

Miniature type LSM - B

2023/03/22

Features



- Miniature type load cell. Suitable for applications with limited space.
- The load cell fixation can be made by an adhesive or a double-faced tape.

Specification

Specification name	Specification contents
Rated capacity	4.903 N{500 gf} ~ 19.61 kN{2 tf}
Safe overload	150 %R.C.
Ultimate overload	150 %R.C. (500K~2T : 200 %R.C.)
Rated output	0.8 mV/V±0.4 mV/V (LSM-500G-B(-U)), 1.0 mV/V±0.4 mV/V (LSM-1K~100K-B(-U)), 1.5 mV/V±0.5 mV/V (LSM-500K ~ 2T-B)
Non-linearity	1 %R.O. (LSM-2T-B : 2 %R.O.), (LSM-500G~100K-B-U : 0.5 %R.O.)
Hysteresis	1 %R.O. (LSM-500G~100K-B-U : 0.5 %R.O.)
Repeatability	1 %R.O. (LSM-500G~100K-B-U : 0.5 %R.O.)
Excitation, recommended	5 V or less
Excitation, maximum	8 V
Zero balance	±0.2 mV/V
Input resistance	350 Ω±10 Ω

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Output resistance	350 Ω±10 Ω
Insulation resistance	1,000 MΩ or more (DC50 V) (between bridge and main body)
Temp. range, compensated	0 °C ~ 50 °C (500K~2T : -10 °C~60 °C)
Temp. range, safe	-10 °C ~ 60 °C (500K~2T : -10 °C~70 °C)
Temp. effect on zero	2 %R.O./10 °C (500K~2T : 1 %R.O./10 °C)
Temp. effect on output	2 %LOAD/10 °C (500K~2T : 1 %LOAD/10 °C)
Class of protection	IP60 or equivalent
Material of element	LSM-500G ~ 2K-B(-U) : Aluminium alloy LSM-5K ~ 2T-B(-U) : Stainless steel (Non-electrolysis nickel plating processing)
Durability	1,000,000 times with rated load applied.

Table of P/N

Parts No.	Rated capacity [N]	Rated capacity [kN]	Rated capacity [gf]	Rated capacity [kgf]	Rated capacity [tf]	Weight(Approx.) [g]
LSM-500G-B(-U)	4.903		500			6
LSM-1K-B(-U)	9.807			1		6
LSM-2K-B(-U)	19.61			2		6
LSM-5K-B(-U)	49.03			5		6
LSM-10K-B(-U)	98.07			10		10
LSM-20K-B(-U)	196.1			20		10
LSM-50K-B(-U)	490.3			50		20
LSM-100K-B(-U)	980.7			100		22
LSM-500K-B		4.903		500		25
LSM-1T-B		9.807			1	25
LSM-2T-B		19.610			2	25

Parts No.	Natural frequency [Hz]	Rated displacement [mm]	Cable	3D CAD files [STEP]	CAD files[DXF]
LSM-500G-	10000	0.05	φ1.8, 4 -cores shielded 3 m cable directly attached. Cable end separated.	LSM-500G-B(-U).STEP	lsm_500gb.dxf

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B(-U)					
LSM-1K-B(-U)	10000	0.05	φ1.8, 4 -cores shielded 3 m cable directly attached. Cable end separated.	LSM-1K-B(-U).STEP	lsm_500gb.dxf
LSM-2K-B(-U)	16000	0.05	φ1.8, 4 -cores shielded 3 m cable directly attached. Cable end separated.	LSM-2K-B(-U).STEP	lsm_500gb.dxf
LSM-5K-B(-U)	21000	0.05	φ1.8, 4 -cores shielded 3 m cable directly attached. Cable end separated.	LSM-5K-B(-U).STEP	lsm_500gb.dxf
LSM-10K-B(-U)	14000	0.05	φ1.8, 4 -cores shielded 3 m cable directly attached. Cable end separated.	LSM-10K-B(-U).STEP	lsm_10kb.dxf
LSM-20K-B(-U)	19000	0.05	φ1.8, 4 -cores shielded 3 m cable directly attached. Cable end separated.	LSM-20K-B(-U).STEP	lsm_10kb.dxf
LSM-50K-B(-U)	29000	0.05	φ1.8, 4 -cores shielded 3 m cable directly attached. Cable end separated.	LSM-50K-B(-U).STEP	lsm_50kb.dxf
LSM-100K-B(-U)	33000	0.05	φ1.8, 4 -cores shielded 3 m cable directly attached. Cable end separated.	LSM-100K-B(-U).STEP	lsm_100kb.dxf
LSM-500K-B	50000	0.05	φ3.2, 4-cores shielded 3 m cable directly attached, and cable end is separated.	LSM-500K-B.STEP	lsm-500k.dxf
LSM-1T-B	50000	0.05	φ3.2, 4-cores shielded 3 m cable directly attached, and cable end is separated.	LSM-1T-B.STEP	lsm-500k.dxf
LSM-2T-B	50000	0.05	φ3.2, 4-cores shielded 3 m cable directly attached, and cable end is separated.	LSM-2T-B.STEP	lsm-500k.dxf