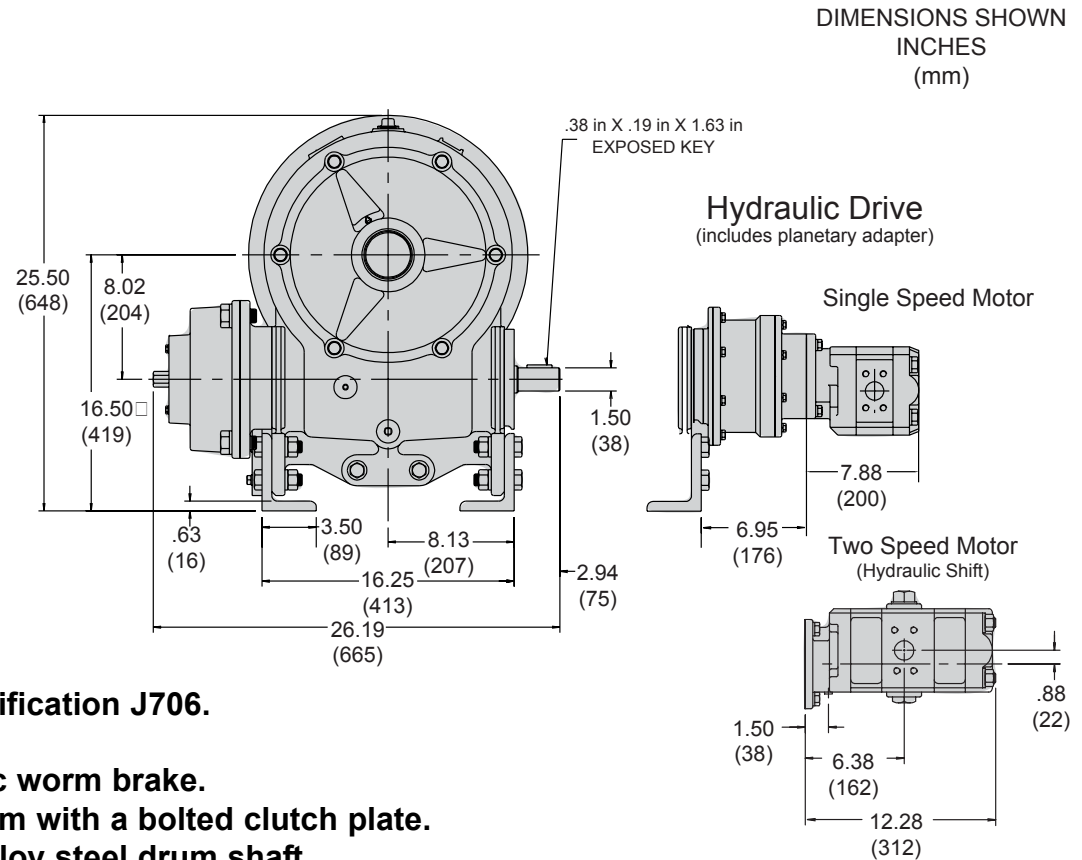
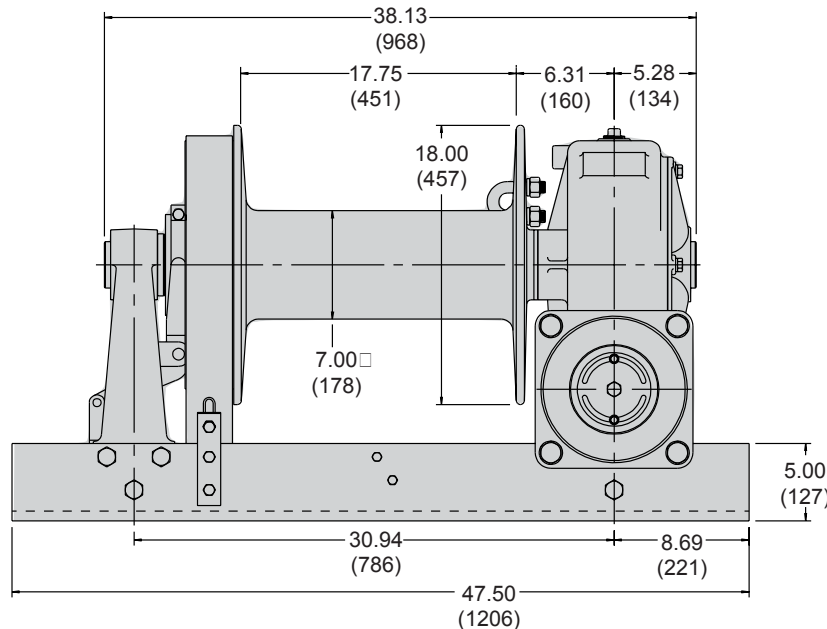


# AHS20P/ AMS20

## 45,000 LB First Layer Line Pull

# BRADEN®

### DIMENSIONAL INFORMATION



- Tested in compliance with SAE Specification J706.
- Rugged and compact design.
- Oil-cooled, fully adjustable automatic worm brake.
- Large capacity ductile iron cable drum with a bolted clutch plate.
- Ground and polished, heat treated alloy steel drum shaft.
- Freespool clutch with negative draft jaws for positive engagement under load.
- Automatic drag brake helps prevent drum from back spinning.

### 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**

**Single Speed Performance**

5.1 cu in. (83 cc)  
2,300 Δ psi (159 Δ bar) @ 60 gpm (277 lpm)

| 7/8 in. WIRE ROPE |           |        |            |       |               |       |
|-------------------|-----------|--------|------------|-------|---------------|-------|
| LAYER             | LINE PULL |        | LINE SPEED |       | ROPE CAPACITY |       |
|                   | (lbs)     | (kg)   | (fpm)      | (mpm) | (ft)          | (m)   |
| 1                 | 45,000    | 20,453 | 18         | 5.5   | 37            | 11.3  |
| 2                 | 36,800    | 16,726 | 22         | 6.7   | 83            | 25.3  |
| 3                 | 31,200    | 14,180 | 26         | 7.9   | 140           | 42.7  |
| 4                 | 27,000    | 12,272 | 30         | 9.2   | 200           | 61.0  |
| 5                 | 23,800    | 10,817 | 34         | 10.4  | 270           | 82.4  |
| 6                 | 21,300    | 9,681  | 38         | 11.6  | 350           | 106.8 |

**2-Speed Performance**

4.9/2.4 cu in. (80/40 cc)  
3,000 Δ psi (209 Δ bar) @ 40 gpm (151 lpm)

| Layer | Low Speed |        |            |       | High Speed |       |            |       |
|-------|-----------|--------|------------|-------|------------|-------|------------|-------|
|       | LINE PULL |        | LINE SPEED |       | LINE PULL  |       | LINE SPEED |       |
|       | (lbs)     | (kg)   | (fpm)      | (mpm) | (lbs)      | (kg)  | (fpm)      | (mpm) |
| 1     | 45,000    | 20,300 | 11         | 3.3   | 20,780     | 9,400 | 24         | 7.2   |
| 2     | 36,000    | 16,200 | 13         | 3.9   | 16,620     | 7,500 | 30         | 9.0   |
| 3     | 30,000    | 13,500 | 16         | 4.8   | 13,850     | 6,200 | 36         | 10.8  |
| 4     | 25,720    | 11,600 | 19         | 5.7   | 11,870     | 5,300 | 42         | 12.6  |
| 5     | 22,500    | 10,100 | 22         | 6.6   | 10,390     | 4,700 | 48         | 14.4  |

**WIRE ROPE CAPACITY**

| ROPE SIZE | LAYER |      |    |      |     |      |     |      |     |      |     |       |     |       |
|-----------|-------|------|----|------|-----|------|-----|------|-----|------|-----|-------|-----|-------|
|           | 1     |      | 2  |      | 3   |      | 4   |      | 5   |      | 6   |       | 7   |       |
| in.       | ft    | (m)  | ft | (m)  | ft  | (m)  | ft  | (m)  | ft  | (m)  | ft  | (m)   | ft  | (m)   |
| 3/4       | 43    | 13.1 | 94 | 28.7 | 150 | 45.7 | 220 | 67.1 | 300 | 91.4 | 380 | 115.8 | 480 | 146.3 |
| 7/8       | 37    | 11.3 | 83 | 25.3 | 140 | 42.7 | 200 | 61.0 | 270 | 82.3 | 350 | 106.7 |     |       |
| 1         | 33    | 10.1 | 74 | 22.6 | 120 | 36.6 | 180 | 54.9 | 250 | 76.2 |     |       |     |       |

WIRE ROPE CAPACITY IS 90% OF THEORITICAL.

**PERFORMANCE FORMULAS**

**LINE PULL AT LOWER PRESSURE**

$$\frac{\text{YOUR SYSTEM PRESSURE}}{\text{MAXIMUM PRESSURE (FROM CHART)}} \times \text{LINE PULL FROM CHART} = \text{LINE PULL ESTIMATE}$$

**LINE SPEED AT LOWER FLOW**

$$\frac{\text{YOUR SYSTEM FLOW}}{\text{MAXIMUM FLOW (FROM CHART)}} \times \text{LINE SPEED FROM CHART} = \text{LINE SPEED ESTIMATE}$$

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

**ENGINEERING DATA**

Worm Gear Ratio.....37:1  
Planetary Adapter Gear Ratio.....7.75:1  
Drum Shaft Diameter.....1.50 in. (38 mm)  
Drum Barrel Diameter.....7.0 in. (178 mm)  
Oil Capacity.....7 pints  
Weight - (winch only).....954 lbs. (433 kg)

**MECHANICAL REQUIREMENTS:**

| Static Input Torque* |       | Dynamic Input Torque* |       | Max Input** |
|----------------------|-------|-----------------------|-------|-------------|
| lb-in                | N-m   | lb-in                 | N-m   | RPM         |
| 13,300               | 1,503 | 9,980                 | 1,128 | 330         |

\* Without Planetary Motor Adapter  
\*\* At Rated Load

**⚠ WARNING ⚠**

The products described herein are neither designed nor intended for use or application to equipment used in lifting or moving of persons.

**⚠ 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, personal injury or death.