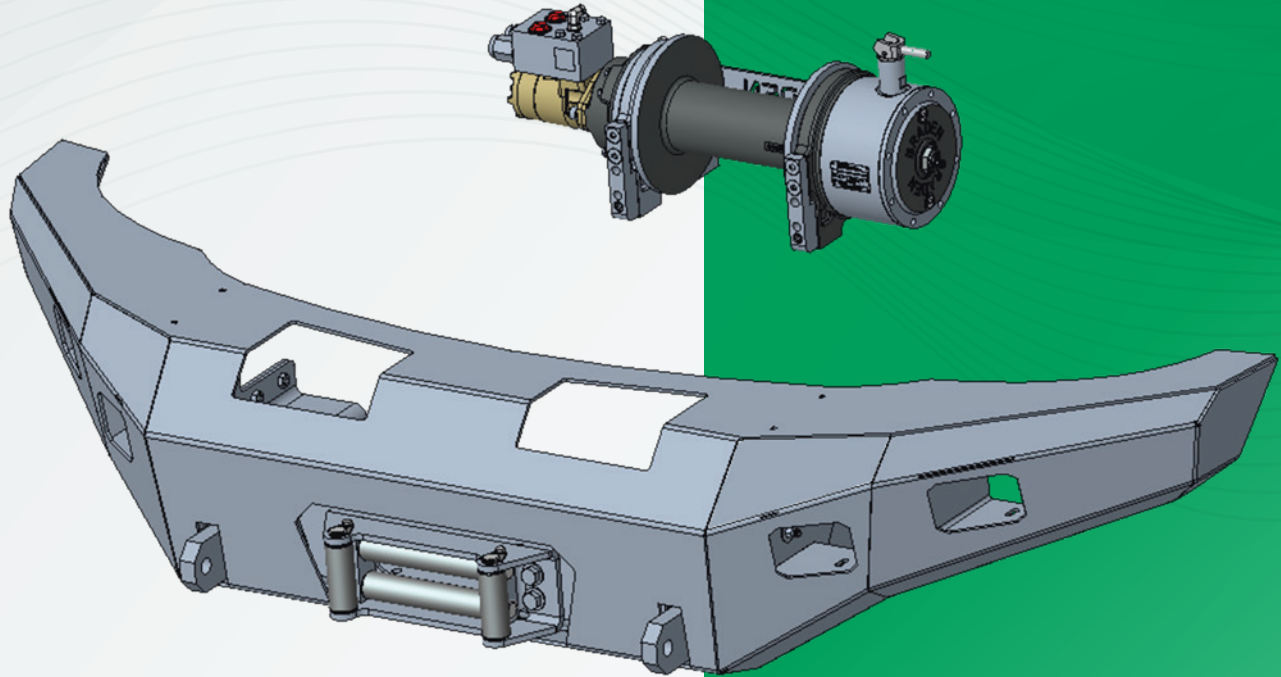


Utility Bumper Systems

UBL | UBX | PD18 | PD35 | HUP12 | PCD24

BRADEN[®]

A PACCAR COMPANY



Features & Benefits

- Custom engineered bumper systems tested with BRADEN recovery winches for optimal performance and safety
- Designed for universal mounting on common work vehicles
- Capstan available on most models for pulling lighter loads at faster speeds
- Optional accessories complete the package

BRADEN Utility Bumper Systems are designed to provide self-recovery capabilities for a wide range of vehicles, from Light Duty to Class 9 trucks. With optional capstan drives, many of our bumper systems can also be used for fast and efficient cable pulling.



Applications

- Self-Recovery
- Cable Pulling

- Lightweight aluminum shell
- Heavy duty steel super-structure with integrated tow-eyes
- Direct bolt-on installation for Ford F350/F450/F550/F600 and Dodge 4400/5500 trucks (model years 2017-current)
- Modular design allows fast and easy installation without the need for custom brackets or welding
- Contoured profile offers increased ground clearance and improved turning radius
- SAE J706 compliant

Winch	TR12 TR15
System Weight*	275 lb (125 kg)
Vehicle Compatibility	Light Duty
Rope Diameters (Wire or Synthetic)	7/16" (11 mm), 1/2" (13 mm)
Extension Shaft	N/A
Toolbox	N/A
Accessories Included	Dual Light Package (Work and Flood) Roller or Hawse Fairlead

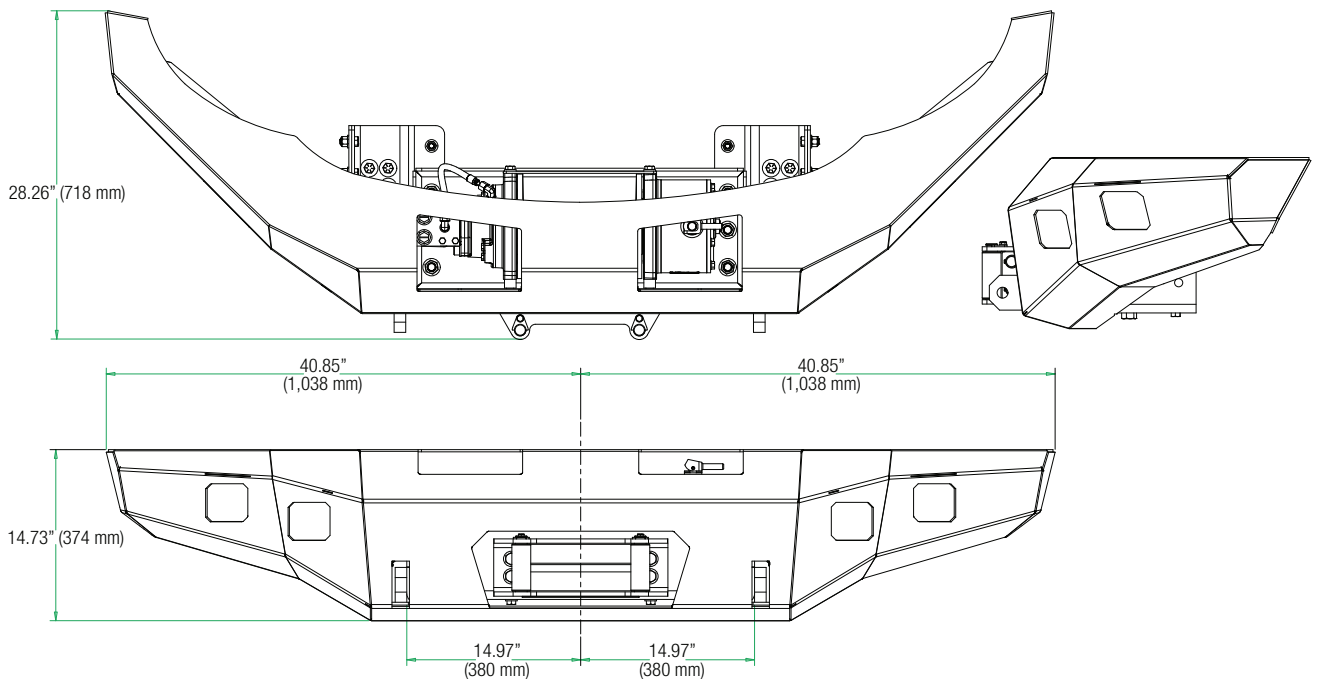
*Does not include rope.

Performance

		Layer 1	Layer 2	Layer 3	Layer 4	Layer 5
Line Pull*	TR12	12,000 lb (5,442 kg)	10,020 lb (4,525 kg)	8,600 lb (3,900 kg)	7,530 lb (3,415 kg)	6,700 lb (3,039 kg)
	TR15	15,000 lb (6,804 kg)	12,520 lb (5,678 kg)	10,750 lb (4,876 kg)	9,420 lb (4,272 kg)	8,380 lb (3,801 kg)
Line Speed*	TR12	46 fpm (14 mpm)	56 fpm (17.1 mpm)	65 fpm (19.8 mpm)	74 fpm (22.6 mpm)	83 fpm (25.3 mpm)
	TR15	39 fpm (12 mpm)	46 fpm (14 mpm)	54 fpm (16.5 mpm)	62 fpm (18.9 mpm)	69 fpm (21 mpm)
Rope Capacity	7/16" (11 mm)	23 ft (7.1 m)	51 ft (15.7 m)	84 ft (25.6 m)	121 ft (37 m)	163 ft (49.7 m)
	1/2" (13 mm)	21 ft (6.3 m)	46 ft (14.1 m)	76 ft (23.2 m)	111 ft (33.7 m)	

*Based on pressure of 2,450 psi (169 bar), 20 gpm (76 lpm) and 9.6 CID motor (TR15) or 8.0 CID motor (TR12) with 7/16" (11 mm) rope. Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes. Rope capacity based on 90% of theoretical.

Dimensions



- Lighter and more aerodynamic than traditional winch bumpers
- Reinforced steel frame with integrated tow-eyes for maximum pulling capabilities
- Larger toolbox lid for more accessible storage (compared to PD18 Bumper)
- Universal fit for all Class 5-7 trucks
- Patented direct bolt-on design for PACCAR New Medium Duty trucks
- Provides better ground clearance and turning radius
- SAE J706 compliant

Winch	TR20
System Weight*	680 lb (308 kg)
Vehicle Compatibility	Medium Duty, Class 5-7
Rope Diameters (Wire or Synthetic)	1/2" (13 mm), 9/16" (14 mm), 5/8" (16 mm)
Extension Shaft	Curbside
Toolbox	Single
Optional Accessories	Aluminum or Ductile Iron Capstan Provision for Collision Mitigation System Roller or Hawse Fairlead

*Does not include rope.

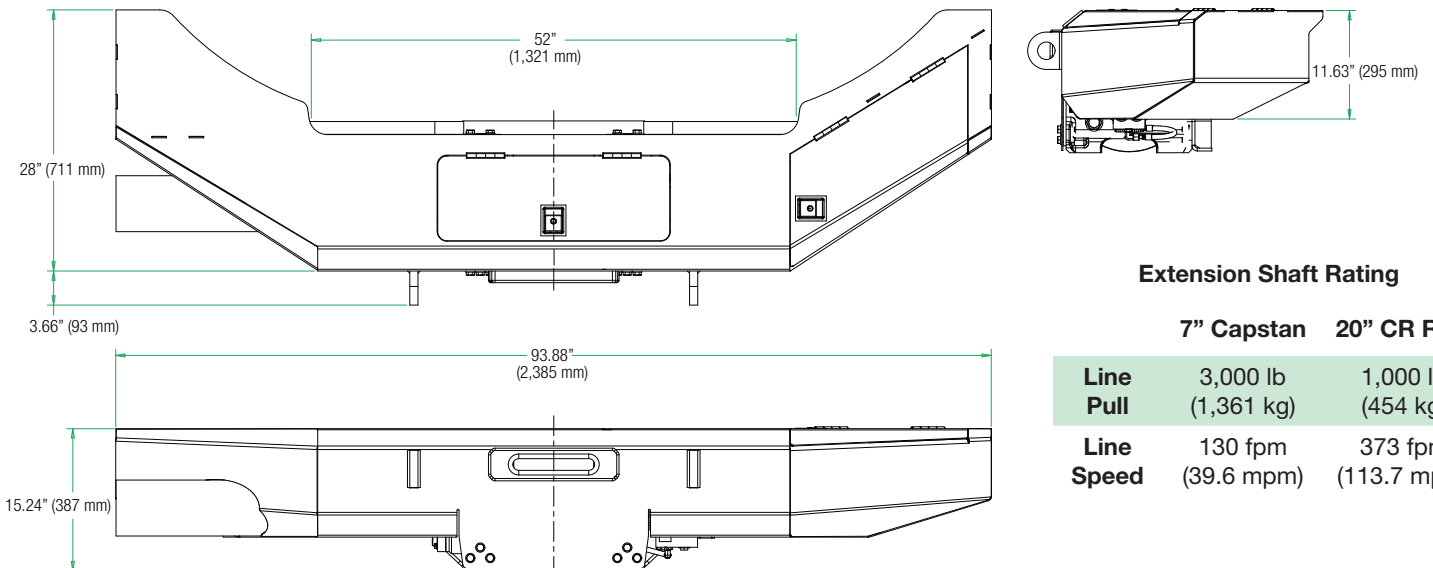
Performance (TR20-29096-02)

	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7
Line Pull*	20,000 lb (9,072 kg)	16,970 lb (7,697 kg)	14,740 lb (6,686 kg)	13,030 lb (5,910 kg)	11,670 lb (5,293 kg)	10,570 lb (4,794 kg)	
Line Speed*	25.7 fpm (7.8 mpm)	30.2 fpm (9.2 mpm)	34.8 fpm (10.6 mpm)	39.4 fpm (12 mpm)	44 fpm (13.4 mpm)	48.6 fpm (14.8 mpm)	
Rope Capacity							
1/2" (13 mm)	25 ft (7.6 m)	54 ft (16.5 m)	87 ft (26.5 m)	124 ft (37.8 m)	165 ft (50.3 m)	210 ft (64 m)	259 ft (79 m)
9/16" (14 mm)	22 ft (6.8 m)	49 ft (14.9 m)	79 ft (24.2 m)	114 ft (34.7 m)	152 ft (46.5 m)	195 ft (59.3 m)	
5/8" (16 mm)	20 ft (6.2 m)	45 ft (13.7 m)	73 ft (22.3 m)	106 ft (32.2 m)	142 ft (43.3 m)		

*Based on pressure of 2,500 psi (172 bar), 20 gpm (76 lpm) and 9.6 CID motor with 9/16" (14 mm) rope.

Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes. Rope capacity based on 90% of theoretical.

Dimensions



Extension Shaft Rating

	7" Capstan	20" CR Reel
Line Pull	3,000 lb (1,361 kg)	1,000 lb (454 kg)
Line Speed	130 fpm (39.6 mpm)	373 fpm (113.7 mpm)

PD18

20,000 lb (9,072 kg) Rated Line Pull

BRADEN®

A PACCAR COMPANY

- The industry standard bumper for utility applications
- Rugged steel construction
- Available in a variety of configurations to meet specific application needs, including:
 - Single or dual toolboxes
 - Curbside or streetside extension shaft for capstan or cable reel
 - Standard or long shaft length
- SAE J706 compliant

Winch	PD18C
System Weight*	780 lb (354 kg)
Vehicle Compatibility	Medium Duty, Class 5-7
Rope Diameters	1/2" (13 mm), 9/16" (14 mm), 5/8" (16 mm)
Extension Shaft	Curbside or Streetside
Toolbox	Single or Dual
Optional Accessories	Aluminum or Ductile Iron Capstan Roller or Hawse Fairlead

*Does not include rope.

Performance

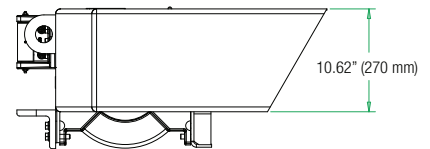
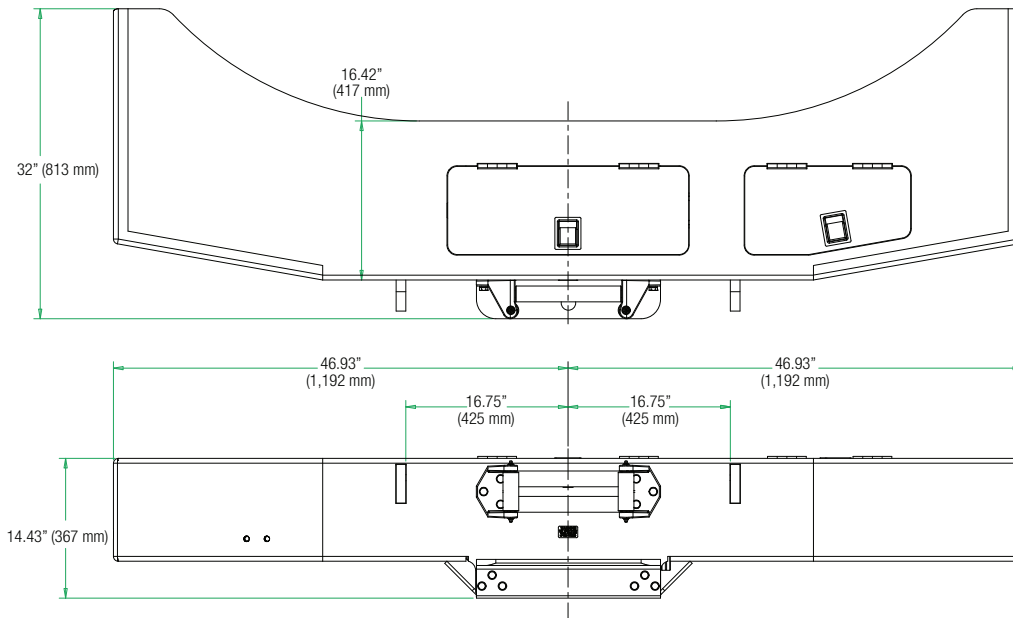
	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7
Line Pull*	20,000 lb (9,072 kg)	17,100 lb (7,756 kg)	15,000 lb (6,804 kg)	13,300 lb (6,033 kg)	11,900 lb (5,398 kg)	10,800 lb (4,899 kg)	
Line Speed*	42 fpm (12.8 mpm)	49 fpm (14.9 mpm)	56 fpm (17.1 mpm)	63 fpm (19.2 mpm)	70 fpm (21.3 mpm)	77 fpm (23.5 mpm)	
Rope Capacity							
1/2" (13 mm)	37 ft (11.3 m)	79 ft (24.1 m)	126 ft (38.4 m)	178 ft (54.3 m)	235 ft (71.6 m)	298 ft (90.8 m)	366 ft (111.6 m)**
9/16" (14 mm)	33 ft (10.1 m)	71 ft (21.6 m)	114 ft (34.7 m)	162 ft (49.4 m)	216 ft (65.8 m)	275 ft (83.8 m)**	
5/8" (16 mm)	30 ft (9.1 m)	65 ft (19.8 m)	105 ft (32 m)	150 ft (45.7 m)	201 ft (61.3 m)	257 ft (78.3 m)**	

*Based on pressure of 2,450 psi (169 bar), 30 gpm (113.5 lpm) and 11.9 CID motor with 5/8" (16 mm) rope.

**PD18C with -11/14 drum only.

Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes. Rope capacity based on 90% of theoretical.

Dimensions



Extension Shaft Rating

	7" Capstan	20" CR Reel
Line Pull	3,000 lb (1,361 kg)	1,000 lb (454 kg)
Line Speed	197 fpm (60 mpm)	560 fpm (170.7 mpm)

PD35

35,000 lb (15,876 kg) Rated Line Pull

BRADEN®

A PACCAR COMPANY

- Rugged steel construction
- Available in a variety of configurations to meet specific application needs, including:
 - Single or dual toolboxes
 - Curbside or streetside extension shaft for capstan
 - Cone holder
 - Storage only bumper option with three toolboxes, 800 lb (363 kg) carrying capacity
- SAE J706 compliant

Winch	PD35A
System Weight*	965 lb (438 kg)
Vehicle Compatibility	Heavy/Special Duty, Class 7-9
Rope Diameters	5/8" (16 mm), 3/4" (19 mm), 7/8" (22 mm)
Extension Shaft	Curbside or Streetside
Toolbox	Single or Dual
Optional Accessories	Aluminum or Ductile Iron Capstan Cone Holder 3rd Tow-Eye Attachment Roller Fairlead

*Does not include rope.

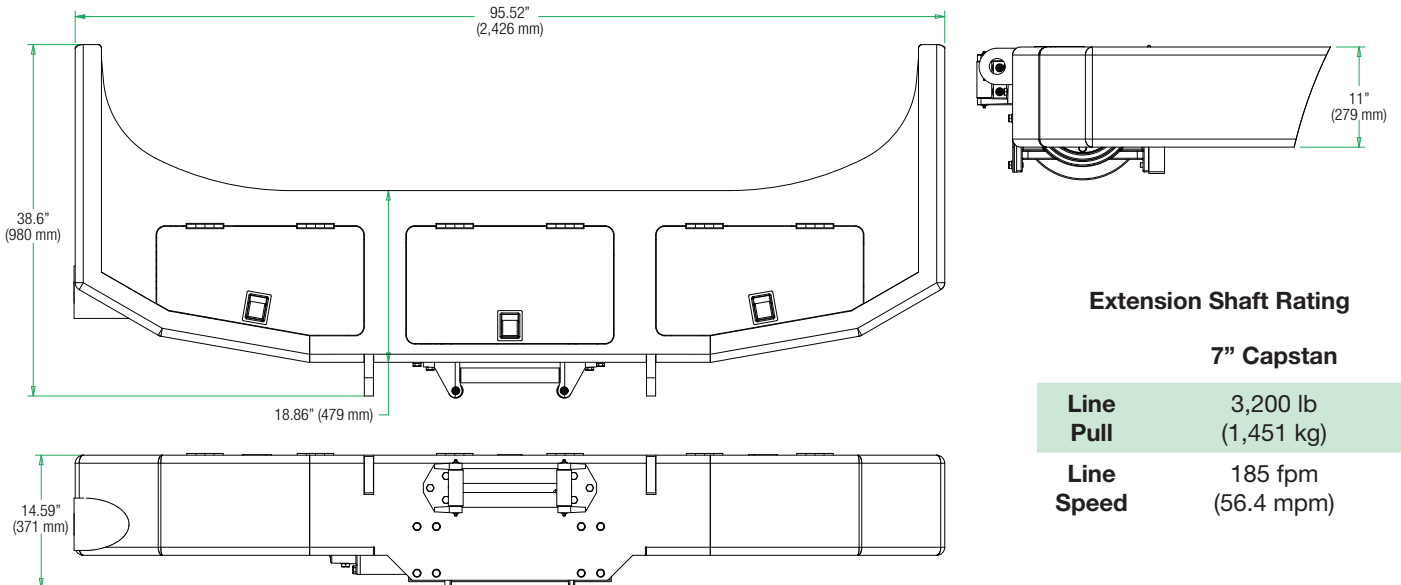
Performance

	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
Line Pull*	35,000 lb (15,876 kg)	28,690 lb (13,014 kg)	24,300 lb (11,022 kg)	21,080 lb (9,562 kg)	18,620 lb (8,446 kg)	
Line Speed*	22 fpm (6.7 mpm)	33 fpm (10.1 mpm)	39 fpm (11.9 mpm)	46 fpm (14 mpm)	52 fpm (15.8 mpm)	
Rope Capacity						
5/8" (16 mm)	31 ft (9.5 m)	67 ft (20.4 m)	109 ft (33.2 m)	157 ft (47.9 m)	211 ft (64.3 m)	271 ft (82.6 m)
3/4" (19 mm)	26 ft (7.9 m)	58 ft (17.7 m)	96 ft (29.3 m)	139 ft (42.4 m)	188 ft (57.3 m)	
7/8" (22 mm)	23 ft (7 m)	51 ft (15.5 m)	85 ft (25.9 m)	125 ft (38.1 m)		

*Based on pressure of 2,580 psi (178 bar), 30 gpm (113.5 lpm) and 11.9 CID motor with 3/4" (19 mm) rope.

Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes. Rope capacity based on 90% of theoretical.

Dimensions



Extension Shaft Rating

7" Capstan

Line Pull	3,200 lb (1,451 kg)
Line Speed	185 fpm (56.4 mpm)

HUP12

12,000 lb (13,608 kg) Rated Line Pull

BRADEN®

A PACCAR COMPANY

- Rugged steel construction
- Simple design provides ample workspace and/or allows for installation of accessories
- HUP12A is available with optional 2-speed motor

Winch	HUP12A
System Weight*	509 lb (231 kg)
Vehicle Compatibility	Medium Duty, Class 4
Rope Diameters	3/8" (10 mm), 1/2" (13 mm), 9/16" (14 mm)
Extension Shaft	Curbside or Streetside
Optional Accessories	Aluminum or Ductile Iron Capstan Roller Fairlead

*Does not include rope.

Performance

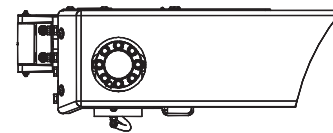
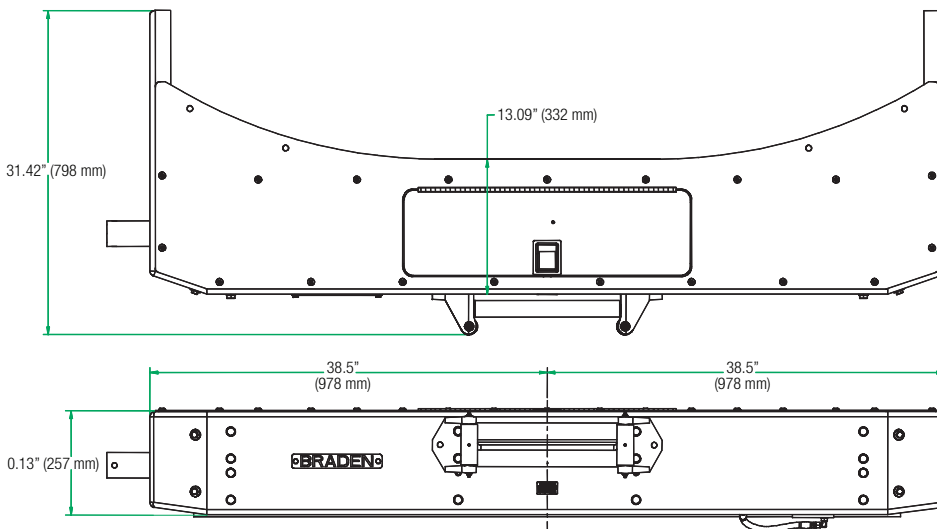
	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
Line Pull*/**	12,000 lb (5,443 kg)	9,800 lb (4,445 kg)	8,300 lb (3,765 kg)	7,200 lb (3,266 kg)	6,350 lb (2,880 kg)	
Line Speed*	51 fpm (15.5 mpm)	63 fpm (19.2 mpm)	74 fpm (22.6 mpm)	86 fpm (26.2 mpm)	97 fpm (29.6 mpm)	
Line Speed**						
LOW	40 fpm (12.2 mpm)	49 fpm (14.9 mpm)	58 fpm (17.7 mpm)	68 fpm (20.7 mpm)	77 fpm (23.5 mpm)	
HIGH	86 fpm (26.2 mpm)	105 fpm (32 mpm)	125 fpm (38.1 mpm)	144 fpm (43.9 mpm)	163 fpm (49.7 mpm)	
Rope Capacity						
3/8" (10 mm)	38 ft (11.6 m)	83 ft (25.3 m)	134 ft (40.8 m)	192 ft (58.5 m)	256 ft (78 m)	327 ft (99.7 m)
1/2" (13 mm)	30 ft (9.1 m)	66 ft (20.1 m)	109 ft (33.2 m)	158 ft (48.2 m)	211 ft (64.3 m)	
9/16" (14 mm)	26 ft (7.9 m)	59 ft (18 m)	98 ft (29.9 m)	144 ft (43.9 m)		

*Based on pressure of 2,700 psi (175 bar), 20 gpm (76 lpm) and 11.9 CID motor with 1/2" (13 mm) rope.

**Based on pressure of 2,400 psi (152 bar), 20 gpm (76 lpm) and 14.2/7.1 CID 2-speed motor with 1/2" (13 mm) rope.

Actual performance will vary dependent on hydraulic system, motor, drum and cable sizes. Rope capacity based on 90% of theoretical.

Dimensions



Extension Shaft Rating

7" Capstan 20" CR Reel 7" Capstan 20" CR Reel

Single Speed Motor

Line Pull	2,250 lb (1,021 kg)	800 lb (363 kg)
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Line Speed	86 fpm (26.2 mpm)	240 fpm (73.2 mpm)
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2-Speed Motor / LOW 2-Speed Motor / HIGH

Line Pull	2,250 lb (1,021 kg)	800 lb (363 kg)	1,600 lb (726 kg)	570 lb (259 kg)
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Line Speed	68 fpm (20.7 mpm)	195 fpm (59.4 mpm)	144 fpm (43.9 mpm)	413 fpm (125.9 mpm)
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PCD24

6,000 lb (2,722 kg) Rated Line Pull

BRADEN®

A PACCAR COMPANY

- Durable steel bumper offers fast, efficient cable pulling capabilities utilizing a simplified capstan drive
- Two toolboxes for storage
- Integrated tow-eyes
- Uninterrupted workspace can accommodate a variety of utility accessories

Capstan Drive	PCD24B
System Weight	610 lb (271 kg)
Vehicle Compatibility	Medium Duty, Class 5-7
Extension Shaft	Curbside
Toolbox	Dual
Optional Accessories	Aluminum or Ductile Iron Capstan

NOTE: PCD24B can also be deck mounted curbside or streetside.

Performance

	Pressure	Flow	7" Capstan		20" Cable Reel	
			Line Pull	Line Speed	Line Pull	Line Speed
PCD24B-08049-01	2,800 psi (193 bar)	20 gpm (76 lpm)	3,000 lb (1,361 kg)	222 fpm (67.7 mpm)	1,200 lb (544 kg)	560 fpm (170.7 mpm)
	2,500 psi (172 bar)	20 gpm (76 lpm)	4,000 lb (1,814 kg)	127 fpm (38.7 mpm)	1,600 lb (726 kg)	343 fpm (104.5 mpm)
PCD24B-08080-01	2,550 psi (176 bar)	30 gpm (114 lpm)	4,000 lb (1,814 kg)	213 fpm (64.9 mpm)	1,600 lb (726 kg)	534 fpm (162.8 mpm)
	2,700 psi (186 bar)	20 gpm (76 lpm)	6,000 lb (2,722 kg)	87 fpm (26.5 mpm)	2,400 lb (1,089 kg)	220 fpm (67.1 mpm)
PCD24B-08119-01H	2,400 psi (165 bar)	30 gpm (114 lpm)	6,000 lb (2,722 kg)	142 fpm (43.3 mpm)	2,400 lb (1,089 kg)	356 fpm (108.5 mpm)

Dimensions

