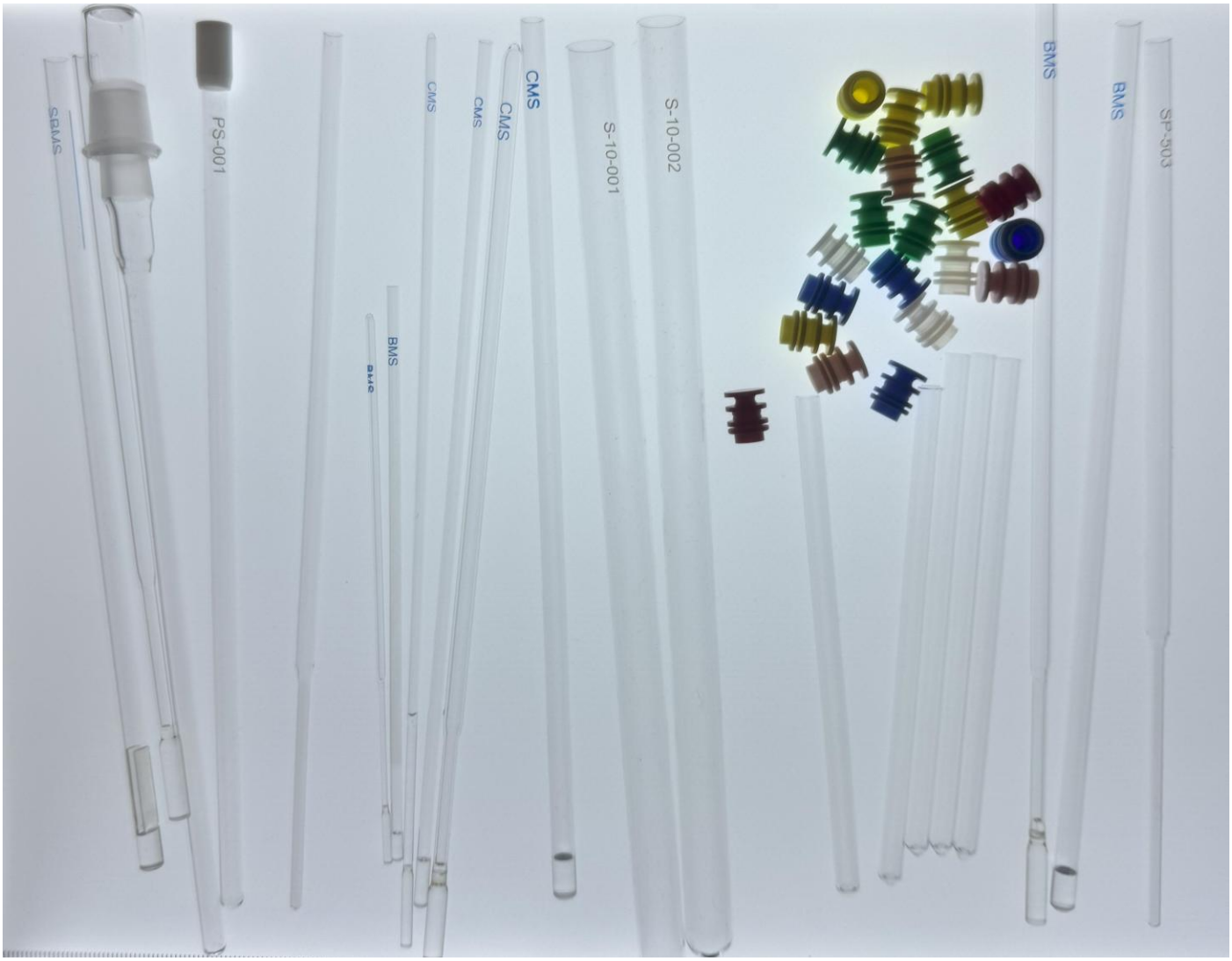
Ver. 20261008

Vol. EN10NP

NMR

SHIGEMI®



NMR/EPR Tubes & Accessories

MADE IN JAPAN

SHIGEMI Co., LTD.

2-4-15 Nakanosanno Hachioji
TOKYO JAPAN
Pone:+81-42-624-2207 FAX:+81-42-622-0937 info@shigemi.co.jp
https://www.shigemi.co.jp/en-introduction

Contents

1. Symmetrical MICRO NMR Tubes	2～6
2. Thin wall Symmetrical MICRO NMR Tubes	7～10
3. SLOT TUBE	11～12
4. Ultra Precision NMR Tubes(Thin wall)	13
5. Economy NMR Tubes	14
6. 5mm MICRO Bottom NMR Tubes	15
7. 5mmϕ Coaxial NMR tube set	16～17
8. 5mmφ Coaxial INNER TUBE for Heat sealing	18
9. 5mmϕ Coaxial GAS tight NMR tube set	19～20
10. Quartz NMR Tubes	21
11. Ultra Thin wall NMR Tubes	22～23
12. Precision Large Volume NMR Tubes	24
13. ESR (EPR) Quartz Tubes	25
14. TRUE GAS TIGHT TUBE FOR NMR・ESR	26～27
15. Accessories	28
16. 5mm NMR SAMPLE TUBE for SampleJet	29

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Symmetrical MICRO NMR Tubes

These unique NMR microtubes are made out of a special type of hard glass with excellent chemical durability. They are magnetic susceptibility matched to each of the following solvents: CDCL3, CD3OD, D20, DMSO

Therefore, the best resolution of a sample can be obtained in each of these solutions with minimal amounts of sample. Yet, the use of a small amount of solution will not affect the spectral resolution or the sideband.

How to use Symmetrical MICRO NMR Tubes

★ **Do not sppining**

★ **We do not garanty auto shimming**
Plaese make shim file from 0

★ **Plaese take out bables**

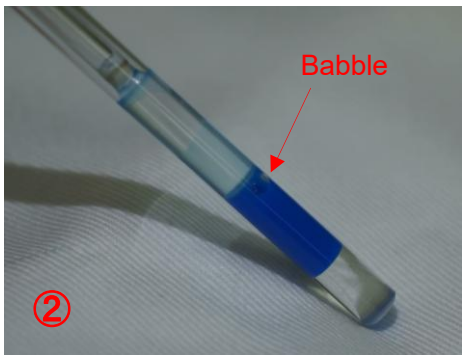
①You turn in an inner tubeslowly

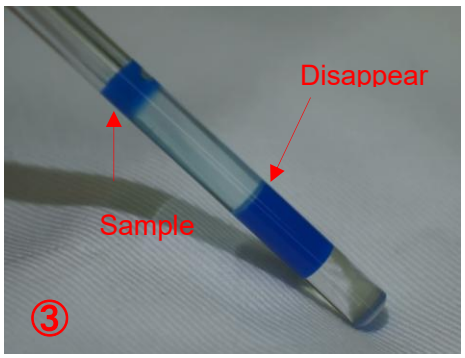
②Brief stop when a inner tube tach at sample surface.

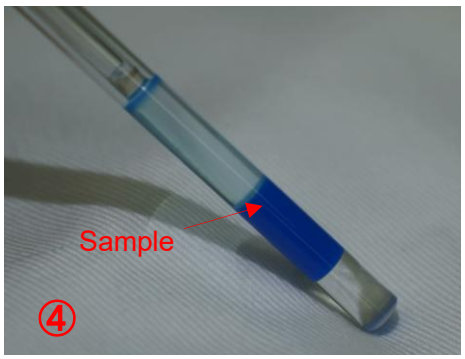
③You push quick a inner tube

④Bables was disapred return an inner tube right possition

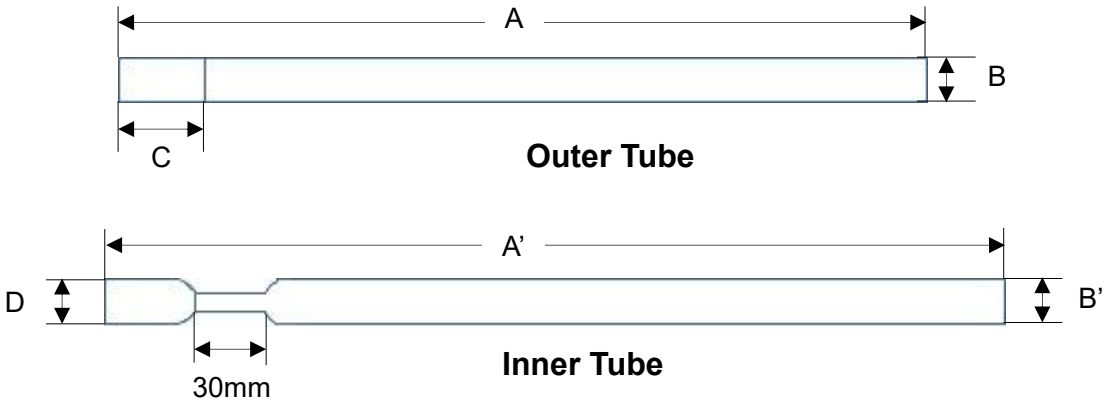








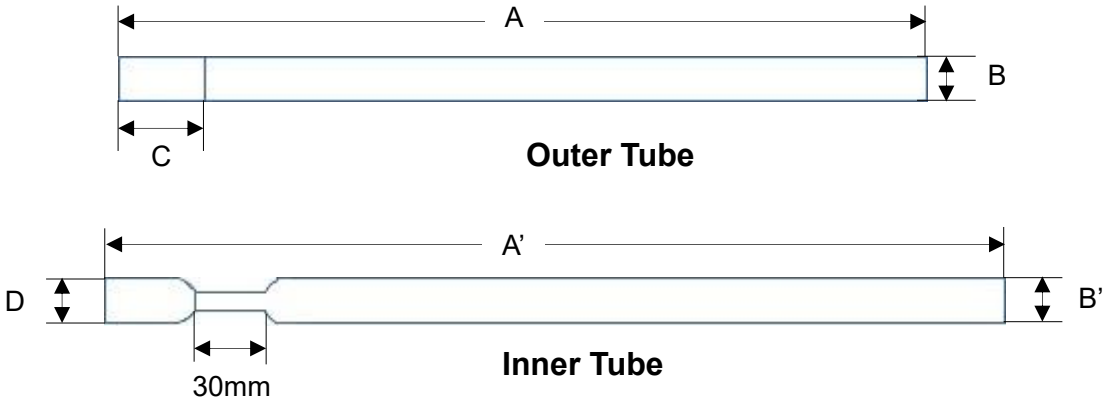
Symmetrical MICRO NMR Tubes for D_2O



Parts N.O.		Outer Tube(mm)			Inner Tube(mm)		
		Length A	O.D B	Muched Glass C	Length A'	O.D. B'	Muched glass D
2.5mmφ	BMS-0025	120	2.5 +0 -0.01	6	115	1.8	1.86 +0 -0.01
3mmφ	BMS-003	180	3.00 -0.01 -0.02	10	190	2.4	2.47 +0 -0.01
4mmφ	BMS-004B	180	4.000 +0.005 -0.010	8	190	3.1	3.16 +0 -0.01
	BMS-004J	180	4.000 +0.005 -0.010	12	190	3.1	3.16 +0 -0.01
	BMS-005V	180	4.000 +0.005 -0.010	15	190	3.1	3.16 +0 -0.01
5mmφ	BMS-005B	180	4.965 +0.005 -0.010	8	190	4.1	4.17 +0 -0.01
	BMS-005J	180	4.965 +0.005 -0.010	12	190	4.1	4.17 +0 -0.01
	BMS-005V	180	4.965 +0.005 -0.010	15	190	4.1	4.17 +0 -0.01
8mmφ	BMS-008BJ	190	7.98 ±0.01	10	200	6.9	6.97 +0 -0.01
	BMS-008V	190	7.98 ±0.01	15	200	6.9	6.97 +0 -0.01
10mmφ	BMS-010BJ	190	9.98 +0 -0.01	10	200	8.9	8.97 +0 -0.01
	BMS-010V	190	9.98 ±0.01	15	200	8.9	8.97 +0 -0.01

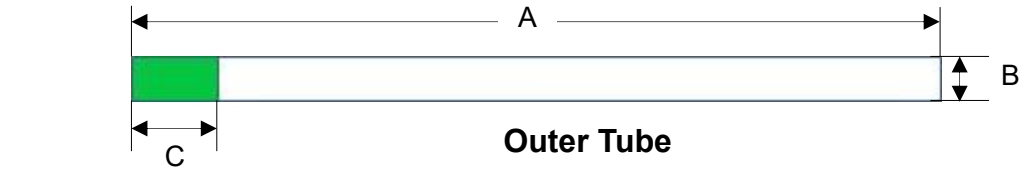
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Symmetrical MICRO NMR Tubes for $CDCl_3$

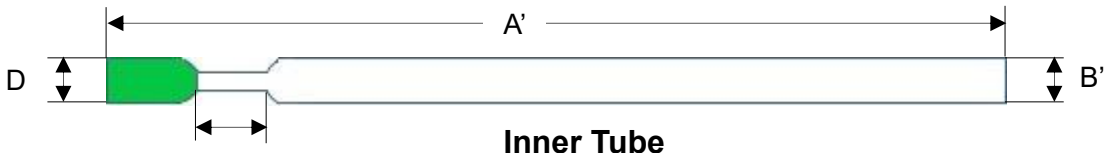


Parts N.O.		Outer Tube(mm)			Inner Tube(mm)		
		Length A	O.D B	Muched glass C	Length A'	O.D. B'	Muched glass D
2.5mmφ	CMS-0025	120	2.5 +0 -0.01	6	115	1.8	1.86 +0 -0.01
3mmφ	CMS-003	180	3.00 -0.01 -0.02	10	190	2.4	2.47 +0 -0.01
5mmφ	CMS-005B	180	4.965 +0.005 -0.010	8	190	4.1	4.17 +0 -0.01
	CMS-005J	180	4.965 +0.005 -0.010	12	190	4.1	4.17 +0 -0.01
	CMS-005V	180	4.965 +0.005 -0.010	15	190	4.1	4.17 +0 -0.01
8mmφ	CMS-008BJ	190	7.98 ±0.01	10	200	6.9	6.97 +0 -0.01
	CMS-008V	190	7.98 ±0.01	15	200	6.9	6.97 +0 -0.01
10mmφ	CMS-010BJ	190	9.98 +0 -0.01	10	200	8.9	8.97 +0 -0.01
	CMS-010V	190	9.98 ±0.01	15	200	8.9	8.97 +0 -0.01

Symmetrical MICRO NMR Tubes for DMSO $(CD_3)_2SO$, C_6D_6, C_5D_5N



Outer Tube

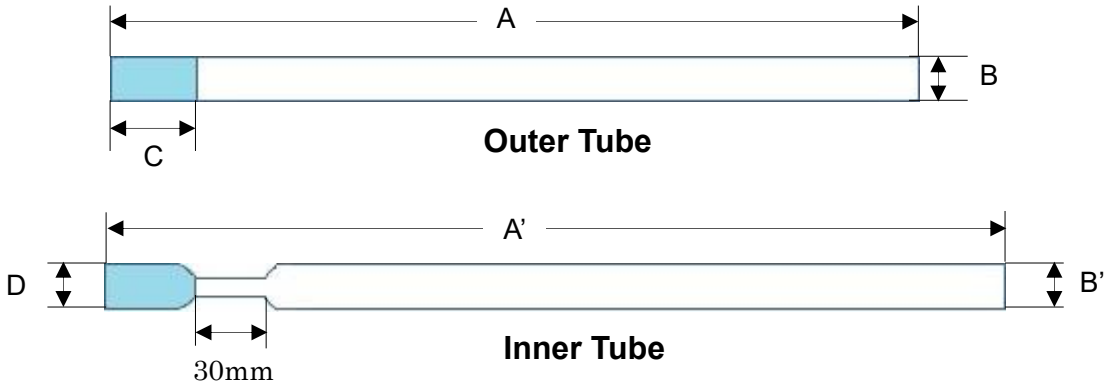


Inner Tube

Parts N.O.		Outer Tube(mm)			Inner Tube(mm)		
		Length A	O.D B	Muched glass C	Length A'	O.D. B'	Muched glass D
2.5mmφ	DMS-0025	120	2.5 +0 -0.01	6	115	1.8	1.86 +0 -0.01
3mmφ	DMS-003	180	3.00 -0.01 -0.02	10	190	2.4	2.47 +0 -0.01
5mmφ	DMS-005B	180	4.965 +0.005 -0.010	8	190	4.1	4.17 +0 -0.01
	DMS-005J	180	4.965 +0.005 -0.010	12	190	4.1	4.17 +0 -0.01
	DMS-005V	180	4.965 +0.005 -0.010	15	190	4.1	4.17 +0 -0.01
8mmφ	DMS-008BJ	190	7.98 ±0.01	10	200	6.9	6.97 +0 -0.01
	DMS-008V	190	7.98 ±0.01	15	200	6.9	6.97 +0 -0.01
10mmφ	DMS-010BJ	190	9.98 +0 -0.01	10	200	8.9	8.97 +0 -0.01
	DMS-010V	190	9.98 ±0.01	15	200	8.9	8.97 +0 -0.01

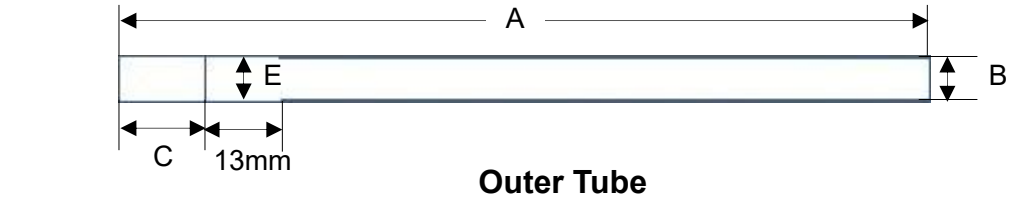
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Symmetrical MICRO NMR Tubes for CD_3OD, CD_3CN

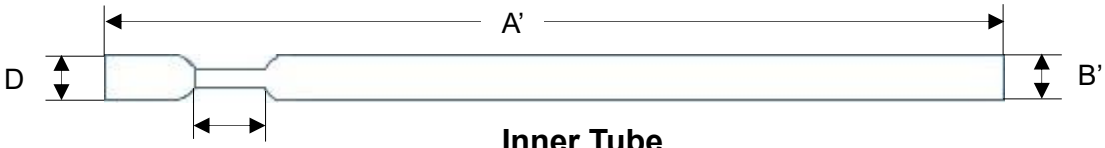


Parts N.O.		Outer Tube(mm)			Inner Tube(mm)		
		Length A	O.D B	Muched glass C	Length A'	O.D. B'	Muched glass D
2.5mmφ	MMS-0025	120	2.5 +0 -0.01	6	115	1.8	1.86 +0 -0.01
3mmφ	MMS-003	180	3.00 -0.01 -0.02	10	190	2.4	2.47 +0 -0.01
5mmφ	MMS-005B	180	4.965 +0.005 -0.010	8	190	4.1	4.17 +0 -0.01
	MMS-005J	180	4.965 +0.005 -0.010	12	190	4.1	4.17 +0 -0.01
	MMS-005V	180	4.965 +0.005 -0.010	15	190	4.1	4.17 +0 -0.01
8mmφ	MMS-008BJ	190	7.98 ±0.01	10	200	6.9	6.97 +0 -0.01
	MMS-008V	190	7.98 ±0.01	15	200	6.9	6.97 +0 -0.01
10mmφ	MMS-010BJ	190	9.98 +0 -0.01	10	200	8.9	8.97 +0 -0.01
	MMS-010V	190	9.98 ±0.01	15	200	8.9	8.97 +0 -0.01

Thin wall Symmetrical MICRO NMR Tubes for D_2O



Outer Tube

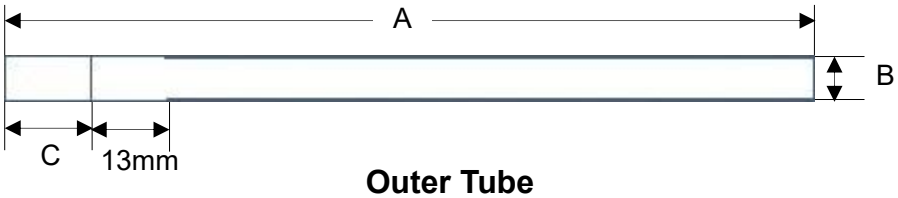


Inner Tube

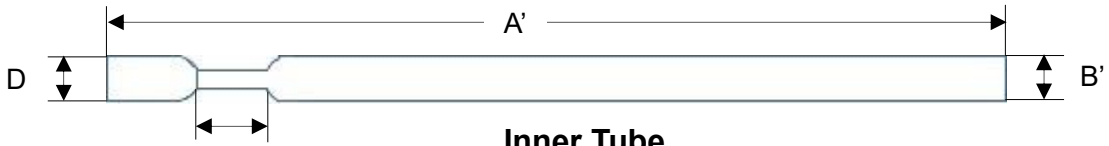
Parts N.O.		Outer Tube(mm)				Inner Tube(mm)		
		Length A	O.D. B	Muched Glass C	Thin Wall I.D. E	Length A'	O.D. B'	Mached Glass O.D. D
5mmφ	BMS-005TB	180	4.965 +0.005 -0.010	8	4.52	190	4.1	4.17 +0 -0.01
	BMS-005TJ	180	4.965 +0.005 -0.010	12	4.52	190	4.1	4.17 +0 -0.01
	BMS-005TV	180	4.965 +0.005 -0.010	15	4.52	190	4.1	4.17 +0 -0.01

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Thin wall Symmetrical MICRO NMR Tubes for $CDCl_3$



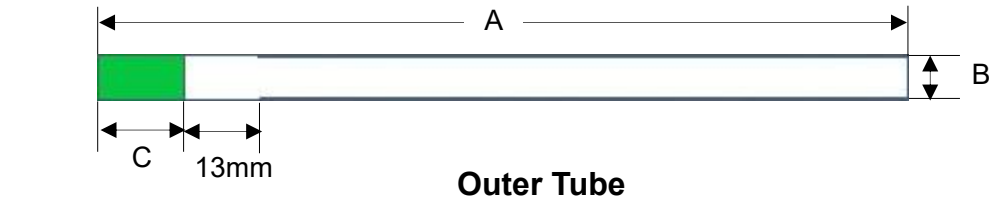
Outer Tube



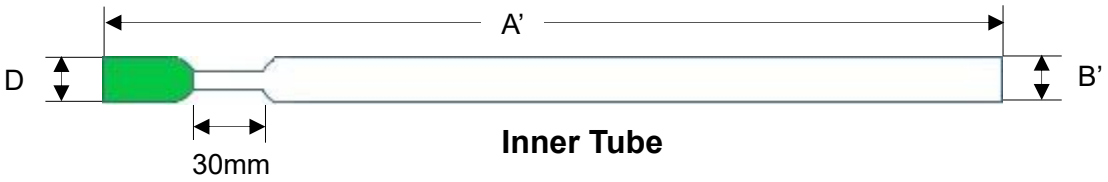
Inner Tube

Parts N.O.		Outer Tube(mm)				Inner Tube(mm)		
		Length A	O.D. B	Muched Glass C	Thin Wall I.D. E	Length A'	O.D. B'	Mached Glass O.D. D
5mmφ	CMS-005TB	180	4.965 +0.005 -0.010	8	4.52	190	4.1	4.17 +0 -0.01
	CMS-005TJ	180	4.965 +0.005 -0.010	12	4.52	190	4.1	4.17 +0 -0.01
	CMS-005TV	180	4.965 +0.005 -0.010	15	4.52	190	4.1	4.17 +0 -0.01

Thin wall Symmetrical MICRO NMR Tubes for DMSO $(CD_3)_2SO$, Benzene C_6D_6 , Pyridine C_5D_5N



Outer Tube

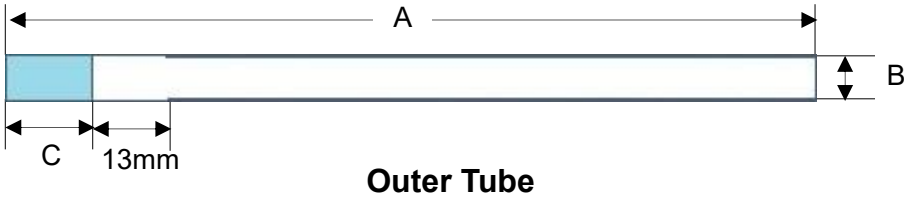


Inner Tube

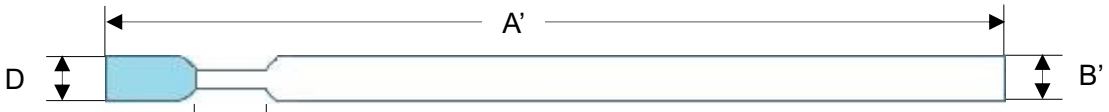
Parts N.O.		Outer Tube(mm)				Inner Tube(mm)		
		Length A	O.D. B	Muched Glass C	Thin Wall I.D. E	Length A'	O.D. B'	Mached Glass O.D. D
5mmφ	DMS-005TB	180	4.965 +0.005 -0.010	8	4.52	190	4.1	4.17 +0 -0.01
	DMS-005TJ	180	4.965 +0.005 -0.010	12	4.52	190	4.1	4.17 +0 -0.01
	DMS-005TV	180	4.965 +0.005 -0.010	15	4.52	190	4.1	4.17 +0 -0.01

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Thin wall Symmetrical MICRO NMR Tubes for Methanol CD_3OD, Acetonitrile CD_3CN



Outer Tube



Inner Tube

Parts N.O.		Outer Tube(mm)				Inner Tube(mm)		
		Length A	O.D. B	Muched Glass C	Thin Wall I.D. E	Lengt h A'	O.D. B'	Mached Glass O.D. D
5mmφ	MMS-005TB	180	4.965 +0.005 -0.010	8	4.52	190	4.1	4.17 +0 -0.01
	MMS-005TJ	180	4.965 +0.005 -0.010	12	4.52	190	4.1	4.17 +0 -0.01
	MMS-005TV	180	4.965 +0.005 -0.010	15	4.52	190	4.1	4.17 +0 -0.01

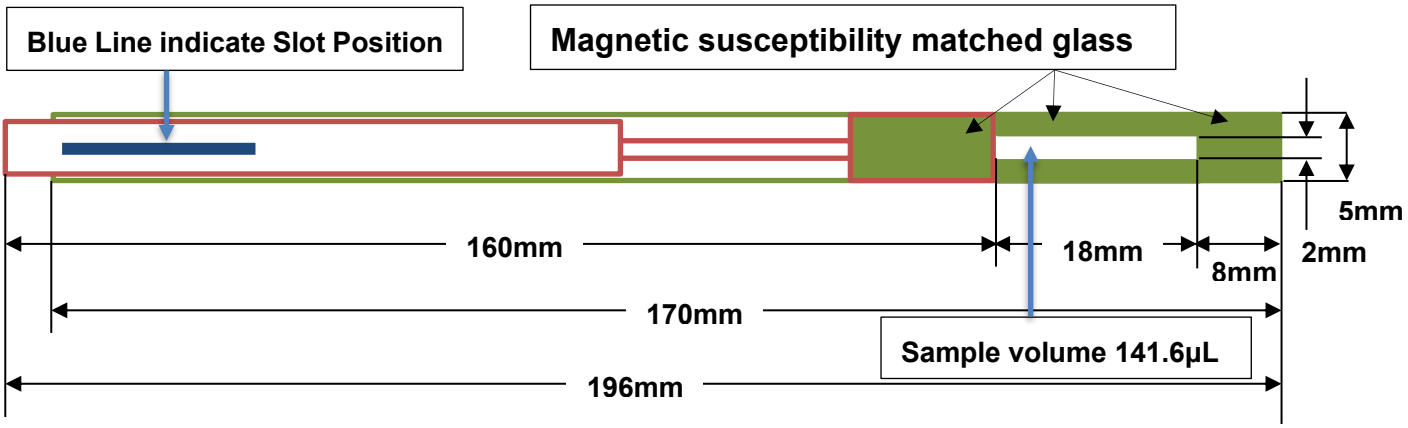
SLOT TUBE

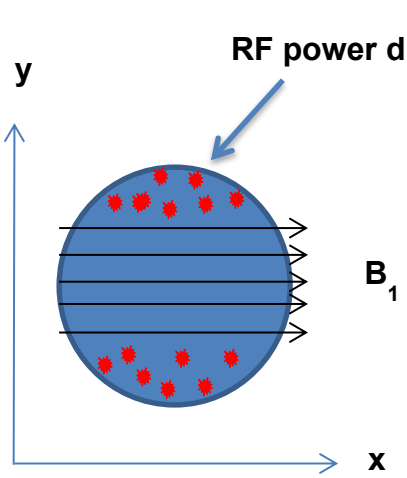
For High concentration electrolyte samples

The SHIGEMI Slot Tube provides the highest sensitivity and shortest 90 degree pulse width with any probes when working with lossy samples such as proteins in aqueous solutions containing high concentrations of electrolyte as salt.

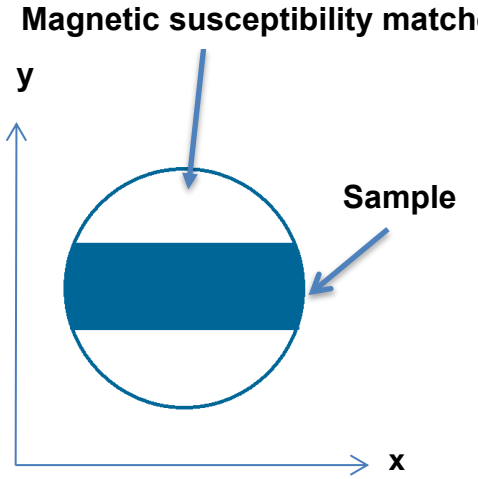
Benefit

- ★ Avoid the hot spot of RF power dissipation.
- ★ Able to obtain the best S/N ratio than any other NMR sample tubes.
- ★ Provide the shortest 90 degree pulse width than any NMR sample tubes.
- ★ Has already been confirmed working well with a Cryo™probe (Bruker) 600, 950MHz and a Cold Probe(Varian/Agilent)600MHz.



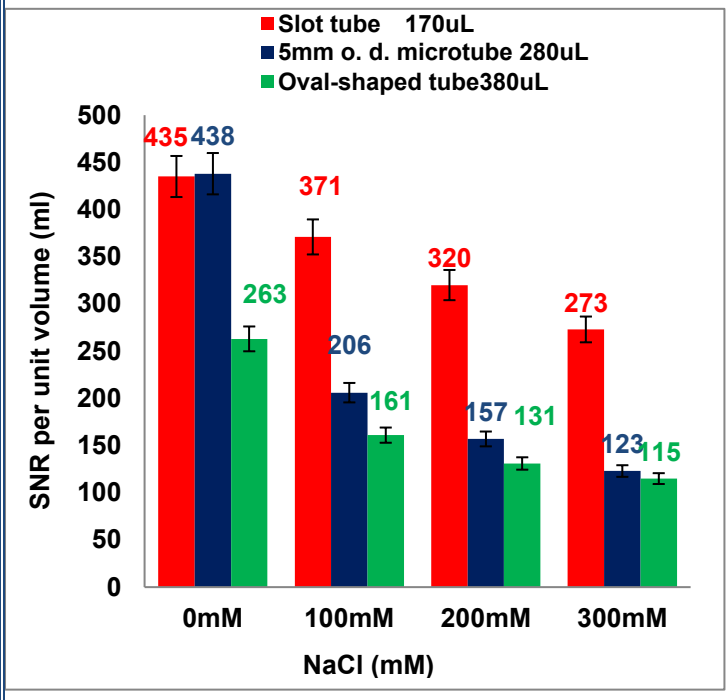


Cylindrical Tube

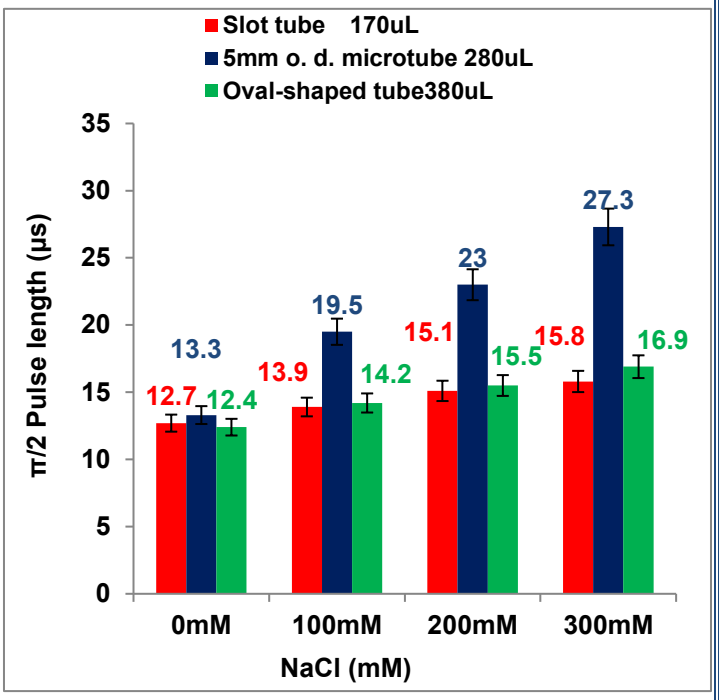


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SNR per unit volume(ml) in different tubes And salt concentrations



π/2 Pulse length (μs) in different tubes and salt concentrations

Data acquired at 14.1T (600 MHz Cryo^{TM}Probe) for the ubiquitin samples of 0.3mM of [U-^{13}C/^{15}N] containing 10mM sodium phosphate

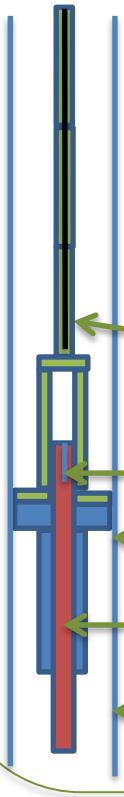
SLOT TUBE

Magnetic susceptibility matched glass



Slot for sample 144.6μL

Positioning tool



If you do not have "Bruker Shaped Shigemi Tube Shuttle (5mm)" , you need this tool for fixing exact position. (shortest 90 degree puls width)

Do not use the air-lift function.

Black Line adjust with Blue Line

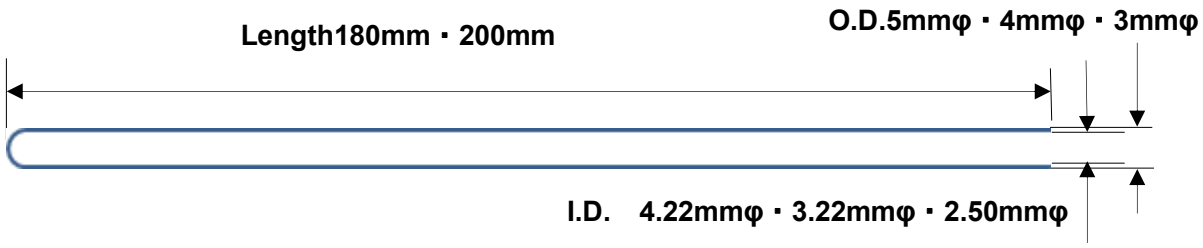
Blue Line

Spinner

SLOT TUBE

Upper Barrel

Ultra Precision NMR Sample Tubes



DURAN®

5mmφ Ultra Precision NMR Sample Tubes Thin wall

Parts N.O.	Dimension (mm)			Tolerance (μm)	
	Length	O.D.	I.D.	Straightness	wall thickness control
PS-001-7	180	4.965 +0.005 -0.010	4.220 +0.01 -0	10	5
PS-001-8	200	4.965 +0.005 -0.010	4.220 +0.01 -0	10	5
PS-002-7	180	4.965 +0.005 -0.010	4.220 +0.01 -0	15	10
PS-002-8	200	4.965 +0.005 -0.010	4.220 +0.01 -0	15	10
PS-003-7	180	4.965 +0.005 -0.010	4.220 +0.01 -0	15	20
PS-003-8	200	4.965 +0.005 -0.010	4.220 +0.01 -0	15	20
PS-004-7	180	4.965 +0.005 -0.010	4.220 +0.01 -0	20	25
PS-004-8	200	4.965 +0.005 -0.010	4.220 +0.01 -0	20	25

4mmφ Ultra Precision NMR Sample Tubes Thin wall

Parts N.O.	Dimension (mm)			Tolerance (μm)	
	Length	O.D.	I.D.	Straightness	wall thickness control
PR-001	180	4 +0 -0.01	3.22 +0.010 -0	15	10
PR-002	180	4 +0 -0.01	3.22 +0.010 -0	20	20

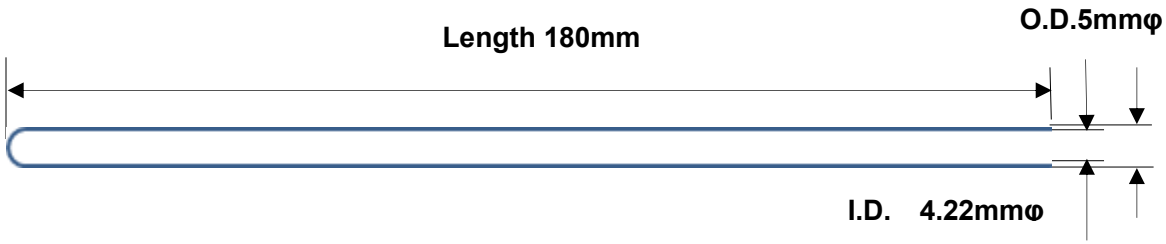
3mmφ Ultra Precision NMR Sample Tubes Thin wall

Parts N.O.	Dimension (mm)			Tolerance (μm)	
	Length	O.D.	I.D.	Straightness	wall thickness control
PN-001	180	3.0 +0.01 -0.02	2.5 +0.01 -0	15	5
PN-002	180	3.0 +0.01 -0.02	2.5 +0.01 -0	25	20

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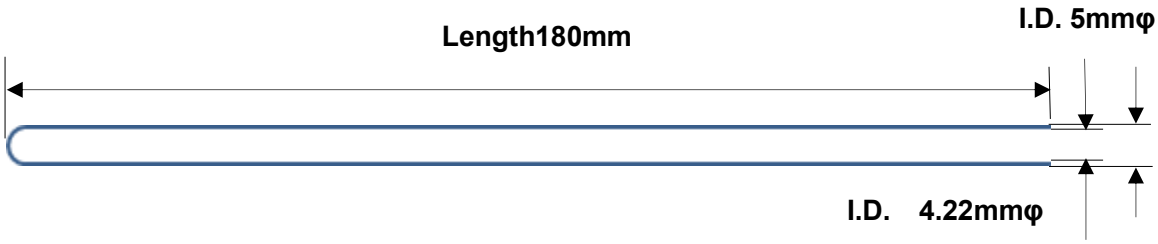
Economy NMR Sample Tubes

For ruotine examination. A quality as same PS-004-7 as Ultra Precision Tubes
We can sale 100 tubes only.



5mm Economy NMR Sample Tubes Thin Wall DURAN®

Parts N.O.	Dimension (mm)			Tolerance (μm)		Minimum sale PCS
	Length	O.D.	I.D.	Straightness	Wall thickness control	
PS-005	180	4.965 +0.005 -0.010	4.220 +0.01 -0	25	40	100 peaces



★Matreal is Brosilicate glass ASTM Type1 Class A as DURAN® of Shott AG
★You can use V.T. examination
★Minimum sales unit 1 unit(25pcsX8box)

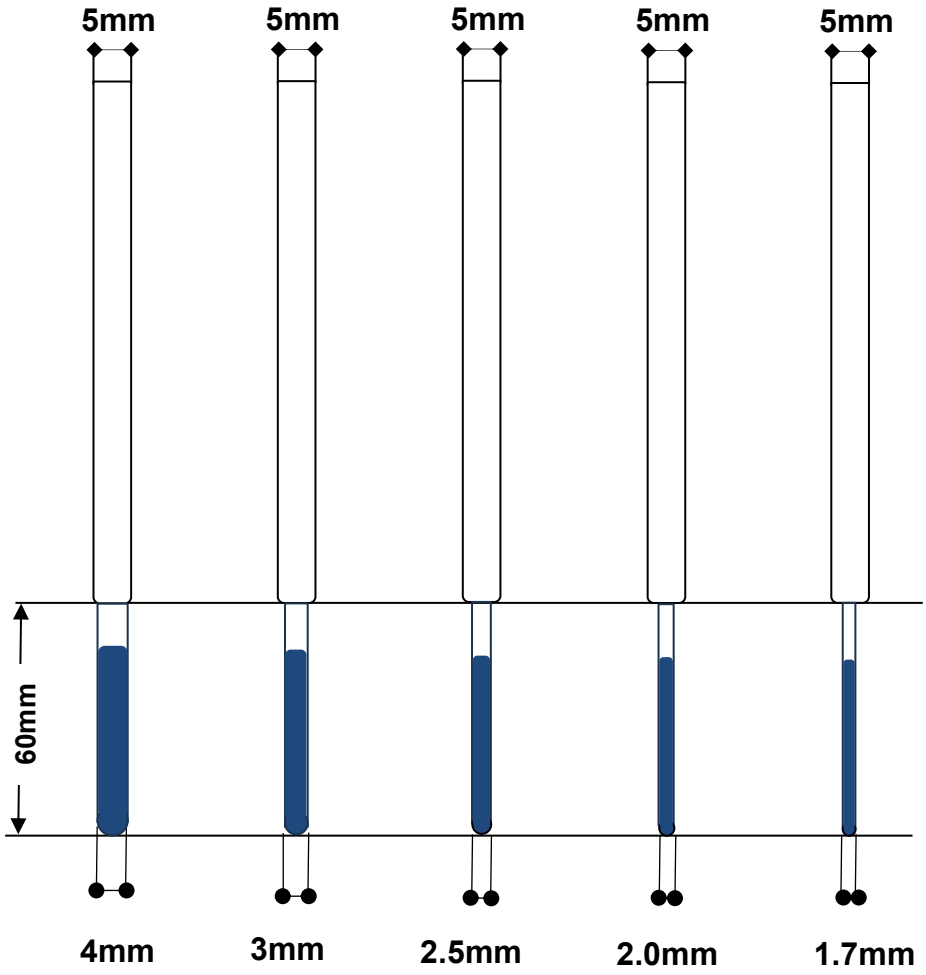
DURAN®

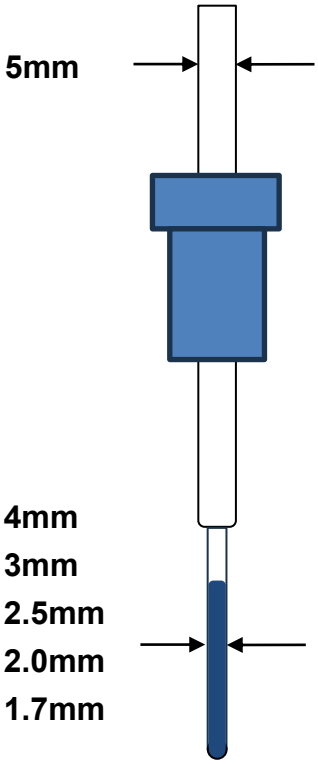
5mm Disposable NMR Sample Tubes Thin Wall

Parts N.O.	Dimension (mm)			Straightness(μm)	Minimum sale PCS
	Length	O.D.	I.D.		
EC-57	180	4.965 +0.005 -0.010	4.220 ±0.10	30	200PCS
EC-58	200	4.965 +0.005 -0.010	4.220 ±0.10	30	200PCS

5mmφ Micro Bottom Tubes

For 5mm Spinner





Volume comparison

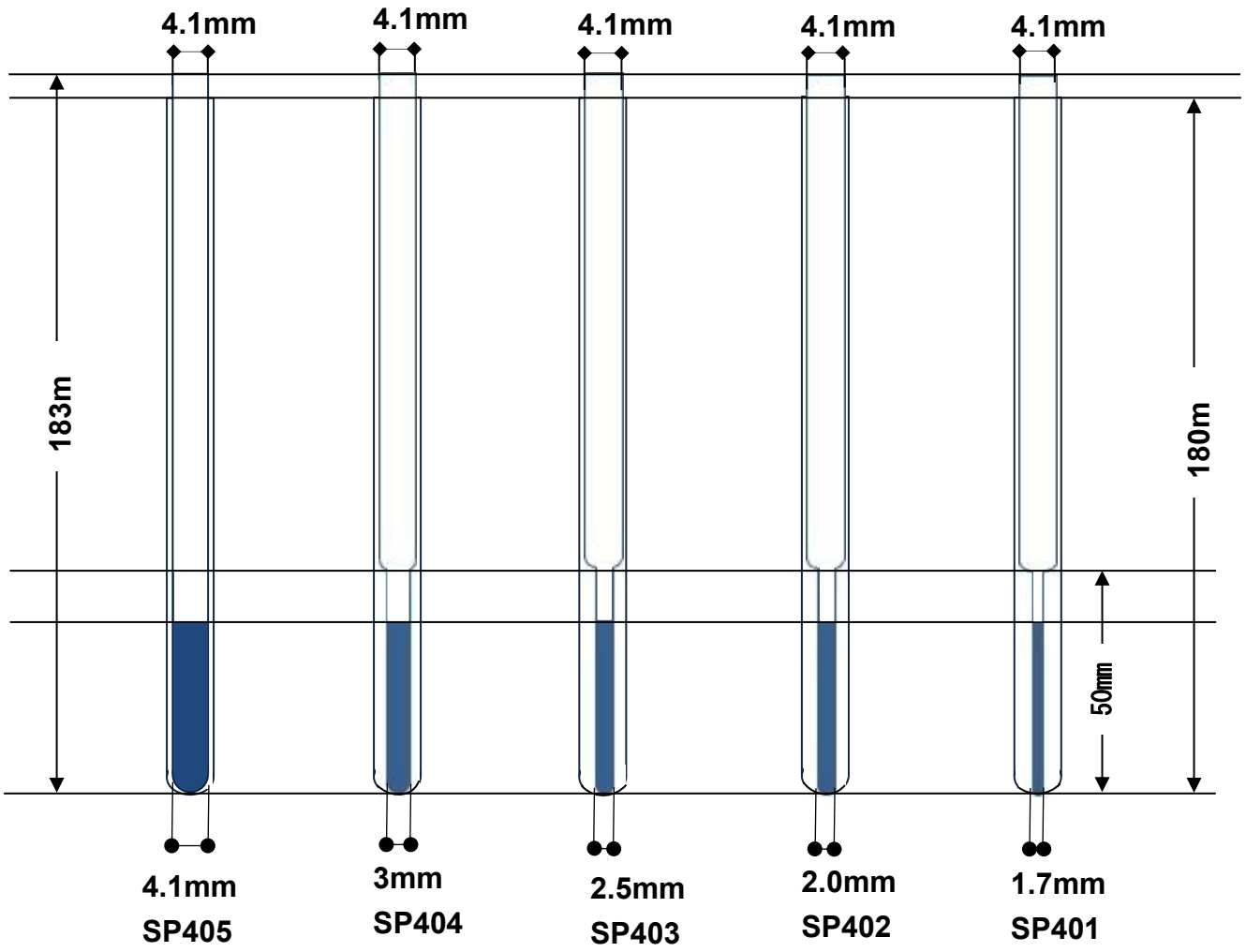
Sample hight	4mm (SP-505)	3mm (SP-504)	2.5mm (SP-503)	2.0mm (SP-502)	1.7mm (SP-501)	5mm Thin wall
30mm	240uL	145 uL	84 uL	53 uL	34 uL	410uL
40mm	321 uL	194 uL	113 uL	70 uL	45 uL	549uL

Parts N.O.	Overall Length	Upper O.D.	Stem Length	Stem O.D.	Stem I.D.
SP-501	180mm	5mm	60mm	1.7mm	1.2mm±0.01mm
SP-502	180mm	5mm	60mm	2mm	1.5mm±0.01mm
SP-503	180mm	5mm	60mm	2.5mm	1.9mm±0.01mm
SP-504	180mm	5mm	60mm	3mm	2.5mm±0.01mm
SP-505	180mm	5mm	60mm	4mm	3.2mm±0.01mm

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5mmφ Coaxial NMR tube set

When you do not want to mix sample with solvent or to compare with the standard sample.
We strong recommend the items.
We sale an outer tube(5mmO.D.), an inner tube with cap.



P.N.	Inner Tube Stem O.D.	Inner Tube Volume 40mm hight	Outer Tube volume（When setting with an inner tube and an outer tube）40mm
SP-401	1.7mm	45uL	459uL
SP-402	2mm	70uL	425uL
SP-403	2.5mm	113uL	355uL
SP-404	3mm	194uL	270uL
SP-405	4.1mm	317uL	55uL
SPT-401	1.7mm	45uL	547uL
SPT-402	2mm	70uL	512uL
SPT-403	2.5mm	113uL	442uL
SPT-404	3mm	194uL	257uL
SPT-405	4.1mm	317uL	142uL

5mmφ Coaxial NMR tube set

With PS-001-7(Thin wall Outer Tube O.D. 5mm)

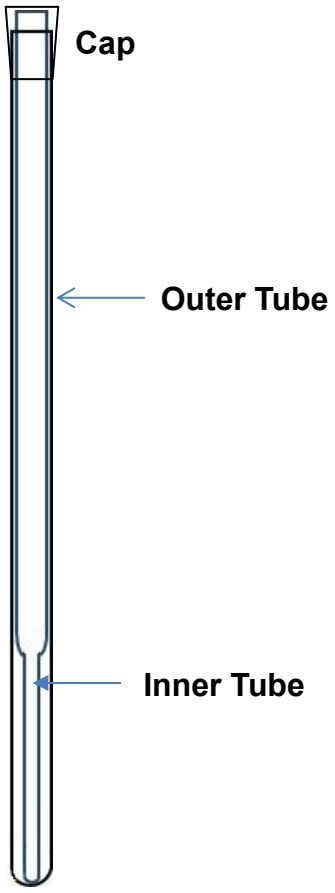
Inner tube detail

P.N.	Length	O.D. Inner tube	Stem Length	Stem O.D	Stem I.D.	tolerance
SP-401	183mm	4.1mm	50mm	1.7mm	1.2mm	±0.01mm
SP-402	183mm	4.1mm	50mm	2mm	1.5mm	±0.01mm
SP-403	183mm	4.1mm	50mm	2.5mm	1.9mm	±0.01mm
SP-404	183mm	4.1mm	50mm	3mm	2.5mm	±0.01mm
SP-405	183mm	4.1mm	50mm	4.1mm	3.2mm	±0.01mm

With PST-001-7(Ultra thin wall Outer Tube O.D. 5mm)

Inner tube detail

P.N.	Length	O.D.	Stem Length	Stem O.D	Stem I.D.	tolerance
SPT-401	183mm	4.1mm	50mm	1.7mm	1.2mm	±0.01mm
SPT-402	183mm	4.1mm	50mm	2mm	1.5mm	±0.01mm
SPT-403	183mm	4.1mm	50mm	2.5mm	1.9mm	±0.01mm
SPT-404	183mm	4.1mm	50mm	3mm	2.5mm	±0.01mm
SPT-405	183mm	4.1mm	50mm	4.1mm	3.2mm	±0.01mm



SPARE PARTS
SP-401INNER TUBE
SP-402INNER TUBE
SP-403INNER TUBE
SP-404INNER TUBE
SP-405INNER TUBE
PS-001 OUTER TUBE
PST-001 OUTER TUBE
CT-005(CAP)

We cannot guarantee for combinations with outer or inner tubes from other manufacturers.

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5mmφ Coaxial INNER TUBE for Heat sealing

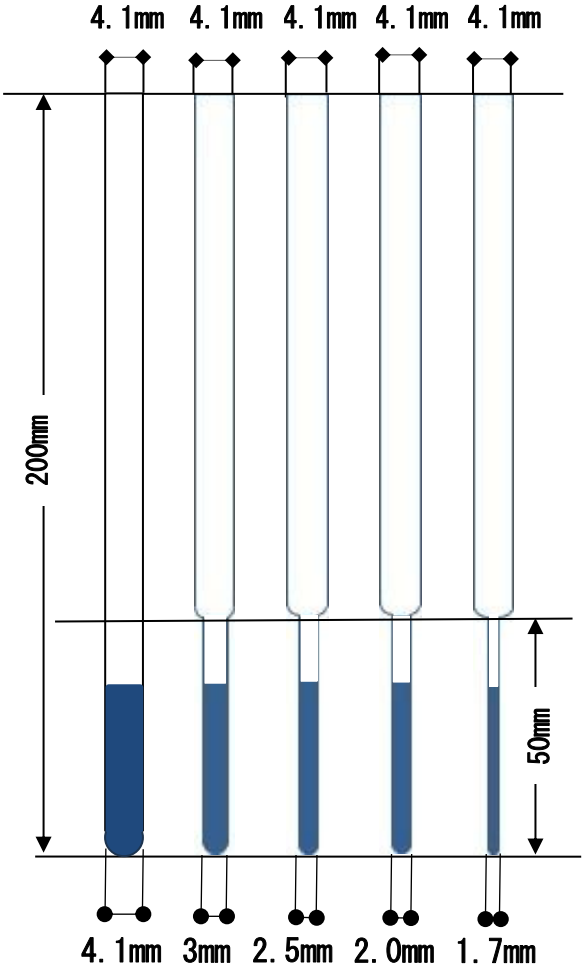
The total length of the outer tube is 180mm, and the total length of this product is 200mm, so even if you fill the inner tube with sample or solvent and heat seal the top, it will still maintain a longer dimension than the outer tube.

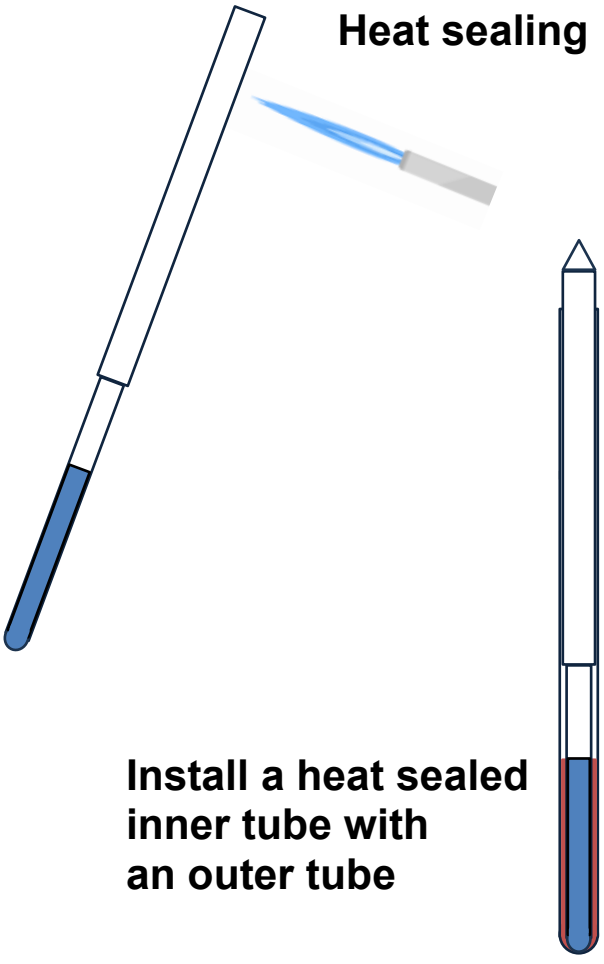
We do not sell this as a set because it will not be possible to cap it. Please purchase the outer tube separately. PS-001-7, PST-001-7

☆We do not guarantee insertion into outer tubes from other manufacturers due to differences in inner diameter dimensions and tolerances.

P.N.	Length	Upper O.D.	Stem Length	Stem O.D.	Stem I.D.	tolerance
SP-401L200	200mm	4.1mm	50mm	1.7mm	1.2mm	±0.01mm
SP-402L200	200mm	4.1mm	50mm	2mm	1.5mm	±0.01mm
SP-403L200	200mm	4.1mm	50mm	2.5mm	1.9mm	±0.01mm
SP-404L200	200mm	4.1mm	50mm	3mm	2.5mm	±0.01mm
SP-405L200	200mm	4.1mm	50mm	4.1mm	3.2mm	±0.01mm

It is 17mm longer than the standard model (standard 183mm, this product 200mm)

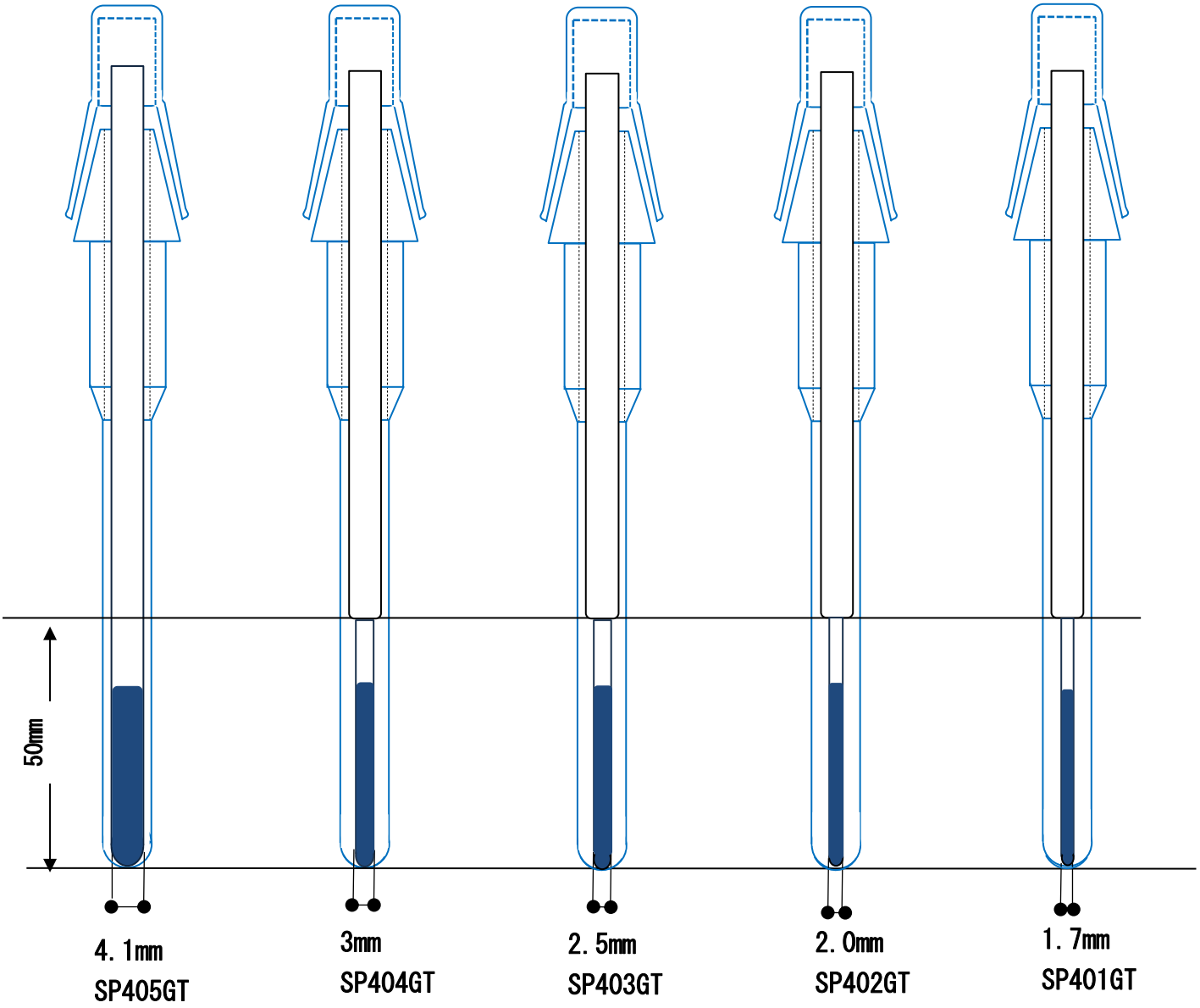




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5mmφ Coaxial GAS tight NMR tube set

A coaxial tube that can block outside air. It is effective for samples that are sensitive to vacuum, nitrogen substitution, evaporation, water absorption, etc. Apply vacuum grease to the edge of the lid before use. Be careful not to let grease get into the sample tube. It can withstand long-term sealing.



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With PS-001-7GT(Thin wall GAS tight Outer Tube O.D. 5mm)

Inner tube detail

P.N.	O.D. Inner tube	Stem Length	Stem O.D	Stem I.D.	tolerance
SP-401GT	4.1mm	50mm	1.7mm	1.2mm	±0.01mm
SP-402GT	4.1mm	50mm	2mm	1.5mm	±0.01mm
SP-403GT	4.1mm	50mm	2.5mm	1.9mm	±0.01mm
SP-404GT	4.1mm	50mm	3mm	2.5mm	±0.01mm
SP-405GT	4.1mm	50mm	4.1mm	3.2mm	±0.01mm

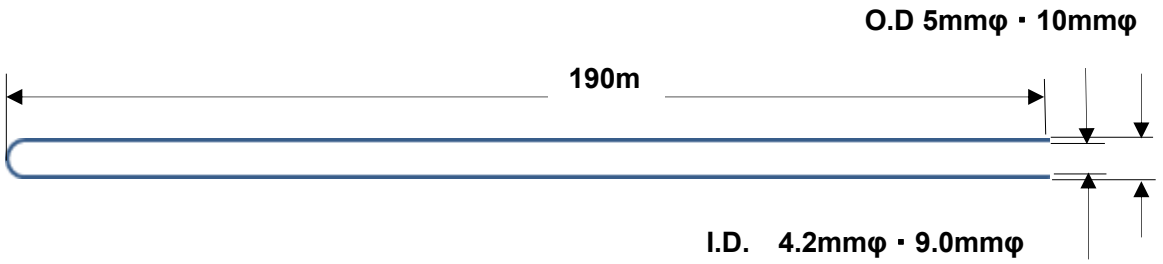
With PST-001-7GT(Ultra Thin wall GAS tight Outer Tube O.D. 5mm)

Inner tube detail

P.N.	O.D. Inner tube	Stem Length	Stem O.D	Stem I.D.	tolerance
SPT-401GT	4.1mm	50mm	1.7mm	1.2mm	±0.01mm
SPT-402GT	4.1mm	50mm	2mm	1.5mm	±0.01mm
SPT-403GT	4.1mm	50mm	2.5mm	1.9mm	±0.01mm
SPT-404GT	4.1mm	50mm	3mm	2.5mm	±0.01mm
SPT-405GT	4.1mm	50mm	4.1mm	3.2mm	±0.01mm

SPARE PARTS
SP-401INNER TUBE
SP-402INNER TUBE
SP-403INNER TUBE
SP-404INNER TUBE
SP-405INNER TUBE
PS-001GT GAS Tight OUTER TUBE
PST-001GT GAS Tight OUTER TUBE

Quartz NMR Tubes



Parts N.O.	Dimension (mm)			Material	For
	Length	O.D.	I.D.		
SS-002	190	4.965 -0.005 -0.010	4.20 ±0.1	Fused Silica	NMR
SS-0010	190	9.98 ±0.01	9.0 ±0.1	Fused Silica	NMR

Fused Silica	Metallic impurity (ppm)										OH radical
	Na	K	Li	Mg	Mn	Fe	Ca	Al	Tl	Zr	
	1.3	<3.0	1.0	0.5	0.1	1.9	1.8	20.3	1.4	2.4	＜5

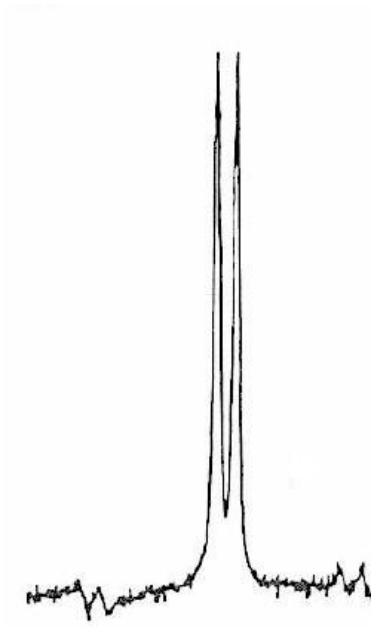
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Ultra thin wall NMR Tubes

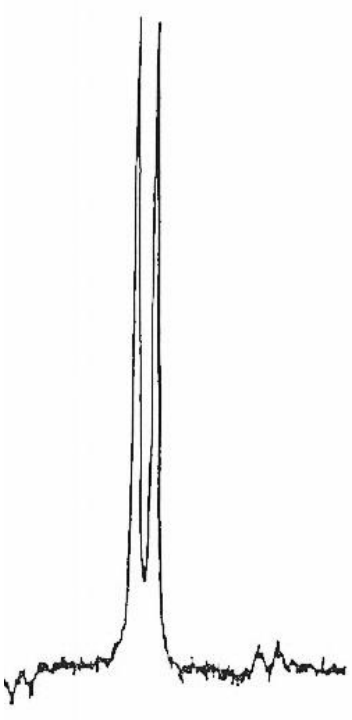
Benefit

- ★ **Tube thicknees effect Signal to Noise**
- ★ **Volume gain**
- ★ **Sample approach RF coil**
- ★ **Better resolusion of NMR spectra (especialy Ultra High Feid Magnet)**
- ★ **Esy to use**

★ 25% gain Sgnal to Noise



Ultra Precision NMR Sample Tubes
Figure 1

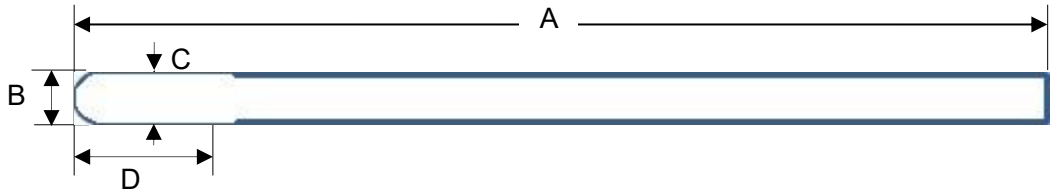


Thin wall NMR Tubes
Figure2

^{1}H NMR Data 1 scan 20mM Surcrose in D_2O 298°K Bruker 600MHz

U.S. Patent No.5, 573, 567

Ultra Thin wall NMR Tubes



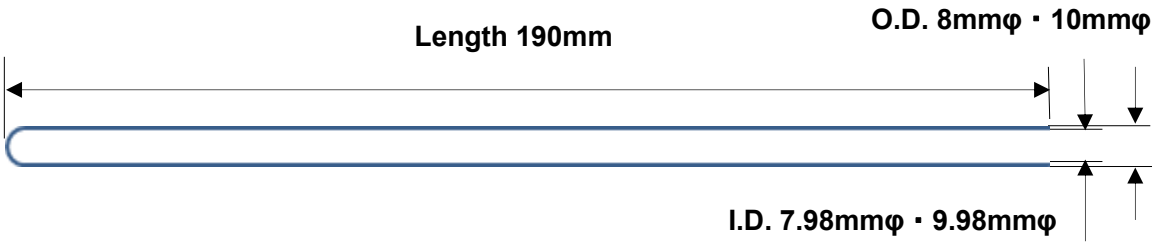
Parts N.O.	Dimension (mm)				Tolerance (μm)	
	Length(A)	O.D.(B)	Wall Thickness(C)	Length of thin wall(D)	Wall thickness control	Straightness
PST-001	180	4.965 +0.005 -0.010	0.21	50	10	10
PST-002	180	4.965 +0.005 -0.010	0.21	50	20	25
ST8-001	190	7.98 ±0.01	0.25	50	10	10
ST8-002	190	7.98 ±0.01	0.25	50	20	20
ST10-001	190	9.98 ±0.01	0.25	50	10	10
ST10-002	190	9.98 ±0.01	0.25	50	20	20

Volume comparison（40mm Height）

I.D(φ)	Thin wall	Ultra Thin Wall
5mm	550μL	637μL
8mm	1,507μL	1,703μL
10mm	2,465μL	1,712μL

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Precision Large Volume NMR Tubes



Parts N.O.	Dimension (mm)			Tolerance (μm)	
	Length	O.D.	I.D.	Straightness	Wall thickness control
S-8-001	190	7.98 ±0.01	7.03 +0.01 -0	10	15
S-8-002	190	7.98 ±0.01	7.03 +0.01 -0	10	20
S-10-001	190	9.98 ±0.01	9.03 +0.01 -0	10	15
S-10-002	190	9.98 ±0.01	9.03 +0.01 -0	10	20
S-10-003	190	9.98 ±0.01	9.03 +0.01 -0	20	30
S-10-004	190	9.98 ±0.01	9.03 +0.01 -0	20	40

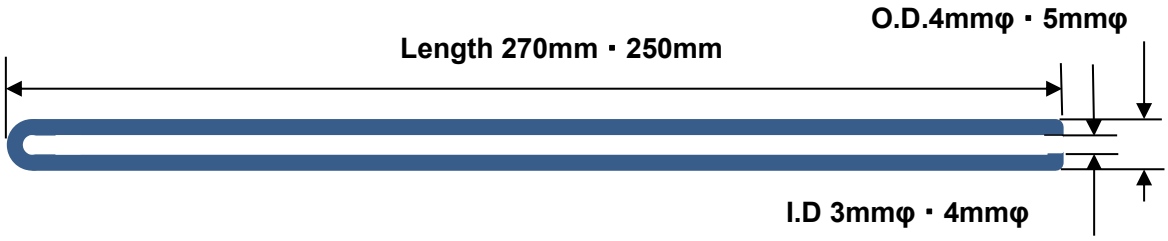
If you need more volume, see “Ultra Thin wall (page 23)”

Volume comparison（40mm Height）

I.D(φ)	Thin wall	Ultra Thin Wall
5mm	550μL	637μL
8mm	1,507μL	1,703μL
10mm	2,465μL	1,712μL

ESR (EPR) Quartz Tubes

★Made of Fused Silica which is ultra-low background!!



Part N.O.	O.D.	I.D.	Length	Material
EPS-004J	4mm	3mm	270mm	Fused Silica
EPS-004B	4mm	3mm	250mm	Fused Silica
EPS-005J	5mm	4mm	270mm	Fused Silica
EPS-005B	5mm	4mm	250mm	Fused Silica

The matrial produce by Shinetsu Quartz Co. LTD

	Metallic impurity (ppm)								OH radical
Fused Silica	Na	K	Li	Mg	Cu	Fe	Ca	Al	
HERALUX-E-LA	<0.05	<0.1	0.05	<0.05	<0.05	0.1	0.5	15	20

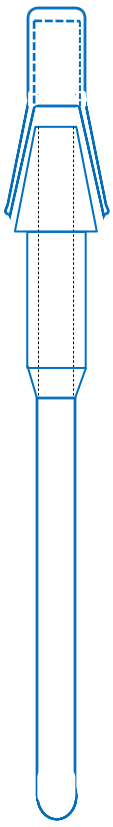
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TRUE GAS TIGHT TUBE FOR NMR・ESR

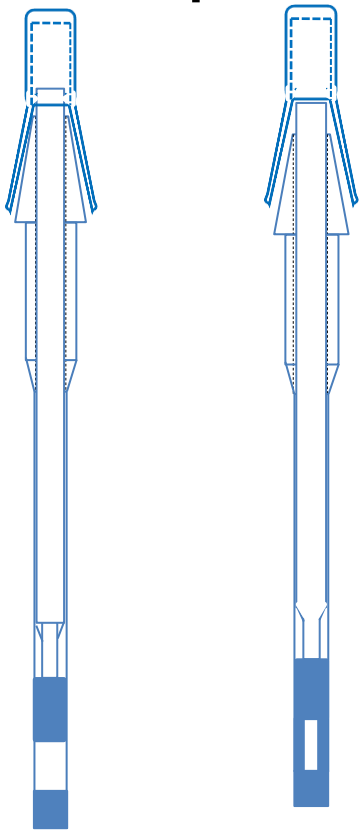
It is effective for samples that are sensitive to vacuum, nitrogen substitution, evaporation, water absorption, etc. Apply vacuum grease to the edge of the lid before use. Be careful not to let grease get into the sample tube. It can withstand long-term sealing.

Benefit

1. To keep long term vacuum.
2. No need HEAT SEALING.
3. Standard Taper



1. To keep long term vacuum.
2. No need HEAT SEALING.
3. Standard Taper



	P.N	
5mm NMR Gas tight tube	PS-003GT	1Set
5mm symmetrical MICRO NMR Gas tight Tube for D_2O	BMS-005BGT	1Set
	BMS-005JGT	1Set
	BMS-005VGT	1Set
5mm symmetrical MICRO NMR Gas tight Tube for $CDCl_3$	CMS-005BGT	1Set
	CMS-005JGT	1Set
	CMS-005VGT	1Set
5mm symmetrical MICRO NMR Gas tight Tube for DMSO($(CD_3)_2SO$),Benzene (C_6D_6), Pyridine (C_5D_5N)	DMS-005BGT	1Set
	DMS-005JGT	1Set
	DMS-005VGT	1Set
5mm symmetrical MICRO NMR Gas tight Tube for Methanol(CD_3OD),Acetonitrile (CD_3CN)用	MMS-005BGT	1Set
	MMS-005JGT	1Set
	MMS-005VGT	1Set
SLOT TUBE Gastight	SBMSGT	1Set
5mm NMR Gas tight tube(Quotz)	SS-002GT	1Set
5mm ESR Gastight tube (Quotz) length 250mm	EPS-005BGT	1Set
5mm ESR Gastight tube (Quotz) length 270mm	EPS-005JGT	1Set
4mm ESR Gastight tube (Quotz) length 250mm	EPS-004BGT	1Set
4mm ESR Gastight tube (Quotz) length 270mm	EPS-004JGT	1Set

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Accessories

NMR Tube Caps



Parts N.O.	Description	Color	1Pack
CP-005-Y	5mm	Yellow	100peaces
CP-005-G	5mm	Green	100peaces
CP-005-R	5mm	Red	100peaces
CP-005-P	5mm	Pink	100peaces

PTFE NMR Tube Caps

Parts N.O.	Description
CT-003	3mm
CT-004	4mm
CT-005	5mm
CT-008	8mm
CT-010	10mm



FKM NMR Tube Caps

Parts N.O.	Description
CF-004	4.1mm
CF-005	5mm
CF-010	10mm



FKM NMR Tube Cap for 5mm SHIGEMI TUBE

Parts N.O.	Description
CS-005	5mm



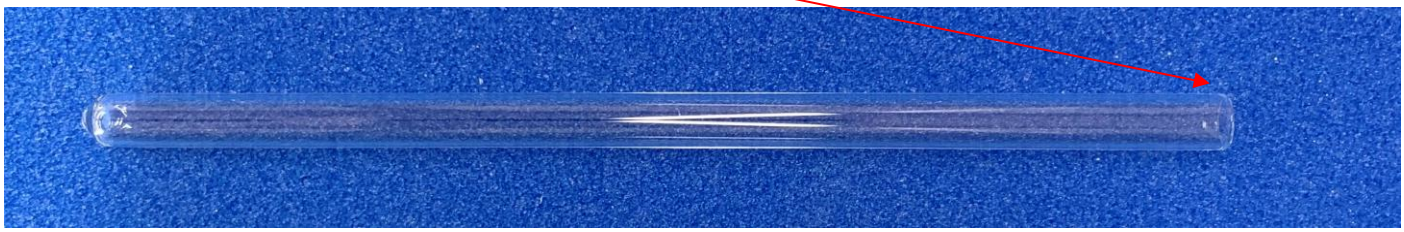
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5mm NMR SAMPLE TUBE for SampleJet

SJ-5

BENEFIT

☆High precision O.D. good for spinning, put on caps, insert spinner.
☆Material:DURAN ASTM ClassA good for variable temperature.
☆To melt end face for strong damage.



SPECIFICATION

PartNumber	(mm)				straightness(μm)
	Length	O.D.	I.D		
SJ-5	103.5(4inch)	4.965 +0.005 -0.010	4.220	±0.10	30

Price

10packs(1,000PCS) (Minimum order unit)

CAPS for SJ-5

Just fit for SJ5 Price 1pack in 100 PCS of caps
Part Number
SJC-5B(blue), SJC-5R(red), SJC-5P(pink), SJC-5Y(yellow), SJC-5W(white)



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