

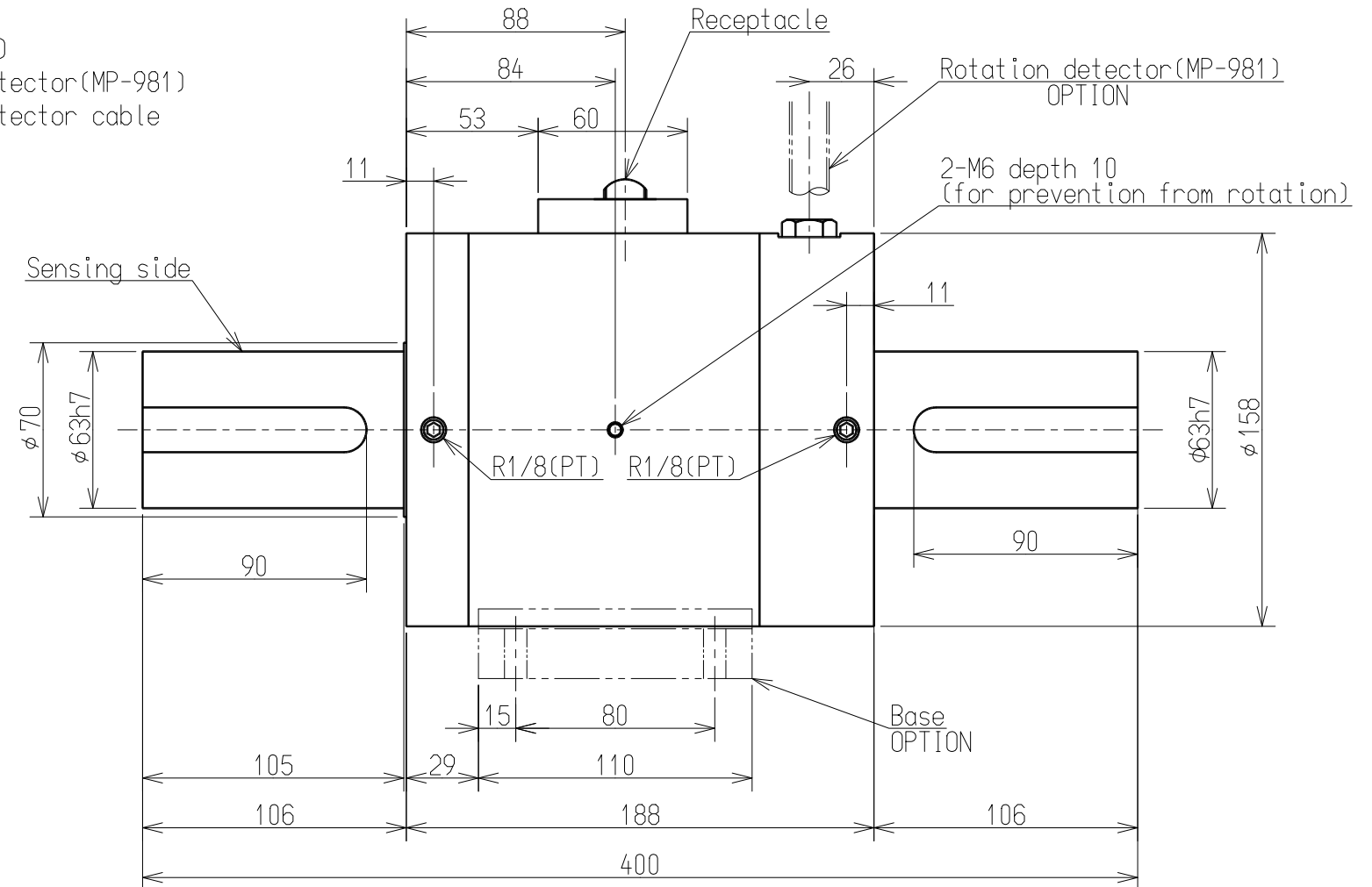
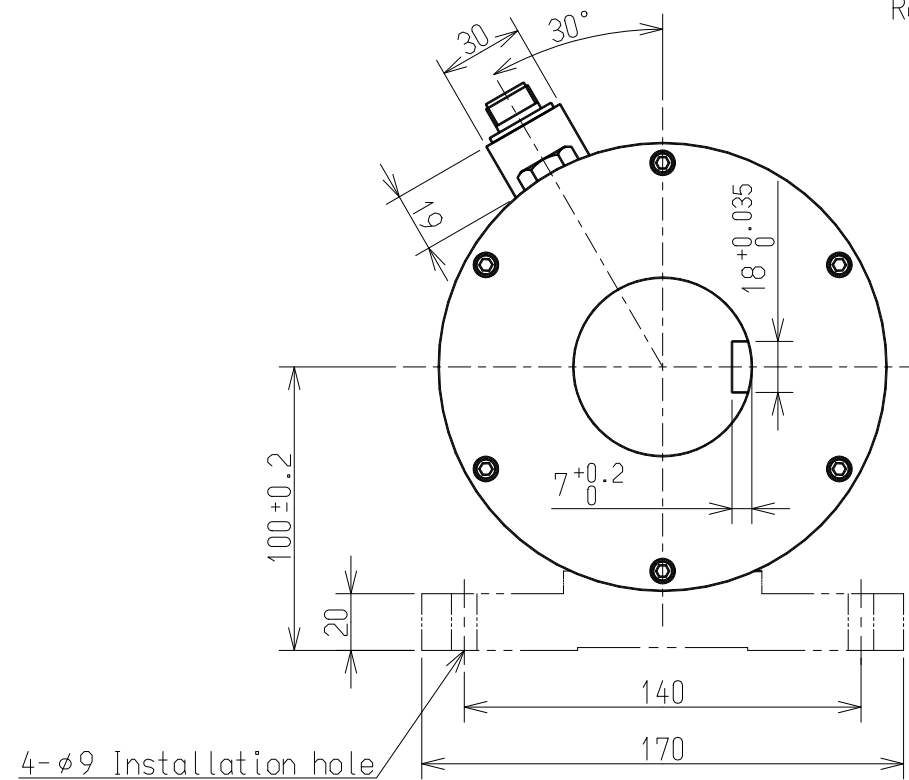
TORQUE TRANSDUCER TYPE TMNR-2KNM~5KNM

SPECIFICATIONS

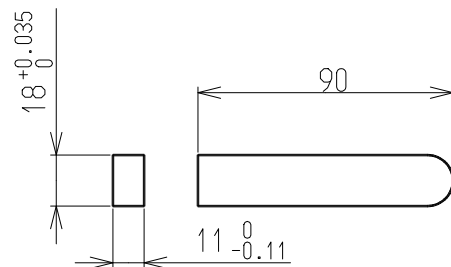
A	Rated capacity(R.C.)	: 2 kN·m, 3 kN·m, 5 kN·m	Rotation effect	: 0.3 %R.O.
	Safe overload	: 120 %R.C.	on zero balance	
	Max. Safe overload	: 200 %R.C.	Generation of heat	: 50 °C or under/Max.revolution
	Rated output(R.O.)	: 1.6 mV/V±0.32 mV/V (in case of combine CSA-561)	caused by rotation	
	Accuracy	: 0.5 %R.O. (in case of combine CSA-561)	IP class	: IP40
	(Include Non-linearity, Hysteresis and Repeatability)		Rotation finder gear	: S45C,120tooth 1module,tooth width 10mm
	Recommended excitation	: 2 V AC	Rotor weight	: approx. 13.2 kg(2KNM) approx. 13.3 kg(3KNM) approx. 13.4 kg(5KNM)
	Insulation resistance	: 500 MΩ or more	Total weight	: approx. 21 kg
	(Bridge-body)		ATTACHMENT	
	Surrounding temperature range	: 0 °C to 40 °C (because heat generation of Bearings.)	Cable	: φ10 4core shield 5m Connector:TC1108-12A10-7M10.0 PRC03-12A10-7M10.5
B	Safe temperature range	: 0 °C to 90 °C	Key	: S45C,2pcs
	Temperature effect on zero balance	: 0.2 %R.O./10°C	OPTION	
	Temperature effect on output	: 0.2 %LOAD/10°C	Base(NRBS-3)	
	Max. revolution	: 5000 r.p.m.	Rotation detector(MP-981)	
C			Rotation detector cable	

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.



【KEY】



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		ミネベア株式会社 MINEBEA CO.,LTD.		単位 UNIT mm	材質 MATERIAL -	作成日 DATE 2015.02.10	
		計測機器事業部		尺度 SCALE Free	表面粗さ SURF.ROUGH. -	品名 DESCRIPTION OUTLINE	
				寸法 L	公差	品番 PART NO.(MODEL NO.) 葉番 SHEET	
				<L≤4	±0.1	TMNR-2KNM~5KNM 1/1	
				4<L≤16	±0.2	熱処理 HEAT TREAT. -	
				16<L≤63	±0.3	図番 DRAWING NO.	
				63<L≤250	±0.5	KT53908-2	
				250<L≤1000	±0.8	改訂 REV.	
				角度 DEG	±0.5	-	
符号 MARK	日付 DATE	変更事項 REASON	ECN NO.				
-	2015.02.10	NEW					