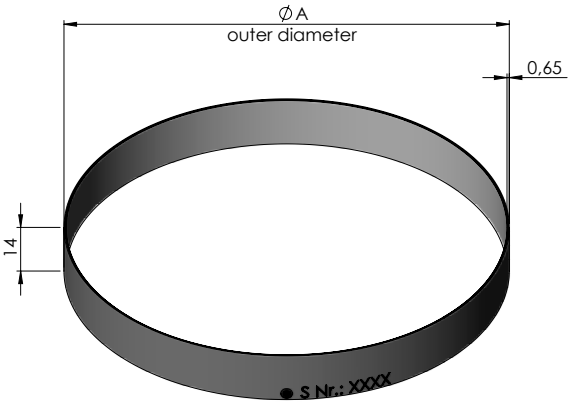
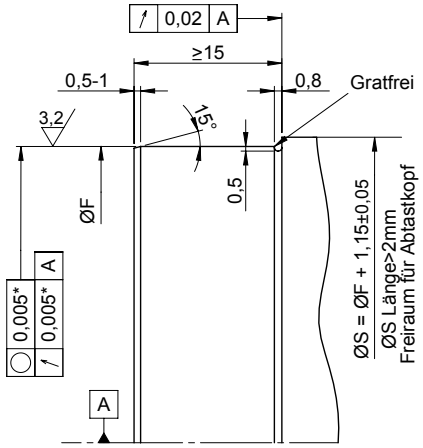
Incremental scale tape ring for outside scanning WMR 1030 A

- **In combination with the scanning head WMK 2030**
- **Grating period 3000µm**



WMR 1030A

Mechanical requirements on the carrier flange



Line count	ØF [mm]
85 to 169	Nx3/π – 0,82 ±0,01
170 to 240	Nx3/π – 0,73 ±0,02
241 to 342	Nx3/π – 0,70 ±0,02
343 to 500	Nx3/π – 0,68 ±0,03
501 to 660	Nx3/π – 0,65 ±0,06
661 to 1000	Nx3/π – 0,62 ±0,07
1001 to 2000	Nx3/π – 0,60 ±0,10
2001 to 4000	Nx3/π – 0,55 ±0,10
4001 to 10000	Nx3/π – 0,45 ±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

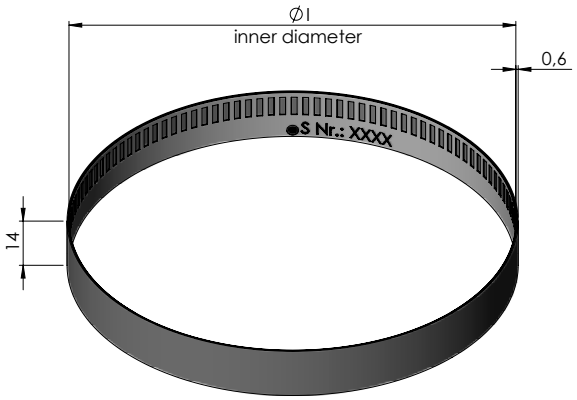
Scale tape ring WMR 1030A 3000 µm									
Line count	120	170	240	256	300	341	360	480	512
Reference mark	Single or distance coded								
Grating period accuracy [1]									
± 20µm arc length	± 72“	± 51“	± 36“	± 34“	± 29“	± 26“	± 24“	± 18“	± 17“
± 10µm arc length	± 36“	± 26“	± 18“	± 17“	± 15“	± 13“	± 12“	± 9,0“	± 8,5“
± 5µm arc length	± 18“	± 13“	± 9“	± 8,5“	± 7,5“	± 6,5“	± 6,0“	± 4,5“	± 4,5“
Outside diameter [mm]	115,12	162,91	229,78	245,06	287,08	326,23	344,39	458,99	489,57
Mech. speed [min^{-1}] [2]	33300	23500	16600	15600	13200	11700	11000	8300	7800
Max. angle acceleration [rad/s^2] [2]	4000					3600	3400	1400	1200

[1] The position error per grating period and the accuracy of the grating result toghether 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.

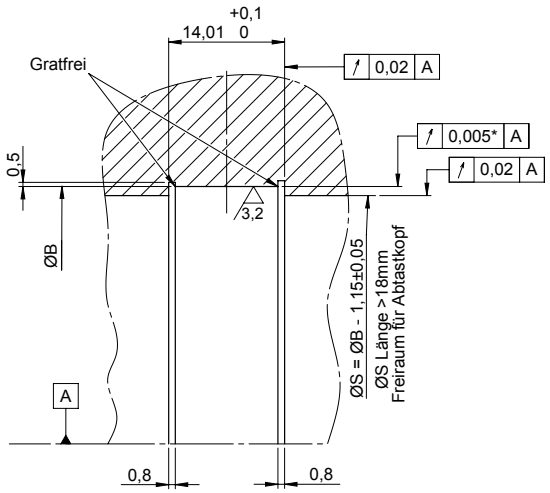
Incremetal scale tape ring for inside scanning WMR 1130 I

- **In combination with the scanning head WMK 2130**
- **Grating period 3000µm**



WMR 1130I

Mechanical requirements on the carrier flange



Line count	ØB [mm]
170 to 240	Nx3/π + 0,73 ±0,01
241 to 342	Nx3/π + 0,67 ±0,02
343 to 500	Nx3/π + 0,64 ±0,03
501 to 830	Nx3/π + 0,60 ±0.05
831 to 1330	Nx3/π + 0,57 ±0,07
1331 to 1830	Nx3/π + 0,54 ±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 1130I 3000 µm								
Line count	170	240	256	300	341	360	480	512
Reference mark	Single or distance coded							
Grating period accuracy [1]								
± 20µm arc lenght	± 51“	± 36“	± 34“	± 29“	± 26“	± 24“	± 18“	± 17“
± 10µm arc lenght	± 26“	± 18“	± 17“	± 15“	± 13“	± 12“	± 9,0“	± 8,5“
± 5µm arc lenght	± 13“	± 9“	± 8,5“	± 7,5“	± 6,5“	± 6,0“	± 4,5“	± 4,5“
Inside diameter ring [mm]	162,91	229,78	245,06	287,08	326,23	344,39	458,99	489,57
Mech. speed [min^{-1}] [2]	23500	16600	15600	13200	11700	11000	8300	7800
Max. angle acceleration [rad/s^2] [2]	4000				3600	3400	1400	1200

[1] The position error per grating period and the accuracy of the grating result toghether 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.

Ordering code

- **WMR - Scale tape ring for incremental angle encoder**
- **Grating period 3000µm**