

Low profile shear-web type UWV1

2023/03/22

Features



Low profile, shear web type load cell.

It is strong in lateral load and suitable to use in the limited space.

Specification

Specification name	Specification contents
Rated capacity	19.61 kN{2 tf}~980.7 kN{100 tf}
Safe overload	150 %R.C.
Ultimate overload	200 %R.C.
Rated output	3 mV/V±0.0075 mV/V
Non-linearity	0.1 %R.O. (UWV1-50T~100T : 0.2 %R.O.)
Hysteresis	0.1 %R.O. (UWV1-50T~100T : 0.2 %R.O.)
Repeatability	0.02 %R.O. (UWV1-50T~100T : 0.05 %R.O.)
Excitation, recommended	12 V or less
Excitation, maximum	20 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)

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2023/03/22

Temperature resistance	±0.05% R.O./10°C (20°C ~ 70°C), ±0.02% R.O./10°C (70°C ~ 80°C)
Temp. range, compensated	-10 °C ~ 70 °C
Temp. range, safe	-20 °C ~ 80 °C
Temp. effect on zero	0.03 %R.O./10 °C
Temp. effect on output	0.03 %LOAD/10 °C
Class of protection	IP64 or equivalent
Material of element	Alloy steel
Paint	Painted with epoxy resin.(Munsell 6GY3.5/2 half-polished resemblance color)
Durability	1,000,000 times with rated load applied.

Table of P/N

Parts No.	Rated capacity [kN]	Rated capacity [tf]	Weight(Approx.) [kg]	Natural frequency [Hz]	Rated displacement [mm]	Cable
UWV1-2T	19.61	2	3.1	4800	0.05	φ10, 4-cores shielded 3 m cable directly attached, Y-type crimp terminal lugs are attached at cable end.
UWV1-5T	49.03	5	4	6500	0.05	φ10, 4-cores shielded 3 m cable directly attached, Y-type crimp terminal lugs are attached at cable end.
UWV1-10T	98.07	10	6.4	6300	0.05	φ10, 4-cores shielded 3 m cable directly attached, Y-type crimp terminal lugs are attached at cable end.
UWV1-20T	196.1	20	15.5	4800	0.05	φ10, 4-cores shielded 3 m cable directly attached, Y-type crimp terminal lugs are attached at cable end.
UWV1-50T	490.3	50	29	5400	0.05	φ10, 4-cores shielded 3 m cable directly attached, Y-type crimp terminal lugs are attached at cable end.
UWV1-100T	980.7	100	74	3400	0.09	φ10, 4-cores shielded 3 m cable directly attached, Y-type crimp terminal lugs are attached at cable end.

Parts No.	3D CAD files [STEP]	CAD files[DXF]
UWV1-2T	UWV1-2T STEP	UWV1-2T dxf

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UWV1-2T	UWV1-2T.STEP	uwv1_2t.dxf
UWV1-5T	UWV1-5T.STEP	uwv1_5t.dxf
UWV1-10T	UWV1-10T.STEP	uwv1_10t.dxf
UWV1-20T	UWV1-20T.STEP	uwv1_20t.dxf
UWV1-50T	UWV1-50T.STEP	uwv1_50t.dxf
UWV1-100T	UWV1-100T.STEP	uwv1_100t.dxf

Options

Spherical rod end