# RNT-M Torsional ring module

### Description

Capacities: (E<sub>max</sub>) 1,2.2,4.7,10,22,33,47t

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)

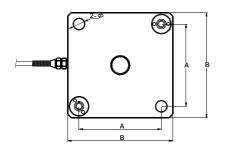
Combined error: 0.015%

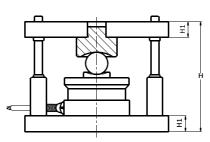
Sealed to IEC 529:

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)





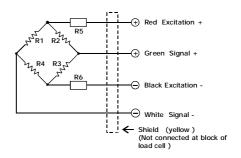
| CAP./SIZE | Α   | В   | Н     | H1 | Φ  |
|-----------|-----|-----|-------|----|----|
| 1~4.7t    | 94  | 120 | 114.4 | 18 | 13 |
| 10~22t    | 94  | 120 | 137.8 | 18 | 13 |
| 33t       | 105 | 130 | 181.1 | 22 | 18 |
| 47t       | 124 | 160 | 228.7 | 22 | 18 |



### **Circuit Diagram**

**Electrical Termination** 4 Core cable standard lengths: <=15t: 5.0 m, 22~47t: 13m 

Connection: Refer to the following drawing:



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

## **Specification**

| Item\ Parameter   | C3                            | Unit                  |  |
|---|-------------------------------|-----------------------|--|
| Rated load (Emax):  | 1,2.2,4.7,10,22,33,47         | 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/℃  |  |
| Temperature effect on zero balance(Tk0):                    | 0.0008                        | ±% of rated output/℃  |  |
| Zero balance:   | 1.0                           | ±% of rated output    |  |
| Input resistance(Rlc):                                      | 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, TKO, TKc are typicI values. The sum of these data meets the requirements according to OIML R60

### Copyright

### Modifications reserved

All details describe our products in general

They are not to be understood as express warranty and do not constitute liability whatsoever.

The company reserves the right to make amendments to this datasheet information without prior notice.

No part of this datasheet, including the texts, photographs, may be reproduced or transmitted without the express written permission of Ningbo Benui Electric Co.,Ltd.



Ningbo Benui Electric Co.,Ltd.

Add:No.18,YangShaShan Xi 9 Road, ChunXiao, Ningbo Economic&Technical Development Zone,China ZIP:315800

Tel: +86-574-8680 6868 0574-8680 6565 Fax: +86-574-8680 6862 0574-8680 6866 E-mail: sales@benui.com benui@benui.com http://www.benui.com www.loadcell.cn

Document number: B95201-en Ningbo Benui Electric Revision: 30-May-2009 page1 of 1