

# ECONOMICAL FORCE OR TORQUE INDICATORS WITH REMOTE SENSORS **TRODEKS®**

## DFG-RS3



- ✓ Interchangeable Force and Torque Sensors
- ✓ High Speed 2000 Hz Sampling rate
- ✓ Ultra-Compact Size
- ✓ 4 Selectable Units of Measure
- ✓ Load Cells Available in Ranges from 0.25 to 10,000 lb
- ✓ Torque Sensors for 10 oz-in to 100 lb-in Ranges
- ✓ USB Data Output
- ✓ Programmable SetPoints with Pass/Fail Indicators
- ✓ Large Backlit Graphics Display
- ✓ Live Load Bargraph with Set Point Markers
- ✓ Peak Readings and Set Points Always Displayed

The DFG-RS3 is an economical digital force and torque indicator that works with a wide variety of plug and play force and torque sensors. All calibration and configuration data is stored in the sensors smart connector instead of the indicator making the sensors truly interchangeable. In addition all of the remote sensors are also fully compatible with the advanced DFG-RS5 force/torque indicators.

A variety of interchangeable force and torque sensors are available for use with the RS3 series. Sensors are available in a range of capacities from 0.25 to 10,000 pounds force for load cells and 10 oz-in to 100 lb-in for torque sensors. In addition to the pre-calibrated sensors the DFG-RSA programmable adapter allows the end user to calibrate most bridge type force or torque sensor with a 1 to 3 mV/V full scale output to work with the DFG-RS3.



DFG-RS3 shown with DFG-RSA, sold separately, shown smaller than actual size.

See our full line of remote sensors RLC and RTQ series.

The RS3 series also shares menu structure and most specifications with the DFG35/HHTQ35 force and torques gauges. A backlit graphic LCD displays large characters and a menu is available to access the gauges features and configurable parameters. Units also have a USB output for data collection and set-point indicators for pass-fail testing.

### SPECIFICATIONS

**Accuracy:** 0.2% of full scale + sensor

**Power:** Rechargeable battery or AC using adapter (batteries and adapter included)

**Battery Life:** Up to 7 hours continuous use with backlight on or 24 hours with backlight off

**Low Battery:** Multi-step low battery indicator is displayed, gauge shuts off automatically when power is too low

**Configurable Settings:** Digital filters, USB output, automatic Shutoff, default settings, key tones, audio alarms, calibration

**USB Output:** Individual data points by pressing the "DATA" key. Configurable to 115,200 baud

**Operating Temperature:** 4 to 38°C (40 to 100°F)

**Humidity:** 96% RH non-condensing



DFG-RSA smaller than actual size.

Calibrates remote sensor to meter.

**Dimensions:** 99.1 H x 64.3 W x 38.1 mm D (3.90 x 2.53 x 1.50")

**Weight:** 0.3 kg (0.7 lb)

### SENSOR COMMON SPECIFICATIONS

**Operating Temperature:** 5 to 38°C (40 to 100°F)

**Operating Humidity:** 96% non-condensing maximum

### LOAD CELLS

**Safe Overload:** 150% of full scale (200% for RLC03-025, RLC03-2 and RLC04 series)

### TORQUE SENSORS

**Safe Overload:** 150% of full scale (300% for RTQ50-10Z, RTQ50-50Z)

**Chuck Opening:** RTQ50-10Z and RTQ50-50Z – 0.062 to 0.375" RTQ50-12, RTQ50-100 – 0.078 to 0.5"

RLC01



RLC02



RLC03



RLC04



RTQ50



## To Order

MODEL NO.	CAPACITY	ACCURACY FULL SCALE
<b>Series Tension/Compression Load Cells</b>		
RLC01-50	±50 lbs	±0.15%
RLC01-100	±100 lbs	±0.15%
RLC01-200	±200 lbs	±0.15%
RLC01-500	±500 lbs	±0.15%
RLC01-1K	±1000 lbs	±0.15%
RLC01-2K	±2000 lbs	±0.15%
RLC01-5K	±5000 lbs	±0.15%
RLC01-10K	±10,000 lbs	±0.15%
<b>Series Compression Load Cells</b>		
RLC02-100	0 to 100 lbs	±0.5%
RLC02-200	0 to 200 lbs	±0.5%
RLC02-500	0 to 500 lbs	±0.5%
RLC02-1K	0 to 1000 lbs	±0.5%
RLC02-2K	0 to 2000 lbs	±0.5%
RLC02-5K	0 to 5000 lbs	±0.5%
RLC02-10K	0 to 10,000 lbs	±0.5%
<b>Series Low Capacity Tension/Compression Load Cells</b>		
RLC03-0.25	±0.25 lbs	±0.15%
RLC03-0.5	±0.5 lbs	±0.15%
RLC03-2	±2 lbs	±0.15%
RLC03-5	±5 lbs	±0.15%
RLC03-10	±10 lbs	±0.15%
RLC03-20	±20 lbs	±0.15%
RLC03-50	±50 lbs	±0.15%
RLC03-100	±100 lbs	±0.15%
<b>Series Miniature Tension/Compression Load Cells</b>		
RLC04-0.25	±0.25 lbs	±0.2%
RLC04-0.5	±0.5 lbs	±0.2%
RLC04-2	±2 lbs	±0.2%
RLC04-5	±5 lbs	±0.2%
RLC04-10	±10 lbs	±0.2%
RLC04-20	±20 lbs	±0.2%
RLC04-50	±50 lbs	±0.2%
RLC04-100	±100 lbs	±0.2%
<b>Series Reaction Torque Sensors</b>		
RTQ50-10Z	±10 oz in	±0.35%
RTQ50-20Z	±20 oz in	±0.35%
RTQ50-50Z	±50 oz in	±0.35%
RTQ50-12	±12 lb in	±0.35%
RTQ50-50	±50 lb in	±0.35%
RTQ50-100	±100 lb in	±0.35%

## To Order

MODEL NO.	DESCRIPTION
DFG-RS3	Economical force or torque indicator for use with remote sensors*
DFG-RSA	User configurable remote sensor adaptor*

Comes complete with carrying case, universal voltage AC adaptor, quick start guide, users manual and certificate of conformance.

All RLC or RTQ sensors come with a NIST traceable calibration certificate. Hooks sold separately part # G1038.

\* Remote sensors sold separately.

**Ordering Examples:** DFG-RS3, economical handheld force or torque indicator, plus RLC01-500, remote 500 pound "S" type load cell.

DFG-RS3, economical handheld force or torque indicator, plus RTQ50-12, ±12 lb in reaction torque sensor.