

WSSCLC STAINLESS STEEL LOW PROFILE COMPRESSION LOAD CELL (U.S. & METRIC)

The WSSCLC series of load cells has been designed for a wide range of force measurement and weighing applications where space is limited. The WSSCLC is constructed from stainless steel and has a fully welded construction, offering a high level of corrosion resistance for use in harsh environments, with environmental sealing to IP68. There are many applications ideally suited to the WSSCLC, including restricted height weighing applications, general force measurement and press calibration. Interface, Inc. can provide the WSSCLC on its own or combined with any of our instrumentation range, to offer a more complete package. Please consult our technical department for any advice required on suitable instrumentation solutions.

FEATURES & BENEFITS

- Capacities from 220 - 16.5K lbf (100 - 7,500 kg) to 22K - 440.9K lbf (10 - 200 MT)
- High Stability
- Fully welded stainless steel construction
- Low height
- Environmentally sealed to IP68
- Accuracy $\leq \pm 0.023\%$

SPECIFICATIONS

ACCURACY – (MAX ERROR)		
Rated load	lbf	220, 551, 1.1K, 2.2k, 5.5k, 11k 16.5k lbf
	kg	100, 250, 500, 1K, 2.5K, 5K, 7.5K kg
	lbf	22K, 44K, 66.1K, 110.2K, 165.3K, 220.4K, 330.6K, 440.9K lbf
	t	10, 20, 30, 50, 75, 100, 150, 200 MT
Overload range	150% full scale output (FSO)	
Ultimate breaking load	>300% FSO	
Maximum transverse load	50% FSO	
Output	2mV/V ($\pm 0.1\%$)	
Zero balance	$\leq \pm 1\%$ FSO	
Combined error	$\leq \pm 0.023\%$ FSO (equivalent to OIML R60, C2)	
Non-repeatability	$\leq \pm 0.01\%$ FSO	
Creep (at nominal load)	$\leq \pm 0.028\%$ FSO over 30 minutes	
	$\leq \pm 0.008\%$ FSO over 20-30 minutes	
Excitation voltage	10vdc recommended (18vdc maximum)	
Input resistance	700 Ω $\pm 2\Omega$	
Output resistance	700 Ω $\pm 2\Omega$	
Insulation resistance	>5G Ω @50vdc	
Compensated temperature range	F°	14 to 104
	C°	-10 to 40
Operating temperature range	F°	-4 to 158
	C°	-20 to 70
Storage temperature range	F°	-4 to 176
	C°	-20 to 80
Zero temperature coefficient	$\leq \pm 0.025\%$ FSO/°C	
Span temperature coefficient	$\leq \pm 0.017\%$ FSO/°C	
Environmental protection level	IP68 (100 hours in 1 metre of water)	
Electrical connections	5 metres PVC cable via special cable gland	

STANDARD CONFIGURATION



MODEL WSSCLC-100 (Shown)



MODEL WSSCLC-100 with WSSCLC-LC-100 (Shown)



MODEL WSSCLC-100 with WSSCLC-BP-100 (Shown)

OPTIONS

- Load cap
- Weighing assembly up to 220.4K lbf (up to 100 MT) - See WSSCLC-MOUNT data sheet
- Mounting plate up to 220.4K lbf (up to 100 MT)
- TEDS option (when used with 9320 handheld display)

Rating	
220 lbf	100 kg
551 lbf	250 kg
1.1K lbf	500 kg
2.2K lbf	1000 kg
5.5K lbf	2500 kg
11K lbf	5000 kg
16.5K lbf	7500 kg
22K lbf	10 MT
44K lbf	20 MT
66.1K lbf	30 MT
110.2K lbf	50 MT
165.3K lbf	75 MT
220.4K lbf	100 MT
330.6K lbf	150 MT
440.9K lbf	200 MT

U.S. dimensions and capacities are provided for conversion only. Standard products have International System of Units (SI) capacities and dimensions.

Datasheet: WSSCLC v1.3 12-20-2022

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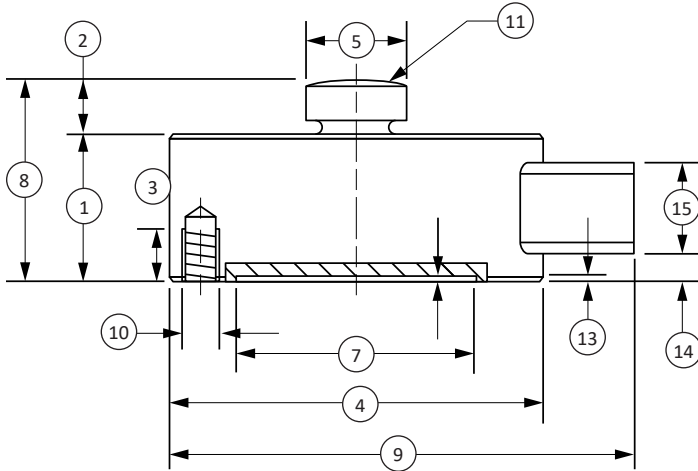
TYPICAL APPLICATIONS

- Vessel weighing
- Press force monitoring
- Center of gravity systems

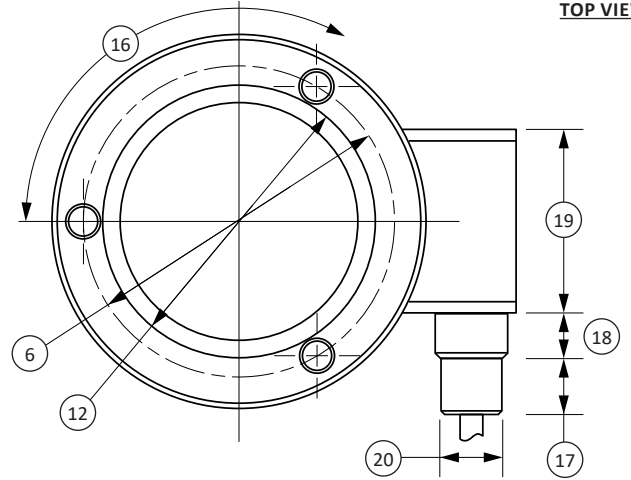
WIRING DIAGRAM

Description	Color
+ve Supply	Red
-ve Supply	Black
+ve Signal	White
-ve Signal	Yellow

SIDE VIEW



TOP VIEW

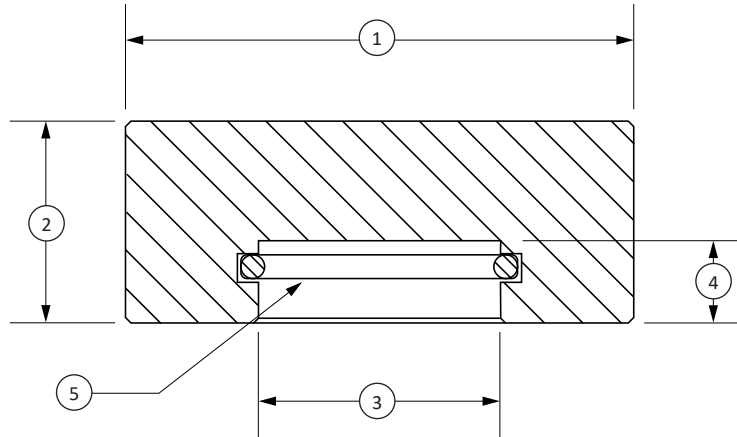


DIMENSIONS

See Drawing	U.S. (lbf)	Metric (kg)	U.S. (lbf)	Metric (MT)	U.S. (lbf)	Metric (MT)	U.S. (lbf)	Metric (MT)	U.S. (lbf)	Metric (MT)
	220, 551, 1.1k, 2.2k, 5.5k, 11k 16.5k	100, 250, 500, 1k, 2.5k, 5k, 7.5k	20K	10	44K, 66.1K	20, 30	110.2K, 165.3K, 220.4K	50, 75, 100	330.6K, 440.9K	150, 200
	in	mm	in	mm	in	mm	in	mm	in	mm
(1)	1.25	32	1.25	32	1.96	50	2.36	60	3.14	80
(2)	0.47	12	0.47	12	0.55	14	0.78	20	1.18	30
(3)	0.43	11	0.43	11	0.47	12	0.78	20	0.78	20
(4)	Ø3.22	Ø82	Ø3.22	Ø82	Ø4.96	Ø126	Ø6.49	Ø165	Ø7.87	Ø200
(5)	Ø0.86	Ø22	Ø0.86	Ø22	Ø1.37	Ø35	Ø2.36	Ø60	Ø3.14	Ø80
(6)	Ø2.67	Ø68	Ø2.67	Ø68	Ø3.54	Ø90	Ø5.19	Ø132	Ø5.9	Ø150
(7)	Ø2.05	Ø52.3	Ø2.05	Ø52.3	Ø3	Ø77.3	Ø3.63	Ø92.3	Ø4.21	Ø107
(8)	1.73	44	1.73	44	2.51	64	3.14	80	4.33	110
(9)	4	102	4	102	5.82	148	7.4	188	8.77	223
(10)	3x M8		3x M8		3x M8		4x M16		4x M16	
(11)	1.96	50	1.96	50	6.29	160	11.81	300	11.81	300
(12)	Ø2.36	Ø60	Ø2.36	Ø60	Ø3.66	Ø93	Ø4.52	Ø115	Ø5	Ø128
(13)	0.01	0.3	0.01	0.3	0.02	0.5	0.03	1	0.03	1
(14)	0.23	6	0.23	6	0.59	15	0.66	17	0.9	23
(15)	0.78	20	0.78	20	0.8	20	0.8	20	0.8	20
(16)	120°		120°		120°		120°		120°	
(17)	0.51	13	0.51	13	0.5	13	0.5	13	0.5	13
(18)	0.39	10	0.39	10	0.4	10	0.4	10	0.4	10
(19)	1.57	40	1.57	40	1.6	40	1.6	40	1.6	40
(20)	¼	6.35	¼	6.35	¼	6.35	¼	6.35	¼	6.35
Weight	2.8 (lbs)	1.3 (kg)	2.8 (lbs)	1.3 (kg)	7.4 (lbs)	3.4 (kg)	20.7 (lbs)	9.4 (kg)	40.1 (lbs)	18.2 (kg)

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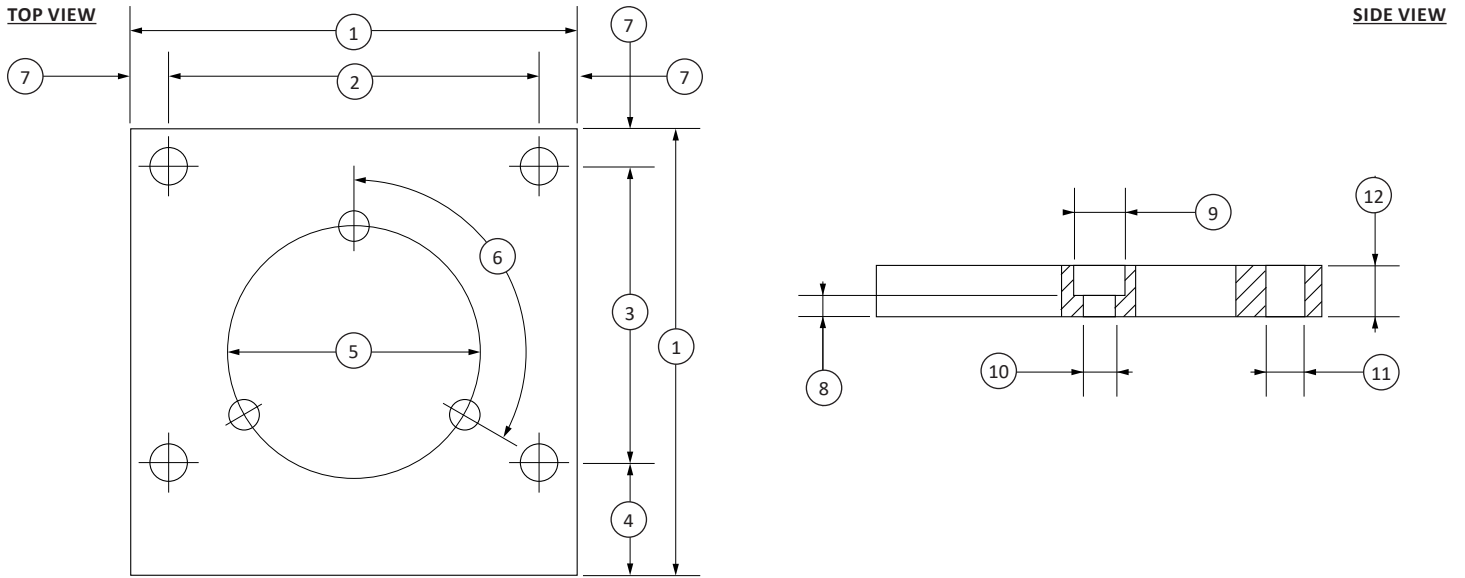
SIDE VIEW



DIMENSIONS

See Drawing	U.S. (lbf)	Metric (kg)	U.S. (lbf)	Metric (MT)	U.S. (lbf)	Metric (MT)	U.S. (lbf)	Metric (MT)	U.S. (lbf)	Metric (MT)
	220, 551, 1.1K, 2.2k, 5.5k, 11k 16.5k	100, 250, 500, 1K, 2.5K, 5K, 7.5K	20K	10	44K, 66.1K	20, 30	110.2K, 165.3K, 220.4K	50, 75, 100	330.6K, 440.9K	150, 200
	in	mm	in	mm	in	mm	in	mm	in	mm
(1)	Ø2.24	Ø57	Ø2.24	Ø57	Ø2.99	Ø76	Ø4.96	Ø126	Ø5.04	Ø128
(2)	0.94	24	0.94	24	1.18	30	1.50	38	2.68	68
(3)	Ø0.91	Ø23	Ø0.91	Ø23	Ø1.42	Ø36	Ø2.40	Ø61	Ø3.19	Ø81
(4)	0.35	9	0.35	9	0.47	12	0.47	12	0.83	21
(5)	O-ring									

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		220, 551, 1.1k, 2.2k, 5.5k, 11k 16.5k	100, 250, 500, 1k, 2.5k, 5k, 7.5k	20K
	in	mm	in	mm
(1)	4.72	120	4.72	120
(2)	3.94	100	3.94	100
(3)	3.15	80	3.15	80
(4)	1.18	30	1.18	30
(5)	2.68	68	2.68	68
(6)	120°		120°	
(7)	0.39	10	0.39	10
(8)	0.33	8.5	0.33	8.5
(9)	0.55	14	0.55	14
(10)	3 x Ø0.33	3 x Ø8.5	3 x Ø0.33	3 x Ø8.5
(11)	4 x Ø0.41	4 x Ø10.5	4 x Ø0.41	4 x Ø10.5
(12)	Ø0.55	Ø14	Ø0.55	Ø14