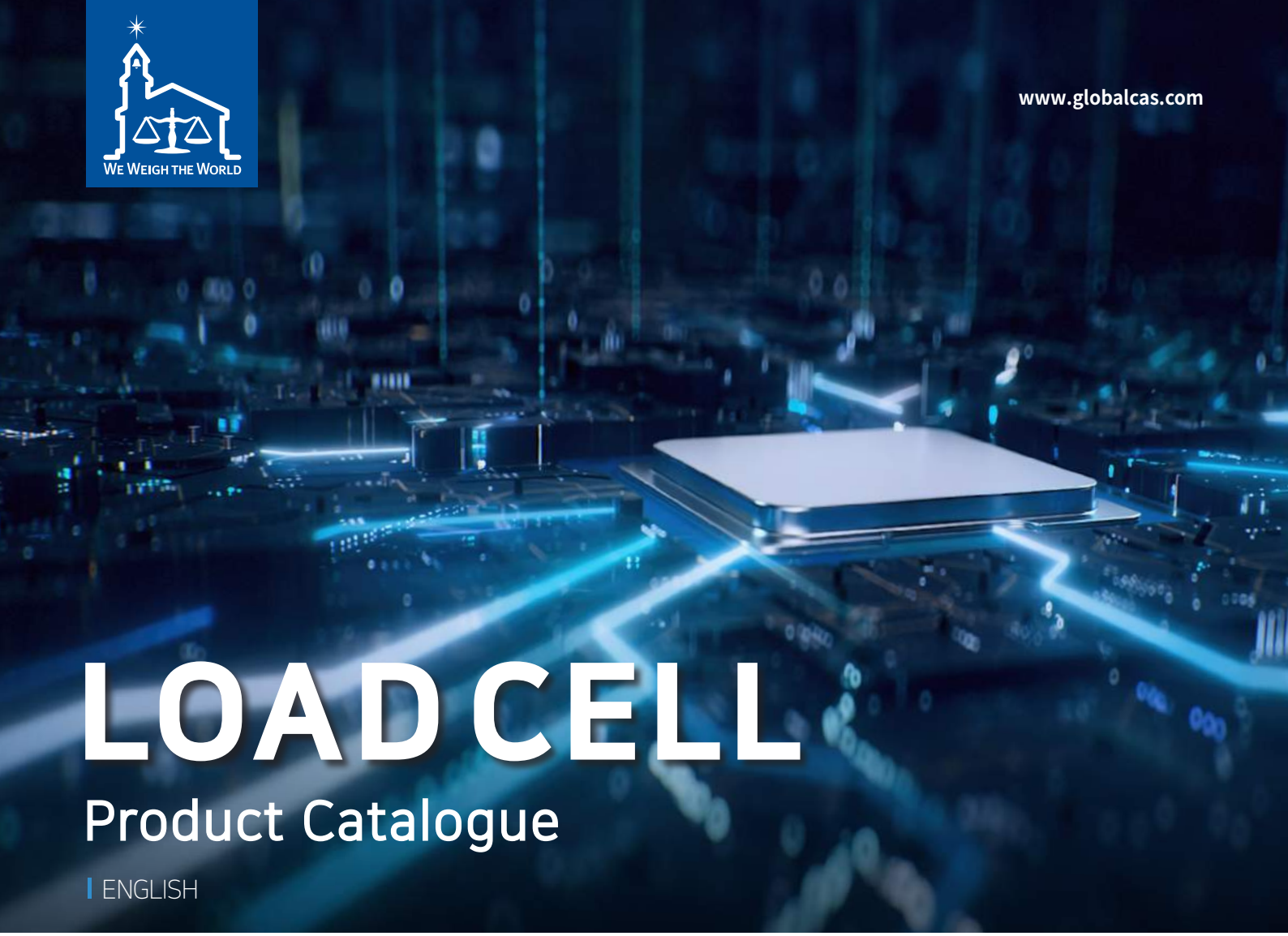


www.globalcas.com

LOAD CELL

Product Catalogue

ENGLISH

- Single Point
- Single Ended Beam
- S-Beam
- Disk Type
- Double Ended Beam
- Canister
- Platform Type
- Special Type
- Weighing Indicator/Controller/Component

CAS

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.
1989 Acquired FCC US Official Standards
1990 Acquired NSC Australian Measuring Verification Standards
Assigned as a National Verification and Correction Facility (177)
1991 Acquired NBS US Measuring Verification Standards
Approved by NTEP & UL, US Safety Standards
1992 Developed strain gage / Establishment of CAS Türkiye
Developed the first label printer in the Korean market
1993 Approved by CSA (Canada)
Establishment of CAS USA
1994 Acquired the first OIML, EU Standards
Establishment of CAS China / Establishment of CAS Russia
1996 Acquired the first ISO 9001 in the Korean weighing industry
1999 Establishment of CAS India
Acquired EC Self-Verification Certification
2000 Awarded the Best Certification Company by ISO9000
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
2002 Awarded the Best Global Company by Japanese Management Association
Awarded Russia Golden Balance 2002
2003 CAS Europe Tour
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
2007 The second CAS Global Business Conference in Korea
Awarded the Global Star prize
Awarded the Techno CEO prize
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
2009 Fourth CAS Global Business Conference in Korea
Establishment of CAS Zhejiang in China
2011 Acquired as Self-National verification & correction Facility from Korean Agency for Technology and Standard
2012 Establishment of CAS Japan
2013 Nominated for WC300
Establishment of CAS Chemical
Establishment of CAS E&C
2014 Chosen to execute 1st year project for the World Class300
Designated as No.1 brand in Global Brand Competency Index(GBCI)
2015 Chosen to execute 2nd year project for the World Class300
Received 2015 Global Excellence Awards
2016 Designated as No.1 brand in Global Customer Satisfaction Competency Index(GCSI)
2018 Designated as No.1 brand in Global Brand Competency Index(GBCI)
Designated as No.1 brand in Global Customer Satisfaction Competency Index(GCSI)
2022 Attending Eurocis 2022 düsseldorf, Germany
Establishment of CAS Mongolia
2023 40th Year Since the Founding of CAS

CONTENTS

INDUSTRIAL WEIGHING SOLUTION™

Single Point Load Cell

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

CAS has advanced technology on weighing, measurement, and control.
We provide accurate and precise load cell to the various industries.

BC | Single Point Load Cell

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.

Features

- Pressure type
- Designed according to IP65

Application

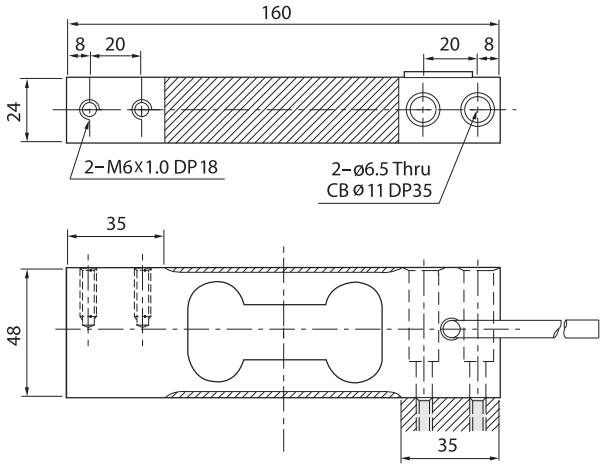
- Commercial Scale
- Bench Scale
- Counting Scale

Specifications

Capacity(R.L.)		kgf	3, 5, 6, 12, 15, 30, 50
Rated Output Zero Balance		mV / V mV / V	3 ~ 5kgf : 1.0 ± 0.1 / 6 ~ 50kgf : 1.2 ± 0.12 0.0 ± 0.06
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.03 ≤ 0.03 ≤ 0.03 ≤ 0.01 ≤ 0.03 ≤ 0.03 ≤ 1/3000 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 MΩ	420 ± 20 350 ± 3.5 > 2000
Compensated Temperature Range Operating Temperature Range		°C °C	-10 to +40 -30 to +80
Material		-	Aluminum
Cable Specification		-	Ø5 x 4p x 35cm (PVC)
Safety Overload		%R.L.	150
Platform Size		mm	400 x 400

Dimensions

▶ BC



BC-D | Single Point Load Cell

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.

Features

- Pressure type
- Designed according to IP65

Application

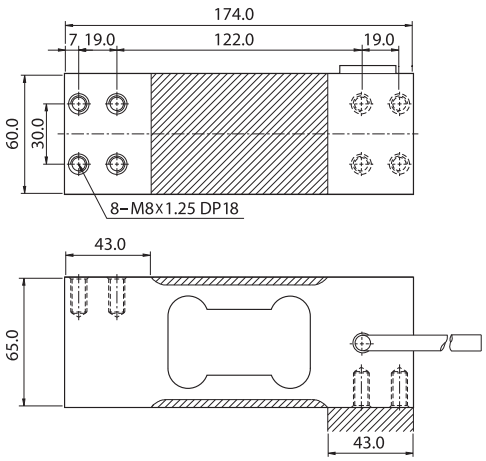
- Commercial Scale
- Bench Scale
- Counting Scale

Specifications

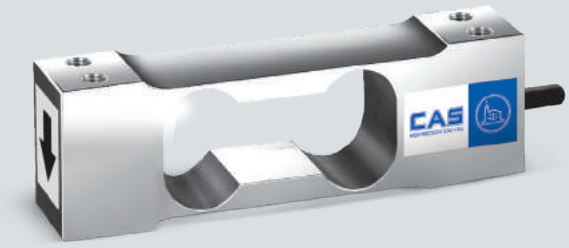
Capacity(R.L.)		kgf	30, 60, 150, 200, 300
Rated Output		mV / V	1.2 ± 0.12
Zero Balance		mV / V	0.0 ± 0.06
Accuracy Class		-	-
Non-Linearity		% R.O.	≤0.03
Hysteresis		% R.O.	≤0.03
Combined Error		% R.O.	≤0.03
Repeatability		% R.O.	≤0.01
Creep for 30min.		% R.O.	≤0.03
Return for 30min.		% R.O.	≤0.03
Resolution		-	≤1/3000
Division		mV / V	0.0004
Temperature Effect on	-Zero Value	%/10°C	≤ 0.028
	-Output Value	%/10°C	≤ 0.014
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		-	Ø6 x 4P x 3m (PVC)/1.365m (PVC)
Safety Overload		% R.L.	150
Platform Size		mm	400 x 600

Dimensions

▶ BC-D



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



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	≤ 0.028
	-Output Value	%/10°C	≤ 0.014
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		-	Ø4 x 4P x 60cm (PVC)
Safety Overload		% R.L.	150
Platform Size		mm	200 x 200

Features

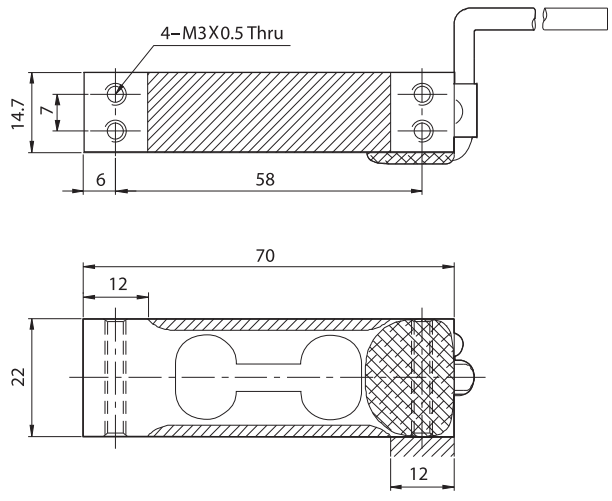
- Pressure type
- Designed according to IP65

Application

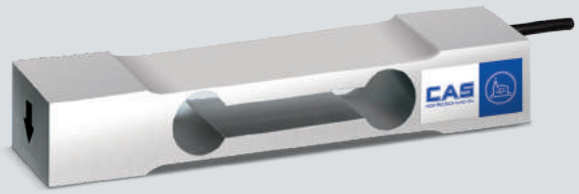
- Commercial Scale
- Bench Scale
- Platform Scale

Dimensions

▶ 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

- Pressure type
- Designed according to IP65

Option

- OIML C3 Approved (OIML 60)

Application

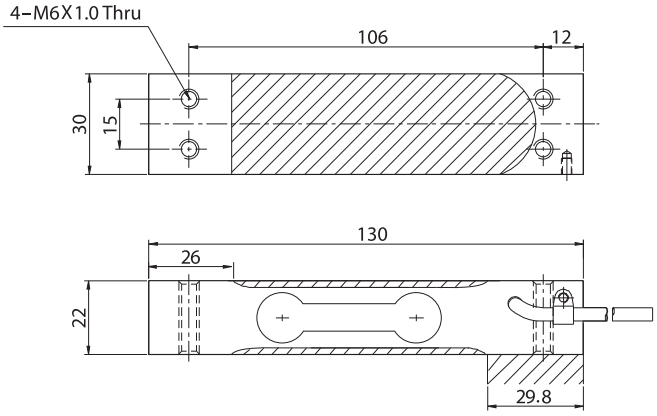
- Commercial Scale
- Bench Scale
- Platform Scale

Specifications

Capacity(R.L.)		kgf	6, 10, 15, 20, 30, 35, 50	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.2 0.0 ± 0.05	
Accuracy Class		-	C3	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤0.025 ≤0.025 ≤0.025 ≤0.01 ≤0.017 ≤0.017 ≤1/4000 0.0005	≤0.03 ≤0.03 ≤0.03 ≤0.01 ≤0.03 ≤0.03 ≤1/3000 0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤0.014 ≤0.011	≤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 Operating Temperature Range		°C °C	-10 to +40 -30 to +80	
Material		-	Aluminum	
Cable Specification		-	Ø4 x 4P x 60cm (PVC)	
Safety Overload		% R.L.	150	
Platform Size		mm	300 x 300	

Dimensions

▶ BCL (6~50kgf)



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

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.

Features

- Pressure type
- Designed according to IP65

Application

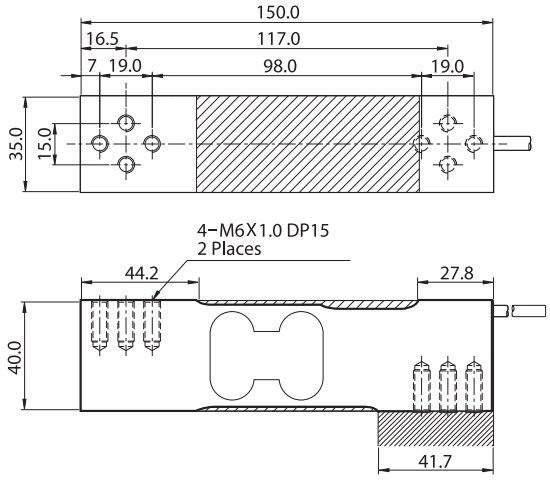
- Commercial Scale
- Bench Scale
- Counting Scale
- Belt Scale
- Platform Scale

Specifications

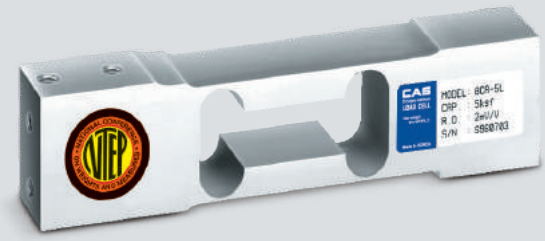
Capacity(R.L.)		kgf	60, 100, 150, 200
Rated Output		mV / V	2.0 ± 0.2
Zero Balance		mV / V	0.0 ± 0.01
Accuracy Class		-	-
Non-Linearity		% R.O.	≤0.03
Hysteresis		% R.O.	≤0.03
Combined Error		% R.O.	≤0.03
Repeatability		% R.O.	≤0.01
Creep for 30min.		% R.O.	≤0.03
Return for 30min.		% R.O.	≤0.03
Resolution		-	≤1/3000
Division		mV / V	0.00067
Temperature Effect on	-Zero Value	%/10°C	≤ 0.028
	-Output Value	%/10°C	≤ 0.014
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		-	Ø4 x 4P x 2m (PVC)
Safety Overload		% R.L.	150
Platform Size		mm	400 x 400

Dimensions

▶ BCL (60~200kgf)



BCA | Single Point Load Cell



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.

Features

- Pressure type
- Designed according to IP65

Option

- OIML C3 approved (OIML 60)
- NTEP III 5,000d Approved
- BCA-EXP (Ex ia IIC T4 Approved)
- 6-wire connection

Application

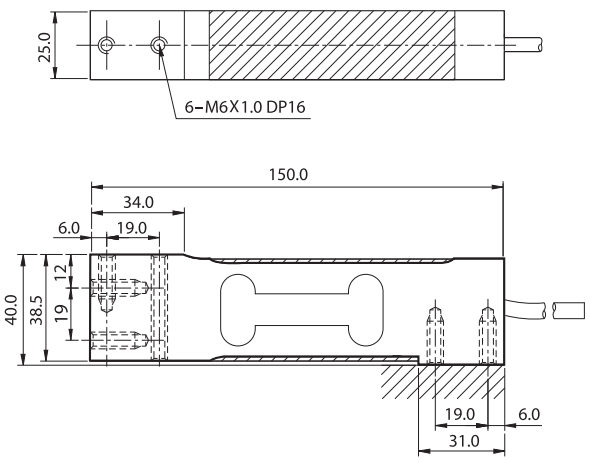
- Bench Scale
- Counting Scale
- Platform Scale

Specifications

Capacity(R.L.)		kgf	5, 6, 10, 15, 20, 30, 50, 60, 75, 100	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.2 0.0 ± 0.1	
Accuracy Class		-	C3	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤0.02 ≤0.02 ≤0.02 ≤0.01 ≤0.017 ≤0.017 ≤1/5000 0.0004	≤0.03 ≤0.03 ≤0.03 ≤0.01 ≤0.03 ≤0.03 ≤1/3000 0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤0.014 ≤0.011	≤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 Operating Temperature Range		°C °C	-10 to +40 -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

▶ BCA



BCA-EXP | Explosion Proof Single Point Load Cell

Description

BCA-EXP is a single point type load cell of aluminum material. It is suitable for medium sized Ex-proof scale in Explosive Hazardous Areas.

Features

- Pressure type
- Explosion-proof Structure
- Designed according to IP65

Option

- BCA-EXP (Ex ia IIC T4 Approved)

Application

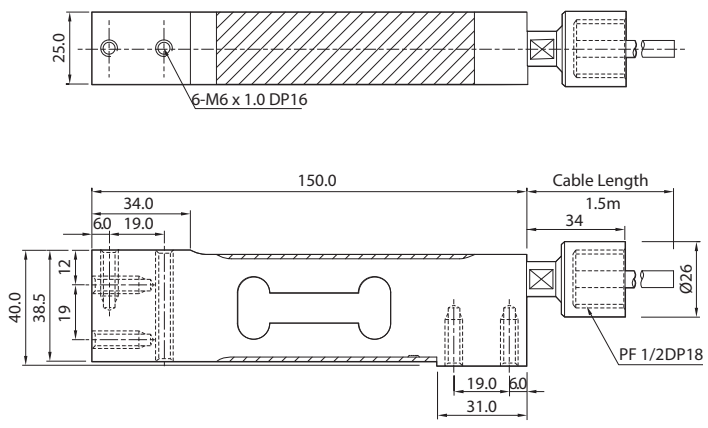
- Bench Scale
- Counting Scale
- Platform Scale

Specifications

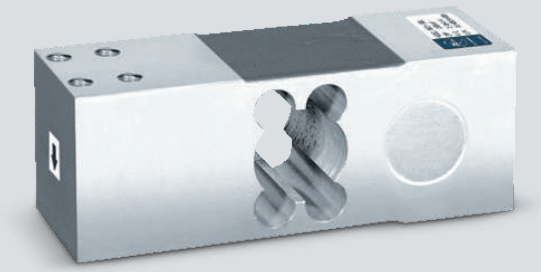
Capacity(R.L.)		kgf	5, 6, 10, 15, 20, 30, 50, 60, 75, 100	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.2 0.0 ± 0.1	
Accuracy Class		-	A	B
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.02 ≤ 0.02 ≤ 0.02 ≤ 0.01 ≤ 0.017 ≤ 0.017 ≤ 1/5000 0.0004	≤ 0.03 ≤ 0.03 ≤ 0.03 ≤ 0.01 ≤ 0.03 ≤ 0.03 ≤ 1/3000 0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.014 ≤ 0.011	≤ 0.028 ≤ 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 Operating Temperature Range		°C °C	-10 to + 40 -30 to + 80	
Material		-	Aluminum	
Cable Specification		-	Ø5 x 4P x 1.5m (Urethane)	
Safety Overload		% R.L.	150%	
Platform Size		mm	400 x 400	

Dimensions

▶ Intrinsic Safety



BCD | Single Point Load Cell



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.

Features

- Pressure type
- Designed according to IP65

Option

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

Application

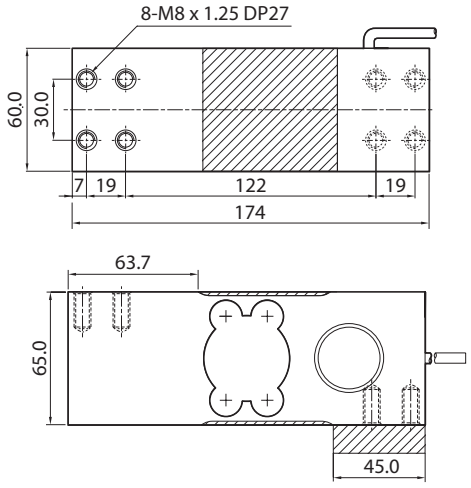
- Bench Scale
- Belt Scale
- Platform Scale

Specifications

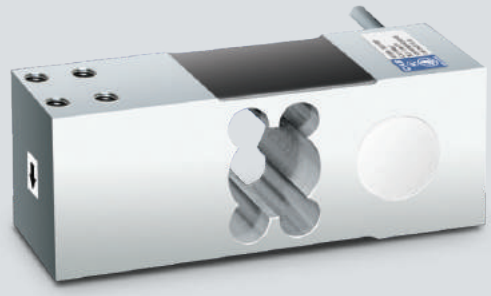
Capacity(R.L.)		kgf	30, 50, 75, 100, 150, 250, 300, 500
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.2 0.0 ± 0.1
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤0.03 ≤0.03 ≤0.03 ≤0.01 ≤0.03 ≤0.03 ≤1/3000 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 Operating Temperature Range		°C °C	-10 to +40 -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

▶ BCD



BCD-EXP | Explosion Proof Single Point Load Cell



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.

Features

- Pressure type
- Explosion-proof Structure
- Designed according to IP65

Option

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

Application

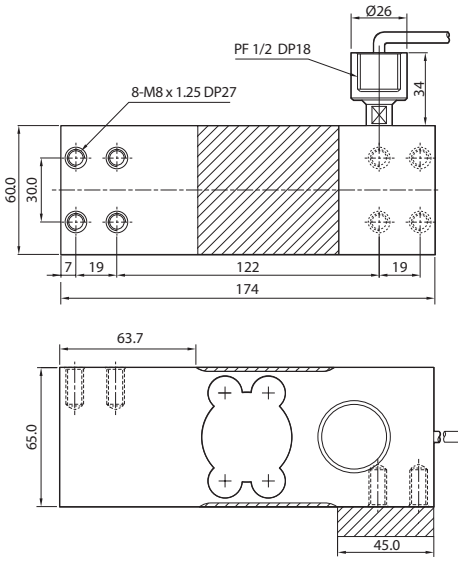
- Bench Scale
- Belt Scale
- Platform Scale

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	%/10°C	≤ 0.028
	-Output Value	%/10°C	≤ 0.014
Excitation	-Recommended	V	10
	-Maximum	V	28
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 4P x 3m (Urethane)
Safety Overload		% R.L.	150%
Platform Size		mm	400 x 600

Dimensions

▶ Intrinsic Safety



BCM | Single Point Load Cell

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.

Features

- Pressure type
- Designed according to IP65

Option

- OIML C3 approved (OIML R60 (50L~500L))
- NTEP III 5,000d Approved
- 6-wire connection

Application

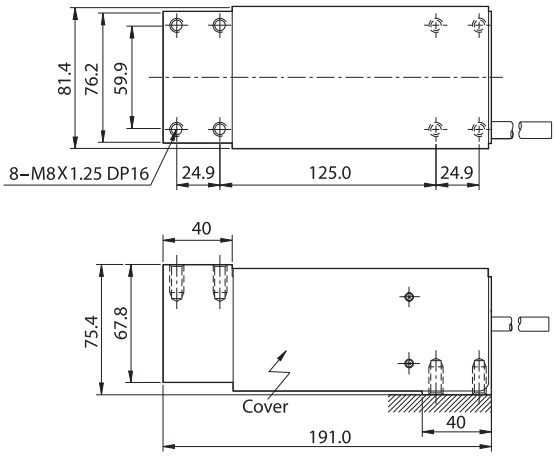
- Bench Scale
- Platform Scale

Specifications

Capacity(R.L.)		kgf	50, 75, 100, 150, 200, 250, 300, 500, 750	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.2 0.0 ± 0.1	
Accuracy Class		-	C3	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤0.02 ≤0.02 ≤0.02 ≤0.01 ≤0.017 ≤0.017 ≤1/5000 0.0004	≤0.03 ≤0.03 ≤0.03 ≤0.01 ≤0.03 ≤0.03 ≤1/3000 0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤0.014 ≤0.011	≤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 Operating Temperature Range		°C °C	-10 to +40 -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

▶ BCM



BCH | Single Point Load Cell

Features

- Pressure type
- Designed according to IP65

Application

- Large Platform Scale
- Hanging Scale

Description

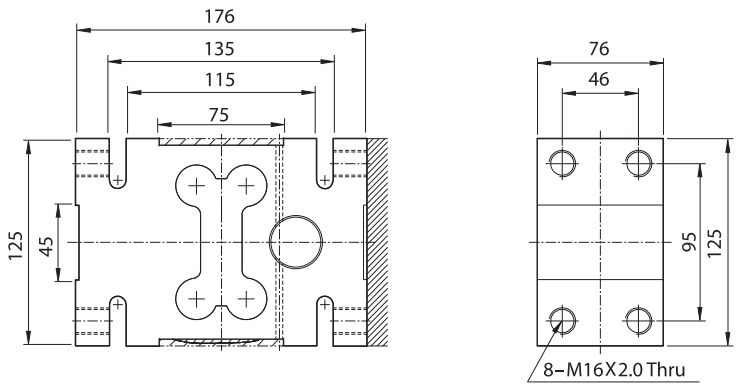
BCH is a single point type load cell of aluminum material. It is suitable for large sized platform scale

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	%/10°C	≤0.028
	-Output Value	%/10°C	≤0.014
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		-	Ø5.4 x 4P x 5m (Urethane)
Safety Overload		% R.L.	150
Platform Size		mm	1200 x 1200

Dimensions

▶ 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

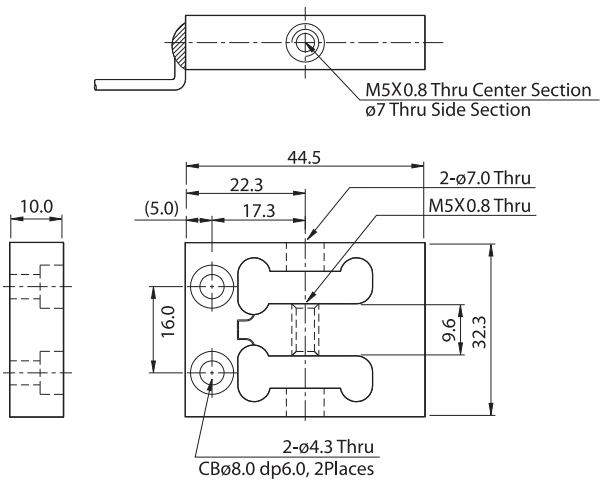
BCK is a single point type load cell of aluminum material. It is suitable for small sized tension and compression testing machine.

Specifications

Capacity(R.L.)		kgf	1, 2, 5, 10, 25, 50
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.2 0.0 ± 0.4
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤0.05 ≤0.05 ≤0.05 ≤0.01 ≤0.1 ≤0.1 ≤1/2000 0.001
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤0.05 ≤0.03
Excitation	-Recommended -Maximum	V V	10 15
Resistance	-Input -Output -Insulation	Ω Ω MΩ	1160 ± 10 1000 ± 10 > 2000
Compensated Temperature Range Operating Temperature Range		°C °C	-10 to +40 -30 to +80
Material		-	Aluminum
Cable Specification		-	4p x 15cm (Flat)
Safety Overload		% R.L.	150
Platform Size		mm	No Platform Type

Dimensions

▶ BCK



BCLS | Single Point Load Cell (10~50kgf)

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.

Features

- Pressure type
- Stainless steel material
- Designed according to IP67

Option

- OIML C3 Approved (OIML R60)

Application

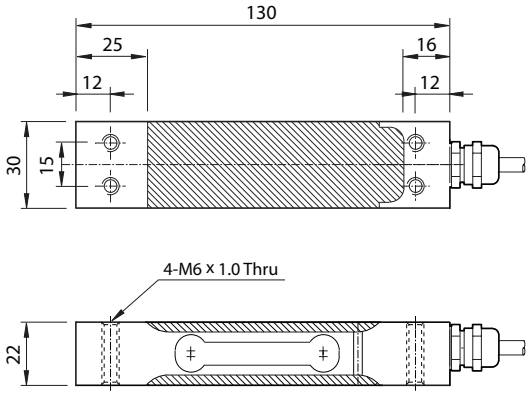
- Water proof platform scale
- Water proof weighing system

Specifications

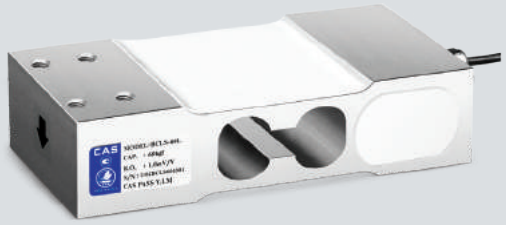
Capacity(R.L.)		kgf	10, 15, 20, 30, 50		
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.2 0 ± 0.05		
Accuracy Class		-	C4	C3	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤0.015 ≤0.015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

▶ BCLS (10~50kgf)



BCLS | Single Point Load Cell (60~150kgf)



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.

Features

- Pressure type
- Stainless steel material
- Designed according to IP67

Option

- OIML C3 Approved (OIML R60)

Application

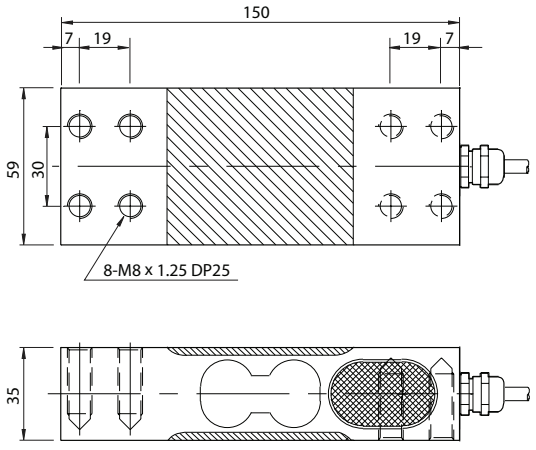
- Water proof platform scale
- Water proof weighing system

Specifications

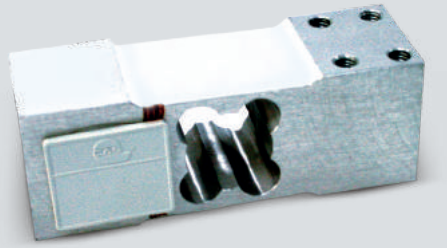
Capacity(R.L.)		kgf	60, 150	
Rated Output Zero Balance		mV / V mV / V	1.0 ± 0.2 0.0 ± 0.1	
Accuracy Class		-	C3	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤0.025 ≤0.025 ≤0.025 ≤0.01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



BCO | Single Point Load Cell



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.

Features

- Pressure type
- Designed according to IP65

Option

- OIML C3 Approved (OIML R60)

Application

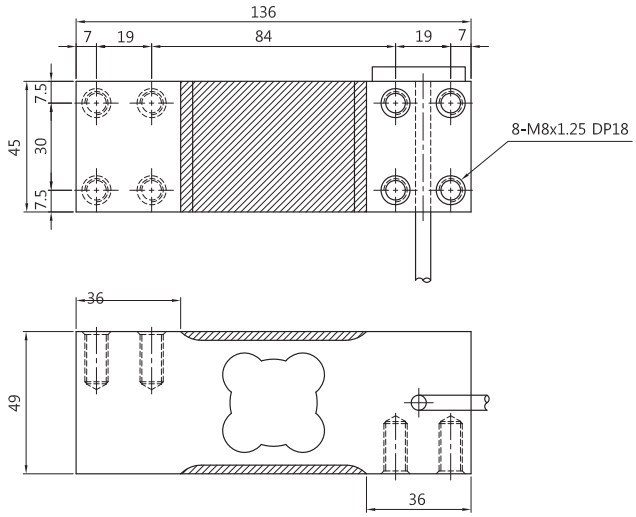
- Bench Scale
- Platform Scale

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	%/10°C	≤ 0.014	≤ 0.028
	-Output Value	%/10°C	≤ 0.011	≤ 0.015
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 1.5m (PVC)	
Safety Overload		% R.L.	150	
Platform Size		mm	400 x 500	

Dimensions

▶ BCO



BC-P | Single Point Load Cell

OIML

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.

Features

- Pressure type
- Designed according to IP67

Application

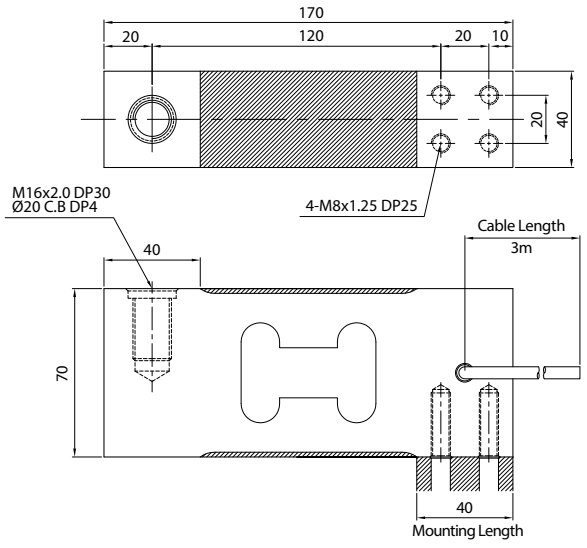
- Bench Scale
- Platform Scale

Specifications

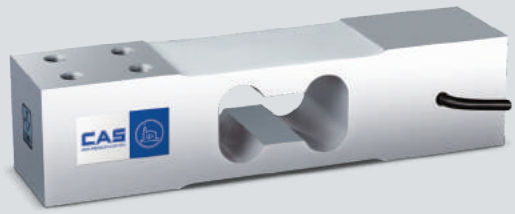
Capacity(R.L.)		kgf	150, 300, 500
Rated Output		mV / V	1.2 ± 0.12
Zero Balance		mV / V	0.0 ± 0.06
Accuracy Class		-	-
Non-Linearity		% R.O.	≤0.03
Hysteresis		% R.O.	≤0.03
Combined Error		% R.O.	≤0.03
Repeatability		% R.O.	≤0.01
Creep for 30min.		% R.O.	≤0.03
Return for 30min.		% R.O.	≤0.03
Resolution		-	≤1/3000
Division		mV / V	0.0004
Temperature Effect on	-Zero Value	%/10°C	≤0.03
	-Output Value	%/10°C	≤0.03
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	420 ± 20
	-Output	Ω	350 ± 10
	-Insulation	MΩ	> 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)
Safety Overload		% R.L.	150
Platform Size		mm	400 x 500

Dimensions

▶ BC-P



BC-F | Single Point Load Cell



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.

Features

- Pressure type
- Designed according to IP65

Option

- OIML C3 Approved (OIML R60)

Application

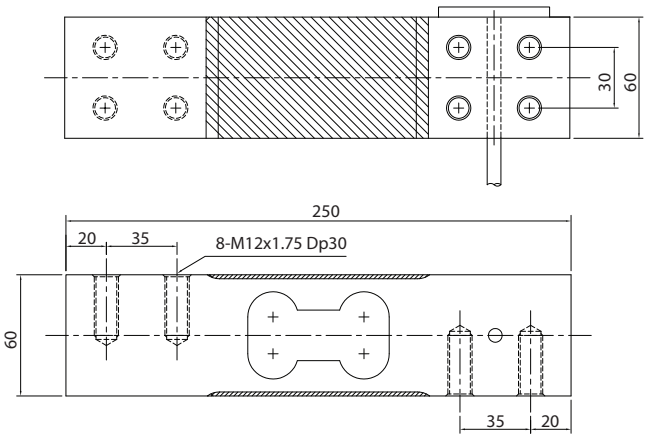
- Bench Scale
- Platform Scale

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	≤ 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	0.0003	0.0004
Temperature Effect on	-Zero Value	%/10°C	≤ 0.014	≤ 0.028
	-Output Value	%/10°C	≤ 0.011	≤ 0.014
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		-	Ø6 x 4P x 3m (PVC)	
Safety Overload		% R.L.	150	
Platform Size		mm	500 x 700	

Dimensions

▶ BC-F



BCP | Single Point Load Cell

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.

Features

- Pressure type
- Designed according to IP65

Application

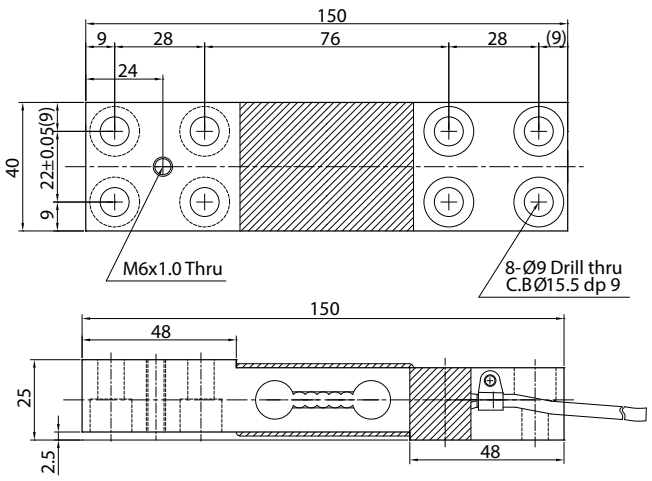
- Commercial Scale
- Platform Scale

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		-	≤1/3000
Division		mV / V	0.0004
Temperature Effect on	-Zero Value	%/10°C	≤0.028
	-Output Value	%/10°C	≤0.014
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	420 ± 20
	-Output	Ω	350 ± 10
	-Insulation	MΩ	> 2000
Compensated Temperature Range		°C	-10 to +40
Operating Temperature Range		°C	-30 to +80
Material		-	Aluminum
Cable Specification		-	Ø5.4 x 4p x 1m (PVC)
Safety Overload		% R.L.	150
Platform Size		mm	400 x 400

Dimensions

▶ BCP



BCW | Single Point Load Cell

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.

Features

- Pressure type
- Designed according to IP65

Option

- OIML C3 Approved (OIML R60)

Application

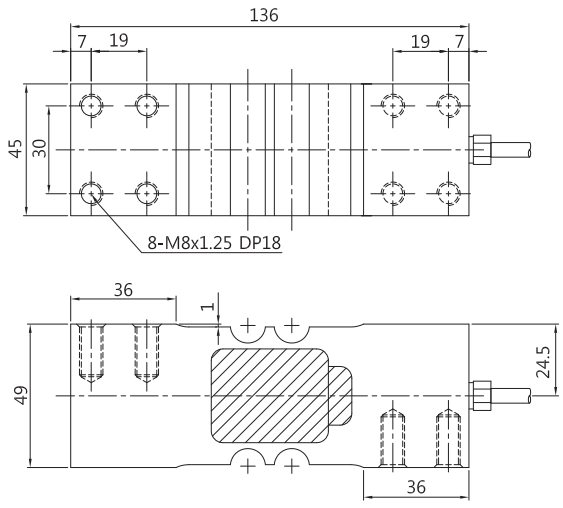
- Waterproof Bench Scale
- Waterproof Platform Scale
- Waterproof Count Scale

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	≤0.028
	-Output Value	%/10°C	≤0.011	≤0.014
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



BCEP-EXP | Explosion Proof Single Point Load Cell (10~50kgf)

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.

Features

- Pressure type
- Stainless steel material
- Hermetically Sealed Structure
- Explosion-proof Structure
- Designed according to IP66

Option

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

Application

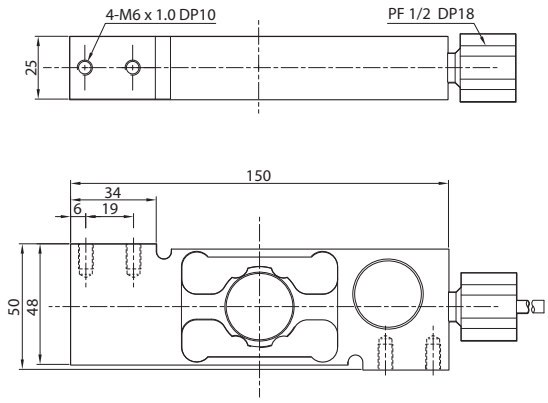
- Bench Scale
- Platform Scale

Specifications

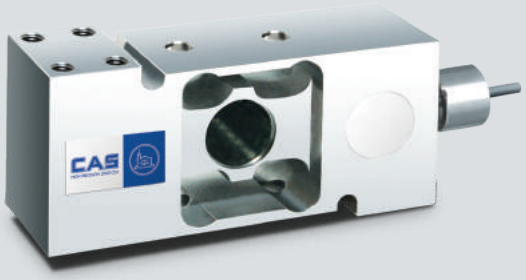
Capacity(R.L.)		kgf	10, 20, 50	
Rated Output		mV / V	2.0 ± 0.2	
Zero Balance		mV / V	0.0 ± 0.2	
Accuracy Class		-	A	B
Non-Linearity		% R.O.	≤ 0.02	≤ 0.03
Hysteresis		% R.O.	≤ 0.02	≤ 0.03
Combined Error		% R.O.	≤ 0.02	≤ 0.03
Repeatability		% R.O.	≤ 0.01	≤ 0.01
Creep for 30min.		% R.O.	≤ 0.017	≤ 0.03
Return 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	%/10°C	≤ 0.014	≤ 0.028
	-Output Value	%/10°C	≤ 0.011	≤ 0.014
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		-	Ø5 x 4P x 3m (Urethane)	
Safety Overload		% R.L.	150	
Platform Size		mm	300 x 300	

Dimensions

▶ Intrinsic Safety



BCEP-EXP | Explosion Proof Single Point Load Cell (100~300 kgf)



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.

Features

- Pressure type
- 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

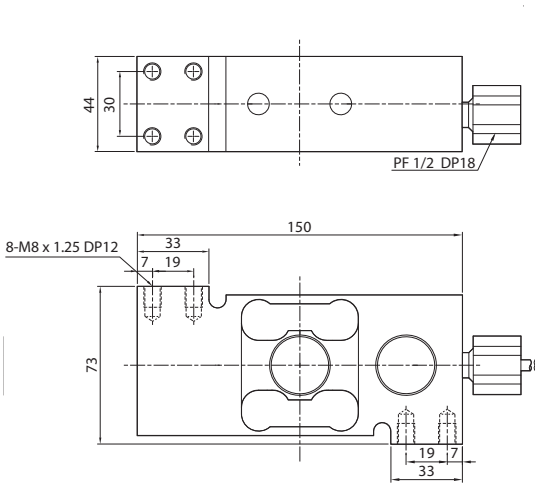
- Bench Scale
- Platform Scale

Specifications

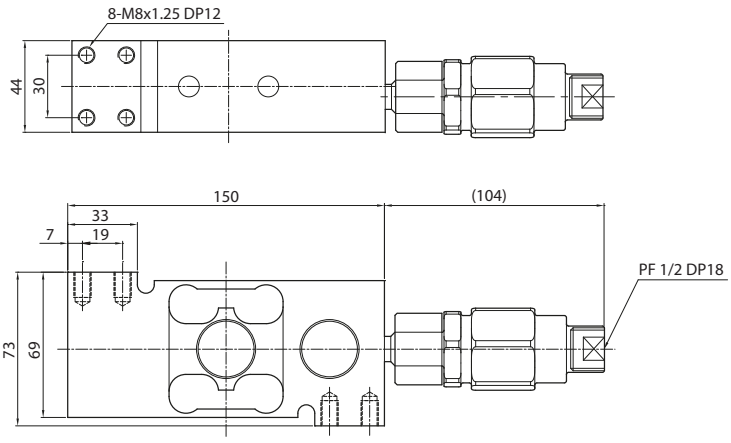
Capacity(R.L.)		kgf	100, 200, 300	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.2 0.0 ± 0.02	
Accuracy Class		-	A	B
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.02 ≤ 0.02 ≤ 0.02 ≤ 0.01 ≤ 0.017 ≤ 0.017 ≤ 1/5000 0.0004	≤ 0.03 ≤ 0.03 ≤ 0.03 ≤ 0.01 ≤ 0.03 ≤ 0.03 ≤ 1/3000 0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.014 ≤ 0.011	≤ 0.028 ≤ 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 Operating Temperature Range		°C °C	-10 to + 40 -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

▶ Intrinsic Safety



▶ Flameproof, Dust-proof



BCEPL-EXP | Explosion Proof Single Point Load Cell (10~100kgf)

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.

Features

- Pressure type
- Stainless steel material
- Explosion-proof Structure
  - Ex db IIC T6 Gb
  - Ex tD A21 T85ºC IP68
- Designed according to IP68

Option

- BCEPL-EXP / Flameproof (Ex d IIC T4)
- BCEPL-EXP / Dust-proof (Ex tD A21 T135˚C IP66)

Application

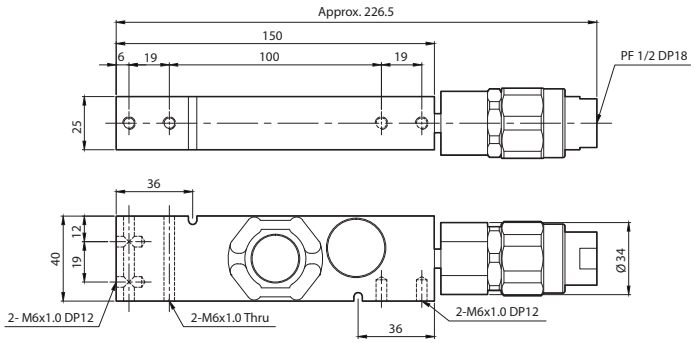
- Platform Scale

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	%/10˚C	≤ 0.028
	-Output Value	%/10˚C	≤ 0.015
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 3m (Urethane)
Safety Overload		% R.L.	150
Platform Size		mm	300 x 300

Dimensions

▶ Flameproof, Dust-proof



BCC | Single Point Load Cell

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.

Features

- Pressure type
- Designed according to IP67

Application

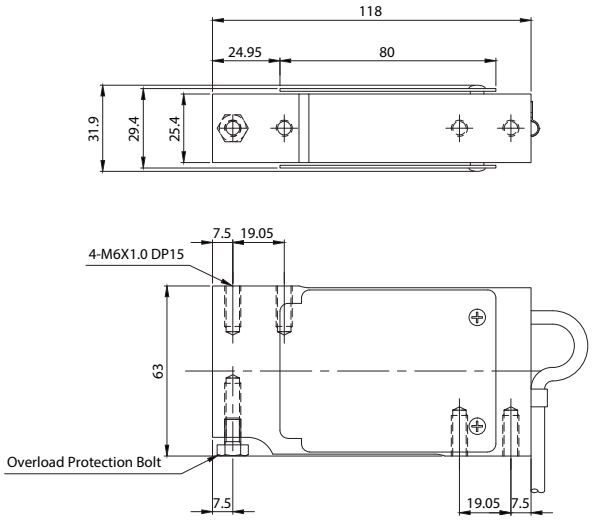
- Low-capacity dynamic weighing

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	-Zero Value	%/10˚C	≤0.05
Effect on	-Output Value	%/10˚C	≤0.05
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 4P x 5m (PVC)
Safety Overload		% R.L.	150

Dimensions

▶ BCC



Single Ended Beam Load Cell

BSA / BSB / BSS / BS / HBS / ZBSHR

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

BSA | Single Ended Beam Load Cell

Description

BSA is a Single ended beam type load cell of steel material. Its Low Profile Pressure Type Structure makes it compatible with platform, hopper, tank scales and a great variety of other scale types.

Features

- Pressure type
- 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 5000d Approved

Application

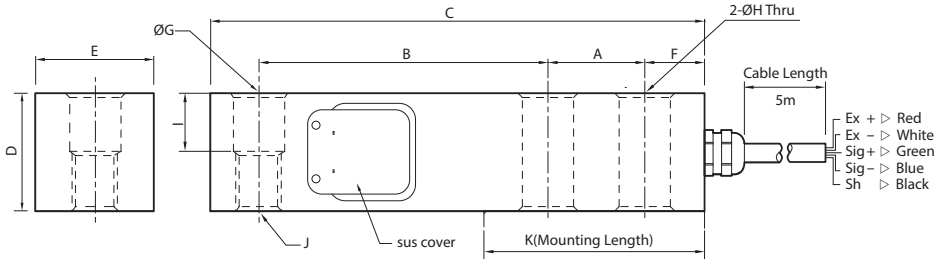
- Platform Scale
- Tank, Hopper Scale

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	≤ 0.028
	-Output Value	%/10°C	≤ 0.011	≤ 0.015
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)	Ø5.4 x 4P x 5M (Urethane)
Safety Overload		% R.L.	150	

Dimensions

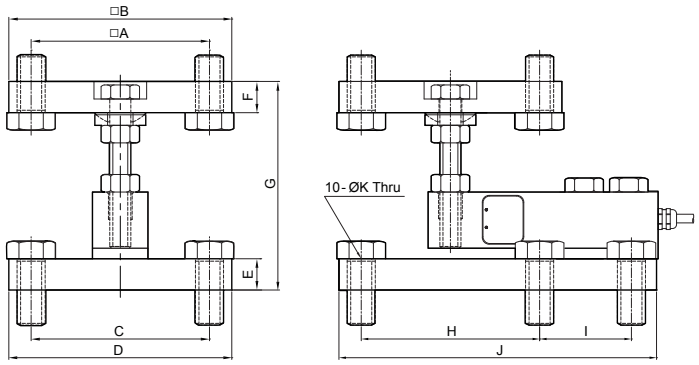
▶ BSA



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	3/5
3~5tf	38.1	95.3	171.5	38	38	19	20	20	19	M18 x 1.5	76.1	

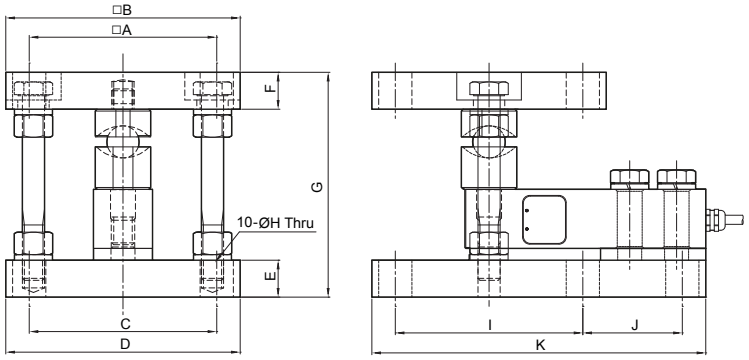
Accessory Dimensions

▶ 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

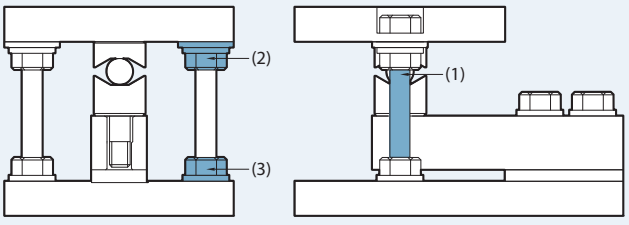
▶ BSA-TWE



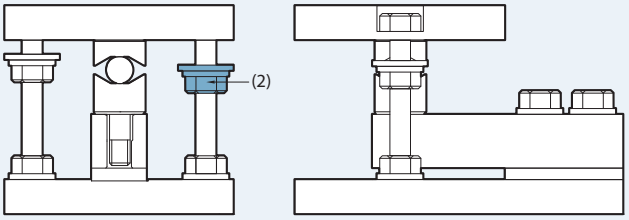
Capa.	A	B	C	D	E	F	G	H	I	J	K
250kgf~2tf	101.6	127	101.6	127	20	20	121.8	18	101.6	53.9	180.9
3~5tf	101.6	127	101.6	127	24	26	156.15	18	101.6	88.9	215.9

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

Description

BSB is a Single ended beam type load cell of steel material . Its Low Profile Pressure Type Structure makes it compatible with platform, hopper, tank scales and a great variety of other scale types.

Features

- Pressure type
- Designed according to IP66

Option

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

Application

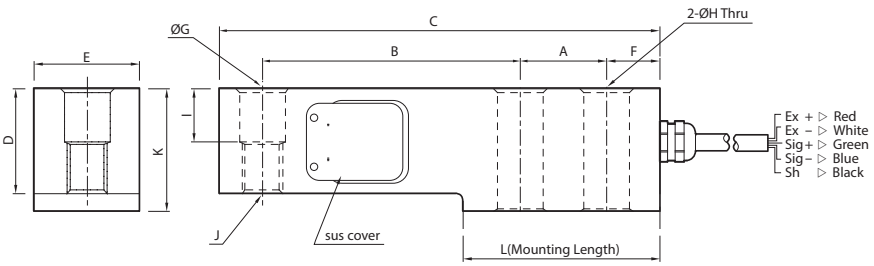
- Platform Scale
- Tank, Hopper Scale

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	%/10°C	≤ 0.028
	-Output Value	%/10°C	≤ 0.015
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), 5m (3~5tf), 10m (10tf)
Safety Overload		% R.L.	150

Dimensions

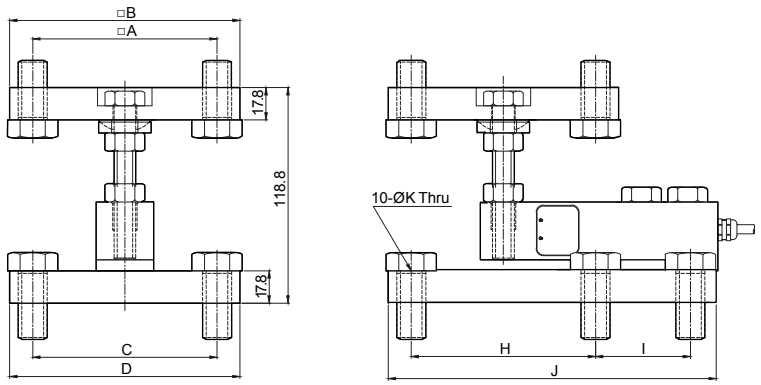
▶ BSB



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

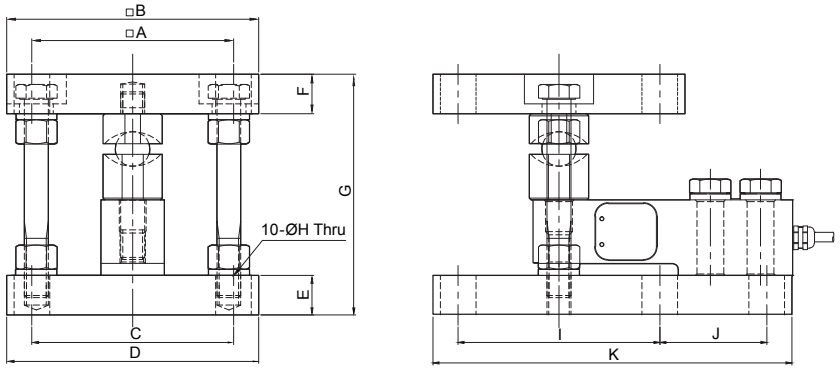
Accessory Dimensions

▶ BSB-TW



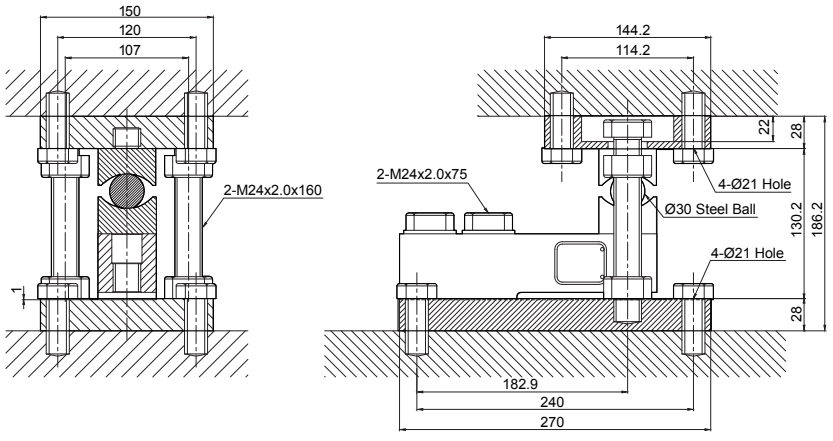
Capa.	A	B	C	D	E	F	G	H	I	J	K
250kgf~2tf	101.6	127	101.6	127	17.8	17.8	118.8	101.6	52.3	180.9	17
3~5tf	101.6	127	101.6	127	23.9	23.9	142.4	101.6	82.5	215.9	17

▶ 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)



BSS | Single Ended Beam Load Cell

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.

Features

- Pressure-type
- 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)
- BCEP-EXP / Intrinsic Safety (Ex ia IIC T4)
- BCEP-EXP-D / Flameproof (Ex d IIC T6)
- BCEP-EXP-TD / Dust-proof (Ex tD A21 T135˚C IP66)
- OIML C3 Approved (OIML R60)
- NTEP Class III 5000 Approved

Application

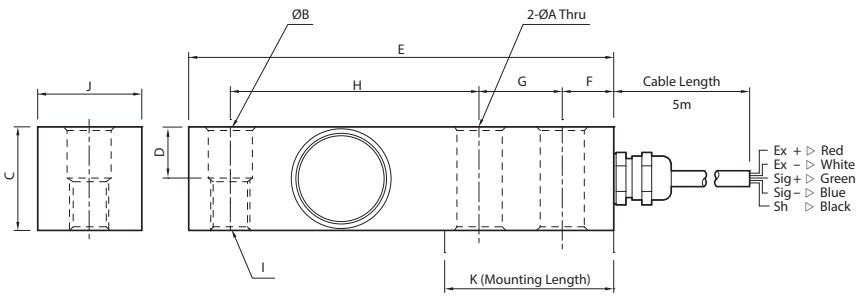
- Platform Scale
- Tank, Hopper Scale

Specifications

Capacity(R.L.)		kgf	500, 1K, 2K, 3K, 5K	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.005 0.0 ± 0.02	
Accuracy Class		-	C3	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.025 ≤ 0.025 ≤ 0.025 ≤ 0.01 ≤ 0.017 ≤ 0.017 ≤ 1/4000 0.005	≤ 0.03 ≤ 0.03 ≤ 0.03 ≤ 0.01 ≤ 0.03 ≤ 0.03 ≤ 1/3000 0.0067
Temperature Effect on	-Zero Value -Output Value	%/10˚C %/10˚C	≤ 0.014 ≤ 0.011	≤ 0.028 ≤ 0.014
Excitation	-Recommended -Maximum	V V	10 15	
Resistance	-Input -Output -Insulation	Ω Ω MΩ	350 ± 3.5 350 ± 3.5 > 2000	
Compensated Temperature Range Operating Temperature Range		˚C ˚C	-10 to +40 -30 to +80	
Material		-	Stainless steel	
Cable Specification		-	Ø5.4 x 4P x 5m (Urethane)	
Safety Overload		% R.L.	150.	

Dimensions

▶ BSS



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

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.

Features

- Pressure-type
- 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)
- BCEP-EXP / Intrinsic Safety (Ex ia IIC T4)
- BCEP-EXP-D / Flameproof (Ex d IIC T6)
- BCEP-EXP-TD / Dust-proof (Ex tD A21 T135°C IP66)

Application

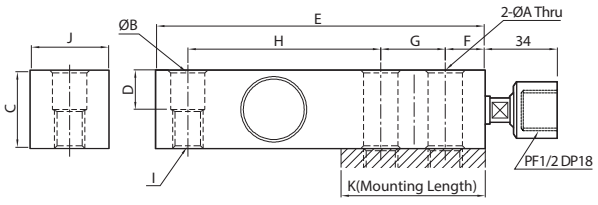
- Platform Scale
- Tank, Hopper Scale

Specifications

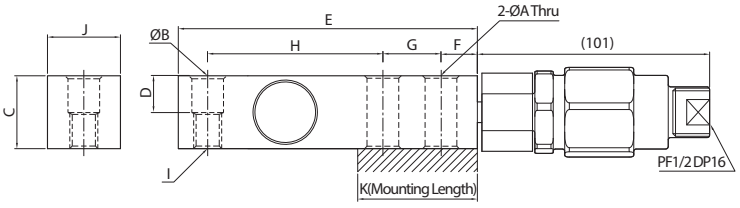
Capacity(R.L.)		kgf	500, 1K, 2K, 3K, 5K	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.005 0.0 ± 0.02	
Accuracy Class		-	A	B
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.025 ≤ 0.025 ≤ 0.025 ≤ 0.01 ≤ 0.017 ≤ 0.017 ≤ 1/5000 0.0004	≤ 0.03 ≤ 0.03 ≤ 0.03 ≤ 0.01 ≤ 0.03 ≤ 0.03 ≤ 1/3000 0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.014 ≤ 0.011	≤ 0.028 ≤ 0.014
Excitation	-Recommended -Maximum	V V	10 28	
Resistance	-Input -Output -Insulation	Ω Ω MΩ	350 ± 3.5 350 ± 3.5 > 2000	
Compensated Temperature Range Operating Temperature Range		°C °C	-10 to + 40 -30 to + 80	
Materia		-	Stainless steel	
Cable Specification		-	Ø5 x 4P x 5m (Urethane)	
Safety Overload		% R.L.	150	

Dimensions

▶ Intrinsic Safety



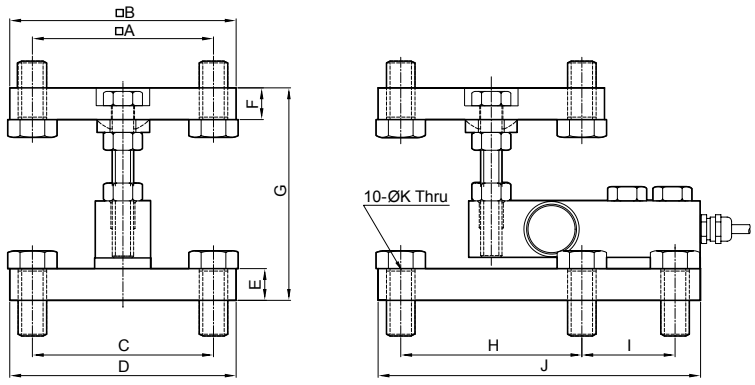
▶ Flameproof, ust-proof



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	

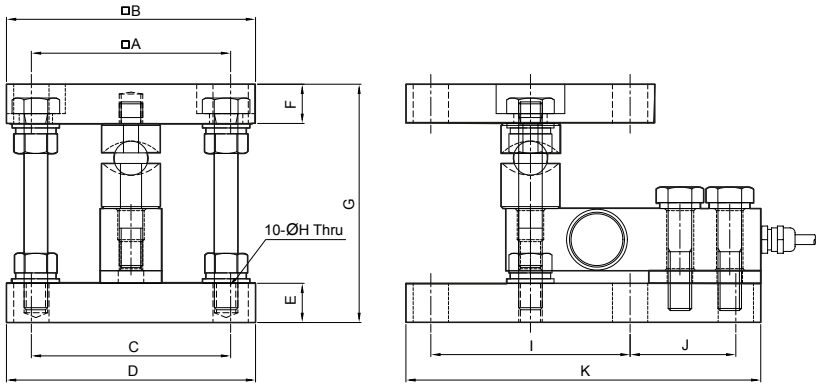
Accessory Dimensions

▶ 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)

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.

Features

- Pressure type
- Low price model
- Designed according to IP65

Option

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

Application

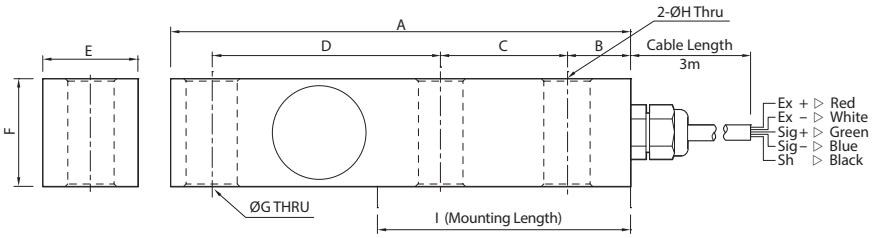
- Platform Scale
- Tank, Hopper Scale

Specifications

Capacity(R.L.)		kgf	250, 500	1K, 2K, 5K, 10K
Rated Output Zero Balance		mV / V mV / V	1.5 ± 0.0037 0.0 ± 0.015	2.0 ± 0.005 0.0 ± 0.02
Accuracy Class		-	-	
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. -	≤ 0.03 ≤ 0.03 ≤ 0.03 ≤ 0.01 ≤ 0.03 ≤ 0.03 ≤ 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 Operating Temperature Range		°C °C	-10 to +40 -30 to +80	
Material		-	Steel	
Cable Specification		-	Ø5.4 x 4P x 3m (Urethane), 10m(10tf)	
Safety Overload		% R.L.	150	
Safety Platform Size		mm	4-Point Platfrom	

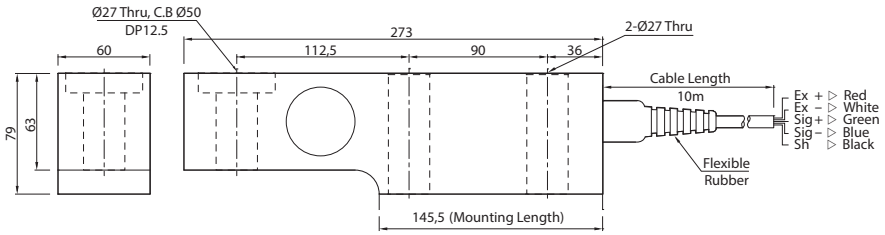
Dimensions

▶ BS (250kgf~5tf)



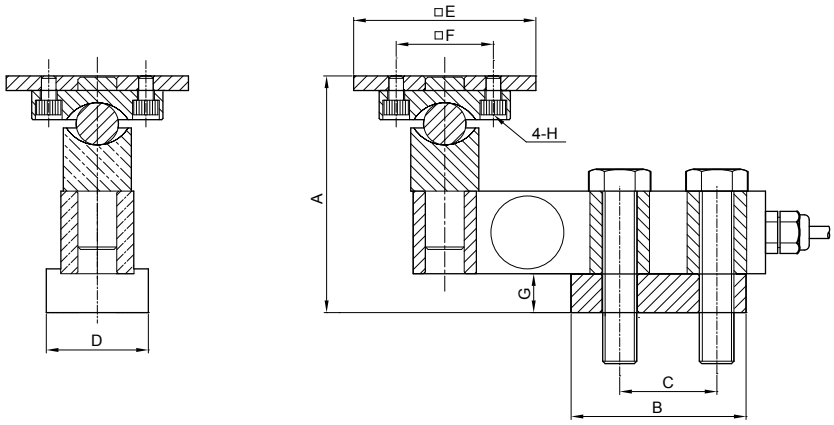
Capa.	A	B	C	D	E	F	G	H	I	Cable (m)
250kgf~2tf	145	20	40	71.9	30	34	16	14.5	72	3
5tf	205	25	55	105	38	48	20.5	20.5	100	10

▶ BS (10tf)



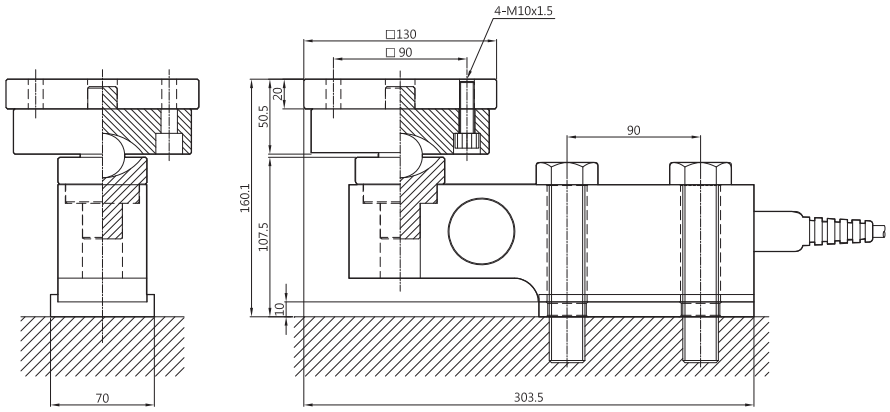
Accessory Dimensions

▶ 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

- Pressure type
- SUS type
- fully welded structure
- Designed according to IP67

Option

- Ball type Accessory
- HBS-EXP/ Essential safety explosion certificate (Ex ia IIC T4) 10~500kgf
- OIML C3 Approved (OIML R60)

Application

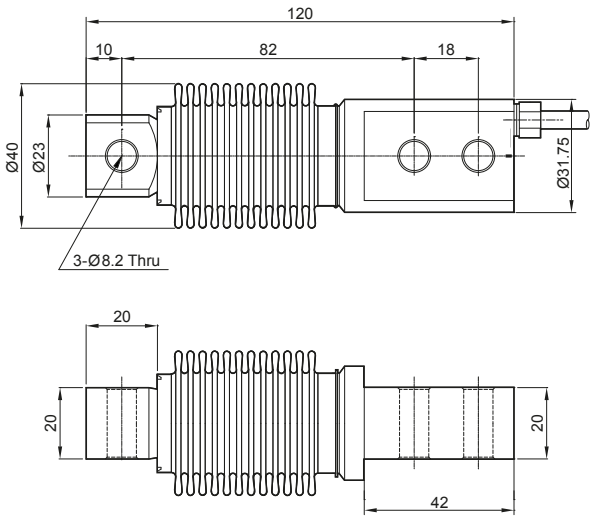
- Platform Scale
- Tank, Hopper Scale

Specifications

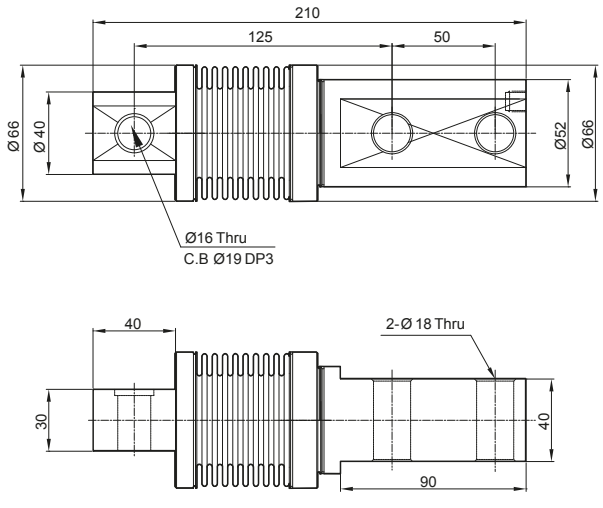
Capacity(R.L.)		kgf	10, 20, 50, 100, 200, 250, 500, 1K, 2K	
Rated Output		mV / V	2.0 ± 0.005	
Zero Balance		mV / V	0.0 ± 0.02	
Accuracy Class		-	C3	-
Non-Linearity		% R.O.	≤ 0.02	≤ 0.03
Hysteresis		% R.O.	≤ 0.02	≤ 0.03
Combined Error		% R.O.	≤ 0.02	≤ 0.03
Repeatability		% R.O.	≤ 0.01	≤ 0.01
Creep for 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	0.0067
Temperature Effect on	-Zero Value	%/10°C	≤ 0.014	≤ 0.028
	-Output Value	%/10°C	≤ 0.011	≤ 0.015
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		-	Ø5.4 x 4P x 3m (Urethane)	
Safety Overload		% R.L.	150	

Dimensions

▶ HBS (10~500kgf)



▶ HBS (1~2tf)



HBS-EXP | Explosion Proof Single Ended Beam Load Cell

Description

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

Features

- Pressure type
- Stainless Steel
- Hermetically sealed structure
- Essential safety explosion certificate (Ex ia IIC T4)
- Designed according to IP68

Option

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

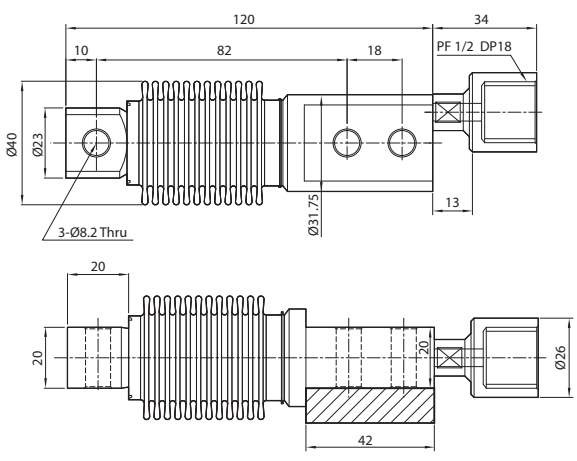
- Platform Scale
- Tank, Hopper Scale

Specifications

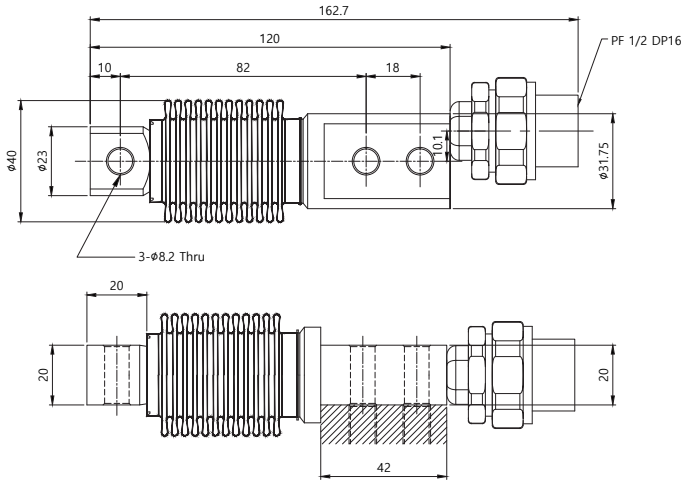
Capacity(R.L.)		kgf	10, 20, 50, 100, 200, 250, 500	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.005 0.0 ± 0.02	
Accuracy Class		-	A	B
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤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

Dimensions

▶ Intrinsic Safety

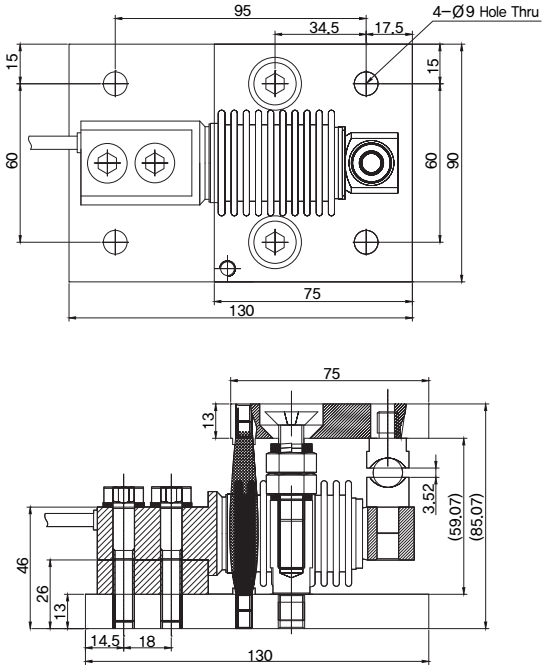


▶ Flameproof, Dust-proof



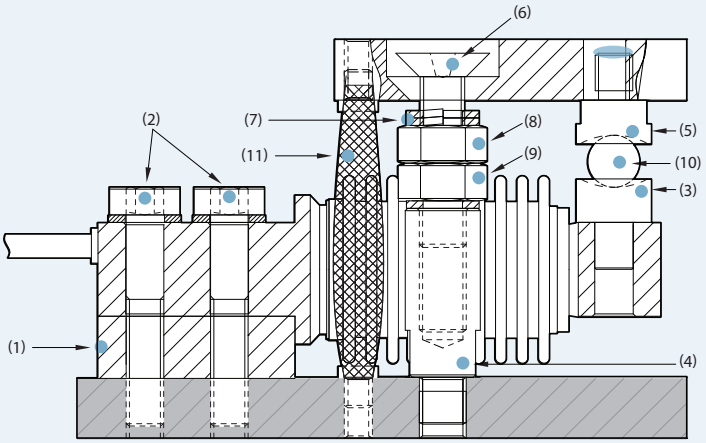
Accessory Dimensions

▶ HBS



Installation method

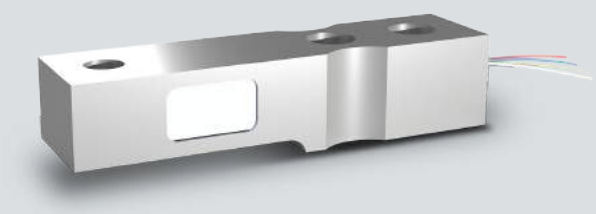
▶ HBS



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



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 forklifts and similar operations.

Features

- Pressure type
- Designed according to IP66

Application

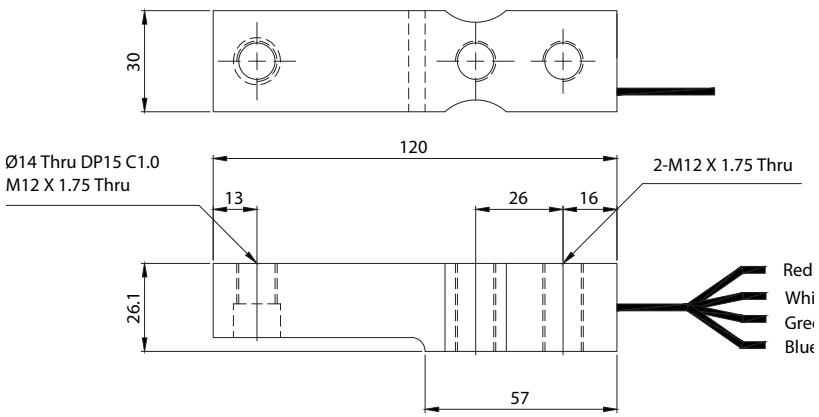
- Load cells for forklift safety diagnostics

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	%/10°C	≤ 0.05
	-Output Value	%/10°C	≤ 0.05
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	400 ± 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
Cable Specification		-	Ø1 x 4P x 60cm (4-Wire)
Safety Overload		% R.L.	150

Dimensions

▶ ZBSHR



S-Beam Load Cell

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

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

SB | S-Beam Load Cell

Description

SB is a tensile type 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.

Features

- Tensile type
- Protecting external shocks with steel covers

Option

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

Application

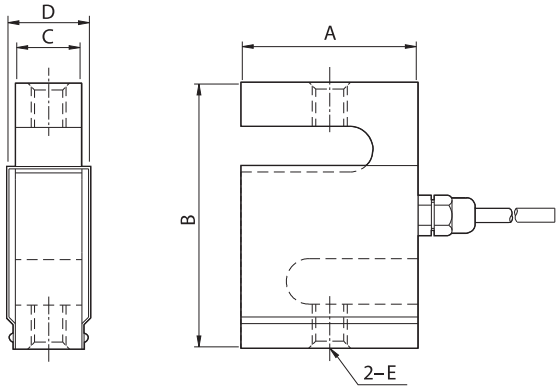
- Material tester
- Tensile testing machine

Specifications

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

Dimensions

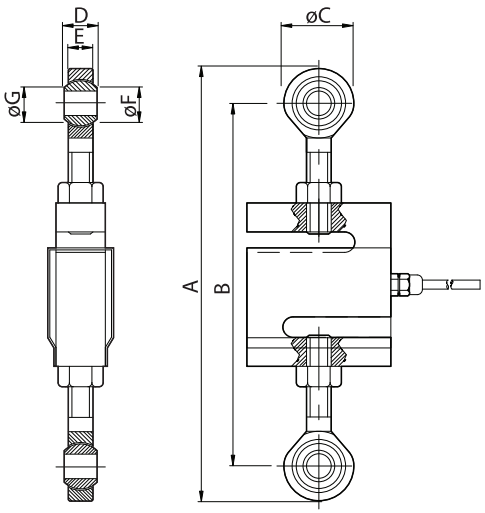
▶ SB



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	

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

Description

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

Features

- Tensile type
- Designing according to IP65

Option

- Obtaining OIML C3 Approved (OIML R60)
- Acquiring NTEP class III 5000d Approved
- Rod end bearing type accessories
  (25-100 kgf: M6 x 1.0)
  (200-1tf: M12 x 1.75)
  (2-5tf: M18 x 1.5)

Application

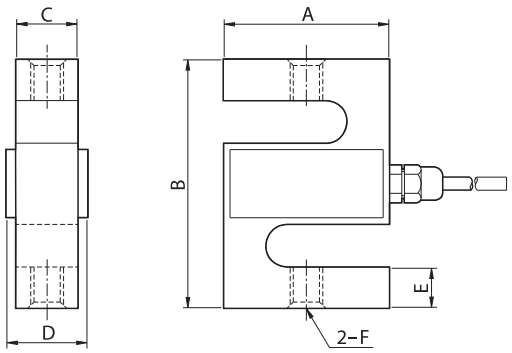
- Material tester
- Tensile testing machine

Specifications

Capacity(R.L.)		kgf	25, 50, 100, 200, 500, 1K, 2K, 3k, 5K	
Rated Output Zero Balance		mV / V mV / V	3.0 ± 0.3 0.0 ± 0.03	
Accuracy Class		-	C3	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤0.02 ≤0.02 ≤0.02 ≤0.01 ≤0.017 ≤0.017 ≤1/5000 0.0006	≤0.03 ≤0.03 ≤0.03 ≤0.01 ≤0.03 ≤0.03 ≤1/3000 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	400 ± 3.5 350 ± 3.5 > 2000	
Compensated Temperature Range Operating Temperature Range		°C °C	-10 to +40 -30 to +80	
Material		-	Steel	
Cable Specification		-	Ø5.4 x 4P x 3m (Urethane)	
Safety Overload		% R.L.	150	

Dimensions

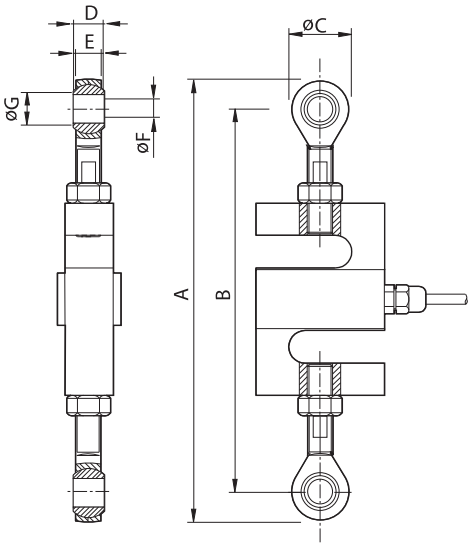
▶ SBA



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

Description

SBS is a stainless steel tensile type 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.

Features

- Tension type
- Stainless steel material
- Hermetically sealed structure
- Designed according to IP66

Option

- Intrinsic safety explosion (Ex ia IIC T4)
- Explosion proof (Ex d IIC T4)
- Dust explosion (Ex tD A21 T135˚C IP66)
- Rod End Bearing Type Accessory
  (500 kgf: M12 x 1.75)
  (1 to 2 tf: M18 x 1.5)
  (5K: M24 x 2.0)

Application

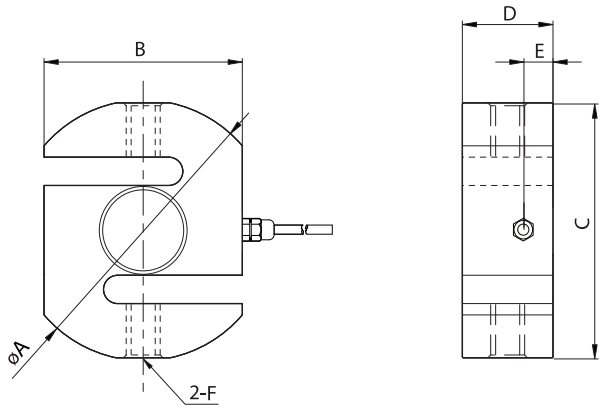
- Crane Scale
- Material Testing Machine
- Tensile Testing Machine

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	%/10˚C	≤0.03
	-Output Value	%/10˚C	≤0.03
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	400 ± 25
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 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



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 type
- Stainless steel material
- Explosion-proof structure (intrinsic safety, internal pressure, dust)
- Hermetically sealed structure
- Designed according to IP66

Option

- Intrinsic safety explosion (Ex ia IIC T4)
- Explosion proof (Ex d IIC T4)
- Dust explosion (Ex tD A21 T135°C IP66)
- Rod End Bearing Type Accessory
  (500 kgf: M12 x 1.75)
  (1 to 2 tf: M18 x 1.5)
  (5K: M24 x 2.0)

Application

- Crane Scale
- Material Testing Machine
- Tensile Testing Machine

Description

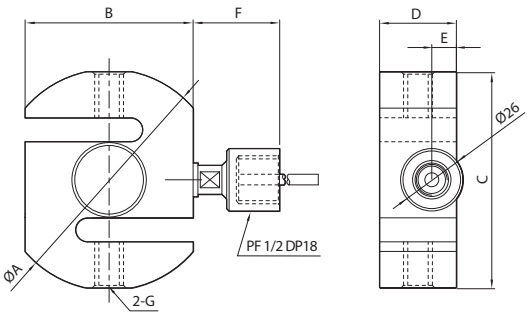
SBS-EXP is a stainless steel tensile type load cell. Designed as an explosion-proof construction, it is suitable for explosion hazardous areas and is suitable for tensile type scale and tensile type material testing machine. It is made of stainless steel material and has IP66 waterproof and dustproof 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	%/10°C	≤ 0.03
	-Output Value	%/10°C	≤ 0.014
Excitation	-Recommended	V	10
	-Maximum	V	28
Resistance	-Input	Ω	400 ± 25
	-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 5m (Urethane)
Safety Overload		% R.L.	150

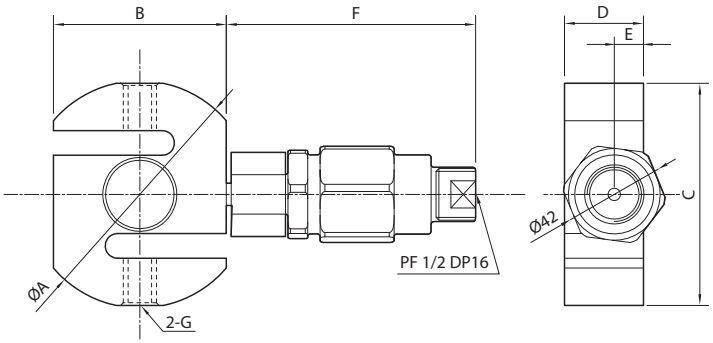
Dimensions

▶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	
3tf	130	100	120	45	15	36	M24 x 2.0	

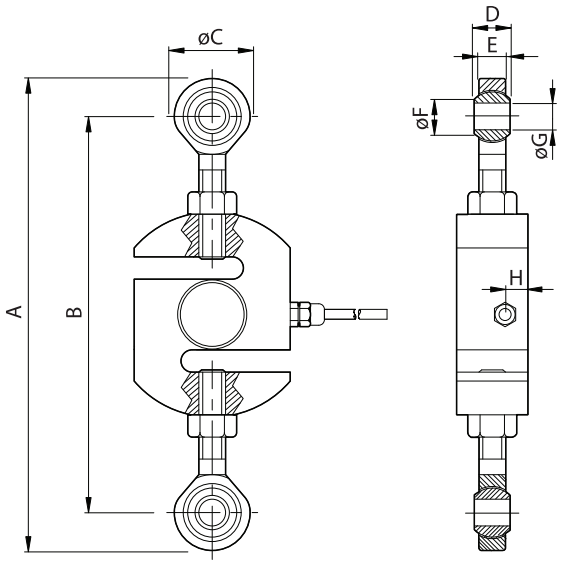
▶ Flameproof, Dust-proof



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	

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

Description

SBAS is a tensile type load cell of aluminum. It is suitable for places where load cell installation space is small as a small tensile type load cell

Features

- Tension type
- Small load cell
- External shock protection through steel cover

Option

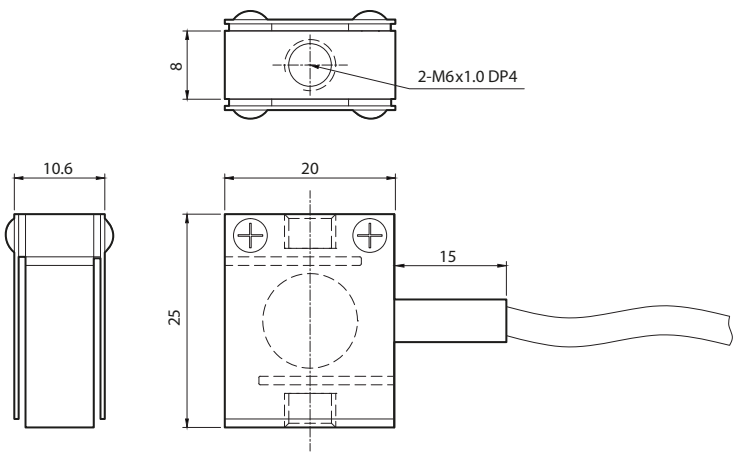
- Material Testing Machine
- Tensile Testing Machine

Specifications

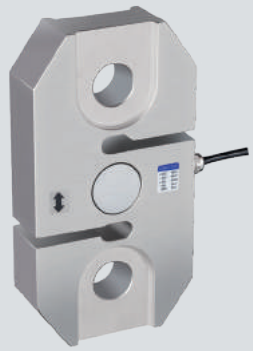
Capacity(R.L.)		kgf	10
Rated Output		mV / V	1.2 ± 0.12
Zero Balance		mV / V	0.0 ± 0.05
Accuracy Class		-	-
Non-Linearity		% R.O.	≤0.05
Hysteresis		% R.O.	≤0.05
Combined Error		% R.O.	≤0.05
Repeatability		% R.O.	≤0.02
Creep for 30min.		% R.O.	≤0.05
Return for 30min.		% R.O.	≤0.05
Resolution		-	≤1/2000
Division		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	MΩ	> 2000
Compensated Temperature Range		°C	-10 to +40
Operating Temperature Range		°C	-30 to +80
Material & Plate		-	Aluminum
Cable Specification		-	Ø3 x 4P x 3m (PVC)
Safety Overload		% R.L.	150

Dimensions

▶ SBAS



SL | S-Beam Load Cell



Features

- Tension type
- Overload protection structure
- Designed according to IP66

Option

- Shackle type accessory

Application

- Material Testing Machine
- Tensile Testing Machine

Description

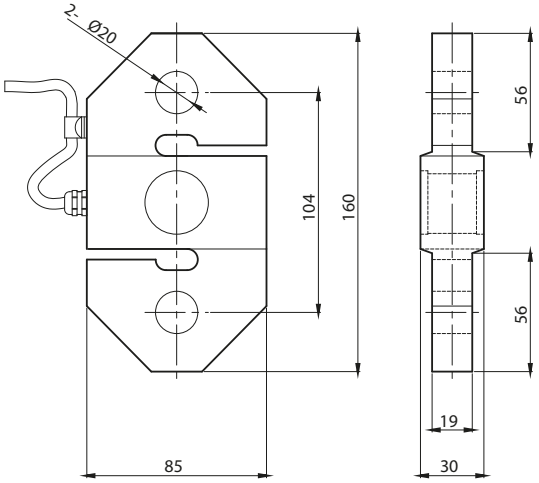
SL is a tensile type load cell of steel material. It is suitable for tensile type scale and tensile type material testing machine. This is a load cell that has safety certification in conjunction with the LM-200A overload protection system for cogs.

Specifications

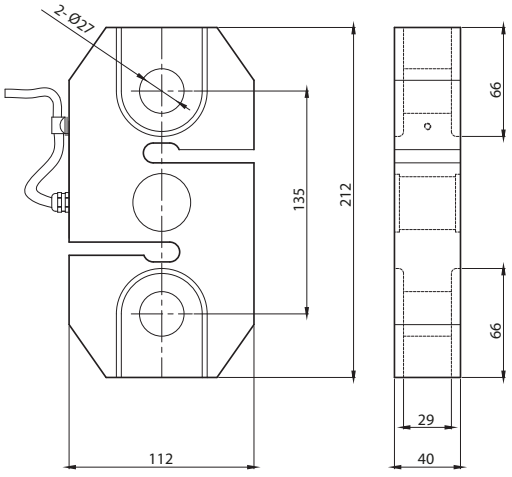
Capacity(R.L.)		kgf	2K, 5K
Rated Output		mV / V	2.0 ± 0.05
Zero Balance		mV / V	0.0 ± 0.03
Accuracy Class		-	-
Non-Linearity		% R.O.	≤0.05
Hysteresis		% R.O.	≤0.05
Combined Error		% R.O.	≤0.05
Repeatability		% R.O.	≤0.05
Creep for 30min.		% R.O.	≤0.05
Return for 30min.		% R.O.	≤0.05
Resolution		-	≤1/2000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

Dimensions

▶ SL-2T



▶ SL-5T

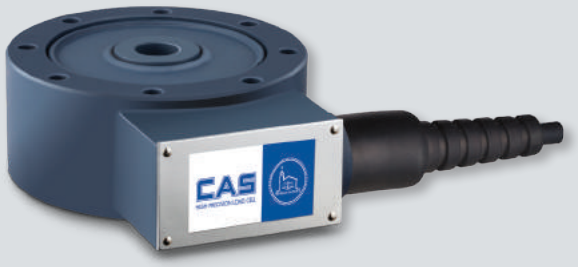


Disk Type Load Cell

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

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

LS | Disk Load Cell



Description

LS is a disk type load cell of steel material. It is a sealed / tensioned / compression type load cell suitable for harsh industrial environments such as hoppers, tanks and silo scales.

Features

- Tensile / Compression Type
- Hermetically sealed structure
- Designed according to IP67

Option

- Tensile Accessories (Rod End Bearing Type)
- Compression type accessories (Load button, ball type)
- LS-EXP / intrinsically safe explosion proof (Ex ia II C T4)
- LS-EXP-D / Explosion proof (Ex d IIC T4)
- LS-EXP-TD / dust explosion proof (Ex tD A21 T135°C IP68)
- LS-NR (CE certified)

Application

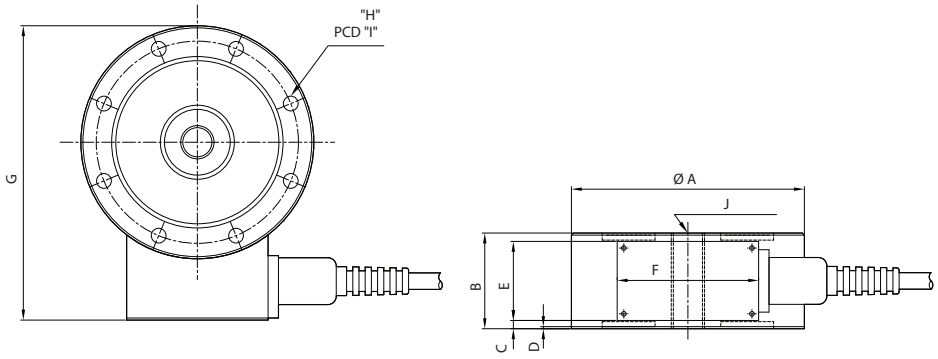
- Hopper, tank, silo scale
- Tensile / Compression Tester

Specifications

Capacity(R.L.)		tf	1, 2, 3, 5, 10, 20, 30, 50, 100, 200, 300	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.005/3.0 ± 0.0075(for 200, 300 tf) 0.0 ± 0.020	
Accuracy Class		-	A	B
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤0.02 ≤0.02 ≤0.02 ≤0.01 ≤0.03 ≤0.03 ≤1/5000 0.0004	≤0.05 ≤0.05 ≤0.05 ≤0.02 ≤0.03 ≤0.03 ≤1/2000 0.001
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤0.03 ≤0.03	≤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 Operating Temperature Range		°C °C	-10 to +40 -30 to +80	
Material		-	Steel / Coating	
Cable Specification		-	Ø8 x 4P x 5m(10m) (PVC) Explosion-proof (Urethane)	
Safety Overload		% R.L.	150	

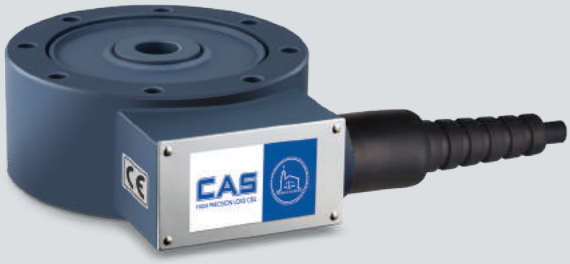
Dimensions

▶ 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

- Tensile / Compression Type
- Hermetically sealed structure
- Built-in noise and surge protection circuit
- Obtained CE certification
- Designed according to IP67

Option

- Tensile Accessories (Rod End Bearing Type)
- Compression type accessories (Load button, ball type)

Application

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

Description

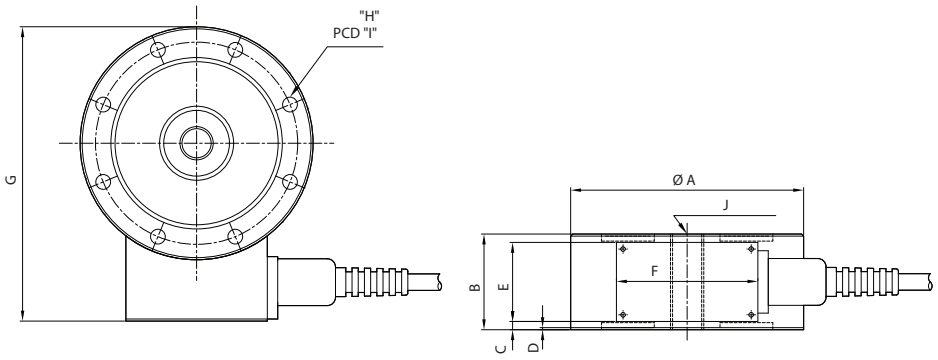
LS-NR is a disk type load cell, of steel material. It is a load cell with high electrical durability. The protection circuit inside the load cell protects against various noise, surge and lightning. Enclosed tension / compression type load cells suitable for harsh industrial environments such as hoppers, 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	%/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	≥ 500
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	V. %	75 AC/DC ±25%
	- RS	MHz	80 ~ 1000MHz, 10V/m
	- Surge	kV	±2

Dimensions

▶ 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

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.

Features

- Tensile / Compression Type
- Hermetically sealed structure
- Explosion-proof structure (intrinsic safety, internal pressure, dust)
- Designed according to IP68

Option

- Tensile Accessories (Rod End Bearing Type)
- Compression type accessories (Load button, ball type)
- LS-EXP / intrinsically safe explosion proof (Ex ia C T4) (1 ~ 300tf)
- LS-EXP-D / Explosion proof (Ex d C T4) (1 ~ 50tf)
- LS-EXP-TD / dust explosion proof (Ex tD A21 T135˚C IP68) (1 ~ 50tf)

Application

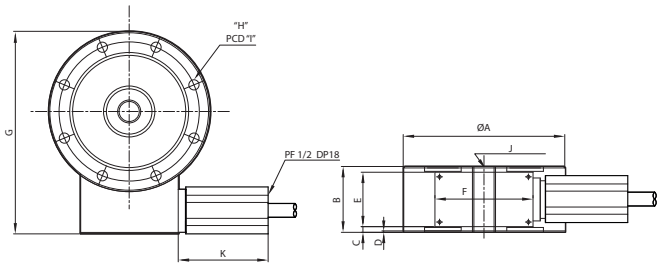
- Hopper, tank, silo scale
- Tensile / Compression Tester

Specifications

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

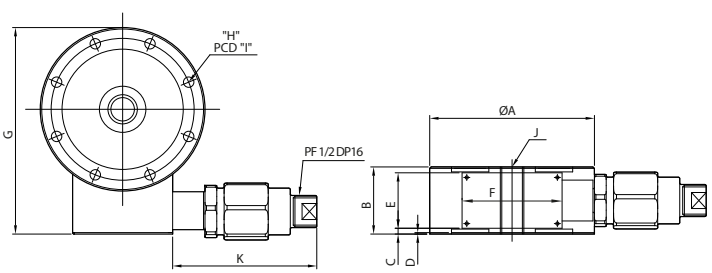
Dimensions

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



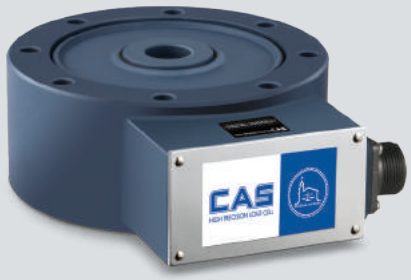
Capa.	A	B	C	D	E	F	G	H	I	J	K	Cable(m)
1~3tf	112	46	4	1	38	68	142.5	8-Ø7.1	97.2	M16 x 2	52	5
5tf	120	46	4				151.4	8-Ø9	103.2	M18 x 1.5		
10tf	138	60	11				171	8-Ø11	117.6	M24 x 2		10
20~30tf	184	80	21				219.5	8-Ø14	157.6	M39 x 2		
50tf	200	60	11				236	12-Ø14.5	170	M45 x 3		
100tf	278	90	2				315.8	16-Ø16.3	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	1	38	68	142.5	8-Ø7.1	97.2	M16 x 2	98	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		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

- Tensile / Compression Type
- High output
- CE Approval
- Hermetically sealed structure
- Designed according to IP67

Option

- Tensile Accessories (Rod End Bearing Type)
- Compression type accessories (Load button, ball type)

Application

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

Description

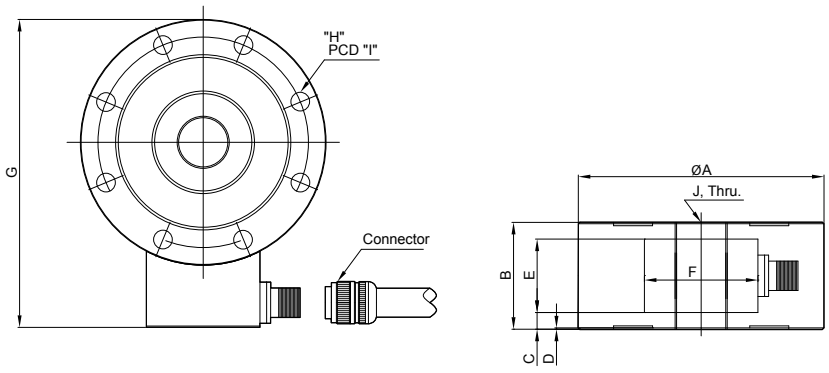
LS-D is a disk type load cell of steel material. It is possible to diagnose by connecting the load cells individually throught the digital output, and when making the weighing system, it is easy and simple to adjust the weighing, compensate corners, check the trouble occurence, and replace the load cell. 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 Hysteresis Combined Error Repeatability Creep for 30min.		% R.O. % R.O. % R.O. % R.O. % R.O.	< 0.015 < 0.015 < 0.015 < 0.01 < 0.017
Temperature Effect on	- Zero Value - Output Value	% R.O./10°C % R.O./10°C	0.014 0.011
Compensated Temperature Range		°C	-10 ~ +40
Operating Temperature Range		°C	-30 ~ +80
Excitation	- Minimum - Recommended - Maximum	V V V	6 9 24
Insulation		MΩ	≥ 2,000
Safety Overload		% R.C.	150
Material		-	Steel / Coating
Commutication 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

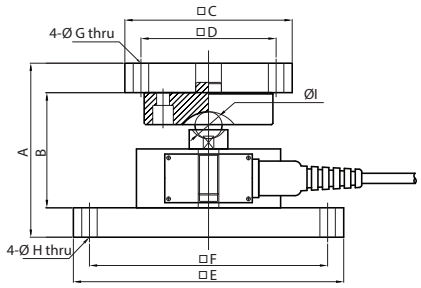
▶ LS-D



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	

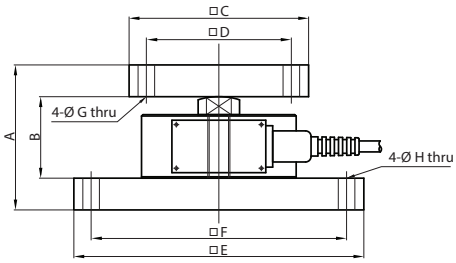
Accessory Dimensions

▶ LS



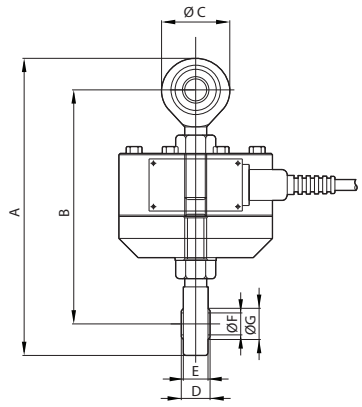
▶ Ball type

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

Description

LSB is a disk type load cell of steel material. It is suitable for Hopper, Tank, Silo Scale

Features

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

Application

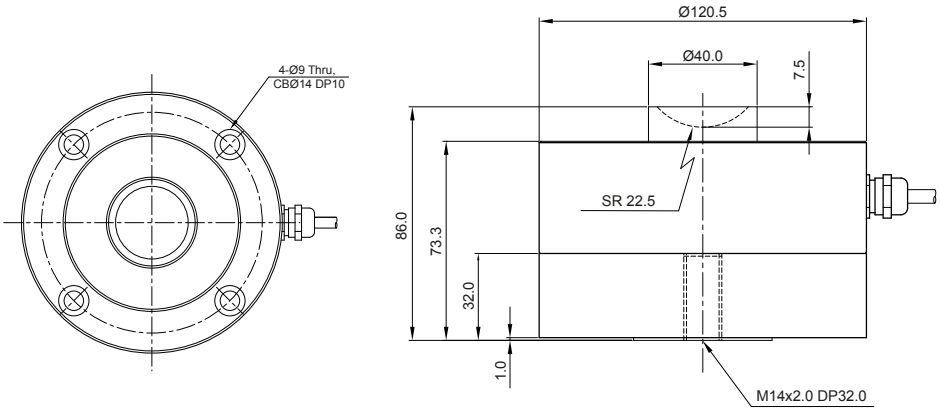
- Hopper, tank, silo scale
- Tensile / Compression Tester

Specifications

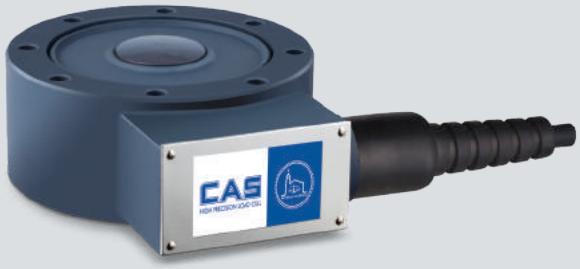
Capacity(R.L.)		tf	10, 20, 30
Rated Output		mV / V	4.0 ± 0.01
Zero Balance		mV / V	0.0 ± 0.04
Accuracy Class		-	-
Non-Linearity		% R.O.	≤ 0.03
Hysteresis		% R.O.	≤ 0.03
Combined Error		% R.O.	≤ 0.03
Repeatability		% R.O.	≤ 0.02
Creep for 30min.		% R.O.	≤ 0.03
Return for 30min.		% R.O.	≤ 0.03
Resolution		-	≤ 1/3000
Division		mV / V	0.0013
Temperature Effect on	-Zero Value	%/10°C	≤ 0.03
	-Output Value	%/10°C	≤ 0.03
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
Cable Specification		-	Ø5.4 x 4P x 10m (Urethane)
Safety Overload		% R.L.	150

Dimensions

▶ LSB



LSC | Disk Load Cell



Description

LSC is a disk type load cell of steel material. It is suitable for Hopper, Tank, Silo Scale

Features

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

Application

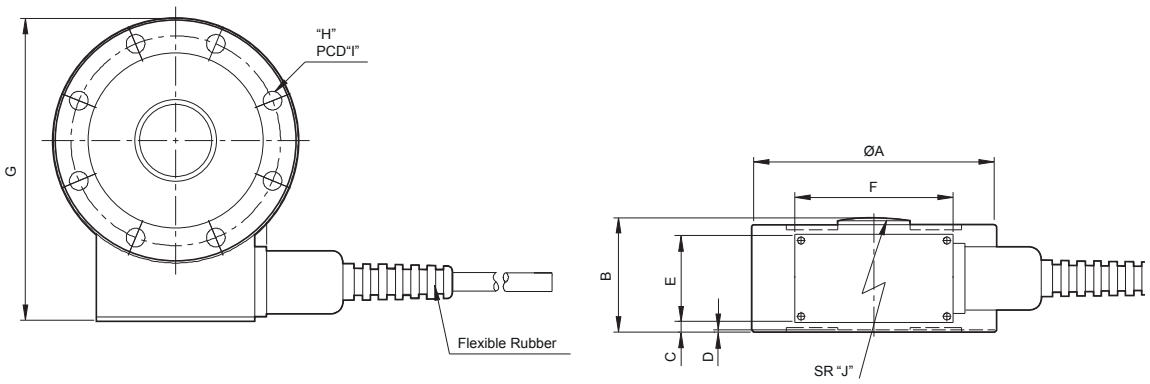
- Hopper, tank, silo scale
- Compression Tester

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	%/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 (10m) (PVC)
Safety Overload		% R.L.	150

Dimensions

▶ 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	10
50tf	190.5	57.2	6.4		38	68	225.2	12-ø13.5	159	200	
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

- Tensile, Compression type
- Stainless Steel
- Hermetically sealed structure
- Designed according to IP68

Option

- Tensile type Accessories (Rod End Bearing Type)
- Compression type Accessories (Load button, ball type)
- LSS-EXP / intrinsically safe explosion proof (Ex ia II C T4)
- LSS-EXP-D / Explosion proof (Ex d IIC T4)
- LSS-EXP-TD / dust poof explosion proof (Ex tD A21 T135 ˚C IP68)
- LSS-NR (CE certified)

Application

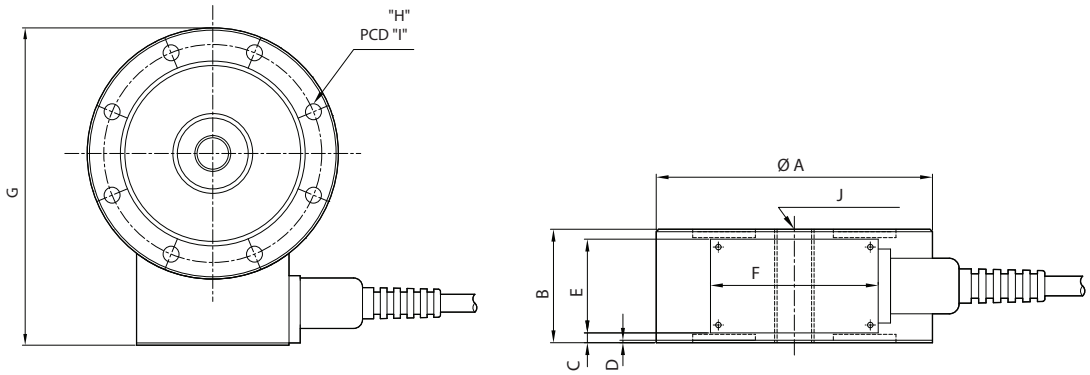
- Hopper, tank, silo scale
- Tensile / Compression Tester

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



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

CE

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.

Features

- Tensile / Compression Type
- Stainless Steel
- Hermetically sealed structure
- Built-in noise and surge protection circuit
- CE Approval
- Designed according to IP68

Option

- Tensile Accessories (Rod end bearing Type)
- Compression type accessories (Load button, ball type)

Application

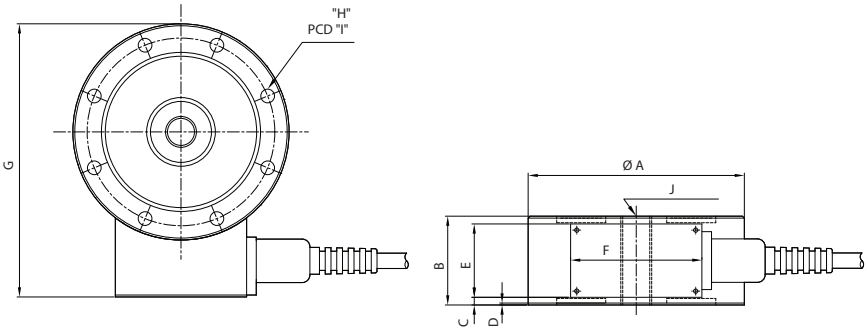
- Hopper, tank, silo scale
- Tensile / Compression Tester

Specifications

Capacity(R.L.)		tf	1, 2, 3, 5, 10, 20, 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	%/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	≥ 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	V. %	75 AC/DC ±25%
	- RS	MHz	80 ~ 1000MHz, 10V/m
	- Surge	kV	±2

Dimensions

▶ 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

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. Stainless and waterproof, suitable for humid environments.

Features

- Tensile / Compression Type
- Stainless Steel
- Hermetically sealed structure
- Explosion-proof structure (intrinsic safety, internal pressure, dust)
- Designed according to IP68

Option

- Tensile Accessories (Rod End Bearing Type)
- Compression type accessories (rod button, ball type)
- LSS-EXP / intrinsically safe explosion proof (Ex ia II C T4)
- LSS-EXP-D / Explosion proof (Ex d IIC T4)
- LSS-EXP-TD / dust explosion proof (Ex tD A21 T135˚C IP68)

Application

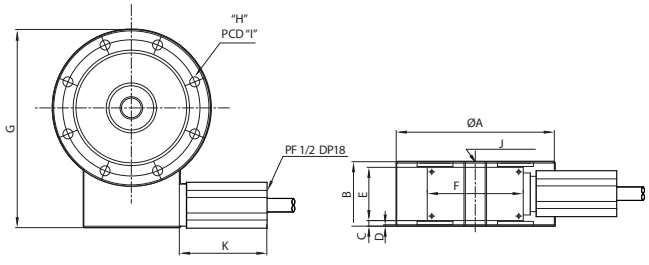
- Hopper, tank scale
- Tensile / Compression Tester

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	%/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 5/10m (Urethane)
Safety Overload		% R.L.	150%

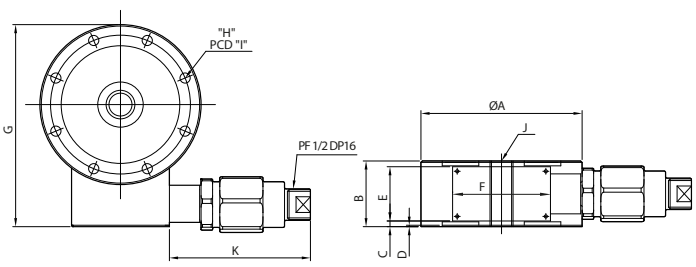
Dimensions

▶ Intrinsic Safety explosion , dust explosion proof



Capa.	A	B	C	D	E	F	G	H	I	J	Cable (m)
1~3tf	112	46	4	1	38	68	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	10
50tf	200	60	7.8				236	12-Ø14.5	170	M45 x 3	

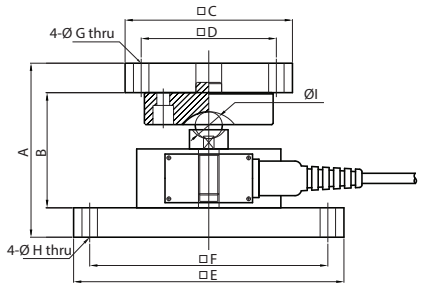
▶ Flameproof



Capa.	A	B	C	D	E	F	G	H	I	J	K	Cable (m)
1~3tf	112	46	4	1	38	68	142.5	8-Ø7.1	97.2	M16 x 2	98	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		10
50tf	200	60	11				236	8-Ø14.5	170	M45 x 3		

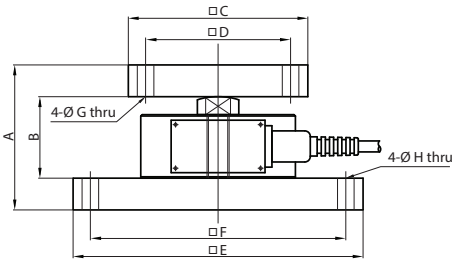
Accessory Dimensions

▶ LSS



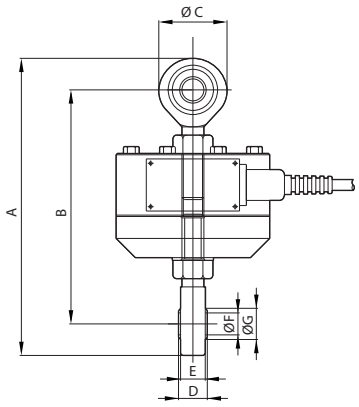
▶ Ball type

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

Description

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

Features

- Tensile / Compression Type
- hollow type
- Hermetically sealed structure
- Designed according to IP67

Application

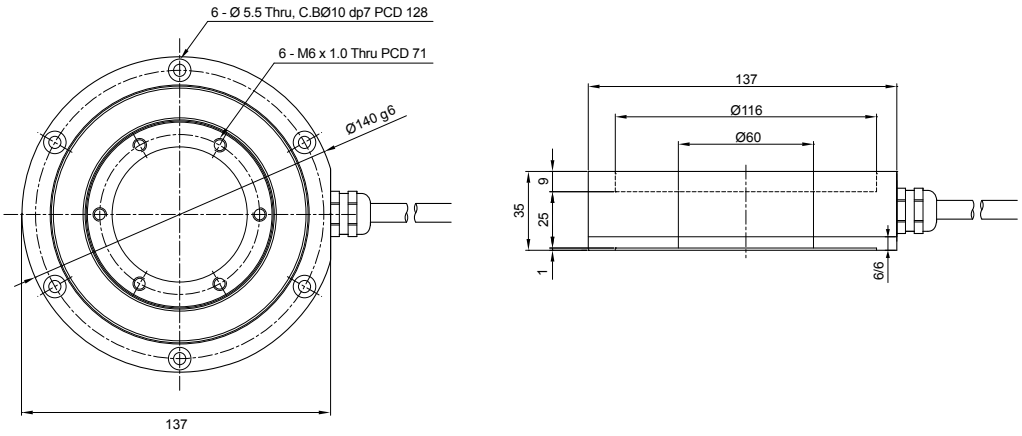
- Compression Tester

Specifications

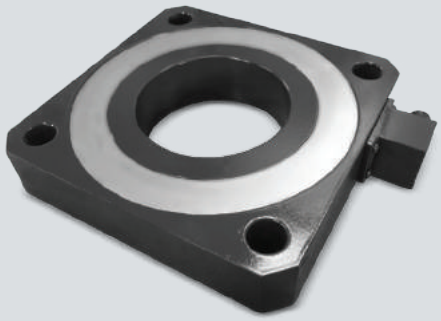
Capacity(R.L.)		tf	1, 2, 3, 5
Rated Output Zero Balance		mV / V mV / V	1.0 ± 0.05 0.0 ± 0.015
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤0.05 ≤0.05 ≤0.05 ≤0.02 ≤0.03 ≤0.03 ≤1/2000 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 Operating Temperature Range		˚C ˚C	-10 to +40 -30 to +80
Material		-	Steel / Coating
Cable Specification		-	Ø5.4 X 4P X 10m (10m) (PVC)
Safety Overload		% R.L.	150

Dimensions

▶ LSW



LSW-HM | Disk Load Cell



Description

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

Features

- Compression Type
- hollow type
- Designed according to IP66

Application

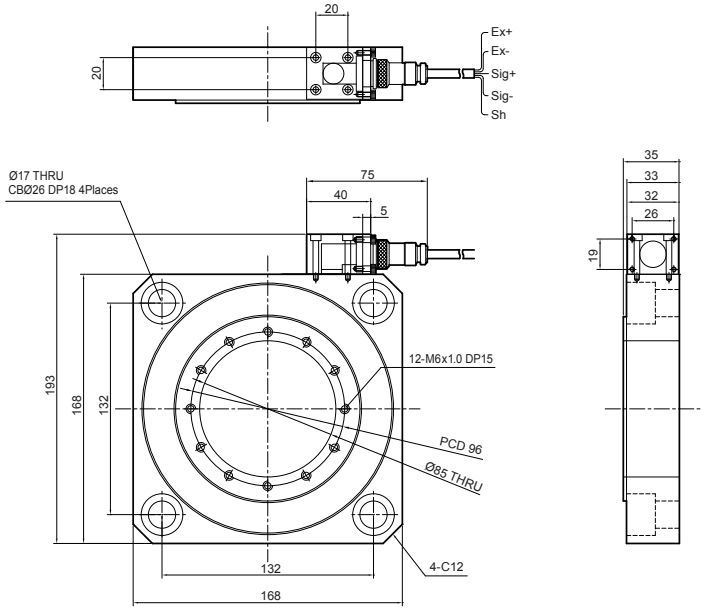
- Compression Tester

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

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

Features

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

Application

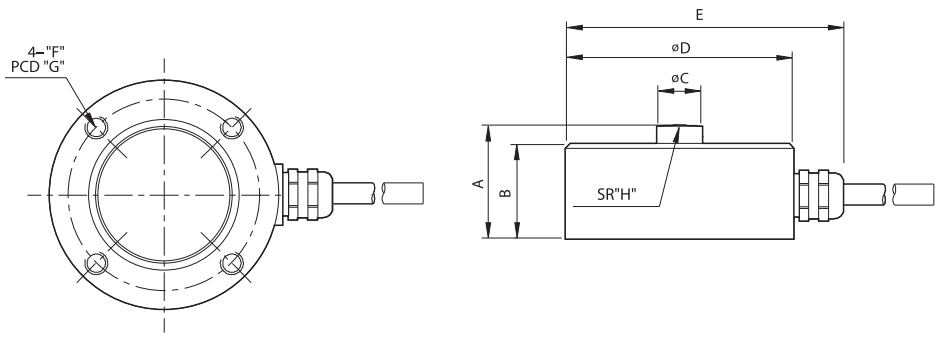
- Semiconductor process
- Testing and metering system
- Compression Tester

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	%/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		-	Stainless steel (50kgf ~ 2tf) Steel (5 ~ 20tf)
Cable Specification		-	Ø5.4 X 4P X 3m (5m) (Urethane)
Safety Overload		% R.L.	150

Dimensions

▶ 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

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-typed load cell.

Features

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

Option

- Tension type accessory

Application

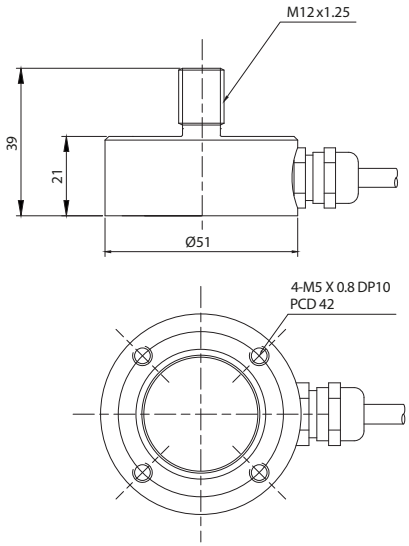
- Semiconductor process
- Testing and metering system
- Tensile tester

Specifications

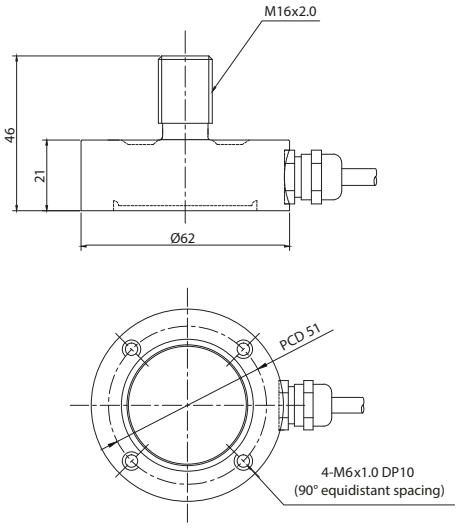
Capacity(R.L.)		kgf	50, 100, 200, 500, 1K, 2K
Rated Output		mV / V	2.0 ± 0.005
Zero Balance		mV / V	0.0 ± 0.06
Accuracy Class		-	-
Non-Linearity		% R.O.	≤ 0.15
Hysteresis		% R.O.	≤ 0.15
Combined Error		% R.O.	≤ 0.15
Repeatability		% R.O.	≤ 0.05
Creep for 30min.		% R.O.	≤ 0.1
Return for 30min.		% R.O.	≤ 0.1
Resolution		-	≤ 1/600
Division		mV / V	0.003
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		-	Stainless steel
Cable Specification		-	Ø5.4 X 4P X 3m (Urethane)
Safety Overload		% R.L.	150

Dimensions

▶ MNT (50~500kgf)

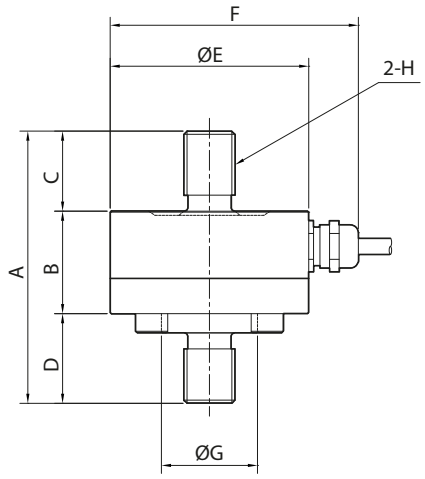


▶ MNT (1, 2tf)



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

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.

Features

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

Application

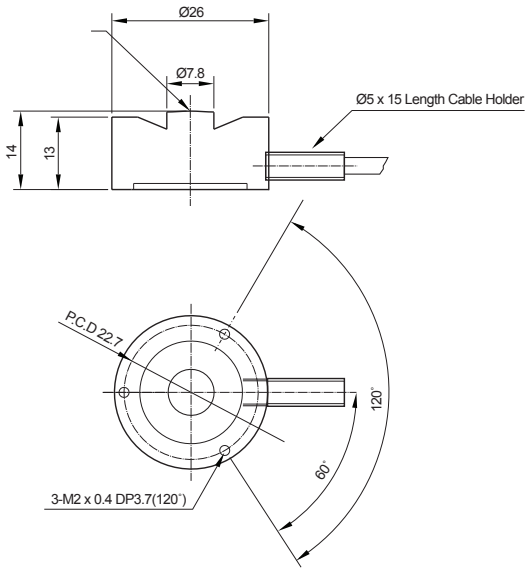
- Semiconductor process
- Testing and metering system
- Compression tester

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	%/10˚C	≤ 0.05
	-Output Value	%/10˚C	≤ 0.1
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		-	Ø3 X 4P X 3m (PVC)
Safety Overload		% R.L.	150

Dimensions

▶ NMNC



SMN | Disk Load Cell

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.

Features

- Compression application
- Designed according to IP65

Application

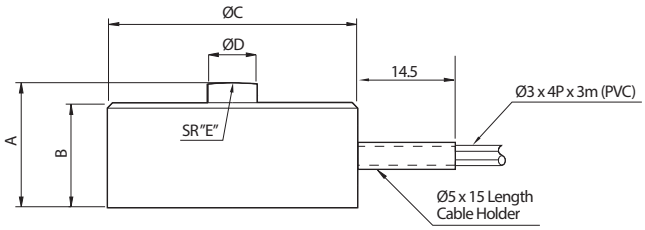
- Semiconductor process
- Testing and metering system
- Compression tester

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.	≤ 2.0
Hysteresis		% R.O.	≤ 2.0
Combined Error		% R.O.	≤ 2.0
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	%/10°C	≤ 0.0.5
	-Output Value	%/10°C	≤ 0.1
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		-	Aluminum: 1~5kgf Stainless steel: 10kgf~2tf
Cable Specification		-	Ø3 X 4P X 3m (PVC)
Safety Overload		% R.L.	150

Dimensions

▶ 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

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.

Features

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

Application

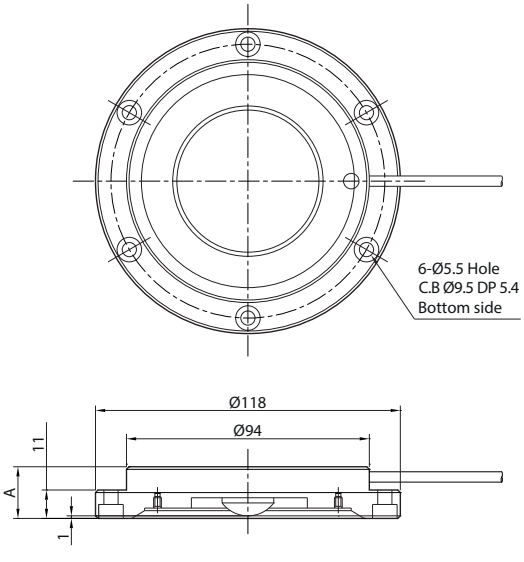
- Mobile accumulator

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	%/10°C	≤ 0.03
	-Output Value	%/10°C	≤ 0.05
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		-	Ø4 X 4P X 0.62m (PVC)
Safety Overload		% R.L.	150

Dimensions

▶ CPA



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

CPAS | Disk Load Cell

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.

Features

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

Application

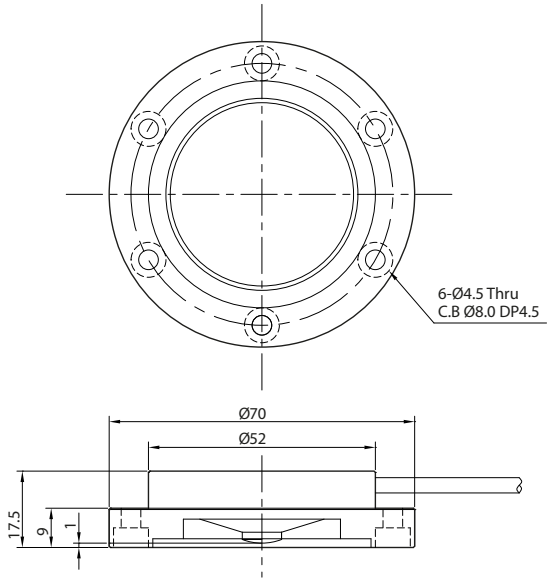
- Mobile accumulator

Specifications

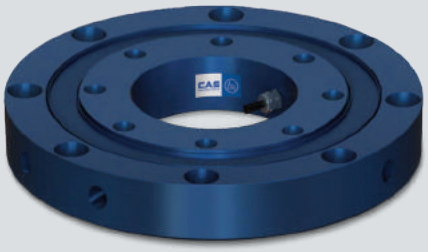
Capacity(R.L.)		tf	3
Rated Output		mV / V	1.2 ± 0.005
Zero Balance		mV / V	0.0 ± 0.005
Accuracy Class		-	-
Non-Linearity		% R.O.	≤ 0.3
Hysteresis		% R.O.	≤ 0.3
Combined Error		% R.O.	≤ 0.3
Repeatability		% R.O.	≤ 0.03
Creep for 30min.		% R.O.	≤ 0.03
Return for 30min.		% R.O.	≤ 0.03
Resolution		-	≤ 1/300
Division		mV / V	0.004
Temperature Effect on	-Zero Value	%/10°C	≤ 0.03
	-Output Value	%/10°C	≤ 0.05
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	2400 ± 240
	-Output	Ω	2000 ± 20
	-Insulation	MΩ	> 2000
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



LSOC | Disk Load Cell



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. A built-in safety device structure against overload ensures safety.

Features

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

Application

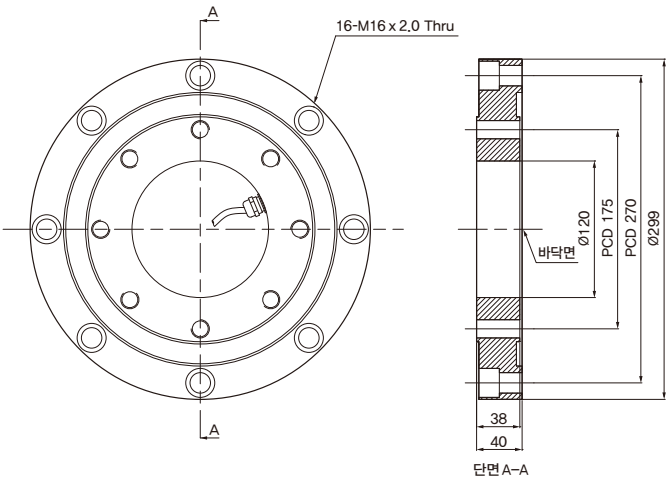
- Safety of the specifically-equipped vehicle
- A Cargo bracket

Specifications

Capacity(R.L.)		tf	5
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.2 0.0 ± 0.01
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.2 ≤ 0.1 ≤ 0.1 ≤ 0.1 ≤ 0.01 ≤ 0.01 ≤1/500 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 Operating Temperature Range		˚C ˚C	-10 to +40 -30 to +80
Material		-	Steel / Coating
Cable Specification		-	Ø5.4 X 4P X1.2m (Urethane)
Safety Overload		% R.L.	150

Dimensions

▶ LSOC



LSOC2 | Disk Load Cell

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. A built-in safety device structure against overload ensures safety.

Features

- Compression application
- Designed according to IP66

Application

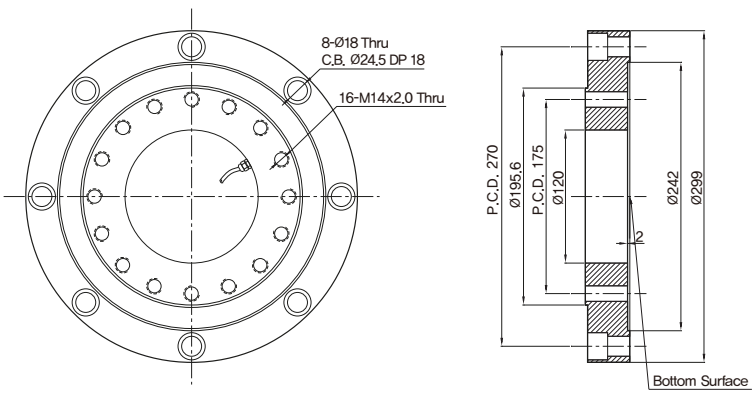
- Safety of the specifically-equipped vehicle
- A Cargo bracket

Specifications

Capacity(R.L.)		tf	5
Rated Output Zero Balance		mV / V mV / V	1.0 ± 0.1 0.0 ± 0.01
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.2 ≤ 0.1 ≤ 0.1 ≤ 0.1 ≤ 0.01 ≤ 0.01 ≤ 1/500 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 Operating Temperature Range		°C °C	-10 to +40 -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



CHE | Disk Load Cell

Features

- Compression Type
- hollow type
- Designed according to IP66

Option

- Compression accessories (pressurized plate)

Application

- Compression Tester

Description

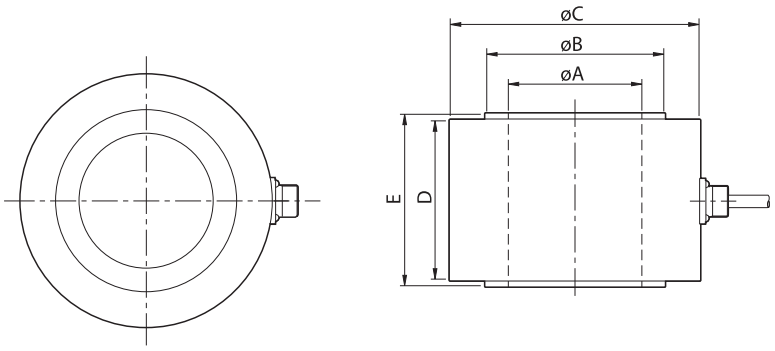
CHE is a Center hole Disk type load cell of steel material. This compression type load cell is suitable for various compression tests and civil-related compression tests

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	≤ 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	MΩ	> 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

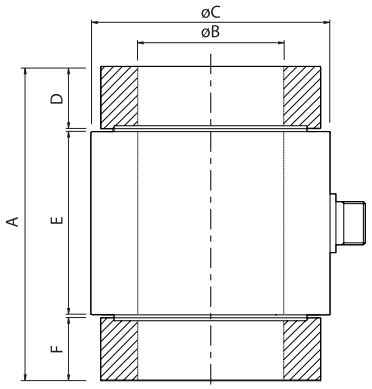
▶ CHE



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

Description

CHE-KM is a Center hole Disk type loadcell of aluminum material. As a compressed type loadcell, it is suitable for various compress test and civil related tests

Features

- Compression Type
- hollow type
- Designed according to IP66

Application

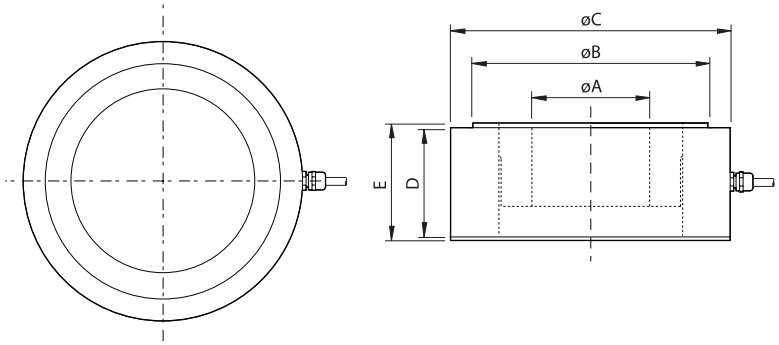
- Compression Tester

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℃	≤ 0.05
	-Output Value	%/10℃	≤ 0.05
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	800 ± 20
	-Output	Ω	700 ± 7
	-Insulation	MΩ	> 2000
Compensated Temperature Range		℃	-10 to +40
Operating Temperature Range		℃	-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

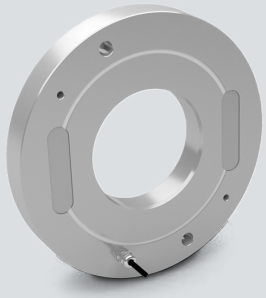
Dimensions

▶ CHE-KM



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



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.

Features

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

Application

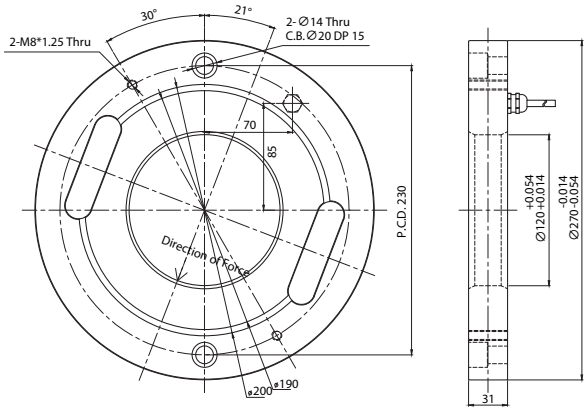
- For ship winch safety

Specifications

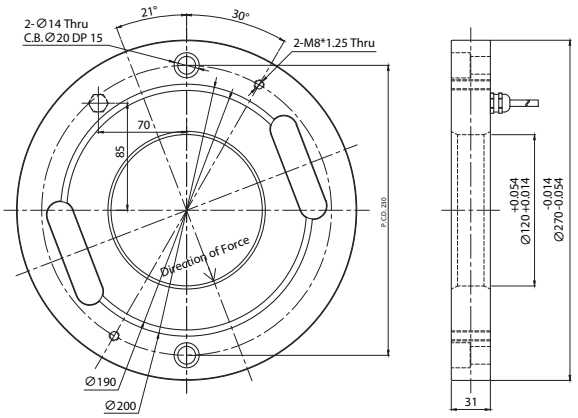
Capacity(R.L.)		tf	15
Rated Output		mV / V	1.5 ± 0.15
Zero Balance		mV / V	0.0 ± 0.015
Accuracy Class		-	-
Non-Linearity		% R.O.	≤ 0.5
Hysteresis		% R.O.	≤ 0.5
Combined Error		% R.O.	≤ 0.5
Repeatability		% R.O.	≤ 0.1
Creep for 30min.		% R.O.	≤ 0.5
Return for 30min.		% R.O.	≤ 0.5
Resolution		-	1/200
Division		mV / V	0.0075
Temperature Effect on	-Zero Value	%/10°C	≤ 0.1
	-Output Value	%/10°C	≤ 0.1
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	390 ± 20
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 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

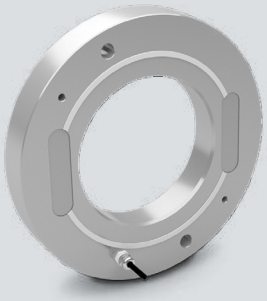
▶ ZWIT-15T (L)



▶ ZWIT-15T (R)



ZWITA-15T | Disk Load Cell



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.

Features

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

Application

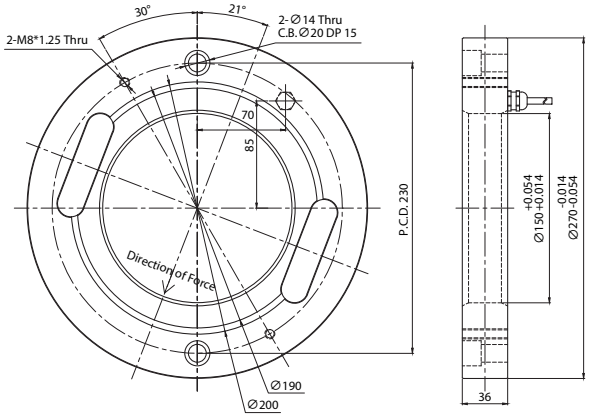
- For ship winch safety

Specifications

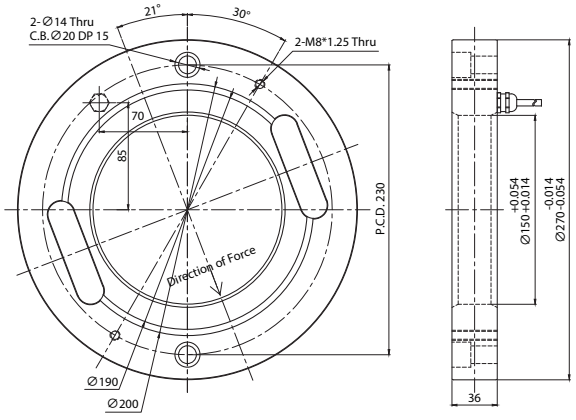
Capacity(R.L.)		tf	15
Rated Output		mV / V	1.5 ± 0.15
Zero Balance		mV / V	0.0 ± 0.015
Accuracy Class		-	-
Non-Linearity		% R.O.	≤ 0.5
Hysteresis		% R.O.	≤ 0.5
Combined Error		% R.O.	≤ 0.5
Repeatability		% R.O.	≤ 0.1
Creep for 30min.		% R.O.	≤ 0.5
Return for 30min.		% R.O.	≤ 0.5
Resolution		-	1/200
Division		mV / V	0.0075
Temperature Effect on	-Zero Value	%/10°C	≤ 0.1
	-Output Value	%/10°C	≤ 0.1
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	390 ± 20
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	> 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

▶ ZWITA-15T (L)



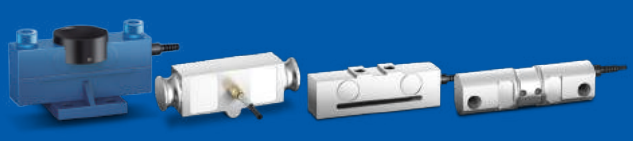
▶ ZWITA-15T (R)



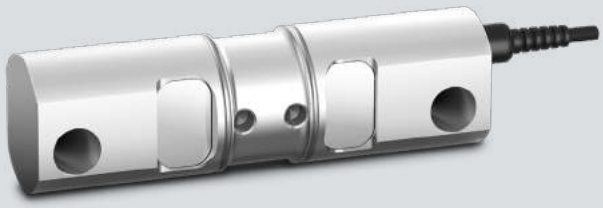
Double Ended Beam Load Cell

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

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



DSB-20 | Double Ended Beam Load Cell



Description

DSB-20 is a double ended ended type loadcell, 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 hoppers and tank scales.

Features

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

Option

- Accessory Set

Application

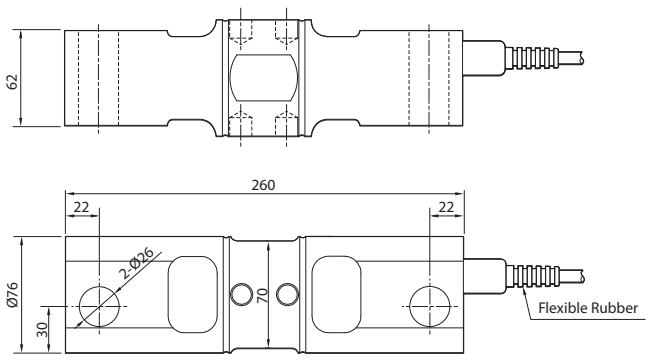
- Hopper, Tank Scale

Specifications

Capacity(R.L.)		tf	20
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.004 0.0 ± 0.02
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.03 ≤ 0.03 ≤ 0.03 ≤ 0.01 ≤ 0.03 ≤ 0.03 ≤ 1/3000 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 Operating Temperature Range		˚C ˚C	-10 to +40 -30 to +80
Material		-	Steel
Cable Specification		-	Ø8 x 4P x 15m (PVC)
Safety Overload		% R.L.	150

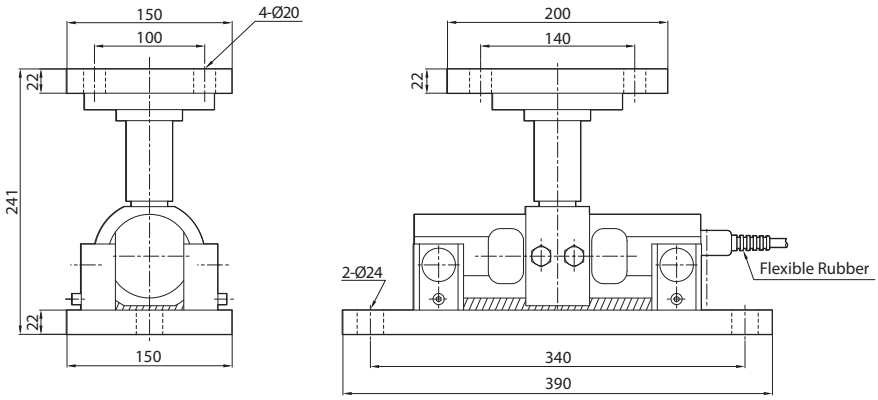
Dimensions

▶ DSB-20

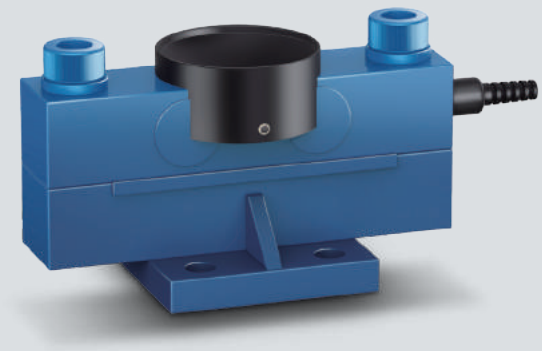


Accessory Dimensions

▶ DSB-20



DSB-B | Double Ended Beam Load Cell



Description

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

Features

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

Option

- Accessory Set

Accessory Features

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

Application

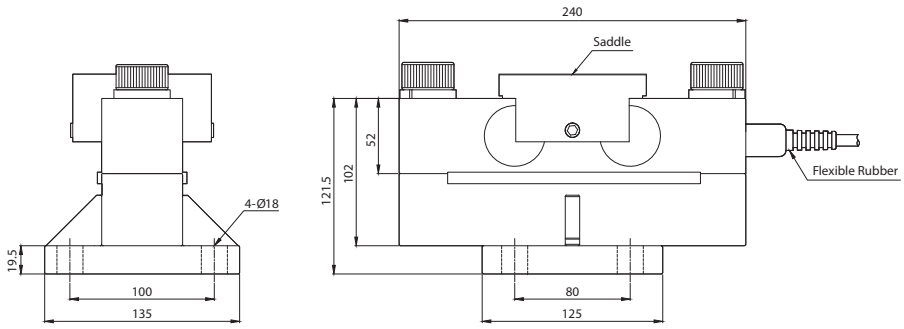
- Hoppers
- Tank scales

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

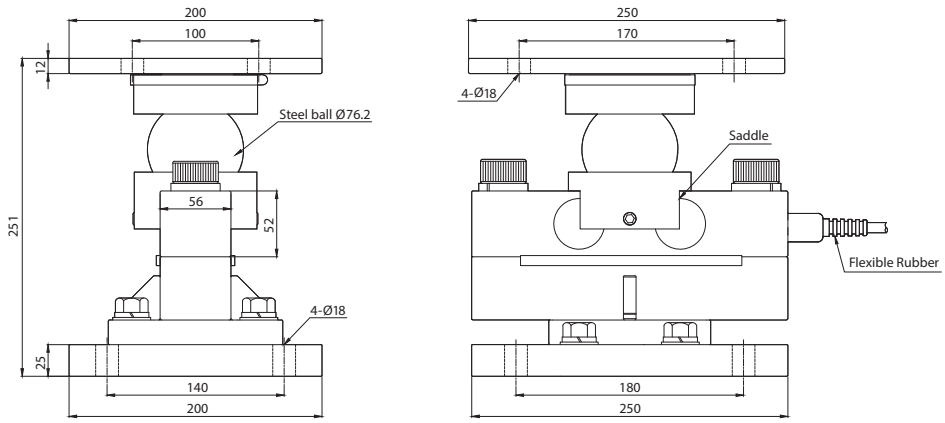
Dimensions

▶ DSB-B

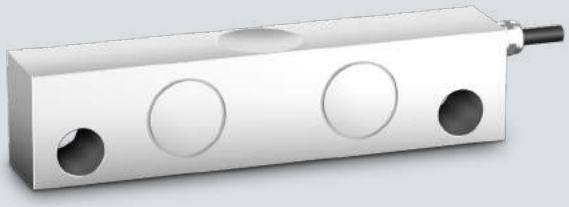


Accessory Dimensions

▶ DSB-B



DES-B | Double Ended Beam Load Cell



Description

DES-B is a double ended type loadcell, and is suitable for high capacity hoppers, tank scales and truck scales. Also through the ball, the force structure makes minimum side force.

Features

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

Option

- Accessory Set

Accessory Features

- Easy loadcell replacement
- Appropriate for tank and truck scale application
- High resolution by use of ball

Application

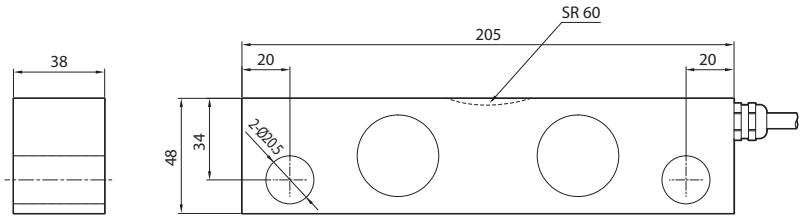
- Hopper, Tank Scale
- Tank Scale

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	%/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 10m (PVC)
Safety Overload		% R.L.	150

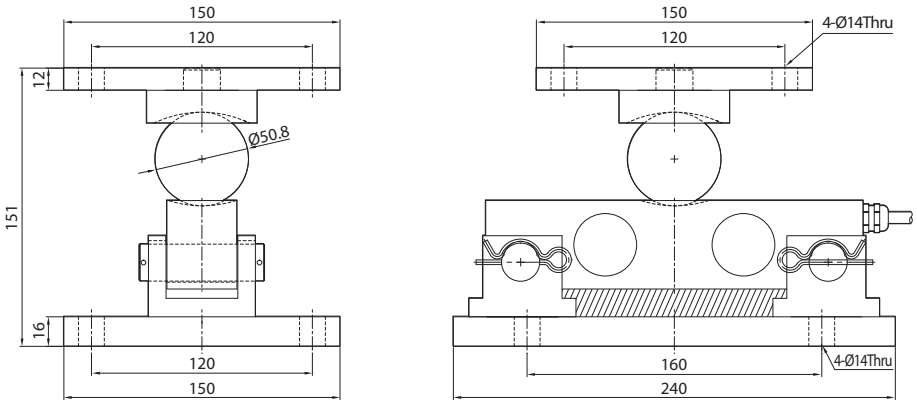
Dimensions

▶ DES-B

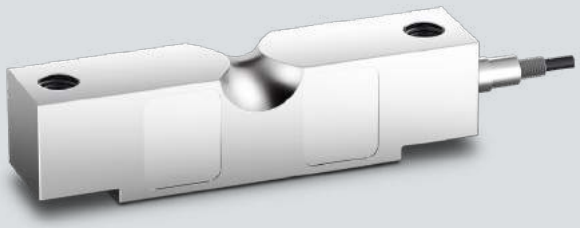


Accessory Dimensions

▶ DES-B



DSB1 | Double Ended Beam Load Cell



Description

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

Features

- Designed according to IP67

Option

- DSB1 TW Accessory set
- NTEP Class IIIL Approved

Accessory Features

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

Application

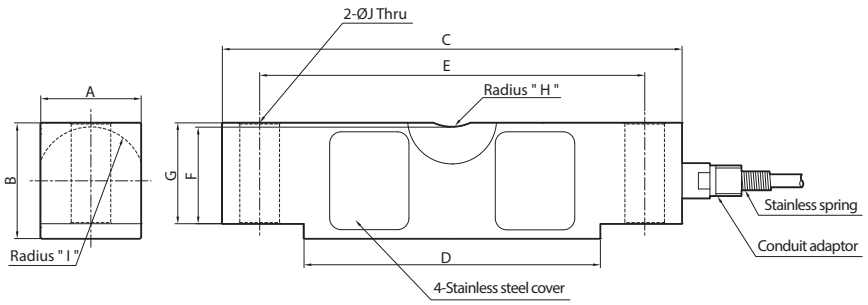
- Hopper, Tank Scale
- Truck scale

Specifications

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

Dimensions

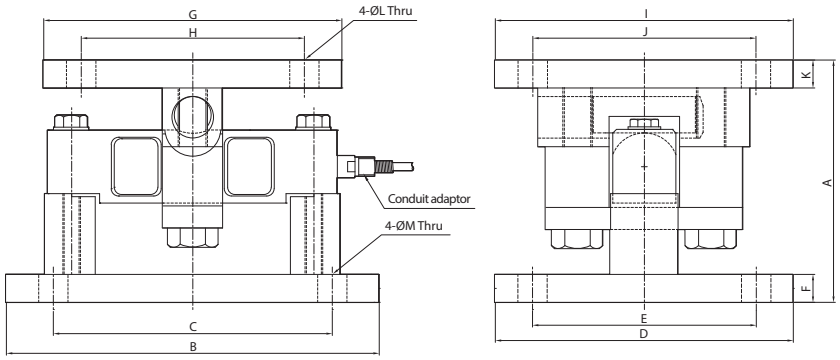
▶ DSB1



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	

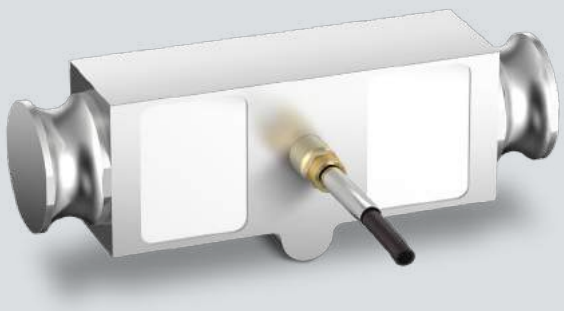
Accessory Dimensions

▶ 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



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.

Features

- Designed according to IP67

Option

- DSB2 TW Accessory Set

Application

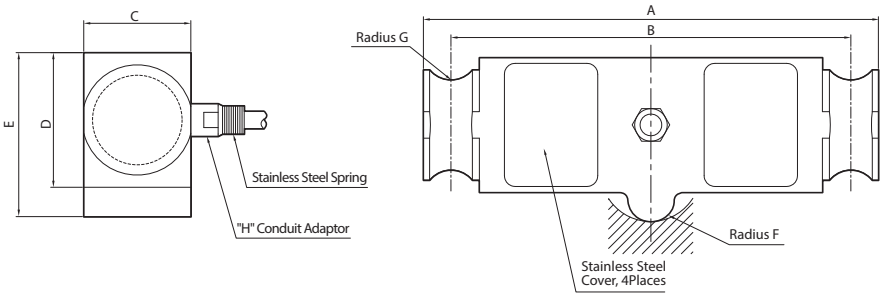
- Hopper, Tank Scale
- Truck scale

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	%/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 12m (Urethane)
Safety Overload		% R.L.	150

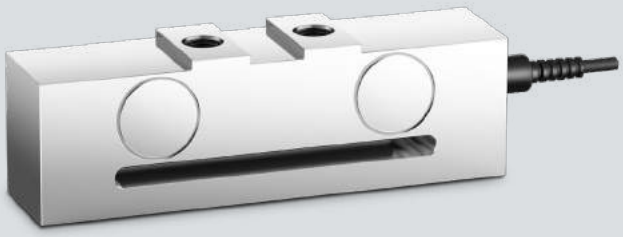
Dimensions

▶ 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

DSBV | Double Ended Beam Load Cell



Description

DSBV is a double ended type load cell with high capacity hoppers, tank scales and truck scales that are suitable. In addition, installation is simple and convenient through direct assembly of load cell and accessories.

Features

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

Option

- Accessory Set

Accessory Features

- Easy loadcell replacement
- Suitable for tank and truck scale

Application

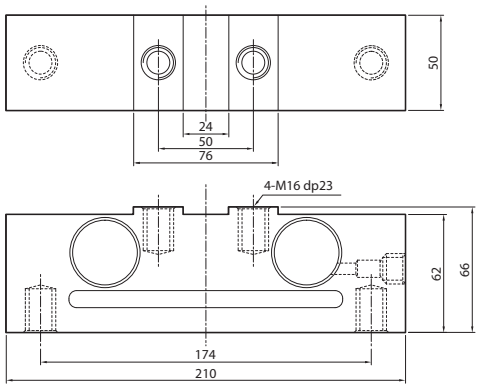
- Hopper, Tank Scale
- Truck Scale

Specifications

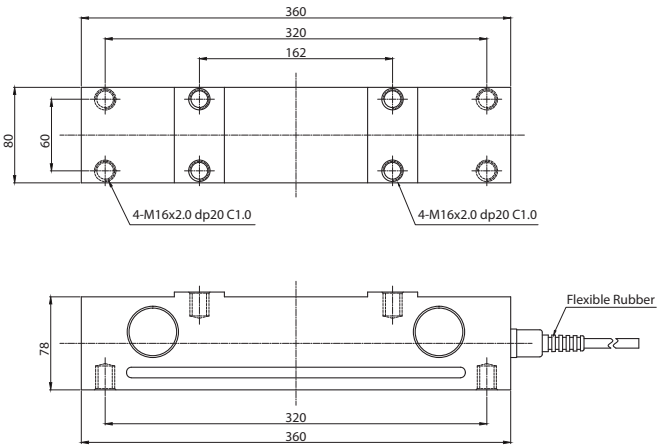
Capacity(R.L.)		tf	1, 2, 3, 5, 10
Rated Output		mV / V	1.2 ± 0.12
Zero Balance		mV / V	0 ± 0.02
Accuracy Class		-	-
Non-Linearity		% R.O.	≤ 0.05
Hysteresis		% R.O.	≤ 0.05
Combined Error		% R.O.	≤ 0.05
Repeatability		% R.O.	≤ 0.03
Creep for 30min.		% R.O.	≤ 0.03
Return for 30min.		% R.O.	≤ 0.03
Resolution		-	≤ 1/2000
Division		mV / V	0.0006
Temperature	-Zero Value	%/10°C	≤ 0.03
Effect on	-Output Value	%/10°C	≤ 0.03
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 5m (PVC)
Safety Overload		% R.L.	150

Dimensions

▶ DSBV (1t ~ 3t)

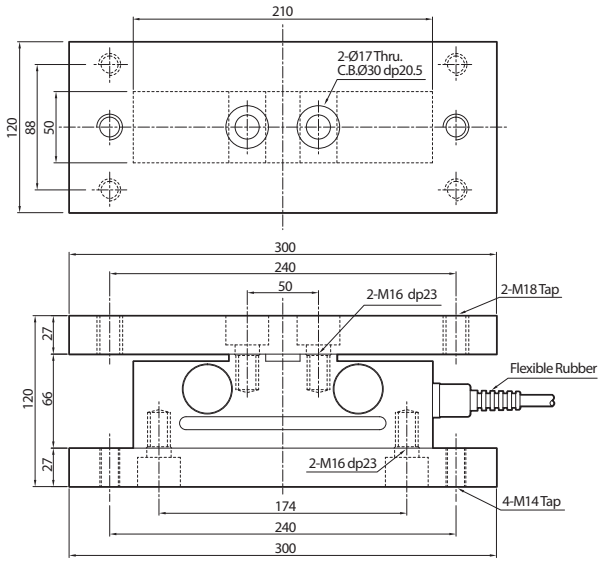


▶ DSBV (5t ~ 10t)

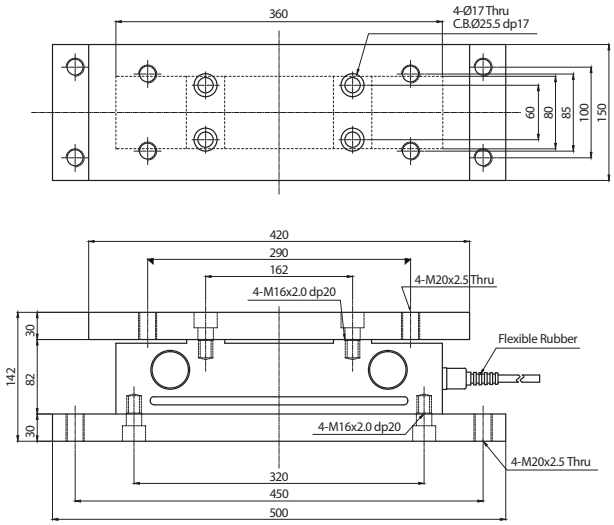


Accessory Dimensions

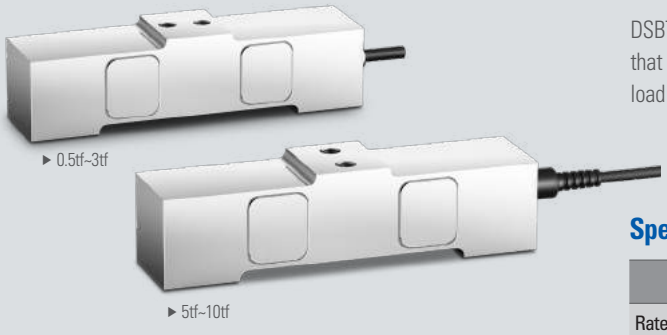
▶ DSBV (1t ~ 3t)



▶ DSBV (5t ~ 10t)



DSBT (0.5tf~10tf) | Double Ended Beam Load Cell



▶ 0.5tf~3tf

▶ 5tf~10tf

Description

DSBT is a double ended type load cell with high capacity hoppers, tank scales and truck scales that are suitable. In addition, installation is simple and convenient through direct assembly of load cell and accessories.

Features

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

Option

- Accessory Set

Accessory Features

- Easy loadcell replacement
- Suitable for tank and truck scale

Application

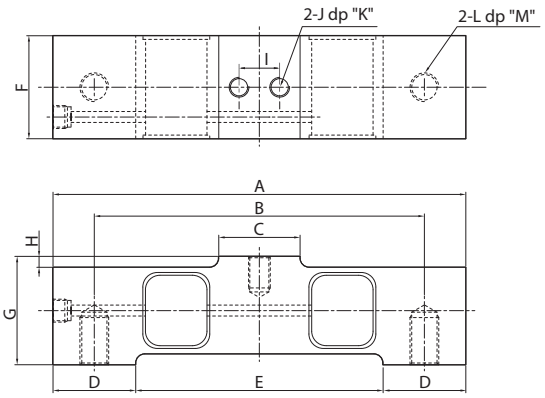
- Hopper, Tank Scale
- Truck Scale

Specifications

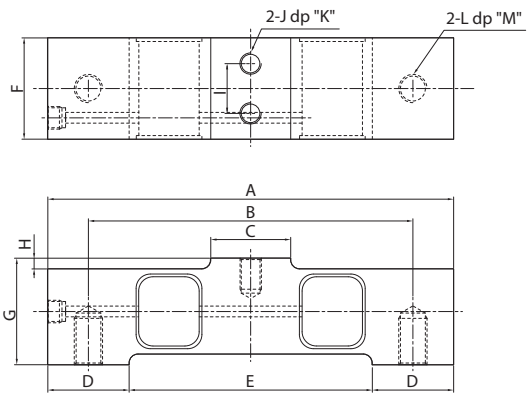
Capacity(R.L.)		tf	0.5 , 1.5 , 3 , 5, 10
Rated Output		mV / V	2.0 ± 0.1
Zero Balance		mV / V	0 ± 0.1
Accuracy Class		-	-
Non-Linearity		% R.O.	≤ 0.1
Hysteresis		% R.O.	≤ 0.1
Combined Error		% R.O.	≤ 0.1
Repeatability		% R.O.	≤ 0.03
Creep for 30min.		% R.O.	≤ 0.03
Return for 30min.		% R.O.	≤ 0.03
Resolution		-	1/1000
Division		mV / V	0.002
Temperature Effect on	-Zero Value	%/10°C	± 0.05
	-Output Value	%/10°C	± 0.05
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	350 ± 10
	-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 5m (PVC)
Safety Overload		% R.L.	150

Dimensions

▶ DSBT (0.5tf~3tf)



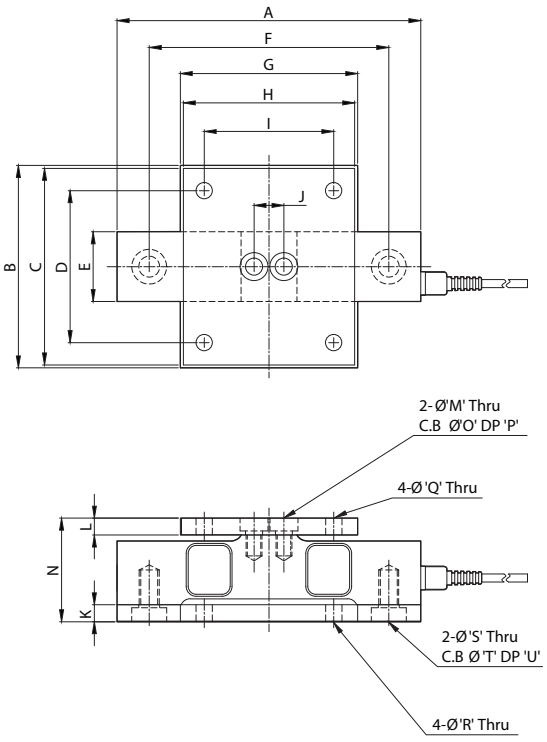
▶ DSBT (5tf~10tf)



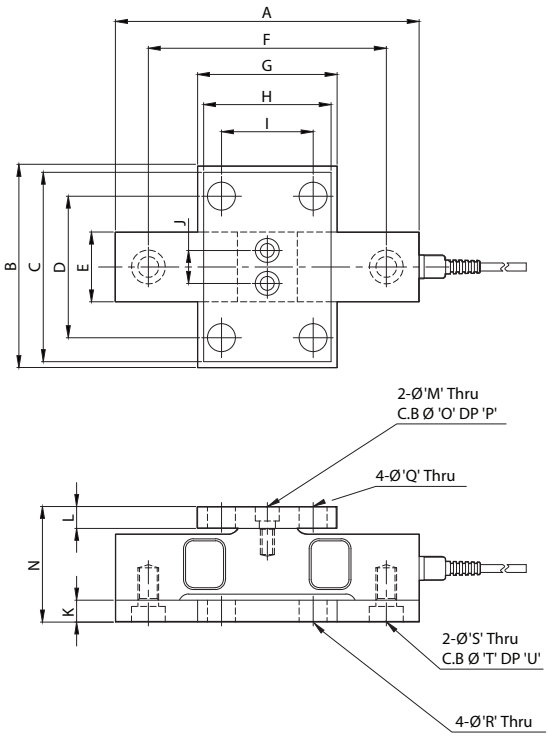
Capa.	A	B	C	D	E	F	G	H	I	J	K	L	M	Cable(m)
0.5tf	152.4	120.2	28	32.2	88	35	35	3	15	M8×1.25	13	M10×1.5	20	5
1.5tf	177.8	139.4	36	38.4	101	40	43	3	18	M8×1.25	13	M12×1.75	20	
2tf	165	138	35	25	115	32	30	1	16	M8×1.25	15	M10×1.5	20	
3tf	177.8	139.4	36	38.4	101	40	43	3	18	M8×1.25	13	M12×1.75	20	
5tf	228.6	182.8	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	

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	
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	5
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

Description

The DSB-D digital load cell is suitable for large-scale 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 output. When weighing system is manufactured, it is easy to calibrate weight, check for trouble and replace load cell easily.

Features

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

Option

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

Application

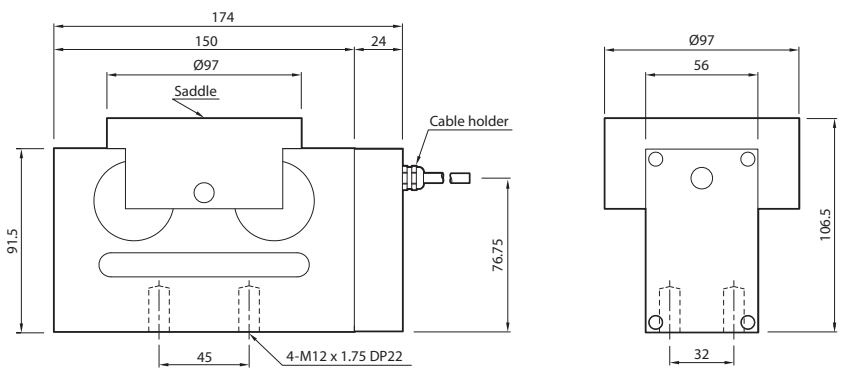
- Hopper, Tank Scale
- Truck Scale

Specifications

Capacity(R.L.)		tf	10, 20, 25, 30
Rated Output		counts	300,000
Zero Balance		counts	± 300
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min.		% R.O. % R.O. % R.O. % R.O. % R.O.	< 0.015 < 0.015 < 0.015 < 0.01 < 0.017
Temperature Effect on	- Zero Value - Output Value	% R.O./10˚C % R.O./10˚C	0.014 0.011
Compensated Temperature Range		˚C	-10 ~ +40
Operating Temperature Range		˚C	-30 ~ +80
Excitation	- Minimum - Recommended - Maximum	V V V	6 9 24
Insulation		MΩ	≥ 2,000
Safety Overload		% R.C.	150
Material		-	Steel
Commutication 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

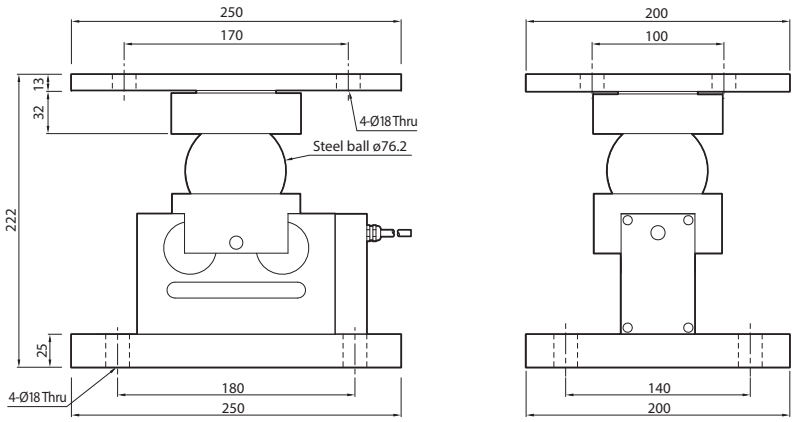
Dimensions

▶ DSB-D

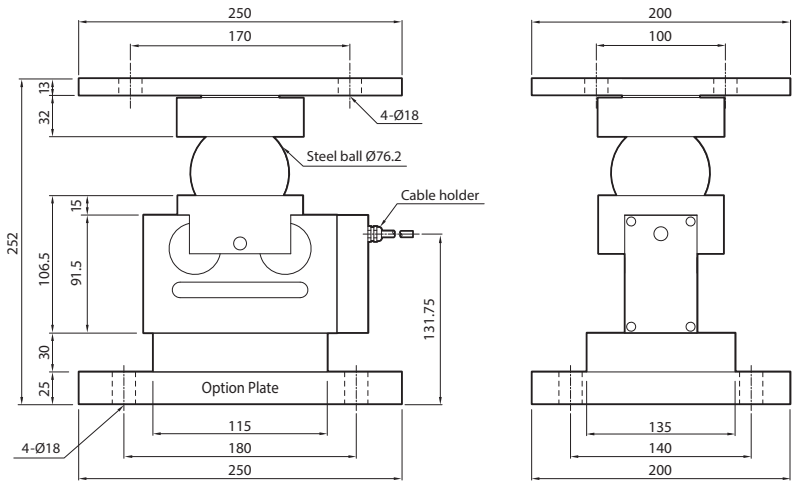


Accessory Dimensions

▶ DSB-D



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



Canister Load Cell

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

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

CC | Canister Load Cell

Description

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

Features

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

Option

- Load button type accessory
- Ball type accessory
- CC-NR (CE certification)

Application

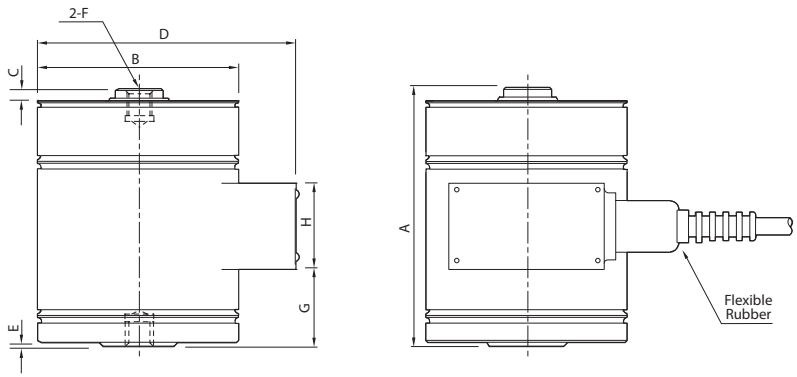
- Hopper, Tank, silo Scale

Specifications

Capacity(R.L.)		kgf	20, 50, 100, 200, 300, 500, 1K, 2K, 3K, 5K, 10K, 20K	
Rated Output Zero Balance		mV / V mV / V	3.0 ± 0.003 0.0 ± 0.03	
Accuracy Class		-	A	B
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.02 ≤ 0.02 ≤ 0.02 ≤ 0.01 ≤ 0.03 ≤ 0.03 ≤ 1/5000 0.0006	≤ 0.05 ≤ 0.05 ≤ 0.05 ≤ 0.02 ≤ 0.03 ≤ 0.03 ≤ 1/2000 0.0015
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.03 ≤ 0.03	≤ 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 Operating Temperature Range		°C °C	-10 to +40 -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



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. Sealed pressure type of load cell suitable for rough industrial environments such as hoppers and tanks and silo scales.

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

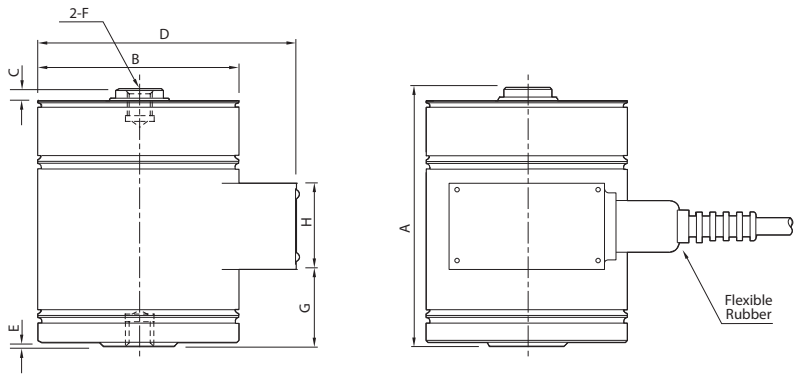
- Hoppers, Silos, Tanks

Specifications

Capacity(R.L.)		kgf	20, 50, 100, 200, 300, 500, 1K, 2K, 3K, 5K, 10K, 20K	
Rated Output Zero Balance		mV / V mV / V	3.0±0.003 0.0±0.03	
Accuracy Class		-	A	B
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.02 ≤ 0.02 ≤ 0.02 ≤ 0.01 ≤ 0.03 ≤ 0.03 ≤ 1/5000 0.0006	≤ 0.05 ≤ 0.05 ≤ 0.05 ≤ 0.02 ≤ 0.03 ≤ 0.03 ≤ 1/2000 0.0015
Temperature Effect on	- Zero Value - Output Value	%/10°C %/10°C	≤ 0.03 ≤ 0.03	≤ 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 Operating Temperature Range		°C °C	-10 to +40 -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

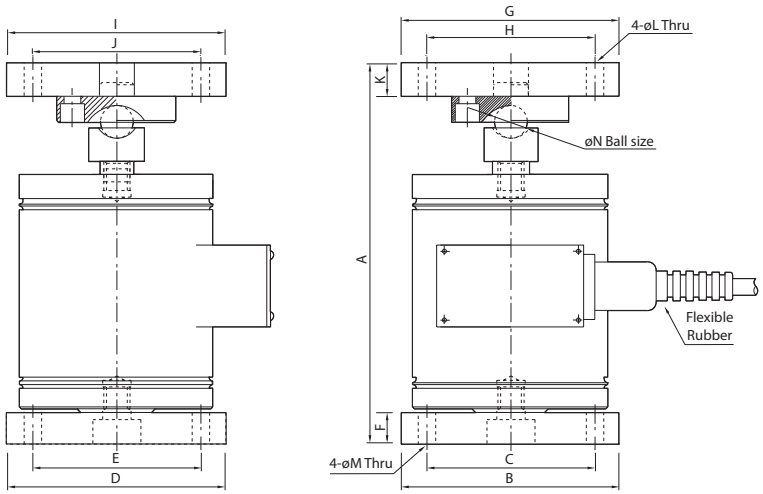
▶ CC-NR



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		
10tf	215	127	12	159	1.6	M39 x 2	97		10
20tf	290	165	16.2	199	1.6	M50 x 2	139.5		

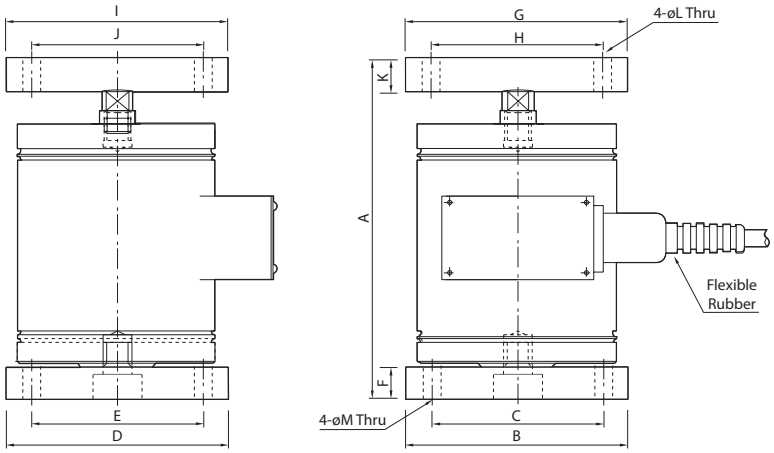
Accessory Dimensions

▶ 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 of 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 and bearing Type Accessory
  (20~1K : M12 x 1.25)
  (2~5K : M24 x 2.0)
  (10K : M39 x 2.0)
- CE approval

Application

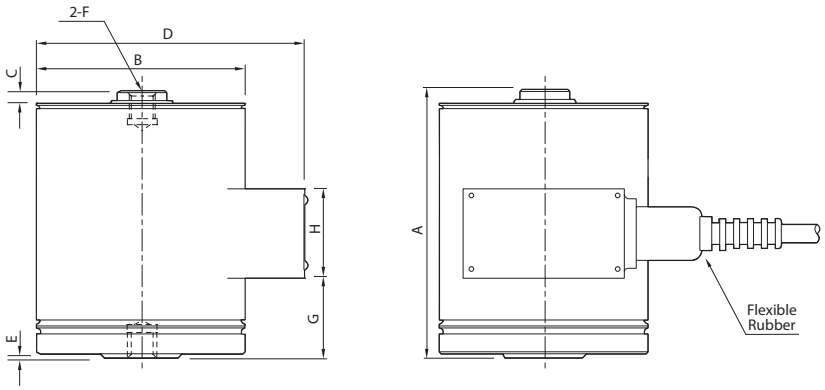
- Hoppers, Tanks

Specifications

Capacity(R.L.)		kgf	20, 50, 100, 200, 300, 500, 1K, 2K, 3K, 5K, 10K, 20K	
Rated Output Zero Balance		mV / V mV / V	3.0 ± 0.003 0.0 ± 0.03	
Accuracy Class		-	A	B
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.02 ≤ 0.02 ≤ 0.02 ≤ 0.01 ≤ 0.03 ≤ 0.03 ≤ 1/5000 0.0006	≤ 0.05 ≤ 0.05 ≤ 0.05 ≤ 0.02 ≤ 0.03 ≤ 0.03 ≤ 1/2000 0.0015
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.03 ≤ 0.03	≤ 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 Operating Temperature Range		°C °C	-10 to +40 -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

▶ 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		
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		

CT-NR | Noise Resistance Canister Load Cell

CE

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

Description

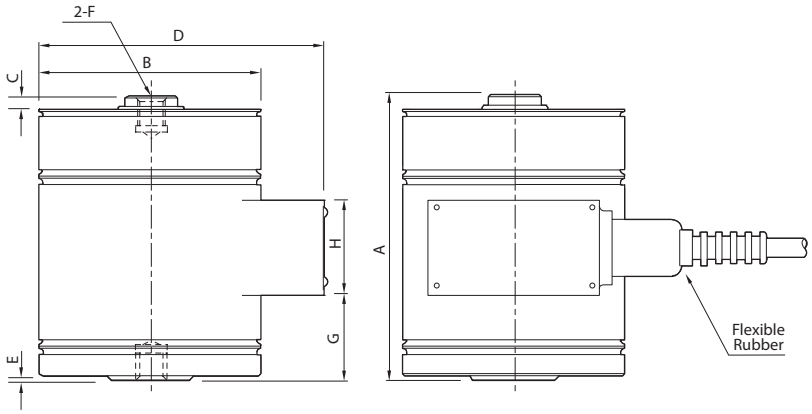
CT-NR is a canister type load cell of steel material with a strong electrical durability. Internal protection circuits provide protection against noise, surge, and lightning. Sealed tension type of load cell suitable for rough industrial environments such as hoppers and tanks and silo scales.

Specifications

Capacity(R.L.)		kgf	20, 50, 100, 200, 300, 500, 1K, 2K, 3K, 5K, 10K, 20K	
Rated Output Zero Balance		mV / V mV / V	3.0±0.003 0.0±0.03	
Accuracy Class		-	A	B
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.02 ≤ 0.02 ≤ 0.02 ≤ 0.01 ≤ 0.03 ≤ 0.03 ≤ 1/5000 0.0006	≤ 0.05 ≤ 0.05 ≤ 0.05 ≤ 0.02 ≤ 0.03 ≤ 0.03 ≤ 1/2000 0.0015
Temperature Effect on	- Zero Value - Output Value	%/10°C %/10°C	≤ 0.03 ≤ 0.03	≤ 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 Operating Temperature Range		°C °C	-10 to +40 -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

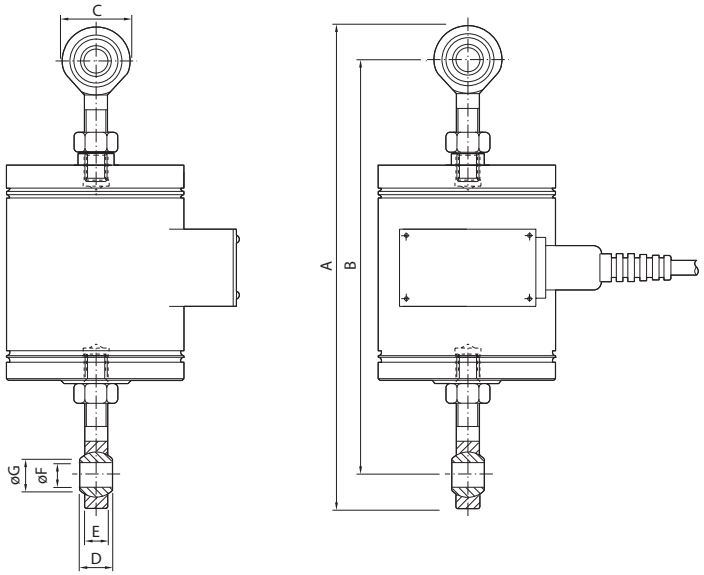
▶ CT-NR



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		
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		

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

Description

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

Features

- Tension type
- Stainless Steel Material
- Hermetically sealed structure
- Designed according to IP68

Option

- Intrinsic safety explosion (Ex ia IIC T4, 500kgf~5tf))
- Explosion proof (Ex d IIC T4, 200kgf~5tf)
- Dust explosion (Ex tD A21 T135°C IP66, 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

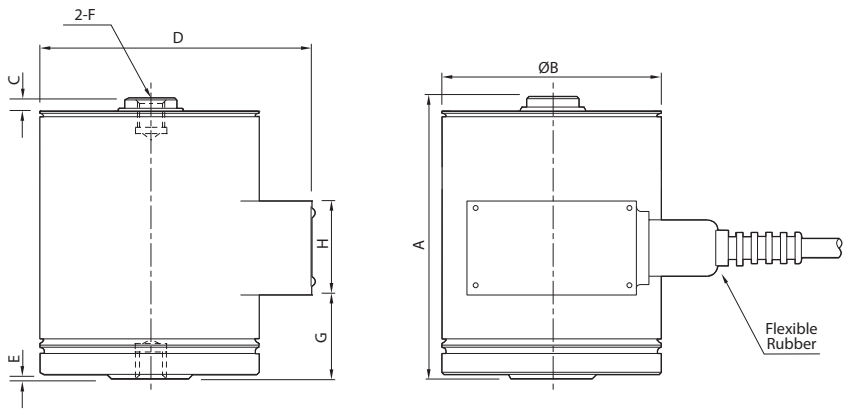
- Hoppers, Tanks

Specifications

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

Dimensions

▶ CTS



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

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.

Features

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

Option

- Intrinsic safety explosion (Ex ia IIC T4, 500kgf~5tf))
- Explosion proof (Ex d IIC T4, 200kgf~5tf)
- Dust explosion (Ex tD A21 T135°C IP66, 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

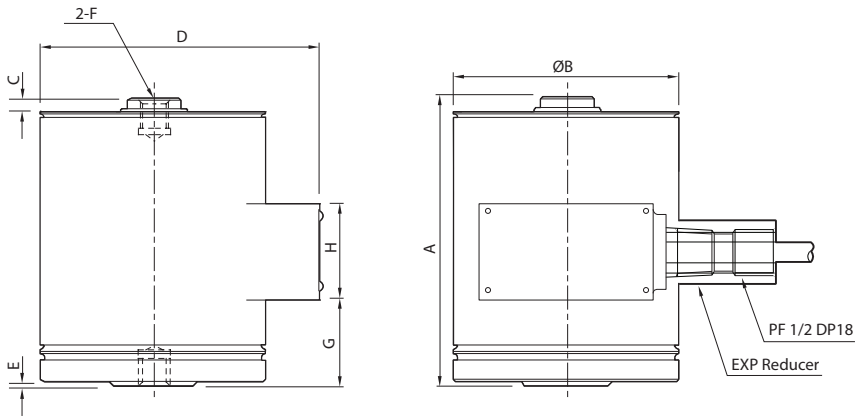
- Hoppers, Tanks

Specifications

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

Dimensions

▶ Intrinsic safety explosion, Explosion proof, Dust proof

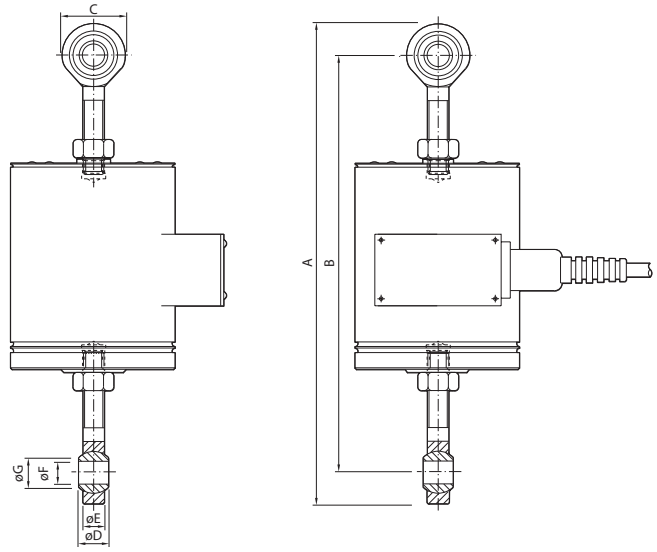


* Intrinsic safety explosion 500kgf~5tf

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	

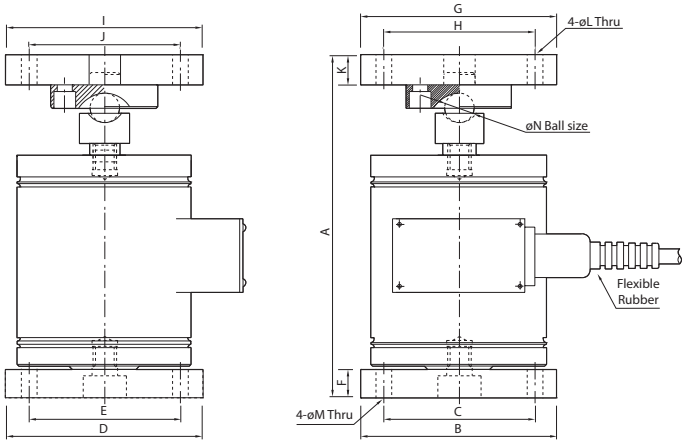
Accessory Dimensions

▶ CTS (Rod End Bearing)



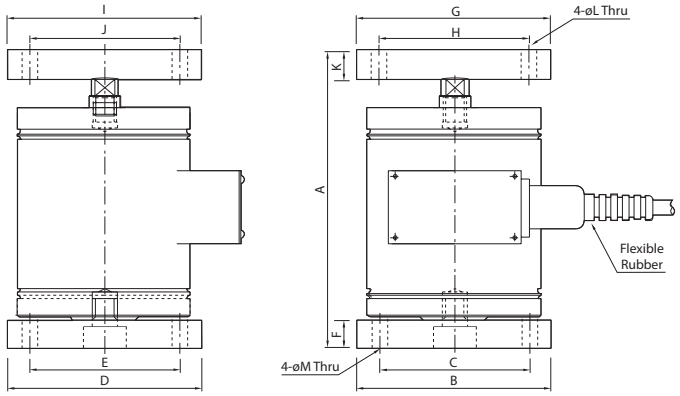
Capa.	A	B	C	D	E	ØF	ØG
200kgf~1tf	255 ~ 260	221 ~ 226	34	16	12	12	15.4
2~5tf	526 ~ 531	424 ~ 429	102	28	27	22	25.8

▶ 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

Description

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

Features

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

Option

- Accessory
- CE Approved (HC-NR)

Application

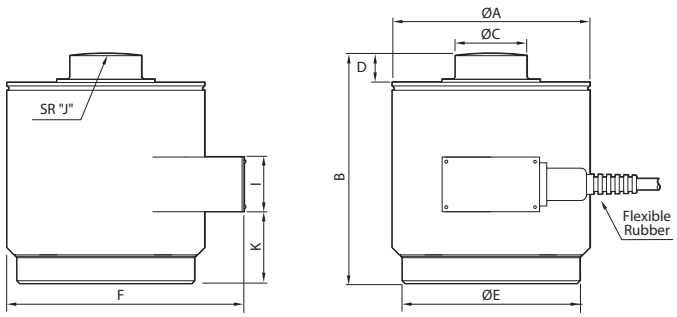
- Hoppers, Tanks

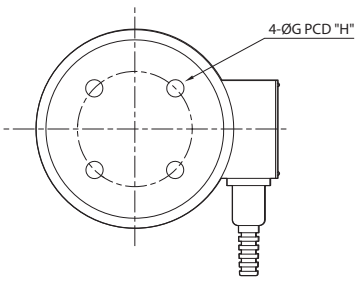
Specifications

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	%/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 +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





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

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

Application

- Hoppers, Silos, Tanks
- Compress equipment

Description

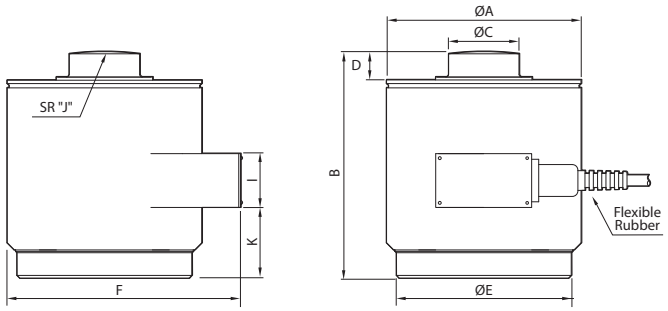
HC-NR is a canister type load cell of steel material with a strong electrical durability. Internal protection circuits provide protection against noise, surge, and lightning. Sealed pressure type of load cell suitable for rough industrial environments such as hoppers and tanks and silo scales.

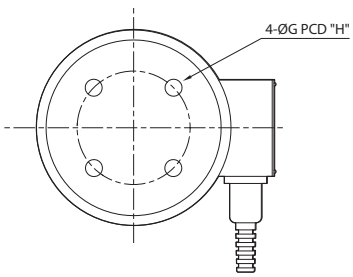
Specifications

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	%/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	≥ 500
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





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

CE

Features

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

Application

- Hoppers, Silos, Tanks
- Compress equipment

Description

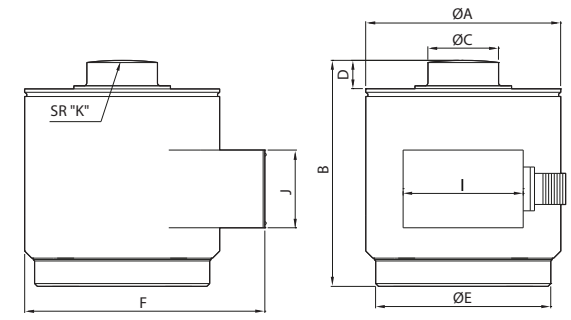
HC-D is a Canister type loadcell of steel material. It can not only be individually diagnosed with digital output but also enables easy loadcell replacement, problem detection, eccentricity compensation. Close structured compression type loadcell is suitable for rough industrial environment such as hoppers,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

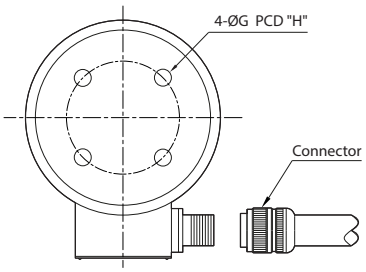
Specifications

Capacity(R.L.)		tf	20, 30, 50, 100, 200
Rated Output		counts	300,000
Zero Balance		counts	± 300
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min.		% R.O. % R.O. % R.O. % R.O. % R.O.	< 0.015 < 0.015 < 0.015 < 0.01 < 0.017
Temperature Effect on	- Zero Value - Output Value	% R.O./10°C % R.O./10°C	0.014 0.011
Compensated Temperature Range		°C	-10 ~ +40
Operating Temperature Range		°C	-30 ~ +80
Excitation	- Minimum - Recommended - Maximum	V V V	6 9 24
Insulation		MΩ	≥ 2,000
Safety Overload		% R.C.	150
Material		-	Steel / Coating
Commutication 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

▶ HC-D

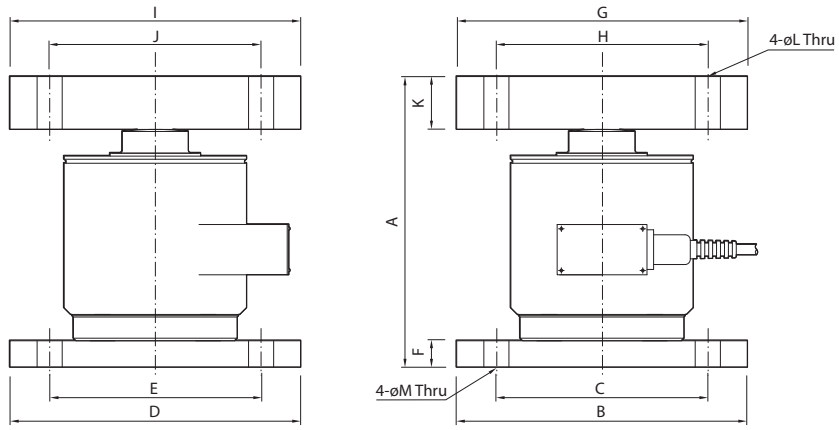




Capa.	A	B	C	D	E	F	G	H	I	J	Cable(m)
20~30tf	118	145	36	10	104	162.5	M12 x 1.75	80	85	55	10
50tf	138	160	50	20	124	182.5	M12 x 1.75	80			
100tf	158	190	70	20	144	202.5	M16 x 2	100			
200tf	214	230	95	30	188	261.5	M16 x 2	130			

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 Canister type loadcell. Close structured compression type loadcell is suitable for rough industrial environment such as hoppers, tanks and silo scales.

Features

- Compressed type
- Stainless Steel Material
- Hermetically sealed structure
- Anti-Explosive Structure (Pressure resistant, Dust ignition)
- Designed according to IP68

Application

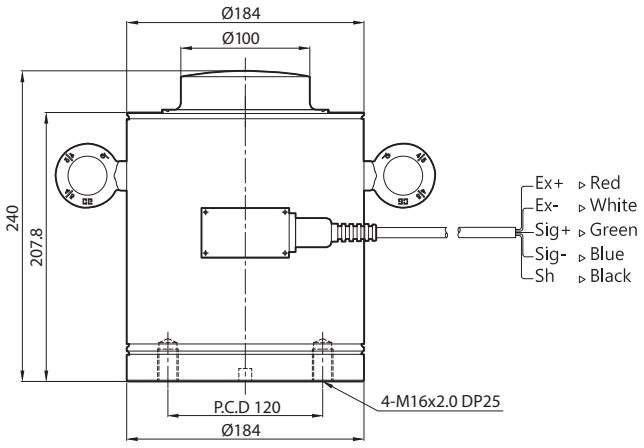
- Hopper, Tank scale

Specifications

Capacity(R.L.)		tf	100, 200, 300
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.002 0.0 ± 0.02
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.5 ≤ 0.5 ≤ 0.5 ≤ 0.1 ≤ 0.05 ≤ 0.05 ≤ 1/200 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 Operating Temperature Range		˚C ˚C	-10 to +70 -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

▶ HC



HCS-EXP | Explosion Proof Canister Load Cell

Description

HCS-EXP is a stainless steel Canister type loadcell. 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.

Features

- Compressed type
- Stainless Steel Material
- Hermetically sealed structure
- Anti-Explosive Structure (Pressure resistant, Dust ignition)
- Designed according to IP68

Option

- Pressure resistant (Ex d IIC T6)
- Dust ignition (EX tD A21 T85°C IP68)

Application

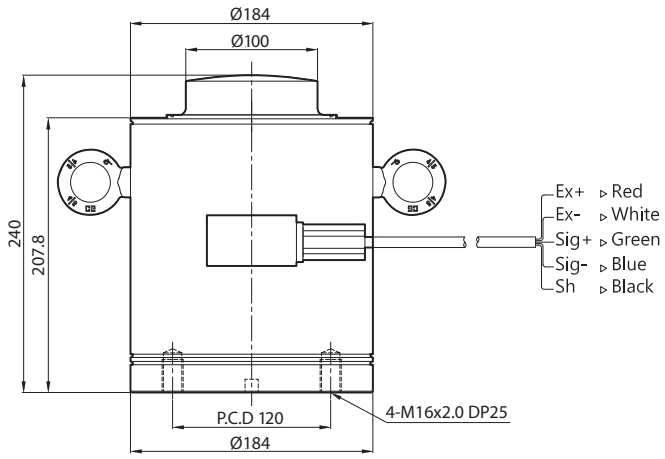
- Hoppers, Tank scales

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	%/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 +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



WBK | Canister Load Cell

Features

- Compressed type
- Stainless Steel Material
- Hermetically sealed structure
- Designed according to IP68 standard
- OIML C3 Approved (OIML R60, 10~50tf)
- Anti-Surge circuit

Option

- Intrinsic safety (Ex ia IIC T4)
- Pressure resistant (Ex d IIC T6)
- Dust ignition (EX tD A21 T85°C IP68)
- Truckscale Accessory SET
- WBK-NR (CE Certification)

Application

- Hopper, Silo, Tank Scale
- Truck scale

Description

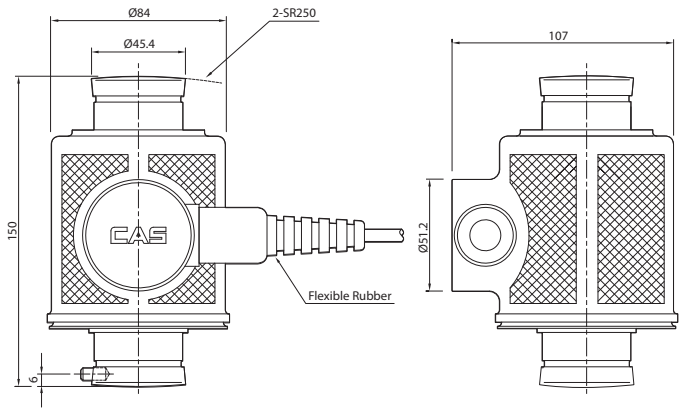
WBK is a stainless steel canister type loadcell. Close structured compression type loadcell is suitable for rough industrial environment such as hoppers, tanks and silo scales.

Specifications

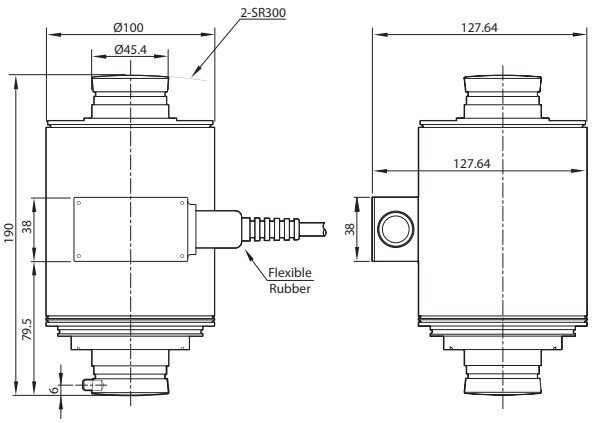
Capacity(R.L.)		tf	10, 20, 25, 30, 50, 100	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.005 0.0 ± 0.020	
Accuracy Class		-	C3	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.02 ≤ 0.02 ≤ 0.02 ≤ 0.01 ≤ 0.017 ≤ 0.017 ≤ 1/5000 0.0004	≤ 0.03 ≤ 0.03 ≤ 0.03 ≤ 0.02 ≤ 0.03 ≤ 0.03 ≤ 1/3000 0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.014 ≤ 0.011	≤ 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 Operating Temperature Range		°C °C	-10 to +40 -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)



WBK-NR | Noise Resistance Canister Load Cell

CE

Features

- Compressed type
- Stainless Steel Material
- Hermetically sealed structure
- Designed according to IP68
- Anti-Surge circuit
- CE Approved

Option

- Truckscale Accessory SET
- WBK-NR (CE Certification)

Application

- Hoppers, Silos and Tank Scales
- Truck Scales

Description

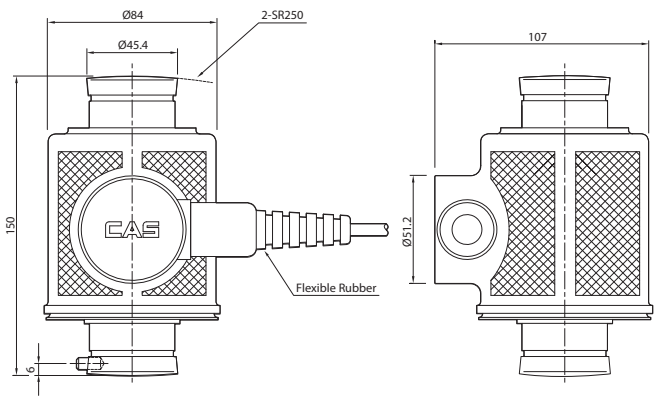
WBK-NR is stainless steel canister type loadcell with strong electrical endurance. Built in protection circuit can protect the loadcell from various noise, surge, and lightning. Close structured compression type loadcell is suitable for rough industrial environment such as hoppers, tanks and silo scales.

Specifications

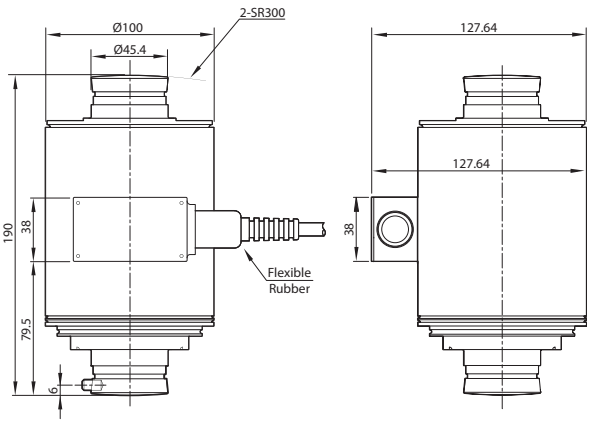
Capacity(R.L.)		tf	10, 20, 25, 30, 50, 100
Rated Output		mV / V	2.0±0.005
Zero Balance		mV / V	0.0±0.02
Accuracy Class		-	-
Non-Linearity		% R.O.	≤0.02
Hysteresis		% R.O.	≤0.02
Combined Error		% R.O.	≤0.02
Repeatability		% R.O.	≤0.01
Creep for 30min.		% R.O.	≤0.017
Return for 30min.		% R.O.	≤0.017
Resolution		-	≤1/5000
Division		mV / V	0.0004
Temperature Effect on	-Zero Value	%/10°C	≤ 0.014
	-Output Value	%/10°C	≤ 0.014
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	350 ± 3.5
	-Output	Ω	350 ± 3.5
	-Insulation	MΩ	≥ 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	V. %	75 AC/DC ±25%
	- RS	MHz	80 ~ 1000MHz, 10V/m
	- Surge	kV	±2

Dimensions

▶ 10tf~30tf



▶ 50tf~100tf



WBK-EXP | Explosion Proof Canister Load Cell

Description

WBK-EXP is a stainless steel Canister type loadcell. 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.

Features

- Compressed type
- Stainless Steel Material
- Explosion-proof Structure
- Hermetically sealed structure
- Designed according to IP68

Option

- Intrinsic safety (Ex ia IIC T4)
- Pressure resistant (Ex d IIC T6)
- Dust ignition (EX tD A21 T85°C IP68)
- Truckscale Accessory SET
- WBK-NR (CE Certification)

Application

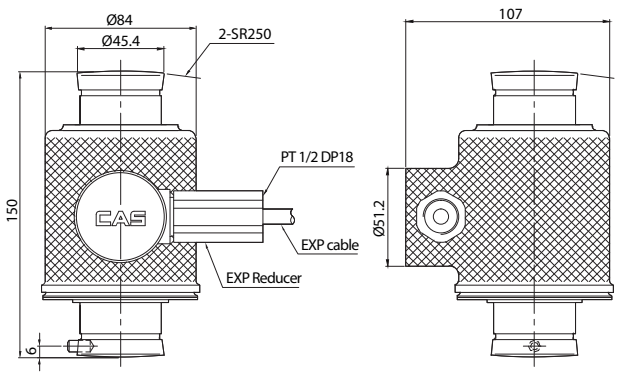
- Hoppers, Silos, Tank Scales
- Truck Scales

Specifications

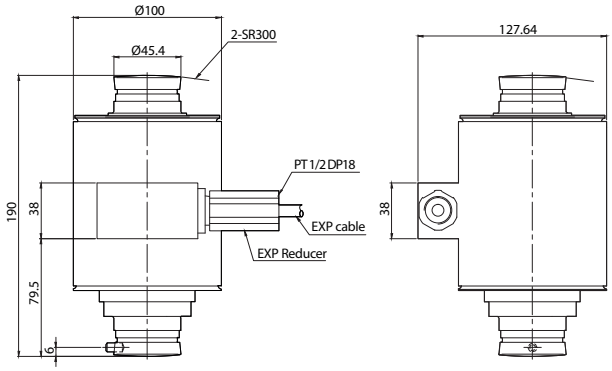
Capacity(R.L.)		tf	10, 20, 25, 30, 50, 100	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.005 0.0 ± 0.02	
Accuracy Class		-	A	B
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.02 ≤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

Dimensions

▶ 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

Description

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

Features

- Compressed 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

- Truckscale Accessory SET

Application

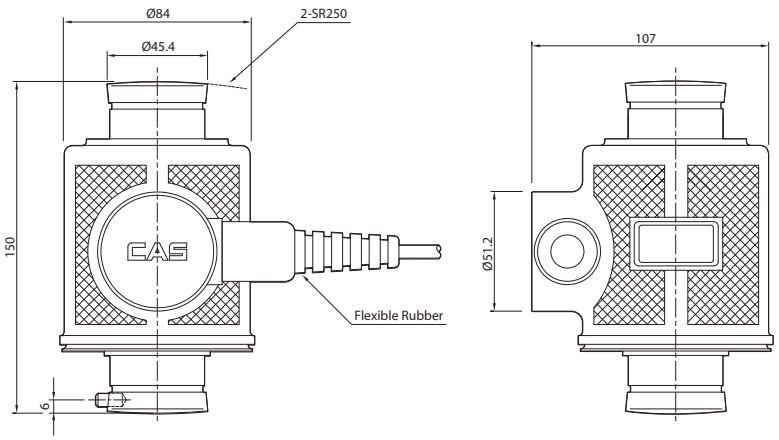
- Hoppers, Silos, Tank Scales
- Truck Scales

Specifications

Capacity(R.L.)		tf	10, 20, 25, 30
Rated Output		counts	300,000
Zero Balance		counts	± 300
Accuracy Class		-	C4
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min.		% R.O. % R.O. % R.O. % R.O. % R.O.	< 0.015 < 0.015 < 0.015 < 0.01 < 0.017
Temperature Effect on	- Zero Value - Output Value	% R.O./10°C % R.O./10°C	0.014 0.011
Compensated Temperature Range		°C	-10 ~ +40
Operating Temperature Range		°C	-40 ~ +80
Excitation	- Minimum - Recommended - Maximum	V V V	6 9 24
Insulation		MΩ	≥ 2,000
Safety Overload		% R.C.	150
Material		-	Stainless Steel
Commutication 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

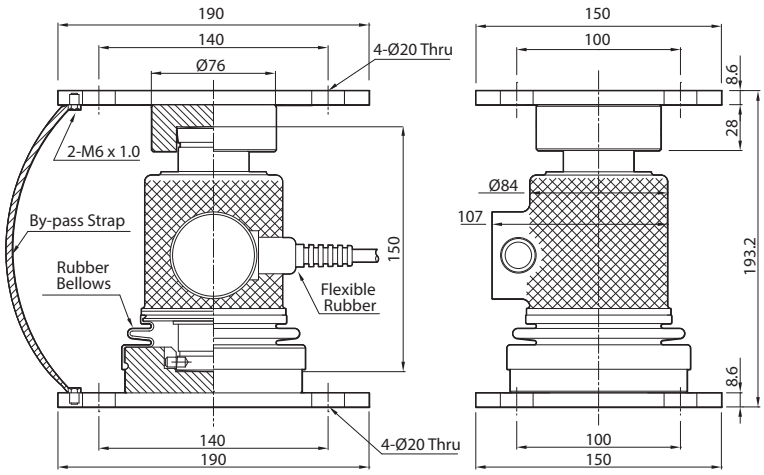
Dimensions

▶ WBK-D

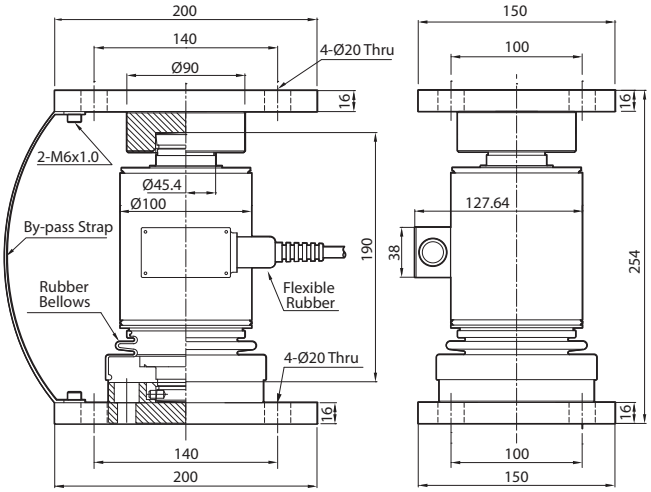


Accessory Dimensions

▶ WBK (10tf~30tf)



▶ WBK (50tf~100tf)



NWBK | Canister Load Cell

Description

NWBK is a stainless steel canister type loadcell. Close structured compression type loadcell is suitable for rough industrial environment such as hoppers, tanks and silo scales .

Features

- Compressed type
- Stainless Steel Material
- Hermetically sealed structure
- Designed according to IP68

Option

- Truckscale Accessory SET

Application

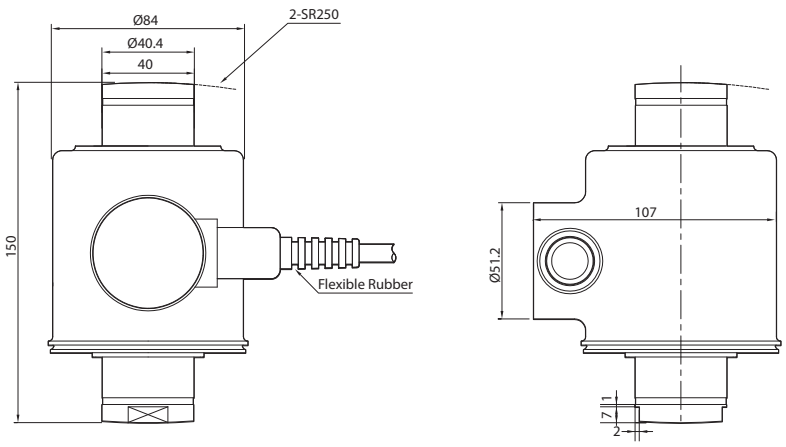
- Hoppers, Silos, Tank Scales
- Truck Scales

Specifications

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

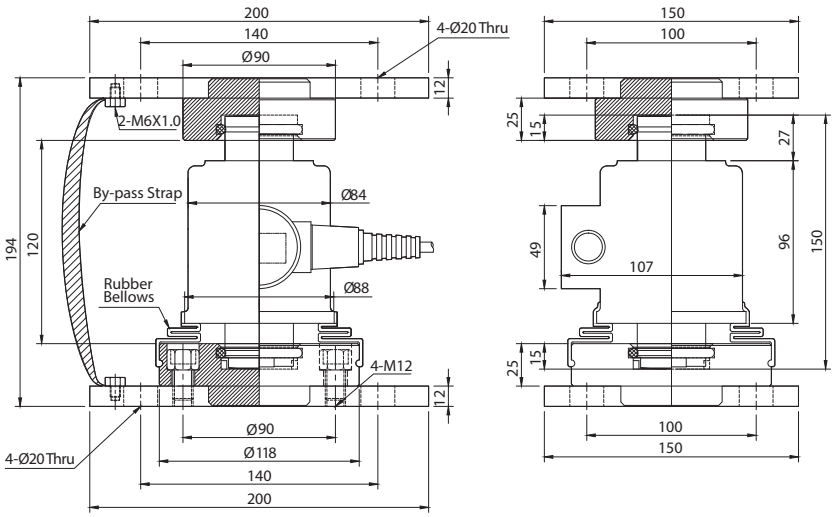
Dimensions

▶ NWBK



Accessory Dimensions

▶ NWBK



WBKL | Canister Load Cell

Features

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

Option

- Truckscale Accessory SET

Application

- Hopper, Silo, Tank Scale
- Truck scale

Description

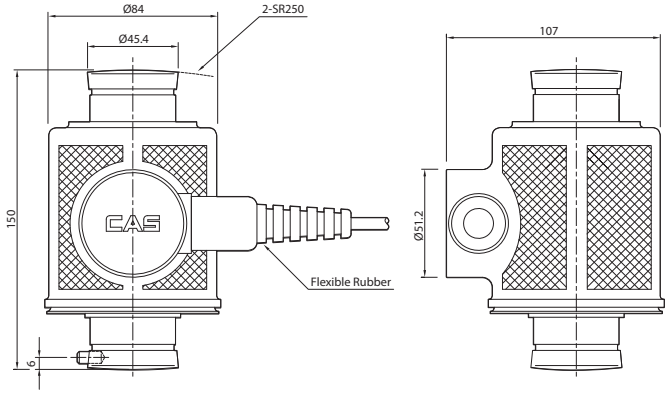
WBKL is a Canister type load cell of steel. Compressed type load cells with a sealed structure are suitable for harsh industrial environments such as hoppers, tanks, silos, and truck scales.

Specifications

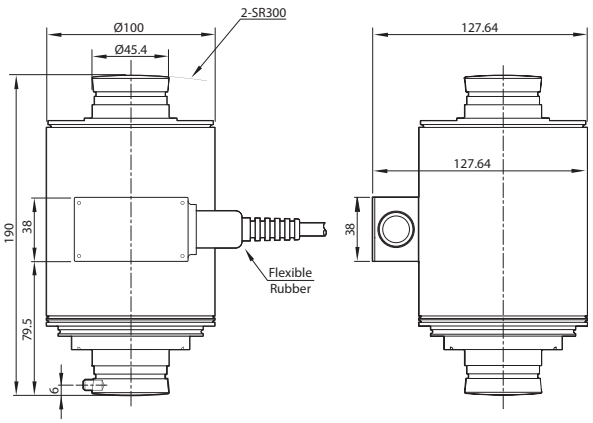
Capacity(R.L.)		tf	10, 20, 25, 30, 50, 100	
Rated Output		mV / V	2.0 ± 0.005	
Zero Balance		mV / V	0.0 ± 0.020	
Accuracy Class		-	A	B
Non-Linearity		% R.O.	≤ 0.02	≤ 0.03
Hysteresis		% R.O.	≤ 0.02	≤ 0.03
Combined Error		% R.O.	≤ 0.02	≤ 0.03
Repeatability		% R.O.	≤ 0.01	≤ 0.02
Creep for 30min.		% R.O.	≤ 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	≤ 0.03
	-Output Value	%/10°C	≤ 0.011	≤ 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	-40 to +8 0	
Material		-	Steel	
Cable Specification		-	Ø8 x 4P x 12M (PVC)	
Safety Overload		% R.L.	150	

Dimensions

▶ WBKL (10tf~30tf)

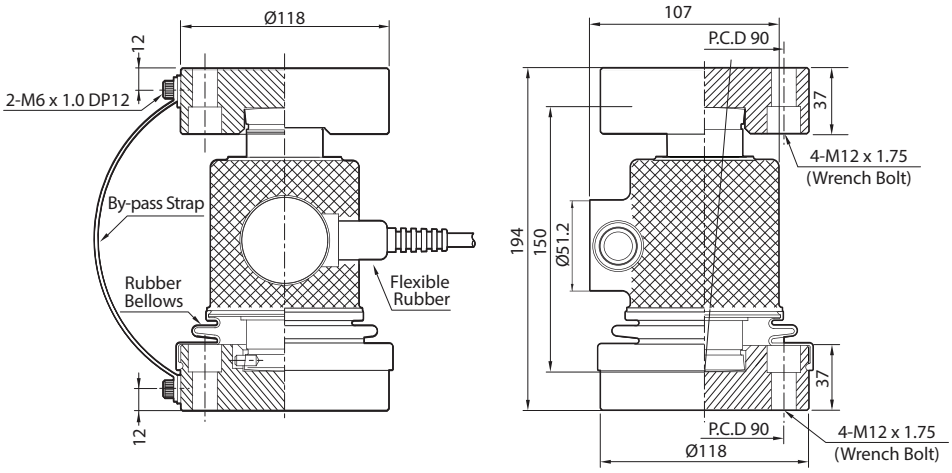


▶ WBKL (50tf~100tf)

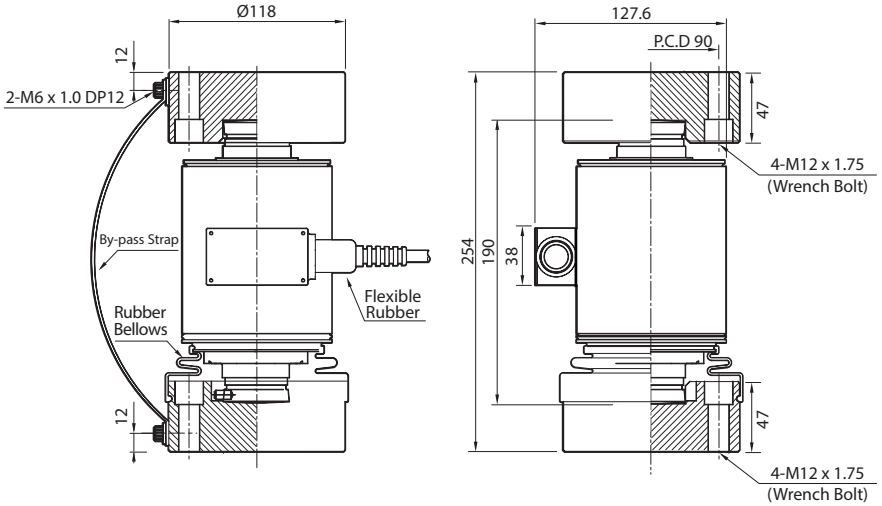


Accessory Dimensions

▶ 10tf~30tf



▶ 50tf~100tf



WBKC | Canister Load Cell

Features

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

Option

- Truckscale Accessory SET

Application

- Hopper, Silo, Tank Scale
- Truck scale

Description

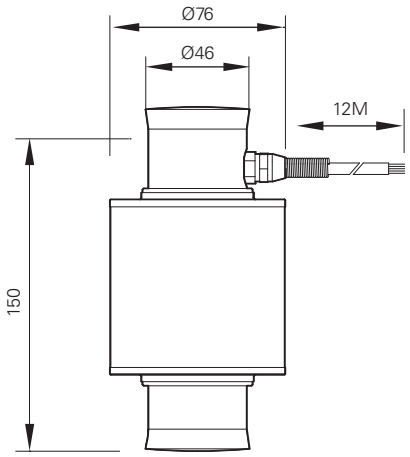
WBKC is a stainless steel Canister type load cell. Compressed type load cells with a sealed structure are suitable for harsh industrial environments such as hoppers, tanks, silos, and truck scales.

Specifications

Capacity(R.L.)		tf	10, 20, 25, 30	
Rated Output Zero Balance		mV / V mV / V	2.0 ± 0.005 0 ± 0.02	
Accuracy Class		-	C3	-
Non-Linearity Hysteresis Combined Error Repeatability Creep for 30min. Return for 30min. Resolution Division		% R.O. % R.O. % R.O. % R.O. % R.O. % R.O. - mV / V	≤ 0.02 ≤ 0.02 ≤ 0.02 ≤ 0.01 ≤ 0.017 ≤ 0.017 ≤ 1/5000 0.0004	≤ 0.03 ≤ 0.03 ≤ 0.03 ≤ 0.02 ≤ 0.03 ≤ 0.03 ≤ 1/3000 0.00067
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	≤ 0.014 ≤ 0.011	≤ 0.028 ≤ 0.015
Excitation	-Recommended -Maximum	V V	10 15	
Resistance	-Input -Output -Insulation	Ω Ω MΩ	350 ± 3.5, 700 ± 7 350 ± 3.5, 700 ± 7 > 2000	
Compensated Temperature Range Operating Temperature Range		°C °C	-10 to + 40 -30 to + 70	
Material		-	Stainless Steel	
Cable Specification		-	5Ø × 4P or 6P × 12M/15M (Urethane/PVC)	
Safety Overload		% R.L.	150	

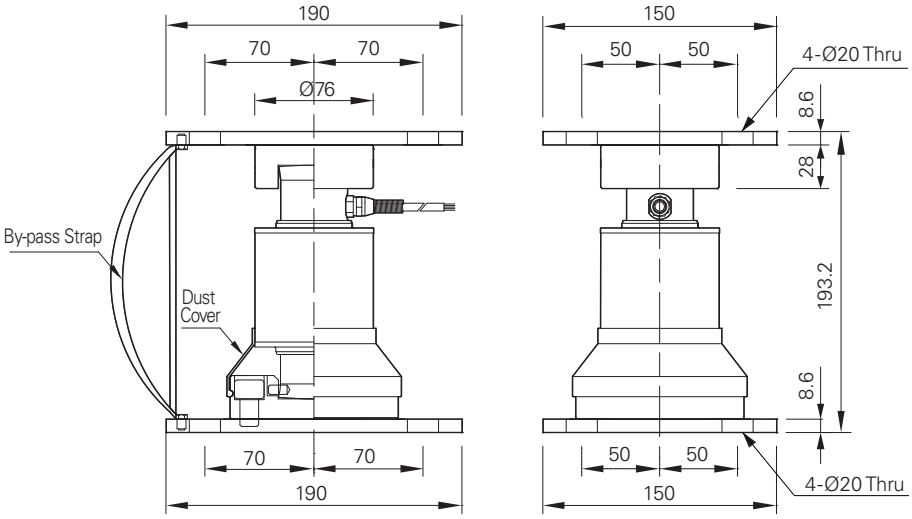
Dimensions

▶ WBKC

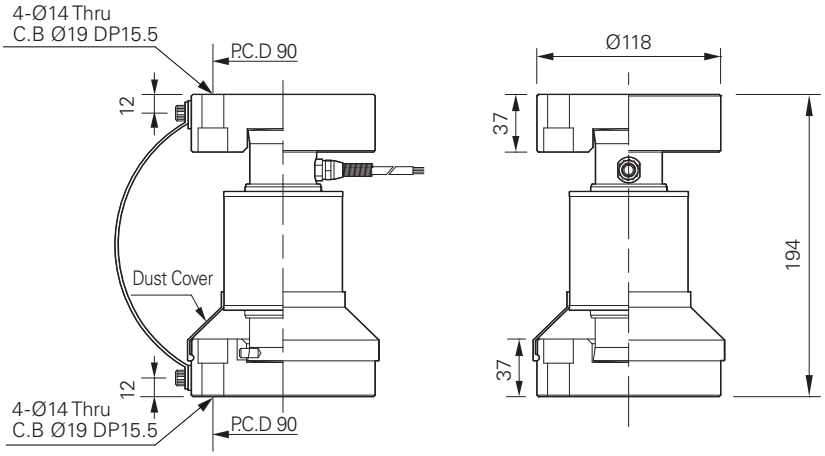


Accessory Dimensions

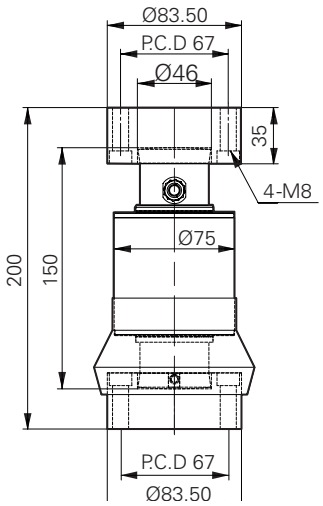
▶ WBKC TYPE1



▶ WBKC TYPE2



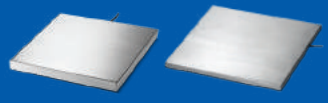
▶ WBKC TYPE3



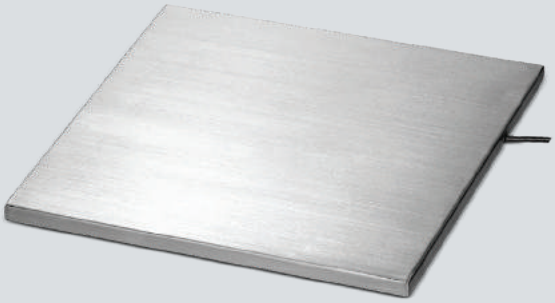
Platform Type Load Cell

SPL / EPL

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



SPL | Slim Platform Type Load Cell



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.

Features

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

Option

- 2-wire Transmitter: Built-in 4 ~ 20mA

Application

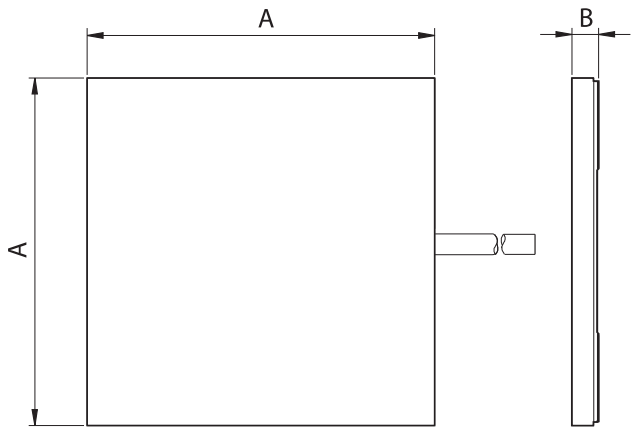
- Application to various industrial weighing devices

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	≤ 0.05
	-Output Value	%/10°C	≤ 0.05
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	760 ± 10
	-Output	Ω	700 ± 7
	-Insulation	MΩ	> 2000
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

▶ SPL



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

EPL | Slim Platform Type Load Cell

Description

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

Features

- Slim structure
- Stainless steel material (cover)

Application

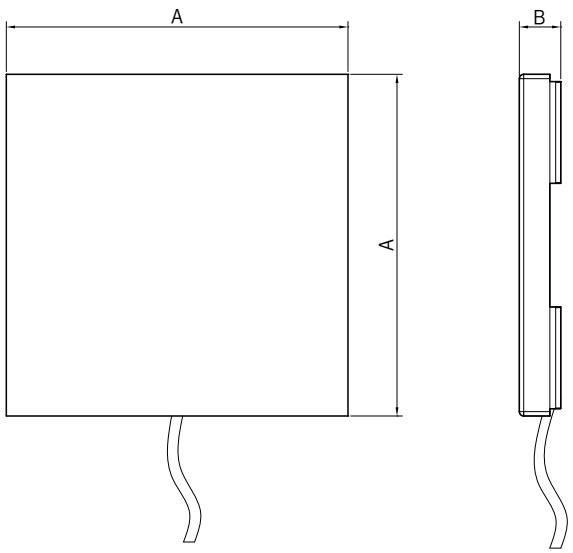
- Application to various industrial weighing devices

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	≤ 0.03
	-Output Value	%/10˚C	≤ 0.03
Excitation	-Recommended	V	10
	-Maximum	V	15
Resistance	-Input	Ω	820 ± 20
	-Output	Ω	700 ± 7
	-Insulation	MΩ	2000
Compensated Temperature Range		˚C	-10 to +40
Operating Temperature Range		˚C	-30 to +80
Material		-	aluminum (plate) / stainless steel (cover)
Cable Specification		-	Ø5.4 x 4P x 5m (Urethane)
Safety Overload		% R.L.	150

Dimensions

▶ EPL



Capa.	A	B
100kgf	250	29.5
200kgf	300	

INDUSTRIAL WEIGHING SOLUTION™

Special Type Load Cell

MAS (2, 3, 5, 6 Axis)

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

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

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.

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

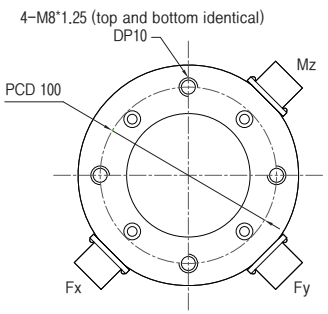
- Robot joint
- Wind tunnel test
- Other Tester

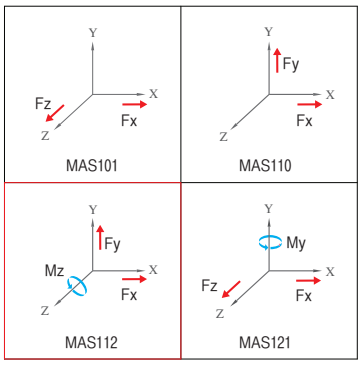
Specifications

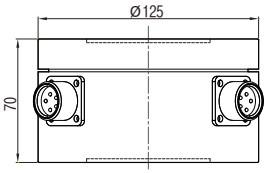
Capacity(R.L.)		kgf	2, 5, 10, 20, 50
Rated Output Zero Balance		mV / V mV / V	0.5 ± 0.005 0.0 ± 0.02
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error		% R.O. % R.O. % R.O.	≤0.5% FS for each component force ≤0.5% FS for each component force ≤0.5% FS for each component force
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	± 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 112



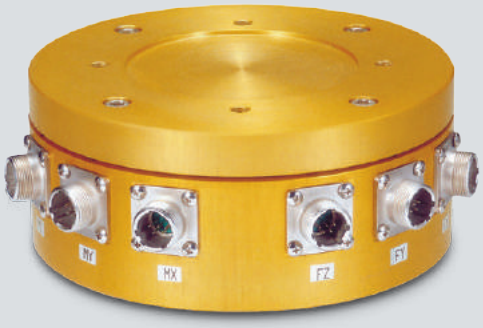




Type			Rated Load(Allowable Moment)					
			Fx (kgf)	Fy (kgf)	Fz (kgf)	Mx (kgf*m)	My (kgf*m)	Mz (kgf*m)
2AXIS	MAS101	2L	2	-	2	-	-	-
		5L	5	-	5	-	-	-
		10L	10	-	10	-	-	-
		20L	20	-	20	-	-	-
		50L	50	-	50	-	-	-
	MAS110	2L	2	2	-	-	-	-
		5L	5	5	-	-	-	-
		10L	10	10	-	-	-	-
		20L	20	20	-	-	-	-
		50L	50	50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

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)



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.

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 (MAS101, MAS110)
- 6-Axis (MAS112, MAS121)

Application

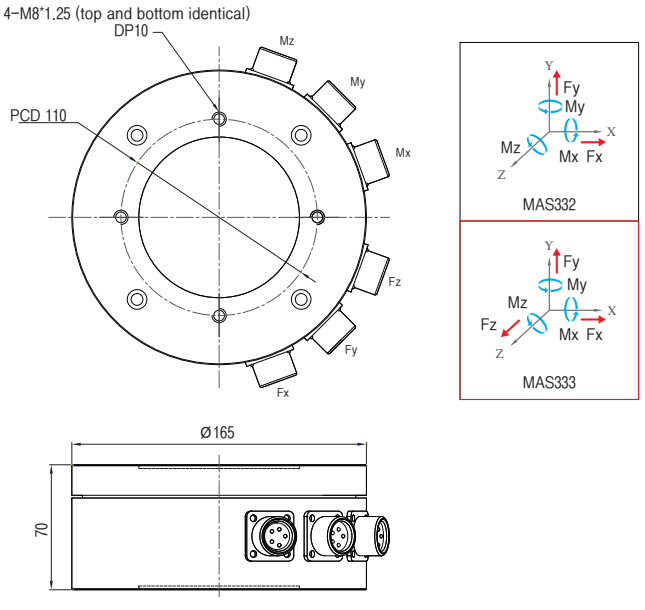
- Robot joint
- Wind tunnel test
- Other Tester

Specifications

Capacity(R.L.)		kgf	2, 5, 10, 20, 50
Rated Output Zero Balance		mV / V mV / V	0.5 ± 0.005 0.0 ± 0.02
Accuracy Class		-	-
Non-Linearity Hysteresis Combined Error		% R.O. % R.O. % R.O.	≤0.5% FS for each component force ≤0.5% FS for each component force ≤0.5% FS for each component force
Temperature Effect on	-Zero Value -Output Value	%/10°C %/10°C	± 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



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	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

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	2	0.2	0.2	0.2
		5L	5	5	5	0.5	0.5	0.5
		10L	10	10	10	1	1	1
		20L	20	20	20	2	2	2
		50L	50	50	50	5	5	5

Weighing Indicator/Controller/Component

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

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

CI-200 Series | Weighing Indicator


CI-200A


CI-200S


CI-201A


CI-200SC

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 (CI-200A/201A)
- Analog output (V-out/I-out)
- Comparing with weight through weight comparing blinker light (CI-200SC)

Option

- RS-442 / 485 interface

Specifications

Model	CI-200A/S/SC	CI-201A/S
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) Weight Comparison Lamp (CI-200SC, UNDER/OK/OVER 3 Lights)	6digits LCD (Character Height : 8mm, Inc. Backlight)
Key	10 Numeric key, 5 Function keys	
Interface	CI-200A/201A : COM Port (RS-232C) x 2EA, CI-200S/200SC/201S : 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	CI-200A/201A : ABS, CI-200S/CI-200SC/201S : Stainless Steel	
Product Size (W x D x H)	CI-200A/201A : 206 x 91 x 139mm, CI-200S/CI-200SC/201S : 250 x 83 x 193.7mm	
Product Weight	CI-200A/201A : 1.3kg, CI-200S/CI-200SC/201S : 1.5kg	

CI-2001AN/BN | Weighing Indicator

CI-2001AN

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

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 58 x 85mm	
Product Weight	0.5kg	

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)

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 130mm		
Product Weight	2kg		

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

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 ℃
Material	ABS
Product Size (W x D x H)	220 x 90 x 205mm
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)

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 × 100 × 66mm
Panel Cutting Size (W x H)		105 x 61mm
Product Weight		0.4kg

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)

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-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 × 53 × 105mm
Panel Cutting Size (W x H)		94 x 46mm
Product Weight		0.4kg

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)

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 × 66mm	
Panel Cutting Size (W x H)	105 x 61mm	
Product Weight	0.7kg	

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)

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)

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 In/Out

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	
Operating Power		AC100~250V 50/60Hz		
Operating Temp		-10 ~ 40°C		
Product Size (W x D x H)		185 x 102 x 92mm		
Panel Cutting Size (W x H)		186.5 x 93.5mm		
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)

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 100mm	
Panel Cutting Size (W x H)		186.5 x 93.5mm	
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

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-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

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 152mm
Product Weight		15kg

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

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 2ea / output 4ea (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		

CD-3000 Series | Remote Display

Features

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

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

TWN | Handheld Indicator

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)

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 202mm
Product Weight	0.2kg

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

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	O	O	O	O
	Through key			O	O
Interface	RS-485	O	O	O	O
	Analog Output		O		O
External (Input : 2ea / Output: 4ea)			O		O
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

DOM-01

DMP-4P

DMP-8P

Features

- Analog Digital Load Cell
- Compact design for installation
- Load cell status test possible
- RS-485 Interface Output

Application

- Various force and load monitoring
- Platform Scales
- Truck, Rail Scales
- Hoppers, Silos and Tank Scales

Specifications

Model		DOM-01	DMP-4P	DMP-8P
No. of Load cell connection		1ea	Up to 4ea (4P)	Up to 8ea (8P)
Product Weight		About 0.2kg	About 0.6kg	About 0.6kg
Product Size (W x D x H)		103x29x48mm	223x33x141.5mm	224x75x168mm
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	

JB-P / JB-PA Series | Junction Box

Features

- Designing according to IP65
- 3, 4, 6, 8 Load cell merging
- Material: JB-P (Aluminum), JB-PA (ABS)

Application

- Tank Scales
- Truck Scales
- Hopper Scales

Specifications

Model	JB-3P/PA	JB-4P/PA	JB-6P/PA	JB-8P/PA
Load cell merging	3ea	4ea	6ea	8ea
Material	JB-P (Aluminum), JB-PA (ABS)			

EXJB-P | Explosion-proof Junction Box

Features

- Ex d IIB T4 (IP65) Explosion proof structure
- Designing according to IP65
- 3, 4, 6 Load cell merging
- Material: Aluminum

Application

- Tank Scales
- Truck Scales
- Hopper Scales

Specifications

Model	EXJB-3P	EXJB-4P	EXJB-6P
load cell merging	3ea	4ea	6ea
Explosion Proof Class	Ex d IIB T4 IP65		
Material	Aluminum		

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 (± 25%)
Stage 2 Clamping Voltage	33 volts
Peak Current	10 kA 8/20μs
Insulation resistance	≥10GΩ
Circuit Impeadance	≒ 0 Ω
Enclosure Material	Polycarbonate (UL94-HB)
Operating Temp	-40 ~ 80°C
Diemensions (W x D x H)	145 x 91.4 x 40mm
Weight	0.5kg

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

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 110mm			
Panel Cutting Size(WxH)	60 x 104mm			
Product Weight	0.6kg			

www.globalcas.com

CAS CORPORATION
CAS BLDG., 1315, YANGJAE-DAERO
GANGDONG-GU, SEOUL, KOREA
TEL_82 2 2225 3500 / FAX_82 2 475 4668

* Specifications are subject to change without notice improvement.

Ver.1.0 502042