Scale Carriage

QTLTS
forklift scale system
(not legal-for-trade)

Technical Specification

FLI 425

FLI 225

DESCRIPTION

General

The Avery Weigh-Tronix QTLTS Forklift Scale System turns a lift truck into a mobile scale. The system includes a durable, front-mounted digital scale carriage with Weigh Bar® electronic weight sensors and two viewing ports, as well as a choice of two in-cab instruments. The system allows operators to easily and quickly capture weight data en route, without extra steps.

Seamless Compatibility

Simply attach the QTLTS scale carriage to an existing Class II or Class III cleat-type forklift carriage and mount the FLI 225/425 instrument in a convenient driver location. This system allows seamless integration of weighing and data management into your operations without adding any extra steps or route changes.

Robust Design

The forklift scale carriage is comprised of two metal plates coupled together by four high capacity Weigh Bars.

- Front loading safety factor of 29.5:1
- Normal load safety factor of 7.5:1
- Overload with no damage of 200%

The instrumentation is designed exclusively for the forklift vehicle. It incorporates design technologies to withstand the environmental and warehouse jolts common in forklift applications.

Performance

The QTLTS is the solution for monitoring loads handled by forklifts that do not require legal-for-trade accuracy. The QTLTS consistently provides 99% or better weight accuracy of the applied load regardless of the position of the forks or mast. The Quick Tach scale carriage attaches to an existing forklift carriage and withstands up to 200% of full capacity applied anywhere up to 24" from the frame and side loads up to 100% of full capacity.

- ITA Class II Cleat Type
  - 5,000 x 1 lb

- ITA Class III Cleat Type
  - 5,000 x 1 lb
  - 10,000 x 2 lb

This electronic scale design has no mechanical flexures or springs to influence the weighing performance.

Data Management

The FLI 225 instrument provides a simple, no-nonsense solution through classic or enhanced operation for capturing weight and supplying it to a peripheral device.

The FLI 425 instrument simultaneously displays multiple fields of data, assisting the operator with a visual reference. Data can be stored on-board or instantly transmitted wirelessly to a local or global network.

SPECIFICATIONS

Scale Carriage

Front and back plates yield strength: 43,500 psi

Weigh Bar® fasteners yield strength: 160,000 psi

Weigh Bar tensioners yield strength: 150,000 psi

Mounting hooks yield strength: 43,500 psi

View port: Two viewing ports

Weight sensors: Four Avery Weigh-Tronix 2500 LB Weigh Bars direct coupled, no flexures

Overload protection: Withstands up to 200% of full capacity applied anywhere up to 24" from frame and side loads up to 100% of full capacity

Finish: High grade powder paint

Avery Weigh-Tronix Weigh Bar

Type: 2.5k weight sensors (4) 5,000 LB
6k weight sensors (4) 10,000 LB

Metal properties: AISI 4340 steel yield strength 140,000 psi

Zero balance: ± 0.10 mv/v

Non-linearity maximum: 0.3% of rated output

Hysteresis maximum: 0.03% of rated output

Temperature effect on output: ± 0.0025% ° C of rated output (-10 to +40° C)

Temperature effect on zero balance: ± 1.70 x 10-7 volts per volt 5°C (-10 to +40° C)

Safe overload rating: 150% of capacity

Digital Weight Summing

Enclosure: Metal enclosure, circuitry encapsulated

System

Not legal-for-trade

Lifting capacity reduced 12-14%

Compatible with ITA Class II, 16" high cleat type carriage

Compatible with ITA Class III, 20" high cleat type carriage

FCC part 15B

FLI 225 Instrument

Type: FLI 225 instrument

Power input: 9 to36 vdc, 3.5 Amp, Inactive stand by mode

Display: High contrast backlit transflective LCD dot matrix
Custom designed font ¾" high digits
Classic and Expanded Operational Modes

Operational keys: On/Off, Zero, Print, Select, Tare, F1-F4

Operational images: Weight, LB/KG, Motion, Center of Zero, Weigh mode, Wireless carriage communication status, Operator status messages and Battery status of FLW 100

Angle compensation: Detects and automatically compensates for out of level accurate weighing

Communication ports: Two RS 232 serial ports

Operating environment: Industrial -34° to +65° C

Enclosure: Composite with tilt and swivel brackets, designed to IP65

Dimensions: 8.14"W x 5.19"H x 4.03" D includes mounting bracket

Weight: 4 LB / 1.8 KG

Options: FLP 100 power conditioner 24 to 72 vdc, FLR 100 remote display, barcode scanner, RM 200 WiFi data 802.11g, RM 100 Bluetooth,® Data management software

FLI 425 Instrument

Type: FLI 425 instrument

Power input: 9 to36 vdc, 3.5 Amp, Inactive stand by mode

Display: 7" backlit multi colored touch screen TFT LCD display, 800 x 480 resolution
1" high custom font weight values, adjustable contrast

Operational keys: Hard keys On/Off, F1, Store, Zero, many touch activated keys

Operational: Weight, LB/KG, Weigh mode, Motion, Center of Zero, Date/Time, Number of stored records, Pro Number, Actual Pieces, Actual Pieces, Accumulated Pieces, Employee ID, Accumulated Weight, Abort, Complete, Alpha Numeric entry screen, WiFi data radio link status, WiFi wireless carriage status, wireless scale carriage battery status, and multiple user messages including diagnostic management with predictive alerts

Design platform: Windows CE.NET®

Angle compensation: Detects and automatically compensates for out of level accurate weighing

Communication ports: RS 232 serial, USB, Ethernet, Compact flash memory, Compact flash WiFi

Audio: Internal speaker

Operating environment: Industrial -34° to +65° C

Enclosure: Cast aluminum with high grade powder paint
Soft surround wrap provides operator head protection
Tilt and swivel brackets, with vibration isolation

Dimensions: 10.75"W x 7.44" H x 4.5" D includes mounting bracket

Weight: 7 LB / 3.2 KG

Options: FLP 100 power conditioner 24 to 72 vdc, FLR 100 remote display, barcode scanner, RM 200 WiFi data 802.11g , RM 100 Bluetooth, Compact flash WiFi 802.11g, Compact memory, Data management software

Avery Weigh-Tronix