

RNT Torsional ring load cell

Description

Capacities: (E_{max})
1,2,2,4,7,10,22,33,47,68,100,
150,220,330,470t

Rated output:
2.0mV/V
Digital: 1,000,000d

Accuracy: C3 OIML R60

Material of elastomer:
Alloy steel or stainless steel

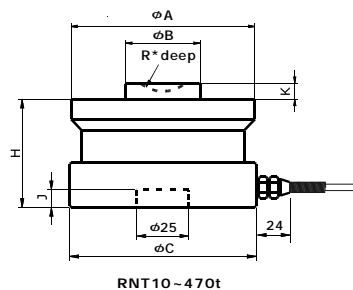
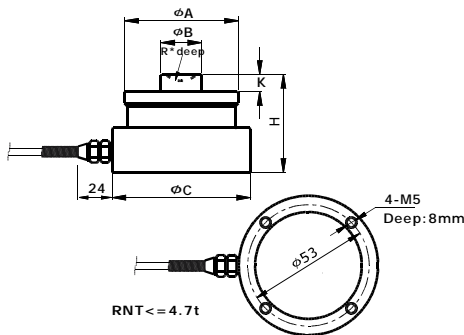
Execution standard:
GB/T 7551-1997 Certificate
(eqv OIML R60)
Combined error: 0.015%

Sealed to IEC 529:
Protection grade: IP67 or IP68.
Protection against total immersion
in water for 30 minutes at a pressure
corresponding to a 1 m head of water.



Dimensions

(In mm. 1mm = 0.03937 inches)



| CAP./SIZE | 1t | 2.2t | 4.7t | 10t | 15t | 22t | 33t | 47t | 68t | 100t | 150t | 220t | 330t | 470t |
|-----------|-----|------|------|------|------|------|-----|-----|-----|------|------|------|------|------|
| ϕA | 49 | 49 | 49 | 74 | 75 | 75 | 95 | 130 | 130 | 150 | 150 | 225 | 225 | 270 |
| ϕB | 20 | 20 | 20 | 30 | 30 | 30 | 40 | 60 | 60 | 70 | 70 | 100 | 100 | 120 |
| ϕC | 60 | 60 | 60 | 75 | 75 | 75 | 95 | 130 | 130 | 150 | 150 | 225 | 225 | 270 |
| H | 43 | 43 | 43 | 50 | 50 | 50 | 65 | 75 | 85 | 90 | 100 | 130 | 145 | 170 |
| J | - | - | - | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 10 | 10 | 10 |
| K | 7.5 | 7.5 | 7.5 | 6.5 | 6.5 | 6.5 | 10 | 14 | 14 | 16 | 16 | 24 | 24 | 28 |
| R | 15 | 15 | 15 | 25.4 | 25.4 | 25.4 | 50 | 60 | - | - | - | - | - | - |
| Deep | 2.2 | 2.2 | 2.2 | 3.3 | 3.3 | 3.3 | 3.3 | 5.1 | - | - | - | - | - | - |

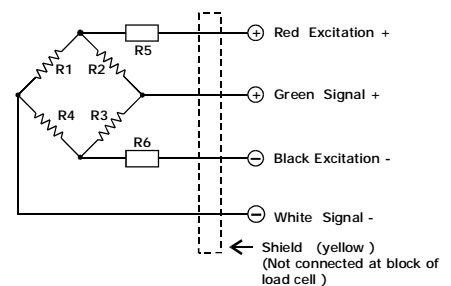
Specification

| Item\ Parameter | C3 | Unit |
|--|-------------------------------|-----------------------|
| Rated load (E_{max}): | 1~470 | t |
| Maximal numbers of load cell verification Intervals (Nic): | 3000 | d |
| Minimum load cell verification intervals Intervals (Vmin): | 0.01 | % of rated load |
| Rated output (Cn): | 2.0±0.1% | mV/V |
| *Combined error: | 0.015 | ±% of rated output |
| Temperature effect on sensitivity (TKc): | 0.0012 | ±% of rated output/°C |
| Temperature effect on zero balance (TK0): | 0.0008 | ±% of rated output/°C |
| Zero balance: | 1.0 | ±% of rated output |
| Input resistance (RiC): | 775±5 / >= 33t: 1550±10 | Ω (Ohms) |
| Output resistance (Ro): | 702±2 / >= 33t: 1402±2 | Ω (Ohms) |
| Insulation resistance: | ≥5000 | MΩ (Mega-Ohms) |
| Safe overload: | 150 | % of rated capability |
| Ultimate overload: | 300 | % of rated capability |
| Operating temperature range: | -20~+70/-20~+160 | °C / °F |
| Recommend excitation: | 8~24 | V (DC or AC) |
| Maximum excitation: | 48 | V (DC or AC) |
| Material of elastomer: | Alloy steel / Stainless steel | |
| Protection class: | IP67/IP68 | |

The data for deviation of synthesis error, TK0, TKc are typical values. The sum of these data meets the requirements according to OIML R60

Circuit Diagram

Electrical Termination
4 Core cable standard lengths:
<=15t: 5.0 m, 22~68t: 13m, >=100t: 5.0m
Diameter: $\phi 6$
Connection:
Refer to the following drawing:



Notice:

Do not change the length of cable, or lese, it will effect the sensitivity of load cell.

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