

Product datasheet

Essa[®] CPF015 Certified Pressure Filter

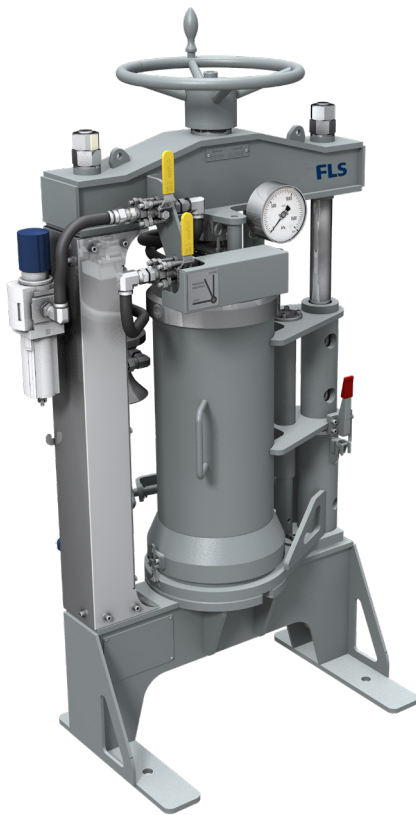
Robust and durable, the Essa[®] CPF015 Certified Pressure Filter is designed with regulatory compliance, ergonomics and operator safety in mind.

Benefits

- Robust and long lasting: fabricated almost exclusively using stainless steel materials and fittings.
- Rated to operate under design conditions of 1380 kPa (200 psi) at 50°C: makes filtering fine samples quicker, reducing sample preparation time and increasing productivity.
- Ease of use: the swing-out barrel is positioned at a suitable height for easy loading and unloading.
- All control levers are within easy reach for operator comfort during long shifts.
- Rotating base for loading and unloading: reduces the risk of contamination of the filter cake or loss of sample.
- Operator safety: lid clamping wheel is fitted with an interlock mechanism which prevents the wheel from being turned to release the lid while the barrel is still pressurised.
- Protective spray shield: the base of the barrel incorporates a stainless steel shield that protects the operator from any liquid spray should the bottom seal be broken.
- Quick access to the filter cake: there is no need to tediously unscrew the base plate as the barrel easily lifts off the filter cake via a simple lever arrangement.

FLS

User-friendly, superior performance



Registered design and construction, easy to use and safe to operate

The floor-mounted Essa CPF015 Certified Pressure Filter handles a capacity of 15 litres and is designed for general laboratory and plant applications.

As one of a new line of pressure filters, it has been designed to comply with Western Australia Department of Mines and Petroleum requirements relating to pressure vessels (i.e. classified plant), commonly found on mine sites in gold rooms, assay laboratories and other metallurgical test facilities. In addition, the new range of pressure filters incorporates ergonomic design, best in class safety features and heavy-duty, corrosion-resistant construction.

Designed for efficiency and durability

The Essa CPF015 Certified Pressure Filter from FLSmith is rated to accept up to 1380 kPa (200 psi) air pressure and the design is compliant with AS 1210, ASME VIII and Pressure Equipment Directive 2014/68/EU.

When operating at a higher air pressure, the user is able to achieve faster cycle times when filtering fine material. A robust, durable finish is achieved thanks to the unit being fabricated almost exclusively using stainless steel materials and fittings. This makes it able to withstand a range of corrosive and moist conditions, ultimately resulting in increased availability and higher productivity.

The desired operational pressure in the barrel can be regulated using the filter regulator and easy-to-read pressure gauge on the machine. It is designed for rapid filtration, enabling the separation of solid materials suspended in liquid. Once the lid is engaged, the filter uses compressed air to separate the liquid from the solids. The liquid filtrate is forced through the filter media into the base drain plate for collection. The result is a de-watered filter cake to be easily retrieved from the base plate and a sample of the liquid released from the original sample material.

Ergonomically improved, user-friendly operation

Designed with superior ergonomics and operator safety in mind, the Essa CPF015 Certified Pressure Filter has the barrel positioned at a suitable height for easy loading and unloading of sample material. All control levers are within easy reach for operator comfort during long shifts.

Additionally, the lid clamping wheel is fitted with an interlock mechanism. This prevents the wheel from being turned, to release the lid, while the barrel is still pressurised. When the air pressure is expelled from the barrel via the discharge ball valve, the lockout sprocket is mechanically released, enabling the lid to be raised.

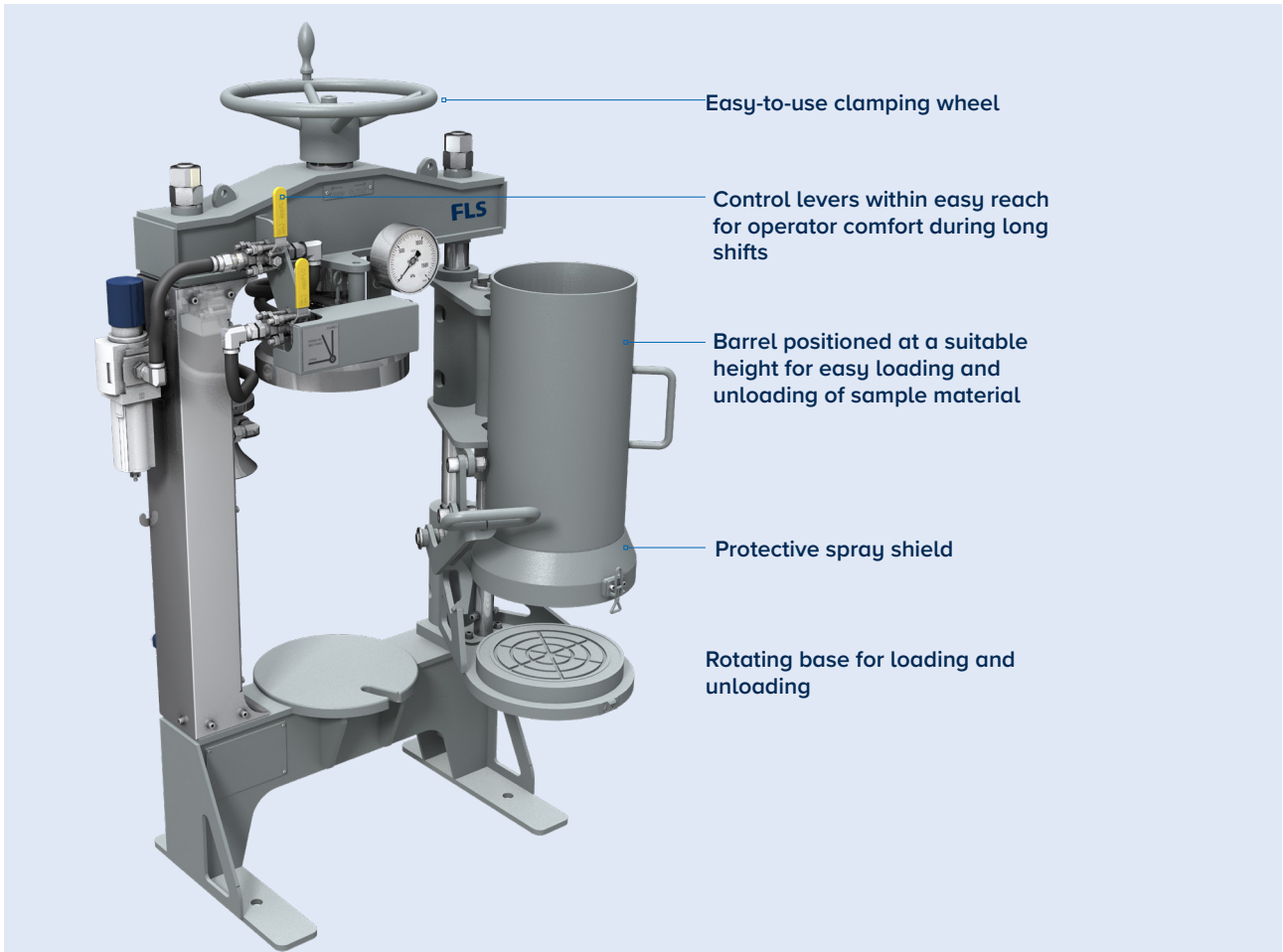
The operator no longer has to unscrew the base plate to access the filter cake after de-watering. By means of a simple lever and gas strut arrangement, the barrel can quickly be raised above the cake.

The base plate and barrel swing out together so access when filling, unloading and cleaning are all carried out unobstructed by the frame.

It could happen that the seal made by the filter media may fail under pressure. This could result in the liquid in the barrel spraying out from the breach in the seal. The CPF015 has a protective shield surrounding the base of the barrel which limits any spray and directs the filtrate towards the base plate to be captured.

Improved productivity

The refined operational ease of use for this pressure filter means it can be used more productively than many current brands in the workplace. The easy-to-use clamping wheel to seal the vessel allows for operators to quickly load large volumes in the open position. A swivelling base makes unloading easier, allowing the operator to place a bucket beneath the unit, thus preventing loss of sample when unloading. The easier access to load the unit and unload the filter cake means that a more competent sample is taken as it reduces risk of contamination of the filter cake or loss of sample.



Easy-to-use clamping wheel

Control levers within easy reach for operator comfort during long shifts

Barrel positioned at a suitable height for easy loading and unloading of sample material

Protective spray shield

Rotating base for loading and unloading

Design compliance

Pressure Equipment Directive 2014/68/EU

Registered with WorkSafe (Government of Western Australia, Department of Commerce)

Design Registration Number: WAP24050

Design Conditions: 1380 kPa at 50°C

Design Code and Class: AS 1210 – 2010 Class 3

Hazard level (as per AS4343): D

Design Registration Number: WAP24047

Design Conditions: 1380 kPa at 50°C

Design Code: ASME VIII Division 1 – 2015

Hazard Level (as per AS4343): D

Specifications

Capacity	15 litres (max)
Dimensions (W x D x H)	795 mm x 646 mm x 1308 mm
Shipping Dimensions (W x D x H)	995 mm x 846 mm x 1508 mm
Working Mass	176 kg
Shipping Mass	228 kg

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