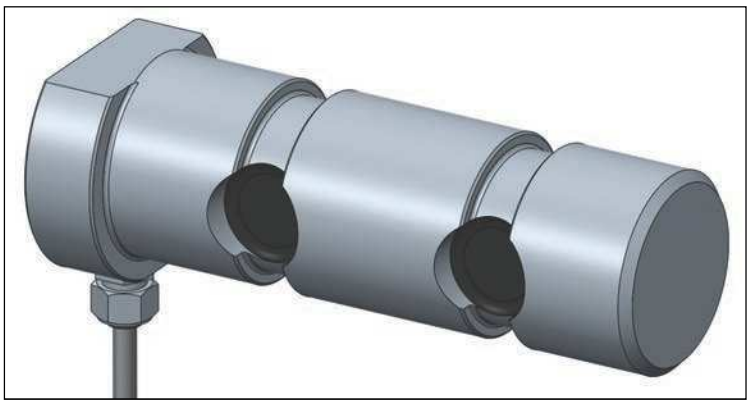
Pin load cell

TPE Series



- Made of alloy structural steel or stainless steel
- Double channel version suitable for PL d (EN13849-1) systems
- Electrical connection with 4xAWG24 4.0 m shielded cable
- Customizable nominal load and physical dimensions

On request:

- Special finishes and materials
- Load cell amplifier (to be ordered separately): BPE «ADS-200 MkII» series

Typical fields of application: Normally used to measure the load in mobile machines or on rotating components (pulley, sheaves, etc.)

Note: the user/installer is responsible for evaluating the values and, thus, the safety of the application

Technical data

Power supply	from 0 to 15 V_{DC}
Output	1.0 ÷ 2.0 mV/V
Nominal load	from 500 to 200000 daN
Linearity, repeatability, hysteresis	± 1% FS
Zero offset	± 1% FS
FS and zero temperature coefficient	0.008 (1) %FS / °C
Insulation	> 5 GΩ @15 V_{DC}
Input and output resistance	350 Ω
Safe overload	150%
Ultimate load	300%
Operating temperature	from -20 to +70 °C
Maximum weight	•
Housing material	alloy structural steel or stainless steel
Standard protection grade	IP67
CE conformity	EMC Directive: 2014/30/EU
EMC: Immunity | Emission	EN 61000-6-2 | EN 61000-6-3
Maximum number of mechanical cycles	$1x10^6$ cycles

(1) Between -10 °C and +40 °C

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Ordering

Pin load cells are normally manufactured on custom request. It is compulsory to have a design or sketch drawing from customer. It is also compulsory to have the data shown in the following tables.

Nominal load	x x x x x x	Nominal load (daN)
Channels	S	Single channel
	D	Double channel
Outer diameter	Ø x x X . x	Expressed in millimeters. Compulsory to define tolerances
Pin length	L x x x . x	Expressed in millimeters. Define tolerances where necessary
Dimension	b x x x . x	See the following draw: supports width, distance between fixed and mobile part
Dimension	c x x x . x	
Dimension	d x x x . x	
Dimension	e x x x . x	
Housing material	1	Structural steel alloy
	2	Stainless steel (if possible: function of dimensions, load, etc.).
Cable length	x x x x x	Standard value is 4,000 mm
Electrical outlet	C R	Radial outlet
	C A	Axial outlet
Anti-rotation lock	✱	Define type and position for pin lock system
Output type	N O T	Not amplified signal
Electrical connection	c a b	Electrical wiring harness code (see on the right)

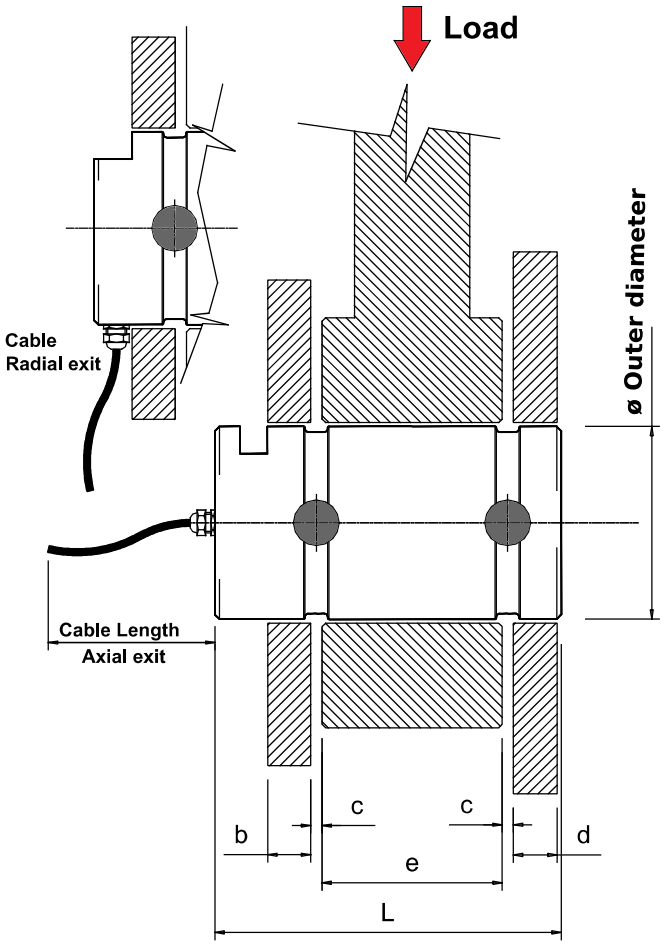
Custom configurations are available on request.

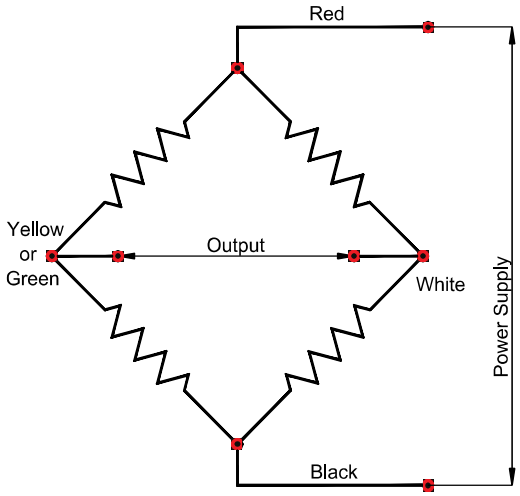
Electrical connections

Code: **CCF** single or double channel

Red	: Positive Supply
Black	: Negative Supply
Yellow or Green	: Signal –
White	: Signal +
Shield	: Not connected

Main dimensions [mm]





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