

LOADCELL TYPE UMM1R-50K to 2T

SPECIFICATIONS

● PERFORMANCE

Rated capacity(R.C.) : 490.3 N{50 kgf},
980.7 N{100 kgf},
1.961 kN{200 kgf},
4.903 kN{500 kgf},
9.807 kN{1 tf},
19.61 kN{2 tf}

Safe overload : 150 %R.C.

Ultimate overload : 200 %R.C.

△ Rated output(R.O.) : 2 mV/V±0.01 mV/V(COMPRESSION)
-2 mV/V±0.01 mV/V(TENSION)

Non-linearity : 0.15 %R.O.

Hysteresis : 0.1 %R.O.

Repeatability : 0.05 %R.O.

● ELECTRICAL

Recommended excitation : 12 V or under

Maximum excitation : 20 V

Zero balance : ±0.06 mV/V

Input terminal resistance : 425 Ω±50 Ω

Output terminal resistance : 350 Ω±5 Ω

Insulation resistance : 2000 MΩ or more(DC50V)
(Bridge-Body)

● TEMPERATURE

Compensated temperature range : -10 ℃ to 70 ℃

Safe temperature range : -20 ℃ to 80 ℃

Temperature effect : ±0.05 %R.O./10 ℃

on zero balance

Temperature effect : ±0.1 %LOAD/10 ℃

on output

● THE OTHERS

Cable : φ6.3 4core shielded robotcable 6m
connected Y-terminals

△ Cable minimum bending radius : 30 mm

IP class : IP67

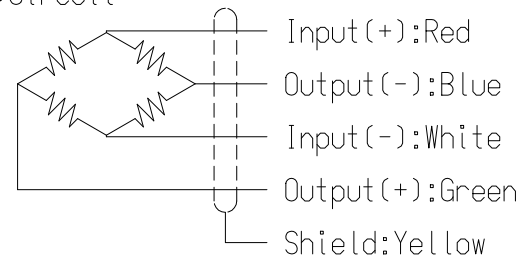
Weight : Aplox 0.6 kg

Material : Stainless steel

Fatigue life : 10⁶ under the R.C.

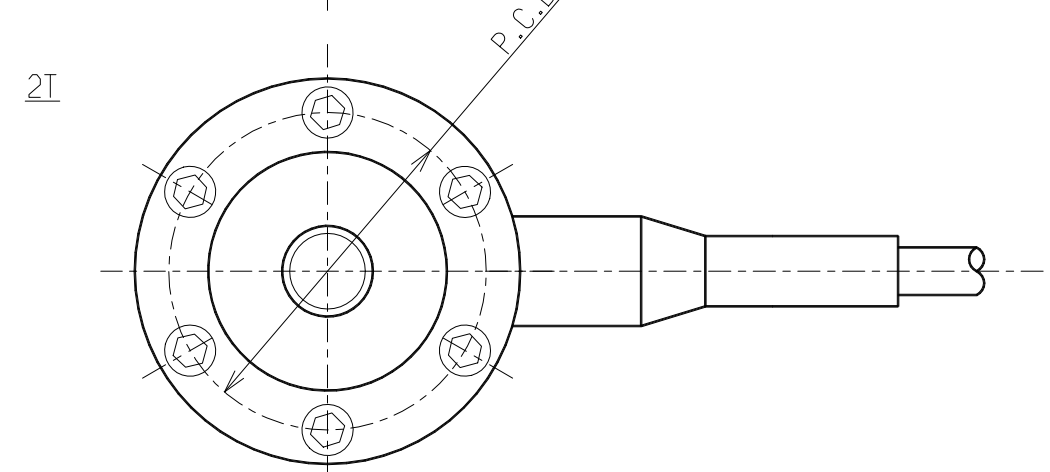
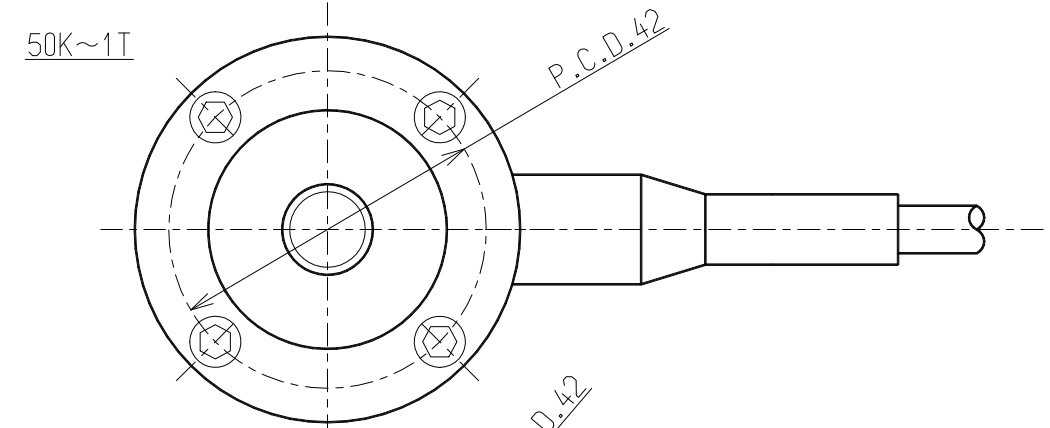
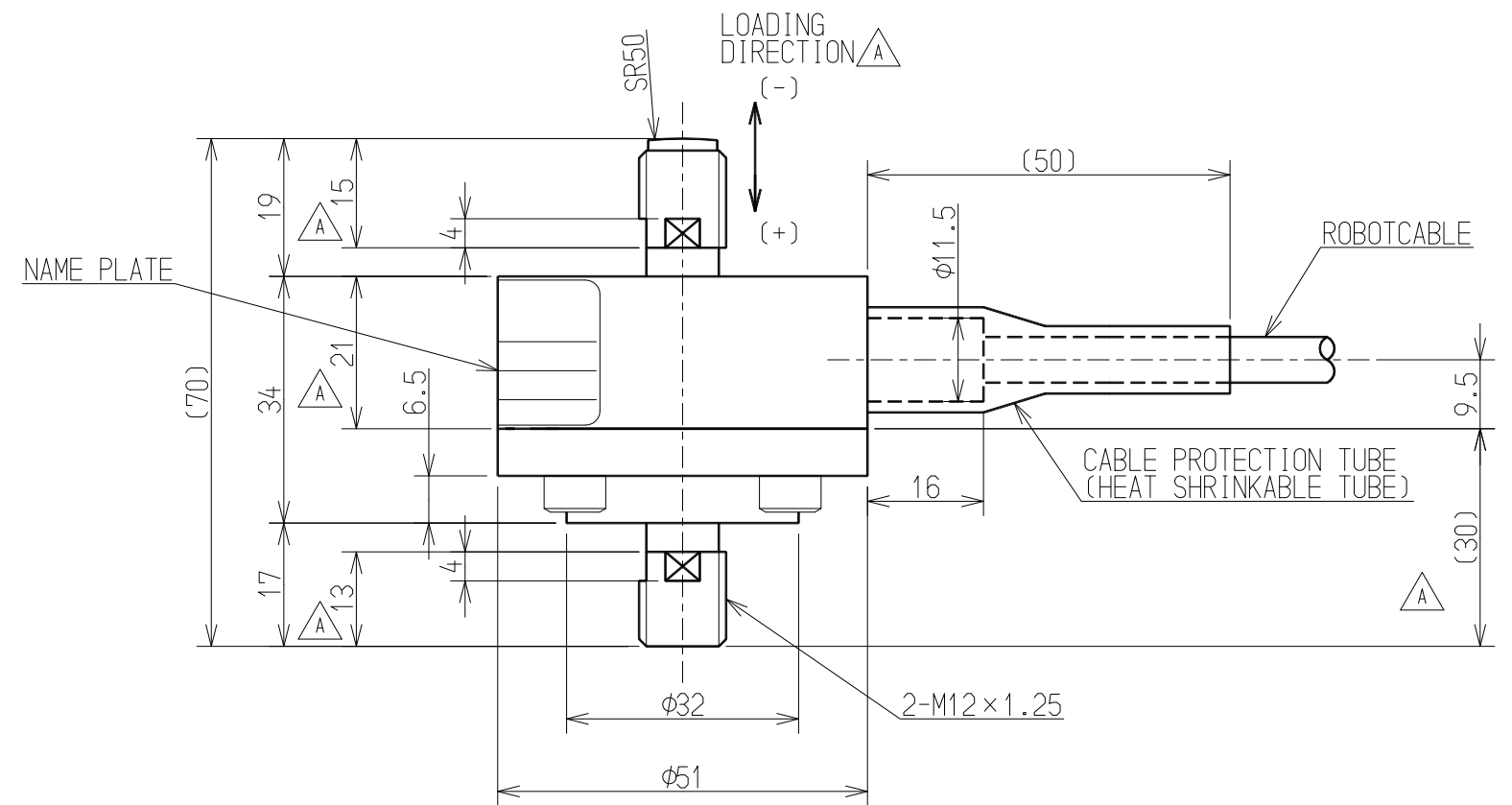
RoHS : Compliant

● Circuit



△ <<Accessories>>

Calibration certificate 1



TYPE	Displacement at rated load (mm)	Natural frequency (Hz)
UMM1R-50K	0.15	3600
UMM1R-100K	0.10	5000
UMM1R-200K	0.07	6000
UMM1R-500K	0.07	7000
UMM1R-1T	0.05	10000
UMM1R-2T	0.05	10000

					ミネベア株式会社 Minebea Co.,Ltd.			単位 UNIT mm	材質 MATERIAL	作成日 DATE 2016.03.30	
					センシングデバイス事業部 Sensing Device Business Unit			尺度 SCALE free	表面粗さ SURF.ROUGH.	品名 DESCRIPTION	
					APPROVED CHECKED DRAWN			DIMENSION L TOL	熱処理 HEAT TREAT.	型式 MODEL NAME	
					F. IDE S.UCHIBORI A.Takahashi					UMM1R-50K to 2T	
符号 MARK	日付 DATE	変更事項 REASON	ECN NO.	担当 ENGINEER	承認 APPROVED				表面処理 FINISH	図番 DRAWING NO.	改訂 REV.
								250<L≤1000 ±0.8		KT53167-2	
								角度 DEG ±0.5		C	