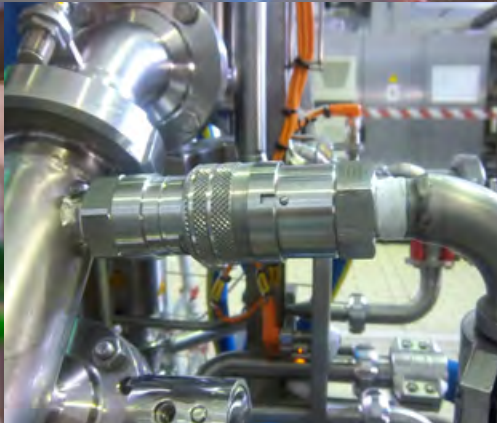




Eaton food processing products  
**Ready for any challenge  
on the menu**



**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.



Solutions for the food and beverage industry



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Eaton's fluid conveyance products offer flexible and proven solutions needed for retooling, maintenance, and repair of processing machinery or general facility upkeep.

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 sanitation

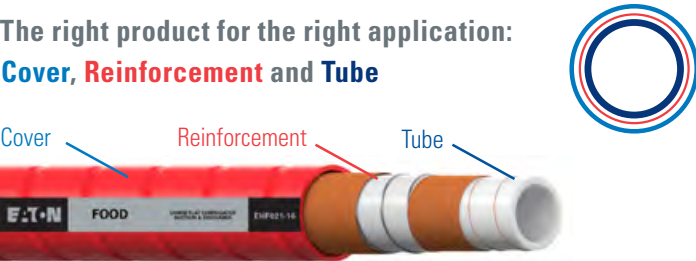
- Strictly follow sanitization recommendations given by Eaton. Don't use high pressure cleaning systems to wash inside the hose.
- Max 120°C for 15 min. with steam -or- Max 50°C for 15 min. with 5% caustic soda.
- Don't use food hose at temperatures or pressure higher above those recommended by Eaton. Doing so will weaken or deteriorate the hose and will significantly decrease its life.

Liquid food transfer

Product overview

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:

Oil-resistant	NBR or vinyl nitrile
Vegetable oil or animal fat	NBR
Diary foodstuff	NBR or vinyl nitrile
Dry bulk food	Natural rubber
Non-oily foodstuff	Natural rubber
Alcoholic liquids	UHMW-PE or EPDM
Light & medium duty alcohol liquids	EPDM
High temperatures/steam	EPDM
Washdown applications	Nitrile or EPDM
Portable water	Natural rubber / SBR

Meets EC no. 1935/2004, Regulation 93/11/EEC, Regulation EC No. 2023/2006, FDA CR 21 177.2600



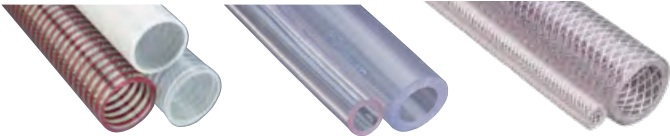


# Liquid food transfer

## 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 amandment (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



# Liquid food transfer

## Dairy products, vegetable oil and beverages



### 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

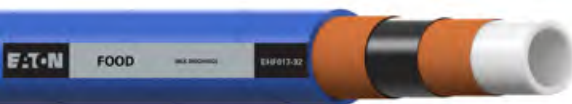


##### Suction and discharge of milk, vegetable oil and beverages

**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:** 7,0 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

► 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

## 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

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

## 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

## EBH500 & EBH501

### 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

## EBH502 & EBH503

### 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



# Liquid food transfer

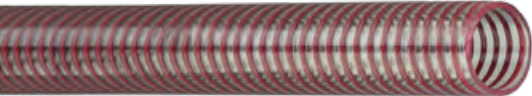
PVC hose and tubing

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 amendement (EU) N-2016/1416 for contact with foodstuff that requires a simulating liquidType 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 spiral 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

## 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:** 5,0-17,2 bar / 75-250 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 +150°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.)

# Liquid food transfer

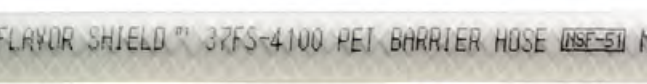
Beverage hose, tubing and cabled bundles



Barrier hose & tubing

## 37FS

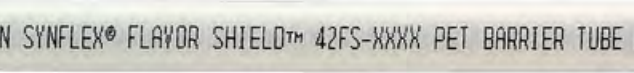
Flavor Shield™ PET Barrier hose



**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

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

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 (188-250psi)  
**Regulations:** FDA Regulation 21 CFR 177.1520; NSF-51 listed, EU regulation No. 1935/2004  
**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.

- Meet EC no. 1935/2004, Regulation 93/11/EEC, Regulation EC No 2023/2006, FDA CR 21 177.2600
- 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



# Dry Bulk food transfer

## Suction and discharge



### 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 +80°C, (-40°F to +176°F)

**Pressure:** 10,5 bar / 150 psi

**Sizes:** 25,4 to 254,0 mm (1 to 10 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:** 50,8 to 203,2 mm (2 to 8 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



### 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

### EC116 - EC216

#### Washdown

Meets EN1829-2



High pressure cleaners for food, car wash, labor areas

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 - +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

### 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 +176°F)

20 bar / 300 psi

Regulation EC 1935/2004, FDA regulation CFR title No.21 art 177.2600

### EHF033

#### Eaton Washdown hose



Cleaning in food industry, pharmaceuticals and healthcare institutions

Tube: White specially FDA approved EPDM tube

Reinforcement: One textile braid

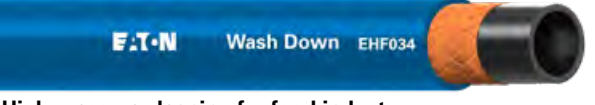
Cover: Antimicrobial blue NBR/PVC cover

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 textile braid

Cover: Synthetic rubber smooth pin pricked color cover

Temp: -40°C to +100°C

Pressure: 200 bar for size 8



# Steam hose applications

Food processing facilities and equipment



## 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

**Convuluted hose, non-conductive**  
Exceeds SAE100R14 standard



**Steam application in food processing**

**Tube:** Convuluted 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 +407°F)  
For superheated steam +232°C (+450°F)  
**Pressure:** 17.2 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.

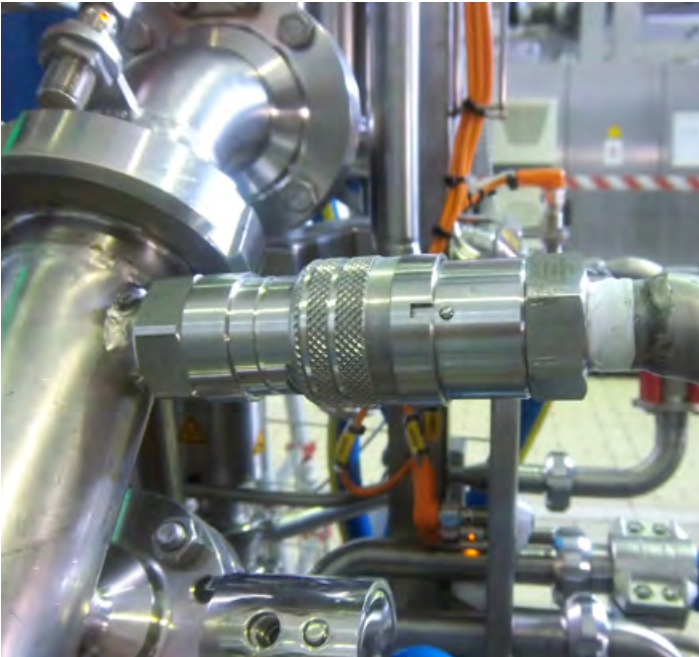
- All food couplings are available in 303 or 316 stainless steel material
- Wide range of sizes from 1/4" up to 2 1/2" and availability of different seal materials to fulfill various applications
- Some couplings like MLDB offer a serviceable design that allows for easy cleaning and seal replacement

### Selection criteria

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

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

► For more information go to Eaton Quick Disconnect Couplings Master Catalog E-MEQD-CC002-E4



In line and tank cleaning operations



# 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

### 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

### 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

### 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"

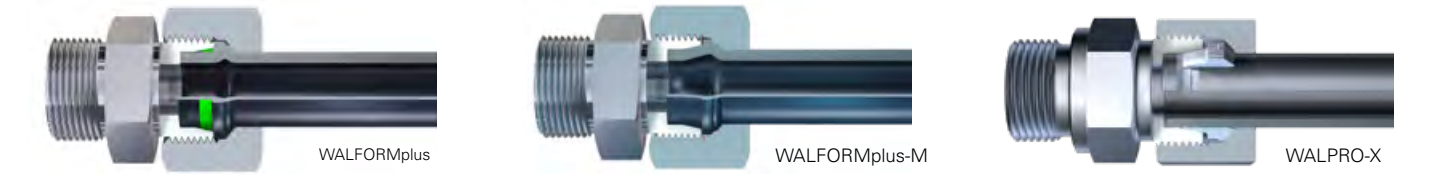
**Features:** Very good corrosion resistance and fluid compatibility  
Wide range of seal options available

► 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/K5)
- 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

### 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

### 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

### M-WF385Xplus

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.



# Food processing applications

## Brewery



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



EHF005 and EHF007

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.



EHF013

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



EHB501, EHB503 and EHF020

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



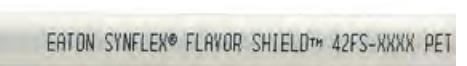
EHF033, EC116 and EHF003

Washdown hose maintains equipment life, and product quality assurance.



EHB503 and EHF021

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



37FS Flavor Shield and Type 60

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



EHT200

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.



EHT500

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.



EHB501

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.



EHF019

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



EHF003, EC116, or EHF033

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



37FS Flavor Shield or H285 Clearforce

Eaton beverage hose and tubing provide great flexibility, minimal potential for flavor migration and superior surface contact smoothness.

# Food processing applications

## Industrial food processing



EHF002

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.



EHF005

Safely handle and transfer while protecting workers and environment.



EHF018 & EHF017

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



EHF012 & EHF013

Abrasion resistance allows for reduced downtime and increase productivity.



H0350 Lion

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



H285, Type 20, 4209 and 4220 tubing

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.

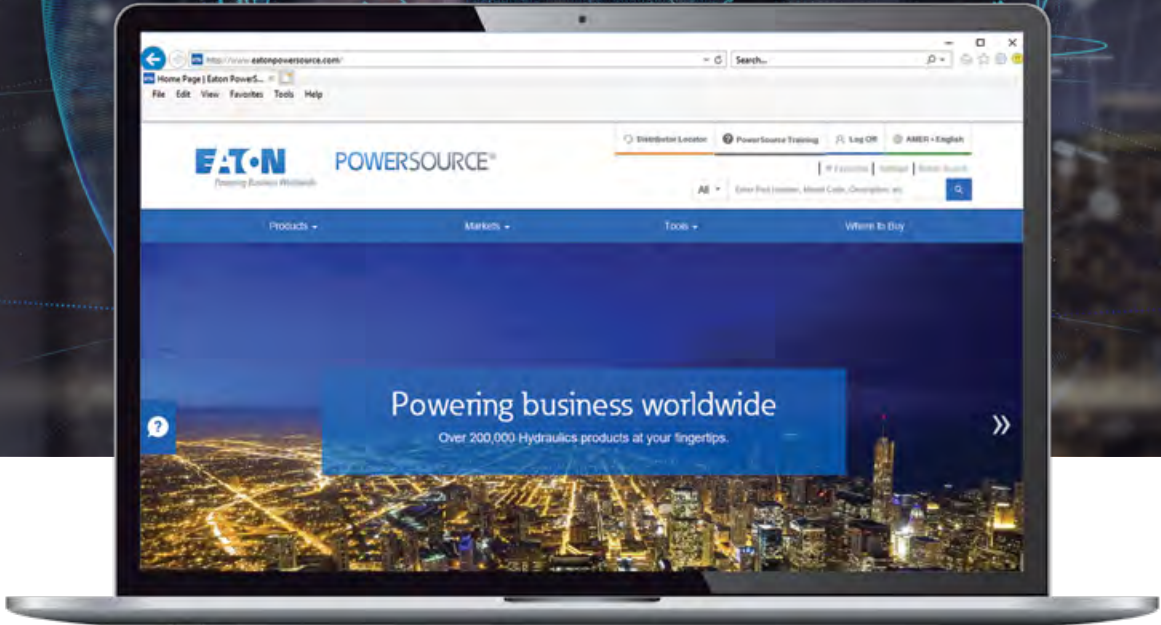
- S** - Size (I.D., O.D. and length)
- T** - Temperature of material conveyed and environmental
- A** - Application, the conditions of use
- M** - Material being conveyed, type and concentration
- P** - Pressure to which the assembly will be exposed
- E** - Ends; style, type, orientation, attachment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



Eaton PowerSource  
Tools

Eaton PowerSource™  
Your information headquarters



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](https://my.eaton.com) and then select tools.
- 22 EATON Food processing products guide E-HOPT-BB003-E
- EATON Food processing products guide E-HOPT-BB003-E
- 23



## PowerSource information

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

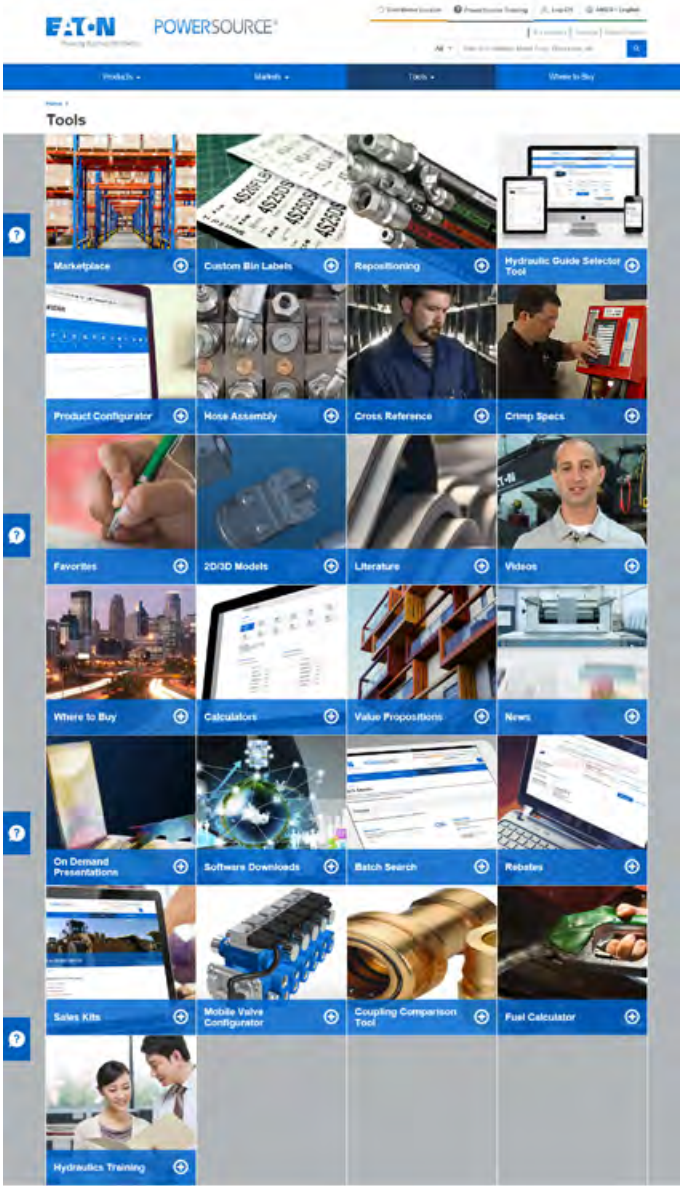
Need help selecting the best hydraulic hose and fittings for the job? Let Eaton help by stepping you through the process of building a hose while showing you which performance characteristics are tied to each hose feature, including inner tube, reinforcement, and cover.

### 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.



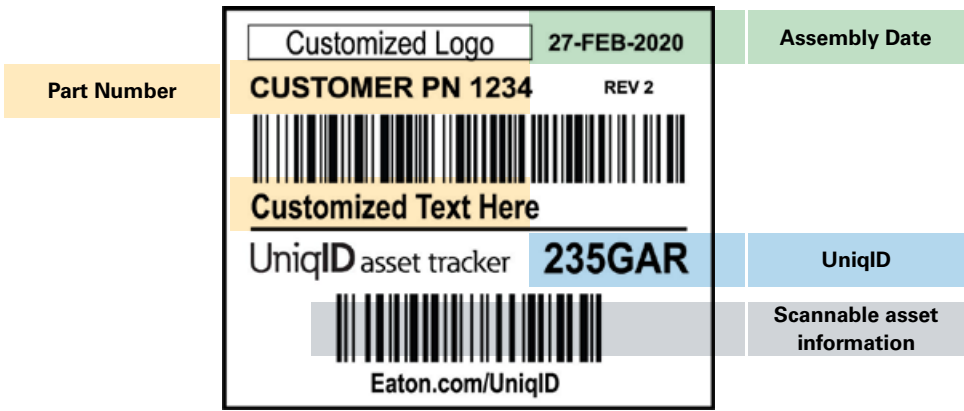
Worldwide connectivity, one label at a time

# UniqID

Label. Track. Replace.

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](http://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.



# Service overview

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

On-site assembly

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

Rapid prototyping

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

Kit building

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

Expedited shipping

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

Kanban/consignment

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

UniqID asset tracking

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

On-site application engineering



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