

1 YEAR
WARRANTY

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User's Guide

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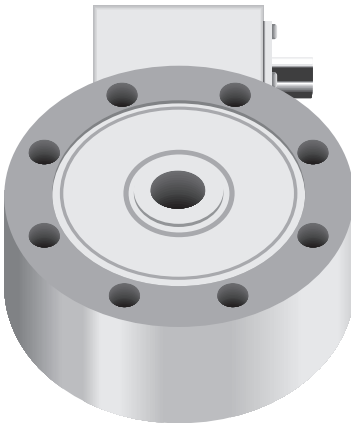
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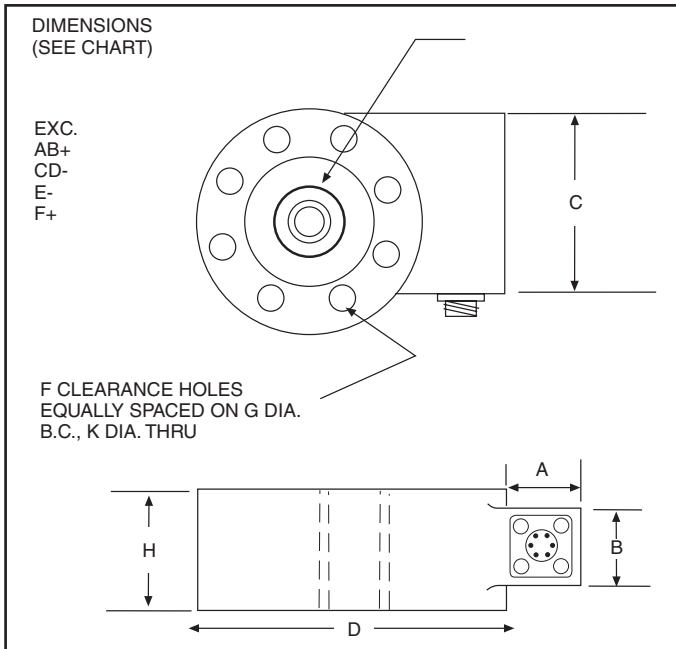


LCHD SERIES Low Profile Load Cells

GENERAL

The OMEGA® LCHD Series low profile tension and compression load cells utilize high quality strain gages, precision strain gage techniques and all stainless steel construction to ensure excellent long-term stability and reliability in severe environments. The load cells are available in the ranges from 0-5 to 0-500,000 lb. measurements. They are designed to be mounted by the through holes and the threaded center shaft. Two stabilizing diaphragms are welded to the sensing member to reduce off center and side load effects (avoid side loading which affects accuracy). The LCHD Series is recommended for use on smooth, flat surfaces for assured linearity, hysteresis, and reliability.

Dimensions



Dimensions Shown in mm (in)

Capacity (lbs.)	D	H	F	G	K	T	A	B	C
5 to 25	64 (2.5)	20 (0.80)	6	51 (2.0)	4.6 (0.18)	1/4-28 UNF	24 (0.94)	19 (0.75)	32 (1.25)
50 to 1 k	76 (3.0)	25 (1.0)	6	57 (2.25)	7.1 (0.28)	3/8-24 UNF	24 (0.94)	19 (0.75)	32 (0.75)
2 k to 5 k	89 (3.5)	25 (1.0)	6	67 (2.63)	8.6 (0.34)	1/2-20 UNF	24 (0.94)	19 (0.75)	32 (0.75)
7.5 k to 15 k	140 (5.5)	46 (1.8)	8	114 (4.5)	10.0 (0.40)	1-14 UNS	32 (1.25)	38 (1.50)	51 (2.0)
20 k to 50 k	152 (6.0)	46 (1.8)	8	124 (4.88)	13 (0.53)	1-1/2-12 UNF	32 (1.25)	38 (1.50)	51 (2.0)
75 k to 100 k	229 (9.0)	64 (2.5)	12	197 (7.75)	17 (0.66)	2-12 UN	32 (1.25)	38 (1.50)	51 (2.0)
150 k to 200 k	279 (11.0)	76 (3.0)	12	241 (9.5)	20 (0.78)	2-1/2-12 UN	32 (1.25)	38 (1.50)	51 (2.0)
300 k to 500 k	356 (14.0)	108 (4.25)	12	298 (11.75)	25 (1.0)	3-1/2-8 UN	32 (1.25)	38 (1.50)	51 (2.0)

SPECIFICATIONS

- SIGNAL OUTPUT:** (Stated on calibration sheet)
- LINEARITY:** ±0.25% FSO ≤2.5 lb. ±0.1% FSO ≤50 lb.
- HYSTERESIS:** ±0.10% FSO
- REPEATABILITY:** ±0.10% FSO ≤2.5 lb. FSO ±0.1 FSO ≤50 lb.
- OPERATING TEMPERATURE:** -65°F to 250°F
- COMPENSATED TEMPERATURE RANGE:** 60°F to 160°F
- TEMPERATURE EFFECT:** Zero 0.002% full scale/°F;
Span 0.002% of reading/°F
- BRIDGE RESISTANCE:** 350 ohm bonded foil strain gage
- DEFLECTION FULL SCALE:** 0.001" to 0.003" Typical
- EXCITATION VOLTAGE:** 10 Vdc (15 Vdc max.)
- SAFE OVERLOAD:** 150%
- CONSTRUCTION:** ≤ 200 k 17-4PH stainless steel
≤ 200 k 4340 alloy steel
- MATING CONNECTOR:** PT06F-10-6S up to 5 K (included);
MS3102E-14S-6P 7.5 k to 500 k (included)

WIRING PIN

- A & B (+) EXCITATION
- C & D (-) EXCITATION
- E (-) OUTPUT
- F (+) OUTPUT



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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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