



## ☆ COMBINATION ACCURACY

1. Torque Transducer And Transmitter CSA-561-\* Combination Accuracy  $\pm 0.2\%R. O.$   
(Not Include Temperature/Noise Performance)
2. Noise At Revolution(SN) Approx. 46 dBp-p

## ☆ ACCESSORIES

1. Keys : Material S45C Parallel Key  

500,1K,2KNME	:	16	-0.043 to 0	× 10	-0.090 to 0	× 85
3KNME	:	18	-0.043 to 0	× 11	-0.110 to 0	× 105
5KNME	:	20	-0.052 to 0	× 12	-0.110 to 0	× 105
2. Speed Sensing Gear : Material S45C (Invoives)  

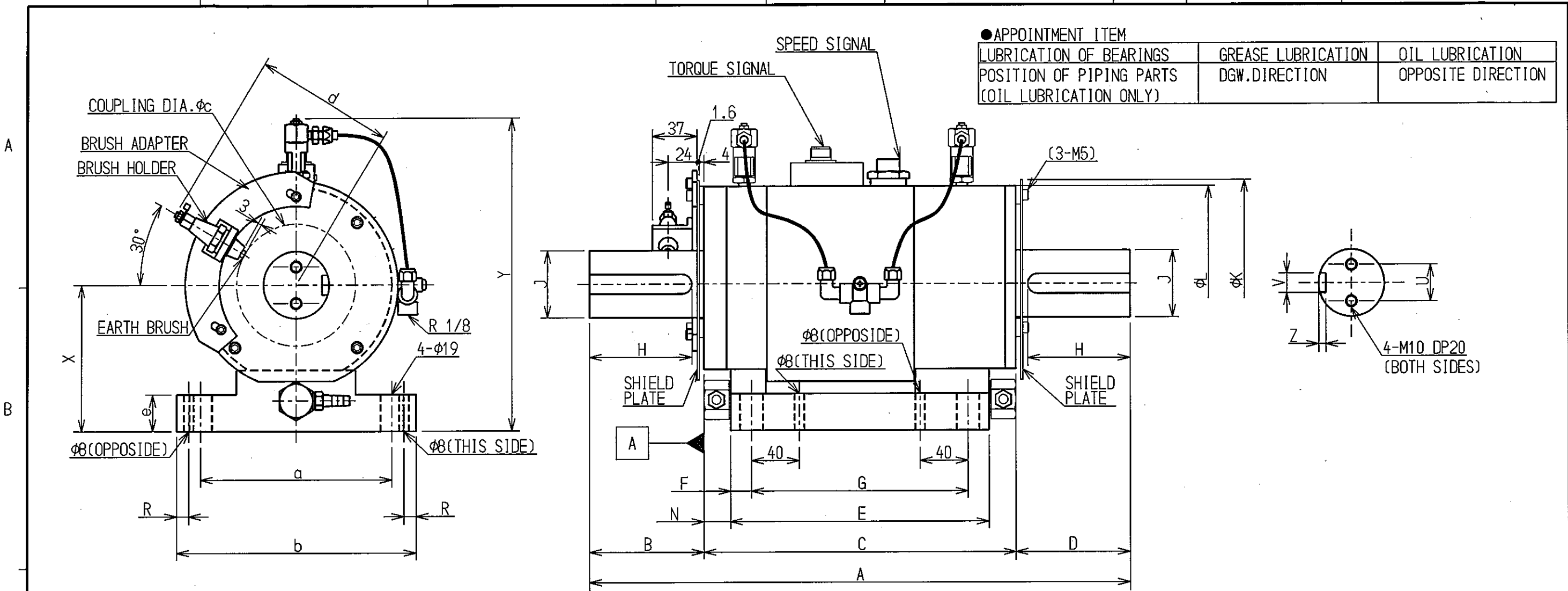
500,1K,2K,3KNME	:	60 Tooth	5KNME	:	120 Tooth
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3. Earth Brush : Brush Holder(Gr60) 1pcs Brush(Gr61) 1pcs
4. Torque Signal Cable :  $\phi 10$  4 Core Shield  
(Choose Length 10m, 20m, 30m)  
Connector Type: TC1108-12A10-7M, PRC03-12A107M10.5

## ☆ ATTENTION

1. For official examination of this unit, combined calibration has been made by transmitter (CSA-561) and the specified cable length. Therefore, when using other type of transmitter and changed cable length, official examination must be conducted once again.
2. Lubrication of bearings is 2 patteen.  

below 3000rpm	:	Lubrication grease (ALVANIA NO.2)
Over 3000rpm	:	Lubrication oil (FBK TURBINE 32)

Quantity of refueling :  $60 \pm 10$  drop/min.  
(Necessity oil pump and oil.)
3. Speed sensor and speed sensor cable is optional.
4. Combination transmitter is only CSA-561-\*
5. When coupling is made directly between the torque transducer and the electric motor (D.C. motor or the like), there may occur noises on the signal of torque transducer due to large current on the shaft of electric motor depending on the type of electric motor. In order to remove these noises, use after installing the earth brush either on the coupling boss or on the rotation shaft.



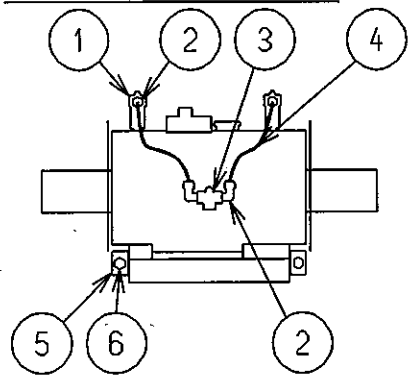
●APPOINTMENT ITEM		
LUBRICATION OF BEARINGS	GREASE LUBRICATION	OIL LUBRICATION
POSITION OF PIPING PARTS (OIL LUBRICATION ONLY)	DGW.DIRECTION	OPPOSITE DIRECTION

<DIMENSIONS>

TYPE	A	B	C	D	E	F	G	H	J	K	L	N	R	U	V	X	Y	Z	a	b	c	d	e
TMNR-500NME																							
TMNR-1KNME	450	95	260	95	215	17.5	180	85	φ55h6	φ170	φ160	22.5	10	30	16 <sup>+0.018</sup> <sub>-0.021</sub>	120 <sup>+0.2</sup> <sub>-0.3</sub>	255	6 <sup>+0.2</sup>	160	200	φ90~φ100	113~118	30
TMNR-2KNME																							
TMNR-3KNME	500	115	270	115	225	17.5	190	105	φ65h6	φ190	φ180	22.5	12	30	18 <sup>+0.018</sup> <sub>-0.021</sub>	150 <sup>+0.2</sup> <sub>-0.3</sub>	295	7 <sup>+0.2</sup>	200	240	φ110~φ120	123~128	50
TMNR-5KNME	530	115	300	115	250	25	200	105	φ75h6	φ210	φ200	25	12	50	20 <sup>+0.024</sup> <sub>-0.027</sub>	150 <sup>+0.2</sup> <sub>-0.3</sub>	305	7.5 <sup>+0.2</sup>	200	240	φ130~φ140	133~138	45

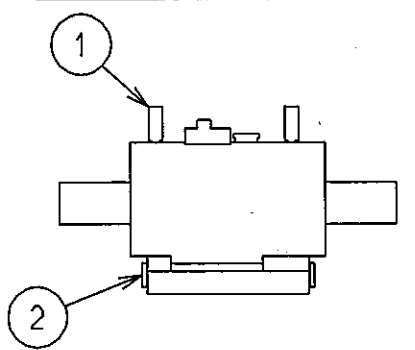
UNIT : mm

OIL LUBRICATION DETAIL



NO.	NAME	TYPE	MAKER
1	OILER	106530	LUBE
2	JOINT	A6,B6 R1/8	NTN
3	CONNECTOR	JV-3	LUBE
4	NYLONTUBE	AS1100-06	NTN
5	ELBOW	K503318-1	NMB
6	HOSE JOINT	NH-115 3/8IN	KOYO

GREASE LUBRICATION DETAIL



NO.	NAME	TYPE
1	NIPULL	G 1/8
2	TAPER PLAG	G 1/4

注記 1. For grease type is dont attached shield plate and joint pipe no 1~6. Therefore brush adapter should be attached [A] surface.

2. Brush adapter is can fitted up opposite direction.

公布
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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	材質 MATERIAL	作成日 DATE
				mm	表面粗さ SURF.ROUGH.	2003.09.16
一般公差 公差 TOL				尺度 SCALE	品名 DESCRIPTION	OUTLINE
				Free	表面処理 FINISH	
承認 APPROVED 検査 CHECKED 図面 DRAWN F. IDE				寸法 L	公差	品番 PART NO.(MODEL NO.)
				<L≤4 4<L≤16 16<L≤63 63<L≤250 250<L≤1000 角度 DEG	±0.1 ±0.2 ±0.3 ±0.5 ±0.8 ±0.5	品番 PART NO.(MODEL NO.) TMNR-•NME 図番 DRAWING NO. KT51750-2
符号 MARK	日付 DATE	変更事項 REASON	ECN NO.	担当 ENGINEER	承認 APPROVED	葉番 SHEET
						3/3
						改訂 REV.
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