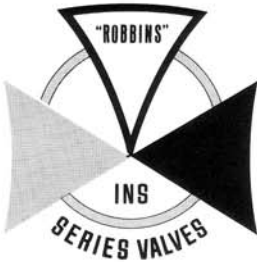


ALTA-ROBBINS

INS Series Valve Data Sheet

INFORMATION FOR ORDERING, IDENTIFICATION, INSPECTION AND MAINTENANCE



QUALITY — ECONOMY — RELIABILITY

Featuring:

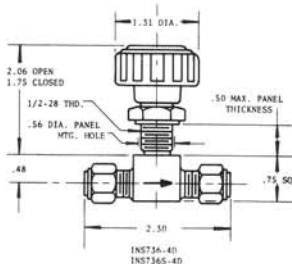
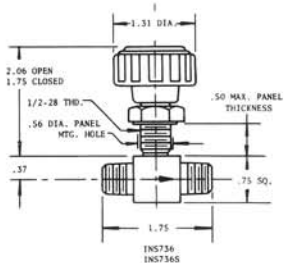
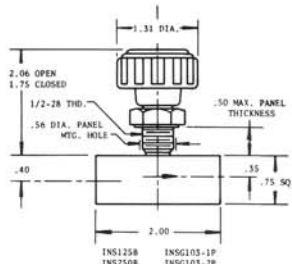
- Absolute Shutoff
- Low Handle Torque
- Fine Metering Control
- Leakproof Operation
- 4-to-1 Safety Factor, ASME Code
- Ease of Maintenance

For Service with:

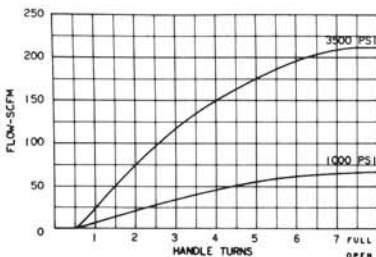
- AIR
- OXYGEN
- NITROGEN
- HYDRAULIC OILS
- WATER
- HELIUM

Typical Applications:

- Laboratories
- Oil Refineries
- Pressure Gauges
- Medical Equipment
- Fine Instrumentation
- Gas Sampling Cylinders
- Gas Chromatography Columns
- Mercury or Water Manometers



AIR FLOW VS. HANDLE TURNS
(At ambient temperature)



TECHNICAL DATA

Max. Operating Pressure:	3500 PSI
Vacuum Rating:	1 x 10 ⁻⁵ mm mercury
Safety Factor:	4:1 per ASME Code
Cv:	Globe: 0.11; Angle: 0.12
Internal & External Leakage:	Zero
Orifice Diameter:	0.093 In.
O-ring Material:	Buna-N (Standard)
Seat Material:	Kel-F (Standard)
Operating Temperature:	-40°F to +250°F
Handle Turns to Open:	7 (Approximate)

REFERENCE INFORMATION

Fitting Part

Parker Part Nos.

CPI

Nut, Brass	4-BZ-B
Nut, 316 SS	4-BZ-SS
Ferrule, Brass	4-TZ-B
Ferrule, 316 SS	4-TZ-SS

ORDERING INFORMATION

	Model No.	Body Matl.	Port Connection	Parker Ftg.	Wt. Lbs.
G	INS125B	Brass	1/8" NPT, Female	—	.47
	INSG103-1P	SS	1/8" NPT, Female	—	.47
L	INS250B	Brass	1/4" NPT, Female	—	.44
	INSG103-2P	SS	1/4" NPT, Female	—	.44
O	INS736	Brass	1/4" NPT, Male	—	.31
	INS736S	SS	1/4" NPT, Male	—	.31
E	INS736-4D	Brass	1/4" Flareless Tube	CPI	.38
	INS736S-4D	SS	1/4" Flareless Tube	CPI	.38

THE FOLLOWING SUBSTITUTIONS ARE ALSO AVAILABLE:

SEATS

Nylon
Teflon (Limits Max. Oper. Press. to 1000 PSI unless Metal Insert is used)

O-RINGS

Viton —

Add to Model No.

N

T

SEATS with METAL INSERTS -12 -763

When using more than one variation, add codes in sequence listed; i.e., INS125BT-12-763 is an INS125B basic valve with Teflon Metal Insert Seat and Viton O-rings.

Valves with Flareless Tube Ports supplied complete with Fittings. Replacement fittings are obtainable from local PARKER dealer.

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-ring regularly. (Factory-assembled valves are lubricated with MAGNALUBE-G; or, if inert lubrication is required, HALOCARBON 25-5S or equal.)

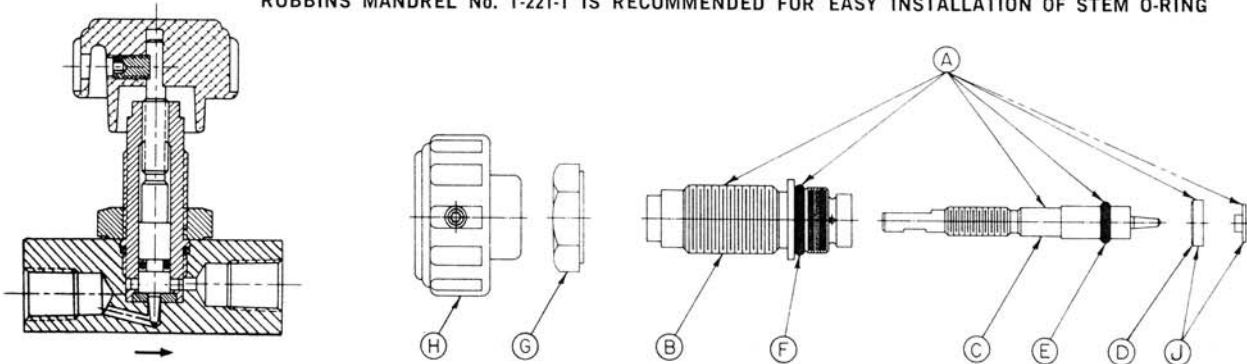
REPLACEMENT OF SEAT AND/OR O-RING SEALS

1. Open valve fully. Loosen Handle Set Screw and remove Handle and Locknut.
2. Unscrew Bonnet and remove Bonnet O-ring.
3. Using Handle as a wrench, screw Stem out of Bonnet clockwise, thereby ejecting Seat and Stem. Remove Stem O-ring.
4. Clean all parts well with solvent. Lubricate lightly stem threads and all O-rings. Install Bonnet and Stem O-rings.
5. Screw Stem into Bonnet until engaged with Bonnet threads; use Handle to retract Stem to full limit.
6. Replace Seat in Bonnet cavity, chamfered end first, making sure it is well seated.
7. Replace Bonnet Assembly in Body, torquing to 45 inch pounds for TEFLON Seats, and 75 inch pounds for KEL-F, NYLON, and all Metal Insert type Seats.
8. Replace Locknut torquing to 75 inch pounds. Replace Handle; tighten Set Screw firmly.

REPLACEMENT PARTS

DET	NAME	NUMBER
*A	BONNET ASSEMBLY WITH KEL-F SEAT BONNET ASSEMBLY WITH NYLON SEAT BONNET ASSEMBLY WITH TEFLON SEAT For Bonnet Assembly with Metal Insert Seat, add -763 to Number *Consists of all functional parts, sealed and ready to install in body	KA49 NA49 TA49
B	BONNET	42AB
C	STEM	43AB
D	SEAT, KEL-F SEAT, NYLON SEAT, TEFLON	44AB-41 44AB-21 44AB-11
J	SEAT, KEL-F WITH METAL INSERT SEAT, NYLON WITH METAL INSERT SEAT, TEFLON WITH METAL INSERT	A44AB-41 A44AB-21 A44AB-11
E	O-RING, STEM - STANDARD O-RING, STEM - ALTERNATE	5006-56 5006-51
F	O-RING, BONNET	5013-51
G	LOCKNUT, BRASS LOCKNUT, STAINLESS STEEL	45AB 45AB-1
H	HANDLE with SET SCREW — SET SCREW (#8-32 x 1/4 Lg Half Dog Pt)	A48-1 10385-4
—	O-RING INSTALLATION MANDREL	T-221-1

ROBBINS MANDREL No. T-221-1 IS RECOMMENDED FOR EASY INSTALLATION OF STEM O-RING



ALTA-ROBBINS

110 South 1200 West
Lindon, Utah 84042
Phone (801) 785-1114
Fax (801) 785-4333

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.