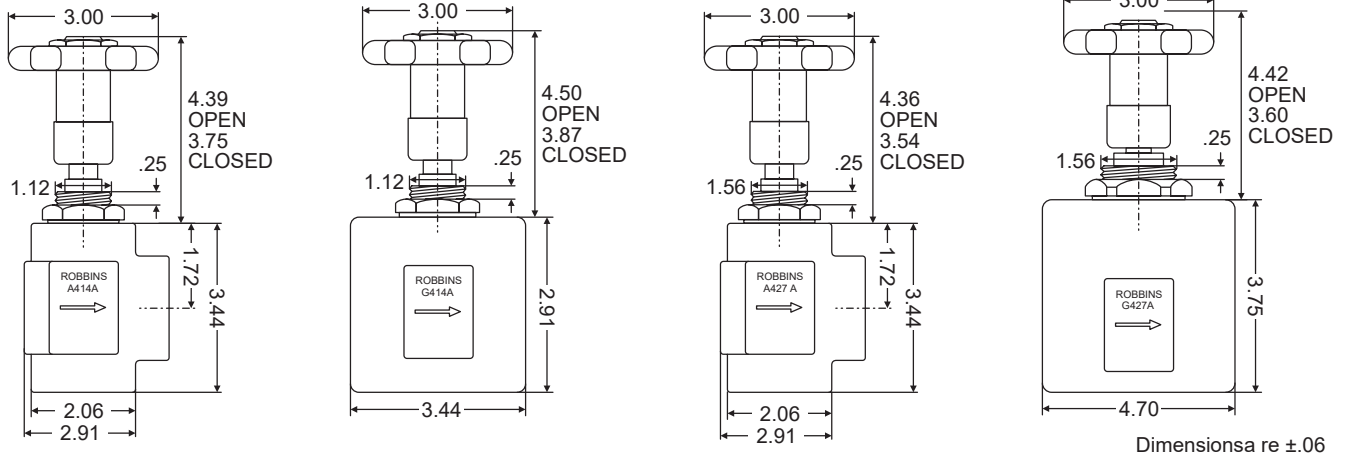


ALTA ROBBINS



- All metal functional parts are 316 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 panel 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 6,000 or 12,000 psi, depending on model
- For applications that require large CV



Dimensions re ±.06

TECHNICAL DATA

MAX. OPERATING 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 ALL STRAIGHT THREAD TUBE FITTINGS

APPROXIMATELY 7 HANDLE TURNS TO OPEN

ORDERING INFORMATION

414 ORIFICE 0.437 PRESSURE:12000 PSI WEIGHT 5.1 lbs.			427 ORIFICE 0.844 PRESSURE:6000 PSI WEIGHT 5.13 lbs. (ANGLE) 7.02 lbs. (GLOBE)			
	MODEL #	PORTS	CV	MODEL #	PORTS	CV
ANGLE	A414A-8B-768	SAE 1/2"	2.5	A427A-12B-768	SAE 3/4"	9.0
	A414A-8C-768	MC240-8	2.5	A427A-12C-768	MC240-12	9.0
	A414A-8S-768	AS5202-8	2.5	A427A-12S-768	AS5202-12	9.0
	A414A-8T-768	MS33649-8	2.5	A427A-12T-768	MS33649-12	9.0
	A414A-12B-768	SAE 3/4"	3.0	A427A-16B-768	SAE 1"	9.5
	A414A-12C-768	MC240-12	3.0	A427A-16C-768	MC240-16	9.5
	A414A-12S-768	AS5202-12	3.0	A427A-16S-768	AS5202-16	9.5
	A414A-12T-768	MS33649-12	3.0	A427A-16T-768	MS33649-16	9.5
GLOBE	G414A-8B-768	SAE 1/2"	1.5	G427A-12B-768	SAE 3/4"	5.0
	G414A-8C-768	MC240-8	1.5	G427A-12C-768	MC240-12	5.0
	G414A-8S-768	AS5202-8	1.5	G427A-12S-768	AS5202-12	5.0
	G414A-8T-768	MS33649-8	1.5	G427A-12T-768	MS33649-12	5.0
	G414A-12B-768	SAE 3/4"	2.0	G427A-16B-768	SAE 1"	6.0
	G414A-12C-768	MC240-12	2.0	G427A-16C-768	MC240-16	6.0
	G414A-12S-768	AS5202-12	2.0	G427A-16S-768	AS5202-16	6.0
	G414A-12T-768	MS33649-12	2.0	G427A-16T-768	MS33649-16	6.0

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 is required for inspection and replacement of worn parts, proceed as follows:

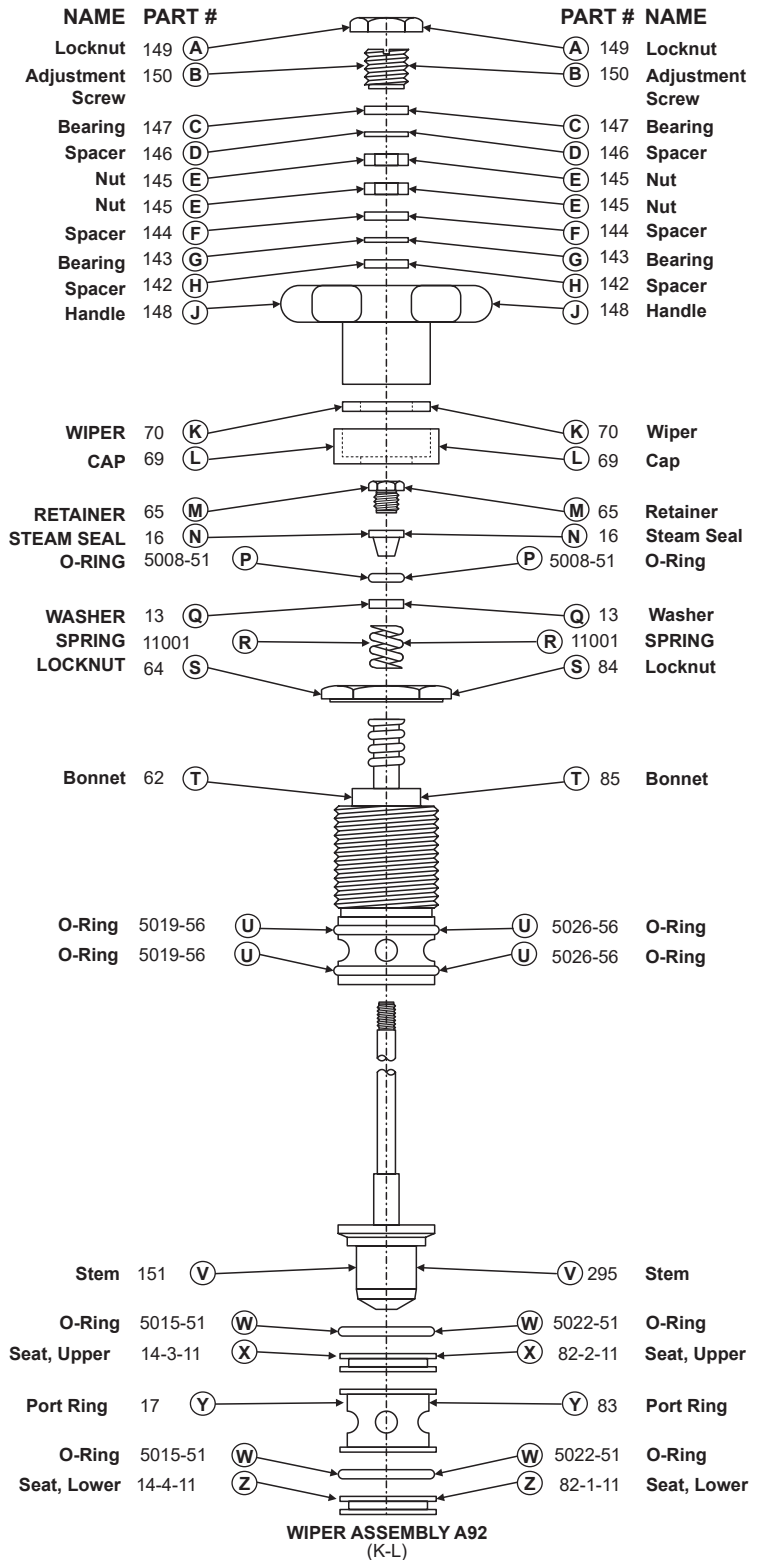
DISASSEMBLY

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)

ASSEMBLY

1. Apply a light film of Halocarbon 25-5S or equal on Stem (V) and insert Stem in Bonnet (T) fully
2. Lubricate all O-Rings with Halocarbon 25-5S
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 in Bonnet, with large taper of Seat toward Handle end
6. Put two O-Rings (U) on Bonnet
7. Apply light film of Halocarbon 25-5S 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 very light film of Halocarbon 25-5S to Stem Seal; then install O-Ring (P) and Stem Seal (N) pushing both below threads in Bonnet.
11. Lubricate Retainer (M) with Halocarbon 25-5S and install in Bonnet. Tighten to 35 inch pounds torque.
12. Lubricate Felt Wiper (K) with Halocarbon 25-5S, then insert into Cap (L) and install on 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 (E) 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 100 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

414A



WIPER ASSEMBLY A92 (K-L)

SOFT GOODS KIT 4019-1-1 (C, G, K, L, N, P, U(2), W(2), X, Z)

BONNET ASSEMBLY A251 (M-Z)

SOFT GOODS KIT 4019-3-1 (C, G, K, L, N, P, U(2), W(2), X, Z)

BONNET ASSEMBLY A252 (M-Z)

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