

Bypass Valves for Large Pumps

Designed for bypass on 2 to 4 in. size pumps, the N100 Series is widely used on both LPG and Anhydrous Ammonia (NH₃) applications. The throttling action of the N100 Series allows only surplus pump discharge to be returned to the tank.

A venturi flow passage gives a boost effect, permitting a greater valve opening for increased flow at the lower pressure build-ups when bypassing full pump output. These features help to give rapid, stable liquid transfer and reduce dangerous pressure pulsations. The valves contain only one moving part - the piston style inner valve.

An external sensing line is not required because tank pressure registers through a hole in the inner valve. Complete field servicing can be made without removing the valve from the piping.

All N100 Series bodies have a 1/4 in. FNPT tapped and plugged boss on the side inlet for either a pressure gauge or a hydrostatic relief valve and have a temperature rating of -20 to 160°F / -29 to 71°C.



Large Pump Bypass Valves						
TYPE	PUMP SIZE, IN.	BODY SIZE, IN.	PSID SETTING		PSID RANGE	
			psig	bar	psig	bar
N100A-08-1 ⁽¹⁾	2	1 FNPT	50	3.4	25 to 75	1.7 to 5.2
N100A-08-2 ⁽¹⁾			115	7.9	50 to 150	3.4 to 10.3
N100A-10-1 ⁽¹⁾	2 or 3	1-1/4 FNPT	50	3.4	25 to 75	1.7 to 5.2
N100A-10-2 ⁽¹⁾			115	7.9	50 to 150	3.4 to 10.3
N100A-12-1 ⁽¹⁾		1-1/2 FNPT	50	3.4	25 to 75	1.7 to 5.2
N100A-12-2 ⁽¹⁾			115	7.9	50 to 150	3.4 to 10.3
N100-16-1	4	2 FNPT	50	3.4	25 to 75	1.7 to 5.2
N100-16-2		2 FNPT	115	7.9	50 to 150	3.4 to 10.3

1. Only the Type N100As are UL® listed.