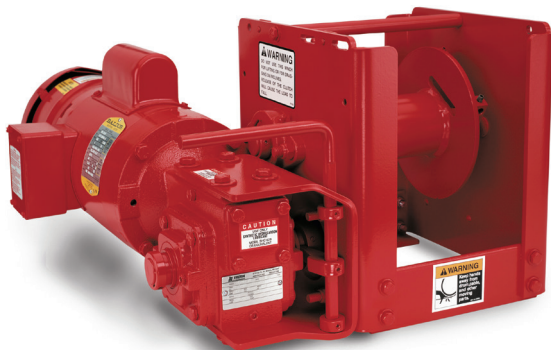


4WS SERIES POWER WINCHES

Series 4WS3M10 shown with clutch



Wire rope assemblies and controls sold separately

Series 4WS Worm/Spur Gear Power Winches

Up to 6000 lb capacity



- **Modular Design** allows us to make-to-order each winch to meet your exact needs.
- **Standard Features** include TEFC brake motors, enclosed machine cut gearing and flange style ball bearings.
- **Custom Modifications** available include grooved drums, special drum lengths and diameters, limit switches, roller pressure bars, and special finishes. Pneumatic, hydraulic and alternate motor voltages are also available.
- **Two-year Limited Warranty**

Series 4WS Electric – Configurations and Performance Characteristics – Section 2

When ordering, please indicate Model Number and Extensions

Examples: 4WS1M6-1100-20-A (without clutch); 4WS1M6-1100-20-A-C (with clutch)

| model number | model number extensions | | | | motor hp | load rating(lb) | | | wire rope dia.(in) | line speed(fpm) | | drum capacity(ft) ¹ | | | approx. ² ship wt.(lb) |
|---|-------------------------|------------|---------------|---------------|----------|-----------------|----------|-----------|--------------------|-----------------|-----------|--------------------------------|----------|-----------|-----------------------------------|
| | load rating | line speed | motor codes | clutch option | | 1st layer | mid drum | full drum | | 1st layer | full drum | 1st layer | mid drum | full drum | |
| 4WS1M6 | 800 | 15 | A, B, D, E, F | C | .5 | 800 | 550 | 420 | 3/16 | 17 | 33 | 21 | 110 | 260 | 155 |
| 4WS1M6 | 800 | 30 | A, B, D, E, F | C | .75 | 800 | 550 | 420 | 3/16 | 29 | 55 | 21 | 110 | 260 | 165 |
| 4WS1M6 | 800 | 40 | A, B, D, E, F | C | 1 | 800 | 550 | 420 | 3/16 | 43 | 82 | 21 | 110 | 260 | 175 |
| 4WS1M6 | 1100 | 20 | A, B, D, E, F | C | .75 | 1100 | 800 | 600 | 1/4 | 18 | 32 | 16 | 62 | 140 | 165 |
| 4WS1M6 | 1100 | 30 | A, B, D, E, F | C | 1 | 1100 | 800 | 600 | 1/4 | 30 | 54 | 16 | 62 | 140 | 175 |
| 4WS1M6 | 1100 | 40 | D, E, F | C | 1.5 | 1100 | 800 | 600 | 1/4 | 44 | 81 | 16 | 62 | 140 | 170 |
| 4WS1M6 | 1500 | 20 | A, B, D, E, F | C | 1 | 1500 | 1000 | 800 | 1/4 | 18 | 32 | 16 | 62 | 140 | 175 |
| 4WS1M6 | 1500 | 30 | D, E, F | C | 1.5 | 1500 | 1100 | 800 | 1/4 | 30 | 54 | 16 | 62 | 140 | 170 |
| 4WS1M6 | 1500 | 40 | B, D, E, F | C | 2 | 1500 | 1100 | 800 | 1/4 | 44 | 81 | 16 | 62 | 140 | 180 |
| clutch option for 4WS1M6 (for horizontal pulling only) | | | | | | | | | | | | | | add: | 5 |
| 4WS3M10 | 2000 | 15 | A, B, D, E, F | C | 1 | 2000 | 1300 | 1000 | 5/16 | 14 | 29 | 34 | 220 | 500 | 310 |
| 4WS3M10 | 2000 | 20 | D, E, F | C | 1.5 | 2200 | 1400 | 1000 | 5/16 | 18 | 39 | 34 | 220 | 500 | 305 |
| 4WS3M10 | 2500 | 20 | B, D, E, F | C | 2 | 2500 | 1600 | 1200 | 3/8 | 22 | 46 | 27 | 160 | 360 | 320 |
| 4WS3M10 | 3000 | 15 | D, E, F | C | 1.5 | 3000 | 2000 | 1500 | 3/8 | 14 | 29 | 27 | 160 | 360 | 305 |
| 4WS3M10 | 3000 | 20 | B, D, E, F | C | 2 | 3000 | 2000 | 1500 | 3/8 | 19 | 39 | 27 | 160 | 360 | 320 |
| 4WS3M10 | 3500 | 7 | A, B, D, E, F | C | 1 | 3500 | 2300 | 1700 | 7/16 | 8 | 15 | 23 | 120 | 270 | 330 |
| 4WS3M10 | 3500 | 15 | B, D, E, F | C | 2 | 3700 | 2500 | 1800 | 7/16 | 14 | 29 | 23 | 120 | 270 | 320 |
| 4WS3M10 | 3500 | 20 | D, E, F | C | 3 | 3700 | 2500 | 1800 | 7/16 | 23 | 46 | 23 | 120 | 270 | 330 |
| clutch option for 4WS3M10 (for horizontal pulling only) | | | | | | | | | | | | | | add: | 8 |
| 4WS6M12 | 3000 | 10 | D, E, F | C | 1.5 | 3400 | 2200 | 1600 | 3/8 | 12 | 25 | 40 | 300 | 660 | 515 |
| 4WS6M12 | 3000 | 20 | B, D, E, F | C | 2 | 3100 | 2000 | 1500 | 3/8 | 20 | 42 | 40 | 300 | 660 | 530 |
| 4WS6M12 | 4000 | 10 | B, D, E, F | C | 2 | 4500 | 2900 | 2100 | 7/16 | 12 | 25 | 34 | 220 | 500 | 530 |
| 4WS6M12 | 4000 | 20 | D, E, F | C | 3 | 4000 | 2500 | 1900 | 7/16 | 24 | 50 | 34 | 220 | 500 | 540 |
| 4WS6M12 | 6000 | 4 | A, B, D, E, F | C | 1 | 6200 | 4000 | 3000 | 1/2 | 4 | 8 | 30 | 170 | 390 | 535 |
| 4WS6M12 | 6000 | 10 | D, E, F | C | 3 | 6400 | 4200 | 3100 | 9/16 | 12 | 25 | 26 | 140 | 310 | 540 |
| 4WS6M12 | 6000 | 20 | D, E, F | C | 5 | 6400 | 4200 | 3100 | 9/16 | 24 | 50 | 26 | 140 | 310 | 585 |
| clutch option for 4WS6M12 (for horizontal pulling only) | | | | | | | | | | | | | | add: | 12 |

Motor Codes

| | | |
|---|--|---------|
| A | 115 volt | 1 phase |
| B | 230 volt | 1 phase |
| D | 230 volt | 3 phase |
| E | 460 volt | 3 phase |
| F | All other voltages – please contact factory. | |

■ For more information and other control options, please see pages 46-48.

■ Custom controls are available including wireless remote control, variable speed control, electronic overload, and enclosures for special environments.

Please contact factory or nearest Thern Distributor for firm fixed price and delivery.

¹ Actual drum capacities 25-30% less, due to nonuniform winding. Wire rope tension will also affect drum capacity.

² Weight may vary with motor.

Electric Drum Control Switches – Order Separately – Section 2

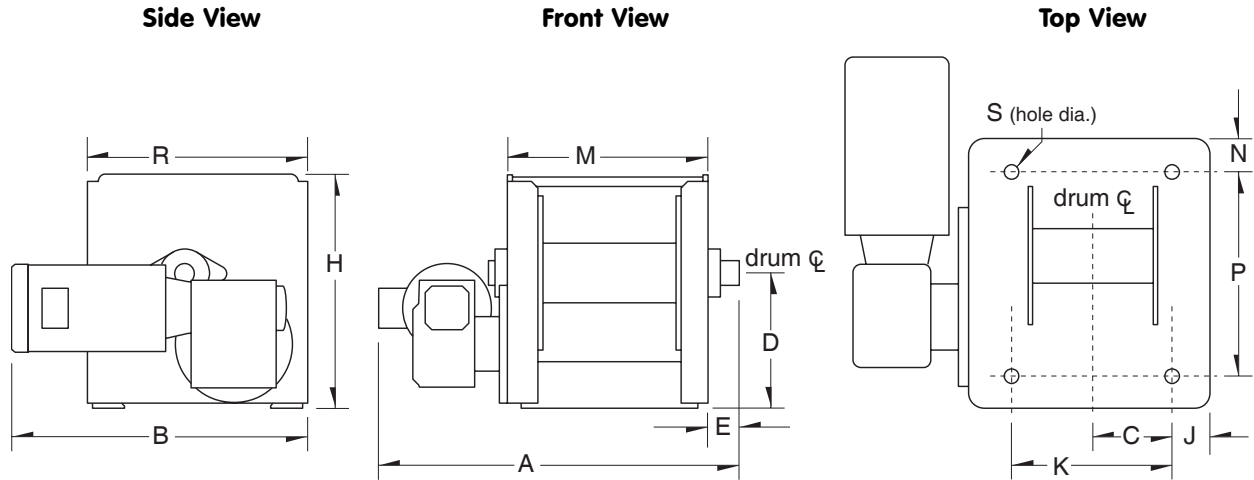
| model | description | 115/1/60 ³ | 230/1/60 | 230/3/60 | 460/3/60 |
|---------|----------------------|-----------------------|----------|----------|-----------|
| 10L2A1 | NEMA 1 | to 1.5 hp | to 2 hp | to 3 hp | to 3 hp |
| 10L7E1 | NEMA 1 | to 1.5 hp | to 3 hp | to 5 hp | to 7.5 hp |
| 10L2A4 | NEMA 4 – watertight | to 1.5 hp | to 2 hp | to 3 hp | to 3 hp |
| 10L7E4 | NEMA 4 – watertight | — | to 3 hp | to 5 hp | to 7.5 hp |
| 10P1A46 | 6 ft pendant control | to 1 hp | — | — | — |

Please contact factory or nearest Thern Distributor for firm fixed price and delivery.

³ Controls for 115V single phase motors up to 1.5 hp, include an 8 ft power cord with grounded plug.

See Dimensions on Next Page

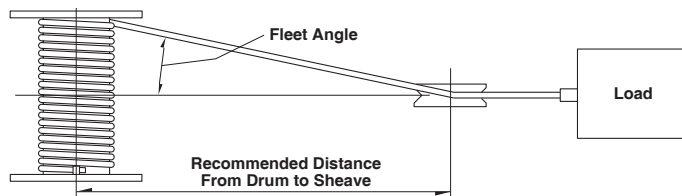
4WS SERIES POWER WINCHES



Series 4WS – Winch Dimensions (in)

| model extension | A | B | C | D | E | H | J | K | M | N | P | R | S (hole dia.) |
|-----------------|-------|-------|------|-------|------|-------|------|-------|-------|------|-------|-------|---------------|
| 4WS1M6-800-15 | 21.00 | 21.62 | 3.00 | 6.75 | 2.25 | 11.75 | 1.75 | 6.00 | 9.75 | 1.25 | 8.50 | 11.00 | .44 |
| 4WS1M6-800-30 | 21.00 | 22.38 | 3.00 | 6.75 | 2.25 | 11.75 | 1.75 | 6.00 | 9.75 | 1.25 | 8.50 | 11.00 | .44 |
| 4WS1M6-800-40 | 21.75 | 23.38 | 3.00 | 6.75 | 2.25 | 11.75 | 1.75 | 6.00 | 9.75 | 1.25 | 8.50 | 11.00 | .44 |
| 4WS1M6-1100-20 | 21.00 | 22.38 | 3.00 | 6.75 | 2.25 | 11.75 | 1.75 | 6.00 | 9.75 | 1.25 | 8.50 | 11.00 | .44 |
| 4WS1M6-1100-30 | 21.75 | 23.38 | 3.00 | 6.75 | 2.25 | 11.75 | 1.75 | 6.00 | 9.75 | 1.25 | 8.50 | 11.00 | .44 |
| 4WS1M6-1100-40 | 21.75 | 22.38 | 3.00 | 6.75 | 2.25 | 11.75 | 1.75 | 6.00 | 9.75 | 1.25 | 8.50 | 11.00 | .44 |
| 4WS1M6-1500-20 | 21.75 | 23.38 | 3.00 | 6.75 | 2.25 | 11.75 | 1.75 | 6.00 | 9.75 | 1.25 | 8.50 | 11.00 | .44 |
| 4WS1M6-1500-30 | 21.75 | 22.38 | 3.00 | 6.75 | 2.25 | 11.75 | 1.75 | 6.00 | 9.75 | 1.25 | 8.50 | 11.00 | .44 |
| 4WS1M6-1500-40 | 21.75 | 25.00 | 3.00 | 6.75 | 2.25 | 11.75 | 1.75 | 6.00 | 9.75 | 1.25 | 8.50 | 11.00 | .44 |
| 4WS3M10-2000-15 | 27.75 | 26.75 | 5.00 | 10.12 | 2.38 | 17.50 | 2.38 | 10.00 | 15.00 | 1.88 | 12.75 | 16.50 | .59 |
| 4WS3M10-2000-20 | 27.75 | 25.75 | 5.00 | 10.12 | 2.38 | 17.50 | 2.38 | 10.00 | 15.00 | 1.88 | 12.75 | 16.50 | .59 |
| 4WS3M10-2500-20 | 27.75 | 28.25 | 5.00 | 10.12 | 2.38 | 17.50 | 2.38 | 10.00 | 15.00 | 1.88 | 12.75 | 16.50 | .59 |
| 4WS3M10-3000-15 | 27.75 | 25.75 | 5.00 | 10.12 | 2.38 | 17.50 | 2.38 | 10.00 | 15.00 | 1.88 | 12.75 | 16.50 | .59 |
| 4WS3M10-3000-20 | 27.75 | 28.25 | 5.00 | 10.12 | 2.38 | 17.50 | 2.38 | 10.00 | 15.00 | 1.88 | 12.75 | 16.50 | .59 |
| 4WS3M10-3500-7 | 27.75 | 32.00 | 5.00 | 10.12 | 2.38 | 17.50 | 2.38 | 10.00 | 15.00 | 1.88 | 12.75 | 16.50 | .59 |
| 4WS3M10-3500-15 | 27.75 | 28.25 | 5.00 | 10.12 | 2.38 | 17.50 | 2.38 | 10.00 | 15.00 | 1.88 | 12.75 | 16.50 | .59 |
| 4WS3M10-3500-20 | 28.81 | 33.00 | 5.00 | 10.12 | 2.38 | 17.50 | 2.38 | 10.00 | 15.00 | 1.88 | 12.75 | 16.50 | .59 |
| 4WS6M12-3000-10 | 33.00 | 26.75 | 5.62 | 12.88 | 2.50 | 22.50 | 3.25 | 12.00 | 19.00 | 1.88 | 18.25 | 22.00 | .88 |
| 4WS6M12-3000-20 | 33.00 | 29.50 | 5.62 | 12.88 | 2.50 | 22.50 | 3.25 | 12.00 | 19.00 | 1.88 | 18.25 | 22.00 | .88 |
| 4WS6M12-4000-10 | 33.00 | 29.50 | 5.62 | 12.88 | 2.50 | 22.50 | 3.25 | 12.00 | 19.00 | 1.88 | 18.25 | 22.00 | .88 |
| 4WS6M12-4000-20 | 34.00 | 29.25 | 5.62 | 12.88 | 2.50 | 22.50 | 3.25 | 12.00 | 19.00 | 1.88 | 18.25 | 22.00 | .88 |
| 4WS6M12-6000-4 | 33.00 | 27.75 | 5.62 | 12.88 | 2.50 | 22.50 | 3.25 | 12.00 | 19.00 | 1.88 | 18.25 | 22.00 | .88 |
| 4WS6M12-6000-10 | 34.00 | 29.25 | 5.62 | 12.88 | 2.50 | 22.50 | 3.25 | 12.00 | 19.00 | 1.88 | 18.25 | 22.00 | .88 |
| 4WS6M12-6000-20 | 34.00 | 31.00 | 5.62 | 12.88 | 2.50 | 22.50 | 3.25 | 12.00 | 19.00 | 1.88 | 18.25 | 22.00 | .88 |

Dimensions are for reference only and subject to change without notice.



Series 4WS – Drum Dimensions

| model extension | drum diameter | flange diameter | drum width | fleet angle distance ¹ |
|-----------------|---------------|-----------------|------------|-----------------------------------|
| 4WS1M6 | 2.88 in | 7.00 in | 6.00 in | 10 ft |
| 4WS3M10 | 4.50 in | 11.50 in | 10.00 in | 16 ft |
| 4WS6M12 | 5.50 in | 14.00 in | 12.00 in | 20 ft |

Dimensions are for reference only and subject to change without notice.

¹ Recommended minimum distance between drum and lead sheave for smooth drum.

Important:

It is the owner's or operator's responsibility to determine the suitability of the equipment to its intended use. Study all applicable codes, manuals, and regulations. Be sure to read the Owner's Manual supplied with the equipment before operating it.



4WS SERIES POWER WINCHES

Thern 4WS series power winches feature dual stage gear reduction for economical handling of large loads. The combination of helical/worm and spur gearing make these winches ideal for applications requiring secure load control and accurate positioning. Our modular design also means we can quickly customize these winches to meet your specific requirements.



FLANGE STYLE ROLLER BEARINGS

are self-aligning bearings with cast housing to maintain smooth drum rotation.

WELDED STEEL DRUM with outside flange anchors allow for uniform winding and help extend life of wire rope. Anchors allow cable to be over wound or under wound from either side of the drum.

EXTENDED STEEL DRUM SHAFT with both ends captured in fabricated steel frame for optimal strength and security.

WIRE ROPE ASSEMBLIES sold separately per customer request.

FLANGE MOUNTED MOTOR is a 230/460 volt 3 phase motor, 60 cycle, IP 54¹, TEFC severe duty, reversible, class B or F insulated, continuous duty brakemotor.

Standard motors comply with relevant standards including NEMA, MG1, ANSI, CSA, IEC¹ and ABS.

LOAD HOLDING MOTOR DISC BRAKE is spring set, electrically released for positive load control.

DUAL STAGE GEARING, comprised of a worm or helical/worm and spur gears, make winches well suited for applications requiring secure load control and accurate positioning.

The heat treated worm or helical/worm gear set provides improved durability and operates in an oil bath, enclosed in a high strength cast iron gearcase, SAE class 30. Double-lip oil seals keep oil in and contaminants out. Large capacity bearings ensure long life. Speed reducers meet AGMA standards.

Guarded, heat treated spur gearing provides secondary reduction. Grease zerks allow for easy lubrication.

ANSI B30.7 COMPLIANCE is available. Please contact the factory.

2 YEAR "MOVE IT WITH CONFIDENCE" LIMITED WARRANTY leads the industry.

4WS SERIES POWER WINCHES

| | HP | Load Rating | Line Speed |
|----------|----------|--------------------|-------------|
| 4WS9M18 | 5 - 10 | 7,000 - 10,000 lb | 10 - 30 fpm |
| 4WS16M20 | 7.5 - 15 | 13,000 - 16,000 lb | 15 - 35 fpm |
| 4WS26M26 | 15 - 25 | 22,000 - 26,000 lb | 10 - 35 fpm |

OPTIONS AND ACCESSORIES

DRUM MODIFICATIONS (A) include grooved drums, multiple compartment drums and modified drum widths and diameters.

WINCH MOUNTING OPTIONS include base, wall or under hung installation.

CABLE PRESSURE BARS (B) help maintain uniform winding of wire rope.

LIMIT SWITCHES (A) provide secondary shut-off for load travel in one or two directions.

MOTOR OPTIONS include air or hydraulic, voltage or phase changes, IP 55 or 65, class F or H insulated and multi-speed operation.

DUTY RATINGS include IEEE 45 marine duty, tropical duty, severe duty and explosion proof ratings.

BRAKE OPTIONS include over-speed, caliper style, band, and more.

CONTROLS (C) are available in a wide range of standard and custom configurations for single or variable speed.

CORROSION RESISTANT FINISHES (D) for harsh or hazardous environments.

MANUAL OVERRIDES for winch operation in power loss situations.



Shown with double compartment and narrow drum width modifications and rotary limit switch.



Shown with cable pressure bar and grooved drum modification.



Shown with grooved drum modification and gray epoxy finish.



4WS SERIES POWER WINCHES

4WS Series Performance Characteristics

| | Model Number Extensions | | | Motor hp | Load Rating | | | | | | Line Speed | | | | Motor Codes |
|----------|-------------------------|---------------------|--------------------------|----------|-------------|--------|----------|-------|-----------|-------|------------|-------|-----------|-------|---|
| | Load Rating (lb) | Line Speed (fpm) | Motor Codes ¹ | hp | 1st Layer | | Mid Drum | | Full Drum | | 1st Layer | | Full Drum | | |
| | | | | | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (fpm) | (mpm) | (fpm) | (mpm) | |
| 4WS9M18 | 7000 | 20 | D,E,F | 5 | 7,300 | 3,312 | 5,000 | 2,268 | 3,800 | 1,724 | 21 | 6.4 | 41 | 12.5 | 1 D 230 volt 3 phase E 460 volt 3 phase F All other voltages please contact factory |
| 4WS9M18 | 7000 | 30 | D,E,F | 7.5 | 7,500 | 3,402 | 5,200 | 2,359 | 4,000 | 1,815 | 32 | 9.8 | 61 | 18.6 | |
| 4WS9M18 | 10000 | 10 | D,E,F | 5 | 10,000 | 4,536 | 6,900 | 3,130 | 5,300 | 2,405 | 13 | 4.0 | 24 | 7.3 | |
| 4WS9M18 | 10000 | 20 | D,E,F | 7.5 | 10,000 | 4,536 | 6,900 | 3,130 | 5,300 | 2,405 | 21 | 6.4 | 41 | 12.5 | |
| 4WS9M18 | 10000 | 30 | D,E,F | 10 | 10,000 | 4,536 | 6,900 | 3,130 | 5,200 | 2,359 | 32 | 9.8 | 61 | 18.6 | |
| 4WS16M20 | 13000 | 15 | D,E,F | 7.5 | 13,000 | 5,897 | 8,800 | 3,992 | 6,700 | 3,040 | 14 | 4.3 | 26 | 7.9 | |
| 4WS16M20 | 13000 | 20 | D,E,F | 10 | 13,300 | 6,033 | 9,100 | 4,128 | 6,900 | 3,130 | 18 | 5.5 | 35 | 10.7 | |
| 4WS16M20 | 13000 | 35 | D,E,F | 15 | 13,000 | 5,897 | 8,900 | 4,038 | 6,700 | 3,040 | 35 | 10.7 | 68 | 20.7 | |
| 4WS16M20 | 16000 | 15 | D,E,F | 7.5 | 16,000 | 7,258 | 11,100 | 5,035 | 8,500 | 3,856 | 12 | 3.7 | 24 | 7.3 | |
| 4WS16M20 | 16000 | 20 | D,E,F | 10 | 16,000 | 7,258 | 11,100 | 5,035 | 8,500 | 3,856 | 16 | 4.9 | 31 | 9.4 | |
| 4WS26M26 | 22000 | 20 | D,E,F | 15 | 22,800 | 10,343 | 16,700 | 7,576 | 13,200 | 5,988 | 18 | 5.5 | 31 | 9.4 | |
| 4WS26M26 | 22000 | 25 | D,E,F | 20 | 22,600 | 10,252 | 16,500 | 7,485 | 13,100 | 5,943 | 25 | 7.6 | 43 | 13.1 | |
| 4WS26M26 | 22000 | 35 | D,E,F | 25 | 22,200 | 10,070 | 16,300 | 7,394 | 12,900 | 5,852 | 36 | 11.0 | 63 | 19.2 | |
| 4WS26M26 | 26000 | 10 | D,E,F | 10 | 26,200 | 11,885 | 19,400 | 8,800 | 15,400 | 6,986 | 10 | 3.0 | 17 | 5.2 | |
| 4WS26M26 | 26000 | 15 | D,E,F | 15 | 26,000 | 11,794 | 20,200 | 9,163 | 16,500 | 7,485 | 16 | 4.9 | 27 | 8.2 | |

Please contact factory or nearest Thern Distributor for firm fixed price and delivery.

4WS Series Drum Capacities

| Wire Rope Dia. | | Breaking Strength ² | | Drum Capacity | 4WS9M18 | | 4WS16M20 | | 4WS26M26 | |
|----------------|------|--------------------------------|--------|---------------|---------|-------|----------|-------|----------|-------|
| (in) | (mm) | (lb) | (kg) | | (ft) | (m) | (ft) | (m) | (ft) | (m) |
| 7/16 | 11.2 | 20,400 | 9,254 | 1st | 87 | 26.5 | — | — | — | — |
| | | | | Mid | 670 | 204.2 | — | — | — | — |
| | | | | Full | 1,500 | 457.2 | — | — | — | — |
| 1/2 | 12.7 | 26,600 | 12,066 | 1st | 76 | 23.2 | — | — | — | — |
| | | | | Mid | 520 | 158.5 | — | — | — | — |
| | | | | Full | 1,170 | 356.6 | — | — | — | — |
| 9/16 | 14.2 | 33,600 | 15,240 | 1st | 67 | 20.4 | 89 | 27.1 | — | — |
| | | | | Mid | 420 | 128.0 | 690 | 210.3 | — | — |
| | | | | Full | 930 | 283.5 | 1,530 | 466.3 | — | — |
| 5/8 | 16.0 | 41,200 | 18,688 | 1st | 59 | 18.0 | 78 | 23.8 | — | — |
| | | | | Mid | 340 | 103.6 | 560 | 170.7 | — | — |
| | | | | Full | 760 | 231.6 | 1,250 | 381.0 | — | — |
| 3/4 | 19.1 | 58,800 | 26,671 | 1st | 48 | 14.6 | 65 | 19.8 | 110 | 33.5 |
| | | | | Mid | 240 | 73.2 | 400 | 121.9 | 670 | 204.2 |
| | | | | Full | 540 | 164.6 | 880 | 268.2 | 1,480 | 451.1 |
| 7/8 | 22.4 | 79,600 | 36,106 | 1st | — | — | 54 | 16.5 | 94 | 28.7 |
| | | | | Mid | — | — | 290 | 88.4 | 480 | 146.3 |
| | | | | Full | — | — | 640 | 195.1 | 1,070 | 326.1 |
| 1 | 25.4 | 103,400 | 46,902 | 1st | — | — | 47 | 14.3 | 82 | 25.0 |
| | | | | Mid | — | — | 220 | 67.1 | 370 | 112.8 |
| | | | | Full | — | — | 490 | 149.4 | 830 | 253.0 |
| 1-1/8 | 28.7 | 130,000 | 58,968 | 1st | — | — | — | — | 71 | 21.6 |
| | | | | Mid | — | — | — | — | 300 | 91.4 |
| | | | | Full | — | — | — | — | 660 | 201.2 |
| 1-1/4 | 31.8 | 159,800 | 72,485 | 1st | — | — | — | — | 63 | 19.2 |
| | | | | Mid | — | — | — | — | 240 | 73.2 |
| | | | | Full | — | — | — | — | 530 | 161.5 |
| 1-3/8 | 34.9 | 192,000 | 87,090 | 1st | — | — | — | — | 56 | 17.1 |
| | | | | Mid | — | — | — | — | 200 | 61.0 |

Electric Motor Controls

| | Description | Approx. Ship Wt. | |
|---------|--|------------------|------|
| | | (lb) | (kg) |
| 10S3D4 | electric motor controls 230/3/60 to 3 hp | 25 | 12 |
| 10S7D4 | electric motor controls 230/3/60 to 7.5 hp | 25 | 12 |
| 10S10D4 | electric motor controls 230/3/60 to 10 hp | 28 | 13 |
| 10S20D4 | electric motor controls 230/3/60 to 20 hp | 28 | 13 |
| 10S30D4 | electric motor controls 230/3/60 to 30 hp | 60 | 28 |
| 10S7E4 | electric motor controls 460/3/60 to 7.5 hp | 25 | 12 |
| 10S15E4 | electric motor controls 460/3/60 to 15 hp | 25 | 12 |
| 10S20E4 | electric motor controls 460/3/60 to 20 hp | 28 | 13 |
| 10S40E4 | electric motor controls 460/3/60 to 40 hp | 60 | 28 |

Controls include NEMA 4 rated enclosure, and NEMA 4x rated pendant control on 50 foot cord.

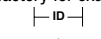
Motor Controls sold separately.

Please contact factory or nearest Thern Distributor for firm fixed price and delivery. All prices include mounting and wiring to motor.

4WS Series Drum Dimensions

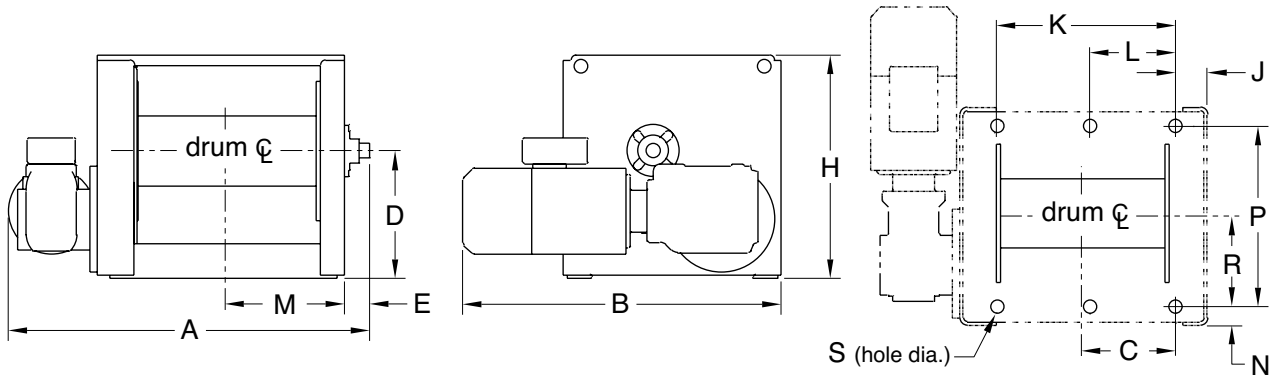
| | Drum Diameter (ID) | | Flange Diameter (OD) | | Drum Width (W) | | Fleet Angle Dist (A) ³ | |
|----------|--------------------|------|----------------------|------|----------------|------|-----------------------------------|------|
| | (in) | (mm) | (in) | (mm) | (in) | (mm) | (ft) | (m) |
| 4WS9M18 | 9.00 | 229 | 20.00 | 508 | 18.00 | 457 | 29 | 8.8 |
| 4WS16M20 | 10.75 | 273 | 24.00 | 610 | 20.00 | 508 | 32 | 9.8 |
| 4WS26M26 | 14.00 | 356 | 28.00 | 711 | 26.00 | 660 | 42 | 12.8 |

³Recommended minimum distance between drum and lead sheave for smooth drum. Dimensions are for reference only and subject to change without notice. Please contact factory for exact dimensions.



4WS SERIES POWER WINCHES

4WS Series



4WS Series Winch Dimensions

| | A | | B | | C | | D | | E | | H | | J | | K | |
|-------------------|-------|-------|-------|-------|-------|------|-------|------|------|------|-------|-------|------|------|-------|------|
| | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) |
| 4WS9M18-7000-20 | 44.00 | 1,118 | 33.75 | 857 | 8.50 | 216 | 17.75 | 451 | 5.13 | 130 | 31.00 | 787 | 4.00 | 102 | 18.00 | 457 |
| 4WS9M18-7000-30 | 45.50 | 1,156 | 38.50 | 978 | 8.50 | 216 | 17.75 | 451 | 5.13 | 130 | 31.00 | 787 | 4.00 | 102 | 18.00 | 457 |
| 4WS9M18-10000-10 | 44.00 | 1,118 | 33.75 | 857 | 8.50 | 216 | 17.75 | 451 | 5.13 | 130 | 31.00 | 787 | 4.00 | 102 | 18.00 | 457 |
| 4WS9M18-10000-20 | 45.50 | 1,156 | 38.50 | 978 | 8.50 | 216 | 17.75 | 451 | 5.13 | 130 | 31.00 | 787 | 4.00 | 102 | 18.00 | 457 |
| 4WS9M18-10000-30 | 45.50 | 1,156 | 40.00 | 1,016 | 8.50 | 216 | 17.75 | 451 | 5.13 | 130 | 31.00 | 787 | 4.00 | 102 | 18.00 | 457 |
| 4WS16M20-13000-15 | 48.00 | 1,219 | 34.75 | 883 | 9.50 | 241 | 20.00 | 508 | 6.25 | 159 | 34.00 | 864 | 4.00 | 102 | 20.00 | 508 |
| 4WS16M20-13000-20 | 48.00 | 1,219 | 37.00 | 940 | 9.50 | 241 | 20.00 | 508 | 6.25 | 159 | 34.00 | 864 | 4.00 | 102 | 20.00 | 508 |
| 4WS16M20-13000-35 | 48.00 | 1,219 | 39.50 | 1,003 | 9.50 | 241 | 20.00 | 508 | 6.25 | 159 | 34.00 | 864 | 4.00 | 102 | 20.00 | 508 |
| 4WS16M20-16000-15 | 48.00 | 1,219 | 34.75 | 883 | 9.50 | 241 | 20.00 | 508 | 6.25 | 159 | 34.00 | 864 | 4.00 | 102 | 20.00 | 508 |
| 4WS16M20-16000-20 | 48.00 | 1,219 | 37.00 | 940 | 9.50 | 241 | 20.00 | 508 | 6.25 | 159 | 34.00 | 864 | 4.00 | 102 | 20.00 | 508 |
| 4WS26M26-22000-20 | 60.50 | 1,537 | 43.50 | 1,105 | 12.38 | 314 | 25.38 | 645 | 8.06 | 205 | 44.50 | 1,130 | 5.88 | 149 | 26.00 | 660 |
| 4WS26M26-22000-25 | 60.50 | 1,537 | 47.00 | 1,194 | 12.38 | 314 | 25.38 | 645 | 8.06 | 205 | 44.50 | 1,130 | 5.88 | 149 | 26.00 | 660 |
| 4WS26M26-22000-35 | 60.50 | 1,537 | 50.00 | 1,270 | 12.38 | 314 | 25.38 | 645 | 8.06 | 205 | 44.50 | 1,130 | 5.88 | 149 | 26.00 | 660 |
| 4WS26M26-26000-10 | 60.50 | 1,537 | 42.00 | 1,067 | 12.38 | 314 | 25.38 | 645 | 8.06 | 205 | 44.50 | 1,130 | 5.88 | 149 | 26.00 | 660 |
| 4WS26M26-26000-15 | 60.50 | 1,537 | 43.50 | 1,105 | 12.38 | 314 | 25.38 | 645 | 8.06 | 205 | 44.50 | 1,130 | 5.88 | 149 | 26.00 | 660 |

| | L | | M | | N | | P | | R | | S (Hole Dia.) | | Ship Wt. | |
|-------------------|-------|------|-------|------|------|------|-------|------|-------|------|---------------|------|----------|-------|
| | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (lb) | (kg) |
| 4WS9M18-7000-20 | — | — | 12.50 | 318 | 2.75 | 70 | 22.00 | 559 | 12.50 | 318 | 1-3/16 | 30 | 1,100 | 499 |
| 4WS9M18-7000-30 | — | — | 12.50 | 318 | 2.75 | 70 | 22.00 | 559 | 12.50 | 318 | 1-3/16 | 30 | 1,100 | 499 |
| 4WS9M18-10000-10 | — | — | 12.50 | 318 | 2.75 | 70 | 22.00 | 559 | 12.50 | 318 | 1-3/16 | 30 | 1,100 | 499 |
| 4WS9M18-10000-20 | — | — | 12.50 | 318 | 2.75 | 70 | 22.00 | 559 | 12.50 | 318 | 1-3/16 | 30 | 1,100 | 499 |
| 4WS9M18-10000-30 | — | — | 12.50 | 318 | 2.75 | 70 | 22.00 | 559 | 12.50 | 318 | 1-3/16 | 30 | 1,160 | 527 |
| 4WS16M20-13000-15 | 10.00 | 254 | 13.50 | 343 | 2.75 | 70 | 27.50 | 699 | 16.25 | 413 | 1-3/16 | 30 | 1,550 | 704 |
| 4WS16M20-13000-20 | 10.00 | 254 | 13.50 | 343 | 2.75 | 70 | 27.50 | 699 | 16.25 | 413 | 1-3/16 | 30 | 1,610 | 731 |
| 4WS16M20-13000-35 | 10.00 | 254 | 13.50 | 343 | 2.75 | 70 | 27.50 | 699 | 16.25 | 413 | 1-3/16 | 30 | 1,650 | 749 |
| 4WS16M20-16000-15 | 10.00 | 254 | 13.50 | 343 | 2.75 | 70 | 27.50 | 699 | 16.25 | 413 | 1-3/16 | 30 | 1,550 | 704 |
| 4WS16M20-16000-20 | 10.00 | 254 | 13.50 | 343 | 2.75 | 70 | 27.50 | 699 | 16.25 | 413 | 1-3/16 | 30 | 1,610 | 731 |
| 4WS26M26-22000-20 | 13.00 | 330 | 18.25 | 464 | 3.00 | 76 | 36.00 | 914 | 21.75 | 552 | 1-3/8 | 35 | 3,110 | 1,411 |
| 4WS26M26-22000-25 | 13.00 | 330 | 18.25 | 464 | 3.00 | 76 | 36.00 | 914 | 21.75 | 552 | 1-3/8 | 35 | 3,290 | 1,493 |
| 4WS26M26-22000-35 | 13.00 | 330 | 18.25 | 464 | 3.00 | 76 | 36.00 | 914 | 21.75 | 552 | 1-3/8 | 35 | 3,350 | 1,520 |
| 4WS26M26-26000-10 | 13.00 | 330 | 18.25 | 464 | 3.00 | 76 | 36.00 | 914 | 21.75 | 552 | 1-3/8 | 35 | 3,070 | 1,393 |
| 4WS26M26-26000-15 | 13.00 | 330 | 18.25 | 464 | 3.00 | 76 | 36.00 | 914 | 21.75 | 552 | 1-3/8 | 35 | 3,110 | 1,411 |

IMPORTANT:

It is the owner's or operator's responsibility to determine the suitability of the equipment to its intended use. Study all applicable codes, manuals, and regulations. Be sure to read the Owner's Manual supplied with the equipment before operating it.

Dimensions are for reference only and subject to change without notice. Please contact factory for exact dimensions.

4WS SERIES POWER WINCHES



LIFT 50 TONS, WHAT DO YOU GET? SIMPLE, RESPECT

Mighty and reliable, Thern power winches can lift, hoist, pull or position up to 100,000 lb to handle any task you've got. Our broad range of standard models can be quickly adapted to suit custom applications. Plus our power winches feature top of the line gear reducers, rugged steel construction, load holding brake motors, and legendary performance and craftsmanship.

➤ **CUSTOMIZABLE**

We build to suit. Thern power winches come in a wide variety of base configurations, making it fast and affordable to customize a winch to your application.

➤ **DURABLE**

Thern's heavy duty power winches are built to take the around the clock punishment of hard working jobsites. Everything about them, from fabricated steel frame to industrial strength controls, says "no kid gloves" required.

➤ **EXPERIENCE**

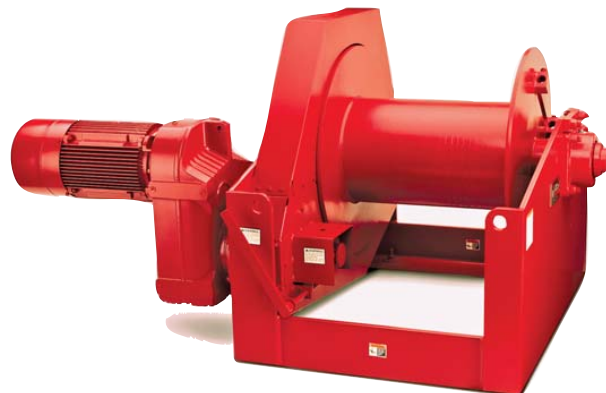
Thern has the experienced people you rely on to get the right product for the job. Our unmatched know-how means you won't end up with a solution that only creates new problems.



Series 4WS



Series 4HS6-26M
Clutch model shown



Series 4HS40-56M
Clutch model shown

4WS SERIES POWER WINCHES



ONE IF BY LAND, THERN IF BY SEA

Just because something floats, doesn't mean it isn't heavy. Try raising and lowering accommodation ladders, launching deep water research equipment or towing a vessel. It takes strength, control and stamina. It takes a Thern heavy duty power winch.

WHEN IT COMES TO HANDLING, THERE'S BULK AND THERE'S BULK

Thern power winches are used to pull trains, position barges, or lift behemoth conveyors. Why? They have the muscle and endurance to do it over the long haul without failure.

A MINER'S BEST FRIEND

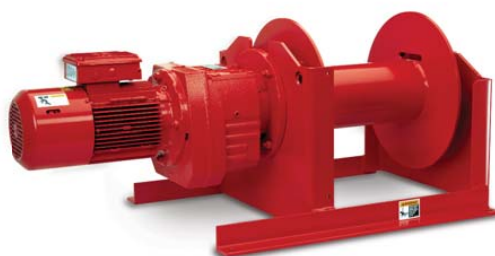
Hard, heavy, dirty. That's everything you need to know about mining. Conditions are poor, mechanical strain constant, and loads a bear, but Thern power winches can handle any task you find in a mine.

POWERFUL ENOUGH FOR POWER PLANTS

Everything about a power plant is big – from steel doors to flare stacks, and it all needs to be lifted, lowered, or positioned. Durable and easily customized, Thern power winches help keep power plants running.



Series 4HWF



Series 4HPF



Series 4HPFC
Clutch model shown