SYNTHETIC SLINGS

PRODUCTS

HMPE Slings

Eye & Eye

HH-EEP

HHI PART NO.	Nominal Diameter	Size (Circ.)	Wall Rope Vertical	Tensile Strength Vertical
	Inches	Inches	Lbs.	Pounds
HH-11-EEP				
HH-12-EEP	1/2"	1-1/2"	0.064	6,260	31,300
HH-14-EEP	9/16"	1-3/4"	0.079	7,580	37,900
HH-16-EEP				
HH-18-EEP	3/4"	2-1/4"	0.135	13	
HH-22-EEP	7/8"	2-3/4"	0.196	18,520	92,600
HH-24-EEP	1"	3"	0.234	22,000	110,000
HH-28-EEP	1-1/8"	3-1/2"	0.319	29,400	147,000
HH-30-EEP	1-1/4"	3-3/4"	0.362	33,300	166,500
HH-32-EEP	1-5/16"	4"	0.4		
HH-36-EEP	1-1/2"				
HH-40-EEP	1-5/8"	5"	0.66	58,200	291,000
HH-44-EEP	1-3/4"	5-1/2"	0.78	62,800	314,000
HH-48-EEP	2"	6"	0.91	71,000	355,000
HH-52-EEP	2-1/8"	6-1/2"	1.09	85,000	426,000
HH-56-EEP	2-1/4"	7"			
HH-60-EEP	2-1/2"	7-1/2"	1.48	106,000	530,000
HH-64-EEP	2-5/8"	8"	1.67	119,200	596,000
HH-68-EEP	2-3/4"	8-1/2"	1.87	132,0	
HH-72-EEP	3"	9"	2.14	156,000	780,000
HH-76-EEP	3-1/8"	9-1/2"	2.35	170,000	850,000
HH-80-EEP	3-1/4"	10"	2.61	186,000	930,000
HH-84-EEP	3-1/2"	10-1/2"	2.98	221,600	1,108,000
HH-88-EEP	3-5/8"	11"	3.24	238,000	1,190,000
HH-92-EEP	3-3/4"	11-1/2"	3.43	263,400	1,317,000
HH-96-EEP	4"	12"	3.64	284,000	1,422,000
HH-100-EEP	4-1/8"	12-1/2"	4.57	324,400	1,622,000
HH-104-EEP	4-1/4"	13"	5.14	339,400	1,697,000
HH-108-EEP	4-1/2"	13-1/2"	5.3	365,400	1,827,000
HH-112-EEP	4-5/8"	14"	5.46	376,000	1,880,000
HH-116-EEP	4-3/4"	14-1/2"	5.87	395,400	1,977,000
HH-120-EEP	5"	15"	6.06	413,900	2,069,500
HH-124-EEP	5-1/8"	15-1/2"	6.57	442,400	2,212,000
HH-128-EEP	5-1/4"	16"	7.03	471,000	2,355,000
HH-132-EEP	5-1/2"	16-1/2"	7.49	499,500	2,497,500
HH-136-EEP	5-5/8"	17"	8.13	528,000	2,640,000
HH-140-EEP	5-3/4"	17-1/2"	8.71	562,500	2,782,500
HH-144-EEP	6"	18"	9.32	585,000	2,925,000
HH-148-EEP	6-1/8"	18-1/2"	9.85	613,600	3,068,000
HH-152-EEP	6-1/4"	19"	10.4	642,000	3,210,000
HH-156-EEP	6-3/8"	19-1/2"	10.9	671,000	3,355,000
HH-160-EEP	6-5/8"	20"	11.59	699,200	3,496,000
HH-164-EEP	6-3/4"	20-1/2"	12.27	727,700	3,638,500
HH-168-EEP	7"	21"	12.84	756,200	3,781,000
HH-172-EEP	7-1/8"	21-1/2"	13.34	792,700	3,963,500
HH-176-EEP	7-1/4"	22"	13.92	813,200	4,066,000
HH-180-EEP	7-1/2"	22-1/2"	14.52	841,800	4,209,000
HH-184-EEP	7-5/8"	23"	15.27	870,300	4,351,500
HH-188-EEP	7-3/4"	23-1/2"	15.85	899,900	4,499,500
HH-192-EEP	8"	24"	16.52	927,400	4,637,000
HH-196-EEP	8-1/8"	24-1/2"	17.1	956,000	4,780,000
HH-200-EEP	8-1/4"	25"	17.98	984,400	4,922,000

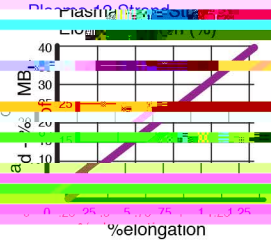
Features & Benefits

- Highest Strength
- Lowest Stretch
- Low Creep
- Soft Hand
- Flexible
- Easy Splicing
- Floats

Applications

- Replacement for Wire
- Vessel Mooring
- Inland River Barge Lines
- Lifting Slings
- Winch Lines
- Aerial Platform Lines
- Emergency Tow Packages

Specific gravity	0.98
Melting point	284° F (140° C)
Critical temp.	150° F (65° C)
Coefficient of friction	0.09-0.12
Elongation at break	4%
Fiber water absorption	0%
UV resistance	moderate
Dry abrasion	superior



Tensile Strength

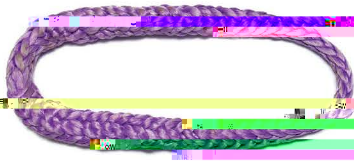
Test Methods for Fiber Rope. Minimum Tensile Strength (MTS) published

Assumes spliced terminations . Weight are calculated at linear density under stated preload (200#) plus 4%.

<-> Design Factor 5:1 <-> Minimum D/d 5:1

HMPE Slings Endless Grommet

HH-EP



HHI PART NUMBER	Nominal Diameter	Size (Circ.)	Approx. Wgt. Bone	Working Load Limit Vertical	Tensile Strength Vertical
	Inches	Inches	Lbs/FT	Pounds	Pounds
HH-11-EP	7/16"	1-1/4"	0.042	6,930	34,650
HH-12-EP	1/2"	1-1/2"	0.064	10,329	51,645
HH-14-EP	[illegible]	1-3/4"	0.079	12,507	62,535
HH-16-EP	5/8"	2"	[illegible]	[illegible]	[illegible]
HH-18-EP	3/4"	2-1/4"	0.133	22,605	113,025
HH-22-EP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-24-EP	1"	3"	0.234	36,300	181,500
HH-28-EP	1-1/8"	3-1/2"	0.319	48,510	[illegible]
HH-30-EP	1-1/4"	3-3/4"	[illegible]	54,450	272,250
HH-32-EP	1-5/16"	4"	0.417	64,680	[illegible]
HH-36-EP	1-1/2"	4-1/2"	0.517	[illegible]	364,650
HH-40-EP	1-5/8"	5"	0.66	96,030	480,150
HH-44-EP	1-3/4"	[illegible]	[illegible]	[illegible]	518,100
HH-48-EP	2"	[illegible]	[illegible]	[illegible]	[illegible]
HH-52-EP	2-1/8"	6-1/2"	1.09	141,240	706,200
HH-56-EP	2-1/4"	7"	1.22	158,730	793,650
HH-60-EP	2-1/2"	7-1/2"	1.48	174,900	[illegible]
HH-64-EP	2-5/8"	8"	1.67	196,680	983,400
HH-68-EP	2-3/4"	8-1/2"	1.87	[illegible]	1,089,000
HH-72-EP	3"	9"	2.14	257,400	[illegible]
HH-76-EP	3-1/8"	9-1/2"	2.35	280,500	[illegible]
HH-80-EP	3-1/4"	10"	2.61	310,200	[illegible]
HH-84-EP	3-1/2"	10-1/2"	2.98	365,640	[illegible]
HH-88-EP	3-5/8"	11"	[illegible]	[illegible]	[illegible]
HH-92-EP	3-3/4"	11-1/2"	3.43	434,610	2,173,050
HH-96-EP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-100-EP	[illegible]	[illegible]	[illegible]	[illegible]	2,676,300
HH-104-EP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-108-EP	4-1/2"	13-1/2"	[illegible]	[illegible]	[illegible]
HH-112-EP	4-5/8"	14"	5.46	620,400	3,102,000
HH-116-EP	4-3/4"	14-1/2"	5.87	635,910	[illegible]
HH-120-EP	5"	15"	6.06	682,935	3,414,675
HH-124-EP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-128-EP	5-1/4"	16"	7.03	777,150	[illegible]
HH-132-EP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-136-EP	5-5/8"	17"	8.13	871,200	[illegible]
HH-140-EP	5-3/4"	17-1/2"	[illegible]	[illegible]	[illegible]
HH-144-EP	6"	18"	9.22	965,250	4,826,250
HH-148-EP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-152-EP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-156-EP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-160-EP	6-5/8"	20"	11.59	1,153,680	5,768,400
HH-164-EP	[illegible]	20-1/2"	12.27	1,200,705	6,003,525
HH-168-EP	7"	21"	12.84	[illegible]	[illegible]
HH-172-EP	[illegible]	21-1/2"	[illegible]	[illegible]	[illegible]
HH-176-EP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-180-EP	7-1/2"	22-1/2"	14.52	[illegible]	[illegible]
HH-184-EP	[illegible]	23"	15.27	[illegible]	7,179,975
HH-188-EP	7-3/4"	23-1/2"	15.89	1,483,020	7,415,100
HH-192-EP	8"	24"	[illegible]	[illegible]	7,651,050
HH-196-EP	8-1/8"	24-1/2"	17.32	1,577,070	7,885,350
HH-200-EP	8-1/4"	25"	17.98	1,624,260	8,121,300

Features & Benefits

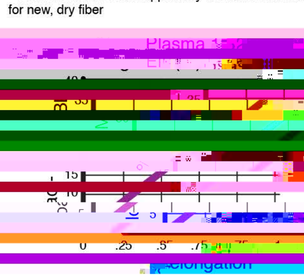
- Highest Strength
- Lowest Stretch
- Soft Hand
- Torque Free
- Easy Splicing
- Floats

Applications

- Replacement for Wire Rope
- Vessel Mooring
- Inland River Barge Lines
- Winch Lines
- Aerial Retrieval Lin[illegible]
- Emergency [illegible]

Specific gravity	0.97 0.98*
Melting point	[illegible]
Critical temp	150° F (65° C)*
Coefficient of friction	0.09-0.12-
Elongation at [illegible]	[illegible]
UV resistance	Moderate
Wet abrasion	Superior

*Value based on data supplied by the fiber manufacturer for new, dry fiber



Tensile Strengths are de[illegible]

Test Methods for Fiber Rope . Minimum Tensile Strength (MTS) published [illegible]

Assumes spliced terminations . Weight are calculated at linear density [illegible]

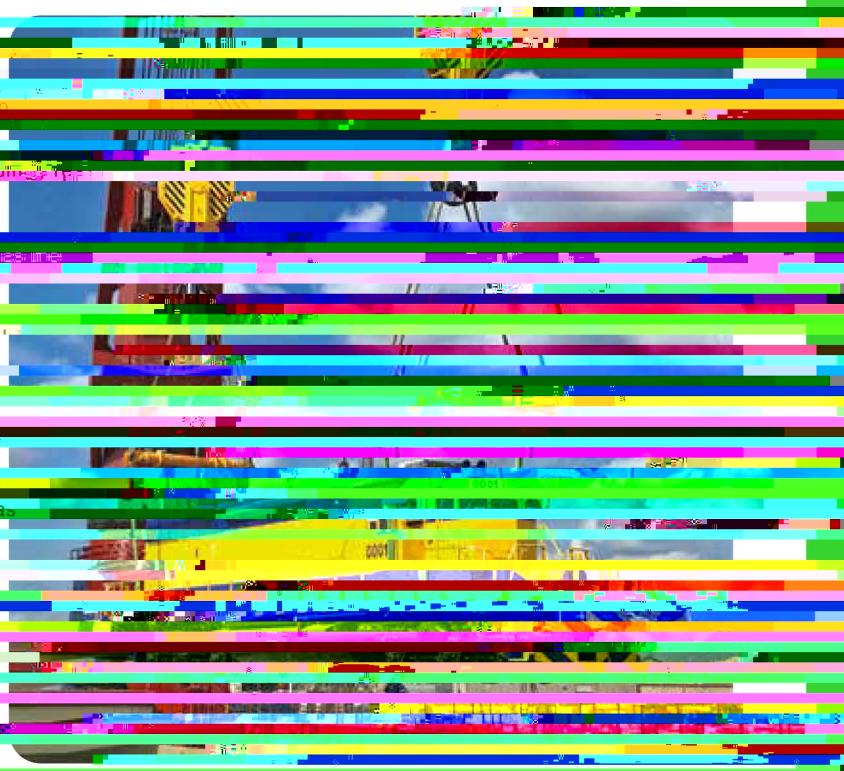
<-> Design Factor 5:1 <-> Minimum D/d [illegible]

HAMMER

- High Strength
- Light Weight
- Durable
- Repairable
- Low Stretch
- 100% Proof Tested

Part No.	Rated Capacities* Vertical	Choker	Vertical Basket	Min length	Hope Dia.	Approx Sling O.D.	wgt per foot of sling
HH-9-EPC	5,700	4,600	11,5				
HH-12-EPC	10,[illegible]	8,200	2[illegible]		2	1/2	
HH-[illegible]	[illegible]	16,900	[illegible]				
HH-18-EPC	[illegible]	[illegible]	[illegible]				
HH-22-EPC	30,500	24,[illegible]00	61,000				
HH-24-EPC	[illegible]	29,000	72,600	2.5'	1"	1-3/8"	0.59
HH-28-EPC	40,000	32,000	87,500	87,000	1"	1-1/8"	1-1/2"	0.8
HH-[illegible]	[illegible]	[illegible]	[illegible]				
HH-[illegible]	[illegible]	[illegible]	[illegible]				
HH-40-EPC	[illegible]	[illegible]	[illegible]				
HH-44-EPC	[illegible]	[illegible]-EPC	103,000				
HH-52-EPC	111,000	112,000	282,000	4.5'	2-1/2"	2-7/8"	2.73
HH-[illegible]-EPC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-60-EPC	174,000	139,000	348,000	5'	2-1/2"	[illegible]	[illegible]
HH-64-EPC	196,000	157,000	393,000	5	2-5/8	3-1/2	[illegible]
HH-68-EPC	2[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-72-EPC	[illegible]57,000	205,000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-76-EPC	280,000	22[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-84-EPC	365,000	292,000	731,000	7.5'	3-1/2"	4.5/8"	7.45
HH-[illegible]-EPC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HH-96-EPC	501,000	401,000	[illegible],003,000	[illegible]	8.5	4"	[illegible]	5-3/8"	[illegible]	9.85

*Your minimum D/d is 2:1. However, it is suggested [illegible] use the sling at a 3:1 D/d or to increase.

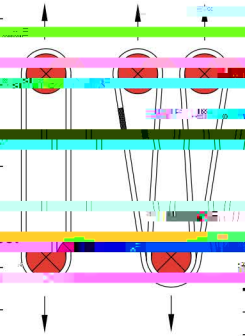


Bending Guidance

In theory, a sling used in a basket hitch has the working load as a sling in a vertical configuration because two ropes are now holding the load instead of one. However, because of bending reductions this theory is incorrect. Users must reduce that factor [illegible] factor (i.e., a bending factor).

The more tight a bend is, the more the bending efficiency reduces. If you have a gentle bend, the D:d ratio increases and the bending D:d ratio goes down, the bending [illegible] reduces.

Example: a 5:1 D:d ratio provides only 9[illegible] efficiency.



Reduced Basket Capacity Calculation

C = B x e

C = Reduced Basket Capacity due to bending efficiency reduction

B = Rated Basket Capacity with consideration of horizontal angle

e = Bending efficiency percentage

Represents a [illegible] contact surface of one or greater. Refer to the [illegible] to the Efficiency Table for the reductions as needed.

Efficiency Table

D:d Ratio	Efficiency (e)
8:1	100.0%
5:1	97.0%
3:1	91.0%
2:1	[illegible]
1:1	79.0%