

Snatch blocks are one of the most widely used blocks. It is a temporary or intermittent - service block which quickly attaches to the wire rope and moves load over comparatively short distances. This is opposed to long lifts and continuous service for which crane and construction blocks are designed. Snatch blocks wire rope-to-sheave diameter ratio is not the same as that recommended for crane and construction blocks. Since the height and frequency of the lifts is not as critical, larger sheaves are not as crucial to snatch block operations. However, provisions should be made to increase the sheave size where the situation demands. Naturally a larger sheave is an advantage for bearing and wire rope life.

Instructions for Safe Use

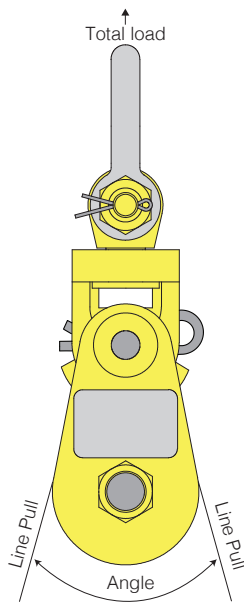
- Always design and rig snatch block systems so that the load will not slip or fall.
- Always design the lifting system with appropriate sheave assembly material to prevent premature sheave, bearing or wire rope wear and failure.
- Improper wire rope size can have a negative (wearing) impact on the wire rope and/or the sheave.
- Always have a qualified person rig the snatch block system. The lower fittings on snatch blocks are **NOT** installed with thrust bearings, therefore the fitting will not swivel under full load.
- Instruct workers to keep hands and body away from the block sheaves, swivels, and "pinch points" where wire rope makes contact with block parts or loads.
- Do not side load snatch blocks. Side loading exerts additional force or loading which the snatch block is not designed to accommodate.
- Always make sure the hook (and not the latch) supports the load.
- Never conduct the opening procedure when the snatch block is loaded. Always ensure the side plate locking mechanism is closed and secured before lifting operations.
- Do not weld snatch blocks or load supporting parts.
- Keep out from under a raised load and stay out of the line of force. Never lift personnel with a snatch block.
- DO NOT continue using the block if the wire rope is fouled or damaged. Ensure the wire rope is clean and free from damage before installing it into the block.
- Lubricate the sheave, swivel head fitting and other moving parts frequently.
- Blocks must be inspected regularly and maintained to increase service life and to enhance safety. Visually inspect the block before each use.

Inspection

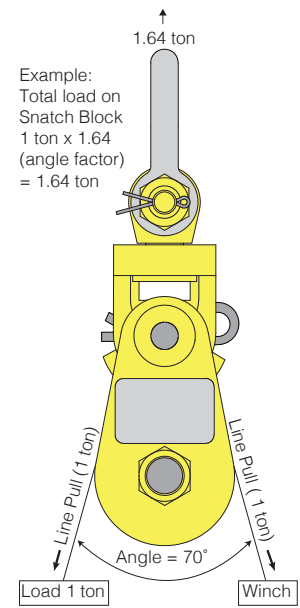
- *Check all nuts or retaining pins for any signs of backing off due to high vibration or damage. The head fitting nut must be checked to ensure it is properly engaged into its retaining nut to full depth and the thread is locked. Also, check for excessive "play" in the head fitting. Excessive free play is a sign of wear. Remove from service any snatch block that is cracked or deformed.
- *Look for wear on pins, axles (check if axle is still fixed), side plates, bushings/bearings and fittings attachment points. Check for any excessive wear. 10% wear is the maximum permissible on head fittings. Bolt or pin with wear exceeding 5% or significant bending in non-threaded areas will require the block to be pulled from service.
- *Check sheaves for wobble, misalignment, uneven groove flange wear, corrugations or wear in sheave groove. If sheave wobbles or is misaligned this indicates bearing wear which will require removal from service.
- *Check any head fittings for deformation or stretch. Make sure hook has not stretched and latch still fits the hook correctly. Check the shackle pin for damage or deformation. Follow ASME standard B30.10 hooks and B30.26 shackles for further instructions on inspection of these items.
- * Ensure all identification tags / WLL tags are legible and still secured to the block.
- * Check block for any rust, pitting or corrosion, and any signs of heat damage or welding splatter. Inspect for other conditions, including visible damage that may cause doubt as to the continued use of the rigging block

Load Angle Factors

The stress on a snatch block varies between the degree of angle between the lead and load lines. As the angle between the lines increases, the stress on the block is reduced. With both lines parallel, 1000 pounds on the lead line results in 2000 pounds on the block. Provisions should also be made to increase the sheave size where the situation demands. Naturally a larger sheave is an advantage for bearing and rope life. Use the chart to calculate the total load, by multiplying the line pull by the angle factor.

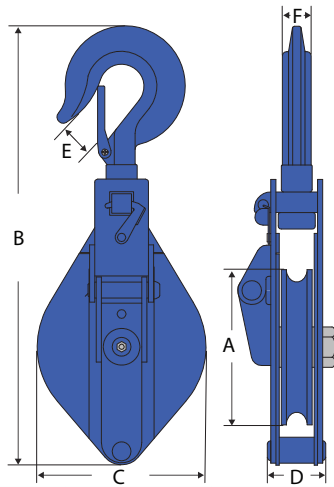


ANGLE FACTOR MULTIPLIERS			
Angle	Factor	Angle	Factor
0°	2.00	90°	1.41
10°	1.99	100°	1.29
20°	1.97	110°	1.15
30°	1.93	120°	1.00
40°	1.87	130°	0.84
45°	1.84	140°	0.68
50°	1.81	150°	0.52
60°	1.73	160°	0.35
70°	1.64	170°	0.17
80°	1.53	180°	0.00



ProCraft Light Duty Snatch Blocks Single Sheave

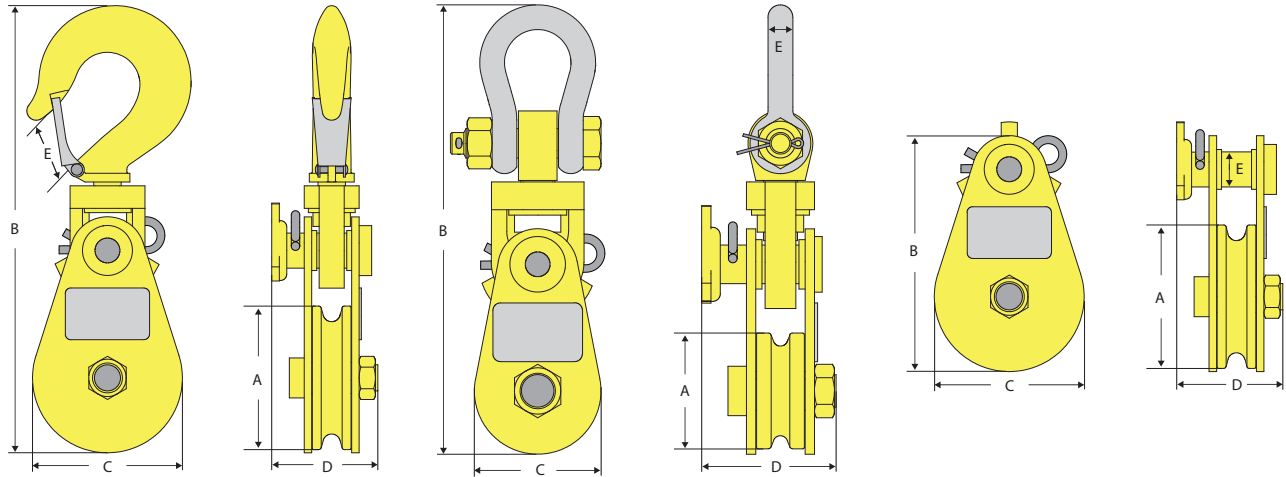
Light Duty Snatch blocks are suitable for synthetic or wire rope. A drop side plate allows easy access for the rope, and its light weight design aids quick installation. Snatch blocks are designed with a 4:1 factor of safety and meet or exceed ASME B30.26 standard. .



Stock Code	Working Load Limit Tonnes	Dimension Inches							Weight per Piece Pounds
		Rope Diameter	Sheave A	B	C	D	E	F	
07SN-DS03J	1/2	5/16	3	11.00	3.35	1.63	0.75	0.68	3.24
07SN-DS04J	1	3/8	4	12.50	4.41	1.87	0.75	0.94	5.91
07SN-DS05J	1-1/2	1/2	5	15.00	5.51	2.17	0.87	0.92	10.03
07SN-DS06J	2	5/8	6	17.90	7.00	3.05	1.27	1.06	16.22

ProCraft Snatch Blocks Bronze Bush Single Sheave

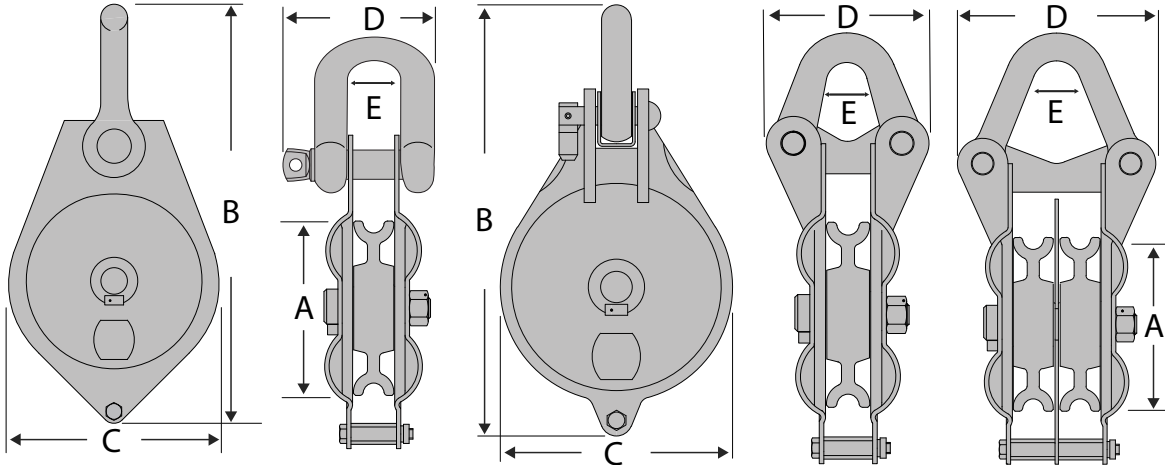
Snatch blocks have a bronze bushing and are generally used with wire rope. They are mostly suited to applications where hoisting speed are not high, and the head fitting is not designed to rotate while under load (not suitable for concrete tilt wall panels). Snatch blocks are designed with a 4:1 factor of safety and meet or exceed ASME B30.26 standard.



Stock Code	Working Load Limit Tonnes	Inches						Weight per Piece Pounds
		Wire Rope Diameter	Sheave A	B	C	D	E	
Hook Head Fitting								
07SB-HK030	2	5/16 - 3/8	3	11.50	3.23	3.23	1.02	8.26
07SB-HK045	4	3/8 - 1/2	4 1/2	14.09	4.72	3.33	1.38	13.67
07SB-HK050	4	3/8 - 1/2	6	16.22	6.30	3.33	1.38	17.60
07SB-HK060	8	5/8 - 3/4	6	19.61	6.30	4.57	1.53	32.29
07SB-HK080	8	5/8 - 3/4	8	21.75	8.27	4.49	1.53	43.86
07SB-HK1508	15	1	8	26.50	8.27	5.20	2.50	70.50
Shackle Head Fitting								
07SB-SH030	2	5/16 - 3/8	3	11.38	3.23	3.23	0.63	8.68
07SB-SH045	4	3/8 - 1/2	4 1/2	14.72	4.72	3.33	0.87	14.68
07SB-SH050	4	3/8 - 1/2	6	16.30	6.30	3.33	0.87	18.22
07SB-SH060	8	5/8 - 3/4	6	18.90	6.30	4.57	1.00	39.55
07SB-SH080	8	5/8 - 3/4	8	21.02	8.27	4.49	1.00	50.52
07SB-SH1208	12	1	8	25.12	8.27	5.53	1.25	71.04
07SB-SH1508	15	1	8	26.18	8.27	5.70	1.50	76.55
07SB-SH1512	15	1	12	31.55	12.24	5.70	1.50	115.52
07SB-SH2214	22	1-1/8 - 1-1/4	14	37.48	14.37	6.25	1.75	212.07
Toggle Head Fitting								
07SB-TB030	2	5/16 - 3/8	3	5.91	3.23	3.23	1.02	4.95
07SB-TB045	4	3/8 - 1/2	4 1/2	7.77	4.72	3.53	1.02	7.91
07SB-TB060	8	5/8 - 3/4	6	10.63	6.30	4.57	1.57	19.68
07SB-TB080	8	5/8 - 3/4	8	12.62	8.27	4.49	1.57	31.17

ProCraft Yarding Blocks

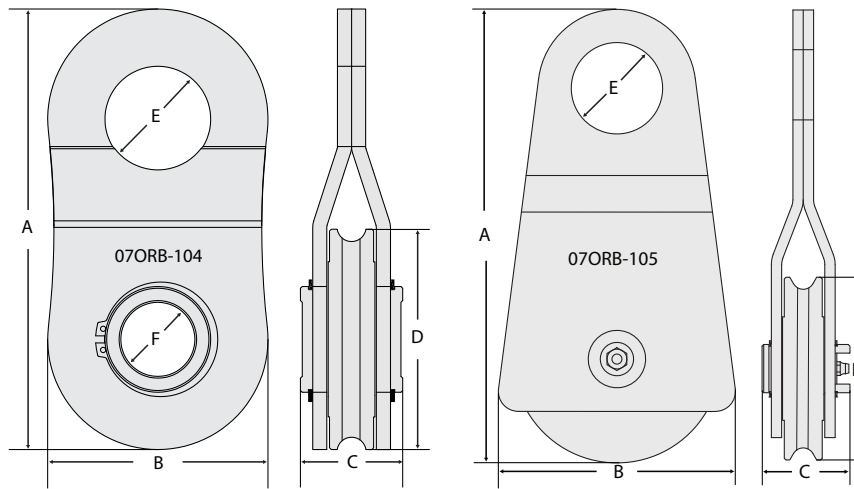
These yarding blocks have a bronze bearing and are mostly suited to light duty applications where hoisting speed is not high. They are perfect for fishing vessels and other marine uses with the hot dipped galvanized finish and black painted finish for the stage rigging and other indoor applications. They are offered with either a single sheave or double sheave, and can be used with wire or synthetic ropes. Working load limits are in Metric Tonnes and are built with a 4:1 factor of safety.



Stock Code	Finish	Size Inches (A)	Working Load Limit Tonnes	Dimension Inches					Weight per Piece Pounds
				Rope Diameter	B	C	D	E	
Single Sheave									
07YD-103G	Galvanized	3	0.5	5/16	7.25	3.35	2.75	1.03	2.43
07YD-103	Black Painted								
07YD-104G	Galvanized	4	1.0	3/8	9.17	4.74	3.41	0.94	3.84
07YD-104	Black Painted								
07YD-105G	Galvanized	5	1.5	7/16	12.00	5.87	4.11	1.24	8.349
07YD-105	Black Painted								
07YD-106G	Galvanized	6	2.0	9/16	13.50	6.92	4.33	1.42	11.57
07YD-106	Black Painted								
07YD-108G	Galvanized	8	4.0	3/4	17.50	9.05	6.50	2.00	30.92
07YD-110G	Galvanized	10	5.0	7/8	22.00	11.50	7.00	2.75	52.42
Double Sheave									
07YD-203G	Galvanized	3	0.5	5/16	3.54	3.53	4.09	1.19	3.84
07YD-203	Black Painted								
07YD-204G	Galvanized	4	1.0	3/8	9.50	4.74	4.57	1.48	6.66
07YD-204	Black Painted								
07YD-205G	Galvanized	5	1.5	7/16	11.50	6.00	5.25	1.24	12.17
07YD-205	Black Painted								
07YD-206G	Galvanized	6	2.0	9/16	13.50	7.09	5.75	1.70	17.63
07YD-206	Black Painted								

ProCraft Off Road Blocks

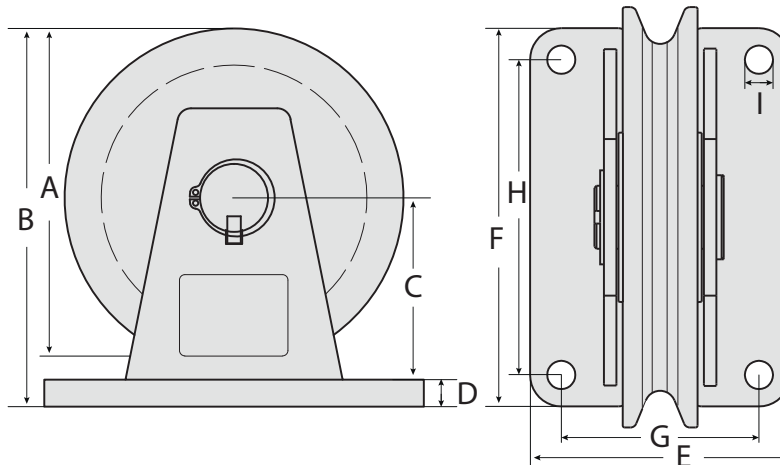
These blocks are perfect for winching or hauling where increased capacity in a winch line is required. The two opening cheek plates allows quick access for synthetic or wire winch lines. These blocks are not suitable for overhead lifting or critical load bearing applications.



Stock Code	Rated Capacity	Rope Diameter	Dimension Inches						Weight per Piece Pounds
			A	B	C	D	E	F	
07ORB-104	4,500 lbs	7/16	8.00	4.00	1.85	4.00	2.00	1.50	4.20
07ORB-105	12,000 lbs	9/16	11.00	5.60	2.25	5.00	2.00	N/A	8.10

ProCraft Vertical Lead Blocks

These versatile blocks are a permanent mountable block offering four mounting holes to affix firmly to the wall, ceiling or a solid flat surface. The pulley is designed for use with wire or synthetic rope. The base is galvanized for increased weather protection. Installation should not be carried out until establishing that the point of affixing conforms to the strength and force requirements of the application.



Stock Code	Resultant Working Load Limit	Wire Rope Diameter	Dimension Inches									Weight per Piece Pounds
			A	B	C	D	E	F	G	H	I	
07VLB-010	1 ton	5/16	4.92	5.49	2.64	0.39	2.36	5.51	1.38	4.33	0.47	5.40
07VLB-020	2 ton	3/8	5.90	6.57	3.15	0.47	3.15	7.09	1.57	5.51	0.55	10.00
07VLB-030	3 ton	7/16	7.87	8.66	4.13	0.59	3.94	9.06	1.97	7.09	0.71	20.50