



ARTEMIS
TESTING INSTRUMENTS

ART-MFi30-WL

Melt Flow Indexer inc Weight Loader

V1.01

Introducing a brand new range of materials testing equipment from **Artemis Instruments**.

Melt Flow Index is one of the most widely used parameters for the quality control of polymers and is the mass flow rate (g/10min) of a molten polymer at controlled conditions of temperature and pressure, extruded through a very precise orifice. The MFi30 instrument has a dedicated microprocessor and 7" touch screen interface and conforms to Methods A,B, & C of International Test standards. Extruded samples can be cut by the integrated Auto Cut Device (method A testing) at set time intervals for accurate and repeatable sample weights and a 10k PPR rotary encoder is fitted which accurately measures the piston displacement for method B,C and D testing. MFR and MVR test results are calculated easily by using the materials Density at Test Temperature value. Test results are automatically displayed on the touch screen display and can be downloaded into the dedicated LABLogic+ software platform supplied with the instrument. The apparatus can quickly calculate MFR, MVR, Viscosity, Shear Stress, Shear rate and Intrinsic Viscosity amongst others. High and low test values can be input for internal QA/QC and multi-slicing values give real time graph analysis and tabular results of the material under test so no physical cutting of the material needs to be done, and Stored Test Parameters can easily be recalled from memory for easy test setup.

Supplied as standard the Artemis **MFi30** comes complete with tooling to get you started from switch on including a standard discharge piston, test die and 2.16kg test load. To compliment the instrument a standard cleaning kit is supplied which includes cleaning rod, test die cleaning tool, cotton cleaning cloth and wire bristled brush. The die go/no-go gauge is also supplied to keep check on the die size and a graduated filling cylinder. Optional anti corrosive cylinder, piston and test die can be supplied if corrosive materials such as PVC is to be tested.

Fitted with the instrument is the optional weight loader. Pneumatically operated to 11bar (150 psi) this is an ideal option when using heavier test loads up to 21.6kg. Weights are mounted on the weight stack so they do not have to be lifted onto the piston each test. Touchscreen operated via the control panel for moving the weight loader up and down the weight loader can also be configured to load the piston automatically at a set period to the test starting. Ideal for faster flowing polymers. A cleaning tool attachment is also supplied for a simple cleaning process between tests. The fitted weight loader option can also perform FRR tests to method D of the ASTM test standard.

The apparatus conforms to ASTM D3364, ASTM D1238, ISO 1133, DIN 53735 amongst Others. The apparatus can be supplied in either 110-120v 60 Hz and 220-240v 50 Hz.



Image shown without guard

Specifications

- Microprocessor controlled Melt Flow Indexer with Pneumatic Weight Loader fitted
- 7" touch screen panel
- Ethernet, USB & flash drive connection
- LABLogic+ download Software
- Temp Range - Ambient to 450 DegC
- Dual zone heating
- Temperature accuracy +/-0.1 DegC
- Thermal stability +/- 0.2 DegC
- Timer resolution 0.01 sec
- 10k PPR digital rotary encoder
- Automatic sample cut off
- Quick change barrel
- Supplied complete with tooling kit including cleaning tools, levelling device, die go/no-go gauge, standard test die and piston
- Fully traceable certificate of calibration and instrument user manual
- UKCA/CE Certified
- Dimension (CM) - 61.5W x 37D x 57H
- Net Weight (Kg) - 35

Options

- Test Loads 1.0kg to 21.6kg
- Hastelloy anti corrosive barrel, piston & test die

Artemis Instruments

A Microtrol Brand

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