



HIGH PRECISION LOAD CELL

LOAD CELL

PRODUCT CATALOG

- Single Point Load Cell
- Single Ended Beam Load Cell
- S-Beam Load Cell
- Disk Type Load Cell
- Double Ended Beam Load Cell
- Canister Load Cell
- Platform Type Load Cell
- Special Type Load Cell
- Explosion-proof Load Cell
- Noise Resistance Load Cell
- Digital Load Cell
- Master Load Cell
- Weighing Indicator/Controller/Component



CAS

CONTENTS

Single Point Load Cell

BC	05
BC-D	06
BCL	07
BCA	10
BCA-EXP	11
BCD	12
BCD-EXP	13
BCM	14
BCH	15
BCK	16
BCLS	17
BCO	19
BC-P	20
BC-F	21
BCP	22
BCW	23
BCEP-EXP (10~50kgf)	24
BCEP-EXP (100~300kgf)	25
BCEPL-EXP (10~100kgf)	26
BCC	27

Single Ended Beam Load Cell

BSA	29
BSB	31
BSS	33
BSS-EXP	34
BS	36
HBS	38
HBS-EXP	39
ZBSHR	41

S-Beam Load Cell

SB	43
SBA	45
SBS	47
SBS-EXP	48
SBAS	50
SL	51

Disk Type Load Cell

LS	53
LS-NR	54
LS-EXP	55
LS-D	56
LSB	58
LSC	59
LSS	60
LSS-NR	61
LSS-EXP	62
LSW	64
LSW-HM	65
MNC	66
MNT	67
NMNC	69
SMN	70
CPA	71
CPAS	72
LSOC	73
LSOC2	74
CHE	75
CHE-KM	77
ZWIT-15T	78
ZWITA-15T	79
ZLSW	80

Double Ended Beam Load Cell

DSB-20	82
DSB-B	84
DES-B	86
DSB1	88
DSB2	90
DSBV	91
DSBT	93
DSB-D	95

Canister Load Cell

ZHCMG-100T	98
MASTERCELL-50T	99
ZSSMD-100T	100
CC	101
CC-NR	102
CT	104
CT-NR	105
CTS	107
CTS-EXP	108
HC	110
HC-NR	111
HC-D	112
HCS	114
HCS-EXP	115
WBK	116
WBK-NR	117
WBK-EXP	118
WBK-D	119
NWBK	121
WBKL	123
WBKC	125

Platform Type Load Cell

SPL	128
EPL	129

Special Type Load Cell

MAS (2,3Axis)	131
MAS (5,6Axis)	132

Weighing Indicator / Controller / Component

CI-200A Series	134
CI-200S Series	135
CI-2001AS/BS & CI-2400BS	136
CI-2001AN/BN	137
CI-170A	138
BI-II	139
CI-150A	140
CI-1500A/1560A	141
CI-600A Series	142
CI-608A	143
CI-400A Series	144
CI-400AL Series	145
CI-600D Series	146
EXI-600AD Series	147
EXI-200AD	148
TWN	149
CD-3000 Series	150
WTM-200/500	151
DOM-01 & DMP-4/8P	152
LCP-01	153
JB-P Series	154
JB-PA Series	155
EXJB-P	156
LCT PRO	157

WE WEIGH THE WORLD™

Since its founding in 1983, CAS Corporation consistently aims at becoming a leader in the international weighing industry. By offering a variety of products and dedicated customer service. CAS rapidly developed its global network system. With a manufacturing facility and Headquarter located in South Korea.

CAS has expended its business territory further to United States, India, Russia, Türkiye and China including active sale performance in over 120 overseas countries. Our global network and cutting-edge technology will ensure total customer satisfaction.

- | | | | |
|------|--|------|--|
| 1983 | Establishment of CAS Co., Ltd. | 2007 | The second CAS Global Business Conference in Korea
Awarded the Global Star prize
Awarded the Techno CEO prize |
| 1989 | Acquired FCC US Official Standards | 2008 | The third CAS Global Business Conference in Korea
Acquired certificate of quality control system of medical instrument
Selected as a electric scale providing company in Chinese standardized market |
| 1990 | Acquired NSC Australian Measuring Verification Standards
Assigned as a National Verification and Correction Facility (177) | 2009 | Fourth CAS Global Business Conference in Korea
Establishment of CAS Zhejiang in China |
| 1991 | Acquired NBS US Measuring Verification Standards
Approved by NTEP & UL, US Safety Standards | 2011 | Acquired as Self-National verification & correction Facility from Korean Agency for Technology and Standard |
| 1992 | Developed strain gage / Establishment of CAS Türkiye
Developed the first label printer in the Korean market | 2012 | Establishment of CAS Japan |
| 1993 | Approved by CSA (Canada)
Establishment of CAS USA | 2013 | Nominated for WC300
Establishment of CAS Chemical
Establishment of CAS E&C |
| 1994 | Acquired the first OIML, EU Standards
Establishment of CAS China / Establishment of CAS Russia | 2014 | Chosen to execute 1 st year project for the World Class300
Designated as No.1 brand in Global Brand Competency Index(GBCI) |
| 1996 | Acquired the first ISO 9001 in the Korean weighing industry | 2015 | Chosen to execute 2 nd year project for the World Class300
Received 2015 Global Excellence Awards |
| 1999 | Establishment of CAS India
Acquired EC Self-Verification Certification | 2016 | Designated as No.1 brand in Global Customer Satisfaction Competency Index(GCSI) |
| 2000 | Awarded the Best Certification Company by ISO9000 | 2018 | Designated as No.1 brand in Global Brand Competency Index(GBCI)
Designated as No.1 brand in Global Customer Satisfaction Competency Index(GCSI) |
| 2001 | Awarded the Best Certification Company by ISO9000 for two consecutive years
Awarded the best prize for Precision technology
Acquired Japanese NMIJ Standards Certification
Establishment of CAS Vietnam | 2022 | Attending Eurocis 2022 düsseldorf, Germany
Establishment of CAS Mongolia |
| 2002 | Awarded the Best Global Company by Japanese Management Association
Awarded Russia Golden Balance 2002 | 2023 | 40th Year Since the Founding of CAS |
| 2003 | CAS Europe Tour | 2024 | Completion of Phase 1 of CAS Smart Factory Complex |
| 2004 | Establishment of CAS Poland
Establishment of CAS Germany | | |
| 2005 | Granted 30 million dollar export Tower from the government
Establishment of CAS Bangladesh | | |
| 2006 | The first CAS Global Business Conference in Korea | | |



HIGH PRECISION LOAD CELL



Single Point Load Cell

CAS has advanced technology on weighing, measurement, and control.

We provide accurate and precise load cell to the various industries.

[BC / BC-D / BCL / BCA / BCA-EXP / BCD / BCD-EXP / BCM / BCH / BCK / BCLS / BCO / BC-P / BC-F
BCP / BCW/BCEP-EXP / BCEPL-EXP / BCC]



BC | Single Point Load Cell



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Application

- Commercial scale
- Bench scale
- Counting scale

Description

BC is a single point type load cell of aluminum material. It is suitable for medium sized commercial scales, bench scales, and counting scales.

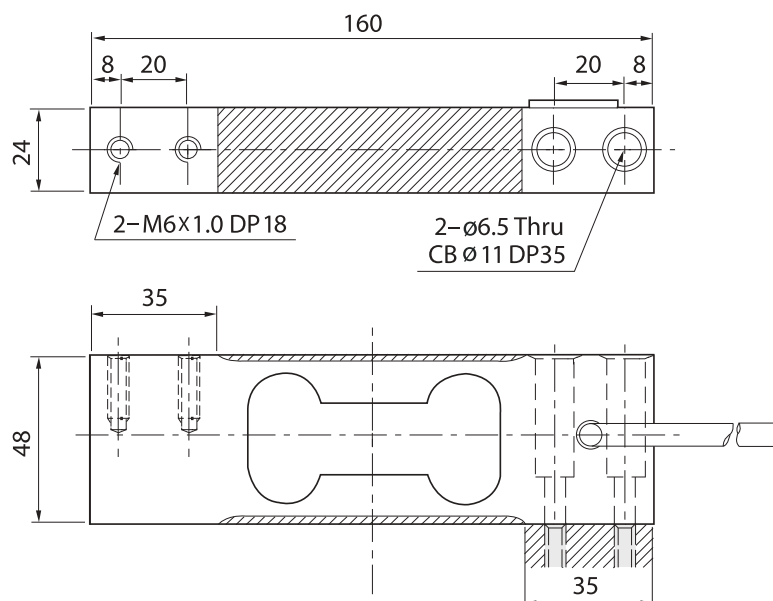
Specifications

Capacity(R.L.)	kgf	3, 5, 6, 12, 15, 30, 50
Rated Output	mV / V	3 ~ 5kgf : 1.0 ± 0.1 / 6 ~ 50kgf : 1.2 ± 0.12
Zero Balance	mV / V	0.0 ± 0.06
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.03
Hysteresis	% R.O.	≤ 0.03
Combined Error	% R.O.	≤ 0.03
Repeatability	% R.O.	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	$\leq 1/3000$
Division	mV / V	0.00033 (Approx.) / 0.0004 (Approx.)
Temperature Effect on	-Zero Value -Output Value	% / 10°C % / 10°C
		≤ 0.028 ≤ 0.014
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω M Ω
		420 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	$^{\circ}\text{C}$	-10 to +40
Operating Temperature Range	$^{\circ}\text{C}$	-30 to +80
Material	-	Aluminum
Cable Specification	-	$\varnothing 5 \times 4 \text{ p} \times 35 \text{ cm}$ (PVC)
Safety Overload	% R.L.	150
Platform Size	mm	400 x 400

Dimensions

Unit : mm

► BC



BC-D | Single Point Load Cell



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Application

- Commercial scale
- Bench scale
- Counting scale

Description

BC-D is a single point type load cell of aluminum material. It is suitable for large sized commercial scales, bench scales and counting scales. It is cost-effective load cell for large platforms.

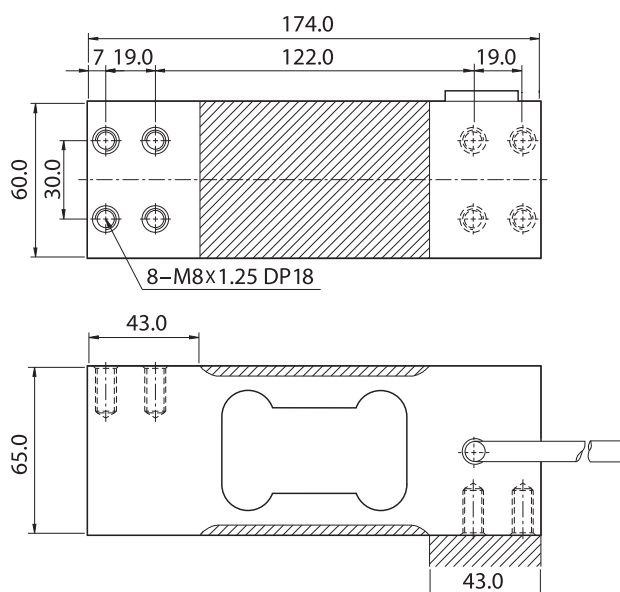
Specifications

Capacity(R.L.)	kgf	30, 60, 150, 200, 300
Rated Output	mV / V	1.2 ± 0.12
Zero Balance	mV / V	0.0 ± 0.06
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.03
Hysteresis	% R.O.	≤0.03
Combined Error	% R.O.	≤0.03
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.03
Return for 30min.	% R.O.	≤0.03
Resolution	-	≤1/3000
Division	mV / V	0.0004
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.028 ≤ 0.014
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		420 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Aluminum
Cable Specification	-	Ø6 x 4P x 3m (PVC)/1.365m (PVC)
Safety Overload	% R.L.	150
Platform Size	mm	400 x 600

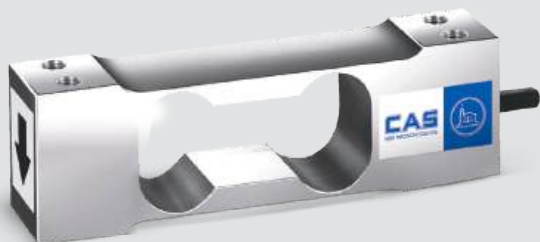
Dimensions

Unit : mm

► BC-D



BCL | Single Point Load Cell (1~5kgf)



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Application

- Commercial scale
- Bench scale
- Platform scale

Description

BCL is a low profile single point type load cell of aluminum material. It is suitable for small sized simple scale.

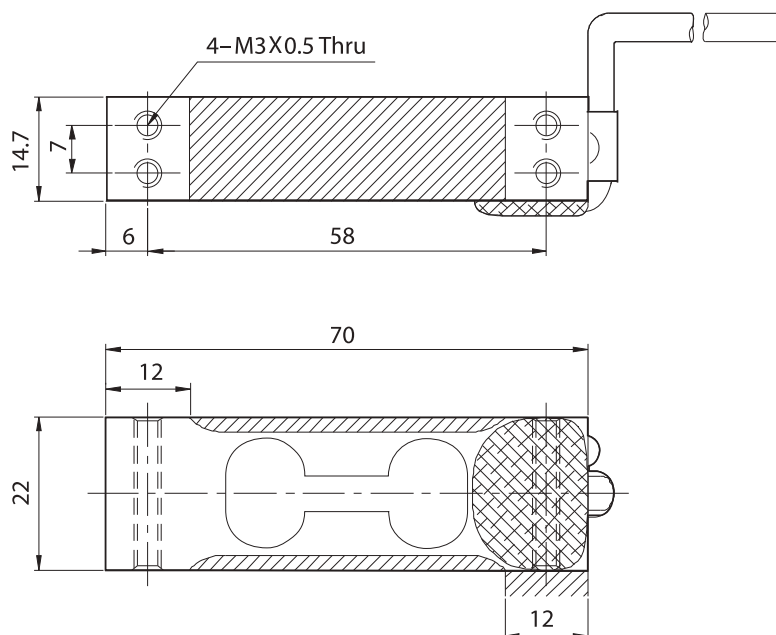
Specifications

Capacity(R.L)	kgf	1, 2, 3, 5
Rated Output	mV / V	1.0 ± 0.1
Zero Balance	mV / V	0.0 ± 0.05
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.03
Hysteresis	% R.O.	≤0.03
Combined Error	% R.O.	≤0.03
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.03
Return for 30min.	% R.O.	≤0.03
Resolution	-	≤1/3000
Division	mV / V	0.00033
Temperature Effect on	-Zero Value	%/10°C
	-Output Value	%/10°C
		≤ 0.028
		≤ 0.014
Excitation	-Recommended	V
	-Maximum	V
		10
		15
Resistance	-Input	Ω
	-Output	Ω
	-Insulation	MΩ
		420 ± 20
		350 ± 3.5
		> 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Aluminum
Cable Specification	-	Ø4 x 4P x 1.5m (PVC)
Safety Overload	% R.L.	150
Platform Size	mm	200 x 200

Dimensions

Unit : mm

- BCL (1~5kgf)

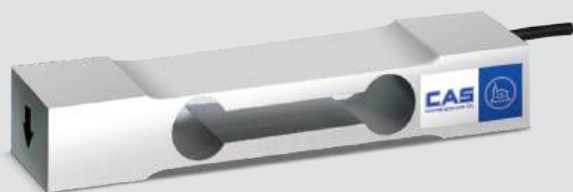


BCL | Single Point Load Cell (6~50kgf)



Description

BCL is a low profile single point type load cell of aluminum material. It is suitable for medium sized commercial scales, bench scales, and counting scales.



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Option

- OIML C3 Approved(OIML R60), 6~30kgf

Application

- Commercial scale
- Bench scale
- Platform scale

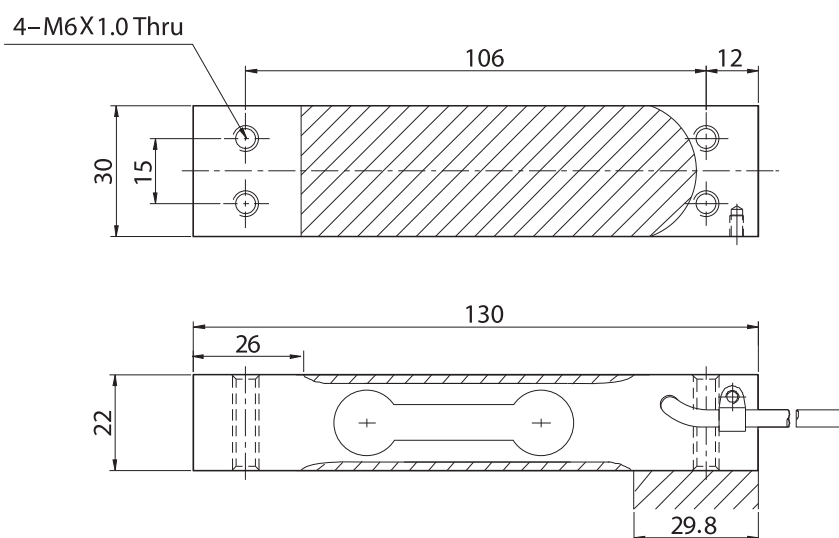
Specifications

Capacity(R.L.)	kgf	6, 10, 15, 20, 30, 35, 50	
Rated Output	mV / V	2.0 ± 0.2	
Zero Balance	mV / V	0.0 ± 0.05	
Accuracy Class	-	C3	-
Non-Linearity	% R.O.	≤0.025	≤0.03
Hysteresis	% R.O.	≤0.025	≤0.03
Combined Error	% R.O.	≤0.025	≤0.03
Repeatability	% R.O.	≤0.01	≤0.01
Creep for 30min.	% R.O.	≤0.017	≤0.03
Return for 30min.	% R.O.	≤0.017	≤0.03
Resolution	-	≤1/4000	≤1/3000
Division	mV / V	0.0005	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤0.014 ≤0.011
Excitation	-Recommended -Maximum	V V	10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ	420 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40	
Operating Temperature Range	°C	-30 to +80	
Material	-	Aluminum	
Cable Specification	-	Ø4 x 4P x 1.5m (PVC)	
Safety Overload	% R.L.	150	
Platform Size	mm	300 x 300	

Dimensions

Unit : mm

- BCL (6~50kgf)



BCL | Single Point Load Cell (60~200kgf)



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Application

- Commercial scale
- Bench scale
- Counting scale
- Belt scale
- Platform scale

Description

BCL is a single point type load cell of aluminum material. It is suitable for medium sized commercial scales, bench scales, and counting scales.

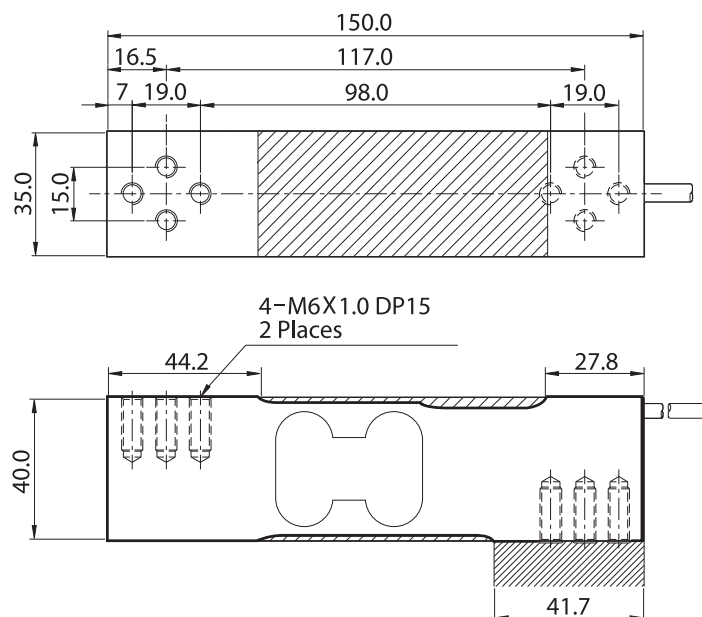
Specifications

Capacity(R.L.)	kgf	60, 100, 150, 200
Rated Output	mV / V	2.0 ± 0.2
Zero Balance	mV / V	0.0 ± 0.01
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.03
Hysteresis	% R.O.	≤ 0.03
Combined Error	% R.O.	≤ 0.03
Repeatability	% R.O.	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/3000
Division	mV / V	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.028 ≤ 0.014
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		420 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Aluminum
Cable Specification	-	Ø4 x 4P x 2m (PVC)
Safety Overload	% R.L.	150
Platform Size	mm	400 x 400

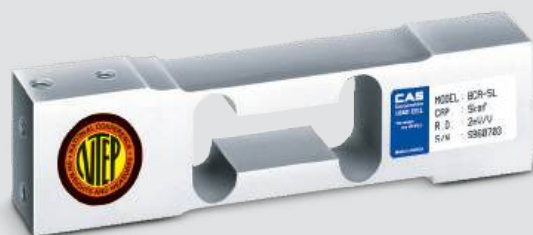
Dimensions

► BCL (60~200kgf)

Unit : mm



BCA | Single Point Load Cell



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Option

- OIML C3 approved (OIML 60)
- NTEP III 5000S Approved
- 6-wire connection

Application

- Bench scale
- Counting scale
- Platform scale

Description

BCA is a single point type load cell of aluminum material. It is suitable for medium sized commercial scales, bench scales, and counting scales.

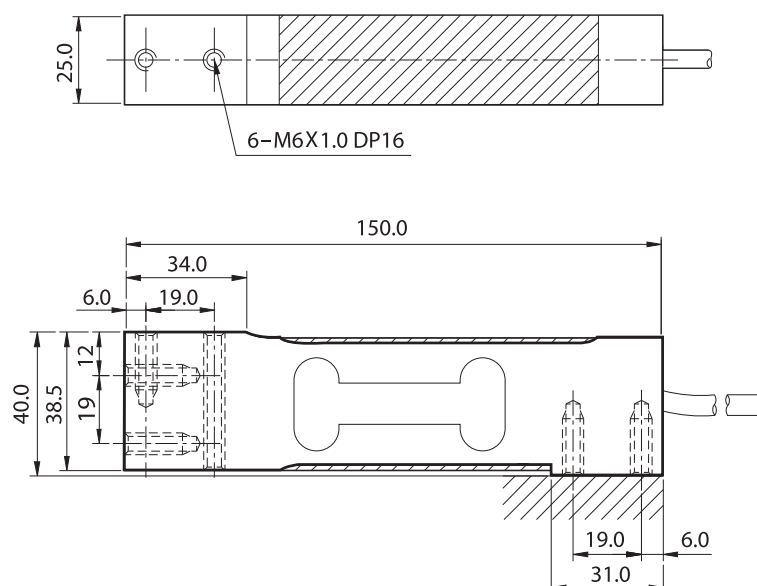
Specifications

Capacity(R.L.)	kgf	5, 6, 10, 15, 20, 30, 50, 60, 75, 100	
Rated Output	mV / V	2.0 ± 0.2	
Zero Balance	mV / V	0.0 ± 0.1	
Accuracy Class	-	C3	-
Non-Linearity	% R.O.	≤0.02	≤0.03
Hysteresis	% R.O.	≤0.02	≤0.03
Combined Error	% R.O.	≤0.02	≤0.03
Repeatability	% R.O.	≤0.01	≤0.01
Creep for 30min.	% R.O.	≤0.017	≤0.03
Return for 30min.	% R.O.	≤0.017	≤0.03
Resolution	-	≤1/5000	≤1/3000
Division	mV / V	0.0004	0.00067
Temperature Effect on	-Zero Value	%/10°C	≤0.014
	-Output Value	%/10°C	≤0.028
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	420 ± 20
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range	°C	-10 to +40	
Operating Temperature Range	°C	-30 to +80	
Material	-	Aluminum	
Cable Specification	-	Ø5 x 4P x 1m (Urethane)	
Safety Overload	% R.L.	150	
Platform Size	mm	400 x 400	

Dimensions

Unit : mm

► BCA





- ## Option

- ## Application

- ## Description

Specifications

SINGLE ENDED BEAM

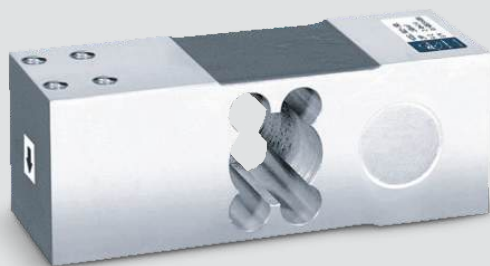
Unit : mm

- ## S-BEAM



BCD

Single Point Load Cell



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Application

- Bench scale
- Belt scale
- Platform scale

Description

BCD is a single point type load cell of aluminum material. It is suitable for large sized commercial scales, bench scales and counting scales.

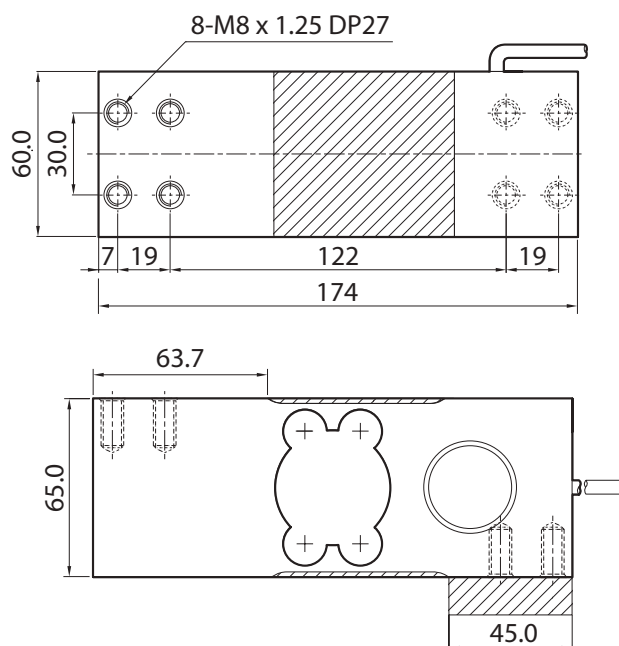
Specifications

Capacity(R.L.)	kgf	30, 50, 75, 100, 150, 250, 300, 500
Rated Output	mV / V	2.0 ± 0.2
Zero Balance	mV / V	0.0 ± 0.1
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.03
Hysteresis	% R.O.	≤0.03
Combined Error	% R.O.	≤0.03
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.03
Return for 30min.	% R.O.	≤0.03
Resolution	-	≤1/3000
Division	mV / V	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Aluminum
Cable Specification	-	Ø5 x 4P x 2.5m (PVC)
Safety Overload	% R.L.	150
Platform Size	mm	400 x 600

Dimensions

Unit : mm

► BCD



BCD-EXP

Explosion Proof
Single Point Load Cell



Features

- Explosion-proof structure
- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Option

- BCD-EXP (Ex ia IIC T4 Approved 75kgf~500kgf)

Application

- Bench scale
- Belt scale
- Platform scale

Description

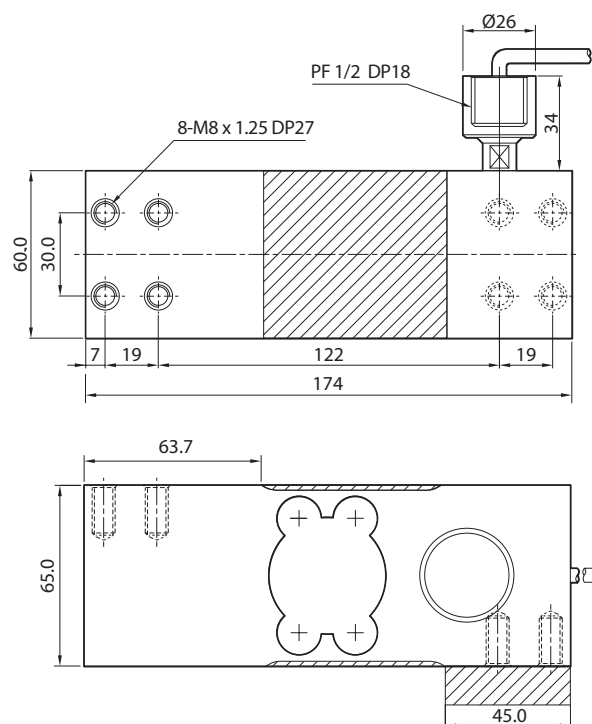
BCD-EXP is a single point type load cell of aluminum material. It is suitable for large sized Ex-proof scale in explosive hazardous areas.

Specifications

Capacity(R.L.)	kgf	75, 100, 150, 250, 300, 500
Rated Output	mV / V	2.0 ± 0.2
Zero Balance	mV / V	0.0 ± 0.1
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.03
Hysteresis	% R.O.	≤ 0.03
Combined Error	% R.O.	≤ 0.03
Repeatability	% R.O.	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/3000
Division	mV / V	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.028 ≤ 0.014
Excitation	-Recommended -Maximum	V V
		10 28
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		400 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to + 40
Operating Temperature Range	°C	-30 to + 80
Material	-	Aluminum
Cable Specification	-	Ø5 x 4P x 3m (Urethane)
Safety Overload	% R.L.	150
Platform Size	mm	400 x 600

Dimensions

- Intrinsic Safety



Unit : mm

BCM

Single Point Load Cell



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Option

- OIML C3 approved (OIML R60 (50L~500L))
- NTEP III 5000S approved
- 6-wire connection

Application

- Bench scale
- Platform scale

Description

BCM is a single point type load cell of aluminum material. It is suitable for large sized platform scales, bench scales and counting scales.

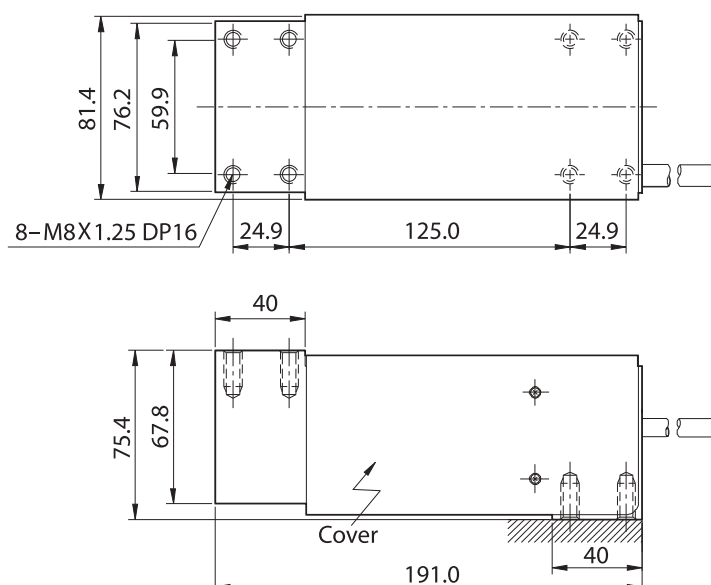
Specifications

Capacity(R.L.)	kgf	50, 75, 100, 150, 200, 250, 300, 500, 750
Rated Output	mV / V	2.0 ± 0.2
Zero Balance	mV / V	0.0 ± 0.1
Accuracy Class	-	C3
Non-Linearity	% R.O.	≤0.02
Hysteresis	% R.O.	≤0.02
Combined Error	% R.O.	≤0.02
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.017
Return for 30min.	% R.O.	≤0.017
Resolution	-	≤1/5000
Division	mV / V	0.0004
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤0.014 ≤0.011
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		420 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Aluminum
Cable Specification	-	Ø5 x 4P x 3m (Urethane)
Safety Overload	% R.L.	150
Platform Size	mm	600 x 600

Dimensions

Unit : mm

► BCM



BCH | Single Point Load Cell



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Application

- Large platform scale
- Hanging scale

Description

BCH is a single point type load cell of aluminum material. It is suitable for large sized platform scale.

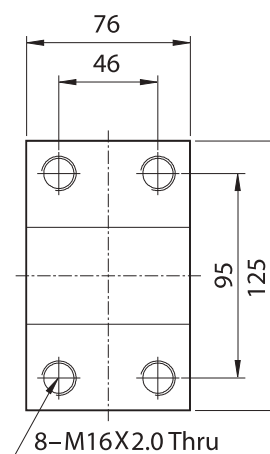
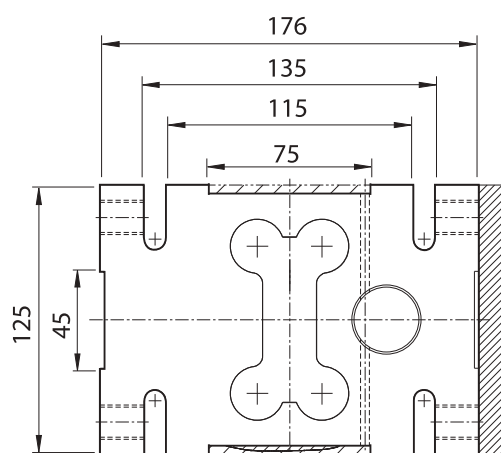
Specifications

Capacity(R.L.)	kgf	500, 1K, 1.5K, 2K, 2.5K
Rated Output	mV / V	2.0 ± 0.2
Zero Balance	mV / V	0.0 ± 0.1
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.03
Hysteresis	% R.O.	≤0.03
Combined Error	% R.O.	≤0.03
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.03
Return for 30min.	% R.O.	≤0.03
Resolution	-	≤1/3000
Division	mV / V	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤0.028 ≤0.014
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		400 ± 20 350 ± 3.5 >2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Aluminum
Cable Specification	-	Ø5.4 x 4P x 5m (Urethane)
Safety Overload	% R.L.	150
Platform Size	mm	1200 x 1200

Dimensions

Unit : mm

► BCH



BCK | Single Point (Force sensor) Load Cell



Features

- Overload protection
- Small size and light weight
- Simplified tension and compression loading
- Anodized aluminum material

Description

BCK is a single point type load cell of aluminum material. It is suitable for small sized tension and compression testing machine.

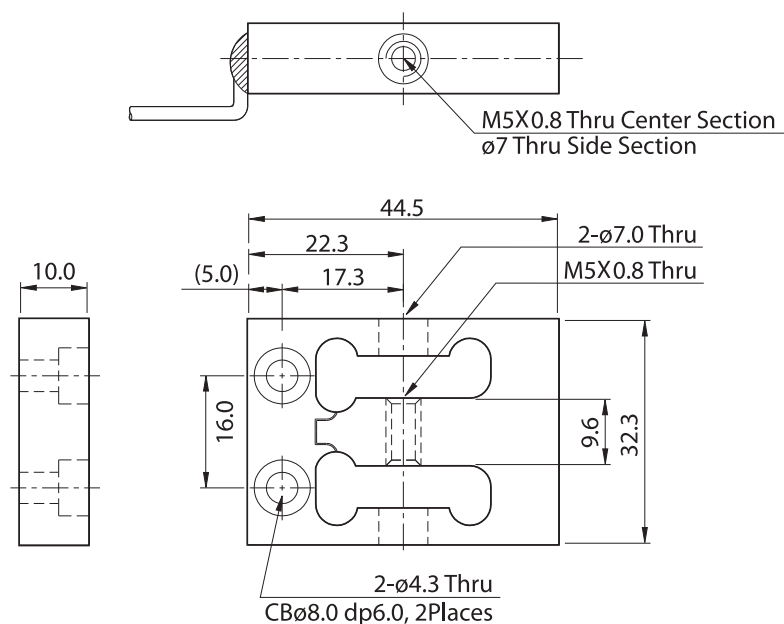
Specifications

Capacity(R.L.)	kgf	1, 2, 5, 10, 25, 50
Rated Output	mV / V	2.0 ± 0.2
Zero Balance	mV / V	0.0 ± 0.4
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.05
Hysteresis	% R.O.	≤0.05
Combined Error	% R.O.	≤0.05
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.1
Return for 30min.	% R.O.	≤0.1
Resolution	-	≤1/2000
Division	mV / V	0.001
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Aluminum
Cable Specification	-	4p x 15cm (Flat)
Safety Overload	% R.L.	150
Platform Size	mm	No Platform Type

Dimensions

Unit : mm

► BCK



BCLSSingle Point
Load Cell (10~50kgf)

Features

- Off center compensated
- High accuracy
- Stainless steel material
- Designed according to IP67

Option

- OIML C4 approved(OIML R60)

Application

- Water proof platform scale
- Water proof weighing system

Description

BCLS is a stainless steel low profile single point type load cell. It is suitable for small sized commercial scales, bench scales and counting scales in humid environment.

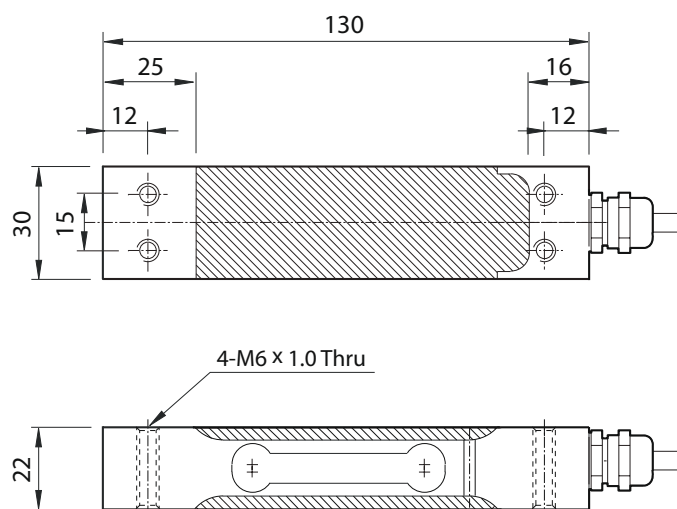
Specifications

Capacity(R.L.)		kgf	10, 15, 20, 30, 50		
Rated Output		mV / V	2.0 ± 0.2		
Zero Balance		mV / V	0 ± 0.05		
Accuracy Class		-	C4	C3	-
Non-Linearity		% R.O.	≤0.015	≤0.025	≤0.03
Hysteresis		% R.O.	≤0.015	≤0.025	≤0.03
Combined Error		% R.O.	≤0.015	≤0.025	≤0.03
Repeatability		% R.O.	≤0.015	≤0.01	≤0.01
Creep for 30min.		% R.O.	≤0.015	≤0.017	≤0.03
Return for 30min.		% R.O.	≤0.015	≤0.017	≤0.03
Resolution		-	≤1/6000	≤1/4000	≤1/3000
Division		mV / V	0.00033	0.0005	0.00067
Temperature Effect on	-Zero Value	%/10°C	0.011	0.014	0.03
	-Output Value	%/10°C	0.008	0.011	0.03
Excitation	-Recommended	V	10		
	-Maximum	V	15		
Resistance	-Input	Ω	420 ± 20		
	-Output	Ω	350 ± 3.5		
	-Insulation	MΩ	> 2000		
Compensated Temperature Range		°C	-10 to +40		
Operating Temperature Range		°C	-30 to +80		
Material		-	Stainless steel		
Cable Specification		-	Ø4x 4P x 1.5m (PVC)		
Safety Overload		% R.L.	150		
Platform Size		mm	300 x 300		

Dimensions

Unit : mm

- BCLS (10~50kgf)



BCLS

Single Point Load Cell (60~150kgf)



Features

- Off center compensated
- High accuracy
- Stainless steel material
- Designed according to IP67

Option

- OIML C3 approved (OIML R60)

Application

- Water proof platform scale
- Water proof weighing system

Description

BCLS is a low profile single point type load cell of stainless steel. It is suitable for small sized commercial scales, bench scales and counting scales in humid environment.

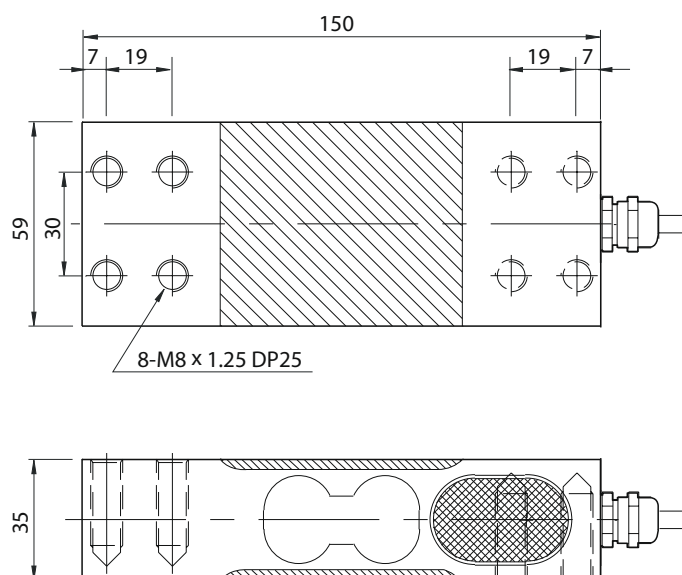
Specifications

Capacity(R.L.)	kgf	60, 150	
Rated Output	mV / V	1.0 ± 0.2	
Zero Balance	mV / V	0.0 ± 0.1	
Accuracy Class	-	C3	-
Non-Linearity	% R.O.	≤0.025	≤0.03
Hysteresis	% R.O.	≤0.025	≤0.03
Combined Error	% R.O.	≤0.025	≤0.03
Repeatability	% R.O.	≤0.01	≤0.01
Creep for 30min.	% R.O.	≤0.017	≤0.03
Return for 30min.	% R.O.	≤0.017	≤0.03
Resolution	-	≤1/4000	≤1/3000
Division	mV / V	0.00025	0.00033
Temperature Effect on	-Zero Value	%/10°C	≤0.014
	-Output Value	%/10°C	≤0.011
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	400 ± 20
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range	°C	-10 to +40	
Operating Temperature Range	°C	-30 to +80	
Material	-	Stainless steel	
Cable Specification	-	Ø5 x 4P x 2m (PVC)	
Safety Overload	% R.L.	150	
Platform Size	mm	400 x 500	

Dimensions

- BCLS (60~150kgf)

Unit : mm



BCO | Single Point Load Cell



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Option

- OIML C3 approved (OIML R60)

Application

- Bench scale
- Platform scale

Description

BCO is a single point type load cell of aluminum material. It is suitable for medium sized commercial scales, bench scales, and counting scales.

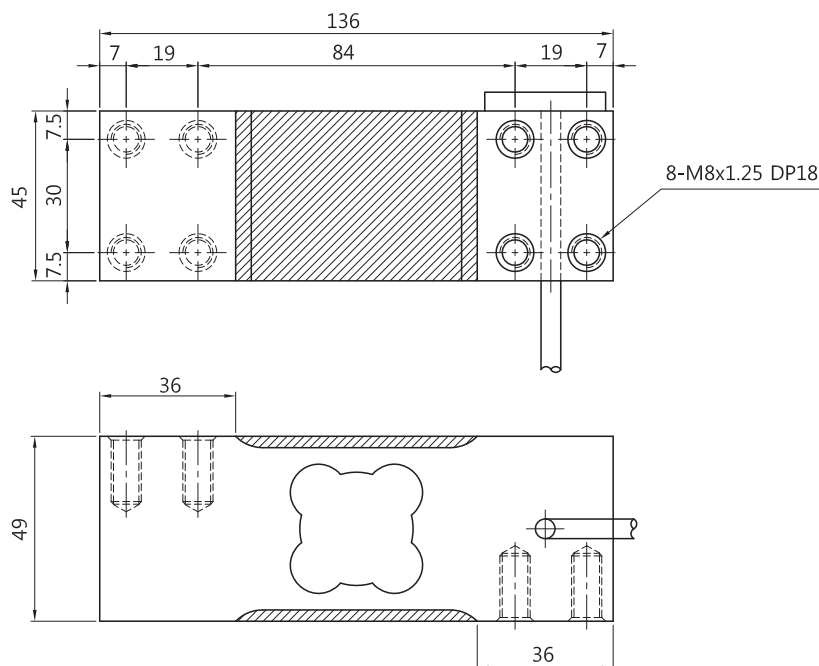
Specifications

Capacity(R.L.)	kgf	60, 150, 200	
Rated Output	mV / V	1.5 ± 0.15	
Zero Balance	mV / V	0.0 ± 0.1	
Accuracy Class	-	C3	-
Non-Linearity	% R.O.	≤ 0.025	≤ 0.03
Hysteresis	% R.O.	≤ 0.025	≤ 0.03
Combined Error	% R.O.	≤ 0.025	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.017	≤ 0.03
Return for 30min.	% R.O.	≤ 0.017	≤ 0.03
Resolution	-	≤ 1/4000	≤ 1/3000
Division	mV / V	0.000375	0.0005
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.014 ≤ 0.015
Excitation	-Recommended -Maximum	V V	10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ	420 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to + 40	
Operating Temperature Range	°C	-30 to + 80	
Material	-	Aluminum	
Cable Specification	-	Ø5 x 4P x 1.5m (PVC)	
Safety Overload	% R.L.	150	
Platform Size	mm	400 x 500	

Dimensions

► BCO

Unit : mm



BC-P

 | Single Point Load Cell

Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Application

- Bench scale
- Platform scale

Description

BC-P is a single point type load cell of aluminum material. It is suitable for medium sized commercial scales, bench scales, and counting scales.

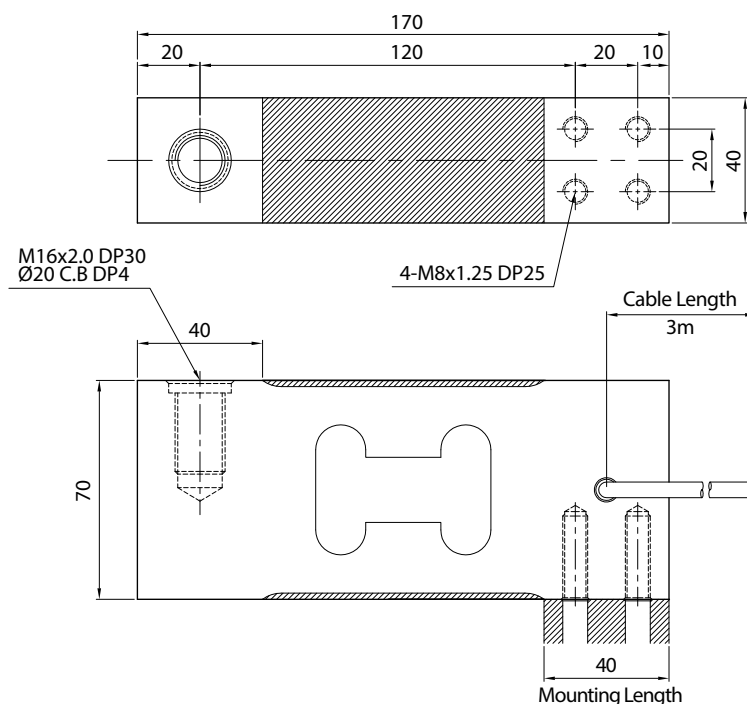
Specifications

Capacity(R.L.)	kgf	150, 300, 500
Rated Output	mV / V	1.2 ± 0.12
Zero Balance	mV / V	0.0 ± 0.06
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.03
Hysteresis	% R.O.	≤0.03
Combined Error	% R.O.	≤0.03
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.03
Return for 30min.	% R.O.	≤0.03
Resolution	-	≤1/3000
Division	mV / V	0.0004
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Aluminum
Cable Specification	-	Ø6 x 4p x 3m (PVC)
Safety Overload	% R.L.	150
Platform Size	mm	400 x 500

Dimensions

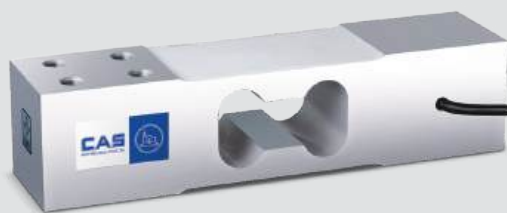
Unit : mm

► BC-P



BC-F

Single Point Load Cell



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Option

- OIML C3 approved (OIML R60)

Application

- Bench scale
- Platform scale

Description

BC-F is a single point type load cell of aluminum material. It is suitable for large sized commercial scales, industrial scales and bench scales.

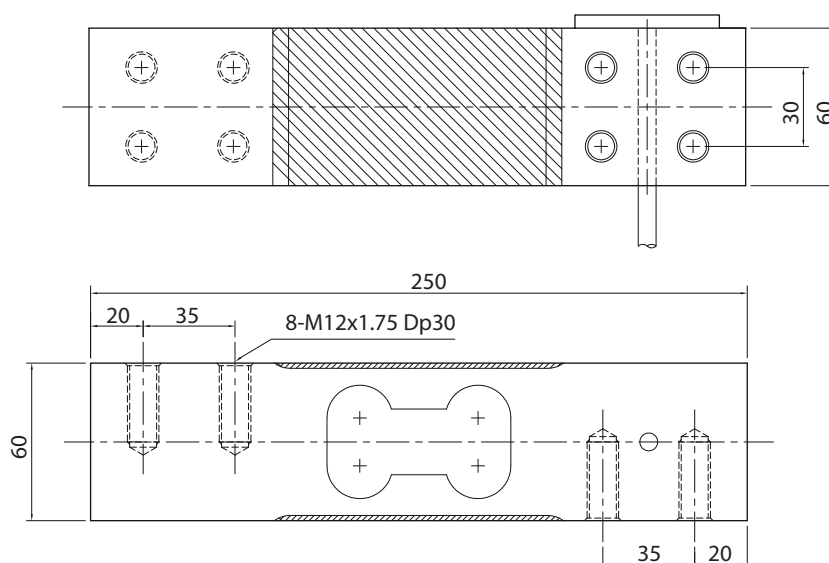
Specifications

Capacity(R.L.)		kgf	200, 300, 400, 600, 700, 1000
Rated Output	mV / V		1.2 ± 0.12
	Zero Balance	mV / V	0.0 ± 0.1
Accuracy Class		-	C3
Non-Linearity		% R.O.	≤ 0.025
Hysteresis		% R.O.	≤ 0.025
Combined Error		% R.O.	≤ 0.025
Repeatability		% R.O.	≤ 0.01
Creep for 30min.		% R.O.	≤ 0.017
Return for 30min.		% R.O.	≤ 0.017
Resolution		-	$\leq 1/4000$
Division		mV / V	0.0003
Temperature Effect on	-Zero Value	%/10°C	≤ 0.014
	-Output Value	%/10°C	≤ 0.011
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	420 ± 20
	-Output	Ω	350 ± 3.5
	-Insulation	M Ω	> 2000
Compensated Temperature Range		°C	-10 to + 40
Operating Temperature Range		°C	-30 to + 80
Material		-	Aluminum
Cable Specification		-	$\varnothing 6 \times 4P \times 3m$ (PVC)
Safety Overload		% R.L.	150
Platform Size		mm	500 x 700

Dimensions

Unit : mm

► BC-F



BCP

Single Point Load Cell



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Application

- Commercial scale
- Platform scale

Description

BCP is a low profile single point type load cell of aluminum material. This high-precision load cell is suitable for medium-sized commercial, industrial/bench and count scales.

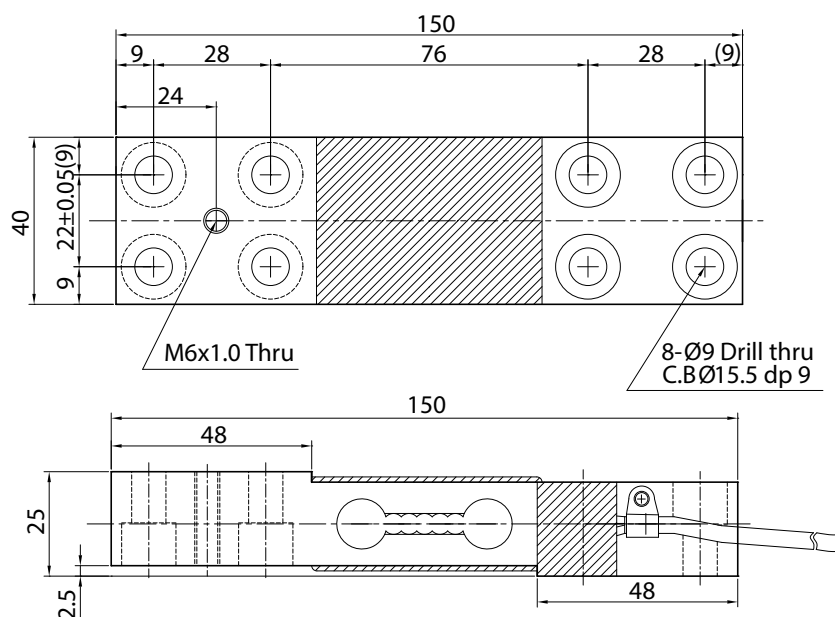
Specifications

Capacity(R.L.)	kgf	50, 100, 200
Rated Output	mV / V	1.2 ± 0.12
Zero Balance	mV / V	0.0 ± 0.1
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.03
Hysteresis	% R.O.	≤ 0.03
Combined Error	% R.O.	≤ 0.03
Repeatability	% R.O.	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	$\leq 1/3000$
Division	mV / V	0.0004
Temperature Effect on	-Zero Value -Output Value	≤ 0.028 ≤ 0.014
Excitation	-Recommended -Maximum	V 15
Resistance	-Input -Output -Insulation	Ω Ω M Ω
		420 ± 20 350 ± 10 > 2000
Compensated Temperature Range	$^{\circ}\text{C}$	-10 to +40
Operating Temperature Range	$^{\circ}\text{C}$	-30 to +80
Material	-	Aluminum
Cable Specification	-	$\varnothing 5.4 \times 4 \text{ p} \times 1 \text{ m}$ (PVC)
Safety Overload	% R.L.	150
Platform Size	mm	400 x 400

Dimensions

Unit : mm

► BCP



BCWSingle Point
Load Cell

Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP65

Option

- OIML C3 approved (OIML R60)

Application

- Waterproof bench scale
- Waterproof platform scale
- Waterproof count scale

Description

BCW is a single point type load cell of aluminum material. This high-precision load cell is suitable for medium-sized commercial, industrial/bench and count scales. Its IP65 rating makes it an excellent choice for moist environments.

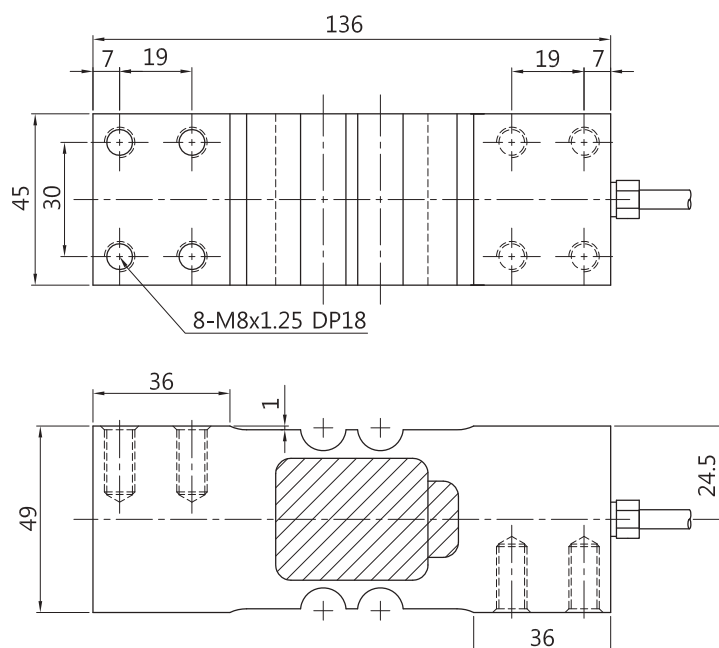
Specifications

Capacity(R.L.)	kgf	60, 70, 150, 180	
Rated Output	mV / V	1.5 ± 0.15	
Zero Balance	mV / V	0.0 ± 0.03	
Accuracy Class	-	C3	
Non-Linearity	% R.O.	≤0.025	≤0.03
Hysteresis	% R.O.	≤0.025	≤0.03
Combined Error	% R.O.	≤0.025	≤0.03
Repeatability	% R.O.	≤0.01	≤0.01
Creep for 30min.	% R.O.	≤0.017	≤0.03
Return for 30min.	% R.O.	≤0.017	≤0.03
Resolution	-	≤1/4000	≤1/3000
Division	mV / V	0.000375	0.0005
Temperature Effect on	-Zero Value	%/10°C	≤0.014
	-Output Value	%/10°C	≤0.028
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	400 ± 20
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range	°C	-10 to +40	
Operating Temperature Range	°C	-30 to +80	
Material	-	Aluminum	
Cable Specification	-	Ø5 x 6P x 1.5m (PVC)	
Safety Overload	% R.L.	150	
Platform Size	mm	400 x 500	

Dimensions

- BCW

Unit : mm



BCEP-EXP

Explosion Proof
Single Point Load Cell (10~50kgf)



Features

- Off center compensated
- Stainless steel material
- Hermetically sealed structure
- Explosion-proof structure
- Designed according to IP66

Option

- BCEP-EXP / Intrinsic safety (Ex ia IIC T4)

Application

- Bench scale
- Platform scale

Description

BCEP-EXP is a stainless steel single point type load cell. BCEP-EXP is built for hazardous environments such as in explosive and moist settings. This high-accuracy load cell is used for small-sized explosion-proof scales.

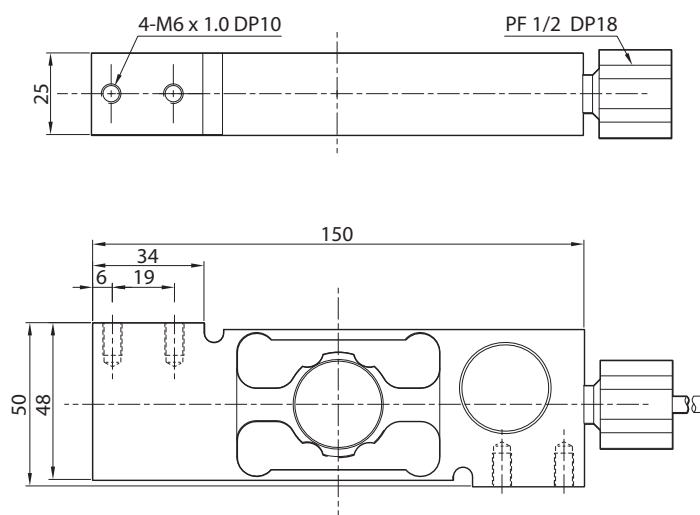
Specifications

Capacity(R.L.)	kgf	10, 20, 50	
Rated Output	mV / V	2.0 ± 0.2	
Zero Balance	mV / V	0.0 ± 0.2	
Accuracy Class	-	A	B
Non-Linearity	% R.O.	≤ 0.02	≤ 0.03
Hysteresis	% R.O.	≤ 0.02	≤ 0.03
Combined Error	% R.O.	≤ 0.02	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.017	≤ 0.03
Return for 30min.	% R.O.	≤ 0.017	≤ 0.03
Resolution	-	≤ 1/5000	≤ 1/3000
Division	mV / V	0.0004	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.014 ≤ 0.028
Excitation	-Recommended -Maximum	V V	10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ	420 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to + 40	
Operating Temperature Range	°C	-30 to + 80	
Material	-	Stainless steel	
Cable Specification	-	Ø5 x 4P x 3m (Urethane)	
Safety Overload	% R.L.	150	
Platform Size	mm	300 x 300	

Dimensions

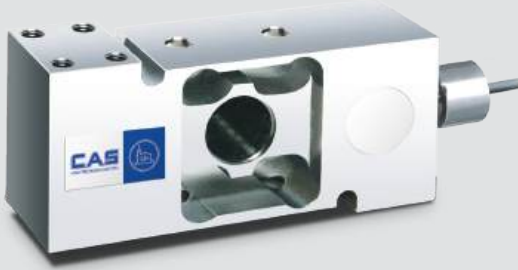
Unit : mm

- Intrinsic Safety



BCEP-EXP

Explosion Proof
Single Point Load Cell (100~300 kgf)



Features

- Off center compensated
- Stainless steel material
- Hermetically sealed structure
- Explosion-proof structure
- Designed according to IP66

Option

- BCEP-EXP / Intrinsic safety (Ex ia IIC T4)
- BCEP-EXP-D / Flameproof (Ex d IIC T4)
- BCEP-EXP-TD / Dust-proof (Ex tD A21 T135°C IP66)

Application

- Bench scale
- Platform scale

Description

BCEP-EXP is a stainless steel Single point type load cell. Capable of withstanding explosions in hazardous areas, this explosion proof load cell is suitable for mid-sized explosion proof scales. Its IP66 approved water proof feature is also highly preferred in wet areas.

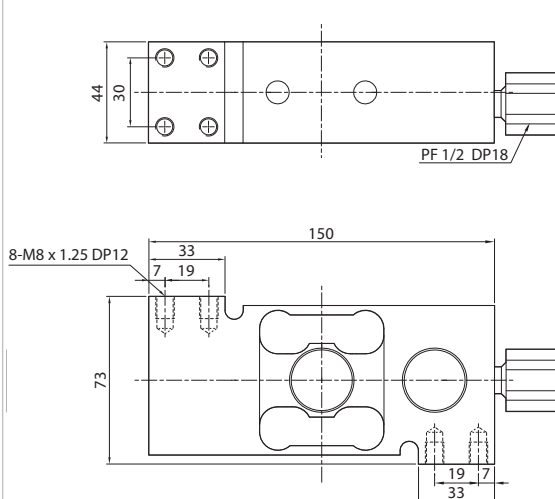
Specifications

Capacity(R.L.)	kgf	100, 200, 300	
Rated Output	mV / V	2.0 ± 0.2	
Zero Balance	mV / V	0.0 ± 0.02	
Accuracy Class	-	A	B
Non-Linearity	% R.O.	≤ 0.02	≤ 0.03
Hysteresis	% R.O.	≤ 0.02	≤ 0.03
Combined Error	% R.O.	≤ 0.02	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.017	≤ 0.03
Return for 30min.	% R.O.	≤ 0.017	≤ 0.03
Resolution	-	≤ 1/5000	≤ 1/3000
Division	mV / V	0.0004	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.014 ≤ 0.028 ≤ 0.011 ≤ 0.014
Excitation	-Recommended -Maximum	V V	10 28
Resistance	-Input -Output -Insulation	Ω Ω MΩ	420 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to + 40	
Operating Temperature Range	°C	-30 to + 80	
Material	-	Stainless steel	
Cable Specification	-	Ø5 x 4P x 3m (Urethane)	
Safety Overload	% R.L.	150	
Platform Size	mm	400 x 500	

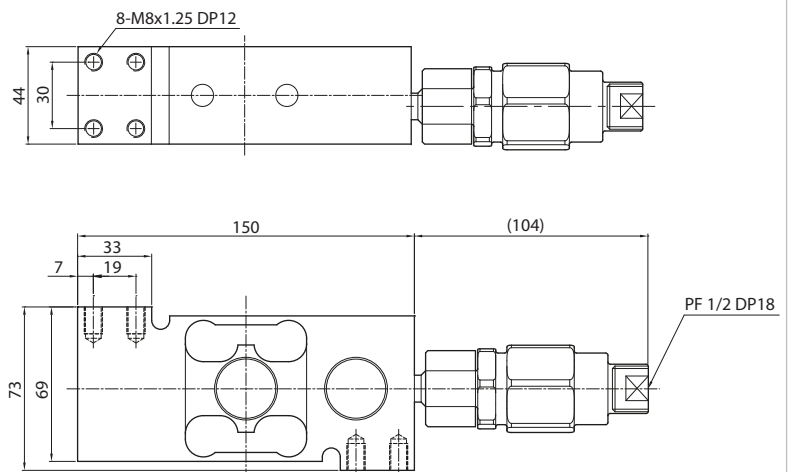
Dimensions

Unit : mm

► Intrinsic Safety



► Flameproof, Dust-proof



BCEPL-EXP

Explosion Proof
Single Point Load Cell (10~100kgf)



Features

- Off center compensated
- Stainless steel material
- Hermetically sealed structure
- Explosion-proof structure
- Designed according to IP66

Option

- BCEPL-EXP-D / Flameproof(Ex db IIC T6 Gb)
- BCEPL-EXP-TD / Dust-proof(Ex tD A21 T85°C IP68)

Application

- Platform scale

Description

BCEP-EXP is a stainless steel single point type load cell. Capable of withstanding explosions in hazardous areas, this explosion proof load cell is suitable for mid-sized explosion proof scales. Its IP68 approved water proof feature is also highly preferred in wet areas.

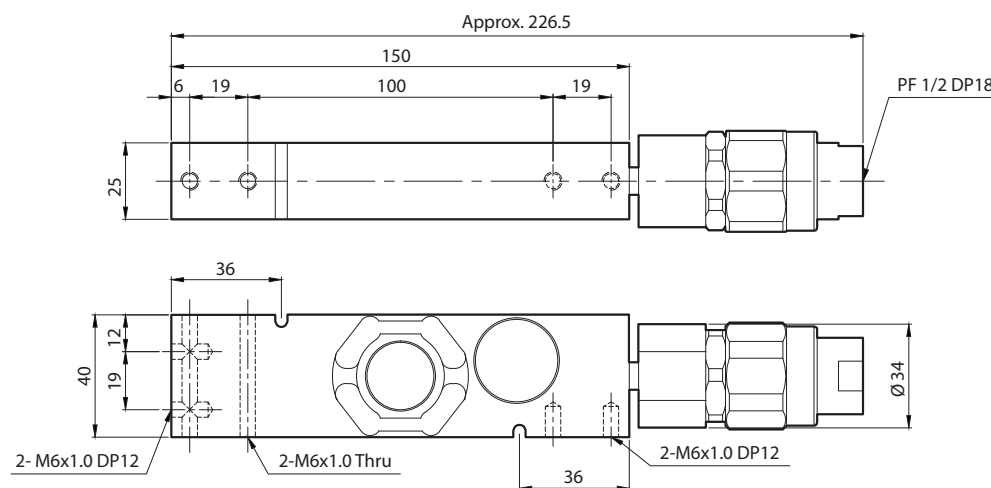
Specifications

Capacity(R.L.)	kgf	10, 20, 50, 100
Rated Output	mV / V	2.0 ± 0.2
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.03
Hysteresis	% R.O.	≤ 0.03
Combined Error	% R.O.	≤ 0.03
Repeatability	% R.O.	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/3000
Division	mV / V	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.028 ≤ 0.015
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		400 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Stainless steel
Cable Specification	-	Ø5 x 4P x 3m (Urethane)
Safety Overload	% R.L.	150
Platform Size	mm	300 x 300

Dimensions

Unit : mm

- Flameproof, Dust-proof



BCC | Single Point Load Cell



Features

- Off center compensated
- High accuracy
- Anodized aluminum construction
- Designed according to IP67

Application

- Low-capacity dynamic weighing

Description

BCC-10,15L is an aluminum material single point type load cell. It is suitable for low-capacity load cells and dynamic weighing products such as auto checkers.

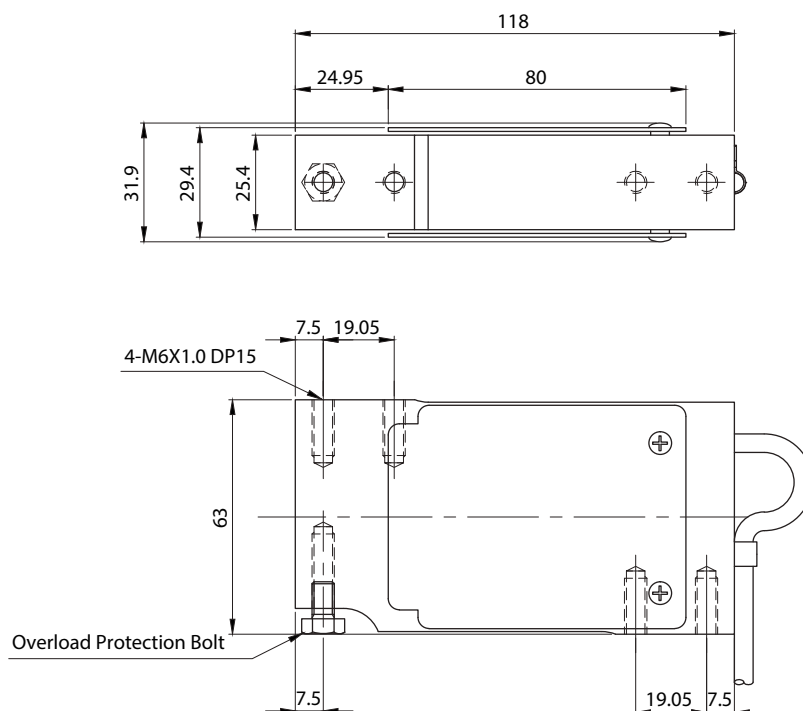
Specifications

Capacity(R.L.)	kgf	10, 15
Rated Output	mV / V	2 ± 0.2
Zero Balance	mV / V	0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.03
Hysteresis	% R.O.	≤0.03
Combined Error	% R.O.	≤0.03
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.03
Return for 30min.	% R.O.	≤0.03
Resolution	-	1/3000
Division	mV / V	0.00066
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤0.05 ≤0.05
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		400 ± 20 350 ± 3.5 >2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Aluminum
Cable Specification	-	Ø5 x 4P x 5m (PVC)
Safety Overload	% R.L.	150

Dimensions

Unit : mm

► BCC



HIGH PRECISION LOAD CELL



Single Ended Beam Load Cell

CAS is a leading manufacturer of weighing and measurement tools, and provides High Accuracy and High Precision Load Cells suitable for Industrial Areas.

[BSA / BSB / BSS / BSS-EXP / BS / HBS / HBS-EXP / ZBSHR]



BSASingle Ended Beam
Load Cell**Features**

- Nickel plated steel construction
- Designed according to IP66

Option

- TW bolt type accessory (250kgf~2tf / 3~5tf)
- TWE ball type accessory (250kgf~2tf / 3~5tf)
- OIML C3 class approved (OIML R60)
- NTEP Class III 5000M approved

Application

- Platform scale
- Tank, hopper scale

Description

BSA is a single ended beam type load cell of steel material. It is compatible with platform, hopper, tank scales, and a wide variety of other scale types.

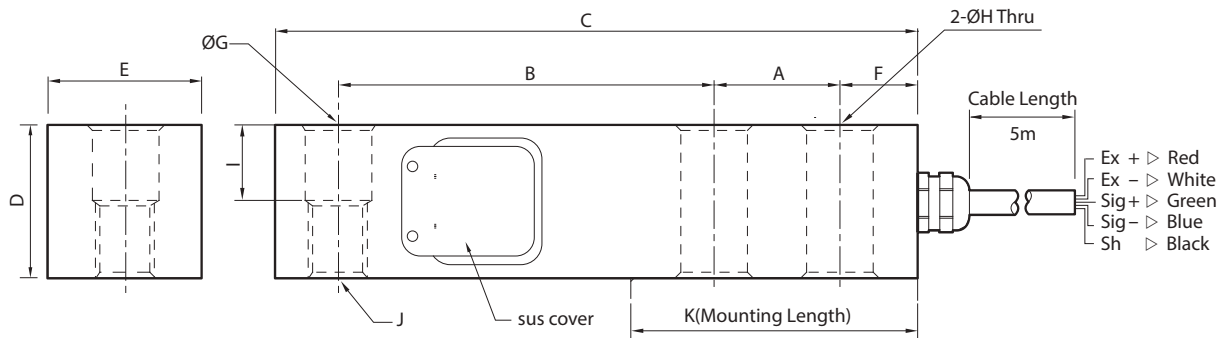
Specifications

Capacity(R.L.)	kgf	250, 500, 1K, 2K, 3K, 5K	
Rated Output	mV / V	3.0 ± 0.0075	
Zero Balance	mV / V	0.0 ± 0.03	
Accuracy Class	-	C3	-
Non-Linearity	% R.O.	≤ 0.025	≤ 0.03
Hysteresis	% R.O.	≤ 0.025	≤ 0.03
Combined Error	% R.O.	≤ 0.025	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.017	≤ 0.03
Return for 30min.	% R.O.	≤ 0.017	≤ 0.03
Resolution	-	≤ 1/4000	≤ 1/3000
Division	mV / V	0.00075	0.001
Temperature Effect on	-Zero Value	%/10°C	≤ 0.014
	-Output Value	%/10°C	≤ 0.011
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	350 ± 3.5
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range		°C	-10 to +40
Operating Temperature Range		°C	-30 to +80
Material		-	Steel
Cable Specification		-	Ø5.4 x 4P x 3m (PVC) (Option) Ø5.4 x 4P x 5m (Urethane)
Safety Overload		% R.L.	150

Dimensions

► BSA

Unit : mm

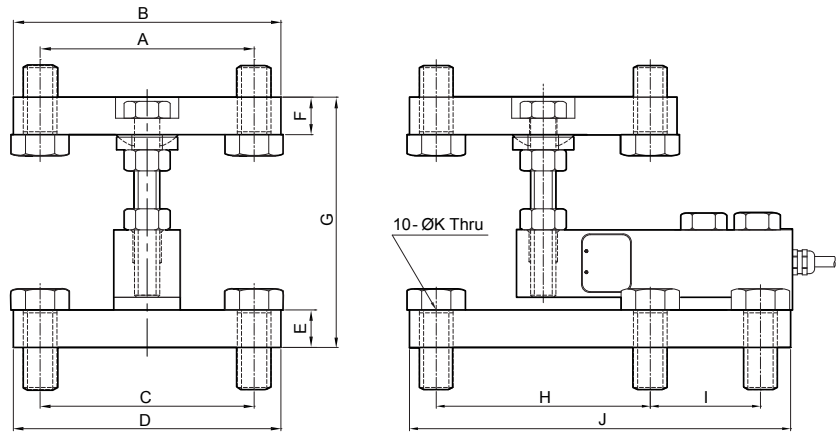


Capa.	A	B	C	D	E	F	G	H	I	J	K	Cable (m)
250kgf~2tf	25.4	76.2	130	32	32	15.8	13.5	13.5	16	M12 x 1.75	57	3 (option) 5
3~5tf	38.1	95.3	171.5	38	38	19	20	20	19	M18 x 1.5	76.1	

Unit : mm

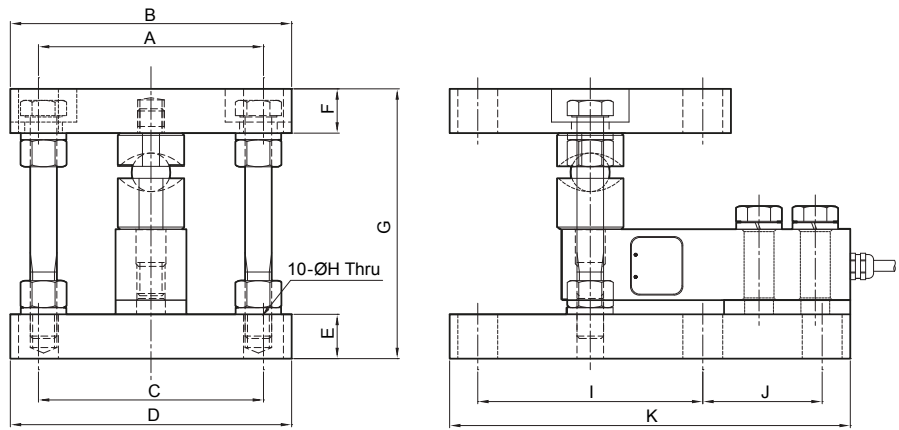
Accessory Dimensions

► BSA-TW



Capa.	A	B	C	D	E	F	G	H	I	J	K
250kgf~2tf	101.6	127	101.6	127	17.8	17.8	118.8	101.6	52.3	180.9	17
3~5tf	101.6	127	101.6	127	23.9	23.9	142.4	101.6	82.5	215.9	17

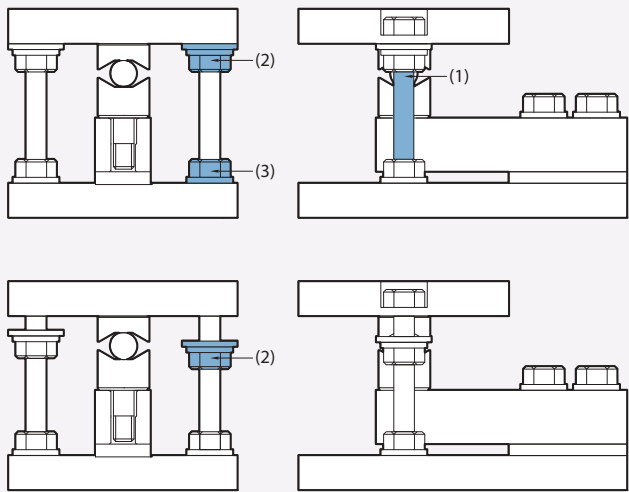
► BSA-TWE



Capa.	A	B	C	D	E	F	G	H	I	J	K
250kgf~2tf	101.6	127	101.6	127	20	20	121.8	18	101.6	53.9	180.9
3~5tf	101.6	127	101.6	127	24	26	156.15	18	101.6	88.9	215.9

Installation method

► BSA



1. Twist Hexagonal Bolt (1) on Mounting Plate.
2. Place Hexagonal Nuts (2), (3) on both ends as shown in image.
3. Squeeze Hexagonal Nuts and Bolt as shown in step 1 and 2 of image.
4. Install Load Cell with BallCup.

1. Slowly Twist Hexagonal Bolt in the opposite direction.
2. Repeat the above step on the Hexagonal Nut on the opposite side.
3. Unwinding the Hexagonal Nut without causing any disturbance in the application of weight placed on element is a crucial part of this step.
4. Replace (2) with a Hexagonal Nut that can adjust its placement.

BSB**Single Ended Beam
Load Cell****Features**

- Nickel plated steel construction
- Designed according to IP66

Option

- TW Bolt Type accessory (250kgf~2tf / 3~5tf)
- TWE Ball Type accessory (250kgf~2tf / 3~5tf)

Application

- Platform scale
- Tank, Hopper scale

Description

BSB is a single ended beam type load cell of steel material. It is compatible with platform, hopper, tank scales and a great variety of other scale types.

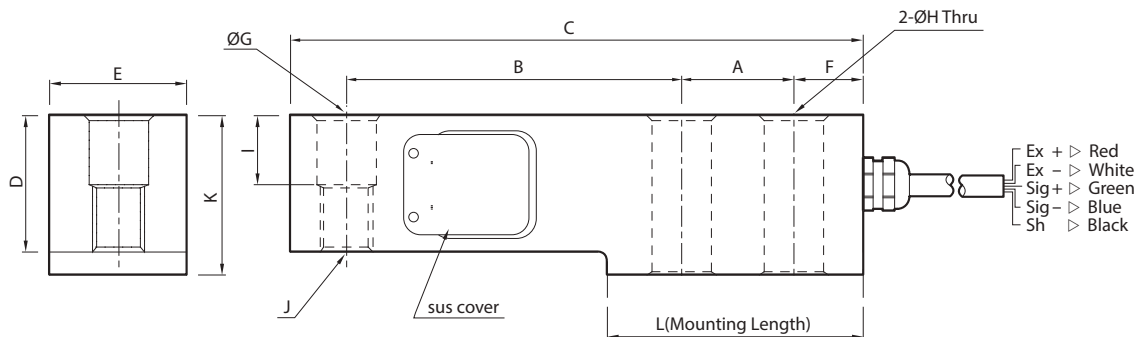
Specifications

Capacity(R.L.)	kgf	250, 500, 1K, 2K, 3K, 5K, 10K
Rated Output	mV / V	3.0 ± 0.0075
Zero Balance	mV / V	0.0 ± 0.03
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.03
Hysteresis	% R.O.	≤ 0.03
Combined Error	% R.O.	≤ 0.03
Repeatability	% R.O.	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/3000
Division	mV / V	0.001
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.028 ≤ 0.015
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		350 ± 3.5 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel
Cable Specification	-	Ø5.4 x 4P x 3m (PVC), 5m (3~5tf), 10m (10tf)
Safety Overload	% R.L.	150

Dimensions

Unit : mm

► BSB

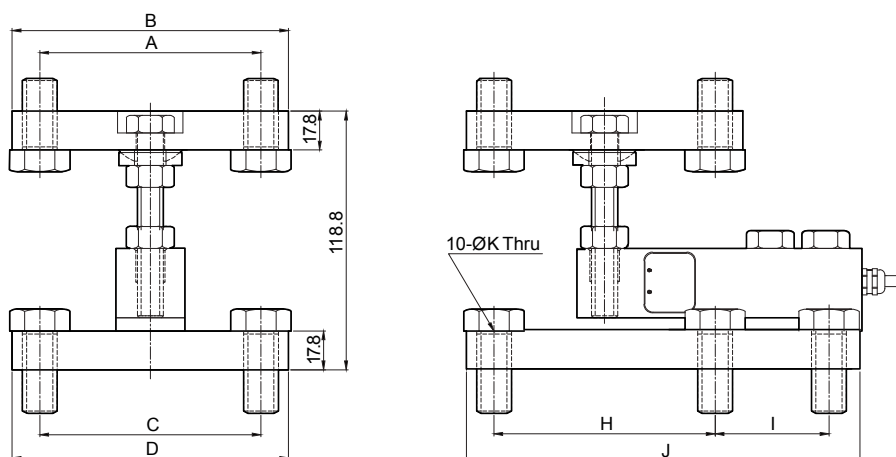


Capa.	A	B	C	D	E	F	G	H	I	J	K	L	Cable (m)
250kgf~2tf	25.4	76.2	131	32	31.8	16.7	13.5	13.5	16	M12 x 1.75	38	57.2	3
3~5tf	38.2	95.3	172.5	38	38	20	20	20	19	M18 x 1.5	44.5	76.2	5
10tf	50.8	120.7	223.3	50.8	50.8	26.4	26.2	26.2	25.4	M24 x 2	57.2	101.6	10

Unit : mm

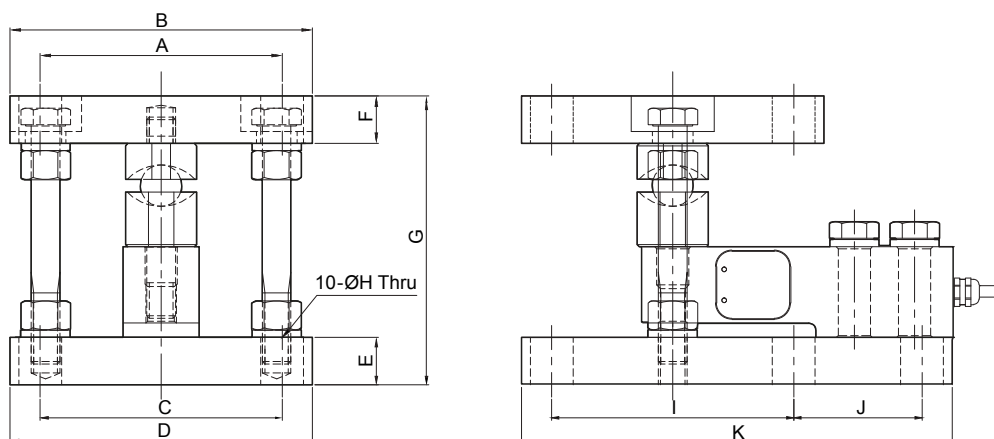
Accessory Dimensions

► BSB-TW



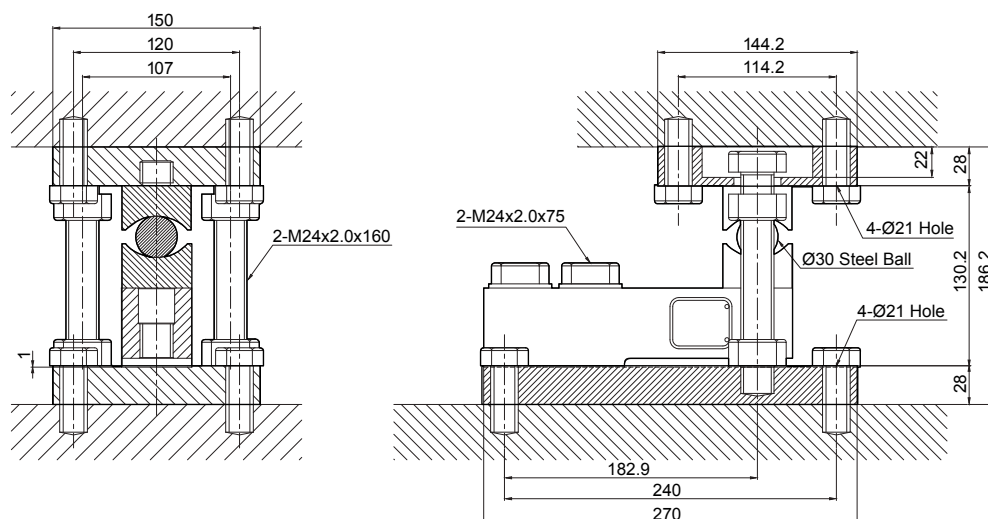
Capa.	A	B	C	D	E	F	G	H	I	J	K
250kgf~2tf	101.6	127	101.6	127	17.8	17.8	118.8	101.6	52.3	180.9	17
3~5tf	101.6	127	101.6	127	23.9	23.9	142.4	101.6	82.5	215.9	17

► BSB-TWE



Capa.	A	B	C	D	E	F	G	H	I	J	K
250kgf~2tf	101.6	127	101.6	127	20	20	121.8	18	101.6	53.9	180.9
3~5tf	101.6	127	101.6	127	24	26	156.15	18	101.6	88.9	215.9

► BSB-TWE (10t)



BSSSingle Ended Beam
Load Cell

Features

- Stainless steel
- Hermetically sealed structure
- Designed according to IP68

Option

- TW bolt type accessory (250kgf~2tf / 3~5tf)
- TWE ball type accessory (250kgf~2tf / 3~5tf)
- OIML C3 approved (OIML R60)
- NTEP class III 5000M approved

Application

- Platform scale
- Tank, Hopper scale

Description

BSS is a stainless steel single ended beam type load cell, BSS is a low profile hermetically-sealed type structure that makes it compatible with platform, hopper, tank scales and a variety of other scales.

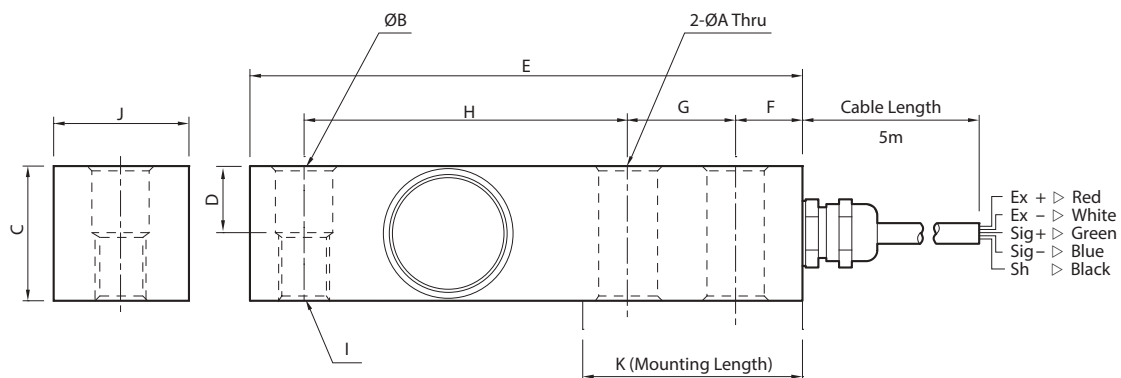
Specifications

Capacity(R.L.)	kgf	500, 1K, 2K, 3K, 5K	
Rated Output	mV / V	2.0 ± 0.005	
Zero Balance	mV / V	0.0 ± 0.02	
Accuracy Class	-	C3	
Non-Linearity	% R.O.	≤ 0.025	≤ 0.03
Hysteresis	% R.O.	≤ 0.025	≤ 0.03
Combined Error	% R.O.	≤ 0.025	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.017	≤ 0.03
Return for 30min.	% R.O.	≤ 0.017	≤ 0.03
Resolution	-	≤ 1/4000	≤ 1/3000
Division	mV / V	0.005	0.0067
Temperature Effect on	-Zero Value	%/10°C	≤ 0.014
	-Output Value	%/10°C	≤ 0.011
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	350 ± 3.5
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range		°C	-10 to +40
Operating Temperature Range		°C	-30 to +80
Material		-	Stainless steel
Cable Specification		-	Ø5.4 x 4P x 5m (Urethane)
Safety Overload		% R.L.	150.

Dimensions

► BSS

Unit : mm



Capa.	A	B	C	D	E	F	G	H	I	J	K	Cable (m)
500kgf~2tf	13.5	13.5	31.7	15.8	130	15.8	25.4	76.1	M12 x 1.75	31.7	57	5
3~5tf	20	20	38.1	19.1	171.5	19	38.1	95.3	M18 x 1.5	38.1	76.1	

BSS-EXP

Explosion Proof
Single Ended Beam Load Cell



Features

- Stainless steel
- Low profile
- Hermetically sealed structure
- Designed according to IP66

Option

- TW bolt type accessory (250kgf~2tf / 3~5tf)
- TWE ball type accessory (250kgf~2tf / 3~5tf)
- BSS-EXP / Intrinsic safety (Ex ia IIC T4)
- BSS-EXP-D / flameproof (Ex d IIC T6)
- BSS-EXP-TD / dust-proof (Ex td A21 T135°C IP66)

Application

- Platform scale
- Tank, Hopper scale

Description

BSS-EXP is a stainless steel single ended beam type load cell. Capable of withstanding explosions in hazardous areas, this explosion proof load cell is suitable for mid-sized explosion proof platform, hopper, tank and many other types of scales. Its IP66 approved water proof feature is also highly preferred in wet areas.

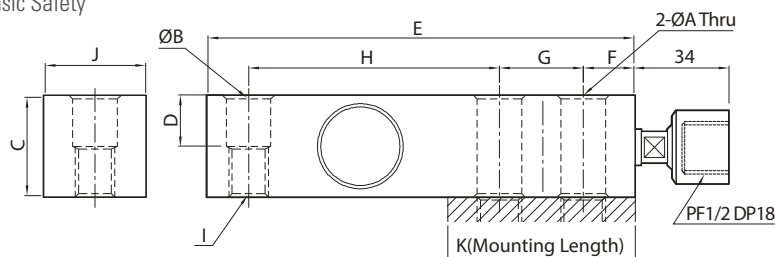
Specifications

Capacity(R.L.)	kgf	500, 1K, 2K, 3K, 5K	
Rated Output	mV / V	2.0 ± 0.005	
Zero Balance	mV / V	0.0 ± 0.02	
Accuracy Class	-	A	B
Non-Linearity	% R.O.	≤ 0.025	≤ 0.03
Hysteresis	% R.O.	≤ 0.025	≤ 0.03
Combined Error	% R.O.	≤ 0.025	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.017	≤ 0.03
Return for 30min.	% R.O.	≤ 0.017	≤ 0.03
Resolution	-	≤ 1/5000	≤ 1/3000
Division	mV / V	0.0004	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.014 ≤ 0.011
Excitation	-Recommended -Maximum	V V	10 28
Resistance	-Input -Output -Insulation	Ω Ω MΩ	350 ± 3.5 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to + 40	
Operating Temperature Range	°C	-30 to + 80	
Material	-	Stainless steel	
Cable Specification	-	Ø5 x 4P x 5m (Urethane)	
Safety Overload	% R.L.	150	

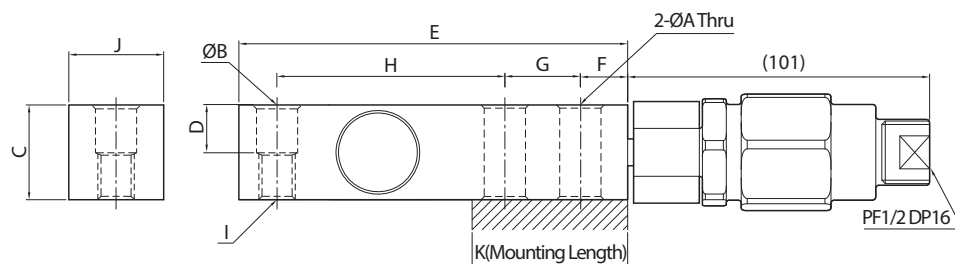
Dimensions

Unit : mm

► Intrinsic Safety



► Flameproof, Dust-proof

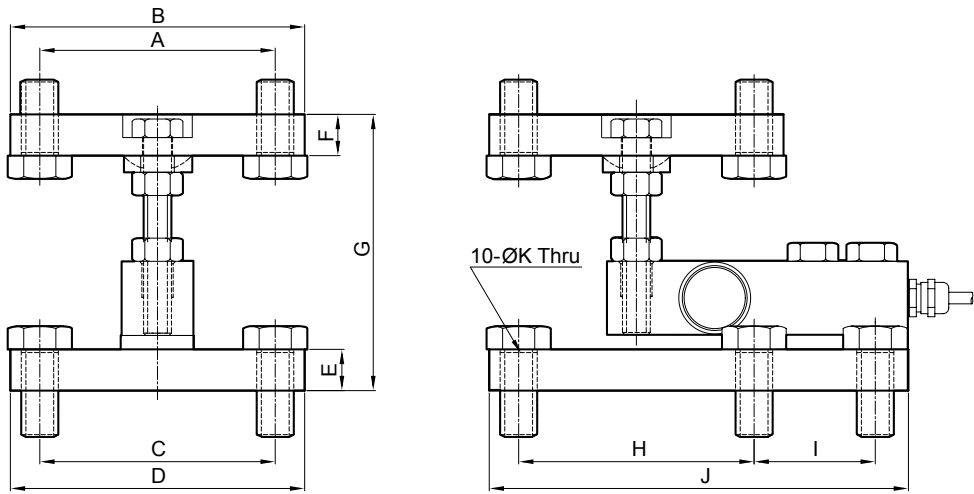


Capa.	A	B	C	D	E	F	G	H	I	J	K	Cable (m)
500kgf~2tf	13.5	13.5	31.7	15.8	130	15.8	25.4	76.1	M12 x 1.75	31.7	52	5
3~5tf	20	20	38.1	19.1	171.5	19	38.1	95.3	M18 x 1.5	38.1	76.2	

Unit : mm

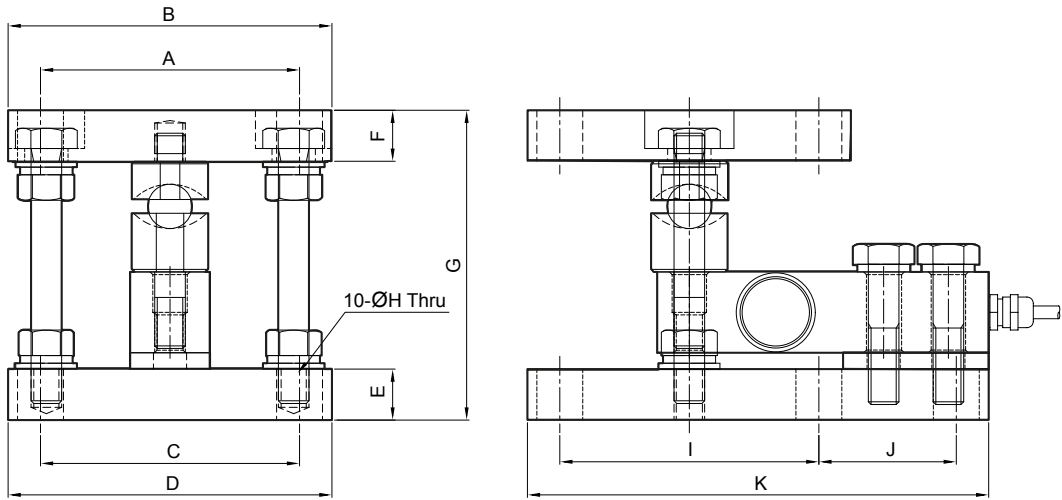
Accessory Dimensions

► BSS-TW



Capa.	A	B	C	D	E	F	G	H	I	J	K
500kgf~2tf	101.6	127	101.6	127	17.8	17.8	118.8	101.6	52.3	180.9	17
3~5tf	101.6	127	101.6	127	23.9	23.9	142.4	101.6	82.5	215.9	17

► BSS-TWE



Capa.	A	B	C	D	E	F	G	H	I	J	K
500kgf~2tf	101.6	127	101.6	127	20	20	121.8	18	101.6	53.9	180.9
3~5tf	101.6	127	101.6	127	24	26	156.15	18	101.6	88.9	215.9

BS | Single Ended Beam Load Cell (250kgf~10tf)



Features

- Low price model
- Nickel plated steel construction
- Designed according to IP65

Option

- Ball type accessory (250kgf~2tf, 5tf, 10tf)

Application

- Platform scale
- Tank, Hopper scale

Description

BS is a single ended beam type load cell of steel material. Compression type of low profile structure is suitable for various use environments such as platform, hopper, and tank size.

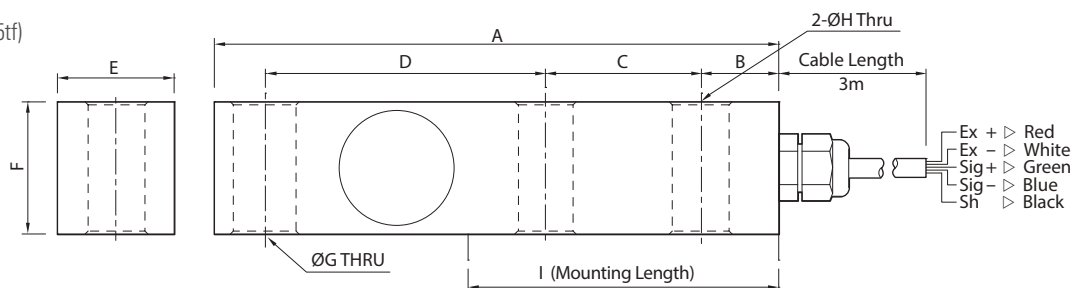
Specifications

Capacity(R.L.)	kgf	250, 500	1K, 2K, 5K, 10K
Rated Output	mV / V	1.5 ± 0.0037	2.0 ± 0.005
Zero Balance	mV / V	0.0 ± 0.015	0.0 ± 0.02
Accuracy Class	-	-	-
Non-Linearity	% R.O.	≤ 0.03	≤ 0.03
Hysteresis	% R.O.	≤ 0.03	≤ 0.03
Combined Error	% R.O.	≤ 0.03	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.03	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03	≤ 0.03
Resolution	-	≤ 1/3000	≤ 1/3000
Division	mV / V	0.0005	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.028 ≤ 0.015
Excitation	-Recommended -Maximum	V V	10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ	400 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40	-10 to +40
Operating Temperature Range	°C	-30 to +80	-30 to +80
Material	-	Steel	Steel
Cable Specification	-	Ø5.4 x 4P x 3m (Urethane), 10m(10tf)	Ø5.4 x 4P x 3m (Urethane), 10m(10tf)
Safety Overload	% R.L.	150	150
Safety Platform Size	mm	4 - Point Platform	4 - Point Platform

Dimensions

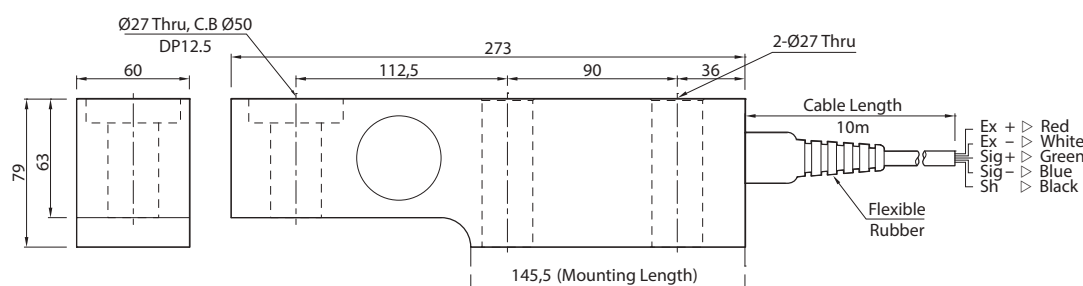
Unit : mm

► BS (250kgf~5tf)



Capa.	A	B	C	D	E	F	G	H	I	Cable (m)
250kgf~2tf	145	20	40	71.9	30	34	16	14.5	72	3
5tf	205	25	55	105	38	48	20.5	20.5	100	10

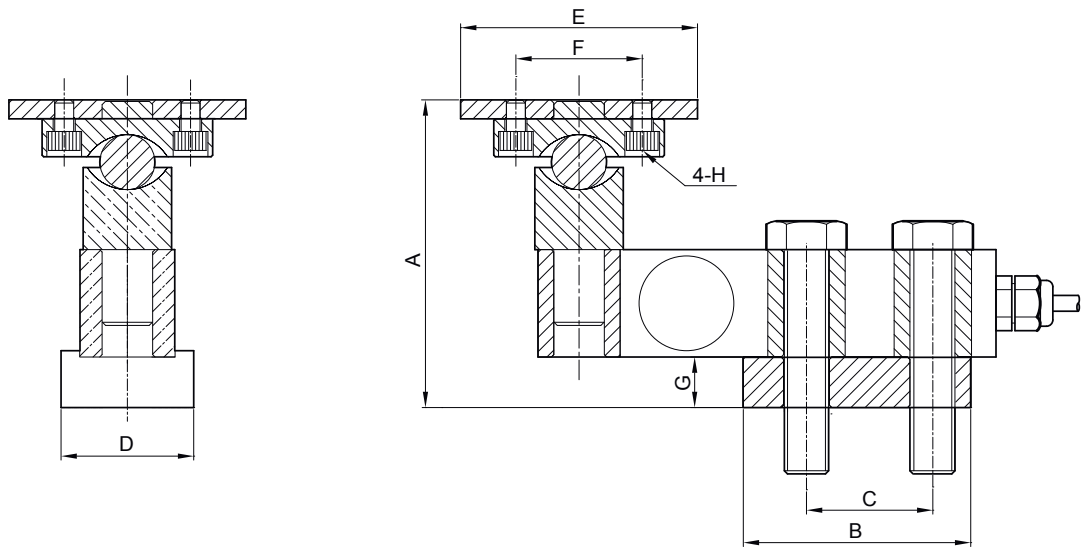
► BS (10tf)



Unit : mm

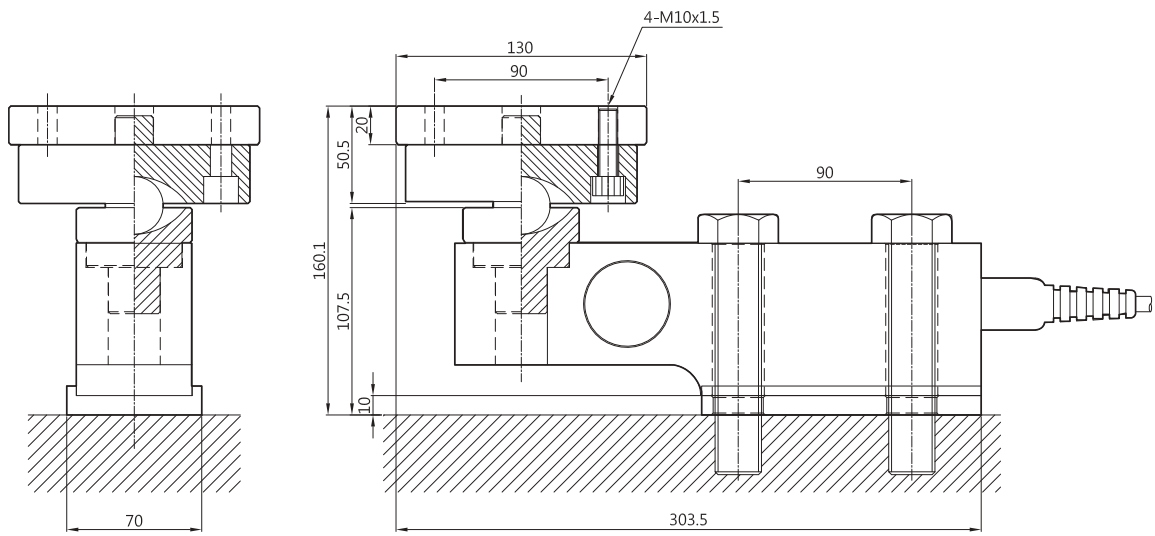
Accessory Dimensions

► BS (250kgf~5tf)



Capa.	A	B	C	D	E	F	G	H
250kgf~2tf	97.4	72	40	42	75	40	16	M6 x 1.0
5tf	134	100	55	48	100	50	16	M10 x 1.5

► BS (10tf)



HBS

Single Ended Beam Load Cell



Description

The HBS is a stainless steel single ended beam type load cell. It is a type of compressive structure that is suitable for various use environments such as platform, hopper and tank size.



Features

- Stainless steel structure
- Hermetically sealed structure
- Designed according to IP67

Option

- Ball type accessory
- OIML C3 approved (OIML R60)

Application

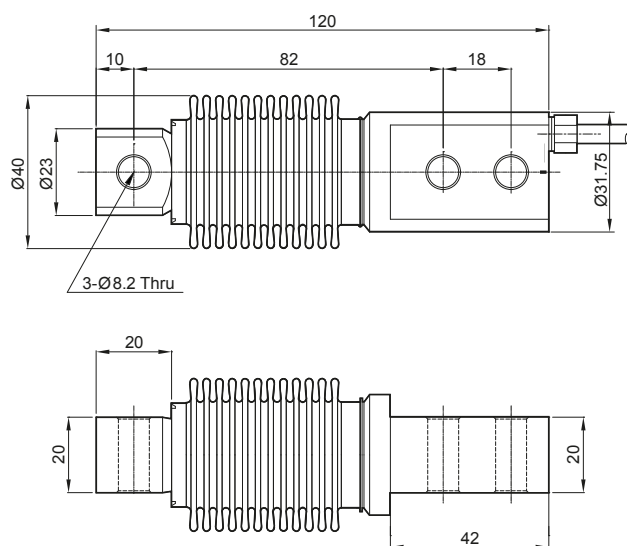
- Platform scale
- Tank, Hopper scale

Specifications

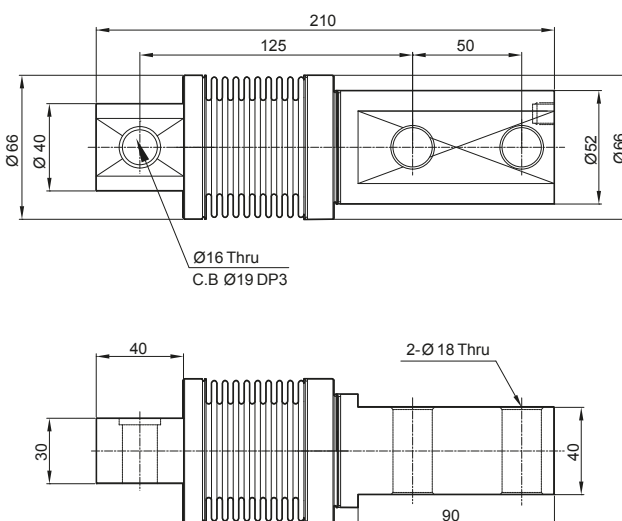
Capacity(R.L.)	kgf	10, 20, 50, 100, 200, 250, 500, 1K, 2K
Rated Output	mV / V	2.0 ± 0.005
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	C3
Non-Linearity	% R.O.	≤ 0.02
Hysteresis	% R.O.	≤ 0.02
Combined Error	% R.O.	≤ 0.02
Repeatability	% R.O.	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.017
Return for 30min.	% R.O.	≤ 0.017
Resolution	-	≤ 1/5000
Division	mV / V	0.0004
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Stainless steel
Cable Specification	-	Ø5.4 x 4P x 3m (Urethane)
Safety Overload	% R.L.	150

Dimensions

► HBS (10~500kgf)



► HBS (1~2tf)



Unit : mm

HBS-EXP

Explosion Proof
Single Ended Beam Load Cell



Features

- Stainless steel structure
- Hermetically sealed structure
- Explosion proof structure
- Designed according to IP68

Option

- Ball type accessory
- HBS-EXP / Intrinsic safety (Ex ia IIC T4)
- HBS-EXP-D / Flameproof (Ex d IIC T6)
- HBS-EXP-TD / Dust-proof (Ex td A21 T85°C)

Application

- Platform scale
- Tank, Hopper scale

Description

HBS-EXP is a stainless steel single ended beam type load cell. Designed with an explosion proof structure, it is suitable for various use environments such as explosion-resistant platforms, hoppers, and tank scale.

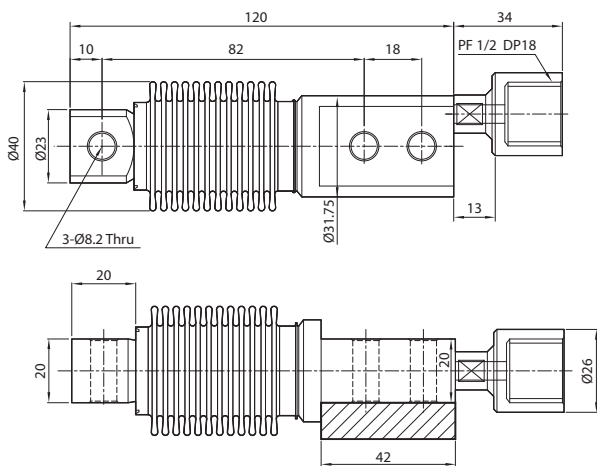
Specifications

Capacity(R.L.)	kgf	10, 20, 50, 100, 200, 250, 500
Rated Output	mV / V	2.0 ± 0.005
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	A B
Non-Linearity	% R.O.	≤ 0.02 ≤ 0.03
Hysteresis	% R.O.	≤ 0.02 ≤ 0.03
Combined Error	% R.O.	≤ 0.02 ≤ 0.03
Repeatability	% R.O.	≤ 0.01 ≤ 0.01
Creep for 30min.	% R.O.	≤ 0.017 ≤ 0.03
Return for 30min.	% R.O.	≤ 0.017 ≤ 0.03
Resolution	-	≤ 1/5000 ≤ 1/3000
Division	mV / V	0.0004 0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C ≤ 0.014 ≤ 0.028 %/10°C ≤ 0.011 ≤ 0.015
Excitation	-Recommended -Maximum	V 10 V 28
Resistance	-Input -Output -Insulation	Ω 400 ± 20 Ω 350 ± 3.5 MΩ > 2000
Compensated Temperature Range	°C	-10 to + 40
Operating Temperature Range	°C	-30 to + 80
Material	-	Stainless steel
Cable Specification	-	Ø5 x 4P x 3m (Urethane)
Safety Overload	% R.L.	150

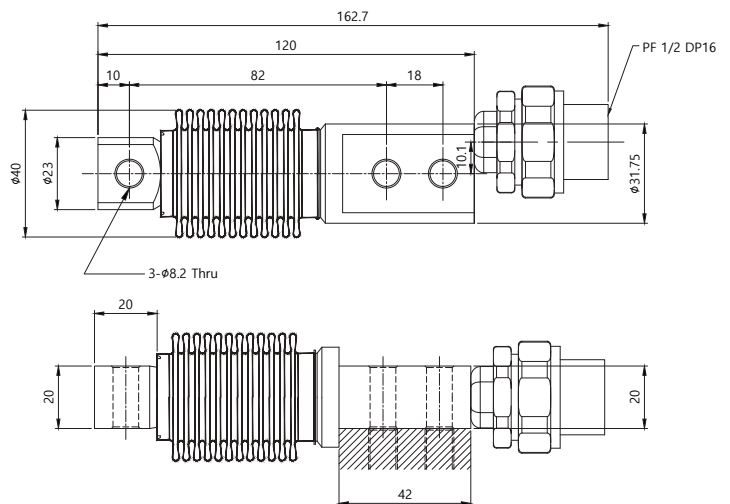
Dimensions

Unit : mm

► Intrinsic Safety



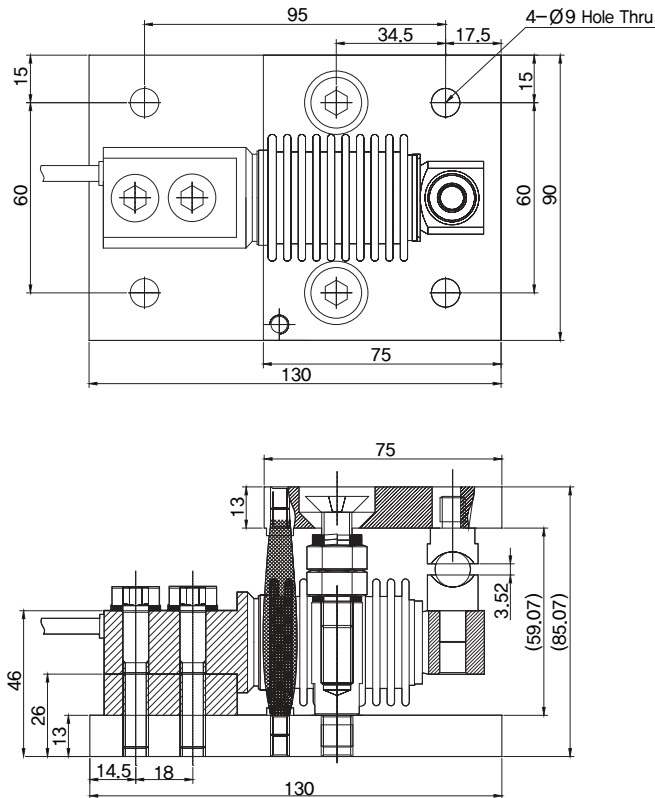
► Flameproof, Dust-proof



Unit : mm

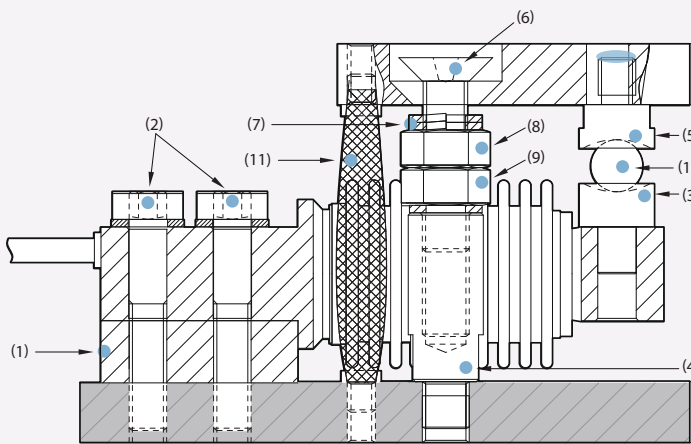
Accessory Dimensions

► HBS



Installation method

► HBS

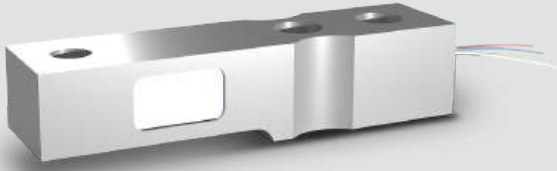


NO.	
(1)	Spacer
(2)	six-piece wrench bolt & washer
(3)	Lower ball cup
(4)	Supporter
(5)	Upper ball cup
(6)	six-piece dish head wrench bolt
(7)	Washer
(8)	Hex nut
(9)	Hex nut(Thin)
(10)	Steel ball
(11)	By-pass strap

1. Attach the spacer (1) to the base plate, and then assemble the load cell (6-angle wrench bolt and washer (2)).
2. Assemble the lower ball cup (3) on the road cell.
3. After assembling the support (4) on the base plate, apply an anti-freeze solution.
4. After assembling the upper ball cup (5) on the upper plate, apply the anti-freeze solution.
5. Tighten the six-piece dish head wrench bolt (M10) (6) on the upper plate and then the M10 Washer (7) and the M10 Nut (8) (9).
6. Combine the six - side dish head wrench bolt (M10) (6) of the upper plate with the booster (4) of the base plate (approx. 10 mm/min_4 times).
7. Insert the ball (10) between the joined ball cup (3) (5).
8. Tighten the nut (9) so that it is fully secured to the support (4) and apply an anti-freeze solution.
9. Connect By-pass strap (11) to the upper plate and the base plate.
10. Lower the nut (8) and adjust it appropriately to obtain approval for the load.

ZBSHR

Single Ended Beam Load Cell



Features

- Nickel plated steel construction
- Designed according to IP66

Application

- Load cells for forklift safety diagnostics

Description

ZBSHR-1T is a steel material single ended beam type load cell. It's a compression type with a low-profile structure, allowing the summation of 4 or more units for use in applications such as fork lifts and similar operations.

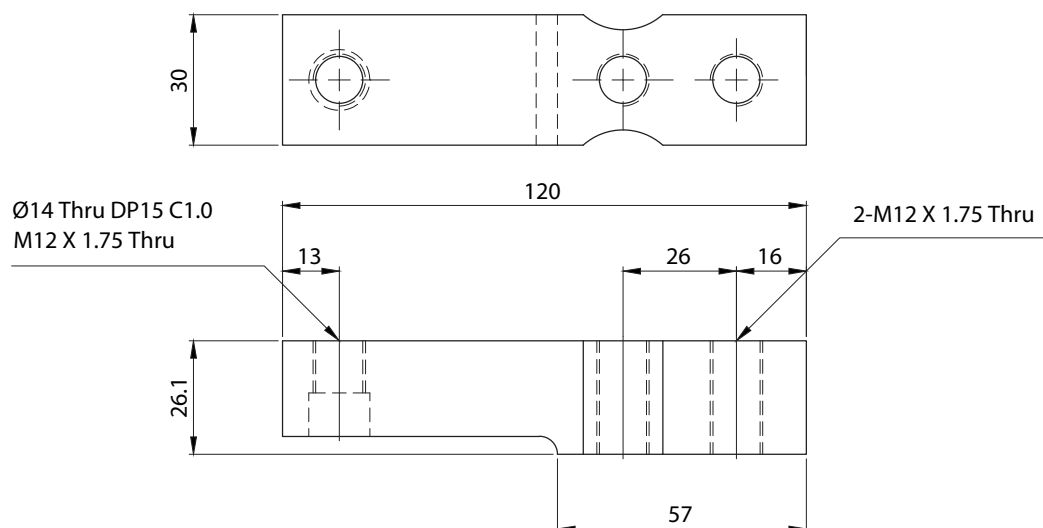
Specifications

Capacity(R.L.)	tf	1
Rated Output	mV / V	1.5 ± 0.01
Zero Balance	mV / V	0 ± 0.015
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.05
Hysteresis	% R.O.	≤ 0.05
Combined Error	% R.O.	≤ 0.05
Repeatability	% R.O.	≤ 0.03
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/2000
Division	mV / V	0.00075
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.05 ≤ 0.05
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		400 ± 30 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel
Cable Specification	-	Ø1 x 4P x 60cm (4-Wire)
Safety Overload	% R.L.	150

Dimensions

Unit : mm

► ZBSHR



HIGH PRECISION LOAD CELL



S-Beam Load Cell

CAS has excellent technology in metering, and control, and provides high accuracy and precision load cells for various industrial environments.

[SB / SBA / SBS / SBS-EXP / SBAS / SL]



SB | S-Beam Load Cell



Features

- Tension load cell
- Fully environmental protection
- Mechanical protection with steel cover
- Different in element material,
 - Anodized aluminum(20kgf~250kgf)
 - Nickel plated steel(500kgf~2tf)

Option

- Rod end bearing type accessories
(20 to 500kgf: M12 x 1.75)
(1-2tf: M18 x 1.5)

Application

- Crane scale
- Tension test machine

Description

SB is a tension load cell of aluminium/steel material. Steel covers are attached to the outside of the load cell to protect against external shocks. Suitable for tensile scale, tensile material testing machines.

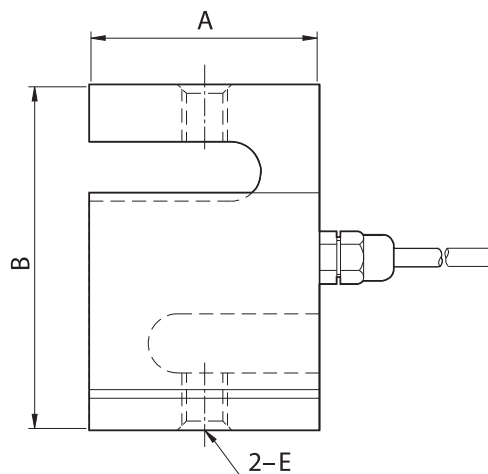
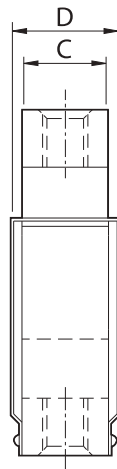
Specifications

Capacity(R.L.)		kgf	20, 50, 75, 100, 200, 250, 500, 1K, 2K
Rated Output	mV / V		2.0 ± 0.005
Zero Balance	mV / V		0.0 ± 0.02
Accuracy Class	-		-
Non-Linearity	% R.O.		≤0.03
Hysteresis	% R.O.		≤0.03
Combined Error	% R.O.		≤0.03
Repeatability	% R.O.		≤0.01
Creep for 30min.	% R.O.		≤0.03
Return for 30min.	% R.O.		≤0.03
Resolution	-		≤1/3000
Division	mV / V		0.00067
Temperature Effect on	-Zero Value	%/10°C	≤0.028
	-Output Value	%/10°C	≤0.015
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	430 ± 40
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range	°C		-10 to +40
Operating Temperature Range	°C		-30 to +80
Material	-		Aluminum(20~250kgf), Steel(500~2000kgf)
Cable Specification	-		Ø5.4 x 4P x 3m (Urethane)
Safety Overload	% R.L.		150

Dimensions

► SB

Unit : mm

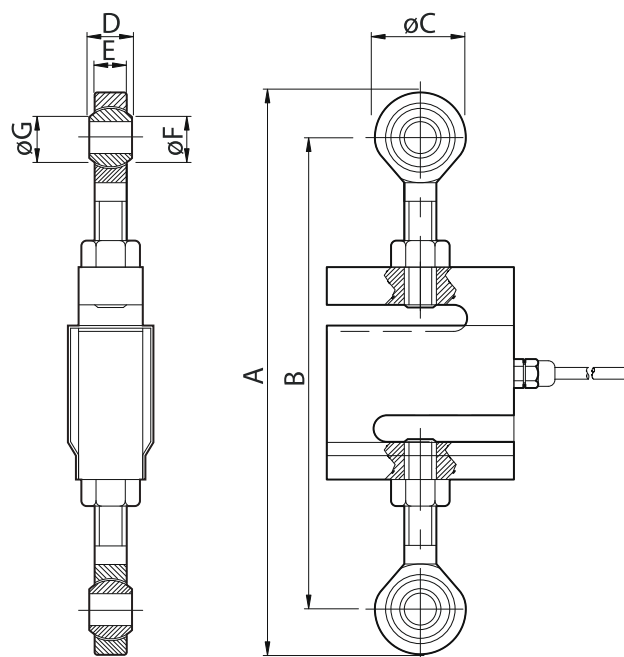


Capa.	A	B	C	D	E	Cable (m)
20~500kgf	70	80	24	32	M12X1.75	3
1~2tf	80	100	30	38	M18 X 1.5	

Unit : mm

Accessory Dimensions

► SB (Rod end bearing)



Capa.	A	B	C	D	E	F	G
20~500kgf	211.6 (Max)	177.6 (Max)	34	16	12	12	15.4
1~2tf	308.6 (Max)	248.6 (Max)	60	23	22	18	21.9

SBA | S-Beam Load Cell



Features

- Tension load cell
- Nickel plated steel construction
- Designed according to IP65

Option

- Obtaining OIML C3 approved (OIML R60)
- NTEP class III 5000S approved (Pound & Imperial thread Ver.)
- Rod end bearing type accessories
(25-100kgf: M6 x 1.0)
(200-1tf: M12 x 1.75)
(2-5tf: M18 x 1.5)

Application

- Crane scale
- Tension test machine

Description

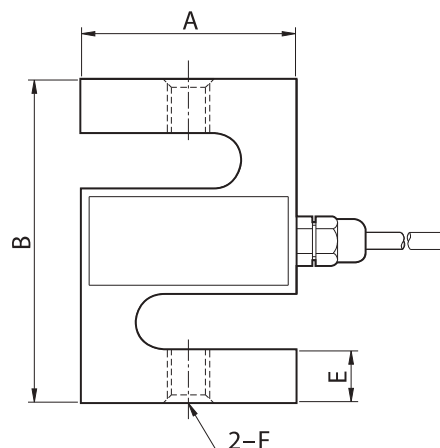
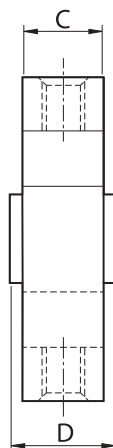
The SBA is a tension load cell of steel material. Suitable for tensile scale, tensile material testing machines.

Specifications

Capacity(R.L.)	kgf	25, 50, 100, 200, 500, 1K, 2K, 3k, 5K
Rated Output	mV / V	3.0 ± 0.3
Zero Balance	mV / V	0.0 ± 0.03
Accuracy Class	-	C3
Non-Linearity	% R.O.	≤0.02
Hysteresis	% R.O.	≤0.02
Combined Error	% R.O.	≤0.02
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.017
Return for 30min.	% R.O.	≤0.017
Resolution	-	≤1/5000
Division	mV / V	0.0006
Temperature Effect on	-Zero Value -Output Value	≤0.028 ≤0.015
Excitation	-Recommended -Maximum	V 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel
Cable Specification	-	Ø5.4 x 4P x 3m (Urethane)
Safety Overload	% R.L.	150

Dimensions

- SBA

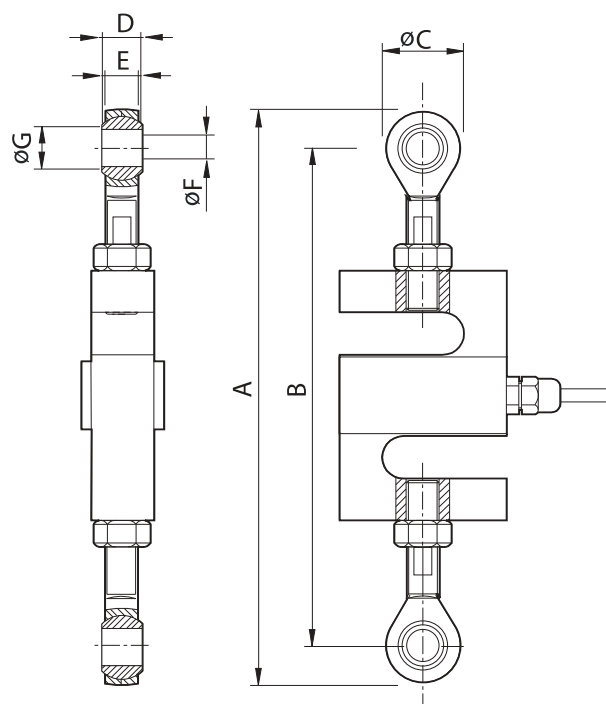


Unit : mm

Capa.	A	B	C	D	E	F	Cable (m)
25-100kgf	50.8	63.5	12.7	20	10.3	M6 X 1	3
200-500kgf	51	76	19	27	12.6	M12 X 1.75	
1tf	51	76	25.4	33	12.6	M12 X 1.75	
2-3tf	77	108	25.4	33	19	M18 X 1.5	
5tf	77	108	25.4	33	19.5	M18 X 1.5	

Accessory Dimensions

► SBA (Rod end bearing)



Capa.	A	B	C	D	E	F	G
25~100 kgf	134.1	115.6	18.5	9	6.8	9	12
200kgf~1tf	211.1	177.1	34	16	12	12	15.4
2~3tf	318	258	60	23	22	18	21.9
5tf	317	257	60	23	22	18	21.9

SBS | S-Beam Load Cell



Features

- Tension load cell
- Stainless steel structure
- Hermetically sealed structure
- Designed according to IP66

Option

- Rod end bearing type accessory
(500kgf: M12 x 1.75)
(1 to 2tf: M18 x 1.5)
(5tf: M24 x 2.0)

Application

- Crane scale
- Tension test machine

Description

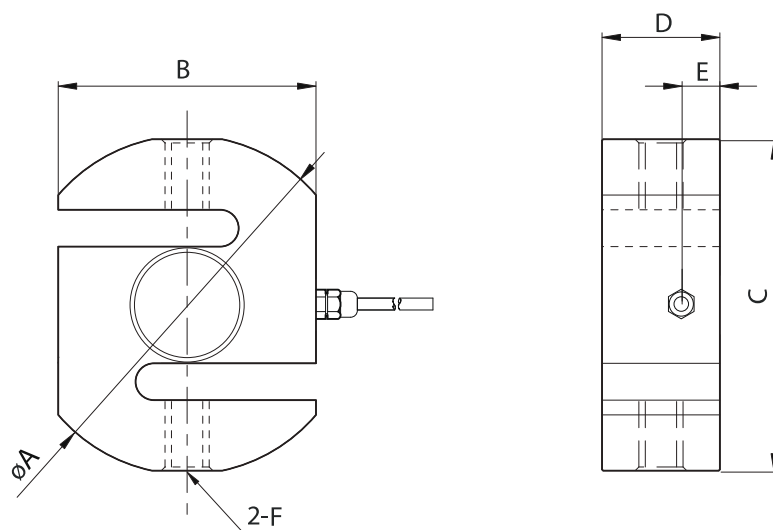
SBS is a stainless steel tension load cell. It is suitable for tensile type scale and tensile type material testing machine. It is made of stainless steel material and has IP66 waterproof and dustproof structure. It is suitable for humid environments.

Specifications

Capacity(R.L.)	kgf	500, 1K, 2K, 5K
Rated Output	mV / V	2.0 ± 0.002
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.05
Hysteresis	% R.O.	≤0.05
Combined Error	% R.O.	≤0.05
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.03
Return for 30min.	% R.O.	≤0.03
Resolution	-	≤1/3000
Division	mV / V	0.001
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤0.03 ≤0.03
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		400 ± 25 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material & Plate	-	Stainless steel
Cable Specification	-	Ø5.4 x 4P x 5m (Urethane)
Safety Overload	% R.L.	150

Dimensions

► SBS



Unit : mm

Capa.	A	B	C	D	E	F	Cable (m)
500kgf	92	70	90	32	10.3	M12 X 1.75	5
1~2tf	92	70	90	32	10.3	M18 X 1.5	
5tf	130	100	120	45	15	M24 X 2	

SBS-EXP

Explosion Proof
S-Beam Load Cell



Features

- Tension load cell
- Stainless steel structure
- Hermetically sealed structure
- Explosion proof structure
- Designed according to IP66

Option

- SBS-EXP / Intrinsic safety explosion(Ex ia IIC T4)
- SBS-EXP-D / Flameproof(Ex db IIC T6 Gb)
- SBS-EXP-TD / Dust-proof(Ex tD A21 T85°C IP68)
- Rod end bearing type accessory

Application

- Crane scale
- Tension test machine

Description

SBS-EXP is a stainless steel tension load cell. Designed as an explosion-proof construction, it is suitable for explosion hazardous areas and is suitable for tensile type scale and tensile type material testing machine. It is made of stainless steel material and has IP66 waterproof and dustproof structure. It is suitable for humid environments.

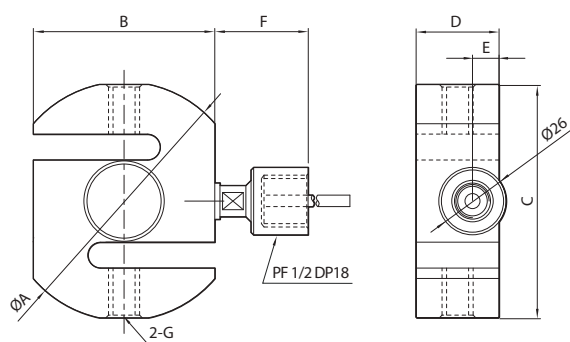
Specifications

Capacity(R.L.)	kgf	500, 1K, 2K, 5K
Rated Output	mV / V	2.0 ± 0.002
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.05
Hysteresis	% R.O.	≤ 0.05
Combined Error	% R.O.	≤ 0.05
Repeatability	% R.O.	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/2000
Division	mV / V	0.001
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.03 ≤ 0.014
Excitation	-Recommended -Maximum	V V
		10 28
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		400 ± 25 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to + 40
Operating Temperature Range	°C	-30 to + 80
Material	-	Stainless steel
Cable Specification	-	Ø5 x 4P x 5m (Urethane)
Safety Overload	% R.L.	150

Dimensions

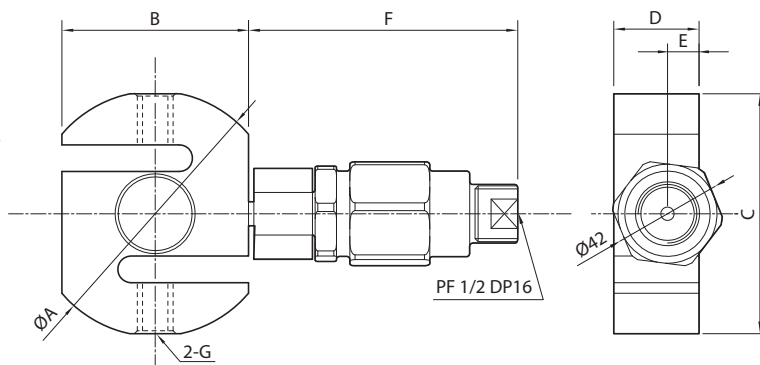
Unit : mm

► Intrinsic safety



Capa.	A	B	C	D	E	F	G	Cable (m)
500kgf	92	70	90	32	10.3	36	M12 x 1.75	5
1~2tf	92	70	90	32	10.3	36	M18 x 1.5	
5tf	130	100	120	45	15	36	M24 x 2.0	

► Flameproof, Dust-proof

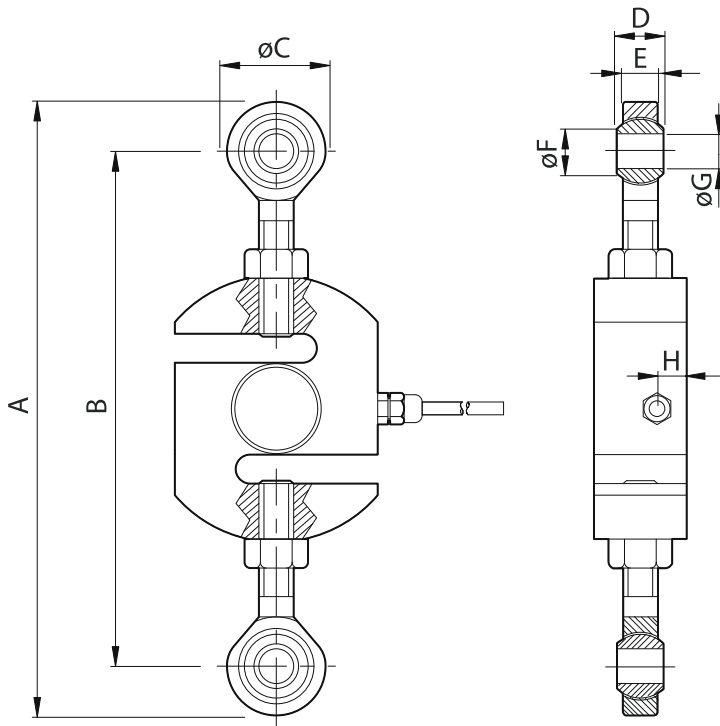


Capa.	A	B	C	D	E	F	G	Cable (m)
500kgf	92	70	90	32	10.3	101	M12 x 1.75	5
1~2tf	92	70	90	32	10.3		M18 x 1.5	
5tf	130	100	120	45	15		M24 x 2.0	

Unit : mm

Accessory Dimensions

► SBS (Rod end bearing)



Capa.	A	B	C	D	E	F	G	H
500kgf	212	178	34	16	12	15.4	12	10.3
1~2tf	299.7	239.7	60	23	22	21.9	18	10.3
5tf	490	388	102	28	27	25.8	22	15

SBAS | S-Beam Load Cell



Features

- Tension load cell
- Miniature load cell
- Mechanical protection with steel cover

Application

- Tension test machine

Description

SBAS is a tension load cell. It is suitable for places where load cell installation spaces is small.

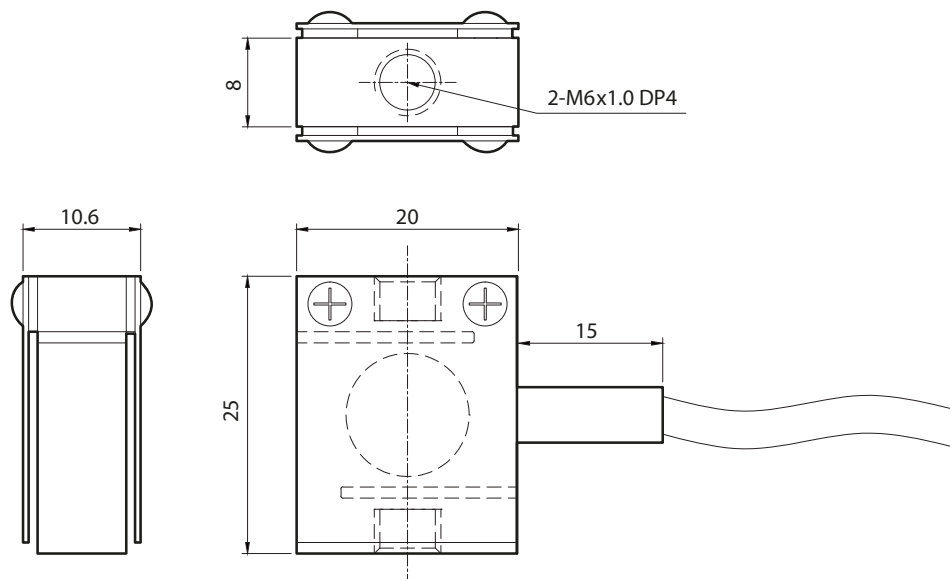
Specifications

Capacity(R.L)		kgf	10
Rated Output	mV / V		1.2 ± 0.12
	mV / V		0.0 ± 0.05
Zero Balance			
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O.	≤ 0.05
		% R.O.	≤ 0.05
		% R.O.	≤ 0.05
		% R.O.	≤ 0.02
		% R.O.	≤ 0.05
		% R.O.	≤ 0.05
		-	$\leq 1/2000$
		mV / V	0.0006
Temperature Effect on	-Zero Value	%/10°C	≤ 0.03
	-Output Value	%/10°C	≤ 0.03
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	400 ± 20
	-Output	Ω	350 ± 3.5
	-Insulation	M Ω	> 2000
Compensated Temperature Range		°C	-10 to +40
Operating Temperature Range		°C	-30 to +80
Material & Plate		-	Aluminum
Cable Specification		-	$\varnothing 3 \times 4P \times 3m$ (PVC)
Safety Overload		% R.L.	150

Dimensions

Unit : mm

► SBAS



SL | S-Beam Load Cell



Features

- Tension load cell
- Nickel plated steel construction
- Designed according to IP66

Option

- Shackle type accessory

Application

- Crane scale
- Tension test machine
- Overload protective device

Description

SL is a tensile type load cell of steel material. It is suitable for tensile type scale and tensile type material testing machine. This is a load cell that has safety certification in conjunction with the LM-200A overload protection system for cogs.

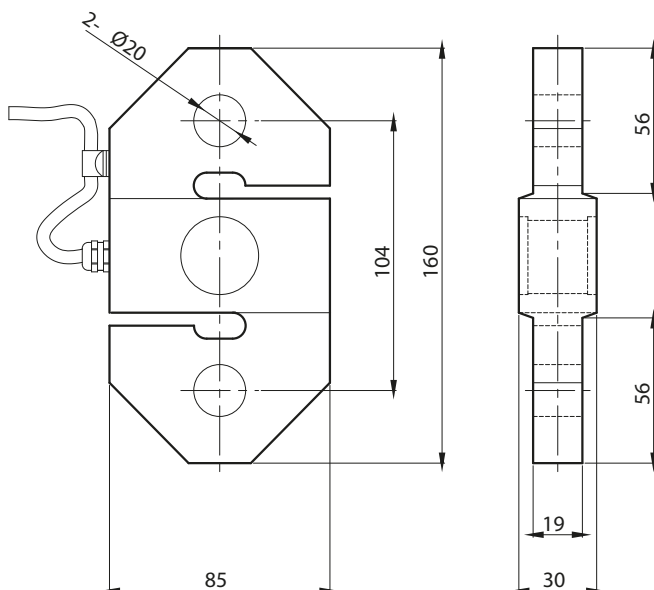
Specifications

Capacity(R.L.)	kgf	2K, 5K
Rated Output	mV / V	2.0 ± 0.05
Zero Balance	mV / V	0.0 ± 0.03
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.05
Hysteresis	% R.O.	≤0.05
Combined Error	% R.O.	≤0.05
Repeatability	% R.O.	≤0.05
Creep for 30min.	% R.O.	≤0.05
Return for 30min.	% R.O.	≤0.05
Resolution	-	≤1/2000
Division	mV / V	0.001
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material & Plate	-	Steel
Cable Specification	-	Ø5.4x4Px6.5m (Urethane)
Safety Overload	% R.L.	150

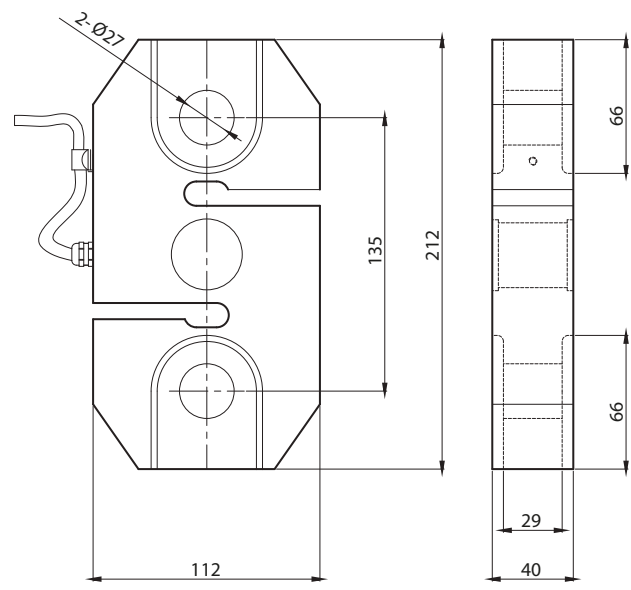
Dimensions

Unit : mm

► SL-2T



► SL-5T



HIGH PRECISION LOAD CELL



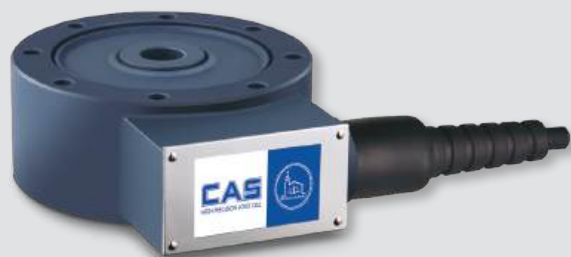
Disk Type Load Cell

CAS has excellent technology in metering, and control, and provides high accuracy and precision load cells for various industrial environments.

[LS / LS-NR / LS-EXP / LS-D / LSB / LSC / LSS / LSS-NR / LSS-EXP / LSW / LSW-HM / MNC / MNT / NMNC
SMN / CPA / CPAS / LSOC / LSOC2 / CHE / CHE-KM / ZWIT-15T / ZWITA-15T / ZLSW]



LS | Disk Load Cell



Features

- Tension / Compression type
- Hermetically structure
- Designed according to IP67

Option

- Tension type accessories(Rod end bearing type)
- Compression type accessories(Load button, ball type)

Application

- Hopper, tank, silo scale
- Tension / compression test machine

Description

LS is a disk type load cell of steel material. Its sealed structure is suitable for harsh environment.

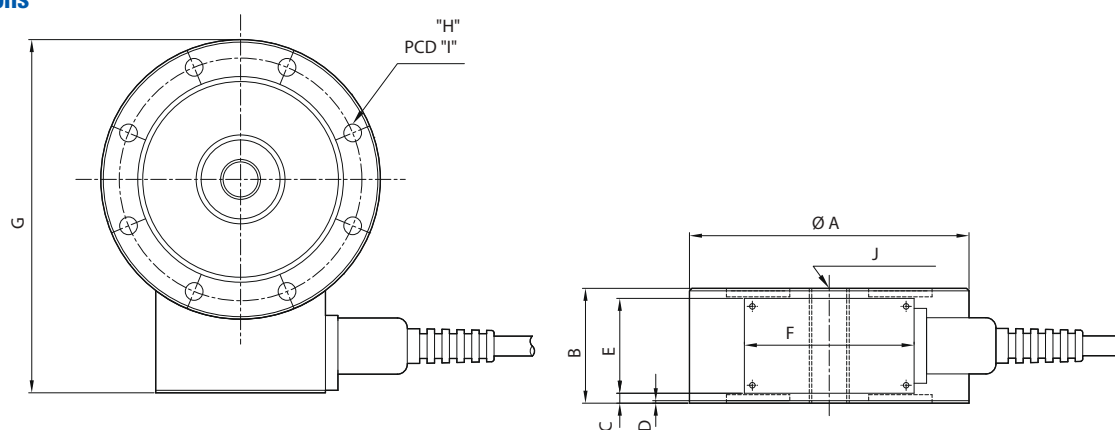
Specifications

Capacity(R.L.)	tf	1, 2, 3, 5, 10, 20, 30, 50, 100, 200, 300
Rated Output	mV / V	2.0 ± 0.005/3.0 ± 0.0075(for 200, 300 tf)
Zero Balance	mV / V	0.0 ± 0.020
Accuracy Class	-	A B
Non-Linearity	% R.O.	≤0.02
Hysteresis	% R.O.	≤0.02
Combined Error	% R.O.	≤0.02
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.03
Return for 30min.	% R.O.	≤0.03
Resolution	-	≤1/5000
Division	mV / V	0.0004
Temperature Effect on	-Zero Value -Output Value	%/10°C ≤0.03
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Coating
Cable Specification	-	Ø8 x 4P x 5m (10m) (PVC) Explosion-proof (Urethane)
Safety Overload	% R.L.	150

Dimensions

Unit : mm

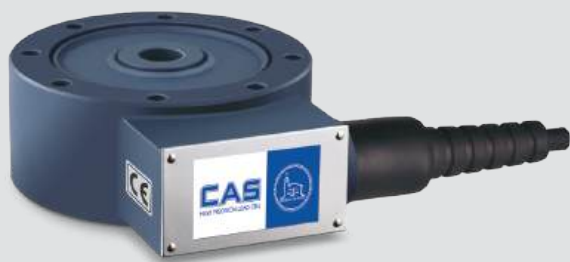
► LS



Capa.	A	B	C	D	E	F	G	H	I	J	Cable(m)
1~3tf	112	46	4	1	38	68	141.5	8-ø7.1	97.2	M16X2	5
5tf	120	46	4				150.4	8-ø9	103.2	M18X1.5	
10tf	138	60	11				170	8-ø11	117.6	M24X2	
20~30tf	184	80	21				218.5	8-ø14	157.6	M39X2	10
50tf	200	60	7.8				235	12-ø14.5	170	M45X3	
100tf	278	90	20				314.8	16-ø16.3	229	M70X3	
200tf	355	108	35				392.7	12-ø26	298	M90X3	
300tf	355	108	35				392.7	12-ø28	300.5	M100X3	

LS-NR

Noise Resistance Disk Load Cell



Features

- Tension / Compression type
- Hermetically structure
- Built-in noise and surge protection circuit
- CE approved
- Designed according to IP67

Option

- Tension type accessories(Rod end bearing type)
- Compression type accessories(Load button, ball type)

Application

- Hopper, tank, silo scale
- Tensile / Compression tester

Description

LS-NR is a disk type load cell, of steel material. It is a load cell with high electrical durability. The protection circuit inside the load cell protects against various noise, surge and lightning. Enclosed tension / compression type load cells suitable for harsh industrial environments such as hoppers, tanks and silo scales.

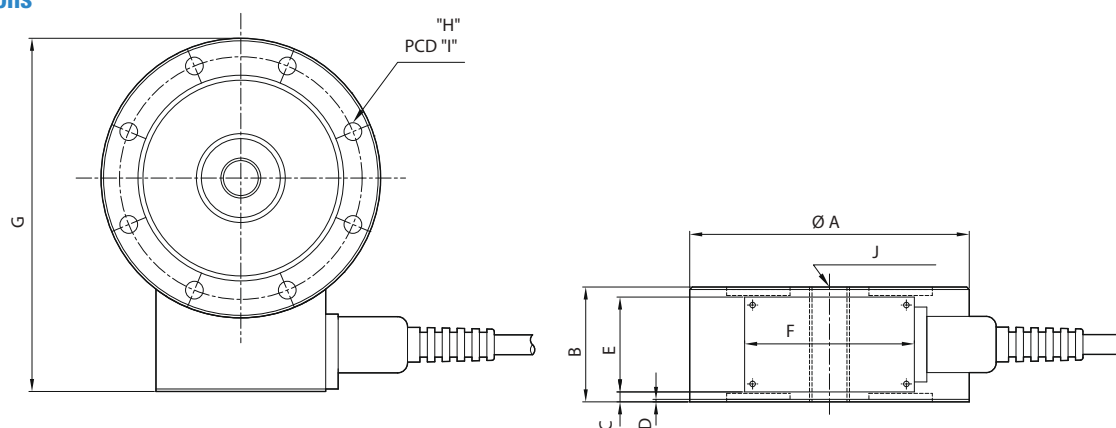
Specifications

Capacity(R.L.)	tf	1, 2, 3, 5, 10, 20, 30, 50, 100, 200, 300
Rated Output	mV / V	2.0±0.005
Zero Balance	mV / V	0.0±0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.02
Hysteresis	% R.O.	≤ 0.02
Combined Error	% R.O.	≤ 0.02
Repeatability	% R.O.	≤ 0.01
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/5000
Division	mV / V	0.0004
Temperature Effect on	- Zero Value - Output Value	%/10°C %/10°C
Excitation	- Recommended - Maximum	V V
Resistance	- Input - Output - Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Coating
Cable Specification	-	Ø8 x 4P x 5m(10m) (PVC)
Safety Overload	% R.L.	150
Electrical Character	- Over Voltage - RS - Surge	V. % MHz kV
		75 AC/DC ±25% 80 ~ 1000MHz, 10V/m ±2

Dimensions

Unit : mm

► LS-NR



Capa.	A	B	C	D	E	F	G	H	I	J	Cable(m)
1~3tf	112	46	4	1	38	68	141.5	8-ø7.1	97.2	M16X2	5
5tf	120	46	4				150.4	8-ø9	103.2	M18X1.5	
10tf	138	60	11				170	8-ø11	117.6	M24X2	
20~30tf	184	80	21				218.5	8-ø14	157.6	M39X2	10
50tf	200	60	7.8				235	12-ø14.5	170	M45X3	
100tf	278	90	20				314.8	16-ø16.3	229	M70X3	
200tf	355	108	35				392.7	12-ø26	298	M90X3	
300tf	355	108	35				392.7	12-ø28	300.5	M100X3	

LS-EXP

Explosion Proof
Disk Load Cell



Features

- Tension / Compression Type
- Hermetically structure
- Explosion-proof structure(Intrinsic safety, Flameproof, Dust)
- Designed according to IP68

Option

- Tension type accessories(Rod end bearing type)
- Compression type accessories(Load button, ball type)
- LS-EXP / Intrinsic safety explosion(Ex ia IIC T4)(1~300tf)
- LS-EXP-D / Flameproof(Ex d IIC T4)(1~50tf)
- LS-EXP-TD / Dust-proof(Ex td A21 T135 IP68) (1~50tf)

Application

- Hopper, Tank, Silo scale
- Tensile / Compression tester

Description

LS-EXP is canister type load cell of steel material. Designed as an explosion-proof structure, it is suitable for rugged industrial environments such as explosion-proof hoppers and tanks, silos and truck scales in explosion hazardous areas. It is made of steel material and has IP68 waterproof and dustproof structure.

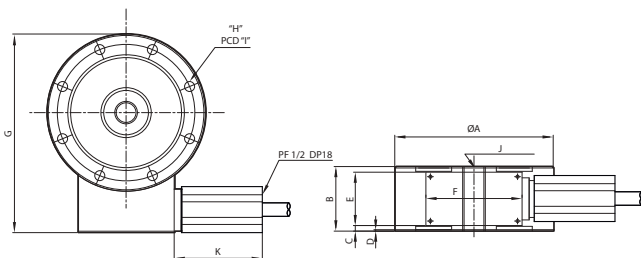
Specifications

Capacity(R.L.)	tf	1, 2, 3, 5, 10, 20, 30, 50, 100, 200, 300
Rated Output	mV / V	2.0 ± 0.005 / 3.0 ± 0.0075 (200tf, 300tf)
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	A B
Non-Linearity	% R.O.	≤ 0.02 ≤ 0.05
Hysteresis	% R.O.	≤ 0.02 ≤ 0.05
Combined Error	% R.O.	≤ 0.02 ≤ 0.05
Repeatability	% R.O.	≤ 0.01 ≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03 ≤ 0.03
Return for 30min.	% R.O.	≤ 0.03 ≤ 0.03
Resolution	-	≤ 1/5000 ≤ 1/2000
Division	mV / V	0.0004 0.0001
Temperature Effect on	-Zero Value -Output Value	%/10°C ≤ 0.03 ≤ 0.03 %/10°C ≤ 0.03 ≤ 0.03
Excitation	-Recommended -Maximum	V 10 V 28
Resistance	-Input -Output -Insulation	Ω 350 ± 3.5 Ω 350 ± 3.5 MΩ > 2000
Compensated Temperature Range	°C	-10 to + 40
Operating Temperature Range	°C	-30 to + 80
Material	-	Steel / Coating
Cable Specification	-	Ø8 x 4P x 5m (10m) (Urethane)
Safety Overload	% R.L.	150%

Dimensions

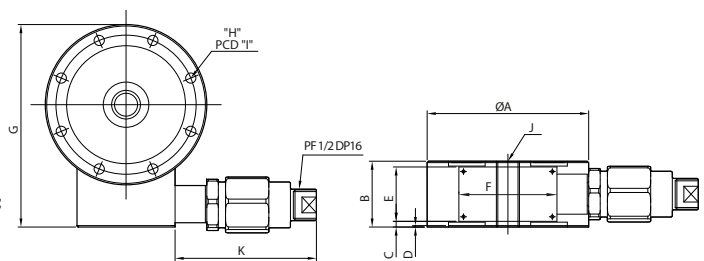
Unit : mm

- Intrinsic Safety explosion proof, (1~300tf)
dust explosion proof (1~50tf)



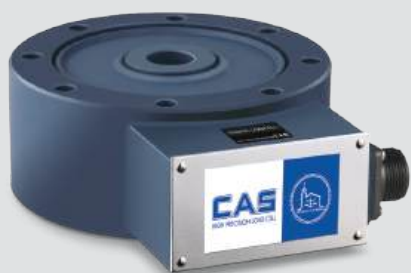
Capa.	A	B	C	D	E	F	G	H	I	J	K	Cable(m)
1~3tf	112	46	4				142.5	8-Ø7.1	97.2	M16 x 2		5
5tf	120	46	4				151.4	8-Ø9	103.2	M18 x 1.5		
10tf	138	60	11				171	8-Ø11	117.6	M24 x 2		
20~30tf	184	80	21				219.5	8-Ø14	157.6	M39 x 2		
50tf	200	60	11	1	38	68	236	12-Ø14.5	170	M45 x 3	52	10
100tf	278	90	2				315.8	16-Ø16.3	229	M70 x 3		
200tf	355	108	35				393.7	12-Ø26	298	M90 x 3		
300tf	355	108	35				393.7	12-Ø28	300.5	M100 x 3		

- Flameproof (1~50tf)



Capa.	A	B	C	D	E	F	G	H	I	J	K	Cable(m)
1~3tf	112	46	4				142.5	8-Ø7.1	97.2	M16 x 2		5
5tf	120	46	4				151.4	8-Ø9	103.2	M18 x 1.5		
10tf	138	60	11	1	38	68	171	8-Ø11	117.6	M24 x 2	98	10
20~30tf	184	80	21				219.5	8-Ø14	157.6	M39 x 2		
50tf	200	60	11				236	8-Ø14.5	170	M45 x 3		

LS-D | Digital Disk Load Cell



Features

- Tension / Compression Type
- Digital output signal
- CE approved
- Hermetically structure
- Designed according to IP67

Option

- Tension type accessories(Rod end bearing type)
- Compression type accessories(Load button, ball type)

Application

- Hopper, Tank, Silo scale
- Tensile / Compression tester

Description

LS-D is a disk type load cell of steel material. It is possible to diagnose by connecting the load cells individually through the digital communication, and when making the weighing system, it is easy and simple to adjust the weighing, compensate corners, check the trouble occurrence, and replace the load cell. Enclosed tension/compression type load cells suitable for harsh industrial environments such as hoppers, tanks and silo scales.

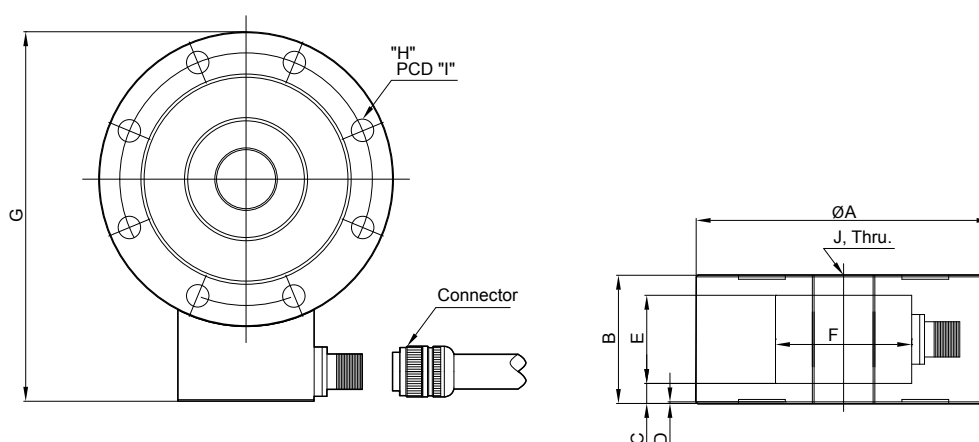
Specifications

Capacity(R.L.)		tf	20, 30, 100, 200, 300
Rated Output		counts	300,000
Zero Balance		counts	± 300
Non-Linearity		% R.O.	< 0.015
Hysteresis		% R.O.	< 0.015
Combined Error		% R.O.	< 0.015
Repeatability		% R.O.	< 0.01
Creep for 30min.		% R.O.	< 0.017
Temperature Effect on	- Zero Value	% R.O./10°C	0.014
	- Output Value	% R.O./10°C	0.011
Compensated Temperature Range		°C	-10 ~ +40
Operating Temperature Range		°C	-30 ~ +80
Excitation	- Minimum	V	6
	- Recommended	V	9
	- Maximum	V	24
Insulation		MΩ	≥ 2,000
Safety Overload		% R.C.	150
Material		-	Steel / Coating
Communication Method		-	RS-485 (2wire)
Communication Speed		kbit/sec	19.2
Max Cable Length for Communication		m	1,000
Warm-up Time from Cold Start		minutes	15
Asynchronous Interface Baudrate		Baud	9,600 ~ 115,200
Number of bus addresses		-	Max. 32

Dimensions

► LS-D

Unit : mm

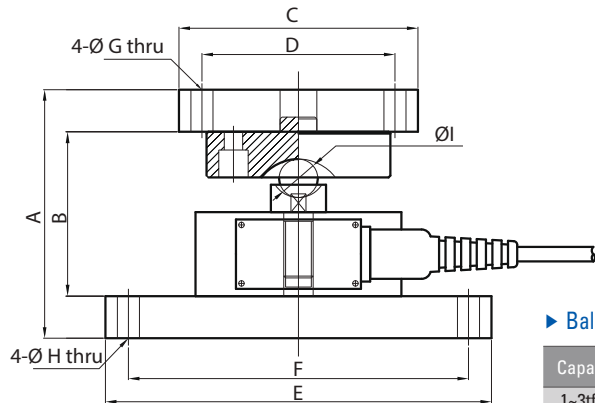


Capa.	A	B	C	D	E	F	G	H	I	J	Cable(m)
20~30tf	184	80	12.5	1	55	85	230.5	8-Ø14	157.6	M39 x 2	10
100tf	278	90	11.5				326.8	16-Ø16.3	229	M70 x 3	
200tf	355	108	26.5				404.7	12-Ø26	298	M90 x 3	
300tf	355	108	26.5				404.7	12-Ø28	298	M100 x 3	

Unit : mm

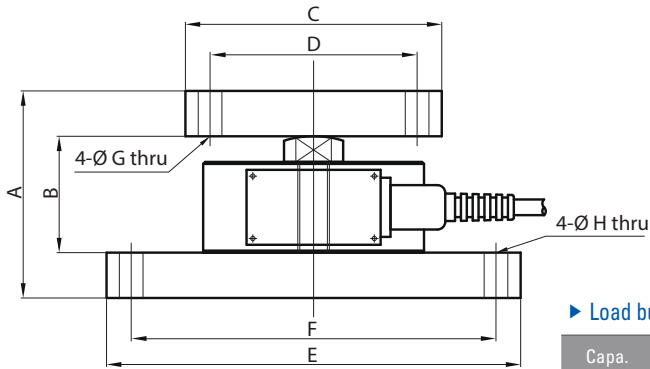
Accessory Dimensions

► LS



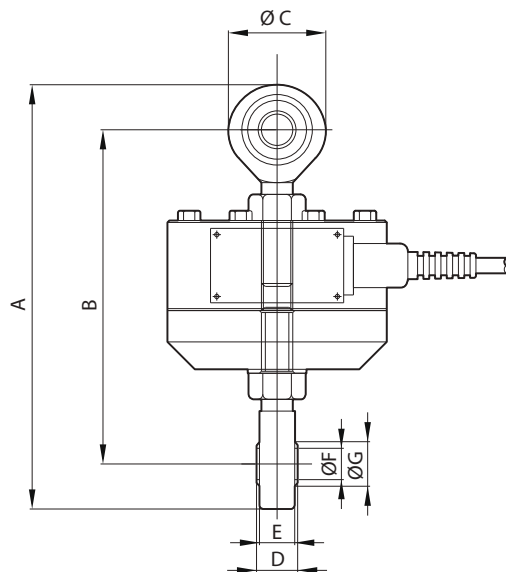
► Ball type

Capa.	A	B	C	D	E	F	G	H	I
1~3tf	136.43	90.43	130 x 130	105 x 105	210 x 130	185 x 105	12	12	21.43
5tf	146.75	100.75			210 x 130	185 x 105		12	31.75
10tf	167.75	114.75			160 x 160	125 x 125		14	31.75
20~30tf	197.75	144.75			200 x 200	160 x 160		14	31.75



► Load button

Capa.	A	B	C	D	E	F	G	H
1~3tf	105	59	130 x 130	105 x 105	210 x 130	185 x 105	12	12
5tf	107	61	130 x 130	105 x 105	210 x 130	185 x 105	12	12
10tf	140	80	160 x 160	125 x 125	160 x 160	125 x 125	14	14
20~30tf	175	115	200 x 200	150 x 150	200 x 200	160 x 160	14	14
50tf	170	105	200 x 200	150 x 150	360 x 360	280 x 280	18	22.5
100tf	225	155	300 x 300	210 x 210	430 x 430	310 x 310	22	26
200tf	258	168	400 x 400	310 x 310	500 x 500	390 x 390	26	32
300tf	268	168	400 x 400	310 x 310	500 x 500	390 x 390	26	32



► Rod end bearing

Capa.	A	B	C	D	E	F	G
1~3tf	216	170	50	21	18	16	19.3
5tf	257	197	60	23	22	18	21.9
10tf	430	328	102	28	27	22	25.8
20~30tf	558	423	135	40	38	39	45

LSB | Disk Load Cell



Features

- Compression type
- high output
- Ball type accessory integral structure
- Designed according to IP66

Application

- Hopper, Tank, Silo scale
- Compression test machine

Description

LSB is a disk type load cell of steel material. It is suitable for hopper, tank, silo scale.

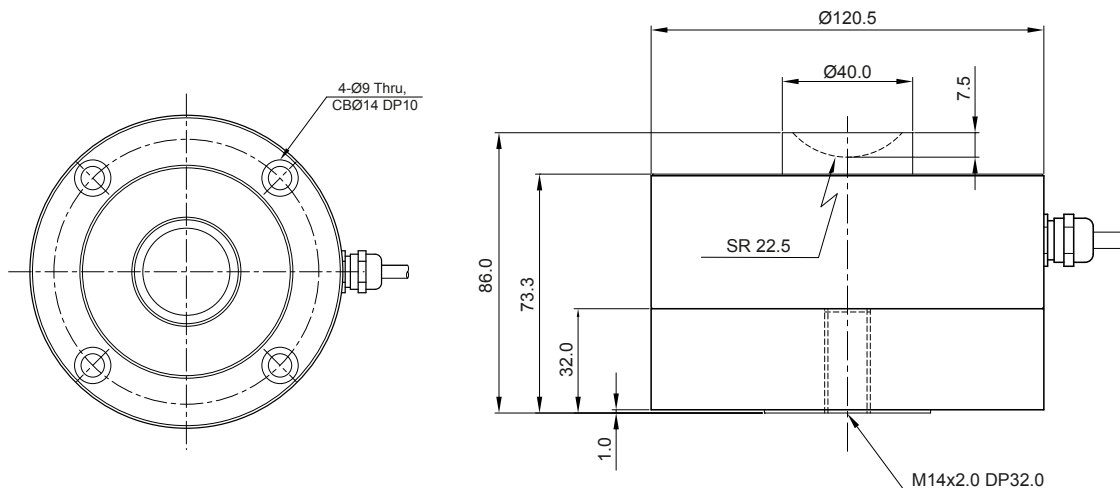
Specifications

Capacity(R.L.)	tf	10, 20, 30
Rated Output	mV / V	4.0 ± 0.01
Zero Balance	mV / V	0.0 ± 0.04
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.03
Hysteresis	% R.O.	≤ 0.03
Combined Error	% R.O.	≤ 0.03
Repeatability	% R.O.	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/3000
Division	mV / V	0.0013
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.03 ≤ 0.03
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		420 ± 30 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel
Cable Specification	-	Ø5.4 x 4P x 10m (Urethane)
Safety Overload	% R.L.	150

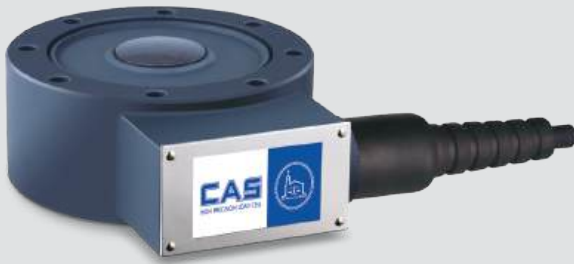
Dimensions

Unit : mm

► LSB



LSC | Disk Load Cell



Features

- Compression type
- Load button type accessory integral structure
- Hermetically sealed structure
- Designed according to IP67

Application

- Hopper, Tank, Silo scale
- Compression test machine

Description

LSC is a disk type load cell of steel material. It is suitable for hopper, tank, silo scale

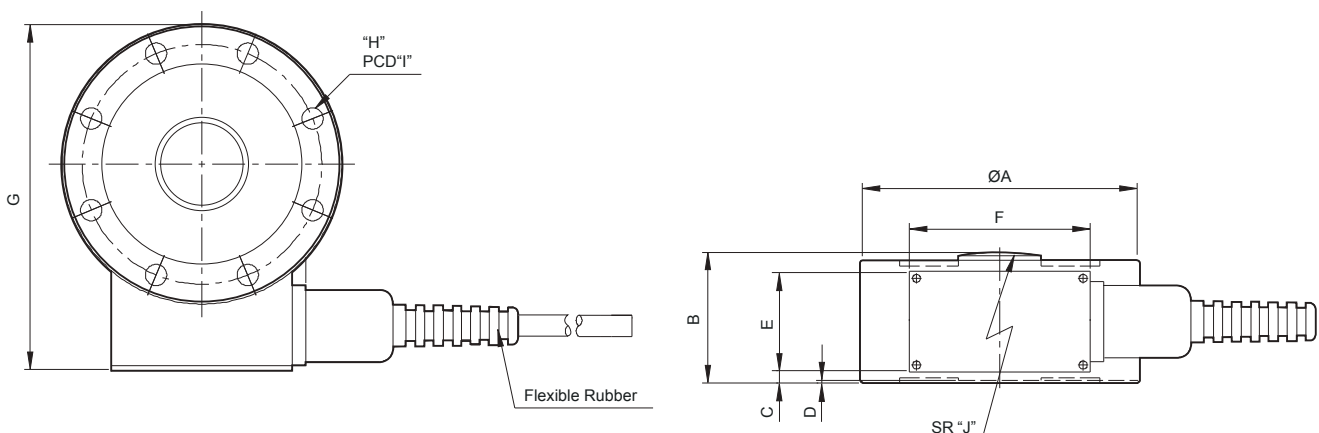
Specifications

Capacity(R.L.)	tf	2, 5, 10, 20, 50, 100
Rated Output	mV / V	3.0 ± 0.0075
Zero Balance	mV / V	0.0 ± 0.03
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.05
Hysteresis	% R.O.	≤0.05
Combined Error	% R.O.	≤0.05
Repeatability	% R.O.	≤0.02
Creep for 30min.	% R.O.	≤0.03
Return for 30min.	% R.O.	≤0.03
Resolution	-	≤1/2000
Division	mV / V	0.0015
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤0.03 ≤0.03
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		350 ± 3.5 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Coating
Cable Specification	-	Ø8 X 4P X 5m (10m) (PVC)
Safety Overload	% R.L.	150

Dimensions

Unit : mm

► LSC



Capa.	A	B	C	D	E	F	G	H	I	J	Cable(m)
2-5tf	105	35	1	1	30	65	130.7	8-ø7	90	100	5
10tf	120	45	2		38	68	150.4	8-ø9	104.5	100	
20tf	120	45	2		38	68	150.4	8-ø9	104.5	100	
50tf	190.5	57.2	6.4		38	68	225.2	12-ø13.5	159	200	10
100tf	209.2	82.6	19.1		38	68	244.5	4-ø18	171.5	200	

LSS | Disk Load Cell



Description

LSS is a stainless steel disk type load cell. It is suitable for hopper, tank, silo scale.



Features

- Tension / Compression Type
- Stainless steel contruciton
- Hermetically structure
- Designed according to IP68

Option

- Tension type accessories(Rod end bearing type)
- Compression type accessories(Load button, ball type)

Application

- Hopper, Tank, Silo scale
- Tension / Compression test machine

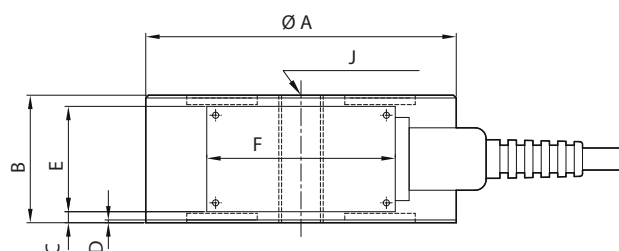
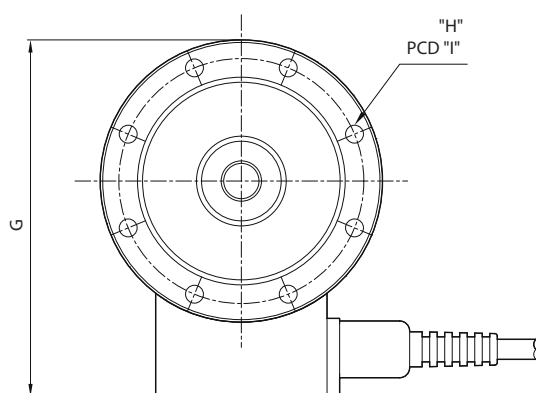
Specifications

Capacity(R.L.)		tf	1, 2, 3, 5, 10, 20, 30, 50
Rated Output		mV / V	2.0 ± 0.0075
Zero Balance		mV / V	0.0 ± 0.020
Accuracy Class		-	-
Non-Linearity		% R.O.	≤0.03
Hysteresis		% R.O.	≤0.03
Combined Error		% R.O.	≤0.03
Repeatability		% R.O.	≤0.02
Creep for 30min.		% R.O.	≤0.03
Return for 30min.		% R.O.	≤0.03
Resolution		-	≤1/3000
Division		mV / V	0.00067
Temperature Effect on	-Zero Value	%/10°C	≤0.03
	-Output Value	%/10°C	≤0.03
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	350 ± 3.5
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range		°C	-10 to +40
Operating Temperature Range		°C	-30 to +80
Material		-	Stainless steel
Cable Specification		-	Ø8 X 4P X 5m (10m) (PVC) Explosion-proof (Urethane)
Safety Overload		% R.L.	150

Dimensions

► LSS

Unit : mm



Capa.	A	B	C	D	E	F	G	H	I	J	Cable(m)
1~3tf	112	46	4	1	38	68	141.5	8-ø7.1	97.2	M16X2	5
5tf	120	46	4				150.4	8-ø9	103.2	M18X1.5	5
10tf	138	60	11				170	8-ø11	117.6	M24X2	5
20~30tf	184	80	21				218.5	8-ø14	157.6	M39X2	10
50tf	200	60	7.8				235	12-ø14.5	170	M45X3	10

LSS-NR

Noise Resistance
Disk Load Cell



Features

- Tension / Compression type
- Stainless steel construction
- Hermetically structure
- Built-in noise and surge protection circuit
- CE approved
- Designed according to IP68

Option

- Tension type accessories(Rod end bearing type)
- Compression type accessories(Load button, ball type)

Application

- Hopper, Tank, Silo scale
- Tension / Compression test machine

Description

LSS-NR is a stainless steel disk type load cell. it's an electrically durable load cell. Protected against noise surge lightning with protective circuitry mounted inside the load cell. It is suitable for hoppers, tanks, and silo scales.

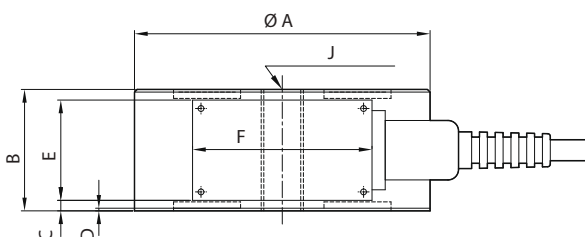
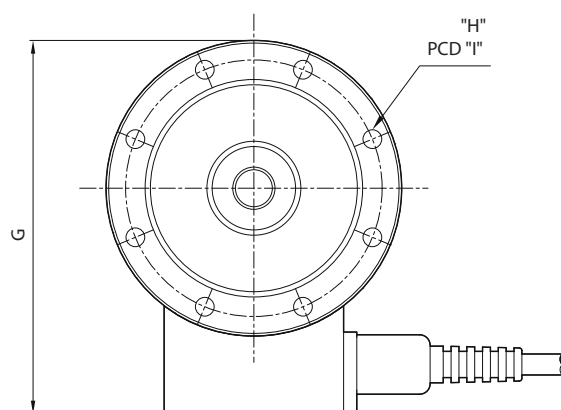
Specifications

Capacity(R.L.)	tf	1, 2, 3, 5, 10, 20, 30, 50
Rated Output	mV / V	2.0±0.005
Zero Balance	mV / V	0.0±0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.03
Hysteresis	% R.O.	≤ 0.03
Combined Error	% R.O.	≤ 0.03
Repeatability	% R.O.	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/3000
Division	mV / V	0.00067
Temperature Effect on	- Zero Value - Output Value	%/10°C %/10°C
		≤ 0.03 ≤ 0.03
Excitation	- Recommended - Maximum	V V
		10 15
Resistance	- Input - Output - Insulation	Ω Ω MΩ
		350 ± 3.5 350 ± 3.5 ≥ 500
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Stainless steel
Cable Specification	-	Ø8 x 4P x 5m / Ø8 x 4P x 10m (PVC)
Safety Overload	% R.L.	150
Electrical Character	- Over Voltage - RS - Surge	V. % MHz kV
		75 AC/DC ±25% 80 ~ 1000MHz, 10V/m ±2

Dimensions

Unit : mm

► LSS-NR



Capa.	A	B	C	D	E	F	G	H	I	J	Cable(m)
1~3tf	112	46	4	1	38	68	141.5	8-ø7.1	97.2	M16X2	5
5tf	120	46	4				150.4	8-ø9	103.2	M18X1.5	5
10tf	138	60	11				170	8-ø11	117.6	M24X2	5
20~30tf	184	80	21				218.5	8-ø14	157.6	M39X2	10
50tf	200	60	7.8				235	12-ø14.5	170	M45X3	10

LSS-EXP

Explosion Proof
Disk Load Cell



Features

- Tension / Compression type
- Stainless steel construction
- Hermetically structure
- Explosion-proof structure(Intrinsic safety, Flameproof, Dust)
- Designed according to IP68

Option

- Tension type accessories(Rod end bearing type)
- Compression type accessories(Load button, ball type)
- LS-EXP / Intrinsic safety explosion(Ex ia IIC T4 Ga)
- LS-EXP-D / Flameproof(Ex d IIC T4)
- LS-EXP-TD / Dust-proof(Ex td A21 T135°C IP68) (1~50tf)

Application

- Hopper, Tank, Silo scale
- Tension / Compression test machine

Description

LSS-EXP is a stainless steel disk type load cell. Designed with explosion proof structure, it is suitable for hoppers, tanks, and silo scales. Its stainless and water-proof structure is suitable for harsh environments.

Specifications

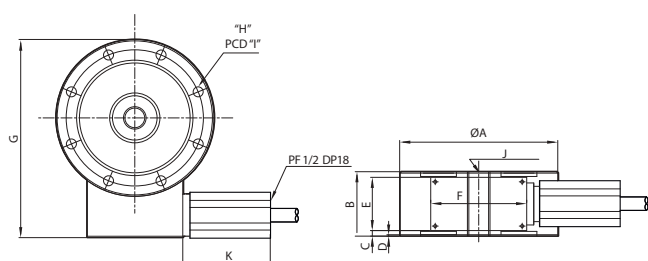
Capacity(R.L.)	tf	1, 2, 3, 5, 10, 20, 30, 50
Rated Output	mV / V	2.0 ± 0.005
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.03
Hysteresis	% R.O.	≤ 0.03
Combined Error	% R.O.	≤ 0.03
Repeatability	% R.O.	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/3000
Division	mV / V	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.03 ≤ 0.03
Excitation	-Recommended -Maximum	V V
		10 28
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		350 ± 3.5 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to + 40
Operating Temperature Range	°C	-30 to + 80
Material	-	Stainless steel
Cable Specification	-	Ø8 x 4P x 5/10m (Urethane)
Safety Overload	% R.L.	150%

Dimensions

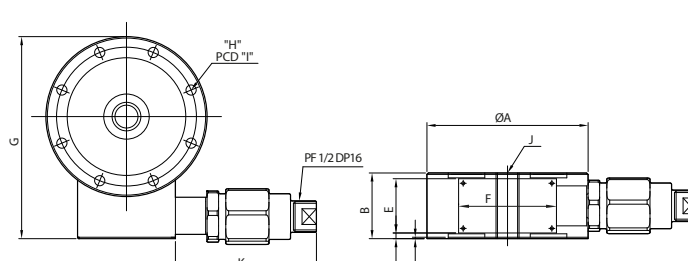
Unit : mm

► Intrinsic Safety explosion , dust explosion proof

► Flameproof



Capa.	A	B	C	D	E	F	G	H	I	J	Cable(m)
1~3tf	112	46	4				142.5	8-Ø7.1	97.2	M16 x 2	
5tf	120	46	4				151.4	8-Ø9	103.2	M18 x 1.5	5
10tf	138	60	11	1	38	68	171	8-Ø11	117.6	M24 x 2	
20~30tf	184	80	21				219.5	8-Ø14	157.6	M39 x 2	10
50tf	200	60	7.8				236	12-Ø14.5	170	M45 x 3	

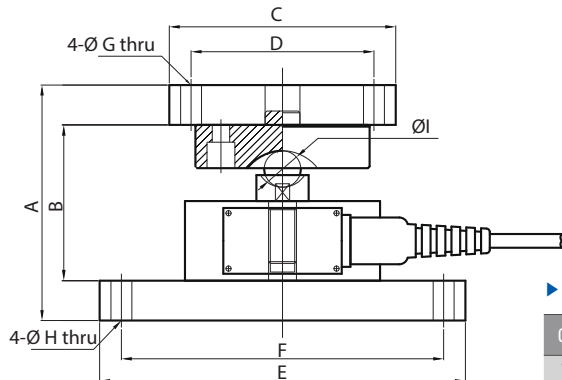


Capa.	A	B	C	D	E	F	G	H	I	J	K	Cable(m)
1~3tf	112	46	4				142.5	8-Ø7.1	97.2	M16 x 2		
5tf	120	46	4				151.4	8-Ø9	103.2	M18 x 1.5		5
10tf	138	60	11	1	38	68	171	8-Ø11	117.6	M24 x 2	98	
20~30tf	184	80	21				219.5	8-Ø14	157.6	M39 x 2		10
50tf	200	60	11				236	12-Ø14.5	170	M45 x 3		

Unit : mm

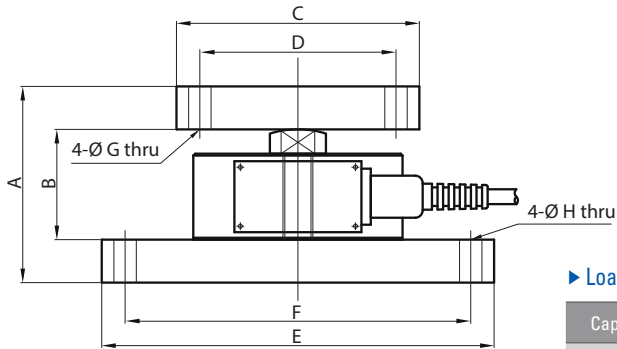
Accessory Dimensions

► LSS



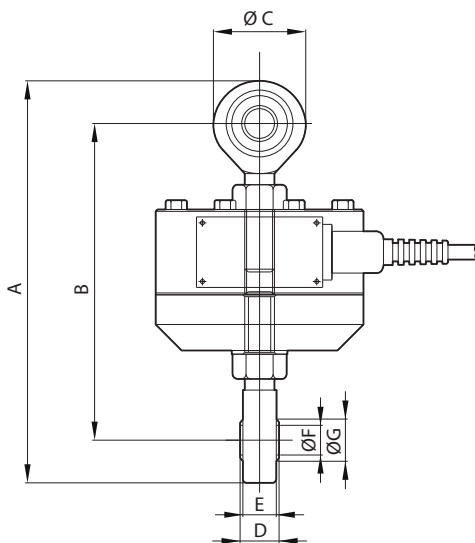
► Ball type

Capa.	A	B	C	D	E	F	G	H	I
1~3tf	136.43	90.43	130 x 130	105 x 105	210 x 130	185 x 105	12	12	21.43
5tf	146.75	100.75			210 x 130	185 x 105		12	31.75
10tf	167.75	114.75			160 x 160	125 x 125		14	31.75
20~30tf	197.75	144.75			200 x 200	160 x 160		14	31.75



► Load button

Capa.	A	B	C	D	E	F	G	H
1~3tf	105	59	130 x 130	105 x 105	210 x 130	185 x 105	12	12
5tf	107	61	130 x 130	105 x 105	210 x 130	185 x 105	12	12
10tf	140	80	160 x 160	125 x 125	160 x 160	125 x 125	14	14
20~30tf	175	115	200 x 200	150 x 150	200 x 200	160 x 160	14	14
50tf	170	105	200 x 200	150 x 150	360 x 360	280 x 280	18	22.5



► Rod end bearing

Capa.	A	B	C	D	E	F	G
1~3tf	216	170	50	21	18	16	19.3
5tf	257	197	60	23	22	18	21.9
10tf	430	328	102	28	27	22	25.8
20~30tf	558	423	135	40	38	39	45

LSW | Disk Load Cell



Features

- Compression type
- Hollow type
- Hermetically structure
- Designed according to IP67

Application

- Compression tester

Description

LSW is a low profile disk type load cell of steel material. It is suitable for compression tester and load control system.

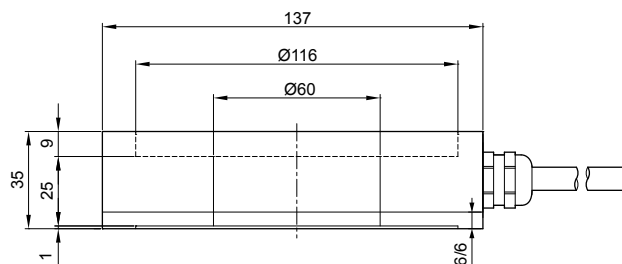
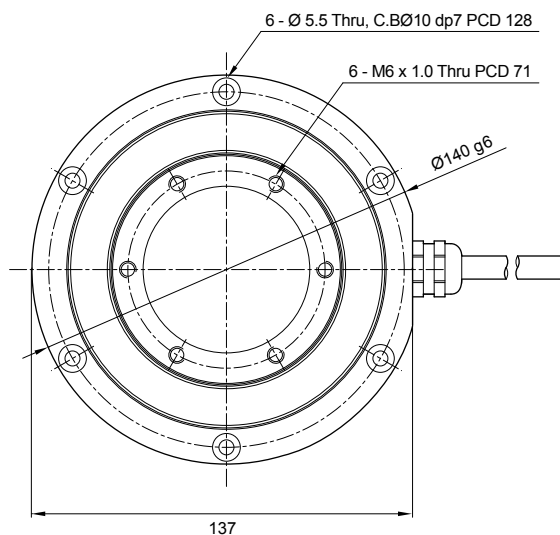
Specifications

Capacity(R.L.)	tf	1, 2, 3, 5
Rated Output	mV / V	1.0 ± 0.05
Zero Balance	mV / V	0.0 ± 0.015
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.05
Hysteresis	% R.O.	≤0.05
Combined Error	% R.O.	≤0.05
Repeatability	% R.O.	≤0.02
Creep for 30min.	% R.O.	≤0.03
Return for 30min.	% R.O.	≤0.03
Resolution	-	≤1/2000
Division	mV / V	0.0005
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤0.05 ≤0.05
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		350 ± 3.5 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Coating
Cable Specification	-	Ø5.4 X 4P X 10m (10m) (PVC)
Safety Overload	% R.L.	150

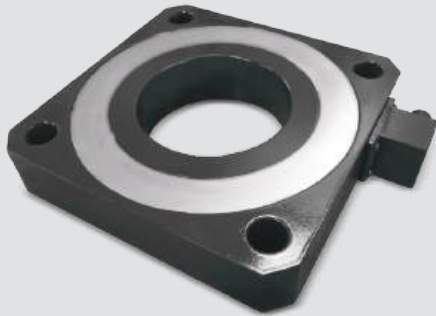
Dimensions

Unit : mm

► LSW



LSW-HM | Disk Load Cell



Features

- Compression type
- Hollow type
- Designed according to IP66

Application

- Compression tester

Description

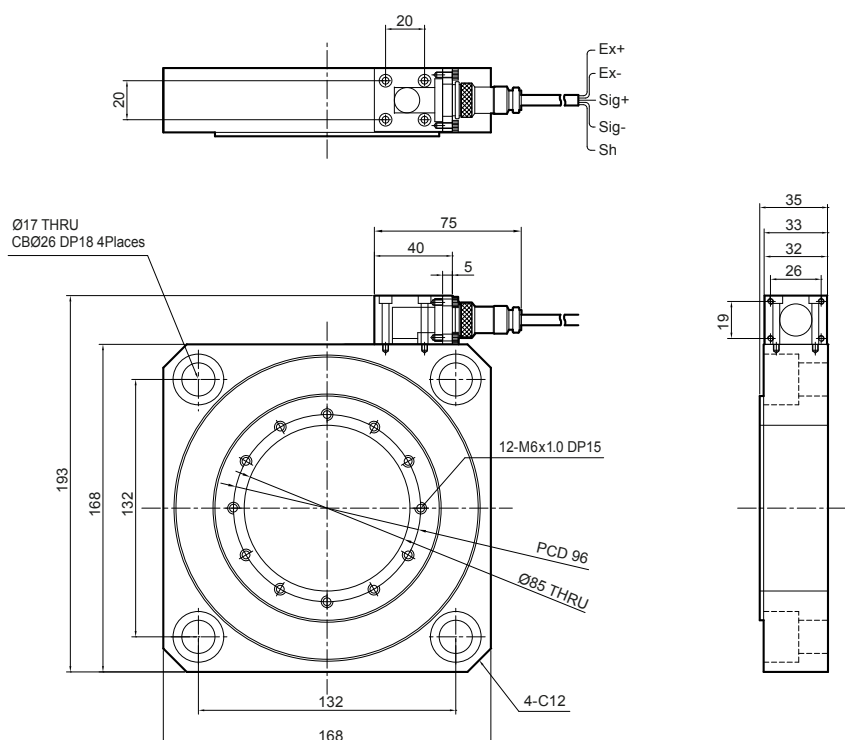
LSW-HM is a low profile disk type load cell of steel material. It is suitable for compression tester and load control system.

Specifications

Capacity(R.L.)		tf	3.5
Rated Output		mV / V	1.0 ± 0.1
Zero Balance		mV / V	0.0 ± 0.005
Accuracy Class		-	-
Non-Linearity		% R.O.	≤ 0.10
Hysteresis		% R.O.	≤ 0.05
Combined Error		% R.O.	≤ 0.10
Repeatability		% R.O.	≤ 0.03
Creep for 30min.		% R.O.	≤ 0.03
Return for 30min.		% R.O.	≤ 0.03
Resolution		-	≤ 1/1000
Division		mV / V	0.001
Temperature Effect on	-Zero Value	%/10°C	≤ 0.05
	-Output Value	%/10°C	≤ 0.05
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	420 ± 30
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range		°C	-10 to +40
Operating Temperature Range		°C	-30 to +80
Material		-	Steel / Coating
Cable Specification		-	5 X 4P X 1.5m (Teflon)
Safety Overload		% R.L.	150

Dimensions

► LSW-HM



MNC | Disk Load Cell



Features

- Compression type
- Stainless steel material (50kgf~2tf), Steel material (5tf~20tf)
- Hermetically sealed structure
- Load button type accessory integral structure
- Designed according to IP67

Application

- Semiconductor process
- Testing and metering system
- Compression tester

Description

MNC is a stainless steel miniature disk type load cell. A compacted type load cell with enclosed structure can be used in a small amount of space and is suitable for various test equipment and metering systems, including semiconductor processes.

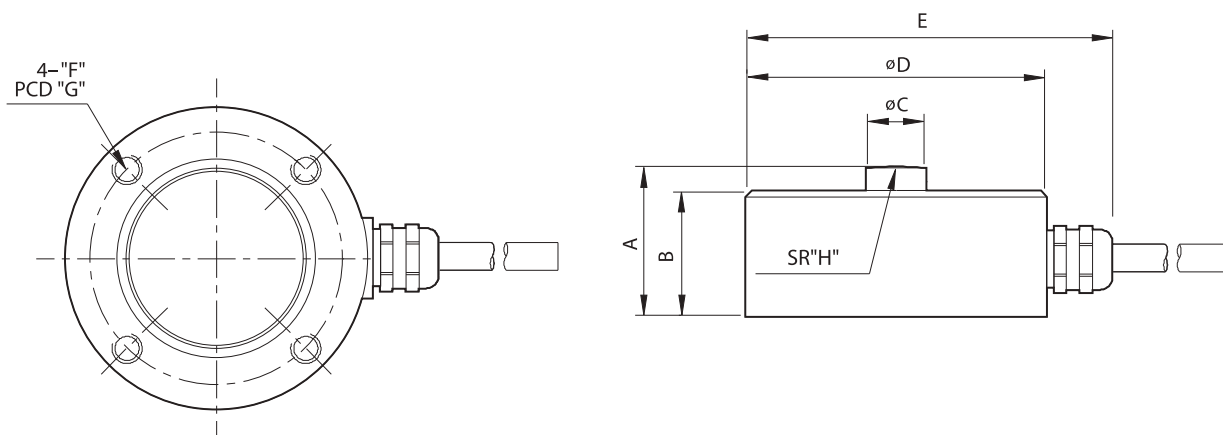
Specifications

Capacity(R.L.)	kgf	50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K
Rated Output	mV / V	2.0 ± 0.005
Zero Balance	mV / V	0.0 ± 0.06
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.15
Hysteresis	% R.O.	≤ 0.15
Combined Error	% R.O.	≤ 0.15
Repeatability	% R.O.	≤ 0.05
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/600
Division	mV / V	0.003
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤0.05 ≤0.05
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		420 ± 30 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Stainless steel (50kgf ~ 2tf) Steel (5tf ~ 20tf)
Cable Specification	-	Ø5.4 X 4P X 3m (5m) (Urethane)
Safety Overload	% R.L.	150

Dimensions

Unit : mm

► MNC



Capa.	A	B	C	D	E	F	G	H	Cable(m)
50~2K	25	21	10	50	64.5	M5 X 0.8 DP 7	42	50	3
5K	40	35	20	98	112.5	M6 X 1.0 DP 8	72	150	5
10K	45	40	20	98	112.5	M6 X 1.0 DP 8	72	150	
20K	50	45	20	118	132.5	M8 X 1.25 DP 10	90	250	

MNT | Disk Load Cell



Features

- Tension application
- Stainless steel
- Hermetically sealed structure
- Designed according to IP67

Option

- Tensile type accessory

Application

- Semiconductor process
- Testing and metering system
- Tensile tester

Description

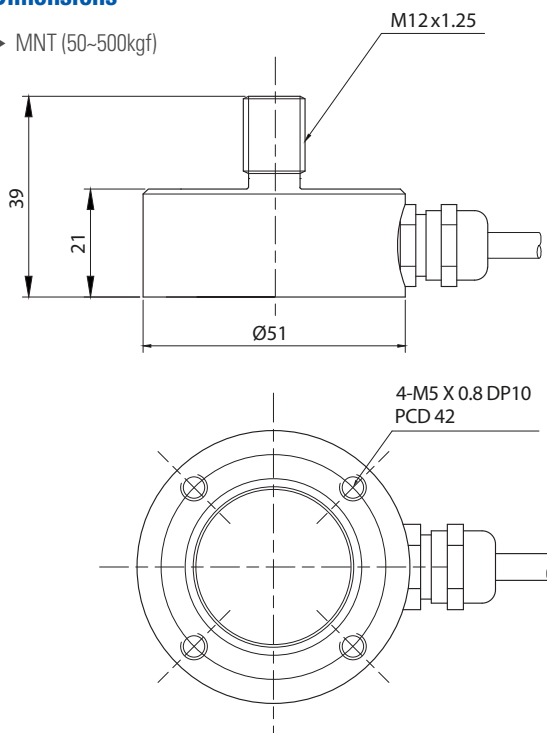
MNT is a stainless steel miniature disk type load cell. It is suitable for various testing equipment and metering systems, including semiconductor processes, and can be used in a small amount of space for installation by a sealed-type load cell.

Specifications

Capacity(R.L.)	kgf	50, 100, 200, 500, 1K, 2K
Rated Output	mV / V	2.0 ± 0.005
Zero Balance	mV / V	0.0 ± 0.06
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.15
Hysteresis	% R.O.	≤ 0.15
Combined Error	% R.O.	≤ 0.15
Repeatability	% R.O.	≤ 0.05
Creep for 30min.	% R.O.	≤ 0.1
Return for 30min.	% R.O.	≤ 0.1
Resolution	-	$\leq 1/600$
Division	mV / V	0.003
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.05 ≤ 0.05
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω M Ω
		420 ± 30 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Stainless steel
Cable Specification	-	$\varnothing 5.4 \times 4P \times 3m$ (Urethane)
Safety Overload	% R.L.	150

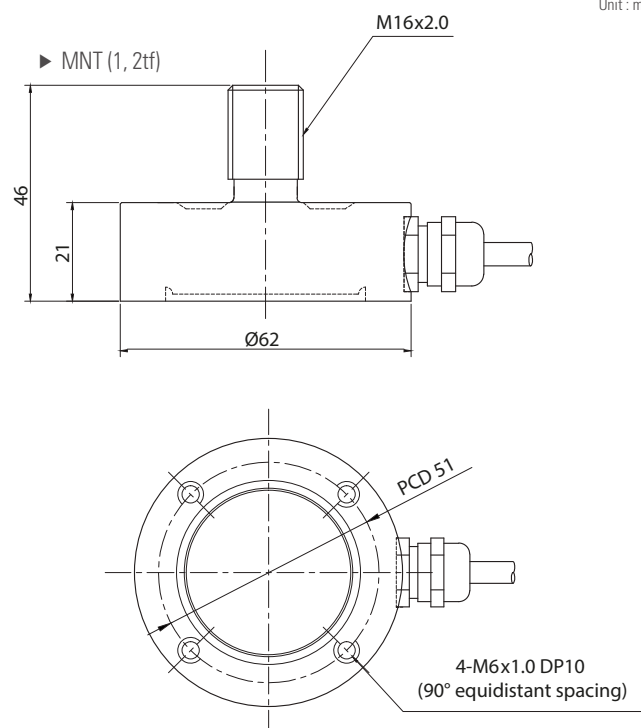
Dimensions

► MNT (50~500kgf)



Unit : mm

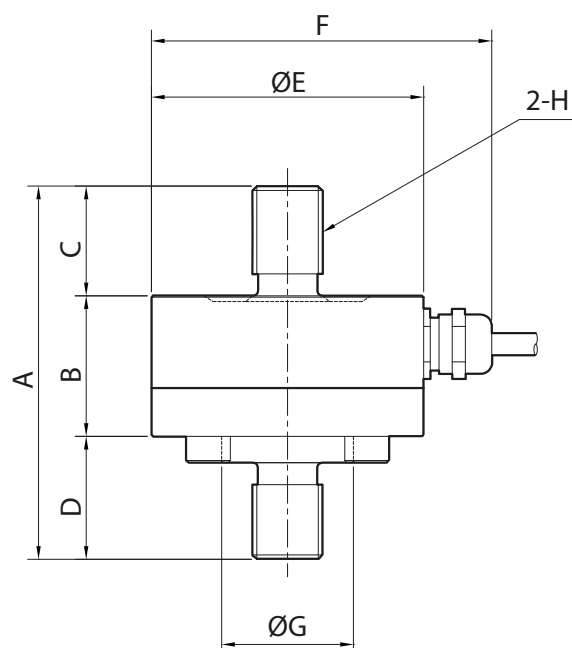
► MNT (1, 2tf)



Unit : mm

Accessory Dimensions

► MNT



Capa.	A	B	C	D	E	F	G	H
50 ~500kgf	70	27	18	25	51	67	20	M12 x 1.25
1~2K	85	32	25	28	62	77.5	30	M16 x 2.0

NMNC | Disk Load Cell



Features

- Compression type
- Stainless steel material
- Designed according to IP65

Application

- Semiconductor process
- Testing and metering system
- Compression tester

Description

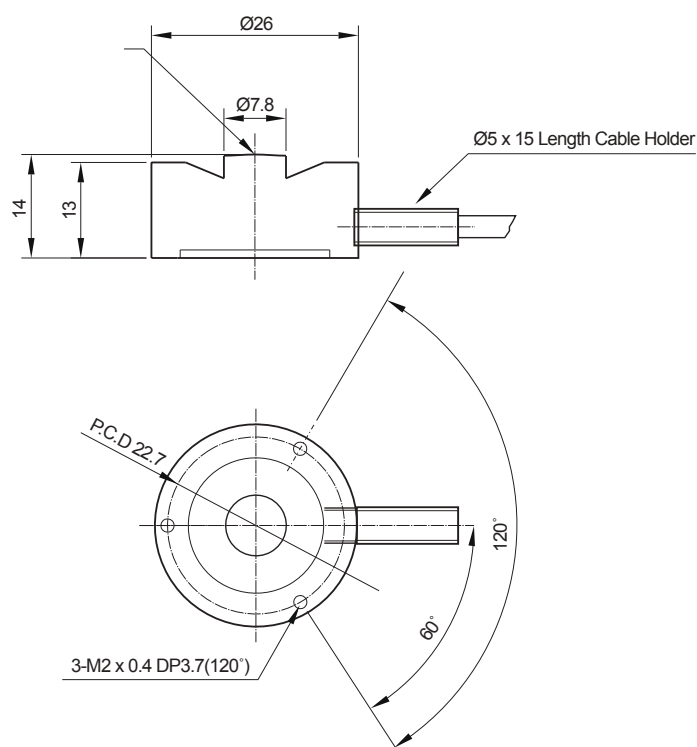
NMNC is a stainless steel miniature disk type load cell. A compacted type load cell can be used in a small amount of space and is suitable for various test equipment and metering systems, including semiconductor processes.

Specifications

Capacity(R.L.)	kgf	50, 100, 200, 500, 1K, 2K, 3K
Rated Output	mV / V	1.0 ± 0.1/2.0 ± 0.2 (for 1~3tf)
Zero Balance	mV / V	0.0 ± 0.1
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.5
Hysteresis	% R.O.	≤ 0.5
Combined Error	% R.O.	≤ 0.5
Repeatability	% R.O.	≤ 0.1
Creep for 30min.	% R.O.	≤ 0.5
Return for 30min.	% R.O.	≤ 0.5
Resolution	-	≤ 1/200
Division	mV / V	0.005
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.05 ≤ 0.1
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		400 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Stainless steel
Cable Specification	-	Ø3 X 4P X 3m (PVC)
Safety Overload	% R.L.	150

Dimensions

► NMNC



Unit : mm

SMN | Disk Load Cell



Features

- Compression type
- Designed according to IP65

Application

- Semiconductor process
- Testing and metering system
- Compression tester

Description

SMN is a miniature disk type of aluminum/stainless steel. This compacted type load cell can be used in a small amount of space and is suitable for various test equipment and metering systems, including semiconductor processes.

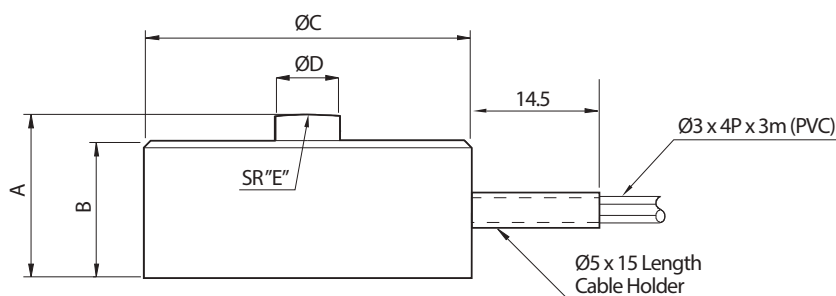
Specifications

Capacity(R.L.)	kgf	1, 2, 5, 10, 20, 30, 50, 100, 200, 300, 500, 1K, 2K
Rated Output	mV / V	0.5 ± 0.1 (for 1, 2, 5 kgf), 1.0 ± 0.1
Zero Balance	mV / V	0.0 ± 0.1
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 1.0
Hysteresis	% R.O.	≤ 1.0
Combined Error	% R.O.	≤ 1.0
Repeatability	% R.O.	≤ 1.0
Creep for 30min.	% R.O.	≤ 1.0
Return for 30min.	% R.O.	≤ 1.0
Resolution	-	-
Division	mV / V	0.02
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.05 ≤ 0.1
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		350 ± 3.5 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Aluminum: 1~5kgf Stainless steel: 10kgf~2tf
Cable Specification	-	Ø3 X 4P X 3m (PVC)
Safety Overload	% R.L.	150

Dimensions

Unit : mm

► SMN



Capa.	A	B	C	D	E	Cable (m)
1 ~ 100 kgf	11	9	20	3	20	3
200kgf ~ 2tf	16	15	20	4	20	

CPA | Disk Load Cell



Features

- Compression type
- All-inclusive structure of load application and joints
- Designed according to IP65

Application

- Mobile accumulator

Description

CPA is a low profile disk type load cell of steel material. Compression type load cell is suitable for low deck high capacity scale application environments, such as mobile accumulators.

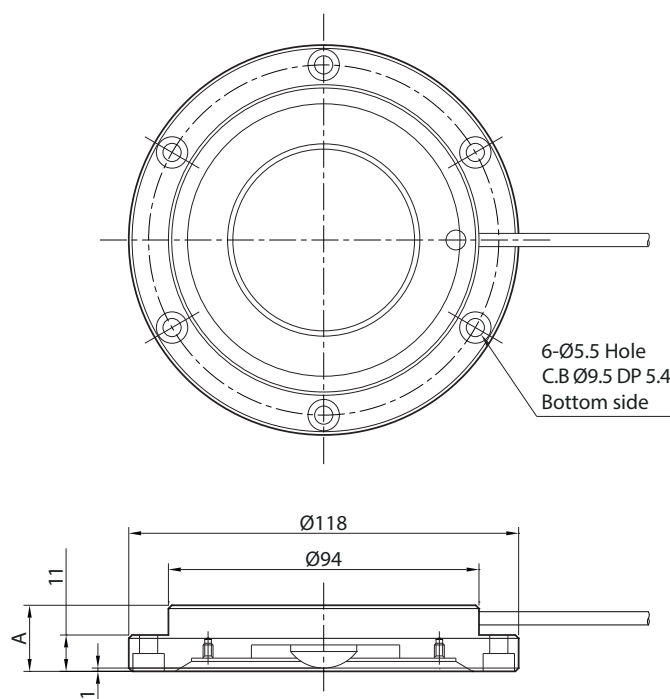
Specifications

Capacity(R.L.)	kgf	500, 1K, 2K, 3K, 5K
Rated Output	mV / V	1.7 ± 0.17
Zero Balance	mV / V	0.0 ± 0.016
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.05
Hysteresis	% R.O.	≤ 0.05
Combined Error	% R.O.	≤ 0.05
Repeatability	% R.O.	≤ 0.03
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/2000
Division	mV / V	0.00085
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.03 ≤ 0.05
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		800 ± 40 700 ± 7 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel
Cable Specification	-	Ø4 X 4P X 0.62m (PVC)
Safety Overload	% R.L.	150

Dimensions

- CPA

Unit : mm



Capa.	A
500kgf/1tf	20
2-5tf	22

CPAS | Disk Load Cell



Features

- Compression type
- All-inclusive structure of load application and joints
- Designed according to IP65

Application

- Mobile accumulator

Description

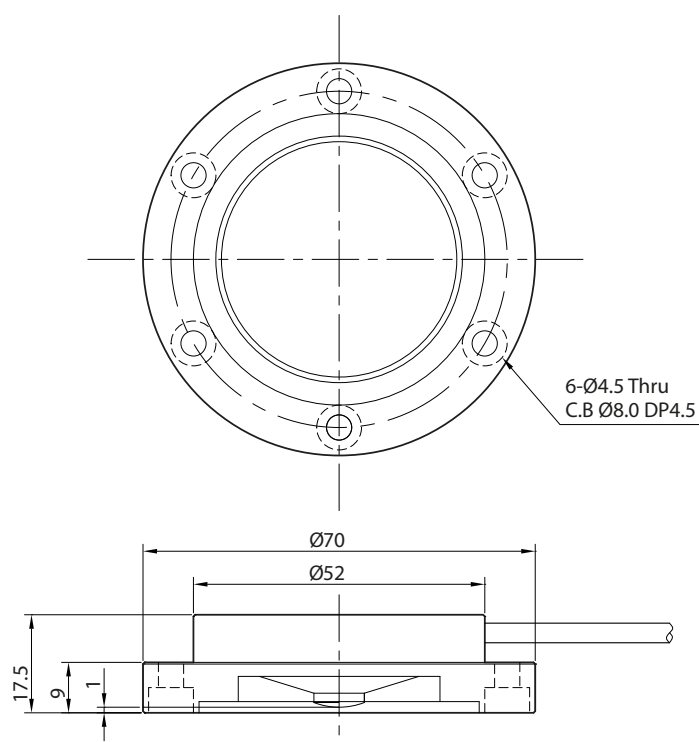
CPAS is a low profile disk type load cell of steel material. Compression type load cell is suitable for low deck high capacity scale application environments, such as mobile accumulators.

Specifications

Capacity(R.L.)	tf	3
Rated Output	mV / V	1.2 ± 0.005
Zero Balance	mV / V	0.0 ± 0.005
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.3
Hysteresis	% R.O.	≤ 0.3
Combined Error	% R.O.	≤ 0.3
Repeatability	% R.O.	≤ 0.03
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/300
Division	mV / V	0.004
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel
Cable Specification	-	Ø3 X 4P X 0.52m (PVC)
Safety Overload	% R.L.	150

Dimensions

► CPAS



Unit : mm

LSOC | Disk Load Cell



Features

- Compression type
- Hermetically sealed structure
- Designed according to IP68

Application

- Safety of the specifically-equipped vehicle
- A cargo bracket equipment

Description

LSOC is a low profile disk type load cell of steel material. A hollow type of compression type load cell in an enclosed structure is suitable for a specifically-equipped vehicle and cargo truck bracket load measurement system that requires safety.

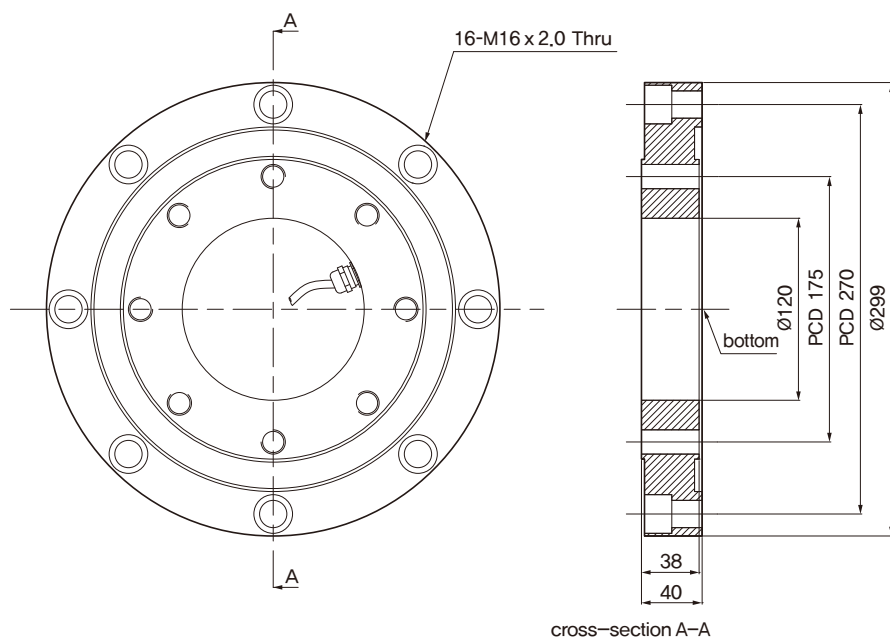
Specifications

Capacity(R.L.)	tf	5
Rated Output	mV / V	2.0 ± 0.2
Zero Balance	mV / V	0.0 ± 0.01
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.2
Hysteresis	% R.O.	≤ 0.1
Combined Error	% R.O.	≤ 0.1
Repeatability	% R.O.	≤ 0.1
Creep for 30min.	% R.O.	≤ 0.01
Return for 30min.	% R.O.	≤ 0.01
Resolution	-	≤ 1/500
Division	mV / V	0.004
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.05 ≤ 0.05
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		410 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Coating
Cable Specification	-	Ø5.4 X 4P X 1.2m (Urethane)
Safety Overload	% R.L.	150

Dimensions

► LSOC

Unit : mm



LSOC2 | Disk Load Cell



Features

- Compression type
- Designed according to IP66

Application

- Safety of the specifically-equipped vehicle
- A cargo bracket equipment

Description

LSOC2 is a low profile disk type load cell of steel material. A hollow type of compression type load cell in an enclosed structure is suitable for a specifically equipped vehicle and cargo truck bracket load measurement system that requires safety.

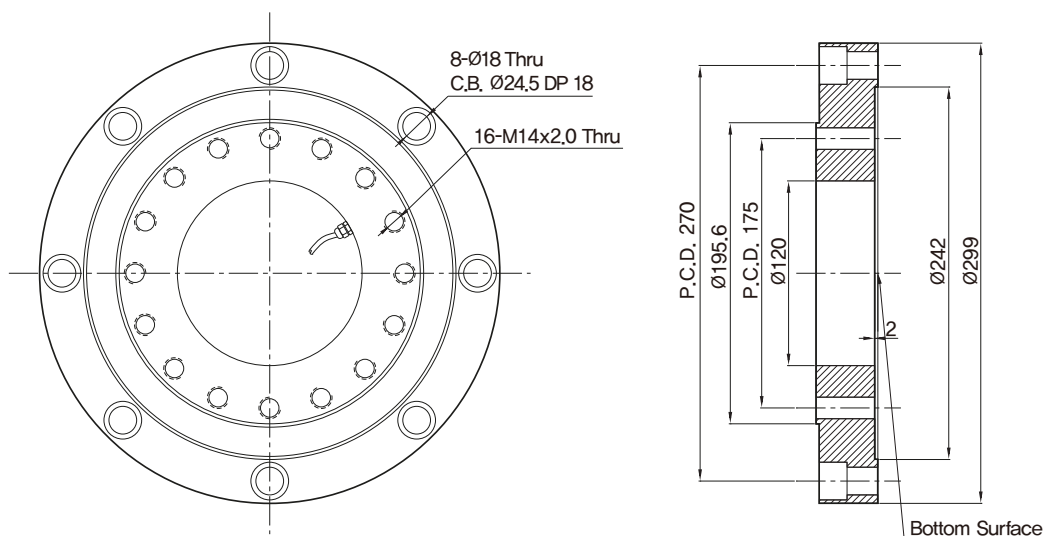
Specifications

Capacity(R.L.)	tf	5
Rated Output	mV / V	1.0 ± 0.1
Zero Balance	mV / V	0.0 ± 0.01
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.2
Hysteresis	% R.O.	≤ 0.1
Combined Error	% R.O.	≤ 0.1
Repeatability	% R.O.	≤ 0.1
Creep for 30min.	% R.O.	≤ 0.01
Return for 30min.	% R.O.	≤ 0.01
Resolution	-	≤ 1/500
Division	mV / V	0.004
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Electroless Nickel Plating
Cable Specification	-	Ø5.4 X 4P X 1.2m (Urethane)
Safety Overload	% R.L.	150

Dimensions

► LSOC2

Unit : mm



CHE | Disk Load Cell



Features

- Compression type
- Hollow type
- Designed according to IP66

Option

- Compression accessories(pressurized plate)
- Order made size and capacity(~1000tf)

Application

- Compression tester

Description

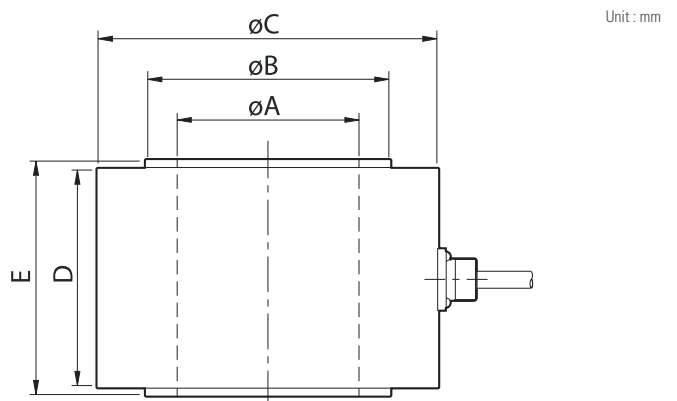
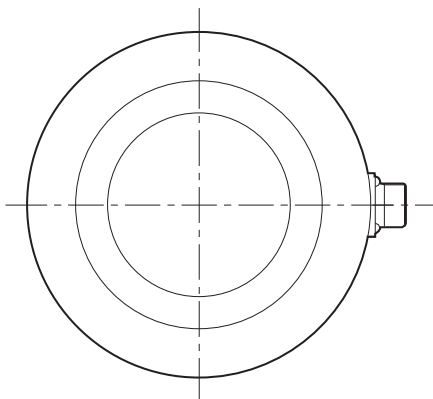
CHE is a center hole disk type load cell of steel material. This compression type load cell is suitable for various compression tests and civil related compression tests.

Specifications

Capacity(R.L.)	tf	20, 50, 100, 150, 200
Rated Output	mV / V	1.5 ± 0.0075
Zero Balance	mV / V	0.0 ± 0.015
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 1.0
Hysteresis	% R.O.	≤ 1.0
Combined Error	% R.O.	≤ 1.0
Repeatability	% R.O.	≤ 0.2
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/100
Division	mV / V	0.015
Temperature Effect on	-Zero Value	%/10°C
	-Output Value	%/10°C
		≤ 0.03
		≤ 0.03
Excitation	-Recommended	V
	-Maximum	V
		10
		15
Resistance	-Input	Ω
	-Output	Ω
	-Insulation	MΩ
		400 ± 20
		350 ± 3.5
		> 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Load Cell: Steel / Electroless Nickel Plating Housing: Steel / Powder Coating
Cable Specification	-	Ø8 X 4P X 10m (PVC)
Safety Overload	% R.L.	150

Dimensions

► CHE

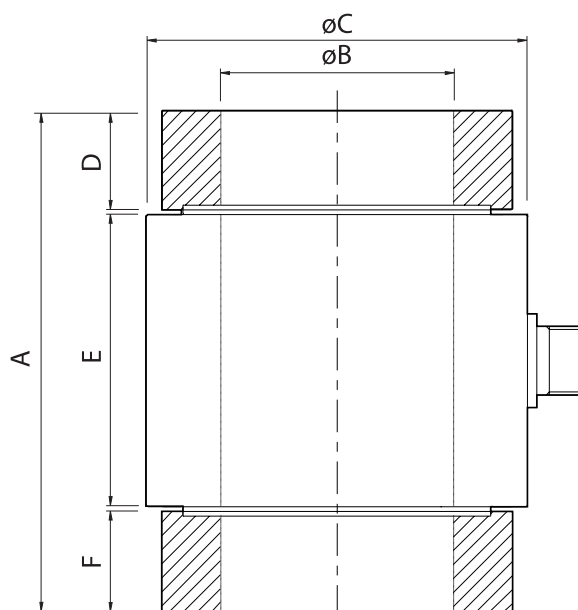


Unit : mm

Capa.	TYPE	A	B	C	D	E	Cable(m)
20 tf	-	35	45	75	69	75	10
50 tf	-	50	67	100	69	75	
100 tf	A	75	99	123	94	100	
	B	100	119	145	94	100	
150 tf	A	75	109	135	94	100	
	B	125	148	178	104	110	
200 tf	-	125	155	186	104	110	

Accessory Dimensions

► CHE



Capa.	TYPE	A	B	C	D	E	F
20 tf	-	135	35	75	32	69	32
50 tf	-	116	50	100	22	69	22
100 tf	A	161	75	123	32	94	32
	B	161	100	145	32	94	32
150 tf	A	167	75	135	35	94	35
	B	177	125	178	35	104	35
200 tf	-	191	125	186	42	104	42

CHE-KM

Disk
Load Cell



Features

- Compression type
- Hollow type
- Designed according to IP66

Application

- Compression tester

Description

CHE-KM is a center hole disk type load cell of aluminum material. As a compressed type load cell, it is suitable for various compress test and civil related tests.

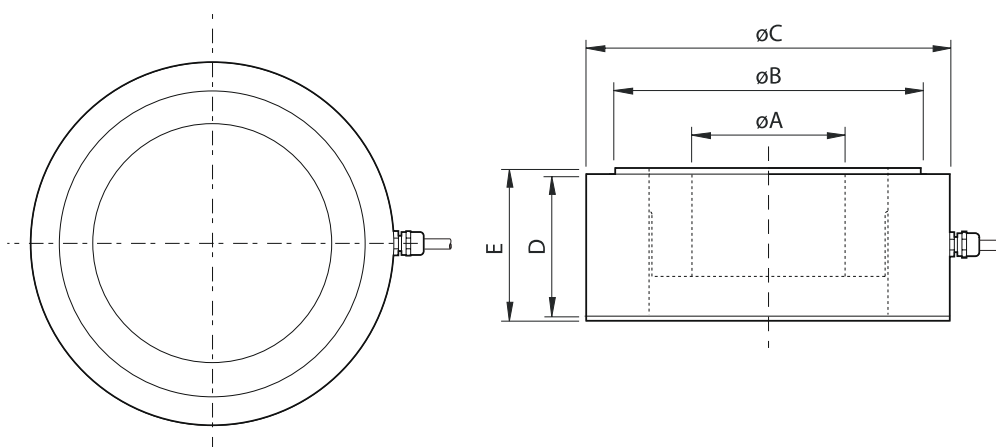
Specifications

Capacity(R.L.)	tf	6, 10, 20, 30
Rated Output	mV / V	1.0 ± 0.007
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 1.0
Hysteresis	% R.O.	≤ 1.0
Combined Error	% R.O.	≤ 1.0
Repeatability	% R.O.	≤ 0.2
Creep for 30min.	% R.O.	≤ 0.015
Return for 30min.	% R.O.	≤ 0.015
Resolution	-	≤ 1/100
Division	mV / V	0.01
Temperature Effect on	-Zero Value	%/10°C
	-Output Value	%/10°C
		≤ 0.05
		≤ 0.05
Excitation	-Recommended	V
	-Maximum	V
		10
		15
Resistance	-Input	Ω
	-Output	Ω
	-Insulation	MΩ
		800 ± 20
		700 ± 7
		> 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Load Cell: Steel / Electroless Nickel Plating Housing: Steel / Powder Coating
Cable Specification	-	Ø5.4 X 4P X 5.16 m(Urethane)
Safety Overload	% R.L.	150

Dimensions

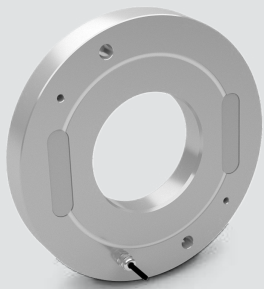
► CHE-KM

Unit : mm



Capa.	A	B	C	D	E	Cable(m)
6 tf	32.1	75	95	51	55	5.16
10 tf	32.1	90	105	51	60	
20 tf	72.1	160	190	74	80	
30 tf	72.1	160	190	74	80	

ZWIT-15T | Disk Load Cell



Features

- Compression type
- Hollow structure type
- Sealed design
- Designed in accordance with IP65 standards

Application

- For ship winch safety

Description

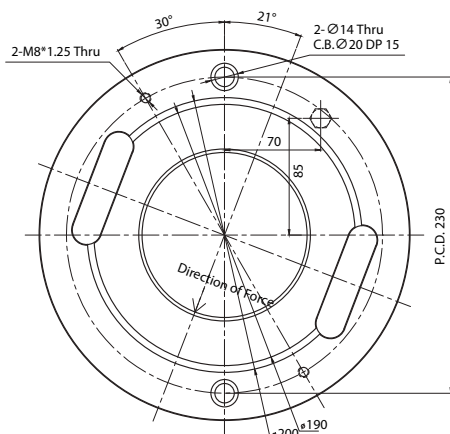
ZWIT is a steel material disk type load cell. It's a sealed, hollow compression-type load cell suitable for systems that detect rope tension in ship winches where safety is crucial. It incorporates safety devices to prevent damage to the ship by handling overloads.

Specifications

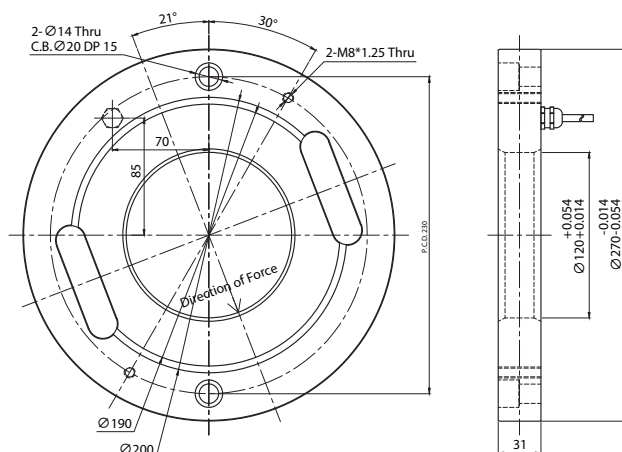
Capacity(R.L.)	tf	15
Rated Output	mV / V	1.5 ± 0.15
Zero Balance	mV / V	0.0 ± 0.015
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.5
Hysteresis	% R.O.	≤ 0.5
Combined Error	% R.O.	≤ 0.5
Repeatability	% R.O.	≤ 0.1
Creep for 30min.	% R.O.	≤ 0.5
Return for 30min.	% R.O.	≤ 0.5
Resolution	-	1/200
Division	mV / V	0.0075
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.1 ≤ 0.1
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		390 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-20 to +70
Material	-	Steel
Cable Specification	-	Ø5.4 X 4P X 0.7m(Urethane, Pin type)
Safety Overload	% R.L.	150

Dimensions

► ZWIT-15T (L)

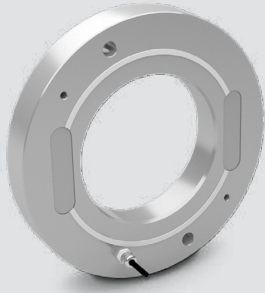


► ZWIT-15T (R)



Unit : mm

ZWITA-15T | Disk Load Cell



Features

- Compression type
- Hollow structure type
- Sealed design
- Designed in accordance with IP65 standards

Application

- For ship winch safety

Description

ZWITA is a steel material disk type load cell. It's a sealed, hollow compression-type load cell suitable for systems that detect rope tension in ship winches where safety is crucial. It incorporates safety devices to prevent damage to the ship by handling overloads.

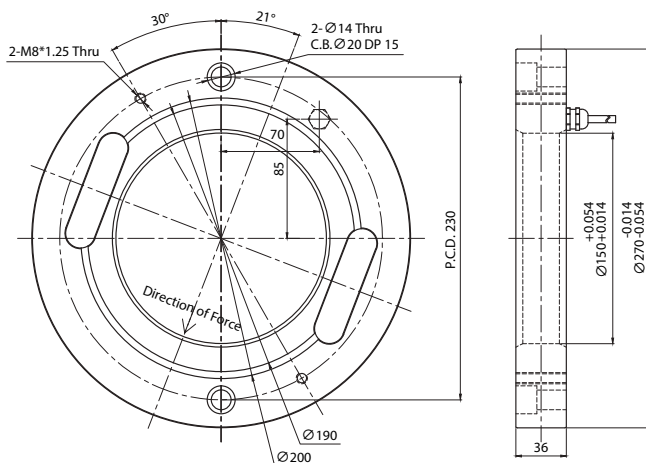
Specifications

Capacity(R.L.)	tf	15
Rated Output	mV / V	1.5 ± 0.15
Zero Balance	mV / V	0.0 ± 0.015
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.5
Hysteresis	% R.O.	≤ 0.5
Combined Error	% R.O.	≤ 0.5
Repeatability	% R.O.	≤ 0.1
Creep for 30min.	% R.O.	≤ 0.5
Return for 30min.	% R.O.	≤ 0.5
Resolution	-	1/200
Division	mV / V	0.0075
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.1 ≤ 0.1
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		390 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-20 to +70
Material	-	Steel
Cable Specification	-	Ø5.4 X 4P X 0.7m(Urethane, Pin type)
Safety Overload	% R.L.	150

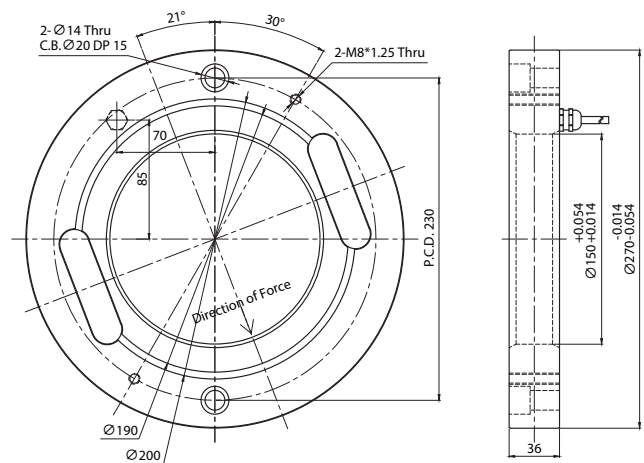
Dimensions

Unit : mm

► ZWITA-15T (L)



► ZWITA-15T (R)



ZLSW | Disk Load Cell



Features

- Tensile / Compression type
- Hollow type
- Hermetically sealed structure
- Steel / Electroless nickel plating

Application

- Compression tester

Description

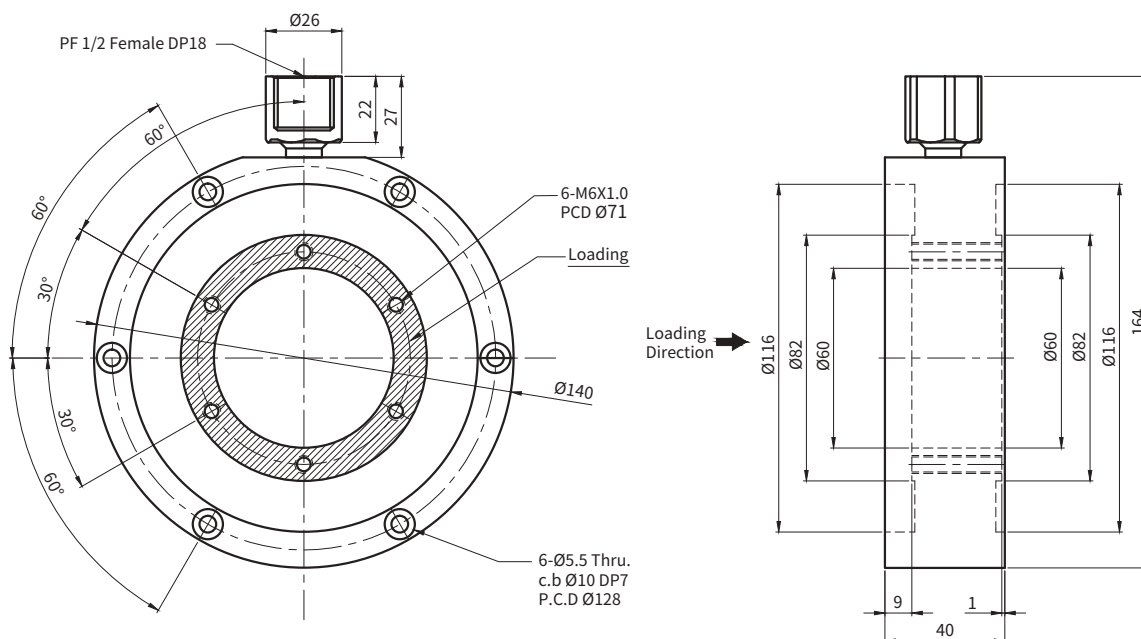
ZLSW is a low profile disk type load cell of steel material. It is suitable for compression tester and load control system.

Specifications

Capacity(R.L.)	tf	1, 2, 2.5, 3, 5
Rated Output	mV / V	1.5 ± 0.05
Zero Balance	mV / V	0 ± 0.015
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.1
Hysteresis	% R.O.	≤0.1
Combined Error	% R.O.	≤0.1
Repeatability	% R.O.	≤0.05
Creep for 30min.	% R.O.	≤0.05
Return for 30min.	% R.O.	≤0.05
Resolution	-	-
Division	mV / V	-
Temperature Effect on	- Zero Value - Span Value	%/10°C %/10°C
		±0.05 ±0.05
Excitation	- Recommended - Maximum	V V
		10 15
Resistance	- Input - Output - Insulation	Ω Ω MΩ
		700 ± 10 700 ± 10 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Electroless Nickel Plating
Cable Specification	-	Ø5 X 4P X 40m (PVC)
Safety Overload	% R.L.	150

Dimensions

Unit : mm



HIGH PRECISION LOAD CELL



Double Ended Beam Load Cell

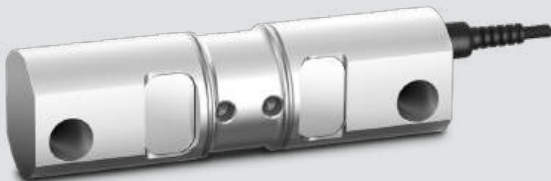
CAS has excellent technology in metering, and control, and provides high accuracy and precision load cells for various industrial environments.

[DSB-20 / DSB-B / DES-B / DSB1 / DSB2 / DSBV / DSBT / DSB-D]



DSB-20

Double Ended Beam Load Cell



Features

- Rocker pin loading design
- Truck scale accessory
- Designed according to IP67

Option

- Accessory set

Application

- Hopper, Tank scale
- Truck scale

Description

DSB-20 is a double ended type load cell, and it can control the hopper or tank's movement, which is located on each side of the loadcell. Also, it has excellent performance in the high capacity weighing system and is suitable for hopper, tank scale and truck scale.

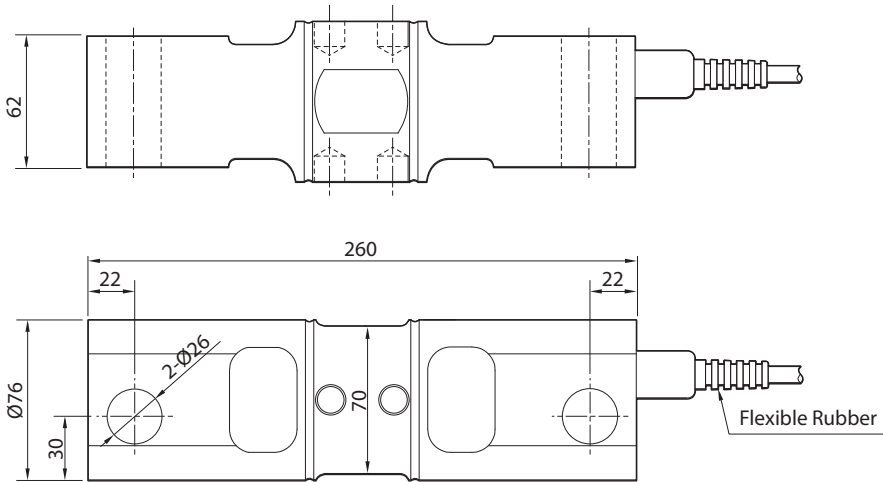
Specifications

Capacity(R.L.)		tf	20
Rated Output	mV / V		2.0 ± 0.004
	mV / V		0.0 ± 0.02
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O.	≤ 0.03
		% R.O.	≤ 0.03
		% R.O.	≤ 0.03
		% R.O.	≤ 0.01
		% R.O.	≤ 0.03
		% R.O.	≤ 0.03
		-	≤ 1/3000
		mV / V	0.00067
Temperature Effect on	-Zero Value	%/10°C	≤ 0.03
	-Output Value	%/10°C	≤ 0.015
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	800 ± 40
	-Output	Ω	700 ± 7
	-Insulation	MΩ	> 2000
Compensated Temperature Range		°C	-10 to +40
Operating Temperature Range		°C	-30 to +80
Material		-	Steel
Cable Specification		-	Ø8 x 4P x 15m (PVC)
Safety Overload		% R.L.	150

Dimensions

- DSB-20

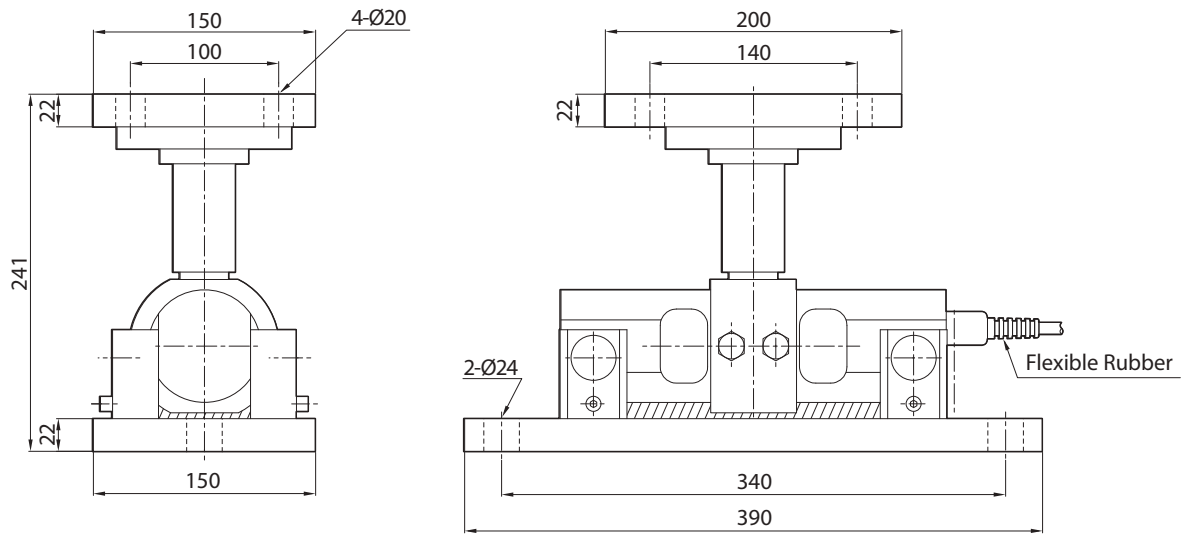
Unit : mm



Accessory Dimensions

Unit : mm

► DSB-20



DSB-B

Double Ended Beam Load Cell



Features

- Compression type
- Robust design and easy installation
- Strong against shock or side force
- Designed according to IP67

Option

- Accessory set

Accessory Features

- Easy load cell replacement
- Appropriate for tank and truck scale applications
- High resolution by use of ball

Application

- Hopper, Tank Scale
- Truck Scale

Description

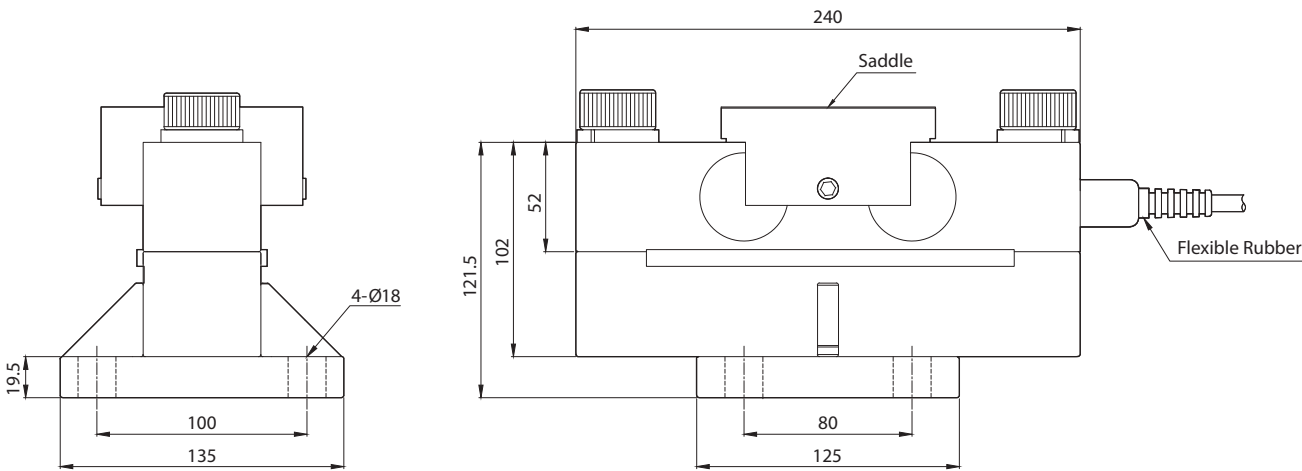
DSB-B is double ended type load cell, and is suitable for high capacity hopper and tank scale and truck scale. Also through the ball, the force structure makes minimum side force.

Specifications

Capacity(R.L.)		tf	10, 25, 30
Rated Output		mV / V	2.0 ± 0.004
Zero Balance		mV / V	0.0 ± 0.02
Accuracy Class		-	-
Non-Linearity		% R.O.	≤ 0.03
Hysteresis		% R.O.	≤ 0.03
Combined Error		% R.O.	≤ 0.03
Repeatability		% R.O.	≤ 0.02
Creep for 30min.		% R.O.	≤ 0.03
Return for 30min.		% R.O.	≤ 0.03
Resolution		-	≤ 1/3000
Division		mV / V	0.00067
Temperature Effect on	-Zero Value	%/10°C	≤ 0.03
	-Output Value	%/10°C	≤ 0.015
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	800 ± 40
	-Output	Ω	700 ± 7
	-Insulation	MΩ	> 2000
Compensated Temperature Range		°C	-10 to +40
Operating Temperature Range		°C	-30 to +80
Material		-	Steel / Coating
Cable Specification		-	Ø8 x 4P x 15m (PVC)
Safety Overload		% R.L.	150

Dimensions

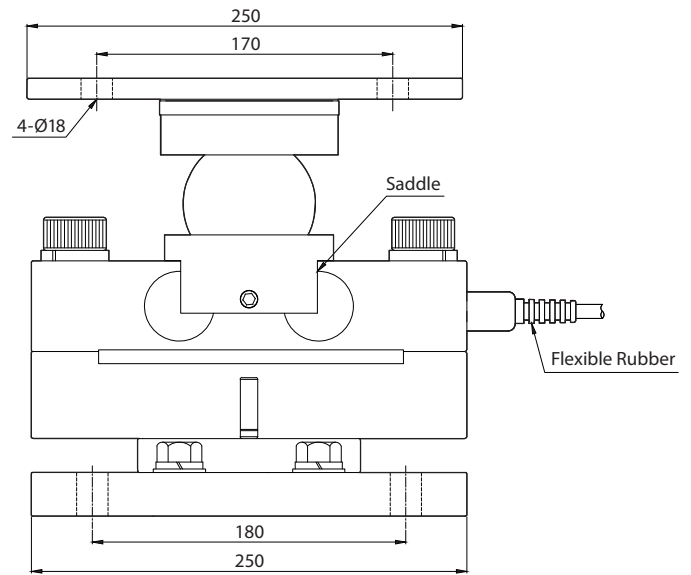
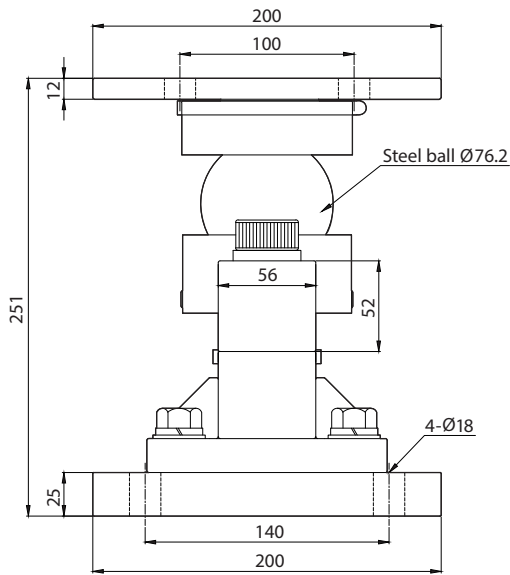
- DSB-B



Unit : mm

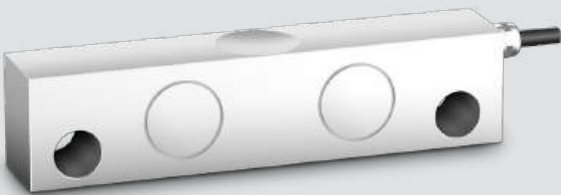
Accessory Dimensions

► DSB-B



DES-B

Double Ended Beam Load Cell



Features

- Robust design and easy installation
- Strong against shock or side force
- Designed according to IP67

Option

- Accessory set

Accessory Features

- Easy load cell replacement
- Appropriate for tank and truck scale applications
- High resolution by use of ball

Application

- Hopper, Tank Scale
- Truck Scale

Description

DES-B is a double ended type load cell, and is suitable for high capacity hopper, tank scale and truck scale. Also through the ball, the force structure makes minimum side force.

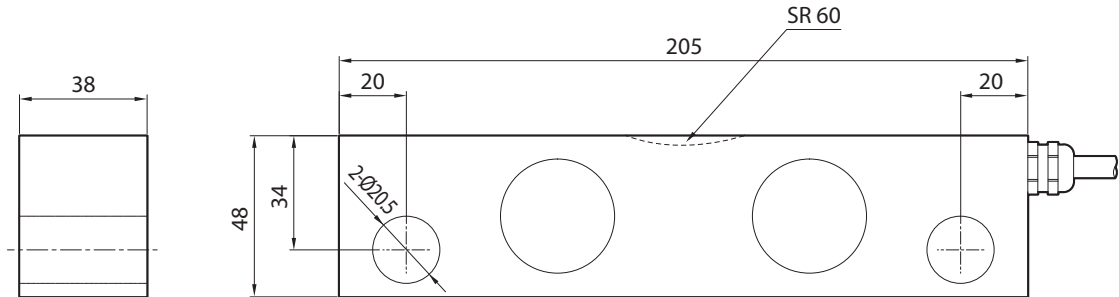
Specifications

Capacity(R.L.)	tf	5, 10, 15, 20
Rated Output	mV / V	2.0 ± 0.005
Zero Balance	mV / V	0.0 ± 0.03
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.03
Hysteresis	% R.O.	≤ 0.03
Combined Error	% R.O.	≤ 0.03
Repeatability	% R.O.	≤ 0.03
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/3000
Division	mV / V	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.03 ≤ 0.015
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		800 ± 40 700 ± 7 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel
Cable Specification	-	Ø8 x 4P x 10m (PVC)
Safety Overload	% R.L.	150

Dimensions

- DES-B

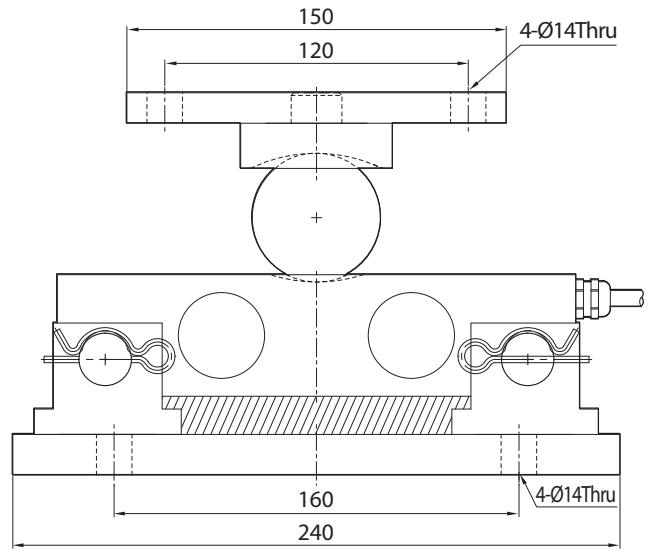
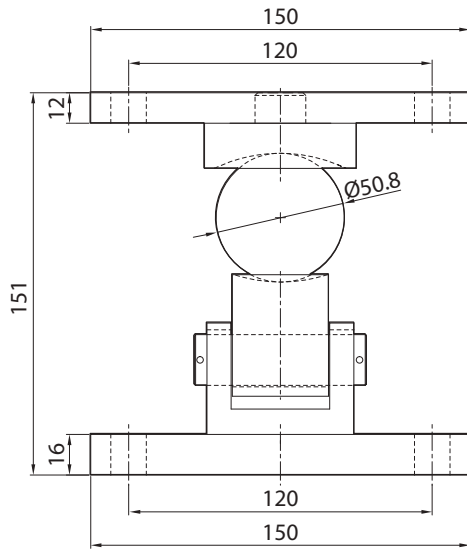
Unit : mm



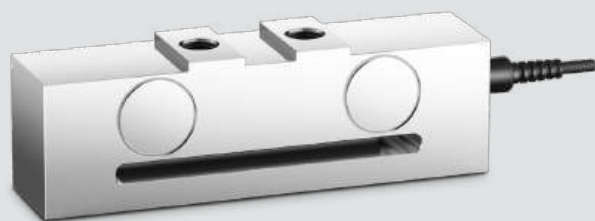
Unit : mm

Accessory Dimensions

► DES-B



DSBV | Double Ended Beam Load Cell



Features

- Robust design and easy installation
- Strong against shock or side force
- Designed according to IP67

Option

- Accessory set

Accessory Features

- Suitable for tank and truck scale

Application

- Wire web tension control
- Tension control of textile production facilities

Description

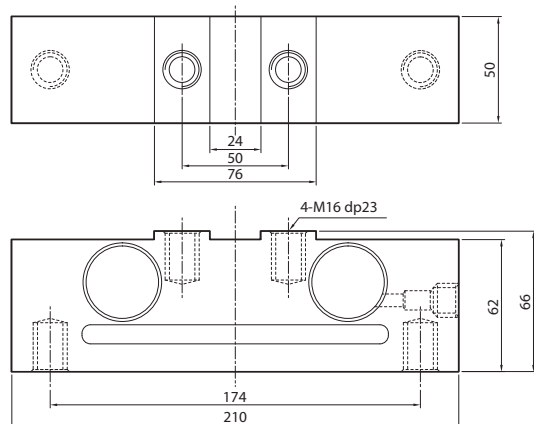
DSBV is a double ended beam type load cell with low profile. Its structure is suitable for tension control of textile production facilities.

Specifications

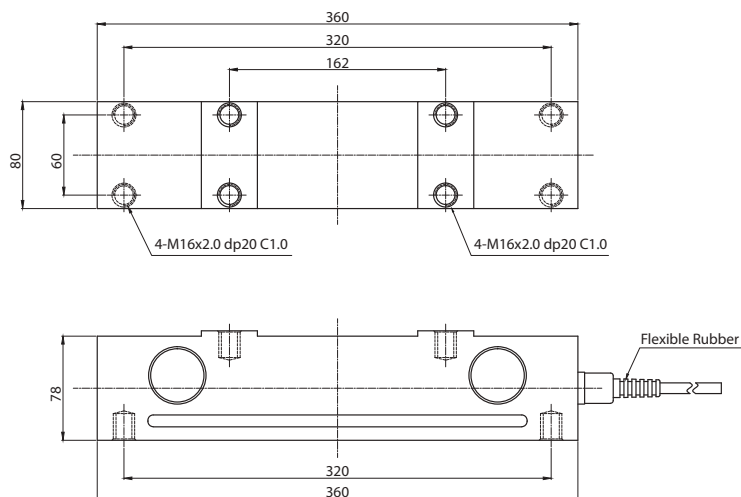
Capacity(R.L.)	tf	1, 2, 3, 5, 10
Rated Output	mV / V	1.2 ± 0.12
Zero Balance	mV / V	0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.05
Hysteresis	% R.O.	≤ 0.05
Combined Error	% R.O.	≤ 0.05
Repeatability	% R.O.	≤ 0.03
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/2000
Division	mV / V	0.0006
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.03 ≤ 0.03
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		800 ± 40 700 ± 7 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel
Cable Specification	-	Ø8 x 4P x 5m (PVC)
Safety Overload	% R.L.	150

Dimensions

► DSBV (1t ~ 3t)



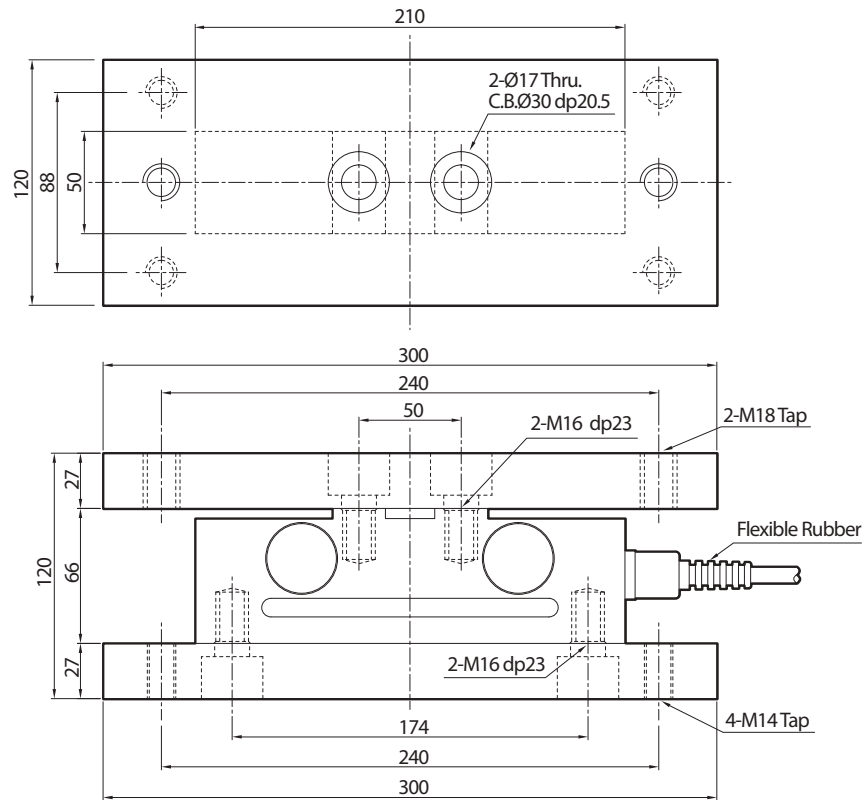
► DSBV (5t ~ 10t)



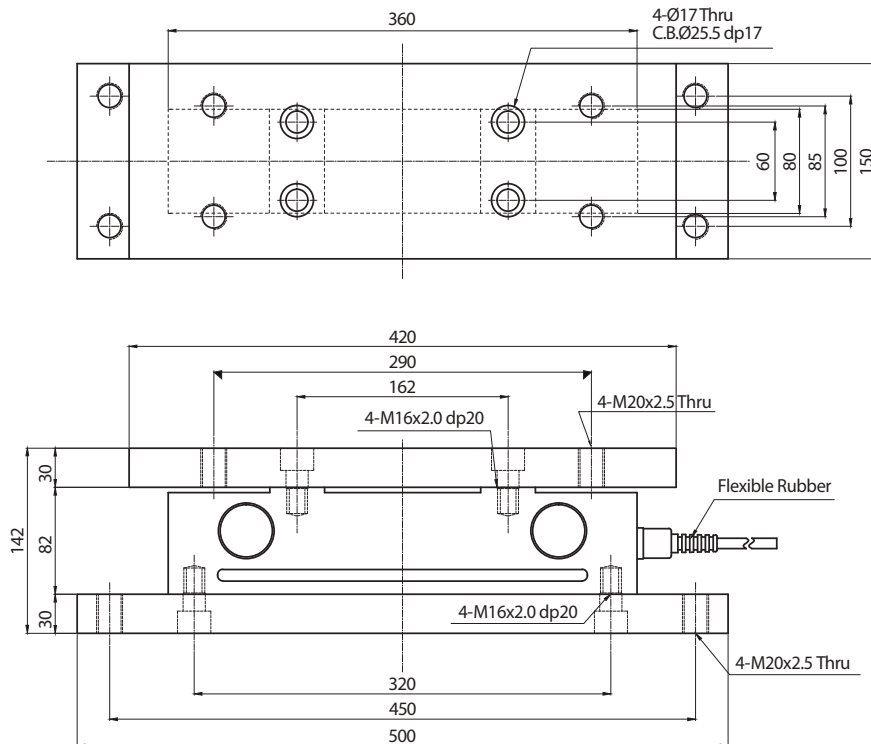
Unit : mm

Accessory Dimensions

► DSBV (1t ~ 3t)

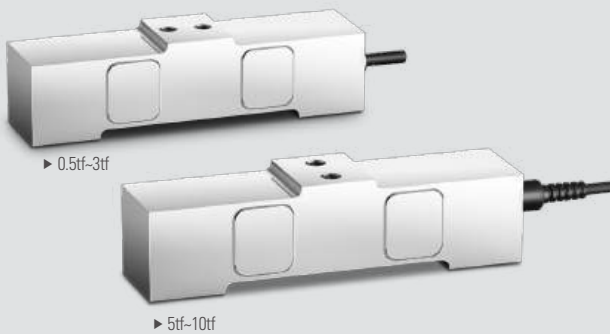


► DSBV (5t ~ 10t)



DSBT (0.5tf~10tf)

Double Ended Beam Load Cell



Features

- Robust design and easy installation
- Strong against shock or side force
- Designed according to IP67

Option

- Accessory set

Accessory Features

- Suitable for tank and truck scale

Application

- Wire web tension control
- Tension control of textile production facilities

Description

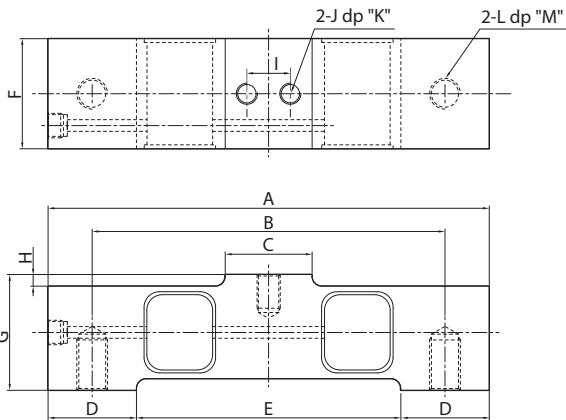
DSBT is a double ended beam type load cell with low profile. Its structure is suitable for tension control of textile production facilities.

Specifications

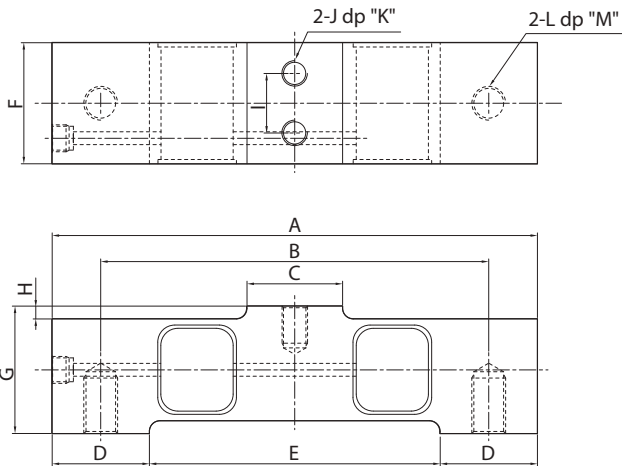
Capacity(R.L.)	tf	0.5 , 1.5 , 3 , 5, 10
Rated Output	mV / V	2.0 ± 0.1
Zero Balance	mV / V	0 ± 0.1
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.1
Hysteresis	% R.O.	≤ 0.1
Combined Error	% R.O.	≤ 0.1
Repeatability	% R.O.	≤ 0.03
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	1/1000
Division	mV / V	0.002
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel
Cable Specification	-	Ø5.4 x 4P x 5m (PVC)
Safety Overload	% R.L.	150

Dimensions

► DSBT (0.5tf~3tf)



► DSBT (5tf~10tf)

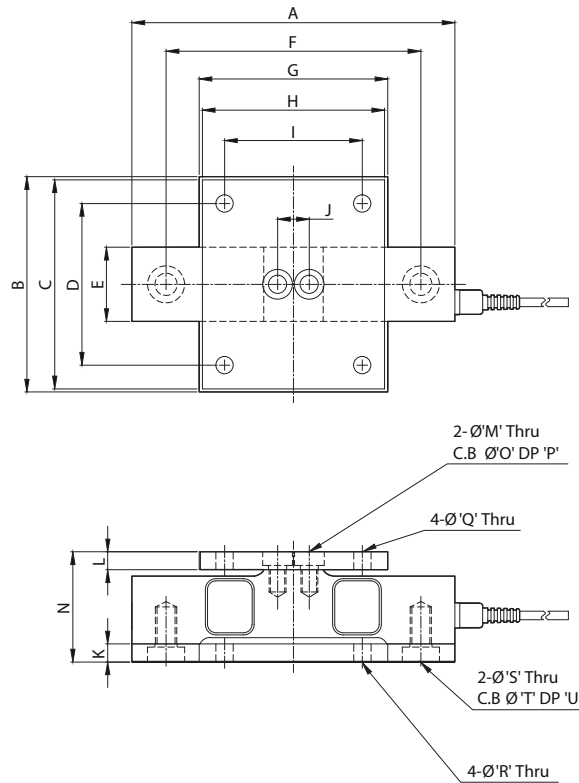


Capa.	A	B	C	D	E	F	G	H	I	J	K	L	M	Cable(m)
0.5tf	152.4	120.2	28	32.2	88	35	35	3	15	M8×1.25	13	M10×1.5	20	5
1.5tf	177.8	139.4	36	38.4	101	40	43	3	18	M8×1.25	13	M12×1.75	20	
2tf	165	138	35	25	115	32	30	1	16	M8×1.25	15	M10×1.5	20	
3tf	177.8	139.4	36	38.4	101	40	43	3	18	M8×1.25	13	M12×1.75	20	
5tf	228.6	182.8	45	45.8	137	57	60	6	28	M12×1.75	20	M16×2	24	
10tf	254	196.8	48	57	140	58	66	7	28	M16×2	24	M16×2	24	

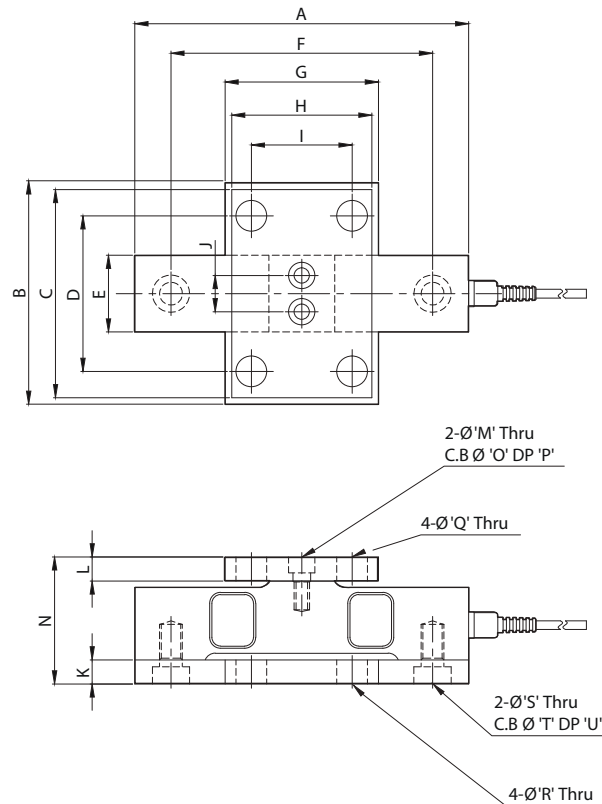
Unit : mm

Accessory Dimensions

► DSBT (0.5tf ~ 3tf)



► DSBT (5tf ~ 10tf)



* Upper and lower plates'fastening hole positions are same.
* No upper plate fastening hole in 1.5tf one.

Capa.	A	B	C	D	E	F	G	H	I	J	K	L	N	M	O	P	Q	R	S	T	U	Cable (m)
0.5tf	152.4	101.6	98.6	76.2	35	120.2	89	89	65	15	8.5	8.5	52	8.5	14	6.5	8.2	8.2	10.5	17.5	7	5
1.5tf	177.8	114.3	70	92	40	139.4	101.6	101.6	79.2	18	10	10	63	8.5	14	7	-	10.2	12.5	22	7	
2tf	165	101.6	98.6	76.2	32	138	115	89	65	16	10.5	8.3	50.8	8.5	14	8.3	8.2	8.2	10.5	22	8	
3tf	177.8	114.3	114.3	92	40	139.4	101.6	101.6	79.2	18	10	10	63	8.5	14	7	10.2	10.2	12.5	22	7	
5tf	228.6	139.7	139.7	112.2	57	182.8	127	127	99.6	28	14.5	14.5	89	12.5	22	10	10.2	10.2	16.5	26	11.5	
10tf	254	165.2	165.2	128.6	58	196.8	139.8	139.8	106.2	28	19.5	19.5	105	16.5	26	13	12.7	12.7	16.5	26	13	

DSB-D

Double Ended Beam Digital Load Cell



Features

- Compression type
- High resolution digital output
- CE approved
- Designed according to IP67

Option

- Ball type accessory
- Option plate (When using DSB Analog)

Application

- Hopper, Tank Scale
- Truck Scale

Description

The DSB-D digital load cell is suitable for large size scales such as car weighers, tanks and hoppers, nickel plated steel IP67 construction for accurate and precise performance in harsh environments. The user can connect the load cells individually through the digital communication. When weighing system is manufactured, it is easy to calibrate weight, check for trouble and replace load cell easily.

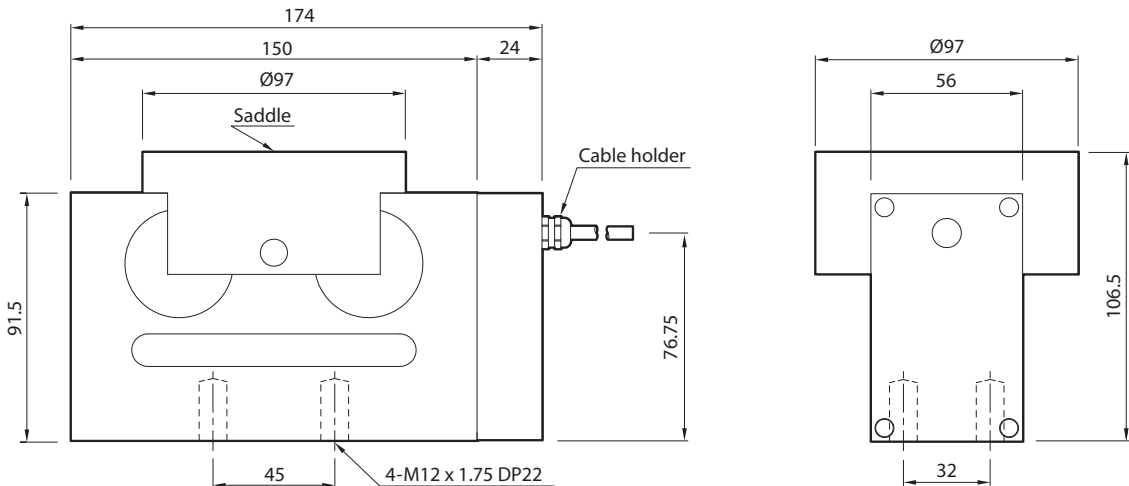
Specifications

Capacity(R.L.)	tf	10, 20, 25, 30
Rated Output	counts	300,000
Zero Balance	counts	± 300
Non-Linearity	% R.O.	< 0.015
Hysteresis	% R.O.	< 0.015
Combined Error	% R.O.	< 0.015
Repeatability	% R.O.	< 0.01
Creep for 30min.	% R.O.	< 0.017
Temperature Effect on	- Zero Value - Output Value	% R.O./10°C % R.O./10°C
Compensated Temperature Range	°C	-10 ~ +40
Operating Temperature Range	°C	-30 ~ +80
Excitation	- Minimum - Recommended - Maximum	V V V
Insulation	MΩ	≥ 2,000
Safety Overload	% R.C.	150
Material	-	Steel
Communication Method	-	RS-485 (2wire)
Communication Speed	kbit/sec	19.2
Max Cable Length for Communication	m	1,000
Warm-up Time from Cold Start	minutes	15
Asynchronous Interface Baudrate	Baud	9,600 ~ 115,200
Number of bus addresses	-	Max. 32

Dimensions

► DSB-D

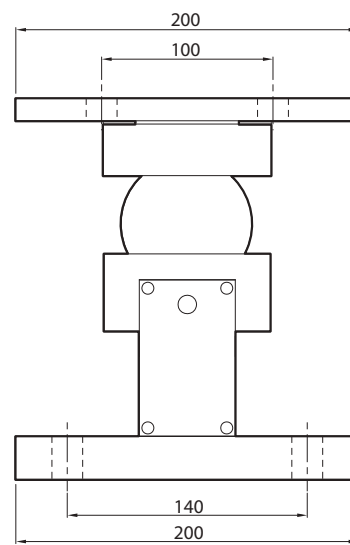
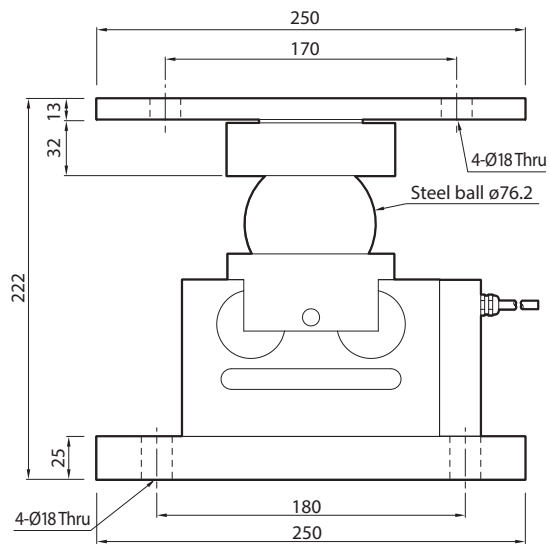
Unit : mm



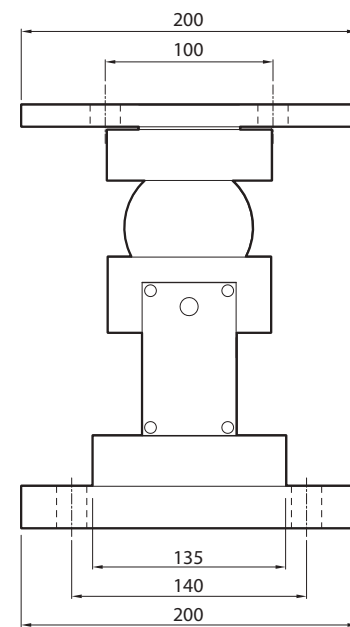
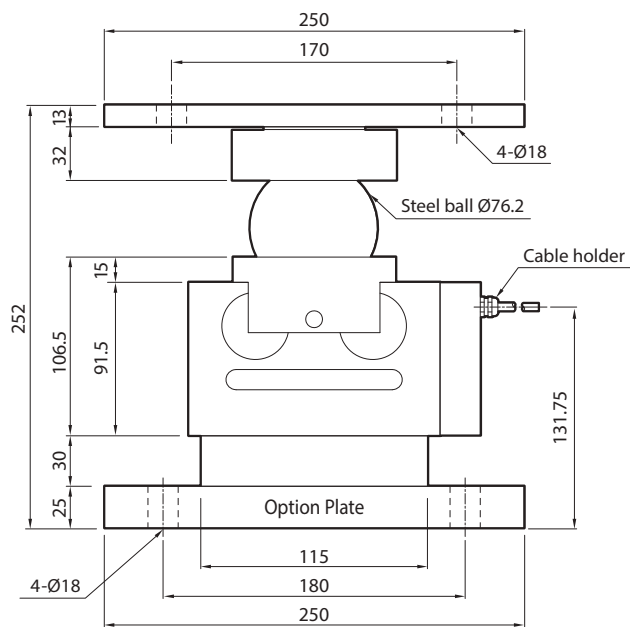
Unit : mm

Accessory Dimensions

► DSB-D



► Including base option (same height as Analog DSB type)



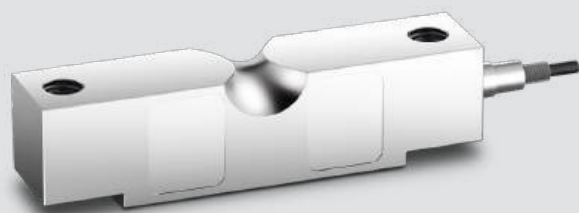
DSB1

Double Ended Beam Load Cell



Description

DSB1 is a nickel plated steel construction double ended type load cell, which is suitable for high capacity hoppers, tank scales and truck scales.



Features

- Designed according to IP67

Option

- DSB1 TW accessory set
- NTEP Class IIIIL approved

Accessory Features

- Appropriate for tank and truck scale applications
- High resolution by use of ball

Application

- Hopper, Tank Scale,
- Truck Scale

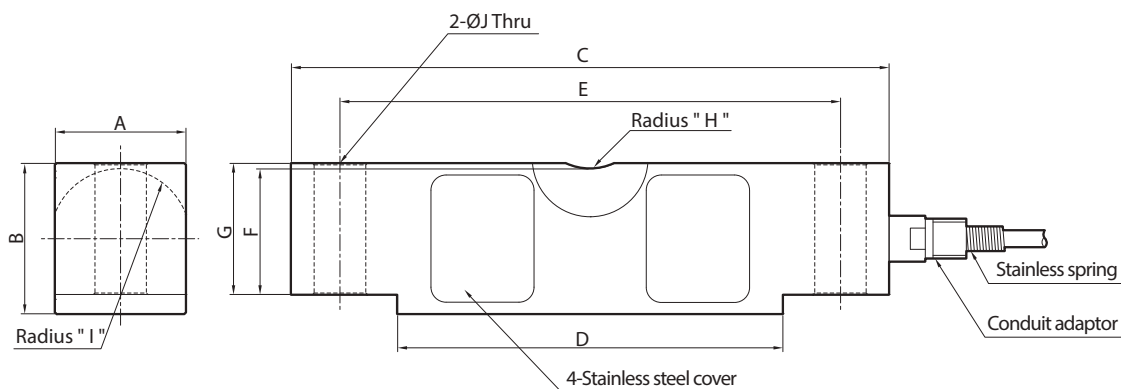
Specifications

Capacity(R.L.)	klb	10, 20, 25, 50, 60, 75	
Rated Output	mV / V	3.0 ± 0.0075	
Zero Balance	mV / V	0.0 ± 0.03	
Accuracy Class	-	IIIIL	-
Non-Linearity	% R.O.	≤ 0.03	≤ 0.05
Hysteresis	% R.O.	≤ 0.03	≤ 0.05
Combined Error	% R.O.	≤ 0.03	≤ 0.05
Repeatability	% R.O.	≤ 0.015	≤ 0.03
Creep for 30min.	% R.O.	≤ 0.02	≤ 0.05
Return for 30min.	% R.O.	≤ 0.02	≤ 0.05
Resolution	-	≤ 1/3000	≤ 1/2000
Division	mV / V	0.001	0.0015
Temperature Effect on	-Zero Value	%/10°C	≤ 0.014
	-Output Value	%/10°C	≤ 0.011
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	800 ± 40
	-Output	Ω	700 ± 7
	-Insulation	MΩ	> 2000
Compensated Temperature Range	°C	-10 to +40	
Operating Temperature Range	°C	-30 to +80	
Material	-	Steel	
Cable Specification	-	Ø5.4 x 4P x 10m (Urethane)	
Safety Overload	% R.L.	150	

Dimensions

Unit : mm

► DSB1

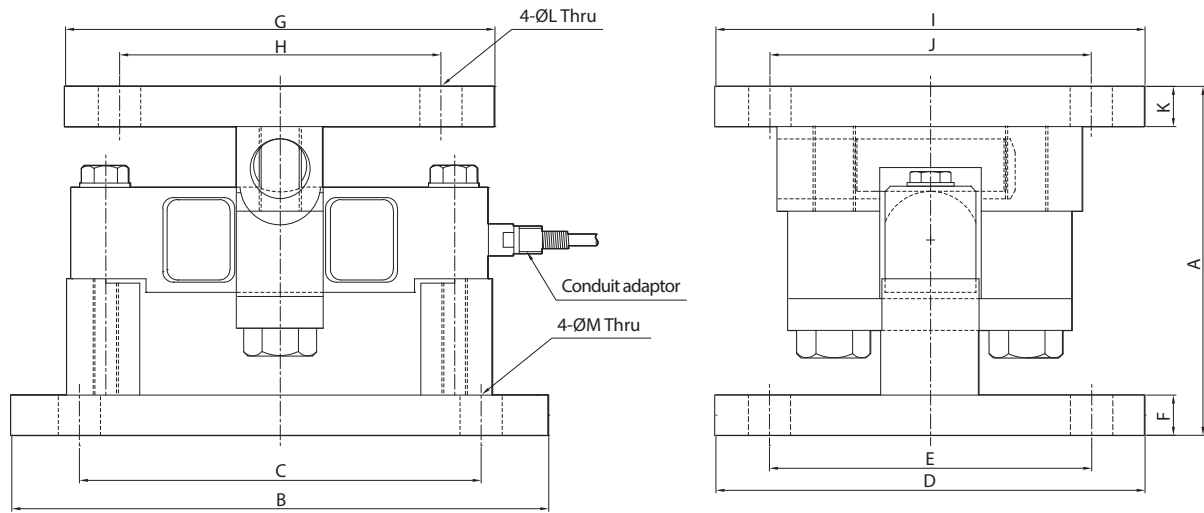


Capa.	A	B	C	D	E	F	G	H	I	J	Cable(m)
10~25klb	43	49.6	197	127	165	41.2	43.2	19	23	17	10
50~75klb	62	74.7	260.6	160.6	216	64.4	67.3	26	35	27	

Unit : mm

Accessory Dimensions

► DSB1



Capa.	A	B	C	D	E	F	G	H	I	J	K	L	M
10~25klb	165	254	190	203	152.4	19	203	152	203	152	19	20	20
50~75klb	241.8	356	292	254	190	24.5	230	165	230	165	25.4	29	29

DSB2

Double Ended Beam Load Cell



Features

- Designed according to IP67

Option

- DSB2 TW accessory set

Application

- Hopper, Tank Scale
- Truck Scale

Description

DSB2 is a nickel plated steel double-end type load cell. It has high capacity hopper and tank suitable for scale and truck scale.

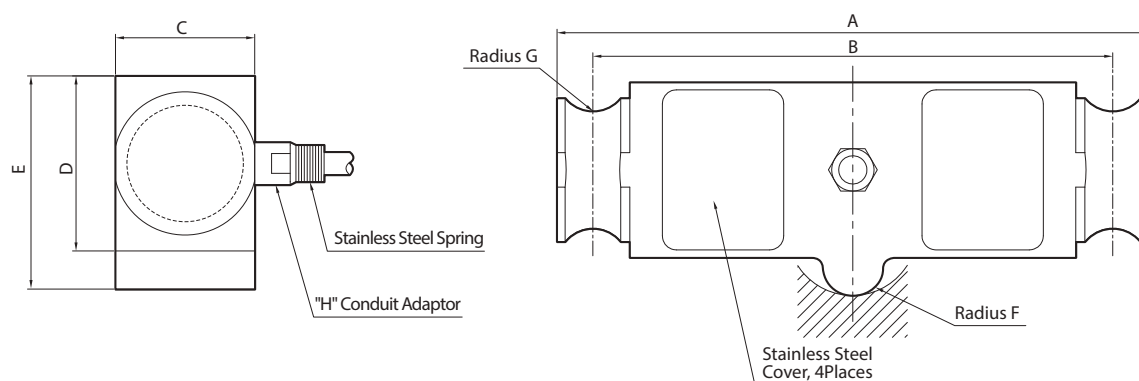
Specifications

Capacity(R.L.)	klb	25, 40, 75
Rated Output	mV / V	3.0 ± 0.0075
Zero Balance	mV / V	0.0 ± 0.03
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.03
Hysteresis	% R.O.	≤ 0.03
Combined Error	% R.O.	≤ 0.03
Repeatability	% R.O.	≤ 0.015
Creep for 30min.	% R.O.	≤ 0.02
Return for 30min.	% R.O.	≤ 0.02
Resolution	-	≤ 1/3000
Division	mV / V	0.001
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.014 ≤ 0.011
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		800 ± 40 700 ± 7 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel
Cable Specification	-	Ø5.4 x 4P x 12m (Urethane)
Safety Overload	% R.L.	150

Dimensions

Unit : mm

► DSB2



Capa.	A	B	C	D	E	F	G	H
25~40klb	209.6	184.2	49.3	62.0	75.5	12.7	12.7	1/4-18NPT
75klb	292.1	254.0	49.3	74.7	88.15	25.4	19.1	1/2-14NPT



Canister Load Cell

CAS has excellent technology in metering, and control, and provides high accuracy and precision load cells for various industrial environments.

[ZHCMG-100T / MASTERCELL-50T / ZSSMD-100T / CC / CC-NR / CT / CT-NR / CTS / CTS-EXP / HC / HC-NR / HC-D / HCS / HCS-EXP / WBK / WBK-NR / WBK-EXP / WBK-D / NWBK / WBKL / WBKC]



ZHCMG-100T | Master Canister Load Cell



Features

- High-resolution 100T capacity
- Available for on-site calibration of third-party equipment
- Designed in accordance with ISO 376 (0.5 Class)

Application

- For equipment calibration

Description

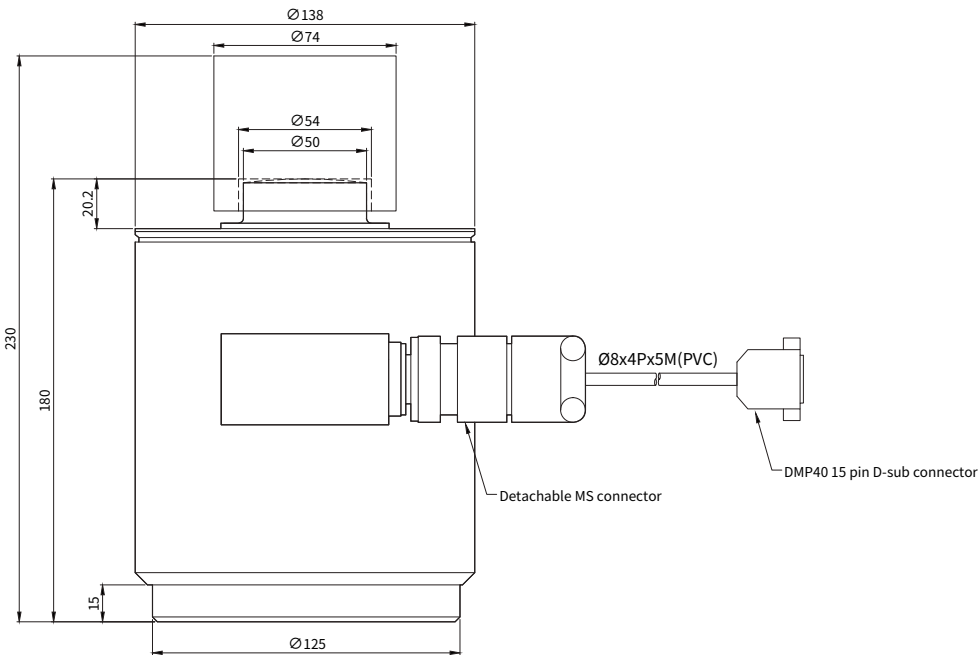
ZHCMG-100T is a master-grade, steel-constructed canister-type load cell with excellent electrical durability. It is equipped with an internal protection circuit that safeguards against various types of noise, surges, and lightning.

Specifications

Capacity(R.L.)	tf	100
Rated Output	mV / V	2.0 ± 0.05
Zero Balance	mV / V	0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.02
Hysteresis	% R.O.	≤ 0.02
Combined Error	% R.O.	≤ 0.02
Repeatability	% R.O.	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	-
Resolution	-	1/5000
Division	mV / V	0.0004
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to + 40
Operating Temperature Range	°C	-30 to + 80
Material	-	Steel / Painting
Cable Specification	-	Ø8 x 4P x 5 m
Safety Overload	% R.L.	150

Dimensions

► ZHCMG-100T



Unit : mm

MASTERCELL-50T

Master Canister Load Cell



Features

- High-resolution 50T capacity
- Designed in accordance with ISO 376 (0.5 Class)

Application

- For production load testing equipment

Description

MASTERCELL-50T is a master-grade, steel-constructed canister-type load cell with excellent electrical durability. It is equipped with an internal protection circuit that safeguards against various types of noise, surges, and lightning.

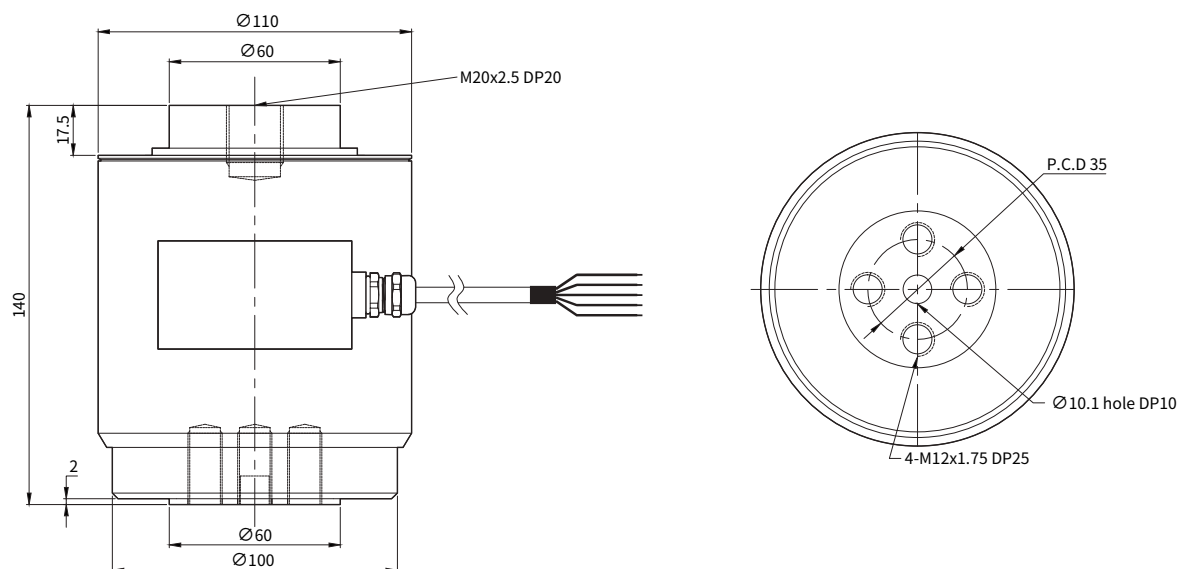
Specifications

Capacity(R.L.)	tf	50
Rated Output	mV / V	2.0 ± 0.05
Zero Balance	mV / V	0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.02
Hysteresis	% R.O.	≤ 0.02
Combined Error	% R.O.	≤ 0.02
Repeatability	% R.O.	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	-
Resolution	-	1/5000
Division	mV / V	0.0004
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤0.02 ≤0.02
Excitation	-Recommended -Maximum	V V
		5 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		350 ± 7 350 ± 7 > 2000
Compensated Temperature Range	°C	-10 to + 40
Operating Temperature Range	°C	-30 to + 80
Material	-	Steel / Painting
Cable Specification	-	Ø8 x 4P x 5 m
Safety Overload	% R.L.	150

Dimensions

► MASTERCELL-50T

Unit : mm



ZSSMD-100T | Master Canister Load Cell



Features

- Tension / Compression type
- High-resolution 100T capacity
- Lightweight product design
- Designed in accordance with ISO 376 (0.5 Class)

Application

- Calibration for tension testing equipment
- Calibration for compression testing equipment

Description

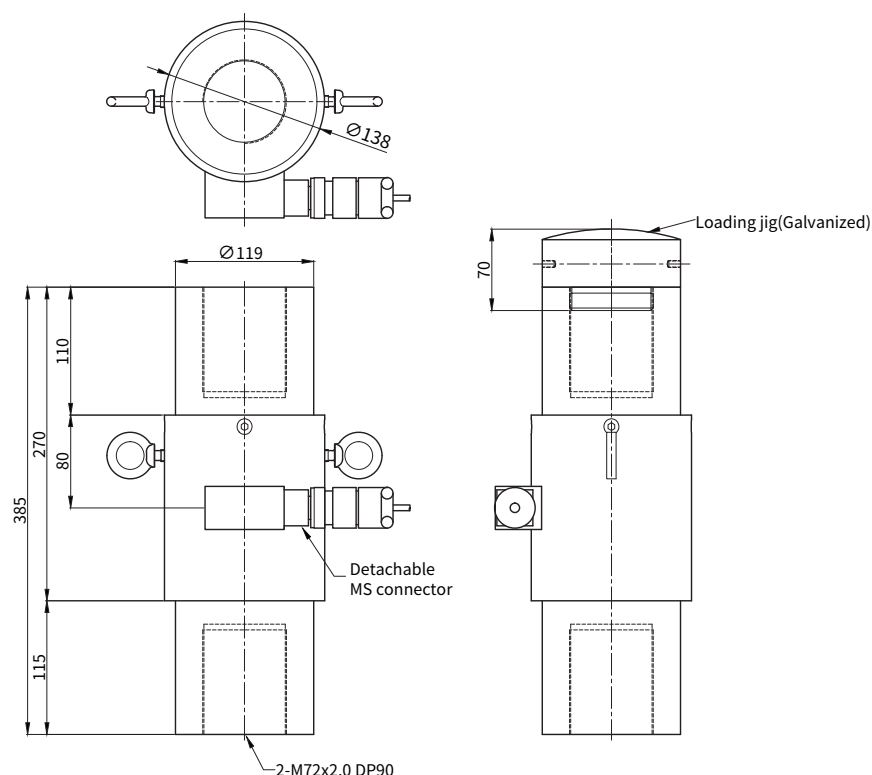
ZSSMD-100T is a master-grade, steel-constructed canister-type load cell with excellent electrical durability. It is equipped with an internal protection circuit that safeguards against various types of noise, surges, and lightning.

Specifications

Capacity(R.L.)	tf	100
Rated Output	mV / V	2.0 ± 0.05
Zero Balance	mV / V	0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.02
Hysteresis	% R.O.	≤ 0.02
Combined Error	% R.O.	≤ 0.02
Repeatability	% R.O.	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	-
Resolution	-	1/5000
Division	mV / V	0.0004
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to + 40
Operating Temperature Range	°C	-30 to + 80
Material	-	Steel / Painting
Cable Specification	-	Ø8 x 4P x 5 m
Safety Overload	% R.L.	150

Dimensions

► ZSSMD-100T



CC | Canister Load Cell



Features

- Compression type
- Hermetically sealed structure
- Designed according to IP67

Option

- Load button type accessory
- Ball type accessory

Application

- Hopper, Tank Scale, Silo Scale

Description

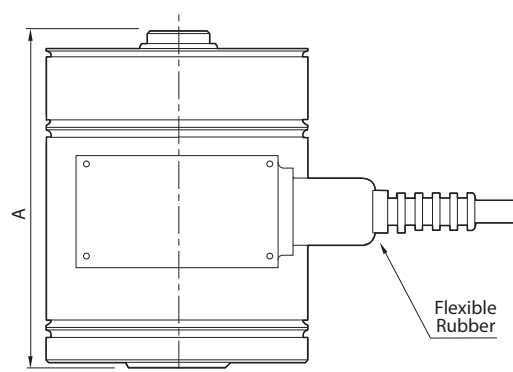
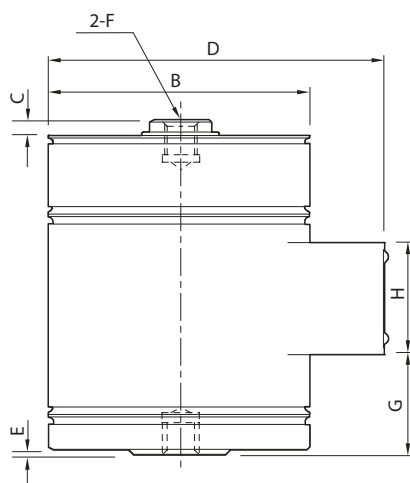
CC is canister type load cell of steel material. Compression type of sealed structure load cell hopper suitable for harsh industrial environments such as tanks and silo scales.

Specifications

Capacity(R.L.)	kgf	20, 50, 100, 200, 300, 500, 1K, 2K, 3K, 5K, 10K, 20K
Rated Output	mV / V	3.0 ± 0.003
Zero Balance	mV / V	0.0 ± 0.03
Accuracy Class	-	A B
Non-Linearity	% R.O.	≤ 0.02 ≤ 0.05
Hysteresis	% R.O.	≤ 0.02 ≤ 0.05
Combined Error	% R.O.	≤ 0.02 ≤ 0.05
Repeatability	% R.O.	≤ 0.01 ≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03 ≤ 0.03
Return for 30min.	% R.O.	≤ 0.03 ≤ 0.03
Resolution	-	≤ 1/5000 ≤ 1/2000
Division	mV / V	0.0006 0.0015
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.03 ≤ 0.03
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		350 ± 3.5 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Coating
Cable Specification	-	Ø8 x 4P x 5M / Ø8 x 4P x 10M (PVC)
Safety Overload	% R.L.	150

Dimensions

► CC



Unit : mm

Capa.	A	ØB	C	D	E	F	G	H	Cable (m)
20~100kgf	115	89	6	115	1.5	M12 x 1.25	38.5	38	5
200kgf~1tf	115	89	5	115	1.5	M12 x 1.25	35		
2~5tf	148	89	6	115	1.6	M24 x 2	38.6		
10tf	215	127	12	159	1.6	M39 x 2	75.6		10
20tf	290	165	16.2	199	1.6	M50 x 2	107.6		

CC-NR

Noise Resistance Canister Load Cell



Description

CC-NR is a canister type load cell of steel material with a strong electrical durability. Internal protection circuits provide protection against noise, surge, and lightning. Its hermetically sealed structure is suitable for harsh industrial environments such as hoppers and tanks and silo scales.

Specifications

Capacity(R.L.)	kgf	20, 50, 100, 200, 300, 500, 1K, 2K, 3K, 5K, 10K, 20K
Rated Output	mV / V	3.0±0.003
Zero Balance	mV / V	0.0±0.03
Accuracy Class	-	A B
Non-Linearity	% R.O.	≤ 0.02 ≤ 0.05
Hysteresis	% R.O.	≤ 0.02 ≤ 0.05
Combined Error	% R.O.	≤ 0.02 ≤ 0.05
Repeatability	% R.O.	≤ 0.01 ≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03 ≤ 0.03
Return for 30min.	% R.O.	≤ 0.03 ≤ 0.03
Resolution	-	≤ 1/5000 ≤ 1/2000
Division	mV / V	0.0006 0.0015
Temperature Effect on	- Zero Value - Output Value	%/10°C %/10°C
Excitation	- Recommended - Maximum	V V
Resistance	- Input - Output - Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Coating
Cable Specification	-	Ø8 x 4P x 5m / Ø8 x 4P x 10m (PVC)
Safety Overload	% R.L.	150
Electrical Character	- Over Voltage - RS - Surge	V. % MHz kV
		75 AC/DC ±25% 80 ~ 1000MHz, 10V/m ±2

Features

- Pressure type
- Hermetically sealed structure
- Built-in noise and surge protection circuit
- CE approval
- Designed according to IP67

Option

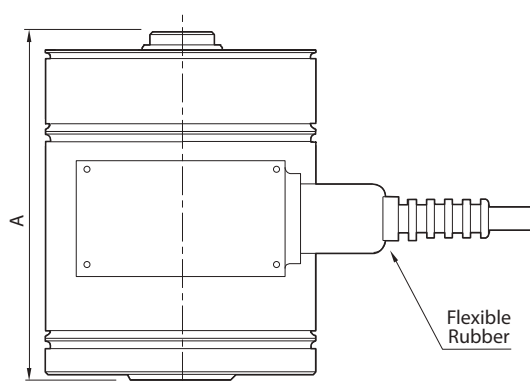
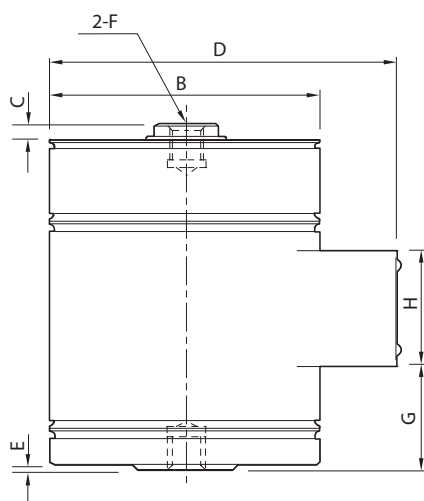
- Load button accessory
- Ball type accessory

Application

- Hopper, Tank scale, Silo scale

Dimensions

► CC-NR



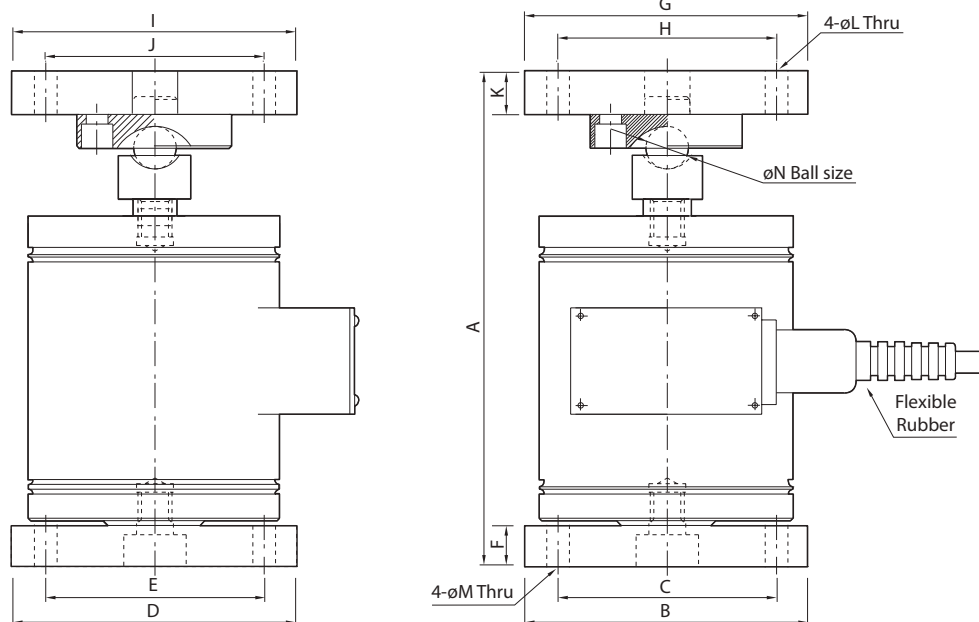
Unit : mm

Capa.	A	ØB	C	D	E	F	G	H	Cable(m)
20~100kgf	115	89	6	115	1.5	M12 x 1.25	38.5	38	5
200kgf~1tf	115	89	5	115	1.5	M12 x 1.25	35		
2~5tf	148	89	6	115	1.6	M24 x 2	38.6		10
10tf	215	127	12	159	1.6	M39 x 2	97		
20tf	290	165	16.2	199	1.6	M50 x 2	139.5		

Unit : mm

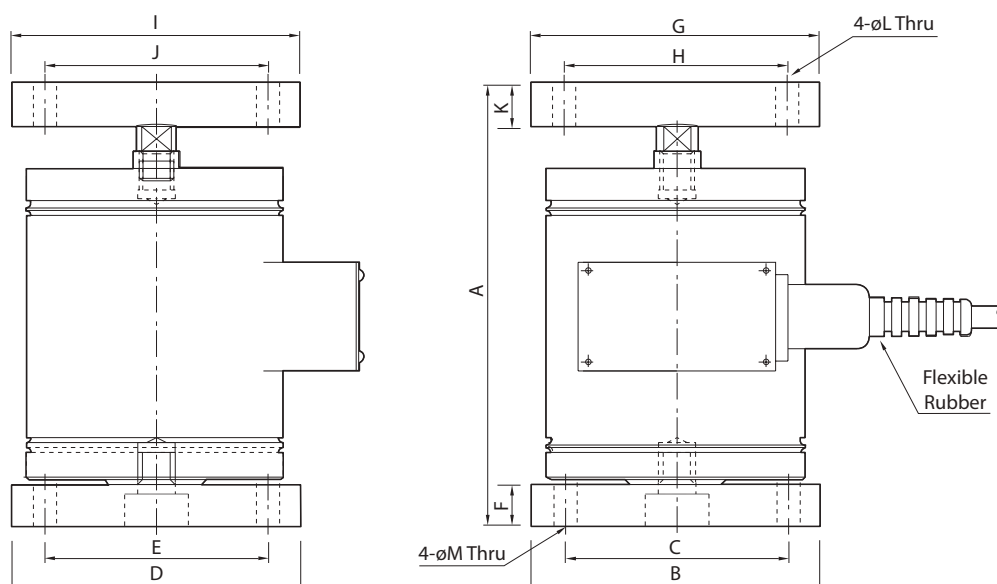
Accessory Dimensions

► CC (Ball Type)



Capa.	A	B	C	D	E	F	G	H	I	J	K	ØL	ØM	ØN
20kgf~1tf	177.4	100	77	100	77	15	100	77	100	77	15	8	8	17.4
2~5tf	253.75	130	105	130	105	23	130	105	130	105	23	12	12	31.75
10tf	334.75	160	125	160	125	30	130	105	130	105	23	12	14	31.75
20tf	409.75	200	150	200	150	30	130	105	130	105	23	12	14	31.75

► CC (Load Button Type)



Capa.	A	B	C	D	E	F	G	H	I	J	K	ØL	ØM
20kgf~1tf	153.7	100	77	100	77	15	100	77	100	77	15	8	8
2~5tf	210.3	130	105	130	105	23	130	105	130	105	23	12	12
10tf	303	160	125	160	125	30	160	125	160	125	30	14	14
20tf	375.5	200	150	200	150	30	200	150	200	150	30	14	14

CT | Canister Load Cell



Description

CT is a canister type load cell of steel material. Sealed tension type load cell suitable for rough industrial environments such as hoppers and tank scales.



Features

- Tension type
- Hermetically sealed structure
- Designed according to IP67

Option

- Rod end bearing type accessory
(20~1K : M12 x 1.25)
(2~5K : M24 x 2.0)
(10K : M39 x 2.0)

Application

- Hopper, Tank scale

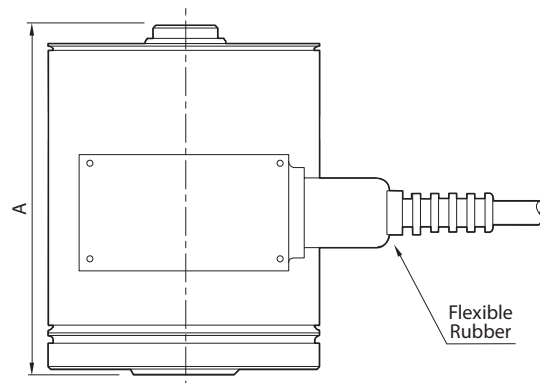
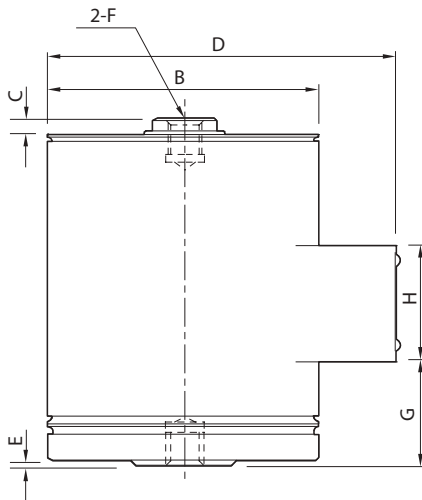
Specifications

Capacity(R.L.)		kgf	20, 50, 100, 200, 300, 500, 1K, 2K, 3K, 5K, 10K, 20K
Rated Output	mV / V		3.0 ± 0.003
	Zero Balance	mV / V	0.0 ± 0.03
Accuracy Class		-	A B
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min.	% R.O.		≤ 0.02
	% R.O.		≤ 0.02
	% R.O.		≤ 0.02
	% R.O.		≤ 0.01
	% R.O.		≤ 0.03
	% R.O.		≤ 0.03
Resolution	-		≤ 1/5000
	Division	mV / V	0.0006 0.0015
Temperature Effect on	-Zero Value	%/10°C	≤ 0.03
	-Output Value	%/10°C	≤ 0.03
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	350 ± 3.5
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range		°C	-10 to +40
Operating Temperature Range		°C	-30 to +80
Material		-	Steel / Coating
Cable Specification		-	Ø8 x 4P x 5M & Ø8 x 4P x 10M (PVC)
Safety Overload		% R.L.	150

Dimensions

Unit : mm

► CT



Capa.	A	ØB	C	D	E	F	G	H	Cable(m)
20~100kgf	115	89	6	115	1.5	M12 x 1.25	38.5	38	5
200kgf~1tf	115	89	5	115	1.5	M12 x 1.25	35		
2~5tf	148	89	6	115	1.6	M24 x 2	38.6		10
10tf	215	127	12	159	1.6	M39 x 2	75.6		
20tf	290	165	16.2	199	1.6	M50 x 2	107.6		

CT-NR

Noise Resistance Canister Load Cell



Features

- Tension type
- Hermetically sealed structure
- Built-in noise and surge protection circuit
- CE approval
- Designed according to IP67

Option

- Rod end bearing type accessory

Application

- Hopper, Tank scale, Silo scale

Description

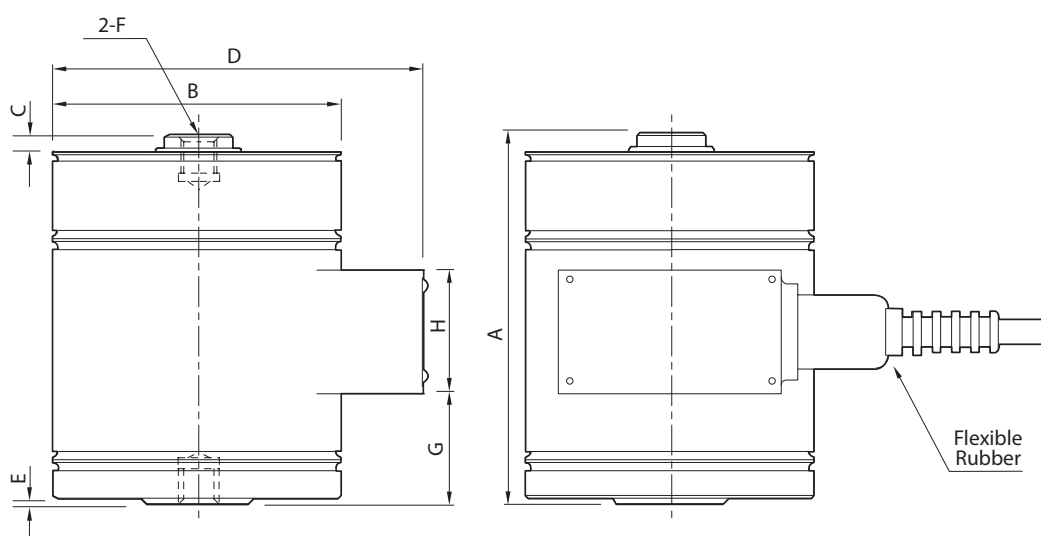
CT-NR is a canister type load cell of steel material with a strong electrical durability. Internal protection circuits provide protection against noise, surge, and lightning. Sealed tension type of load cell suitable for rough industrial environments such as hoppers and tanks and silo scales.

Specifications

Capacity(R.L.)	kgf	20, 50, 100, 200, 300, 500, 1K, 2K, 3K, 5K, 10K, 20K
Rated Output	mV / V	3.0±0.003
Zero Balance	mV / V	0.0±0.03
Accuracy Class	-	A B
Non-Linearity	% R.O.	≤ 0.02 ≤ 0.05
Hysteresis	% R.O.	≤ 0.02 ≤ 0.05
Combined Error	% R.O.	≤ 0.02 ≤ 0.05
Repeatability	% R.O.	≤ 0.01 ≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03 ≤ 0.03
Return for 30min.	% R.O.	≤ 0.03 ≤ 0.03
Resolution	-	≤ 1/5000 ≤ 1/2000
Division	mV / V	0.0006 0.0015
Temperature Effect on	- Zero Value - Output Value	%/10°C %/10°C
Excitation	- Recommended - Maximum	V V
Resistance	- Input - Output - Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Coating
Cable Specification	-	Ø8 x 4P x 5m / Ø8 x 4P x 10m (PVC)
Safety Overload	% R.L.	150
Electrical Character	- Over Voltage - RS - Surge	V. % MHz kV
		75 AC/DC ±25% 80 ~ 1000MHz, 10V/m ±2

Dimensions

► CT-NR

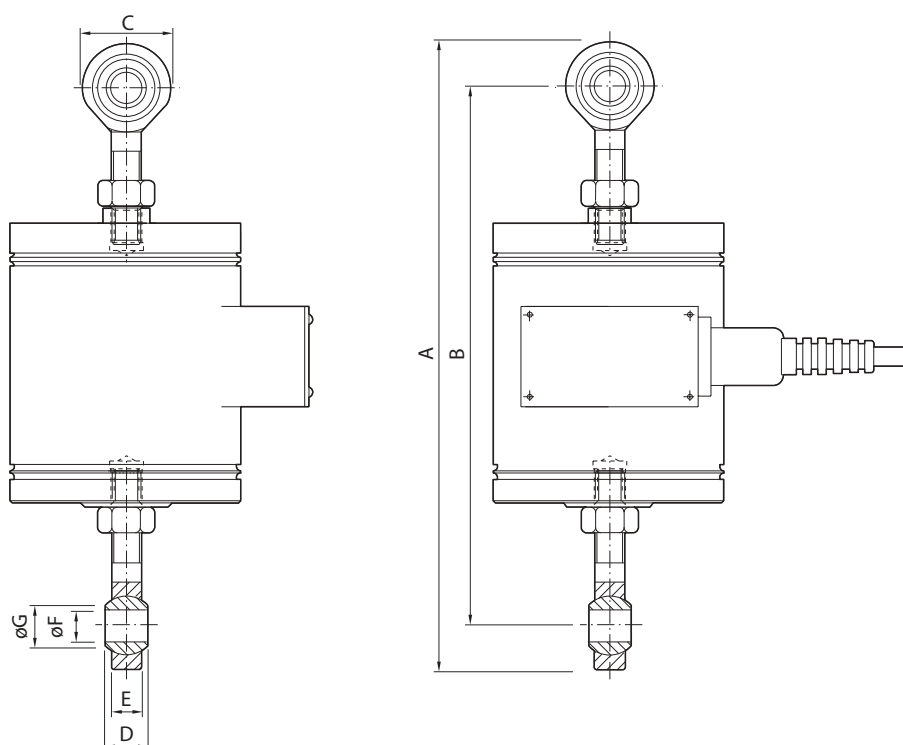


Capa.	A	ØB	C	D	E	F	G	H	Cable(m)
20~100kgf	115	89	6	115	1.5	M12 x 1.25	38.5	38	5
200kgf~1tf	115	89	5	115	1.5	M12 x 1.25	35		
2~5tf	148	89	6	115	1.6	M24 x 2	38.6		10
10tf	215	127	12	159	1.6	M39 x 2	75.6		
20tf	290	165	16.2	199	1.6	M50 x 2	107.6		

Unit : mm

Accessory Dimensions

► Rod End Bearing



Capa.	A	B	C	D	E	ØF	ØG
20~100kgf	249~254	215~220	34	16	12	12	15.4
200kgf~1tf	255~260	221~226	34	16	12	12	15.4
2~5tf	525~530	423~428	102	28	27	22	25.8
10tf	680~685	545~550	135	40	38	39	45
20tf	Demand Accessory						

CTS

Canister
Load Cell

Features

- Tension / Compression type
- Stainless steel material
- Hermetically sealed structure
- Designed according to IP68

Option

- Rod end bearing type accessory
(500 kgf: M12 x 1.75)
(1 to 2 tf: M18 x 1.5)
- Ball type accessory
- Load button type accessory

Application

- Hopper, Tank scale

Description

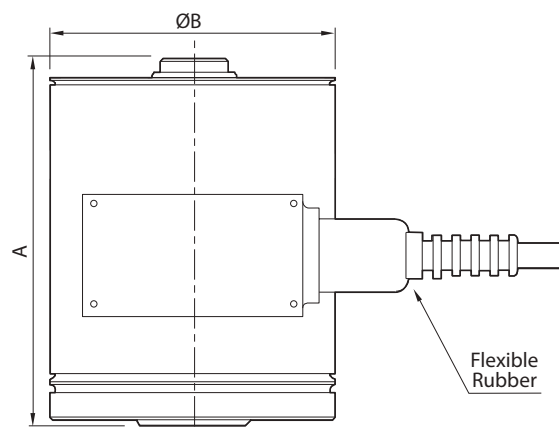
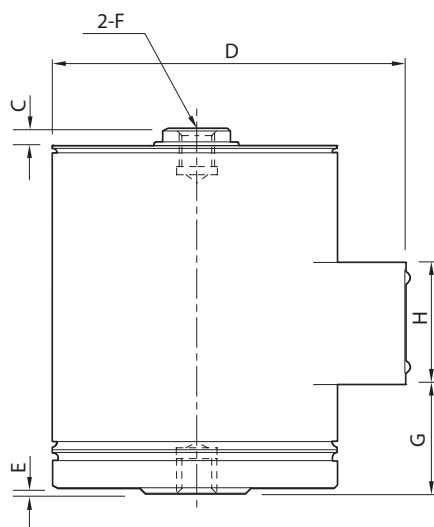
CTS is a stainless steel canister type load cell. Sealed tension and compression type of load cell suitable for rough industrial environments such as hoppers, silos, and tank scales.

Specifications

Capacity(R.L.)	kgf	200, 500, 1K, 2K, 3K, 5K	
Rated Output	mV / V	3.0 ± 0.003	
Zero Balance	mV / V	0.0 ± 0.03	
Accuracy Class	-	A	B
Non-Linearity	% R.O.	≤ 0.02	≤ 0.05
Hysteresis	% R.O.	≤ 0.02	≤ 0.05
Combined Error	% R.O.	≤ 0.02	≤ 0.05
Repeatability	% R.O.	≤ 0.01	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03	≤ 0.03
Resolution	-	≤ 1/5000	≤ 1/2000
Division	mV / V	0.0006	0.0015
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.03 ≤ 0.03
Excitation	-Recommended -Maximum	V V	10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ	350 ± 3.5 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40	
Operating Temperature Range	°C	-30 to +80	
Material	-	Stainless Steel	
Cable Specification	-	Ø8 x 4P x 5m (PVC)	
Safety Overload	% R.L.	150	

Dimensions

► CTS



Unit : mm

Capa.	A	B	C	D	E	F	G	H	Cable(m)
200kgf~1tf	115	89	5	115	1.5	M12 x 1.25	35	38	5
2~5tf	148	88	4	115	1.6	M24 x 2	55	38	

CTS-EXP

Explosion Proof
Canister Load Cell



Features

- Tension / Compression type
- Stainless Steel Material
- Hermetically sealed structure
- Explosion-proof structure
- Designed according to IP68

Option

- CTS-EXP / Intrinsic safety explosion(Ex ia IIC T4, 500kgf~5tf)
- CTS-EXP-D / Flameproof(Ex d IIC T4, 200kgf~5tf)
- CTS-EXP-TD / Dust-proof(Ex td A21 T135°C IP68, 200kgf~5tf)
- Rod end bearing type accessory
(500 kgf: M12 x 1.75) (1 to 2 tf: M18 x 1.5)
- Ball type accessory
- Load button type accessory

Application

- Hopper, Tank scale

Description

CTS-EXP is a stainless steel canister type load cell. Designed in explosion-proof structure, it is suitable for rough industrial environments such as explosion-proof hoppers, tanks and silos in blast-prone areas. The water-resistant structure of IP68 for stainless steel materials is ideal for humid environments.

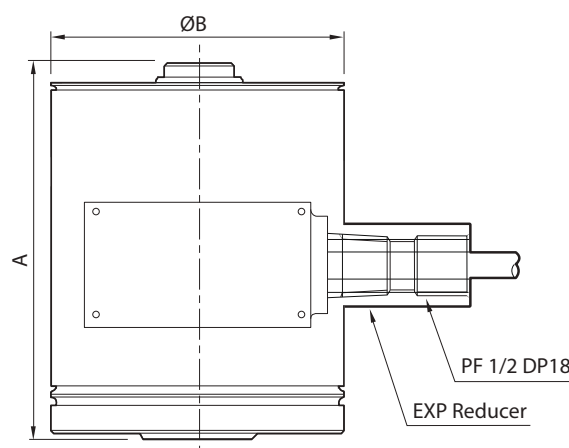
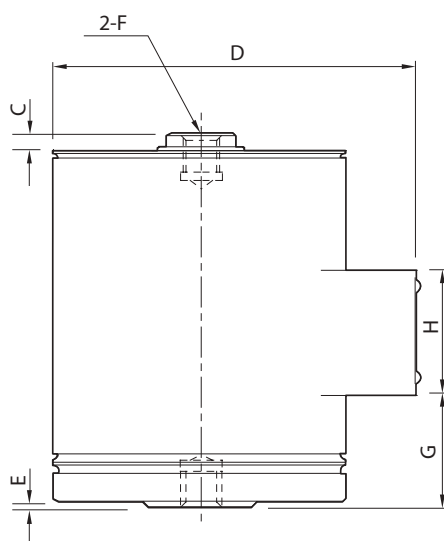
Specifications

Capacity(R.L.)	kgf	200, 300, 500, 1K, 2K, 3K, 5K	
Rated Output	mV / V	3.0 ± 0.003	
Zero Balance	mV / V	0.0 ± 0.03	
Accuracy Class	-	A	B
Non-Linearity	% R.O.	≤ 0.02	≤ 0.05
Hysteresis	% R.O.	≤ 0.02	≤ 0.05
Combined Error	% R.O.	≤ 0.02	≤ 0.05
Repeatability	% R.O.	≤ 0.01	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.03	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03	≤ 0.03
Resolution	-	≤ 1/5000	≤ 1/2000
Division	mV / V	0.0006	0.00015
Temperature Effect on	-Zero Value	%/10°C	≤ 0.03
	-Output Value	%/10°C	≤ 0.03
Excitation	-Recommended	V	10
	-Maximum	V	28
Resistance	-Input	Ω	350 ± 3.5
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range	°C	-10 to + 40	
Operating Temperature Range	°C	-30 to + 80	
Material	-	Stainless Steel	
Cable Specification	-	Ø8 x 4P x 5m (Urethane)	
Safety Overload	% R.L.	150	

Dimensions

Unit : mm

- Intrinsic safety explosion, Explosion proof, Dust proof



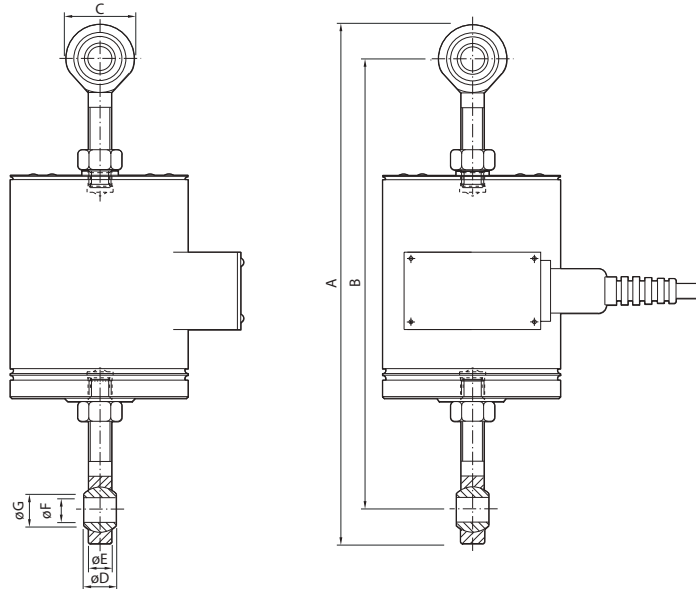
* Intrinsic safety explosion 500kgf~5tf

Capa.	A	B	C	D	E	F	G	H	Cable(m)
200kgf~1tf	115	89	5	115	1.5	M12 x 1.25	35	38	5
2~5tf	148	88	4	115	1.6	M24 x 2	55	38	

Unit : mm

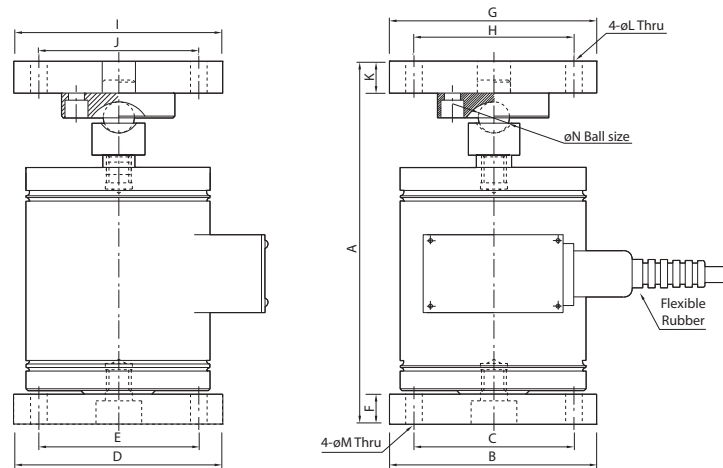
Accessory Dimensions

► CTS (Rod End Bearing)



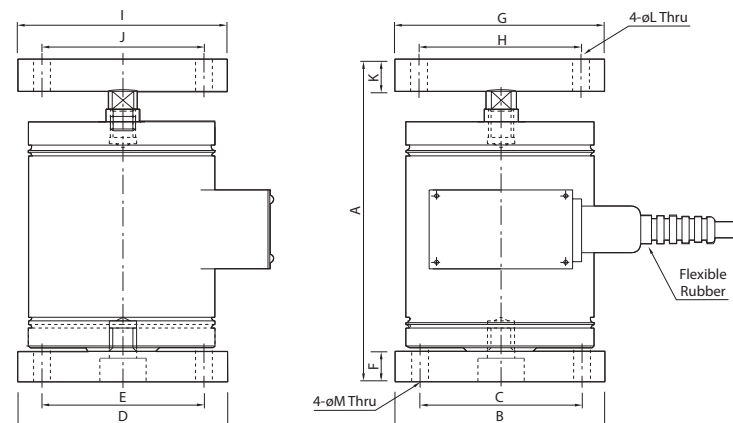
Capa.	A	B	C	D	E	ØF	ØG
200kgf~1tf	255 ~ 260	221 ~ 226	34	16	12	12	15.4
2~5tf	526 ~ 531	424 ~ 429	102	28	27	22	25.8

► CTS (Ball type)



Capa.	A	B	C	D	E	F	G	H	I	J	K	ØL	ØM	ØN
200kgf~1tf	177.4	100	77	100	77	15	100	77	100	77	15	8	8	17.4
2~5tf	253.75	130	105	130	105	23	130	105	130	105	23	12	12	31.75

► CTS (Load Button type)



Capa.	A	B	C	D	E	F	G	H	I	J	K	ØL	ØM
200kgf~1tf	153.7	100	77	100	77	15	100	77	100	77	15	8	8
2~5tf	210.3	130	105	130	105	23	130	105	130	105	23	12	12

HC | Canister Load Cell



Features

- Compression type
- Hermetically sealed structure
- Designed according to IP67

Option

- Accessory

Application

- Hopper, Tank scale

Description

HC is a canister type load cell of steel material. Sealed compression type load cell suitable for rough industrial environments such as hoppers, silos, and tank scales.

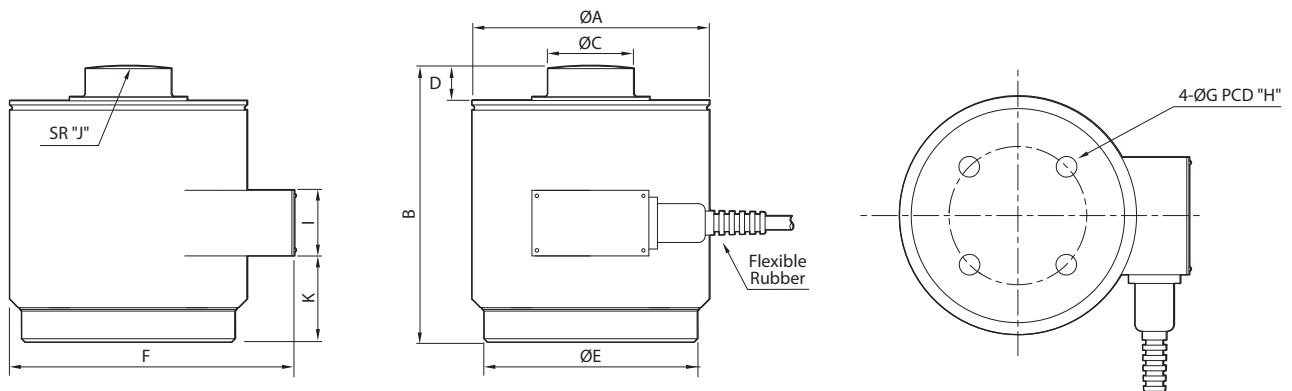
Specifications

Capacity(R.L.)	tf	20, 30, 50, 100, 200
Rated Output	mV / V	2.0 ± 0.002
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.15
Hysteresis	% R.O.	≤ 0.15
Combined Error	% R.O.	≤ 0.15
Repeatability	% R.O.	≤ 0.1
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/700
Division	mV / V	0.0028
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +70
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Coating
Cable Specification	-	Ø8 x 4P x 10m (PVC)
Safety Overload	% R.L.	150

Dimensions

► HC

Unit : mm



Capa.	A	B	C	D	E	F	G	H	I	J	K	Cable(m)
20~30tf	118	145	36	10.4	104	148.7	M12 x 1.75	80	38	150	40	10
50tf	138	160	50	20.2	124	170.5	M12 x 1.75	80	38	200	50	
100tf	158	190	70	20	144	191.3	M16 x 2	100	38	200	54	
200tf	214	230	95	29.8	188	249.5	M16 x 2	130	38	300	73	

HC-NR

Noise Resistance Canister Load Cell



Features

- Compression type
- Hermetically sealed structure
- Built-in noise and surge protection circuit
- CE approval
- Designed according to IP67

Application

- Hopper, Tank scale, Silo scale
- Compression test equipment

Description

HC-NR is a canister type load cell of steel material with a strong electrical durability. Internal protection circuits provide protection against noise, surge, and lightning. Sealed compression type load cell suitable for rough industrial environments such as hoppers and tanks and silo scales.

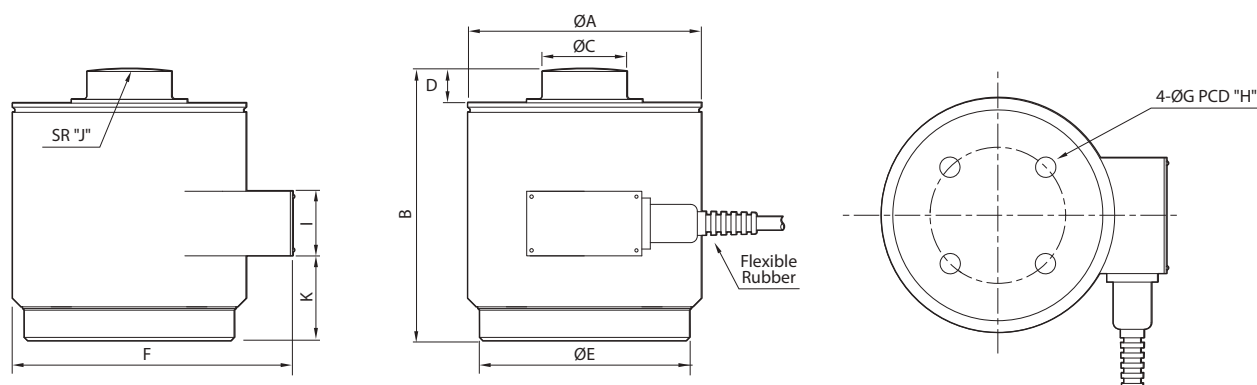
Specifications

Capacity(R.L.)	tf	20, 30, 50, 100, 200
Rated Output	mV / V	2.0±0.005
Zero Balance	mV / V	0.0±0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.15
Hysteresis	% R.O.	≤ 0.15
Combined Error	% R.O.	≤ 0.15
Repeatability	% R.O.	≤ 0.1
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/700
Division	mV / V	0.0028
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
Excitation	-Recommended -Maximum	V V
Resistance	-Input -Output -Insulation	Ω Ω MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel / Coating
Cable Specification	-	Ø8 x 4P x 10m (PVC)
Safety Overload	% R.L.	150
Electrical Character	- Over Voltage - RS - Surge	V. % MHz kV
		75 AC/DC ±25% 80 ~ 1000MHz, 10V/m ±2

Dimensions

► HC-NR

Unit : mm



Capa.	A	B	C	D	E	F	G	H	I	J	K	Cable(m)
20~30tf	118	145	36	10.4	104	148.7	M12 x 1.75	80	38	150	40	10
50tf	138	160	50	20.2	124	170.5	M12 x 1.75	80	38	200	50	
100tf	158	190	70	20	144	191.3	M16 x 2	100	38	200	54	
200tf	214	230	95	29.8	188	249.5	M16 x 2	130	38	300	73	

HC-D

 | Digital Canister Load Cell

Description

HC-D is a canister type load cell of steel material. It can not only be individually diagnosed with digital communication but also enables easy loadcell replacement, problem detection, eccentricity compensation. Sealed compression type load cell is suitable for rough industrial environment such as hoppers, tanks and silo scales.



Features

- Compression type
- Hermetically sealed structure
- Built-in noise and surge protection circuit
- CE approved
- Designed according to IP67

Application

- Hopper, Tank scale, Silo scale
- Compression test equipment

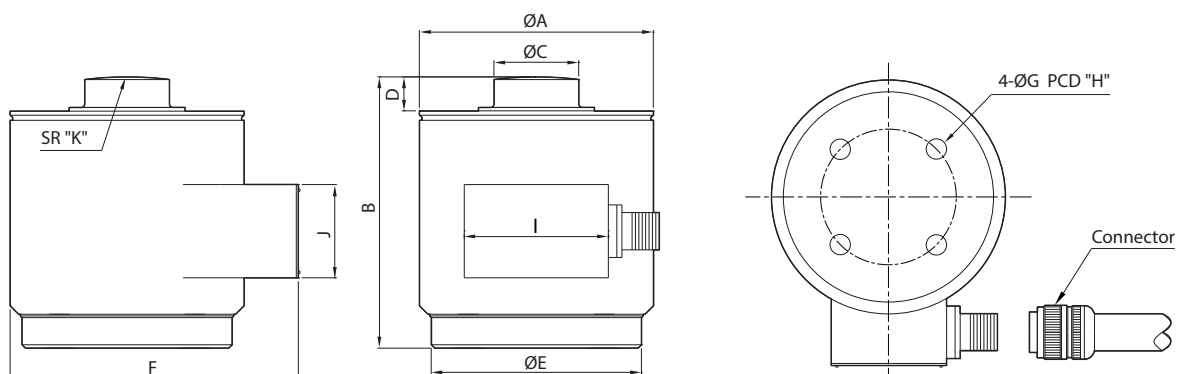
Specifications

Capacity(R.L.)		tf	20, 30, 50, 100, 200
Rated Output		counts	300,000
Zero Balance		counts	± 300
Non-Linearity		% R.O.	< 0.015
Hysteresis		% R.O.	< 0.015
Combined Error		% R.O.	< 0.015
Repeatability		% R.O.	< 0.01
Creep for 30min.		% R.O.	< 0.017
Temperature Effect on	- Zero Value	% R.O./10°C	0.014
	- Output Value	% R.O./10°C	0.011
Compensated Temperature Range		°C	-10 ~ +40
Operating Temperature Range		°C	-30 ~ +80
Excitation	- Minimum	V	6
	- Recommended	V	9
	- Maximum	V	24
Insulation		MΩ	≥ 2,000
Safety Overload		% R.C.	150
Material		-	Steel / Coating
Communication Method		-	RS-485 (2wire)
Communication Speed		kbit/sec	19.2
Max Cable Length for Communication		m	1,000
Warm-up Time from Cold Start		minutes	15
Asynchronous Interface Baudrate		Baud	9,600 ~ 115,200
Number of bus addresses		-	Max. 32

Dimensions

Unit : mm

► HC-D

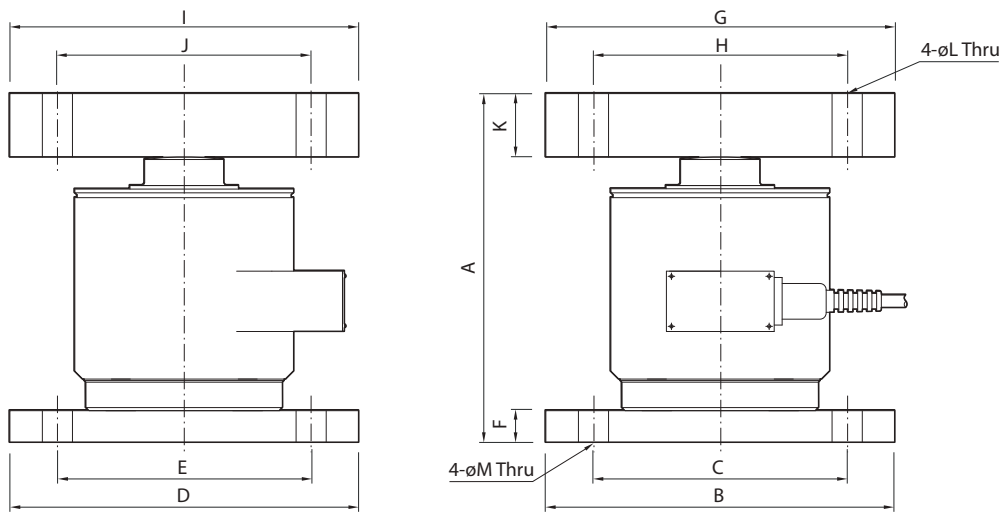


Capa.	A	B	C	D	E	F	G	H	I	J	Cable(m)
20~30tf	118	145	36	10	104	162.5	M12 x 1.75	80	85	55	10
50tf	138	160	50	20	124	182.5	M12 x 1.75	80			
100tf	158	190	70	20	144	202.5	M16 x 2	100			
200tf	214	230	95	30	188	261.5	M16 x 2	130			

Unit : mm

Accessory Dimensions

► HC (Upper & lower plate)



Capa.	A	B	C	D	E	F	G	H	I	J	K	ØL	ØM
20~30tf	190	200	150	200	150	15	200	150	200	150	30	14	14
50tf	220	220	160	220	160	20	220	160	220	160	40	19	19
100tf	280	260	200	260	200	30	260	200	260	200	60	23	23
200tf	350	280	200	280	200	40	280	200	280	200	80	27	27

HCS | Canister Load Cell



Description

HCS is a stainless steel compression type load cell. Close structured compression type load cell is suitable for rough industrial environment such as hoppers, tanks and silo scales.



Features

- Compression type
- Stainless steel material
- Hermetically sealed structure
- Anti-explosive structure (Pressure resistant, Dust ignition)
- Designed according to IP68

Application

- Hopper, Tank scale

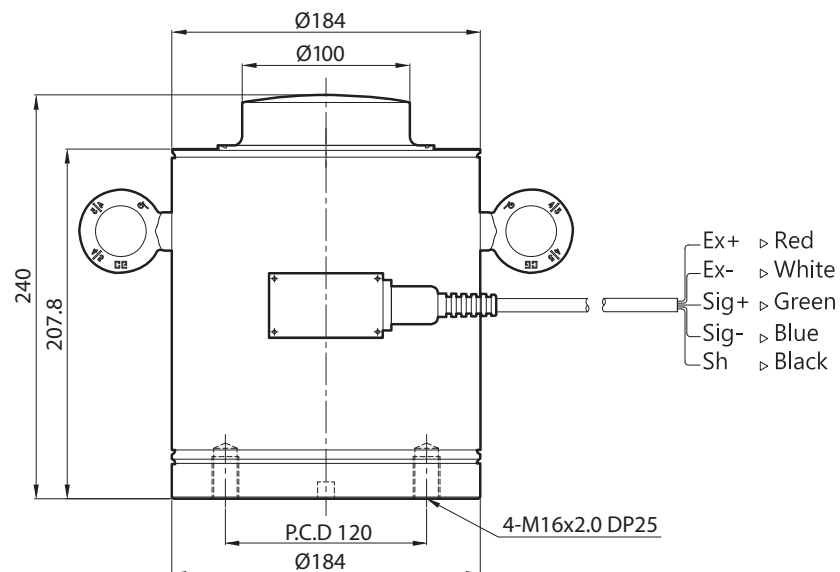
Specifications

Capacity(R.L.)	tf	100, 200, 300
Rated Output	mV / V	2.0 ± 0.002
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.5
Hysteresis	% R.O.	≤ 0.5
Combined Error	% R.O.	≤ 0.5
Repeatability	% R.O.	≤ 0.1
Creep for 30min.	% R.O.	≤ 0.05
Return for 30min.	% R.O.	≤ 0.05
Resolution	-	≤ 1/200
Division	mV / V	0.01
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.03 ≤ 0.03
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		350 ± 3.5 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +70
Operating Temperature Range	°C	-30 to +80
Material	-	Stainless Steel
Cable Specification	-	Ø8 x 4P x 10m/ Ø8 x 4P x 20m (PVC)
Safety Overload	% R.L.	150

Dimensions

Unit : mm

► HC



HCS-EXP

Explosion Proof
Canister Load Cell



Features

- Compression type
- Stainless steel material
- Hermetically sealed structure
- Explosion-proof structure(Flameproof, Dust)
- Designed according to IP68

Option

- HCS-EXP-D / Flameproof(Ex d IIC T6)
- CTS-EXP-TD / Dust-proof(Ex tD A21 T85°C IP68)

Application

- Hoppers, Tank scale

Description

HCS-EXP is a stainless steel compression type load cell. The antiexplosive structure is suitable for explosive-hazard environments where hoppers, tanks and silo scales are used. The IP68 level stainless steel structure can endure humid areas.

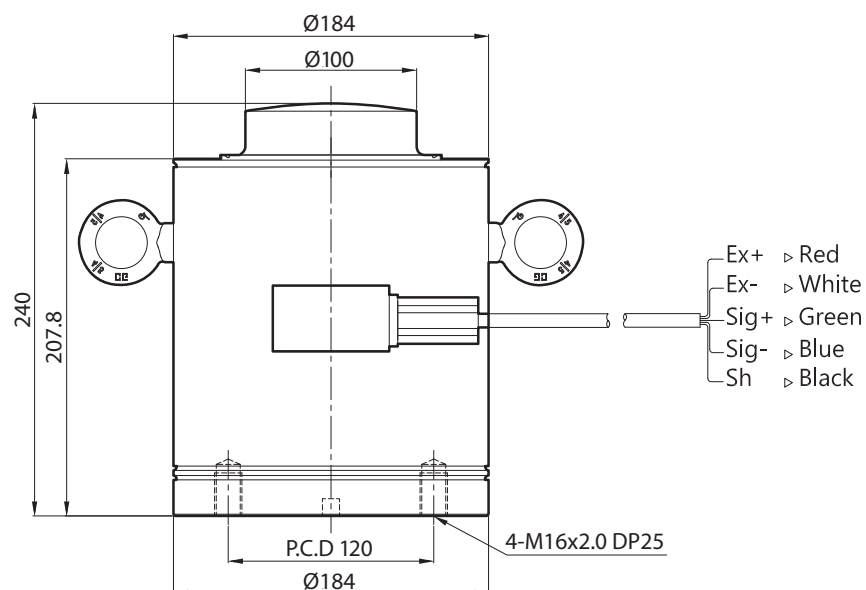
Specifications

Capacity(R.L.)	tf	100, 200, 300
Rated Output	mV / V	2.0 ± 0.002
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.5
Hysteresis	% R.O.	≤ 0.5
Combined Error	% R.O.	≤ 0.5
Repeatability	% R.O.	≤ 0.1
Creep for 30min.	% R.O.	≤ 0.05
Return for 30min.	% R.O.	≤ 0.05
Resolution	-	≤ 1/200
Division	mV / V	0.01
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤ 0.03 ≤ 0.03
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		350 ± 3.5 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +70
Operating Temperature Range	°C	-30 to +80
Material	-	Stainless Steel
Cable Specification	-	Ø8 x 4P x 10m/ Ø8 x 4P x 20m (Urethane)
Safety Overload	% R.L.	150

Dimensions

► HC

Unit : mm



WBK | Canister Load Cell



Features

- Compression type
- Stainless steel material
- Hermetically sealed structure
- Designed according to IP68 standard
- OIML C3 approved (OIML R60, 10~50tf)
- Anti-surge circuit

Option

- Truck scale accrsroy set

Application

- Hopper, Silo scale, Tank scale
- Truck scale

Description

WBK is a stainless steel canister type load cell. Sealed compression type load cell is suitable for rough industrial environment such as hoppers, tanks and silo scales.

Specifications

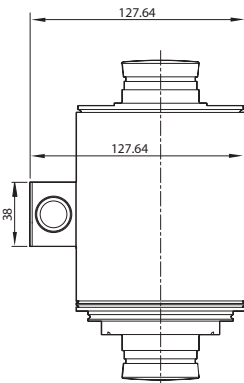
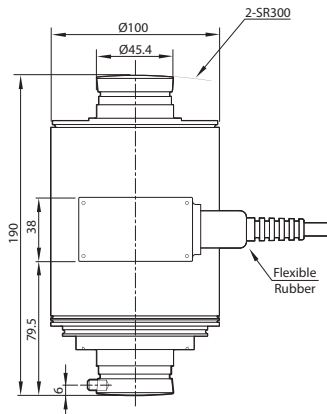
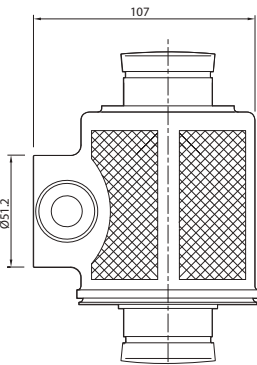
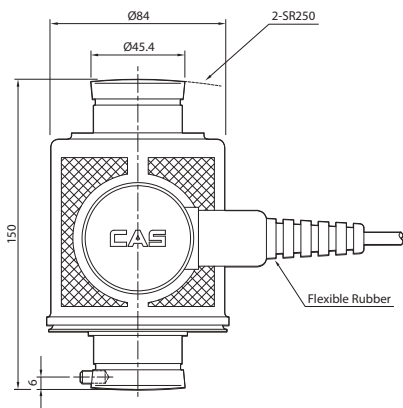
Capacity(R.L.)	tf	10, 20, 25, 30, 50, 100	
Rated Output	mV / V	2.0 ± 0.005	
Zero Balance	mV / V	0.0 ± 0.020	
Accuracy Class	-	C3	-
Non-Linearity	% R.O.	≤ 0.02	≤ 0.03
Hysteresis	% R.O.	≤ 0.02	≤ 0.03
Combined Error	% R.O.	≤ 0.02	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.017	≤ 0.03
Return for 30min.	% R.O.	≤ 0.017	≤ 0.03
Resolution	-	≤ 1/5000	≤ 1/3000
Division	mV / V	0.0004	0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.014 ≤ 0.011
Excitation	-Recommended -Maximum	V V	10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ	350 ± 3.5 350 ± 3.5 > 2000
Compensated Temperature Range	°C	-10 to +40	
Operating Temperature Range	°C	-40 to +80	
Material	-	Stainless Steel	
Cable Specification	-	Ø8 x 4P x 12m (PVC)	
Safety Overload	% R.L.	150	

Dimensions

► WBK (10tf~30tf)

► WBK (50tf~100tf)

Unit : mm



WBK-NR

Noise Resistance
Canister Load Cell



Features

- Compression type
- Stainless steel material
- Hermetically sealed structure
- Designed according to IP68
- Anti-surge circuit
- CE approved

Option

- Truck scale accessory SET

Application

- Hopper, Silo scale, Tank scale
- Truck scale

Description

WBK-NR is stainless steel canister type load cell with strong electrical endurance. Built in protection circuit can protect the loadcell from various noise, surge, and lightning. Sealed compression type load cell is suitable for rough industrial environment such as hoppers, tanks and silo scales.

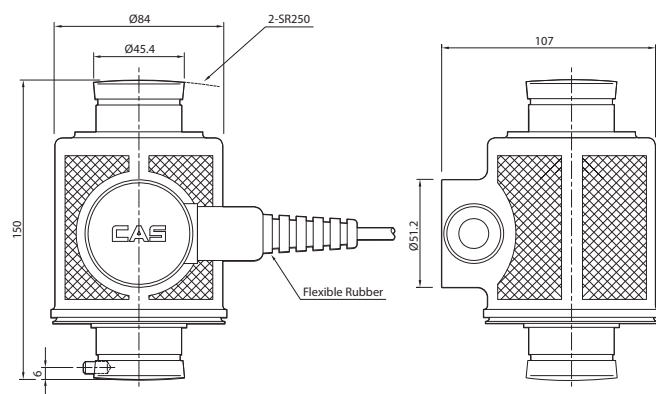
Specifications

Capacity(R.L.)	tf	10, 20, 25, 30, 50, 100
Rated Output	mV / V	2.0±0.005
Zero Balance	mV / V	0.0±0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.02
Hysteresis	% R.O.	≤0.02
Combined Error	% R.O.	≤0.02
Repeatability	% R.O.	≤0.01
Creep for 30min.	% R.O.	≤0.017
Return for 30min.	% R.O.	≤0.017
Resolution	-	≤1/5000
Division	mV / V	0.0004
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C
		≤0.014 ≤0.014
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		350 ± 3.5 350 ± 3.5 ≥ 500
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-40 to +80
Material	-	Stainless Steel
Cable Specification	-	Ø8 x 6P x 10m / Ø8 x 4P x 25m (PVC) Ø8 x 6P x 12m (Urethane)
Safety Overload	% R.L.	150
Electrical Character	- Over Voltage - RS - Surge	V. % MHz kV
		75 AC/DC ±25% 80 ~ 1000MHz, 10V/m ±2

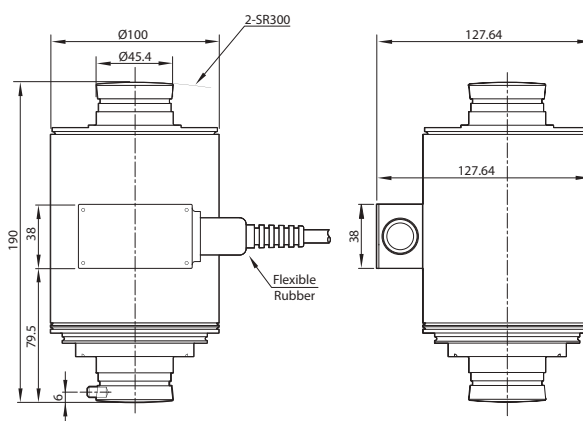
Dimensions

Unit : mm

► 10tf~30tf



► 50tf~100tf



WBK-EXP

Explosion Proof
Canister Load Cell



Features

- Compression type
- Stainless steel material
- Explosion-proof structure
- Hermetically sealed structure
- Designed according to IP68

Option

- WBK-EXP / Intrinsic safety explosion(Ex ia IIC T4, 10tf~50tf)
- WBK-EXP-D / Flameproof(Ex d IIC T4, 10tf~100tf)
- WBK-EXP-TD / Dust-proof(Ex td A21 T135°C IP68, 10tf~100tf)
- Truck scale accessory set

Application

- Hopper, Silo scale, Tank scale
- Truck scale

Description

WBK-EXP is a stainless steel compression type load cell. The antiexplosive structure is suitable for explosive-hazard environments where hopper, tank, and silo scale are used. The IP68 level stainless steel structure can endure humid areas.

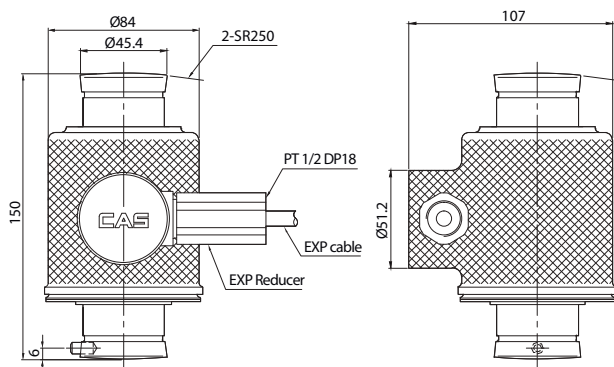
Specifications

Capacity(R.L.)	tf	10, 20, 25, 30, 50, 100	
Rated Output	mV / V	2.0 ± 0.005	
Zero Balance	mV / V	0.0 ± 0.02	
Accuracy Class	-	A	B
Non-Linearity	% R.O.	≤ 0.02	≤ 0.03
Hysteresis	% R.O.	≤ 0.02	≤ 0.03
Combined Error	% R.O.	≤ 0.02	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.017	≤ 0.03
Return for 30min.	% R.O.	≤ 0.017	≤ 0.03
Resolution	-	≤ 1/5000	≤ 1/3000
Division	mV / V	0.0004	0.00067
Temperature Effect on	-Zero Value	%/10°C	≤ 0.14
	-Output Value	%/10°C	≤ 0.11
Excitation	-Recommended	V	10
	-Maximum	V	28
Resistance	-Input	Ω	350 ± 3.5
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range	°C	-10 to + 40	
Operating Temperature Range	°C	-30 to + 80	
Material	-	Stainless Steel	
Cable Specification	-	Ø8 x 4P x 10m (Urethane)	
Safety Overload	% R.L.	150%	

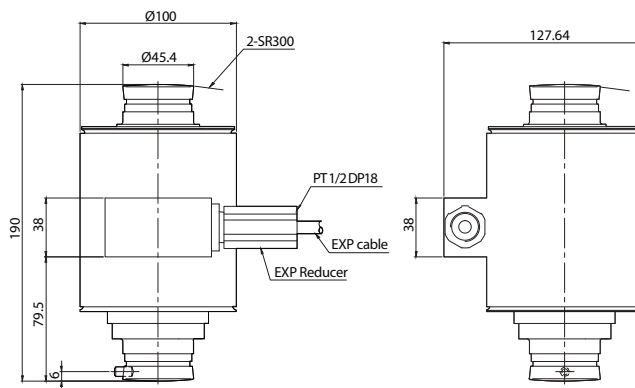
Dimensions

Unit : mm

► 10tf~30tf (Intrinsic safety, Pressure resistance, Dust ignition proof)



► 50tf~100tf (Intrinsic safety, Pressure resistance, Dust ignition proof)



* Intrinsic safety 10~50tf

WBK-D | Digital Canister Load Cell



Features

- Compression type
- Stainless steel material
- High resolution digital output
- Hermetically sealed structure
- Designed according to IP68 standard
- OIML C4 approved (OIML R60, 10~50tf)
- CE approved

Option

- Truck scale accessory set

Application

- Hopper, Silo scale, Tank scale
- Truck scale

Description

WBK-D is a stainless steel canister type load cell. Digital communication enables diagnose each load cell individually, and it can control the weight, eccentricity compensation, diagnose problem, load cell replacement in simple way. Sealed compression type load cell is suitable for rough industrial environment such as hoppers, tanks, silo scales, etc.

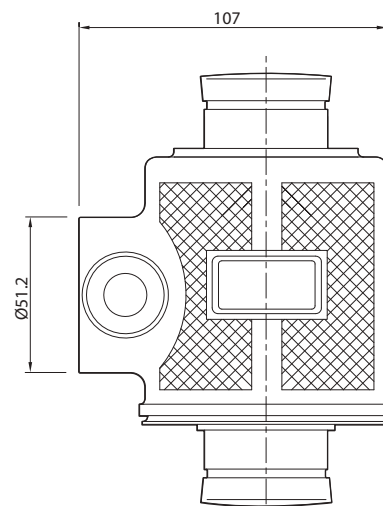
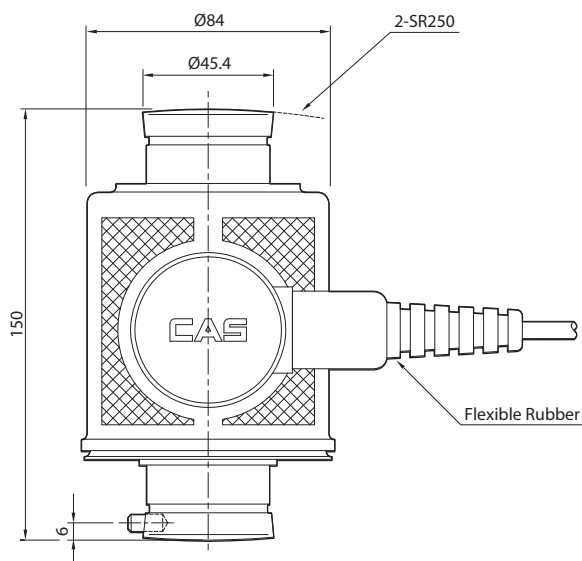
Specifications

Capacity(R.L.)	tf	10, 20, 25, 30
Rated Output	counts	300,000
Zero Balance	counts	± 300
Accuracy Class	-	C4
Non-Linearity	% R.O.	< 0.015
Hysteresis	% R.O.	< 0.015
Combined Error	% R.O.	< 0.015
Repeatability	% R.O.	< 0.01
Creep for 30min.	% R.O.	< 0.017
Temperature Effect on	- Zero Value - Output Value	% R.O./10°C % R.O./10°C
Compensated Temperature Range	°C	-10 ~ +40
Operating Temperature Range	°C	-40 ~ +80
Excitation	- Minimum - Recommended - Maximum	V V V
Insulation	MΩ	≥ 2,000
Safety Overload	% R.C.	150
Material	-	Stainless Steel
Communication Method	-	RS-485 (2wire)
Communication Speed	kbit/sec	19.2
Max Cable Length for Communication	m	1,000
Warm-up Time from Cold Start	minutes	15
Asynchronous Interface Baudrate	Baud	9,600 ~ 115,200
Number of bus addresses	-	Max. 32

Dimensions

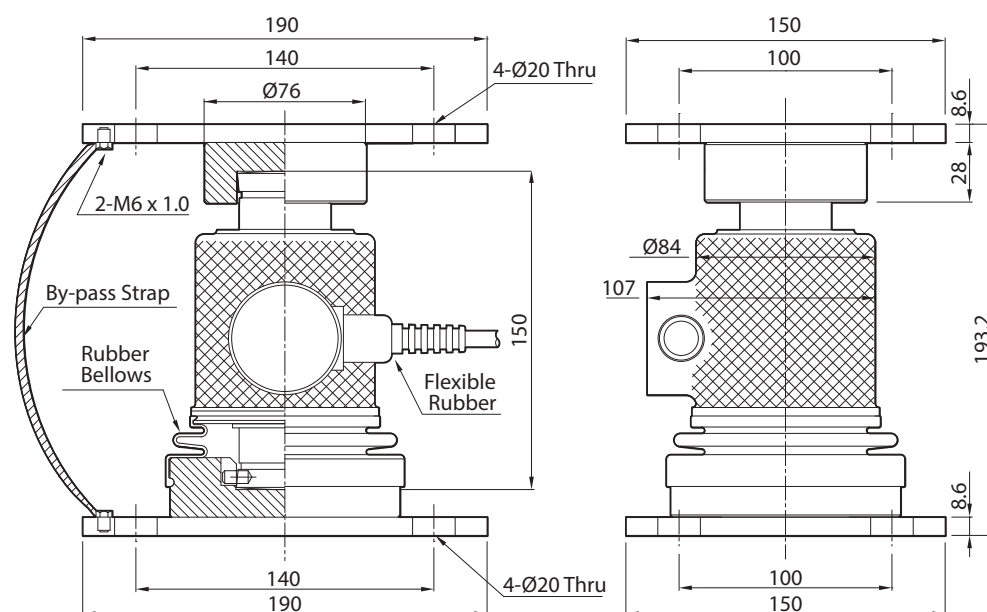
Unit : mm

► WBK-D

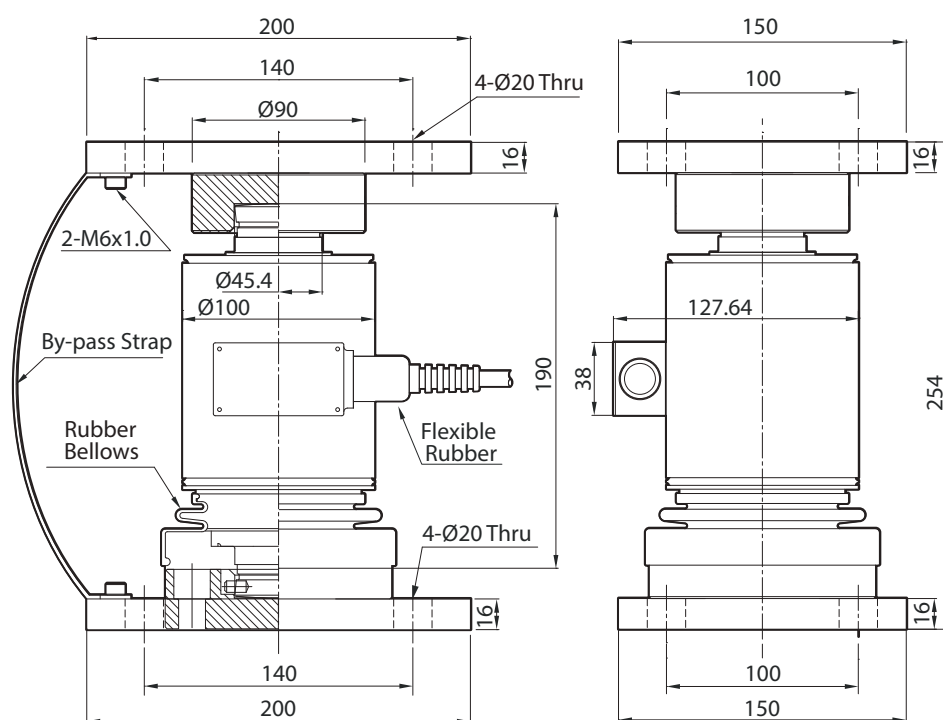


Accessory Dimensions

► WBK (10tf~30tf)



► WBK (50tf~100tf)



NWBK

Canister Load Cell



Features

- Compression type
- Stainless steel material
- Hermetically sealed structure
- Designed according to IP68

Option

- Truck scale accessory set

Application

- Hopper, Silo scale, Tank scale
- Truck scale

Description

NWBK is a stainless steel canister type load cell. Sealed compression type load cell is suitable for rough industrial environment such as hoppers, tanks and silo scales.

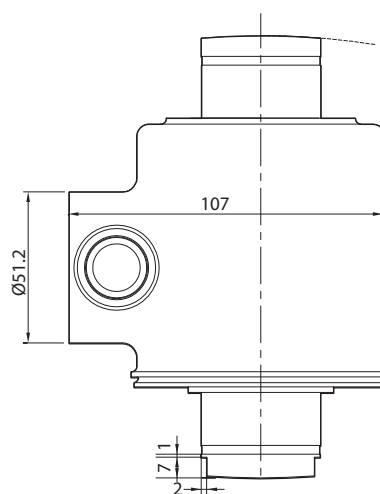
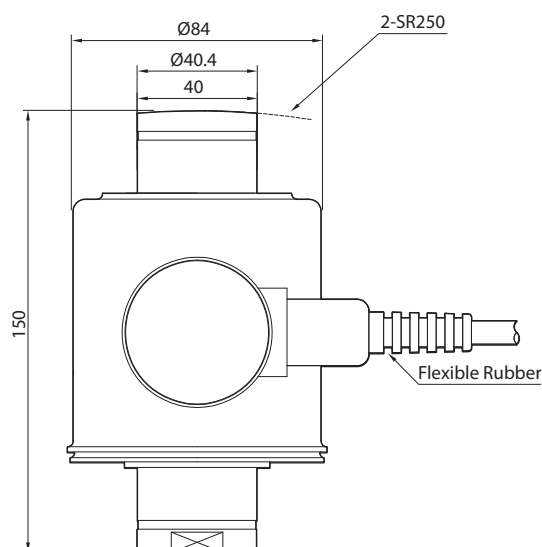
Specifications

Capacity(R.L.)	tf	10, 25, 30	
Rated Output	mV / V	2.0 ± 0.005	
Zero Balance	mV / V	0.0 ± 0.020	
Accuracy Class	-	A	B
Non-Linearity	% R.O.	≤ 0.02	≤ 0.03
Hysteresis	% R.O.	≤ 0.02	≤ 0.03
Combined Error	% R.O.	≤ 0.02	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.017	≤ 0.03
Return for 30min.	% R.O.	≤ 0.017	≤ 0.03
Resolution	-	≤ 1/5000	≤ 1/3000
Division	mV / V	0.0004	0.00067
Temperature Effect on	-Zero Value	%/10°C	≤ 0.014
	-Output Value	%/10°C	≤ 0.011
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	350 ± 3.5
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range	°C	-10 to +40	
Operating Temperature Range	°C	-40 to +80	
Material	-	Stainless Steel / Steel Coating	
Cable Specification	-	Ø8 x 4P x 12M (PVC)	
Safety Overload	% R.L.	150	

Dimensions

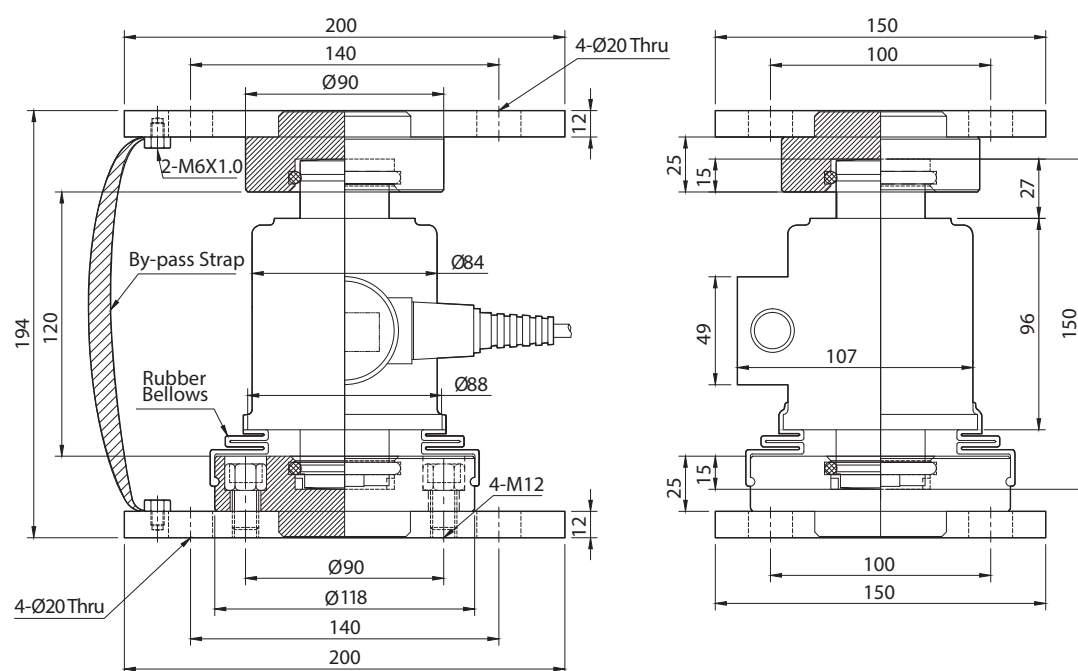
Unit : mm

► NWBK



Accessory Dimensions

► NWBK



WBKL**Canister
Load Cell****Features**

- Compression type
- Hermetically sealed structure
- Designed according to IP68

Option

- Truck scale accessory set

Application

- Hopper, Silo scale, Tank scale
- Truck scale

Description

WBKL is a canister type load cell of steel. Compression type load cells with a sealed structure are suitable for harsh industrial environments such as hoppers, tanks, silos, and truck scales.

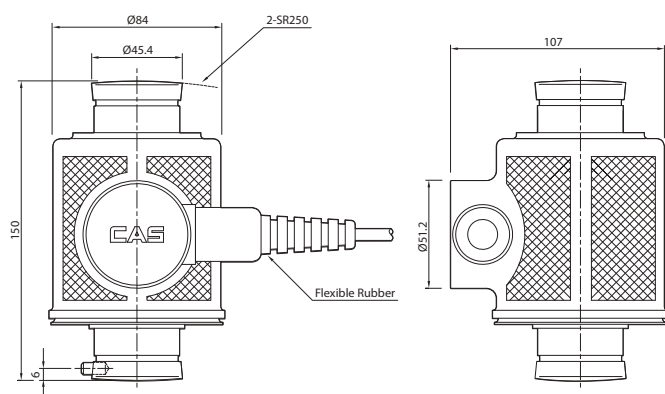
Specifications

Capacity(R.L.)	tf	10, 20, 25, 30, 50, 100	
Rated Output	mV / V	2.0 ± 0.005	
Zero Balance	mV / V	0.0 ± 0.020	
Accuracy Class	-	A	B
Non-Linearity	% R.O.	≤ 0.02	≤ 0.03
Hysteresis	% R.O.	≤ 0.02	≤ 0.03
Combined Error	% R.O.	≤ 0.02	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.017	≤ 0.03
Return for 30min.	% R.O.	≤ 0.017	≤ 0.03
Resolution	-	≤ 1/5000	≤ 1/3000
Division	mV / V	0.0004	0.00067
Temperature Effect on	-Zero Value	%/10°C	≤ 0.014
	-Output Value	%/10°C	≤ 0.011
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	350 ± 3.5
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 2000
Compensated Temperature Range	°C	-10 to +40	
Operating Temperature Range	°C	-40 to +80	
Material	-	Stainless Steel / Steel	
Cable Specification	-	Ø8 x 4P x 12M (PVC)	
Safety Overload	% R.L.	150	

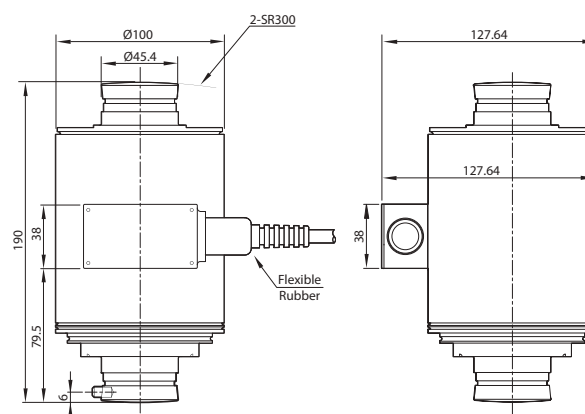
Dimensions

Unit : mm

► WBKL (10tf~30tf)



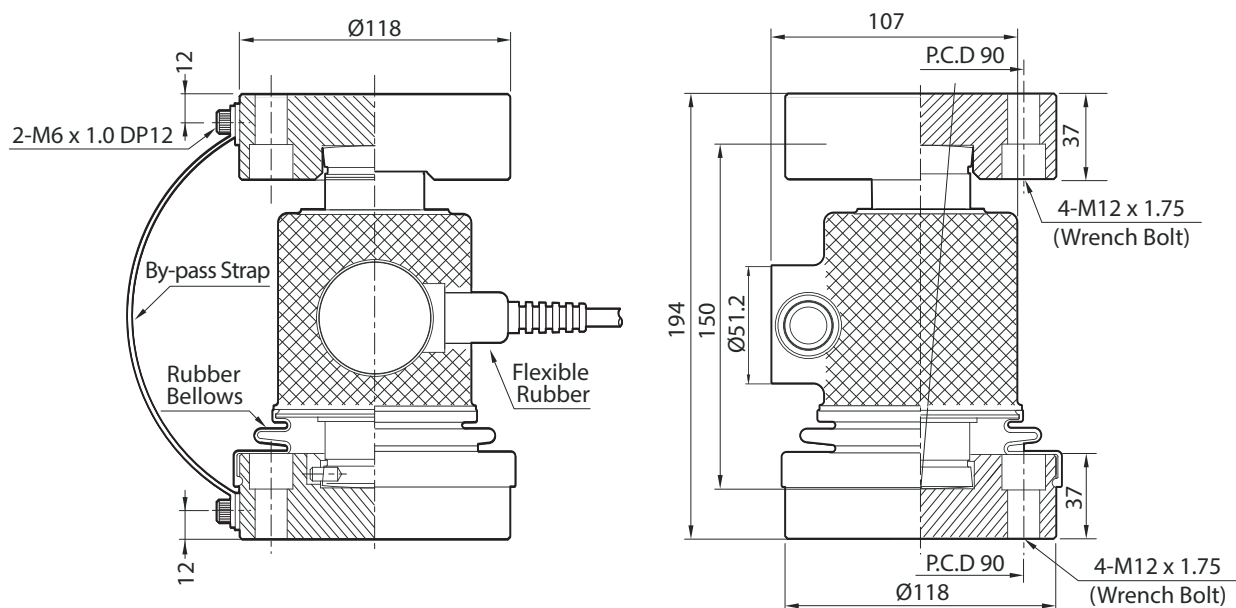
► WBKL (50tf~100tf)



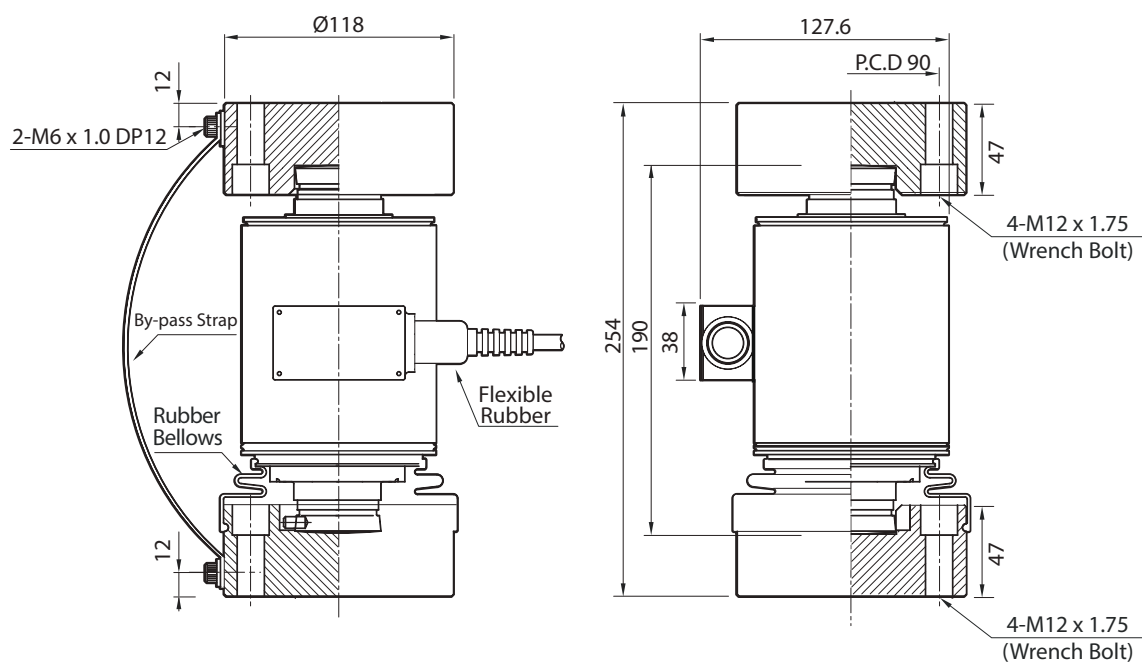
Unit : mm

Accessory Dimensions

► 10tf-30tf



► 50tf-100tf



WBKC

Canister Load Cell



Features

- Compression type
- Hermetically sealed structure
- Designed according to IP68

Option

- Truck scale accessory set

Application

- Hopper, Silo scale, Tank scale
- Truck scale

Description

WBKC is a stainless steel canister type load cell. Compression type load cells with a sealed structure are suitable for harsh industrial environments such as hoppers, tanks, silos, and truck scales.

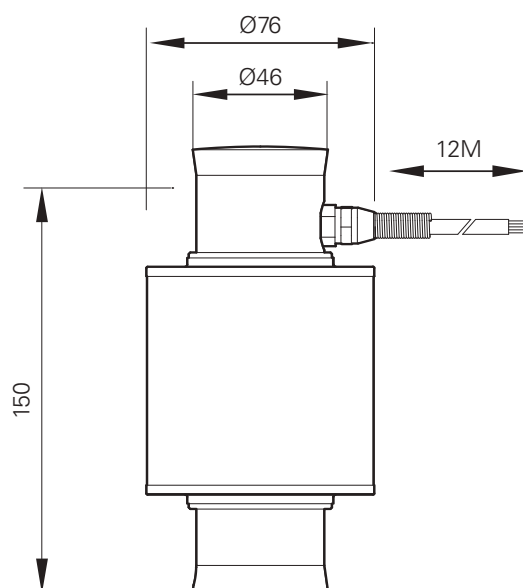
Specifications

Capacity(R.L.)	tf	10, 20, 25, 30	
Rated Output	mV / V	2.0 ± 0.005	
Zero Balance	mV / V	0 ± 0.02	
Accuracy Class	-	C3	-
Non-Linearity	% R.O.	≤ 0.02	≤ 0.03
Hysteresis	% R.O.	≤ 0.02	≤ 0.03
Combined Error	% R.O.	≤ 0.02	≤ 0.03
Repeatability	% R.O.	≤ 0.01	≤ 0.02
Creep for 30min.	% R.O.	≤ 0.017	≤ 0.03
Return for 30min.	% R.O.	≤ 0.017	≤ 0.03
Resolution	-	≤ 1/5000	≤ 1/3000
Division	mV / V	0.0004	0.00067
Temperature Effect on	-Zero Value	%/10°C	≤ 0.014
	-Output Value	%/10°C	≤ 0.011
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	350 ± 3.5, 700 ± 7
	-Output	Ω	350 ± 3.5, 700 ± 7
	-Insulation	MΩ	> 2000
Compensated Temperature Range	°C	-10 to + 40	
Operating Temperature Range	°C	-30 to + 70	
Material	-	Stainless Steel	
Cable Specification	-	5Ø × 4P or 6P × 12M/15M (Urethane/PVC)	
Safety Overload	% R.L.	150	

Dimensions

- WBKC

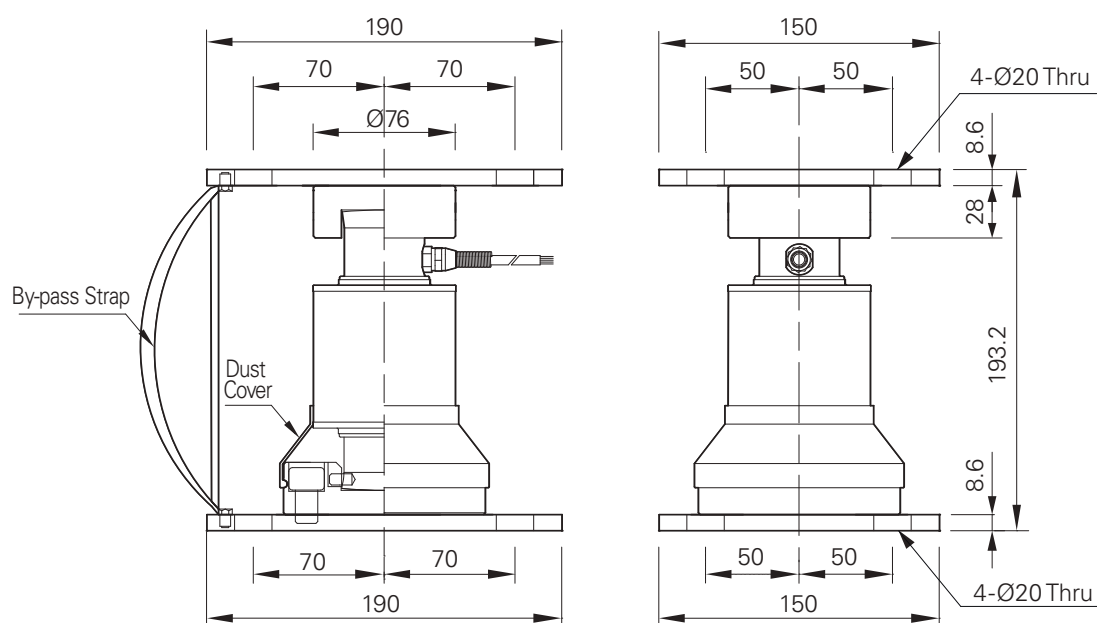
Unit : mm



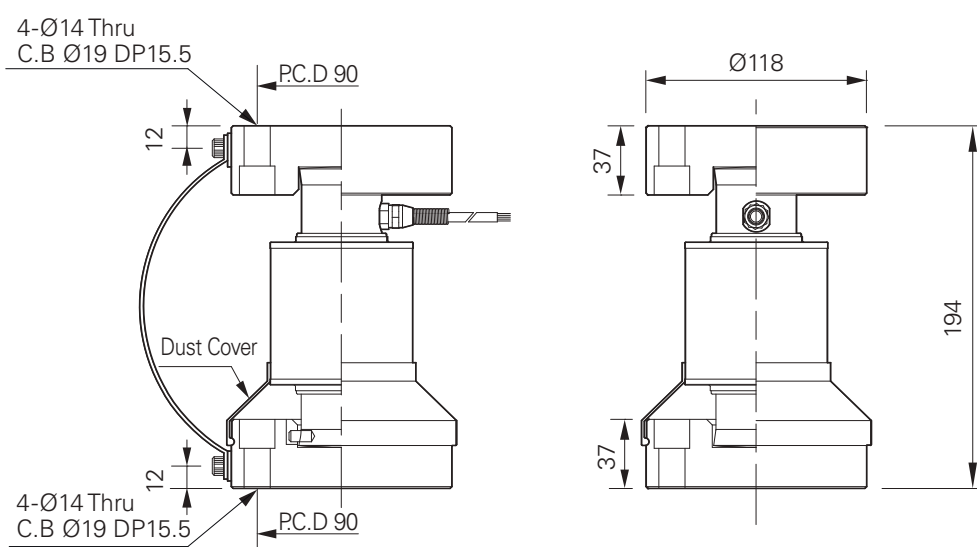
Unit : mm

Accessory Dimensions

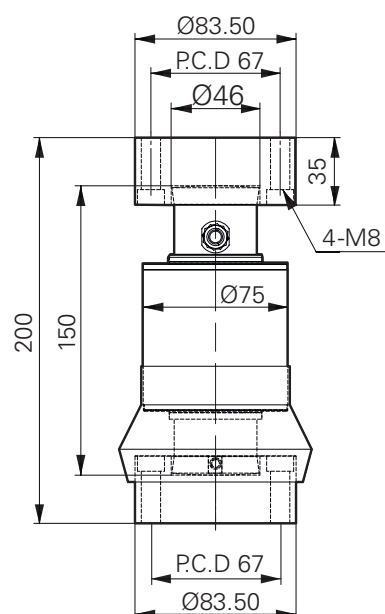
► WBKC TYPE1

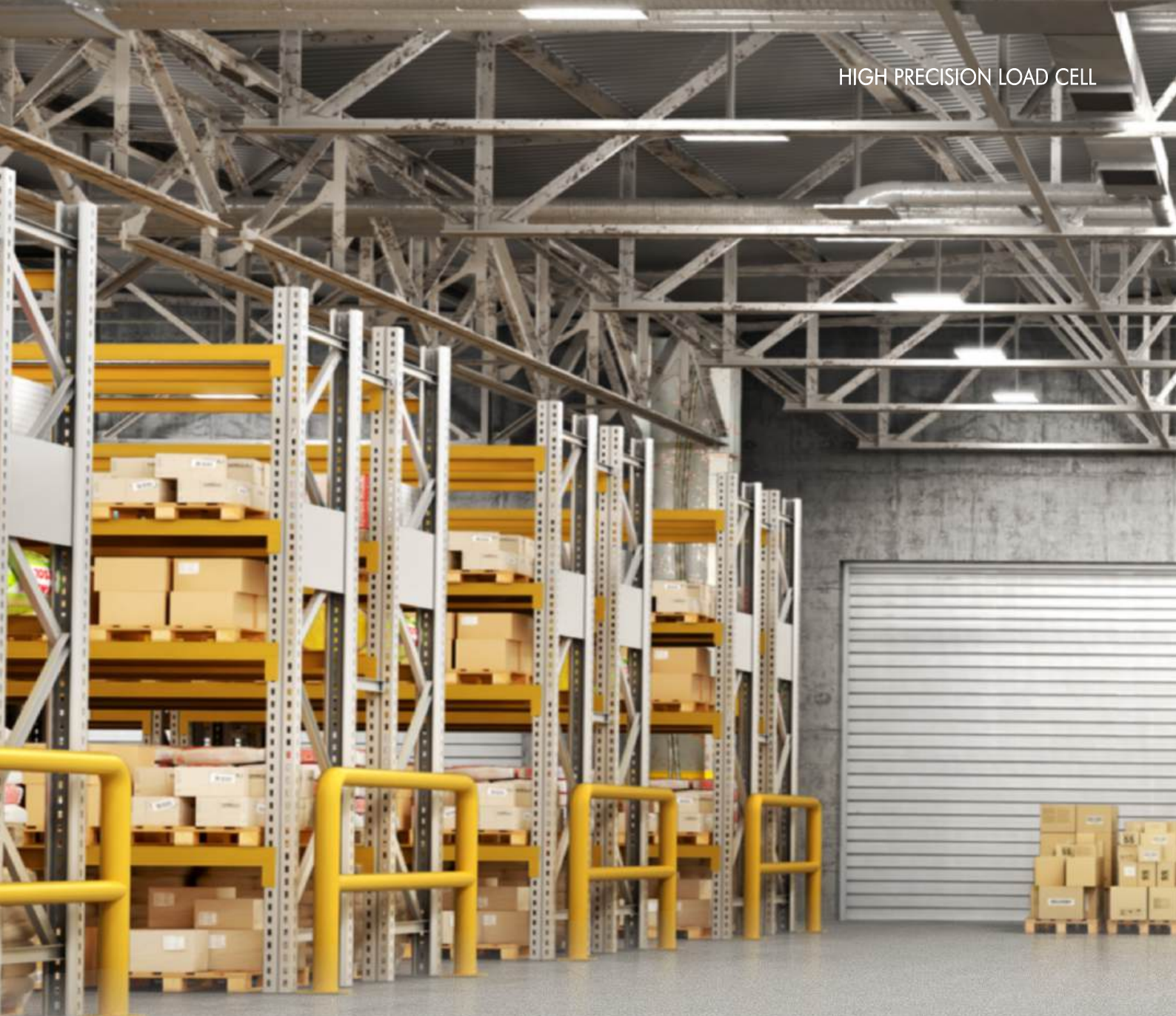


► WBKC TYPE2



► WBKC TYPE3

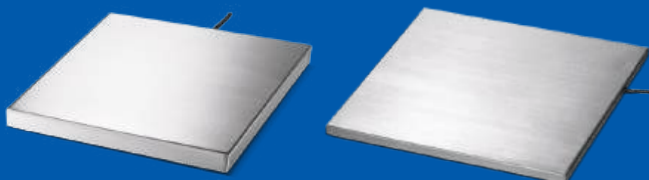




Platform Type Load Cell

CAS is a leading manufacturer of weighing and measurement tools, and provides high accurate and precise load cells suitable for Industrial Areas.

[SPL / EPL]



SPL | Slim Platform Type Load Cell



Features

- Slim structure
- Stainless steel material (cover)
- Various capacities from 50kg to 400kg
- Structure suitable for gas cylinder weighing

Option

- Built in transmitter(4~20mA, 2 Wire Type)

Application

- Gas/chemical scale of semiconductor production process

Description

SPL is a platform type load cell of zinc plated steel and stainless steel material (cover). It is mainly used for various industrial weighing devices with its slim structure.

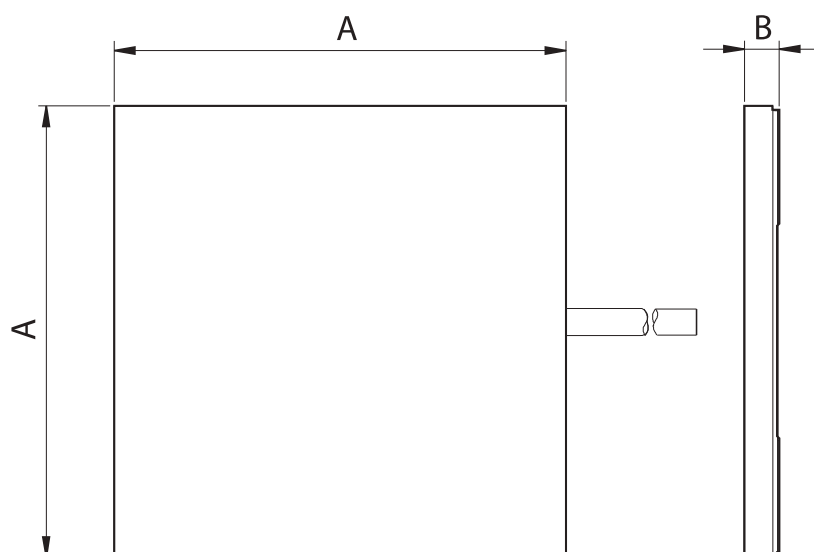
Specifications

Capacity(R.L.)	kgf	50, 60, 100, 200, 300, 400
Rated Output	mV / V	2.0 ± 0.2
Zero Balance	mV / V	0.0 ± 0.1
Accuracy Class	-	-
Non-Linearity	% R.O.	≤ 0.05
Hysteresis	% R.O.	≤ 0.05
Combined Error	% R.O.	≤ 0.05
Repeatability	% R.O.	≤ 0.05
Creep for 30min.	% R.O.	≤ 0.03
Return for 30min.	% R.O.	≤ 0.03
Resolution	-	≤ 1/2000
Division	mV / V	0.001
Temperature Effect on	-Zero Value	%/10°C
	-Output Value	%/10°C
Excitation	-Recommended	V
	-Maximum	V
Resistance	-Input	Ω
	-Output	Ω
	-Insulation	MΩ
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Steel (plate) / Stainless steel (cover)
Cable Specification	-	Ø5.4 x 4P x 5m (Urethane) Ø5.4 x 2P x 5m (Urethane) transmitter type
Safety Overload	% R.L.	150

Dimensions

Unit : mm

► SPL



Capa.	A	B
50kgf	300	23
60kgf		23
100kgf		24
200kgf		25
300kgf		28
400kgf		29

EPL | Slim Platform Type Load Cell



Features

- Slim structure
- Stainless steel material (cover)

Application

- Gas/chemical scale of semiconductor production process

Description

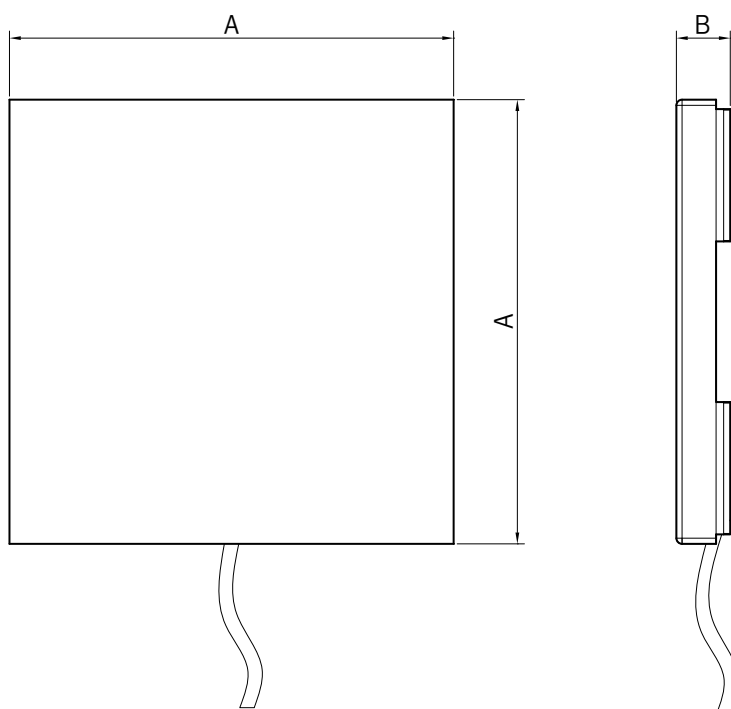
EPL is a platform type load cell of aluminum and stainless steel material (cover). It is mainly used for various industrial weighing devices.

Specifications

Capacity(R.L.)	kgf	100, 200
Rated Output	mV / V	2.0 ± 0.1
Zero Balance	mV / V	0.0 ± 0.1
Accuracy Class	-	-
Non-Linearity	% R.O.	0.1
Hysteresis	% R.O.	0.1
Combined Error	% R.O.	0.1
Repeatability	% R.O.	0.1
Creep for 30min.	% R.O.	0.06
Return for 30min.	% R.O.	0.06
Resolution	-	1/1000
Division	mV / V	0.002
Temperature Effect on	-Zero Value	%/10°C
	-Output Value	%/10°C
Excitation	-Recommended	V
	-Maximum	V
Resistance	-Input	Ω
	-Output	Ω
	-Insulation	M Ω
Compensated Temperature Range	°C	-10 to +40
Operating Temperature Range	°C	-30 to +80
Material	-	Aluminum (plate) / Stainless steel (cover)
Cable Specification	-	$\varnothing 5.4 \times 4P \times 5m$ (Urethane)
Safety Overload	% R.L.	150

Dimensions

► EPL



Unit : mm

Capa.	A	B
100kgf	250	29.5
200kgf	300	

HIGH PRECISION LOAD CELL



Special Type Load Cell

CAS has excellent technology in metering, and control, and provides high accurate and precise load cells for various industrial environments.

MAS (2, 3, 5, 6 Axis)



MAS | Multi Axis Load Cell (2Axis, 3Axis)



Features

- 2 to 3-axis configuration of various capacities
- High accuracy less than 0.5% for each axis
- Customized specifications (capacity, size)
(Fx, Fy, Fz 3-Axis specifications are 5 ~ 6 Axis size)

Option

- 2-Axis (MAS101, MAS110)
- 3-Axis (MAS112, MAS121)

Application

- Robot joint
- Wind tunnel test
- Other tester

Description

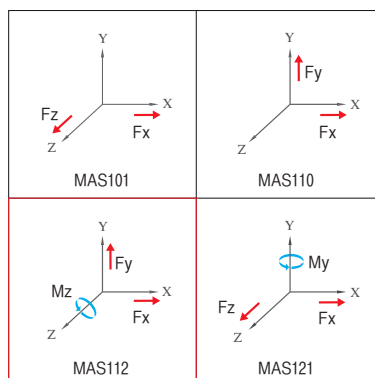
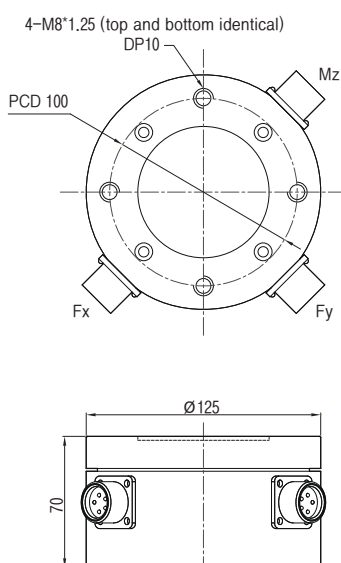
MAS is a multi axis type load cell of aluminum material. Simultaneously measures forces or moments in various directions to show the force and moment of the X, Y and Z axes acting in any direction.

Specifications

Capacity(R.L.)		kgf	2, 5, 10, 20, 50
Rated Output	mV / V		0.5 ± 0.005
	mV / V		0.0 ± 0.02
Zero Balance			
Accuracy Class		-	-
Non-Linearity	% R.O.		≤0.5% FS for each component force
	Hysteresis	% R.O.	≤0.5% FS for each component force
	Combined Error	% R.O.	≤0.5% FS for each component force
Temperature Effect on	-Zero Value	%/10°C	± 0.01% FS/°C for each component force
	-Output Value	%/10°C	± 0.06% FS/°C for each component force
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	350 ± 7
	-Output	Ω	350 ± 7
	-Insulation	MΩ	>2000
Material		-	Aluminum
Cable Specification		-	ø5.4 x 4p x 5m (Urethane)
Safety Overload		% R.L.	150% FS for each component force

Dimensions

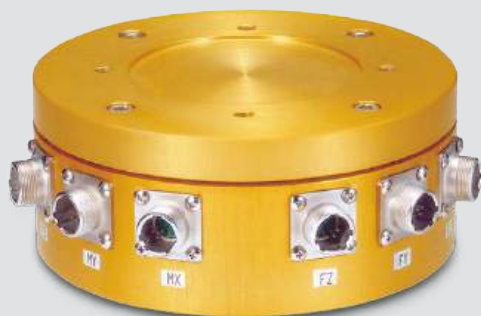
► MAS 112



Type		Rated Load (Allowable Moment)					
		Fx (kgf)	Fy (kgf)	Fz (kgf)	Mx (kgf·m)	My (kgf·m)	Mz (kgf·m)
2AXIS	MAS101	2L	2	-	2	-	-
		5L	5	-	5	-	-
		10L	10	-	10	-	-
		20L	20	-	20	-	-
		50L	50	-	50	-	-
	MAS110	2L	2	2	-	-	-
		5L	5	5	-	-	-
		10L	10	10	-	-	-
		20L	20	20	-	-	-
		50L	50	50	-	-	-

Type		Rated Load (Allowable Moment)					
		Fx (kgf)	Fy (kgf)	Fz (kgf)	Mx (kgf·m)	My (kgf·m)	Mz (kgf·m)
3AXIS	MAS112	2L	2	2	-	-	0.2
		5L	5	5	-	-	0.5
		10L	10	10	-	-	1
		20L	20	20	-	-	2
		50L	50	50	-	-	5
	MAS121	2L	2	-	2	-	0.2
		5L	5	-	5	-	0.5
		10L	10	-	10	-	1
		20L	20	-	20	-	2
		50L	50	-	50	-	5

MAS | Multi Axis Load Cell (5 Axis, 6 Axis)



Features

- 5 to 6-axis configuration of various capacities
- High accuracy less than 0.5% for each axis
- Customized specifications (capacity, size)

Option

- 5-Axis(MAS332)
- 6-Axis(MAS333)

Application

- Robot joint
- Wind tunnel test
- Other tester

Description

MAS is a multi axis type load cell of aluminum material. Simultaneously measures forces or moments in various directions to show the force and moment of the X, Y and Z axes acting in any direction.

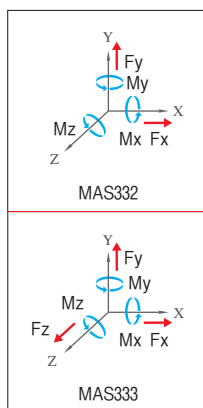
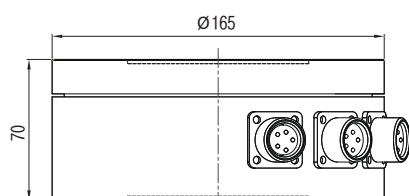
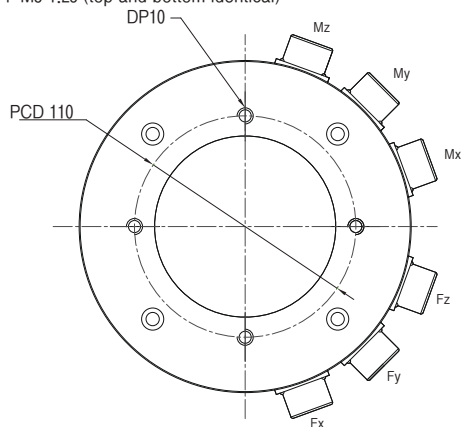
Specifications

Capacity(R.L.)	kgf	2, 5, 10, 20, 50
Rated Output	mV / V	0.5 ± 0.005
Zero Balance	mV / V	0.0 ± 0.02
Accuracy Class	-	-
Non-Linearity	% R.O.	≤0.5% FS for each component force
Hysteresis	% R.O.	≤0.5% FS for each component force
Combined Error	% R.O.	≤0.5% FS for each component force
Temperature Effect on	-Zero Value -Output Value	± 0.01% FS/°C for each component force ± 0.06% FS/°C for each component force
Excitation	-Recommended -Maximum	V V
		10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ
		350 ± 7 350 ± 7 >2000
Material	-	Aluminum
Cable Specification	-	ø5.4 x 4p x 5m (Urethane)
Safety Overload	% R.L.	150% FS for each component force

Dimensions

► MAS 333

4-M8*1.25 (top and bottom identical)



Unit : mm

Type		Rated Load (Allowable Moment)					
		Fx (kgf)	Fy (kgf)	Fz (kgf)	Mx (kgf·m)	My (kgf·m)	Mz (kgf·m)
5AXIS	MAS332	2L	2	2	-	0.2	0.2
		5L	5	5	-	0.5	0.5
		10L	10	10	-	1	1
		20L	20	20	-	2	2
		50L	50	50	-	5	5

Type		Rated Load (Allowable Moment)					
		Fx (kgf)	Fy (kgf)	Fz (kgf)	Mx (kgf·m)	My (kgf·m)	Mz (kgf·m)
6AXIS	MAS333	2L	2	2	0.2	0.2	0.2
		5L	5	5	0.5	0.5	0.5
		10L	10	10	1	1	1
		20L	20	20	2	2	2
		50L	50	50	5	5	5



Weighing Controller / Indicator / Component

The CAS weighing indicators, controllers and components have high performance, high resolution and various interfaces that provides optimal solutions for various industrial sites.

CI-200A Series / CI-200S Series / CI-2001AS/BS & CI-2400BS / CI-2001AN/BN / CI-170A / BI-II / CI-150A / CI-1500A/1560A /
CI-600A Series / CI-608A / CI-400A Series / CI-400AL Series / CI-600D Series / EXI-600AD Series / EXI-200AD / TWN /
CD-3000 Series / WTM-200/500 / DOM-01&DMP-4/8P // LCP-01 / JB-P Series / JB-PA Series / EXJB-P / LCT PRO



CI-200A Series | Weighing Indicator



CI-200A



CI-201A

Features

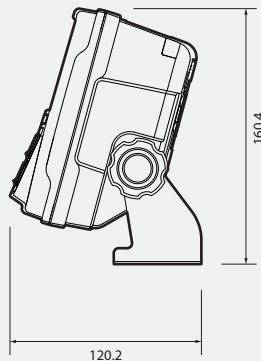
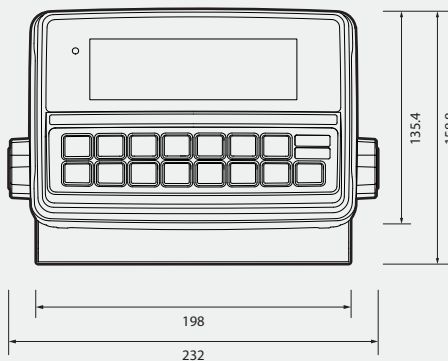
- Clear LED/LCD display
- Number key & function key application
- Multi-purpose cradle (MPC)
- Easy weight setting (Full Digital Calibration)
- High speed of A/D conversion (80times/sec.)
- 1/10,000 high resolution
- Weight back-up
- 4 wire, 6 wire load cells support (can be connected 8 wire load cell)
- 2 Serial Ports
- Analog output (V-out/I-out)

Option

- RS-442 / 485 interface

Dimensions

Unit : mm



Specifications

Model	CI-200A	CI-201A
Load cell excitation voltage	DC 5V	
No. of Load cell connection	8ea (350Ω)	
Zero Adjustment Range	0mV ~ 2mV/V	
Load cell Input Range	-1.2mV/V ~ 3.2mV/V	
Input sensitivity	0.5uV/D (OIML, KC, NTEP), 0.2uV/D (Non-approval)	
A/D Internal resolution	1/520,000	
A/D external resolution	1/10,000 (OIML, KC, NTEP), 1/20,000 (Non-approval, 2mV/V load cell)	
A/D conversion speed	Up to 80 times/sec	
Display	6digits LED (Character Height: 25mm)	6digits LCD (Character Height : 8mm, Inc. Backlight)
Key	10 Numeric key, 5 Function keys	
Interface	COM Port (RS-232C) x 2EA	
Operating Power	DC 6V Rechargeable battery, DC 12V Adaptor	
Battery Consumption Time	Approx. 33hours	Approx. 22hours
Charging Time	Approx. 12hours	
Operating Temp	-10 ~ 40°C	
Material	ABS	
Product Size (W x D x H)	206 x 92 x 139 mm	
Product Weight	1.3 kg	

CI-200S Series

Weighing
Indicator

CI-200SC

CI-200S

Features

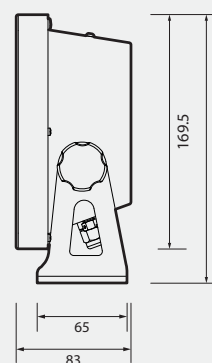
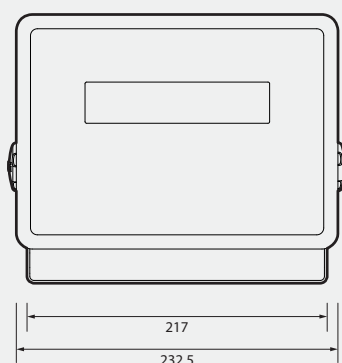
- Clear LED/LCD display
- Number key & function key application
- Multi-purpose cradle (MPC)
- Easy weight setting (Full Digital Calibration)
- High speed of A/D conversion (80times/sec.)
- 1/10,000 high resolution
- Weight back-up
- 4 wire, 6 wire load cells support (can be connected 8 wire load cell)
- Analog output (V-out/I-out)
- Comparing with weight through weight comparing blinker light (CI-200SC)

Option

- RS-442 / 485 interface

Dimensions

Unit : mm



Specifications

Model	CI-200S/SC	CI-201S
Load cell excitation voltage	DC 5V	
No. of Load cell connection	8ea (350Ω)	
Zero Adjustment Range	0mV ~ 2mV/V	
Load cell Input Range	-1.2mV/V ~ 3.2mV/V	
Input sensitivity	0.5uV/D (OIML, KC, NTEP), 0.2uV/D (Non-approval)	
A/D Internal resolution	1/520,000	
A/D external resolution	1/10,000 (OIML, KC, NTEP), 1/20,000 (Non-approval, 2mV/V load cell)	
A/D conversion speed	Up to 80 times/sec	
Display	6digits LED (Character Height: 25mm)	6digits LCD (Character Height : 8mm, Inc. Backlight)
Key	10 Numeric key, 5 Function keys	
Interface	COM Port (RS-232C) x 1EA	
Operating Power	DC 6V Rechargeable battery, DC 12V Adaptor	
Battery Consumption Time	Approx. 33hours	Approx. 22hours
Charging Time	Approx. 12hours	
Operating Temp	-10 ~ 40°C	
Material	Stainless Steel	
Product Size (W x D x H)	250 x 83 x 194 mm	
Product Weight	1.5 kg	

CI-2001AS/BS & CI-2400BS

Weighing Indicator



CI-2001AS



CI-2001BS



CI-2400BS

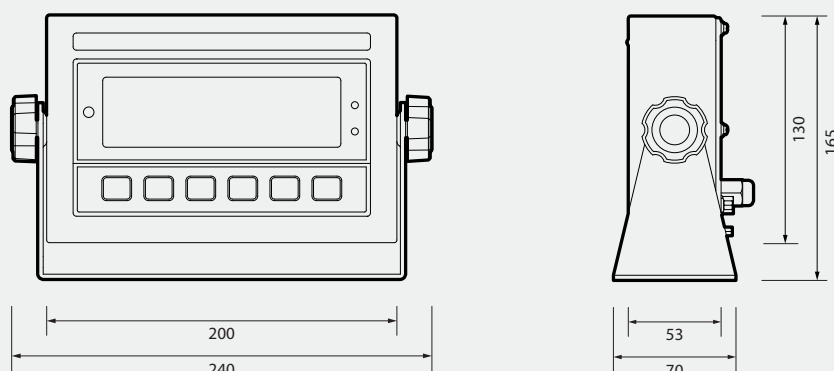
Features

- Wall-mounted / Small Indicator
- Easy weight setting (Full Digital Calibration)
- Weight back-up (Saving of weight at sudden power failure)
- Watch-dog circuitry (System restoration)

Option

- RS-422/485
- RTC (Real Time clock, CI-2001BN)
- External 4 Output (CI-2400BS)
- Rechargeable battery (CI-2400BS)

Dimensions



Unit : mm

Specifications

Model	CI-2001AS	CI-2001BS	CI-2400BS
Load cell excitation voltage	DC 5V		
No. of Load cell connection	4ea (350Ω)		6ea (350Ω)
Zero Adjustment Range	0.05 mV ~ 5 mV		
Load cell Input Range	0 mV/V ~ 4 mV/V		
Input sensitivity	2uV/D (OIML, KC, NTEP), 0.5 uV/D (Non-approval)		
A/D Internal resolution	1/200,000		
A/D external resolution	1/5,000 (OIML, KC, NTEP), 1/30,000 (Non-approval)		1/5,000(OIML, KC, NTEP), 10,000 (Non-approval)
A/D conversion speed	Up to 10 times/sec		
Display	6digits LED (Character Height: 25mm)	5digits LCD (Character Height: 25mm)	
Key	6 Function keys		
Interface	RS-232C		
Operating Power	DC 12V Adaptor		
Operating Temp	-10 ~ 40°C		-5 ~ 35°C
Material	Stainless Steel		
Product Size (W x D x H)	200 x 53 x 130 mm		
Product Weight	2 kg		

CI-2001AN/BN

Weighing
Indicator

CI-2001BN



Features

- Wall-mounted / Small Indicator
- Easy weight setting (Full digital calibration)
- Weight back-up (Saving of weight at sudden power failure)
- Watch-dog circuitry (System restoration)

Option

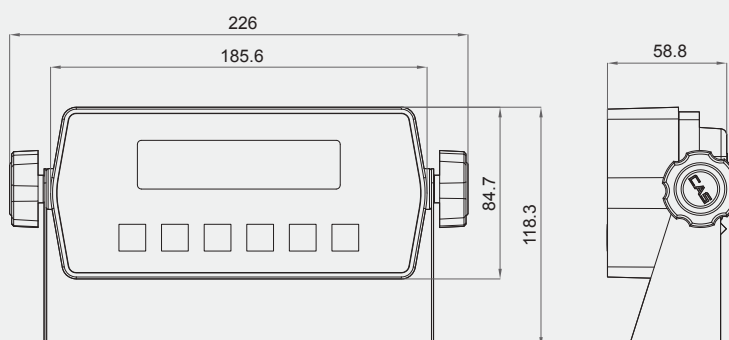
- RS-422/485
- RTC (Real time clock, CI-2001BN)
- USB
- Panel guide

CI-2001AN



Dimensions

Unit : mm



Specifications

Model	CI-2001AN	CI-2001BN
Load cell excitation voltage	DC 5V	
No. of Load cell connection	4ea (350Ω)	
Zero Adjustment Range	0.05 mV ~ 5 mV	
Load cell Input Range	0 mV/V ~ 3.2 mV/V	
Input sensitivity	2uV/D (OIML, KC, NTEP), 0.5 uV/D (Non-approval)	
A/D Internal resolution	1/200,000	
A/D external resolution	1/5,000 (OIML, KC, NTEP) 1/30,000 (Non-approval)	
A/D conversion speed	Up to 10 times/sec	
Display	6digits LED (Character Height: 14mm)	5digits LCD (Character Height: 25mm)
Key	6 Function keys	
Interface	RS-232C	
Operating Power	DC 12V Adaptor	
Operating Temp	-10 ~ 40 °C	
Material	ABS	
Product Size (W x D x H)	186 x 59 x 85 mm	
Product Weight	0.5 kg	

CI-170A

Weighing
Indicator



Features

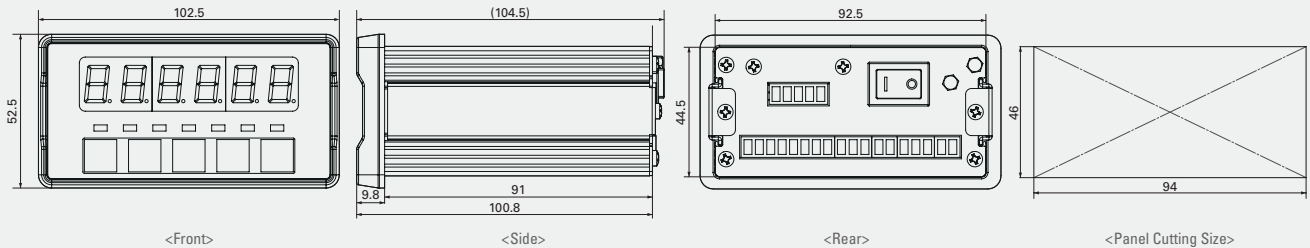
- High speed ADC : 320 times/sec
- Compact din size body 96(W) x 48(H) mm
- Load cell (350Ω) possible simultaneous connections of 8EA
- Support modbus RTU protocol
- Terminal block port
- Multi point calibration
- Provide various interfaces
- Weight back-up (Saving of weight at sudden power failure)
- Watch-dog circuitry (System restoration)

Option

- RS-485 (Modbus RTU)
- Analog output (V-out/I-out)

Dimensions

Unit : mm



Specifications

Model		CI-170A
Load cell excitation voltage		DC5V
No. of Load cell connection		8ea (350Ω)
Zero Adjustment Range		0.05mV ~ 5mV
Load cell Input Range		-1.2mV/V ~ 3.2mV/V
Input sensitivity		0.36uV/D (OIML, KC), 0.2uV/D (Non-approval)
A/D Internal resolution		1/1,000,000
A/D external resolution		1/10,000 (OIML, KC), 1/30,000 (Non-approval, Max)
A/D conversion speed		Up to 320 times/sec
Display		6digits LED (Character Height: 13mm)
Key		5 Function keys
Interface	Basics	RS-232C
	Option	RS-485, Analog output (V-out/I-out)
External Input / Output		Input 2ea / output 4ea (Option)
Operating Power		DC 9~24V, 1.5A
Operating Temp		-10 ~ 40°C
Product Size (W x D x H)		103 x 53 x 105 mm
Panel Cutting Size (W x H)		94 x 46 mm
Product Weight		0.4 kg

BI-II | Weighing Indicator



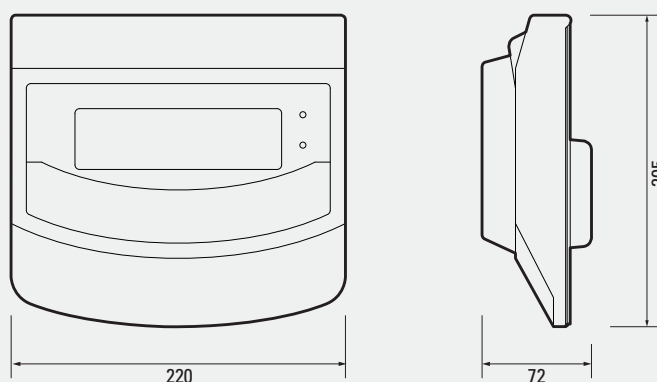
Features

- General (manganese, alkaline) battery or rechargeable battery
- Waterproof design (IP65)
- 5 digits LCD Display (Backlight)
- Easy weight setting (Full Digital Calibration)

Option

- Rechargeable battery, fixing bracket

Dimensions



Unit : mm

Specifications

Model	BI-II
Load cell excitation voltage	DC 5V
No. of Load cell connection	4ea (350Ω)
Zero Adjustment Range	0.05 mV ~ 5 mV
Load cell Input Range	0 mV/V ~ 2.0 mV/V
Input sensitivity	2μV/D
A/D Internal resolution	1/100,000
A/D external resolution	1/10,000
A/D conversion speed	Up to 10 times/sec
Display	6digits LCD (Character Height: 24mm)
Key	6 Function keys
Interface	RS-232C
Operating Power	DC 1.5V C Size battery 6ea / DC 1.2V AA Size Rechargeable battery 6ea / DC 12V 1.25A Adaptor
Operating Temp	-10 ~ 40 °C
Material	ABS
Product Size (W x D x H)	220 x 90 x 205 mm
Product Weight	1.8kg

CI-150A | Weighing Controller



Features

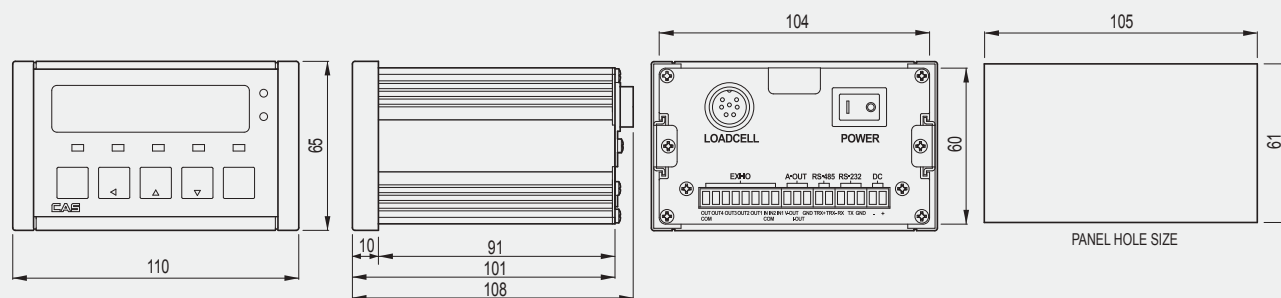
- High speed ADC : 320 times/sec
- Load cell (350Ω) possible simultaneous connections of 8EA
- Support modbus RTU protocol
- Terminal block port
- Multi point calibration
- Provide various interfaces
- Weight back-up (Saving of weight at sudden power failure)
- Watch-dog circuitry (System restoration)

Option

- RS-485 (Modbus RTU)
- External 2 Input / 4 Output
- Analog output (V-out/I-out)
- RTC (Real Time Clock)

Dimensions

Unit : mm



Specifications

Model		CI-150A
Load cell excitation voltage		DC5V
No. of Load cell connection		8ea (350Ω)
Zero Adjustment Range		0.05mV ~ 5mV
Load cell Input Range		-1.2mV/V ~ 3.2mV/V
Input sensitivity		0.36uV/D (OIML, KC), 0.2uV/D (Non-approval)
A/D Internal resolution		1/1,000,000
A/D external resolution		1/10,000 (OIML, KC), 1/30,000 (Non-approval, Max)
A/D conversion speed		Up to 320 times/sec
Display		6digits LED (Character Height: 13mm)
Key		5 Function keys
Interface	Basics	RS-232C
	Option	RS-422/485, Analog output (V-out/I-out)
External Input / Output		Input 2ea / output 4ea (Option)
Operating Power		DC 9~24V, 1.5A
Operating Temp		-10 ~ 40°C
Product Size (W x D x H)		110 x 108 x 66 mm
Panel Cutting Size (W x H)		105 x 61 mm
Product Weight		0.4 kg

CI-1500A/1560A | Weighing Controller



CI-1500A



CI-1560A

Features

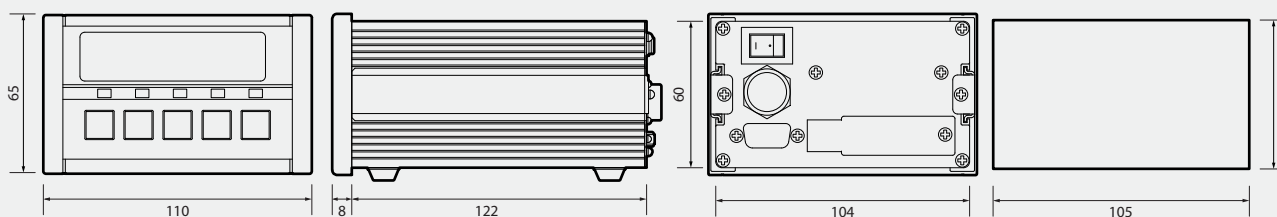
- Small Indicator
- Weight back-up (Saving of weight at sudden power failure)
- Watch-dog circuitry (System restoration)
- External 2 Input / 4 Output (CI-1560A)
- Shielded against noise (RFI & EMI)

Option

- RS-232C
- RTC (Real time clock)

Dimensions

Unit : mm



Specifications

Model	CI-1500A	CI-1560A
Load cell excitation voltage	DC 5V	
No. of Load cell connection	8ea(350Ω)	
Zero Adjustment Range	0.05mV ~ 30mV	
Load cell Input Range	0 mV/V ~ 4 mV/V	
Input sensitivity	1μV/D	
A/D Internal resolution	1/200,000	
A/D external resolution	1/10,000	
A/D conversion speed	Up to 10 times/sec	
Display	6digits LED (Character Height: 13mm)	
Key	5 Function keys	
Interface	RS-232C	
External Input / Output	-	Input 2ea / output 4ea
Operating Power	AC 220V, 50/60Hz	
Operating Temp	-10 ~ 40°C	
Product Size (W x D x H)	110 × 130 × 66 mm	
Panel Cutting Size (W x H)	105 x 61 mm	
Product Weight	0.7 kg	

CI-600A Series

Weighing
Controller



Features

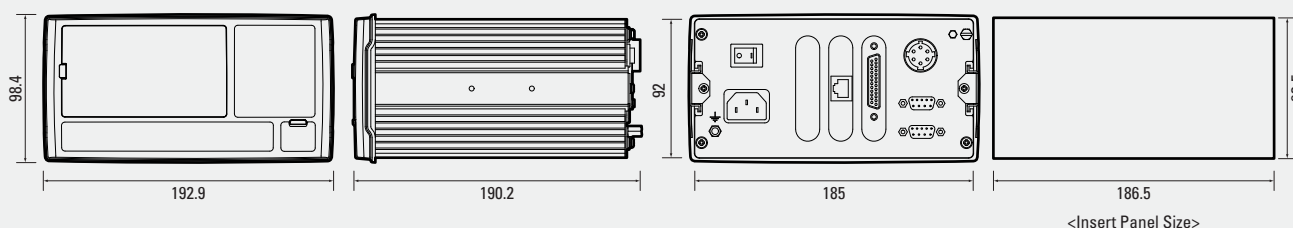
- High A/D conversion speed (200times/sec)
- High display resolution 1/10,000
- User-friendly interface (4.3" Full Graphic TFT LCD)
- Storing 100 items' information
- USB data backup
- Self-hardware test function
- Weight back-up (Saving of weight at sudden power failure)
- PC software to manage indicator
- Various communication interfaces

Option

- RS-422/RS-485 (Modbus RTU)
- Analog out (V-out/I-out)
- BCD In/Out
- External 2 Input / 6 Output
- External 6 Input / 8 Output
- Ethernet (Modbus TCP)

Dimensions

Unit : mm



Specifications

Model		CI-601A	CI-605A	CI-607A
Load cell excitation voltage		DC 5V		
No. of Load cell connection		10ea (350Ω)		
Zero Adjustment Range		0 ~ 2mV/V		
Load cell Input Range		-2.0mV/V ~ 3.0 mV/V		
Input sensitivity		0.5 uV/D (OIML, KC), 0.3 uV/D (Non-approval)		
A/D Internal resolution		1 / 1,000,000		
A/D external resolution		1/10,000 (OIML, KC), 1/20,000 (Non-approval)		
A/D conversion speed		Up to 200 times/sec		
Display		4.3" TFT Color LCD		
Key		10 Numeric key, 9 Function keys		
Interface	Basics	RS-232C X 2 Port (COM1, COM2)		
	Option	RS-422/485 (Modbus RTU), Analog output (V-out/I-out), BCD In/Out, Ethernet (Modbus TCP)		
External Input / Output		-	Input 4ea / output 6ea (Option)	Input 6ea / output 8ea (Option)
Operating Power		AC100~240V 50/60Hz		
Operating Temp		-10 ~ 40°C		
Product Size (W x D x H)		192.9 X 190.2 X 98.4mm		
Panel Cutting Size (W x H)		186.5 x 93.5mm		
Product Weight		1.5kg		

CI-608A

Loss-In-Weight Screw Feeder



Features

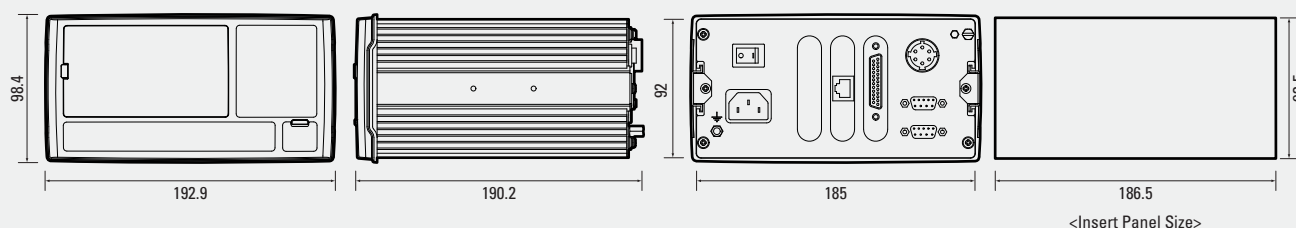
- Loss-in-weight screw feeder
- High A/D conversion speed (200times/sec)
- High display resolution 1/10,000
- User-friendly interface (4.3" Full Graphic TFT LCD)
- Storing 100 items' information
- USB data backup
- Self-hardware test function
- Weight back-up (Saving of weight at sudden power failure)
- PC software to manage indicator
- Various communication interfaces

Option

- RS-422/RS-485 (Modbus RTU)
- BCD In/Out / Ethernet (Modbus TCP)

Dimensions

Unit : mm



Specifications

Model		CI-608A
Load cell excitation voltage		DC5V
No. of Load cell connection		10ea (350Ω)
Zero Adjustment Range		0 ~ 2mV/V
Load cell Input Range		-2.0mV/V ~ 3.2 mV/V
Input sensitivity		0.5 uV/D (OIML, KC), 0.3 uV/D (Non-approval)
A/D Internal resolution		1 / 2,000,000
A/D external resolution		1/10,000 (OIML, KC), 1/20,000 (Non-approval)
A/D conversion speed		Up to 200 times/sec
Display		4.3" TFT Color LCD
Key		10 Numeric key, 9 Function keys
Status display		Stable, Zero, Tare, Total/Net weight, Hold, Transmit, Receive, External input/output, Supply, Discharge
Interface	Basics	RS-232C X 2 Port (COM1, COM2), Analog output (V-out : 0~10V)
	Option	RS-422/485 (Modbus RTU), BCD In/Out, Ethernet (Modbus TCP)
External Input / Output		Input 8ea / output 8ea
Operating Power		AC100~240V 50/60Hz
Operating Temp		-10 ~ 40°C
Product Size (W x D x H)		192.9 X 190.2 X 98.4mm
Panel Cutting Size (W x H)		186.5 x 93.5mm
Product Weight		1.8kg

CI-400A Series | Weighing Controller



CI-401A



CI-405A



CI-407A

Features

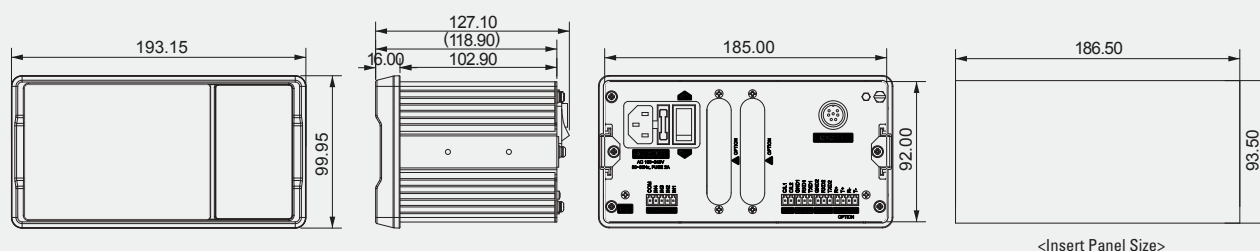
- High A/D conversion speed (200times/sec)
- High display resolution 1/10,000
- 6 wire load cell support
- Easy weight setting (Full digital calibration)
- High visibility LED display (Character height : 20mm)
- Built-in serial communication (Current loop, RS-232C x 2ea)
- Easy cable routing with terminal block type connector

Option

- Analog out (V-out/I-out)
- BCD Input
- BCD Output (NPN type)

Dimensions

Unit : mm



Specifications

Model		CI-401A	CI-405A	CI-407A
Load cell excitation voltage		DC5V		
No. of Load cell connection		8ea (350Ω)		
Zero Adjustment Range		0 ~ 2 mV/V		
Load cell Input Range		-2.0mV/V ~ 3.0 mV/V		
Input sensitivity		0.3 uV/D(CE, KC), 0.2uV/D (Non-approval)		
A/D Internal resolution		1/1,000,000		
A/D external resolution		1/10,000 (CE, KC), 1/30,000 (Non-approval)		
A/D conversion speed		Up to 320 times/sec		
Display	Main	6digits LED (Character Height: 20mm)		
	Sub	-	7-segment 4digits LED x 2ea 6digits LED x 2ea (Character Height: 8mm)	6digits LED x 4ea (Character Height: 8mm)
Key		10 Numeric key, 3 Function keys		
Interface	Basics	RS-232C x 2 Port (COM1, COM2), RS-422/485(Modbus RTU), Current loop		
	Option	Analog output (V-out/I-out), BCD In/Out		
External Input / Output		Input 4ea	Input 4ea / output 6ea	Input 4ea / output 6ea
Operating Power		AC100~250V 50/60Hz		
Operating Temp		-10 ~ 40°C		
Product Size (W x D x H)		185 x 103 x 92 mm		
Panel Cutting Size (W x H)		186.5 x 93.5 mm		
Product Weight		1.2kg		

CI-400AL Series

Weighing
Controller

Features

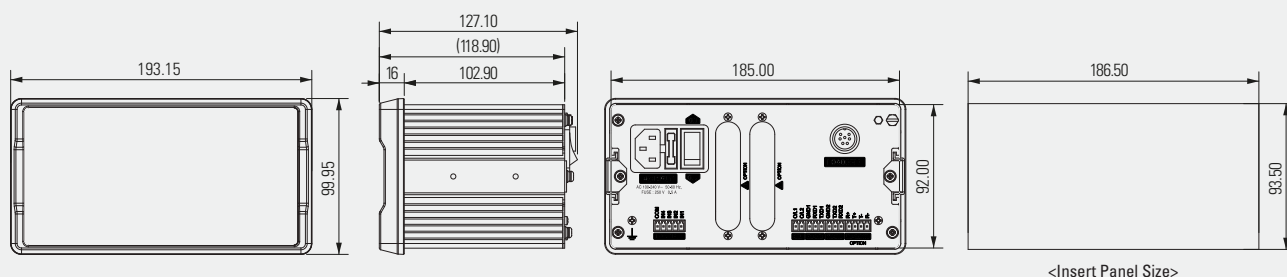
- High A/D conversion speed (200times/sec)
- High display resolution 1/10,000
- 6 wire load cell support
- Easy weight setting (Full digital calibration)
- High visibility LED display (Character height : 38mm)
- Built-in serial communication (Current loop, RS-232C x 2ea)
- Easy cable routing with terminal block type connector

Option

- RS-485(Modbus RTU protocol)
- Analog out (V-out/I-out) / BCD In/Out
- External I/O(4In/6Output for CI-401A)

Dimensions

Unit : mm



Specifications

Model		CI-401AL	CI-405AL
Load cell excitation voltage		DC5V	
No. of Load cell connection		8ea (350Ω)	
Zero Adjustment Range		0 ~ 2 mV/V	
Load cell Input Range		-2.0mV/V ~ 3.0 mV/V	
Input sensitivity		0.3 uV/D(CE, KC), 0.2uV/D (Non-approval)	
A/D Internal resolution		-	1/1,000,000
A/D external resolution		1/10,000 (CE, KC), 1/30,000 (Non-approval)	
A/D conversion speed		Up to 320 times/sec	
Display		5digits LED (Character Height:38mm)	
Key		5 function key(Zero, Tare, Net/Gross, Print, Set	
Interface	Basics	RS-232C x 2Port(COM1, COM2), Current loop	
	Option	RS-422/485 (Modbus RTU), Analog Output(V-out/I-out), BCD In/Out	
External Input / Output		Input 4ea	Input 4ea/Output 6ea
Operating Power		AC100~250V 50/60Hz	
Operating Temp		-10 ~ 40°C	
Product Size (W x D x H)		193 x 127 x 100 mm	
Panel Cutting Size (W x H)		186.5 x 93.5 mm	
Product Weight		1.2kg	

CI-600D Series

Digital Loadcell Weighing Controller



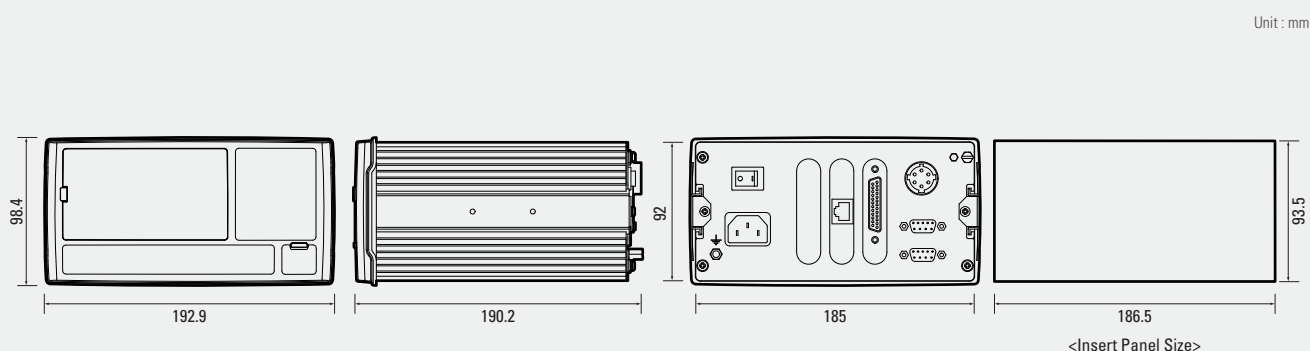
Features

- User-friendly interface (4.3" full graphic TFT LCD)
- Digital loadcell self test function
- Digital loadcell weighing controller
- Storing 100 items' information
- USB data backup
- Weight back-up (Saving of weight at sudden power failure)
- PC software to manage indicator
- Various communication interfaces

Option

- RS-422/RS-485 (Modbus RTU)
- Analog out (V-out/I-out)
- Ethernet (Modbus TCP)
- External 4 Input / 6 Output
- External 6 Input / 8 Output
- BCD In/Out

Dimensions



Specifications

Model		CI-601D	CI-605D	CI-607D
Load cell excitation voltage		DC9V		
No. of Load cell connection		10ea		
Load cell Interface		RS-485 Half duplex		
Baud rate		9600~115,200bps		
Display		4.3TFT Color LCD		
Key		10 Numeric key, 9 Function keys		
Interface	Basics	RS-232C X 2Port (COM1, COM2)		
	Option	RS-422/485 (Modbus RTU), Analog output (I-out/V-out), BCD In/Out, Ethernet (Modbus TCP)		
External Input / Output (Option)		-	Input 4ea / output 6ea (Option)	Input 6ea / output 8ea (Option)
Operating Power		AC100~240V 50/60Hz		
Operating Temp		-10 ~ 40°C		
Product Size (W x D x H)		192.9 X 190.2 X 98.4mm		
Panel Cutting Size (W x H)		186.5 x 93.5mm		
Product Weight		1.8kg		

EXI-600AD Series

Explosion-proof Weighing Controller



Features

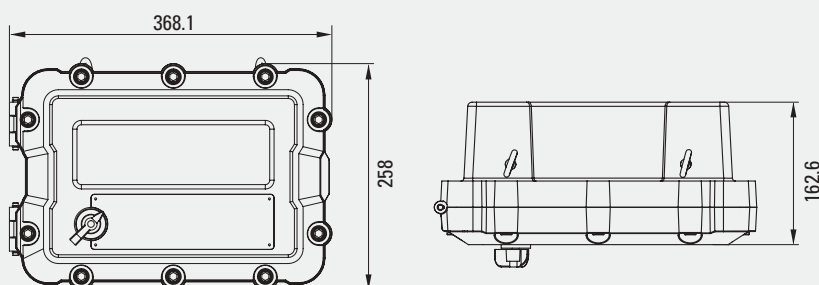
- Explosion-proof and waterproof structure
 - Intrinsic pressure, dust, hydrogen gas explosion proof structure
 - Waterproof (IP66)
 - ATEX & KCS approval
- Front opening structure
- High A/D conversion speed (200times/sec)
- High display resolution 1/10,000
- User-friendly interface (4.3" full graphic TFT LCD)
- Constant voltage touch method
- Provide various interfaces

Option

- Analog out (V-out/I-out)
- Ethernet (Modbus TCP)
- BCD In/Out
- External 4 Input / 6 Output
- External 6 Input / 8 Output

Dimensions

Unit : mm



Specifications

Model		EXI-601AD	EXI-605AD	EXI-607AD
Explosion Proof Class	Korean (KCS)	Ex d IIB+H2 T6 (Ex tD A21 T80~120°C IP66)		
	European (ATEX)	II 2G Ex D IIB+H2 T6 Gb, II 2D Ex tb IIIC T80°C Db		
Load cell excitation voltage		DC5V		
No. of Load cell connection		8ea (350Ω)		
Zero Adjustment Range		0 ~ 2mV/V		
Load cell Input Range		-2.0mV/V ~ 3.2 mV/V		
Input sensitivity		0.5 uV/D (Approval) , 0.3 uV/D (Non-approval)		
A/D Internal resolution		1/1,000,000		
A/D external resolution		1/10,000		
A/D conversion speed		Up to 200 times/sec		
Display		4.3" Graphic LCD		
Key		10 Numeric key, 5 Function keys (Touch key)		
Interface	Basics	RS-232C X Port (COM1, COM2), RS-422/485 (Modbus RTU) x 1ea		
	Option	Analog output (I-out/V-out), Ethernet (Modbus TCP), BCD In/Out		
External Input / Output		-	Input 4ea / output 6ea (Option)	Input 6ea / output 8ea (Option)
Operating Power		DC10~24V or AC100~240V		
Operating Temp		-20 ~ 40°C		
Product Size (W x D x H)		368.1 X 162.6 X 258mm		
Product Weight		18kg		

EXI-200AD

Explosion-proof Weighing Controller



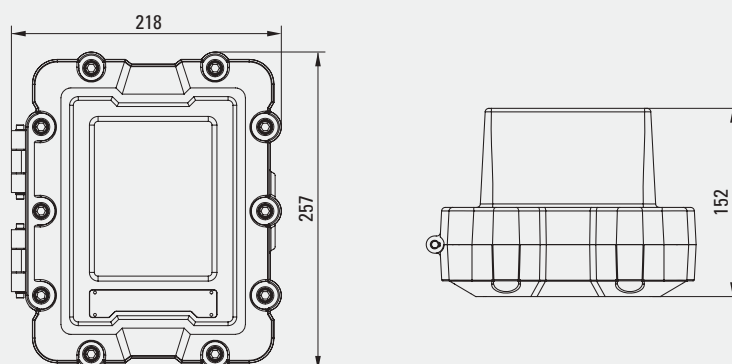
Features

- Explosion-proof and waterproof structure
 - Intrinsic pressure, dust, hydrogen gas explosion proof structure
 - Waterproof (IP66)
 - ATEX & KCS approval
- Front opening structure
- High A/D conversion speed (200times/sec)
- High display resolution 1/10,000
- Constant voltage touch method
- Provide various interfaces

Option

- Analog out (V-out/I-out)
- Ethernet (Modbus TCP)
- External 2 Input / 4 Output

Dimensions



Unit : mm

Specifications

Model		EXI-200AD
Explosion Proof Class	Korean (KCS)	Ex d IIB+H2 T6 (Ex tD A21 T80~120°C IP66)
	European (ATEX)	II 2G Ex D IIB+H2 T6 Gb, II 2D Ex tb IIIC T80°C Db
Load cell excitation voltage		DC5V
No. of Load cell connection		8ea (350Ω)
Zero Adjustment Range		0 ~ 2mV/V
Load cell Input Range		-2.0mV/V ~ 3.2 mV/V
Input sensitivity		0.5 uV/D (Approval), 0.2 uV/D (Non-approval)
A/D Internal resolution		1/1,000,000
A/D external resolution		1/10,000
A/D conversion speed		Up to 320 times/sec
Display		6digits LED (Character Height: 8mm)
Key		10 Numeric key, 6 Function keys (Touch key)
Interface	Basics	RS-232C X 2 Port (COM1, COM2), RS-422/485 (Modbus RTU) x 1ea
	Option	Analog output (I-out/V-out), Ethernet (Modbus TCP)
External Input / Output		Input 2ea / output 4ea (Option)
Operating Power		DC10~24V or AC100~240V
Operating Temp		-20 ~ 40°C
Product Size (W x D x H)		257 X 218 X 152 mm
Product Weight		15 kg



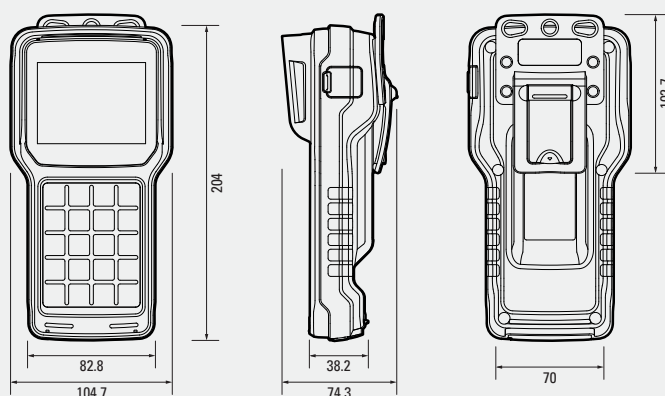
Features

- Compact size and handheld type
- Selectable communication
(Option of choosing between zigbee or bluetooth version)
- TFT LCD display with SUNCAP
- TWN ↔ USB communication to PC
- Connectable to mobile printer (Choose between wired or bluetooth type)
- Memory capacity of 100 items & 5,000 recorded weight data
(including date, time and gross weight.)
- Item management and data back-up with TW-Works software

Option

- Wireless communication (select zigbee or bluetooth version)

Dimensions



Unit : mm

Specifications

Model	TWN
Interface	Zigbee or Bluetooth
Communication rate (Baud rate)	9600
Communication distance	Max 50 ~ 100M
Display	320x240 TFT LCD
Battery Consumption Time	Approx. 24 hours
Charging Time	Approx. 5~6 hours
Interface	USB (TWN ↔ PC connection), RS-232C (Mobile printer connection)
Operating Power	TWN: DC 3.6V 4400mA rechargeable battery, adapter: DC 4.2V 1.2A
Operating Temp	-10 ~ +40°C
Product Size (W x D x H)	105 x 74 x 204 mm
Product Weight	0.2 kg

CD-3000 Series

Remote Display

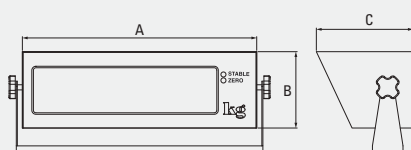


Features

- Secondary display
- High-resolution display (5digits LED)
- Two status display: Stable lamps
- RS-232C, RS-422 & current loop auto setting

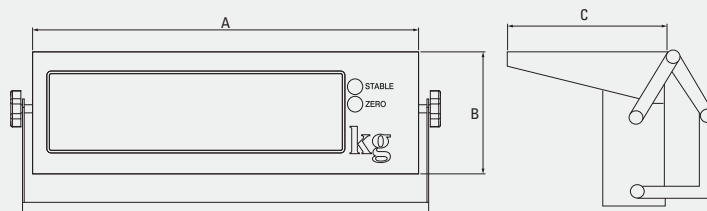
Dimensions

► CD-3020 / 3030



Model	A	B	C
CD-3020	425	190	150
CD-3030	425	190	150

► CD-3040



Model	A	B	C
CD-3040	700	210	180

Unit : mm

Specifications

Model	CD-3020	CD-3030	CD-3040
Display	6digits LED		
Character Height (W x H)	33x57mm (2.3inch)	43x76mm (3inch)	60x100 (4inch)
Operating Power	AC 85 ~ 264V		
Operating Temp	-10 ~ 40°C		
Product Size (W x D x H)	425 X 190 X 150mm	425 X 190 X 150mm	700 X 210 X 180mm
Product Weight	4.9kg	4.9kg	5.6kg

WTM-200/500 | Weight Transmitter



WTM-200



WTM-500

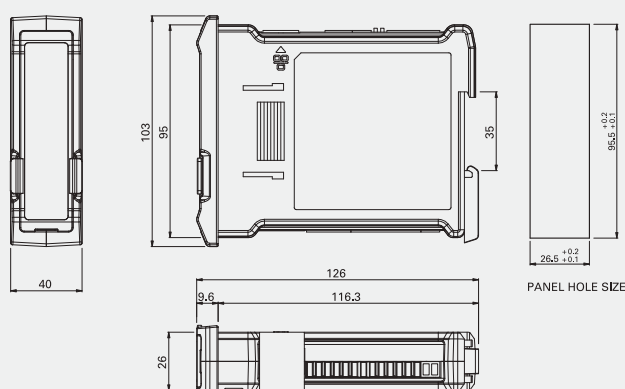
Features

- Slim and din rail of back panel and front panel with mounting
- 7-segment 6digits LED display (Character height : 20mm, WTM-500/501)
- Easy setup by using 4keys (only for WTM-500/501)
- Ideal for PLC system requiring weighing data
- High A/D conversion speed : 5 ~1,600 times/sec
- Terminal block Port
- Adjustable stepped increase of weight
- Multi point calibration
- Provide various interfaces

Option

- External 2 Input / 4 Output
- Analog out
- Alibi memory
- Ethernet

Dimensions



Specifications

Model		WTM-200	WTM-201	WTM-500	WTM-501
Load cell excitation voltage		DC 5V			
No. of Load cell connection		8ea (350Ω)			
Zero Adjustment Range		0~2 mV/V			
Load cell Input Range		-2.0mV/V ~ 3.2 mV/V			
Input sensitivity		0.36 uV/D (OIML, KC, CE), 0.2 uV/D (Non-approval)			
A/D Internal resolution		1/1,000,000			
A/D external resolution		1/10,000 (OIML, KC, CE), 1/30,000 (Non-approval)			
A/D conversion speed		Up to 1,600 times/sec			
Product installation type		DIN rail (back panel installable), front panel installable structure			
Display Type		6digits LED (Character Height: 8mm)			
Key		4ea			
Calibration	Through PC software	0	0	0	0
	Through key			0	0
Interface	RS-485	0	0	0	0
	Analog Output		0		0
External (Input : 2ea / Output: 4ea)			0		0
Operating Power		DC 10 ~ 24V			
Operating Temp		-10 ~ 40°C			
Product Size (W x D x H)		103 x 126 x 40mm			
Product Weight		0.15kg			

DOM-01&DMP- 4/8P | Digital Module Box



DMP-4P



DMP-8P



DOM-01

Application

- Various force and load monitoring
- Platform scales
- Truck, rail scales
- Hoppers, silos and tank Scales

Features

- Analog digital load cell
- Compact design for installation
- Load cell status test possible
- RS-485 interface output

Specifications

Model	DOM-01	DMP-4P	DMP-8P
No. of Load cell connection	1ea	Up to 4ea (4P)	Up to 8ea (8P)
Product Weight (kg)	About 0.2	About 0.6	About 0.6
Product Size (W x D x H) (mm)	143 x 75 x 56	223 x 33 x 141.5	224 x 75 x 168
Description	Min	Type	Max
Bridge sensor power supply	DC 5V		
Bridge Input Impedance	43Ω	350Ω	5,000Ω
Sensitivity	-1.2~3.2mV/V		
Bridge Sensor Power Supply	4-wire		
Gain drift 2.5 ppm	2.5 ppm/°C		
Nonlinearity	0.0004 % of FSR		
Internal Resolution @ 10Hz Sampling	60,000 Counts		
Internal Resolution @ 80Hz Sampling	30,000 Counts		
Power supply voltage and current (350Ω bridge)	DC 9~24V, 25mA ~ 30mA/module		
Communication speed	1,200~115,200 BPS		
Temperature range	Calibration temperature range	-10~40°C	
	Operating temperature range	-20~80°C	

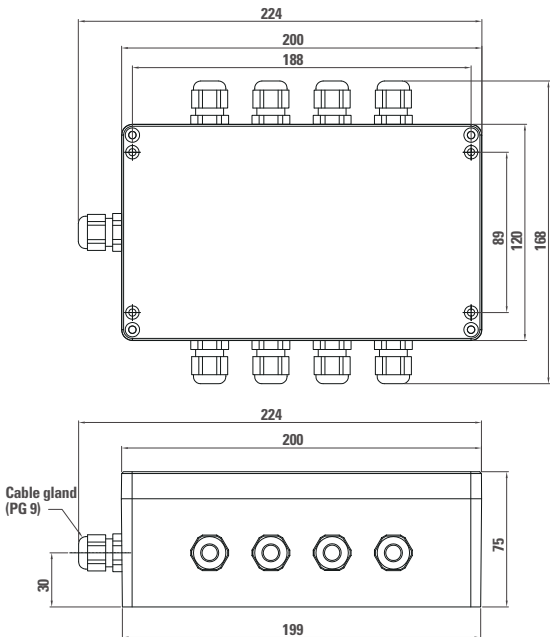
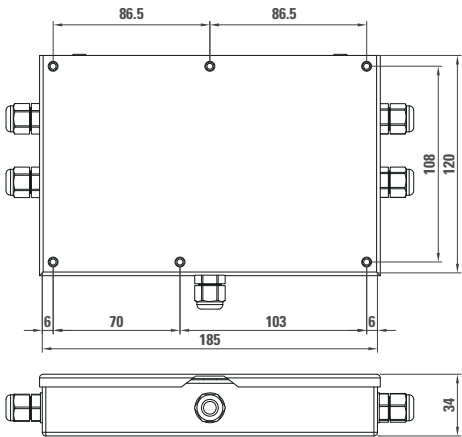
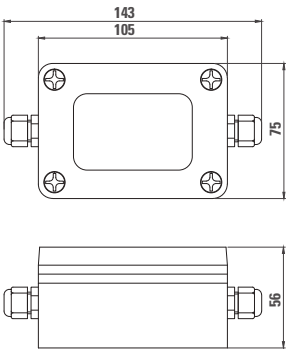
Dimensions

DOM-01

DMP-4P

DMP-8P

Unit : mm



LCP-01

Load Cell Protection Device



Features

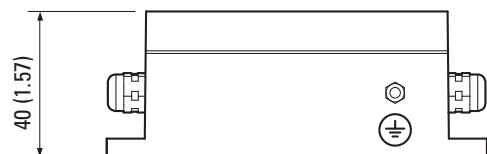
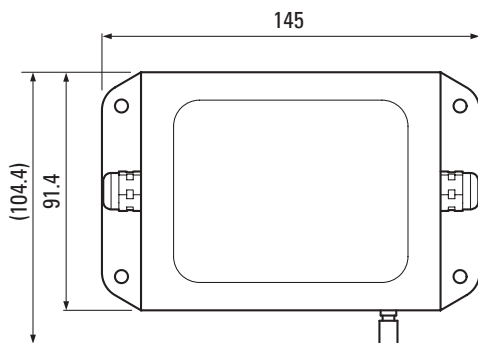
- Protection of the load cell from thunderbolt or a variety of surges
- High power 2-stage surge protection
- Gas tube ceramic arrestor
- No power, low impedance
- Load cell 4 or 6 wire load cell applicable
- All strain gauge based sensors applicable

Specifications

Model	LCP-01
Stage 1 Clamping Voltage	75 volts ($\pm 25\%$)
Stage 2 Clamping Voltage	33 volts
Peak Current	10 kA 8/20 μ s
Insulation resistance	$\geq 10G\Omega$
Circuit Impedance	$\approx 0\Omega$
Enclosure Material	Polycarbonate (UL94-HB)
Operating Temp	-40 ~ 80°C
Dimensions (WxDxH)	145 x 91.4 x 40mm
Weight	0.5kg

Dimensions

Unit : mm



JB-P Series

Junction
Box



Features

- Designed according to IP65
- 3, 4, 6, 8 load cell merging
- Material: Aluminum

Application

- Tank scale, Truck scale, Hopper scale

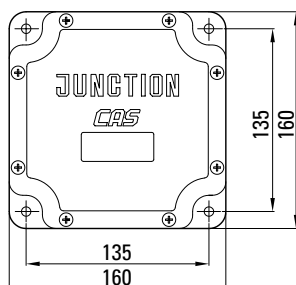
Specifications

Model	JB-3P	JB-4P	JB-6P	JB-8P
Load cell merging	3ea	4ea	6ea	8ea
Material	Aluminum			

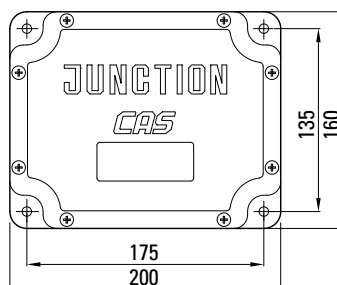
Dimensions

Unit : mm

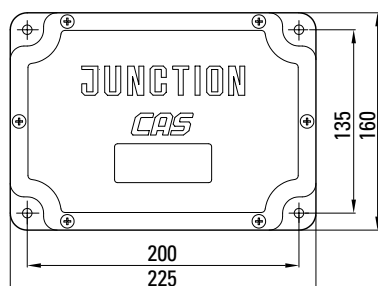
JB-3P



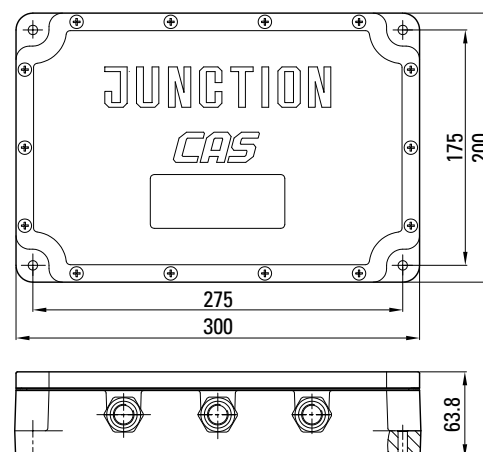
JB-4P



JB-6P



JB-8P



JB-PA Series | Junction Box



Features

- Designed according to IP65
- 3, 4, 6, 8 load cell merging
- Material: ABS

Application

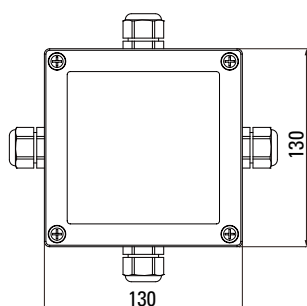
- Tank scale, Truck scale, Hopper scale

Specifications

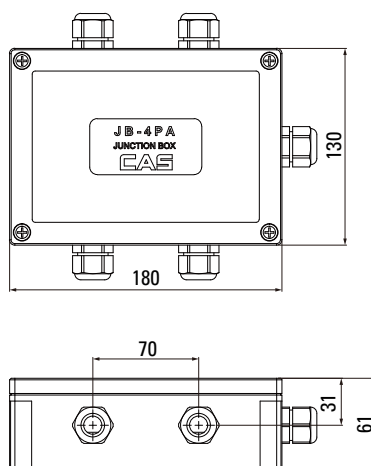
Model	JB-3PA	JB-4PA	JB-6PA	JB-8PA
Load cell merging	3ea	4ea	6ea	8ea
Material	ABS			

Dimensions

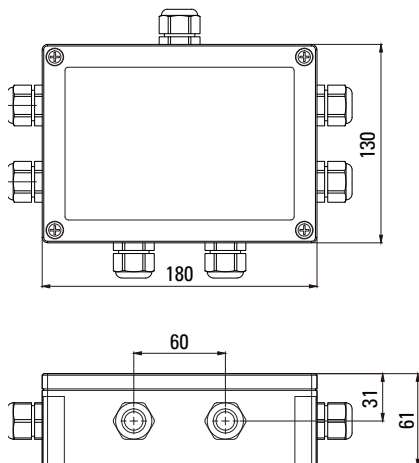
JB-3PA



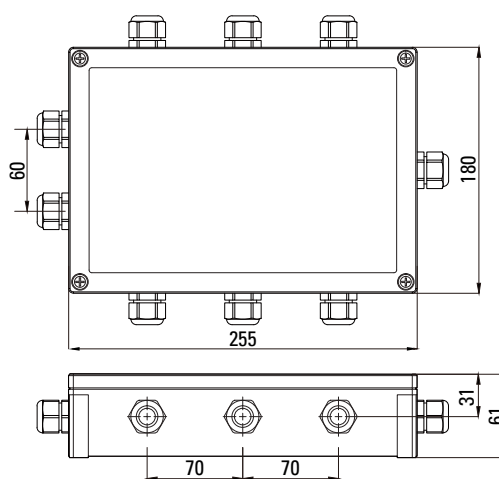
JB-4PA



JB-6PA



JB-8PA



Unit: mm

EXJB-P

Explosion-proof
Junction Box



- Features**
- Ex d IIB T4 (IP65) explosion proof structure
 - Dust-proof (Ex tD A21 T85°C IP66)
 - Designed according to IP65
 - 3, 4, 6 load cell merging
 - Material : Aluminum

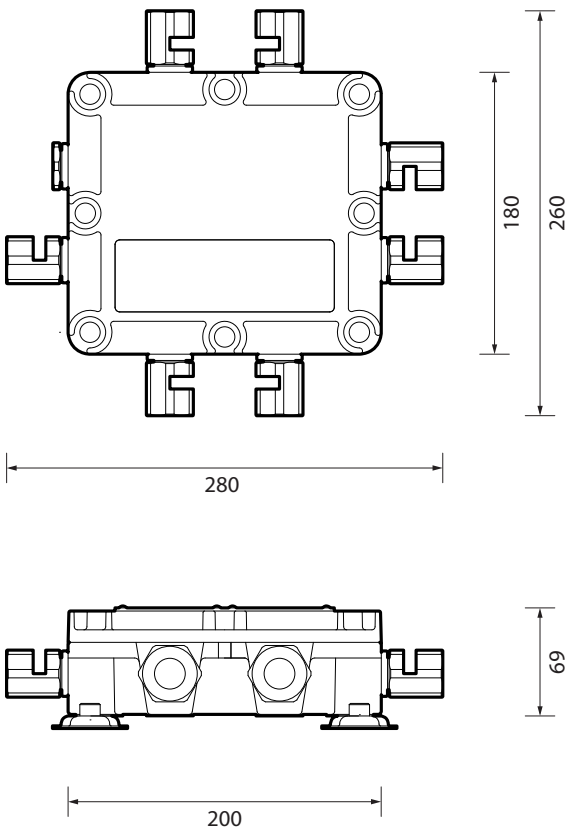
- Application**
- Tank scale, Truck scale, Hopper scale

Specifications

Model	EXJB-3P	EXJB-4P	EXJB-6P
Load cell merging	3ea	4ea	6ea
Explosion Proof Class	Ex d IIB T4 IP65 / Ex tD A21 T85°C IP66		
Material	Aluminum		

Dimensions

Unit : mm



LCT PRO | Strain Amplifier



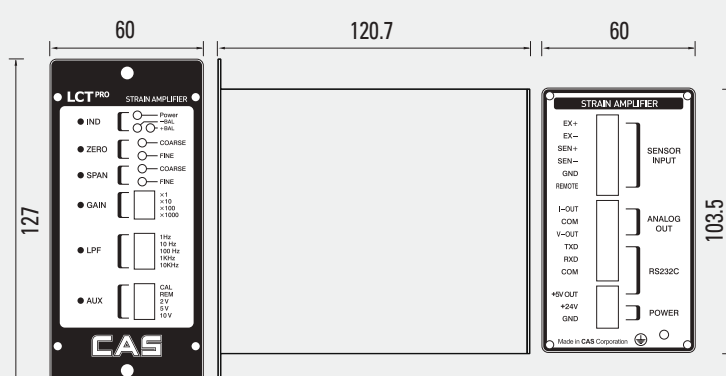
Features

- Available for all bridge sensors (1/4, 1/2, full bridge)
- Gain adjustment range from 1 to 11,000
- Bridge shunt calibration (Amp calibration)
- Built-in low-pass filter for signal conditioning
- Wide frequency response (10KHz, -0.5dB)
- Selectable excitation voltage (DC 2 V, 5V, 10V)
- Excitation remote sensor installed
- Various output signal type
- Digital output (RS-232C), Current output, (0~40mA), Voltage output (0~ ± 10V)

Option

- Current output, Digital output (RS-232C), Bridge module

Dimensions



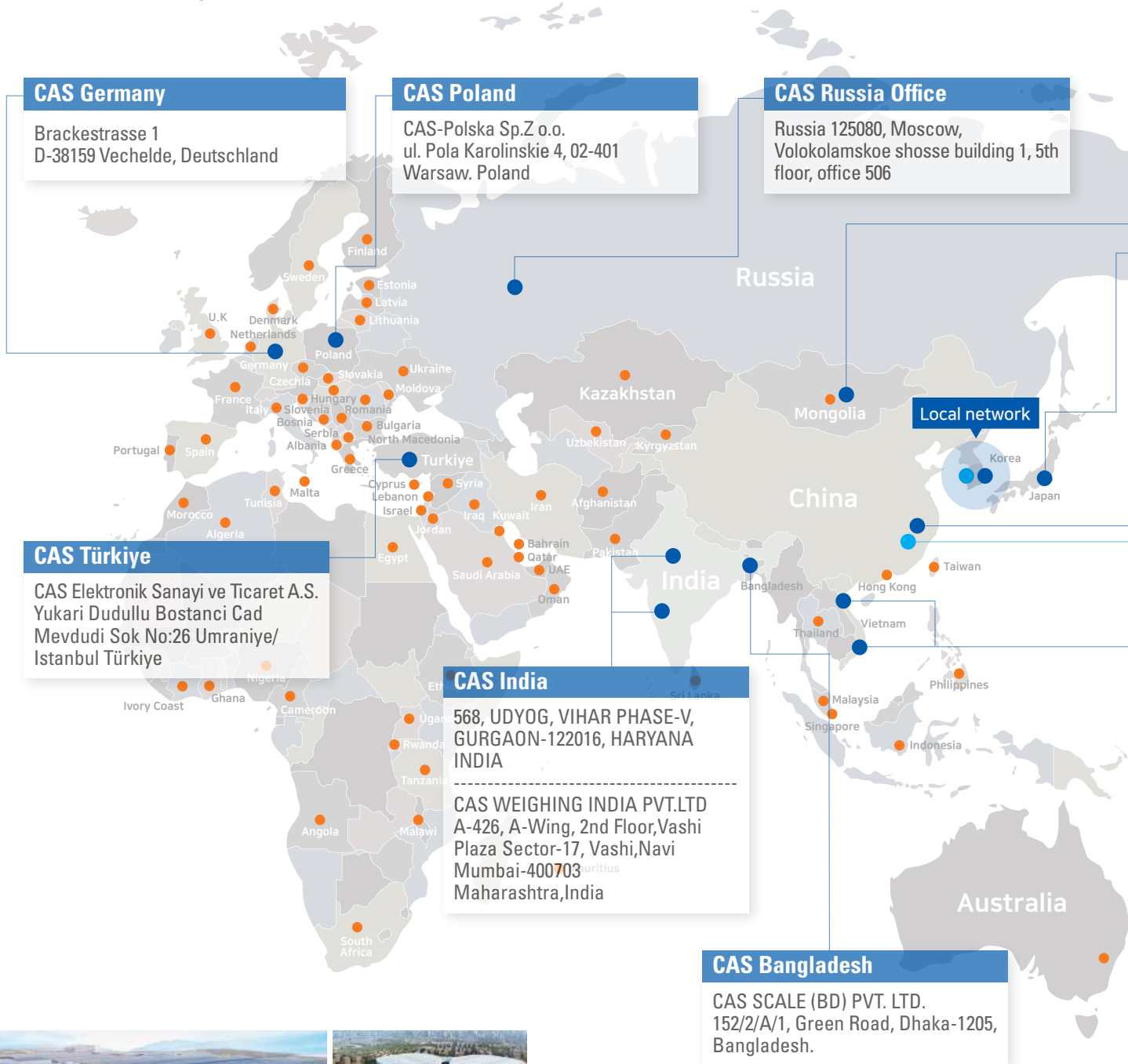
Unit : mm

Specifications

LCT PRO	Voltage Output	Current Output (Option)	Digital Output (Option)	Bridge Module (Option)
Input	Full Bridge Transducer			- Strain gauge 1/4, 1/2, full(50Ω ~ 1KΩ) - Transducers Strain gauge Sensor Pressure sensor Resistive displacement sensor Dcdt displacement sensor Various displacement transducers
Output	0~±10V	0~40mA	0 ~ ±10V, RS232C	
Power	DC18~24V			
Gain	x1, x10, x100, x1000, x1 ~ x11 (Fine Volume) (Load Cell 0.1mV/V~100mV/V)			
Filter	Low-pass filter 1Hz,10Hz,100Hz,1KHz, 10KHz selectable			
Input Impedance	≤10 ¹⁰ Ω			
1010ΩExcitation voltage2V	2V,5V,10V selectable (Remote Sense)			
Zero Balance	±100% (R.O)			
Span Balance	±10% (R.O)			
Linearity	±0.01% (F.S)			
Accuracy	±0.01% (F.S)			
Operating Temp	-25 ~ 85°C, 85%			
Mea. Impedance	1.7 KΩ <	0 ~ 500Ω	3 ~ 7KΩ	
RS-232C	-		9600bps, Stream Mode 16bit, 8Hz sampling Rate	
Product Size (W x D x H)	64 x 123.5 x 110 mm			
Panel Cutting Size(WxH)	60 x 104 mm			
Product Weight	0.6 kg			

Global Network

Since its foundation in 1983, CAS has acquired major weighing certificates in major countries, and has sold products to over 120 countries through 11 overseas corporations and branches. Furthermore, it plans to strengthen overseas business, and pursue business stability through localization strategies.



China (Jiashan)



China (Shanghai)



U.S



Germany



Poland



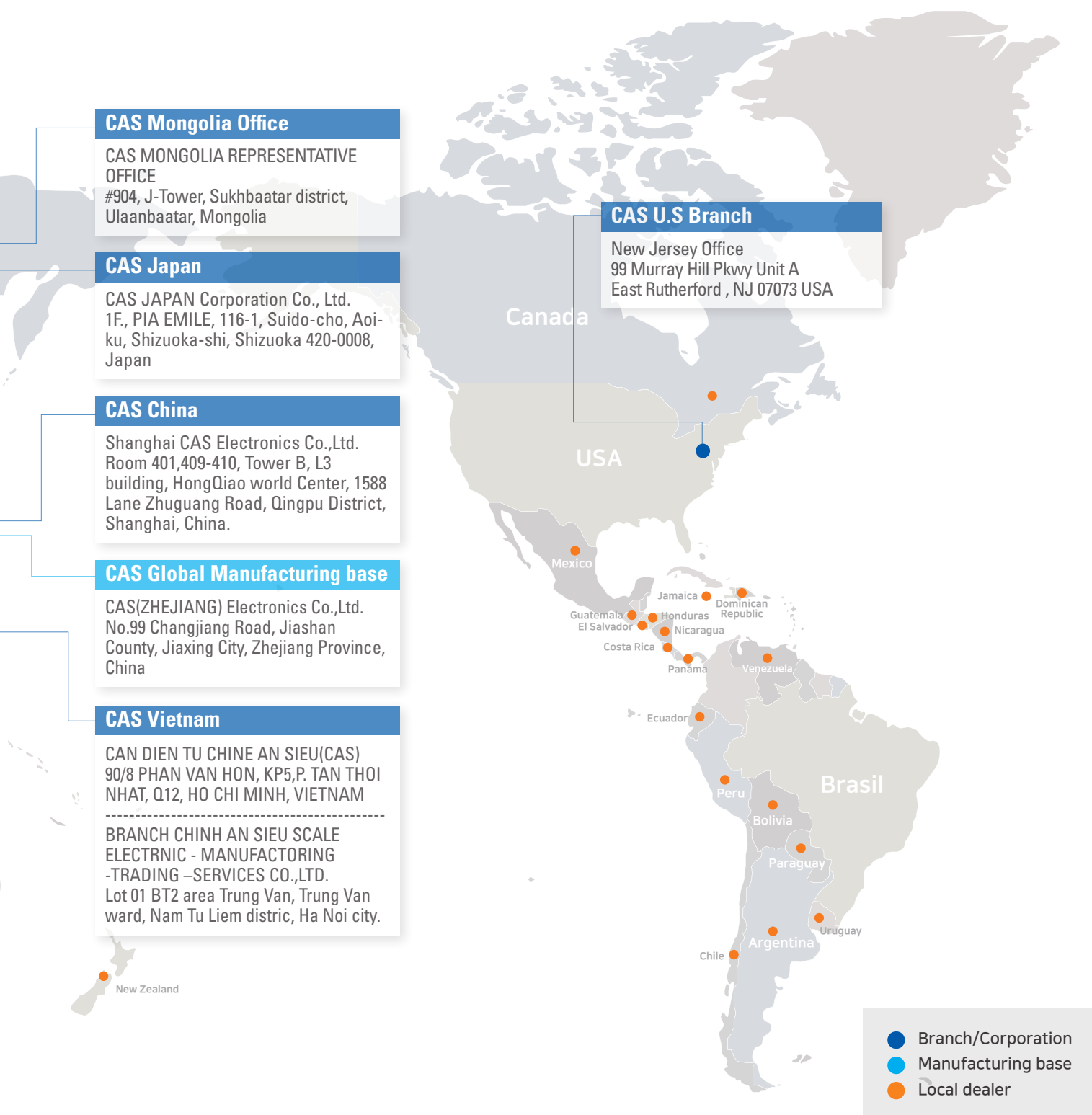
Türkiye



India (Gurgaon)



India (Mumbai)





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* Specifications are subject to change without notice improvement.

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