



FLEXIBLE COMPOSITE HOSES MADE IN SWITZERLAND





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All information in this brochure was correct at time of publication.
We reserve the right to make alterations from time to time, without notice.

COMPANY INFORMATION

GLOBAFLEX is specialized in the manufacturing and marketing of composite hoses and hose assemblies named under the brand of **SWISSFLEX**.

The Company was established in Switzerland in 1965 and early 2000 **GLOBAFLEX** opened an operation in Baar, to service the Global Markets.

SWISSFLEX offers the most extensive composite hose range to the Industry through specialized Agents and Distributors all over the world.

The complete range of hoses and fittings are developed, manufactured and tested within the company and quality control is executed on management level.

PRODUCT INFORMATION

HOSE CONSTRUCTION

The hoses are constructed from polypropylene, polyamide or polyester films and fabrics, depending on the application, and a outer cover of pvc coated polyester fabric, which is abrasion, weather and ozone resistant. For more demanding applications layers and/or tubes of PTFE and ECTFE are used in the construction of the hoses

INTERNAL AND EXTERNAL WIRES

A choice can be made between galvanized steel, polypropylene coated mild steel and 316 stainless steel internal wire, depending on the application, or aluminium, for extra light hoses.

Standard **SWISSFLEX** hoses have a galvanized external wire but all hoses can be manufactured with a 316 stainless steel external wire or aluminium as well.

ELECTRICAL CONTINUITY

A dual connection between the internal and external wires and end fittings guarantees electrical continuity and anti-static properties.

SAFETY

All **SWISSFLEX** hose assemblies are pressure tested at 1,5 times their rated working pressure before shipment.

Test certificates are provided with all Heavy Duty Marine hose assemblies as a standard.

All **SWISSFLEX** hoses are color coded for easy identification before use.

All **SWISSFLEX** hoses are FIRE RETARDANT

TEMPERATURE

SWISSFLEX composite hoses are suitable for use in operating temperatures from:

-30°C (-22°F) to +100°C (+ 212°F), dependent on the conveyent.

STANDARDS

SWISSFLEX composite hoses comply with various international standards including BS 5842 – BS 4089 & EN 13765 - EN 13766, BS 3492 and meets the requirements of the US Coast Guard.

Heavy Duty Marine hoses are type approved to IMO Codes



HOSE TYPE

CODE	SERVICE	INNER WIRE	TUBE	COVER COLOUR
SWISSFUEL 10 GG	OIL / SOLVENT	GALVANIZED STEEL	POLYPROPYLENE	BLUE
SWISSCHEM 10 PG	CHEMICAL	POLYPROP.COATED STEEL	POLYPROPYLENE	GREY
SWISSCHEM 10 SG	CHEMICAL	STAINLESS STEEL 316	POLYPROPYLENE	GREY
SWISSFLUOR 10 SG	CHEMICAL	STAINLESS STEEL 316	ECTFE	RED

STAINLESS STEEL OUTER WIRE ON REQUEST

Applications

General purpose Medium Duty hose, suitable for the safe transfer of a wide variety of general chemicals (**SWISSCHEM 10**), of aggressive chemicals (**SWISSFLUOR 10**), of hydrocarbons including fuel oils, petrol, diesel, lubricating oils, kerosene, and 100% aromatics (**SWISSFUEL 10**), under suction or pressure. Commonly used for road and rail tanker loading and discharging, storage tank.

Construction

High strength polypropylene films and fabrics, high density polyethylene films reinforcement, and Polyester film barrier layers. PVC coated polyester fabric cover, fire resistant, abrasion, weather and ozone resistant.

SWISSFLUOR 10, is constructed around an ECTFE inner liner

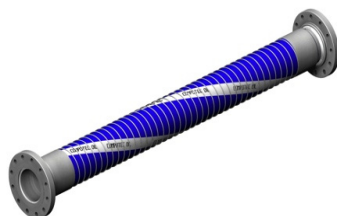
Specifications

Temperature range from -30°C to +80°C - W.P. 10 Bar -Safety factor 4:1 - Full vacuum rated – Electrically continuous, 100% Antistatic, - Meets EN, CE Rules and regulations.

ALL SWISSFLEX HOSES ARE FIRE RETARDANT

Technical Data

INSIDE DIAMETER		WORKING PRESSURE		MIN.BEND RADIUS		APPROX WEIGHT		MAXIMUM LENGTH	
INCH	MM	PSI	BAR	INCH	MM	LBS/FT	KG/M	FT	MTR
1½	38	150	10	4	100	0,80	1,20	100	30
2	50	150	10	5	125	1,15	1,70	100	30
2½	65	150	10	6	150	1,45	2,10	100	30
3	75	150	10	7	175	1,70	2,50	100	30
4	100	150	10	11	275	2,60	3,90	100	30



HOSE TYPE

CODE	SERVICE	INNER WIRE	TUBE	COVER COLOUR
SWISSFUEL 14 GG	OIL / SOLVENT	GALVANIZED STEEL	POLYPROPYLENE	BLACK
SWISSCHEM 14 PG	CHEMICAL	POLYPROP.COATED STEEL	POLYPROPYLENE	GREY
SWISSCHEM 14 SG	CHEMICAL	STAINLESS STEEL 316	POLYPROPYLENE	GREY
SWISSFLUOR 14 SG	CHEMICAL	STAINLESS STEEL 316	PTFE	RED

STAINLESS STEEL OUTER WIRE ON REQUEST

Applications

Standard Duty hose is strong, robust and suitable for the most demanding applications including suction & discharge of a wide variety of acids and solvents, (**SWISSCHEM 14**), of aggressive chemicals (**SWISSFLUOR 14**), and petroleum products including fuel oils, gasoline, diesel, lubricating oils, kerosene, and 100% aromatics (**SWISSFUEL 14**), under vacuum or positive pressure

Construction

High strength polypropylene films and fabrics, high density polyethylene films reinforcement, and Polyester film barrier layers. PVC coated polyester fabric cover, fire resistant, abrasion, weather and ozone resistant.

SWISSFLUOR 14, is constructed around a pure PTFE inner liner

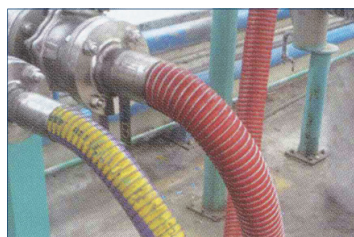
Specifications

Temperature range from -30°C to +100°C - W.P. 14 Bar - Safety factor 5:1 - Full vacuum rated – Electrically continuous, 100% Antistatic, - Meets EN, CE rules and regulations.

ALL SWISSFLEX HOSES ARE FIRE RETARDANT

Technical Data

INSIDE DIAMETER		WORKING PRESSURE		MIN.BEND RADIUS		APPROX WEIGHT		MAXIMUM LENGTH	
INCH	MM	PSI	BAR	INCH	MM	LBS/FT	KG/M	FT	MTR
1	25	200	14	4	100	0,67	1,00	100	30
1 1/4	32	200	14	4 3/4	120	0,80	1,20	100	30
1 1/2	38	200	14	5	125	0,95	1,40	100	30
2	50	200	14	6	150	1,30	1,90	100	30
2 1/2	65	200	14	7	175	1,90	2,80	100	30
3	75	200	14	10	250	2,15	3,20	100	30
4	100	200	14	14	360	3,20	4,80	100	30



HOSE TYPE

CODE	SERVICE	INNER WIRE	TUBE	COVER COLOUR
SW PETROMAR 14 GG	OIL / SOLVENT	GALVANIZED STEEL	POLYPROPYLENE	BLACK
SW CHEMAR 14 PG	CHEMICAL	POLYPROP.COATED STEEL	POLYPROPYLENE	GREY
SW CHEMAR 14 SG	CHEMICAL	STAINLESS STEEL 316	POLYPROPYLENE	GREY
SW FLUORMAR 14 SG	CHEMICAL	STAINLESS STEEL 316	PTFE*	RED

STAINLESS STEEL OUTER WIRE ON REQUEST

Applications

Heavy Duty construction for the transfer of a wide variety of Chemical and Hydrocarbon conveyants under suction or pressure. Used for black oils and heavier lubricating products, Ship to Shore and Ship to Ship, Dockside and in general for the most arduous Industrial and Marine applications. Commonly used for all Hose loading arms in Loading operations, thanks to the special reinforcement for minimal elongation

Construction

High strength polypropylene films and fabrics, high density polyethylene films reinforcement, and Polyester film barrier layers. PVC coated polyester fabric cover, fire resistant, abrasion, weather and ozone resistant.

FLUORMAR 14, is constructed around pure PTFE inner liner

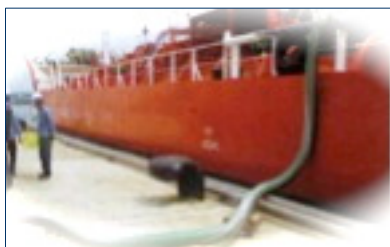
Specifications

Temperature range from -30°C to +100°C - W.P. 14 Bar - Safety factor 5:1 - Full vacuum rated – Electrically continuous, 100% Antistatic - Meets EN, CE, U.S. Coast Guard requirements, Type Approved as complying with Par.2.12 and 5.7 of the IMO Code.

ALL SWISSFLEX HOSES ARE FIRE RETARDANT

Technical Data

INSIDE DIAMETER		WORKING PRESSURE		MIN.BEND RADIUS		APPROX WEIGHT		MAXIMUM LENGTH	
INCH	MM	PSI	BAR	INCH	MM	LBS/FT	KG/M	FT	MTR
3	75	200	14	11	280	2,50	3,70	100	30
4	100	200	14	16	400	3,70	5,50	100	30
6	150	200	14	20	500	7,70	11,50	100	30
8	200	200	14	29	740	11,50	17,00	100	30
10	250	200	14	36	920	15,50	23,00	65	20
12	300	200	14	48	1200	20,10	30,00	65	20



COMPLIES WITH USCG MARINE VAPOUR CONTROL SYSTEMS 33 CFR PART 154.810

RECOMMENDED FOR VAPOUR RECOVERY SYSTEM IN TANKTRUCK, BOTTOM LOADING, IN-PLANT AND SHIP TO SHORE / SHIP TO SHIP APPLICATIONS

HOSE TYPE

CODE	SERVICE	INNER WIRE	TUBE	COVER COLOUR
SWISSFUEL VR GG	VAPOUR RECOVERY	GALVANIZED STEEL	POLYPROPYLENE	YELLOW
SWISSCHEM VR PG	VAPOUR RECOVERY	POLYPROP.COATED STEEL	POLYPROPYLENE	YELLOW
SWISSCHEM VR SG	VAPOUR RECOVERY	STAINLESS STEEL 316	POLYPROPYLENE	YELLOW

STAINLESS STEEL OUTER WIRE ON REQUEST

Applications

SWISSFUEL VR is a composite hose purpose built for vapour return of hydrocarbon products in marine, road and rail tanker operations.

SWISSCHEM VR is a composite hose with similar construction to **SWISSFUEL VR**, but designed for return of more aggressive chemical vapours.

Construction

SWISSFLEX VR Vapour Recovery hoses are robust, but light weight and extremely flexible.

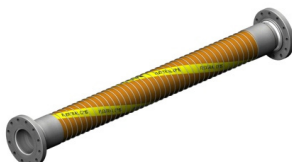
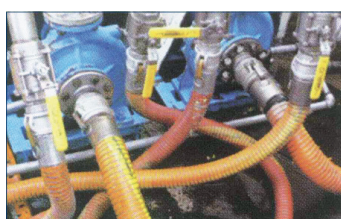
Specifications

Temperature range from -30°C to +80°C - W.P.: 7 Bar -Safety factor 4:1 - Full vacuum rated –Electrically continuous, 100% Antistatic, - Meets EN, CE, U.S. Coast Guard requirements, Type Approved as complying Vapour control systems 33 CFR Part 154.810

ALL SWISSFLEX HOSES ARE FIRE RETARDANT

Technical Data

INSIDE DIAMETER		WORKING PRESSURE		MIN.BEND RADIUS		APPROX WEIGHT		MAXIMUM LENGTH	
INCH	MM	PSI	BAR	INCH	MM	LBS/FT	KG/M	FT	MTR
2	50	100	7	6	150	1,00	1,50	100	30
2 ½	65	100	7	8	200	1,34	2,00	100	30
3	75	100	7	10	250	1,54	2,30	100	30
4	100	100	7	12	300	2,55	3,80	100	30
6	150	100	7	20	500	6,37	9,50	100	30
8	200	100	7	30	740	9,05	13,50	100	30
10	250	100	7	40	1000	13,40	20,00	65	20
12	300	100	7	45	1150	18,80	28,00	65	20



SPECIAL REINFORCEMENT FOR MINIMAL ELONGATION

RECOMMENDED FOR BOTTOM LOADING INSTALLATIONS & ON LOADING ARMS

HOSE TYPE

CODE	SERVICE	INNER WIRE	TUBE	COVER COLOUR
SWISS FUEL BL GG	BOTTOM LOADING	GALVANIZED STEEL	POLYPROPYLENE	BLACK
SWISS CHEM BL PG	BOTTOM LOADING	POLYPROP.COATED STEEL	POLYPROPYLENE	GREY
SWISS CHEM BL SG	BOTTOM LOADING	STAINLESS STEEL 316	POLYPROPYLENE	GREY
SWISS FLUOR BL SG	BOTTOM LOADING	STAINLESS STEEL 316	ECTFE	RED

STAINLESS STEEL OUTER WIRE ON REQUEST

Applications

SWISSFLEX Bottom Loading hose is strong, robust and low elongation hose, suitable for the most demanding applications including transfer of a wide variety of acids and solvents, (**CHEM BL**), of aggressive chemicals (**FLUOR BL**), and petroleum products including fuel oils, gasoline, diesel, lubricating oils, kerosene, and 100% aromatics (**FUEL BL**).

Construction

Extra strong / low elongation Aramidic reinforcement, polypropylene films and fabrics, high density polyethylene films reinforcement, and Polyester film barrier layers. PVC coated polyester fabric cover, fire resistant, abrasion, weather and ozone resistant. **SWISSFLUOR BL**, is constructed around pure ECTFE inner liner.

Specifications

Temperature range from -30°C to +100°C - W.P.: 14 Bar - Safety factor 5:1 - Full vacuum rated -Electrically continuous, 100% Antistatic, - Meets EN, CE, U.S. Coast Guard requirements.

ALL SWISSFLEX HOSES ARE FIRE RETARDANT

Technical Data

INSIDE DIAMETER		WORKING PRESSURE		MIN.BEND RADIUS		APPROX WEIGHT		MAXIMUM LENGTH	
INCH	MM	PSI	BAR	INCH	MM	LBS/FT	KG/M	FT	MTR
2	50	200	14	6 ½	150	1,30	2,00	100	30
2 ½	65	200	14	7	175	1,90	2,90	100	30
3	75	200	14	8	200	2,20	3,40	100	30
4	100	200	14	14	360	3,20	4,80	100	30
6	150	200	14	20	500	7,00	10,50	100	30



RECOMMENDED FOR SUBMERSIBLE APPLICATIONS AND AS DRAINING HOSE FOR FLOATING ROOF TANKS WHERE THE HOSE IS EXPOSED TO THE PRODUCT, BOTH INSIDE AND OUTSIDE

HOSE TYPE

CODE	SERVICE	INNER WIRE	OUTER WIRE	TUBE	COLOUR
SCUBAFUEL GG	SUBMERSIBLE	GALVANIZED STEEL	GALVANIZED STEEL	POLYPROPYLENE	WHITE
SCUBACHEM PS	SUBMERSIBLE	P.P. COATED STEEL	STAINLESS STEEL 316	POLYPROPYLENE	WHITE
SCUBACHEM SS	SUBMERSIBLE	STAINLESS STEEL 316	STAINLESS STEEL 316	POLYPROPYLENE	WHITE
SCUBAFLUOR SS	SUBMERSIBLE	STAINLESS STEEL 316	STAINLESS STEEL 316	PTFE	WHITE

Applications

SWISSFLEX Submarine hose is, suitable both, for draining rain water from external floating roof tanks, or where the hose is immersed in the fluid.

Construction

Extra strong, designed to resist chemicals or hydrocarbons, both, inside and outside. Built around several polypropylene films and fabrics, high density polyethylene films reinforcement, and Polyester film barrier layers. The cover is weather and ozone resistant.

Designed to withstand external pressures up to 200 meters deep.

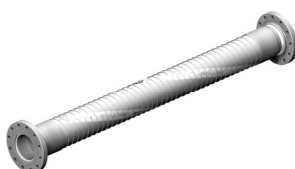
SCUBAFLUOR, is constructed around pure PTFE inner liner, and upon request can also be supplied with PTFE outer cover.

Specifications

Temperature range from -30°C to +80°C - W.P. 14 Bar - Safety factor 5:1 - Full vacuum rated – Electrically continuous, 100% Antistatic,- Meets EN, CE, U.S. Coast Guard requirements

Technical Data

INSIDE DIAMETER		WORKING PRESSURE		MIN.BEND RADIUS		APPROX WEIGHT		MAXIMUM LENGTH	
INCH	MM	PSI	BAR	INCH	MM	LBS/FT	KG/M	FT	MTR
1½	38	200	14	4 ½	110	0,85	1,25	100	30
2	50	200	14	5 ½	140	1,35	2,00	100	30
2½	65	200	14	6 ½	165	1,75	2,60	100	30
3	75	200	14	9	230	2,50	3,70	100	30
4	100	200	14	15	380	4,30	6,50	100	30
6	150	200	14	18	460	6,90	10,50	100	30
8	200	200	14	27	690	11,00	16,00	100	30



RECOMMENDED FOR FULLY REFRIGERATED CONVEYANTS DOWN TO -50°C (-58°F) IN ROAD, RAILROAD, INPLANT AND SHIP TO SHORE APPLICATIONS.

HOSE TYPE

CODE	SERVICE	INNER WIRE	OUTER WIRE	TUBE	COLOUR
CRYOFLEX 50 GG	CRYOGENIC	GALVANIZED STEEL	GALVANIZED STEEL	PP – PA – PET	WHITE
CRYOFLEX 50 GS	CRYOGENIC	GALVANIZED STEEL	STAINLESS STEEL 316	PP – PA – PET	WHITE
CRYOFLEX 50 SS	CRYOGENIC	STAINLESS STEEL 316	STAINLESS STEEL 316	PP – PA – PET	WHITE

ROPE LAGGING ON REQUEST

Applications

CRYOFLEX 50 hose is a strong and robust hose, suitable for the transfer of conveyant such as LPG, AMMONIA, ACETALDEHYDE, BUTANE, BUTANE/PROPANE, BUTADIENE, BUTYLENE, DIMETHYLAMINE, ETHYLAMINE, ETHYLCHLORIDE, METHYLBROMIDE, METHYL-ACETYLENE, PROPYLENE, PROPANE, PROPADIENE, VINYL-CHLORIDE.

Construction

Extra strong reinforcement, polypropylene films and fabrics, plus additional polyamide films reinforcement, and Polyester film barrier layers. High density White polyester fabric cover, fire resistant, abrasion, weather and ozone resistant.

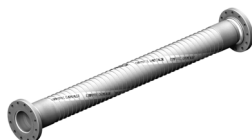
Specifications

Temperature range from -50°C to +100°C - W.P. 25 Bar -Safety factor 5:1 - Full vacuum rated – Electrically continuous, 100% Antistatic, - Meets EN, CE, U.S. Coast Guard requirements.

ALL SWISSFLEX HOSES ARE FIRE RETARDANT

Technical Data

INSIDE DIAMETER		WORKING PRESSURE		MIN.BEND RADIUS		APPROX WEIGHT		MAXIMUM LENGTH	
INCH	MM	PSI	BAR	INCH	MM	LBS/FT	KG/M	FT	MTR
1	25	360	25	6	150	0,65	1,00	100	30
1 ½	40	360	25	7	175	1,10	1,50	100	30
2	50	360	25	7 ½	185	1,55	2,30	100	30
2 ½	65	360	25	8	200	2,15	3,20	100	30
3	75	360	25	10	250	2,95	4,40	100	30
4	100	360	25	20	500	4,95	7,30	100	30
6	150	360	25	26	660	9,45	14,00	100	30
8	200	360	25	35	900	12,75	18,90	100	30
10	250	360	25	50	1250	15,00	23,00	65	20
12	300	360	25	60	1500	22,00	34,00	65	20



RECOMMENDED FOR FULLY REFRIGERATED CONVEYANTS DOWN TO -200°C (-328°F) IN ROAD, RAILROAD, INPLANT AND SHIP TO SHORE APPLICATIONS

TYPE APPROVED AS COMPLYING EN 13766:2010 & PAR 5.7 AND 5.4 OF THE IMO IGC CODE FOR SHIPS CARRYING LIQUIFIED GASES IN BULK

HOSE TYPE

CODE	SERVICE	INNER WIRE	OUTER WIRE	TUBE	COLOUR
CRYOFLEX 200 GG	CRYOGENIC	GALVANIZED STEEL	GALVANIZED STEEL	PP – PA – PET	WHITE
CRYOFLEX 200 GS	CRYOGENIC	GALVANIZED STEEL	STAINLESS STEEL 316	PP – PA – PET	WHITE
CRYOFLEX 200 SS	CRYOGENIC	STAINLESS STEEL 316	STAINLESS STEEL 316	PP – PA – PET	WHITE

ROPE LAGGING ON REQUEST

Applications

CRYOFLEX 200 hose is a strong and robust hose, suitable for the transfer of conveyant such as LIQUID NITROGEN, LIQUID NATURAL GAS and METHANE

Construction

Extra strong reinforcement, polypropylene films and fabrics, plus additional polyamide films reinforcement, and Polyester film barrier layers. High density white polyester fabric cover, reinforced with antistatic carbon fibers. Fire resistant, abrasion, weather and ozone resistant.

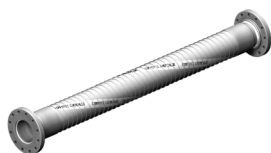
Specifications

Temperature range from -200°C to +80°C - W.P. 15 Bar - Safety factor 5:1 - Full vacuum rated –Electrically continuous, 100% Antistatic, - Meets EN, CE, U.S. Coast Guard requirements

ALL SWISSFLEX HOSES ARE FIRE RETARDANT

Technical Data

INSIDE DIAMETER		WORKING PRESSURE		MIN.BEND RADIUS		APPROX WEIGHT		MAXIMUM LENGTH	
INCH	MM	PSI	BAR	INCH	MM	LBS/FT	KG/M	FT	MTR
1	25	220	15	6	150	0,65	1,00	100	30
1 ½	40	220	15	7	175	1,10	1,50	100	30
2	50	220	15	11	280	1,55	2,30	100	30
2 ½	65	220	15	15	380	2,15	3,20	100	30
3	75	220	15	20	500	2,95	4,40	100	30
4	100	220	15	29	740	4,95	7,30	100	30
6	150	220	15	32	810	9,45	14,00	100	30
8	200	220	15	36	920	12,75	18,90	100	30
10	250	220	15	50	1250	15,00	23,00	65	20
12	300	220	15	60	1500	22,00	34,00	65	20



SPECIAL REINFORCEMENT FOR MINIMAL ELONGATION

**SIZES:**

1" to 12"

MATERIALS:

Carbon Steel

Stainless Steel

Aluminium

Brass

Polypropylene

THREADS:

BSPP - BSPT - NPT

FLANGES:

DIN - ANSI - JIS - BS10

FERRULES:

Carbon Steel, Aluminium or Stainless Steel
externally swaged.

Handling

Hose supports or nylon slings are recommended for handling composite hoses.

Testing

Composite hoses must be tested on a regular basis, using the following procedure:

Drain and thoroughly clean the hose

Lay the hose in a straight line allowing space for elongation under pressure.

Test the hose for electrical continuity whilst unpressurized and throughout the test (when relevant to construction)

Blank of one end of the hose and fill with water, ensuring that all air is released from the hose.

Pressurize the hose assembly for 10 minutes on 1,5 times the hose for any leaks or carcass distortion.

Release pressure and drain the hose.

Inspection

Hose should be visually examined before each operation checking on:

Displacement of reinforcing wires and impact damage to the hose carcass.

Abrasion or corrosion of the outer wire and abrasion of the outer cover.

Storage

Drain and thoroughly clean the hose

Store the hose in a straight line on horizontal supports in a naturally ventilated dark, dry area.

Take blanking caps or blind flanges off for ventilation through the hose

Protect hose from tropical sun and U V ray's

Maintenance

Hose must be cleaned after use and the method will depend on location and use. Flushing out with clean water, hot water, detergents and solvents at ambient temperatures is sufficient in most cases.

Low pressure open steam can also be used as long as the temperature does not exceed the maximum working temperature of the hose.



FLEXIBLE COMPOSITE HOSES

MADE IN SWITZERLAND

LOCAL DISTRIBUTOR



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