

TORQUE TRANSDUCER TYPE TMNR-500NM, 1KNM

SPECIFICATIONS

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 : 0.5 %R.O.
 (Include Non-linearity, Hysteresis and Repeatability)
 Recommended excitation : 2 V AC
 Insulation resistance : 500 MΩ or more
 (Bridge-body)
 Surrounding temperature range : 0 °C to 40 °C
 (because heat generation of Bearings.)
 Safe temperature range : 0 °C to 90 °C
 Temperature effect on zero balance: 0.2 %R.O./10°C
 Temperature effect on output : 0.2 %LOAD/10°C
 Max. revolution : 8000 r.p.m.

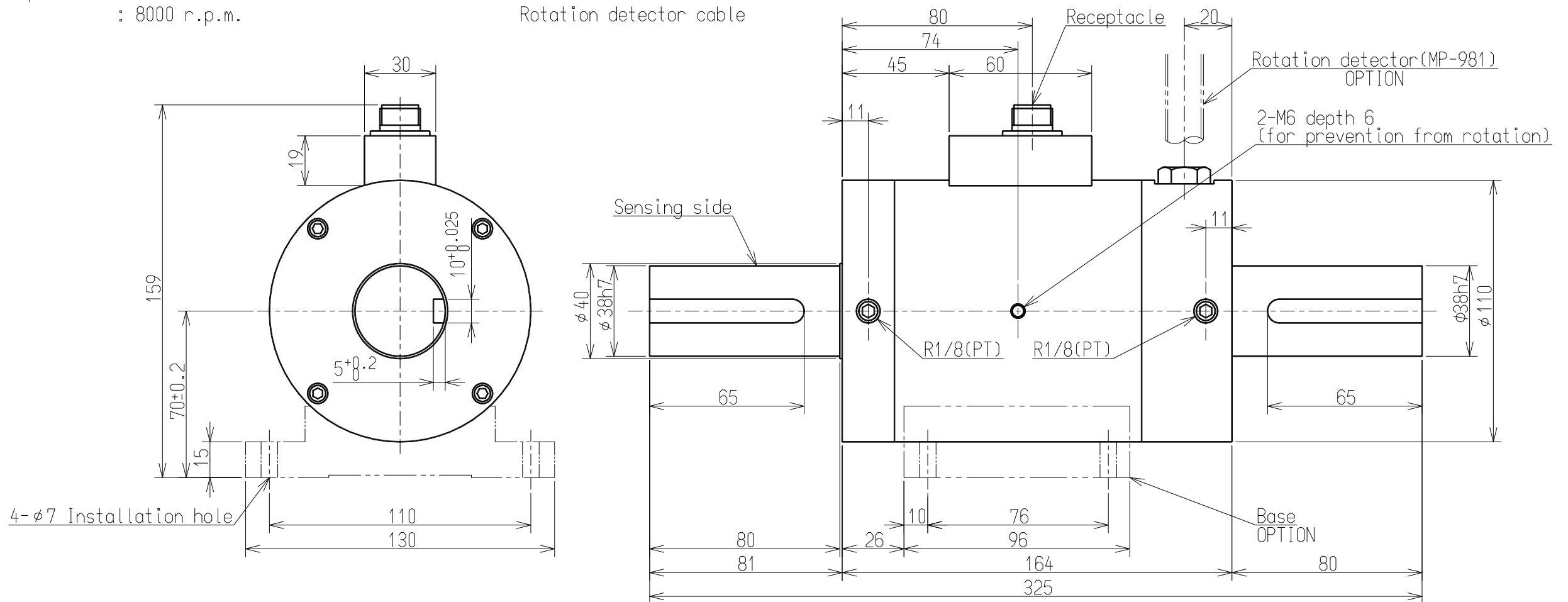
Rotation effect : 0.3 %R.O.
 on zero balance
 Generation of heat : 40 °C or under/Max.revolution
 caused by rotation
 IP class : IP40
 Rotation finder gear : S45C,60tooth
 (build in) 1.25module,tooth width 10mm
 Rotor weight : approx. 4.3 kg
 Total weight : approx. 7.5 kg

ATTACHMENT
 Cable : Φ10 4core shield 5m
 Connector:TC1108-12A10-7M10.0
 PRC03-12A10-7M10.5
 Key : S45C,2pcs

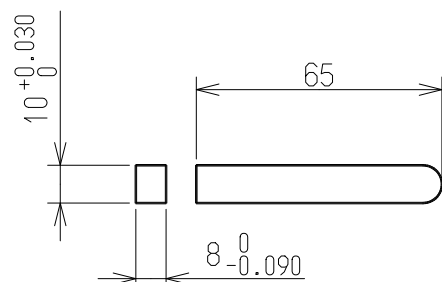
OPTION
 Base(NRBS-2)
 Rotation detector(MP-981)
 Rotation detector cable

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
				APPROVED	CHECKED	DRAWN	品番 PART NO.(MODEL NO.)	葉番 SHEET
				F.IDE	M.Tanaka	y.Kobayashi	TMNR-500NM,1KNM	1/1
符号 MARK	日付 DATE	変更事項 REASON	ECN NO.	担当 ENGINEER	承認 APPROVED	TOL	図番 DRAWING NO.	改訂 REV.
-	2015.02.10	NEW		KOBAYASHI F.IDE			KT53907-2	-