

TORQUE TRANSDUCER TYPE TMNR-2KNM~5KNM

SPECIFICATIONS

Rated capacity(R.C.) : 2 kN·m, 3 kN·m, 5 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 : 5000 r.p.m.

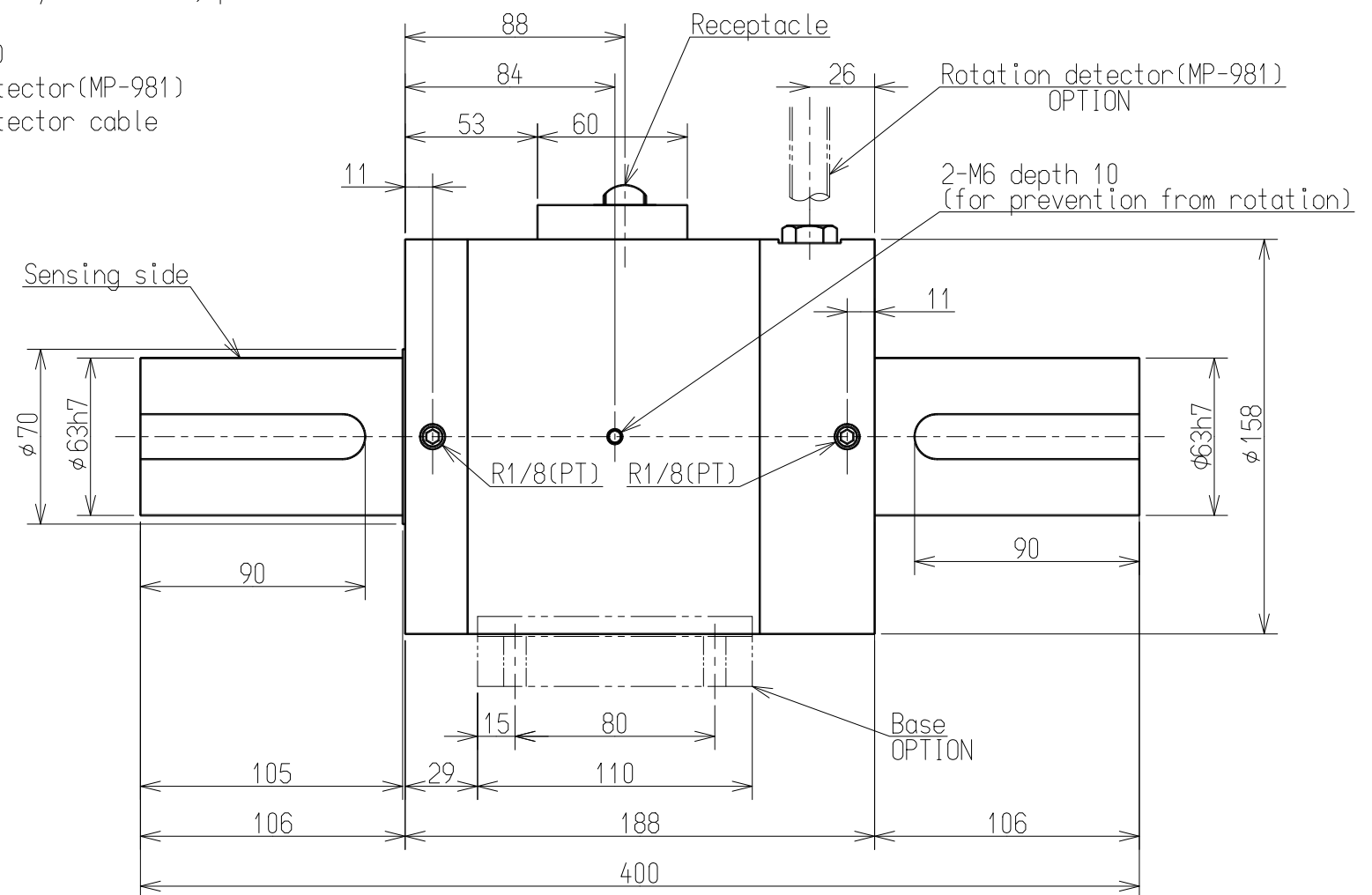
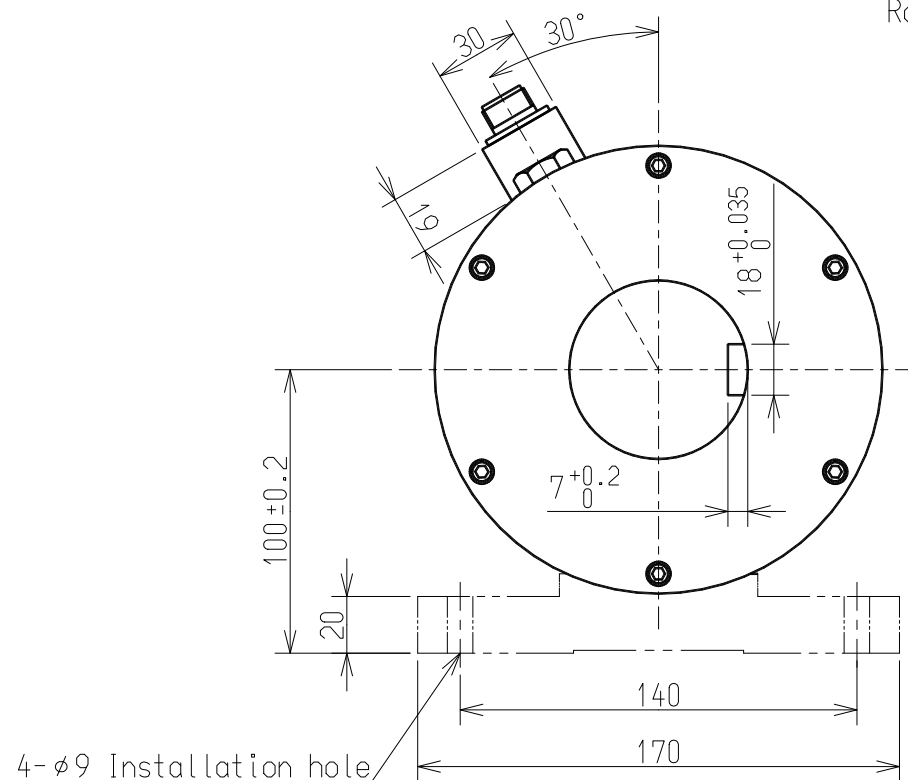
Rotation effect : 0.3 %R.O.
 on zero balance
 Generation of heat : 50 °C or under/Max.revolution
 caused by rotation
 IP class : IP40
 Rotation finder gear : S45C,120tooth
 (build in) 1module,tooth width 10mm
 Rotor weight : approx. 13.2 kg(2KNM)
 approx. 13.3 kg(3KNM)
 approx. 13.4 kg(5KNM)
 Total weight : approx. 21 kg

Model(Capacity indicated)	2KNM	3KNM	5KNM
Rotor inertia (kg·cm ²)	123.6	124.5	124.5
Rotor GD2 (kg·cm ²)	494.3	498.2	498.2
Torsional stiffness (kN·m/rad)	319.5	384.5	446.9
Torsion peculiar pitch (kHz)	2.7	3.0	3.2
Twist angle at R.C. (°)	0.352	0.438	0.629
Safe radial load (N)	245.2	294.2	441.3
Safe radial load(Static) (N)	1470	1961	2942
Safe thrust load (N)	490.3	490.3	490.3
Bearing	6014ZZ	6014ZZ	6014ZZ

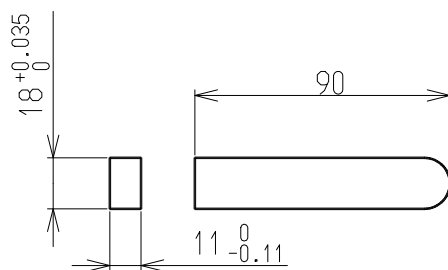
【NOTES】
 Safe radial load:
 Above data is at maximum speed.
 Safe radial load(static):
 Above data is direct loading by static test.

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

OPTION
 Base(NRBS-3)
 Rotation detector(MP-981)
 Rotation detector cable



【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.) TMNR-2KNM~5KNM	
				F.IDE	M.Tanaka	y.Kobayashi	葉番 SHEET 1/1	
符号 MARK	日付 DATE	変更事項 REASON	ECN NO.	担当 ENGINEER	承認 APPROVED	公差 TOL 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		図番 DRAWING NO. KT53908-2
-	2015.02.10	NEW		KOBAYASHI F.IDE		葉番 SHEET 1/1		改訂 REV. -