AHU7 / AMU7 20,000 LB First Layer Line Pull

BRADEN_®

DIMENSIONAL INFORMATION

RIGHT HAND ASSEMBLY SHOWN.

HYDRAULIC DRIVE

MECHANICAL DRIVE



WIRE ROPE CAPACITY

14.33 in. DRUM

ROPE	LAYER											
SIZE	1		2		3		4		5		6	
in.	ft	(m)	ft	(m)	ft	(m)	ft	(m)	ft	(m)	ft	(m)
7/16	34	10.4	75	22.9	123	37.5	177	53.9	239	72.8	307	93.6
1/2	30	9.1	67	20.4	111	33.8	162	49.4	219	66.8		
9/16	27	8.2	61	18.6	102	31.1	150	45.7				
5/8	25	7.6	57	17.4	95	29.0	140	42.7				

9.00 in. DRUM ROPE LAYER SIZE 2 5 1 3 4 6 ft (m) ft (m) ft (m) ft (m) ft (m) ft (m) in. 7/16 22 6.7 47 14.3 77 23.5 111 33.8 150 45.7 193 58.8 70 138 42.1 1/2 19 5.8 42 12.8 21.3 102 31.1 17 39 11.9 64 19.5 94 28.7 9/16 5.2 60 5/8 16 36 11.0 18.3 88 26.8 4.9

LINE SPEED

(mpm)

7.8

9.3

LINE PULL

ESTIMATE

(fpm)

17

22

26

31

=

A WARNING A

A minimun 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, personal injury or death.

WIRE ROPE CAPACITY IS 90% OF THEORITICAL.

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1

2

3

YOUR SYSTEM PRESSURE

MAXIMUM PRESSURE (FROM CHART)

PERFORMANCE INFORMATION

2,800 ∆ psi (193 ∆ bar) @ 22 gpm (83 lpm)

(kg)

9.000

7.100

5.900

5.000

X FROM CHART

2-Speed Performance

LINE PULL

(lbs)

20.000

15.700

13,000

11.000

10.8/5.4 cu in. (177/89 cc)

Single Speed Performance

R					ROPE CAPACITY					
ΥE		OLL	LINE 5	PEED	14.33 ir	n. Drum	9.00 in. Drum			
Ľ	(lbs)	(kg)	(fpm)	(mpm)	(ft)	(m)	(ft)	(m)		
1	20,000	9,090	20	6.1	27	8.2	17	5.2		
2	16,040	7,290	25	7.6	61	18.6	39	11.9		
3	13,390	6,086	30	9.2	102	31.1	64	19.5		
4	11,500	5,227	25	7.6	150	45.8	94	28.7		

HYDRAULIC REQUIREMENTS:							
	MAX	MAX		MAX	MAX		
MOTOR	∆ PSI	(∆ bar)		gpm	(Ipm)		
11.9 cu.in.	2,200	152		28	106		
14.9 cu.in.	1,700	117	@	35	132		
10.8/5.4 cu.in.	2,800	193		22	83		

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 theoritical 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 the winch rating. Consult the wire rope manufacturer for ratings.

MECHANICAL REQUIREMENTS: Static Input Dvnamic Input Max Input Torque Torque lb-in N-m lb-in N-m RPM 3.940 3.000 500 445 339

Worm Gear Ratio.....

ENGINEERING DATA

Worm Gear Ratio		
Input Shaft Diameter	1.25"	(31.75 mm)
Oil Capacity	2 pints	
Weight - 14 in. Drum (winch only)	245 lbs.	(111 kg)
Weight - (w/ single speed hydraulic motor)	260 lbs.	(118 kg)

AHU7 / AMU7

PERFORMANCE FORMULAS LINE PULL AT LOWER PRESSURE LINE SPEED AT LOWER FLOW

(kg)

2.600

2.300

High Speed

LINE SPEED

(mpm)

10.2

12.9

15.6

18.6

(fpm)

52

62

			LOWENTE		
YC	OUR SYSTEM FLOW	v	LINE SPEED	_	LINE SPEED
	MAXIMUM FLOW (FROM CHART)	X	FROM CHART	=	ESTIMATE

5.1 9,000 4,100 34 6.6 7,100 3,200 43

LINE PULL

(lbs)

5.800

5.000

A WARNING A

neither designed nor intended for use or application to equipment used in lifting or moving of persons.