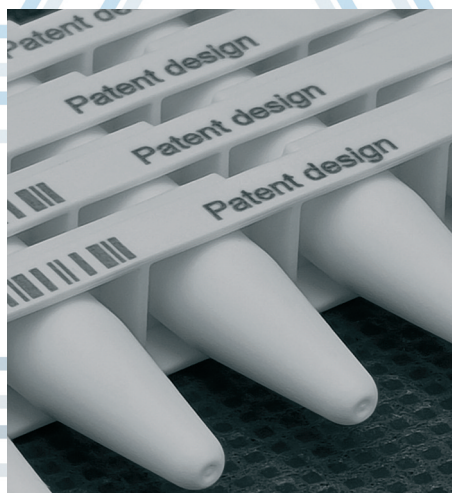
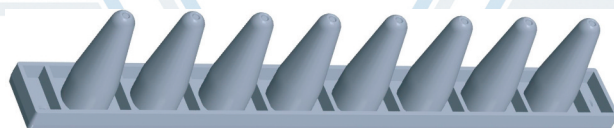


BIOplastics

MANUFACTURER OF SUPERIOR (q)PCR CONSUMABLES

Firm Deck products

New Industry Standards



Cross Reference

**ISO17025
accredited**

PCR & qPCR cyclers calibration
at www.cyclertest.com

Head Quarters & Manufacturing

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order@bioplastics.com

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In control of variables in (q)PCR

BIOplastics BV and its sister company CYCLERtest BV targetting two, most often underestimated variables:
The used (q)PCR disposable and the (thermal and optical) performance of the (Real-Time) thermocycler.

BIOplastics BV manufactures Extreme Uniform plastic disposables, enabling control of the plastic consumable aspect of the (q)PCR process. BIOplastics focuses on (q)PCR plates, strips and tubes. For customers who require lowest variability, the number of the to be used products can be reduced to a minimum of **One!**.
Next to that BIOplastics manufactures products used in the pre- and post-(q)PCR process.

CYCLERtest BV offers multi-channel thermal calibration equipment and ISO 17025 accredited calibration services for any brand and model (q)PCR thermocycler. For more information about thermocyclers calibration tools and calibration services both thermal and/or optical contact: www.cyclertest.com, www.driftcon.com, www.celsiuslabs.com or call +31(0)45 533 8733.

Extreme Uniform Plastics

To control your (q)PCR in the best possible way and to obtain the most reproducible and accurate results, BIOplastics developed a state-of-the-art range of (q)PCR disposables called: Extreme Uniform (q)PCR plastics. These plastics are characterized by Extreme Uniformity in:

- Wall thickness
- Robust Flat and Ridgidness
- Low evaporation rates
- High thermal conductivity (if applicable)
- Low binding
- High signal to noise ratios in qPCR
- Full interchangeability between used products (fit, binding and chemistry)

These characteristics lead to extreme uniform reaction conditions in (q)PCR, whereas the latest BIOplastics development enables to reduce the number of "different" products to a minimum of one, regardless the wide variety of brands and models (q)PCR cyclers in a laboratory.



Sister company CYCLERtest Head Quarters & Manufacturing

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Liability and Warranty

Data supplied with products are correct and reliable to the best of our knowledge and belief.
Under no circumstances will BIOplastics BV be liable for consequential damage arising from the use of its products. BIOplastics BV is liable exclusively and restrictively to replace defective products.
BIOplastics BV warrants its products to be free of defects in material and workmanship. BIOplastics BV will replace any products that are found to be defective, at no costs.

BIOplastics BV

Being innovator and manufacturer of high-quality injection moulding (q)PCR consumables over the last 25 years we are proud to make the next forward step in innovation:

Firm Deck Next Generation (q)PCR disposables

Changes Industry Standards

BIOplastics with its sole headquarter and manufacturing facility in Landgraaf, The Netherlands comprises of CYCLERtest BV, BIOplastics/CYCLERtest Inc. (USA) and Hendrixx Ltd. (China). BIOplastics offers the widest and most superior range of (q)PCR plastics globally. Our products can be found in many MDX (q)PCR kits and related fields. BIOplastics products are, in addition to being integrated into MDX kits, offered through a worldwide network of selected distributors and resellers.



BIOplastics BV (q)PCR industry Views

The ongoing growing molecular marketplace requires superior, independent and complete supply of (q)PCR disposables. The new Firm Deck (FD) Next Generation (q)PCR disposables range provides next to accurate, consistent and reproducible results also a unique platform for both robotic and (q)PCR cycler systems. FD products are easy to handle (q)PCR disposables which are more environmentally friendly with a low CO2 footprint. Furthermore the Firm Deck products range enables Full Traceability of each well by irreversible in product coding. This patented Firm Deck (FD) Next Generation (q)PCR platform Changes Industry Standards while one is able to reduce the preferred vessel type format to One only.



Michael T. Hendrixx. CEO BIOplastics BV

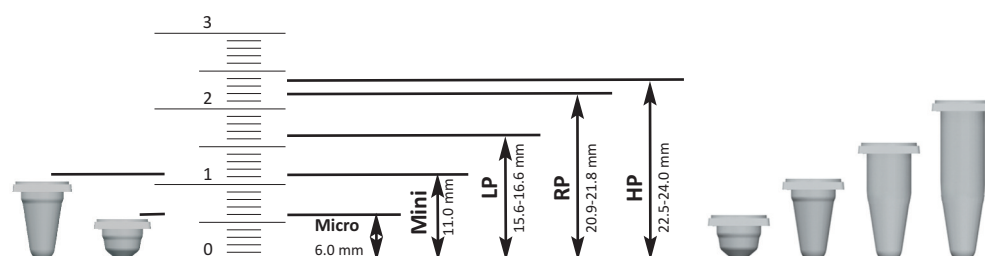


Trademarks and its holders
Firm Deck™ Products are protected by design patents.
Firm Deck™ , Opti-Seal™
MTAS® , Driftcon® :
LightCycler® 480 systems
FrameStar®
Hard-Shell® Droplet Digital™ PCR Systems
twin.tec®
Roche, Thermo, Qiagen, Bio-Rad, and Eppendorf are registered trademarks of mentioned company

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CYCLERtest BV
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Firm Deck products are Globally Design patent protected

FEATURES	ADVANTAGES	BENEFITS
In house Extruded PP blend	Optimized blend for maximal (q)PCR efficiency Material non sticking for biomolecules Flexible non cracking tubes	Optimal reaction conditions and High S/N ratios Low copy detection No loss of sample
Firm Deck Plates	Robust Flat and Rigid No twisting, wrapping or bending Patent design, single component Replaces multi-component plates (Hard/Frame/Tec) Multiple formats Non, semi & Full Skirted (LP and RP) Smart state of the Art format	Easy handling, stackable and use in Robotic systems No Sticking in cyclers Easy handling Low CO ₂ footprint, recyclable in chain 5 More environment friendly and lower CO ₂ footprint Fits any brand and model (q)PCR cycler Enables one plate fits all cyclers strategy
Firm Deck Tear Off Mats	Semi Skirted Robust Flat and Rigid Use of multiples of 8 or 12 wells Unique lasermark coded 2D and/or barcoded Fits IS-FD-frame grids Available in LP (0,1 ml) and RP(0.2 ml) formats	Easy handling, stackable and use in Robotic systems (with ISFD grids) Economic usage Easy unique sample identification Easy handling, stackable and use in Robotic systems Fits any brand & model (q)PCR cycler, enables one fits All strategy
Firm Deck 8 & 12 tube-strips	Semi Skirted Robust Flat and Rigid Unique lasermark coded 2D and/or barcoded Fits IS -FD-frame grids (IS :indented Surface)	Easy handling, stackable and use in Robotic systems (with ISFD grids) Easy unique sample identification Easy handling, stackable and use in Robotic systems
All FD plates, mats and strips		
Uniform wall thickness	Uniform heating No risk of cracking Minimize evaporation	Consistent reaction conditions No loss of sample Consistent reaction conditions
Uniform closure part tube/strip/plate	Uniform closure & interchangeability	Consistent reaction conditions
Thin wall lower part tube	Maximal heat transfer	Optimal reaction conditions
Thick wall upper part tube	Minimal evaporation	Consistent reaction conditions
Wide range (q)PCR product	Always a product to fit any thermocycler	Always best fitting plastics
Frosted plates and tubes	Higher signal/noise ratio	Lower copy detection
White plates and tubes	Highest signal/noise ratio Avoid signal contamination from block	Lower copy detection Consistent reaction conditions
Optimal contact angle	Better heat transfer	Optimal reaction conditions
Laser mark coded	Easy sample identification Uniquely coded	Traceability samples Avoid mix-up samples & trays
Extra robust strips	No twisting, wrapping or bending In line and no breakage	Easy to handle, stable shape Easy positioning and handling
Tear Off Formats	Use of multiples of 8 wells or 12 wells Removal of individual rows of a plate	Economic usage Pipette in 96 well format, use in 8 (12) well or multiple of 8 (12) well format Minimize cross contamination
FD Shell Frame Grids	Enabling to make specific Semi and Full skirted plates	Easy use in robotics Enables specific qPCR cycler for strips and FD stripmats Combined compatibility use (eg.Thermo, Bio-Rad, Roche, Qiagen, Analytic Jena) (q)PCR thermocyclers



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(q)PCR Caps and Seals










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Icons Corner Cut (q)PCR Plates

	No corner cut
	North East
	South East
	North West
	North East, South East
	North East, South East South West
	North East, South East North West
	North East, South East North West, South West
	Variety of holes, nicks corner shapes etc.

(q)PCR vessels and its appearances

Identical products are often named differently.
To clarify the confusion just see the list below:

Low Profile = 0.1 ml (100 µl) height appr 16 mm

Regular Profile=0.2 ml (200 µl) height appr 21 mm

High Profile = 0.22 ml (220 ul) height appr 23 mm

Mini tube = 0.05 ml (50 µl) height 11 mm

Micro tube = 0.025 ml (25 µl) height 6 mm
(heated lid free cycling)

Change a 0.1 ml vessel to 0.2 ml

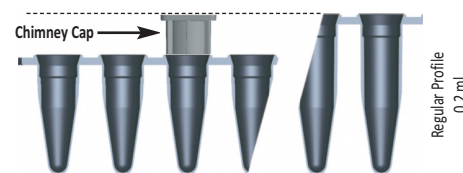
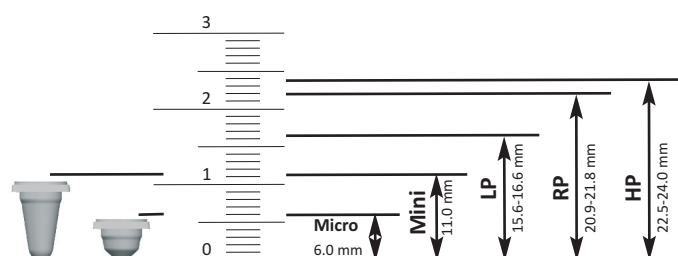
One chemistry in only one plate or strip and still be able to run it on different cycler platforms in stead of using a variety of plastic formats?? BIOplastics offers the solution by offering Chimney and Cylinder Cap formats.
Chimney and Cylinder caps are both optical however we recommend Chimney caps for all (qPCR and PCR) applications and Cylinder caps for non qPCR application.

qPCR

Low Profile 0.1 ml vessel + Optical Cap = Low profile 0.1 ml vessel
Regular Profile 0.2 vessel + Optical Cap = Regular Profile 0.2 ml vessel
Low Profile 0.1 ml vessel + Chimney Cap = Regular Profile 0.2 ml vessel

PCR

Low Profile 0.1 ml vessel + Optical Cap = Low profile 0.1 ml vessel
Regular Profile 0.2 vessel + Optical Cap = Regular Profile 0.2 ml vessel
Low Profile 0.1 ml vessel + Cylinder Cap = Regular Profile 0.2 ml vessel
Low Profile 0.1 ml vessel + Chimney Cap = Regular Profile 0.2 ml vessel

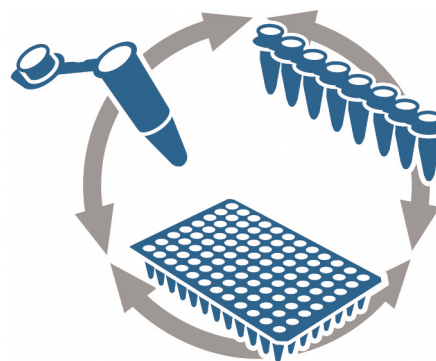


Interchangeability of products and processes

BIOplastics has assembled a range of products including its patented Firm Deck range, which are fully interchangeable with each other.

A (q)PCR process optimized in one of the BIOplastics strips, tubes or plates can simply be transferred to any other BIOplastics strip, tube or plate. The fact that BIOplastics offers products for ALL BRANDS and models of (q)PCR cyclers enable end-users to “one time only” optimize the (q)PCR process in its, at that moment in time, preferred BIOplastics model. Once optimized you can swap to a different BIOplastics format without re-optimizing or re-validating the process, since you are benefiting from our identical, interchangeable model and raw material properties. Using the same protocol on a different cycler is done by selecting the designated BIOplastics product for that model of cycler.

No need for re-optimizing the whole process since BIOplastics plastics characteristics are exactly the same for the whole range of the (q)PCR product line. **Thermal and/or Optical performance difference between cyclers**, cycler models, and brands can be accurately determined using **CYCLERtest calibration service or CYCLERtest DRIFTCON® temperature calibration tools**. Did you optimize your (q)PCR process in tube strips and need more or less capacity? Just start using BIOplastics plates, Tear Off or strip-tubes without the requirement of adjusting your protocol.



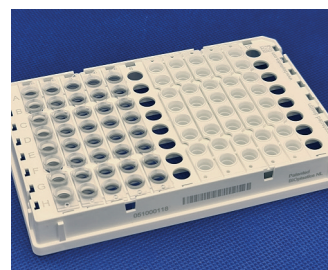
Firm Deck Shell Frame Grids

Firm Deck (FD) Shell Frame Grids are designed to combine designated BIOplastics (q)PCR vessel formats with an interchangeable and rigid skirt. This smart design enables to reduce the **total amount of used plates or strips to a minimum of One**, regardless the **variety of your (q)PCR cycler range**.

- Simply make your selection of low profile (0.1 ml) and/or regular profile (0.2 ml) size
- Select your preferable format either from the FD range or “regular” e.g. cut-able plate, tear-off strip mat, 8 or tube-strips or 8 tube-strip with attached caps.
- Decide your preference for Ultra Clear, Frosted or White

Your selected product(s) enable you to perform any (q)PCR on any (q)PCR cycler platform regardless cycler-range and assortment. Even if you want to use your low profile (0.1 ml) strip/plate on a regular profile (0.2 ml) cycler you can opt to do so by selecting one of our patented **caps with bridges the difference in height between low profile (0.1 ml) strip/plate on a regular profile (0.2 ml)**. These caps are **Chimney cap and/or Cylinder cap**. Both caps have optical reading properties

Outcome: superior accurate, uniform and interchangeability of results and limiting variables in MDX or experiments.



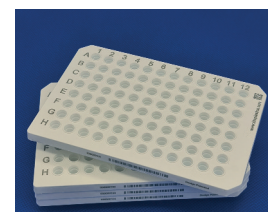
One (q)PCR disposable only to fit your cycler assortment

Why continue to use a number of different products to equip your (q)PCR cycler assortment if a “one product does it all” is at your fingertips. The use of BIOplastics’ **Firm Deck (FD) Shell Frame Grids fit-able products** enables to opt for a “**one product only**” strategy. This strategy enables you to equip your whole 0.1 ml and/or 0.2 (q)PCR cycler assortment with one product only.

Reduce the number of products and vendors.

“**One product does it all**” BIOplastics (q)PCR products and its FD range are designed to fit pretty much all PCR and qPCR cyclers and our latest Firm Deck (FD) Shell Frame Grid fitting products even enables reduction of your usual (q)PCR disposables selection to one, regardless the cycler platform(s). Benefit **buying from one vendor**, using **one product and one chemistry strategy**, and grant your laboratory and its customers superior and consistent results. We recommend using the dynamic search engine at our website to find the correct product for your application, opt for “Firm Deck Shell Frame Grid fitting” products or use our website “current competitor product” to BIOplastics superior products converter. If not sure or too much of a hassle, just contact BIOplastics for the best recommendation suiting your needs.

The One and Only

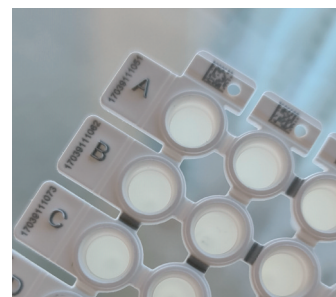


Eliminate ID# errors by irreversible coding

BIOplastics’ BPLPM technology results in a **non removable, uniquely marked and coded product**. No writing with markers, no mistakes, no removal of marks, no double identification numbers, just use the **unique ID#** at the beginning of your process. Link the unique ID# to your Lab LIMS system. BPLPM technology is currently used in a selected range of products. BPLPM technology is particular useful for critical labs and in Pre-diagnostics and Diagnostic settings allowing improvement of procedures and reducing risks of identification and/or label failures. Custom layouts and customized codes, whether in **1D** or **2D** can be added on demand.

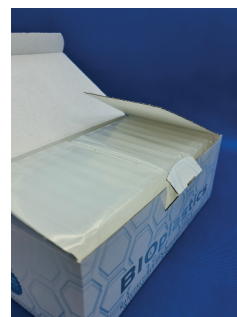
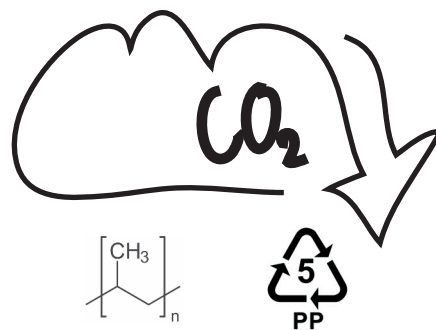
Several options (including your own coding) are available and particularly useful for kit manufacturers, enabling full traceability of products and applications. The technology is a precursor of regulations set by e.g. FDA 21CFR809.10, IVD, ISO, ILAC etc..

Firm Deck 8 and 12 tube strips, Firm Deck Tear off Mats and Firm Deck plates are either barcoded and/or 2D laser-mark coded for each strip or plate



Reduce CO₂ emission, environmentally friendly plastics

At BIOplastics we are, as many people, concerned about the environment in relation to the use of plastics. BIOplastics is often contacted in the assumption to have the solution for biodegradable-degradable plastics as these are also called “bioplastics”. We do monitor the development of these **biodegradable plastics** carefully and are open for incorporating these plastics into our product portfolio. The current (q)PCR process, does not (yet) allow the use of biodegradable plastics. However **Firm Deck plates replaces popular 2 component plates** typically a combination of **glass-enforced plastics and/or polycarbonate with polypropylene**. Our patented smart **Firm Deck design** enables to achieve the **same product performance** for a better price with **substantial reduction of the CO₂ footprint**. **Firm Deck products are made from polypropylenes which is easy to recycle**. (recycle identification code 5) Two component plates are way more difficult to recycle. (identification code 7) As a matter of fact the **Firm Deck product range** enables to reduce the CO₂ footprint of (q)PCR disposable by itself. As an example our Tear Off (FD) plate-mats and cap mats product range provide highest efficiency while very costs effective. Products fit-able FD Shell Frame Grids offers superior reproducibility of results and allow using a minimize amount of product.



Highly Efficient Packaging

To further minimize the CO₂ footprint BIOplastics has changed and minimized its packaging. This means that packing and amount of products in each package is depending on the product-size. Consequently, you find different and maximized amount of product in a limited range of “standard” recyclable cardboard boxes. Products are shipped without “excess” of air. This means lower shipping costs and a lower CO₂ footprint.

Standardize and improve reproducibility

BIOplastics manufactures the widest range (q)PCR disposables globally. We offer products for ALL BRANDS of PCR and qPCR cyclers and integrate full interchangeability between these products. No need for shopping at different cycler manufacturers or vendors who are typically not the manufacturer. Why not buy at the inventors and manufacturers. They know their products and how to manufacture them. Even more amazing BIOplastics does not only design and manufacture (q)PCR disposables, we know how (q)PCR cyclers perform and what it takes to generate best results. How do we know? Remember our sister-company CYCLERtest, located in the same building calibrates (q)PCR cyclers (under ISO17025) as they also design and manufacture (q)PCR cycler calibration hard and software. So actually we at BIOplastics go by known calibration outcome facts and performance knowledge of temperature and optical performance of (q)PCR cyclers. Enjoy the benefits of facts, knowledge and ease of use of superior quality (q)PCR vessels which all have the same raw material compositions. Combine this with the extreme uniform wall thickness of the products and you actually have standardized and improved the reproducibility of your results by excluding variables in uniformity, material composition and properties.



In house confidential recipe PP material extrusion

The carefully selected types of medical grade polypropylenes recipe are “in house blended” to well-defined proprietary ratios. This specific fine-tuned blend is mixed, melted, and extruded. The generate pelletized grains are dried and collected prior to be used in the Injection Moulding Process. These, unusual extra steps are required to achieving the highest product and user performance properties.

Custom Manufacturing and OEM production

BIOplastics enables custom manufacturing for third parties like MDX kit manufacturers. Custom manufacturing can cover but is not limited to Injection Moulding with specific confidential “BIOplastics” owned PP recipes, any custom embedded lasering, custom product design and moulding and/or licencing BIOplastics patented designs.



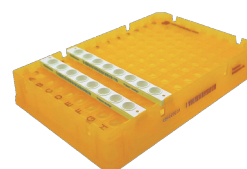
Low copy detection

BIOplastics recipe of medical polypropylene blends are designed for low copy DNA, RNA and protein molecule detection through low binding characteristics. Polypropylenes are chemically inert, but still exhibit charged groups, static properties and hydrophobic areas. Different types or blends of polypropylene therefore do differ in binding characteristics and consequently charged groups like DNA, RNA, proteins and ions can bind in low amounts to polypropylene. BIOplastics (q)PCR products are developed with a specific blend of PP. The blend is designed to maximize product functionality and application while providing extremely low binding characteristics to DNA, RNA and proteins.



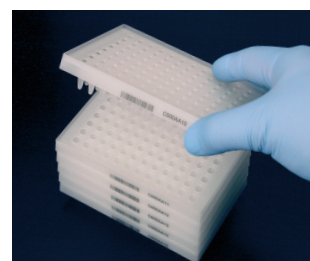
Robotics and Liquid Handling

Firm Deck products are perfect to be used in **robotic and liquid handling system** prior or post (q)PCR. Firm Deck and non-Firm Deck products can be used either direct or in combination with **Firm Deck Shell Frame Grids** in (q)PCR cyclers, robotics and liquid handling systems. BPLPM technology enables “**in product**” marking on either top or skirt(s) of the plates Tear Off mats and tube strips. (2D and/or barcoding, custom coding)



Flat stackable non-nesting plates

All BIOplastics plates are flat when purchased, which allows not only easy removal from a stack but also easy pipetting, positioning and removal from cyclers. **Plates, strips and Tear Off mats** are **stackable** in a way that they **do not nest or stick** together. This is appreciated by those who do not want to waste time and effort into de-stacking plates as well as those who require **liquid handling automation without de-stacking failures**. Some plates are cut-able, some are breakable, some have "Tear Off" features, and some are additionally also assigned to **fit Firm Deck Shell Frame Grids**. All plates have easy orientation marks even when parts of a plate are cut or torn off.



Non nesting plates, ideal for pipetting and robotic applications

In product coding and labelling with BIOplastics BPLPM technology

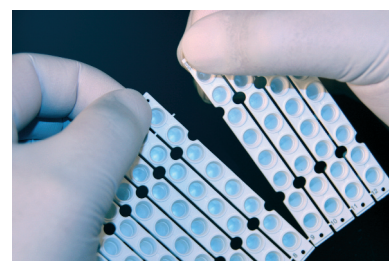
BIOplastics innovated the incorporation of micro particles in (q)PCR and related products. These BPLPM technology (BIOplastics particle mix) products are offered in a majority of (q)PCR products. BPLPM enables indelible **IN PRODUCT labelling and identification**. While others use stickers, ink, stamps, or dyes containing organic solutions, BIOplastics BPLPM technique results in a **irreversible, non-removable, uniquely marked and coded product**. No writing with markers, no removal of marks, **no double identification numbers**; just use the unique ID#, barcode or 2D code at the beginning of your process. Link the unique ID#, barcode or 2D code to your Lab LIMS system and samples. BPLPM technology is a predecessor of near future regulations similar as **21CFR809.10**, ISO and others.

Custom layouts and customized codes can be requested.



Tear Off 8-Tube Strip Mat and Tear Off 12-Tube Strip Mat

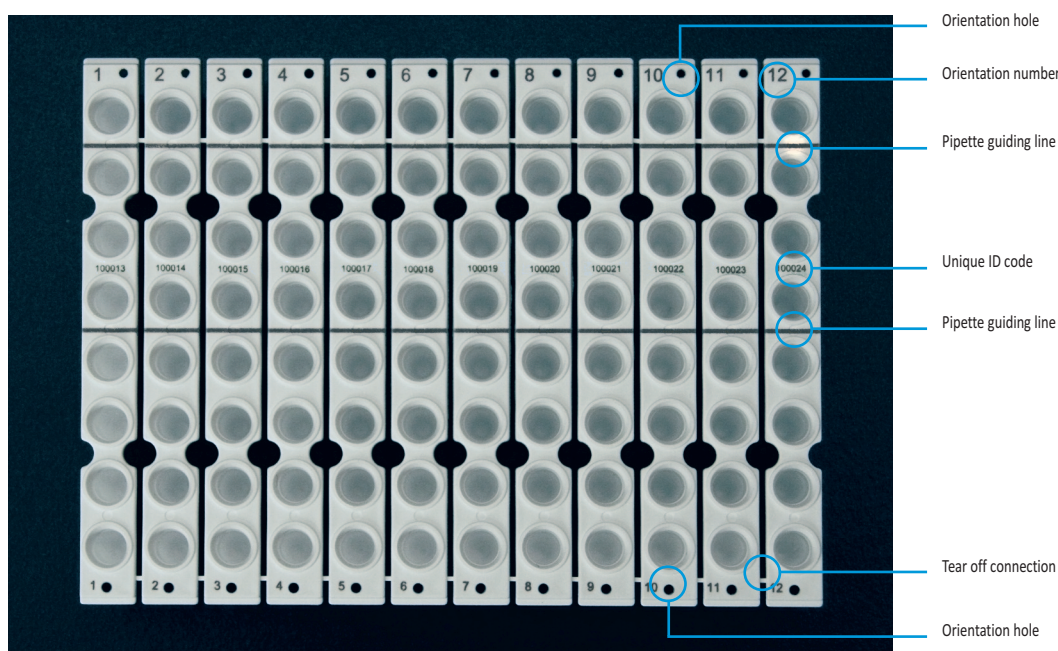
The Tear Off 8-Tube Strip Mat and Tear Off 12-Tube Strip Mat can be considered as a flexible plate composed of 12 robust 8-tube strips or 8 robust 12-tube strips which are connected to each other by thin bands. Part of the "plate" or one of multiple robust 8-tube strips or 12-tube strips can be easily and effortlessly torn off. Enjoy the benefit of full flexibility and use the format required for your application or cycler. Tear Off 8-Tube Strip Mats or Tear Off 12-Tube Strip Mats as a whole or in partitions can be "clicked in" Firm Deck Shell Frame Grids. Why not use one format only and enjoy the benefit of full flexibility.



DNA(se), RNA(se), inhibitor and pyrogen-free

Producing products under strict cleanroom and "no-hands-on" conditions ensures the absence of DNA, RNA, and their breakdown enzymes. A sterile product is not necessarily DNA(se), RNA(se) and pyrogen-free.

Only regular testing during and after the production process guarantees a DNA(se), RNA(se) and pyrogen-free product. All our (q)PCR disposables are DNA(se), RNA(se) and pyrogen-free. The absence of metals in polymer products like (q)PCR vessels is essential for laboratory use since metals can interfere in (q)PCR and other reactions with ions as Mg²⁺. BIOplastics tips and tubes are guaranteed inhibitor and metal free.



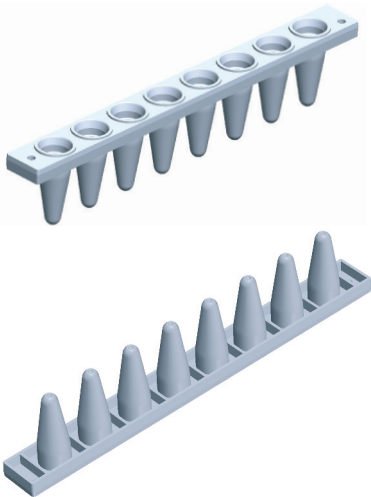
1.1.0 0.1 ml 8-Tube Strip Firm Deck (q)PCR Strips, Low Profile

0.1ml Firm Deck 8-Tube Strips, Semi Skirted, fits FD Shell Frame Grids (FD-SFG)

Fits almost all PCR and qPCR (fast) cyclers models which accept low profile products as Thermo®, Roche®, Bio-Rad®, Eppendorf® and others. See compatibility list at www.bioplastics.com.
Flat, rigid, semi skirted.
Designed for PCR and qPCR applications. Can be used with FD adaptors or can be positioned in specific (skirted) grids also called FD Shell Frame Grids and once "positioned in" becoming a plate assembly for specific (q)PCR instruments. There are a number of FD grids available: To fit Roche LightCycler® 480 systems use grid A480REV (re-useable). For Robotic Liquid Handling systems use B1671ISFD Grid (Full Skirted,Indented Surface, ANSI footprint)
See also: FD Shell Frame Grids (type D)
Closure can be accomplished with any EU 8-cap strip. For qPCR closure the use of B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended.

Order#	Description	Package Size
K1271FD	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Ultra Clear , stacked, natural	.240 (12 bags x 20 pcs)
B1271FD	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, natural	.240 (12 bags x 20 pcs)
B1279FD	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, white	.240 (12 bags x 20 pcs)
L1271FDB	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, barcode East, natural	.240 (12 bags x 20 pcs)
L1271FDQ	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, 2D code South, natural	.240 (12 bags x 20 pcs)
L1279FDB	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, barcode East, white	.240 (12 bags x 20 pcs)
L1279FDQ	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, 2D code South, white	.240 (12 bags x 20 pcs)

Note 1: also available as Tear-Off mats.
Note 2: Custom mark-lasering on request. LWH (mm) 79.6 x 8.2 x 15.7 : Skirt-height 4
Fits FD Shell Frame Grid
type D (B671ISFD) Full Skirted
type F (A480REV) Sub Skirted



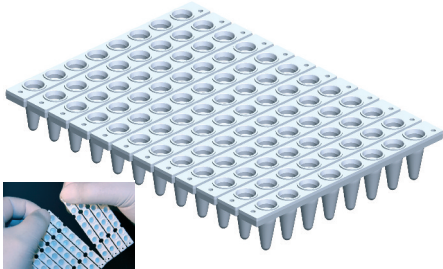
1.1.1 0.1 ml 8-Tube Strip Mat Firm Deck (q)PCR Strips, Low Profile

0.1ml Firm Deck TEAR-OFF 8-Tube Strip Mat, Semi Skirted, fits FD Shell Frame Grids(FD-SFG)

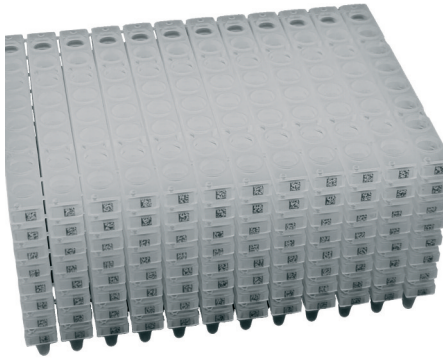
The 96 x 0.1ml Firm Deck Tear Off 8-Tube Strip Mat is designed for PCR and qPCR applications, the semi skirted 8-tube strips are barely attached to each other. One or more individual 8-tube strips can be easily torn off.
For qPCR applications frosted or white mats are recommended. The mats can be used as plates and/or as a torn off partition of it. Can be used with FD adaptors or can be positioned in specific (skirted) grids also called FD Shell Frame Grids and once "positioned in" becoming a plate assembly for specific (q)PCR instruments. There are a number of FD grids available: To fit Roche LightCycler® 480 systems use grid A480REV (re-useable). For Robotic Liquid Handling systems use B1671ISFD Grid (Full Skirted,Indented Surface, ANSI footprint))
See also: FD Shell Frame Grids (type D)
Closure can be accomplished with any EU 8-cap strip. For qPCR closure the use of B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended.

Order#	Description	Package Size
K5911FD	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Ultra Clear , stacked, natural	.36 Mats (2 bags x 18 pcs)
B5911FD	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, natural	.36 Mats (2 bags x 18 pcs)
B5919FD	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, white	.36 Mats (2 bags x 18 pcs)
L5911FDQ	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, 2D code South, natural	.36 Mats (2 bags x 18 pcs)
L5911FDT	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, LaserM deck, natural	.36 Mats (2 bags x 18 pcs)
L5919FDQ	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, 2D code South, white	.36 Mats (2 bags x 18 pcs)
L5919FDT	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, LaserM deck, white	.36 Mats (2 bags x 18 pcs)

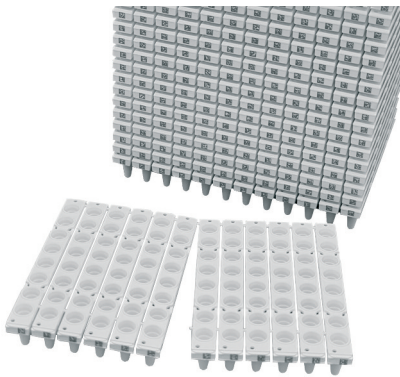
*Note 1: Custom mark-lasering on request
Fits FD Shell Frame Grid
type D (B671ISFD) Full Skirted
type F (A480REV) Sub Skirted



L1279FDB Barcoded irreversible laser marked
0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, barcode East, white



L5911FDQ 2D coded Irreversible laser marked Tear Off Mat



L5919FDQ 2D coded Irreversible laser marked Tear Off Mat

0.1 ml LP FD strips

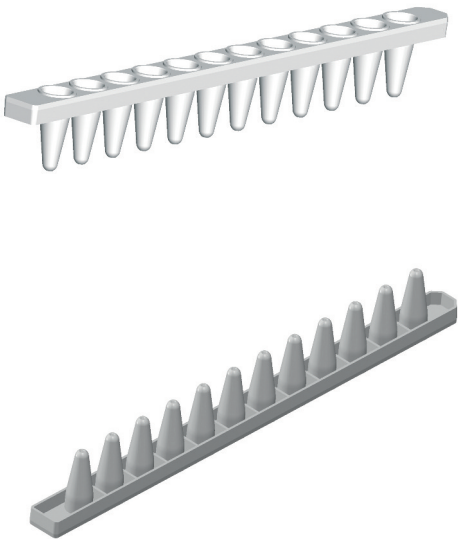
1.2.0 0.1 ml 12-Tube Strip Firm Deck (q)PCR Strips, Low Profile

0.1ml Firm Deck 12-Tube Strips, Semi Skirted, fits FD Shell Frame Grids (FD-SFG)

Fits almost all PCR and qPCR (fast) cyclers models which accept low profile products as Thermo®, Roche®, Bio-Rad®, Eppendorf® and others. See compatibility list at www.bioplastics.com. Flat, rigid, semi skirted. Designed for PCR and qPCR applications. Can be used with FD adaptors or can be positioned in specific (skirted) grids also called FD Shell Frame Grids and once "positioned in" becoming a plate assembly for specific (q)PCR instruments. There are a number of FD grids available: To fit Roche LightCycler® 480 systems use grid A480REV (re-useable). For Robotic Liquid Handling systems use B1671ISFD Grid (Full Skirted, Indented Surface, ANSI footprint) See also: FD Shell Frame Grids (type D) Closure can be accomplished with any EU 12-cap strip. For qPCR closure the use of B57861, B57871, B56501 or Optical Tear-Off 12-Cap Strip Mat B58671 or B58651 is recommended.

Order#	Description	Package Size
B1291FD	0.1ml, 12-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, natural160 (8 bags x 20 pcs)
B1299FD	0.1ml, 12-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, white160 (8 bags x 20 pcs)
L1291FDB	0.1ml, 12-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, barcode South, natural160 (8 bags x 20 pcs)
L1299FDB	0.1ml, 12-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked,barcode South, white160 (8 bags x 20 pcs)

* also available as Tear-Off mats
Note 2: Custom mark-lasering on request. LWH (mm) 121.0 x 8.2 x 15.7 : Skirt-height 4
Fits FD Shell Frame Grid
type D (B671ISFD) Full Skirted
type F (A480REV) Sub Skirted



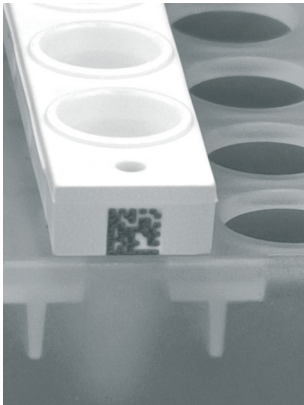
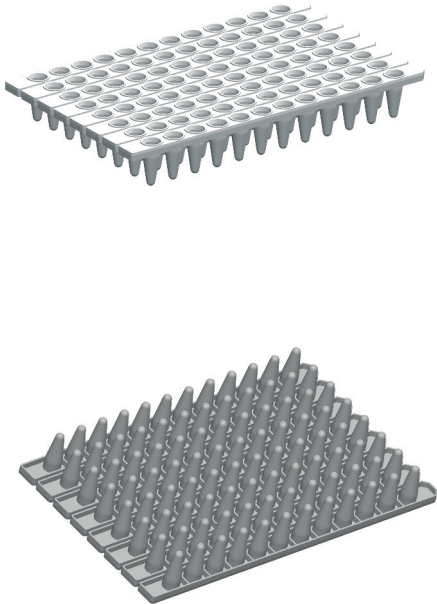
1.2.1 0.1 ml 12-Tube Strip Tear Off Mat Firm Deck (q)PCR Strips, LP

0.1ml Firm Deck TEAR-OFF 12-Tube Strip Mat, Semi Skirted, fits FD Shell Frame Grids (FD-SFG)

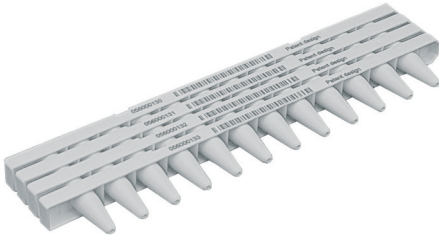
The 96 x 0.1ml Firm Deck Tear Off 12-Tube Strip Mat is designed for PCR and qPCR applications, the semi skirted 12-tube strips are barely attached to each other. One or more individual 12-tube strips can be easily torn off. For qPCR applications frosted or white mats are recommended. The mats can be used as plates and/or as a torn off partition of it. Can be used with FD adaptors or can be positioned in specific (skirted) grids also called FD Shell Frame Grids and once "positioned in" becoming a plate assembly for specific (q)PCR instruments. There are a number of FD grids available: To fit Roche LightCycler® 480 systems use grid A480REV (re-useable). For Robotic Liquid Handling systems use B1671ISFD Grid (Full Skirted, Indented Surface, ANSI footprint) See also: FD Shell Frame Grids (type D) Closure can be accomplished with any EU 12-cap strip. For qPCR closure the use of B57861, B57871, B56501 or Optical Tear-Off 12-Cap Strip Mat B58671 or B58651 is recommended

Order#	Description	Package Size
B5991FD	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, natural36 Mats (2 bags x 18 pcs)
B5999FD	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, white36 Mats (2 bags x 18 pcs)
L5991FDQ	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, 2D code West, natural	36 Mats (2 bags x 18 pcs)
L5991FDT	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, LaserM deck, natural	36 Mats (2 bags x 18 pcs)
L5999FDQ	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, 2D code West, white	36 Mats (2 bags x 18 pcs)
L5999FDT	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, LaserM deck, white	36 Mats (2 bags x 18 pcs)

Note 1: On request also available as Ultra Clear in stead of Light Frosted
Note 2: Custom mark-lasering on request
Fits FD Shell Frame Grid
type D (B671ISFD) Full Skirted
type F (A480REV) Sub Skirted



Irreversible embedded laser marked 2 D code on a 12 tube strip



L1299FDB Barcoded irreversible laser marked
0.1ml, 12-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked,barcode South, white



Firm Deck 12 tube strip positioned in Firm Deck Shell Frame Grid Type D B671ISFD (see also page 20)

1.3.0. 96 x 0.1 ml Firm Deck (q)PCR Plates, Semi Skirted, LP, DR8

96 x 0.1ml Firm Deck (FD2) robust(q)PCR Plate, fits all (q)PCR Cyclers Semi Skirted(DR8)

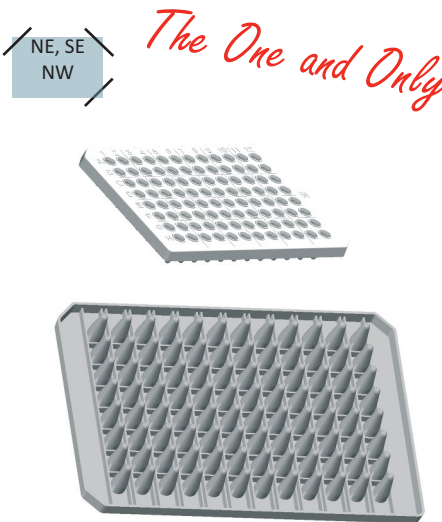
This **SEMI SKIRTED** 96x0.1ml Firm Deck2 plate is a universal plate that **fits almost any thermal cycler with a fast 0.1 ml block**. So no longer 3 different plates with specific cut corners for **Thermo, Roche, Bio-Rad and Qiagen** real-time thermal cyclers, but 1 plate with 3 cut corners for all.

Firm Deck plates are designed as a direct alternative to hard-frame two-component 96-well plates like the Bio-Rad Hard-Shell® plates, the Eppendorf twin.tec® plates and the Thermo FrameStar® plates.

FD2 plates are extremely flat, rigid and warp-free, designed to withstand high temperatures during (q)PCR and heat sealing. The extreme flatness and rigidity are obtained by double ribs (DR-8) underneath the plate deck to prevent the plate from warping and bending. Plate Type DR2 double rib 8 format

Closure can be accomplished with any EU 8-cap strip or Opti-Seal™. For qPCR closure the use of B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended.

See compatibility search engine at www.bioplastics.com. **Corner cut at North-West, North East and South East**



Order#	Description	Package Size
K4690FD2	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR8, Ultra Clear, natural	36 plates
B4690FD2	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR8, Frosted, natural	36 plates
B4699FD2	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR8, white	36 plates
L4690FD2B	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR8, Frosted, natural, Laser Mark (Bar) Coded South,	36 plates
L4690FD2BN	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR8, Frosted,natural, Laser Mark (Bar) Coded North	36 plates
L4690FD2B4	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR8, Frosted, natural, Laser Mark (Bar) Coded South, East,North, West	36 plates
L4699FD2B	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR8, white , Laser Mark (Bar) Coded South,	36 plates
L4699FD2BN	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR8, white , Laser Mark (Bar) Coded North	36 plates
L4699FD2B4	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR8, white , Laser Mark (Bar) Coded South, East,North, West	36 plates

Custom laser labelling is available on demand

1.3.1 96 x 0.1 ml Firm Deck (q)PCR Plates, Semi Skirted, LP

96 x 0.1ml Firm Deck, (q)PCR Plate, fits Roche LightCycler® 480 systems

These **SEMI SKIRTED** Firm Deck plates are designed for PCR and qPCR applications and specifically to fit **Roche LightCycler® 480 systems**. FD plates are extremely flat, rigid and warp-free.

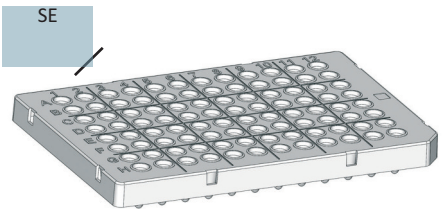
These plates also fits most (q)PCR cycler models which accept low profile (LP) products.

For qPCR we recommend the use of frosted products or white products.

Closure can be accomplished with any EU 8-cap strip or Opti-Seal™.

For qPCR closure the use of Opti-Seal™, B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended. Plate Type SR single rib format

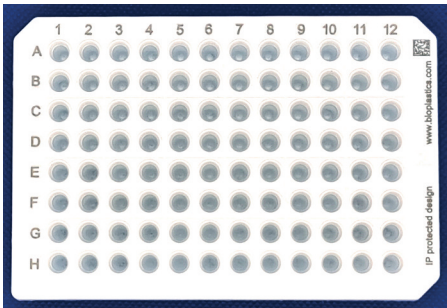
See compatibility search engine at www.bioplastics.com. **Corner cut at South East**



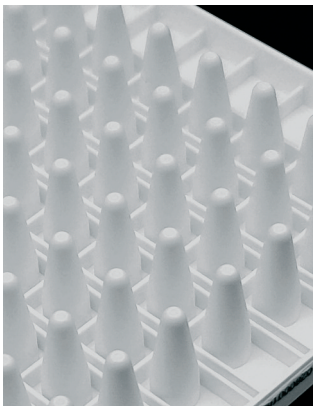
Order#	Description	Package Size
B17480FD	96 x 0.1ml, Firm Deck plate, Semi skirted, SR, Frosted, natural	28 plates
B17489FD	96 x 0.1ml, Firm Deck plate, Semi skirted, SR, white	28 plates
L17489FDB	96 x 0.1ml, Firm Deck plate, Semi skirted, SR, white , Laser Mark (Bar) Coded North	28 plates
L17489FDB4	96 x 0.1ml, Firm Deck plate, Semi skirted, SR, white , Laser Mark (Bar) Coded South, East, North, West	28 plates

Alternatively Roche LightCycler® 480 systems can also be equipped with Firm Deck 8 tube-strips , Firm Deck 12-tube-strips or Form Deck Tear Off mats the combination would be: A480REV (Adaptor) with B1279FD (8 -tube-strip) or B5919FD (8 tube-strip) Tear Off Mat or B1299FD 12 tube-strip , or B5999FD 12-tube Tear Off Mat

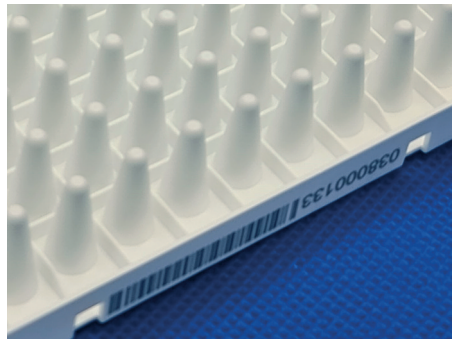
Non Firm Deck BIOplastics products can also be used combined with either Roche 480 adaptor (B79480) or generic adaptor (B7489GFD) combined with either B59909 (8 -tube-strip) or Tear Off 8 Tube Strip Mats B59009-1-(8 tube-strip) Tear Off Mat



L4699FD2* Top Deck of Laser-marked 96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR8, **white**, *Laser Mark (Bar) at one or more side-skirts



DR8 double-ribs at bottom of the Top deck of 96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR8, **white**, barcoded (e.g. L4699FD2B4)



The One and Only refers to Firm Deck plates (DR8/DR12, LP/RP) which fits almost all cyclers e.g. L4699FD2B4 fits 0.1 ml (q)PCR cyclers as Thermo®, Roche, Bio-Rad, Qiagen, Eppendorf, Analytik Jena and others *not all

0.1 ml LP FD plates

1.3.2 96 x 0.1 ml Firm Deck (q)PCR Plates, Semi Skirted, LP, DR12

96 x 0.1ml Firm Deck (FD2) robust(q)PCR Plate, fits all (q)PCR Cyclers (DR12) Semi Skirted

This SEMI SKIRTED 96x0.1ml Firm Deck2 plate is a universal plate that fits any thermal cycler with a fast 0.1 ml block. So no longer 3 different plates with specific cut corners for Thermo, Roche, Bio-Rad and Qiagen real-time thermal cyclers, but 1 plate with 3 cut corners for all.

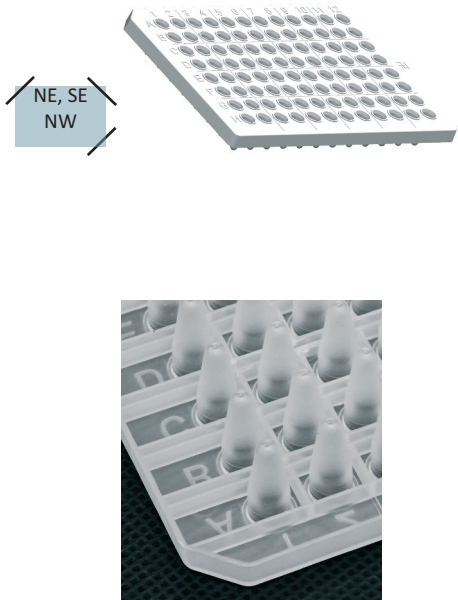
Firm Deck plates are designed as a direct alternative to hard-frame two-component 96-well plates like the Bio-Rad Hard-Shell® plates, the Eppendorf twin.tec® plates and the Thermo FrameStar® plates.

FD2 plates are extremely flat, rigid and warp-free, designed to withstand high temperatures during (q)PCR and heat sealing. The extreme flatness and rigidity are obtained by double ribs (DR-12) underneath the plate deck to prevent the plate from warping and bending. Plate Type DR12 double rib 12 format

For qPCR closure the use of Opti-Seal™, B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended. Corner cut at North-West, North East and South East

Order#	Description	Package Size
B4610FD2	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR12, Frosted, natural	36 plates
B4619FD2	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR12, white	36 plates
L4610FD2B	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR12, Frosted, natural, Laser Mark (Bar) Coded South,	36 plates
L4610FD2BN	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR12, Frosted, natural, Laser Mark (Bar) Coded North	36 plates
L4610FD2B4	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR12, Frosted, natural, Laser Mark (Bar) Coded South, East,North, West	36 plates
L4619FD2B	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR12, white, Laser Mark (Bar) Coded South,	36 plates
L4619FD2BN	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR12, white, Laser Mark (Bar) Coded North	36 plates
L4619FD2B4	96 x 0.1ml, Firm Deck2 plate, Semi skirted, DR12, white, Laser Mark (Bar) Coded South, East,North, West	36 plates

Custom laser labelling on demand

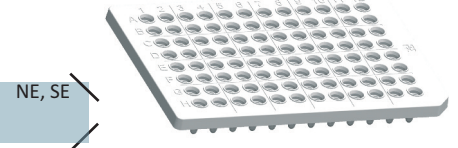


1.3.3 96 x 0.1 ml Firm Deck (q)PCR Plates, Semi Skirted, LP

96 x 0.1ml Firm Deck (FD) robust(q)PCR Plate, fits most (q)PCR Cyclers Semi Skirted

This SEMI SKIRTED 96x0.1ml Firm Deck plate fits most thermal cyclers with a 0.1 ml block as, Roche, Bio-Rad and Qiagen real-time thermal cyclers. Corner cut at North East and South East

Order#	Description	Package Size
B50751FD	96 x 0.1ml, Firm Deck2 plate, Semi skirted, Ultra Clear, natural	36 plates
B50759FD	96 x 0.1ml, Firm Deck2 plate, Semi skirted, white	36 plates



1.3.4 96 x 0.1 ml Firm Deck (q)PCR Plates, Semi Skirted, LP, DR8, S

96 x 0.1ml Firm Deck, (q)PCR Plates, Semi Skirted, Clear wells, S-Deck

These SEMI SKIRTED Firm Deck2 plates are designed for PCR and qPCR applications. The deck surface is slightly smaller (**S-deck= 123.2 x 81.7 mm**) compared to regular deck surface (**R-deck= 127.4 x 85 mm**). FD plates are extremely flat, rigid and warp-free. These plates fits most (q)PCR cycler models which accept low profile (LP) products.

For qPCR with Optical reading through the caps we recommend the use of frosted products or white products.

Closure can be accomplished with any EU 8-cap strip or Opti-Seal™. For qPCR closure the use of Opti-Seal™, B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended.

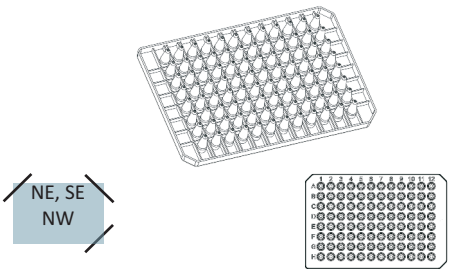
Plate Type DR8 double rib format

See compatibility search engine at www.bioplastics.com.

S Deck
Slightly smaller Top Deck

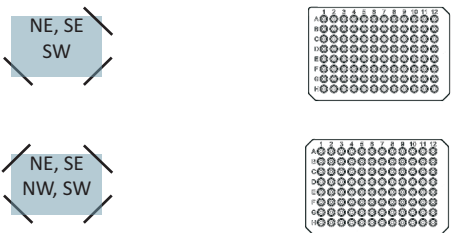
Order#	Description	Package Size
B50751FD2	96 x 0.1ml, Firm Deck plate, Semi skirted, DR8, S deck, Ultra Clear, natural	36 plates
B50759FD2	96 x 0.1ml, Firm Deck plate, Semi skirted, DR8, S deck, white	36 plates

Corner cut at South East and North East, North West custom laser-marking on demand



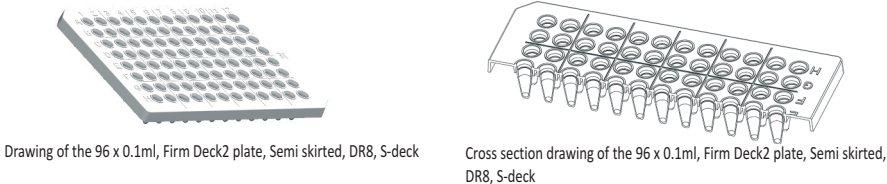
Order#	Description	Package Size
B50731FD2	96 x 0.1ml, Firm Deck plate, Semi skirted, DR8, S deck, Ultra Clear, natural	36 plates
B50739FD2	96 x 0.1ml, Firm Deck plate, Semi skirted, DR8, S deck, white	36 plates
L50739FD2B4	96 x 0.1ml, Firm Deck plate, Semi skirted, DR8, S deck, white Laser Mark (Bar) Coded South, East,North, West	36 plates

Corner cut at South East and North East, South West custom laser-marking on demand



Order#	Description	Package Size
B50741FD2	96 x 0.1ml, Firm Deck plate, Semi skirted, DR8, S deck, Ultra Clear, natural	36 plates
B50749FD2	96 x 0.1ml, Firm Deck plate, Semi skirted, DR8, S deck, white	36 plates
L50749FD2B4	96 x 0.1ml, Firm Deck plate, Semi skirted, DR8, S deck, white Laser Mark (Bar) Coded South, East,North, West	36 plates

Corner cut at South East and North East, South West, North West custom laser-marking on demand



1.3.5 96 x 0.1 ml Firm Deck (q)PCR Plates, Full Skirted, Low Profile

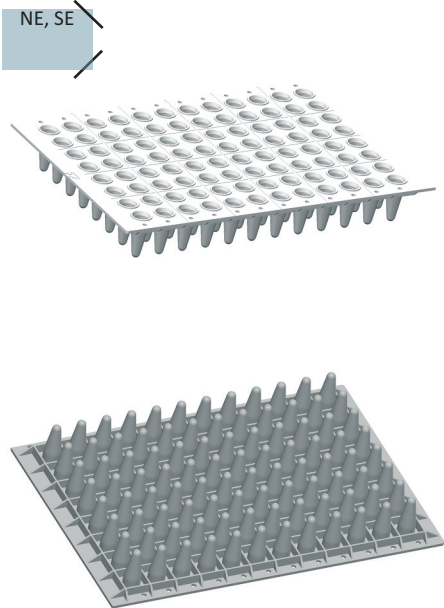
96 x 0.1ml robust, (q)PCR Plate, flat, fully skirted, stackable and robotic friendly
This **FULL SKIRTED** 96x0.1ml Firm Deck plate is designed as a direct **alternative to hard-frame two-component** 96-well plates like the **Bio-Rad Hard-Shell®**, the **Eppendorf twin.tec®**, and **Thermo FrameStar®** plates. Firm Deck plates are extremely flat, rigid and warp-free, designed to withstand high temperatures during (q)PCR and heat sealing. The extreme flatness and rigidity are obtained by ribs (SR) underneath the plate deck to prevent the plate from warping and bending. Plate Type SR single rib format. Plates are robust, **stackable, robotic friendly, ANSI footprint** and no nesting occurs when stacking them. Closure can be accomplished with any EU 8-cap strip or Opti-Seal™. For qPCR closure the use of Opti-Seal™, B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended. See compatibility search engine at www.bioplastics.com. **Corner cut at North East and South East**



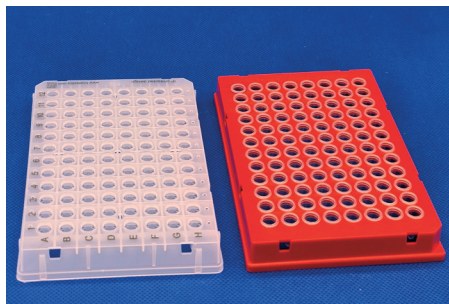
Order#	Description	Package Size
B70671FD	96 x 0.1 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Ultra Clear, Robotic Friendly , natural	.20 plates
B70679FD	96 x 0.1 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , white	.20 plates
L70671FD	96 x 0.1 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark Deck, natural	.20 plates
L70671FDB	96 x 0.1 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark Barcoded South, natural	.20 plates
L70671FDBN	96 x 0.1 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark (Bar) Coded North, natural	.20 plates
L70671FDB4	96 x 0.1 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark (Bar) Coded N,S,E,West, natural	.20 plates
L70679FD	96 x 0.1 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark Deck, white	.20 plates
L70679FDB	96 x 0.1 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark (Bar) Coded South, white	.20 plates
L70679FDB4	96 x 0.1 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark (Bar) Coded N,S,E,West, white	.20 plates

1.3.6 96 x 0.1 ml Firm Deck (q)PCR Plates, Non Skirted, Low Profile

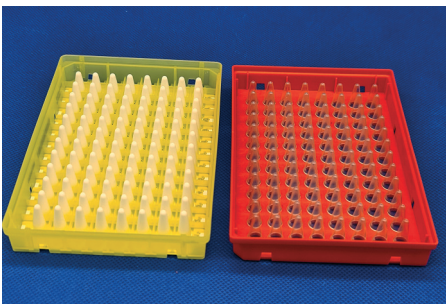
96 x 0.1ml Firm Deck, (q)PCR Plates, NON SKIRTED, Clear wells
These **NON SKIRTED** Firm Deck plates are designed for PCR and qPCR applications. FD plates are extremely flat, rigid and warp-free. These plates fits most (q)PCR cyclers models which accept low profile (LP) products. Firm Deck plates are extremely flat, rigid and warp-free, designed to withstand high temperatures during (q)PCR and heat sealing. The extreme flatness and rigidity are obtained by ribs (SR) underneath the plate deck to prevent the plate from warping and bending. Notice that although the plate is non skirted still the rib grid is faceable. For qPCR with Optical reading through the caps we recommend the use of frosted or white plates or tube-strips. Closure can be accomplished with any EU 8-cap strip or Opti-Seal™. For qPCR closure the use of Opti-Seal™, B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended. Plate Type SR single rib format. See compatibility search engine at www.bioplastics.com. **Corner cut at South East and North East**



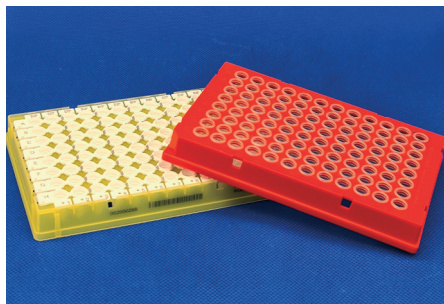
Order#	Description	Package Size
B60101FD	96 x 0.1ml, Firm Deck plate, non skirted, SR, Ultra Clear , natural	.40 plates
B60109FD	96 x 0.1ml, Firm Deck plate, non skirted, SR, white	.40 plates



Left: Firm Deck Plate L70671FD versus Right: Bio-Rad Hard Shell Plate
Firm Deck plates have similar stiff-ness, better performance, Lower CO2 footprint and are better priced



Left Firm Deck plate combo, B1675FD Firm Deck Plate Grids with B59009
"clicked in" versus Bio-Rad Hard Shell Plate



Left Firm Deck plate combo, B1675FD Firm Deck Plate Grids with B59509
"clicked in" Transformer plate versus Bio-Rad Hard Shell Plate.
Transformer plate is unique coded for each row and column and cuttable in either direction

0.2 ml RP FD strips

2.1.0 0.2 ml 8-Tube Strip Firm Deck (q)PCR Strips, Regular Profile

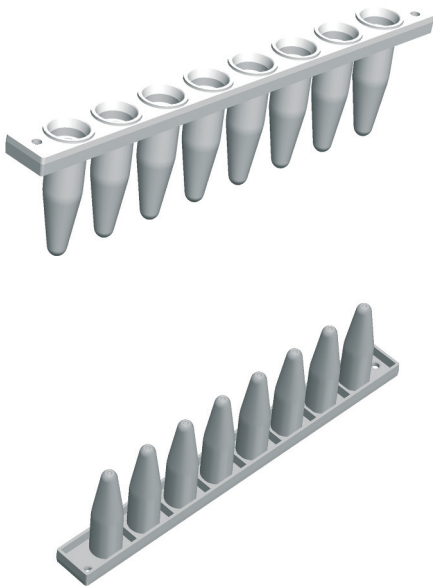
0.2ml Firm Deck 8-Tube Strips, Semi Skirted, fits FD Shell Frame Grids (FD-SFG)

Fits almost all PCR and qPCR cyclers models which accept regular profile products as Thermo®, Bio-Rad®, Eppendorf® and others. See compatibility list at www.bioplastics.com. Flat, rigid, semi skirted.

Designed for PCR and qPCR applications. Can be used with FD adaptors or can be positioned in specific (skirted) grids also called FD Shell Frame Grids and once "positioned in" becoming a plate assembly for specific (q)PCR instruments or robotic handling. There are a number of FD grids available: For **Robotic Liquid Handling systems** use **B1671ISFD Grid (Indented Surface Full Skirted, ANSI footprint)**

See also: FD Shell Frame Grids

Closure can be accomplished with any EU 8-cap strip. For qPCR closure the use of B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended.



Order#	Description	Package Size
K1371FD	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Ultra Clear, stacked, natural	.120 (10 bags x 12 pcs)
B1371FD	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, natural	.120 (10 bags x 12 pcs)
K1379FD	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, stacked, white	.120 (10 bags x 12 pcs)
B1379FD	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, white	.120 (10 bags x 12 pcs)
L1371FDB	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, barcode East, natural	.120 (10 bags x 12 pcs)
L1371FDQ	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, 2D code South, natural	.120 (10 bags x 12 pcs)
L1379FDB	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, barcode East, white	.120 (10 bags x 12 pcs)
L1379FDQ	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, 2D code South, white	.120 (10 bags x 12 pcs)

* also available as Tear-Off mats

Note : Custom mark-lasering on request

LWH (mm) 79.6 x 8.2 x 20.8 : Skirt-height 4

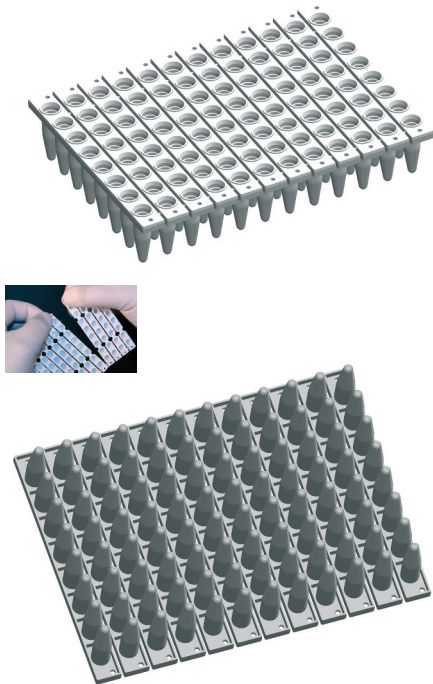
2.1.1 0.2 ml 8-Tube Strip MAT Firm Deck (q)PCR Strips, RP

0.2ml Firm Deck TEAR-OFF 8-Tube Strip Mat, Semi Skirted, fits FD Shell Frame Grids (FD-SFG)

The 96 x 0.2ml Firm Deck Tear Off 8-Tube Strip Mat is designed for PCR and qPCR applications, the semi skirted 8-tube strips are barely attached to each other. One or more individual 8-tube strips can be easily torn off. For qPCR applications frosted or white mats are recommended. The mats can be used as plates and/or as a torn off partition of it. Can be used with FD adaptors or can be positioned in specific (skirted) grids also called FD Shell Frame Grids and once "positioned in" becoming a plate assembly for specific (q)PCR instruments. There are a number of FD grids available: For **Robotic Liquid Handling systems** use **B1671ISFD Grid (Indented Surface Full Skirted, ANSI footprint)**

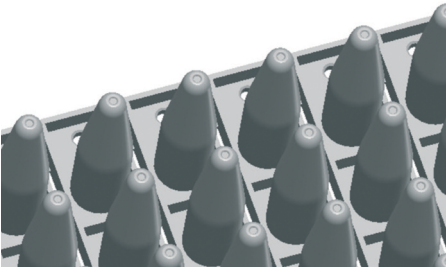
See also: FD Shell Frame Grids

Closure can be accomplished with any EU 8-cap strip. For qPCR closure the use of B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended.

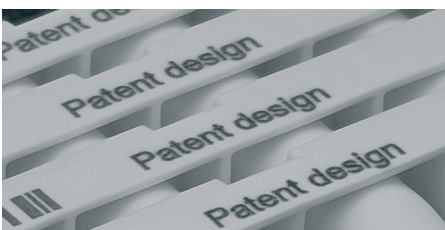


Order#	Description	Package Size
K5811FD	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Ultra Clear, stacked, natural	.20 Mats
B5811FD	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, natural	.20 Mats
B5819FD	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, white	.20 Mats
L5811FDQ	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, 2D code South,natural	.20 Mats
L5811FDT	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, LaserM deck,natural	.20 Mats
L5819FDQ	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, 2D code South,white	.20 Mats
L5819FDT	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, LaserM deck, white	.20 Mats

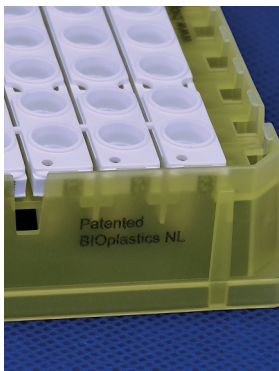
Note: Custom mark-lasering on request



Bottom side of a Tear Off 8 Tube Strip Mat



Firm Deck products are patent protected

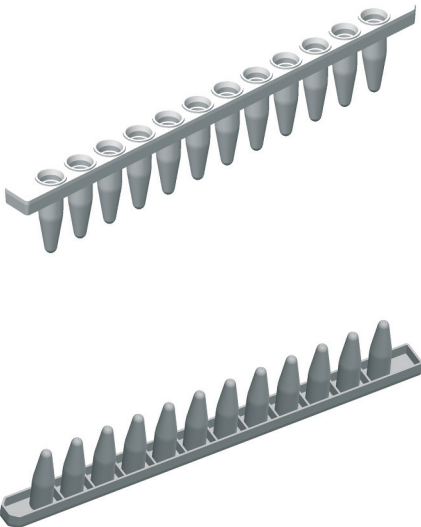


2D coded Tear Off Mat white (L58519FDQ) positioned in Firm Deck Grid (D) B675ISFD for robotic handling

2.2.0 0.2 ml 12-Tube Strip Firm Deck (q)PCR Strips, Regular Profile

0.2ml Firm Deck 12-Tube Strips, Semi Skirted, fits FD Shell Frame Grids (FD-SFG)

Fits almost all PCR and qPCR cycler models which accept regular profile products as Thermo®,Bio-Rad®, Eppendorf® and others. See compatibility list at www.bioplastics.com.
Flat, rigid, semi skirted.
Designed for PCR and qPCR applications. Can be used with FD adaptors or can be positioned in specific (skirted) grids also called FD Shell Frame Grids and once "positioned in" becoming a plate assembly for specific (q)PCR instruments. There are a number of FD grids available: For **Robotic Liquid Handling systems** use **B1671ISFD Grid (Full Skirted,Indented Surface, ANSI footprint)**
See also: FD Shell Frame Grids
Closure can be accomplished with any EU 12-cap strip. For qPCR closure the use of B57861, B57871, B56501 or Optical Tear-Off 12-Cap Strip Mat B58671 or B58651 is recommended.



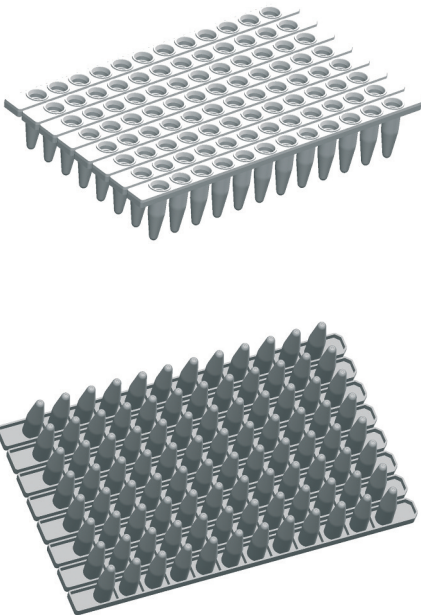
Order#	Description	Package Size
K1491FD	0.2ml, 12-tube strip, Firm Deck, Semi Skirted, Reg Profile, Ultra Clear , stacked, natural120 (10 bags x 12 pcs)
B1499FD	0.2ml, 12-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, white120 (10 bags x 12 pcs)
L1491FDB	0.2ml, 12-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, barcode South, natural120 (10 bags x 12 pcs)
L1499FDB	0.2ml, 12-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked,barcode South, white120 (10 bags x 12 pcs)

* also available as Tear-Off mats
Note: Custom-mark lasering on request
LWH (mm) 127.3 x 8.2 x 20.8 : Skirt-height 4

2.2.1 0.2 ml 12-Tube Strip MAT Firm Deck (q)PCR Strips, RP

0.2ml Firm Deck **TEAR-OFF** 12-Tube Strip Mat, Semi Skirted, fits FD Shell Frame Grids (FD-SFG)

The 96 x 0.2ml Firm Deck Tear Off 12-Tube Strip Mat is designed for PCR and qPCR applications, the semi skirted 12-tube strips are barely attached to each other. One or more individual 12-tube strips can be easily torn off.
For qPCR applications frosted or white mats are recommended. The mats can be used as plates and/or as a torn off partition of it. Can be used with FD adaptors or can be positioned in specific (skirted) grids also called FD Shell Frame Grids and once "positioned in" becoming a plate assembly for specific (q)PCR instruments. There are a number of FD grids available: For **Robotic Liquid Handling systems** use **B1671ISFD Grid (Full Skirted,Indented Surface, ANSI footprint)**
See also: FD Shell Frame Grids
Closure can be accomplished with any EU 12-cap strip. For qPCR closure the use of B57861, B57871, B56501 or Optical Tear-Off 12-Cap Strip Mat B58671 or B58651 is recommended

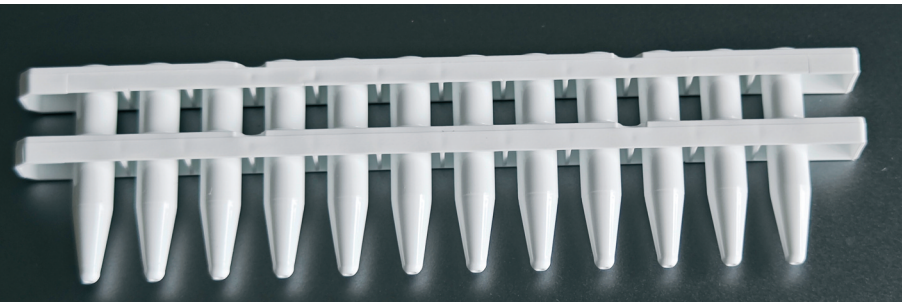


Order#	Description	Package Size
K5891FD	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Ultra Clear , stacked, natural20 Mats
B5899FD	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, white20 Mats
L5891FDQ	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, 2D code West,natural20 Mats
L5891FDT	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, LaserM deck,natural20 Mats
L5899FDQ	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, 2D code West,white20 Mats
L5899FDT	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, LaserM deck,white20 Mats

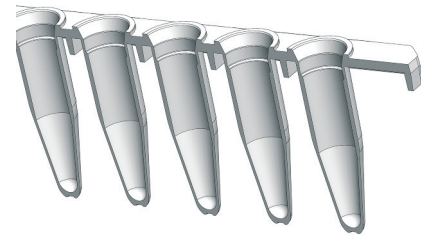
Note: Custom marked lasering on request



B1499FD 0.2ml, 12-tube strip, Firm Deck, Semi Skirted, Reg Profile, stacked, white



L1499FDB 0.2 ml, 12-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked,barcode South, white



Cross section drawing of the Firm Deck 12 tube strip 0.2 ml

0.2 ml RP FD plates

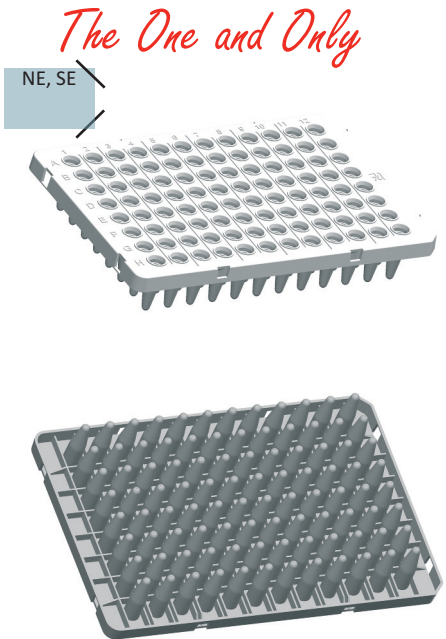
2.3.0 96 x 0.2 ml Firm Deck (q)PCR Plates, Semi Skirted, RP, DR8

96 x 0.2ml Firm Deck (FD2) robust(q)PCR Plate, fits All 0,2 ml (q)PCR Cyclers (DR8) Semi Skirted

This **SEMI SKIRTED** 96x0.2ml Firm Deck2 plate is a universal plate that fits any thermal cycler with a 0.2 ml block. So no longer different plates with specific cut corners , but just 1 plate with 2 cut corners for all. Firm Deck plates are designed as a **direct alternative** to hard-frame two-component 96-well plates like the **Bio-Rad Hard-Shell®**, **Eppendorf twin.tec®** and **Thermo FrameStar®** plates. FD2 plates are extremely flat, rigid and warp-free, designed to withstand high temperatures during (q)PCR and heat sealing. The extreme flatness and rigidity are obtained by double ribs (DR-8) underneath the plate deck to prevent the plate from warping and bending. Plate Type DR2 double rib 8 format Closure can be accomplished with any EU 8-cap strip or Opti-Seal™. For qPCR closure the use of B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended. See compatibility search engine at www.bioplastics.com. **Corner cut at North East and South East**

Order#	Description	Package Size
K4790FD2	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR8, Ultra Clear, natural	20 plates
B4790FD2	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR8, Frosted, natural	20 plates
B4799FD2	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR8, white	20 plates
L4790FD2B	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR8, Frosted, natural, Laser Mark (Bar Coded) South,	20 plates
L4790FD2BN	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR8, Frosted,natural, Laser Mark (Bar Coded) North	20 plates
L4790FD2B4	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR8, Frosted, natural, Laser Mark (Bar Coded) South, East,North, West	20 plates
L4799FD2B	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR8, white, Laser Mark (Bar Coded) South,	20 plates
L4799FD2BN	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR8, white, Laser Mark (Bar Coded) North	20 plates
L4799FD2B4	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR8, white, Laser Mark (Bar Coded) South, East,North, West	20 plates

Custom laser labelling is available on demand
Ultra clear version on demand



2.3.1 96 x 0.2 ml Firm Deck (q)PCR Plates, Semi Skirted, RP

96 x 0.2ml Firm Deck, (q)PCR Plates, Semi Skirted, Clear wells

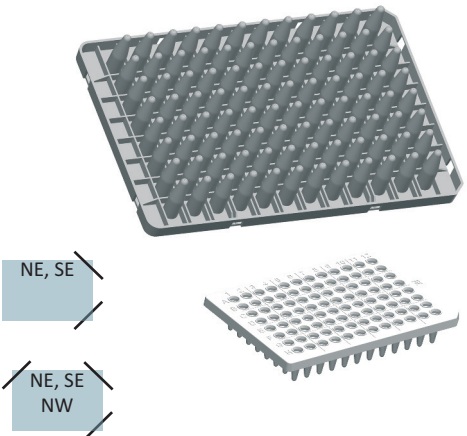
These **SEMI SKIRTED** Firm Deck plates are designed for PCR and qPCR applications. FD plates are extremely flat, rigid and warp-free. These plates fits most (q)PCR cycler models which accept regular profile (RP) products. For qPCR with Optical reading through the caps we recommend the use of frosted products or white products. Closure can be accomplished with any EU 8-cap strip or Opti-Seal™. For qPCR closure the use of Opti-Seal™, B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended. Plate Type SR single rib format.

Corner cut at North East and South East

Order#	Description	Package Size
B7501FD	96 x 0.2ml, Firm Deck plate, Semi skirted, SR, Ultra Clear, Corner Cut SE, NE, natural	20 plates
B7509FD	96 x 0.2ml, Firm Deck plate, Semi skirted, SR, Corner Cut SE, NE, white	20 plates

Corner cut at North West, North East and South East

Order#	Description	Package Size
B7511FD	96 x 0.2ml, Firm Deck plate, Semi skirted, SR, Ultra Clear, Corner Cut NW, SE, NE, natural	20 plates
B7519FD	96 x 0.2ml, Firm Deck plate, Semi skirted, SR, Corner Cut NW, SE, NE, white	20 plates



2.3.2 96 x 0.2 ml Firm Deck (q)PCR Plates, Semi Skirted, RP, DR8, S

96 x 0.2ml Firm Deck, (q)PCR Plates, Semi Skirted, Clear wells, S-Deck

These **SEMI SKIRTED** Firm Deck2 plates are designed for PCR and qPCR applications. The deck surface is slightly smaller (**S-deck= 123.2 x 81.7 mm**) compared to regular deck surface (**R-deck= 127.4 x 85 mm**). FD plates are extremely flat, rigid and warp-free. Plates fits most (q)PCR cycler models which accept regular profile (RP) products. For qPCR with Optical reading through the caps we recommend the use of frosted products or white products. Closure can be accomplished with any EU 8-cap strip or Opti-Seal™. For qPCR closure the use of Opti-Seal™, B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended. Dubbel Rib Format See compatibility search engine at www.bioplastics.com.

Corner cut at North West, South East and North East

Order#	Description	Package Size
B7511FD2	96 x 0.2ml, Firm Deck plate, Semi skirted, DR8, S deck, Ultra Clear, Corner Cut NW, SE, NE, natural	20 plates
B7519FD2	96 x 0.2ml, Firm Deck plate, Semi skirted, DR8, S deck, Corner Cut NW, SE, NE, white	20 plates

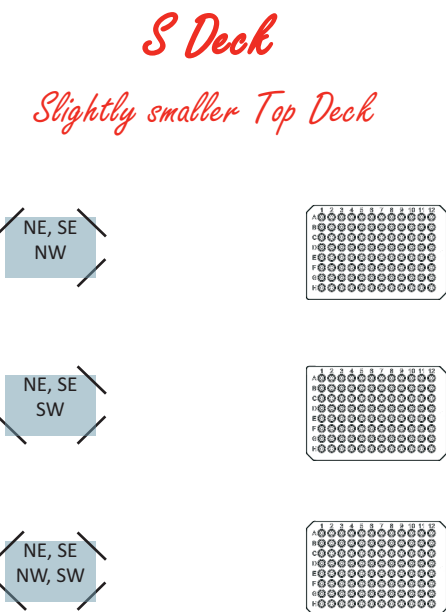
Corner cut at South West, South East and North East

Fits QX600/QX200 Droplet Digital™ PCR Systems

Order#	Description	Package Size
B7531FD2	96 x 0.2ml, Firm Deck plate, Semi skirted, DR8, S deck, Ultra Clear, Corner Cut SW, SE, NE, natural	20 plates
B7539FD2	96 x 0.2ml, Firm Deck plate, Semi skirted, DR8, S deck, Corner Cut SW, SE, NE, white	20 plates
L7539FD2B4	96 x 0.2ml, Firm Deck plate, Semi skirted, DR8, S deck, Cut SW, SE, NE, white, Laser Mark (Bar Coded) South, East,North, West	20 plates

Corner cut at South West, South East, North East and North West

Order#	Description	Package Size
B7541FD2	96 x 0.2ml, Firm Deck plate, Semi skirted, DR8, S deck, Ultra Clear, Corner Cut SW, SE, NE, NW, natural	20 plates
B7549FD2	96 x 0.2ml, Firm Deck plate, Semi skirted, DR8, S deck, Corner Cut SE, NE, NW, white	20 plates
L7549FD2B4	96 x 0.2ml, Firm Deck plate, Semi skirted, DR8, S deck, Co. Cut SW, SE, NE, NW, white Laser Mark (Bar Coded) South, E,N, W	20 plates



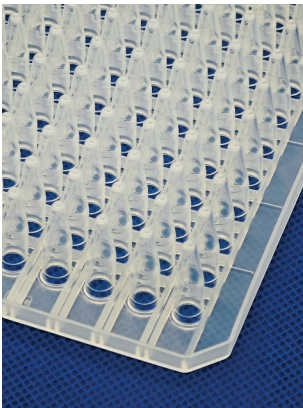
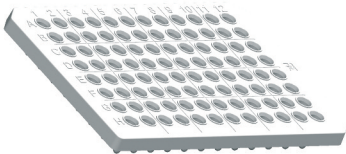
2.3.3 96 x 0.2 ml Firm Deck (q)PCR Plates, Semi Skirted, RP, DR12

96 x 0.2ml Firm Deck (FD2) (q)PCR Plate, fits all 0,2 ml (q)PCR Cyclers Semi Skirted (DR12)

This **SEMI SKIRTED** 96x0.2ml Firm Deck2 plate is a universal plate that fits any thermal cycler with a 0.2 ml block. So no longer different plates with specific cut corners, but just 1 plate with 3 cut corners for all. Firm Deck plates are designed as a **direct alternative** to hard-frame two-component 96-well plates like the **Bio-Rad Hard-Shell®**, **Eppendorf twin.tec®** and **Thermo FrameStar®** plates. FD2 plates are extremely flat, rigid and warp-free, designed to withstand high temperatures during (q)PCR and heat sealing. The extreme flatness and rigidity are obtained by double ribs (DR-8) underneath the plate deck to prevent the plate from warping and bending. Plate Type DR2 double rib 12 format Closure can be accomplished with any EU 8-cap strip or Opti-Seal™. For qPCR closure the use of B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended. See compatibility search engine at www.bioplastics.com. **Corner cut at North East, South East, North West**

Order#	Description	Package Size
B4710FD2	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR12, Ultra Clear, Natural	20 plates
B4719FD2	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR12, white	20 plates
L4710FD2B	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR12, natural, Laser Mark (Bar Coded) South,	20 plates
L4710FD2BN	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR12,natural, Laser Mark (Bar Coded) North	20 plates
L4710FD2B4	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR12, natural, Laser Mark (Bar Coded) South, East,North, West	20 plates
L4719FD2B	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR12, white, Laser Mark (Bar Coded) South,	20 plates
L4719FD2BN	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR12, white, Laser Mark (Bar Coded) North	20 plates
L4719FD2B4	96 x 0.2ml, Firm Deck2 plate, Semi skirted, DR12, white, Laser Mark (Bar Coded) South, East,North, West	20 plates

Custom laser labelling is available on demand

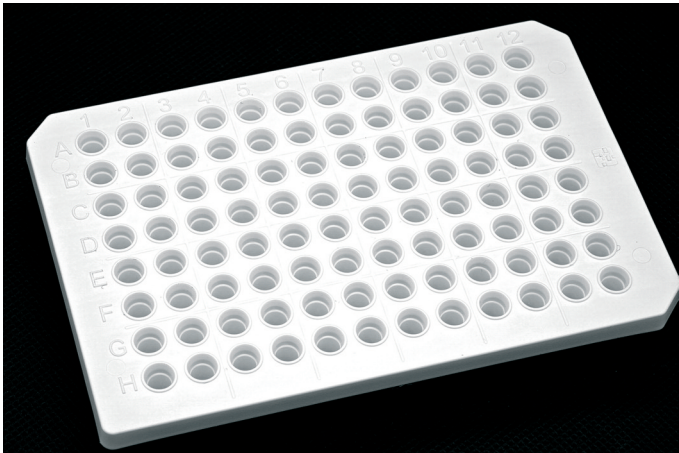
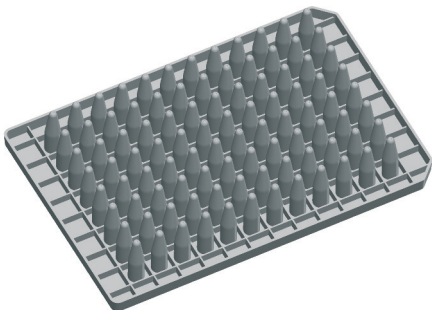
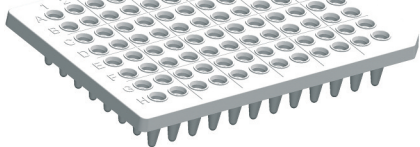
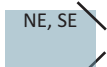


2.3.4 96 x 0.2 ml Firm Deck (q)PCR Plates, Semi Skirted, RP

96 x 0.2ml Firm Deck, (q)PCR Plates, Semi Skirted, Light Frosted wells

These **SEMI SKIRTED** Firm Deck plates are designed for PCR and qPCR applications. FD plates are extremely flat, rigid and warp-free. These plates fits most (q)PCR cycler models which accept regular profile (RP) products. For qPCR with Optical reading through the caps we recommend the use of frosted products or white products. Closure can be accomplished with any EU 8-cap strip or Opti-Seal™. For qPCR closure the use of Opti-Seal™, B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended. Plate Type R single rib format See compatibility search engine at www.bioplastics.com. **Corner cut at South, East and North East**

Order#	Description	Package Size
B7901FD	96 x 0.2ml, Firm Deck plate, Semi skirted, SR, Light Frosted, natural	20 plates
B7909FD	96 x 0.2ml, Firm Deck plate, Semi skirted, SR, white	20 plates
L7909FDB	96 x 0.2ml, Firm Deck plate, Semi skirted, SR, white, Laser Mark (Bar Coded) South	20 plates



B4719FD2 top view



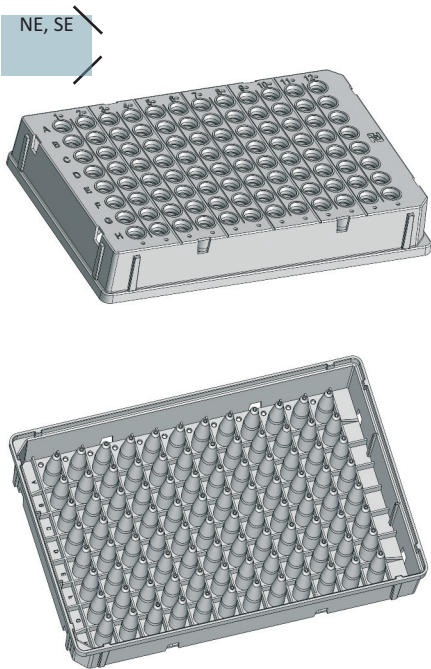
B4719FD2 bottom view with DR12 faceable (double rib 12 direction)

0.2 ml RP FD plates

2.3.5 96 x 0.2 ml Firm Deck (q)PCR Plates, Full Skirted, RP

96 x 0.2ml robust, (q)PCR Plate, flat, full skirted, stackable and robotic friendly
This **unique FULL SKIRTED** 96x0.2ml Firm Deck plate is designed as a direct **alternative** to hard-frame two-component 96-well plates. Fact is that a **Firm Deck Full Skirted plate can handle 0.2 ml** makes this valued rigid, flat and wrap free plate **popular in Next Generations Sequencing applications**. *Volume max. 250 µl (seal) or 225 µl (cap)*
Firm Deck plates are extremely flat, rigid and warp-free, designed to withstand high temperatures during (q)PCR and heat sealing. The extreme flatness and rigidity are obtained by ribs (SR) underneath the plate deck.
Plate Type SR single rib format.
Plates are robust, **stackable, robotic friendly, ANSI footprint** and no nesting occurs when stacking them.
Closure can be accomplished with any EU 8-cap strip or Opti-Seal™. For qPCR closure the use of Opti-Seal™, B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended.
See compatibility search engine at www.bioplastics.com. **Corner cut at North East and South East**

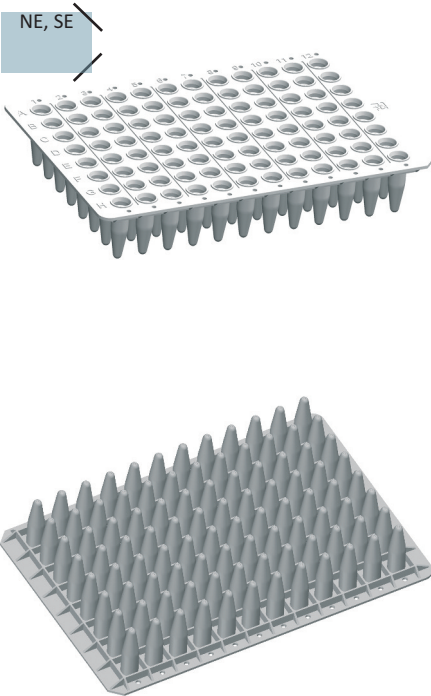
Order#	Description	Package Size
B72671FD	96 x 0.2 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Light Frosted, Robotic Friendly , natural	.14 plates
B72679FD	96 x 0.2 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , white	.14 plates
L72671FD	96 x 0.2 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark Deck, natural	.14 plates
L72671FDB	96 x 0.2 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark Deck, natural	.14 plates
L72671FDBN	96 x 0.2 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark (Bar) Coded North, natural	.14 plates
L72671FDB4	96 x 0.2 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark (Bar) Coded N,S,E,West, natural	.14 plates
L72679FD	96 x 0.2 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark Deck, white	.14 plates
L72679FDB	96 x 0.2 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark (Bar) Coded South, white	.14 plates
L72679FDB4	96 x 0.2 ml, Firm Deck, Thin-wall plate, Full skirted, SR, Robotic Friendly , Laser Mark (Bar) Coded N,S,E,West, white	.14 plates



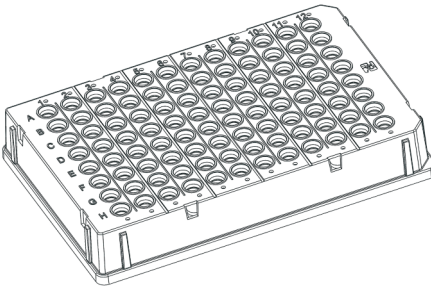
2.3.6 96 x 0.2 ml Firm Deck (q)PCR Plates, Non Skirted, RP

96 x 0.2 ml Firm Deck, (q)PCR Plates, NON SKIRTED, Clear wells
These **NON SKIRTED** Firm Deck plates are designed for PCR and qPCR applications. FD plates are extremely flat, rigid and warp-free. These plates fits most (q)PCR cycler models which accept regular profile (RP) products.
Designed to withstand high temperatures during (q)PCR and heat sealing. The extreme flatness and rigidity are obtained by ribs (SR) underneath the plate deck to prevent the plate from warping and bending. Plate Type SR single rib format
Notice that although the plate is non skirted stil the rib grid is faceable
For qPCR with Optical reading through the caps we recommend the use of frosted products or white products.
Closure can be accomplished with any EU 8-cap strip or Opti-Seal™. For qPCR closure the use of Opti-Seal™, B57801, B57881, B79701-1 or B57651 Optical Tear-Off 8-Cap Strip Mat is recommended.
Plate Type SR single rib format
See compatibility search engine at www.bioplastics.com. **Corner cut at South East and North East**

Order#	Description	Package Size
B70501FD	96 x 0.2ml, Firm Deck plate, non skirted, SR, Ultra Clear , natural	.20 plates
B70509FD	96 x 0.2ml, Firm Deck plate, non skirted, SR, white	.20 plates



L72679FDB4 Regular Profile 0.2 ml Fulll Skirted Plate, Robotic Friendly, Laser Mark (Bar) Coded North, South, East, West, white



Drawing of B72671FD Regular Profile 0.2 ml Fulll Skirted Plate, Robotic Friendly and unique in its appearance

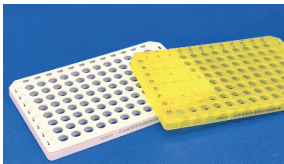
3.1.0 Firm Deck Shell Frame Grids

BIOplastics manufactures and offers the widest range (q)PCR disposables for ALL BRANDS of PCR and qPCR cyclers. Our new patented Firm Deck (q)PCR plastics range comprises new Firm Deck Shell Frame Grids. The new Firm Deck Shell Frame Grid Range is the final touch for changing the (q)PCR Industry Standards.

Firm Deck (FD) Shell Frame Grids

The innovative development of the Firm Deck Shell Frame Grid range enables the use of, pretty much, all of our (q)PCR disposables on your cycler, liquid handling or robotic platform, regardless model or brand. Firm Deck Shell Frame Grids can be seen as the skirted version of a plate, however without any tubes. **FD Shell Frame Grids** are **flat, rigid and warp-free**, designed to **withstand high temperatures** during (q)PCR and heat sealing. FD Shell Frame grids can hold BIOplastics SFG compatible products by clicking them into the grid. The combination of flat, rigid FD Shell Frame Grid with a “clicked in” SFG fit able product is a **alternative to** two-component 96-well plates like the **Bio-Rad Hard-Shell®**, the **Eppendorf Twin Tec®**, and **Thermo FrameStar®** plates. Notice that only the required amount of e.g strips have to be “clicked in”. This is highly efficient and environment friendly. In addition you can e.g., “click in” any BIOplastics SFG compatible strip (example 0.1 ml LP strip B59901) in a Full Skirted **FD Shell Frame Grid model** (e.g. B1671FD). Assemblies can be handled by Liquid Handling systems. Once completed the required strips or partitions of plates can be “clicked out” and positioned in another model **FD Shell Frame Grid** eg. **FD semi skirted grid (B7489FD)** This **assembly fits cyclers as Roche LightCycler® 480 systems, Thermo fast 0.1 ml cyclers, Bio-Rad, Qiagen, Analytic Jena** and pretty much all cycler models which accepts 0.1 ml vessels. Notice that there are Shell Frame Grids which handle non skirted SFG compatible products like strips, mats and plates and Shell Frame grids which can handle FD strips and mats.

FD Shell Frame Grids are available in **PP, limited re-useable**, formats next to two durable and ongoing **re-useable HPL formats**

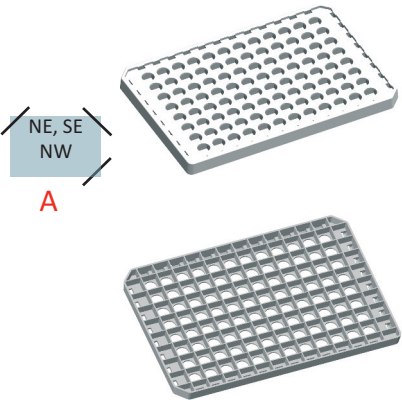


Firm Deck (FD) Shell Frame Grid models

3.1.1 Firm Deck Shell Frame Grid, Semi Skirted

- Semi skirted (A)**
- fits all thermal cyclers (PCR & qPCR), flat, rigid, warp-free
 - Laser-mark coded, corner cut at North-West, North-East and South East
 - Accepts all Shell-Frame-Grid Compatible BIOplastics (q)PCR Strips, Mats & Plates as LP(0.1ml), RP(0.2 ml) or HP formats

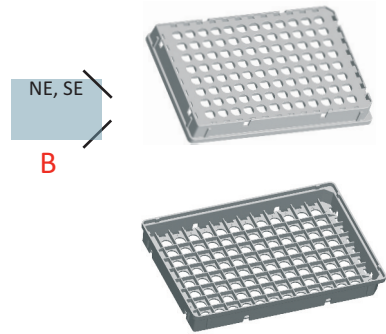
Order#	Description	Package Size
B7483FD	Firm Deck SFG, Semi Skirted accept all Shell Frame Grid Compatible (q)PCR Strips, Mats & plates, blue	36 Grids
B7485FD	Firm Deck SFG, Semi Skirted accept all Shell Frame Grid Compatible (q)PCR Strips, Mats & plates, Laser Mark Coded, yellow . . .	36 Grids
B7489FD	Firm Deck SFG, Semi Skirted accept all Shell Frame Grid Compatible (q)PCR Strips, Mats & plates, Laser Mark Coded, white . . .	36 Grids



3.1.2 Firm Deck Shell Frame Grid, Low Profile, Full Skirted

- Full skirted Low Profile (0.1 ml) (B)**
- ANSI Footprint, Stackable, flat, rigid and warp-free, corner cut , North-East and South East
 - Can be handle by Robotics, Liquid Handling and NGS platforms
 - Accepts Low Profile 0.1 ml Shell Frame Grid Compatible BIOplastics (q)PCR Strips, Mats & plates
 - Fits thermal cyclers as Bio-Rad, Qiagen, Analytik Jena and others

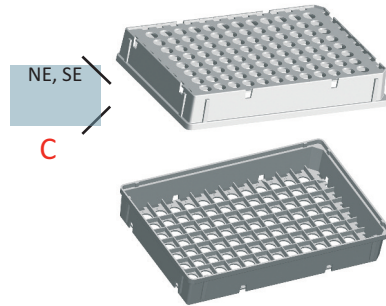
Order#	Description	Package Size
B1675FD	Firm Deck SFG, Full Skirted LP accept LP Shell Frame Grid Compatible(q)PCR Strips, Mats & plates, Laser Mark Coded, yellow	18 Grids
B1679FD	Firm Deck SFG, Full Skirted LP accept LP Shell Frame Grid Compatible(q)PCR Strips, Mats & plates, Laser Mark Coded, white . . .	18 Grids



3.1.3 Firm Deck Shell Frame Grid, Regular Profile, Full Skirted

- Full skirted Regular Profile (0.1 & 0.2 ml) (C)**
- ANSI Footprint, Stackable, flat, rigid and warp-free, corner cut at, North-East and South East
 - Can be handle by Robotics, Liquid Handling and NGS platforms
 - Accepts Low Profile 0.1 ml and Regular Profile 0.2 ml Shell Frame Grid Compatible BIOplastics (q)PCR Strips, Mats & plates
 - Fits thermal cyclers as Bio-Rad, Qiagen, Analytik Jena and others

Order#	Description	Package Size
B675FD	Firm Deck SFG, Full Skirted RP accept LP & RP Shell Frame Grid Compatible Strips, Mats & plates, Laser Mark Coded, yellow . .	14 Grids
B679FD	Firm Deck SFG, Full Skirted RP accept LP & RP Shell Frame Grid Compatible(q) Strips, Mats & plates, Laser Mark Coded, white . .	14 Grids



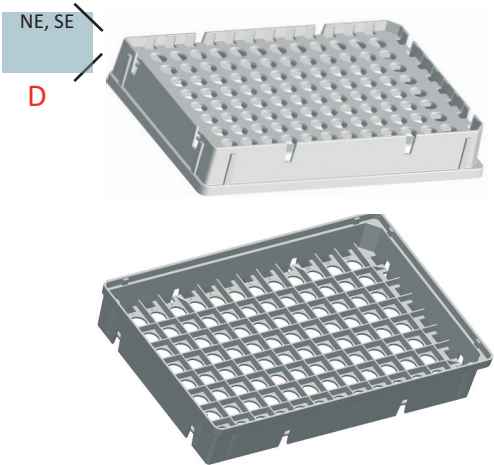
Firm Deck Shell Frame Grids

3.1.4 Firm Deck Shell Frame Grid, Indented Deck, Full Skirted

Full skirted Firm Deck Regular Profile Indented Deck for Firm Deck Strips and Tear Off Mats (0.1 & 0,2 ml) (D)

- ANSI Footprint, Stackable, flat, rigid and warp-free, corner cut , North-East and South East
- Can be handle by Robotics, Liquid Handling and NGS platforms
- Accepts Firm Deck Low Profile FD 0.1 ml and Firm Deck Regular Profile FD 0.2 ml (q)PCR Strips, Mats & plates
- Fits if equiped with Firm Deck Regular Profile 0.2 ml (q)PCR Strips, Mats & plates thermal cyclers as Bio-Rad, Qiagen, Analytik Jena and others

Order#	Description	Package Size
B675ISFD	Firm Deck SFG, Full Skirted RP Indented Deck accept LP & RP Firm Deck Strips, Mats & plates ,Laser Mark Coded, yellow14 Grids	
B679ISFD	Firm Deck SFG, Full Skirted RP Indented Deck accept LP & RP Firm Deck Strips, Mats & plates ,Laser Mark Coded, white14 Grids	



3.1.5 HPL Firm Deck Shell Frame Grid, Semi Skirted

Durable Shell Frame Grids HPL (re-useable) (E, F)

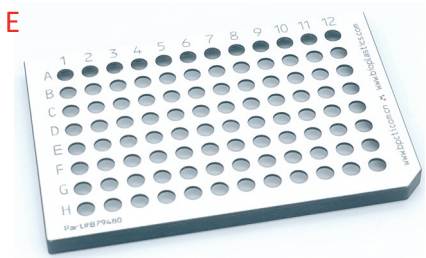
Instead of the semi-disposable FD Shell Frame Grids you may opt for using a permanent solution specifically to fit Roche LightCycler® 480 systems and some Thermo 0.1 ml Fast Systems

These disposable and durable Shell Frame Grids which accepts depending in model all type of Shell Frame Grid compatible “click in” disposables(E) or All (F) FD tube-strips, FD Tear Off Mats, and Shell Frame Grid compatible FD plates.

Durable Shell Frame Grids are robust, stiff, re-usable and made of durable HPL.

Shell Frame Grids

- Semi or Sub skirted (reverse semi-Skirted)
- Ideal for all PCR and qPCR applications
- Fits designated specific Thermal cyclers (PCR & qPCR)
- Type E and F Accepts Shell Frame Grid compatible “click in” disposables (for Semi-Skirted version)
- Type F Accepts Shell Frame Grid compatible FD disposables (for Sub Skirted -Skirted version)



Shell Frame durable, permanent (E) for non skirted products

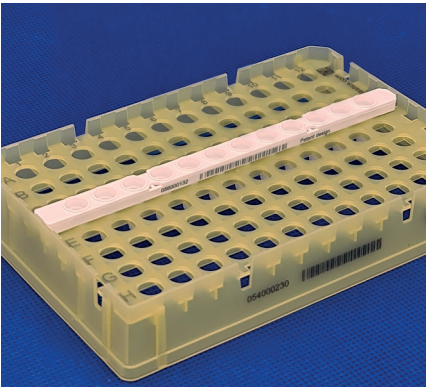
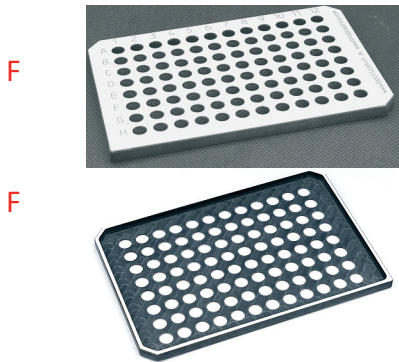
Order#	Description	Package Size
B79480	EU adaptor 1 for use in Roche LightCycler® 480 systems, re-useable accept SFG compatible products (LP)1 adaptor	

For Type F see below 3.1.6.

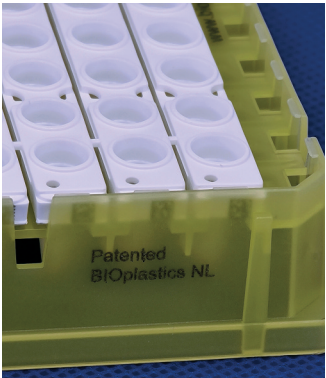
3.1.6 HPL Firm Deck Shell Frame Grid, Semi Skirted, Indented Deck

Shell Frame durable, permanent (F) for FD strips & mats

Order#	Description	Package Sizer
A480REV	Adaptor HPL reverse. Subskirted for use in Roche LightCycler® 480 systems and Thermo Fast systems,1 adaptor for FD Strip Tubes, FD Tear Off Mats and FD plates which are SFG compatible	



Firm Deck 12-strip “clicked in” into a Full Skirted B675ISFD grid



8-Tube Strip Mat Firm Deck, 2D coded “clicked in” into a Full Skirted B675ISFD grid



Detail of an 8 Tube-Strip Mat 0.1 ml LP (ultra clear), “clicked in” into a white FD Full Skirted grid (B1679FD or B679FD).

FD strips fitting Firm Deck Shell Frame Grids

4.1.0 Firm Deck Tube-Strips (0.1 & 0.2 ml) which fit Firm Deck Shell Frame Grids Type **D** and **F**

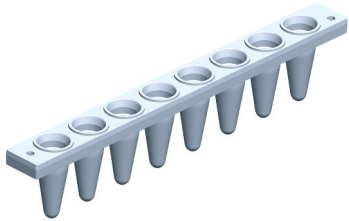
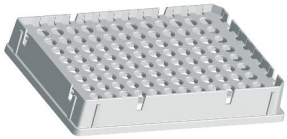
B679ISFD Firm Deck SFG, Full Skirted (LP & RP) indented Deck ANSI footprint (**D**)

A480REV Firm Deck SFG Semi Skirted Adaptor, (LP & RP) indented Deck (HPL)(**F**)

Category 0.1 ml LP Low profile and 0.2 ml RP FD products

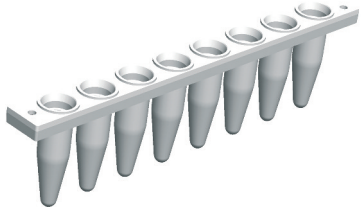
0.1ml Firm Deck LP 8-Tube Strips, Semi Skirted, fits FD Shell Frame Grids (FD-SFG D, F)

Order#	Description	Package Size
K1271FD	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Ultra Clear, stacked, natural	.240 (12 bags x 20 pcs)
B1271FD	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, natural	.240 (12 bags x 20 pcs)
B1279FD	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, white	.240 (12 bags x 20 pcs)
L1271FDB	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, barcode East, natural	.240 (12 bags x 20 pcs)
L1271FDQ	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, 2D code South, natural	.240 (12 bags x 20 pcs)
L1279FDB	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, barcode East, white	.240 (12 bags x 20 pcs)
L1279FDQ	0.1ml, 8-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, 2D code South, white	.240 (12 bags x 20 pcs)



0.2ml Firm Deck RP 8-Tube Strips, Semi Skirted, fits FD Shell Frame Grids (FD-SFG D, F)

Order#	Description	Package Size
K1371FD	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Ultra Clear, stacked, natural	.120 (10 bags x 12 pcs)
B1371FD	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, natural	.120 (10 bags x 12 pcs)
K1379FD	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, stacked, natural	.120 (10 bags x 12 pcs)
B1379FD	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, white	.120 (10 bags x 12 pcs)
L1371FDB	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, barcode East, natural	.120 (10 bags x 12 pcs)
L1371FDQ	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, 2D code South, natural	.120 (10 bags x 12 pcs)
L1379FDB	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, barcode East, white	.120 (10 bags x 12 pcs)
L1379FDQ	0.2ml, 8-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, 2D code South, white	.120 (10 bags x 12 pcs)



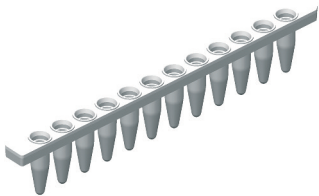
0.1ml Firm Deck LP 12-Tube Strips, Semi Skirted, fits FD Shell Frame Grids (FD-SFG D, F)

Order#	Description	Package Size
B1291FD	0.1ml, 12-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, natural	.160 (8 bags x 20 pcs)
L1291FDB	0.1ml, 12-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, barcode South, natural	.160 (8 bags x 20 pcs)
B1299FD	0.1ml, 12-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, white	.160 (8 bags x 20 pcs)
L1299FDB	0.1ml, 12-tube strip, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, barcode South, white	.160 (8 bags x 20 pcs)



0.2ml Firm Deck RP 12-Tube Strips, Semi Skirted, fits FD Shell Frame Grids (FD-SFG D, F)

Order#	Description	Package Size
K1491FD	0.2ml, 12-tube strip, Firm Deck, Semi Skirted, Reg Profile, Ultra Clear, stacked, natural	.120 (10 bags x 12 pcs)
B1499FD	0.2ml, 12-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, white	.120 (10 bags x 12 pcs)
L1491FDB	0.2ml, 12-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, barcode South, natural	.120 (10 bags x 12 pcs)
L1499FDB	0.2 ml, 12-tube strip, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked,barcode South, white	.120 (10 bags x 12 pcs)



Frosted 0.2 ml 8-Tube Strip Tear Off Mat "clicked in" into a Semi Skirted Firm Deck Grid (B7483FD)



Partition of a white (left) and a clear (right) 0.1 ml (LP) 8-Tube Strip Tear Off Mat "clicked in" into a Full Skirted grid (B1675FD)



0.2 ml (RP) frosted 8-Tube-Strips (B69901) partly clicked in" into a Full Skirted grid (B679FD)

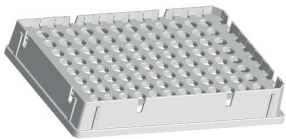
FD strip Mats fitting Firm Deck Shell Frame Grids

4.1.1 FD Shell Frame Grids which accept BIOplastics 0.1 & 0.2 ml Firm Deck (FD) Tear Off Mats

B679ISFD Firm Deck SFG, Full Skirted (LP & RP) indented Deck ANSI footprint (D)

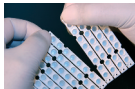
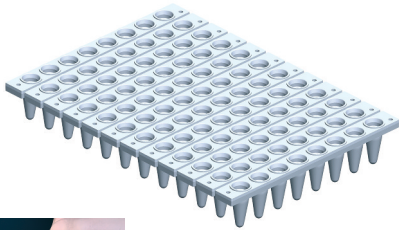
A480REV Firm Deck SFG Semi Skirted Adaptor, (LP & RP) indented Deck (HPL)(F)

Category 0.1 ml LP Low profile and 0.2 ml RP FD products



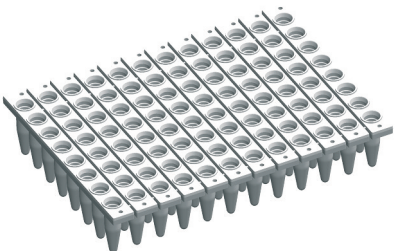
0.1ml Firm Deck TEAR-OFF LP 8-Tube Strip Mat, Semi Skirted, fits FD Shell Frame Grids (D, F)

Order#	Description	Package Size
K5911FD	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Ultra Clear, stacked, natural	36 Mats (2 bags x 18 pcs)
B5911FD	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, natural	36 Mats (2 bags x 18 pcs)
L5911FDQ	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, 2D code South,natural	36 Mats (2 bags x 18 pcs)
L5911FDT	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, LaserM deck,natural	36 Mats (2 bags x 18 pcs)
B5919FD	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, white	36 Mats (2 bags x 18 pcs)
L5919FDQ	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, 2D code South,white	36 Mats (2 bags x 18 pcs)
L5919FDT	0.1ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted, stacked, LaserM deck,white	36 Mats (2 bags x 18 pcs)



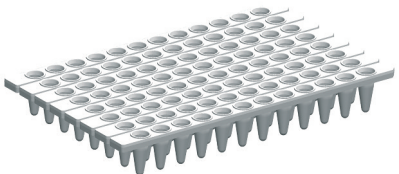
0.2ml Firm Deck TEAR-OFF RP 8-Tube Strip Mat, Semi Skirted, fits FD Shell Frame Grids (D, F))

Order#	Description	Package Size
K5811FD	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Ultra Clear, stacked, natural	20 Mats
B5811FD	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, natural	20 Mats
B5819FD	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, white	20 Mats
L5811FDQ	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, 2D code South,natural	20 Mats
L5811FDT	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, LaserM deck,natural	20 Mats
L5819FDQ	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, 2D code South,white	20 Mats
L5819FDT	0.2ml, 8-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted, stacked, LaserM deck, white	20 Mats



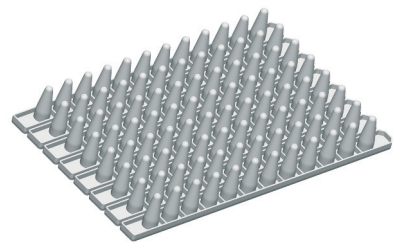
0.1ml Firm Deck TEAR-OFF LP 12-Tube Strip Mat, Semi Skirted, fits FD Shell Frame Grids (D, F))

Order#	Description	Package Size
B5991FD	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, natural	36 Mats (2 bags x 18 pcs)
B5999FD	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, white	36 Mats (2 bags x 18 pcs)
L5991FDQ	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, 2D code West,natural	36 Mats (2 bags x 18 pcs)
L5999FDQ	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, 2D code West,white	36 Mats (2 bags x 18 pcs)
L5991FDT	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, LaserM deck,natural	36 Mats (2 bags x 18 pcs)
L5999FDT	0.1ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Low Profile, Light Frosted , stacked, LaserM deck,white	36 Mats (2 bags x 18 pcs)

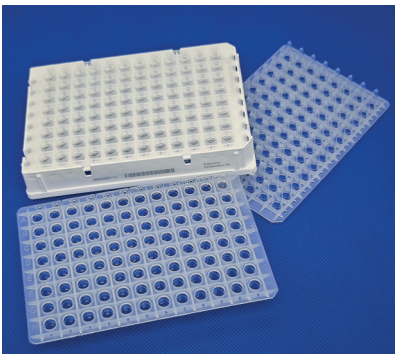


0.2ml Firm Deck TEAR-OFF RP 12-Tube Strip Mat, Semi Skirted, fits FD Shell Frame Grids (D, F)

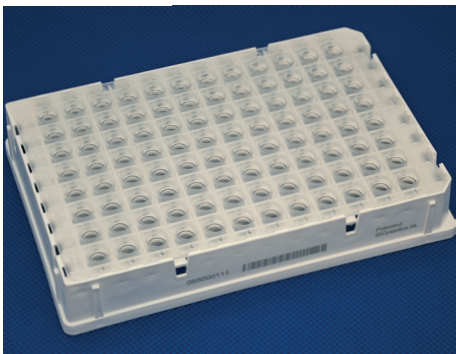
Order#	Description	Package Size
K5891FD	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Ultra Clear , stacked, natural	20 Mats
B5899FD	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, white	20 Mats
L5891FDQ	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, 2D code West,natural	20 Mats
L5891FDT	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, LaserM deck,natural	20 Mats
L5899FDQ	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, 2D code West,white	20 Mats
L5899FDT	0.2ml, 12-tube strip Mat, Firm Deck, Semi Skirted, Reg Profile, Light Frosted , stacked, LaserM deck,white	20 Mats



Bottom of B60101FD 0.1 ml non skirted Firm Deck plate. Notice its Firm Deck frame on the underside



B60101FD 0.1 ml non skirted Firm Deck plate. T Notice its Firm Deck frame on the underside



Assembly of B60101FD 0.1 ml non skirted Firm Deck plate “ clicked in B679ISFD Shell Frame Firm Deck Full Skirted Grid

0.1 ml LP products (non FD) which fits FD Shell Frame Grids

4.2.0 Firm Deck Shell Frame Grids which accept BIOplastics Low profile 0.1 ml products

B7489FD Firm Deck SFG, Semi Skirted (LP & RP) (A)

B1679FD Firm Deck SFG, Full Skirted LP ANSI footprint (B)

B679FD Firm Deck SFG, Full Skirted (LP & RP) ANSI footprint (C)

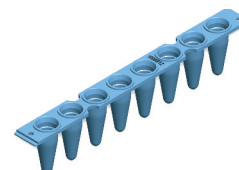
B79480 Firm Deck SFG Semi Skirted Adaptor, LP (HPL)(E)

Category 0.1 ml LP Low profile



EU 0.1ml 8-Tube Strips, extra robust, low profile fits Shell Frame Grids (A,B,C & E)

Order#	Description	Package Size
K59901	EU 0.1ml, Thin-wall 8-tube strip, Extra Robust, Low Profile, Ultra Clear, fits SFG, natural	.bag, 120
B59901	EU 0.1ml, Thin-wall 8-tube strip, Extra Robust, Low Profile, Frosted, fits SFG, natural	.bag, 120
B59909	EU 0.1ml, Thin-wall 8-tube strip, Extra Robust, Low Profile, fits SFG, white	.bag, 120



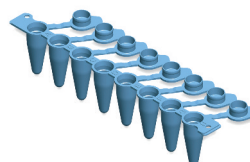
EU 0.1ml 8-Tube Strips, robust, low profile, fits Shell Frame Grids (A,B,C & E)

Order#	Description	Package Size
K77001	EU 0.1ml, Thin-wall 8-tube strip, Robust, Low Profile, Ultra Clear, fits SFG, natural	.bag, 120
B77001	EU 0.1ml, Thin-wall 8-tube strip, Robust, Low Profile, Frosted, fits SFG, natural	.bag, 120
B77009	EU 0.1ml, Thin-wall 8-tube strip, Robust, Low Profile, fits SFG, white	.bag, 120



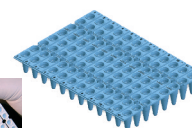
EU 0.1ml 8-Tube Strips with single attached optical wide area caps, low profile, fits Shell Frame Grids (A,B,C & E)

Order#	Description	Package Size
K72810B	EU 0.1ml, Thin-wall 8-tube strip with attached optical cap, Low Profile, Ultra Clear, fits SFG, natural	.bag, 300
B72811	EU 0.1ml, Thin-wall 8-tube strip with attached optical cap, Low Profile, Frosted, fits SFG, natural	.bag, 120



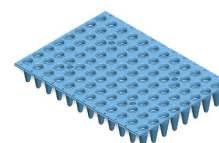
EU 0.1ml 8-Tube Strips, extra robust, low profile, Tear Off Mat, fits Shell Frame Grids(A,B,C & E)

Order#	Description	Package Size
K59001-1	EU 96 x 0.1ml, 8-tube strip Tear Off Mat, Low Profile, Ultra Clear, natural	.25 mats (300 strips)
B59001-1	EU 96 x 0.1ml, 8-tube strip Tear Off Mat, Low Profile, Frosted, natural	.25 mats (300 strips)
K59009-1	EU 96 x 0.1ml, 8-tube strip Tear Off Mat, Low Profile, white	.25 mats (300 strips)



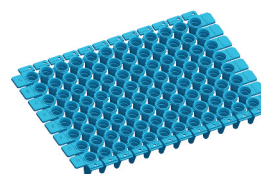
EU 96 x 0.1ml robust, cut-able (q)PCR Plate, fits Shell Frame Grids (A,B,C & E)

Order#	Description	Package Size
B60101-1	96 x 0.1ml, Thin-wall plate, Non skirted, fits SFG, Ultra Clear, natural	.25 plates
B50601-1	96 x 0.1ml, Thin-wall plate, Non skirted, fits SFG, Frosted, natural	.25 plates
B60109-1	96 x 0.1ml, Thin-wall plate, Non skirted, fits SFG, white	.25 plates



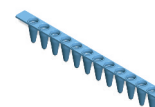
EU 96 x 0.1ml robust, Transformer cut-able (q)PCR Plate, fits Shell Frame Grids (A,B,C & E)

Order#	Description	Package Size
B59501	EU 0.1ml, Transformer plate, Low Profile, Frosted, SFG, natural	.25 plates
B59509	EU 0.1ml, Transformer plate, Low Profile, SFG, white	.25 plates
K59601	EU 0.1ml, Transformer TOO plate, Low Profile, Ultra Clear, SFG, natural	.25 plates
K59609	EU 0.1ml, Transformer TOO plate, Low Profile, SFG, white	.25 plates



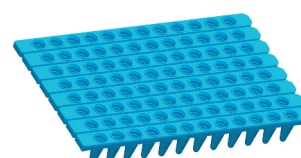
EU 0.1ml 12-Tube Strips, extra robust, low profile fits Shell Frame Grids (A,B,C & E)

Order#	Description	Package Size
B76601	EU 0.1ml, Thin-wall 12-tube strip, Extra Robust, Low Profile, Ultra Clear, fits SFG, natural	.bag 80
B76609	EU 0.1ml, Thin-wall 12-tube strip, Extra Robust, Low Profile, fits SFG, white	.bag 80
B76621	EU 0.1ml, Thin-wall 12-tube strip, Extra Robust, Low Profile, Frosted, fits SFG, natural	.bag 80
K76629	EU 0.1ml, Thin-wall 12-tube strip, Extra Robust, Low Profile, fits SFG, white	.bag 80



EU 0.1ml 12 Tube Strips, extra robust, low profile, Tear Off Mat, fits Shell Frame Grids (A,B,C & E)

Order#	Description	Package Size
K59151	EU 96 x 0.1ml, 12-tube strip Tear Off Mat, Low Profile, fits SFG, Ultra Clear, natural	.25 mats (300 strips)
B59151	EU 96 x 0.1ml, 12-tube strip Tear Off Mat, Low Profile, fits SFG, Frosted, natural	.25 mats (300 strips)
B59159	EU 96 x 0.1ml, 12-tube strip Tear Off Mat, Low Profile, fits SFG, white	.25 mats (300 strips)



0.2 ml RP products (non FD) which fits FD Shell Frame Grids

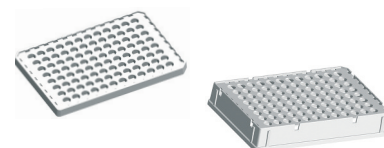
4.3.0 Shell Frame Grids which accept BIOplastics 0.2 ml Regular Profile and Low Profile 0.1 ml products

B7489FD Firm Deck SFG, Semi Skirted (LP & RP) (A)

B679FD Firm Deck SFG, Full Skirted (LP & RP) ANSI footprint (C)

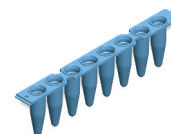
B79480 Firm Deck SFG Semi Skirted Adaptor, LP (HPL)(E)

Category 0.2 ml RP regular profile



EU 0.2ml 8-Tube Strips, extra robust, regular profile, fits Shell Frame Grids (A,C & E)

Order#	Description	Package Size
K69901	EU 0.2ml, Thin-wall 8-tube strip, Extra Robust, Regular Profile, Ultra Clear, fits SFG, natural	.bag, 120
B69901	EU 0.2ml, Thin-wall 8-tube strip, Extra Robust, Regular Profile, Frosted, fits SFG, natural	.bag, 120
B69909	EU 0.2ml, Thin-wall 8-tube strip, Extra Robust, Regular Profile, fits SFG, white	.bag, 120



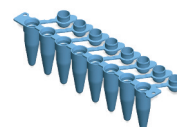
EU 0.2ml 8-Tube Strips, robust, regular profile fits Shell Frame Grids (A,C & E)

Order#	Description	Package Size
K77101	EU 0.2ml, Thin-wall 8-tube strip, Robust, Regular Profile, Ultra Clear, fits SFG, natural	.bag, 120
B77101	EU 0.2ml, Thin-wall 8-tube strip, Robust, Regular Profile, Frosted, fits SFG, natural	.bag, 120
B77109	EU 0.2ml, Thin-wall 8-tube strip, Robust, Regular Profile, fits SFG, white	.bag, 120



EU 0.2ml 8-Tube Strips with single attached optical wide area caps, fits Shell Frame Grid (A,C&E)

Order#	Description	Package Size
K72910	EU 0.2ml, Thin-wall 8-tube strip with attached optical cap, Regular Profile, Ultra Clear, fits SFG, natural	.stacked, 120
K72910B	EU 0.2ml, Thin-wall 8-tube strip with attached optical cap, Regular Profile, Ultra Clear, fits SFG, natural	.bag, 300
B72910	EU 0.2ml, Thin-wall 8-tube strip with attached optical cap, Regular Profile, Frosted, fits SFG, natural	.stacked, 120
B72911	EU 0.2ml, Thin-wall 8-tube strip with attached optical cap, Regular Profile, Frosted, fits SFG, natural	.bag, 120

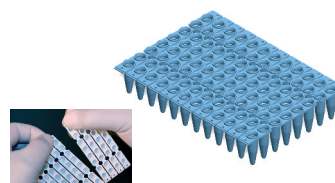


EU 0.2ml 8-Tube Strips with single attached domed caps, fits Shell Frame Grids (A,C & E)

Order#	Description	Package Size
C78201	EU 0.2ml, Thin-wall 8-tube strip with attached domes caps, Regular Profile, Ultra Clear, natural	.bag, 120

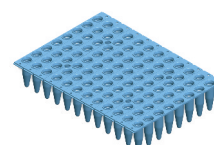
EU 96 x 0.2ml Mat of 8-Tube Strips, robust, Tear Off Mat , fits Shell Frame Grids (A,C & E)

Order#	Description	Package Size
K58001-1	EU 96 x 0.2ml, 8-tube strip Tear Off Mat, Regular Profile, Ultra Clear, natural	.25 mats (300 strips)
B58001-1	EU 96 x 0.2ml, 8-tube strip Tear Off Mat, Regular Profile, Frosted, natural	.25 mats (300 strips)
B58009-1	EU 96 x 0.2ml, 8-tube strip Tear Off Mat, Regular Profile, white	.25 mats (300 strips)



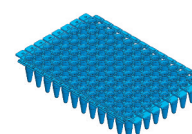
EU 96 x 0.2ml robust, cut-able (q)PCR Plate, fits Shell Frame Grids (A,C & E)

Order#	Description	Package Size
B70501-1	96 x 0.2ml, Thin-wall plate, Non skirted, fits SFG, Ultra Clear, natural	.25 plates
B50501-1	96 x 0.2ml, Thin-wall plate, Non skirted, fits SFG, Frosted, natural	.25 plates
B70509-1	96 x 0.2ml, Thin-wall plate, Non skirted, fits Shell Frame Grids, white	.25 plates



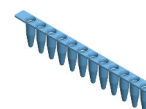
EU 96 x 0.2ml robust, Transformer cut-able (q)PCR Plate, fits Shell Frame Grids (A,C & E)

Order#	Description	Package Size
B58501	96 x 0.2ml, Transformer plate, Regular Profile, Frosted, SFG, natural	.25 plates
B58509	96 x 0.2ml, Transformer plate, Regular Profile, SFG, white	.25 plates
K58601	96 x 0.2ml, Transformer TOO plate, Regular Profile, Ultra Clear, SFG, natural	.25 plates
K58609	96 x 0.2ml, Transformer TOO plate, Regular Profile, SFG, white	.25 plates



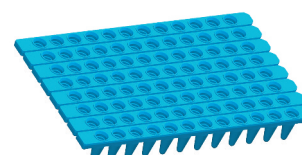
EU 0.2ml 12-Tube Strips, extra robust, regular profil, fits Shell Frame Grids (A,C & E)

Order#	Description	Package Size
K56601	EU 0.2ml, Thin-wall 12-tube strip, Extra Robust, Regular Profile, Ultra Clear, natural	.bag, 80
B56601	EU 0.2ml, Thin-wall 12-tube strip, Extra Robust, Regular Profile, Frosted, natural	.bag, 80
B56609	EU 0.2ml, Thin-wall 12-tube strip, Extra Robust, Regular Profile, white	.bag, 80



EU 0.2ml 12 Tube Strips, extra robust, low profile, Tear Off Mat, fits Shell Frame Grids (A,B,C & E)

Order#	Description	Package Size
K58101	EU 96 x 0.2ml, 12-tube strip Tear Off Mat, Low Profile, fits SFG, Ultra Clear, natural	.25 mats (300 strips)
B58101	EU 96 x 0.2ml, 12-tube strip Tear Off Mat, Low Profile, fits SFG, Frosted, natural	.25 mats (300 strips)
B58109	EU 96 x 0.2ml, 12-tube strip Tear Off Mat, Low Profile, fits SFG, white	.25 mats (300 strips)



Optical cap products to close tube strips and plates

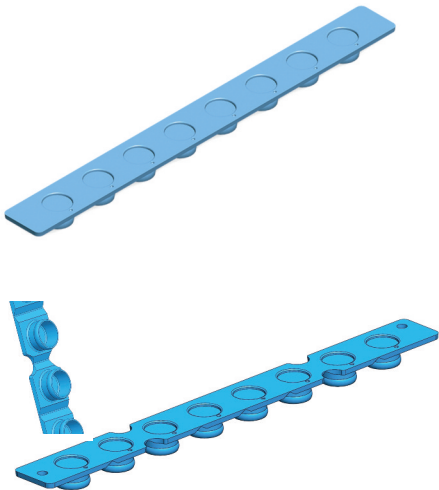
5.1.0 Optical 8 Cap Strips qPCR and PCR

BIoplastics manufactures and offers the widest range (q)PCR disposables for ALL BRANDS of PCR and qPCR cyclers. The caps are robust, have a wide indented Optical area, and **fits all BIoplastics qPCR and PCR vessels**. Caps are offered in several formats as 8-tube strips, 12 tube strips, Tear Off mats and also in some Innovative patented designs as Chimney* and Cylinder* Caps.

Optical wide area 8-Cap Strip robust with wide indented flat cap

Optimized for qPCR and PCR applications. Indented cap prevents “finger touch” signal interference.
For closure of all BIoplastics type (q)PCR tubes, strips and plates.

Order#	Description	Package Size
B57801	EU Optical Wide 8-cap strip, with wide indented flat cap, Robust, natural	.bag, 120
B57801B	EU Optical Wide 8-cap strip, with wide indented flat cap, Robust, natural	.bag, 300
B57811	EU Optical Wide 8-cap strip, with wide indented flat cap, Robust, natural, sterile	.bag, 120



Optical wide area 8-Cap Strip robust with wide indented flat cap, “flexible “in between”

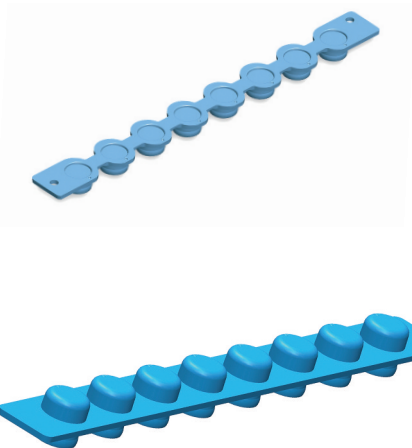
Optimized for qPCR and PCR applications. Indented cap prevents “finger touch” signal interference.
Allows opening per line-up tube.

Order#	Description	Package Size
B57881	EU Optical wide area 8-cap strip, Extra Robust “flexible “in between” and extra secure closure	.bag, 120
B57881B	EU Optical wide area 8-cap strip, Extra Robust “flexible “in between” and extra secure closure	.bag, 300

Optical wide area 8-Cap Strip with wide indented flat cap

Designed and optimized for PCR and qPCR applications. Indented cap prevents “finger touch” signal interference.
For closure of all BIoplastics type (q)PCR tubes, strips and plates.

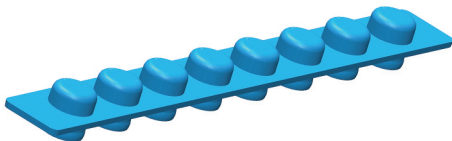
Order#	Description	Package Size
B79701-1	EU Optical Wide 8-cap strip, with wide indented flat cap, natural	.bag, 120
B79701B-1	EU Optical Wide 8-cap strip, with wide indented flat cap, natural	.bag, 300
B79711-1	EU Optical Wide 8-cap strip, with wide indented flat cap, natural, sterile	.bag, 120



Semi-domed 8 Cap Strip

For qPCR optimized signals use B57801 or B79701-1, EU Wide Optical 8-Cap Strip.

Order#	Description	Package Size
C79701N	EU Semi-domed Thin-wall 8-cap strip, natural	.bag, 120
C79701NB	EU Semi-domed Thin-wall 8-cap strip, natural	.bag, 300

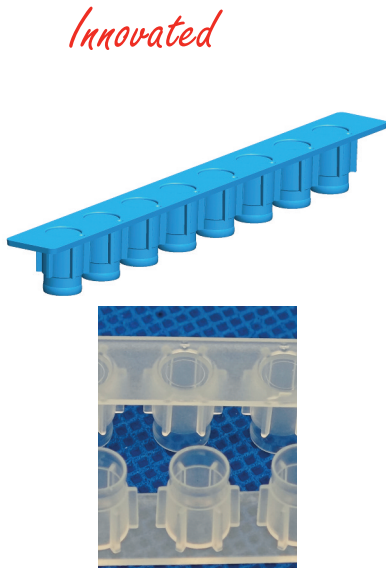
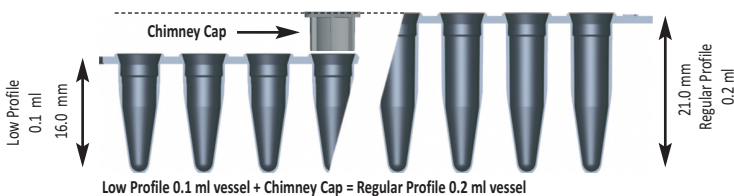


Chimney Caps **Changes Low Profile 0.1 ml tube format to Regular Profile 0,2 ml tube format** Optical

Chimney optical caps strips are design protected and enables to change a low profile tube/strip/plate format (0.1 ml) to a regular profile tube/strip/ plate format (0.2 ml). It can be used in many (q)PCR cycler formats. The optical wide area indented thin wall cap can also be used for optical qPCR detection. When combined with BIoplastics low profile tubes (0.1 ml) the combination has the same height as a regular profile (0.2 ml) tube. Positive absolute height rims assures precise repeatable closure. Chimney Caps can be handled by Regular Profile 0.2 ml PCR and qPCR cyclers.

Chimney Optical 8 Cap-Strip

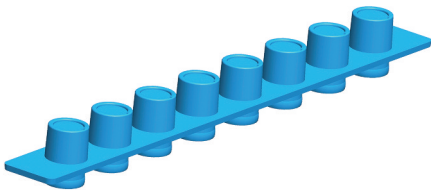
Order#	Description	Package Size
B66801	EU Optical 8-cap strip, Extra Robust, Chimney changes height from LP to RP and ULP to LP	.bag, 120



Optical cap products to close tube strips and plates

CYLINDER Caps **Changes Low Profile 0.1 ml tube format to Regular Profile 0,2 ml tube format** Optical

Cylinder optical caps strips are design protected and enables to change a low profile tube/strip/plate format (0.1 ml) to a regular profile tube/strip/ plate format (0.2 ml). It can be used in many (q)PCR cy-cler formats. The optical wide area indented thin wall cap can also be used for optical qPCR detection. When combined with BIOplastics low profile tubes (0.1 ml) the combination has the same height as a regular profile (0.2 ml) tube. Notice that only a limited number of qPCR (real time) cyclers can handle Cylinder caps. In addition, the cap can, in reverse direction also be used as small reaction vessels which can be closed with BIOplastics micro (q)PCR tube. (becomes the lid)



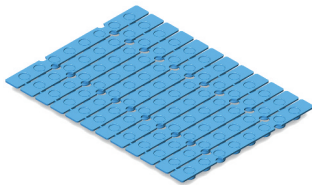
Cylinder Optical 8 Cap-Strip

Order#	Description	Package Size
B66901	EU Optical 8-cap strip, Extra Robust, Cylinder changes height from LP to RP and ULP to LP	.Bag, 120 strips

5.1.1 Optical 8-cap strip Tear-Off Mats

Optical wide area 8-Cap Strip, robust with wide indented flat cap, Tear Off Mat

The Tear Off 8-Cap Strip Mat is designed and optimized for PCR and qPCR applications. The extra robust 8-cap strips are barely attached to each other. One or more individual 8-cap-strips can easily be torn off. For closure of all BIOplastics type (q)PCR tube strips and plates.

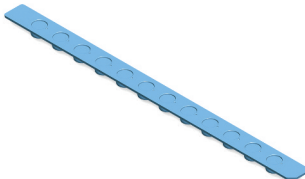


Order#	Description	Package Size
B57651	EU Optical Wide 8-cap strip mat, Robust with wide indented flat cap, natural	.50 mats (600 strips)
B57751	EU Optical Wide 8-cap strip mat, Robust with wide indented flat cap, "flexible " in between" (12 x 8)natural	.50 mats (600 strips)

5.1.2 Optical 12-Cap Strips qPCR and PCR

Optical wide area 12-Cap Strip, robust with wide indented flat cap Optimized for qPCR and PCR applications.

Indented cap prevents "finger touch" signal interference. For closure of all BIOplastics type (q)PCR 12-tube strips and plates.

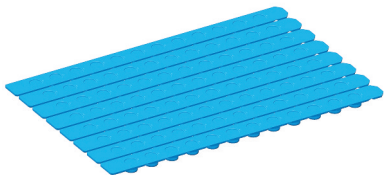


Order#	Description	Package Size
B57821	EU Optical Wide 12-cap strip, with wide indented flat cap, natural	.bag, 80
B57821B	EU Optical Wide 12-cap strip, with wide indented flat cap, natural	.bag, 200
B57871	EU Optical Wide 12-cap strip, with wide indented flat cap, Extra Robust "flexible " in between, natural	.bag, 80
B57841	EU Optical Wide 12-cap strip, with wide indented flat cap, Robust "flexible " in between, natural	.bag, 80

5.1.3 Optical 12-cap strip Tear-Off Mats

Optical wide area 8-Cap Strip, robust with wide indented flat cap, Tear Off Mat

The Tear Off 12-Cap Strip Mat is designed and optimized for PCR and qPCR applications. The extra robust 12-cap strips are barely attached to each other. One or more individual 12-cap-strips can be easily torn off.



Order#	Description	Package Size
B58651	Optical Tear-off 12-cap strip Mat, robust with wide indented flat cap, slightly attached to each other, natural	.box, 50 mats

5.1.4 Optical Seals

Opti-Seal™ optical disposable adhesive, classic version

Opti-Seal™ provides the best sealing option for EU plates. The EU Opti-Seal™ is non pierce-able and can be easily removed after the (q)PCR reaction is performed. Pressure applied by the heated lid of the thermal cycler, is needed to keep the seal well closed during thermal cycling. Opti-Seal™ generates excellent results and is designed and tested to be used in Real-Time PCR applications.



Order#	Description	Package Size
157300	Opti-Seal™, optical, disposable, adhesive	.100 sheets

Latest update products

6.1.0 New design for 0.5 ml Screw Cap Tubes(-200°C to 110°C)

BIOplastics manufactures and offers the widest range (q)PCR disposables and laboratory vessels. In our well known screw cap tubes family , ranging from 0.5, 1.5 and 2.0 ml both conical and free standing versions. The 0.5 ml free standing model has been upgraded to the latest technology and its height has been decreased by 13.2 mm. The new 0.5 ml free standing screw cap tube model has a height of 33.1 mm instead of 46.3 mm (old type), is more stable in its free standing position and the amount of plastics has reduced. All other properties as working range of -200°C to 110°C, centrifuged capacity up to 20,000 g and the fit to our Smart Secure Closure Technology caps remains in place.

Free standing (without screw caps)

Order#	Description	Package Size
B71060N	0.5 ml free standing screw cap tube, naturalbag, 500
B91032Nred	B91035Nyellow
B91033Nblue	B91036Norange
B91034Ngreen	B91037Nviolet
		B91038Namber
		B91039Nwhite
		B91041Nnatural, sterile

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6.2.0 Innovated products the guidance to near future standards, micro-tube-strips

(q)PCR without the use of a heated lid.

background

qPCR and PCR is typically executed in 0.1 ml low profile or in 0.2 ml regular profile vessels. Since the vessel is way larger in volume as the reaction mixture itself, typically 25 µl or less, there is a not only an exceeded amount of “air” in the vessel but it is leading to the fact that the tubes are sticking out of the cyler reaction block. Consequently condensation in the tube occurs at the part sticking outside the reaction block. To prevent this condensation to occur cyclers are equipped with a heated lid. The fact that a heated lid is present leads however to a number of currently still accepted disadvantages.

disadvantage facts heated lid: (q)PCR results are less accurate and reproducible
 temperature control of cyclers is less accurate
 cyler manufacturing cost is substantially higher
 optics and optical detector in qPCR cyclers are less accurate
 optics and optical detector in qPCR waer out much faster

The innovation thoughts

Design a vessel which fits a cylerblock perfectly without any “sticking out of block parts” without compromising work and easiness of pipetting flow

(q)PCR without heated lid



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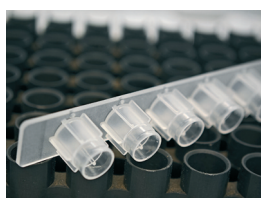
6.2.1 Micro tube 0.025 ml 8-Tube Strip Mat, the new vessel type (25µl)

The new vessel type Micro Tube Strip

The Micro Tube Strip Mat is designed for PCR and qPCR applications. The design patented Micro Tube strip has a height of 6 mm and 10 mm less high as a 0.1 ml low profile tube. The microtube sits completely in the (q)PCR cyler reaction block. Consequently, no heated lid is required while the temperature performance of the used cyler will substantially improve simply by the absence of the heated lid. In addition, the qPCR optics typically positioned in the lid will become more precise and accurate. More likely new cyler type models, with an optimized microtube fit will become available on the market shortly. The microtube which has a working volume of 25 µl or less, does not require the use of a heated lid anymore since condensation cannot occur. Closure can be accomplished with any BIOplastics cap-strip whereas for qPCR applications B57801, B57881 or B79701-1 is recommended.

0.025 ml TEAR-OFF 8-Tube Strip Mat

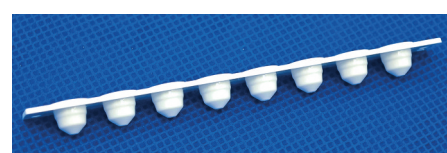
Order#	Description	Package Size
B42001	Tear Off 8-tube strip Mat, 25 µl, natural	.box, 40 mats (480 strips)
B42009	Tear Off 8-tube strip Mat, 25 µl, white	.box, 40 mats (480 strips)



Optical Chimney Cap strip B66801, changes a 0.1 ml LP vessel to a 0.2 ml RP vessel.
 Notice the “absolute stop ribs”assuring precision of exact height



Optical Chimney Cap strip B66801 and Optical Cylinder Cap strip B66901, both changes a 0.1 ml LP vessel to a 0.2 ml RP vessel.



Micro Tube Strip (0.025 ml) enables Heated Lid Free (q)PCR runs if used in a micro-tube (q)PCR instrument reaction block

Update innovated (q)PCR vessel products

6.3.0 Mini tube 0.05 ml 8 Tube Strip (50 µl)

(q)PCR in smaller less height vessels, possible without a heated lid

EU 0.05 ml Mini 8-tube strip background

qPCR and PCR is typically executed in 0.1 ml low profile or in 0.2 ml regular profile vessels. Since the vessel is way larger in volume as the reaction mixture itself, typically 25 µl or less, there is a not only an exceeded amount of “air” in the vessel but its resulting also to the fact that the tubes are substantially sticking out of the cyclor reaction block. Consequently, condensation in the tube occurs at the part sticking outside the reaction block. To prevent this condensation to occur cyclers are equipped with a heated lid. The fact that a heated lid is present leads however to a number of, currently still accepted disadvantages.

The use of excess of air is not at all a functional part and only lead to side-effects caused by the required use of a heated lid.

- disadvantage facts heated lid:
- (q)PCR results are less accurate and reproducible
 - temperature control of cyclers is less accurate
 - cycler manufacturing cost is substantially higher
 - optics and optical detector in qPCR cyclers are less accurate
 - optics and optical detector in qPCR wear out much faster

The innovation thoughts

Design a vessel which fits a cyclorblock perfectly without any “sticking out of block parts” without compromising work and easiness of pipetting flow.

The new vessel type Mini Tube Strip

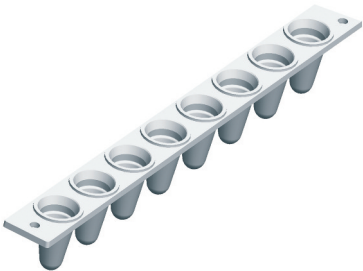
The Micro Tube Strip is designed for PCR and qPCR applications. The design patented Mini Tube strip has a height of 11 mm and 5 mm less high as a 0.1 ml low profile. In so called “Deep Well” (q)PCR cyclers the mini-tube seat completely in the cyclor reaction block. Consequently, the temperature performance of the used cyclor will substantially improve since no heated lid is required. In addition, the qPCR optics typically positioned in the lid will become more precise and accurate. The Mini tube which has a working volume of 50 µl or less, does not require the use of a heated lid anymore if used in a “Deep Well” cyclor block since condensation cannot occur.

Closure can be accomplished with any BIOplastics cap-strip whereas for qPCR applications B57801, B57881 or B79701-1 is recommended.

(q)PCR cyclers lacking “Deep Well” reaction blocks and or cyclers which require 0.1 ml low profile lid height position will also accept the Mini-Tube formats however the benefit of cycling without a heat lid cannot be used.

In case 0.1 ml low profile tubes height is required by the cyclor one should use either Chimney or Cylinder caps for closure. Chimney and Cylinder cap format bridges the height difference and the combined height of Mini-Tube with Chimney or Cylinder Caps are identical to 0.1 ml Low Profile tubes.

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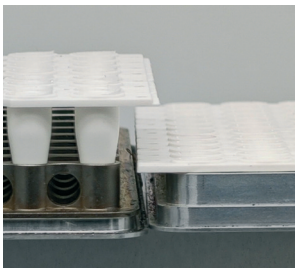
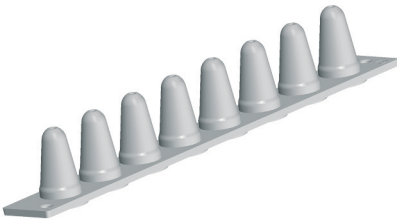
0.05 ml 8-Tube Strip (50 µl)

Order#	Description	Package Size
B42711	EU 0.05 ml Mini 8-tube strip, Clear, Extra Robust,Natural,	Bag of 120 strips
B42719	EU 0.05 ml Mini 8-tube strip, Extra Robust, White	Bag of 120 strips

Closure options for 0.05 ml 8-Tube Strip

Order#	Description	Package Size
B66801*	EU Optical 8-cap strip, Extra Robust, Chimney changes height from LP to RP and ULP to LP	Bag, 120 strips
B66901*	EU Optical 8-cap strip, Extra Robust, Cylinder changes height from LP to RP and ULP to LP	Bag, 120 strips
B57801	EU Optical Wide 8-cap strip, with wide indented flat cap, Robust, natural	Bag, 120 strips

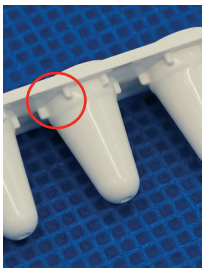
*Mini format Extra Robust (0.1 ml) if combined with Chimney or Cylcinder Caps, patent protected



Difference in (q)PCR block position between normal (q)PCR vessel (left) and (q)PCR microtube 0.025 ml (right). Notice that microtube is fully embedded eliminating the use of a heated lid.

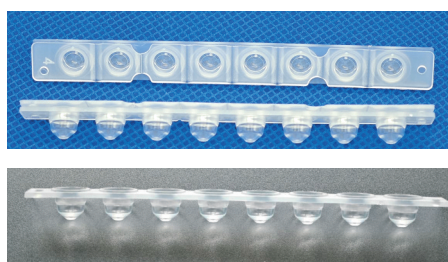


0.025 ml micro (top) and 0.05 ml mini (bottom) (q)PCR tube-strips

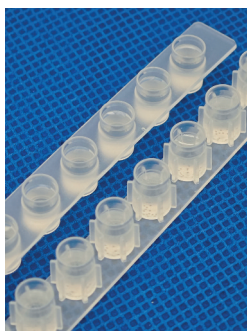


Detail of an 0.05 ml mini (q)PCR tube strip. Positive stops make the strips stackable, no nesting and fitable in existing (q)PCR instrument reaction blocks

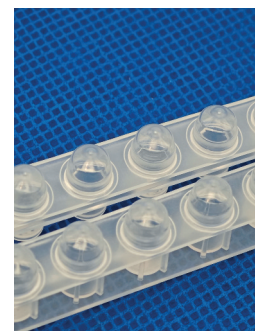
Product #	Page	Product #	Page	Product #	Page	Product #	Page	Product #	Page
157300	26	B57841	26	B7485FD	19	K58101	24	L4710FD2B4	17
A480REV	20	B57871	26	B7489FD	19	K5811FD	14	L4710FD2BN	17
B1271FD	9/21	B57881	25	B7501FD	16	K58601	24	L4719FD2B	17
B1279FD	9/21	B57881B	25	B7509FD	16	K58609	24	L4719FD2B4	17
B1291FD	10/21	B58001-1	24	B7511FD	16	K5891FD	15/22	L4719FD2BN	17
B1299FD	10/21	B58009-1	24	B7511FD2	16	K59001-1	23	L4790FD2B	16
B1371FD	14/21	B58101	24	B7519FD	16	K59009-1	23	L4790FD2B4	16
B1379FD	14/21	B58109	24	B7519FD2	16	K5911FD	9	L4790FD2BN	16
B1499FD	15/21	B5811FD	14/22	B7531FD2	16	K59601	23	L4799FD2B	16
B1675FD	19	B5819FD	14/22	B7539FD2	16	K59609	23	L4799FD2B4	16
B1679FD	19	B58501	24	B7541FD2	16	K59901	23	L4799FD2BN	16
B17480FD	11	B58509	24	B7549FD2	16	K69901	24	L50739FD2B4	12
B17489FD	11	B58651	26	B76601	23	K72810B	23	L50749FD2B4	12
B42001	27	B5899FD	15/22	B76609	23	K72910	24	L5811FDQ	14/22
B42009	27	B59001-1	23	B76621	23	K72910B	24	L5811FDT	14/22
B42711	28	B59009	23	B76629	23	K77001	23	L5819FDQ	14/22
B42719	28	B5911FD	9/22	B77001	23	K77101	24	L5819FDT	14
B4610FD2	12	B5919FD	9/22	B77009	23	L1271FD	9/21	L5891FDQ	15/22
B4619FD2	12	B59501	23	B77101	24	L1271FDB	9/21	L5891FDT	15/22
B4690FD2	11	B59509	23	B77109	24	L1279FDB	9/21	L5899FDQ	15/22
B4699FD2	11	B59901	23	B7901FD	17	L1279FDQ	9/21	L5899FDT	15/22
B4710FD2	17	B59909	23	B7909FD	17	L1291FDB	10/21	L5911FDQ	9/22
B4719FD2	17	B5991FD	10/22	B79480	20	L1299FDB	10/21	L5911FDT	9/22
B4790FD2	16	B5999FD	10/22	B79701-1	25	L1371FDB	14/21	L5919FDQ	9/22
B4799FD2	16	B60101-1	23	B79701B-1	25	L1371FDQ	14/21	L5919FDT	9/22
B50501-1	24	B60101FD	13	B79711-1	25	L1379FDB	14/21	L5991FDQ	10/22
B50601-1	23	B60109-1	23	B91032N	27	L1379FDQ	14/21	L5991FDT	10/22
B50731FD2	12	B60109FD	13	B91033N	27	L1491FDB	15/21	L5999FDQ	10/22
B50739FD2	12	B66801	25/28	B91034N	27	L1499FDB	15/21	L5999FDT	10/22
B50741FD2	12	B66901	26/28	B91035N	27	L17489FDB	11	L70671FD	13
B50749FD2	12	B675FD	19	B91036N	27	L17489FDB4	11	L70671FDB	13
B50751FD	12	B675ISFD	20	B91037N	27	L4610FD2B	12	L70671FDB4	13
B50751FD2	12	B679FD	19	B91038N	27	L4610FD2B4	12	L70671FDBN	13
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B50759FD2	12	B69901	24	B91041N	27	L4619FD2B	12	L70679FDB	13
B56601	24	B69909	24	C78201	24	L4619FD2B4	12	L70679FDB4	13
B56609	24	B70501-1	24	C79701N	25	L4619FD2BN	12	L72671FD	18
B57651	26	B70501FD	18	C79701NB	25	L4690FD2B	11	L72671FDB	18
B57751	26	B70509-1	24	K1271FD	9	L4690FD2B4	11	L72671FDB4	18
B57801	25/28	B70509FD	18	K1371FD	14/21	L4690FD2BN	11	L72671FDBN	18
B57751	26	B70671FD	13	K1379FD	14/21	L4699FD2B	11	L72679FD	18
B57801	25/28	B70679FD	13	K1491FD	15/21	L4699FD2B4	11	L72679FDB	18
B57801B	25	B72811	23	K4690FD2	11	L4699FD2BN	11	L72679FDB4	18
B57811	25	B72910	24	K4790FD2	16	L4710FD2B	17	L7539FD2B4	16
B57821	26	B72911	24	K56601	24			L7909FDB	17
B57821B	26	B7483FD	19	K58001-1	24				



2 pictures of the patented microtube-strip (0.025 ml). Top micro-tube with Optical Lid, below micro-strip without cap. This may become the new industry standard since it enables (q)PCR cycling without a heated lid resulting in better results and performances of the (q)PCR cyciler.



Creative use of the Chimney and Cyclinder cap. Used Upside down while using its optical bottom for e.g. liquid microscopy and storage. The "cap vessel" can hold 90 µl and can be closed with "the micro-tube strip"



Chimney and Cyclinder cap (90 µl), closed with micro-tube strip used as storage container. (-80 °C)

Notes and Supported 2D-code website links



BIOplastics BV website (q)PCR product search property based

https://www.bioplastics.com/Guided_Products.aspx



Convert your current competitor brand product to a superior BIOplastics product

<https://www.bioplastics.com/productsBPconvert.aspx>



BIOplastics BV website

<https://www.bioplastics.com/Index.aspx>



BIOplastics website products search if product# is known

<https://www.bioplastics.com/Products.aspx>



CYCLERtest BV website

<https://www.cyclertest.com/Default.aspx>

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