



PV401 Series

PV401 series of pressure vents are often used on storage tanks and limit excess pressure within a tank to 30kPa max.

There are several different variations using combinations of aluminium, mild steel, stainless steel and 316 grade stainless steel together with either buna nitrile, Viton™ or Teflon™ encapsulated O-rings.

Special opening pressures can be supplied on request.

Features & Benefits

- Limits excess pressure within a tank to 30 kPa max.
- Range of materials and seals available.
- Simple and reliable emergency pressure relief venting.
- Special opening pressures can be supplied on request.

Technical Information

Opening Pressure

Standard setting vent opens at 30 kPa.

Capacity

3250m³/hr at a pressure of 45 kPa.

Ordering Information

- **PV401-AA-B:** Aluminium cover, Aluminium flange, Nitrile O-ring.
- **PV401-AA-T:** Aluminium cover, Aluminium, flange Teflon™ encapsulated O-ring.
- **PV401-AA-V:** Aluminium cover, Aluminium flange, Viton™ O-ring.
- **PV401-AM-B:** Aluminium cover, Mild Steel flange, Buna O-ring.
- **PV401-AM-V:** Aluminium cover, Mild Steel, flange Viton™ O-ring.
- **PV401-AS-V:** Aluminium cover, Stainless Steel 316 flange, Viton™ O-ring.
- **PV401-SS-V:** Stainless Steel 316 cover, Stainless Steel 316 flange, Viton™ O-ring.
- **PV401-SST316:** Stainless Steel 316 cover, Stainless Steel 316 flange, Teflon™ encapsulated O-ring.
- **PV401-AM-BRC:** Aluminium cover, Mild Steel flange with MWP of 210 kPa for Rail car.
- **PV401-AS-BRC:** Aluminium cover, Stainless Steel flange with MWP of 210 kPa for Rail car.

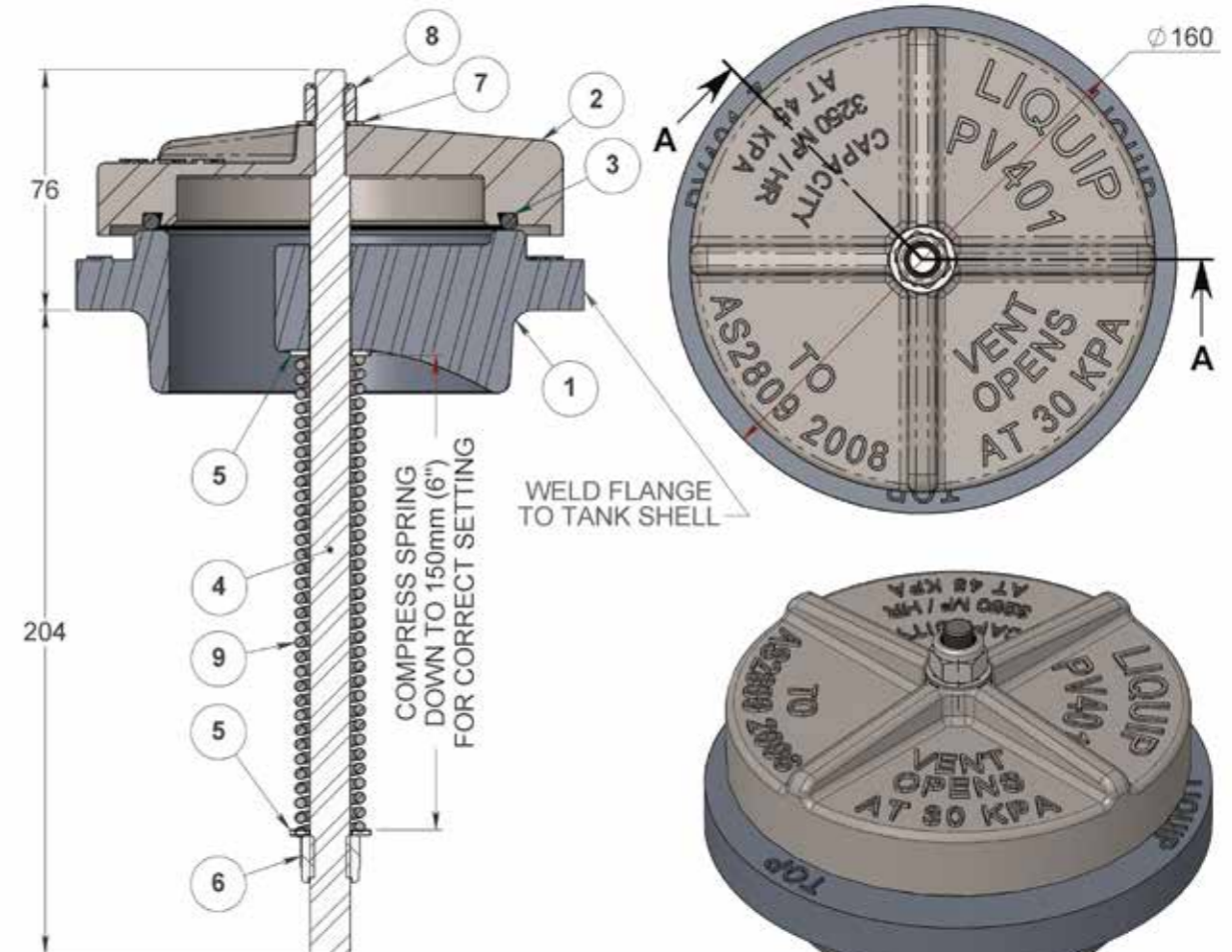
Mounting

Weld in flange.

Standards

Conforms to AS2809-1985.

PV401 PRESSURE VENT



SECTION A-A

ITEM	PART NUMBER	DESCRIPTION	QTY	MATERIAL
1	PV401-7	FLANGE WELD AL	1	ALUMINIUM
2	PV401-13	COVER AL	1	ALUMINIUM
3	0208	O-RING	1	NITRILE
4	PV401-3	SPINDLE	1	ST STEEL
5	0104	WASHER FLAT IMPERIAL	2	Z/P STEEL
6	0152	NUT NYLOC	1	Z/P STEEL
7	0116	WASHER SHK-PRF INT	1	Z/P STEEL
8	0150	NUT NYLOC	1	Z/P STEEL
9	4457	SPRING	1	ST STEEL
10	PV401-14	INSTRUCTION LEAFLET	1	PAPER



PVV100 Series

The PVV104 series pressure and vacuum relief vents are used on tank trucks and incorporate roll-over protection.

The PVV104 prevents the build up of pressure and vacuum caused by expansion, contraction and tanker movement.

The PVV104 is designed primarily for thermal relief. The vent incorporates rollover protection by locking shut at any angle greater than 60° from the vertical.

Features & Benefits

- Allow excess pressure and vacuum to be equalised through a gauzed flame proof opening.
- Aluminium body and Stainless Steel Springs.
- All models have roll-over protection ensuring compartment is sealed if tilted more than 60° from vertical.
- The PVV range of vents can be mounted inside the tank either on the manhole cover or on a separate flange.

Technical Information

Materials

- Aluminium body & poppets.
- Stainless steel springs.
- Bonded nitrile seals.
- Nylon coated bronze ball.

PVV104 (Australia/NZ)

- Pressure: Opens at 16±1 kPa.
- Vacuum: Opens at 2±1 kPa.
- Capacity: 98m³/hr free air at 35 kPa.
- Locks shut at 60° from vertical.
- Approved to AS2809-1990.
- PVV104 is identified by the free air bleed hole in the body.

Ordering Information

- **PVV104:** PV vent suitable for Australia/NZ.
- **PVV104U:** PV vent suitable for rest of world.



PVV Repair Kits

Liquip offer a Vapour Vent Repair Kit for PVV104 to ensure users are able to repair and rebuild their PVV104 every 2½ years in line with Australian Standards.

Ordering Information

- **PVVREPKIT:** Repair kit for PVV104.

Mounting

Mounted directly to the manhole on the underside of the emergency vent.

PVV104U (rest of world)

- Pressure: Opens at 8 to 12 kPa.
- Vacuum: Opens at -0.4 to -2.5 kPa.
- Capacity: 90m³/hr free air at 30 kPa inlet & 33m³/hr free air at 3 kPa pressure drop for vacuum.
- Locks shut at 60° from vertical Approved to UK requirements.
- PVV104U has no bleed hole and a very distinctive full circle marker groove around.

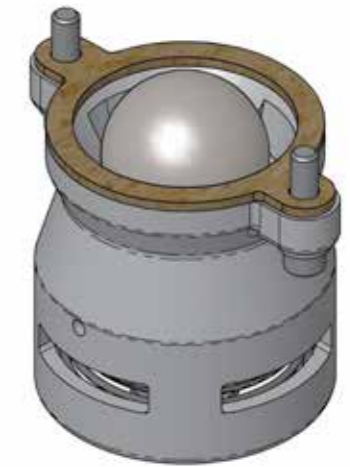
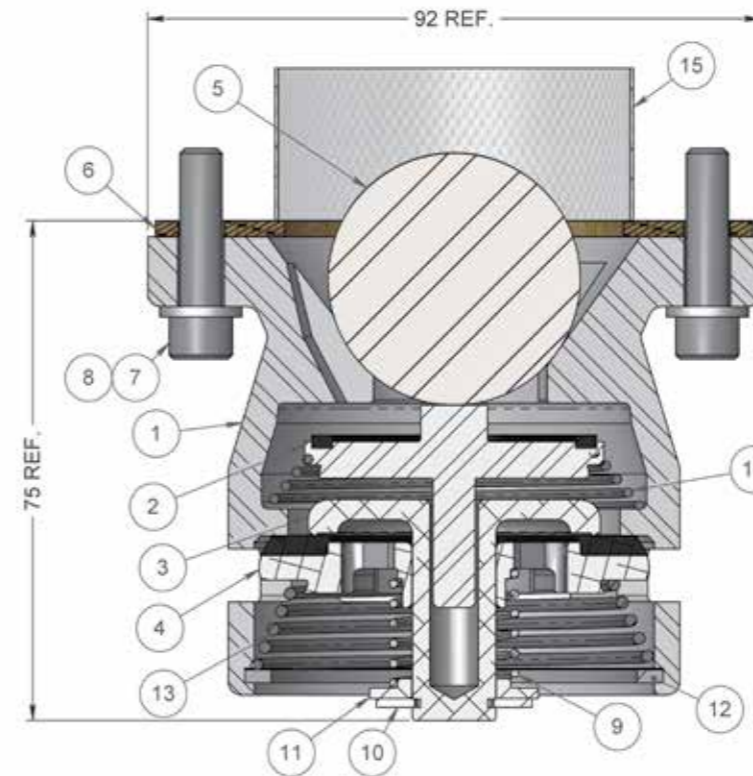
Associated Equipment

- VOH400 series Hatch.
- VOH700 series Hatches.
- SH300 series swing back Hatches.

Associated Equipment

- **PVV104:** PV vent suitable for Australia/NZ.

PVV104 & PVV104U



SEE DATASHEET X952196 FOR MOUNTING OPTIONS

ITEM NO.	PART NUMBER	DESCRIPTION	PVV104	PVV104U	MATERIAL
1	PVV104-1	BODY - WITH HOLE	1	-	ALUMINIUM
	PVV104-1U	BODY - WITH GROOVE	-	1	ALUMINIUM
2	PVV104-7	ROLLOVER POPPET	1	1	ALUMINIUM
3	PVV104-8	PRESSURE POPPET	1	1	ALUMINIUM
4	PVV104-9	VACUUM POPPET	1	1	ALUMINIUM
5	PVV104-13	BALL Ø38	1	1	NYLON/BRONZE
6	4250	GASKET FOR PVV104	1	1	NBR-CORK
7	0714	CAPSCREW IMPERIAL	2	2	Z/P STEEL
8	0107	WASHER SPRING	2	2	Z/P STEEL
9	4420	SPRING	1	-	ST STEEL
	6109	SPRING	-	1	ST STEEL
10	0096	E-CLIP IMPERIAL	1	1	STEEL
11	PVV104-3	SPRING RETAINER	1	1	ALUMINIUM
12	4347	CIRCLIP INTERNAL	-	1	Z/P STEEL
13	4419	SPRING COMPRESSION	1	1	ST STEEL
14	4421	SPRING COMPRESSION	1	1	ST STEEL
15	VOH700-19	SPARK ARRESTOR	1	1	ST STEEL
16	6436	INSTRUCTION LEAFLET	1	1	PAPER
17	59052	LABEL	-	1	ALUMINIUM
18	55031	RIVET	-	1	STEEL
19	59051	TEST CERTIFICATE	-	1	PAPER



PVV200 Series

The PVV204 series vents are designed for use on tank trucks which load or discharge with fill caps closed and incorporates roll-over protection.

The PVV204s prevent the build up of pressure and vacuum caused by expansion, contraction and tanker movement.

The PVV204 is designed primarily for thermal relief. The vent incorporates rollover protection by locking shut at any angle greater than 60° from the vertical.

The vent may also be used on storage and blending tanks. It is important that the pressure/vacuum capability of the tank is known. Different settings may be required.

Features & Benefits

- Allow excess pressure and vacuum to be equalised through a gauzed flame proof opening.
- Aluminium body and poppets (S/S also available).
- All models have roll-over protection ensuring compartment is sealed if tilted more than 60° from vertical.
- The vent is normally mounted directly to the manhole on the underside of the emergency vent or on a separate weld flange.
- PVV vents for chemical and stainless steel tanks available.

Technical Information

Materials

- Aluminium body & poppets.
- Stainless steel housing, shafts and springs.
- Bonded nitrile seals.
- Nylon coated bronze ball.

Mounting

May be on a Liquip Manhole cover or on a separate weld flange.

PVV204 (settings comply with AS2809)

- Pressure Setting 15 kPa.
- Vacuum Setting 3 kPa.
- Capacity 240m³/hr free air at 35 kPa.
- Max recommended liquid loading rate 1,000 LPM.
- Free air bleed hole in body.

PVV204U (settings comply with international codes)

- Pressure Setting 10 kPa.
- Vacuum Setting 2 kPa.
- Capacity 240m³/hr free air at 35 kPa.
- Max recommended liquid loading rate 1,000 LPM.
- No bleed hole.

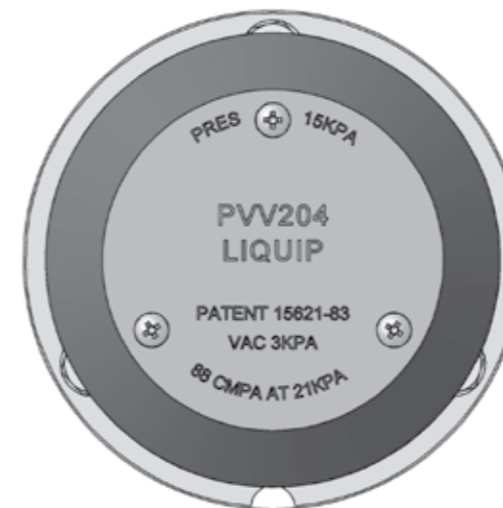
Ordering Information

- **PVV204:** Aluminium Pressure & Vacuum Vent with Nitrile seals (complies to AS2809).
- **PVV204U:** Aluminium Pressure & Vacuum Vent with Nitrile seals (complies to UK & USA codes).
- **PVV204-ST316:** 316 Stainless Steel Pressure & Vacuum Vent with Teflon™ seals (for S/S tanks).
- **PVV204-AT:** Aluminium Pressure & Vacuum Vent with Teflon™ seals (for chemical use).
- **PVV204U-AT:** Aluminium Pressure & Vacuum Vent with Teflon™ seals (for chemical use).

Associated Equipment

- VOH400 series Hatch.
- VOH700 series Hatches.
- SH300 series swing back Hatches.

PVV204 PRESSURE & VACUUM VENT



TOP VIEW (AUSTRALIAN MARKINGS)

PART	COMPLIES TO	PRESSURE & VACUUM SETTINGS
PVV204	AUSTRALIAN STANDARD AS2809-2008	PRESSURE 15-17kPa VACUUM 2kPa±1
PVV204U	UK & USA CODES	PRESSURE 8-12 kPa VACUUM 2kPa±1

