



...the right weigh

## Type RC1 Load Cell

RC1称重传感器



### Important Features

- Capacities: 250 kN to 900 kN.
- High accuracy.
- Total stainless steel construction.
- Complete hermetic sealing.
- Protection IP 68.
- W&M certified for 3000 intervals. (NMI: TC2097 Rev. 4)
- Calibration in mV/V/Ω.
- Factory Mutual approved.

### Option

- Explosion protection zone 0, 1, 2 and 20, 21, 22 ATEX.

### 选型

<b>RC1</b>	-量程	-防爆 (EX)
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### 主要特点

- 量程: 250kN~900kN
- 高精度
- 不锈钢结构
- 全金属焊接密封
- 防护等级 (IP68)
- W&M认证, 3000分度. (NMI: TC2097 Rev. 4)
- 数字标定, 标定精度0.05%
- OIML、NTEP、CE、Ex、FM认证

### 选项

- 可选防爆区域0, 1, 2和20, 21, 22ATEX

### RC1 Specifications 技术参数

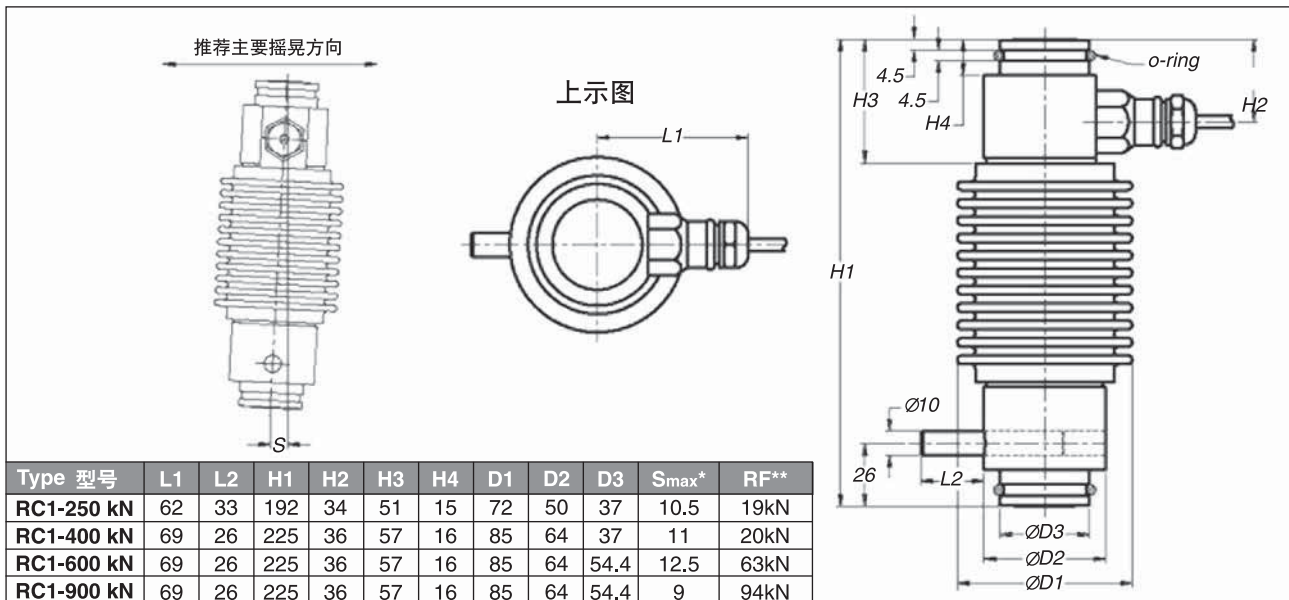
Maximum capacity 量程 (E <sub>max</sub> )	kN	250/400/600/900		
Metric equivalent (1 N=0.10197 kg) 公制	t	25.5/40.8/61.2/91.8		
Rated Output 输出灵敏度 (C <sub>n</sub> )	mV/V	2 ± 0.1%		
Calibration in mV/V/Ω 数字标定精度	%C <sub>n</sub>	≤ ± 0.05 (≤ ± 0.005)		
Accuracy class according to OIML R 60 精度等级		(GP)	C1	C3
Maximum number of verification intervals 最大检定分度数 (N <sub>max</sub> )		n.a.	1000	3000
Minimum load cell verification interval 最小检定分度 (V <sub>min</sub> )		n.a.	E <sub>max</sub> /4667	E <sub>max</sub> /10000
Combined error 综合误差	%C <sub>n</sub>	≤ ± 0.040	≤ ± 0.030	≤ ± 0.020
Creep error (30 minutes)/DR 蠕变	%C <sub>n</sub>	≤ ± 0.060	≤ ± 0.049	≤ ± 0.016
Temperature effect on minimum dead load output 零点温度系数	%C <sub>n</sub> /°C	≤ ± 0.0040	≤ ± 0.0028	≤ ± 0.0012
Temperature effect on sensitivity 灵敏度温度系数	%/°C	≤ ± 0.0020	≤ ± 0.0016	≤ ± 0.0011
Excitation voltage 激励电压	V	5...15		



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Zero balance 零点平衡	%Cn	<math>\leq \pm 5</math>
Input resistance 输入电阻	$\Omega$	$400 \pm 15$
Output resistance 输出电阻	$\Omega$	$351 \pm 1$
Insulation resistance 绝缘电阻	M $\Omega$	$\geq 5000$
Compensated temperature range 补偿温度范围	$^{\circ}\text{C}$	-10...+40
Operating temperature range 工作温度范围	$^{\circ}\text{C}$	-40...+80
Safe load limit 安全载荷限制	%Emax	200
Ultimate load 极限载荷	%Emax	300
Load cell material 材料		stainless steel 17-4 PH (1.4548) 不锈钢
Sealing 密封		complete hermetic sealing; 全金属焊接密封
Protection according DIN 40.050 防护等级		IP 68

## Dimensions 尺寸



\* S<sub>max</sub>=maximum lateral displacement of load introduction. Recommended gap 3...5 mm.

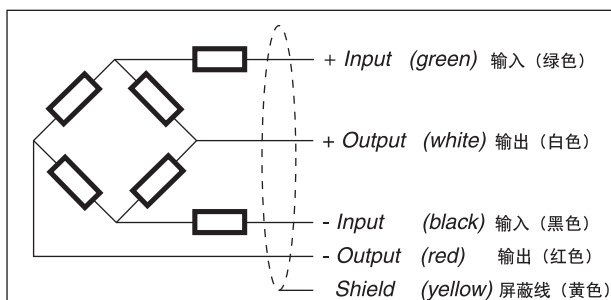
\* S<sub>max</sub>=最大侧向偏移量。推荐为3...5mm

\*\* RF =restoring force at S<sub>max</sub> and E<sub>max</sub>.

\*\* RF=在S<sub>max</sub>和E<sub>max</sub>之间的复位力。

All dimensions in mm. 所有尺寸单位为mm.

## 接线图



## Wiring

- The load cell is provided with a shielded, conductor cable (AWG 20). Cable jacket polyurethane.
- Cable length: 12 m for RC1-250 kN, 16 m for RC1-400 kN, 18 m for RC1-600 and 900 kN.
- Cable diameter: 7.8 mm.
- The shield is floating (On request the shield can be connected to the load cell body).

## 连线

- 称重传感器带屏蔽线，4线制电缆（AWG 20）。
- 电缆长度：RC1-250 kN为12m、RC1-400 kN为16m、RC1-600和900 kN为18m。
- 电缆直径为：7.8 mm
- 屏蔽线悬浮（如果需要，屏蔽线可与称重传感器本体相连）