

Thermo Scientific PocketTips D.A.R.T.s

Thermo Scientific PocketTip D.A.R.T.s (Disposable Automation Research Tips) enable customers to transfer 50-250 nl of sample volume using Thermo Scientific Matrix Hydra DT and PlateMate automated liquid handling instruments. These low volume transfers eliminate intermediate pipetting steps and improve data quality, while providing soft in-tip mixing. The PocketTip® D.A.R.T.s® include an internally molded capillary pocket and are designed to be used with the current selection of Matrix interchangeable 96- and 384-format pipetting heads.



Conserve time, labware and reagents.

By transferring nanoliter volumes directly to the assay plate, eliminate timely aqueous dilution steps that can cause precipitation and result in unreliable data, while generating labware and reagent savings. Gently combine sample and assay material with soft in tip mixing, removing the need for offline procedures and improving data quality through thorough mixing that will not damage sensitive material.

Highest quality. Consistent accuracy and precision is tightly controlled during the molding process. A coefficient of variation of less than 6% can be achieved for any pocket size. Purity and straightness validation is also performed on compatible instrumentation to ensure only the highest quality.

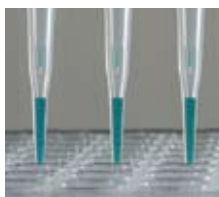
Options for a range of throughput needs.

With instrument compatibility range starting from the Hydra DT, on-the-fly dose response curves or assay development procedures can be set up with simple and quick Hydra DT programming. Higher throughput needs can be met with the PlateMate 2x3 and Catalyst Express or PlateMate Plus instruments.

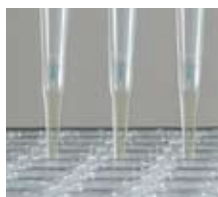
Sterile option. 96- and 384- format PocketTip D.A.R.T.s are available in sterile format for sensitive liquid handling procedures or operations that require sterility.

Knowledgeable support. Our Automation Sales Specialists are available to assist with instrument programming and modifications or instrument validation of any Matrix automated liquid handler.

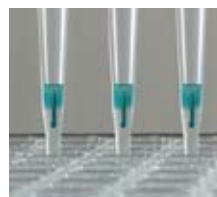
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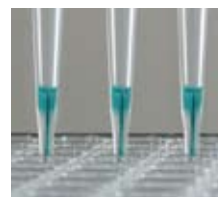
Step 1: Source Plate: Sample aspirated and pocket fills to capacity (50 nl, 100 nl or 250 nl)



Step 2: Source Plate: Sample dispensed back to vessel and pocket remains full



Step 3: Wash Plate: The portion of the tip below the pocket is washed to eliminate carryover



Step 4: Destination Plate: Sample/liquid in destination plate is aspirated to pocket level in the tip

Step 5: Destination Plate: Sample from the pocket and destination plate are dispensed back to the destination plate

Tip Dimensional Specifications

Thermo Scientific PocketTip D.A.R.T.s are compatible with Thermo Scientific Matrix PlateMate and Matrix Hydra DT Instruments

Item No. Size	Pocket Diameter	Tip Shoulder	Tip Length	Overall Magazine	Length Below Orifice	Inner Compatibility	Plate Volume Range	Overall Tip
5596-50	50 nl	0.172" / 4.37 mm	0.140" / 3.56 mm	1.516" / 38.50 mm	.825" / 20.95 mm	0.012" / 0.305 mm	96, 384	0.5 - 30 µl
• 5597-50	50 nl	0.172" / 4.37 mm	0.140" / 3.56 mm	1.516" / 38.50 mm	.825" / 20.95 mm	0.012" / 0.305 mm	96, 384	0.5 - 30 µl
5596-100	100 nl	0.172" / 4.37 mm	0.140" / 3.56 mm	1.516" / 38.50 mm	.825" / 20.95 mm	0.012" / 0.305 mm	96, 384	0.5 - 30 µl
• 5597-100	100 nl	0.172" / 4.37 mm	0.140" / 3.56 mm	1.516" / 38.50 mm	.825" / 20.95 mm	0.012" / 0.305 mm	96, 384	0.5 - 30 µl
5596-250	250 nl	0.172" / 4.37 mm	0.140" / 3.56 mm	1.516" / 38.50 mm	.825" / 20.95 mm	0.012" / 0.305 mm	96, 384	0.5 - 30 µl
• 5597-250	250 nl	0.172" / 4.37 mm	0.140" / 3.56 mm	1.516" / 38.50 mm	.825" / 20.95 mm	0.012" / 0.305 mm	96, 384	0.5 - 30 µl
5796-50	50 nl	0.172" / 4.37 mm	0.140" / 3.56 mm	1.516" / 38.50 mm	.825" / 20.95 mm	0.012" / 0.305 mm	384, 1536	0.5 - 30 µl
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• = Sterile

Performance Specifications

Description	Pocket Size	Accuracy	Precision
96 and 384 format; Sterile and Non-Sterile	100nl, 50nl, 250nl	10% of pocket capacity	6%

Ordering Guide

Item No.	Description	Quantity
5596-50	PocketTip D.A.R.T.s, 96-Channel Heads, 50 nl pocket	20 racks of 96 tips/case
• 5597-50	PocketTip D.A.R.T.s, 96-Channel Heads, 50 nl pocket	20 racks of 96 tips/case
5596-100	PocketTip D.A.R.T.s, 96-Channel Heads, 100 nl pocket	20 racks of 96 tips/case
• 5597-100	PocketTip D.A.R.T.s, 96-Channel Heads, 100 nl pocket	20 racks of 96 tips/case
5596-250	PocketTip D.A.R.T.s, 96-Channel Heads, 250 nl pocket	20 racks of 96 tips/case
• 5597-250	PocketTip D.A.R.T.s, 96-Channel Heads, 250 nl pocket	20 racks of 96 tips/case
5796-50	PocketTip D.A.R.T.s, 384-Channel Heads, 50 nl pocket	20 racks of 384 tips/case
• 5797-50	PocketTip D.A.R.T.s, 384-Channel Heads, 50 nl pocket	20 racks of 384 tips/case
5796-100	PocketTip D.A.R.T.s, 384-Channel Heads, 100 nl pocket	20 racks of 384 tips/case
• 5797-100	PocketTip D.A.R.T.s, 384-Channel Heads, 100 nl pocket	20 racks of 384 tips/case
5796-250	PocketTip D.A.R.T.s, 384-Channel Heads, 250 nl pocket	20 racks of 384 tips/case
• 5797-250	PocketTip D.A.R.T.s, 384-Channel Heads, 250 nl pocket	20 racks of 384 tips/case

• = Sterile

Compatible Instruments

Matrix PlateMate Plus, 96 and 384

Matrix PlateMate 2x3, 96 and 384

Matrix Hydra DT, 96 and 384

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