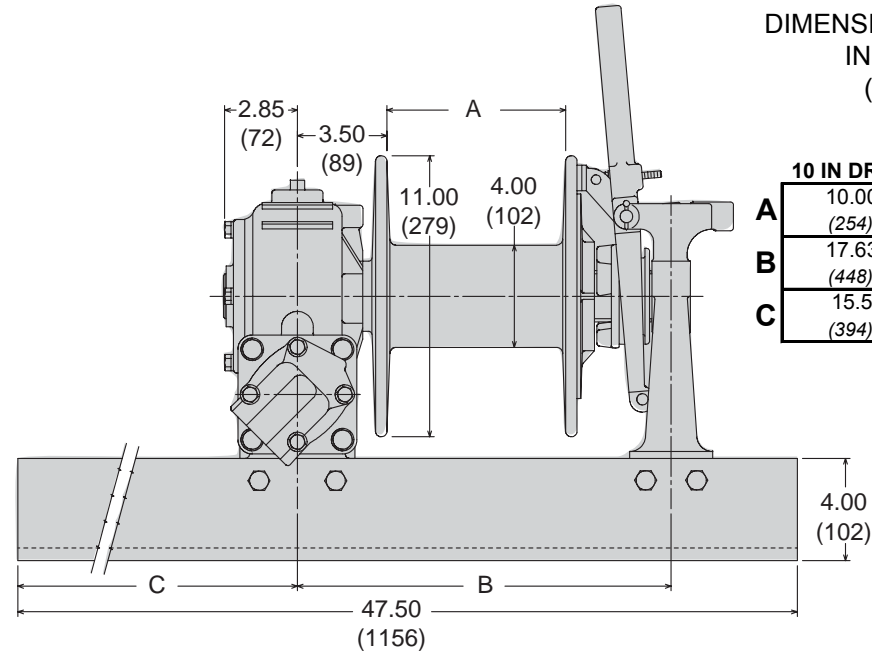
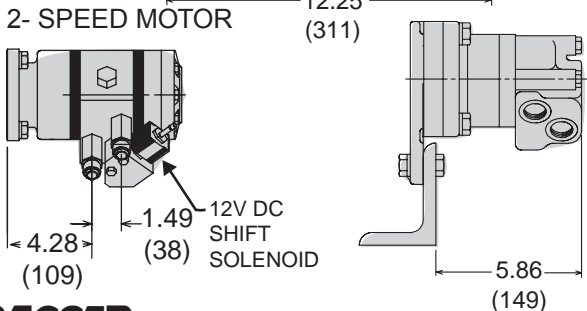
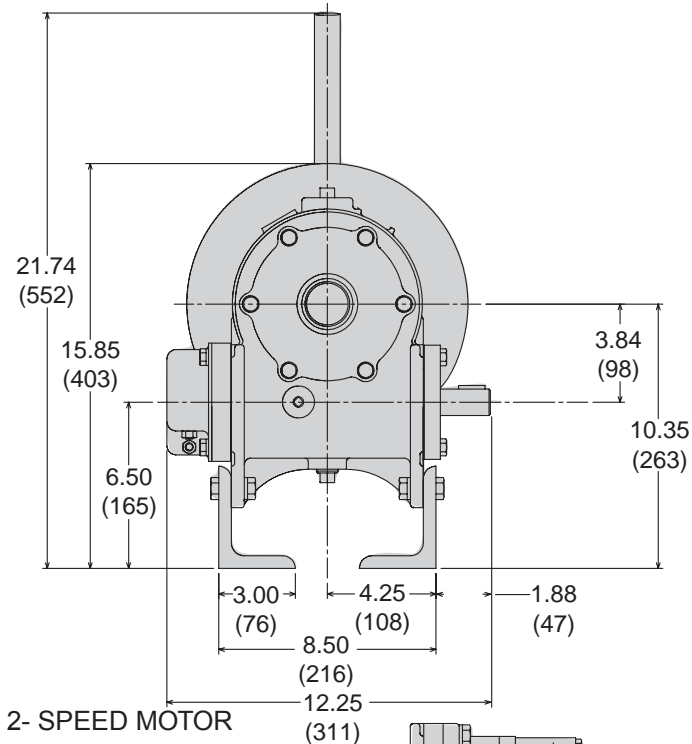


# AHS3 / AMS3

## 10,000 LB First Layer Line Pull

# BRADEN®

### DIMENSIONAL INFORMATION



DIMENSION SHOWN  
INCHES  
(mm)

|   | 10 IN DRUM     | 7 IN DRUM      |
|---|----------------|----------------|
| A | 10.00<br>(254) | 7.00<br>(178)  |
| B | 17.63<br>(448) | 14.63<br>(372) |
| C | 15.5<br>(394)  | 17.00<br>(432) |

- Tested in compliance with SAE Specification J706.
- Rugged and compact design.
- Adjustable dry band type worm brake.
- High strength aluminum bronze worm gear for increased pulling power and long gear life.
- Freespool clutch with negative draft jaws for positive engagement under load.
- Automatic drag brake helps prevent drum from back spinning when in freespool mode.

### PACCAR WINCH DIVISION

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**WIRE ROPE CAPACITY**

**7 IN DRUM**

| ROPE SIZE | LAYER |     |    |      |    |      |    |      |     |      |     |      |     |      |     |      |     |      |  |
|-----------|-------|-----|----|------|----|------|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|--|
|           | 1     |     | 2  |      | 3  |      | 4  |      | 5   |      | 6   |      | 7   |      | 8   |      | 9   |      |  |
| in.       | ft    | (m) | ft | (m)  | ft | (m)  | ft | (m)  | ft  | (m)  | ft  | (m)  | ft  | (m)  | ft  | (m)  | ft  | (m)  |  |
| 1/2       | 15    | 4.6 | 33 | 10.1 | 55 | 16.8 | 80 | 24.4 | 110 | 33.5 | 140 | 42.7 | 175 | 53.3 |     |      |     |      |  |
| 7/16      | 17    | 5.2 | 37 | 11.3 | 60 | 18.3 | 90 | 27.4 | 120 | 36.6 | 150 | 45.7 | 180 | 54.9 | 230 | 70.1 |     |      |  |
| 3/8       | 20    | 6.1 | 42 | 12.8 | 70 | 21.3 | 95 | 29.0 | 130 | 39.6 | 165 | 50.3 | 200 | 61.0 | 250 | 76.2 | 300 | 91.4 |  |

**10 IN DRUM**

| ROPE SIZE | LAYER |     |    |      |     |      |     |      |     |      |     |      |     |      |     |       |     |       |  |
|-----------|-------|-----|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|-------|-----|-------|--|
|           | 1     |     | 2  |      | 3   |      | 4   |      | 5   |      | 6   |      | 7   |      | 8   |       | 9   |       |  |
| in.       | ft    | (m) | ft | (m)  | ft  | (m)  | ft  | (m)  | ft  | (m)  | ft  | (m)  | ft  | (m)  | ft  | (m)   | ft  | (m)   |  |
| 1/2       | 21    | 6.4 | 47 | 14.3 | 80  | 24.4 | 115 | 35.1 | 155 | 47.2 | 200 | 61.0 | 250 | 76.2 |     |       |     |       |  |
| 7/16      | 24    | 7.3 | 53 | 16.2 | 85  | 25.9 | 125 | 38.1 | 170 | 51.8 | 215 | 65.5 | 260 | 79.2 | 325 | 99.1  |     |       |  |
| 3/8       | 28    | 8.5 | 60 | 18.3 | 100 | 30.5 | 135 | 41.1 | 185 | 56.4 | 235 | 71.6 | 290 | 88.4 | 350 | 106.7 | 420 | 128.0 |  |

WIRE ROPE CAPACITY IS 90% OF THEORETICAL.

**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**

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

**⚠ 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.

**⚠ WARNING ⚠**

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

**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.

**MECHANICAL REQUIREMENTS:**

| Static Input Torque |     | Dynamic Input Torque |     | Max Input RPM |
|---------------------|-----|----------------------|-----|---------------|
| lb-in               | N-m | lb-in                | N-m | RPM           |
| 2,770               | 313 | 2,000                | 226 | 400           |

**PERFORMANCE INFORMATION**

**Single Speed Performance**

9.6 cu in. (157 cc)

2500 Δ psi (172 Δ bar) @ 18 gpm (68 lpm)

**1/2 in. WIRE ROPE**

| LAYER | LINE PULL |       | LINE SPEED |       | ROPE CAPACITY |      |                |      |
|-------|-----------|-------|------------|-------|---------------|------|----------------|------|
|       |           |       |            |       | 7.00 in. Drum |      | 10.00 in. Drum |      |
|       | (lbs)     | (kg)  | (fpm)      | (mpm) | (ft)          | (m)  | (ft)           | (m)  |
| 1     | 10,000    | 4,545 | 16         | 4.9   | 15            | 4.6  | 21             | 6.4  |
| 2     | 8,200     | 3,727 | 20         | 6.1   | 33            | 10.1 | 47             | 14.3 |
| 3     | 6,900     | 3,136 | 24         | 7.3   | 55            | 16.8 | 80             | 24.4 |
| 4     | 6,000     | 2,727 | 27         | 8.2   | 80            | 24.4 | 115            | 35.1 |
| 5     | 5,300     | 2,409 | 31         | 9.5   | 110           | 33.6 | 155            | 47.3 |
| 6     | 4,700     | 2,136 | 34         | 10.4  | 140           | 42.7 | 200            | 61.0 |
| 7     | 4,300     | 1,954 | 38         | 11.6  | 175           | 53.4 | 250            | 76.3 |

**2-Speed Performance**

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

1,800 Δ psi (124 Δ bar) @ 22 gpm (83 lpm)

| Layer | Low Speed |       |            |       | High Speed |       |            |       |
|-------|-----------|-------|------------|-------|------------|-------|------------|-------|
|       | LINE PULL |       | LINE SPEED |       | LINE PULL  |       | LINE SPEED |       |
|       | (lbs)     | (kg)  | (fpm)      | (mpm) | (lbs)      | (kg)  | (fpm)      | (mpm) |
| 1     | 10,000    | 4,500 | 17         | 5.1   | 4,500      | 2,000 | 34         | 10.2  |
| 2     | 8,200     | 3,700 | 21         | 6.3   | 3,700      | 1,700 | 42         | 12.6  |
| 3     | 6,900     | 3,100 | 25         | 7.5   | 3,100      | 1,400 | 78         | 23.4  |
| 4     | 6,000     | 2,700 | 28         | 8.4   | 2,700      | 1,200 | 113        | 33.9  |
| 5     | 5,300     | 2,400 | 32         | 9.6   | 2,400      | 1,100 | 158        | 47.4  |
| 6     | 4,700     | 2,100 | 36         | 10.8  | 2,100      | 900   | 207        | 62.1  |
| 7     | 4,300     | 1,900 | 40         | 12.0  | 1,900      | 900   | 262        | 78.6  |

**ENGINEERING DATA**

|  |                  |
|--|------------------|
| Worm Gear Ratio.....                   | 29:1             |
| Oil Capacity.....                      | 0.75 pints       |
| Input Shaft Diameter.....              | 1 in. (25.40 mm) |
| Weight - 7 in. Drum (Winch Only).....  | 205 lbs. (93 kg) |
| Weight - 10 in. Drum (Winch Only)..... | 210 lbs. (95 kg) |