

Zakład Elektroniki Pomiarowej Wielkości Nieelektrycznych

Weight load cell CL 14M

- High accuracy
- Bipolar load measurement
- Self-aligning housing
- Three year warranty and after market service

The weight load cell CL 14M has been designed for weighing systems with single or several transducers. Together with the ZEPWN electronic instrumentation allows to take measurements with C2 accuracy. The sensor CL 14M can be load two-directional.

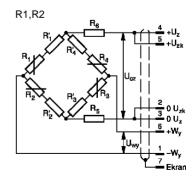
The conversion of measured load is realized due to a steel spring element with strain gage full bridge. The bridge is balanced and thermal compensated. Conversion elements are closed in a hermetic housing which is secured against corrosion with powder lacquer.

For electrical protection IP40 the sensor is equipped with connectors. For electrical protection IP68 the sensor is equipped with a stuffing on the connection cable.

Specifications:		
Range	[kg]:	5; 10; 20; 50; 100; 200; 500; 1000; 2000; 5000; 10000
Accuracy		C2
Cumulative pitch error	[%]	0,02
Signal of unbalance	[%]	±2
Signal of unbalance from zero after nominal load take away (30 min)	[%]	≤ 0,03
Zero point deviation	[%/30 min]	≤ 0,03
Nominal supply voltage	[V]	10
Nominal sensitivity	mV/V	1 or 2
Input resistance: up to 1000 kg	[Ω]	410 ± 10
above 2000 kg		380 ± 5
Output resistance	[Ω]	350 ± 5
Operating temperature	[°C]	-20 ÷ 100
Temperature effect on the sensitivity	[%/10K]	0,05
Temperature effect on the signal of unbalance	[%/10K]	0,05
Compensation temperature	[°C]	0 ÷ 90
Maximal strain	[mm]	0,5
Connectors		Z1 – LUMBERG or O1- O-ring gland
Protection degree		IP40, IP68
Insulation resistance	[GΩ]	1
Material		steel, aluminium
Cable length		0,5 m (standard) or other optional

Designations and cable outlets

1 brown	-W _v
2 pink	0 Ú _{zk}
3 white	0 Uz
4 yellow	+Uz
5 grey	+U _{zk}
6 green	+Wy
7 black	shield



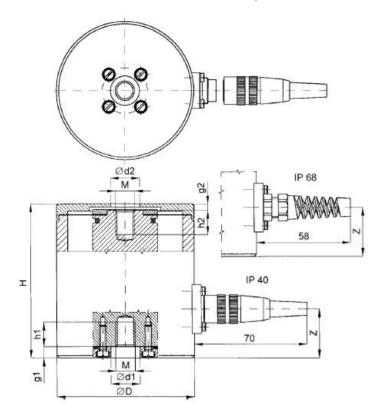
CL 14M



Quality assurance

Each sensor is detailed examined after manufacturing process.

The manufacturer offers 36 month warranty for the sensor and after that time also repair and calibration services.



Range	Н	D	Z	М	d1	g1	h1	d2	g2	h2
kg	mm									
5	75	65	22	M8	10	7	10	18	10	11
10	75	65	22	M8	10	7	10	18	10	11
20	75	65	22	M8	10	7	10	18	10	11
50	75	65	22	M8	10	7	10	18	10	11
100	75	65	22	M8	10	7	10	18	10	11
200	93	85	30	M12	14	7	10	28	10	19
500	93	85	30	M12	14	7	10	28	10	19
1000	97	88	30	M24x2	28	8	10	45	10	20
5000	97	88	30	M24x2	28	8	10	45	10	20
10000	140	126	50	M39x2	42	8	10	64	10	35

Options:	CL 14M	1000	C2	R2	10	Z1	1	
Range [kg]: 5;10; 20; 50;100; 200; 500; 1000; 2000; 50	000; 10000							
Accuracy class: C2								
Configuration: R1 – bridge 350 Ω, 1 mV/V, R2 – 350 Ω, 2 mV/V								
Supply voltage: 10 V								
Connectors: Z1 – Lumberg DIN 45329; O1 – stuffing with stay wire								
Cable length: standard 0,5 m or other optional								

Example of options for ordering

CL 14M – 1000 kg – C2 – R2 – 10- Z1 – 1: sensor with dimensions as in table, range 1000 kg; accuracy C2; strain gage bridge 350 Ω , 2 mV/V; supply 10 V; connector Lumberg; cable length 1 m

Manufacturer

Zakład Elektroniki Pomiarowej Wielkości Nieelektrycznych, 05-270 Marki, ul. Kołłątaja 8 tel./fax: 004822. 7812169, 7712411, e-mail: <u>zepwn@zepwn.com.pl</u>, http://www.zepwn.com.pl