

TORQUE TRANSDUCER TYPE TMNR-500NM, 1KNM

SPECIFICATIONS

A	Rated capacity(R.C.)	: 500 N·m, 1 kN·m
	Safe overload	: 120 %R.C.
	Max. Safe overload	: 200 %R.C.
	Rated output(R.O.)	: 1.6 mV/V±0.32 mV/V (in case of combine CSA-561)
	Accuracy (Include Non-linearity, Hysteresis and Repeatability)	: 0.5 %R.O. (in case of combine CSA-561)
	Recommended excitation	: 2 V AC
	Insulation resistance (Bridge-body)	: 500 MΩ or more
	Surrounding temperature range	: 0 ℃ to 40 ℃ (because heat generation of Bearings.)
	Safe temperature range	: 0 ℃ to 90 ℃
	B	Temperature effect on zero balance:
	Temperature effect on output	: 0.2 %LOAD/10℃
	Max. revolution	: 8000 r.p.m.

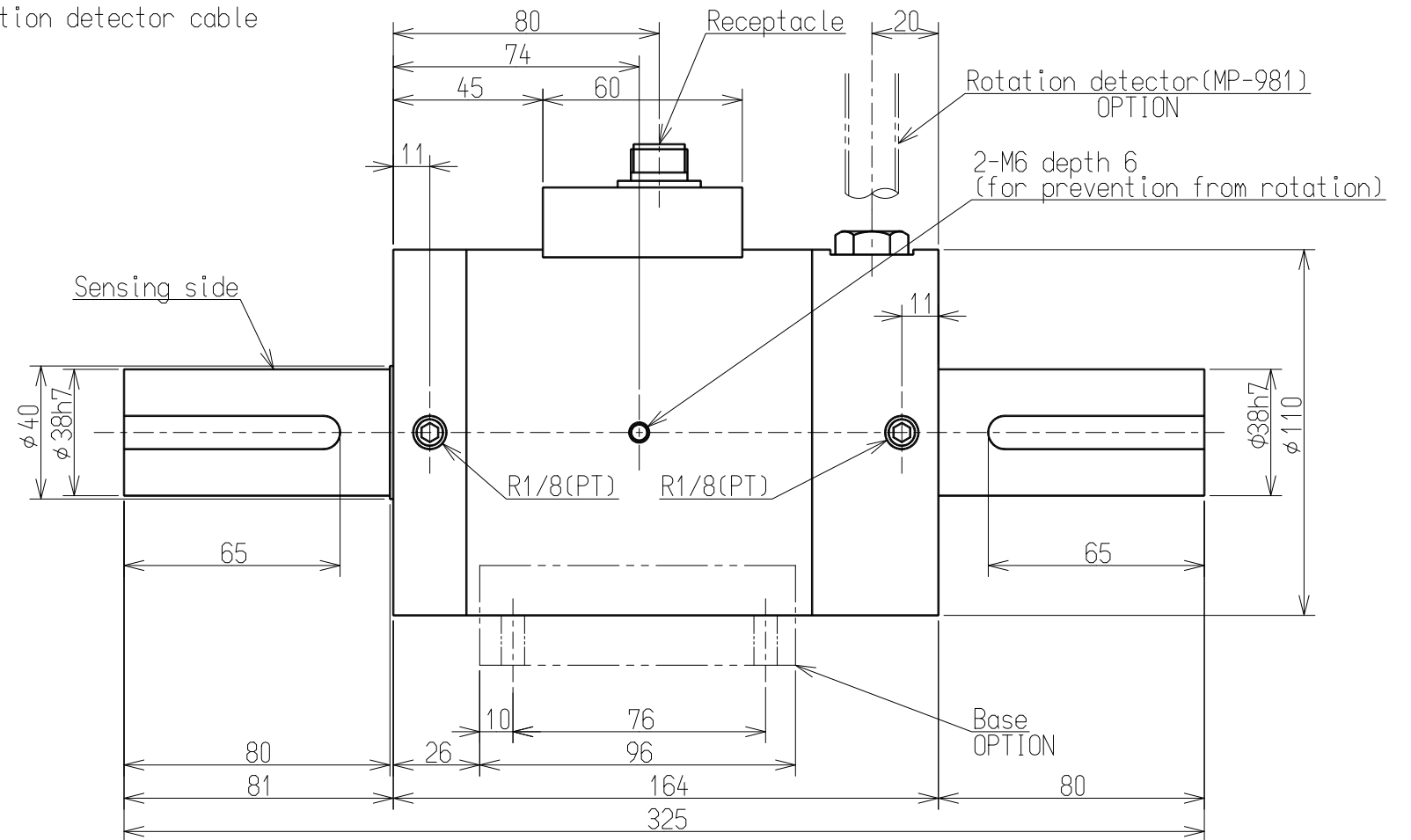
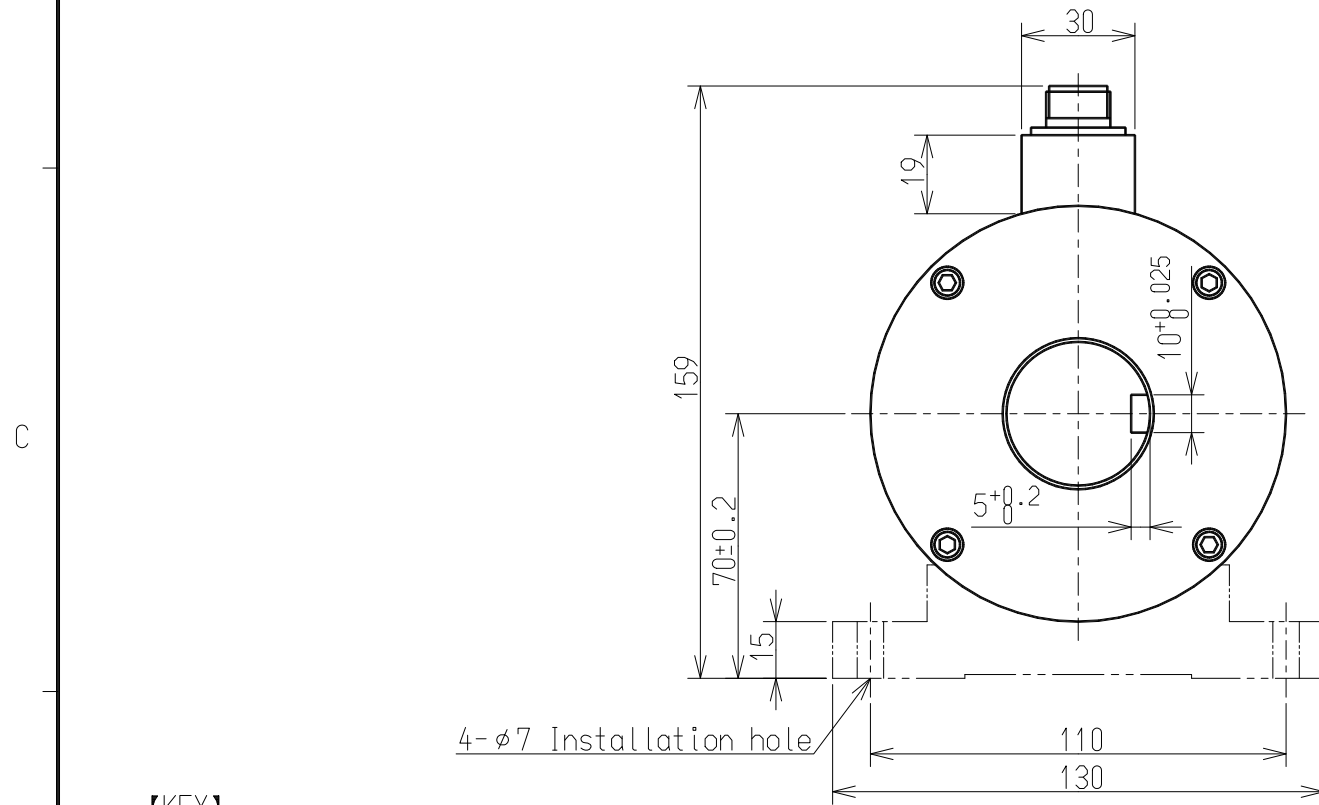
Rotation effect	: 0.3 %R.O. on zero balance
Generation of heat	: 40 ℃ or under/Max.revolution caused by rotation
IP class	: IP40
Rotation finder gear (build in)	: S45C,60tooth 1.25module,tooth width 10mm
Rotor weight	: approx. 4.3 kg
Total weight	: approx. 7.5 kg

ATTACHMENT	Cable : φ10 4core shield 5m Connector:TC1108-12A10-7M10.0 PRC03-12A10-7M10.5
	Key : S45C,2pcs

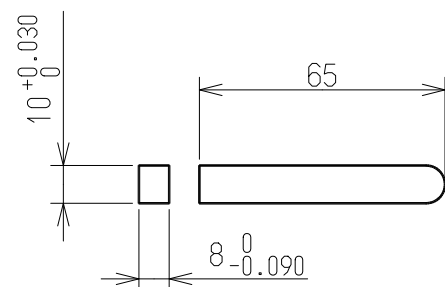
OPTION	Base(NRBS-2) Rotation detector(MP-981) Rotation detector cable
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Model(Capacity indicated)	500NM	1KNM
Rotor inertia (kg·cm ²)	16.38	16.48
Rotor GD2 (kg·cm ²)	65.51	65.90
Torsional stiffness (kN·m/rad)	48.90	63.98
Torsion peculiar pitch (kHz)	3.3	3.8
Twist angle at R.C. (°)	0.575	0.878
Safe radial load (N)	49.03	98.07
Safe radial load(Static) (N)	490.3	980.7
Safe thrust load (N)	294.2	294.2
Bearing	6008ZZ	6008ZZ

【NOTES】
Safe radial load:
Above data is at maximum speed.
Safe radial load(static):
Above data is direct loading by static test.



【KEY】



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		ミネベア株式会社 MINEBEA CO.,LTD. 計測機器事業部		単位 UNIT mm 尺度 SCALE Free	材質 MATERIAL - 表面粗さ SURF.ROUGH. - 熱処理 HEAT TREAT. - 表面処理 FINISH -	作成日 DATE 2015.02.10 品名 DESCRIPTION OUTLINE
2015.02.10 NEW				寸法 L 公差 <L≤4 ±0.1 4<L≤16 ±0.2 16<L≤63 ±0.3 63<L≤250 ±0.5 250<L≤1000 ±0.8 角度 DEG ±0.5	品番 PART NO.(MODEL NO.) TMNR-500NM,1KNM	葉番 SHEET 1/1
符号 MARK 日付 DATE 変更事項 REASON ECN NO.					図番 DRAWING NO. KT53907-2	改訂 REV. -