

OMRON's V720 tag inlays conform to the ISO 15693 international standard. The inlays are super thin and highly flexible, making them one of the most cost-effective among the ID tags.

Features and Benefits

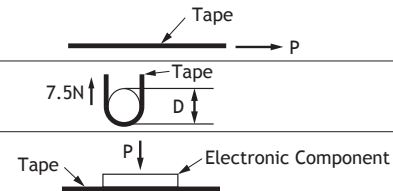
Conforms to ISO 15693, the international standard for contactless IC cards.
 Adopted I.CODE chip technology by Royal Philips Electronics.
 Thin and flexible.

Withstands bending.
 Easy secondary processing into business forms (roll-to-roll).

General Specifications

Item	V720-D52P03/04	V720S-D13P01/02/06
Applicable chip	I.CODE 1	I.CODE SLI
Memory capacity	44 bytes (user area)	112 bytes (user area)
Memory type	64-byte EEPROM	128-byte EEPROM
Communications frequency	13.56 MHz	
Data retention time	10 years after data is written (at 55 C and lower)	
Number of data rewrites	100,000 times for each address	
Ambient temperature in operation	-10 to 70 C (non icing or condensing)	
Ambient temperature in storage	-30 to 70 C (non icing or condensing)	
Heat resistance	No communications error after leaving the product in ambient atmosphere at 85 C for 250 hours	
Cold resistance	No communications error after leaving the product in ambient atmosphere at -30 C for 250 hours	
Thermal shock resistance	No communications error after 100 test cycles, where a cycle is a high temperature exposure (the product is left at -30 C ambient atmosphere for 30 minutes) followed by low temperature exposure (the product is left at 85 C ambient atmosphere for 30 minutes).	
Vibration resistance	Resistance: No abnormality after sweeping variable vibration of 10 Hz to 2 kHz, 1.5 mm double amplitude at 150 m/s ² in the X, Y, and Z directions 10 times for 15 minutes each.	
Shock resistance	Resistance: No abnormality after applying a 500 m/s ² shock in the X, Y, and Z directions three times each for a total of 18 times.	
Moisture resistance	No communication error after leaving the product in ambient atmosphere at 85 C with 85% humidity for 250 hours	
Standard price (yen)	Contact your OMRON representative separately.	

Item	V720S-D13P01	V720S-D13P02	V720S-D13P06	V720-D52P03	V720-D52P04
Tape tension (P)	< 10 N				
Bending diameter (D)	> 20 mm				
Static pressure (P)	< 10 MPa (10 N/mm ²)				



Inner diameter of 76.2 mm

Roll Delivery Form

Item	V720S-D13P01	V720S-D13P02	V720S-D13P06	V720-D52P03	V720-D52P04
Appearance	Single-row roll form				
Number of units per roll	1,000 pcs. (V720 -D P -R1K) and 5,000 pcs. (V720 -D P -R5K)				
Sheet length (1,000 pcs./5,000 pcs.)	Approx. 100/500 m	Approx. 50/250 m	Approx. 33/167 m	Approx. 33/167 m	Approx. 33/167 m
Roll core	Inner diameter of 76.2 mm				
Outer diameter of roll (1,000 pcs./5,000 pcs.)	160/260mm	155/210mm	150/200mm	150/200mm	150/200mm
Weight (1,000 pcs./5,000 pcs.)	0.7/2.4kg	0.6/1.4kg	0.7/1.5kg	0.5/1.0kg	0.5/1.0kg

Communications Range*1 (Measured at t = 25°C)

Reference value	V720S-D13P01	V720S-D13P02	V720S-D13P06	V720-D52P03	V720-D52P04
V720S-H01					
Read	250	210	160	80	70
Write	250	210	160	75	65
V720S-HMC73					
Read	50	45	35	20	20
Write	50	45	35	5 ~ 20	5 ~ 20

*1. The communications range may be affected by environmental noise or members around the product. Secondary processing of the inlet with extremely high heat or pressure may affect the communications range.

Tag Inlays Dimensions

Item	V720S-D13P01	V720S-D13P02	V720S-D13P06	V720-D52P03	V720-D52P04	<p>Tag Inlet Dimension</p> <p>Core inner diameter: 76.2 mm</p> <p>48 mm (or 70 mm)</p> <p>mm</p> <p>Roll delivery form</p>
Width	48 ± 1.0mm		70 ± 1.0mm	48 ± 1.0mm		
Pitch between the coils	96 ± 0.3mm	48 ± 0.3mm	32 ± 0.3mm	32 ± 0.3mm	32 ± 0.3mm	
Thickness at electronic parts	Max. 270 μm					
Overall thickness of the copper antenna coil	50+10 μm / -0 μm					
Size of the antenna coil	46 × 75mm	46 × 43mm	60 × 20mm	21mm	16.5 × 22mm	