UP-6181B Automatic Melt Flow Index Tester

Product introduction:

This high-precision melt flow rate tester is used to measure the MFR / MVR value of various plastics and resins passing through a certain temperature and load in the viscous state every 10 minutes. It is suitable for polycarbonate, polysulfone, fluoroplastic, nylon and other engineering plastics with high melting temperature, as well as polyethylene (PE), polystyrene (PS), polypropylene (P P) ABS resin, POM, PC resin and other plastics with low melting temperature are widely used in plastic production, plastic products, petrochemical and other industries, as well as relevant colleges, research institutions and commodity inspection departments.

Standards:

GB/T3682-2018:Measurement of melt flow rate and melt volume flow rate of thermoplastic

ISO 1133：1997:Measurement of MFR and MVR of thermoplastic melt

ASTM D1238:Standard Test Method for melt flow rate of thermoplastics by extrusion

plastometer

Product characteristics:

1. Multi stage (2-stage) temperature control mode, 2 groups of platinum resistance sensors, 2 copper heating sleeves for individual temperature control, high-precision intelligent PID control, adjustable temperature rise slope, namely, temperature rise speed
2. The temperature resolution is 0.1 ℃, the temperature fluctuation within 24 hours is not more than 0.5 ℃, and the resolution of displacement sensor is 0.01mm.
3. Over temperature protection device
4. The manual and automatic cutting is integrated, and the cutting time (0 ~ 999) and cutting times (0 ~ 999) can be set arbitrarily
5. The mass method, the volume method, or both methods can be used in the test, and the flow rate ratio can be calculated. Both methods start the test when the piston rod moves to a certain position.
6. It can set the countdown of 240 seconds (specified in gb3682) material preheating seconds. After the countdown, the weight will be loaded automatically, and the automatic cutting will start when it is loaded to the specified range. It can also set the preheating time such as American Standard (ASTM).
7. Built in multiple plastic material melt index test conditions, convenient for customers to use at any time, reduce tedious workload, and store the last test conditions and results
8. Built in micro printer for printing test data
9. High precision touch screen controller, 7-inch touch screen, can store and print the latest test conditions and data. The setting of test printing menu includes test time (system default), material name, test conditions (temperature, weight of weight, cutting time interval), test result data.
10. RS232 interface or USB interface shall be reserved to connect the computer, which can control instrument operation and transfer test data to the computer,

Placing the weight on the weight bracket first can realize electric loading and unloading and reduce manual operation.

Main technical parameters:

Temperature range: 40 ℃ - 450 ℃
Temperature drift: 4 hours ≤ 0.5 ℃
Temperature fluctuation: ± 0.2 ℃
Temperature uniformity of 10-70 mm above the die: ± 0.5 ℃
Temperature display resolution: 0.1 ℃

Time display resolution: 0.1s
Cutting timing range: 1-999s adjustable
Die diameter: Φ 2.095 ± 0.005mm (half die 1.05mm + 0.005, optional)
Outlet length: 8.000 ± 0.025mm
Piston rod diameter: 9.474 ± 0.007mm
Length of piston rod: 6.35 ± 0.13MM
Loading barrel diameter: Φ 9.550 ± 0.007mm
Test range: 0.1-150g/10min
Weight accuracy: ± 0.5%
Output mode: micro automatic print output
Cutting mode: manual and automatic cutting
Test load: 8 levels in total, 8 sets of weights
Power supply voltage: AC220V ± 10% 50Hz

Configuration list:

No.	**Name**	**Qty**	**Remarks**
1	Machine	1	Printer included
2	Weights	1 Set,8 levels:0.325 kg，1.200 kg，2.160 kg，3.800 kg，5.000 kg，10.000 kg，12.000 kg，21.600 kg	(1# Within level 1 load)
3	Weight pallet	1	Within level 1 load
4	Piston rod	1	Within level 1 load
5	Die	1	Tungsten carbide
6	Charging hopper	1	Stainless steel
7	Charging rod	1	
8	Barrel cleaning rod	1	
9	Die cleaning rod	1	Stainless steel
10	Gauze	2	
11	Printing paper	2	
12	Others	Factory certificate, instruction, discharge tray	