

# Circus™ NFC

## Overview

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**Frequency Band**  
NFC 13.56 MHz

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**Chip**  
NXP NTAG210 Micro  
NXP NTAG213  
NXP NTAG216

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**Antenna Dimensions**  
Ø 20 mm / 0.79 in

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**International Standard**  
ISO 14443A

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**Industry Segments**  
Electronics and Gaming  
Apparel

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**Applications**  
NFC  
Gaming and Toys  
Electronics

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**RoHS**  
EU Directive 2011/65/EC and  
Directive (EU) 2015/863

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**REACH**  
Regulation (EC) No 1907/2006

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## Smallest round HF inlay with best-in-class performance

Our AD Circus™ NFC inlays and tags are designed to suit applications where small size and high performance are critical. These round-form products are ideal for use in small stickers, key fobs and item-level tagging.

AD Circus™ NFC inlays and tags are available with NXP's NTAG210 Micro, NTAG213 and NTAG216 chips. AD Circus™ NFC with the NTAG210 Micro chip is a cost-efficient alternative where small size with 48 bytes of user memory is required, meeting the applications such as media advertising or collectable playing cards.

If a small form factor with large user memory is needed, then AD Circus™ NFC with NXP's NTAG213 chip is a proven product of choice. It offers 144 bytes of user memory, and comes with unique ID (UID) mirror functionality, which enables the chip serial number to be mirrored as part of its encoded URL address. This feature allows every tag to be seen and read as unique from the application perspective, without requiring users to encode inlays with different numbers.

AD Circus™ NFC products are based on the ISO 14443 a standard, and conform to NFC Forum standards. Our inlays and tags are also compliant with ISO 9001:2015 Quality Management and ISO 14001:2015 Environmental Management. This ensures a reliable and state-of-the-art product that meets a variety of application needs.

## Technical features

Chip	NXP NTAG210 Micro	NXP NTAG213	NXP NTAG216
EPC and User Memory	48 bytes	144 bytes	888 bytes
Product Code	3006535 / IL-603118	3002981 / IL-602761, 3007321 / IL-603573	3004473 / IL-602829
Delivery Format	Wet inlay+	Wet inlay+	Wet inlay+
Die-Cut Dimension	Ø 22 mm / 0.866 in	Ø 22 mm / 0.866 in	Ø 22 mm / 0.866 in
Inlay Substrate	PET	PET	PET
Face Sheet	Clear PET	Clear PET	Clear PET
Total Thickness	136 µm	136 µm	136 µm
Standard Pitch	27 mm / 1.063 in	27 mm / 1.063 in	27 mm / 1.063 in
Web Width	27 mm / 1 in	27 mm / 1 in	27 mm / 1 in
Core Size	76 mm / 3 in	76 mm / 3 in	76 mm / 3 in
Quantity / Reel	5000 pcs/reel 20000 pcs/box	5000 pcs/reel 20000 pcs/box	5000 pcs/reel 20000 pcs/box
Operating Temperature	-25 °C to 70 °C / -13 °F to 158 °F		

### Contact information

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Connect with us on:



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**Warranty:** Please refer to Avery Dennison standard terms and conditions: [rfid.averydennison.com/termsandconditions](http://rfid.averydennison.com/termsandconditions)

**Care and handling:** RFID inlays are sensitive to ESD. Observe standard industry practices relating to electronics / RFID to keep environmental impact and static charge to a minimum.

**Applications:** This product should be tested by the customer / user thoroughly under end use conditions to ensure the product meets the particular requirements. Avery Dennison does not represent that this product is fit for any particular purpose or use. Avery Dennison reserves the right to modify, change, supplement or discontinue product offerings at any time without notice. The information contained herein is believed to be reliable but Avery Dennison makes no representation concerning the accuracy or correctness of the data.

