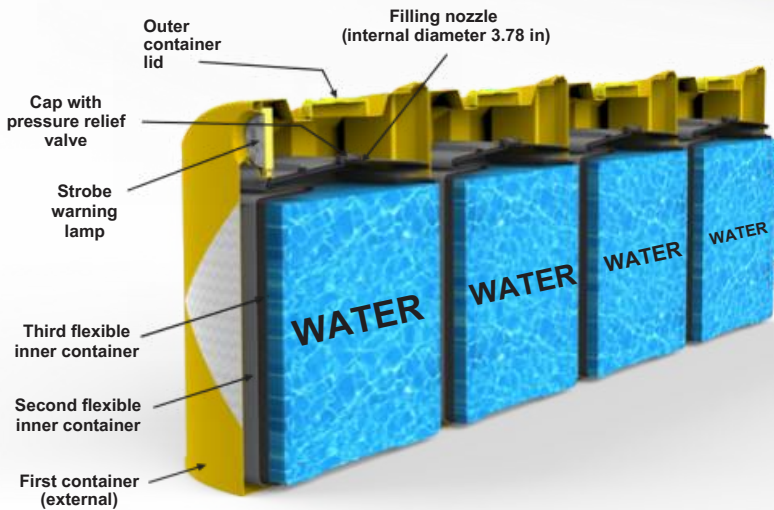
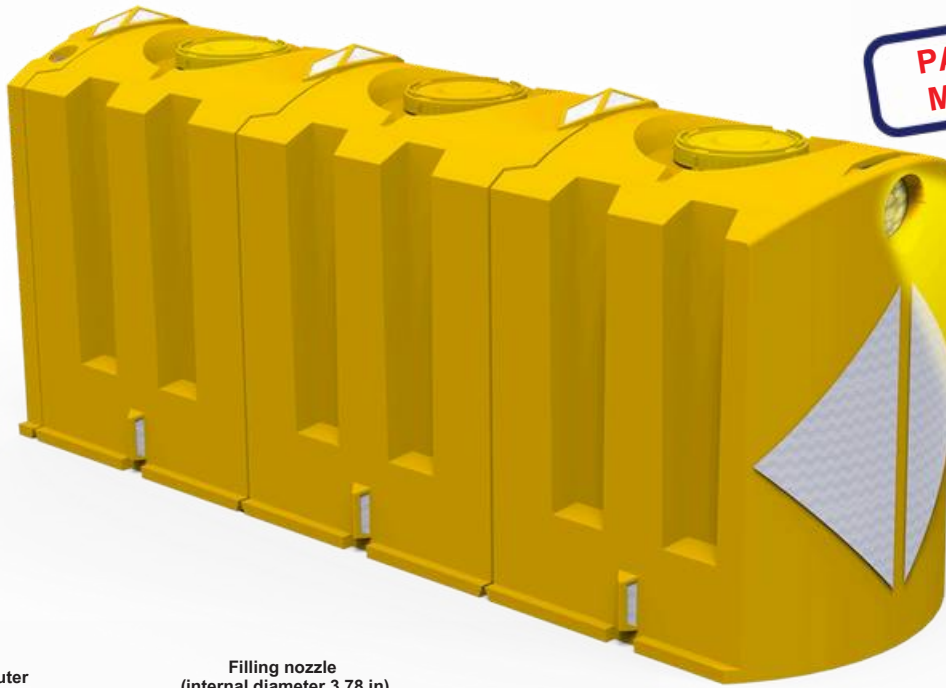


ABSORB 130

IMPACT ATTENUATOR WITH
TRIPLE-CONTAINER MODULAR DESIGN

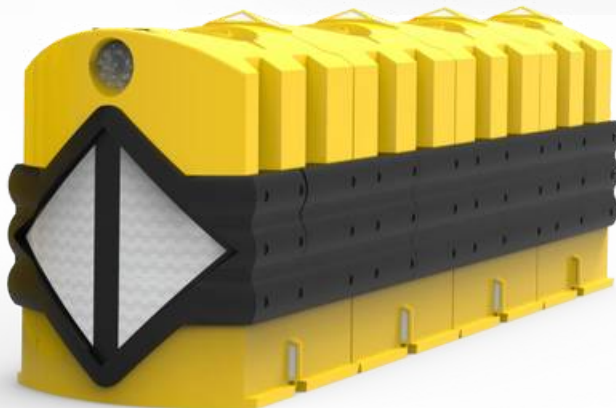
Code: ABSORB-130

PATENT PENDING
MX/u/2019/000516



Features

- No metal parts.
- Modules feature a triple-container system:
 - Outer container made of rotomolded plastic
 - Two inner flexible containers with high tear and puncture resistance
- Hermetic sealing lid with pressure relief valve.
- No water loss due to evaporation.
- Maintenance-free, no refilling required.
- Optional solid plastic side reinforcement manufactured using the intrusion process.
- Complements available with optional preventive elements:
 - Violetón Luminus
 - Brío 105 Delineator Post
 - 76 Delineator Post (Superflexible Poliflexy®)



Coupling System



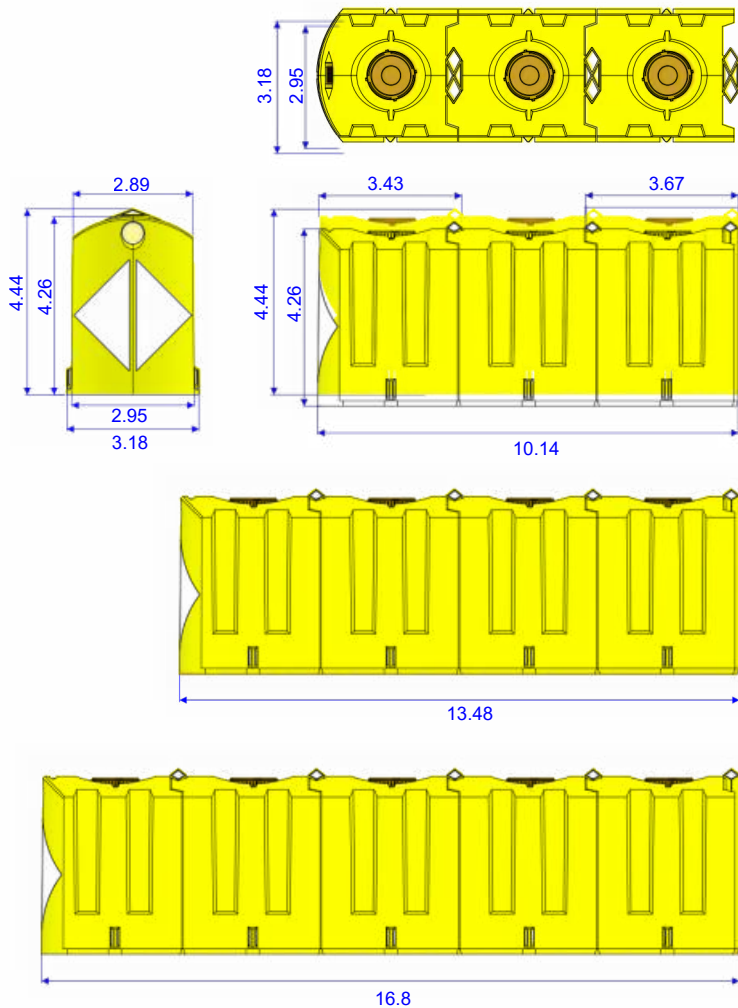
Features

- The Absorb 130 consists of a front module, complemented by universal modules. Depending on the number of modules, it can reach up to Containment Level NC-3 according to the NOM-008-SCT2-2013 standard, and it is finished with an end cap to provide support when filled with water.
- Modules are connected using a specially designed coupling system, ensuring that all modules work in unison upon impact, preventing separation during a collision.
- Equipped with the innovative **“Triple Container Impact Absorption System”**, each module features an outer container that houses a second flexible container. Inside the second container is a third flexible reservoir, which is filled with water up to 80% of the outer container’s capacity.
- This design allows the Absorb 130 to efficiently absorb and dissipate impact forces, making it perfect for high-speed roads and highways. It is specifically engineered to prevent vehicles from colliding with hazards such as bridge structures, toll booths, poles, trees, and more. By absorbing impact energy and reducing vehicle speed in a controlled manner, it significantly mitigates the severity of injuries in the event of a crash.
- The outer containers are constructed from medium-density polyethylene with UV protection, providing optimal durability and resistance to environmental exposure.
- The front module is equipped with a solar-powered strobe light, ensuring visibility from a long distance.
- Additionally, the interior flexible containers feature a safety valve and a hermetic sealing fill valve, which prevent water loss due to evaporation and enable easy filling.

ABSORB 130

IMPACT ATTENUATOR WITH TRIPLE-CONTAINER MODULAR DESIGN

Code: ABSORB-130

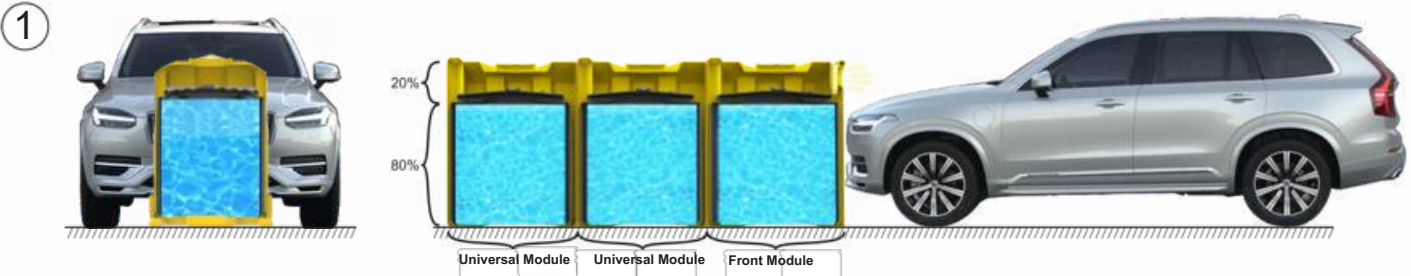


Containment Level: TL-1
 Speed: 31.07 mph
 Empty weight: 330 lb
 Weight with 80% water fill: 5,665.89 lb
 1 Front Module, 2 Universal Modules

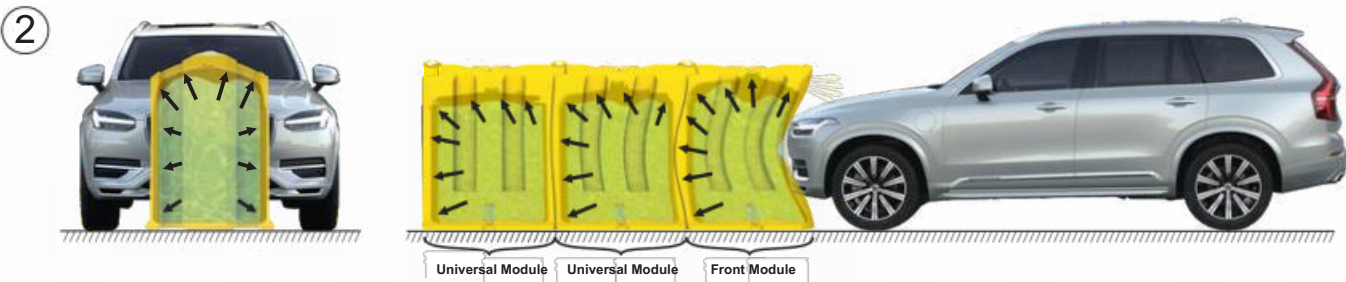
Containment Level: TL-2
 Speed: 43.5 mph
 Empty weight: 441 lb
 Weight with 80% water fill: 7,595 lb
 1 Front Module, 3 Universal Modules

Containment Level: TL-3
 Speed: 62.14 mph
 Empty weight: 551.15 lb
 Weight with 80% water fill: 9,524 lb
 1 Front Module, 4 Universal Modules

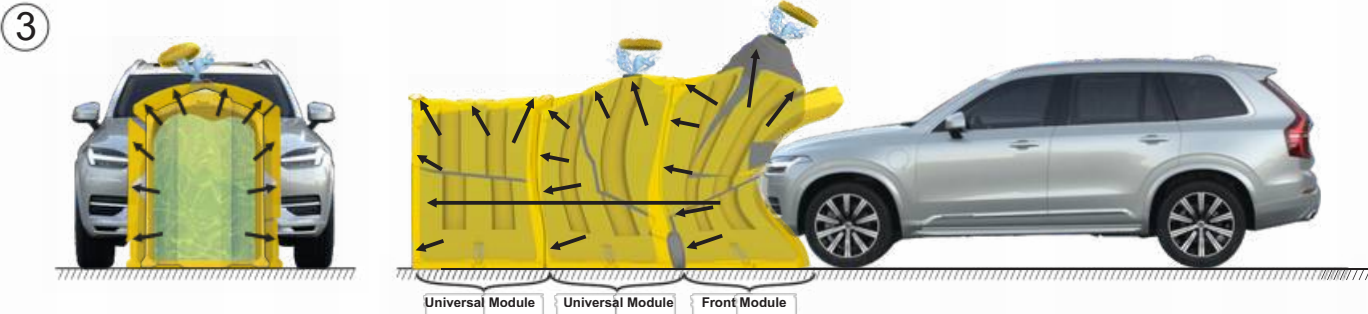
Dimensions are in feet



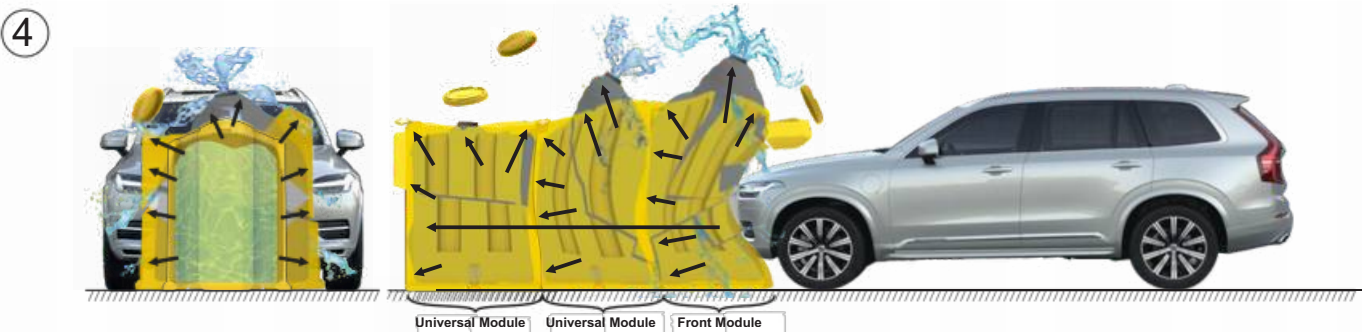
The inner flexible containers in each module are filled with water up to 80% of the outer container's total capacity. Once filled, any remaining air within the flexible container assembly is evacuated. The unit is then hermetically sealed with a cap that includes a pressure relief valve, and the entire assembly is carefully folded and placed inside the outer container.



From the moment the vehicle contacts the first module, the impact attenuation process is activated. The outer container deforms and may rupture upon impact. Meanwhile, the inner flexible containers are compressed, causing the water inside to shift. This allows the containers to conform to the shape of the vehicle's front end, effectively wrapping around it and absorbing the collision energy.



If the pressure exerted during the impact exceeds a certain threshold, the pressure relief valve is activated, allowing water to be released in a controlled manner. This process helps alleviate some of the pressure on the water, extending the contact time between the vehicle and the triple-container system, thereby enhancing its energy absorption capacity.



If the flexible container assembly is punctured during impact, the water is released through the perforations, relieving some of the pressure exerted on the system. However, the assembly remains intact and does not rupture, which further enhances the system's impact attenuation capacity.