

Melt Flow Indexer

Model: M0004

a measurable difference...

IDM[®]

instruments

The Melt Flow Indexer is a dead-weight extrusion plastometer.

It consists of a thermostatically controlled melting chamber (the barrel) in which the polymer under testing is heated and from which it is extruded through a standard die under standard conditions of load. The load is made up of the combined weights of the extrusion piston and the loose weight both of which are carefully calibrated to well within the most stringent limits.



Applications:

- Plastics

Features:

• Barrel	Material	Precision ground and honed high grade tool steel	
	Outside diameter	50.8mm	
	Inside diameter	9.55mm	
• Piston	Length	162 mm	
	Diameter	9.47mm	
	Weight	100g	
• Timer accuracy	Piston Weights	1 x 4.9 kg weight 1 x 2.06 kg weight	
		0.01s	
	• Die	Material	Tungsten Carbide
Outside diameter		9.5504mm	
Inside diameter		2.0955mm	
• Temperature	Length	8 mm long	
	Temperature Range	50.0° - 300.0°C, ± 0.2°C 50.0° - 400.0°C, ± 0.2°C	
		Barrel temperature is controlled by the Precision Digital Temperature Controller	
• Working Environment	Operating Temperature	-10°C to 55°C	
	Operating Humidity	25% to 65%	
• Includes		1 x Sample Cut Off Knife	1 x Cleaning Tool
		1 x Die Remover	1 x Filler Tool
		1 x Die Cleaner	1 x Level

Standards:

- BS2782
- ASTM D1238: Procedure A
- ISO 1133

Options:

- **Die:** Alternate Standard die used in BS2782 Method 1050 with a bore diameter of 1.181 mm



Procedural Conditions:

Material	Condition	
Acetals (copolymer and homopolymer)	190/2.16	190/1.05
Acrylics	230/1.2	230/3.8
Acrylonitrile-butadiene-styrene	200/5.0	230/3.8
	220/10	
Acrylonitrile/butadiene/styrene/polycarbonate blends	230/3.8	250/1.2
	265/3.8	265/5.0
Cellulose esters	190/0.325	190/2.16
	190/21.60	210/2.16
Ethylene-chlorotrifluoroethylene copolymer	271.5/2.16	
Ethylene-tetrafluoroethylene copolymer	297/5.0	
Nylon	275/0.325	235/1.0
	235/2.16	235/5.0
	275/5.0	
Perfluoro (ethylene-propylene) copolymer	372/2.16	
Perfluoroalkoxyalkane	372/5.0	
Polycaprolactone	125/2.16	80/2.16
Polychlorotrifluoroethylene	265/12.5	
Polyethylene	125/0.325	125/2.16
	250/1.2	
	190/0.325	190/2.16
	190/21.60	190/10
	310/12.5	
Polycarbonate	300/1.2	
Polymonochlorotrifluoroethylene	265/21.6	
	265/31.6	
Polypropylene	230/2.16	
Polystyrene	200/5.0	230/1.2
	230/3.8	190/5.0
Polyterephthalate	250/2.16	210/2.16
	285/2.16	
Poly (vinyl acetal)	150/21.6	
Poly (vinylidene fluoride)	230/21.6	
	230/5.0	
Poly (phenylene sulfide)	315/5.0	
Styrene acrylonitrile	220/10	230/10
	230/3.8	
Styrenic Thermoplastic Elastomer	190/2.16	200/5.0
Thermoplastic Elastomer-Ether-Ester	190/2.16	220/2.16
	230/2.16	240/2.16
		250/2.16
Thermoplastic Elastomers (TEO)	230/2.16	
Vinylidene fluoride copolymers	230/21.6	
	230/5.0	

These conditions have been found satisfactory for the materials listed

Connections:

- **Electrical:** 220/240 VAC @ 50 HZ or 110 VAC @ 60 HZ
please specify when ordering

Dimensions:

- **H:** 480mm
- **W:** 430mm
- **D:** 270mm
- **Weight:** 27kg