

# ALTA-ROBBINS

Manometers □ Valves □ Air Purification

VALVE  
PRODUCTS

314 Series  
Data Sheet

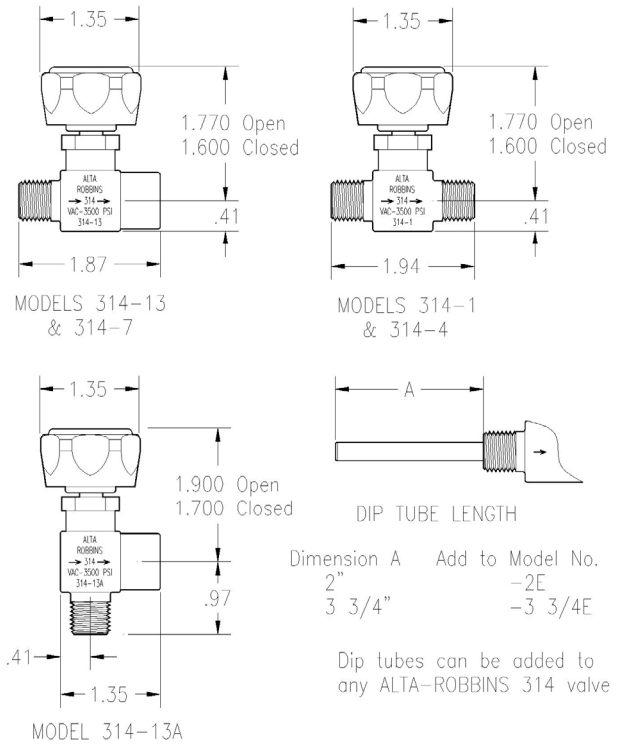
INFORMATION FOR ORDERING, IDENTIFICATION, INSPECTION, INSTALLATION AND MAINTENANCE

## SAFE – VERSATILE – ECONOMICAL



### Designed for Use on Sample Cylinders

- Bonnet Safety Lock Nut and stem design prevent blowout or accidental unscrewing of bonnet.
- Small envelope and rugged construction permit more diversified usage than do most control and shutoff valves.
- Extensively field-tested by the oil refining industry...in sample bomb use...in laboratory applications.
- Bubble-tight shutoff with fingertip effort.
- Extra large orifice and flow passage.
- Handle skirt protects stem threads from dirt and damage.



### Also Available with Dip Tubes

- Especially designed for sample bomb use.
- The Dip Tube forms an integral part of the valve and is available in two lengths.

### TECHNICAL DATA

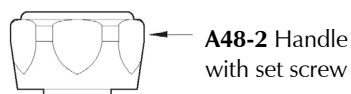
Operating Pressure:	Vacuum — 3500 PSI
Safety Factor:	4:1
C <sub>v</sub> :	0.31
Leakage:	Zero
Orifice Diameter:	0.187 inches
Body Material:	303 or 316 Stainless Steel
Bonnet Material:	303 or 316 Stainless Steel
Stem Material:	303 or 316 Stainless Steel
Handle Material:	Aluminum (black anodized)
Lock Nut Material:	Stainless Steel
O-Ring Material:	See Ordering Information
Seat Material:	See Ordering Information
Port Connection:	See Ordering Information
Weight:	See Ordering Information
Handle Turns To Open:	5 (approximately)



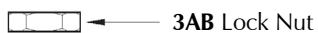
### Simple to Service

All functional parts can be removed for cleaning or replacement without disturbing body connections.

## REPLACEMENT PARTS



**A48-2** Handle with set screw



**3AB** Lock Nut



**5013-56\*** O-Ring

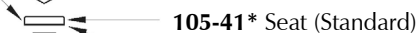
**306** Bonnet



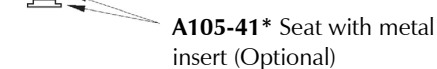
**110** Stem



**5008-56\*** O-Ring

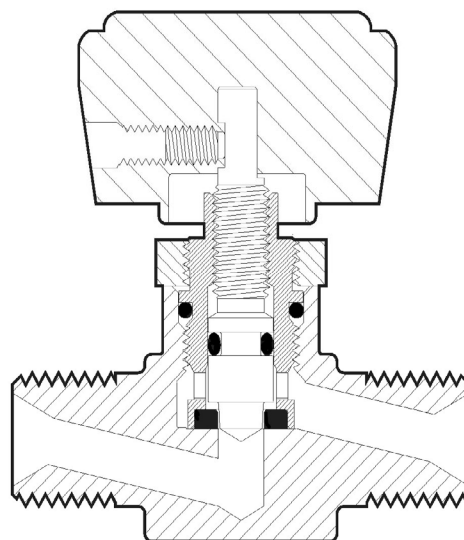


**105-41\*** Seat (Standard)



**A105-41\*** Seat with metal insert (Optional)

**Bonnet Assembly**  
(See Ordering Information for part numbers)



\*This part is available in various materials. The part number shown above is considered standard - See Ordering Information for Other Options

### ORDERING INFORMATION

#### VALVES

Model	Inlet Port	Outlet Port	WT
314-1	¼ NPT Male	¼ NPT Male	.31
314-1-4D	¼ NPT Male	¼ Tube Female	.36
314-10	⅜ NPT Male	⅜ NPT Male	.36
314-13	¼ NPT Male	¼ NPT Female	.31
314-13A	¼ NPT Male	¼ NPT Female	.31

**Note :** The above models ship with Buna-N o-rings, Kel-F seats (without metal insert), black handles, and 303 stainless steel bodies, bonnets, and stems. The above models do not include dip tubes or rupture discs. To change the standard configuration add the following suffixes to the model number.

316 Stainless Body, Bonnet, and Stem	-768
Monel Body, Bonnet, and Stem	-M
Buna-N O-Rings for MTBE Service	-59
Kalrez™ O-Rings	-08
Ethylene Propylene O-Rings	-06
Viton O-Rings	-12
Teflon Seat	-T
Nylon Seat	-N
Seat with Metal Insert	-763
2" Dip Tube	-2E
3¾" Dip Tube	-3¾
Red Handle (other colors available on special)	-R

#### BONNET ASSEMBLIES

Part Number	Seat Material
KA309	Kel-F (PCTFE)
TA309	Teflon
NA309	Nylon

**Note:** If more than one modification is required, add dash code to model number in sequence listed. Dash codes also apply to bonnet assemblies where applicable.

### MAINTENANCE

#### Valve Can Be Serviced Without Removal from Line

**IMPORTANT:** Lubricate stem threads and stem o-rings regularly with Halocarbon 25-5S or equal.

#### REPLACEMENT OF SEAT AND/OR O-RING SEALS

1. Open valve fully. Loosen handle set screw and remove handle.
2. Remove lock nut with 11/16" wrench.
3. Unscrew bonnet with a 3/8" wrench. Remove bonnet o-ring.
4. Using handle as a wrench, screw stem out of bonnet clockwise, thereby ejecting seat and stem. Remove stem o-ring.
5. Clean all parts well with solvent. Lightly lubricate threads and both o-rings.
6. Screw stem into bonnet slowly until engaged with bonnet threads; use handle to retract stem to full limit.
7. Replace seat in bonnet cavity, chamfered end first (toward handle), making sure it is well seated.
8. Screw bonnet slowly into body to allow o-ring to flow into bonnet bore. Torque to 75 inch pounds for Kel-F seat and 100 inch pounds for all seats with metal inserts.
9. Replace lock nut and tighten firmly (100 inch pounds). Replace handle and tighten set screw firmly.