

THE HYDRAULIC MRL, SIMPLIFIED



ALLIANCE
ELEVATOR SOLUTIONS



MRL FAMILY

The ADVANTAGE MRL™ (Hydraulic)

The Hydraulic MRL - Simplified

Alliance Elevator Solutions is a privately owned team of forward-thinking professionals who are passionate about the elevator craft. We designed our ADVANTAGE MRL™ for the architect, engineered it for the elevator contractor, and refined it for the building owner.

Architects appreciate the flexibility of a true, non-proprietary, machine-room-less hydraulic elevator.

Elevator contractors are thrilled by the short lead times as well as the wide range of travel and capacities.

And, building owners enjoy the significant cost savings on their monthly service contracts when compared to a traction MRL.

Why the ADVANTAGE MRL™

- Fits in most standard hydraulic and traction MRL hoistways
- Exceptionally low true cost of ownership
- Smooth ride while producing minimal noise
- Flexible material arrangements allowing for customized solutions
- Manufacturing lead times are 30% less than a comparable traction package
- 100% non-proprietary, 100% open source



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Meet our ADVANTAGE MRLs

Simplicity was our focus years ago when AES started the hydraulic MRL journey. After years of product development, countless hours of field refinements, and rigorous code inspections, AES is proud to announce the ADVANTAGE MRL™.

Did you know...

All of our major components come standard with a 2-year warranty?

PERFECT FOR LOW-RISE BUILDINGS.

Building Owners



Material cost is approximately 30% less than non-proprietary gearless MRLs



Huge labor savings during the installation when compared to gearless MRLs



Monthly Maintenance and Service contracts are drastically less than gearless traction MRLs

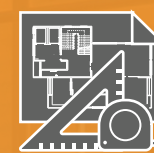


2 Year Warranty

Architects



Simplistic and flexible design



Online tools, specifications, prints, and cut sheets

12' 6"
OVERHEAD

Low overhead less than 12'6"



Great substitute for a traction MRL when project is overbudget



Manufactured in the USA

Independent Elevator Contractors



Quote online - generating material cost in seconds



Manage projects through the ToolBOX™



Speeds up to 125 FPM



2,100 - 4,500 lb capacities

HOLELESS
OR
INGROUND

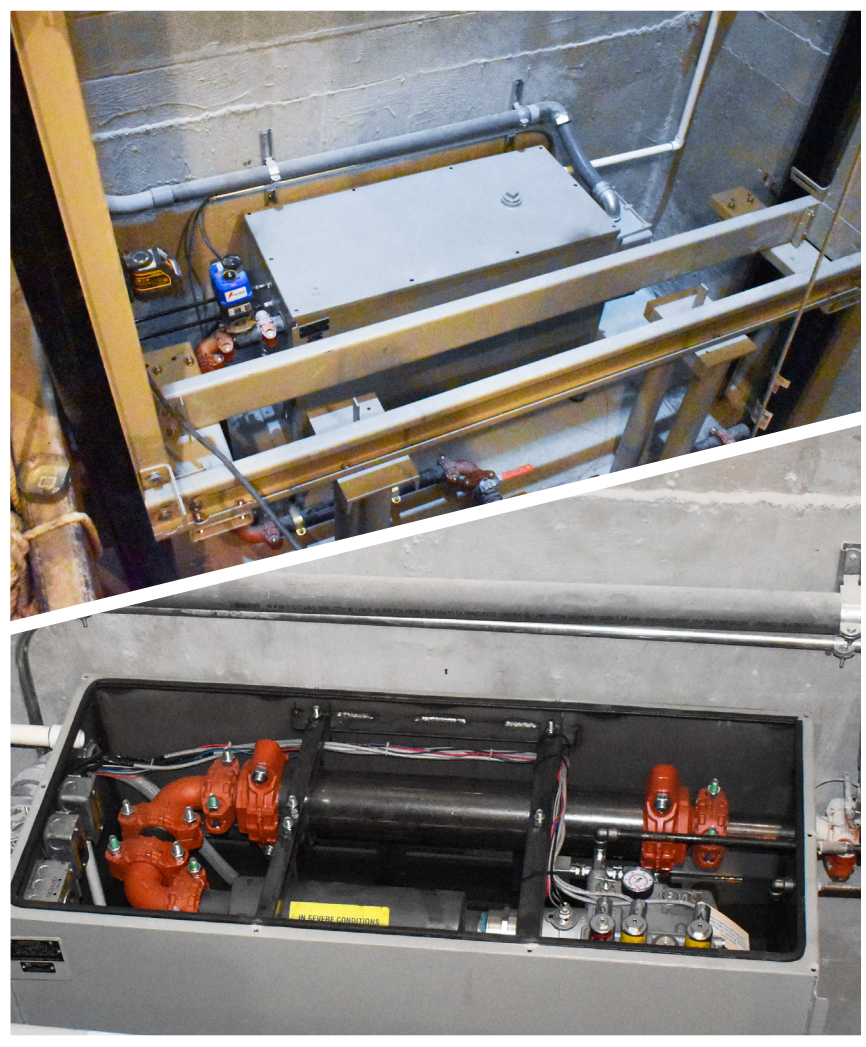
Holeless or inground jack options



Travel up to 50'

Advantages

	ADVANTAGE MRL™ IPA (In-Pit Arrangement)	ADVANTAGE MRL™ EDA (Equipment Door Arrangement)	EDGE Traction MRL™
No elevator machine room required	●	●	●
Non-proprietary components and easy to use interface	●	●	●
Can be installed and maintained with union or non-union mechanics	●	●	●
Low cost/high value solution to an MRL application	●	●	
Fewer moving parts and lower maintenance cost	●	●	
Endless possibilities with finishes, cab interiors, and capacities up to 4,500 lb	●	●	
More energy efficient with high standby applications (low use elevators)	●	●	
Eco friendly - Biodegradable oil can be substituted for conventional 32 weight	●	●	
Fits in standard hoistway (hydraulic)	●		
Elevator disconnects can be included in elevator package	●		
Quite ride, engineered with multiple mufflers and expansion chambers built into the in-pit power unit	●		
Traditional access door not required	●		



ADVANTAGE MRL™ IPA

The In-Pit Arrangement MRL utilizes an in-pit power unit accompanied by an in-wall controller and valve box, making this space saving configuration the ideal choice when every square inch of floor space counts.



ADVANTAGE MRL™ EDA

The Equipment Door Arrangement MRL utilizes engineered components and is a fantastic choice for service-minded building owners as it allows for easy access to many of the service components of the elevator equipment.



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Key Components

Sacrificing space doesn't mean sacrificing quality. In fact, many of the components you'll find in our MRLs are the exact same components found in our more traditional passenger and service elevator lines.

Here are some of those key components:



Cabs

Standard AES cabs are manufactured from 14-gauge galvaneal steel and may be sprayed with an electrostatic paint to ensure a strong durable coating. Our robust steel shell allows for endless possibilities with flush and raised laminate or even rigidized metals.

Did you know...

Our AlliancePRO™ network of Independent Elevator Contractors spans across the nation and are ready to install, maintain and service your next job?

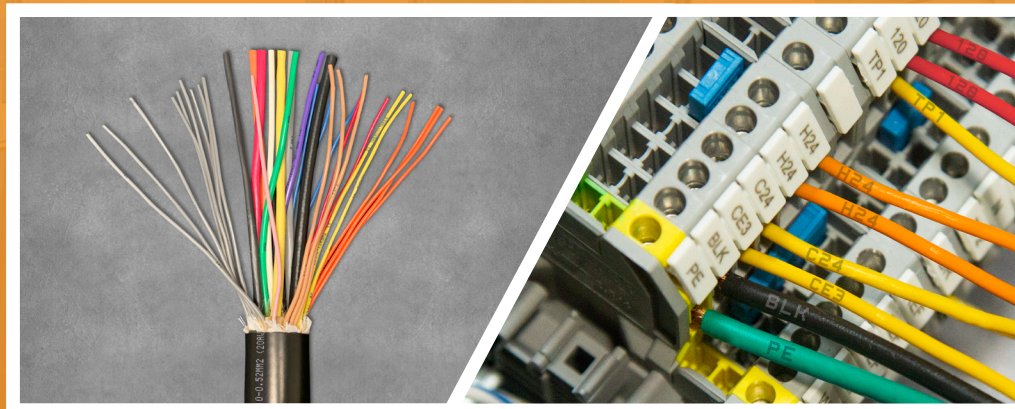
Fixtures

Traditional or Vandal resistant. Our fixture packages come in a variety of styles, offering endless options of shapes, sizes, materials and finishes.



Jacks (single/two stage)

The ADVANTAGE MRL™ utilizes an array of holeless and inground jacks manufactured locally at our south central Pennsylvania facility.



Cable

Each ADVANTAGE MRL™ includes a custom traveler and hoistway cable. The cables come pre-labeled to match the terminal pins on the controller. This simplifies the wiring between the controller and the car operating panel while preventing errors and decreasing installation times.



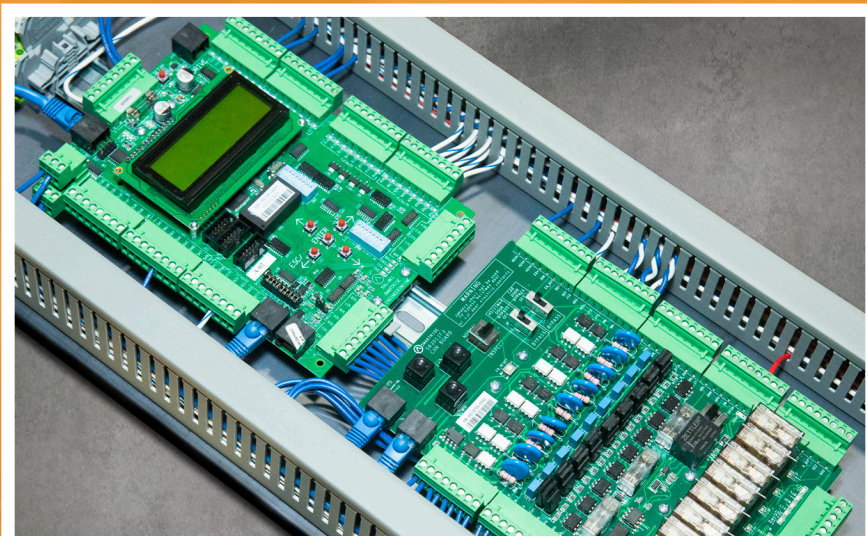
Slings and Platform

Built locally by our experienced fabricators and machinists, cold rolled steel is formed to produce a high strength, low weight foundation for each elevator package.



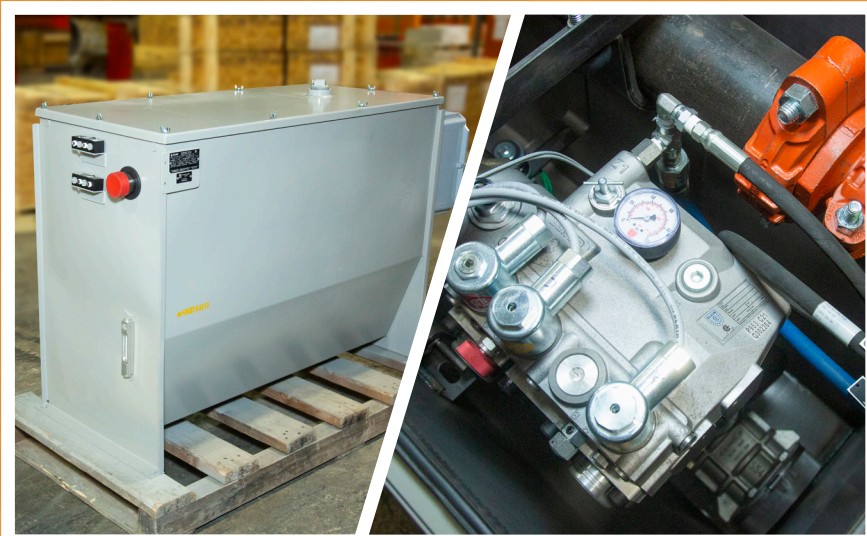
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Key IPA Components (In-Pit Arrangement)



Controller arrangements (with disconnects, SRU boards - Valve Box, with manual lever)

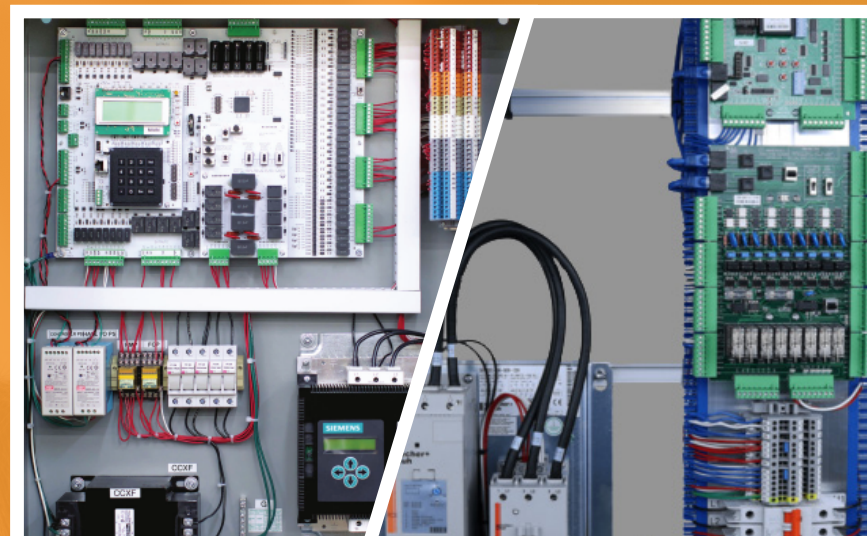
The IPA design is powered by a highly customized non-proprietary Smartrise Engineering serial link solid-state controller. This specialized arrangement fits in walls as thin as 8 1/2". The mounted user interface tool provides easy access to adjustments and parameters for maintenance and service.



Power Unit

The power unit, located in the pit, is designed with expansion chambers and pulsating mufflers to reduce noise and ensure a quite ride. The electronic valve is engineered by German specialists, providing the smoothest ride available in a hydraulic elevator.

Key EDA Components (Equipment Door Arrangement)



Controller

The EDA maximizes flexibility by allowing space for most non-proprietary controller manufacturers. This flexibility is just one more reason why the EDA is the preferred choice for many of our independent AlliancePROs.

Did you know...

Our award-winning online design resources allow you to quote, order, generate prints, and track your job anywhere at any time?



Power Unit

The power unit, located behind the main elevator rails and accessible by an access door, is designed to incorporate a proven Maxton control valve. The EDA arrangement allows for maximum serviceability by allowing access to the power unit without entering the hoistway.

Low Capacity Standard Dimension & Specification Chart

Capacity (lb)	Openings (Front/ Rear)	Door Type and Width	Platform Size W x D	Hoistway Size* W x D	Clear Inside W x D	Running Clearance Sill/Plat	Sill Depth Required
2100	F	SSSO 36"	6'-0" x 5'-1"	7'-4" x 5'-9"	5'-8" x 4'-3"	1 ¼"	5"
2100	F&R	SSSO 36"	6'-0" x 5'-7 ½"	7'-4" x 6'-8"	5'-8" x 4'-4"	1 ¼"	5"
2500	F	SSSO 42"	7'-0" x 5'-1"	8'-4" x 5'-9"	6'-8" x 4'-3"	1 ¼"	5"
2500	F&R	SSSO 42"	7'-0" x 5'-7 ½"	8'-4" x 6'-8"	6'-8" x 4'-4"	1 ¼"	5"
3000	F	SSSO 42"	7'-0" x 5'-6"	8'-4" x 6'-2"	6'-8" x 4'-8"	1 ¼"	5"
3000	F&R	SSSO 42"	7'-0" x 5'-10 ½"	8'-4" x 6'-11"	6'-8" x 4'-7"	1 ¼"	5"
3500	F	SSSO 42"	7'-0" x 6'-3"	8'-4" x 6'-11"	6'-8" x 5'-5"	1 ¼"	5"
3500	F&R	SSSO 42"	7'-0" x 6'-7 ½"	8'-4" x 7'-8"	6'-8" x 5'-5"	1 ¼"	5"
3500H**	F	2SSO 42"	5'-4" x 8'-4"	6'-8" x 9'-3"	5'-0" x 7'-4"	1 ¼"	6 ½"
3500H**	F&R	2SSO 42"	5'-4" x 9'-0"	6'-8" x 10'-3"	5'-0" x 7'-4"	1 ¼"	6 ½"
4000**	F	2SSO 48"	8'-0" x 6'-3"	9'-4" x 7'-0"	7'-8" x 5'-5"	1 ¼"	5"
4000**	F&R	2SSO 48"	8'-0" x 6'-9"	9'-4" x 7'-9"	7'-8" x 5'-5"	1 ¼"	5"
4000H	F	2SSO 48"	6'-0" x 8'-5"	7'-4" x 9'-2 ½"	5'-8" x 7'-5"	1 ¼"	6 ½"
4000H	F&R	2SSO 48"	6'-0" x 9'-½"	7'-4" x 10'-4"	5'-8" x 7'-5"	1 ¼"	6 ½"
4500H	F	2SSO 48"	6'-0" x 8'-9"	7'-6" x 9'-6 ½"	5'-8" x 7'-9"	1 ¼"	6 ½"
4500H	F&R	2SSO 48"	6'-0" x 9'-5 ½"	7'-6" x 10'-9"	5'-8" x 7'-10"	1 ¼"	6 ½"
5000H**	F	2SSO 48"	6'-0" x 9'-8"	7'-6" x 10'-7"	5'-8" x 8'-8"	1 ¼"	6 ½"
5000H**	F&R	2SSO 48"	6'-0" x 10'-4"	7'-6" x 11'-7"	5'-8" x 8'-8"	1 ¼"	6 ½"

Overhead Required - Quick Calculation

	SINGLE STAGE		TWO STAGE		THREE STAGE	
	100 FPM	125 FPM	100 FPM	125 FPM	100 FPM	125 FPM
Pit Depth	4' – 0"	4' – 0"	4' – 0"	4' – 0"	5' – 0"	5' – 0"
Overhead	12' – 8"	12' – 9"	13' – 6"	13' – 6"	13' – 6"	13' – 6"
Top Over Travel	4"	5"	9"	14"	9"	14"
Bottom Over Travel	6"	7"	6"	8"	6"	8"
Max. Travel	13' – 10"	13' – 7"	25' – 4"	23' – 9"	41' – 2"	39' – 2"
Max. Cab Height	8' – 7"	8' – 6"	8' – 0"	8' – 7"	9' – 0"	8' – 7"

APPROXIMATE CLEAR INSIDE DIMENSIONS OF CAB

Width = Platform width less than 4"

- Depth = Front Open Only
- SSSO & CO Doors = Platform Depth Less 10"
 - 2SSO Doors = Platform Depth Less 11 ½"

- Depth = Front & Rear Open
- SSSO & CO Doors = Platform Depth Less 16"
 - 2SSO Doors = Platform Depth Less 19"

D.B.G. (Distance Between Guides)
Platform Width plus 3 ¼" 12#

- STANDARD SIZES
- Our standard cab height is 8'
 - Our standard pit depth is 4'
 - Contact AES for machine room requirements

Note: Other hoistway sizes can be accommodated. Contact AES for further information. Nonstandard sizes: Contact your AES representative for accurate pricing.



Passenger & Service
Cars Available



*EDA Configurations
Add 8" to hoistway width,
or 12" to hoistway depth

NO MACHINE ROOM
MEANS MORE SPACE!



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ADVANTAGE MRL™ IPA (In-Pit Arrangement)

Pros	Cons
No machine closet needed	
Fits in most standard hoistway footprints	
Hall box/main controller box is hidden in the wall	
Uses advanced electronic valve to maximize space & offers micro adjustments to deliver a very smooth ride	
Does not require an access door	
Very quiet - in most cases, less than 60 decibels	
Elevator disconnects may be included in elevator package	
Performing maintenance on power unit requires working under platform	
Rough opening required for valve box on the lowest landing	
Limited controller options	
Limited to 40hp, which could limit elevator speed in higher capacity elevators	
Requires at least 8 ½" wall thickness for hall box	
More costly of the two hydraulic MRL options	

ADVANTAGE MRL™ EDA (Equipment Door Arrangement)

Pros	Cons
Most cost effective MRL option	
Utilizes proven hydraulic components throughout hoistway equipment	
Works with many control valve manufactures	
Does not require work underneath a car	
Works with controller company of your choice	
Room for electrician provided main line disconnects	
Requires additional 8" in hoistway width to fit power unit, or 12" to rear of hoistway	
Requires a fire rated access door on lowest landing	
Motor and pump difficult to access for maintenance	



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