

# ADVANCED DIGITAL FORCE OR TORQUE INDICATORS WITH REMOTE SENSORS

## DFG-RS5

- ✓ Interchangeable Force and Torque Sensors
- ✓ High Speed 7000 Hz Sampling Rate
- ✓ 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
- ✓ Calibration Data Stored in Sensor
- ✓ USB, RS232, Mitutoyo and Analog Outputs
- ✓ Programmable Setpoints with Indicators and Outputs
- ✓ Large Backlit Graphics Display
- ✓ Live Load Bar Graph with Set Point Markers
- ✓ Peak Readings and Set Points Always Displayed

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



DFG-RSA smaller than actual size.



Calibrates remote sensor to meter.

DFG-RS5, shown with DFG-RSA, sold separately.

The DFG-RS5 is a high performance digital 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 DFG-RS3 basic force/torque indicators.

A variety of interchangeable force and torque sensors are available for use with the DFG-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 adaptor 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-RS5.

The DFG-RS5 also shares menu structure and most specifications with the DFG55 force gauges. It's fast 7000 Hz sampling rate produces accurate results even for quick action tests. It also has an average mode that addresses the need to record the average load over time and an on board data memory for up to 1000 readings.

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 setpoint indicators for pass-fail testing.

### SPECIFICATIONS

**Accuracy:** 0.1% of full scale  $\pm 1$  digit + 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, outputs, automatic shutoff, default settings, averaging mode, external trigger, passwords, key tones, audio alarms, backlight, calibration

#### Outputs:

**USB/RS232 Output:** Configurable to 115,200 baud

**Mitutoyo (Digimatic):** Serial BCD suitable for all Mitutoyo SPC compatible devices

**Analog:**  $\pm 1$  Vdc,  $\pm 2\%$  full scale accuracy

**General Purpose:** 3 open drain outputs, 1 input

**Set Points:** 3 open drain lines

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

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

**Dimensions:** 149.4 H x 64.3 W x 33.6 mm D (5.88 x 2.53 x 1.32")

**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)

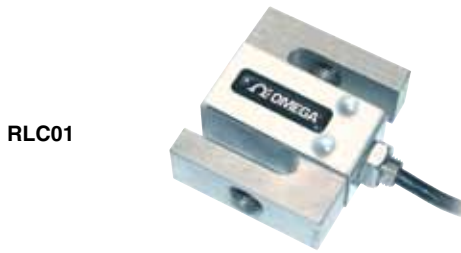
### TORQUE SENSORS

**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"



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.



RLC01



RLC02



RLC03



RLC04



RTQ50

To Order		
MODEL NO.	CAPACITY	ACCURACY FULL SCALE
<b>RLC01 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>RLC02 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>RLC03 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>RLC04 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>RTQ50 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-RS5	Advanced 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.

\* Remote sensors sold separately.

Ordering Examples: DFG-RS5, advanced handheld force or torque indicator, plus RLC01-500, remote 500 pound "S" type load cell.

DFG-RS5, advanced handheld force or torque indicator, plus RTQ50-12, ±12 lb in reaction torque sensor.