



A K O

Save in quality

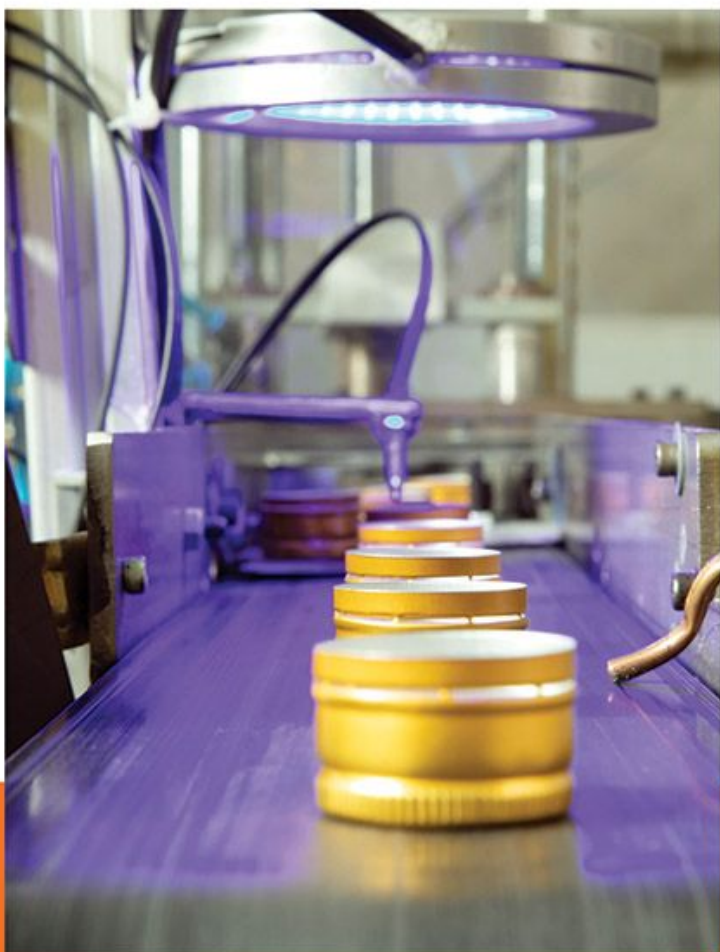
**SPECIALIZED
MANUFACTURER**
OF PHARMACEUTICAL PACKAGING
AND ACCESSORIES

Product Catalog





PRODUCTS CATALOG



How It All Began

Ako Sanat Tejarat Aria stepped into the field of pharmaceutical packaging industry in 2014.

Through our knowledgeable group and applying the latest machines in the very field we are able to provide a wide variety of injection vial/bottle caps, pilfer proof caps etc. Our teams stay on top of technical and pharmaceutical advancements, so that we are certified according to ISO 9001 and GMP.

Ako believes in close collaboration with its customers: A center of excellence supports customers in finding the right packaging solution for their products. Together, Ako co-engineers the functionality and design of the customers' products by utilizing industry expertise and engineering know-how. Pride in our work and commitment to our customers is the driving force behind our success.

The Major Approach Of The Organization

Our purpose is grounded in our commitment to create value for shareholders and provide public benefits. Our values determine the success route and guide our decision making. In this regard, we consider some steps including:

- Comprehensive attempts to improve the quality of the products by identifying and following relevant standards.
- Providing agile and safe environment for employees, enhancing their technical knowledge, motivating them to take part in teamwork tasks and improving efficiency to gain quality, safety, sanitary and environmental goals.
- We have combined the strength of three golden factors: quality, price and on time delivery.

A Vision Of Tomorrow

Ako Sanat is establishing a new manufacturing complex located in Barekat industrial pharmaceutical town to fulfill its sustainable development goals. This factory is being built in an area with 6000 square meters, based on the latest standards and high-tech equipment.

Barekat-the first specialized pharmaceutical town in Iran-is founded with the aim of developing pharmaceutical industry.



Good Manufacturing Practice (GMP)

The entire manufacturing and testing processes are following the good manufacturing practices as specified below:

- Incoming raw materials are verified via material inspection and testing. Moreover, our suppliers are approved via Ako's specialized vendor management system.
- In addition to the on-line inspections, in-process inspection and final product testing are performed to ensure compliance with approved specifications.
- The manufacturing and testing details of each batch of product are recorded on batch record which is retained in accordance with document control procedures.
- Ako operates a system of internal and external audits to maintain compliance.
- Ako confirms that it will continue to adhere to relevant national and international standards in designing and manufacturing its products.
- Ako serves the right to use the internal change control procedure to change raw material suppliers and production process.



Sealing Solution For Vials

Ako is a reliable solution partner to global pharmaceutical companies. Its unique range of products and services includes the most innovative coatings, aluminum seals and processing technologies. Ako also offers one of the most extensive product portfolios for vial applications in the present pharmaceutical markets worldwide.

Ako's experience, knowledge and engineering expertise translates into:

- Aluminum Seals for traditional pharma solutions
 - High compatibility with most types of small and large volume parenteral containers
-

SEALING
SOLUTIONS
FOR VIALS

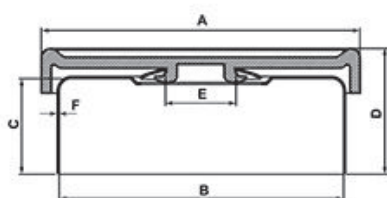


Flip-off Vial Seals

Flip-off is a new vial cap technology with the following features:

- Ability to distinguish injection drug by the plastic component color
- Easier usage compared to older technologies such as seal cap
- Unalterable and unfalsifiable
- Elegant vial packaging
- Capable of being inscribed according to customers desired logo
- Available in various vial sizes, including 13, 20 and 32mm
- Excellent chemical resistance

	White	11006		Green brain 51043 closed		Yellow	21325
	Gray	71005		Pale green 51048		Orange	31148
	Pale gray	71004		Dark green 51050		Red	31002
	Colorful gray	71008		Pale blue 41072		Pink	31265
	Black	82016		Blue navy 41050		Lilac	41478
	Brown	61021		Dark blue 41007		Purple	41969
						Colorless	00



Name	A	B	C	D	E	F
Flip-Off 13 mm	15.55 ± 0.40	13.35 ± 0.10	6.20 ± 0.10	7.90 ± 0.30	4.10 ± 0.05	0.20 ± 0.01
Flip-Off 20 mm	22.45 ± 0.25	20.15 ± 0.05	7.5 ± 0.10	9.10 ± 0.30	5 ± 0.05	0.20 ± 0.01
Flip-Off 32 mm (H 11 mm)	34.95 ± 0.15	32.55 ± 0.05	10.80 ± 0.05	$12.75^{+0.15}_{-0.25}$	11.50 ± 0.05	0.20 ± 0.01
Flip-Off 32 mm (H 13 mm)	34.95 ± 0.15	32.65 ± 0.15	12.80 ± 0.10	$14.75^{+0.20}_{-0.25}$	11.50 ± 0.05	0.20 ± 0.01

Unit : mm

CAP

Aluminum caps are used to close glass bottles filled with pharmaceutical, mineral and drinking water, alcoholic and non-alcoholic beverages or juices.

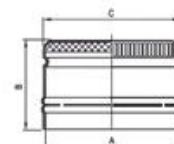
ROPP (roll-on pilfer proof) caps are cost-effective, provide an effective seal, are compatible with contents, easily opened by the consumer, often reclosable and comply with product, packaging and environmental regulations.

Vision systems are used to ensure the highest quality level and process monitoring. From the lined shell to the terminated caps, every component is carefully inspected with high-resolution cameras.



28mm Aluminum Cap

The very aluminum cap has been taken into consideration by pharmaceutical and food industries all over the country. It is worthy to remark that the aluminum part is coated by FDA approved and anti-corrosion lacquere.

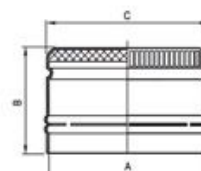


Name	A	B	C
Aluminium Cap 28 mm	28.10 ± 0.10	18.35 ± 0.20	28.60 ± 0.25

Unit : mm

35mm Aluminum Cap

Since there was a vacancy for this size of aluminum cap among Iranian manufacturers, Ako realized the necessity of manufacturing 35mm ROPP cap.



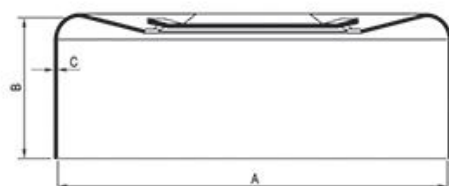
Name	A	B	C
Aluminium Cap 35 mm	34.50 ± 0.30	17.80 ± 0.20	35.40 ± 0.30

Unit : mm

Seal Cap

Seal Cap

Seal caps are the first vial cap technology made of aluminum. They are manufactured and offered in various colors upon customer request.

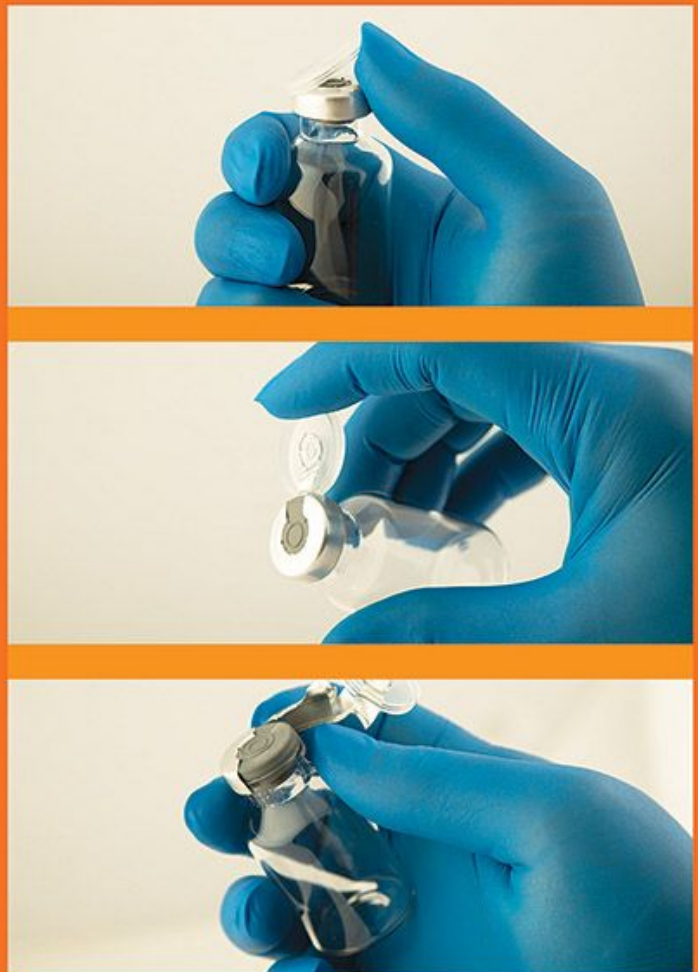


Name	A	B	C
Seal cap 20 mm	20.15 ± 0.05	7.50 ± 0.10	0.20 ± 0.01

Unit : mm



Tear-off



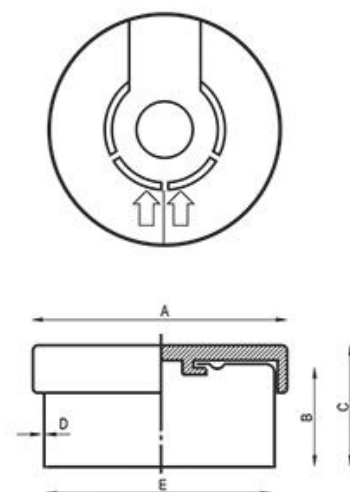
Tear - off

A seal combining the merits of the flip-off seal with the removability feature of the aluminum part.

The plastic lid will flip off and expose the underlying stopper for use with a syringe . Moreover, it is widely used in viscous drugs and contrast media administration.

As the first Iranian manufacturer of 20 mm tear-off caps, we claim the following specifications:

- The caps withstand a sterilization process in accordance with ISO 8872
- During opening, the complete tear-off tab, tears off and no parts of aluminum cap breaks except the bridges and score paths



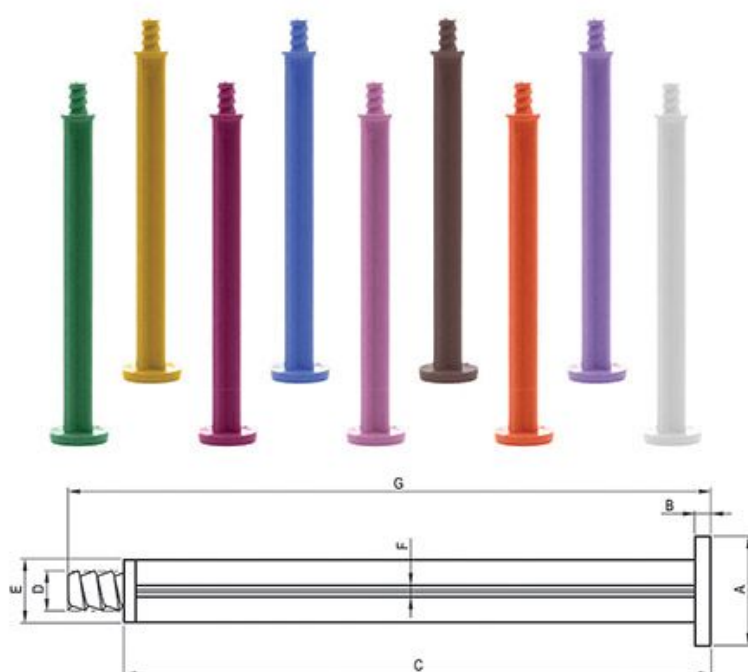
Name	A	B	C	D	E
Tear off 20 mm	22.45 ± 0.25	7.30 ± 0.20	9.20 ± 0.40	0.20 ± 0.01	20.15 ± 0.05

Unit : mm

Plunger Rods

In the field of drug delivery system, our solution dedicated to pharmacists looking for a perfect product. Plunger rod is a core mechanism of prefilled syringes. Our plunger rods are made of polypropylene or polystyrene based formulation, having all of physical, mechanical and chemical characteristics needed for a safe drug administration.

AKO offers 1cc colored (PP) and transparent (PS) plunger rods.



Name	A	B	C	D	E	F	G
Rod Plunger 1 ml	$\varnothing 9.80 \pm 0.25$	1.40 ± 0.10	52.50 ± 0.50	$\varnothing 3.50 \pm 0.10$	$\varnothing 5.70 \pm 0.10$	0.90 ± 0.10	57.50 ± 0.50

Unit : mm



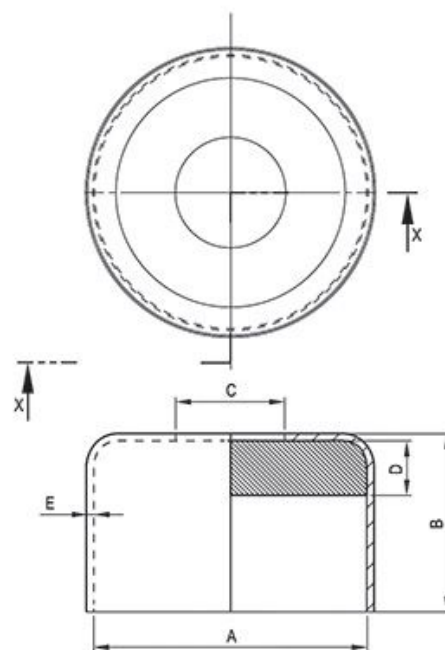
COMBISEAL



Combiseal

In order to fulfill our healthcare mission, we are always striving to widen our products. Proudly, Ako has recently added combiseal to its collection. We at Ako, guarantee that our combiseal is an effective packaging solution for related drug containers. The Aluminum component along with the single layer rubber, complete the sealing solution for 1.8 and 3 ml vials.

Ako assures absolute commitment to the national and international standards.



Name	A	B	C	D	E
Combiseal 7.5 mm	7.50 ± 0.05	4.90 ± 0.15	3.00 ± 0.20	1.50 ± 0.15	0.2 ± 0.010

Unit : mm

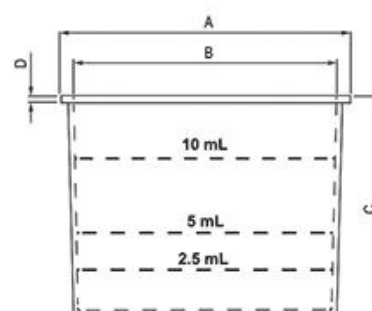


Measuring Cup

Measuring cup is widely used for mixing, dosing and administering medicines in hospital, clinics and pharmacies. It is made of polypropylene and is graded from 2.5 to 10 ml. It provides more elegant syrup packaging. Considering the dosage sensitivity of some syrups, its grading allows users to accurately measure medicine dose. Since usage exceeding the doctor's prescription will cause serious harm and using less, will reduce its effectiveness. It is also placed on top of the product cap to save space and make packaging cost-effective.

From scientific research and advance design in such a product that calls for precision, and health care considerations, be it for its shape, smooth edges, physical characteristics, grading and material, AKO has manufactured a high-quality and transparent measuring cup. Its decisive advantages are enumerated as follows:

- Cleanliness
- Transparency
- No sign of injection gate
- Excellent chemical resistance



Name	A	B	C	D
Measuring Cup 2.5 - 10 ml	33 ± 0.30	30 ± 0.30	21.90 ± 0.30	0.60 ± 0.15

Unit : mm

Seals And Liners For Closures And Caps

One of the customary ways to improve the cap's sealing of the bottle or jar is with the insertion of a seal into the cap.

The seal has several functions:

1. Leakage prevention from the bottle or jar
2. Product protection from oxygen and moisture permeation and extending the product shelf life
3. Excellent chemical resistance

Foam Liner

This liner is a single layer extruded seal consisting of foamed low density polyethylene (LDPE) and is typically used for powders, dry and liquid products.

Food Contact Approval

All materials intended to come into contact with food/drug are in conformity with the relevant FDA requirements, the relevant national regulations and the European community directives.

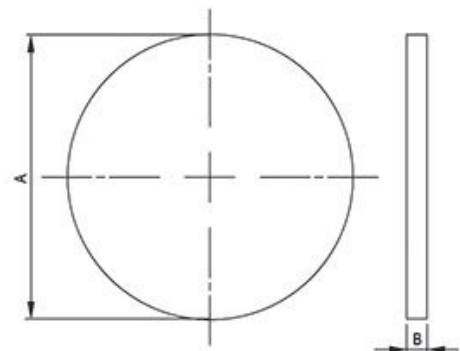
All products comply with commission directive 94/62/EC concerning heavy metals.

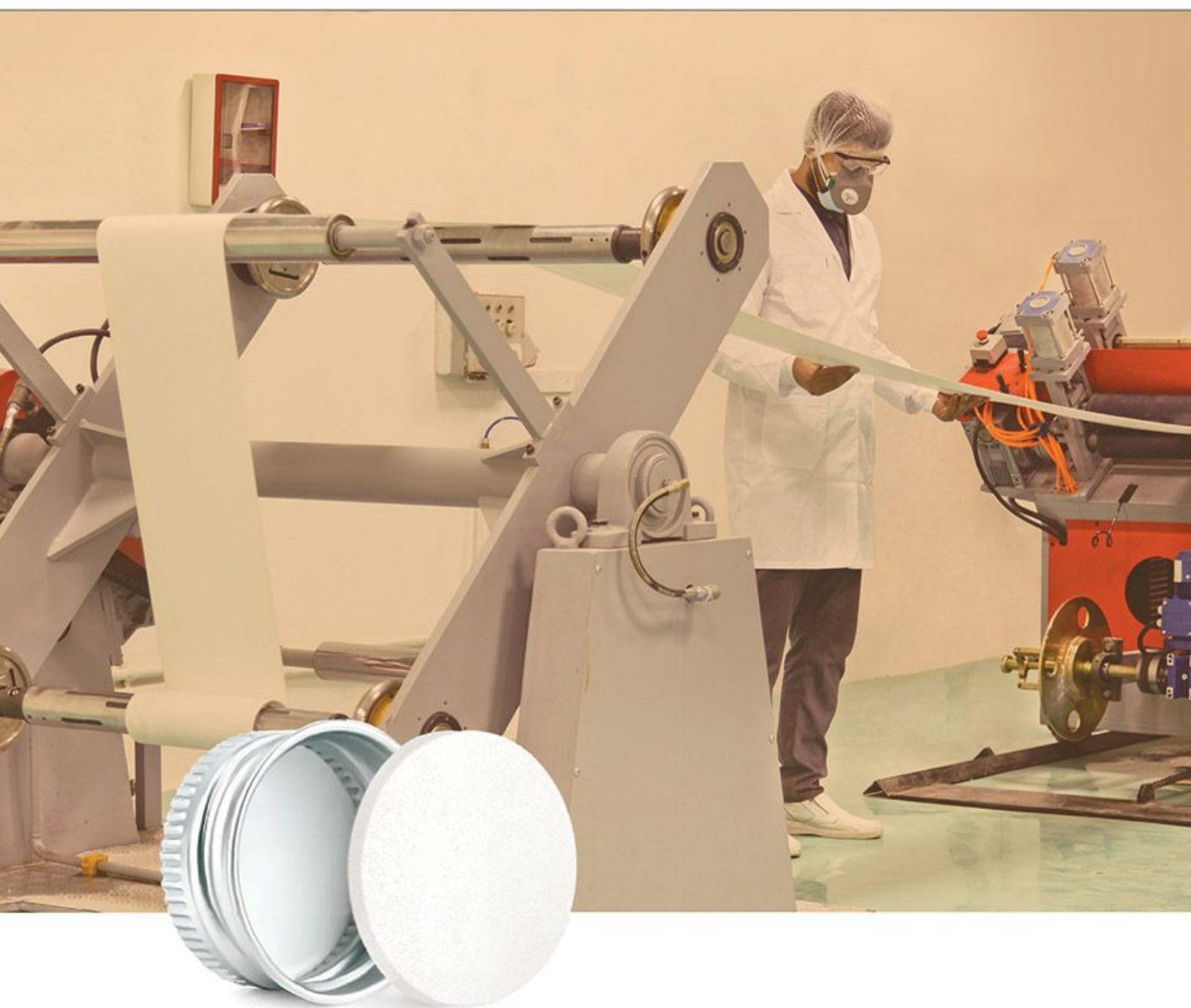
Dimensions

Thickness	1.90 ± 0.15
Diameter	27.95 ± 0.25

Unit : mm

* The specified dimensions can be customised based on order.





Yellow Pipette Tip (10 - 100 ml)

Pipette tips are disposable parts which fit on the tip holder of the pipette and prevent the instrument from contact with the aspirated liquid.

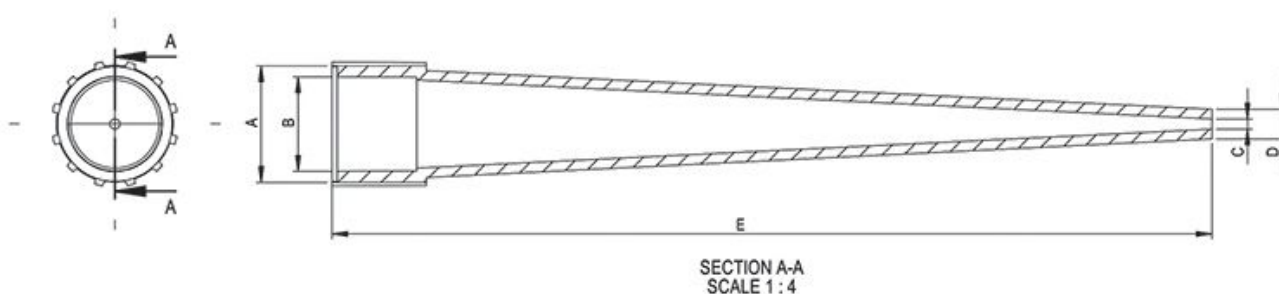
The dispensing orifice of the tip is shaped in such a way that consistent dispensing of the liquid to be measured is ascertained.

With "AKO made" quality, they are a perfect fit for micropipettes, enabling maximum tip sealing and accuracy. Ako pipette tips are manufactured using virgin polypropylene and state-of-the-art manufacturing techniques, that guarantee the highest performance and precision for your pipetting needs.

Tip material will not leach into or degrade dispensed liquid and provides your valuable samples with the ultimate protection from contamination.

We adhere to the strictest quality standards and control procedures from raw material to automated manufacturing.

{ ONE TIP
ANY PIPETTE



Name	A	B	C	D	E
Yellow Pipette Tip	6.60	4.95	0.53 ± 0.05	1.53 ± 0.20	45.90 ± 0.20

Unit: mm

YELLOW PIPETTE TIP



Ring Hanger:

Ring hangers are suspension devices for infusion bottles during administering of their contents.

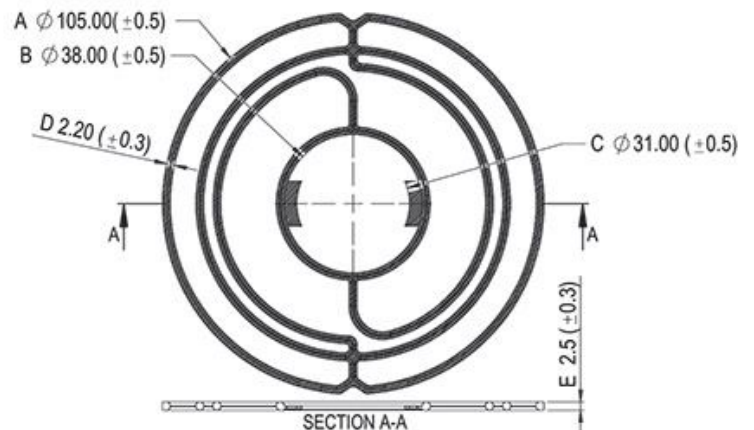
Infusion bottle hangers are manufactured with FDA approved material with special formulation to meet all requirements, including permanent and gravitation load bearing and resisting the sterilization condition.

Of a distinct advantage is their dimensional accuracy, tightened tolerance range and cleanliness.

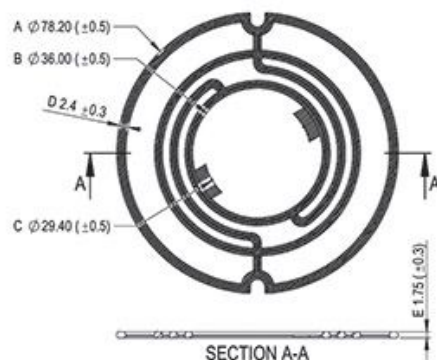
Our injection, infusion and transfusion related and products reflect our commitment to premium quality to satisfy your highest expectations.



Name	Plastic Ring Hanger
Outer Diameter	A
Inner Diameter	B
Central Edge Diameter	C
Width	D
Thickness	E



Name	Plastic Ring Hanger
Outer Diameter	A
Inner Diameter	B
Central Edge Diameter	C
Width	D
Thickness	E

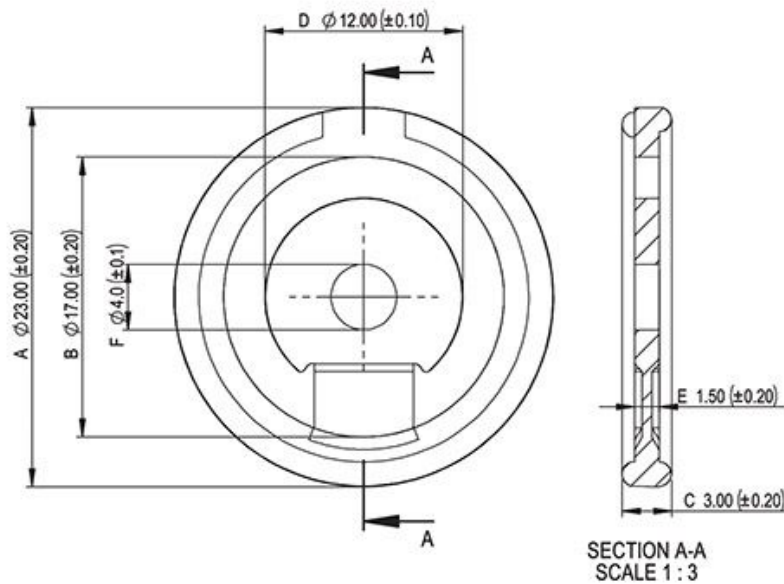


Hanger:

Hanger is a part of the infusion container that is used to hang it up.

Attention should be given to selecting materials that are more inert towards disinfectants and less sensitive to stress cracking and thermal stress.

The selected material for suspension device shall ensure that all requirements stated in related standards can be met. AKO has a wealth of science and experience to specify the right material.



Name	Hanger
Outer Diameter	A
Inner Diameter	B
Thickness	C
Ring Diameter	D
Ring Thickness	E
Central Hole Diameter	F



www.ako-sanat.com

Tel & Fax: (+98)26 347 02 900-347 00 506

☎ +98 935 440 30 40

export@ako-sanat.com

sm@ako-sanat.com

info@ako-sanat.com

No. 38, Pakshoma Ave., Shora Blvd.,
Kamal Shahr, Karaj, Iran