

# SlimFlex™ Tag

Pliable RFID tags mount anywhere and endure rugged conditions



HID Global® SlimFlex™ RFID tags are among the most advanced general purpose flexible tags available. The unique thermoplastic polyurethane (TPU) housings – made from the same materials used worldwide to manufacture automobile pipes and hoses – tolerate repeated bending or torsion, while maintaining excellent performance characteristics. The durable housing safeguards embedded electronics, even under harsh conditions.

SlimFlex passive contactless transponders improve data collection speed and accuracy for logistics applications.

Anti-collision functionality, fast data-rate communication and password data protection enable precise, reliable reading and updating of each tag's large user memory. SlimFlex tags are compliant with ISO certified readers and modules. All SlimFlex RFID tags are waterproof. They can be used in deep-sea operations, provide high resistance to aggressive liquids

and UV rays, and deliver reliable performance and reading stability at high and sub-freezing temperatures.

Available in multiple configurations:

- Rectangular **SlimFlex tags** attach snugly to round or irregular surfaces, such as cylindrical containers, plastic pipes, helmets or even trees. These tags conform to surface contours, and can be securely attached with cable ties, industrial adhesives, rivets or screws.
- Designed for garments, each **SlimFlex Laundry tag** withstands chemical exposure and high temperature of related washing cycles. This small, flexible white strip can be discreetly sewn into the hem of clothing, unnoticeable to users during everyday operations. SlimFlex Laundry tags enable automated sorting, inventory and accounting for commercial cleaners. For commercial linen, please refer to the HID LinTRAK® tag, which has been optimized for this use case.
- The **SlimFlex Tag Washer** has been designed with one reinforced hole to rivet it. This version is ideal whenever a SlimFlex tag shall be fixed with a single rivet to hang down from metal bars or be placed on a hook.



## KEY BENEFITS:

- **Flexibility** – Repeated bending will not impede performance; enables secure mounting on rounded or irregular surfaces
- **High durability** – Resistant to liquids, dust, impact and weather extremes
- **Enhanced reliability** – Precise, consistent read ranges when mounted to plastic or wood

## TECHNOLOGY HIGHLIGHTS:

- HF 13.56 MHz version readable with ISO/IEC 15693 compatible NFC devices with tag option for on-metal use.
- Broadband UHF version for worldwide use at 860 to 960 MHz.
- Fully interoperable, standards compliant.
- Bendable, durable housing.
- Waterproof; resistant to chemicals, impact and UV rays.
- Large user memory.
- 1D barcode laser engraved optional

## APPLICATION AREAS:

### Asset tracking and logistics


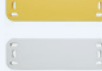



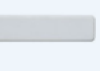


- Inventory management
- Itemize tracking of pallets and goods
- Cylindrical items such as plastic bins or tree trunks

### Laundry, medical & health

- Uniform companies
- Commercial laundry
- Hospital laundry
- Medical compartments

### Returnable transport items

- Shipping container or pallet tracking
- Waste management
- Commercial and industrial plastic bin identification

	SlimFlex™ Tag							
	HF		UHF					
	200	OM (on-metal)	Standard	200	301	Laundry 2G	Mini	Washer
								
Base Model Number	629990 (blank) 629990-020 (1D barcode)	62999C-101 (Yellow) 62999C-102 (White)	6M6990-101	6M6990-200 6M6990-220 (1D barcode)	6M6990-300	698992	69899A	6M6990-400
	ELECTRONIC							
Operating Frequency	13.56 MHz		860-960 MHz (EU, US, JP)					
Chip Type	ICODE SLiX		M730			Higgs 3		M730
Memory	1024 bit EEPROM		128 bit EPC			512 bit user memory + 96 bit EPC + 64 bit TID		128 bit EPC
Anti-Collision	Yes							
Reading Distance (2W reader ERP, free space)			Up to 19.7 ft (6 m)			Up to 16.4 ft (5 m)	Up to 13.1 ft (4 m)	Up to 19.7 ft (6 m)
	PHYSICAL							
Dimensions	3.3 x 1.0 x 0.1 in (83 x 25 x 3 mm)	3.3 x 1.0 x 0.2 in (83 x 25 x 6 mm)	3.0 x 1.0 X 0.1 in (77 x 25 x 3 mm)	3.3 x 1.0 x 0.12 in (83 x 25 x 3 mm)	3.4 x 1.0 x 0.1 in (87 x 25 x3 mm)	2.2 x 0.5 x 0.08 in (55 x 12 x 2.2 mm)	2.5 x 0.5 x 0.08 in (65 x 12 x 2 mm)	4.3 x 1.0 x 0.1 in (110 x 25 x 3 mm)
Mounting Method	Cable tie, glue, rivet, screw	Cable tie	Glue, rivet, screw	Cable tie vertical to surface, glue, rivet, screw	Cable tie flush with surface, glue, rivet, screw	Sew into hem, glue	Cable tie, glue, rivet, screw	Aluminum Rivet
Fixation Hole Size	0.2 x 0.1 in (6 x 2.5 mm)		Ø 0.1 in (3 mm)	0.2 x 0.1 in (6 x 2.5 mm)	Ø 0.27 in (7 mm)	[none]	0.25 x 0.08 in (6.5 x 2 mm)	Ø 0.18 in (4.8 mm)
Affixes To	Any material (vertical mount)	Any material (flat mount)	Plastic, dry wood	Any material (vertical mount)	Plastic, dry wood	Cloth fabric, plastic	Any material (vertical mount)	
Housing Material	TPU					TPE	TPU	
Color	Yellow (Pantone 108)	Yellow (Pantone 108) White (RAL 9016)	Green	Yellow (Pantone 108)		White		Yellow
Weight	0.2 oz (6 g)	0.3 oz (8.5 g)	0.2 oz (6 g)			0.05 oz (1.4 g)		0.3 oz (9 g)
	CHEMICAL AND MECHANICAL RESISTANCE							
Water	IP68, 68° F (20° C), 6.6 ft (2 m) x 24 h							
Withstands Exposure To	Mineral oil, petroleum, salt mist, vegetable oil, HCL (10%), Bleach (5%); UV light							
Environmental Test Conditions	68° F (20° C), 100 h							
Vibration	IEC 68.2.6 [10 g, 10 to 2000 Hz, 3 axis, 2.5 h]							
Shock	IEC 68.2.29 [40 g, 18 ms, 6 axis, 2000 times]							
Axial / Radial Force	1000 N, 10 sec							
Water Press Extraction (set point)						70 bars (5 min)		
Impact	IEC 62262-IK06							
Drop Test	100 drops 5.9 ft (1.8 m)							
Bending	5.9 in (150 mm) curve radius					500 each side, 10 mm radius; 500 each side, 180° twist	5.9 in (150 mm) curve radius	
	THERMAL							
Storage	-40° to +158° F (-40° to +70° C)					-40° to +185° F (-40° to +85° C)		-40° to +158° F (-40° to +70° C)
Operating Temperature	-40° to +158° F (-40° to +70° C)					-40° to +185° F (-40° to +85° C)		-40° to +158° F (-40° to +70° C)
Peak	212° F (100° C), 100 h					248° F (120° C), 100 h; 428° F (220° C) [20 bars, 10 x 10 sec, with thin tissue between iron and tag]		
Shock/Fatigue	-40° to +158° F (-40° to +70° C) , 100 x 5 min with 30 sec transition					+68° to +320° F (+20° to +160° C), 200 x 5 min with 30 sec transition	-40° to +185° F (-40° to +85° C) , 100 x 5 min with 30 sec transition	-40° to +158° F (-40° to +70° C), 100 x 5 min with 30 sec transition
	OTHER							
Standards	ISO/IEC 15693, 18000-3 Mode 1, NFC Tag Type 5 (if NDEF formatted)		UHF EPC Class 1 Gen 2, ISO 18000-6C, RAIN					
Options	Laser engraving, custom encoding, alternate colors		Custom embossed logo, alternate colors	Laser engraving, custom embossed logo, alternate colors				
Box Size	1,000 pcs	500 pcs	500 pcs.	1,000 pcs.		1,500 pcs.		1,000 pcs.
Warranty	2 Years							

