

Type UB6 Load Cell



Flintec load cells are designed to meet the most stringent accuracy requirements. Certifications have been obtained from Weights & Measures Authorities, worldwide.

UB6 universal load cells are available in the capacities 1 kN to 5 kN (102 kg to 510 kg) and include Accuracy Classifications GP, C1, C3 and C3 MR according to OIML R 60.

They offer total stainless steel construction and complete hermetic sealing, making them suitable for use in the toughest industrial environments.

The Flintec calibration technique (in mV/V/Ω) eliminates time consuming corner calibration in multiple load cell systems.

The UB6 is available for use in hazardous areas zone 1, 2 (gas) and 21, 22 (dust) according to EEx ia IIC T6...T4 T130°C ATEX.

Important Features

- Capacities: 1 kN to 5 kN.
- High accuracy.
- Total stainless steel construction.
- Complete hermetic sealing.
- Protection IP 68.
- High input resistance: 1100 Ω.
- W&M certified for 3000 intervals.
- Multi range accuracy.
- Calibration in mV/V/Ω.
- Easy cable replacement.
- Complete range of loading hardware available.
- Factory mutual approved.

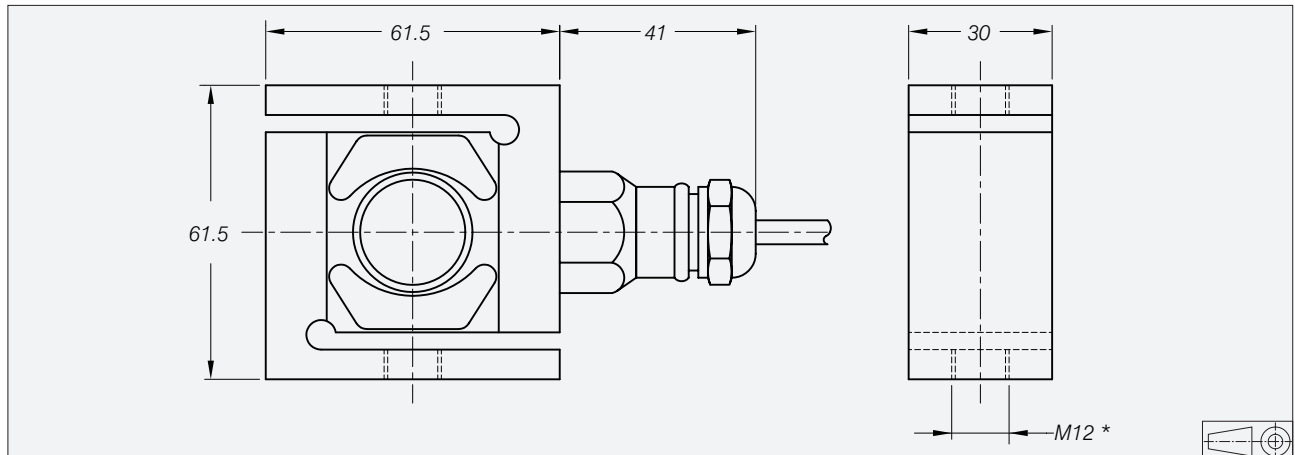
Option

- Ex-version zone 1, 2, 21 and 22 ATEX.

UB6 Specifications

Maximum capacity (=E _{max})	kN	1 / 2 / 5			
Metric equivalents (1 N=0.10197 kg)	kg	102 / 204 / 510			
Rated Output (=RO)	mV/V	2 ± 0.1%			
Calibration in mV/V/Ω (A...I classified)	%RO	≤ ± 0.05 (≤ ± 0.005)			
Accuracy class according to OIML R 60		(GP)	C1	C3	C3 MR
Maximum number of verification intervals (n)		n.a.	1000	3000	3000
Minimum load cell verification interval (v _{min})		n.a.	E _{max} /5000	E _{max} /10500	E _{max} /20000
Combined error	%RO	≤ ± 0.040	≤ ± 0.030	≤ ± 0.020	≤ ± 0.020
Creep error (30 minutes)	%RO	≤ ± 0.060	≤ ± 0.049	≤ ± 0.024	≤ ± 0.024
Temperature effect on minimum dead load output	%RO/°C	≤ ± 0.0040	≤ ± 0.0028	≤ ± 0.0012	≤ ± 0.0007
Temperature effect on sensitivity	%/°C	≤ ± 0.0020	≤ ± 0.0016	≤ ± 0.0011	≤ ± 0.0011
Excitation voltage	V	5...15			
Zero balance	%RO	≤ ± 1.0			
Input resistance	Ω	1106 ± 5			
Output resistance	Ω	1000 ± 1			
Insulation resistance	MΩ	≥ 5000			
Compensated temperature range	°C	-10... +40			
Operating temperature range	°C	-40... +85			
Safe load limit	%E _{max}	200			
Ultimate load	%E _{max}	300			
Load cell material		stainless steel 17-4 PH (1.4548)			
Sealing		complete hermetic sealing; cable entry sealed by glass to metal header			
Protection according DIN 40.050		IP68			

Dimensions



All dimensions in mm. Dimensions and specifications are subject to change without notice.

* Unified thread 1/2-20 UNF is available.

Wiring

- The load cell is provided with a shielded, 4 conductor cable.
- Cable length: 6 m.
- Cable diameter: 5 mm.
- The shield is floating.

