

## Load beam bending type U3C1-B

2023/03/22

## Features



- Compact size beam type load cell with tension and compression service.
- Suitable for a weighing system to which the mounting height is limited.

## Specification

Specification name	Specification contents
Rated capacity	49.03 N {5 kgf}~980.7 kN {100 kgf}
Safe overload	150 %R.C.
Ultimate overload	200 %R.C.
Rated output	3 mV/V±0.015 mV/V (U3C1-5K~10K-B : 3 mV/V±0.06 mV/V)
Non-linearity	0.05 %R.O.
Hysteresis	0.05 %R.O. (U3C1-5K~10K-B : 0.08 %R.O.)
Repeatability	0.03 %R.O.
Excitation, recommended	10 V or less
Excitation, maximum	15 V
Zero balance	±0.03 mV/V
Input resistance	450 Ω±50 Ω
Output resistance	350 Ω±5 Ω
Insulation resistance	2.000 MΩ or more (DC50 V) (Between bridge and main body)

## Load beam bending type U3C1-B

2023/03/22

Temperature resistance	2,000 times or more (2,000 Hz) (electronic stage and main body)
Temp. range, compensated	-10 °C~70 °C
Temp. range, safe	-20 °C~80 °C
Temp. effect on zero	0.05 %R.O./10 °C
Temp. effect on output	0.1 %LOAD/10 °C
Class of protection	IP64 or equivalent
Material of element	Aluminum
Paint	Black alumite
Durability	1,000,000 times with rated load applied.

## Table of P/N

Parts No.	Rated capacity [N]	Rated capacity [kgf]	Weight(Approx.) [g]	Natural frequency [Hz]	Rated displacement [mm]	Cable
U3C1-5K-B	49.03	5	143	157	0.3	φ3.2, 4-cores shielded 3 m cable directly attached, and cable end is separated.
U3C1-10K-B	98.07	10	143	250	0.3	φ3.2, 4-cores shielded 3 m cable directly attached, and cable end is separated.
U3C1-20K-B	196.1	20	143	418	0.3	φ3.2, 4-cores shielded 3 m cable directly attached, and cable end is separated.
U3C1-50K-B	490.3	50	143	553	0.5	φ3.2, 4-cores shielded 3 m cable directly attached, and cable end is separated.
U3C1-100K-B	980.7	100	143	1150	0.7	φ3.2, 4-cores shielded 3 m cable directly attached, and cable end is separated.

Parts No.	3D CAD files [STEP]	CAD files[DXF]
U3C1-5K-B	<a href="#">U3C1-5K-B.STEP</a>	<a href="#">u3c1.dxf</a>
U3C1-10K-B	<a href="#">U3C1-10K-B.STEP</a>	<a href="#">u3c1.dxf</a>
U3C1-20K-B	<a href="#">U3C1-20K-B.STEP</a>	<a href="#">u3c1.dxf</a>
U3C1-50K-B	<a href="#">U3C1-50K-B.STEP</a>	<a href="#">u3c1.dxf</a>
U3C1-100K-B	<a href="#">U3C1-100K-B.STEP</a>	<a href="#">u3c1.dxf</a>