

# Midrange End Controls

Harken® Midrange traveler controls allow installation of 2:1 to 4:1 purchases. Assemblies secure to the track, eliminating additional holes. Tough one-piece bases and cam arms are machined from a single piece of aluminum. Compact, high-strength Carbo AirBlock® components combined with a Carbo-Cam® cleats keep traveler weight minimal. For angled cleating, install the 380 X-Treme Angle Fairlead.

Use 1620 double-sheave ESP end controls for cabintop travelers where lines lead to the aft edge of the cabintop. Use the 1623 car control for a 3:1 purchase, the 1845 (see page 116) for a 4:1 purchase. Contact Harken® to order special length 1618 track with mounting holes for 1620 end controls.

End controls feature 40 mm Carbo AirBlock® sheaves with free-running Torton® ball bearings

Installs with single screw

Dual shock absorbers cushion car impact

Integral bar for dead-ending control line



1631



1620



1632



1633



1642

## Control Purchase Recommendations

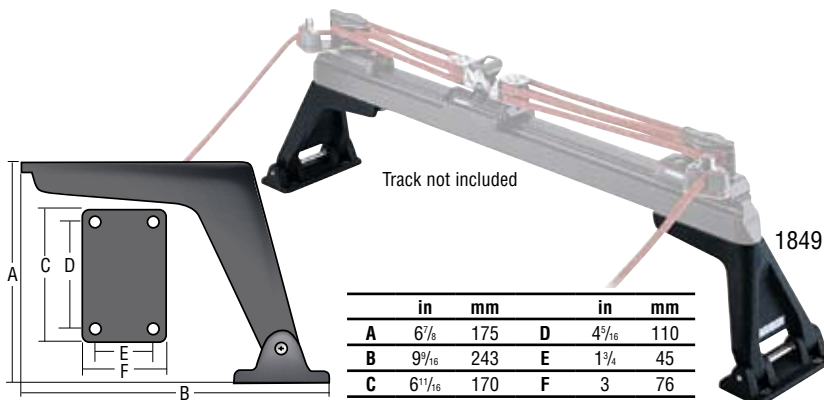
Sail area				
End-boom sheeting		Mid-boom sheeting		Purchase
ft²	m²	ft²	m²	
Under 140	Under 13	Under 125	Under 12	2:1
140-235	13-22	125-200	12-19	3:1
235-275	22-25	200-250	19-23	4:1

Part No.	Description	Sheave Ø		Length		Width		Weight		Max line Ø		Height above track		Maximum working load		Breaking load		Purchase
		in	mm	in	mm	in	mm	oz	g	in	mm	in	mm	lb	kg	lb	kg	
1620	ESP Double sheave (pair)‡‡	1 <sup>9</sup> / <sub>16</sub>	40	5 <sup>1</sup> / <sub>2</sub>	140	1 <sup>9</sup> / <sub>16</sub>	40	16	454	<sup>3</sup> / <sub>8</sub>	10	1 <sup>9</sup> / <sub>16</sub>	40	600	272	1500	680	3:1/4:1
1631	Single sheave (pair)***	1 <sup>9</sup> / <sub>16</sub>	40	4 <sup>1</sup> / <sub>2</sub>	114	1 <sup>15</sup> / <sub>16</sub>	49	20	574	<sup>3</sup> / <sub>8</sub>	10	1 <sup>9</sup> / <sub>16</sub>	33	350	159	875	397	2:1/3:1
1632	Double sheave (pair)***	1 <sup>9</sup> / <sub>16</sub>	40	4 <sup>1</sup> / <sub>2</sub>	114	1 <sup>15</sup> / <sub>16</sub>	49	26	730	<sup>3</sup> / <sub>8</sub>	10	2	50	700	318	1750	794	3:1/4:1
1633	Double sheave/365 Carbo-Cam® (pair)***	1 <sup>9</sup> / <sub>16</sub>	40	4 <sup>1</sup> / <sub>2</sub>	114	3 <sup>15</sup> / <sub>16</sub>	100	36	1020	<sup>3</sup> / <sub>8</sub>	10	2	50	600	272	1500	680	3:1/4:1
1642	Pinstop‡	—	—	2 <sup>5</sup> / <sub>16</sub>	59	1 <sup>15</sup> / <sub>16</sub>	49	4.8	136	—	—	1 <sup>9</sup> / <sub>16</sub>	33	—	—	—	—	—

Fits Midrange track \*\*\*Includes <sup>3</sup>/<sub>16</sub>" (8 mm) RH fasteners ‡Requires 1617 track ‡‡Requires special track

# Track Risers

Use 1849 risers for mid-boom travelers that must clear companionway hatches. Risers fit most cabintops and articulate for use with either straight or curved track. Sold in pairs.



1849

	in	mm		in	mm
A	6 <sup>7</sup> / <sub>16</sub>	175	D	4 <sup>7</sup> / <sub>16</sub>	110
B	9 <sup>9</sup> / <sub>16</sub>	243	E	1 <sup>1</sup> / <sub>4</sub>	45
C	6 <sup>11</sup> / <sub>16</sub>	170	F	3	76

Part No.	Description	Fits	Weight	
			oz	g
1849	Track riser (pair)	1618/3156	131.2	3720