

Compression Force Transducer 1t up to 100t

With very high accuracy



Description

This force transducer is designed to measure static compression forces. It is made of stainless steel and has a very low installation height.

Because of compact and rugged design this transducer is used in small and mid-size platform scales, silo scales and in process engineering.

The measuring range of the force transducer is 1t up to 100t.

The completely welded design and the high quality cable connection guarantee a reliable application even in harsh conditions.

Note

During installation the force transducer should be connected and the measured value monitored. On this way overloading the force transducer can be avoided.

The force needs to be applied centrally and free of side loads.

Mounting the force transducer on an even surface is of importance.

Features

- For compression forces
- Ease of force introduction
- Rugged design
- Ease of installation
- Protection type IP68 (hermetically sealed)
- Accuracy 0.05% of F.S.

Measuring Range

- 1t up to 100t

Applications

- Apparatus engineering
- Assembly lines
- Measuring and Monitoring facilities
- Special equipment construction
- Weighing.

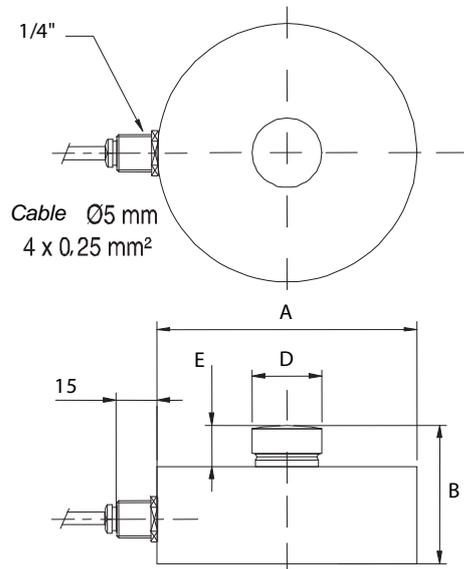
Model: F1215

Technical Data

Model	F1215
Nominal load F_{nom} in t	1; 2.5; 5; 10; 15; 30; 50; 100
Combined error	0.05% of F.S.
Limit load	150% F_{nom}
Breaking load	>300% F_{nom}
Max. dynamic load	+70% F_{nom} according to DIN 50 100
Creep, 30 min. at F_{nom}	$\leq \pm 0.03\%$ of F.S.
Nominal temperature range	-10...+50
Service temperature range	-20...+60
Temperature effect	-Span $\leq \pm 0.0050\%$ of F.S./ °C -Zero $\leq \pm 0.0050\%$ of F.S./ °C
Protection type acc. to DIN 40 050/EN 60 529	IP 68
Insulation resistance	$\geq 2 \text{ G}\Omega$ (50 V)
Analogue output	
- Output signal	2.0 mV/V
- Bridge resistance	700 $\pm 20 \Omega$
- Bridge resistance output	700 $\pm 5 \Omega$
- Tolerance of span	$\pm 0.1\%$ of F.S.
- Zero Tolerance	$\leq \pm 1.0\%$ of F.S.
- Supply power	5 ... 15 V
- Electrical connection	Measuring cable 4-wires, Length: 5m ($\leq 10t$) and 10m ($\geq 15t$)
Installation kit	see data sheet DE939
Weight	1.5 kg ($\leq 15t$) and 4kg ($\geq 30t$)
Material of measuring device	Stainless steel 1.4542

F.S. = Full Scale

Dimensions



Nominal load	$\varnothing A$	$\varnothing D$	B	E
1; 2.5; 5; 10; 15 t	82	22	44	12
30 t	126	35	54	14
50; 100 t	164	60	80	20

Wiring Code	Colour
Supply (-)	black
Supply (+)	Red
Signal (+)	Green
Signal (-)	White

Subject to technical changes