity, ozone, sunlight, oils, solvents, corrosive liquids and fumes, insects, rodents and radioactive materials. The appropriate method of storing hose depends to a great extent on its size (diameter and length), and the way in which it is packaged. Hose should not be piled or stacked to such an extent that the weight of the stack creates distortions on the bottom. Since hose products vary considerably in size, weight and length, it is not practical to establish definite recommendations on this point. Hose having a very light wall will not support as much load as would a hose having a wire reinforcement. Hose which is shipped in coils or bales should be stored so that the coils are in a horizontal plane.

Notes

General Hose Information

General Hose Information

Hose Construction

Hose Construction

A hose consists of three components including the tube, reinforcement, and cover. Each component serves an important function in contributing to the overall performance of the hose.

Components of a hose:

Tube functions:

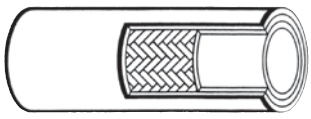
- Conveys media
- Temperature resistant
- Protects reinforcement and cover
- Dissipates static electricity

Reinforcement functions:

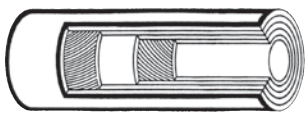
- Supports pressure/ vacuum
- Supports tube
- Controls elongation/ shrinking of hose OD/ID
- Helps fitting retention

Reinforcement types:

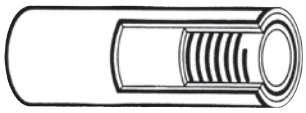
1) Braid - carbon steel or fiber
2) Spiral - carbon steel or fiber
3) Helical - carbon steel



Braid reinforcement



Spiral reinforcement



Helical reinforcement

Cover functions:

- Protects reinforcement from external environment
- Provides weather, abrasion, chemical, temperature, and ozone resistance

Hose Selection

Selecting the proper hose for an application is critical to ensure safety of people and property, as well as long hose life. Therefore, it is important to understand the factors involved.

Factors include:

- Application
- Pressure and/or suction
- Environment
- Compatibility with material conveyed
- Temperature
- Size
- Flexibility
- Bend radius
- Weight

Application

The first step in properly selecting a hose is to identify the application and material to be transferred. Then consider the hoses available for that type of service. Eaton Industrial hose is intended for specific applications and materials.

WARNING Hose use and care: Never use a hose to transfer material it is not specifically meant to transfer. Doing so could deteriorate the hose and result in leaking, hose bursting, or end blow-offs. This could lead to serious personal injury or death. Always transfer material in a hose that is designed specifically to transfer that material.

A special application consideration, especially in gases, petroleum-based liquids, volatile solvents, and dry material transfer applications, is whether the velocity of the material being transferred will cause static buildup. This, in turn, can cause an explosion.

According to ARPM Hose Handbook 8th edition 2009:

Electrical engineers differ in opinion on the effects of static electricity and the means of dissipating it. In handling gasoline and other petroleum-based liquids, recognized national associations and companies have conflicting opinions on the need for conductive hoses.

Until a consensus is reached among all associations, laboratories and users and a standard practice is established, it is essential that the user determine the need for a static bonded hose based on (a) the intended use of the hose, (b) instructions from the company's Safety Division, (c) the ensurer, and (d) the laws of the states in which the hose will be used.

Some types of hose include a body reinforcing wire. This wire can be used for electrical continuity provided that proper contact is made between it and the hose coupling. This can be done by extending the body wire to the ends of the hose, or by attaching a light static wire to the outermost coils of the body wire. This lighter wire is led through the ends of the hose and attached to the couplings. In nonwire reinforced hose, a static wire can be included in the hose body.

The tendency has been toward a grounding connection completely separate from the hose or to have the tube or cover of the hose conducting. Examples would be sand blast hose with conducting tube or aircraft fueling hose with a conducting cover.

An internal static wire could break or lose contact with the couplings and not be detected visually. This could occur from an unusual stress imposed on the hose.

Finally, be aware that many industries have governing agencies that issue mandatory or suggested guidelines for the use of hose in certain applications.

General Hose Information

Hose Construction

Pressure & Suction

The selected hose and coupling must be able to continually withstand the maximum pressure that will be generated in the application.

WARNING Hose use and care: Consider both working pressure and pressure surges when determining "maximum" pressure. Failure to select a hose that meets both these requirements could lead to end blow-offs, hose leakage, and hose bursting. The result could be serious injury or death. The Eaton Industrial hose you choose must meet or exceed the required working pressure, and must have a safety factor to allow for surge pressure.

It may be reassuring to know that every length of Eaton Industrial chemical transfer hose is pressure tested to 1-1/2 times the working pressure before it is packaged and shipped.

CAUTION In suction applications, suction (or vacuum) considerations are as critical to hose life as pressure considerations. Hoses in these applications are vulnerable to crushing forces because the atmospheric pressure outside the hose is greater than the pressure inside the hose. A hose not having the proper suction rating for your applications may collapse and result in equipment failure.

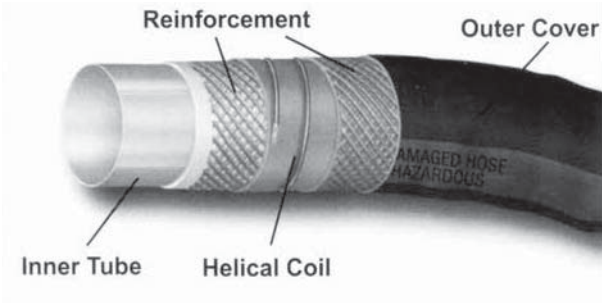
Eaton Industrial suction hoses have helical wire reinforcement and are rated for full vacuum. "Inches of mercury" is the standard of measurement for vacuum. Full vacuum is equal to 29.92 inches of mercury.

Environment & Compatibility

Environment refers to both the external environment and the internal environment in which the hose will be working. Different components of the hose will be affected by these two types of environment.

Most hoses consist of three components: an inner tube, a reinforcement, and an outer cover.

Elastomers are the basic ingredient of all rubber compounds. However, be aware that when specifying tube and cover compounds, significant application differences may exist between two compounds listed as having the same basic elastomer.



For example, Eaton Industrial's Tiger and Otter hoses list inner tubes made from EPDM, but *recommended* use for each of these hoses is quite different.

These differences occur because compounds contain many materials in addition to elastomers. Some of these materials include processing aids, carbon black, vulcanization agents, accelerators, age resistors, and other ingredients. Before making assumptions about the suitability of a particular hose for a given application, always read the "Applications" information for each specific hose listed in this catalog.

The first hose component, the inner tube, conveys the material being transferred. The tube must be compatible with these materials. This is the hose's internal environment. Whenever you specify a Eaton Industrial hose, refer to the chemical resistance chart in this catalog.

DANGER Never transfer material in an inner tube that is not compatible with that material. Likewise, never use hose at temperatures, pressures, or chemical concentrations above those recommended by Eaton. Doing so will weaken or deteriorate the hose, leading to leakage, hose bursting, or end blow-offs. Personal injury or death can result.

The next hose component, the reinforcement, is the strength member of the hose. Reinforcement usually consists of fiber, thermoplastic, carbon steel, or stainless steel spirals, braids and coils. The helical coil is used in all hardwall hoses and is required in vacuum and suction applications. The coil is necessary to help the hose withstand atmospheric pressure that is greater than the internal pressure of the hose to prevent the hose from collapsing. It is usually made of steel or thermoplastic monofilament.

General Hose Information

Hose Construction

The final hose component is the outer cover. The outer cover protects the reinforcement from the external environment. It is usually rubber, thermoplastic, fiber, or metal. The hose outer cover must protect against weathering, abrasion, chemicals, extreme temperature ranges, ozone, and other adverse conditions.

The "Elastomers" chart in this catalog (page M-14) contains a listing of general characteristics of some common elastomers and their physical properties as they relate to specific service needs. When application questions arise, contact Eaton Technical Support:

- For North America, contact Eaton Technical Support at 1-888-258-0222 available 7:30 AM CST–4:30 PM CST
- For global support, contact your local Eaton technical representative.

Heat can be a catalyst for chemical reaction. When selecting a Eaton Industrial hose, consider both the ambient temperature and the temperature of the material being conveyed.

WARNING Do not use a hose at temperatures that exceed the hose temperature rating. Doing so could deteriorate the hose, leading to leaks, hose bursting, and end blow-offs. This could result in serious personal injury or death.

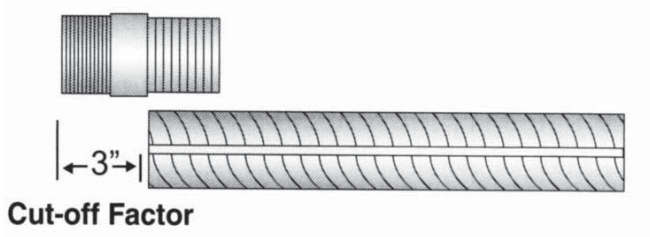
Cold temperatures are another consideration. Hose must be flexible and be able to withstand temperatures well below 0°F in some applications.

Be aware that rated hose temperatures do not imply that a hose can handle all materials within the listed temperature range and concentration.

For specific application information and hose temperature ratings, always follow the guidelines in this catalog, or contact Eaton Technical Support:

- For North America, contact Eaton Technical Support at 1-888-258-0222 available 7:30 AM CST–4:30 PM CST
- For global support contact your local Eaton technical representative.

All chemicals listed in the chart are rated at 70°F unless otherwise stated.



Cut-off Factor

Size

Size can refer to the length of the hose, the inner diameter (I.D.), and the outer diameter (O.D.). To determine the correct length of hose for an application, always remember to subtract the cut-off factor for each end fitting or coupling from the overall length of the assembly. For example, if the total length of the assembly needs to be 20 feet, and each end extends past the hose three inches, the cut-off factor is three inches at each end, or six inches total. Twenty feet minus six inches yields a hose length of 19-1/2 feet.

Remember to subtract the cut-off factor for each end fitting when preparing hose.

Inner diameter is important in relation to volume transfer requirements. The larger the hose inner diameter, the greater the volume of material that can be transferred in a given time.

WARNING Be aware that if you replace a hose with one having a different I.D. than the original hose, material velocity could increase or decrease, possibly creating static electricity. This could lead to an explosion causing serious injury or death.

General Hose Information

Hose Maintenance

Hose Maintenance

Hose has a limited life based on the severity and type of chemical contact, environment or exposure to heat and petroleum products. Eaton recommends the following maintenance procedure to determine when hose should be replaced.

General Test and Inspection Procedures for Hose

An inspection and hydrostatic test should be done periodically to ensure hose is suitable for continued service.

A visual inspection of the hose should be made for loose covers, kinks, bulges, or soft spots which might indicate broken or displaced reinforcement. The couplings or fittings should be closely examined and, if there is any sign of movement of the hose from the couplings, the hose should be removed from service.

The periodic inspection should include a hydrostatic test for one minute at 150 percent of the recommended working pressure of the hose. During the hydrostatic test, the hose should be straight, not coiled or in a kinked position. Water is the usual test medium and, following the test, the hose may be flushed with alcohol to remove traces of moisture. A regular schedule for testing should be followed and inspection records maintained.

Hose Inspection

Hose assemblies shall be inspected and tested immediately after the hose is subjected to abnormal abuse such as: severe end pull, flattening or crushing or sharp kinking. As you inspect a hose assembly, remember that most hose failures occur between the coupling and the first three feet along the hose length. Pay close attention to this area. Any hose that has been recoupled shall be proof-tested for one minute at 150 percent of the recommended working pressure of the hose, and inspected before being placed in service.

SAFETY WARNING: Before conducting any pressure tests on hose, provision must be made to ensure the safety of the personnel performing the tests and to prevent any possible damage to property. Only trained personnel using proper tools and procedures should conduct any pressure tests.

The following guidelines should be adhered to during testing and/or inspection:

1. **Air or any other compressible gas must never be used as the test medium because of the explosive action of the hose should a failure occur. Such a failure might result in possible damage to property and serious bodily injury.**
2. **Air should be removed from the hose by bleeding it through an outlet valve while the hose is being filled with the test medium.**
3. **Hose to be pressure tested must be restrained by placing steel rods or straps close to each end and at approximate 10 foot (3m) intervals along its length to keep the hose from "whipping" if failure occurs; the steel rods or straps are to be anchored firmly to the test structure but in such a manner that they do not contact the hose which must be free to move.**
4. **The outlet end of hose is to be bulwarked so that a blown-out fitting will be stopped.**
5. **Provisions must be made to protect testing personnel from the forces of the pressure medium if a failure occurs.**
6. **Testing personnel must never stand in front of or in back of the ends of a hose being pressure tested.**
7. **If liquids such as gasoline, oil, solvent, or other hazardous fluids are used as the test fluid, precautions must be taken to protect against fire or other damage should a hose fail and the test liquid be sprayed over the surrounding area.**

Visual Inspection

1. Hose

Any cuts, gouges or tears in the cover which do not expose the reinforcement should be repaired before the hose is returned to service. If the reinforcement is exposed, retire the hose from service.

Covers may show surface cracking or crazing due to prolonged exposure to sunlight, ozone, or high temperature during soak tank cleaning. Such deterioration, which does not expose reinforcing materials, is not cause for retirement.

Check for signs of soft spots, blisters, and kinking. If soft spots exist, pressure test the hose assembly and determine whether it is necessary to discard it.

WARNING If cover blisters exist, be careful not to pop them. If the hose was damaged in such a way that material was allowed to leak between the cover and inner tube, the blisters may contain this material. If the material is hazardous and splatters when the blisters are popped, it could cause serious physical injury.

General Hose Information

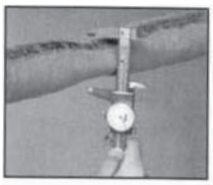
Hose Maintenance

Look for any indication of kinking or broken reinforcement as evidenced by any permanent distortion, longitudinal ridges, or bulges.

According to RMA IP-11-7 Chemical Hose Bulletin, crushed or kinked spots where the hose O.D. is reduced by 20 percent or more of the normal O.D. indicate the hose probably has internal damage. The hose assembly must be removed from service to ensure the safety of people in the work area.

⚠ WARNING: Kinks can cause hose to burst, leading to bodily harm.

Hose containing kinked or crushed spots where the hose O.D. is reduced by 20 percent may be used if the hose passes the hydrostatic tests. Use a caliper to measure the hose outer diameter at several places around the diameter to determine any O.D. reduction. An inspection mirror and a flashlight can be used to inspect the inner tube for abuse, wear, and/or chemical attack.



2. Couplings

All metals are subject to attack by various chemicals. Check with the manufacturer to make sure that suitable end fittings, appropriate to both the hose and the chemical being handled, are being used.

Exposed surfaces of couplings, flanges and nipples shall be examined for cracks or excessive corrosion. Either condition shall cause the hose assembly to be retired from service. Any evidence of coupling or nipple slippage on the hose is cause for removing the hose assembly from service.

The Rubber Manufacturers Association (RMA) has published a series of technical bulletins which detail maintenance, testing, and inspection recommendations.

Because the life expectancy of the hose is limited, the user must be alert to signs of impending failure, particularly when the conditions of service include high working pressures and/or the conveyance or containment of hazardous materials. The periodic inspection and testing procedures described here provide a schedule of specific measures which constitute a minimum level of user action to detect signs indicating hose deterioration or loss of performance before conditions leading to malfunction or failure are reached.

⚠ SAFETY WARNING: Failure to properly follow the manufacturer's recommended procedures for the care, maintenance and storage of a particular hose might result in its failure to perform in the manner intended and might result in possible damage to property and serious bodily injury.

Hydrostatic Pressure Test

For large-bore hose being used in dock service, an inspection card which describes the hose, manufacturer, date received, purchase order number, and date of installation should be maintained for each hose. The inspection card should be used to record the test results and condition of the hose.

Eaton recommends that new hose assemblies be hydrostatically tested before being placed in service. Hydrostatic testing should be done at periodic intervals to determine if a hose is suitable for continued service. The hydrostatic test and examination shall be conducted in the following manner.

Hose to be pressure tested must be restrained by placing steel rods or straps close to each end and at approximate 10 foot (3m) intervals along its length to keep the hose from "whipping" if failure occurs; the steel rods or straps are to be anchored firmly to the test structure but in such a manner that they do not contact the hose which must be free to move.

1. Hose shall lie in a straight and horizontal position supported on rollers to permit easy movement when under the test pressure.
2. Water should be used as the test liquid. Never pressure test with solvents, corrosive liquids, or with compressed gases.
3. Fill the hose with water with the outlet end raised and the outlet valve open to ensure the complete removal of air. When all the air has been expelled, close the outlet valve and lower the raised end.
4. For new hose, raise the pressure to 2 times the rated working pressure of the hose and hold for 5 minutes. During this hold period, the hose shall be examined for leaks at the couplings, fitting slippage, or for any indication of weakness in the hose structure.
5. For used hose, test with a pressure of 1-1/2 times the rated working pressure of the hose for one minute and examine as above.
6. Completely relieve test pressure from the system prior to releasing hose from test equipment.
7. Thoroughly drain the water from the hose after completion of the hydrostatic test.

Electrical Continuity

When required by the user, electrical continuity between the fittings shall be tested using an ohm meter. The hose must be clean and dry for this test.

General Hose Information

Hose Maintenance

General Care and Maintenance of Hose

Hose should not be subjected to any form of abuse in service. It should be handled with reasonable care. Hose should not be dragged over sharp or abrasive surfaces unless specifically designed for such service. Care should be taken to protect hose from severe end loads for which the hose or hose assembly was not designed. Hose should be used at or below its rated working pressure; any changes in pressure should be made gradually so as to not subject the hose to excessive surge pressures. Hose should not be kinked or be run over by equipment. In handling large size hose, dollies should be used whenever possible; slings or handling rigs, properly placed, should be used to support heavy hose used in oil suction and discharge service.

Hose Repair

There are some circumstances in which chemical hoses can be repaired. For example, if a hose has been kinked near the coupling and a close inspection of the assembly reveals that this is the only damage, the assembly can be repaired.

WARNING Wear safety glasses, gloves, and protective clothing when cutting hose. They will help protect your eyes and skin from flying debris. When recoupling a used hose assembly, begin by cutting the hose far enough beyond the shank to eliminate the possibility of cutting into the shank. When cutting out a kink, cut behind the kink far enough so that the ID/OD of the remaining hose is round. Use calipers to confirm roundness. Make sure to cut the hose squarely. Next wipe the inner tube of the cut end with a clean rag.

Before recoupling the hose, make sure to carefully inspect the tube. This is important because it is easy to see the condition of the tube and reinforcement of the hose when the coupling is cut off. Look for any evidence of deterioration of the hose tube. If there are signs of deterioration, remove the hose assembly from service. If after close inspection none of these signs is present, the hose may be recoupled.

Any hose that has been used to convey an abrasive material, such as plastic pellets and powders, should not be recoupled due to the inherent thickness reduction that results from the transfer of abrasive materials.

Finally, pressure test and tag any recoupled assembly as recommended.

Storage

Proper storage conditions can enhance and extend substantially the ultimate life of hose products. Rubber hose products in storage can be affected adversely by temperature, humidity, ozone, sunlight, oils, solvents, corrosive liquids and fumes, insects, rodents and radioactive materials. The appropriate method for storing hose depends to a great extent on its size (diameter and length), the quantity to be stored, and the way in which it is packaged. Hose should not be piled or stacked to such an extent that the weight of the stack creates distortions on the lengths stored at the bottom. Since hose products vary considerably in size, weight, and length, it is not practical to establish definite recommendations on this point. Hose having a very light wall will not support as much load as would a hose having a heavier wall or hose having a wire reinforcement. Hose which is shipped in coils or bales should be stored so that the coils are in a horizontal plane.

Storage Do's:

- Whenever feasible, rubber hose products should be stored in their original shipping containers which provide some protection against the deteriorating effects of oils, solvents, and corrosive liquids; shipping containers also afford some protection against ozone and sunlight.
- Certain rodents and insects will damage rubber hose products, and adequate protection from them should be provided. Be sure ends are capped to keep out insects, rodents, and other contaminants that can damage the hose.
- Hose shipped in coils or bales should be stored so the coils are in a horizontal plane.
- Store items on a first-in, first-out basis. Remember that even under the best of conditions, an unusually long shelf life will deteriorate certain rubber products. Inspect and test the hose assembly before placing it in service. Usually, any wear or damage will be apparent during inspection or testing.
- The ideal temperature for the storage of rubber products ranges from 50° to 70°F (10-21°C) with a maximum limit of 100°F (38°C). If stored below 32°F (0°C), some rubber products become stiff and will require warming before being placed in service.
- Storage areas should be relatively cool and dark, and free of dampness and mildew. Items should be stored on a first-in, first-out basis, since even under the best of conditions, an unusually long shelf life could deteriorate certain rubber products.

Storage Don'ts:

- Don't pile or stack hose to such an extent that the weight of the stack distorts the lengths stored on the bottom. Remember that hose having a very light wall will not support as much load as a hose having a heavier wall or wire reinforcement.

General Hose Information

Hose Maintenance

- Don't store rubber products near heat sources such as radiators and base heaters, or near electrical equipment that might generate ozone. Also do not store hose for long periods in geographical areas of known high ozone concentration. Ozone ages rubber.
- Don't expose hose to direct or reflected sunlight during storage. This ages rubber.
- Don't store uncovered hose under fluorescent or mercury lamps. They generate light waves harmful to rubber.
- Don't hang hose assemblies on hooks, nails, or other devices which could cut or damage hose.

The Rubber Manufacturers Association has published separately a series of Hose Technical Information bulletins describing hoses designed for different applications which detail Maintenance, Testing and Inspection recommendations. Refer to the *ARPM Catalog of Publications*, issued annually, to determine the availability of the latest edition. Bulletins published include the following:

Publication No.

IP 11—1— Steam Hose

IP 11—2— Anhydrous Ammonia Hose

IP 11—4— Oil Suction and Discharge Hose

IP 11—5— Welding Hose

IP 11—6— Fire Hose

IP 11—7— Chemical Hose

IP 11—8— Fuel Dispensing Hose

ARPM

1400 K Street, N.W.
Washington, D.C. 20005

RMA Publications order desk: (800) 325-5095

Proper Used Hose Storage

Before placing used hose in storage, completely drain it and flush out any potentially explosive vapors or corrosive residues.

Also make sure you dispose of waste in a manner that complies with federal, state, and local environmental regulations.

⚠ WARNING: Take extreme care when flushing out a chemical hose with water. Some chemicals, such as concentrated acids, may react with water and cause spattering. These materials can cause serious personal injury or death if they get into eyes or onto skin. Wear safety glasses, gloves and other protective clothing to help guard against this.

Continue by laying the hose assembly on a solid support, allowing air to circulate through it. This helps extend the hose life. Further, store the hose in a cool, dark, dry place at a temperature ideally between 50°F and 70°F.

Proper Hose Handling

Proper hose handling can help preserve hose assembly life and work environment safety. Therefore, consider the following points when handling hose assemblies.

- Avoid crushing or kinking the hose. This can cause severe damage to the reinforcement that isn't always obvious when looking at the cover.
- Do not drag the hose or lift a large bore hose from the middle of its length with the ends hanging down. Doing so can cause kinking, cover cuts, hose reinforcement damage, and coupling damage.
- Limit the curvature of the hose to the minimum bend radius recommended by the manufacturer. Also avoid sharp bends at the end fittings and at manifold connections.
- Do not exceed pressure and temperature limits because this could damage the hose and ultimately result in serious bodily injury or property damage. Monitor pressure and temperature during hose use.
- Never allow chemicals, solvents, or any other hazardous materials to drip onto ground. Always comply with environmental laws.
- Never allow chemicals to drip on the exterior of a hose or allow hose to lay in a pool of chemicals. The hose cover may not have the chemical resistance of the tube. If a corrosive material comes into contact with the hose reinforcement, the result could be early hose failure.
- Avoid extreme flexing of the hose near the coupling. If necessary, use elbows in the piping system to assure a straight line connection with the hose.
- Protect hose from heat, flame, cutting, and twisting. Use shields or clamps to do this.
- Support hose to avoid mechanical strain on couplings.
- Be aware that dropping or dragging the assembly, chemical incompatibility, exposure to temperature extremes, or extensive internal coupling abrasion can cause leaks and reduce coupling retention.

⚠ WARNING: Do not use damaged hose. Doing so could result in serious personal injury or death.

General Hose Information

Hose Maintenance

Cleaning Hose Assemblies

Cleaning of hose assemblies should be done at a facility with the means of disposing of wastes and hazardous materials properly. All water and/or cleaning solutions used should be retained and disposed of in a way that complies with applicable laws.

Eaton Industrial does not recommend that distributors handle hose assemblies that have not been cleaned properly.

When you clean a tank or change the materials to be transferred, clean the hose assemblies. Three methods can be used: the soak tank, the closed loop system, or the rotating brush. The most appropriate method will depend on the hose use and location.

⚠ WARNING: Use of pressure wands to clean hose is not recommended. The high concentration of heat and pressure in a confined area can damage the hose inner tube and lead to hose bursting, leakage, spraying, or end blow-offs. This could cause serious personal injury or death.

⚠ WARNING: Always wear safety glasses, gloves, and protective clothing when cleaning hose, no matter which hose cleaning method you use. Otherwise, burns, blisters, eye damage or other injuries could occur.

If you choose the soak tank method, the cleaning solution usually caustic soda and water- should be no more than 150°F. Gently lay the hose in the cleaning solution to prevent it from splashing.

Soak the hose no more than 15 minutes to prevent the hose from becoming brittle with a shortened service life. Flush the hose thoroughly with clean water. After making sure that all the water is drained from the hose, store the hose in a cool, dry place. Once the hose has cooled (approximately 45 minutes), cap the ends to keep contaminants out.

The second method of cleaning is the closed-loop system. With this method, the caustic solution used to clean the tank is also pumped through the hose and back to the tank. Typically, fluid is 180°F and is pumped through the system until the tank is clean.

When the cleaning process is complete, flush the hose thoroughly with water. Store the hose in a cool, dry place. Cap the ends to keep contamination out.

⚠ WARNING: Strong acids should be thoroughly drained prior to and after cleaning to avoid an exothermic reaction.

Class Oil Resistance

Rubber hose is used to convey petroleum products both in the crude and refined stages. The aromatic content of refined gasoline is often adjusted to control the octane rating. The presence of aromatic hydrocarbons in this fuel generally has a greater effect on rubber components than do aliphatic hydrocarbons. Aromatic materials in contact with rubber tend to soften it and reduce its physical properties. For long lasting service, the buyer of gasoline hose should inform the hose manufacturer of the aromatic content of the fuel to be handled so that the proper tube compound can be recommended for the specific application.

The effects of oil on rubber depend on a number of factors that include the type of rubber compound, the composition of the oil, the temperature and time of exposure. Rubber compounds can be classified as to their degree of oil resistance based on their physical properties after exposure to a standard test fluid. As a guide to the user of the hose in contact with oil, the oil resistance classes and a corresponding description are listed.

Physical Properties After Exposure to Oil

	Volume Change Maximum	Tensile Strength Retained
Class A (High oil resistance)	+25%	80%
Class B (Medium-High oil resistance)	+65%	50%
Class C (Medium oil resistance)	+100%	40%

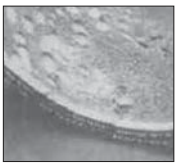
General Hose Information

Troubleshooting


1.


2.


3.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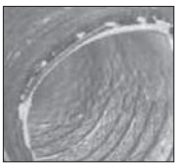
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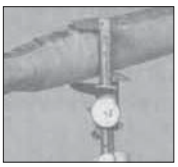
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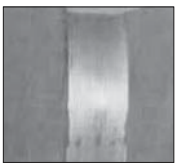
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⚠ WARNING: Selection of the proper hose for the application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to selection of hose for the application can result in serious bodily injury or property damage. In order to avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog.

Hose failures can be caused by conditions such as excessive pressures, fluid incompatibility, extreme temperatures and many more. Eaton has illustrated below some of the more common failures. If the conditions you are experiencing are not listed, please contact Eaton Technical Support for North America at 1-888-258-0222 for global technical support contact your local Eaton technical representative.

1. **Problem:** The hose has exposed reinforcement and a loose cover. This could be caused by an abrasive environment or the life of the hose has been exceeded.

Solution: Route hose properly to avoid excessive abrasion. Some hoses are made with materials that handle abrasion better.

2. **Problem:** Cracks in the hose cover can be caused by prolonged exposure to sunlight, ozone or high temperatures.

Solution: Store hose in cool dark areas when possible. Do not store or use the hose where the recommended temperature rating is exceeded.

3. **Problem:** Cuts, gouges, or tears in hose tube can be caused by improper cleaning with high-pressure water wand.

Solution: Do not use high pressure water wand to clean hoses. Instead, three cleaning methods are commonly used: the soak tank, the closed loop system or the rotating brush. The most appropriate method will depend on the hose use and location.

4. **Problem:** Bubbling and flaking of the tube material caused by the tube not being compatible with the chemical being conveyed.

Solution: Check the chemical resistance guidelines to make sure the hose you are using is compatible with the chemical(s) being transferred. Also, make sure the hose can handle the application temperatures.

5. **Problem:** Deterioration of the hose tube has caused the reinforcement to be exposed. This may be caused by abrasive material being conveyed through a hose not made for this abrasive material or hose life has been exceeded.

Solution: Make sure that the hose can handle the material being conveyed. Possibly use a hose with a thicker tube.

6. **Problem:** Hose is kinked due to exceeding the minimum bend radius of the hose. The result is damaged reinforcement.

Solution: To avoid this problem, check the minimum bend radius of the hose and route the hose so the minimum bend radius is not exceeded.

7. **Problem:** Improperly banded shank may create a possible leak path.

Solution: Make sure the coupling is secured tightly and according to manufacturer's specifications. Bands should be placed inside of the barbs on the coupling shank, toward the coupling side. The band farthest from the hose end should be tightened first. If two bands are present, Eaton suggests rotating the clamp buckles 180° from each other.

8. **Problem:** Overtightened band could cause leaks, spraying and end blow-offs. Band was applied with excessive pressure and cut the cover of the hose causing reinforcement to be exposed.

Solution: Do not attach bands at pressures that are too high. Apply the bands to the manufacturer's recommended settings.

9. **Problem:** The steam hose has developed cracks in the cover due to heat in the application.

Solution: Steam hose has a limited service life. It should be inspected before every use. Any crack that exposes the reinforcement is a reason for the hose to be removed from service.

General Hose Information

Flow Rate, Pressure Drop and Flow Capacity

There are several factors which affect selection of a hose sized such that it will provide the desired rate of flow at the required pressure; these are:

- Hose size
- Hose length
- Hose fittings
- Material conveyed
- Bends
- Static head pressure

Hose Size

Undersized pressure lines produce excessive pressure drop with attendant energy loss and heating, and undersized suction lines cause cavitation at the pump inlet. Oversized hose assemblies, on the other hand, are excessively costly and generally too heavy.

In selecting hose for hydraulic systems, the following empirical values can be used to achieve minimum pressure drop consistent with reasonable hose size (see Chart 2):

Velocity of pressure lines 7 to 15 ft./sec. Velocity of short pressure lines to 20 ft./sec. Velocity of suction lines 2 to 5 ft./sec. To use Chart 2, lay a straight-edge across the chart as shown by the dotted line. To minimize pressure drop, always use the next larger size hose shown if the line passes between sizes listed.

Hose Length

Chart 1 gives the pressure drop in different-sized hoses based on hoses of 100-foot length, and is based on water as the material conveyed. For hoses of a different length, these values must be corrected. For example, a 100-foot length of 1/2" hose causes a pressure drop of 100 lbs./in.^{2} at a flow rate of 10 gal./min. If the hose in question is 50 feet long, the pressure drop derived from Chart 1 must be corrected by multiplying the value by the ratio of the actual length to 100 feet, or 50/100, or 0.5. Therefore, the actual pressure drop caused by a 50-foot length of 1/2" hose, at a flow rate of 10 gal./min. is 50 lbs./in.^{2} (0.5 x 100 = 50 lb./in.^{2}).

Hose Fittings and Fluid Conveyed

In most cases, the end fitting openings are slightly smaller than the hose itself. However, this varies widely with hose fitting designs from 'full-flow' ends which have the same I.D. as the hose, down to as much as 1/8" smaller I.D. than the hose bore. To allow for this, assume a 10-to-15% greater flow rate than actually measured in the system when determining pressure drop.

Chart 1 is based on water as the material conveyed, and for other fluids it is necessary to correct for the difference in specific gravity and viscosity. Chart 3 lists common fluids, their specific gravities, viscosities, and corresponding correction factors. To determine the pressure drop for a specific fluid, first determine the pressure drop from Chart 1 for the hose length then divide this by the correction factor found in Chart 3. For example, the 50-foot length of 1/2" hose just described had a pressure drop of 50 lbs./in.^{2} at a flow of 10 gal./min. of water. To determine the pressure drop if #2 fuel oil is the material conveyed, divide by 0.752 (from Chart 3) 50 ÷ 0.752 = 66.5 lbs./in.^{2} pressure drop. If, on the other hand, the material conveyed is Type #3 gasoline, the pressure drop would be 50 ÷ 1.19 = 42 lbs./in.^{2}

CHART 1. Hose Flow Rate vs. Pressure Drop

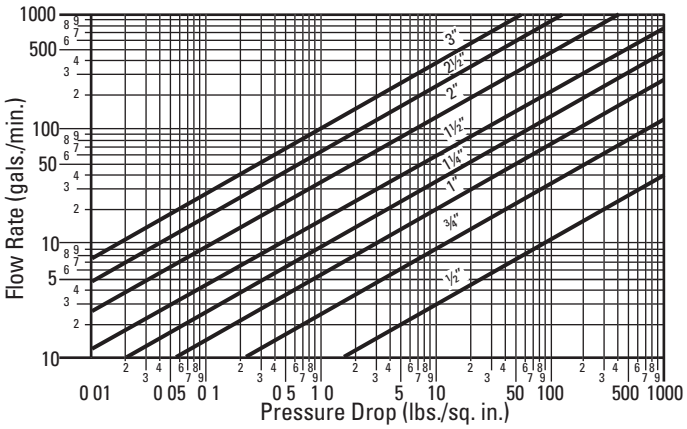
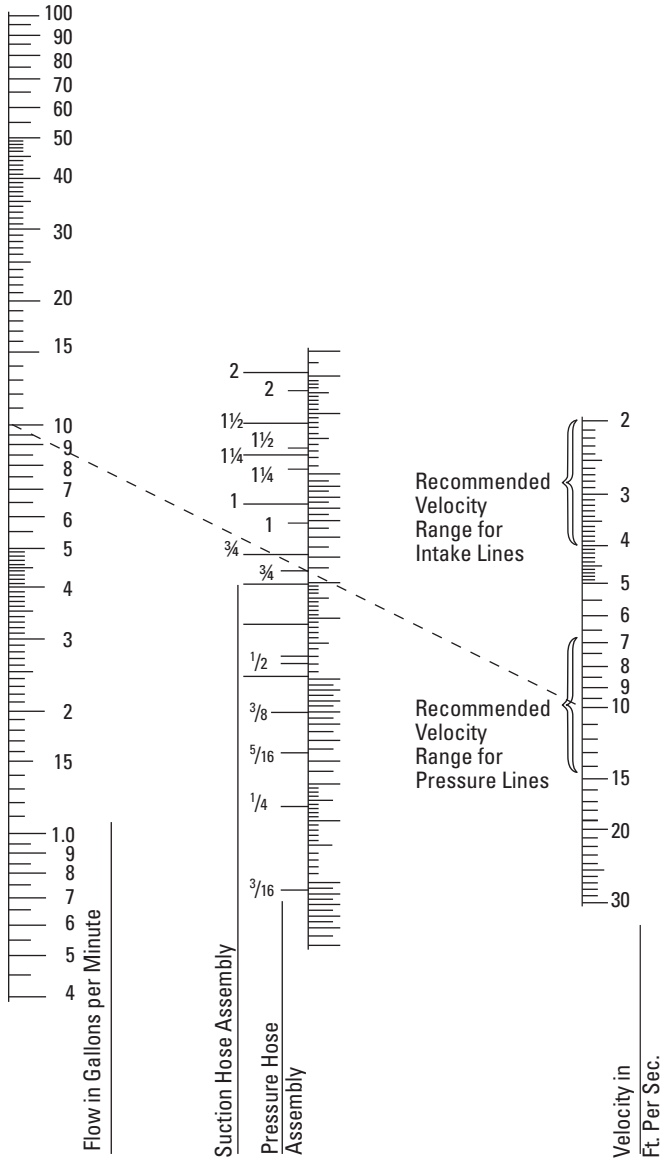


CHART 2. Hose Flow Capacity



General Hose Information

Steam Temperatures

Temperatures of Saturated Steam at Various Pressures

Lbs. Per Sq. Inch Pressure	Degrees Fahrenheit	Degrees Centigrade	Lbs. per Sq. Inch Pressure	Degrees Fahrenheit	Degrees Centigrade
0	212.0	100.0	110	344.1	173.4
5	227.1	108.4	115	347.2	175.1
10	239.4	115.2	120	350.1	176.7
15	249.8	121.0	125	352.9	178.3
20	258.8	126.0	130	355.6	179.8
22	261.2	127.8	135	358.3	181.3
24	265.3	129.6	140	360.9	182.7
26	268.3	131.3	145	363.4	184.1
28	271.2	132.9	150	365.9	185.5
30	274.1	134.5	155	368.2	186.8
32	276.8	136.0	160	370.6	188.1
34	279.3	137.4	165	373.9	189.4
36	281.8	138.8	170	375.3	190.7
38	284.4	140.2	175	377.4	191.9
40	286.7	141.5	180	379.6	193.1
42	289.0	142.8	185	381.7	194.3
44	291.2	144.0	190	383.7	195.4
46	293.5	145.3	195	385.9	196.6
48	295.5	146.4	200	387.9	197.7
50	297.7	147.6	205	398.8	198.8
52	299.9	148.7	210	391.6	199.8
54	301.6	149.8	215	392.9	200.5
56	303.6	150.9	220	395.4	201.7
58	305.4	151.9	225	397.2	202.9
60	307.4	153.0	230	399.0	203.9
62	309.2	154.0	235	400.7	204.8
64	310.8	154.9	240	402.5	205.8
66	312.6	155.9	245	404.2	206.8
68	314.2	156.8	250	406.1	207.8
70	316.0	157.0	255	407.7	208.7
72	317.7	158.7	260	409.4	209.7
74	319.3	159.6	265	411.0	210.6
76	320.9	160.5	270	412.6	211.4
78	322.3	161.3	275	414.2	212.3
80	323.8	162.1	280	415.7	213.2
85	327.6	164.2	300	421.0	216.1
90	331.2	166.2	350	436.5	224.7
95	334.6	168.1			
100	337.8	169.9			
105	341.1	171.7			

WARNING Steam heat is hotter than 212°F (boiling water) and increases in temperature as pressure increases.

General Hose Information

Flow Capacities

Flow Capacities of Hose Assemblies at Suggested Flow Velocities

The chart below is designed and provided as an aid in the determination of the correct hose size.

Example: At 13 U.S. gallons per minute, what is proper hose size within the suggested velocity range for pressure lines?

Solution: Locate 13 U.S. gallons per minute in the left hand column and 10 feet per second in the right hand column (the center of the suggested velocity range for pressure lines). Lay a straightedge across the two points. The inside diameter is shown in the center column nearest the straight edge.

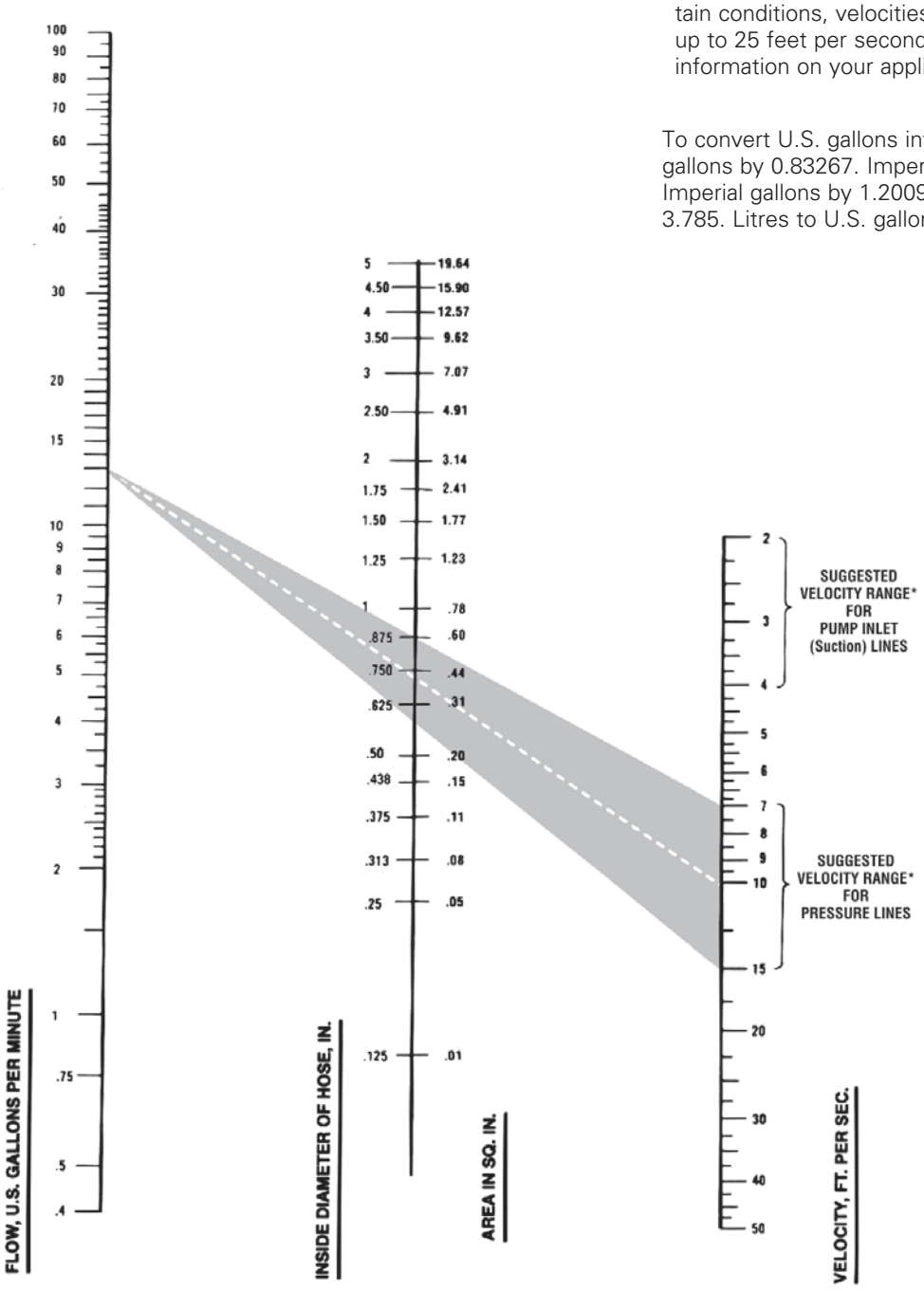
For suction hose, follow the same procedure except use suggested velocity range for pump inlet lines in the right hand column.

Based on Formula

$$\text{AREA (SQ. IN.)} = \frac{\text{G.P.M. x 0.3208}}{\text{VELOCITY (FT./SEC.)}}$$

*Suggestions are for oils having a maximum viscosity of 315 S.S.U. at +100°F (+38°C) and operating at temperatures between +65°F and +155°F (+54°C to +69°C). Under certain conditions, velocities in pressure lines can be increased up to 25 feet per second. Contact Aeroquip with specific information on your application.

To convert U.S. gallons into Imperial gallons multiply U.S. gallons by 0.83267. Imperial gallons into U.S. gallons multiply Imperial gallons by 1.20095. U.S. gallons to litres multiply by 3.785. Litres to U.S. gallons, multiply by 0.2642.



General Hose Information

Elastomer Chart

The chart below shows the general characteristics of some of the common rubber compounds. Elastomers are mixed with various chemicals to provide a wide range of physical properties for specific service needs.

ASTM Designation	Common Name	Composition	General Properties
CR	Neoprene	Chloroprene	• Good abrasion • Good weathering resistance • Good oil resistance • Flame retarding
NBR	Nitrile (Buna-N)	Acrylonitrile-butadiene	• Excellent oil resistance • Moderate resistance to aromatics
IIR	Butyl	Isobutylene-isoprene	• Excellent ozone resistance • Good resistance to fire resistant fluids • Good heat resistance • Low permeability • Poor resistance to petroleum fluids
CIIR	Chlorinated Butyl	Chloro-isobutylene isoprene	• Same as Butyl
SBR	SBR	Styrene-butadiene	• Good abrasion resistance • Poor resistance to petroleum fluids
EPM	Ethylene Propylene	Rubber Composition	• Excellent ozone resistance • Excellent chemical resistance • Good heat resistance • Poor resistance to petroleum based fluids
EPDM	EPDM	Ethylene-propylene diene terpolymer	• Excellent ozone resistance • Good chemical resistance • Good temperature resistance • Poor resistance to petroleum fluids
XLPE	Cross-Linked Polyethylene	Polyethylene & cross linking agents	• Excellent chemical resistance
EVA	EVA	Ethylvinylacetate	• Excellent flexibility • Chemical resistance
LLDPE	Linear, low density Polyethylene	Linear, low density Polyethylene	• Excellent ESCR resistant • FDA Approved NSF 51 material available
Nylon 11	Nylon 11	Nylon 11	• Good chemical resistance
PVC/PU Blend	PVC/PU Blend	Polyvinyl flouride/polyurethane Blend	• Excellent chemical resistance
PVDF	KYNAR®	Polyvinylidene flouride	• Excellent chemical resistance
PA	Nylon	Polyamide	• Good abrasion resistance • Good chemical resistance • Low coefficient of friction
CSM	Hypalon	Chloro-sulfonated Polyethylene	• Excellent ozone resistance • Good abrasion resistance • Good heat resistance • Fair petroleum qualities
NR	Natural Rubber	Polyisoprene	• Excellent abrasion resistance • Acid resistance • Not oil resistant
V-NBR	Vinyl Nitrile	PVC/NBR	• Good ozone resistance • Good resistance to animal fats & oils • Good petroleum resistance
UHMWPE	Ultra-high molecular weight polyethylene	Polyethylene	• Excellent chemical resistance • Moderate heat resistance • Excellent abrasion resistance • FDA-accepted material
CM	CPE	Chlorinated Polyethylene	• Excellent ozone resistance • Excellent weathering resistance • Good abrasion resistance • Good heat resistance • Good resistance to petroleum oils
XNBR	Carboxylated Nitrile	Carboxylated Acrylonitrile-butadiene	• Excellent abrasion resistance • Excellent oil resistance • Excellent weather resistance
PTFE	Teflon	Polytetrafluoroethylene	• Excellent temperature resistance • Excellent chemical resistance • FDA accepted material • Low coefficient of friction for high flow rates and easy cleaning • Excellent resistance to thermocycling
PVC	PVC	Polyvinylchloride	• Resistant to many chemicals • Good flexibility
FEP	Teflon	Fluorinated Ethylene Propylene	• Excellent temperature resistance • Excellent chemical resistance • FDA accepted material • Low coefficient of friction for high flow rates and easy cleaning • Excellent resistance to thermocycling

General Hose Information

Flow Capacities Pressure Drop

Pressure drop in psi (pounds per square inch)/gpm (gallons per minute) for 10 feet of hose (smooth bore) without fittings.

Fluid specification:
Specific gravity = .85; Viscosity = v = 20 centistokes (C.S.), (20 C.S. = 97 S.S.U.).

Hose Pressure Drop

Hose Dash Size →	-04		-05		-06		-08		-10		-12		-16		-20		-24		-32		-40	-48
Hose I.D. (inches) ←	.19	.25	.25	.31	.31	.38	.41	.50	.50	.63	.63	.75	.88	1.00	1.13	1.25	1.38	1.50	1.81	2.00	2.38	3.00
U.S. Gallons per minute .25	10	3.1	3.1																			
.50	19	6	6	2.7	2.7																	
1	40	12	12	5.5	5.5	2.4																
2	95	24	24	10	10	4.8	3.5															
3	185	46	46	17	17	7	5	2.2	2.2													
4		78	78	29	29	12	8	3	3	1.2	1.2											
5		120	120	44	44	18	12	4.5	4.5	1.6	1.6	.72										
8				95	95	39	26	10	10	3.6	3.6	1.4	.60									
10						59	40	15	15	5.7	5.7	2	1	.55								
12						80	52	20	20	7.2	7.2	2.6	1.5	.75	.43							
15							75	30	30	10	10	4.2	2.2	1.2	.67	.38						
18							107	40	40	15	15	6.3	3	1.5	.70	.55	.35					
20								49	49	19	19	8	3.4	2	1.1	.65	.43	.27				
25								72	72	26	26	11	5.5	3	1.6	1	.64	.40	.17			
30										34	34	14	7	3.6	2.2	1.3	.80	.52	.22	.14		
35										47	47	19	9.5	5	2.8	1.7	1.1	.70	.27	.18		
40												25	12	6.5	3.4	2.2	1.4	.90	.38	.24		
50												36	17	9	5.3	3.3	2	1.3	.54	.35	.15	
60												50	23	12	7.5	4.4	2.8	1.8	.75	.45	.20	
70													31	17	9.3	6	3.8	2.4	1	.65	.30	
80													38	21	12	7.1	4.6	3	1.2	.76	.34	.11
90													49	27	15	9	5.9	3.8	1.5	1	.45	.13
100														33	19	12	7	4.7	1.9	1.3	.55	.18
150														60	36	22	13	8.5	3.4	2.2	1	.33
200																36	23	15	6	3.9	1.7	.55
250																54	33	22	8.5	5.3	2.5	.75
300																	45	29	12	7.5	4	1.1
400																		51	21	14	6.5	2.2
500																			32	20	10	3
800																					18	5
1000																						10

*Pressure drop values listed are typical of many petroleum based hydraulic oils at approximately +100°F (+38°C).
Differences in fluids, fluid temperature and viscosity can increase or decrease actual pressure drop compared to the values listed.

To Convert

U.S. gallons into Imperial gallons multiply U.S. gallons by 0.83267. Imperial gallons into U.S. gallons multiply Imperial gallons by 1.20095. U.S. gallons to litres multiply by 3.785. Litres to U.S. gallons, multiply by 0.2642.

Hose Index

Eaton Terms and Conditions

Standard Terms and Conditions of Sale

These terms and conditions of sale are between the Buyer and the Eaton affiliate selling the products or services (hereinafter referred to as "products") to Buyer (hereinafter referred to as "Seller") 1. Quotations. Unless otherwise indicated on the quote, written quotations by Seller shall expire automatically 90 days after the date appearing on the quotation unless Seller receives and accepts Buyer's purchase order within that period. Prior to the expiration date any quotation is subject to change by Seller at any time upon verbal or written notice to Buyer.

2. Acceptance of Purchase Orders. Notwithstanding any contrary language in Buyer's purchase order, each purchase order shall be subject to acceptance by an authorized employee of Seller and each transaction shall be governed exclusively by these Terms and Conditions of Sale. Such acceptance is expressly limited to these Terms and Conditions of Sale, and any additional or different terms proposed by Buyer are automatically rejected unless expressly assented to in writing by an authorized employee of Seller. All purchase orders accepted by Seller are deemed to be sales for commercial Buyers and shall not, unless plainly and prominently stated on the face of the purchase order, be considered a sale to any federal, state, provincial or municipal governmental entity either domestic or foreign. No contract shall exist except as hereinabove provided.

3. Price Changes. Prices are subject to change to the prices in effect at the time of delivery. Seller reserves the right to make any corrections to prices quoted due to clerical errors or errors of omission. In the event of any design, specification or ordered quantity changes representing a price increase, Buyer will be notified and afforded an opportunity to confirm.

4. Delivery. Lead times are for reference only and are subject to change. Design and/ or specification changes are subject to review for possible adjustments to delivery. Order quantities subject to scheduled delivery dates must be mutually agreed upon.

5. Taxes. Any and all sales, use, or other permissible taxes assessed upon any sale or products sold shall be added to the purchase price of the products.

6. Payment Terms. Payment terms are net 30 days from date of invoice if Seller has approved Buyer's credit.

7. Packaging. The cost of standard bulk packaging for shipment in the United States and Canada is included in Seller's price. Additional charges may be imposed for special domestic packaging, overseas packaging, or special marking performed at Buyer's request and agreed to by Seller.

8. Shipment Terms. Unless Seller agrees otherwise, all shipments shall be freight collect F.O.B. origin (shipping point). Seller shall also be entitled to impose additional charges for the completion, at Buyer's request, of forms with respect to shipping. Unless otherwise agreed, shipment may be made by lots of reasonable commercial size as Seller deems appropriate.

9. Title and Risk of Loss. Risk of loss or damage in transit shall be borne entirely by Buyer at all times after the products are delivered to the carrier for shipment. However, the right to stop delivery in transit shall remain with Seller until payment in full has been received by Seller.

10. Delays or Default in Delivery. Seller shall have no liability to Buyer for Seller's delay or default in delivery due to strikes, secondary boycotts, riots, wars, accidents, fires, floods, explosions, vandalism, government embargoes, priorities or regulations, transportation delays, shortages of labor, fuel, materials, supplies, power, transportation facilities or tooling capacity or other similar or dissimilar causes beyond Seller's reasonable control. Under no circumstances shall Seller have any liability for penalties or other consequential damages of any kind resulting in whole or in part from Seller's delay in delivering, or failure to deliver, any products to Buyer as agreed.

11. Intellectual Property Infringement. With respect to all products manufactured to Buyer's specifications, Buyer shall indemnify and hold Seller harmless from and against any and all loss, cost, expense, claims, demands, suits and judgments arising from actual or alleged infringement of any third party intellectual property right. With respect to all other products sold by Seller, Seller shall defend any suit or proceeding brought against Buyer on claim that such product, or any part thereof, directly infringes any third party intellectual property right, provided that Seller is notified promptly in writing and given all necessary information, assistance and authority to defend the same. Seller shall pay all damages and costs awarded against Buyer as a result thereof. If as the result of such direct infringement, the court enjoins the use of any product, or part thereof, in the manner intended by Seller, Seller shall at its sole expense and option: (a) procure for Buyer the right to continue using said product or part; (b) replace such product or part with a non- infringing product or part; (c) modify said product or part so that it becomes non-infringing; or (d) remove said product or part and refund its purchase price and transportation costs. Seller shall have no further liability for actual or alleged patent infringement except as provided herein.

12. Design and Technical information. Seller claims proprietary rights in the items and information associated with this order. Drawings and technical information are issued in confidence for engineering information and mutual assistance only and may not be publicly disseminated, reproduced or used by Buyer without Seller's prior written consent and shall be returned upon the earlier of Seller's written request or when its purpose has been served.

13. Warranty. Seller's warranty is set forth in Seller's Warranty Policy Number M-HYOV-TB001-E, which can be accessed on the Eaton Hydraulics Product Literature website www.eaton.com/hydraulics/ warranty. THE WARRANTY IS BUYER'S EXCLUSIVE REMEDY AND SELLER HEREBY EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. Seller's warranty shall constitute the sole remedy of Buyer and the sole liability of Seller.

14. Cancellation. Changes and/or cancellations to existing schedules or orders are subject to Seller's acceptance and any applicable cancellation charges (and possible increase in per piece price due to reschedules). Cancellation charges will be determined by the type of product and the stage of completion. Cancellation charges for special products will be based on the selling price less amounts saved at the time of cancellation. Seller will accept temporary holds on orders for rescheduling purposes for a period not to exceed 30 days. If at that time a reschedule is not received, Seller reserves the right to recommence shipments in accordance with the original schedule or cancel the order.

15. Returns. No products shall be returned to Seller, whether for inspection, repair, replacement, or any other reason, without prior written approval from Seller. Products and parts must be returned in new or like new condition with complete identification in accordance with Seller's instructions or the shipment may not be accepted. All returns must be sent to Seller freight prepaid F.O.B. destination unless otherwise instructed. Where written authorization has been obtained to return products and parts for reasons beyond warranty, a restocking charge of twenty five percent (25%) and any additional transportation charges are applicable.

16. Minimum Order. Minimum order amount is $100.00.

17. Remedies. Any lawsuit or legal claim for breach of this order must be brought within one year after the breach occurs.

18. Currency. Unless otherwise indicated on the invoice, all payments are to be made in United States dollars.

19. Governing Law. The terms and conditions of this agreement shall be construed according to the laws of the state of Ohio.

20. Limitation of Liability. THE REMEDIES OF THE BUYER SET FORTH IN THESE TERMS AND CONDITIONS OF SALE ARE EXCLUSIVE AND ARE ITS SOLE REMEDIES FOR ANY FAILURE OF SELLER TO COMPLY WITH ITS OBLIGATIONS HEREUNDER. NOTWITHSTANDING ANY PROVISION IN THESE TERMS AND CONDITIONS OF SALE TO THE CONTRARY, IN NO EVENT SHALL SELLER BE LIABLE IN CONTRACT, WARRANTY, IN TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR OTHERWISE FOR DAMAGE TO PROPERTY OR EQUIPMENT OTHER THAN PRODUCTS SOLD HEREUNDER, LOSS OF PROFITS OR REVENUE, LOSS OF USE OF PRODUCTS OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF SUBSTITUTE EQUIPMENT, FACILITIES OR SERVICES, DOWNTIME COSTS, DELAYS, CLAIMS OF CUSTOMERS OF THE BUYER OR OTHER THIRD PARTIES OR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER, REGARDLESS OF WHETHER SUCH POTENTIAL DAMAGES ARE FORESEEABLE OR IF SELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE TOTAL CUMULATIVE LIABILITY OF SELLER ARISING FROM, CONNECTED WITH, RESULTING FROM OR RELATED TO THESE TERMS AND CONDITIONS OF SALE WHETHER THE CLAIMS ARE BASED IN CONTRACT, WARRANTY, IN TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR OTHERWISE, SHALL NOT EXCEED THE PRICE OF THE PRODUCT ON WHICH SUCH LIABILITY IS BASED.

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