

Square beam type load cell C3B1- \* -NS series  
(General spec.)

2024/02/28

Features



Ideal for the measuring system of floor scale, tank scale and hopper.

Specification

Specification name	Specification contents
Rated capacity	1.961 kN {200 kgf}~49.03 kN {5 tf}
Safe overload	150 %R.C.
Ultimate overload	200 %R.C.
Rated output	3 mV/V±0.003 mV/V
Non-linearity	0.025 %R.O.
Hysteresis	0.025 %R.O.
Repeatability	0.025 %R.O.
Creep	0.03 %R.O./20 min
Creep recovery	0.03 %R.O./20 min
Excitation, recommended	12 V or less
Max. excitation	20 V
Zero balance	±0.03 mV/V
Input resistance	420 Ω±40 Ω
Output resistance	350 Ω±5 Ω
Insulation resistance	2,000 MΩ or more (DC50 V) (between bridge 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

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Temp. effect on output	0.02 %LOAD/10 ℃
Class of protection	IP67 or equivalent
Paint	Epoxy resin Paint (Black)
Material of element	Alloy steel
Durability	1,000,000 times with rated load applied.

Table of P/N

Parts No.	Rated capacity [kN]	Rated capacity [kgf]	Rated capacity [tf]	Natural frequency [Hz]	Rated displacement [mm]	Weight(Approx. ) [kg]
C3B1-200K-NS	1.961	200		2600	0.5	1
C3B1-300K-NS	2.942	300		2600	0.5	1.1
C3B1-500K-NS	4.903	500		2600	0.5	1.1
C3B1-1T-NS	9.807		1	2500	0.5	1.1
C3B1-2T-NS	19.61		2	2300	0.9	2
C3B1-3T-NS	29.42		3	2200	0.9	2
C3B1-5T-NS	49.03		5	2200	0.9	2

Parts No.	Cable	3D CAD files [STEP]	CAD files [DXF]	Specification sheet	Instruction Manual
C3B1-200K-NS	φ4.7, 4-cores shielded 6 m cable directly attached. with Y-type crimp terminal lugs at cable end.	<a href="#">C3B1-200K~1T-NS.zip</a>	<a href="#">c3b1_200k.dxf</a>	<a href="#">No.K507309-2</a>	<a href="#">ENKT60242-1_C3B1+C2B1B+CBC1+CBE1+U3C1.pdf</a>
C3B1-300K-NS	φ4.7, 4-cores shielded 6 m cable directly attached. with Y-type crimp terminal lugs at cable end.	<a href="#">C3B1-200K~1T-NS.zip</a>	<a href="#">c3b1_200k.dxf</a>	<a href="#">No.K507309-2</a>	<a href="#">ENKT60242-1_C3B1+C2B1B+CBC1+CBE1+U3C1.pdf</a>

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C3B1-500K-NS	φ4.7, 4-cores shielded 6 m cable directly attached. with Y-type crimp terminal lugs at cable end.	C3B1-200K~1T-NS.zip	c3b1_200k.dxf	No.K507309-2	ENKT60242-1_C3B1+C2B1B+CBC1+CBE1+U3C1.pdf
C3B1-1T-NS	φ4.7, 4-cores shielded 6 m cable directly attached. with Y-type crimp terminal lugs at cable end.	C3B1-200K~1T-NS.zip	c3b1_200k.dxf	No.K507309-2	ENKT60242-1_C3B1+C2B1B+CBC1+CBE1+U3C1.pdf
C3B1-2T-NS	φ4.7, 4-cores shielded 6 m cable directly attached. with Y-type crimp terminal lugs at cable end.	C3B1-2T~5T-NS.zip	c3b1_2t.dxf	No.K507309-2	ENKT60242-1_C3B1+C2B1B+CBC1+CBE1+U3C1.pdf
C3B1-3T-NS	φ4.7, 4-cores shielded 6 m cable directly attached. with Y-type crimp terminal lugs at cable end.	C3B1-2T~5T-NS.zip	c3b1_2t.dxf	No.K507309-2	ENKT60242-1_C3B1+C2B1B+CBC1+CBE1+U3C1.pdf
C3B1-5T-NS	φ4.7, 4-cores shielded 6 m cable directly attached. with Y-type crimp terminal lugs at cable end.	C3B1-2T~5T-NS.zip	c3b1_2t.dxf	No.K507309-2	ENKT60242-1_C3B1+C2B1B+CBC1+CBE1+U3C1.pdf

## Options

&lt;Bearing plate&gt;

BP(SB)/RP(SB) series BPRP1

&lt;Rocker pin&gt;

BP(SB)/RP(SB) series BPRP1

&lt;Mounting attachment with slide-stop mechanism&gt;

Rocker pin method mounting attachment RCA-C3B1 series