

To:

Product Specifications

Name: Tag Inlet

Model: V720-D52P01-R□K

OMRON Corporation
Card Business Promotion Division

C	20010619	Improved vibration resistance, Changed lot number construction	Iwamae
B	20010323	Change of the distance between inlets	Iwamae
A	20000401	The first edition	Iwamae
Code	Revision date	Revised content	Approved by

Date of Issue:

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1. Application

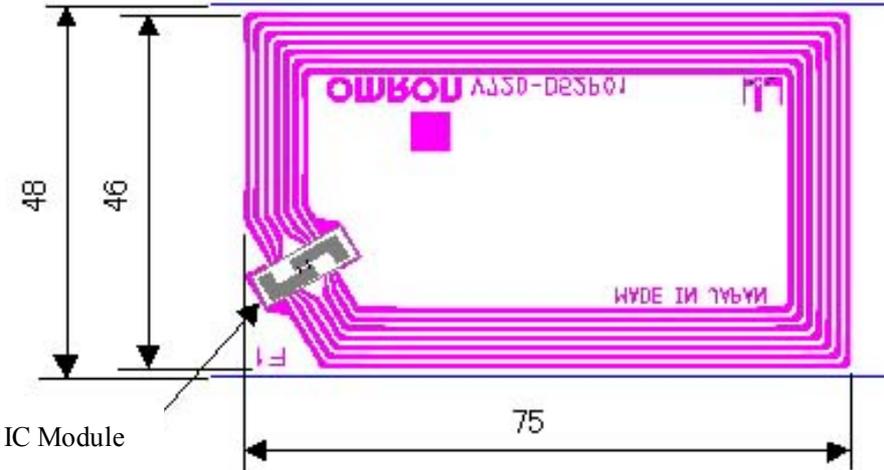
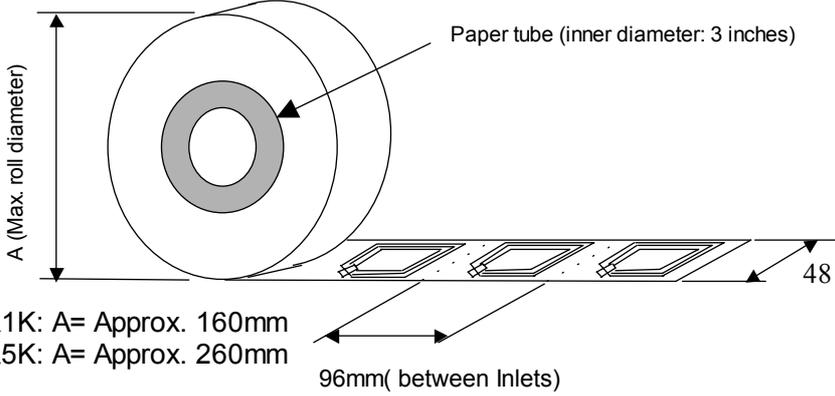
These specifications apply to non-contact Tag Inlets and their packaging.

2. Product Models

V720-D52P01-R1K (1,000 pcs. per roll)

V720-D52P01-R5K (5,000 pcs. per roll)

3. Shapes and Dimensions

<p>Shape of Inlet</p>	 <p>Maximum thickness (at IC): 0.27mm</p>
<p>Shape of roll</p>	 <p>Paper tube (inner diameter: 3 inches)</p> <p>A (Max. roll diameter)</p> <p>48</p> <p>96mm(between Inlets)</p> <p>R1K: A= Approx. 160mm R5K: A= Approx. 260mm</p>
<p>Material</p>	<p>Polyethylene terephthalate resin</p>
<p>Weight of roll</p>	<p>R1K: Approx. 0.7 Kg R5K: Approx. 2.4 Kg</p>

4. General Specifications

Communications frequency	13.56 MHz
Memory	512-bit EEPROM (user memory area: 352 bits)
Data backup time	10 years
Data writing life	100,000 times
Ambient operating temperature (See note 1.)	-10 to 70°C (with no icing, no condensation)
Ambient storage temperature (See note 2.)	-30 to 70°C (with no icing, no condensation)
Ambient storage humidity (See note 1.)	60% RH max.
Heat resistance	No communications error after leaving the product for 250 hours at 85°C
Cold resistance	No communications error after leaving the product for 250 hours at -30°C
Thermal shock resistance	No communications error after 100 cycles between 85°C and -30°C holding 30 minutes at each temperature.
Vibration resistance	Destruction: 10 to 2000 Hz, 1.5-mm double amplitude at 150 m/s ² in X, Y, and Z directions 10 times each for 11 minutes
Shock resistance	Destruction: 500 m/s ² three times each in X, Y, and Z directions

Note 1: Observe the following precautions.

- a) Do not use or store the product in places where the temperature falls outside the ranges specified above or where temperature changes are so radical or humidity is so high that condensation forms.
- b) Do not expose the product to water; the product is not waterproofed.
- c) Do not use or store the product in places where it is exposed to explosive gases, flammable gasses, corrosive gases, oil, chemicals, organic solvents, dust, salt, or metal powder.
- d) Do not bend the product or apply mechanical stresses, such as warping or twisting forces, to the product. Doing so may cause communications failure. Special attention must be paid not to apply excessive mechanical stresses to the IC, otherwise it will be damaged.

Note 2: As a general rule, use the product within one month from the date of delivery.

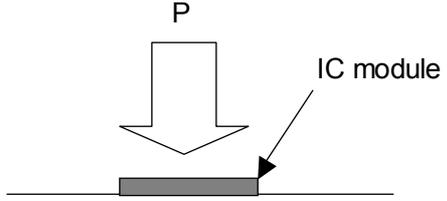
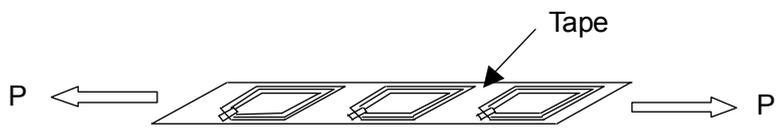
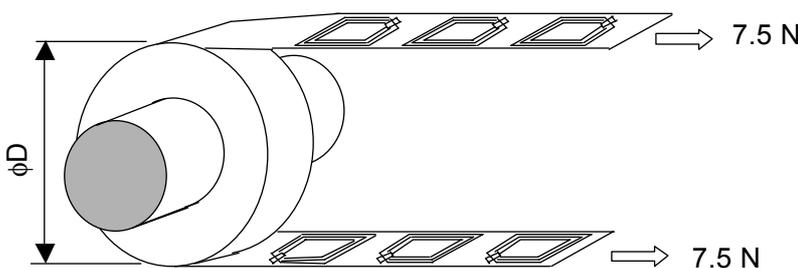
5. Communications Distances(reference)

Read distance	25 cm (Read/Write Antenna: V720-H01)
Write distance	25 cm (Read/Write Antenna: V720-H01)

Note 1: The communications distances may be affected by ambient noise and surrounding materials. Before actually using the product, check if the distances are affected by surrounding environment.

6. Fabrication Specifications

Following specifications must be taken into consideration when fabricating Tag Inlets, such as forming them into cards.

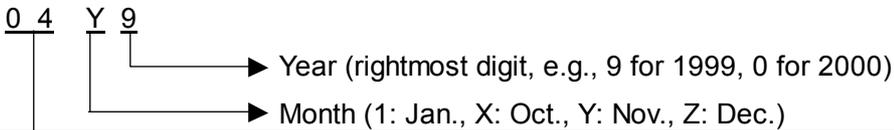
Fabrication temperature	85°C max.
Applied pressure (P) (See note 1.)	10 Mpa (10 N/mm ²) max. 
Tape tension (P)	10 N max. 
Bending diameter (φD)	20 mm min. 
Static electricity resistance	5 kV max.

Note 1: Do not apply a pin-point load to the IC section.

7. Packing Specifications

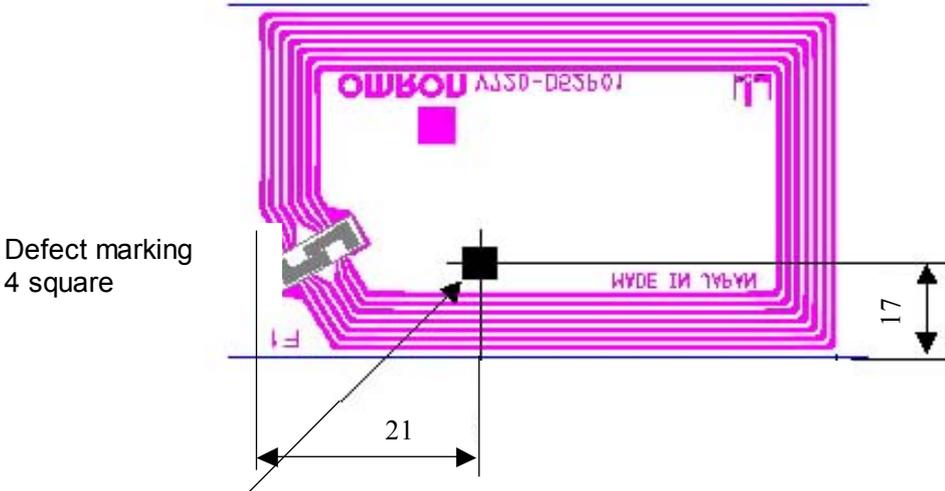
7.1 Tag Inlet Delivery Form

- (1) Tag Inlets are rolled onto a paper tube with an inner diameter of 3 inches and delivered in rolls with a width of 48 mm ±0.5.
- (2) Defective Inlets are indicated with markings to distinguish from good ones on the roll.
- (3) Inlets are rolled so that IC mounting surface faces inside.
- (4) Leaders are attached to the beginning and end of the roll.
- (5) Lot numbers are printed using a laser beam.

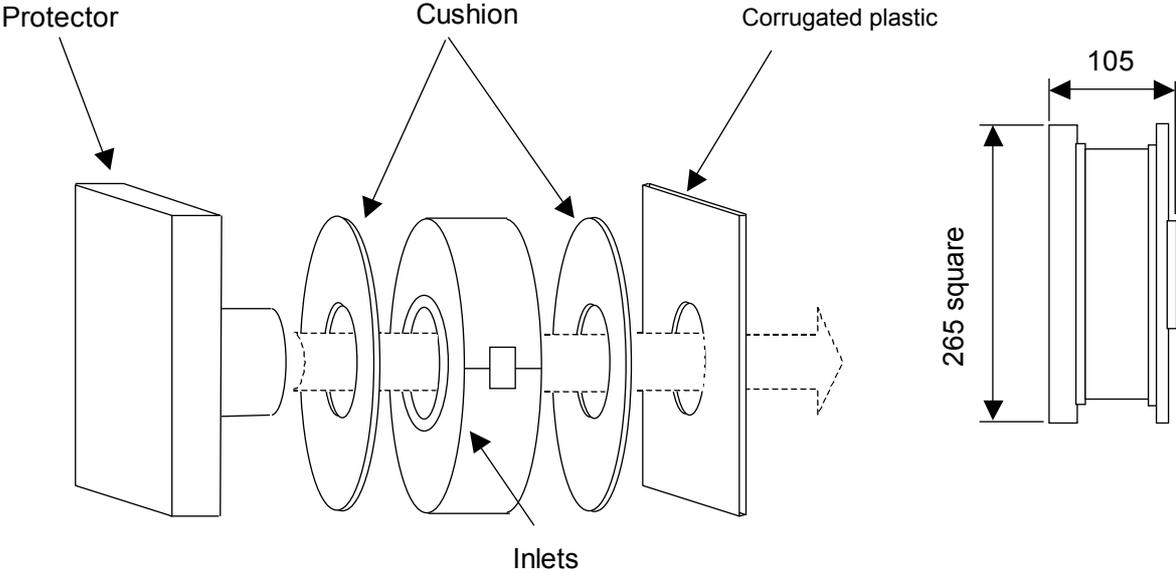




7.2 Defect Marking



7.3 Internal Packing



- (1) As shown above, the Tag Inlets are held between cushions with a protector and corrugated plastic board. The entire assembly is bound with rubber bands.
- (2) The assembly is placed in a vinyl bag together with desiccant and then the bag is thermally

sealed.

7.4 External Packing

The packaged products are placed in cardboard boxes with cushioning material.

7.5 Indications

The product name and quantity are placed on the specified label and attached to the package.

8. Handling Precautions

The products are delivered as inlets. Damages due to unpredictable static electricity or excessive forces may occur. Observe the following precautions in handling these products.

- (1) Provide countermeasures against static electricity when handling the products.
- (2) Store the products in packed state.
- (3) Do not remove the products from packages except when actually using them. Do not leave the products exposed after they are unpacked.

9. Others

- (1) As a rule, do not modify the product specifications without a prior approval from OMRON. This rule does not apply to cases where design or processing specification changes are within the ranges specified in these Specifications.
- (2) If questions arise with regard to these Specifications or to matters not specified here, both parties will cooperate in finding solutions.