

FLINTEC ROCKER COLUMN LOADCELL



DESCRIPTION

The Flintec RC3 rocker column loadcells are available in the capacities of 7.5t to 300t and are designed to meet the most stringent accuracy requirements. Certification has been obtained from the National Measurement Institute of Australia (NMI) for up to 4,000 divisions - see NMI Certificate of Approval No. S368.

The high internal impedance of the Flintec RC3 ensures minimal power loss through the cables - especially over long cable runs. The minimal power consumption allows a single digital indicator to power a greatly increased number of Flintec RC3s due to the reduced current overhead of the excitation circuits in the digital indicator.

The Flintec RC3 offers total stainless steel construction and complete hermetic sealing, making them suitable for use in the toughest industrial environments of Australia. The loadcell design unites excellent load introduction with a low profile outline.

The Flintec RC3 calibration technique (in mV/V/Ω) eliminates time consuming corner calibration in multiple load cell systems - ideal for streamlining weighbridge servicing and recalibration. The Flintec RC3 is available for use in hazardous areas zone 0, 1, 2 (gas) and 20, 21, 22 (dust) according to EEx ia IIC T6...T4 T130°C ATEX.

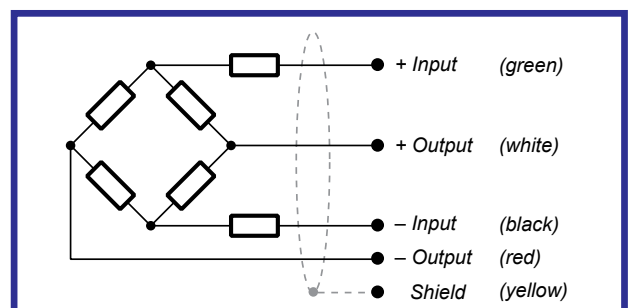


HIGHLIGHTS

- Capacities: 7.5t to 300t
- High Accuracy
- Total Stainless Steel Construction
- Complete Hermetic Sealing
- Protection IP-68
- High Input Resistance: 1,100Ω
- NMI-Approved for 4,000 Intervals
- Calibration in mV/V/Ω
- Complete Range of Loading Hardware Available
- Factory Mutual Approved

WIRING

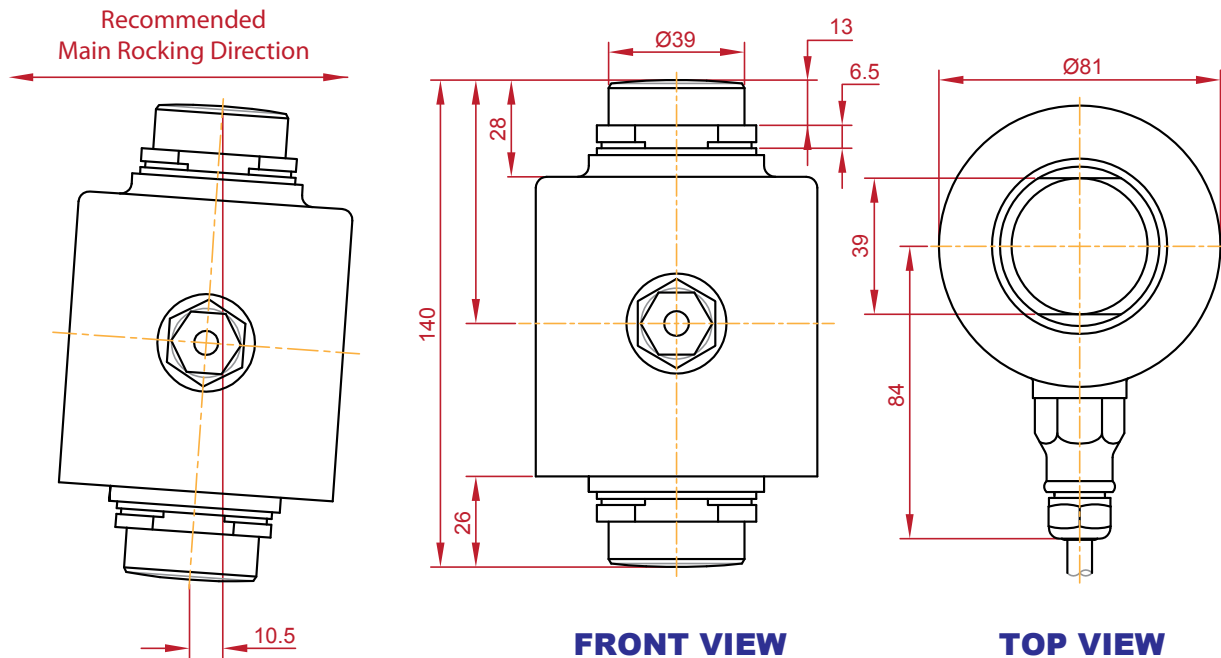
- The Loadcell is Provided with a Shielded, Four-Conductor Cable (AWG 24 for 7.5 to 22.5t / AWG 20 for 30 to 300t)
- Cable Jacket: Polyurethane
- Cable Length: 12m for 7.5 to 22.5t, 18m for 30 to 300t
- Cable Diameter: 5mm for 7.5 to 22.5t, 7.8mm for 30 to 300t
- The Shield is Floating (On Request the Shield Can be Connected to the Loadcell Body)



SPECIFICATIONS

Maximum Capacity	(E _{max})	t	7.5 / 15 / 22 / 30 / 40 / 50 / 100 / 150 / 300	7.5 / 15 / 22 / 30 / 40 / 50		
Rated Output	(Cn)	mV/V	2 ± 0.1%			
Calibration in mV/V/Ω (A...I classified)	%Cn	≤ ± 0.05 (≤ ± 0.005)				
Accuracy Class According to OIML R 60		(GP)	C1	C3	C4	C3 MI 8
Maximum Number of Verification Intervals (n _{max})		n.a.	1,000	3,000	4,000	3,000
Minimum Loadcell Verification Interval (v _{min})		n.a.	E _{max} /5,000	E _{max} /15,000		
Combined Error	%Cn	≤ ± 0.040	≤ ± 0.030	≤ ± 0.020	≤ ± 0.018	≤ ± 0.015
Creep Error (30 minutes) / DR	%Cn	≤ ± 0.060	≤ ± 0.049	≤ ± 0.016	≤ ± 0.012	≤ ± 0.006
Temperature Effect on Minimum Dead Load Output	%Cn/°C	≤ ± 0.0040	≤ ± 0.0028	≤ ± 0.0009	≤ ± 0.0009	≤ ± 0.0009
Temperature Effect on Sensitivity	%/°C	≤ ± 0.0020	≤ ± 0.0015	≤ ± 0.0010	≤ ± 0.0008	≤ ± 0.0010
Excitation Voltage	V	5...15				
Zero Balance	%Cn	≤ ± 5				
Input Resistance	Ω	1,150 ± 50				
Output Resistance	Ω	1,000 ± 2				
Insulation Resistance (100VDC)	MΩ	≥5,000				
Compensated Temperature Range	°C	-10...+40				
Operating Temperature Range	°C	-40...+80				
Safe Load Limit	(E _{lim})	%E _{max}	200			
Ultimate Load		%E _{max}	300			
Loadcell Material		Stainless Steel 17-4 PH (1.4548)				
Sealing		Complete Hermetic Sealing; Cable Entry Sealed by Glass to Metal Header				
Protection According DIN 40.050		IP-68				

DIMENSIONS (30t MODEL)



All dimensions in mm. Dimensions and specifications are subject to change without notice.



Australian Government
National Measurement Institute



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