

GCxxx series - Vapour Gate (Guard Bar)

The Liquip vapour gate/interlock bar is a pivoting bar that is installed over the bottom loading API adaptors, overfill system connection and vapour recovery adaptor.

The bar provides driveway protection by ensuring drivers raise/drop the bar to connect/disconnect hoses or loading arms. An integral pneumatic interlock valve which provides a signal that can be used to apply the vehicles brakes and can also open the vapour recovery vents when the gate is raised.



GC301 Model Shown with pneumatic valve connected

Features and Benefits

- The interlock bar is positioned over the bottom loading API adaptors, overfill system connection and vapour recovery adaptor.
- The bar must be lifted for hose/loading arm connections to be made.
- The pivot incorporates a cam that actuates a pneumatic 3/2 (CV300) or 5/2 valve.
- An integral pneumatic interlock valve applies the vehicle brakes and can be set up to also open the vapour recovery vents.
- Supplied in component form so the vehicle manufacturer can easily adapt to suit the number of compartments/truck plug positions.
- Brackets are available in different length configurations to suit both upward and downward operating API adaptors.
- Length Options:

Standard Left Hand Bracket
GC300-1

Standard Right Hand Bracket
GC300-2

Long Left Hand Bracket
GC300L-1

Long Right Hand Bracket
GC300L-2

Technical Information

Materials	Brackets in cast aluminium AA601. Polyurethane bushes. Purchaser to supply to 34mm ID alum tube x approximately 3mm wall thickness in weldable grade.
Supply	Supplied as a kit without the aluminium tube. Tube is supplied and welded on site by purchaser to custom fit each tanker. Air valve CV300 must also be ordered separately.
Operation	The pivot incorporates a cam that actuates a pneumatic 3/2 (CV300) or 5/2 valve. This signal is used to apply the vehicle brakes to prevent the vehicle moving when hoses or load arms are connected. The signal is also used for other purposes such as opening vents or preventing the overfill system from providing a permissive signal. The guard bar also prevents access to the overfill protection plug.

Installation

Installation document supplied with parts (PN 4772)
Left-hand bracket incorporates hand-release lock pin. Right-hand is plain.
Hold brackets vertically and mark off and drill from TTMA pipe flange (normally M10 dia bolts).
Cut aluminium 34mm ID x 40mm OD to suit clearances and to fit the weld-on corner pieces.
Remove springs prior to welding. Tack weld first to check swing clearance and for any obstructions. Ensure all caps are in position when sizing.
Add weld-on tube stub to right-hand side arm to cover/uncover the overfill plug. This must be made to suit for each particular tanker.
Replace springs, mount CV300 air valve and adjust. Brakes should be applied on tanker before the gate can be lifted sufficiently to fit a hose.

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Ordering Information

- **GC300Z:** Vapour Gate Assembly (Left and Right Hand sides) C/W CV300 AIR VALVE.
- **GC301LZ:** Vapour Gate Assembly (Left and Right Hand sides - Long Brackets). C/W CV300 AIR VALVE.
- **GC301:** Vapour Gate Assembly (Left and Right Hand sides). No AIR VALVE.
- **GC301L:** Vapour Gate Assembly (Left and Right Hand sides - Long Brackets). No AIR VALVE.
- **GC300S:** Vapour Gate Assembly (Single Arm - Left Side Only). No Air Valve.
- **GC500Z:** Vapour Gate Assembly (Left and Right Hand sides) C/W 5/2 AIR VALVE.
- **GC500DPZ:** Vapour Gate Assembly (Left and Right Hand sides) C/W DUSTPROOF 5/2 AIR VALVE.

ITEM	PART No	DESCRIPTION	GC300S	GC300Z	GC301	GC301L	GC301LZ	GC302	GC302Z	GC303	GC303Z	GC500Z	GC501LZ	GC502Z	GC503Z	MATERIAL
1	GC300-1	MOUNTING BRACKET LH	1	1	1	-	-	-	-	1	1	1	-	-	2	ALUMINIUM
	GC300L-1	MOUNTING BRACKET LONG - LH	-	-	-	1	1	1	1	-	-	-	1	1	-	ALUMINIUM
2	GC300-2	MOUNTING BRACKET RH	-	1	1	-	-	1	1	-	-	-	-	1	-	ALUMINIUM
	GC300L-2	MOUNTING BRACKET LONG - RH	-	-	-	1	1	-	-	1	1	1	1	-	1	ALUMINIUM
3	GC300-3	OPERATING ARM LH	1	1	1	1	1	1	1	1	1	1	1	1	1	ALUMINIUM
4	GC300-4	OPERATING ARM RH	-	1	1	1	1	1	1	1	1	1	1	1	1	ALUMINIUM
5	GC300-6	BUSH	2	4	4	4	4	4	4	4	4	4	4	4	4	POLYURETHANE
6	GC300-7	SPACER FOR	1	2	2	2	2	2	2	2	2	2	2	2	2	SS TUBE
7	4903	BOLT METRIC	1	2	2	2	2	2	2	2	2	2	2	2	-	Z/P STEEL
8	5266	WASHER FLAT	3	5	5	5	5	5	5	5	5	5	5	5	-	Z/P STEEL
9	6001	NUT NYLOC	1	2	2	2	2	2	2	2	2	2	2	2	2	Z/P STEEL
10	4482	GATE TENSION SPRING	1	2	2	2	2	2	2	2	2	2	2	2	2	ST STEEL
11	GC300-8	LOCKING PIN	1	1	1	1	1	1	1	1	1	1	1	1	1	ST STEEL
12	4481	LOCKING LEVER SPRING	1	1	1	1	1	1	1	1	1	1	1	1	1	Z/P SPR STEEL
13	0897	SPRING (ROLL) PIN	1	1	1	1	1	1	1	1	1	1	1	1	-	Z/P STEEL
14	G300-5	VAPOUR GATE ELBOW	1	2	2	2	2	2	2	2	2	2	2	2	2	ALUMINIUM
15	CV300	AIR VALVE 3/2	-	1	-	-	1	-	1	-	1	-	-	-	-	ALUMINIUM
16	CV500	AIR VALVE 5/2	-	-	-	-	-	-	-	-	-	1	1	1	1	ALUMINIUM
17	4901	BOLT METRIC	-	2	-	-	2	-	2	-	2	2	2	2	2	Z/P STEEL
18	5267	WASHER FLAT	-	2	-	-	2	-	2	-	2	2	2	2	2	Z/P STEEL
19	4399	NUT NYLOC	-	2	-	-	2	-	2	-	2	2	2	2	2	Z/P STEEL
20	EXT4030Q	ALUMINIUM TUBE Ø40 OD 3mm WALL	AS REQUIRED FOR FABRICATION													ALUMINIUM

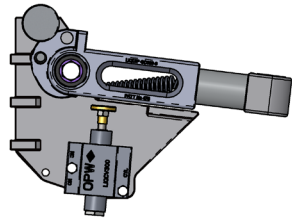
Associated Equipment

- **CV300:** Air Valve 3 Port with Push Button.
- **AVV07x:** Vapour Vent (Aluminium).
- **AVV3SSC:** Vapour Vent (Stainless Steel Chemical Version).
- **MAC300 series:** Pneumatic tanker control box.
- **API49x series:** API loading adaptor (upward or downward operating).
- **SLV5-ARO Series:** Internal foot valve.
- **TP10x series:** Liquip overfill truck plugs.

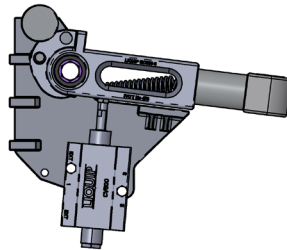


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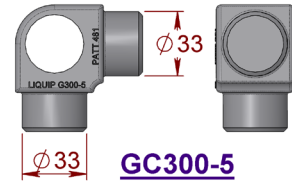
GCxxx VAPOUR GATE (GUARD BAR)



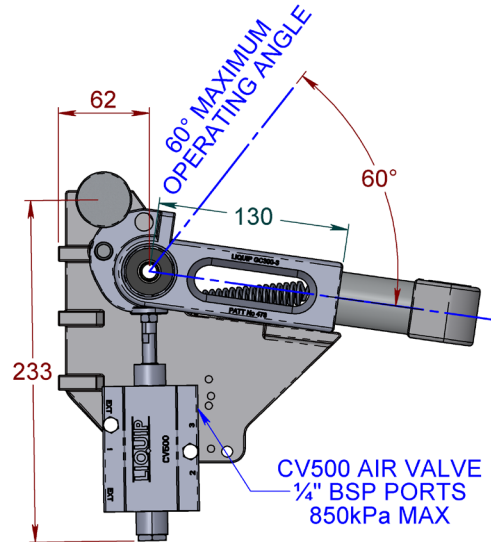
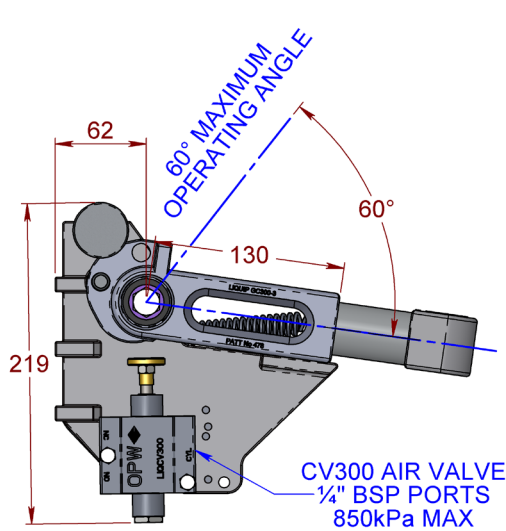
ALTERNATIVE MOUNTING LOCATION FOR CV300 VALVE



ALTERNATIVE MOUNTING LOCATION FOR CV500 VALVE



GC300-5



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2	GC300-2	MOUNTING BRACKET RH	-	1	1	-	-	1	1	-	-	-	-	1	-	ALUMINIUM
	GC300L-2	MOUNTING BRACKET LONG - RH	-	-	-	1	1	-	-	1	1	1	1	-	1	ALUMINIUM
3	GC300-3	OPERATING ARM LH	1	1	1	1	1	1	1	1	1	1	1	1	1	ALUMINIUM
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