

#### INSTRUCTIONS

#### **Element™ Blocks**

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WARNING! Strictly follow all instructions to avoid an accident, damage to your vessel, personal injury or death. See <a href="https://www.harken.com/manuals">www.harken.com/manuals</a> for additional safety information.

#### **Features**

Strong durable sideplates are forged aluminum with hardcoat anodizing.

Tough sheaves made from fiber reinforced nylon.

**Proven bearing system** where sheave spins on a stainless axle.

Versatile cam assembly adjusts and locks in several positions.

Adaptable cam cleat flips around for up or down release.

Multifunctional headpost lock fixes shackle in either direction or swivel position.



Specifications - 45 mm Blocks										
Part	45 mm → —————————————————————————————————		line* Ø	Maxi workin	ig load	Breaking load				
No.	Description	mm	in	kg	lb	kg	Ib			
6230	Single/swivel	12	1/2	700	1543	1400	3086			
6231	Single/swivel/becket	12	1/2	700	1543	1400	3086			
6232	Fiddle/swivel	8	5/16	700	1543	1400	3086			
6233	Fiddle/swivel/becket	8	5/16	700	1543	1400	3086			
6234	Fiddle/150 Cam-Matic/swivel/becket	8	5/16	550	1213	1100	2426			
6235	Fiddle/150 Cam-Matic/swivel	8	5/16	408	900	816	1800			
6236	Single/150 Cam-Matic/swivel/becket	12	1/2	272	600	544	1200			
6238	Double/swivel	12	1/2	875	1929	1750	3858			
6239	Double/swivel/becket	12	1/2	875	1929	1750	3858			
6240	Triple/swivel	12	1/2	1050	2315	2100	4630			
6241	Triple/swivel/becket	12	1/2	1050	2315	2100	4630			
6242	Triple/150 Cam-Matic/swivel	12	1/2	680	1499	1360	2998			
6243	Triple/150 Cam-Matic/swivel/becket	12	1/2	816	1799	1632	3598			

**Footblocks** 

Part		Fasteners (FH)				imum ng load	Breaking load	
No.	Description	mm	mm	in	kg	lb	kg	lb
6237	Single footblock	6	12	1/2	700	1543	1400	3086

	Specifi	cations	- 60 mm	Blocks				
Part	60 mm→ ← 2 3/8"	Max	iline* Ø		mum ıg load	Breaking load		
No.	Description	mm	mm	kg	lb	kg	lb	
6260	Single/swivel	14	9/16	1100	2425	2200	4850	
6261	Single/swivel/becket	14	9/16	1100	2425	2200	4850	
6262	Fiddle/swivel	10	3/8	1100	2425	2200	4850	
6263	Fiddle/swivel/becket	10	3/8	1100	2425	2200	4850	
6264	Fiddle/150 Cam-Matic/swivel/becket	10	3/8	550	1213	1100	2426	
6265	Fiddle/150 Cam-Matic/swivel	10	3/8	408	900	816	1800	
6266	Single/150 Cam-Matic/swivel/becket	12	1/2	272	600	544	1200	
6269	Double/swivel	14	9/16	1375	3032	2750	6064	
6270	Double/swivel/becket	14	9/16	1375	3032	2750	6064	
6272	Triple/swivel	14	9/16	1650	3638	3300	7276	
6273	Triple/swivel/becket	14	9/16	1650	3638	3300	7276	
6274	Triple/150 Cam-Matic/swivel	12	1/2	680	1499	1360	2998	
6275	Triple/150 Cam-Matic/swivel/becket	12	1/2	816	1799	1632	3598	

# **Footblocks**

60 mm 2 3/8" 1

Part		Fasteners (FH)	Max line* Ø			mum ig load	Breaking load	
No.	Description	mm	mm	in	kg	lb	kg	lb
6267	Single	8	14	9/16	1100	2425	2200	4850
6268	Single/lockoff	8	14	9/16	1100	2425	2200	4850
6271	Double	8	14	9/16	725	1600	1450	3200
6276	Single/lockoff/left	8	14	9/16	1100	2425	2200	4850

<sup>\*</sup>Tip: When selecting line diameter, use one size smaller for smooth running blocks.

### Specifications - 80 mm Blocks

Part	80 mm → 3 1/		Max line* "Ø		Maximum working load		king ad
No.	Description	mm	in	kg	lb	kg	lb
6290	Single/swivel	16	5/8	2200	4850	4400	9700
6291	Single/swivel/becket	16	5/8	2200	4850	4400	9700
6292	Fiddle/swivel	14	9/16	2200	4850	4400	9700
6293	Fiddle/swivel/becket	14	9/16	2200	4850	4400	9700
6296	Double/swivel	16	5/8	2750	6064	5500	12128
6297	Double/swivel/becket	16	5/8	2750	6064	5500	12128

# 80 mm 3 1/8" 🕴

Part		Fasteners (FH)	Max line* Ø			mum ig load	Breaking load	
No.	Description	mm	mm	in	kg	lb	kg	lb
6294	Single	10	16	5/8	2200	4850	4400	9700
6295	Single/lockoff	10	16	5/8	2200	4850	4400	9700
6298	Double	10	16	5/8	1450	3197	2900	6394
6299	Single/lockoff/left	10	16	5/8	2200	4850	4400	9700

<sup>\*</sup>Tip: When selecting line diameter, use one size smaller for smooth running blocks.

#### **Shackle Rotation**

Rotating shackle 90°- Remove shackle, rotate headpost 90° and reinstall shackle.



**Footblocks** 





**Swivel shackle** - To change shackle from locked to swivel, remove headpost lock and reinstall shackle.







#### **Adjusting Cam Arm Angle**

To adjust cam arm angle:

- 1. Loosen center screws.
- 2. Remove cam arm adjuster screws.
- 3. Rotate cam arm to desired position and reinstall screws.

Note: Use threadlocking solution such as blue Loctite® adhesive on screws.



#### Flipping Cam

The cam can flip to change from down release to up release.

- 1. Remove nuts and cam arm screws, keeping them in flairlead. Slip cam out.
- 2. Flip the cam and fasteners around as shown.

Note: Make sure that cam pawls open out from the block and cutout in flairlead faces away from block.



3. Slip fasteners and flairlead through arms and cam. Secure with nuts. Note: Use threadlocking solution such as blue Loctite adhesive on screws.



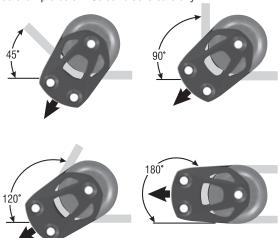




Loctite is a registered trademark of Henkel AG & Company KGaA.

#### **Block Loading vs Angle of Deflection**

Block load increases when the line turns at a greater angle. Block loads double when the line turns 180 degrees. See example below. Select blocks carefully.



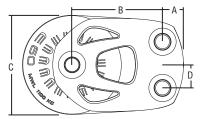
Angle of		Angle of		Angle of	
deflection	Load factor	deflection	Load factor	deflection	Load factor
30°	52%	90°	141%	150°	193%
45°	76%	105°	159%	160°	197%
60°	100%	120°	173%	180°	200%
75°	122%	135°	185%	_	

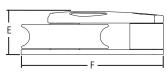
#### **Mounting Footblock**



WARNING! You must mount to solid deck construction using specified fasteners in all mounting holes and nuts, washers or backing plates to achieve correct maximum working load to avoid a failure leading to an accident.

Refer to dimensions below for planning location of block. Make sure block bisects the angle as shown in images.





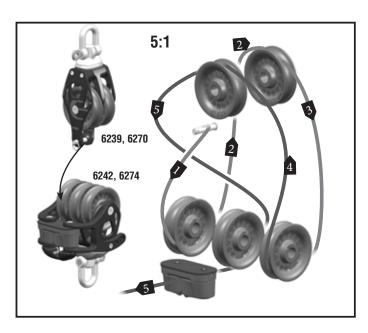
	A		A B		C		D		E		F	
Part No.	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
6237	11	7/16	41.5	1 5/8	45	1 3/4	9.5	3/8	24.5	15/16	74.5	2 15/16
6267 6268 6276	12.5	1/2	54.5	2 5/32	60.0	2 3/8	14.0	9/16	29.5	1 3/16	97.5	3 13/16
6268	12.5	1/2	54.5	2 5/32	60.0	2 3/8	14.0	9/16	52.5	2 1/16	97.5	3 13/16
6294 6295 6299	19.5	3/4	61.0	2 13/32	80.0	3 1/8	19.8	25/32	34.5	1 3/8	121	4 3/4
6298	19.5	3/4	61.0	2 13/32	80.0	3 1/8	19.8	25/32	61	2 3/8	121	4 3/4

#### Reeving Blocks

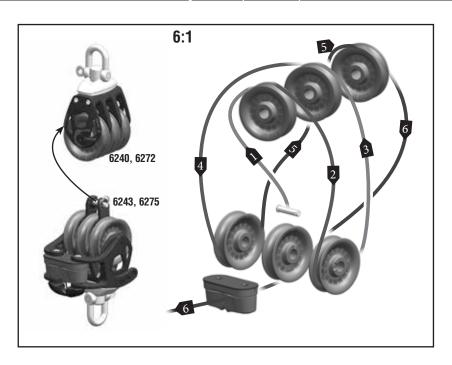
Use splice or knot to deadend sheet to becket. Use the sequences below to reeve blocks. **Note:** Upper and lower blocks will be at right angles to each other.

Reeving diagrams shown without block structure for clarity.





## Reeving Blocks (continued)



See Maintenance on Next Page

#### Maintenance

Periodically inspect all fasteners and shackles to make sure they are secure.

Keep your equipment clean and free-running by frequently flushing with fresh water. Periodically clean with mild detergent and water solution. Spin sheave to distribute soap solution evenly. Flush with fresh water.

Note: Sheave is not removable.

If block has cam cleat, flush balls in cam cleats while rotating pawls.



#### **General Maintenance**

Harken equipment is designed for minimal maintenance. However, some upkeep is required to give the best service and comply with the Harken limited warranty.

Keep your equipment clean and free-running by frequently flushing with fresh water. Periodically clean with mild detergent and water solution. Spin sheaves to distribute soap solution evenly. Flush with fresh water.

IMPORTANT! Exposure to some teak cleaners and other caustic solutions can result in discoloration of part and is not covered under the Harken warranty.

#### Warranty

For additional safety, maintenance and warranty information see <u>www.harken.com/manuals</u> or the Harken catalog.