

DSB7 beam load cell



product description

The DSB7 range of double ended shear beam load cells is engineered for industrial vehicles and agricultural machinery where high accuracy, high capacity payload control is needed in demanding conditions.

The DSB7 provides a very low profile design which allows for a wide range of installation options for on board vehicle weighing applications.

applications

Under body vehicle weighing systems such as RCV's, tipper trucks and agricultural machinery including muck spreaders, trailers and feed mixers.

key features

Corrosion resistant stainless steel

Hermetically sealed

Low profile

Designed for on-board vehicle weighing

Capacities of 7.5t (16.5klb), 15t (33klb) and 25t (55klb) available

accessories

Compatible range of hardware

Compatible range of electronics

options

Optional through end-hole, weld block and spacer



RoHS
compliant



specifications

Maximum capacity (E_{max})	t	7.5	15	25
Accuracy class		GP		
Temperature effect on minimum dead load output (TC_0)	%*RO/10°C	± 0.0400		
Temperature effect on sensitivity (TC_{RO})	%*RO/10°C	± 0.0200		
Combined error	%	± 0.15	± 0.25	± 0.5
Creep error (30 minutes) / DR	%*RO	± 0.0600		
Rated Output (RO)	mV/V	2 ± 1%		
Zero balance	%*RO	± 1.5 (or better)		
Excitation voltage	V	5...10		
Input resistance (R_{LC})	Ω	800 ± 50		
Output resistance (R_{out})	Ω	700 ± 2		
Insulation resistance (100 V DC)	MΩ	≥ 5,000		
Safe load limit (E_{lim})	%* E_{max}	200		
Ultimate load	%* E_{max}	300		
Safe side load	%* E_{max}	100		
Compensated temperature range	°C	-10...+40		
Operating temperature range	°C	-30...+70		
Load cell material		stainless steel 17-4 PH		
Sealing		complete hermetic sealing		
Protection according EN 60 529		IP68 (up to 2m water depth)		
Packet weight	kg	1.75 (7.5t), 4.5 (15t), 15 (25t)		

The limits for Non-Linearity, Hysteresis, and TC_{RO} are typical values. The sum of Non-linearity, Hysteresis and TC_{RO} meets the requirements according to OIML R60 with $p_{LC}=0.7$.

wiring

The load cell is provided with unshielded moulded 4-pin M12 male connector (AWG 24). Cable jacket polyurethane.

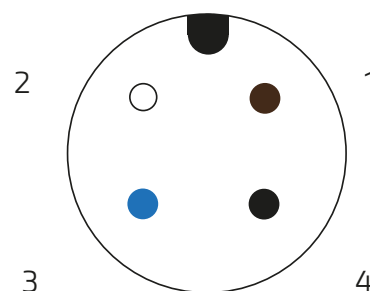
Cable length: 5.0 m
longer or shorter on request

Cable diameter: 5.5 mm

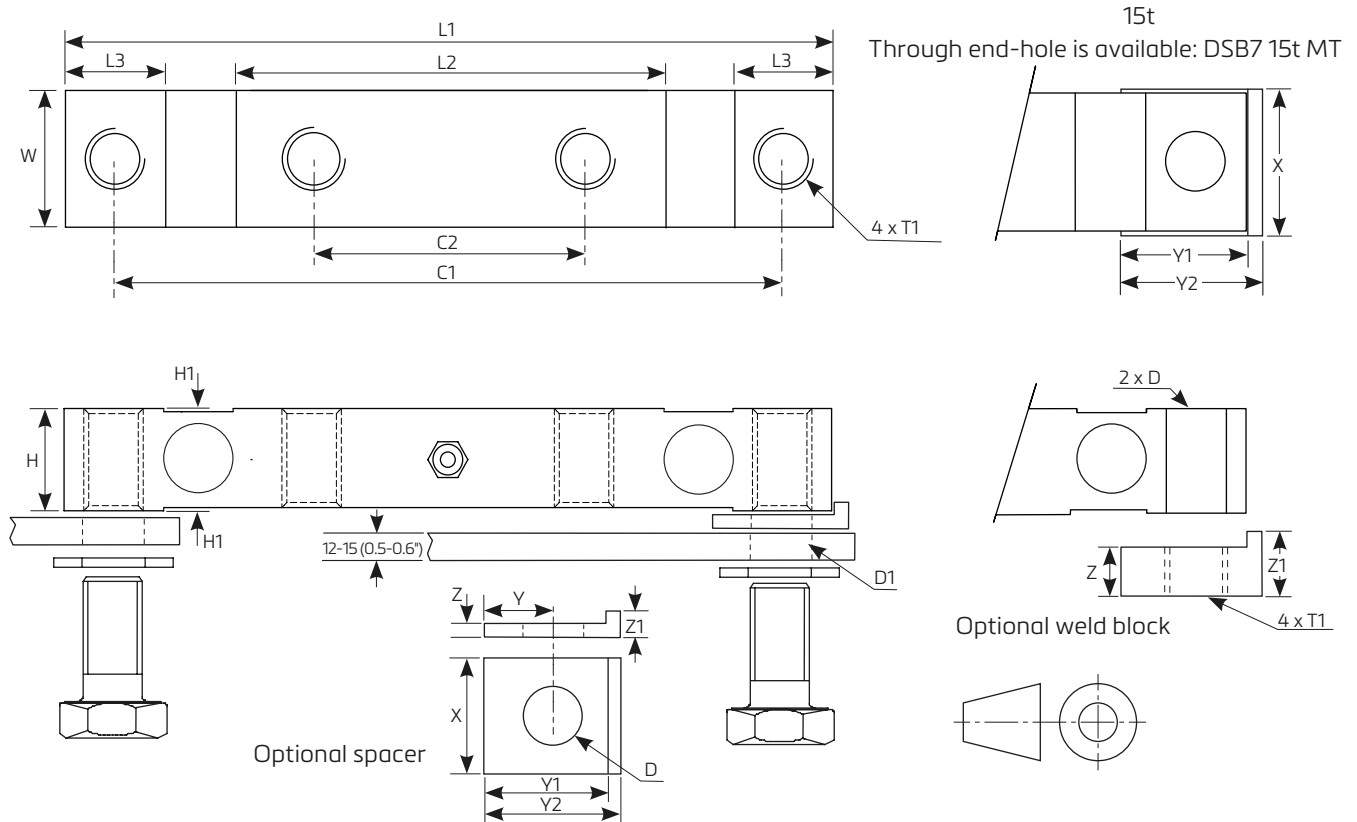
Optional: Shielded 4 core cable with wire ends earthed to the load cell body is available on request

pin colour function

1. brown	+ Excitation
2. white	+ Signal
3. blue	- Excitation
4. black	- Signal

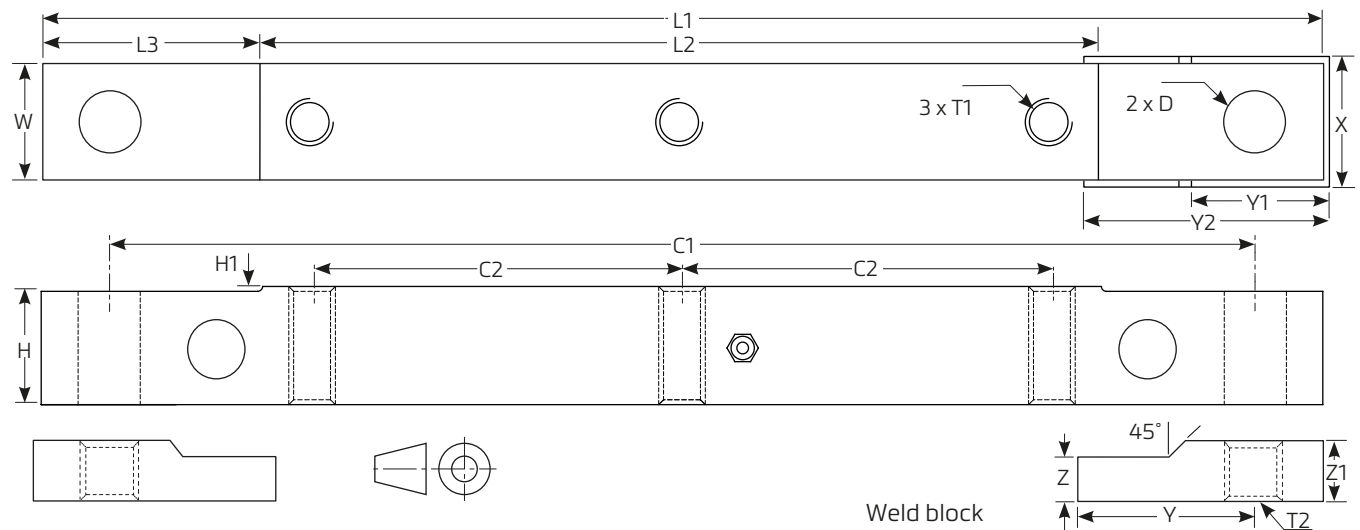


7.5t & 15t Dimensions (mm)



Type	L1	L2	L3	C1	C2	H	H1	W	T1	D	D1	X	Y	Y1	Y2	Z	Z1
7.5 t	200	96	29	171.5	67.5	30	0.5	40	M16x1.5	-	17-18	42	20	36	42	6	12
15t	310	174	40	270	110	40	2.5	54	M24x2.0	25	25-26	56	30	48	54	8	14

25t Dimensions (in mm)



Type	L1	L2	L3	C1	C2	H	H1	W	T1	T2	D	X	Y	Y1	Y2	Z	Z1
25 t	660	432	114	590.5	190.5	58	3.0	58	M24x2.0	M30x2.0	32	62	87	60.25	125	25	32

Specifications and dimensions are subject to change without notice

