Uses water to control floods

	M 50	MXL 80	H 100	S 130
	Twin element, 2 hoses laid side by side permanently			2 single elements strapped together to form a twin element
Measurements				
Diameter in cm	Ø 60	Ø 90	Ø 110	Ø 150
Maximum Water Depth in cm up to max	50	80	100	130
Maximum Water Depth when stacked in cm up to max (Emergency Option to increase hold back in cm)	80	125	ca. 150	ca. 190
Length in metre	5/10/15/20	5/10/15/20	5/10/15/20	5/10/15/20
Weights				
Weight of an empty 10 m element in kg	45 (Twin element)	70 (Twin element)	98 (Twin element)	80 (Single element)
Weight of a 10 m twin element filled with water in kg	7000	12 000	15 000	35 000
Fittings				
Filling connections	Storz 55/75	Storz 55/75	Storz 55/75	Storz 55/75
Drain openings	at each end	at each end	at each end	at each end
Material				
Weight in g/m²	870 respectively 1200			
Tensile strength at 5 cm	> 410 resp. > 510			
Material	PVC laminate, coated on both sides; Temperature minus 30° until plus 70°			

«**USING THOSE "SUPER SAUSAGES" MEANT WE SURVIVED THE FLOODS.** Last week these water-filled tubes protected the Matten quarter in Berne from floods.»

Swiss daily newspaper «Blick», August, 15th 2007

«The new orange sausage system was a **GREAT HELP.** Using sandbags it would have taken us much longer to set up a comparable 1m-high wall.»

Swiss daily newspaper «Berner Zeitung», August, 10th 2007

«The Matten quarter in Berne struck luck big time thanks to BEAVER flood barriers. Just 3 weeks after purchasing Beaver elements, we set up Beaver flood barriers for the second time – **THE DEPLOYMENT WAS A RESOUNDING SUCCESS.**»

Swiss daily newspaper «Berner Zeitung», August, 10th 2007

Edition 6, 2.2016. Product details may vary.

«The system is quick and easy to install, and since 2001, when we purchased BEAVER flood barriers, many floods have been prevented. **DIRECT RESULT: 0 SWISS FRANCS OF DAMAGE** – instead of the estimated 13 million if we did NOT have the BEAVER!»

Swiss Army, Arsenal Lyss/Switzerland

«A 320M-LONG BEAVER FLOOD BARRIER, WITH A MAXIMUM DESIGN HEAD OF WATER OF 50CM, WAS DEPLOYED IN 90 MINUTES BY 8 PEOPLE. Anybody who has ever built a sandbag dam knows how much longer it would have taken to build a similar flood barrier using sandbags!»

Fire Brigade, Lucerne/Switzerland

«In the last few years, we have achieved **SEVERAL HIGHLY SUCCESSFUL DEPLOYMENTS.** Without Beaver flood barriers, the damage to buildings and the financial consequences would have been much higher.»

Fire Brigade Vals/Switzerland

«WE PREFER TO ACT PROACTIVELY INSTEAD OF BEING REACTIVE, that's why we bought 200m of Beaver flood barriers. Sandbags are too slow and we were often too late to protect our city and people!»

Community of Eichenau/Germany

«After evaluating several systems we selected BEAVER flood barriers. The BEAVER dam is the protection we need in an emergency. **IT'S EASY TO DEPLOY, FLEXIBLE, ASSEMBLY IS FAST, AND THE MATERIAL IS STRONG AND TESTED.**»

Community of Ertingen/Germany

«We were the only ones not flooded in our area. **THE BEAVER FLOOD BARRIER PROTECTED US AGAINST 40CM DEEP FLOOD WATERS.»**

Fire Brigade RUAG, Wilderswil/Switzerland

«Two months after we purchased BEAVER elements, the mobile flood barriers protected us against the rising waters of the Emme river. Thank God the water didn't enter as it did years before. Damage: 0 Swiss Franc. **WE ARE VERY SATISFIED WITH BEAVER FLOOD BARRIERS!**»

Fire Brigade Biberist/Switzerland

The Beaver® Storm and Flood Protection System is manufactured by Bieri Tenta AG, Grosswangen/Luzern, Switzerland. The Bieri Group employs 150 staff.

The company's main business is the manufacturing of textile and synthetic fabrics. In recent years modern equipment has reduced the reliance on handcraftmanship.

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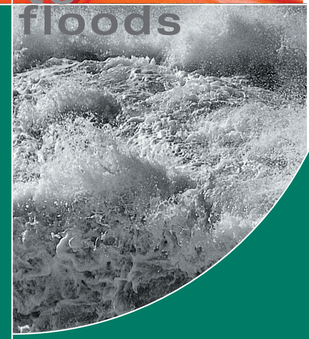
Your Distributor:

Quality
Our Commitment.

BEAVER® PROTECTION SYSTEMS

Storm and Flood Protection

Uses water to control floods



- Fast assembly
- Flexible and easy to install
- Good storability
- Real life deployments

Uses water to control floods

Storms and floods cause damage which runs into millions. The economic costs place an enormous strain on land and home owners, businesses, insurance companies and public authorities and therefore eventually on the taxpayer. Together with the distress to victims, such events can grow into a national disaster.

The Beaver® Protection System helps to prevent or at least reduce storm and flood damage and their economic costs.

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The Beaver® Storm and Flood Protection System consists of two PVC tubes laid side by side permanently joined together to form a twin element.

Beaver® – the Protection System

The elements of the flood barrier are initially inflated, easily moved into the desired position and subsequently filled with water from a nearby water source or a hydrant.

The individual elements are joined together by a patented link system. This makes it possible to build flood barriers of any length which conform to all types of terrain.

Additional hold back capacity can be obtained by adding a further single hose on top of the twin element.

The Beaver® Protection System guarantees fast assembly of temporary flood barriers and their simple and flexible use.

The rapid and easy disassembly and removal, together with good storability are additional assets of this reusable system.

In recent years, Beaver® flood barriers have, in over 1000 cases, protected cities and their citizens, lands and buildings. The Civil Defence appreciates the convenience Beaver® flood barriers provide for dam building in flood situations. Over 80'000 m of Beaver® flood barriers sold to date (Feb 2016) will help reduce storm and flood damage in the coming years.

Rapid Installation

A Type M50 dam measuring 500 metres (1670 feet) in length can be erected by 8 men in only 2 hours. For a comparable sandbag wall to be erected it would take many days, not taking into account the additional time required to organise, transport, fill sand bags, stack and then remove all afterwards.

Deploy

unroll

inflate

link

fill with water

(whilst evacuating the air)

operational

Especially in storms and floods, fast assembly and erection of a dam is crucial. By stacking an additional tube the hold back capacity can be increased quickly and easily in case of an emergency.

Floods in Berne, 1999. Photo archive Fritz Friedli

Two hours after the thunderstorm in November 2005
Community of Vals/GR Switzerland

Floods in Locarno, November 2002. Sign. Maffi, Corriere del Ticino

In past years more frequent and more severe storms and floods have caused enormous economic costs – several billions alone in the worst year 2002. Due to environmental and climatic changes worldwide we expect billions of dollars of damages in the years to come.

Flexible and easy to use

The Beaver® Protection System is extremely user friendly. Besides simplicity and flexibility in application, the removal is also rapid and simple. The Beaver® tubes are storable on small surfaces.

The elements adapt optimally to the terrain.

Changes of direction are possible on any point without special elements.

Specially developed hardware and supplies.

Tight and sturdy links.

Patented draining system.

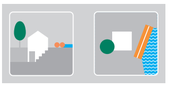
Minimal effort to drain.

Beaver® dams can be stacked in case of emergency.

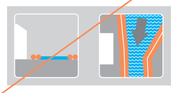
Multipurpose application

Protect the landscape
Villages, towns, agriculture, settlements.

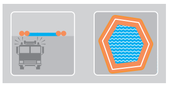
Protect whole buildings
Houses, factories, industrial sites, campgrounds, sport facilities.



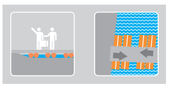
Protect property parts
Garages, basements, staircases, entrances.



Hold back and divert water
During storms and floods on lakes, rivers and creeks as well as mud and water pipe rupture.



Store water
As a temporary watertank for fire fighting vehicles.



Cross water
As a footbridge during floods or even as a raft with an outboard motor.

The Beaver® Storm and Flood Protection System can be quickly erected with few staff, and is very cost efficient.