

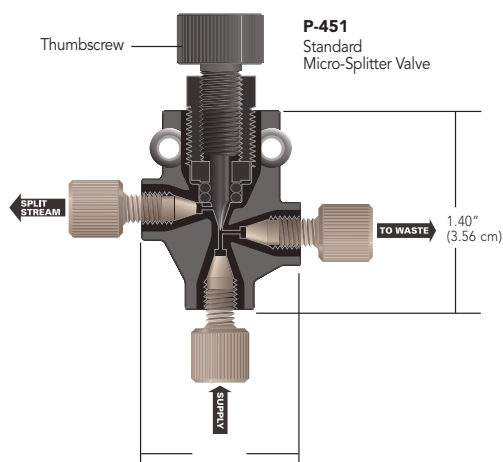
Micro-Splitter Valves

- ▶ For interfacing LC-MS systems
- ▶ Adjustable split stream flow rates
- ▶ Versions for up to 800 psi (55 bar) and up to 4,000 psi (276 bar)

The Upchurch Scientific® line of Micro-Splitter Valves is designed to accurately split and control a low-flow stream off a single incoming supply. Choose between 1/4-28 flat-bottom and 10-32 coned threaded versions.

The High Pressure Micro-Splitter Valves are designed to operate successfully up to 4,000 psi (276 bar) and the standard Micro-Splitter valves are pressure rated to 800 psi (55 bar).

The Graduated Valve offers many of the benefits and features of Micro-Splitter Valves, plus the ability to adjust and set the split flow to repeatable settings. This allows documentation of settings and the resulting flow rates for easier method development. The graduations also make it easier to employ the valve in a system used to run multiple analyses that require different split flow rates.



APPLICATION NOTE

- ▶ With an incoming flow rate of 1 mL/min using room temperature water and equal pressures on both outlet lines, the minimum split flow rate is 2 μ L/min for the standard micro-splitter valves and 4.8 μ L/min for the high pressure micro-splitter valves.
- ▶ All Micro-Splitter Valves have been tested at flow rates to 100 mL/min, with a maximum resulting pressure drop of only 45 psi (3.1 bar) when the valve is fully opened.

SPECIFICATIONS & DETAILS

Part No.	Valve Type	Threads	Internal Volume ¹ (closed/fully open)	Max. Operating Pressure
P-450	Standard	1/4-28	2.1 / 4.1 μ L	800 psi (55 bar)
P-451	Standard	10-32	1.2 / 2.8 μ L	800 psi (55 bar)
P-460S, T	High Pressure	10-32	1.2 / 2.8 μ L	4,000 psi (276 bar)
P-470	High Pres. Graduated	10-32	1.2 / 2.8 μ L	4,000 psi (276 bar)

¹ The supply and waste port thru-holes have IDs of 0.020" (0.50 mm). The ID for the split-stream port thru-hole is 0.020" (0.50 mm) in standard versions; in capillary versions it is 0.010" (0.25 mm).

Part No.	Description	Includes
MICRO-SPLITTER VALVES		
P-450	Standard, 1/4-28, Biocompatible	(3) XP-235
P-451	Standard, 10-32, Biocompatible	(3) F-120
P-460S	High Pressure, 10-32, with Stainless Steel Needle	(3) F-120
P-460T	High Pressure, 10-32, with Titanium Needle	(3) F-120
GRADUATED MICRO-SPLITTER VALVES		
P-470	High Pressure Graduated, 10-32, with Stainless Steel Needle	(3) F-120

* Use with the MicroTight Tubing Sleeves, found on page 19.