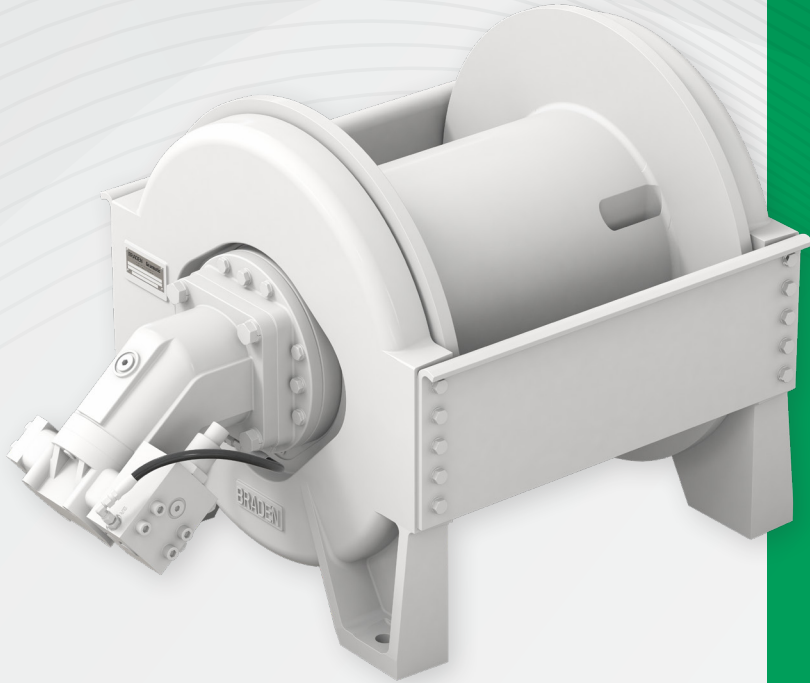


CH Series

CH165 | CH175 | CH210 | CH230 | CH280 | CH400 | CH640



Features & Benefits

- Patented BRADEN brake valve enables smooth operation and precise load control
- Sealed, high-efficiency gear system for continuous duty performance and quiet operation
- Anti-friction bearings for long service life
- Overrunning clutch for fall-back protection
- Dynamic and multi-disc static brake systems for smooth operation and fail-safe load handling
- Integrated gearing in the drum minimizes overall dimensions
- Easy-to-access drum oil drain allows for servicing with cable in place
- API 2c compliant (optional)

BRADEN CH Series construction hoists are engineered based on our long heritage of innovative design and superior performance. Built to deliver high line pulls, fast line speeds and large cable storage capacity, CH Series hoists are ready to go to work for you in a wide variety of applications including offshore platforms, communication tower erection, cable sagging and mobile cranes.

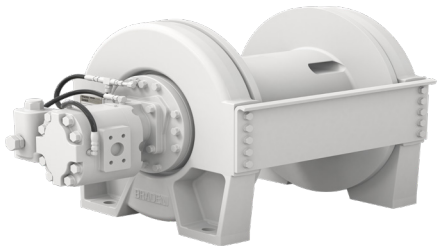
Applications

- Mobile Cranes
- Offshore Cranes
- Winch Skids
- Mining



CH165A Planetary Hoist

16,500 lb (7,484 kg) Rated Line Pull



Gear Ratios	25:1, 26:1
Approx. Unit Weight	1,000 to 1,782 lb (454 to 808 kg)
Standard Motors	090 (9.0 CID), 110 (11.0 CID), 120 (12.0 CID)
Drum Sizes	01 — 12.75" (324 mm) B x 23" (584 mm) F x 17" (432 mm) BF 02 — 12.75" (324 mm) B x 22.75" (578 mm) F x 32" (813 mm) BF
Rope Diameters	7/16" (11 mm), 3/4" (19 mm)
Freefall Options	Freefall (FF), Controlled Freefall (CF)
Cable Management Options	Grooved Drum, Tension Roller
API 2c Compliant	Yes (optional)

Specifications are representative of common configuration. Consult factory for additional options.

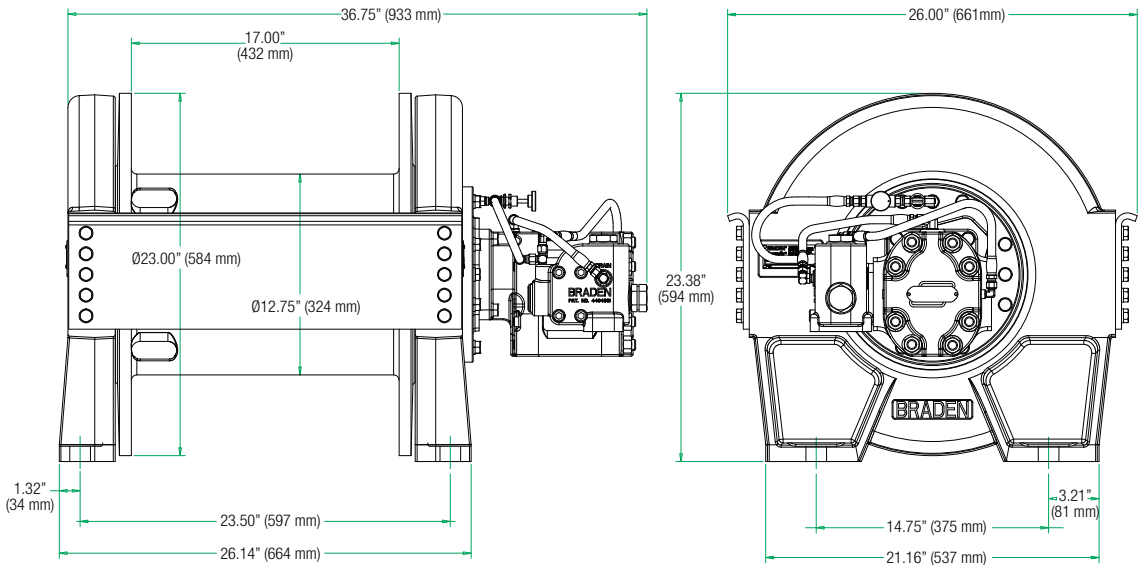
Performance (CH165A-25120-01-1)

	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
Line Pull*	16,500 lb (7,484 kg)	14,850 lb (6,736 kg)	13,500 lb (6,123 kg)	12,370 lb (5,611 kg)	11,420 lb (5,180 kg)	10,610 lb (4,813 kg)
Line Speed*	434 fpm (132.3 mpm)	482 fpm (146.9 mpm)	530 fpm (161.5 mpm)	579 fpm (176.5 mpm)	627 fpm (191.1 mpm)	675 fpm (205.7 mpm)
Drum Capacity**						
7/16" (11 mm)	134 ft (40.6 m)	277 ft (84.4 m)	429 ft (130.8 m)	590 ft (179.8 m)	760 ft (231.6 m)	939 ft (286.2 m)
1/2" (13 mm)	118 ft (36.0 m)	245 ft (74.7 m)	381 ft (116.1 m)	526 ft (160.3 m)	680 ft (207.3 m)	842 ft (245.5 m)
9/16" (14 mm)	105 ft (32.0 m)	219 ft (66.8 m)	342 ft (104.2 m)	474 ft (144.5 m)	615 ft (187.5 m)	765 ft (233.2 m)
5/8" (16 mm)	95 ft (29.0 m)	199 ft (60.7 m)	312 ft (95.1 m)	434 ft (132.3 m)	565 ft (172.2 m)	705 ft (214.9 m)
3/4" (19 mm)***	80 ft (24.4 m)	169 ft (51.5 m)	267 ft (81.4 m)	374 ft (114.0 m)	490 ft (149.4 m)	615 ft (187.5 m)
1" (25 mm)***	69 ft (21.0 m)	147 ft (44.8 m)	234 ft (71.3 m)	330 ft (100.6 m)	435 ft (132.6 m)	-

*Based on pressure of 2,982 psi (207 bar), 170 gpm (644 lpm), 3/4" (19 mm) rope and 12.0 CID (197 cc) motor.
Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes.

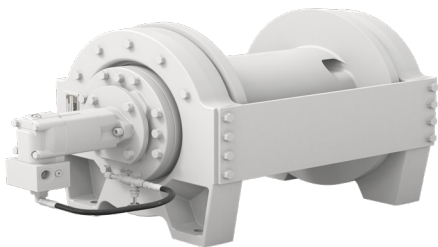
**Capacity per ANSI/ASME.
***Boom hoist application only.

Dimensions (CH165-25120-01-1 shown. Additional technical information available at www.arrowheadwinch.com.)



CH175B Planetary Hoist

17,500 lb (7,938 kg) Rated Line Pull



Gear Ratios	22:1, 23:1
Approx. Unit Weight	880 to 1,512 lb (399 to 686 kg)
Standard Motors	090 (9.0 CID), 110 (11.0 CID), 120 (12.0 CID)
Drum Size	01 — 10.75" (273 mm) B x 18.75" (476 mm) F x 16" (406 mm) BF 02 — 10.75" (273 mm) B x 19.25" (489 mm) F x 32.19" (818 mm) BF
Rope Diameters	7/16" (11 mm), 1/2" (13 mm), 9/16" (14 mm), 5/8" (16 mm), 3/4" (19 mm)
Freefall Options	Freefall (FF), Controlled Freefall (CF)
Cable Management Options	Grooved Drum, Tension Roller
API 2c Compliant	Yes (optional)

Specifications are representative of common configuration. Consult factory for additional options.

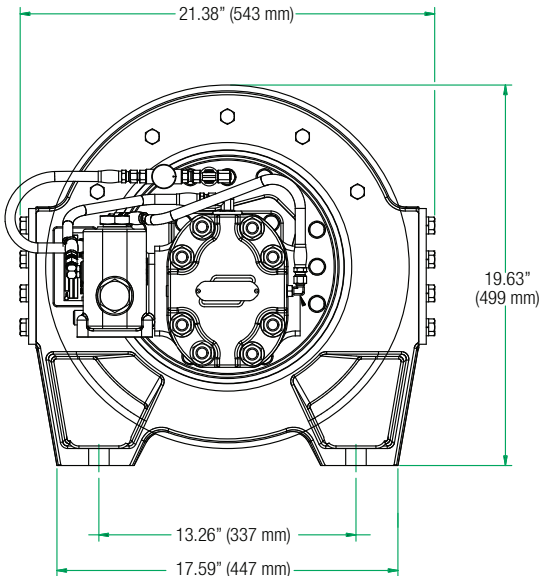
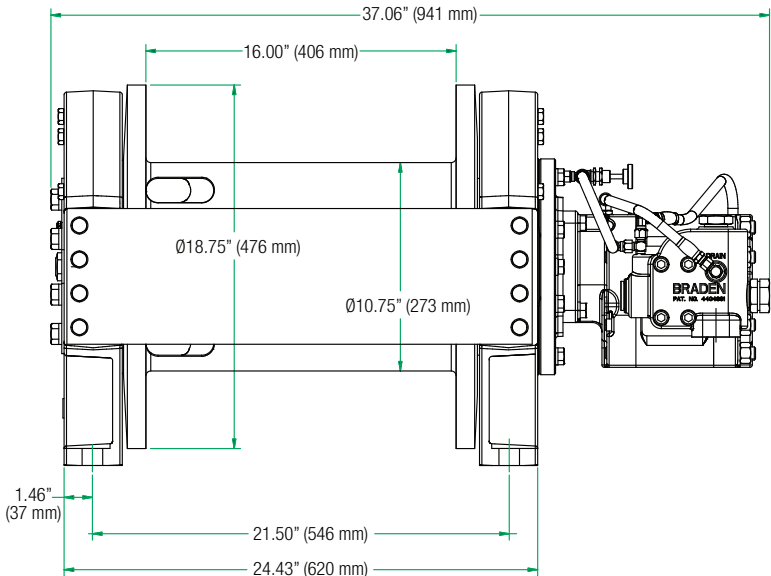
Performance (CH175B-22120-01-1)

	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
Line Pull*	17,500 lb (7,938 kg)	15,770 lb (7,153 kg)	14,350 lb (6,509 kg)	13,160 lb (5,969 kg)	12,160 lb (5,516 kg)	11,290 lb (5,121 kg)
Line Speed*	406 fpm (123.7 mpm)	451 fpm (137.5 mpm)	496 fpm (151.2 mpm)	541 fpm (164.9 mpm)	585 fpm (178.3 mpm)	630 fpm (192 mpm)
Drum Capacity**						
7/16" (11 mm)	107 ft (32.6 m)	222 ft (67.7 m)	346 ft (105.5 m)	478 ft (145.7 m)	619 ft (188.7 m)	768 ft (234.1 m)
1/2" (13 mm)	94 ft (28.7 m)	197 ft (60.0 m)	308 ft (93.9 m)	427 ft (130.1 m)	555 ft (169.1 m)	691 ft (210.6 m)
9/16" (14 mm)	84 ft (25.6 m)	177 ft (53.9 m)	278 ft (84.7 m)	387 ft (118.0 m)	505 ft (153.9 m)	631 ft (192.3 m)
5/8" (16 mm)	76 ft (23.2 m)	161 ft (49.1 m)	254 ft (77.4 m)	355 ft (108.2 m)	465 ft (141.7 m)	583 ft (177.7 m)
3/4" (19 mm)***	64 ft (19.5 m)	137 ft (41.8 m)	218 ft (66.4 m)	307 ft (93.6 m)	405 ft (123.4 m)	-

*Based on pressure of 2,963 psi (204 bar), 170 gpm (644 lpm), 5/8" (16 mm) rope and 12.0 CID (197 cc) motor.
Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes.

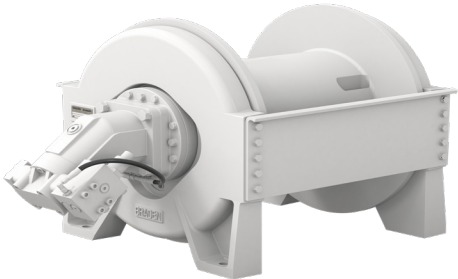
**Capacity per ANSI/ASME.
***Boom hoist application only.

Dimensions (CH175B-22120-01-1 shown. Additional technical information available at www.arrowheadwinch.com.)



CH210A Planetary Hoist

21,400 lb (9,707 kg) Rated Line Pull



Gear Ratios	36:1, 50:1
Approx. Unit Weight	1,325 to 1,925 lb (601 to 873 kg)
Standard Motors	090 (9.0 CID), 110 (11.0 CID), 120 (12.0 CID)
Drum Size	01 — 15" (381 mm) B x 26.5" (673 mm) F x 19.92" (506 mm) BF 02 — 16" (406 mm) B x 27.5" (699 mm) F x 31.98" (812 mm) BF 03 — 16" (406 mm) B x 24.9" (632 mm) F x 20.42" (519 mm) BF
Rope Diameters	3/4" (19 mm), 7/8" (22 mm)
Freefall Options	Freefall (FF), Controlled Freefall (CF)
Cable Management Options	Grooved Drum, Tension Roller
API 2c Compliant	Yes (optional)

Specifications are representative of common configuration. Consult factory for additional options.

Performance

(CH210A-50110-01-1)

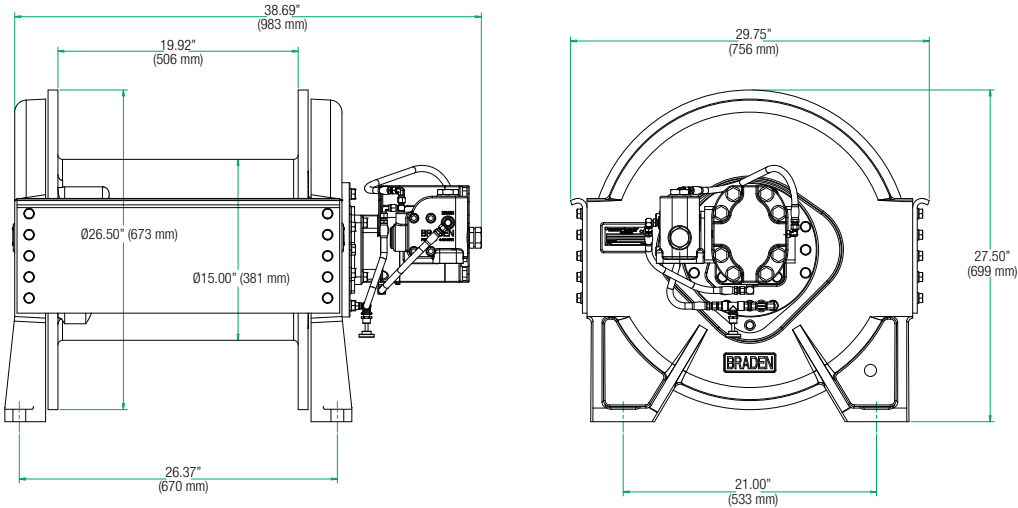
	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
Line Pull*	21,400 lb (9,707 kg)	19,270 lb (8,741 kg)	17,530 lb (7,951 kg)	16,080 lb (7,294 kg)	14,850 lb (6,736 kg)	13,800 lb (6,260 kg)
Line Speed*	251 fpm (76.5 mpm)	279 fpm (85 mpm)	307 fpm (93.6 mpm)	334 fpm (101.8 mpm)	362 fpm (110.3 mpm)	390 fpm (118.9 mpm)
Drum Capacity**						
7/16" (11 mm)	184 ft (56.1 m)	378 ft (115.2 m)	583 ft (177.7 m)	798 ft (243.2 m)	1024 ft (312.1 m)	1260 ft (384.0 m)
1/2" (13 mm)	162 ft (49.3 m)	334 ft (101.8 m)	517 ft (157.6 m)	710 ft (216.4 m)	913 ft (278.3 m)	1127 ft (343.5 m)
9/16" (14 mm)	144 ft (43.9 m)	299 ft (91.1 m)	464 ft (141.4 m)	640 ft (195.1 m)	826 ft (251.8 m)	1022 ft (311.5 m)
5/8" (16 mm)	130 ft (39.6 m)	271 ft (82.6 m)	422 ft (128.6 m)	584 ft (178.0 m)	756 ft (230.4 m)	939 ft (286.2 m)
3/4" (19 mm)	110 ft (33.5 m)	230 ft (70.1 m)	360 ft (109.7 m)	501 ft (152.7 m)	652 ft (198.7 m)	814 ft (248.1 m)
7/8" (22 mm)***	95 ft (29.0 m)	200 ft (61.0 m)	315 ft (96.0 m)	441 ft (134.4 m)	577 ft (175.9 m)	724 ft (220.7 m)
1" (25 mm)***	83 ft (25.3 m)	177 ft (54.9 m)	281 ft (85.6 m)	396 ft (120.7 m)	521 ft (158.8 m)	—

*Based on pressure of 2,500 psi (172 bar), 155 gpm (587 lpm), 7/8" (22 mm) rope and 11.0 CID (180 cc) motor.
Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes.

**Capacity per ANSI/ASME.
***Boom hoist application only.

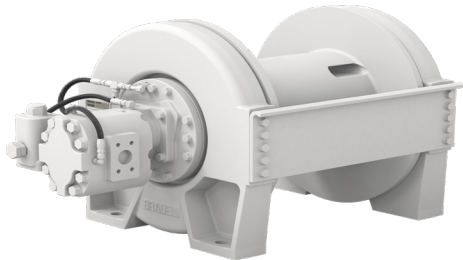
Dimensions

(CH210A-50110-01-1 shown. Additional technical information available at www.arrowheadwinch.com.)



CH230B Planetary Hoist

23,000 lb (10,433 kg) Rated Line Pull



Gear Ratios	35:1, 36:1
Approx. Unit Weight	1,040 to 1,850 lb (472 to 839 kg)
Standard Motors	090 (9.0 CID), 110 (11.0 CID), 120 (12.0 CID)
Drum Size	01 — 12.75" (324 mm) B x 23" (584 mm) F x 17" (432 mm) BF 21 — 12.75" (324 mm) B x 22.75" (578 mm) F x 24" (610 mm) BF
Rope Diameters	7/16" (11 mm), 1/2" (13 mm), 9/16" (14 mm), 5/8" (16 mm), 3/4" (19 mm), 7/8" (22mm)
Freefall Options	Freefall (FF), Controlled Freefall (CF)
Cable Management Options	Grooved Drum, Tension Roller
API 2c Compliant	Yes (optional)

Specifications are representative of common configuration. Consult factory for additional options.

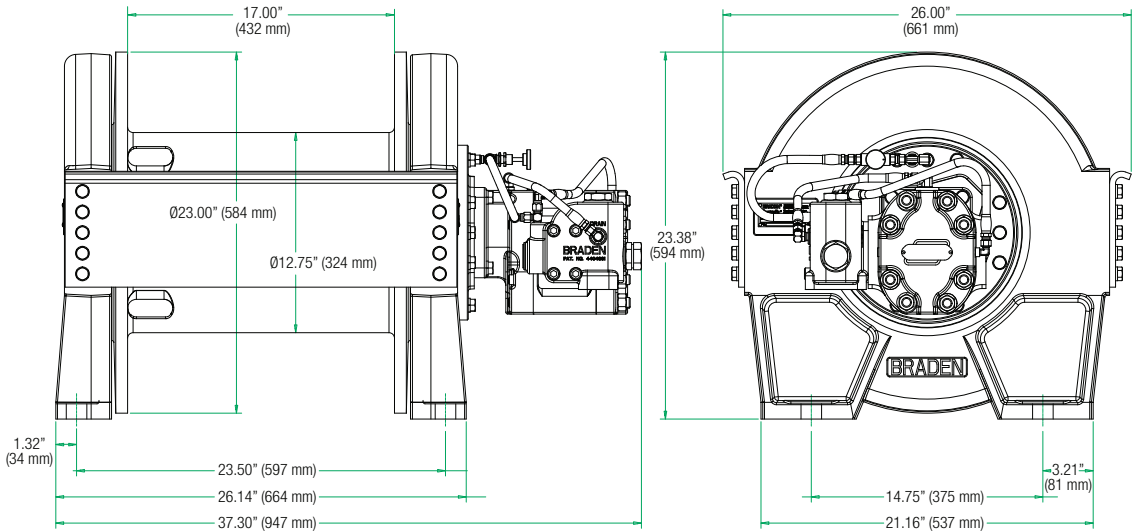
Performance (CH230B-35120-01-1)

	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
Line Pull*	23,000 lb (10,433 kg)	20,700 lb (9,389 kg)	18,220 lb (8,264 kg)	17,250 lb (7,824 kg)	15,920 lb (7,221 kg)	14,780 lb (6,704 kg)
Line Speed*	310 fpm (94.5 mpm)	344 fpm (104.9 mpm)	379 fpm (115.5 mpm)	413 fpm (125.9 mpm)	448 fpm (136.6 mpm)	482 fpm (146.9 mpm)
Drum Capacity**						
7/16" (11 mm)	134 ft (40.8 m)	277 ft (84.4 m)	429 ft (130.8 m)	590 ft (179.8 m)	760 ft (231.6 m)	939 ft (286.2 m)
1/2" (13 mm)	118 ft (36.0 m)	245 ft (74.7 m)	381 ft (116.1 m)	526 ft (160.3 m)	680 ft (207.3 m)	842 ft (256.6 m)
9/16" (14 mm)	105 ft (32.0 m)	219 ft (66.6 m)	342 ft (104.2 m)	474 ft (144.5 m)	615 ft (187.5 m)	765 ft (233.2 m)
5/8" (16 mm)	95 ft (29.0 m)	199 ft (60.7 m)	312 ft (95.1 m)	434 ft (132.3 m)	565 ft (172.2 m)	705 ft (214.9 m)
3/4" (19 mm)	80 ft (24.4 m)	169 ft (51.5 m)	267 ft (81.4 m)	374 ft (114.0 m)	400 ft (121.9 m)	615 ft (187.5 m)
7/8" (22 mm)***	69 ft (21.0 m)	147 ft (44.8 m)	234 ft (71.3 m)	330 ft (100.6 m)	435 ft (132.6 m)	—

*Based on pressure of 2,970 psi (205 bar), 170 gpm (644 lpm), 3/4" (19 mm) rope and 12.0 CID (197 cc) motor.
Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes.

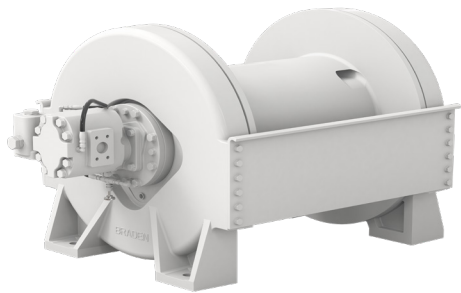
**Capacity per ANSI/ASME.
***Boom hoist application only.

Dimensions (CH230B-35120-01-1 shown. Additional technical information available at www.arrowheadwinch.com.)



CH280A Planetary Hoist

28,000 lb (12,701 kg) Rated Line Pull



Gear Ratio	54:1
Approx. Unit Weight	2,245 to 3,015 lb (1,018 to 1,368 kg)
Standard Motors	090 (9.0 CID), 110 (11.0 CID), 120 (12.0 CID), 144 (14.4 CID)
Drum Size	01 — 18" (457 mm) B x 31.25" (794 mm) F x 24.36" (619 mm) BF 02 — 17.9" (455 mm) B x 31.25" (794 mm) F x 38.61" (981 mm) BF
Rope Diameters	7/16" (11 mm), 1/2" (13 mm), 9/16" (14 mm), 5/8" (16 mm), 3/4" (19 mm), 7/8" (22 mm), 1" (25 mm)
Freefall Options	Freefall (FF), Controlled Freefall (CF)
Cable Management Options	Grooved Drum, Tension Roller
API 2c Compliant	Yes (optional)

Specifications are representative of common configuration. Consult factory for additional options.

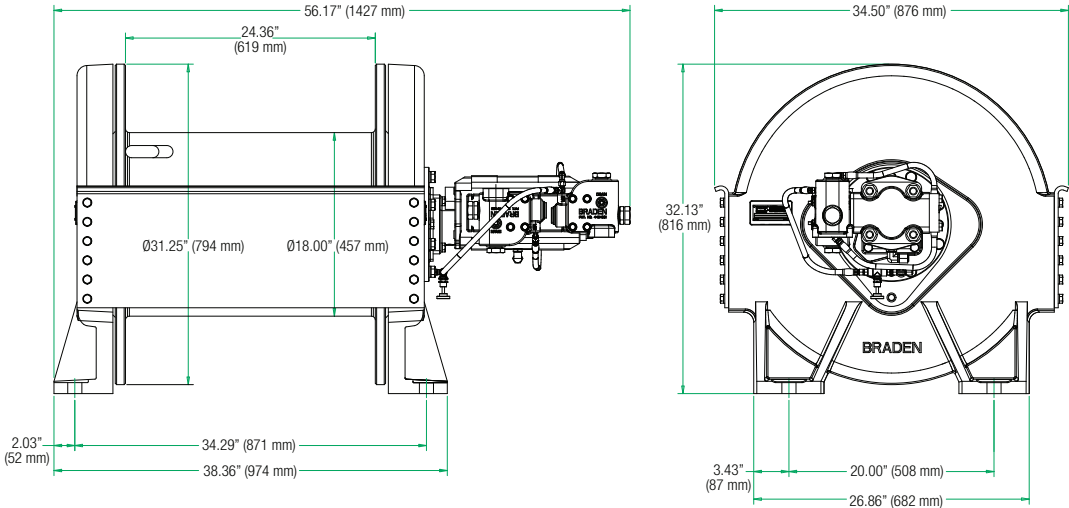
Performance (CH280A-54144-01-1)

	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
Line Pull*	28,000 lb (12,701 kg)	25,320 lb (11,485 kg)	23,120 lb (10,487 kg)	21,270 lb (9,648 kg)	19,700 lb (8,936 kg)	18,340 lb (8,319 kg)
Line Speed*	264 fpm (80.5 mpm)	291 fpm (88.7 mpm)	319 fpm (97.2 mpm)	347 fpm (105.8 mpm)	375 fpm (114.3 mpm)	402 fpm (122.5 mpm)
Drum Capacity**						
7/16" (11 mm)	269 ft (82.0 m)	551 ft (167.9 m)	845 ft (257.6 m)	1,152 ft (351.1 m)	1,472 ft (448.7 m)	1,805 ft (550.2 m)
1/2" (13 mm)	236 ft (71.9 m)	485 ft (147.8 m)	746 ft (227.4 m)	1,020 ft (310.9 m)	1,307 ft (398.4 m)	1,607 ft (489.8 m)
9/16" (14 mm)	210 ft (64.0 m)	433 ft (132.0 m)	669 ft (203.9 m)	918 ft (279.8 m)	1,179 ft (359.4 m)	1,453 ft (442.9 m)
5/8" (16 mm)	190 ft (57.9 m)	393 ft (119.8 m)	609 ft (185.6 m)	837 ft (255.1 m)	1,078 ft (328.6 m)	1,332 ft (406.0 m)
3/4" (19 mm)	159 ft (48.5 m)	331 ft (100.9 m)	516 ft (157.3 m)	714 ft (217.6 m)	924 ft (281.6 m)	1,147 ft (349.6 m)
7/8" (22 mm)	138 ft (42.1 m)	288 ft (87.8 m)	451 ft (137.5 m)	627 ft (191.1 m)	816 ft (248.7 m)	1,017 ft (310.0 m)
1" (25 mm)	121 ft (36.9 m)	255 ft (77.7 m)	402 ft (122.5 m)	561 ft (171.0 m)	733 ft (223.4 m)	918 ft (279.8 m)

*Based on pressure of 2,700 psi (186 bar), 200 gpm (757 lpm), 1" (25 mm) rope and 14.4 CID (236 cc) motor.
Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes.

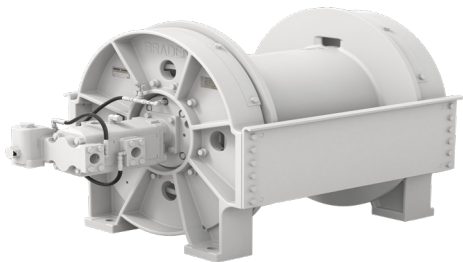
**Capacity per ANSI/ASME.

Dimensions (CH280A-54144-01-1 shown. Additional technical information available at www.arrowheadwinch.com.)



CH400B Planetary Hoist

40,000 lb (18,144 kg) Rated Line Pull



Gear Ratios	70:1, 87:1, 101:1
Approx. Unit Weight	2,750 to 5,755 lb (1,247 to 2,610 kg)
Standard Motors	120 (12.0 CID), 144 (14.4 CID)
Drum Size	01 — 20" (508 mm) B x 32.5" (826 mm) F x 23.88" (607 mm) BF 02 — 20" (508 mm) B x 32.5" (826 mm) F x 38.12" (968 mm) BF 03 — 20.9" (531 mm) B x 32.25" (819 mm) F x 50.9" (1293 mm) BF 04 — 20.88" (530 mm) B x 32.25" (819 mm) F x 50.9" (1293 mm) BF 21 — 20" (508 mm) B x 32.5" (826 mm) F x 54.62" (1387 mm) BF
Rope Diameters	5/8" (16 mm), 3/4" (19 mm), 7/8" (22 mm), 1" (25 mm), 1-1/8" (28 mm)
Freefall Options	Freefall (FF), Controlled Freefall (CF)
Cable Management Options	Grooved Drum
API 2c Compliant	Yes (optional)

Specifications are representative of common configuration. Consult factory for additional options.

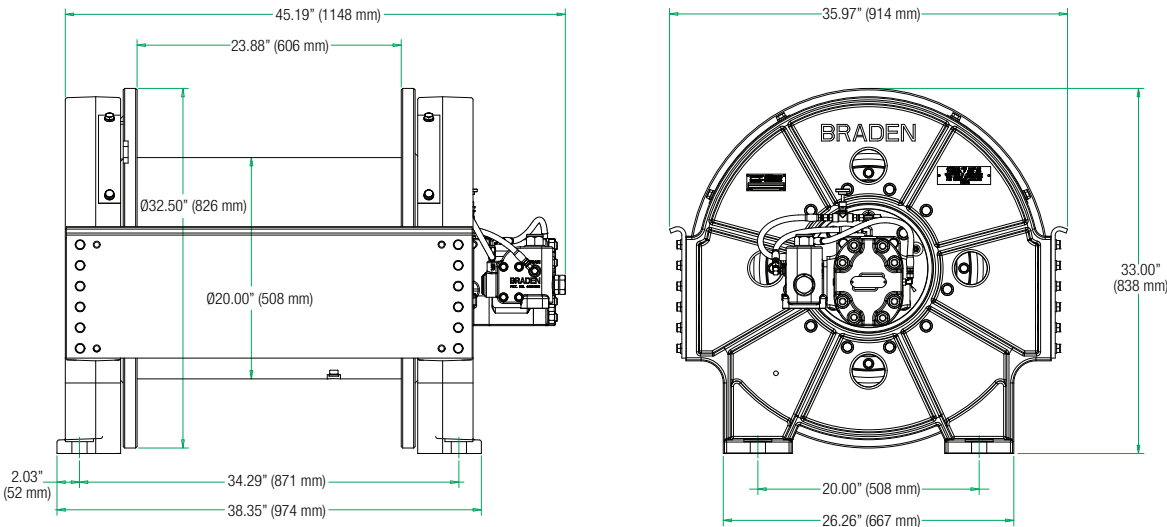
Performance (CH400B-101120-01-1)

	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5
Line Pull*	40,000 lb (18,144 kg)	36,140 lb (16,393 kg)	32,970 lb (14,955 kg)	30,310 lb (13,748 kg)	28,040 lb (12,719 kg)
Line Speed*	167 fpm (50.9 mpm)	185 fpm (56.4 mpm)	203 fpm (61.9 mpm)	221 fpm (67.4 mpm)	239 fpm (72.8 mpm)
Drum Capacity**					
5/8" (16 mm)	206 ft (62.8 m)	425 ft (129.5 m)	656 ft (199.9 m)	900 ft (274.3 m)	1,156 ft (352.3 m)
3/4" (19 mm)	173 ft (52.7 m)	358 ft (109.1 m)	556 ft (169.5 m)	766 ft (233.5 m)	989 ft (301.4 m)
7/8" (22 mm)	149 ft (45.4 m)	311 ft (94.8 m)	485 ft (147.8 m)	672 ft (204.8 m)	871 ft (265.5 m)
1" (25 mm)	131 ft (39.9 m)	275 ft (83.8 m)	431 ft (131.4 m)	600 ft (182.9 m)	781 ft (238.0 m)
1-1/8" (28 mm)	117 ft (35.7 m)	247 ft (75.3 m)	389 ft (118.6 m)	544 ft (165.8 m)	711 ft (216.7 m)

*Based on pressure of 2,887 psi (186 bar), 170 gpm (757 lpm), 1.125" (25 mm) rope and 12.03 CID (236 cc) motor.
Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes.

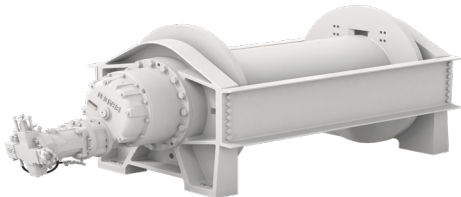
**Capacity per ANSI/ASME.

Dimensions (CH400B-101120-01-1 shown. Additional technical information available at www.arrowheadwinch.com.)



CH640A Planetary Hoist

64,000 lb (29,030 kg) Rated Line Pull



Gear Ratios	66:1, 80:1, 85:1, 96:1, 102:1, 128:1
Approx. Unit Weight	7,000 to 8,800 lb (3,175 to 3,992 kg)
Standard Motors	090 (9.0 CID), 110 (11.0 CID), 120 (12.0 CID), 144 (14.4 CID)
Drum Sizes	01 — 24" (610 mm) B x 41.5" (1,054 mm) F x 36.13" (918 mm) BF 02 — 24" (610 mm) B x 41.5" (1,054 mm) F x 54.13" (1,375 mm) BF 21 — 24" (610 mm) B x 41.5" (1,054 mm) F x 66" (1,676 mm) BF 22 — 22" (559 mm) B x 41.5" (1,054 mm) F x 72" (1,829 mm) BF 23 — 24" (610 mm) B x 41.5" (1,054 mm) F x 72" (1,829 mm) BF 24 — 22" (559 mm) B x 47" (1,194 mm) F x 48.25" (1,226 mm) BF 29 — 22" (559 mm) B x 34.5" (876 mm) F x 40" (1,016 mm) BF
Rope Diameters	1" (25 mm), 1-1/8" (28 mm), 1-1/4" (32 mm)
Freefall Options	None
Cable Management Options	None
API 2c Compliant	Yes (optional)

Specifications are representative of common configuration. Consult factory for additional options.

Performance (CH640A-96D120-01-1)

	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
Line Pull*	63,640 lb (28,867 kg)	57,900 lb (26,263 kg)	53,120 lb (24,094 kg)	49,060 lb (22,253 kg)	45,580 lb (20,675 kg)	42,560 lb (19,305 kg)
Line Speed*	185 fpm (56.4 mpm)	203 fpm (61.9 mpm)	222 fpm (67.7 mpm)	240 fpm (73.2 mpm)	258 fpm (78.6 mpm)	277 fpm (84.4 mpm)
Drum Capacity**						
1" (25 mm)	240 ft (73.2 m)	499 ft (152.1 m)	777 ft (236.8 m)	1,074 ft (327.4 m)	1,390 ft (423.7 m)	1,726 ft (526.1 m)
1-1/8" (28 mm)	214 ft (65.2 m)	447 ft (136.2 m)	700 ft (213.4 m)	972 ft (296.3 m)	1,263 ft (385.0 m)	1,573 ft (479.5 m)
1-1/4" (32 mm)	194 ft (59.1 m)	407 ft (124.1 m)	639 ft (194.8 m)	890 ft (271.3 m)	1,160 ft (353.6 m)	1,450 ft (442.0 m)

*Based on pressure of 2,900 psi (200 bar), 300 gpm (1,135 lpm), 1-1/8" (28 mm) rope and 12.0 x 2 CID (197 cc) motor. Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes.

**Capacity per ANSI/ASME.

Dimensions (CH640A-96D120-01-1 shown. Additional technical information available at www.arrowheadwinch.com.)

