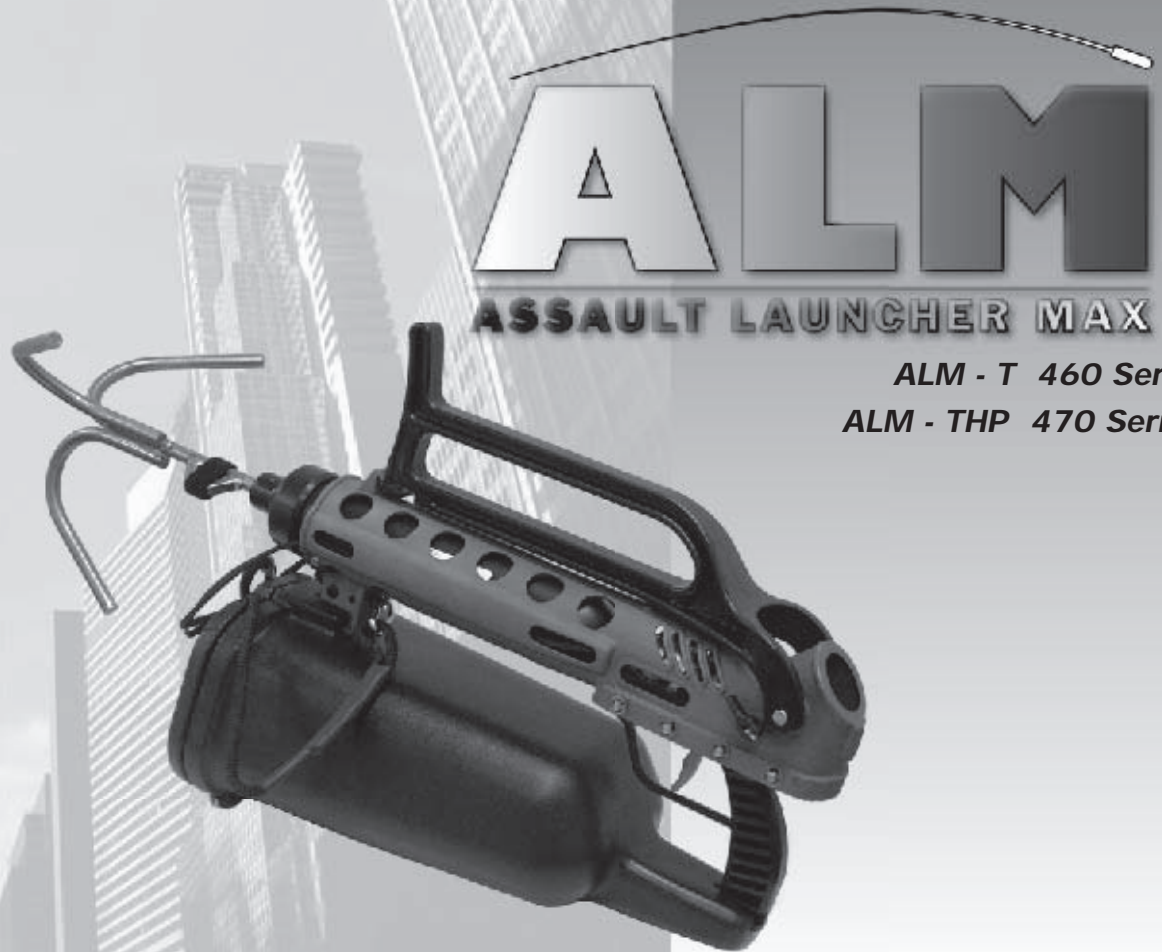


MAXimum Distance.

MAXimum Safety.

MAXimum Performance.



ALM
ASSAULT LAUNCHER MAX

ALM - T 460 Series
ALM - THP 470 Series

"The Global Leader in intrinsically safe line-throwing equipment"



The ALM™ is **the NEW Generation** high performance line-throwing appliance specifically designed to deploy a line only, a grappling hook and climbing line, or a grappling hook and ascending ladder to an otherwise inaccessible point in both land-based and surface and subsurface maritime environments.

- Utilizing a patented air-thrust technology, the ALM is non-pyrotechnic, re-usable, and re-fillable.
- Launcher Assembly housings are cast from 6AL-4V Titanium for best weight/strength ratio, and are inert to seawater and have a lifetime guarantee against all hazards.
- 4500 psi / 300 Bar service pressure Titanium projectile.
- 3000 psi / 207 Bar service pressure Aluminum projectile.

ALM Kits are recommended basic configurations

tailored for your specific applications. Additional

lines, projectiles, and accessories can be

purchased separately. Custom Kit configurations

are also available on request.

▶ MAXimum Distance

The ALM is capable of deploying a 3,200lb test strength line horizontally up to 330 feet / 100 meters. The ALM can deploy a 7.0mm climbing line with Climbing Grappling Hook vertically up to 130 feet / 40 meters. A 50ft / 15m Ascending Ladder and Climbing Grappling Hook can be fully deployed by the ALM.

▶ MAXimum Safety

- The safety mechanism is "always on," re-setting automatically when a projectile is inserted.
- The projectile's "Push-Click" engagement allows easy reloading, even in the dark.
- A pressure relief burst disk prevents unsafe pressure build-up that could result from exposure to extreme heat.
- Each launcher is fitted with a luminous pressure gauge for close visibility at night.

▶ MAXimum Performance

Multi-Shot Capacity. Our patented *nozzle-valve* permits any number of projectiles to be precharged and stored with the unit, allowing deployment of multiple projectiles in rapid succession.

■ Line & Ladder Options

Any line type may be combined with any projectile option.

Part #	Description	Minimum Break Load		Weight per Length		Length	
		lbs	kg	lbs	kg	ft	m
801	7mm Nylon/Spectra Climbing Line	5780	2622	3.96	1.8	165	50
802	5.5mm Nylon/Spectra Climbing Line	3200	1194	2.60	1.2	330	100
735	40ft / 12m Ascending Ladder	7500	3400	5.2	2.35	40	12
740	50ft / 15m Ascending Ladder	7500	3400	7.15	3.3	50	15

★ Custom line options and ladder lengths to meet user requirements are also available.

The ALM - T and ALM - T - HP series were designed to suit the missions of modern day Tactical & Special Forces units - for use in applications which may include severe exposure to marine environments, including submersion in seawater - such as sub-surface movements of swimmers, as well as for land-based and surface based maritime environments.

Each launcher housing is cast from Grade IV Titanium, and each launcher mechanism is machined from Ti 6AL-4V Titanium. Titanium is inert to seawater.

The ALM - T projectiles are made from 6061-T6 heat treated aluminum, with a service pressure of 3,000 psi. / 207 Bar.

The ALM - T - HP series is designed for the same applications as the ALM - T, but offers higher performance, operating at higher service pressure. The projectiles are made from Ti 6AL-4V heat treated titanium, with a service pressure of 4,500 psi. / 300 Bar.

▶ MAXimum Versatility

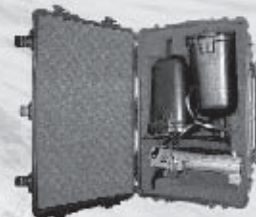
■ Line Projectile

The line projectile will deploy a variety of line only over a range of distances, depending on the service pressure and the type of line used.



■ "Pelican" Transport/Storage Case

An unbreakable, watertight, dustproof, chemical resistant and corrosion proof transport/storage case made of Ultra Impact structural copolymer.



22 x 12 x 33 in / 56 x 30 x 84 cm
Approx Weight of a Typical Kit with Case: 50Lb / 23kg

■ Folding Stock

A 12 in / 30 cm folding stock is designed for greater accuracy of deployment and serves as a convenient carry handle in the collapsed position.



■ Cordura Kit Carry Bag

Cordura fabric carry bag is designed for durability and convenience. Features 2 external & 1 internal zippered storage pockets and a reinforced water-resistant vinyl bottom.



12 x 18 x 27 in / 30 x 46 x 69 cm

■ Climbing Grappling Hook

A fixed hook with three non-barbed tines is fabricated from titanium. Closed-cell elastomeric nitrile rubber cladding (not shown for clarity) is included -- to reduce signature noise. This hook is certified for climbing.



■ Ascending Ladder

Lightweight and durable! Constructed of nylon webbing with injection molded elastomer rungs at 12 in / 30 cm o.c., this ladder is available in 40ft / 12m or 50 ft / 15 m lengths that can be fully deployed vertically. Side members have a combined breaking strength of 7,500 lbs / 3,400 kg.



★ Custom lengths available

* US Patents #5,690,524; RE36,965 of 5,584,736; and other Patents Pending.

ALM Kits

ALM - T - 460 Titanium

- 1 Titanium Launcher with Folding Stock
- 2 Line Projectiles with 2 spare Molded PVC Foam Projectile Covers - 3000 psi
- 1 5780lb test 7mm Black Climbing line (165ft / 50m) with Compact Line Container
- 1 3200lb test 5.5mm Black line (330ft / 100m) with Compact Line Container
- 1 Titanium Climbing Grappling Hook
- 1 Filler Hose (#911 SCBA, #912 SCUBA or #913 SCBA-DIN)
- 1 Cordura Kit Carry Bag - Black
- 1 Pelican Storage/Transport Case - Black

ALM - T - 461 Titanium

- 1 Titanium Launcher with Folding Stock
- 2 Line Projectiles with 2 spare Molded PVC Foam Projectile Covers - 3000 psi
- 1 5780lb test 7mm Black Climbing line (165ft / 50m) with Compact Line Container
- 1 Ascending Ladder - 40ft / 12m with Large Line Container
- 1 Titanium Climbing Grappling Hook
- 1 Filler Hose (#911 SCBA, #912 SCUBA or #913 SCBA-DIN)
- 1 Cordura Kit Carry Bag - Black
- 1 Pelican Storage/Transport Case - Black

ALM - T - 462 Titanium

- 1 Titanium Launcher with Folding Stock
- 2 Line Projectiles with 2 spare Molded PVC Foam Projectile Covers - 3000 psi
- 1 Ascending Ladder - 40ft / 12m with Large Line Container
- 1 3200lb test 5.5mm Black line (330ft / 100m) with Compact Line Container
- 1 Titanium Climbing Grappling Hook
- 1 Filler Hose (#911 SCBA, #912 SCUBA or #913 SCBA-DIN)
- 1 Cordura Kit Carry Bag - Black
- 1 Pelican Storage/Transport Case - Black

ALM - T - HP - 470 Titanium

- 1 Titanium Launcher with Folding Stock
- 2 Line Projectiles with 2 spare Molded PVC Foam Projectile Covers - 4500 psi
- 1 5780lb test 7mm Black Climbing line (165ft / 50m) with Compact Line Container
- 1 3200lb test 5.5mm Black line (330ft / 100m) with Compact Line Container
- 1 Titanium Climbing Grappling Hook
- 1 Filler Hose (#911 SCBA, #912 SCUBA or #913 SCBA-DIN)
- 1 Cordura Kit Carry Bag - Black
- 1 Pelican Storage/Transport Case - Black

ALM - T - HP - 471 Titanium

- 1 Titanium Launcher with Folding Stock
- 2 Line Projectiles with 2 spare Molded PVC Foam Projectile Covers - 4500 psi
- 1 5780lb test 7mm Black Climbing line (165ft / 50m) with Compact Line Container
- 1 Ascending Ladder - 50ft / 15m with Large Line Container
- 1 Titanium Climbing Grappling Hook
- 1 Filler Hose (#911 SCBA, #912 SCUBA or #913 SCBA-DIN)
- 1 Cordura Kit Carry Bag - Black
- 1 Pelican Storage/Transport Case - Black

ALM - T - HP - 472 Titanium

- 1 Titanium Launcher with Folding Stock
- 2 Line Projectiles with 2 spare Molded PVC Foam Projectile Covers - 4500 psi
- 1 Ascending Ladder - 50ft / 15m with Large Line Container
- 1 3200lb test 5.5mm Black line (330ft / 100m) with Compact Line Container
- 1 Titanium Climbing Grappling Hook
- 1 Filler Hose (#911 SCBA, #912 SCUBA or #913 SCBA-DIN)
- 1 Cordura Kit Carry Bag - Black
- 1 Pelican Storage/Transport Case - Black

Technical Specifications

	303 Stainless Steel	18-8 Stainless Steel	316 Stainless Steel	440C Stainless Steel	6061-T6 heat-treated aluminum	Injection molded Poly- carbonate	Poly- ethylene (HDPE)	Titanium 6AL-4V
Launcher								
Mechanism Body								■ ■
Quick Release Bearings				○				
Internal Springs		○						
Safety Mechanism								■ ■
Valve Key Mechanism								■ ■
Launcher Trigger	○							
Bleed Screw Body		○						
Pressure Gauge			○					
Launcher Barrel								
Launcher Handle						○		
Line Container								
Line Container							○	
Cast-In Inserts & Fasteners		○						
Folding Stock								
Stock Body						○		
Cast-In Inserts & Fasteners		○						
Locking Slide	○							
Projectiles								
Projectile Cylinder					■			■
Projectile Nozzle Assembly			■					■
Nozzle Protector						○		
Grappling Hook								
Climbing Grappling Hook								○

Pressure Gauges -- Dual Scale - Metric & Imperial Units -- Luminescent at short range

Filler Hose -- SAE 517 standard 108R Pressure Hose with 5,000psi service/20,000 psi burst

Climbing Grappling Hook -- Design Rating - Ultimate Strength of 2,200 lbs / 1,000 kg, Recommended Loads not to exceed 730 lbs / 330 kg

○ Common to all Series

■ ALM - T - 460 Series only

■ ALM - THP - 470 Series only

Performance

Testing under varying conditions shows conservative distance achieved, below.

Conservative Distances

Part #	Description	3000 psi				4500 psi			
		HORIZONTAL with line projectile		VERTICAL with Climbing Grappling Hook		HORIZONTAL with line projectile		VERTICAL with Climbing Grappling Hook	
		ft	m	ft	m	ft	m	ft	m
801	5780lb test 7mm Black Climbing line (165ft / 50m)	165 [★]	50 [★]	80	25	165 [★]	50 [★]	130	40
802	3200lb test 5.5mm Black Climbing line (330ft / 100m)	250	75	110	33	330 [★]	100 [★]	180	55
735	40ft / 12m Ascending Ladder	n/a	n/a	40	12	n/a	n/a	40 [★]	12 [★]
740	50ft / 15m Ascending Ladder	n/a	n/a	n/a	n/a	n/a	n/a	50 [★]	15 [★]

★ at reduced pressure

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