# Q50 compression load cell



#### product description

The Q50 compression load cell offer high capacity weighing in a low profile and compact sensor. Designed for applications in the food and chemicals industry, the Q50 offers easy of clean features such as smooth electro-polished surfaces and no wells that can hold contamination. The Q50 is ideally suited to weighing applications in clean-in-place/sterilize-in-place environments. Completely hermetically sealed by laser welding.

#### applications

Vessel and silo weighing systems, high capacity platform scales, general test and measurement tasks.

#### key features

Wide range of capacities from 500kg through to 30T

All stainless-steel construction

Hermetically sealed to IP68

Low profile

Hygienic design with electro-polished finish for food industry applications

Calibration in mV/V/Ω



RoHS







#### approvals

ATEX hazardous area approval for zones 0, 1, 2, 20, 21 and 22

FM hazardous area approval

#### accessories

Type 66-20 Weigh Module

Compatible range of electronics



## specifications

Maximum capacity (E <sub>max</sub> )	t	0.5/1/2/5/10/20/30		
Rated Output (RO)	mV/V	2 ± 0.1		
Zero balance	%*RO	± 5		
Calibration in mV/V/Ω	%	± 0.05		
Creep error (30 minutes) (CR)	%*RO	± 0.06		
Minimum dead load output return (DR)	%*RO	± 0.05		
Combined error	%*RO	± 0.25		
Temperature effect on minimum dead load output (TC <sub>0</sub> )	%*RO/10°C	± 0.04		
Temperature effect on sensitivity (TC <sub>RO</sub> )	%*RO/10°C	± 0.02		
Excitation voltage	V	515		
Input resistance (R <sub>LC</sub> )	Ω	366 ± 10		
Output resistance (R <sub>out</sub> )	Ω	351 ± 2		
Insulation resistance (100 V DC)	ΜΩ	≥ 5,000		
Safe load limit (E <sub>lim</sub> )	%*E <sub>max</sub>	200		
Ultimate load	%*E <sub>max</sub>	300		
Compensated temperature range	°C	-10+40 (ATEX-40+60)		
Operating temperature range	°C	-20+65		
Load cell material		stainless steel 17-4 PH (1.4548)		
Protection according EN 60 529		IP68 (up to 2 m water depth) / IP69K		
Packet weight	kg	1.0 (0.5t, 1t, 2t, 5t), 1.5 (10t), 3.2 (20t, 30t)		

## wiring

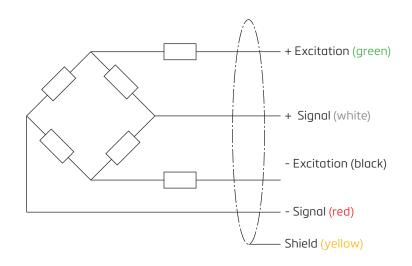
The load cell is provided with a shielded, 4 conductor cable (AWG 24).

Cable jacket polyurethane

Cable length: 5m for 500kg to 10t; 10m for 20 to 30t

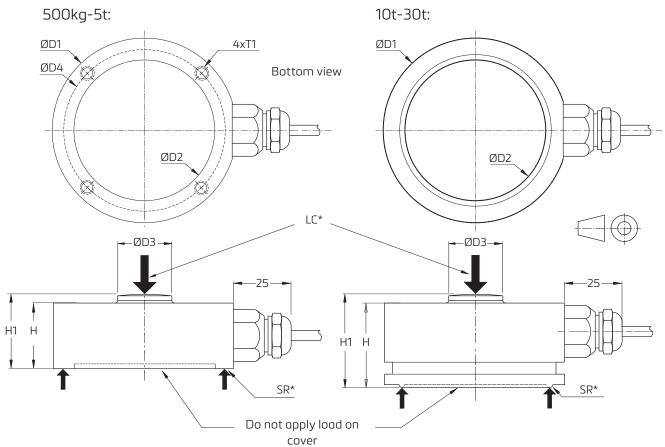
Cable diameter: 5mm

The shield is floating





## product dimensions (mm)



SR\* - Support ring LC\* - Load centre

Туре	H1	Н	D1	D2	D3	D4	T1
500 kg 5 t	32.5	29.7	80	62	16	70	M6 x 1, 8 deep
10 t	42	35.45	95	75	29	-	-
20 t 30 t	54	46.32	120	87.5	42.5	-	-