

PENDULUM-TYPE WEIGHING ASSEMBLY FOR HIGH ACCURACY APPLICATIONS

capacities 2t - 20t

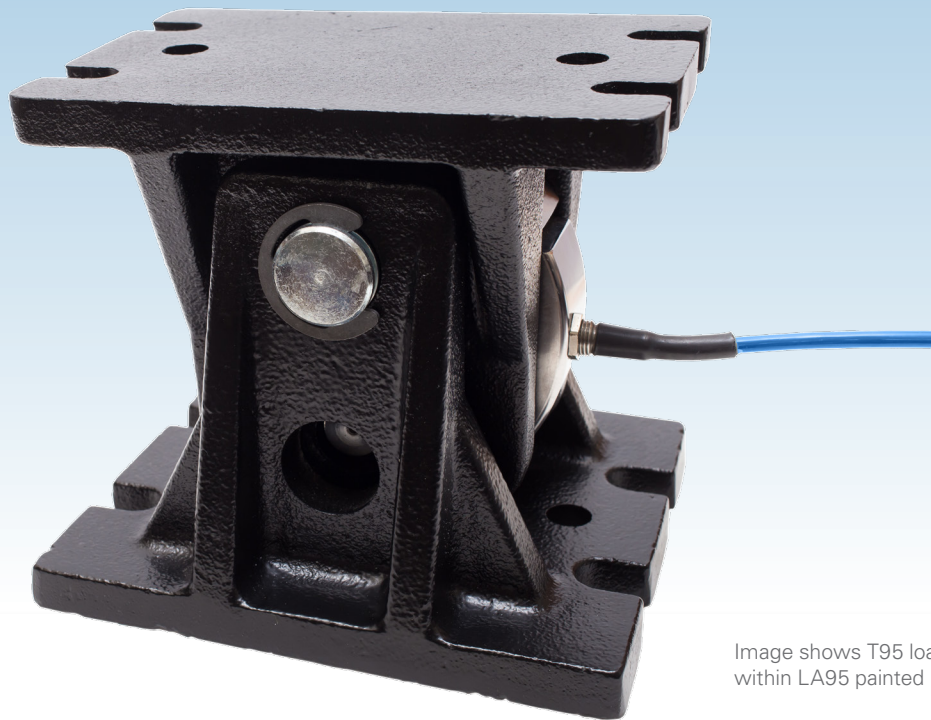


Image shows T95 load cell installed within LA95 painted mounting accessory

The T95 weighing assembly comprises a stainless steel high accuracy load cell, complete with a tough mounting accessory in painted alloy steel (optionally stainless steel up to 10t). Although the assembly is used in compression, the cell is mounted in a unique pendulum configuration and loaded in tension. This ensures that the load vector is always maintained through the central axis of the load cell, even when the assembly is subjected to considerable movement or misalignment. This results in high accuracy weighing.

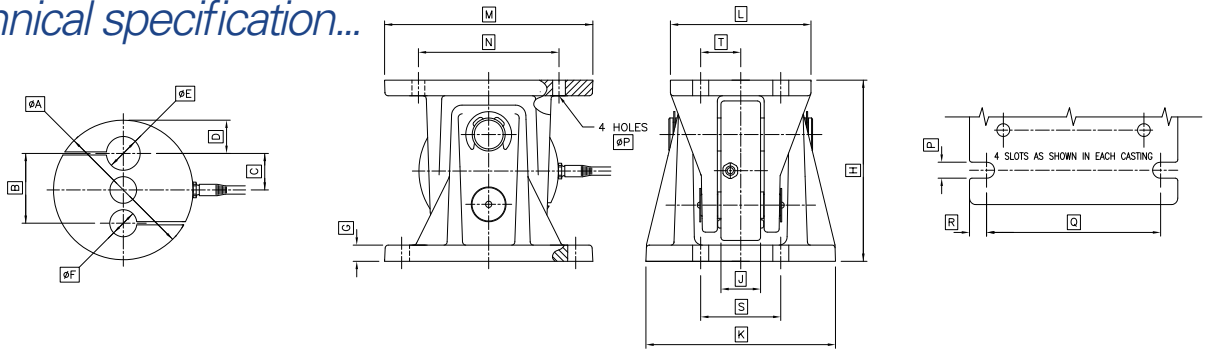
The T95 is most suitable for high accuracy applications where movement or vibration is present, e.g. mixers, agitators, catalyst vessels, weighing platforms, axle weighers and vehicle weigh-in-motion (WIM) systems. The T95 load cell is also available with ATEX and IECEx approval certification for all gas and dust zones. Barriers are not required for use in gas zone 2 or dust zones 20, 21, 22.

For applications in aggressive environments where stress corrosion or acid attack is a concern, a special Parylene coating can be specified as an option. Also available is an optional High Temperature variant, for continuous operation up to 150°C.

- Stainless steel load sensor
- Fully welded and hermetically sealed construction to IP68/IP69K
- Simple installation
- Load cell is always in tension
- OIML C3 (3000 divisions) approval up to 10t
- Tough and durable painted mounting accessory, with Stainless Steel option
- 5 year warranty
- Integral lift-off prevention
- Ideal in mixer and vibrating applications
- Unique damping feature

T95

technical specification...



T95 Load Cell ATEX and IECEx Certification

Cert.	Code	Safety Parameters	Key Points
ATEX	II 1 GD Ex ia IIC T6 Ga Ex ia IIIC T70°C Da	$U_i=30\text{ V}$, $P_i=1.3\text{ W}$ $C_i=2.4\text{ nF}$, $L_i=8\text{ }\mu\text{H}$	Suitable for all dust and gas zones but requires safety barriers.
IECEx	Ex ia IIC T6 Ga Ex ia IIIC T70°C Da		
ATEX	II 3 G Ex nA IIC T6 Gc $-20\text{ }^\circ\text{C} \leq T_a \leq +60\text{ }^\circ\text{C}$	$U_i=30\text{ V}$, $P_i=1.3\text{ W}$ $C_i=2.4\text{ nF}$, $L_i=8\text{ }\mu\text{H}$	Suitable for Gas zone 2 only. No safety barriers are required; refer to ATEX certificate for further details.
ATEX	II 1 D Ex ta IIIC T80°C Da IP6X $-20\text{ }^\circ\text{C} \leq T_a \leq +60\text{ }^\circ\text{C}$	$U_m=18\text{ V}$	Suitable for all Dust zones: 20, 21, 22. No safety barriers are required. Excitation voltage must be below 18V. Safe ambient temperature range is from $-20\text{ }^\circ\text{C}$ to $+60\text{ }^\circ\text{C}$.

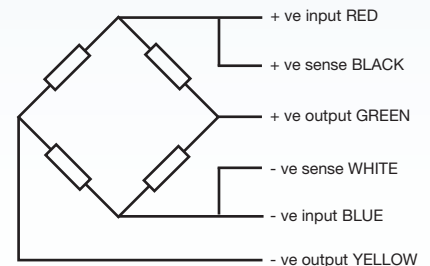
Dimensions

Range (kg)	2000 - 10000	20000
A	137	187
B	65.3	86
C	34.3	46
D	34.2	47.5
E	32.6	48.1
F	26.1	36.1
G	15	22
H	174	245
J	40	57
K	182	252
L	135	186
M	200	260
N	135	185
P	16	20
Q	168	218
R	16	21
S	70	100
T	35	50

T95 Load Cell

	Load cell specification		Units
Load Cell Capacities (E_{max})	2000, 5000, 10000	20000	kg
Accuracy Class	3000	-	n.OIML
Rated Output (S_n)	2		mV/V \pm 0.25%
Combined Error	$< \pm 0.017$	$< \pm 0.05$	% S_n
Non-repeatability	$< \pm 0.015$	$< \pm 0.02$	% S_n
Temperature Effect on Zero Balance	$< \pm 0.002$	$< \pm 0.0025$	% S_n / $^\circ\text{C}$
Temperature Effect on Span	$< \pm 0.0012$	$< \pm 0.0035$	% S_n / $^\circ\text{C}$
Compensated Temperature Range	-10 to +40		$^\circ\text{C}$
Operating Temperature Range	-40 to +80		$^\circ\text{C}$
Safe Overload	150		% E_{max}
Ultimate Overload	300		% E_{max}
Zero Balance	$< \pm 2$		% S_n
Input Resistance	380		$\Omega \pm 30$
Output Resistance	350		$\Omega \pm 5$
Insulation Resistance	> 5000		M Ω @ 100V
Recommended Supply Voltage	5 - 15		V
Maximum Supply Voltage	15		V
Environmental Protection	IP68 / IP69K		
Cable Length	10	20	m
Cable Material	Polyurethane		
Nominal Shipping Weight - load cell	4	11.5	kg
Nominal Shipping Weight - accessory	14	38.5	kg

Dimensions in mm



Electrical Connections

Via 6-core, 5.7mm outer diameter, screened Polyurethane cable (halogen free).
Screen not connected electrically to load cell.

Construction

- T95 Load cell:
High strength stainless steel, type 17-4PH
- LA95 Mounting accessory – 2 options:
- Alloy steel, durable painted finish (black)
 - Loading shafts: zinc plated alloy steel / corrosion resisting hardened stainless steel, type 17-4PH
 - Screws and circlips: zinc plated alloy steel
 - Stainless steel
 - Loading shafts: both are corrosion resisting hardened stainless steel, type 17-4PH
 - Screws and circlips: stainless steel

DISTRIBUTED BY:



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Our policy is one of continuous product enhancement. We therefore reserve the right to incorporate technical modifications without prior notification.