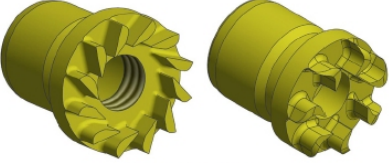

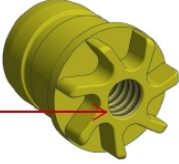



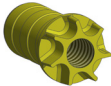

Accessories For 4 mm DI (Drop-in) Spinners

We have new, more robust turbines for DI-3 and DI-4 rotors. We are phasing these in beginning with Torlon and GFT. The new design includes modified turbine blades and a threaded hole with a different thread pitch thus necessitating a new Insertion and Removal Tool with matching thread. (New spacers will have the new thread as well.) We will continue to supply which-ever turbine puller you need (or both).

Item	Turbine and Spacer Insertion and Removal Tool	Thread
 <p>DI-4 Turbines</p>		Part No: 01003 1-72 THREAD
<p>Note how the turbine blades are connected to form a ring around the threaded hole.</p>  <p>New DI-4 Turbine</p>		Part No: 06027 0-80 THREAD

➤ Thick wall rotors and Torlon caps are provided for **fastest spinning**. DI4 Thin wall rotors and caps are available for maximum signal to noise. The maximum speed of thin wall rotors is about 50% the maximum speed of thick wall rotors. Teflon spacers are provided for highest homogeneity and rf field strength. **(US\$ – Foreign prices higher, plus taxes.)**

For material specifications: <http://dotynmr.com/download/Materials-and-Speeds-Data.pdf>

4 mm DI-4 Rotor Length =24.95 mm Low density* Spinning max Thick Wall rotor – Max. 18 kHz		DI4Sample Volume : Thick Wall = 122 μ l, with Spacers = 60 μ l Thin Wall = 158 μ l, with Spacers = 77 μ l	Front DI Turbine 	Rear DI Tip Cap 
Please note: Although the front turbine and rear tip cap are sold separately, a pair consisting of a front turbine and a rear tip cap are needed for spinning.				
DI4 #	Price	Description	Maximum SpinSpeed*	
Thick Wall Rotors and Caps			4 mm	
45127	\$600	DI 4mm Thick Wall Rotor – Silicon Nitride	18 kHz	
45127-P	\$650	DI 4mm Thick Wall Rotor – Silicon Nitride - Painted **	18 kHz	
45129	70	DI 4mm Front Turbine Cap for Thick Wall – GFT (glass filled torlon)	18 kHz	
46136	70	DI 4mm Rear Tip Cap for Thick Wall – GFT (glass filled torlon)	18 kHz	
46142	70	DI 4mm Front Turbine Cap for Thick Wall – Torlon	18 kHz	
46140	70	DI 4mm Rear Tip Cap for Thick Wall – Torlon	18 kHz	
46142-A	70	DI 4mm Front Turbine Cap for Thick Wall – Aurum	15 kHz	
46140-A	70	DI 4mm Rear Tip Cap for Thick Wall – Aurum	15 kHz	
45130	70	DI 4mm Front Turbine Cap for Thick Wall – Kel-F	9 kHz	
46137	70	DI 4mm Rear Tip Cap for Thick Wall – Kel-F	9 kHz	
45137	25	DI 4mm Spacer for Thick Wall Rotors – Teflon	Restricts/centers the sample to within the coil region). Two are required.	
46206	25	D 4mm Spacer for Thick Wall Rotors – Kel-F		

Continued...

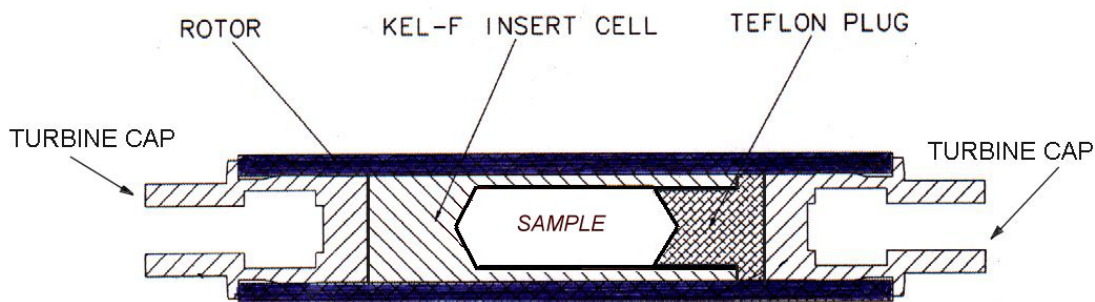
Accessories For 4 mm DI (Drop-in) Spinners

DI4 #	Price	DI4 Thin Wall Rotors and Caps	Maximum Spin Speed
03136	\$600	DI 4mm Thin Wall Rotor – Silicon Nitride	12 kHz
03136-P	\$600	DI 4mm Thin Wall Rotor – Silicon Nitride - Painted **	12 kHz
45131	70	DI 4mm Front Turbine Cap for Thin Wall – GFT (glass filled torlon)	12 kHz
46138	70	DI 4mm Rear Tip Cap for Thin Wall – GFT (glass filled torlon)	12 kHz
46141	70	DI 4mm Front Turbine Cap for Thin Wall – Torlon	12 kHz
46169	70	DI 4mm Rear Tip Cap for Thin Wall – Torlon	12 kHz
46141-A	70	DI 4mm Front Turbine Cap for Thin Wall – Aurum	12 kHz
46169-A	70	DI 4mm Rear Tip Cap for Thin Wall – Aurum	12 kHz
45132	70	DI 4mm Front Turbine Cap for Thin Wall – Kel-F	9 kHz
46139	70	DI 4mm Rear Tip Cap for Thin Wall – Kel-F	9 kHz
45138	25	DI 4mm Spacer for Thin Wall Rotors – Teflon	Restricts/centers the sample to within the coil region). Two are required.
46207	25	DI 4mm Spacer for Thin Wall Rotors – Kel-F	
DI4 #	Price	Cap Pullers and Accessories	
01003 or 06027	\$70	DI4 Turbine or Spacer Insertion and Removal Tool <i>(Used for both turbine caps and spacers - since 10/2012)</i>	
96188	110	Rotor Holder and Plungers – tools for tip cap and rear spacer removal	
99683	160	Sample Packing Set For Thick Wall DI 4 Rotors	
99682	160	Sample Packing Set For Thin Wall DI 4 Rotors	

DI-4 Sealing Cells for Liquids and Semi-Solids

Sealing cells are for use inside DI thin-walled ceramic rotors. The plastic cells are available in Kel-F with teflon plugs for proton NMR, or in ultem with polyvinyl-chloride (PVC) plugs for fluorine NMR.

All cells are suitable for long-term sample storage without loss. They may be used with all common solvents, including acetone, alcohols, benzene, DMSO, ethers, methylene chloride, strong bases, and most strong acids – as long as the sample density does not exceed the density of the plug (2.2 g/cm³ for teflon, 1.4 g/cm³ for PVC).



Kel-F (or Ultem) Insert Cell With Plug - for Liquids or Semi-solid Samples

Note: DI rotors use a front turbine and a rear tip cap, not the rear turbine as shown in the picture above.

4 mm DI4 Sealing Cells. (For thin wall rotors)				
Kel-F cells with teflon plugs or Ultem cells with PVC plugs.				
	Kel-F	Ultem	Sample	Price
	Part #	Part #	Volume	_____
DI4	95142	95143	50 µL	\$35
DI4	95141	95139	20 µL	35