



**Acecells Instrument(ZJ)Co.,Ltd.**

## Aluminum Medium Capacity Single-Point Load Cell

### Special features

- OIML R60 approved
- NTEP HB44 approved
- Max. capacities: 50kg ~ 250kg
- Off center load compensated (OIML R76)
- Max. platform size: 400 x 500mm
- IP65 protection
- Aluminum construction

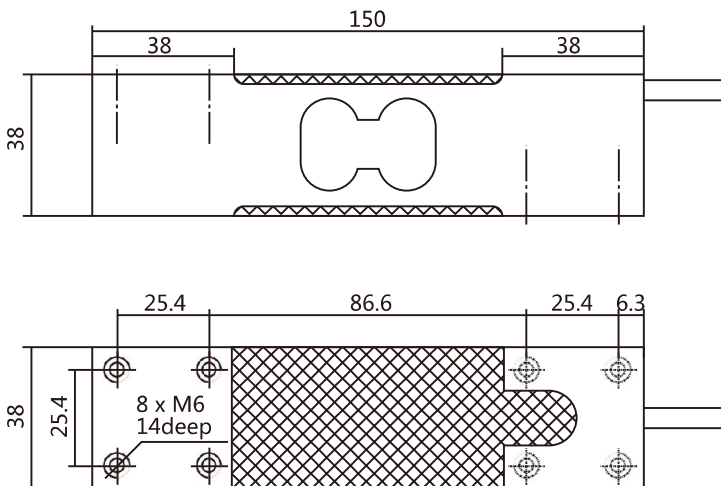


### Optional

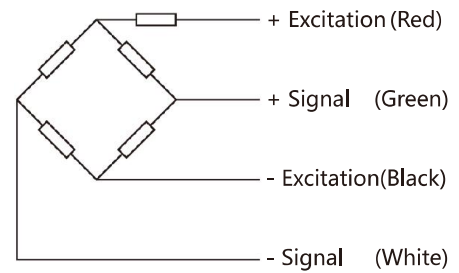
- Reduced minimum LC verification interval (Vmin) for multi-range applications

**Model WL1241**

### Outline dimensions (in millimeters)



### Wiring Schematic Diagram



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## Aluminum Medium Capacity Single-Point Load Cell

<b>Specifications</b>				
Parameter	Value			Units
Accuracy class	C3、C3MR			
Maximum number of LC intervals (n <sub>max</sub> )	3000、2×3000			
Maximum capacity (E <sub>max</sub> )	50	100	250	kg
Min. LC verification interval (v <sub>min</sub> ) ( C3 )	10	20	50	g
Temp. effect on zero balance ( C3 )	± 0.0028	± 0.0028	± 0.0028	% of E <sub>max</sub> /°C
Min. LC verification interval (v <sub>min</sub> ) ( C3MR )	5	10	20	g
Temp. effect on zero balance ( C3MR )	± 0.0014	± 0.0014	± 0.00112	% of E <sub>max</sub> /°C
Zero balance	± 0.1			mV/V
Rated output	2.0			mV/V
Rated output tolerance	± 0.2			mV/V
Temp. effect on rated output +20 ~ +40°C	± 0.00175			% of AL/°C
-10 ~ +20°C	± 0.00117			
Hysteresis error	± 0.0166			% of E <sub>max</sub>
Non-linearity error	± 0.0166			% of E <sub>max</sub>
Min. dead load output return	± 0.0166			% of AL
Offer center load error ( OIML R76 3000e )	± 0.0044	± 0.0044	± 0.0044	% of AL/cm
Offer center load error ( OIML R76 2×3000e )	± 0.0022	± 0.0022	± 0.0018	% of AL/cm
Input resistance	404 ± 15			Ω
Output resistance	350 ± 3			Ω
Insulation resistance @50VDC	> 2000			MΩ
Excitation voltage, recommended	10			V AC/DC
Excitation voltage, maximum	15			V AC/DC
Temperature compensation range	-10 to +40			°C
Operating temperature range	-10 to +50			°C
Safe storage temperature range	-25 to +70			°C
Safe load limit	150			% of E <sub>max</sub>
Ultimate load limit	300			% of E <sub>max</sub>
Cable length	1.5			m
Cable type	4-wire, PVC			
Construction	Aluminum			
Coating	Silicone rubber over gage			
Protection class	IP65			
Maximum platform size	400 x 500			mm
Recommended torque	14.0			N.m

**Notes:**

The values for linearity, hysteresis and temp. effect on rated output are recommended values, the sum of these data meets the requirements according to OIML R60.

## Aluminum Medium Capacity Single-Point Load Cell

<b>Specifications</b>				
Parameter	Value			Units
Accuracy class	C5、 C6			
Maximum number of LC intervals (n <sub>max</sub> )	5000、 6000			
Maximum capacity (E <sub>max</sub> )	50	100	200	kg
Min. LC verification interval (v <sub>min</sub> ) ( C5 )	/	10	20	g
Temp. effect on zero balance ( C5 )	/	± 0.0014	± 0.0014	% of E <sub>max</sub> /°C
Min. LC verification interval (v <sub>min</sub> ) ( C6 )	5	10	20	g
Temp. effect on zero balance ( C6 )	± 0.0014	± 0.0014	± 0.0014	% of E <sub>max</sub> /°C
Zero balance	± 0.1			mV/V
Rated output	2.0			mV/V
Rated output tolerance	± 0.2			mV/V
Temp. effect on rated output +20 ~ +40°C ( C5 )	± 0.00105			% of AL/°C
-10 ~ +20°C ( C5 )	± 0.00070			
Temp. effect on rated output +20 ~ +40°C ( C6 )	± 0.00087			% of AL/°C
-10 ~ +20°C ( C6 )	± 0.00058			
Hysteresis error	± 0.0083			% of E <sub>max</sub>
Non-linearity error	± 0.0083			% of E <sub>max</sub>
Min. dead load output return ( C5 )	± 0.0100			% of AL
Min. dead load output return ( C6 )	± 0.0083			% of AL
Offer center load error ( OIML R76 5000e )	± 0.0026			% of AL/cm
Offer center load error ( OIML R76 6000e )	± 0.0022			% of AL/cm
Maximum platform size	400 x 500			mm
Recommended torque	14.0			N.m

**Notes:**

The values for linearity, hysteresis and temp. effect on rated output are recommended values, the sum of these data meets the requirements according to OIML R60.



# OIML Certificate of Conformity

**OIML Member State**  
The Netherlands

Number R60/2000-NL1-14.07  
Project number 13200571  
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Issuing authority	NMi Certin B.V. Person responsible: C. Oosterman
Applicant and Manufacturer	Acecells Instruments (ZJ) Co.Ltd. No.123 Zhenning West Road, Jiaochuan Street, Zhenhai District, Ningbo China
Identification of the certified type	A <b>single point load cell</b> , with strain gauges. Type : WL1241, WL1243 and WL1245.
Characteristics	See next page

This Certificate attests the conformity of the above identified Type (represented by the sample(s) identified in the OIML Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

**OIML R60** - Edition 2000 (E) for accuracy class C

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation above-identified. This Certificate does not bestow any form of legal international approval.

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Issuing Authority **NMi Certin B.V., OIML Issuing Authority NL1**  
6 June 2014



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The conformity was established by the results of tests and examinations provided in the associated OIML Test Report(s):

- No. NMI-13200571-01 dated 27 May 2014 that includes 51 pages.

## Characteristics of the load cell:

Maximum capacity ( $E_{max}$ )	60 kg up to and including 300 kg
Minimum dead load	0 kg
Accuracy Class	C
Rated Output	2,2 mV/V
Maximum number of load cell intervals (n)	6000
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	15000
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	6000
Input impedance	400 $\Omega \pm 10 \Omega$
Temperature range	-10 °C / +40 °C
Fraction $p_{LC}$	0,7
Humidity Class	CH
Safe overload	150 % of $E_{max}$
Output impedance	350 $\Omega \pm 3 \Omega$
Recommended excitation	10 V AC / DC
Excitation maximum	15 V AC / DC
Transducer material	Aluminium
Atmospheric protection	IP65

The characteristics for  $n_{max}$  and Y can be reduced separately. Z is proportional or equal to  $n_{max}$ .

Each produced load cell is provided with an accompanying document with information about its characteristics.