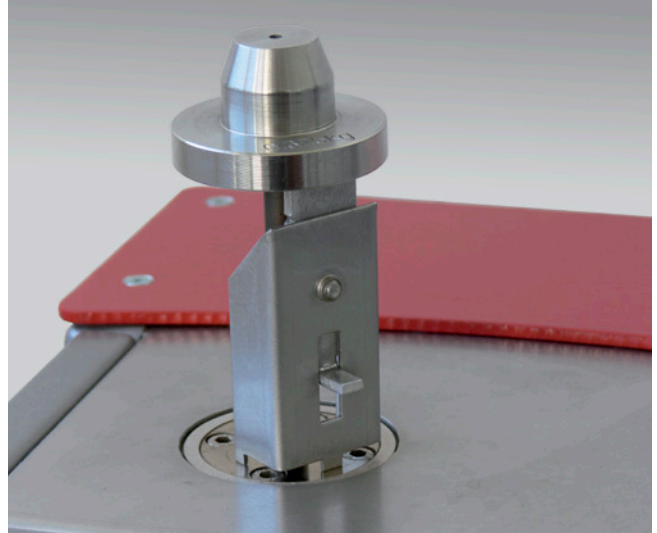


## Product Information

### Cflow Extrusion Plastometer



#### Applicational range

The Cflow is a compact instrument that allows rapid determination of the Melt mass flow rate of plastics.

It is specifically designed for the processors of plastics that are less subject to extrusion tests and which do not require a connection to a PC.

The temperature control of the heating elements, the heating chamber and the extrusion barrel are perfectly matched to each other. The temperature is generated where it is needed. That ensures an excellent distribution of temperature across the full height of the barrel from the outset.

Rapid device control is facilitated by the test granulate contained in the scope of delivery. Addition control options are available for the temperature in the extrusion barrel, for the diameter of orifices and barrels with plug gages.

An automatic or manual extrudate cutter, a separating door and a die plug are optionally available for the Cflow.

#### Advantages:

- The extrusion behavior of plastics is tested safely and quickly according to Method A
- You hold the test weight in the pre-heating position with the optionally available spacer
- Extensive accessories, such as the automatic or manual extrudate cutter, are also available

## Product Information

### Cflow Extrusion Plastometer

#### Instruments

Description	Item number
Cflow Extrusion Plastometer, supply voltage 220 to 240 V, 50/60 Hz	<b>004949</b>
Cflow Extrusion Plastometer, supply voltage 100 to 127 V, 50/60 Hz	<b>004950</b>

#### Technical data for Cflow Extrusion Plastometer

The Cflow Extrusion Plastometer is designed for MFR testing to Method A. Tests according to the following Standards are possible: Method A to ISO 1133, ASTM D 1238, ASTM D 3364, JIS K 7210.

Technical data of the instruments	
Power consumption	500 W
Weight	46.6 kg (all equipment included)
Dimensions: height x width x depth	850 x 270 x 400 mm (incl. weights, all equipment included)
Display	Double-spaced, actual / set value temperature display, back-lit
Operational ranges	
Test loads	0.325 up to 21.6 kg
Temperature range	+125 up to +400 °C
Error limits	
Temperature accuracy in the area of 0 to 75 mm over the orifice in the temperature range of 190°C to 300 °C	< 0.3 °C with distance and with time, acc. to ISO 1132-2
Temperature display resolution	0.1 °C
Error limit of time measurement (Method A)	±0.02 s using automatic extrudate cutter

#### Scope of supply:

- Test weights (325 g and 2.16 kg)
- Funnel
- Cleaning accessories (cleaning rod, cleaning brush, cleaning pads (500 pieces), orifice cleaning drill Ø 2.095 mm) for extrusion barrel and orifice
- Test granulate and a filling channel for the granulate

#### Extrusion barrels

An extrusion barrel must be selected depending on the material that is to be tested. Cleaning pads and a cleaning piston are supplied to clean the extrusion barrel.

Description	Item number
Extrusion barrel for flourine-free plastics, inner dia. 9.55 mm, accurately machined hole, wear-resistant	<b>001331</b>
Extrusion barrel for flourine-containing plastics, inner dia. 9.55 mm, accurately machined hole	<b>001345</b>

#### Cooling unit

Description	Item number
Cooling unit for a fast cooling of the extrusion barrel with compressed air	<b>090173</b>

## Product Information

### Cflow Extrusion Plastometer

#### Pistons

At least one piston must be selected depending on the materials that are to be tested.

If testing should be performed to ISO 1133-1997, a piston with non-rounded edge (sharp-edge) is required:

Description	Item number
Piston for fluorine-free plastics, according to ISO 1133, weight 0.325 kg, wear-resistant	<b>001336</b>
Piston for fluorine-containing plastics, according to ISO 1133, weight 0.325 kg	<b>001340</b>
Piston for fluorine-free plastics, sharp-edge, according to ISO 1133-1997, wear resistant	<b>001350</b>
Piston for fluorine-free plastics, according to ASTM D 1238, wear resistant	<b>1007541</b>

#### Orifices

At least one pair of orifices (2 pieces) must be selected depending on the materials that are to be tested.

Scope of supply: 2 pieces

Description	Item number
Sintered material orifices, inner dia. 2.095 mm, acc. to ISO 1133, length 8 mm, wear-resistant, for fluorine-free and fluorine-containing plastics	<b>312342</b>
Sintered material orifices, inner dia. 1.05 mm, acc. to ISO 1133, length 4 mm, wear-resistant, for fluorine-free and fluorine-containing plastics	<b>325554</b>
Sintered material orifices, inner dia. 1.18 mm, acc. to BS 2782-7, method 720A-1997, length 8 mm, wear-resistant, for fluorine-free and fluorine-containing plastics	<b>001351</b>
Sintered material orifices, inner dia. 2.095 mm, acc. to ASTM D 3364, length 25.4 mm, for PVC tests (acid resistant)	<b>092326</b>

#### Test weights

The Cflow can be fitted with test weights depending on the type of plastics that is to be tested.

Test weights for obtaining a test load of	Item number
5 kg	<b>001380</b>
5 kg, 10 kg	<b>001381</b>
5 kg, 10 kg, 15 kg, 21.6 kg	<b>001443</b>
1 kg	<b>001385</b>
1.05 kg	<b>001386</b>
1.02 kg	<b>001387</b>
3.8 kg	<b>001459</b>
12.5 kg <sup>(1)</sup>	<b>001389</b>
20 kg <sup>(2)</sup> (ASTM D 3364)	<b>008077</b>

<sup>(1)</sup> Requires test weights with test load 5 kg and 10 kg (Item number 001381).

<sup>(2)</sup> Requires test weights with test load 5, 10, 15 and 21.6 kg (Item number 001443).

#### Spacer

Description	Item number
For holding the test weight in the pre-heat position, stepless adjustable with marks at 50, 60 and 70 mm	<b>026875</b>

## Product Information

### Cflow Extrusion Plastometer

#### Protective shields

For catching individual extrudates.

Description	Item number
Protective shield, for automatically operated extrudate cutter	<b>001379</b>
Protective shield, for manually operated extrudate cutter	<b>004996</b>

#### Extrudate cutters and orifice plug

We recommend the manual extrudate cutter for cutting intervals longer than one minute. However for short cutting intervals the automatic extrudate cutter would be the right solution to get a precisely timed cut. The orifice plug prevents the early flow of the plastic material when testing with high flow rates ( $> 10 \text{ cm}^3 / 10 \text{ min}$ ). For the use of the orifice plug an extrudate cutter is necessary. The orifice plug prevents the early flow of the plastic material when testing with high flow rates ( $> 10 \text{ cm}^3 / 10 \text{ min}$ ). For the use of the orifice plug an extrudate cutter is necessary.

Description	Item number
Extrudate cutter manually operated	<b>001371</b>
Extrudate cutter automatically operated, automatic control of the time interval or manually by pushbutton	<b>010864</b>
Orifice plug for tests on high flow rate plastics, incl. ceramic cap	<b>012728</b>

#### Graph: Accessories

