

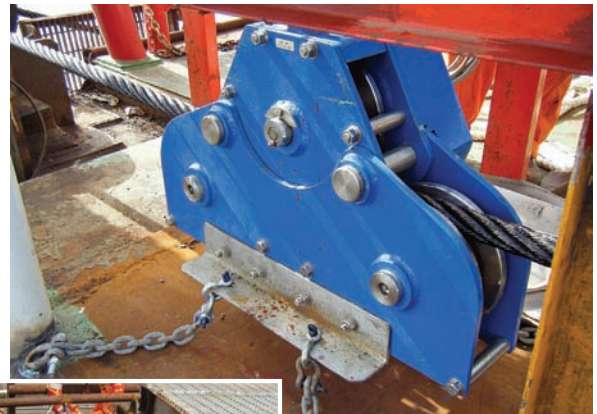
Line Riders

Compact Running Line Tensiometers

Running Line Tensiometers (RLTs) are ideal for new and existing winches to enable line tension, speed, and payout monitoring – key variables for offshore mooring applications, towing, or for ensuring the safety of oceanographic payloads.

These models feature a rugged, compact design, high accuracy rotational and/or force sensors, and easy setup via an instrumented, and removable, center sheave. Standard models are available for applications ranging from 0–500 tons, and wire rope diameters up to 4.5 inches.

All units are constructed from powder-coated tool steel with 316 stainless steel fasteners and 4340 hardened steel sheaves. When paired with an LCI-90i display, the system provides winch operators with real-time line parameter monitoring.



- 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 with Transocean, Noble, Rowan, NPCC, and others.
- High line speed rating under full load.
- Sealed roller bearings rated for high static and dynamic tension loads.
- Intrinsically Safe 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

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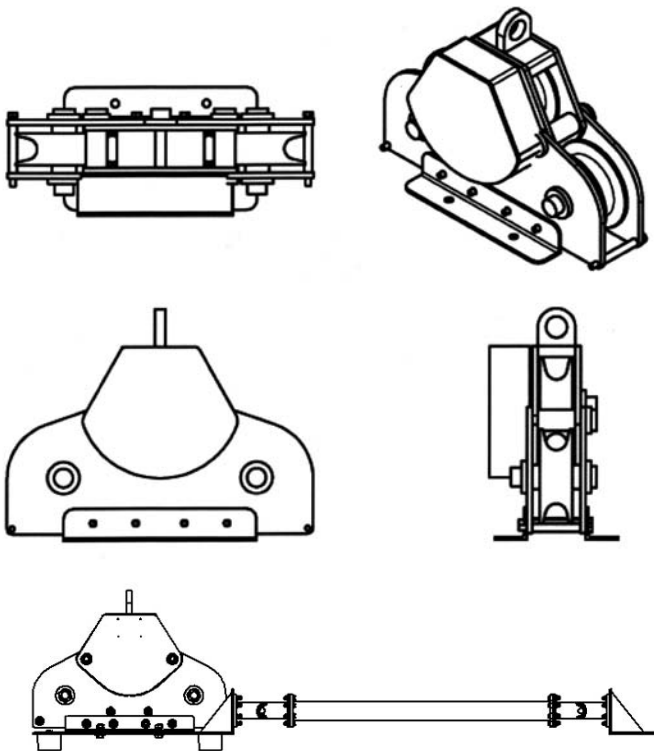
MEASUREMENT
Technology
NORTHWEST

Line Riders

Standard RLT Models

MODEL	WEIGHT	MAX TENSION	MAX WIRE DIAMETER INCHES/MM	DIMENSIONS
RL05	27.5 lbs. / 12.5 kg	10 ton / 89 kN	1" / 25 mm	10.8" x 6.5" x 9.3" H
RL10	95 lbs. / 43 kg	45 ton / 400 kN	1.5" / 38 mm	19" x 10" x 15" H
RL20	260 lbs. / 118 kg	150 ton / 1335 kN	2" / 52 mm	28.5" x 13" x 22" H
RL30	440 lbs. / 200 kg	375 ton / 3737 kN	3" / 80 mm	36" x 15.4" x 26.4" H
RL40	750 lbs. / 340 kg	500 ton / 4450 kN	4.5" / 115 mm	41" x 16.3" x 30.8" H

General Assembly



Construction Specifications

Frame	Thermo Plastic Powder Coated Tool Steel
Fasteners	316 Stainless Steel
Pins & Shafts	17-4 PH Stainless Steel Fixed Mounting Points & Tether Points
Sheaves	4340 Alloy Steel (Standard) 17-4 PH Stainless (Optional) Machined Cast Nylon (Optional)
Bearings	Regreaseable Roller Bearings
Temperature Range	-20°C to 70°C
Tension Sensor	Load Pin, 4-20mA (3 wire) High Tensile Stainless Steel Mechanical Overload: 300% (Ultimate) Proofload: 150%
Count Sensor	Hall Effect (Quadrature output) 9-36 VDC Excitation Stainless Steel Housing
Payout Sensors	4-12 targets per sheave revolution Intrinsically Safe available