

Relief Valves for Bulk Storage

Types H284 and H5114 internal spring relief valves can be used in the H500 Combo Joe™ relief valve manifold or as separate units on stationary tanks. The valves are identical except for valve body materials – Type H284 of brass (LPG service) and Type H5114 of 316 Stainless steel (Anhydrous Ammonia (NH₃) or LPG service). All other components are stainless steel, including a 300 Series Stainless steel spring for additional resistance to product contaminants. A thickly molded main seal improves service life and resistance to severe applications. Flow area is 3.20 sq. in. Standard product temperature rating is -20 to 160°F / -29 to 71°C.

When used in ASME tanks, internal spring relief valves have only the poppet and part of the body outside the tank. The adjusting screw

and all other parts are inside the tank, safe from tampering. Standard setpoints listed with UL for the Type H284 includes 225 and 250 psig / 15.5 and 17.2 bar. Standard setpoints listed with UL for the Type H5114 includes 250 and 265 psig / 17.2 and 18.3 bar. All set points between 100 and 400 psig \mid 6.9 and 27.6 bar are available with ASME approvals.

Outlet is 3 in. NPT for discharge stack connection. Type P104-24 pipe away adaptor (3 in. FNPT) is available for use with either valve. A 3-1/2 in. wrench can be used when installing or removing the valve. The drain deflector is furnished as standard on both the Types H284 and H5114. The Type P299 Rain Cap ships standard with each valve.

UL® Approved Types H284 and H5114 Large Stationary Tank Relief Valves								
TYPE ⁽¹⁾	CONTAINER CONNECTION, IN.	SERVICE	CONSTRUCTION MATERIAL	START-TO-DISCHARGE SETTING, psig / bar	FLOW CAPACITY, SCFM / SCMH AIR		FOR TANK WITH AREA UP TO ⁽²⁾ :	
					UL	ASME	Ft² / m²	
H284-225	2 MNPT	LPG	Brass	225 / 15.5	9835 / 16,710	8797 / 14,946	575 53.4	
H284-250				250 / 17.2	10,530 / 17,891	9724 / 16,521	625 / 58.1	
H5114-250		NH₃ or LPG	Stainless Steel	250 / 17.2	10,530 / 17,891	9724 / 16,521	625 / 58.1	
H5114-265				265 / 18.3	11,300 / 19,199	10,280 / 17,466	681 / 63.3	
1 Use with a 3.5 in h	nex size installation tool.							

^{2.} Based on UL flow capacities.

Types H884 and H8114 Special Service Large Stationary Tank Relief Valves								
TYPE	SPRING RANGE ⁽²⁾ , psig / bar	CONTAINER CONNECTION, IN.	MATERIAL OPTION	ASME FLOW RATE FACTOR ⁽³				
H884-1	100 to 149 / 6.9 to 10.3			30.90				
H884-2	150 to 200 / 10.3 to 13.8							
H884-3	201 to 275 / 13.9 to 19.0							
H884-4	276 to 330 / 19.0 to 22.8		Standard - Nitrile (NBR) E - EPDM K - Kalrez® N - Neoprene (CR)					
H884-5	331 to 400 / 22.8 to 27.6	O MANIOT O MANIOT(1)						
H8114-1	100 to 149 / 6.9 to 10.3	2 MNPT x 3 MNPT ⁽¹⁾						
H8114-2	150 to 200 / 10.3 to 13.8		V - Viton®					
H8114-3	201 to 275 / 13.9 to 19.0							
H8114-4	276 to 300 / 19.0 to 22.8							
H8114-5	331 to 400 / 22.8 to 27.6							

^{1.} Use with a 3.5 in. hex size installation tool.



^{2.} ASME-Approved set points approved within these spring ranges.

3. ASME Flow Capacity (SCFM Air) = [Set Pressure (psig)*1.2+14.7]* ASME Flow Rate Factor.