

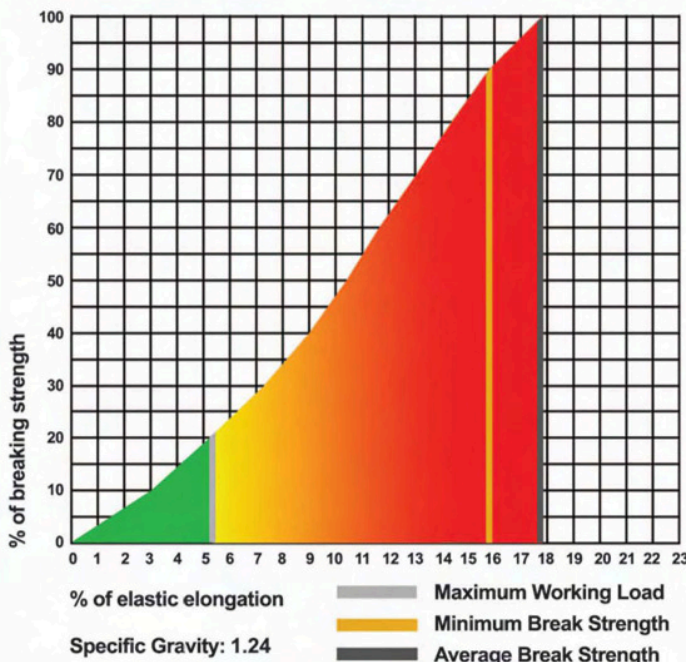
POLYDYNE™

Polydyne is a double braided rope which utilizes a polyester sleeve over a nylon core. Despite the dissimilar stretch characteristics of these fibers, Yale engineers have produced constructions where both fibers contribute. The resulting rope has high breaking strength and more stretch in its working load range, which in many applications is a plus. Polydyne is up to taking more dynamic abuse

without being degraded prematurely. Take special note of the working energy absorption rating which is the amount of energy a rope absorbs before reaching its working load. The ultimate energy absorption of this rope is also correspondingly high. All this and a tough polyester jacket make this a long wearing rope with extraordinary dynamic capabilities.

Diameter Inches (mm)	Average Spliced Break Strength*		Minimum Spliced Break Strength*		Maximum** Work Load 5:1		Weight	
	Lbs	Kg	Lbs	Kg	Lbs	Kg	Lbs/ 100ft	Kg/ 100m
1/4 (6.0)	2,500	1,135	2,250	1,020	500	225	1.9	2.8
5/16 (8.0)	3,800	1,725	3,420	1,550	760	345	2.8	4.2
3/8 (9.0)	5,000	2,270	4,500	2,040	1,000	450	4.4	6.6
7/16 (11.0)	7,500	3,405	6,750	3,060	1,500	680	5.8	8.6
1/2 (12.0)	11,000	4,990	9,900	4,490	2,200	995	7.6	11.3
9/16 (14.0)	15,000	6,810	13,500	6,125	3,000	1,360	9.7	14.4
5/8 (16.0)	18,900	8,580	17,010	7,720	3,780	1,715	13.3	19.8
3/4 (18.0)	26,000	11,800	23,400	10,620	5,200	2,360	16.8	25.0
7/8 (22.0)	33,600	15,250	30,240	13,725	6,720	3,050	23.5	35.0
1 (24.0)	42,000	19,065	37,800	17,160	8,400	3,810	32.7	48.7
1-1/8 (27.0)	52,000	23,605	46,800	21,245	10,400	4,720	41.5	61.8
1-1/4 (30.0)	65,000	29,510	58,500	26,555	13,000	5,900	50.8	75.6
1-5/16 (32.0)	77,000	34,955	69,300	31,460	15,400	6,990	55.0	81.9
1-1/2 (36.0)	90,000	40,860	81,000	36,770	18,000	8,170	66.0	98.3

* **Knots** and abrupt bends significantly reduce the strength of all ropes and lowers maximum working load.
 ** **Working load** is based on static or moderately dynamic lifting/pulling operations. Instantaneous changes in load up or down, in excess of 10 percent of the rope's rated working load constitutes hazardous shock load and would void normal working load recommendation. Consult Yale Cordage for guidelines for working loads and safe use of rope.



Energy Absorption

The colored area under the curve represents the rope's ability to do "work" and is expressed in foot-pounds per pound of rope in tension.

- Green working 576 ft. lbs./lb.
- Red ultimate 11,187 ft. lbs./lb.

Dielectric Strength: The maximum allowable leakage for clean, dry Polydyne is 500 Micro Amperes when tested at 90KV per ASTM 1701-05 "Routine Production Test". Absorbed and entrained moisture or impurities will increase ropes conductivity dramatically.

Splice using Yale's splicing technique document #10017200 (all sizes).