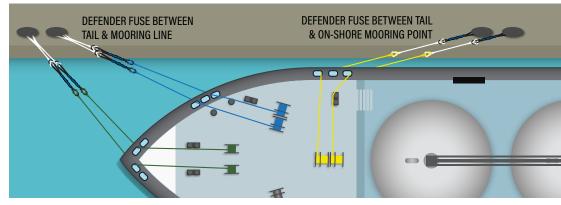
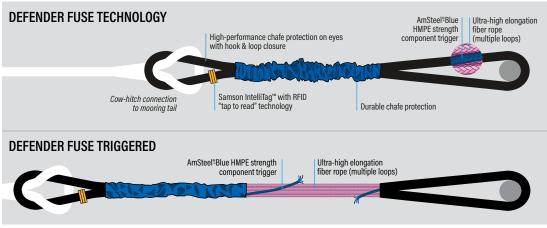


Recoil in any mooring situation is dangerous and potentially life-threatening. While common systems are designed to minimize risk, some situations arise outside standard protocols that may require additional safety measures. That's why Samson developed Defender Fuse.

Defender Fuse is designed to complement standard mooring systems and is easily positioned between the mainline and tail or between the tail and on-shore connection. Defender Fuse consists of two types of rope, and once triggered, the load is transferred from the HMPE strength component to loops of a specially designed high-elongating material or "catch." Developed to mitigate recoil situations before they occur, the catch material will continue to elongate until it reaches its final length, up to 150% more than its original, before complete rupture. In this way, the elongating material acts as an early warning system allowing the crew to take immediate action and reduce load.



Defender Fuse can be positioned between the mooring line and tail or between the tail and on-shore mooring point.



Once the Defender Fuse is triggered, the internal rope structure is exposed as a visual advance warning of the overload. The ultra-high elongation rope will continue to elongate, up to 150% more than it's original length, before complete rupture.



Defender FuseADVANCED WARNING SYSTEM

Product Code: 805

TECHNICAL SPECIFICATIONS[†]

FIBER: HMPE-Polyester / Nylon COLOR: Blue/Black CONSTRUCTION: Multi-loop Sling

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TYPE APPROVAL: ABS

FEATURES & BENEFITS

- Energy absorption catch component with high-strength trigger
- Can be added to new or existing mooring systems
- > 1-meter eye with tag one end and 2-meter eye other end

Samson's Defender Fuse™ can accommodate common 11-meter and 22-meter tail configurations with mooring deployment lengths up to 100 meters, but custom fuses can be designed to your specific arrangement if required.

Available in two configurations, standard and high recoil control (HRC).

- Standard energy absorption capability to accommodate up to 11 meter non-nylon tails
- HRC energy absorption capability to accommodate up to 22 meter nylon tails

Samson has designed the Defender Fuse™ to absorb energy contained within the stiff, high-performance mooring lines common in the industry and the elastic tails they are typically connected to. If exceedingly long tail lengths or traditional fiber mooring lines with greater elasticity are utilized, alternate energy storage levels must be considered. In these cases, contact your Samson representative to determine the best design for your unique needs.

DEFENDER FUSE SELECTION GUIDE

Mooring System Requirements	Max. Vessel MBLsd* METRIC TONS	Trigger Deployment Load METRIC TONS	Unit Length METERS	Unit Weight KILOGRAMS
Total Deployment: 100 meters	31 mt	18.4 mt	4.0 m	23.6 kg
	40 mt	23.9 mt	4.5 m	25.0 kg
Maximum Tail Length: 11 meters	49 mt	29.2 mt	4.5 m	25.5 kg
	62 mt	37.2 mt	4.5 m	26.0 kg
Nylon Tail Compatible: No	69 mt	41.2 mt	4.5 m	26.4 kg
	82 mt	49.4 mt	5.0 m	27.9 kg
	95 mt	56.7 mt	5.0 m	33.2 kg
	101 mt	60.8 mt	5.0 m	33.4 kg
	112 mt	67.1 mt	5.0 m	34.2 kg
	125 mt	74.8 mt	5.0 m	34.9 kg
	140 mt	84.0 mt	5.5 m	37.8 kg
	155 mt	93.0 mt	5.5 m	43.5 kg
	172 mt	103 mt	5.5 m	44.7 kg

DEFENDER FUSE HIGH RECOIL CONTROL SELECTION GUIDE

Mooring System Requirements	Max. Vessel MBLsd* METRIC TONS	Trigger Deployment Load METRIC TONS	Unit Length METERS	Unit Weight KILOGRAMS
Total Deployment: 100 meters	31 mt	18.4 mt	4.5 m	24.7 kg
	40 mt	23.9 mt	4.5 m	25.0 kg
Maximum Tail Length: 22 meters	49 mt	29.2 mt	4.5 m	29.7 kg
	62 mt	37.2 mt	5.0 m	31.8 kg
Nylon Tail Compatible: Yes	69 mt	41.2 mt	5.0 m	32.4 kg
	82 mt	49.4 mt	5.0 m	37.4 kg
	95 mt	56.7 mt	5.5 m	39.9 kg
	101 mt	60.8 mt	5.5 m	40.4 kg
	112 mt	67.1 mt	5.5 m	55.3 kg
	125 mt	74.8 mt	5.5 m	59.0 kg
	140 mt	84.0 mt	5.5 m	64.9 kg
	155 mt	93.0 mt	5.5 m	65.3 kg
	172 mt	103 mt	6.0 m	75.3 kg

[†]Due to our continued research and development of product performance, the specifications listed herein are subject to change. For the most current sizes, weights, and strengths, go to SamsonRope.com.



^{*}Contact Samson for selection of MBLsd (ship design minimum break load) specific Defender Fuse size.