

## Bypass Valves for Small Pumps

**N110 Series** – is intended for bypass service on the smaller pumps (5 to 40 GPM / 18.9 to 151 l/min) used on stationary tanks or delivery trucks. Suitable for LPG or Anhydrous Ammonia (NH<sub>3</sub>) installations, the valve has an internal sensing orifice and does not require an external sensing line. Standard product temperature rating is -20 to 160°F / -29 to 71°C. A vent opening of the sensing orifice channel allows trapped vapor to escape, eliminating any vapor in the system when the pump is started. The compact size of the N110 Series (less than 6.5 in. / 165 mm overall) permits installation in limited space. A 1/4 in. FNPT tapped and plugged boss on the inlet side of the body can be used to install a hydrostatic relief valve or a pressure gauge. The valve does not have to be removed from the line for servicing; all internal parts can be reached by unscrewing the union nut.



N110 SERIES

Small Pump Bypass Valves							
TYPE	PUMPING CAPACITY		BODY SIZE, IN.	PSID SETTING		PSID RANGE	
	GPM	l/min		psig	bar	psig	bar
N110-06-1	5 to 20	18.9 to 75.7	3/4 FNPT	50	3.4	25 to 75	1.7 to 5.2
N110-08-1	20 to 40	75.7 to 151	1 FNPT				
N110-06-2	5 to 20	18.9 to 75.7	3/4 FNPT	100	6.9	75 to 150	5.2 to 10.3
N110-08-2	20 to 40	75.7 to 151	1 FNPT				

## Backpressure Valves

These valves are soft seated, holding a differential backpressure on liquid meters. A N120 Series backpressure valve is installed after the meter and it holds backpressure on the meter until vapor is forced back to the tank through the vapor eliminator. Standard product temperature rating is -20 to 160°F / -29 to 71°C. In this way vapor cannot form within the meter during liquid delivery.

Intended for smaller pumps, N120 Series are ideal on such applications as cylinder filling installations. All units have a 1/4 in. FNPT tapped and plugged boss on the inlet side of body and can be used for both LPG and Anhydrous Ammonia (NH<sub>3</sub>) service. The N120 Series has a 1/4 in. FNPT connection in the closing cap for attachment of an external sensing line from the tank vapor space or vapor eliminator.



N120 SERIES

Backpressure Valves						
TYPE	LIQUID METER SIZE, IN.	BODY SIZE, IN.	PSID SETTING		PSID RANGE	
			psig	bar	psig	bar
N120-06-3	3/4 or 1	3/4 FNPT	12	0.83	10 to 20	0.69 to 1.4
N120-08-3		1 FNPT				