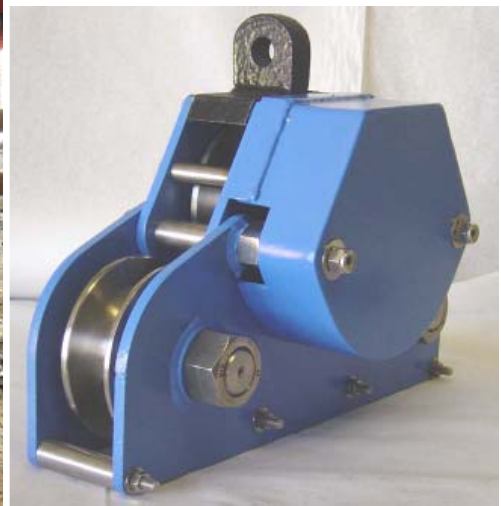


Compact Running Line Tensiometers



Running line tensiometers (RLT's) are ideal for retrofitting existing winches to enable line tension, speed, and payout monitoring - key variables for offshore mooring applications or for ensuring the safety of oceanographic payloads.

These models feature a rugged, compact design, high accuracy count and/or force sensors, and easy setup via an instrumented, and removable, center sheave. Standard models are available for applications ranging from 20 to 800 KIPS, and wire rope diameters up to 4.25 inches.

All units are constructed from powder-coated alloy steel with 316 stainless steel fasteners and 4140 hardened steel sheaves. When paired with an LCI-90 display, the system provides winch operators with real-time line parameter monitoring and maximum flexibility in remote viewing, sensor calibration, and data logging.

- Quick installation or removal via compact Sensing Head Design.
- Design validated by FEA and field-proven!
- All electronics safely located in center sensing head.
- Systems installed on rigs operated by TransOcean, Frontier, NPCC and others.
- High line speed rating.
- Sealed cylindrical roller bearings rated for high static and dynamic tension loads.
- IS sensors available as an option.
- Compact and rugged, RLT's offer portability. They can be relocated to other vessels of opportunity, if needed.

LCI Display Systems - For Superior Line Control

Running Line Tensiometers

Standard RLT Models

RL-1020K (Standard)

RL-1020K-SS (Stainless Steel)

Max Wire Rope Diameter: 1.25"

Line Tension Capacity: 20 KIPS

Max Speed @ Full Load: 800 ft/min

Overall Dimensions: 19" x 8" x 12"H

Weight: 100 lbs

RL-1040K (Standard)

RL-1040K-SS (Stainless Steel)

Max Wire Rope Diameter: 1.25"

Line Tension Capacity: 40 KIPS

Max Speed @ Full Load: 800 ft/min

Overall Dimensions: 19" x 8" x 12"H

Weight: 100 lbs

RL-1060K (Standard)

RL-1060K-SS (Stainless Steel)

Max Wire Rope Diameter: 1.25"

Line Tension Capacity: 60 KIPS

Max Speed @ Full Load: 800 ft/min

Overall Dimensions: 19" x 8" x 12"H

Weight: 100 lbs

RL-20175K (Standard)

RL-20175K-SS (Stainless Steel)

Max Wire Rope Diameter: 2.0"

Line Tension Capacity: 175 KIPS

Max Speed @ Full Load: 800 ft/min

Overall Dimensions: 30" x 12" x 22"H

Weight: 350 lbs

RL-30350K (Standard)

RL-30350K-SS (Stainless Steel)

Max Wire Rope Diameter: 3.0"

Line Tension Capacity: 350 KIPS

Max Speed @ Full Load: 1,000 ft/min

Overall Dimensions: 36" x 12.5" x 25"H

Weight: 400 lbs

RL-40500K (Standard)

RL-40500K-SS (Stainless Steel)

Max Wire Rope Diameter: 4.25"

Line Tension Capacity: 500 KIPS

Max Speed @ Full Load: 1,000 ft/min

Overall Dimensions: 41" x 18" x 32"H

Weight: 680 lbs

RL-40800K (Standard)

RL-40800K-SS (Stainless Steel)

Max Wire Rope Diameter: 4.25"

Line Tension Capacity: 800 KIPS

Max Speed @ Full Load: 1,000 ft/min

Overall Dimensions: 41" x 18" x 32"H

Weight: 680 lbs

Construction Specifications

Frame: Powder Coated Alloy Steel

Fasteners: 316 Stainless Steel

Pins & Shafts: 316 Stainless Steel

Fixed Mounting Points & Tether Points

Sheaves: 4140 Alloy Steel

17-4 PH Stainless (Optional)

Bearings: Double Roller Bearings w/seals

Mechanical Overload (Ultimate): 300%

Electrical Overload (No Damage): 150%

Temperature Range: -20°C to 70°C

Tension Sensor: Load Pin, 4-20mA (3 wire)

Internally gauged

24VDC excitation

Count Sensor: Hall Effect

(Quadrature output)

Payout: 6-10 targets per sheave revolution

