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# 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

## 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



RoHS  
compliant



 **flintec**  
quality + precision

## specifications

Maximum capacity ( $E_{max}$ )	t	0.5 / 1 / 2 / 5 / 10 / 20 / 30
Rated Output (RO)	mV/V	$2 \pm 0.1$
Zero balance	%*RO	$\pm 5$
Calibration in mV/V/ $\Omega$	%	$\pm 0.05$
Creep error (30 minutes) (CR)	%*RO	$\pm 0.06$
Minimum dead load output return (DR)	%*RO	$\pm 0.05$
Combined error	%*RO	$\pm 0.25$
Temperature effect on minimum dead load output ( $TC_0$ )	%*RO/10°C	$\pm 0.04$
Temperature effect on sensitivity ( $TC_{RO}$ )	%*RO/10°C	$\pm 0.02$
Excitation voltage	V	5...15
Input resistance ( $R_{LC}$ )	$\Omega$	$366 \pm 10$
Output resistance ( $R_{out}$ )	$\Omega$	$351 \pm 2$
Insulation resistance (100 V DC)	M $\Omega$	$\geq 5,000$
Safe load limit ( $E_{lim}$ )	%* $E_{max}$	200
Ultimate load	%* $E_{max}$	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

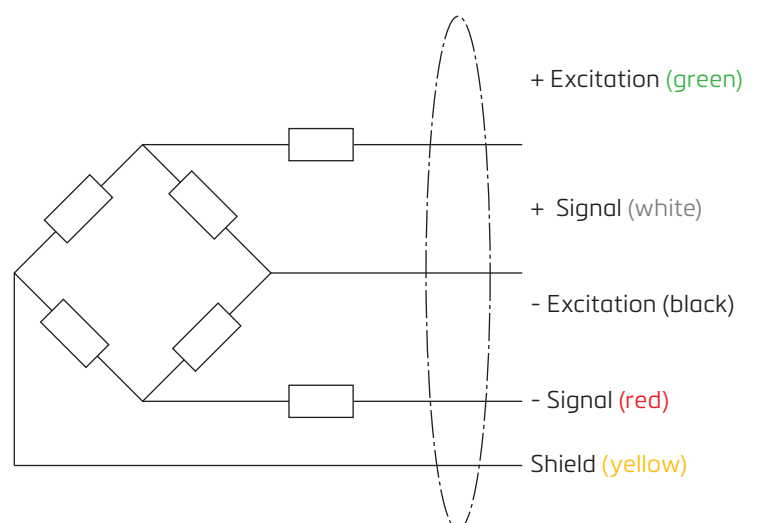
The load cell is provided with a shielded, 4 conductor cable (AWG 24).

Cable jacket polyurethane

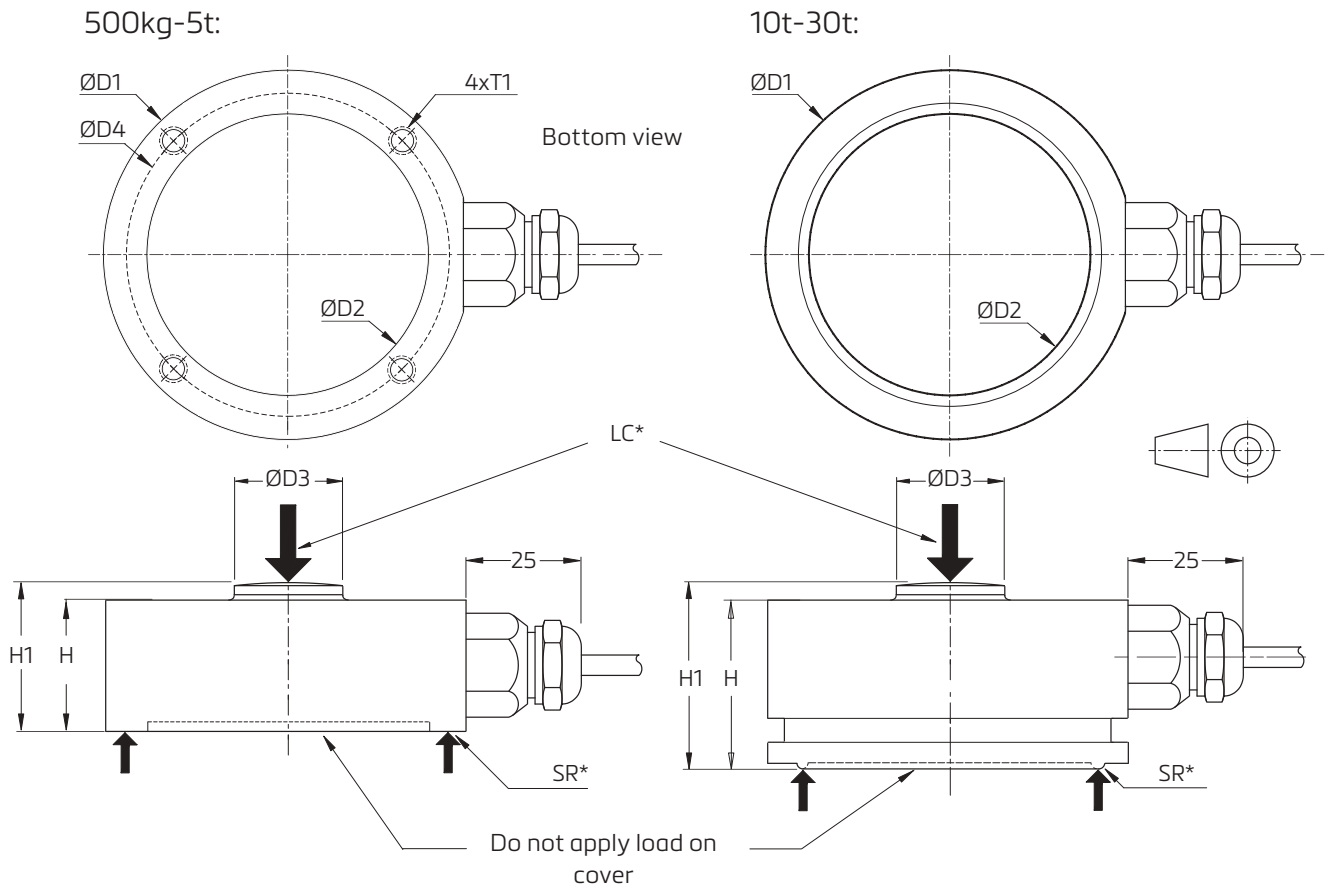
Cable length: 5m for 500kg to 10t; 10m for 20 to 30t

Cable diameter: 5mm

The shield is floating



product dimensions (mm)



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

Type	H1	H	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	-	-

Specifications and dimensions are subject to change without notice.