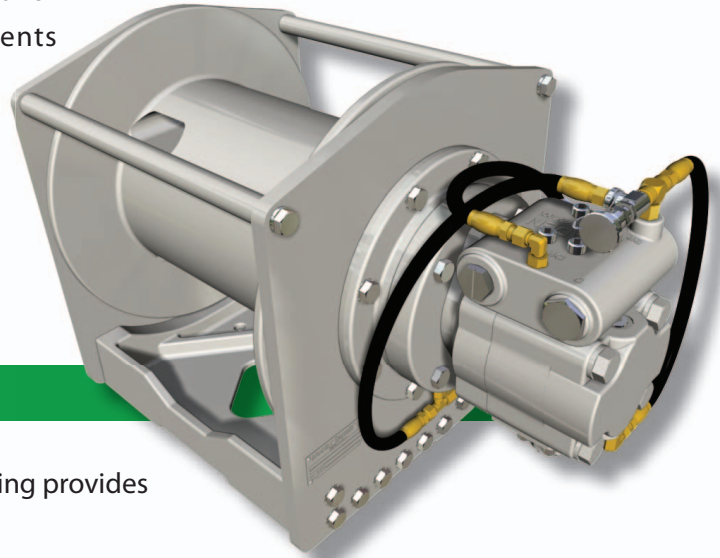


The BRADEN PD12 delivers superior performance and unrivaled durability in a wide range of hoisting applications. The power drum design and patented BRADEN brake valve provide outstanding reliability and control for maximum productivity. Robust winch construction and precision gear manufacturing ensure long-lasting operation. More than 200 standard configurations are available to meet the demanding requirements of mobile and offshore platform cranes, personnel handling systems for drilling and service rigs, and many other applications. Proven performance plus ease of service make the PD12 the first choice for design engineers, operators, and service technicians alike.



Features/Benefits

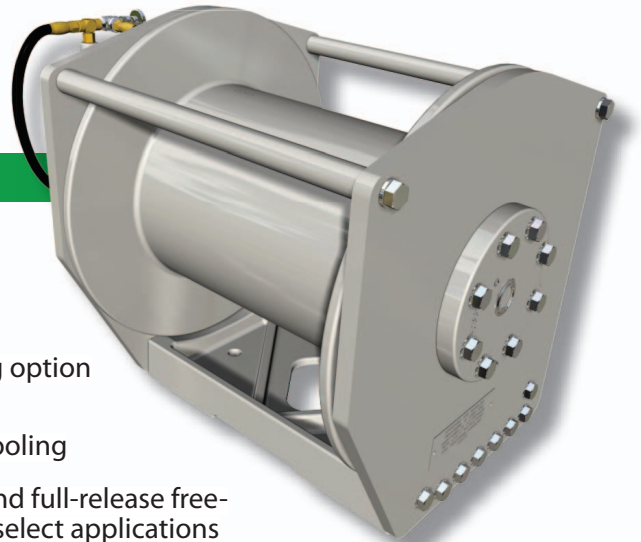
- Sealed, high-efficiency planetary reduction gearing provides continuous-duty performance
- Shave-finished, crowned gears produce smooth, quiet operation, optimal load-carrying capacity, and ultimately longer gear life
- Patented BRADEN brake valve* works in conjunction with the overrunning clutch and spring-applied, hydraulically-released multi-disc brake for precise control and fail-safe (3:1 safety factor) load handling
- High-efficiency, anti-friction bearings used throughout hoist to ensure long service life
- Three-piece drum base for maximum installation versatility

* gear motor models

Options

- Choose from four gear ratios, four drum sizes, and multiple high-efficiency gear or piston motor options for optimum performance
- API Specification 2C-compliant personnel handling option expands functionality for crane and rig usage
- Smooth or grooved** cable drum for improved spooling
- Controlled free-fall (CF) for improved cycle times and full-release free-fall (FF) for emergency load-lowering capability in select applications
- Underwind configuration available for clockwise hoisting
- Tension roller kits available for enhanced productivity

** -02 drum



PD12C PLANETARY HOIST

12,000 lb (5,455 kg)



Model Identification

BRADEN planetary hoists are available in a wide variety of configurations with optional drums, gear ratios, and motor displacements to meet your requirements.

The configuration may be determined by this model numbering system:

PD	12	C	—	FF	—	41	V	039	—	02	G	R	—	1
POWER DRUM	MAX RATING	MODEL SERIES		OPTION		GEAR RATIO	MOTOR TYPE	MOTOR SIZE*		DRUM CODE	DRUM AND BASE OPTIONS			

CHARACTER	DESIGNATION
PD	POWER DRUM
12	MAXIMUM RATED FIRST-LAYER LINE PULL CAPACITY, LB (X 1,000)
C	MODEL SERIES (DESIGN CHANGES)
FF/CF	FF=FULL-RELEASE FREE FALL OPTION / CF = CONTROLLED FREE FALL
41	TOTAL GEAR REDUCTION RATIO (THE PD12C IS AVAILABLE IN 21:1, 29:1, 41:1, and 59:1 RATIOS)
V/P	V=VARIABLE-DISPLACEMENT PISTON MOTOR / P=FIXED-DISPLACEMENT PISTON MOTOR / NO LETTER= SINGLE OR TWO-SPEED GEAR MOTOR
039	HYDRAULIC MOTOR DISPLACEMENT, CU INCHES/REV – FIGURES SEPARATED BY “/” INDICATE TWO-SPEED MOTOR
02	DRUM CODE - DESIGNATES DRUM SIZE
U	UNDERWIND (CLOCKWISE HOISTING) OPTION
L	LEFT-HAND BASE OPTION
G	GROOVED CABLE DRUM OPTION
R	TENSION ROLLER OPTION
1	API SPECIFICATION 2C COMPLIANCE OPTION - PERMITS LIFTING & LOWERING OF PERSONNEL FOR OFFSHORE CRANE APPLICATIONS

* WHERE NO MOTOR IS SPECIFIED, “000” OR SAE MOTOR SHAFT AND BOLT PATTERN (FOR EXAMPLE, “C4C”) WILL BE PROVIDED

Performance

**-01 DRUM
Single-speed
Motor**

RATIO		59:1						41:1					
MOTOR	051 (5.1 cu in.)	039 (3.92 cu in.)	029 (2.94 cu in.)				064 (6.38 cu in.)	051 (5.1 cu in.)		039 (3.92 cu in.)			
PRESSURE	1,705 psi	2,400 psi	3,000 psi				1,900 psi	2,430 psi		3,000 psi			
FLOW	75 gpm	65 gpm	50 gpm				80 gpm	75 gpm		65 gpm			
WIRE ROPE DIA		1/2 in.						1/2 in.					
LAYER	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	
1	12,000	144	12,000	161	10,920	161	12,000	175	12,000	204	10,540	228	
2	10,930	158	10,930	176	9,950	176	10,930	192	10,930	224	9,600	250	
3	10,040	172	10,040	191	9,140	191	10,040	209	10,040	244	8,820	272	
4	9,280	186	9,280	207	8,450	207	9,280	226	9,280	264	8,150	294	
WIRE ROPE DIA		9/16 in.						9/16 in.					
1	12,000	145	12,000	162	10,920	162	12,000	176	12,000	205	10,540	229	
2	10,820	160	10,820	179	9,850	179	10,820	195	10,820	227	9,500	254	
3	9,850	176	9,860	196	8,960	196	9,850	214	9,850	250	8,650	279	
4*	9,050	192	9,040	214	8,230	214	9,040	233	9,040	272	7,940	304	

* Layer does not meet ANSI B30.7

RATIO		59:1						41:1					
MOTOR	051 (83.6 cc)	039 (64.2 cc)	029 (48.2 cc)				064 (104.5 cc)	051 (83.6 cc)		039 (64.2 cc)			
PRESSURE	118 bar	166 bar	207 bar				131 bar	168 bar		206 bar			
FLOW	283.9 lpm	246 lpm	189.3 lpm				303 lpm	284 lpm		246 lpm			
WIRE ROPE DIA		13 mm						13 mm					
LAYER	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	
1	5,445	44	5,445	49	4,955	49	5,445	53	5,445	62	4,780	69	
2	4,960	48	4,960	54	4,515	54	4,960	59	4,960	68	4,355	76	
3	4,555	52	4,555	58	4,145	58	4,555	64	4,555	74	4,000	83	
4	4,210	57	4,210	63	3,830	63	4,210	69	4,210	80	3,695	90	
WIRE ROPE DIA		14 mm						14 mm					
1	5,445	44	5,445	49	4,955	49	5,455	54	5,445	63	4,780	70	
2	4,910	49	4,910	55	4,470	55	4,910	59	4,910	69	4,315	77	
3	4,470	54	4,470	60	4,065	60	4,470	65	4,470	76	3,930	85	
4*	4,100	59	4,100	65	3,735	65	4,100	71	4,100	83	3,605	93	

* Layer does not meet ANSI B30.7

PD12C PLANETARY HOIST

12,000 lb (5,455 kg)



Performance (cont.)

-02 DRUM
Single-speed
Motor

RATIO		59:1						41:1					
MOTOR	051 (5.1 cu in.)	039 (3.92 cu in.)		029 (2.94 cu in.)		064 (6.38 cu in.)		051 (5.1 cu in.)		039 (3.92 cu in.)			
PRESSURE	1,720 psi	2,400 psi		3,000 psi		1,900 psi		2,430 psi		3,000 psi			
FLOW	75 gpm	65 gpm		50 gpm		80 gpm		75 gpm		65 gpm			
WIRE ROPE DIA		1/2 in.						1/2 in.					
LAYER	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	
1	12,000	144	12,000	160	11,000	160	12,000	175	12,000	204	10,600	227	
2	10,930	158	10,930	176	10,010	176	10,930	192	10,930	224	9,660	250	
3	10,040	172	10,040	191	9,190	191	10,040	209	10,040	244	8,870	272	
4	9,280	186	9,280	207	8,500	207	9,280	226	9,280	264	8,200	294	
5	8,630	200	8,630	223	7,900	223	8,630	243	8,630	284	7,630	316	
6	8,070	214	8,070	239	7,380	239	8,070	260	8,070	304	7,130	339	
WIRE ROPE DIA		9/16 in.						9/16 in.					
1	12,000	144	12,000	161	10,920	161	12,000	176	12,000	205	10,540	229	
2	10,820	160	10,820	179	9,850	179	10,820	195	10,820	227	9,510	254	
3	9,860	176	9,860	196	8,970	196	9,860	214	9,860	250	8,660	279	
4	9,050	192	9,050	214	8,230	214	9,050	233	9,050	272	7,950	304	
5	8,360	207	8,360	231	7,610	231	8,360	252	8,360	294	7,350	328	

RATIO		59:1						41:1					
MOTOR	051 (83.6 cc)	039 (64.2 cc)		029 (48.2 cc)		064 (104.5 cc)		051 (83.6 cc)		039 (64.2 cc)			
PRESSURE	118 bar	166 bar		207 bar		131 bar		168 bar		206 bar			
FLOW	283.9 lpm	246 lpm		189.3 lpm		303 lpm		284 lpm		246 lpm			
WIRE ROPE DIA		13 mm						13 mm					
LAYER	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	
1	5,455	44	5,455	49	4,990	49	5,455	53	5,455	62	4,820	69	
2	4,970	48	4,970	54	4,550	54	4,970	59	4,970	68	4,390	76	
3	4,565	52	4,565	58	4,175	58	4,565	64	4,565	74	4,030	83	
4	4,220	57	4,220	63	3,865	63	4,220	69	4,220	80	3,725	90	
5	3,925	61	3,925	68	3,590	68	3,925	74	3,925	87	3,470	96	
6	3,665	65	3,665	73	3,355	73	3,665	79	3,665	93	3,240	103	
WIRE ROPE DIA		14 mm						14 mm					
1	5,455	44	5,455	49	4,965	49	5,455	54	5,455	62	4,790	70	
2	4,920	49	4,920	55	4,480	55	4,920	59	4,920	69	4,325	77	
3	4,480	54	4,480	60	4,080	60	4,480	65	4,480	76	3,935	85	
4	4,115	59	4,115	65	3,740	65	4,115	71	4,115	83	3,615	93	
5	3,800	63	3,800	70	3,460	70	3,800	77	3,800	90	3,340	100	

Performance (cont.)

-02 DRUM
Single-speed
Motor (cont.)

RATIO	29:1		21:1	
MOTOR	064 (6.38 cu in.)	051 (5.1 cu in.)	064 (6.38 cu in.)	051 (5.1 cu in.)
PRESSURE	2,700 psi	3,000 psi	3,000 psi	3,000 psi
FLOW	80 gpm	75 gpm	80 gpm	75 gpm

WIRE ROPE DIA		1/2 in.				1/2 in.			
LAYER	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	
1	12,000	249	10,440	290	9,570	345	7,500	405	
2	10,930	273	9,520	319	8,720	379	6,830	444	
3	10,040	297	8,740	347	8,010	413	6,270	484	
4	9,280	322	8,080	376	7,400	447	5,800	523	
5	8,630	346	7,510	404	6,880	480	5,390	563	
6	8,070	370	7,020	432	6,430	514	5,040	602	

WIRE ROPE DIA		9/16 in.				9/16 in.			
LAYER	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	
1	12,000	250	10,380	292	9,570	349	7,450	407	
2	10,820	277	9,370	324	8,630	387	6,720	451	
3	9,860	305	8,530	356	7,860	425	6,120	496	
4	9,050	332	7,830	387	7,210	463	5,620	540	
5	8,360	359	7,240	419	6,600	501	5,200	584	

RATIO	29:1		21:1	
MOTOR	064 (104.5 cc)	051 (83.6 cc)	064 (104.5 cc)	051 (83.6 cc)
PRESSURE	186 bar	207 bar	207 bar	
FLOW	303 lpm	284 lpm	303 lpm	284 lpm

WIRE ROPE DIA		13 mm				13 mm			
LAYER	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	
1	5,455	76	4,745	88	4,395	105	3,410	123	
2	4,970	83	4,325	97	4,005	116	3,105	135	
3	4,565	91	3,975	106	3,675	126	2,850	148	
4	4,220	98	3,675	115	3,400	136	2,635	159	
5	3,925	105	3,415	123	3,160	146	2,450	172	
6	3,665	113	3,190	132	2,955	157	2,295	183	

WIRE ROPE DIA		14 mm				14 mm			
LAYER	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	
1	5,455	76	4,720	89	4,370	106	3,385	124	
2	4,920	84	4,260	99	3,940	117	3,055	137	
3	4,480	93	3,875	109	3,585	129	2,780	151	
4	4,115	101	3,560	118	3,295	141	2,555	165	
5	3,800	109	3,290	128	3,045	152	2,365	178	

PD12C PLANETARY HOIST

12,000 lb (5,455 kg)



Performance (cont.)

-02 DRUM
Two-speed
Motor

RATIO		59:1				41:1			
MOTOR	Low: 049 (4.9 cu in.)	High: 024 (2.4 cu in.)		Low: 049 (4.9 cu in.)		High: 024 (2.4 cu in.)			
PRESSURE	1,925 psi				2,730 psi				
FLOW	40 gpm				40 gpm				
WIRE ROPE DIA	1/2 in.				1/2 in.				
LAYER	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	
1	12,000	66	5,600	150	12,000	94	5,590	213	
2	10,930	72	5,100	164	10,940	103	5,090	233	
3	10,040	79	4,680	179	10,040	112	4,680	254	
4	9,280	85	4,330	193	9,280	121	4,320	275	
5	8,630	92	4,030	208	8,630	130	4,020	295	
6	8,060	98	3,760	223	8,070	140	3,760	316	
WIRE ROPE DIA	9/16 in.				9/16 in.				
1	12,000	67	5,530	150	12,000	94	5,590	214	
2	10,820	74	4,980	167	10,820	105	5,040	237	
3	9,850	81	4,540	183	9,860	115	4,590	260	
4	9,040	88	4,170	199	9,050	125	4,220	283	
5	8,350	95	3,850	216	8,360	135	3,900	307	

* Layer does not meet ANSI B30.7

RATIO		59:1				41:1			
MOTOR	Low: 049 (80.3 cc)	High: 024 (40.1 cc)		Low: 049 (80.3 cc)		High: 024 (40.1 cc)			
PRESSURE	133 bar				188 bar				
FLOW	151.4 lpm				151.4 lpm				
WIRE ROPE DIA	13 mm				13 mm				
LAYER	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	
1	5,455	20	2,545	46	5,455	29	2,540	65	
2	4,970	22	2,320	50	4,975	31	2,315	71	
3	4,565	24	2,125	55	4,565	34	2,125	77	
4	4,220	26	1,970	59	3,220	37	1,965	84	
5	3,925	28	1,830	63	3,925	40	1,85	90	
6	3,665	30	1,710	68	3,670	43	1,710	96	
WIRE ROPE DIA	14 mm				14 mm				
1	5,455	67	2,545	46	5,455	95	2,540	65	
2	4,920	74	2,295	51	4,920	105	2,290	72	
3	4,480	81	2,090	56	4,475	115	2,085	79	
4	4,110	88	1,920	61	4,110	125	1,915	87	
5	3,795	95	1,775	66	3,795	136	1,770	94	

* Layer does not meet ANSI B30.7

Performance (cont.)

-02 DRUM
Two-speed
Motor (cont.)

RATIO	29:1	
MOTOR	Low: 049 (4.9 cu in.)	High: 024 (2.4 cu in.)
PRESSURE	3,000 psi	
FLOW	40 gpm	

WIRE ROPE DIA 1/2 in.

LAYER	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)
1	9,260	134	4,320	303
2	8,440	147	3,940	332
3	7,750	160	3,610	361
4	7,160	173	3,340	391
5	6,660	186	3,110	420
6	6,220	199	2,900	450

WIRE ROPE DIA 9/16 in.

1	9,260	134	4,320	305
2	8,350	149	3,900	337
3	7,600	164	3,550	371
4	6,980	178	3,250	404
5	6,450	193	3010	437

* Layer does not meet ANSI B30.7

RATIO	29:1	
MOTOR	Low: 049 (80.3 cc)	High: 024 (40.1 cc)
PRESSURE	207 bar	
FLOW	151.4 lpm	

WIRE ROPE DIA 13 mm

LAYER	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)
1	4,210	41	1,965	92
2	3,835	45	1,790	101
3	3,525	49	1,640	110
4	3,255	53	1,520	119
5	3,025	57	1,415	128
6	2,825	61	1,320	137

WIRE ROPE DIA 14 mm

1	4,210	41	1,965	93
2	3,795	45	1,335	103
3	3,455	50	1,615	113
4	3,175	55	1,475	123
5	2,930	59	1,370	133

* Layer does not meet ANSI B30.7

PD12C PLANETARY HOIST

12,000 lb (5,455 kg)



Performance (cont.)

-04 DRUM
Single-speed
Motor

RATIO		59:1						41:1					
MOTOR	051 (5.1 cu in.)	039 (3.92 cu in.)		029 (2.94 cu in.)		064 (6.38 cu in.)	051 (5.1 cu in.)		039 (3.92 cu in.)				
PRESSURE	1,720 psi	2,400 psi		3,000 psi		1,900 psi	2,430 psi		3,000 psi				
FLOW	75 gpm	65 gpm		50 gpm		80 gpm	75 gpm		65 gpm				
WIRE ROPE DIA		1/2 in.						1/2 in.					
LAYER	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	
1	11,000	156	11,000	174	10,120	174	11,000	189	11,000	221	9,770	185	
2	10,090	170	10,090	189	9,290	189	10,090	207	10,090	241	8,970	202	
3	9,320	184	9,320	205	8,580	205	9,320	224	9,320	261	8,280	218	
4	8,660	198	8,660	221	7,970	221	8,660	241	8,660	281	7,700	235	
5	8,090	212	8,090	236	7,450	236	8,090	258	8,090	301	7,190	252	
6	7,590	226	7,590	252	6,980	252	7,590	275	7,590	321	6,740	268	
7	7,140	240	7,140	268	6,580	268	7,140	292	7,140	341	6,350	285	
8	6,750	254	6,750	283	6,210	283	6,750	309	6,750	361	6,000	302	
9*	6,400	268	6,400	299	5,890	299	6,400	326	6,400	381	5,680	318	
WIRE ROPE DIA		9/16 in.						9/16 in.					
1	11,000	157	11,000	175	10,070	175	11,000	190	11,000	222	9,720	186	
2	10,000	172	10,000	192	9,150	192	10,000	210	10,000	245	8,830	205	
3	9,160	188	9,160	210	8,390	210	9,160	229	9,160	267	8,100	223	
4	8,460	204	8,460	227	7,740	227	8,460	248	8,460	289	7,470	242	
5	7,850	220	7,850	245	7,190	245	7,850	267	7,850	312	6,940	261	
6	7,330	235	7,330	262	6,710	262	7,330	286	7,330	334	6,480	279	
7	6,870	251	6,870	280	6,290	280	6,870	305	6,870	356	6,070	298	
8*	6,470	267	6,470	298	5,920	298	6,470	324	6,470	379	5,710	317	
WIRE ROPE DIA		5/8 in.						5/8 in.					
1	11,000	157	11,000	176	10,020	176	11,000	192	11,000	224	9,660	187	
2	9,900	175	9,900	195	9,020	195	9,900	213	9,900	249	8,700	208	
3	9,000	192	9,000	215	8,210	215	9,000	234	9,000	274	7,910	229	
4	8,250	210	8,250	235	7,530	234	8,250	256	8,250	299	7,250	250	
5	7,610	227	7,610	254	6,950	253	7,610	277	7,610	323	6,690	270	
6	7,070	245	7,070	274	6,460	273	7,070	298	7,070	348	6,210	291	
7	6,600	262	6,600	293	6,030	292	6,600	320	6,600	373	5,800	312	

* Layer does not meet ANSI B30.7

Performance (cont.)

-04 DRUM
Single-speed
Motor (cont.)

RATIO		59:1						41:1					
MOTOR	051 (83.6 cc)	039 (64.2 cc)	029 (48.2 cc)				064 (104.5 cc)	051 (83.6 cc)	039 (64.2 cc)				
PRESSURE	118 bar	166 bar	207 bar				131 bar	168 bar	207 bar				
FLOW	283.9 lpm	246 lpm	189.3 lpm				303 lpm	284 lpm	246 lpm				
WIRE ROPE DIA		13 mm						13 mm					
LAYER	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	
1	5,000	48	5,000	53	4,600	53	5,000	58	5,000	67	4,440	56	
2	4,585	52	4,585	58	4,225	58	4,585	63	4,585	73	4,075	62	
3	4,235	56	4,236	62	3,900	62	4,235	68	4,235	80	3,765	66	
4	3,935	60	3,935	67	3,625	67	3,935	73	3,935	86	3,500	72	
5	3,680	65	3,680	72	3,385	72	3,680	79	3,680	92	3,270	77	
6	3,450	69	3,450	77	3,175	77	3,450	84	3,450	98	3,065	82	
7	3,245	73	3,245	82	2,990	82	3,245	89	3,245	104	2,885	87	
8	3,070	77	3,070	86	2,825	86	3,080	94	3,070	110	2,725	92	
9*	2,910	82	2,910	91	2,680	91	2,910	99	2,910	116	2,580	97	
WIRE ROPE DIA		14 mm						14 mm					
1	5,000	48	5,000	53	4,575	53	5,000	58	5,000	68	4,420	57	
2	4,545	52	4,545	59	4,160	59	4,545	64	4,545	75	4,015	62	
3	4,165	57	4,165	64	3,815	64	4,165	70	4,165	81	3,680	68	
4	3,845	62	3,845	69	3,520	69	3,845	76	3,845	88	3,395	74	
5	3,570	67	3,570	75	3,270	75	3,570	81	3,570	95	3,155	80	
6	3,330	72	3,335	80	3,050	80	3,330	87	3,330	102	2,945	85	
7	3,125	77	3,125	85	2,860	85	3,125	93	3,125	109	2,760	91	
8*	2,940	81	2,940	91	2,690	91	2,940	99	2,940	116	2,595	97	
WIRE ROPE DIA		16 mm						16 mm					
1	5,000	48	5,000	54	4,555	54	5,000	59	5,000	68	4,390	57	
2	4,500	53	4,500	59	4,100	59	4,500	65	4,500	76	3,955	63	
3	4,090	59	4,090	66	3,730	66	4,090	71	4,090	84	3,595	70	
4	3,750	64	3,750	72	3,425	71	3,750	78	3,750	91	3,295	76	
5	3,460	69	3,460	77	3,160	77	3,460	84	3,460	98	3,040	82	
6	3,215	75	3,215	84	2,935	83	3,215	91	3,215	106	2,825	89	
7	3,000	80	3,000	89	2,740	89	3,000	98	3,000	114	2,635	95	

* Layer does not meet ANSI B30.7

PD12C PLANETARY HOIST

12,000 lb (5,455 kg)



Performance (cont.)

-04 DRUM
Single-speed
Motor (cont.)

RATIO		29:1				21:1				
MOTOR	064 (6.38 cu in.)	051 (5.1 cu in.)		064 (6.38 cu in.)		051 (5.1 cu in.)				
PRESSURE	2,700 psi		3,000 psi		3,000 psi					
FLOW	80 gpm		75 gpm		80 gpm		75 gpm			
WIRE ROPE DIA		1/2 in.				1/2 in.				
LAYER	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)
1	11,000	270	9,530	316	8,780	376	6,840	440		
2	10,090	294	8,740	343	8,060	410	6,280	479		
3	9,320	318	8,080	372	7,440	444	5,800	518		
4	8,660	343	7,510	400	6,910	478	5,390	558		
5	8,090	367	7,010	429	6,460	511	5,030	597		
6	7,590	391	6,570	457	6,060	545	4,720	637		
7	7,150	416	6,190	485	5,700	579	4,440	676		
8	6,750	440	5,850	514	5,390	613	4,200	716		
9*	6,400	464	5,540	542	5,110	647	3,980	755		
WIRE ROPE DIA		9/16 in.				9/16 in.				
1	11,000	272	9,530	317	8,780	379	6,840	442		
2	10,000	299	8,660	349	7,980	416	6,220	486		
3	9,160	326	7,930	381	7,310	454	5,690	530		
4	8,450	353	7,320	413	6,750	492	5,250	575		
5	7,840	381	6,800	445	6,260	530	4,880	619		
6	7,320	408	6,340	476	5,840	568	4,550	664		
7	6,860	435	5,940	508	5,480	607	4,270	708		
8*	6,460	463	5,590	540	5,150	645	4,010	753		
WIRE ROPE DIA		5/8 in.				5/8 in.				
1	11,000	273	9,530	319	8,780	381	6,840	444		
2	9,900	303	8,580	354	7,900	422	6,150	493		
3	9,000	334	7,800	390	7,180	465	5,590	543		
4	8,250	364	7,150	425	6,580	507	5,130	592		
5	7,620	394	6,600	461	6,080	549	4,730	642		
6	7,070	425	6,120	496	5,640	592	4,400	691		
7	6,600	455	5,720	531	5,270	634	4,100	740		

* Layer does not meet ANSI B30.7

Performance (cont.)

-04 DRUM
Single-speed
Motor (cont.)

RATIO		29:1				21:1			
MOTOR	064 (104.5 cc)	051 (83.6 cc)		064 (104.5 cc)		051 (83.6 cc)			
PRESSURE	186 bar		207 bar		207 bar				
FLOW	303 lpm		284 lpm		303 lpm		284 lpm		
WIRE ROPE DIA		13 mm				13 mm			
LAYER	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	
1	4,990	82	4,325	96	3,985	115	3,105	134	
2	4,575	90	3,965	105	3,660	125	2,850	146	
3	4,230	97	3,665	113	3,375	135	2,630	158	
4	3,930	105	3,405	122	3,135	146	2,445	170	
5	3,670	112	3,180	131	3,135	156	2,280	182	
6	3,445	119	2,980	139	2,750	166	2,140	194	
7	3,245	127	2,810	148	2,585	176	1,905	206	
8	3,060	134	2,655	157	2,445	187	1,925	218	
9*	2,905	141	2,515	165	2,320	197	1,805	230	
WIRE ROPE DIA		14 mm				14 mm			
1	4,990	83	4,325	97	3,985	116	3,105	135	
2	4,540	91	3,930	106	3,620	127	2,820	148	
3	4,155	99	3,595	116	3,315	138	2,580	162	
4	3,835	108	3,320	126	3,060	150	2,380	175	
5	3,555	116	3,085	135	2,840	162	2,215	189	
6	3,320	124	2,875	145	2,650	173	2,065	202	
7	3,110	133	2,695	155	2,485	185	1,940	216	
8*	2,930	141	2,540	164	2,340	197	1,820	230	
WIRE ROPE DIA		16 mm				16 mm			
1	4,990	83	4,325	97	3,985	116	3,105	135	
2	4,490	92	3,890	108	3,585	129	2,790	150	
3	4,080	102	3,540	119	3,260	142	2,540	165	
4	3,740	111	3,245	130	2,985	155	2,330	180	
5	3,455	120	2,995	141	2,760	167	2,145	196	
6	3,205	130	2,775	151	2,560	180	1,995	211	
7	2,995	139	2,595	162	2,390	193	1,860	226	

* Layer does not meet ANSI B30.7

PD12C PLANETARY HOIST

12,000 lb (5,455 kg)



Performance (cont.)

-04 DRUM
Two-speed
Motor

RATIO		41:1				21:1			
MOTOR	Low: 049 (4.9 cu in.)	High: 024 (2.4 cu in.)		049 (6.38 cu in.)		024 (5.1 cu in.)			
PRESSURE	2,730 psi				3,000 psi				
FLOW	40 gpm				40 gpm				
WIRE ROPE DIA		1/2 in.				1/2 in.			
LAYER	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	LINE PULL (lb)	LINE SPEED (fpm)	
1	11,000	102	5,130	231	6,100	203	2,850	457	
2	10,090	111	4,710	251	5,600	220	2,620	498	
3	9,320	120	4,350	272	5,170	239	2,420	539	
4	8,660	129	4,040	293	4,800	257	2,240	580	
5	8,090	138	3,770	313	4,490	275	2,100	622	
6	7,590	148	3,540	334	4,210	293	1,970	663	
7	7,140	159	3,330	355	3,960	311	1,850	704	
8	6,750	166	3,150	376	3,740	330	1,750	745	
9*	6,400	175	2,980	396	3,550	348	1,660	786	
WIRE ROPE DIA		9/16 in.				9/16 in.			
1	11,000	103	5,130	232	6,100	204	2,850	460	
2	10,000	113	4,660	255	5,540	224	2,590	506	
3	9,160	123	4,270	278	5,080	244	2,370	552	
4	8,450	133	3,940	301	4,690	265	2,190	598	
5	7,840	144	3,660	325	4,350	285	2,030	645	
6	7,320	154	3,410	348	4,060	306	1,900	691	
7	6,860	164	3,200	371	3,800	326	1,780	741	
8*	6,460	175	3,010	394	3,580	347	1,670	787	
WIRE ROPE DIA		5/8 in.				5/8 in.			
1	11,000	103	5,130	233	6,100	205	2,850	463	
2	9,900	114	4,620	259	5,490	227	2,560	514	
3	9,000	126	4,200	285	4,990	250	2,330	565	
4	8,250	137	3,850	311	4,570	273	2,140	616	
5	7,610	149	3,550	337	4,220	295	1,970	668	
6	7,070	160	3,370	363	3,920	318	1,830	719	
7	6,600	172	3,080	389	3,660	341	1,710	771	

* Layer does not meet ANSI B30.7

Performance (cont.)

-04 DRUM
Two-speed
Motor (cont.)

RATIO		41:1				21:1			
MOTOR	Low: 049 (80.3 cc)	High: 024 (40.1 cc)			Low: 049 (80.3 cc)	High: 024 (40.1 cc)			
PRESSURE	188 bar				205 bar				
FLOW	151 lpm				150 lpm				
WIRE ROPE DIA		13 mm				13 mm			
LAYER	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	LINE PULL (kg)	LINE SPEED (mpm)	
1	4,990	31	2,305	70	2,775	62	1,295	139	
2	4,575	34	2,115	77	2,545	67	1,190	152	
3	4,230	37	1,955	83	2,350	73	1,100	164	
4	3,930	39	1,815	89	2,180	78	1,015	177	
5	3,670	42	1,695	95	2,040	84	955	190	
6	3,445	45	1,590	105	1,915	89	895	202	
7	3,245	48	1,495	108	1,800	95	840	215	
8	3,060	51	1,415	115	1,700	101	795	227	
9*	2,905	53	1,340	121	1,615	106	755	240	
WIRE ROPE DIA		14 mm				14 mm			
1	4,990	31	2,305	71	2,775	62	1,295	140	
2	4,535	34	2,095	78	2,520	68	1,175	154	
3	4,155	37	1,920	85	2,310	74	1,075	168	
4	3,835	41	1,775	92	2,130	80	995	182	
5	3,560	44	1,645	99	1,980	87	920	197	
6	3,320	47	1,535	106	1,845	93	860	211	
7	3,110	50	1,440	113	1,730	99	805	225	
8*	2,930	53	1,355	120	1,630	105	760	239	
WIRE ROPE DIA		16 mm				16 mm			
1	4,990	31	2,310	71	2,775	62	1,295	141	
2	4,490	35	2,080	79	2,495	69	1,160	157	
3	4,080	38	1,890	87	2,275	76	1,060	172	
4	3,740	42	1,730	94	2,080	83	970	188	
5	3,450	45	1,600	102	1,925	90	895	204	
6	3,205	49	1,485	110	1,785	97	830	219	
7	2,995	52	1,385	118	1,670	104	775	235	

* Layer does not meet ANSI B30.7

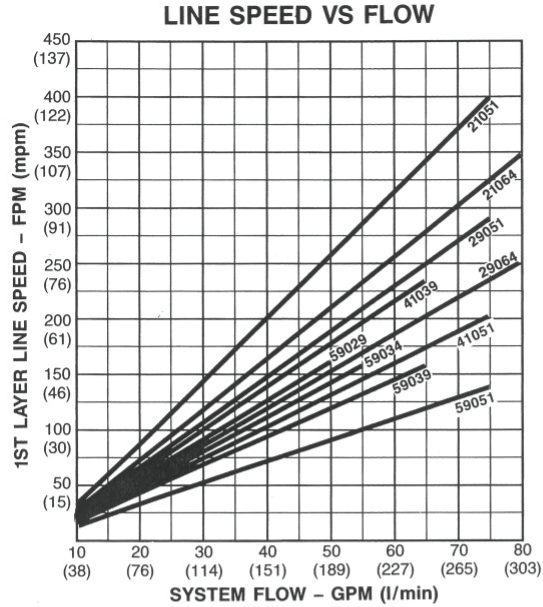
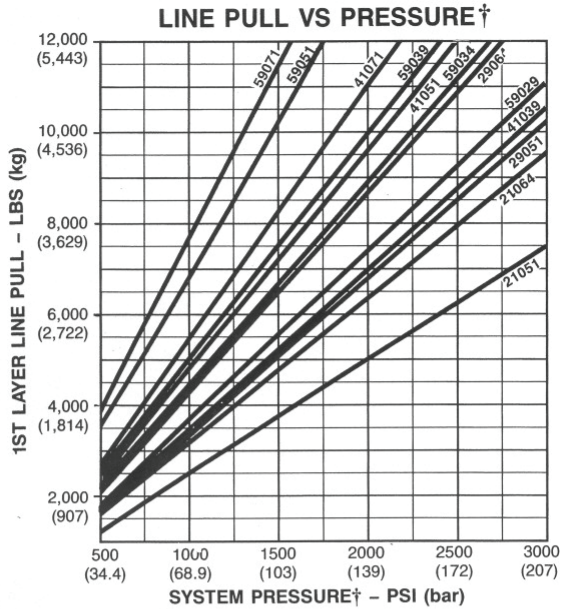
PD12C PLANETARY HOIST

12,000 lb (5,455 kg)

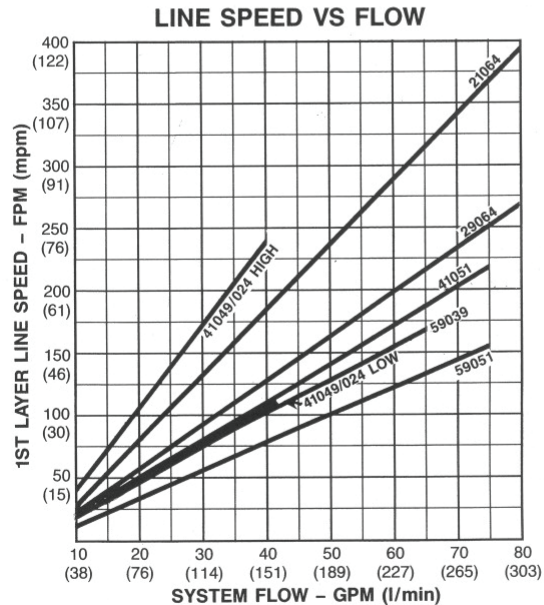
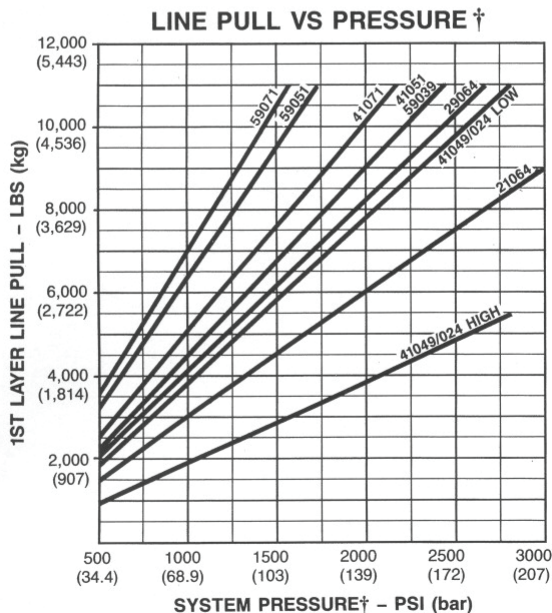


Performance Graphs

-01, -02, -02G DRUMS



-04, -05 DRUMS



MINIMUM GPM RECOMMENDATION FOR SMOOTH OPERATION

MOTOR 029 9 GPM (34 l/min) MOTOR 039 11 GPM (42 l/min)
 MOTOR 034 10 GPM (38 l/min) MOTOR 051 11 GPM (42 l/min)

MOTOR 064 12 GPM (45 l/min)
 MOTOR 049/024 15 GPM (57 l/min)
 MOTOR 071 5 GPM (19 l/min)

† ΔP across motor

Drum Capacity

-01 DRUM

WIRE ROPE STORAGE, ft

WIRE ROPE DIA	LAYER	1	2	3	4	5	6	D/d
	3/8 in.	97	201	313	432	558	691*	27:1
7/16 in.	84	175	273	378	491	-	23:1	
1/2 in.	74	155	243	338	-	-	20:1	
9/16 in.	66	139	219	307*	-	-	18:1	

* Layer does not meet ANSI B30.7

WIRE ROPE STORAGE, m

WIRE ROPE DIA	LAYER	1	2	3	4	5	6	D/d
	9 mm	30	61	95	132	170	211*	27:1
11 mm	26	53	83	115	186	225	23:1	
13 mm	23	47	74	103	-	-	20:1	
14 mm	20	42	67	94*	-	-	18:1	

* Layer does not meet ANSI B30.7

-02 DRUM

WIRE ROPE STORAGE, ft

WIRE ROPE DIA	LAYER	1	2	3	4	5	6	7	8	D/d
	3/8 in.	97	201	313	432	558	691	831	979	27:1
7/16 in.	84	175	273	378	491	611	738*	-	23:1	
1/2 in.	74	155	243	338	441	551	-	-	20:1	
9/16 in.	66	139	219	307	402	-	-	-	18:1	

* Layer does not meet ANSI B30.7

WIRE ROPE STORAGE, m

WIRE ROPE DIA	LAYER	1	2	3	4	5	6	7	8	D/d
	9 mm	30	61	95	132	170	211	253	298	27:1
11 mm	26	53	83	115	150	186	225*	-	23:1	
13 mm	23	47	74	103	134	168	-	-	20:1	
14 mm	20	42	67	94	123	-	-	-	18:1	

* Layer does not meet ANSI B30.7

-04 DRUM

WIRE ROPE STORAGE, ft

WIRE ROPE DIA	LAYER	1	2	3	4	5	6	7	8	9	10	11	12	D/d
	3/8 in.	104	215	333	458	590	729	875	1028	1188	1355	1529	1710*	29:1
7/16 in.	89	185	288	399	517	642	774	913	1059	1212	-	-	25:1	
1/2 in.	79	165	258	358	465	579	700	828	963*	-	-	-	22:1	
9/16 in.	70	147	231	322	421	527	640	760*	-	-	-	-	19:1	
5/8 in.	64	135	213	298	390	486	595	-	-	-	-	-	17:1*	

* Layer does not meet ANSI B30.7

WIRE ROPE STORAGE, m

WIRE ROPE DIA	LAYER	1	2	3	4	5	6	7	8	9	10	11	12	D/d
	9 mm	32	66	101	140	180	222	267	313	362	413	466	521*	29:1
11 mm	27	56	88	122	158	196	236	278	323	369	-	-	25:1	
13 mm	24	50	79	109	142	176	213	252	294*	-	-	-	22:1	
14 mm	21	45	70	98	128	161	195	232*	-	-	-	-	19:1	
16 mm	20	41	65	91	119	149	181	-	-	-	-	-	17:1*	

* Layer does not meet ANSI B30.7

D/d RATIO IS BASED ON PITCH DIAMETER OF WIRE ROPE AT FIRST LAYER
* 18:1 AT CENTER OF WIRE ROPE

Drum Capacity (cont.)

-05 DRUM

WIRE ROPE STORAGE, ft

	LAYER	1	2	3	4	5	6	7	D/d
WIRE ROPE DIA	3/8 in.	104	215	333	458	590	729	875	29:1
	7/16 in.	89	185	288	399	517	642	-	25:1
	1/2 in.	79	165	258	358	465	-	-	22:1
	9/16 in.	70	147	231	322	421*	-	-	19:1

* Layer does not meet ANSI B30.7

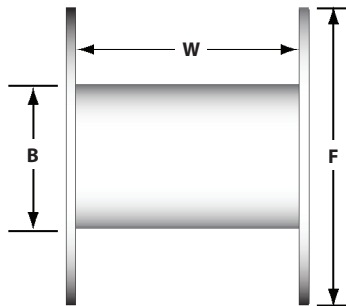
WIRE ROPE STORAGE, m

	LAYER	1	2	3	4	5	6	7	D/d
WIRE ROPE DIA	9 mm	32	66	101	140	180	222	267	29:1
	11 mm	27	56	88	122	158	196	-	25:1
	13 mm	24	50	79	109	142	-	-	22:1
	14 mm	21	45	70	98	128*	-	-	19:1

* Layer does not meet ANSI B30.7

D/d RATIO IS BASED ON PITCH DIAMETER OF WIRE ROPE AT FIRST LAYER
 * 18:1 AT CENTER OF WIRE ROPE

Drum Sizes



DIMENSIONS, in.

DRUM	01	02	02G	04	05
B	9.75	9.75	9.75**	10.63	10.63
F	14.13	16.38	16.38	20.00	16.50
W	13.75	13.75	13.57	13.50	13.50

DIMENSIONS, mm

DRUM	01	02	02G	04	05
B	248	248	248**	270	270
F	359	416	416	508	419
W	349	349	345	343	343

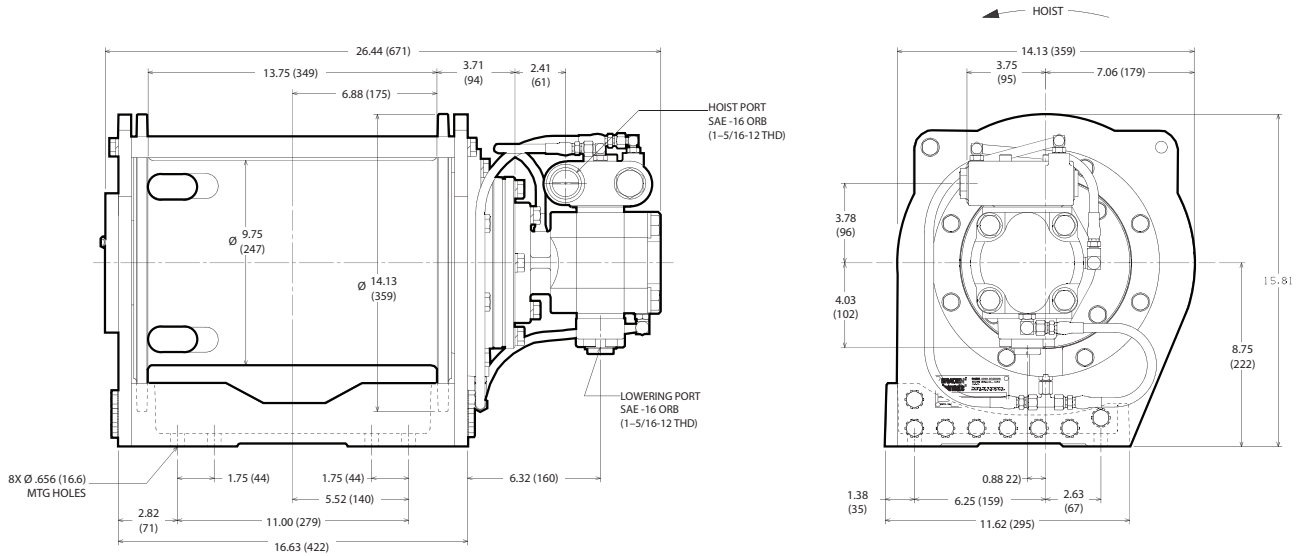
B=BARREL DIAMETER F=FLANGE DIAMETER W=BARREL WIDTH

** ROOT DIAMETER FOR GROOVED DRUM

Dimensions

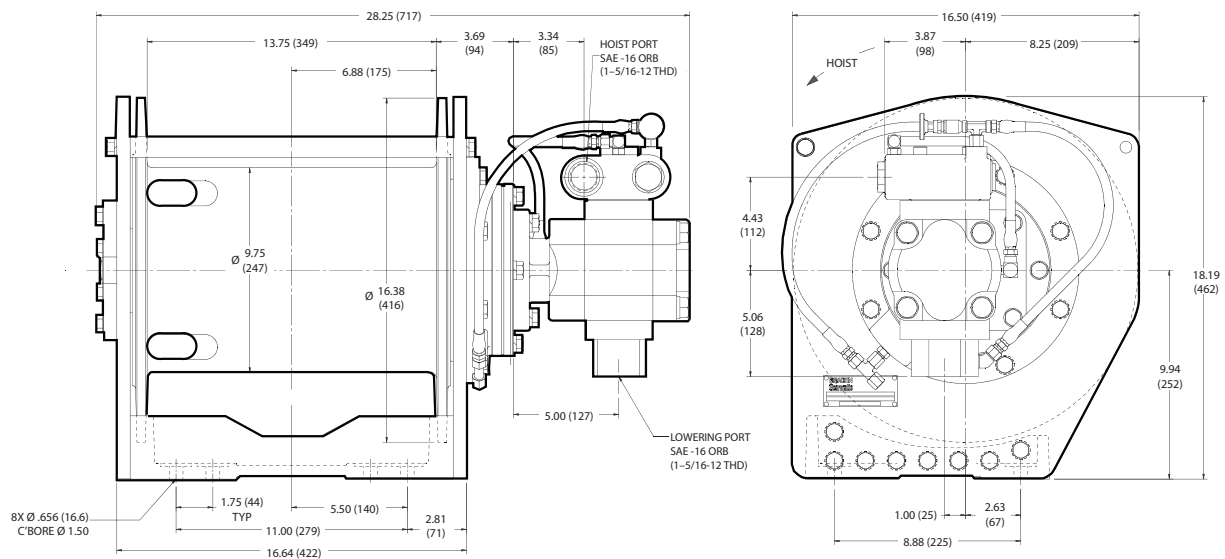
PD12C-59029-01

DIMENSIONS IN INCHES (MM)



PD12C-29064-02-1

DIMENSIONS IN INCHES (MM)



PD12C PLANETARY HOIST

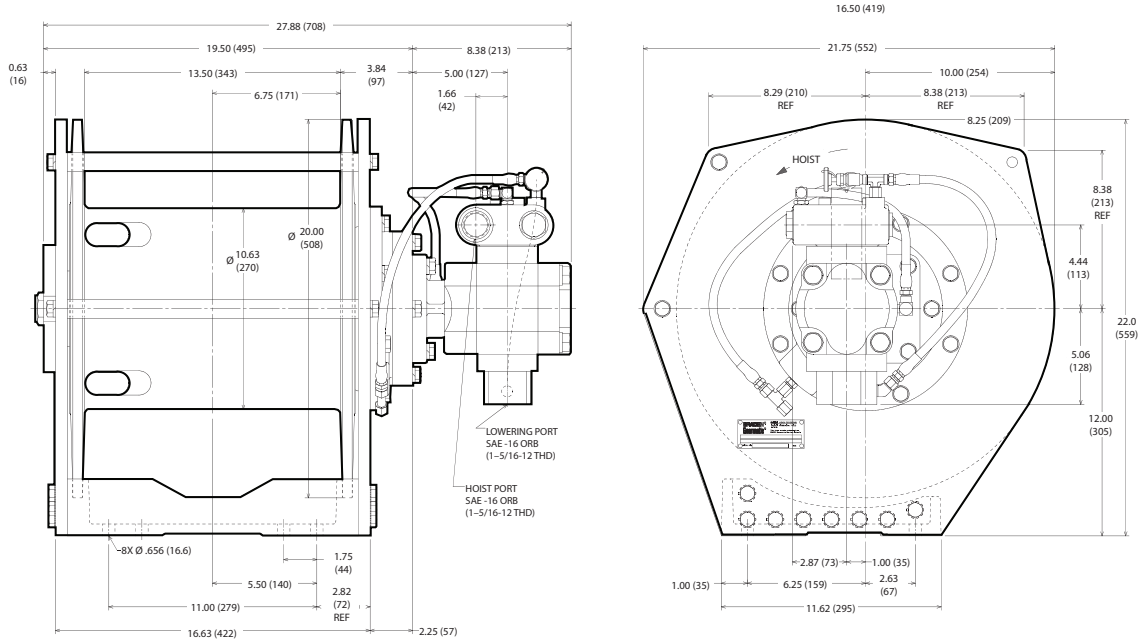
12,000 lb (5,455 kg)



Dimensions (cont.)

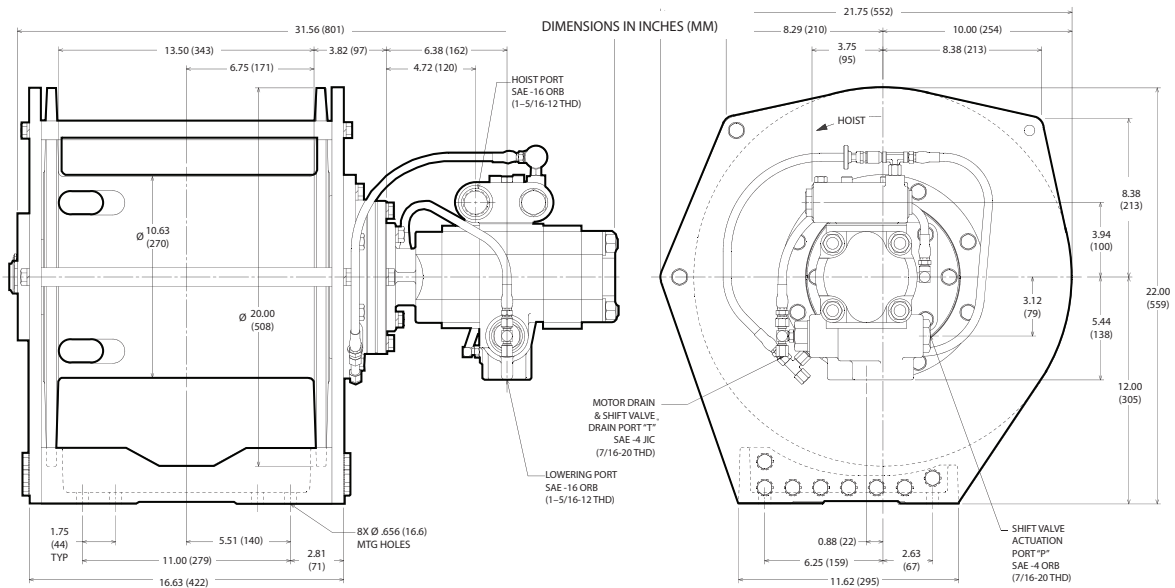
PD12C-29064-04-1

DIMENSIONS IN INCHES (MM)



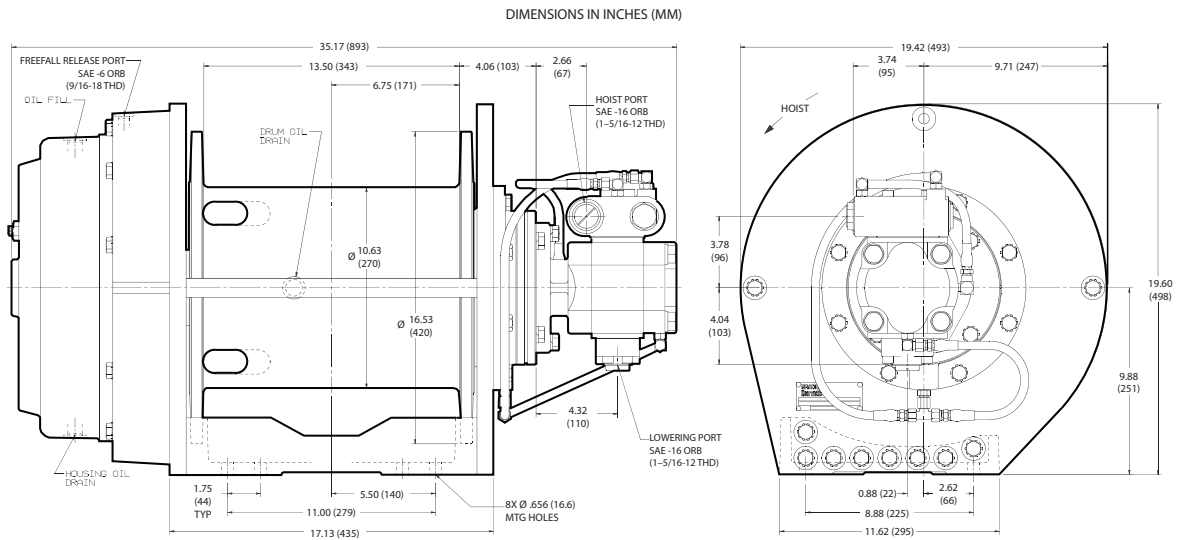
PD12C-41049/024-04-1

DIMENSIONS IN INCHES (MM)



Dimensions (cont.)

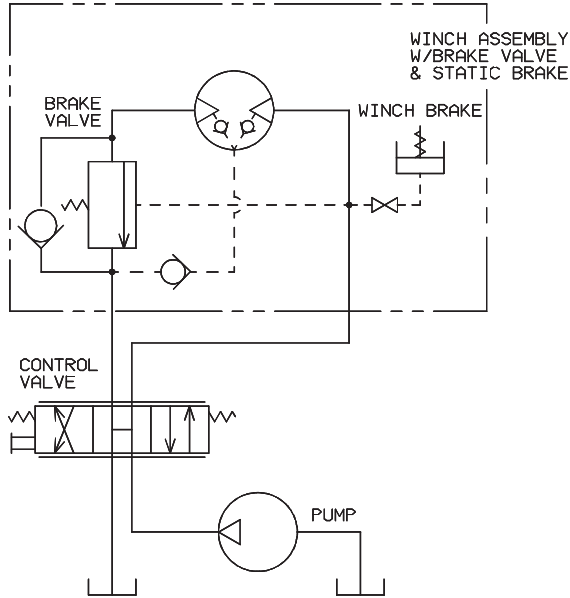
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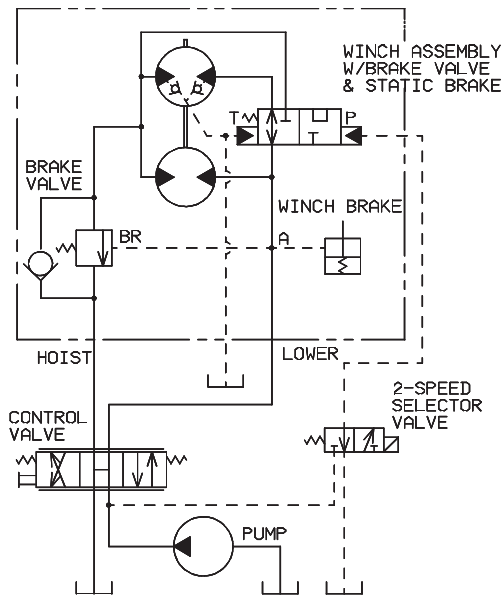
CONTACT BRADEN REPRESENTATIVE FOR PISTON-MOTOR MODEL DIMENSIONS

Typical Hydraulic Control Circuits

Single-speed Circuit

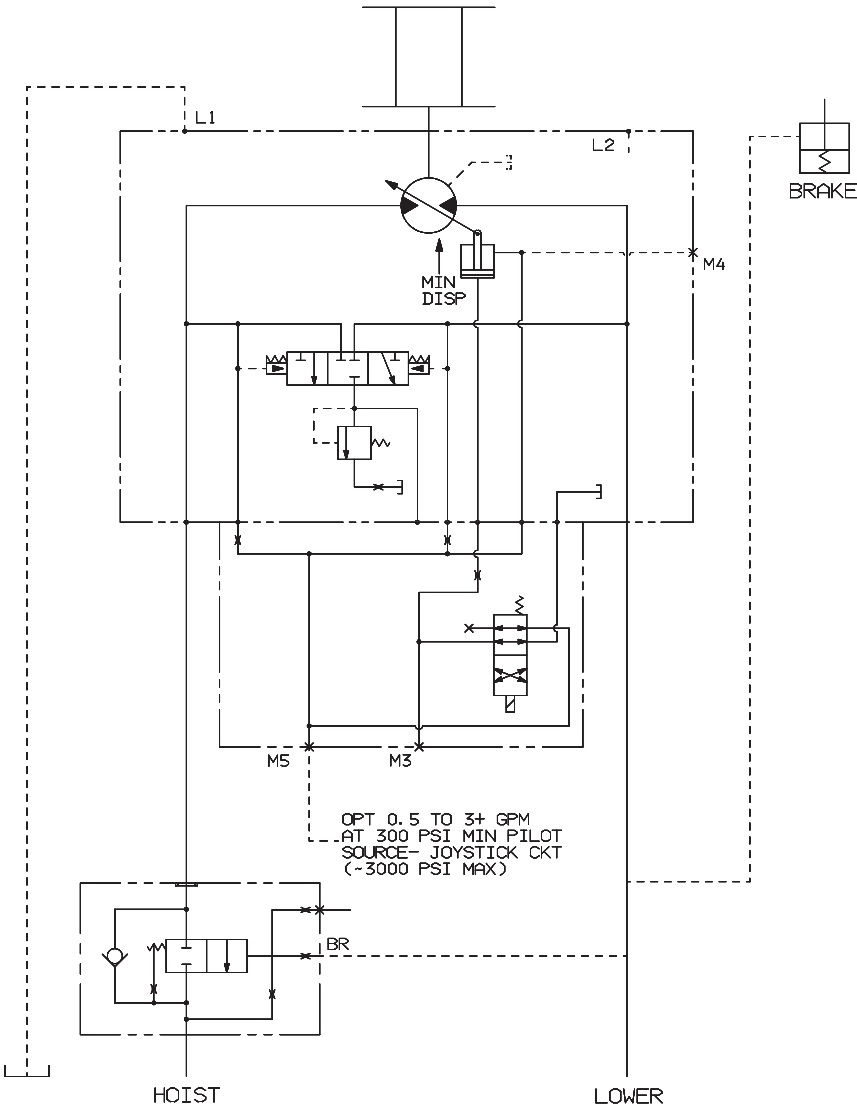


Two-speed gear Motor Circuit



Typical Hydraulic Control Circuits (cont.)

Variable-speed Piston Motor Circuit



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LIT2311 R3_08-2013
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