

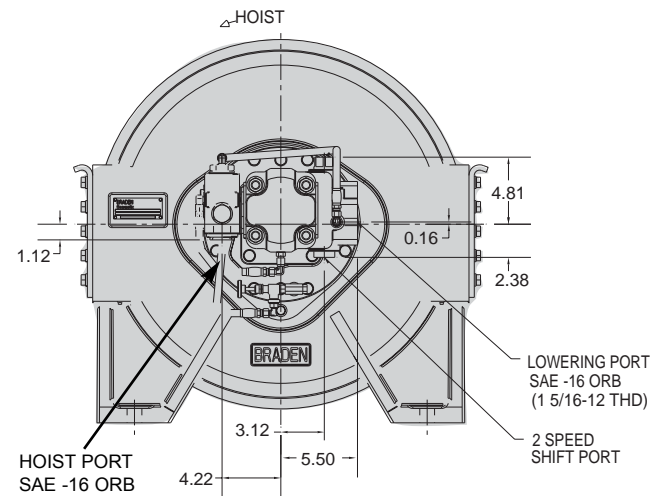
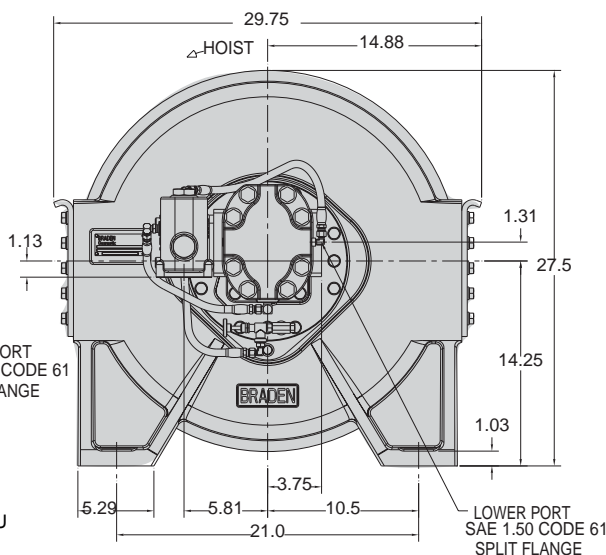
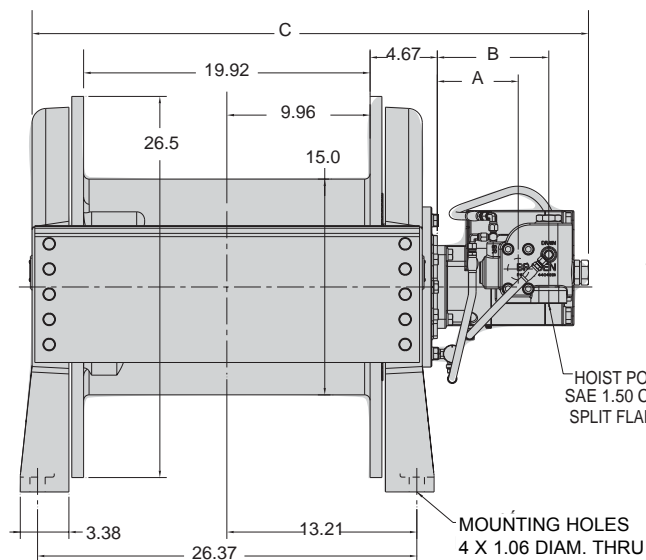


# CH210A - 01 DRUM

## 21,000 LB First Layer Line Pull

# BRADEN®

### DIMENSIONAL INFORMATION



**2-SPEED MOTOR**

MOTOR	A	B	C
090	5.38	7.50	38.44
110	5.63	7.75	38.69
120	5.75	7.88	38.82
128/064	8.56	10.56	43.68

- Increased line pull ratings to better utilize higher strength wire ropes
- Gearing is designed for improved service life at higher input RPM and higher input torque
- New brake design increases allowable input RPM, overrunning clutch capacity and oil flow to the brake
- SAE "C" and "D" motor mounts for improved hydraulic motor compatibility
- Optional electronic rotation sensor
- Same mounting hole locations and envelope size as the CH185A
- Improved serviceability

### MOTOR OPTIONS

<b>090</b>	9.02 cu in.
<b>110</b>	11.03 cu in.
<b>120</b>	12.03 cu in.
<b>128/064</b>	12.76/6.38 cu in. (2 speed)

Consult the factory for additional drum and hydraulic motor options.

**PACCAR WINCH DIVISION**  
P.O. Box 547 Broken Arrow, Oklahoma 74013  
PHONE: (918) 251-8511 FAX: (918) 259-1575  
www.paccarwinch.com

## PERFORMANCE INFORMATION

ROPE SIZE	LAYER	090 MOTOR				110 MOTOR				120 MOTOR				ROPE CAPACITY	
		9.02 CU. IN. DISP. - 3000 ΔPSI @ 125 GPM* (148 CC DISP. - 207 Δbar @ 473 LPM*)				11.03 CU. IN. DISP. - 3000 ΔPSI @ 155 GPM* (181 CC DISP. - 207 Δbar @ 587 LPM*)				12.04 CU. IN. DISP. - 3000 ΔPSI @ 170 GPM* (197 CC DISP. - 207 Δbar @ 643 LPM*)					
		LINE PULL		LINE SPEED		LINE PULL		LINE SPEED		LINE PULL		LINE SPEED			
(in.)		(LBS)	(KG)	(FPM)	(MPM)	(LBS)	(KG)	(FPM)	(MPM)	(LBS)	(KG)	(FPM)	(MPM)	ft	M
3/4	1	14,780	6,704	344	105	18,580	8,428	349	106	20,490	9,294	351	107	109	33.2
	2	13,490	6,119	377	115	16,970	7,698	382	116	18,710	8,487	384	117	228	69.5
	3	12,410	5,629	410	125	15,610	7,081	416	127	17,210	7,806	418	127	358	109
	4	11,490	5,212	443	135	14,450	6,555	449	137	15,940	7,230	451	137	498	152
	5	10,700	4,854	475	145	13,460	6,105	482	147	14,840	6,731	485	148	649	198
	6	10,010	4,541	508	155	12,590	5,711	515	157	13,880	6,296	418	127	810	247
	7	9,400	4,264	541	165	11,830	5,366	549	167	13,040	5,915	552	168	982	299
7/8	1	14,660	6,650	347	106	18,440	8,364	352	107	20,330	9,222	354	108	94	28.7
	2	13,200	5,988	385	117	16,610	7,534	391	119	18,310	8,305	393	120	199	60.7
	3	12,010	5,448	423	129	15,110	6,854	429	131	16,650	7,552	432	132	314	95.7
	4	11,020	4,999	462	141	13,860	6,287	468	143	15,280	6,931	471	144	439	134
	5	10,170	4,613	500	152	12,800	5,806	507	155	14,110	6,400	510	155	575	175
	6	9,450	4,287	538	164	11,890	5,393	546	166	13,100	5,942	549	167	721	220

\*Consult factory for flows above 120 GPM (454 LPM)

ROPE SIZE	LAYER	TWO SPEED MOTOR							
		LOW SPEED				HIGH SPEED			
		12.74 CU. IN. DISP. - 2650 ΔPSI @ 85 GPM (209 CC DISP. - 183 Δbar @ 322 LPM)				6.38 CU. IN. DISP. - 2500 ΔPSI @ 85 GPM (105 CC DISP. - 172 Δbar @ 322 LPM)			
(in.)		(LBS)	(KG)	(FPM)	(MPM)	(LBS)	(KG)	(FPM)	(MPM)
3/4	1	21,400	9,707	158	48	9,690	4,395	324	99
	2	19,540	8,863	173	53	8,850	4,014	355	108
	3	17,970	8,151	188	57	8,140	3,692	386	118
	4	16,640	7,548	204	62	7,540	3,420	417	127
	5	15,490	7,026	219	67	7,020	3,184	448	137
	6	14,500	6,577	234	71	6,570	2,980	479	146
	7	13,620	6,178	249	76	6,170	2,799	510	155
7/8	1	21,400	9,707	160	49	9,690	4,395	327	100
	2	19,270	8,741	177	54	8,730	3,960	363	111
	3	17,530	7,952	195	59	7,940	3,602	399	122
	4	16,080	7,294	212	65	7,280	3,302	435	133
	5	14,850	6,736	230	70	6,730	3,053	471	144
	6	13,790	6,255	248	76	6,250	2,835	507	155

**MINIMUM FLOW RECOMMENDATION FOR SMOOTH OPERATION**  
(RECOMMENDED MINIMUM **SYSTEM** FLOW SHOULD BE 2X THESE VALUES)

MOTOR	GPM	LPM
090	24	91
110	27	102
120	28	106
128/064	CONSULT FACTORY	

## NOTES

Specifications are subject to change without notification and without incurring obligation. Pressure and flow shown are the maximum allowable for the particular combination of winch, ratio, motor and drum. Specifications in this publication are theoretical and may vary depending on hydraulic system, environment, etc. Line pulls are maximum ratings for the winch only. Wire rope ratings may be lower than the winch rating. Consult the wire rope manufacturer for ratings

## ⚠ WARNING ⚠

A minimum of 5 wraps of wire rope must be left on the drum to prevent the load from being supported by the wire rope anchor alone. Since the wire rope anchor is not designed to hold the rated load, failure to leave 5 wraps of wire rope on the drum could cause the load to drop, which could result in property damage, injury or death.

## OPTIONS

**Consult the factory for high pressure piston motors and available ratios.**

## COMMITMENT

Every process in the design, manufacture and support of BRADEN products is focused on one goal: Providing the highest quality winch, hoist and drive systems in the world. PACCAR Winch Division is committed to providing the best in product functionality and reliability. Since 1905 PACCAR Inc has provided high quality products and services to numerous markets and countries. Let us put our experience and expertise to work for you.

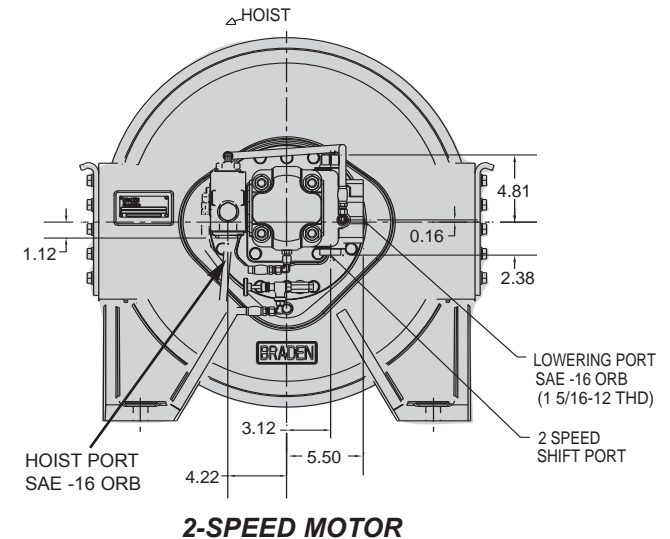
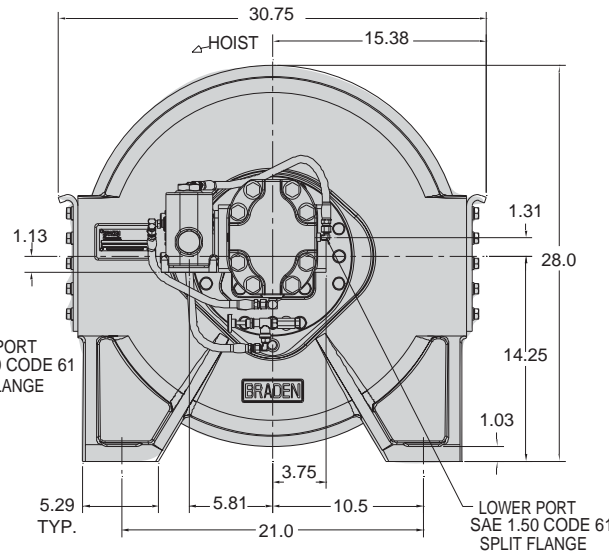
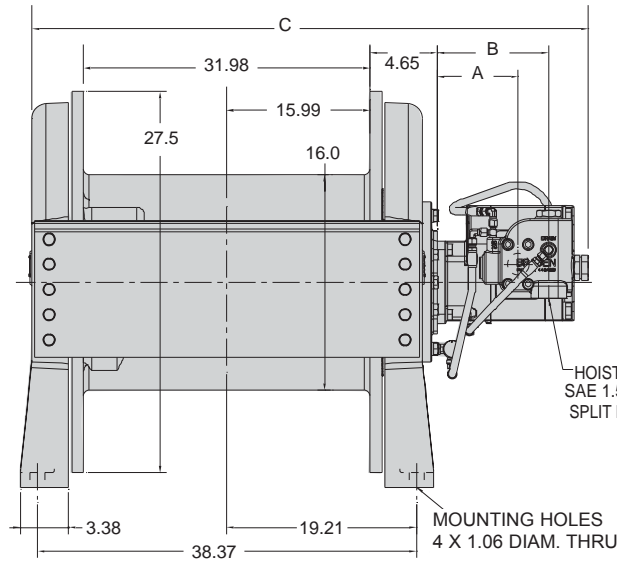


# CH210A - 02 DRUM

## 20,000 LB First Layer Line Pull

# BRADEN®

### DIMENSIONAL INFORMATION



MOTOR	A	B	C
090	5.38	7.50	50.44
110	5.63	7.75	50.69
120	5.75	7.88	50.82
128/064	8.56	10.56	55.69

- Increased line pull ratings to better utilize higher strength wire ropes
- Gearing is designed for improved service life at higher input RPM and higher input torque
- New brake design increases allowable input RPM, overrunning clutch capacity and oil flow to the brake
- SAE "C" and "D" motor mounts for improved hydraulic motor compatibility
- Optional electronic rotation sensor
- Same mounting hole locations and envelope size as the CH185A
- Improved serviceability

**2-SPEED MOTOR**

### MOTOR OPTIONS

<b>090</b>	9.02 cu in.
<b>110</b>	11.03 cu in.
<b>120</b>	12.03 cu in.
<b>128/064</b>	12.76/6.38 cu in. (2 speed)

Consult the factory for additional drum and hydraulic motor options.

**PACCAR WINCH DIVISION**  
P.O. Box 547 Broken Arrow, Oklahoma 74013  
PHONE: (918) 251-8511 FAX: (918) 259-1575  
[www.paccarwinch.com](http://www.paccarwinch.com)



**PERFORMANCE INFORMATION**

ROPE SIZE	LAYER	090 MOTOR				110 MOTOR				120 MOTOR				ROPE CAPACITY	
		9.02 CU. IN. DISP. - 3000 ΔPSI @ 125 GPM** (148 CC DISP. - 207 Δbar @ 473 LPM*)				11.03 CU. IN. DISP. - 3000 ΔPSI @ 155 GPM** (181 CC DISP. - 207 Δbar @ 587 LPM*)				12.04 CU. IN. DISP. - 3000 ΔPSI @ 170 GPM** (197 CC DISP. - 207 Δbar @ 643 LPM*)					
		LINE PULL		LINE SPEED		LINE PULL		LINE SPEED		LINE PULL		LINE SPEED			
(in.)		(LBS)	(KG)	(FPM)	(MPM)	(LBS)	(KG)	(FPM)	(MPM)	(LBS)	(KG)	(FPM)	(MPM)	ft	M
3/4	1	13,890	6,301	366	112	17,470	7,924	371	113	19,270	8,741	373	114	186	56.7
	2	12,750	5,783	399	122	16,040	7,276	404	123	17,680	8,020	407	124	389	119
	3	11,780	5,343	432	132	14,820	6,722	438	134	16,340	7,412	440	134	609	186
	4	10,950	4,967	465	142	13,770	6,246	471	144	15,190	6,890	474	144	846	258
	5	10,230	4,640	497	151	12,870	5,838	504	154	14,180	6,432	507	155	1,099	335
	6	9,600	4,355	530	162	12,070	5,475	538	164	13,310	6,037	541	165	1,369	417
	7*	9,040	4,101	563	172	11,370	5,157	571	174	12,530	5,684	574	175	1,656	505
7/8	1	13,790	6,255	369	112	17,340	7,865	374	114	19,120	8,673	376	115	161	49.1
	2	12,500	5,670	407	124	15,710	7,126	413	126	17,330	7,861	415	126	339	103
	3	11,420	5,180	445	136	14,370	6,518	452	138	15,840	7,185	454	138	533	162
	4	10,520	4,772	484	148	13,230	6,001	490	149	14,580	6,613	493	150	744	227
	5	9,750	4,423	522	159	12,260	5,561	529	161	13,520	6,133	532	162	972	296
	6*	9,080	4,119	560	171	11,420	5,180	568	173	12,590	5,711	571	174	1,217	371

\* This layer does not comply with ANSI standard B30.5 for 1/2 inch exposed flange.

\*\* Consult factory for flows above 120 GPM (454 LPM)

**NOTES**

Specifications are subject to change without notification and without incurring obligation. Pressure and flow shown are the maximum allowable for the particular combination of winch, ratio, motor and drum. Specifications in this publication are theoretical and may vary depending on hydraulic system, environment, etc. Line pulls are maximum ratings for the winch only. Wire rope ratings may be lower than the winch rating. Consult the wire rope manufacturer for ratings

ROPE SIZE	LAYER	TWO SPEED MOTOR							
		LOW SPEED				HIGH SPEED			
		12.74 CU. IN. DISP. - 2920 ΔPSI @ 85 GPM (209 CC DISP. - 201 Δbar @ 322 LPM)				6.38 CU. IN. DISP. - 2920 ΔPSI @ 85 GPM (105 CC DISP. - 201 Δbar @ 322 LPM)			
(in.)		(LBS)	(KG)	(FPM)	(MPM)	(LBS)	(KG)	(FPM)	(MPM)
3/4	1	20,120	9,126	168	51	9,110	4,132	345	105
	2	18,470	8,378	183	56	8,360	3,792	376	115
	3	17,060	7,738	199	61	7,730	3,506	406	124
	4	15,860	7,194	214	65	7,180	3,257	437	133
	5	14,810	6,718	229	70	6,710	3,044	468	143
	6	13,900	6,305	244	74	6,290	2,853	499	152
	7*	13,090	5,938	259	79	5,930	2,690	530	162
7/8	1	19,970	9,058	170	52	9,050	4,105	347	106
	2	18,090	8,206	187	57	8,200	3,720	383	117
	3	16,540	7,503	205	62	7,490	3,397	419	128
	4	15,230	6,908	223	68	6,900	3,130	455	139
	5	14,120	6,405	240	73	6,390	2,899	491	150
	6*	13,150	5,965	258	79	5,960	2,703	528	161

\* This layer does not comply with ANSI standard B30.5 for 1/2 inch exposed flange.

**MINIMUM FLOW RECOMMENDATION FOR SMOOTH OPERATION**

(RECOMMENDED MINIMUM SYSTEM FLOW SHOULD BE 2X THESE VALUES)

MOTOR	GPM	LPM
090	24	91
110	27	102
120	28	106
128/064	CONSULT FACTORY	

**OPTIONS**

Consult the factory for high pressure piston motors and available ratios.

**WARNING**

A minimum of 5 wraps of wire rope must be left on the drum to prevent the load from being supported by the wire rope anchor alone. Since the wire rope anchor is not designed to hold the rated load, failure to leave 5 wraps of wire rope on the drum could cause the load to drop, which could result in property damage, injury or death.

**COMMITMENT**

Every process in the design, manufacture and support of BRADEN products is focused on one goal: Providing the highest quality winch, hoist and drive systems in the world. PACCAR Winch Division is committed to providing the best in product functionality and reliability.

Since 1905 PACCAR Inc has provided high quality products and services to numerous markets and countries. Let us put our experience and expertise to work for you.