Application Data

Important Safety Information

Read this page before using any of the 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 Boston 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 hoses in this catalog, consult the safety section in this catalog, and Chemical Compatibility Chart on page 21 or Boston Hose Chemical Resistance Guidelines. If you do not have the most recent copy, contact Eaton Customer Support at 1-888-258-0222.

Selection of Hose

Selection of the proper Boston 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:

- hose size
- hose length
- hose ends
- fluid conveyed
- bends
- temperature
- hose pressure
- static head pressure
- installation design

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 at 1-888-258-0222.

Application Data

Important Safety Information

Proper Selection of Hose Ends

Selection of the proper Boston 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, please contact Eaton Technical Support at 1-888-258-0222.

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, please contact Eaton Technical Support at 1-888-258-0222.

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.

Coll-O-Crimp Hose, Hose Ends and Assembly Equipment Compatibility

The Coll-O-Crimp Equipment Package, Coll-O-Crimp Hose Ends and Coll-O-Crimp Hose have been engineered and designed as a complete hose assembly system. Each component of the Coll-O-Crimp hose assembly system is compatible with other Coll-O-Crimp components to which it relates. Component compatibility, along with the use of quality components, insures the production of reliable hose assemblies when assembled properly. The use or intermixing of fittings and hose not specifically engineered and designed for use with each other and Coll-O-Crimp equipment is not recommended and may result in the production of unsafe or unreliable hose assemblies. This can result in hose assembly leakage, hose separation or other failures which can cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances.

Hose

Petroleum Service Intro

Important Petroleum Service Hose Safety Information!

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 HOSE BENEFITS

4:1 Safety Factor (Burst: Working Pressure)

- Safer operation.
- Longer hose life

Environmental Resistance

- The tube and cover materials of the Boston "Big Cats" 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. Boston 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 "Big Cats" is designed to be easy to handle as safety and job performance will allow.

The Boston Reputation for Quality

- Your assurance of dependable performance.

Hose

Light Duty Petroleum

Refer to warnings and safety information on pages 3-4 and page 109.

Boston Light Duty Petroleum

Tube: Vinyl Nitrile
Reinforcement: Fiber, 4 Spiral and Helical Wires
Cover: Vinyl Nitrile
Color: Black
Temperature Range: -40°F to +160°F
Type Of Branding: Impression
Suction: Full Vacuum
Working Pressure: 100 PSI (Depending on coupling)
Type Of Coupling: Cam and Groove or Combination Nipple.
Clamps—Band.

Features:

- Vinyl nitrile cover
- Vinyl nitrile tube
- Continuous impression brand
- Minimum 4-to-1 safety factor

Advantages:

- Abrasion, animal fat, oil and weather resistant
- Easy identification
- Meets R.M.A. requirements

Markets:

- Petrochemical/Petroleum Industry
- Paper/Pulp Industry
- Oil Exploration and Drilling
- Ship Building

Applications:

- Transfer of petroleum products
- Transfer of crude oil, salt water, fresh water, and slurries.

CATALOG NUMBER	NOMINAL I.D. (IN)	(MM)	SPIRAL	NOMINAL O.D. (IN)	(MM)	APPROX. LBS. WEIGHT PER 100 FT	MAXIMUM WORKING PRESS. (PSI)	MINIMUM BEND RADIUS (IN.)	(MM)	STANDARD LENGTHS (FT)
H043624-100	1-1/2	38.1	4	2	50.8	106	100	5	127.0	100
H043632-100	2	50.8	4	2-1/2	63.5	128	100	6	152.4	100
H043648-100	3	76.2	4	3-9/16	90.5	192	100	12	304.8	100
H043664-100	4	101.6	4	4-9/16	115.9	267	100	14	355.6	100

Hose

Light Duty
Petroleum

Refer to warnings and safety information on pages 3-4 and page 109.

Boston Bobcat LT Light Weight Petroleum

Tube: Vinyl Nitrile

Reinforcement: Fiber, 2 Ply and Helical Wires

Cover: Vinyl Nitrile (RD), Neoprene (BK)

Color: Red (RD) or Black (BK)

Temperature Range: -40°F to +180°F

Type Of Branding: Printed Strip

Suction: Full Vacuum

Working Pressure: 100 PSI (Depending on coupling and clamps)

Type Of Coupling: Cam and Groove, Combination Nipple or Swaged/Crimped. Clamps—Band.

Features:

- Vinyl nitrile cover
- Vinyl nitrile tube
- Continuous printed brand with caution label every ten feet
- Light weight and flexible

Advantages:

- Abrasion, oil and weather resistant
- Easy identification
- Safety
- Easy to route; easy to handle

Markets:

- Petrochemical/Petroleum Industry
- Oil Exploration and Drilling
- Tank Trucks
- Gasoline Drop
- Waste Hauling

Applications:

- Transfer and blending of petroleum products
- Transfer of crude oil, salt water, fresh (non-potable) water, and slurries.
- Loading or unloading, pumping, suction, or gravity flow discharge

CATALOG NUMBER	NOMINAL I.D. (IN)	(MM)	PLY	NOMINAL O.D. (IN)	(MM)	APPROX. LBS. WEIGHT PER 100 FT	MAXIMUM WORKING PRESS. (PSI)	MINIMUM BEND RADIUS (IN.)	(MM)	STANDARD LENGTHS (FT)
H036932-150	2	50.8	2	2-1/2	63.5	119	100	3	76.2	150 (RD,BK)
H036948-150	3	76.2	2	3-1/2	88.9	188	100	5	127.0	150 (RD,BK)
H036964-150	4	101.6	2	4-1/2	114.3	240	100	7	177.8	150 (RD,BK)
H036832-150	2	50.8	2	2-1/2	63.5	119	150	3	76.2	150 (RD,BK)
H036848-150	3	76.2	2	3-1/2	88.9	188	150	5	127.0	150 (RD)

Hose

Medium Duty Petroleum

Refer to warnings and safety information on pages 3-4 and page 109.

Boston Puma Petroleum

Tube: Vinyl Nitrile

Reinforcement: Fiber, 2 Braid, 2 or 4 Ply and Helical Wires

Cover: Vinyl Nitrile

Color: Red (RD) or Black (BK)

Temperature Range: -40°F to +180°F

Type Of Branding: Printed Strip

Suction: Full Vacuum

Working Pressure: 150 PSI (Depending on coupling and clamps)

Type Of Coupling: Cam and Groove, Combination Nipple or Swaged/Crimped. Clamps—Band.

Features:

- Vinyl nitrile cover
- Vinyl nitrile tube
- Continuous printed brand

Advantages:

- Abrasion, animal fat, oil and weather resistant
- Easy identification

Markets:

- Petrochemical/Petroleum Industry
- Paper/Pulp Industry
- Oil Exploration and Drilling
- Ship Building
- Tank Trucks
- Railroad Tank Cars
- Waste Hauling

Applications:

- Transfer of petroleum products
- Transfer of crude oil, salt water, fresh (non-potable) water, and slurries.
- Loading or unloading, pumping, suction, or gravity flow discharge

PRODUCT NUMBER	NOMINAL I.D. (IN.)	(MM)	REINF.	NOMINAL O.D. (IN.)	(MM)	APPROX. LBS. WEIGHT PER 100 FT.	MAXIMUM WORKING PRESS. (PSI)	MINIMUM BEND RADIUS (IN.)	(MM)	STANDARD LENGTH (FT)*
H036316-150	1	25.4	2 Ply	1-31/64	37.7	75	150	6	152.4	150(BK)
H036320-150	1-1/4	31.8	2 Ply	1-25/32	45.2	85	150	6	152.4	150(BK)
H036324-50										50
H036324-100	1-1/2	38.1	4 Sp	2-1/16	52.4	98	150	5	127.0	100(BK)
H036324-150										150
H036332-50										50
H036332-100	2	50.8	4 Sp	2-9/16	65.1	115	150	6	152.4	100(BK,RD)
H036332-150										150
H036340-150	2-1/2	63.5	2 Ply	3-1/32	77.0	140	150	9	228.6	150(BK)
H036348-100	3	76.2	4 Sp	3-9/16	90.5	166	150	12	304.8	100(BK,RD)
H036364-50										50
H036364-100	4	101.6	4 Sp	4-9/16	115.9	224	150	14	355.6	100(BK)
H036364-150										150
H036396-25	6	152.4	2 Ply	6-55/64	174.2	514	150	30	762.0	25(BK)
H036396-100										100(BK)
H036396-150										150(BK)
H03638A-25	8	203.2	4 Ply	8-55/64	225.0	674	150	—	—	25(BK)
H03638A										50(BK)

**150 foot lengths available upon request.*

Hose

Heavy Duty Petroleum

Refer to warnings and safety information on pages 3-4 and page 109.

Boston Jaguar Heavy Duty Petroleum

Tube: Vinyl Nitrile

Reinforcement: Fiber, 2 or 4 Ply and Helical Wires

Cover: Vinyl Nitrile

Color: Orange (6" & 8" Jaguar has a black Vinyl Nitrile cover)

Temperature Range: -40°F to +180°F

Type Of Branding: Printed Strip

Suction: Full Vacuum

Working Pressure: 250 PSI (Depending on coupling and clamps)

Type Of Coupling: Cam and Groove, Combination Nipple or Swaged/Crimped. Clamps—Band.

Features:

- Vinyl nitrile cover
- Vinyl nitrile tube
- Continuous printed brand and caution label every ten feet
- Orange cover

Advantages:

- Abrasion, animal fat, oil and weather resistant
- Easy identification
- Meets OSHA color requirements for flexible pipe systems

Markets:

- Tank Trucks
- Railroad Tank Cars
- Waste Hauling
- Petrochemical/Petroleum Industry

Applications:

- Loading and unloading, pumping, suction
- Bottom loading, gravity flow discharge
- Transfer of petroleum products

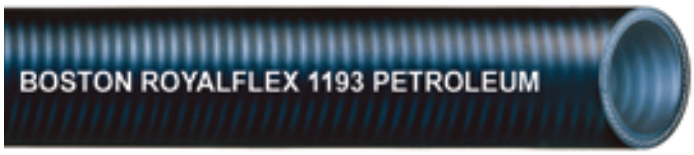
CATALOG NUMBER	NOMINAL I.D. (IN)	(MM)	PLY	NOMINAL O.D. (IN)	(MM)	APPROX. LBS. WEIGHT PER 100 FT	MAXIMUM WORKING PRESS. (PSI)	MINIMUM BEND RADIUS (IN.)	(MM)	STANDARD LENGTHS (FT)
H032724-150	1-1/2	38.1	2	2-1/16	52.4	99	250	4.0	101.6	150
H032732-150	2	50.8	2	2-9/16	65.1	124	250	5.0	127.0	150
H032740-150	2-1/2	63.5	2	3-1/32	77.0	161	250	7.5	190.5	150
H032748-150	3	76.2	2	3-9/16	90.5	200	250	8.0	203.2	150
H032764-150	4	101.6	2	4-9/16	115.9	292	250	12.5	317.5	150
H032796	6	152.4	4	7-1/4	184.2	721	250	30.0	762.0	50
H032796-100										100
H032796-150										150
H03278A	8	203.2	4	9-1/8	231.8	909	250	32.0	812.0	50
H03278A-100										100
H03278A-150										150

Hose

Heavy Duty Petroleum

Refer to warnings and safety information on pages 3-4 and page 109.

Boston Royalflex 1193 Petroleum



Tube: Nitrile

Reinforcement: 100% Polyester and Helical Wires

Color: Black

Temperature Range: -20°F to +180°F

Suction: Full Vacuum

Working Pressure: 200-300 PSI (Depending on coupling)

Type Of Coupling: For permanently attached coupling, contact Eaton. Cam and Groove, Long Shank, Interlocking or Swaged. Clamps—Interlocking, Band or Dixon Holedall II.

Features:

- Nitrile tube and cover
- More turns of helical wire per inch
- Higher working pressure
- Light weight
- Flexible
- Longer lengths

Advantages:

- Abrasion, oil and weather resistant
- More crush and kink resistant
- 300 PSI applications
- Easy to handle
- Economical; eliminates couplings

Markets:

- Tank Trucks
- Industrial Cleaning
- Petroleum/Petrochemical
- Refineries
- Tank car
- Storage Tanks
- Oil Exploration/Drilling
- Waste Hauling

Applications:

- Transfer of petroleum and chemicals

PRODUCT NAME	NOMINAL I.D. (IN.)	(MM)	NOMINAL O.D. (IN.)	(MM)	APPROX WEIGHT W/O FITTINGS (LB/FT)	(KG/M)	MAXIMUM WORKING PRESS. (PSI)	(BAR)	MINIMUM BEND RADIUS (IN.)	(MM)	MTO MIN. ORDER QTY.	STANDARD LENGTH (FT)
H119324	1-1/2	38.1	2	50.8	.80	1.191	300	20.68	6	152	1,000	50
H119324-60												60
H119324-100												100
H119324-120												120
H119332	2	50.8	2-1/2	63.5	1.10	1.652	300	20.68	8	203	1,000	50
H119332-60												60
H119332-100												100
H119332-120												120
H119340	2-1/2	63.5	3	76.2	1.34	1.994	300	20.68	10	254	1,000	50
H119340-60												60
H119340-100												100
H119340-120												120
H119348	3	76.2	3-1/2	88.9	2.00	2.992	250	17.24	12	305	1,000	50
H119348-60												60
H119348-100												100
H119348-120												120
H119364	4	102.0	4-1/2	114.3	2.72	4.084	200	13.79	16	406	1,000	50
H119364-60												60
H119364-100												100
H119364-120												120