



# Data Sheets

## Book 1 of 3

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## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
 DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

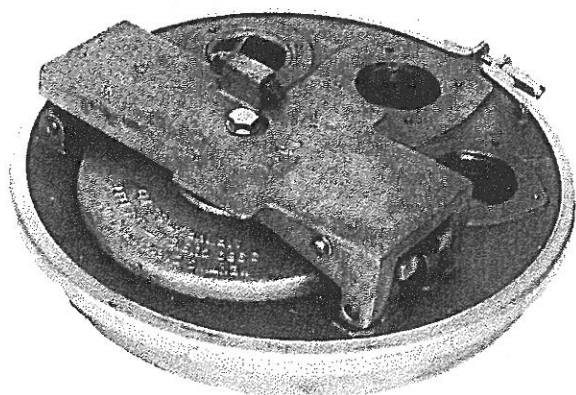
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# LIQUIP MANHOLES & HATCHES



## VOH 100 MANHOLE WITH HATCH & EMERGENCY VENT

### FEATURES

- Cast lid has built-in raised mountings for dip and fill tubes, dip and fill adaptors and pressure and vacuum vent.
- Quick-opening inspection hatch also acts as emergency vent.
- Lid seals to coaming with a one-bolt clamp band.
- Safety catch protects operator if inspection hatch is opened with pressurised tank.
- Designed and manufactured to AS2016-1977 for flammable liquids and approved in all States.

### SPECIFICATIONS

All aluminium except stainless steel hinge pins and steel clamp-band.

Choice of buna, viton or teflon seals.

Accepts 75mm or 100mm dip or fill tubes.

Accepts 63mm, 76mm or 102mm dip and fill adaptors.

Coamings available as VOH6 (steel, 50mm long), VOH7 (aluminium, 25mm long), or VOH7L (aluminium, 50mm long).

Vent opens at 22kPa (3.2psi), gas capacity 4450m<sup>3</sup>/hr. free air at 35kPa (5psi).

Hatch lock LL100 fitted as standard. Hatch weather cover HWC100 optional extra. (See Page 2/11).

### DIMENSIONS

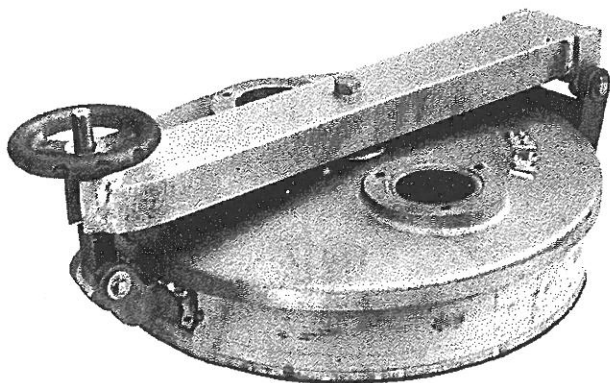
COAMING O/D	OVERALL O/D	MIN. INSTALLED HEIGHT WITH DIP HATCH	MANHOLE: CENTRE TO CENTRE OF DIP HATCH	WEIGHT OF ASSEMBLY WITH DIP, FILL AND VENT
435	470	160	143	13kg



## LIQUIP SALES PTY. LTD.

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DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

# LIQUIP MANHOLES & HATCHES



SH 201 (420mm dia.)  
SH 202 (460mm dia.)  
SWING-BACK HATCH

## FEATURES

- Simply cut hole and weld assembly into tank.
- Cast lid has built-in mountings for pressure and vacuum vents.
- Hand-wheel clamping allows quick and easy access for filling, cleaning and inspection.
- Recessed sealing-ring to prevent damage.
- Hinge-stops hold lid open but prevent it striking the tank top.
- Designed and manufactured to AS2016-1977 for flammable liquids and approved in all States.

## SPECIFICATIONS

Plated steel bridge, bronze hand-wheel, stainless steel hinge-pins.

Lid available in cast aluminium or cast stainless steel.

Coaming available in aluminium, mild steel or stainless steel.

Standard coaming 75mm long, extensions available to order.

Bosses accept PVV200 pressure and vacuum vent, PV2 pressure vent or VV2 vacuum vent. Blanking plate VRB-2 available if vents not required.

Seals available in buna, viton or teflon.

## DIMENSIONS

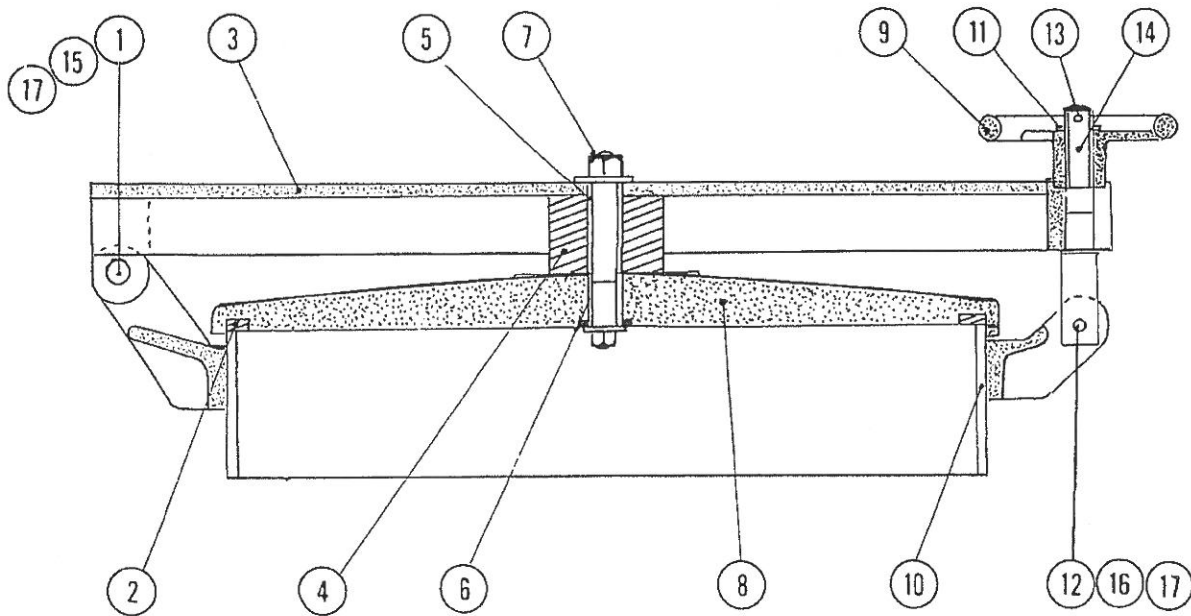
MODEL	COAMING O/D	OVERALL O/D	MIN. INSTALLED HEIGHT	WEIGHT (ALUM.)	WEIGHT (ST. ST.)
SH201	420	440	175	13kg	27kg
SH202	457	480	175	15kg	30kg



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## SWING BACK HATCH ASSEMBLY SH201 SH202



Item No.	DESCRIPTION	Qty.	Part No.	Item No.	DESCRIPTION	Qty.	Part No.
1	Hinge Pin – Bridge	1	SH201/13	9	Hand Wheel	1	SH201/8
2	Seal	1*	P241	10	Coaming	1*	SH201/4
			P291				SH202/4
			Viton			1*	SH201/5
			P242				SH202/5
			P292			1*	SH201/6
3	Bridge Assembly	1*	SH201/7			1*	SH202/6
			SH202/7				
4	Rubber Buffer	1	SH201/9	11	5/8" Washer	1	P105
5	Spacer Tube	1	SH201/10	12	Hinge Pin – Bolt	1	SH201/12
6	O-Ring	1	P224	13	Roll Pin	1	P899
7	½" BSW Bolt	1	P90	14	Swing Bolt	1	SH201/11
	Washer	2	P104	15	½" Washer	7	P104
	Nut	1	P152	16	3/8" Washer	2	P102
8	Cover	1*	SH201/1	17	Split Pin	4	P760
			SH202/1				
			M/St.				
			SH201/2				
			SH202/2				
			St/St.				
			SH201/3				
			SH202/3				

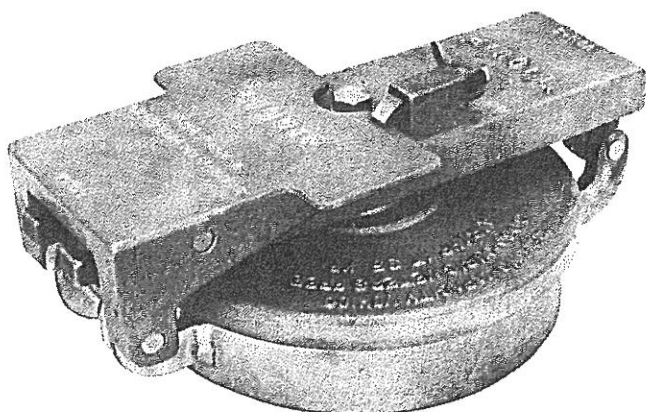
\* ORDER AS REQUIRED

**LIQUIP SALES PTY LTD**

212-216 RAILWAY TERRACE    GUILDFORD    SYDNEY    N.S.W. 2161    AUSTRALIA

TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

# LIQUIP MANHOLES & HATCHES



## VIH 9 INSPECTION HATCH

### FEATURES

- Complete assembly, ready to weld into tank.
- Provides full 225mm dia. inspection or filling aperture.
- Easy cam-action closing, incorporates safety catch in case tank is pressurised.
- Lid normally acts also as an emergency vent opening at 22kPa standard (3psi), other pressures to order.
- Designed and manufactured to AS2016-1977 for flammable liquids and approved in all States.

### SPECIFICATIONS

Aluminium bridge and handle, stainless steel hinge-pins.

Lid and coaming available in aluminium, mild steel or stainless steel.

Standard coaming length 75mm, extensions available to order.

Seal available in buna, viton or teflon.

Hatch lock LL100 available as optional extra.

Vent capacity 4450m<sup>3</sup>/hr. free air at 35kPa (5psi).

### DIMENSIONS

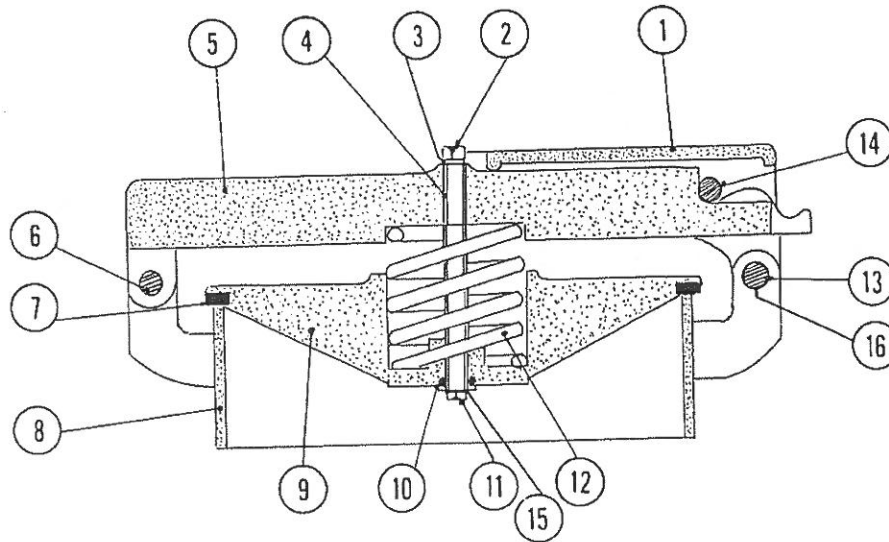
COAMING O/D	OVERALL O/D	LENGTH ALONG BRIDGE	MIN. INSTALLED HEIGHT	WEIGHT (ALUM.)	WEIGHT (ST. ST.)
241	260	350	125	6.5kg	10.5kg



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## VENTING INSPECTION HATCH VIH9



Item No.	DESCRIPTION	Qty.	Part No.
1	Handle	1	VOH/3
2	½" BSW Bolt	1	P90
3	½" Flat Washer	1	P104
4	Spacer Tube	1	VOH/11
5	Bridge	1	VOH/2
6	Hinge Pin - Bridge	1	VOH/8
7	Seal	1*	P236
			Buna
			Viton
8	Coaming Assy.	1*	P237
			Alum.
			Mild St.
			St/St.
			1*
9	Cover	1*	VOH4
			Alum.
			Mild St.
			St/St.
			1*
10	O-Ring	1	VIH3
11	½" BSW Nyloc Nut	1	VIH4
12	Spring	1	VIH5
13	Hinge Pin - Handle	1	VOH4
14	Cam Pin	1	VIH1
15	½" Flat Washer	1	VIH2
16	½" E-Clip	1*	VOH9
17	Optional Fitment of Hatch Lock	1	VOH10
			P224
			P152
			P297
			P96
			LL100

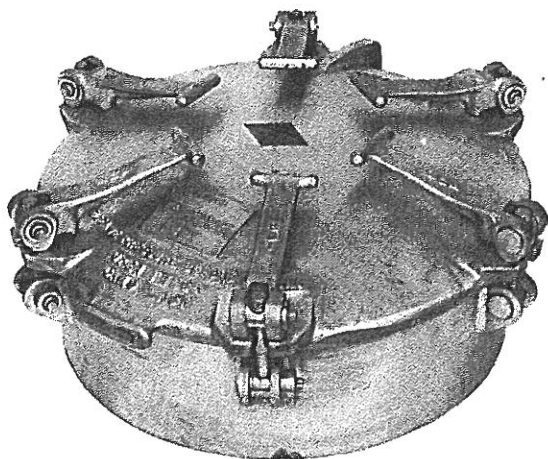
\* ORDER AS REQUIRED

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TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

# LIQUIP MANHOLES & HATCHES



PH 18 (470mm dia.)  
PH 20 (510mm dia.)  
PRESSURE-VESSEL  
HATCH

## FEATURES

- Complete assembly, ready to weld into tank.
- Standard cam-handles adjustable with normal spanners without depressurising tank. Other types of handles available to order.
- Seal dove-tailed into lid to provide protection and easy replacement.
- Designed and manufactured to AS1210 (pressure vessels).

## SPECIFICATIONS

Available in aluminium, mild steel and stainless steel.

Clamping components are cadmium plated steel.

Standard coaming length 150mm.

Neoprene seal is standard, other materials to order.

## DIMENSIONS

\*Models shown below are stock lines. A wide range is available to order, with sizes from 200mm dia. to 600mm dia. and pressure ratings from 35kPa to 2100kPa (300psi).

MODEL	MATERIALS	PRESSURE RATING	COAMING O/D	OVERALL O/D	MIN. INSTALLED HEIGHT	WEIGHT kg
PH18—AC—AR	Alum. Lid Alum. Coaming	170kPa 25psi	470	530	170	17
PH18—AC—SR	Alum. Lid Steel Coaming	300kPa 43psi	470	530	170	23
PH20—AC—AR	Alum. Lid Alum. Coaming	275kPa 40psi	508	600	190	24
PH20—AC—SR	Alum. Lid Steel Coaming	620kPa 90psi	508	600	190	31

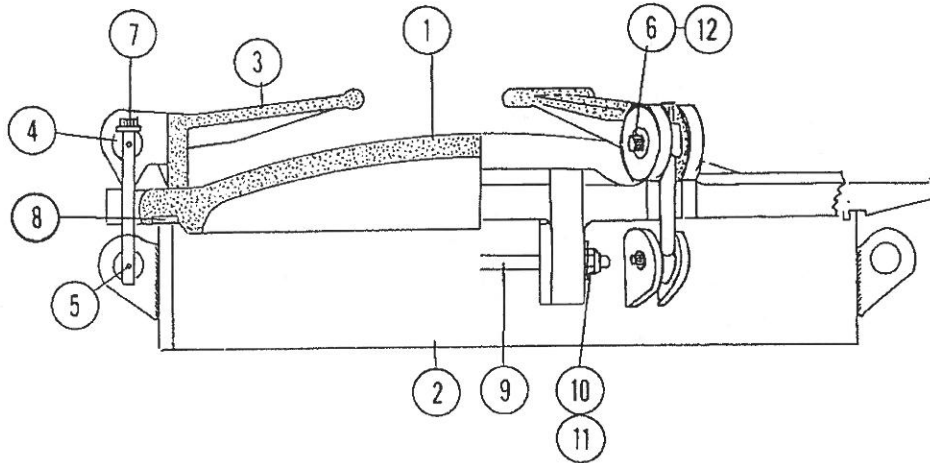


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**PRESSURE HATCH**

**PH18 & PH20**



Item No.	DESCRIPTION		Qty.	Part No.	
				460mm Hatch	500mm Hatch
1	Cover	Alum.	1*	PH18/16	PH20/16
		M. St.	1*	PH18/17	PH20/17
		St. St.	1*	PH18/18	PH20/18
2	Coaming assy.	Alum	1*	PH18/19	PH20/19
		M. St.	1*	PH18/20	PH20/20
		St. St.	1*	PH18/21	PH20/21
3	Cam Handle		6	PH18/8	PH20/8
4	Cam Pin		6	PH18/9	PH20/9
5	Neck Pin		6	PH18/10	PH20/10
6	Lock-Screw		12	PH18/12	PH18/12
7	Cam Bolt		6	PH18/11	PH20/11
8	Seal		1	PH18/13	PH20/13
9	Hinge Bolt		1	PH18/14	PH18/14
10	Nut		1	PH18/15	PH18/15
11	Washer		1	P111	P111
12	Nylon Plug		12	PH18/6	PH18/6

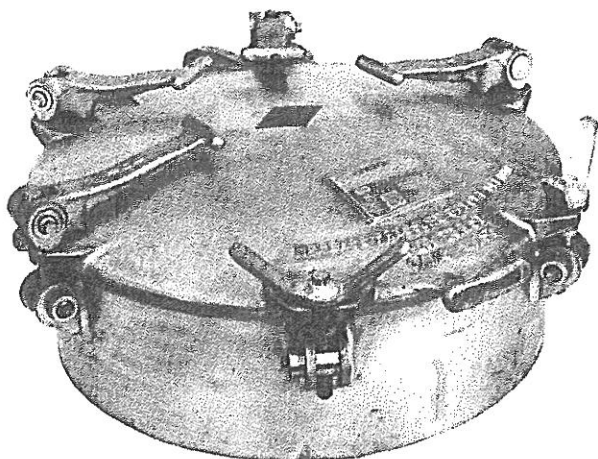
\* ORDER AS REQUIRED

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TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

# LIQUIP MANHOLES & HATCHES



PH 18V (470mm dia.)  
PH 20V (510mm dia.)  
PRESSURE-VESSEL  
HATCH

## FEATURES

- Complete assembly, ready to weld into tank.
- Two wing-nut assemblies by lifting handle ensure that vessel is depressurised before the lid can be lifted. Other fastenings are quick-acting cam handles.
- Seal dove-tailed into lid to provide protection and easy replacement.
- Designed and manufactured to AS1210 (pressure vessels).

## SPECIFICATIONS

Available in aluminium, mild steel and stainless steel.

Clamping components are cadmium plated steel.

Standard coaming length 150mm.

Neoprene seal is standard, other materials to order.

## DIMENSIONS

\*Models shown below are stock lines. A wide range is available to order, with sizes from 200mm dia. to 600mm dia. and pressure ratings from 35kPa to 2100kPa (300psi).

MODEL	MATERIALS	PRESSURE RATING	COAMING O/D	OVERALL O/D	MIN. INSTALLED HEIGHT	WEIGHT kg
PH18V—AC—AR	Alum. Lid Alum. Coaming	170kPa 25psi	470	530	170	17
PH18V—AC—SR	Alum. Lid Steel Coaming	300kPa 43psi	470	530	170	23
PH20V—AC—AR	Alum. Lid Alum. Coaming	275kPa 40psi	508	600	190	24
PH20V—AC—SR	Alum. Lid Steel Coaming	620kPa 90psi	508	600	190	31

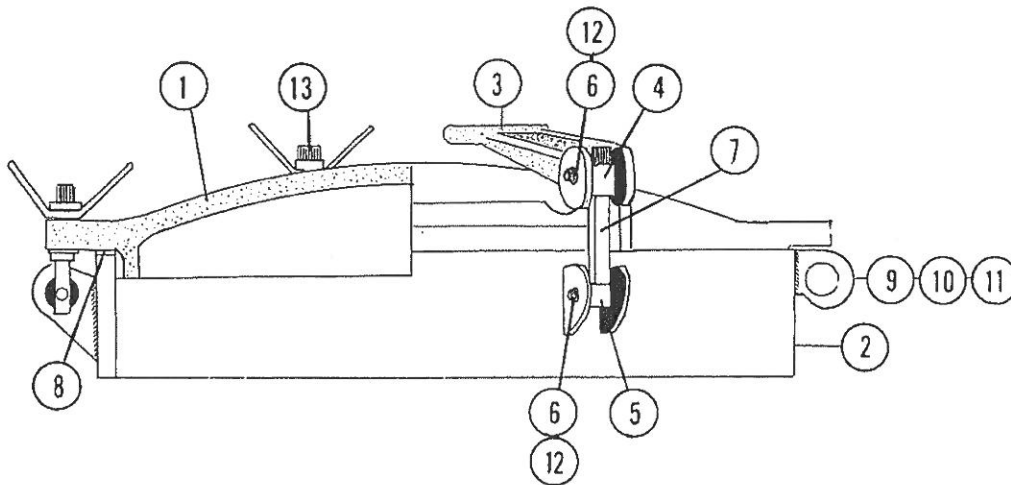


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## PRESSURE HATCH vic regs PH18V & PH20V

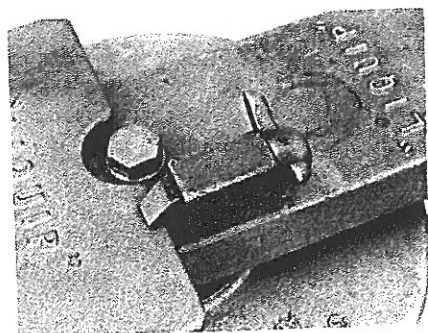


Item No.	DESCRIPTION		Qty.	Part No.	
				460mm Hatch	500mm Hatch
1	Cover	Alum	1*	PH18/16V	PH20/16V
		M. St.	1*	PH18/17V	PH20/17V
		St. St.	1*	PH18/18V	PH20/18V
2	Coaming Assy.	Alum.	1*	PH18/19V	PH20/19V
		M. St.	1*	PH18/20V	PH20/20V
		St. St.	1*	PH18/21V	PH20/21V
3	Cam Handle		4	PH18/8	PH20/8
4	Cam Pin		4	PH18/9	PH20/9
5	Neck Pin		6	PH18/10	PH20/10
6	Lock-Screw		8	PH18/12	PH18/12
7	Cam Bolt		4	PH18/11	PH20/11
8	Seal		1	PH18/13	PH20/13
9	Hinge Bolt		1	PH18/14	PH18/14
10	Nut		1	PH18/15	PH18/15
11	Washer		1	P111	P111
12	Nylon Plug		8	PH18/6	PH18/6
13	Wing Handle Assy.		2**	PH18/7	PH20/7

\* ORDER AS REQUIRED

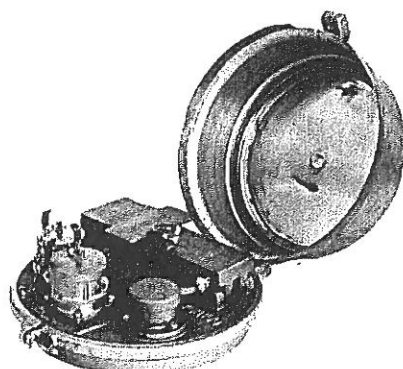
\*\* Wing Handle assemblies adjacent to the Lifting Handle on the Cover.

## LIQUIP HATCH ACCESSORIES



### LL 100 HATCH LOCK

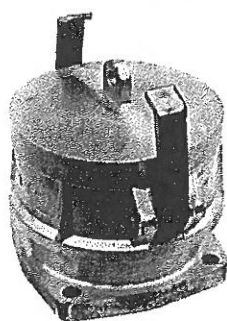
All VOH100 and VIH9 hatch bridges have cast-on bosses to accept the hatch lock. Also available as separate unit for other types of hatch. Spring-loaded action ensures ease of operation. The lock provides additional security against accidental opening of the hatch in normal operations or in case of a roll-over accident.



### HWC 100 HATCH WEATHER COVER

Used as additional protection for the VOH100 hatch where contamination is a hazard, for example with aviation fuel or in harsh climates. Manufactured in spun aluminium with toggle-pin fastener.

O/D 500mm; Height 200mm; Weight 1kg.



### VOH SERIES DIP & FILL ADAPTORS

Flanged aluminium camlock adaptors with caps bolt onto the VOH100 hatch for dip and fill connections. The dip and fill tubes are rivetted directly to the underside of the VOH hatch.

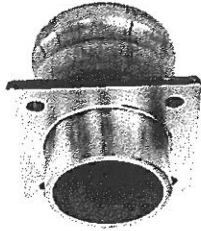
MODEL	SIZE mm	HEIGHT WITH CAP	FLANGE	HOLES	HOLE SIZE	WEIGHT WITH CAP kg
VOH12	64	110	102 square	On 76 square	4 x 9mm	0.9
VOH13	76	125	102 square	On 76 square	4 x 9mm	1.1
VOH14	102	135	145 square	On 152 square	4 x 9mm	1.8
VOH15	51	110	102 square	On 76 square	4 x 9mm	0.8
VOH16	Blanking Plate		102 square	On 76 square	4 x 9mm	0.1



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## REMOTE DIP & FILL ADAPTORS



DF series adaptors are available in aluminium, steel or stainless steel. They are for walk-way mounting, e.g. in conjunction with the SH or VIH hatches which do not have built-in tube mounts.

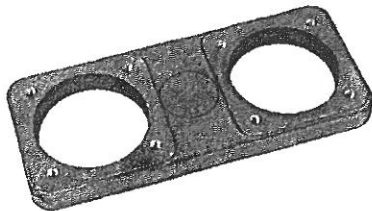
The adaptors are standard camlocks with caps and have an extension inside the tank which accepts the dip or fill tube.

Bolt direct to the tank or use DP weld-pad shown below.

Specify as suffix A (aluminium), M (mild steel), or S (stainless steel).

MODEL	SIZE mm	TUBE DIA. mm	HEIGHT WITH CAP mm	FLANGE	HOLES	HOLE SIZE	WT. WITH CAP (ALUM.)kg
DF2.0	51	76	110	102 square	On 76 square	4 x 9mm	0.9
DF2.5	64	76	110	102 square	On 76 square	4 x 9mm	1.0
DF3.0	76	76	125	102 square	On 76 square	4 x 9mm	1.2
DF4.0	102	102	135	145 square	On 102 square	4 x 9mm	1.9

## DIP & FILL PADS



Weld to tank to accept DF adaptors for convenient mounting of dip and fill tubes.

DP3.0 accepts 51mm, 64mm and 76mm adaptors.

DP4.0 accepts 102mm adaptor.

Specify suffix A (aluminium), M (mild steel), or S (stainless steel).

## DIP & FILL TUBES

Supplied ready for fitting to VOH100 hatch or DF adaptors.

Standard material is aluminium with brass gauze

Also available with stainless steel gauze (add suffix C) or in all stainless steel (add suffix S).

Order as below or specify your requirements.

DIA.	80mm O/D			100mm O/D		
	Length mm.	1200	1500	1800	1200	1500
Dip Tube Part No.	DTS3/4	DTS3/5	DTS3/6	DTS4/4	DTS4/5	DTS4/6
Fill Tube Part No.	FTB3/4	FTB3/5	FTB3/6	FTB4/4	FTB4/5	FTB4/6



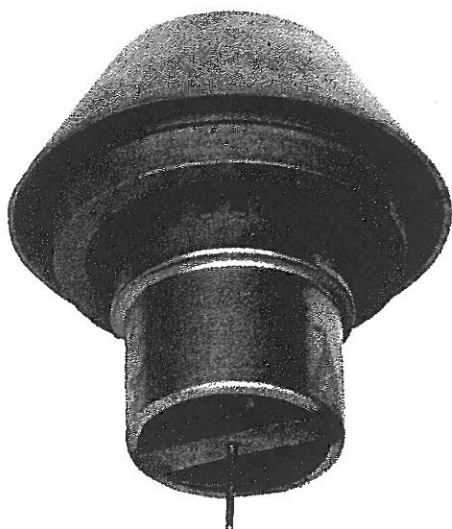
## TUBE GUIDES & STEADIES

Shaped inlet provides easy but positive location for either 80mm tube (model TS/3) or 100mm tube (TS/4).

Available in aluminium (specify with suffix A) or mild steel to weld to tank bottom.

	<b>LIQUIP SALES PTY LTD</b>					
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TELEPHONE 02 682 1244 (6 LINES)				TELEGRAMS "LIQUIP"		

# LIQUIP VENTS



## PVV 400 COMBINATION PRESSURE & VACUUM VENT — 100 mm orifice

### FEATURES

- For applications with high product flow rates where it is preferred to keep hatches closed.
- Sufficient capacity to allow filling and discharge rates up to 3600l/min. (800gpm) with compartment pressure below 21kPa (3psi).
- Gauzed exits and truck roll-over protection comply with AS2016. Roll-over valve limits compartment pressure when inverted.
- Pressure setting 12kPa (1.75psi).
- Vacuum setting —7kPa (—1psi).
- Supplied complete with mounting flange VRB-3 which is interchangeable with vapour vent AVV3-5 for later conversion. Specify aluminium or mild steel.

\*Also available as model PVV401 which is identical except that it is without the roll-over protection unit or flange.

### SPECIFICATIONS

Aluminium body, valves and cover, stainless steel roll-over cage and springs with bronze valve.

Brass gauze.

Viton seals.

Gas-flow capacity 3000m<sup>3</sup>/hr. free air at 35kPa (5psi).

Note — position in tank so as to avoid product surge

### DIMENSIONS

HEIGHT ABOVE TANK	OVERALL HEIGHT	O/D	FLANGE O/D	PCD	HOLES	WEIGHT kg
140	255	255	220	184	8 x 13mm	6

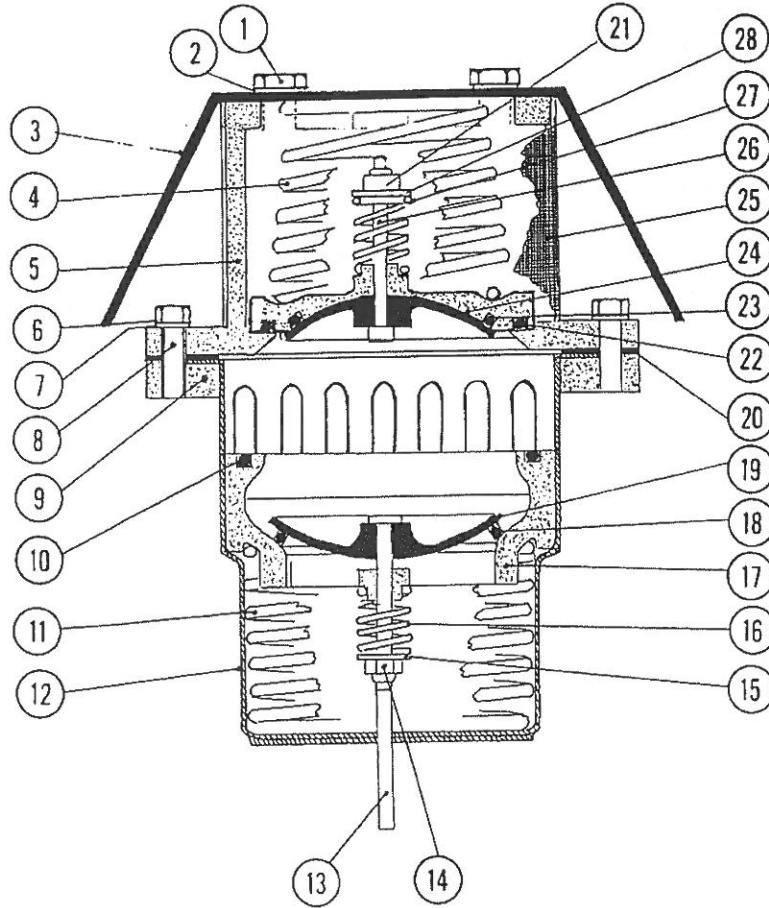


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AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

**PRESSURE AND VACUUM RELIEF VALVE**

**PVV400**



Item No.	DESCRIPTION	Qty.	Part No.	Item No.	DESCRIPTION	Qty.	Part No.
1	Setscrew	4	P11	14	Nut	1	P129
2	Shakeproof Washer	4	P122	15	Spring Retainer	1	PVV400/4
3	Weathershield	1	PVV400/3	16	Spring	1	P306
4	- 12 kPa Spring - Pressure	1*	P304	17	Valve, Roll-Over	1	PVV400/9
5	Body	1	PVV400/1	18	O-Ring	1	P207
6	Nut	6	P130	19	Valve Disc	2	PVV400/7
7	Washer, Spring	6	P109	20	Gasket	1	P659
8	Stud	6	P687	21	Nut	1	P129
9	Flange - Aluminium	1*	PVV400/11	22	O-Ring	1	P208
	Flange - Mild Steel	1*	PVV400/10	23	O-Ring	1	P207
10	O-Ring	1	P209	24	Pressure Valve	1	PVV400/6
11	Spring	1	P307	25	Gauze	1	PVV400/2
12	Housing	1	PVV400/8	26	Spindle	1	PVV400/5
13	Spindle	1	PVV400/12	27	Spring	1	P305
				28	Spring Retainer	1	PVV400/4

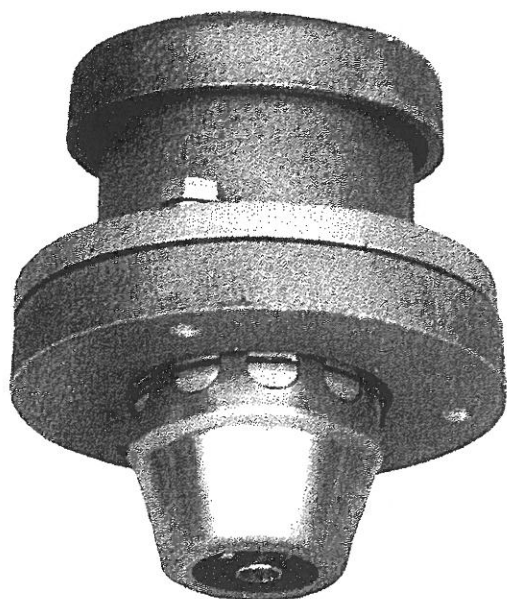
\* ORDER AS REQUIRED

**LIQUIP SALES PTY LTD**

212-216 RAILWAY TERRACE GUILDFORD SYDNEY N.S.W. 2161 AUSTRALIA

TELEPHONE 02 682 1244 (6 LINES) TELEGRAMS "LIQUIP"

# LIQUIP VENTS



## PVV 200 COMBINATION PRESSURE & VACUUM VENT — 25 mm orifice

### FEATURES

- A vent of this type is mandatory for flammable liquids tankers. PVV200 is approved under AS2016.
- Rubber-coated ball in upper body rests on a small valve, allowing tank to breathe under normal conditions. In the case of a roll-over, the ball rolls off the valve which seats to prevent leakage and control compartment pressure.
- Bolts directly to VOH100 and SH hatches, or weld flanges available.
- Available in aluminium or stainless steel.
- Allows loading rate of 1100l/min. at 21kPa (3psi) compartment pressure.

### SPECIFICATIONS

Pressure setting 15kPa (2psi).

Vacuum setting —3kPa (—0.4psi).

Gas capacity 190m<sup>3</sup>/hr. free air at 35kPa (5psi).

Body and valves in aluminium or stainless steel (specify suffix S).

Buna, viton or teflon seals.

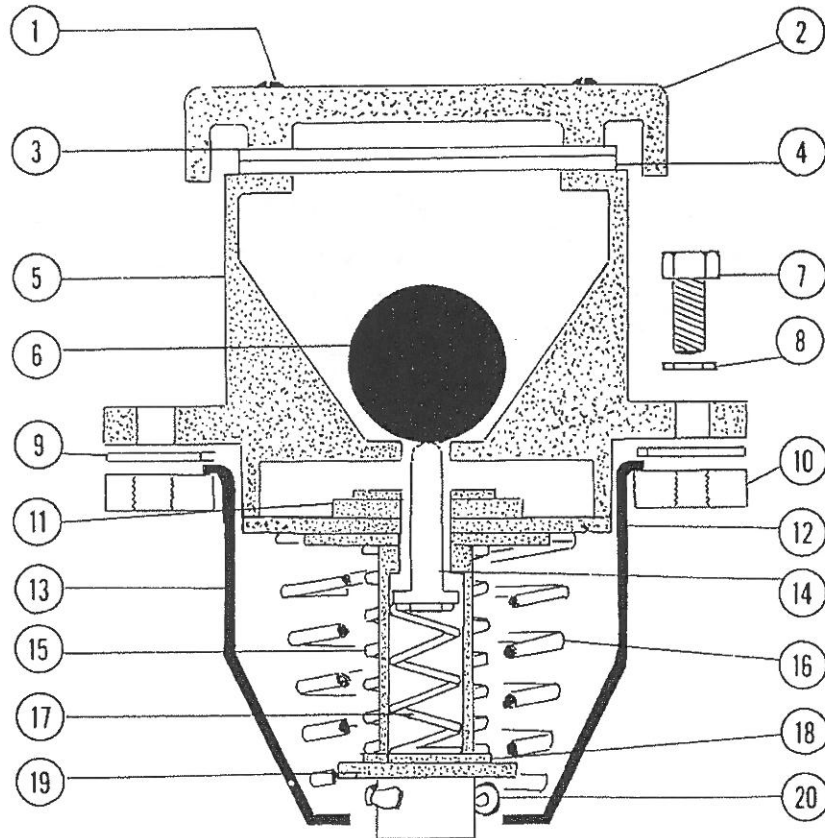
### DIMENSIONS

HEIGHT ABOVE TANK	OVERALL HEIGHT	BODY O/D	FLANGE O/D	PCD	HOLE	WEIGHT (ALUM.) kg
65	120	87	115	95	3 x 8mm	0.8



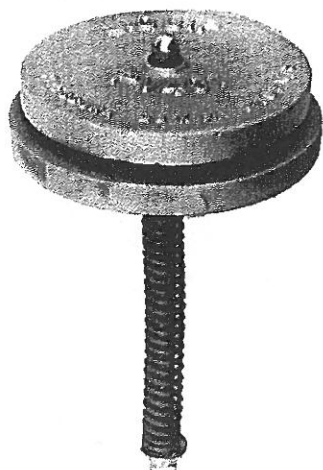
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**PRESSURE VACUUM VENT****PVV 200**

Item No.	DESCRIPTION	Qty.	Part No.	Item No.	DESCRIPTION	Qty.	Part No.
1	Screw	3	P961	11	Press Valve Assy.	1	PVV200/16
2	Top Cover	1	PVV200/7	12	Valve Seat Assy.	1	PVV200/2
3	Gauze Retainer	1	PVV200/6	13	Housing	1	PVV200/9
4	Gauze	1	PVV200/5	14	Nylon Shaft	1	PVV200/14
5	Body	1	PVV200/1	15	Pressure Spring	1	P302
6	Ball	1	P986	16	Vacuum Spring	1	P301
7	Setscrew ZP	3	P11	17	Spring	1	P285
8	Spring Washer	3	P108	18	Washer	1	P106
9	Gasket	1	P658	19	Spring Retainer	1	PVV200/4
10	Flange	1	PV200/11	20	Cotter Pin	1	P771

# LIQUIP VENTS



## PV 401 EMERGENCY PRESSURE VENT — 100 mm orifice

### FEATURES

- A vent of this type is mandatory for flammable liquids tankers. The VOH100 and VIH9 hatches have built-in vents; model PV401 is for use with other hatches, e.g. SH series.
- Simple construction allows low profile and light weight.
- Seat flange welds directly to tank shell.
- Shaft guide is bushed for minimum friction.

### SPECIFICATIONS

Relief pressure 21kPa (3psi) standard. Other settings available.

Gas capacity 3000m<sup>3</sup>/hr. free air at 35kPa (5psi).

Specify as PV401/A—aluminium cover and flange, steel shaft and spring, bronze bush.

— or PV401/M — as above, but mild steel flange.

— or PV401/C — as PV401/A but teflon trim and stainless steel shaft and spring.

— or PV401/S — aluminium cover, teflon bush, remainder stainless steel.

— or PV401/SS — all stainless steel with teflon bush.

Seal available in buna, viton or teflon.

### DIMENSIONS

HEIGHT ABOVE TANK	OVERALL HEIGHT	O/D	VALVE LIFT AT 35kPa	WEIGHT (ALUM.) kg
50	270	165	19	1.3



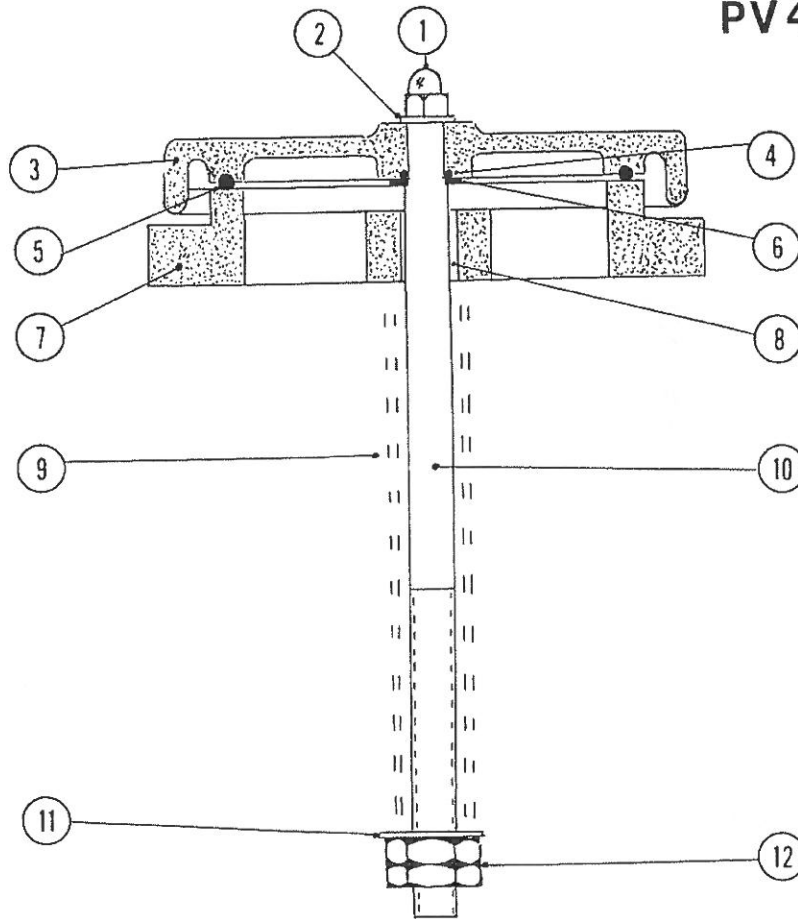
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**PRESSURE VENT**

**PV401**



Item No.	DESCRIPTION	Qty.	Part No.	Item No.	DESCRIPTION	Qty.	Part No.
1	3/8" BSW Dome Nut NP.	1	P143	7	Flange	1*	PV401/7
2	3/8" Shakeproof Washer	1	P116			1*	PV401/8
3	Cover	1*	PV401/13			1*	PV401/6
			St/St.	8	Bush	1*	P946
4	O-Ring	1	P194			1*	P943
5	O-Ring	1*	P208	9	Spring	1*	P303
			Buna			1*	P298
			Viton	10	Spindle	1*	PV401/4
			Teflon			1*	PV401/5
6	3/8" Flat Washer	1*	P812	11	1/2" Flat Washer	1*	P814
			St/St.			1*	P104
			Z/P	12	1/2" BSW Locknut	2*	P804
						1*	P152

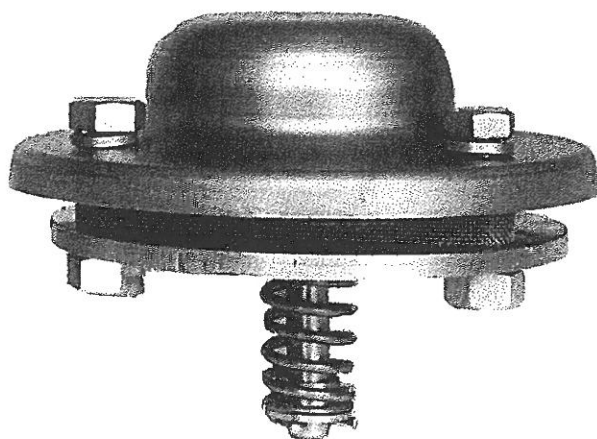
\* ORDER AS REQUIRED

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212-216 RAILWAY TERRACE    GUILDFORD    SYDNEY    N.S.W. 2161    AUSTRALIA

TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

# LIQUIP VENTS



**PV 2  
PRESSURE VENT  
— 50 mm orifice**

## FEATURES

- Developed for the chemical industry — simple construction, easy to clean and maintain.
- Mounts directly onto SH hatches, along with the matching vacuum vent VV2, or weld flanges available.
- Most components interchangeable with VV2 vacuum vent.
- High flow capacity, gauzed exits, special spring settings if required.
- Manufactured in all stainless steel with teflon seal for corrosive products; aluminium with elastomer for less arduous conditions.
- Allows loading rate of 2500l/min. at 21kPa compartment pressure.

## SPECIFICATIONS

Choice of all stainless steel (specify as suffix S) or aluminium body with stainless steel trim.

Seal in buna, viton or teflon.

Standard pressure setting 21kPa (3psi).

Gas capacity 430m<sup>3</sup>/hr. free air at 35kPa (5psi)

## DIMENSIONS

HEIGHT ABOVE TANK	OVERALL HEIGHT	BODY O/D	FLANGE O/D	PCD	HOLES	WEIGHT (ALUM.) kg
60	95	135	115	95	3 x 8mm	0.4

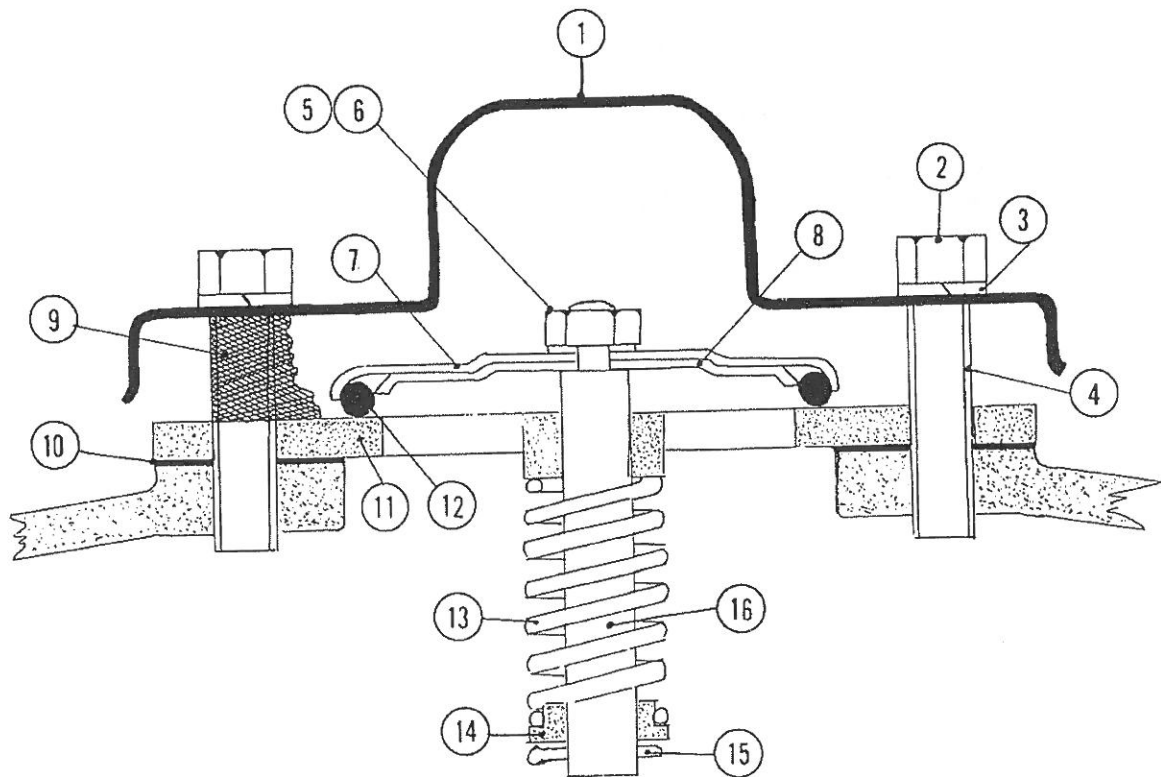


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# PRESSURE VENT

## PV2



Item No.	DESCRIPTION		Qty.	Part No.
1	Top Cover	St/St.	1*	PV2/S/1
		Alum.	1*	PV2/A/1
2	Setscrew		3	P827
3	Washer		3	P821
4	Top Cover Spacer		3	PV2/S/2
5	Nut		1	P800
6	Flat Washer		1	P810
7	O-Ring Retainer Large		1	PV2/9
8	O-Ring Retainer Small		1	PV2/8
9	Gauze — Brass		1	PV2/3
10	Gasket		1	P658
11	Flange Assembly	St/St.	1*	PV2/10/S
		Alum.	1*	PV2/10/A
12	O-Ring	Viton	1*	P218
		Buna	1*	P217
13	Spring		1	P308
14	Spring Retainer		1	PV2/7
15	Cotter Pin		1	P767
16	Spindle		1	PV2/5

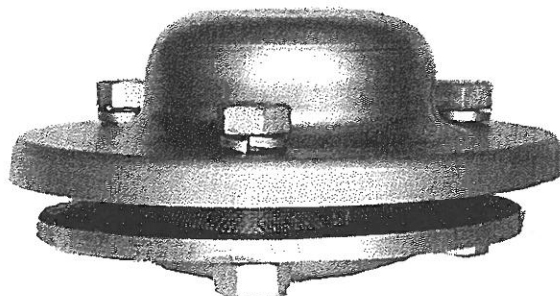
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LIQUIP SALES PTY LTD

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GUILDFORD
SYDNEY
N.S.W. 2161
AUSTRALIA

TELEPHONE 02 682 1244 (6 LINES)
TELEGRAMS "LIQUIP"

# LIQUIP VENTS



**VV 2  
VACUUM VENT  
— 50 mm orifice**

## FEATURES

- Developed for the chemical industry — simple construction, easy to clean and maintain.
- Mounts directly onto SH hatches, along with the matching pressure vent PV2, or weld flanges available.
- Most components interchangeable with PV2 pressure vent.
- High flow capacity, gauzed exits, special spring settings if required.
- Manufactured in all stainless steel with teflon seal for corrosive products; aluminium with elastomer for less arduous conditions.

## SPECIFICATIONS

Choice of all stainless steel (specify as suffix S) or aluminium body with stainless steel trim.

Seal in buna, viton or teflon.

Standard vacuum setting —3kPa (—0.4psi).

## DIMENSIONS

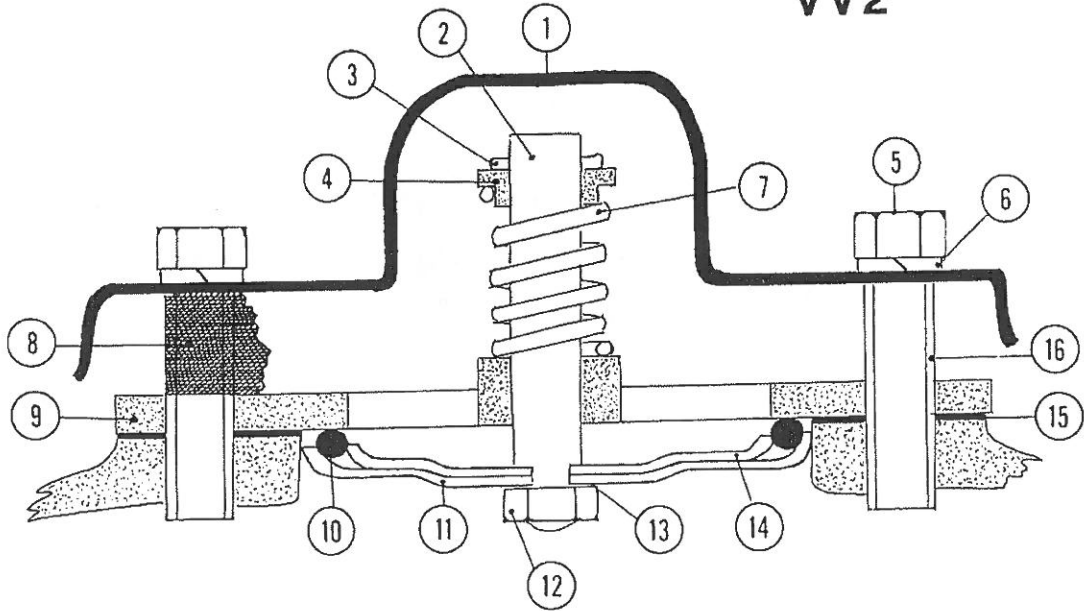
HEIGHT ABOVE TANK	OVERALL HEIGHT	BODY O/D	FLANGE O/D	PCD	HOLES	WEIGHT (ALUM.) kg
60	70	135	115	95	3 x 8mm	0.4



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**VACUUM VENT  
VV2**



Item No.	DESCRIPTION		Qty.	Part No.
1	Top Cover	St/St.	1*	PV2/S/1
		Alum.	1*	PV2/A/1
2	Spindle		1	PV2/5
3	Cotter Pin		1	P767
4	Spring Retainer		1	PV2/7
5	Setscrew		3	P827
6	Washer		3	P821
7	Spring		1	P309
8	Gauze — Brass		1	PV2/3
9	Flange Assembly	St/St.	1*	PV2/S/10
		Alum.	1*	PV2/A/10
10	O-Ring	Viton	1*	P218
		Buna	1*	P217
11	O-Ring Retainer Outer		1	PV2/9
12	Nut		1	P800
13	Flat Washer		1	P810
14	O-Ring Retainer Inner		1	PV2/8
15	Gasket		1	P658
16	Top Cover Spacer		3	PV2/S/2

\* ORDER AS REQUIRED

**LIQUIP SALES PTY LTD**

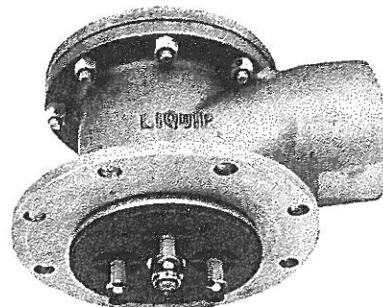
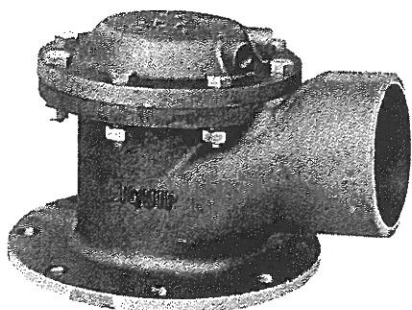
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TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

**LIQUIP VENTS**

AVV3.5/P

AVV3.5

**AIR-OPERATED VENT  
FOR VAPOUR RECOVERY****FEATURES**

- Bolts onto tank top, outlet pipe connects to vapour manifold with flexible hose.
- Operates on compressed air at only 70kPa (10psi).
- Uses diaphragm to open poppet for light weight, simplicity, reliability and ease of servicing.
- Two ports provided to allow sequencing, e.g. so that vent must open before the internal valve is opened.
- Inward opening poppet eliminates liquid surge problems in road tankers. Also acts as emergency vacuum vent.
- Suitable for chemicals — diaphragm is not exposed to the vapours.
- Standard seal assembly is the same as internal valve ITV4 for ease of servicing.
- Can also be supplied with built-in pressure relief vents for added protection. See AVV3.5/P illustrated above.

**SPECIFICATIONS**

Normal operating pressure 350kPa (50psi).

Operating range 70kPa to 850kPa (10psi to 120psi).

Consumption .0015cu.m/stroke (.05)cu.ft.) of free air.

Aluminium body, stainless steel shaft and spring.

Choice of mild steel or stainless steel and aluminium poppets with viton or teflon seal.

Ports tapped 1/4 BSP

Bolt direct to walkway or use mounting flange VRB-3.

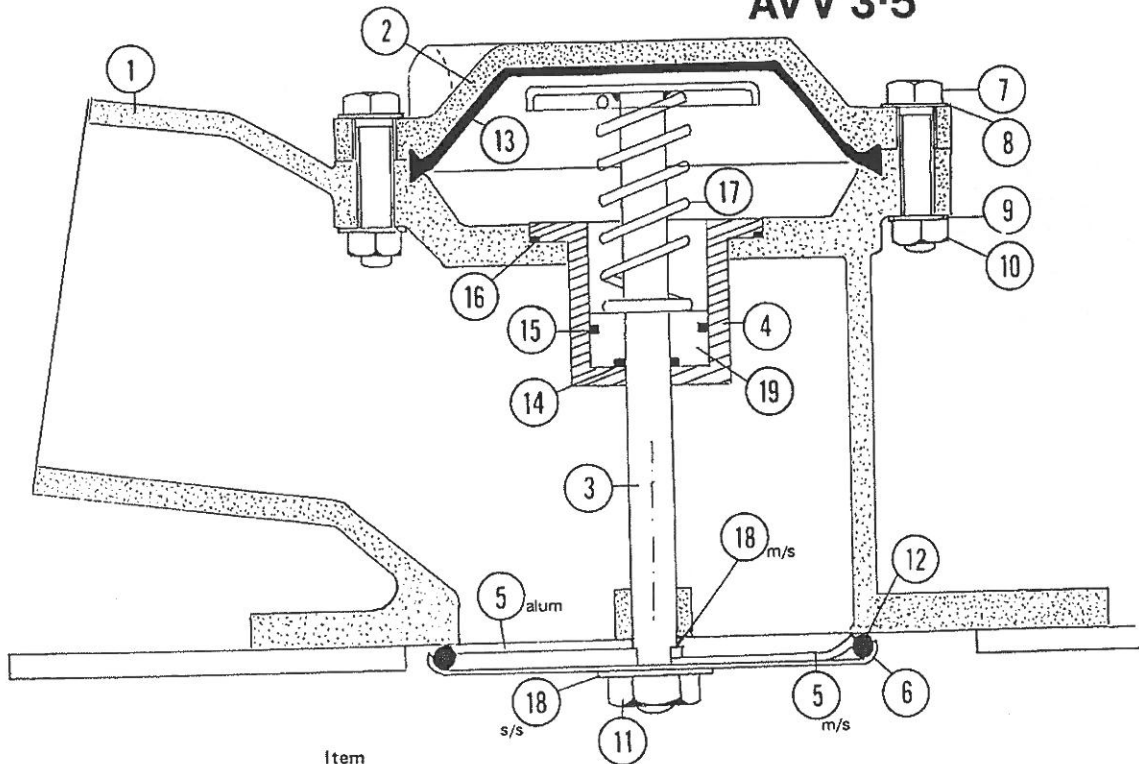
**DIMENSIONS**

HEIGHT	FLANGE O/D	PCD	HOLES	OUTLET PIPE					WEIGHT kg
				CENTRE HEIGHT	CENTRE TO BODYCENTRE	ANGLE	O/D	I/D	
160	210	184	8 x 14mm Drilled off-centre	90	150	5°	102	90	4.5

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## AIR OPERATED VAPOUR VENT AVV 3-5



Item No.	DESCRIPTION	Qty.	Part No.
1	Body	1	AVV3.5/1
2	Top Cover	1	" /2
3	Spindle Assy.	1	" /3
4	Insert-Bush Support	1	" /4
5	O-Ring Retainer - Inner	1*	" /5
	" " - "	M/Steel	1* ITV4/12
6	" " - Outer	St/St.	1* ITV4/11S
	" " - "	M/St.	1* ITV4/11
7	Bolt	8	P62
8	Flat Washer	8	P102
9	Spring Washer	8	P109
10	Nut	8	P130
11	Nut	St/St.	1* P804
	Nyloc Nut	1*	P152
12	O-Ring : Main Seal	1	P230
13	Diaphragm	1	P246
14	O-Ring : Spindle	1	P293
15	O-Ring : Bush	1	P294
16	O-Ring : Insert	1	P295
17	Spring	1	P332
18	Flat Washer	M/St.	2* P104
	" "	St/St.	1* P814
19	Bush	1	P941

\* ORDER AS REQUIRED

\* For chemicals use aluminium and St/St. assembly

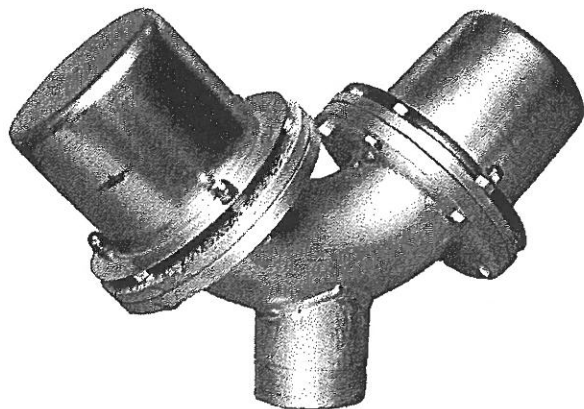
For other applications use M/St. assembly.

### LIQUIP SALES PTY LTD

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## LIQUIP VENTS



**BV 300 Y  
'BLACK OIL' TANKER VENT  
— 75 mm orifice**

### FEATURES

- Specially designed for use on bitumen and high viscosity products.
- Separate pressure and vacuum vents for ease of servicing. Each vent can be set to the customer's requirements.
- Vents have flexibly-mounted knife-edge seats which are angled to encourage drainage of product.
- Entry to vent is baffled to minimise effect of surge.
- Screws into standard socket welded into tank top.
- Supplied ready for work complete with weather-covers as illustrated.

### SPECIFICATIONS

Plated-steel body with stainless steel bushes.

Standard pressure setting 21kPa (3psi).

Standard vacuum setting 10kPa (1.5psi).

Screw fitting is 3 inch taper BSP thread.

### DIMENSIONS

HEIGHT ABOVE TANK	OVERALL HEIGHT	LENGTH	WIDTH	WEIGHT kg
250	280	460	180	11



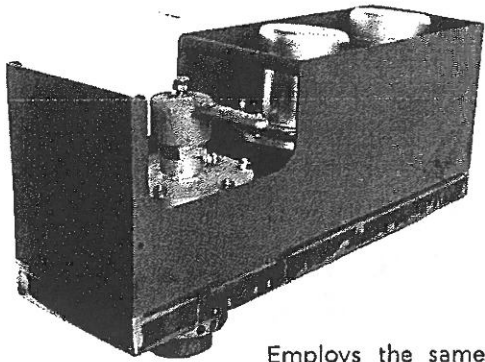
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3/14

## LIQUIP VENTS



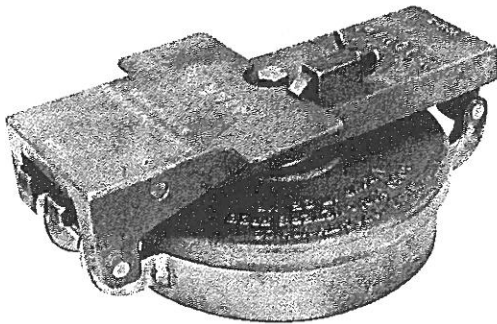
### BV 300 BITUMEN TANKER VENT

Employs the same mechanisms and features as the BV300-Y, but includes insulation and dispersal for boil-over. Operation of the cam-lift handle during loading seals off the normal vents and allows venting through an internal pipe to ground level.

Any boil-over occurs through this pipe, which can easily be contained. Closing the handle after loading allows the vents to function normally.

Size 760mm x 230mm x 300mm high.

Weight 25kg.




### VIH - 9 INSPECTION HATCH & EMERGENCY VENT

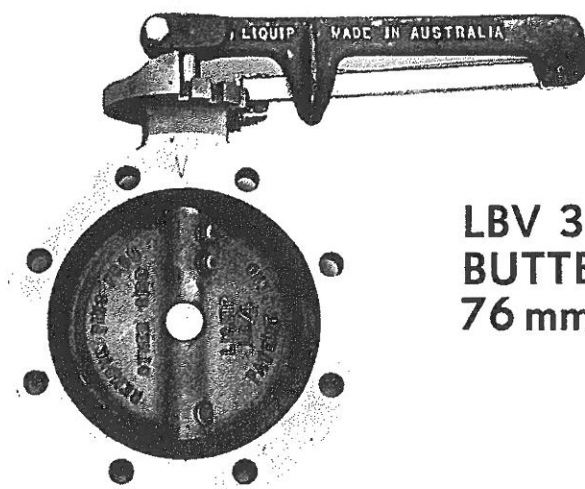
Described in detail on Page 2/5.

Where a tank requires an emergency vent, but does not have a quick-release manhole, the VIH-9 provides a combination vent and inspection or dip hatch for greater convenience.

Standard setting is 21kPa (3psi), alternative settings made to order. The venting hatch is available in aluminium, steel or stainless steel.

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# LIQUIP VALVES



**LBV 3    LBV 4    LBV 5**  
**BUTTERFLY VALVES**  
**76 mm    102 mm    127 mm**

## FEATURES

- Provides full through-flow area.
- Thick elastomer seat provides outstanding resilience — will still seal after minor damage from foreign objects.
- Double o-ring seals and grease-trap give long-lasting lubrication with effective sealing and dirt exclusion.
- Locking handle supplied as standard.
- Small size and light weight, drilled to TTMA standard.
- Simply remove drive-bolts to disassemble.
- Full range of matching flanges and nose-cones available — see Page 4/23.

## SPECIFICATIONS

Aluminium body, handle and disc. Viton seat with stainless steel shaft and high-tensile steel drive-bolts.

Maximum pressure 1200kPa (175psi).

Maximum temperature 200°C.

## DIMENSIONS

MODEL	SIZE	THICKNESS	BORE	PCD	No. HOLES	HOLE SIZE	OVERALL HEIGHT	WEIGHT kg
LBV3	76	28.6	86	124	8	11	203	1.8
LBV4	102	28.6	111	149	8	11	229	2.7
LBV5	127	28.6	137	178	12	11	264	2.9

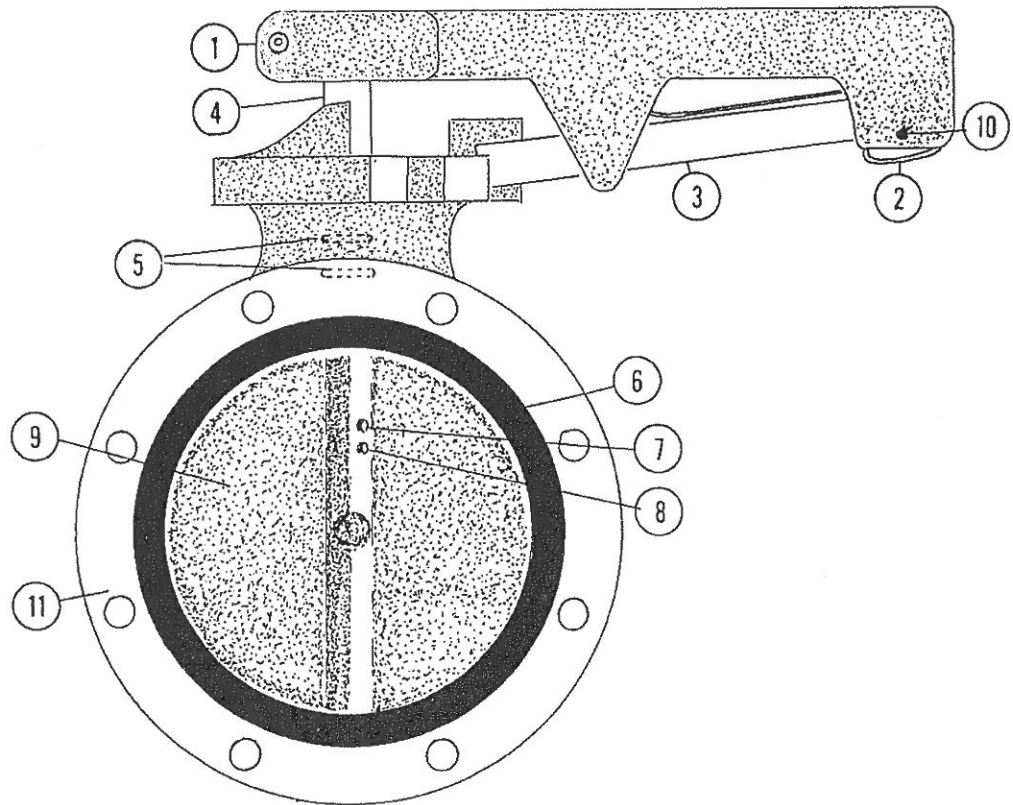


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AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
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## BUTTERFLY VALVE

### LBV3 LBV4 LBV5



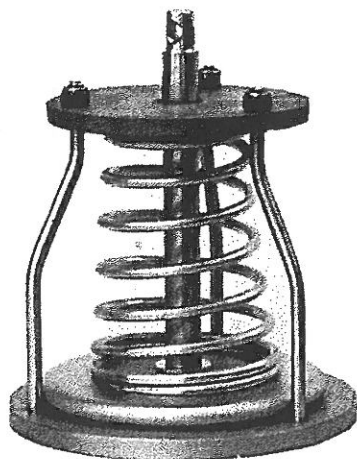
Item No.	DESCRIPTION	Qty.	76mm. Part No.	102mm Part No.	127mm. Part No.
1	Handle Assembly	1	LBV3/1	LBV3/1	LBV3/1
2	Spring	1	P319	P319	P319
3	Lock Lever	1	LBV3/3	LBV3/3	LBV3/3
4	Spindle	1	LBV3/6	LBV4/3	LBV5/3
5	'O' Ring	2	P225	P225	P225
6	Viton Insert	1	LBV3/8	LBV4/5	LBV5/5
7	5mm Nyloc Nut	2	P156	P156	P156
8	5mm Capscrew	2	P709	P709	P709
9	Disc	1	LBV3/5	LBV4/2	LBV5/2
10	Selox Pin	1	P896	P896	P896
11	Body	1	LBV3/4	LBV4/1	LBV5/1
-	Gasket	1	P656	P657	P655

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TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

# LIQUIP VALVES



ITV 2    ITV 4    ITV 6  
INTERNAL VALVES  
51 mm        102 mm        152 mm

## FEATURES

- An AS2016 requirement for road tankers carrying flammable liquids.
- Extremely light but robust construction.
- Can be serviced from inside or outside the tank.
- Simple installation, no restriction to flow rate.
- Choice of materials and seals.
- See Pages 4/11 to 4/22 for flanges, elbows, operators and bottom loading deflectors.

## SPECIFICATIONS

Standard assembly plated steel with aluminium upper spring retainer. Order for camlift operation (add first suffix B), standard bottom operation (add first suffix O) or squat operation (add first suffix S); e.g. ITV4/B or ITV4/S.

Also available in aluminium and stainless steel only — add second suffix C, e.g. ITV4/B/C.

Also available in all stainless steel — add second suffix S, e.g. ITV4/B/S.

Specify seal in buna, viton or teflon.

## DIMENSIONS

MODEL	BORE	HEIGHT	MAX. DIA.	WEIGHT kg
ITV2	51	110	88	0.75
ITV4	102	175	152	1.6
ITV6	152	175	216	3.0

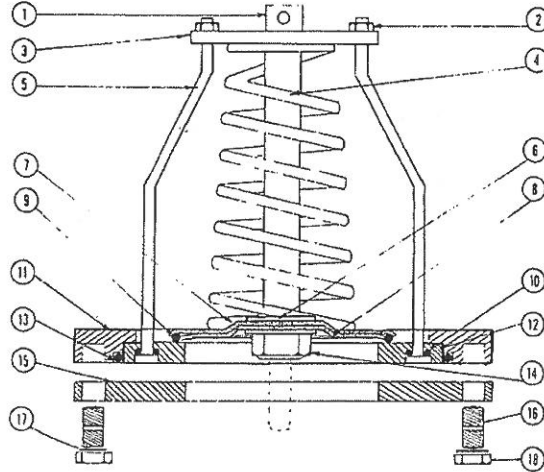


## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
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**INTERNAL VALVE**

**ITV2  
ITV4  
ITV6**



Item No.	DESCRIPTION	Qty.	Part No.		
			2"	4"	6"
1	Basic Spindle	1	ITV2/8	ITV4/8	ITV4/8
	Batt. Op. Spindle	1	ITV2/9	ITV4/9	ITV6/8
	Squat Elbow Spindle	1	—	ITV4/10	ITV6/9
2	¼" Nyloc Nut	3	P979collet	P148	P148
3	Spring Retainer	1	ITV2/6	ITV4/6	ITV6/6
4	Spring	1	P312	P280	P281
5	Support Rod	3	ITV2/7	ITV4/7	ITV4/7
6	½" Flat Washer	2	P102	P104	P104
7	O-Ring Ret. Outer	1	ITV2/10	ITV4/11	ITV6/10
8	O-Ring Ret. Inner	1	ITV2/11	ITV4/12	ITV6/11
9	O-Ring Buna Inner	1*	P217	P229	P196
	O-Ring Viton Inner	1*	P218	P230	P197
10	O-Ring	3	P214	P214	P214
11	Tank Flange	Alum. M/St.	1* 1*	ITV2/3 ITV4/3	ITV6/3
12	Seat	1	ITV2/5	ITV4/5	ITV6/5
13	O-Ring Buna Outer	1*	P220	P232	P198
	O-Ring Viton Outer	1*	P221	P233	P199
14	½" BSW Nyloc Nut	1	P150	P152	P152
15	Pipe Flange	Alum. M/Steel	1* 1*	ITV2/4 ITV4/2	ITV6/4
16	½" BSW Stud	6	P688	P690	P690
17	½" Shakeproof Washer	6	P123	P118	P118
18	½" BSW Hex Nut ZP	6	P130	P132	P132

\* ORDER AS REQUIRED

**LIQUIP SALES PTY LTD**

212-216 RAILWAY TERRACE    GUILDFORD    SYDNEY    N.S.W. 2161    AUSTRALIA

TELEPHONE 02 682 1244 (6 LINES)    TELEGRAMS "LIQUIP"

# LIQUIP VALVES



## API 401 BOTTOM LOADING VALVE

### FEATURES

- Dimensioned to API standard RP1004 for uniformity.
- Openable poppet for gravity discharge.
- Minimum number of parts for simplicity and light weight.
- Low pressure drop from full flow area (equal to 100mm bore throughout) and shaped interior.
- Dependable o-ring seals.
- Hardened aluminium construction.
- Easy conversion of existing tankers — bolts onto existing Liquip 100mm butterfly valve flange.

### SPECIFICATIONS

Aluminium body, poppet and handle.

Stainless steel shafts and springs.

Bronze cam standard, stainless steel alternative.

Viton o-rings.

Delrin bushes for both shafts.

Pressure drop 7kPa (1psi) at 2750l/min.

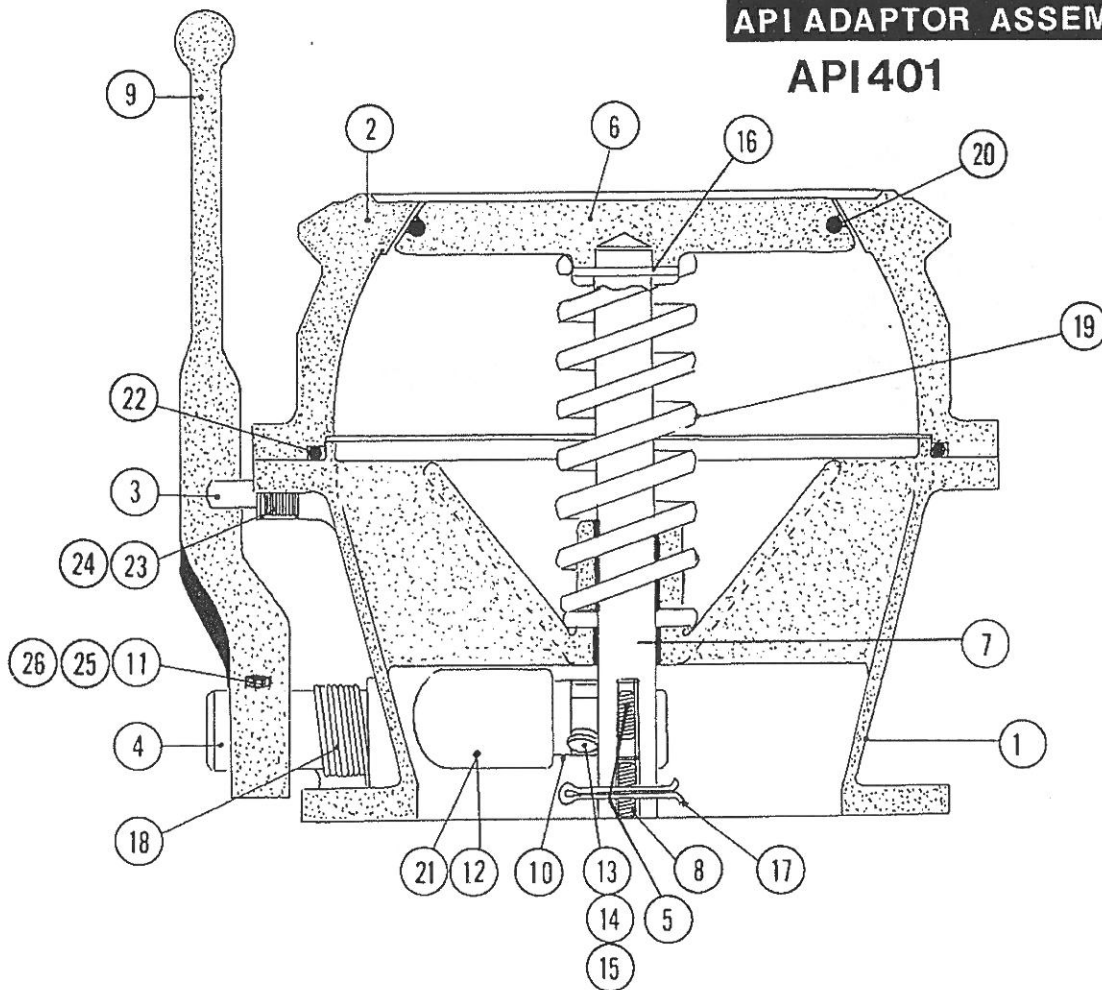
### DIMENSIONS

LENGTH	MAX. DIA.	WIDTH OVER HANDLE	FLANGE O/D	PCD	HOLES	POPPET MOVEMENT	WEIGHT kg
170	205	225	168	149	8 x 11mm	51	4.5



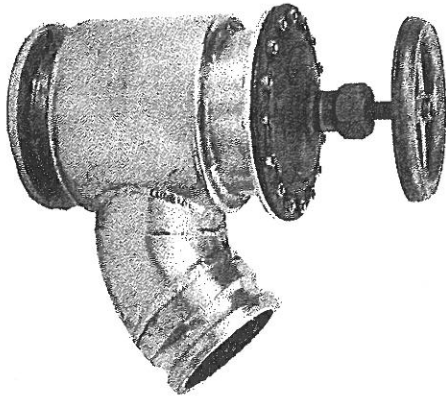
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AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

**API ADAPTOR ASSEMBLY****API401**

Item No.	DESCRIPTION	Qty.	Part No.	Item No.	DESCRIPTION	Qty.	Part No.
1	Body — Rear c/w BUSH	1	API 401/1	14	Flat Washer	1	P99
2	Nose Cone	1	/2	15	Cotter Pin	1	P756
3	Retaining Pin — Handle	1	/3	16	Selox Pin	1	P911
4	Camshaft	1	/4	17	Cotter Pin	1	P775
5	Cam	1	/5	18	Spring — Handle	1	P331
6	Poppet and Stem Assy.	1	/6	19	Spring — Poppet	1	P330
7	Stem — Poppet	1	/7	20	O-Ring — Poppet	1	P289
8	Roller — Poppet	1	/8	21	O-Ring — Camshaft	2	P288
9	Handle	1	/9	22	O-Ring — Body	1	P290
10	Spacer Washer	1	/10	23	3/8" Skt.hd. Screw	8	P715
11	Bolt — Handle	1	/11	24	Flat Washer	8	P101
12	Bush	1	/12	25	1/2" Nyloc Nut	1	P148
13	Clevis Pin	1	/13	26	Flat Washer	1	P810

# LIQUIP VALVES



## LCV 4 CHEMICAL VALVE

**SPECIALLY DESIGNED FOR CHEMICAL TANKERS**

### FEATURES

- Screw-down closure with flat-face teflon seal ensures leak-free operation with improved tolerance to dirt. Floating poppet guarantees alignment.
- Simply remove top cover to take out poppet assembly and expose valve body. Easy to clean, no crevices or blind spots to hide contamination.
- Angled outlet provides complete drainage through 100mm body.
- Body fabricated for light weight with strength. Aluminium standard, stainless steel to order.
- Flange is TTMA standard, identical to Liquip 100mm butterfly valve and API bottom loading adaptor.
- Standard camlock outlet, choice of size. Specify as LCV3 for 76mm camlock.

### SPECIFICATIONS

- Teflon seal, stainless steel seal holder and shaft.
- Standard valve is aluminium with viton packing.
- Stainless steel body with teflon packing also available.

### DIMENSIONS

LENGTH	BODY DIA.	MAX. WIDTH OVER OUTLET	FLANGE O/D	PCD	HOLES	WEIGHT (ALUM.) kg
330	180	330	168	149	8 x 11mm	4.0

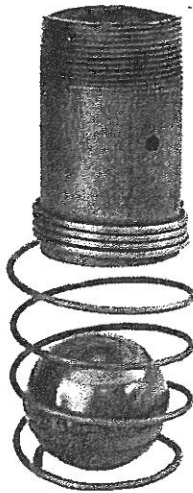


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# LIQUIP VALVES



**VBV 1.5**

**VBV 2.0**

## FLOAT VALVES

The float valves prevent over-filling in gravity fed storage tanks and underground tanks. They are fitted internally to the vent pipe or vapour return pipe.

When product reaches the hollow stainless steel ball, it floats until it seals against the chamfered pipe end. This prevents further product flow except for a minimal amount allowed by the small bleed hole. The bleed prevents tank pressurisation and allows the discharge hose to be drained.

The ball is contained in a stainless steel cage and is designed so that the weld is always horizontal and does not contact the sealing face. The pipe is plated steel.

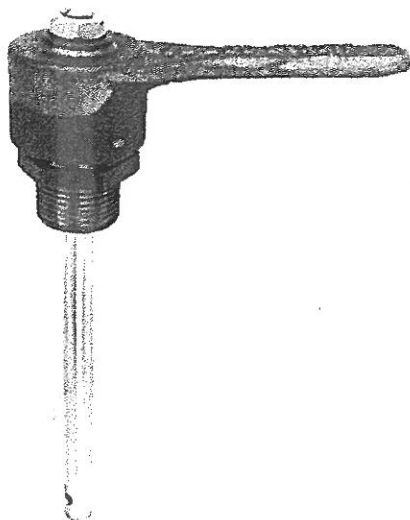
### DIMENSIONS

VBV150 is designed for tanks having 2 inch (51mm) or 2½ inch (63mm) BSP sockets. The 1½ inch (38mm) BSP valve is screwed into a standard adaptor and the whole assembly screwed into the tank from the outside. Outside dia. of the cage is 55mm and the valve inside dia. is 38mm.

VBV200 is for tanks having 3 inch (76mm) or 4 inch (102mm) sockets and is fitted in a similar fashion. Outside dia. of the cage is 80mm and flow dia. is 51mm.

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# LIQUIP VALVE ACCESSORIES



## CAMLIFT FOR 50 mm INTERNAL VALVES

Sits on top of the tank with a cable or rod down to the internal valve. As the handle is rotated, cams lift the internal valve poppet.

### FEATURES

- Designed for small internal valves only, light-weight and inexpensive.
- Screws into socket welded in tank top.
- Cast bronze construction.
- Smooth action with "rest" position at full lift.
- Shaft sealed to prevent leakage.
- Serrated handle for firm grip and leverage.

### SPECIFICATIONS

Cast bronze handle and body.

Steel spindle.

Elastomer lip seal.

### DIMENSIONS

INSTALLED HEIGHT	BODY DIA.	MAX. WIDTH ACROSS HANDLE	LIFT	MOUNTING	WEIGHT kg
75	52	130	28	1" (25mm) BSP thread	0.5

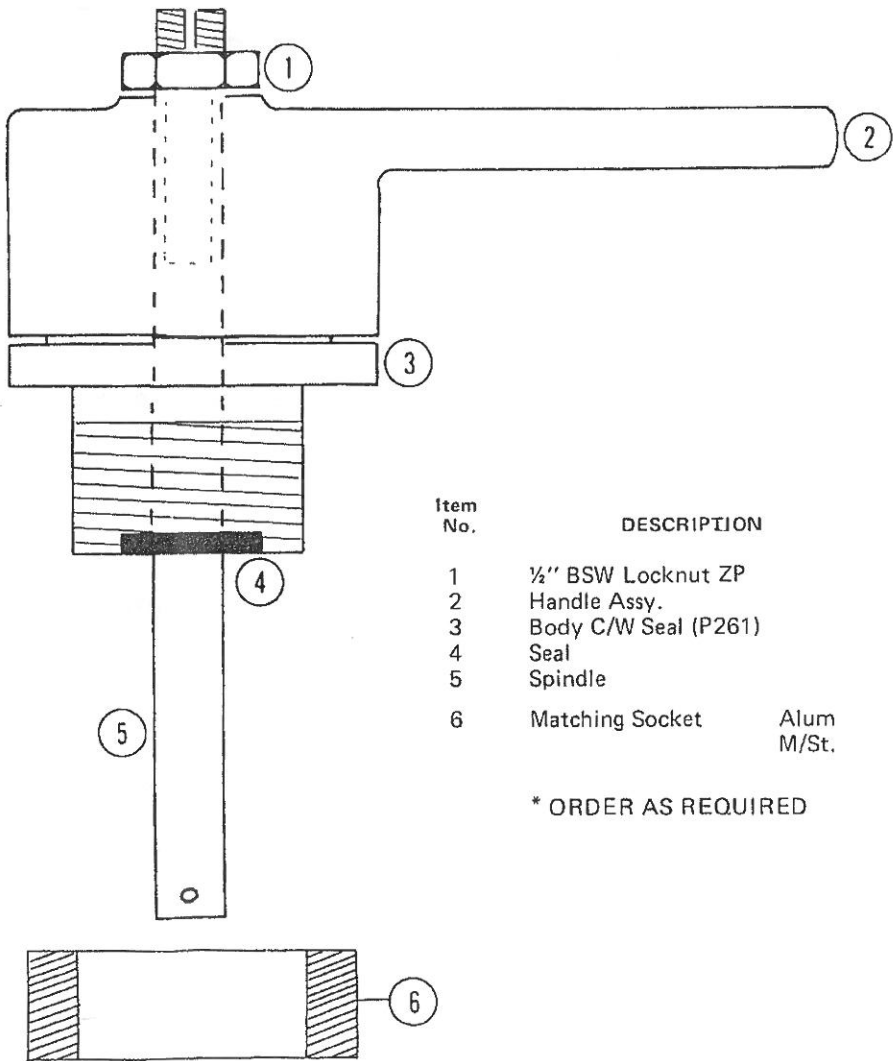


## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
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**CAMLIFT ASSEMBLY**

**CL 200**



Item No.	DESCRIPTION	Qty.	Part No.
1	½" BSW Locknut ZP	1	P139
2	Handle Assy.	1	CL200/4
3	Body C/W Seal (P261)	1	CL200/5
4	Seal	1	P261
5	Spindle	1	CL401/3
6	Matching Socket	1*	CL200/1
		1*	P552

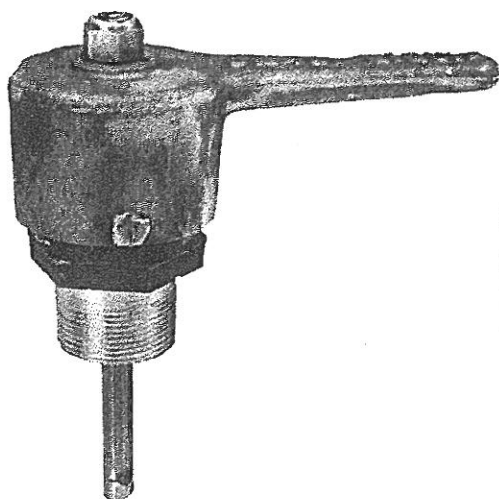
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# LIQUIP VALVE ACCESSORIES



## CL 401 CAMLIFT FOR INTERNAL VALVES

A larger unit for use with internal valves up to 150mm. Mounted on tank top with a cable or rod connection through the tank to the internal valve.

### FEATURES

- Available in heat-treated aluminium or stainless steel.
- Screws into socket welded into tank.
- Smooth action through use of rollers on a cam.
- Lip seal on shaft to prevent leakage.
- Ample leverage with serrated handle grip.
- Simple external adjustment for slack in cable.

### SPECIFICATIONS

Aluminium handle with stainless steel rollers.

Choice of aluminium or stainless steel body (specify suffix S).

Stainless steel spindle.

### DIMENSIONS

INSTALLED HEIGHT	BODY DIA.	MAX. WIDTH ACROSS HANDLE	LIFT	MOUNTING	WEIGHT kg
110	80	175	44	1½" (38mm) BSP thread	1.1

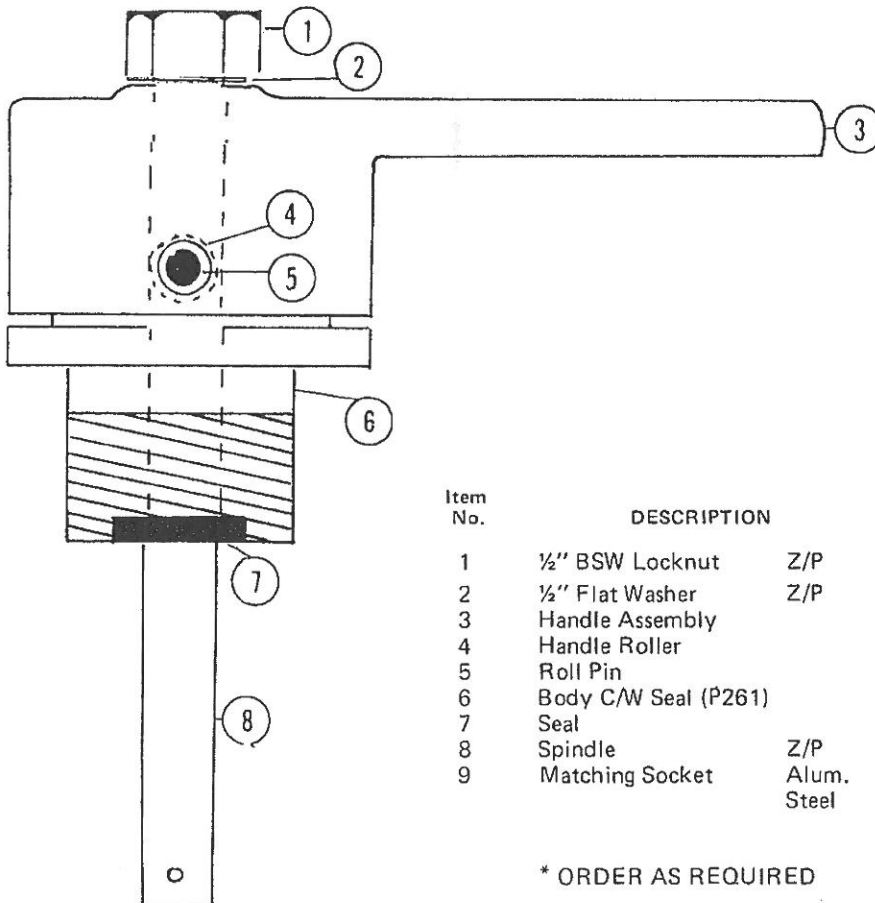


## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

# CAMLIFT ASSEMBLY

## CL 401

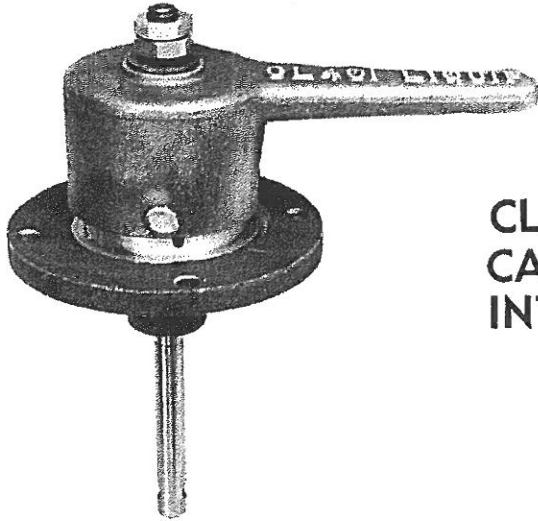


Item No.	DESCRIPTION		Qty.	Part No.
1	½" BSW Locknut	Z/P	1	P152
2	½" Flat Washer	Z/P	1	P104
3	Handle Assembly		1	CL401/1
4	Handle Roller		2	CL401/6
5	Roll Pin		2	P930
6	Body C/W Seal (P261)		1	CL401/12
7	Seal		1	P261
8	Spindle	Z/P	1	CL401/3
9	Matching Socket	Alum.	1*	CL401/11
		Steel	1*	P554

\* ORDER AS REQUIRED



# LIQUIP VALVE ACCESSORIES



## CL 402 CAMLIFT FOR INTERNAL VALVES

### FEATURES

A flanged unit for use with internal valves up to 150mm. Mounted on tank top with a cable or rod connection through the tank to the internal valve.

- Light-weight and sturdy construction through use of heat-treated aluminium.
- Flange mounting spreads the load. Bolt direct to tank or use weld-on flanges.
- Smooth action through use of rollers on a cam.
- Lip seal on shaft to prevent leakage.
- Ample leverage with serrated handle grip.
- Simple external adjustment for slack in cable.

### SPECIFICATIONS

Aluminium body and handle.

Stainless steel spindle and rollers.

Elastomer seal.

### DIMENSIONS

INSTALLED HEIGHT	BODY DIA.	MAX. WIDTH ACROSS HANDLE	LIFT	FLANGE O/D	PCD	HOLES	WEIGHT kg
110	80	175	44	127	111	4 x 7mm	1.1

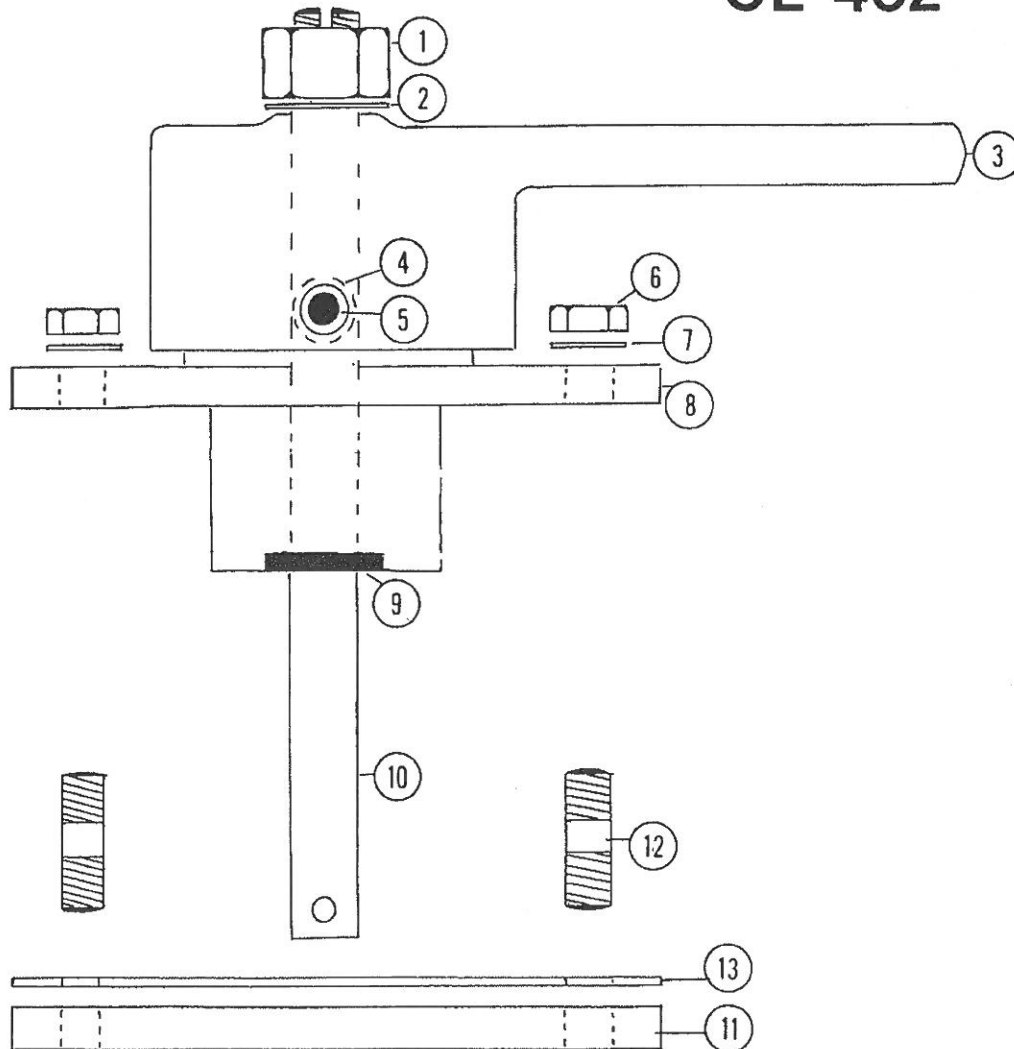


## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
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# CAMLIFT ASSEMBLY

## CL 402



Item No.	DESCRIPTION	Qty.	Part No.	Item No.	DESCRIPTION	Qty.	Part No.
1	1/2" BSW Locknut ZP	2	P152	8	Body Assembly C/W Seal	1	CL402/4
2	1/2" Flat Washer ZP	1	P104	9	Seal	1	P261
3	Handle Assembly	1	CL401/1	10	Spindle	1	CL401/3
4	Handle Roller	2	CL401/6	11	Mtg. Flange	1*	CL402/1
5	Roll Pin	2	P930			1*	CL402/2
6	3/8" BSW Hex Nut ZP	4	P130	12	3/8" BSW Stud	4*	P687
7	3/8" Ir.t. Star Washer ZP	4	P116	13	Gasket	1*	P673

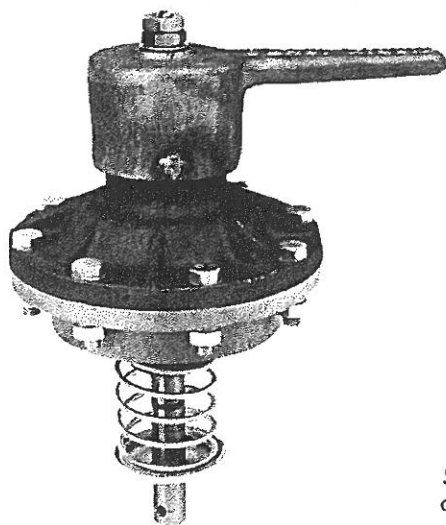
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LIQUIP SALES PTY LTD

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TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

# LIQUIP VALVE ACCESSORIES



## ACL 404

### AIR-OPERATED CAMLIFT FOR INTERNAL VALVES

Similar to the CL402 manual camlift but keeps the driver safely on the ground.

#### FEATURES

- Diaphragm-powered for minimum moving parts and maximum reliability.
- Uses same diaphragm as the AVV3.5 vapour vent for ease of parts stocking.
- Features manual emergency handle.
- Bolts onto same mounting as CL402 for easy conversion.
- Return spring ensures a slack lifting cable and closed internal valve.
- Operates at only 140kPa (20psi).
- Heat-treated-aluminium construction for light weight with strength.
- Bolt direct to tank top or use weld-on mounting flange.

#### SPECIFICATIONS

Aluminium body and handle.

Stainless steel shaft.

Fibre-reinforced elastomer diaphragm.

Delrin bush, viton o-ring.

Port tapped 1/4 BSP.

#### DIMENSIONS

INSTALLED HEIGHT	BODY DIA.	LIFT	MTG. FLANGE O/D	PCD	HOLES	MAX. SPRING O/D	WEIGHT kg
165	165	44	127	111	4 x 5/16 BSW	64	3.0



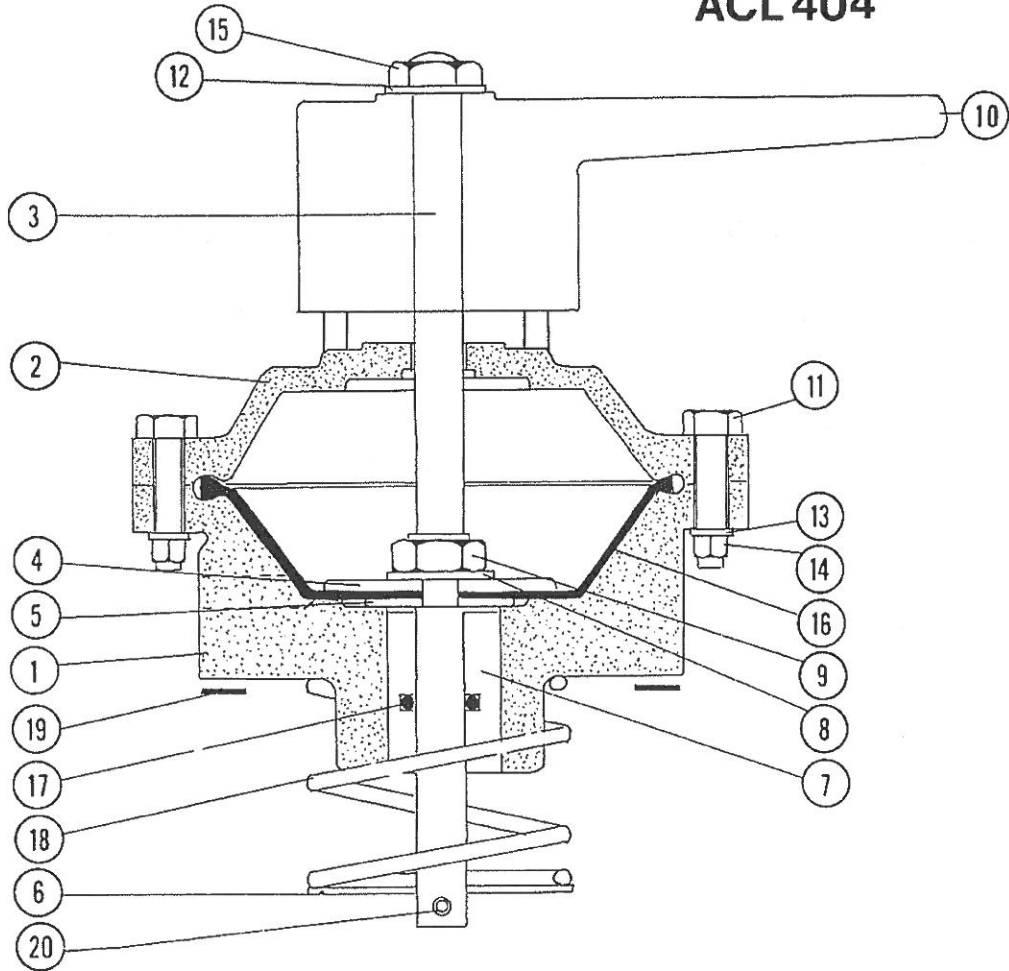
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AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND



**CAMLIFT ASSEMBLY**

**ACL 404**



Item No.	DESCRIPTION	Qty.	Part No.	Item No.	DESCRIPTION	Qty.	Part No.
1	Base	1	ACL404/1	12	1/2" Flat Washer Z/P	1	P104
2	Top	1	ACL404/2	13	3/8" Spring Washer Z/P	8	P109
3	Spindle	1	ACL404/3	14	3/8" BSW Hex Nut Z/P	8	P130
4	Top Plate	1	ACL404/4	15	1/2" BSW Nylock Nut	1	P152
5	Bottom Plate	1	ACL404/5	16	Diaphragm	1	P246
6	Spring Retainer	1	ACL404/6	17	'O' Ring - BS116 Viton	1	P278
7	Bush	1	ACL404/7	18	Spring Z/P	1	P329
8	Washer	1	ACL404/8	19	Gasket	1	P673
9	Nut	1	ACL404/9	20	7/32" Dia x 1" Selox Pin	1	P914
10	Handle	1	CL401/1				
11	3/8" BSW x 1 1/2" Bolt Z/P	8	P62	21	Mtg. Flange Alum	1*	ACL404/11
					Mtg. Flange M/St.	1*	

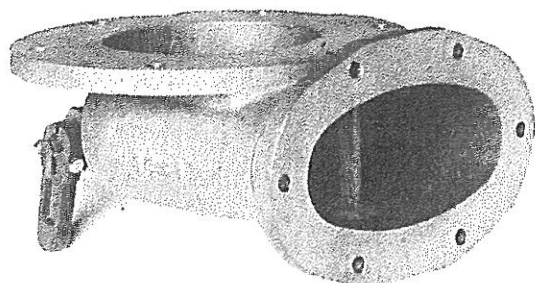
\* ORDER AS REQUIRED

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212-216 RAILWAY TERRACE GUILDFORD SYDNEY N.S.W. 2161 AUSTRALIA

TELEPHONE 02 682 1244 (6 LINES) TELEGRAMS "LIQUIP"

# LIQUIP VALVE ACCESSORIES



OLE 2    OLE 2/1  
 OLE 4    OLE 4/1  
 SE 4     SE 4/1  
 OLE 6    OLE 6/1  
 SE 6     SE 6/1  
**OUTLET ELBOWS**

The outlet elbows bolt to the welded-in ITV tank flange (see Page 4/21), so locating and sealing the internal valve.

The OLE series are large radius. The SE series are squat profile for use where room is limited such as above suspensions or turntable. A suffix "1" indicates provision for bottom operation of the internal valve via a lever as illustrated.

## FEATURES

- All elbows incorporate a shear groove as required by AS2016.
- Light-weight aluminium construction.
- Full range of adaptors for mild steel and aluminium pipe and tube. See parts list on other side of page.
- High flow rates.
- Bottom operation elbows also available with stainless steel and teflon trim. Add second suffix C, e.g. SE4/1/C.
- Plain flanges also available if elbow not required. See Page 4/21.

## DIMENSIONS

MODEL	FLANGE O/D	No. HOLES	DRILL	PCD	OUTLET FLANGE O/D	No. HOLES	DRILL	PCD	O.A. HEIGHT	CENTRE HEIGHT	WEIGHT kg
OLE2	139	6	11.0	121	88 sq.	4	11.0	88	120	75	0.8
OLE4	216	5	12.7	187	170	8	12.7	149	187	102	2.9
SE4	216	6	12.7	187	—	—	—	—	83	44.5	2.9
OLE6	292	6	12.7	254	170	8	11.0	191	229	127	5.9
SE6	292	6	12.7	254	—	—	—	—	121	70	5.4

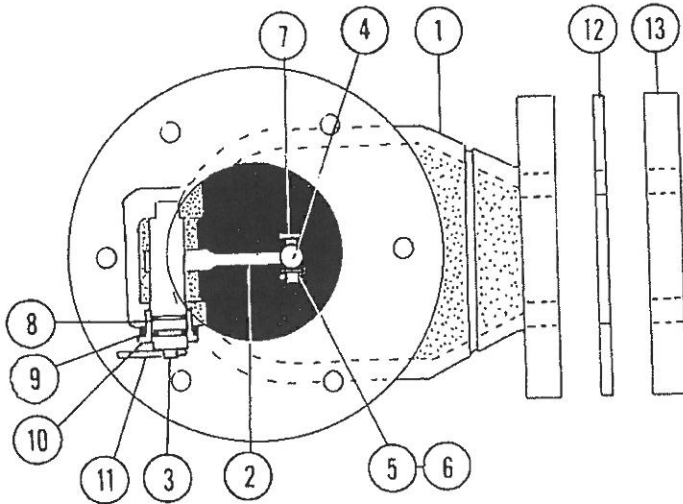
NOTE: All squat elbows are drilled on the centre-line. Others are drilled off the centre-line. Add 0.3kg for bottom operation elbows.



## LIQUIP SALES PTY. LTD.

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**OUTLET ELBOWS : BOTTOM OPERATING**



**OLE2/1  
OLE4/1  
SE4/1  
OLE6/1  
SE6/1**

tem No.	DESCRIPTION	Qty.	OLE2/1 Part No.	OLE4/1 Part No.	SE4/1 Part No.	OLE6/1 Part No.	SE6/1 Part No.
			OLE2/1	OLE4/1	SE4/1	OLE6/1	SE6/1
1	Body	1	OLE2	OLE4	SE4	OLE6	SE6
2	Cam	1	OLE4/4	OLE4/4	OLE4/4	OLE6/4	OLA6/4
3	Cam Spindle	1	OLE4/5	OLE4/5	OLE4/5	OLE4/5	OLE4/5
4	Guide	1	OLE4/6	OLE4/6	OLE4/6	OLE4/6	OLE4/6
5	Clevis Pin	1	P1001	P1001	P1001	P1001	P1001
6	Washer	1	P100	P100	P100	P100	P100
7	Cotter Pin	1	P760	P760	P760	P760	P760
8	O-Ring	2	P223	P223	P223	P223	P223
9	Gasket	1	P891	P891	P891	P891	P891
10	Gland Nut	1	OLE4/9	OLE4/9	OLE4/9	OLE4/9	OLE4/9
11	Operating Lever Assy.	1	OLE4/11	OLE4/11	OLE4/11	OLE4/11	OLE4/11
12	Gasket	1*	P667	P668	P670	P669	P671
13	Outlet Adaptor	Alum. 1*	OLE2/3	OLE3/3(75mm)	OLA3(75mm)	OLE6/3	OLA6/1(100mm)
		1*	-	OLE4/3(100mm)	OLA4(100mm)	-	OLA(150mm)
	Outlet Adaptor	M/St. 1*	OLE2/2	OLE3/2(75mm)	OLA3/1(75mm)	OLE6/2	-
		1*	-	OLE4/2(100mm)	OLA4/1(100mm)	-	-

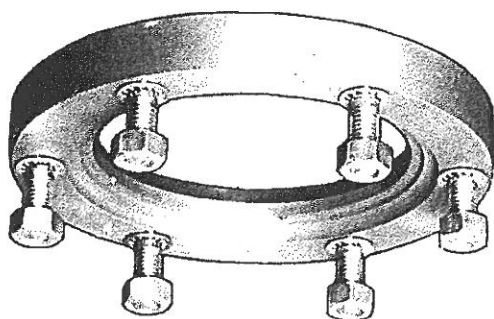
\* ORDER AS REQUIRED

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TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

# LIQUIP VALVE ACCESSORIES



ITV 2/1    ITV 2/3  
 ITV 4/1    ITV 4/3  
 ITV 6/1    ITV 6/3  
 Mild Steel    Aluminium

## TANK MOUNTING FLANGES FOR INTERNAL VALVES

The flange is welded into the bottom of the tanker and the internal valve flange sits in the inner recess. An o-ring seal fits into the outer recess, and the whole assembly is clamped and sealed by the outlet elbow flange. If an outlet elbow is not required, a plain flange is available for welding to pipe: order as /2 for mild steel or /4 for aluminium, e.g. ITV4/2.

### DIMENSIONS

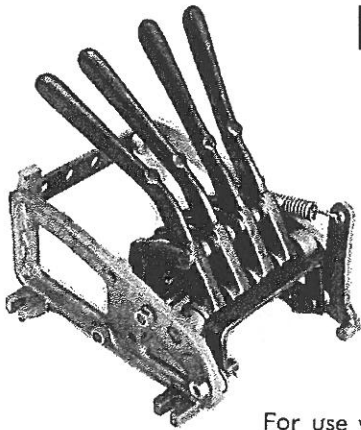
FLANGE	MATERIAL	FLANGE O/D	No. HOLES	STUD SIZE	PCD	THICKNESS	WEIGHT kg
ITV2/1	Steel	139	6	3/8 BSW	121	13	1.0
ITV2/3	Alum.	139	6	3/8 BSW	121	13	0.8
ITV4/1	Steel	216	6	1/2 BSW	187	13	1.4
ITV4/3	Alum.	216	6	1/2 BSW	187	25	1.2
ITV6/1	Steel	292	6	1/2 BSW	254	19	3.2
ITV6/3	Alum.	296	6	1/2 BSW	254	25	2.8



## LIQUIP SALES PTY. LTD.

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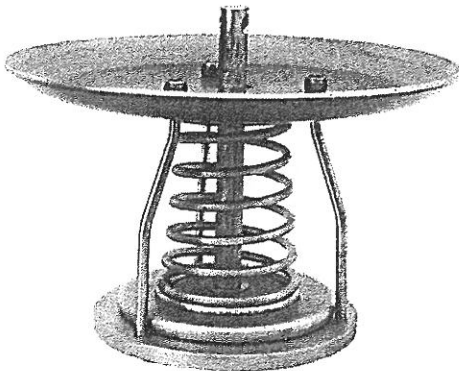
## LIQUIP VALVE ACCESSORIES



CO-1 CO-2 CO-3 CO-4  
CO-5 CO-6  
**COMPARTMENT OPERATORS**

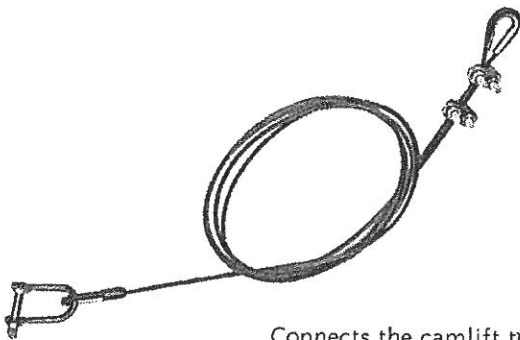
For use with bottom-operation outlet elbows. The operator is connected to the individual elbow levers by cables so the tanker can be unloaded with the driver on the ground and by the outlet valves. A fusible link is incorporated which closes all valves if the temperature exceeds 65°C.

The suffix indicates the number of compartments in the bank. Of lightweight aluminium construction.



ITV 4-14 ITV 6-14  
**INTERNAL VALVE DEFLECTOR  
FOR BOTTOM LOADING**


A necessity for bottom loading under AS2016. The deflector has been designed to eliminate splash onto the overfill sensor, splash through open vapour vents and to reduce turbulence and static electricity build-up.



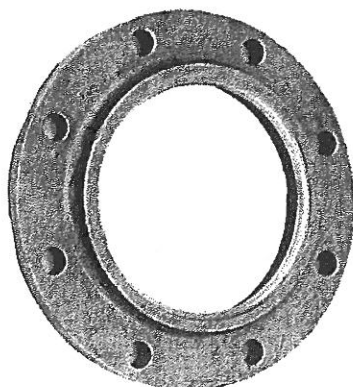
**LW 400  
LIFTING WIRE**

Connects the camlift to the internal valve.

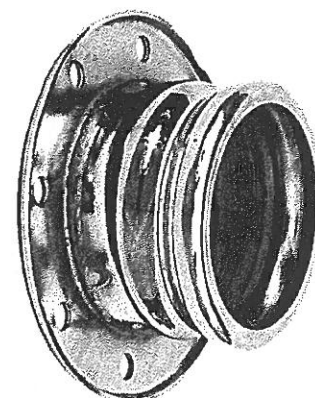
Borrowed from the yachtsmen, the lifting wire comes complete with shackles and is fitted in moments. Of stainless steel, it is almost strong enough to lift a complete tanker and is far lighter and cheaper than the old-style lifting rod.

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TELEPHONE 02 682 1244 (6 LINES)			TELEGRAMS "LIQUIP"	

# LIQUIP VALVE ACCESSORIES



## BUTTERFLY VALVE NOSE CONES & FLANGES



The nose-cones bolt directly to the butterfly valve for the simplest and most inexpensive method of providing an outlet adaptor. Available straight or angled, in steel or aluminium.

## NOSE CONES

PART No.	DESCRIPTION
MC2/V3 5°	50mm NATO camlock to 76mm valve, 5° angle
MC2.5/V3	63mm NATO camlock to 76mm valve, straight
MC2.5/V3 5°	63mm NATO camlock to 76mm valve, 5° angle
MC2.5/V3 20°	63mm NATO camlock to 76mm valve, 20° angle
MC3/V3	76mm NATO camlock to 76mm valve, straight
MC3/V3 5°	76mm NATO camlock to 76mm valve, 5° angle
MC3/V3 20°	76mm NATO camlock to 76mm valve, 20° angle
MC2.5/V4	63mm NATO camlock to 102mm valve, straight
MC2.5/V4 20°	63mm NATO camlock to 102mm valve, 20° angle
MC3/V4	76mm NATO camlock to 102mm valve, straight
MC3/V4 5°	76mm NATO camlock to 102mm valve, 5° angle
MC3/V4 20°	76mm NATO camlock to 102mm valve, 20° angle
MC4/V4	102mm NATO camlock to 102mm valve, straight
MC4/V4 5°	102mm NATO camlock to 102mm valve, 5° angle
MC4/V4 20°	102mm NATO camlock to 102mm valve, 20° angle

## FLANGES

A wide variety of flanges for welding to pipe or tube is available where the butterfly valve is in a pipe-line.

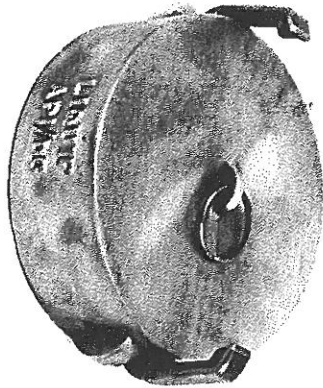
Specify size of valve, size and material of pipe or tube and whether solid or pressed flanges are required.



# LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
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## LIQUIP VALVE ACCESSORIES



**API/DC  
DUST-CAP FOR API ADAPTOR**

1.2kg



**API/T3                      API/T4  
HOSE-TAILS FOR API ADAPTOR**

1.7kg

2.0kg



**API/MC3                      API/MC4  
API TO MALE CAMLOCK  
ADAPTOR**

1.5kg

1.8kg

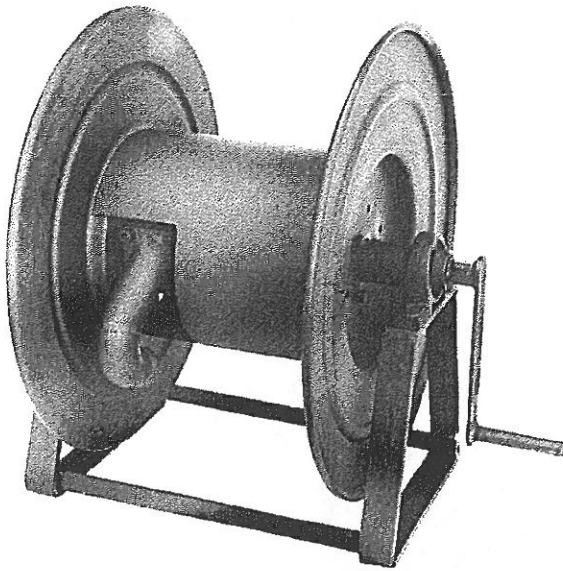
Big brother to the camlock, these fittings for the API adaptor use the same principle of closure and the same cam arms.

Body is cast aluminium, and the chunky buna seal fits into a recess to prevent it dropping out. The recess for the cam is fully closed in at the front for maximum strength. Cams are cast bronze with high-strength replaceable brass hinge-pins.

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TELEPHONE 02 682 1244 (6 LINES)			TELEGRAMS "LIQUIP"	



# LIQUIP HOSEREELS



## R 12 R 18 R 24 END REWIND HOSEREEL

### FEATURES

- Direct drive to the manifold. Supplied complete with handle.
- Shaped goose-neck takes stress off the hose.
- Full 38mm dia. flow area.
- Twin seals in inlet bearing, pillow-block bearing on drive side.
- Sturdy frame, can be mounted in any position.
- Positive locking device.
- Formed cheek-plates for maximum rigidity.

### SPECIFICATIONS

Bronze inlet bearing assembly with elastomer seals. Otherwise all steel.

Inlet 1½ inch (38mm) female BSP.

Outlet 1½ inch (38mm) male BSP.

### DIMENSIONS

Allow for additional length of inlet pipe for installations.

\*Using 32mm (1¼ inch) hose).

MODEL	HOSE CAPACITY* METRES	OVERALL HEIGHT	OVERALL WIDTH	OVERALL LENGTH	DRUM LENGTH	DRUM DIA.	CHEEK-PLATE DIA.	WEIGHT kg (NO HOSE)
R12	30	580	580	510	305	254	550	26
R18	45	580	580	660	460	254	550	29
R24	60	580	580	815	610	254	550	32

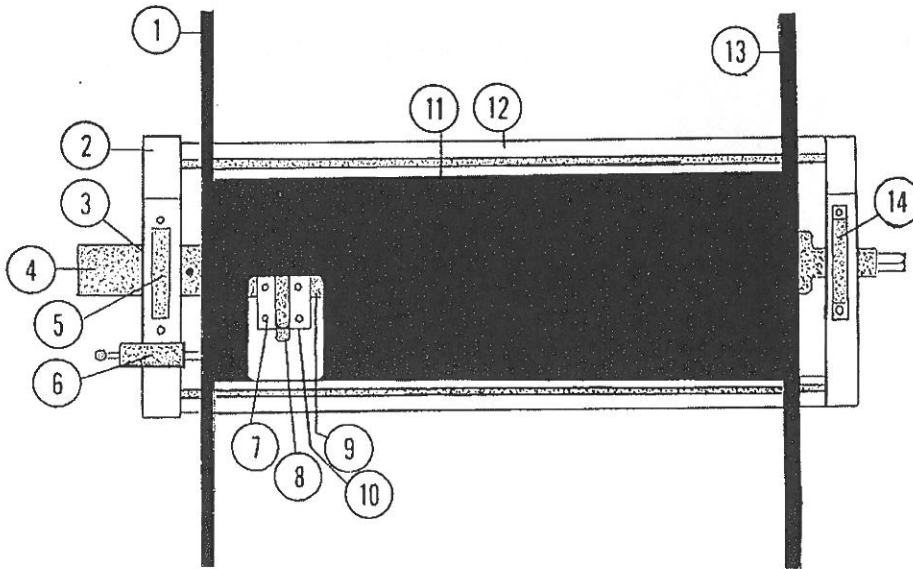


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DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND



**END REWIND HOSEREEL**  
**R12 R18 R24**



Item No.	DESCRIPTION	Qty.	Part No.
1	End Spinning Lock Pin Side	1	R12/8
2	A-Frame Inlet Bearing Side	1	R12/6
3	Gasket Inlet Bearing Assy.	1	P663
4	Inlet Flange Assy.	1	R12/13
5	Inlet Bearing Assy.	1	R12/12
6	Hosereel Lockpin Assy.	1	R12/10
7	3/8" Skt. Hd. Cap Screw	4	P719
8	Gooseneck Assy.	1	R12/11
9	Manifold	1*	R24/1 R18/1 R12/1
10	Gasket Gooseneck Assy.	1	P664
11	Drum	1*	R24/2 R18/2 R12/32
12	A-Frame Spacer Bar	2*	R24/3 R18/3 R12/33
13	End Spinning Plain Side	1	R12/6
14	1 1/4" Pillow Block	1	P333

**PARTS NOT LISTED**

DESCRIPTION	Qty.
1/2"x5/16" Whit Set Screw	6*
1 1/4"x5/16" " "	3*
5/16" Whit Nut	9*
5/16" Spring Washer	9*
1 1/2"x3/8" Whit Set Screw	2*
3/8" Whit Nut	4*
3/8" Spring Washer	8*
3/8" Flat Washer	2*
1 1/4"x3/8" Whit Set Screw	2*
1/4"x1/8" Pop Blind Rivet	16* 73AS4-2
Handle Assy.	1* R12/26
Seals (For Inlet Bearing)	2* P262

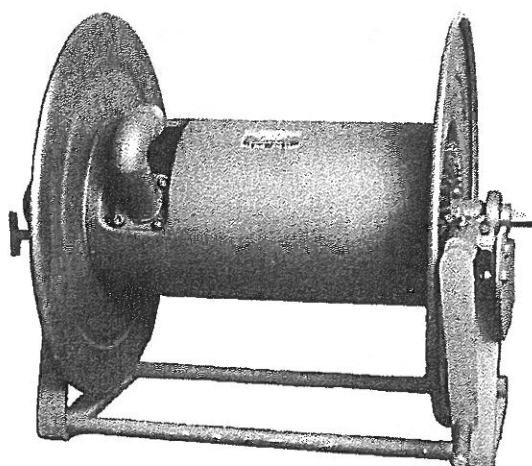
\* ORDER AS REQUIRED

**LIQUIP SALES PTY LTD**

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TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

# LIQUIP HOSEREELS



## FR 12 FR 18 FR 24 FRONT REWIND HOSEREEL

### FEATURES

- Bevel gears enable reel to be rewound from the front — essential when mounted on many tankers, convenient in most situations.
- Gearing reduces effort required.
- Goose-neck helps laying of hose, reduces wear and tear.
- High flow rate — full 38mm bore throughout.
- Double seals in inlet bearing.
- Positive lock.
- Handle supplied.
- Formed cheek-plates for rigidity.

### SPECIFICATIONS

Bronze inlet bearing with elastomer seals.

Heat-treated aluminium bevel gears — otherwise all steel.

Inlet 1½ inch (38mm) female BSP.

Outlet 1½ inch (38mm) male BSP.

### DIMENSIONS

Allow for additional length of inlet pipe for installations.

\*Using 32mm (1¼ inch) hose.

MODEL	HOSE CAPACITY* METRES	OVERALL HEIGHT	OVERALL WIDTH	OVERALL LENGTH	DRUM LENGTH	DRUM DIA.	CHEEK-PLATE DIA.	WEIGHT kg (NO HOSE)
FR12	30	580	580	510	305	254	550	30
FR18	45	580	580	660	460	254	550	33
FR24	60	580	580	815	610	254	550	36

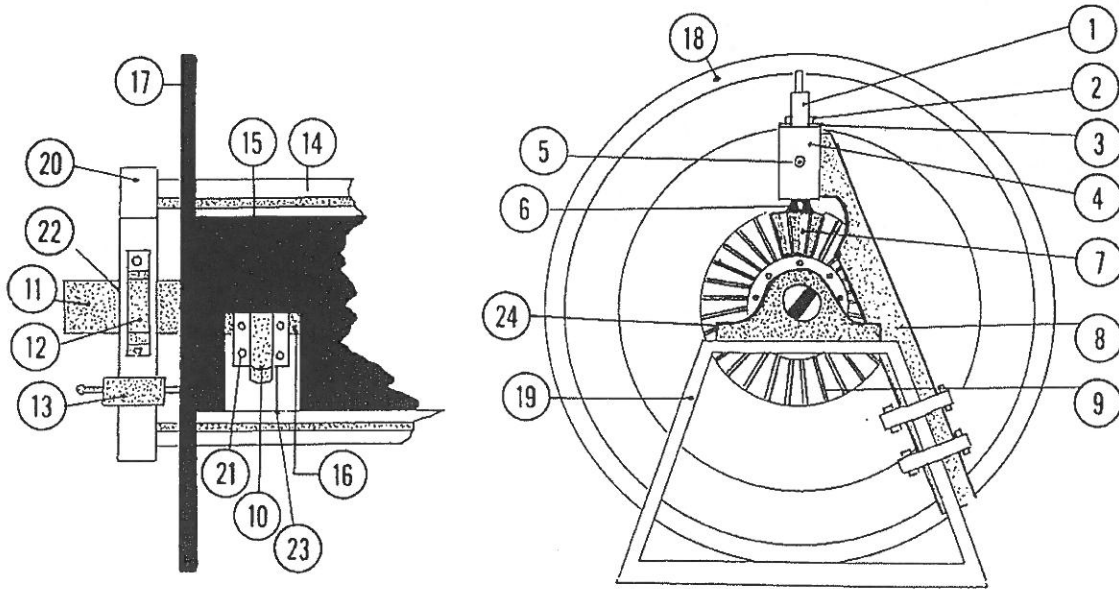


## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

## FRONT REWIND HOSEREEL

### FR12 FR18 FR24



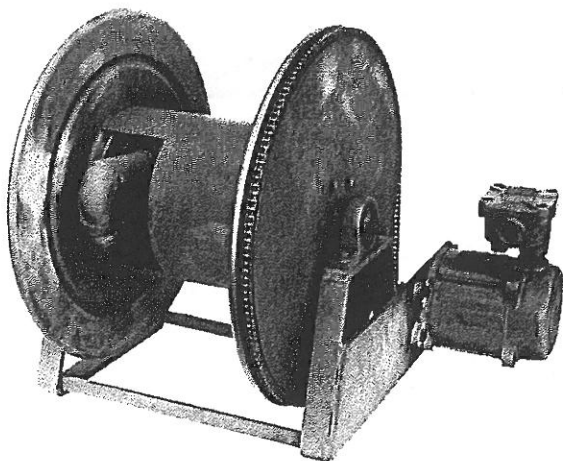
Item No.	DESCRIPTION	Qty.	Part No.	DESCRIPTION	Qty.
1	Front Rewind Shaft	1	FR12/3	1/8" Dia x 1/4" Long Pop Rivet	16
2	Selox Pin	1	P925	5/16 BSW x 1/2" Long Hex Hd. Set Screw	3
3	Spacer	1	FR12/9	5/16 BSW x 1 1/2" Long Hex Hd. Set Screw	6
4	Shaft Housing	1	FR12/8	5/16 BSW x 1 3/4" Long Hex Hd. Set Screw	3
5	Grease Nipple	1	P476	3/8 BSW x 1" Long Hex Hd. Set Screw	2
6	Selox Pin	1	P926	3/8 BSW x 1 1/4" Long Hex Hd. Set Screw	2
7	Pinion Gear	1	FR12/6	3/8 BSW x 1 1/2" Long Hex Hd. Set Screw	2
8	Shaped Angle	1	FR12/7	5/16 BSW Hex Nut	3
9	Crown Wheel	1	FR12/5	3/8 BSW Hex Nut	6
10	Gooseneck	1	R12/11	5/16 Spring Washer	12
11	Inlet Flange Assy.	1	R12/13	3/8 Spring Washer	10
12	Inlet Bearing Assy.	1	R12/12	3/8 Flat Washer	2
13	Lock Assy.	1	R12/10		
14	A-Frame Spacer Bar	2	R12/33*		
15	Drum	1	R12/32*		
16	Manifold	1	FR12/1*		
17	End Spinning Lock Pin Side	1	R12/8		
18	End Spinning Lock Plain Side	1	R12/9		
19	A-Frame Rewind Side	1	R12/7		
20	A-Frame Inlet Bearing Side	1	R12/6		
21	3/8" BSW Skt. Hd. Cap Screw	4	P719		
22	Gasket Inlet Bearing Assy.	1	P663		
23	Gasket - Gooseneck	1	P664		
24	Pillow Block Bearing	1	P333		

\*ALTERNATIVE PART Nos.

FR18	FR24
R18/3	R24/3
R18/2	R24/2
FR18/1	FR24/1

# LIQUIP HOSEREELS

## ER 12 ER 18 ER 24 ELECTRIC REWIND HOSEREEL



### FEATURES

- Electric motor with chain drive for speedy rewind and cleaner working conditions.
- Flameproof motor\* and switch meet safety standards for flammable liquids. \*Specify voltage required.
- Completely self-contained with stop-start switch, ready to wire up.
- All the features of the manual rewind reels
  - twin inlet seals
  - high flow rate
  - positive lock
  - stiffened cheek-plates

### SPECIFICATIONS

Bronze inlet bearing with elastomer seals — remainder steel.

Inlet 1½ inch (38mm) female BSP.

Outlet 1½ inch (38mm) male BSP.

### DIMENSIONS

Allow for additional length of inlet pipe for installations.

\*Using 32mm (1¼ inch) hose.

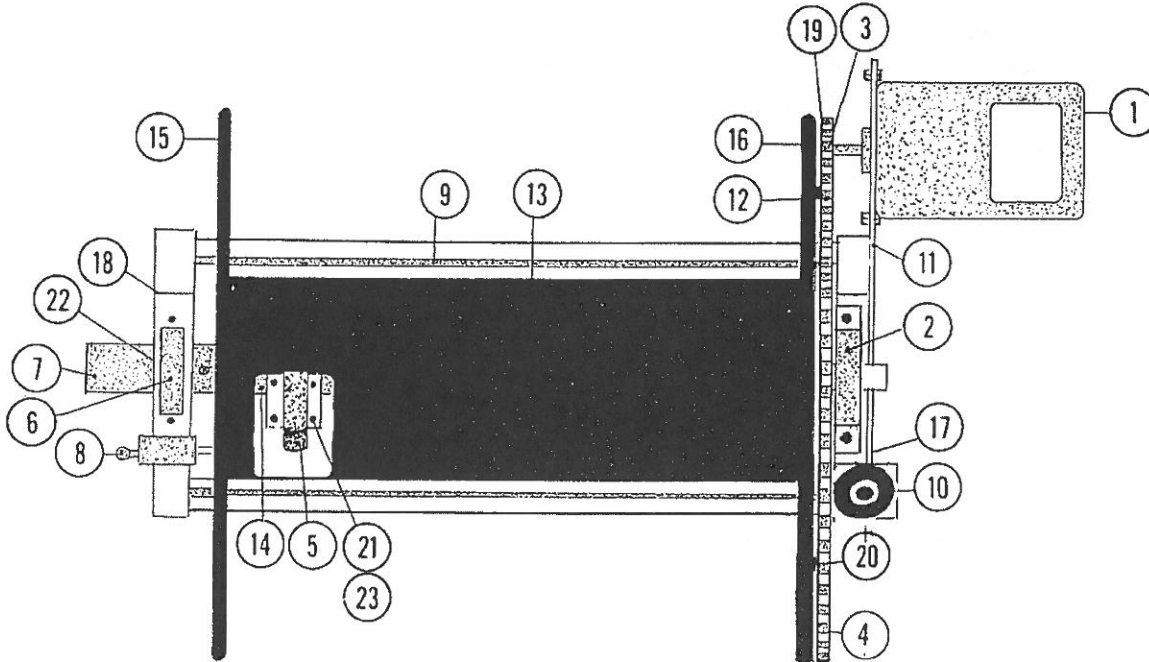
MODEL	HOSE CAPACITY* METRES	OVERALL HEIGHT	OVERALL WIDTH	OVERALL LENGTH	DRUM LENGTH	DRUM DIA.	CHEEK-PLATE DIA.	WEIGHT kg (NO HOSE)
ER12	30	580	580	760	305	254	550	62
ER18	45	580	580	910	460	254	550	65
ER24	60	580	580	1060	610	254	550	68



## LIQUIP SALES PTY. LTD.


AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

## ELECTRIC REWIND HOSEREEL ER12. ER18. ER24



Item No.	DESCRIPTION	Qty.	Part No.	Item No.	DESCRIPTION	Qty.	Part No.
1	OR 24v Flameproof Motor	1	P1335	13	Drum	1	R24/2 *
2	Pillow Block Bearing	1	P333		"	1	R18/2 *
3	176 Tooth Sprocket	1	P1259		"	1	R12/32*
4	9.5mm Simplex Chain	2.5m	P1256	14	Manifold	1	FR24/1*
5	Gooseneck	1	R12/11		"	1	FR18/1*
6	Inlet Bearing Assembly	1	R12/12		"	1	FR12/1*
7	Inlet Flange Assembly	1	R12/13	15	End Spinning Lock — Pin Side	1	R12/8
8	Lock Assembly	1	R12/10	16	End Spinning Lock — Plain Side	1	R12/9
9	A-Frame Spacer Bar	2	R24/3 *	17	A-Frame — Rewind Side	1	R12/7
	" " "	2	R18/3 *	18	A-Frame — Inlet Bearing Side	1	R12/6
	" " "	2	R12/33*	19	9 Tooth Sprocket	1	P1262
10	Stop Start Switch	1	P1333	20	176 Tooth Sprocket Spacer Block	6	ER12/2
11	Motor Mtg. Plate	1	ER12/1	21	3/8" BSW Socket Hd. Cap Screw	4	P719
12	9.5mm Connecting Link	1	P1257	22	Gasket — Inlet Bearing Assy.	1	P663
				23	Gasket — Gooseneck	1	P664

\* ORDER AS REQUIRED

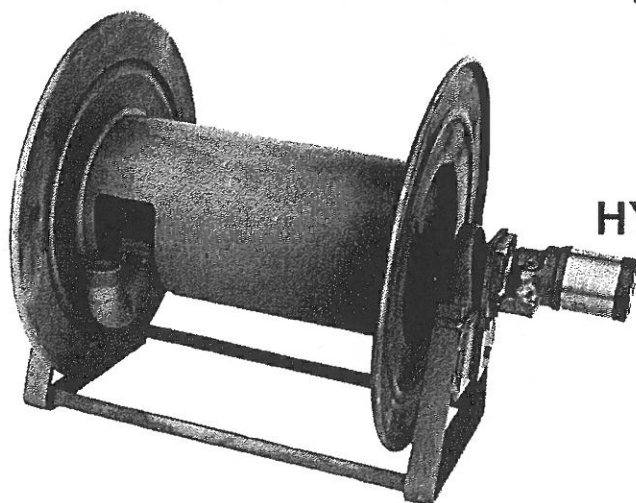


**LIQUIP SALES PTY LTD**

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TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

# LIQUIP HOSEREELS



## HR 12 HR 18 HR 24 HYDRAULIC REWIND HOSEREEL

### FEATURES

- Direct drive by hydraulic motor. \*Consult Liquip for your combination pto/pump requirements.
- Normally supplied complete with hand control.
- Safe for use with flammable liquids.
- Twin inlet seals — full 38mm bore flow dia. for maximum delivery—positive lock.

### SPECIFICATIONS

Bronze inlet bearing.

Elastomer seals.

Remainder steel.

Inlet 1½ inch (38mm) female BSP.

Outlet 1½ inch (38mm) male BSP.

### DIMENSIONS

Allow for additional length of inlet pipe for installations.

\*Using 32mm (1¼ inch) hose).

MODEL	HOSE CAPACITY* METRES	OVERALL HEIGHT	OVERALL WIDTH	OVERALL LENGTH	DRUM LENGTH	DRUM DIA.	CHEEK-PLATE DIA.	WEIGHT kg (NO HOSE)
HR12	30	580	580	660	305	254	550	37
HR18	45	580	580	810	460	254	550	40
HR24	60	580	580	960	610	254	550	43

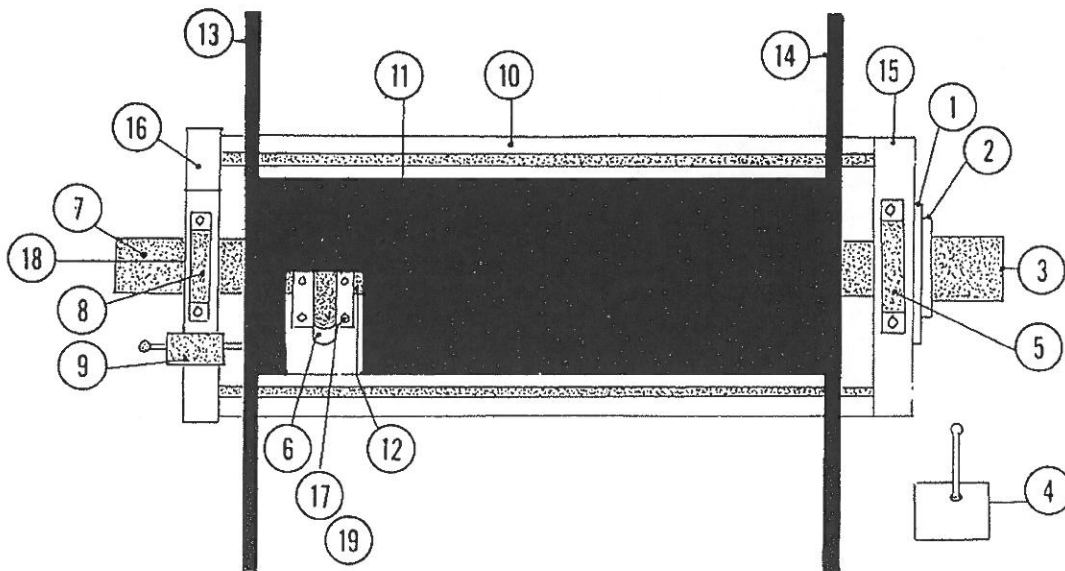


## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

## HYDRAULIC REWIND HOSEREEL

### HR12 HR18 HR24

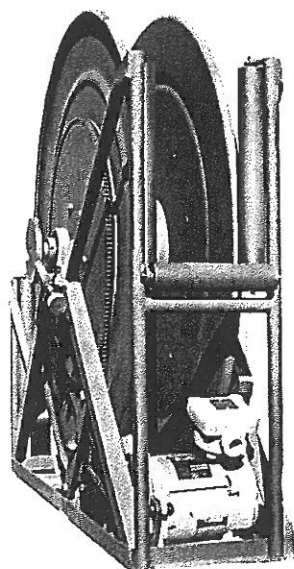


Item No.	DESCRIPTION	Qty.	Part No.
1	Motor Spacer	1	HR12/4
2	Motor Mtg. Plate	1	HR12/3
3	Motor (B.E.)	1	P343
4	Hand Control	1	P324
5	Pillow Block Bearing	1	P333
6	Gooseneck	1	R12/11
7	Inlet Flange Assy.	1	R12/13
8	Inlet Bearing Assy.	1	R12/12
9	Lock Assy.	1	R12/10
10	Frame Spacer Bar	2	R24/3 * R18/3 * R12/33*
11	Drum	1	R24/2 * R18/2 * R12/32*
12	Manifold	1	FR24/1* FR18/1* FR12/1*
13	End Spinning Lock — Pin Side	1	R12/8
14	End Spinning Lock — Plain Side	1	R12/9
15	A-Frame Rewind Side	1	R12/7
16	A-Frame Inlet Bearing Side	1	R12/6
17	3/8" BSW-Socket Hd. Cap Screw	4	P719
18	Gasket Inlet Bearing Assy.	1	P663
19	Gasket Gooseneck	1	P664

\* ORDER AS REQUIRED

**LIQUIP SALES PTY LTD**  
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 TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

# LIQUIP HOSEREELS



## ER 6 ELECTRIC REWIND CARTWHEEL TYPE

### FEATURES

- Braced frame and stiffened steel cheek-plates for maximum rigidity and long life.
- Shaped goose-neck and roller guides look after the hose.
- Geared-down electric motor\* supplied with switch and circuit breaker to prevent over-loading. \*Specify voltage required.
- Pillow block bearings both sides for minimum friction and wear.
- Drive system includes simple chain adjuster.
- Adjustable disc brake to control over-run on pull-out.
- Hose can be used from either side of the reel.
- Incorporates the standard Liquip hose-reel features: positive lock, double seals, 38mm dia. flow.
- Also available to order as ER-9 to accept 100 metres of hose.

### SPECIFICATIONS

Bronze inlet bearing.

Elastomer seals.

Remainder steel.

Inlet 1½ inch (38mm) female BSP.

Outlet 1½ inch (38mm) male BSP.

### DIMENSIONS

Allow for additional length of inlet pipe on installations.

\*Using 32mm (1¼ inch) hose.

HOSE CAPACITY* METRES	OVERALL HEIGHT	OVERALL WIDTH	OVERALL LENGTH	DRUM LENGTH	DRUM DIA.	CHEEK-PLATE DIA.	WEIGHT kg (NO HOSE)
60	1150	1350	480	150	254	1100	200



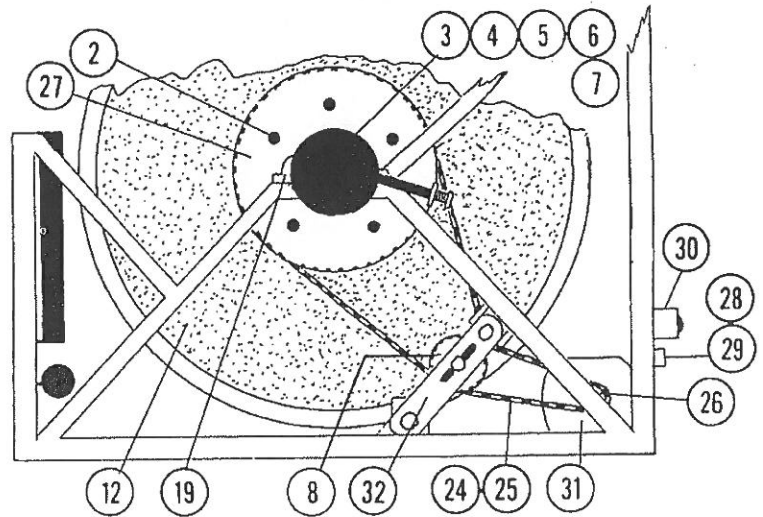
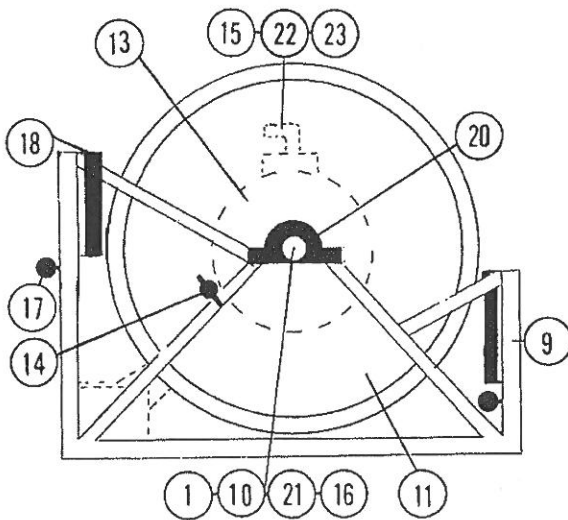
## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND



**ELECTRIC REWIND HOSEREEL**

**ER6**



Item No.	DESCRIPTION	Qty.	Part No.	Item No.	DESCRIPTION	Qty.	Part No.
1	Manifold	1	ER6/1	21	Gasket - Inlet Flange	1	P663
2	Sprocket Spacer	6	ER6/2	22	Gasket - Gooseneck Assy.	1	P664
3	Brake Disc	1	ER6/4	23	3/8"BSW x 1" long Sh.Capscrew	4	P719
4	Nylon Rod	1	ER6/5	24	3/8"Pitch Simplex Chain	8 ft	P1256
5	Adjuster Locknut	1	ER6/6	25	3/8"Pitch Simplex Conn. Chain	2	P1257
6	Adjuster Handle	1	ER6/7	26	9 Tooth Sprocket	1	P1260
7	Adjuster Body	1	ER6/8	27	200 Tooth Sprocket	1	P1261
8	27 x 14 Tooth Sprocket	1	ER6/10	28	SIQ Cover	1	P1331
9	A-Frame	1	HR6/1	29	Q115c Circuit Breaker	1	P1332
10	Inlet Bearing Assy.	1	HR6/10	30	Wilco WFPB-1 Start Switch	1	P1330
11	Side Plate Assy. - Lock Pin Side	1	HR6/12	31	12v Anti-Clockwise Motor	1*	P1335
12	Side Plate Assy. - Plain	1	HR6/15		24v " " "	*	
13	Drum	1	HR6/17	32	Plate Chain Adjuster	1	ER6/12
14	Lockpin Assy.	1	R12/10				
15	Gooseneck Assy.	1	R12/11				
16	Inlet Flange Assy.	1	R12/13				
17	9" x 2" Lemcol Roller	2	P325				
18	16" x 2" Lemcol Roller	4	P326				
19	Pillow Block Bearing SALP 208-24	1	P334				
20	" " " ASAH1 P211-32	1	P335				
					<b>PARTS NOT LISTED</b>		
					3/8" BSW Nyloc Nut	1	P150
					1/2" BSW Nyloc Nut	1	P152
					3/16" BSW x 3/4"		

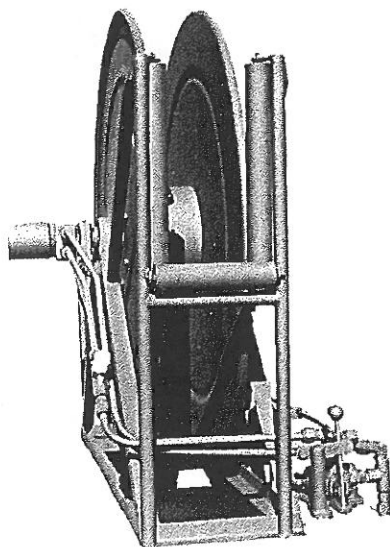
\* ORDER AS REQUIRED

**LIQUIP SALES PTY LTD**

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TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"

# LIQUIP HOSEREELS



## HR 6 HYDRAULIC REWIND CARTWHEEL TYPE

### FEATURES

- Direct drive by reliable hydraulic motor. \*Consult Liquip for your combination pto/pump requirements.
- Supplied complete with hand control, operable from both sides.
- Hose life extended by shaped goose-neck and roller guides.
- Hose can be used from both sides of the reel.
- Stiffened steel cheek-plates and braced frame gives rugged construction.
- Pillow-block bearings on both sides for reduced friction and longevity.
- 38mm bore throughout for maximum flow rate.
- Positive lock.
- Double inlet seals.
- Also available to order as ER-9 to accept 100 metres of hose.

### SPECIFICATIONS

Bronze inlet bearing.

Elastomer lip seals.

Otherwise all steel.

Inlet 1½ inch (38mm) female BSP.

Outlet 1½ inch (38mm) male BSP.

### DIMENSIONS

Allow for additional length of inlet pipe on installations.

\*Using 32mm (1¼ inch) hose.

HOSE CAPACITY* METRES	OVERALL HEIGHT	OVERALL WIDTH	OVERALL LENGTH	DRUM LENGTH	DRUM DIA.	CHEEK-PLATE DIA.	WEIGHT kg (NO HOSE)
60	1150	1350	550	150	254	1100	175

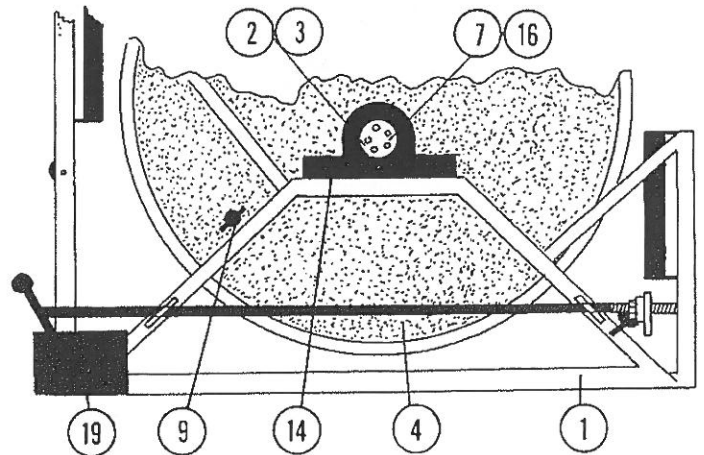
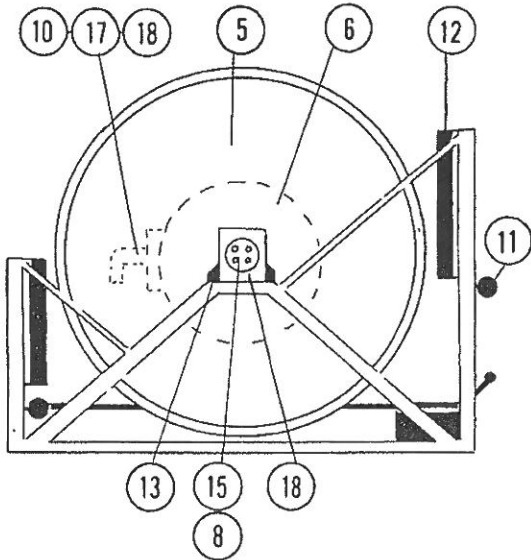


## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

## HYDRAULIC REWIND HOSEREEL

## HR6



Item No.	DESCRIPTION	Qty.	Part No.
1	A-Frame Assy.	1	HR6/1
2	Manifold	1	HR6/5
3	Inlet Bearing	1	HR6/10
4	End Spinning Assy. (Lock Side)	1	HR6/12
5	End Spinning Assy. (Plain Side)	1	HR6/15
6	Drum	1	HR6/17
7	Inlet Flange	1	HR6/18
8	Motor Mtg. Plate	1	HR6/19
9	Lockpin Assy.	1	R12/10
10	Gooseneck Assy.	1	R12/11
11	9" Lemcol Roller	2	P325
12	16" Lemcol Roller	2	P326
13	1½" Pillow Block Brg.	1	P334
14	2" Pillow Block Brg.	1	P335
15	Ross Mac 24.001 Motor	1	P339
16	Inlet Gasket	1	P663
17	Gooseneck Gasket	1	P664
18	1"x3/8" BSW Socket Hd C/S	4	P719
19	Hand Control	1	P324



LIQUIP SALES PTY LTD

212-216 RAILWAY TERRACE

GUILDFORD

SYDNEY

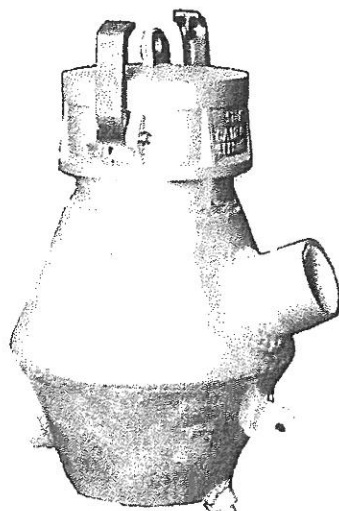
N.S.W. 2161

AUSTRALIA

TELEPHONE 02 682 1244 (6 LINES)

TELEGRAMS "LIQUIP"

# LIQUIP PUMPS & METERING EQUIPMENT



LS 150/S    LS 200/S  
 LS 250/S (small)    LS 250/S (large)  
 LS 300/S    LS 400/S

## STRAINERS — SCREWED

**Protect your Pump**

### FEATURES

- Light-weight plated steel construction.
- Compact yet provides more than adequate flow area.
- Unique closure. Inspection and cleaning require no spanners, just remove the camlock cap.
- Any size mesh supplied, in brass or stainless steel.
- Drain plug provided.
- Standard BSP screwed mounting.

### SPECIFICATIONS

Plated steel body and spring.

Aluminium camlock cap.

Basket in brass as standard, stainless steel mesh to order.

### DIMENSIONS

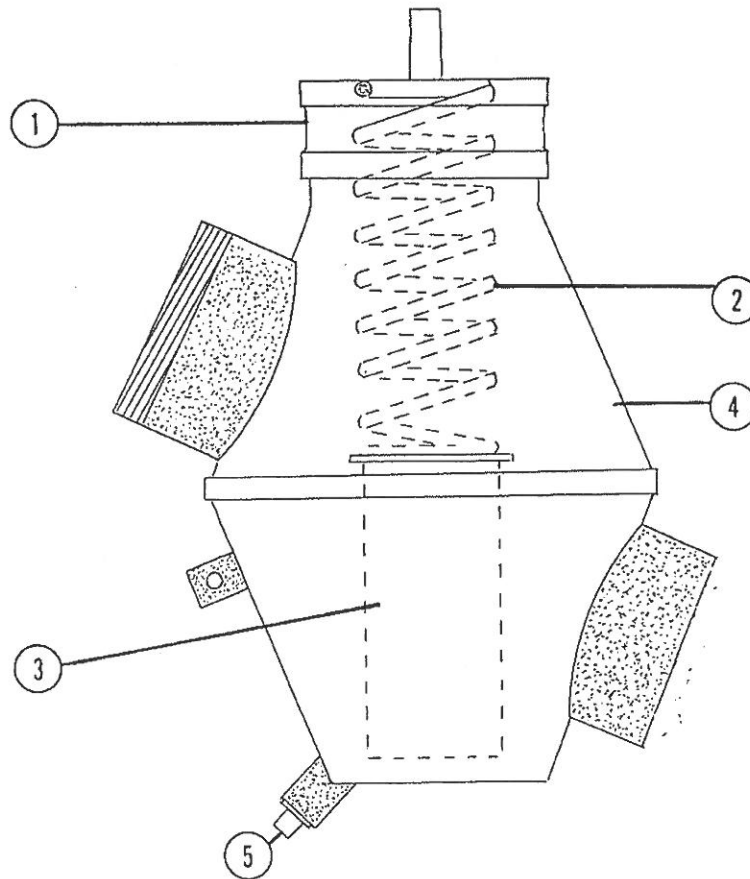
MODEL	SIZE	O.A. LENGTH	HEIGHT	INLET	OUTLET	WEIGHT kg
LS150/S	38	229	254	1 ½ BSP Male	1 ½ BSP Female	3.0
LS200/S	51	229	254	2 BSP Male	2 BSP Female	3.1
LS250/S Small	63	254	254	2 ½ BSP Male	2 ½ BSP Female	3.2
LS250/S Large	63	330	457	2 ½ BSP Male	2 ½ BSP Female	7.6
LS300/S	76	343	457	3 BSP Male	3 BSP Female	8.1
LS400/S	102	356	457	4 BSP Male	4 BSP Female	8.9



## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
 DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

## LINE STRAINER LS Series

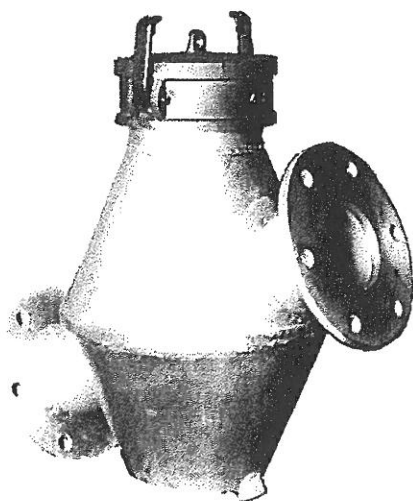


Item No.	DESCRIPTION	Qty.	MODEL					
			38mm LS150S	50mm LS200S	63mm LS250S (Small)	63mm LS250S (Large)	76mm LS300S	102mm LS400S
1	Camlock Cap	1	CLC3.0	CLC3.0	CLC3.0	CLC4.0	CLC4.0	CLC4.0
2	Spring	1	P317	P317	P317	P318	P318	P318
3	Basket *	1	LS-S	LS-S	LS-S	LS-L	LS-L	LS-L
4	Body Assembly	1	LS150/ SA	LS200/ SA	LS250/ SA	LS250/ SA/L	LS300/ SA/L	LS400/ SA/L
5	Drain Plug	1	P612	P612	P612	P614	P614	P614

\* STATE MESH REQUIRED WHEN ORDERING

**LIQUIP SALES PTY LTD**  
 212-216 RAILWAY TERRACE GUILDFORD SYDNEY N.S.W. 2161 AUSTRALIA  
 TELEPHONE 02 682 1244 (6 LINES) TELEGRAMS "LIQUIP"

# LIQUIP PUMPS & METERING EQUIPMENT



LS 150/F    LS 200/F  
 LS 250/F (small)    LS 250/F (large)  
 LS 300/F    LS 400/F

## STRAINERS — FLANGED

**Protect your Pump**

### FEATURES

- Easiest cleaning method available. No spanners, simply remove the camlock cap to extract the strainer basket.
- Lightweight and compact.
- High flow rate from generous strainer dimensions.
- Specify strainer material and mesh size.
- Drain plug standard.
- Matching flanges available.

### SPECIFICATIONS

Plated steel body and spring.

Aluminium camlock cap.

Basket in brass as standard, stainless steel mesh to order.

### DIMENSIONS

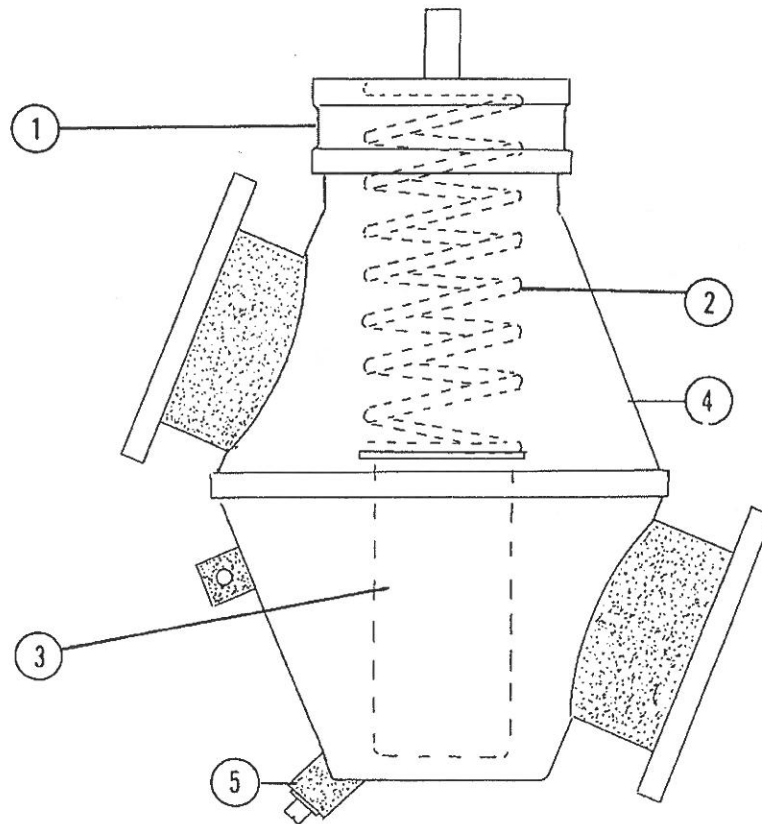
MODEL	SIZE	O.A. LENGTH	HEIGHT	FLANGE O/D	No. HOLES	HOLE SIZE	PCD	WEIGHT kg
LS150/F	38	254	290	102	6	8.5	86	3.0
LS200/F	51	254	290	102	6	8.5	86	3.2
LS250/F Small	63	254	290	140	6	11	121	3.4
LS250/F Large	63	330	457	143	8	11	124	8.6
LS300/F	76	356	457	143	8	11	124	9.1
LS400/F	102	356	457	168	8	11	149	9.9



## LIQUIP SALES PTY. LTD.

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 DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

## LINE STRAINER LF series



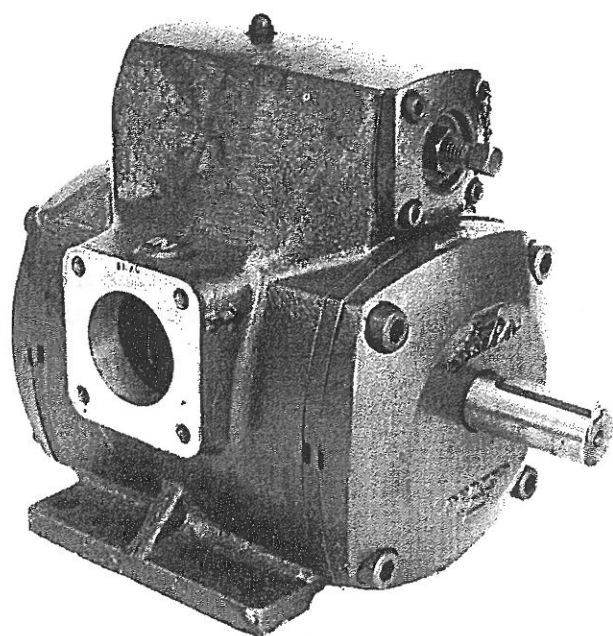
Item No.	DESCRIPTION	Qty.	MODEL					
			1½" LS150F	2" LS200F	2½" LS250F (Small)	2½" LS250F (Large)	3" LS300F	4" LS400F
1	Camlock Cap	1	CLC3.0	CLC3.0	CLC3.0	CLC4.0	CLC4.0	CLC4.0
2	Spring	1	P317	P317	P317	P318	P318	P318
3	Basket*	1	LS-S	LS-S	LS-S	LS-L	LS-L	LS-L
4	Body Assembly	1	LS150/FA	LS200/FA	LS250/FA	LS250/FA/L	LS300/FA	LS400/FA
5	Drain Plug	1	P612	P612	P612	P614	P614	P614
6	Matching Flange	M/St.	—** R12/31	ITV2/2	ITV2/2/2½	ITV2/2/2½	BF3/1	BF4/1
7	Gasket		—** P663	P665	P655/2½	P655/2½	P656	P657

\* State mesh size required when ordering.

\*\* Order as required.

	<b>LIQUIP SALES PTY LTD</b>					
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	TELEPHONE 02 682 1244 (6 LINES)			TELEGRAMS "LIQUIP"		

# LIQUIP PUMPS & METERING EQUIPMENT



## PUMPS

- CENTRIFUGAL
- GEAR
- VANE
- PTO DRIVE
- ELECTRIC MOTOR
- HYDRAULIC MOTOR
- PETROL OR DIESEL ENGINE
- HANDLE PRODUCTS FROM WATER THROUGH PETROLEUM DERIVATIVES TO CHEMICALS

Liquip specialise in designing and supplying pumping equipment from 20l/min. to 1000l/min. for a variety of liquids.

All units are supplied ready flame-proofed where necessary.

The type of pump chosen will depend on your needs.

CONSULT US FOR YOUR REQUIREMENTS.

Strainers, pressure relief valves, supply valves and motor controls also available. Single or banked truck-mounted pumps a speciality — direct pto drive or pto pump hydraulic drive with brake interlocks.

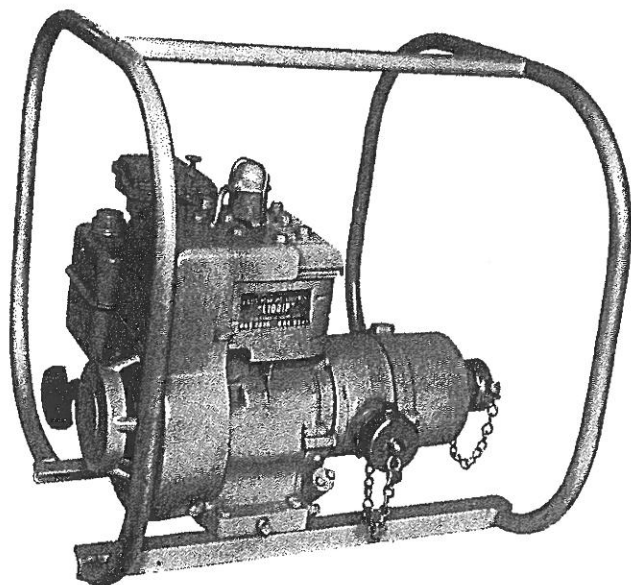


## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND



# LIQUIP PUMPS & METERING EQUIPMENT



## POWER PACKS

**A convenient, compact and light-weight, self-contained pumping system**

Standard unit comprises 4 hp Briggs & Stratton engine with direct coupled positive displacement 38mm turbodyne pump.

- 200 litres/minute.
- Positive displacement—no priming required.
- Mechanical seal.
- Flame-proofed for class 3.3 products.
- Built-in filter and by-pass.
- Protective cradle withstands rough handling.
- 1½ inch (38mm) male BSP threads on suction and discharge, or fit camlocks of your choice.
- Weight only 24kg. Size 500mm cube.


Variants available as required:—

Petters diesel engine for pumping petrol — weight 50kg.

With additional Liquip strainer for dirty fluids.

With flame-proof electric motor.

With other types of pump;

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# LIQUIP PUMPS & METERING EQUIPMENT

## DRUM PUMPS

### ROTARY VANE



#### RP-100 (large)

24l/min.

6.35kg

#### RP-90 (small)

20l/min.

4.3kg

Being rotary, both pumps are extremely easy to operate. They are reversible and can also be set to siphon after a few revolutions.

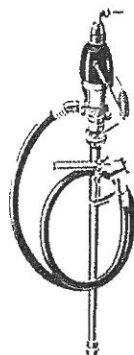
All Liquip drum pumps have full length steel suction pipes with collars to suit standard 200l drums. The collar is adjustable to allow use in smaller drums.

### ROTARY ROOTS TYPE RP99Z

100l/min.

7kg

Very high capacity Roots pump with gear-drive in oil bath. Includes strainer in suction pipe.

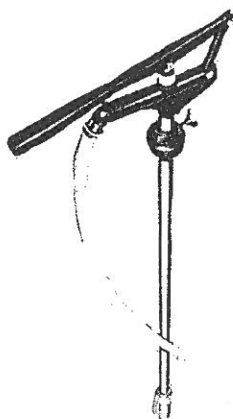


### AIR POWERED CENTRIFUGAL CPA100

70l/min.

7kg

Operates on normal factory compressed air. Safe for flammable liquids, gives maximum delivery head of 5m. Pumps anything from petrol to heavy lube oil.



### RECIPROCATING PISTON AP80

20l/min.

2kg

An inexpensive light weight pump for less arduous conditions. Suitable for petroleum products. Can be set to siphon after a few strokes.

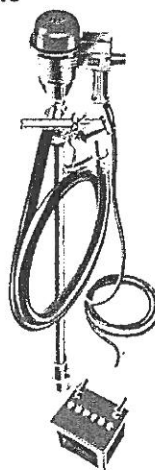
### 12v ELECTRIC CENTRIFUGAL CPA31

40l/min.

6kg

Similar to CPA-100 but with 12V D.C. 10 amp motor.

Ideal for remote areas — comes complete with discharge hose and nozzle. Not to be used for pumping petrol.



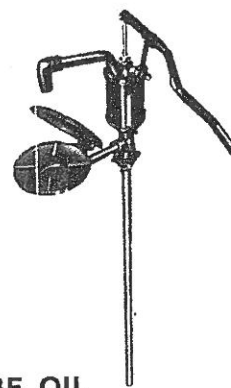
### LUBE OIL ½ LITRE/STROKE MP50

½ litre/stroke

± .03l

6kg

A piston-type pump for dispensing lube oils. The special drip tray incorporates a strainer and any spillage is returned directly to the drum.

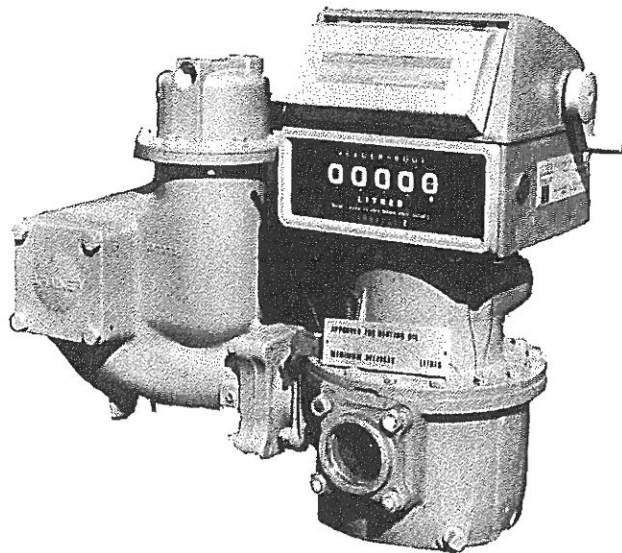


## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

6/8

# LIQUIP PUMPS & METERING EQUIPMENT



## METERS

**We Supply  
Service  
Calibrate  
meters for all purposes**

<b>SIZES</b>	From 25mm to 300 mm.
<b>CAPACITIES</b>	From 20l/min. to 5000l/min.
<b>PRESSURES</b>	Up to 10,000kPa (1450psi).
<b>PRODUCTS</b>	Water, all petroleum products, LPG, chemicals, starches and other food products.
<b>VARIANTS</b>	Air eliminators, ticket-printer heads, pre-set stop valves, remote read-out, temperature compensation, drum-fillers, etc.

**CONSULT US FOR YOUR METER REQUIREMENTS AND SERVICE**

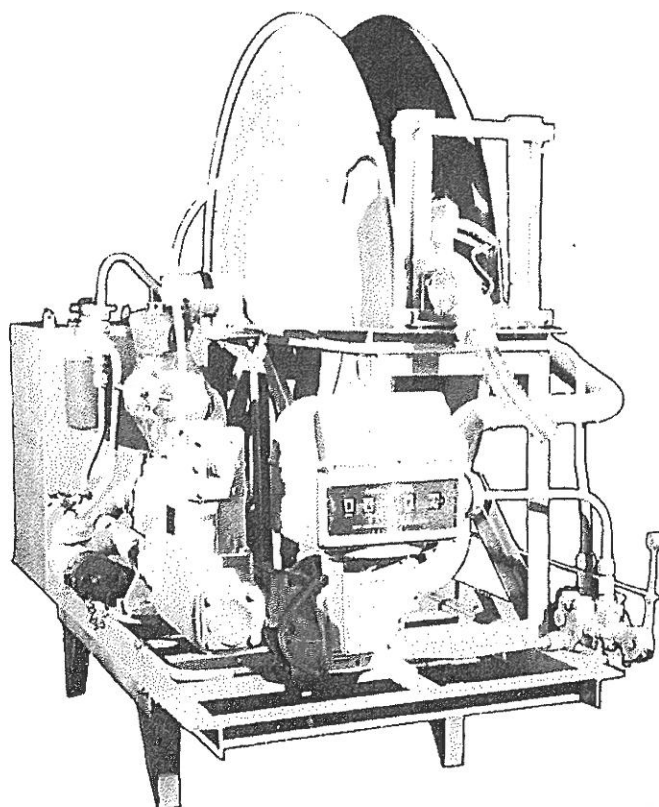
Exchange registers are available for most meters.

We are approved calibrators and can improve your system with our specialised equipment.

We are happy to assist with system design and layout.

**LIQUIP SALES PTY LTD**  
212-216 RAILWAY TERRACE GUILDFORD SYDNEY N.S.W. 2161 AUSTRALIA  
TELEPHONE 02 682 1244 (6 LINES) TELEGRAMS "LIQUIP"

# LIQUIP PUMPS & METERING EQUIPMENT



## DISPENSING UNITS

Specialised equipment for easy and accurate delivery of liquid products from road tanker to the consumer's tank.

Suitable for petrol, distillate, kerosene, heating oil and lubricating oil. Other products on request.

ILLUSTRATED is a packaged unit with hydraulic-powered pump, hydraulic rewind hose reel, meter and hose with delivery nozzle. This is a lift-on/lift-off dispenser using a truck pto pump as source of power.

SIMILAR units can be manufactured with electric power or with petrol or diesel engines to be completely self-contained.

CHASSIS-MOUNTED units can be built on to your truck, either side-mounting (drum type hose-reel) or behind the cab or tank (cartwheel type hose-reel). Typically the pump or pumps are shaft driven by pto and the hose-reels are electric or manual rewind.

One system will be the best for you — we are happy to assist.

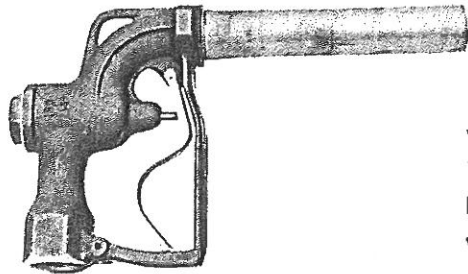
NATIONAL STANDARDS COMMISSION APPROVAL is required for measuring systems for use in trade. Liquip holds several approvals for the varying types of meter and products and will obtain new approvals as necessary. It is illegal to use a non-approved system for trade.



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# LIQUIP PUMPS & METERING EQUIPMENT

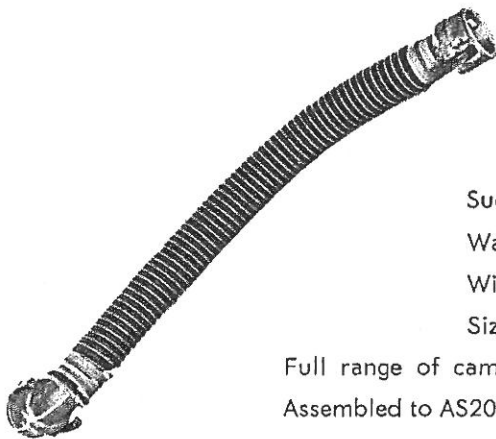


## NOZZLES

We stock nozzles from 19mm simple farm trade type through to 50mm automatic. Aviation nozzles are supplied to order.

Hose-tails are shown below.

We also repair all types of nozzles.



## HOSES — MADE TO ORDER

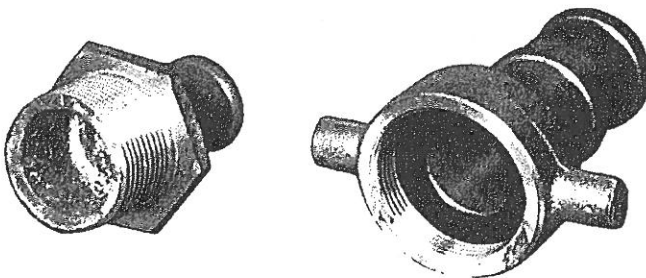
Suction — delivery.

Water — petroleum — chemical.

Wire-whipped or "Band-it".

Sizes 19mm dia. to 150mm.

Full range of camlock couplings, hose tails or fire brigade "Storz" couplings.  
Assembled to AS2016 standard for flammable liquids.



## SMALL BORE HOSE FITTINGS

MALE BSP THREAD TO HOSE SHANK

Sizes 1 inch (25mm) male BSP to 3 inch (76mm) male BSP.

Fit all nozzles to suit 25mm through to 76mm dia. smooth bore hose.

NUTS AND TAILS TO HOSE SHANK

Sizes 1 inch (25mm) female BSP to 3 inch (76mm) female BSP.

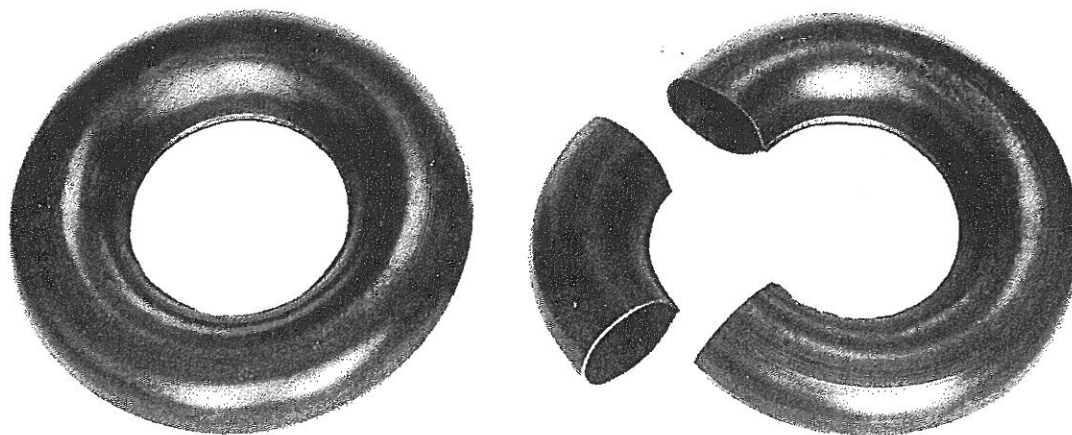
Specially suited to Liquip hose-reels for 25mm through to 76mm smooth bore hose.

**LIQUIP SALES PTY LTD**

212-216 RAILWAY TERRACE    GUILDFORD    SYDNEY    N.S.W. 2161    AUSTRALIA

LIQUIP    TELEPHONE 02 682 1244 (6 LINES)    TELEGRAMS "LIQUIP"

# LIQUIP PUMPS & METERING EQUIPMENT



## PIPE BENDS

Make complicated pipe-work simple. Just cut the pipe bend to the required angle and butt-weld to the adjoining pipe ends. Minimises friction losses on corners, reduces working time, eliminates unsightly "lobster-backs" or heating and bending.

Use on PRODUCT LINES — EXHAUSTS — AIR INTAKES — VENTILATION.

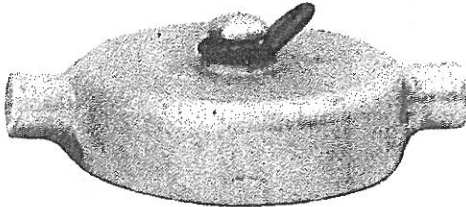
PART No.	BEND O/DIA.	BEND I/DIA.	PIPE SIZE O/DIA.	MATERIAL GAUGE		
				ALUM.	M/ST.	316 ST. ST. 90° BENDS ONLY
PB1.5	178	102	38	—	1.6mm 16swg	1.6mm 16swg
PB2.0	197	95	51	3.25mm 10swg	1.6	1.6
PB2.5	305	178	63	3.25	2.0	1.6
PB3.0	305	152	76	3.25	2.0	1.6
PB3.5	305	127	89	3.25	2.0	—
PB4.0 Small	330	127	102	3.25	2.0	1.6
PB4.0 Large	508	305	102	—	—	—
PB4.25	343	254	108	3.25	—	—
PB4.5	483	254	114	—	2.0	—
PB5.0	533	280	127	—	2.0	2.0mm 14swg
PB5.75	387	295	146	3.25	—	2.0



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AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND

# LIQUIP PUMPS & METERING EQUIPMENT



## SCREWED CAPS

Aluminium or bronze dust-caps threaded female BSP.

Full-face buna seal.

Supplied complete with chain link.

Integral arms for use without spanners or tools.

Sizes —

SC 1.5 — 1½ inch (38mm) BSP

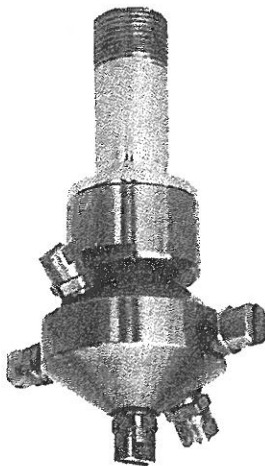
SC 2.0 — 2 inch (51mm) BSP

SC 2.5 — 2½ inch (63mm) BSP

SC 3.0 — 3 inch (76mm) BSP

SC 4.0 — 4 inch (102mm) BSP

Specify suffix A for aluminium, suffix B for brass.



## TANK SPRAY-CLEANER


Pressure of the cleaning fluid rotates the cleaner head so that piercing jets contact all parts of the tank interior.

All stainless steel.

Suitable for water or wet steam.

Simple to install — either permanently or on a portable lance.

OVERALL LENGTH	MAX. DIA.	PRESSURE REQUIRED	FLOW RATE	INLET SIZE	JETS FOR WATER	JETS FOR STEAM
150	90	250kPa (36psi) min.	90l/min. (20gpm)	Male ¾BSP (19mm)	80/60	80/40



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212-216 RAILWAY TERRACE    GUILDFORD    SYDNEY    N.S.W. 2161    AUSTRALIA

TELEPHONE 02 682 1244 (6 LINES)      TELEGRAMS "LIQUIP"



# LIQUIP QUICK COUPLERS

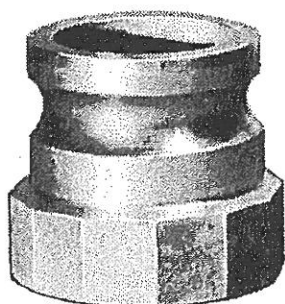
## CAMLOCKS

Quick-release camlock couplings have become by far the most common type in Australia. All couplings manufactured to the NATO standard are interchangeable, even between different manufacturers.

Our store has one of the biggest ranges of camlocks in stock in Australia. We also carry the less common Australian standard.

SPECIFY ALUMINIUM, STEEL, BRONZE, STAINLESS STEEL OR POLYPROPYLENE.

### Camlock Adaptor to Female BSP Thread



MC 0.5 /F 0.5	13mm
MC 0.75/F 0.75	19mm
MC 1.0 /F 1.0	25mm
MC 1.25/F 1.25	32mm
MC 1.5 /F 1.5	38mm
MC 2.0 /F 2.0	51mm
MC 2.5 /F 2.5	63mm
MC 3.0 /F 3.0	76mm
MC 4.0 /F 4.0	102mm
MC 6.0 /F 6.0	152mm

Interchangeable with 633A and NA\*—1. Also available ex-stock in non-matching sizes, e.g. MC 2.0/F3.0 MC 3.0/F 2.5, etc.

### Camlock Dust Caps



CLC 0.5	13mm
CLC 0.75	19mm
CLC 1.0	25mm
CLC 1.25	32mm
CLC 1.5	38mm
CLC 2.0	51mm
CLC 2.5	63mm
CLC 3.0	76mm
CLC 4.0	102mm
CLC 6.0	152mm

Interchangeable with 634B and NA\*—2. Also available with locking levers. Add suffix K.



### Camlock Coupling to Male BSP Thread

FC 0.75/M 0.75	19mm
FC 1.0 /M 1.0	25mm
FC 1.25/M 1.25	32mm
FC 1.5 /M 1.5	38mm
FC 2.0 /M 2.0	51mm
FC 2.5 /M 2.5	63mm
FC 3.0 /M 3.0	76mm
FC 4.0 /M 4.0	102mm

Interchangeable with 633B and NA\*—3.



### Camlock Double Adaptor

MC 1.0/MC 1.0	25mm
MC 1.5/MC 1.5	38mm
MC 2.0/MC 2.0	51mm
MC 2.5/MC 2.5	63mm
MC 3.0/MC 3.0	76mm
MC 4.0/MC 4.0	102mm

Interchangeable with 633A and NA\*—4.

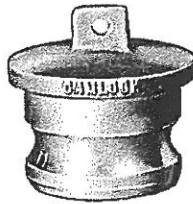


## LIQUIP SALES PTY. LTD.

AUSTRALIA'S LEADING MANUFACTURER OF TANK AND TANKER EQUIPMENT  
DISTRIBUTORS THROUGHOUT AUSTRALIA AND NEW ZEALAND



# LIQUIP QUICK COUPLERS



## Camlock Dust Plug

CP 1.0	25mm
CP 1.25	32mm
CP 1.5	38mm
CP 2.0	51mm
CP 2.5	63mm
CP 3.0	76mm
CP 4.0	102mm
CP 6.0	152mm

Interchangeable  
with 634A  
and NA\*—8.

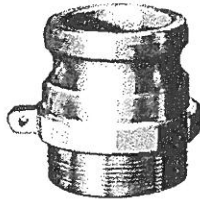
## Camlock Coupling to Smooth Bore Hose



FC 0.5 /H 0.5	13mm
FC 0.75/H 0.75	19mm
FC 1.0 /H 1.0	25mm
FC 1.25/H 1.25	32mm
FC 1.5 /H 1.5	38mm
FC 2.0 /H 2.0	51mm
FC 2.5 /H 2.5	63mm
FC 2.5 /H 2.0	63mm
FC 2.5 /H 1.5	63mm
FC 3.0 /H 3.0	76mm
FC 4.0 /H 4.0	102mm
FC 6.0 /H 6.0	152mm

Interchangeable  
with 633C  
and NA\*—9.

## Camlock Adaptor to Male BSP Thread



MC 0.5 /M 0.5	13mm
MC 0.75/M 0.75	19mm
MC 1.0 /M 1.0	25mm
MC 1.25/M 1.25	32mm
MC 1.5 /M 1.5	38mm
MC 2.0 /M 2.0	51mm
MC 2.5 /M 2.5	63mm
MC 3.0 /M 3.0	76mm
MC 4.0 /M 4.0	102mm
MC 6.0 /M 6.0	152mm

Interchangeable  
with 633F  
and NA\*—10.

Also available  
ex-stock in non-  
matching sizes,  
e.g. MC 3.0/M 2.0  
MC 2.5/M 3.0, etc.

## Camlock Hydrant Adaptor to Female BSP Thread



MCH 2.0/F 2.0	51mm
MCH 2.5/F 2.0	63mm
MCH 3.0/F 2.0	76mm
MCH 2.5/F 3.0	63mm
MCH 3.0/F 3.0	76mm

Interchangeable  
with 633HA,  
NA\*—11 and NA\*—12.

## 68° Camlock Coupling to Smooth Bore Hose



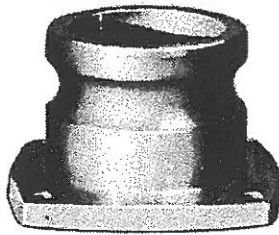
FC 2.0/H 2.0	68°	51mm
FC 2.5/H 2.5	68°	63mm
FC 3.0/H 3.0	68°	76mm
FC 4.0/H 4.0	68°	102mm

Interchangeable  
with 633 BC  
and NA\*—13

	<b>LIQUIP SALES PTY LTD</b>			
	212-216 RAILWAY TERRACE	GUILDFORD	SYDNEY	N.S.W. 2161 AUSTRALIA
	TELEPHONE 02 682 1244 (6 LINES)			TELEGRAMS "LIQUIP"

## LIQUIP QUICK COUPLERS

### Camlock Adaptor to Square Flanges



MC 2.0/SF	51mm	4 holes 8mm dia. on	76mm square
MC 2.5/SF	63mm	4 holes 8mm dia. on	76mm square
MC 3.0/SF	76mm	4 holes 8mm dia. on	76mm square
MC 4.0/SF	102mm	4 holes 8mm dia. on	102mm square

### Camlock Coupling to Female BSP Thread



FC 0.5 /F 0.5	13mm
FC 0.75 /F 0.75	19mm
FC 1.0 /F 1.0	25mm
FC 1.25 /F 1.25	32mm
FC 1.5 /F 1.5	38mm
FC 2.0 /F 2.0	51mm
FC 2.5 /F 2.5	63mm
FC 3.0 /F 3.0	76mm
FC 4.0 /F 4.0	102mm
FC 6.0 /F 6.0	152mm

Interchangeable  
with 633D  
and NA\*—20.

### Camlock Adaptor to Smooth Bore Hose



MC 0.75/H	0.75	19mm
MC 1.0 /H	1.0	25mm
MC 1.25/H	1.25	32mm
MC 1.5 /H	1.5	38mm
MC 2.0 /H	2.0	51mm
MC 2.5 /H	2.5	63mm
MC 3.0 /H	3.0	76mm
MC 4.0 /H	4.0	102mm
MC 6.0 /H	6.0	152mm

Interchangeable  
with 633E  
and NA\*—22.

### Basic Camlock Adaptors

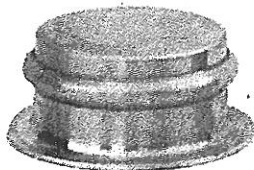
A male camlock supplied ready to weld to a tank, flange or pipe. Available as spinning or solid-machined in aluminium, mild steel or stainless steel.



MC 2/1	51mm spun mild steel
MC 2.5/1	63mm spun mild steel
MC 3.0/1	76mm spun mild steel
MC 4.0/1	102mm spun mild steel
MC 3/1M	76mm machined mild steel
MC 4/1M	102mm machined mild steel
MC 3/1A	76mm machined aluminium
MC 4/1A	102mm machined aluminium

Add suffix "S"  
for stainless steel

### Snap-on Caps



A simple spun-aluminium dust excluder which pushes over the male camlock and locates on an o-ring. Not to be used with dangerous or flammable liquids.

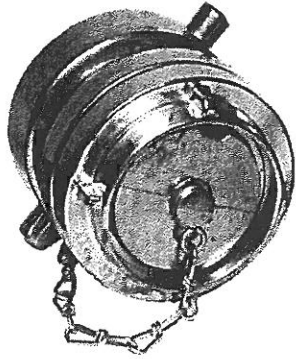
CDC 2.0	52mm. Fits all MC2 camlocks.
CDC 2.5	63mm. Fits all MC 2.5 camlocks.



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# LIQUIP QUICK COUPLERS



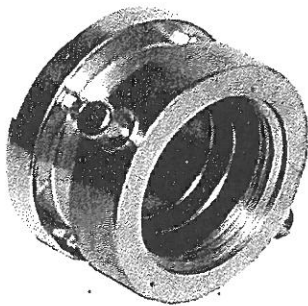
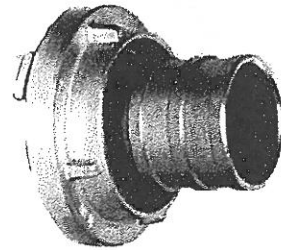
## STORZ FIRE BRIGADE COUPLINGS

Storz couplings have been in use for many years in Europe and they have been adopted by many Australian Fire Brigades.

They have the advantage of being uniform (no male or female — any two couplings of the same size will match) and quick to release.


Pressure capability is from vacuum up to 4800kPa (700psi).

Materials are aluminium, brass, or a combination.



TYPE	STORZ SIZE mm									
	19	25	38	52	65	90	100	125	150	
Hose Coupling	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Cap	—	—	—	✓	✓	✓	✓	✓	✓	
Storz/Female BSP	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Storz/Male BSP	✓	✓	✓	✓	✓	✓	—	—	—	
Storz/63mm Female Fire Brigade Thread	—	—	✓	—	✓	✓	—	—	—	
Storz/63mm Male Fire Brigade Thread	—	—	✓	—	✓	✓	—	—	—	
Storz/126mm Female Fire Brigade Thread	—	—	—	—	—	—	—	—	—	
Storz/126mm Male Fire Brigade Thread	—	—	—	—	—	—	—	✓	✓	

✓ Means available ex-stock. Other types available to order.



**LIQUIP SALES PTY LTD**  
 212-216 RAILWAY TERRACE GUILDFORD SYDNEY N.S.W. 2161 AUSTRALIA  
 TELEPHONE 02 682 1244 (6 LINES) TELEGRAMS "LIQUIP"

# LIQUIP TRUCK EQUIPMENT & SERVICES

Our large modern factory and workshops are fully equipped for tanker fit-out, vapour recovery conversion and equipment repair.

Below are examples of completed vehicles with notes on various features.



Aluminium tank mounted by Liquip with pumps and dispensing equipment.

## Mudguards, Brackets and Mudflaps

Single or tandem mudguards. We can supply, or also mount on to your vehicle with jigs to ensure correct clearances.

- PVC, single only in a wide range of colours. Simple to mount in multiples for bogies or tri-axles.
- Ribbed aluminium, single or tandem.
- Fibreglass, single or tandem.
- Plus cast brackets and mudflaps with backing strips.

## Drum-trays

Full width, either four or eight drum capacity.

## Dispensing Equipment

Mounted on chassis to your specification.



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# LIQUIP TRUCK EQUIPMENT & SERVICES



Specialised lube oil delivery vehicle. 12,000l tank on 4-axle chassis. Five completely separate pumps and metering systems, one for each compartment with a different grade of oil. Hose-reels are electric rewind.

## Tank Mounting and Axle Loading

Tank mounts must comply with AS2016 and be approved by the appropriate government department. Axle loads must comply with local requirements.

Liquip supply the mountings and position the tank not only within the regulations but also to give years of trouble-free operation.

## Shrouding of Exhaust Systems and Electrical Wiring

The danger of fire is ever-present with road tankers, and exhaust systems must be shrouded to prevent product spillage reaching hot areas. Similarly all wiring must be conduited and safety switches and engine stops provided.

We can provide a package deal on your complete vehicle fit-out, from chassis through to registration.

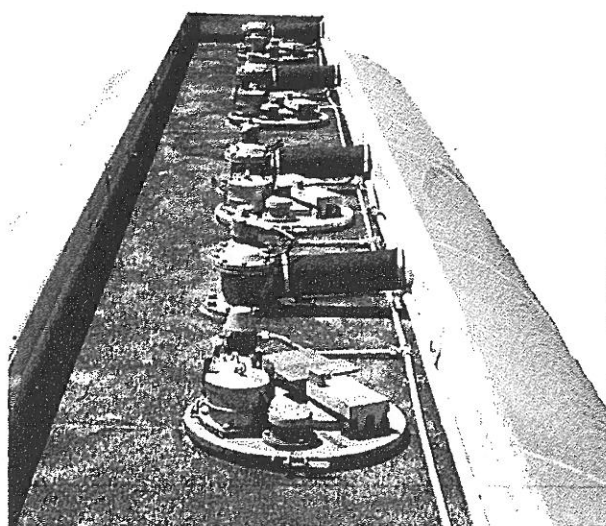
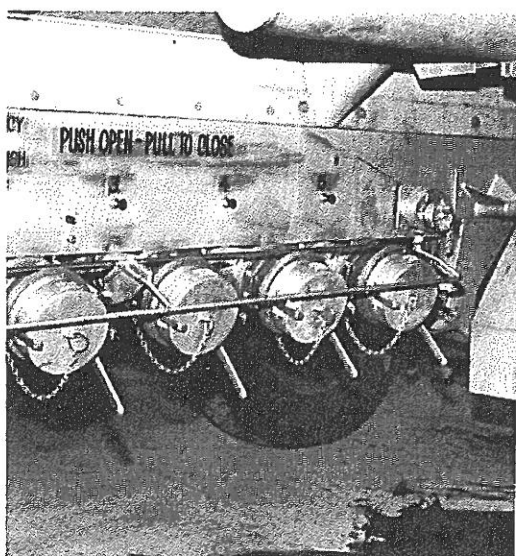
## Equipment Repair and Conversion

Our drive-in workshop offers a fast service to get your vehicle back on the road. Hatch, valve and vent repairs — piping modifications — leaks — all can be fixed at Liquip.

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# LIQUIP TRUCK EQUIPMENT & SERVICES



Conversion of a tanker to vapour recovery system.

The walkway shows addition of air-operated camlift and vapour vent with over-fill protection device. The outlet pipes at ground level have been fitted with API adaptors, and the push-button air operating knobs and electrical connection for over-fill protection can also be seen. The 'gate' applies the trailer brakes.

A blanking kit is available for tankers which may require conversion at a later date. The kit allows later fitment of hardware without the necessity for hot-work on the tank.

## VAPOUR RECOVERY CONVERSIONS

Your existing tanker can be converted in a matter of days to your individual specification. The air control circuit can be set up to provide a variety of functions such as:—

- Gate over API adaptors operates parking brake and opens all internal valves and vents when gate is lifted.
- Gate operates parking brake but individual push buttons control each compartment.
- Individual push/pull buttons but no brake interlock.
- Individual push-pull buttons at both ground level and on the walk-way for dual operation.
- Warning light in cab for "hose still connected" — can be incorporated with brake interlock.
- Consoles to hold air and overfill protection controls and ancillaries.  
... plus other variations to your choice.



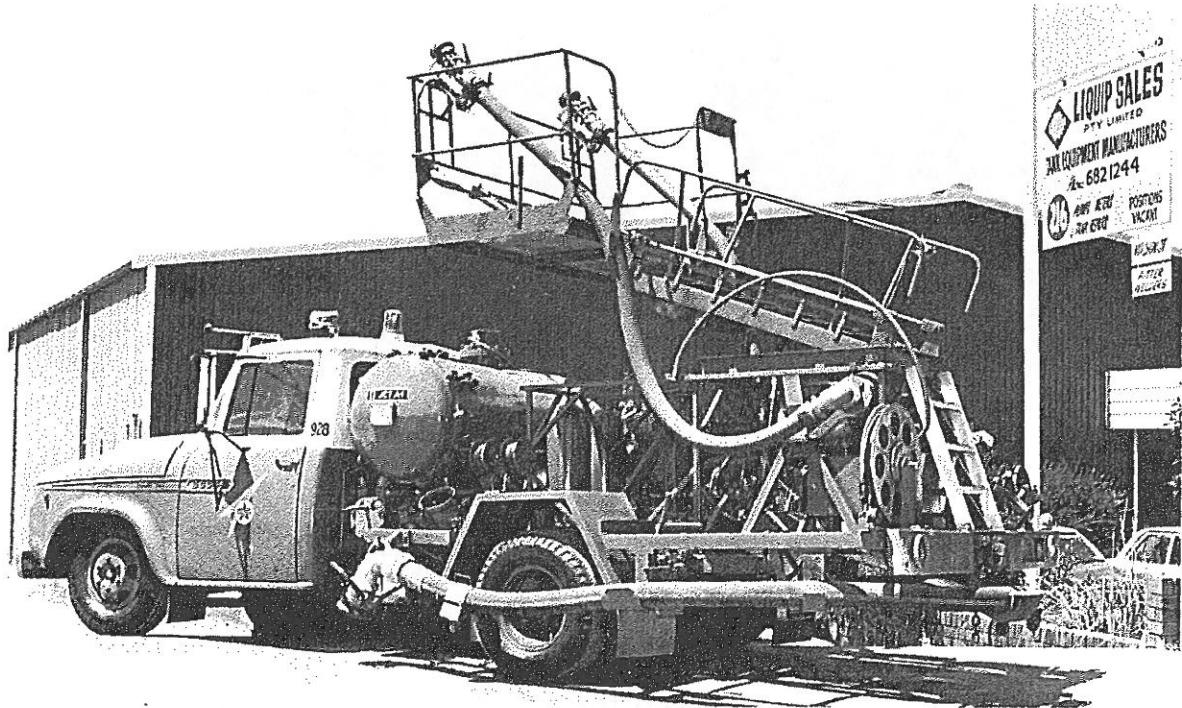
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# LIQUIP TRUCK EQUIPMENT & SERVICES

Aviation hydrant refueller converted  
for use on high-flow international  
airport service.



## AVIATION REFUELLERS

Modification and repair of all types of hydrant-carts and aviation tankers.

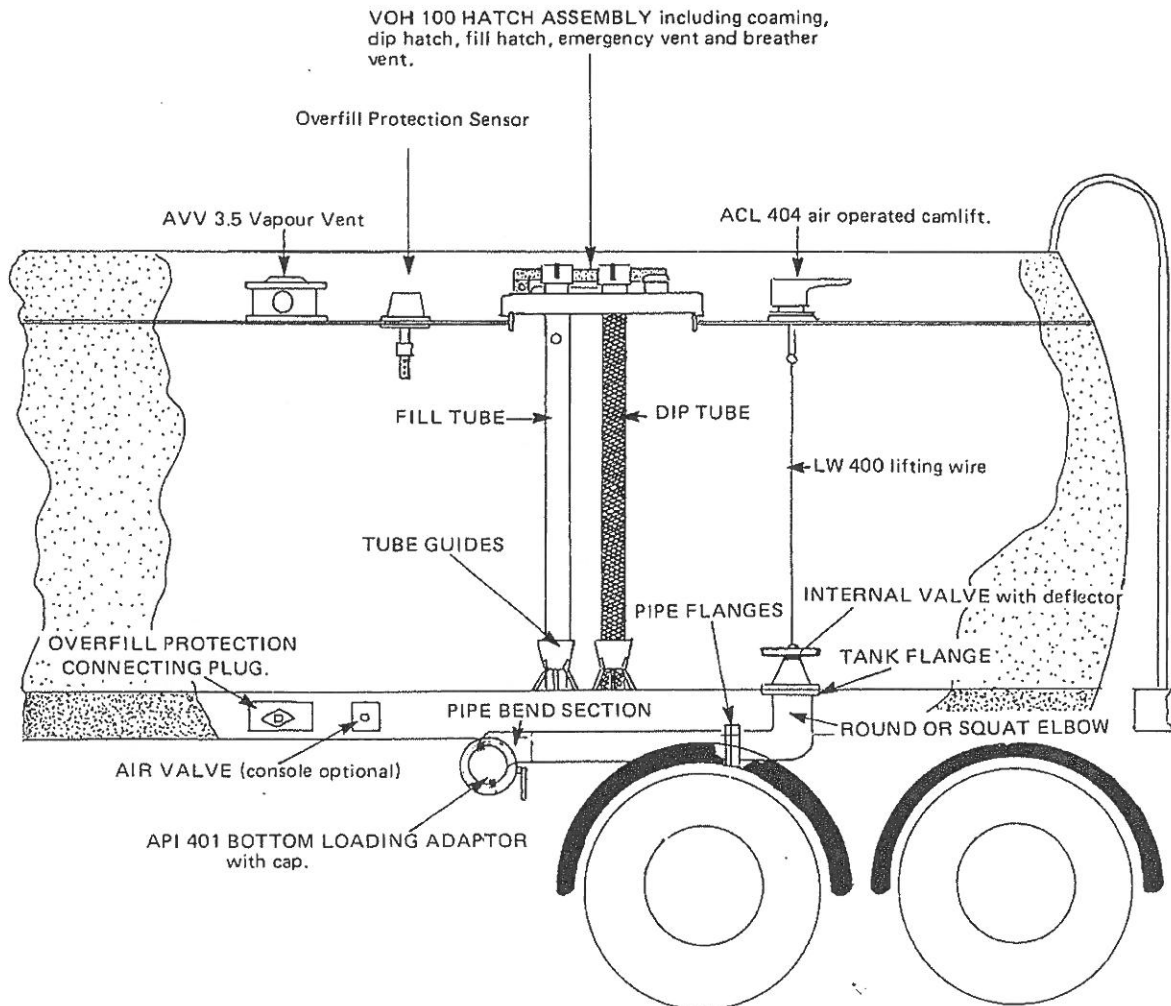
A specialised field requiring the highest standard of workmanship and complex control systems.

If you are modernising, repairing or having functional problems, Liquip will be happy to discuss your requirements.

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TYPICAL **LIQUIP** TANK LAYOUT

## PETROLEUM TANKER WITH VAPOUR RECOVERY SYSTEM

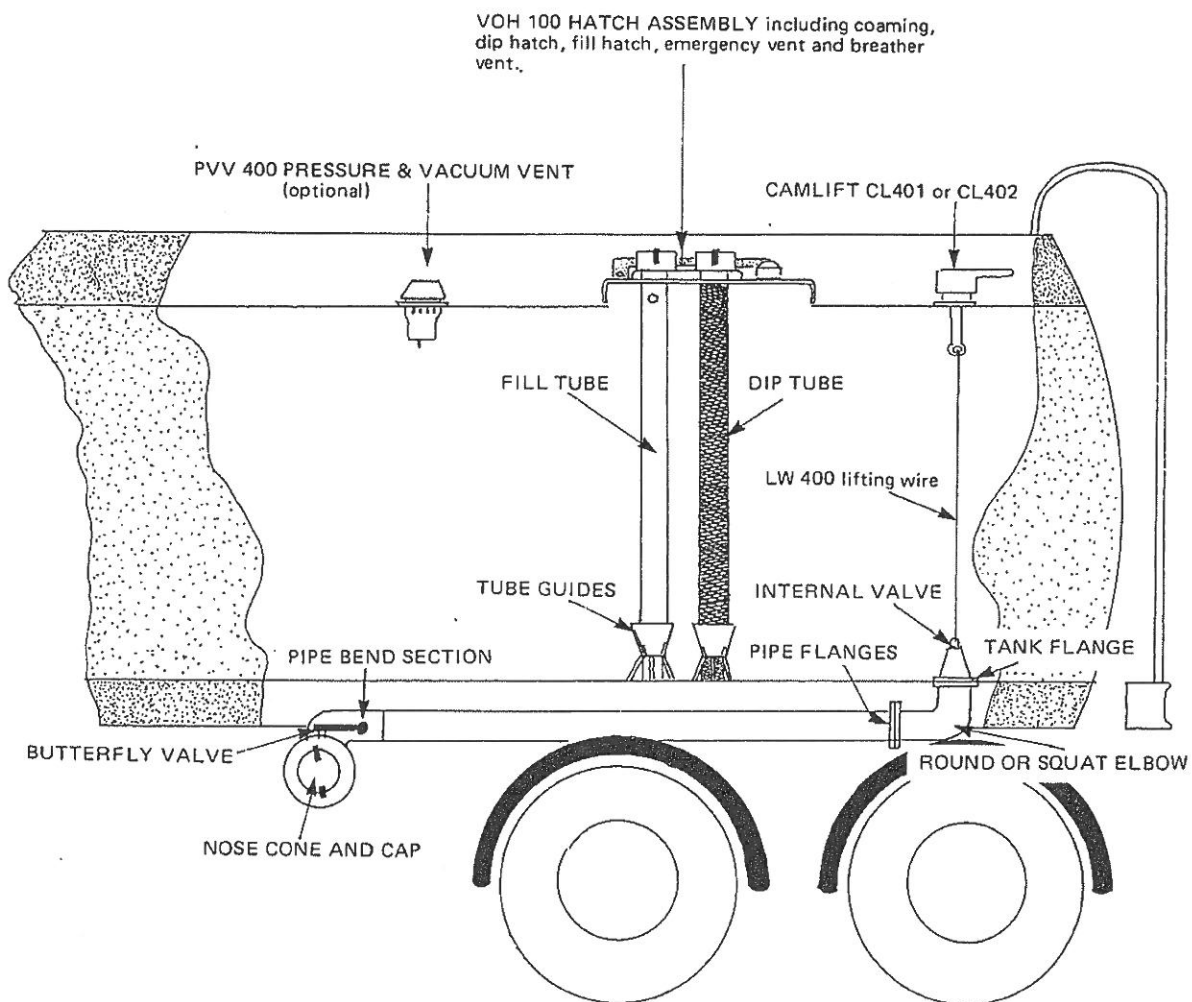


The diagram shows a tanker compartment fully equipped for vapour recovery. Liquip can also part-convert your tanker so that it is suitable for bottom-loading but without going to full vapour recovery.

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## TYPICAL LIQUIP TANK LAYOUT STANDARD PETROLEUM TANKER



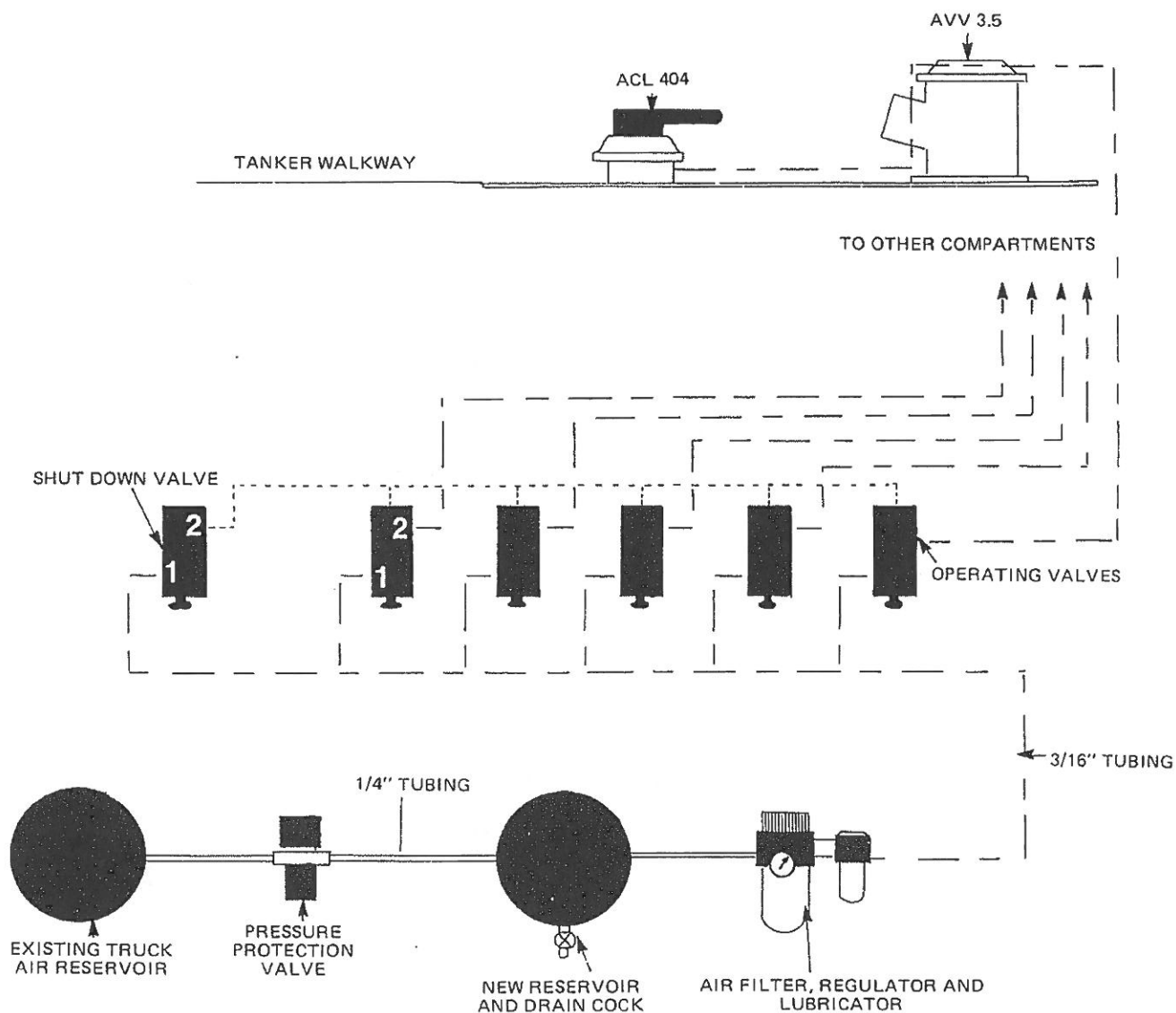
This diagram is a pictorial representation of a tanker compartment to demonstrate a typical layout.  
Consult Liquip or your tanker manufacturer for detailed specifications and variations.



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TYPICAL **LIQUIP** TANK LAYOUT  
 AIR OPERATION — BASIC PNEUMATIC CIRCUIT



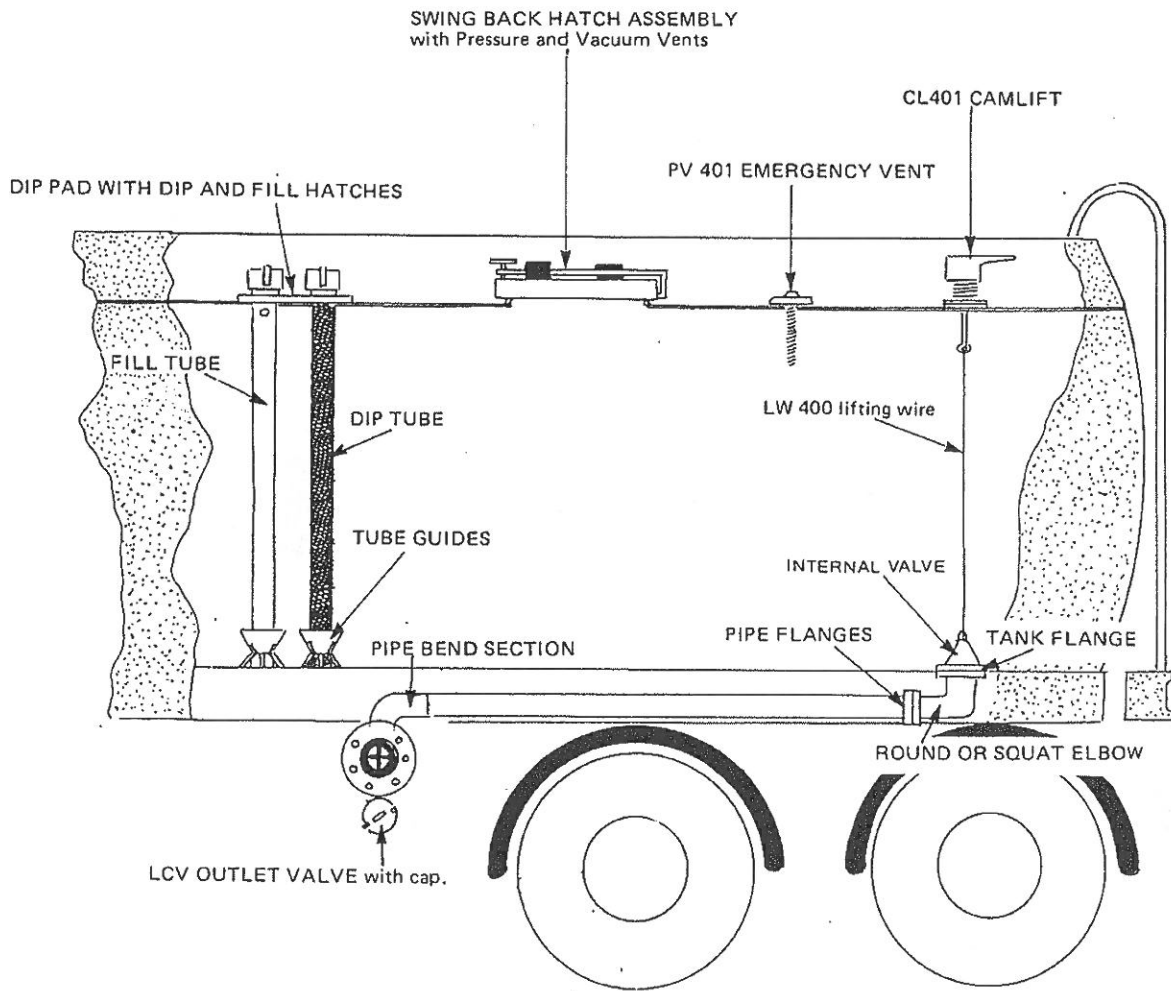
Many variations are available, e.g. brake interlock, dual control, overfill sensor interlock, etc.




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TYPICAL **LIQUIP** TANK LAYOUT  
CHEMICAL TANKER



Pictorial only. Consult Liquip or your tanker manufacturer for detailed specifications to suit your products and operations.



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