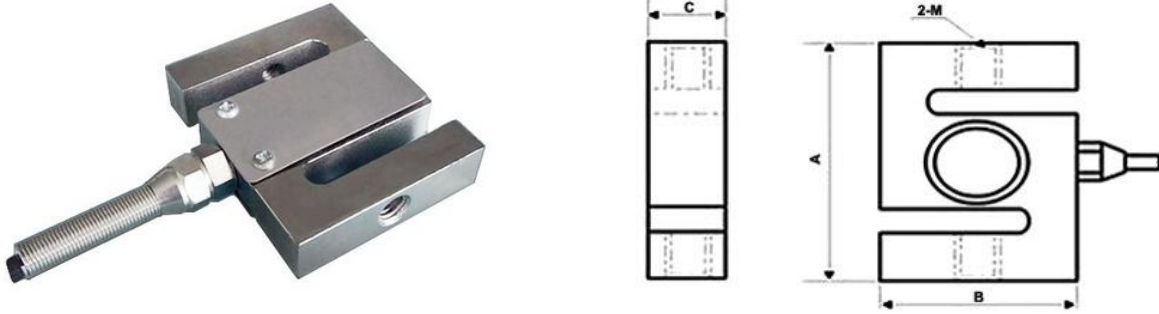


### S Type Load Cell

#### ATO-LCS-TJL-1

S type load cell can bear both tension and pressure, with good output symmetry, high accuracy, compact structure and complete specifications. Strain gauge load cell can be applied for batching scale, electronic-mechanical scale, crane scales and other force value measurement and control.



#### Dimension:

Capacity	Dimension (mm)			
	A	B	C	M
5~50kg	64	51	12.7	M8
100~700kg	76	51	19.1	M12
1~1.5 ton	76	51	25.4	M12
2~5 ton	108	76	25.4	M20
7.5~10 ton	178	127	51	M30
20 ton	188	140	60	M36*3

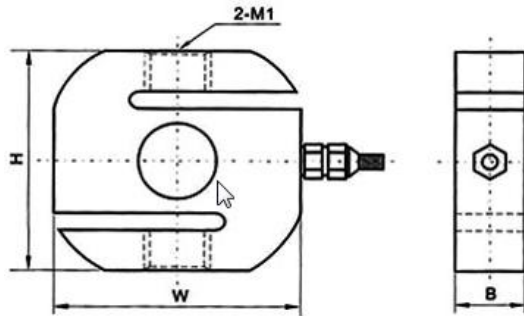
#### Specification:

Model	ATO-LCS-TJL-1
Shipping weight	1~12.7kg
Capacity range	5 kg~20 ton
Accuracy	0.02~0.05%F.S (linearity + hysteresis + repeatability)
Sensitivity	2.0±0.05mV/V
Creep	±0.02%F.S/30min
Zero output	±1%F.S
Temperature effect on zero	±0.02%F.S/10°C
Temperature effect on output	±0.02%F.S/10°C
Operating temperature	-20°C ~+65°C
Input impedance	380±10Ω
Output impedance	350±3Ω
Insulation resistance	≥5000MΩ (DC 50V)
Safety overload	150%F.S
Bridge voltage	DC 10V
Material	Alloy steel or stainless steel
Protection class	IP67
Cable length	2m (≤1ton), 5m (>1ton)
Wiring	EXC+: Red, EXC-: Black, SIG+: Green, SIG-: White

### S Type Load Cell

#### ATO-LCS-DYLY-102

S type load cell can bear both tension and pressure, with overload protection device, good output symmetry, high accuracy, compact structure and complete specifications. Strain gauge load cell can be applied for batching scale, electronic-mechanical scale, crane scales, automatic weighing instrument and other force value measurement and control.



#### Dimension:

Capacity	Dimension (mm)			
	W	H	B	M1
0~1kg	60	58	12	M6*1.25
2~30kg	60	58	12	M8*1.25
50~200kg	70	64	20	M12*1.75
300~500kg	70	64	20	M12*1.75
1 ton	70	64	25	M16*2
2~7 ton	84	92	32	M20*2.5

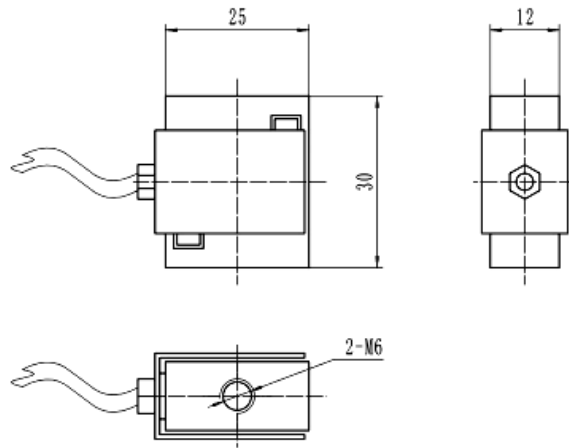
#### Specification:

Model	ATO-LCS-DYLY-102
Shipping weight	1~2kg
Capacity range	1kg~7 ton
Accuracy	0.03%F.S (linearity + hysteresis + repeatability)
Sensitivity	1.0-3.0±0.05mV/V
Creep	±0.03%F.S/30min
Zero output	±1%F.S
Temperature effect on zero	±0.03%F.S/10°C
Temperature effect on output	±0.03%F.S/10°C
Operating temperature	-20°C~+65°C
Input impedance	350±20Ω
Output impedance	350±5Ω
Insulation resistance	≥5000MΩ
Safety overload	150%F.S
Bridge voltage	DC 5-15V, suggest DC 10V
Material	Alloy steel
Protection class	IP67
Cable length	2m (<5ton), 5m (≥5ton)
Wiring	EXC+: Red, EXC-: Black, SIG+: Green, SIG-: White

### S Type Load Cell

#### ATO-LCS-DYLY-106

S type load cell can bear both tension and pressure, with good stability, good output symmetry, high accuracy, low temperature drift, compact structure and complete specifications. Micro load cell is suited to use in restricted spaces.



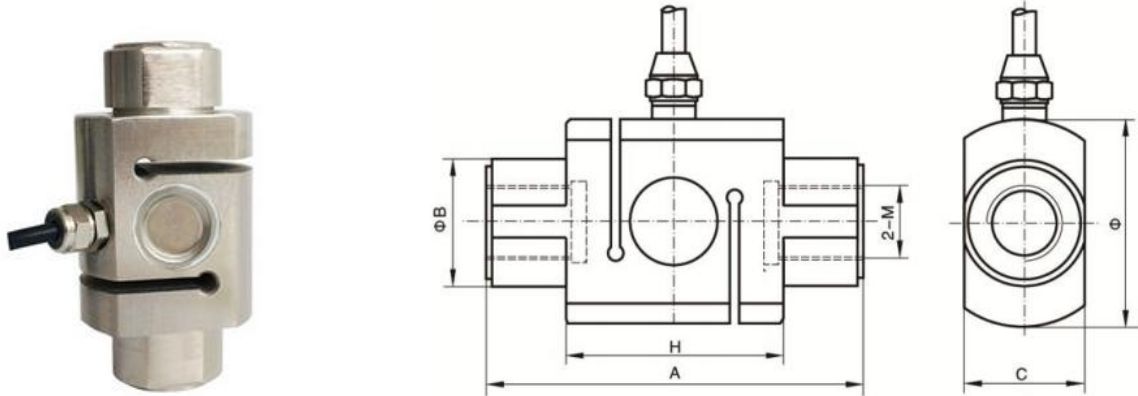
#### Specification:

Model	ATO-LCS-DYLY-106
Weight	0.06kg
Capacity range	0kg~50kg
Accuracy	0.03%F.S (linearity + hysteresis + repeatability)
Sensitivity	2.0±0.05mV/V
Creep	±0.03%F.S/30min
Zero output	±1%F.S
Temperature effect on zero	±0.03%F.S/10°C
Temperature effect on output	±0.03%F.S/10°C
Operating temperature	-20°C~+80°C
Input impedance	350±20Ω
Output impedance	350±5Ω
Insulation resistance	≥5000MΩ
Safety overload	150%F.S
Bridge voltage	DC 5-15V, suggest DC 10V
Material	Alloy steel
Protection class	IP67
Cable length	2m
Wiring	EXC+: Red, EXC-: Black, SIG+: Green, SIG-: White

### S Type Load Cell

#### ATO-LCS-TJL-4

Tension and compression load cell can bear both tension and pressure, with good output symmetry, high eccentric load resistant, compact structure and complete specifications. Strain gauge load cell can be applied for batching scale, crane scales and other special weighing instruments.



#### Dimension:

Capacity	Dimension (mm)					
	A	H	Φ B	Φ	M	C
100~500kg	88	58	28	44	M16*1.5	26
700kg	88	58	32	44	M16*1.5	30
1~5 ton	120	68	51	63	M22	48
7~15 ton	138	94	60	76	M30	56
20 ton	156	108	68.5	88	M36*3	76

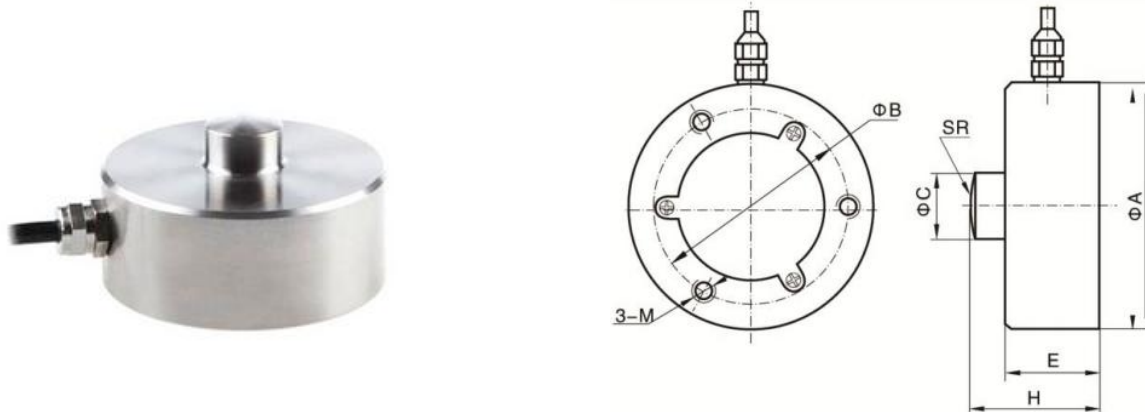
#### Specification:

Model	ATO-LCS-TJL-4
Shipping weight	1~4kg
Capacity range	100 kg~20 ton
Accuracy	0.05%F.S (linearity + hysteresis + repeatability)
Sensitivity	2.0±0.1mV/V
Creep	±0.05%F.S/30min
Zero output	±1%F.S
Temperature effect on zero	±0.05%F.S/10°C
Temperature effect on output	±0.05%F.S/10°C
Operating temperature	-20°C~+65°C
Input impedance	380±10Ω
Output impedance	350±3Ω
Insulation resistance	≥5000MΩ
Safety overload	150%F.S
Bridge voltage	DC 10V
Material	Alloy steel or stainless steel
Protection class	IP67
Cable length	2m (≤1ton), 5m (> 1ton)
Wiring	EXC+: Red, EXC-: Black, SIG+: Green, SIG-: White

### Tension and Compression Load Cell

#### ATO-LCC-TJH-14

Compression load cell is special designed for weight measurement, with compact structure, pouring sealant or welding seal, low height, all stainless steel, good anti-eccentric load performance and corrosion-resistant. Load cell can be applied for platform scale, truck scale, rail weighbridge and automated measurement and control areas.



#### Dimension:

Capacity	Dimension (mm)						
	Φ A	Φ B	Φ C	H	E	M	SR
300kg~1000kg	78	64	15	40	32	M6	40
2~10 ton	82	66	22	44	32	M8	50
15~30 ton	127	90	25	70	62	M10	60

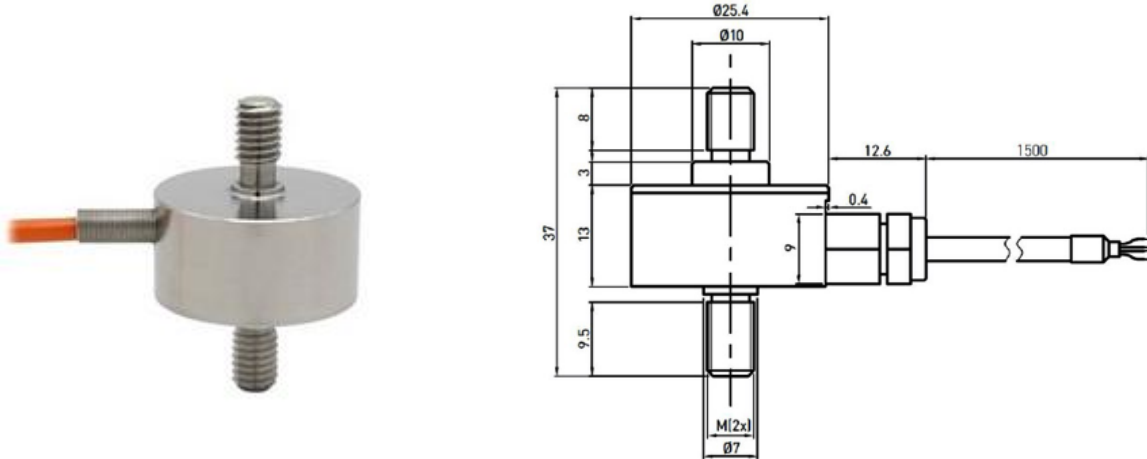
#### Specification:

Model	ATO-LCC-TJH-14
Shipping weight	1.3~6.3kg
Capacity range	300 kg~30 ton
Accuracy	0.03%F.S (linearity + hysteresis + repeatability)
Sensitivity	2.0±0.1mV/V
Creep	±0.03%F.S/30min
Zero output	±1%F.S
Temperature effect on zero	±0.03%F.S/10°C
Temperature effect on output	±0.03%F.S/10°C
Operating temperature	-20°C~+65°C
Input impedance	380±10Ω or 750±15Ω
Output impedance	350±3Ω or 700±5Ω
Insulation resistance	≥5000MΩ
Safety overload	150%F.S
Bridge voltage	DC 10V
Material	Stainless steel
Protection class	IP67
Cable length	2m (≤1ton), 5m (>1ton)
Wiring	EXC+: Red, EXC-: Black, SIG+: Green, SIG-: White

### Tension and Compression Load Cell

#### ATO-LCC-DYMH-103

Tension and compression load cell can bear both tension and pressure, with good anti-eccentric load performance, low height, all sealed structure and complete specifications. Miniature load cell is suited to use in restricted spaces, such as using in vehicle/test instrument/laminator measurement and control.



#### Dimension:

Capacity	M
5kg, 10kg, 15kg, 20kg, 30kg, 50kg	M5
60kg, 100kg	M6
200kg	M8

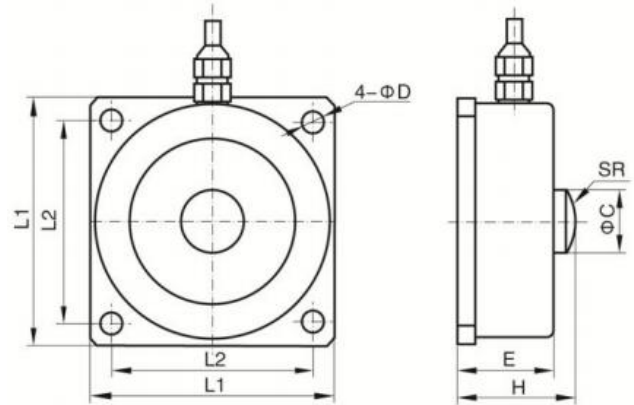
#### Specification:

Model	ATO-LCC-DYMH-103
Weight	0.1kg
Capacity range	0kg~200kg
Accuracy	0.03%F.S (linearity + hysteresis + repeatability)
Sensitivity	1.0~1.5mV/V
Creep	±0.05%F.S/30min
Zero output	±1%F.S
Temperature effect on zero	±0.05%F.S/10°C
Temperature effect on output	±0.05%F.S/10°C
Operating temperature	-30°C~+70°C
Input impedance	400±10Ω
Output impedance	350±10Ω
Insulation resistance	≥5000MΩ
Safety overload	150%F.S
Overload limit	200%F.S
Bridge voltage	DC 10-15V, suggest DC 10V
Material	Stainless steel
Protection class	IP67
Cable length	2-6m
Wiring	EXC+: Red, EXC-: Black, SIG+: Green, SIG-: White

### Tension and Compression Load Cell

#### ATO-LCST-TJH-4A

Compression load cell is special designed for weight measurement, with good anti-eccentric load performance, low height, all sealed, complete specifications, Load cell can be applied for platform scale, truck scale, rail weighbridge and material level measurement and control in warehouse.



#### Dimension:

Capacity	Dimension (mm)						
	L1	L2	Φ C	Φ D	H	E	SR
300~1000kg	74	62	16	6.5	41	33	52
2~7ton	90	73	20	8.5	53.5	44	70
10~25ton	116	96	30	11	82	70	91
30~50ton	132	108	38	13	97	85	120

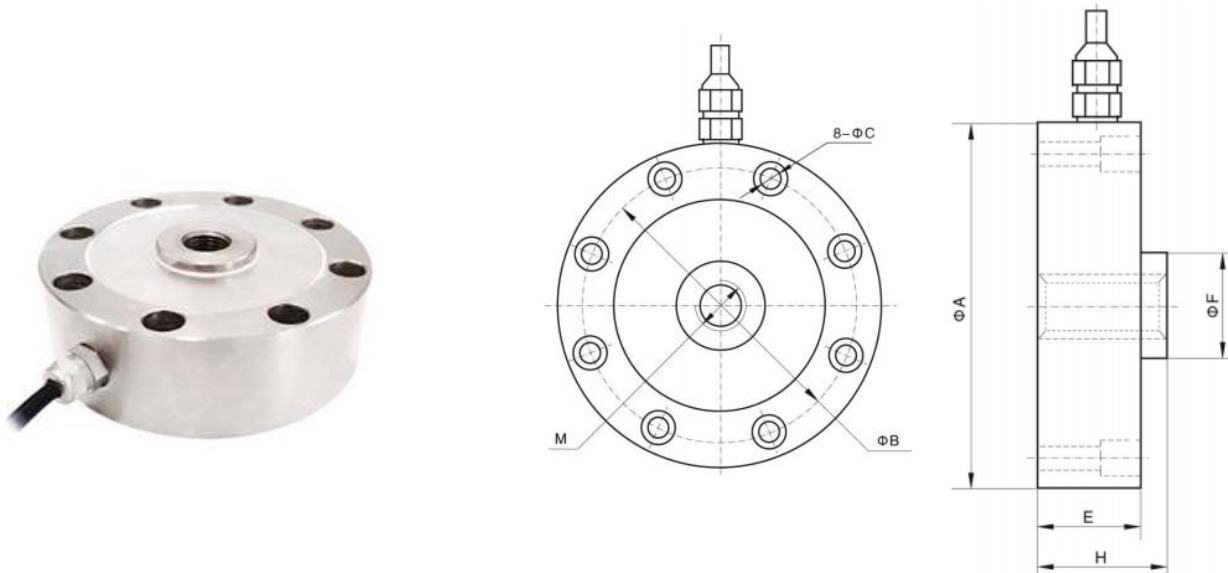
#### Specification:

Model	ATO-LCST-TJH-4A
Shipping weight	1.5~10.7kg
Capacity range	300 kg~50 ton
Accuracy	0.03%F.S (linearity + hysteresis + repeatability)
Sensitivity	2.0±0.1mV/V
Creep	±0.03%F.S/30min
Zero output	±1%F.S
Temperature effect on zero	±0.03%F.S/10°C
Temperature effect on output	±0.03%F.S/10°C
Operating temperature	-20°C ~+65°C
Input impedance	380±10Ω or 750±15Ω
Output impedance	350±3Ω or 700±5Ω
Insulation resistance	≥5000MΩ
Safety overload	150%F.S
Bridge voltage	DC 10V
Material	Alloy steel or stainless steel
Protection class	IP67
Cable length	2m (≤1ton), 5m (>1ton)
Wiring	EXC+: Red, EXC-: Black, SIG+: Green, SIG-: White

### Tension and Compression Load Cell

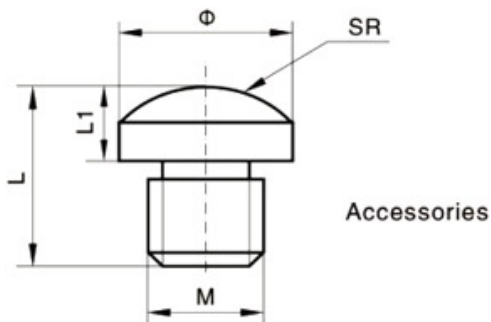
#### ATO-LCST-TJH-4B

Tension and compression load cell can be applied for platform scale, truck scale, rail weighbridge and material level measurement and control in warehouse, with good anti-eccentric load performance, low height, all sealed structure and complete specifications.



#### Dimension:

Capacity	Dimension (mm)						
	Φ A	Φ B	Φ C	Φ F	M	H	E
500kg~7 ton	105	88.9	6.5	32	M16*1.5	37	34
10~25 ton	125	101.6	8.5	39	M32*1.5	52	48
30~50 ton	145	116.8	10.5	50	M40*1.5	58	54
60~100 ton	205	162	12.5	80	M60*2	85	78



#### Accessories dimension:

Capacity	Dimension (mm)				
	Φ	L1	L	M	SR
500kg~7 ton	31	13	28	M16*1.5	80
10~25 ton	38	24	51	M32*1.5	120
30~50 ton	50	32	62	M40*1.5	200
60~100 ton	80	42	80	M60*2	280



### Tension and Compression Load Cell

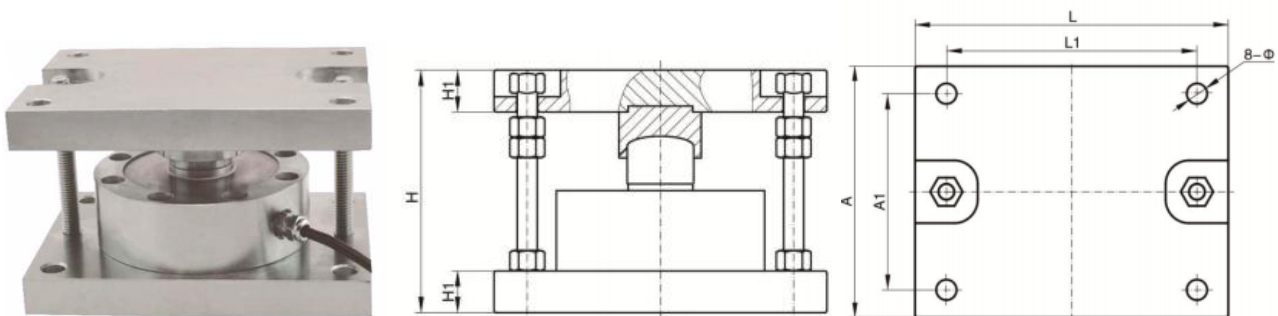
#### ATO-LCST-TJH-4B

##### Specification:

Model	ATO-LCST-TJH-4B
Shipping weight	1.5~20.8kg
Capacity range	500 kg~100 ton
Accuracy	0.05%F.S (linearity + hysteresis + repeatability)
Sensitivity	2.0±0.1mV/V
Creep	±0.05%F.S/30min
Zero output	±1%F.S
Temperature effect on zero	±0.05%F.S/10°C
Temperature effect on output	±0.05%F.S/10°C
Operating temperature	-20°C~+65°C
Input impedance	380±10Ω or 750±15Ω
Output impedance	350±3Ω or 700±5Ω
Insulation resistance	≥5000MΩ
Safety overload	150%F.S
Bridge voltage	DC 10V
Material	Alloy steel or stainless steel
Protection class	IP67
Cable length	2m (≤1ton), 5m (>1ton)
Wiring	EXC+: Red, EXC-: Black, SIG+: Green, SIG-: White

### Tension and Compression Load Cell Module

#### ATO-LCST-TJH-4M



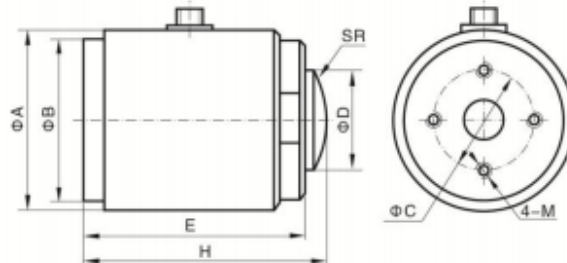
##### Dimension:

Capacity	Dimension (mm)						
	L	L1	A	A1	H	H1	Φ
500kg~7 ton	160	135	115	90	100	20	11
10~25 ton	200	160	160	125	145	25	13
30~50 ton	240	200	180	135	175	30	17
60~100 ton	300	260	240	200	240	35	17

### Compression Load Cell

#### ATO-LCCT-TJH-3

Column type load cell undertake special surface spraying and seal processing, can be used in harsh environment for a long time. Compression load cell can be applied for large platform scale, truck scale, rail weighbridge, and special for engineering force testing, overload safety testing and impact force measurement and control.



#### Dimension:

Capacity	Dimension (mm)							
	Φ A	Φ B	Φ C	Φ D	H	E	M	SR
200~700kg	59	52	30	20	88	79	5	35
1~5 ton	74	68	38	28	100	91	6	65
7~10 ton	86	78	56	32	130	120	8	85
15~30ton	86	78	56	40	140	129	10	200
40~60 ton	100	92	68	80	150	133	12	350
100 ton	107	98	68	80	170	156	16	500

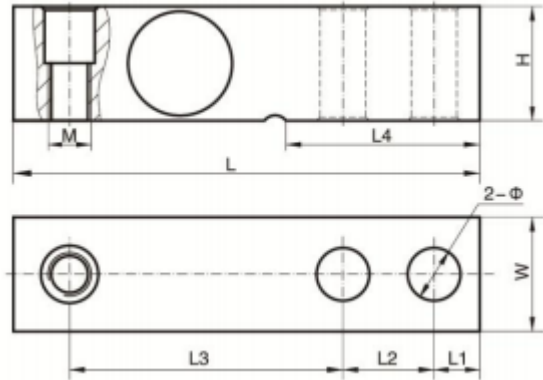
#### Specification:

Model	ATO-LCCT-TJH-3
Shipping weight	1.8~11.1kg
Capacity range	200kg~100 ton
Accuracy	0.05%F.S (linearity + hysteresis + repeatability)
Sensitivity	2.0±0.1mV/V
Creep	±0.05%F.S/30min
Zero output	±1%F.S
Temperature effect on zero	±0.05%F.S/10℃
Temperature effect on output	±0.05%F.S/10℃
Operating temperature	-20℃~+65℃
Input impedance	380±10Ω
Output impedance	350±3Ω
Insulation resistance	≥5000MΩ
Safety overload	150%F.S
Bridge voltage	DC 10V
Material	Alloy steel
Protection class	IP67
Cable length	2m (≤1ton), 5m (>1ton)
Wiring	EXC+: Red, EXC-: Black, SIG+: Green, SIG-: White

### Shear Beam Load Cell

#### ATO-LCSB-TJH-5B

Shear beam load cell has two ends, one end for fixing, one end for loading, with sealed well, high accuracy, easy to install, easy to use, good interchangeability. It can bear both tension and pressure, and has good automatic self-aligning performance after force. Load cell can be applied for ultrathin electronic truck scale, crane scales, hopper weigher and other weighing instruments.



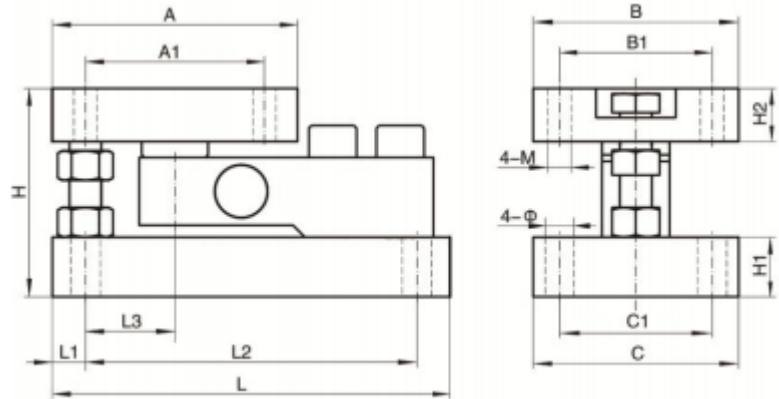
#### Dimension:

Capacity	Dimension (mm)								
	L	L1	L2	L3	L4	H	Φ	M	W
200kg~2.5 ton	130	15.8	25.4	76.2	54	31.8	12.7	M12/M16	31.8
3~5 ton	171	19.1	38.1	95.3	80	38.1	20	M18*1.5	38.1
10ton	222.5	25.4	50.8	123.8	110	50.8	26	M24*2	50.8

#### Specification:

Model	ATO-LCSB-TJH-5B
Shipping weight	1.1~5kg
Capacity range	200 kg~10 ton
Accuracy	0.02%F.S (linearity + hysteresis + repeatability)
Sensitivity	2.0±0.1mV/V
Creep	±0.02%F.S/30min
Zero output	±1%F.S
Temperature effect on zero	±0.02%F.S/10°C
Temperature effect on output	±0.02%F.S/10°C
Operating temperature	-20°C~+65°C
Input impedance	380±10Ω
Output impedance	350±3Ω
Insulation resistance	≥5000MΩ
Safety overload	150%F.S
Bridge voltage	DC 10V
Material	Alloy steel or stainless steel
Protection class	IP67
Cable length	2m (≤1ton), 5m (>1ton)
Wiring	EXC+: Red, EXC-: Black, SIG+: Green, SIG-: White

**Shear Beam Load Cell Module**  
**ATO-LCSB-TJH-5M**



**Dimension:**

Capacity	Dimension (mm)														
	A	A1	B	B1	C	C1	L	L1	L2	L3	H	H1	H2	M	Φ
50~100kg	110	95	100	80	100	80	180	15	160	45	85	20	20	8	10
150kg~ 1 ton	150	125	125	100	125	100	210	20	180	70	110	25	25	10	12
1.5~5 ton	175	135	150	115	150	115	260	25	220	72.5	145	35	30	16	18
7~10 ton	185	135	155	115	155	115	300	25	250	67.5	157	40	45	20	22
15~20 ton	220	180	210	170	210	170	400	30	350	90	220	55	55	24	26