

## Calibration and Measurement Capability

Classification Calibration parameters	Reference Diameter			
	No fewer than 20mm, No more than 60mm	Over 60mm, No more than 110mm	Over 110mm, No more than 165mm	Over 165mm, No more than 250mm
Profile:				
Total profile deviation	0.5 μm	0.5 μm	0.5 μm	0.6 μm
Profile form deviation	0.5 μm	0.5 μm	0.5 μm	0.6 μm
Profile slope deviation	0.5 μm	0.5 μm	0.5 μm	0.6 μm
Helix:				
Total helix deviation	0.4 μm	0.4 μm	0.4 μm	0.4 μm
Helix form deviation	0.4 μm	0.4 μm	0.4 μm	0.4 μm
Helix slope deviation	0.4 μm	0.4 μm	0.4 μm	0.4 μm
Pitch:				
Single pitch deviation	0.3 μm	0.3 μm	0.4 μm	0.5 μm
Total cumulative pitch deviation	0.5 μm	0.5 μm	0.6 μm	0.7 μm

Uncertainty ( $k=2$ ) of calibration of each type made  
by TPR OSAKA SEIMITSU KIKAI CO., LTD.

	Profile	Helix	Single pitch	Cumulative pitch
Master gear for auto measurement MTG1-55	0.7 μm	0.5 μm	0.3 μm	0.5 μm
MTG1-85	0.7 μm	0.5 μm	0.3 μm	0.5 μm
MTG1-150	0.7 μm	0.6 μm	0.4 μm	0.6 μm
Master for profile and helix MTL-51	0.6 μm	0.6 μm	-----	-----
MTL-100	0.6 μm	0.5 μm	-----	-----
Master for helix ML75-100A	0.6 μm	0.7 μm	-----	-----
ML75-100B	0.7 μm	1.0 μm	-----	-----
ML75-100C	0.7 μm	1.0 μm	-----	-----
ML100-100B	0.7 μm	1.2 μm	-----	-----
Mater for profile MT4-100B	0.5 μm	-----	-----	-----
MI4-100A	0.5 μm	-----	-----	-----
MT-200	0.6 μm	-----	-----	-----