

TORQUE TRANSDUCER TYPE TMNR-10NM~50NM

SPECIFICATIONS

Rated capacity(R.C.) : 10 N·m, 20 N·m, 50 N·m
 Safe overload : 120 %R.C.
 Max. Safe overload : 200 %R.C.
 Rated output(R.O.) : 0.75 mV/V±0.15 mV/V (10NM,20NM)
 : 1.6 mV/V±0.32 mV/V (50NM)
 (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.)

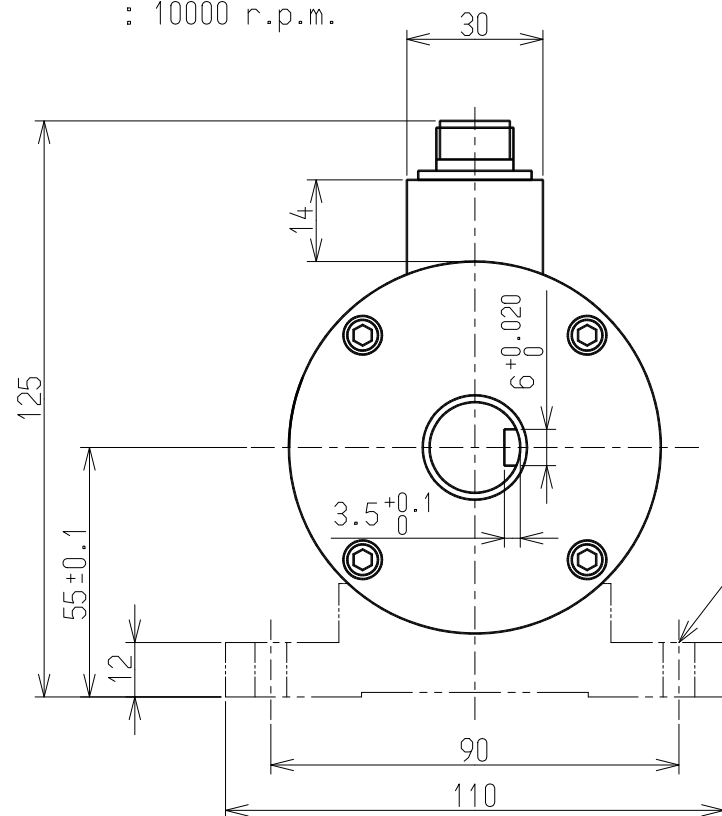
Rotation effect : 0.5 %R.O.
 on zero balance
 Generation of heat : 40 °C or under/Max.revolution
 caused by rotation
 IP class : IP40
 Rotation finder gear : S45C,60tooth
 (build in) 1module,tooth width 8mm
 Rotor weight : approx. 1.3 kg
 Total weight : approx. 3.0 kg
 ATTACHMENT

Model(Capacity indicated)	10NM	20NM	50NM
Rotor inertia (kg·cm ²)	2.864	2.864	2.864
Rotor GD2 (kg·cm ²)	11.45	11.45	11.45
Torsional stiffness (kN·m/rad)	1.912	3.128	4.080
Torsion peculiar pitch (kHz)	2.8	3.6	4.0
Twist angle at R.C. (°)	0.294	0.359	0.689
Safe radial load (N)	9.807	14.71	14.71
Safe radial load(Static) (N)	9.807	29.42	49.03
Safe thrust load (N)	98.07	98.07	98.07
Bearing	6005ZZ	6005ZZ	6005ZZ

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

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 : 10000 r.p.m.

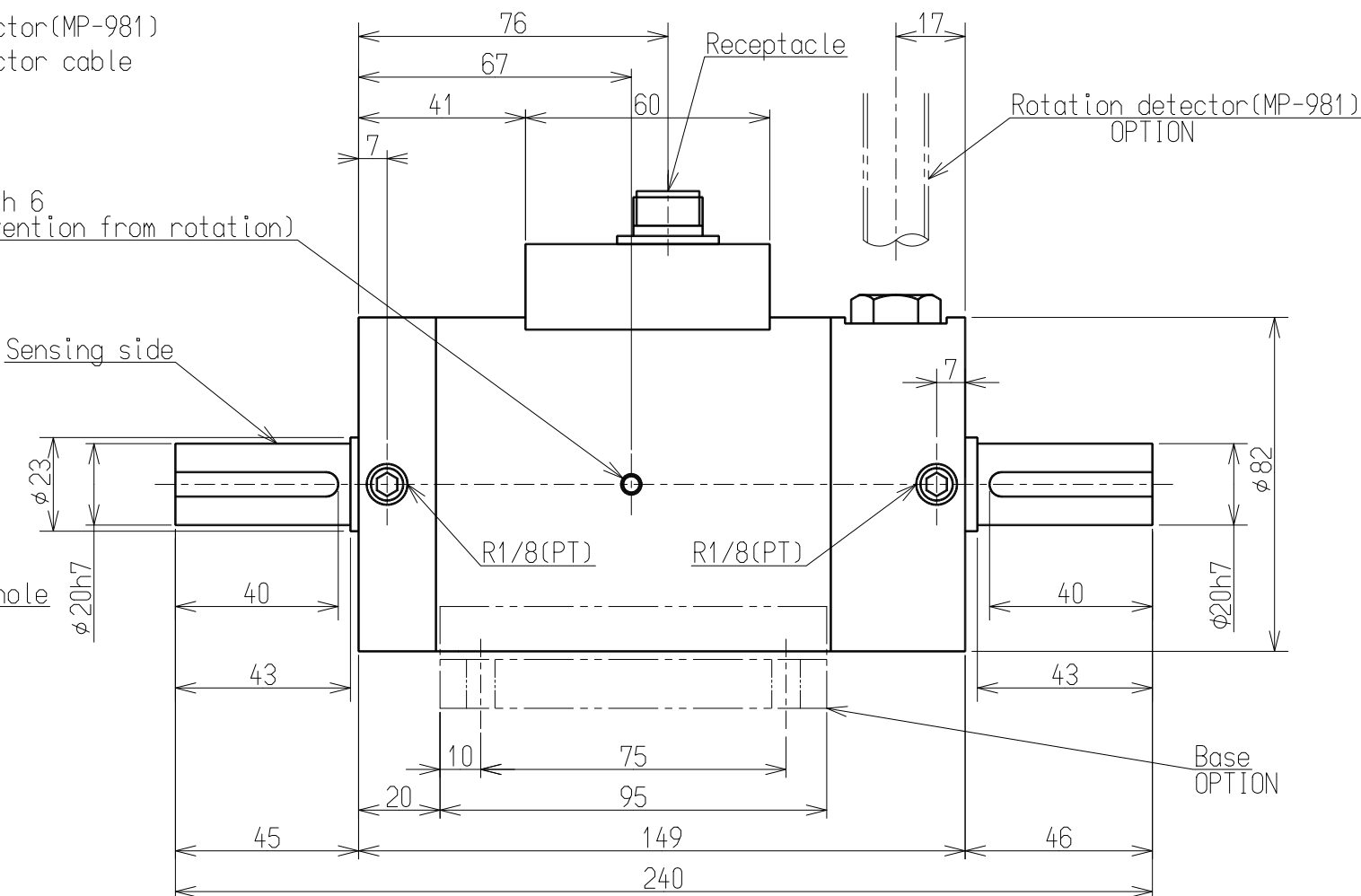
OPTION
 Base(NRBS-1)
 Rotation detector(MP-981)
 Rotation detector cable



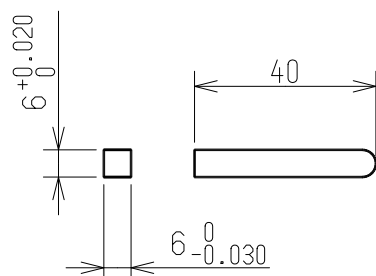
2-M5 depth 6
 (for prevention from rotation)

Sensing side

4-φ7
 Installation hole



【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-10NM~50NM	葉番 SHEET 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. KT53905-2	改訂 REV. -
-	2015.02.10	NEW		KOBAYASHI	F. IDE	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		