

## SPECIFICATIONS

Small size compression/tension type load cell

Load cell  
UMM1-50K ~ 2T

SPEC.No.EN213101-A

1/3

### PERFORMANCE

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 $\pm$ 0.01 mV/V
Non-linearity	: 0.15 %R.O.
Hysteresis	: 0.1 %R.O.
Repeatability	: 0.05 %R.O.

### ELECTRICAL

Excitation, recommended	: 12 V or less
Excitation, at maximum	: 18 V
Zero balance	: $\pm$ 0.06 mV/V
Input resistance	: 425 $\pm$ 50
Output resistance	: 350 $\pm$ 5
Insulation resistance ( Between bridge and main body )	: 2 000 M or more (DC 50 V)

### TEMPERATURE

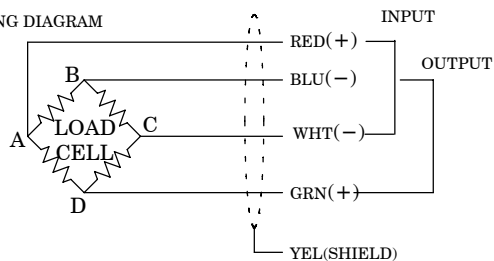
Temperature range, compensated	: - 10 to 70
Temperature range, safe	: - 20 to 80
Temperature effect on zero balance	: 0.05 %R.O./10
Temperature effect on output	: 0.1 %LOAD/10
Cable	: 6.3, 4 cores shielded 3 m cable directly attached. Y type solderless terminal is attached at cable end.
Class of protection	: Equivalent to IP67 (Main body only)
Materials of the element	: Stainless steel
Durability	: 10 <sup>6</sup> times with rated capacity.

NOTE) R.O. indicates Rated Output and also R.C. indicates Rated Capacity.

Polarity of output will become plus (+) when the direction of compression load is applied.

When polarity change is required, change wiring of blue and green.

WIRING DIAGRAM



Composition

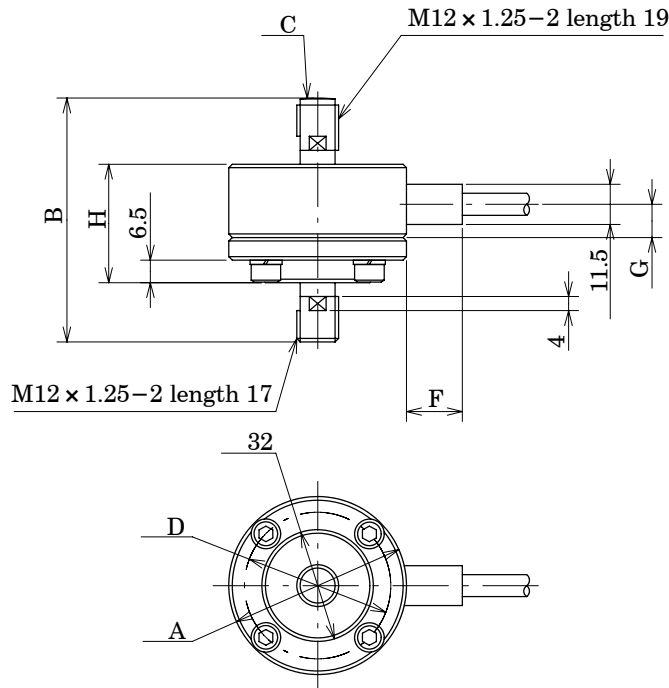
Composition	
Main body	1
Inspection data	1
Instruction manual	1

# SPECIFICATIONS

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SPEC.No.EN213101-A

2/3



Unit : mm

Outline dimension table

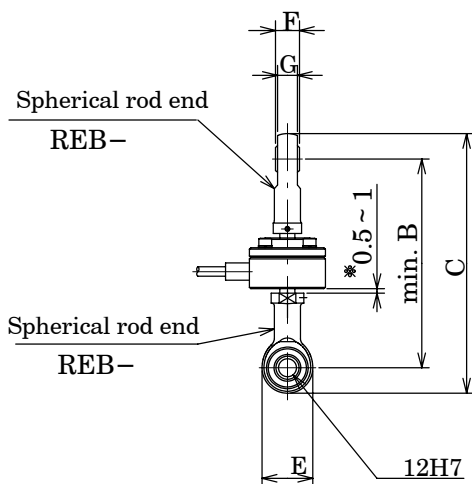
Unit : mm

P/N	Rated capacity	A	B	C	D	F	G	H	Rated displacement	Natural frequency(Hz)	Weight (Approx.kg)
UMM1-50K	490.3 N{50 kgf}	51	70	SR50	42	16	9.5	34	0.15	3 600	0.6
UMM1-100K	980.7 N{100 kgf}								0.10	5 000	
UMM1-200K	1.961 kN{200 kgf}								0.07	6 000	
UMM1-500K	4.903 kN{500 kgf}	51	70	SR50	42	16	9.5	34	0.07	7 000	0.6
UMM1-1T	9.807 kN{1 tf}								0.05	10 000	
UMM1-2T	19.61 kN{2 tf}								0.05	10 000	

## Attached spherical rod end

### Composition

Main body	1
Spherical rod end(REB- )	2



Outline dimension table

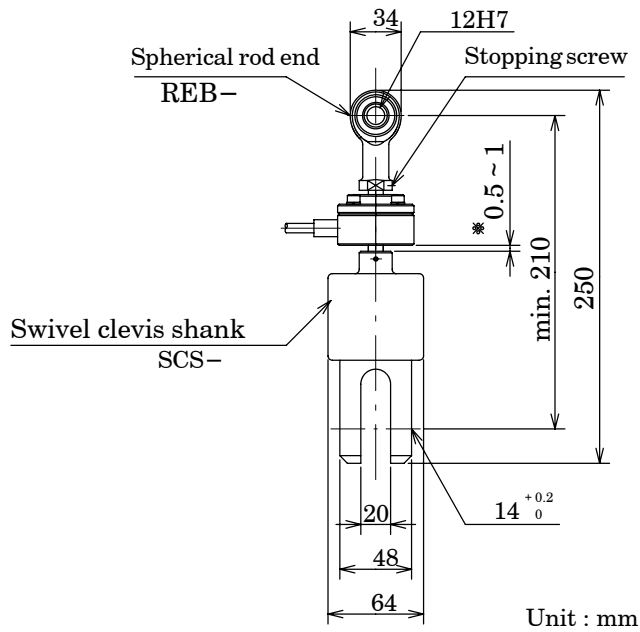
Unit : mm

P/N	P/N of accessory (Opton)	B	C	E	F	G	Stopping screw	Weight (Approx.g)
UMM1-50K	REB-1	140	175	34	16	13.25	M3 x 0.5	131
UMM1-100K								
UMM1-200K								
UMM1-500K								
UMM1-1T								
UMM1-2T								
UMM1-50K	REB-1L	140	170	30	16	12	M3 x 0.5	109
UMM1-100K								
UMM1-200K								
UMM1-500K								

Please take a space like mark when spherical rod end and swivel crevis shank is attached.

## SPECIFICATIONS

Spherical rod end and swivel clevis shank installed :



Unit : mm

Load cell

UMM1-50K ~ 2T

SPEC.No.EN213101-A

3/3

### Composition

Main body	1
Spherical rod end (REB- )	1
Swivel clevis shank(SCS- )	1

### Table for P/N

P/N	P/N of accessory (Option)	Stopping screw
UMM1-50K	REB-1	M3 × 0.5
UMM1-100K	SCS-1	
UMM1-200K		
UMM1-500K		
UMM1-1T		
UMM1-2T		

Please take a space like    mark when spherical rod end and swivel crevis shank is attached.

Specifications and outline dimensions and so on which have printed may subject to change for the purpose of improvement.