

Arbor Reels / Spring Reels (Open)

Metal & Plastic Construction

John Evans' manufactures a wide array of "open style" construction spring reels, also known as arbor reels, as they have a threaded metal arbor or a delrin plastic arbor (see picture). Our reels come in two categories: Plastic and Metal Arbored Open Reels. In an open reel, the cable is exposed, wrapped around the exterior circumference of the reel, and contained between two flanges.

Open reels are available in selected diameters from 1.64" to 6.0" and in widths from 0.49" to 1.63". A common application of this type of spring powered cable retracting device is to counterbalance stairs on business class jets (pictured rear right). Some of the smaller sizes are available with plastic cases, and all are available with metal cases.

Image of aircraft stairs (at right) shows a perfect example of how a pair of counterbalance reels maintain the correct amount of "lift assist", without creating an unsafe/unmanageable situation for the crew or ground support.

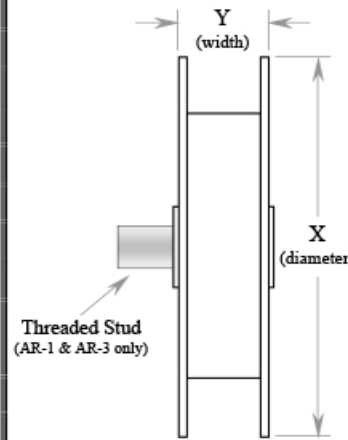


Open Reel Selection Chart

Part Number	Load (lbs.)	Deflection (Feet)	Cable	X Diameter (Inches)	Y Width (Inches)	Arbor	
PR104B	0.3	6.6	CA-1	1.64	0.49	AR-1	
PR105B	0.5	5.0					
PR108B	1.1	3.0					
PR110B	2.0	2.3		1.95	0.55		
PR210	2.0	6.0					
PR212	2.6	4.5					
PR213	3.4	3.75					
PR216	4.3	2.7					
PR310B	1.8	10.0	CA-3	3.38	0.98	AR-2	
PR315B	3.6	6.5			0.88		
MR315B	3.6	6.5			0.98		
PR320B	6.3	4.5			0.88		
MR320B	6.3	4.5			0.98		
MR325B	12.5	3.5			0.98		
PR420B	4.5	18.0	CA-4	5.09	1.10	AR-2	
PR425B	8.0	13.5					
MR425B	8.0	13.5		5.00	0.88		
MR425E	16.0	13.5					1.63
MR428D	15.0	12.0					1.38
MR428E	22.0	12.0		5.00	1.63		
MR433D	22.5	10.0					1.38
MR433E	29.0	10.0					1.63
MR525D	10.0	27.0		6.00	1.38		AR-3
MR542D	28.0	13.0					
MR550D	45.0	11.5					

This chart describes our standard reels. We can customize reels upon request. Reel cases are made of either Plastic (PR) or Metal (MR). The load and deflection (travel) are determined by size and spring thickness. The nominal load is measured at 80% of the total available deflection.

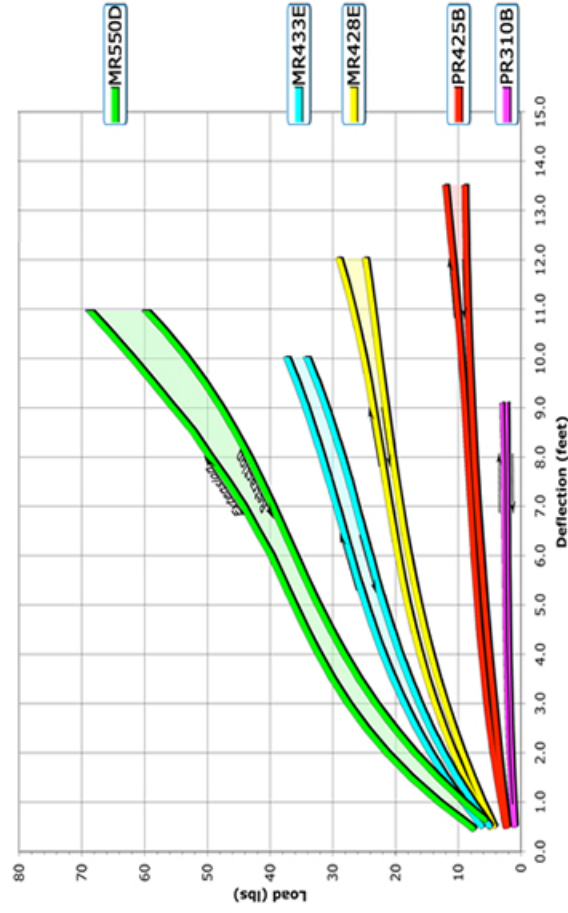
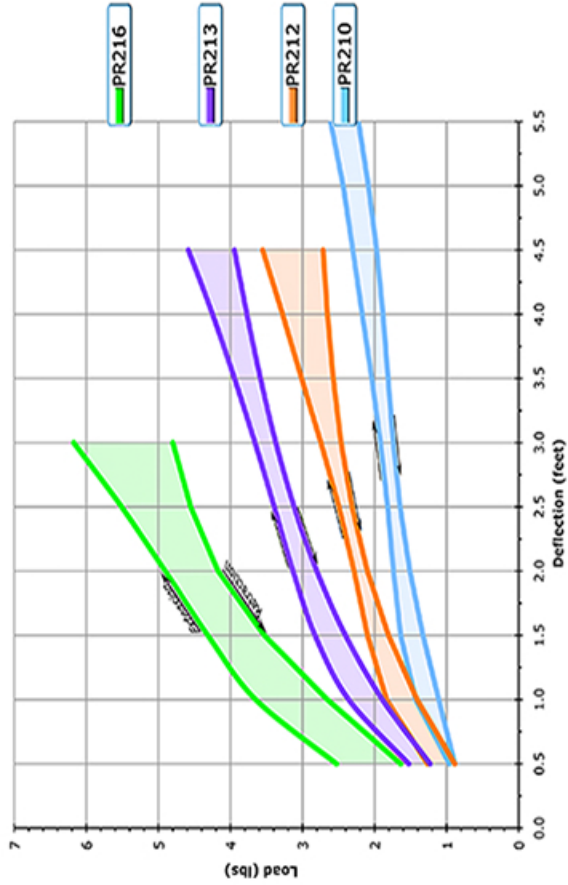
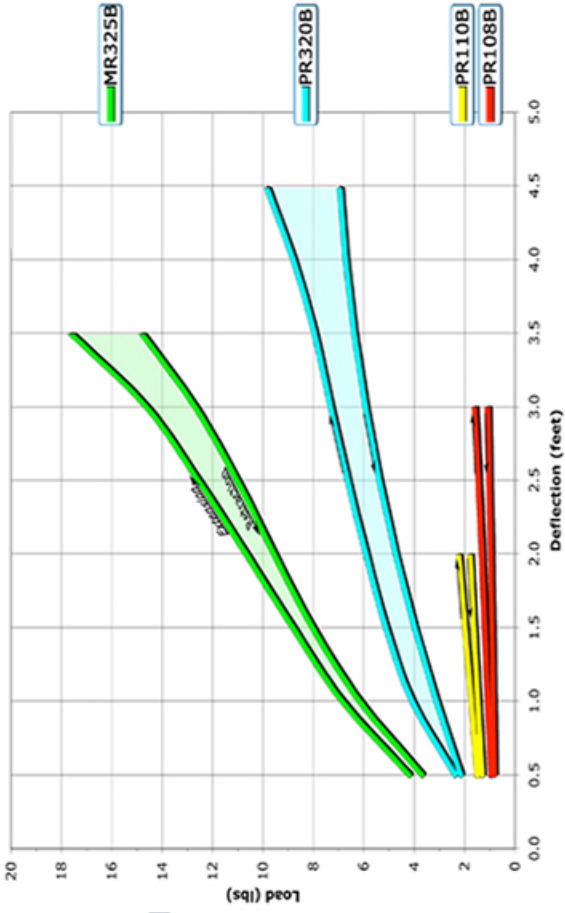
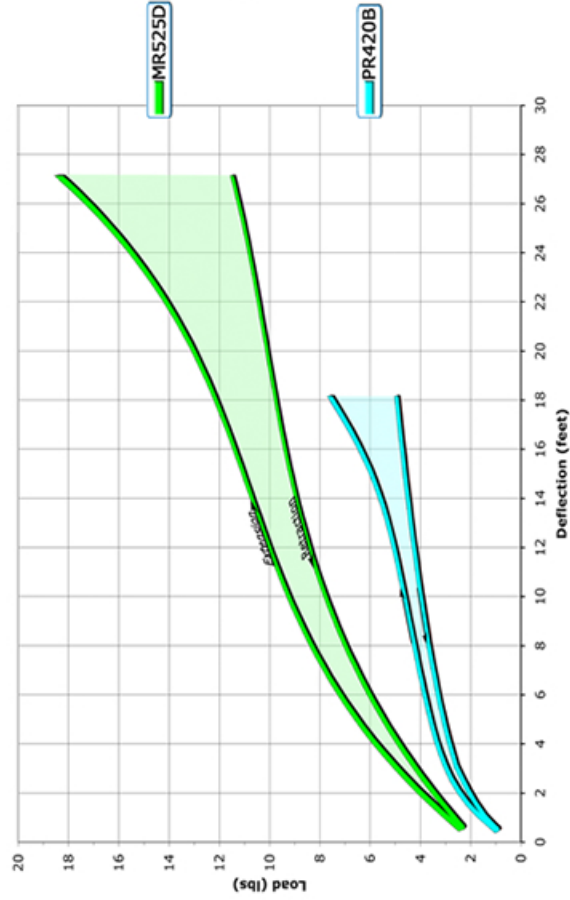
- **PR1 & PR2 Series** – Case is glass filled nylon. (other plastic reel sizes are ABS plastic)
- **Cable Descriptions:** (cables are of stranded construction)
 - Terminal hole dia: .17" (accommodates #8 screw)
 - CA-1 .018" dia. stainless steel, nylon coated to .024" dia.
 - Terminal hole dia: .26" (accommodates 1/4" screw)
 - CA-3 3/64" dia. galvanized steel, nylon coated to 1/16" dia.
 - CA-4 1/16" dia. galvanized steel, nylon coated to 3/32" dia.
- **Arbor Descriptions:**
 - AR-1 10-32 UNF threaded stud x 3/16" long.
 - AR-2 Delrin arbor with .320" square thru hole.
 - AR-3 1/2-13 UNC threaded stud x 11/16" long.



JOHN EVANS' SONS Est. 1850

SPRINGS MADE BETTER

Load vs. Deflection Performance Charts



Charts are typical & do not represent minimum or maximum values. Actual results may vary.