ANM ANMIndustries

PRODUCT CATALOGUE
2021-22

ANM ALLIANCE

INDEX

OUR VISION

To be the finest skills - based total solution provider for turnkey projects, delighting our customers.

OUR MISSION

The management team will focus on delivering great value to customers by developing high calibre professional skills in core competence and representing world-class instrumentation and automation products.

OUR VALUES

◎ Integrity and honesty
◎ Passion for customers, for our partners and technology
◎ Openness and respectfulness
◎ Taking on big challenges
◎ Constructive self-criticism, self- improvement and personal excellence
◎ Accountability towards customers, partners and employees for commitments, results and quality
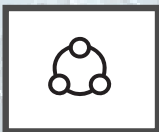
OUR CORE COMPETENCIES

◎ Project management
◎ System integration and maintenance
◎ Delivering the best solutions for MEP

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ANM Industries, a company under ANM Alliance group, is one of the largest establishment in Laboratory Business. ANM Industries was established in April, 2010 under the Indian Companies Act, having manufacturing facility with an overall supportive infrastructural area fully equipped with the latest manufacturing equipment.

The strategic location of the facility on the outskirts of the financial hub of India, Mumbai offers a strong infrastructure conveniently accessible to Sea & Air Ports. This benefits our clients of India and overseas enabling ANM Industries to offer a competitive pricing structure.

All our products are checked under one roof with the result that specific requirements of our clients can be incorporated into a proposed design / product requirement. We specialise in planned inventory and prompt technical support by a network of skilled people across the country.

ANM Industries products are under third party testing / design appraisals to achieve conformance following the international criterias and standards. We have a team strength of over 150 employees across the country with offices nationwide.

"

Water Bath, Circulating / Refrigerated

Features

- Compact and Space saving, table top model
- Microprocessor based PID controlled
- User-Fiendly Operation
- External Circulation
- Dual display with 7 segment LED display
- Display Resolution : 0.1°C
- Temperature Stability : +/-0.3°C
- R134a CFC free Refrigerant
- Robust cooling, Powerful pump
- Inner bath of SS and outer housing MS powder coated
- Can be used as chiller, circulator, water bath & refrigerated bath

Upto -20°C

SPECIFICATIONS

Order Code	WB 2000	WB 2100
Temperature Range	-10º C to 100º C	-20º C to 100º C
Temperature Control	PID	PID
Temperature Stability	± 0.3°C	± 0.3°C
Display	Dual 7 segment LED	Dual 7 segment LED
Display Resolution	0.1°C	0.1°C
Heater Capacity	1000 watts	1000 watts
Cooling Capacity @ 19°C	300 watts	300 watts
Pump Flow Rate	12 liters / min	12 liters / min
Bath Opening [W X L X D]	110 X 110 X 150mm	110 X 110 X 150mm
Dimesions [W X L X H]	420 X 420 X 360mm	420 X 420 X 360mm

ORDERING INFORMATION

Order Code	Description
WB 2000	Circulating Waterbath, -10°C to 100°C, 5 Ltr. Horizontal
WB 2100	Circulating Waterbath, -20°C to 100°C, 5 Ltr. Horizontal

Features

- Compact and Space saving, table top model
- Microprocessor based PID controlled
- User-Fiendly Operation
- External Circulation
- Dual display with 7 segment LED display
- Display Resolution : 0.1°C
- Temperature Stability : +/-0.3°C
- R134a CFC free Refrigerant
- Robust cooling, Powerful pump
- Inner bath of SS and outer housing MS powder coated
- Can be used as chiller, circulator, water bath & refrigerated bath

Upto -40°C

SPECIFICATIONS

Order Code	WB 2000 V	WB 2100 V	WB 2200 V	WB 2300 V
Temperature Range	-10° C to 100° C	-20° C to 100° C	-30° C to 100° C	-40° C to 100° C
Temperature Control	PID	PID	PID	PID
Temperature Stability	± 0.3°C	± 0.3°C	± 0.3°C	± 0.3°C
Display	Dual 7 segment LED	Dual 7 segment LED	Dual 7 segment LED	Dual 7 segment LED
Display Resolution	0.1°C	0.1°C	0.1°C	0.1°C
Heater Capacity	1000 watts	1000 watts	2000 watts	2000 watts
Cooling Capacity @ 19°C	300 watts	300 watts	400 watts	800 watts
Pump Flow Rate	12 liters / min	12 liters / min	12 liters / min	17 liters / min
Bath Opening [W X L X D]	130 X 120 X 150mm	130 X 120 X 150mm	200 X 120 X 150mm	170 X 100 X 150mm
Dimesions [W X L X H]	240 X 450 X 625mm	240 X 450 X 625mm	320 X 470 X 625mm	460 X 510 X 785mm

ORDERING INFORMATION

Order Code	Description
WB 2000 V	Circulating Waterbath, -10°C to 100°C, 5 Ltr. Vertical
WB 2100 V	Circulating Waterbath, -20°C to 100°C, 5 Ltr. Vertical
WB 2200 V	Circulating Waterbath, -30°C to 100°C, 9 Ltr. Vertical
WB 2300 V	Circulating Waterbath, -40°C to 100°C, 9 Ltr. Vertical

Ultrasonic Cleaner

with Digital temperature controller

Sweep & Degassing Function
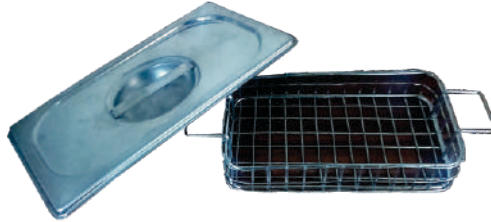
Weight Rings

Features

- ☐ Powerful and reliable cleaning
- ☐ Built-in micro processor controller with MOSFET based technology
- ☐ Built-in a digital thermometer and timer to set an optimum condition for cleaning
- ☐ Easy to read operation status on digital display

SPECIFICATIONS

Order Code	USC100	USC200	USC300	USC400	USC 500
Volume Capacity	1.5 Ltr.	3 Ltr.	5.5 Ltr.	10 Ltr.	20 Ltr.
Temperature Range	Fixed to 45°C	RT to 70°C	RT to 70°C	RT to 70°C	RT to 70°C
Bath Dimension [L X W X H mm]	240X140X65	240X140X100	320X240X100	300X240X150	500X300X200
Ultrasonic Power	50 Watts	100 Watts	150 Watts	300 Watts	400 Watts
Timer Range	0 - 15 min	0 - 90 min	0 - 90 min	0 - 99 min	0 - 99 min
Rated Supply	230 VAC	170 to 270 VAC	170 to 270 VAC	170 to 270 VAC	170 to 270 VAC

ORDERING INFORMATION

Order Code	Description
USC 100	Ultrasonic cleaner, 1.5 Ltr.
USC 200	Ultrasonic cleaner, 3 Ltr.
USC 300	Ultrasonic cleaner, 5.5 Ltr.
USC 400	Ultrasonic cleaner, 10 Ltr.
USC 500	Ultrasonic cleaner, 20 Ltr.

ACCESSORIES

WR-2CM	Weight Rings For Volumatric flask (ID 200 mm)
WR-3CM	Weight Rings For Volumatric flask (ID 300 mm)
WR-5CM	Weight Rings For Volumatric flask (ID 500 mm)

Features

- Built-in microprocessor controller
- High performance industrial BLT type transducer
- Selectable use of ultrasonic power (3 steps: Low-1, Medium-2, High-3)
- **Degassing function to eliminate dissolved gas in water or solutions**
- Use-friendly control panel for easy and simple operation
- Elegant style and strong durability
- Lid to see the inside of the bath
- Built-in alarm function for operation stop
- Stainless steel tray (optional)
- Housing material of SUS 304 + PP(Polypropylene) for stronger durability
- **Sweep function to optimize the cleaning power by modulating the frequency**

SPECIFICATIONS

Order Code	605	610	620
Transducer	Industrial BLT type		
Time Range	1-99 min (Digital)		
Temp. Range	Ambient -70°C (Digital)		
Frequency	40 KHz		
Housing Material	SUS 304 + PP		
Bath Capacity	5.7 L	10.7 L	20.7 L
Bath Dimensions [W X D X H]	300 X 155 X 150mm	300 X 240 X 150mm	500 X 300 X 150mm
Overall Dimensions [W X D X H]	385 X 255 X 270mm	385 X 345 X 270mm	590 X 405 X 275mm
Tray Dimensions [W X D X H]	260 X 100 X 100mm	260 X 195 X 100mm	445 X 240 X 115mm
Required Power	350 watt	400 watt	700 watt
Net Weight	6.1 Kg	7.3Kg	11.8 Kg
Voltage	240V, 50/60Hz		

ORDERING INFORMATION

Order Code	Description
605	Ultrasonic Cleaner 605 (5.7 liter), 220V
610	Ultrasonic Cleaner 610 (10.7 liter), 220V
620	Ultrasonic Cleaner 620 (20.7 liter), 220V

New Features for 605/610/620

Keyboard

- Drain knob on the right side of the unit for greater convenience.
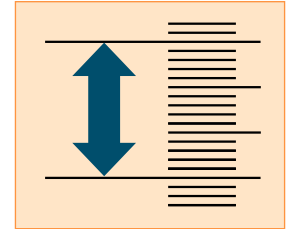
Drain Knob for 605/610/620

Electromagnetic Sieve Shaker

Features

- 3 directional shifting motion
- Intermittent and Continuous tapping motion
- Very low noise operation
- Wet Sieve attachment (Optional)
- Mesh is uniformly tensioned & welded

Sieves on pages 11 to 14

Amplitude (2.5 mm)

SPECIFICATIONS

Order Code	SSA 200
Display	16 x 2 character alphanumeric LCD
Intermittent operation	At interval Upto 0.5 seconds
Capacity	Upto 8 Sieves of 50 mm height
Shake time	Programmable from 1min to 99 min
Power (Vibration) level	Programmable from 5 to 20
Max.Batch / Feed Capacity	3 Kg
Noise level	Less than 61 dB without sieves at maximum amplitude Less than 71 dB without sieves and material at maximum amplitude
Dimensions [L X W X H]	339 X 312 X 270mm
Weight	50 Kg Approx without sieves
Power	220 / 230 V AC, 50 Hz, 600VA
Std. Supply	Main Unit + Lid + Receiver + 2 Nos. of sieves (Mesh Size from 5.6 mm to 40 µm with compliance certificate, S - 200 XX user selectable)

ORDERING INFORMATION

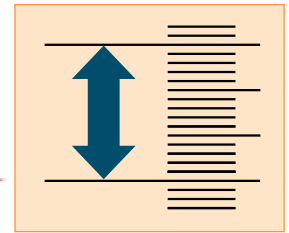| Order Code	Description
SSA - 200	Sieve Shaker
SSA - LR	Lid & Receiver
SSA - LR - Wet	Wet sieve attachment

Features

- 3-D effect sieving
- Continuous, Intermittent
- Monochrome Graphical Display, with 18 key alpha numeric keypad
- Measuring range from 20µm to 10mm
- Digital Setting for parameters
- Globally comparable and reproducible results
- Maintenance free and low noise
- Wet sieving attachment - Optional
- 3 Level password protection

NEW

Sieves on pages 11 to 14

Amplitude (2.5 mm)

SPECIFICATIONS

| Order Code	SSA 200 - A
Display	LCD - Monochrome Graphical display
Intermittent operation	At interval Upto 0.5 seconds
Capacity	Upto 8 Sieves of 200 mm Dia X 50 mm height Upto 16 Sieves of 100mm Dia X 25 mm height
Shake time	Programmable from 1min to 99 min
Power(Vibration) level	Programmable from 1 to 20
Max.Batch / Feed Capacity	3 Kg
Interval operation	Combined programming Feature of Both continuous and Intermittent mode with Digital Amplitude Programming feature (20 Program can be stored)
Noise level	Less than 50 db without sieves at maximum amplitude
Printer	Dot Matrix Printer 80 C (Ext), USB interface, RS 232 interface
Dimensions [L X W X H]	385 X 305 X 245mm
Weight	35 Kg Approx without sieves
Power	115V ± 15V, 50/60 Hz or 230V ± 23V, 50/60Hz
Std. Supply	Main Unit + Lid + Receiver + 8 Nos. of sieves (Mesh Size from 5.6 mm to 40 µm with compliance certificate, S - 200 XX user selectable)

ORDERING INFORMATION

Order Code	Description
SSA - 200 - A	Advanced Electro Magnetic Sieve Shaker
SSA - LR	Lid & Receiver
SSA - LR - Wet	Wet sieve attachment

Test Sieves

International Style
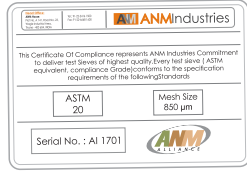
Certificate

Calibration certificate

Indian Style

Features

- Sieves made from stainless steel (Mesh- SS 316 / Ring- SS 304) with laser marking of specification & serial number
- Specially designed sieves without crevasses and without Lead
- No soldering process involved
- Lead free which makes it ideal for food grade products

International Test Sieves Comparison Table				200 mm/8 Inch Brass Frame *Indian Style*	200 mm/8 Inch ss Frame *Indian Style*	200 mm/8 Inch ss Frame *International Style*	200 mm/8 Inch ss Frame *International Style*
Bss BSI	**ASTM**	**ISS** ISO	**Mesh Size**	**non Certified Price ₹**	**non Certified Price ₹**	**With Certificate Price ₹**	**With Calibration Certificate (Price ₹)**
3	3.35	5.6	5.6 mm	IBS 200-5.6 mm	ISS 200-5.6 mm	S 200-5.6 mm	
		5	5 mm			S 200-5 mm	
3.5	4	4.75	4.75 mm	IBS 200-4.75 mm	ISS 200-4.75 mm	S 200-4	
		4.5	4.5 mm			S 200-4.5 mm	
4	5	4	4 mm	IBS 200-4 mm	ISS 200-4 mm	S 200-5	
		3.55	3.55 mm			S 200-3.55 mm	
5	6	3.35	3.35 mm	IBS 200-3.35 mm	ISS 200-3.35 mm	S 200-6	
		3.15	3.15 mm			S 200-3.15 mm	
6	7	2.8	2.8 mm	IBS 200-2.8 mm	ISS 200-2.8 mm	S 200-7	
		2.5	2.5 mm			S 200-2.5 mm	
7	8	2.36	2.36 mm	IBS 200-2.36 mm	ISS 200-2.36 mm	S 200-8	
		2.24	2.24 mm			S 200-2.24 mm	

International Test Sieves Comparison Table				200 mm/8 Inch Brass Frame *Indian Style*	200 mm/8 Inch ss Frame *Indian Style*	200 mm/8 Inch ss Frame *International Style*	200 mm/8 Inch ss Frame *International Style*
Bss BSi	ASTM ASTM	ISS ISO	Mesh Size	non Certified Price ₹	non Certified Price ₹	With Certificate Price ₹	With Calibration Certificate (Price ₹)
8	10	2	2 mm	IBS 200-2 mm	ISS 200-2 mm	S 200-10	
		1.8	1.8 mm			S 200-1.8 mm	
10	12	1.7	1.7 mm	IBS 200-1.7 mm	ISS 200-1.7 mm	S 200-12	
		1.6	1.6 mm			S 200-1.6 mm	
12	14	1.4	1.4 mm	IBS 200-1.4 mm	ISS 200-1.4 mm	S 200-14	
		1.25	1.25 mm			S 200-1.25 mm	
14	16	1.18	1.18 mm	IBS 200-1.18 mm	ISS 200-1.18 mm	S 200-16	
		1.12	1.12 mm			S 200-1.12 mm	
16	18	1	1 mm	IBS 200-1 mm	ISS 200-1 mm	S 200-18	
		900	900 µ			S 200-900 µ	
18	20	850	850 µ	IBS 200-850 µ	ISS 200-850 µ	S 200-20	
		800	800 µ			S 200-800 µ	
22	25	710	710 µ	IBS 200-710 µ	ISS 200-710 µ	S 200-25	
		630	630 µ			S 200-630 µ	
25	30	600	600 µ	IBS 200-600 µ	ISS 200-600 µ	S 200-30	
		560	560 µ			S 200-560 µ	
30	35	500	500 µ	IBS 200-500 µ	ISS 200-500 µ	S 200-35	

Test Sieves

International Test Sieves Comparison Table				200 mm/8 Inch Brass Frame *Indian Style*	200 mm/8 Inch ss Frame *Indian Style*	200 mm/8 Inch ss Frame *International Style*	200 mm/8 Inch ss Frame *International Style*
Bss BSI	ASTM	ISS ISO	Mesh Size	non Certified Price ₹	non Certified Price ₹	With Certificate Price ₹	With Calibration Certificate (Price ₹)
		450	450 μ			S 200-450 μ	
36	40	425	425 μ	IBS 200-425 μ	ISS 200-425 μ	S 200-40	
		400	400 μ			S 200-400 μ	
44	45	355	355 μ	IBS 200-355 μ	ISS 200-355 μ	S 200-45	
		315	315 μ			S 200-315 μ	
52	50	300	300 μ	IBS 200-300 μ	ISS 200-300 μ	S 200-50	
		280	280 μ			S 200-280 μ	
60	60	250	250 μ	IBS 200-250 μ	ISS 200-250 μ	S 200-60	
		224	224 μ			S 200-224 μ	
72	70	212	212 μ	IBS 200-212 μ	ISS 200-212 μ	S 200-70	
		200	200 μ			S 200-200 μ	
85	80	180	180 μ	IBS 200-180 μ	ISS 200-180 μ	S 200-80	
		160	160 μ			S 200-160 μ	
100	100	150	150 μ	IBS 200-150 μ	ISS 200-150 μ	S 200-100	
		140	140 μ			S 200-140 μ	
120	120	125	125 μ	IBS 200-125 μ	ISS 200-125 μ	S 200-120	
		112	112 μ			S 200-112 μ	

International Test Sieves Comparison Table				200 mm/8 Inch Brass Frame *Indian Style*	200 mm/8 Inch ss Frame *Indian Style*	200 mm/8 Inch ss Frame *International Style*	200 mm/8 Inch ss Frame *International Style*
Bss BSI	ASTM	ISS ISO	Mesh Size	non Certified Price ₹	non Certified Price ₹	With Certificate Price ₹	With Calibration Certificate (Price ₹)
150	140	106	106 µ	IBS 200-106 µ	ISS 200-106 µ	S 200-140	
		100	100 µ			S 200-100 µ	
170	170	90	90 µ	IBS 200-90 µ	ISS 200-90 µ	S 200-170	
		80	80 µ			S 200-80 µ	
200	200	75	75 µ	IBS 200-75 µ	ISS 200-75 µ	S 200-200	
		71	71 µ			S 200-71 µ	
240	230	63	63 µ	IBS 200-63 µ	ISS 200-63 µ	S 200-230	
		56	56 µ			S 200-56 µ	
300	270	53	53 µ	IBS 200-53 µ	ISS 200-53 µ	S 200-270	
		50	50 µ			S 200-50 µ	
585	325	45	45 µ	IBS 200-45 µ	ISS 200-45 µ	S 200-325	
		40	40 µ			S 200-40 µ	
400	400	38	38 µ	IBS 200-38 µ	ISS 200-38 µ	S 200-400	
		36	36 µ			S 200-36 µ	
	450	32	32 µ			S 200-450	
500	500	25	25 µ	IBS 200-25 µ	ISS 200-25 µ	S 200-500	
600	600(635)	20	20 µ	IBS 200-20 µ	ISS 200-200 µ	S 200-600(635)	

Vacuum Oven

Features

- Fitted with highly accurate controller that allows gentle drying of heat sensitive materials avoiding damage due to rapid temperature overshooting
- Dries faster than the conventional oven
- Separate vacuum release valve releasing vacuum by gentle turn of the knob
- Separate vacuum connection valve preventing oil spillage in the oven
- The interior and the exterior of the chamber is made of stainless steel with one aluminum rack
- The door provided with silicon gasket & positive latch to maintain seal at all vacuum levels
- Door with glass window for viewing of the sample inside the chamber
- Heater mounted below the tray, ensures rapid and equal heating without any thermal loss
- Visual alarm for temperature deviations

Shelf Heating Technology helps heat samples effectively under vacuum

SPECIFICATIONS

Order Code	VO 100
Temperature Range	50°C to 200°C
Resolution	0.1 °C
Temperature Accuracy	± 2°C
Capacity Litres	30
Inner dimension [L X W X D]	300 X 300 X 275mm
External dimensions [L X W X D]	590 X 420 X 460mm
Shelves	1
Rated Supply	230V, 50Hz, 15A

ORDERING INFORMATION

Order Code	Description
VO 100	Vacuum Oven, 30 Ltr.
VP-1	Vacuum Pump

Features

- Oil free, Portable, Diaphragm type vacuum pump
- Made from Special grade Aluminum: light weight and good strength
- Built in Micro suction filter with 2-play nylon reinforced neoprene rubber diaphragm
- Special sealed bearing to eliminate lubrication
- Moisture trap & pressure regulator with pressure gauge
- Built-in thermal protection device to shut off the pump automatically when overheated and then restart it when the temperature cools down
- Vibration-proof assembly makes pump run at the lowest noise level among all other equivalent pumps

with Vacuum Pump

Features

- ☐ CFC Free refrigeration
- ☐ LCD display drying curves
- ☐ Big opening of condenser
- ☐ Condenser has pre-freezing function
- ☐ Low noise compressor, good efficiency, long service life
- ☐ Stainless steel condenser, shelves/Trays, operation panel
- ☐ Drying Chamber with organic glass is safe and visible
- ☐ Customized tray spacing
- ☐ Small volume, easy and convenient operation
- ☐ Nitrogen valve is optional
- ☐ Communication interface is optional

SPECIFICATIONS

Order Code	FD-50	FD-80	FD-50B	FD-80B
Condenser temperature	-50°C	-80°C	-50°C	-80°C
Tray Dimension	200mm dia X 4 layers	200mm dia X 4 layers	200mm dia X 4 layers with 8 ports manifold	200mm dia X 4 layers with 8 ports manifold
Freeze Drying Area	0.12m^2			
Condenser Capacity	3-5kg			
Vacuum degree	< 10 Pa			
Bulk Capacity	1.2L, 10mm thickness			
Voltage	220V, 50Hz			
Power	700W			
Dimension [L X W X H]	460X625X(370 + 465)mm			

ORDERING INFORMATION

Order Code	Description
FD-50	Freeze dryer -50°C, 4 layers
FD-80	Freeze dryer -80°C, 4 layers
FD-50B	Freeze dryer -50°C, 4 layers with 8 ports manifold
FD-80B	Freeze dryer -80°C, 4 layers with 8 ports manifold

OPTIONAL ACCESSORIES

Order Code	Description
FD-NV	Nitrogen Valve
FD-COM	Communication Interface

Karl Fischer Titrator

NEW

Features

- Karl Fischer method is used to determine trace amounts of water in a sample (uses coulometric or volumetric titration)

- The popularity of the Karl Fischer titration is due to several practical advantages that it holds over methods of moisture determination such as high accuracy, speed, selectivity and precision, typically within 1% of available water

- The sample quantity required for analysis is small

- Little or no sample preparation is needed

- The analysis is typically complete within a minute

SPECIFICATIONS

Order Code	KF - 5000
Method of Detection	Conductometric / Volumetric
Range of Moisture Detection	Better than 20 ppm to 100%
Display of Reading	Moisture in ppm, percentage(%), mg/ml of water, gm/L, Mol/L
Magnetic Stirrer	Built-in with soft touch Key speed controller
Stirring Time	0 - 99 mins - users adjustable
End Point Time	1-99 seconds - users adjustable
Auto Neutralization	On/ Off - users selectable- reduces the time between analyses & gives accurate results
Auto Neutralization	On/ Off - users selectable- reduces the time between analyses & gives accurate results
Type of Electrode	Dual Platinum - Combined Type
Type of Dispenser	Motorized - for accurate measurement
Over Titer facility	Audio / Visual Alarm at 15 ml to save KF Ragent
MOC of Dispenser	SS-316L & Teflon for Corrosion Protection
Dispenser Calibration/Validation	Onsite by users
Flushing Mode	For cleaning dispensing path
Auto Drain Facility (Optional)	For cleaning reaction vessel - advisable for large volume sample
Short Link	Provided to diagnose the problem either with Instrument OR Electrode
End Point Sensitivity	Users adjustable - 80 to 100 for moisture detection
End Point Detection	By Audio & Visual Alarm
Calibration Reminder Alarm	0-99 Hours
Average Factor Calculation	Automatic – Maximum 5 factors can be stored in memory
Calibration Data Storage	Non Volatile Memory
Report Formation	As per GLP Compliance
Analysis Data Storage	More than 500 analysis data can be stored
Printer	40 / 80 Column Dot Matrix Printer (Optional)
Power Supply	230 VAC ±10%, 50 Hz

ORDERING INFORMATION

Order Code	Description
KF - 5000	Karl Fischer Titrator
KF - CC	Calibration Certificate with traceability
KF - ADF	Auto Drain Facility
KF - AST	Auto Solvent Transfer Unit
KF - IQ/OQ	IQ / OQ Documentation only
KF -PRN	40 Columns Dot Matrix Printer

Features

- Excellent chemical resistance
- Four ranges of bottle-top dispensers cover a volume range from 0.5ml to 50ml
- Easy to clean and maintain
- The optional flexible discharge tube with safety handle permits fast and precise dispensing
- Easy to dismantle, clean and assembly
- Springless valve design
- High chemical resistance and a longer-life with minimal maintenance
- Volume lock ensures stopping of any accidental discharge
- The device comes with 4 additional adapters for most common bottle sizes

SPECIFICATIONS

Order Code	BTD-100	BTD-200	BTD-300	BTD-400
Graduation [ml]	0.10	0.20	0.50	1.00
Range [ml]	0.5 to 5.0	1.0 to 10.0	2.5 to 25.0	5.0 to 50.0

ORDERING INFORMATION

Order Code	Description
BTD-100	Bottle Top Dispenser, 0.5 to 5.0 ml
BTD-200	Bottle Top Dispenser, 1.0 to 10.0 ml
BTD-300	Bottle Top Dispenser, 2.5 to 25.0 ml
BTD-400	Bottle Top Dispenser, 5.0 to 50.0 ml

Personal Centrifuges

PC 103

PC 103V

Features

- ☐ Patented magnetic design for tool-free rotor removal
- ☐ Digital display of time and RPM
- ☐ 8 place closed rotor for better airflow, better efficiency and low heat generation
- ☐ Electronic brake for immediate stop on lid opening for user safety
- ☐ Imbalance detection with auto cut off
- ☐ User enabled digital calibration function
- ☐ Whisper-quiet operation
- ☐ Small footprint for saving valuable bench space
- ☐ Suitable for use in hoods and cold rooms
- ☐ Microprocessor controlled centrifuge with variable speed and time setting, along with last run memory function

SPECIFICATIONS

Order Code	PC 103	PC 103V
Display	Digital Display (LED)	
Maximum RPM/RCF [g]	6000/2000 g	6000/2000 g
Timer	Infinite Mode	1 to 25 Minutes & Infinite Mode
Variable Speed	NA	1000 - 6000 RPM in step of 100 RPM
Noise Level	< 55 db	< 55 db
Dimensions [L X W X H]	162 X 157 X 116 mm	162 X 157 X 116 mm
Rotors & Adaptors, (Included in standard pack)	8 X 1.5 / 2.0 ml Closed Rotor, PCR Strip Rotor (2 X 8 X 0.2 ml), Reduction Adaptors for 0.2 / 0.5 ml Micro tubes	8 X 1.5 / 2.0 ml Closed Rotor, PCR Strip Rotor (2 X 8 X 0.2 ml), Reduction Adaptors for 0.2 / 0.5 ml Micro tubes
Rotor	8 X 1.5/2.0 ml Micro tubes	8 X 1.5/2.0 ml Micro tubes
Weight	1.1 Kgs	1.1 Kgs
Imbalance detection	No	Yes

ORDERING INFORMATION

Order Code	Description
PC 103	Personal Centrifuge, fixed speed, RPM 6000, RCF 2000 X g
PC 103V	Personal Centrifuge, variable speed, RPM 6000, RCF 2000 X g

Features

- Precise RPM setting from 500 to 6500 RPM with least count of 00 RPM
- Lid lock safety - Lid releases (automatically) after run completion
- Timer setting from 1 to 30 minutes & infinite mode
- Smart airflow design ensures quiet operation and low temperature rise
- Microprocessor controlled centrifuge with variable speed and time setting, along with last run memory function
- Better airflow design for lesser heat generation, greater sample safety and lesser Noise
- Brushless DC Motor for maintenance free long Life
- Autoclavable rotors and with tube adaptors 2ml / 5ml/ 7ml / 9 ml blood collection tubes
- Imbalance Detection with Auto cut off
- One Switch Changeover from RPM to RCF

SPECIFICATIONS

Order Code	U4500-P
Maximum RPM	6500
Speed Setting	500 to 6500 RPM
Timer Setting	1 to 30 mins & infinite mode
Weight	4 kg
Noise Level	< 60 db
Dimensions [W X D X H]	260 X 244 X 205 mm
Motor Type	Brushless DC
Lid Lock Safety	Yes
Imbalance detection	Yes
Fixed Angle Rotor (Optional Rotors)	6 X15 ml(Autoclavable) - 3684g (Standard)
	8 X15 ml(Autoclavable) - 3873g (Optional)
Adaptors (included in standard pack)	Chosen rotor with (adaptors for 5,7 ml & 1.5/2 ml tubes - takes most standard blood collection tubes)

ORDERING INFORMATION

Order Code	Description
U4500-P	Doctor Centrifuge, RPM 6500, RCF 3664 X g

OPTIONAL ACCESSORIES

Order Code	Description
45P R-1	6 X 15ml Tube Rotor for U-4500 P Centrifuge
45P R-2	8 X 15ml Tube Rotor for U-4500 P Centrifuge

High Speed Programmable Centrifuges

Features

- Intuitive simple interface for quick and convenient setting
- Lid lock safety - Lid opens automatically on run completion
- One touch Short Spin operation & RPM / RCF conversion
- Small footprint saves valuable bench space
- Suitable for use in hoods or cold rooms
- Compatible with Mini Hematocrit Rotor & PCR strip rotor
- Brushless DC Motor – Maintenance free, Delivers Better Power/ Weight Ratio & Fit for extended runs
- Microprocessor controlled centrifuge with variable speed and time setting, along with last run memory function
- Better airflow design for lesser heat generation, greater sample safety and lesser Noise

SPECIFICATIONS

Order Code	UC15000P
Display	Digital Display
Maximum RPM / RCF	15000 / 15596 X g
Timer Setting	1 - 99 mins & infinite mode
Rotor Capacity (Standard)	12 X 1.5/2.0 ml micro tubes
Motor Type	(BLDC) Brushless DC motor
Noise Level	< 60db
Dimensions [W X D X H]	260 X 244 X 205 mm
Imbalance Detection	Yes
Rotor	Rotor with Screw on lid (for better contamination protection)
Rotor (Optional)	Mini Hematocrit Rotor - 24 X 45 length capillary tubes
Adaptors (included in standard pack)	Reduction adaptors for 0.2 ml micro tubes
	Reduction adaptors for 0.4/0.5 ml micro tubes

ORDERING INFORMATION

Order Code	Description
UC15000P	High Speed Prog. Centrifuge, RPM 15000, RCF 15596 X g

OPTIONAL ACCESSORIES

Order Code	Description
15P R-1	12 X 1.5/2 ml tube rotor for U-15000 P Centrifuge
15P R-2	2 X 8 X 0.2ml PCR strip Rotor for U-15000 P Centrifuge
15P R-3	24 X 40mm capillary tube rotor for U-15000 P Centrifuge

Features

- Microprocessor controlled with last run memory function
- Large digital display for easy reading
- Brushless DC motor - maintenance free, delivers better power / weight ratio and fit for extended runs
- Imbalance detection auto cut off
- Better airflow design ensures lesser heat generation and less noise
- Lid lock safety : Lid opens automatically on run completion
- Intuitive simple interface for quick and convenient setting
- 1 to 30 mins countdown timer
- Small footprint saves valuable bench space suitable for use in hoods or cold rooms

SPECIFICATIONS

Order Code	U15000R
Temperature range	-20°C to 40°C
Speed range RPM / RCF (g)	15000 RPM (200-15000 RPM), increment: 10 RPM, 21380 X g, increment: 10 X g
Timer	30 sec - 99 min / (Continuous operation)
Rotor	24 place X 1.5 / 2.0 ml or 8 place X 5.0 ml (Supplied as Standard Acc.)
Motor Type	Brushless motor
Noise Level	< 56db
Dimensions [W X D X H]	338W X 580D X 324 mm

ORDERING INFORMATION

Order Code	Description
U15000R	High Speed Micro Centrifuge, RPM 15000, RCF 21380 X g

ROTOR OPTIONS

1	2	3	4
8 x 5 ml (18461 g)	24 x 2 ml (21420 g)	44 x 2 ml (22388 g)	4 PCR STRIP (15397 g)

OPTIONAL ACCESSORIES

Order Code	Description
15R R-1	24 X 1.5/2ml tube Rotor for U-15000 R Centrifuge
15R R-2	44 X 1.5/2ml tube Rotor for U-15000 R Centrifuge
15R R-3	8 X 5 ml tube Rotor for U-15000 R Centrifuge
15R R-4	4 X 8 X 0.2ml PCR strip Rotor for U-15000 R Centrifuge

Overhead Stirrer

Features

- Brushless DC motor for quiet operation and maintenance free long operation
- Microprocessor controlled for consistent accuracy with viscous and non-viscous liquids
- Reversible mixing motion - CW/CCW
- Large digital display for all the parameters at one glance
- Uninterrupted operation through Smart control
- Safety cut for overload, over current & over temperature
- Counter reaction to speed change
- Push through shaft for viscous liquid or smaller vessels

SPECIFICATIONS

Order Code	OHS 200	OHS 401
Capacity [H2O]	25 L	50 L
Speed Range	50-2000 RPM	60-2000 RPM
Torque	20 Ncm	50 Ncm
Viscosity	8000mPas	30000mPas
Timer	1 min to 99 hr 59 mins & infinite mode	
Dimensions [L X W X H]	79 X 225 X 179 mm	102 X 249 X 242 mm
Protection Class	IP 54	IP 42
Weight	1.8 kg	5.1 kg

ORDERING INFORMATION

Order Code	Description
OHS 200	Overhead Stirrer with Display, 25 Ltr. with Stand
OHS 401	Overhead Stirrer with Display, 50 Ltr. with Stand

Impeller to be order separately

OPTIONAL ACCESSORIES

Order Code	Description
OHS-A	Universal Stand with support holder & fixing device
OHS-B	Cross-Welded Impeller : 50 X 12 X 350 mm
OHS-C	Straight Blade Impeller : 35 X 12 X 350 mm
OHS-D	Straight Blade Impeller : 50 X 12 X 550 mm
OHS-E	Pivoting Blade Impeller : 60 X 15 X 550 mm
OHS-F	Collapsible Blade Impeller : 80 X 10 X 550 mm
OHS-G	Square Blade Impeller : 38 X 38 X 550 mm
OHS-H	Anchor Blade Impeller : 50 X 50 X 550 mm
OHS-I	Paddle Blade Impeller : 70 X 70 X 550 mm
OHS-J	Paddle Blade Impeller : 70 X 80 X 550 mm

OHS-B Crossed Stirrer	OHS-C Straight Stirrer	OHS-D Blade Stirrer	OHS-E Pivoting Stirrer	OHS-F Collapsible Blade	OHS-G Square Blade	OHS-H Anchor Blade	OHS-I Paddle Blade	OHS-J Paddle Blade

Features

- Robust top made up of nano-crystalline glass ceramic for resistance against temperature shocks and liquid splash
- Elevated control panel for protection against leaking liquids
- Display for easy value setting, all set values readily visible without toggle. No shared display
- 3 heating modes for rapid, gradual & accurate heating
- Pulse mode for vigorous mixing of liquids
- Constant speed across diverse loads and viscosity
- Compatible with PT- 1000 Temperature Probe for accurate measurement of media temperature (available as an optional accessory)
- Powerful BLDC motor for constant speed delivery under varying load conditions

MS 101

MS 303

SPECIFICATIONS

Order Code	MS 101	MS 303
Speed Range	200 - 2200 in steps of 10 RPM	
Dimensions (L x W x H)	156 X 248 X 104 mm	330 X 225 X 113 mm
Stirring Quantity in Ltr (Max)	10	20
Heating Temp. Range (°C)	Ambient to 320°C	Ambient to 550°C
Set-up Plate Feature	Ceramic Coated SS	Ceramic Plate
Set-up Plate Dimensions	140 mm dia (Round)	180 X 180 mm
RS 232 interface	N.A	Yes
Weight	2.2 kg	5.4 kgs
Temp. Accuracy	±1°C	
IP Rating	IP 21	
Safety Temp. Circuit	Yes	
Slip Detection	Yes	

ORDERING INFORMATION

Order Code	Description
MS 101	Magnetic Stirrer with Heater, 10 Ltr
MS 303	Magnetic Stirrer with Heater, 20 Ltr

OPTIONAL ACCESSORIES

Order Code	Description
MS-A	External Sensor (PT 1000)
MS-B	Support Clamp for external sensor

Multichannel Magnetic Stirrer

MSML 101

MSML 104

Features

- ☐ No moving parts, truly maintenance free
- ☐ Microprocessor based controlled operation
- ☐ Last run memory function
- ☐ Pulse mode - reverses the direction every 30 seconds for proper mixing
- ☐ Software driven gradual acceleration
- ☐ Universal power supply - small wall mount adaptor
- ☐ IP 65 complaint design (Water spill resistant)
- ☐ Corrosion resistant SS top surface for better chemical resistance
- ☐ Synchronized speed setting (MSML 104)

SPECIFICATIONS

Order Code	MSML 101	MSML 104
Max. RPM	1500	1200
Speed Setting	From 15 RPM at every 50 RPM	
Time Setting	1 to 99 mins	
Digital Display	Yes	
Capacity	1 X 800 ml	4 X 400 ml
Recommended bar length	25 mm	
Pulse function	Yes	
Sync Mode	NA	Yes
Last run memory	Yes	
Dimension [L x W x H]	124 X 191 X 14.5 mm	457 X 126 X 13.4 mm
Weight	400 gms	1.5 kg
Protection Class	IP 64 (Water spill resistant)	

ORDERING INFORMATION

Order Code	Description
MSML 101	Single Channel Magnetic Stirrer
MSML 104	Four Channel Magnetic Stirrer

Features

- Powerful BLDC motor delivers constant speed
- Microprocessor controlled multi position stirrer
- variable speed & time setting
- Last run memory function
- High performance multi position stirrer with 5/10 stirring positions
- optimum use of laboratory space
- Heater temperature setting from ambient to 120°C
- Homogenous temperature distribution across heating plate
- Programmable pulse mode-reverses direction for better mixing
- Water proof heater with in-built safety cut-off
- Non slip strength rubber feet

SPECIFICATIONS

Order Code	MMS 105	MMS 110
No. of Stirring Positions	5	10
Stirring Quantity Max	400 ml per position	
Variable Speed	300 - 1500 RPM in steps of 10 RPM	
Temperature Range	Ambient to 120°C	
Run Time	1-999 mins & infinite	
Pulse Mode	Programmable pulse mode - user can set time from 30 to 99 sec.	
Set-up Plate Material	Stainless steel plate with silicone sheet	
Set-up Plate Dimensions	565 X 136 X 75 mm	565 X 196 X 75 mm
Weight	3 kg	5 kg
Length of Stir Bar	25 mm	
Protection Class	IP 42	

ORDERING INFORMATION

Order Code	Description
MMS 105	Five Channel Programmable Magnetic Stirrer with Heater
MMS 110	Ten Channel Programmable Magnetic Stirrer with Heater

Vortex Mixers

VM 100

VM 101

Features

- Adjustable speed
- Silent operation
- Orbital diameter of 4 mm
- 3 way switch (On/Off/Touch)
- Brushless DC motor for maintenance free long life
- Inbuilt counter balance for stable & safe operation
- Robust construction for stable operation
- Timer setting 0 to 999 minutes (VM 101)
- Programmable pulse mode function (VM 101)
- Digital display toggles between speed and time every 5 second (VM 101)

SPECIFICATIONS

Order Code	VM 100	VM 101
Max (RPM)	2800	4200
Digital Display	No	Yes
Orbital diameter	4 mm Ø	
Motor Type	AC motor	Brushless DC
Time Setting	No	1-999min
Dimensions [L X W X H]	205 X 136 X 138.5 mm	
Max Load Capacity	500 gm	
Weight	3 kgs	

ORDERING INFORMATION

Order Code	Description
VM 100	Vortex Mixer, Variable Speed
VM 101	Vortex Mixer, Variable Speed, Digital Display

OPTIONAL ACCESSORIES

Order Code	Description
VMA-1	Universal Attachment
VMA-2	Attachment for 20 x1.5/2 ml tubes
VMA-3	Attachment for 96 well plate
VMA-4	Attachment for 250ml Flask
VMA-6	Round Disc Attachment
VMA-7	Cup Attachment

MM 100

MM 104

Features

- ☐ Compact & universal Micro Plate Mixer suitable for small vessels & 96 micro plate
- ☐ Wide range of accessories, easy installation and replacement
- ☐ Continuous operation
- ☐ Stepless speed regulation of motor
- ☐ DC brushless motor, low running noise and long service

SPECIFICATIONS

Order Code	MM 100	MM 104
Speed (RPM)	0-1500	200-1200
Shaking movement	orbital	orbital
Orbital diameter [mm]	4	3
Motor Type	DC Brushless motor	DC Brushless motor
Run type	Continuous	1 - 999 mins & Continuous
Dimensions [W X D X H]	260 X 150 X 80mm	343 X 195 X 88mm

ORDERING INFORMATION

Order Code	Description
MM 100	Micro-plate Mixer, Variable Speed
MM 104	4 plate Mixer, Variable Speed, Digital Display

Tube Roller

Features

- Brushless DC motor for quiet operation and maintenance free long life
- Tool free detachable rollers for easy cleaning in case of spillage
- Microprocessor controlled tube roller with variable speed and time setting
- Last run memory function
- User programmable - save up to 9 programs
- Programmable pulse mode feature
- Gentle rocking and rolling motion for proper mixing
- Stackable design with robust construction for stable operation

TR 100

SPECIFICATIONS

Order Code	TR 100
Motor Type	Brushless DC Motor
Motion	Rocking & Rolling
Speed Range	10 to 80 RPM
Operation Type	Continuous & Timed Operation
Timer Range	1 to 99 mins
Removable Rollers	Yes
Pulse Mode	Yes
Tilt Angle	± 3°
Protection Class	IP 21
Weight	6 kg
Number of tubes	15 X 7 ml Blood Tubes
Dimensions [L X W X H]	502 X 92.5 X 301 mm

ORDERING INFORMATION

Order Code	Description
TR 100	Tube Roller, Variable Speed, 6 Rollers

TR 200

Features

- Quiet and maintenance free long life operation
- Microprocessor controlled plate rotator with variable speed and time
- Last run memory function
- Adjustable speed range from 10 to 80 RPM with +/-1 accuracy
- User programmable - save up to 9 user defined programs
- Automatic Power on resumption of running program in case of power failure
- Easy removal / installation of Plates for replacement & cleaning

SPECIFICATIONS

Order Code	TR 200
Motor Type	Brushless DC Motor
Programmable Mode	Set and save up to 9 user defined programs
Speed Range	10 to 80 RPM
Timer Range	1 to 99 mins & infinite
Pulse Mode	Alternate clockwise and anticlockwise motion with 2 second intervals
Protection Class	IP 21
Digital Display	Yes
Weight (Capacity)	1.5 kg
Capacity [supplied with any one chosen plate)	16 Tubes X 50ml / 35 Tubes X 15 ml / 55 Tubes X 2ml
Dimensions [W X D X H]	540 X 274 X 186mm

ORDERING INFORMATION

Order Code	Description
TR 200	Rotators, Variable Speed, Adjustable Mixing Angle

OPTIONAL ACCESSORIES

Order Code	Description
TR-A	Rotisserie Accessory for 15 ml X 35 tubes
TR-B	Rotisserie Accessory for 1.5 ml/2 ml X 55 tubes
TR-C	Rotisserie Accessory for 50 ml X 16 tubes

ROTOR OPTIONS

15 ml
(35 Tubes)

1.5/2 ml
(55 Tubes)

50 ml
(16 Tubes)
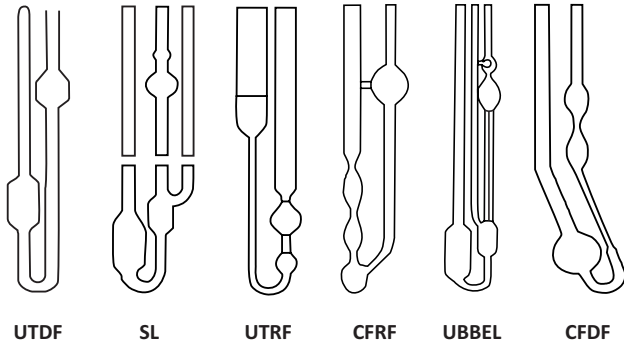
Shaker & Rocker

LS/OS 750

OS 250

Features

□ Platform shaker with true Orbital and Linear reciprocating motion, for shaking mass up to 7.5/2.5kg

□ Brushless DC motor for long life and maintenance free operation

□ Dedicated display for Speed, Time & Program parameters

□ Program mode allows setting motion, direction, speed, time, dwell time, sequence and loop operation (LS/OS 750)

□ Save up to 6 programs, each with 9 sub-programs (LS/OS 750)

□ Universal platform attachments for using vessels of all shapes and sizes

SPECIFICATIONS

Order Code	LS/OS 750	OS 250
Shaking movement	Orbital / Linear Please specify at the time of placing the order	Orbital
Orbital diameter	10/ 20 mm please specify at the time of placing the order	4 mm
Max Weight	Upto 7.5 Kg	2.5 kg
Speed	50 RPM To 500(300 RPM for 20 mm movement)	100 - 800RPM
Time Setting Range	Upto 99.59 hrs	1min - 19h59min
Motor Type	Brushless DC motor	
Protection Class	IP 21	
Programable feature	6 programs with each program having 9 sub-programs	NA
Platform Size [L X W]	330 X 330 mm	250 X 250
Program Looping	Yes	NA
Dimensions [L X W X H]	350 X 408 X 99 mm	300 X 340 X 100
Weight	10 Kgs	8.1 kg

ORDERING INFORMATION

Order Code	Description
LS/OS 750	Linear / Orbital Shaker 7.5 kg, with Universal attachment
OS 250	Orbital Shaker 2.5 kg, with Universal attachment

UTDF   SL   UTRF   CFRF   UBBEL   CFDF

Features

Supplied with Certificate

Optional Calibration Certificate Traceable to Cannon Viscosity Standard

Kinematic Viscosity Bath on page 37

- ☐ Confirms to specifications ASTM D-445 & 446
- ☐ 'U' Tube Reverse Flow / Cannon Fensky Reverse Flow Viscometers for opaque liquid
- ☐ 'U' Tube Direct Flow / Cannon Fensky Direct Flow Viscometers for transparent liquid
- ☐ Suspended Level / Ubbelohde Viscometers for transparent liquid
- ☐ Supplied with test certificate of constant @40°C or @40°C & 100°C

UTDF - 'U' Tube Direct Flow	CFRF - Cannon Fensky Reverse Flow	UITRF - 'U' Tube Reverse Flow
SL - Suspended Level	CFDF - Cannon Fensky Direct Flow	UBBEL- Ubbelohde Viscometer

ORDERING INFORMATION

Order Code	Description	@40°C	@40° & 100°C
UBBELOHDE VISCOMETER for transparent liquids			
UBBEL-1	Size number 1 - Viscosity range from 2 to 10 cSt		
UBBEL-1C	Size number 1C - Viscosity range from 6 to 30 cSt		
UBBEL-1B	Size number 1B - Viscosity range from 10 to 50 cSt		
UBBEL-2	Size number 2 - Viscosity range from 20 to 100 cSt		
CANNON-FENSKE ROUTINE VISCOMETER DIRECT FLOW TYPE for transparent liquids			
CFDF-75	Size number 75 - Viscosity range from 1.6 to 8 cSt		
CFDF-100	Size number 100 - Viscosity range from 3 to 15 cSt		
CFDF-150	Size number 150 - Viscosity range from 7 to 35 cSt		
CFDF-200	Size number 200 - Viscosity range from 20 to 100 cSt		
CFDF-300	Size number 300 - Viscosity range from 50 to 200 cSt		
CFDF-350	Size number 350 - Viscosity range from 100 to 500 cSt		
CFDF-400	Size number 350 - Viscosity range from 200 to 1200 cSt		
CANNON-FENSKE VISCOMETER REVERSE FLOW TYPE for opaque liquids			
CFRF-75	Size number 75 - Viscosity range from 1.6 to 8 cSt		
CFRF-100	Size number 100 - Viscosity range from 3 to 15 cSt		
CFRF-150	Size number 150 - Viscosity range from 7 to 35 cSt		
CFRF-200	Size number 200 - Viscosity range from 20 to 100 cSt		
CFRF-300	Size number 300 - Viscosity range from 50 to 200 cSt		
CFRF-350	Size number 350 - Viscosity range from 100 to 500 cSt		
BS/IP U RF VISCOMETER for opaque liquids			
UTRF-1	Size number 1 - Viscosity range from 0.6 to 3 cSt		
UTRF-2	Size number 2 - Viscosity range from 2 to 10 cSt		
UTRF-3	Size number 3 - Viscosity range from 6 to 30 cSt		
UTRF-4	Size number 4 - Viscosity range from 20 to 100 cSt		
UTRF-5	Size number 5 - Viscosity range from 60 to 300 cSt		
BS/IP SL VISCOMETER for transparent liquids			
SL-1	Viscosity range 3.5 to 10 cSt		
SL-1A	Viscosity range 6 to 30 cSt		
SL-2	Viscosity range 20 to 100 cSt		
SL-2A	Viscosity range 60 to 500 cSt		
BS/IP U DF VISCOMETER for transparent liquids			
UTDF-A	Viscosity range 1 to 5 cSt		
UTDF-B	Viscosity range 2 to 15 cSt		
UTDF-C	Viscosity range 6 to 45 cSt		
UTDF-D	Viscosity range 20 to 120 cSt		
UTDF-E	Viscosity range 60 to 500 cSt		

ABEL Flash Point Apparatus

Features

- Confirms to specifications as per - **IP-33 & IP-170 & Is1448 (P-20) standards**
- Outer body made of heavy gauge mild steel, painted with powder coated paint
- Temperature will be controlled by digital temperature controller cum indicator & PT-100 sensor
- Electrically heated model with metallic heating plate with gas jet/oil test jet and manual stirrer

SPECIFICATIONS

Order Code	AFP - D
Supply	230V AC, Single Phase, 50 Hz
Standard Package Contains	• Thermometer IP-74C - 1 No • Thermometer IP-75C - 1 No • Energy Regulator • Test Cup made of Brass • Water Bath (Heating Vessel) Made of copper • Manual Stirrer • Oil test jet Gas test jet with control valve and silicon tubing

ORDERING INFORMATION

Order Code	Description
AFP - D	Abel Flash Point Apparatus
AFP - CAL	Calibration Certificate

Cleveland Open Cup Flash Point Apparatus (COC) - Digital

Features

- Confirms to specifications as per - **ASTM D-92, IP-36 & Is1448 (P-69)** standards
- Electrically heated model with metallic heating plate
- Manually Controlled Flame
- Outer body made of heavy gauge MS powder coated
- Temperature controlled by digital temperature controller cum indicator & PT-100 sensor

SPECIFICATIONS

Order Code	COC - D
Supply	230V AC, Single Phase, 50 Hz
Standard Package Contains	• Thermometer IP-28C - 1 No • Open Cup with handle • Clamp for thermometer • Oil test jet OR Gas test jet with control valve and silicon tubing

ORDERING INFORMATION

Order Code	Description
COC - D	Cleveland Open Cup Flash Point Apparatus (COC) - Digital
COC - D - CAL	Calibration Certificate

Features

- Confirms to specifications as per - **ASTM D-93, IP-34 & Is1448 standards**
- Outer body made of heavy gauge mild steel, painted with powder coated paint
- Temperature will be controlled by digital temperature controller cum indicator & PT-100 sensor
- Electrically heated model

SPECIFICATIONS	
Order Code	PMCC - D
Supply	230V AC, Single Phase, 50 Hz
Standard Package Contains	• Thermometer IP-15C/ASTM-9C - 1 No • Thermometer IP-16C/ASTM-10C - 1 No • Test Cup & Cup Cover • Pilot Flame • Motorized Stirrer • Heating Unit • Oil test jet OR Gas test jet with control valve, 'Y' connection, silicon tubing & rubber tubing

ORDERING INFORMATION	
Order Code	Description
PMCC - D	Pensky Marten Closed Cup Flash Point Apparatus (PMCC) - Digital

OPTIONAL ACCESSORIES	
Order Code	Description
PMCC - D - CAL	Calibration Certificates

Saybolt Chromometer

Features

- Saybolt Chromometer with daylight source built-in the base arranged to project a diffused light up through the tubes, 3-position turret assembly (1/2, 1 and 2) with certified Saybolt filters reducing the time required to make a determination and eliminating the handling of the standard filters and the possibility of loss and damage.
- For use on AC 230V - 50Hz - 0.3 A - 180x180x760 mm - (± 8 kg).

ORDERING INFORMATION	
Order Code	Description
SCREF-941	Saybolt Chromometer

Kinematic Viscosity Bath

Features

- Confirms to specifications as per ASTM D-445 & 446,IP-71 standards
- Double walled constructions, outer body made of heavy gauge mild steel, painted with powder coated paint, inside made of stainless steel
- Glass wool insulation will be provided to prevent heat loss
- Leak proof argon arc welded & fine finished joints
- Toughened glass windows will be fitted on front and rear sides of the bath
- In-built light arrangement will be provided
- A stirrer provided for turbulence free agitation & uniform temperature throughout the bath
- Temperature will be controlled by digital temperature controller cum indicator and PT-100 sensor

SPECIFICATIONS

Temperature Range	Ambient RT+5°C to 120°C
Display Resolution	0.1°C (0.01°C up to 99.99°C and above 100°C will be 0.1°C in KVB-04-P Model.)
Accuracy	± 0.05°C
Heater wattage	1.5 KW
Supply	230V AC, Single Phase
Standard Package Contains	• Thermometer IP-32C / IP-66C / IP-92C (Any One) - 1 No • Viscometer Holder made of Bakelite • Digital Stop Watch -1No.

ORDERING INFORMATION

Order Code	Description
KVB-04-E	Standard Kinematic Viscosity Bath , with 4 holes
KVB-04-P	Standard Kinematic Viscosity Bath , with 4 holes, Eurotherm Controller

OPTIONAL ACCESSORIES

Order Code	Description
KVB-CAL	Calibration Certificate

Features

- Ergonomic design ensuring light weight and soft plunger movement
- High grade engineering plastics
- Smart engineering design
- Click-stop digital system for volume setting
- 100% Fully Autoclavable Pipettes
- Color coded for easy identification
- Calibration conforms to DIN 12650 & EN ISO 8655 standards
- Calibration report enclosed with every pipette

ORDERING INFORMATION

Order Code	Description
V-100	Pipettes, Variable Volume, 0.5 to 10 µl
V-200	Pipettes, Variable Volume, 5 to 50 µl
V-300	Pipettes, Variable Volume, 50 to 200 µl
V-400	Pipettes, Variable Volume, 200 to 1000 µl
V-500	Pipettes, Variable Volume, 10 to 100 µl
V-600	Pipettes, Variable Volume, 100 to 1000 µl
V-700	Pipettes, Variable Volume, 2 to 20 µl
V-800	Pipettes, Variable Volume, 20 to 200 µl
V-900	Pipettes, Variable Volume, 500 to 5000 µl
F-100	Pipettes, Fixed Volume, 5 µl
F-200	Pipettes, Fixed Volume, 10 µl
F-300	Pipettes, Fixed Volume, 20 µl
F-400	Pipettes, Fixed Volume, 25 µl
F-500	Pipettes, Fixed Volume, 50 µl
F-600	Pipettes, Fixed Volume, 100 µl
F-700	Pipettes, Fixed Volume, 200 µl
F-800	Pipettes, Fixed Volume, 250 µl
F-900	Pipettes, Fixed Volume, 500 µl
F-1000	Pipettes, Fixed Volume, 1000 µl (1ml)
F-5000	Pipettes, Fixed Volume, 5000 µl (5ml)
8CH-100	8 Channel Research Pipettes, 0.5 to 10 µl
8CH-200	8 Channel Research Pipettes, 5 to 50 µl
8CH-300	8 Channel Research Pipettes, 30 to 300 µl
12CH-100	12 Channel Research Pipettes, 0.5 to 10 µl
12CH-200	12 Channel Research Pipettes, 5 to 50 µl
12CH-300	12 Channel Research Pipettes, 30 to 300 µl

Data Logger

Features

- The software is 21 CFR Part-II Compliace
- Common Data Logger for different brand instruments
- Uses latest micro controller based technology for batter accuracy
- Easy on-line field calibration by front panel membrane keypad
- Field programmable channel scan time 1 to 59 sec., Logging Interval 1 to 9999 sec. & Printing interval 5 to 9999 sec.
- Field programmable delay time 1 to 99 sec. for relay output
- Optional RS-232 / RS-485 Modbus Serial / Parallel Printer Port
- 8 channel fixed input for all thermocouple, J, K, R, S, T, E, B, N programmable by user & RTD (PT-100), 4-20 mA, 0-10 VDC factory settable

SPECIFICATIONS

Inputs	Range Minimum	Maximum	Resolution Normal	Accuracy Full Scale
RTD PT-100 (3 WIRE)	-200°C	400°C	0.1	±0.25%
K - Type (Cr - AL)	-50°C	1300°C	1	±0.25%
R - Type (PT - 13% Rh/PT), S -Type (PT - 10% Rh/PT)	0°C	1750°C	1	±0.25%
T - Type (Cu / CON)	-200°C	400°C	0.1	±0.25%
E - Type (NI Cr - CON)	0°C	1000°C	1	±0.25%
4 to 20 mA / 0 to 20 mA	-999°C	9999°C	Programmable	±0.25%
Voltage (0 to 1 VDC / 0 to 10 VDC)	-999°C	9999°C	By User	±0.25%
Set Point	2 independent set points for each channel with 2 common relay outputs & programmable latch / non-latch facility for relay and alarm indications.			
Relay Output	4 common relay outputs, potential free contcts			
Print Interval	5 to 9999 sec. for Direct printout on 24 / 08 / 132 Column Dot Matrix			
Logging Interval	1 to 999 sec. log interval for data logger model; programmable by user			
Memory	5000 reading storage capacity for DLS 8 3000 reading storage capacity for DLS 16			
Fault Indication	Under range, over range indication for RTD and all Thermocouple I/Ps			
Dimensions for 16 Channel [H X W X D]	192 X 96 X 200mm			

ORDERING INFORMATION

Order Code	Description
DLS 8	Data Logger, 8 Channel
DLS 16	Data Logger, 16 Channel
DLS SW	Software for Data Logger, 21 CFR Compliant software

OPTIONAL ACCESSORIES

Order Code	Description
DLS - A	Temperature Sensor, RTD PT100, -50°C to 400°C
DLS - B	Temperature Sensor, Thermocouple, k type, 100°C to 1200°C
DLS - C	Temperature Humidity Transmitter, -40°C to 1200°C, 0 to 100%H

Features

☐ **Customizable modes for different applications**
- Direct Mode
- Interval Printing
- Statistical (Sum, Mean etc.)
- Formulation
- Pipette Calibration
- Comparator Mode

☐ **OLED Dot Matrix Display**

Offers easy-to-read, brightly illuminated OLED display

☐ **In-built Clock**

Prints Time and Date information when hooked to a balance without clock function

☐ **Password Protection for Date / Time Setting**

Password Protection against Date / Time alteration

☐ **Plug and Play Interfacing**

Automatically sets the appropriate communication with a balance as soon as an operator connects the printer to weighing balance

☐ **Enhanced Support for ISO/GLP**

USP-100 can output time/signature information. In addition to this information, USP-100 can output other information based on your demands together with measured values

☐ **User Defined Header & Footer**

SPECIFICATIONS

Display	Alpha Numeric LED Display
Printing	• Method : Impact dot matrix • Speed : 2.7 lines/sec. (Approx.) • Printer mechanism durability : 1.5 million lines • Character size : 1.7mm (W) × 2.6mm (H) ASCII • Inking : Ink ribbon • Print format : 24 digits / line (5 × 7 dot matrix) • Paper : Normal paper 57.5mm width
Interface	Compatible with all types of Weighing balances having **RS-232 & DB9** interfacing facility
Power Supply	12 V DC /1.5 A
Dimension [L X W X H]	188.5 X116 X 87mm

ORDERING INFORMATION

Order Code	Description
USP-100	Universal Statistic Printer

H₂O Stabilizer

Features

- Stops/minimizes the biological breeding of bacteria, algae, fungus in instrument where water is stored
- Water changing duration is minimized
- Heat-transfer efficiency is maintained
- The transparency/cleanliness of water is maintained
- All contact parts are protected against corrosion
- Safe to use
- Biodegradable
- Non irritating to skin at recommended concentrations
- It can also be used as a general purpose fluid for routine Laboratory applications

ORDERING INFORMATION

Order Code	Description
WBA	H2O Stabilizer Water Bath Additive/Preservative (Qty 4 X 500 ml)

Foamless Detergent & Neutralizer for Lab Glassware Washer / Dryer

Features

- Glassware Washing Machines require foamless surfactant free detergent for trouble free operation
- Detergent & Neutralizer are available in pack size of 10 liters along with Certificate of Analysis

ORDERING INFORMATION

Order Code	Description
FLD	Foamless Detergent for Glassware Washer,10 Ltr.
FLN	Neutralizer for Glassware Washer, 10 Ltr.

Features

- High levels of accuracy with Peak force Measurements
- Easy to operate and handy to carry
- Force gauge displays the test direction
- Allows for real time data transfer
- Can store 10 test values and calculate the average of the stored test value automatically
- Zero point adjustment for calibration

SPECIFICATIONS

Order Code	**THT 101**
Display	LCD with backlit display
Keypad	User Friendly 9 Key operations
Hardness Range	5-500N
Hardness Accuracy	±0.05% FS
Measurable Units	N (Newton), KGF (KiloGram Force) and LBF (Low Bound Force)
Interface Ports	RS-232
Battery	1200 mAH, 8.4V, Ni-Hi Rechargeble Battery
Acrylic Safety Glass Cover	yes
Tablet Size	2mm to 28mm
Dimensions [L X B X H]	355 X 60 X 105 mm
Weight	2 Kg
Electrical Power /Adapter	230V 50 Hz to DC 12V, 300mA

ORDERING INFORMATION

Order Code	Description
THT 101	Tablet Hardness Tester - Portable

Tablet Hardness Tester - Basic

Features

- High Quality Electronic Load cell
- 3 Parameter - Thickness, Diameter and Hardness up to 500 N
- Easy Calibration and No Tilt During Calibration
- +/- 0.06 mm accuracy
- No extra gauges for thickness, all in one measurement
- Built in Mini Dot Matrix Printer
- Self-test and overload protection
- No tablet detection
- Password Protection with real time clock

SPECIFICATIONS

Order Code	THT 301
Display	LED
Keypad	User Friendly 9 Key operations
Hardness Range	5-500N
Hardness Accuracy	>1N
Diameter and Thickness Range	1.5 - 40 mm
Diameter Accuracy	>±0.06 mm
Measurements	Thickness and Diameter in either mm or inches
Measurable Units	N (Newton), KP (KiloPond, 1KP = 9.81N), SC (StrongCobb 1KP = 1.43Sc)
Number of Test for Statistics	Up to 99
Stored Methods	Last Test Result
Calibration Procedure	Requires 10mm Reference block and 10 Kg Reference Weight (certified)
Calibration Technique	No Tilt (User Friendly)
Load cell Linearity	3 point Linear Calibration with certified weight (5, 10, 15 Kg)
Load cell Diagnostic Check	Yes
Factory Setting Reset	Yes
Interface Ports	RS-232(Serial Port for Service Use Only), External 80/40 Column Printer and 40 column inbuilt Mini Dot Matrix Printer)
Dimensions [L X B X H]	235 X 420 X 195 mm
Weight	7.5 Kg
Electrical Power	115V ± 15V, 50/60 Hz or 230V ± 23V , 50/60 Hz

ORDERING INFORMATION

Order Code	Description
THT 301	Tablet Hardness Tester - Basic

ANM Industries

www.anmalliance.com

Features

- ☐ High Quality Electronic Load cell
- ☐ Big Graphical Display
- ☐ 5 Parameter - Weight, Width, Thickness, Diameter and Hardness up to 500 N, 800 N(optional)
- ☐ Easy Calibration and No Tilt During Calibration
- ☐ No extra gauges for thickness, all in one measurement
- ☐ Built in Mini Dot Matrix Printer
- ☐ On screen statistical View
- ☐ 3 level Password Protection with real time clock
- ☐ Self-test and overload protection
- ☐ No tablet detection

SPECIFICATIONS

Order Code	THT 401
Display	Graphic LCD (240 X 128 pixels)
Keypad	Alpha - Numeric Function Keys
Hardness Range	5-500N (800N Option Available)
Hardness Accuracy	>1N
Width , Diameter and Thickness Range	0.5 - 40 mm
Accuracy	>±0.06 mm
Weight Balance Interface	External Balance Interface (Sartorius, Mettler and Shimadzu)
Measuring Units	Width , Thickness and Diameter in either mm or inches
Measurable Units	N (Newton), KP (KiloPond, 1KP = 9.81N), SC (StrongCobb 1KP = 1.43Sc)
Force Rate	Constant (Linear) Force or Constant (Linear) Speed
Number of Test for Statistics	Up to 100
Stored Methods	Up to 10
Load cell Linearity	3 point Linear Calibration with certified weight (5, 10, 15 Kg)
Load cell Diagnostic Check	Yes
Fault Localization	Yes (Text Format)
Loadcell Overload Protection	Yes
Weight	17.6 lbs / 8 Kg
Interface Ports	USB Type A, USB Type B, LAN, RS - 232(serial Port for Balance Connection), External 80/40 Column, Printer and 40 Column inbuilt Mini Dot Matrix Printer
Dimensions [L X B X H]	250 X 450 X 195 mm
Electrical Power	115V ± 15V, 50/60 Hz or 230V ± 23V , 50/60 Hz

ORDERING INFORMATION

Order Code	Description
THT 401	Tablet Hardness Tester - Advanced

Leak Tester Apparatus

Features

- Automatic Pressure correction
- Self-Test, Graphical Display
- High quality Pumps / Relays
- Quick Fit PU Tubing
- Data transfer to PC through LAN/RS 232 port/USB
- Built in Mini Dot Matrix Printer
- 3 level Password

SPECIFICATIONS

Order Code	LTA 201
Vacuum Range	150 - 600 mmHg
Pressure Unit	mmHg / Psi / kPa
Accuracy	± 10 mmHg
Display	128 X 64 monochrome Graphic Display
Keypad	Alphanumeric Keypad
Interface Port	LAN, RS - 232 , External 80/40 column printer and 40 column built in mini Dot Matrix Printer
Hold Time	Upto 30 minutes
Batch test results	20 Test and 10 Methods with date and time available
Accessories	Polycarbonate Desiccator along with connecting tube, Instruction Manual
Password Production	3 Tire Password Protection
Balance Interface	At extra cost (Optional)
Dimensions [L X B X H]	360 X 260 X 170 mm
Weight	25.5 lbs / 11.6 Kg
Electrical Power	115V ± 15V, 50/60 Hz or 230V ± 23V, 50/60 Hz

ORDERING INFORMATION

Order Code	Description
LTA 201	Leak Tester Apparatus

Features

- ☐ 20 X 4 line alphanumeric LCD display with backlit
- ☐ Tap Density, Initial Density, Compressibility Index
- ☐ Independent programmable setups for User & USP mode with storage
- ☐ RS232 printer attachment facility
- ☐ Automatically calculate result parameters like Hausner ratio
- ☐ Automatically stores last result
- ☐ Power Failure detection facility

SPECIFICATIONS

Order Code	TDT 101
Test Methods	USP [USP-I, USP-II, USP-III], ASTM & User Selectable
No. of stations	2
Keypad	Soft Touch Membrane Key and Alphanumeric Mobile Keypad
Drop Height	Position 1 : 14 ± 2mm Position 2 : 03 ± 0.2mm
Taps/Minute & Tap Height	USP I (300 taps per minute) & 14mm height or 250 taps/min with 3mm height
	USP II (250 taps per minute) with 3mm height USP-III (55 taps per minute) and ASTM (100, 150, 200, 250, 300 taps per minute) with 3mm tap height
No. of Tap Counts	10 to 9999
Platform Rotation	5 - 15 rotations / minute
Type of Drive	Direct Drive with Stepper Motor
Weight Balance Interface	Yes
PC Compatibility	RS-232 for Data Downloading
Printer Port	Parallel (Dot Matrix 80 Column)
Standard Accessories	Cylinder 100 & 250ml[1each], Cylinder Holders for 100 & 250m+B86I[1 each]
Environmental Operating Conditions	a) Operation Indoor
	b) Temperature Ambient to 45°C
	c) Humidity 20% to 80%
Dimensions	310 mm X 300 mm X 155 mm
Weight	23.5 lbs / 10.7 Kg

ORDERING INFORMATION

Order Code	Description
TDT 101	Tap Density Tester

Torque Tester For Bottle Caps

Features

- High quality Torque Sensor
- Self - Test Feature
- Graphical Display
- Compact in design
- Load cell protection with auto zero calibration
- Built in Mini Dot Matrix Printer
- 3 Tier Password with real time clock
- Customized print reports

SPECIFICATIONS

Order Code	TTB 201
Display	LCD Monochrome Graphical Display
Units Available	Kgf.cm / Inch.lbs / daN.cm / N.cm / N.m / KP
Measuring Units	Minimum 0.0 N to Max 10 and 20 N
Keypad	Alpha-Numeric Function Keys
Accuracy	± 0.5 FS
Memorization of 4 thresholds	Very Low , Low , High , Very high
Batch test results	20 TEST/BATCH with date and time available
Test sample diameter	15 mm - 200 mm
Interface Ports	LAN , RS - 232, External 80/40 Column printer and 40 Column inbuit Mini Dot Matrix Printer
Calibration	Easy Calibration only with 5 Kg
Validation	Easy Validation
RS 232 C outputs	Printing of the values data transmit to PC during every test
Dimensions [L X B X H]	310 X 210 X 134 mm
Weight	13.2 lbs / 6 Kg

ORDERING INFORMATION

Order Code	Description
TTB 201	Torque Tester for Bottle Caps

Features

- Highly compact and variable speed
- Self - Test and validation
- Power failure resume
- German stepper motor for smooth running
- Data transfer to PC
- Real time clock with password protection
- Built in Mini Dot Matrix Printer

SPECIFICATIONS

Order Code	TFT 201
Display	LCD Display 20 x 4
Printer	40 Column inbuilt Mini Dot Matrix printer
Keypad	Alpha-Numeric Functional Keys
Interface Ports	RS-232 x 3
Total Number of Revolutions	1 to 14999 rev
Total Testing Time	1 to 9 hours 59 mins 59 sec
Weight Balance Interface	Sartorius, Mettler and Shimadzu (External Weighing)
Variable Speed	20 – 60 RPM
Accuracy	±1 RPM
Mode	Count, Time and Quick
Fault Localization	Yes
Power OFF Resume	Yes
Auto Unloading	Yes
10° angle	Yes
Dimensions [L X B X H]	290 X 240 X 320 mm
Weight	19.8 lbs / 9 Kg
Auto calculation % of loss	Yes
Automatic home position	Yes
Electrical power	115V ± 15V, 50/60 Hz or 230V ± 23V, 50/60Hz

ORDERING INFORMATION

Order Code	Description
TFT 201	Tablet Friability Tester

Tablet Disintegration Apparatus

Features

- Complies with USP, IP specifications
- Extremely useful for pharmaceuticals labs
- Highly accurate and easy to operate
- Baskets 'UP'&'DOWN' movement as per IP/USP specifications
- 20 x 2 line alphanumeric LCD with Backlit
- Printer Attachment Facility
- Audio visual indicators for system status

SPECIFICATIONS

Order Code	**TDA 101**
Display	20 X 2 Line back lighted LCD display
Keyboard	Alphanumeric splash water proof polyester soft keys
Dip speed	30, ±1 DPM
Stroke Length	5.5, ±0.1 cm
Beaker Volume	1000 ml x 2 beakers
Basket	2 X 6 test positions (10 mesh) USP type A
Fluted Disk	6 numbers in each basket USP type A
Water bath temperature range	Ambient +5 to 50°C
Water bath temperature accuracy	±0.3°C
Water bath circulation	Immersion Pump
Test mode	Programmable Time up to 99:59 (HH:MM)
	Display Format 99:59:59
Output Printer	Parallel Port
RS-232C	PC Connectivity for data downloading
Dimension (Approx.) [L X B X H]	330 X 330 X 580 mm
Shipping Weight (Approx.)	37 Kg Approx
Electrical Power	230V ± 23V , 50/60 Hz

ORDERING INFORMATION

Order Code	Description
TDA 101	Tablet Disintegration Apparatus

Advanced Application Laboratory

" **The opening of this Advanced Lab will help the customers in India with Application Support & Product Demonstration "**

" **The Lab will serve the customers in West Asia, Africa & the ASEAN nations as a knowledge resource centre for Analytical Technologies "**

Terms & Conditions:

- Prices : Ex-godown
- Delivery : Ex-stock, subject to prior sales, or else 4 to 6 weeks after receipt of confirmed order copy
- Taxes : GST extra as applicable
- Insurance : Extra @3% or at customer risk
- Packing : Charges extra at actual
- Installation : Charges extra as applicable
- Freight : Extra @2%
- Payment : 100% advance with Purchase Order
- Our responsibility ceases once we deliver the goods to the carrier
- Prices in this list are those current at time of publication and are subject to change without prior notice.
- Images, Appearance, Features & Specifications may vary due to continuous improvements & developments
- All transactions are subject to Mumbai Jurisdiction.

Order to be placed on : ANM Industries Pvt. Ltd.

Plot No. 210, Gala No - C, GIDC Station Road, Umargaon - 396 171, Gujarat

ANM ANMIndustries

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