

# Double-Ended Shear Beam Load Cell

## for economical, no-compromise weighing

### SLD425 Shear Beam Load Cell

Use the SLD425 when economy counts in moderate to high capacity applications and weighing performance cannot be compromised.

Every SLD425 load cell features:

- Reliable strain gage design
- Standard mechanical interface
- Robust design, Nickel plated alloy steel
- High output signal 3mV/V
- Minimum sensitivity to off-center forces
- IP67 Protection
- Minimum sensitivity to off-center forces



The load cell's tight combined error specification is suitable for many industrial applications, while its high output signal permits the use of economic terminals and transmitters. Together, these features ensure the best possible system performance.



### Double-ended Shear Beam Weighing

Use the SLD425 in applications requiring center loading to minimize sensitivity to off-center forces. The SLD425 offers an efficient solution by applying the shear beam weighing principle for moderate to medium capacity applications.



### Robust Strain Gage Design

The SLD425 load cell uses a reliable strain gage design with excellent measurement stability. The high sensitivity output enables the use of economic weight indicators, providing a valuable low-cost solution.



### Alloy Steel Construction

The SLD425 is available in capacities ranging from 1,000 lb to 75,000 lbs. Each version is constructed of nickel plated Alloy Steel to ensure good performance even in difficult industrial environments.

# SLD425 Load Cell Specifications

SLD425 Load Cell

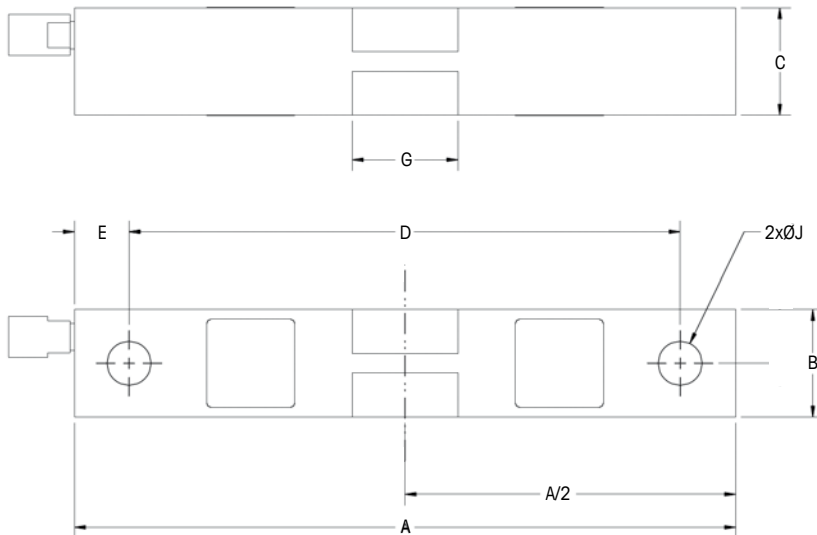
Parameter		Unit of measure	Specification <sup>2)</sup>								
Model number			SLD425								
Rated Capacity (R.C.)		klb (t, nominal)	1 (0.4)	2 (0.9)	5 (2.2)	10 (4.4)	15 (6.8)	25 (11.4)	35 (15.9)	50 (22.7)	75 (34.1)
Rated Output		mV/V R.C.	3 ± 0.27%								
Zero load Output		%R.C.	≤ 1.0								
Combined Error <sup>1)</sup>		%R.C.	≤ 0.026								
Repeatability Error		%A.L. <sup>3)</sup>	≤ 0.01								
Creep, 30 minute		%A.L. <sup>3)</sup>	≤ 0.017								
Temperature effect on	Min. Dead Load Output	% R.C./10°C (50°F)	≤ 0.014								
	Sensitivity <sup>2)</sup>	% R.C./10°C (50°F)	≤ 0.013								
Temperature range	Compensated	°F (°C)	+14 to +104 (-10 to +40)								
	Operating	°F (°C)	-31 to +149 (-35 to +65)								
Factory Mutual Approval			Pending								
Excitation voltage	Recommended	V DC	5 – 12								
	Maximum	V DC	18								
Terminal resistance	Excitation	Ω	700 ± 7								
	Output	Ω	703 ± 4								
Insulation Resistance 50VDC		MΩ	> 5000								
Material	Spring Element		Alloy Steel								
	Cable		Polyurethane								
Protection	Type		Potting Compound								
	IP Rating		IP67								
Load limit	Safe	% R.C.	150								
	Ultimate	% R.C.	300								
Deflection @ R.C., nominal		in (mm)	0.001 (0.02)	0.003 (0.08)	0.008 (0.19)	0.004 (0.11)	0.006 (0.16)	0.01 (0.27)	0.015 (0.37)	0.010 (0.26)	0.021 (0.54)
Weight, nominal		lb (kg)	2.2 (1)	2.2 (1)	2.2 (1)	5.5 (2.5)	5.5 (2.5)	5.5 (2.5)	5.5 (2.5)	24.2 (11)	24.2 (11)
Cable	Length	ft (m)	19.7 (6)								

<sup>1)</sup> Typical error due to the combined effect of non-linearity and hysteresis

<sup>2)</sup> Typical values only.

<sup>3)</sup> A.L. = Applied Load

## SLD425 Load Cell Dimensional Drawing in inches (mm)



## SLD425 Load Cell Order Information

Model Number	Item No.
SLD425, 1k, alloy steel, 19.7 ft. cable	61043224
SLD425, 2k, alloy steel, 19.7 ft. cable	61043225
SLD425, 5k, alloy steel, 19.7 ft. cable	61043226
SLD425, 10k, alloy steel, 19.7 ft. cable	61043227
SLD425, 15k, alloy steel, 19.7 ft. cable	61043228
SLD425, 25k, alloy steel, 19.7 ft. cable	61043229
SLD425, 35k, alloy steel, 19.7 ft. cable	61043230
SLD425, 50k, alloy steel, 19.7 ft. cable	61043231
SLD425, 75k, alloy steel, 19.7 ft. cable	61043232

## SLD425 Load Cell Cable Colors

Color	Function
Red	+ Excitation
Black	- Excitation
Green	+ Signal
White	- Signal
Clear	Shield

Capacity	A	B	C	D	E	G	ØJ
1000 - 5000 lb	7.50 (190.5)	1.22 (31.0)	1.22 (31.0)	6.25 (158.8)	0.63 (15.9)	1.20 (30.5)	0.50 (12.7)
10,000 - 35,000 lb	8.75 (222.3)	1.94 (49.2)	1.44 (36.5)	7.50 (190.5)	0.63 (15.9)	1.62 (41.2)	0.81 (20.6)
50,000 - 75,000 lb	13.50 (342.9)	2.94 (74.7)	2.44 (62.0)	11.50 (292.1)	1.00 (25.4)	3.25 (82.6)	1.31 (33.3)