Eaton food processing products
Ready for any challenge on the menu

Eaton
Powering Business Worldwide
We put the world in motion

Eaton has the solutions and expertise

Custom solutions engineered to solve your unique challenges
- Research, developing & housemix a variety of compounds
- Provide consistent, high-quality end products
- Optimize processes to lower total cost of ownership
- Keep personnel and consumers safe

Our market knowledge enables us to offer solutions you may not have thought possible
- Non-marking hose covers
- Inner tube and reinforcement to cover every food application
- Easy identification (high visibility branding and color coding)
- Expertise in regulations and required documentation
  - Meet European legislations 1935/2004 and 2023/2006*
  - US FDA code of Federal regulations Title 21 section 177.2600 and NSF-51/NSF-61
Eaton industrial hose line comes from a long tradition of **excellence and innovation**

Innovation, experience, safety and convenience make up the foundation of our industrial hoses. Eaton has been an industrial hose industry leader since 1870. We understand what you look for in hoses and we strive every day to ensure our hoses meet these standards.

Eaton’s industrial hose line comes from a long tradition of excellence and innovation. Boston Woven Hose & Rubber Company, founded in 1870, was among the first companies to produce a tubular rubber hose. These early pioneers in the industrial hose industry passed on their expertise from one generation to the next.

At Eaton, we value the knowledge of these early innovators, so much so that in 2002, we bought the company. Our Eaton industrial hose products build upon the expertise of these early innovators in partnership with our cutting-edge technology to make us the leading authority in industrial hose.

If your business relies on quality hose products that have stood the test of time, rely on Eaton.
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

- Strictly follow sanitization recommendations given by Eaton. Don’t use high pressure cleaning systems to wash inside the hose.

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

- Don’t use food hose at temperatures or pressure higher above those recommended by Eaton. Doing so will weaken or deteriorate the hose and will significantly decrease its life.

Eaton’s fluid conveyance products offer flexible and proven solutions needed for retooling, maintenance, and repair of processing machinery or general facility upkeep.
Suction and discharge of potable water, oily food products as well as dairy, non-dairy food products. Specialized tubing compounds convey many beverages; mineral water, fruit juices and alcohol bases liquids; beer, wine and liquor applications.

The right product for the right application: **Cover, Reinforcement** and **Tube**

**Construction: Cover**

Cover options vinyl nitrile, synthetic rubber, and EPDM.
- Corrugated covers for easier routing in the application
- The high visibility branding and color coding removes the guess work from hose selection
- Color-coded covers to differentiate hose types

**Construction: Reinforcement**

Reinforcements for abrasion resistance and strength:
- Polyethylene helix to decrease overall weight of the hose and elastic recovery by not deforming plastically in comparison to metal helix
- Helical wire reinforcement for added strength and conductivity
- Options include synthetic textile, 1 or 2-ply fiber braid, synthetic rubber

**Construction: Tube**

Improved compound recipes that provide odorless and tasteless characteristics of the inner tube.

Different compounds which fit perfectly to the right application:

<table>
<thead>
<tr>
<th>Compartment</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil-resistant</td>
<td>NBR or vinyl nitrile</td>
</tr>
<tr>
<td>Vegetable oil or animal fat</td>
<td>NBR</td>
</tr>
<tr>
<td>Diary foodstuff</td>
<td>NBR or vinyl nitrile</td>
</tr>
<tr>
<td>Dry bulk food</td>
<td>Natural rubber</td>
</tr>
<tr>
<td>Non-oily foodstuff</td>
<td>Natural rubber</td>
</tr>
<tr>
<td>Alcoholic liquids</td>
<td>UHMW-PE or EPDM</td>
</tr>
<tr>
<td>Light &amp; medium duty alcohol liquids</td>
<td>EPDM</td>
</tr>
<tr>
<td>High temperatures/steam</td>
<td>EPDM</td>
</tr>
<tr>
<td>Washdown applications</td>
<td>Nitrile or EPDM</td>
</tr>
<tr>
<td>Portable water</td>
<td>Natural rubber / SBR</td>
</tr>
</tbody>
</table>

Liquid food transfer
Product overview

PVC hose

Different reinforcement constructions in regards to their different applications: spiral for suction and braided for discharge.

- Phthalate-free compounds
- NSF-51 certified FDA approved materials
- PVC hoses can be color coded (transparent, red, blue etc.)
- Low temperature (up to -20°C) versions available on request
- PVC hoses meet FDA CR 21 177.1520 and European Plastic Regulation (EU) No 10/2011 Reg. UE 10/2011 and it amendment (EU) N.2016/1416 for contact with foodstuff that requires a simulating liquid type A, B, C, D1 migration tests performed at 40°C for 10 days.

Beverage

Flavor-Shield™ hose and tubing products feature a modified PET barrier bonded to a special polyolefin alloy which provides maximum flexibility and ease of installation.

- NSF-51/-61 certified and EU Regulation compliance No. 1935/2004 tubes and hoses
- Temperature range -23°C to 65°C
- Optimal resistance to carbon dioxide, nitrogen, oxygen and mixed gas permeation
- Minimal potential to flavor migration
- Minimized microbial growth potential
- Thermoformed capabilities to increase routing efficiency
- RoHS compliant
- Major soft drink manufacturer approved
- Superior surface contact smoothness
- These products are lightweight, non-marking and flexible
- Possibilities to bundle the products
**H0350**

**LION™ Food transfer**

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

---

**EHF001**

**Liquid food discharge**

Discharge of milk, vegetable oil and beverages  
**Tube:** Vegetable oil-resistant NBR  
**Reinforcement:** High-tensile synthetic textile  
**Cover:** Synthetic rubber  
**Temp:** -40°C to +80°C, (-40°F to +176°F)  
**Pressure:** 10.5 bar / 150 psi

---

**EHF002**

**Liquid food suction & discharge**

Suction and discharge of milk, vegetable oil and beverages  
**Tube:** Vegetable oil-resistant NBR  
**Reinforcement:** High-tensile synthetic textile with steel helical wire  
**Cover:** Synthetic rubber  
**Temp:** -40°C to +80°C, (-40°F to +176°F)  
**Pressure:** 10.5 bar / 150 psi

---

**EHF017**

**Milk discharge**

Discharge of milk  
**Tube:** Vegetable oil-resistant NBR  
**Reinforcement:** High-tensile synthetic textile  
**Cover:** Synthetic rubber  
**Temp:** -40°C to +80°C, (-40°F to +176°F)  
**Pressure:** 7 bar / 100 psi

---

**EHF018**

**Milk suction & discharge**

Suction and discharge of milk  
**Tube:** Vegetable oil-resistant NBR rubber  
**Reinforcement:** High-tensile synthetic textile with steel helical wire  
**Cover:** Synthetic rubber  
**Temp:** -40°C to +80°C, (-40°F to +176°F)  
**Pressure:** 70 bar / 100 psi

For more information on these and other industrial hose products, go to Eaton PowerSource for literature E-HOIN-SS001-E1

---
Liquid food transfer
Potable water and non-oily foods

**EHF010 & EHF011**
Non-oily Suction and Discharge

Suction and discharge of food, such as water, fruit juices, etc.

- **Tube:** SBR blend
- **Reinforcement:** High-tensile synthetic textile with steel helical wire
- **Cover:** Synthetic rubber
- **Temp:** -40°C to +80°C, (-40°F to +176°F)
- **Pressure:** 7,0-10,5 bar / 100-150 psi

**EHF008 & EHF009**
Non-oily Liquid Discharge

Discharge of food, such as water, fruit juices, etc.

- **Tube:** SBR blend
- **Reinforcement:** High-tensile synthetic textile
- **Cover:** Synthetic rubber
- **Temp:** -40°C to +80°C, (-40°F to +176°F)
- **Pressure:** 7,0-10,5 bar / 100-150 psi

**EHF007**
Heavy Duty Potable Water Suction and Discharge

Suction and discharge of potable water

- **Tube:** SBR blend
- **Reinforcement:** High-tensile synthetic textile with steel helical wire
- **Cover:** EPDM rubber
- **Temp:** -30°C to +70°C, (-22°F to +158°F)
- **Pressure:** 172 bar / 250 psi

**EHF005**
Potable Water Suction and Discharge

Suction and discharge of potable water

- **Tube:** Synthetic rubber
- **Reinforcement:** High-tensile synthetic textile with steel helical wire
- **Cover:** Synthetic rubber
- **Temp:** -40°C to +70°C, (-40°F to +158°F)
- **Pressure:** 10,5 bar / 150 psi

For more information on these and other industrial hose products, go to Eaton PowerSource for literature E-HOIN-SS001-E1
Liquid food transfer
Alcohol, beer and wine

**EHF021**
Flat Corrugated Alcohol Suction & Discharge

Suction and discharge of food containing high percentage of alcohol
- Tube: UHMW-PE
- Reinforcement: High-tensile synthetic textile with steel helical wire
- Cover: Flat corrugated EPDM rubber
- Temp: -40°C to +80°C, (-40°F to +176°F)
- Pressure: 10.5 bar / 150 psi

**EHF019**
Alcohol transfer

Discharge of food containing high percentage of alcohol
- Tube: UHMW-PE
- Reinforcement: High-tensile synthetic textile
- Cover: EPDM rubber
- Temp: -40°C to +80°C, (-40°F to +176°F)
- Pressure: 10.5 bar / 150 psi

**EHF020**
Alcohol Suction & discharge

Suction and discharge of food containing high percentage of alcohol
- Tube: UHMW-PE
- Reinforcement: High-tensile synthetic textile with steel helical wire
- Cover: EPDM rubber
- Temp: -40°C to +80°C, (-40°F to +176°F)
- Pressure: 10.5 bar / 150 psi

**EHF019**
Alcohol transfer

Discharge of food containing high percentage of alcohol
- Tube: UHMW-PE
- Reinforcement: High-tensile synthetic textile
- Cover: EPDM rubber
- Temp: -40°C to +80°C, (-40°F to +176°F)
- Pressure: 10.5 bar / 150 psi

**EHB500 & EHB501**
Beer/Wine Light duty discharge

Discharge of beverages; mineral water, fruit juices, beer, wine & liquor
- Tube: EPDM rubber
- Reinforcement: High-tensile synthetic textile
- Cover: EPDM rubber
- Temp: -40°C to +120°C, (-40°F to +248°F)
- Pressure: 7.0-10.5 bar / 100-150 psi

**EHB502 & EHB503**
Medium Duty Beer/Wine Suction & discharge

Suction and discharge of beverages; mineral water, fruit juices, beer, wine & liquor
- Tube: EPDM rubber
- Reinforcement: High-tensile synthetic textile with steel helical wire
- Cover: EPDM rubber
- Temp: -40°C to +120°C, (-40°F to +248°F)
- Pressure: 7.0-10.5 bar / 100-150 psi

For more information on these and other industrial hose products, go to Eaton PowerSource for literature E-HOIN-SS001-E1
Liquid food transfer
PVC hose and tubing
Spiral and braid

EHT500
Heavy duty wine delivery PVC hose

Delivery of mineral waters, fruit juices, wines, liqueurs alcohol contents alimentary liquids
Tube: Strong, flexible and smooth plasticized PVC
Reinforcement: shock resistant PVC spiral
Cover: Crushing, abrasion and weather resistant, light corrugated PVC
Temp: -10°C to +60°C (+14°F to +140°F)
Pressure: 9-40 bar / 131-580 psi
Regulations: UE 10/2011 and it amandement (EU) N-2016/1416 for contact with foodstuff that requires a simulating liquid Type A, B, C, D1 migration tests performed at 40°C for 10 days.

EHT200
Steel spiral PVC hose

Suction and delivery of water, mineral water, fruit juices, liquids, in industries, agricultural and industrial machineries
Tube: Strong very flexible, smooth, transparent food grade PVC
Reinforcement: Shock resistant galvanized steel wire
Cover: Abrasion resistant, crush and weather resistant smooth PVC
Temp: -5°C to +60°C, (+23°F to +140°F)
Pressure: 6,0-21,0 bar / 87-305 psi

Type 10
Food Grade PVC tubing

Food and beverage transfer lines, drain lines, sight gauges and light vacuum lines
Tube: PVC
Temp: -5°C to +65°C (-25°F to +149°F)
Pressure: 2,4-4,5 bar (35-65 psi)
Regulations: FDA Regulation 21 CFR 177.1520; NSF-51 listed

Type 20
Food Grade braided PVC hose

Air lines, water lines, food and beverage dispensing, potable water transfer and pneumatic applications
Tube: PVC
Reinforcement: Textile braid
Cover: PVC
Temp: -5°C to +65°C (-25°F to 150°F)
Pressure: 5,2-17,5 bar (75-250 psi)
Regulations: FDA Regulation 21 CFR 177.1520; NSF-51 listed
Customize: Can be color coded (transparent, red, blue etc.)

H285
CLEARFORCE™ — R

For food and beverage dispensing; and spraying and conveying
Tube: Clear PVC
Reinforcement: 2-spiral fiber
Cover: Clear PVC
Temp: -26°C to +66°C, (-15°F to +150°F)
Pressure: 5,0-172 bar / 75-250 psi
Barrier hose & tubing

37FS

Flavor Shield™ PET Barrier hose

Beverage dispensing hose
Tube: PET tubing
Reinforcement: Textile reinforcement
Cover: PET cover
Temp: -23° C to + 65°C (-10°F to 150°F)
Pressure: 12.1-17.2 bar (175-250 psi)
Regulations: NSF
-51/-61, RoHS compliant components, EU regulation No. 1935/2004

42FS

Flavor Shield™ PET Barrier tubing

Beverage dispensing tube
Tube: PET tubing
Temp: -23° C to + 65°C (-10°F to 150°F)
Pressure: 5.2-6.9 bar (75-100 psi)
Regulations: NSF-51/61, RoHS compliant components, EU regulation No. 1935/2004

Non-Barrier hose & tubing

Type 60

White / Blue-line Non-Barrier braided hose

Excellent for air, water and food transfer
Tube: LLDPE
Reinforcement: Textile reinforcement
Cover: LLDPE
Temp: -45° C to + 65°C (-50°F to 150°F)
Pressure: 12, 9-17.5 bar (188-250 psi)
Sizes: 6.4, 9.7, & 13 mm (0.265, 0.38, 0.510 in.)

4209

Eaton Non-Barrier LLDPE tube

Excellent for air, water and food transfer
Tube: LLDPE
Temp: -45° C to + 65°C (-50°F to 150°F)
Pressure: 5.2-8.6 bar (75-125 psi)
Regulations: FDA Regulation 21 CFR 177.1520; NSF-51 listed
Sizes: 6.4, 9.5, & 12.7 mm (0.25, 0.375, 0.5 in.)

Insulated Cabled beverage bundles

Eaton Insulated Bundles are ideal for applications where beverage temperature must be controlled in a precise and accurate manner. Our bundles are constructed with a core of hose/tubing for product and recirculation lines. The core is then wrapped with cling and aluminum tapes in order to seal the bundle core which protects against conductive heat loss. The construction is then insulated with closed-cell foam insulation and either wrapped with a PVC tape or a PVC extruded sheathing.

Our bundles are available in a variety of hose and tube combinations and can be manufactured utilizing any of Eaton’s Flavor Shield PET and non-barrier single line products.

Non-Insulated Cabled beverage bundles

Eaton Cabled Barrier Bundles are ideal for applications requiring beverages to be conveyed at ambient temperatures. Our non-insulated bundles are constructed of a cabled core of tubing or hose, wrapped with a vapor barrier taped and jacketed with a PVC sheath. This construction provides the ultimate in barrier protection coupled with excellent overall bundle flexibility.

Our bundles are available in a variety of hose and tube combinations and can be manufactured utilizing any of Eaton’s Flavor Shield PET and non-barrier single line products.
**Dry Bulk food transfer**

**Product overview**

**Abrasion resistant hose for suction and discharge bulk abrasive products; sugar, flour, grains, milk powder & granules.**

Improved compound recipes that provide odorless and tasteless characteristics.

- Abrasion loss value acc. DIN53516 ≤120mm³
- Large sizes up to 10” (254 mm)

**The right product for the right application:**

**Cover, Reinforcement and Tube**

**Construction: Cover**

Synthetic rubber cover for abrasion resistant durability.

- Corrugated covers for easier routing in the application.
- The high visibility branding and color coding removes the guess work from hose selection
- Color coded covers to differentiate hose types

**Construction: Reinforcement**

Reinforcements for abrasion resistance and strength.

- Steel helical wire reinforcement for added strength
- Anti-static copper wire for conductivity
- High tensile synthetic textile

**Construction: Tube**

Choose natural / synthetic rubber for abrasion resistant inner tubes

- White non-marking inner tube does not leave trace on the transported products
**EHF015**

**Flat Corrugated Bulk Suction & Discharge**

Suction & discharge bulk abrasive products; sugar, flour, milk powder & granules
Tube: Synthetic rubber
Reinforcement: High-tensile synthetic textile with steel helical wire and anti-static copper wire
Cover: Flat corrugated abrasion, ozone, and weather resistant synthetic rubber
Temp: -40°C to +80°C, (-40°F to +176°F)
Pressure: 10,5 bar / 150 psi
Sizes: 25,4 to 203,2 mm (1 to 8 in.)

**EHF012**

**Bulk Discharge**

Discharge of bulk abrasive material for food industry
Tube: Synthetic rubber
Reinforcement: High-tensile synthetic textile and anti-static copper wire
Cover: Pin-pricked, abrasion, ozone, and weather resistant synthetic rubber
Temp: -40°C to +80°C, (-40°F to +176°F)
Pressure: 10,5 bar / 150 psi
Sizes: 25,4 to 254,0 mm (1 to 10 in.)

**EHF013**

**Bulk Suction & Discharge**

Suction & discharge bulk abrasive products; sugar, flour, milk powder & granules
Tube: Synthetic rubber
Reinforcement: High-tensile synthetic textile with steel helical wire and anti-static copper wire
Cover: Pin-pricked, abrasion, ozone, and weather resistant synthetic rubber
Temp: -40°C to +70°C, (-40°F to +158°F)
Pressure: 5 bar / 75 psi
Sizes: 50,8 to 203,2 mm (2 to 8 in.)

**EHF022**

**Flat Light Duty Bulk Discharge**

Discharge of bulk abrasive material for food industry
Tube: Synthetic rubber
Reinforcement: High-tensile synthetic textile and anti-static copper wire
Cover: Abrasion, ozone, and weather resistant synthetic rubber
Temp: -40°C to +70°C, (-40°F to +158°F)
Pressure: 5 bar / 75 psi
Sizes: 25,4 to 254,0 mm (1 to 10 in.)
Washdown hose
Product overview

Washdown hose are specifically designed for food processing facilities & equipment.
• Non marking color covers
• Hoses to meet a high variety of different pressure levels
• Up to 150°C (intermittent) working temperature
• Smooth synthetic rubber covers resistant to oil, animal fat and abrasion
• Great flexibility and kink resistance
• Compact design
• Inner tube resistant to hot water, oil and detergent solutions
• Antimicrobial cover possible for selected hoses

The right product for the right application:
Cover, Reinforcement and Tube

Construction: Cover

Synthetic rubber or vinyl nitrile cover for oil, weather and abrasion resistant durability.
• The high visibility branding and color coding removes the guess work from hose selection
• Color-coded covers to differentiate hose types

Construction: Reinforcement

Various reinforcements available to meet your application requirements:
• Steel wire reinforcement for added strength
• High tensile synthetic textile

Construction: Tube

Choose nitrile, synthetic rubber EPDM for abrasion resistant inner tubes
• Inner tube resistant to hot water, oil and detergent solutions
• FDA compliant inner tube available on selected hoses
Washdown hose
Food processing facilities and equipment

EHF003
Dairy Washdown
Cleaning in food processing facilities
Tube: Synthetic rubber
Reinforcement: High-tensile synthetic textile
Cover: Synthetic rubber, oil, heat, abrasion resistant
Steam
-40°C to +165°C (-40°F to +329°F)
7 bar / 100 psi
Hot water
-40°C to +80°C (-40°F to +176°F)
20 bar / 300 psi
Regulation EC 1935/2004, FDA regulation CFR title No.21 art 177.2600

EC116 - EC216
Washdown
Meets EN1829-2

H1066
Creamery/Packing Washdown
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

EHF033
Eaton Washdown hose
Cleaning in food industry, pharmaceutics and healthcare institutions
Tube: White specially FDA approved EPDM tube
Reinforcement: One textile braid
Cover: Antimicrobial blue NBR/PVC cover
Temp: -40°C to +120°C (-40°F to +248°F)
Pressure: 45-58 bar for size 8 and 12

EHF034
Eaton Washdown hose
High pressure cleaning for food industry
Tube: Synthetic rubber tube
Reinforcement: One or two wire braid reinforcement
Cover: Blue or grey smooth synthetic rubber for oil, abrasion and weather resistance
Temp: -40°C to +150°C (intermittent) (-40°F to +302°F)
Pressure: 250 bar (1 wire); 400 bar (2 wire)
Approved fitting: One-piece TTC
For more information Eaton Hose Master Catalog - EMEA: E-HOHP-CC002-E.

H9610
WASHDOWN™ 1000
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
Approved fitting: One piece TTC and Optimum 4T fittings

EATON Food processing products guide E-HOPEB003-E 13
PTFE - EN-TW Series
Smooth bore, Non-dissipating
SAE 100R14-A, SAE J517

Steam application in food processing
Tube: Non-conductive PTFE inner tube
Cover: 304 stainless wire braid cover
Temp: -54°C to +236°C (-65°F to +456°F)
Pressure: 68-210 bar / 1000-3000 psi
Sizes: -04 (210/3000), -06 (175/2500), -08 (140/2000), -10 (103/1500), -12 (86/1250), -16 (68/1000)
Available fittings: E-Series, field attachable

PTFE - Everflex 8000 Series
Convoluted hose, non-conductive
Exceeds SAE100R14 standard

Steam application in food processing
Tube: Convoluted Teflon tube (Non-conductive)
Cover: 304 stainless wire braid cover
Temp: -54°C to +204°C (-65°F to +400°F)
Pressure: 35-103 bar / 500-1500 psi
Sizes: -08 (103/1500), -12 (86/1250), -16 (62/900), -20 (62/900), -24 (52/750), -32 (35/500)
Available fittings: Conv-O-Crimp

EH084
STEAM SLAYER™
Transfer of steam for processing products and cleaning equipment
Tube: Special chlorobutyl blend
Reinforcement: 2-wire braid
Cover: Pin-pricked EPDM
Temp: -40°C to +206°C (-40°F to +400°F)
For superheated steam +232°C (+450°F)
Pressure: 172 bar / 250 psi
Sizes: -08, -10, -16
Available fittings: Eaton EJ series

EHS006
Steel Wire Reinforced Steam
ISO 6134-2A

Transfer of steam for processing products and cleaning equipment
Tube: EPM
Reinforcement: High-tensile steel wire cords
Cover: Pin-pricked synthetic rubber
Temp: -40°C to +208°C (-40°F to +406°F)
Pressure: 18 bar / 261 psi
Fittings: Ground joint female or Boss male
FishPump hose
Aquaculture industry and dredging

ORCA PVC hose
Heavy duty PVC fish transfer hose for aquaculture industry

To transfer of fish from hatcheries, seine or ponds to vessels, trucks, live-haul tanks or processing, and also dredging.

Reinforcement: Shock resistant PVC spiral. Crushing, chemical, abrasion and weather resistant
Cover: Strong, flexible and smooth plasticized PVC
Temp: -25°C to +55°C (-13°F to +131°F)
Pressure: 3-6 bar (43.5-87 psi)

Features

- Transparent construction allows for visual confirmation of material flow
- High UV resistant compound
- Vacuum pressure 9.5m/h²
- Ensure optimized flow properties
- Increased flexibility
- High durability
- Great performance in suction application
- Lower cost compared to a rubber hose
- Can be used for dredging application

Dredging application is an excavation activity usually carried underwater, in shallow seas or freshwater areas with the purpose of gathering up out bottom sediments and widening.
Quick Disconnect couplings
Product overview

For over 100 years, Eaton has continued to manufacture and supply the highest performing quick disconnect couplings globally for many different market segments including agriculture, construction, transportation, and food processing.

From traditional industry standards to custom couplings for the next generation of emerging markets and new advanced technologies, Eaton continues to provide quick disconnect coupling solutions to meet your demands. And backed by the industry’s leading 3 year warranty, you will have the lasting confidence in the performance of Eaton’s quick disconnect couplings.

Couplings provide a means of quickly connecting and disconnecting a line without a loss of fluid or entrance of air into a system.

Eaton offers a wide range of different coupling types available for food applications, eg. dry break designs to avoid spillage when disconnecting and full flow design without valves to maximize flow capacity:

• All food couplings are available in 303 or 316 stainless steel material
• Wide range of sizes from ¼” up to 2 ½” and availability of different seal materials to fulfill various applications
• Some couplings like MLDB offer a serviceable design that allows for easy cleaning and seal replacement

Selection criteria
When choosing couplings, there are a few key selection criteria to keep in mind:

• Pressure
• Fluid compatibility
• Temperature
• Size
• Sleeve lock
• Environment
• External loads
• Connect/disconnect under pressure

For more information go to Eaton Quick Disconnect Couplings Master Catalog E-MEQD-CC002-E4
Quick Disconnect couplings
Food industry applications

MLDB Series
Flat Face/Dry Break

Stainless steel dry break coupling for fluid transfer and cooling in chemical, pharmaceuticals, food processing, and corrosive environments

• Ability to connect with less force
• Available in a wide range of configurations, also seals and terminal ends
• Its serviceable design allows for easy cleaning and seal replacement

Sizes: 1/4” up to 1” cover the whole range
Material: 316/316L stainless steel
Rated Flow: 15-200 lpm for size 1/4” - 1”
Pressure: 25 bar
Features: No spillage when disconnecting Serviceable design

ST Series
Full flow straight-through coupling

Free flow of liquid or gas in the application
Transfer-type systems minimum pressure drop is required and valving is not needed and suited for various and versatile fluid in chemical, food and beverage, medical, pressure and steam cleaning.

• Available in wide range of body materials, seal materials and sizes

Sizes: 1/4” up to 2 1/2” cover the whole range
Material: Rugged construction of 303 stainless steel
Also available in brass, steel
Rated Flow: 10-1855 lpm for size 1/8” - 2”
Pressure: 103-517 bar for size 1/8” - 2”
Features: Ball latching mechanism
Proprietary design
Maximized flow capacity

L7000
Full flow stainless steel

Food processing and pressure cleaning where maximum flow capacity is a requirement and valving is not needed
Heat treatment and hardened materials give the coupling excellent resistance to mechanical and hydraulic demands

• Available in wide range of body materials, seal materials and sizes

Sizes: 1/4” up to 2” cover the whole range
Material: Rugged construction of 303 stainless steel
Rated Flow: The nominal flow diameter of the coupling has no impact on pressure drop, as it is wider than the circuit diameter
Pressure: 40-300 bar for size 1/8” - 2”
Suited for up to 1000 bar operating pressure
Features: Maximized flow capacity
Proprietary design

MLHK Series
ISO 7241-B interchange stainless steel

Stainless steel ball latch coupling for supporting processes where high corrosion resistance and fluid compatibility is required
Heat treatment and hardened materials give the coupling excellent resistance to mechanical and hydraulic demands

• Available in wide range of seal materials

Sizes: 1/8” up to 2 1/2” cover the whole range
Material: 316 stainless steel
Rated Flow: 3-757 lpm for size 1/8” - 2 1/2”
Pressure: 104-344 bar for size 1/8” - 2 1/2”
Features: Very good corrosion resistance and fluid compatibility
Wide range of seal options available

For more information go to Eaton Quick Disconnect Couplings Master Catalog E-MEQD-CC002-E4
**Tube connectors**
WALFORMplus, WALFORMplus-M and WALPRO-X

**WALFORMplus**
WALFORMplus is a very robust, absolute leak free and easy in assembly tube forming system where the tube end is cold formed within seconds by a machine.
The sealing mode is primarily done by the symmetric WALFORM-captive seal, and additionally metal-to-metal by the specific WALFORMplus-nose. The specific shape itself creates the holding function.
- All parts built to DIN EN ISO 8434-1 for 24° fittings
- Corrosion resistance >1000 hrs. to red rust (VDMA 24576/KS)
- L Series fittings up to 500 bar / 7,250 psi
- S Series fittings up to 800 bar / 11,600 psi, connection system for thin-walled tubes
- 4:1 Safety factor
- All fittings available stainless steel (1.4571)
- Elastomeric + Metal-on-metal sealing principle

**WALFORMplus-M**
WALFORMplus-M is a positive-locking fitting system for steel and stainless steel tubes that consists of only two components. The mechanically reshaped tube end is screwed together using a conventional DIN/ISO stud and a DIN/ISO union nut, and the only possibly leakage path is sealed off by means of the 24° taper of the tube.
- For applications with aggressive media or very high temperatures, where a soft seal is unsuitable
- Requires just two components (nut and stud) to create the tube connection
- Material for studs and nuts: Carbon steel or 1.4571 stainless steel
- L Series fittings up to 500 bar / 7,250 psi
- S Series fittings up to 800 bar / 11,600 psi
- Over 60% lower torque requirements in comparison with other tube connecting systems

**WALPRO-X**
WALPRO-X is a metallic sealing cutting ring out of stainless steel material. It can be assembled with stainless steel tubing to be used in corrosive environment and for wide range of media.
- All parts built to DIN EN ISO 8434-1 for 24° fittings
- Material 1.4571 Stainless Steel
- L Series fittings up to 400 bar / 5,801 psi
- S Series fittings up to 630 bar / 9,137 psi
- 4:1 Safety factor

With **M-WF385Xplus** WALFORM machine you can reduce assembly errors as it allows easy machine set-up, short cycle times and robust performance.
For cold tube forming of carbon steel tube diameters from 6 to 42 mm and stainless steel tube diameter from 6 to 38mm

**MW1**
Assembly trolley for easy transport of the machine on the shop floor.

For more information: Eaton Walterscheid
Master E-MEFi-CC001-D
Food processing applications

Brewery

Flexibility and flavor integrity is critical for hoses and tubing used in beverage production, transfer and dispensing.

Pure water is essential to good beer – and brewers pay close attention to the source of the brewing water. Using a proper hose for potable water is critical to keep good taste properties.

Eaton food dry bulk hose transfers grain efficiently to make the malt, grain allowed to germinate, and dried or roasted.

Transfer of the water and grain, or mash, to a straining vessel, revealing “wort”.

Washdown hose maintains equipment life, and product quality assurance.

For one to three weeks, the beer is stored cold and then filtered once or twice before bottling, packaging, or shipping directly to restaurant.

Flavor Shield™ hose and tubing products feature a modified PET barrier bonded to a special polyolefin alloy which provides maximum flexibility and ease of installation.
Food processing applications

Winery

Growers take care of grapes before the crushing of them to get the juice and skins separated. Eaton PVC food and beverage hoses meet FDA and European Plastic Regulation (EU) No 10/2011 and provide minimal potential for flavor migration.

Prepared grapes are transferred to fermentation vessels. Eaton EHT500 PVC wine hose offers excellent flexibility, crush resistance and meet most stringent European regulations for contact with food and beverage products.

In wine distilling the racking step allows solids to fall to the bottom of the tank. Alcohol resistant hose will transfer the wine to another holding container assuring taste and quality.

Cold processing the clarified wine is then racked into another vessel, where it is ready for bottling or further aging.

Maintenance and cleaning for properly following strict health guidelines and keeping equipment running efficiently.

Eaton beverage hose and tubing provide great flexibility, minimal potential for flavor migration and superior surface contact smoothness.
Faced with a menu of challenges driven by strict safety regulations, regulatory compliance, slim margins and increasing competition, you must find ways to reduce downtime and increase productivity while protecting your people and the safety of the consumers who buy your products.

Whether the hose transfers oils, dairy, water, alcohol in the high heat, or low temperatures, Eaton fluid conveyance products are the right choice for your application.

Safely handle and transfer while protecting workers and environment.

Food processing dairy has special temperature requirements for freshness and quality assurance.

Abrasion resistance allows for reduced downtime and increase productivity.

Hoses in multiple sizes for suction and discharge applications. Our hoses are abrasion and heat resistant for robust service in harsh environments and applications.

Conforms to packaging within strict safety guidelines.
Safety information
Food and beverage hose

Eaton hose and fittings 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:** 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.

Determine the correct hose configuration

Eaton recommends using the ‘STAMPED’ process to aid in determining the correct hose and coupling for your application.

- **S** - Size (I.D., O.D. and length)
- **T** - Temperature of material conveyed and environmental conditions
- **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

Read all instructions concerning the hose you are selecting. If any questions arise contact Eaton technical support.
Putting fluid conveyance information at your fingertips

Eaton PowerSource™ is the hub for all of Fluid Conveyance. This informational site houses Eaton’s product, market and technical information including:

1. Searchable fluid conveyance product information:
   - Part numbers
   - Sizes
   - Performance and specifications
   - Branding information
2. Literature and videos
3. Product value propositions
4. Crimp specifications
5. Coupling cross reference tool
6. Custom bin label tool
7. 2D/3D cad models
8. Hose assembly configurator
9. Marketplace (authenticated PowerSource only)
10. List prices and lead times (authenticated PowerSource only)

To access these tools and more, visit and log in to PowerSource from My.Eaton.com and then select tools.
Beyond the features highlighted on the previous pages, PowerSource also offers:

**Literature**
Access the complete Eaton Product Literature library, which includes product catalogs, brochures and sell sheets, operators manuals, repair documents, and technical and installation documents.

**Videos**
View Eaton’s promotional, training, and help videos.

**On demand presentations**
Access training videos in the On Demand Presentations section to learn about the latest products from Eaton.

**Sales kits**
Your one-stop-shop for selling tools on the benefits of Eaton’s products and services.

**Hydraulic guide selector tool**
Need help selecting the best hydraulic hose and fittings for the job? Let Eaton help by stepping you through the process of building a hose while showing you which performance characteristics are tied to each hose feature, including inner tube, reinforcement, and cover.

**Hose assembly tool**
To build a hose assembly and then create a bill of materials, start by selecting a hose, hose endings, and specify the length.

**Calculators**
Eaton’s Hydraulic Calculators are designed to get you the right parts to suit your needs.
Manage your assets like never before with Eaton’s UniqID asset tracker.

Eaton’s UniqIDTM asset tracker is a cloud-based tool that can be used worldwide by Eaton distributors. The UniqID asset tracker was created by Eaton to label, manage, and track products. This tool accelerates replacement time by eliminating the need to physically bring in products to be replaced. While the tool is designed for Eaton hose assemblies, it is versatile and can be applied across industrial products.

Complete asset lifecycle
Label, track and manage products while meeting OEM compliance requirements.

Reduce downtime
Repair and replace quickly and accurately with instant hose assembly information for reorder ease. Minimize paper-based processes.

Manage assets on the go
Accessible on smartphones, tablets, and desktop applications anywhere, anytime.

Perform scheduling & reporting
Pro actively manage upcoming maintenance and replacement needs via built-in scheduling. Run and export custom reports.

Increase revenue
Secure aftermarket sales with the unique six-digit code that directs customers back to the original hose assembler.

Streamline record keeping
Upload inspection info, testing certifications, engineering drawings, and much more.

If you have additional questions or are interested in getting started, please contact UniqID@Eaton.com or visit our website at www.Eaton.com/UniqID. Eaton’s UniqID asset tracker is also available for download from the App Store or Google Play for on-the-go requests.
Key service benefits

- Simplify product supply and ordering processes
- Improve assembly configurations
- Optimize production engineering processes
- Bring down total cost
- Achieve complete solutions with a single code and from a single supplier

Value that goes beyond the hose

As one of the world’s preferred suppliers of fluid conveyance products, we’re relentlessly dedicated to helping our customers gain competitive advantage in a wide array of demanding industries. Whether our customers rely on machines that move, turn, shape, mold, lift, dig, or haul, Eaton products are there to deliver the performance they need to stay ahead.

To help our customers go further and faster, we’ve developed a broad portfolio of value-added services. Working hand-in-hand on tailored solutions, we use our expertise to help customers harness theirs—freeing them to focus on what they do best.

By streamlining and simplifying component supply and installation processes, we can help customers rationalize spending, accelerate productivity, flex with new demands, and outmaneuver competitors. We carefully evaluate each customer’s processes and workflow to tell them how they could be optimized, helping to ensure their operations are adding value every day.

Contact Eaton EMEA Hydraulics about the services:
HoseAssemblyServiceEMEA@eaton.com
Service overview

Kanban/consignment

Developed to improve production efficiency, Kanban offers a clear advantage for lean and on-time manufacturing. We can create a bespoke logistics solution to meet any customer requirements.

Key benefits:
- Increases productivity
- Reduces inventory demands
- Ensures streamlined and reliable on-time delivery

UniqID asset tracking

UniqID asset tracking is our cloud-based tool designed to label, manage, and track hose assemblies. It enables customers to manage their assets like never before—anywhere, anytime—while also meeting OEM compliance requirements.

Key benefits:
- Enables complete asset lifecycle management
- Reduces downtime with fast and accurate maintenance and replacement
- Streamlines record-keeping

On-site assembly

Through on-site hose assembly, we can make a customer’s production system faster, more efficient, and more predictable, as well as simplifying their ordering and inventory processes.

Key benefits:
- Enables short lead times and a rapid response to new demands
- Optimizes costs due to reduced logistics and packaging

Kit building

We use kit building to optimize the customer production process, helping them work faster and more efficiently—making better use of space, simplifying assembly, reducing training demands, and more.

Key benefits:
- Reduces inventory space and costs
- Enables faster assembly and optional direct delivery to line

Expedited shipping

Our expedited manufacturing and shipping service helps clients cope with challenges like inventory errors, breakdowns, or short-term production changes—avoiding delays, higher costs, and unhappy end customers.

Key benefits:
- Enables rapid delivery of urgently needed parts
- Prevents line stops or ramp up issues

Rapid prototyping

We can help customers quickly create even high complexity hose assembly prototypes—enabling them to leverage the value of a physical specimen to create more optimized and competitive solutions.

Key benefits:
- Rapidly enables design verification, testing and optimization
- Maximizes product lifetime and performance

On-site application engineering

With on-site support from our experienced engineers at their manufacturing location, customers can reduce the time and cost for new application development and select the most suitable components during prototyping to guarantee an efficient, cost-effective, and competitive solution.

Key benefits:
- Makes application development faster and less expensive
- Expert support ensures an efficient, cost-effective, and competitive solution
- Ideal routing upfront reduces design iterations and later issues