



M = rotary axis / Rotationsachse

- OL = length of tape / Bandlänge
- α [°] = measuring range / Messbereich
- DA = mating diameter / Aufnahmedurchmesser
- D = scanning diameter / Abtastdurchmesser
- Dn = neutral axis / neutrale Faser
- RI = reference mark(s) / Referenzmarke(n)
- β [°] = any position of the reference mark from the beginning of measuring range / beliebige Position der Referenzmarke vom Beginn des Messbereiches
- γ [°] = additional reference mark / zusätzliche Referenzmarke
- C = cable / Anschlusskabel
- K = customer mounting dimensions / kundenseitige Anschlussmaße
- R = bending radius / Biegeradius: stat. $R \geq 8\text{mm}$, dyn. $R \geq 20\text{mm}$
- L = LED function display / LED Funktionsanzeige

Permissible position deviation scanning head - scale tape A B
 Zulässige Lageabweichungen Abtastkopf - Maßband A B

- $\varphi_z = \pm 1\text{mrad}$ or / oder $\pm 0,06^\circ$ (yaw angle / Gierwinkel)
- $\varphi_y = \pm 1,5\text{mrad}$ or / oder $\pm 0,09^\circ$ (pitch angle / Nickwinkel)
- $\varphi_x = \pm 4,0\text{mrad}$ or / oder $\pm 0,23^\circ$ (roll angle / Rollwinkel)
- $\Delta_z = \pm 0,15$ radial displacement (airgap) / radiale Verschiebung (Abstand)
- $\Delta_y = \pm 0,5$ lateral displacement / laterale Verschiebung

- SO = steel tape scale / Stahlmaßband
- D = DA+0,5
- SK = steel tape scale with adhesive tape / Stahlmaßband mit Klebeband
- D = DA+0,9

accuracy / Genauigkeit: $\pm 15\mu\text{m/m}$
 even state (not bent) / eben aufgelegt (nicht gebogen)

calculation OL / Berechnung OL
 $OL = 20 + (D - 0,25) * \pi * \alpha / 360^\circ$

theoretical lines per revolution (360°) / theoretische Strichzahl pro Umdrehung (360°)
 $n = 78,5398 * D + 33,1942$ (rounded / abgerundet)

angle calculation strongly dependent on the accurate knowledge of diameter
 Winkelberechnung direkt abhängig vom exaktem Durchmesser

Original drawing		MSS15		ID number:	
Scale	Format	MSS15		Change No.	C157360-23
Dimensions in mm	1:1 A3	Anschlussmaße / Mating Dimensions		Phase:	Serie
				Tolerances as per ISO 8015	
				General Tolerances ISO 2768:1989-mH $\leq 6:\pm 0.2$	
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