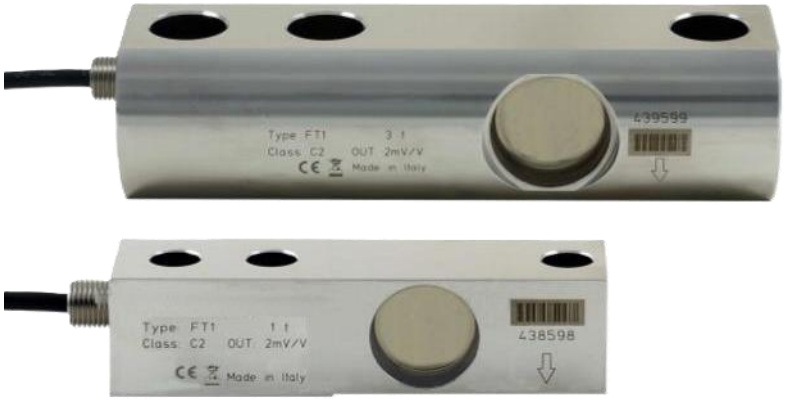
SHEAR BEAM LOAD CELL



- OIML R60 CLASS C2 AND C3 · FT1A APPROVED
- COMBINED ERROR ≤ ±0.020 %
- IP68 — 100 h AT 1 m WATER COLUMN
- LASER-WELDED STAINLESS STEEL

IP68 · Stainless Steel · Fully Laser Welded · ISO 17025 · mV/V

NOMINAL LOAD (FS)

kg	N	Net weight (kg)	Fixing screws	FT1A	Rated Output (mV/V)
350	3 500	1.1	M12		2.0 ±0.1 %
500	5 000	1.1	M12	•	2.0 ±0.1 %
1 000	10 000	1.1	M12	•	2.0 ±0.1 %
2 000	20 000	1.1	M12	•	2.0 ±0.1 %
3 000	30 000	2.6	M20		2.0 ±0.1 %
5 000	50 000	2.6	M20		2.0 ±0.1 %
7 500	75 000	2.6	M20		2.0 ±0.1 %

TECHNICAL DATA

PRECISION

Rated Output (Cn)	2 mV/V ± 0.1 %
Zero Balance	± 1 %
Legal divisions	2 000 (C2) · 3 000 (C3)
Verification interval (V_{min})	LBAC: E_{max} / 10 000 FT1A: E_{max} / 15 000
Combined error	± 0.024 % (C2) · ± 0.020 % (C3)
Non-repeatability	± 0.012 % (C2) · ± 0.010 % (C3)
Zero return over 30 min	± 0.028 % (C2) · ± 0.020 % (C3)
Creep over 30 min	± 0.026 % (C2) · ± 0.010 % (C3)
Creep over 20 and 30 min	± 0.012 % (C2) · ± 0.008 % (C3)
Temp. effect on zero / 10 °C	± 0.026 % (C2) · ± 0.014 % (C3)
Temp. effect on sensitivity / 10 °C	± 0.020 % (C2) · ± 0.014 % (C3)
Temperature nominal range	-10...+40 °C
Service temperature	-20...+70 °C
Storage temperature	-20...+80 °C
Reference Temperature	+23 °C

MECHANICAL PROPERTIES

Material	Stainless steel, laser welded
Displacement at FN	0.2 ... 0.5 mm
Fixing screws	M12 · 150 Nm · M20 · 160 Nm, class 12.9

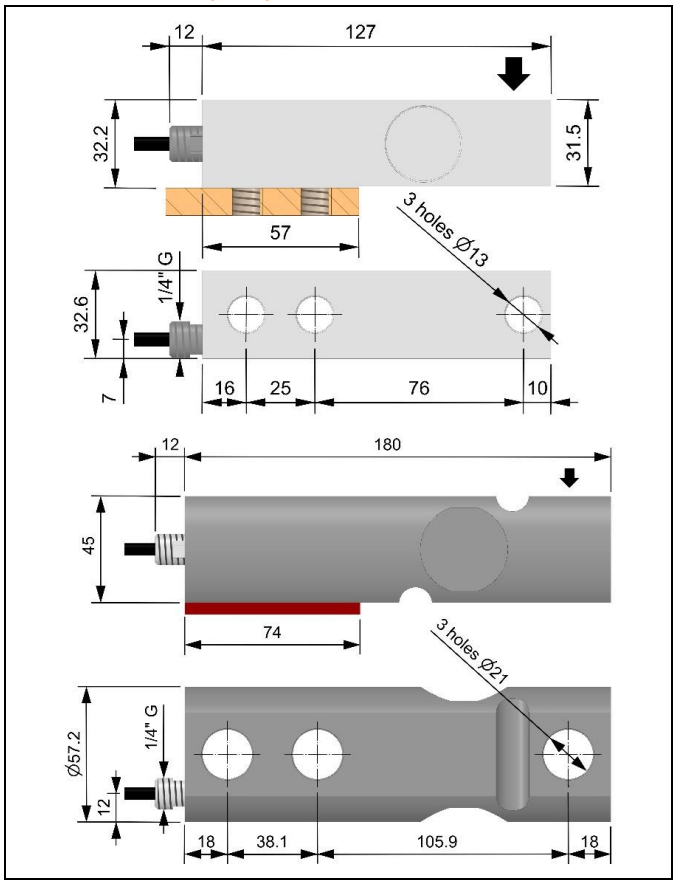
ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	420 ± 20 Ω
Output resistance	350 ± 2 Ω
Insulation resistance	> 5 GΩ
Supply voltage	10 V recommended · 1 – 15 V · max. 18 V
Cable	LBAC: PVC 105 °C, shielded, Ø 5.2 mm, 4 × 0.35 mm², tinned FT1A: PVC 80 °C, shielded, Ø 5.2 mm, 6 × 0.25 mm², tinned
Cable length	5 m (10 m on request)

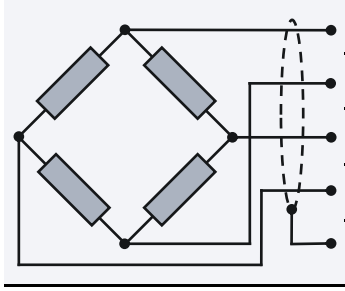
LOAD DIRECTION



DIMENSIONS (mm)

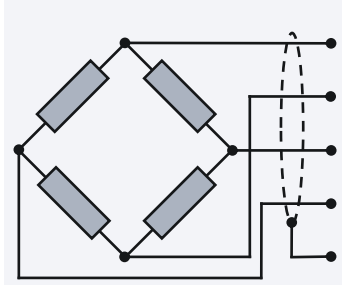


ELECTRICAL CONNECTION



+ EXCITATION	RED
– EXCITATION	BLACK
+ SIGNAL	WHITE
– SIGNAL	YELLOW
SHIELD	connected to the body

ELECTRICAL CONNECTION (FT1A)



+ EXCITATION + REF./SENSE	RED ORANGE
– EXCITATION – REF./SENSE	BLACK BLUE
+ SIGNAL	WHITE
– SIGNAL	YELLOW
SHIELD	connected to the body

MECHANICAL LIMITS

Service load	120 %FS	No permanent deformation, no change in calibration.
Max. permissible load	150 %FS	Highest static load that may be applied briefly without damage.
Breaking load	> 300 %FS	Load at which permanent deformation or fracture occurs.
Max. transverse load (side)	50 %FS	Maximum lateral load, e.g. from misalignment or friction.
Max. permissible dynamic load	50 %FS	Amplitude limit for cyclic loads, against fatigue failure.

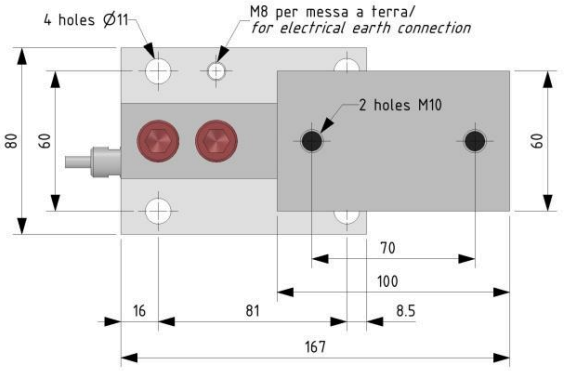
COMPLIANCE AND CERTIFICATION

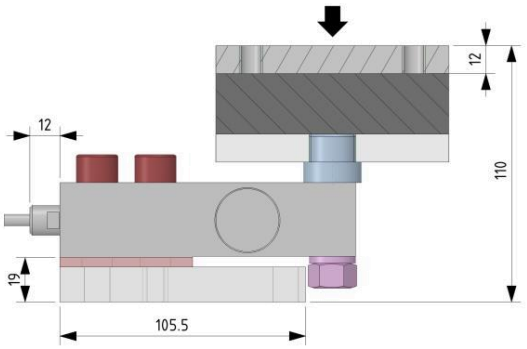
Protection Rating	IP68 (EN 60529) — 100 h at 1 m water column
Accuracy class	OIML R60 — C2 (2 000 d) and C3 (3 000 d)
Type approval	FT1A: OIML R60 certificate R60/2000-NL1-03.05
Compliance	CE, RoHS, EAC
Explosion protection	Optional ATEX: II 2G Ex ib IIC T6 Gb · II 2D Ex ib IIIC T70 °C Db (TÜV CY 18 ATEX 0206102 X)
Calibration	Factory-calibrated
Manufacturer approvals	ATEX production quality assurance notification TÜV CY 17 ATEX 0205891 Q · ISO 17025 accredited laboratory (optional) · EN ISO 9001:2015 (Dasa-Rägister IQ-1100-01)
HS-CODE	9031.80.80 (octogon)

MOUNTING KITS AND ACCESSORIES

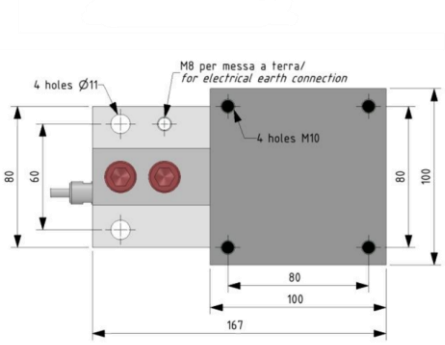
Code	Description	Application range
CUPFT1EL1T	Weighing unit LMAAC in AISI 304 stainless steel with elastomer bearing. Load cell not included.	LBAC 350 kg ... 1 t
CUPFT1EL	Weighing unit LMAAC in AISI 304 stainless steel with elastomer bearing. Load cell not included.	LBAC 2 t
CUPFT1EL3E5T	Weighing unit LMAAC in AISI 304 stainless steel with elastomer bearing. Load cell not included.	LBAC 3 t and 5 t

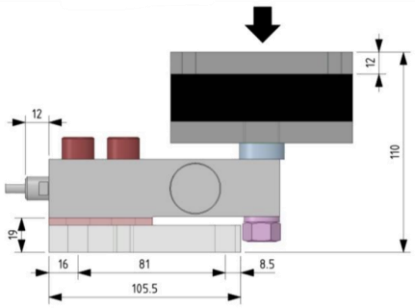
CUPFT1EL1T — LBAC 350 kg ... 1 t





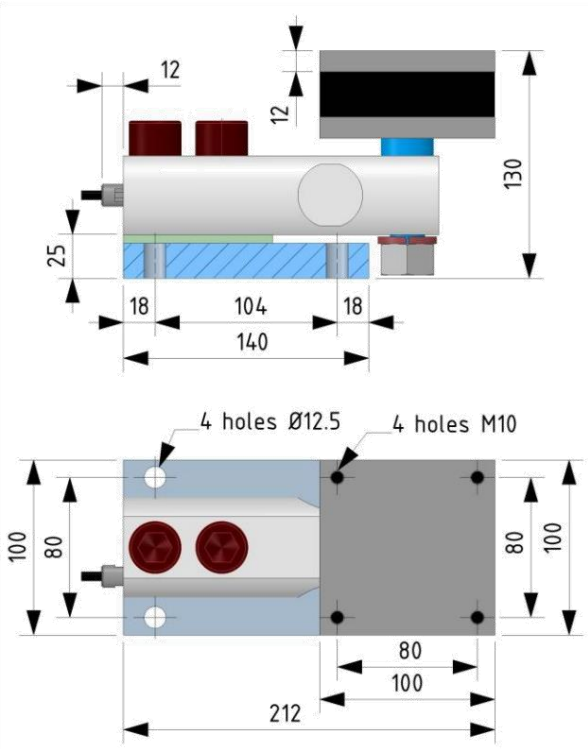


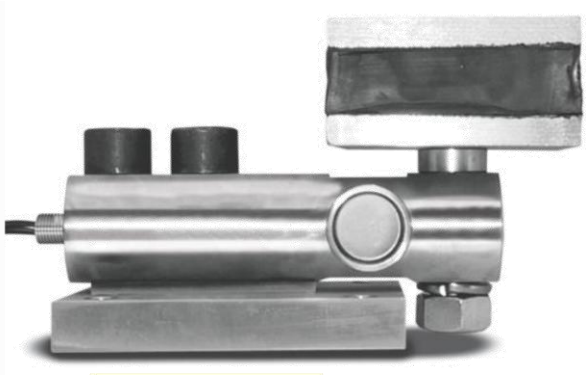




MOUNTING KITS AND ACCESSORIES

CUPFT1EL — LBAC 2 t





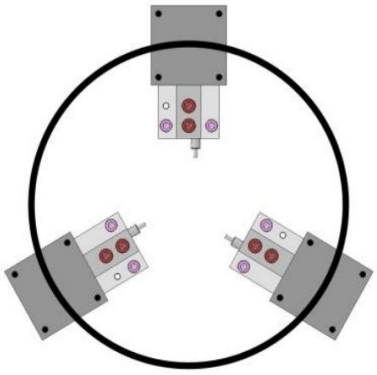
CUPFT1EL3E5T — LBAC 3 t and 5 t



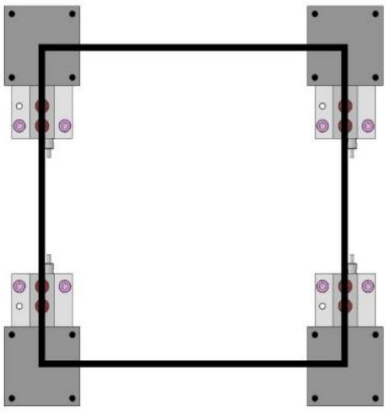


Weighing unit LMAAC — Mounting: M10 or M12 bolts to the floor depending on the model, M10 bolts to the structure. The unit preserves the IP68 rating and the accuracy class of the load cell.

MOUNTING PLAN

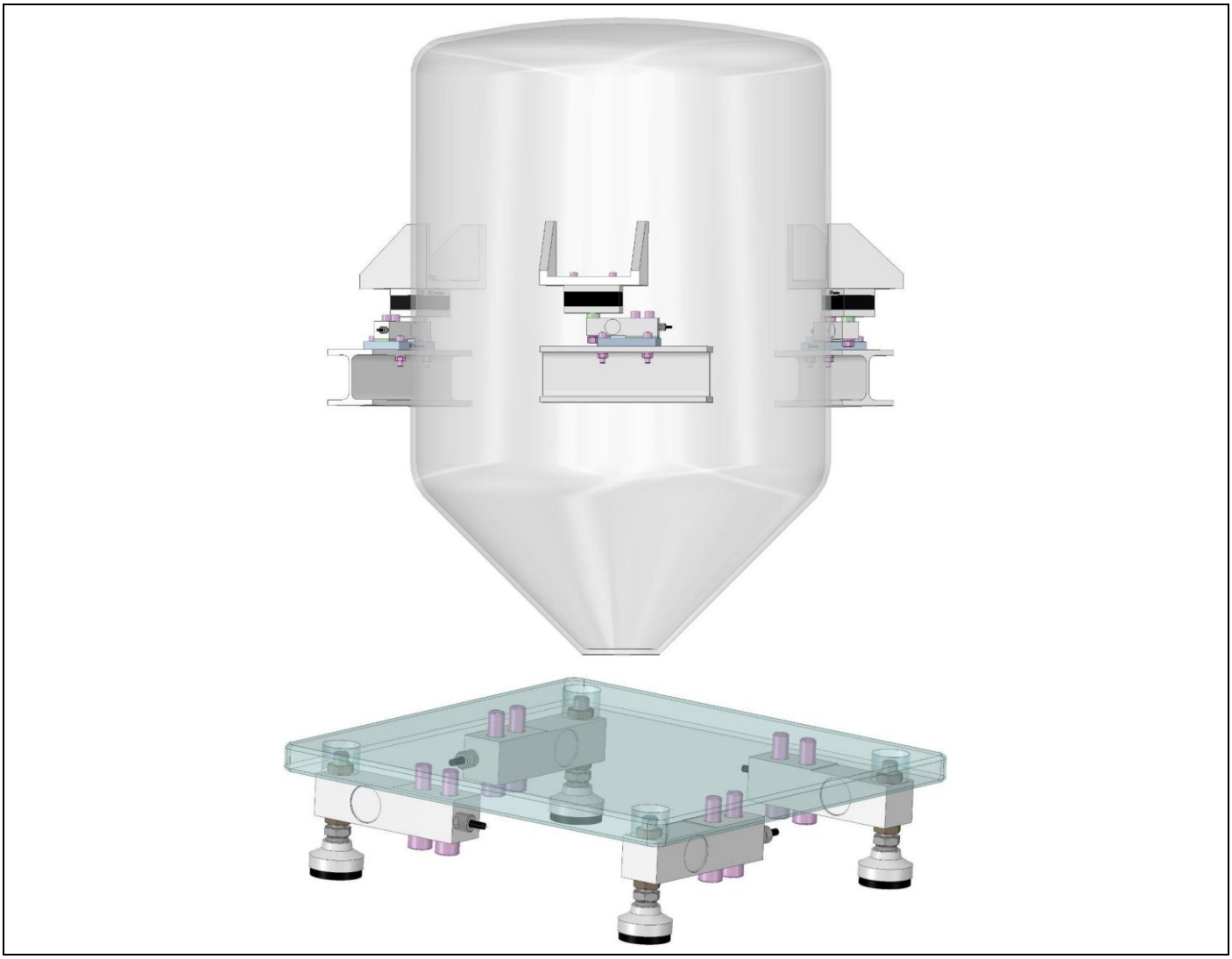


Sistema circolare a 3 punti di appoggio.
Circular system with 3 supporting points.

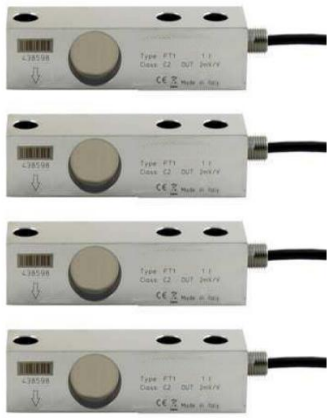


Sistema quadro a 4 punti di appoggio.
Square system with 4 supporting points.

EXAMPLES OF INSTALLATION



TYPICAL CONFIGURATION







N° 4 LBAC + SG4 + MP2F





N° 4 LBAC + TA4 + PLC