







# CONTENT

#### FOOD AND BEVERAGE HOSES

1553-10 Multifood	6
1553-15 Multifood Revive	7
1554-70 Foodmaster	8
1554-50 Dairymaster	9
1554-55 Dairymaster Revive	10
1554-65 Brewmaster	11
1554-60 Brewmaster Helix	12
1554-80 Distiller	13
1452-00 Foodflush	14
1452-10 Foodsteam	15

#### FOOD FITTINGS AND CLAMPS

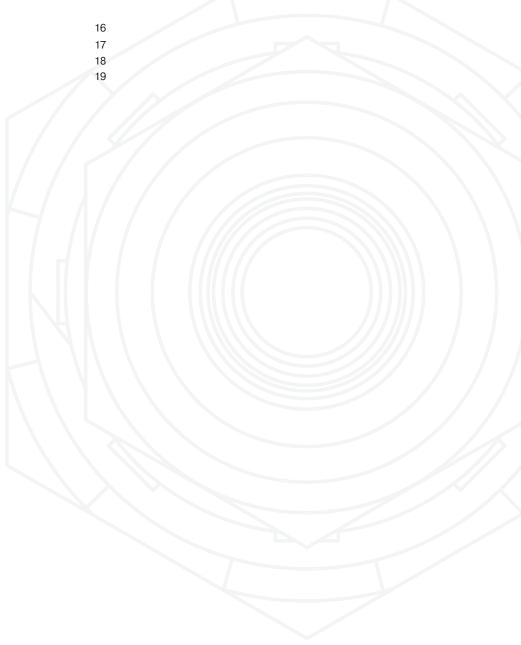
Food fitting SMS 1145

Food fitting DIN 11851

Food clamp TRI-CLAMP

Cleaning and sanitizing food hoses

15





# HIGH-QUALITY ASSORTMENT OF FOOD & BEVERAGE HOSES

Hydroscand was founded in 1969 and since then we have supplied the industry with a wide range of high quality hydraulic and industrial hoses to suit specific customer needs. Hydroscand now launches a new high-quality assortment of industrial hoses and fittings especially selected by our expert team to suit the demands of customers within the high performing food and beverage industry.

The assortment of high-quality hoses meets the international standards for safety for food and beverages production and transportation and all the products are non-phthalates. The Hydroscand food and beverage assortment provides hoses for producing and transferring, whether suction or delivery and are applicable for a large variety of food and beverage applications like liquid or powders, such as milk, wine, beer, vegetable oils, sugar.

Hydroscand offers our customers a complete range of high-quality food and beverage hoses and fittings, all in one place. We also offer the design and development of transportation systems for the food and beverage industrial production.

#### THE ASSORTMENT FEATURES:

- Complete range in one place
- Highest possible quality
- Food and Beverage Safety certificates
- Does not contain phthalates
- Delivering safety

YOUR SUPPLIER
OF HIGH-QUALITY
FOOD AND BEVERAGE
INDUSTRIAL HOSES
AND FITTINGS

### **MULTIFOOD**

### PΨ

### NBR ALL-AROUND FOOD SUCTION & DELIVERY HOSE

1553-10

#### **CONSTRUCTION**

Inner tube: Food-grade Nitrile Rubber NBR
Reinforcement: Steel wire helix, synthetic plies

Reinforcement: Steel wire helix, synthetic plies Temperature: -25°C / +80°C

 Cover:
 Nitrile Rubber NBR
 Cover design:
 Blue wrapped with white label

Safety factor:

#### **DESCRIPTION**

A highly resilient, highly versatile hose that's perfect for suction and delivery of foodstuffs, both fatty and non-fatty. This hose is characterized by its robustness. As well as being tough, it is also designed to reduce the risk of kinking. This hose is an all-rounder, perfect for any stationary or mobile applications in processing and filling plants.

The Multifood is a food-grade NBR hose that can be cleaned with most common detergents and steam-cleaned up to 130°C. It is free from phthalates, and meets major regulations for food contact.



















Item number	Inner diameter mm	Outer diameter mm	Max working pressure MPa	Vacuum pressure Max %	Bend radius mm	Length m/coil	Weight kg/m
15531012	19	31	1.0	90	60	40	0.740
15531016	25	37	1.0	90	85	40	0.910
15531020	32	44	1.0	90	115	40	1.120
15531024	38	51	1.0	90	150	40	1.400
15531032	51	64	1.0	90	210	40	1.800
15531040	63.5	78.5	1.0	90	265	40	2.700
15531048	76	91	1.0	90	320	40	3.170
15531064	102	118	1.0	90	430	40	4.420



### **MULTIFOOD REVIVE**



### NBR CRUSH-RESISTANT ALL-AROUND FOOD SUCTION & DELIVERY HOSE

1553-15

#### **CONSTRUCTION**

Inner tube: Food-grade Nitrile Rubber NBR

**Reinforcement:** Thermoplastic wire helix, synthetic plies **Temperature:**  $-25^{\circ}\text{C}$  /  $+80^{\circ}\text{C}$ 

**Cover:** Nitrile Rubber NBR **Design:** Blue wrapped with white label

Safety factor: 1:3

#### **DESCRIPTION**

A highly resilient, highly versatile hose that's perfect for suction and delivery of foodstuffs, both fatty and non-fatty. This version of the Multifood is reinforced with a thermoplastic helix, meaning that when it gets crushed it will regain its original shape. It is up to 10% lighter than the standard version, and is characterized by its robustness. This hose is an all-rounder, perfect for any stationary or mobile applications in processing and filling plants.

The Multifood Revive is a food-grade NBR hose which can be cleaned with most common detergents and steam up to 130°C. It is free from phthalates, and meets major regulations for food contact.

















Item number	Inner diameter mm	Outer diameter mm	Max working pressure MPa	Vacuum pressure Max %	Bend radius mm	Length m/coil	Weight kg/m
15531524	38	54	1.0	70	170	40	1.580
15531532	51	67	1.0	70	240	40	2.000
15531540	63.5	81.5	1.0	70	310	40	2.700
15531548	76	94	1.0	70	380	40	3.150



### **FOODMASTER**

### PΨ

### EPDM ALL-AROUND NON-FATTY FOOD SUCTION & DELIVERY HOSE

1554-70

#### **CONSTRUCTION**

Inner tube: Food-grade EPDM Safety factor: 1:

**Reinforcement:** Steel wire helix, synthetic plies **Temperature:** -40°C / +120°C

 Cover:
 EPDM
 Cover design:
 Red wrapped with white label

#### **DESCRIPTION**

A great, versatile multipurpose suction and delivery hose, capable of withstanding working temperatures of up to 120°C. Although it has been designed specifically for use with non-fatty food products, this highly kink-resistant hose is also ideal for use as an additional air line for road tankers carrying bulk products.

The food-grade EPDM hose can be cleaned with most common detergents and can be steam-cleaned at temperatures of up to 130°C. It meets major requirements for food contact materials and is free from phthalates.

















Item number	Inner diameter mm	Outer diameter mm	Max working pressure MPa	Vacuum pressure Max %	Bend radius mm	Length m/coil	Weight kg/m
15547012	19	21	1.0	90	60	40	0.710
15547016	25	37	1.0	90	85	40	0.870
15547020	32	44	1.0	90	115	40	1.050
15547024	38	51	1.0	90	150	40	1.340
15547032	51	64	1.0	90	210	40	1.720
15547040	63.5	78.5	1.0	90	265	40	2.590
15547048	76	91	1.0	90	320	40	3.040
15547064	102	118	1.0	90	430	40	4.250



### **DAIRYMASTER**

### PΨ

#### NR MILK HANDLING SUCTION & DELIVERY HOSE

1554-50

#### **CONSTRUCTION**

Inner tube: Food-grade Natural Rubber NR Safety factor: 1:3

Reinforcement: Steel wire helix, synthetic plies Temperature: -40°C / +80°C

Cover: Natural Rubber NR Design: Blue wrapped with white label

#### **DESCRIPTION**

As the name suggests, this high-quality, lightweight NR hose is perfect for the collection and handling of milk and other dairy products – staying flexible in cold outdoor conditions, whatever the weather, and providing a functional, easy-to-attach and ergonomic solution when collecting and unloading.

The Dairymaster is capable being steam-cleaned at temperatures of up to 110°C and is also designed to withstand cleaning with most common detergents. It is a food-grade product that meets major food contact requirements, and is phthalate-free.















Item number	Inner diameter mm	Outer diameter mm	Max working pressure MPa	Vacuum pressure Max %	Bend radius mm	Length m/coil	Weight kg/m
15545016	25	36	0.6	90	75	40	0.720
15545020	32	43	0.6	90	95	40	0.880
15545024	38	50	0.6	90	115	40	1.200
15545032	51	63	0.6	90	150	40	1.540
15545040	63.5	75.5	0.6	90	190	40	1.980
15545048	76	90	0.6	90	230	40	2.760
15545064	102	116	0.6	90	300	40	3.780



### DAIRYMASTER REVIVE



### NR CRUSH-RESISTANT MILK HANDLING SUCTION & DELIVERY HOSE

1554-55

#### **CONSTRUCTION**

Inner tube: Food-grade Natural Rubber NR Safety factor: 1:3

**Reinforcement:** Thermoplastic wire helix, synthetic plies **Temperature:**  $-40^{\circ}\text{C} / +80^{\circ}\text{C}$ 

Cover: Natural Rubber NR Cover design: Blue wrapped with white label

#### **DESCRIPTION**

This improved, crush-resistant version of the high-quality Dairymaster milk and dairy hose is perfect for the collection and handling of milk and other dairy products. The thermoplastic helix used in this hose offers reliable crush resistance without the weight. This means it returns to its original shape after being squashed, and makes the Dairymaster Revive 15% lighter than the standard Dairymaster hose with a steel helix. It remains flexible even in cold outdoor conditions and provides milk tanker operators with a functional, easy-to-attach and ergonomic solution for loading bays.

The hose can be steam-cleaned at temperatures of up to 110°C and is also designed to withstand cleaning with most common detergents. It is a food-grade product that meets major food contact requirements and is phthalate-free.













Item number	Inner diameter mm	Outer diameter mm	Max working pressure MPa	Vacuum pressure Max %	Bend radius mm	Length m/coil	Weight kg/m
15545524	38	52	0.6	70	130	40	1.150
15545532	51	65	0.6	70	185	40	1.450
15545540	63.5	77.5	0.6	70	240	40	1.800
15545548	76	92	0.6	70	300	40	2.400



### **BREWMASTER**



#### **BIIR BEER HOSE**

1554-65

#### **CONSTRUCTION**

Inner tube: Food-grade Butyl BIIR Safety factor: 1:3

**Reinforcement:** Synthetic plies **Temperature:** -40°C / +120°C

Cover: EPDM Cover design: Red wrapped with white label

#### **DESCRIPTION**

This premium, ultra-low-permeability butyl (BIIR) hose is perfect for beer and ideal for use in breweries and microbreweries. It is built without a helix and can regain its shape if accidentally crushed. It is equipped with a tough abrasion- and weather-resistant cover that can be dragged on the floor without scuffing surfaces. It is also suitable for a wide range of non-fatty food products.

The Brewmaster can withstand high working pressures of up to 16 bar and can be used for some vacuum applications. It can also be used at a wide range of temperatures – from -40°C to +120°C. It is very easy to clean with most common detergents, can be steam-cleaned at temperatures up to 130°C, and is ideal for Clean-in-Place (CIP) setups. It meets major requirements for food contact materials and is phthalate-free.

















Item number	Inner diameter mm	Outer diameter mm	Max working pressure MPa	Vacuum pressure Max %	Bend radius mm	Length m/coil	Weight kg/m
15546516	25	37	1.6	60	150	40	0.760
15546520	32	48	1.6	50	210	40	1.270
15546524	38	56	1.6	50	260	40	1.830
15546532	51	70	1.6	40	350	40	2.410
15546540	63.5	89	1.6	40	470	40	3.950
15546548	76	99	1.6	30	580	40	4.180
15546564	102	130	1.6	20	800	40	6.680



### BREWMASTER HELIX



#### BIIR BEER SUCTION & DELIVERY HOSE

1554-60

#### **CONSTRUCTION**

Inner tube: Food-grade Butyl BIIR Safety factor: 1:

**Reinforcement:** Steel wire helix, synthetic plies **Temperature:**  $-40^{\circ}\text{C} / +120^{\circ}\text{C}$ 

**Cover:** EPDM **Cover design:** Red wrapped with white label

#### **DESCRIPTION**

This premium, ultra-low-permeability butyl (BIIR) hose is perfect for beer and ideal for use in breweries and microbreweries. It's equipped with a helix for reinforcement and made with a tough abrasion- and weather-resistant cover that can be dragged on the floor without scuffing surfaces. It is also suitable for a wide range of non-fatty food products.

The Brewmaster Helix can withstand high working pressures of up to 16 bar and can be used as a vacuum hose. It can also be used at a wide range of temperatures – from -40°C to +120°C. It's very easy to clean with most common detergents, can be steam-cleaned at temperatures up to 130°C, and is ideal for Clean-in-Place (CIP) setups. It meets major requirements for food contact materials and is phthalate-free.



















Item number	Inner diameter mm	Outer diameter mm	Max working pressure MPa	Vacuum pressure Max %	Bend radius mm	Length m/coil	Weight kg/m
15546024	38	53	1.6	90	155	40	1.510
15546032	51	66	1.6	90	215	40	1.960
15546040	63.5	81	1.6	90	275	40	3.020
15546048	76	94	1.6	90	330	40	3.920
15546064	102	120	1.6	90	450	40	5.260



### **DISTILLER**

### TW.

### UPE STRONG ALCOHOL SUCTION & DELIVERY HOSE

1554-80

#### **CONSTRUCTION**

Inner tube: Food-grade UPE Safety factor: 1:3

Reinforcement: Steel wire helix, synthetic plies Temperature: -35°C / +100°C

Cover: Natural Rubber NR Cover design: Blue wrapped with white label

#### **DESCRIPTION**

The Distiller is a hose specifically designed for strong alcohol and liquids with high alcohol content – up to 99%. The UPE material used in its construction is capable of withstanding chemicals, acids, solvents, and oils, and is highly resistant to both heat and kinking. Although this hose is ideal for distilleries, it is tough and versatile enough to be used for numerous jobs, including applications involving fatty and non-fatty foodstuffs.

It is made from food-grade translucent UPE, can be cleaned with common detergents – even at high levels of concentration – and can be steam cleaned at temperatures of up to 130°C. The Distiller meets major requirements for food contact materials and is free from phthalates.













Item number	Inner diameter mm	Outer diameter mm	Max working pressure MPa	Vacuum pressure Max %	Bend radius mm	Length m/coil	Weight kg/m
15548012	19	29	1.0	90	50	40	0.500
15548016	25	35	1.0	90	70	40	0.630
15548020	32	43	1.0	90	100	40	0.960
15548024	38	50	1.0	90	130	40	1.150
15548032	51	63	1.0	90	190	40	1.490
15548040	63.5	76.5	1.0	90	240	40	2.220
15548044	70	83	1.0	90	290	40	2.420
15548048	76	89	1.0	90	300	40	2.610



### **FOODFLUSH**



#### **NBR CLEANING HOSE**

1452-00

#### **CONSTRUCTION**

**Inner tube:** Food-grade NBR **Safety factor:** 1:3

**Reinforcement:** Synthetic plies **Temperature:**  $-35^{\circ}\text{C} / +100^{\circ}\text{C}$ 

Cover: NBR/PVC Cover design: Blue smooth with white letters

#### **DESCRIPTION**

Ideal for clean-up tasks, the Foodflush is a textile-reinforced washdown and cleaning hose that can also be used to transport liquid food products. It is a versatile piece of equipment which is useful in all kinds of applications in processing and filling plants. It can also be comfortably stored out of the way on hose reels.

The Foodflush's cover protects it from damage from grease and oil. It is phthalate-free and meets FDA and BFR regulations for food contact materials.





Item number	Inner diameter mm	Outer diameter mm	Max working pressure MPa	Bend radius mm	Length m/coil	Weight kg/m
14520008	13	21	1.0	65	40	0.330
14520010	16	25	1.0	85	40	0.380
14520012	19	28	1.0	120	40	0.430
14520016	25	35	1.0	150	40	0.660



### **FOODSTEAM**



#### **EPDM STEAM & CLEANING HOSE**

1452-10

#### **CONSTRUCTION**

Inner tube: Food-grade EPDM Safety factor: 1:3

**Reinforcement:** Synthetic plies **Temperature:** -40°C / +164°C

Cover: Nitrile Rubber NBR Cover design:w Blue wrapped with white label

#### **DESCRIPTION**

This cleaning hose is capable of handling relatively high pressures of 20 bar for water and 6 bar for steam, making it a particularly great choice for environments like processing and filling plants, or wherever washdown and cleaning with hot water and steam is required.

Although designed for cleaning, the Foodsteam can also double up as a transportation hose for non-fatty food. It has a large temperature range, and is capable of withstanding temperatures from  $-40^{\circ}$ C to  $+164^{\circ}$ C. It can be stored on hose reels, is free from phthalates, and meets major regulations for food contact materials.















Item number	Inner diameter mm	Outer diameter mm	Max working pressure 164°C MPa	Max working pressure 95°C MPa	Length m/coil	Weight kg/m
14521006	10	20	0.6	2.0	40	0.290
14521008	13	23	0.6	2.0	40	0.350
14521010	16	26	0.6	2.0	40	0.410
14521012	19	31	0.6	2.0	40	0.600
14521016	25	39.5	0.6	2.0	40	0.930
14521020	32	46.5	0.6	2.0	40	1.160
14521024	38	54	0.6	2.0	40	1.470
14521032	51	68	0.6	2.0	40	2.030



SMS 1145 (Swedish Manufacturing Standard) food fittings are used in the food, chemical and pharmaceutical industries.

SMS 1145 food fittings are connected in the same way as DIN 11851-compliant food fittings, but not interchangeable with each other. The nut is slid across the head of the female fitting and onto the male fitting. The flat face of the female fitting is brought into contact with the turned-up seal of the male fitting. The nut is then tightened by hand or using a wrench.

Fitting offer male and female SMS 1145 food fittings with smooth or serrated hose shank. The smooth hose shank with collar is designed in accordance with EN 14420-2 / DIN2817 for assembly using safety clamps. Where a serrated hose shank assembly is required, swage ferrules are recommended.

#### SMS 1145

Fitting	Stainless steel AISI 316L - 1.4401
Nut and cap	Stainless steel AISI 304 - 1.4301
Safety clamp	EN 14420-3 / DIN 2817, AISI 316L
Swage ferrule	Stainless steel AISI 316L - 1.4401
Seal (standard)	EPDM
Sealing surface	Flat / Smooth
Fitting and nut threads	DIN 405/1 (SMS 1145 are not interchangeable with DIN 11851 fittings)
Working pressure	6 bar
Temperature	-40 °C / +145 °C
Diameters range	1" - 4"

Hose ID mm	Hose ID inches	Nut ID mm	DIN 405/4 Nut thread
25	1"	32	RD 40 x 1/6"
32	1 1/4"	40	RD 48 x 1/6"
38	1 1/2"	48	RD 60 x 1/6"
50	2"	60,5	RD 70 x 1/6"
63	2 1/2"	74	RD 85 x 1/6"
75	3"	87	RD 98 x 1/6"
100	4"	112	RD 132 x 1/6"



## **SMS 1145**



## **DIN 11851**

Food fittings complying with DIN 11851 are used in the food, chemical and pharmaceutical industries to connect rubber food hoses and stainless-steel pipes (in compliance with DIN 11850).

The seal must be inserted correctly into the seal sitting of the male fitting before connection. The conical female fitting is then pushed onto the male threaded fitting. The two are secured by sliding the nut across the conical head of the female fitting and onto the thread of the male fitting. The flanged seal enables easy assembly and prevents any displacement by vacuum or pressure. Threaded food fittings complying with DIN 11851 have a rounded thread complying with DIN 405/1. This rounded thread ensures that DIN 11851 compliant food fittings are easy to connect by hand or using a wrench.

Fittings offer male and female SMS 1145 food fittings with smooth or serrated hose shank. The smooth hose shank with collar is designed in accordance with EN 14420-2 / DIN2817 for assembly using safety clamps. Where a serrated hose shank assembly is required, swage ferrules are recommended.

#### DIN 11851

Fitting	Stainless steel AISI 316L - 1.4401
Nut and cap	Stainless steel AISI 304 - 1.4301
Welding fitting	Stainless steel AISI 304 - 1.4301
Safety clamp	EN 14420-3 / DIN 2817, AISI 316L
Swage ferrule	Stainless steel AISI 316L - 1.4401
Seal (standard)	Food-grade NBR
Sealing surface	Conical
Fitting and nut threads	DIN 405/1 (SMS 1145 are not interchangeable with DIN 11851 fittings)
Working pressure	25 - 40 bar
Temperature	-40 °C / +145 °C
Diameters range	1/2" - 4"

Hose ID mm	Hose ID inches	Nut ID mm	DIN 405/4 Nut thread
13	1/2"	25	RD 34 x 1/8"
19	3/4"	31	RD 44 x 1/6"
25	1"	36	RD 52 x 1/6"
32	1 1/4"	42	RD 58 x 1/6"
38	1 1/2"	49	RD 65 x 1/6"
50	2"	62	RD 78 x 1/6"
63	2 1/2"	80	RD 95 x 1/6"
80	3"	94	RD 110 x 1/4"
100	4"	115	RD 130 x 1/4"



Tri-clamp fittings are quick fittings used in working environments demanding high levels of hygiene, like food, pharmaceutical, chemical and life science industries. Tri-clamp fittings are available in SMS, DIN 32676, INCH, IMPERIAL or ISO 1127 standards.

Tri-clamp fittings are easily identified by their flange design. The transition from the flange side to the hose side is made by a conical profile. The flange side is used to connect to another flange of the same dimension and standard. Users should ensure that only Tri-clamp's complying with the same standard is connected. The Tri-clamp seal (profiled or non-profiled) is fitted to one of the flanges. The second Tri-clamp is then brought together with the flange containing the seal. The heavy-duty clamp is applied to the flanges and closed. The fitting can easily be connected, disconnected and reused.

#### TRI-CLAMP

Fitting	Stainless steel AISI 316Ti - 1.4571
Сар	Stainless steel AISI 316L - 1.4401
Welding fitting	Stainless steel AISI 316L - 1.4401
Clamp	Stainless steel AISI 316L - 1.4401
Seal (standard)	NBR, EPDM, FPM, PTFE, MVQ, Silicone
Sealing surface	Flat / Smooth
Working pressure	10 - 16 bar
Temperature	-30°C / +300°C
Flange sizes	25 - 130 mm
Diameters range	1/2" - 4"













### CLEANING AND SANITIZING FOOD HOSES

	Medium	Hose tube	Concentration	Temperature
Rinsing	Hot water	NR / NBR / SILICONE / EPDM BIIR / UPE / PTFE	-	Max 90°C
Physical Disinfectant	Steam  (we suggest open steam sterilization)	NR	-	Max 110°C Max 10 min
		NBR	-	Max 130°C Max 10 min
		EPDM / BIIR / UPE / PTFE	-	Max 130°C Max 30 min
		SILICONE	-	Max 135°C Max 18 min
Chemical Disinfectant	Acid (i.e. Nitric acid)	NR / NBR / SILICONE	0,1%	Max 65°C
			2%	Max 25°C
		EPDM / BIIR / UPE / PTFE	0,1%	Max 85°C
			3%	Max 25°C
	Citric acid	PU	5%	Max 20°C
	Alkaline solution (i.e. Caustic soda)	NR / NBR / SILICONE	2%	Max 65°C
			4%	Max 25°C
		EPDM / BIIR / UPE / PTFE	2%	Max 85°C
			5%	Max 25°C
	Caustic soda	PU	2%	Max 20°C
	Disinfectant (i.e. Peracetic acid]	NR / NBR / SILICONE	1%	Max 25°C
		EPDM / BIIR / UPE / PTFE	1 70	Max 40°C

The life of the hose is affected by the cleaning and sanitizing process due to the mechanical and chemical stresses which occur during the cleaning and sanitizing procedure. The service life of rubber hoses is directly dependent on frequency and time of exposure to PHYSICAL and CHEMICAL disinfectants. Users should frequently monitor the physical condition of the rubber hose material product contact surfaces. Such observations are necessary to determinate the actual sanitary service period of rubber hoses.

The present tabulation is based on tests and on generally available sources, and believed to be reliable. However, must be used as a guidance only since it does not take in consideration all variable that may be encountered in actual use such as and not limited to duration of exposure and stability of the fluid and possible contamination.



hydroscand.com