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Sample Tube Consumables and Instruments Catalogue

fluidX™
From Brooks LIFE SCIENCES

brookslifesciences.com

A Guide to our FluidX Next-Generation Tubes

Next-Generation Jacket Tri-coded

Each tube features a permanent 2D-code laser etched in high-contrast on the tube base, a permanent 1D (linear barcode) and Human-Readable Number laser etched in high-contrast on the tube side.

The Next-Generation jacket tube is manufactured using an advanced manufacturing process which results in a one-piece jacket tube. All three codes are identical and auditing processes guarantee all three codes match. Our standard 2D option is black on white.

Next-Generation 2D-coded Jacket

Our Next-Generation jacket tubes are also available with a 2D-code laser etched on the base only. Allowing users to add additional information or a second identifier in high-contrast to the tube side. Our standard 2D option is black on white.

Dual-coded tubes

Each tube features a permanent 2D-code and Human Readable Number laser etched in high-contrast on the tube base or tube side (0.26ml).

The Next-Generation Dual-coded tube is manufactured using an advanced manufacturing technique used to integrate 2 resin colors into the same tube for high resolution coding.

Both codes are identical and auditing processes guarantee both codes match.

Our standard 2D option is white on black.

Non-coded tubes

Simply come as they are

Glossary of Terms

2D Datamatrix code

Unique pattern of squares, dots, hexagons and other geometric shapes printed on the base of a tube

1D-code / Linear barcode

Unique barcode represented by parallel lines of different widths and spacings printed on the side of a tube, SBS rack or CryoBox. Our standard code is code 128. Code 128 is able to encode alpha-numeric data

2D-coded

2D-code on tube base

2D4-coded

Quad Code on AcoustiX tube base

Dual-coded

2D code and Human readable Number on tube base or tube side (0.26ml)

Tri-coded

2D-code on tube base, 1D (linear barcode) and Human-Readable Number on tube side

Jacket tube

Standard tube with a fixed black cover to facilitate rapid code recognition and reading

Next-Generation tube

Next-Generation manufacturing technique used to integrate 2 resin colors into the same tube for high resolution coding.

External Thread

Thread is on the outside of the tube so there is no loss in working volume when a cap is added, saving valuable freezer space. FluidX external thread caps feature a double start thread. The thread is fully engaged after a maximum rotation of 180°, making the cap easier to use especially in automated environments.

Internal Thread

Thread is on the inside of the tube.

Working Volume

The maximum sample volume that will still allow space between the sample and underside of the cap for ice expansion during freezing.

Fill Volume

The total capacity of the tube at 21°C.

Introduction

ALL ABOUT THE SAMPLE!

As a global leader in innovative sample management solutions Brooks Life Sciences is all about the sample.

Working across a wide range of industries Brooks Life Sciences offers unparalleled knowledge and experience of 2D-coded sample storage tubes, readers and sample management systems. As part of the team that developed the original 2D-coded sample tubes in 1999, we have been at the global forefront of developing sample storage consumables and instruments for nearly 20 years and we continue our philosophy of innovation to this day.

In addition to the innovation behind our products, we are committed to providing the highest levels of customer service, support and quality. Our Technical Support Team provides expert assistance, making sure our products give the reliable and optimal performance you expect.

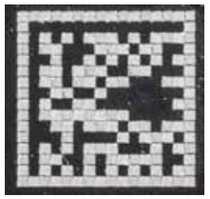
We believe that a quality sample is the cornerstone in the generation of reliable, reproducible and quantifiable data - which is why Brooks Life Sciences is **all about the sample.**

FluidX Sample Storage Consumables and Devices

FluidX tubes are available in a range of formats, including racked, bulk, capped and uncapped. Our robust code management system ensures each and every code is permanently affixed, unique and never duplicated. Tubes are suitable for applications ranging from +121°C to -196°C.

All FluidX tubes are developed with broad compatibility in mind, performing without compromise in conjunction with automated code reading, capping and sample management systems from FluidX and all other industry-recognized manufacturers.

KEY FEATURES



Our coding systems are designed to deliver the highest levels of sample security and labeling flexibility. We offer tubes with a choice of code, either 2D-code, 1D (linear barcode) or Human Readable Number (HRN). Our Tri-coded tubes have all three options whilst our Dual-coded tubes, can have a 2D-code and Human Readable Number on the tube base or side.

A robust code management system ensures each and every code is unique and never duplicated, preventing any possibility of misidentification involving your samples.

All FluidX polypropylene sample storage tubes sealed with a screw cap are suitable for use in cryogenic storage conditions.

Superior Datamatrix code quality:

FluidX sample storage tubes are easy to read even in harsh conditions or when damaged. Our 2D-codes adhere fully to the ECC200 standard. All codes are generated using the latest and most sophisticated error correction methods and high quality, permanent laser etching provides sharp detail

Every tube is quality checked to ensure they meet our exacting standards for readability.

Excellent Sealing: Tubes work equally well with either TPE septum or screw caps. A double start thread engages in a maximum rotation of 180°, facilitating automation.

Ideal for Cold Storage: Temperature range from -196°C (with screw cap) to 121°C. All our polypropylene tubes are suitable for cryogenic storage, but not for submersion in liquid phase nitrogen.

Automation Friendly

Screw capped tubes are compatible with our range of cappers and de-cappers, includung our IntelliXcap range. Available in 24, 48, and 96 format to automatically remove and re-cap a complete rack of tubes. The TwistLock feature prevents the tubes rotating in the rack during capping and de-capping.

Integration Friendly

CHOICE OF CODING OPTIONS

Next-Generation Jacket Tri-coded:

Each tube features a permanent 2D-code laser etched in high-contrast on the tube base, a permanent 1D (linear barcode) and Human-Readable Number laser etched in high-contrast on the tube side.

The Next-Generation jacket tube is manufactured using an advanced manufacturing process which results in a one-piece jacket tube. All three codes are identical and auditing processes guarantee all three codes match. Our standard 2D option is black on white.

Next-Generation Dual-coded:

Each tube features a permanent 2D-code and Human-Readable Number laser etched in high-contrast on the tube base or side.

The Next-Generation Dual-coded tube is manufactured using an advanced manufacturing technique used to integrate 2 resin colors into the same tube for high resolution coding.

Both codes are identical and auditing processes guarantee both codes match.

Our standard 2D option is white on black

Non-coded - simply come as they are.

2D Datamatrix code – unique pattern of squares, dots, hexagons and other geometric shapes printed on the base of a tube.

1D-coded / Linear barcode - unique barcode represented by parallel lines of different widths and spacings printed on the side of a tube, SBS rack or CryoBox. Our standard code is code 128. Code 128 is able to encode alpha-numeric data

2D-coded – 2D-code on tube base.

Dual-coded – 2D-code and Human-Readable Number on tube base or side.

Tri-coded – 2D-code on tube base, 1D (linear barcode) and Human-Readable Number on tube side.

Next-Generation – Next-Generation manufacturing technique used to integrate 2 resin colors into the same tube for high resolution coding

Dual-Coded (white on black)

2D-Coded (black on white)

Unique 2D4 Code allows code reading without interfering with Acoustic dispensing window

2D coded rack base allows automatic detection of orientation by instrumentation.

SBS Storage Rack Options

FluidX tubes are compatible with industry standard SBS sized racks in either: 24, 48, 96, 240 or 384 format. Dependent upon tube type, the following rack options are available

TwistLock:

prevents tubes rotating within the rack to enable automated capping and de-capping of screw caps. TwistLock is provided as standard with the option available to remove.

TwistLock

LidLock:

racks fitted with a LidLock latch are designed to withstand a 1m drop for added sample security.

LidLock

TubeLock:

tubes can be locked into the rack to prevent falling out, even when there is no lid present. Tubes can be placed in either locked or unlocked positions. TubeLock is used in manual workflows and is activated by applying pressure to the tube top, clicking the tube into place. Racked tubes can be ordered either pre-locked or non-locked.

TubeLock

Automatic Rack Orientation:

racks can be supplied with a unique 2D-code identifier which can be read at the same time as the tube 2D-code. This provides automatic rack orientation and more secure sample tracking.

Direct Laser Etching:

a cutout window on the rack sides allow the linear barcode to be read more easily; linear barcodes can be laser etched directly onto racks.

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Cryo Racks

In addition to industry standard SBS racks, a range of tube and application specific cryo racks are available. Each cryo rack incorporates:

- Open bottom for 2D-code decoding on FluidX Perception HD LF reader
- Direct laser etched 1D linear barcode and 2D rack ID on base of rack.

9 x 9 Cryo Storage Racks

- 136.2mm x 136.2mm polycarbonate cryo rack option for cryogenic sample storage
- Holds 81 tubes in 9 x 9 array

9 x 9 rack

10 x10 Cryo Storage Racks

- 136.2mm x 136.2mm polycarbonate cryo rack option for cryogenic sample storage
- Holds 100 tubes in 10 x 10 array

14 x 14 Cryo Storage Racks

- 136.2mm x 136.2mm polycarbonate cryobox rack option for cryogenic sample storage
- Holds 196 tubes in 14 x 14 array

10 x 10 rack

WARNING

Do not store any FluidX tubes in liquid phase nitrogen

Ingress of nitrogen into the tube can occur causing the tube to rupture when taken out of storage

May cause injury and loss of tube contents.

14 x 14 rack

Anatomy of a FluidX Next-Gen Tube - Internal Thread, Dual-Coded

FluidX 96-format, Internal Thread, Next-Generation Dual-coded tubes have a range of features that are only possible with advanced manufacturing techniques. Next-Generation co-molded caps offer a far superior seal over traditional O-ring caps, which can 'pop' when a sample is frozen or the cap is overtightened.

Internal Threaded Cap:
- Automation friendly
- Co-molding prevents o-ring ‘popping’
- Our most secure internal threaded cap

High Quality Virgin Polypropylene:
- No detectable leachables or extractables
- Manufactured in ISO Class 8 clean-room environment
- Endotoxin, DNase/RNase, heavy metals & animal free

Clear Window:
- Allows visual inspection
- Optional space to print direct due to high quality manufacturing

Dual-coded:
- 2D-code and Human-Readable Number (HRN) on tube base
- Enables whole rack or single tube reading
- High contrast enabling reliable reading
- Permanent laser etching

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Anatomy of a FluidX Next-Gen Tube - External Thread, Tri-Coded

The FluidX External Thread Next-Generation Jacket Tri-coded tube offers our most secure seal. This highly secure design also offers significant benefits over internal thread caps including, a higher working volume.

External Threaded Cap:
- Automation friendly
- Our most secure cap
- Enables greater working volume
- Designed to prevent over tightening

High Quality Virgin Polypropylene:
- No detectable leachables or extractables
- Manufactured in ISO Class 8 clean-room environment
- Endotoxin, DNase/RNase, heavy metals & animal free

Side Coding:
- Linear Barcode
- Human-Readable Number
- Permanent laser etching

Clear Window:
- Allows visual inspection
- Optional space to print direct due to high quality manufacturing

2D-coded:
- Enables whole rack or single tube reading
- High contrast enabling reliable reading
- Permanent laser etching

Anatomy of a FluidX Next-Gen Tube - External Thread, Dual-Coded

The FluidX Next-Gen Dual-Coded tube with external thread cap offers our most secure seal. This highly secure design also offers significant benefits over internal thread caps including, a higher working volume.

External Threaded Cap:
- Automation friendly
- Our most secure cap
- Enables greater working volume
- Designed to prevent over tightening

High Quality Virgin Polypropylene:
- No detectable leachables or extractables
- Manufactured in ISO Class 8 clean-room environment
- Endotoxin, DNase/RNase, heavy metals & animal free

Clear Window:
- Allows visual inspection
- Optional space to print direct due to high quality manufacturing

Dual-Coded:
- 2D-code and Human-Readable Number (HRN) on tube base
- Enables whole rack or single tube reading
- High contrast enabling reliable reading
- Permanent laser etching

Anatomy of a FluidX AcoustiX™ Sample Tube - Labcyte Echo® Qualified Consumable

Internal Threaded Cap:
- New internal co-molded design
- Increases capping and de-capping performance to over 500 cycles

Optimized Geometry:
- Optimized Tube Geometry for Acoustic dispensing technology
- 70µl Working Volume

High Quality Virgin Polypropylene:
- No detectable leachables or extractables
- Manufactured in ISO Class 8 clean-room environment
- Endotoxin, DNase/RNase, heavy metals & animal free

2D4 Coded:
- Unique 2D4 Code allows reading of the code without interfering with Acoustic dispensing window
- Tri-coded rack with Tube Retention for sample handling with Acoustic Dispenser and traditional liquid handlers
- Permanent laser etching

Customization Options

In addition to standard catalogue products the FluidX range can also be customized to provide tubes and racks ideally matched to your particular workflow. Available customization options are detailed below.

Tube Barcoding

Custom prefixing with user defined two letter prefix followed by an 8 digit number sequence determined by Brooks. e.g. AB12345678.

Full custom coding with a user generated 10 digit alphanumerical sequence, e.g. ABC1234567.

Choice of Black on White or White on Black 2D Datamatrix coding.

Rack Barcoding

Code 128 barcodes applied by Laser etching or labelling.

Barcode position selectable on any or multiple sides.

Cap Colours

In addition to Orange, caps are available in a variety of user selectable colours.

96 format caps available in: Natural, Clear/Light Blue, Dark Blue, Green, Purple, Red, White, Yellow, Amber and Black.

48 format caps available in: Dark Blue, Green, Red & Yellow for externally threaded tubes and in Natural for Internally threaded tubes.

24 format caps (automation friendly) for externally threaded tubes available in natural.

TPE Septum caps available in Dark Blue, Green, Red, and Yellow.

Sterilization

Gamma Irraditaion, Ethylene Oxide or Dual Ethylene Oxide sterilization treatments are available.

Special Options

Further options may be available depending upon product selection and details of requirements including custom product packaging and user definable tube/rack combinations.

Please note that for all custom products a minimum order quantity will be applied.

For further information on how to order please contact your local Brooks Life Sciences representative

FluidX Sample Storage Tube Range

FluidX Sample Storage Tube Range

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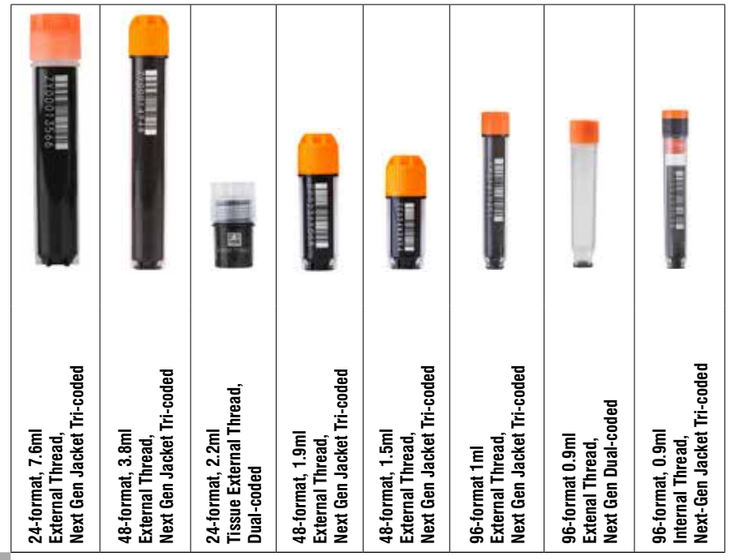
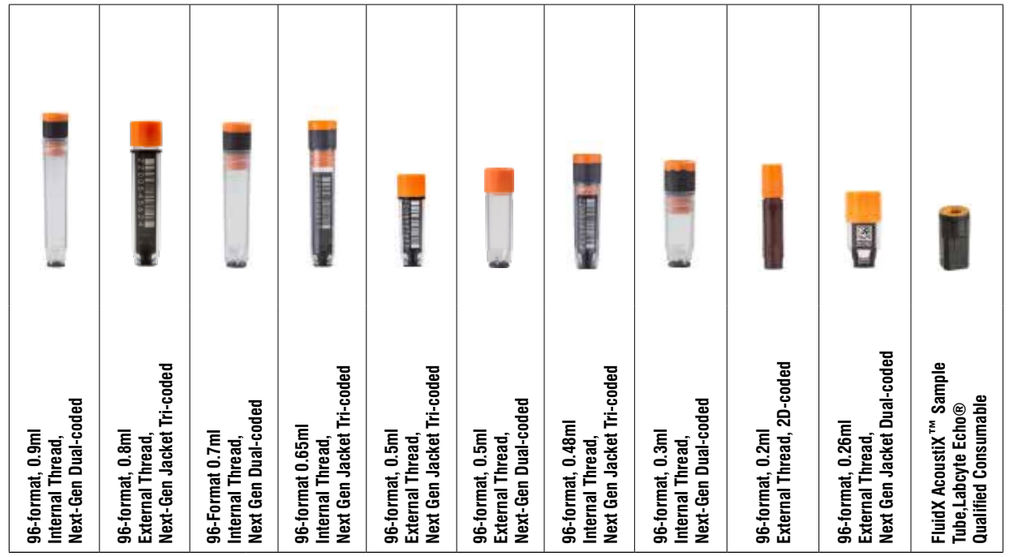


	24-format, 7.6ml External Thread, Next Gen Jacket Tri-coded	48-format, 3.8ml External Thread, Next Gen Jacket Tri-coded	24-format, 2.2ml Tissue External Thread, Dual-coded	48-format, 1.9ml External Thread, Next Gen Jacket Tri-coded	48-format, 1.5ml External Thread, Next Gen Jacket Tri-coded	96-format 1ml External Thread, Next Gen Jacket Tri-coded	96-format 0.9ml Extenal Thread, Next Gen Dual-coded	96-format, 0.9ml Internal Thread, Next-Gen Jacket Tri-coded
Further details see Page:	27	26	45	25	24	23	39	30
Max Fill Volume 21°C (ml) Screw Cap	9.2	4.6	2.7	2.3	1.8	1.2	1.0	1.1
Max Working Volume (ml) Screw Cap Frozen	7.6	3.8	2.2	1.9	1.5	1.0	0.9	0.9
Max Working Volume (µl) Screw Cap	7660	3830	2250	1910	1500	1000	911	916
Max Working Volume (µl) Septum Cap	-	-	-	-	-	916	887	999
Tube Height (mm)	77.4	75	25.9	38.2	30.6	46.2	42.3	44.2
Tube Height with Cap (mm)	83.6	80.7	32.1	43.9	36.3	49.6	45.7	52.5
Tube Height with Septum Cap (mm)	-	-	-	-	-	47.4	43.5	45.4
Inner Diameter (mm)	13	9.6	13.1	9.6	9.6	6.5	6.5	6.8
Outer Diameter with Cap (mm)	17	12.8	17	12.8	12.6	8.7	8.7	8.6
Center to Center (mm)	18	13.5	18	13.5	13.5	9	9	9
Min Temperature °C Screw Cap	-196	-196	-196	-196	-196	-196	-196	-196
Min Temperature °C Septum Cap	-	-	-	-	-	-80	-80	-80
2D-coded	Base	Base	Base & Side	Base	Base	Base	Base	Base
Human Readable Number	Side	Side	Side	Side	Side	Side	Base	Side
Linear Barcode	Side	Side	-	Side	Side	Side	-	Side
Product Codes								
Bulk, Uncapped	65-9303	65-7516	68-4000-00	65-7640	65-7660	68-1003-00	68-1001-00	67-0757-00
Bulk, Capped	66-9302	65-7517	68-4000-31	65-7641	65-7661	68-1003-10	68-1001-10	67-0757-10
Racked, Uncapped	-	65-7514	-	65-7642	65-7662	68-1003-01	68-1001-01	67-0757-01
Racked, Capped	-	65-7515	68-4000-33	65-7643	65-7663	68-1003-11	68-1001-11	67-0757-11



	96-format, 0.9ml Internal Thread, Next-Gen Dual-coded	96-format, 0.8ml External Thread, Next-Gen Jacket Tri-coded	96-Format 0.7ml Internal Thread, Next Gen Dual-coded	96-format 0.65ml Internal Thread, Next Gen Jacket Tri-coded	96-format, 0.5ml External Thread, Next Gen Jacket Tri-coded	96-format, 0.5ml External Thread, Next-Gen Dual-coded	96-format, 0.48ml Internal Thread, Next Gen Jacket Tri-coded	96-format, 0.3ml Internal Thread, Next-Gen Dual-coded	96-format, 0.2ml External Thread, 2D-coded	96-format, 0.26ml External Thread, Next Gen Jacket Dual-coded	FluidX Acoustix™ Sample Tube.Labcyte Echo® Qualified Consumable
Further details see Page:	37	22	36	29	21	38	28	35	47	34	44
Max Fill Volume 21°C (ml) Screw Cap	1.1	0.96	0.88	0.80	0.66	0.66	0.58	0.40	0.24	0.31	0.15
Max Working Volume (ml) Screw Cap Frozen	0.9	0.8	0.7	0.65	0.5	0.5	0.48	0.3	0.2	0.26	0.07
Max Working Volume (µl) Screw Cap	929	800	731	666	552	550	482	336	204	261	70
Max Working Volume (µl) Septum Cap	1018	-	821	749	525	525	572	425	-	238	-
Tube Height (mm)	43.5	36.9	36.2	36.8	26.4	26.4	26.4	21	24.1	15.2	13.4
Tube Height with Cap (mm)	51.8	40.3	44.5	45.1	29.8	29.8	34.7	29.3	27.5	18.6	14.7
Tube Height with Septum Cap (mm)	44.7	-	37.4	38	27.6	27.6	27.6	22.1	-	16.4	
Inner Diameter (mm)	6.8	6.5	6.8	6.8	6.5	6.5	6.8	6.8	3.9	6.5	6.5
Outer Diameter with Cap (mm)	8.6	8.7	8.6	8.6	8.7	8.5	8.3	8.7	5.8	8.7	7.6
Center to Center (mm)	9	9	9	9	9	9	9	9	9 (96) 6 (240)	9	
Min Temperature °C Screw Cap	-196	-196	-196	-196	-196	-196	-196	-196	-196	-196	-80
Min Temperature °C Septum Cap	-80	-	-80	-80	-80	-80	-80	-80	-	-80	-
2D-coded	Base	Base	Base	Base	Base	Base	Base	Base	Base	Base & Side	2D4 Quad Code
Human Readable Number	Base	Side	Base	Side	Side	Base	Side	Base	-	Side	-
Linear Barcode	-	Side	-	Side	Side	-	Side	-	-	-	-
Product Codes											
Bulk, Uncapped	66-62345	68-0801-00	66-62318	67-0755-00	68-0703-00	68-0701-00	67-0753-00	66-62326	67-0203-01	68-0303-00	-
Bulk, Capped	66-62345-Y6	68-0801-10	66-62318-Y6	67-0755-10	68-0703-10	68-0701-10	67-0753-10	66-62326-Y6	67-0203-10	68-0303-10	-
Racked, Uncapped	66-62330	68-0801-01	66-62319	67-0755-01	68-0703-02	68-0701-02	67-0753-02	66-62325	67-0203-02	68-0303-01	-
Racked, Capped	66-62330-Y6	68-0801-11	66-62319-Y6	67-0755-11	68-0703-12	68-0701-12	67-0753-12	66-62325-Y6	67-0203-11	68-0303-11	69-0200-11

Introduction to FluidX External Thread Next-Generation Jacket Tri-Coded Tubes

OVERVIEW

FluidX External Thread Next-Generation Jacket Tri-coded tubes have been developed to exceed the demands of sample security, management and tracking in modern high-density storage applications. Each tube features a permanent 2D-code laser etched in high-contrast on the tube base, a permanent 1D (linear barcode) and Human-Readable Number laser etched in high-contrast on the tube side. The Next-Generation jacket tube is manufactured using an advanced manufacturing process which results in a one-piece jacket tube, therefore, you never lose the code. All three codes are identical and auditing processes guarantee all three codes match. Our standard 2D coding option for these tubes is black on white.

The tubes provide a lifelong and secure chain of custody for samples in biobanks, compound libraries and a broad range of biological and chemical stores, including cryogenic storage.

Designed and developed with broad compatibility in mind, the tubes perform without compromise in conjunction with automated barcode reading, capping and sample management systems from FluidX and all other industry-recognized manufacturers.

External Thead Next-Generation Jacket Tri-coded tube

KEY FEATURES

- Permanently laser etched, 2D-code on base, 1D (linear barcode) and Human-Readable Number on the side
- FluidX Next-Generation Jacket Tri-coded offers unequalled sample audit traceability, enabling sample tracking and data sharing between multiple users, labs, locations and automation capabilities
- 100% Quality Control, each tube is tested to ensure both readability and uniqueness
- Manufactured using an advanced manufacturing process which results in a one-piece jacket tube from high-quality virgin polypropylene
- External thread tubes provide greater working volume than internal thread tubes
- Suitable for cryogenic storage as low as -196°C*
- Secure sample storage and tracking
- Available bulk uncapped or capped
- Available pre-racked and capped in 96, 48 and 24 well format SBS racks
- 2D-codes readable without removing tubes from racks
- Suitable for sealing with either screw caps or TPE septum caps

*not for use in liquid phase Nitrogen

CAPPING OPTIONS

Screw Caps

- A deforming compression seal more effective than a silicone alternative
- A non-silicone seal means the cap can never be over-tightened
- Caps and tubes are manufactured from the same material, preventing differential expansion during freeze-thaw cycles
- A double-start thread engages in a maximum rotation of 180°, thereby facilitating automation

Introduction to FluidX Internal Thread Next-Generation Jacket Tri-Coded Tubes

OVERVIEW

FluidX Internal Thread Next-Generation Jacket Tri-coded tubes have been developed to exceed the demands of sample security, management and tracking in modern high-density storage applications and comply with ISBER standards. Each tube features a permanent 2D-code laser etched in high-contrast on the tube base, a permanent 1D (linear barcode) and Human-Readable Number laser etched in high-contrast on the tube side. The Next-Generation jacket tube is manufactured using an advanced manufacturing process which results in a one-piece jacket tube, therefore, you never lose the code. All three codes are identical and auditing processes guarantee all three codes match. Our standard 2D coding option for these tubes is black on white.

The tubes provide a lifelong and secure chain of custody for samples in biobanks, compound libraries and a broad range of biological and chemical stores, including cryogenic storage.

Designed and developed with broad compatibility in mind, the tubes perform without compromise in conjunction with automated barcode reading, capping and sample management systems from FluidX and all other industry-recognized manufacturers.

Internal Thead Next-Generation Jacket Tri-coded tube

KEY FEATURES

Secure Sample Storage and Tracking

- Permanently laser etched, 2D-code on base, 1D (linear barcode) and Human-Readable Number on the side
- FluidX Next-Generation Jacket Tri-coded offers unequalled sample audit traceability, enabling sample tracking and data sharing between multiple users, labs, locations and automation capabilities
- 100% Quality Control, each tube is tested to ensure both readability and uniqueness
- Manufactured using an advanced manufacturing process which results in a one-piece jacket tube from high-quality virgin polypropylene
- Suitable for cryogenic storage as low as -196°C*
- Secure sample storage and tracking
- Available bulk uncapped or capped
- Available pre-racked and capped in 96 well format SBS racks
- 2D-codes readable without removing tubes from racks
- Suitable for sealing with either screw caps or TPE septum caps

*not for use in liquid phase Nitrogen

CAPPING OPTIONS

Screw Caps

- Automation friendly co-molded screw caps for internal thread tubes eliminate the possibility of over tightening
- Co-molded caps eliminate the failures in caps using a silicone O-ring
- A double-start thread engages in a maximum rotation of 180°, thereby facilitating automation

TPE Septum Caps

- Cost-effective sealing option for samples that are only accessed occasionally
- Septum caps are supplied in 96-format back mats to facilitate automation

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FluidX Next-Generation Jacket Tri-Coded Sample Storage Tubes

FluidX Next-Generation Jacket Tri-Coded Sample Storage Tubes

FluidX 96-Format, 0.5ml External Thread, Next-Gen Jacket, Tri-Coded Tube

- Supplied in 96-well format SBS racks or un-racked
- Securely sealed using screw caps or TPE septum caps

	0.5ml screw cap	0.5ml TPE septum cap
	 0.5ml external thread, next-gen jacket, tri-coded tube with screw cap	 0.5ml external thread, next-gen jacket, tri-coded tube with septum cap
Max Working Volume (ml)	0.52	0.50
Tube Height (mm)	26.4	26.4
Tube Height with Cap (mm)	29.8	27.6
Inner Diameter (mm)	6.5	6.5
Outer Diameter with Cap (mm)	8.7	8.7
Center to Center (mm)	9.0	9.0
Minimum Temperature (°C)	-196	-80
Tube Height in Rack (mm)	30.3	28.1
Overall Rack Height inc. lid (mm)	32.9	32.9

Ordering Information

68-0703-00	**FluidX 96-format, 0.5ml External Thread, Next-Gen Jacket Tri-coded Tube,** 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, bulk,** 960 tubes per case
68-0703-02	**FluidX 96-format, 0.5ml External Thread, Jacket Tri-coded Tube,** 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, 10 racks per case**. HighBase Rack. Empty rack part number: 66-51026
68-0703-10	**FluidX 96-format, 0.5ml External Thread, Next-Gen Jacket Tri-coded Tube,** 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **capped, bulk**, 960 tubes per case
68-0703-12	**FluidX 96-format, 0.5ml External Thread, Next-Gen Jacket Tri-coded Tube,** 2D-code on base,1D Linear Barcode and Human Readable Number on side, **capped, 10 racks per case**, HighBase Rack. Empty rack part number: 66-51026
68-0704-00	**FluidX 96-format, 0.5ml External Thread, Next-Gen Jacket 2D-coded Tube**, 2D-code on base, **uncapped, bulk**, 960 tubes per case
68-0704-10	**FluidX 96-format, 0.5ml External Thread, Next-Gen Jacket 2D-coded Tube**, 2D-code on base, **capped, bulk,** 960 tubes per case
68-0704-02	**FluidX 96-format, 0.5ml External Thread, Next-Gen Jacket 2D-coded Tube,** 2D-code on base, **uncapped, 10 racks per case**. HighBase Rack. Empty rack part number: 66-51026
68-0704-12	**FluidX 96-format, 0.5ml External Thread, Next-Gen Jacket 2D-coded Tube**, 2D-code on base, **capped, 10 racks per case.** HighBase Rack. Empty rack part number: 66-51026

FluidX 96-Format, 0.8ml External Thread, Next-Gen Jacket, Tri-Coded Tube

- Supplied in 96-well format SBS racks or un-racked
- Securely sealed using screw caps or TPE septum caps

	0.8ml screw cap	0.8ml TPE septum cap
	 0.8ml external thread, next-gen jacket, tri-coded tube with screw cap	 0.8ml external thread, next-gen jacket, tri-coded tube with septum cap
Max Working Volume (ml)	0.8	0.7
Tube Height (mm)	36.9	36.9
Tube Height with Cap (mm)	40.3	38.1
Inner Diameter (mm)	6.5	6.5
Outer Diameter with Cap (mm)	8.7	8.7
Center to Center (mm)	9.0	9.0
Minimum Temperature (°C)	-196	-80
Tube Height in Rack (mm)	41.2	39
Overall Rack Height inc. lid (mm)	43.9	43.9

Ordering Information

68-0801-00	**FluidX 96-format, 0.8ml External Thread, Next-Gen Jacket Tri-coded Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, bulk,** 960 tubes per case
68-0801-01	**FluidX 96-format, 0.8ml External Thread, Next-Gen Jacket Tri-coded Tube**, 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, 10 racks per case,** HighBase Rack, Empty rack part number: 66-51021
68-0801-10	**FluidX 96-format, 0.8ml External Thread, Next-Gen Jacket Tri-coded Tube**, 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **capped, bulk,** 960 tubes per case
68-0801-11	**FluidX 96-format, 0.8ml External Thread, Next-Gen Jacket Tri-coded Tube**, 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **capped, 10 racks per case,** HighBase Rack, Empty rack part number: 66-51021

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FluidX 96-Format, 1.0ml External Thread, Next-Gen Jacket, Tri-Coded Tube

- Supplied in 96-well format SBS racks or un-racked
- Securely sealed using screw caps or TPE septum caps

	1.0ml screw cap	1.0ml TPE septum cap
	 1.0ml external thread, next-gen jacket, tri-coded tube with screw cap	 1.0ml external thread, next-gen jacket, tri-coded tube with septum cap
Max Working Volume (ml)	1.0	0.9
Tube Height (mm)	46.2	46.2
Tube Height with Cap (mm)	49.6	47.4
Inner Diameter (mm)	6.5	6.5
Outer Diameter with Cap (mm)	8.7	8.7
Center to Center (mm)	9.0	9.0
Minimum Temperature (°C)	-196	-80
Tube Height in Rack (mm)	50.5	47.1
Overall Rack Height inc. lid (mm)	53.2	53.2

Ordering Information

68-1003-00	**FluidX 96-format, 1.0ml External Thread, Next-Gen Jacket Tri-coded Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, bulk,** 960 tubes per case
68-1003-10	**FluidX 96-format, 1.0ml External Thread, Next-Gen Jacket Tri-coded Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **capped, bulk,** 960 tubes per case
68-1003-01	**FluidX 96-format, 1.0ml External Thread, Next-Gen Jacket Tri-coded Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, 10 racks per case.** HighBase Rack. Empty rack part number: 66-51020
68-1003-11	**FluidX 96-format, 1.0ml External Thread, Next-Gen Jacket Tri-coded Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **capped, 10 racks per case.** HighBase Rack. Empty rack part number: 66-51020
68-1004-00	**FluidX 96-format, 1.0ml External Thread, Next-Gen Jacket 2D-coded Tube**, 2D-code on base, **uncapped, bulk,** 960 tubes per case
68-1004-10	**FluidX 96-format, 1.0ml External Thread, Next-Gen Jacket 2D-coded Tube**, 2D-code on base, **capped, bulk,** 960 tubes per case
68-1004-01	**FluidX 96-format, 1.0ml External Thread, Next-Gen Jacket 2D-coded Tube,** 2D-code on base, **uncapped, 10 racks per case.** HighBase Rack. Empty rack part number: 66-51020
68-1004-11	**FluidX 96-format, 1.0ml External Thread, Next-Gen Jacket 2D-coded Tube,** 2D-code on base, **capped, 10 racks per case.** HighBase Rack. Empty rack part number: 66-51020

FluidX 48-Format, 1.5ml External Thread, Next-Gen Jacket, Tri-Coded Cryo Tube

- Supplied in 48-well format SBS racks or un-racked, empty 10x10 cryo racks or 9x9 cryo racks also available (see page 7)
- Securely sealed using screw caps

	1.5ml screw cap
	 1.5ml external thread, next-gen jacket, tri-coded cryo tube with screw cap
Max Working Volume (ml)	1.5
Tube Height (mm)	30.6
Tube Height with Cap (mm)	36.3
Inner Diameter (mm)	9.6
Outer Diameter with Cap (mm)	12.8
Center to Center (mm)	13.5
Minimum Temperature (°C)	-196
Tube Height in Rack (mm)	45.4
Overall Rack Height inc. lid (mm)	49.4

Ordering Information

65-7660	**FluidX 48-format, 1.5ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube,** 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, bulk,** 480 tubes per case
65-7661	**FluidX 48-format, 1.5ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **capped, bulk,** 480 tubes per case
65-7662	**FluidX 48-format, 1.5ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, 10 racks per case** 48-format Rack (1 Piece Rack Base). Empty rack part number: 65-9451
65-7663	**FluidX 48-format, 1.5ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **capped, 10 racks per case** 48-format Rack (1 Piece Rack Base). Empty rack part number: 65-9451
65-7664	**FluidX 48-format, 1.5ml External Thread, Next-Gen Jacket 2D-coded Cryo Tube**, 2D-code on base, **uncapped, bulk,** 480 tubes per case
65-7665	**FluidX 48-format, 1.5ml External Thread, Next-Gen Jacket 2D-coded Cryo Tube**, 2D-code on base, **capped, bulk,** 480 tubes per case
65-7666	**FluidX 48-format, 1.5ml External Thread, Next-Gen Jacket 2D-coded Cryo Tube**, 2D-code on base, **uncapped, 10 racks per case.** 48-format Rack (1 Piece Rack Base). Empty rack part number: 65-9451
65-7667	**FluidX 48-format, 1.5ml External Thread, Next-Gen Jacket 2D-coded Cryo Tube**, 2D-code on base, **capped, 10 racks per case.** 48-format Rack (1 Piece Rack Base). Empty rack part number: 65-9451
66-1801	**FluidX Cryo Rack 9x9, Black, polycarbonate**, 10 racks per case Suitable for 1.5ml and 1.9ml External Thread Jacket Tube

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FluidX 48-Format, 1.9ml External Thread, Next-Gen Jacket, Tri-Coded Cryo Tube

- Supplied in 48-well format SBS racks or un-racked, empty 10x10 cryo racks or 9x9 cryo racks also available (see page 7)
- Securely sealed using screw caps

	1.9ml screw cap
	 1.9ml external thread, next-gen jacket, tri-coded cryo tube with screw cap
Max Working Volume (ml)	1.9
Tube Height (mm)	38.2
Tube Height with Cap (mm)	43.9
Inner Diameter (mm)	9.6
Outer Diameter with Cap (mm)	12.8
Center to Center (mm)	13.5
Minimum Temperature (°C)	-196
Tube Height in Rack (mm)	45
Overall Rack Height inc. lid (mm)	49.4

Ordering Information

65-7640	**FluidX 48-format, 1.9ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, bulk**, 480 tubes per case
65-7641	**FluidX 48-format, 1.9ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **capped, bulk**, 480 tubes per case
65-7642	**FluidX 48-format, 1.9ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube,** 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, 10 racks per case** 48-format Rack (1 Piece Rack Base). Empty rack part number: 65-9451
65-7643	**FluidX 48-format, 1.9ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **capped, 10 racks per case** 48-format Rack (1 Piece Rack Base). Empty rack part number: 65-9451
65-7644	**FluidX 48-format, 1.9ml External Thread, Next-Gen Jacket 2D-coded Cryo Tube**, 2D-code on base, **uncapped, bulk,** 480 tubes per case
65-7645	**FluidX 48-format, 1.9ml External Thread, Next-Gen Jacket 2D-coded Cryo Tube**, 2D-code on base, **capped, bulk,** 480 tubes per case
65-7646	**FluidX 48-format, 1.9ml Externa Thread, Next-Gen Jacket 2D-coded Cryo Tube**, 2D-code on base, **uncapped, 10 racks per case.** 48-format Rack (1 Piece Rack Base) Empty rack part number: 65-9451
65-7647	**FluidX 48-format, 1.9ml External Thread, Next-Gen Jacket 2D-coded Cryo Tube,** 2D-code on base, **capped, 10 racks per case.** 48-format Rack (1 Piece Rack Base). Empty rack part number: 65-9451
66-1800	**FluidX Cryo Rack 10x10, Black, polycarbonate**, 10 racks per case Suitable for 1.9ml External Thread Jacket Tubes

FluidX 48-Format, 3.8ml External Thread, Next-Gen Jacket, Tri-Coded Cryo Tube

- Supplied in 48-well format SBS racks or un-racked
- Securely sealed with screw caps

	3.8ml screw cap
	 3.8ml external thread, next-gen jacket, tri-coded cryo tube with screw cap
Max Working Volume (ml)	3.8
Tube Height (mm)	75.0
Tube Height with Cap (mm)	80.7
Inner Diameter (mm)	9.6
Outer Diameter with Cap (mm)	12.8
Center to Center (mm)	13.5
Minimum Temperature (°C)	-196
Tube Height in Rack (mm)	81.7
Overall Rack Height inc. lid (mm)	86.2

Ordering Information

65-7516	**FluidX 48-format, 3.8ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube**, round bottom, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, bulk,** 480 tubes per case
65-7517	**FluidX 48-format, 3.8ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube,** round bottom, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **capped, bulk,** 480 tubes per case
65-7514	**FluidX 48-format, 3.8ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube**, round bottom, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, 10 racks per case**, 48-format Rack (2 Piece Rack Base). Empty rack part number: 65-9460
65-7515	**FluidX 48-format, 3.8ml External Thread, Next-Gen Jacket Tri-coded Cryo Tube**, round bottom, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **capped, 10 racks per case** 48-format Rack (2 Piece Rack Base). Empty rack part number: 65-9460

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FluidX 24-Format, 7.6ml External Thread, Next-Gen Jacket, Tri-Coded Tube

- Supplied in bulk and empty 24-well format SBS racks
- Securely sealed using standard screw caps or automation-friendly screw caps providing flexibility to use tubes across a range of industry-recognized automated tube handling platforms

	7.6ml automation-friendly screw cap
	 7.6ml external thread, next-gen jacket, tri-coded tube with auto-friendly cap
Max Working Volume (ml)	7.6
Tube Height (mm)	77.4
Tube Height with Cap (mm)	83.6
Inner Diameter (mm)	13.0
Outer Diameter with Cap (mm)	17.0
Center to Center (mm)	18.0
Minimum Temperature (°C)	-196
Tube Height in Rack (mm)	84.7
Overall Rack Height inc. lid (mm)	88.5

Ordering Information

66-9302	**FluidX 24-format, 7.6ml External Thread, Next-Gen Jacket Tri-coded Tube**, 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **capped with Automation Friendly Screw Cap, bulk**, 240 tubes per case
65-9303	**FluidX 24-format, 7.6ml External Thread, Next-Gen Jacket Tri-coded Tube,** 2D-code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, bulk,** 240 tubes per case

Large format Caps

66-9401	**FluidX Automation Friendly External Thread Cap**, Orange, 24-format, **bulk,** 240 caps per case Suitable for 2.2ml Tissue Tube, 5.0ml and 7.6ml PP External Thread Jacket Tubes

Large format Racks

66-9455	**FluidX 24-format Rack, 1 Piece Rack Base,** with Open Bottom for rack reading, with 19.5mm tube to tube spacing for use with IntelliXcap decapper, without lid, 10 rack bases per case
64-9455	**FluidX 24-format Rack, 2 Piece Rack Base**, with Open Bottom for reading on rack readers, without lid, 10 racks per case. Suitable for 7.6ml External Thread, Next-Gen Jacket Tri-coded Tubes (part number 66-9302 and 65-9303)

FluidX 96-Format, 0.48ml Internal Thread, Next-Gen Jacket, Tri-Coded Tube

- Supplied in 48-well format SBS racks or un-racked
- Securely sealed with screw caps

	0.48ml screw cap	0.48ml TPE septum cap
		
	0.48ml internal thread, next-gen jacket, tri-coded tube with screw cap	0.48ml internal thread, next-gen jacket, tri-coded tube with TPE septum cap
Max Working Volume (ml)	0.48	0.57
Tube Height (mm)	26.4	26.4
Tube Height with Cap (mm)	34.7	27.6
Inner Diameter (mm)	6.8	6.8
Outer Diameter with Cap (mm)	8.6	8.6
Center to Center (mm)	9.0	9.0
Minimum Temperature (°C)	-196	-80
Tube Height in Rack (mm)	36.2	35.2
Overall Rack Height inc. lid (mm)	44.9	43.9

Ordering Information

67-0753-00	**FluidX 96-format, 0.48ml Internal Thread, Next-Gen Jacket Tri-coded Tube, 2**D Code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, bulk,** 960 tubes per case
67-0753-02	**FluidX 96-format, 0.48ml Internal Thread, Next-Gen Jacket Tri-coded Tube,** 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, 10 racks per case,** HighBase Rack, Empty rack part number: 66-51027
67-0753-10	**FluidX 96-format, 0.48ml Internal Thread, Next-Gen Jacket Tri-coded Tube,** 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **capped, bulk,** 960 tubes per case
67-0753-12	**FluidX 96-format, 0.48ml Internal Thread, Next-Gen Jacket Tri-coded Tube,** 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **capped, 10 racks per case**, HighBase Rack, Empty rack part number: 66-51027

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FluidX 96-Format, 0.65ml Internal Thread, Next-Gen Jacket, Tri-Coded Tube

- Supplied in bulk and empty 96-well format SBS racks
- Securely sealed using standard screw caps or automation-friendly screw caps providing flexibility to use tubes across a range of industry-recognized automated tube handling platforms

	0.65ml automation-friendly screw cap	0.65ml TPE septum cap
		
	0.65ml external thread, next-gen jacket, tri-coded tube with auto-friendly cap	0.65ml external thread, next-gen jacket, tri-coded tube with TPE septum cap
Max Working Volume (ml)	0.65	0.75
Tube Height (mm)	36.8	36.8
Tube Height with Cap (mm)	45.1	38.0
Inner Diameter (mm)	6.8	6.8
Outer Diameter with Cap (mm)	8.4	8.4
Center to Center (mm)	9.0	9.0
Minimum Temperature (°C)	-196	-80
Tube Height in Rack (mm)	46	38.9
Overall Rack Height inc. lid (mm)	50.8	43.9

Ordering Information

67-0755-00	**FluidX 96-format, 0.65ml Internal Thread, Next-Gen Jacket Tri-coded Tube,** 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, bulk,** 960 tubes per case
67-0755-01	**FluidX 96-format, 0.65ml Internal Thread, Next-Gen Jacket Tri-coded Tube,** 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, 10 racks per case,** HighBase Rack, Empty rack part number: 66-51022
67-0755-10	**FluidX 96-format, 0.65ml Internal Thread, Next-Gen Jacket Tri-coded Tube**, 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **capped, bulk,** 960 tubes per case
67-0755-11	**FluidX 96-format, 0.65ml Internal Thread, Next-Gen Jacket Tri-coded Tube**, 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **capped, 10 racks per case**, HighBase Rack, Empty rack part number: 66-51022

FluidX 96-Format, 0.9ml Internal Thread, Next-Gen Jacket, Tri-Coded Tube

- Supplied in 96-well format SBS racks or un-racked
- Securely sealed with screw caps

	0.9ml screw cap	0.9ml TPE septum cap
		
	0.9ml internal thread, next-gen jacket, tri-coded tube with screw cap	0.9ml internal thread, next-gen jacket, tri-coded tube with TPE septum cap
Max Working Volume (ml)	0.9	0.99
Tube Height (mm)	44.2	44.2
Tube Height with Cap (mm)	52.5	45.4
Inner Diameter (mm)	6.8	6.8
Outer Diameter with Cap (mm)	8.4	8.6
Center to Center (mm)	9.0	9.0
Minimum Temperature (°C)	-196	-80
Tube Height in Rack (mm)	53.4	46.3
Overall Rack Height inc. lid (mm)	61.8	50.8

Ordering Information

67-0757-00	**FluidX 96-format, 0.9ml Internal Thread, Next-Gen Jacket Tri-coded Tube,** 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, bulk,** 960 tubes per case
67-0757-01	**FluidX 96-format, 0.9ml Internal Thread, Next-Gen Jacket Tri-coded Tube,** 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **uncapped, 10 racks per case,** HighBase Rack, Empty rack part number: 66-51023
67-0757-10	**FluidX 96-format, 0.9ml Internal Thread, Next-Gen Jacket Tri-coded Tube,** 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **capped, bulk,** 960 tubes per case
67-0757-11	**FluidX 96-format, 0.9ml Internal Thread, Next-Gen Jacket Tri-coded Tube,** 2D Code on base, 1D Linear Barcode and Human Readable Number on side, **capped, 10 racks per case,** HighBase Rack, Empty rack part number: 66-51023

FluidX Next-Generation Dual-Coded Sample Storage Tubes

FluidX Next-Generation Dual-Coded Sample Storage Tubes

Introduction to FluidX 96-Format Next-Gen Dual-Coded Tubes

OVERVIEW

The FluidX Next-Gen Dual-Coded Tube features a 2D-code and Human Readable Number (HRN) on the tube base, allowing compatibility with low throughput manual workflows, semi-automated workflows or fully automated workflows on integrated platforms.

The tubes provide a lifelong and secure chain of custody for samples in biobanks, compound libraries and a broad range of biological and chemical stores, including cryogenic storage.

Designed and developed with broad compatibility in mind, the tubes perform without compromise in conjunction with automated barcode reading, capping and sample management systems from FluidX and all other industry-recognized manufacturers.

Dual-Coded tube internal thread

KEY FEATURES

- Permanently laser etched, 2D-code and a Human Readable Number (HRN) on the tube base
- Developed to exceed the demands of sample security, management and tracking in modern high-density storage
- 100% Quality Control, each tube is tested to ensure both readability and uniqueness
- Manufactured using an advanced manufacturing process which results in a one-piece tube from high-quality virgin polypropylene
- 2D-code and HRN ensure a permanent link between sample and data
- High-contrast 2D-codes are more reliably readable in frost or condensation conditions
- 2D-codes can be scanned and decoded without removing tubes from storage racks, enabling data to be associated with individual tubes
- Equally suitable for sealing with either screw caps or TPE septum caps
- FluidX tubes have been leak tested to ensure sample security
- Suitable for cryogenic storage
- Manufactured from high-quality virgin polypropylene

Screw Caps

- Automation friendly co-molded screw caps for internal thread tubes eliminate the possibility of over tightening
- Co-molded caps eliminate the failures in caps using a silicone O-ring
- A double-start thread engages in a maximum rotation of 180°, thereby facilitating automation

96-Well Format SBS Racks

- TwistLock: prevents tubes rotating within the rack to enable automated capping and de-capping of screw caps, provided as standard
- LidLock: racks fitted with a LidLock latch are designed to withstand a 1m drop test for added sample security
- TubeLock: tubes can be locked in position in a rack, even without a lid, preventing them from falling out even if the rack is inverted. Lock or unlock simply by pushing the tube downwards or upwards
- Automatic Rack Orientation: racks are supplied with a unique 2D barcode identifier which can be read at the same time as the tube 2D barcode, to provide automatic rack orientation and more secure sample tracking
- Direct Laser Etching: linear barcodes are permanently etched directly onto the rack

14 x 14 Cryo Storage Racks

- 136.2mm x 136.2mm polycarbonate cryobox rack option available for cryogenic sample storage
- Holds 196 tubes in 14 x 14 array
- Open bottom for 2D barcode decoding on FluidX Perception HD LF reader
- Cryo racks can be supplied with a unique 2D barcode identifier which can be read at the same time as the tube 2D barcode, to provide more secure sample tracking

FluidX 96-Format, 0.26ml External Thread, Next-Gen Jacket, Dual-Coded Tube

- Supplied in 96-well format SBS racks or un-racked
- Securely sealed using screw caps or TPE septum caps

	0.26ml screw cap	0.26ml septum cap
	 0.26ml external thread, next-gen jacket, dual-coded tube with screw cap	 0.26ml external thread, next-gen jacket, dual-coded tube with septum cap
Max Working Volume (ml)	0.26	0.23
Tube Height (mm)	15.2	15.2
Tube Height with Cap (mm)	18.6	16.4
Inner Diameter (mm)	6.5	6.5
Outer Diameter with Cap (mm)	8.7	8.7
Center to Center (mm)	9.0	9.0
Minimum Temperature (°C)	-196	-80
Tube Height in Rack (mm)	19.13	15.73
Overall Rack Height inc. lid (mm)	22	22

Ordering Information

68-0303-00	**FluidX 96-format, 0.26ml External Thread, Next-Gen Jacket Dual-coded Tube,** 2D-code on base, 2D-code and Human Readable Number on side, **uncapped, bulk**, 960 tubes per case
68-0303-10	**FluidX 96-format, 0.26ml External Thread, Next-Gen Jacket Dual-coded Tube**, 2D-code on base, 2D-code and Human Readable Number on side, **capped, bulk,** 960 tubes per case
68-0303-01	**FluidX 96-format, 0.26ml External Thread, Next-Gen Jacket Dual-coded Tube**, 2D-code on base, 2D-code and Human Readable Number on side, **uncapped, 10 racks per case** LowBase Rack. Empty rack part number: 68-0300-20
68-0303-11	**FluidX 96-format, 0.26ml External Thread, Next-Gen Jacket Dual-coded Tube**, 2D-code on base, 2D-code and Human Readable Number on side, **capped, 10 racks per case** LowBase Rack. Empty rack part number: 68-0300-20

Note: available with 2D-code only on request.

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FluidX 0.3ml 96-Format, Internal Thread, Next-Gen Dual-Coded Tube

- Supplied in 96-well format SBS racks, or un-racked compatible with 14x14 cryo storage racks
- Securely sealed using standard automation-friendly screw caps providing flexibility to use tubes across a range of industry-recognized automated tube handling platforms

	0.3ml automation friendly screw cap
	 0.3ml Internal Thread Next-Gen Dual-Coded with Screw Cap
Max Working Volume (ml)	0.33
Tube Height (mm)	21
Tube Height with Cap (mm)	29.3
Inner Diameter (mm)	6.8
Outer Diameter with Cap (mm)	8.7
Center to Center (mm)	9
Minimum Temperature (°C)	-196
Tube Height in Rack (mm)	29.5
Overall Rack Height inc. lid (mm)	33.1

Ordering Information

66-62326	**FluidX 96-format, 0.3ml Internal Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **uncapped, bulk,** 960 tubes per case
66-62326-Y6	**FluidX 96-format, 0.3ml Internal Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **capped, bulk,** 960 tubes per case
66-62325	**FluidX 96-format, 0.3ml Internal Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **uncapped, 10 racks per case** LowBase Rack. Empty rack part number: 66-51004
66-62325-Y6	**FluidX 96-format, 0.3ml Internal Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **capped, 10 racks per case** LowBase Rack. Empty rack part number: 66-51004

FluidX 96-Format, 0.7ml Internal Thread, Next-Gen Dual-Coded Tube

- Supplied in 96-well format SBS racks, or un-racked compatible with 14x14 cryo storage racks
- Securely sealed using standard automation-friendly screw caps providing flexibility to use tubes across a range of industry-recognized automated tube handling platforms

	0.7ml automation friendly screw cap
	 0.7ml Internal Thread Next-Gen Dual-Coded Tube with Screw Cap
Max Working Volume (ml)	0.73
Tube Height (mm)	36.2
Tube Height with Cap (mm)	44.5
Inner Diameter (mm)	6.8
Outer Diameter with Cap (mm)	8.6
Center to Center (mm)	9
Minimum Temperature (°C)	-196
Tube Height in Rack (mm)	46.4
Overall Rack Height inc. lid (mm)	50.8

Ordering Information

66-62318	**FluidX 96-format, 0.7ml Internal Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **uncapped, bulk,** 960 tubes per case
66-62318-Y6	**FluidX 96-format, 0.7ml Internal Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **capped, bulk,** 960 tubes per case
66-62319	**FluidX 96-format, 0.7ml Internal Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **uncapped, 10 racks per case** HighBase Rack. Empty rack part number: 66-61002
66-62319-Y6	**FluidX 96-format, 0.7ml Internal Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **capped, 10 racks per case** HighBase Rack. Empty rack part number: 66-61002

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FluidX 96-Format, 0.9ml Internal Thread, Next-Gen Dual-Coded Tube

- Supplied in 96-well format SBS racks, or un-racked compatible with 14x14 cryo storage racks
- Securely sealed using standard automation-friendly screw caps providing flexibility to use tubes across a range of industry-recognized automated tube handling platforms

	0.9ml automation friendly screw cap
	 0.9ml Internal Thread Next-Gen Dual-Coded Tube with Screw Cap
Max Working Volume (ml)	0.92
Tube Height (mm)	43.5
Tube Height with Cap (mm)	51.8
Inner Diameter (mm)	6.8
Outer Diameter with Cap (mm)	8.6
Center to Center (mm)	9
Minimum Temperature (°C)	-196
Tube Height in Rack (mm)	53.8
Overall Rack Height inc. lid (mm)	61.8

Ordering Information

66-62345	**FluidX 96-format, 0.9ml Internal Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **uncapped, bulk,** 960 tubes per case
66-62345-Y6	**FluidX 96-format, 0.9ml Internal Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **capped, bulk**, 960 tubes per case
66-62330	**FluidX 96-format, 0.9ml Internal Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **uncapped, 10 racks per case** HighBase Rack, Lid suitable for Screw Caps and TPE Caps. Empty rack part number: 66-61003
66-62330-Y6	**FluidX 96-format, 0.9ml Internal Thread, Next-Gen Dual-coded Tube,** 2D-code and Human Readable Number on base, **capped, 10 racks per case** HighBase Rack, Lid suitable for Screw Caps and TPE Caps. Empty rack part number: 66-61003

FluidX 96-Format, 0.5ml External Thread, Next-Gen Dual-Coded Tube

- Supplied in 96-well format SBS racks, or un-racked compatible with 14x14 cryo storage racks
- Securely sealed using standard automation-friendly screw caps providing flexibility to use tubes across a range of industry-recognized automated tube handling platforms

	0.5ml automation friendly screw cap
	 0.5ml External Thread Next-Gen Dual-Coded with Screw Cap
Max Working Volume (ml)	0.55
Tube Height (mm)	26.4
Tube Height with Cap (mm)	29.8
Inner Diameter (mm)	6.5
Outer Diameter with Cap (mm)	8.5
Center to Center (mm)	9
Minimum Temperature (°C)	-196
Tube Height in Rack (mm)	30.0
Overall Rack Height inc. lid (mm)	33.1

Ordering Information

68-0701-00	**FluidX 96-format, 0.5ml External Thread, Next-Gen Dual-coded Tube,** 2D-code and Human Readable Number on base, **uncapped, bulk,** 960 tubes per case
68-0701-02	**FluidX 96-format, 0.5ml External Thread, Next-Gen Dual-coded Tube,** 2D-code and Human Readable Number on base, **uncapped, 10 racks per case.** HighBase Rack. Empty rack part number: 66-51026
68-0701-10	**FluidX 96-format, 0.5ml External Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **capped, bulk,** 960 tubes per case
68-0701-12	**FluidX 96-format, 0.5ml External Thread, Next-Gen Dual-coded Tube,** 2D Code and Human Readable Number on base, **capped, 10 racks per case**. HighBase Rack Empty rack part number: 66-51026

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FluidX 96-Format, 0.9ml External Thread, Next-Gen Dual-Coded Tube

- Supplied in 96-well format SBS racks, or un-racked compatible with 14x14 cryo storage racks
- Securely sealed using standard automation-friendly screw caps providing flexibility to use tubes across a range of industry-recognized automated tube handling platforms

	0.9ml automation friendly screw cap
	 0.9ml External Thread Next-Gen Dual-Coded with Screw Cap
Max Working Volume (ml)	0.9
Tube Height (mm)	42.3
Tube Height with Cap (mm)	45.7
Inner Diameter (mm)	6.5
Outer Diameter with Cap (mm)	8.7
Center to Center (mm)	9
Minimum Temperature (°C)	-196
Tube Height in Rack (mm)	47.8
Overall Rack Height inc. lid (mm)	50.8

Ordering Information

68-1001-00	**FluidX 96-format, 0.9ml External Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **uncapped, bulk,** 960 tubes per case
68-1001-01	**FluidX 96-format, 0.9ml External Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **uncapped, 10 racks per case** HighBase Rack. Empty Rack part number: 66-61002
68-1001-10	**FluidX 96-format, 0.9ml External Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **capped, bulk,** 960 tubes per case
68-1001-11	**FluidX 96-format, 0.9ml External Thread, Next-Gen Dual-coded Tube**, 2D-code and Human Readable Number on base, **capped, 10 racks per case** HighBase Rack. Empty Rack part number: 66-61002
66-61002	**FluidX 96-format, HighBase Rack,** 10 racks per case Suitable for: 0.7ml Internal Thread Tubes with Screw Caps, 0.9ml Internal Thread Tubes with Septum TPE Caps and AirFilm Seals, 0.9ml External Thread Tubes with Screw Caps
66-51016	**FluidX 96-format, HighBase Rack, with TubeLock,** 10 racks per case. Suitable for: 0.7ml Internal and External Tubes with screw caps, 0.9ml External Tubes with Screw Caps, 0.9ml Internal with TPE Septum Caps
66-0196-01	**FluidX Cryo Rack 14x14, Black, polycarbonate,** 10 racks per case. Suitable for 0.3ml Internal, 0.5ml External, 0.5ml External Jacket and 0.48ml Internal Thread Jacket Tubes

FluidX 2D-Coded Sample Storage Tubes

FluidX 2D-Coded Sample Storage Tubes

FluidX External Thread 2D-Coded Tubes

FluidX External Thread 2D-coded tubes carry a unique and permanent high-contrast 2D-code tube identifier on the base of the tube readable in frost or condensation conditions, or when damaged. The tubes provide a lifelong and secure chain of custody for samples in biobanks, compound libraries and a broad range of biological and chemical stores, including cryogenic storage.

KEY FEATURES

- Permanently laser etched, 2D-code on base
- 100% Quality Control, each tube is tested to ensure both readability and uniqueness
- Manufactured from high-quality virgin polypropylene
- External thread tubes provide greater working volume than internal thread tubes
- Suitable for cryogenic storage as low as -196°C
- Secure Sample Storage and Tracking
- Available bulk uncapped or capped
- Available pre-racked and capped in 96, 48 and 24 well format SBS racks
- 2D-codes readable without removing tubes from racks

Screw Caps

- A deforming compression seal is more effective than a silicone alternative
- Non-silicone seal means the cap can never be over-tightened
- Caps and tubes are manufactured from the same material, preventing differential expansion during freeze-thaw cycles
- A double-start thread engages in a maximum rotation of 180° thereby facilitating automation

FluidX Internal Thread 2D-Coded Tubes

FluidX 2D-coded internal thread tubes carry a unique and permanent high-contrast 2D-code tube identifier on the base of the tube readable in frost or condensation conditions, or when damaged. The tubes provide a lifelong and secure chain of custody for samples in biobanks, compound libraries and a broad range of biological and chemical stores, including cryogenic storage.

KEY FEATURES

- Permanently laser etched, 2D-code on base
- 100% Quality Control, each tube is tested to ensure both readability and uniqueness
- Manufactured from high-quality virgin polypropylene
- Suitable for cryogenic storage as low as -196°C
- Secure Sample Storage and Tracking
- Available bulk uncapped or capped
- Available pre-racked and capped in 96, 48 and 24 well format SBS racks
- 2D-codes readable without removing tubes from racks

Screw Caps

- Co-molded screw caps for internal thread tubes eliminate the possibility of over-tightening
- Co-molded caps eliminate the failures common in caps using silicon O-rings
- Improved internal thread provides a more secure seal when using screw caps

TPE Septum Caps

- Cost-effective sealing option for samples that are only accessed occasionally
- Septum caps are supplied in 96-format back mats to facilitate automation

FluidX AcoustiX™ Sample Tube, Labcyte Echo® Qualified Consumable

- Acoustic dispense direct from the tube
- Assay robustness based on a higher sample integrity
- Compound saving vs. Conventional storage methods
- Faster turnaround time from request for compound to compound ready for assay
- Established benefits of 2D-coded Tubes vs. Plates which have to be fully thawed and unsealed to access one sample
- Combined technologies of 2D-coded Tubes and Acoustic Transfer
- Unique and permanent 2D4 Quad Code laser-etched on tube base
- Secure Sample Storage and Tracking - barcode ensures a permanent link between sample and data
- Scan and decode without removing tubes from storage racks, enables data to be associated with individual tubes
- Leak tested to ensure sample security
- Screw Caps - non-silicone seal means the cap can never be overtightened
- Double-start thread engages in a maximum rotation of 180°, facilitating automation

FluidX AcoustiX™ Sample Tube, Labcyte Echo® Qualified	
	 FluidX AcoustiX™ Sample Tube, Labcyte Echo® Qualified
Max Working Volume	70 µL @5mm
Dead Volume	Approx. 15µL (with DMSO)
Total Volume	85µL
Rack Option	SBS format 96-way rack
Tube Height (mm)	13.4
Tube Height with Cap (mm)	14.7
Outer Diameter with Cap (mm)	7.9
Rack Height with lid (mm)	22.1
Coding	2D4 Quad Code on base
Capping Option	Internal Thread

Ordering Information

Please contact your local Brooks Life Sciences representative.

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Introduction to FluidX 24-Format, External Thread, Dual-Coded Tissue Tube

OVERVIEW

Dual-coded tissue tubes are specifically designed for long-term storage of tissue samples. Suitable for cryogenic storage, tubes are supplied in 24-well format SBS racks or, un-racked. The 2D-codes are readable without removing the tubes from their racks.
Dual-coded tissue tubes offer unequalled audit traceability, enabling sample tracking and data sharing between multiple labs, locations and automation capabilities. Tubes are manufactured from high-quality virgin polypropylene and are securely sealed using standard screw caps or automation-friendly screw caps.

KEY FEATURES

Secure Sample Storage and Tracking Optimized for Tissue Sample Storage

- Flat Bottom for easy sample extraction
- Straight sides optimized for forceps use
- Holds samples up to 9.5mm in size, ideal for samples between 5-7mm
- External thread is easy to tighten with gloves or forceps,
- Permanently laser etched, 2D-code on tube base
- Permanently laser etched, 2D-code and Human Readable number on tube side
- Dual-Coded tube supports sample sharing between labs and locations
- 100% Quality control, each tube is tested to ensure code readability and uniqueness
- FluidX tubes have been leak tested to ensure sample security
- Suitable for cryogenic storage
- Manufactured from high-quality virgin polypropylene

Screw Caps

- Automation friendly cap option

24-Format SBS Racks

- Automation Rack Orientation: racks are supplied with a unique 2D-code which can be read at the same time as the tube 2D-code, to provide automatic rack orientation and more secure sample tracking
- Direct Laser Etching: linear barcodes are permanently laser etched directly onto the rack

FluidX 24-Format, 2.2ml External Thread, Dual-Coded Tissue Tube

	2.2ml Tissue Tube with automation-friendly screw cap
	 2.2ml external thread, dual-coded tissue tube with automation-friendly screw cap
Max Working Volume (ml)	2.2
Tube Height (mm)	25.9
Tube Height with Cap (mm)	32.1
Inner Diameter (mm)	13.1
Outer Diameter with Cap (mm)	17.0
Center to Center (mm)	18.0
Minimum Temperature (°C)	-196
Tube Height in Rack (mm)	33.8
Overall Rack Height inc. lid (mm)	35.7

Ordering Information

68-4000-00	**FluidX 24-format, 2.2ml External Thread, Dual-coded Tissue Tube**, flat bottom, 2D-code on base, 2D and Human Readable Number on side, **uncapped, bulk,** 240 tubes per case
68-4000-31	**FluidX 24-format, 2.2ml External Thread, Dual-coded Tissue Tube,** flat bottom, 2D-code on base, 2D and Human Readable Number on side, **capped with clear Automation Friendly Screw Cap, bulk,** 240 tubes per case
68-4000-33	**FluidX 24-format, 2.2ml External Thread, Dual-coded Tissue Tube** flat bottom, 2D-code on base, 2D and Human Readable Number on side, **capped with clear Automation Friendly Screw Cap, 10 racks per case.** 24-format Rack, without TwistLock. Empty rack part number: 68-4000-22

Tissue Tube Caps

66-9402	**FluidX Automation Friendly External Thread Cap**, Clear, 24-format, bulk, 240 caps per case Suitable for 2.2ml Tissue Tube, 5.0ml and 7.6ml PP External Thread Jacket Tubes
66-9401	**FluidX Automation Friendly External Thread Cap**, Orange, 24-format, bulk, 240 caps per case Suitable for 2.2ml Tissue Tube, 5.0ml and 7.6ml PP External Thread Jacket Tubes

Tissue Tube Racks

68-4000-22	**FluidX 24-format Rack, without TwistLock**, 10 racks per case Suitable for Tissue Tubes with automation friendly caps

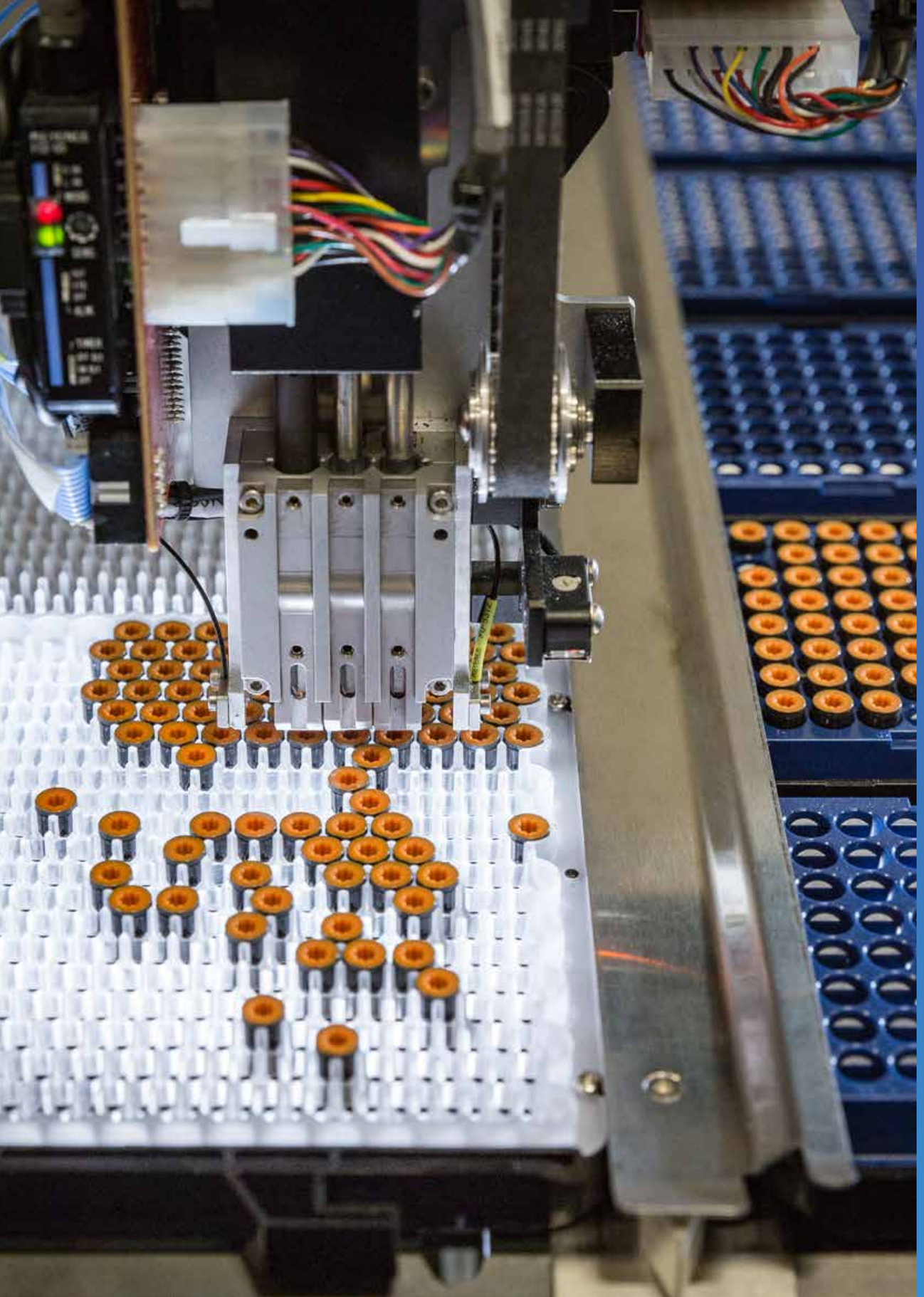
FluidX 96-format, 0.2ml External Thread, 2D-Coded Tube

- Supplied in 96-well format SBS racks
- Securely sealed using screw caps

	0.2ml External Thread 2D-coded tube with screw cap
	 0.2ml External Thread 2D-coded tube with screw cap
Max Working Volume (ml)	0.2
Tube Height (mm)	24.1
Tube Height with Cap (mm)	27.5
Inner Diameter (mm)	3.9
Outer Diameter with Cap (mm)	5.8
Center to Center (mm)	9.0
Minimum Temperature (°C)	-196
Tube Height in Rack (mm)	28
Overall Rack Height inc. lid (mm)	31

Ordering Information

67-0203-01	**FluidX 96-format, 0.2ml External Thread, 2D-coded Tube**, 2D-code on base, **uncapped, bulk,** 960 tubes per case
67-0203-10	**FluidX 96-format, 0.2ml External Thread, 2D-coded Tube**, 2D-code on base, **capped, bulk,** 960 tubes per case
67-0203-02	**FluidX 96-format, 0.2ml External Thread, 2D-coded Tube,** 2D-code on base, **uncapped, 10 racks per case.** 96 Format Rack, with 1D Linear Barcode and 2D Rack ID, Low Profile Lid Empty rack part number: 67-0203-00
67-0203-11	**FluidX 96-format, 0.2ml External Thread, 2D-coded Tube**, 2D-code on base, **capped, 10 racks per case.** 96 Format Rack, with 1D Linear Barcode and 2D Rack ID, Low Profile Lid Empty rack part number: 67-0203-00
67-0203-51	**FluidX External Thread Screw Cap,** 96-format, bulk, 960 caps per case. Suitable for 0.2ml External Thread, 2D-coded Tube
67-0203-00	**FluidX 96-format Rack,** 10 racks per case. Suitable for 0.2ml Tubes
67-0200-00	**FluidX 240-format Rack**; 10 racks per case. Suitable for 0.2ml Tubes



FluidX Non-Coded Sample Storage Tubes

FluidX Non-Coded Tubes

In addition to our fully traceable coded tubes offering sample security, management and tracking in modern high-density storage applications, FluidX tubes are also available non-coded or with alpha numeric coding.

Ordering Information

0.5ml Non-Coded External Thread Screw Cap Tubes

66-0700-00	**FluidX 96-format, 0.5ml External Thread, Non-coded Tube**, **uncapped, bulk,** 960 tubes per case
66-0700-01	**FluidX 96-format, 0.5ml External Thread, Non-coded Tube**, **uncapped, 10 racks per case**
66-0700-02	**FluidX 96-format, 0.5ml External Thread, Non-coded Tube**, **uncapped, 10 racks per case. HighBase Rack.** Empty rack part number: 66-51026
66-0700-11	**FluidX 96-format, 0.5ml External Thread, Non-coded Tube, capped, 10 racks per case. LowBase Rack.** Empty rack part number: 66-51004
66-0700-12	**FluidX 96-format, 0.5ml External Thread, Non-coded Tube**, **capped, 10 racks per case. HighBase Rack.** Empty rack part number: 66-51026

0.9ml Non-Coded External Thread Screw Cap Tubes

66-1000-00	**FluidX 96-format, 0.9ml External Thread, Non-coded Tube**, **uncapped, bulk,** 960 tubes per case
66-1000-10	**FluidX 96-format, 0.9ml External Thread, Non-coded Tube**, **capped, bulk,** 960 tubes per case
66-1000-01	**FluidX 96-format, 0.9ml External Thread, Non-coded Tube**, **uncapped, 10 racks per case.** HighBase Rack. Empty rack part number: 66-61002
66-1000-02	**FluidX 96-format, 0.9ml External Thread, Non-coded Tube, uncapped, 10 racks per case.** HighBase Rack, **with TubeLock.** Empty rack part number: 66-51016
66-1000-11	**FluidX 96-format, 0.9ml External Thread, Non-coded Tube**, **capped, 10 racks per case.** HighBase Rack. Empty rack part number: 66-61002
66-1000-12	**FluidX 96-format, 0.9ml External Thread, Non-coded Tube**, **capped, 10 racks per case.** HighBase Rack, **with TubeLock.** Empty rack part number: 66-51016

0.3ml Non-Coded Internal Thread Tubes

66-32040	**FluidX 96-format, 0.3ml Internal Thread, Non-coded Tube**, **uncapped, bulk,** 960 tubes per case
66-32040-Y6	**FluidX 96-format, 0.3ml Internal Thread, Non-coded Tube**, **capped, bulk**, 960 tubes per case
66-32041	**FluidX 96-format, 0.3ml Internal Thread, Non-coded Tube**, **V-bottom, uncapped, 10 racks per case.** LowBase Rack, suitable for use with Screw Cap Tubes. Empty rack part number: 66-51004
66-32141	**FluidX 96-format, 0.3ml Internal Thread, Non-coded Tube**, **uncapped, 10 racks per case.** LowBase Rack, Lid suitable for use with TPE Caps/AirFilm only. Empty rack part number: 66-51003
66-32041-Y6	**FluidX 96-format, 0.3ml Internal Thread, Non-coded Tube, V-bottom, capped, 10 racks per case.** LowBase Rack. Empty rack part number: 66-51004
66-32041-Y6-L	**FluidX 96-format, 0.3ml Internal Thread, Non-coded Tube**, **V-bottom, capped, 10 racks per case.** LowBase Rack, **with TubeLock,** includes Standard Profile Non-Locking Lid. Empty rack part number: 66-51014

0.7ml Non-Coded Internal Thread Tubes

66-32033	**FluidX 96-format, 0.7ml Internal Thread, Non-coded Tube, uncapped, bulk**, 960 tubes per case
66-32033-Y6	**FluidX 96-format, 0.7ml Internal Thread, Non-coded Tube**, **capped, bulk,** 960 tubes per case
66-32034	**FluidX 96-format, 0.7ml Internal Thread, Non-coded Tube**, **V-bottom, uncapped, 10 racks per case.** HighBase Rack. Empty rack part number: 66-61002
66-32034-Y6	**FluidX 96-format, 0.7ml Internal Thread, Non-coded Tube**, **V-bottom, capped, 10 racks per case.** HighBase Rack. Empty rack part number: 66-61002
66-32034-L	**FluidX 96-format, 0.7ml Internal Thread, Non-coded Tube**, **V-bottom, uncapped, 10 racks per case.** HighBase Rack, **with TubeLock.** Empty rack part number: 66-51016
66-32034-Y6-L	**FluidX 96-format, 0.7ml Internal Thread, Non-coded Tube**, **V-bottom, capped, 10 racks per case.** HighBase Rack, **with TubeLock.** Empty rack part number: 66-51016

0.9ml Non-Coded Internal Thread Screw Cap Tubes

66-32062	**FluidX 96-format, 0.9ml Internal Thread, Non-coded Tube**, **uncapped, bulk,** 960 tubes per case
66-32062-Y6	**FluidX 96-format, 0.9ml Internal Thread, Non-coded Tube**, **capped, bulk,** 960 tubes per case
66-32042	**FluidX 96-format, 0.9ml Internal Thread, Non-coded Tube**, **uncapped, 10 racks per case.** HighBase Rack, Lid suitable for TPE Caps only. Empty rack part number: 66-61002
66-32043	**FluidX 96-format, 0.9ml Internal Thread, Non-coded Tube**, **uncapped, 10 racks per case.** HighBase Rack, Lid suitable for Screw Caps and TPE Caps. Empty rack part number: 66-61003
66-32043-Y6	**FluidX 96-format, 0.9ml Internal Thread, Non-coded Tube**, **capped, 10 racks per case.** HighBase Rack, Lid suitable for Screw Caps and TPE Caps. Empty rack part number: 66-61003
66-32042-L	**FluidX 96-format, 0.9ml Internal Thread, Non-coded Tube, uncapped, 10 racks per case.** HighBase Rack, **with TubeLock,** Lid suitable for TPE Caps only. Empty rack part number: 66-51016
66-32043-L	**FluidX 96-format, 0.9ml Internal Thread, Non-coded Tube**, uncapped, **10 racks per case.** HighBase Rack, **with TubeLock,** Lid suitable for Screw Caps and TPE Caps. Empty rack part number: 66-51017
66-32043-Y6-L	**FluidX 96-format, 0.9ml Internal Thread, Non-coded Tube**, **capped, 10 racks per case**. HighBase Rack, **with TubeLock.** Empty rack part number: 66-51017

FluidX Capping and Sealing Options

FluidX Capping and Sealing Options

FluidX Screw Caps

Developed to exceed the demands of sample security, management and tracking in modern high-density storage applications, screw caps are manufactured from high-quality virgin polypropylene and are designed for optimal seal quality and sample security.

Compatible with all FluidX 96-format sample storage tubes with a screw top, caps are available for use with either external or internal thread FluidX screw top tubes and are supplied in bags of 960 caps.

Practical Design Based on Experience of Applications

- High chemical resistance
- Broad operating temperature range -196°C to +121°C, do not use in liquid phase nitrogen
- Automation friendly, available in FluidX Cap Carrier for use with automated capping and de-capping systems
- Autoclavable
- Available in up to 10 different colors to aid sample identification

Screw Caps for External Thread FluidX Tubes

- Deforming compression seal is more effective than a silicone alternative
- Non-silicone seal means the cap can never be over-tightened
- Cap and tube manufactured from the same material, preventing differential expansion during freeze-thaw cycles
- Double-start thread engages in a maximum rotation of 180°, facilitating automation

Screw Caps for Internal Thread FluidX Tubes

- Co-molded screw caps for internal thread tubes eliminate the possibility of over-tightening
- Co-molded caps eliminate the failures common in caps using silicon O-rings
- Improved internal thread provides a more secure seal when using screw caps

Designed for Reduced Sample Loss

- Significant amounts of liquid can become trapped within a standard design screw cap, resulting in potential loss of valuable sample
- This hollow area on the cap can catch sample, and surface tension then makes cap removal difficult
- Studies demonstrate that FluidX cap design, with a reduced hollow, reduces this effect by lowering liquid retention whilst maintaining seal quality

Ordering Information

96 Format External Thread Screw Caps

68-53111-10N	**FluidX Cap Carrier (External Thread),** With Orange Caps, 96-format, SBS stackable, re-usable, 10 carriers/960 caps per case. Suitable for all FluidX 96-format External Thread Screw Cap Tubes
68-53111-50N	**FluidX Cap Carrier (External Thread),** With Orange Caps, 96-format, SBS stackable, re-usable, 50 carriers/4,800 caps per case. Suitable for all FluidX 96-format External Thread Screw Cap Tubes
68-53100-Z1N	**FluidX External Thread Screw Cap,** White, 96-format, bulk, 960 caps per case
68-53100-Z2N	**FluidX External Thread Screw Cap**, Red, 96-format, bulk, 960 caps per case
68-53100-Z3N	**FluidX External Thread Screw Cap**, Yellow, 96-format, bulk, 960 caps per case
68-53100-Z4N	**FluidX External Thread Screw Cap**, Blue, 96-format, bulk, 960 caps per case
68-53100-Z5N	**FluidX External Thread Screw Cap**, Transparent Blue, 96-format, bulk, 960 caps per case
68-53100-Z6N	**FluidX External Thread Screw Cap**, Orange, 96-format, bulk, 960 caps per case
68-53100-Z8N	**FluidX External Thread Screw Cap**, Green, 96-format, bulk, 960 caps per case
68-53100-Z10N	**FluidX External Thread Screw Cap**, Amber, 96-format, bulk, 960 caps per case
68-53100-Z11N	**FluidX External Thread Screw Cap**, Purple, 96-format, bulk, 960 caps per case
68-53100-Z12N	**FluidX External Thread Screw Cap**, Natural, 96-format, bulk, 960 caps per case
68-53100-Z13N	**FluidX External Thread Screw Cap**, Black, 96-format, bulk, 960 caps per case

48 Format External Thread Screw Caps

65-7572	**FluidX External Thread Screw Cap,** Orange, 48-format, bulk, 480 caps per case. Suitable for Cryo Tubes
65-7573	**FluidX External Thread Screw Cap,** Red, 48-format, bulk, 480 caps per case. Suitable for Cryo Tubes
65-7574	**FluidX External Thread Screw Cap,** Blue, 48-format, bulk, 480 caps per case. Suitable for Cryo Tubes
65-7575	**FluidX External Thread Screw Cap,** Green, 48-format, bulk, 480 caps per case. Suitable for Cryo Tubes
65-7576	**FluidX External Thread Screw Cap,** Yellow, 48-format, bulk, 480 caps per case. Suitable for Cryo Tubes
65-7577	**FluidX External Thread Screw Cap**, Purple, 48-format, bulk, 480 caps per case. Suitable for Cryo Tubes

96 Format Internal Thread Screw Caps

66-63100-Y1	**FluidX Internal Thread Screw Cap,** White, 96-format, bulk, 960 caps per case
66-63100-Y2	**FluidX Internal Thread Screw Cap**, Red, 96-format, bulk, 960 caps per case
66-63100-Y3	**FluidX Internal Thread Screw Cap,** Yellow, 96-format, bulk, 960 caps per case
66-63100-Y4	**FluidX Internal Thread Screw Cap**, Blue, 96-format, bulk, 960 caps per case
66-63100-Y5	**FluidX Internal Thread Screw Cap**, Transparent Blue, 96-format, bulk, 960 caps per case
66-63100-Y6	**FluidX Internal Thread Screw Cap**, Orange, 96-format, bulk, 960 caps per case
66-63100-Y8	**FluidX Internal Thread Screw Cap,** Green, 96-format, bulk, 960 caps per case
66-63100-Y10	**FluidX Internal Thread Screw Cap**, Amber, 96-format, bulk, 960 caps per case
66-63100-Y11	**FluidX Internal Thread Screw Cap**, Purple, 96-format, bulk, 960 caps per case
66-63100-Y12	**FluidX Internal Thread Screw Cap**, Natural, 96-format, bulk, 960 caps per case
66-63100-Y13	**FluidX Internal Thread Screw Cap**, Black, 96-format, bulk, 960 caps per case

24 Format External Thread Screw Caps

66-0202-50	**FluidX External Thread Cap,** 24-format, 2,400 caps per case
66-9401	**FluidX Automation Friendly External Thread Cap,** Orange, 24-format, bulk, 240 caps per case Suitable for 2.2ml Tissue Tube and 7.6ml Next-Gen Jacket Tubes
66-9402	**FluidX Automation Friendly External Thread Cap,** Clear, 24-format, bulk, 240 caps per case Suitable for 2.2ml Tissue Tube and 7.6ml Next-Gen Jacket Tubes
65-9371	**FluidX External Thread Low Profile Screw Cap,** Yellow, 24-format, bulk, 240 caps per case Suitable for 2.2ml Tissue Tube and 7.6ml Next-Gen Jacket Tubes
65-9372	**FluidX External Thread Low Profile Screw Cap,** Orange, 24-format, bulk, 240 caps per case Suitable for 2.2ml Tissue Tube and 7.6ml Next-Gen Jacket Tubes

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FluidX TPE Septum Caps

Developed to meet the needs of sample security, management and tracking in modern high-density storage applications, TPE septum caps are a disposable, thermo plastic elastomer (TPE) cap designed for optimal seal quality. Compatible with 96-format tubes, TPE caps are available for use with internal thread tubes and are manufactured from high-quality TPE, supplied as 96-cap mats or in bulk.

Practical Design Based on Experience of Applications

- Piercable cap, for use with any 96-format FluidX internal thread tube
- Broad operating temperature range, suitable for use -80°C to +110°C
- Ideal solution for -20°C storage with occasional access
- Available in a choice of five colors to aid sample identification
- Suitable for Automatic and Semi-Automatic Cappers and De-cappers
- Natural color only recommended for automatic systems
- Supplied in 96-format back mats to facilitate automation

Septum Cap Compatibilty

- Suitable for 96-format FluidX Jacket Tri-coded Sample Storage Tubes
  - Internal thread 0.65ml, 0.9ml
- Suitable for FluidX 96-format Next-Generation Dual-coded Tubes
  - Internal thread 0.3ml, 0.7ml, 0.9ml

Practical Design Based on Experience of Applications

- Piercable cap, for use with any 96-format internal FluidX tube
- Broad operating temperature range, suitable for use -80°C to +110°C
- Ideal solution for -20°C storage with occasional access
- Available in a choice of five colors to aid sample identification
- Suitable for Automatic and Semi-Automatic Cappers and De-cappers
- Natural color only recommended for automatic systems
- Supplied in 96-format back mats to facilitate automation

Septum Cap Compatibilty

- Suitable for 96-format FluidX Jacket Tri-coded Sample Storage Tubes
  - Internal thread 0.65ml, 0.9ml
- Suitable for FluidX 96-format Next-Generation Dual-coded Tubes
  - Internal thread 0.3ml, 0.7ml, 0.9ml

Ordering Information

Internal Thread TPE Septum Seals

65-73000	**FluidX Pierceable TPE Septum Cap**, Natural, 96-format, on backing mat, 50 mats/4,800 caps per case. Suitable for all Internal Thread Tubes
65-73001	**FluidX Pierceable TPE Septum Cap**, Blue, 96-format, on backing mat, 50 mats/4,800 caps per case. Suitable for all Internal Thread Tubes
65-73002	**FluidX Pierceable TPE Septum Cap**, Green, 96-format, on backing mat, 50 mats/4,800 caps per case. Suitable for all Internal Thread Tubes
65-73003	**FluidX Pierceable TPE Septum Cap**, Red, 96-format, on backing mat, 50 mats/4,800 caps per case. Suitable for all Internal Thread Tubes
65-73004	**FluidX Pierceable TPE Septum Cap**, Yellow, 96-format, on backing mat, 50 mats/4,800 caps per case. Suitable for all Internal Thread Tubes
65-74000	**FluidX Pierceable TPE Septum Cap**, Natural, 96-format, bulk, 960 caps per case. Suitable for all Internal Thread Tubes

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FluidX SBS Cap Carriers

SBS-format screw cap carriers enable automated capping of 96-format sample storage tubes. Cap carriers are suitable for manual use or for use with FluidX Aperio™ Semi-Automated Capping and De-capping systems and IntelliXcap / XSD-Series Automated Capping and De-capping systems.

Cap carriers are supplied in cases of 10 or 50, pre-filled with low-retention screw caps that can reduce sample loss (960 caps per case for 10 cap carriers, 4800 caps per case for 50 cap carriers).

Improved Process Efficiency

- Cap Carriers enable uncapped tubes to be used immediately and then capped using an automated capping and de-capping system
- Leads to improved process efficiency and allows batch filling of tubes prior to capping
- When used manually, by transferring caps from the carrier to the tube using a single tube transfer device, the operation becomes faster and the risk of contamination is reduced as cap handling is eliminated

Ordering Information

68-53111-50X	**FluidX Cap Carrier (External and Internal Thread)**, Empty, 96-format, SBS stackable, re-usable, 50 carriers per case. Suitable for all FluidX 96-format External and Internal Thread Screw Cap Tubes
67-63111-10	**FluidX Cap Carrier (Co-molded Internal Thread),** With Orange Caps, 96-format, SBS stackable, re-usable, 10 carriers/960 caps per case. Suitable for all FluidX Internal Thread Screw Cap Tubes
67-63111-50	**FluidX Cap Carrier (Co-molded Internal Thread)**, With Orange Caps, 96-format, SBS stackable, re-usable, 50 carriers/4,800 caps per case. Suitable for all FluidX Internal Thread Screw Cap Tubes
68-53111-10N	**FluidX Cap Carrier (External Thread)**, With Orange Caps, 96-format, SBS stackable, re-usable, 10 carriers/960 caps per case. Suitable for all FluidX 96-format External Thread Screw Cap Tubes
68-53111-50N	**FluidX Cap Carrier (External Thread)**, With Orange Caps, 96-format, SBS stackable, re-usable, 50 carriers/4,800 caps per case. Suitable for all FluidX 96-format External Thread Screw Cap Tubes

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FluidX Sterilization Services

FluidX Sterilization Services

FluidX Sterilization Services

We understand how important it is to provide labware in a pristine condition and ideally suited for your research. This is why we provide four alternative methods for contamination-free products.

Standard Product

Prevention is better than a cure, so we manufacture all sample storage consumables in an ISO class 8 clean-room environment. To gain access to this area, everyone must wear a gown, gloves, face mask, hair net and overshoes. In addition, they must pass through a double door with an “air-shower” designed to remove any particles. No material that could cause contamination is allowed in the clean-room.

The products are sterile at the point of molding, which takes place at temperatures that melt the resin – typically between 140°C to 150°C for copolymer and 165°C to 175°C for homopolymer.

From the injection molding machine, our consumables are processed and bagged in the clean-room. Only once they have left the clean-room are they are placed in the transport box for shipment.

The efficacy of this process is tested periodically, which allows us to have a high degree of confidence that our products meet the standards outlined in the table below.

Contaminant	Testing Standard
Endotoxin (Pyrogen)	Product(s) are tested on a periodic basis and found to be below the acceptance level ≤0.05 EU/ml
DNA/RNA DNase/RNase	Product(s) are free of contaminations based on 3rd party electrophoresis evaluation of degradation
Heavy Metals	No heavy metal is contained in any of our product(s) that meet CONEG requirements of 100 ppm/weight
Animal (TSE/BSE)	No product(s) are manufactured from or come into contact with, animal materials
PCR Inhibitors	Product(s) are PCR-inhibitor free

Gamma Irradiation Sterilization

Typically, laboratory consumables requiring sterilization are treated to ensure a “Sterility Assurance Level” (or SAL) of either 10^{-3} or 10^{-6}. Irradiation does not guarantee the product is free from other contaminants such as those listed above, only that there are no viable micro-organisms. It is still essential to confirm no contaminants are present to verify SAL.

Gamma irradiation is not guaranteed to destroy DNA contamination to the point where it doesn’t amplify or interfere with subsequent analysis. Ensuring that no amplifiable DNA is present relies on (i) the manufacturing process and testing described above and (ii) fulfilling requirements for sensitive applications such as sterilization using Ethylene Oxide (EtO).

Gamma irradiation can negatively affect polypropylene, making it more brittle over time and increasing the binding characteristics of the plastic. For this reason, Brooks Life Sciences recommends that wherever possible, the standard product is relied on to deliver the contamination-free product required for research and long-term storage.

Ethylene Oxide Sterilization (EtO)

Sterilization using EtO is just as effective as gamma irradiation at providing a sterility assurance level of 10^{-6}. In addition, it ensures there is no DNA that can be amplified to a level where there is risk of subsequent interference. Therefore, EtO is the sterilization method of choice in critical areas such as forensics.

Dual Ethylene Oxide Sterilization (EtO2)

The newly published ISO 18385:2016 standard centers on minimizing the risk of human DNA contamination in consumable products used in collection, storage, or analysis of biological material for forensic DNA purposes. Dual EtO treatment is being recommended to further minimize the presence of PCR-amplifiable DNA.

Ordering Information

	Standard Product	Gamma Irradiation	Ethylene Oxide	Dual Ethylene Oxide
General Description	Product is made in an ISO 8 (class 100K) clean room. Product is endotoxin (pyrogen), DNAase/RNAase, heavy metals & animal-free.	Ensures no viable micro-organisms but cannot guarantee destroyed DNA contamination. Affects PP, making it more brittle over time & increasing binding of plastic.	Effective at ensuring no DNA can be amplified to a level where there is any risk of interference.	Recommended for consumables used in the collection, storage, or analysis of biological material for forensic DNA.
Recommended for standard use	Yes	No	No	No
Recommended for critical forensic applications (DNA amplification)	No	No	Yes	Yes
Modifies Polypropylene	No	Yes	No	No
Product types	All	Capped or uncapped tubes	Uncapped tubes only, bulk caps, cap carriers	Uncapped tubes only, bulk caps, cap carriers
Packaging	Bulk, case of 10 racks	Sleeve of five racks as standard – individually wrapped as option	Individually wrapped	Individually wrapped
Min Quantity	None	10 cases	25 cases	25 cases
Part number	N/A	-GS	-S	-DS
Example part number	68-0703-02	68-0703-02-GS	68-0703-02-S	68-0703-02-DS

Recommended Temperature Range for FluidX Sample Storage Tubes

Recommended Temperature Range for FluidX Sample Storage Tubes

Cryogenic storage at very cold temperatures is designed to provide an indefinite, if not nearly infinite, longevity to biological materials.

By reducing sample temperatures to below the glass transition phase of water, all metabolic activity comes to a halt. Storage below this temperature therefore offers the most secure form of long term cryopreservation.

Storage in gas phase liquid Nitrogen provides a convenient way of storing samples at temperatures below this transition temperature.

FluidX screw cap storage tubes are designed for long term sample storage at cryogenic temperatures, including storage in the gas phase of liquid Nitrogen.

Gas phase liquid Nitrogen temperatures have been typically quoted as between -150°C and -178°C, depending on the location and the distance away from the liquid nitrogen reservoir surface. However, the latest generation of cryogenic storage systems are powered by liquid nitrogen in such a way to ensure a consistent temperature within the storage chamber, and can be as low as -195°C.

All FluidX screw cap storage tubes are fully compatible with this storage temperature and can be safely used for long term storage in this environment. However, immersion in liquid nitrogen is not recommended for two reasons:

1. Liquid nitrogen is extremely pervasive.

   If a tube cap is not completely and correctly tightened nitrogen may seep inside the tube. When the tube is then removed from storage this liquid nitrogen will instantly boil, expanding to over 700 times its liquid volume. This creates a significant risk of explosion and/or biohazard risk from aerosols.
2. Many researchers have noted that immersion in liquid nitrogen carries with it a significant risk of cross contamination from bacteria, viruses and DNA that can be present within the liquid nitrogen.

   Therefore, if required, snap-freezing is best achieved by immersing the tube in liquid nitrogen to a depth that avoids the nitrogen coming into direct contact with the tube cap

BioStore™ III Cryo with CryoPod™ Carrier

BioStore™ III Cryo

How Safe Are Your Samples? - Leachables and Extractables, Working Volume and Pressure Testing

White Papers Available

Part I: Evaluation of FluidX External Thread Tubes for Potential Leachable Compounds - Most plastics are supplied sterile, pyrogen- and DNAse/RNAse-free, it is generally accepted that this guarantees product integrity. Few researchers ever consider that despite these apparent guarantees, plastic ware can still provide a potential source of error. Evidence shows that bioactive compounds can diffuse into solutions that come into contact with the surface of the plastic. These compounds, typically referred to as “leachables” or “extractables”, are used during the manufacturing process to improve product stability and durability.

The aim of this evaluation was to determine if “extractables” could be detected in solvent solutions stored in FluidX external thread tubes and to compare the performance against competitor tubes.

Part II - Working Volume - Knowledge of the working volume is a key criterion to consider when selecting the most appropriate tube and, is dependent on a range of factors including: Fill volume of the tube; Accuracy of the volume dispensed; Freezing conditions; Thawing conditions; Cap selected; Burst pressure of the cap.

Manufacturers of sample storage tubes specify the size of tubes in a variety of ways, but rarely state the sample type or storage conditions required to achieve the volumes stated. This can lead to catastrophic results if the working volume of the tube is exceeded.

Part III: Sample Integrity Through Secure Capping - When using sample tubes, secure capping is paramount to protect sample integrity during the storage and handling process for a range of applications. These applications could include; Biobanking, Compound Management, Cell Therapy, Benchtop Research or applied industry. Two major hazards that can be mitigated through safe and secure sample tube capping are Evaporation and Cross contamination.

To download, visit www.brookslifesciences.com

FluidX Barcode Reading Systems

FluidX Barcode Reading Systems

Scope™ Single Tube Barcode Readers

FreezerPRO Compatible

Scope

Scope BT Wireless

The Scope™ tube reader range comprises high-performance, easy to use, portable readers. Scope has the dual capability of decoding any 2D datamatrix coded tube and reading any tube or rack carrying a 1D linear barcode.

Given the variety of 2D-coded tubes on the market, the Scope range is designed and developed with broad compatibility in mind. Scope can read any 2D-coded sample tube currently on the market, not only those supplied by FluidX.

Scope™ USB single tube reader provides instant “plug and play” decoding of all 2D-coded tubes and 1D-barcoded tubes and racks.

Scope™ BT Wireless single tube reader is the very first single-tube reader to connect by Bluetooth to iPad and Android tablet devices. No software required, “plug and play”.

All Scope Readers are supplied with a 5-year warranty.

KEY FEATURES

Compatible with all 2D-Coded Tubes

- Scope single tube readers are compatible with all FluidX tubes as well as any 2D datamatrix coded tubes, including those supplied by Greiner, Matrix, Nunc, LVL and Micronic
- Any tube size can be read. Scope will quickly scan tubes in 24, 48, 96, 240 and 384-well rack formats, as well as larger capacity tubes including glass compound storage tubes, cryo tubes and biological sample tubes

Instant 1D and 2D-Code Reading

- Scope takes less than one second to scan any 2D-coded tube and display the result
- The tube ID is displayed instantly on the computer screen for identification or sample entry, or the application can be run in the background
- The large scanning window and superior decoding technology means the Scope can quickly and easily decode 1D barcodes on racks and tubes

Error-Proof Barcode Reading

- Blue LED target lights are emitted so that positioning the barcode for scanning is error proof, even when the user is wearing gloves
- Scope automatically scans the code (1D or 2D) and confirms a “good read”

Direct Data Export to Any Application

- The FluidX keyboard wedge allows you to enter the results into any application
- Simply place the cursor where the data is to be entered before scanning the tube. The data will instantly be displayed wherever the cursor is positioned
- Scope will insert tube data into any application, such as Excel, Notepad, etc.

Fast Set Up

- No need to calibrate, no drivers or software to install before scanning your first 1D or 2D-code
- Scope USB simply starts working when plugged into a PC or laptop, no external power supply is required due to USB connectivity
- Scope BT Wireless connects to your tablet device by simply scanning the connectivity barcode provided in the operation manual, powered by a rechargeable battery, up to 50,000 tube scans between charges

Mobile Decoding

- Scope BT Wireless allows you to read barcodes anywhere, at any time by using Bluetooth connectivity to provide complete mobility

Flexible Connectivity with Scope Wireless BT

- If multiple devices are used with your tube reader, switching between different Bluetooth-enabled mobile devices can be completed in just a few seconds
- Scope Wireless BT can be connected to an iPad, Android tablet, iPod, iPhone or Android phone or PC/Mac with Bluetooth
- Bluetooth modem option is available to provide instant connection to any PC or laptop without drivers or software. Simply scan the barcode on the modem to establish connection

	Scope™ USB Single Tube Barcode Reader	Scope™ BT Wireless Single Tube Barcode Reader
		
Code formats read	Datamatrix, ISO 16022, square and rectangular format, ECC200, 0 to 20 grid sizes, white on black, black on white, numeric, alpha numeric and 1D linear barcodes	
Sensor type	Sensor CMOS 1.2 Megapixel (1280 x 960) gray scale	
Light source	Red LED with blue targeting LED	
Read time	< 1 second per tube or rack, either 1D or 2D	
Ambient operating temperature	-20°C to 55°C	
Tube compatibility	All tubes in 24, 48, 96, 240 and 384-formats Glass compound storage tubes, cryo tubes, biological sample tubes	
Rack compatibility	Linear barcode types: Codabar, Code 11, Code 32, Code 39, Code 93, Code 128	
Dimensions	38mm (H) x 59mm (W) x 150mm (D)	45mm (H) x 75mm (W) x 196mm (D)
Operating humidity	5% to 95% (non condensing)	
Power requirements	5vdc (mA): typical = <200mA idle = <90mA	4.2vdc (mA): typical and peak = 362mA idle = 80mA

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	Scope™ USB Single Tube Barcode Reader	Scope™ BT Wireless Single Tube Barcode Reader
User interface	USB 2.0 HID keyboard	Bluetooth (Class II) BT Modem: USB 2.0 HID
Operating system(s)	Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10, Windows CE, Mac O SX and Linux	Wireless Bluetooth HID mode: iOS, Android OS, Windows 8 mobile edition, (Also Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10, Windows CE, Mac OSX and Linux) USB Bluetooth Modem mode: Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10, Windows CE, Mac OSX and Linux

Ordering Information

FLX-20-1003	**FluidX Scope™ USB Single Tube Reader** with large window, hardware decoding with USB keyboard wedge. Suitable for all 2D-coded and 1D linear barcoded tubes
20-1025-A	**FluidX Scope™ BT Wireless Single Sample Tube Reader** Bluetooth portable single tube wireless reader with large window for all 2D datamatrix labeled tubes and 1D linear barcodes, hardware decoding with Bluetooth
20-1025-C	**20-1025-A supplied with additional Bluetooth USB Modem for use with any PC**

Impression™ Rapid Rack 2D & 1D Barcode Scanner

Integration Friendly

Developed specifically for integration, the FluidX Impression™ Rapid Rack Scanner offers fast identification of SBS-format racked, 2D-coded sample storage tubes, without the need to remove tubes from racks. The backbone of many sample storage and tracking systems Impression is ideal for applications including biobanks, compound libraries and other high-throughput storage environments

- Compact, bench-top whole SBS rack scanner
- Integration friendly
- Small-footprint scanner-based solution
- No decoding attempt for empty tube position
- Given the variety of 2D-coded tubes on the market, Impression™ is designed and developed with broad compatibility in mind, including 2D-coded tubes from alternative manufacturers, not only FluidX. Designed and developed entirely with the end user in mind, the FluidX Impression™ Rapid Rack Scanner offers fast identification of SBS-format racked, 2D-coded sample storage tubes, without the need to remove tubes from racks.
- Impression™ Rapid Rack Scanner systems offer the very best optical quality barcode scanning for 2D and 1D barcoded tubes within a rapid whole-rack scanner format with a small footprint. Impression™ Rapid Rack Scanner is based on scanning technology and forms the backbone of many sample storage and tracking systems, for applications including biobanks, compound libraries and other high-throughput storage environments
- Impression™ Rapid Rack Scanner is supplied with a 5-year warranty

KEY FEATURES

Compatibility

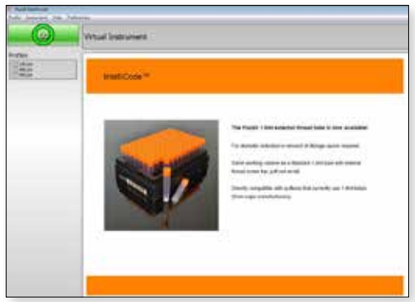
- Compatible with all FluidX 2D datamatrix coded tubes, as well as with tubes supplied by other manufacturers
- Suitable for use with 48 and 96 SBS-format racks

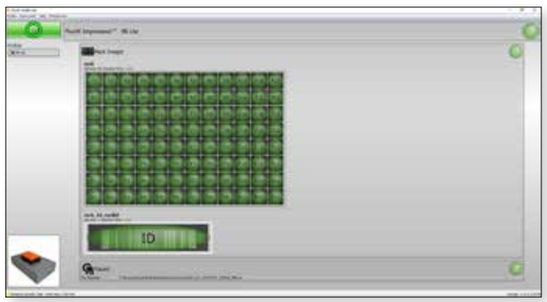
Integration Friendly

- Solution for rapid reading and integration
- Includes single position USB 1D linear barcode module for reading linear rack barcodes

“No Tube” Feature Eliminates Errors

- Able to discriminate between a tube with a code that cannot be decoded, and an empty rack position
- Will not decode empty tube positions, so data files are kept clean
- Decoding speed is optimized as wasted data entry is eliminated





Impression™ Rapid Rack Scanner	
	
Code formats read	datamatrix, ISO 16022, square and rectangular format, ECC200, 0 to 20 grid sizes, white on black, black on white, numeric, alpha numeric, Option: 1D linear barcodes
Sensor type	Color Contact Image Sensor (CMOS CIS)
Light source	R, G, B LED (variable light source)
Read time	4 to 5 seconds total scan and decode time
Ambient operating temperature	5°C to 55°C
Tube compatibility	Most tubes in 48 and 96 format SBS racks
Dimensions	51mm (H) x 156mm (W) x 256mm (D)
Operating humidity	10% to 90% (non condensing)
Power requirements	USB and AC 100 to 240V
User interface	FluidX GUI, including Windows TCP/IP, ODBC
Operating system(s)	Windows 7, Windows 8, Windows 10

Ordering Information

20-2101-A	**Impression Rapid Rack Scanner (MKI) with Single Position USB Linear Barcode Reader** Small Form Factor Whole rack reader for racks of 48 / 96 2D labelled tubes; small-footprint scanner-based solution for rapid reading and integration; small form factor scanner has a lower depth of focus and is not suitable for all racks. Includes 1 x 70-2010
70-2010	**Single Position USB Linear Barcode Reader,** for Impression range; 1 per case

Perception™ HD Range of Whole Rack 2D & 1D Barcode Readers

Integration Friendly

FreezerPRO Compatible

Perception HD

Perception HD AcoustiX

Perception HD LF

The Perception™ HD range of compact whole rack 2D & 1D barcode readers offers fast identification of racked, 2D-barcoded sample storage tubes, without the need to remove tubes from racks.

Using advanced camera-based imaging systems, Perception whole rack readers are ideal for more challenging applications and environments, such as integrating into robotic systems, or when speed and size of reader are important.

Perception readers form the backbone of many sample storage and tracking systems, for applications including biobanks, compound libraries and other high-throughput storage environments.

An integrated multi-position Linear Barcode Reader is available for the simultaneous reading of rack linear 1D barcodes.

KEY FEATURES OF THE PERCEPTION RANGE

Flexible Applications through Advanced Design

- Using advanced camera-based systems, FluidX Perception whole rack readers are ideal for more challenging applications, such as integration into robotic systems, cold store and low temperature environments and where speed and small footprint are important

Automation and Robotics Friendly

- All FluidX Perception rack readers have a gripper cutout section around the scan window to enable easy robotic handling of shallow racks
- The Perception Rapid SBS reader has a small footprint, barely larger than the SBS rack itself, aiding greater compatibility with automated systems including liquid handling

Easy System Integration with IntelliCode™ Software

- Perception HD Reader systems used in conjunction with FluidX IntelliCode™ software offer the most advanced data export options available
- Easy integration with database sample tracking and LIMS systems
- Compatible with MS Word templates, with powerful design and formatting capabilities to create customized reports

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Additional Sample Security

- FluidX storage tube racks can be supplied with the option of carrying a unique 2D-code identifier
- All FluidX Perception HD whole rack readers are capable of reading both tube and rack 2D-codes simultaneously, to provide automatic rack orientation and greater sample security

Linear 1D Barcode Reader (optional)

- Integrated multi-position 1D linear barcode reader helps to simplify robotic integration, is ideal for decoding more challenging (non-FluidX) linear barcodes and provides rack orientation

Stored Rack Profiles

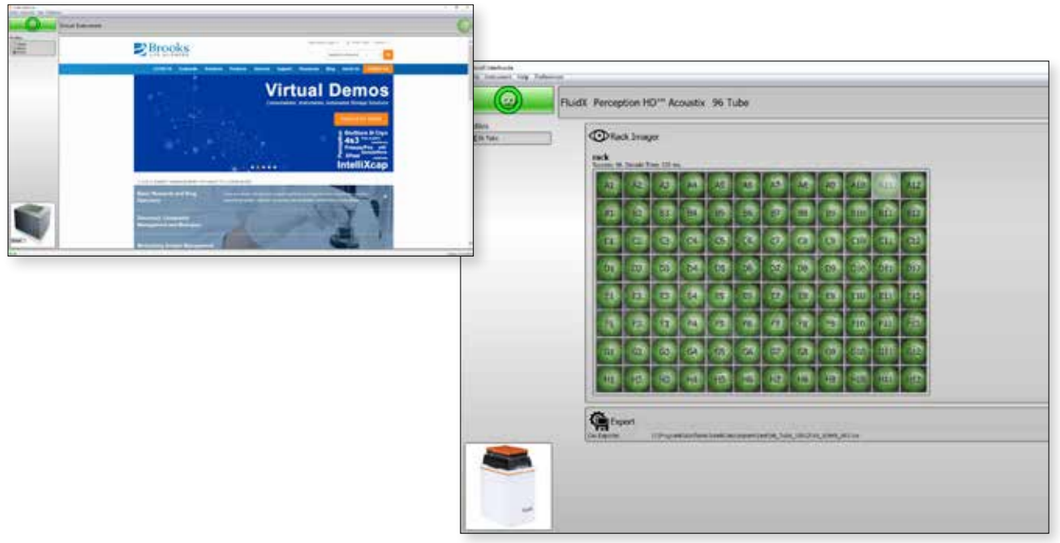
- Custom rack profiles can be set up for the regular use of routine, custom rack profiles, such as empty rows or control tubes in specific positions, saving set-up time

Seamless Changing of Rack Format

- Using either built-in, or customized rack profiles, IntelliCode software will automatically determine which rack type is being read
- Software will select the appropriate rack profile for decoding and exporting tube data
- Switch between 24, 48, 96, 240 and 384-format racks without making any changes to Perception readers or IntelliCode software

“No Tube” Feature Eliminates Errors

- Perception HD whole rack readers are able to discriminate between a tube with a code that cannot be decoded, and an empty rack position
- The reader will not attempt to decode empty tube positions, so data files are kept clean
- Reading speed is optimized as wasted data entry is eliminated



Perception™ HD Reader

Integration Friendly | Freezer^PRO Compatible

Providing even greater clarity, the FluidX Perception HD range of compact whole rack 2D & 1D barcode readers offers fast identification of racked, 2D-coded sample storage tubes, without the need to remove tubes from racks.

Using high definition, camera based imaging systems, Perception whole rack readers are ideal for more challenging applications and environments, such as integrating into robotic systems, cold environments or when speed and size of reader are important.

Features & Benefits:

- Compatibility - Use with any 2D-coded tubes in SBS format rack
- Footprint - The smallest range of rack readers available
- Speed - decode a full rack of tubes in less than 1 second
- High Definition - Reliably decode a variety of tubes
- Avoid Waste - "No tube" feature ensures wasted data entries are avoided
- Integration - Automation friendly design
- Linear Barcode Reading - Available with integrated multi-position linear barcode reader

Available in 3 models:

- Perception™ HD
- Perception™ HD AcoustiX
- Perception™ HD LF

Perception HD

Part Number	20-4018
Dimension (W x L x H)	97mm x137mm x 160mm
Weight	1000g
Camera Resolution	18 MegaPixel
Power supply	Powered by USB
Communication	USB 3.1
Linear Barcode Reader	Optional (70-4012) – Plug directly into PC
Decodable Formats	2D Datamatrix®, QR Codes, ISO 16022, Square and Rectangular Format, ECC 200, 0 - 20 grid sizes, White on Black and Black on White, Numeric and Alphanumeric
Tube Formats	Almost all tubes in SBS format rack. Either 24, 48, 96, 240 or 384-formats.
Total Read TIme	<1 second
Operating Systems	Windows 7, Windows 8, Windows 10

Ordering Information

20-4018	**FluidX Perception™** HD High Definition Camera, Whole rack reader for racks of 2D labelled tubes; small-footprint single camera based solution for very rapid reading and ideal for integration, USB 3.1 cable
70-4012	**Multiple Position Linear Barcode Adaptor,** including USB Opticon Barcode Reader for Perception HD (20-4018) and Perception HD AcoustiX (20-4013)

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Perception™ HD AcoustiX

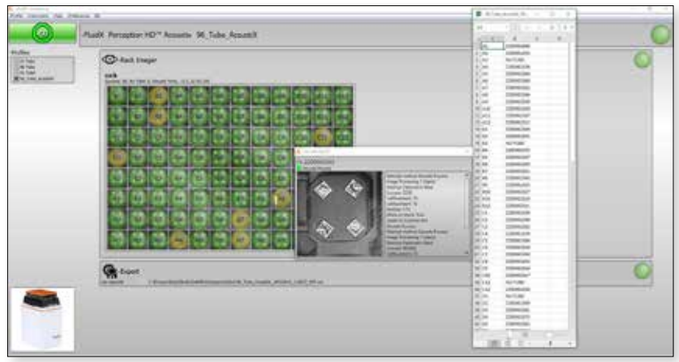
Integration Friendly | Freezer^PRO Compatible

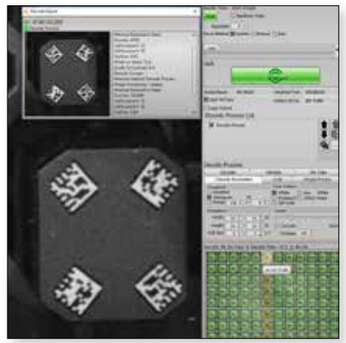
Perception HD AcoustiX

Part Number	20-4013
Dimension (W x L x H)	97mm x137mm x 160mm
Weight	1000g
Camera Resolution	18 MegaPixel
Power supply	Powered by USB
Communication	USB 3.1
Linear Barcode Reader	Optional (70-4012) – Plug directly into PC
Decodable Formats	2D Datamatrix®, AcoustiX 2D4 Codes, QR Codes, ISO 16022, Square and Rectangular Format, ECC 200, 0 - 20 grid sizes, White on Black and Black on White, Numeric and Alphanumeric
Tube Formats	Almost all tubes in SBS format rack. Either 24, 48, 96, 240 or 384-formats.
Total Read Time	<1 second
Operating Systems	Windows 7, Windows 8, Windows 10

Ordering Information

20-4013	**FluidX Perception™ HD AcoustiX** High Definition Camera, Whole rack reader for racks of 2D labelled tubes, including Labcyte Echo® Qualified AcoustiX Tube; small-footprint single camera based solution for very rapid reading and ideal for integration, USB 3.1 cable
70-4012	**Multiple Position Linear Barcode Adaptor**, including USB Opticon Barcode Reader for Perception HD (20-4018) and Perception HD AcoustiX (20-4013)





Perception™ HD LF Reader

Integration Friendly

Freezer^PRO Compatible

	Perception HD LF
	
Part Number	20-4016
Dimension (W x L x H)	147mm x147mm x 224mm
Weight	1350g
Camera Resolution	18 MegaPixel
Power supply	Powered by USB
Communication	USB 3.1
Linear Barcode Reader	Optional (70-4013) – Plug directly into PC
Decodable Formats	2D Datamatrix®, QR Codes, ISO 16022, Square and Rectangular Format, ECC 200, 0 - 20 grid sizes, White on Black and Black on White, Numeric and Alphanumeric
Tube Formats	Almost all tubes in SBS format rack and Freeze Boxes. Either 9x9, 10x10, 13x13, 14x14, 24, 48, 96, 240 or 384-formats.
Total Read Time	<1 second
Operating Systems	Windows 7, Windows 8, Windows 10

Ordering Information

20-4016	**Perception™ HD LF** Large Format Cryo Rack Reader, Whole rack reader for 14x14, 10x10, 9x9, 7x7 5x5 Square Cryo Racks of 2D labelled tubes and 24, 48, 96, 240, 384 SBS-format racks; Single camera based solution for very rapid reading, with USB 3.1 cable
70-4013	**Multiple Position Linear Barcode Adaptor**, including USB Opticon Barcode Reader for Perception HD LF (20-4016)

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FluidX IntelliCode™ Decoding Software

Integration Friendly

Freezer^PRO Compatible

FluidX IntelliCode™ is intuitive software, designed with the input of users, for decoding 1D and 2D-coded sample storage tubes and racks.

IntelliCode rapidly and simultaneously decodes FluidX sample storage tubes as well as any 2D datamatrix coded tubes, including those supplied by Greiner, Matrix, Nunc and Micronic.

IntelliCode automatically recognizes rack types, without requiring additional setup, and provides a secure audit trail of all decoding performed creating text files and customized reports in MS Word and Adobe PDF, as well as secure data export to an SQL database.

KEY FEATURES

Easy Set-up Saves Time

- IntelliCode is pre-configured for use with 24, 48, 96, 240 and 384-format SBS racks
- Simply place your rack on the sample storage tube barcode reader and IntelliCode will do the work
- Simple, automatic profile creation for any readable 2D-coded tubes at the push of a button
- Determines rack profile (24, 48, 96, 240 and 384), automatically decodes and saves your data

Ultra-Fast Decoding

- IntelliCode takes only 3.1milliseconds to decode a sample storage tube, using the Perception HD range of rack readers
- Dual Decoding Engine, so both FluidX proprietary decoding and industry-standard decoding engines work simultaneously for additional power and speed
- With true Multi-Core optimization, IntelliCode is designed for use with modern PCs. This parallel processing enables a rack of 96 2D-coded tubes to be imaged and decoded in less than one second

Unique and Secure Audit Trail

- IntelliCode keeps a secure audit trail of all decoding performed
- To recreate any export files, change file format or make a backup copy, simply set the data range required and IntelliCode will generate the export file as required

Simple File Export to LIMS or Database

- The built-in generator will customize the export file so that it is compatible with any LIMS or database system (txt or CSV files)
- Alternatively, use the auto-generate function to create a file in standard export format
- Use the built-in database connector for secure transfer of scanned tube data to your corporate SQL database

Creative Report Generation

- Design your own, customized MS Word template with images, logos and format
- IntelliCode can automatically use this template to create professional and elegant data reports for your internal and external customers

Remote Use

- IntelliCode can be remotely controlled using a console or TCIP.

Advanced Rack ID Functionality

- IntelliCode can perform both 2D and 1D rack decoding when used in conjunction with a FluidX Impression whole rack scanner with Linear Barcode Reader
- A manual input option is available if the rack scanner is unable to read a rack barcode, or if an independent linear barcode reader is to be used

“No Tube” Feature

- IntelliCode software is able to discriminate between a tube with a code that cannot be decoded and a rack position containing no tube, and will not attempt to decode empty tube positions
- Data files are kept clean as wasted data entry is avoided, resulting in a faster rack reader and better data

Share Profiles and Data Files

- User profiles and export files can be shared between users on a single PC, and across a network, reducing set-up time and facilitating work streams

FluidX Capping and Sealing Systems

FluidX Capping and Sealing Systems

FluidX Capping and Sealing Systems

FluidX provides dependable manual, semi- and fully automated capping and de-capping solutions. The range incorporates products from single-tube manual de-cappers, through column cappers / de-cappers to fully automated and whole-rack solutions. All products are the result of over 15 years of continuous development and innovation, bringing the best solutions, with the most useful features, to the sample storage market.

FluidX XSD-1 Semi-Automatic Single Tube Capper/De-capper

The XSD-1 is the first-of-its-kind, single tube capper/de-capper in the industry. It provides a low-cost, reliable solution for managing the automated capping and de-capping of single and larger sized master sample tubes such as: centrifuge, cell culture and even glass tubes. Unlike many products on the market, where an engineering change of the gripper is required in order to tighten different tube types, the XSD-1 allows you to manage a variety of tube types with a simple, interchangeable cap-driver system which can be changed in 5 seconds.

A flexible, faster and lower cost option for managing the capping/de-capping of larger sample tubes in the laboratory, XSD-1 is compatible with FluidX sample storage tubes, as well as a wide variety of tubes, with internal and external threads, from almost all major manufacturers.

XSD-1 is designed to improve productivity while reducing the risk of repetitive strain injury.

KEY FEATURES

- Fastest and most consistent single tube capper/de-capper on the market
- Perfect for automating the handling of larger sized master sample tubes such as: centrifuge, cell culture or even glass tubes
- Interchangeable cap driver kit for any tube format (9mm-40mm)
- Change the cap driver in 5 seconds
- Easy, single button, multi-torque control
- Suitable for use inside a laminar flow cabinet
- Low cost, automated solution
- Please contact us to discuss your specific tube requirements

Automation for Fast and Consistent Capping Performance

- The same torque is applied to each cap, according to tube manufacturer specification, in order to ensure a consistent seal quality
- Automation reduces sample handling time, increasing sample throughput and workflow
- Screw caps can be held within the XSD unit whilst the user fills, or accesses, the sample tube
- Caps can subsequently be re-applied to the same tubes, eliminating the risk of cross-contamination

Broad Compatibility for Every Laboratory

- XSD-1 is compatible with sample storage tubes from almost every manufacturer, as long as the screw cap can be gripped with cap drivers and the cap has a diameter from 9mm up to 40mm
- By adjusting the tube pitch required for each tube manufacturer, XSD-1 ensures that caps are not cross threaded during the capping cycle

Multiple Torque Control and Interchangeable Cap Driver

- Quick, user-friendly, interchangeable cap driver
- Cap driver can be changed in less than 5 seconds
- Torque is adjusted to fit the majority of tubes, allowing users to determine the optimal setting for their tubes
- 3 different torque settings: Low, Medium and High
- Easy to Use

Technical Specification

Dimensions	333(L) x 110(W) x 300(H) mm
Weight	6.0 kg
Power Requirements	AC 100 -240V, 50/60 Hz, 26W
Cycle Time De-cap	< 3 sec per tube
Cycle Time Cap	< 3 sec per tube
Compatibility	Standard sized tubes with screw cap (verify gripper list)

Ordering Information

46-6001	**XSD-1 Semi-Automatic Single Tube Capper/De-capper** interchangeable cap drivers and multiple torque settings. Specify tube type when ordering

Ordering Information - Grippers

46-6002-1	**Gripper kit XSD-1,** TRP tube 50ml Cap (Fujifilm)
46-6002-2	**Gripper kit XSD-1,** BD Falcon tube 50ml Cap
46-6002-3	**Gripper kit XSD-1**, BD Greiner tube Cap
46-6002-4	**Gripper kit XSD-1,** Sarstedt 0.5 & 1.5 & 2.0ml Cap
46-6002-5	**Gripper kit XSD-1,** FluidX 6 & 10ml Automation-Friendly Cap
46-6002-6	**Gripper kit XSD-1,** Corning 21mm Cap
46-6002-7	**Gripper kit XSD-1,** FluidX 6.0 & 10ml External Cap
46-6002-8	**Gripper kit XSD-1,** FluidX 4.0ml Glass Jacket Tube Cap
46-6002-9	**Gripper kit XSD-1,** Ø 50mm Cap for glass container
46-6002-10	**Gripper kit XSD-1,** FluidX / Greiner Ext & Sarstedt Internal Cap
46-6002-11	**Gripper kit XSD-1,** Greiner/Corning 1.2ml – 5.0ml Cap
46-6002-12	**Gripper kit XSD-1,** Fisher Custom Tube Cap dia. 16mm
46-6002-13	**Gripper kit XSD-1,** Falcon 15mm dia. centrifuge tube
46-6002-14	**Gripper kit XSD-1,** FluidX 96-format External & Internal Co-Molded Caps
46-6002-15	**Gripper kit XSD-1,** Sarstedt 12ml screwcap tube (60.9922.937); dia. 16mm
46-6002-16	**Gripper kit XSD-1,** 3.5ml 14mm dia. False Bottom MarketLab Tube (Inpeco tube, EXT)
46-6002-17	**Gripper kit XSD-1,** Glass Vials, 4ml (dia. 15mm,length 48mm, GNF)
46-6002-18	**Gripper kit XSD-1,** 50ml, green cap, dia. 35.8mm, customized tube for optimum processing

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IntelliXcap™ M8 for Capping & De-capping Screw Capped Tubes

IntelliXcap™ M8 provides users with a flexible solution for capping and de-capping 96 format screw caps for low-to-mid throughput environments, with easily interchangeable cartridges to switch between tube types. The 8-channel hand-held capper and de-capper offers consistent sealing at an affordable price.

KEY FEATURES

Designed With The User In Mind

- Lightweight, hand-held, semi-automatic single column-based capper and de-capper
- Compatible with 96-SBS rack format screw capped tubes
- Caps a single column in under 4 seconds; caps/de-caps a complete rack of 96 tubes in less than 90 seconds
- All caps are tightened to the same torque to create a secure seal
- Battery operation allows capping/de-capping for more than 40 complete racks
- Docking station for instrument placement/storage and charging also provides contamination-free handling of caps
- Single 'action' button operation to de-cap, re-cap and eject caps
- Option to eject caps onto cap carrier using second 'eject' button

Flexibility For Ease Of Use

- Designed to be used by both left and right-handed users
- Unit can be operated by battery charge or powered through AC plug in
- Easily transportable
- Interchangeable cartridges, easy to switch between cap types

Get in touch with your local representative to discuss your labware requirements with us.

Ordering Information

46-9012	**IntelliXcap M8 Semi-Automatic 8-Channel Screw Top Tube Rack Decapper / Re-capper** Includes decapper IntelliXcap M8 (46-9008), docking station (46-9001), set of power cables, operation manual, IntelliXCartridges for FluidX Internal Thread (48-9013-01) and External Thread (48-9013-02) for 96-SBS format racks

Aperio™ Semi-Automated Systems for Capping & De-capping Screw Capped Tubes

The Aperio™ range of semi-automated systems are compact, bench top units designed for efficient tube capping in labs with medium throughput. Offering the consistency of an automated de-capping system, but at much lower cost, Aperio can cap a single column of tubes, from a cap carrier, in under 10 seconds and will cap, or de-cap, a complete rack of 96 tubes in under 2 minutes.

KEY FEATURES

Flexible Product Options to Suit a Range of Tube Types

Aperio 4

Aperio 6

Aperio 8

- **Aperio 4 :** 4-channel capping and de-capping system compatible with screw-capped tubes in 24-format SBS racks
- **Aperio 6 :** 6-channel capping and de-capping system compatible with screw-capped tubes in 48-format SBS racks
- **Aperio 8 :** 8-channel capping and de-capping system compatible with screw-capped tubes in 96-format SBS racks

Your choice of Aperio model can be configured for use with one of the following tube types:

- FluidX internal and external thread screw-capped tubes
- Thermo-Matrix internal thread screw-capped tubes
- Micronic internal and external thread screw-capped tubes
- Thermo-Nunc Bank-IT tubes
- LVL external thread screw capped tubes
- Please contact your local representative for the latest list of supported tubes

Fast and Consistent Sealing Performance

- Aperio has a set-down position that allows the simple insertion of screw caps using a FluidX Cap Carrier
- Caps a single tube in under 10 seconds
- Caps or de-caps a complete rack of 96 tubes in less than 2 minutes
- Individually spring-loaded cap drivers mean easy and consistent capping
- All caps tightened to the same torque, delivering a secure seal and peace of mind
- Designed for ease of use by both left and right handed people

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Space Saving Design

With a small footprint, Aperio fits easily onto the bench top and is easy to install in a laminar flow cabinet.

Weight: 6 kg, Dimensions: 310mm (w) x 345mm (l) x 345mm (h)

Ordering Information

FluidX Aperio™ 8-Channel Semi-Automatic Screw Cap Tube Rack Decapper/Capper for use with 96-format racked tubes	
46-6501	**FluidX Aperio 8-Channel Semi-Automatic Screw Cap Tube Rack De-capper/Capper** for FluidX 96-format Internal Thread tubes and racks
46-6502	**FluidX Aperio 8-Channel Semi-Automatic Screw Cap Tube Rack De-capper/Capper** for FluidX 96-format External Thread tubes and racks
46-6601	**FluidX Aperio 8-Channel Semi-Automatic Screw Cap Tube Rack Capper/De-capper** for Matrix/ Thermo 96-format Internal Thread tubes and racks
46-6602	**FluidX Aperio 8-Channel Semi-Automatic Screw Cap Tube Rack Capper/De-capper** for Micronic 96-format Internal Thread tubes and racks
46-6604	**FluidX Aperio 8-Channel Semi-Automatic Screw Cap Tube Rack De-capper/Capper** for LVL Technologies 96-format External Thread tubes and racks
46-6606	**FluidX Aperio 8-Channel Semi-Automatic Screw Cap Tube Rack De-capper/Capper** for Micronic 96-format External Thread tubes and racks
FluidX Aperio™ 6-Channel Semi-Automatic Screw Cap Tube Rack Decapper/Capper for use with 48-format racked tube	
46-6511	**FluidX Aperio 6-Channel Semi-Automatic Screw Cap Tube Rack De-capper/Capper** for FluidX 48-format External Thread Jacket Cryo tubes and racks
46-6512	**FluidX Aperio 6-Channel Semi-Automatic Screw Cap Tube Rack De-capper/Capper** for FluidX 48-format Internal Thread Jacket and Non-Jacket Cryo tubes and racks
46-6513	**FluidX Aperio 6-Channel Semi-Automatic Screw Cap Tube Rack Capper/De-capper** for Nunc 48-format Internal Thread Cryo tubes in 65-7541 racks
46-6605	**FluidX Aperio 6-Channel Semi-Automatic Screw Cap Tube Rack De-capper/Capper** for LVL Technologies 48-format External Thread tubes and racks
FluidX Aperio™ 4-Channel Semi-Automatic Screw Cap Tube Rack Decapper/Capper for use with 24-format racked tubes	
46-6521	**FluidX Aperio 4-Channel Semi-Automatic Screw Cap Tube Rack Capper/De-capper** for FluidX 24-format External Thread Jacket Cryo tubes and racks

IntelliXcap™

Integration Friendly

IntelliXcap™ is the next-generation capper and de-capper, engineered for increased throughput, ease of use and high system reliability, making the system ideal for any laboratory managing compound libraries or biological sample stores.

Capper & De-capper for 96, 48 and 24 format Screw Capped Tubes

KEY FEATURES

Advanced Automation Means Increased Throughput

- IntelliXcap is extremely fast and works with multiple sample storage tube types from a range of tube manufacturers in 24, 48 and 96 format
- The only 96-format full rack capper and de-capper capable of de-capping a complete rack of 96 tubes in as little as 20 seconds
- Automation and high speed reduces sample handling time, increasing sample throughput workflow
- Ideal for medium to high-throughput laboratories managing compound libraries, biobanks or other biological samples

Compact, Modular Design Means Ultimate Flexibility

- IntelliXcap features the unique, fully automated, interchangeable IntelliXcartridge cap driver system
- IntelliXcartridge™ allows change between different pre-configured tube types in less than 2 minutes
- Simply by fitting the relevant IntelliXcartridge, IntelliXcap is compatible with all FluidX sample storage tubes, as well as sample storage tubes from Thermo Matrix, Thermo Nunc, LVL and Micronic
- IntelliXcartridge is available for both internal and external thread screw-cap tubes
- No need for specialist intervention to change cartridge drivers
- Control is via a quick installation, easy-to-use touch panel
- Light Curtain System detects the height of tube rack on the stage reducing the risk of damage to tubes, samples or the instrument itself that could be caused by failed de-capping / capping or the use of incorrect consumables

Easy to Use, Easy to Integrate

- Quick installation, easy-to-use touch panels bring instant control
- Wide operating temperature range of 5°C to 40°C
- Electric torque control means less persistent wear on cap drivers
- Easily integrated, sample rack stage extension facilitates fully automated workflow integration

Driver and Cap Compatibility

- We provide a wide range of custom made and off the shelf driver cartridges to accommodate your specific labware needs
- The modular design of IntelliXcap™ allows you to quickly and easily change the cap driver cartridge and seamlessly swap between tube types, making the instrument the ideal capper/de-capper for your automated high throughput workflows
- Due to its flexibility, with one IntelliXcap™ instrument you can cap, de-cap and re-cap both internal and external thread tubes
- Please contact us to discuss your specific tube requirements

Weights and Dimensions

	Weight (kg)	Height (mm)	Width (mm)	Depth (mm)
IntelliXcap 96	26.80	320	256	468
IntelliXcap 48	28.74	386.2	256	464.4
IntelliXcap 24	27.96	386.2	256	464.4

Ordering Information

46-8012	**FluidX IntelliXcap 96 96-Format Screw Cap Tube Rack De-capper/Capper** with automatic glide rail for integration, includes 1 cartridge of choice, please quote tube type when ordering. Suitable for all FluidX tubes and almost all other brands with IntelliXcartridges
46-8011	**FluidX IntelliXcap 48 48-Format Screw Top Tube Rack De-capper/Capper** with automatic glide rail for integration, includes 1 cartridge of choice, please quote tube type when ordering. Suitable for all FluidX tubes and almost all other brands with IntelliXcartridges
46-8010	**FluidX IntelliXcap 24 24-Format Screw Top Tube Rack De-capper/Capper** with automatic glide rail for integration, includes 1 cartridge of choice, please quote tube type when ordering. Suitable for all FluidX tubes and almost all other brands with IntelliXcartridges
46-8112	**FluidX IntelliXcap Extended Stage for Automation.** Suitable for IntelliXcap 24, IntelliXcap 48 and IntelliXcap 96

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XCAP™

Xcap™ is a semi-automatic system for TPE septum cap sealing of sample tubes in 96-well SBS format.

Offering secure storage tube sealing, Xcap helps preserve sample integrity and audit trails in biobanks, compound libraries and other high-throughput storage applications.

Semi-Automatic Septum Cap Sealer for Sample Storage Tubes

KEY FEATURES

Flexible Sealing Performance, Broad Compatibility

- Xcap is suitable for use with all 96-format FluidX sample storage tubes with TPE Septum Caps, as well as Micronic tubes with TPE Capmats, Matrix Technologies tubes with Sepraseals and Abgene Sealing Mats
- Depth of capping action is adjustable with the use of spacer plates, which ensures effective and efficient capping of all tube types
- Xcap can be used to seal either full, or partially-full, racks

Fast and Easy to Use

- Cycle time for capping is 20-30 seconds, depending on tube type and on the spacer plate used
- Simply place a rack in the Xcap drawer, with a TPE septum cap mat fitted loosely on top and, if needed, a spacer plate (adapter). Push the drawer shut, and the capping action will start automatically. Once all caps have been inserted, the drawer will open automatically and the sealed rack of tubes can be removed

Additional TubeLock Functionality

- Using Xcap in conjunction with FluidX racks featuring TubeLock enables automatic locking and unlocking of tubes within the rack
- FluidX racks with TubeLock are dual position, allowing tubes to be locked in place for added sample security during handling
- Individual sample tubes can be pushed downwards to lock and pulled upwards to unlock in the rack
- For a faster approach, Xcap, with an adapter set, can be used to lock, or unlock, all tubes in a 96-format rack simultaneously

Ordering Information

System	
46-2004-115V	**FluidX Xcap Semi-Automatic Septum Capper 115V** Capmat Sealer, includes set of adapters: 42-1001; 6.09.664 & 42-1003 suitable for 96-format FluidX tubes with TPE Caps
46-2004-230V	**FluidX Xcap Semi-Automatic Septum Capper 230V** Cap-mat Sealer, includes set of adapters: 42-1001; 6.09.664 & 42-1003 suitable for 96-format FluidX tubes with TPE Caps
Adapters	
42-1003	**Adapter for FluidX tube rack [A]** C:2mm H:4mm - Included
6.09.661	**Adapter for FluidX tube rack [B]** C:1.6mm H:14mm - Included
42-1001	**Adapter for FluidX tube rack [C]** C:2mm H:21mm - Included
6.09.663	**Adapter for FluidX tube rack [D]** C:0.4mm H:30mm - Optional
6.09.664	**Adapter for FluidX tube rack [E]** C:0.4mm H:37mm - Optional

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XDC-96 Automatic Whole Rack Septum Capping & De-capping System

Integration Friendly

XDC-96 is a compact, standalone, high-speed whole rack tube de-capper and capper that automatically removes, re-caps or disposes of septum caps from a full 96-format SBS rack of sample storage tubes.

XDC-96 can also be integrated into automated sample storage and handling environments.

Using the XDC-96 systems for secure storage tube sealing, and eliminating the need for manual intervention, preserves sample integrity and audit trail in biobank, compound library and other high-throughput storage applications.

XDC-96

KEY FEATURES

Broad Compatibility

- XDC-96 is suitable for use with most 96-format TPE septum sealed caps
- Compatible with:
  - FluidX 96-format tubes with septum caps (0.3ml, 0.48ml, 0.7ml, 0.9ml)
  - Micronic Microtubes with Capcluster caps (0.65ml, 1.4ml)
  - Matrix TrakMates with SepraSeal caps (0.5ml, 0.75ml, 1.4ml)
  - Abgene Cypher with caps (0.65ml, 1.2ml)
  - Contact FluidX for information on other tube types
- Type of tube to be used with XDC-96 should be specified at time of ordering; XDC-96 is recommended to be used with natural colored TPE septum caps.

Improved Productivity

- XDC-96 de-capping function eliminates the need to manually remove septum caps, dramatically improving productivity
- Septum piercing is no longer required, meaning a wider range of liquid handling systems can be considered for use on samples
- XDC-96 will dispose of the septum caps, or recap the same caps into the same tubes, manual recapping after sampling from tubes is no longer required

Fast and Easy to Use

- Cycle time for de-capping and re-capping is 15-30 seconds, depending on tube type
- XDC-96 is a standalone system with a simple to operate LCD touch screen, allowing set up, calibration and settings changes without PC connection
- XDC-96 can be used in standalone mode, or can be integrated into automated systems easily by using the RS232 interface
- Windows-compatible maintenance and calibration software package provided with each unit

Additional Automation Workflow Features

Purge Module: XDC-96 is fitted with a purge module that allows an inert gas of choice to be layered over the samples immediately after de-capping, and immediately before re-capping. This layering technique protects sensitive samples from the action of humidity and oxygen while uncapped. Purging immediately prior to re-capping ensures that the sample is stored in a dry, inert atmosphere.

Air Blade: The air blade feature prevents the waste chute from becoming blocked when caps are sent to disposal. Useful especially when caps might be sticky after DMSO use. An air cushion is created as the caps are removed from the harpoons, propelling the unwanted caps through the waste chute at speed.

	XDC-96
Dimensions	215mm W x 350mm H x 680mm D (with shuttle) 480mm D (without)
Weight	30kg
Power Requirements	AC 115V-230V +/-10%, Power <55W
User Interface	LCD touch screen for manual operation
Cable Interface	Serial RS232

Ordering Information

46-5003	**FluidX XDC-96 Automatic 96-format Tube Rack De-capper/Capper** Compatible with various FluidX, Matrix or Micronic tubes and individual caps (some restrictions apply to smaller volume tubes). For either integration or benchtop use only. Please specify tube range when ordering i.e. FluidX, Abgene, Matrix or Micronic

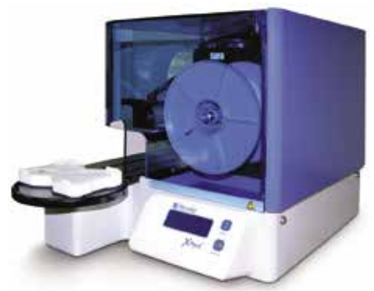
XPeel® Automated Plate Seal Remover

Integration Friendly

XPeel® automatically removes seals from a wide range of microplate types with the single touch of a button.

A robust and elegantly-simple automated system, XPeel eliminates the need for repetitive, manual removal of plate seals and enables the adoption of the gold-standard operating model (sealed plates, no lids).

The patented XTape® removal medium eliminates the need for mechanical removal mechanisms which are often prone to failure. XPeel is highly reliable and can be used manually or integrated into automated systems with external robotics.



XPeel®

KEY FEATURES

Compatible with Virtually All Plate Types and Seal Types

- XPeel can be used with a wide variety of microplates, including full-skirted PCR plates, low-base microplates and deep-well (up to 2ml) plates
- XPeel is compatible with a variety of full-plate seals, including heat and pressure applied seals
- Uses proprietary XTape to de-seal microplates, up to 400 seal removals per XTape roll

Preserves Sample Integrity

- Eliminates cross contamination common with manual seal removal techniques
- Supports Quality Control measures requiring samples to be sealed until their moment of use
- XPeel holds the plate down whilst the seal is peeled away from the plate, eliminating another contamination issue
- Operating mode minimizes plate or seal damage
- Integrated seal removal verification feature reduces plate handling errors

Easy to Use, Easy to Integrate

- Can be used as a standalone system, or integrated into automated and robotic workflows via Serial RS232 remote interface
- One-touch, push-button operation to de-seal plates makes XPeel an ideal standalone device for busy laboratories
- Capacity to remove up to 200 plate seals per hour
- Robust, time-proven device with hundreds of units placed globally in a range of manual and automated environments

	XPeel® Automated Plate Seal Removal
Seal Removal Capacity	Up to 400 per XTape® Roll
Seal Verification Sensor	Reflective with Sensitivity Adjustment
Communication	Serial RS232
Motion Parameters	XTape Adhere Time, De-seal Speed, Plate Output Orientation, Begin Peel Location
General Parameters	Auto XTape Advance, Plate Verification, Menu Language
Weight	35kg (76lbs)
Power Requirements	115VAC, 4A, 60Hz 230VAC, 2A, 50Hz
Throughput	Up to 200 Plate Seal Removals per Hour

Ordering Information

Please contact us for further information.

a4S™ Automatic Roll Heat Sealer

Integration Friendly

A perfect solution for automated heat sealing of microplates, PCR plates, assay plates and storage plates used in medium to high-throughput or full automation applications. Unrivalled sealing performance and consistency with as many as 5,000 perfect seals without user intervention.

a4S™

KEY FEATURES

Simple Installation

- No need for compressed air - Installation is fast and flexible
- 2 positions for different roll sizes - Increased flexibility
- Optional roll cover - Seal protection for sensitive applications

Easy Handling

- Color touch screen with intuitive user interface - Ease of use
- Unlimited password protected protocols - 3 security levels save personalized and SOP set temperatures and times
- Rapid heating - Fast start up time, block uniformity is maintained to ± 1 °C
- Variable time/temperature controls - Adjustment of time and temperature settings enables the perfect seal to be established for any sealer friendly, high-quality plate type, e.g. all 4titude® plates
- Up to 5,000 seals without manual intervention - True walk-away-system

Reproducible Sealing

- Reproducible sealing - Fixed pressure and accurate time and temperature controls ensure consistent sealing
- High sealing pressure - Improved seal uniformity on the widest range of plates
- Sealing cycle time of less than 15 sec - Time saving

High Flexibility

- Compatible with a wide range of plate types, from racked tubes to 1536 well PCR plates - Highest flexibility
- Flexibility of seal material choice - 4titude® offers a wide range of sealing materials, with a variety of properties
- Compatible with gas permeable heat seals - No instrument modification necessary for maximum convenience

Economic Efficiency

- Competitive pricing - Save money without compromises
- Auto standby mode - Saves energy and prolongs component life
- 2 year warranty on parts and labour
- Extended warranty and service contracts available - For peace of mind

Plug and Play Robotic Integration

- Compliant with SiLA standards for rapid integration of automated systems (www.sila-standard.org). This means “plug and play” connectivity with other instruments, such as readers, robotic arms and liquid handlers, to give a custom automated system without the need to write expensive custom drivers. The a4S heat sealer is extremely versatile leaving you the freedom to expand and configure your systems such as adding robotic plate handling.
- Full communication protocol available - Operate the instrument and record sealing conditions for each seal using the RS232 communication port

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	a4S Automatic Roll Heat Sealer
Dimensions (W x L x H)	230 x 507 x 276 mm
Sealing Temperature Range	100-195 °C
Sealing Time Range	0.1-10 sec
Weight (without roll)	27 kg
Power Supply	V in: AC 100-240 V V out: DC 24 V 320 W
Power Consumption	700 W (max)
Working Temperature Range	10-30 °C
Operating Humidity (RH)	0-85%
Connection	RS-232 serial port, USB port

Rolls with a width of between 75-85 mm can be loaded in either of two roll positions, depending on roll length and available space, enabling the entire instrument to fit under the gantry of most liquid handling robots.

The width and length of the applied seals are set to precisely cover an SBS footprint plate without interfering with plate stacking. The seal position can be adjusted to give an overhang at one end of the plate to facilitate ease of seal removal.

Ordering Information

Please contact us for further information.

FluidX Sample Tube Management Systems

Manual Tube Pickers & Manual Decappers

A manual device, with one-handed operation, the XTP-1 incorporates an eject button enabling tube pick and place operations whilst avoiding contact between the hand and tube.
The XTP-1 minimizes the risk of heat transfer to a frozen sample, as well as minimizing the risk of possible cross contamination.
Simple to use, even when wearing laboratory or cryogenic-handling gloves, the tube picker is available in either 96-rack or 48-rack format.

XTP-1 Manual Sample Tube Picker

KEY FEATURES

- Single-handed operation, soft grip handle
- Easy to use whilst wearing gloves
- All components that potentially come into contact with samples are made from temperature-resistant and chemically-resistant plastics
- Tubes can be selected from any position in the rack
- Removes the need for manual contact with tubes reducing the risk of heat transfer to frozen samples and cross contamination
- Ideal for use with FluidX sample storage tubes and compatible with sample storage tubes from most other manufacturers

Specification

96-format XTP-1	length 150mm	diameter 17mm	weight 20g
48-format XTP-1	length 165mm	diameter 17mm	weight 23g

Manual Decappers: The ideal range of accessories for the manual removal of TPE caps and Screw caps.

Our TPE septum cap options comprise: A 1-way decapper for the individual removal of TPE caps and an 8-way decapper for the simultaneous removal of 8 TPE caps. For screw caps, we offer our FluidX screw cap Capper/Decapper, designed specifically for external thread tubes.

Ordering Information

10-5010	**FluidX XTP-1 Manual Single Tube Picker**, 96-format, 1 picker per case Suitable for FluidX and most other manufacturers 96-format tubes
10-5020	**FluidX XTP-1 Manual Single Tube Picker**, 48-format, 1 picker per case Suitable for FluidX and most other manufacturers 48-format Cryo Tubes
65-54000	**FluidX Manual Decapper-1**, for removal of 1 TPE cap at a time, 1 decapper per case
65-54001	**FluidX Manual Decapper-8**, for removal of 8 TPE caps at a time, 1 decapper per case
65-54004	**FluidX Manual Screw Cap Capper/Decapper,** 1 capper/decapper per case. Suitable for FluidX 96-format External Thread tubes





XTL Automated Tube Labeller

A highly specialized printer and applicator for the automatic application of individually printed labels on microtubes within SBS format racks.

- Automatic application of individually printed labels on microtubes within SBS format racks
- Thermal printing, labels 800 tubes per hour

KEY FEATURES

- Uses thermal printing to label 800 tubes per hour
- Standard label sizes: 28 x 15mm or 28 x 12.5mm. Further labels sizes are also available
- Compatible with both capped and non-capped tubes
- An integrated PLC unit offers maximum control

Specifications

	XTL Automated Sample Tube Labeller
Interface	USB and RS232
Software	Windows XP, 7 & 10 compatible GUI
Print method	Thermal transfer. Able to print a variety of widely used barcodes and human readable text
Label size	Multiple label sizes available depending on tube size. These specially designed labels can withstand temperature as low as -40 °C with no loss of adherence
Media	Compatible with FluidX sample storage tubes, as well as sample storage tubes from Thermo Matrix, Thermo Nunc, Sarstedt and Micronic Operates on capped and uncapped tubes within a 24, 48 or 96 format SBS rack
Capacity	800 tubes/hour (approx)
Dimensions	L 690 x W 510 x H 520mm
Power	100-240 VAC
Air supply	6-8 bar
Weight	25Kg

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Ordering Information

Use these numbers to request a quote	
75-0001	**XTL Base Unit,** including one gripper head, please specify at point of ordering
75-0101	**XTL Four Rack Tray**, optional rack tray to run with four racks unattended
75-9001	**XTL Multiple Tube Configuration**, required if XTL will be used for more than one tube type
77-0006	**XTL Database Software,** optional software, required if using multiple tube setup
	XTL Gripper Kits. Please contact us for further information
XTL Labels	
75-1001-A	Label 9mm x 32mm, 2000 labels per roll, White PetTop, suitable for -80°C - +150°C
75-1001-B	Label 9mm x 38mm, 2000 labels per roll, White PetTop, suitable for -80°C - +150°C
75-1001-C	Label 9mm x 42mm, 2000 labels per roll, White PetTop, suitable for -80°C - +150°C
75-1001-D	Label 13mm x 28mm, 2000 labels per roll, White PetTop, suitable for -80°C - +150°C
75-1001-E	Label 13mm x 35mm, 2000 labels per roll, White PetTop, suitable for -80°C - +150°C
75-1001-F	Label 13mm x 42mm, 2000 labels per roll, White PetTop, suitable for -80°C - +150°C
75-1001-G	Label 15mm x 35mm, 2000 labels per roll, White PetTop, suitable for -80°C - +150°C
75-1001-H	Label 15mm x 38mm, 2000 labels per roll, White PetTop, suitable for -80°C - +150°C
75-1001-I	Label 15mm x 42mm, 2000 labels per roll, White PetTop, suitable for -80°C - +150°C
75-1001-J	Label 15mm x 28mm, 2000 labels per roll, White PetTop, suitable for -80°C - +150°C
75-1013	XTL Ribbon, Thermal Transfer Black Ribbon, 35mm x 450m
75-9900	XTL Customization for non-standard tube labels. Please provide 2 rolls from 2 different batches for testing and validation with tube labeller. (Brooks is not responsible for batch-to-batch variations in labels causing reliability issues with the tube labeller)

Sample Tube Rack Thawing Station

The Rack Thawing Station is a stand-alone system designed to speed up the defrost time of chilled or frozen sample storage tubes. The system operates with 24, 48 or 96-format SBS racks providing gentle, but accelerated, thawing of racks of sample tubes.

Tubes are simultaneously and quickly thawed with minimum risk of sample damage and are ready for use at ambient temperature in around 20 minutes.

KEY FEATURES

Thawing with Minimized Risk of Sample Damage

- Complete sample recovery without applying heat
- Gentle, yet faster, tube thawing is achieved by forcing air at ambient temperature, using a fan, over the frozen sample tubes
- Minimizes the risk of sample damage as no direct heat is applied to the sample tubes

Fast and Flexible Performance

- A typical frozen sample, in deionized water, will defrost to an ambient temperature of 20°C in approximately 20 minutes
- The Sample Tube Rack Thawing Station does not require warm-up time, reducing delays in sample processing
- Compatible with SBS racked tubes in 24, 48 and 96-format
- Compact design is able to defrost whole racks of tubes simultaneously
- Simply select a 24, 48 or 96-way insert to suit sample format, place rack on thawing top plate and press start

	FLX-10-1061 Sample Tube Rack Thawing System
Fan Flow	>5 CFM
Defrost Time	Approx. 20 minutes for frozen deionized water to reach ambient 20°C
Rack Compatibility	24, 48 and 96-format racks conforming to ANSI/SBS 1-2004 microplate footprint dimensions
Dimensions L x W x H	138mm x 97mm x42mm
Electrical	100-240VAC, 50/60Hz, 0.3A 12VDC, 4W max
Weight	264g

Ordering Information

FLX-10-1061	**FluidX Microtube Thawing Station**

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FrostX^2 Sample Tube De-Icing System

FrostX^2 is designed to quickly remove ice and frost from SBS-format racks of frozen sample tubes, to ensure complete readability of 2D datamatrix codes in cold-storage environments. Sample thawing is not necessary for accurate barcode reading and the FrostX^2 de-icing process takes 10 to 15 seconds whilst your sample remains frozen.

Failure to remove frost from a 2D-coded sample tube prior to reading can lead to serious errors. Delays in decoding can result from frosting, and tubes can become completely unreadable if more than 30% of the barcode is frosted.

FrostX^2 is a compact and lightweight unit, producing effective defrosting with any type of tube that can be stored in an SBS-format rack. The unit generates a high-pressure air blade, which removes the frost from the bottom of the tubes in a controlled and homogenous way.

KEY FEATURES

Broad Compatibility

- FrostX^2 can be used to defrost any 2D datamatrix coded tubes in SBS-format racks from all manufacturers
- 24, 48, 96, 240 and 384-format racks are all accommodated. PCR tubes, e.g. 2D-coded Random Access Tubes from 4titude are also supported
- Defrosting platform has a level, stable and dry surface to aid rapid defrosting

Designed With Sample Integrity in Mind

- Complete defrosting without applying heat, sample remains frozen
- Sensor confirms when SBS rack is correctly inserted for defrosting
- No direct heat is applied to the sample tubes, minimizing the risk of sample damage

Fast and Flexible Performance

- Number of air blade cycles, pressure of air flow and the speed that the air blade moves across the rack can be varied to optimize defrosting performance for each rack
- User-defined settings can be called up depending on rack type
- Defrosting process typically takes 10 to 15 seconds whilst the sample remains frozen

	FrostX^2 Sample Tube Rack Defrosting System
Supported Labware	Any SBS-format rack of any tubes. 24, 48, 96, 240 and 384-formats supported
Ambient Temperature	10°C to 40°C
Ambient Humidity	<70% relative humidity
Dimensions L x W x H	375mm x 234mm x 155mm
Electrical	24V, 1.5A input
Weight	5.3kg
Input Air Pressure	2.5 to 6 bar
Ambient Parameters	No vibration, no direct sunlight

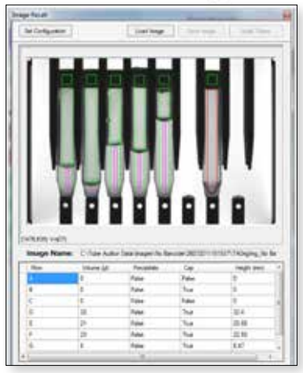
Ordering Information

10-8001	**FluidX FrostX2 De-Icing Instrument.** Suitable for SBS-format racks, 1 base unit and AC adapter per case

Tube Auditor™

Integration Friendly

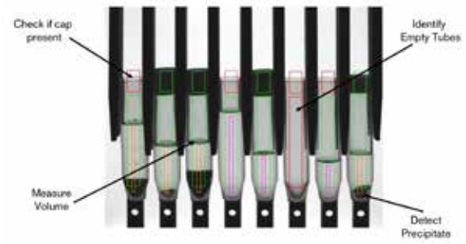
Brooks Tube Auditor™ is a fast, accurate and non-invasive device used to measure sample volume in microtubes. The instrument performs quick and easy Goods-In and Goods-Out QA checks to help ensure that your suppliers are providing what you ordered and that your customers are receiving what you promised. Tube Auditor gives confidence in sample quality (at both collection and output) and helps to reduce downstream costs and waste, which can arise from empty wells and precipitated samples



- High-speed measurement - accurate to better than +/- 10µl - minimizes downstream costs from the processing of empty plate wells
- Compatible with 96-SBS or 48-SBS format racks
- Precipitate detection - increases confidence in the concentration of delivered output samples
- Cap detection - helps avoid damage to liquid handling tips caused by failed de-cap operations
- No need to de-cap tubes - eliminates possibility of cross contamination
- Manual or remote operation - if integrated into an automated system, an OPC license is required to enable remote control
- Image storage and recall - allows audit trail and provides ability to re-assess or re-analyze the image
- Tube Auditor uses high-speed vision technology to measure sample volume and detect precipitate

Specification

Parameter	Tube Auditor
Volume measurement	√
Cap detection	√
Manual and remote operation	√
User interface software	√
Image capture and recall	Available with “Pro” version enabled only
Precipitate detection	Available with “Pro” version enabled only
Dimensions (L x W x H)	872 x 433 x 433mm (34.33 x 17.05 x 17.05in)
Weight	35kg (77lbs)
Electrical	110-240 VAC 50/60Hz
PC	Microsoft Windows 10
Output data format	CSV or XML(user configurable)



Ordering Information

Tube Auditor compatible with 96-SBS racks	
96-0001	Standard configuration; includes 1D Barcode Reader (to identify the evaluated SBS-rack), PC and TA software used to assess volumes by default
96-0002	Equipped with 2D reader; includes all items mentioned on 96-0001 plus a 2D barcode reader for fast identification of racked 2D-coded sample tubes
96-0003	Standard configuration for integration; includes 1D barcode reader (to identify the evaluated SBS-rack), PC and TA software used to assess volumes by default; also equipped with an OPC license (Open Platform Communications) for industrial telecommunication and system integration
96-0004	Premium configuration; includes 1D barcode reader (to identify the evaluated SBS-rack), PC and TA software used to assess volumes by default; also equipped with a 2D barcode reader (for sample tubes) and with an OPC license for system integration
Tube Auditor compatible with 48-SBS racks	
98-0001	Standard configuration; includes 1D barcode reader (to identify the evaluated SBS-rack), PC and TA software used to assess volumes by default
98-0002	Equipped with 2D reader; includes all items mentioned on 98-0001 plus a 2D barcode reader for fast identification of racked 2D-coded sample tubes
98-0003	Standard configuration for integration; includes 1D barcode reader (to identify the evaluated SBS-rack), PC and TA software used to assess volumes by default; also equipped with an OPC license (Open Platform Communications) for industrial telecommunication and system integration
98-0004	Premium configuration; includes 1D barcode Reader (to identify the evaluated SBS-rack), PC and TA software used to assess volumes by default; also equipped with a 2D barcode reader (for sample tubes) and with an OPC license for system integration
Software License for Pro version	
97-0001	Precipitate detection

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FreezerPro® - Laboratory Management Software

Integration Friendly

The FreezerPro system is a scalable web-based sample inventory management system ideal for users managing hundreds of collections in all types of organizations ranging from lower throughput labs to central biorepositories with millions of records; delivers secure management of samples and sample information.

- Complete sample management
- Track samples in and out of freezers
- Reporting and data export/import (multiple formats)
- Live and smart search
- Full audit trails

Using cross-region servers and industry-defining storage technologies, the system is designed to keep samples in the right conditions and make retrieving them for study easier. We manage security through sample data encryption, both during sample transit and while they are at rest. FreezerPro is designed and developed as a web-based sample management system that provides access to sample information from anywhere in the world.

- **No IT Requirements Whatsoever** - By not requiring installation, individual labs within larger organizations gain more autonomy. Start-ups and other small labs can completely avoid all IT staffing and investment
- **Regulatory Liability Protection** - Remove nearly all liability concerns related to data security. Using FreezerPro® Cloud negates expensive information security upgrades for individual labs
- **Lower Capital Expenditure** - With FreezerPro Cloud, the total cost of deployment is significantly lower, compared to other sample management software options. FreezerPro is a class-leading frozen sample management solution that is indispensable to any modern scientific or pharmaceutical laboratory
- **Deployed in Hours, Not Weeks** - FreezerPro systems automate more daily sample management operations than expensive software solutions
- **Makes Daily Lab Operations Easier** - FreezerPro Cloud records information for sample check in and out, aliquotting and inheritance, plus storage location data with only a few clicks or a drag of the mouse
- **Enhances Accuracy and Availability of Lab Information** - Advanced data mining, automatic data validity checks, hundreds of alert settings and embedded integration with Microsoft Excel are just a few of the tools users and admins have to ensure that data is input properly and is immediately accessible for analysis and reporting.

Automated Sample Storage: Ambient to -190°C

In addition to our extensive range of consumables and instruments, Brooks Life Sciences is also the global leader in automated sample storage systems.

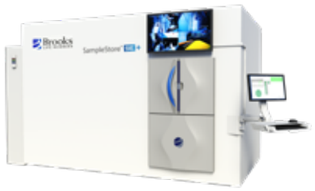
Our deep application experience and proven, highly reliable technology protects sample integrity and improves sample visibility to ensure the continuity of your sample management. From compound management and high-throughput screening, to biobank sample management, to storage of cellular products at cryogenic temperatures; Brooks provides flexible, modular solutions that offer the security and reliability to optimize our customers workflow. As the preferred storage partner to the world's top biotechnology companies, Brooks reduces risk and delivers industry-leading uptime that maximizes the return of your sample management investment.

Flexible automated storage technology that fits your applications allowing you to focus on delivering your research goals.

Transforming workflows and productivity to improve research timeslines our stores accommodate from 70,000 to more than 10 million tubes and are adaptable to meet future needs.

- **SampleStore™ SE+: Ambient to -20°C**
- **BioStore™ SE: -80°C**
- **SampleStore™: Ambient to -20°C**
- **BioStore™ II: -80°C**
- **BioStore™ III Cryo: -190°C vapor storage environment**
- **BioStore™ III v: -20°C and -150°C**

SampleStore™ SE+ Ambient to -20° C



BioStore™ II -80° C

BioStore™ III -190° C

Note: See our Cryo range of stores for -190°C storage

Strata™ Control Software

Brooks Strata™ control software enables precise sample inventory management within the Brooks automated storage systems. Strata's intuitive, information rich interface makes automated storage flexible, easy and convenient.

- No special engineering expertise is required
- Efficiently processes and securely protects samples
- Sample data is accessible from any location using a laptop, tablet, or other web enabled devices.
- Simplified integration with corporate IT and LIMS networks
- Intelligent diagnostics and error recovery ensure reliable performance.

SampleStore™: Ambient to -20°C Automated Storage

Exceptional Flexibility & Highly Configurable Modules

For over 20 years, Brooks has been the global leader in high density automated sample storage.

- Preferred storage partner of choice, supporting 9 out of 10 top biopharma companies
- A range of flexible storage temperatures from room temperature to -20°C
- Fully configurable modules allow a wide range of applications: capacity, throughput and labware
- Adaptable storage automation from single labware type to multiple formats: tubes, vials, or plates
- Versatile picking capability including standard SBS 96-way tubes, SBS format micro plates, REMP microtubes, vials

FEATURES AND BENEFITS

- **System sizing:** a wide range of capacity options are available from 200,000 to over 22 million tubes dependent on labware
- **Functional modules:** allow for customization to meet your needs today and can be modified to meet your future needs
- **High-density storage:** reformatting labware to proprietary HD storage trays can more than double storage capacity compared to SBS formatted storage
- **Multi-pitch shelving:** dynamic storage shelving maximizes storage density. A sample imaging module captures barcodes, labware type and heights to assure an optimal storage location
- **Easy to use:** no special expertise required to operate the system
- **Improved thermal insulation for enhanced sample temperature stability and energy efficiency**
- **Modular capacity and throughput options optimized to the sample collection size and workflow throughput requirements**
- **Automation Interface option:** provides a means of directly interfacing the store with an external automation system

High-density storage:
75% increase in storage capacity over SBS racks

Storage Capacity Examples

Description & Model	Length	Width	Height	Capacity FluidX 0.2ml tube
S3-C18-H10	2.8m [9ft 2"]	3.7m [12ft 2"]	2.6m [8ft 6"]	1,100,000
S3-C60-H15	3.8m [12ft 6"]	7.5m [24ft 7"]	2.6m [8ft 6"]	3,900,000
S3-C130-H15	3.8m [12ft 6"]	13.9m 45ft 7"]	2.6m [8ft 6"]	9,800,000
S3-C170-H20	4.8m [15ft 9"]	17.5m [57ft 5"]	2.6m [8ft 6"]	22,000,000

Strata™ Sample Management Software

- Simplified user interface, adaptable for day-to-day operation with standard dashboards, to more detailed drill-downs and advanced screens for custom needs of 'super users'
- Compatible with PC and mobile devices, Strata simplifies integration with corporate IT systems and a range of LIMS supporting web service options
- Allows remote monitoring and management of the store protecting sample integrity with temperature monitoring, throughput and space optimizations and security with user management, sample audit trail and CCTV feeds
- Supports Oracle and Microsoft SQL databases

Designed for Scalable Throughput

The Brooks Life Sciences SampleStore™ is scalable for sample storage capacity and throughput. Our Sample Management experts will design the store to meet the requirements of your workflow also considering the growth of the sample collection and future processing needs. The store can be customized to increase throughput.

- Single / Dual Tray Conveyors
- Single / Dual Shuttle Robotics
- Up to 16 picking stations
- Acoustic Workflow Compatible
- Automation Interface Module (AIM) for downstream processing
- 3 / 4-Lane Selectors to minimize Automation idle times

BioStore™ II: -80°C Automated Storage

Brooks BioStore™ II is an automated -80°C sample management and storage system for biobanks desiring consistent storage temperature and data integrity.

BioStore II is the only automated sample management and biological storage system that provides flexible, modular solutions with the security and reliability which can precisely fit the biobank customer's needs. It is ideal for biobanks at biopharmaceutical companies and research institutions trying to effectively manage sample inventories while minimizing temperature cycling that degrades sample quality.

- BioStore II improves sample quality with highly controlled cold-chain and inventory management. The BioStore II system's HD storage trays and multi-pitch shelving maximize storage density to offer storage efficiency and incredible storage density.
- BioStore II's decoupled robotics allow for targeted access and servicing while the rest of the system remains operational maximizing system uptime.
- Trained users can handle first level service issues and access the system in case of emergency.
- The proven BioStore II system provides the highest throughput, for optimum sample availability.

FEATURES AND BENEFITS

- **System sizing:** a wide range of capacity options are available from 70,000 to over 10 million tubes
- **Labware flexibility and adaptability:** handles the widest range of labware available in a single store, including cryovials, SBS formatted tubes, SBS plates and more
- **Functional modules:** allow for customization to meet your needs today and can be modified to meet your future needs
- **High-density storage:** reformatting labware to proprietary HD storage racks can more than double storage capacity compared to SBS formatted storage
- **Multi-pitch shelving:** dynamic storage shelving maximizes storage density. A sample imaging module captures barcodes, labware type and heights to assure an optimal storage location
- **Easy to use:** no special expertise required to operate the system

High-density storage:
75% increase in storage capacity over SBS racks

Storage Capacity Examples

Description & Model	Height	Length	Depth	Capacity FluidX 0.7ml
BioStore II SingleBank B2-C26-H10	2.78m [9' 1"]	5.67 [18' 7"]	2.94 [9' 8"]	990,000
BioStore II TwinBank B2-C52-H10	2.78m [9' 1"]	7.37 [24' 2"]	3.05 [10']	1,970,000
BioStore II QuadBank B2-C104-H10	2.78m [9' 1"]	12.77 [41' 11"]	3.05 [10']	3,900,000
BioStore II QuadBank B2-C104-H20	4.78m [15' 8"]	12.77 [41' 11"]	3.21 [10' 6"]	7,900,000

Strata™ Sample Management Software

- Simplified user interface, adaptable for day-to-day operation with standard dashboards, to more detailed drill-downs and advanced screens for custom needs of 'super users'.
- Compatible with PC and mobile devices, Strata simplifies integration with corporate IT systems and a range of LIMS supporting web service options.

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SampleStore™SE+: Ambient to -20°C Automated Storage

The SampleStore™ SE+ is a range of space efficient automated sample storage systems for temperatures from ambient to -20°C. The systems have been designed to fit in today's standard laboratory. SampleStore SE+ systems store a range of container types and sizes and provide compact, flexible, high density sample storage.

SampleStore SE+ solutions could be the first step in simplifying your lab sample inventory and sample management.

- The SampleStore SE+ is the ideal solution for labs which have smaller sample library collections but need the benefits of automation like easier, faster and more reliable access to high-quality samples
- The SampleStore SE+ captures sample barcode data upon input to automatically update the inventory and assign a storage location

FEATURES AND BENEFITS

- **Easier Sample Storage and Greater Space Efficiency**
  - SampleStore SE+ are space efficient solutions to fit in standard labs
  - Simple intuitive design for easy system operation
- **Simple Sample Management**
  - Push button sample storage and retrieval
- **Sample Protection**
  - Automated handling for minimized sample temperature cycling
  - Remote monitoring and product support
- **Labware Support**
  - 96-way Tube, AcoustiX™ Sample Tube, Vial, Plate, and REMP Selectors to support your Labware needs
- **Automation Interface**
  - Improve workflow and efficiency with direct workcell integration

High-density storage:
75% increase in storage capacity over SBS racks

FreezerPRO
From Brooks LIFE SCIENCES

Brooks offers integration of FreezerPro®, Brooks' popular sample information management software, with our automated stores. With this integration, stores customers can take advantage of FreezerPro's user-friendly graphical interface to manage a rich dataset of sample information, whether those samples are in automated or manual stores.

SampleStore SE+ Store Dimensions

	Height	Length	Depth
SE	2.48m [8ft 2in]	3.9m [12ft 10in]	2.1m [6ft 11in]
SE+1	2.48m [8ft 2in]	5.0m [16ft 5in]	2.1m [6ft 11in]]
SE+2	2.48m [8ft 2in]	6.1m [20ft 1in]	2.1m [6ft 11in]]
SE+3	2.48m [8ft 2in]	7.2m [23ft 8in]	2.1m [6ft 11in]

*Dimensions are for the cold chamber only, space is required for doors, control panels, access, etc

SampleStore SE+ Capacities

Labware Description	SampleStore SE	SampleStore SE+1	SampleStore SE+2	SampleStore SE+3
FluidX 2.0ml	105,000	157,500	210,000	262,500
FluidX 1.0ml	295,000	442,500	590,000	737,500
FluidX 0.7ml	355,000	532,500	710,000	887,500
FluidX 0.2ml	600,000	900,000	1,200,000	1,500,000
FluidX AcoustiX Tube	740,000	1,110,000	1,480,000	1,850,000
REMP Single Use Microtube, Foil Sealed	1,720,000	2,580,000	3,440,000	4,300,000
SBS Microplate, 14.5mm High, Foil Sealed	4,500	6,750	9,000	11,250

BioStore™ SE: -80°C Automated Storage

The BioStore™ SE is the new space efficient automated -80°C sample storage system from Brooks. The system bas been designed to fit in today's standard laboratory. BioStore SE stores a range of container types and sizes and provides compact, flexible, high density sample storage.

This could be the first step in simplifying your lab sample inventory and sample management.

- The BioStore SE is the ideal solution for those who have smaller sample collections but need the benefits of automation like easier, faster and more reliable access to high-quality samples.
- The BioStore SE captures sample barcode data upon input to automatically update the inventory and assign a storage location.

FEATURES AND BENEFITS

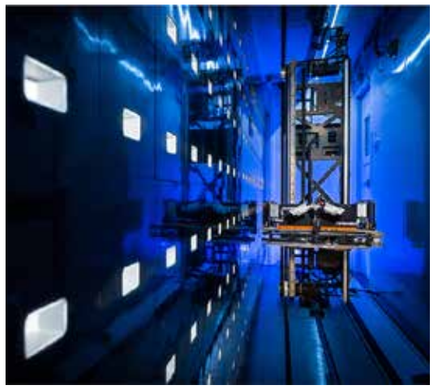
- **Easier Sample Storage and Greater Space Efficiency**
  - BioStore SE is space efficient to fit in standard labs
  - Simple intuitive design for easy system operation
- **Simple Sample Management**
  - Push button sample storage and retrieval
- **Sample Protection**
  - Automated handling for minimized sample temperature cycling
  - Robust refrigeration design for sample protection from disasters
  - Remote monitoring and product support
- **Optional -20°C Storage Zone**
  - Extra flexibility for storing different sample types

BioStore SE Store Dimensions

	Height	Width	Depth
BioStore SE	2.48m [8ft 2in]	4.31m [14ft 2in]	2.38m [7ft 10in]
Room Requirement	2.50m [8ft 3in]	5.51m [18ft 1in]	3.4m [11ft 2in]

BioStore SE Capacity

Labware Description	-80°C Capacity
2.0 mL sample storage tubes 2D-coded, external threads	76,000
1.0 mL sample storage tube, 2D-coded, external threads	212,000
0.7 mL sample storage tube, 2D-coded, external threads	265,000
0.3 mL sample storage tube, 2D-coded, external threads	375,000
0.2 mL 240 positions in an SBS rack, 2D-coded, External threads	495,000
SBS Microplates 14.5mm high, foil sealed	3,200



BioStore™ III Cryo -190°C Automated Storage

The BioStore III Cryo provides the best in class automated storage solution for cellular products and other materials requiring storage temperatures below glass transition (Tg).

The system combines Chart MVE's proven, high-efficiency LN2 stainless steel freezer with the Brooks automation technology and software to ensure the highest sample integrity, greatest sample protection and comprehensive inventory management and control with a superior user experience at an affordable price

Targeted and non-targeted samples are protected from warming above Tg (glass transition) throughout sample retrieval and quality is assured by viewing user access, sample inventory, history, and audit-trail reports

Emergency situation protection provides greater than 20 days of temperature stability in the case of energy or LN2 loss

- Highest sample protection
- Comprehensive inventory management system
- Superior user experience
- LIMS connectivity

FEATURES AND BENEFITS

- Consistent -190°C temperatures achieved for from top to bottom using LN2 vapor
- A sample integrity calculator protects samples from excessive warming by predicting their temperatures based on experimental evidence
- Integrity is further enhanced by protecting innocent samples during storage and retrieval transient exposures
- Racks are quickly pulled into an insulated sleeve, significantly slowing transient warming
- 20-day safety hold time below -135°C (Tg) with full manual access if power or LN2 are disrupted
- Comprehensive inventory management with vial-level ID, audit trail, reports, and LIMS connectivity

Sofware

- BioStore III controller software and touchscreen enable efficient order management and execution
- Its easy-to-use graphical interface permits tube-level inventory management plus sample storage, retrieval, and auditing
- The software monitors storage environment data and has comprehensive error handling
- LIMS connectivity is available for real-time sample management
- Full 21-CFR-11 reporting capability is available
- Administrator-defined libraries and access control can optimize the system as a shared resource

Specifications

Parameter	BioStore™ III Cryo 1500	BioStore™ III Cryo 1800
Dimensions	1,067mm (42in)	1,524mm (60in)
Cryobox capacity	252	630
2ml vial capacity	25,200	63,000

Ordering Information

Please contact us for further information

BioStore™ IIIv -80°C Automated Storage System

BioStore™ IIIv is a space efficient automated freezer which can be used for a wide range of applications and inventory types, designed by combining the advanced automation technologies and user interface from Brooks Life Sciences with the performance of the Chart Vario freezers. BioStore™ IIIv is an industry-first -80°C LN2 refrigerated automated storage system with inventory control including 21-CFR-11 reporting.

The system offers best-in-class sample security, data management, and inventory control. Complete sample protection with innovative design prevents transient sample warming events that usually occur during sample retrieval from typical -80°C mechanical storage systems.

The system is a perfect fit for biobank customers with high-value, temperature-sensitive samples protecting irreplaceable sample assets with the security and efficiencies of LN2 storage while providing all the benefits of automated storage at -80°C.

- Accommodates a wide range of labware
- Holds 630 cryoboxes for a wide range of labware
- Sample retrieval in under 60 seconds
- LIMS connectivity

FEATURES AND BENEFITS

- Can be set to a desired temperature between -20°C and -150°C*
- Insulating tower temperature protection for non-targeted boxes
- Extended hold time compared to mechanical freezers in emergency situations
- Ergonomically designed for simple user experience and minimized injury risk
- Superior user interface for easy operation and inventory documentation
- Simple, accurate and documented inventory management to the vial level
- Secure username and password access for full traceability
- Library management is an option, allowing the freezer to be partitioned into libraries with user defined access control
- LIMS integration and reporting options to enhance existing storage and tracking infrastructure
- Holds more than 120,000 1.0ml FluidX tubes or 63,000 2.0ml FluidX tubes
- Use with a variety of labware types including cryoboxes, SBS racks
- Automatic retrieval of samples through a touchscreen interface

Quality

- Innocent sample protection: insulated tower prevents sample warming of targeted and non-targeted tubes when a source rack is removed from the system
- Secure: access and defined libraries can be restricted to preauthorized users
- Disaster protection: extended sample hold-time during unplanned disasters or emergencies is 16 times longer than typical mechanical freezers
- Qualification services: IQ/OQ/PQ available to meet regulatory requirements

Specifications

Parameter	Value
Capacity storage locations	Holds 630 cryoboxes for a wide range of labware
1.0ml FluidX Tubes	1.0ml: 123,480
2.0ml FluidX Tubes	2.0ml: 63,000
6.0ml aseptic vials	15,750
Box level retrieval speed	Approximately 60 seconds
Labware types	Cryoboxes, SBS racks*
Static holding time vapor	4 days of hold time from -80°C to -60°C
Electrical	110v/220v
Empty freezer weight	114 lbs/ft2
Full freezer weight	3,721lbs/1,691kg
Maximum floor load	114lbs/ft2 (4.8kg/m2) (based on full system weight)
LN2 connection type	1/2" (NPT female fitting to existing vacuum jacket line)
LN2 supply pressure (open valve)	22-35 psig/1.52-2.41bar
LN2 evaporation rate/day (nominal)	12-14l/day
Dimensions (H x W x D)	125 inches (3175mm) x 60 inches (1524mm) x 70 inches (1778mm)
Warranty	1 year (includes onsite service, travel, and spare parts) (preventative maintenance and wear parts not included)
Other	Installation & operator training included Validation qualification services available

Ordering Information

Please contact us for further information

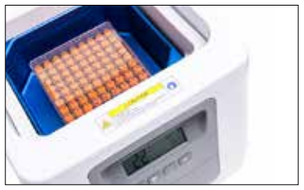
CryoPod™ Carrier

Portable Liquid Nitrogen (LN2)-Based Cryogenic Transport.

CryoPod™ Carrier provides a safe, reliable and portable < -150°C cryogenic environment for the handling and transport of biological specimens for over 3 hours. The instrument displays and logs temperature, date and time, and features audible and visual alarms, and integrates into an optional automated filling station for hands-free replenishing of the LN2 charge in less than15 minutes.

Ensures operator safety

- Allows safe and quick transportation of cryogenic samples
- Hands-free auto-fill option



Maintains sample cold chain integrity

- Temperature display with audible and visual alarms
- Temperature logging and retrieval

Delivers reliable performance

- Over 3 hours <-150°C
- No direct sample contact with LN2

Portable

- Compact footprint; only ~9 lbs
- Built-in handle and bottom finger grips

Specifications

Hold Time	Over 3 hours < -150°C with lid closed
Capacity	One 2” cryobox, 2 SBS plates or some cassette sizes
Charge	Requires < 3L liquid nitrogen (LN2)
Alarm	Two settings with audible and visual signals
Lid	Magnetized foam lid for safer transport and insulation
Power	3 AA alkaline batteries (included)
Temperature Audit Trail	Downloadable temperature log data via USB port and CryoPod Data Log Software
Weight	4.1 kg (9 lbs) without LN2 5.9 kg (13 lbs) fully charged with 3L LN2 - no samples
External dimensions (L x W x H)	34.0 x 32.0 x 26.0 cm (13.4 x 12.6 x 10.2 in)
Cryogenic chamber basket dims (L x W x H)	17.4 x 18.8 x 7.8 cm (6.9 x 7.4 x 3.1 in)

Ordering Information

243354-001	**CryoPod™ Carrier,** includes orange lid and manual fill kit
252888-002	**CryoPod™ lid,** green, optional
252888-001	**CryoPod™ lid,** orange, optional
252888-004	**CryoPod™ lid,** pink, optional
252888-003	**CryoPod™ lid,** grey, optional
252888-005	**CryoPod™ lid,** purple, optional
252885	**CryoPod™ Manual Fill Kit**
252886	**CryoPod™ LN2 Absorbent Pads,** 4pc, 2/pk

Brooks LIFE SCIENCES

Biocision Key Products

Biocision Key Products

Biocision - Standardization Through The Last Mile

Prepare.

Ice-free sample cooling and freezing
- Consistent and reproducible
- Ideal for working in a hood

CoolRack® and CoolBox™ cooling systems

Protect.

Controlled-rate cell freezing
- No alcohol
- High post-thaw recovery and viability
- Proven for stem cells, primary cells, PBMC, cell lines and more

CoolCell® controlled-rate alcohol-free cell freezing containers

Preserve.

Archival storage integrity
- Hinged lid helps box and lid stay together
- LN2 drain holes and water proof fiberboard

TruCool® hinged cryoboxes and FluidX sample storage tubes

Biocision CoolCell® Container Controlled-Rate, Alcohol-Free Cell Freezing

CoolCell® alcohol-free cell freezing containers ensure standardized controlled-rate -1°C/minute cell freezing in a -80°C freezer - without alcohol or any fluids. Proven for use with a variety of cell types including stem cells, primary cells, PBMC cell lines, insect cells, yeast and others. The patent-pending CoolCell technology utilizes a thermo-conductive alloy core and highly-insulative outer material to control the rate of heat removal and provide reproducible cell cryopreservation. CoolCell units are easy to use and deliver comparable results to expensive programmable freezers.

CoolCell® is proven to work with many cell types including:

Primary Cells

Neonatal Keratinocytes
Human WBCs
Mouse WBCs
Human CD34+
Muscle
Human Tendon Fibroblasts
Melanoma Tumor
Human Cardiac Ventricular
Human Cardiac Atrial

Stem Cells

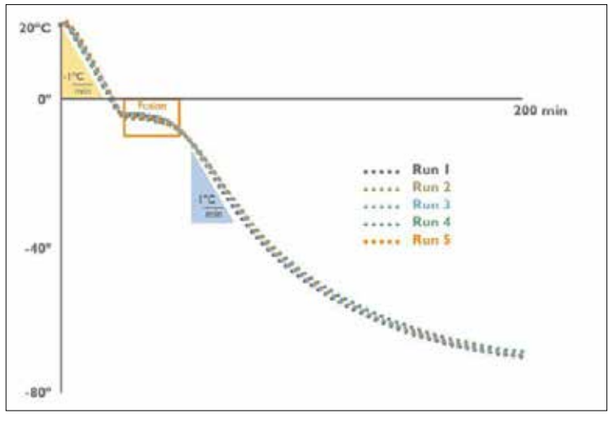
Human Embryonic Stem
Preadipocytes
Breast Cancer Stem
Colon Cancer Stem
Glioblastoma Stem
Mouse Embryonic Stem
Human Endothelial Progenitor

Cell Lines

CHO
LnCap
HTB77
A549
HeLa

CoolCell® Reproducibility

Performance test: A temperature probe was placed into a 2.0 mL cryogenic vial containing 1.0 mL of water and the tube was inserted into a room temperature CoolCell®. The CoolCell was placed into a -80°C freezer and the temperature rate and profile was recorded over a 3 hour period. The test was repeated 5 consecutive times. Conclusion: CoolCell generated identical fusion time and cooling profiles over five consecutive freeze cycles.



KEY FEATURES

CoolCell® Container No Alcohol

No fluids
No pre-cooling
Saves 12L/unit of IPA per year

No Variability

All vials have uniform freeze rate
Radially symmetric design ensures vial consistency

No On-Going Cost

No alcohol purchase or disposal

No Stuck Lids

Ergonomic lid comes off easily when frozen
Not cold to the touch when removing from the -80˚C freezer

Quick Re-Use Time

Ready to use again after five minutes

Biocision CoolCell® Container Controlled-Rate, Alcohol-Free Cell Freezing

For 12 standard 1.0 mL to 2.0 mL cryogenic vials, 1.0 mL fill per vial. Radially symmetric for uniform vial freezing. Numbered wells for easy sample identification. Bevelled lid for secure gripping and easy opening. Exposed vial tops when lid is open for quick, organized removal of frozen samples.

Ordering Information

Item No.	Description	External Dimensions	Well Diam.	No. of Wells	Pack Size
BCS-405	CoolCell LX, purple	Diam 11.7 x H 9.9 cm	12.7 mm	12	1
BCS-405G	CoolCell LX, green	"	"	"	"
BCS-405O	CoolCell LX, orange	"	"	"	"
BCS-405PK	CoolCell LX, pink	"	"	"	"
BCS-405MC	One of each color: purple, green, orange and pink; 4 containers	"	"	"	"

Biocision CoolCell® FTS30

For 30 standard 1.0 mL to 2.0 mL cryogenic vials, 1.0 mL fill per vial. Controlled micro-convection for uniform freezing of 30 vials. Removable vial tray for one-step transfer of samples into and out of freezing chamber.

Ordering Information

Item No.	Description	External Dimensions	Well Diam.	No. of Wells	Pack Size
BCS-170	CoolCell FTS30, purple	Diam 16.5 x H 11.5 cm	12.3 mm	30	1
BCS-170G	CoolCell FTS30, green	"	"	"	"
BCS-170O	CoolCell FTS30, orange	"	"	"	"
BCS-170PK	CoolCell FTS30, pink	"	"	"	"

Biocision CoolCell® 1mL FX

CoolCell® 1mL FX
For 12 standard 1mL storage tubes. 0.5mL to 1mL fill per vial. Optimized for freezing 1mL 96-format sample tubes. Radially symmetric for uniform freezing. Numbered wells for easy identification. Beveled lid for secure gripping and easy opening.

Ordering Information

Item No.	Description	External Dimensions	Well Diam.	No. of Wells	Pack Size
BCS-407P	CoolCell 1mL FX, purple	Diam 11.8 x H 11.0 cm	8.9mm	12	1
BCS-407O	CoolCell 1mL FX, orange	"	"	"	"

Brooks LIFE SCIENCES

Biocision Cell Cryopreservation Accessories

Biocision CryoCeps™ Cryogenic Vial Grippers

Cryogenic vial grippers feature a unique design to grasp internal-or external-thread cryogenic vials. Easily sort or move vials while maintaining sterility and protecting fingers from frozen vials, dry ice and liquid nitrogen.

Ordering Information

BCS-213MC	**CryoCeps Cryogenic Vial Grippers,** multi-color. 5 per pack.

Biocision TruCool® Hinged CryoBoxes

Patented hinged lid offers convenience and archival integrity, ensuring markings and vials remain in sync. Lid stays attached to the base minimizing risk of separation and lid contamination. Lid is easy to open when frozen. Available in 9x9,10x10, and vapor phase LN2 compatible formats. Plastic 81-place grid has adjustable slats to accommodate multiple vial types. 2-inch box holds 1.0 mL or 2.0 mL cryogenic vials and microfuge tubes. 3.5-inch box holds 3.0 mL to 5.0 mL cryogenic vials.

Ordering Information

	Freezer Storage						Cryo Storage	
	2-inch Hinged CryoBox with adjustable plastic grid, 81-place		2-inch Hinged CryoBox with fixed plastic insert, 100-place		3.5-inch Hinged CryoBox with adjustable plastic grid, 81-place		2-inch Hinged CryoBox with adjustable plastic grid, LN2 drain holes, 81 place	
Qty per pack:	5	50	5	50	6	30	5	50
● White	BCS-206	BCS-207	-	-	-	-	-	
● Blue	BCS-206B	BCS-207B	-	-	-	-	-	
● Green	BCS-206G	BCS-207G	BCS-209G	BCS-220G	BCS-215G	BCS-219G	BCS-217G	BCS-221G
● Orange	BCS-206O	BCS-207O	-	-	-	-	-	
● Purple	BCS-206P	BCS-207P	BCS-209P	BCS-220P	BCS-215P	BCS-219P	BCS-217P	BCS-221P
● Pink	BCS-206PK	BCS-207PK	-	-	-	-	-	
Multi-color (no white)	BCS-206MC	-	-		-		-	
Dimensions (L x W x H)	13.3 x 13.3 x 5.1 cm 5.25 x 5.25 x 2.0 in		13.3 x 13.3 x 5.1 cm 5.25 x 5.25 x 2.0 in		13.3 x 13.3 x 9.2 cm 5.25 x 5.25 x 3.5 in		13.3 x 13.3 x 51cm 5.25 x 5.25 x 2.0 in	

For further Biocision product information please contact us for the Brooks Biocision Catalogue

PRODUCT INDEX

Brooks LIFE SCIENCES

About Brooks:

Brooks is a leading worldwide provider of automation and cryogenic solutions for multiple markets including semiconductor manufacturing and life sciences. Brooks' technologies, engineering competencies and global service capabilities provide customers speed to market and ensure high uptime and rapid response, which equate to superior value in their mission-critical controlled environments. Since 1978, Brooks has been a leading partner to the global semiconductor manufacturing market as a provider of precision automation and cryogenic vacuum solutions. Since 2011, Brooks has applied its automation and cryogenics expertise to meet the sample storage needs of customers in the life sciences industry, through Brooks Life Sciences. Brooks Life Sciences offerings include a broad range of products and services for on-site infrastructure for sample management at temperatures of Ambient to -190°C, as well as comprehensive outsource service solutions across the complete life cycle of biological samples including collection, transportation, processing, storage, protection, retrieval and disposal. Brooks is headquartered in Chelmsford, MA, with operations in North America, Europe and Asia.

Ordering Information

For ordering information please contact your local Brooks Life Sciences representative.

EU	Email: BLSS.Europe.Orders@brooks.com	Tel: Europe +44.0.161.777.2000
US	Email: BLSS.NA.Orders@brooks.com	Tel: North America +1.858.527.7080