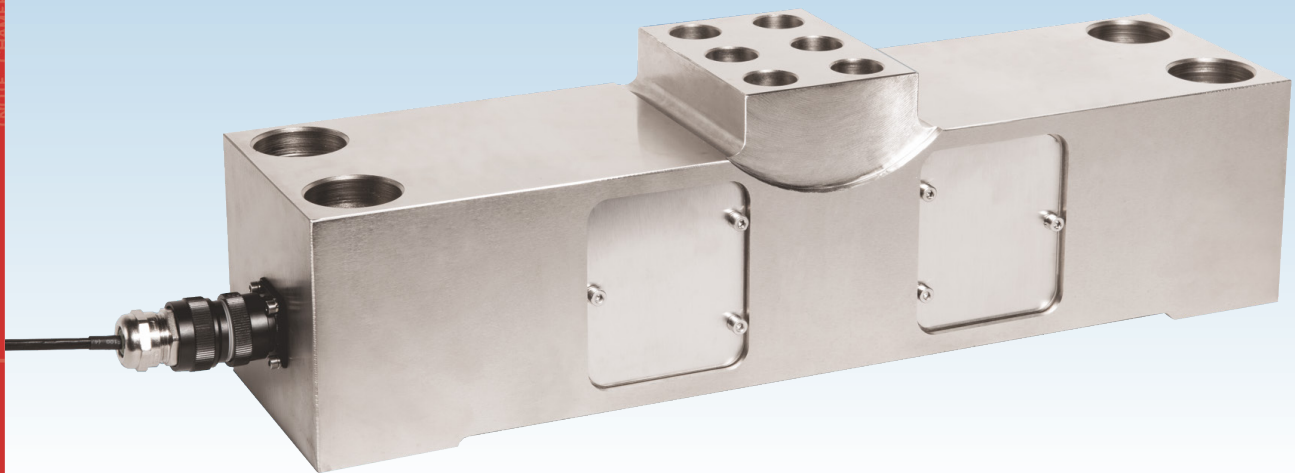


# DOUBLE SHEAR BEAM LOAD CELL FOR HIGH TEMPERATURE APPLICATIONS

*capacities 40t - 200t*



This high accuracy double shear beam load cell is ideal for weighing in high temperature environments within Foundries, for example ladle turret and ladle ferry scales, scrap buckets, roller tables, tundish cars and silo/hopper weighing systems.

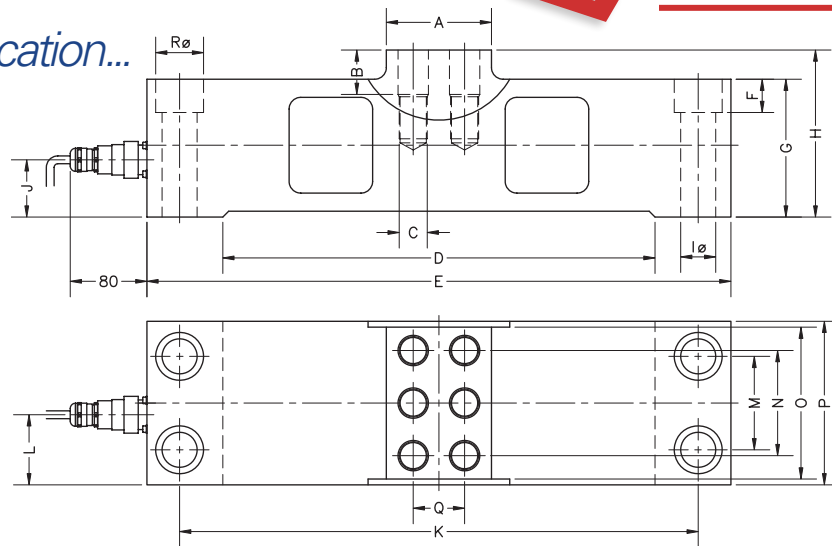
The T38 load cell features a combined error of just  $\pm 0.05\%$ , a maximum service temperature of  $150^{\circ}\text{C}$ , a measuring element from nickel plated alloy steel and environmental protection to IP67. The connection to the 15-metre long PTFE cable is by a hermetically sealed connector, so that the cable can be changed or installed separately (if desired).

Installation is simple and fast, through direct bolting to the connecting structure with no moving parts. Additionally, there is no need for any tie-bars or holding rods. Maintenance requirements are kept to a minimum with this optimised design.

- Double shear beam load cell
- Combined error  $\pm 0.05\%$
- PTFE cable, 15 metres long
- Hermetically sealed cable connector, for separate connection of cable (if desired)
- 6-wire (with sense) connection
- IP67 protection
- 2 year warranty
- Maximum service temperature  $150^{\circ}\text{C}$
- Nickel plated alloy steel measuring element
- Virtually unaffected by shock loads and inevitable side loads or moments
- Wide compensated temperature range
- Superior repeatability and long-term stability

# T38

technical specification...



## T38 Load Cell

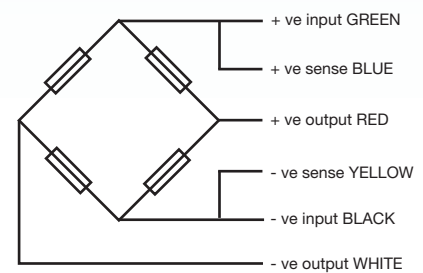
	Load cell specification	Units	
<b>Load Cell Capacities</b>	40, 50, 100, 150, 200	tonnes	
<b>Rated Output</b>	2	mV/V +/- 0.25%	
<b>Combined Error (constant temp.)</b>	< +/- 0.05	%*	
<b>Non-repeatability</b>	< +/- 0.05	%*	
<b>Creep (30 minutes)</b>	< +/- 0.05	%*	
<b>Temperature Effect on Zero Balance</b>	< +/- 0.005	%* / °C	
<b>Temperature Effect on Span</b>	< +/- 0.003	%* / °C	
<b>Compensated Temperature Range</b>	-10 to +100	°C	
<b>Operating Temperature Range</b>	-30 to +150	°C	
<b>Minimum Dead Load (E<sub>min</sub>)</b>	0	%*	
<b>Safe Overload</b>	150	%*	
<b>Ultimate Overload</b>	≥ 180	%*	
<b>Zero Balance</b>	< +/- 2	%*	
<b>Input Resistance</b>	800	Ω +/- 30	
<b>Output Resistance</b>	700	Ω +/- 5	
<b>Insulation Resistance</b>	> 5000	MΩ @ 100V	
<b>Recommended Supply Voltage</b>	10	V	
<b>Maximum Supply Voltage</b>	15	V	
<b>Environmental Protection</b>	IP67		
<b>Cable Length</b>	15	m	
<b>Maximum deflection (at capacity)</b>	0.6 to 1	mm	
<b>Nominal Shipping Weight</b>	40t	32	kg
	50t	36	
	100t	54	
	150t	81	
	200t	116	

\*With respect to rated load

## Dimensions

Capacity	40t	50t	100t	150t	200t
<b>A</b>	n/a	80	90	90	90
<b>B</b>	n/a	32	38	38	40
<b>C</b>	M20x30	M20x30	M24x36	M24x36	M24x40
<b>D</b>	340	340	370	410	450
<b>E</b>	450	450	500	560	620
<b>F</b>	n/a	25.5	28.5	32	32
<b>G</b>	105	105	118	133	150
<b>H</b>	n/a	130	143	158	175
<b>I Ø</b>	26	26	30	33	33
<b>J</b>	45	45	49	66	70.5
<b>K</b>	398	398	444	500	560
<b>L</b>	47	52	58	67.5	64
<b>M</b>	68	68	80	94	114
<b>N</b>	75	75	90	102	110
<b>O</b>	n/a	110	130	150	170
<b>P</b>	110	120	140	160	180
<b>Q</b>	40	40	44	44	44
<b>R Ø</b>	n/a	38	41	46	46

Dimensions in mm



The 2 sense wires are especially important with long cables and wide temperature ranges.

## Electrical Connections

Via 6 wire, 4.5mm diameter, screened PTFE cable.  
Screen not connected electrically to load cell.

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