

## Cold Filter Plugging Point - CFPP I Cryostat

ASTM D 6371, DIN 51428 (obs.), EN 116, EN 14214, IP 309, JIS K2288, SIS 155 122 (obs.)

**Product group(s):** Cold Behaviour, Fuel

**User group(s):** Biodiesel, Biofuel, Diesel, Fuel

**Scope:** For the determination of the cold filter plugging point (CFPP) temperature of diesel and domestic heating fuels using either dry ice cooling or cryostat cooling apparatus.

The test may not be applicable to the determination of the low temperature operability of distillate fuels used in equipment with exposed paper filters in the fuel supply system.

The Cold-Filter Plugging Point informs about possible trouble by precipitation of paraffin on filters at low temperatures.

The Cold Filter Plugging Point is defined as the highest temperature (expressed as a multiple of 1 °C) at which the fuel, when cooled under the prescribed conditions, either will not flow through the filter or requires more than 60 sec for 20 ml to pass through.



### Cold Filter Plugging Point Test Equipment

to be composed of:

- **CFPP I - Cryostat**  
with 1 Test-Device (accessories for 1 test place)
- **Vacuum Device**

### Technical Data

Dimensions (W x D x H): 600 x 730 x 1000 mm

Weight: 110 Kg

## Main Unit

13-2418

### CFPP I - Cryostat Test Arrangement (1 Chamber)

ASTM D 6371 - EN 116 - EN 14214 - IP 309 - JIS K2288  
(DIN 51 428, SIS 155 122)

For standard determination of the CFPP value down to -20°C,  
at a bath temperature setting of -34°C.

Consisting of:

Air-cooled refrigeration cabinet on castors.

1 Aluminum-Block test chamber with 4 test place avoiding the use of any hazardous bath medium, the aluminum block also serves as an air jacket; electronic temperature control in the range of +20 to -69° C block-temperature, digital display of real temperature.

Electronic heater for rapid warming of the test block when changing from very low temperature to a higher one.

Supplied with:

1 CFPP-Test-Device consisting of:

1 test glass, 1 centering guide, 1 stopper, 1 test tube, 1 filter assembly,  
1 thermometer ASTM 5C (-38 to +50 °C).

Note! The vacuum device is not included.

Power supply: 230 V, 50 Hz

13-2414

### CFPP I - Cryostat Test Arrangement (1 Chamber)

Like 13-2418 but:

Power supply: 115 V, 60 Hz

**13-0450 Vacuum Device**  
 Consisting of:  
 2 pressure equalizing vessels (5 l) with stoppers and tubes,  
 U-tube manometer (250-0-250 mm), flow meter (1.6-16 l/h),  
 electric vacuum pump, hose, hose clip, T-piece and 3-way cock  
 Power supply: 230 V, 50 Hz

**13-0449 Vacuum Device**  
 Like 13-0450 but:  
 Power supply: 110/115 V, 60 Hz

**Options & Accessories**

**10-0013 Water Jet Pump acc. to Hanff, made of glass**

**13-0010 Filter Paper II b DIN 52 135, pack of 100**

**Spare Parts**

**16-0371 Thermometer ASTM 5C / IP 1C**  
 Range: -38 to +50 : 1 °C  
 Length: 230 mm, Immersion: 108 mm, Ø 7 mm

**16-0372 Thermometer ASTM 5C / IP 1C**  
 Range: -38 to +50 : 1 °C (officially certified)

**16-0375 Thermometer ASTM 6C / IP 2C**  
 Range: -80 to +20 : 1 °C  
 Length: 230 mm, Immersion: 76 mm, Ø 7 mm

**16-0376 Thermometer ASTM 6C / IP 2C**  
 Range: -80 to +20 : 1 °C (officially certified)

**13-0422 Test Jar, flat-bottom, 45 ml level marking**

**13-0424 Measuring Tube , made of glass**  
 with 20 ml level mark, without filter assembly

**13-0425 Gaskets (set of 10) for measuring tube (13-0424)**

**13-0426 Gaskets (set of 10) for the filter sieve (13-0427)**

**13-0427 Filter Sieve (45 µm mesh)**

**13-0430 Filter Assembly without measuring tube**  
 Consisting of:  
 1 gasket for filter sieve and 2 gaskets for measuring tube.

**13-0444 Centering Guide (for CFPP-units made since 2/2002)**

**13-0447 Stopper, PE (Ø 70 mm / bored twice)**  
 for test-thermometer, pipet and evacuation

**Order Guideline**

Minimum equipment: 1x 13-2418 + 1x 13-0450  
 Spares (approx. 1 year): 13-0424, 13-0425, 13-0010, Thermometer  
 Additional requirements: