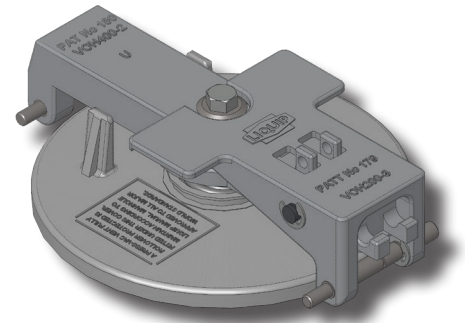


VOH501-3xx - Emergency Vent & Bridge Arrangements for VOH Hatches

Liquip's tanker top manhole Ø230mm quick-opening inspection hatch sub-assembly also doubles as emergency vent with provision for pressure/vacuum relieving vent and rollover protection. Must be fitted to a VOH manhole (supplied separately).

Key Features

- Enables bulk pressure release in event of a fire or rollover.
- Easy to open and lightweight aluminium construction.
- Two stage opening for added safety.
- VOH501-32x have a plain handle
- VOH501-33x have a lockable handle.
- A key (VOH400-10, order separately) is required to access inspection hatch when fitted with lockable handle.
- Pressure/vacuum vent mounts onto underside of the sub-assembly (PVV104M valve, order separately).
- VOH501-3xx is supplied with metric threads.
- Mounts onto all Liquip VOH series manholes with hinge pins provided.



Liquip's VOH501-32A emergency vent assembly shown

Ordering Information

	30kPa spring (6108) & label 7321 to suit PVV104M	24kPa spring (4464) & label 7322 to suit PVV104UM	30kPa spring (6108) & label 7324 to suit PVV104UM
VOH200-3 Plain Handle	VOH501-32A	VOH501-32B	VOH501-32U
VOH400-7 Lockable Handle	VOH501-33A	VOH501-33B	VOH501-33U
Pressure/Vacuum Vent to be used	PVV104M	PVV104UM	PVV104UM

Specifications

Operation	Handle may be opened (a key is required for VOH501-33x lockable versions) to allow bridge & vent lid to swing away and make inspection hatch accessible. Both handles may be locked with additional padlock (not supplied).
Mounting	Mounts onto all Liquip VOH series manholes with hinge pins provided.
Weight	12.0kg (without coaming & mounted accessories)
Materials	All major components are aluminium. Vent seal is nitrile rubber (viton also available).
Dismantle	Remove bolt from centre of vent lid to access spring, bellows and o-rings under bolt head. When re-assembling, ensure there is a 3mm gap under bolt head when the emergency vent is closed on the manhole cover.
Adjustment or Service	Periodically check seals & gaskets, and check vent for correct opening pressure.
Associated Equipment	PVV104M: Pressure Vacuum Vent - Aust Spec (Metric). PVVREPKIT-M: PVV104M repair kit (Metric). PVV104UM: Pressure Vacuum Vent - International Spec (Metric). VOH41x, VOH45x, VOH50x and VOH750 series hatches/manhole covers.

VOH501-32A - Plain Handle

EMERGENCY VENT

Opens at: 30kPa

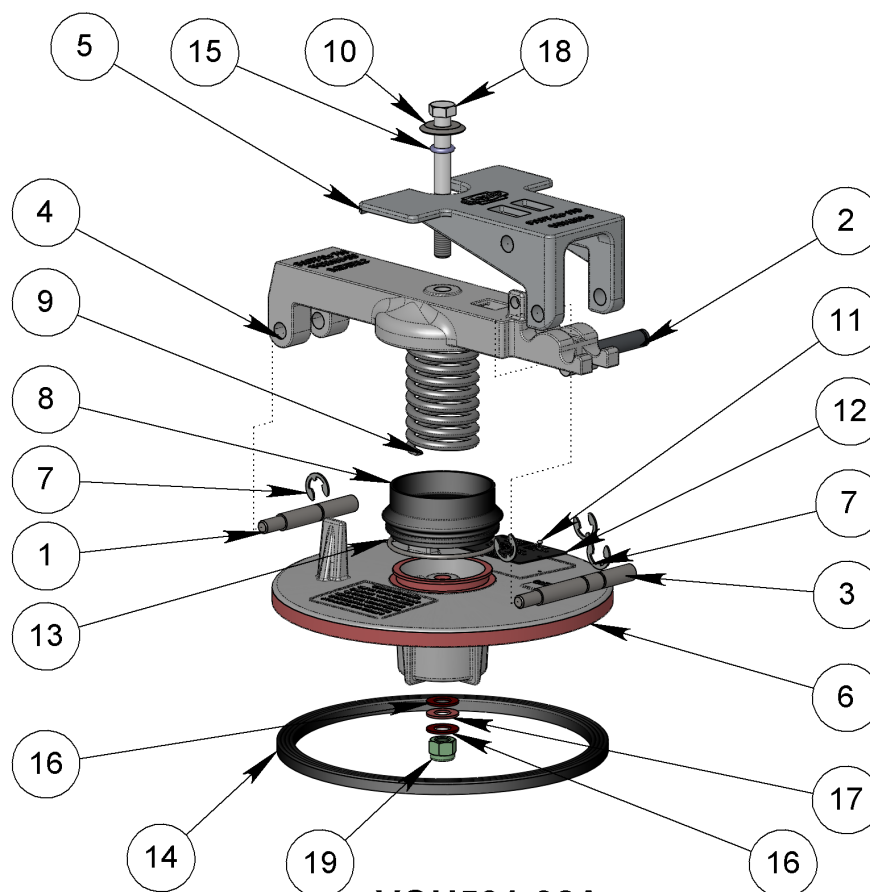
Capacity: 8500m³/hr at 45kPa

PRESSURE/VACUUM VENT

Model PVV104M, supplied separately

Opens at: 10 to 17kPa pressure & 0 to -4kPa vacuum

Capacity: 98m³/hr at 35kPa



VOH501-32A

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	MATERIAL
1	VOH200U-9	BRIDGE PIN	1	ST STEEL
2	VOH200-10	CAM PIN FOR VOH200	1	1/2" ST STEEL
3	VOH200-21	HANDLE PIN FOR GRAVITY LATCH	1	ST STEEL
4	VOH400-2U-METRIC	BRIDGE - MANHOLE EMERGENCY VENT	1	ALUMINIUM
5	VOH200-3	HANDLE FOR VOH MANHOLES	1	ALUMINIUM
6	VOH700-4U-METRIC	EMERGENCY VENT COVER 9"	1	ALUMINIUM
7	0096	E-CLIP IMPERIAL	4	STEEL
8	7141	BELLOWS TO SUIT MANHOLES	1	EPDM
9	6108	SPRING COMPRESSION	1	SPRING STEEL
10	7143	COVER for BOLT O-RING ON MANHOLE	1	ST STEEL
11	6579	HAMMER DRIVE SCREW	2	Z/P STEEL
12	7321	LABEL f. EMERGENCY VENT	1	ALUMINIUM
13	6140	SPRING CLIP FOR BELLOWS	1	ST STEEL
14	0236	SEAL 9" HATCH LID	1	HAN
15	5386	O-RING	2	VITON A
16	5387	WASHER FLAT METRIC SMALL	2	FIBRE
17	55107	WASHER FLAT	1	ST STEEL
18	5388	BOLT METRIC	1	Z/P STEEL
19	6001	NUT NYLOC	1	Z/P STEEL

VOH501-32B - Plain Handle

EMERGENCY VENT

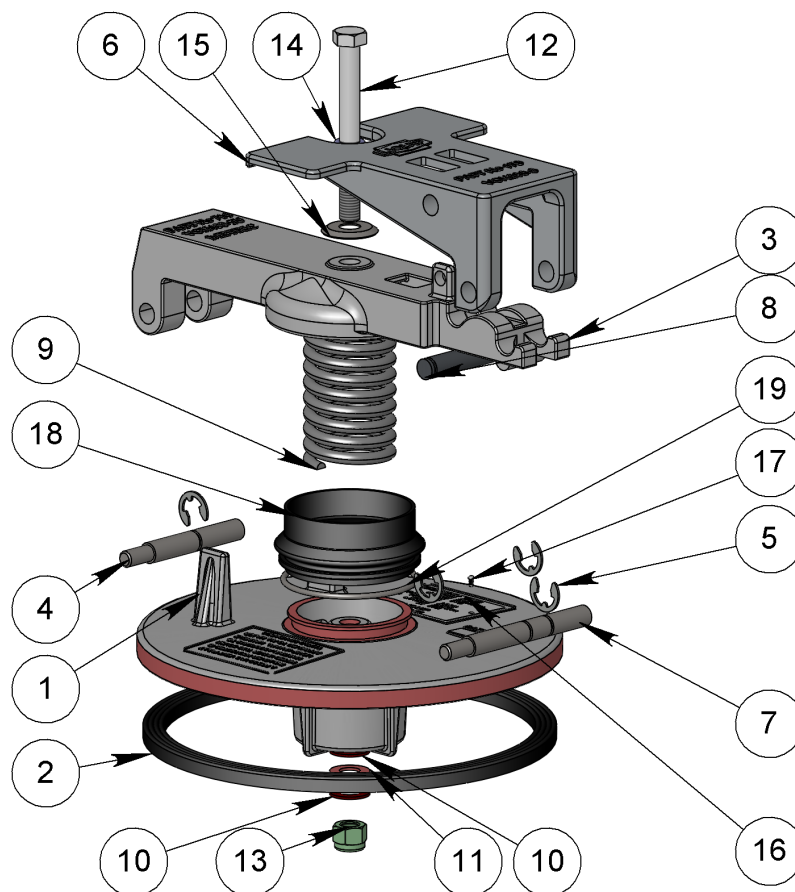
Opens at: 24kPa (3 PSI)

Capacity: 8500m³/hr at 45kPa
(243,000ft³/hr at 5 PSI)

PRESSURE/VACUUM VENT

Model PVV104UM, supplied separately

Opens at: 8 to 12kPa pressure & -0.4 to -2.5kPa vacuum
Capacity: 91m³/hr at 30kPa (3460ft³/hr at 5 PSI)



VOH501-32B

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	MATERIAL
1	VOH700-4U-METRIC	EMERGENCY VENT COVER 9"	1	ALUMINIUM
2	0236	SEAL 9" HATCH LID	1	HAN
3	VOH400-2U-METRIC	BRIDGE - MANHOLE EMERGENCY VENT	1	ALUMINIUM
4	VOH200U-9	BRIDGE PIN	1	ST STEEL
5	0096	E-CLIP IMPERIAL	4	STEEL
6	VOH200-3	HANDLE FOR VOH MANHOLES	1	ALUMINIUM
7	VOH200-21	HANDLE PIN FOR GRAVITY LATCH	1	ST STEEL
8	VOH200-10	CAM PIN FOR VOH200	1	1/2" ST STEEL
9	4464	SPRING COMPRESSION	1	SPRING STEEL
10	5387	WASHER FLAT METRIC SMALL	2	FIBRE
11	55107	WASHER FLAT	1	ST STEEL
12	5388	BOLT METRIC	1	Z/P STEEL
13	6001	NUT NYLOC	1	Z/P STEEL
14	5386	O-RING	2	VITON A
15	7143	COVER for BOLT O-RING ON MANHOLE	1	ST STEEL
16	7322	LABEL f. EMERGENCY VENT	1	ALUMINIUM
17	6579	HAMMER DRIVE SCREW	2	Z/P STEEL
18	7141	BELLOWS TO SUIT MANHOLES	1	EPDM
19	6140	SPRING CLIP FOR BELLOWS	1	ST STEEL

VOH501-32U - Plain Handle

EMERGENCY VENT

Opens at: 30kPa

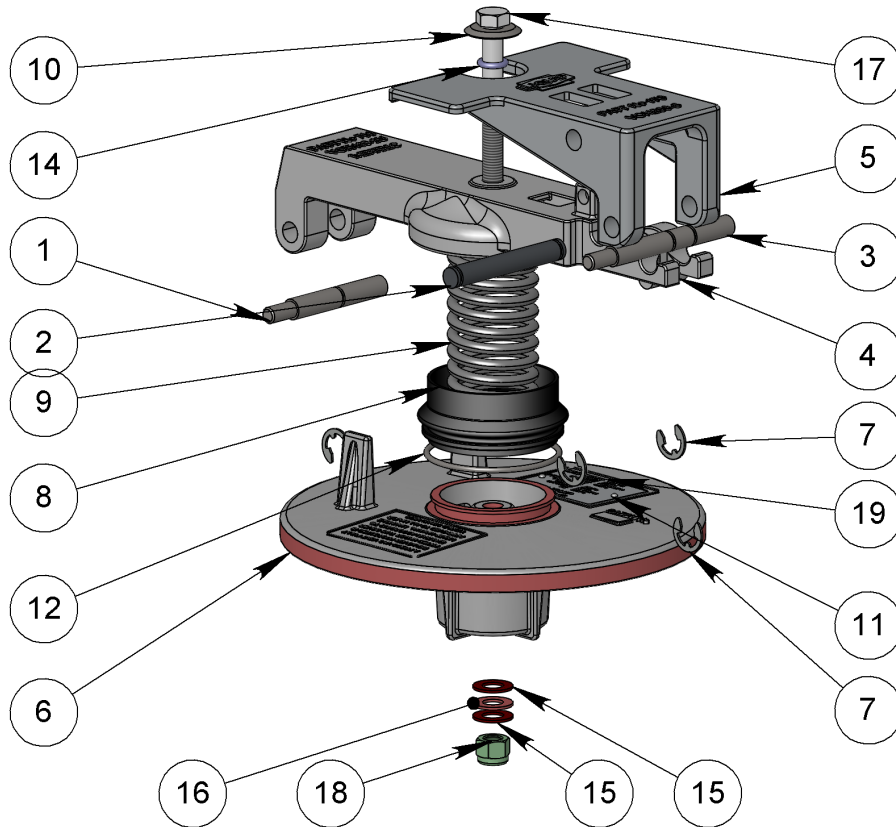
Capacity: 8500m³/hr at 45kPa

PRESSURE/VACUUM VENT

Model PVV104UM, supplied separately

Opens at: 8 to 12kPa pressure & -0.4 to -2.5kPa vacuum

Capacity: 91m³/hr at 30kPa (3460ft³/hr at 5 PSI)



VOH501-32U

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	MATERIAL
1	VOH200U-9	BRIDGE PIN	1	ST STEEL
2	VOH200-10	CAM PIN FOR VOH200	1	1/2" ST STEEL
3	VOH200-21	HANDLE PIN FOR GRAVITY LATCH	1	ST STEEL
4	VOH400-2U-METRIC	BRIDGE - MANHOLE EMERGENCY VENT	1	ALUMINIUM
5	VOH200-3	HANDLE FOR VOH MANHOLES	1	ALUMINIUM
6	VOH700-4U-METRIC	EMERGENCY VENT COVER 9"	1	ALUMINIUM
7	0096	E-CLIP IMPERIAL	4	STEEL
8	7141	BELLOWS TO SUIT MANHOLES	1	EPDM
9	6108	SPRING COMPRESSION	1	SPRING STEEL
10	7143	COVER for BOLT O-RING ON MANHOLE	1	ST STEEL
11	6579	HAMMER DRIVE SCREW	2	Z/P STEEL
12	6140	SPRING CLIP FOR BELLOWS	1	ST STEEL
13	0236	SEAL 9" HATCH LID	1	HAN
14	5386	O-RING	2	VITON A
15	5387	WASHER FLAT METRIC SMALL	2	FIBRE
16	55107	WASHER FLAT	1	ST STEEL
17	5388	BOLT METRIC	1	Z/P STEEL
18	6001	NUT NYLOC	1	Z/P STEEL
19	7324	LABEL f. EMERGENCY VENT	1	ALUMINIUM

VOH501-33A - Lockable Handle

EMERGENCY VENT

Opens at: 30kPa

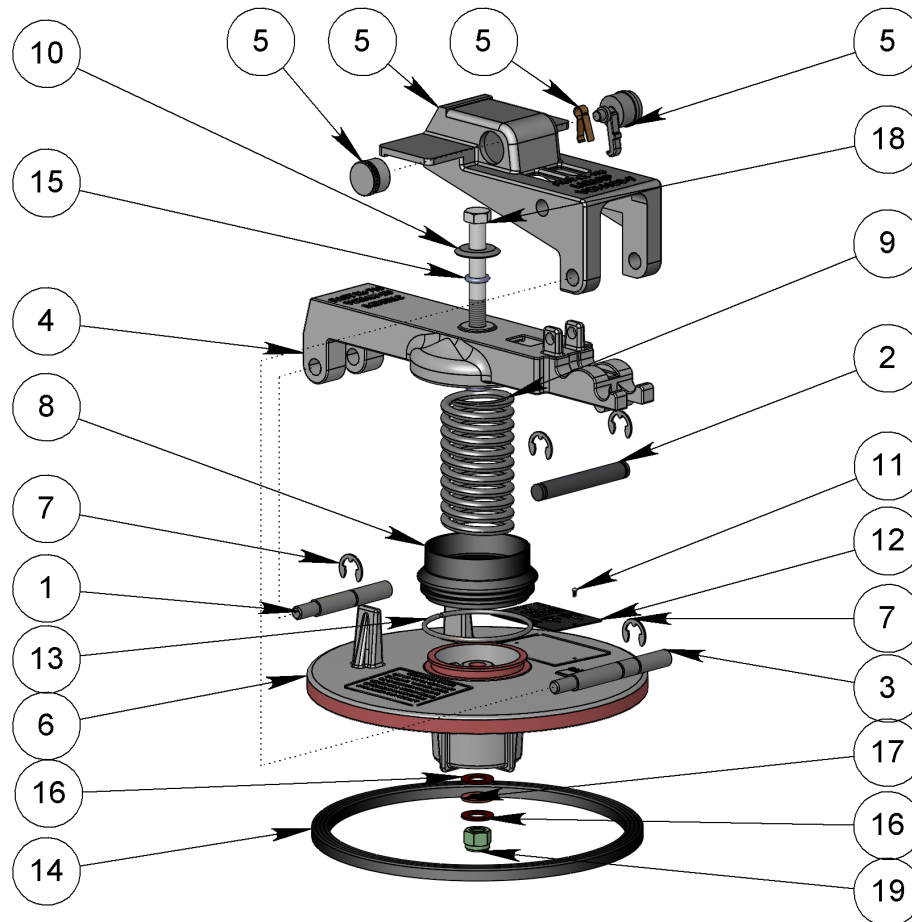
Capacity: 8500m³/hr at 45kPa

PRESSURE/VACUUM VENT

Model PVV104M, supplied separately

Opens at: 10 to 17kPa pressure & 0 to -4kPa vacuum

Capacity: 98m³/hr at 35kPa



VOH501-33A

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	MATERIAL
1	VOH200U-9	BRIDGE PIN	1	ST STEEL
2	VOH200-10	CAM PIN FOR VOH200	1	1/2" ST STEEL
3	VOH200-21	HANDLE PIN FOR GRAVITY LATCH	1	ST STEEL
4	VOH400-2U-METRIC	BRIDGE - MANHOLE EMERGENCY VENT	1	ALUMINIUM
5	VOH400-7	HANDLE - LOCKABLE	1	ALUMINIUM
6	VOH700-4U-METRIC	EMERGENCY VENT COVER 9"	1	ALUMINIUM
7	0096	E-CLIP IMPERIAL	4	STEEL
8	7141	BELLOWS TO SUIT MANHOLES	1	EPDM
9	6108	SPRING COMPRESSION	1	SPRING STEEL
10	7143	COVER for BOLT O-RING ON MANHOLE	1	ST STEEL
11	6579	HAMMER DRIVE SCREW	2	Z/P STEEL
12	7321	LABEL f. EMERGENCY VENT	1	ALUMINIUM
13	6140	SPRING CLIP FOR BELLOWS	1	ST STEEL
14	0236	SEAL 9" HATCH LID	1	HAN
15	5386	O-RING	2	VITON A
16	5387	WASHER FLAT METRIC SMALL	2	FIBRE
17	55107	WASHER FLAT	1	ST STEEL
18	5388	BOLT METRIC	1	Z/P STEEL
19	6001	NUT NYLOC	1	Z/P STEEL

VOH501-33B - Lockable Handle

EMERGENCY VENT

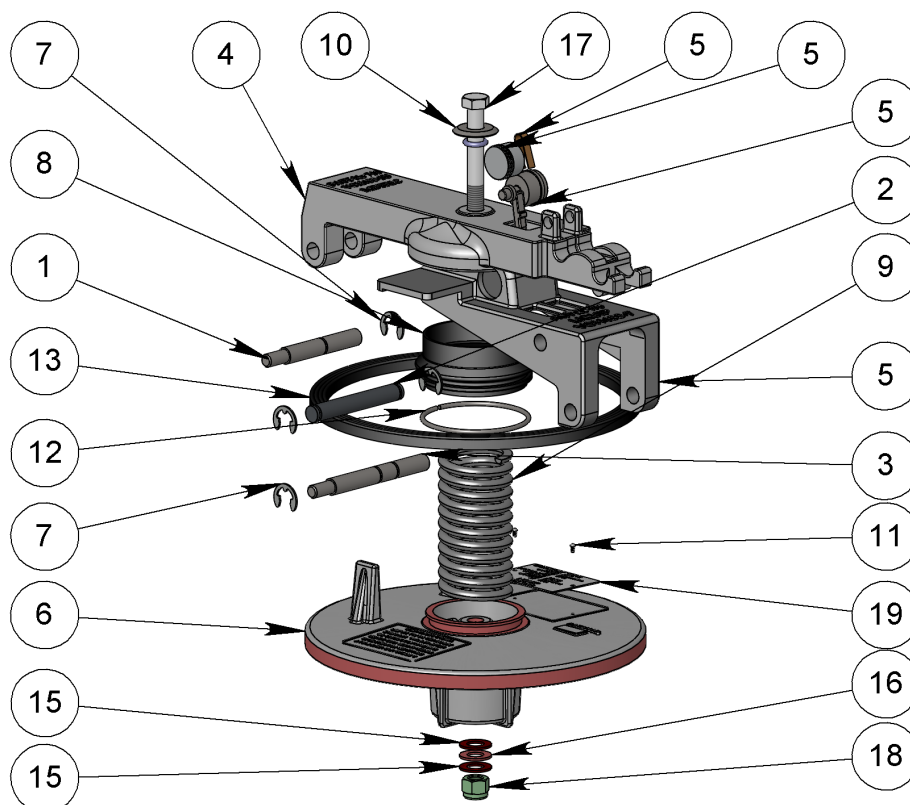
Opens at: 24kPa (3 PSI)

Capacity: 8500m³/hr at 45kPa
(243,000ft³/hr at 5 PSI)

PRESSURE/VACUUM VENT

Model PVV104UM, supplied separately

Opens at: 8 to 12kPa pressure & -0.4 to -2.5kPa vacuum
Capacity: 91m³/hr at 30kPa (3460ft³/hr at 5 PSI)



VOH501-33B

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1	VOH200U-9	BRIDGE PIN	ST STEEL	1
2	VOH200-10	CAM PIN FOR VOH200	1/2" ST STEEL	1
3	VOH200-21	HANDLE PIN FOR GRAVITY LATCH	ST STEEL	1
4	VOH400-2U-METRIC	BRIDGE - MANHOLE EMERGENCY VENT	ALUMINIUM	1
5	VOH400-7	HANDLE - LOCKABLE	ALUMINIUM	1
6	VOH700-4U-METRIC	EMERGENCY VENT COVER 9"	ALUMINIUM	1
7	0096	E-CLIP IMPERIAL	STEEL	4
8	7141	BELLOWS TO SUIT MANHOLES	EPDM	1
9	4464	SPRING COMPRESSION	SPRING STEEL	1
10	7143	COVER for BOLT O-RING ON MANHOLE	ST STEEL	1
11	6579	HAMMER DRIVE SCREW	Z/P STEEL	2
12	6140	SPRING CLIP FOR BELLOWS	ST STEEL	1
13	0236	SEAL 9" HATCH LID	HAN	1
14	5386	O-RING	VITON A	2
15	5387	WASHER FLAT METRIC SMALL	FIBRE	2
16	55107	WASHER FLAT	ST STEEL	1
17	5388	BOLT METRIC	Z/P STEEL	1
18	6001	NUT NYLOC	Z/P STEEL	1
19	7322	LABEL f. EMERGENCY VENT	ALUMINIUM	1

VOH501-33U - Lockable Handle

EMERGENCY VENT

Opens at: 30kPa

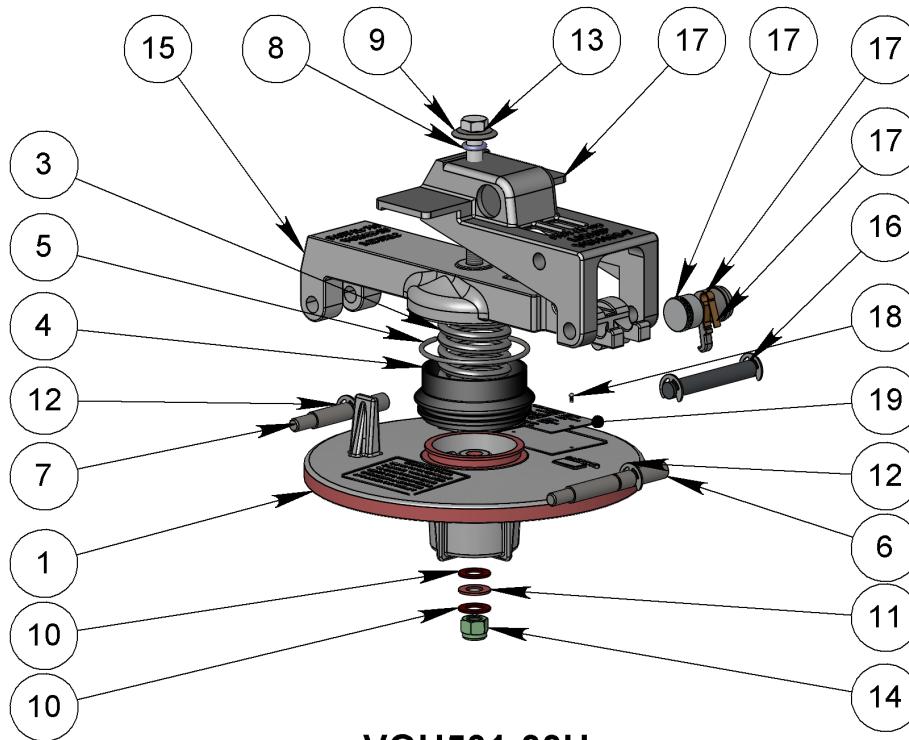
Capacity: 8500m³/hr at 45kPa

PRESSURE/VACUUM VENT

Model PVV104UM, supplied separately

Opens at: 8 to 12kPa pressure & -0.4 to -2.5kPa vacuum

Capacity: 91m³/hr at 30kPa (3460ft³/hr at 5 PSI)



VOH501-33U

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1	VOH700-4U-METRIC	EMERGENCY VENT COVER 9"	ALUMINIUM	1
2	0236	SEAL 9" HATCH LID	HAN	1
3	6108	SPRING COMPRESSION	SPRING STEEL	1
4	7141	BELLOWS TO SUIT MANHOLES	EPDM	1
5	6140	SPRING CLIP FOR BELLOWS	ST STEEL	1
6	VOH200-21	HANDLE PIN FOR GRAVITY LATCH	ST STEEL	1
7	VOH200U-9	BRIDGE PIN	ST STEEL	1
8	5386	O-RING	VITON A	2
9	7143	COVER for BOLT O-RING ON MANHOLE	ST STEEL	1
10	5387	WASHER FLAT METRIC SMALL	FIBRE	2
11	55107	WASHER FLAT	ST STEEL	1
12	0096	E-CLIP IMPERIAL	STEEL	4
13	5388	BOLT METRIC	Z/P STEEL	1
14	6001	NUT NYLOC	Z/P STEEL	1
15	VOH400-2U-METRIC	BRIDGE - MANHOLE EMERGENCY VENT	ALUMINIUM	1
16	VOH200-10	CAM PIN FOR VOH200	1/2" ST STEEL	1
17	VOH400-7	HANDLE - LOCKABLE	ALUMINIUM	1
18	6579	HAMMER DRIVE SCREW	Z/P STEEL	2
19	7324	LABEL f. EMERGENCY VENT	ALUMINIUM	1