



Product Description

The type Q50 is a stainless steel compression disk load cell with complete hermetic sealing. It is a perfect fit for use in industrial environments and is particularly suited for use in tank and silo weighing applications in food and pharmaceutical production as a result of the clean and hygienic design.

Approvals

- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval in preparation

Application

- Hoppers, tanks and silos
- General force measurement applications

Packed Weight

■ Capacity (t)	0.5	1	2	5
Weight (kg)	1.0	1.0	1.0	1.0
■ Capacity (t)	10	20	30	
Weight (kg)	1.5	3.2	3.2	

Key Features

- Wide range of capacities from 500 kg to 30 t
- Stainless steel construction with electro-polished finish
- Environmental Protection IP68 with complete laser welded hermetic sealing
- Low profile design
- Calibration in mV/V/Ω

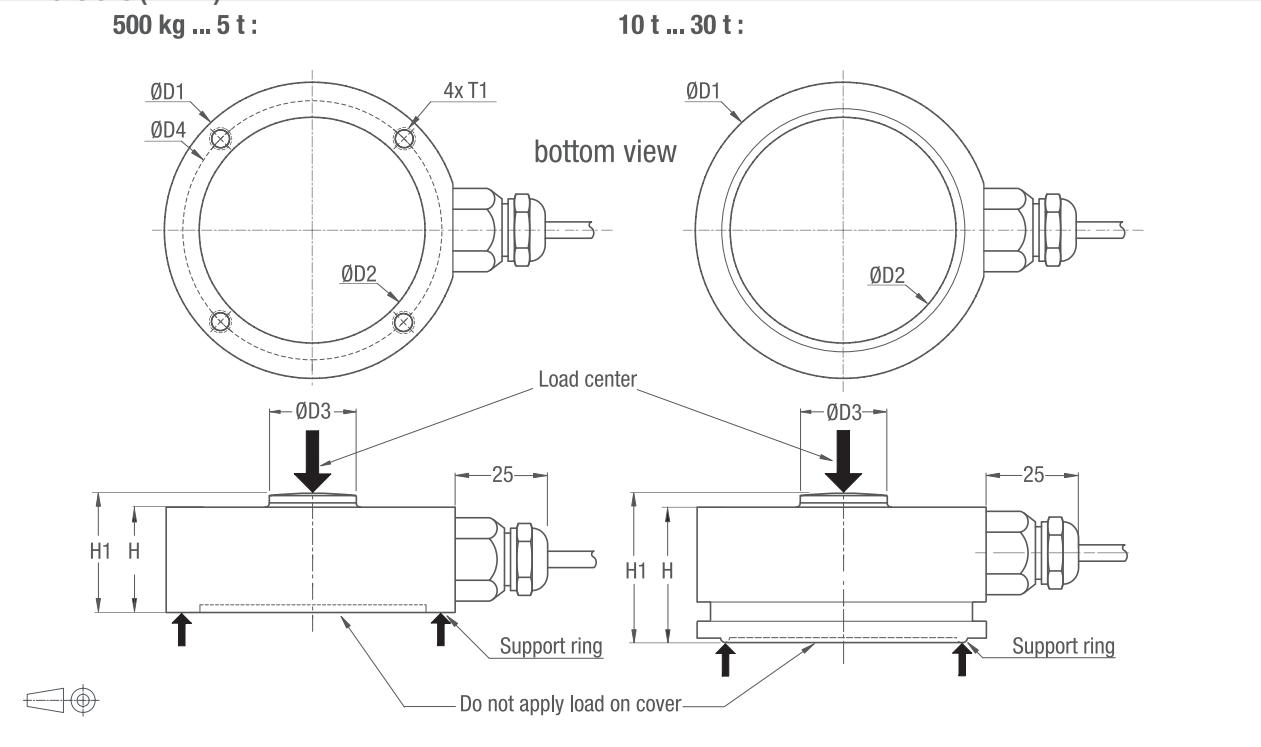
Available Accessories

- Type 66-20 Weigh Module
- Compatible range of electronics available

Specifications

Maximum capacity	(E _{max})	t	0.5 / 1 / 2 / 5 / 10 / 20 / 30
Rated Output	(R _O)	mV/V	2 ± 0.1
Zero balance		%*R _O	± 5
Calibration in mV/V/Ω		%	± 0.05
Creep error (30 minutes)	(C _R)	%*R _O	± 0.06
Minimum dead load output return	(D _R)	%*R _O	± 0.05
Combined error		%*R _O	± 0.25
Temperature effect on minimum dead load output	(T _{C0})	%*R _O /10°C	± 0.04
Temperature effect on sensitivity	(T _{CRO})	%*R _O /10°C	± 0.02
Excitation voltage		V	5...15
Input resistance	(R _{LC})	Ω	366 ± 10
Output resistance	(R _{out})	Ω	351 ± 2
Insulation resistance (100 V DC)		MΩ	≥ 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

Dimensions (in mm)



Load Cell Type	Capacity	H1	H	D1	D2	D3	D4	T1
Q50	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	-	-

Wiring

- The load cell is provided with a shielded, 4 conductor cable (AWG 24). Cable jacket polyurethane
- Cable length: 5 m for 500 kg to 10 t
10 m for 20 to 30 t
- Cable diameter: 5 mm
- The shield is floating

