

Flow Back Valves

Electrically Operated Ball Valves



“I’ve reduced my chemical consumption by 15%* using TeeJet Flow Back valves and automatic boom section control. With less overlap and fewer skips, the Flow Back valves have paid for themselves in a single season.”

Eric Farrier - Ainsworth, IA USA
Operator of a 1600-gallon Top Air sprayer equipped with TeeJet 460 Flow Back valves and automatic boom section control.

*Savings and performance will vary with sprayer design and spraying practices.

TeeJet Technologies Flow Back valves are improving the accuracy of spraying operations in a broad range of applications. The patented Flow Back feature provides rapid shut off of spray tips when boom sections are shut off. These valves eliminate the five second, ten second, or even longer shutoff delay common on sprayers equipped with standard valves.

Flow Back valves relieve the remaining pressure in the boom after the section valves are shut off. No more waiting for the eventual shut-off of the spray tips. The boom remains full of spray solution as only a limited amount of liquid must be diverted back to the tank to eliminate the pressure.

Flow Back Features

- Tips shut off 80% faster*
- Compatible with all levels of sprayer control systems, from simple to sophisticated
- Simple installation - single liquid return line
- No additional wiring or sensors
- Compact design suitable for increasing numbers of boom sections
- Excellent companion to BoomPilot automatic boom section control systems

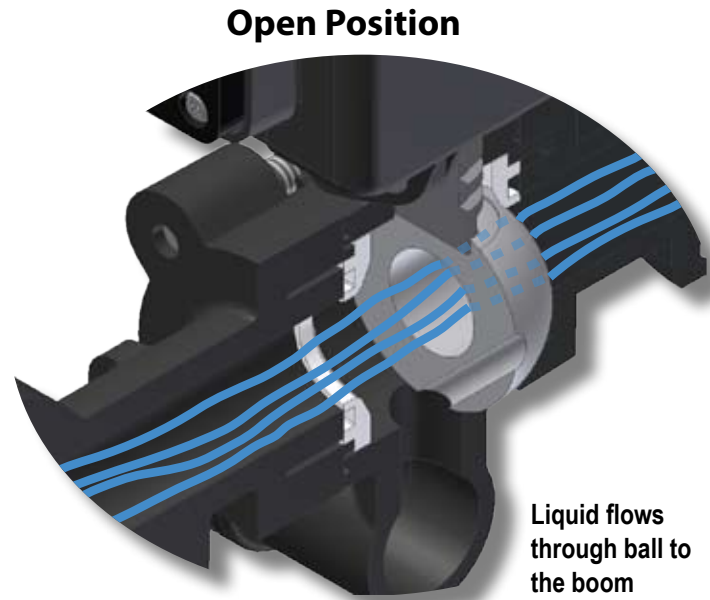
* Based on reducing five second shut off time to one second.

Flow Back Benefits

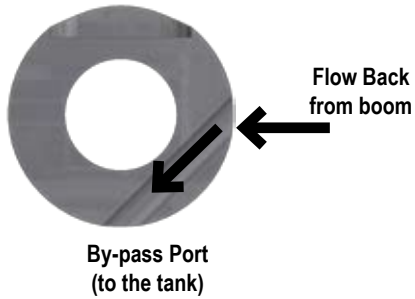
- Improve application accuracy
- Reduce skips, overlaps and resprays
- Eliminate guesswork – spray to the end of rows
- Protect boundaries, waterways and the overall environment
- Reduce chemical expense

How Flow Back Works

- Extra passages in the shut-off balls allow liquid from the boom to return to the tank after the section valves are shut off.
- Relieving the pressure trapped in the boom section allows for rapid shut-off of the check valves.
- A single hose returns the "Flow Back" liquid to the top of the tank.
- Properly plumbed, the boom system remains full of liquid - the system is not drained.



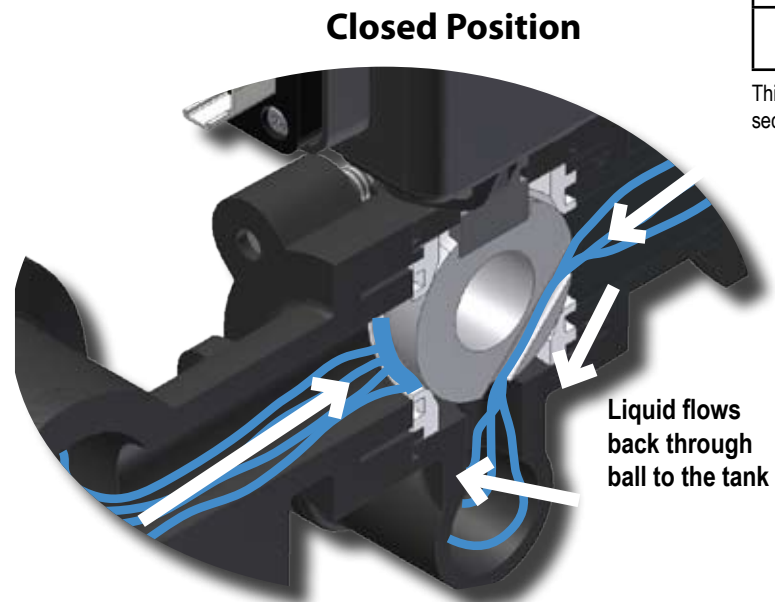
Cross-section view of ball in Closed Position



This table illustrates the potential area of off-rate application occurring each time the boom is switched off. With a Flow Back equipped sprayer you can spray to the end of the row.

Speed	Distance	Area for 90 foot (27 meter) boom
6 mph (9.6 kph)	44 feet (13.4 meters)	3,960 sq.ft. (368 sq. meters)
10 mph (16 kph)	74 feet (22.6 meters)	6,660 sq.ft. (619 sq. meters)
15 mph (24 kph)	110 feet (33.6 meters)	9,900 sq.ft. (920 sq. meters)

This chart represents distance traveled and area covered in five seconds while system pressure decays on a typical sprayer.

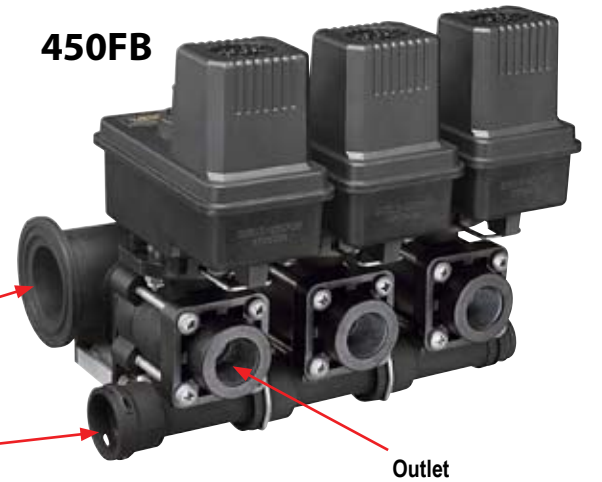


Flow Back is available in 450 and 460 series

All Flow Back valves provide high flow in a compact design, an integral return line and the patented Flow Back technology. Flow Back valves provide rapid shut-off of individual boom sections while utilizing a single return line, minimizing installation costs.

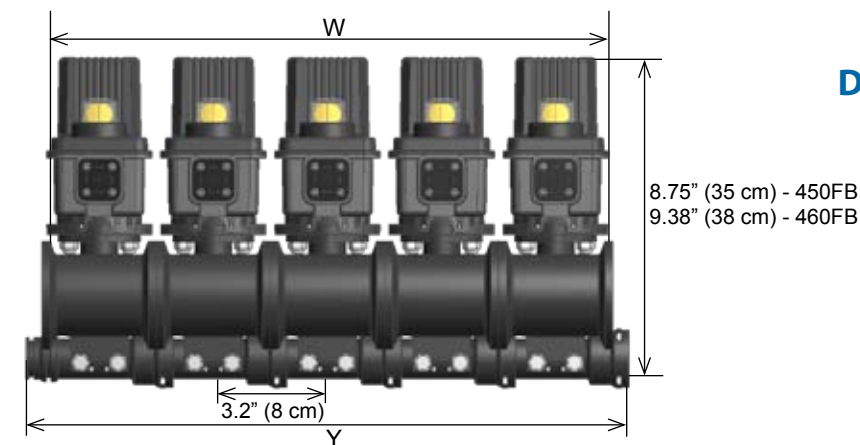
450FB Specifications

- 32 gpm (120 l/min) flow capacity at 5 psi (0.35 bar) pressure drop
- 200 psi (13.8 bar) pressure rating
- Space saving narrow footprint
- Reinforced polypropylene construction
- Choice of polypropylene or stainless steel ball



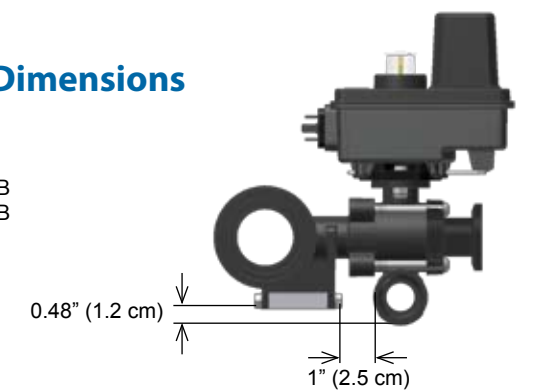
460FB Specifications

- 24 gpm (90 l/min) flow capacity at 5 psi (.35 bar) pressure drop
- 300 psi (20 bar) pressure rating
- Space saving narrow footprint
- Reinforced nylon construction
- Stainless steel ball



	3 valve	5 valve	7 valve	9 valve
W (450 and 460)	9.6" (24.4 cm)	16" (40.6 cm)	22.4" (60 cm)	28.8" (73 cm)
Y (450 only)	10.54" (27 cm)	16.94" (43 cm)	23.34" (59 cm)	29.74" (74 cm)

Dimensions



* 450 series mounting slots accept 5/16" or 8mm bolts
460 series mounting slots accept 6mm bolts only
(Center to center spacing for mounting slots is the same for 450 and 460 series)

Sample Valve Part Number

(B) 463BEC-3FBF-CN15AB

OUTLET THREADS

PART CODE	DESCRIPTION
BLANK	ALL THREADS TO BE NPT (IF EQUIPPED)
(B)	ALL THREADS TO BE BSPT (IF EQUIPPED)

MODEL SPECIFICATION

PART CODE	DESCRIPTION
45	450 MANIFOLD
46	460 MANIFOLD

MANIFOLD SIZES

PART CODE	DESCRIPTION
1	1-VALVE MANIFOLD
2	2-VALVE MANIFOLD
3	3-VALVE MANIFOLD
4	4-VALVE MANIFOLD
5	5-VALVE MANIFOLD

MOTOR SPECIFICATIONS

PART CODE	SWITCH	DESCRIPTION
E	DPDT	25 RPM, 0.6 SECOND SHUTOFF VALVE
EC	SPST	

VALVE TYPE

PART CODE	DESCRIPTION
3FB	FLOW BACK

END CAPS OR OUTLET FITTINGS

PART CODE	DESCRIPTION
3	3/4" PIPE THREAD
4	1" PIPE THREAD
Q	QUICK CONNECT
F	50 SERIES FLANGE



WIRING CONNECTORS

SPECIFIC ELECTRICAL CONNECTOR STYLE AND PIN-OUTS. IF NO CONNECTOR IS NEEDED LEAVE BLANK.

MOTOR CABLES

PART CODE	DESCRIPTION
C	POSITIVELY SWITCHED w/ 0.5-METER CABLE
CN	NEGATIVELY SWITCHED w/ 0.5-METER CABLE
* C03	POSITIVELY SWITCHED w/ 0.3-METER CABLE
* CN03	NEGATIVELY SWITCHED w/ 0.3-METER CABLE
* C15	POSITIVELY SWITCHED w/ 1.5-METER CABLE
* CN15	NEGATIVELY SWITCHED w/ 1.5-METER CABLE
* C60	POSITIVELY SWITCHED w/ 6.0-METER CABLE
* CN60	NEGATIVELY SWITCHED w/ 6.0-METER CABLE
D	POSITIVELY SWITCHED w/ DIN CONNECTOR
DN	NEGATIVELY SWITCHED w/ DIN CONNECTOR

BoomPilot®

Flow Back valves are a perfect complement to automatic boom section control systems like BoomPilot and CenterLine® 230BP. For more information on these two products, please visit www.teejet.com.



BoomPilot



CenterLine 230BP



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