

Load cell type 180

Advantages:

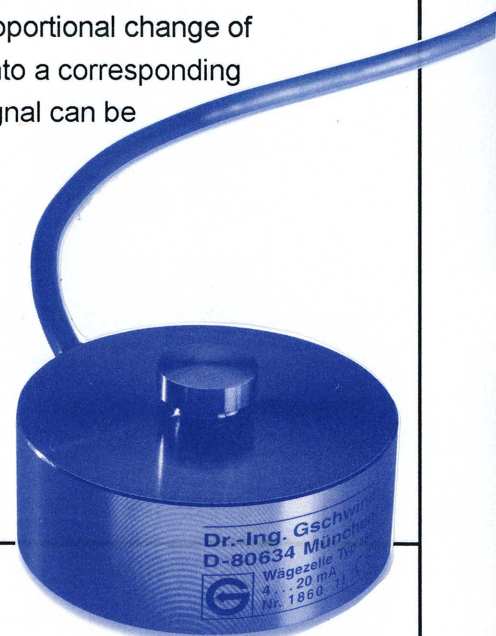
- low profile design
 - provides high quality
 - low cost performance in weighing
 - fatigue testing
 - thrust force measurement and a variety of laboratory uses
 - on-line process weighing
 - compact size permits optimized mounting structures
 - high output
 - true linearity as a key factor
 - long term stability and fatigue life for weighing systems and other long term installations
- low deflection causes a minimum interaction between load cell and mounting construction
 - simple installation with or without mounting structures brings the installation costs to a minimum
 - stainless steel and waterproof for outdoor use
 - simple combining load cell with analogue or digital indicators
 - ideal for bin and tank weighing applications
 - thoroughly field proven and tested
- although primarily designed for use in tank weighing systems, the type 180 is adaptable to a wide variety of applications

Applications:

all kind of tank weighing and dosing systems for the protection of machines, elevators, crane-equipments against overload by compressive forces.

Way of function

The measuring part of the load cell is a deformation body with mounted strain gages. The force acting to the deformation body causes a proportional change of the resistor of the strain gages. This change is transformed into a corresponding constant current signal by the inbuilt amplifier. The current signal can be directly displayed by a mA-meter.



**Dr.-Ing. Gschwind
Elektronik GmbH**

Frundsbergstr. 31 · D - 80634 München
Tel. (089) 16393-0 · Fax (089) 168 97 52

Load cell type 180 datasheet

DATUM	05/05	BLATT 1 VON 2 BLATT
GEZEICHNET	mg-gs	Z. NR. 10.100.00E
GEPRÜFT		F:\GMBH\INBAU\LOADC_1.FH3

Installing hints:

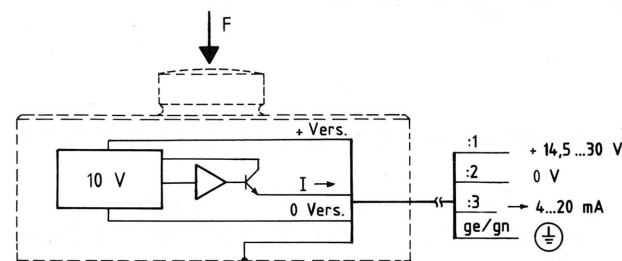
All forces to be measured should act exactly vertically to the load cell.

Side loads, bending and torsion stress should be avoided.

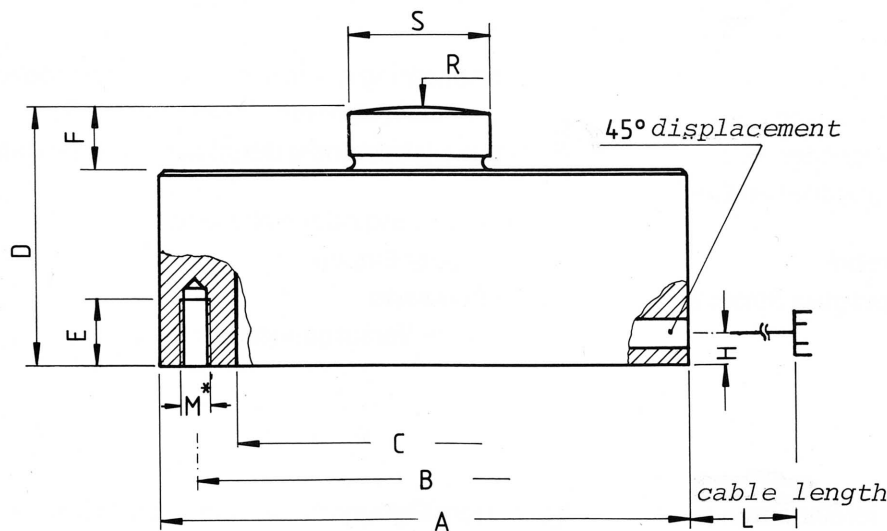
Specifications:

nominal load:	0,5, 1, 2, 4, 6, 10, 20, 25 t	output signal:	4-20 mA (max. electric load 200 Ohm)
nominal span:	16 mA	applicable load*:	1,2 x nominal load
accuracy:	0,2	max. applicable load*:	1,5 x nominal load
temperature drift of span:	0,02 %/°C	break load*:	3 x nominal load
temperature drift of zero:	0,02 %/°C	cable length:	25 m, other length available
nominal temperature range:	-10... + 50°C	nominal displacement :	< 0,1 mm
application temperature range:	-30... + 50°C	* determining is the sum of dynamic and static load	
supply:	14,5 to 30 V/70 mA DC wrong polarity protection		

electric signals with connecting
diagram



dimensions



* 4 fixing thread, each displaced 90°

nominal load	0,5, 1, 2 and 4 t	10 and 20 t
ø A	94	114
ø B	80	90
ø C	66	
D	48	60
E	12	16
F	12,5	
M*	M 5	M 12
H	6	
ø S	25	32
R	100	150
L (m)	25	



**Dr.-Ing. Gschwind
Elektronik GmbH**

Fruntsbergstr. 31 · D-80634 München
Tel. (089) 16393-0 · Fax (089) 168 97 52

Load cell type 180 data sheet

DATUM	05/05	BLATT 2 VON 2 BLATT
GEZEICHNET	ma-gs	Z. NR. 10.100.00E
GEPRÜFT		FA:GMBH/EINBAU/LOADC_2.FH3