

S-12 DB2000-X



S-12 DB2000-X ropes are produced using the highest quality UHMWPE yarns and high tenacity Polyester yarns or, upon special arrangement, with mixed Polyester / UHMWPE yarns for improved cover behavior. Additionally, they are treated with special coatings during a unique heat-setting process that enhance the yarns' superior characteristics. S-12 DB2000-X ropes are 7-8 times stronger than steel ropes and 3 times stronger than polyester (on a weight by weight comparison).

The applied coatings and the heat-setting procedure improve drastically the structural stability of the rope and enhance the coherence & co-operation of the UHMWPE rope core and the jacket for superior performance.

APPLICATIONS: Mooring (to be used with synthetic tails) - Anchoring - Tow Lines (to be used with synthetic tails) - STS operations.

S-12 DB2000-X HMPE ropes are an excellent wire-rope alternative because of the following main benefits:

1. Most cost effective ropes to buy due to lower labor requirements and decreased mooring & towing times.
2. Safer and easier to use due to their high strength and low weight.
3. 2-3 times longer service life.
4. Negligible maintenance costs.

Specific Gravity: 1.015 (mixed cover) – 1.060 (PES cover)

Note: Sea water density is 1.025 average, therefore the specially mixed jacketed HMPE ropes do not sink. The 100% Polyester jacketed HMPE ropes, even though more dense than the seawater, display a slow sinking trend in seawater environment.

Elongation at breaking: 3.5% (when new)

Melting point: 145°C

Resistance to UV radiation: Excellent

Chemical Resistance to ALKALI Excellent

Chemical Resistance to ORGANIC SOLVENT Very Good

Chemical Resistance to ACID Good. Resistant to H₂SO₄ in temperatures up to 25°C

Technical Data

Size (Circ)	Size (Diam)	Weight (+/- 5%)		Minimum Breaking Load
		Kilos/ 100m	Kilos/ 220m	
1	8	4.5	9.9	3.6
1 ¹ / ₄	10	7.1	15.6	6.0
1 ¹ / ₂	12	10.0	22.0	9.0
1 ³ / ₄	14	13.4	29.5	13.5
2	16	15.9	35.0	18.2
2 ¹ / ₄	18	21.1	46.4	22.2
2 ¹ / ₂	20	24.9	54.8	28.5
2 ³ / ₄	22	31.1	68.4	34.5
3	24	37.5	82.5	41.2
3 ¹ / ₄	26	44.0	96.8	47.9
3 ¹ / ₂	28	50.5	111.1	55.0
3 ³ / ₄	30	56.8	125.0	61.8
4	32	65.5	144.1	67.5
4 ¹ / ₄	34	73.5	161.7	75.0
4 ¹ / ₂	36	80.5	177.1	82.0
4 ³ / ₄	38	89.5	196.9	91.5
5	40	103.0	226.6	105.0
5 ¹ / ₄	42	112.5	247.5	115.0
5 ¹ / ₂	44	123.0	270.6	127.5
5 ³ / ₄	46	134.0	294.8	137.5
6	48	147.0	323.4	148.0
6 ¹ / ₄	50	159.5	350.9	162.5
6 ¹ / ₂	52	169.0	371.8	174.5
7	56	185.1	407.2	196.0
7 ¹ / ₂	60	215.1	473.2	221.2
8	64	240.0	528.0	242.2
8 ¹ / ₂	68	272.5	599.5	271.2
9	72	308.9	679.6	303.4
9 ¹ / ₂	76	347.5	764.5	339.0
10	80	385.0	847.0	375.0
9 ¹ / ₂	84	428.0	941.6	405.2
11	88	495.0	1089.0	433.0
12	96	540.6	1189.3	501.0