



### Relief Valves for Mobile Tanks and Transports

Primarily for trucks transporting LPG, Anhydrous Ammonia (NH<sub>3</sub>) or other compressed gases.

**Types H722, H733 and H5118** stainless steel relief valves resist rust and corrosion, 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. Stainless steel makes it easy to remove the valve from the tank for periodic testing (as prescribed by DOT) and permits standard tank couplings instead of the more costly flanged tank openings. The Type H733 has an optional CL300 RF Flange connection. Standard product temperature rating is -20 to 160°F / -29 to 71°C.

**Type H5118:** Semi-Internal relief valve for 2 in. threaded recessed well-head connections on transports.

Tight fitting protective caps (Types P297, P298 and P299) are standard on the valve to ensure no debris blocks the valve discharge. Standard setpoints listed with UL for the Type H722 include 125, 156, 250, 265, 275 and 312 psig / 8.6, 10.8, 17.2, 18.3, 19.0 and 21.5 bar. Standard set points listed with UL for the Types H733 and H5118 include 250 and 265 psig / 17.2 and 18.3 bar. All set points between 100 and 400 psig / 6.9 and 27.6 bar are available with ASME approvals.

A 1-1/2 and 2-1/2 in. hex size (Type P304 or P305) wrench can be inserted into the valve socket when installing/removing the valve to provide a means of attaching a standard wrench.

#### UL® Approved Internal Relief Valves

TYPE	CONTAINER CONNECTION, IN.	START-TO-DISCHARGE SETTING		FLOW CAPACITY, SCFM / SCMH AIR		FOR TANK WITH AREA UP TO <sup>(3)</sup> : Ft <sup>2</sup> / m <sup>2</sup>	PROTECTIVE CAP (INCLUDED)
		psig	bar	UL	ASME		
H722-250	2 MNPT <sup>(1)</sup>	250	17.2	3635 / 6176	3203 / 5136	171 / 15.9	Type P297
H722-265		265	18.3	3556 / 6042	3386 / 5753	166 / 15.4	
H722-275		275	19.0	3714 / 6310	3508 / 5960	175 / 16.3	
H733-250	3 MNPT <sup>(2)</sup>	250	17.2	10,150 / 17,245	9369 / 15,918	598 / 55.6	Type P298
H733-265		265	18.3	10,940 / 18,587	9904 / 16,827	655 / 60.9	
H733F3-250		250	17.2	10,150 / 17,245	9369 / 15,918	598 / 55.6	
H733F3-265	3 in. CL300 RF Flange	265	18.3	10,940 / 18,587	9904 / 16,827	655 / 60.9	Type P298
H5118-250 <sup>(4)</sup>	2 MNPT	250	17.2	10,530 / 17,891	9724 / 16,521	625 / 58.1	Type P299
H5118-265 <sup>(4)</sup>		265	18.3	11,300 / 19,199	10,280 / 17,466	681 / 63.3	

1. Order Type P304 (1-1/2 in. hex bar) installation wrench.

2. Order Type P305 (2-1/2 in. hex bar) installation wrench.

3. Based on UL flow capacities.

4. Use with a 3.5 in. hex size installation tool.

#### Internal Relief Valves

TYPE	CONTAINER CONNECTION, IN.	SPRING RANGE <sup>(3)</sup> , psig / bar	MATERIAL OPTION	ASME FLOW RATE FACTOR <sup>(4)</sup>
H822-1	2 MNPT <sup>(1)</sup>	100 to 150 / 6.9 to 10.3	<b>Standard</b> - Nitrile (NBR) E - EPDM K - Kalrez® N - Neoprene (CR) V - Viton®	10.18
H822-2	2 MNPT <sup>(1)</sup>	151 to 250 / 10.4 to 17.2		
H822-3	2 MNPT <sup>(1)</sup>	251 to 400 / 17.3 to 27.6		
H833-1	3 MNPT <sup>(2)</sup>	100 to 149 / 6.9 to 10.3		
H833-2	3 MNPT <sup>(2)</sup>	150 to 200 / 10.3 to 13.8		29.77
H833-3	3 MNPT <sup>(2)</sup>	201 to 275 / 13.9 to 19.0		
H833-4	3 MNPT <sup>(2)</sup>	276 to 330 / 19.0 to 22.8		
H833-5	3 MNPT <sup>(2)</sup>	331 to 400 / 22.8 to 27.6		
H833F3-3	3 CL300 RF Flange	201 to 275 / 13.9 to 19.0	<b>Standard</b> - Nitrile (NBR) N - Neoprene (CR)	30.90
H8118-3 <sup>(5)</sup>	2 MNPT	201 to 275 / 13.9 to 19.0		

1. Order Type P304 (1-1/2 in. hex bar) installation wrench.

2. Order Type P305 (2-1/2 in. hex bar) installation wrench.

3. ASME-Approved set points approved within these spring ranges.

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

5. Use with a 3.5 in. hex size installation tool.

# Internal Relief Valves

## Valves

FISHER™



### 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 (NH<sub>3</sub>) 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 / 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 <sup>(1)</sup>	CONTAINER CONNECTION, IN.	SERVICE	CONSTRUCTION MATERIAL	START-TO-DISCHARGE SETTING, psig / bar	FLOW CAPACITY, SCFM / SCM/H AIR		FOR TANK WITH AREA UP TO <sup>(2)</sup> : Ft <sup>2</sup> / m <sup>2</sup>
					UL	ASME	
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		NH <sub>3</sub> 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. hex size installation tool.  
2. Based on UL flow capacities.

#### Types H884 and H8114 Special Service Large Stationary Tank Relief Valves

TYPE	SPRING RANGE <sup>(2)</sup> , psig / bar	CONTAINER CONNECTION, IN.	MATERIAL OPTION	ASME FLOW RATE FACTOR <sup>(3)</sup>
H884-1	100 to 149 / 6.9 to 10.3	2 MNPT x 3 MNPT <sup>(1)</sup>	<b>Standard</b> - Nitrile (NBR) E - EPDM K - Kalrez® N - Neoprene (CR) V - Viton®	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			
H884-5	331 to 400 / 22.8 to 27.6			
H8114-1	100 to 149 / 6.9 to 10.3			
H8114-2	150 to 200 / 10.3 to 13.8			
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.