

LCS-D

Explosion-proof Construction Compression Load Cell



Explosion-proof*

*Explosion class and ignition degree of target gas or vapor: 2G4

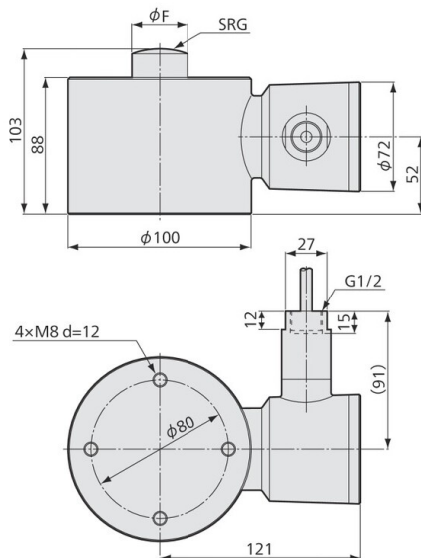
Certification number T20770 (Japanese Explosion-Proof Certification)

●Rated capacity: 5 to 50 kN

Load cells suitable for hazardous areas in petrochemical and steel industries where highly explosive liquids and gases are handled.

*Comply with "Constructional Requirements for Electrical Equipment for Explosive Atmospheres" established in Japan.

■Dimensions



Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.2\%$ RO
Hysteresis	Within $\pm 0.2\%$ RO
Repeatability	0.2% RO or less
Rated Output	2 mV/V $\pm 0.2\%$

Environmental Characteristics

Safe Temperature	-15 to 75°C
Compensated Temperature	-10 to 70°C
Temperature Effect on Zero	Within $\pm 0.007\%$ RO/°C
Temperature Effect on Output	Within $\pm 0.005\%$ /°C
Explosion-proof Environmental Conditions	
Ambient temperature: -10 to 40°C	
Relative humidity: 45 to 85%	

Electrical Characteristics

Safe Excitation	15 V AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	350 Ω $\pm 0.5\%$
Output Resistance	350 Ω $\pm 0.5\%$
Cable	4-conductor (0.3 mm ²) chloroprene shielded cable, 7.6 mm diameter by 5 m long, terminated with a connector plug PRC03-12A10-7M (Shield wire is connected to the case.)

Mechanical Properties

Safe Overloads	120%
Natural Frequencies	See table below.
Weight	Approx. 4.5 kg

■Optional Accessories

Saddle CA
Mount base CF
Movable saddle ER-B
Junction box JBS-C

■Models

Model	Rated Capacity	Natural Frequencies (Approx.)	ϕF	SRG	Saddle	Movable Saddle	Mount Base
LCS-500KD	5 kN	4 kHz	18	30	—	—	CF-80
LCS-1TD	10 kN	5.3 kHz	23	50	CA-10B	ER-53	
LCS-2TD	20 kN	6.2 kHz	24	50	CA-10B	ER-53	
LCS-5TD	50 kN	6 kHz	24	50	CA-10B	ER-53	CF-80

To Ensure Proper Usage

These are suitable for use in measuring tanks handling combustible liquids. They do not require an intrinsically safe explosion-proof Zener barrier. For details, check the "Guide to Factory Explosion-Proof Equipment for Users (2012)" technical guidelines released by the National Institute of Occupational Safety and Health, Japan.

Connector plug (standard)
PRC03-12A10-7M



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Sensor



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor