



LCGD Series

Compression Load Cells



INSTRUCTION
SHEET

M0443/0707

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GENERAL

The OMEGA® LCGD Series bonded foil strain gage load cells are compression only units that are highly cost effective. To ensure excellent long term stability and reliability in severe environments, the LCGD Series utilizes high quality strain gages, precision gaging techniques and all stainless steel construction. These units have a machined load button as an integral part of the basic load cell. The LCGD Load Cell is designed to operate by mounting on a flat surface. The LCGD must rest on a flat surface at least the diameter D_1 dimension for proper operation.

The part number indicates the load cell type (LCGD) and load range (eg., 500 for 500 lb). Models are available with load ranges of 100, 250, 500, 1000, 2000, 5000, 10,000 and 50,000 lb. LCGD series load cells are compatible with the DP41-S and DP25B-S digital panel meters. These and other compatible instruments can be found in Section D of the OMEGA Pressure, Strain and Force Handbook™.

SPECIFICATIONS

Signal Output:	2mV/V nominal see cal. sheet for exact output
Linearity:	0.25% FS, BFSL
Hysteresis:	0.2%
Zero Balance:	+2%
Repeatability:	±0.1% FS
Compensated Temperature Range:	60°F to 160°F

Temperature Effect:

Zero:

$\pm 0.009\%$ FSO/ $^{\circ}\text{C}$

Span:

$\pm 0.018\%$ reading/ $^{\circ}\text{C}$

Bridge Resistance:

350 ohm foil strain gage

Excitation Voltage:

10 V

Safe Overload:

150% of full scale

Electrical Connection:

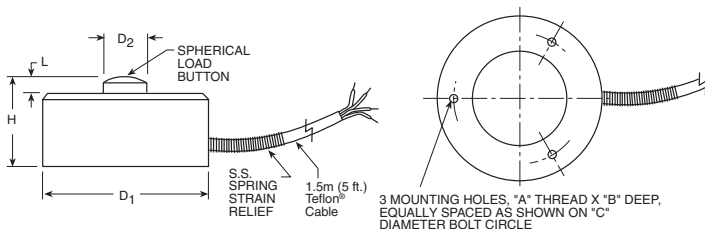
5 feet of shielded cable with pigtail end

Operating Temperature

Range:

-65° to 250°F

CABLE COLOR CODE	
+EXC	RED
+SIG	WHITE
-SIG	GREEN
-EXC	BLACK



RANGES	D1"	D2"	H"	L"	A"	B	C
100 lb	1.00	.21	.62	.05	#4-40 UNC	.22	.75
250 to 2000 lb	1.25	.32	.39	.07	#6-32 UNC	.25	1.00
5,000, 10,000 lb	1.50	.43	.63	.08	#6-32 UNC	.25	1.25
50,000 lb	3.00	.78	1.50	.18	#6-32 UNC	.25	2.375



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It is the policy of OMEGA Engineering, Inc. to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

WARNING: These products are not designed for use in, and should not be used for, human applications.

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's Warranty adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence. The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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