



DAVIS STANDARD®

Where your ideas take shape.



Wire & Cable

Accumulators Vertical And Horizontal

Overview

A full line of Merritt Davis Electric accumulator systems with tension ranges as low as .05 ounces can be engineered to meet customer specifications. Accumulator systems are sold in both vertical and horizontal configurations.

Horizontal accumulators can be floor or ceiling mounted, or arranged for mezzanine applications. All accumulators utilize a precision feed-back sensor to monitor trolley position for precise speed control. A variety of accessories are available to complete the installation. Sheave sizes range from 4 inch (100mm) ultra light weight to 60 inches (1,524mm) in diameter. Sheave materials include Delrin®, UHMW and aluminum.

Features

- Configured for either payoff or takeup operation
- Continuous operation with no change in running tension
- Available in single and double beam configuration based on wire range and tension requirements
- PLC controlled for increased flexibility and reliability in matching the operation to the line
- Designed to operate as a speed control dancer via position control (0-10VDC output) when operating in the open position (payoff) or in the closed position (takeup)

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Auto-Rate-Return

This circuit, on both vertical and horizontal models, utilizes a PLC which senses the trolley position to automatically adjust the payoff or takeup speed after restart for precision control of accumulator fill or evacuation speed. A proprietary algorithm adjusts the payoff or takeup speed to consistently achieve the same rate of fill or evacuation regardless of reel barrel size or build-down/up of wire.

Vertical Models

Standard models are available with 8 to 24 inch (200 to 600mm) diameter sheaves with accumulation capabilities up to 500 feet (152 meters) and tension ranges up to 75 pounds (34 kg) per strand.

Horizontal Models

Standard models are available with 12 to 60 inch (300 to 1,524mm) diameter sheaves with accumulation capabilities from 500 to 1,250 feet (152 to 381 meters) and tension ranges up to 300 pounds (136 kg) per strand. Installation can be floor, wall or ceiling mounts. Floor supports are available in addition to access platforms and stairs for convenient string-up.

HORIZONTAL ACCUMULATORS MACHINE

DESIGN PARAMETERS

Model	Maximum Tension	Maximum Accumulation	Sheaves Fixed/ Moving	Sheave Size	O.A Length
500H-12	20 lbs.	500 ft.	7/8	12"	42 ft.
750H-12	20 lbs.	750 ft.	11/12	12"	42 ft.
1000H-12	20 lbs.	1000 ft.	15/16	12"	42 ft.
1250H-12	20 lbs.	1250 ft.	18/19	12"	42 ft.
500H-16	30 lbs.	500 ft.	7/8	16"	42 ft.
750H-16	30 lbs.	750 ft.	11/12	16"	42 ft.
1000H-16	30 lbs.	1000 ft.	15/16	16"	42 ft.
1250H-16	30 lbs.	1250 ft.	18/19	16"	42 ft.
500H-20	50 lbs.	500 ft.	7/8	20"	42 ft.
750H-20	50 lbs.	750 ft.	11/12	20"	42 ft.
1000H-20	50 lbs.	1000 ft.	15/16	20"	42 ft.
1250H-20	50 lbs.	1250 ft.	18/19	20"	42 ft.
500H-24	75 lbs.	500 ft.	7/8	24"	42 ft.
750H-24	75 lbs.	750 ft.	11/12	24"	42 ft.
1000H-24	75 lbs.	1000 ft.	15/16	24"	42 ft.
400H-36	200 lbs.	400 ft.	5/6	36"	50 ft.
660H-36	200 lbs.	660 ft.	5/6	36"	75 ft.
1000H-36	200 lbs.	1000 ft.	5/6	36"	100 ft.
500H-48	200 lbs.	500 ft.	5/5	48"	75 ft.
750H-48	200 lbs.	750 ft.	4/4	48"	100 ft.
1000H-48	200 lbs.	1000 ft.	6/6	48"	100 ft.
500H-48	300 lbs.	500 ft.	3/3	48"	100 ft.
750H-48	300 lbs.	670 ft.	3/3	48"	125 ft.
1000H-48	300 lbs.	1000 ft.	4/4	48"	125 ft.
500H-60	250 lbs.	500 ft.	7/8	60"	50 ft.
1000H-60	250 lbs.	1000 ft.	7/8	60"	75 ft.

VERTICAL ACCUMULATORS MACHINE DESIGN PARAMETERS

Model	Maximum Tension	Maximum Accumulation	Sheaves Upper/Lower	Sheave Size	O.A Height
300V-8	12 lbs.	300 ft.	12/13	8"	16 ft.
400V-8	12 lbs.	400 ft.	12/13	8"	20 ft.
500V-8	12 lbs.	500 ft.	15/16	8"	20 ft.
300V-12	25 lbs.	300 ft.	12/13	12"	16 ft.
400V-12	25 lbs.	400 ft.	12/13	12"	20 ft.
500V-12	25 lbs.	500 ft.	15/16	12"	20 ft.
300V-16	50 lbs.	300 ft.	10/11	16"	20 ft.
400V-16	50 lbs.	400 ft.	12/13	16"	20 ft.
500V-16	50 lbs.	500 ft.	15/16	16"	20 ft.
300V-20	50 lbs.	300 ft.	10/11	20"	20 ft.
400V-20	50 lbs.	400 ft.	13/14	20"	20 ft.
500V-20	50 lbs.	500 ft.	16/17	20"	20 ft.
300V-24	75 lbs.	300 ft.	10/11	24"	20 ft.
400V-24	75 lbs.	400 ft.	13/14	24"	20 ft.
500V-24	75 lbs.	500 ft.	16/17	24"	20 ft.