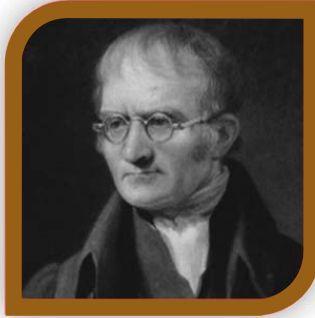


## Chapter 4: Liquid Handling & Dispensing Products



**John Dalton**  
6 September 1766 - 27 July 1844

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John Dalton was an English chemist, meteorologist and physicist. He is famous for his influential work in chemistry, mainly being the atomic theory. The five main points of Dalton's atomic theory are the most essential and basic information about atoms. Many branches of chemistry have benefitted from this theory. He also contributed to some of the basic Gas Laws which are very important in the field of thermodynamics. He also contributed to the phenomenon of color blindness and this phenomenon is sometimes referred as Daltonism. His contributions to the field and chemistry have helped both the fields to prosper in to a new era.

Liquid handling at its most basic, liquid transfer devices obtain a volume of liquid from a source container by creating suction called aspirating. This liquid is dispensed over the destination container by creating a positive pressure. The fluid transferred is known as the sample fluid. The sample fluid is usually held in a structure called a "Tip". Tips can be structures resembling thin tubes or needles made from metal or plastic or disposable conical pieces made from plastic. Many liquid handling systems have more than one tip allowing for faster transfer of liquids. The suction pressure in liquid handling systems can be created by piston pumps, air pumps or gear motor pump. Liquid handling systems are also classified on the number of channels, the three main variations are single channel, multi channel with small numbers of tips and multiple channel with large number of tips. Some of the critical characteristics for liquid transfer devices are accuracy, cavitations, coefficient of variation, flow rate or speed, laminar flow, wettability, surface adhesion, tip diameter and viscosity of the liquid.

Here in ScichemTech, Our R&D has developed many Liquid Handling devices, which is used commonly in many Labs and institutes worldwide. Our devices are designed and manufactured precisely. We covered majority the Applications. In case should you require or need any devices for any specific application, please contact us, we will try our level best to fulfill your requirement.

We dedicate this whole chapter to all the Scientists who have contributed to the fluid dynamics and to the Vacuum Technology.

**ScichemTech Team...**

## ScichemTech® LIQUID HANDLING PRODUCTS

In all the labs, Liquid Handling has become a vital technique. Our ScichemTech- product research team has put their full efforts to make the Liquid handling products too precise and elegant. Our products are designed to look elegant, soft, and attractive like "FLOWERS". Our product colours are look like flowers and bring happiness like flowers. All the lab Technicians, Scientist use these products often daily in their work, just like the way we use flowers daily in our life. So, we named all our liquid handling products and models in the name of flowers.

We are sure, all our customers will feel very happy, light & colourful, while they are using our Liquid handling products.

### SCT TULIP PIPETTE CONTROLLERS

These SCT-TULIP pipette controllers are produced just to replace the traditional way of using mouth to pipette the liquids. Using these small devices end-users are safe in handling various liquids.

#### SALIENT FEATURES:

- SCT TULIP Pipette controllers are made of good quality Rubber / Plastics.
- Robust and light weight
- Comfortable and simple to use.
- Easy to maintain and clean
- Precise pipetting control and rigid
- 1-100 ml volumetric or serological pipettes can be used
- Autoclavable silicone pipette holder
- Uses integral and replaceable 3.0µm filter
- The filter and adapter can be integral and replaceable
- Filling and delivery are easily controlled with a small sensitive lever
- Available in 5 colours
- Easy Identification



PRODUCT NO.	DESCRIPTION
SCT-104.001.01	SCT-TULIP-Blue
SCT-104.001.02	SCT- TULIP-Red
SCT-104.001.03	SCT- TULIP-Green
SCT-104.001.04	SCT- TULIP-Yellow
SCT-104.001.05	SCT- TULIP-Pink
SCT-104.001.06	Spare-Filter 3.0µm 1pc/ pk

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### SCT PANSY MINI PIPETTES

- SCT PANSY is 130mm in length which is optimum size to facilitate the user in handling the SCT
- SCT PANSY is like a standard pipette and not like a syringe.
- Unique Tip-Cone design to accept both micro tip (200µl) and ultra micro tip (25 µl).
- Two stage plunger movement ensures high accuracy and precision in pipetting technique. This also facilitates last drop dispensing.
- SCT PANSY is FULLY AUTOCLAVABLE at 121°C and 15 psi for sensitive applications.
- Colour coded for various capacities for easy identification in laboratory environment

#### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	CAPACITY	ACCURACY ±%	CV ≤%
SCT-104.002.01	5 µl	1.5%	1.0%
SCT-104.002.02	10 µl	1.0%	1.0%
SCT-104.002.03	20 µl	0.5%	0.5%
SCT-104.002.04	25 µl	0.5%	0.5%
SCT-104.002.05	50 µl	0.4%	0.3%
SCT-104.002.06	100 µl	0.3%	0.3%
SCT-104.002.07	200 µl	0.5%	0.5%
SCT-104.002.08	250 µl	0.5%	0.5%
SCT-104.002.09	500 µl	0.5%	0.5%
SCT-104.002.10	1000 µl	0.5%	0.5%



#### ORDERING INFORMATION:

PRODUCT NO.	DESCRIPTION
SCT-104.002.01	SCT PANSY STANDARD PIPETTE 5 µl SUPPLIED COMPLETE WITH INSTRUCTION MANUAL
SCT-104.002.02	SCT PANSY STANDARD PIPETTE 10 µl SUPPLIED COMPLETE WITH INSTRUCTION MANUAL
SCT-104.002.03	SCT PANSY STANDARD PIPETTE 20 µl SUPPLIED COMPLETE WITH INSTRUCTION MANUAL
SCT-104.002.04	SCT PANSY STANDARD PIPETTE 25 µl SUPPLIED COMPLETE WITH INSTRUCTION MANUAL
SCT-104.002.05	SCT PANSY STANDARD PIPETTE 50 µl SUPPLIED COMPLETE WITH INSTRUCTION MANUAL
SCT-104.002.06	SCT PANSY STANDARD PIPETTE 100 µl SUPPLIED COMPLETE WITH INSTRUCTION MANUAL
SCT-104.002.07	SCT PANSY STANDARD PIPETTE 200 µl SUPPLIED COMPLETE WITH INSTRUCTION MANUAL
SCT-104.002.08	SCT PANSY STANDARD PIPETTE 250 µl SUPPLIED COMPLETE WITH INSTRUCTION MANUAL
SCT-104.002.09	SCT PANSY STANDARD PIPETTE 500 µl SUPPLIED COMPLETE WITH INSTRUCTION MANUAL
SCT-104.002.10	SCT PANSY STANDARD PIPETTE 1000 µl SUPPLIED COMPLETE WITH INSTRUCTION MANUAL

## SCT YARROW STEPPER PIPETTERS

SCT –YARROW STEPPER – Pipettes are made for easy and continuous dosing by hand. These are used for micro level, contamination free dispensing. SCT light weight stepper pipette makes the user comfortable and safer to do their daily lab micro level liquid dispensing. Already so many users using our stepper happily.

### SALIENT FEATURES:

- SCT - YARROW stepper pipettors are made of good quality plastic.
- Light weight and Ergonomic
- Factory calibrated and Precised
- Maintenance-free and continuous operation
- One-hand operation with easy grip and multi dispensing.
- Volume range of 1ml to 5ml can be dispensed
- Works with seven sizes of disposable, polypropylene syringes from 0.5ml to 50ml
- Equipped with durable tip insertion lever

### TECHNICAL SPECIFICATIONS:

DIAL SETTING	1	2	3	4	5	A %	P %
NUMBER OF DOSES	48	23	15	11	8		
SYRINGE VOLUME (ML)	SAMPLE VOLUME (ML)						
0.05	1	2	3	4	5	± 2.5	≤ 5.0
0.50	10	20	30	40	50	± 0.8	≤ 0.7
1.25	25	50	75	100	125	± 0.8	≤ 0.5
2.50	50	100	150	200	250	± 0.8	≤ 0.4
5.00	100	200	300	400	500	± 0.4	≤ 0.3
12.50	250	500	750	1000	1250	± 0.3	≤ 0.3
25.00	500	1000	1500	2000	2500	± 0.2	≤ 0.3
50.00	1000	2000	3000	4000	5000	± 0.2	≤ 0.2



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### ORDERING INFORMATION:

PRODUCT NO.	DESCRIPTION	
SCT-104.003.01	SCT YARROW STEPPER - PIPETTE	
	SPARE - CONSUMABLE (SYRINGES)	UNIT PACK SIZE
SCT-104.003.02	0.5 ML, SYRINGES (PISTON TYPE) PE-HD, CYLINDER, PP, NON-STERILE	100/PK
SCT-104.003.03	1.25 ML, SYRINGES (PISTON TYPE) PE-HD, CYLINDER, PP, NON-STERILE	100/PK
SCT-104.003.04	2.5 ML, SYRINGES (PISTON TYPE), PE-HD, CYLINDER, PP, NON-STERILE	100/PK
SCT-104.003.05	5.0 ML, SYRINGES (PISTON TYPE), PE-HD, CYLINDER, PP, NON-STERILE	100/PK

## SCT FULLY AUTOCLAVABLE FIXED AND VARIABLE VOLUME MICROPIPETTES

Scientific and Research Communities have increased their activities and work due to the emergence of Micro Pipettes keeping these demands in mind, ScichemTech R&D have started designing & manufacturing two models SCT-LAVENDER (FIXED) AND SCT-CAMELLIA (VARIABLE) Micro Digital Pipettes

### SCT LAVENDER FIXED VOLUME MICROPIPETTES WITH FULLY AUTOCLAVABLE

### SALIENT FEATURES:

- SCT LAVENDER fixed volume pipettes are made of good quality plastic.
- Fixed volume and fully autoclavable.
- Constructed of fully autoclavable plastic and combined with stainless steel piston
- Individually Calibrate as per procedure laid down in ISO 8655 Standards; a calibration details are included with each pipette.
- All the Models are Individually calibrated as per ISO 8655 and detailed QC report is included in the box / pack

### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	VOLUME $\mu$ l	ACC. $\pm$ %	CV $\leq$ %
SCT-104.004.01	1	2.5	1.8
SCT-104.004.02	2	2.0	1.2
SCT-104.004.03	5	1.5	0.8
SCT-104.004.04	10	1.0	0.5
SCT-104.004.05	20	1.0	0.5
SCT-104.004.06	25	0.5	0.3
SCT-104.004.07	50	0.3	0.3
SCT-104.004.08	100	0.3	0.2
SCT-104.004.09	200	0.3	0.2
SCT-104.004.10	250	0.3	0.2
SCT-104.004.11	500	0.3	0.2
SCT-104.004.12	1000	0.3	0.2
SCT-104.004.13	2000	0.3	0.2
SCT-104.004.14	5000	0.3	0.2
SCT-104.004.15	10000	0.3	0.2



**ORDERING INFORMATIONS:**

PRODUCT NO.	DESCRIPTION
SCT-104.004.01	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 1 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.02	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 2 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.03	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 5 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.04	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 10 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.05	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 20 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.06	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 25 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.07	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 50 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.08	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 100 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.09	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 200 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.10	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 250 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.11	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 500 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.12	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 1000 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.13	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 2000 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.14	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 5000 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.004.15	SCT LAVENDER SINGLE CHANNEL FULLY AUTOCLAVABLE MICROPIPETTES 10000 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.

**SCT CAMELLIA VARIABLE VOLUME MICROPIPETTES WITH FULLY AUTOCLAVABLE**

**SALIENT FEATURES:**

- SCT CAMELLIA variable volume Micropipettes are made of good quality plastic.
- Simple light weight and ergonomic design.
- Pistons are made of High Quality Stainless steel
- Easy re-calibration by the user
- Wide Range of Volume for many applications
- Variable volume from 0.2 to 10000 µl
- High accuracy and Precision as per ISO 8655 Standards.
- Clear Digital Numbers Display.
- Quick and some volume setting - variable volume.
- All the models are fully autoclavable
- All Models have inbuilt separate tip ejection for removing the tips
- All SCT-Models are individually calibrated as per ISO 8655 Standards and detailed QC report is included in the box / pack.

**TECHNICAL SPECIFICATIONS:**

PRODUCT NO.	VOL. RANGE	INC. (µl)	VOL. (µl)	ACC. (±%)	CV (≤%)
SCT-104.005.01	0.2 - 2.0 µl	0.01	0.2	12.0	6.0
			1.0	2.5	1.5
			2.0	1.5	0.7
SCT-104.005.02	0.5 - 10 µl	0.1	0.5	5.0	2.8
			5.0	1.5	0.8
			10.0	1.0	0.4
SCT-104.005.03	2 - 20 µl	0.1	2.0	5.0	1.5
			10.0	1.0	0.6
			20.0	1.0	0.3
SCT-104.005.04	5 - 50 µl	1	5.0	2.5	1.5
			25.0	0.7	0.3
			50.0	0.7	0.3
SCT-104.005.05	10 -100 µl	1	10.0	2.5	0.7
			50.0	0.8	0.3
			100.0	0.8	0.15
SCT-104.005.06	20 -200 µl	1	20.0	2.5	0.7
			100.0	1.0	0.3
			200.0	0.6	0.2
SCT-104.005.07	100 -1000 µl	10	100.0	1.6	0.3
			500.0	0.6	0.2
			1000.0	0.5	0.2
SCT-104.005.08	500 - 5000 µl	100	500.0	1.5	0.3
			2500.0	0.6	0.2
			5000.0	0.6	0.2
SCT-104.005.09	1000 -10000 µl	100	1000.0	1.5	0.3
			5000.0	0.6	0.2
			10000.0	0.6	0.2



**ORDERING INFORMATIONS:**

PRODUCT NO.	DESCRIPTION
SCT-104.005.01	SCT CAMELLIA VARIABLE VOLUME FULLY AUTOCLAVABLE MICROPIPETTES 0.2 - 2 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.005.02	SCT CAMELLIA VARIABLE VOLUME FULLY AUTOCLAVABLE MICROPIPETTES 0.5 - 10 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.005.03	SCT CAMELLIA VARIABLE VOLUME FULLY AUTOCLAVABLE MICROPIPETTES 2 - 20 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.005.04	SCT CAMELLIA VARIABLE VOLUME FULLY AUTOCLAVABLE MICROPIPETTES 5 - 50 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.005.05	SCT CAMELLIA VARIABLE VOLUME FULLY AUTOCLAVABLE MICROPIPETTES 10 - 100 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.005.06	SCT CAMELLIA VARIABLE VOLUME FULLY AUTOCLAVABLE MICROPIPETTES 20 - 200 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.005.07	SCT CAMELLIA VARIABLE VOLUME FULLY AUTOCLAVABLE MICROPIPETTES 1000 - 1000 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.005.08	SCT CAMELLIA VARIABLE VOLUME FULLY AUTOCLAVABLE MICROPIPETTES 500 - 5000 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.005.09	SCT CAMELLIA VARIABLE VOLUME FULLY AUTOCLAVABLE MICROPIPETTES 1000 - 10000 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.

**SCT - HEATHER & HOLLY MULTI CHANNEL MICROPIPETTES**

ScichemTech, always think ahead one step for the demand for the new scientific tools. In the recent past the demand for the Multichannel micropipettes have been increasing, thinking this demand. SCT has released 2 models Heather and Holly, for their 8 channels and 12 channels respectively.

So many happy users are using our HEATHER+HOLLY around the world

**SCT HEATHER FULLY AUTOCLAVABLE - 8 - CHANNEL**

**SALIENT FEATURES:**

- SCT-HEATHER 8-Channel Micropipettes are made of good quality plastic.
- Pleasant Colour and Good Looking - 8 Channel Pipettes.
- Light Weight, Great grip to hold and soft plunger movement.
- SCT - Heather is fully autoclavable
- Variable range from 0.5 to 300 µl
- High accuracy and precision for in 6 models dispensing to 96 well microtiter plates
- All the models fitted with easy tip ejector
- All SCT - Models are supplied with the QC-report in the box.

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**TECHNICAL SPECIFICATIONS:**

PRODUCT NO.	VOL. RANGE	INC. µl	VOL. µl	ACC. ±%	CV ≤%
SCT-104.006.01	0.5 - 10 µl	0.1	1	4.00	4.00
			5	2.50	2.50
			10	1.50	1.50
SCT-104.006.02	2 - 20 µl	0.1	2	4.00	4.00
			10	1.50	1.50
			20	1.50	1.00
SCT-104.006.03	5 - 50 µl	1.0	5	3.00	2.00
			25	1.50	1.00
			50	0.50	0.50
SCT-104.006.04	10-100 µl	1.0	10	3.00	1.50
			50	1.00	0.50
			100	1.00	0.50
SCT-104.006.05	20-200 µl	1.0	20	2.00	0.80
			100	1.00	0.50
			200	0.70	0.25
SCT-104.006.06	40-300 µl	1.0	40	2.00	0.80
			150	1.00	0.50
			300	0.70	0.25



**ORDERING INFORMATIONS:**

PRODUCT NO.	DESCRIPTION
SCT-104.006.01	SCT - HEATHER 8 CHANNEL MICROPIPETTES 0.5 - 10 µl SUPPLIED COMPLETE WITH INSTRUCTIONS
SCT-104.006.02	SCT - HEATHER 8 CHANNEL MICROPIPETTES 2 - 20 µl SUPPLIED COMPLETE WITH INSTRUCTIONS
SCT-104.006.03	SCT - HEATHER 8 CHANNEL MICROPIPETTES 5 - 50 µl SUPPLIED COMPLETE WITH INSTRUCTIONS
SCT-104.006.04	SCT - HEATHER 8 CHANNEL MICROPIPETTES 10 - 100 µl SUPPLIED COMPLETE WITH INSTRUCTIONS
SCT-104.006.05	SCT - HEATHER 8 CHANNEL MICROPIPETTES 20 - 200 µl SUPPLIED COMPLETE WITH INSTRUCTIONS
SCT-104.006.06	SCT - HEATHER 8 CHANNEL MICROPIPETTES 40 - 300 µl SUPPLIED COMPLETE WITH INSTRUCTIONS

## SCT HOLLY FULLY AUTOCLAVABLE - 12 CHANNEL

### SALIENT FEATURES:

- SCT - HOLLY 12 Channel Micro-pipettes are made of good quality plastic.
- SCT - Holly is fully autoclavable and it has 12 channels.
- Pleasant Colour and Good Looking - 12 channel pipettes.
- Light Weight, Great grip to hold and soft plunger movement.
- SCT HOLLY has variable range from 0.5 to 300  $\mu$ l
- High accuracy and precision for in 6 models dispensing to 96 well microtiter plates
- All the models fitted with easy tip ejector
- All SCT - HOLLY models are supplied with the QC report in the box.

### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	VOL. RANGE	INC. $\mu$ l	Vol. $\mu$ l	Acc. $\pm\%$	CV $\leq\%$
SCT-104.007.01	0.5-10 $\mu$ l	0.1	1	4.00	4.00
			5	2.50	2.50
			10	1.50	1.50
SCT-104.007.02	2-20 $\mu$ l	0.1	2	4.00	4.00
			10	1.50	1.50
			20	1.50	1.00
SCT-104.007.03	5-50 $\mu$ l	1.0	5	3.00	2.00
			25	1.50	1.00
			50	0.50	0.50
SCT-104.007.04	10-100 $\mu$ l	1.0	10	3.00	1.50
			50	1.00	0.50
			100	1.00	0.50
SCT-104.007.05	20-200 $\mu$ l	1.0	20	2.00	0.80
			100	1.00	0.50
			200	0.70	0.25
SCT-104.007.06	40-300 $\mu$ l	1.0	40	2.00	0.80
			150	1.00	0.50
			300	0.70	0.25



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### ORDERING INFORMATION:

PRODUCT NO.	DESCRIPTION
SCT-104.007.01	SCT - HOLLY 12 CHANNEL MICROPIPETTES 0.5 - 10 $\mu$ l SUPPLIED COMPLETE WITH INSTRUCTIONS
SCT-104.007.02	SCT - HOLLY 12 CHANNEL MICROPIPETTES 2 - 20 $\mu$ l SUPPLIED COMPLETE WITH INSTRUCTIONS
SCT-104.007.03	SCT - HOLLY 12 CHANNEL MICROPIPETTES 5 - 50 $\mu$ l SUPPLIED COMPLETE WITH INSTRUCTIONS
SCT-104.007.04	SCT - HOLLY 12 CHANNEL MICROPIPETTES 10 - 100 $\mu$ l SUPPLIED COMPLETE WITH INSTRUCTIONS
SCT-104.007.05	SCT - HOLLY 12 CHANNEL MICROPIPETTES 20 - 200 $\mu$ l SUPPLIED COMPLETE WITH INSTRUCTIONS
SCT-104.007.06	SCT - HOLLY 12 CHANNEL MICROPIPETTES 40 - 300 $\mu$ l SUPPLIED COMPLETE WITH INSTRUCTIONS

## SCT GINGER - ELECTRONIC PIPETTES

### SALIENT FEATURES:

- SCT - GINGER is a Compact - Electronic Pipette
- Constructed of fully autoclavable plastic and combined with stainless steel piston
- Based on Stepper Motor Technology and User friendly software.
- Optimized ergonomics and working comfort and Built-in tip ejector.
- Six models cover the complete Pipetting range from 0.2 to 10.000  $\mu$ l.
- Mode (easy selection of modes from single key):  
Stepper mode / Dilution mode / Standard mode / Calibration mode
- Variable Working Speed can be selected on a scale of 1-5
- Easy volume selection from 'UP' & 'DOWN' keys.
- Large Fire Button - Single 'FIRE BUTTON' for filling and dispensing.
- Large Liquid Crystal Display - Two line Alphanumeric LCD and Recharging during operation
- Calibration - User friendly calibration mode facilitates easy calibration by the user.
- Each SCT - GINGER Electronic Pipette is supplied with the QC report in the box.



### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	Vol. Range	Inc.µl	Vol. µl	Acc. ±%	CV ≤%
SCT-104.008.01	0.2-10 µl	0.05	0.2	12.00	10.00
			5	1.00	0.75
			10	0.90	0.40
SCT-104.008.02	5-120 µl	0.5	5	3.50	1.50
			50	0.70	0.30
			120	0.40	0.15
SCT-104.008.03	20-300 µl	1	20	2.50	0.70
			150	0.60	0.20
			300	0.40	0.15
SCT-104.008.04	50-1000 µl	5	50	2.00	1.00
			500	0.60	0.20
			1000	0.40	0.15
SCT-104.008.05	100-5000 µl	10	100	1.60	0.40
			2500	0.80	0.20
			5000	0.50	0.15

### ORDERING INFORMATION:

PRODUCT NO.	DESCRIPTION
SCT-104.008.01	SCT GINGER ELECTRONIC PIPETTES 0.2 - 10 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.008.02	SCT GINGER ELECTRONIC PIPETTES 5 - 120 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.008.03	SCT GINGER ELECTRONIC PIPETTES 20 - 300 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.008.04	SCT GINGER ELECTRONIC PIPETTES 50 - 1000 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.008.05	SCT GINGER ELECTRONIC PIPETTES 100 - 5000 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.
SCT-104.008.06	SCT GINGER ELECTRONIC PIPETTES 500 - 10000 µl SUPPLIED COMPLETE WITH INSTRUCTIONS.

## SCT COSMOS PIPETTE FILLER

In many Biological and in Analytical labs handling measuring and volumetric pipettes using mouth has become a difficult task and to prevent this difficulty in the labs, ScichemTech R&D has designed Economic and cost effective.

“SCT COSMOS” Electronic filling device to handle the task with hands.

### SALIENT FEATURES / TECHNICAL SPECIFICATIONS :

- Modern Design and available in 3 different colours.
- Easy one hand operations and comfortable Grip.
- Battery operated with rechargeable battery, 8 hours continuous operations.
- Pump speed adjustment can be done during operations.
- SCT-COSMOS can hold any pipettes from 1 – 100ml with firm holdings.
- In built, Integrated microfilter prevents contamination and accidental liquid entry, these membranes are replaceable and easy to change.
- LED indicates low battery charge and changing indications.



### ORDERING INFORMATION:

PRODUCT NO.	DESCRIPTION
SCT-104.009.01	SCT PIPETTE FILLER WITH GREY BODY/ GREY COLLECT AND PLUNGER
SCT-104.009.02	SCT PIPETTE FILLER WITH GREY BODY/ VIOLET COLLECT AND PLUNGER
SCT-104.009.03	SCT PIPETTE FILLER WITH GREY BODY/ RED COLLECT AND PLUNGER
SCT-104.009.04	SCT PIPETTE FILLER WITH WHITE BODY/ GREY COLLECT AND PLUNGER
SCT-104.009.05	SCT PIPETTE FILLER WITH WHITE BODY/ VIOLET COLLECT AND PLUNGER
SCT-104.009.06	SCT PIPETTE FILLER WITH WHITE BODY/ RED COLLECT AND PLUNGER

## SCT ORCHID RACKS FOR MICROPIPETTES

### SALIENT FEATURES:

SCT-ORCHID-Racks for Micropipettes are made of rigid acrylic plastic. It holds the pipettes firmly and gives a good support.

### ORDERING INFORMATION:

PRODUCT NO.	DESCRIPTION
SCT-104.010.01	SCT - ORCHID ACRYLIC STAND FOR 3 PIPETTES
SCT-104.010.02	SCT - ORCHID ACRYLIC STAND FOR 6 PIPETTES
SCT-104.010.03	SCT - ORCHID ACRYLIC STAND FOR 8 CHANNEL PIPETTES
SCT-104.010.04	SCT - ORCHID ACRYLIC STAND FOR 12 CHANNEL PIPETTES
SCT-104.010.05	SCT - ORCHID ACRYLIC STAND FOR ONE PIPETTE (MODULAR)

## SCT BOTTLE TOP DISPENSER – MARY GOLD RESEARCH MODELS

SCT Bottle top dispenser is genius of its strong R& D base. Responding to the needs of the present generation, SCT is proud to offer its New Bottle top Dispensers in Mary Gold Research which is an unique combination of affordable pricing and high performance

SCT MARY GOLD Research models: All wetted parts are PTFE, FEP and borosilicate glass only. This can be used for all laboratory reagent application.

Simple design clubbed with variety of useful feature makes SCT Bottle Top Dispenset an obvious choice for all dispensing needs.

High precision and accuracy is ensured through careful selection of component raw material and several stages of strict quality checks during manufacturing process.

Each instrument is individually calibrated in accordance with ISO 8655 standards and comes with Individual Calibration certificate.

### SALIENT FEATURES:

- Ergonomic and Modern Design
- Each instrument comes with five adaptors to fit in most of the laboratory reagent bottles.
- Mary Gold research model have five adjustable volume sizes:  
(a) 0.25 – 2.5 ml (b) 0.5-5.0 ml (c) 1.0-10.0 ml (d) 2.5 -30 ml (e) 5.0-60.0 ml.
- Instrument is fully autoclavable at 121°C, 15 psi. No need for dis-assembling the instrument for autoclaving.
- Easy to use, simple construction and smooth, effortless plunger movement for bubble free dispensing.
- Nozzle cap prevents only unwanted drop on the workspace.
- Piston : Specially designed PTFE piston with silicone O-ring ensures wiper like smooth effortless piston movement and high accuracy.
- Screw type volume adjustment knob with large pointer ensures precise, easy and quick volume adjustment.
- Easy to dis-assemble for cleaning and servicing.
- Valve Manifold : specially designed, springless, single piece PTFE valve manifold in the research model ensures excellent chemical compatibility, leak proof valve functioning and excellent reproductibility
- Glass barrel is protected by a polypropylene sleeve. It also ensures no glass splitting in case of any accidental breakage
- Calibration: Specially designed universal calibration tool is provided for convenient and quick In- lab user re-calibration. This is in compliance with GLO/ISO Norms.



### TECHNICAL SPECIFICATIONS:

SCT-MARYGOLD PARAMETERS	DESCRIPTION
PISTON	PTFE
CYLINDER	GLASS
VOLUME ADJUSTMENT KNOB	SCREW TYPE
VALVE HOUSING	PTFE
VALVE ASSEMBLY	GLASS BALL & SEAT
DISCHARGE ASSEMBLY	PTFE
DELIVERY TUBE	FEP
INLET TUBE	FEP
CALIBRATION	INDIVIDUALLY CALIBRATED AND CERTIFIED IN LAB EASY CALIBRATION BY USER IS ALSO POSSIBLE.
ACCURACY & REPRODUCABILITY	IN ACCORDANCE WITH ISO 8655 STANDARDS
COMPATIBILITY	EXCELLENT COMPATIBILITY WITH ALL REAGENT EXCEPT HF ( Hydro Fluoric Acid )

PRODUCT NO.	CAPACITY	ACCURACY	CV							
			± %	± ML	± %	± ML	± %	± ML	± %	± ML
SCT-104.011.01	0.25-2.5 ML	0.05 ML	0.6	0.015	0.2	0.005	0.6	0.015	0.2	0.005
SCT-104.011.02	0.5-5 ML	0.1 ML	0.6	0.03	0.2	0.01	0.5	0.025	0.1	0.005
SCT-104.011.03	1-10 ML	0.2 ML	0.6	0.06	0.2	0.02	0.5	0.05	0.1	0.01
SCT-104.011.04	2.5-30 ML	0.5 ML	0.6	0.18	0.2	0.06	0.5	0.15	0.1	0.03
SCT-104.011.05	5-60 ML	1.0 ML	0.6	0.36	0.2	0.12	0.5	0.3	0.1	0.06

### ORDERING INFORMATIONS:

PRODUCT NO.	DESCRIPTION
SCT-104.011.01	SCT-MARY GOLD RESEARCH MODEL BOTTLE TOP DISPENSER 0.25 TO 2.5 ML IS SUPPLIED COMPLETE BUT WITHOUT BOTTLE
SCT-104.011.02	SCT-MARY GOLD RESEARCH MODEL BOTTLE TOP DISPENSER 0.5 TO 5 ML IS SUPPLIED COMPLETE BUT WITHOUT BOTTLE
SCT-104.011.03	SCT-MARY GOLD RESEARCH MODEL BOTTLE TOP DISPENSER 1 TO 10 ML IS SUPPLIED COMPLETE BUT WITHOUT BOTTLE
SCT-104.011.04	SCT-MARY GOLD RESEARCH MODEL BOTTLE TOP DISPENSER 2.5 TO 30 ML IS SUPPLIED COMPLETE BUT WITHOUT BOTTLE
SCT-104.011.05	SCT-MARY GOLD RESEARCH MODEL BOTTLE TOP DISPENSER 5 TO 60 ML IS SUPPLIED COMPLETE BUT WITHOUT BOTTLE



## SCT AZALEA DIGITAL BURETTE

In the modern advanced Analytical and related Labs, Digital Burette is vital

In using the SCT AZALEA will recognize the changing point faster than with common glass burettes, and the SCT AZALEA is more sensitive and much less costly than motorized burettes. The dosing speed is adjusted when turning the handwheels steplessly from fast to drop by drop.

### SALIENT FEATURES:

- SCT - AZALEA Digital Burette is made of high quality components.
- One instrument covers a range from 0 - 50ml
- "Air Purging" without loss of reagent or contamination, as pumping can be performed in a closed circuit.
- No more spills or reagent loss – with a turn off the operation mode selector the cylinder contents will be pumped back into the container.
- A flashing indicator in the display warns when the battery must be re-charged, allowing remaining titrations to be unaffected. Automatic power cut-off after 3 minutes.
- Calibration is permanently adjusted to water at 20°C, yet the SCT AZALEA can be easily recalibrated for different viscosities/densities by pushing the "0/CAL" button & following the simple instructions in the manual. Operating temperature: 0 to 40°C.
- "MEM" key helps to avoid repeating complicated calculations
- Standard or fine adjustment models available



### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	VOLUME RANGE ML	RESOLUTION	R <±%	V <±%
SCT-104.012.01	0-50	0.01 ML	0.2	0.1
SCT-104.012.02	0-50 - FINE	0.01 ML	0.2	0.1

### ORDERING INFORMATION:

PRODUCT NO.	DESCRIPTION
SCT-104.012.01	SCT- AZALEA BURETTE DIGITAL, STANDARD
SCT-104.012.02	SCT- AZALEA BURETTE DIGITAL, FINE ADJUSTMENT
SPARES AND OPTIONAL ACCESSORIES	
SCT-104.012.03	SCT-SUCTION TUBE, PTFE
SCT-104.012.04	SCT-FLEXIBLE DISCHARGE TUBING, PTFE
SCT-104.012.05	SCT- DISCHARGE TUBE, PTFE
SCT-104.012.06	SCT-THREAD ADAPTER (REDUCTION ADAPTER GL45/GL32)

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## SCT PUMPS AND DISPENSING PRODUCTS

In the laboratorial and industrial liquid handling, pumps play a major role. There are many types of pumps available and it has various applications. We at scichemtech has selected a good range of manual and electric vacuum pumps used in our daily applications.

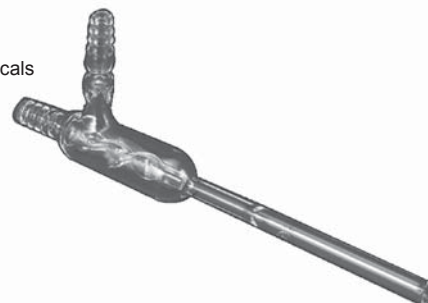
Pls. note some of these pumps are exclusively made for us in the United States, Europe with the high quality and standards to match with our existing product ranges.

## SCT MANUAL PUMPS

### SCT GLASS WATER FILTER PUMP

### SALIENT FEATURES:

- SCT Glass Water Filter Pump is made of Borosilicate 3.3 Glass which is resistant to chemicals
- Creates a small amount of vacuum (around 60 mbar) with the water supply connection
- Fitted with non-return valve to prevent the back flow and flooding.
- SCT manual glass pumps are used in analytical / chemical applications.



### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	MODEL NO.	BODY DIAMETER MM	OVERALL HEIGHT MM	UNIT PACK SIZE
SCT-104.120.01	SCT-FILTER	20	240	1

### ORDERING INFORMATION:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.120.01	SCT-FILTER	SCT-GLASS WATER FILTER PUMP IS SUPPLIED COMPLETELY READY TO USE.

## SCT PURE WATER PUMP

### SALIENT FEATURES:

- SCT Pure water pump is used in manual pumping of water or any inert liquid directly from the water streams .
- It can be also fitted directly with any compatible containers, tanks to make filtered water.
- The pump delivers up to 57 PSI pressure at any point
- Pump has internal filter which removes viruses and bacteria.
- Can produce 390 liters of pure water without replacing the filter.

### TECHNICAL SPECIFICATIONS:

- Pump delivers 57 PSI at point of contact
- Produces 390 litres before filter needs changing
- Fits most containers
- Collapses into two easy-to-carry components
- Filters up to 99.9999% of chemicals, biologicals, dissolved solids and aesthetics
- Filters fluoride and chlorine
- Great for camping, fishing, group adventure travel
- Suitable for humanitarian / disaster / emergency use
- Ultralight, compact size - carry with you anywhere
- BPA Free and non-leaching and re-useable
- All materials are food-grade FDA approved
- Filter tested by independent laboratories using EPA/ANSI protocols and NSF Standards 42 & 53.



### ORDERING INFORMATION:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.121.01	SCT-PURE	SCT-PURE WATER PUMP IS SUPPLIED COMPLETELY READY TO USE

## SCT BARREL PUMP, POLYPROPYLENE

### SALIENT FEATURES:

- SCT Barrel pump is made of good quality polypropylene.
- Acids and alkalis can be dispensed / pumped
- With suitable PTFE gaskets and good strong discharge tubes.
- Long immersion tube 1500 mm long with 30 mm dia which allows deep liquid pumping..

### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	MODEL NO.	OVERALL LENGTH (MM)	DIAMETER (MM)	UNIT PACK SIZE
SCT-104.122.01	SCT-BARREL	1590	30	1

### ORDERING INFORMATION:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.122.01	SCT-BARREL	SCT-WATER BARREL PUMP IS SUPPLIED COMPLETELY READY TO USE.



## SCT FILLING HAND PUMP

### SALIENT FEATURES:

- SCT siphon pump is made of good plastic
- Fits different size of Bottles,cans and barrels
- Easy operation by squeezing the bulb to get the liquid from the Bottle or container
- Fitted with release button to stop the flow
- Can be dismantled and packed easily for any field operations

### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	MODEL NO.	FLOW RATE LITRES / MIN.	STOPPER O.D. (MM)	TUBE O.D. x LENGTH (MM)	UNIT PACK SIZE
SCT-104.123.01	SCT-SIPHON	26	30 - 70	18 x 70	1

### ORDERING INFORMATION:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.123.01	SCT-SIPHON	SCT-HAND PUMP SUPPLIED WITH BULB AND SIPHON READY TO USE.



## SCT WATER JET PUMP

### SALIENT FEATURES:

- SCT Water Jet Pump is made of good quality plastic.
- Suitable for most laboratory water pressures and application.
- Integrated non-return valve increases safety.
- Detachable vacuum connection - accepts 6-9mm bore tubing.
- Supplied with water inlet hose nipple and R 3/4" threaded tap connectors, with R 1/2" reduction adapter.
- Water inlet hose nipple accepts 10-12mm bore tubing.
- Very low water consumption: 190 litre/h at 3.5 bar water supply pressure.
- The ultimate pressure of 16 mbar (water temperature of 12°C) is achievable with a water supply pressure from 3 to 6 bar.
- High suction capacity with a flow rate of approx. 400 litres/h of air (at 1 atm and water supply pressure of 3.5 bar at 12°C).

### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	MODEL NO.	DESCRIPTION	UNIT PACK SIZE
SCT-104.124.01	SCT-JET	WATER-JET VACUUM PUMP	1

### ORDERING INFORMATION:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.124.01	SCT-JET	SCT-WATER JET PUMP IS SUPPLIED COMPLETELY READY TO USE.



## SCT - LIQUID TRANSFER MANUAL PUMP

### SALIENT FEATURES:

- SCT Liquid Transfer manual pump is made of chemically resistance Polypropylene.
- Rigid Handle for Easy rotary movement.
- Pumps makes manual rotary suction movement.
- Mainly suitable for Drums / chemical Dispensing.

### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	MODEL NO.	DESCRIPTION	UNIT PACK SIZE
SCT-104.125.01	SCT-LIQUID	PUMPING RATE (20 LITRES / MIN)	1

### ORDERING INFORMATION:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.125.01	SCT-LIQUID	SCT-MANUAL LIQUID TRANSFER PUMP IS SUPPLIED WITH COMPLETE FITTINGS AND DIRECTLY OPERATIONAL.



## SCT OTTA OIL FREE ECONOMICAL VACUUM FILTRATION PUMPS

### SALIENT FEATURES:

- SCT - OTTO pumps are designed for it's simplicity & compactness
- Suitable for 12 liters / min-vacuum filtrations with single flask or manifold.
- Oil free vacuum pressure pump, piston powered and vacuum pumps can be switched to compressor through replacing the outlet muffler with specific kits purchased at option.
- Suitable for aspiration and filtration of biological fluids.
- Portable - light weight (7 kgs), supplied with handle for carrying and easy shifting
- Noise less 57 decibels / vibration less operations with the rubber feet
- SCT - OTTO pump will usually stop automatically under continuous working with the highest vacuum and unventilated environment causing the surface temperature of motor to reach at above 90°C then it will resume working till the temp of motor cools down below 70°C.
- Made of good quality components and maintenance free.
- Ideal for basic aspiration and filtration applications.



**TECHNICAL SPECIFICATIONS:**

<b>PRODUCT NO.</b>	<b>SCT-104.126.01</b>
<b>MODEL NO</b>	<b>SCT-OTTO</b>
MAX. VACUUM	650 MM HG = 85.5 KPA = 110 TORR
MAX. FLOW RATE	17 L/MIN
HORSE POWER	1/8 HP
POLE	4P
PORT THREAD	5/16"
NOISE LEVEL	50 DB
MAX. POWER CONSUMPTION (W)	60
MAX. CURRENT(A)	0.3
POWER	220-240V / 50,60Hz
NET WET	4.1KG
GROSS WEIGHT	5.1KG

**ORDERING INFORMATIONS:**

PRODUCT NO.	MODEL NO	DESCRIPTION
SCT-104.126.01	SCT-OTTO	SCT-OTTO OIL FREE ECONOMICAL FILTRATION PUMP IS SUPPLIED COMPLETELY READY TO USE.

**SCT-WATSON OIL FREE VACUUM PRESSURE PUMPS**

**SALIENT FEATURES:**

- SCT - WATSON pumps are designed for it's simplicity & elegant appearance.
- Suitable for 15 liters / min biological related operations.
- Oil free vacuum pressure pump and efficient operations.
- Suitable for aspiration and filtration of biological fluids.
- Portable-light weight (14 kgs), supplied with handle for carrying and easy shifting.
- Noise less 45 decibels / vibration free operations.
- Made of very high quality components and maintenance free.
- Ideal for basic aspiration / desiccation and filtration applications.
- Can be used filtration funnels up to 4.



**TECHNICAL SPECIFICATIONS:**

<b>PRODUCT NO.</b>	<b>SCT-104.127.01</b>
<b>PARAMETERS MODEL NO</b>	<b>SCT-WATSON</b>
FREE AIR DISPLACEMENT	
M3/H (L/MIN) @50HZ	0.7 (15)
CFM (L/MIN) @60HZ	0.6 (17)
ULTIMATE PRESSURE, MBAR (TORR)	100 (75)
MAXIMUM VACUUM, IN HG	26.8
ASPIRATION RATE OF LIQUIDS ML/S	25
SOUND LEVEL DBA	45
WEIGHT, KG (LBS.)	8.0 (17.6)
<b>OVERALL DIMENSIONS</b>	
L CM(IN.) X W CM(IN.)H CM(IN.)	35.5 (14.2) X 14.5 (5.8) X 27.7 (11.1)

**ORDERING INFORMATIONS:**

PRODUCT NO.	MODEL NO	DESCRIPTION
SCT-104.127.01	SCT WATSON	SCT-WATSON OIL FREE VACUUM PRESSURE PUMPS SUPPLIED COMPLETELY READY TO USE.

**OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):**

SCT-104.127.02	HANDHELD PIPETTOR SET
SCT-104.127.03	POWER-PACKAGE FOR SIMULTANEOUS OPERATION OF TWO HANDHELD PIPETTORS.
SCT-104.127.04	ON/OFF FOOT SWITCH
SCT-104.127.05	SPARE MICRO-FILTER (HYDROPHOBIC)
SCT-104.127.06	REPLACEMENT JAR SPARE RECEIVER KIT INCLUDES THE GLASS RECEIVER.
SCT-104.127.07	UPGRADE KIT, TO A FILTRATION STATION. FILTER CAP CAN BE USED FOR ALL STANDARD FILTER FUNNELS.

## SCT - OLIVER OIL FREE VACUUM PRESSURE PUMPS

SINGLE HEAD + SINGLE STAGE PUMP (28 LITERS )

### SALIENT FEATURES:

- SCT-Oliver pumps are designed for it's simplicity & elegant appearance.
- Single head and single stage pump.
- Oil free vacuum pressure pump and efficient operations.
- Suitable for pumping vapours of aqueous solutions not for acidic, basic and organic vapours.
- Portable - supplied with handle for carrying and easy shifting.
- Noise less / vibration free operations.
- Made of very high quality components and maintenance free.
- Ideal for basic aspiration / desiccation and filtration applications.
- Can be used filtration funnels up to 4.



### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	SCT-104.128.01
MODEL NO	SCT - OLIVER
NUMBER OF HEADS / STAGES	1 / 1
FREE AIR DISPLACEMENT	
M3/H (L/MIN)@50HZ	1.7 (28)
CFM (L/MIN)@60HZ	1.2 (34)
ULTIMATE PRESSURE, MBAR (TORR)	93 (70)
MAXIMUM VACUUM, IN. HG	27.2
MAX. OVERPRESSURE, BAR	5.8
IN / EX HOSE CONNECTOR	DN 8
TUBING NEEDED, I.D. MM (IN.)	8 (0.31)
INTAKE (EXHAUST) THREAD NPT	1/4 (1/4)
MOTOR POWER, WATTS (HP)	93 (0.13)
WEIGHT, KG (LBS.)	5.3 (7.7)
<b>OVERALL DIMENSIONS</b>	
L CM (IN.) X W CM (IN.) X H CM (IN.)	20.6 (8.1) X 22.4 (8.8) X 25.4 (10)

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### ORDERING INFORMATION:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.128.01	SCT-OLIVER	SCT OLIVER - OIL FREE VACUUM PRESSURE PUMP IS SUPPLIED WITH VACUUM AND PRESSURE REGULATOR, VACUUM AND PRESSURE GAUGE, SILENCER AND WATER TRAP.

### OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):

SCT-104.128.02	VACUUM HOSE RUBBER RED - O.D.MM 18, IDMM 8, WALL THICKNESS 5
SCT-104.128.03	VACUUM HOSE RUBBER RED - O.D.MM 20, IDMM 10, WALL THICKNESS 5
SCT-104.128.04	VACUUM HOSE SILICONE - O.D.MM 12, IDMM 6, WALL THICKNESS 3
SCT-104.128.05	HOSE ADAPTER KIT INCLUDES HOSE CONNECTOR, CENTERING RING, HINGE CLAMP CLAMP & 2.5M VACUUM HOSE, RUBBER RED.
SCT-104.128.06	PARTICULATE IN LINE FILTER
SCT-104.128.07	VACUUM AND PRESSURE REGULATOR
SCT-104.128.08	REPLACEMENT JARS

## SCT-GALIVER OIL FREE STANDARD DUTY DRY PISTON VACUUM PUMPS

DOUBLE HEAD + SINGLE STAGE PUMP (83 LITERS )

### SALIENT FEATURES:

- SCT - GALIVER pumps are designed for it's simplicity & elegant appearance.
- Double head and single stage pump.
- Oil free vacuum pressure pump and efficient operations.
- Suitable for pumping vapours of aqueous solutions not for acidic, basic & organic vapours.
- Portable supplied with handle for carrying and easy shifting.
- Noise less / vibration free operations.
- Made of very high quality components and maintenance free.
- Ideal for basic aspiration / desiccation and filtration applications.
- Can be used for the filtration manifolds with 6 funnels.



**TECHNICAL SPECIFICATIONS:**

PRODUCT NO.	SCT-104.129.01
MODEL NO	SCT-GALIVIER
NUMBER OF HEADS / STAGES	2 / 1
FREE AIR DISPLACEMENT	
M3/H (L/MIN) @50HZ	4.9 (83)
CFM (L/MIN) @60HZ	3.5 (100)
ULTIMATE PRESSURE, MBAR (TORR)	80 (60)
MAXIMUM VACUUM, IN. HG	27.6
MAX. OVERPRESSURE, BAR	-
IN / EX HOSE CONNECTOR	DN 10
TUBING NEEDED, I.D. MM (IN.)	10 (0.38)
INTAKE (EXHAUST) THREAD NPT	1/4 (1/4)
MOTOR POWER, WATTS (HP)	250 (0.34)
WEIGHT, KG (LBS.)	7.4 (16.5)
OVERALL DIMENSIONS	
L CM (IN.) X W CM (IN.)H CM (IN.)	38.1 (15.0) X 25.4 (10) X 25.4 (10)

**ORDERING INFORMATIONS::**

PRODUCT NO.	MODEL NO	DESCRIPTION
SCT-104.129.01	SCT-GALIVER	SCT GALIVER OIL FREE STANDARD DUTY DRY PISTON VACUUM PUMPS IS SUPPLIED WITH VACUUM AND PRESSURE REGULATOR, VACUUM AND PRESSURE GAUGE, SILENCER AND WATER TRAP.

**OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):**

SCT-104.129.02	VACUUM HOSE RUBBER RED - O.D.MM 18, IDMM 8, WALL THICKNESS 5
SCT-104.129.03	VACUUM HOSE RUBBER RED - O.D.MM 20, IDMM 10, WALL THICKNESS 5
SCT-104.129.04	VACUUM HOSE SILICONE - O.D.MM 12, IDMM 6, WALL THICKNESS 3
SCT-104.129.05	HOSE ADAPTER KIT INCLUDES HOSE CONNECTOR, CENTERING RING, HINGE CLAMP CLAMP & 2.5M VACUUM HOSE, RUBBER RED.
SCT-104.129.06	PARTICULATE IN LINE FILTER
SCT-104.129.07	EXHAUST SILENCER
SCT-104.129.08	VACUUM REGULATOR
SCT-104.129.09	REPLACEMENT JARS (GLASS)

**SCT-SALA OIL FREE STANDARD DIAPHRAGM VACUUM PUMPS**

DOUBLEHEAD + SINGLE STAGE PUMP (10 LITERS )

**SALIENT FEATURES:**

- SCT-SALA pumps are designed for it's rich & elegant appearance.
- Two heads and single stage pump for 10 liters / min operations.
- Oil free standard dry vacuum pump and basic non-chemical operations.
- SCT-SALA can be used in automated systems.
- Portable - supplied with handle for carrying and easy shifting.
- Noise less (42 decibels) / vibration free operations.
- Made of very high quality components and maintenance free.
- Ideal good aspiration / desiccation and filtration applications.

**TECHNICAL SPECIFICATIONS:**

PRODUCT NO.	SCT-104.130.01
MODEL NO .	SCT-SALA
NUMBER OF HEADS / STAGES	2 / 1
FREE AIR DISPLACEMENT	
M3/H (L/MIN)@50HZ	0.6 (10)
CFM (L/MIN)@60HZ	0.4 (10)
ULTIMATE PRESSURE, MBAR (TORR)	60 (45)
MAXIMUM VACUUM, IN. HG	28.2
IN / EX HOSE CONNECTOR	DN 6/8 / SILENCER
TUBING NEEDED, I.D. MM (IN)	6 (0.24) / 8 (0.32)
INTAKE (EXHAUST) THREAD NPT	- (-)
SOUND LEVEL, DBA	42
MOTOR POWER, WATTS (HP)	20 (0.03)
TYPE OF MOTOR PROTECTION, IP	20
WEIGHT, KG (LBS.)	2.3 (5.1)
OVERALL DIMENSIONS	
L CM (IN.) X W CM (IN.)H CM (IN.)	11.5 (4.5) X 16.5 (6.5) X 14.5 (5.7)



**ORDERING INFORMATIONS:**

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.130.01	SCT-SALA	SCT SALA OIL FREE STANDARD DIAPHRAGM VACUUM PUMPS IS SUPPLIED WITH ON/OFF SWITCH AND INTERNAL, PROTECTIVE THERMAL SWITCH FOR THE MOTOR, CARRY HANDLE AND VIBRATION ISOLATING FEET. COMES PRE-ASSEMBLED.

**OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):**

VACUUM HOSE, VACUUM HOSE CONNECTION CERTAIN FOR COMMON LABORATORY APPLICATION. PLEASE INDICATE THE LENGTH IN METER.	
SCT-104.130.02	VACUUM HOSE, MATERIAL RUBBER RED, O.D.MM 18, I.D.MM 8, WALL THICKNESS 5
SCT-104.130.03	VACUUM HOSE, MATERIAL RUBBER RED, O.D.MM 20, I.D.MM 10, WALL THICKNESS 5
SCT-104.130.04	VACUUM HOSE, MATERIAL SILICONE, O.D.MM 12, I.D.MM 06,WALL THICKNESS 3
SCT-104.130.05	HOSE ADAPTER KIT-, HOSE ADAPTER KIT INCLUDES HOSE CONNECTOR, CENTERING RING, HINGE CLAMP RING AND 2.5M VACUUM HOSE, RUBBER RED.
SCT-104.130.06	DIGITAL VACUUM CONTROLLER WITH VARIOUS VACUUM PUMP TYPES IN THE VACUUM RANGE. EASY TO MANINTAIN VACUUM LEVEL
SCT-104.130.07	HOSE CONNECTOR DN8 MALE 1/4 INCH
SCT-104.130.08	HOSE CONNECTOR DN10 MALE 1/4 INCH
SCT-104.130.09	Y PIECE

**SCT-RACER OIL FREE CHEMICAL DUTY DIAPHRAGM VACUUM PUMPS**

FOUR HEADS AND THREE STAGE PUMP (20 LITERS )

**SALIENT FEATURES:**

- SCT - Racer pumps are designed for it's rich & elegant appearance.
- Four heads and three stage pump for 20 liters / min operations.
- Oil free chemical duty dry vacuum pump and efficient operations.
- SCT-Racer can be used in automated systems.
- PTFE dry diaphragm pump for aspirating acidic, basic, or organic liquids.
- Portable - supplied with handle for carrying and easy shifting.
- Noise less (44 decibels) / vibration free operations.
- Made of very high quality components and maintenance free.
- PTFE dry diaphragm pump for automated Aspiration systems is effective for aspirating liquids that are strongly acidic, basic or organic.
- Ideal Good Aspiration / Dessication And Filtration Applications.



**TECHNICAL SPECIFICATIONS:**

PRODUCT NO.	SCT-104.131.01
MODEL NO	SCT-RACER
NUMBER OF HEADS / STAGES	4/3
FREE AIR DISPLACEMENT	
M3/H (L/MIN) @50HZ	1.2 (20)
CFM (L/MIN) @60HZ	0.7 (20)
ULTIMATE PRESSURE, MBAR (TORR)	2 (1.5)
MAXIMUM VACUUM, IN. HG	29.9
IN / EX HOSE CONNECTOR	DN8
TUBING NEEDED, I.D. MM (IN.)	8 (0.32)
INTAKE (EXHAUST) THREAD NPT	- (-)
SOUND LEVEL, DBA	44
MOTOR POWER, WATTS (HP)	68 (0.09)
TYPE OF MOTOR PROTECTION, IP	42
WEIGHT, KG (LBS.)	7.5 (16.5)
<b>OVERALL DIMENSIONS</b>	
L CM (IN.) X W CM (IN.)H CM (IN.)	23.5 (9.3) X14 (5.5)X 32.7 (12.9)

**ORDERING INFORMATIONS:**

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.131.01	SCT-RACER	SCT RACER OIL FREE CHEMICAL DUTY DIAPHRAGM VACUUM PUMPS IS SUPPLIED WITH ON/OFF SWITCH AND INTERNAL PROTECTIVE THERMAL SWITCH FOR THE MOTOR, CARRY HANDLE AND VIBRATION ISOLATING FEET. COMES PRE-ASSEMBLED.

**OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):**

VACUUM HOSE, VACUUM HOSE CONNECTION CERTAIN FOR COMMON LABORATORY APPLICATION. PLEASE INDICATE THE LENGTH IN METER.	
SCT-104.131.02	VACUUM HOSE, MATERIAL RUBBER RED, O.D.MM 18, I.D.MM 8, WALL THICKNESS 5
SCT-104.131.03	VACUUM HOSE, MATERIAL RUBBER RED, O.D.MM 20, I.D.MM 10, WALL THICKNESS 5
SCT-104.131.04	VACUUM HOSE, MATERIAL SILICONE, O.D.MM 12, I.D.MM 06, WALL THICKNESS 3
SCT-104.131.05	HOSE ADAPTER KIT-HOSE ADAPTER KIT INCLUDES HOSE CONNECTOR, CENTERING RING, HINGE CLAMP RING AND 2.5M VACUUM HOSE, RUBBER RED.
SCT-104.131.06	DIGITAL VACUUM CONTROLLER WITH VARIOUS VACUUM PUMP TYPES IN THE VACUUM RANGE. EASY TO MAINTAIN VACUUM LEVEL
SCT-104.131.07	HOSE CONNECTOR DN8 MALE 1/4 INCH
SCT-104.131.08	HOSE CONNECTOR DN10 MALE 1/4 INCH
SCT-104.131.09	Y PIECE

## SCT-TRACER OIL FREE CHEMICAL DUTY DIAPHRAGM VACUUM PUMPS

FOUR HEADS AND THREE STAGE PUMP ( 33 LITERS )

### SALIENT FEATURES:

- SCT - TRACER pumps are designed for it's rich & elegant appearance
- Four heads and three stage pump for 33 liters / min operations.
- Oil free chemical duty dry vacuum pump and efficient operations
- SCT - TRACER can be used in automated systems
- PTFE dry diaphragm pump for aspirating acidic, basic, or organic liquids
- Portable -supplied with handle for carrying and easy shifting
- Noise less (45 decibels) / vibration free operations
- Made of very high quality components and maintenance free.
- PTFE dry diaphragm pump for automated aspiration systems is effective for aspirating liquids that are strongly acidic, basic or organic.
- Ideal good aspiration / desiccation and filtration applications.



### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	SCT-104.132.01
MODEL NO	SCT-TRACER
NUMBER OF HEADS / STAGES	4/3
FREE AIR DISPLACEMENT	
M3/H (L/MIN) @50HZ	2.0 (33)
CFM (L/MIN) @60HZ	1.3 (36)
ULTIMATE PRESSURE, MBAR (TORR)	2 (1.5)
MAXIMUM VACUUM, IN. HG	29.9
IN / EX HOSE CONNECTOR	DIN
TUBING NEEDED, I.D. MM (IN.)	8 (0.32)
INTAKE (EXHAUST) THREAD NPT	1 / 4 (1/4)
SOUND LEVEL, DBA	45
MOTOR POWER, WATTS (HP)	90 (0.12)
TYPE OF MOTOR PROTECTION, IP	54
WEIGHT, KG (LBS.)	10.3 (22.7)
<b>OVERALL DIMENSIONS</b>	
L CM (IN.) X W CM (IN.) X H CM (IN.)	20 (7.9) X 26 (10.2) X 15 (5.9)

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### ORDERING INFORMATIONS::

PRODUCT NO.	MODEL NO	DESCRIPTION
SCT-104.132.01	SCT-TRACER	SCT TRACER OIL FREE CHEMICAL DUTY DIAPHRAGM VACUUM PUMPS IS SUPPLIED WITH ON/OFF SWITCH AND INTERNAL PROTECTIVE THERMAL SWITCH FOR THE MOTOR, CARRY HANDLE AND VIBRATION ISOLATING FEET. COMES PRE-ASSEMBLED.

### OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):

VACUUM HOSE, VACUUM HOSE CONNECTION CERTAIN FOR COMMON LABORATORY APPLICATION. PLEASE INDICATE THE LENGTH IN METER.	
SCT-104.132.02	VACUUM HOSE, MATERIAL RUBBER RED, O.D.MM 18, I.D.MM 8, WALL THICKNESS 5
SCT-104.132.03	VACUUM HOSE, MATERIAL RUBBER RED, O.D.MM 20, I.D.MM 10, WALL THICKNESS 5
SCT-104.132.04	VACUUM HOSE, MATERIAL SILICONE, O.D.MM 12, I.D.MM 06, WALL THICKNESS 3
SCT-104.132.05	HOSE ADAPTER KIT, HOSE ADAPTER KIT INCLUDES HOSE CONNECTOR, CENTERING RING, HINGE CLAMP RING AND 2.5M VACUUM HOSE, RUBBER RED.
SCT-104.132.06	DIGITAL VACUUM CONTROLLER WITH VARIOUS VACUUM PUMP TYPES IN THE VACUUM RANGE. EASY TO MAINTAIN VACUUM LEVEL
SCT-104.132.07	HOSE CONNECTOR DN8 MALE 1 / 4 INCH
SCT-104.132.08	HOSE CONNECTOR DN10 MALE 1 / 4 INCH
SCT-104.132.09	'Y' PIECE

## SCT-FRACER OIL FREE CHEMICAL DUTY DIAPHRAGM VACUUM PUMPS

FOUR HEADS AND THREE STAGE PUMP ( 75 LITERS )

### SALIENT FEATURES:

- SCT-FRACER pumps are designed for it's rich & elegant appearance
- Four heads and three stage pump for 75 liters / min operations.
- Oil free chemical duty dry vacuum pump and efficient operations.
- SCT-FRACER can be used in automated systems.
- PTFE dry diaphragm pump for aspirating acidic, basic, or organic liquids.
- Portable supplied with handle for carrying and easy shifting.
- Noise less (45 decibels) / vibration free operations.
- Made of very high quality components and maintenance free.
- PTFE dry diaphragm pump for automated aspiration systems is effective for aspirating liquids that are strongly acidic, basic or organic.
- Ideal good aspiration / desiccation and filtration applications.





**TECHNICAL SPECIFICATION:**

PRODUCT NO.	SCT-104.133.01
MODEL NO	SCT-FARCER
NUMBER OF HEADS / STAGES	4 / 3
FREE AIR DISPLACEMENT	
M3/H (L/MIN) @50HZ	4.5 (75)
CFM (L/MIN) @60HZ	2.9 (81)
ULTIMATE PRESSURE, MBAR (TORR)	2 (1.5)
MAXIMUM VACUUM, IN. HG	29.9
MAX. OVERPRESSURE, BAR	-
IN / EX HOSE CONNECTOR	DIN
TUBING NEEDED, I.D. MM (IN.)	8 (0.32)
INTAKE (EXHAUST) THREAD NPT	- (1/4 )
SOUND LEVEL DBA	45
MOTOR POWER, WATTS (HP)	370 (0.5)
TYPE OF MOTOR PROTECTION IP	54
WEIGHT, KG (LBS.)	18.3 (40.3)
OVERALL DIMENSIONS	
L CM (IN.) X W CM (IN.) X H CM (IN.)	23 (9.1) X 38 (15) X 16.9 (6.7)

**ORDERING INFORMATIONS:**

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.133.01	SCT-FRACER	SCT FRACER OIL FREE CHEMICAL DUTY DIAPHRAGM VACUUM PUMPS SUPPLIED WITH ON/OFF SWITCH AND INTERNAL PROTECTIVE THERMAL SWITCH FOR THE MOTOR, CARRY HANDLE AND VIBRATION ISOLATING FEET. COMES PRE-ASSEMBLED

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**OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):**

SCT-104.133.02	VACUUM HOSE RUBBER RED – O.D.MM 18, IDMM 8, WALL THICKNESS 5
SCT-104.133.03	VACUUM HOSE RUBBER RED – O.D.MM 20, IDMM 10, WALL THICKNESS 5
SCT-104.133.04	VACUUM HOSE SILICONE – O.D.MM 12, IDMM 6, WALL THICKNESS 3
SCT-104.133.05	HOSE ADAPTER KIT INCLUDES HOSE CONNECTOR, CENTERING RING, HINGE CLAMP CLAMP AND 2.5M VACUUM HOSE, RUBBER RED.
SCT-104.133.06	COMPLETE VACUUM SYSTEMS ARE INTEGRATED VACUUM SYSTEMS WHICH ARE DESIGNED FOR SOLVENT DISTILLATION / EVAPORATION APPLICATIONS
SCT-104.133.07	HANDHELD GENERAL RANGE VACUUM GAUGE WITH DIGITAL DISPLAY
SCT-104.133.08	EXPLOSION PROOF DIGITAL VACUUM GAUGE USE IN THE AREAS WITH POTENTIALLY EXPLOSIVE ATMOSPHERES

**SCT-NEON OIL FREE CHEMICAL DUTY DIAPHRAGM VACUUM PUMPS**

DOUBLE HEADS AND TWO STAGE PUMP ( 38 LITERS )

**SALIENT FEATURES:**

- SCT - NEON pumps are designed for it's rich & elegant appearance
- Two heads and two stage pump for 38 liters / min operations.
- Oil free chemical duty dry vacuum pump and efficient operations
- SCT-neon can be used in rotary evaporators and gel dryer
- PTFE dry diaphragm pump for aspirating Acidic, basic, or organic liquids
- Portable supplied with handle for carrying and easy shifting
- Noise less (45 decibels) / vibration free operations
- Made of very high quality components and maintenance free.
- PTFE dry diaphragm pump for automated Aspiration systems is effective for aspirating liquids that are strongly acidic, basic or organic.
- Ideal for vacuum oven/ concentrators / desiccation and drying applications.



**TECHNICAL SPECIFICATION:**

PRODUCT NO.	SCT-104.134.01
MODEL NO	SCT-NEON
NUMBER OF HEADS / STAGES	2 / 2
FREE AIR DISPLACEMENT	
M3/H (L/MIN) @50HZ	2.3 (38)
CFM (L/MIN) @60HZ	1.5 (41)
ULTIMATE PRESSURE, MBAR (TORR)	8 (6)
MAXIMUM VACUUM, IN. HG	29.7
IN / EX HOSE CONNECTOR	DIN
TUBING NEEDED, I.D. MM (IN.)	8 (0.32)
INTAKE (EXHAUST) THREAD NPT	- (-)
SOUND LEVEL, DBA	45
MOTOR POWER, WATTS (HP)	180 (0.25)
TYPE OF MOTOR PROTECTION, IP	54
WEIGHT, KG (LBS.)	11.2 (24.7)
OVERALL DIMENSIONS	
L CM (IN.) X W CM (IN.) X H CM (IN.)	23 (9.1) X 26.5 (10.4) X 16.9 (6.7)

**ORDERING INFORMATIONS:**

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.134.01	SCT-NEON	SCT NEON OIL FREE CHEMICAL DUTY DIAPHRAGM VACUUM PUMPS SUPPLIED COMPLETE READY TO USE

**OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):**

SCT-104.134.02	VACUUM HOSE, MATERIAL RUBBER RED, O.D.MM 18, I.D.MM 8, WALL THICKNESS 5
SCT-104.134.03	VACUUM HOSE, MATERIAL RUBBER RED, O.D.MM 20, I.D.MM 10, WALL THICKNESS 5
SCT-104.134.04	VACUUM HOSE, MATERIAL SILICONE, O.D.MM 12, I.D.MM 06, WALL THICKNESS 3
SCT-104.134.05	HOSE ADAPTER KIT, HOSE ADAPTER KIT INCLUDES HOSE CONNECTOR, CENTERING RING, HINGE CLAMP RING AND 2.5M VACUUM HOSE, RUBBER RED.
SCT-104.134.06	VACUUM REGULATOR WITH DIAL GAUGE - THE REGULATOR VALVE FOR INTAKE ALLOWS THE ADJUSTMENT OF THE ULTIMATE PRESSURE. THE DIAL VACUUM GAUGE INDICATES THE VACUUM LEVEL. THE AIR REGULATOR VALVE WILL BE MOUNTED DIRECTLY ON THE PUMP

**SCT-ZION OIL FREE CHEMICAL DUTY DIAPHRAGM VACUUM PUMPS**

DOUBLE HEADS AND TWO STAGE PUMP ( 113 LITERS )

**SALIENT FEATURES:**

- SCT-ZION pumps are designed for it's rich & elegant appearance.
- Two heads and two stage pump for 113 liters / min operations.
- Oil free chemical heavy duty dry vacuum pump and efficient operations.
- SCT-ZION can be used in rotary evaporators and gel dryer.
- PTFE dry diaphragm pump for aspirating Acidic, basic, or organic liquids.
- Portable -supplied with handle for carrying and easy shifting.
- Noise less (45 decibels) / vibration free operations.
- Made of very high quality components and maintenance free.
- PTFE dry diaphragm pump for automated Aspiration systems is effective for aspirating liquids that are strongly acidic, basic or organic.
- Ideal for drying / degassing / distillation and evaporation applications.



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**TECHNICAL SPECIFICATIONS:**

<b>PRODUCT NO.</b>	<b>SCT-104.135.01</b>
<b>MODEL NO</b>	<b>SCT-ZION</b>
NUMBER OF HEADS / STAGES	4 / 2
<b>FREE AIR DISPLACEMENT</b>	
M3/H (L/MIN) @50HZ	6.8 (113)
CFM (L/MIN) @60HZ	4.4 (125)
ULTIMATE PRESSURE, MBAR (TORR)	8 (6)
MAXIMUM VACUUM, IN. HG	29.7
MAX. OVERPRESSURE, BAR	-
IN / EX HOSE CONNECTOR	DIN
TUBING NEEDED, I.D. MM (IN.)	8 (0.32)
INTAKE (EXHAUST) THREAD NPT	- (-)
SOUND LEVEL DBA	45
MOTOR POWER, WATTS (HP)	370 (0.5)
TYPE OF MOTOR PROTECTION IP	54
WEIGHT, KG (LBS.)	18.3 (40.3)
<b>OVERALL DIMENSIONS</b>	
L CM (IN.) X W CM (IN.) X H CM (IN.)	23 (9.1) X 38 (15) X 16.9 (6.7)

**ORDERING INFORMATIONS:**

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.135.01	SCT-ZION	SCT ZION OIL FREE CHEMICAL DUTY DIAPHRAGM VACUUM PUMPS SUPPLIED WITH ON/OFF SWITCH AND INTERNAL PROTECTIVE THERMAL SWITCH FOR THE MOTOR, CARRY HANDLE AND VIBRATION ISOLATING FEET COMES PRE-ASSEMBLED

**OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):**

SCT-104.135.02	VACUUM HOSE RUBBER RED - O.D.MM 18, IDMM 8, WALL THICKNESS 5
SCT-104.135.03	VACUUM HOSE RUBBER RED - O.D.MM 20, IDMM 10, WALL THICKNESS 5
SCT-104.135.04	VACUUM HOSE SILICONE- O.D.MM 12, IDMM 6, WALL THICKNESS 3
SCT-104.135.05	HOSE ADAPTER KIT INCLUDES HOSE CONNECTOR, CENTERING RING, HINGE CLAMP CLAMP & 2.5M VACUUM HOSE, RUBBER RED.
SCT-104.135.06	COMPLETE VACUUM SYSTEMS ARE INTEGRATED VACUUM SYSTEMS WHICH ARE DESIGNED FOR SOLVENT DISTILLATION / EVAPORATION APPLICATIONS
SCT-104.135.07	HANDHELD GENERAL RANGE VACUUM GAUGE WITH DIGITAL DISPLAY
SCT-104.135.08	EXPLOSION PROOF DIGITAL VACUUM GAUGE USE IN THE AREAS WITH POTENTIALLY EXPLOSIVE ATMOSPHERES
SCT-104.135.09	HOSE CONNECTOR DN8 MALE ¼ INCH
SCT-104.135.10	HOSE CONNECTOR Y PIECE

## SCT-DRYER - ROTARY VANE ECONOMICAL OIL VACUUM PUMPS

### SALIENT FEATURES:

- SCT -DRYER pumps are designed for it's simplicity and compactness.
- Suitable for basic vacuum drying, basic filtration, basic free drying, and other general chemicals related applications.
- SCT-DRYER good for continues operations with the basic applications
- Light in weight - made of aluminium - portable supplied with handle for carrying and easy shifting
- Noise less (52 decibels) / vibration free operations
- Made of very high quality components and maintenance free.
- Ideal for basic and general freeze drying applications.
- Single stage pump operates with oil suitable for semi- continues and optimal operations
- Eliminate the harmful vapors that destroy your Pump in the most demanding vacuum applications

### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	SCT-104.136.01
MODEL NO.	SCT DRYER
NUMBER OF STAGE	1
FREE AIR DISPLACEMENT	CFM (L / MIN) @ 60HZ 5 (140)
MAX. VACUUM, TORR (MBAR)	0.1 (0.13)
MOTOR PUMP SPEED @ 60HZ	1725 RPM
MOTOR HORSE POWER	1/2 HP
PORT THREAD	5/16"
NOISE LEVEL (DB)	52
VOLTAGE	AC220V/50-60 HZ
DIMENSION ( L X W X H CM )	33.5 X 13.8 X 27
PACKING DIMENSION ( L X W X H ) CM	38.5 X 20.6 X 30.4
NET WEIGHT (KG)	12
GROSS WEIGHT (KG)	13.2



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### ORDERING INFORMATION:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.136.01	SCT-DRYER	SCT-DRYER ROTARY VANE VACUUM PUMP, AC220V/50HZ SUPPLIED COMPLETE WITH INSTRUCTION MANUAL.

### OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):

SCT-104.136.02	EXHAUST FILTER
SCT-104.136.03	OPTIONAL ACCESSORY FOR CAPTURING OIL MIST FROM THE EXHAUST PORT
SCT-104.136.04	STAINLESS STEEL HOUSING BUILT IN A REPLACEABLE FILTER ELEMENT
SCT-104.136.05	SCT-DRYER VACUUM OIL 1000 ML / BOTTLE

## SCT-FREEZE – ROTARY VANE OIL VACUUM PUMPS

### SALIENT FEATURES:

- SCT-FREEZE pumps are designed for it's rigidity & elegant appearance.
- Two stage pump suitable for applications closer to 4.2 To 5.8 Liters/ min.
- Operates with oil suitable for continues and efficient operations.
- Freeze pumps includes continues acid neutralization and oil filtration.
- Portable - supplied with handle for carrying and easy shifting.
- Noise less (49 decibels) / vibration free operations.
- Made of very high quality components and maintenance free.
- Ideal for basic and general freeze drying applications.
- Suitable for tfa, hbr, acetonitrile and other harsh chemicals.
- Eliminate the harmful vapors that destroy your Pump in the most demanding vacuum applications.

Please consider the following notes for sensitive applications

#### Application Note for Freeze Drying and use of Harsh chemicals

Drug discovery labs are using freeze dryers for the final drying step when samples isolated by HPLC and LC include heat sensitive proteins and peptides. These samples are typically dissolved in a water, Acetonitrile and 0.1% TFA solution. Acetonitrile and TFA and its by-products will cause rapid breakdown of pump oil, changing its viscosity and leading to pump failure - sometimes after only a few runs.

There is no way to prevent the ingestion of harsh chemicals into the pump. Three steps to minimize ingestion of harsh chemicals are:

1. Clean the freeze dryer's condenser after each freeze drying run to prevent sublimation of the frozen chemicals into the pump.
2. Size the pump to the freeze dryer. Pumping speed that is too high will shorten residence time in the condenser, reducing its trapping efficiency.
3. Spread the drying of multiple samples over time to evenly distribute the vapor load on the condenser.

CAUTION: For high acetonitrile vapor loads, add a cold trap operating at -75° C or colder.

#### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	SCT-104.137.01
MODEL NO	SCT-FREEZE
NUMBER OF STAGES	2
<b>FREE AIR DISPLACEMENT</b>	
M3/H (L/MIN) @50HZ	5.8 (97)
CFM (L/MIN) @60HZ	3.9 (110)
ULTIMATE PRESSURE, MBAR (TORR)	
PARTIAL ABS	2X10-4 (0.00015)
TOTAL WITHOUT GAS BALLAST	2X10-3 (0.0015)
TOTAL WITH GAS BALLAST	1X10-2 (0.0075)
MAX. ALLOWED INTAKE/EXHAUST PRESSURE, BAR	1
WATER VAPOR TOLERANCE, MBAR (TORR)	60 (45)
WATER VAPOR CAPACITY, G/H	170
OIL CAPACITY, L (QT)	0.55 (0.58)
IN / EX HOSE CONNECTOR	DN 16 KF
TUBING NEEDED, I.D. MM (IN.)	HOSE CONNECTOR AVAILABLE
INTAKE (EXHAUST) THREAD NPT	- (-)
SOUND LEVEL, DBA	49
MOTOR/PUMP SPEED, RPM@50HZ (60HZ)	1440 (1740)
MOTOR POWER, WATTS (HP)	200 (0.27)
TYPE OF MOTOR PROTECTION, IP	54
<b>OVERALL DIMENSIONS AND WEIGHT</b>	
WEIGHT, KG (LBS.)	19.5 (43)
L CM (IN.) X W CM (IN.) X H CM (IN.)	43 (16.9) X 15 (5.9) X 23.5 (9.3)

#### ORDERING INFORMATIONS:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.137.01	SCT-FREEZE	SCT-FREEZE ROTARY VANE OIL VACUUM PUMP IS SUPPLIED COMPLETE WITH ANTI-SUCTION BACK VALVE, GAS BALLAST VALVE, VACUUM PUMP OIL, CENTERING RING, CLAMPING RING AND MOTOR OVERLOAD PROTECTION. READY FOR USE AFTER OIL FILLING.

#### OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):

SCT-104.137.02	FREEZE DRYER ADAPTER KITS INCLUDE 2 WAY BALL VALVE, HOSE CONNECTOR, HINGE CLAMP, RING, CENTERING RING, OIL MIST SEPERATOR (AKD) AND 1.5M VACUUM HOSE
SCT-104.137.03	VACUUM MEASUREMENT PACKAGES INCLUDES VACUUM GAUGES, T CONNECTION, HINGE CLAMP, RING AND CENTERING RING.
SCT-104.137.04	VACUUM CONTROL PACKAGES INCLUDES DIGITAL MULTI RANGE GAUGE / CONTROLLER, VACUUM SENSOR, 'T' CONNECTION, SOLENOID VALVE, HINGE CLAMP, AND CENTERING RING
<b>ONE AND TWO STAGE PUMP ACCESSORIES</b>	
FOR PUMP EXHAUST	
SCT-104.137.05	OIL MIST SEPARATOR
SCT-104.137.06	EXHAUST SEPARATOR WITH OIL RETURN
SCT-104.137.07	OIL MIST FILTER
<b>FOR PUMP INTAKE</b>	
SCT-104.137.08	CONDENSER
SCT-104.137.09	ACID NEUTRALIZATION TRAP
SCT-104.137.10	FINE VACUUM ADSORPTION TRAP
SCT-104.137.11	VACUUM PUMP OILS.

## SCT - BREEZE - TWO STAGE DIRECT DRIVEN ROTARY VANE OIL VACUUM PUMPS

### SALIENT FEATURES:

- SCT-BREEZE pumps are designed for it's rigidity & elegant appearance.
- Two stage pump suitable for applications closer to 183 Liters/ min.
- Operates with gold oil suitable for continues and efficient operations.
- Freeze pumps includes continues acid neutralization and oil filtration.
- Portable -supplied with handle for carrying and easy shifting.
- Noise less(49 decibels) / vibration free operations.
- Made of very high quality components and maintenance free.
- Ideal for heavy duty lab freeze drying / desiccation and vacuum concentration applications.
- Suitable for TFA, HBR, Acetonitrile and other harsh chemicals.
- Eliminate the harmful vapors that destroy your pump in the most demanding vacuum applications.
- Can be used for the heavy and continues lab freezing and concentrating works.



Please consider the following notes for sensitive applications

### Application Note for Freeze Drying and Use of Harsh Chemicals

Drug discovery labs are using freeze dryers for the final drying step when samples isolated by HPLC and LC include heat sensitive proteins and peptides. These samples are typically dissolved in a water, Acetonitrile, and 0.1% TFA solution. Acetonitrile and TFA and its by-products will cause rapid breakdown of pump oil, changing its viscosity and leading to pump failure—sometimes after only a few runs.

There is no way to prevent the ingestion of harsh chemicals into the pump. Three steps to minimize ingestion of harsh chemicals are:

1. Clean the freeze dryer's condenser after each freeze drying run to prevent sublimation of the frozen chemicals into the pump.
  2. Size the pump to the freeze dryer. Pumping speed that is too high will shorten residence time in the condenser, reducing its trapping efficiency.
  3. Spread the drying of multiple samples over time to evenly distribute the vapor load on the condenser.
- CAUTION: For high Acetonitrile vapor loads, add a cold trap operating at -75°C or colder.

### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	SCT-104.138.01
MODEL NO	SCT-BREEZE
NUMBER OF STAGES	2
<b>FREE AIR DISPLACEMENT</b>	
M3/H (L/MIN) @50HZ	11.0 (183)
CFM (L/MIN)@60HZ	7.8 (220)
ULTIMATE PRESSURE, MBAR (TORR)	
PARTIAL ABS	1x10 <sup>-4</sup> (0.00013)
TOTAL WITHOUT GAS BALLAST	2x10 <sup>-3</sup> (0.0015)
TOTAL WITH GAS BALLAST	3x10 <sup>-3</sup> (0.00225)
MAX. ALLOWED INTAKE/EXHAUST PRESSURE, BAR	1
WATER VAPOR TOLERANCE, MBAR (TORR)	35 (26.2)
WATER VAPOR CAPACITY, G/H	450
OIL CAPACITY, L (QT)	1 (1.06)
IN / EX HOSE CONNECTOR	DN 25 KF
TUBING NEEDED, I.D. MM (IN.)	HOSE CONNECTOR AVAILABLE
INTAKE (EXHAUST) THREAD NPT	- (-)
SOUND LEVEL, DBA	49
MOTOR/PUMP SPEED, RPM@50HZ (60HZ)	1400 (1680)
MOTOR POWER, WATTS (HP)	550 ( 0.75)
TYPE OF MOTOR PROTECTION, IP	54
<b>OVERALL DIMENSIONS AND WEIGHT</b>	
WEIGHT, KG (LBS.)	35 (77.2)
L CM (IN.) X W CM (IN.) X H CM (IN.)	54 (21.3) X 17 (6.7) X 26 (10.2)

### ORDERING INFORMATION:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.138.01	SCT-BREEZE	SCT - BREEZE - TWO STAGE DIRECT DRIVEN ROTARY VANE OIL VACUUM PUMPS IS SUPPLIED COMPLETE WITH ANTI-SUCTION BACK VALVE, GAS BALLAST VALVE, VACUUM PUMP OIL, CENTERING RING, CLAMPING RING AND MOTOR OVERLOAD PROTECTION. READY FOR USE AFTER OIL FILLING.

**OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):**

SCT-104.138.02	FREEZE DRYER ADAPTER KITS INCLUDE 2 WAY BALL VALVE, HOSE CONNECTOR, HINGE CLAMP, RING, CENTERING RING, OIL MIST SEPARATOR (AKD) AND 1.5M VACUUM HOSE
SCT-104.138.03	VACUUM MEASUREMENT PACKAGES INCLUDES VACUUM GAUGES, T CONNECTION, HINGE CLAMP, RING AND CENTERING RING.
SCT-104.138.04	VACUUM CONTROL PACKAGES INCLUDES DIGITAL MULTI RANGE GAUGE / CONTROLLER, VACUUM SENSOR, T CONNECTION, SOLENOID VALVE, HINGE CLAMP, AND CENTERING RING
ONE AND TWO STAGE PUMP ACCESSORIES	
FOR PUMP EXHAUST	
SCT-104.138.05	OIL MIST SEPARATOR
SCT-104.138.06	EXHAUST SEPARATOR WITH OIL RETURN
SCT-104.138.07	OIL MIST FILTER
FOR PUMP INTAKE	
SCT-104.138.08	CONDENSER
SCT-104.138.09	ACID NEUTRALIZATION TRAP
SCT-104.138.10	VACUUM PUMP OIL

**SCT - DALTON OIL SEALED PUMP SYSTEM VACUUM PUMPS**

**SALIENT FEATURES:**

- SCT-DALTON pumps are designed for it's rich & elegant appearance.
- Two heads and two stage pump for 183 liters / min operations.
- SCT-DALTON can be used in automated systems.
- Portable - 47 kgs supplied with handle for carrying and easy shifting.
- Noise less (50 decibels) / less vibration operations.
- Made of very high quality components and maintenance free.
- Vacuum sealed oil pump suitable for chemical related heavy duty vacuum pump for chemical operations.
- Ideal for chemical and corrosive gases and vapours related applications.



**TECHNICAL SPECIFICATIONS:**

PRODUCT NO.	SCT-104.139.01
MODEL NO	SCT-DALTON
NUMBER OF STAGES	2+2
FREE AIR DISPLACEMENT, M3/H (L/MIN) @50HZ, CFM (L/MIN) @60HZ	11.0 (183), 7.8 (220)
ULTIMATE PRESSURE, MBAR (TORR)	
PARTIAL	1X10-4 (0.00013)
TOTAL	2X10-3 (0.0015)
MAX. IN/EX PRESSURE, BAR	1
WATER V. TOLERANCE, MBAR (TORR)	80 (60)
WATER VAPOR CAPACITY, G/H	550
OIL CAPACITY, L (QT)	1 (1.06)
IN / EX HOSE CONNECTOR	DN 25 KF
TUBING NEEDED, I.D. MM (IN.)	HOSE CONNECTOR AVAILABLE
INTAKE (EXHAUST) THREAD NPT	- (-)
SOUND LEVEL, DBA	50
MOTOR/P. SPEED, RPM@50HZ (60HZ)	1400 (1680)
MOTOR POWER, WATTS (HP)	900 (1.23)
TYPE OF MOTOR PROTECTION, IP	54
<b>OVERALL DIMENSIONS AND WEIGHT</b>	
WEIGHT, KG (LBS.)	42.5 (93.7)
L CM (IN.) X W CM (IN.) X H CM (IN.)	59 (23.3) X 34.5 (13.6) X 42 (16.4)

**ORDERING INFORMATIONS:**

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.139.01	SCT-DALTON	SCT DALTON OIL SEALED PUMP SYSTEM VACUUM PUMPS IS SUPPLIED WITH OIL MIST SEPARATOR, SOLVENT TRAP, DIAL VACUUM GAUGE, VACUUM PUMP OIL, CENTERING RING AND HINGE CLAMP RING. PUMP SYSTEM IS COMPLETELY MOUNTED, READY FOR USE AFTER OIL FILLING.

**OPTIONAL ACCESSORIES (SELECT ONLY IF REQUIRED):**

<b>FREEZE DRYER ADAPTER KITS - ALL IN ONE KIT FOR CONNECTION TO A FREEZE DRYER</b>	
SCT-104.139.02	TYPE-KIT 6, SIZE DN 25 KF ADAPTER KITS INCLUDE HOSE CONNECTOR, HINGE CLAMP RING, CENTERING RING & 1.5M VACUUM HOSE.
OIL FILTER: THE OIL FILTERS ARE DESIGNED FOR QUICK AND EASY INSTALLATION TO ALL SCT, ROTARY VANE / SCT PUMP MODELS. THE MECHANICAL OIL-FILTER (OPF 40M), FILTERS OUT DUST AND PARTICULATE FROM THE OIL. THE CHEMICAL OIL-FILTER (OPF 40C) ADSORBS CORROSIVE SUBSTANCES, REDUCING PUMP WEAR. AN INDICATOR SHOWS WHEN THE OIL FILTER ELEMENT HAS TO BE REPLACED.	
SCT-104.139.03	TYPE- OPF 40C, OIL CAPACITY 1.0 LITER
SCT-104.139.04	TYPE- OPF 40M, OIL CAPACITY 0.5 LITER
SCT-104.139.05	HOSE CONNECTOR
SCT-104.139.06	SCT VACUUM OIL

## GENERAL VACUUM PUMP ACCESSORIES

### SCT - LIZA-1 HANDHELD GENERAL RANGE VACUUM GAUGE

#### SALIENT FEATURES:

- SCT-LIZA-1 vacuum gauge is an economical raw gauge for uses in laboratory.
- The external sensor reads results to large LCD.
- Operates on standard 9V battery or with AC/DC Adapter.

#### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	SCT-104.145.01
MODEL NO	SCT-LIZA-1
RANGE mbar (torr)	1050 - 1 (785 - 1)
OVERALL DIMENSIONS L X W X H cm (in.)	80 X 36 X 125 (3.1 X 1.4 X 4.9)
VOLTAGE	90 - 260V, 50/60 Hz

#### ORDERING INFORMATION:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.145.01	SCT-LIZA-1	LIZA-1 HANDHELD GENERAL RANGE VACUUM GAUGE IS SUPPLIED WITH SENSOR, CABLE AND AC/DC ADAPTER +9V BATTERY.



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### SCT - LIZA-2 HANDHELD MULTI RANGE VACUUM GAUGE

#### SALIENT FEATURES:

- SCT-LIZA-2 take accurate vacuum reading at multiple vacuum levels with combination sensor.
- The external sensor comes with 2 mtr. data cable and can be extended.
- Operates on standard 9V battery or with AC/DC Adapter.

#### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	SCT-104.146.01
MODEL NO	SCT-LIZA-2
RANGE mbar (torr)	1050 - 10 <sup>-3</sup> (785 - 10 <sup>-3</sup> )
OVERALL DIMENSIONS L X W X H cm (in.)	80 X 36 X 125 (3.1 X 1.4 X 4.9)
VOLTAGE	90 - 260V, 50/60 Hz

#### ORDERING INFORMATION:

PRODUCT NO.	MODEL NO.	DESCRIPTION
SCT-104.146.01	SCT-LIZA-2	LIZA-2 HANDHELD MULTI RANGE VACUUM GAUGE IS SUPPLIED WITH AC/DC ADAPTER +9V BATTERY.



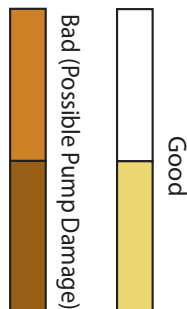
### SCT - VAC OIL - VACUUM PUMP OILS

#### TECHNICAL SPECIFICATIONS:

PRODUCT NO.	SCT-104.149.01	SCT-104.149.02	SCT-104.149.03	SCT-104.149.04	SCT-104.149.05
MODEL NO	SCT-VAC OIL-1	SCT-VAC OIL-2	SCT-VAC OIL-3	SCT-VAC OIL-4	SCT-VAC OIL-5
OIL TYPE	MINERAL OIL	SYNTHETIC OIL	PARAFFIN OIL	PFPE OIL	PAO OIL
CAPACITY	10 LTRS.	10 LTRS.	5 LTRS.	1 LTR.	1 LTR.
VAPOUR PRESSURE mbar (torr)	10-5	10-5	10-8	10-4	10-6
VISCOSITY AT 40°C (104°F) cSt	118	110	94	120	47.9
FLASH POINT °C (°F)	270 (518)	260 (500)	260 (500)	N/A	257 (495)
DENSITY @ 15°C (59°F) g/ml	0.888	0.960	0.886	1.890	0.918

#### VACUUM PUMP OIL CONDITION COLOR

Vacuum Pump oil can become contaminated with ingested fluids and vapours. Use recommended pump oil and change your pump oil regularly. Cloudy and discolored oil will lead to premature pump failure. Make the clear choice and change your oil regularly.



\* In case if you need any specific spares (or) accessories - please contact our local dealer (or) us.

**NOTES :**

SCT - Team Thanks our customers for spending your valuable time in reading our Chapter 4; we are sure that it would have got some brief required informations. The first 4 Chapters contains mainly the basic essential things in the laboratories and the following chapters you will many instruments and equipments used in all kind of labs. In the following chapter 5 you will find SCT-OPTICAL AND SPECTROPHOTOMETRY PRODUCTS. In any case, should you require any additional details, pls. contact us at [sales@scichemtech.com](mailto:sales@scichemtech.com)

\* Manufacturer has the rights to change (or) modify the specifications without prior notice for quality improvement.