

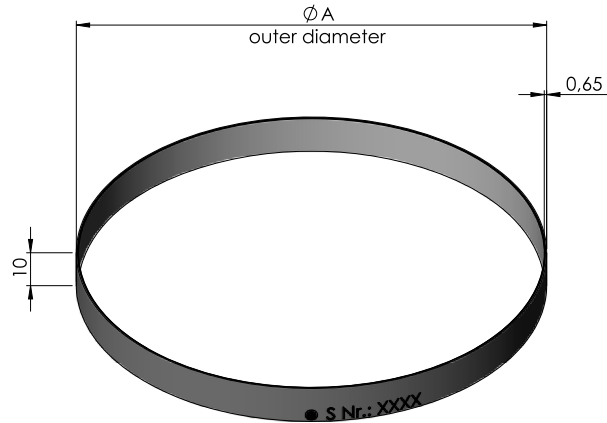
- WMK - Scanning head for incremental angle encoder
- Grating period 500μm

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¹⁾ Electrical connection for miniturized design of the scanning head 10 and 12.
²⁾ Option „FA“ only used for dividing factor „01“

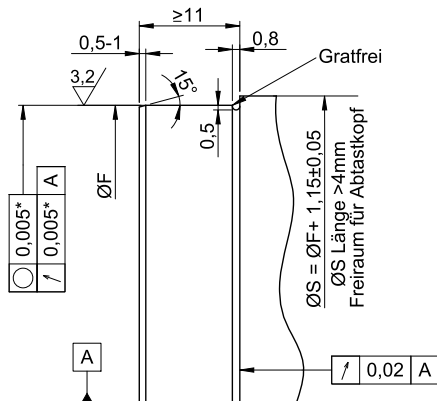
Incremental scale tape ring for outside scanning WMRA 1010 A

- In combination with the scanning head WMK 2010 / WMK 1010
- Grating period 1000µm



WMR 1010A

Mechanical requirements on the carrier flange



Line count	ØF [mm]
256 to 359	$N/\pi - 0,84 \pm 0,01$
360 to 511	$N/\pi - 0,77 \pm 0,01$
512 to 719	$N/\pi - 0,73 \pm 0,02$
720 to 1024	$N/\pi - 0,70 \pm 0,02$
1025 to 1500	$N/\pi - 0,68 \pm 0,03$
1501 to 2000	$N/\pi - 0,65 \pm 0,06$
2001 to 3000	$N/\pi - 0,62 \pm 0,07$
3001 to 6000	$N/\pi - 0,60 \pm 0,10$
> 6000	$N/\pi - 0,55 \pm 0,10$

*) Recommended eccentricity: Greater eccentricities up to ~0,05mm do not affect the function of the device, but cause a proportional loss in positioning accuracy.

Technical data

Scale tape ring WMR 1010A 1000µm									
Line count	256	360	512	720	900	1024	1440	1800	2048
Reference mark	Single or distance coded								
<u>Grating period accuracy</u> ¹⁾									
± 10µm arc length	±51″	±36″	±26″	±18″	±15″	±13″	±9,0″	±7,5″	±6,5″
± 5µm arc length	±26″	±18″	±13″	±9,0″	±7,5″	±6,5″	±4,5″	±4,0″	±3,5″
± 3µm arc length	±16″	±11″	±8,0″	±5,5″	±4,5″	±4,0″	±3,0″	±2,5″	±2,0″
Outside diameter ring [mm]	81,95	115,12	163,54	229,78	287,08	326,55	458,99	573,61	652,58
Mech. speed [min ⁻¹] ²⁾	46800	33300	23400	16600	13200	11700	8300	6600	5800
Max. angle acceleration [rad/s ²] ²⁾	4000					3800	1500	650	450

¹⁾ The position error per grating period and the accuracy of the grating result together in the encoder specific error; additional deviations caused by mounting and bearing are not considered in this error.

²⁾ Values should be considered to ensure a mechanical fault exclusion.