

“PANCAKE” STYLE, HIGH-ACCURACY, LOW-PROFILE LOAD CELLS

STANDARD AND METRIC MODELS

LC402/LCM402 Series LC412/LCM412 Series

Tension/Compression
50 lb to 750,000 lb, 25 kgf to 10,000 kgf

Starts at
\$730



- ✓ Industrial Weighing
- ✓ FM Intrinsically Safe
- ✓ All Stainless Steel for Harsh Industrial Applications
- ✓ 0.25% Interchangeability for Multiple Load Cell Applications
- ✓ 5 Point NIST Traceable Calibration Included



LC412/LCM412 units with twist-lock connector.

LC412-3K, \$730, shown actual size.

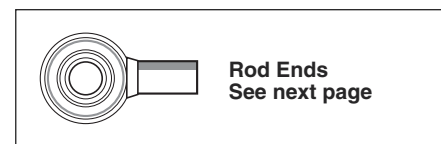
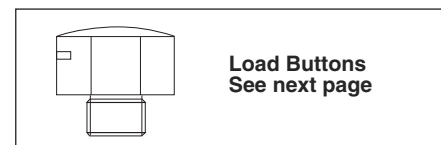
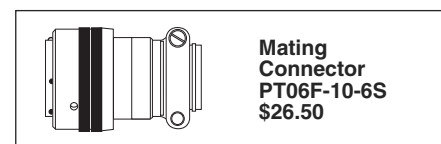
SPECIFICATIONS

Excitation: 10 Vdc (15 Vdc max)
Output: 3 mV/V \pm 0.25%
5-Point Calibration: 0%, 50%, 100%, 50%, 0% in compression. Units ordered with optional tension plate calibrated in tension.
Linearity: 0.10% FSO
Hysteresis: 0.10% FSO
Repeatability: 0.05% FSO
Zero Balance: \pm 1% FSO
Agency Approval: FM Intrinsically Safe IS/I.II.III/1/CDEFG
Operating Temp Range:
 LC402/LCM402: -54 to 121°C (-65 to 250°F)
 LC412/LCM412: -54 to 127°C (-65 to 260°F)
Compensated Temp Range: 16 to 71°C (60 to 160°F)
Protection Class: IP65
Thermal Effects:
 Zero: 0.0045% FSO/°C
 Span: 0.0045% FSO/°C
Safe Overload: 150% of capacity
Ultimate Overload: 300% of capacity for ranges \leq 400,000 lb; 200% of capacity for ranges $>$ 400,000 lb

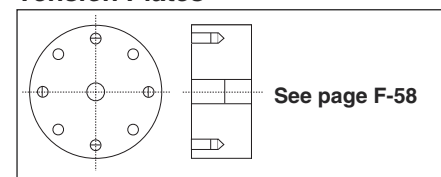
Bridge Resistance: 350 \pm 10 Ω
FS Deflection: 0.025 to 0.075 mm (0.001 to 0.003") typ
Construction: 17-4 PH stainless steel
Electrical Connection:
 LC402/LCM402: 4.8 m (15') 4-conductor shielded PVC cable
 LC412/LCM412: DT02H-10-6P connector (or equivalent)

POPULAR OPTIONS Add'l Price

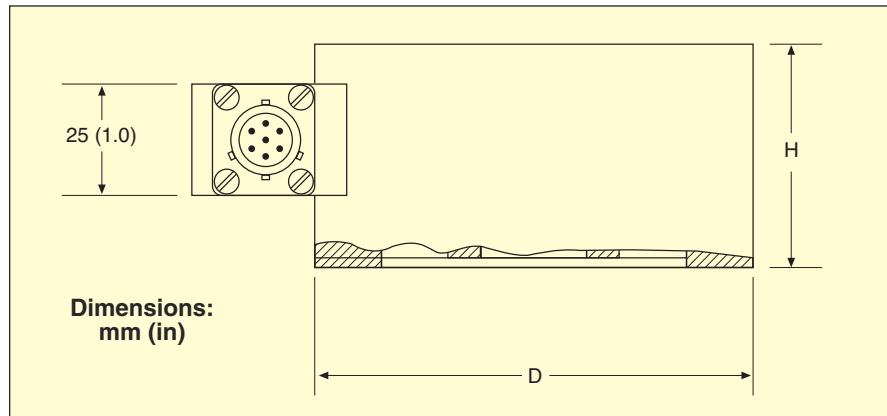
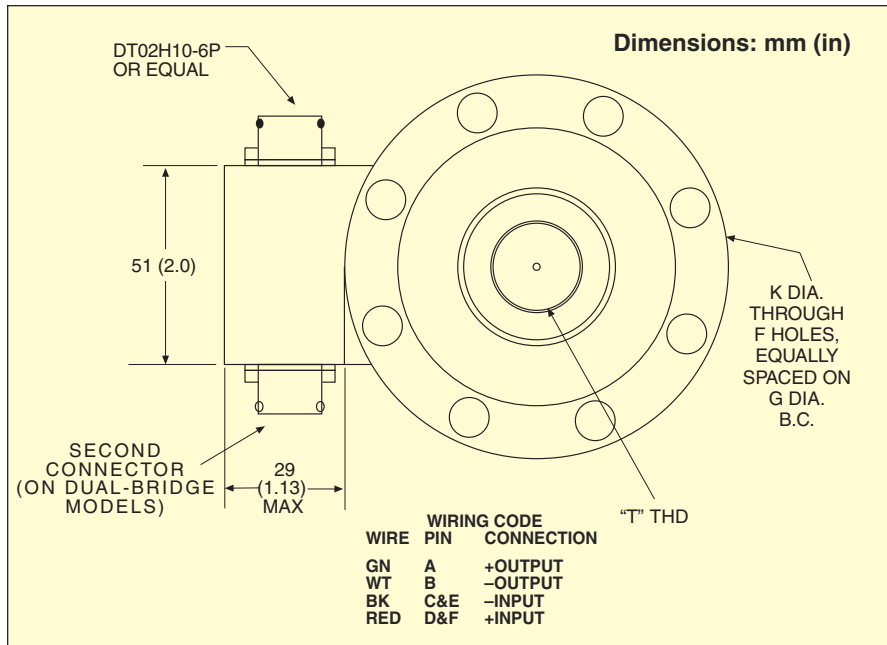
0 to 5 Vdc Output “-5V” \$175
 \geq 3000 kgf (Ranges)
Overload Stops: “-OL” Consult Factory
Dual Bridge:
 \leq 5000 lb (2500 kgf) “-DUAL” 250
 $>$ 5000 lb (2500 kgf) “-DUAL” 350
Extended Temperature Range: Add'l Price
 -45 to 93°C “-TC1” \$50
 (-50 to 200°F)
 -45 to 177°C “-TC2” 225
 (-50 to 350°F)
Watertight Cable Exit: “-WTC” 125
Additional Cable Length: 6.50/m



Tension Plates



"PANCAKE" STYLE, HIGH-ACCURACY, LOW-PROFILE LOAD CELLS STANDARD AND METRIC MODELS



Dimensions: mm (in)

CAPACITY	D DIA.	H HEIGHT	F	G	K	T	WEIGHT kg (lb)
STANDARD MODELS							
50 to 300 lb	76 (3.00)	38 (1.50)	8	57 (2.25)	6.7 (0.266)	3/8-24	2.5 (1.1)
500 to 3K lb	89 (3.50)	38 (1.50)	8	73 (2.875)	6.7 (0.266)	1/2-20	3 (1.4)
5000 to 10K lb	95 (3.75)	38 (1.50)	8	83 (3.25)	6.7 (0.266)	3/4-16	5 (2.3)
15K to 25K lb	102 (4.00)	51 (2.00)	8	89 (3.50)	10.3 (0.406)	1-14	7.5 (3.4)
30K to 50K lb	178 (7.00)	76 (3.00)	8	143 (5.625)	13.5 (0.531)	1 1/2-12	33 (15)
75K lb	203 (8.00)	89 (3.50)	8	171 (6.750)	16.7 (0.656)	1 3/4-12	50 (23)
100K lb	241 (9.50)	102 (4.00)	8	203 (8.00)	19.8 (0.781)	2-12	81 (37)
150K to 200K lb	279 (11.0)	102 (4.00)	12	235 (9.25)	26 (1.030)	2 1/2-12	102 (46)
300K to 400K lb	279 (11.0)	102 (4.00)	12	235 (9.25)	26 (1.030)	3-12	102 (46)
500K lb	305 (12.0)	102 (4.00)	12	280 (10.25)	29 (1.156)	3 1/2-8	115 (52)
750K lb	330 (13.0)	114 (4.50)	12	279 (11.00)	33 (1.281)	4-8	135 (61)
METRIC MODELS							
25 to 100 kgf	76 (3.00)	38 (1.50)	8	57 (2.25)	6.7 (0.266)	M10 x 1.5	2.5 (1.1)
250 to 1500 kgf	89 (3.50)	38 (1.50)	8	73 (2.875)	6.7 (0.266)	M12 x 1.75	3 (1.4)
2.5K to 5K kgf	95 (3.75)	38 (1.50)	8	83 (3.25)	6.7 (0.266)	M20 x 1.5	5 (2.3)
7.5K to 10K kgf	102 (4.00)	51 (2.00)	8	89 (3.50)	10.3 (0.406)	M24 x 2.0	7.5 (3.4)

STANDARD LOAD BUTTONS

MODEL	PRICE	THREAD
LBC-038	\$40	3/8-24
LBC-012	40	1/2-20
LBC-034	55	3/4-16
LBC-100	55	1-14
LBC-112	70	1 1/2-12
LBC-200-12	*	2-12

* Consult Engineering.

METRIC LOAD BUTTONS

MODEL NO.	PRICE	THREAD
MLBC-M10	\$40	M10 x 1.5
MLBC-M12	40	M12 x 1.75
MLBC-M20	55	M20 x 1.5
MLBC-M24	55	M24 x 2.0

STANDARD MALE ROD ENDS

MODEL NO.	PRICE	THREAD UNF-3A
REC-010M*	\$10	10-32
REC-038M	25	3/8-24
REC-012M	45	1/2-20
REC-034M	65	3/4-16
REC-100M	135	1-14
REC-112M	185	1 1/2-12

* Not available with grease fitting.

METRIC MALE ROD ENDS

MODEL NO.	PRICE	THREAD
MREC-M10M	\$35	M10 x 1.5
MREC-M12M	35	M12 x 1.75
MREC-M20M	165	M20 x 1.5
MREC-M24M	520	M24 x 2.0

See pages F-22 and F-23 for load button and rod end dimensions

HIGH-ACCURACY, LOW-PROFILE LOAD CELLS

STANDARD MODELS

 MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)						TENSION BASE PLATE (See F-58 for Details)	
CAPACITY		MODEL NO.		PRICE	COMPATIBLE METERS*	MODEL NO.	PRICE
lb	kgf	CABLE	CONNECTOR				
50	23	LC402-50	LC412-50	\$730	DPiS, DP41-S, DP25B-S	LC412-TP225	\$110
100	45	LC402-100	LC412-100	730	DPiS, DP41-S, DP25B-S	LC412-TP225	110
250	114	LC402-250	LC412-250	730	DPiS, DP41-S, DP25B-S	LC412-TP225	110
500	227	LC402-500	LC412-500	730	DPiS, DP41-S, DP25B-S	LC412-TP288	110
1000	455	LC402-1K	LC412-1K	730	DPiS, DP41-S, DP25B-S	LC412-TP288	110
2000	909	LC402-2K	LC412-2K	730	DPiS, DP41-S, DP25B-S	LC412-TP288	110
3000	1361	LC402-3K	LC412-3K	730	DPiS, DP41-S, DP25B-S	LC412-TP288	110
5000	2269	LC402-5K	LC412-5K	730	DPiS, DP41-S, DP25B-S	LC412-TP325	110
10,000	4537	LC402-10K	LC412-10K	925	DPiS, DP41-S, DP25B-S	LC412-TP325	110
15,000	6806	LC402-15K	LC412-15K	995	DPiS, DP41-S, DP25B-S**	LC412-TP350	250
20,000	9074	LC402-20K	LC412-20K	995	DPiS, DP41-S, DP25B-S**	LC412-TP350	250
25,000	11,343	LC402-25K	LC412-25K	995	DPiS, DP41-S, DP25B-S**	LC412-TP350	250
50,000	22,686	LC402-50K	LC412-50K	1375	DPiS, DP41-S, DP25B-S**	LC412-TP563	425
75,000	34,029	LC402-75K	LC412-75K	†	DPiS, DP41-S, DP25B-S**	LC412-TP675	585
100,000	45,372	LC402-100K	LC412-100K	†	DPiS, DP41-S, DP25B-S**	LC412-TP800	760
200,000	90,744	LC402-200K	LC412-200K	†	DPiS, DP41-S, DP25B-S**	LC412-TP925	2200
300,000	136,116	LC402-300K	LC412-300K	†	DPiS, DP41-S, DP25B-S**	LC412-TP925-3	2200
400,000	181,488	LC402-400K	LC412-400K	†	DPiS, DP41-S, DP25B-S**	LC412-TP925-3	2200
500,000	226,860	LC402-500K	LC412-500K	†	DPiS, DP41-S, DP25B-S**	LC412-TP1025	2200
750,000	340,290	LC402-750K	LC412-750K	†	DPiS, DP41-S, DP25B-S**	LC412-TP1100	3200

Comes complete with 5-point NIST-traceable calibration and 59 kΩ shunt data.

* See section D for compatible meters. DPiS suitable for one direction measurement only. ** 4-digit meter. † Consult factory.

To order dual-bridge models, add suffix “-DUAL” to the model number; price: ≤5000 lb add \$250; >5000 lb add \$350.

Note: Models >300,000 lb are calibrated at 300,000 lb. Full scale calibration above 300,000 lb within ±1% available; add suffix “-FS” to the model number and consult Sales for price and delivery.

Ordering Examples: LC412-10K-DUAL, dual-bridge 10,000 lb capacity connector-style load cell, \$925 + 350 = \$1275.

PT06F10-6S, mating connector, 2 required (sold separately), \$26.50 ea. LC412-TP325, optional tension plate (see next page), \$110.

LC412-20K-5V, 20,000 lb capacity connector-style load cell with optional 0 to 5 Vdc output, \$995 + 135 = \$1130. PT06F10-6S, mating connector (sold separately), \$26.50. LC412-TP350, optional tension plate (see next page), \$250.

METRIC MODELS

CAPACITY		MODEL NO.		PRICE	COMPATIBLE METERS*	TENSION BASE PLATE	
kgf	lb	CABLE	CONNECTOR			MODEL NO.	PRICE
25	55	LCM402-25	LCM412-25	\$730	DP41-B, DP41-S, DP25B-S	LCM412-TP225	\$110
50	110	LCM402-50	LCM412-50	730	DP41-B, DP41-S, DP25B-S	LCM412-TP225	110
100	220	LCM402-100	LCM412-100	730	DP41-B, DP41-S, DP25B-S	LCM412-TP225	110
250	551	LCM402-250	LCM412-250	730	DP41-B, DP41-S, DP25B-S	LCM412-TP288	110
500	1102	LCM402-500	LCM412-500	730	DP41-B, DP41-S, DP25B-S	LCM412-TP288	110
1000	2205	LCM402-1K	LCM412-1K	730	DP41-B, DP41-S, DP25B-S	LCM412-TP288	110
1500	3307	LCM402-1.5K	LCM412-1.5K	730	DP41-B, DP41-S, DP25B-S	LCM412-TP288	110
2500	5512	LCM402-2.5K	LCM412-2.5K	730	DP41-B, DP41-S, DP25B-S	LCM412-TP325	110
5000	11,023	LCM402-5K	LCM412-5K	995	DP41-B, DP41-S, DP25B-S	LCM412-TP325	110
7500	16,535	LCM402-7.5K	LCM412-7.5K	995	DP41-B, DP41-S, DP25B-S	LCM412-TP350	250
10,000	22,046	LCM402-10K	LCM412-10K	995	DP41-B, DP41-S, DP25B-S**	LCM412-TP350	250

ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
PT06F10-6S	\$26.50	Mating connector for LC412/LCM412 load cells

Comes complete with 5-point NIST-traceable calibration and 59 kΩ shunt data. * See section D for compatible meters. ** 4-digit meter.

To order dual-bridge models, add suffix “-DUAL” to model number and \$250 for ≤5000 lb, \$350 for >5000 lb.

Ordering Examples: LCM412-10K-DUAL, dual-bridge 10,000 kgf capacity connector-style load cell, \$995 + 350 = \$1345.

PT06F10-6S, mating connector, 2 required (sold separately), \$26.50 ea. LCM412-TP350, optional tension plate, \$250. LCM402-100, 100 kgf capacity cable-style load cell, \$730. LCM412-TP225, optional tension plate, \$110.



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