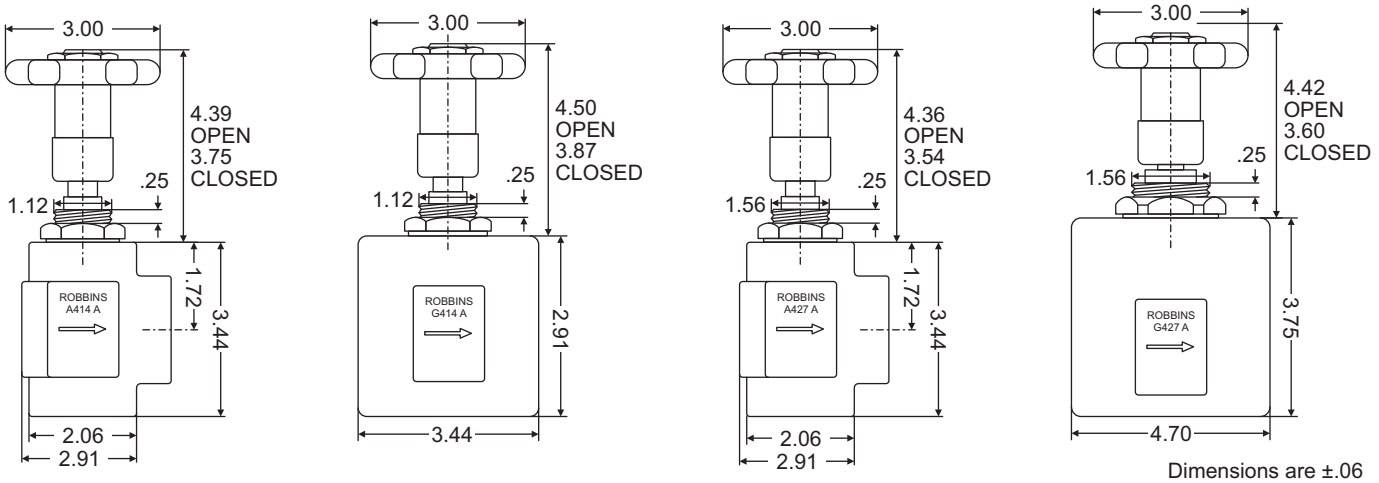
ALTA-ROBBINS

427 Series Valve Data Sheet

INFORMATION FOR ORDERING, IDENTIFICTATION, INSPECTION AND MAINTENANCE

- All Metal Functional Parts are Stainless Steel
- No Dynamic O-Ring Seals
- Solid One-Piece Stainless Steel Handle Prevents Loosening
- Low Operating and Shutoff Torque
- Excellent Throttling Characteristics
- Exterior Acme Stem Threads Protected from Dust and Dirt
- Static Stem Seals
- For Pane Mounting - Easily Serviced from Front of Panel without Removal from Line
- For Liquid and Gaseous Applications Requiring Leakproof Sealing in Operation from Vacuum to either 6000 or 12000 PSI, depending on model
- Bonnet Assembly may also be used in Robbins 414 and 427 Series Valves



Dimensions are ±.06

TECHNICAL DATA

Max. Oper. Pressure: See Ordering Information Table
Safety Factor: 4:1
CV: See Table
External Leakage: Zero
Internal Leakage: Zero
Orifice Dia: See Table
Body Material: 316 Stainless Steel
Bonnet & Stem Material: 316 Stainless Steel
O-Ring Material: Buna-N (Standard)
Seat Material: Teflon
Weight: See Table
Oper. Temperature: -40°F to +250°F
Max. Handle Torque: 35 IN. LBS.
Dimensions: See Drawings Above
Port Size: See Table
Female Sae Straight Thread
O-Ring Boss - Accepts AND, MS, or SAE Straight Thread Tube Fittings

Approximately 7 Handle Turns to Open

ORDERING INFORMATION

	Model Number	Ports	Body Material	Orifice	Average CV	Weight lbs.	Pressure PSI
Angle Valve	A414A-8B-768	SAE 1/2"	316 SS	.437	2.5	5.10	12000
	A414A-8C-768	MC240-8	316 SS	.437	2.5	5.10	12000
	A414A-12B-768	SAE 3/4"	316 SS	.437	3.0	5.10	12000
	A427A-12B-768	SAE 3/4"	316 SS	.844	9.0	5.13	12000
	A427A-16B-768	SAE 1"	316 SS	.844	9.5	5.13	6000
	A427A-16C-768	MC240-16	316 SS	.844	9.5	5.13	6000
Globe Valve	G414A-8T-768	MS33649-8	316 SS	.437	1.5	5.10	12000
	G414A-8B-768	SAE 1/2"	316 SS	.437	1.5	5.10	12000
	G414A-12B-768	SAE 3/4"	316 SS	.437	2.0	5.10	12000
	G414A-12C-768	MC240-12	316 SS	.437	2.0	5.10	12000
	G427A-8T-768	MS33649-8	316 SS	.844	2.5	7.02	6000
	G427A-12B-768	SAE 3/4"	316 SS	.844	5.0	7.02	6000
	G427A-12T-768	MS33649-12	316 SS	.844	5.0	7.02	6000
	G427A-16B-768	SAE 1"	316 SS	.844	6.0	7.02	6000
	G427A-16T-768	MS33649-16	316 SS	.844	6.0	7.02	6000

MAINTENANCE

As all functional parts of the valve are contained in the Bonnet Assembly, an installed valve may be quickly restored to service without removal from the line by replacing the Bonnet Assembly as a unit:

1. Loosen Locknut (S).
2. Unscrew Bonnet Assembly.
3. Insert new or rebuilt Bonnet Assembly in Body and tighten to 150 inch pounds torque.
   CAUTION: Valve Stem (V) should be unscrewed to approximately half open position when installing Bonnet Assembly.
4. Tighten Locknut to 300 inch pounds torque.

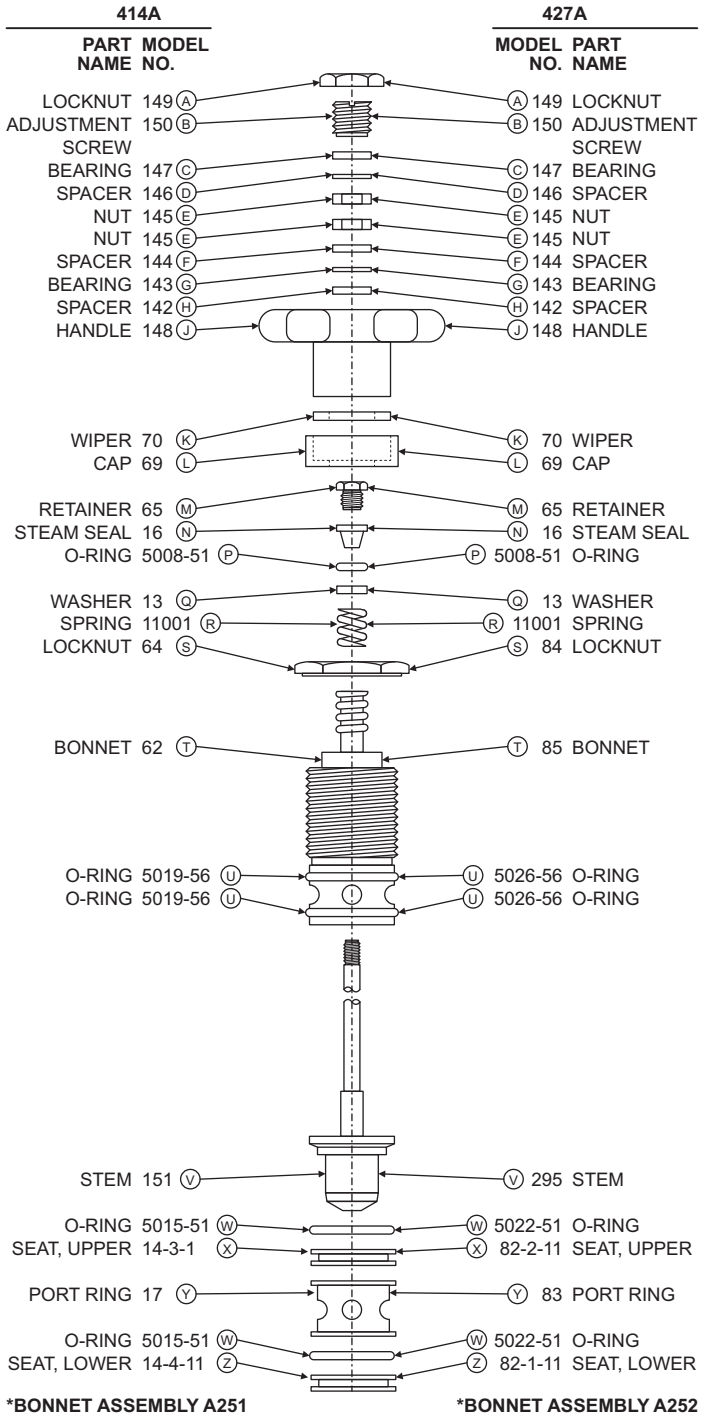
If complete disassembly of the valve's required for inspection and replacement of worn parts, proceed as follows:

DISSASEMBLY

1. Open Valve fully.
2. Unscrew Locknut (A) and Adjustment Screw (B).
3. Turn Handle (J) down to expose Bearing (C), Spacer (D), and Nuts (E).
4. Remove Bearing (C) and Spacer (D).
5. Unscrew Two Nuts (E) and remove.
6. Remove Handle from Stem (V).
7. Remove Spacer (F), Bearing (G), and Spacer (H) from Handle.
8. Remove Stem Seal Retainer (M).
9. Remove Bonnet Locknut (S).
10. Remove Bonnet Assembly from Body.
11. Apply hand pressure on handle end of Stem (V) to eject Lower Seat (Z), Port Ring (Y), and Upper Seat (X) from Bonnet.
12. Remove Stem (V) from Bonnet (T).
13. Push Stem back through Bonnet and remove Stem Seat (N), O-Ring (P), Washer (Q), and Spring (R).

ASEMBLY

1. Apply a light film or Kel-F #10 oil on Stem (V) and insert stem in Bonnet (T) fully.
2. Lubricate all O-Rings with Kel-F #10 oil.
3. Put one O-Ring (W) on Upper Seat (X) and install in Bonnet, making sure on 414A Valves that heavy shoulder of Seat is toward Handle end.
4. Insert Port Ring (Y) in Bonnet. **Be sure flow holes in Port Ring are in line with flow holes in Bonnet.**
5. Put one O-Ring (W) on Lower Seat (Z) and install Bonnet, with large taper of Seat toward Handle end.
6. Put two O-Rings (U) on Bonnet.
7. Apply light film of Kel-F #10 oil on outside surface of Bonnet and screw Bonnet into Body using 150 inch pounds of torque to tighten.
8. Install Locknut (S) on Bonnet (T) and tighten Locknut to 300 inch pounds torque.
9. Install Spring (R) and Washer (Q) in Bonnet, with beveled edge of washer toward handle.
10. Apply one drop of Kel-F #10 oil to Stem Seal; then install O-Ring (P) and Stem Seal (N) pushing both below threads in Bonnet.
11. Lubricate Retainer (M) with Kel-F #10 oil and install in Bonnet. Tighten to 35 inch pounds toque.
12. Lubricate Felt Wiper (K) with Kel-F #10 oil, then insert into Cap (L) and install in Handle (J).
13. Screw Handle on Bonnet fully.
14. Install Spacer (H), Bearing (G), and Spacer (F) in Handle.
15. Screw two Nuts (E) on Stem. Stem should be 3/32" to 1/16" below top of top nut.
16. Lock Nuts (#) against each other using 30 inch pounds torque.
17. Turn handle counterclockwise as far as possible.
18. Install Spacer (D), Bearing (C), and Adjustment Screw (B) in Handle.
19. Torque Adjustment Screw (B) to about 300 inch pounds torque.
20 Install Locknut (A) and torque to 100 inch pounds while holding Adjustment Screw (B) with screwdriver to prevent turning while tightening Locknut.



WIPER ASSEMBLY A92
(Wiper K - Cap L)

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