



2012

# Load Cell Product Manual



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# Load Cell Product Contents

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## S type Load Cell

ULS-a.....	1
ULS-b.....	2
ULS-c.....	3
ULS-d.....	4
ULS-e.....	5

## Shear Beam Load Cell

ULX-a.....	6
ULX-b.....	7
ULX-c.....	8
ULX-d.....	9
ULX-d2.....	10
ULX-e.....	11

## Double Ended Shear Beam Load cell

ULQ-a.....	12
ULQ-b.....	13
ULQ-c.....	14
ULQ-d.....	15

## Shear Web Compression Load Cell

ULL-a.....	16
ULL-b.....	17
ULL-c.....	18

## Compression Load Cell

ULL-d.....	19
ULZ-a.....	20
ULL-e.....	21
ULM-f.....	22

# Load Cell Product Contents

---

## Single Point Load Cell

ULD-a.....	23
ULD-b.....	24
ULD-c.....	25
ULD-d.....	26
ULD-e.....	27
ULD-a1.....	28
ULD-g.....	29

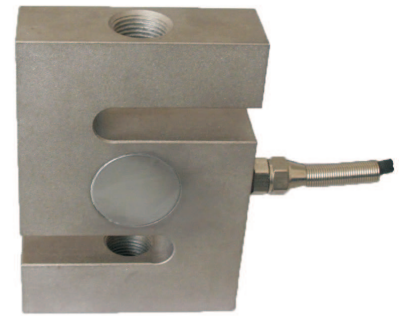
## Junction Box and Indicator

ULJ Series.....	30
UID-6A.....	31

# ULS-a S Type Load Cell

## Features

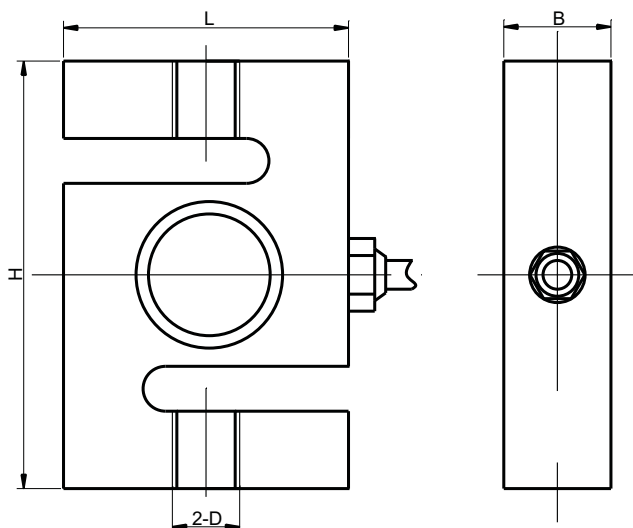
- Capacity: 20kg...30t
- Alloy steel or stainless steel material, welded sealing, oil-proof, water-proof, anti-corrosion.
- S type, compression & tension measurement, easy installation.



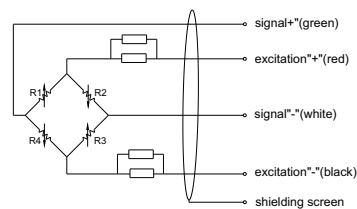
## Specifications

capacity	20kg/30kg/50kg/100kg/200kg/300kg/0.5t/0.75t/1t/2t/3t/5t/10t/20t/30t
output	2±0.004mV/V;3.0±0.004mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.02%FS/30min
zero unbalance	1%FS
excitation voltage	5VDC~15VDC
operating temperature range	-35~+80°C
compensated temperature range	-10~+55°C
temperature coefficient of zero	0.02%FS/10°C
temperature coefficient of span	0.03%FS/10°C
input resistance	360±10Ω
output resistance	350±10Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	150%FS
ultimate overload	200%FS
protection	IP67
electrical interface	4-core shielded cable, diameter:5.7mm, length:3.5m(0.75~2t);6m(3~10t)

## Dimensions



## Electrical connection



Capacity	L	H	B	D
20~30kg	51	64	12.7	M8x1.25
50~750kg	50.8	76.2	19.1	M12x1.75
1t	50.8	76.2	25.4	M12x1.75
1.5t	50.8	76.2	25.4	M16x1.5
2~3t	76.2	108	31.8	M20x1.5
5t	76.2	108	37	M24x2
7.5t	100	139.7	37	M24x2
10t	125.5	177.8	50.8	M30x2
20t	140	170	81	M42x3
30t	190	230	80	M42x3

# ULS-b S Type Load Cell

## Features

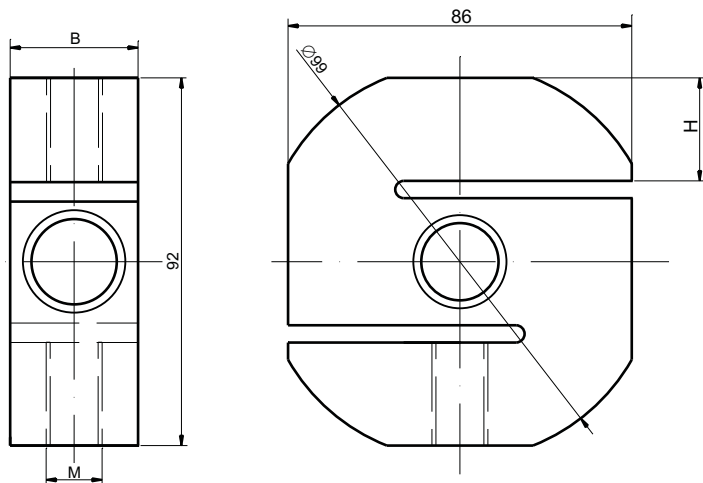
- Capacity: 0.5t~7.5t
- Stainless steel material, welded sealing, oil-proof, water-proof, anti-corrosion
- S type, compression & tension measurement, easy installation
- Explosive-proof, suitable for bad conditions & dangerous work sites



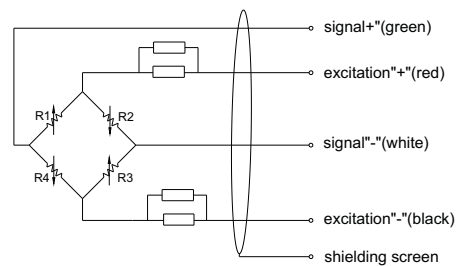
## Specifications

capacity	0.5t/1t/2t/3t/4t/5t/6t/7.5t
output	2±0.004mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.012%FS/30min
zero unbalance	1.5%FS
excitation voltage	5VDC~12VDC
operating temperature range	-35~+65°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.010%FS/10°C
temperature coefficient of span	0.009%FS/10°C
input resistance	360±10Ω
output resistance	350±10Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	120%FS
ultimate overload	150%FS
protection	IP68
electrical interface	4-core shielded cable, diameter:5mm, length:3m(0.5t);6m(1t~7.5t)

## Dimensions



## Electrical connection



Capacity(t)	B	H	M
0.5,1	32	25	M12x1.75
2,3	32	25	M20x1.5
4	36	25	M20x1.5
5~7.5	50	24	M24x2

# ULS-c S Type Load Cell

## Features

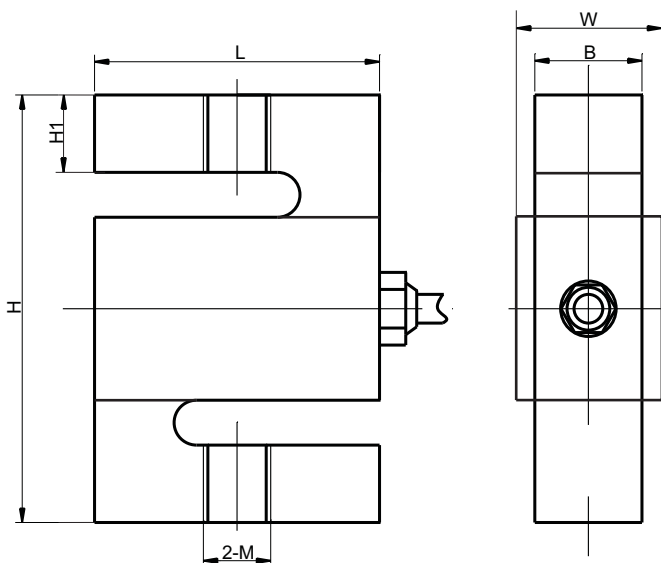
- Capacity: 0.025t~30t.100lb~20klb
- Alloy steel material, rubber sealing, oil-proof, water-proof, anti-corrosion.
- S type, compression & tension measurement, easy installation.
- Explosive-proof, suitable for bad conditions & dangerous



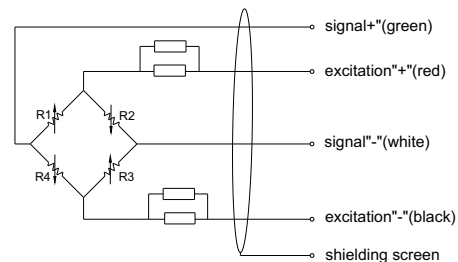
## Specifications

capacity	0.025/0.05/0.1/0.2/0.25/0.3/0.5/0.6/0.75/1/1.5/2/2.5/3/5/7.5/10/15/20/30t
output	2.0±0.004mV/V
combined error	0.02%FS, 0.03%FS(option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.016%FS/30min
zero unbalance	1%FS
excitation voltage	5VDC~12VDC
operating temperature range	-35~+65°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.015%FS/10°C
temperature coefficient of span	0.011%FS/10°C
input resistance	430±60Ω
output resistance	351±2Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	120%FS
ultimate overload	150%FS
protection	IP67
electrical interface	4-core shielded cable, diameter:5mm, length:3m(0.025~0.75t),6m(1~30t)

## Dimensions



## Electrical connection

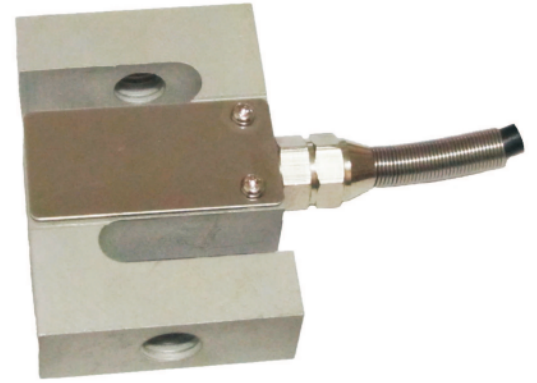


Capacity(t)	L	H	B	W	H1	D
25~50kg	50.8	76.2	12.7	14.5	15.7	M8
0.1~0.15t	50.8	76.2	19.0	20.8	15.3	M10x1.5
0.2~0.75	50.8	76.2	19.0	20.8	13.6	M12x1.75
1~1.5t	50.8	76.2	25.4	27.2	12.1	M12x1.75
2~5t	76.2	101.6	25.4	27.2	20	M20x1.5
7.5~10t	125	175	50	/	40.2	M33x3
15~20t	160	200	60	/	51	M42x3
30	190	230	80	/	57.5	M42x3

# ULS-d S Type Load Cell

## Features

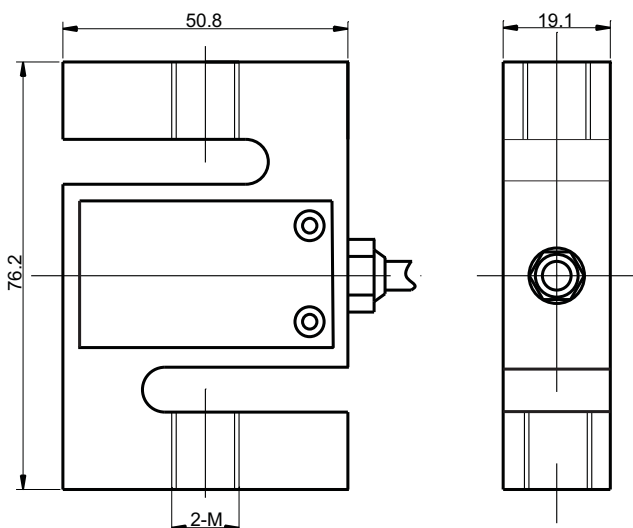
- Capacity: 20kg~500kg
- Aluminum alloy material, anodized treatment
- S type, compression & tension measurement, easy installation
- Application for hanging- and hopper-scales



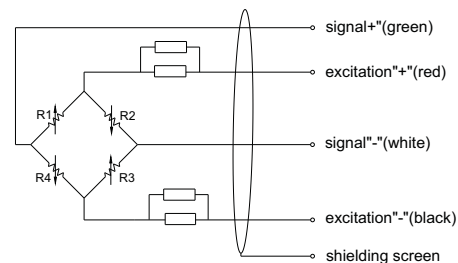
## Specifications

capacity	20kg/30kg/50kg/100kg/200kg/300kg/500kg
output	2±0.008mV/V
combined error	0.03%FS (option: OIML C3)
non-linearity	±0.03%FS
hysteresis	±0.03%FS
repeatability	±0.02%FS
creep	±0.02%FS/30min
zero unbalance	1%FS
excitation voltage	5VDC~12VDC
operating temperature range	-35~+80°C
compensated temperature range	-10~+55°C
temperature coefficient of zero	0.03%FS/10°C
temperature coefficient of span	0.02%FS/10°C
input resistance	400±10Ω
output resistance	350±10Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	120%FS
ultimate overload	150%FS
protection	IP66
electrical interface	4-core shielded cable, diameter:5.7mm, length:3.5m

## Dimensions



## Electrical connection

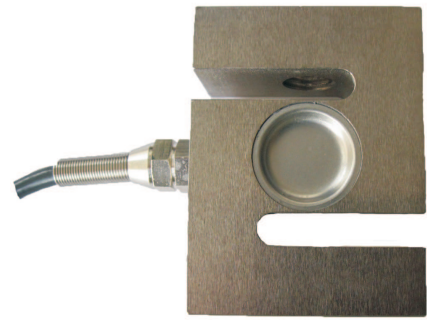


Capacity(kg)	M
20,30	M10x1.5
50~500	M12x1.75

# ULS-e S Type Load Cell

## Features

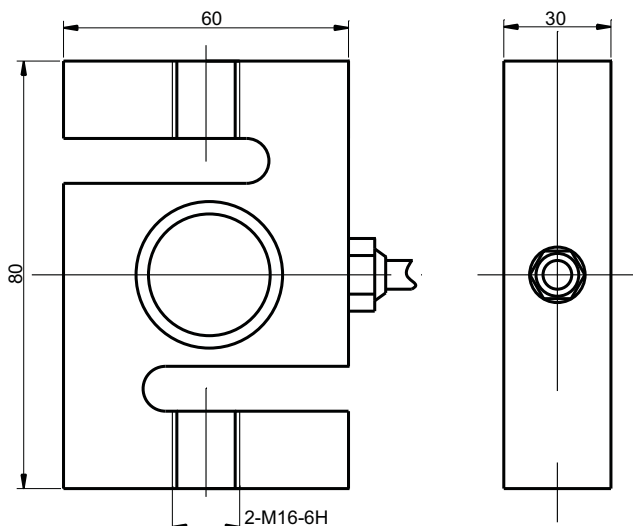
- Capacity: 1...3t
- Alloy steel material, welded sealing, oil-proof, water-proof, anti-corrosion.
- S type, compression & tension measurement, easy installation.



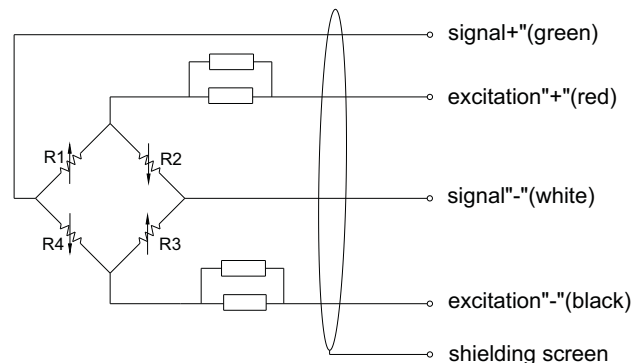
## Specifications

capacity	1t/2t/3t
output	2.0±0.01mV/V
combined error	0.03%FS
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.02%FS
creep	±0.02%FS/30min
zero unbalance	±1%FS
excitation voltage	5VDC~15VDC
operating temperature range	-35~+80°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.05%FS/10°C
temperature coefficient of span	0.02%FS/10°C
input resistance	365±10Ω
output resistance	350±3Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	150%FS
ultimate overload	200%FS
protection	IP67
electrical interface	4-core shielded cable, diameter:5.7mm, length:3.5m

## Dimensions



## Electrical connection





# ULX-a Shear-beam Load Cell

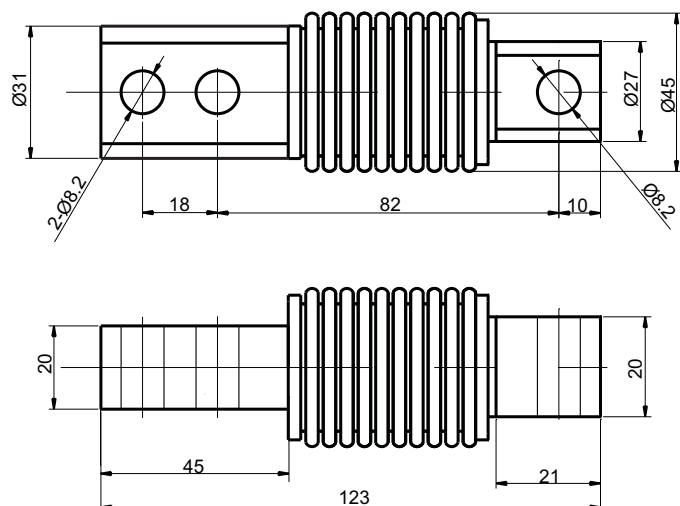
## Features

- Capacity: 5kg~500kg
- Alloy steel or stainless steel material
- Laser welded sealing, protection reaches IP68
- Explosive-proof, can be used in bad conditions.
- Application for belt scales, hopper scales or some areas need to measure beam ending loads.

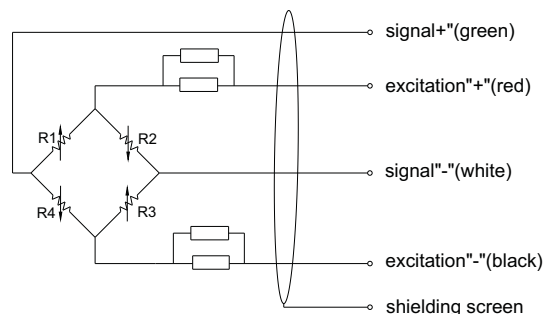
## Specifications

capacity	5kg/10kg/20kg/30kg/50kg/100kg/200kg/300kg/350kg/500kg
output	2±0.002mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.017%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.02%FS/30min
zero unbalance	±1%FS
excitation voltage	9VDC~12VDC
operating temperature range	-20~+55°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.02%FS/10°C
temperature coefficient of span	0.014%FS/10°C
input resistance	350±5Ω
output resistance	350±3Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	150%FS
ultimate overload	200%FS
protection	IP66 or IP67
electrical interface	4-core shielded cable, diameter:5mm, length:3m

## Dimensions



## Electrical connection



# ULX-b Shear-beam Load Cell

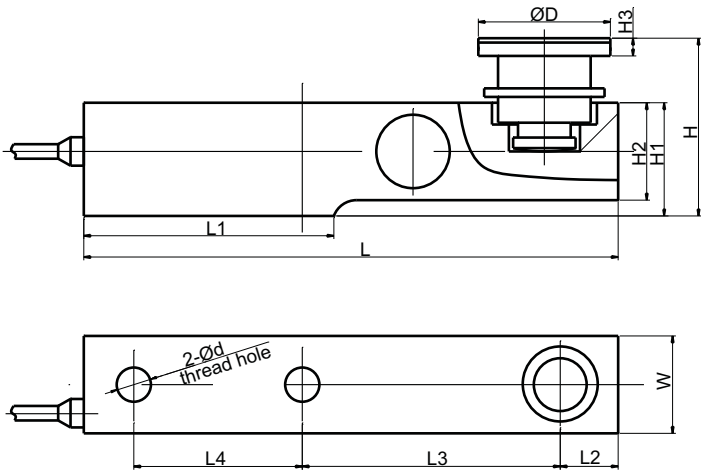
## Features

- Capacity: 0.5t~25t
- Alloy steel material, surface nickle plated treatment.
- Single ended shear-beam type, easy installation
- Anti-corrosive, suitable for all working conditions
- Application for hanging scales and hopper scales

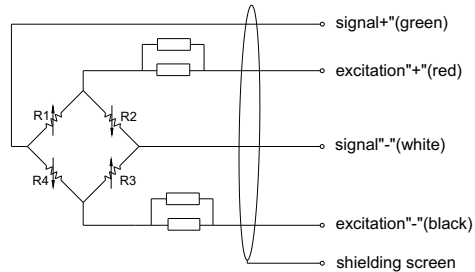
## Specifications

capacity	0.5t/1t/2t/2.5t/3t/5t/10t/15t/20t/25t
output	2.0±0.002mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.016%FS/30min
zero unbalance	±1.5%FS
excitation voltage	5VDC~12VDC
operating temperature range	-30~+65°C
compensated temperature range	-10~+45°C
temperature coefficient of zero	0.011%FS/10°C
temperature coefficient of span	0.019%FS/10°C
input resistance	350±3.5Ω
output resistance	351±2Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	120%FS
ultimate overload	150%FS
protection	IP67
electrical interface	4-core shielded cable, diameter:6.2mm,length:4m(0.5~3t);7m(5t),12m(10~25t)

## Dimensions



## Electrical connection



Capacity(t)	H	H1	H2	H3	D	d	W	L	L1	L2	L3	L4
0.5~2	57.9	43	37	5	35	13	37	203	95	22	98	64
2.5	57.9	43	37	5	35	15	37	203	95	22	98	64
3	62.9	43	37	5	35	15	37	203	95	22	98	64
5	78.7	52	48	8	42	21	48	235	110	22	124	66
10,15	127.7	67	60	12	57	28	60	279	133	32	140	82
20,25	143.5	82.5	70	12	70	34	70	318	153	38	159	89

# ULX-c Shear-beam Load Cell

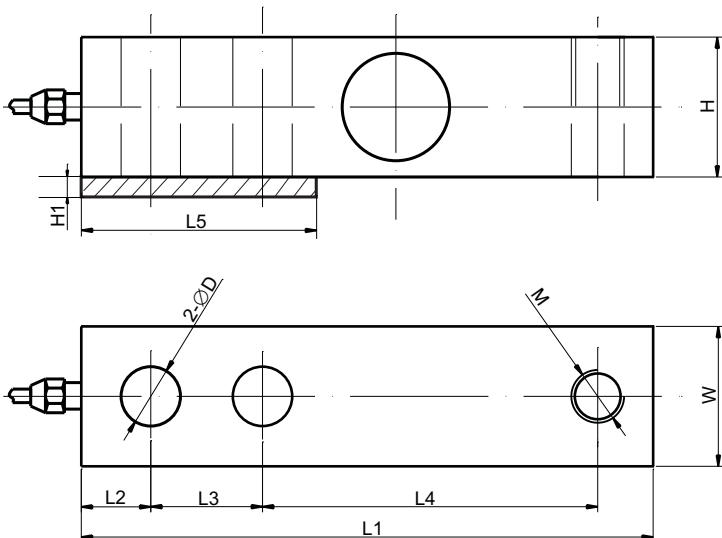
## Features

- Capacity: 0.25t~10t
- Alloy steel material, surface nickle plated treatment.
- Single ended shear-beam type, easy installation
- Application for hanging scales and hopper scales

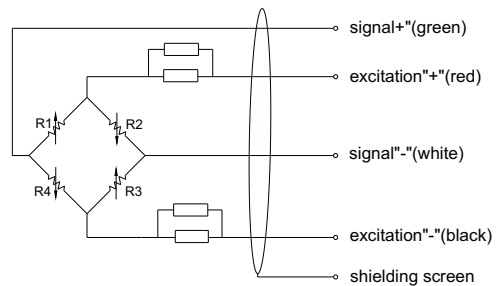
## Specifications

capacity	0.25t/0.5t/1.5t/2t/2.5t/3t/5t/10t
output	3.0±0.02mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.02%FS/30min
zero unbalance	±1%FS
excitation voltage	5VDC~15VDC
operating temperature range	-30~+80°C
compensated temperature range	-10~+55°C
temperature coefficient of zero	0.03%FS/10°C
temperature coefficient of span	0.016%FS/10°C
input resistance	365±5Ω
output resistance	350±3Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	150%FS
ultimate overload	300%FS
protection	IP66 or IP67
electrical interface	4-core shielded cable, diameter:5.7mm, length:3.5m(0.25~3t);6m(5~10t)

## Dimensions



## Electrical connection



Capacity(t)	L1	L2	L3	L4	H	W	D	M	L5	H1	
0.25~0.2	130.0	15.8	25.4	76.2	31.8	31.8	13.5	M12	1.75	57	4
2.5~3	171.5	19.1	38.1	95.3	38.1	38.1	19.8	M12	1.75	76	6
10	222.2	25.4	50.8	120.6	50.8	50.8	26.2	M16	1.5	108	6

# ULX-d Shear-beam Load Cell

## Features

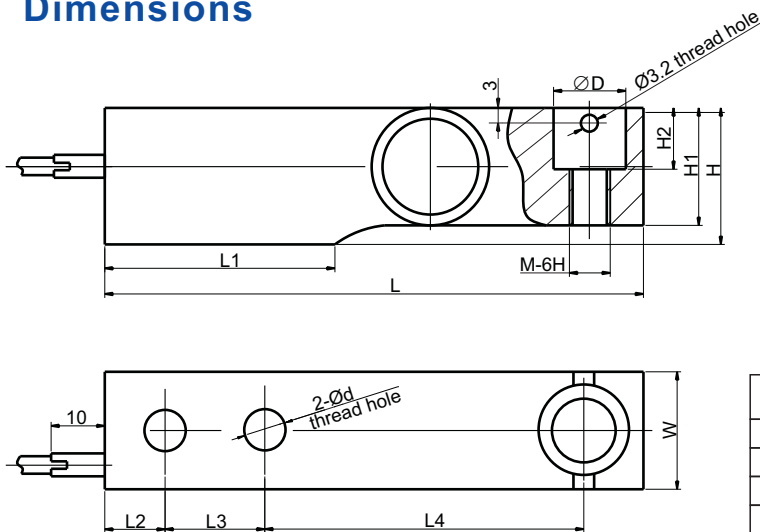
- Capacity: 0.25t~5t
- Alloy steel material, surface nickle plated treatment.
- Silicon rubber filled, oil-proof, water-proof, anti-corrosive, suitable for different working conditions
- Single ended shear-beam type, easy installation
- Application for hanging scales and hopper scales



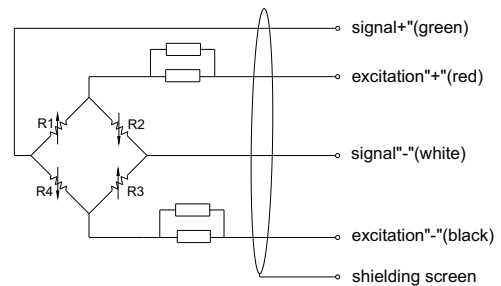
## Specifications

capacity	0.25t/0.5t/1t/2t/5t
output	2.0±0.002mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.016%FS/30min
zero unbalance	±1.5%FS
excitation voltage	5VDC~12VDC
operating temperature range	-35~+65°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.011%FS/10°C
temperature coefficient of span	0.019%FS/10°C
input resistance	350±3.5Ω
output resistance	351±2Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	120%FS
ultimate overload	150%FS
protection	IP67
electrical interface	4-core shielded cable, diameter: 5mm, length: 4m

## Dimensions



## Electrical connection



Capacity(t)	L	L1	L2	L3	L4	H	H1	H2	W	D	d	M
5	172	76.2	19.1	38.1	95.3	44	40	20	38	30.2	20.5	M20
2	130	57.1	15.5	25.4	76.2	35.9	31.95	14.2	31.8	20.5	13	M12
1	130	57.1	15.5	25.4	76.2	31.8	27.95	14.2	31.8	20.5	13	M12
0.5	130	57.1	15.5	25.4	76.2	31.8	26	14.2	31.8	20.5	13	M12
0.25	130	57.1	15.5	25.4	76.2	31.8	25.5	14.2	31.8	20.5	13	M12

# ULX-d2 Shear-beam Load Cell

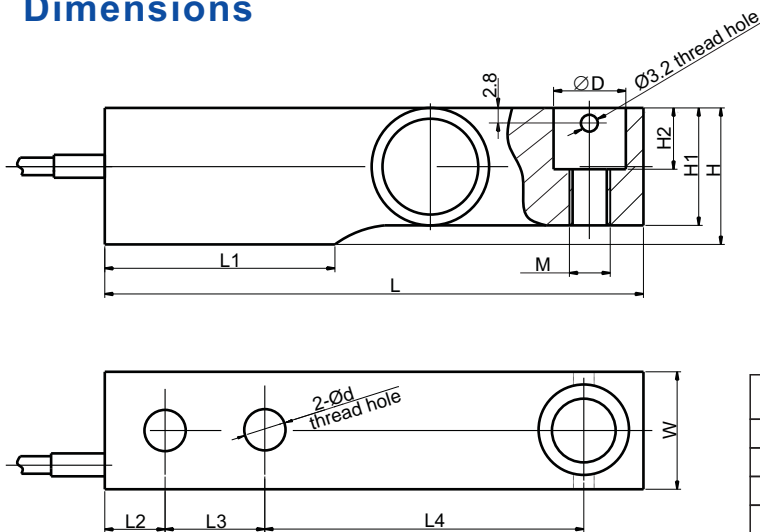
## Features

- Capacity: 0.25t~5t
- Stainless steel material
- Cap welded sealing, filled gel inside
- Single ended shear-beam type, easy installation
- Application for hanging scales and hopper scales
- Protection:IP68

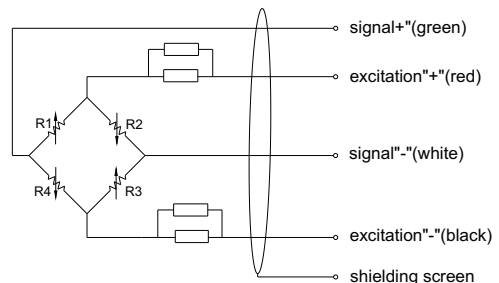
## Specifications

capacity	0.25t/0.5t/1t/2t/5t 500lb/1klb/2.5klb/4klb/5klb/10klb
output	2.0±0.02mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.016%FS/30min
zero unbalance	±1.5%FS
excitation voltage	5VDC~12VDC
operating temperature range	-35~+65°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.011%FS/10°C
temperature coefficient of span	0.019%FS/10°C
input resistance	1000±10Ω; 350±3.5Ω
output resistance	1004±5Ω; 351±2Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	120%FS
ultimate overload	150%FS
protection	IP68
electrical interface	4-core shielded cable, length: 3m(500kg~1t;1klb~2.5klb),6m(2t~5t;4klb~10klb)

## Dimensions



## Electrical connection



Capacity(t)	L	L1	L2	L3	L4	H	H1	H2	W	D	d	M
5	172	76.2	19.1	38.1	95.3	44	40	20	37.5	30.2	20.5	M20
2	130	57.1	15.7	25.4	76.2	35.7	31.95	14	31.3	20.5	13	M12
1	130	57.1	15.7	25.4	76.2	31.8	27.95	14	31.3	20.5	13	M12
0.5	130	57.1	15.7	25.4	76.2	31.8	26	14	31.3	20.5	13	M12
0.25	130	57.1	15.7	25.4	76.2	31.8	25.5	14	31.3	20.5	13	M12

# ULX-e Shear-beam Load Cell

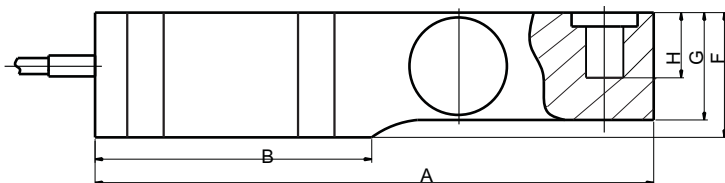
## Features

- Capacity: 0.5t~50t
- Stainless steel material or Alloy steel material
- Cap welded sealing, filled gel inside
- Single ended shear-beam type, easy installation
- Application for hanging scales and hopper scales
- Protection: IP67

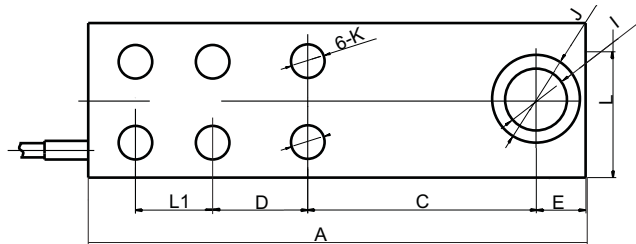
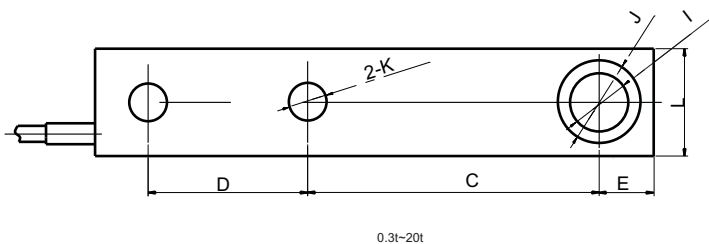
## Specifications

capacity	0.5t/1t/2t/3t/5t/10t/20t/30t/50t
output	2.0±0.04mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.02%FS/30min
zero unbalance	±1%FS
excitation voltage	5VDC~15VDC
operating temperature range	-35~+80°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.02%FS/10°C
temperature coefficient of span	0.014%FS/10°C
input resistance	1050±10Ω; 365±10Ω(optional)
output resistance	1000±5Ω; 350±3Ω(optional)
insulation resistance	≥5000MΩ@50VDC
safe overload	150%FS
ultimate overload	200%FS
protection	IP67
electrical interface	4-core shielded cable, length: Ø5.7x3.5m(0.5~3t);8m(5~8t);Ø6.3x13m(10~50t)

## Dimensions



Capacity(t)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	L1
0.5~3	203	95	98	64	22	43	37	30	∅16	∅32	∅13	37	∅35	10.4	44.9	
5,8	235	110	124	66	22	52	48	30	∅22	∅38	∅21	48	∅42	19.7	56.7	
10	279	133	140	82	32	67	60	20	∅32	∅48	∅28	60	∅57	55.7	80.7	
20	318	153	158	89	38	82.5	70	24	∅38	∅54	∅34	70	∅70	54.5	85	
30	374	189	181	76	44.5	115	90	32	∅54	∅38	∅26	96	∅70	53	91	51
50	416	210	196	92	48	143	100	32	∅60	∅44	∅29	105	∅85	65	102	56



# ULQ-a Double-ended Shear beam Load Pin

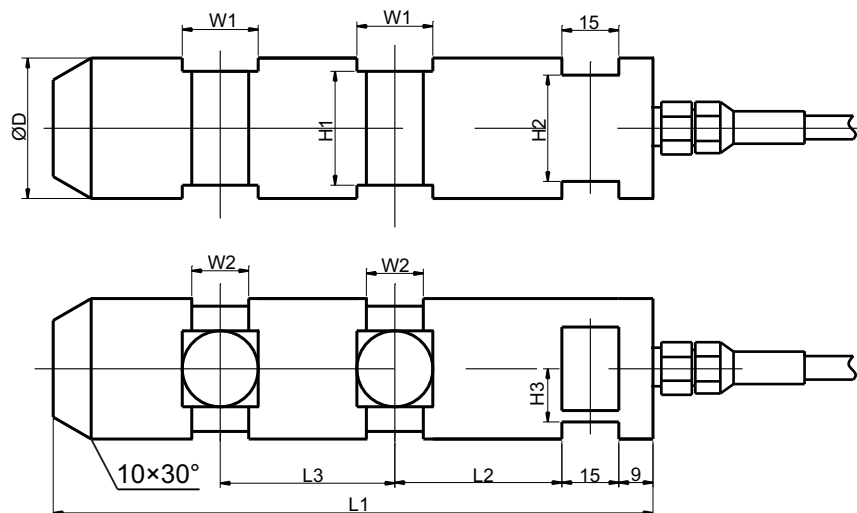
## Features

- Capacity: 20kN~800kN
- Alloy steel material, welded sealing, oil-proof, water-proof, anti-corrosion.
- Double ended shear beam, pin type, easy installation
- Application for draft sensors, cranes, hopper weighing process weighing and onboard vehicle weighing

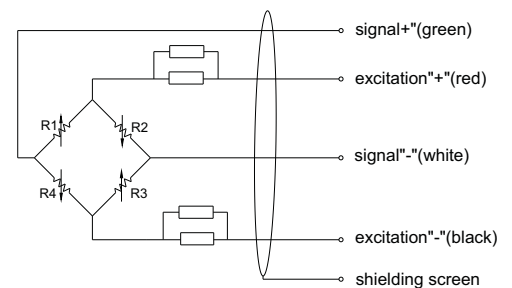
## Specifications

capacity	20kN/30kN/50kN/100kN/200kN/300kN/500kN/800kN	
output	2±0.01mV/V	
combined error	0.2%FS	0.5%FS
non-linearity	±0.2%FS	±0.5%FS
hysteresis	±0.2%FS	±0.5%FS
repeatability	±0.1%FS	±0.2%FS
creep	±0.2%FS/30min	±0.3%FS/30min
zero unbalance	1.5%FS	
excitation voltage	5VDC~15VDC	
operating temperature range	-35~+70°C	
comperature temperature range	-10~+55°C	
temperature coefficient of zero	0.1%FS/10°C	
temperature coefficient of span	0.1%FS/10°C	
input resistance	410±30Ω	
output resistance	350±10Ω	
insulation resistance	≥5000MΩ@50VDC	
safe overload	150%FS	
ultimate overload	200%FS	
protection	IP66 or IP67	
electrical interface	4-core shielded cable, diameter:5.7mm, length:5m	

## Dimensions



## Electrical connection



Capacity(kN)	D	H1	H2	H3	L1	L2	L3	W1	W2
20,30,50	37	30	28	14	158	44	46	20	15
100	50	41	38	12.5	158	44	46	20	15
200	70	57	54	25	245	44	121	32	27
300,500	95	80	76	37	285	52	145	32	27
800	108	92	88	44	285	52	145	32	27

# ULQ-b Double-ended Shear Beam Load Cell

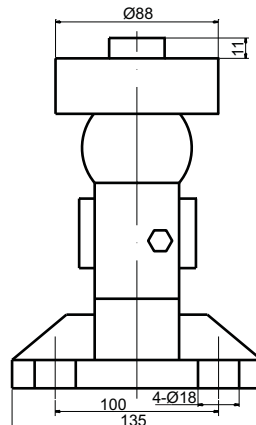
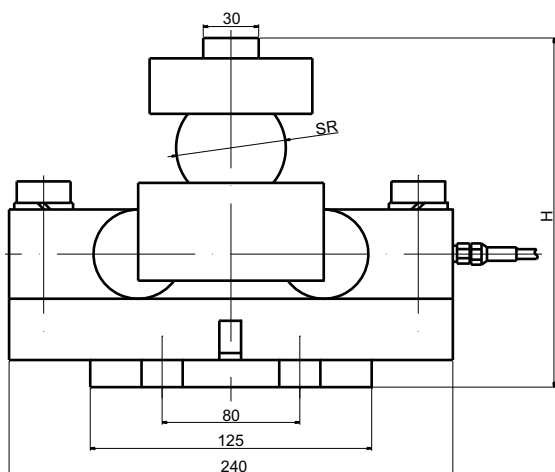
## Features

- Capacity: 10t~50t
- Alloy steel material, surface nickle treatment, welded sealing, oil-proof, water-proof, anti-corrosion
- Double ended shear beam type, easy installation
- Application for crane scales, vehicle scales

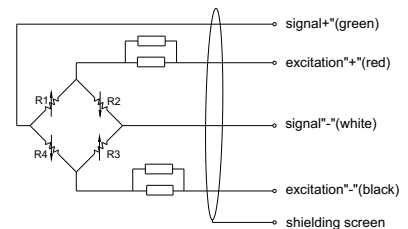
## Specifications

capacity	10t/20t/25t/30t/40t/50t
output	2±0.002mV/V
combined error	0.02%FS(OIML R60 C 3 option)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.016%FS/30min
zero unbalance	1.5%FS
excitation voltage	5VDC~15VDC
operating temperature range	-35~+65°C
comperature temperature range	-10~+40°C
temperature coefficient of zero	0019%FS/10°C
temperature coefficient of span	0.011%FS/10°C
input resistance	700±7Ω
output resistance	703±4Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	150%FS
ultimate overload	200%FS
protection	IP67
electrical interface	4-core shielded cable, diameter:5.5mm, length:12m

## Dimensions



## Electrical connection



Capacity(t)	H	SR
10	195	50
20~30	225	76
40,50	267	82



# ULQ-c Double-ended Shear Beam Load Cell

## Features

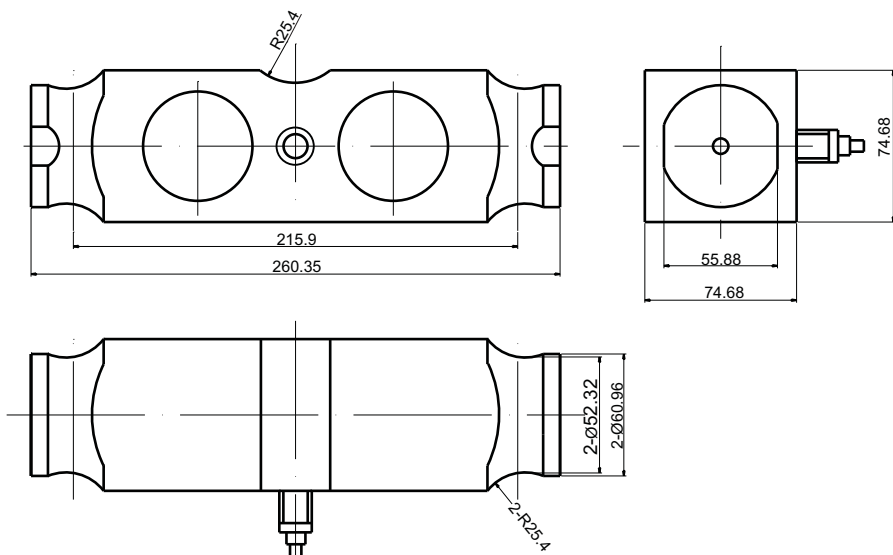
- Capacity: 50klb~150klb
- 17-4PH stainless steel, oil-proof, water-proof, and anti-corrosive gas, suitable for different working conditions.
- Double ended shear beam, easy installation.
- Application for crane scales, vehicle scales



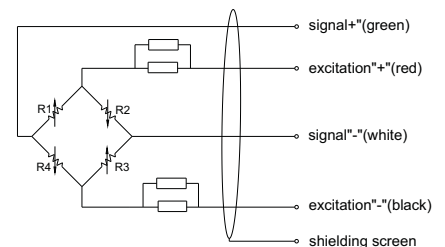
## Specifications

capacity	50klb/60klb/65klb/70klb/100klb/125klb/150klb
output	2.0±0.003mV/V
combined error	0.02%FS
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.016%FS/30min
zero unbalance	1%FS
excitation voltage	5VDC~12VDC
operating temperature range	-35~+65°C
comperature temperature range	-10~+40°C
temperature coefficient of zero	0.019%FS/10°C
temperature coefficient of span	0.011%FS/10°C
input resistance	700±7Ω
output resistance	703±4Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	120%FS
ultimate overload	150%FS
protection	IP67
electrical interface	4-core shielded cable, diameter:5mm, length:9m

## Dimensions



## Electrical connection



# ULQ-d Double-ended Shear Beam Load Cell

## Features

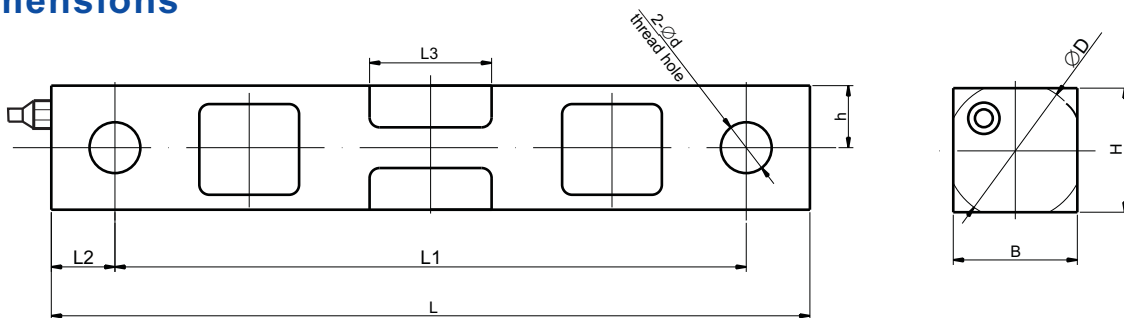
- Capacity: 1klb~75klb
- Stainless steel or alloy steel, oil-proof, water-proof, and anti-corrosive gas, suitable for different working conditions.
- Double ended shear beam, easy installation, performance stable
- Application for crane scales, vehicle scales and other weighing systems



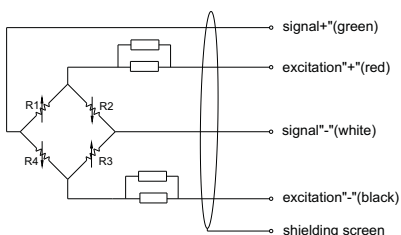
## Specifications

capacity	1klb/1.5klb/2klb/2.5klb/4klb/5klb/10klb/15klb/20klb/25klb/35klb/50klb/75klb
output	3.0±0.008mV/V
combined error	0.02%FS (C3 option)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.016%FS/30min
zero unbalance	1%FS
excitation voltage	5VDC~12VDC
operating temperature range	-35~+650°C
comperature temperature range	-10~+40°C
temperature coefficient of zero	0.011%FS/10°C
temperature coefficient of span	0.019%FS/10°C
input resistance	700±7Ω
output resistance	703±4Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	120%FS
ultimate overload	150%FS
protection	IP67
electrical interface	4-core shielded cable, diameter:5mm, length:6m

## Dimensions



## Electrical connection



Capacity(klb)	L	L1	L2	L3	H	h	B	D	d
1~5	190.5	158.8	15.9	30.48	30.99	16.76	30.99	31.5	12.7
10~35	222.3	190.5	15.9	41.15	49.15	24.58	36.45	50.8	20.57
50~75	342.9	292.1	25.4	82.55	74.68	37.34	61.98	75.95	33.32

# ULL-a Shear-web Compression Load Cell

## Features

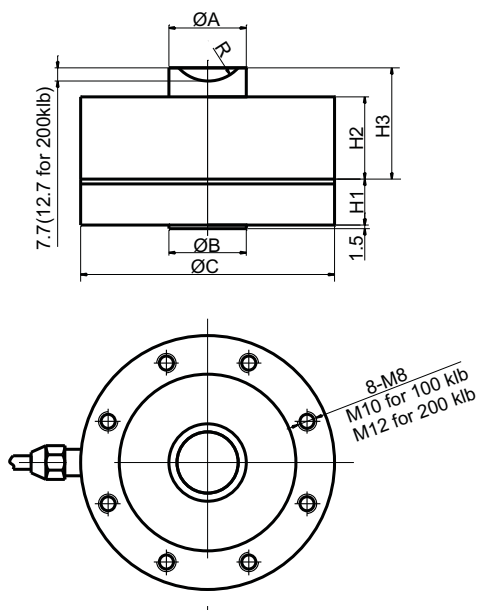
- Capacity: 5klb~200klb
- Alloy steel material, silicon rubber sealed, oil-proof, water-proof, anti-corrosion, suitable for different bad & dangerous conditions
- Shear-web compression type, easy installation
- Application for hopper scales and vehicle scales



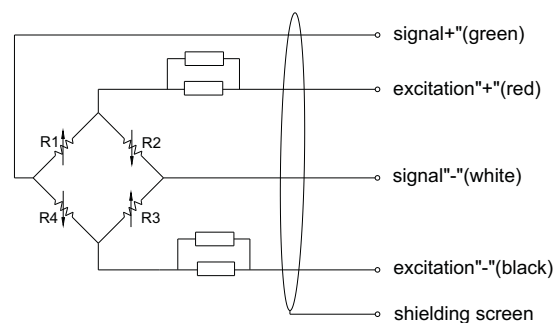
## Specifications

capacity	5klb/10klb/25klb/50klb/100klb/200klb	
output	2±0.04mV/V	4.0±0.04mV/V
combined error	0.02%FS	0.03%FS
non-linearity	±0.02%FS	±0.03%FS
hysteresis	±0.02%FS	±0.03%FS
repeatability	±0.015%FS	±0.02%FS
creep	±0.02%FS/30min	±0.03%FS/30min
zero unbalance	±1%FS	
excitation voltage	5VDC~15VDC	
operating temperature range	-35~+80°C	
comperature temperature range	-10~+55°C	
temperature coefficient of zero	0.05%FS/10°C	0.05%FS/10°C
temperature coefficient of span	0.16%FS/10°C	0.02%FS/10°C
input resistance	365±10Ω	730±8Ω
output resistance	350±3Ω	700±5Ω
insulation resistance	≥5000MΩ@50VDC	
safe overload	150%FS	
ultimate overload	200%FS	
protection	IP66 or IP67	
electrical interface	4-core shielded cable, diameter:6.3mm, length:13m	

## Dimensions



## Electrical connection



Capacity		A	R	H3	H2	H1	C	B
5~10klb	2~5t	32	16	46	34	19	105	32
25~50klb	10~25t	40.6	22.2	53	47	19	121	32
100klb	50t	51	22.6	57.6	51	29	141	32
200klb	100t	76	44.2	83	70	42	200	51

# ULL-b Shear-web Compression Load Cell

## Features

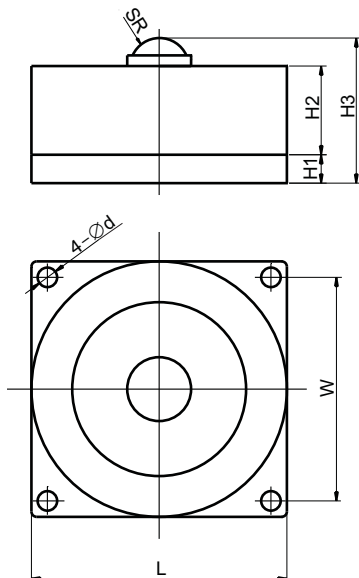
- Capacity: 0.5t~10t
- Alloy steel material, silicon rubber sealed, oil-proof, water-proof, anti-corrosion, suitable for different bad & dangerous conditions
- Shear-web compression type, four corner fixed, central ball bearing load
- Application for hopper scales and vehicle scales



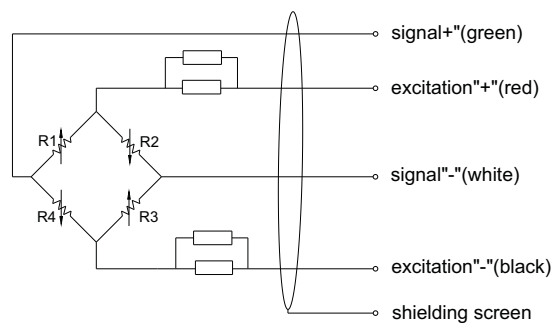
## Specifications

capacity	0.5t/1.5t/2t/3t/5t/10t
output	2±0.04mV/V
combined error	0.05%FS
non-linearity	±0.05%FS
hysteresis	±0.05%FS
repeatability	±0.015%FS
creep	±0.02%FS/30min
zero unbalance	±2%FS
excitation voltage	5VDC~15VDC
operating temperature range	-20~+60°C
comperature temperature range	-10~+50°C
temperature coefficient of zero	0.05%FS/10°C
temperature coefficient of span	0.05%FS/10°C
input resistance	730±5Ω
output resistance	700±2Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	120%FS
ultimate overload	150%FS
protection	IP66 or IP67
electrical interface	4-core shielded cable, diameter:6mm, length:5m

## Dimensions



## Electrical connection

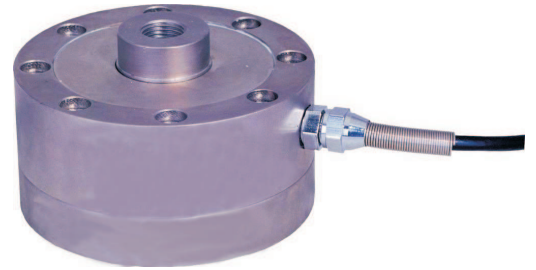


Capacity(t)	H1	H2	H3	L	W	SR	d
0.5~1.5	8	25	41	72 72	63 63	8	5.5
2~3	8	34	51	88 88	76 76	10	6
5~10	12	38	60	120 120	105 105	25	8.6

# ULL-c Shear-web Compression Load Cell

## Features

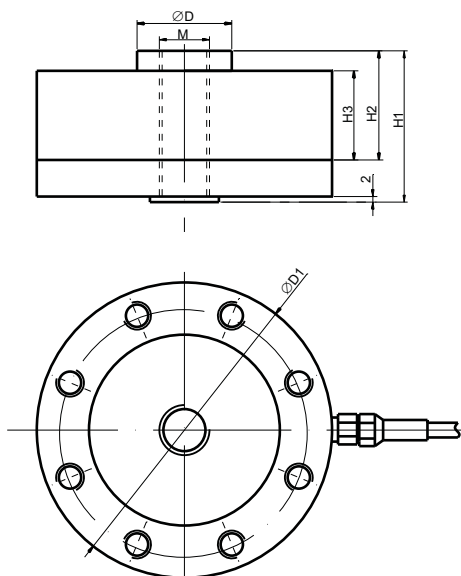
- Capacity: 5~200klb
- Alloy steel material, surface nickle treatment, suitable for different bad & dangerous conditions.
- Shear-web compression type, easy installation
- Application for hopper scales and vehicle scales



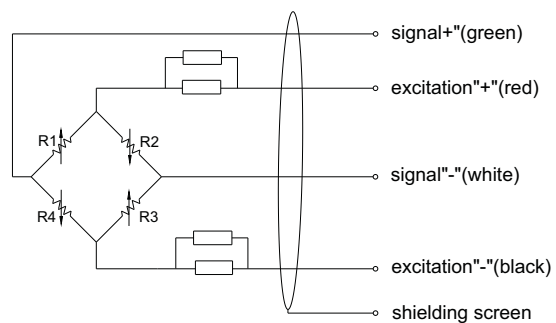
## Specifications

capacity	5klb/10klb/25klb/50klb/100klb/200klb	
output	2±0.04mV/V	4.0±0.04mV/V
combined error	0.02%FS	0.03%FS
non-linearity	±0.02%FS	±0.03%FS
hysteresis	±0.02%FS	±0.03%FS
repeatability	±0.015%FS	±0.02%FS
creep	±0.02%FS/30min	±0.03%FS/30min
zero unbalance	±1%FS	
excitation voltage	5VDC~15VDC	
operating temperature range	-35~+80°C	
comperature temperature range	-10~+55°C	
temperature coefficient of zero	0.05%FS/10°C	0.05%FS/10°C
temperature coefficient of span	0.16%FS/10°C	0.02%FS/10°C
input resistance	365±10Ω	730±8Ω
output resistance	350±3Ω	700±5Ω
insulation resistance	≥5000MΩ@50VDC	
safe overload	150%FS	
ultimate overload	200%FS	
protection	IP66 or IP67	
electrical interface	4-core shielded cable, diameter:6.3mm, length:13m	

## Dimensions



## Electrical connection



Capacity(t)	H1	H2	H3	M	D	D1
1~5	67	45	34	M16×1.5	32	105
20,25,30	80	53.8	41	M32×1.5	41	121
5~10	85	53.8	47	M32×1.5	41	121

# ULL-d Miniature Compression Load Cell

## Features

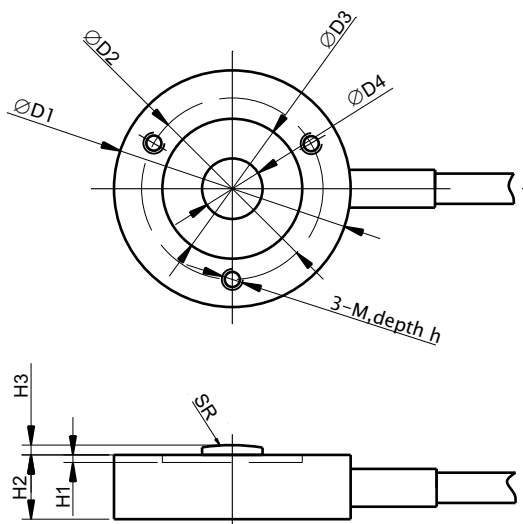
- Capacity: 0.1~20kN
- Alloy steel material, suitable for different bad & dangerous conditions
- Miniature compression load cell, easy installation
- Low cost ,high precision



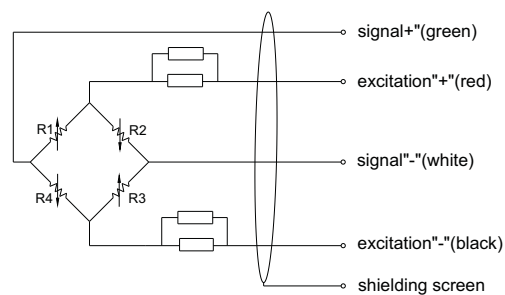
## Specifications

capacity	0.1kN/0.2kN/0.3kN/0.5kN/1kN/2kN/3kN/5kN/10kN/15kN/20kN
output	1.5mV/V
combined error	0.5%FS
non-linearity	±0.5%FS
hysteresis	±0.5%FS
repeatability	±0.2%FS
creep	±0.2%FS/30min
zero unbalance	±1%FS
excitation voltage	5VDC~15VDC
operating temperature range	-35~+80°C
comperature temperature range	-10~+55°C
temperature coefficient of zero	0.1%FS/10°C
temperature coefficient of span	0.2%FS/10°C
input resistance	410±30Ω
output resistance	350±10Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	120%FS
ultimate overload	150%FS
protection	IP66 or IP67
electrical interface	4-core shielded cable, diameter:2mm, length:1.5m

## Dimensions



## Electrical connection



Capacity(kN)	D1	D2	D3	D4	H1	H2	H3	M	h	SR
0.1,0.2,0.3,0.5	25	18	15	2.8	0.5	7.7	1.3	M2.5	thru	40
1,2,3,5	31.3	24	18.5	8	0.5	8.5	1.3	M2.5	6	50
10,15,20	37.7	32	25.4	12	0.7	14	1.7	M3	8	60

# ULZ-a Column Compression Load Cell

## Features

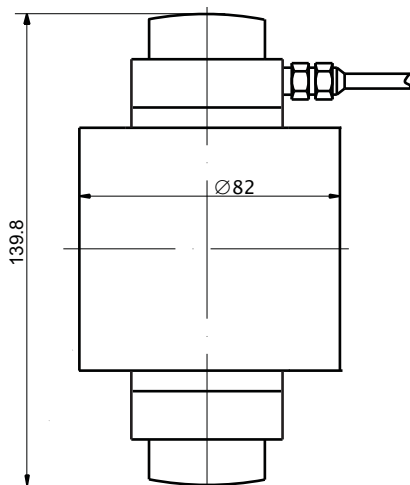
- Capacity: 20t~40t
- Stainless steel material, welded sealing, oil-proof, water-proof, anti-corrosion.
- Column type, easy installation.
- Application for truck scales, vessel weighing and hopper scales.



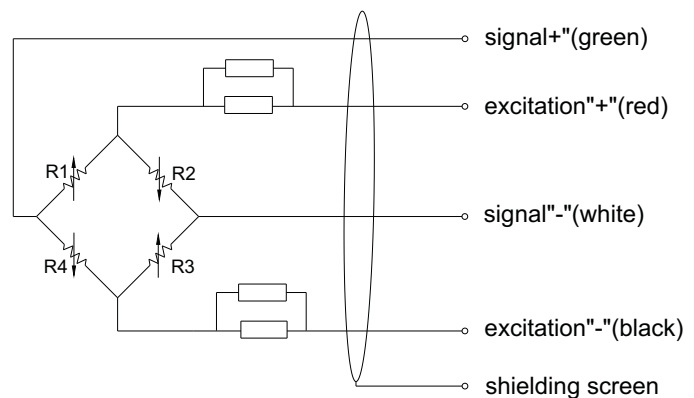
## Specifications

capacity	20t/30t/40t
output	2±0.004mV/V
accuracy	0.03%FS (option: OIML C3)
non-linearity	±0.03%FS
hysteresis	±0.03%FS
repeatability	±0.02%FS
creep	±0.02%FS/30min
zero unbalance	1%FS
excitation voltage	5VDC~15VDC
operating temperature range	-40~+80°C
comperature temperature range	-10~+40°C
temperature coefficient of zero	0.03%FS/10°C
temperature coefficient of span	0.02%FS/10°C
input resistance	750±10Ω
output resistance	700±10Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	150%FS
ultimate overload	200%FS
protection	IP67
electrical interface	4-core shielded cable, diameter:6.3mm, length:10m

## Dimensions



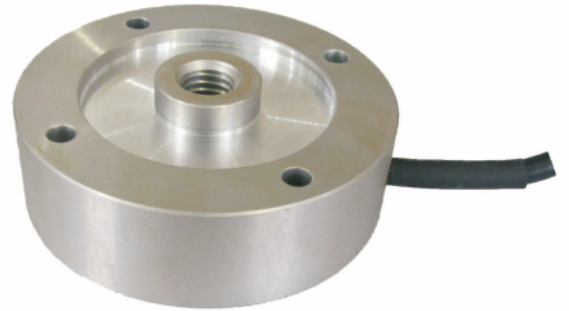
## Electrical connection



# ULL-e Compression Load Cell

## Features

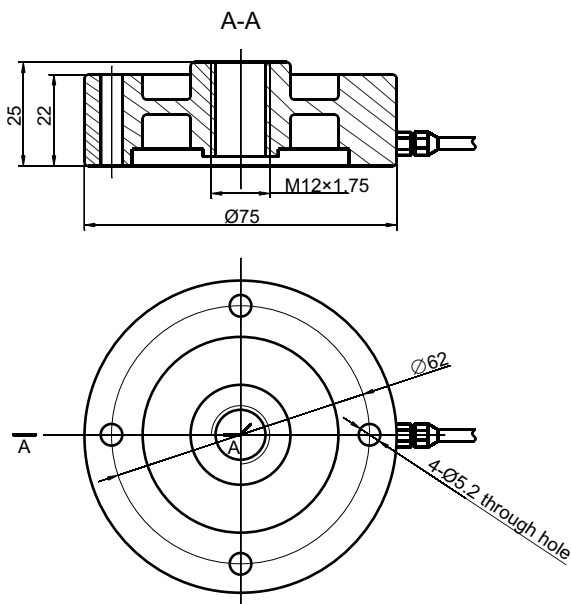
- Capacity: 30~1000kg
- Aluminium alloy
- Compression load cell, easy installation
- Low cost ,high precision



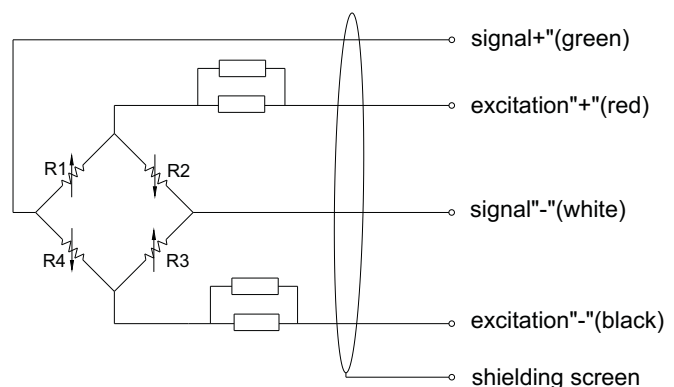
## Specifications

capacity	30kg/50kg/100kg/500kg/1000kg
output	1.5±0.3mV/V
combined error	0.03%FS
non-linearity	±0.03%FS
hysteresis	±0.03%FS
repeatability	±0.03%FS
creep	±0.03%FS/30min
zero unbalance	±1%FS
excitation voltage	5VDC~15VDC
operating temperature range	-35~+80°C
comperature temperature range	-10~+40°C
temperature coefficient of zero	0.05%FS/10°C
temperature coefficient of span	0.1%FS/10°C
input resistance	770±10Ω
output resistance	700±3Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	120%FS
ultimate overload	150%FS
protection	IP66
electrical interface	4-core shielded cable, diameter:4.2mm, length:3.5m

## Dimensions



## Electrical connection

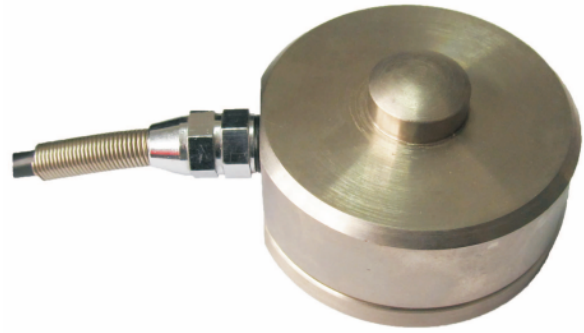




# ULM-f Compression Load Cell

## Features

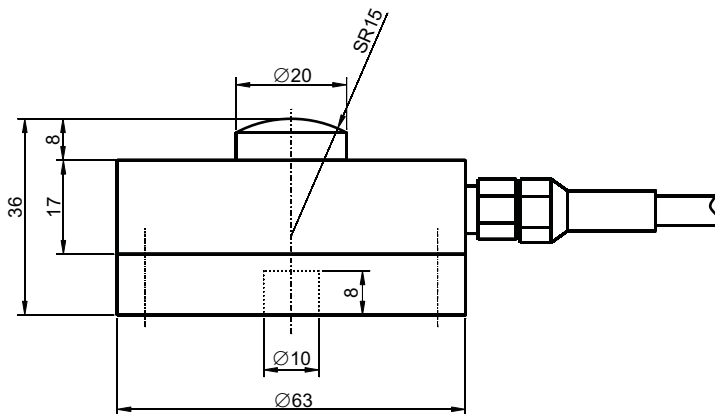
- Capacity: 1t,2t,3t;
- Stainless steel or alloy steel material;
- Easy installation;
- Application for vehicle testing.



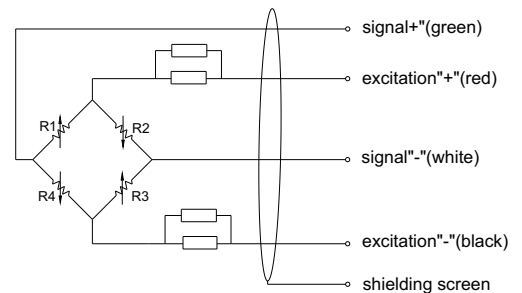
## Specifications

capacity	1t/2t/3t
output	$2 \pm 0.004 \text{ mV/V}$
accuracy	0.03%FS (option: OIML C3)
non-linearity	$\pm 0.03\% \text{ FS}$
hysteresis	$\pm 0.03\% \text{ FS}$
repeatability	$\pm 0.02\% \text{ FS}$
creep	$\pm 0.03\% \text{ FS}/30 \text{ min}$
zero unbalance	1%FS
excitation voltage	5VDC~12VDC
operating temperature range	-30~+80°C
comperature temperature range	-10~+40°C
temperature coefficient of zero	0.05%FS/10°C
temperature coefficient of span	0.017%FS/10°C
input resistance	$725 \pm 5 \Omega$
output resistance	$700 \pm 5 \Omega$
insulation resistance	$\geq 5000 \text{ M}\Omega @ 50 \text{ VDC}$
safe overload	150%FS
ultimate overload	300%FS
protection	IP67
electrical interface	4-core shielded cable, diameter:5.7mm, length:10m

## Dimensions



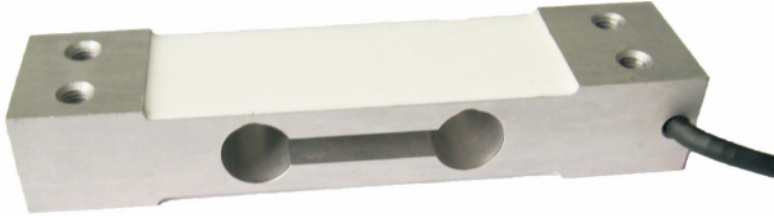
## Electrical connection



# ULD-a Single Point Load Cell

## Features

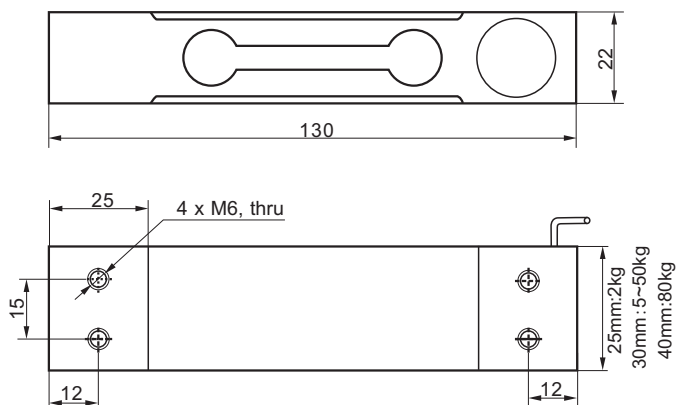
- Capacity 2kg...80kg
- Aluminum alloy material, single point type, silicon rubber sealing, surface anodized treatment, good anti-corrosive ability
- Suggested max. platform size: 350mm×350mm
- Overall construction, easy installation



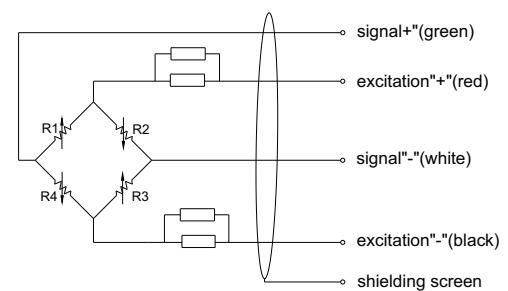
## Specifications

capacity	2kg/3kg/5kg/6kg/8kg/10kg/30kg/35kg/40kg/50kg/60kg/80kg
output	2±0.15mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.02%FS/30min
zero unbalance	1%FS
excitation voltage	5VDC~15VDC
operating temperature range	-20~+65°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.02%FS/10°C
temperature coefficient of span	0.02%FS/10°C
input resistance	400±10Ω/1065±15Ω
output resistance	350±5Ω/1000±15Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	150%FS
ultimate overload	200%FS
protection	IP65
electrical interface	4-core shielded cable, diameter:4.2mm, length:350mm

## Dimensions



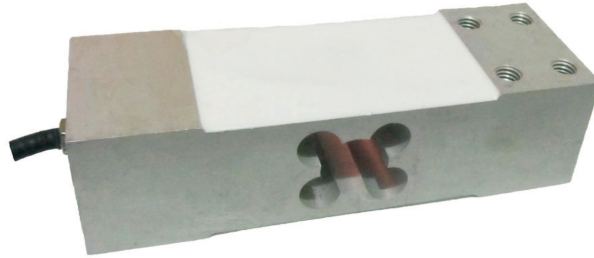
## Electrical connection



# ULD-b Single Point Load Cell

## Features

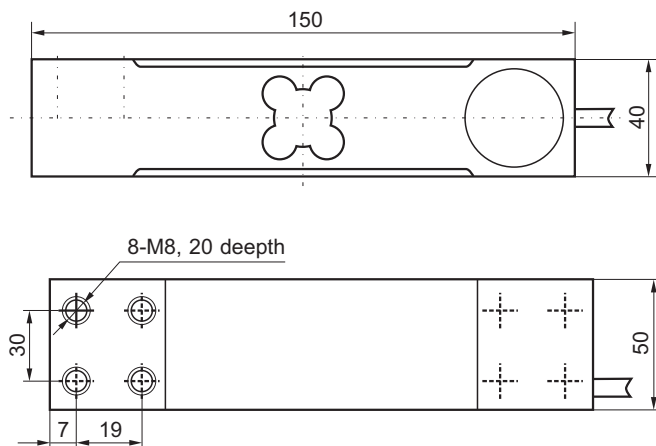
- Capacity 100kg...500kg
- Aluminum alloy material, single point type, silicon rubber sealing, surface anodized treatment, good anti-corrosive ability
- Suggested max. platform size: 500mm×600mm
- Overall construction, easy installation



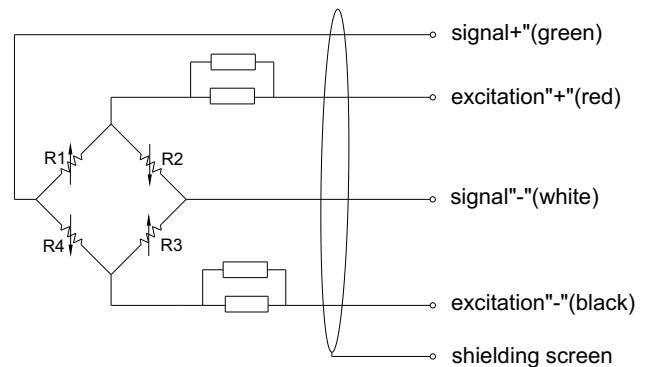
## Specifications

capacity	100kg/200kg/250kg/300kg/400kg/500kg
output	2±0.2mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.02%FS/30min
zero unbalance	1%FS
excitation voltage	5VDC~15VDC
operating temperature range	-20~+65°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.02%FS/10°C
temperature coefficient of span	0.02%FS/10°C
input resistance	400±10Ω
output resistance	350±10Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	150%FS
ultimate overload	200%FS
protection	IP65
electrical interface	4-core shielded cable, diameter:5.7mm, length:2m

## Dimensions



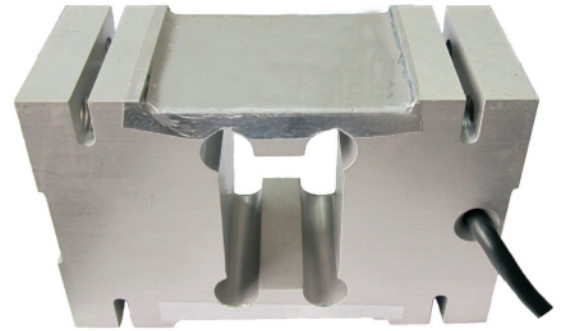
## Electrical connection



# ULD-c Single Point Load Cell

## Features

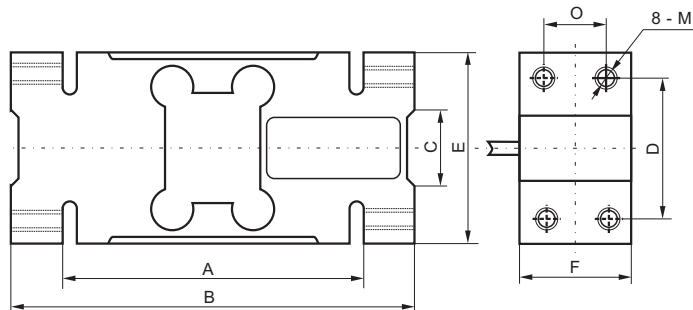
- Capacity 250kg. . . 2000kg
- Aluminum alloy material, single point type, silicon rubber sealing, surface anodized treatment, good anti-corrosive ability
- Overall construction, easy installation
- Suggested max. platform size: 1200mm x 1200mm



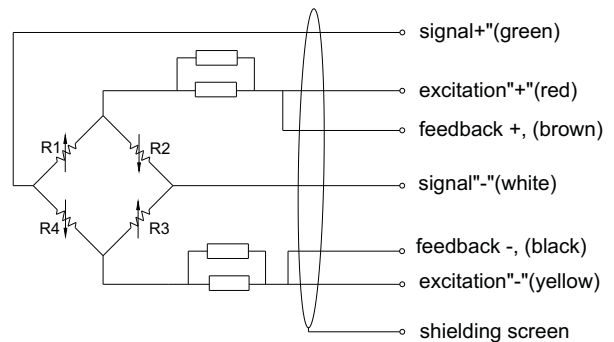
## Specifications

capacity	250kg/500kg/750kg/1000kg/1500kg/2000kg
output	2±0.2mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.02%FS/30min
zero unbalance	1%FS
excitation voltage	5VDC~15VDC
operating temperature range	-20~+60°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.02%FS/10°C
temperature coefficient of span	0.02%FS/10°C
input resistance	405±5Ω
output resistance	350±5Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	150%FS
ultimate overload	200%FS
protection	IP65
electrical interface	6-core shielded cable, diameter:5.7mm, length:5m

## Dimensions



## Electrical connection



Capacity	B	E	F	D	O	A	C	M
250~500 kg	146	95	60	70	36	104.5	20	M12
750~2000 kg	176	125	76	95	46	134.5	45	M16

# ULD-d Single Point Load Cell

## Features

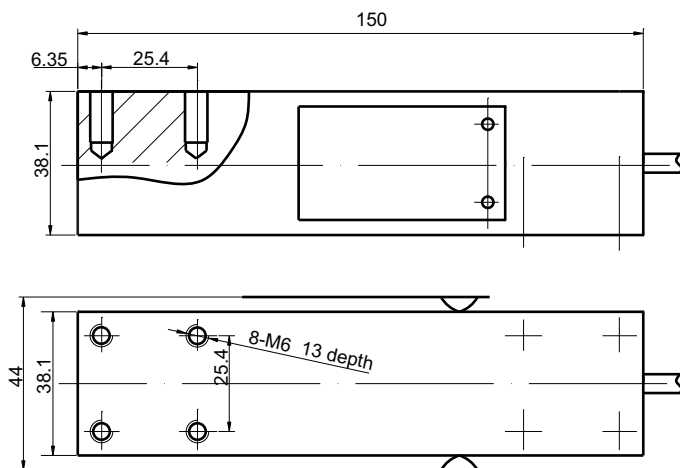
- Capacity 50kg. . . 250kg
- Aluminum alloy material, single point type, silicon rubber sealing, surface anodized treatment, good anti-corrosive ability
- Overall construction, easy installation
- Suggested max. platform size: 400mm 400mm



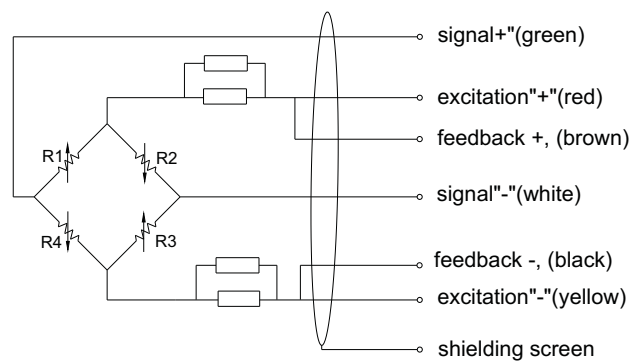
## Specifications

capacity	50kg/100kg/150kg/200kg/250kg
output	2±0.2mV/V
combined error	0.02%FS (option: OIML C3)
non-linearity	±0.02%FS
hysteresis	±0.02%FS
repeatability	±0.01%FS
creep	±0.02%FS/30min
zero unbalance	1%FS
excitation voltage	5VDC~15VDC
operating temperature range	-20~+60°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.02%FS/10°C
temperature coefficient of span	0.02%FS/10°C
input resistance	406±6Ω
output resistance	350±5Ω
insulation resistance	≥5000MΩ@50VDC
safe overload	150%FS
ultimate overload	300%FS
protection	IP66
electrical interface	6-core shielded cable, diameter:5.0mm, length:3m

## Dimensions



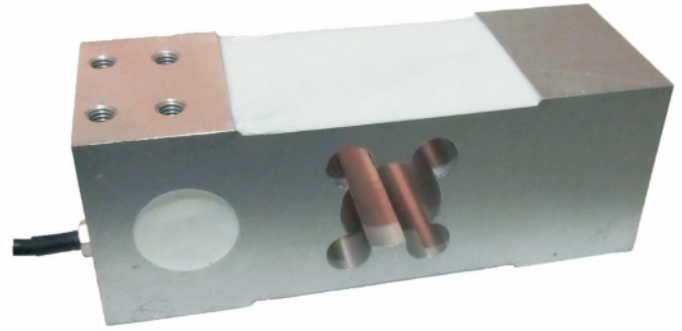
## Electrical connection



# ULD-e Single Point Load Cell

## Features

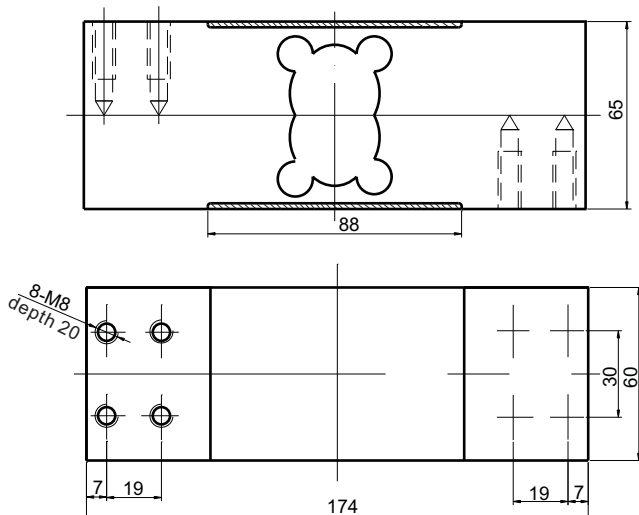
- Capacity 50kg...750kg
- Aluminum alloy material, single point type, silicon rubber sealing, surface anodized treatment, good anti-corrosive ability
- Suggested max. platform size: 600mm×600mm
- Overall construction, easy installation



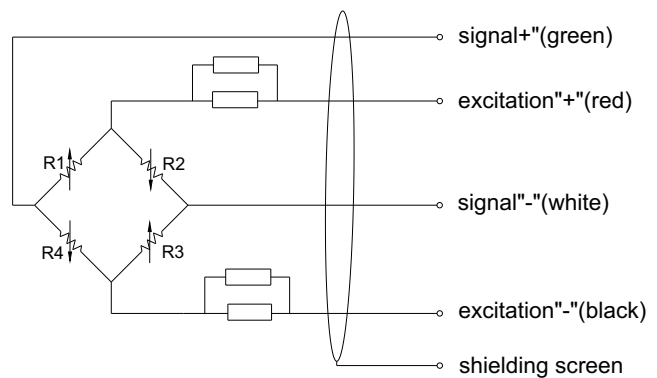
## Specifications

capacity	50kg/100kg/200kg/300kg/500kg/750kg
output	$2 \pm 0.2 \text{ mV/V}$
combined error	0.02%FS (option: OIML C3)
non-linearity	$\pm 0.02\% \text{ FS}$
hysteresis	$\pm 0.02\% \text{ FS}$
repeatability	$\pm 0.01\% \text{ FS}$
creep	$\pm 0.02\% \text{ FS}/30 \text{ min}$
zero unbalance	1%FS
recommended excitation voltage	5VDC~15VDC
operating temperature range	-35~+80°C
compensated temperature range	-10~+40°C
temperature coefficient of zero	0.02%FS/10°C
temperature coefficient of span	0.02%FS/10°C
input resistance	$400 \pm 10 \Omega$
output resistance	$350 \pm 5 \Omega$
insulation resistance	$\geq 5000 \text{ M}\Omega @ 50 \text{ VDC}$
safe overload	150%FS
ultimate overload	200%FS
protection	IP65
electrical interface	4-core shielded cable, diameter:5.7mm, length:3m

## Dimensions



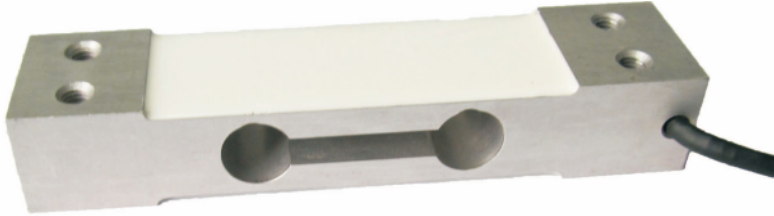
## Electrical connection



# ULD-a1 High Accuracy Single Point Load Cell

## Features

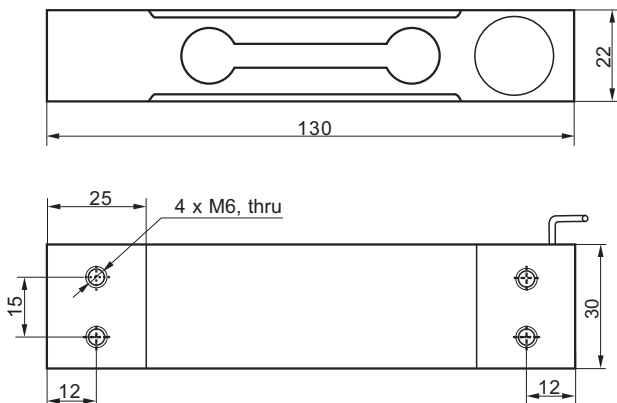
- Capacity 3kg...50kg
- Aluminum alloy material, single point type, silicon rubber sealing, surface anodized treatment, good anti-corrosive ability
- Suggested max. platform size: 350mm×350mm
- Overall construction, easy installation



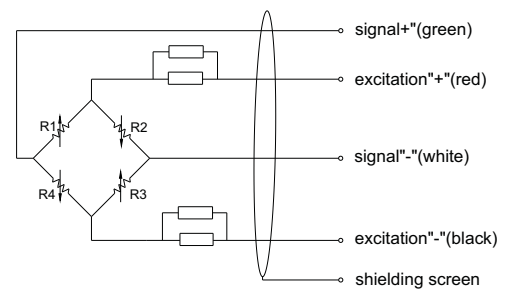
## Specifications

capacity	3kg/5kg/6kg/8kg/10kg/30kg/35kg/40kg/50kg		
output	2±0.15mV/V		
combined error	0.005%FS	0.01%FS	0.02%FS
non-linearity	±0.005%FS	±0.01%FS	±0.02%FS
hysteresis	±0.005%FS	±0.01%FS	±0.02%FS
repeatability	±0.005%FS	±0.01%FS	±0.02%FS
creep	±0.005%FS/30min	±0.01%FS/30min	±0.02%FS/30min
zero unbalance	1%FS		
excitation voltage	5VDC~15VDC		
operating temperature range	-20~+65°C		
compensated temperature range	-10~+40°C		
temperature coefficient of zero	0.017%FS/10°C		
temperature coefficient of span	0.02%FS/10°C		
input resistance	405±20Ω		
output resistance	350±5Ω		
insulation resistance	≥5000MΩ@50VDC		
safe overload	120%FS		
ultimate overload	150%FS		
protection	IP65		
electrical interface	4-core shielded cable, diameter:4.2mm, length:350mm		

## Dimensions



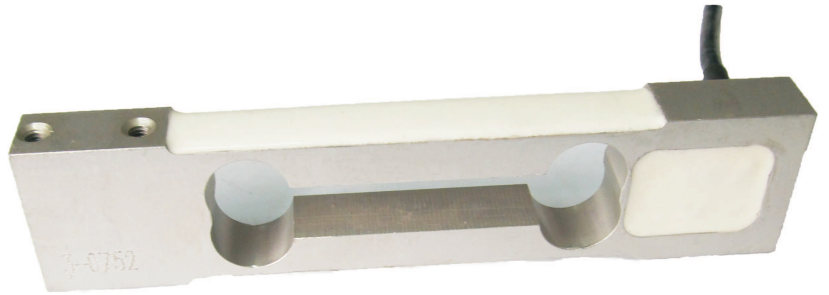
## Electrical connection



# ULD-g High Accuracy Single Point Load Cell

## Features

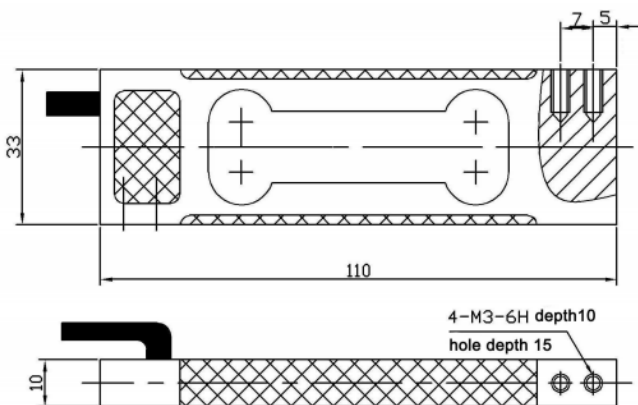
- Capacity: 0.1kg~0.6kg
- high precision load cell
- surface anodized treatment
- aluminium alloy material
- silicon rubber sealing
- for electronic scales



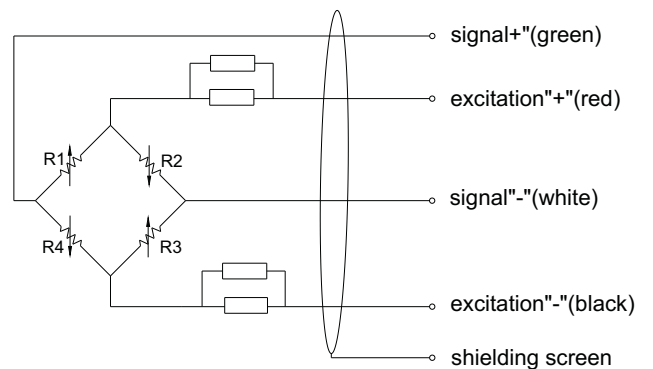
## Specifications

capacity	0.1kg/0.2kg/0.3kg/0.6kg		
output	1±0.15mV/V		
combined error	0.005%FS	0.01%FS	0.02%FS
creep	±0.005%FS/30min	±0.02%FS/30min	±0.02%FS/30min
zero unbalance	1%FS		
excitation voltage	5VDC~15VDC		
operating temperature range	-20~+80℃		
compensated temperature range	-10~+40℃		
temperature coefficient of zero	0.017%FS/10℃		
temperature coefficient of span	0.02%FS/10℃		
input resistance	406±20Ω		
output resistance	350±5Ω		
insulation resistance	≥5000MΩ@50VDC		
safe overload	120%FS		
ultimate overload	150%FS		
protection	IP65		
electrical interface	4-core shielded cable, diameter:4mm, length:300mm		

## Dimensions



## Electrical connection

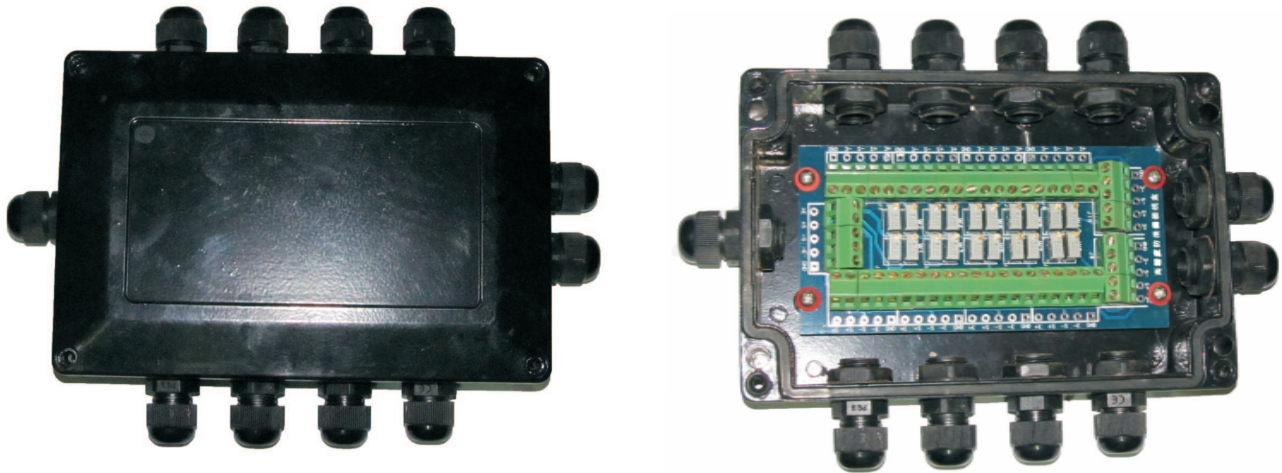




# ULJ Series Junction Box

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1. stainless steel, or cast aluminum material, all sealed for anti-water or humidity.
2. adopting high precision and low shift resistance and capacitors to confirm the operating precision and stability of system.
3. special separate tie-in for load cell cable and signal cable to ensure the connection reliability.
4. the codes are marked at the side of cable's solder dots, it is convenient for electrical connection.
5. supplied voltage adjusting and output signal adjusting are for options.



## ULJ-10 junction box

1. plastic housing
2. supplied voltage adjusting or output signal adjusting
3. dimension: 158mm 91mm 46mm
4. 10pcs load cells



## ULJ-6 junction box

1. cast aluminum with plastic covered
2. output signal adjusting
3. dimension: 182mm 120mm 38mm
4. 4pcs or 6pcs load cells



## ULJ-4 junction box

1. cast aluminum with plastic covered
2. output signal adjusting
3. dimension: 135mm 65mm 38mm
4. 2pcs or 4pcs load cells

# UID-6A Weighing Indicator

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## Application

For static weighing systems like electronic platform scales, floor scales etc. which

## General functions

Weigh accumulation, accumulation display, accumulation clear up  
Switching between kg and pound, energy saving

## Specification

Input signal:  $-16\text{mV}\sim 18\text{mV}$   
Power supply for transducer: DC3V  
Connected transducers: 1-4pcs (350 $\Omega$ )  
Electrical connection of transducer: 4-wire  
Number of divisions for calibration: 3000  
Display: 6-digit LED, 6 status indicator  
Display range:  $-99990\sim 999900$   
AC power supply: AC85~265V; 50~60Hz