

COMPRESSION LOAD CELL



TYPE MC 100 kg
436243 2mV/V

Ø 35mm



TYPE MC 250 kg
910429 2mV/V

Ø 42mm

 COMPRESSION

- STAINLESS STEEL
- COMBINED ERROR $\leq \pm 0.28 \%$
- IP67 PROTECTION RATING



NOMINAL LOAD (FS)

kg	kN	Net weight (kg)	Combined error			Rated Output (mV/V)
50	0.5	0.13	$\leq \pm 0.28 \%$	•	•	2.0 $\pm 0.2 \%$
100	1	0.13	$\leq \pm 0.28 \%$	•	•	2.0 $\pm 0.2 \%$
250	2.5	0.13	$\leq \pm 0.28 \%$	•	•	2.0 $\pm 0.2 \%$
500	5.0	0.13	$\leq \pm 0.28 \%$	•	•	2.0 $\pm 0.2 \%$
1000	10	0.20	$\leq \pm 0.28 \%$	•	•	2.0 $\pm 0.2 \%$
2500	25	0.20	$\leq \pm 0.28 \%$	•	•	2.0 $\pm 0.2 \%$
3500	35	0.20	$\leq \pm 0.28 \%$	•	•	2.0 $\pm 0.2 \%$
5000	50	0.20	$\leq \pm 0.28 \%$	•	•	2.0 $\pm 0.2 \%$



TECHNICAL DATA

PRECISION

Nominal sensitivity	2.0 mV/V
Calibration tolerance	$\leq \pm 0.2 \%FS$
Zero Balance	$< \pm 1.0 \%FS$
Combined error	$\leq \pm 0.28 \%FS$
Non-linearity	$\leq \pm 0.20 \%FS$
Hysteresis	$\leq \pm 0.20 \%FS$
Repeatability	$\leq \pm 0.05 \%FS$
Creep	$\leq \pm 0.1 \%FS$ (at 30 min FS)
Temperature coefficient on zero	$\leq \pm 0.030 \%FS$
Temperature coefficient on sensitivity	$\leq \pm 0.025 \%FS$
Compensated temperature range	-10...+40 °C
Operating temperature range	-20...+70 °C
Reference Temperature	23 °C

MECHANICAL PROPERTIES

Material	STAINLESS STEEL
Deflection at FN	~ 0.2 mm

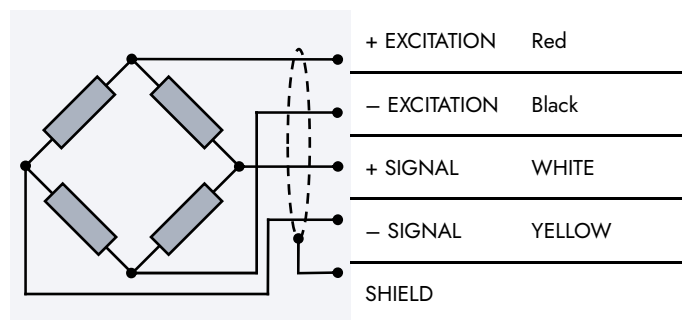
MECHANICAL LIMITS

Service load	120 %FS	Load without any permanent deformation or change in calibration.
Safe overload	150 %FS	The highest static load that may be applied once or briefly without mechanical damage.
Breaking load	> 300 %FS	Load at which permanent deformation or mechanical failure (fracture) occurs.
Max. transverse load (side)	50 %FS	Maximum lateral or shear load that can be applied (e.g. due to misalignment or friction).
Max. permissible dynamic load	75 %FS	For cyclic or oscillating loads, the amplitude should not exceed this load to prevent fatigue failure.

ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	$400 \pm 20\Omega$
Output resistance	$350 \pm 2\Omega$
Insulation resistance	$\geq 5 G\Omega$ at 100 V
Recommended excitation voltage	max. 18 V
Cable diameter	4.2 mm
Cable length	3 m

ELECTRICAL CONNECTION

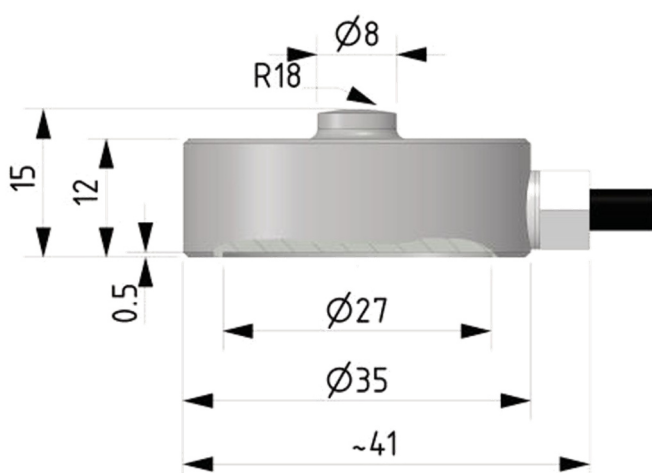
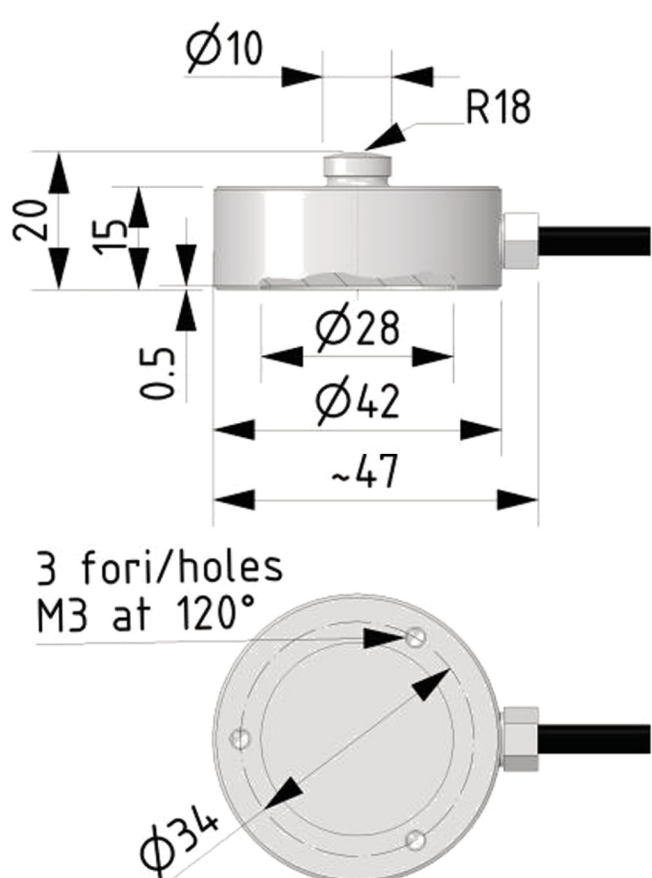


COMPLIANCE AND CERTIFICATION

Protection Rating	IP67
Compliance	CE, RoHS, REACH
Calibration	Factory-calibrated, ISO 17025 calibration available on request
HS-CODE	9031.80.80
Certifications (on request)	 Accredia traceable calibration report



DIMENSIONS (mm)

Diameter: Ø 35mm  Nominal load (kg): 50 100 250 500 1 000 2 500
Diameter: Ø 42mm  3 fori/holes M3 at 120° Nominal load (kg): 50 100 250 500 1 000 2 500 3 500 5 000



ACCESSORIES

CTICCM35 | CTICCM42

- CTICCM35: for Ø35 force transducer
- CTICCM42: for Ø42 force transducer

