

Compression force transducer, Miniature, up to 2000 N

with electrical output



Description

With its compact dimensions and robust design, this load cell, manufactured from stainless steel, can be used in a wide variety of stations, in test bays and laboratories.

The load cell is easy to handle and facilitates relatively simple installation. Its compact dimensions make it particularly suitable for use in highly constricted structures where pressure forces are to be measured.

Note

In order to avoid overloading, it is advantageous to connect the load cell electrically during installation and to monitor the measured value.

The force to be measured must be applied concentrically and free of transverse force.

The load cells are to be mounted on a level surface.

Features

- Ease of force input
- Compact and small dimensions
- Ease of assembly
- Very low installation height
- Protection class IP 65
- Combined error 0.35% of F.S.

Measuring ranges

- 100 N ... 2000 N

Applications

- Plant engineering
- Machine tool construction
- Measurement and inspection equipment
- Precision engineering
- Fully automated production centres, etc.

Specific information

- Calibration control: 100% signal

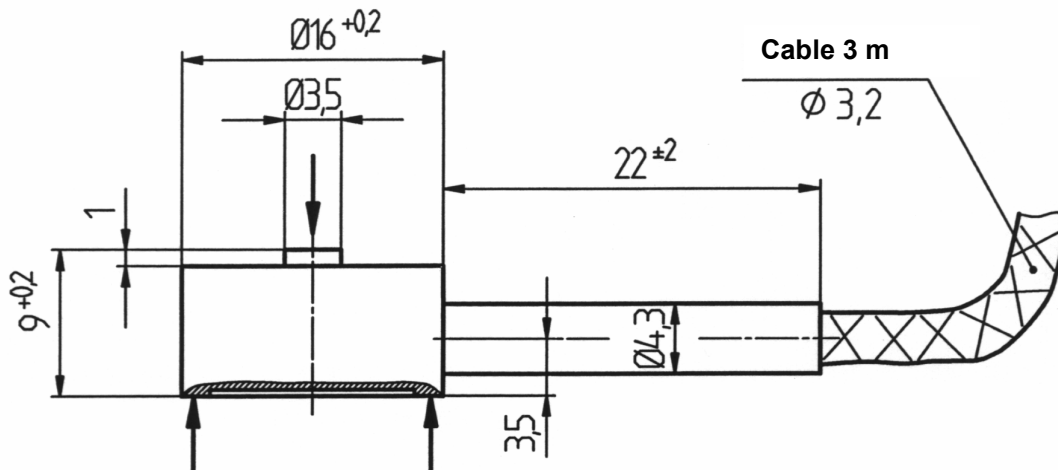
Model: F1212

Technical data

Model	F1212	Options	
Nominal load F_{nom}	100, 200, 500, 1000, 2000 N	100% signal	
Accuracy class	0.5% of F.S.		
Limit load	150% F_{nom}		
Breaking load	>300% F_{nom}		
Combined error	$\leq \pm 0.35\%$ of F.S.		
Max. dynamic load	$\pm 70\%$ F_{nom} acc. to DIN 50100		
Creep, 30 min. at F_{nom}	$< \pm 0.1\%$ of F.S.		
Nominal deflection	< 0.2 mm		
Nominal temperature range	-10 up to +50°C		
Service temperature range	-30 up to +80°C		
Storage temperature range	-50 up to +95°C		
Reference temperature	23°C		
Temperature effect	-span -zero		$\leq \pm 0.2\%$ of F.S./ 10K $\leq \pm 0.2\%$ of F.S./ 10K
Protection type (acc. to EN 60 529/ IEC 529)	IP 65		
Insulation resistance	> 2 G Ω		
Analoque output			
- output signal	0.8 ... 1.2 mV/V		
- bridge resistance	350 Ω		
- Option	Cable integrated amplifier 0(4) ... 20 mA, 0 ... 10 V DC		
- Tolerance of span	$\leq \pm 0.5\%$ of F.S.		
- Excitation voltage	2 ... 8 V (max. 10 V)		
- Option	16...32 V DC for cable integrated amplifier		
- Electrical connection	Cable 3 m / 4-wire, shielded		
Calibration control			
Material of measuring device	stainless steel		
Weight	0,05 kg		

of F.S. = full scale value

Dimensional drawing



Nominal load [N]	Dimensions in [mm]
100, 200, 500, 1000, 2000	see drawing above

Electrical connection	
Supply (-)	green
Supply (+)	brown
Sign. (+)	yellow
Sign. (-)	white
Control	grey
Screen	screen

Subject to technical changes