

DCVTC4—Bi-Directional Pancake Load Cell



FEATURES

- Capacities 0.5—100T
- Sealed to IP67.
- Accuracy 0.05% RO.

APPLICATIONS

- Test Machines.
- Test laboratories.
- General weighing.

DESCRIPTION

The BD-DCVTC4 provides a simple low profile device for tension and compression measurement with a built in display. The DCVTC4 is produced from stainless steel and is a fully welded assembly.

The indicator has a 7 segment display with a character height of 13mm.

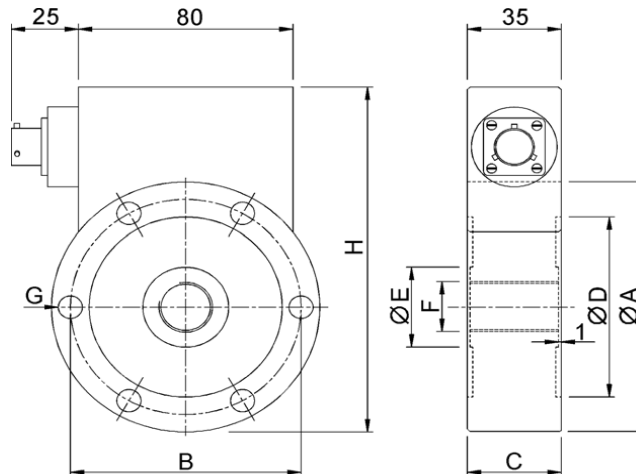
The DCVTC4 load cell has been designed for test rig applications where static and dynamic measurement is required.

TYPICAL SPECIFICATION

PARAMETER	VALUE	UNITS
Capacities Range	0.. 0.5, 1, 2.5, 5, 10, 20, 30, 50, 75, 100	Te
Rated Output	2.0 ±0.002	mV/V
Linearity & non repeatability	0.05	±% of Rated Output
Zero Return after 30 minutes	0.05	±% of Applied Load
Zero Balance	±10% Adjustment	
Temperature Range: Operating	-10 to +70	°C
Temperature Range: Compensated	-10 to +40	
Temperature Effect: On Output	0.024	±% of Rated Output/°C
Temperature Effect: On zero	0.028	±% of Rated Load/°C
Safe Overload	150	% of Rated Capacity
Ultimate Overload	300	% of Rated Capacity
Excitation: Recommended	12	Volts AC or DC
Excitation: Maximum	15	
Maximum Electrical Input	25	mA
Connector	MIL PT02E10-6P	
Insulation Resistance	>2	GΩ at 50VDC
Deflection at Rated Capacity	~ 0.06 - 0.23	mm
Weight (approximate) :	~ 1.6 - 16.5	kg
Construction	Stainless Steel	
Environmental Protection	IP40	
Cable	5m 2 core + screened	

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OUTLINE DIMENSIONS in millimeters



MODEL CODE	LOAD	DISPLAY	ØA	B	C	ØD	ØE	F	G	N°G	H
TC4100500K5	0.5Te	0.5000t	100	86	35	72	32	M20x1.5	9	6	139
TC41001T5	1Te	1.000t									
TC41002T55	2.5Te	2.500t									
TC41275T5	5Te	5.000t	127	110	35	92	47	M30x2	10.5	8	166
TC412710T5	10Te	10.000t	165	138	50	108	62	M42x3	17	12	204
TC416520T5	20Te	20.000t			60						
TC416530T5	30Te	30.00t									
TC416550T5	50Te	50.00t	230	185	80	145	98	M60x3	26	12	296
TC423075T5	75Te	75.00t									
TC4230100T5	100Te	100.00t									

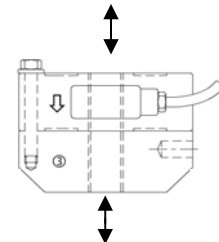
NOTE: If the dimensions or specification do not suit, PCM have an in-house design and build service that should satisfy your requirements.

WIRING DETAIL

PIN	INPUT	CABLE
A	POWER + (12Vdc)	Red
B	POWER - (GND)	Black
F	EARTH	Shield*

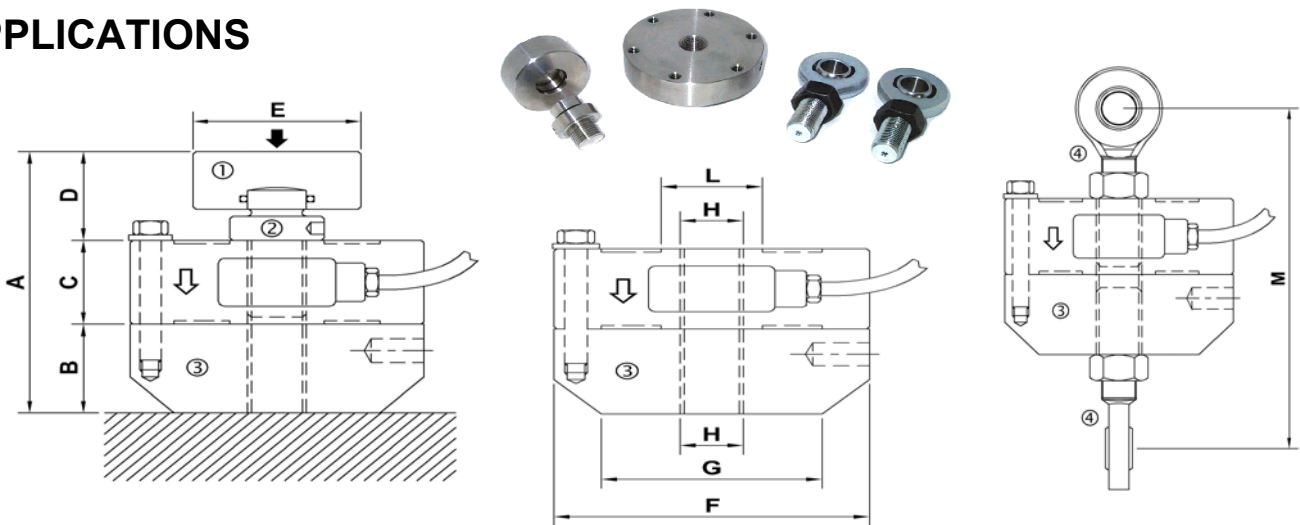
*Connected to the body of the load cell.

LOADING MODE



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APPLICATIONS



TC4 CAPACITY	A	B	D	E	F	G	H	L	M
0.5,1,2.5TE	109	37	37	Ø57	Ø100	Ø70	M20x1.5	Ø32	~170
5, 10TE	110	37	38	Ø76	Ø127	Ø100	M30x2	Ø47	~200
20, 30TE	159	60	59	Ø76	Ø165	Ø100	M42x3	Ø62	~224
50TE	169	60	59	Ø76	Ø165	Ø100	M42x3	Ø62	/
75, 100TE	253	85	88	Ø126	Ø230	Ø180	M60x3	Ø98	/

TC4 CAPACITY	ITEM	ORDER CODE	ACCESSORIES DESCRIPTION
0.5,1,2.5TE	①	CTIC22	LOADING HEAD
	②	CTC425M20	SPHERICAL LOADING HEAD M20 x 1.5
	③	CPBTC4D100	MOUNTING PLATE Ø 100mm
	④	CACCEM20	KNUCKLE JOINTS
5, 10TE	①	CTIC28	LOADING HEAD
	②	CTC445M30	SPHERICAL LOADING HEAD M30 x 2
	③	CPBTC4D127	MOUNTING PLATE Ø 127mm
	④	CACCEM30	KNUCKLE JOINTS
20, 30, 50TE	①	CTIC35	LOADING HEAD
	②	CTS62M42	SPHERICAL LOADING HEAD M42 x 3
	②	CTC450M42	SPHERICAL LOADING HEAD M42 x 3 (500kN)
	③	CPBTC4D165	MOUNTING PLATE Ø 165mm
75, 100TE	④	CACCEM42	KNUCKLE JOINTS. (MAX 200kN)
	①	CTIC60	LOADING HEAD
	②	CTS96M60	SPHERICAL LOADING HEAD M60 x 3
	③	CPBTC4D230	MOUNTING PLATE Ø 230mm