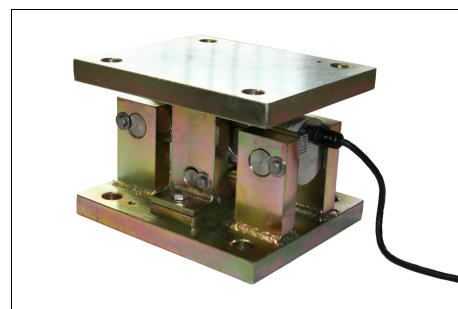


# DSL

## Double Ended Shear Beam Load Cells

**PRECIA  
MOLEN™**  
WORLDWIDE WEIGHING



### USE APPLICATION

- ▼ Weighing large capacity hoppers and tanks.
- ▼ Particularly suited for weighing stirred tanks or tanks undergoing large thermal dilatations.
- ▼ Mechanical mount for high fidelity even in harsh environments.

### PRESENTATION

The DSL load cell is a double ended shear beam load cell with a stainless steel body which is hermetically sealed by welding and ensures a high level of protection.

The double ended shear beam design makes it particularly immune to lateral stresses.

It class C3\* approval allows for precision weighing in industrial environments.

Available in Ex version for potentially explosive atmospheres.

### AVAILABLE MODELS

Type	Nominal load (E max)	Minimum interval (v min)	Limit load	Breaking load
DSL 20 t	20 t	2 kg	30 t	40 t
DSL 50 t	50 t	5 kg	75 t	100 t
DSL 100 t	100 t	10 kg	150 t	200 t

#### Certification

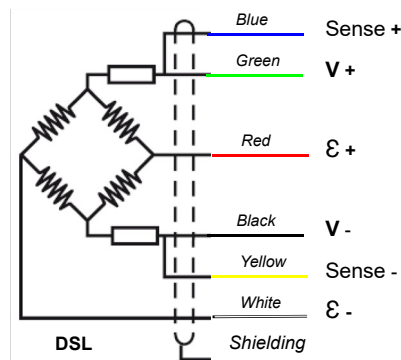
Compliant with the ATEX European Directive relating to protection systems and devices intended for use in potentially explosive atmospheres as well as with IECEx standards.

#### Option

Ex version for use in potentially explosive zone.

- ▼ Zones 0 and 1 ..... Protection ia
- ▼ Zone 2 ..... Protection ia or nA
- ▼ Zone 20, 21 ..... Protection ta or ia
- ▼ Zone 22 ..... Protection tc or ia

### WIRING



- ▼ PVC shielded 6-wire cable

- Length ..... 12 m
- External diameter ..... 6 mm

### TECHNICAL DATA

#### Characteristics

Type DSL		Available Models		
		20 t	50 t	100 t
Accuracy class		C3	NT	
Max. number of intervals (nLC)		3000		
Temperature compensation		-10° .. +40° C		
Limit temperatures		-30° .. +70° C -20° .. +60° C (in Ex zone)		
Max. sag (at nominal capacity)		0,6... 1 mm		
Nominal sensitivity (Cn)		2 mV / V ± 0,1 %		
Power supply nominal voltage		10 V		
Power supply max. voltage		15 V		
Input impedance		800 Ω ± 30 Ω		
Output impedance		700 Ω ± 3 Ω		
Isolation resistance		> 5000 MΩ		
Protection rating		IP 68		
Load cell packaging	Dimensions	320 x 225 x 150 mm	470 x 240 x 210 mm	
	Weight	4 kg	8 kg	15 kg
Load cell mount packaging	Dimensions	250 x 250 x 200 mm	400 x 320 x 270 mm	
	Weight	18 kg	35 kg	85 kg

\* For DSL 20 t

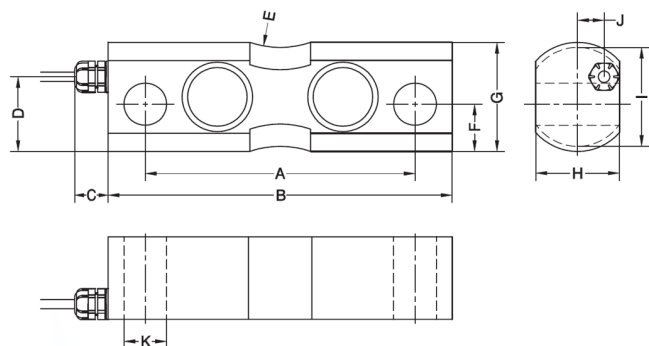
## TECHNICAL DATA - LOAD CELL

### Mounting

The anti-lift mount is supplied assembled, with no load cell, and can be directly installed on the tank to weigh, without using a dummy load cell.

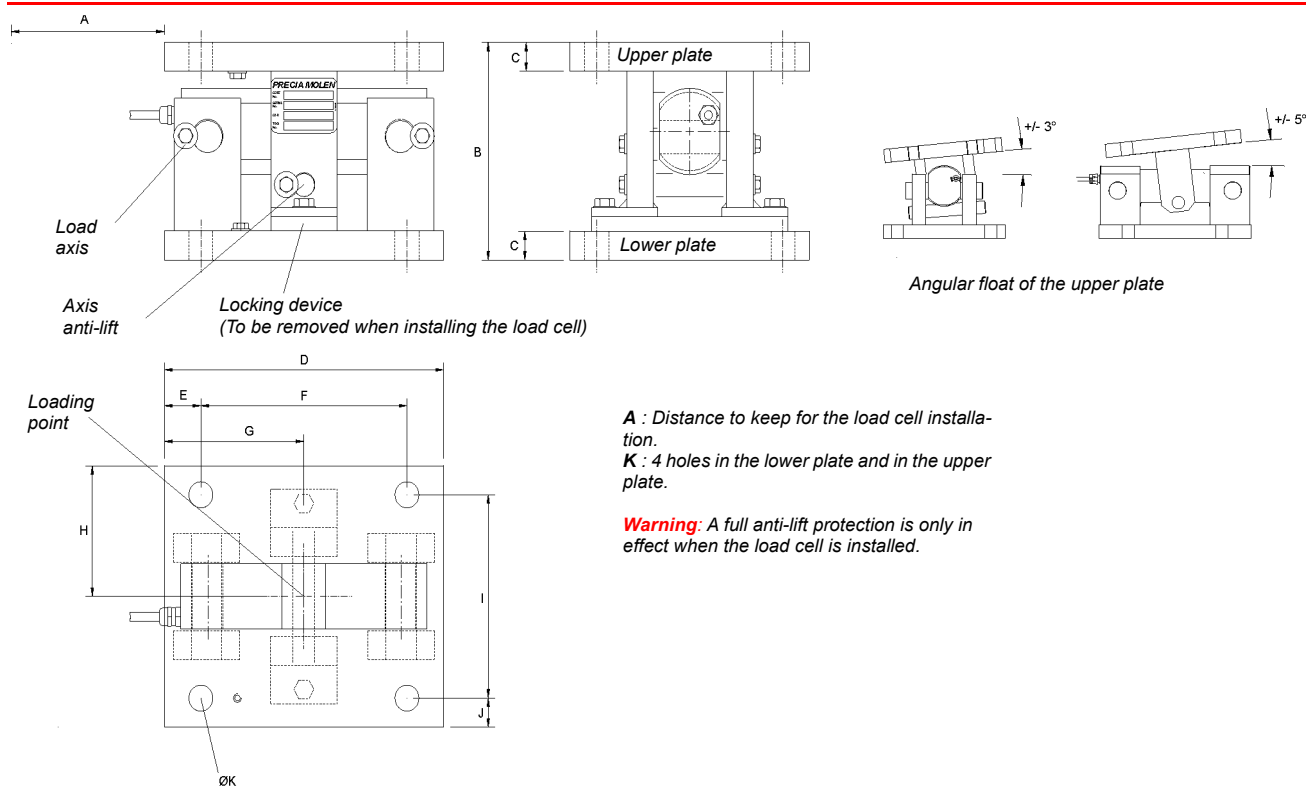
After implementation, the load cell is inserted in its mount and the locking device is released to put the assembly into operational position.

This device also allows for a quick load cell change for maintenance.



Cn	A*	B	C	D	E	F	G	H	I	J	K
20 t	145	185	16	41	50	25.7	59.5	45	54	14	23
50 t	220	285	16	48	50	29.7	74.5	60	65	22	30
100 t	260	340	16	66	50	37.2	99.5	80	90	32	50

## TECHNICAL DATA - LOAD CELL MOUNT



A : Distance to keep for the load cell installation.  
K : 4 holes in the lower plate and in the upper plate.

**Warning:** A full anti-lift protection is only in effect when the load cell is installed.

Cn	A <sup>(i)</sup>	B	C	D	E	F	G	H	I	J	K	Max. transverse offset	Max. lift force	Max. lateral force	Plan no. zinc plated stainless steel
20 t	250	150	20	210	27.5	155	105	90	140	20	18	±5	9000 kg	4550 kg	7057200 7057203
50 t	300	195	25	300	62.5	175	150	110	175	22.5	22	±5	21000 kg	8600 kg	7057201 7057204
100 t	350	255	30	370	75	220	185	150	220	40	26	±10	34000 kg	12000 kg	7057202 7057205

<sup>(i)</sup> All dimensions are in mm.