SLD430 Load Cell

Double-Ended Shear Beam Load Cell

for economical, no-compromise weighing

Double-ended Shear Beam Weighing

Use the SLD430 in applications requiring center loading to minimize sensitivity to off-center forces. The SLD430 offers an efficient solution by applying the shear beam weighing principle for moderate to high capacity applications.

Robust Strain Gage Design

The SLD430 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 SLD430 is available in capacities ranging from 5,000 lb to 250,000 lb. Each version is constructed of alloy steel to ensure good performance even in difficult industrial environments.

SLD430 Shear Beam Load Cell

Use the SLD430 when economy counts in moderate to high capacity applications and weighing performance cannot be compromised.

Every SLD430 load cell features:

- Reliable strain gage design
- Standard mechanical interface
- Robust design, alloy steel
- High output signal 3mV/V
- Tight combined error specification
- NTEP and Factory Mutual Certified
- IP67 Protection
- Minimum sensitivity to off-center forces

SLD430'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.

METTLER TOLEDO

SLD430 Load Cell Specifications

Parameter		Unit of measure	Specification									
Model number			SLD430									
Rated Capacity (R.C.)		klb (t, nominal)	5 (2.2)	10 (4.5)	20 (9.1)	30 (13.6)	40 (18.1)	50 (22.7)	60 (27.2)	100 (45.4)	150 (68)	200 (90.7)	250 (113.4)
Rated Output		mV/V @ R.C.	3.00 ± 0.1%									
Zero load Output		% R.C.	≤ ± 1.00									
Combined Error[1]		% R.C.	≤ ± 0.02									
Repeatability Error		% F.S.[3]	≤ ± 0.01									
Creep, 30 minute		% F.S.[3]	≤ ± 0.03									
Temperature effect on	Min. Dead Load Output	% R.C.[4]/ °F	≤ ± 0.001									
	Sensitivity[2]	% A.L.[5]/ °F	≤ ± 0.0008									
Temperature range	Compensated	°F (°C)	14 to +104 (-10 to +40)									
	Operating	°F (°C)	-40 to +176 (-40 to +80)									
	Safe storage	°F (°C)	-40 to +194 (-40 to +90)									
NTEP Approval Cert, Class, Nmax			10-098, CIII/CIIIL, 5'000/10'000									
Factory Mutual Approval			3036007									
Excitation voltage	Recommended	V AC/DC	5 - 12									
	Maximum	V AC/DC	15									
Terminal resistance	Excitation	Ω	700 ± 7									
	Output	Ω	703 ± 4									
Insulation resistance at 50 VDC		MΩ	> 5000									
Material	Spring Element		Alloy steel									
	Finish		Nickel plated									
	Cable		Polyurethane									
Protection	Type		Potted with metal covers									
	IP Rating		IP67									
Load limit	Safe	% R.C.	150									
	Ultimate	% R.C.	300									
Deflection @ R.C., nominal		in (mm)	0.10 (0.004)	0.12 (0.005)	0.16 (0.006)	0.13 (0.005)	0.15 (0.006)	0.16 (0.006)	0.18 (0.007)	0.20 (0.008)	0.18 (0.007)	
Weight, nominal		lb (kg)	1.8 (4)		3.3 (7.3)	8.5 (18.7)				12.1 (26.7)	14.5 (32)	41.2 (90.8)	43.4 (95.7)
Cable	Length	m (ft)	9.1 (30)									
	Diameter	mm (in)	5 (0.20)			8 (0.31)						

[1] Typical error due to the combined effect of non-linearity and hysteresis

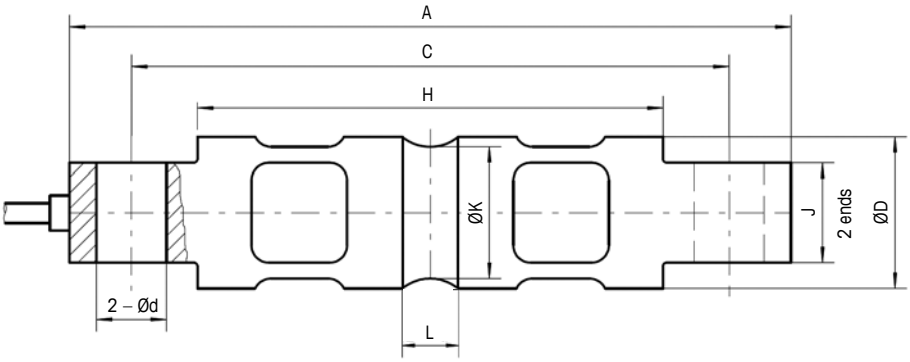
[2] Typical values only

[2] F.S. = Full Scale

[2] R.C. = Rated Capacity

[2] A.L. = Applied Load

SLD430 Load Cell Dimensional Drawing inch [mm]



Emax/Cap	A	C	H	ØD	J	Ød	ØK	L
5'000 - 10'000 lb	8.12 [206]	6.88 [174]	5.24 [133.1]	1.70 [43.2]	1.12 [28.4]	0.66 [16.7]	1.49 [37.6]	0.62 [15.7]
20'000 lb	8.12 [206]	6.88 [174]	5.24 [133.1]	1.95 [49.5]	1.12 [28.4]	0.66 [16.7]	1.49 [37.6]	0.84 [21.3]
30'000 - 60'000 lb	10.25 [260.4]	8.50 [215.9]	6.50 [165.1]	3.00 [76.2]	2.37 [60.2]	1.06 [26.9]	2.73 [69.3]	1.00 [25.4]
100'000 lb	11.25 [285.8]	9.50 [241.3]	7.49 [190.5]	3.50 [88.9]	2.50 [63.5]	1.06 [26.9]	3.24 [82.3]	1.25 [31.8]
150'000 lb	11.25 [285.8]	9.50 [241.3]	7.49 [190.5]	3.90 [99.1]	2.80 [71.1]	1.06 [26.9]	3.64 [92.5]	1.25 [31.8]
200'000 - 250'000 lb	16.10 [408.9]	13.00 [330.3]	10.0 [254.0]	5.38 [136.5]	4.6 [116.8]	1.56 [39.6]	5.18 [131.4]	1.30 [33.0]

SLD430 Load Cell
Order Information

Model Number	Item No.
SLD430 Load Cell, 5K, alloy steel	61042081
SLD430 Load Cell, 10K, alloy steel	61042082
SLD430 Load Cell, 20K, alloy steel	61042083
SLD430 Load Cell, 30K, alloy steel	61042084
SLD430 Load Cell, 40K, alloy steel	61042085
SLD430 Load Cell, 50K, alloy steel	61042086
SLD430 Load Cell, 60K, alloy steel	61042087
SLD430 Load Cell, 100K, alloy steel	61042088
SLD430 Load Cell, 150K, alloy steel	61042089
SLD430 Load Cell, 200K, alloy steel	61042090
SLD430 Load Cell, 250K, alloy steel	61042091

SLD430 Load Cell
Cable Colors

Color	Function
Red	+ Excitation
Black	– Excitation
Green	+ Signal
White	– Signal
Bare	Shield

Full Connectivity

Our sensors and instruments are professional communicators. METTLER TOLEDO supplies you with various data communication interfaces that allow you to communicate with your PLCs, MES or ERP systems.

PROFIBUS, EtherNet/IP, DeviceNet, ControlNet, ModConnect, EnCompass, ENABLED

Global Approvals

The 793 is provided with all listed approvals. No need to think about options and additional charges. Simplifies the conduct of global business, order processing and service-part stocking.

METTLER TOLEDO Service

Our extensive service network is among the best in the world and ensures maximum availability and service life of your product.

Weighing Electronics

METTLER TOLEDO offers a complete family of electronics from simple weighing to application solutions for filling, stock control, batching, formulation, counting, checkweighing.

ISO 9001 ISO 14001

Quality certificate ISO9001
Environment certificate ISO14001

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