

COMPRESSION AND TENSION LOAD CELL

TENSION &
COMPRESSION



- 17-4 PH STAINLESS STEEL
- SPOKE TYPE STRUCTURE
- COMBINED ERROR $\leq \pm 0.03\%$
- IP68 / IP67 PROTECTION RATING
- OVER 20 MILLION WORKING CYCLES



NOMINAL LOAD (FS)

kg	kN	Connection type	Combined error	UKCA	Ex	IECEx	Rated Output (mV/V)
500	5	cable gland M8	$\leq \pm 0.03\%$	•	•	•	2 $\pm$ 0.1%
1 000	10	cable gland M8	$\leq \pm 0.03\%$	•	•	•	2 $\pm$ 0.1%
2 000	20	cable gland M8 / connector	$\leq \pm 0.03\%$	•	•	•	2 $\pm$ 0.1%
5 000	50	cable gland M8 / connector	$\leq \pm 0.03\%$	•	•	•	2 $\pm$ 0.1%
10 000	100	cable gland M8 / connector	$\leq \pm 0.03\%$	•	•	•	2 $\pm$ 0.1%
20 000	200	cable gland M8 / connector	$\leq \pm 0.03\%$	•	•	•	2 $\pm$ 0.1%
30 000	300	cable gland M8 / connector	$\leq \pm 0.03\%$	•	•	•	2 $\pm$ 0.1%
60 000	600	connector	$\leq \pm 0.03\%$	•	•	•	2 $\pm$ 0.1%
100 000	1 000	connector	$\leq \pm 0.03\%$	•	•	•	2 $\pm$ 0.1%
200 000	2 000	connector	$\leq \pm 0.03\%$	•	•	•	2 $\pm$ 0.1%

ON REQUEST



TECHNICAL DATA

PRECISION

Rated Output (Cn)	2 mV/V ± 0.1 % at FS
Zero Balance	± 1 %
Combined error	$\leq \pm 0.03$ %FS
Creep	0.05 % (at 30 min FS)
Temperature coefficient of zero	0.005 %/°C
Temperature coefficient of sensitivity	0.005 %/°C
Compensated temperature range	-10...+50 °C
Operating temperature range	-20...+70 °C

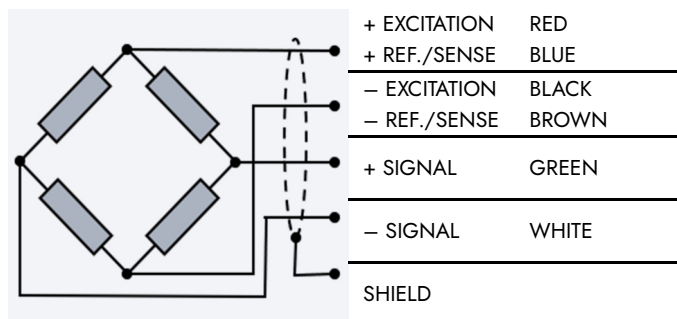
MECHANICAL PROPERTIES

Material	17-4 PH stainless steel
Structure	Spoke type
Fatigue life	> 20 million working cycles
Deflection at FN	0.35 mm

ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 6-wire
Input resistance	700 Ω ± 20
Output resistance	700 Ω ± 5
Insulation resistance	> 5 000 M Ω
Max. supply voltage without damage	5...15 VDC
Cable diameter	5 mm
Cable cores	6 x 0.14 mm ²
Cable length	5 000 mm

ELECTRICAL CONNECTION



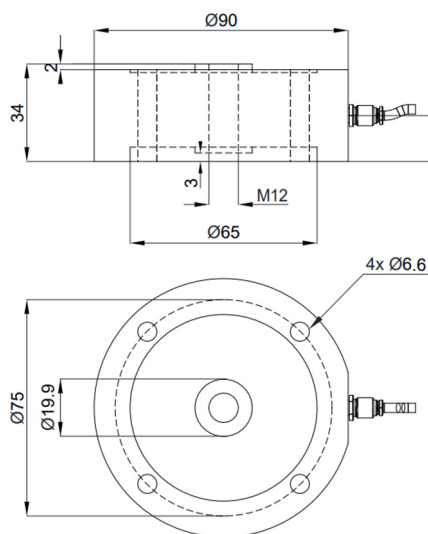
MECHANICAL LIMITS

Safe overload	150 %FS	The highest static load that may be applied once or briefly without mechanical damage.
Ultimate overload	300 %FS	Load at which permanent deformation or mechanical failure (fracture) occurs.

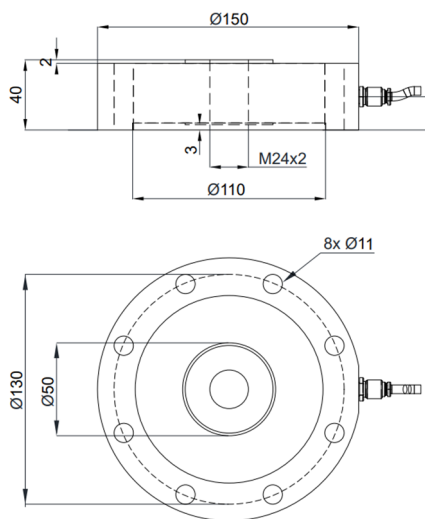


DIMENSIONS (mm)

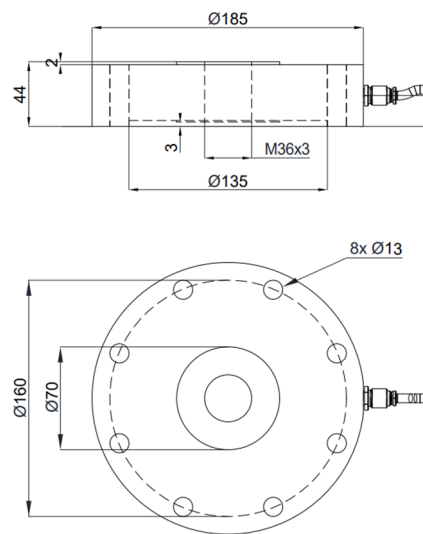
500 – 1 000 kg



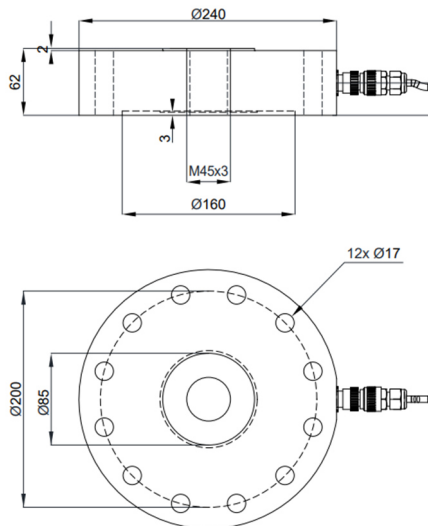
2 000 – 5 000 kg



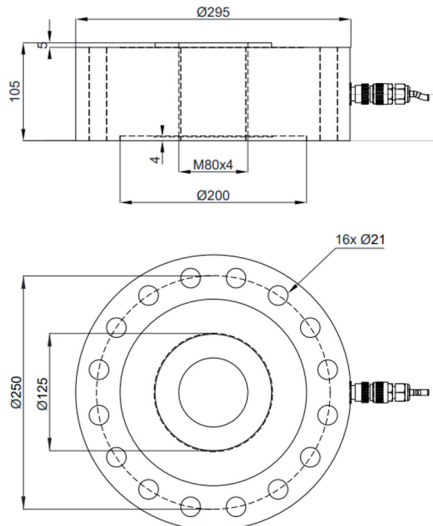
10 000 – 30 000 kg



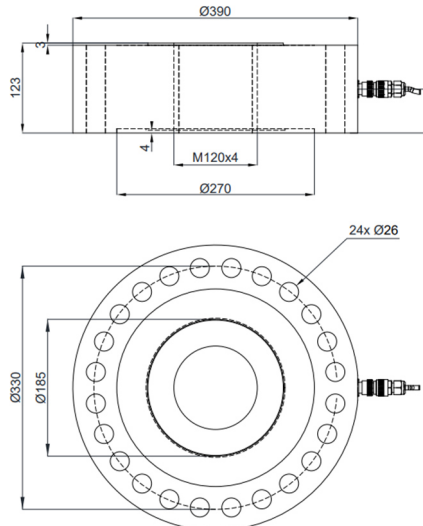
60 000 kg



100 000 kg



200 000 kg



COMPLIANCE AND CERTIFICATION

Protection Rating	IP68 (500...30 000 kg), IP67 (60 000...200 000 kg) according to IEC 60529	
Compliance	CE, RoHS, REACH	
Calibration	Factory calibrated, ISO 17025 calibration available on request	
HS-CODE	9031.80.80	
Certifications		Equivalent of the CE marking for the United Kingdom
Certifications (on request)		Calibration report
		ATEX (zone 2-22)
		ATEX/IECEx (zone 1-21)

