

Compact size compression type load cell CMM1R- ※ series

2024/02/28

Features



Compact size, light weight load cell with all stainless steel construction.

Specification

Specification name	Specification contents
Rated capacity	490.3 N {50 kgf}~19.61 kN {2 tf}
Safe overload	150 %R.C.
Ultimate overload	200 %R.C.
Rated output	2 mV/V±0.005 mV/V
Non-linearity	0.15 %R.O.
Hysteresis	0.1 %R.O.
Repeatability	0.05 %R.O.
Excitation, recommended	12 V or less
Excitation, maximum	18 V
Zero balance	±0.06 mV/V
Input resistance	425 Ω±50 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
Temp. effect on output	0.1 %LOAD/10 °C
Class of protection	IP67 or equivalent
Material of element	Stainless steel

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Material of element	Stainless steel
Durability	1,000,000 times with rated load applied.

Table of P/N

Parts No.	Rated capacity [N]	Rated capacity [kN]	Rated capacity [kgf]	Rated capacity [tf]	Natural frequency [Hz]	Rated displacement [mm]
CMM1R-50K	490.3		50		3600	0.15
CMM1R-100K	980.7		100		5000	0.10
CMM1R-200K		1.961	200		6000	0.07
CMM1R-500K		4.903	500		7000	0.07
CMM1R-1T		9.807		1	10000	0.05
CMM1R-2T		19.61		2	10000	0.05

Parts No.	Weight(Approx.) [kg]	Cable	3D CAD files [STEP]	CAD files[DXF]	Specification sheet	Instruction Manual
CMM1R-50K	0.34	φ6.3 4-cores shielded robotcable 6m connected Y-terminals	CMM1(R)-50K~2T.zip	cmm1.dxf	No.KT53158-2	ENKT60244-1_CMM1+CMP1+UMM1.pdf
CMM1R-100K	0.34	φ6.3 4-cores shielded robotcable 6m connected Y-terminals	CMM1(R)-50K~2T.zip	cmm1.dxf	No.KT53158-2	ENKT60244-1_CMM1+CMP1+UMM1.pdf
CMM1R-200K	0.34	φ6.3 4-cores shielded robotcable 6m connected Y-terminals	CMM1(R)-50K~2T.zip	cmm1.dxf	No.KT53158-2	ENKT60244-1_CMM1+CMP1+UMM1.pdf

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		TERMINALS				
CMM1R-500K	0.34	φ6.3 4-cores shielded robotcable 6m connected Y-terminals	CMM1(R)-50K~2T.zip	cmm1.dxf	No.KT53158-2	ENKT60244-1_CMM1+CMP1+UMM1.pdf
CMM1R-1T	0.34	φ6.3 4-cores shielded robotcable 6m connected Y-terminals	CMM1(R)-50K~2T.zip	cmm1.dxf	No.KT53158-2	ENKT60244-1_CMM1+CMP1+UMM1.pdf
CMM1R-2T	0.34	φ6.3 4-cores shielded robotcable 6m connected Y-terminals	CMM1(R)-50K~2T.zip	cmm1.dxf	No.KT53158-2	ENKT60244-1_CMM1+CMP1+UMM1.pdf

Options

<Expansion plate>

[EP series EP2](#)

<Mounting plate>

[BP/MP series BPMP3](#)

<Mounting attachment with slide-stop mechanism>

[Flexible stop method mounting attachment FCA-CMM1/CMP1 series](#)[Steel ball method mounting attachment SCA-CMM1/CMP1 series](#)[Robot cable for CMM1J \(RC019-6M\)](#)