



The Super Lightweight POLYFLEX HYDRANT PIT

A breakthrough in aviation
technology

Key Features

- The Liquip Polyflex Hydrant Pit is the lightest pit/lid combination in the world for aviation fuel hydrant systems
- Lids are half the weight, and just as strong.
- Automatic latches similar to a door latch provide guaranteed latching if the lid is in place.
- The pit body is a high tech non-corroding polyethylene hybrid.
- The extended bellows provides a perfect sealing face for a 100mm ANSI 150lb or 150mm ANSI 300lb bolt pattern weld neck flange (with integral seal fitted) available from Liquip.
- The whole pit body and integral bellows is entirely seamless with the pit rim fitted into the pit while hot from the mould to provide a liquid tight shrink bond. The pit will hold an immense amount of product before the first possible leak point.
- The pit body is electrically non conductive, eliminating the need for insulating compounds. A stainless steel bonding strap provides the electrical bond between the riser pipe and the pit rim.
- The body only is 31kg (68 lb) versus 125 (275 lb) for the steel equivalent. At 1/4 the weight, the Liquip Polyflex Hydrant Pit offers distinct advantages for transport, handling and installation.
- Available in 2 sizes: 600mm diameter (24") with inner and outer lid and 460mm diameter (18") with single lid, the Liquip Polyflex Hydrant Pit offers huge savings in the initial purchase, not to mention the associated handling costs which are also saved.
- Can be supplied as a full assembly with pit retaining system or a pit assembly only
- Can be used with pit valves or high point vents/low point drain valves.

Super Strong! Super Light! Super Value!

The future of hydrant pit technology is here now and available in the form of the Liquip Polyflex Hydrant Pit complete with aluminium lid.

With a primary focus on health and safety, environmental and commercial considerations, the Liquip Polyflex Hydrant Pit is one quarter the weight of conventional pits, providing a non-conductive, seamless, advanced sealing pit at an attractive price.

You'll save money right from the initial purchase, from shipping, to installation, and throughout the life of the pit with easy maintenance and improved product retention in case of spills or drips.

The durable long lasting pit body is a high-tech polyethylene one-piece construction with a cast aluminium rim fitted into the body to provide a liquid tight bond. The Liquip Polyflex Hydrant Pit will hold up to 100 litres (for a 24" pit) of product with the valve in place – up to 45 litres before the first possible leak point which is the join between the bellows and riser pipe. There are no separate seals as the bellows are moulded with the body, which is electrically non-conductive and consumes no cathodic protection power.

The Liquip Polyflex Hydrant Pit is the lightest pit/lid combination in the world for aviation fuel hydrant systems



Pit Covers (Inner Lid)

Liquip's lightweight hydrant pit lid completes the Liquip Polyflex Hydrant Pit package, providing further health and safety features not available in similar conventional lids.

The HLA100 lids are 18" and are lightweight aluminium hydrant pit covers. The weight of the Hydrant Pit cover is reduced and safety is increased with two self-latching mechanisms. Furthermore the cover incorporates an effective seal that prevents the ingress of water and dirt.

Built tough to withstand the forces and weights exerted by all commercial aircraft.



Adaptor (Outer Lid)

Available in 18" and 24" diameters, the Hydrant Pit accepts the same lid whichever the size by way of a fully sealed aluminium adaptor ring. It is quickly detachable to provide access for maintenance of the pit valve. An O-ring between the adaptor ring and the pit rim fully seals the join.

Cover Specifications

Extensively field tested and well proven, Liquip's lightweight aluminium Hydrant Cover withstands the harshest conditions and the heaviest commercial aircraft. The unique self-locking mechanism works like a door latch, automatically latching as soon as the lid is dropped into place.

- Comes completely assembled and will only fit the Liquip HPA series of hydrant pits:
- The cover has been designed to be dropped straight into the pit rim, no rotation or locking is required. (The cover's latches lock the cover into place with a light press of your foot.)
- With both latches locked the seal provides a water resistant and durable seal.
- Special, high wear and chemical resistant plastic feet protect latching mechanisms and the bottom of the pit cover from damage.
- To remove the cover a single hand is required to grasp the handle and with one motion draw the handle up and towards you releasing the lock, opening the special vacuum breaker and removing the cover. To replace simply slide into the rim and press with your foot if the cover fails to latch under it's own weight.



Angled Floor (Sloped Bottom)

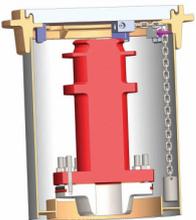
The sloped bottom ensures fluid build-up in the pit is drained to one side and is immediately noticeable. This simple yet important feature also enables easier cleaning as the fluids are collected in one low point. A support on the underside of the high point provides a level base for installation.



Integral Bellows

Pictured separately of the pit and cross sectioned for viewing purposes, the integral moulded bellows provide seamless flexibility to accommodate the riser pipe, and the 24" pit retains 45 litres before the liquid level reaches the top of the bellows which is the first possible leak point.

Liquip's companion flange for the Polyflex Hydrant Pit has an o-ring on the outer circumference for sealing against the bellows of the pit. It is specially modified to suit the Polyflex Pit and should be specified with the pipe flange. The bellows have an extended top, allowing variable installation height, and the surplus can be trimmed back. Entry point is designed for 100NB ANSI 150lb bolt pattern or 150NB ANSI 300lb bolt pattern weld neck flange. These have a thick flange for improved sealing.



Tether

The pits are also available with the option of a tether for the lid (PRSx00). The tether ensures compliance to JIG Bulletin No. 10. PRS200 suits HPA2x0 series and PRS300 suits HPA1x0 series.

Ordering Information - Hydrant Pit Box with Pit Retaining System Assemblies

HPA100-PRS300	460mm diameter lightweight Hydrant pit assembly with integral bellows to accept a special 100 NB (4") 150lb flange & 100NB pit valves. The assembly comes complete with HLA100 lid. Also supplied with pit retaining system to suit HPA100 (tether)
HPA150-PRS300	460mm diameter lightweight Hydrant pit assembly with integral bellows to accept a special 150 NB (6") 300lb flange & 100NB pit valves. The assembly comes complete with HLA100 lid. Also supplied with pit retaining system to suit HPA150 (tether)
HPA200-PRS200	600mm diameter lightweight Hydrant pit assembly with integral bellows to accept a special 100 NB (4") 150lb flange & 100NB pit valves. The assembly comes complete with HLA100 lid and outer lid. Also supplied with pit retaining system to suit HPA 200 (tether)
HPA250-PRS200	600mm diameter lightweight Hydrant pit assembly with integral bellows to accept a special 150 NB (6") 300lb flange & 100NB pit valves. The assembly comes complete with HLA100 lid and outer lid. Also supplied with pit retaining system to suit HPA 250 (tether)

NOTE: For a complete pit solution, flanges and bonding kits must be ordered separately (see Hydrant Pit Accessories below).

Hydrant Pit Accessories

HLA100	18" Lightweight aluminium hydrant pit lid
HLA100-5	Sealing O-ring cord to suit HLA100 lid
HLC200-12	4" 150lb Carbon Steel Base flange to suit HPA100 & HPA200
HLC200-12SS	4" 150lb Stainless Steel Base flange to suit HPA100 & HPA200
HLC250-12	6" 300lb Carbon Steel Base flange (SCH40) to suit HPA150 & HPA250
HLC250-12-SCH80	6" 300lb Carbon Steel Base flange (SCH80) to suit HPA150 & HPA250
HLC250-12SS	6" 300lb Stainless Steel Base flange to suit HPA150 & HPA250
HLC200-11	Bonding (grounding) kit wire for Polyflex Pits
HLC200-10	Seal for outer lid to suit HPA2x0 series.

Hydrant Pit Box Only Assemblies

Model	Hydrant Pit Lid Inner (outer) OD	Bellow suits
HPA100	18"	100NB 150lb riser flange
HPA150	18"	150NB 300lb riser flange
HPA200	18" (24")	100NB 150lb riser flange
HPA250	18" (24")	150NB 300lb riser flange