

Compact type(U3)

2023/03/22

Features



High accuracy, tension / compression service load cell

Specification

Specification name	Specification contents
Rated capacity	196.1 N{20 kgf}~9.807 kN{1 tf}
Safe overload	150 %R.C.
Ultimate overload	200 %R.C.
Rated output	3 mV/V±0.015 mV/V
Non-linearity	0.05 %R.O.
Hysteresis	0.05 %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	350 Ω±3.5 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

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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	U3B1-20K~200K-B : Alluminium alloy, U3B1-500K~1T-B : Alloy steel
Durability	1,000,000 times with rated load applied.

Table of P/N

Parts No.	Rated capacity [N]	Rated capacity [kN]	Weight(Approx.) [kg]	Natural frequency [Hz]	Rated displacement [mm]	Cable
U3B1-20K-B	196.1		0.33	600	0.18	φ6.3, 4-cores shielded 3 m cable 3 m directly attached, Y-type crimp terminal lugs are attached at cable end.
U3B1-50K-B	490.3		0.33	1100	0.16	φ6.3, 4-cores shielded 3 m cable 3 m directly attached, Y-type crimp terminal lugs are attached at cable end.
U3B1-100K-B	980.7		0.33	1600	0.14	φ6.3, 4-cores shielded 3 m cable 3 m directly attached, Y-type crimp terminal lugs are attached at cable end.
U3B1-200K-B		1.961	0.33	2100	0.12	φ6.3, 4-cores shielded 3 m cable 3 m directly attached, Y-type crimp terminal lugs are attached at cable end.
U3B1-500K-B		4.903	0.63	2600	0.14	φ6.3, 4-cores shielded 3 m cable 3 m directly attached, Y-type crimp terminal lugs are attached at cable end.
U3B1-1T-B		9.807	0.63	3000	0.12	φ6.3, 4-cores shielded 3 m cable 3 m directly attached, Y-type crimp terminal lugs are attached at cable end.

Parts No.	3D CAD files [STEP]	CAD files[DXF]	Specification sheet	Instruction Manual
U3B1-20K-B	U3B1-20K-B.STEP	u3b1_20k.dxf	No.K102767-2-B	No.ENKT60247-1-G
U3B1-50K-B	U3B1-50K-B.STEP	u3b1_20k.dxf	No.K102767-2-B	No.ENKT60247-1-G
U3B1-100K-B	U3B1-100K-B.STEP	u3b1_100k.dxf	No.K102767-2-B	No.ENKT60247-1-G

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U3B1-100K-B	U3B1-100K-B.STEP	u3b1_100k.dxf	No.K102767-2-B	No.ENKT60247-1-G
U3B1-200K-B	U3B1-200K-B.STEP	u3b1_200k.dxf	No.K102767-2-B	No.ENKT60247-1-G
U3B1-500K-B	U3B1-500K-B.STEP	u3b1_200k.dxf	No.K102767-2-B	No.ENKT60247-1-G
U3B1-1T-B	U3B1-1T-B.STEP	u3b1_200k.dxf	No.K102767-2-B	No.ENKT60247-1-G

Options

load button

Spherical rod end