



#### **Hydrophobic & Lipophobic Coating of Pins**

All of the above pins can also be obtained with a <a href="https://hydrophobic/lipophobic/lipophobic">hydrophobic/lipophobic coating</a>. Just adding an H to the above pin designates that pin as a hydrophobic/lipophobic coated pin. These coated pins are very useful in handling solutions with proteins or lipids that may stick to naked stainless steel.



# Hydrophobic Coated Standard length Pins used in Double Float Plate Replicators

Exposed pin length = 17 mm, overall pin length = 50.8 mm, pin diameter= 0.914 mm, delivery volume = $\sim$ 120 nl, hydrophobic coated <b>NEW</b>	<b>FP4H</b>
Exposed pin length = 17 mm, overall pin length = $50.8$ mm, pin diameter= $0.787$ mm, delivery volume = $\sim\!80$ nl, hydrophobic coated	FP3H
Exposed pin length = 17 mm, overall pin length = 50.8 mm, pin diameter= 0.457 mm, delivery volume = $\sim$ 20 nl, hydrophobic coated	FP1H
Exposed pin length = 17 mm, overall pin length = 50.8 mm, pin diameter=0.356 mm, delivery volume = $\sim$ 10 nl, hydrophobic coated <b>NEW</b>	FP8H
Exposed pin length = 17 mm, overall pin length = $50.8$ mm, pin diameter= $0.229$ mm, delivery volume = $\sim 4$ nl, hydrophobic coated	<b>FP9H</b>

### **Hydrophobic Coated short Pins used in Double Float Plate Replicators**

Exposed pin length = 12 mm, overall pin length = 33 mm, pin diameter = $0.914$ mm, delivery volume = $\sim 120$ nl, hydrophobic coated <b>NEW</b>	FP4CBH
Exposed pin length = $12$ mm, overall pin length = $33$ mm, pin diameter = $0.787$ mm, delivery volume = $\sim 80$ nl, hydrophobic coated	FP3CBH
Exposed pin length = 12 mm, overall pin length = 33 mm, pin diameter = $0.457$ mm, delivery volume = $\sim\!20$ nl, hydrophobic coated	FP1CBH
Exposed pin length = 12 mm, overall pin length = 33 mm, pin diameter = $0.356$ mm, delivery volume = $\sim 10$ nl, hydrophobic coated <b>NEW</b>	FP8CBH
Exposed pin length = $12$ mm, overall pin length = $33$ mm, pin diameter= $0.229$ mm, delivery volume = $\sim 4$ nl, hydrophobic coated	FP9CBH



#### **Hydrophobic Coated Tall Pins used in Double Float Plate Replicators**

Exposed pin length = $30$ mm, overall pin length = $50.8$ mm, pin diameter = $0.914$ mm, delivery volume = $\sim 120$ nl, hydrophobic coated <b>NEW</b>	FP4TH
Exposed pin length = 30 mm, overall pin length = $50.8$ mm, pin diameter = $0.787$ mm, delivery volume = $\sim 80$ nl, hydrophobic coated <b>NEW</b>	FP3TH
Exposed pin length = 30 mm, overall pin length = $50.8$ mm, pin diameter = $0.457$ mm, delivery volume = $\sim 20$ nl, hydrophobic coated <b>NEW</b>	FP1TH
Exposed pin length = 30 mm, overall pin length = $50.8$ mm, pin diameter = $0.356$ mm, delivery volume = $\sim 10$ nl, hydrophobic coated <b>NEW</b>	FP8TH
Exposed pin length = 30 mm, overall pin length = $50.8$ mm, pin diameter = $0.229$ mm, delivery volume = $\sim 4$ nl, hydrophobic coated <b>NEW</b>	FP9TH

#### \*\*\*NEW\*\*\*

## Hydrophobic coated 17 mm length pins for short tube solid Pins used in Double Float Plate Replicators

Exposed pin length = 17 mm, overall pin length = $38.1$ mm, pin diameter = $0.914$ mm, delivery volume = $\sim 120$ nl*, hydrophobic coated <b>NEW</b>	FP4NH
Exposed pin length = 17 mm, overall pin length = $38.1$ mm, pin diameter = $0.787$ mm, delivery volume = $\sim 80$ nl, hydrophobic coated <b>NEW</b>	FP3NH
Exposed pin length = 17 mm, overall pin length = $38.1$ mm, pin diameter = $0.457$ mm, delivery volume = $\sim 20$ nl, hydrophobic coated <b>NEW</b>	FP1NH
Exposed pin length = 17 mm, overall pin length = $38.1$ mm, pin diameter = $0.356$ mm, delivery volume = $\sim 10$ nl, hydrophobic coated <b>NEW</b>	FP8NH
Exposed pin length = 17 mm, overall pin length = $38.1$ mm, pin diameter = $0.229$ mm, delivery volume = $\sim 4$ nl, hydrophobic coated <b>NEW</b>	FP9NH

<sup>\*</sup>The above delivery volumes for these pins are approximate values, the actual volumes delivered depend upon many controllable factors that will vary from one application to another. For example in liquid to liquid transfers the amount transferred will include the hanging drop on the bottom of the pin as well as the liquid on the sides of the pin. If the transfer was to a membrane then only the hanging drop would be transferred and not the liquid on the sides of the pin. If the transfer was to a dry plate then only about 35% of the hanging drop would be transferred to the dry plate and the rest would be on the pin. The division of the hanging drop would be determined by the surface tension of the pin and the surface tension of the dry plate. The speed of pin withdrawal can increase the volume transferred by 3 fold.

Tel:03-9039999 Fax:03-9039090 e-mail:degroot@degroot.co.il www.degroot.co.il