

# CMM1/CMM1R/CMM1J Series - Compact Size Compression Type Load Cell



## Specifications

- Rated capacity : 490.3 N {50 kgf} ~ 19.61 kN {2 tf}
- Safe overload : 150 %R.C.
- Ultimated 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.
- Recommended excitation : 12 V or less
- Maximum excitation : 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 body)
- Compensated temp. range : - 10 °C ~ 70 °C
- Safe temp. range : - 20 °C ~ 80 °C
- Temp. effect on zero balance : 0.05 %R.O./10 °C
- Temp. effect on output : 0.1 %LOAD/10 °C
- Cable : CMM1 : φ6.3, 4-cores 3 m shielded cable directly attached with Y type terminals  
CMM1R : φ6.3, 4-cores 6 m shielded robot cable directly attached with Y type terminals  
CMM1J : P/No.RC019-6M (Sold separately.)  
φ6.3, 4-cores 6 m shielded robot cable with connector P/No.R04-P6F at load cell side and Y type terminals.
- Protection grade : IP67
- Element material : Stainless steel
- Durability : 10<sup>6</sup> times at rated capacity.

## Features

- Compact, light weight load cell with all stainless steel construction.
- Suitable for use in a corrosive environment.



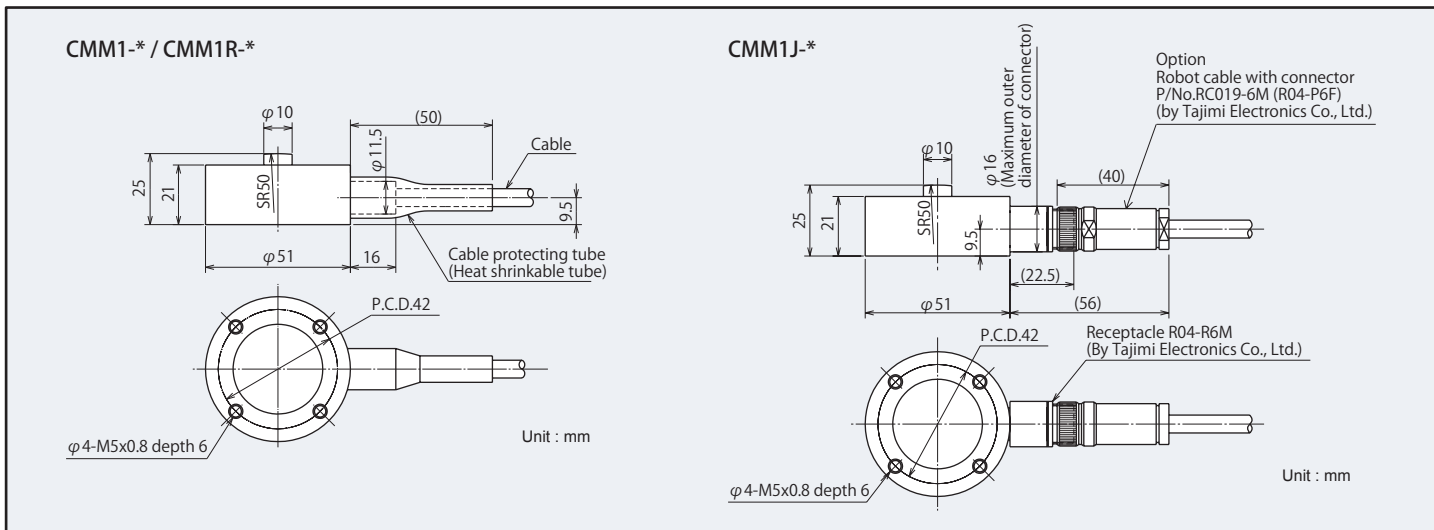
### < CMM1R >

An excellent robot cable (6m) in the elasticity is equipped with. Best suitable for the application where the load cell and the cable work movably.

### < CMM1J >

The connection of the load cell main body and the cable is the connector uniting method. The cable is sold separately as an option. As the main body and the cable separate in this method, it becomes easy to install in the place where the cable becomes obstructive in setting up. When maintaining it, the load cell and the cable can be separately exchanged. The structure that the main body and the cable separate cannot be recommended to the usage such as outdoor tanks exposed under the hostile environment for a long time though the water proof connector is used.

## Outlines



## < Dimension table >

Parts No.	Rated Capacity	Displacement	Natural Freq. (Hz)	Weight (Approx.kg)
CMM1-50K / CMM1R-50K / CMM1J-50K	490.3 N {50 kgf}	0.15	3 600	0.34
CMM1-100K / CMM1R-100K / CMM1J-100K	980.7 N {100 kgf}	0.10	5 000	
CMM1-200K / CMM1R-200K / CMM1J-200K	1.961 kN {200 kgf}	0.07	6 000	
CMM1-500K / CMM1R-500K / CMM1J-500K	4.903 kN {500 kgf}	0.07	7 000	
CMM1-1T / CMM1R-1T / CMM1J-1T	9.807 kN {1 tf}	0.05	10 000	
CMM1-2T / CMM1R-2T / CMM1J-1T	19.61 kN {2 tf}	0.05	10 000	

## < Accessories >

- Inspection data sheet ..... 1 copy

## < Optional fittings >

- Expansion plate EPA-\*
- Mounting plate MPA-\* with bolt for installation
- Mounting attachment with slide stop mechanism
- Flexible stop type FCA-CMM1-50K/2T-S
- Steel ball type SCA-CMM1-50K/2T
- Cable (P/No. RC019-6M (for CMM1J))