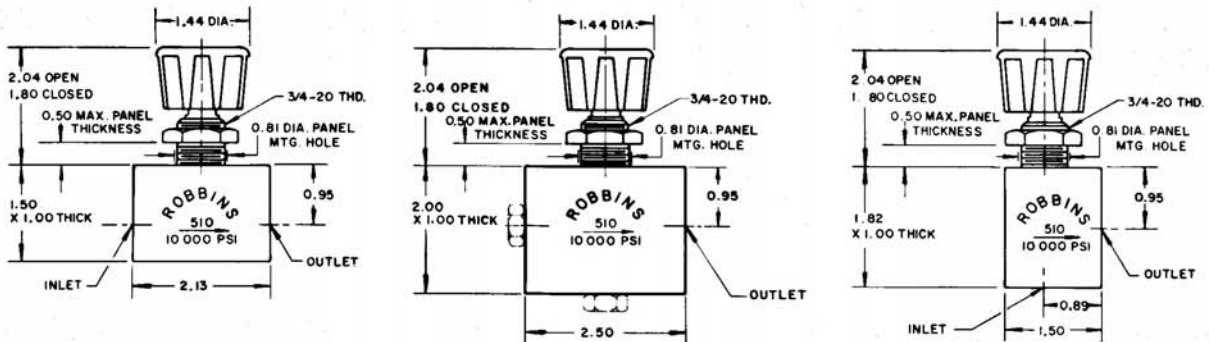


ALTA-ROBBINS

510 Series Valve Data Sheet

INFORMATION FOR ORDERING, IDENTIFICATION, INSPECTION AND MAINTENANCE



WHEN USED FOR VACUUM, VACUUM SHOULD BE DRAWN IN DIRECTION OF FLOW ARROW
DIMENSIONS ARE ALL $\pm .03$

TECHNICAL DATA

Operating Pressure:	Vac. — 10,000 PSI
Safety Factor:	4:1
C_v :	Globe — .28 Angle — .35 3-Port Angle — .42 Line — .36
Leakage:	Zero
Orifice Diameter:	.160 In.
Body Material:	316 SS
O-Ring Material:	Buna-N
Seat Material:	Kel-F
Operating Temperature:	-40°F to +250°F
Port Connections:	Female Tube
Weight (Approx.):	Globe — 1.06 Lb. Angle — .94 Lb. 3-Port — 1.56 Lb. 15 In. Lbs.
Max. Handle Torque:	5½ (Approx.)
Handle Turns to Open:	

ORDERING INFORMATION

	Model Number [†]	Ports ^{**}
GLOBE	510G-KA5-4C4C	MC240-4
	510G-KA5-4T4T	MS33649-4
ANGLE	510A-KA5-4C4C	MC240-4
	510A-KA5-4T4T	MS33649-4
3-PORT	510T-KA5-6T6T6T*	MS33649 - 3/8"
	510T-KA5-6T6T4T*	MS33649 - Inline Ports: 3/8" Bottom Port: 1/4"

*Supplied Less Sealing Plug

**Mate with straight thread tube fittings such as Parker, "Super-Lok"
F5BU4 Series (J and T fittings are identical)

CURRENT MANUFACTURERS' NET PRICE LIST
AVAILABLE UPON REQUEST

MAINTENANCE

Valve can be serviced without removal from line using standard tools.

IMPORTANT: Lubricate Stem Threads and Stem O-Rings regularly with Halocarbon 25-5S or equal.

DISASSEMBLY:

1. Open valve fully and remove handle (D).
2. Remove Panel Nut (F). Unscrew and Remove Bonnet Assembly (A). (If replacing Bonnet Assembly as a Unit, Insert New Bonnet Assembly, Tightening to 250 inch pounds Torque. Replace Panel Nut and Handle — Disregarding remaining Instructions.)
3. Remove Stem (L) from Bonnet (C) by screwing in a clockwise direction thereby ejecting Seat Retainer Insert (J) and Seat (G) from Seat Retainer (H).
4. Remove O-Rings (E and M), Backup Ring (B), and Seat Retainer Seal (K).

ASSEMBLY:

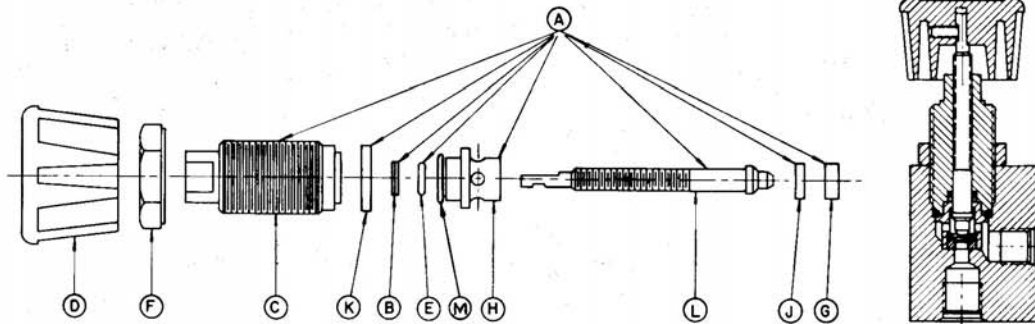
Making Sure Parts are Thoroughly Clean:

1. Before assembly, Lubricate Stem Threads, Stem Body, Internal and External Bonnet Threads and O-Ring Cavity of Bonnet.
2. Install Seat Retainer (H) on Stem (L).
3. Install O-Rings (E and M) on Stem so it holds Seat Retainer against Stem Shoulder.
4. Install Backup Ring (B) on Bonnet (C) and place Seat Retainer Seal (K) on shoulder of Bonnet.
5. Screw Stem through the Backup Ring (B) into Bonnet Threads, pulling the Seat Retainer (H) into the Bonnet. USE CAUTION TO ENSURE THAT SEAT RETAINER SEAL (K) IS IN CORRECT POSITION.
6. Install Seat Retainer Insert (J) into Seat Retainer (H), making sure Beveled Face is toward end of Stem.
7. Install Seat (G), making sure I.D. Chamfer is toward end of Stem.
8. Install Assembled Bonnet in Body and tighten to 250 inch pounds Torque. Install Panel Nut and tighten to 100 inch pounds Torque.
9. Place Handle (D) on Stem and tighten Set Screw to 14 inch pounds Torque.

REPLACEMENT PARTS

DET	NAME	MODEL NUMBER
A	Bonnet Assembly All functional Parts, sealed and ready to install in valve body.	510-102
B	Backup Ring	10447
C	Bonnet	510-2-1
D	Handle with Set Screw Set Screw (#8-32 x 1/4 Lg. Half Dog Pt.)	510-107 10385-4
E	O-Ring	5009-56
F	Panel Nut	510-5-1
G	Seat	510-4-K
H	Seat Retainer	510-8-1
J	Seat Retainer Insert	510-10-1
K	Seat Retainer Seal	510-17-T
L	Stem	510-3-8
—	1/4" Sealing Plug w/O-Ring O-Ring, Buna-N	A56-4 6004-55
—	3/8" Sealing Plug w/O-Ring O-Ring, Buna-N	A56-6 6006-55
—	O-Ring Installation Mandrel	T-221-6
M	O-Ring	5014-51

MANDREL No. T-221-6 IS RECOMMENDED FOR QUICK, EASY INSTALLATION OF STEM O-RING.



ALTA-ROBBINS

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WARRANTY: Alta-Robbins warrants to the purchaser of its products that any part thereof which proves to be defective in material or workmanship within one year from the date of original purchase for use will be replaced free of charge. This warranty does not apply to damages resulting from accidents, alterations, misuse, or abuse.

NOTICE: The designs, data, and/or processes set forth hereon or in connection herewith are directly related to products of Alta-Robbins.