

# Food industry

## Fluid transfer solutions

Our hose assemblies solutions for food industry

[www.trelleborg.com/fluidhandling](http://www.trelleborg.com/fluidhandling)





# TRELLEBORG GROUP LEADER IN POLYMER SOLUTIONS

Trelleborg is a world leader in engineered polymer solutions that seal, damp and protect critical applications in demanding environments. Its innovative solutions accelerate performance for customers in a sustainable way. In 2022, the Trelleborg Group had annual sales of approximately SEK 30 billion in around 40 countries.

The Group comprises two business areas: Trelleborg Industrial Solutions and Trelleborg Sealing Solutions. The Trelleborg share has been listed on the Stock Exchange since 1964 and is listed on Nasdaq Stockholm, Large Cap. [www.trelleborg.com](http://www.trelleborg.com)

**[www.trelleborg.com](http://www.trelleborg.com)**

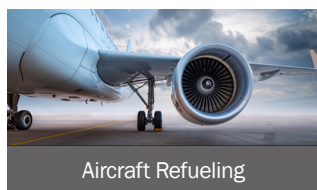


Trelleborg Industrial Solutions



Trelleborg Sealing Solutions

## TRELLEBORG FLUID HANDLING SOLUTIONS



Aircraft Refueling



Aquaculture



Chemical Fluid Transfer



Construction



Food & Beverage Production



Marine & Leisure Boat



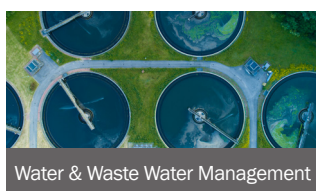
Petrochemicals



Energy Transfer



Manufacturing & Machine Tools



Water & Waste Water Management



Mining Equipment



Oil Transfer

### **We Protect the Essential, Innovate for Tomorrow.**

At Trelleborg Fluid Handling Solutions, we champion the protection of what's crucial to you - from ensuring the purity of the food on your table to maintaining the environmental integrity of our oceans. Our commitment extends beyond today, preparing for the challenges of tomorrow with innovative, reliable, and sustainable solutions that safeguard people, assets, and the environment.

### **Your Trusted Partner in Fluid Management.**

Built on over 100 years of engineering expertise, Trelleborg Fluid Handling Solutions transcends traditional fluid management.

We're not just about engineering; we're about redefining excellence with precision and care. Our pioneering solutions enhance the fluid transfer process, setting new industry benchmarks for safety, efficiency, and sustainability.

### **We offer reliable Fluid Handling Solutions.**

We engineer the future with top-tier hoses that guarantee a smooth, leak-free flow, increase workplace safety and embody environmental stewardship with sustainable, waste-minimizing designs. We are Trelleborg Fluid Handling Solutions — Your trusted partner in Fluid Handling Solutions.

Our rubber coated nuts prevent burns and guarantee optimal tightening by hand

Proprietary fitting system:

- No risk of disconnection
- No retention area, preventing bacterial growth

**PHthalates  
FREE**

**BISPhenol A  
FREE**

**REACH**


Each hose assembly has, engraved on ferrule, assembly date, ID number and pressure test value

**Before first use**, you should proceed as follows in order to prevent any alteration of your fluid.

- Fill hose with hot water (70°C to 80°C).
- Keep water inside for minimum 2 hours.
- Then, clean hose using any of the following cleaning processes which should prevent early ageing of your hoses.

### △ ADVICE FOR CLEANING PROCESSES

- These recommendations are based on maximum of 2 cycles a day (with maximum 15 minutes in total for the chemical cleanings).
- **Every cleaning cycle must be immediately followed by a complete rinse.**
- For any other chemical or mix of chemicals, concentration, duration, temperature and frequency, please contact us to select the best hose for your application.

	Max duration in total	CITERDIAL LACTADIAL - ALCODIAL	SUPERVRAC AL EC TRELLVAC AL EC	ALIKLER D ALIKLER G2 - BIOVAST BIOCLEAN - KLENET	BEERDIAL - VINITRELL G2 MILLESIME TRELLVIN - BERGALAV MULTIDIAL UPE FOOD 10 HOT EU
Hot water	max 30 minutes	• max 90 °C		• max 95 °C	
Steam (open end circuit)	max 10 or 30 minutes	• max 110 °C during max 10 minutes	• max 130 °C during max 30 minutes		
Nitric acid	max 15 minutes	• 0.1% at max 85 °C • 3% at room temperature			
Phosphoric acid		• 1% at max 85 °C • 3% at room temperature			
Chlorinated products (hydrochloric acid, sodium hypochlorite...)		• 1% at max 70 °C			
Sodium hydroxide		• 2% at max 80 °C • 5% at room temp.	• 2% at max 60 °C • 5% at room temperature		• 2% at max 80 °C • 5% at room temp.
Hydrogen peroxide		• 3% at room temperature			• 1.5% at max 85 °C • 3% at room temp.
Peracetic acid		• 0.5% at room temp.	• 1% at room temp.		• 1% at max 50 °C

### △ REGULAR CHECKS

**It is recommended to carry out regular checks on the hose (cover and tube) to make sure it is still safe of use as its original properties will eventually alter upon usage.**

### △ STORAGE

Keep away from (sun) light and heat. Only use pierced plugs when needed.

### △ STAGNATION

**Prohibited** except with ALCODIAL or MULTIDIAL UPE, for limited duration.

### ⊘ BE CAREFUL

Do not use high pressure cleaning systems to wash inside the hose.

## REGULATIONS AND STANDARDS

Compounds and hoses are all complying with latest regulations:

- European regulations 1935/2004 and 2023/2006 ; 10/2011 for ALCODIAL and MULTIDIAL UPE.
- France: order of 5/8/2020 ;
- Germany: BfR recommendation XXI when applicable ;
- USA: FDA - 21 CFR 177.2600 and CFR 177.1520 for ALCODIAL and MULTIDIAL UPE.



BfR

FDA

Made in France



# SAFEFLOW®

NEW

**The future of your fluid transfer management**

**The answer of your Food Defense issues**

The promise of improve security, efficiency, and traceability of your fluid transfer.

A solution that addresses the main challenges of our industry.

## DETECTION SOLUTION

A coupling connection integrating and RFID chip associated with a sensor, in other words a reader head, makes it possible to detect, in real time, whether your fitting is tight and watertight.



## CONNECTION SOLUTION

The detection solution is now connected to Master IO Link with an industrial controller allowing generate intelligence and thus optimize traceability, monitoring and reliability of your flows and equipment.

A revolution in the world of industrial hoses.



# Hygiene Traceability Reliability

## HYGIENE

Trust Trelleborg for hoses and assemblies engineered with hygiene as a top priority. Our smooth inner tube resists standard cleaning methods, while our unique coupling system eliminates bacterial growth.

Crafted from food-grade compounds that meet the highest safety standards, our products are phthalate and Bisphenol A-free. Choose from our non-marking red or blue covers to keep your floors spotless.

## RELIABILITY AND SAFETY

Our flexible yet robust rubber material absorbs shock and adapts seamlessly to temperature changes, maintaining flexibility and pressure resistance even in low temps.

Our crimping coupling systems fit most common fittings, preventing bacterial growth and disconnections. Plus, our rubber-coated nuts ensure safe handling and optimal tightening.

## TRACEABILITY

Every Trelleborg hose features an embossed tape indicating the production week, year, and batch number for easy traceability. Each assembly is also marked with an engraved ferrule, detailing the assembly date, identification number, and pressure test value.













## TYPES OF ELASTOMERS

NR	Natural rubber
NBR	Nitrile rubber
SBR	Styrene Butadiene rubber
EPDM	Ethylene Propylene rubber
UPE	Ultra High Molecular Weight Polyethylene
Special Polymer	Special Polymer



# LIQUID FOODSTUFFS

TRELLEBORG RANGE FOR FOOD INDUSTRY				WP	Vacuum	Temp.	Inner	ID
TRANSFERS IN PROCESS/PACKAGING/UNLOADING OPERATIONS/MILK COLLECTION				(bar)	(bar)	(°C)	tube	(mm)
<b>BEERDIAL</b>	<b>NEUTRAL</b>		<b>NEW</b>	15	0.9	+ 120	Special Polymer	25-100
<ul style="list-style-type: none"><li>• High flexibility</li><li>• Optimum organoleptic neutrality</li><li>• High temperature</li></ul>								
<b>VINITRELL G2</b>	<b>SLIDING</b>			10	0.9	+ 120	Special Polymer	38-75
<ul style="list-style-type: none"><li>• Alcohol up to 96%</li><li>• Excellent flexibility</li><li>• Optimum organoleptic neutrality</li><li>• Sliding cover</li><li>• High temperature</li></ul>				6	0.9	+ 120	Special Polymer	100-150
<b>CITERDIAL</b>	<b>FLEXIBLE</b>			10	0.9	+ 80	NR	25-150
<ul style="list-style-type: none"><li>• Unrivalled flexibility</li></ul>								
<b>LACTADIAL</b>	<b>LIGHT</b>			10	0.7	+ 80	NR	51-80
<ul style="list-style-type: none"><li>• 20% lighter than CITERDIAL</li></ul>								
<b>ALCODIAL</b>	<b>NEUTRAL</b>			10	0.9	+ 80	UPE	25-76
<ul style="list-style-type: none"><li>• Accept temporary alcohol stagnation</li></ul>								
<b>ALIKLER G2</b>	<b>FATTY FOODSTUFFS</b>			10	0.9	+ 100	NBR	25-150
<ul style="list-style-type: none"><li>• Robust</li></ul>								
<b>ALIKLER D</b>	<b>FATTY FOODSTUFFS</b>			15	0.7	+ 100	NBR	32-100
<ul style="list-style-type: none"><li>• For higher pressure (15 bar)</li><li>• Will recover shape after accidental squeeze</li></ul>								
<b>MULTIDIAL UPE</b>	<b>MULTI PURPOSE</b>			10	0.9	+ 100	UPE	25-100
<b>NEUTRAL</b>								
<ul style="list-style-type: none"><li>• Excellent chemical resistance</li></ul>								
<b>MILLESIME</b>	<b>TEMPERATURE</b>			10	0.9	+ 100	EPDM	25-150
<ul style="list-style-type: none"><li>• Cover has outstanding resistance to ageing</li></ul>								
<b>TRELLVIN</b>	<b>LIGHT</b>			10	0.7	+ 100	EPDM	38-75
<ul style="list-style-type: none"><li>• Will recover its shape after accidental squeeze</li></ul>								



Stainless Steel nut



DIN



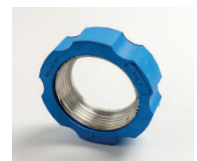
SMS



MACON



CLAMP







Rubber Coated nut

# SOLID FOODSTUFFS

comfortable  
handling

WHETHER YOU NEED TO TRANSFER SUGAR, MILK POWDER, FLOUR, ... TRELLEBORG HAS A HOSE THAT CAN MEET YOUR DEMANDS AND REQUIREMENTS

## TRELLEBORG RANGE FOR FOOD INDUSTRY UNLOADING/TRANSFER OPERATIONS OF SOLID FOODSTUFFS

		WP (bar)	Vacuum (bar)	Temp. (°C)	Inner tube	ID (mm)
<b>SUPERVRAC AL EC/UNLOADING</b> <b>CONDUCTIVE TUBE</b> <ul style="list-style-type: none"> <li>Resistant to abrasion, light and flexible, can be rolled flat</li> </ul>		7	-	+ 80	<b>NBR</b>	75-125
<b>TRELLVAC AL EC/SUCTION</b> <b>CONDUCTIVE TUBE</b> <ul style="list-style-type: none"> <li>Resistant to abrasion, easy to handle</li> </ul>		5	0.9	+ 80	<b>NBR</b>	51-150
<b>PERFORMER AL EC/SUCTION</b> <b>CONDUCTIVE TUBE</b> <ul style="list-style-type: none"> <li>Resistant to abrasion, long lifespan</li> </ul>		10	0.9	+ 80	<b>NBR</b>	50-150
<b>SUPERVRAC AL EC</b> <b>TRELLVAC AL EC</b> <b>PERFORMER AL EC</b> <b>ATEX</b>	Checked and approved by INERIS (French notified body) for use in any ATEX areas				<b>ATEX</b>	



UTS ferrule



GUILLEMIN 1/2 sym.



STORZ



Safety clamp



BULK ferrule



BLOC-END





## TRELLEBORG COMPLETE RANGE FOR WASH DOWN AND STEAM CLEANING ALSO FOR TRANSFER OPERATIONS

### KLENET **WATER**

- Standard water wash down
- Not recommended with washing gun



WP  
(bar)

Vacuum  
(bar)

Temp.  
(°C)

Inner  
tube

ID  
(mm)

10

-

+ 95

**NBR**

13-25

### BERGALAV **HOT WATER**

- Very good hose for reels
- Occasional steam, max. 160°C



10

-

+ 160

**EPDM**

10-25

### BIOVAST **STEAM**

- Very robust
- Oil and fats resistant
- Water up to 20 bar/100°C
- Steam up to 6 bar/165°C



20

-

+ 100

**NBR**

13-25



### BIOCLEAR **HIGH PRESSURE**

- For high pressures (60 bar/100°C)



60

-

+ 100

**NBR**

8-16



Female BSPP



Male BSPP



Swivel male BSPT



Anti-kinking spring  
and swivel coupling



Spray



Washing gun

## TRELLEBORG COMPLEMENTARY RANGE FOR HIGH PRESSURE JETTING

### TRELLJET 681 AP

#### **VERY HIGH PRESSURE**

- For very high pressures (up to 200 bar/120°C)
- Kink resistant



WP  
(bar)

Vacuum  
(bar)

Temp.  
(°C)

Inner  
tube

ID  
(mm)

200

-

+ 120

**NBR**

10-13

**SBR**



BSP cone 60°



M22 nipple with nut



D10/11 swiveling  
nipple for gun



Rubberized handle  
protection



Nipple M22 male/male



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[WWW.TRELLEBORG.COM](http://WWW.TRELLEBORG.COM)



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