

## R.A.M.™ Large Opening Vials, 12x32mm, 9mm Neck Finish

### Vials



40% larger opening, the R.A.M.™ Vial is specifically designed to work in robotic arm autosamplers such as Agilent. Choose from clear or amber Type I borosilicate glass. Available with graduated marking spots which can be written on with a #2 pencil.



2.0mL Graduated Marking Spot Vial



2.0mL Round Bottom Vial



The new Interlocked™ Vial is composed of a glass vial and a clear glass insert fused together thus eliminating any movement of the insert and concerns about contaminants around the fused seam/ space between the neck of the vial and the insert.

#### Shelf Pack - 100 pieces; Case Pack - 1000 pieces

Cat. No.	Description
32009-1232	2.0mL Clear Vial
32009-1232A	2.0mL Amber Vial
32009M-1232	2.0mL Clear Vial, White Marking Spot
32009M-1232A	2.0mL Amber Vial, White Marking Spot
32009E-1232	2.0mL Clear Vial, White Graduation Spot
32009E-12B	2.0mL Clear Vial, Blue Graduation Spot
32009E-12G	2.0mL Clear Vial, Green Graduation Spot
32009E-12R	2.0mL Clear Vial, Rust Graduation Spot
32009E-12Y	2.0mL Clear Vial, Yellow Graduation Spot
32009E-1232A	2.0mL Amber Vial, White Graduation Spot
32009E-12AB	2.0mL Amber Vial, Blue Graduation Spot
32009E-12AG	2.0mL Amber Vial, Green Graduation Spot
32009E-12AR	2.0mL Amber Vial, Rust Graduation Spot
32009E-12AY	2.0mL Amber Vial, Yellow Graduation Spot

### Round Bottom Vials

#### Shelf Pack - 100 pieces; Case Pack - 1000 pieces

Cat. No.	Description
32009RB-1232	2.0mL Clear Round Bottom Vial
3209RB-1232A	2.0mL Amber Round Bottom Vial

### Limited Volume Large Opening R.A.M.™ Vials

#### Interlocked™ Vials

##### Case Pack - 100 pieces

Cat. No.	Description
30209-1232	300µL Clear Interlocked™ R.A.M. Vial/Insert
30209-1232A	300µL Amber Interlocked™ R.A.M. Vial/Insert
30209M-1232	300µL Clear Interlocked™ R.A.M. Vial/Insert with Marking Spot
30209M-1232A	300µL Amber Interlocked™ R.A.M. Vial/Insert with Marking Spot

# R.A.M.™ Large Opening Vials, 12x32mm, 9mm Neck Finish

## Vials



350µL R.A.M.™ Vial with Flanged Bottom Insert



250µL R.A.M.™ Vial Step Insert



1.5mL R.A.M.™ High Recovery Glass Vial



Plastic R.A.M.™ Vials, 9mm Thread

### Limited Volume Large Opening R.A.M.™ Vials

#### Glass Insert/Plastic Outside Vials

Case Pack - 100 pieces

Cat. No.	Description
30109G-1232	100µL R.A.M.™ Glass Insert/Clear Plastic Vial

#### R.A.M.™ Vials Assembled with Flanged Flat Bottom Insert

Shelf Pack- 100 pieces; Case Pack - 1000 pieces

Cat. No.	Description
80209FB-1232	350µL Clear Glass R.A.M.™ Vial with Flanged Flat Bottom Insert
8029FBE-1232	350µL Clear Glass R.A.M.™ Vial with Flanged Flat Bottom Insert and Graduated Spot
8029FB-1232A	350µL Amber Glass R.A.M.™ Vial with Flanged Flat Bottom Insert
829FBE-1232A	350µL Amber Glass R.A.M.™ Vial with Flanged Flat Bottom Insert and Graduated Spot

#### R.A.M.™ Vials Assembled with Step Insert

Case Pack - 100 pieces

Cat. No.	Description
80209-1232	250µL Clear Glass R.A.M.™ Vial with Step Insert
80209M-1232	250µL Clear Glass R.A.M.™ Vial with Step Insert and Marking Spot
80209-1232A	250µL Amber Glass R.A.M.™ Vial with Step Insert
80209M-1232A	250µL Amber Glass R.A.M.™ Vial with Step Insert and Marking Spot

#### Solid Glass High Recovery Vials

Case Pack - 100 pieces

Cat. No.	Description
31509-1232	1.5mL R.A.M.™ High Recovery Glass Vial

#### Plastic Vials

Shelf Pack - 100 pieces; Case Pack - 1000 pieces

Cat. No.	Description
30109P-1232	100µL Polypropylene R.A.M.™ Vial
30109CP-1232	100µL Clear Polypropylene R.A.M.™ Vial
30109T-1232	100µL TPX (Polymethylpentene) R.A.M.™ Vial
30509P-1232	500µL Polypropylene R.A.M.™ Vial
31509P-1232	1.5mL Polypropylene R.A.M.™ Vial (patented)

# R.A.M.™ Large Opening Vials, 12x32mm, 9mm Neck Finish

## Closures



Easy-on, easy-off convenience with a twist of the cap that produces an evaporation-proof seal. Larger opening provides increased target area for needle penetration.

Available in a variety of colors for easy sample identification. Choose a septa best suited for your application.



9mm Solid Top Caps



Preassembled closures and septa come ready to use. Designed to work in Agilent or other robotic arm autosamplers

### Screw Thread Closures (9mm)

**Shelf Pack - 100 pieces; Case Pack - 1000 pieces**

Cat. No.	Description
5310F-09	9mm R.A.M.™ Black, Polypropylene Open Hole Cap
5310F-09RB	9mm R.A.M.™ Royal Blue, Polypropylene Open Hole Cap
5310F-09G	9mm R.A.M.™ Green, Polypropylene Open Hole Cap
5310F-09N	9mm R.A.M.™ Natural, Polypropylene Open Hole Cap
5310F-09R	9mm R.A.M.™ Red, Polypropylene Open Hole Cap
5310F-09Y	9mm R.A.M.™ Yellow, Polypropylene Open Hole Cap
5310-09F	9mm R.A.M.™ Ribbed Black, Polypropylene Open Hole Cap
5310-09FRB	9mm R.A.M.™ Ribbed Royal Blue, Polypropylene Open Hole Cap
5310-09FG	9mm R.A.M.™ Ribbed Green, Polypropylene Open Hole Cap
5310-09FN	9mm R.A.M.™ Ribbed Natural, Polypropylene Open Hole Cap
5310-09FR	9mm R.A.M.™ Ribbed Red, Polypropylene Open Hole Cap
5310-09FY	9mm R.A.M.™ Ribbed Yellow, Polypropylene Open Hole Cap
5320-09	9mm R.A.M.™ Solid Top, Black Polypropylene Unlined Cap
5330-09	9mm R.A.M.™ Top Seal™ Closure, Clear Polypropylene, molded 10mil septa
5360-09	9mm R.A.M.™ Solid Top, Black Polypropylene PTFE/F217 Lined Cap

### Septa for R.A.M.™ Screw Thread Closures (9mm)

**Shelf Pack - 100 pieces; Case Pack - 1000 pieces**

Cat. No.	Description
601010-09	9mm x 0.010" White PTFE Septa
604040-09	9mm x 0.040" PTFE/Red Rubber Septa
604040-09F	9mm x 0.040" PTFE/Butyl Rubber Septa
604050-09	9mm x 0.040" PTFE/Silicone Septa
604060-09	9mm x 0.040" Red PTFE/Silicone/Red PTFE Septa
604070-09	9mm x 0.040" Red PTFE/Silicone w/Slit Septa

### Preassembled R.A.M.™ Screw Thread Closure and Septa (9mm)

**Shelf Pack - 100 pieces; Case Pack - 1000 pieces**

Cat. No.	Description
5394F-09	9mm R.A.M.™ Cap, Black, PTFE/ Butyl Rubber
5394F-09G	9mm R.A.M.™ Cap, Green, PTFE/Butyl Rubber
5394F-09N	9mm R.A.M.™ Cap, Natural, PTFE/Butyl Rubber
5394F-09R	9mm R.A.M.™ Cap, Red, PTFE/Butyl Rubber
5394F-09RB	9mm R.A.M.™ Cap, Royal Blue, PTFE/Butyl Rubber
5394F-09Y	9mm R.A.M.™ Cap, Yellow, PTFE/Butyl Rubber
5395F-09	9mm R.A.M.™ Cap, Black, PTFE/Silicone
5395F-09G	9mm R.A.M.™ Cap, Green, PTFE/Silicone
5395F-09N	9mm R.A.M.™ Cap, Natural, PTFE/Silicone
5395F-09R	9mm R.A.M.™ Cap, Red, PTFE/Silicone
5395F-09RB	9mm R.A.M.™ Cap, Royal Blue, PTFE/Silicone
5395F-09Y	9mm R.A.M.™ Cap, Yellow, PTFE/Silicone

# R.A.M.™ Large Opening Vials, 12x32mm, 9mm Neck Finish

## Preassembled R.A.M.™ Screw Thread Closure and Septa (9mm)



9mm R.A.M.™  
Ribbed Cap

5396F-09	9mm R.A.M.™ Cap, Black, PTFE/Silicone/PTFE
5396F-09G	9mm R.A.M.™ Cap, Green, PTFE/Silicone/PTFE
5396F-09N	9mm R.A.M.™ Cap, Natural, PTFE/Silicone/PTFE
5396F-09R	9mm R.A.M.™ Cap, Red, PTFE/Silicone/PTFE
5396F-09RB	9mm R.A.M.™ Cap, Royal Blue, PTFE/Silicone/PTFE
5396F-09Y	9mm R.A.M.™ Cap, Yellow, PTFE/Silicone/PTFE
5397F-09	9mm R.A.M.™ Cap, Black, PTFE/Silicone w/Slit
5397F-09G	9mm R.A.M.™ Cap, Green, PTFE/Silicone w/Slit
5397F-09N	9mm R.A.M.™ Cap, Natural, PTFE/Silicone w/Slit
5397F-09R	9mm R.A.M.™ Cap, Red, PTFE/Silicone w/Slit
5397F-09RB	9mm R.A.M.™ Cap, Royal Blue, PTFE/Silicone w/Slit
5397F-09Y	9mm R.A.M.™ Cap, Yellow, PTFE/Silicone w/Slit
5394-09F	9mm R.A.M.™ Ribbed Cap, Black, PTFE/Butyl Rubber
5394-09FG	9mm R.A.M.™ Ribbed Cap, Green, PTFE/Butyl Rubber
5394-09FN	9mm R.A.M.™ Ribbed Cap, Natural, PTFE/Butyl Rubber
5394-09FR	9mm R.A.M.™ Ribbed Cap, Red, PTFE/Butyl Rubber
5394-09FRB	9mm R.A.M.™ Ribbed Cap, Royal Blue, PTFE/Butyl Rubber
5394-09FY	9mm R.A.M.™ Ribbed Cap, Yellow, PTFE/Butyl Rubber
5395-09F	9mm R.A.M.™ Ribbed Cap, Black, PTFE/Silicone
5395-09FG	9mm R.A.M.™ Ribbed Cap, Green, PTFE/Silicone
5395-09FN	9mm R.A.M.™ Ribbed Cap, Natural, PTFE/Silicone
5395-09FR	9mm R.A.M.™ Ribbed Cap, Red, PTFE/Silicone
5395-09FRB	9mm R.A.M.™ Ribbed Cap, Royal Blue, PTFE/Silicone
5395-09FY	9mm R.A.M.™ Ribbed Cap, Yellow, PTFE/Silicone
5396-09F	9mm R.A.M.™ Ribbed Cap, Black, PTFE/Silicone/PTFE
5396-09FG	9mm R.A.M.™ Ribbed Cap, Green, PTFE/Silicone/PTFE
5396-09FN	9mm R.A.M.™ Ribbed Cap, Natural, PTFE/Silicone/PTFE
5396-09FR	9mm R.A.M.™ Ribbed Cap, Red, PTFE/Silicone/PTFE
5396-09FRB	9mm R.A.M.™ Ribbed Cap, Royal Blue, PTFE/Silicone/PTFE
5396-09FY	9mm R.A.M.™ Ribbed Cap, Yellow, PTFE/Silicone/PTFE
5397-09F	9mm R.A.M.™ Ribbed Cap, Black, PTFE/Silicone w/Slit
5397-09FG	9mm R.A.M.™ Ribbed Cap, Green, PTFE/Silicone w/Slit
5397-09FN	9mm R.A.M.™ Ribbed Cap, Natural, PTFE/Silicone w/Slit
5397-09FR	9mm R.A.M.™ Ribbed Cap, Red, PTFE/Silicone w/Slit
5397-09FRB	9mm R.A.M.™ Ribbed Cap, Royal Blue, PTFE/Silicone w/Slit
5397-09FY	9mm R.A.M.™ Ribbed Cap, Yellow, PTFE/Silicone w/Slit

## R.A.M.™ Large Opening Vials, 12x32mm, 9mm Neck Finish

### Preassembled R.A.M.™ Screw Thread Closure with Fixed Septa (9mm)

**Shelf Pack - 100 pieces; Case Pack - 1000 pieces**

Cat. No.	Description
53951F-09	9mm R.A.M.™ Cap, Black, Fixed PTFE/Silicone
53951F-09G	9mm R.A.M.™ Cap, Green, Fixed PTFE/Silicone
53951F-09N	9mm R.A.M.™ Cap, Natural, Fixed PTFE/Silicone
53951F-09R	9mm R.A.M.™ Cap, Red, Fixed PTFE/Silicone
53951F-09RB	9mm R.A.M.™ Cap, Royal Blue, Fixed PTFE/Silicone
53951F-09Y	9mm R.A.M.™ Cap, Yellow, Fixed PTFE/Silicone
53971F-09	9mm R.A.M.™ Cap, Black, Fixed PTFE/Silicone w/Slit
53971F-09G	9mm R.A.M.™ Cap, Green, Fixed PTFE/Silicone w/Slit
53971F-09N	9mm R.A.M.™ Cap, Natural, Fixed PTFE/Silicone w/Slit
53971F-09R	9mm R.A.M.™ Cap, Red, Fixed PTFE/Silicone w/Slit
53971F-09RB	9mm R.A.M.™ Cap, Royal Blue, Fixed PTFE/Silicone w/Slit
53971F-09Y	9mm R.A.M.™ Cap, Yellow, Fixed PTFE/Silicone w/Slit
53951-09F	9mm R.A.M.™ Ribbed Cap, Black, Fixed PTFE/Silicone
53951-09FG	9mm R.A.M.™ Ribbed Cap, Green, Fixed PTFE/Silicone
53951-09FN	9mm R.A.M.™ Ribbed Cap, Natural, Fixed PTFE/Silicone
53951-09FR	9mm R.A.M.™ Ribbed Cap, Red, Fixed PTFE/Silicone
53951-09FRB	9mm R.A.M.™ Ribbed Cap, Royal, Fixed PTFE/Silicone
53951-09FY	9mm R.A.M.™ Ribbed Cap, Yellow, Fixed PTFE/Silicone
53971-09F	9mm R.A.M.™ Ribbed Cap, Black, Fixed PTFE/Silicone w/Slit
53971-09FG	9mm R.A.M.™ Ribbed Cap, Green, Fixed PTFE/Silicone w/Slit
53971-09FN	9mm R.A.M.™ Ribbed Cap, Natural, Fixed PTFE/Silicone w/Slit
53971-09FR	9mm R.A.M.™ Ribbed Cap, Red, Fixed PTFE/Silicone w/Slit
53971-09FRB	9mm R.A.M.™ Ribbed Cap, Royal Blue, Fixed PTFE/Silicone w/Slit
53971-09FY	9mm R.A.M.™ Ribbed Cap, Yellow, Fixed PTFE/Silicone w/Slit



Bonded septa in the closure provides extra resealability.

### Preassembled R.A.M.™ Magnetic Cover, Screw Thread Closure and Septa (9mm)

**Case Pack - 100 pieces**

Cat. No.	Description
5394M-09FRB	9mm R.A.M.™ Magnetic Cap, PTFE/Butyl Rubber
5395M-09FRB	9mm R.A.M.™ Magnetic Cap, PTFE/Silicone
5396M-09FRB	9mm R.A.M.™ Magnetic Cap, PTFE/Silicone/PTFE
5397M-09FRB	9mm R.A.M.™ Magnetic Cap, PTFE/Silicone w/Slit



A convenient and easier alternative to aluminum seals, the 9mm magnetic cover and screw thread closure prefitted with a variety of septa is designed for use in CTC GC PAL, Agilent, Gerstel and Shimadzu instruments.

## Limited Volume Inserts



Inserts are available preassembled with a polymer bottom spring or patented Top Spring™. The polymer spring acts as a shock absorber that protects against breakage if the needle bottoms out. The conical design permits complete sample removal. The Step Insert precisely

sits in the neck of the vial, thus eliminating the need for metal or plastic springs.



*250µL Polypropylene Big Mouth Inserts*



*350µL Glass Flat Bottom Inserts*

### Conical Glass Inserts

#### Case Pack - 100 pieces

Cat. No.	Description
4005BS-625	50µL Glass Big Mouth Insert w/Bottom Spring
401TF-529	100µL Glass Insert w/Glass Flange
401TS-529	100µL Glass Insert w/Patented Top Spring™
4025-629	250µL Glass Big Mouth Insert, No Spring
4025BS-629	250µL Glass Big Mouth Insert w/Bottom Spring

### Conical Polypropylene Inserts

#### Shelf Pack - 100 pieces; Case Pack - 1000 pieces

Cat. No.	Description
401PTS-530	100µL Polypropylene Insert w/Patented Top Spring™
4025P-631	250µL Polypropylene Big Mouth Insert, No Spring
4025PBS-631	250µL Polypropylene Big Mouth Insert w/Bottom Spring
4025PF-631	250µL Polypropylene Step Insert w/Plastic Flange

### Flat Bottom Glass and Polypropylene Inserts

#### Shelf Pack - 100 pieces; Case Pack - 1000 pieces

Cat. No.	Description
4035-630	350µL Glass Flat Bottom Insert
4035-630ID	350µL Glass Flat Bottom Insert w/ID Ring
4035P-630	350µL Polypropylene Flat Bottom Insert
4035-631	350µL Glass Flat Bottom Insert
4035-631ID	350µL Glass Flat Bottom Insert w/ID Ring

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## Accessories



Snap Racks™ are constructed of durable glass reinforced polypropylene, with a center well to conveniently hold caps, seals, septa, etc. Racks snap together securely to double your rack capacity.

### Snap Racks™

**Case Pack - 5 pieces**

Cat. No.	Description
9700-12	50 Position White Rack for 12mm Vials
9700-12B	50 Position Blue Rack for 12mm Vials

## Convenience Packs and Preassembled Convenience Packs

### Preassembled Convenience Packs

Any combination of vial, closure and septa is available. Please call.



Components packaged in a tray that fits into bench drawer for easy access. Packaging keeps products visible and particle free. Convenience

Packs and Preassembled Packs come ready to use.