

LOW-PROFILE PANCAKE STYLE LOAD CELLS **STANDARD** AND **METRIC** MODELS

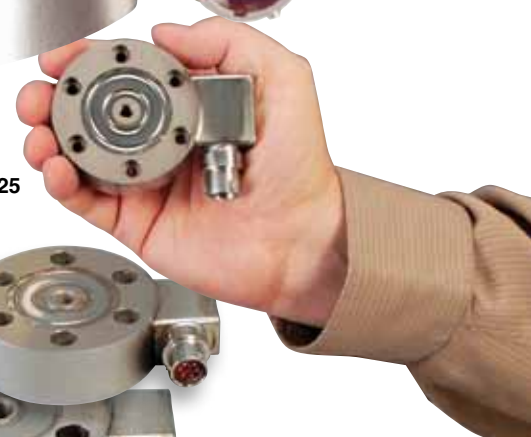


**Tension/Compression
Calibrated in Tension
5 to 500,000 lb Capacities
2.5 kgf to 10,000 kgf Capacities**

LCHD/LCMHD Series



LCHD-5K, shown actual size. See next page for dimensions.



LCHD-25

- ✓ 0.25% Interchangeability for Scale Applications
- ✓ All Stainless Steel Construction
- ✓ Heavy-Duty Design
- ✓ High Accuracy
- ✓ Low Profile for Easy Installation
- ✓ 5-Point Calibration
- ✓ Mating Connector Included

LCHD-100

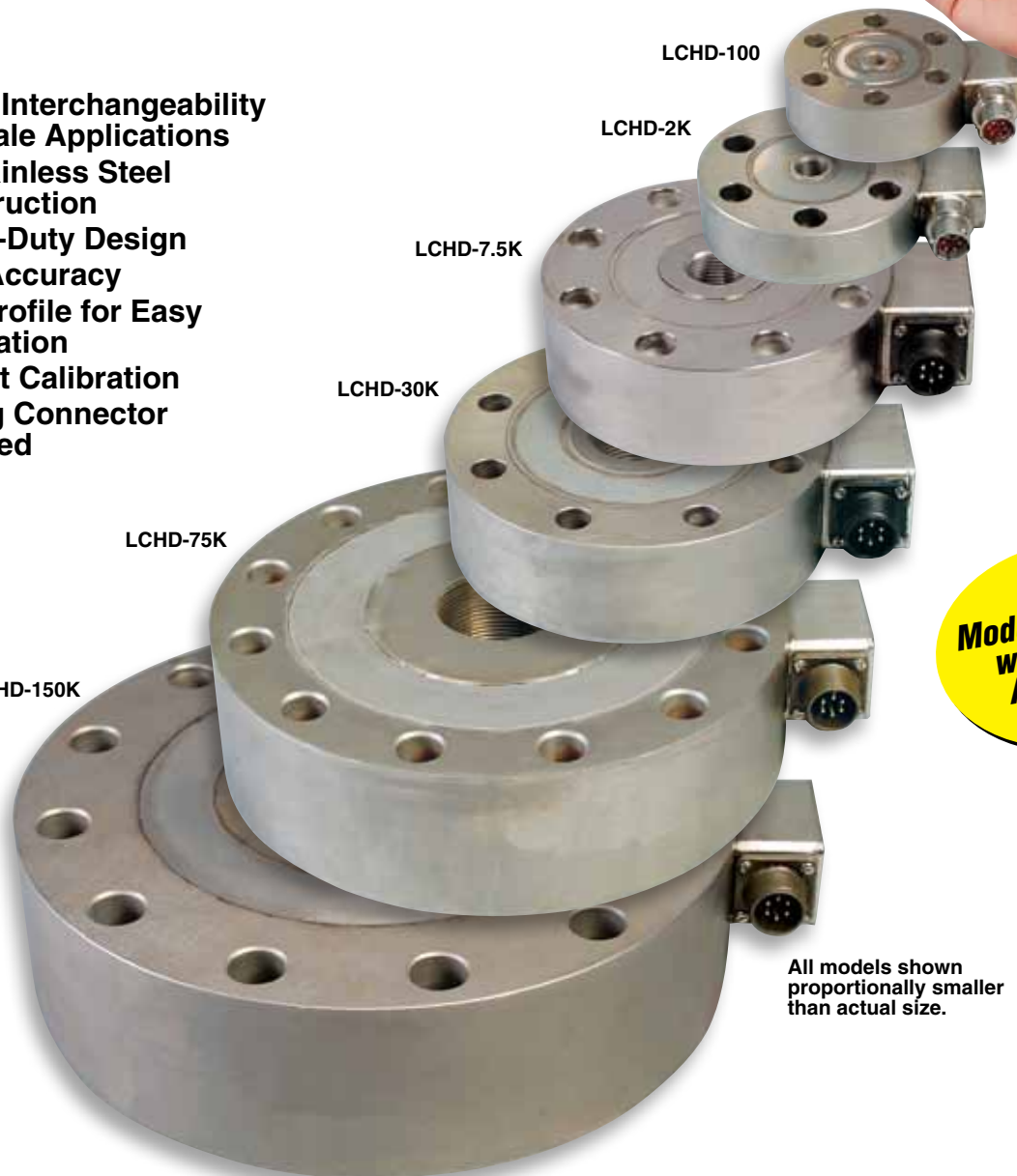
LCHD-2K

LCHD-7.5K

LCHD-30K

LCHD-75K

LCHD-150K



**Models Available
with Built-In
Amplifiers!**

All models shown proportionally smaller than actual size.

SPECIFICATIONS

Excitation: 10 Vdc (15 V max)

Output (FSO):

≤25 lb/10 kgf: 2 mV/V ±0.25%

≥50 lb/20 kgf: 3 mV/V ±0.25%

5-Point Calibration (in Tension):

0%, 50%, 100%, 50%, 0%

Linearity:

≤25 lb/10 kgf: ±0.20% FSO

≥50 lb/20 kgf: ±0.10% FSO

Hysteresis:

≤25 lb/10 kgf: ±0.10% FSO

≥50 lb/20 kgf: ±0.08% FSO

Repeatability:

≤25 lb/10 kgf: ±0.1% FSO

≥50 lb/20 kgf: ±0.03% FSO

Zero Balance: ±1% of FSO

Operating Temp Range:

-54 to 121°C (-65 to 250°F)

Compensated Temp Range:

16 to 71°C (60 to 160°F)

Thermal Effects:

Zero: 0.0036% FSO/°C

Span: 0.0036% FSO/°C

Safe Overload: 150% of capacity

Ultimate Overload: 300% of capacity

Input Resistance: 350 ±10 Ω

Output Resistance: 350 ±10 Ω

FS Deflection:

0.025 to 0.076 mm

(0.001 to 0.003") typical

Construction: 17-4 PH stainless steel

Electrical:

≤5000 lb/2000 kgf: DT02H-10-6P

>5000 lb/2500 kgf: MS3102E-14S-6P

(or equiv.)

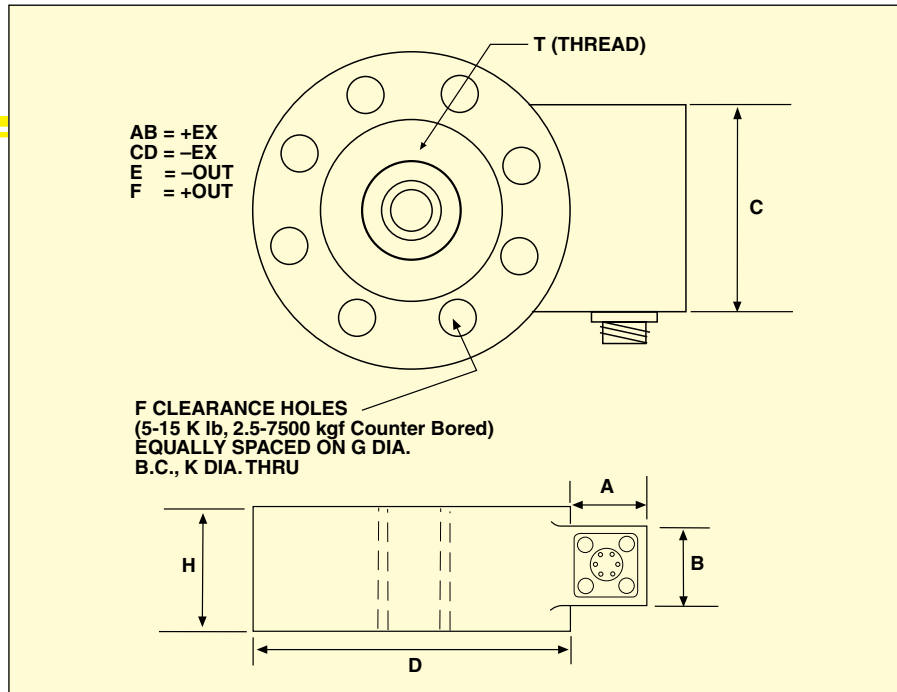
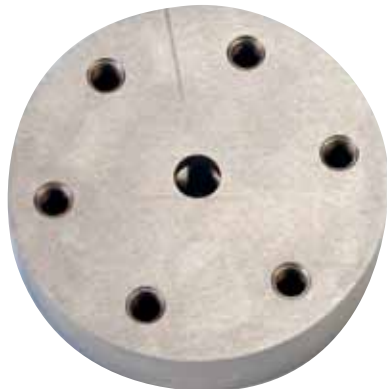
Mating Connector (Included):

≤5000 lb/2000 kgf: PT06F-10-6S

>5000 lb/2500 kgf: MS3102E-14S-6S

(or equiv.)

LCHD-TP263, optional tension plate for 2k to 5k LCHD load cells, shown smaller than actual size.



Dimensions: mm (inch)

| CAPACITY | D | H | F | G | K | T | A | B | C |
|------------------------|--------------|---------------|----|----------------|---------------|------------|--------------|--------------|--------------|
| STANDARD MODELS | | | | | | | | | |
| 5 to 25 lb | 64 (2.5) | 20 (0.80) | 6 | 51 (2.0) | 4.6 (0.18) | ¼-28 UNF | 24 (0.94) | 19 (0.75) | 32 (1.25) |
| 50 to 1K lb | 76 (3.0) | 25 (1.0) | 6 | 57 (2.25) | 7.1 (0.28) | ¾-24 UNF | 24 (0.94) | 19 (0.75) | 32 (1.25) |
| 2K to 5K lb | 89 (3.5) | 25 (1.0) | 6 | 67 (2.63) | 8.6 (0.34) | ½-20 UNF | 24 (0.94) | 19 (0.75) | 32 (1.25) |
| 7.5K to 15K lb | 140 (5.5) | 46 (1.8) | 8 | 114 (4.5) | 10 (0.40) | 1-14 UNS | 32 (1.25) | 38 (1.5) | 51 (2.0) |
| 20K to 50K lb | 152 (6.0) | 46 (1.8) | 8 | 124 (4.88) | 13 (0.53) | 1½-12 UNF | 32 (1.25) | 38 (1.5) | 51 (2.0) |
| 75K to 100K lb | 229 (9.0) | 64 (2.5) | 12 | 197 (7.75) | 17 (0.66) | 2-12 UN | 32 (1.25) | 38 (1.5) | 51 (2.0) |
| 150K to 200K lb | 279 (11) | 76 (3.0) | 12 | 241 (9.5) | 20 (0.78) | 2½-12 UN | 32 (1.25) | 38 (1.5) | 51 (2.0) |
| 300K to 500K lb | 356 (14) | 108 (4.25) | 12 | 298 (11.75) | 25 (1.0) | 3½-8 UN | 32 (1.25) | 38 (1.5) | 51 (2.0) |
| METRIC MODELS | | | | | | | | | |
| 2.5 to 10 kgf | 64 (2.5) | 20 (0.80) | 6 | 51 (2.0) | 4.6 (0.18) | M6 x 1.00 | 24 (0.94) | 19 (0.75) | 32 (1.25) |
| 25 to 500 kgf | 76 (3.0) | 25 (1.0) | 6 | 57 (2.25) | 7.1 (0.28) | M10 x 1.5 | 24 (0.94) | 19 (0.75) | 32 (1.25) |
| 1000 to 2500 kgf | 89 (3.5) | 25 (1.0) | 6 | 67 (2.63) | 8.6 (0.34) | M12 x 1.75 | 24 (0.94) | 19 (0.75) | 32 (1.25) |
| 5000 to 7500 kgf | 140 (5.5) | 46 (1.8) | 8 | 114 (4.5) | 10 (0.40) | M24 x 2.0 | 32 (1.25) | 38 (1.5) | 51 (2.0) |
| 10000 kgf | 152 (6.0) | 46 (1.8) | 8 | 124 (4.88) | 13 (0.53) | M36 x 2.0 | 32 (1.25) | 38 (1.5) | 51 (2.0) |

To Order

TENSION PLATES

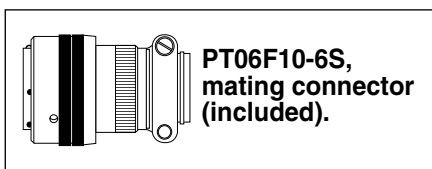
| MODEL NO. | DESCRIPTION |
|------------|--|
| LCHD-TP200 | Tension plate, 5 to 25 lb ranges |
| LCHD-TP225 | Tension plate, 50 to 1000 lb ranges |
| LCHD-TP263 | Tension plate, 2000 to 5000 lb ranges |
| LCHD-TP450 | Tension plate, 7500 to 15,000 lb ranges |
| LCHD-TP488 | Tension plate, 20,000 to 50,000 lb ranges |
| LCHD-TP775 | Tension plate, 75,000 to 100,000 lb ranges |

LOW-PROFILE PANCAKE STYLE LOAD CELLS



POPULAR OPTIONS

| DESCRIPTION | SUFFIX |
|---|--------------------|
| 5V Output Calibrated 0 to 5 Vdc in tension. (Output is bi-directional ± 5 Vdc) | “-5T” |
| Overload Stops | “-OL” |
| Dual Bridge ≤ 5000 lb/2500 kgf > 5000 lb/2500 kgf | “-DUAL” “-DUAL” |
| Extended Temperature Range between: -45 to 93°C (-50 to 200°F) and to 163°C (325°F) | “-TC1” “-TC2” |



To Order

| CAPACITY | | MODEL NO. | COMPATIBLE METERS |
|------------------------|-------------|-------------------|------------------------|
| STANDARD MODELS | | | |
| 5 lb | 2.3 kgf | LCHD-5 | DPiS, DP41-S, DP25B-S |
| 10 lb | 4.5 kgf | LCHD-10 | DPiS, DP41-S, DP25B-S |
| 25 lb | 11 kgf | LCHD-25 | DPiS, DP41-S, DP25B-S |
| 50 lb | 23 kgf | LCHD-50 | DPiS, DP41-S, DP25B-S |
| 100 lb | 45 kgf | LCHD-100 | DPiS, DP41-S, DP25B-S |
| 250 lb | 114 kgf | LCHD-250 | DPiS, DP41-S, DP25B-S |
| 500 lb | 227 kgf | LCHD-500 | DPiS, DP41-S, DP25B-S |
| 1K lb | 455 kgf | LCHD-1K | DPiS, DP41-S, DP25B-S |
| 2K lb | 909 kgf | LCHD-2K | DPiS, DP41-S, DP25B-S |
| 3K lb | 1361 kgf | LCHD-3K | DPiS, DP41-S, DP25B-S |
| 4K lb | 1815 kgf | LCHD-4K | DPiS, DP41-S, DP25B-S |
| 5K lb | 2269 kgf | LCHD-5K | DPiS, DP41-S, DP25B-S |
| 7.5K lb | 3403 kgf | LCHD-7.5K | DPiS, DP41-S, DP25B-S |
| 10K lb | 4537 kgf | LCHD-10K | DPiS, DP41-S, DP25B-S |
| 15K lb | 6806 kgf | LCHD-15K | DPiS, DP41-S, DP25B-S* |
| 20K lb | 9074 kgf | LCHD-20K | DPiS, DP41-S, DP25B-S* |
| 30K lb | 13,612 kgf | LCHD-30K | DPiS, DP41-S, DP25B-S* |
| 50K lb | 22,686 kgf | LCHD-50K | DPiS, DP41-S, DP25B-S* |
| 75K lb | 34,029 kgf | LCHD-75K | DPiS, DP41-S, DP25B-S* |
| 100K lb | 45,372 kgf | LCHD-100K | DPiS, DP41-S, DP25B-S* |
| 150K lb | 68,058 kgf | LCHD-150K | DPiS, DP41-S, DP25B-S* |
| 200K lb | 90,744 kgf | LCHD-200K | DPiS, DP41-S, DP25B-S* |
| 300K lb | 136,116 kgf | LCHD-300K | DPiS, DP41-S, DP25B-S* |
| 400K lb | 181,488 kgf | LCHD-400K | DPiS, DP41-S, DP25B-S* |
| 500K lb | 226,860 kgf | LCHD-500K | DPiS, DP41-S, DP25B-S* |
| METRIC MODELS | | | |
| 5.5 lb | 2.5 kgf | LCMHD-2.5 | DPiS, DP41-S, DP25B-S |
| 11 lb | 5 kgf | LCMHD-5 | DPiS, DP41-S, DP25B-S |
| 22 lb | 10 kgf | LCMHD-10 | DPiS, DP41-S, DP25B-S |
| 55 lb | 25 kgf | LCMHD-25 | DPiS, DP41-S, DP25B-S |
| 110 lb | 50 kgf | LCMHD-50 | DPiS, DP41-S, DP25B-S |
| 220 lb | 100 kgf | LCMHD-100 | DPiS, DP41-S, DP25B-S |
| 551 lb | 250 kgf | LCMHD-250 | DPiS, DP41-S, DP25B-S |
| 1102 lb | 500 kgf | LCMHD-500 | DPiS, DP41-S, DP25B-S |
| 2205 lb | 1000 kgf | LCMHD-1K | DPiS, DP41-S, DP25B-S |
| 3307 lb | 1500 kgf | LCMHD-1.5K | DPiS, DP41-S, DP25B-S |
| 4409 lb | 2000 kgf | LCMHD-2K | DPiS, DP41-S, DP25B-S |
| 5512 lb | 2500 kgf | LCMHD-2.5K | DPiS, DP41-S, DP25B-S |
| 11,023 lb | 5000 kgf | LCMHD-5K | DPiS, DP41-S, DP25B-S |
| 16,535 lb | 7500 kgf | LCMHD-7.5K | DPiS, DP41-S, DP25B-S |
| 22,046 lb | 10,000 kgf | LCMHD-10K | DPiS, DP41-S, DP25B-S |

Comes complete with 5-point NIST-traceable calibration, mating connector, and 59 k Ω shunt data.

* 4-digit meter.

** DPiS meter suitable for one direction measurement only.

Note: Models $> 300,000$ lb are calibrated at 300,000 lb—see Specifications.

Ordering Examples: **LCHD-500**, 500 lb capacity load cell.

LCMHD-500, 500 kgf capacity load cell.

PT06F10-6S, mating connector (included). **LCMHD-10K**, 10,000 kgf capacity load cell.

MS3106E-14S-6S, mating connector (included).

ACCESSORIES

| MODEL NO. | DESCRIPTION |
|-----------------------|---|
| MS3106E-14S-6S | Spare mating connector for units above 5000 lb capacity |
| PT06F10-6S | Spare mating connector for units below 7500 lb capacity |