

MEDIAJET Petri Dish Compatibility List

DOCUMENT NAME: OI_MJ_Petri_dish_compatibility_list_V22

Document Change History

Vers.	Status:	Name:	Date:	Change:
V21	Released	GPo	01.05.2024	Kord Valmark #2901 60x15 added
				Fisher FB0875713 and FB08757150 Bi-Plate added
				NUNC #150288 (60x15 mm) added
				Fisher FB0875711 added
V22	Released	GPo	05.09.2024	Kord Valmark #2905, 2910P, 2917, 2950 added
				Tritech T3315, T3361 added
				New section 6 "Incompatible Petri dishes" added
				Tritech T3500 and Kord Valmark 2904, 2914 added to
				"incompatible Petri dishes"

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1 Introduction

This document is intended to support sales representatives and customers working with MEDIAJET devices and applications.

For historical reasons, almost all PDs are not specifically designed for automated use. They are neither standardized. You can find an extensive variation of different Ø90/Ø100, Ø55/Ø60 or Ø35 dishes on the market. The actually measured dimension of the Petri dishes deviate from the nominal dimensions given by the manufacturer. We found variations of heights and diameters within the same product ID, even depending on the production location, and within the same lot.

Thus a general compatibility of a locally available Petri dish with MEDIAJET or MEDIAJET vario cannot be guaranteed by INTEGRA Biosciences.

For an exact specification of the dimensions for Petri dishes compatible with MEDIAJET please refer to the latest Operating Instructions (OI), 6.2 Petri dish specifications. In addition, this document lists a set of Petri dishes already successfully tested for mechanical processability and used on MEDIAJET by INTEGRA Biosciences.

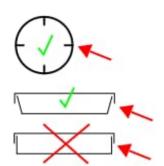
As manufactures can change the dimensions of their Petri dishes without prior informing INTEGRA Biosciences, this list can only serve as an indication and is subjected to continuous changes.



We recommend to test the application with the desired dishes and original media in the customer's lab.



2 General Recommendations

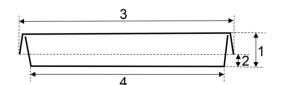


Use dishes with ventilation camps on the inside of the dish lid. Ventilation cams prevent the formation vacuum, the base can fall down.

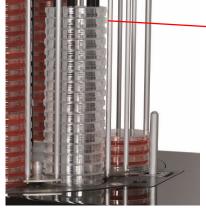
Dishes with stacking ring can be used, because the gripper mechanism gently holds the plates without shearing them away.

The base of the plate must be conical.

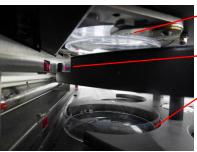
The following dimensions are critical for an optimal performance of the MEDIAJET:



- 1. Dish height: 12-25 mm
- 2. Ground clearance:
 - \geq 6 mm (for Ø 90 mm dishes) or \geq 5 mm (for Ø 60 and Ø 35 mm dishes)
- 3. Lid outer diameter
- 4. Base outer diameter



If the lid outer diameter (at bottom) is too large, the lid gets stuck between the carousel rods.



If the ground clearance is too low, the gripper cannot grip the base without lid.

If the lid outer diameter is too small, the lid falls through the upper rotor position and the dish is not opened.

If the base outer diameter is too large, the base does not lie flat in the rotor and dispensing is not possible without spilling.

Petri dish manufacturer nominal size	Lid outer diameter (3) (mm)	Base outer diameter (4) (mm)	Carousel	Rotor	Conversion set
90 – 100 mm	93.2 – 94.6	≤ 88.4	90L	90L	90L
	91.7 – 93.1		90	90 (standard or biplate)	90 (required for MJ vario only)
	90.7 – 92.1	≤ 87.6	90S	90S	
FF 60 mm	58.0 - 59.4	≤ 54.8	60	60	60
55 – 60 mm	56.6 - 58.0	≤ 51.2	60	60S	60S
35 mm	37.8 – 39.2	≤ 35.4	35	35	35



Special configurations for other Petri dish formats are available on request.

3 Petri dishes Ø90/Ø100 - MEDIAJET standard/vario

3.1 Petri dishes for 90 configuration (MEDIAJET standard PN 103005/103006 or MEDIAJET vario PN 113000/113001/113002)

Manufacturer	Product no./type	Nominal Size	Remark	Carousel	Rotor	Conversion set			
BD Falcon (Corning)	351029	100 x 15 mm		for Ø 90 mm:	for Ø 90 mm:				
Bibby-Sterilin	101VR20	90 mm		Part No.	Part No.				
	SH93-101 BH93B-102 (sterile)	90 x 14.2 mm		103 020 or 103 021	103 271				
Corning Gosselin	SB93-101 SB93-102 (sterile) BP93-101 (bag) BP93-102 (sterile, bag)	100 x 15 mm	90S rotor is also suitable		or biplate Part No. 113 806	biplate Part No.	biplate Part No.	biplate MEDIAJ Part No. vario on 113 806 Part. No	for Ø 90 mm, MEDIAJET vario only: Part. No.
	BT93-02	100 x 25 mm	deep]		113 051			
Fisherbrand	FB0875712 standard	100 x 15 mm							
FL Medical, Italy	29052, 29062 (sterile)	90 x 16.2 mm							
Greiner bio-one	633180 633102 (heavy) 633161 (heavy, sterile) 632181	94 x 16 mm	Tested by IUS						
	664102 (heavy) 664160 (cellstar, ster.)	100 x 20 mm							
Kord Valmark, USA	2909	100 x 25 mm	deep						
Kord Valmark, USA	2905	100 x 20 mm	Runs well, tested by IUS, 10 dish height 213 mm						
Kord Valmark, USA	2910P	100 x 15	Runs well, tested by IUS, 10 dish height 154 mm						
Nunc	4031	100 x 25 mm	deep						
Phoenix Biomedical	018	90 x 15 mm							

Manufacturer	Product no./type	Nominal Size	Remark	Carousel	Rotor	Conversion set
Sarstedt AG	82.1473	92 x 16 mm				
Sarstedt AG	82.1472	92 x 16 mm				
VWR	391-0468, 391-0608 391-0469 (sterile)	90 x 16.2 mm				
VWR	89107-632	100 x 25 mm	Deep dishes, tested by IUS, Spacer under filling nozzle bracket required.			
VWR	25384-342	100 x 15 mm	Tested by IUS, plate runs smoothly			
VWR	25384-302	100 x 15 mm	Teach in successful only with UV enabled. 155mm 10 dish height.	-		
Techno Plas (AU)	10603001	90 x 14 mm	Ground clearance (6 mm) just within specifications.	for Ø 90 mm: Part No. 103 020 or 103 021	for Ø90 mm: Part No. 103 271 or biplate Part No. 113 806	for Ø 90 mm, MEDIAJET vario only: Part. No. 113 051
Techno Plas (AU)	TECTPG9014	90 x 14 mm				
NEST	753001	100 x15 mm	Tested by IUS, works well, 10 dish height: 157 mm			
Tarsons	460095	90 x 14 mm	Runs smoothly			

Note: Product numbers in brackets are not tested, but the dimensions are identical (e.g. sterile and non-sterile version).



3.2 Petri dishes for 90S configuration (MEDIAJET standard PN 103005/103006 or MEDIAJET vario PN 113000/113001/113002)

Manufacturer	Product no./type	Nominal Size	Remark	Carousel	Rotor	Conversion set		
BIO-BIK	I-90	90 mm		. ~~~				
LabServ, New Zealand	LBS60018X	90 x 20 mm		for Ø 90S mm: Part No.	for Ø 90S mm: Part No.	for Ø 90 mm, MEDIAJET		
0 0	82.1473	92 x 16 mm		103 022 or	103 272	vario only:		
Sarstedt AG	82.1472	92 x 16 mm		103 023			Part. No. 113 051	
EIKEN Chemical (JP)	AU3110	87.2 x 14.25 mm	Lid diameter (90.7 mm) just within 90S rotor specifications. Centering unit (PN 103048) for planar stacking of PDs is strongly recommended		nit			
EIKEN Chemical (JP)	AU3240	87.3 x 14 mm	Lid diameter (90.4 mm) is below 90S rotor specifications. PDs are still properly processed. Centering unit (PN 103048) for planar stacking of PDs is strongly recommended					
Sansei (JP)	01-002 CL	90 x 15 mm	Lid diameter (90.4 mm) is below 90S rotor specifications. PDs are still properly processed. Centering unit (PN 103048) for planar stacking of PDs is strongly recommended					
Sansei (JP)	01-014 SCL	90 x 15 mm	Lid diameter (90.5 mm) is below 90S rotor specifications. PDs are still properly processed. Centering unit (PN 103048) for planar stacking of PDs is strongly recommended					
Sansei (JP)	01-004 FX	90 x 20 mm	Deep PDs. Lid diameter (90.5 mm) is below 90S rotor specifications. PDs are still properly processed. Centering unit (PN 103048) for planar stacking of PDs is strongly recommended					
BIOFIL	MCD100090	90 x 15 mm	PDs run smoothly with 90S configuration. Centering unit 103048 to optimize planar stacking is recommended					

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Manufacturer	Product no./type	Nominal Size	Remark	Carousel	Rotor	Conversion set
GREINER	664161 (VWR PN 82050- 918)	100 x 20 mm	210mm 10 dish height Dishes run error-free	for Ø 90S mm: Part No. 103 022 or 103 023	for Ø 90S mm: Part No. 103 272	for Ø 90 mm, MEDIAJET vario only: Part. No. 113 051
Fisher	FB0875713	100 x 15 mm	Tested at IUS Runs well - Requires 90S components			
Fisher	FB0875711	100 x 25 mm	Tested at IUS Runs well - Requires 90S components 10 dish height 243 mm			
Tritech	T3361	90 x 15 mm	Runs well, tested by IUS, 10 dish height 153 mm			
Kord Valmark	2917	100 x 15 mm	Runs well, tested by IUS, 10 dish height 153 mm			
Kord Valmark	2950	85 x 13 mm	Runs well, dish is 85 mm and fits loosely in rotor, however did not cause operational issues during testing			

3.3 Petri dishes for 90L configuration (MEDIAJET vario PN 113000/113001/113002)

Manufacturer	Product no./type	Nominal Size	Remark	Carousel	Rotor	Conversion set
				for Ø 90L mm	for Ø 90L mm	for Ø 90L mm
				Part No.	Part No.	Part. No.
				113 022	113 460	113 055

3.4 Biplate (two-compartment) Petri dishes (for MEDIAJET vario with biplate option PN 113002)

Manufacturer	Product no./type	Nominal Size	Remark	Carousel	Rotor	Conversion set
Bibby-Sterilin	502V	90 mm		(a	(COO	f = 17 (200 mm)
Corning Gosselin	BI93D-101	100 x 15 mm		for Ø 90 mm Part No.	for Ø 90 mm biplate	for Ø 90 mm
FL Medical, Italy	29057 (29067)	90 x 16.2 mm		103 020 or	Part No.	Part. No.
Greiner bio-one	635102 635161 (sterile)	94 x 16 mm		103 021	113 806	113 051
Sarstedt AG	82.1195	92 x 16 mm				
VWR	391-0492	90 x 16.2 mm				
Sansei (Japan)	01-006 H	90 x 15	Lid diameter (90.5 mm) is below 90S rotor specifications. PDs are still properly processed. Centering unit (PN 103048) for planar stacking of PDs is strongly recommended	for Ø 90S mm: Part No. 103 022 or 103 023	for Ø 90S mm: Part No. 103 272	for Ø 90 mm Part. No. 113 051
Fisher	FB08757150 Bi-Plate	100x15	Tested at IUS Runs well – requires 90S components (10 dish height = 148 mm)			

4 Petri dishes Ø55/Ø60 - MEDIAJET vario

4.1 Petri dishes for 60 configuration (MEDIAJET vario PN 113000/113001/113002)

Manufacturer	Product no./type	Nominal Size	Remark	Carousel	Rotor	Conversion set
BD Falcon (Corning)	351007	60 x 15 mm		for Ø 60 mm	for Ø 60 mm	for Ø 60 mm
Corning-Gosselin	BP53-06 BP53-03 (sterile)	55 x 14.2 mm	Base of 54.1 mm too large for 60S rotor. BP50: same dimensions, no vents.	Part No. 113 020	Part No. 113 271	Part. No. 113 052
Greiner bio-one	628102 628160 (cellstar, ster.) 628161 (sterile)	60 x 15 mm				
Kord Valmark, USA	2916	60 x 15 mm				
Sarstedt AG	82.1194	60 x 15 mm	Set stack height to 16.1 instead of 15.8			
VWR	391-3655	60 x 15 mm				
FisherBrand	FB0875713A	60 x 15 mm	Tested by IUS. Plate runs well.			
Weber Scientific	3051-15	60 x 15 mm	Tested by IUS. Plate runs well.			
Tarsons	460061	60 x 15 mm	Tested at ICH. Plate runs smoothly			
Kord Valmark	2901	60 x15 mm	Tested at IUS 10 dish height: 147 mm			
NUNC	150288	60 x 15 mm	Plates run smoothly.			

4.2 Petri dishes for 60S configuration (MEDIAJET vario PN 113000/113001/113002)

Manufacturer	Product no./type	Nominal Size	Remark	Carousel	Rotor	Conversion set
Tritech Research	T3308	60 x 15 mm	Tested by IUS, plate runs well, no issues	for Ø 60 mm	for Ø 60S mm	for Ø 60S mm



Tritech Research	T3315	60 x 15 mm	Works well, tested by IUS, 10 dish height 146 mm	Part No. 113 020	Part No. 113 276	Part. No. 113 056	

5 Petri dishes Ø35 - MEDIAJET vario

5.1 MEDIAJET vario PN 113000/113001/113002

Manufacturer	Product no./type	Nominal Size	Remark	Carousel	Rotor	Conversion set
Greiner bio-one	627102 627160 (cellstar, ster.) 627161 (sterile)	35 x 15 mm		for Ø 35 mm	for Ø 35 mm	for Ø 35 mm Part. No.
Thermo Scientific (Nunc)	153 066	35 x 10 mm		Part No. 113 021	Part No. 113 272	113 053

6 Incompatible Petri dishes

Manufacturer	Product no./type	Nominal Size	Remark
Tritech Research	T3500	35 mm	Does not fit 35 mm rotor
Kord Valmark	2904	100 x 10 mm	Dish too short for automation to handle
Kord Valmark	2914	95 x 15 mm	Does not fit any rotor